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

For

Exalt Communications, Inc.

580 Division Street,

Campbell, CA 95008, USA

FCC ID: TTM-105P25U
IC: 6254A-105P25U

Report Type:	Equipment Type:
Class II Permissive Change	802.11 RF Module with Host

Prepared By:	Ning Ma
Report No.:	R1302222-DFS
Report Date:	2013-08-15
Reviewed By:	Victor Zhang EMC/RF Lead

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	R1302222-DFS Draft	Original Report	2013-08-06
1	R1302222-DFS Draft Rev A	Revised Sections 1.1 and 4.6; Pages 40, 43, 46, and 49	2013-08-13
2	R1302222-DFS	Revised Sections 1.1 & 4.6	2013-08-15

1   General Description

1.1   Product Description for Equipment under Test (EUT)

This test and measurement report was prepared on behalf of *Exalt Communications, Inc.*, and their product, FCC: TTM-105P25U and IC: 6254A-105P25U, model: *eMIMO 100,* which will henceforth be referred to as the EUT "Equipment Under Test". The EUT is an 802.11 WLAN module and operates on 4940-4990 MHz, 5250-5350 MHz, 5470-5725 MHz, 5725-5825 MHz UNII bands, and 5725-5850 MHz ISM band. 5 and 10 MHz mode of 4940-4990 MHz cannot transmit both chains simultaneously and will not operate on 5725-5825 MHz UNII band.

1.2   Mechanical Description of EUT

The EUT measures approximately 33.8 cm (L) x 33.8 cm (W) x 11.4 cm (H) and weighs 3.18kg.

 The test data gathered are from typical production sample, serial number: EC17130074, provided by the manufacturer.

1.3   Objective

This report is prepared on behalf of Exalt Communications, Inc., in accordance with FCC CFR47 §15.407 (h), RSS-210, Issue 8, Dec 2010 and FCC 06-96 Appendix adding DFS bands 5250-5350 MHz and 5470-5725 MH with Class II Permissive change.

The objective is to determine compliance with FCC rules for DFS Detection Threshold, Channel Availability Check Time, Uniform Spreading U-NII Detection Bandwidth, Channel Closing Transmission Time, and Channel Move time in Master Mode.

1.4   Related Submittal(s)/Grant(s)

N/A

1.5   Test Methodology

FCC CFR 47 Part2, Part15.407 (h)

FCC 06-96 Appendix "COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION"

1.6   Test Facility

Bay Area Compliance Laboratories Corp. (BACL) is:

1- An independent Commercial Test Laboratory accredited to **ISO 17025: 2005** by **A2LA**, in the fields of: Electromagnetic Compatibility & Telecommunications covering Emissions, Immunity, Radio, RF Exposure, Safety and Telecom. This includes NEBS (Network Equipment Building System), Wireless RF, Telecommunications Terminal Equipment (TTE); Network Equipment; Information Technology Equipment (ITE); Medical Electrical Equipment; Industrial, Commercial, and Medical Test Equipment; Professional Audio and Video Equipment; Electronic (Digital) Products; Industrial and Scientific Instruments; Cabled Distribution Systems and Energy Efficiency Lighting.

2- An ENERGY STAR Recognized Laboratory, for the LM80 Testing, a wide variety of Luminaires and Computers.

3- A NIST Designated Phase-I and Phase-II CAB including: ACMA (Australian Communication and Media Authority), BSMI (Bureau of Standards, Metrology and Inspection of Taiwan), IDA (Infocomm Development Authority of Singapore), IC (Industry Canada), Korea (Ministry of Communications Radio Research Laboratory), NCC (Formerly DGT; Directorate General of Telecommunication of Chinese Taipei) OFTA (Office of the Telecommunications Authority of Hong Kong), Vietnam, VCCI - Voluntary Control Council for Interference of Japan and a designated EU CAB (Conformity Assessment Body) (Notified Body) for the EMC and R&TTE Directives.

4 - A Product Certification Body accredited to **ISO Guide 65: 1996** by **A2LA** to certify:
1- Unlicensed, Licensed radio frequency devices and Telephone Terminal Equipment for the FCC. Scope A1, A2, A3, A4, B1, B2, B3, B4 & C.
2. Radio Standards Specifications (RSS) in the Category I Equipment Standards List and All Broadcasting Technical Standards (BETS) in Category I Equipment Standards List for Industry Canada.
3. Radio Communication Equipment for Singapore.
4. Radio Equipment Specifications, GMDSS Marine Radio Equipment Specifications, and Fixed Network Equipment Specifications for Hong Kong.
5. Japan MIC Telecommunication Business Law (A1, A2) and Radio Law (B1, B2 and B3).
6. Audio/Video, Battery Charging Systems, Computers, Displays, Enterprise Servers, Imaging Equipment, Set-Top Boxes, Telephony, Televisions, Ceiling Fans, CFLs (including GU24s), Decorative Light Strings, Integral LED Lamps, Luminaires, Residential Ventilating Fans.

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 C63.4-2009, 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 TEST CONFIGURATION

2.1   Justification

The EUT was configured for testing according to FCC Part 15.407(H), RSS-210 and FCC 06-96 Standards.

2.2   EUT Exercise Software

The software version is exaltExAireMIMO_v1.0.1.0-FAKE-OTPdfs, was provided by customer and verified by Ning Ma to comply with the standard requirements being tested against.

2.3   Equipment Modifications

Includes reference to the location of the pictures

2.4   Local Support Equipment

Manufacturer	Description	Model	Serial Number
DELL	Laptop	Latitude E5420	-

2.5   EUT Internal Configuration

Manufacturer	Description	Type	Serial Number
Exalt	PCA, Mother Board	PCA	207463-002

2.6   Interface Ports and Cables

Cable Description	Length (m)	To	From
RF Cable	<1.0	PSA	EUT
RJ 45 Cable	<1.0	LAPTOP	POE
RJ 45 Cable	<1.0	POE	EUT

2.7   Power Supply List and Details

Manufacturer	Description	Model	Part Number
PowerDsine	POE Adapter	PD-3501G/AC	-

3   Summary of Test Results

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

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

4   Applicable Standards

4.1   DFS Requirement

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

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

4.2   DFS Measurement System

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

4.3   System Block Diagram
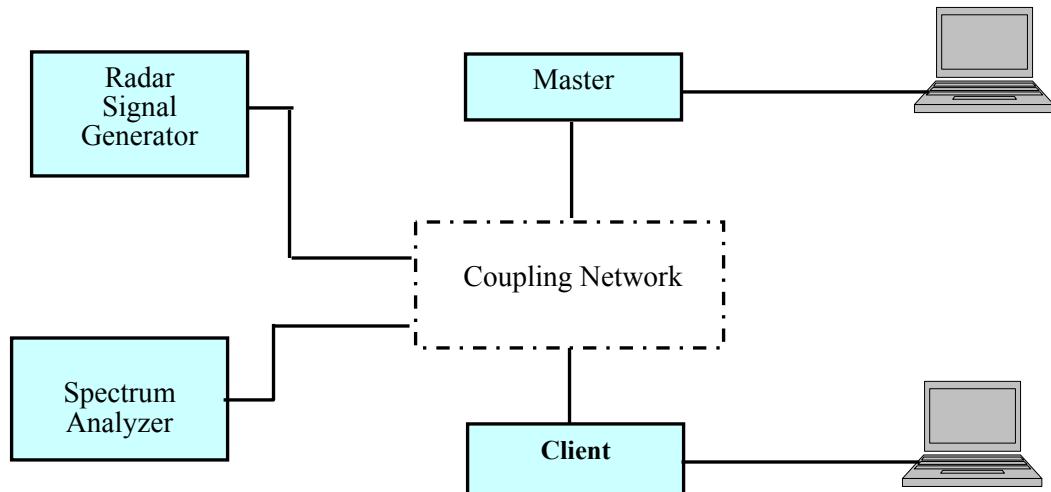
4.4   Conducted Method
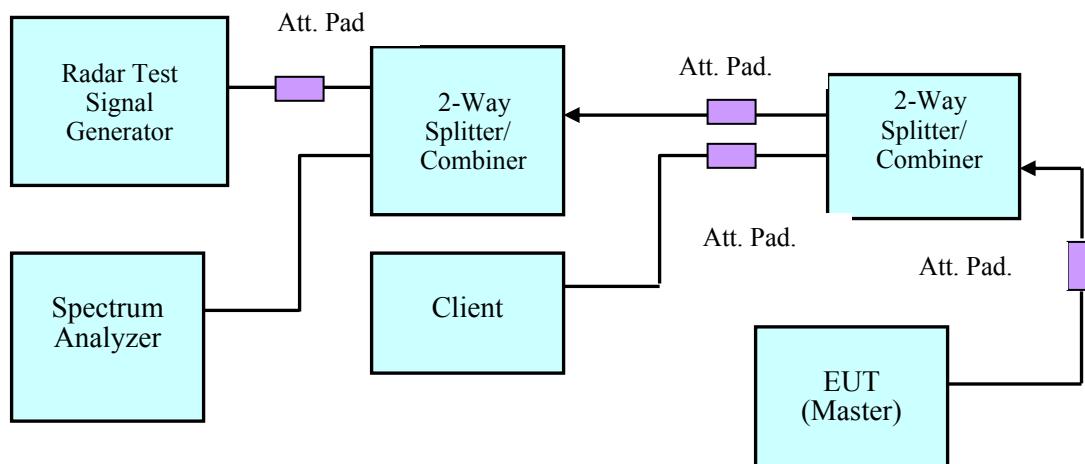
Setup for Master with injection at the Master
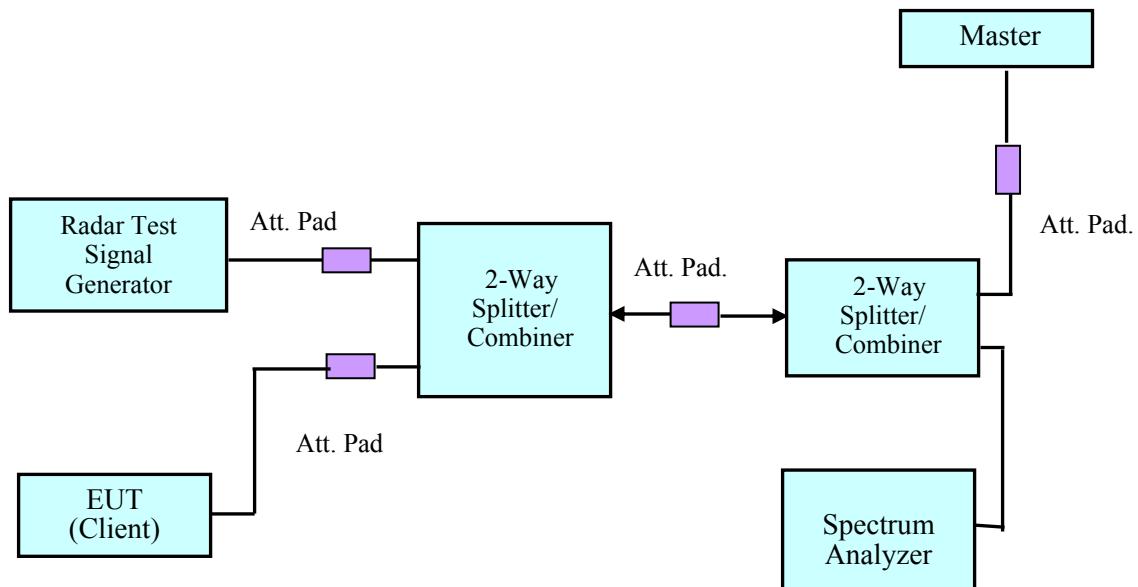
Setup for Client with injection at the Master
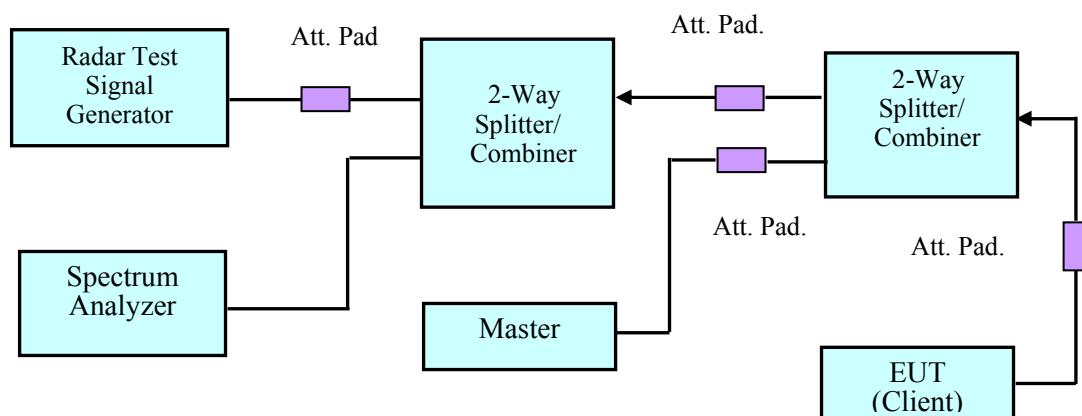
Setup for Client with injection at the Client

4.5   Radiated Method

Client

Antenna

Spectrum
Analyzer

Antenna

Antenna

Radar Test
Signal
Generator

Antenna

Master

D
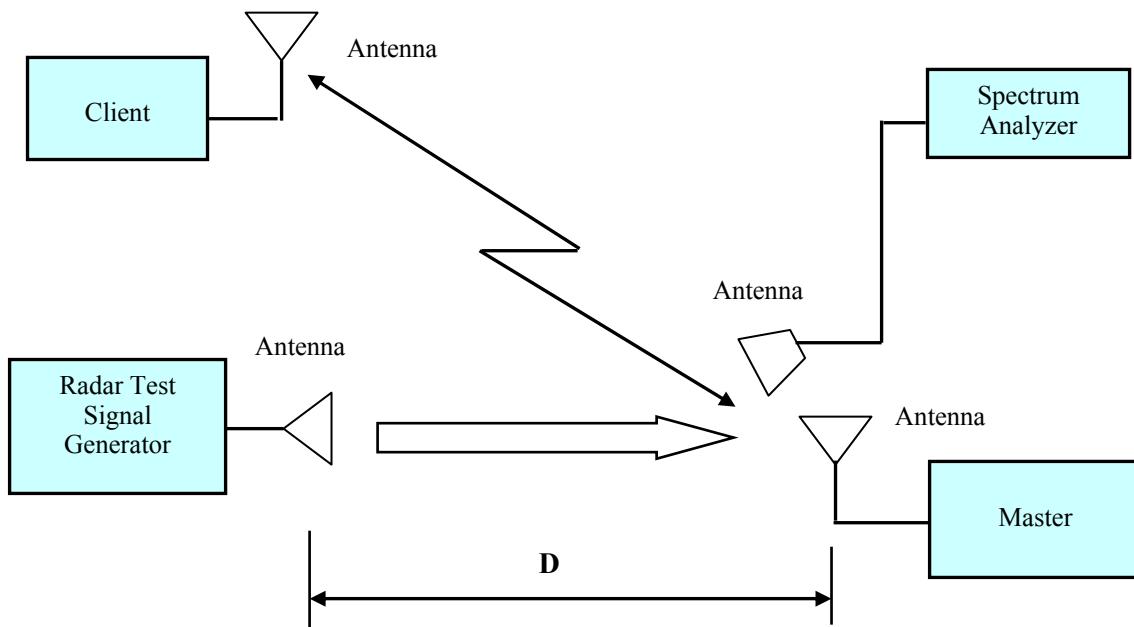
4.6   Test Procedure

A spectrum analyzer is used as a monitor that verifies the EUT's status, which includes the Channel Closing Transmission Time and the Channel Move Time. The Spectrum analyzer is used to monitor the equipment under test (EUT) and does not transmit on the same channel during the Non-Occupied Period after the radar detection. It is also used to monitor EUT transmissions during the Channel Availability Check Time.

5   Test Results

5.1   Description of EUT

The EUT operates in 5230-5350 MHz and 5470-5725 MHz range in Master Mode.

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 -64 dBm.

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

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

The EUT consists of non-standard antenna connectors, and antenna gain varies from 9 dBi to 37.9 dBi. Manufacture will control the effective gain (antenna + cable loss) be equal or less than 9 dBi and 28 dBi, which depends on the point to point or point to multiple point operation output power. Professional installation is needed to ensure the product complies with legal restrictions; therefore, it complies with the antenna requirement.

The EUT was tested in the host specified in this report with the lowest gain antenna of 9 dBi.

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

5.2   Test Equipment List and Details

Manufacturer	Equipment Description	Model Number	S/N	Calibration Date
National Instruments	NI PXI-1042 8-Slot chassis	PXI-1042	V08X01EE1	N/A
National Instruments	Arbitrary Waveform Generator	PXI-5421	N/A	N/A
National Instruments	RF Upconverter	PXI-5610	N/A	N/A
ASCOR	Upconverter	AS-7206	N/A	N/A
Agilent	Spectrum Analyzer	E4440A	MY44303352	2012-10-16
A.R.A.	Antenna Horn	DRG-118/A	1132	2013-01-29
EMCO	Antenna Horn	3115	9511-4627	2012-10-17
Mini-Circuits	Splitter/Combiner	2FSC-2-10G	0349	N/A
Narda	Splitter/Combiner	4326B-2	03514	N/A
Midwest	Attenuator	290-30	N/A	N/A
Mini-Circuits	Attenuator	BW-S30W2	N/A	N/A
HP	Amplifier	8449B	3147A00400	2013-02-04

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

5.3   Radar Waveform Calibration

Radiated Calibration Setup Block Diagram
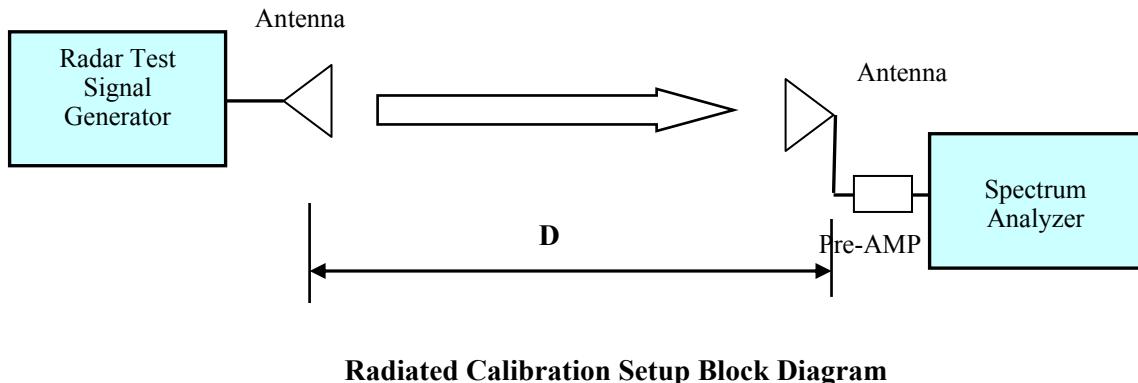
5.4   Test Environmental Conditions

Temperature:	22 °C
Relative Humidity:	32 %
ATM Pressure:	101.6 kPa

Testing performed by Ning Ma on 2013-07-28 at DFS testing site.

Plots of Radar Waveforms

5280 MHz

<div align="center">

Radar Type 1
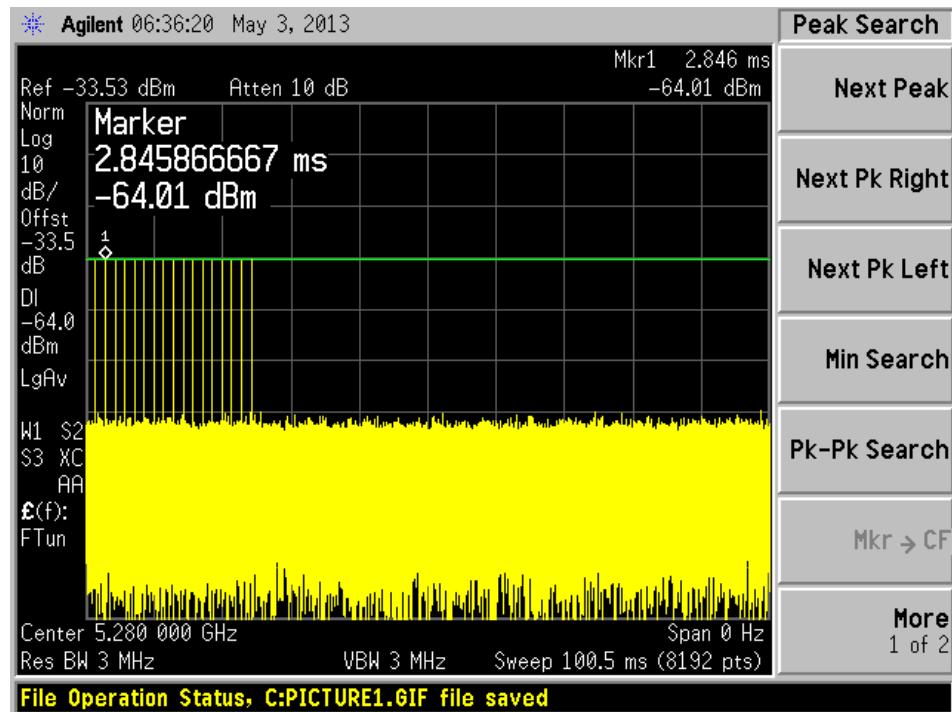
</div>

<div align="center">

Radar Type 2

</div>
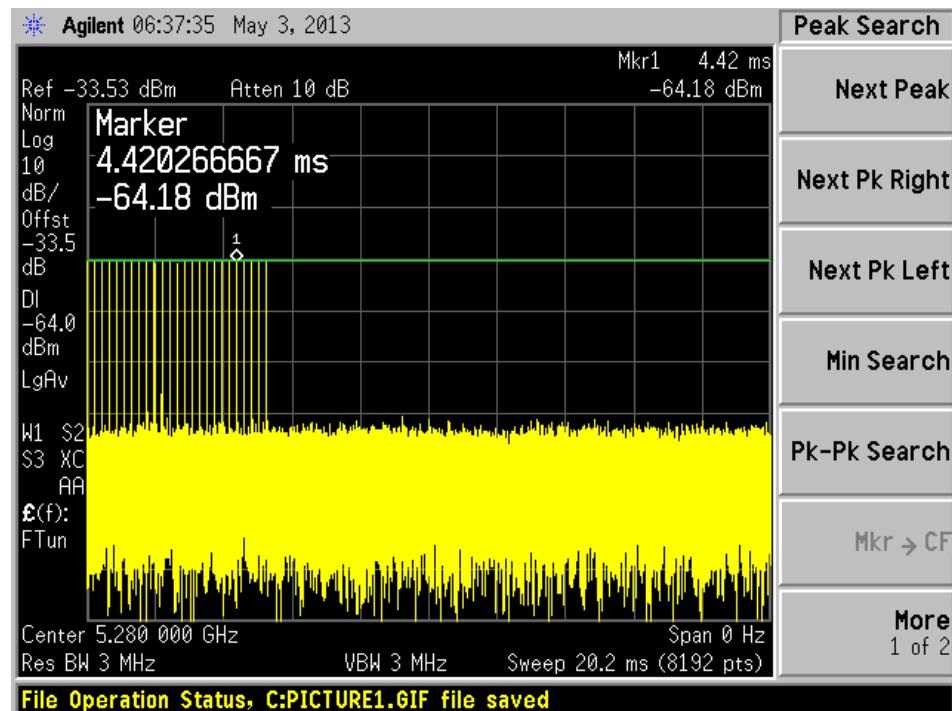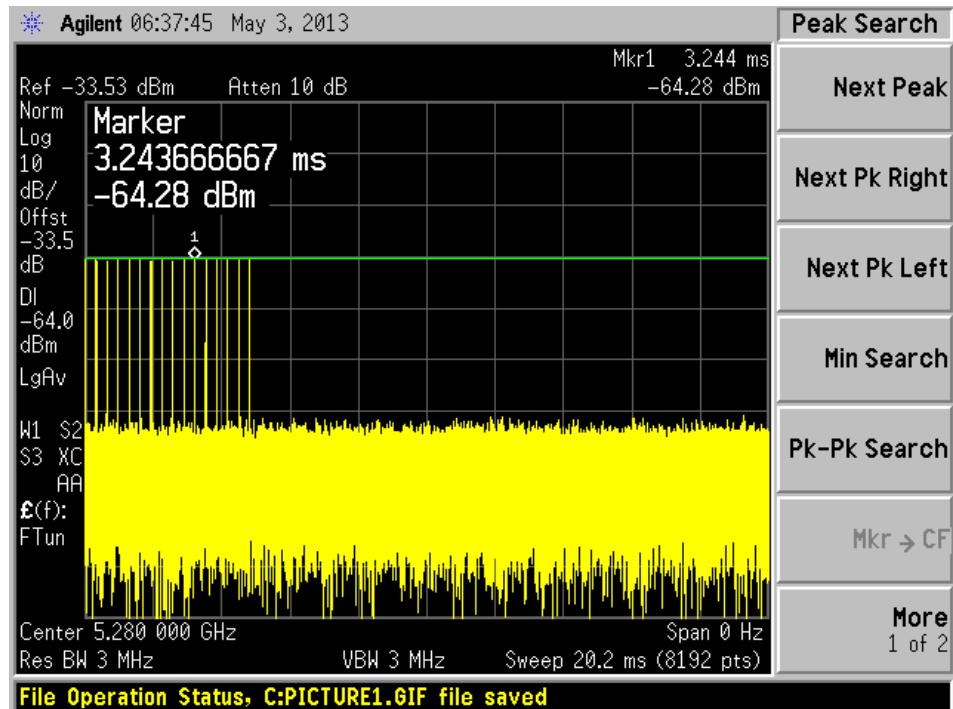
Radar Type 3
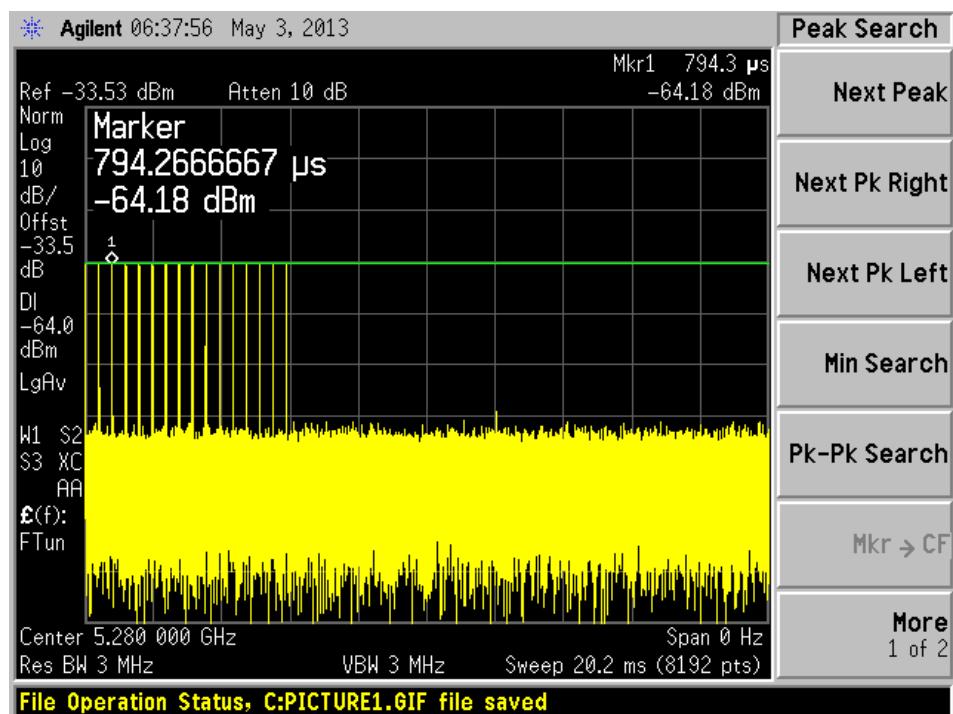
Radar Type 4
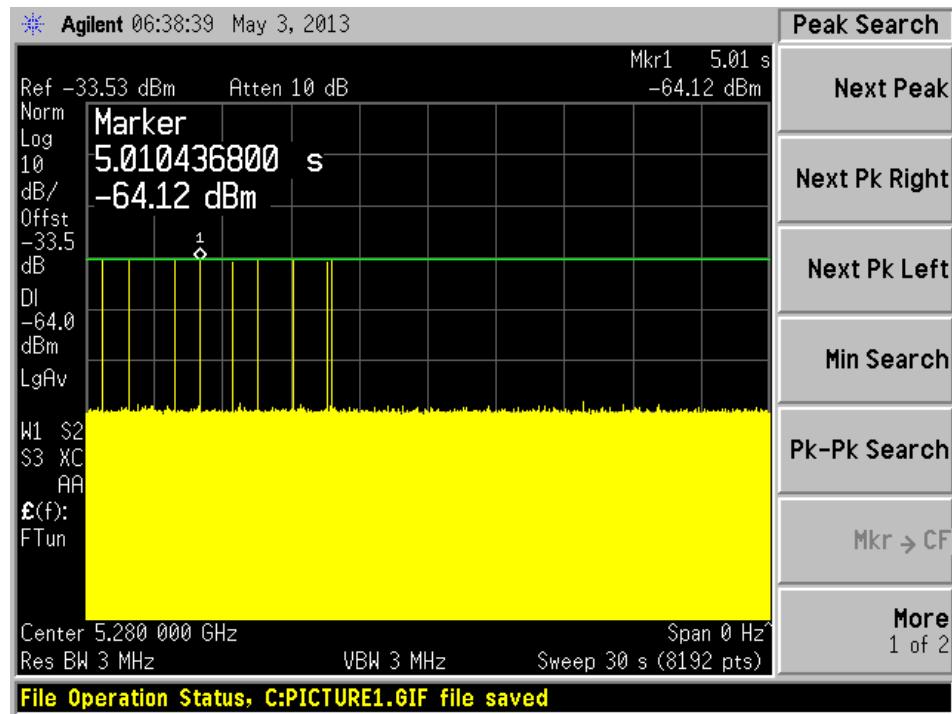
Radar Type 5
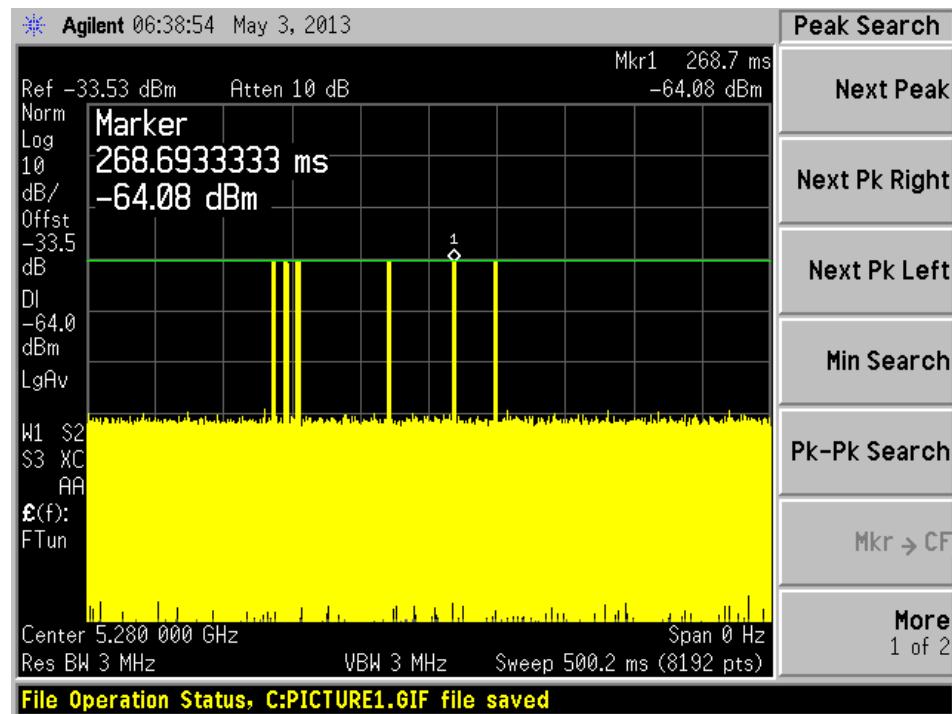
Radar Type 6

5580 MHz

Radar Type 1
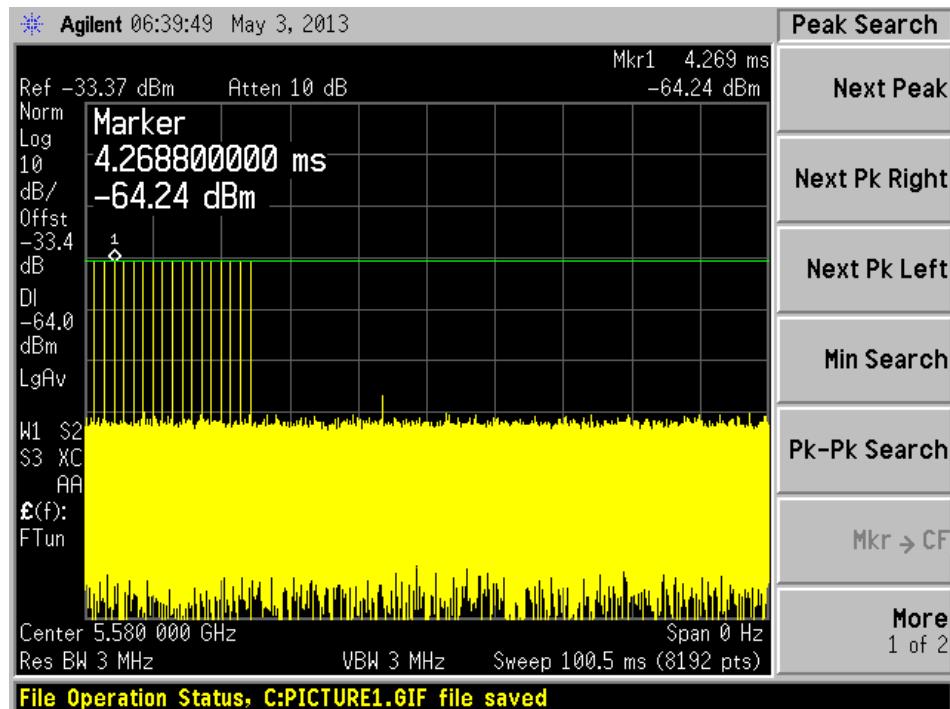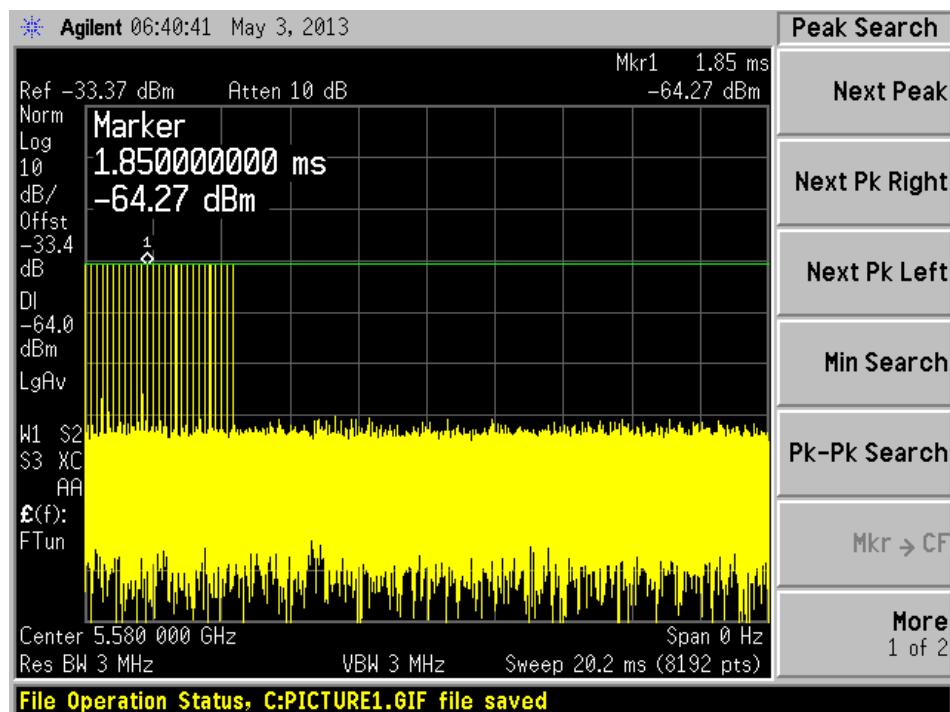
Radar Type 2
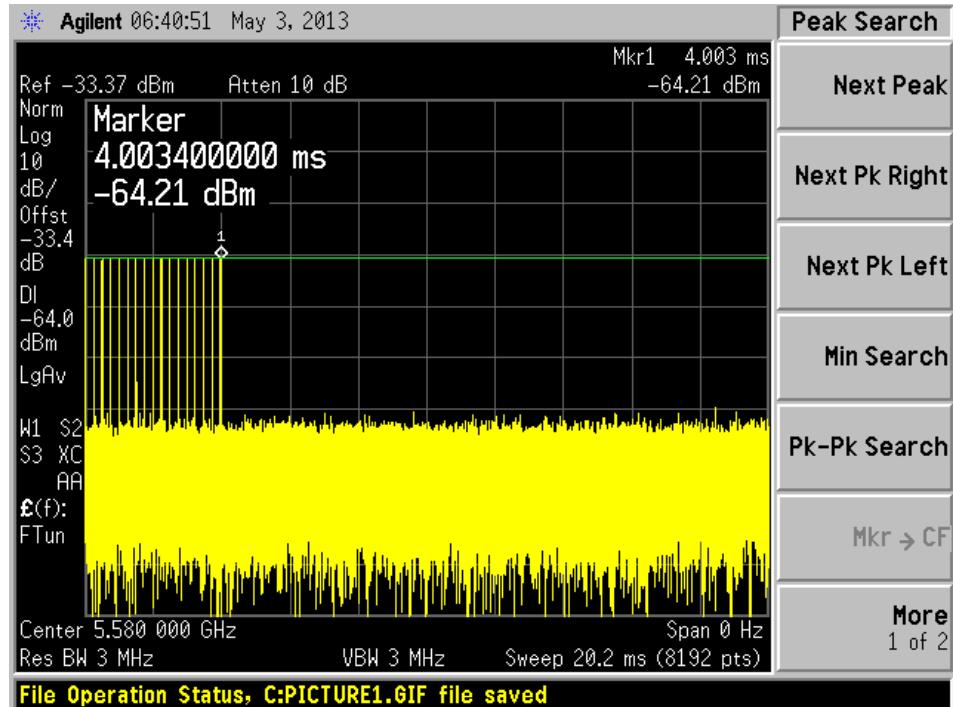
Radar Type 3
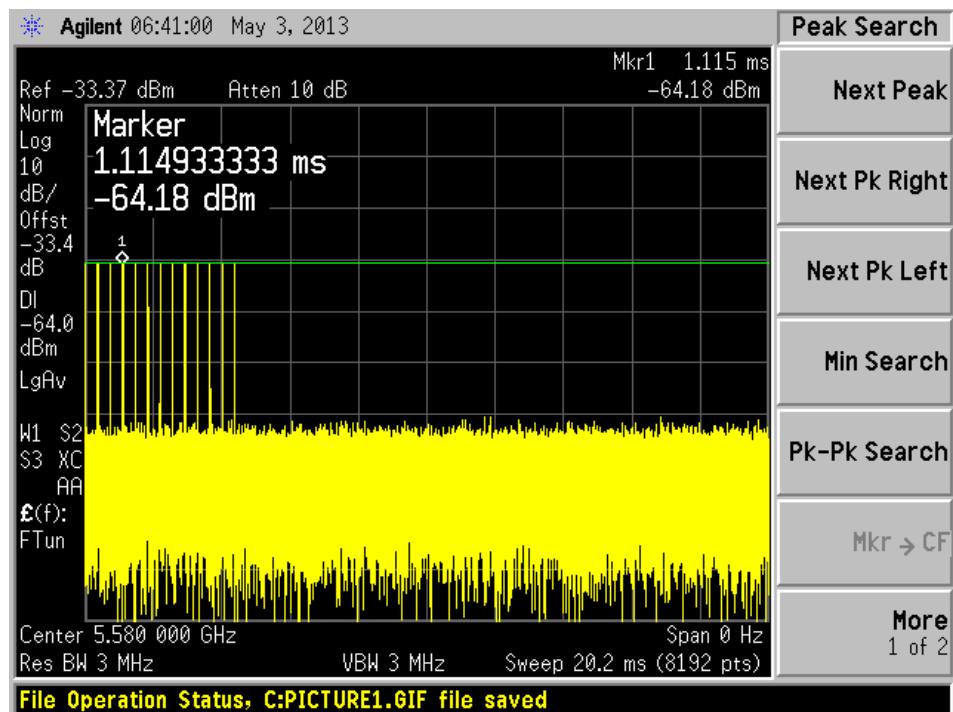
Radar Type 4
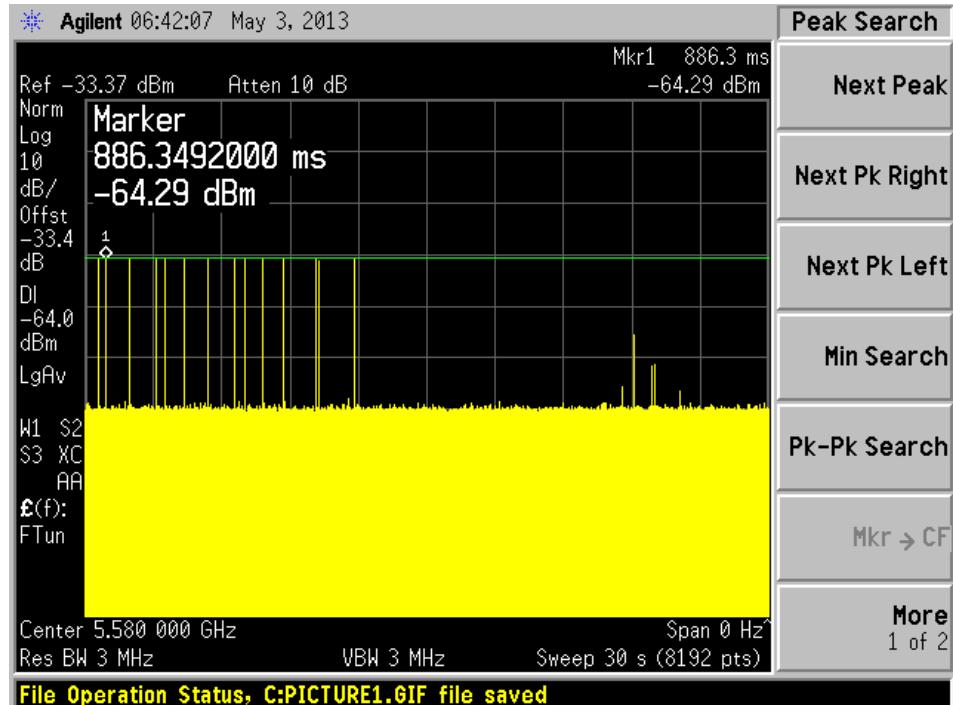
Radar Type 5

Radar Type 6
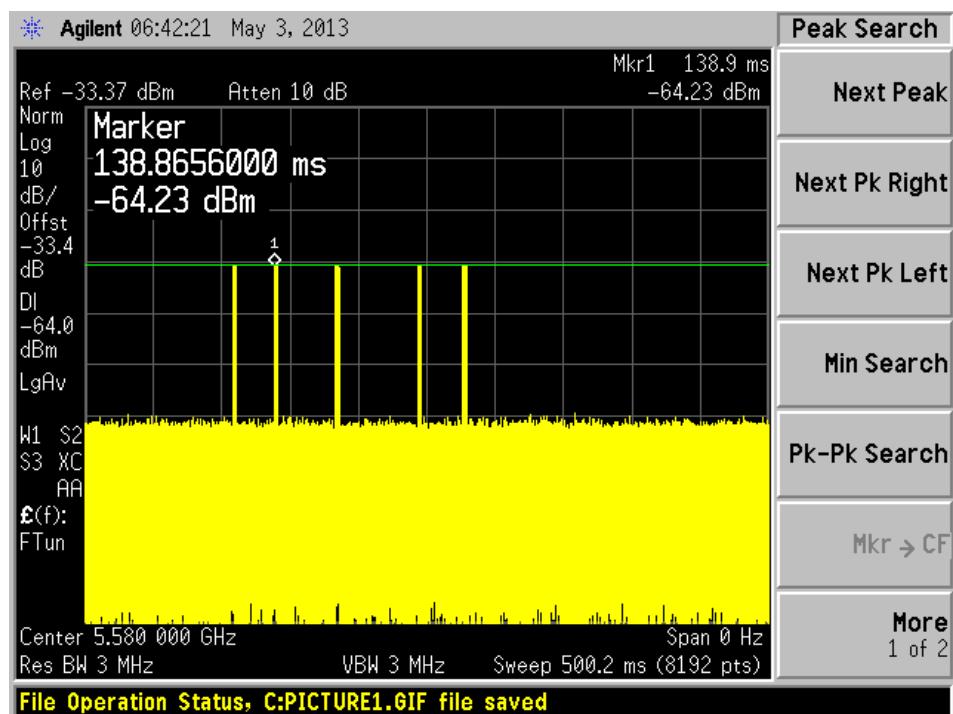
6   Channel Availability Check Time (CAC)

6.1   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 5 MHz

EUT initial Power-up cycle (Second)
5280 MHz: 33s; 5580 MHz: 34s.

5270 MHz and 5550 MHz Bandwidth 40 MHz

EUT initial Power-up cycle (Second)
5270 MHz: 33s; 5550 MHz: 33.5s.

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 5 MHz

<div align="center">

Plot of without Radar signal applied

</div>
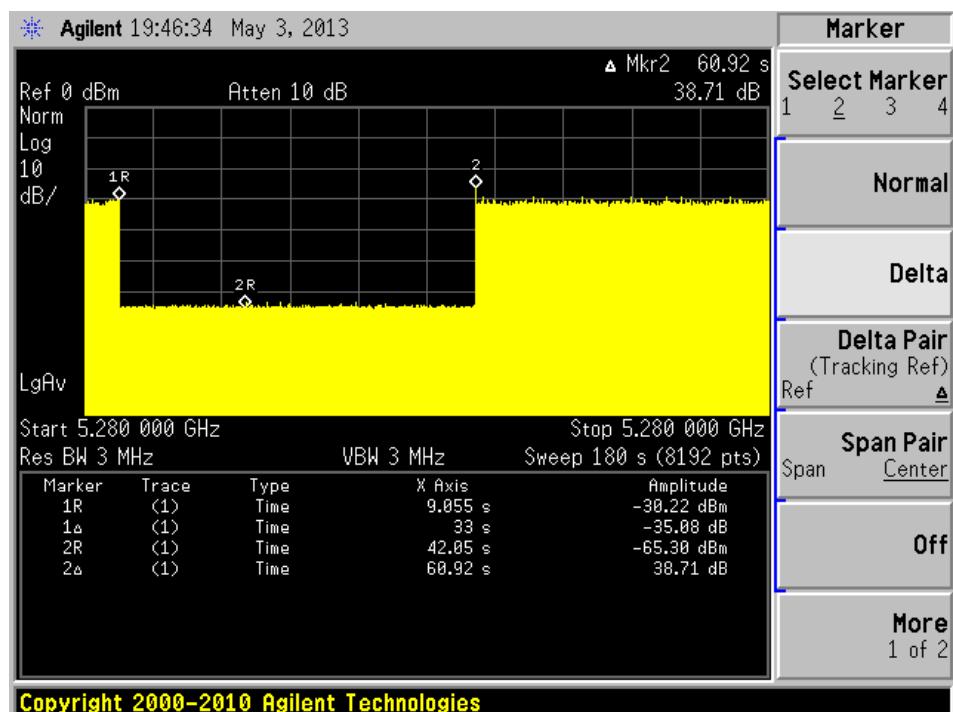
Note: The power-up cycle is 33 seconds.

Plot of Radar signal applied within 2 seconds of start of CAC
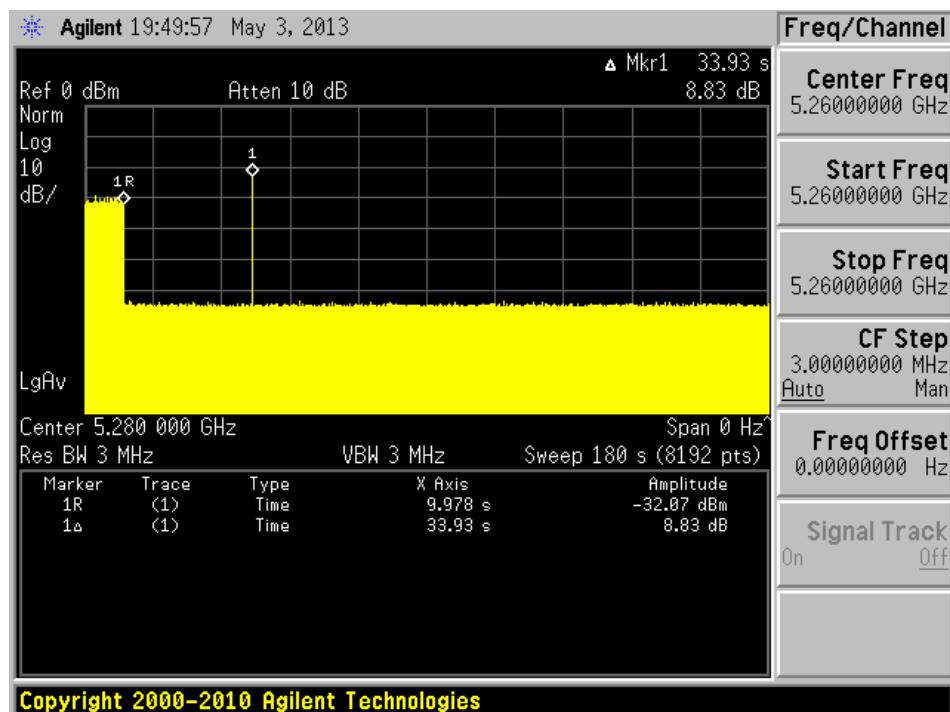
No transmissions found after radar signal applied.

Plot of Radar signal applied at the end of 2 seconds of CAC
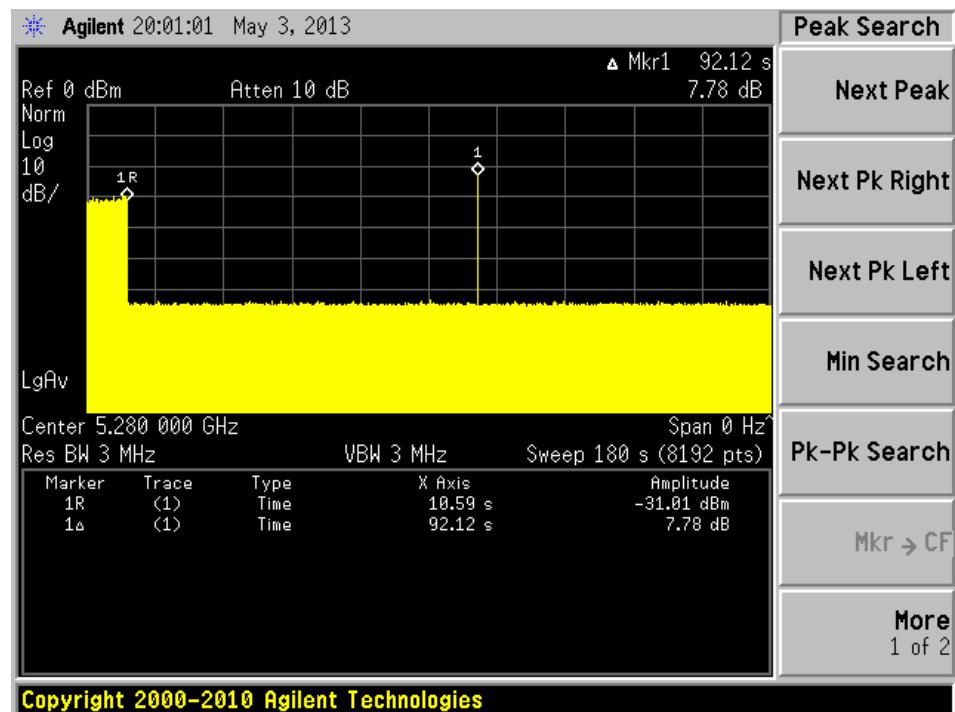
No transmissions found after radar signal applied.

5580 MHZ Bandwidth 5 MHz

Plot of without Radar signal applied
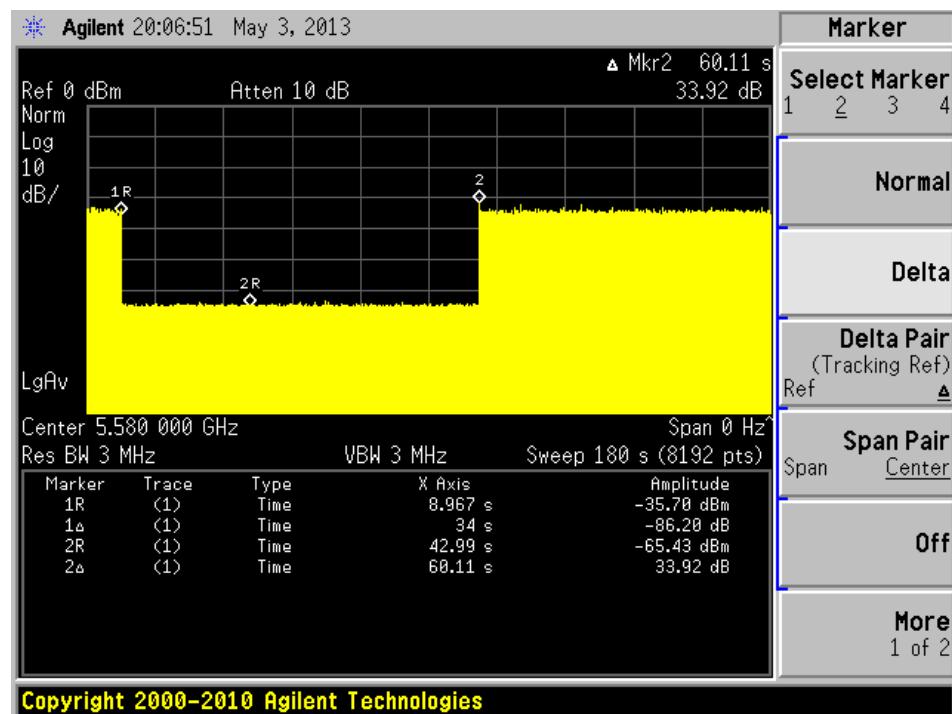
Note: The power-up cycle is 34 seconds.

Plot of Radar signal applied within 2 seconds of start of CAC
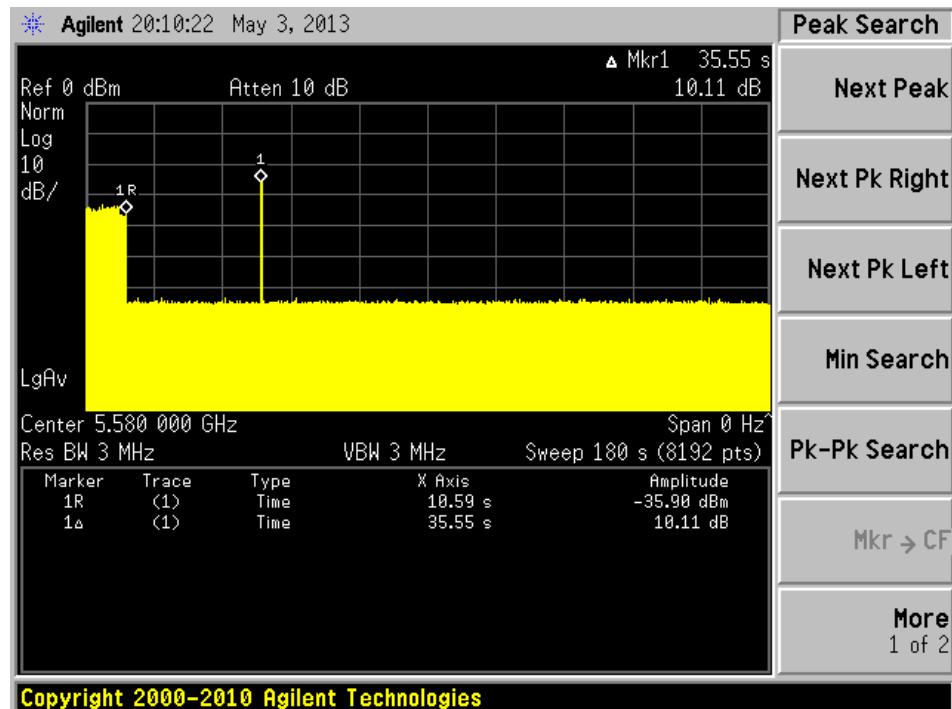
No transmissions found after radar signal applied.

Plot of Radar signal applied at the end of 2 seconds of CAC
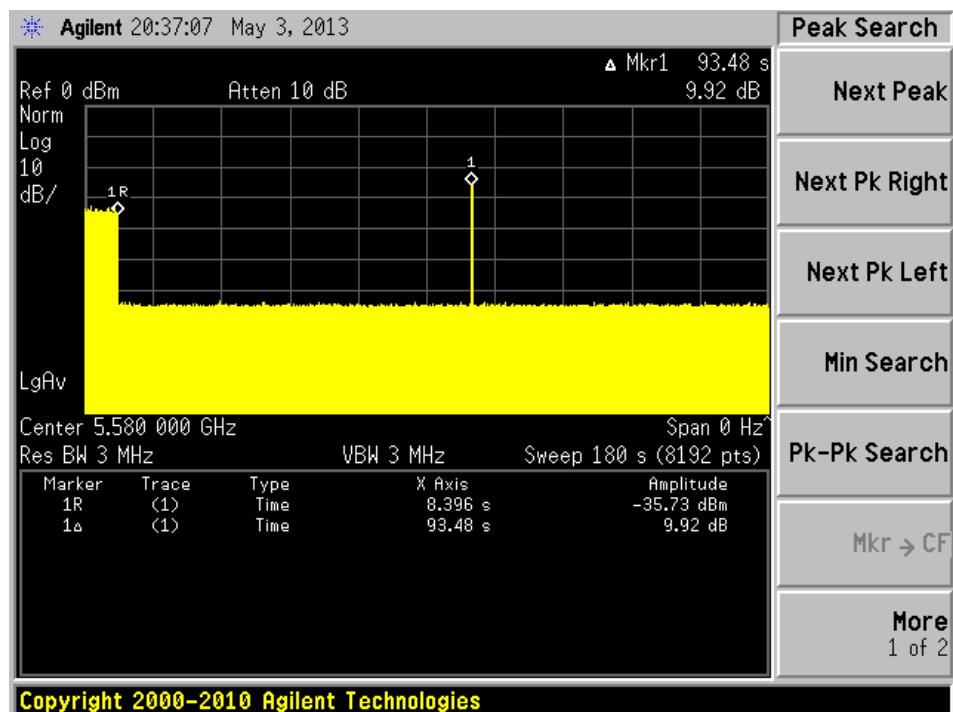
No transmissions found after radar signal applied.

5270 MHZ Bandwidth 40 MHz
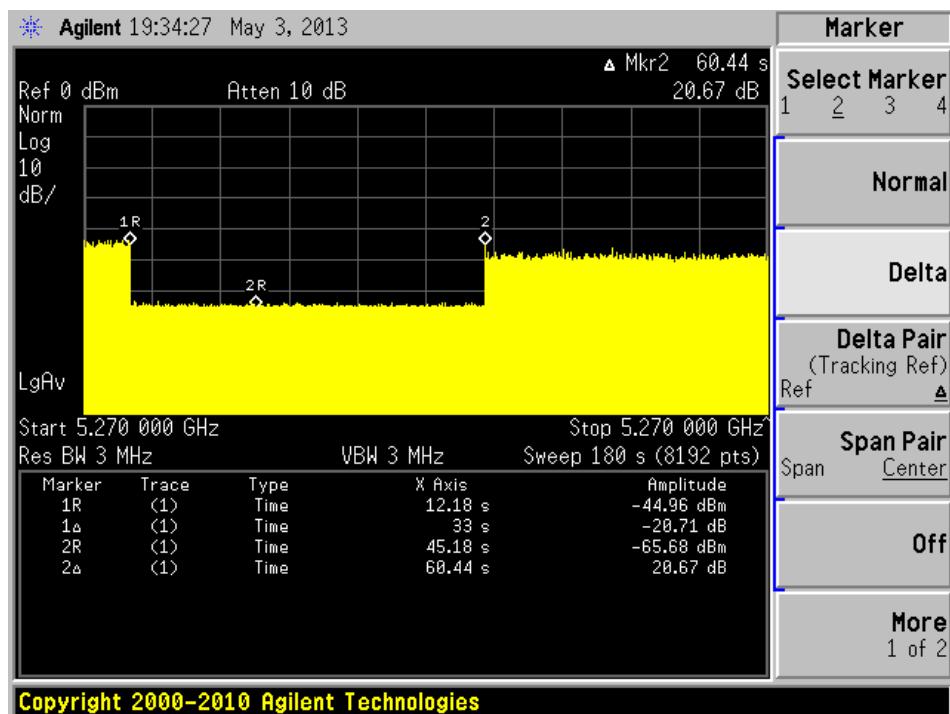
Plot of without Radar signal applied

Note: The power-up cycle is 33 seconds.

Plot of Radar signal applied within 2 seconds of start of CAC
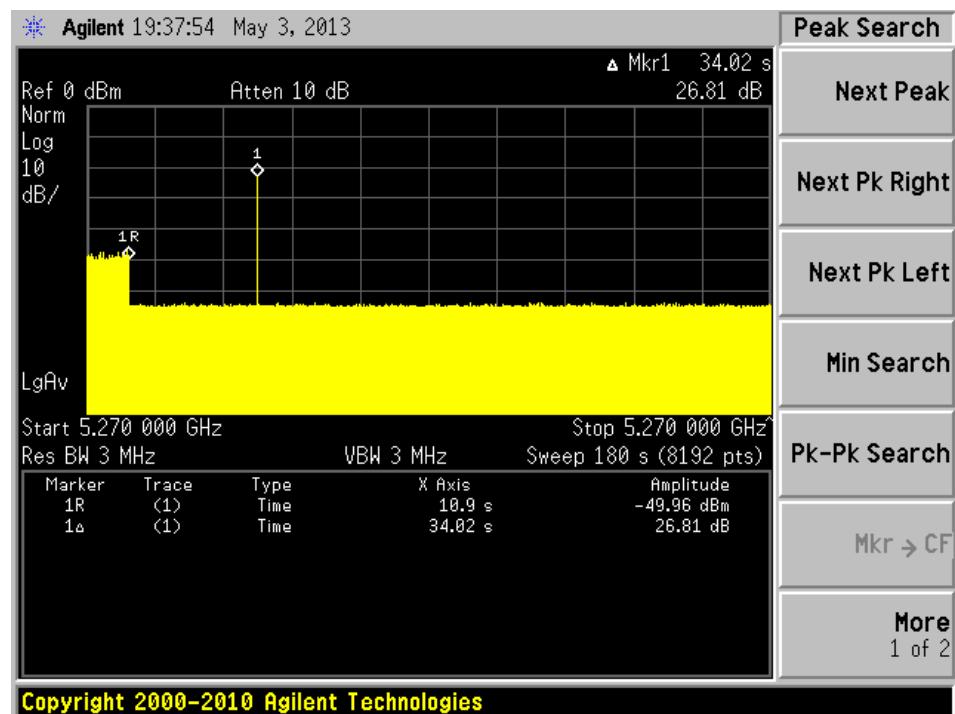
No transmissions found after radar signal applied.

Plot of Radar signal applied at the end of 2 seconds of CAC
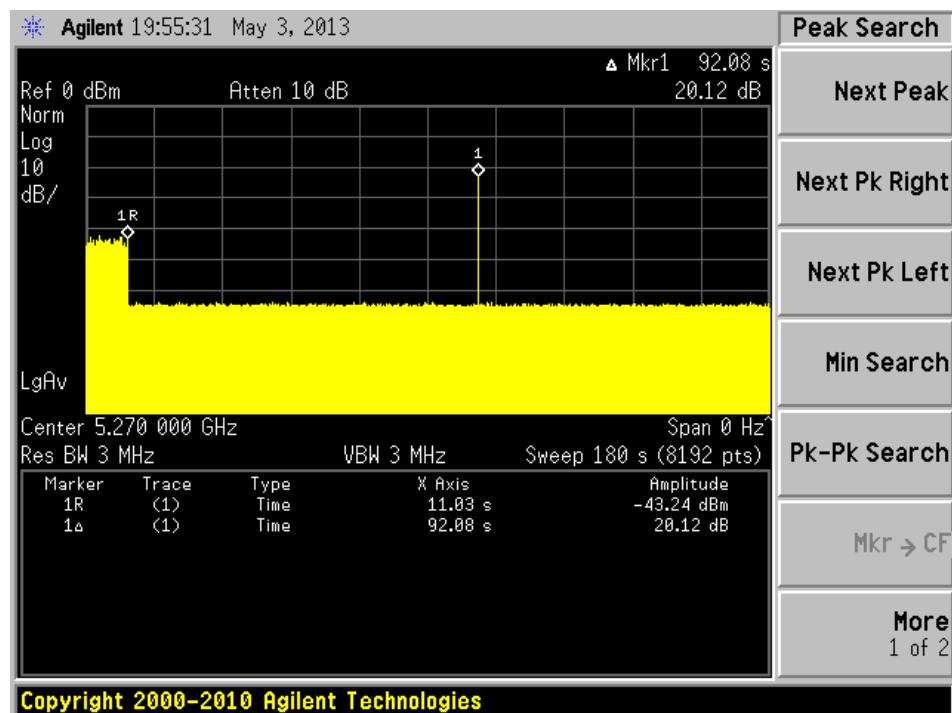
No transmissions found after radar signal applied.

5550 MHZ Bandwidth 40 MHz

Plot of without Radar signal applied
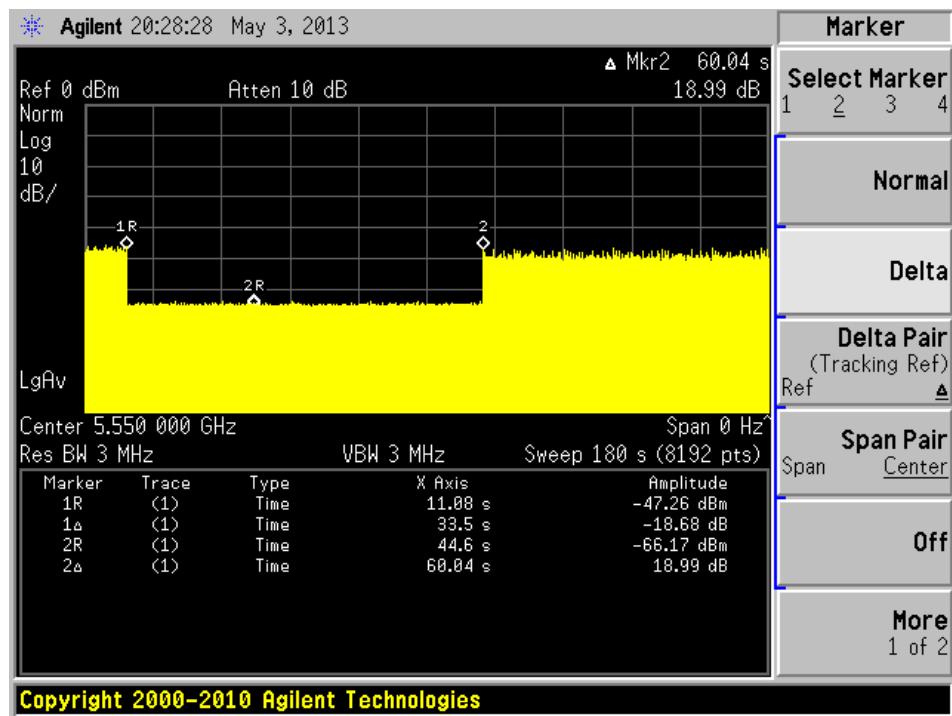
Note: The power-up cycle is 33.5 seconds.

Plot of Radar signal applied within 2 seconds of start of CAC
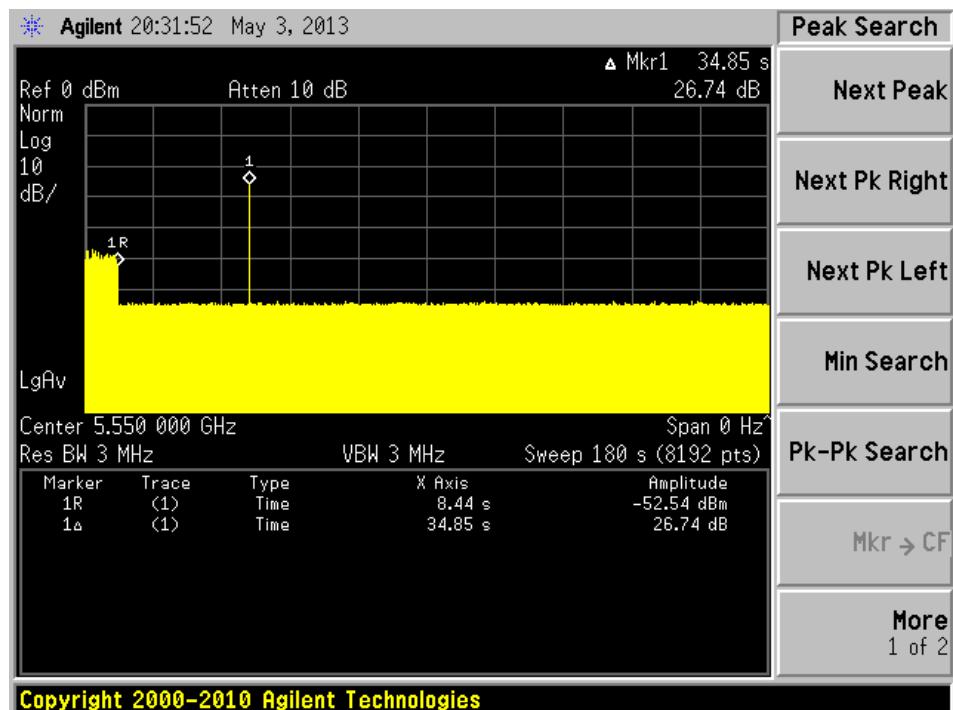
No transmissions found after radar signal applied.

Plot of Radar signal applied at the end of 2 seconds of CAC
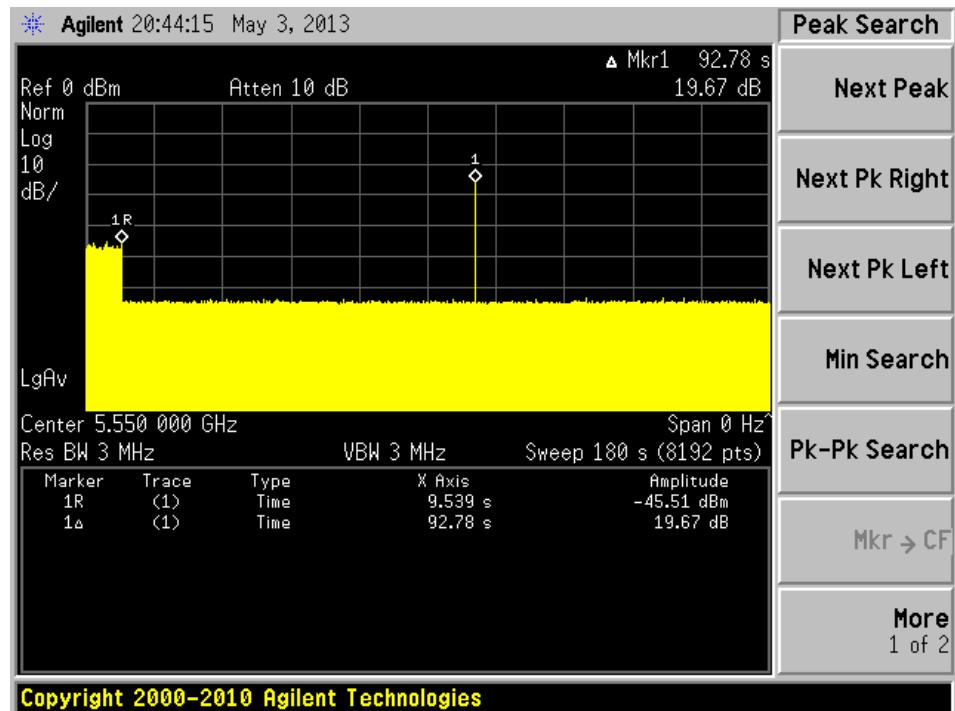
No transmissions found after radar signal applied.

7   Channel Move Time and Channel Closing Transmission Time

7.1   Test Procedure

Perform one of the type1 to type 4 short pulse radar waveform, BACL use type 2 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)

7.2   Test Results

Frequency (MHz)	Bandwidth (MHz)	Radar Type	Results
5280	5	Type2	Compliant
		Type 5	Compliant
5580	5	Type 2	Compliant
		Type 5	Compliant
5270	40	Type 2	Compliant
		Type 5	Compliant
5550	40	Type 2	Compliant
		Type 5	Compliant

Please refer to the following tables and plots.

5280 MHz Bandwidth 5 MHz
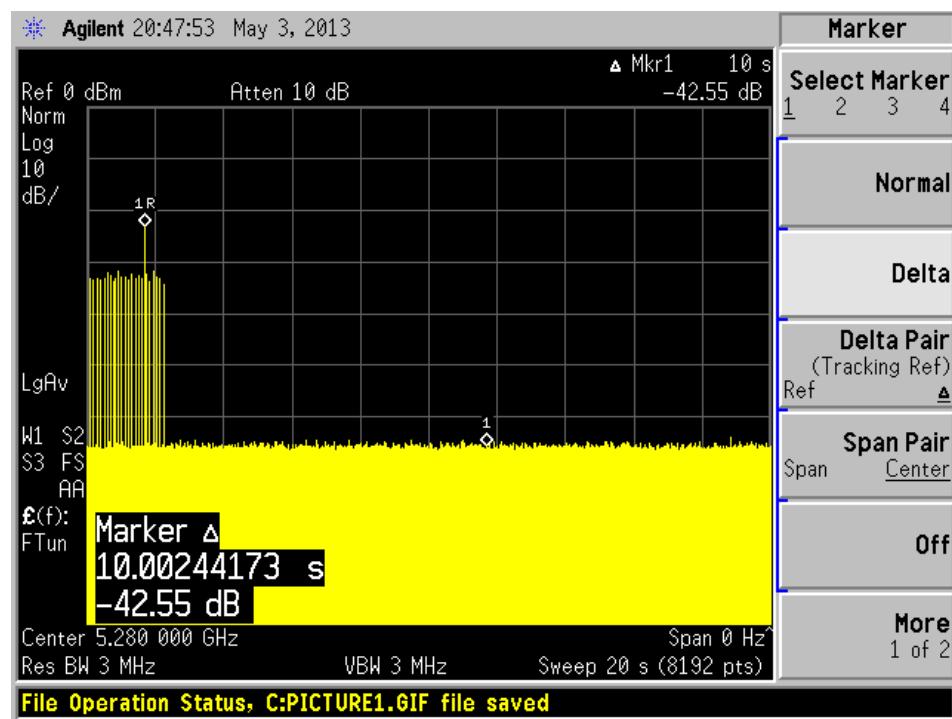
Type 2 radar channel move time result:

Type2 radar channel closing transmission time result:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
9.766	60	50.234
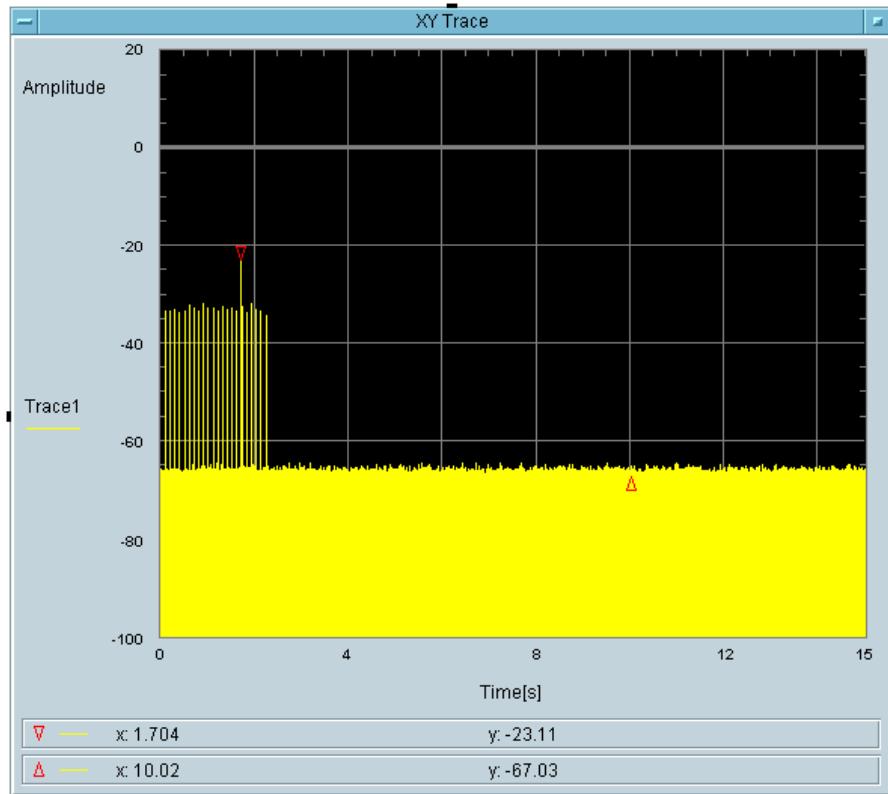
Total On Time [s]	Total On Time After Delay [s]
17.09m	9.766m

Type 5 radar channel move time result:

The traffic ceases at the end of the radar waveform, therefore it also ceases at 10 seconds after the end of the radar waveform.
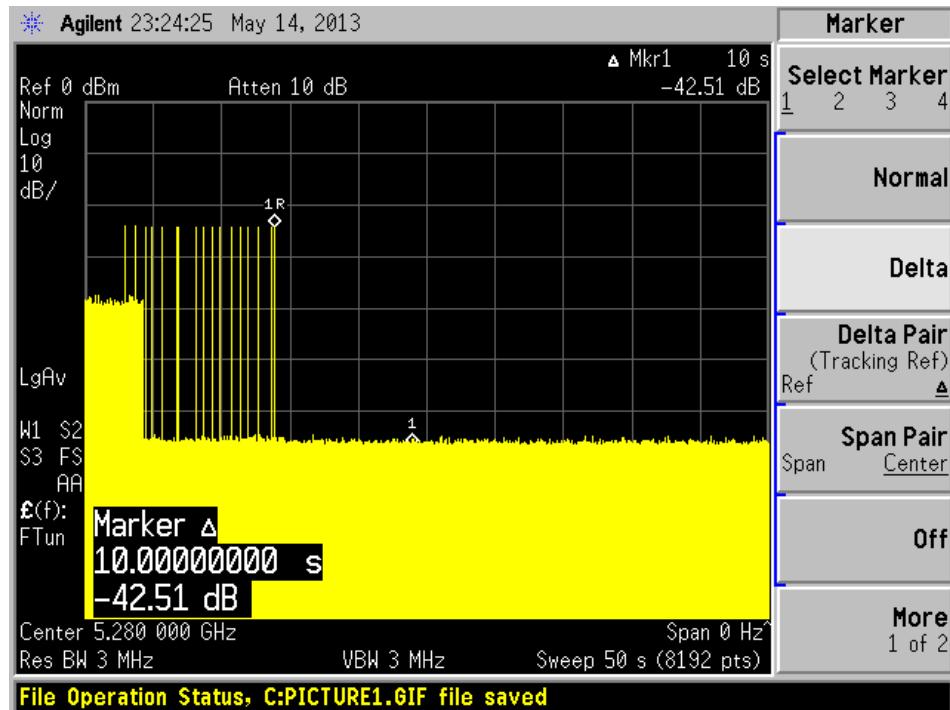
5580 MHz Bandwidth 5 MHz
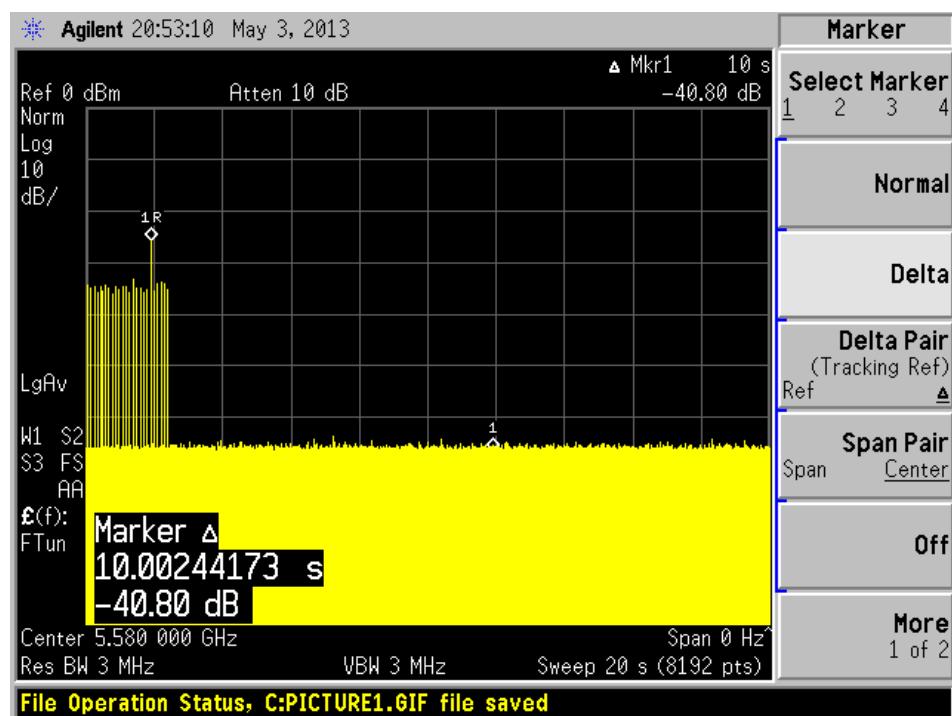
Type 2 radar channel move time result:

Type2 radar channel closing transmission time result:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
7.324	60	52.676
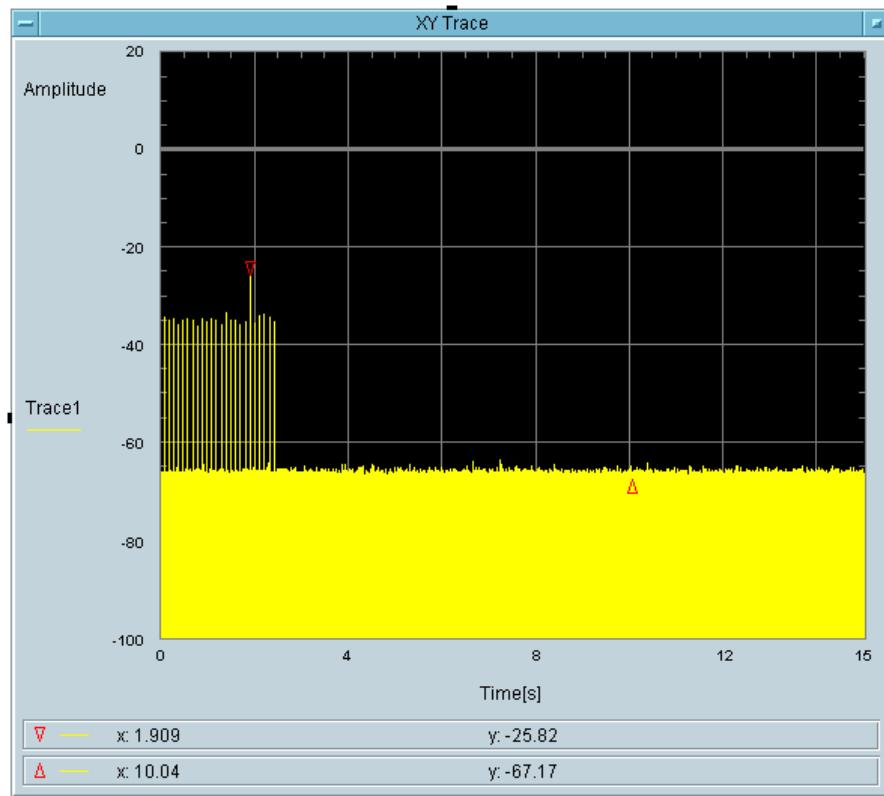
Total On Time [s]	Total On Time After Delay [s]
14.65m	7.324m

Type 5 radar channel move time result:

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

5270 MHz Bandwidth 40 MHz

Type 2 radar channel move time result:

Type2 radar channel closing transmission time result:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
7.324	60	52.676
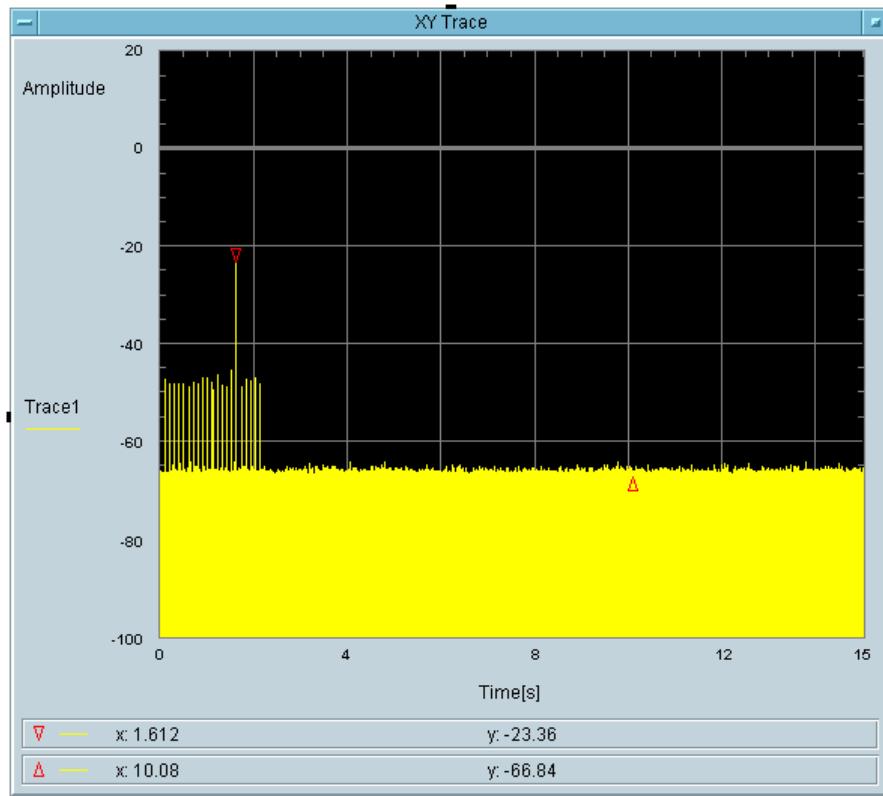
Type 5 radar channel move time result:

The traffic ceases at the end of the radar waveform, therefore it also ceases at 10 seconds after the end of the radar waveform.
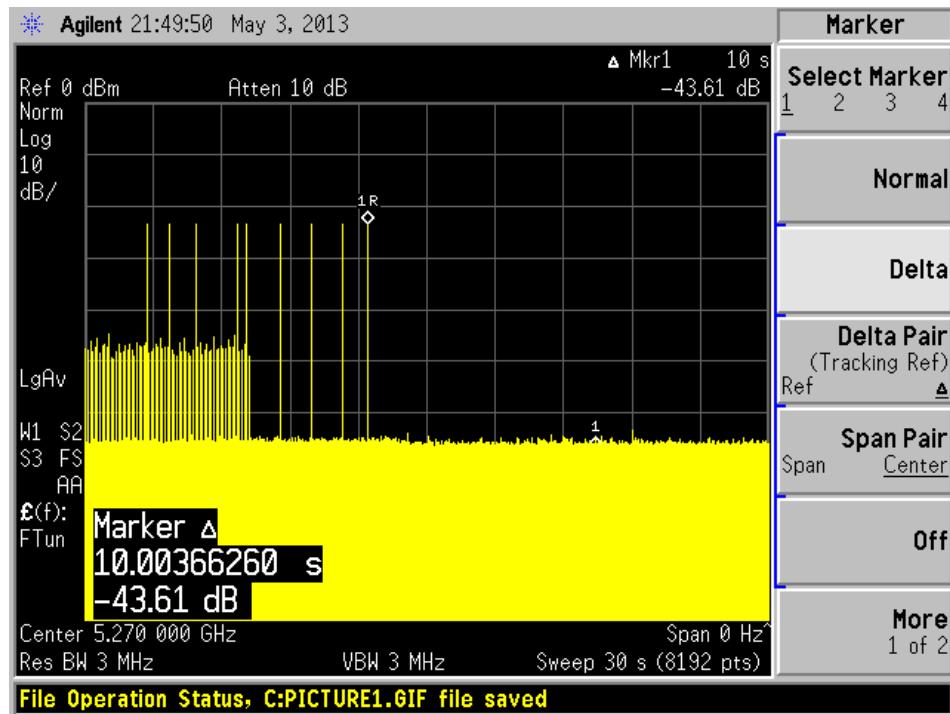
5550 MHz Bandwidth 40 MHz
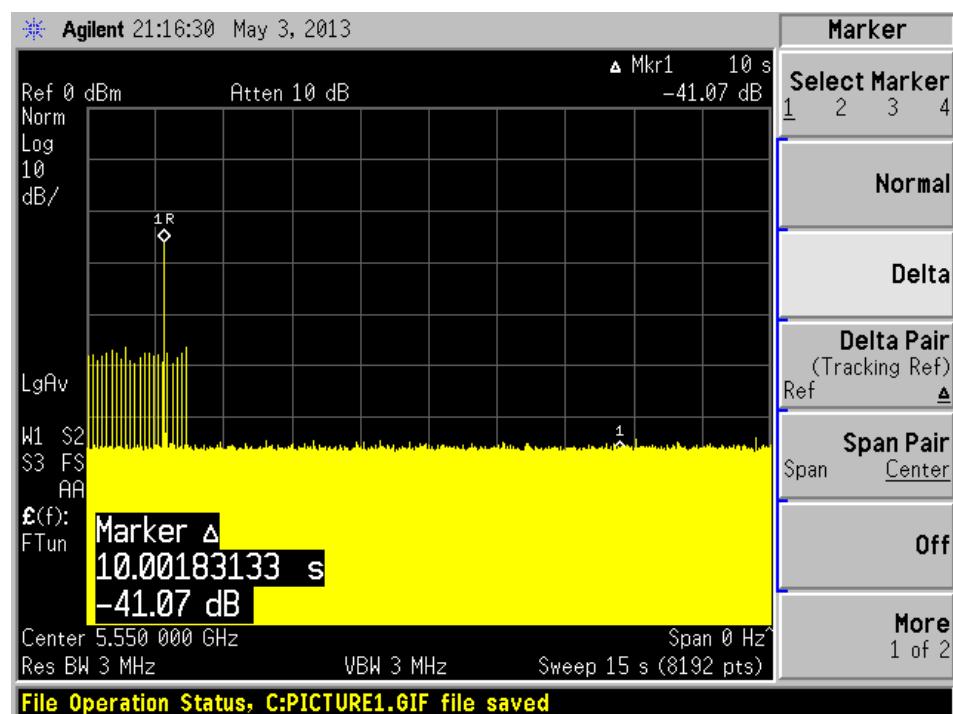
Type 2 radar channel move time result:

Type2 radar channel closing transmission time result:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
5.493	60	54.507
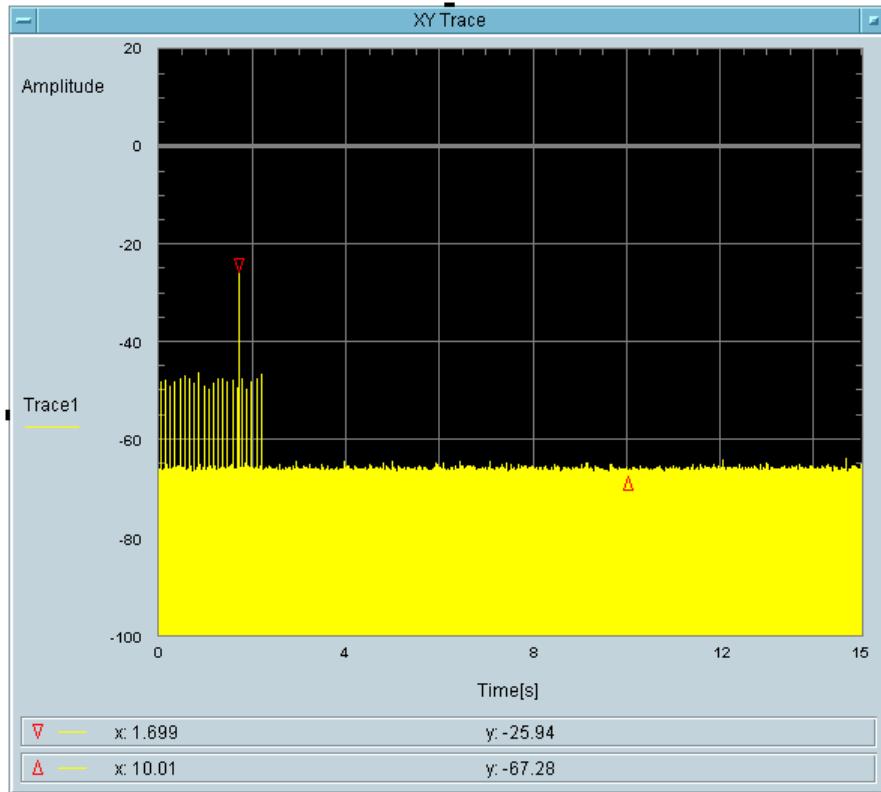
Type 5 radar channel move time result:

The traffic ceases at the end of the radar waveform, therefore it also ceases at 10 seconds after the end of the radar waveform.
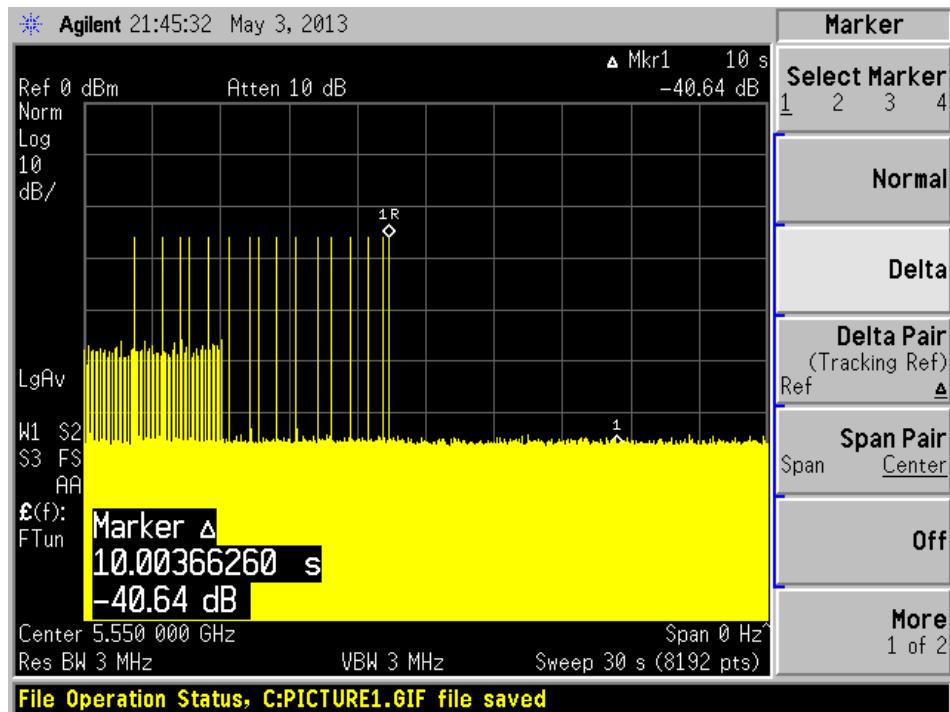
8   Non-Occupancy Period

8.1   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)

8.2   Test Results

Frequency (MHz)	Bandwidth (MHz)	Spectrum Analyzer Display
5280	5	No transmission within 30 minutes
5580	5	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 5 MHz
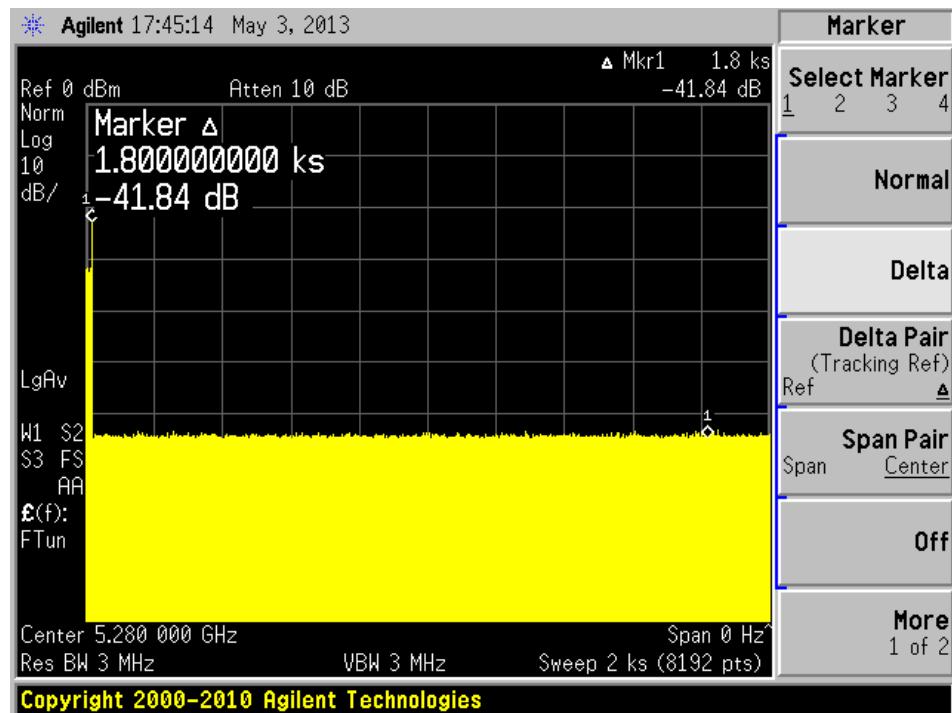
5580 MHz Bandwidth 5 MHz
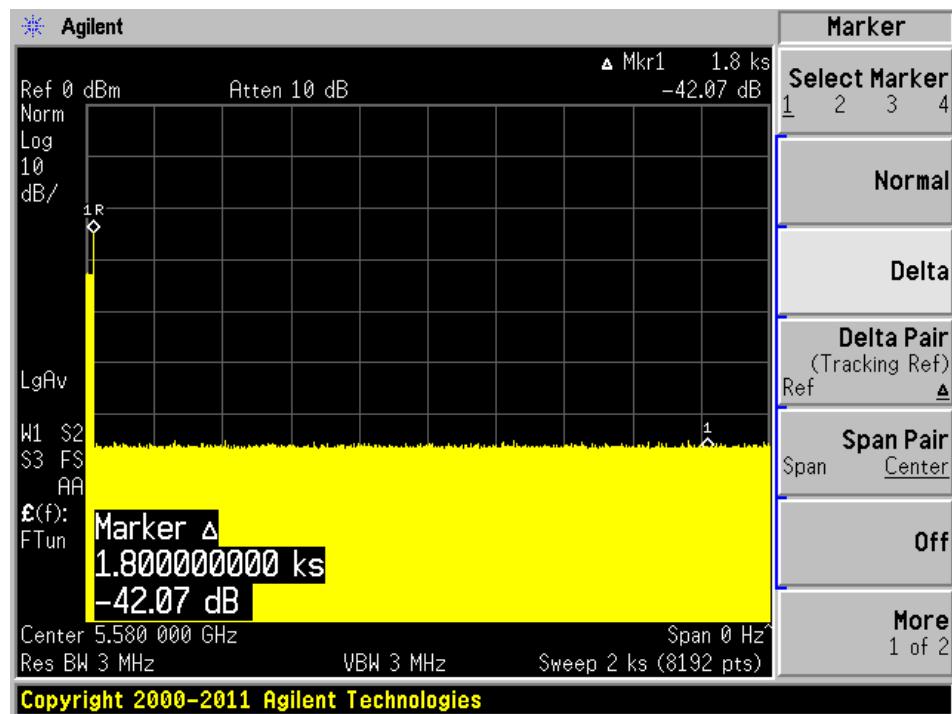
5270 MHz Bandwidth 40 MHz
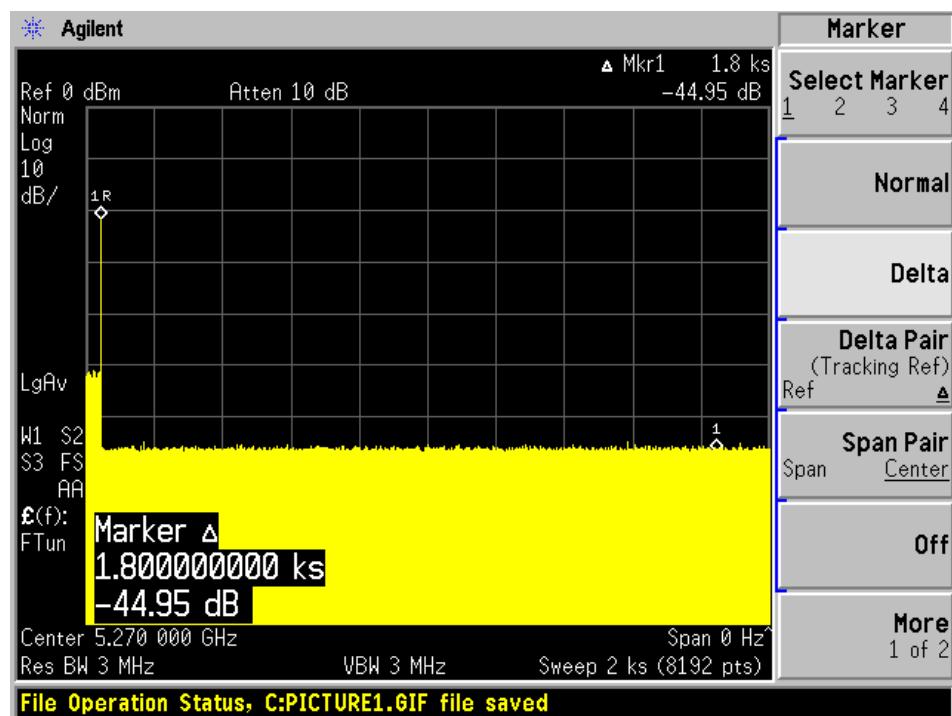
5550 MHz Bandwidth 40 MHz
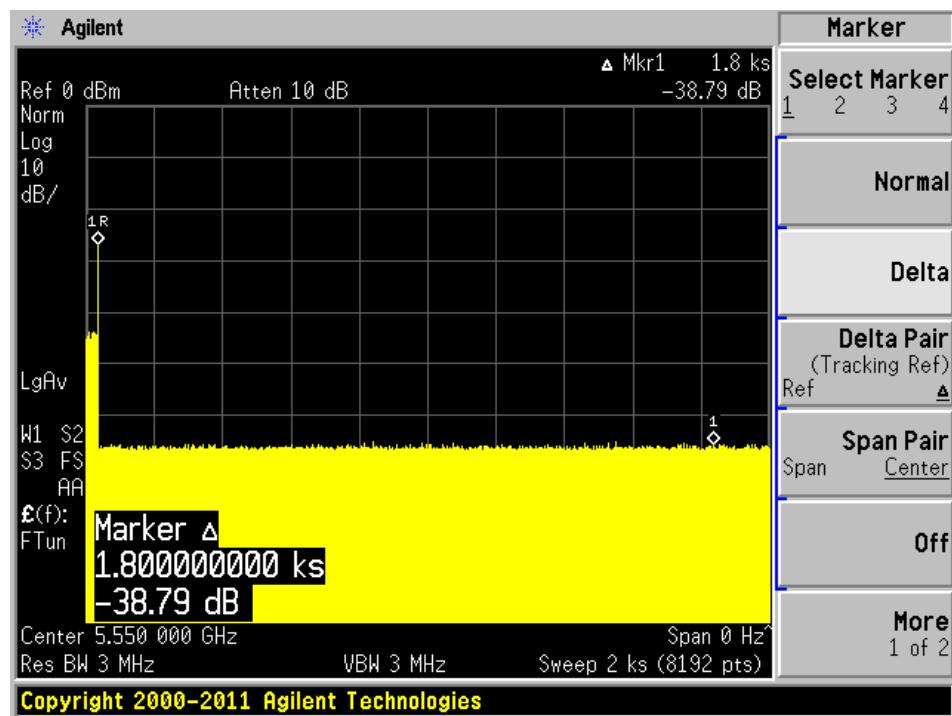
9   Radar Detection Bandwidth & Radar Detection Performance Check

9.1   Detection Bandwidth

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

Test Results

Frequency (MHz)	F_L (MHz)	F_H (MHz)	Detection Bandwidth (MHz)	Minimum Limit	Result
5280	5277	5284	7	80%	Compliance
5580	5577	5584	7	80%	Compliance
5270	5250	5290	40	80%	Compliance
5550	5530	5570	40	80%	Compliance

Please refer to the following tables and plots.

Results of Detection Bandwidth:

EUT Frequency = 5280 MHz										
DFS Detection Trials (1 = Detected, Blank = No Detected)										
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5276	0	0	0	0	0	0	0	0	0	0	0 %
5277(F_L)	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(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
5285	0	0	0	0	0	0	0	0	0	0	0 %
Detection Bandwidth = $F_H - F_L$ = 5284-5277 = 7 MHz										
EUT 99% BW = 4.1221 MHz; 4.1221 * 80% = 3.29768 MHz **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 (%)
5576	0	0	0	0	0	0	0	0	0	0	0 %
5577(F_L)	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(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
5585	0	0	0	0	0	0	0	0	0	0	0 %
Detection Bandwidth = $F_H - F_L$ = 5584-5577 = 7 MHz										
EUT 99% BW = 4.1279 MHz; 4.1279 * 80%= 3.30232 **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	0	0	0	0	0	0	0	0	0	0	0 %
5250(F_L)	1	1	1	1	1	1	1	1	1	1	100 %
5252	1	1	1	1	1	1	1	1	1	1	100 %
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(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
5291	0	0	0	0	0	0	0	0	0	0	0 %
Detection Bandwidth = $F_H - F_L$ = 5290-5250 = 40 MHz										
EUT 99% BW = 36.7056 ; 36.7056 * 80% = 29.36448 MHz							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	0	0	0	0	0	0	0	0	0	0	0 %
5530(F_L)	1	1	1	1	1	1	1	1	1	1	100 %
5531	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	90 %
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 %
5569	1	1	1	1	1	1	1	1	1	1	100 %
5570(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
5571	0	0	0	0	0	0	0	0	0	0	0 %
Detection Bandwidth = F_H – F_L = 5570 – 5530 = 40 MHz										
EUT 99% BW = 36.5091 MHz; 36.5091 * 80% = 29.25528 MHz **Result:** Pass										

9.2   Radar Detection Performance Check

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%

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

Test Results:

5280 MHz, 5 MHz Bandwidth

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

Please refer to the following statistical tables:

5280 MHz, 5 MHz Bandwidth

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	26	2.1	167	1
2	5280	28	1	164	1
3	5280	26	3.6	158	1
4	5280	24	2.9	196	1
5	5280	26	1.6	186	1
6	5280	25	2.5	230	1
7	5280	23	4.1	230	1
8	5280	29	1.5	192	1
9	5280	26	3	213	1
10	5280	23	3.8	190	1
11	5280	26	2.8	210	1
12	5280	27	3.9	166	1
13	5280	28	1.7	169	1
14	5280	28	4.6	201	1
15	5280	28	1.1	211	1
16	5280	28	2.6	216	1
17	5280	24	3.6	183	1
18	5280	28	2.2	209	1
19	5280	29	5	218	1
20	5280	28	3.1	203	1
21	5280	25	2.4	169	1
22	5280	28	3.3	162	1
23	5280	28	3.8	207	1
24	5280	28	2.7	203	1
25	5280	28	1	179	1
26	5280	27	1.2	154	1
27	5280	26	2.7	226	1
28	5280	24	1.5	190	1
29	5280	24	3	163	1
30	5280	23	1.6	205	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	17	7.9	478	1
2	5280	17	7.5	214	1
3	5280	16	9.2	456	1
4	5280	17	8.2	218	1
5	5280	16	6.8	332	1
6	5280	17	6.9	250	1
7	5280	18	7.7	279	1
8	5280	17	8.4	264	1
9	5280	17	9.6	433	1
10	5280	16	9.8	292	1
11	5280	18	7.9	289	1
12	5280	17	6.4	316	1
13	5280	17	8.1	368	1
14	5280	18	8.2	289	1
15	5280	17	6.9	330	1
16	5280	17	6.6	425	1
17	5280	17	6.1	280	1
18	5280	16	7.2	364	1
19	5280	18	9.3	426	1
20	5280	17	6	285	1
21	5280	17	8.8	277	1
22	5280	16	9.7	297	1
23	5280	17	6.1	403	1
24	5280	17	9.2	343	1
25	5280	16	8.4	213	1
26	5280	16	6.2	370	1
27	5280	16	6.6	374	1
28	5280	18	8.9	254	1
29	5280	17	8.2	485	1
30	5280	18	8.8	224	1
Detection Percentage: 100 % (>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	15	18.4	285	1
2	5280	15	16.3	220	1
3	5280	12	14.3	429	1
4	5280	15	12	228	1
5	5280	13	19	211	1
6	5280	12	11.6	462	1
7	5280	16	13.3	451	1
8	5280	15	13.3	273	1
9	5280	12	17.3	215	1
10	5280	16	11.8	423	1
11	5280	15	18.8	370	1
12	5280	13	11.3	493	1
13	5280	16	19.3	329	1
14	5280	13	14.8	277	1
15	5280	12	11	368	1
16	5280	14	14.2	226	1
17	5280	15	15.4	219	1
18	5280	12	13.3	225	1
19	5280	12	16	473	1
20	5280	16	19.4	215	1
21	5280	13	19.6	317	1
22	5280	14	18.3	213	1
23	5280	15	12.4	472	1
24	5280	12	12.4	214	1
25	5280	12	14.7	260	1
26	5280	14	14.5	246	1
27	5280	16	14.9	399	1
28	5280	15	19.8	481	1
29	5280	16	15.4	425	1
30	5280	13	16.4	366	1
Detection Percentage: 100 % (>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	1	18	74.3			0.259126	
1	2	19	60.3	1608		1.259362	
2	3	19	64.9	1725	1928	2.613073	
3	3	17	88.3	1588	1638	3.349493	
4	2	11	99.5	1153		4.377453	
5	3	11	54.7	1108	1252	5.303797	
6	1	6	78.2			6.066171	1
7	3	10	85.5	1543	1052	6.86604	
8	2	18	78.1	1510		7.629558	
9	3	13	65.2	1309	1953	8.611357	
10	3	19	94.6	1222	1183	9.281277	
11	1	15	83.5			11.059247	
12	2	18	57	1014		11.650168	

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	9	74.6	1357	1304	0.376182	
1	2	11	92.9	1616		0.703013	
2	2	11	78.1	1092		1.347062	
3	2	18	61.9	1590		2.190448	
4	1	18	59.2			2.947302	
5	3	15	76.8	1740	1833	3.77187	
6	3	11	98.5	1668	1706	4.054053	
7	2	20	78.4	1899		4.903963	
8	1	10	53.3			5.771096	1
9	2	10	93.7	1028		6.36326	
10	3	16	87.8	1479	1380	6.82374	
11	2	15	82	1615		7.624503	
12	2	10	77.4	1549		8.412998	
13	2	13	66.1	1087		9.259042	
14	1	17	72.1			9.617048	
15	1	17	63.7			10.536381	
16	2	17	79.2	2000		10.677633	
17	1	6	90.3			11.724845	

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	53.3	1183		0.418254	
1	3	12	91.5	1708	1070	1.641237	
2	2	13	80.1	1522		2.386981	
3	3	11	69	1233	1199	3.101174	
4	3	16	77.9	1998	1192	4.339919	
5	1	20	81.3			5.444372	
6	3	6	86.7	1835	1341	5.654873	1
7	2	12	53.1	1104		6.999349	
8	3	5	66	1802	1721	7.957259	
9	2	10	84.2	1046		9.100746	
10	2	9	92.8	1023		9.357857	
11	2	15	99.7	1072		10.492339	
12	3	11	67.8	1861	1269	11.381471	

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	1	14	85.7			0.337876	
1	1	9	88.4			0.886247	
2	3	12	97.6	1442	1270	1.567403	
3	1	18	78.1			2.289473	
4	1	15	58.6			2.712281	
5	1	10	97.3			3.762752	
6	2	14	95	1988		4.093171	
7	1	17	78.7			4.952567	
8	1	10	57			5.144209	
9	2	10	99.7	1088		5.779503	1
10	3	9	81.2	1041	1702	6.917611	
11	2	7	55.3	1682		7.498168	
12	1	10	84.3			8.010087	
13	2	12	90	1691		8.686209	
14	2	7	79.9	1474		9.432716	
15	2	19	89.9	1139		9.625602	
16	2	10	87	1793		10.382031	
17	3	7	81.2	1289	1786	10.936335	
18	2	18	66.2	1186		11.801756	

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	17	84.4	1060		0.441725	
1	3	11	69.8	1765	1212	2.454735	
2	2	7	94.8	1423		3.563227	
3	2	10	89.2	1210		4.711271	
4	3	9	57.3	1510	1949	5.735988	1
5	3	13	97.1	1156	1243	7.944855	
6	2	14	87.5	1101		8.044856	
7	1	7	62.8			9.971845	
8	1	12	58.6			11.019557	

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	10	91.1	1526		0.4123	
1	2	9	57	1057		1.026803	
2	2	6	59.7	1252		1.659026	
3	3	19	70.6	1166	1870	2.930405	
4	1	13	80.6			3.022238	
5	2	13	89.5	1857		3.861123	
6	2	8	91.8	1667		5.17348	
7	2	16	69.5	1058		5.760911	
8	2	17	64.6	1679		6.119092	
9	2	9	57.1	1583		7.367702	1
10	2	20	53.5	1254		7.855978	
11	2	16	68.3	1706		8.523054	
12	2	15	66.6	1713		9.400694	
13	1	7	57.3			10.069055	
14	2	11	66.5	1430		10.920594	
15	1	10	89.8			11.450493	

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	16	97.6	1082		0.59391	
1	2	11	99.6	1131		1.58078	
2	2	10	91.7	1417		3.543437	
3	1	18	97.9			4.384778	
4	1	8	69.6			5.707275	1
5	3	16	92.9	1577	1660	7.225401	
6	2	18	52.9	1257		8.196223	
7	3	18	77.9	1345	1932	10.234062	
8	1	9	51.8			10.957555	

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	1	13	94.1			0.389061	
1	3	8	83.6	1955	1032	1.146144	
2	1	8	73.5			1.444023	
3	3	10	62.2	1773	1505	2.450094	
4	1	10	79.6			3.516388	
5	3	8	75.1	1473	1112	3.987248	
6	2	15	95.7	1057		4.743088	
7	2	8	62.4	1774		5.205785	
8	1	7	83.7			6.273109	1
9	2	7	99.7	1866		6.540194	
10	3	10	84.1	1506	1075	7.484817	
11	3	15	83.7	1850	1741	8.222734	
12	2	10	75.5	1087		9.0201	
13	2	20	64.6	1986		9.817408	
14	2	12	54.1	1233		10.524868	
15	2	13	88	1721		10.66338	
16	2	11	58.2	1922		11.954505	

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	12	80.1	1942		0.369827	
1	3	9	87.8	1430	1438	1.365269	
2	2	16	79.9	1333		2.519007	
3	2	14	61.7	1781		3.200736	
4	1	17	78			4.591051	
5	2	8	81	1826		5.873202	1
6	3	10	95.2	1328	1954	6.587978	
7	1	15	68			7.157383	
8	1	18	72.7			8.798752	
9	2	16	67.4	1699		9.704151	
10	3	12	50	1287	1985	10.037305	
11	2	14	98.9	1650		11.121529	

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	1	16	92.7			0.032957	
1	3	5	55.8	1889	1905	1.703936	
2	3	6	58.5	1409	1803	2.106133	
3	1	17	96.6			2.783897	
4	3	10	62.7	1396	1528	3.739342	
5	1	19	55.2			4.445521	
6	2	18	71.6	1762		5.963036	
7	1	7	87.6			6.77073	1
8	2	19	72.8	1462		7.436032	
9	2	13	77.8	1717		8.080268	
10	2	18	82	1132		8.80701	
11	2	19	84.6	1630		9.602961	
12	3	5	89.9	1322	1375	10.960552	
13	3	12	79.2	1744	1121	11.835185	

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	3	18	64.4	1895	1342	0.524035	
1	2	16	57	1917		2.256867	
2	1	10	52.6			2.664756	
3	1	6	91.2			3.942174	
4	1	7	77.5			5.38537	
5	3	20	95.1	1634	1543	6.5773	1
6	3	8	63.6	1430	1209	7.612756	
7	3	17	92.9	1253	1884	8.668595	
8	2	8	99.5	1918		10.571675	
9	1	12	55.5			11.436699	

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	11	90.2	1852		0.309731	
1	3	5	86.9	1735	1415	2.141434	
2	2	16	73.8	1923		3.979154	
3	2	9	60.3	1023		5.221721	
4	2	9	79.7	1517		6.622625	1
5	1	14	97.5			7.455506	
6	2	15	82.8	1665		8.53862	
7	1	6	50.8			10.047596	
8	2	10	91	1151		11.385112	

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	59.9	1463		1.205344	
1	1	9	58.9			2.461522	
2	1	16	61.3			3.584963	
3	2	11	67.2	1820		4.43921	
4	2	6	73.2	1617		6.6159	1
5	2	12	73.4	1453		7.784732	
6	1	5	80.3			9.184679	
7	1	11	86.2			10.537489	
8	1	20	91.4			11.838185	

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	1	12	53.3			0.133106	
1	1	18	58.6			1.123979	
2	1	16	91.8			1.824102	
3	2	14	78.5	1989		2.74549	
4	2	8	74	1010		3.343662	
5	2	18	96.8	1105		4.170318	
6	2	15	81.9	1588		4.236179	
7	3	6	87.4	1892	1282	5.582748	1
8	1	7	68			6.081519	
9	2	9	83.3	1492		6.829478	
10	2	9	66.4	1377		7.171952	
11	3	19	71.1	1732	1045	8.283623	
12	3	7	89.8	1064	1556	9.048397	
13	1	18	51.3			9.539853	

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	16	62.5	1828		0.46315	
1	3	13	75.9	1622	1723	1.498256	
2	2	16	68.7	1556		1.818484	
3	2	11	80.7	1867		3.351235	
4	2	15	76.2	1621		4.144386	
5	3	10	78.5	1026	1596	4.624824	
6	2	7	91	1971		5.239872	1
7	2	11	73.3	1290		6.266438	
8	2	6	64	1545		7.568509	
9	2	12	95.2	1183		8.002209	
10	2	6	85.7	1339		8.917196	
11	2	15	97.1	1473		10.255193	
12	2	8	89.9	1963		10.307795	
13	2	20	67.9	1225		11.595885	

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	12	96.7	1869	1133	0.6242	
1	2	9	78.5	1638		1.620996	
2	2	13	58.1	1235		1.7152	
3	2	18	63.9	1458		3.126178	
4	2	6	53.8	1518		3.897277	
5	2	9	73.9	1300		4.378644	
6	2	11	66.4	1174		5.681281	
7	2	14	55.6	1382		6.845951	1
8	2	7	92.8	1435		7.123032	
9	2	18	86.6	1017		7.913542	
10	1	16	67.4			9.141825	
11	2	18	80.2	1791		9.802963	
12	2	10	92.7	1793		10.429584	
13	3	6	51.1	1622	1493	11.774396	

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	19	68.9	1210		0.724426	
1	2	18	77.6	1351		1.373958	
2	1	7	89.7			2.01413	
3	2	14	88.9	1448		2.284699	
4	2	5	93.6	1993		3.436473	
5	1	6	55.8			3.9529	
6	2	8	91.4	1299		4.667847	
7	3	14	83.6	1044	1081	5.459286	1
8	1	6	73.5			6.588007	
9	3	12	94.3	1968	1067	7.135289	
10	3	12	62.5	1323	1334	8.2002	
11	1	16	57.5			8.621962	
12	3	18	84.1	1901	1626	9.25157	
13	2	8	81.4	1815		10.075731	
14	3	20	80	1976	1803	10.637648	
15	2	13	87.4	1197		11.764368	

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	1	13	73.1			0.175616	
1	3	8	70.5	1333	1277	1.375583	
2	2	13	96.7	1413		2.815971	
3	1	14	61.1			3.612823	
4	2	20	52.6	1982		5.05323	
5	1	19	93.4			5.586899	1
6	1	9	53			7.260625	
7	2	13	63.6	1132		7.643638	
8	2	19	91.2	1174		9.206495	
9	1	6	58.8			10.199064	
10	2	7	73.5	1120		11.932129	

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	1	12	92.9			0.59676	
1	2	19	70.3	1066		1.28204	
2	3	8	61.5	1256	1325	1.703306	
3	2	5	86.5	1166		2.898582	
4	3	17	87.1	1403	1879	3.26947	
5	2	5	64.3	1190		4.154941	
6	1	8	97.5			4.727978	
7	2	13	75.1	1417		5.340074	1
8	1	18	68.6			6.393958	
9	1	19	82.4			7.442766	
10	2	14	77.1	1363		7.576745	
11	3	18	72.2	1529	1794	8.860534	
12	3	16	66.3	1748	1918	9.390007	
13	2	13	68.7	1074		10.1438	
14	1	11	76.2			11.116945	
15	3	8	77.5	1195	1508	11.718016	

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	19	84.3			0.031725	
1	2	18	85.3	1952		0.977996	
2	2	19	55.6	1422		1.92942	
3	2	9	63.4	1234		2.34699	
4	3	14	55.9	1064	1059	3.718927	
5	1	6	84.8			4.234562	
6	2	12	92.9	1971		4.596039	
7	1	7	72.8			5.907934	
8	3	20	50.1	1389	1862	6.367144	1
9	1	9	50.2			6.76168	
10	3	11	61	1111	1313	7.889371	
11	1	12	67.2			8.874349	
12	2	17	79.6	1469		9.508268	
13	3	14	72.3	1348	1366	9.904953	
14	2	18	53.8	1737		11.119753	
15	2	16	54.7	1235		11.811758	

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	18	53.8	1539		0.12772	
1	2	9	83.2	1603		0.798702	
2	1	13	94.3			2.097498	
3	2	6	97	1746		2.857452	
4	2	14	86.1	1515		3.108063	
5	2	11	87.8	1199		4.067627	
6	1	10	75.4			4.866287	
7	2	8	72.9	1177		5.498774	
8	2	11	63.9	1726		6.689158	1
9	3	10	60.1	1428	1915	6.797131	
10	3	8	80.1	1643	1131	7.852137	
11	3	6	92.8	1478	1400	8.931429	
12	3	9	55.9	1821	1061	9.388533	
13	2	12	61.3	1142		10.325665	
14	3	13	83.1	1204	1556	10.817396	
15	3	12	93.3	1899	1847	11.361071	

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	1	19	84.8			0.06406	
1	2	18	71	1095		1.08354	
2	1	6	94.5			1.441117	
3	2	8	67	1676		2.114407	
4	2	16	96.8	1787		2.842147	
5	2	6	96.7	1725		3.630142	
6	2	17	92.3	1728		4.555879	
7	2	12	64.1	1358		5.010091	
8	2	15	87.8	1214		5.668256	1
9	3	11	81.3	1186	1857	6.165311	
10	1	7	97.1			7.213885	
11	2	18	63.6	1689		7.764698	
12	1	12	53.2			8.560145	
13	2	6	97.1	1395		8.87126	
14	1	15	97.4			9.855585	
15	3	5	87.7	1884	1140	10.574946	

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	1	5	57.3			0.454421	
1	3	17	91.6	1444	1852	0.931163	
2	1	20	67			2.022941	
3	3	11	82.8	1849	1109	3.006606	
4	2	18	88.4	1570		4.02771	
5	2	11	78.8	1090		5.16518	
6	3	12	54.3	1287	1579	6.33851	1
7	3	9	61.8	1687	1942	6.52222	
8	3	8	68.5	1954	1576	7.471649	
9	2	9	87.9	1486		9.176504	
10	2	13	60.7	1839		9.883502	
11	3	13	68.8	1768	1973	10.343159	
12	1	17	53.8			11.975571	

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	12	84.2	1446		0.052267	
1	1	19	77.8			1.646197	
2	1	17	78.1			2.330732	
3	2	6	54	1923		3.305725	
4	2	16	65.9	1473		4.153841	
5	2	12	82.5	1589		5.360306	
6	3	11	80	1753	1793	5.928396	1
7	1	13	79.3			7.302827	
8	1	16	84			7.859945	
9	3	17	84.2	1424	1478	8.757516	
10	1	17	94			9.521731	
11	3	15	91.9	1166	1331	11.059288	
12	3	12	99	1706	1261	11.174631	

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	3	18	68.3	1291	1899	0.552848	
1	2	5	64.5	1297		1.007169	
2	3	17	97.9	1718	1304	1.470147	
3	2	9	85.3	1421		2.364696	
4	2	9	70.8	1162		2.689776	
5	2	14	99.7	1132		3.538108	
6	1	15	92			4.120195	
7	3	18	50.3	1193	1769	4.538268	
8	1	20	95.9			5.442665	
9	1	20	96.6			6.129421	1
10	2	15	83.4	1709		6.446814	
11	3	10	87.2	1065	1262	7.048718	
12	1	15	81.7			7.594484	
13	1	9	59.8			8.392593	
14	2	9	81.2	1839		8.955293	
15	2	16	54.6	1136		10.009361	
16	2	12	82	1398		10.369079	
17	2	11	53.9	1210		10.81679	
18	1	12	94.6			11.676117	

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	67.9	1495	1114	0.781359	
1	3	8	67.3	1461	1331	2.074256	
2	2	11	76.8	1296		2.980292	
3	2	8	65	1744		3.794951	
4	2	9	57.4	1490		5.057581	
5	1	6	74.3			6.327906	1
6	3	12	76.7	1721	1578	6.636571	
7	1	10	70.6			8.417474	
8	1	6	63.6			9.497276	
9	2	17	54.7	1006		9.959729	
10	2	17	64.1	1568		11.715243	

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	16	83.1	1441		0.468692	
1	1	14	87.3			0.938662	
2	2	18	52.6	1006		1.538772	
3	2	9	61.9	1267		1.998314	
4	2	9	68.4	1779		2.64784	
5	3	19	94.8	1603	1092	3.410663	
6	2	12	95.1	1123		4.049808	
7	2	8	58.3	1198		4.820672	
8	2	9	54.5	1198		5.450575	
9	2	20	76.8	1920		6.20126	1
10	3	12	67.2	1040	1800	6.463319	
11	2	8	55.9	1730		7.35806	
12	1	12	91.5			7.931513	
13	1	16	91.7			8.330164	
14	2	14	94.9	1896		9.168824	
15	2	15	51.6	1077		9.524264	
16	2	14	97.8	1293		10.72887	
17	3	18	82.4	1739	1414	11.326607	
18	2	16	76.3	1859		11.987635	

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	98	1419		0.242871	
1	2	12	68.1	1002		0.971562	
2	1	16	59.6			2.026652	
3	1	15	52.3			2.825733	
4	2	15	84.2	1849		3.272193	1
5	1	17	50.3			4.186404	
6	2	6	68.5	1666		5.217791	
7	1	18	53.2			6.175064	
8	2	8	70.5	1041		6.799298	
9	2	14	69.5	1885		7.800772	

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	9	93.9			0.301304	
1	2	9	66	1427		1.393409	
2	2	19	78.9	1793		1.69704	
3	2	8	66.1	1771		2.413961	
4	3	9	91.9	1269	1218	3.079029	
5	3	7	86.7	1463	1608	4.360277	
6	3	18	69.2	1277	1516	5.160636	
7	2	5	72.6	1218		5.26893	
8	2	19	69.6	1481		6.119196	1
9	2	12	89.1	1005		7.135619	
10	2	16	60.9	1843		7.985343	
11	3	14	69.4	1772	1716	8.853342	
12	1	6	97.5			9.609363	
13	1	5	52.9			10.142472	
14	3	15	53.8	1335	1671	10.838357	
15	1	19	66.9			11.68788	

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	20	63.1	1546		0.692684	
1	2	10	50.9	1245		1.550863	
2	3	16	51.8	1958	1178	3.923295	
3	1	7	74			4.118673	
4	1	8	95.1			6.075259	1
5	3	13	57	1660	1620	6.854014	
6	3	15	88.6	1241	1927	9.082695	
7	2	12	51.9	1984		9.530968	
8	3	6	70	1428	1250	11.566125	

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	5529.0, 5401.0, 5569.0, 5456.0, 5431.0, 5592.0, 5544.0, 5519.0, 5626.0, 5466.0, 5548.0, 5514.0, 5722.0, 5298.0, 5428.0, 5331.0, 5360.0, 5480.0, 5473.0, 5624.0, 5353.0, 5696.0, 5596.0, 5720.0, 5254.0, 5321.0, 5591.0, 5328.0, 5526.0, 5399.0, 5387.0, 5661.0, 5398.0, 5673.0, 5545.0, 5657.0, 5453.0, 5410.0, 5524.0, 5556.0, 5280.0, 5336.0, 5287.0, 5645.0, 5558.0, 5567.0, 5289.0, 5699.0, 5477.0, 5515.0, 5711.0, 5279.0, 5676.0, 5509.0, 5432.0, 5684.0, 5689.0, 5625.0, 5433.0, 5438.0, 5261.0, 5299.0, 5691.0, 5403.0, 5660.0, 5386.0, 5698.0, 5256.0, 5693.0, 5573.0, 5292.0, 5533.0, 5489.0, 5717.0, 5555.0, 5683.0, 5390.0, 5490.0, 5627.0, 5406.0, 5525.0, 5642.0, 5504.0, 5423.0, 5400.0, 5528.0, 5411.0, 5344.0, 5538.0, 5420.0, 5339.0, 5429.0, 5643.0, 5654.0, 5276.0, 5672.0, 5305.0, 5417.0, 5505.0, 5650.0 (number of hits: 6)
2	5280	9	1	333	1	5629.0, 5596.0, 5667.0, 5625.0, 5379.0, 5257.0, 5575.0, 5355.0, 5520.0, 5687.0, 5619.0, 5417.0, 5666.0, 5395.0, 5422.0, 5537.0, 5670.0, 5274.0, 5681.0, 5349.0, 5586.0, 5308.0, 5389.0, 5309.0, 5620.0, 5651.0, 5486.0, 5269.0, 5550.0, 5371.0, 5439.0, 5724.0, 5288.0, 5577.0, 5545.0, 5683.0, 5390.0, 5621.0, 5432.0, 5600.0, 5261.0, 5400.0, 5267.0, 5406.0, 5315.0, 5347.0, 5713.0, 5524.0, 5444.0, 5608.0, 5583.0, 5546.0, 5447.0, 5704.0, 5644.0, 5450.0, 5548.0, 5693.0, 5503.0, 5547.0, 5435.0, 5382.0, 5716.0, 5369.0, 5720.0, 5686.0, 5423.0, 5275.0, 5581.0, 5562.0, 5607.0, 5452.0, 5678.0, 5264.0, 5494.0, 5410.0, 5589.0, 5717.0, 5480.0, 5580.0, 5334.0, 5372.0, 5289.0, 5599.0, 5407.0, 5259.0, 5572.0, 5380.0, 5533.0, 5654.0, 5645.0, 5522.0, 5539.0, 5684.0, 5543.0, 5700.0, 5251.0, 5647.0, 5426.0, 5673.0 (number of hits: 4)
3	5280	9	1	333	1	5584.0, 5507.0, 5496.0, 5696.0, 5466.0, 5567.0, 5601.0, 5448.0, 5323.0, 5709.0, 5631.0, 5458.0, 5471.0, 5433.0, 5328.0, 5640.0, 5278.0, 5571.0, 5716.0, 5298.0, 5261.0, 5518.0, 5557.0, 5633.0, 5446.0, 5402.0, 5401.0, 5575.0, 5394.0, 5487.0, 5463.0, 5286.0, 5322.0, 5497.0, 5461.0, 5285.0, 5420.0, 5695.0, 5361.0, 5430.0, 5547.0, 5580.0, 5550.0, 5715.0, 5451.0, 5668.0, 5318.0, 5392.0, 5675.0, 5609.0, 5536.0, 5327.0, 5393.0, 5342.0, 5661.0, 5687.0, 5399.0, 5429.0, 5379.0, 5257.0,

						5618.0, 5544.0, 5329.0, 5294.0, 5423.0, 5389.0, 5664.0, 5355.0, 5479.0, 5515.0, 5383.0, 5486.0, 5478.0, 5552.0, 5622.0, 5688.0, 5673.0, 5670.0, 5646.0, 5425.0, 5594.0, 5558.0, 5582.0, 5627.0, 5658.0, 5624.0, 5352.0, 5340.0, 5534.0, 5297.0, 5410.0, 5301.0, 5723.0, 5444.0, 5271.0, 5303.0, 5492.0, 5358.0, 5649.0, 5538.0 (number of hits: 7)
4	5280	9	1	333	1	5649.0, 5516.0, 5441.0, 5501.0, 5675.0, 5499.0, 5312.0, 5473.0, 5696.0, 5536.0, 5426.0, 5526.0, 5446.0, 5619.0, 5414.0, 5621.0, 5681.0, 5660.0, 5461.0, 5383.0, 5709.0, 5584.0, 5712.0, 5524.0, 5262.0, 5401.0, 5302.0, 5438.0, 5435.0, 5657.0, 5704.0, 5573.0, 5500.0, 5508.0, 5313.0, 5429.0, 5642.0, 5412.0, 5332.0, 5622.0, 5285.0, 5484.0, 5386.0, 5392.0, 5485.0, 5607.0, 5252.0, 5631.0, 5686.0, 5300.0, 5532.0, 5643.0, 5378.0, 5713.0, 5628.0, 5593.0, 5279.0, 5596.0, 5395.0, 5462.0, 5265.0, 5606.0, 5522.0, 5633.0, 5719.0, 5308.0, 5297.0, 5315.0, 5562.0, 5341.0, 5541.0, 5598.0, 5289.0, 5693.0, 5582.0, 5340.0, 5354.0, 5318.0, 5259.0, 5447.0, 5321.0, 5504.0, 5307.0, 5692.0, 5291.0, 5413.0, 5363.0, 5336.0, 5603.0, 5277.0, 5439.0, 5602.0, 5457.0, 5347.0, 5303.0, 5577.0, 5507.0, 5612.0, 5453.0, 5710.0 (number of hits: 11)
5	5280	9	1	333	1	5304.0, 5403.0, 5546.0, 5353.0, 5707.0, 5668.0, 5417.0, 5459.0, 5313.0, 5626.0, 5352.0, 5556.0, 5254.0, 5561.0, 5339.0, 5552.0, 5398.0, 5656.0, 5594.0, 5317.0, 5259.0, 5382.0, 5468.0, 5262.0, 5453.0, 5724.0, 5471.0, 5399.0, 5488.0, 5343.0, 5584.0, 5406.0, 5647.0, 5675.0, 5349.0, 5504.0, 5268.0, 5383.0, 5370.0, 5388.0, 5701.0, 5374.0, 5518.0, 5290.0, 5586.0, 5678.0, 5637.0, 5369.0, 5269.0, 5312.0, 5505.0, 5525.0, 5579.0, 5293.0, 5329.0, 5717.0, 5689.0, 5405.0, 5523.0, 5648.0, 5710.0, 5509.0, 5315.0, 5294.0, 5609.0, 5322.0, 5438.0, 5485.0, 5319.0, 5624.0, 5526.0, 5665.0, 5458.0, 5697.0, 5387.0, 5585.0, 5511.0, 5273.0, 5467.0, 5345.0, 5669.0, 5625.0, 5421.0, 5256.0, 5529.0, 5265.0, 5448.0, 5660.0, 5340.0, 5464.0, 5693.0, 5305.0, 5466.0, 5410.0, 5704.0, 5291.0, 5715.0, 5361.0, 5514.0, 5255.0 (number of hits: 8)
6	5280	9	1	333	1	5256.0, 5367.0, 5692.0, 5485.0, 5627.0, 5342.0, 5724.0, 5384.0, 5383.0, 5393.0, 5317.0, 5400.0, 5525.0, 5357.0, 5694.0, 5403.0, 5663.0, 5297.0, 5702.0, 5395.0, 5560.0, 5666.0, 5653.0, 5484.0, 5619.0, 5676.0, 5343.0, 5601.0, 5309.0, 5359.0, 5372.0, 5285.0, 5303.0, 5366.0, 5541.0, 5650.0, 5614.0, 5685.0, 5271.0, 5675.0, 5542.0, 5449.0, 5689.0, 5492.0, 5711.0,

						5616.0, 5589.0, 5705.0, 5529.0, 5625.0, 5397.0, 5375.0, 5549.0, 5577.0, 5412.0, 5364.0, 5554.0, 5283.0, 5699.0, 5581.0, 5267.0, 5714.0, 5566.0, 5274.0, 5291.0, 5321.0, 5687.0, 5568.0, 5479.0, 5712.0, 5424.0, 5459.0, 5537.0, 5339.0, 5701.0, 5442.0, 5351.0, 5515.0, 5302.0, 5401.0, 5599.0, 5450.0, 5584.0, 5576.0, 5707.0, 5358.0, 5586.0, 5722.0, 5558.0, 5632.0, 5465.0, 5660.0, 5704.0, 5673.0, 5270.0, 5368.0, 5641.0, 5695.0, 5434.0, 5363.0 (number of hits: 6)
7	5280	9	1	333	1	5365.0, 5363.0, 5266.0, 5325.0, 5374.0, 5432.0, 5562.0, 5392.0, 5546.0, 5614.0, 5648.0, 5478.0, 5652.0, 5661.0, 5345.0, 5454.0, 5694.0, 5425.0, 5457.0, 5656.0, 5621.0, 5260.0, 5653.0, 5615.0, 5395.0, 5317.0, 5342.0, 5670.0, 5613.0, 5529.0, 5410.0, 5601.0, 5494.0, 5430.0, 5675.0, 5431.0, 5439.0, 5560.0, 5362.0, 5446.0, 5294.0, 5445.0, 5267.0, 5423.0, 5533.0, 5466.0, 5622.0, 5636.0, 5450.0, 5402.0, 5301.0, 5408.0, 5475.0, 5384.0, 5511.0, 5691.0, 5604.0, 5500.0, 5720.0, 5292.0, 5281.0, 5681.0, 5387.0, 5545.0, 5697.0, 5569.0, 5376.0, 5647.0, 5296.0, 5713.0, 5643.0, 5716.0, 5587.0, 5320.0, 5257.0, 5714.0, 5644.0, 5306.0, 5280.0, 5516.0, 5502.0, 5640.0, 5381.0, 5399.0, 5677.0, 5293.0, 5378.0, 5467.0, 5517.0, 5638.0, 5370.0, 5564.0, 5663.0, 5559.0, 5507.0, 5704.0, 5349.0, 5318.0, 5528.0, 5508.0 (number of hits: 6)
8	5280	9	1	333	1	5361.0, 5665.0, 5346.0, 5659.0, 5656.0, 5724.0, 5503.0, 5562.0, 5470.0, 5528.0, 5307.0, 5436.0, 5433.0, 5699.0, 5674.0, 5595.0, 5709.0, 5650.0, 5691.0, 5647.0, 5718.0, 5627.0, 5392.0, 5424.0, 5419.0, 5514.0, 5664.0, 5635.0, 5533.0, 5687.0, 5384.0, 5679.0, 5521.0, 5273.0, 5529.0, 5328.0, 5325.0, 5711.0, 5438.0, 5446.0, 5305.0, 5437.0, 5530.0, 5555.0, 5363.0, 5253.0, 5382.0, 5655.0, 5614.0, 5364.0, 5512.0, 5681.0, 5411.0, 5483.0, 5504.0, 5389.0, 5568.0, 5258.0, 5297.0, 5320.0, 5301.0, 5572.0, 5661.0, 5400.0, 5274.0, 5669.0, 5639.0, 5596.0, 5265.0, 5567.0, 5474.0, 5304.0, 5551.0, 5262.0, 5306.0, 5527.0, 5541.0, 5390.0, 5666.0, 5468.0, 5598.0, 5553.0, 5580.0, 5294.0, 5714.0, 5678.0, 5575.0, 5309.0, 5549.0, 5394.0, 5287.0, 5457.0, 5641.0, 5721.0, 5319.0, 5300.0, 5628.0, 5554.0, 5460.0, 5505.0 (number of hits: 10)
9	5280	9	1	333	1	5510.0, 5658.0, 5399.0, 5456.0, 5513.0, 5347.0, 5370.0, 5444.0, 5368.0, 5477.0, 5631.0, 5573.0, 5312.0, 5603.0, 5383.0, 5461.0, 5515.0, 5642.0, 5568.0, 5701.0, 5291.0, 5663.0, 5280.0, 5463.0, 5251.0, 5509.0, 5520.0, 5270.0, 5536.0, 5300.0,

						5691.0, 5374.0, 5672.0, 5521.0, 5279.0, 5547.0, 5345.0, 5431.0, 5589.0, 5304.0, 5595.0, 5422.0, 5341.0, 5660.0, 5455.0, 5424.0, 5483.0, 5514.0, 5302.0, 5582.0, 5705.0, 5434.0, 5560.0, 5548.0, 5410.0, 5397.0, 5692.0, 5354.0, 5721.0, 5621.0, 5583.0, 5544.0, 5519.0, 5265.0, 5653.0, 5677.0, 5512.0, 5439.0, 5451.0, 5404.0, 5366.0, 5688.0, 5344.0, 5324.0, 5555.0, 5543.0, 5633.0, 5351.0, 5479.0, 5546.0, 5375.0, 5719.0, 5296.0, 5715.0, 5271.0, 5619.0, 5269.0, 5313.0, 5502.0, 5590.0, 5676.0, 5601.0, 5534.0, 5401.0, 5472.0, 5406.0, 5491.0, 5718.0, 5427.0, 5372.0 (number of hits: 7)
10	5280	9	1	333	1	5583.0, 5437.0, 5279.0, 5294.0, 5253.0, 5352.0, 5428.0, 5350.0, 5690.0, 5285.0, 5712.0, 5450.0, 5653.0, 5252.0, 5388.0, 5368.0, 5273.0, 5426.0, 5625.0, 5419.0, 5335.0, 5505.0, 5325.0, 5528.0, 5263.0, 5328.0, 5422.0, 5313.0, 5251.0, 5612.0, 5631.0, 5657.0, 5302.0, 5703.0, 5493.0, 5305.0, 5495.0, 5435.0, 5586.0, 5371.0, 5361.0, 5472.0, 5340.0, 5389.0, 5383.0, 5481.0, 5497.0, 5519.0, 5390.0, 5669.0, 5385.0, 5501.0, 5689.0, 5386.0, 5363.0, 5265.0, 5434.0, 5683.0, 5465.0, 5484.0, 5520.0, 5510.0, 5674.0, 5467.0, 5714.0, 5546.0, 5278.0, 5275.0, 5407.0, 5439.0, 5661.0, 5575.0, 5404.0, 5449.0, 5333.0, 5559.0, 5262.0, 5648.0, 5436.0, 5310.0, 5524.0, 5477.0, 5297.0, 5382.0, 5716.0, 5710.0, 5281.0, 5380.0, 5447.0, 5257.0, 5511.0, 5463.0, 5376.0, 5521.0, 5349.0, 5534.0, 5424.0, 5551.0, 5430.0, 5299.0 (number of hits: 8)
11	5280	9	1	333	1	5258.0, 5654.0, 5507.0, 5519.0, 5462.0, 5698.0, 5315.0, 5440.0, 5527.0, 5431.0, 5685.0, 5363.0, 5307.0, 5524.0, 5640.0, 5430.0, 5384.0, 5647.0, 5723.0, 5495.0, 5606.0, 5316.0, 5603.0, 5541.0, 5485.0, 5483.0, 5354.0, 5465.0, 5582.0, 5477.0, 5284.0, 5327.0, 5521.0, 5670.0, 5597.0, 5622.0, 5441.0, 5520.0, 5408.0, 5608.0, 5415.0, 5395.0, 5596.0, 5517.0, 5506.0, 5372.0, 5252.0, 5587.0, 5651.0, 5695.0, 5604.0, 5330.0, 5722.0, 5346.0, 5568.0, 5493.0, 5480.0, 5696.0, 5332.0, 5321.0, 5693.0, 5561.0, 5688.0, 5588.0, 5275.0, 5724.0, 5652.0, 5576.0, 5333.0, 5377.0, 5383.0, 5555.0, 5673.0, 5533.0, 5618.0, 5414.0, 5703.0, 5629.0, 5300.0, 5345.0, 5547.0, 5550.0, 5668.0, 5280.0, 5590.0, 5257.0, 5336.0, 5548.0, 5720.0, 5263.0, 5510.0, 5390.0, 5369.0, 5676.0, 5697.0, 5690.0, 5496.0, 5699.0, 5385.0, 5468.0 (number of hits: 2)
12	5280	9	1	333	1	5495.0, 5278.0, 5375.0, 5269.0, 5674.0, 5629.0, 5295.0, 5533.0, 5469.0, 5643.0, 5699.0, 5697.0, 5694.0, 5476.0, 5611.0,

						5453.0, 5493.0, 5353.0, 5280.0, 5582.0, 5719.0, 5513.0, 5464.0, 5430.0, 5420.0, 5695.0, 5516.0, 5337.0, 5291.0, 5721.0, 5367.0, 5501.0, 5561.0, 5330.0, 5519.0, 5527.0, 5554.0, 5601.0, 5550.0, 5365.0, 5461.0, 5605.0, 5324.0, 5613.0, 5342.0, 5599.0, 5360.0, 5364.0, 5587.0, 5281.0, 5710.0, 5265.0, 5566.0, 5354.0, 5522.0, 5377.0, 5635.0, 5473.0, 5604.0, 5289.0, 5273.0, 5720.0, 5466.0, 5691.0, 5585.0, 5549.0, 5298.0, 5568.0, 5717.0, 5462.0, 5448.0, 5424.0, 5254.0, 5538.0, 5705.0, 5320.0, 5688.0, 5380.0, 5374.0, 5455.0, 5547.0, 5652.0, 5339.0, 5698.0, 5411.0, 5706.0, 5607.0, 5383.0, 5487.0, 5258.0, 5620.0, 5544.0, 5443.0, 5494.0, 5470.0, 5655.0, 5542.0, 5292.0, 5438.0, 5669.0 (number of hits: 5)
13	5280	9	1	333	1	5250.0, 5464.0, 5622.0, 5663.0, 5673.0, 5317.0, 5607.0, 5273.0, 5566.0, 5418.0, 5408.0, 5368.0, 5599.0, 5369.0, 5416.0, 5560.0, 5506.0, 5457.0, 5382.0, 5309.0, 5362.0, 5342.0, 5291.0, 5378.0, 5628.0, 5442.0, 5340.0, 5251.0, 5409.0, 5401.0, 5604.0, 5667.0, 5274.0, 5345.0, 5384.0, 5639.0, 5629.0, 5361.0, 5286.0, 5424.0, 5669.0, 5612.0, 5429.0, 5688.0, 5648.0, 5461.0, 5516.0, 5580.0, 5391.0, 5640.0, 5452.0, 5535.0, 5465.0, 5479.0, 5631.0, 5559.0, 5530.0, 5586.0, 5336.0, 5656.0, 5367.0, 5438.0, 5613.0, 5511.0, 5536.0, 5303.0, 5381.0, 5634.0, 5602.0, 5609.0, 5377.0, 5261.0, 5614.0, 5475.0, 5678.0, 5375.0, 5717.0, 5714.0, 5595.0, 5581.0, 5668.0, 5509.0, 5720.0, 5544.0, 5534.0, 5283.0, 5423.0, 5654.0, 5346.0, 5647.0, 5390.0, 5520.0, 5398.0, 5542.0, 5579.0, 5553.0, 5295.0, 5330.0, 5652.0, 5311.0 (number of hits: 6)
14	5280	9	1	333	1	5305.0, 5353.0, 5667.0, 5431.0, 5541.0, 5464.0, 5285.0, 5709.0, 5695.0, 5428.0, 5342.0, 5388.0, 5536.0, 5539.0, 5437.0, 5416.0, 5472.0, 5624.0, 5501.0, 5376.0, 5528.0, 5339.0, 5434.0, 5671.0, 5704.0, 5568.0, 5482.0, 5514.0, 5485.0, 5291.0, 5680.0, 5698.0, 5373.0, 5518.0, 5675.0, 5629.0, 5329.0, 5684.0, 5521.0, 5418.0, 5463.0, 5315.0, 5694.0, 5493.0, 5529.0, 5645.0, 5662.0, 5284.0, 5622.0, 5719.0, 5427.0, 5579.0, 5618.0, 5346.0, 5338.0, 5494.0, 5578.0, 5365.0, 5349.0, 5555.0, 5250.0, 5724.0, 5584.0, 5657.0, 5633.0, 5355.0, 5271.0, 5326.0, 5617.0, 5550.0, 5641.0, 5569.0, 5551.0, 5282.0, 5370.0, 5674.0, 5478.0, 5535.0, 5631.0, 5609.0, 5302.0, 5507.0, 5500.0, 5557.0, 5559.0, 5627.0, 5297.0, 5591.0, 5708.0, 5634.0, 5320.0, 5720.0, 5663.0, 5456.0, 5699.0, 5538.0, 5348.0, 5537.0, 5333.0, 5632.0 (number of hits: 5)

15	5280	9	1	333	1	5396.0, 5418.0, 5531.0, 5395.0, 5610.0, 5541.0, 5485.0, 5480.0, 5483.0, 5366.0, 5309.0, 5271.0, 5646.0, 5423.0, 5659.0, 5321.0, 5647.0, 5411.0, 5338.0, 5412.0, 5617.0, 5699.0, 5284.0, 5467.0, 5713.0, 5645.0, 5653.0, 5568.0, 5590.0, 5546.0, 5615.0, 5687.0, 5593.0, 5306.0, 5358.0, 5482.0, 5355.0, 5524.0, 5685.0, 5486.0, 5642.0, 5627.0, 5539.0, 5670.0, 5665.0, 5257.0, 5631.0, 5721.0, 5703.0, 5478.0, 5613.0, 5654.0, 5468.0, 5471.0, 5371.0, 5705.0, 5359.0, 5449.0, 5390.0, 5479.0, 5410.0, 5515.0, 5405.0, 5401.0, 5513.0, 5679.0, 5523.0, 5406.0, 5658.0, 5272.0, 5681.0, 5606.0, 5347.0, 5414.0, 5595.0, 5664.0, 5416.0, 5433.0, 5476.0, 5376.0, 5370.0, 5472.0, 5400.0, 5458.0, 5570.0, 5417.0, 5381.0, 5600.0, 5499.0, 5261.0, 5274.0, 5473.0, 5651.0, 5521.0, 5260.0, 5421.0, 5342.0, 5533.0, 5322.0, 5354.0 (number of hits: 2)
16	5280	9	1	333	1	5438.0, 5375.0, 5322.0, 5580.0, 5514.0, 5335.0, 5265.0, 5700.0, 5319.0, 5712.0, 5463.0, 5599.0, 5260.0, 5298.0, 5267.0, 5385.0, 5290.0, 5692.0, 5301.0, 5275.0, 5663.0, 5346.0, 5367.0, 5598.0, 5464.0, 5716.0, 5318.0, 5491.0, 5434.0, 5613.0, 5650.0, 5615.0, 5535.0, 5344.0, 5285.0, 5706.0, 5425.0, 5679.0, 5581.0, 5259.0, 5525.0, 5687.0, 5444.0, 5713.0, 5709.0, 5609.0, 5597.0, 5558.0, 5310.0, 5643.0, 5524.0, 5274.0, 5291.0, 5636.0, 5722.0, 5266.0, 5277.0, 5455.0, 5422.0, 5486.0, 5637.0, 5531.0, 5419.0, 5479.0, 5503.0, 5345.0, 5710.0, 5571.0, 5468.0, 5550.0, 5666.0, 5480.0, 5627.0, 5575.0, 5649.0, 5600.0, 5374.0, 5570.0, 5494.0, 5680.0, 5520.0, 5642.0, 5698.0, 5634.0, 5586.0, 5257.0, 5426.0, 5717.0, 5630.0, 5640.0, 5304.0, 5573.0, 5493.0, 5357.0, 5589.0, 5394.0, 5628.0, 5388.0, 5430.0, 5603.0 (number of hits: 7)
17	5280	9	1	333	1	5300.0, 5645.0, 5576.0, 5709.0, 5420.0, 5717.0, 5651.0, 5566.0, 5573.0, 5681.0, 5548.0, 5640.0, 5496.0, 5297.0, 5529.0, 5549.0, 5637.0, 5699.0, 5323.0, 5302.0, 5470.0, 5252.0, 5711.0, 5491.0, 5648.0, 5321.0, 5584.0, 5554.0, 5284.0, 5347.0, 5535.0, 5457.0, 5561.0, 5298.0, 5569.0, 5343.0, 5639.0, 5715.0, 5251.0, 5421.0, 5351.0, 5591.0, 5341.0, 5571.0, 5394.0, 5393.0, 5456.0, 5397.0, 5524.0, 5592.0, 5540.0, 5690.0, 5604.0, 5498.0, 5623.0, 5697.0, 5270.0, 5448.0, 5693.0, 5577.0, 5483.0, 5722.0, 5494.0, 5610.0, 5624.0, 5466.0, 5678.0, 5263.0, 5283.0, 5559.0, 5372.0, 5606.0, 5328.0, 5599.0, 5654.0, 5371.0, 5333.0, 5390.0, 5374.0, 5475.0, 5720.0, 5667.0, 5259.0, 5563.0, 5519.0, 5452.0, 5404.0, 5642.0, 5260.0, 5632.0,

						5546.0, 5481.0, 5556.0, 5426.0, 5635.0, 5641.0, 5602.0, 5409.0, 5462.0, 5306.0 (number of hits: 5)
18	5280	9	1	333	1	5311.0, 5321.0, 5319.0, 5435.0, 5626.0, 5548.0, 5650.0, 5258.0, 5330.0, 5473.0, 5467.0, 5446.0, 5414.0, 5318.0, 5314.0, 5719.0, 5688.0, 5649.0, 5609.0, 5456.0, 5287.0, 5392.0, 5378.0, 5333.0, 5724.0, 5372.0, 5567.0, 5280.0, 5310.0, 5558.0, 5640.0, 5525.0, 5465.0, 5328.0, 5529.0, 5360.0, 5504.0, 5404.0, 5618.0, 5539.0, 5475.0, 5277.0, 5554.0, 5428.0, 5694.0, 5667.0, 5484.0, 5644.0, 5628.0, 5595.0, 5637.0, 5270.0, 5576.0, 5301.0, 5415.0, 5327.0, 5371.0, 5364.0, 5646.0, 5492.0, 5635.0, 5452.0, 5260.0, 5584.0, 5427.0, 5692.0, 5282.0, 5313.0, 5627.0, 5395.0, 5366.0, 5552.0, 5411.0, 5674.0, 5448.0, 5716.0, 5526.0, 5355.0, 5505.0, 5656.0, 5643.0, 5578.0, 5672.0, 5540.0, 5423.0, 5308.0, 5393.0, 5636.0, 5594.0, 5648.0, 5334.0, 5661.0, 5686.0, 5383.0, 5405.0, 5639.0, 5430.0, 5297.0, 5564.0, 5432.0 (number of hits: 8)
19	5280	9	1	333	1	5569.0, 5570.0, 5585.0, 5463.0, 5567.0, 5342.0, 5254.0, 5438.0, 5270.0, 5634.0, 5268.0, 5448.0, 5576.0, 5312.0, 5714.0, 5674.0, 5471.0, 5468.0, 5639.0, 5369.0, 5532.0, 5656.0, 5695.0, 5608.0, 5318.0, 5415.0, 5713.0, 5414.0, 5707.0, 5611.0, 5622.0, 5413.0, 5350.0, 5573.0, 5678.0, 5409.0, 5631.0, 5593.0, 5421.0, 5460.0, 5277.0, 5598.0, 5304.0, 5658.0, 5508.0, 5251.0, 5368.0, 5279.0, 5305.0, 5700.0, 5645.0, 5345.0, 5255.0, 5424.0, 5347.0, 5670.0, 5702.0, 5288.0, 5686.0, 5494.0, 5271.0, 5426.0, 5498.0, 5364.0, 5266.0, 5459.0, 5719.0, 5390.0, 5642.0, 5538.0, 5556.0, 5361.0, 5479.0, 5317.0, 5718.0, 5461.0, 5595.0, 5565.0, 5386.0, 5651.0, 5387.0, 5676.0, 5400.0, 5407.0, 5282.0, 5353.0, 5293.0, 5303.0, 5488.0, 5395.0, 5649.0, 5506.0, 5553.0, 5467.0, 5543.0, 5655.0, 5339.0, 5588.0, 5274.0, 5388.0 (number of hits: 6)
20	5280	9	1	333	1	5528.0, 5516.0, 5538.0, 5614.0, 5585.0, 5331.0, 5598.0, 5640.0, 5415.0, 5316.0, 5417.0, 5636.0, 5289.0, 5431.0, 5612.0, 5421.0, 5309.0, 5616.0, 5496.0, 5469.0, 5465.0, 5568.0, 5530.0, 5398.0, 5445.0, 5360.0, 5354.0, 5580.0, 5512.0, 5641.0, 5422.0, 5650.0, 5283.0, 5699.0, 5259.0, 5315.0, 5257.0, 5399.0, 5302.0, 5413.0, 5723.0, 5715.0, 5574.0, 5318.0, 5446.0, 5534.0, 5673.0, 5378.0, 5348.0, 5461.0, 5572.0, 5620.0, 5292.0, 5420.0, 5314.0, 5573.0, 5704.0, 5686.0, 5478.0, 5502.0, 5311.0, 5485.0, 5510.0, 5509.0, 5498.0, 5293.0, 5698.0, 5564.0, 5694.0, 5365.0, 5345.0, 5608.0, 5339.0, 5497.0, 5363.0,

						5682.0, 5350.0, 5566.0, 5458.0, 5401.0, 5252.0, 5647.0, 5555.0, 5518.0, 5402.0, 5453.0, 5319.0, 5449.0, 5250.0, 5305.0, 5275.0, 5464.0, 5388.0, 5310.0, 5313.0, 5254.0, 5540.0, 5621.0, 5582.0, 5367.0 (number of hits: 10)
21	5280	9	1	333	1	5609.0, 5302.0, 5703.0, 5476.0, 5537.0, 5716.0, 5640.0, 5491.0, 5323.0, 5572.0, 5326.0, 5478.0, 5579.0, 5388.0, 5661.0, 5432.0, 5532.0, 5638.0, 5525.0, 5411.0, 5274.0, 5635.0, 5529.0, 5574.0, 5477.0, 5601.0, 5475.0, 5687.0, 5667.0, 5416.0, 5405.0, 5636.0, 5545.0, 5340.0, 5485.0, 5363.0, 5328.0, 5559.0, 5402.0, 5393.0, 5630.0, 5714.0, 5690.0, 5576.0, 5424.0, 5356.0, 5673.0, 5465.0, 5282.0, 5583.0, 5644.0, 5479.0, 5599.0, 5303.0, 5382.0, 5300.0, 5353.0, 5289.0, 5301.0, 5582.0, 5334.0, 5604.0, 5387.0, 5542.0, 5518.0, 5657.0, 5448.0, 5541.0, 5706.0, 5569.0, 5351.0, 5461.0, 5528.0, 5394.0, 5616.0, 5489.0, 5400.0, 5474.0, 5286.0, 5653.0, 5327.0, 5419.0, 5473.0, 5459.0, 5617.0, 5581.0, 5600.0, 5645.0, 5693.0, 5254.0, 5450.0, 5560.0, 5531.0, 5399.0, 5260.0, 5422.0, 5696.0, 5279.0, 5418.0, 5676.0 (number of hits: 6)
22	5280	9	1	333	1	5298.0, 5714.0, 5616.0, 5455.0, 5432.0, 5631.0, 5700.0, 5463.0, 5433.0, 5384.0, 5420.0, 5558.0, 5667.0, 5560.0, 5600.0, 5473.0, 5713.0, 5386.0, 5656.0, 5434.0, 5461.0, 5292.0, 5711.0, 5618.0, 5294.0, 5422.0, 5556.0, 5672.0, 5321.0, 5333.0, 5460.0, 5353.0, 5454.0, 5423.0, 5521.0, 5613.0, 5655.0, 5308.0, 5601.0, 5530.0, 5621.0, 5507.0, 5324.0, 5633.0, 5710.0, 5569.0, 5342.0, 5701.0, 5428.0, 5712.0, 5490.0, 5571.0, 5671.0, 5457.0, 5329.0, 5480.0, 5602.0, 5575.0, 5295.0, 5636.0, 5288.0, 5414.0, 5339.0, 5495.0, 5401.0, 5684.0, 5581.0, 5505.0, 5598.0, 5270.0, 5412.0, 5382.0, 5553.0, 5281.0, 5312.0, 5628.0, 5435.0, 5304.0, 5577.0, 5303.0, 5635.0, 5596.0, 5525.0, 5550.0, 5611.0, 5437.0, 5562.0, 5709.0, 5546.0, 5340.0, 5666.0, 5361.0, 5604.0, 5531.0, 5497.0, 5438.0, 5623.0, 5271.0, 5584.0, 5405.0 (number of hits: 9)
23	5280	9	1	333	1	5633.0, 5462.0, 5519.0, 5395.0, 5664.0, 5255.0, 5444.0, 5334.0, 5685.0, 5309.0, 5270.0, 5553.0, 5450.0, 5661.0, 5644.0, 5475.0, 5571.0, 5637.0, 5336.0, 5294.0, 5264.0, 5651.0, 5551.0, 5544.0, 5446.0, 5524.0, 5414.0, 5699.0, 5589.0, 5292.0, 5370.0, 5480.0, 5261.0, 5563.0, 5372.0, 5371.0, 5326.0, 5634.0, 5696.0, 5407.0, 5630.0, 5682.0, 5532.0, 5358.0, 5486.0, 5562.0, 5340.0, 5654.0, 5442.0, 5659.0, 5376.0, 5514.0, 5723.0, 5632.0, 5383.0, 5660.0, 5325.0, 5599.0, 5525.0, 5499.0,

#	Freq					Hits
						5674.0, 5267.0, 5482.0, 5489.0, 5520.0, 5296.0, 5295.0, 5560.0, 5379.0, 5344.0, 5387.0, 5592.0, 5593.0, 5698.0, 5549.0, 5681.0, 5526.0, 5434.0, 5367.0, 5545.0, 5269.0, 5402.0, 5606.0, 5491.0, 5250.0, 5511.0, 5701.0, 5252.0, 5669.0, 5468.0, 5463.0, 5615.0, 5290.0, 5377.0, 5550.0, 5678.0, 5565.0, 5291.0, 5274.0, 5423.0 (number of hits: 7)
24	5280	9	1	333	1	5314.0, 5604.0, 5481.0, 5637.0, 5337.0, 5327.0, 5502.0, 5269.0, 5478.0, 5418.0, 5394.0, 5419.0, 5398.0, 5441.0, 5384.0, 5463.0, 5309.0, 5528.0, 5531.0, 5326.0, 5336.0, 5308.0, 5369.0, 5343.0, 5379.0, 5307.0, 5420.0, 5345.0, 5714.0, 5582.0, 5363.0, 5370.0, 5505.0, 5317.0, 5498.0, 5686.0, 5722.0, 5260.0, 5411.0, 5530.0, 5396.0, 5504.0, 5292.0, 5474.0, 5364.0, 5404.0, 5462.0, 5332.0, 5487.0, 5378.0, 5278.0, 5609.0, 5464.0, 5653.0, 5334.0, 5375.0, 5711.0, 5295.0, 5493.0, 5659.0, 5280.0, 5614.0, 5273.0, 5694.0, 5390.0, 5624.0, 5349.0, 5613.0, 5373.0, 5529.0, 5436.0, 5399.0, 5536.0, 5448.0, 5692.0, 5639.0, 5638.0, 5663.0, 5539.0, 5667.0, 5383.0, 5514.0, 5662.0, 5424.0, 5470.0, 5702.0, 5495.0, 5342.0, 5515.0, 5296.0, 5392.0, 5647.0, 5439.0, 5395.0, 5490.0, 5521.0, 5687.0, 5553.0, 5592.0, 5348.0 (number of hits: 7)
25	5280	9	1	333	1	5511.0, 5270.0, 5476.0, 5552.0, 5683.0, 5609.0, 5444.0, 5711.0, 5498.0, 5639.0, 5431.0, 5361.0, 5703.0, 5483.0, 5307.0, 5530.0, 5315.0, 5301.0, 5363.0, 5654.0, 5517.0, 5382.0, 5716.0, 5521.0, 5583.0, 5350.0, 5405.0, 5657.0, 5428.0, 5555.0, 5487.0, 5296.0, 5277.0, 5700.0, 5311.0, 5571.0, 5575.0, 5562.0, 5668.0, 5404.0, 5362.0, 5359.0, 5691.0, 5481.0, 5316.0, 5445.0, 5676.0, 5393.0, 5646.0, 5544.0, 5288.0, 5589.0, 5379.0, 5680.0, 5472.0, 5260.0, 5656.0, 5617.0, 5365.0, 5618.0, 5280.0, 5482.0, 5317.0, 5380.0, 5584.0, 5475.0, 5331.0, 5693.0, 5535.0, 5284.0, 5287.0, 5543.0, 5401.0, 5723.0, 5469.0, 5460.0, 5347.0, 5534.0, 5660.0, 5251.0, 5293.0, 5641.0, 5275.0, 5574.0, 5351.0, 5623.0, 5279.0, 5366.0, 5662.0, 5563.0, 5547.0, 5551.0, 5494.0, 5667.0, 5389.0, 5689.0, 5358.0, 5507.0, 5686.0, 5709.0 (number of hits: 7)
26	5280	9	1	333	1	5426.0, 5656.0, 5674.0, 5299.0, 5473.0, 5517.0, 5634.0, 5663.0, 5638.0, 5382.0, 5574.0, 5401.0, 5573.0, 5673.0, 5558.0, 5671.0, 5492.0, 5695.0, 5471.0, 5416.0, 5480.0, 5437.0, 5651.0, 5359.0, 5707.0, 5624.0, 5608.0, 5475.0, 5557.0, 5708.0, 5697.0, 5511.0, 5345.0, 5643.0, 5284.0, 5587.0, 5354.0, 5321.0, 5251.0, 5696.0, 5438.0, 5325.0, 5680.0, 5307.0, 5280.0,

						5637.0, 5432.0, 5461.0, 5316.0, 5333.0, 5303.0, 5706.0, 5544.0, 5546.0, 5304.0, 5318.0, 5357.0, 5586.0, 5555.0, 5598.0, 5393.0, 5521.0, 5340.0, 5560.0, 5618.0, 5459.0, 5559.0, 5506.0, 5420.0, 5265.0, 5575.0, 5566.0, 5279.0, 5392.0, 5675.0, 5259.0, 5286.0, 5714.0, 5627.0, 5571.0, 5436.0, 5364.0, 5629.0, 5385.0, 5689.0, 5569.0, 5576.0, 5368.0, 5665.0, 5664.0, 5355.0, 5319.0, 5391.0, 5717.0, 5672.0, 5533.0, 5450.0, 5361.0, 5518.0, 5609.0 (number of hits: 5)
27	5280	9	1	333	1	5517.0, 5537.0, 5612.0, 5353.0, 5488.0, 5325.0, 5305.0, 5658.0, 5547.0, 5497.0, 5486.0, 5601.0, 5531.0, 5665.0, 5589.0, 5697.0, 5600.0, 5566.0, 5529.0, 5702.0, 5393.0, 5650.0, 5461.0, 5457.0, 5567.0, 5707.0, 5406.0, 5583.0, 5254.0, 5507.0, 5602.0, 5471.0, 5339.0, 5571.0, 5375.0, 5403.0, 5699.0, 5674.0, 5321.0, 5592.0, 5300.0, 5502.0, 5309.0, 5544.0, 5333.0, 5478.0, 5264.0, 5440.0, 5384.0, 5663.0, 5599.0, 5698.0, 5280.0, 5417.0, 5568.0, 5396.0, 5677.0, 5541.0, 5330.0, 5662.0, 5352.0, 5723.0, 5303.0, 5646.0, 5444.0, 5256.0, 5651.0, 5640.0, 5342.0, 5432.0, 5374.0, 5692.0, 5538.0, 5410.0, 5491.0, 5301.0, 5701.0, 5524.0, 5623.0, 5438.0, 5481.0, 5462.0, 5465.0, 5520.0, 5316.0, 5409.0, 5554.0, 5516.0, 5604.0, 5317.0, 5308.0, 5302.0, 5591.0, 5341.0, 5267.0, 5451.0, 5595.0, 5269.0, 5306.0, 5703.0 (number of hits: 8)
28	5280	9	1	333	1	5610.0, 5687.0, 5461.0, 5629.0, 5387.0, 5599.0, 5596.0, 5413.0, 5595.0, 5345.0, 5702.0, 5268.0, 5404.0, 5719.0, 5529.0, 5634.0, 5472.0, 5558.0, 5573.0, 5647.0, 5386.0, 5339.0, 5419.0, 5697.0, 5603.0, 5641.0, 5453.0, 5477.0, 5508.0, 5544.0, 5451.0, 5574.0, 5290.0, 5440.0, 5506.0, 5271.0, 5278.0, 5439.0, 5364.0, 5635.0, 5585.0, 5455.0, 5370.0, 5646.0, 5359.0, 5710.0, 5581.0, 5365.0, 5711.0, 5436.0, 5611.0, 5567.0, 5620.0, 5285.0, 5304.0, 5412.0, 5628.0, 5288.0, 5408.0, 5250.0, 5659.0, 5306.0, 5503.0, 5390.0, 5518.0, 5705.0, 5495.0, 5458.0, 5569.0, 5366.0, 5491.0, 5662.0, 5349.0, 5389.0, 5497.0, 5342.0, 5338.0, 5604.0, 5444.0, 5435.0, 5532.0, 5645.0, 5724.0, 5269.0, 5517.0, 5482.0, 5576.0, 5597.0, 5480.0, 5479.0, 5586.0, 5682.0, 5490.0, 5447.0, 5416.0, 5303.0, 5284.0, 5527.0, 5265.0, 5469.0 (number of hits: 6)
29	5280	9	1	333	1	5668.0, 5646.0, 5544.0, 5262.0, 5513.0, 5673.0, 5579.0, 5674.0, 5447.0, 5408.0, 5439.0, 5704.0, 5581.0, 5399.0, 5569.0, 5250.0, 5388.0, 5716.0, 5324.0, 5393.0, 5423.0, 5699.0, 5406.0, 5529.0, 5365.0, 5271.0, 5309.0, 5691.0, 5298.0, 5389.0,

						5509.0, 5505.0, 5323.0, 5613.0, 5463.0, 5655.0, 5402.0, 5386.0, 5690.0, 5266.0, 5415.0, 5589.0, 5524.0, 5559.0, 5724.0, 5351.0, 5424.0, 5356.0, 5378.0, 5623.0, 5495.0, 5425.0, 5493.0, 5556.0, 5317.0, 5337.0, 5594.0, 5419.0, 5683.0, 5702.0, 5652.0, 5443.0, 5459.0, 5490.0, 5305.0, 5545.0, 5578.0, 5631.0, 5552.0, 5428.0, 5564.0, 5456.0, 5658.0, 5261.0, 5468.0, 5401.0, 5269.0, 5367.0, 5414.0, 5708.0, 5675.0, 5278.0, 5446.0, 5665.0, 5636.0, 5521.0, 5391.0, 5604.0, 5615.0, 5331.0, 5687.0, 5566.0, 5510.0, 5442.0, 5306.0, 5555.0, 5628.0, 5427.0, 5532.0, 5299.0 (number of hits: 5)
30	5280	9	1	333	1	5458.0, 5528.0, 5518.0, 5268.0, 5412.0, 5597.0, 5605.0, 5673.0, 5320.0, 5288.0, 5383.0, 5511.0, 5311.0, 5527.0, 5291.0, 5668.0, 5472.0, 5567.0, 5583.0, 5687.0, 5286.0, 5554.0, 5292.0, 5609.0, 5522.0, 5293.0, 5538.0, 5590.0, 5672.0, 5621.0, 5551.0, 5479.0, 5294.0, 5519.0, 5691.0, 5408.0, 5282.0, 5272.0, 5317.0, 5540.0, 5266.0, 5500.0, 5516.0, 5656.0, 5277.0, 5445.0, 5384.0, 5276.0, 5564.0, 5688.0, 5296.0, 5462.0, 5367.0, 5344.0, 5553.0, 5379.0, 5327.0, 5299.0, 5430.0, 5719.0, 5387.0, 5349.0, 5476.0, 5486.0, 5650.0, 5603.0, 5631.0, 5341.0, 5523.0, 5283.0, 5274.0, 5659.0, 5464.0, 5576.0, 5254.0, 5335.0, 5493.0, 5645.0, 5622.0, 5547.0, 5697.0, 5507.0, 5491.0, 5415.0, 5644.0, 5692.0, 5646.0, 5251.0, 5275.0, 5617.0, 5714.0, 5381.0, 5253.0, 5316.0, 5353.0, 5380.0, 5608.0, 5642.0, 5638.0, 5350.0 (number of hits: 9)

5580 MHz

Radar Signal Type	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 0	30	100 %	60%	Pass
Type 1 A	30	100 %	60%	Pass
Type 1 B				
Type 2	30	100 %	60%	Pass
Type 3	30	100 %	60%	Pass
Type 4	30	100 %	60%	Pass
Aggregate (Type1 to 4)	120	100 %	80%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	100 %	70%	Pass

Please refer to the following statistical tables:

5580 MHz, 5 MHz Bandwidth

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

Please refer to the following statistical tables:

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	24	3.8	166	1
2	5580	29	1.6	150	1
3	5580	24	4.6	218	1
4	5580	26	1.2	201	1
5	5580	28	1.3	225	1
6	5580	25	3.9	167	1
7	5580	28	2.1	202	1
8	5580	28	2.2	206	1
9	5580	29	3.9	215	1
10	5580	23	1.2	223	1
11	5580	25	1.5	203	1
12	5580	29	1.3	154	1
13	5580	23	3.6	159	1
14	5580	26	2.1	203	1
15	5580	26	1.3	166	1
16	5580	29	1	217	1
17	5580	25	4.5	154	1
18	5580	27	5	165	1
19	5580	28	2.7	176	1
20	5580	27	3.8	182	1
21	5580	28	4.3	230	1
22	5580	28	1.1	154	1
23	5580	27	4.1	155	1
24	5580	28	2.3	215	1
25	5580	26	3.5	228	1
26	5580	28	4.9	172	1
27	5580	29	2.7	205	1
28	5580	27	3.2	172	1
29	5580	23	2.8	162	1
30	5580	28	3.4	226	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	5580	16	7	416	1
2	5580	16	9.6	359	1
3	5580	18	6.7	318	1
4	5580	17	9	268	1
5	5580	16	8.2	490	1
6	5580	18	7	290	1
7	5580	16	9.2	308	1
8	5580	18	8.8	426	1
9	5580	17	9.5	261	1
10	5580	16	9.2	305	1
11	5580	17	8.2	365	1
12	5580	17	9.8	363	1
13	5580	16	7	358	1
14	5580	18	9.6	209	1
15	5580	16	7.2	455	1
16	5580	18	7	467	1
17	5580	18	9.5	483	1
18	5580	17	6.5	376	1
19	5580	18	7.9	206	1
20	5580	18	9.4	283	1
21	5580	18	6.7	279	1
22	5580	18	8.7	317	1
23	5580	18	7.8	369	1
24	5580	16	8.1	422	1
25	5580	16	6	288	1
26	5580	18	9.4	464	1
27	5580	18	9.4	212	1
28	5580	17	6.6	230	1
29	5580	17	8.5	452	1
30	5580	17	9	278	1
Detection Percentage: 100 % (>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	15	14.8	224	1
2	5580	13	13.9	410	1
3	5580	15	13.6	217	1
4	5580	14	18.4	206	1
5	5580	16	13.1	309	1
6	5580	15	11.4	226	1
7	5580	16	11.5	490	1
8	5580	16	19.6	226	1
9	5580	13	15	326	1
10	5580	12	11.2	271	1
11	5580	16	16.2	304	1
12	5580	16	14.1	276	1
13	5580	13	13.9	326	1
14	5580	13	18.5	412	1
15	5580	16	12.3	249	1
16	5580	16	11.6	261	1
17	5580	16	19.8	308	1
18	5580	12	15.9	289	1
19	5580	15	16	212	1
20	5580	13	19.6	203	1
21	5580	13	16.4	278	1
22	5580	16	12.9	406	1
23	5580	14	19.1	250	1
24	5580	12	14.2	226	1
25	5580	16	13.3	497	1
26	5580	14	19.2	301	1
27	5580	15	13.6	301	1
28	5580	14	17.6	432	1
29	5580	16	14	433	1
30	5580	16	11	398	1
Detection Percentage: 100 % (>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	99.7	1674		0.240702	
1	3	10	85.2	1294	1977	1.192394	
2	1	12	89.2			1.349665	
3	2	7	56.9	1475		2.466429	
4	2	19	76.2	1575		2.960743	
5	2	19	56.1	1739		3.605565	
6	2	5	55.6	1982		4.274976	
7	2	19	76.5	1202		4.723802	
8	2	14	50.7	1774		5.554972	
9	2	14	61.2	1762		6.082506	1
10	2	14	51.2	1347		6.78956	
11	1	12	77			7.020003	
12	2	18	80.6	1412		7.882482	
13	2	17	80.1	1426		8.795942	
14	2	16	59.6	1517		9.46189	
15	2	8	95.3	1327		9.520639	
16	2	9	84.8	1708		10.546882	
17	2	13	69.8	1847		11.241461	
18	2	6	77.7	1929		11.911357	

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	5	61.1			0.397851	
1	1	7	94.9			2.0976	
2	3	6	58.3	1401	1228	2.833395	
3	3	7	68.3	1420	1721	3.340212	
4	2	8	69.4	1824		5.188384	
5	3	10	90.5	1094	1040	6.075832	1
6	2	16	57	1622		7.050144	
7	1	19	53.2			7.695284	
8	2	12	80.6	1420		9.712294	
9	3	12	68.4	1049	1677	10.723199	
10	1	14	50			11.469095	

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	3	10	63.9	1260	1407	0.264864	
1	2	8	94.4	1902		1.251109	
2	1	12	74.4			2.196208	
3	2	14	77.1	1192		3.690155	
4	3	8	80	1443	1122	5.355645	
5	1	8	74.7			5.943691	1
6	2	19	58.2	1871		7.442394	
7	2	20	80.4	1717		7.86066	
8	1	10	79.1			8.825598	
9	1	16	83.6			10.340496	
10	2	11	99.9	1890		11.072827	

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	17	71.6	1682		0.544137	
1	2	10	93.2	1235		1.073728	
2	1	16	83.9			1.847315	
3	3	6	97.8	1667	1792	3.042855	
4	3	19	56.2	1900	1618	3.793399	
5	3	19	86.9	1398	1159	4.719342	
6	2	10	81.9	1188		4.99513	
7	2	15	50.3	1267		6.085231	1
8	3	15	93	1248	1452	6.408921	
9	3	20	51.5	1074	1060	7.718377	
10	1	8	78.3			8.769491	
11	1	15	63.8			9.056118	
12	2	6	54.3	1058		9.994573	
13	2	12	94.2	1553		10.43837	
14	3	10	89	1411	1250	11.513166	

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	12	95.5	1861		0.560609	
1	1	14	81			0.934221	
2	2	19	88.5	1323		1.81858	
3	2	8	80.7	1004		2.675275	
4	2	7	77.1	1738		3.634674	
5	1	16	88			3.859871	
6	1	10	72.1			4.500728	
7	2	18	65.5	1002		5.787321	
8	2	10	86.1	1764		6.666663	1
9	2	14	78.7	1663		7.40555	
10	2	18	95.1	1266		7.922878	
11	2	15	70.3	1946		8.335396	
12	2	17	78.7	1818		9.402583	
13	1	9	62.5			10.263427	
14	1	13	72.6			10.916517	
15	1	14	54.9			11.532638	

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	16	81.8	1564	1314	0.3192	
1	1	15	68.8			1.308634	
2	3	18	73.8	1920	1289	1.400534	
3	2	14	69.8	1982		2.50781	
4	2	7	64	1845		3.184218	
5	3	10	77.8	1112	1320	3.349197	
6	1	12	99.2			4.145705	
7	2	16	96	1639		4.7857	
8	2	9	59.1	1907		5.624123	1
9	2	9	54.1	1551		6.248903	
10	2	20	69.6	1128		7.196171	
11	2	19	97.8	1092		7.542737	
12	1	8	88.7			8.025573	
13	3	11	62.5	1703	1152	8.856557	
14	1	20	86.5			9.803785	
15	2	20	90.8	1811		10.081224	
16	2	15	50.1	1177		10.820709	
17	1	11	69.1			11.417751	

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	18	90.6	1244		0.687868	
1	2	18	71.7	1603		1.301791	
2	1	16	81.3			2.2213	
3	2	6	95.5	1788		3.355726	
4	3	10	73.4	1600	1332	3.85926	
5	1	11	77.9			4.554902	
6	2	10	67.2	1413		5.143319	
7	2	15	61.6	1831		6.123011	1
8	2	8	55.9	1616		7.231462	
9	2	10	78.4	1348		7.771367	
10	2	17	90.1	1710		9.183451	
11	2	11	74.6	1217		9.809145	
12	2	13	78.4	1577		10.662829	
13	2	14	96.6	1347		11.19898	

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	3	7	51.4	1540	1475	0.936394	
1	3	19	63.3	1006	1901	1.653242	
2	2	13	95.8	1951		2.0047	
3	2	15	64.7	1774		3.13523	
4	2	11	84.3	1871		4.327532	
5	1	16	63.6			5.446978	
6	2	13	71.5	1152		6.628922	1
7	1	7	67.6			7.904511	
8	3	7	96.7	1395	1338	8.794901	
9	2	19	82.8	1370		9.04291	
10	2	14	92.5	1189		10.290995	
11	1	17	95			11.548864	

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	9	59.5	1181		0.654985	
1	1	5	94.2			1.867402	
2	2	11	95.6	1436		2.480104	
3	3	12	66.2	1629	1508	3.662965	
4	1	14	77.5			5.075363	1
5	1	17	71.5			6.973633	
6	2	11	83.5	1249		7.20399	
7	3	7	84.8	1969	1978	9.407878	
8	2	10	96	1474		10.193019	
9	1	18	87.6			10.86764	

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	5	96.7	1105	1835	0.106914	
1	2	9	62.2	1615		0.862572	
2	2	19	55	1174		2.302015	
3	1	17	73			3.070968	
4	2	7	93	1753		3.240281	
5	2	17	50.2	1895		4.665886	
6	2	17	95.3	1786		4.869521	
7	1	18	71.7			6.351195	1
8	2	19	52.6	1045		6.586826	
9	3	18	51	1024	1127	7.303373	
10	2	15	78.1	1896		8.299127	
11	1	11	63.8			8.914451	
12	1	16	74.7			9.660107	
13	1	16	78.1			10.749212	
14	2	14	65.1	1296		11.293859	

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	3	17	58.3	1542	1559	0.194305	
1	2	8	71.3	1332		2.534114	
2	2	18	66.8	1287		3.295392	
3	2	13	61.2	1702		4.469612	
4	2	9	93.5	1257		5.394749	1
5	1	8	67.7			7.894188	
6	1	12	93.2			8.290979	
7	2	8	91.2	1115		9.531016	
8	1	6	73.1			11.552059	

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	12	78.8	1120		0.011447	
1	1	13	62.9			0.803547	
2	2	17	62.5	1859		1.602449	
3	2	12	97.4	1817		2.53302	
4	2	19	84.4	1469		3.198306	
5	1	16	55.6			3.815358	
6	3	12	91.8	1122	1779	4.139744	
7	2	7	96.2	1037		5.23744	
8	3	12	98.3	1595	1791	5.337191	
9	1	18	69.4			6.106916	1
10	2	9	81.1	1270		7.12125	
11	2	6	78.6	1147		7.886824	
12	3	11	67.7	1311	1464	8.150813	
13	2	7	58.4	1961		9.294251	
14	3	14	58.4	1067	1583	9.646316	
15	3	10	90.3	1835	1518	10.350515	
16	2	19	86.7	1423		10.931306	
17	2	19	79.8	1106		11.7234	

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	18	83.1	1750	1607	0.325382	
1	2	11	91.2	1048		0.955862	
2	2	16	81.8	1161		1.824372	
3	3	18	62.5	1233	1118	2.844318	
4	3	15	72.1	1708	1837	3.458059	
5	2	16	94.1	1058		4.438155	
6	3	17	68.3	1755	1730	5.450473	
7	1	11	94.1			5.766219	1
8	1	9	80.7			6.908032	
9	2	10	91.4	1482		7.419724	
10	1	15	89.5			8.501306	
11	3	14	78.3	1914	1283	8.951651	
12	1	10	93.9			10.124199	
13	1	13	85.9			10.574242	
14	2	8	63.3	1041		11.962033	

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	10	53.4	1530		0.605809	
1	2	13	94.9	1363		0.95386	
2	1	13	73.7			1.817216	
3	1	13	81.1			2.289986	
4	2	16	94.3	1025		3.253999	
5	2	13	58.4	1553		3.848734	
6	2	8	63.8	1903		4.412059	
7	2	18	69.4	1267		5.290982	
8	2	10	60.8	1552		5.800424	
9	2	6	67.3	1341		6.063124	1
10	2	19	65.3	1896		7.327578	
11	1	9	67.9			7.548698	
12	1	9	53.7			8.223965	
13	1	17	91.1			9.004619	
14	1	6	53.4			9.441736	
15	1	17	72.3			10.131736	
16	2	7	88.4	1818		11.209103	
17	3	13	63.2	1150	1434	11.553227	

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	17	55.4	1954	1490	0.82424	
1	2	17	68	1409		1.342286	
2	3	16	67.8	1981	1431	2.108474	
3	3	14	99.7	1969	1087	3.216386	
4	3	7	59.6	1207	1155	4.501662	
5	2	7	62.2	1647		5.204971	
6	2	9	68.8	1569		5.968932	1
7	1	17	91.5			7.152906	
8	2	7	65.2	1485		7.783407	
9	1	8	51.8			9.062111	
10	3	14	76.8	1822	1200	10.03477	
11	3	6	90.7	1592	1932	10.43928	
12	2	19	76.4	1583		11.123852	

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	10	77.9	1928	1428	0.285066	
1	2	14	57.7	1918		1.523136	
2	2	7	82	1663		2.811792	
3	2	13	56.2	1280		3.508346	
4	2	8	63.2	1143		4.964226	
5	1	15	80.6			5.812731	1
6	1	19	87.2			6.570475	
7	3	11	66.2	1610	1803	8.699931	
8	2	7	67.2	1349		9.510017	
9	2	17	55.2	1970		10.132095	
10	3	10	78.5	1334	1000	11.509916	

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	3	17	82.1	1325	1969	0.115953	
1	1	9	91.3			1.353262	
2	2	5	71.8	1431		1.886149	
3	2	11	60.6	1880		2.859427	
4	3	9	72.3	1502	1565	3.903866	
5	1	19	88.6			4.623775	
6	2	16	70.4	1770		6.192344	1
7	2	11	82.1	1702		6.516289	
8	2	8	75.9	1358		8.257553	
9	2	12	74.4	1251		8.888078	
10	3	17	83.9	1682	1796	9.926496	
11	3	17	71.7	1096	1757	10.596205	
12	3	20	63.8	1604	1721	11.956093	

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	13	98.7	1073		0.583778	
1	2	16	88.5	1474		1.575389	
2	3	8	52.6	1973	1955	2.719111	
3	2	20	59.1	1458		4.675608	
4	1	13	54.9			5.510177	
5	2	13	55.1	1457		6.725826	1
6	3	9	75.3	1180	1150	7.253334	
7	3	14	79.2	1093	1614	9.535829	
8	1	11	95.7			10.012963	
9	1	17	63.2			11.531048	

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	17	89.3	1798		0.438332	
1	2	16	57.1	1861		1.358866	
2	2	12	61.1	1188		1.514854	
3	2	14	57.1	1340		2.470416	
4	2	12	95.6	1077		3.161102	
5	2	16	60.2	1749		3.810685	
6	2	19	56.8	1762		5.23646	
7	3	8	56.5	1795	1345	5.876578	
8	2	19	57	2000		6.698041	1
9	3	8	89.7	1643	1677	6.769805	
10	2	20	78.8	1243		8.208779	
11	2	16	52.3	1086		8.475059	
12	3	20	96.9	1125	1521	9.554011	
13	2	19	57.3	1773		10.130564	
14	2	17	75.3	1409		10.756085	
15	3	14	63.9	1841	1235	11.972943	

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	16	66.2	1838	1162	0.727471	
1	1	8	54.3			1.043253	
2	3	13	53.2	1245	1389	1.905256	
3	2	18	81.4	1943		2.805372	
4	3	7	86.3	1919	1468	3.920912	
5	2	11	56.3	1780		4.140524	
6	2	8	57.6	1400		5.172507	
7	2	16	90.6	1561		6.10664	1
8	1	14	59.8			6.96515	
9	1	7	59.9			7.655279	
10	2	13	98.7	1595		8.45854	
11	3	9	94.8	1026	1628	9.361495	
12	2	7	93.2	1687		9.828887	
13	2	15	68	1029		10.606518	
14	2	18	69.1	1638		11.439984	

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	12	68.5	1850	1823	0.718291	
1	3	10	81.3	1107	1909	1.451104	
2	2	16	88.9	1326		2.099998	
3	2	13	57	1024		2.635369	
4	2	16	90.1	1374		3.619368	
5	2	18	72.7	1654		5.014969	
6	2	10	59.6	1619		5.923897	
7	3	13	61.7	1169	1424	6.286122	1
8	3	18	65.3	1943	1671	7.104037	
9	2	8	87.9	1001		7.907595	
10	2	16	56.8	1613		8.951013	
11	2	17	70.6	1242		10.172722	
12	2	13	83.1	1198		10.930501	
13	2	19	96.6	1647		11.19732	

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	1	15	79.8			0.519188	
1	2	16	98	1099		1.604014	
2	3	11	82.5	1920	1155	2.43502	
3	3	10	63.3	1162	1982	3.195903	
4	2	10	93.3	1183		4.532254	
5	3	17	83.4	1931	1521	5.419121	
6	2	12	54.2	1682		5.719221	1
7	1	9	67.5			7.116427	
8	2	8	94.5	1399		7.856458	
9	2	16	77.7	1334		9.026087	
10	2	12	59.5	1510		9.848191	
11	2	12	74.2	1993		10.610343	
12	2	7	71.1	1994		11.153787	

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	1	20	74.6			0.261431	
1	2	17	76.6	1429		1.264927	
2	3	15	59.8	1211	1270	1.735984	
3	2	20	83.2	1740		2.118684	
4	3	10	52.9	1852	1469	3.014802	
5	2	13	59.1	1180		3.547314	
6	3	10	54.3	1998	1348	4.506058	
7	1	14	67.1			5.175249	
8	2	6	78.5	1792		5.857032	1
9	1	7	98			6.469551	
10	1	16	71.3			7.23235	
11	2	12	79.4	1344		8.284509	
12	2	6	75.1	1413		9.169529	
13	2	8	59.9	1833		9.736877	
14	3	19	87.4	1672	1304	10.171313	
15	3	12	61.3	1097	1014	11.151223	
16	3	10	91.9	1765	1424	11.503214	

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	12	52.1			0.530832	
1	1	11	70.6			1.190228	
2	3	6	58.2	1524	1685	1.518242	
3	1	8	75.3			1.988819	
4	1	15	58.8			2.840026	
5	3	16	60.9	1215	1469	3.19859	
6	1	17	67.9			3.817573	
7	3	6	52.1	1334	1701	4.433271	
8	2	6	68.8	1371		4.91954	1
9	3	14	83	1635	1103	5.68769	
10	2	7	71.1	1920		6.032539	
11	2	8	87	1105		6.955212	
12	2	14	58.1	1524		7.424608	
13	2	18	79.3	1144		8.270419	
14	2	17	95.1	1428		8.951466	
15	1	16	50.3			9.219654	
16	3	5	84.6	1524	1167	9.767329	

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	10	56.4			0.24557	
1	3	13	89	1771	1819	0.713516	
2	2	5	73.2	1618		1.897925	
3	2	12	58.9	1413		2.625721	
4	1	13	84.1			3.148306	
5	3	12	76.2	1895	1190	4.143322	
6	2	8	84.3	1211		4.612247	
7	3	9	52.8	1875	1238	5.140332	
8	1	19	78.9			6.233754	1
9	1	16	67.5			6.887274	
10	2	16	88.2	1097		7.068648	
11	3	9	66.5	1534	1374	8.142674	
12	1	13	58.8			9.173306	
13	3	18	59	1469	1017	9.493679	
14	1	13	72.5			10.042042	
15	3	13	92.7	1110	1962	11.029763	
16	3	14	55.8	1992	1054	11.742151	

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	5	51.3	1530	1616	0.679331	
1	3	10	78.6	1644	1014	1.05005	
2	1	9	93.4			2.460557	
3	3	16	99.6	1469	1746	2.627768	
4	2	20	71.9	1455		4.200461	
5	1	6	51.4			4.773639	
6	3	17	79.8	1767	1711	5.350075	
7	3	9	53.9	1554	1329	6.265228	1
8	3	14	81	1300	1518	7.147585	
9	2	9	88.4	1154		8.276726	
10	2	11	52.1	1952		8.72142	
11	2	15	75.9	1221		9.633033	
12	1	16	88.8			10.596634	
13	2	7	69.5	1863		11.628179	

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	18	53.1	1430		1.072685	
1	1	11	87.6			1.485448	
2	2	14	86.3	1393		3.868164	
3	2	16	65.6	1149		4.823168	
4	1	12	58.8			5.842651	1
5	2	14	74.4	1167		6.923132	
6	2	16	97	1120		8.562079	
7	2	5	65	1657		10.319874	
8	2	16	89.2	1664		11.355821	

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	19	67.3			0.359278	
1	1	13	81.2			1.520842	
2	1	17	58.9			2.746463	
3	2	13	76.8	1059		4.059686	
4	3	17	68.7	1799	1671	5.516351	1
5	3	10	77.1	1397	1346	7.562585	
6	2	16	61.8	1025		8.985248	
7	2	13	77.6	1671		10.353987	
8	2	19	81	1458		11.2765	

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	15	89.9	1715		0.926253	
1	2	18	89.5	1214		2.231492	
2	2	10	76.9	1741		3.60319	
3	3	14	70.7	1618	1860	5.378914	
4	2	9	77.6	1018		6.94603	1
5	2	6	72	1297		7.825529	
6	3	15	99	1491	1110	9.319515	
7	1	16	88.7			11.279118	

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	66.8	1594		0.160094	
1	2	7	86	1176		1.050172	
2	3	8	87.7	1106	1119	1.763834	
3	3	11	56.1	1989	1643	2.519681	
4	2	19	96.9	1414		3.085258	
5	2	11	51.4	1765		3.45032	
6	3	17	88.8	1445	1602	4.050951	
7	1	7	89.4			4.507036	
8	1	12	75.2			5.50716	
9	1	11	72.4			5.748093	1
10	2	8	77.1	1827		6.899205	
11	2	8	66	1746		7.573941	
12	3	12	79.7	1390	1581	7.643396	
13	1	11	57.3			8.610426	
14	2	16	87.7	1445		9.149183	
15	3	17	94.9	1367	1159	9.716976	
16	2	19	56.1	1569		10.447053	
17	2	9	71.2	1383		11.034262	
18	1	17	68.3			11.845	

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	5594.0, 5577.0, 5702.0, 5386.0, 5630.0, 5275.0, 5373.0, 5659.0, 5536.0, 5425.0, 5639.0, 5304.0, 5671.0, 5574.0, 5501.0, 5346.0, 5464.0, 5724.0, 5649.0, 5300.0, 5295.0, 5497.0, 5527.0, 5676.0, 5417.0, 5364.0, 5468.0, 5571.0, 5265.0, 5410.0, 5698.0, 5590.0, 5667.0, 5469.0, 5531.0, 5463.0, 5650.0, 5662.0, 5641.0, 5289.0, 5616.0, 5343.0, 5549.0, 5541.0, 5335.0, 5700.0, 5288.0, 5522.0, 5440.0, 5332.0, 5607.0, 5608.0, 5398.0, 5466.0, 5320.0, 5453.0, 5613.0, 5387.0, 5546.0, 5651.0, 5376.0, 5686.0, 5302.0, 5697.0, 5668.0, 5318.0, 5312.0, 5391.0, 5588.0, 5681.0, 5366.0, 5321.0, 5542.0, 5638.0, 5370.0, 5606.0, 5482.0, 5534.0, 5604.0, 5652.0, 5525.0, 5684.0, 5645.0, 5372.0, 5655.0, 5529.0, 5572.0, 5470.0, 5530.0, 5612.0, 5658.0, 5294.0, 5720.0, 5258.0, 5516.0, 5306.0, 5259.0, 5413.0, 5299.0, 5424.0 (number of hits: 10)
2	5580	9	1	333	1	5340.0, 5694.0, 5582.0, 5369.0, 5358.0, 5446.0, 5665.0, 5536.0, 5576.0, 5646.0, 5377.0, 5680.0, 5492.0, 5308.0, 5378.0, 5321.0, 5291.0, 5326.0, 5256.0, 5373.0, 5363.0, 5463.0, 5617.0, 5357.0, 5533.0, 5494.0, 5329.0, 5281.0, 5624.0, 5659.0, 5442.0, 5502.0, 5535.0, 5644.0, 5309.0, 5713.0, 5483.0, 5348.0, 5475.0, 5684.0, 5629.0, 5286.0, 5414.0, 5456.0, 5655.0, 5490.0, 5307.0, 5510.0, 5509.0, 5615.0, 5301.0, 5546.0, 5719.0, 5331.0, 5620.0, 5360.0, 5353.0, 5467.0, 5482.0, 5278.0, 5322.0, 5682.0, 5710.0, 5549.0, 5714.0, 5712.0, 5480.0, 5438.0, 5516.0, 5718.0, 5454.0, 5389.0, 5723.0, 5715.0, 5662.0, 5499.0, 5417.0, 5311.0, 5553.0, 5566.0, 5380.0, 5551.0, 5591.0, 5346.0, 5498.0, 5716.0, 5548.0, 5267.0, 5445.0, 5608.0, 5707.0, 5341.0, 5565.0, 5589.0, 5588.0, 5559.0, 5264.0, 5517.0, 5382.0, 5355.0 (number of hits: 7)
3	5580	9	1	333	1	5265.0, 5478.0, 5375.0, 5283.0, 5341.0, 5654.0, 5643.0, 5719.0, 5652.0, 5306.0, 5564.0, 5476.0, 5443.0, 5647.0, 5494.0, 5326.0, 5351.0, 5470.0, 5497.0, 5439.0, 5425.0, 5297.0, 5411.0, 5447.0, 5372.0, 5481.0, 5323.0, 5459.0, 5563.0, 5400.0, 5458.0, 5693.0, 5723.0, 5272.0, 5406.0, 5483.0, 5581.0, 5435.0, 5689.0, 5571.0, 5385.0, 5398.0, 5353.0, 5356.0, 5454.0,

						5666.0, 5259.0, 5278.0, 5549.0, 5677.0, 5715.0, 5649.0, 5707.0, 5720.0, 5574.0, 5699.0, 5575.0, 5295.0, 5499.0, 5594.0, 5686.0, 5387.0, 5255.0, 5514.0, 5617.0, 5550.0, 5664.0, 5508.0, 5703.0, 5388.0, 5480.0, 5313.0, 5682.0, 5399.0, 5621.0, 5438.0, 5487.0, 5340.0, 5383.0, 5379.0, 5320.0, 5545.0, 5445.0, 5601.0, 5338.0, 5271.0, 5460.0, 5374.0, 5378.0, 5363.0, 5495.0, 5717.0, 5402.0, 5583.0, 5553.0, 5513.0, 5528.0, 5329.0, 5312.0, 5332.0 (number of hits: 5)
4	5580	9	1	333	1	5355.0, 5311.0, 5599.0, 5347.0, 5556.0, 5387.0, 5377.0, 5321.0, 5547.0, 5408.0, 5624.0, 5306.0, 5352.0, 5612.0, 5315.0, 5363.0, 5317.0, 5581.0, 5572.0, 5515.0, 5534.0, 5337.0, 5672.0, 5265.0, 5407.0, 5366.0, 5588.0, 5432.0, 5553.0, 5469.0, 5590.0, 5571.0, 5476.0, 5298.0, 5682.0, 5390.0, 5662.0, 5477.0, 5704.0, 5707.0, 5601.0, 5591.0, 5546.0, 5533.0, 5427.0, 5720.0, 5491.0, 5423.0, 5596.0, 5351.0, 5267.0, 5400.0, 5297.0, 5540.0, 5429.0, 5345.0, 5552.0, 5330.0, 5609.0, 5560.0, 5259.0, 5310.0, 5451.0, 5703.0, 5403.0, 5367.0, 5339.0, 5676.0, 5416.0, 5690.0, 5503.0, 5331.0, 5474.0, 5557.0, 5260.0, 5380.0, 5605.0, 5681.0, 5670.0, 5253.0, 5502.0, 5632.0, 5287.0, 5493.0, 5615.0, 5415.0, 5513.0, 5722.0, 5406.0, 5659.0, 5710.0, 5404.0, 5622.0, 5526.0, 5307.0, 5711.0, 5576.0, 5538.0, 5445.0, 5290.0 (number of hits: 8)
5	5580	9	1	333	1	5364.0, 5429.0, 5528.0, 5681.0, 5427.0, 5330.0, 5599.0, 5347.0, 5482.0, 5324.0, 5438.0, 5354.0, 5679.0, 5637.0, 5401.0, 5605.0, 5331.0, 5418.0, 5470.0, 5539.0, 5610.0, 5266.0, 5453.0, 5361.0, 5263.0, 5297.0, 5497.0, 5715.0, 5425.0, 5648.0, 5422.0, 5628.0, 5353.0, 5305.0, 5625.0, 5473.0, 5682.0, 5592.0, 5633.0, 5326.0, 5621.0, 5523.0, 5390.0, 5510.0, 5450.0, 5327.0, 5352.0, 5300.0, 5702.0, 5651.0, 5290.0, 5276.0, 5343.0, 5547.0, 5378.0, 5338.0, 5485.0, 5312.0, 5479.0, 5424.0, 5569.0, 5714.0, 5502.0, 5323.0, 5613.0, 5270.0, 5431.0, 5700.0, 5289.0, 5647.0, 5575.0, 5466.0, 5337.0, 5643.0, 5529.0, 5445.0, 5687.0, 5692.0, 5346.0, 5471.0, 5255.0, 5626.0, 5366.0, 5546.0, 5711.0, 5542.0, 5536.0, 5559.0, 5571.0, 5654.0, 5283.0, 5484.0, 5285.0, 5408.0, 5705.0, 5469.0, 5508.0, 5449.0, 5483.0, 5708.0 (number of hits: 7)
6	5580	9	1	333	1	5685.0, 5534.0, 5485.0, 5711.0, 5566.0, 5354.0, 5700.0, 5287.0, 5308.0, 5707.0, 5379.0, 5678.0, 5651.0, 5271.0, 5252.0,

						5307.0, 5426.0, 5419.0, 5513.0, 5717.0, 5533.0, 5584.0, 5277.0, 5619.0, 5421.0, 5300.0, 5609.0, 5630.0, 5358.0, 5434.0, 5480.0, 5653.0, 5315.0, 5309.0, 5722.0, 5603.0, 5328.0, 5716.0, 5398.0, 5416.0, 5391.0, 5525.0, 5376.0, 5565.0, 5437.0, 5345.0, 5383.0, 5261.0, 5392.0, 5499.0, 5410.0, 5362.0, 5618.0, 5569.0, 5455.0, 5676.0, 5479.0, 5643.0, 5667.0, 5380.0, 5436.0, 5541.0, 5556.0, 5461.0, 5481.0, 5665.0, 5286.0, 5697.0, 5568.0, 5596.0, 5294.0, 5270.0, 5608.0, 5395.0, 5310.0, 5633.0, 5305.0, 5394.0, 5661.0, 5295.0, 5500.0, 5649.0, 5466.0, 5281.0, 5331.0, 5378.0, 5458.0, 5547.0, 5484.0, 5420.0, 5695.0, 5589.0, 5389.0, 5641.0, 5371.0, 5361.0, 5335.0, 5351.0, 5723.0, 5404.0 (number of hits: 10)
7	5580	9	1	333	1	5608.0, 5655.0, 5530.0, 5252.0, 5302.0, 5410.0, 5383.0, 5621.0, 5681.0, 5374.0, 5496.0, 5484.0, 5540.0, 5506.0, 5401.0, 5434.0, 5365.0, 5670.0, 5384.0, 5619.0, 5544.0, 5594.0, 5689.0, 5713.0, 5360.0, 5466.0, 5574.0, 5511.0, 5262.0, 5599.0, 5660.0, 5642.0, 5481.0, 5499.0, 5452.0, 5571.0, 5440.0, 5711.0, 5561.0, 5616.0, 5251.0, 5547.0, 5430.0, 5291.0, 5691.0, 5532.0, 5334.0, 5382.0, 5712.0, 5626.0, 5593.0, 5721.0, 5572.0, 5257.0, 5349.0, 5615.0, 5303.0, 5298.0, 5653.0, 5504.0, 5477.0, 5330.0, 5590.0, 5426.0, 5480.0, 5318.0, 5417.0, 5407.0, 5270.0, 5640.0, 5684.0, 5297.0, 5551.0, 5357.0, 5555.0, 5552.0, 5340.0, 5472.0, 5589.0, 5719.0, 5724.0, 5315.0, 5617.0, 5423.0, 5346.0, 5564.0, 5686.0, 5354.0, 5308.0, 5648.0, 5598.0, 5518.0, 5458.0, 5628.0, 5701.0, 5500.0, 5565.0, 5344.0, 5710.0, 5441.0 (number of hits: 6)
8	5580	9	1	333	1	5500.0, 5361.0, 5265.0, 5323.0, 5322.0, 5645.0, 5411.0, 5594.0, 5672.0, 5351.0, 5694.0, 5402.0, 5416.0, 5352.0, 5590.0, 5592.0, 5696.0, 5620.0, 5636.0, 5334.0, 5684.0, 5525.0, 5638.0, 5688.0, 5293.0, 5377.0, 5433.0, 5520.0, 5608.0, 5453.0, 5707.0, 5332.0, 5509.0, 5663.0, 5536.0, 5448.0, 5462.0, 5683.0, 5538.0, 5568.0, 5575.0, 5290.0, 5553.0, 5581.0, 5255.0, 5376.0, 5480.0, 5610.0, 5549.0, 5479.0, 5273.0, 5562.0, 5622.0, 5442.0, 5301.0, 5456.0, 5589.0, 5685.0, 5436.0, 5643.0, 5591.0, 5324.0, 5555.0, 5612.0, 5380.0, 5394.0, 5302.0, 5599.0, 5303.0, 5459.0, 5266.0, 5607.0, 5634.0, 5611.0, 5362.0, 5335.0, 5646.0, 5426.0, 5569.0, 5331.0, 5573.0, 5558.0, 5559.0, 5409.0, 5609.0, 5467.0, 5602.0, 5384.0, 5360.0, 5355.0,

						5712.0, 5312.0, 5325.0, 5391.0, 5512.0, 5483.0, 5424.0, 5395.0, 5278.0, 5675.0 (number of hits: 6)
9	5580	9	1	333	1	5571.0, 5272.0, 5540.0, 5528.0, 5475.0, 5368.0, 5615.0, 5618.0, 5551.0, 5677.0, 5660.0, 5642.0, 5635.0, 5572.0, 5467.0, 5428.0, 5336.0, 5644.0, 5662.0, 5301.0, 5647.0, 5639.0, 5515.0, 5499.0, 5607.0, 5491.0, 5340.0, 5579.0, 5442.0, 5500.0, 5381.0, 5426.0, 5567.0, 5718.0, 5625.0, 5263.0, 5486.0, 5388.0, 5716.0, 5363.0, 5383.0, 5361.0, 5252.0, 5266.0, 5348.0, 5292.0, 5489.0, 5485.0, 5555.0, 5547.0, 5598.0, 5583.0, 5689.0, 5397.0, 5594.0, 5283.0, 5589.0, 5391.0, 5668.0, 5435.0, 5312.0, 5278.0, 5632.0, 5286.0, 5256.0, 5389.0, 5724.0, 5419.0, 5306.0, 5360.0, 5257.0, 5400.0, 5574.0, 5359.0, 5374.0, 5517.0, 5664.0, 5349.0, 5652.0, 5353.0, 5452.0, 5544.0, 5439.0, 5661.0, 5424.0, 5305.0, 5380.0, 5463.0, 5498.0, 5495.0, 5566.0, 5557.0, 5561.0, 5387.0, 5612.0, 5289.0, 5455.0, 5509.0, 5454.0, 5295.0 (number of hits: 8)
10	5580	9	1	333	1	5508.0, 5350.0, 5694.0, 5591.0, 5323.0, 5534.0, 5523.0, 5364.0, 5517.0, 5524.0, 5266.0, 5442.0, 5292.0, 5310.0, 5430.0, 5467.0, 5540.0, 5418.0, 5655.0, 5271.0, 5477.0, 5365.0, 5361.0, 5315.0, 5322.0, 5290.0, 5390.0, 5693.0, 5593.0, 5573.0, 5606.0, 5437.0, 5250.0, 5259.0, 5381.0, 5414.0, 5325.0, 5516.0, 5302.0, 5334.0, 5273.0, 5497.0, 5582.0, 5284.0, 5670.0, 5691.0, 5649.0, 5305.0, 5574.0, 5297.0, 5387.0, 5635.0, 5371.0, 5709.0, 5460.0, 5285.0, 5633.0, 5436.0, 5514.0, 5650.0, 5375.0, 5569.0, 5712.0, 5647.0, 5552.0, 5454.0, 5327.0, 5455.0, 5690.0, 5448.0, 5268.0, 5507.0, 5299.0, 5528.0, 5664.0, 5653.0, 5518.0, 5611.0, 5298.0, 5317.0, 5557.0, 5585.0, 5495.0, 5556.0, 5294.0, 5600.0, 5542.0, 5464.0, 5362.0, 5663.0, 5612.0, 5458.0, 5601.0, 5484.0, 5433.0, 5545.0, 5354.0, 5496.0, 5333.0, 5505.0 (number of hits: 10)
11	5580	9	1	333	1	5450.0, 5530.0, 5675.0, 5379.0, 5527.0, 5349.0, 5329.0, 5588.0, 5545.0, 5525.0, 5284.0, 5713.0, 5443.0, 5409.0, 5656.0, 5652.0, 5618.0, 5292.0, 5720.0, 5547.0, 5331.0, 5426.0, 5259.0, 5636.0, 5586.0, 5607.0, 5276.0, 5517.0, 5300.0, 5471.0, 5482.0, 5375.0, 5313.0, 5626.0, 5361.0, 5412.0, 5494.0, 5490.0, 5282.0, 5464.0, 5250.0, 5486.0, 5263.0, 5579.0, 5422.0, 5319.0, 5315.0, 5533.0, 5535.0, 5428.0, 5611.0, 5695.0, 5446.0, 5647.0, 5560.0, 5621.0, 5662.0, 5456.0, 5506.0, 5565.0,

						5475.0, 5371.0, 5324.0, 5291.0, 5526.0, 5406.0, 5353.0, 5310.0, 5403.0, 5388.0, 5316.0, 5553.0, 5380.0, 5309.0, 5347.0, 5493.0, 5700.0, 5384.0, 5437.0, 5716.0, 5523.0, 5389.0, 5665.0, 5632.0, 5595.0, 5383.0, 5460.0, 5277.0, 5272.0, 5686.0, 5415.0, 5582.0, 5411.0, 5330.0, 5393.0, 5723.0, 5273.0, 5499.0, 5703.0, 5519.0 (number of hits: 6)
12	5580	9	1	333	1	5638.0, 5277.0, 5682.0, 5312.0, 5430.0, 5582.0, 5635.0, 5352.0, 5574.0, 5542.0, 5653.0, 5389.0, 5491.0, 5500.0, 5356.0, 5414.0, 5629.0, 5661.0, 5411.0, 5697.0, 5549.0, 5650.0, 5637.0, 5470.0, 5386.0, 5459.0, 5632.0, 5437.0, 5671.0, 5265.0, 5334.0, 5607.0, 5606.0, 5636.0, 5677.0, 5270.0, 5360.0, 5362.0, 5329.0, 5701.0, 5622.0, 5250.0, 5275.0, 5614.0, 5617.0, 5273.0, 5371.0, 5524.0, 5565.0, 5340.0, 5317.0, 5648.0, 5654.0, 5442.0, 5513.0, 5474.0, 5481.0, 5581.0, 5471.0, 5286.0, 5639.0, 5354.0, 5375.0, 5476.0, 5304.0, 5579.0, 5598.0, 5516.0, 5547.0, 5342.0, 5694.0, 5640.0, 5398.0, 5521.0, 5484.0, 5461.0, 5535.0, 5477.0, 5526.0, 5719.0, 5458.0, 5707.0, 5483.0, 5326.0, 5520.0, 5450.0, 5361.0, 5530.0, 5449.0, 5307.0, 5664.0, 5552.0, 5457.0, 5611.0, 5669.0, 5284.0, 5462.0, 5641.0, 5575.0, 5571.0 (number of hits: 4)
13	5580	9	1	333	1	5560.0, 5567.0, 5280.0, 5379.0, 5402.0, 5371.0, 5285.0, 5324.0, 5294.0, 5407.0, 5350.0, 5360.0, 5657.0, 5388.0, 5420.0, 5391.0, 5251.0, 5313.0, 5652.0, 5432.0, 5642.0, 5252.0, 5687.0, 5704.0, 5282.0, 5684.0, 5693.0, 5451.0, 5291.0, 5441.0, 5381.0, 5529.0, 5602.0, 5511.0, 5576.0, 5618.0, 5685.0, 5288.0, 5258.0, 5384.0, 5316.0, 5585.0, 5352.0, 5667.0, 5581.0, 5383.0, 5306.0, 5498.0, 5372.0, 5716.0, 5516.0, 5339.0, 5321.0, 5550.0, 5423.0, 5297.0, 5658.0, 5362.0, 5346.0, 5506.0, 5355.0, 5487.0, 5256.0, 5644.0, 5403.0, 5501.0, 5526.0, 5375.0, 5424.0, 5541.0, 5678.0, 5460.0, 5418.0, 5661.0, 5320.0, 5478.0, 5683.0, 5265.0, 5671.0, 5261.0, 5438.0, 5692.0, 5494.0, 5480.0, 5361.0, 5578.0, 5309.0, 5625.0, 5630.0, 5701.0, 5325.0, 5505.0, 5615.0, 5608.0, 5422.0, 5385.0, 5336.0, 5525.0, 5497.0, 5690.0 (number of hits: 8)
14	5580	9	1	333	1	5342.0, 5465.0, 5522.0, 5584.0, 5347.0, 5530.0, 5267.0, 5360.0, 5721.0, 5299.0, 5540.0, 5718.0, 5384.0, 5426.0, 5670.0, 5416.0, 5500.0, 5386.0, 5702.0, 5331.0, 5663.0, 5420.0, 5559.0, 5539.0, 5424.0, 5621.0, 5382.0, 5336.0, 5620.0, 5300.0,

						5655.0, 5415.0, 5645.0, 5577.0, 5561.0, 5324.0, 5307.0, 5429.0, 5618.0, 5362.0, 5277.0, 5361.0, 5716.0, 5627.0, 5558.0, 5494.0, 5453.0, 5543.0, 5398.0, 5463.0, 5328.0, 5351.0, 5346.0, 5255.0, 5445.0, 5335.0, 5385.0, 5321.0, 5302.0, 5649.0, 5304.0, 5407.0, 5542.0, 5493.0, 5318.0, 5373.0, 5608.0, 5715.0, 5451.0, 5535.0, 5387.0, 5629.0, 5515.0, 5687.0, 5296.0, 5431.0, 5270.0, 5496.0, 5265.0, 5443.0, 5590.0, 5600.0, 5437.0, 5724.0, 5581.0, 5686.0, 5511.0, 5562.0, 5682.0, 5634.0, 5411.0, 5551.0, 5597.0, 5693.0, 5280.0, 5570.0, 5582.0, 5383.0, 5316.0, 5678.0 (number of hits: 6)
15	5580	9	1	333	1	5462.0, 5552.0, 5426.0, 5705.0, 5487.0, 5287.0, 5681.0, 5301.0, 5652.0, 5401.0, 5670.0, 5642.0, 5622.0, 5508.0, 5531.0, 5465.0, 5683.0, 5464.0, 5447.0, 5600.0, 5643.0, 5554.0, 5701.0, 5716.0, 5545.0, 5588.0, 5648.0, 5457.0, 5339.0, 5374.0, 5455.0, 5641.0, 5382.0, 5548.0, 5302.0, 5340.0, 5562.0, 5395.0, 5695.0, 5504.0, 5308.0, 5355.0, 5268.0, 5370.0, 5346.0, 5255.0, 5658.0, 5603.0, 5367.0, 5429.0, 5274.0, 5352.0, 5451.0, 5576.0, 5644.0, 5436.0, 5403.0, 5710.0, 5676.0, 5453.0, 5712.0, 5718.0, 5265.0, 5619.0, 5383.0, 5471.0, 5529.0, 5281.0, 5440.0, 5551.0, 5404.0, 5604.0, 5717.0, 5538.0, 5515.0, 5571.0, 5610.0, 5325.0, 5316.0, 5407.0, 5351.0, 5454.0, 5387.0, 5420.0, 5298.0, 5425.0, 5260.0, 5578.0, 5359.0, 5608.0, 5584.0, 5384.0, 5523.0, 5664.0, 5399.0, 5626.0, 5353.0, 5482.0, 5259.0, 5391.0 (number of hits: 5)
16	5580	9	1	333	1	5544.0, 5307.0, 5279.0, 5557.0, 5503.0, 5633.0, 5292.0, 5656.0, 5334.0, 5495.0, 5711.0, 5517.0, 5519.0, 5528.0, 5675.0, 5379.0, 5620.0, 5457.0, 5277.0, 5499.0, 5719.0, 5614.0, 5376.0, 5265.0, 5441.0, 5339.0, 5393.0, 5672.0, 5478.0, 5445.0, 5621.0, 5331.0, 5351.0, 5647.0, 5496.0, 5581.0, 5475.0, 5657.0, 5700.0, 5622.0, 5377.0, 5698.0, 5501.0, 5580.0, 5536.0, 5658.0, 5693.0, 5650.0, 5467.0, 5651.0, 5454.0, 5373.0, 5696.0, 5662.0, 5606.0, 5674.0, 5676.0, 5368.0, 5488.0, 5643.0, 5518.0, 5708.0, 5723.0, 5481.0, 5288.0, 5595.0, 5483.0, 5347.0, 5569.0, 5683.0, 5472.0, 5348.0, 5695.0, 5567.0, 5364.0, 5554.0, 5406.0, 5372.0, 5434.0, 5400.0, 5365.0, 5560.0, 5309.0, 5558.0, 5523.0, 5383.0, 5471.0, 5463.0, 5697.0, 5330.0, 5590.0, 5378.0, 5304.0, 5286.0, 5720.0, 5263.0, 5313.0, 5390.0, 5718.0, 5415.0 (number of hits: 7)

17	5580	9	1	333	1	5304.0, 5260.0, 5488.0, 5305.0, 5716.0, 5429.0, 5680.0, 5712.0, 5704.0, 5544.0, 5684.0, 5619.0, 5537.0, 5598.0, 5532.0, 5543.0, 5592.0, 5294.0, 5407.0, 5700.0, 5493.0, 5255.0, 5660.0, 5644.0, 5515.0, 5621.0, 5492.0, 5556.0, 5714.0, 5409.0, 5661.0, 5303.0, 5348.0, 5450.0, 5512.0, 5283.0, 5687.0, 5542.0, 5634.0, 5596.0, 5618.0, 5558.0, 5340.0, 5394.0, 5593.0, 5336.0, 5367.0, 5685.0, 5451.0, 5439.0, 5612.0, 5528.0, 5309.0, 5602.0, 5413.0, 5356.0, 5477.0, 5570.0, 5397.0, 5541.0, 5571.0, 5398.0, 5497.0, 5316.0, 5384.0, 5567.0, 5359.0, 5586.0, 5320.0, 5523.0, 5643.0, 5465.0, 5525.0, 5386.0, 5315.0, 5319.0, 5347.0, 5264.0, 5559.0, 5280.0, 5460.0, 5562.0, 5663.0, 5545.0, 5438.0, 5423.0, 5533.0, 5292.0, 5638.0, 5522.0, 5624.0, 5710.0, 5511.0, 5607.0, 5399.0, 5422.0, 5262.0, 5502.0, 5701.0, 5271.0 (number of hits: 6)
18	5580	9	1	333	1	5574.0, 5327.0, 5472.0, 5354.0, 5686.0, 5627.0, 5285.0, 5608.0, 5439.0, 5636.0, 5656.0, 5265.0, 5292.0, 5344.0, 5517.0, 5418.0, 5307.0, 5291.0, 5323.0, 5408.0, 5602.0, 5514.0, 5707.0, 5320.0, 5446.0, 5666.0, 5372.0, 5531.0, 5594.0, 5620.0, 5416.0, 5466.0, 5413.0, 5371.0, 5684.0, 5295.0, 5563.0, 5321.0, 5487.0, 5600.0, 5624.0, 5694.0, 5703.0, 5561.0, 5334.0, 5392.0, 5315.0, 5263.0, 5259.0, 5606.0, 5287.0, 5252.0, 5351.0, 5269.0, 5609.0, 5618.0, 5436.0, 5393.0, 5468.0, 5282.0, 5710.0, 5544.0, 5714.0, 5385.0, 5674.0, 5543.0, 5704.0, 5643.0, 5556.0, 5485.0, 5366.0, 5461.0, 5410.0, 5480.0, 5310.0, 5362.0, 5527.0, 5299.0, 5396.0, 5452.0, 5719.0, 5483.0, 5562.0, 5605.0, 5635.0, 5294.0, 5359.0, 5672.0, 5615.0, 5496.0, 5424.0, 5402.0, 5270.0, 5390.0, 5550.0, 5475.0, 5364.0, 5500.0, 5630.0, 5329.0 (number of hits: 9)
19	5580	9	1	333	1	5294.0, 5459.0, 5447.0, 5354.0, 5347.0, 5636.0, 5723.0, 5635.0, 5496.0, 5563.0, 5509.0, 5301.0, 5397.0, 5628.0, 5403.0, 5534.0, 5339.0, 5398.0, 5590.0, 5366.0, 5533.0, 5452.0, 5652.0, 5669.0, 5640.0, 5326.0, 5331.0, 5336.0, 5549.0, 5470.0, 5270.0, 5328.0, 5657.0, 5492.0, 5696.0, 5267.0, 5350.0, 5587.0, 5710.0, 5619.0, 5645.0, 5406.0, 5622.0, 5302.0, 5323.0, 5373.0, 5567.0, 5575.0, 5253.0, 5647.0, 5605.0, 5472.0, 5581.0, 5661.0, 5485.0, 5644.0, 5353.0, 5675.0, 5288.0, 5444.0, 5699.0, 5566.0, 5461.0, 5658.0, 5320.0, 5649.0, 5540.0, 5568.0, 5266.0, 5338.0, 5314.0, 5601.0, 5352.0, 5442.0, 5516.0,

						5257.0, 5409.0, 5300.0, 5454.0, 5677.0, 5380.0, 5684.0, 5260.0, 5659.0, 5596.0, 5614.0, 5292.0, 5427.0, 5489.0, 5664.0, 5474.0, 5626.0, 5668.0, 5486.0, 5465.0, 5289.0, 5426.0, 5356.0, 5420.0, 5617.0 (number of hits: 8)
20	5580	9	1	333	1	5459.0, 5350.0, 5381.0, 5548.0, 5661.0, 5518.0, 5271.0, 5522.0, 5425.0, 5413.0, 5547.0, 5423.0, 5488.0, 5586.0, 5572.0, 5393.0, 5507.0, 5597.0, 5406.0, 5264.0, 5340.0, 5705.0, 5580.0, 5421.0, 5295.0, 5693.0, 5385.0, 5601.0, 5617.0, 5483.0, 5300.0, 5684.0, 5378.0, 5453.0, 5498.0, 5592.0, 5519.0, 5609.0, 5449.0, 5490.0, 5394.0, 5415.0, 5399.0, 5516.0, 5552.0, 5585.0, 5410.0, 5663.0, 5383.0, 5579.0, 5284.0, 5254.0, 5497.0, 5486.0, 5325.0, 5328.0, 5400.0, 5718.0, 5590.0, 5573.0, 5348.0, 5386.0, 5669.0, 5494.0, 5634.0, 5482.0, 5448.0, 5530.0, 5457.0, 5654.0, 5644.0, 5662.0, 5278.0, 5416.0, 5620.0, 5521.0, 5542.0, 5251.0, 5510.0, 5440.0, 5313.0, 5683.0, 5653.0, 5556.0, 5373.0, 5647.0, 5466.0, 5611.0, 5408.0, 5638.0, 5509.0, 5641.0, 5323.0, 5401.0, 5610.0, 5710.0, 5417.0, 5651.0, 5503.0, 5469.0 (number of hits: 3)
21	5580	9	1	333	1	5332.0, 5272.0, 5462.0, 5572.0, 5693.0, 5284.0, 5280.0, 5451.0, 5620.0, 5323.0, 5445.0, 5307.0, 5640.0, 5383.0, 5563.0, 5593.0, 5552.0, 5257.0, 5493.0, 5331.0, 5275.0, 5642.0, 5432.0, 5713.0, 5538.0, 5362.0, 5446.0, 5433.0, 5426.0, 5344.0, 5418.0, 5650.0, 5475.0, 5313.0, 5413.0, 5643.0, 5377.0, 5404.0, 5308.0, 5670.0, 5380.0, 5363.0, 5464.0, 5287.0, 5360.0, 5429.0, 5355.0, 5491.0, 5442.0, 5526.0, 5534.0, 5699.0, 5373.0, 5501.0, 5395.0, 5385.0, 5471.0, 5371.0, 5277.0, 5571.0, 5637.0, 5709.0, 5604.0, 5456.0, 5608.0, 5357.0, 5434.0, 5489.0, 5354.0, 5525.0, 5636.0, 5666.0, 5321.0, 5662.0, 5274.0, 5478.0, 5652.0, 5279.0, 5682.0, 5440.0, 5345.0, 5288.0, 5487.0, 5707.0, 5262.0, 5281.0, 5510.0, 5551.0, 5328.0, 5269.0, 5721.0, 5512.0, 5346.0, 5703.0, 5599.0, 5638.0, 5394.0, 5337.0, 5359.0, 5381.0 (number of hits: 5)
22	5580	9	1	333	1	5381.0, 5283.0, 5274.0, 5330.0, 5289.0, 5565.0, 5463.0, 5696.0, 5315.0, 5599.0, 5338.0, 5642.0, 5603.0, 5474.0, 5656.0, 5672.0, 5639.0, 5710.0, 5607.0, 5632.0, 5574.0, 5676.0, 5326.0, 5508.0, 5681.0, 5588.0, 5295.0, 5398.0, 5313.0, 5667.0, 5636.0, 5663.0, 5699.0, 5668.0, 5717.0, 5689.0, 5547.0, 5651.0, 5359.0, 5572.0, 5307.0, 5296.0, 5259.0, 5421.0, 5592.0,

						5461.0, 5386.0, 5469.0, 5323.0, 5308.0, 5270.0, 5616.0, 5293.0, 5298.0, 5707.0, 5452.0, 5476.0, 5450.0, 5468.0, 5532.0, 5540.0, 5511.0, 5465.0, 5424.0, 5423.0, 5387.0, 5503.0, 5350.0, 5531.0, 5365.0, 5357.0, 5577.0, 5449.0, 5360.0, 5541.0, 5506.0, 5697.0, 5432.0, 5550.0, 5312.0, 5496.0, 5671.0, 5620.0, 5416.0, 5251.0, 5302.0, 5255.0, 5348.0, 5571.0, 5267.0, 5290.0, 5299.0, 5698.0, 5276.0, 5389.0, 5341.0, 5393.0, 5453.0, 5716.0, 5545.0 (number of hits: 12)
23	5580	9	1	333	1	5341.0, 5689.0, 5439.0, 5534.0, 5314.0, 5257.0, 5392.0, 5282.0, 5545.0, 5677.0, 5384.0, 5488.0, 5535.0, 5363.0, 5321.0, 5600.0, 5492.0, 5702.0, 5421.0, 5541.0, 5382.0, 5354.0, 5525.0, 5268.0, 5522.0, 5623.0, 5486.0, 5333.0, 5527.0, 5612.0, 5263.0, 5289.0, 5704.0, 5465.0, 5557.0, 5553.0, 5451.0, 5521.0, 5295.0, 5415.0, 5334.0, 5351.0, 5348.0, 5463.0, 5409.0, 5260.0, 5646.0, 5577.0, 5493.0, 5445.0, 5627.0, 5705.0, 5344.0, 5366.0, 5468.0, 5472.0, 5618.0, 5328.0, 5379.0, 5666.0, 5362.0, 5428.0, 5686.0, 5652.0, 5570.0, 5698.0, 5585.0, 5614.0, 5292.0, 5723.0, 5501.0, 5438.0, 5411.0, 5520.0, 5561.0, 5524.0, 5530.0, 5514.0, 5611.0, 5637.0, 5707.0, 5424.0, 5564.0, 5480.0, 5443.0, 5250.0, 5629.0, 5681.0, 5457.0, 5326.0, 5664.0, 5669.0, 5406.0, 5437.0, 5504.0, 5266.0, 5435.0, 5264.0, 5645.0, 5456.0 (number of hits: 4)
24	5580	9	1	333	1	5351.0, 5626.0, 5565.0, 5288.0, 5394.0, 5706.0, 5320.0, 5354.0, 5651.0, 5265.0, 5659.0, 5552.0, 5465.0, 5603.0, 5549.0, 5461.0, 5571.0, 5477.0, 5480.0, 5386.0, 5573.0, 5528.0, 5566.0, 5419.0, 5637.0, 5628.0, 5503.0, 5481.0, 5670.0, 5653.0, 5658.0, 5539.0, 5299.0, 5267.0, 5657.0, 5668.0, 5399.0, 5525.0, 5321.0, 5449.0, 5669.0, 5664.0, 5529.0, 5416.0, 5431.0, 5453.0, 5417.0, 5330.0, 5356.0, 5452.0, 5442.0, 5257.0, 5413.0, 5498.0, 5568.0, 5451.0, 5521.0, 5697.0, 5615.0, 5272.0, 5430.0, 5406.0, 5607.0, 5483.0, 5586.0, 5679.0, 5701.0, 5500.0, 5333.0, 5276.0, 5250.0, 5622.0, 5595.0, 5491.0, 5718.0, 5388.0, 5638.0, 5588.0, 5317.0, 5631.0, 5675.0, 5558.0, 5297.0, 5656.0, 5370.0, 5713.0, 5496.0, 5444.0, 5614.0, 5489.0, 5293.0, 5704.0, 5459.0, 5377.0, 5460.0, 5494.0, 5522.0, 5271.0, 5567.0, 5484.0 (number of hits: 4)
25	5580	9	1	333	1	5495.0, 5403.0, 5628.0, 5297.0, 5276.0, 5353.0, 5558.0, 5496.0, 5376.0, 5571.0, 5709.0, 5537.0, 5595.0, 5689.0, 5398.0,

						5536.0, 5582.0, 5569.0, 5311.0, 5312.0, 5433.0, 5256.0, 5564.0, 5448.0, 5575.0, 5510.0, 5634.0, 5601.0, 5252.0, 5401.0, 5470.0, 5522.0, 5346.0, 5557.0, 5384.0, 5586.0, 5331.0, 5362.0, 5394.0, 5722.0, 5710.0, 5476.0, 5529.0, 5494.0, 5619.0, 5467.0, 5489.0, 5501.0, 5449.0, 5462.0, 5486.0, 5559.0, 5300.0, 5374.0, 5607.0, 5369.0, 5371.0, 5717.0, 5291.0, 5637.0, 5700.0, 5280.0, 5348.0, 5456.0, 5679.0, 5347.0, 5408.0, 5301.0, 5590.0, 5719.0, 5275.0, 5708.0, 5389.0, 5250.0, 5576.0, 5587.0, 5396.0, 5473.0, 5641.0, 5307.0, 5304.0, 5699.0, 5277.0, 5286.0, 5379.0, 5334.0, 5285.0, 5284.0, 5270.0, 5552.0, 5427.0, 5413.0, 5445.0, 5584.0, 5258.0, 5539.0, 5406.0, 5431.0, 5502.0, 5644.0 (number of hits: 10)
26	5580	9	1	333	1	5365.0, 5678.0, 5576.0, 5711.0, 5438.0, 5570.0, 5362.0, 5477.0, 5587.0, 5634.0, 5344.0, 5407.0, 5439.0, 5259.0, 5665.0, 5392.0, 5384.0, 5593.0, 5675.0, 5704.0, 5347.0, 5366.0, 5644.0, 5303.0, 5395.0, 5512.0, 5664.0, 5411.0, 5417.0, 5403.0, 5272.0, 5542.0, 5318.0, 5352.0, 5369.0, 5536.0, 5293.0, 5677.0, 5419.0, 5603.0, 5519.0, 5649.0, 5335.0, 5669.0, 5273.0, 5619.0, 5315.0, 5368.0, 5530.0, 5724.0, 5460.0, 5626.0, 5253.0, 5676.0, 5475.0, 5471.0, 5712.0, 5709.0, 5447.0, 5618.0, 5707.0, 5650.0, 5444.0, 5320.0, 5436.0, 5654.0, 5314.0, 5577.0, 5358.0, 5684.0, 5370.0, 5595.0, 5396.0, 5670.0, 5329.0, 5337.0, 5513.0, 5497.0, 5361.0, 5298.0, 5289.0, 5342.0, 5474.0, 5508.0, 5292.0, 5405.0, 5300.0, 5380.0, 5450.0, 5541.0, 5316.0, 5343.0, 5280.0, 5257.0, 5294.0, 5581.0, 5503.0, 5393.0, 5714.0, 5517.0 (number of hits: 8)
27	5580	9	1	333	1	5590.0, 5663.0, 5686.0, 5612.0, 5578.0, 5476.0, 5521.0, 5508.0, 5358.0, 5423.0, 5291.0, 5280.0, 5513.0, 5643.0, 5369.0, 5636.0, 5673.0, 5351.0, 5625.0, 5298.0, 5560.0, 5457.0, 5518.0, 5347.0, 5623.0, 5700.0, 5462.0, 5367.0, 5315.0, 5400.0, 5500.0, 5586.0, 5506.0, 5384.0, 5366.0, 5283.0, 5567.0, 5444.0, 5434.0, 5568.0, 5264.0, 5574.0, 5259.0, 5306.0, 5628.0, 5545.0, 5606.0, 5657.0, 5407.0, 5627.0, 5710.0, 5552.0, 5466.0, 5622.0, 5661.0, 5459.0, 5360.0, 5251.0, 5570.0, 5642.0, 5603.0, 5277.0, 5543.0, 5565.0, 5382.0, 5658.0, 5385.0, 5317.0, 5287.0, 5613.0, 5346.0, 5585.0, 5529.0, 5580.0, 5381.0, 5372.0, 5575.0, 5550.0, 5676.0, 5285.0, 5714.0, 5390.0, 5281.0, 5562.0, 5255.0, 5647.0, 5455.0, 5322.0, 5537.0, 5491.0,

						5721.0, 5405.0, 5343.0, 5688.0, 5665.0, 5376.0, 5635.0, 5702.0, 5467.0, 5484.0 (number of hits: 5)
28	5580	9	1	333	1	5322.0, 5400.0, 5487.0, 5281.0, 5627.0, 5447.0, 5335.0, 5290.0, 5712.0, 5263.0, 5705.0, 5415.0, 5583.0, 5353.0, 5449.0, 5319.0, 5696.0, 5413.0, 5287.0, 5662.0, 5638.0, 5631.0, 5642.0, 5605.0, 5409.0, 5269.0, 5398.0, 5437.0, 5680.0, 5534.0, 5670.0, 5260.0, 5292.0, 5592.0, 5506.0, 5686.0, 5498.0, 5488.0, 5716.0, 5570.0, 5702.0, 5709.0, 5607.0, 5612.0, 5270.0, 5653.0, 5330.0, 5514.0, 5311.0, 5444.0, 5595.0, 5463.0, 5582.0, 5428.0, 5576.0, 5645.0, 5258.0, 5556.0, 5454.0, 5723.0, 5274.0, 5364.0, 5383.0, 5389.0, 5687.0, 5490.0, 5621.0, 5320.0, 5707.0, 5405.0, 5626.0, 5541.0, 5647.0, 5715.0, 5255.0, 5475.0, 5306.0, 5256.0, 5524.0, 5695.0, 5374.0, 5442.0, 5410.0, 5618.0, 5718.0, 5656.0, 5377.0, 5664.0, 5708.0, 5317.0, 5682.0, 5529.0, 5276.0, 5692.0, 5357.0, 5339.0, 5698.0, 5579.0, 5284.0, 5359.0 (number of hits: 5)
29	5580	9	1	333	1	5630.0, 5287.0, 5663.0, 5340.0, 5257.0, 5341.0, 5682.0, 5688.0, 5471.0, 5325.0, 5458.0, 5309.0, 5608.0, 5369.0, 5352.0, 5703.0, 5537.0, 5277.0, 5723.0, 5346.0, 5568.0, 5576.0, 5420.0, 5427.0, 5550.0, 5266.0, 5405.0, 5696.0, 5554.0, 5714.0, 5388.0, 5507.0, 5288.0, 5509.0, 5543.0, 5381.0, 5713.0, 5262.0, 5403.0, 5333.0, 5578.0, 5361.0, 5260.0, 5596.0, 5469.0, 5396.0, 5435.0, 5305.0, 5661.0, 5448.0, 5690.0, 5321.0, 5279.0, 5353.0, 5581.0, 5390.0, 5623.0, 5437.0, 5440.0, 5603.0, 5275.0, 5540.0, 5489.0, 5410.0, 5289.0, 5377.0, 5517.0, 5535.0, 5615.0, 5314.0, 5472.0, 5464.0, 5394.0, 5512.0, 5708.0, 5468.0, 5457.0, 5482.0, 5406.0, 5720.0, 5270.0, 5499.0, 5562.0, 5404.0, 5639.0, 5653.0, 5473.0, 5616.0, 5332.0, 5265.0, 5595.0, 5454.0, 5491.0, 5484.0, 5631.0, 5291.0, 5640.0, 5592.0, 5593.0, 5528.0 (number of hits: 7)
30	5580	9	1	333	1	5586.0, 5490.0, 5563.0, 5272.0, 5683.0, 5301.0, 5276.0, 5721.0, 5657.0, 5533.0, 5386.0, 5408.0, 5290.0, 5645.0, 5568.0, 5555.0, 5620.0, 5440.0, 5396.0, 5720.0, 5708.0, 5504.0, 5663.0, 5350.0, 5534.0, 5613.0, 5542.0, 5469.0, 5706.0, 5305.0, 5605.0, 5269.0, 5323.0, 5621.0, 5258.0, 5689.0, 5284.0, 5498.0, 5675.0, 5634.0, 5430.0, 5459.0, 5381.0, 5450.0, 5700.0, 5432.0, 5340.0, 5558.0, 5655.0, 5546.0, 5356.0, 5481.0, 5346.0, 5714.0, 5295.0, 5329.0, 5380.0, 5411.0, 5339.0, 5397.0,

						5674.0, 5281.0, 5316.0, 5686.0, 5306.0, 5398.0, 5539.0, 5547.0, 5271.0, 5548.0, 5278.0, 5512.0, 5264.0, 5343.0, 5250.0, 5414.0, 5580.0, 5522.0, 5326.0, 5275.0, 5654.0, 5506.0, 5671.0, 5557.0, 5550.0, 5652.0, 5656.0, 5574.0, 5426.0, 5670.0, 5638.0, 5371.0, 5395.0, 5632.0, 5646.0, 5614.0, 5254.0, 5486.0, 5388.0, 5667.0 (number of hits: 5)

5270 MHz, 40 MHz Bandwidth

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

Please refer to the following statistical tables:

5270 MHz, 40 MHz Bandwidth

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	1
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: 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	5270	24	3	217	1
2	5270	29	2.7	193	1
3	5270	29	4.2	226	1
4	5270	26	1.6	167	1
5	5270	25	4.4	177	1
6	5270	26	4.6	190	1
7	5270	26	4.4	191	1
8	5270	29	2.7	218	1
9	5270	28	1.7	226	1
10	5270	24	1.9	170	1
11	5270	27	2.4	223	1
12	5270	27	3.1	216	1
13	5270	24	3.5	151	1
14	5270	26	2	199	1
15	5270	24	1.6	185	1
16	5270	26	4.1	175	1
17	5270	28	1.2	186	1
18	5270	27	2.4	206	1
19	5270	29	3.5	167	1
20	5270	23	3.4	183	1
21	5270	23	1.9	192	1
22	5270	27	3.5	165	1
23	5270	24	2.1	202	1
24	5270	23	4.4	154	1
25	5270	26	2.1	162	1
26	5270	27	4.7	155	1
27	5270	26	1.9	150	1
28	5270	29	2.9	195	1
29	5270	28	3.5	191	1
30	5270	25	4.4	225	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	5270	18	7	222	1
2	5270	18	7.9	400	1
3	5270	17	7.1	317	1
4	5270	17	9.1	210	1
5	5270	18	7.4	286	1
6	5270	16	7	314	1
7	5270	17	7.2	367	1
8	5270	16	9.8	222	1
9	5270	18	7.5	255	1
10	5270	18	7.6	215	1
11	5270	16	9.9	390	1
12	5270	16	6.3	325	1
13	5270	17	6	429	1
14	5270	17	9.9	379	1
15	5270	16	8	367	1
16	5270	16	6.7	334	1
17	5270	18	6.2	421	1
18	5270	17	8.4	252	1
19	5270	17	8.5	306	1
20	5270	16	8.7	218	1
21	5270	17	6.9	419	1
22	5270	16	10	459	1
23	5270	16	10	209	1
24	5270	18	9.2	235	1
25	5270	16	9.6	222	1
26	5270	16	7.9	465	1
27	5270	16	7.3	273	1
28	5270	17	7.5	381	1
29	5270	18	9.9	420	1
30	5270	18	7.1	305	1
Detection Percentage: 100 % (>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	15	16.2	219	1
2	5270	12	19.6	381	1
3	5270	15	13.5	441	1
4	5270	15	18.1	283	1
5	5270	12	12	448	1
6	5270	15	13.6	458	1
7	5270	16	16	334	1
8	5270	12	19.1	446	1
9	5270	14	18.3	368	1
10	5270	13	12.7	298	1
11	5270	14	18.9	392	1
12	5270	15	13.7	206	1
13	5270	12	14	458	1
14	5270	16	13.5	234	1
15	5270	15	18	419	1
16	5270	12	15.9	223	1
17	5270	13	18.1	242	1
18	5270	12	16.8	325	1
19	5270	13	17.8	494	1
20	5270	14	16.4	497	1
21	5270	16	17.3	207	1
22	5270	12	11.4	367	1
23	5270	14	19.1	286	1
24	5270	14	19.7	259	1
25	5270	15	12.4	325	1
26	5270	15	11.3	402	1
27	5270	13	16.5	484	1
28	5270	13	13.4	388	1
29	5270	14	14.9	414	1
30	5270	13	16.9	200	1
Detection Percentage: 100 % (>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	14	58.9	1108	1873	0.319677	
1	1	9	57.2			1.236379	
2	2	8	86.9	1263		1.661723	
3	1	9	93.2			2.070376	
4	1	15	89.9			2.871876	
5	2	9	94.5	1729		3.889801	
6	2	6	65.8	1885		4.548512	
7	2	15	84.2	1557		5.254753	
8	2	10	91	1952		5.826805	
9	2	14	87.5	1583		6.199469	1
10	3	19	82.1	1133	1489	6.73967	
11	3	16	59.4	1855	1541	7.656911	
12	2	8	89.4	1736		8.604054	
13	2	15	89.4	1344		9.084327	
14	2	19	99.7	1515		9.439342	
15	2	20	85.2	1391		10.482999	
16	1	13	76.3			10.927651	
17	2	19	63.3	1313		11.974958	

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	15	68.3	1913	1708	0.582944	
1	2	8	94.2	1971		1.508069	
2	2	14	58.1	1406		2.295087	
3	2	16	89.8	1307		2.879453	
4	1	16	95.9			4.320728	
5	2	14	52.9	1172		4.903648	
6	2	11	76.1	1877		5.798692	1
7	2	6	73.5	1905		6.626528	
8	3	7	96.3	1931	1859	7.951142	
9	3	15	72.4	1524	1223	8.512649	
10	3	7	60.3	1589	1330	9.834058	
11	1	10	52.9			10.286005	
12	1	15	70.1			11.156155	

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	1	7	81.4			0.326371	
1	2	16	61.5	1939		0.952064	
2	2	13	59.7	1715		1.755321	
3	3	13	86.7	1542	1917	2.794942	
4	1	16	90.7			3.506143	
5	1	18	52.7			4.305652	
6	1	15	55.1			5.170837	
7	3	5	52.1	1033	1976	5.503049	
8	2	6	80.4	1542		6.08274	1
9	2	7	93.5	1945		6.98733	
10	1	6	51			7.624833	
11	2	12	85.6	1054		8.355809	
12	3	6	53.3	1120	1298	9.715575	
13	3	13	82.4	1527	1163	9.960683	
14	1	15	72.6			11.009231	
15	2	13	62.3	1853		11.909303	

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	9	65.3	1800		0.84852	
1	3	9	64.2	1013	1919	1.374921	
2	3	17	80	1859	1819	2.215125	
3	2	17	74.7	1345		2.89384	
4	2	10	62.2	1904		4.520608	
5	1	18	78.8			4.786441	
6	2	20	85	1977		6.443046	1
7	2	19	68.8	1415		6.746615	
8	1	7	99.8			7.479912	
9	1	12	83.2			9.146353	
10	3	14	50.9	1041	1200	10.079708	
11	2	16	76.3	1992		10.940646	
12	2	15	91.8	1520		11.267123	

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	15	64.8	1523		0.005372	
1	3	7	93.7	1593	1573	1.67355	
2	2	7	99.7	1384		3.557833	
3	3	10	69.9	1850	1216	5.002058	
4	1	6	80.7			5.541736	1
5	2	9	79.4	1998		7.538455	
6	2	13	65.4	1778		8.675526	
7	2	12	59.1	1298		10.544217	
8	2	11	77.9	1129		10.940132	

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	6	50.5	1509		0.791071	
1	3	9	98.5	1655	1127	2.344465	
2	1	18	59.3			2.580653	
3	2	17	84.7	1485		4.678347	
4	2	12	56.8	1433		5.851098	
5	2	6	56.7	1886		6.433179	1
6	1	16	84.3			7.975996	
7	2	16	52.1	1016		9.239497	
8	1	13	61.1			9.80234	
9	3	6	99.5	1976	1521	11.391644	

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	18	50.4	1971	1976	1.253035	
1	3	10	59.9	1171	1900	2.051594	
2	2	16	69.4	1349		2.810374	
3	2	15	57.4	1004		5.093009	
4	1	8	61.3			6.632307	1
5	2	19	77	1860		7.582892	
6	2	20	92.7	1217		8.210462	
7	1	14	65.1			10.028078	
8	1	12	74			11.510592	

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	13	57.7	1183		0.703675	
1	3	19	93.6	1220	1506	1.169584	
2	2	11	64.4	1515		2.387762	
3	3	5	91.4	1988	1438	3.646082	
4	2	6	75.6	1594		3.970719	
5	2	19	76.7	1255		5.109185	
6	2	10	70.3	1330		6.394558	1
7	2	14	71.8	1959		7.115509	
8	3	17	80.8	1776	1610	8.102235	
9	2	8	78.6	1823		8.8206	
10	2	8	63.1	1247		9.458843	
11	2	12	58.5	1083		10.477597	
12	2	13	64	1875		11.384851	

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	20	61.7	1738		0.096181	
1	2	18	70.3	1811		1.063434	
2	1	11	62.4			1.432588	
3	2	14	78.9	1241		2.105932	
4	2	8	98.6	1936		2.567353	
5	1	8	82.2			3.278038	
6	1	6	92.4			3.96076	
7	1	9	71			4.884923	
8	2	5	80.8	1314		5.168521	
9	2	15	79.7	1604		6.247222	1
10	2	11	95	1527		6.596816	
11	3	15	56.8	1847	1617	7.215185	
12	2	16	86.8	1026		7.81865	
13	1	17	97.1			8.31426	
14	3	14	57.7	1086	1432	9.29066	
15	2	14	90.5	1911		9.874637	
16	3	9	70.4	1463	1737	10.505868	
17	1	12	68.6			11.326944	
18	3	5	97.7	1259	1711	11.586372	

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	8	66.5	1758		0.186997	
1	2	19	79.1	1068		0.860319	
2	2	6	83.3	1501		1.689354	
3	2	5	65.2	1848		2.06588	
4	2	18	59.4	1907		2.723623	
5	2	13	54.2	1816		3.773534	
6	3	5	79.4	1131	1691	3.793501	
7	2	9	92.6	1881		4.979103	
8	3	9	53.2	1045	1153	5.296533	
9	2	17	97.1	1149		5.932908	1
10	2	7	82.6	1133		6.774863	
11	3	9	80.5	1534	1993	7.342622	
12	2	14	92	1845		7.631946	
13	2	17	81.8	1134		8.563467	
14	3	16	51.8	1316	1907	9.395731	
15	2	8	74.8	1957		9.866352	
16	1	9	50.3			10.695833	
17	3	19	89.3	1346	1805	11.04778	
18	3	20	64.6	1845	1630	11.984218	

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	5	71.3			0.283881	
1	2	18	54.7	1066		1.280645	
2	2	18	53.4	1964		1.627735	
3	2	16	98.7	1985		2.319509	
4	3	11	96.9	1925	1805	3.00189	
5	2	14	57.6	1887		3.636296	
6	2	7	73	1816		4.597577	
7	3	7	99.8	1121	1855	5.188177	
8	2	14	95.7	1465		6.066584	1
9	2	18	62.1	1146		6.915594	
10	3	20	54.7	1004	1247	7.399432	
11	3	17	84.6	1265	1203	8.436898	
12	3	10	99.5	1222	1633	9.018359	
13	2	19	98.2	1426		9.479343	
14	3	11	58.3	1272	1609	9.927753	
15	3	7	60.5	1579	1337	11.105487	
16	3	17	53.3	1789	1524	11.61584	

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	12	88.8	1921		0.330712	
1	2	15	95.4	1499		0.760168	
2	2	15	99	1824		1.76935	
3	2	9	86.3	1102		2.555108	
4	2	13	57.9	1534		2.911364	
5	1	19	94.4			3.859197	
6	2	8	56.6	1418		4.312712	
7	1	17	65.9			5.111759	
8	2	18	51.2	1671		5.991952	
9	3	17	77.7	1051	1674	6.205555	1
10	3	12	67	1988	1019	6.823764	
11	1	6	87.8			7.428832	
12	3	20	72.6	1282	1341	8.090539	
13	2	13	62	1868		8.844383	
14	3	9	69	1026	1879	9.855549	
15	2	9	80.3	1471		10.211321	
16	3	12	50.3	1576	1642	10.821723	
17	3	10	58.9	1799	1723	11.518112	

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	18	69.8	1382		0.559582	
1	3	15	60.6	1741	1640	1.292747	
2	2	15	74.9	1919		1.399382	
3	2	16	89.4	1018		2.08883	
4	2	12	51.3	1957		2.795906	
5	2	14	96.4	1164		3.70303	
6	2	12	86.9	1181		4.340208	
7	2	5	66.4	1787		4.796316	
8	2	19	56	1733		5.457004	
9	2	6	70.2	1540		6.174177	1
10	2	19	97.6	1041		7.153579	
11	3	15	92.9	1357	1102	7.406309	
12	1	10	78.6			8.332616	
13	3	12	87	1809	1035	9.32488	
14	2	11	70.5	1906		9.793664	
15	2	11	92	1072		10.482003	
16	2	6	56.7	1849		10.786522	
17	2	19	51.5	1779		11.735184	

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	86.8	1231		0.061384	
1	1	8	66			0.900718	
2	2	17	82.7	1720		2.346207	
3	2	9	94.4	1449		2.660759	
4	2	12	88.2	1862		3.840368	
5	3	8	84.4	1903	1866	4.537913	
6	3	13	86.4	1263	1403	5.294089	
7	2	15	79.5	1798		6.33764	1
8	2	11	72.7	1640		6.553544	
9	3	11	81.8	1188	1906	7.734381	
10	1	16	84			8.163129	
11	2	5	99.4	1613		9.024437	
12	3	11	82.8	1809	1311	10.226088	
13	1	14	75.4			10.984294	
14	2	12	78.2	1748		11.428218	

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	63	1067	1133	0.50309	
1	3	17	62.2	1726	1702	2.377707	
2	1	14	57.5			2.689846	
3	2	17	89.1	1931		4.561589	
4	3	15	76	1387	1089	5.989174	1
5	2	14	69.4	1015		7.177817	
6	3	8	83.6	1672	1472	8.356281	
7	1	16	91.5			9.006214	
8	2	13	50.3	1196		10.222386	
9	2	15	83.8	1336		11.371001	

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	7	90	1014		0.578686	
1	2	20	52.6	1435		1.84674	
2	2	17	87.4	1577		2.66786	
3	1	16	95.4			3.483728	
4	3	19	70	1562	1012	4.037183	
5	1	15	83.7			5.587637	
6	2	7	78.2	1219		6.574032	1
7	2	9	58.7	1840		7.182392	
8	2	19	85.1	1755		8.774148	
9	2	7	74.2	1758		9.897812	
10	2	9	67.2	1333		10.403851	
11	2	18	52.1	1622		11.722553	

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	3	12	80.6	1994	1629	0.581706	
1	2	20	64.3	1421		1.11905	
2	2	16	58.5	1989		1.43869	
3	2	6	63.8	1822		2.186917	
4	3	18	53.2	1365	1343	3.006563	
5	2	7	95.6	1027		3.480029	
6	2	20	72.8	1327		4.311994	
7	3	15	90.8	1449	1076	4.854346	
8	3	5	72.7	1611	1941	5.663698	
9	3	15	93.1	1295	1141	6.178841	1
10	2	8	91.4	1025		6.542826	
11	1	18	97.8			7.330945	
12	2	7	80.8	1703		8.156318	
13	2	13	64.2	1184		8.323046	
14	1	18	88.4			9.162193	
15	1	9	54.6			9.933018	
16	1	16	99.8			10.235451	
17	1	11	53.2			10.877158	
18	1	16	99.1			11.419987	

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	19	54.8	1601	1715	0.67574	
1	3	8	64.6	1776	1349	1.018227	
2	2	8	52.5	1117		1.727873	
3	2	9	93.5	1114		2.735943	
4	1	17	98.4			3.069158	
5	3	12	94.7	1153	1971	4.041542	
6	2	7	78.8	1418		4.351236	
7	3	8	61.8	1351	1154	5.041705	
8	2	9	50.5	1123		5.775091	1
9	2	16	56	1443		6.956514	
10	2	17	68.4	1823		7.57282	
11	3	10	90.9	1371	1195	8.460638	
12	3	16	86.6	1006	1462	8.844106	
13	2	6	73.1	1842		9.715104	
14	3	11	65.5	1641	1912	10.392431	
15	2	19	91.4	1263		10.866825	
16	3	18	79.5	1395	1430	11.903694	

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	16	52.3	1156	1351	1.346616	
1	2	10	70	1309		2.278356	
2	2	19	76.2	1140		3.185532	
3	1	7	87.3			5.499062	1
4	2	9	92.3	1490		6.485848	
5	3	8	86.1	1617	1201	8.16231	
6	2	6	90.8	1093		10.470003	
7	3	8	81.2	1744	1398	11.397919	

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	12	74.8	1454		0.028924	
1	2	14	67.7	1529		1.492179	
2	2	11	78.7	1563		1.707381	
3	2	12	72.4	1733		2.971504	
4	2	11	99.9	1398		3.050733	
5	3	19	90.8	1589	1892	4.148751	
6	1	14	68.8			5.199352	
7	3	8	58.5	1931	1262	5.871918	1
8	3	15	68.5	1958	1137	6.68789	
9	1	18	78.1			7.397522	
10	1	17	67.8			7.834212	
11	2	19	92.3	1760		8.361355	
12	1	9	73.9			9.194139	
13	3	18	84.6	1262	1874	9.84874	
14	2	14	50.1	1587		11.009962	
15	2	13	79	1031		11.431872	

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	18	62.3	1467		0.497954	
1	2	8	67.3	1035		1.136614	
2	3	8	54.9	1302	1738	1.54891	
3	3	14	74.8	1289	1925	2.556556	
4	2	9	80.5	1500		3.673285	
5	1	14	52.7			3.836349	
6	1	8	67.6			4.746682	
7	1	9	60.8			5.953261	
8	3	17	81.5	1472	1184	6.555667	1
9	1	19	76.3			6.81551	
10	2	16	67.5	1979		8.190942	
11	3	13	59.8	1869	1987	8.756525	
12	2	11	90.5	1650		9.269327	
13	1	9	58.3			9.963441	
14	1	6	98.6			10.624258	
15	2	16	92.8	1447		11.357404	

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	9	51.4	1596		0.257141	
1	2	7	86.3	1836		2.014942	
2	3	17	50.5	1707	1613	2.709756	
3	2	15	74.5	1625		5.260207	
4	1	13	82.2			5.781397	1
5	2	8	53.2	1429		7.89016	
6	1	14	79.2			8.216392	
7	1	12	60.7			9.884234	
8	1	14	99.9			10.970187	

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	1	20	69.2			0.250771	
1	2	11	62	1873		1.465235	
2	1	19	98.2			2.186128	
3	2	19	80.8	1541		2.813828	
4	3	11	95.2	1752	1114	3.285612	
5	1	14	93.8			4.006999	
6	2	12	98.6	1427		5.510741	
7	2	18	66.1	1923		6.174698	1
8	1	10	73.7			7.051577	
9	2	12	50.4	1927		7.515082	
10	2	5	84	1555		8.291241	
11	2	9	70.3	1701		9.305591	
12	2	7	94.6	1995		10.142545	
13	3	12	55.8	1834	1203	10.757915	
14	3	14	76.5	1709	1124	11.881165	

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	17	60.9			0.838082	
1	2	11	68.4	1394		1.004155	
2	2	14	80.2	1629		2.655922	
3	2	7	74.3	1045		3.654315	
4	1	7	76.3			4.258639	
5	2	10	79.4	1961		5.727562	
6	1	17	98.9			6.308247	1
7	1	5	85.8			7.226422	
8	2	7	99	1504		8.677078	
9	3	9	83.5	1235	1528	9.668078	
10	1	8	79.9			10.360572	
11	1	18	87.7			11.356397	

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	16	67.8	1860		0.615858	
1	2	17	54.4	1991		1.158585	
2	2	6	86.3	1842		2.296944	
3	2	17	58.2	1727		3.508436	
4	1	16	84.6			4.076003	
5	2	10	88.4	1786		5.858049	
6	2	10	86.6	1112		6.095507	1
7	3	10	100	1252	1390	7.320889	
8	3	14	60.8	1728	1154	8.901388	
9	2	15	56.3	1383		9.200512	
10	1	8	50.9			10.305837	
11	2	12	57.7	1805		11.006268	

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	2	15	56.4	1606		0.291638	
1	2	15	58.8	1651		1.123918	
2	2	11	74.5	1263		2.626604	
3	2	9	87.7	1889		3.320565	
4	3	6	83.7	1398	1243	4.87629	
5	3	7	62.1	1484	1126	5.318508	
6	2	16	62.5	1326		6.090096	1
7	2	18	97.9	1853		7.816953	
8	3	6	85.2	1837	1733	8.901759	
9	2	11	51.8	1433		9.255781	
10	2	13	78.6	1229		10.106151	
11	2	9	51.4	1456		11.129888	

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	17	55.9			0.503177	
1	3	5	76.1	1247	1869	1.657667	
2	3	11	50.4	1819	1728	2.325539	
3	3	10	81.3	1532	1628	2.774766	
4	2	16	65	1999		3.749742	
5	2	14	88.6	1960		4.42143	
6	1	5	54.1			5.839305	
7	2	18	56.7	1873		6.519738	1
8	3	18	93.6	1932	1456	7.677447	
9	3	12	86.8	1204	1128	7.723135	
10	2	6	85.8	1423		8.972905	
11	2	15	64.4	1620		9.757073	
12	1	6	93.5			10.758891	
13	3	17	80.3	1887	1768	11.618919	

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	15	73.8	1082		0.020756	
1	3	12	62	1161	1129	1.613187	
2	2	19	84.3	1459		2.607596	
3	1	5	68.4			4.520001	
4	1	7	71.2			5.115614	
5	2	11	76.7	1442		6.958259	1
6	2	6	94.4	1981		7.76534	
7	3	6	56.5	1884	1080	9.36839	
8	2	13	90.2	1918		10.250617	
9	1	19	80.3			10.848789	

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	12	93.3	1356		0.12057	
1	2	10	62.3	1799		1.196817	
2	1	15	74.7			2.192477	
3	3	15	76.4	1646	1541	3.176483	
4	2	18	86.6	1860		4.100767	
5	2	7	62.8	1732		5.343817	
6	1	15	99.6			6.355259	1
7	2	6	82.5	1913		6.983646	
8	1	6	74.7			8.187646	
9	2	6	95.7	1024		8.774416	
10	2	20	69	1524		9.448995	
11	3	9	96.7	1149	1867	10.178018	
12	2	20	86	1466		11.743977	

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	20	75.2	1983		0.513922	
1	3	16	89.4	1066	1555	1.964183	
2	3	9	68.9	1304	1552	2.808403	
3	2	15	82.8	1827		3.086463	
4	2	15	60.1	1999		4.750637	
5	1	8	94.5			5.521837	1
6	2	6	91.8	1574		6.864036	
7	2	7	74.7	1656		7.614284	
8	2	8	72.7	1553		8.586246	
9	3	16	54.5	1876	1026	9.334056	
10	3	14	71.3	1784	1093	10.367041	
11	2	15	74	1866		11.213495	

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	5381.0, 5534.0, 5432.0, 5389.0, 5469.0, 5555.0, 5409.0, 5605.0, 5632.0, 5616.0, 5509.0, 5263.0, 5665.0, 5549.0, 5251.0, 5366.0, 5463.0, 5607.0, 5578.0, 5539.0, 5683.0, 5255.0, 5427.0, 5679.0, 5279.0, 5268.0, 5431.0, 5618.0, 5535.0, 5498.0, 5406.0, 5571.0, 5696.0, 5295.0, 5428.0, 5459.0, 5479.0, 5364.0, 5689.0, 5424.0, 5444.0, 5433.0, 5404.0, 5275.0, 5430.0, 5570.0, 5702.0, 5601.0, 5588.0, 5413.0, 5557.0, 5480.0, 5497.0, 5514.0, 5615.0, 5456.0, 5708.0, 5354.0, 5383.0, 5661.0, 5398.0, 5388.0, 5282.0, 5720.0, 5375.0, 5377.0, 5525.0, 5602.0, 5407.0, 5540.0, 5283.0, 5634.0, 5293.0, 5567.0, 5466.0, 5265.0, 5586.0, 5587.0, 5553.0, 5473.0, 5511.0, 5603.0, 5273.0, 5712.0, 5663.0, 5297.0, 5505.0, 5503.0, 5625.0, 5443.0, 5390.0, 5302.0, 5276.0, 5658.0, 5630.0, 5675.0, 5425.0, 5286.0, 5288.0, 5502.0 (number of hits: 6)
2	5270	9	1	333	1	5327.0, 5259.0, 5715.0, 5683.0, 5283.0, 5346.0, 5255.0, 5501.0, 5380.0, 5295.0, 5308.0, 5496.0, 5397.0, 5719.0, 5270.0, 5294.0, 5569.0, 5522.0, 5409.0, 5398.0, 5672.0, 5562.0, 5415.0, 5277.0, 5668.0, 5721.0, 5712.0, 5469.0, 5633.0, 5447.0, 5361.0, 5499.0, 5637.0, 5602.0, 5547.0, 5616.0, 5376.0, 5686.0, 5583.0, 5429.0, 5649.0, 5252.0, 5299.0, 5281.0, 5600.0, 5360.0, 5655.0, 5543.0, 5519.0, 5673.0, 5433.0, 5253.0, 5379.0, 5444.0, 5646.0, 5389.0, 5416.0, 5396.0, 5331.0, 5542.0, 5455.0, 5478.0, 5694.0, 5486.0, 5432.0, 5359.0, 5514.0, 5667.0, 5260.0, 5551.0, 5537.0, 5296.0, 5385.0, 5517.0, 5604.0, 5628.0, 5489.0, 5484.0, 5713.0, 5546.0, 5553.0, 5552.0, 5262.0, 5550.0, 5465.0, 5293.0, 5458.0, 5609.0, 5393.0, 5335.0, 5698.0, 5581.0, 5472.0, 5558.0, 5625.0, 5591.0, 5622.0, 5506.0, 5689.0, 5414.0 (number of hits: 6)
3	5270	9	1	333	1	5545.0, 5541.0, 5648.0, 5671.0, 5670.0, 5619.0, 5705.0, 5460.0, 5339.0, 5406.0, 5467.0, 5407.0, 5257.0, 5511.0, 5667.0, 5552.0, 5539.0, 5546.0, 5489.0, 5625.0, 5589.0, 5383.0, 5687.0, 5537.0, 5325.0, 5345.0, 5542.0, 5641.0, 5419.0, 5340.0, 5397.0, 5626.0, 5277.0, 5702.0, 5442.0, 5516.0, 5488.0, 5512.0, 5484.0, 5714.0, 5327.0, 5256.0, 5372.0, 5471.0, 5485.0, 5561.0, 5355.0, 5713.0, 5387.0, 5267.0, 5347.0, 5305.0, 5363.0, 5293.0, 5315.0, 5706.0, 5567.0, 5476.0, 5618.0, 5715.0,

						5333.0, 5464.0, 5343.0, 5487.0, 5326.0, 5440.0, 5364.0, 5513.0, 5469.0, 5268.0, 5381.0, 5344.0, 5367.0, 5544.0, 5250.0, 5543.0, 5707.0, 5677.0, 5685.0, 5359.0, 5373.0, 5691.0, 5297.0, 5459.0, 5280.0, 5264.0, 5320.0, 5536.0, 5582.0, 5480.0, 5550.0, 5528.0, 5603.0, 5309.0, 5410.0, 5697.0, 5694.0, 5664.0, 5322.0, 5594.0 (number of hits: 4)
4	5270	9	1	333	1	5657.0, 5339.0, 5440.0, 5406.0, 5625.0, 5633.0, 5630.0, 5292.0, 5532.0, 5537.0, 5707.0, 5316.0, 5641.0, 5706.0, 5578.0, 5552.0, 5533.0, 5495.0, 5360.0, 5521.0, 5372.0, 5612.0, 5494.0, 5443.0, 5529.0, 5649.0, 5638.0, 5321.0, 5587.0, 5461.0, 5393.0, 5384.0, 5258.0, 5378.0, 5508.0, 5250.0, 5676.0, 5622.0, 5632.0, 5270.0, 5349.0, 5662.0, 5687.0, 5345.0, 5352.0, 5472.0, 5354.0, 5695.0, 5311.0, 5449.0, 5631.0, 5513.0, 5573.0, 5555.0, 5319.0, 5454.0, 5517.0, 5389.0, 5276.0, 5581.0, 5429.0, 5392.0, 5395.0, 5496.0, 5600.0, 5380.0, 5528.0, 5457.0, 5252.0, 5260.0, 5673.0, 5531.0, 5323.0, 5549.0, 5351.0, 5322.0, 5325.0, 5295.0, 5437.0, 5417.0, 5652.0, 5266.0, 5267.0, 5265.0, 5607.0, 5358.0, 5336.0, 5541.0, 5362.0, 5718.0, 5524.0, 5547.0, 5307.0, 5591.0, 5713.0, 5383.0, 5445.0, 5409.0, 5514.0, 5328.0 (number of hits: 4)
5	5270	9	1	333	1	5446.0, 5385.0, 5376.0, 5457.0, 5367.0, 5400.0, 5526.0, 5658.0, 5592.0, 5502.0, 5660.0, 5368.0, 5424.0, 5686.0, 5415.0, 5471.0, 5402.0, 5563.0, 5674.0, 5675.0, 5612.0, 5695.0, 5488.0, 5518.0, 5578.0, 5696.0, 5378.0, 5297.0, 5535.0, 5516.0, 5339.0, 5436.0, 5698.0, 5632.0, 5714.0, 5608.0, 5493.0, 5634.0, 5426.0, 5573.0, 5569.0, 5322.0, 5362.0, 5365.0, 5380.0, 5250.0, 5316.0, 5529.0, 5613.0, 5267.0, 5298.0, 5390.0, 5509.0, 5371.0, 5417.0, 5494.0, 5295.0, 5549.0, 5579.0, 5337.0, 5342.0, 5277.0, 5336.0, 5689.0, 5432.0, 5475.0, 5506.0, 5700.0, 5562.0, 5568.0, 5587.0, 5638.0, 5558.0, 5623.0, 5319.0, 5324.0, 5706.0, 5386.0, 5369.0, 5630.0, 5586.0, 5701.0, 5373.0, 5355.0, 5375.0, 5403.0, 5524.0, 5480.0, 5537.0, 5462.0, 5643.0, 5719.0, 5710.0, 5406.0, 5708.0, 5673.0, 5300.0, 5268.0, 5617.0, 5266.0 (number of hits: 4)
6	5270	9	1	333	1	5596.0, 5343.0, 5405.0, 5350.0, 5453.0, 5586.0, 5406.0, 5581.0, 5442.0, 5259.0, 5589.0, 5500.0, 5656.0, 5720.0, 5309.0, 5614.0, 5699.0, 5570.0, 5371.0, 5502.0, 5551.0, 5568.0, 5524.0, 5520.0, 5384.0, 5592.0, 5563.0, 5345.0, 5636.0, 5492.0, 5710.0, 5613.0, 5712.0, 5366.0, 5615.0, 5284.0, 5637.0, 5392.0, 5645.0, 5594.0, 5655.0, 5513.0, 5355.0, 5375.0, 5258.0,

						5701.0, 5330.0, 5414.0, 5472.0, 5580.0, 5531.0, 5575.0, 5533.0, 5348.0, 5370.0, 5365.0, 5391.0, 5338.0, 5514.0, 5427.0, 5396.0, 5465.0, 5401.0, 5706.0, 5622.0, 5425.0, 5377.0, 5298.0, 5271.0, 5672.0, 5368.0, 5501.0, 5408.0, 5671.0, 5415.0, 5308.0, 5421.0, 5599.0, 5374.0, 5255.0, 5618.0, 5295.0, 5483.0, 5643.0, 5449.0, 5486.0, 5460.0, 5433.0, 5657.0, 5561.0, 5372.0, 5627.0, 5711.0, 5458.0, 5418.0, 5404.0, 5266.0, 5721.0, 5504.0, 5606.0 (number of hits: 4)
7	5270	9	1	333	1	5529.0, 5664.0, 5581.0, 5439.0, 5517.0, 5569.0, 5681.0, 5570.0, 5303.0, 5643.0, 5341.0, 5715.0, 5434.0, 5525.0, 5545.0, 5467.0, 5676.0, 5710.0, 5316.0, 5445.0, 5555.0, 5712.0, 5650.0, 5451.0, 5629.0, 5294.0, 5301.0, 5421.0, 5559.0, 5602.0, 5704.0, 5374.0, 5464.0, 5626.0, 5614.0, 5252.0, 5510.0, 5412.0, 5448.0, 5305.0, 5278.0, 5398.0, 5458.0, 5468.0, 5472.0, 5694.0, 5534.0, 5413.0, 5580.0, 5624.0, 5256.0, 5656.0, 5321.0, 5657.0, 5444.0, 5307.0, 5431.0, 5576.0, 5376.0, 5450.0, 5511.0, 5499.0, 5619.0, 5666.0, 5518.0, 5330.0, 5636.0, 5479.0, 5520.0, 5682.0, 5372.0, 5348.0, 5477.0, 5351.0, 5373.0, 5686.0, 5625.0, 5571.0, 5255.0, 5713.0, 5549.0, 5355.0, 5496.0, 5302.0, 5608.0, 5268.0, 5639.0, 5331.0, 5514.0, 5680.0, 5290.0, 5271.0, 5471.0, 5419.0, 5644.0, 5723.0, 5631.0, 5522.0, 5323.0, 5502.0 (number of hits: 7)
8	5270	9	1	333	1	5715.0, 5304.0, 5283.0, 5377.0, 5358.0, 5300.0, 5602.0, 5684.0, 5392.0, 5406.0, 5654.0, 5266.0, 5347.0, 5338.0, 5469.0, 5670.0, 5683.0, 5318.0, 5575.0, 5635.0, 5663.0, 5519.0, 5397.0, 5271.0, 5394.0, 5718.0, 5494.0, 5281.0, 5328.0, 5619.0, 5475.0, 5705.0, 5678.0, 5374.0, 5622.0, 5263.0, 5695.0, 5497.0, 5551.0, 5650.0, 5543.0, 5560.0, 5488.0, 5449.0, 5545.0, 5624.0, 5511.0, 5516.0, 5260.0, 5253.0, 5311.0, 5412.0, 5408.0, 5295.0, 5417.0, 5270.0, 5660.0, 5493.0, 5298.0, 5334.0, 5598.0, 5387.0, 5647.0, 5498.0, 5667.0, 5456.0, 5360.0, 5329.0, 5638.0, 5655.0, 5550.0, 5401.0, 5302.0, 5299.0, 5269.0, 5346.0, 5716.0, 5703.0, 5285.0, 5693.0, 5342.0, 5268.0, 5645.0, 5666.0, 5368.0, 5296.0, 5580.0, 5721.0, 5587.0, 5267.0, 5573.0, 5659.0, 5649.0, 5499.0, 5316.0, 5362.0, 5486.0, 5536.0, 5709.0, 5574.0 (number of hits: 9)
9	5270	9	1	333	1	5318.0, 5716.0, 5458.0, 5565.0, 5442.0, 5658.0, 5416.0, 5510.0, 5316.0, 5502.0, 5526.0, 5448.0, 5256.0, 5266.0, 5373.0, 5325.0, 5379.0, 5581.0, 5681.0, 5332.0, 5684.0, 5274.0, 5640.0, 5414.0, 5453.0, 5447.0, 5637.0, 5375.0, 5298.0, 5440.0,

						5371.0, 5326.0, 5283.0, 5481.0, 5408.0, 5613.0, 5646.0, 5301.0, 5472.0, 5255.0, 5575.0, 5258.0, 5396.0, 5309.0, 5438.0, 5335.0, 5264.0, 5567.0, 5714.0, 5406.0, 5275.0, 5308.0, 5594.0, 5391.0, 5587.0, 5292.0, 5436.0, 5427.0, 5672.0, 5589.0, 5619.0, 5559.0, 5477.0, 5551.0, 5484.0, 5341.0, 5302.0, 5455.0, 5429.0, 5603.0, 5395.0, 5670.0, 5311.0, 5279.0, 5633.0, 5270.0, 5263.0, 5696.0, 5389.0, 5527.0, 5462.0, 5433.0, 5382.0, 5501.0, 5629.0, 5630.0, 5479.0, 5677.0, 5664.0, 5541.0, 5586.0, 5625.0, 5700.0, 5680.0, 5333.0, 5347.0, 5590.0, 5616.0, 5591.0, 5655.0 (number of hits: 7)
10	5270	9	1	333	1	5342.0, 5606.0, 5433.0, 5338.0, 5397.0, 5290.0, 5456.0, 5563.0, 5682.0, 5520.0, 5407.0, 5560.0, 5664.0, 5252.0, 5335.0, 5414.0, 5337.0, 5662.0, 5283.0, 5448.0, 5586.0, 5281.0, 5282.0, 5373.0, 5625.0, 5690.0, 5259.0, 5328.0, 5498.0, 5595.0, 5555.0, 5567.0, 5576.0, 5512.0, 5618.0, 5608.0, 5500.0, 5661.0, 5341.0, 5415.0, 5687.0, 5715.0, 5568.0, 5315.0, 5351.0, 5695.0, 5591.0, 5261.0, 5475.0, 5566.0, 5572.0, 5372.0, 5628.0, 5513.0, 5646.0, 5502.0, 5600.0, 5603.0, 5359.0, 5447.0, 5467.0, 5464.0, 5459.0, 5656.0, 5707.0, 5477.0, 5696.0, 5451.0, 5491.0, 5501.0, 5358.0, 5626.0, 5478.0, 5345.0, 5596.0, 5548.0, 5706.0, 5462.0, 5668.0, 5291.0, 5287.0, 5346.0, 5367.0, 5380.0, 5497.0, 5597.0, 5330.0, 5623.0, 5710.0, 5644.0, 5703.0, 5515.0, 5340.0, 5320.0, 5530.0, 5533.0, 5700.0, 5438.0, 5611.0, 5429.0 (number of hits: 3)
11	5270	9	1	333	1	5472.0, 5443.0, 5362.0, 5403.0, 5489.0, 5623.0, 5514.0, 5618.0, 5334.0, 5568.0, 5340.0, 5354.0, 5429.0, 5273.0, 5270.0, 5458.0, 5679.0, 5592.0, 5404.0, 5692.0, 5251.0, 5663.0, 5390.0, 5365.0, 5301.0, 5509.0, 5358.0, 5313.0, 5288.0, 5608.0, 5495.0, 5420.0, 5410.0, 5573.0, 5479.0, 5617.0, 5496.0, 5704.0, 5451.0, 5642.0, 5498.0, 5377.0, 5387.0, 5327.0, 5512.0, 5350.0, 5505.0, 5349.0, 5502.0, 5394.0, 5712.0, 5603.0, 5552.0, 5631.0, 5587.0, 5607.0, 5366.0, 5549.0, 5584.0, 5383.0, 5329.0, 5359.0, 5686.0, 5510.0, 5662.0, 5279.0, 5409.0, 5575.0, 5318.0, 5353.0, 5423.0, 5322.0, 5285.0, 5401.0, 5367.0, 5715.0, 5594.0, 5414.0, 5585.0, 5688.0, 5486.0, 5615.0, 5442.0, 5253.0, 5599.0, 5719.0, 5262.0, 5418.0, 5653.0, 5254.0, 5466.0, 5721.0, 5583.0, 5707.0, 5561.0, 5609.0, 5255.0, 5654.0, 5375.0, 5312.0 (number of hits: 5)
12	5270	9	1	333	1	5431.0, 5460.0, 5573.0, 5463.0, 5468.0, 5278.0, 5445.0, 5514.0, 5479.0, 5625.0, 5574.0, 5704.0, 5313.0, 5254.0, 5650.0,

						5681.0, 5484.0, 5462.0, 5649.0, 5353.0, 5632.0, 5624.0, 5531.0, 5324.0, 5477.0, 5718.0, 5609.0, 5694.0, 5437.0, 5707.0, 5309.0, 5476.0, 5600.0, 5666.0, 5388.0, 5403.0, 5451.0, 5665.0, 5579.0, 5506.0, 5690.0, 5259.0, 5350.0, 5482.0, 5679.0, 5491.0, 5659.0, 5568.0, 5306.0, 5394.0, 5559.0, 5410.0, 5360.0, 5261.0, 5648.0, 5475.0, 5257.0, 5408.0, 5423.0, 5551.0, 5450.0, 5383.0, 5602.0, 5554.0, 5700.0, 5316.0, 5588.0, 5255.0, 5296.0, 5603.0, 5307.0, 5349.0, 5364.0, 5571.0, 5592.0, 5432.0, 5331.0, 5552.0, 5610.0, 5516.0, 5262.0, 5713.0, 5599.0, 5398.0, 5444.0, 5381.0, 5687.0, 5395.0, 5380.0, 5526.0, 5563.0, 5628.0, 5295.0, 5358.0, 5564.0, 5605.0, 5635.0, 5508.0, 5497.0, 5292.0 (number of hits: 7)
13	5270	9	1	333	1	5313.0, 5395.0, 5567.0, 5600.0, 5365.0, 5498.0, 5669.0, 5507.0, 5459.0, 5697.0, 5663.0, 5449.0, 5559.0, 5325.0, 5549.0, 5413.0, 5290.0, 5579.0, 5483.0, 5412.0, 5314.0, 5377.0, 5660.0, 5671.0, 5578.0, 5560.0, 5415.0, 5674.0, 5463.0, 5653.0, 5410.0, 5719.0, 5608.0, 5379.0, 5259.0, 5330.0, 5419.0, 5281.0, 5626.0, 5493.0, 5373.0, 5616.0, 5448.0, 5425.0, 5353.0, 5592.0, 5577.0, 5474.0, 5684.0, 5369.0, 5686.0, 5554.0, 5702.0, 5543.0, 5267.0, 5645.0, 5703.0, 5262.0, 5296.0, 5715.0, 5503.0, 5454.0, 5657.0, 5635.0, 5552.0, 5468.0, 5512.0, 5628.0, 5398.0, 5593.0, 5252.0, 5416.0, 5649.0, 5312.0, 5268.0, 5433.0, 5681.0, 5435.0, 5301.0, 5555.0, 5535.0, 5570.0, 5619.0, 5536.0, 5585.0, 5444.0, 5289.0, 5509.0, 5491.0, 5319.0, 5515.0, 5494.0, 5403.0, 5696.0, 5581.0, 5621.0, 5441.0, 5329.0, 5473.0, 5571.0 (number of hits: 7)
14	5270	9	1	333	1	5657.0, 5287.0, 5612.0, 5430.0, 5409.0, 5388.0, 5339.0, 5450.0, 5360.0, 5658.0, 5621.0, 5627.0, 5501.0, 5424.0, 5626.0, 5442.0, 5665.0, 5607.0, 5268.0, 5506.0, 5326.0, 5358.0, 5568.0, 5481.0, 5385.0, 5602.0, 5521.0, 5592.0, 5495.0, 5266.0, 5511.0, 5642.0, 5496.0, 5334.0, 5458.0, 5691.0, 5649.0, 5704.0, 5564.0, 5273.0, 5399.0, 5383.0, 5680.0, 5671.0, 5662.0, 5596.0, 5594.0, 5661.0, 5427.0, 5475.0, 5444.0, 5681.0, 5317.0, 5428.0, 5302.0, 5380.0, 5533.0, 5281.0, 5455.0, 5577.0, 5439.0, 5457.0, 5611.0, 5565.0, 5608.0, 5420.0, 5330.0, 5573.0, 5263.0, 5371.0, 5274.0, 5597.0, 5633.0, 5363.0, 5670.0, 5480.0, 5276.0, 5314.0, 5362.0, 5635.0, 5553.0, 5702.0, 5318.0, 5344.0, 5508.0, 5417.0, 5634.0, 5397.0, 5566.0, 5516.0, 5366.0, 5668.0, 5581.0, 5694.0, 5651.0, 5641.0, 5502.0, 5539.0, 5359.0, 5453.0 (number of hits: 3)

15	5270	9	1	333	1	5354.0, 5521.0, 5291.0, 5330.0, 5666.0, 5269.0, 5489.0, 5379.0, 5405.0, 5657.0, 5393.0, 5400.0, 5494.0, 5266.0, 5338.0, 5648.0, 5711.0, 5492.0, 5271.0, 5653.0, 5670.0, 5310.0, 5397.0, 5430.0, 5610.0, 5543.0, 5353.0, 5480.0, 5663.0, 5577.0, 5407.0, 5609.0, 5320.0, 5534.0, 5284.0, 5556.0, 5508.0, 5544.0, 5591.0, 5697.0, 5680.0, 5456.0, 5588.0, 5504.0, 5462.0, 5406.0, 5608.0, 5477.0, 5396.0, 5319.0, 5569.0, 5293.0, 5389.0, 5651.0, 5570.0, 5699.0, 5380.0, 5334.0, 5502.0, 5288.0, 5581.0, 5621.0, 5274.0, 5607.0, 5638.0, 5476.0, 5356.0, 5645.0, 5350.0, 5437.0, 5273.0, 5260.0, 5522.0, 5575.0, 5620.0, 5365.0, 5377.0, 5443.0, 5324.0, 5305.0, 5436.0, 5669.0, 5351.0, 5399.0, 5280.0, 5512.0, 5495.0, 5572.0, 5531.0, 5676.0, 5551.0, 5402.0, 5696.0, 5642.0, 5311.0, 5585.0, 5473.0, 5258.0, 5461.0, 5440.0 (number of hits: 6)
16	5270	9	1	333	1	5310.0, 5495.0, 5710.0, 5379.0, 5474.0, 5390.0, 5362.0, 5271.0, 5696.0, 5577.0, 5717.0, 5316.0, 5325.0, 5273.0, 5657.0, 5473.0, 5656.0, 5626.0, 5510.0, 5534.0, 5342.0, 5455.0, 5423.0, 5313.0, 5566.0, 5550.0, 5489.0, 5369.0, 5254.0, 5387.0, 5590.0, 5639.0, 5624.0, 5723.0, 5600.0, 5713.0, 5480.0, 5300.0, 5551.0, 5290.0, 5687.0, 5453.0, 5628.0, 5585.0, 5330.0, 5329.0, 5291.0, 5477.0, 5289.0, 5561.0, 5677.0, 5444.0, 5653.0, 5418.0, 5391.0, 5303.0, 5490.0, 5707.0, 5619.0, 5634.0, 5633.0, 5406.0, 5251.0, 5400.0, 5506.0, 5286.0, 5297.0, 5456.0, 5393.0, 5370.0, 5359.0, 5682.0, 5502.0, 5377.0, 5588.0, 5326.0, 5332.0, 5549.0, 5678.0, 5530.0, 5525.0, 5688.0, 5443.0, 5314.0, 5517.0, 5536.0, 5647.0, 5650.0, 5606.0, 5457.0, 5599.0, 5324.0, 5374.0, 5305.0, 5346.0, 5371.0, 5311.0, 5667.0, 5367.0, 5348.0 (number of hits: 12)
17	5270	9	1	333	1	5264.0, 5710.0, 5724.0, 5565.0, 5621.0, 5541.0, 5369.0, 5572.0, 5292.0, 5483.0, 5638.0, 5657.0, 5668.0, 5362.0, 5493.0, 5463.0, 5337.0, 5258.0, 5441.0, 5557.0, 5421.0, 5647.0, 5423.0, 5372.0, 5679.0, 5713.0, 5685.0, 5635.0, 5351.0, 5592.0, 5263.0, 5306.0, 5690.0, 5380.0, 5406.0, 5328.0, 5694.0, 5628.0, 5544.0, 5322.0, 5383.0, 5386.0, 5604.0, 5304.0, 5302.0, 5368.0, 5677.0, 5458.0, 5500.0, 5603.0, 5622.0, 5588.0, 5482.0, 5286.0, 5522.0, 5418.0, 5470.0, 5676.0, 5651.0, 5284.0, 5420.0, 5445.0, 5395.0, 5666.0, 5250.0, 5427.0, 5487.0, 5714.0, 5449.0, 5505.0, 5563.0, 5495.0, 5494.0, 5485.0, 5364.0, 5294.0, 5523.0, 5660.0, 5338.0, 5561.0, 5578.0, 5580.0, 5384.0, 5473.0, 5389.0, 5653.0, 5310.0, 5715.0, 5650.0, 5376.0,

						5348.0, 5579.0, 5271.0, 5525.0, 5359.0, 5305.0, 5663.0, 5619.0, 5432.0, 5538.0 (number of hits: 8)
18	5270	9	1	333	1	5267.0, 5538.0, 5440.0, 5480.0, 5603.0, 5520.0, 5289.0, 5578.0, 5646.0, 5604.0, 5447.0, 5382.0, 5399.0, 5329.0, 5353.0, 5602.0, 5304.0, 5439.0, 5437.0, 5656.0, 5318.0, 5568.0, 5305.0, 5581.0, 5612.0, 5491.0, 5699.0, 5714.0, 5532.0, 5288.0, 5666.0, 5401.0, 5281.0, 5466.0, 5619.0, 5320.0, 5697.0, 5702.0, 5462.0, 5272.0, 5533.0, 5713.0, 5625.0, 5594.0, 5350.0, 5682.0, 5355.0, 5508.0, 5607.0, 5444.0, 5671.0, 5443.0, 5694.0, 5686.0, 5516.0, 5264.0, 5335.0, 5465.0, 5567.0, 5290.0, 5275.0, 5600.0, 5506.0, 5426.0, 5598.0, 5524.0, 5347.0, 5340.0, 5668.0, 5572.0, 5707.0, 5334.0, 5460.0, 5695.0, 5587.0, 5627.0, 5256.0, 5565.0, 5319.0, 5474.0, 5672.0, 5343.0, 5679.0, 5688.0, 5684.0, 5271.0, 5517.0, 5274.0, 5557.0, 5378.0, 5658.0, 5575.0, 5534.0, 5269.0, 5487.0, 5610.0, 5549.0, 5375.0, 5653.0, 5531.0 (number of hits: 5)
19	5270	9	1	333	1	5271.0, 5721.0, 5705.0, 5689.0, 5670.0, 5398.0, 5517.0, 5451.0, 5713.0, 5628.0, 5469.0, 5539.0, 5368.0, 5250.0, 5544.0, 5273.0, 5565.0, 5351.0, 5405.0, 5606.0, 5298.0, 5687.0, 5568.0, 5542.0, 5266.0, 5589.0, 5365.0, 5712.0, 5435.0, 5549.0, 5303.0, 5677.0, 5287.0, 5481.0, 5641.0, 5342.0, 5262.0, 5323.0, 5316.0, 5388.0, 5369.0, 5563.0, 5310.0, 5547.0, 5419.0, 5572.0, 5586.0, 5624.0, 5476.0, 5305.0, 5290.0, 5669.0, 5698.0, 5578.0, 5486.0, 5259.0, 5685.0, 5436.0, 5607.0, 5421.0, 5666.0, 5328.0, 5674.0, 5453.0, 5408.0, 5667.0, 5593.0, 5580.0, 5387.0, 5488.0, 5621.0, 5479.0, 5494.0, 5459.0, 5498.0, 5613.0, 5502.0, 5447.0, 5483.0, 5433.0, 5533.0, 5314.0, 5638.0, 5356.0, 5308.0, 5612.0, 5543.0, 5588.0, 5295.0, 5662.0, 5473.0, 5438.0, 5474.0, 5710.0, 5471.0, 5390.0, 5642.0, 5654.0, 5535.0, 5468.0 (number of hits: 9)
20	5270	9	1	333	1	5451.0, 5407.0, 5717.0, 5627.0, 5410.0, 5313.0, 5678.0, 5262.0, 5427.0, 5705.0, 5315.0, 5650.0, 5252.0, 5321.0, 5702.0, 5295.0, 5316.0, 5632.0, 5379.0, 5472.0, 5253.0, 5509.0, 5620.0, 5552.0, 5526.0, 5691.0, 5268.0, 5548.0, 5376.0, 5635.0, 5557.0, 5282.0, 5553.0, 5258.0, 5570.0, 5522.0, 5467.0, 5675.0, 5639.0, 5338.0, 5287.0, 5568.0, 5588.0, 5661.0, 5423.0, 5689.0, 5452.0, 5439.0, 5411.0, 5375.0, 5255.0, 5619.0, 5293.0, 5683.0, 5603.0, 5459.0, 5668.0, 5631.0, 5692.0, 5558.0, 5285.0, 5713.0, 5642.0, 5652.0, 5701.0, 5617.0, 5448.0, 5530.0, 5260.0, 5424.0, 5643.0, 5298.0, 5486.0, 5500.0, 5669.0,

						5656.0, 5466.0, 5428.0, 5536.0, 5400.0, 5489.0, 5714.0, 5314.0, 5266.0, 5501.0, 5453.0, 5636.0, 5468.0, 5405.0, 5529.0, 5473.0, 5679.0, 5641.0, 5585.0, 5283.0, 5367.0, 5686.0, 5416.0, 5541.0, 5319.0 (number of hits: 7)
21	5270	9	1	333	1	5423.0, 5669.0, 5705.0, 5460.0, 5662.0, 5447.0, 5306.0, 5352.0, 5706.0, 5696.0, 5408.0, 5485.0, 5610.0, 5276.0, 5596.0, 5419.0, 5271.0, 5272.0, 5252.0, 5722.0, 5469.0, 5326.0, 5559.0, 5348.0, 5307.0, 5498.0, 5404.0, 5318.0, 5475.0, 5712.0, 5501.0, 5558.0, 5560.0, 5539.0, 5547.0, 5583.0, 5396.0, 5580.0, 5723.0, 5619.0, 5427.0, 5497.0, 5531.0, 5593.0, 5448.0, 5492.0, 5545.0, 5573.0, 5484.0, 5600.0, 5440.0, 5647.0, 5653.0, 5587.0, 5295.0, 5602.0, 5259.0, 5342.0, 5374.0, 5287.0, 5668.0, 5679.0, 5636.0, 5429.0, 5683.0, 5633.0, 5435.0, 5451.0, 5621.0, 5701.0, 5525.0, 5536.0, 5282.0, 5261.0, 5495.0, 5414.0, 5724.0, 5584.0, 5411.0, 5599.0, 5391.0, 5422.0, 5257.0, 5528.0, 5503.0, 5632.0, 5661.0, 5472.0, 5385.0, 5392.0, 5601.0, 5641.0, 5254.0, 5676.0, 5420.0, 5512.0, 5298.0, 5320.0, 5551.0, 5364.0 (number of hits: 5)
22	5270	9	1	333	1	5346.0, 5495.0, 5302.0, 5506.0, 5572.0, 5405.0, 5615.0, 5378.0, 5720.0, 5575.0, 5427.0, 5678.0, 5349.0, 5428.0, 5564.0, 5532.0, 5605.0, 5451.0, 5607.0, 5668.0, 5444.0, 5449.0, 5399.0, 5579.0, 5656.0, 5539.0, 5700.0, 5407.0, 5655.0, 5541.0, 5602.0, 5342.0, 5363.0, 5550.0, 5641.0, 5278.0, 5657.0, 5481.0, 5565.0, 5706.0, 5544.0, 5527.0, 5472.0, 5642.0, 5559.0, 5521.0, 5275.0, 5610.0, 5578.0, 5502.0, 5667.0, 5462.0, 5443.0, 5592.0, 5519.0, 5632.0, 5259.0, 5719.0, 5305.0, 5272.0, 5268.0, 5311.0, 5431.0, 5545.0, 5647.0, 5576.0, 5255.0, 5573.0, 5341.0, 5445.0, 5308.0, 5520.0, 5553.0, 5400.0, 5609.0, 5424.0, 5513.0, 5322.0, 5710.0, 5577.0, 5323.0, 5273.0, 5676.0, 5693.0, 5718.0, 5295.0, 5467.0, 5689.0, 5314.0, 5594.0, 5251.0, 5714.0, 5357.0, 5651.0, 5421.0, 5643.0, 5290.0, 5716.0, 5660.0, 5404.0 (number of hits: 7)
23	5270	9	1	333	1	5414.0, 5577.0, 5675.0, 5300.0, 5313.0, 5550.0, 5721.0, 5694.0, 5530.0, 5293.0, 5482.0, 5445.0, 5535.0, 5528.0, 5679.0, 5541.0, 5653.0, 5579.0, 5552.0, 5316.0, 5496.0, 5322.0, 5638.0, 5472.0, 5598.0, 5570.0, 5594.0, 5711.0, 5334.0, 5615.0, 5441.0, 5674.0, 5271.0, 5402.0, 5320.0, 5636.0, 5603.0, 5493.0, 5353.0, 5478.0, 5255.0, 5574.0, 5542.0, 5272.0, 5265.0, 5578.0, 5712.0, 5490.0, 5432.0, 5436.0, 5612.0, 5270.0, 5269.0, 5438.0, 5360.0, 5314.0, 5621.0, 5418.0, 5388.0, 5291.0,

						5587.0, 5488.0, 5460.0, 5525.0, 5540.0, 5646.0, 5710.0, 5331.0, 5714.0, 5424.0, 5492.0, 5549.0, 5684.0, 5338.0, 5511.0, 5258.0, 5430.0, 5581.0, 5676.0, 5259.0, 5529.0, 5267.0, 5495.0, 5606.0, 5260.0, 5333.0, 5427.0, 5713.0, 5364.0, 5699.0, 5634.0, 5299.0, 5458.0, 5311.0, 5306.0, 5620.0, 5285.0, 5693.0, 5312.0, 5661.0 (number of hits: 10)
24	5270	9	1	333	1	5379.0, 5611.0, 5260.0, 5505.0, 5423.0, 5478.0, 5625.0, 5360.0, 5452.0, 5305.0, 5599.0, 5319.0, 5652.0, 5539.0, 5538.0, 5634.0, 5256.0, 5277.0, 5489.0, 5292.0, 5717.0, 5380.0, 5645.0, 5555.0, 5402.0, 5577.0, 5498.0, 5377.0, 5527.0, 5472.0, 5477.0, 5494.0, 5351.0, 5517.0, 5337.0, 5486.0, 5283.0, 5296.0, 5295.0, 5636.0, 5664.0, 5516.0, 5659.0, 5565.0, 5579.0, 5446.0, 5448.0, 5610.0, 5618.0, 5386.0, 5534.0, 5649.0, 5633.0, 5466.0, 5284.0, 5712.0, 5624.0, 5464.0, 5692.0, 5620.0, 5566.0, 5362.0, 5451.0, 5605.0, 5532.0, 5462.0, 5428.0, 5653.0, 5288.0, 5312.0, 5508.0, 5608.0, 5287.0, 5399.0, 5252.0, 5482.0, 5372.0, 5294.0, 5394.0, 5487.0, 5251.0, 5632.0, 5511.0, 5520.0, 5356.0, 5630.0, 5314.0, 5435.0, 5714.0, 5571.0, 5524.0, 5582.0, 5570.0, 5417.0, 5530.0, 5301.0, 5718.0, 5475.0, 5434.0, 5354.0 (number of hits: 10)
25	5270	9	1	333	1	5333.0, 5424.0, 5404.0, 5283.0, 5370.0, 5570.0, 5468.0, 5295.0, 5281.0, 5667.0, 5431.0, 5364.0, 5499.0, 5365.0, 5429.0, 5469.0, 5263.0, 5349.0, 5494.0, 5516.0, 5385.0, 5541.0, 5484.0, 5446.0, 5614.0, 5668.0, 5717.0, 5278.0, 5672.0, 5392.0, 5383.0, 5598.0, 5625.0, 5555.0, 5254.0, 5540.0, 5448.0, 5388.0, 5691.0, 5652.0, 5271.0, 5362.0, 5318.0, 5512.0, 5268.0, 5338.0, 5336.0, 5711.0, 5683.0, 5453.0, 5520.0, 5430.0, 5641.0, 5352.0, 5384.0, 5358.0, 5459.0, 5607.0, 5436.0, 5317.0, 5314.0, 5643.0, 5391.0, 5252.0, 5664.0, 5375.0, 5421.0, 5531.0, 5397.0, 5487.0, 5632.0, 5596.0, 5315.0, 5458.0, 5374.0, 5513.0, 5634.0, 5587.0, 5679.0, 5354.0, 5651.0, 5609.0, 5712.0, 5479.0, 5648.0, 5376.0, 5489.0, 5561.0, 5639.0, 5277.0, 5527.0, 5264.0, 5452.0, 5273.0, 5575.0, 5660.0, 5628.0, 5296.0, 5681.0, 5258.0 (number of hits: 3)
26	5270	9	1	333	1	5343.0, 5448.0, 5664.0, 5651.0, 5363.0, 5322.0, 5342.0, 5538.0, 5709.0, 5251.0, 5447.0, 5389.0, 5391.0, 5562.0, 5403.0, 5623.0, 5325.0, 5713.0, 5592.0, 5620.0, 5305.0, 5272.0, 5566.0, 5409.0, 5685.0, 5716.0, 5324.0, 5341.0, 5377.0, 5424.0, 5470.0, 5689.0, 5330.0, 5700.0, 5404.0, 5446.0, 5396.0, 5695.0, 5367.0, 5491.0, 5319.0, 5372.0, 5327.0, 5317.0, 5640.0,

						5460.0, 5686.0, 5421.0, 5373.0, 5366.0, 5388.0, 5383.0, 5715.0, 5641.0, 5427.0, 5472.0, 5287.0, 5496.0, 5543.0, 5572.0, 5359.0, 5488.0, 5452.0, 5430.0, 5299.0, 5614.0, 5585.0, 5461.0, 5289.0, 5260.0, 5387.0, 5589.0, 5638.0, 5539.0, 5312.0, 5569.0, 5392.0, 5398.0, 5524.0, 5697.0, 5253.0, 5304.0, 5321.0, 5630.0, 5563.0, 5498.0, 5596.0, 5546.0, 5690.0, 5600.0, 5323.0, 5578.0, 5656.0, 5469.0, 5518.0, 5356.0, 5698.0, 5619.0, 5340.0, 5677.0 (number of hits: 6)
27	5270	9	1	333	1	5473.0, 5367.0, 5548.0, 5689.0, 5559.0, 5391.0, 5433.0, 5598.0, 5468.0, 5363.0, 5261.0, 5653.0, 5665.0, 5449.0, 5311.0, 5496.0, 5253.0, 5256.0, 5494.0, 5371.0, 5278.0, 5577.0, 5664.0, 5268.0, 5593.0, 5533.0, 5444.0, 5366.0, 5344.0, 5568.0, 5519.0, 5260.0, 5287.0, 5651.0, 5541.0, 5511.0, 5615.0, 5667.0, 5571.0, 5340.0, 5471.0, 5649.0, 5476.0, 5266.0, 5601.0, 5428.0, 5578.0, 5269.0, 5693.0, 5521.0, 5322.0, 5586.0, 5589.0, 5617.0, 5490.0, 5273.0, 5417.0, 5542.0, 5330.0, 5313.0, 5357.0, 5459.0, 5277.0, 5451.0, 5467.0, 5525.0, 5466.0, 5627.0, 5646.0, 5369.0, 5336.0, 5659.0, 5560.0, 5267.0, 5505.0, 5319.0, 5620.0, 5281.0, 5486.0, 5515.0, 5321.0, 5674.0, 5293.0, 5408.0, 5554.0, 5385.0, 5343.0, 5583.0, 5270.0, 5498.0, 5458.0, 5663.0, 5537.0, 5594.0, 5402.0, 5295.0, 5424.0, 5595.0, 5647.0, 5403.0 (number of hits: 5)
28	5270	9	1	333	1	5303.0, 5523.0, 5594.0, 5331.0, 5540.0, 5513.0, 5450.0, 5590.0, 5508.0, 5559.0, 5584.0, 5713.0, 5669.0, 5635.0, 5435.0, 5698.0, 5370.0, 5541.0, 5641.0, 5550.0, 5292.0, 5583.0, 5549.0, 5492.0, 5622.0, 5326.0, 5307.0, 5613.0, 5707.0, 5505.0, 5712.0, 5575.0, 5632.0, 5251.0, 5407.0, 5701.0, 5489.0, 5616.0, 5269.0, 5432.0, 5694.0, 5412.0, 5643.0, 5600.0, 5664.0, 5654.0, 5386.0, 5404.0, 5417.0, 5706.0, 5478.0, 5364.0, 5710.0, 5418.0, 5354.0, 5398.0, 5283.0, 5658.0, 5563.0, 5631.0, 5655.0, 5481.0, 5347.0, 5254.0, 5308.0, 5313.0, 5634.0, 5689.0, 5389.0, 5539.0, 5528.0, 5266.0, 5259.0, 5362.0, 5263.0, 5385.0, 5415.0, 5327.0, 5565.0, 5722.0, 5593.0, 5305.0, 5515.0, 5321.0, 5264.0, 5647.0, 5516.0, 5556.0, 5553.0, 5452.0, 5333.0, 5662.0, 5723.0, 5542.0, 5650.0, 5314.0, 5690.0, 5345.0, 5554.0, 5375.0 (number of hits: 7)
29	5270	9	1	333	1	5640.0, 5587.0, 5561.0, 5265.0, 5408.0, 5285.0, 5659.0, 5676.0, 5469.0, 5415.0, 5648.0, 5434.0, 5696.0, 5283.0, 5297.0, 5320.0, 5625.0, 5401.0, 5331.0, 5454.0, 5525.0, 5334.0, 5591.0, 5258.0, 5329.0, 5303.0, 5458.0, 5532.0, 5677.0, 5305.0,

						5389.0, 5309.0, 5482.0, 5671.0, 5393.0, 5597.0, 5666.0, 5506.0, 5362.0, 5290.0, 5592.0, 5636.0, 5353.0, 5369.0, 5600.0, 5623.0, 5354.0, 5635.0, 5448.0, 5540.0, 5387.0, 5465.0, 5451.0, 5577.0, 5275.0, 5517.0, 5473.0, 5601.0, 5319.0, 5703.0, 5519.0, 5602.0, 5682.0, 5503.0, 5261.0, 5403.0, 5504.0, 5683.0, 5293.0, 5476.0, 5356.0, 5424.0, 5509.0, 5423.0, 5675.0, 5645.0, 5719.0, 5654.0, 5590.0, 5637.0, 5311.0, 5269.0, 5447.0, 5689.0, 5642.0, 5372.0, 5486.0, 5539.0, 5392.0, 5615.0, 5576.0, 5656.0, 5383.0, 5593.0, 5622.0, 5367.0, 5410.0, 5598.0, 5589.0, 5253.0 (number of hits: 8)
30	5270	9	1	333	1	5563.0, 5590.0, 5703.0, 5457.0, 5669.0, 5337.0, 5415.0, 5492.0, 5701.0, 5616.0, 5334.0, 5468.0, 5613.0, 5551.0, 5352.0, 5661.0, 5274.0, 5689.0, 5295.0, 5559.0, 5580.0, 5631.0, 5517.0, 5281.0, 5308.0, 5617.0, 5350.0, 5688.0, 5399.0, 5360.0, 5649.0, 5381.0, 5556.0, 5519.0, 5364.0, 5252.0, 5635.0, 5315.0, 5704.0, 5333.0, 5516.0, 5507.0, 5255.0, 5380.0, 5670.0, 5565.0, 5418.0, 5401.0, 5576.0, 5690.0, 5367.0, 5627.0, 5318.0, 5552.0, 5487.0, 5713.0, 5697.0, 5306.0, 5660.0, 5608.0, 5672.0, 5668.0, 5496.0, 5376.0, 5717.0, 5481.0, 5386.0, 5714.0, 5434.0, 5342.0, 5339.0, 5433.0, 5269.0, 5633.0, 5498.0, 5302.0, 5456.0, 5330.0, 5408.0, 5520.0, 5696.0, 5365.0, 5539.0, 5640.0, 5650.0, 5710.0, 5412.0, 5486.0, 5290.0, 5591.0, 5564.0, 5716.0, 5483.0, 5431.0, 5639.0, 5609.0, 5280.0, 5632.0, 5497.0, 5694.0 (number of hits: 5)

5550 MHz, 40 MHz Bandwidth

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

Please refer to the following statistical tables:

5550 MHz, 40 MHz Bandwidth

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	1
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	1
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	1
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: 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	5550	26	4.1	226	1
2	5550	28	1.2	204	1
3	5550	24	3.7	203	1
4	5550	24	2.1	166	1
5	5550	25	1.2	226	1
6	5550	29	1.1	198	1
7	5550	25	4.6	189	1
8	5550	28	4.3	209	1
9	5550	28	2.5	161	1
10	5550	23	2.2	210	1
11	5550	24	1.7	228	1
12	5550	28	1.5	206	1
13	5550	26	3.5	209	1
14	5550	28	3.8	199	1
15	5550	25	4	154	1
16	5550	23	5	200	1
17	5550	23	3.4	168	1
18	5550	25	2.8	219	1
19	5550	23	3.1	169	1
20	5550	26	3.8	180	1
21	5550	27	4.9	157	1
22	5550	26	4.2	225	1
23	5550	23	3	168	1
24	5550	26	4.5	218	1
25	5550	28	3.6	176	1
26	5550	25	4.9	188	1
27	5550	25	3.5	170	1
28	5550	27	4.5	184	1
29	5550	24	1.9	157	1
30	5550	24	5	197	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	5550	16	7.4	336	1
2	5550	16	9.9	279	1
3	5550	17	6.1	375	1
4	5550	16	6.4	344	1
5	5550	17	8.8	216	1
6	5550	16	8.6	320	1
7	5550	18	7.3	445	1
8	5550	17	8	241	1
9	5550	18	9.1	476	1
10	5550	18	7.5	204	1
11	5550	18	8.1	233	1
12	5550	17	9.7	397	1
13	5550	16	7.9	488	1
14	5550	17	7.1	200	1
15	5550	17	10	348	1
16	5550	16	6.2	465	1
17	5550	16	8.8	413	1
18	5550	17	9	332	1
19	5550	17	9.9	222	1
20	5550	17	8.9	470	1
21	5550	16	6.5	263	1
22	5550	17	8.8	372	1
23	5550	17	8.6	365	1
24	5550	16	8.1	447	1
25	5550	18	7.7	258	1
26	5550	16	6.2	463	1
27	5550	18	6.2	282	1
28	5550	18	9.3	348	1
29	5550	18	7.8	258	1
30	5550	17	9.5	232	1
Detection Percentage: 100 % (>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	19	476	1
2	5550	14	16.5	369	1
3	5550	14	11.9	447	1
4	5550	14	16.5	209	1
5	5550	13	17.7	366	1
6	5550	16	12	308	1
7	5550	16	17.9	449	1
8	5550	13	16.8	370	1
9	5550	12	11.9	248	1
10	5550	16	17.3	476	1
11	5550	16	18.2	304	1
12	5550	14	13.8	433	1
13	5550	12	17.6	477	1
14	5550	15	15	351	1
15	5550	13	17.5	326	1
16	5550	13	11.8	398	1
17	5550	13	17.4	255	1
18	5550	16	12	313	1
19	5550	13	15.8	202	1
20	5550	12	16.6	252	1
21	5550	12	14.1	365	1
22	5550	16	14.6	381	1
23	5550	12	14.9	419	1
24	5550	13	18.1	323	1
25	5550	13	19	402	1
26	5550	15	12.7	493	1
27	5550	15	17.8	344	1
28	5550	14	14	352	1
29	5550	14	18	436	1
30	5550	15	17.3	226	1
Detection Percentage: 100 % (>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	6	96.3	1798	1983	0.473593	
1	2	11	62.3	1299		0.661946	
2	2	10	93.4	1276		1.612391	
3	3	10	66.2	1191	1142	2.162414	
4	2	10	82.3	1635		2.928195	
5	2	20	54.4	1654		3.584798	
6	2	19	83	1493		3.710178	
7	3	5	57.1	1112	1388	4.480254	
8	1	17	87.4			5.185779	
9	1	8	59.4			5.843283	1
10	3	18	96.4	1721	1008	6.308569	
11	3	14	52.9	1449	1295	6.942669	
12	2	8	87.4	1702		7.448967	
13	2	15	84.5	1443		8.348123	
14	3	7	97.4	1329	1113	8.76453	
15	3	17	61.3	1685	1115	9.034001	
16	1	14	67.8			9.97877	
17	2	18	84.5	1550		10.227293	
18	1	12	64.8			11.343129	
19	1	16	77.7			11.451043	

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	56.3			0.258986	
1	1	14	74.3			0.878478	
2	2	11	98.3	1249		1.658004	
3	2	12	80.8	1429		2.259634	
4	3	15	77.7	1512	1687	2.717868	
5	3	7	92.5	1289	1509	3.871422	
6	1	8	76.1			4.625908	
7	1	15	70.3			4.96818	
8	3	12	64	1682	1885	5.65923	1
9	2	11	60.2	1171		6.068051	
10	1	20	61.9			6.85343	
11	1	18	92.3			7.597701	
12	3	13	99.6	1995	1541	8.519071	
13	2	17	58.4	1498		8.914159	
14	3	19	68.7	1757	1397	9.378502	
15	2	15	67.8	1991		10.29937	
16	1	10	78.1			10.842279	
17	3	15	91.8	1351	1532	11.805966	

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	8	81.7	1194		0.80826	
1	1	19	98.2			1.945626	
2	3	8	61.2	1775	1154	3.128283	
3	3	17	99.3	1728	1077	3.470352	
4	2	18	70.8	1421		4.424254	
5	2	16	70.7	1052		5.514753	1
6	3	11	50.1	1976	1889	7.320455	
7	1	15	55.1			7.997486	
8	3	9	92.2	1588	1048	9.020501	
9	2	13	98.8	1627		10.684898	
10	2	8	81.7	1466		11.162151	

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	1	8	71.6			0.837349	
1	2	18	80.2	1743		1.613817	
2	1	17	74.8			4.230761	
3	2	14	71.8	1389		5.652221	
4	1	12	80.2			6.268873	1
5	1	9	83.7			7.865654	
6	2	8	76.4	1554		10.488506	
7	1	17	82.7			11.332005	

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	82.1	1480		0.183732	
1	1	13	71.9			1.232816	
2	2	12	78.2	1310		1.4132	
3	2	14	69.6	1534		2.07325	
4	1	16	97.7			2.963901	
5	2	11	89.6	1452		3.235636	
6	2	16	88.4	1429		3.97823	
7	2	13	53.8	1430		4.490828	
8	2	7	68.9	1273		5.385685	
9	2	10	78.3	1069		5.946321	1
10	3	6	88.2	1325	1834	6.506573	
11	3	15	96.3	1612	1953	7.052731	
12	2	9	74.8	1707		7.784299	
13	2	17	71.9	1169		8.600786	
14	2	12	78.2	1349		9.014246	
15	3	19	66	1384	1576	9.921843	
16	2	9	50.4	1866		10.714627	
17	2	14	58.1	1342		10.811522	
18	3	20	68.8	1445	1958	11.627494	

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	9	87	1248		0.258889	
1	1	12	95.3			0.842823	
2	2	16	71.7	1603		1.667009	
3	1	14	69.6			2.008995	
4	2	16	89.6	1712		3.159937	
5	2	11	55.8	1833		3.974143	
6	3	17	64.7	1843	1190	4.086729	
7	2	16	67.4	1358		4.754424	
8	2	17	56.1	1248		5.450418	
9	2	7	66.4	1064		6.187095	1
10	2	19	51.1	1861		6.982496	
11	1	13	74.5			7.492686	
12	3	8	80.2	1515	1641	8.487743	
13	1	13	63.3			9.038622	
14	3	8	52.4	1195	1948	9.35779	
15	2	15	87.9	1990		10.457376	
16	2	20	80.5	1506		10.860968	
17	2	10	65.5	1239		11.706284	

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	12	68.1			0.670958	
1	3	14	51.3	1145	1844	1.527833	
2	2	11	94.7	1377		3.155292	
3	2	16	65	1186		4.388602	
4	2	9	59.7	1038		5.40126	1
5	1	9	83.2			6.955282	
6	2	6	52.5	1799		8.585379	
7	2	11	86.7	1637		10.430794	
8	2	12	92.8	1571		10.699088	

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	1	16	98.4			0.202685	
1	1	15	51.8			2.265323	
2	3	16	98.1	1852	1629	3.449118	
3	1	6	75.3			4.908203	
4	2	16	63.8	1198		5.655762	1
5	2	10	82.2	1145		6.943255	
6	2	12	60.8	1163		8.261992	
7	2	19	77.1	1956		9.970955	
8	3	12	80.9	1619	1632	11.462363	

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	17	99.1	1431	1802	0.134944	
1	3	16	76.4	1942	1947	1.311262	
2	2	6	77.7	1319		2.506585	
3	3	9	77.2	1706	1561	2.840994	
4	2	19	58.3	1411		4.137602	
5	2	6	61.8	1285		4.793787	
6	1	12	92.1			5.395615	
7	1	16	57.4			6.843008	1
8	2	9	56.6	1146		7.683526	
9	2	19	56.1	1825		8.39041	
10	2	16	80	1441		9.244222	
11	2	11	75.1	1732		10.036443	
12	1	11	89.4			10.451996	
13	2	13	50.4	1134		11.413968	

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	6	53.5	1592		0.575351	
1	2	7	86.6	1605		0.720765	
2	3	11	70.5	1734	1952	1.922534	
3	2	15	84.9	1350		2.618319	
4	3	19	53.4	1958	1673	3.444778	
5	2	6	59.1	1431		3.670603	
6	3	16	70.8	1265	1237	4.929168	
7	3	14	89.1	1839	1328	5.536797	
8	1	18	75.6			5.915964	1
9	2	18	96.1	1209		6.932011	
10	2	19	91.6	1722		7.51038	
11	2	11	50.3	1655		7.90846	
12	2	16	63	1464		8.837646	
13	3	15	67.9	1685	1125	9.283502	
14	2	6	55.5	1485		9.993024	
15	1	11	65.8			10.710036	
16	2	17	72.9	1024		11.965234	

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	18	53.1	1182		0.519182	
1	1	15	65.5			1.259836	
2	3	13	63	1358	1903	1.404049	
3	2	12	50.8	1858		2.050931	
4	1	8	78.6			2.993922	
5	2	15	79	1886		3.627813	
6	2	5	78	1692		4.654912	
7	3	17	76	1520	1791	4.710992	
8	2	16	69.4	1553		5.714727	
9	2	19	59.6	1018		6.203641	1
10	2	12	75.6	1365		7.111484	
11	2	15	58.2	1718		7.34366	
12	2	11	97.3	1939		8.197049	
13	3	18	97.8	1161	1382	8.954395	
14	1	16	58.6			9.752366	
15	2	16	67.3	1983		10.136162	
16	2	14	95.9	1293		11.057394	
17	1	15	54.3			11.883233	

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	15	95.6	1880		0.475964	
1	2	7	97.6	1420		1.786647	
2	2	12	61.3	1408		2.411464	
3	2	14	51.8	1787		3.308395	
4	3	16	71.5	1751	1061	4.505816	
5	2	5	86.2	1711		5.468903	
6	3	18	77.1	1199	1210	6.223289	1
7	1	16	69.2			6.98576	
8	1	18	87.7			8.156176	
9	2	20	50	1237		8.854301	
10	2	14	92.8	1361		9.534166	
11	3	19	87.1	1693	1426	10.234031	
12	2	20	79.9	1285		11.144127	

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	9	61.7	1074		0.059806	
1	2	5	56.9	1759		1.15979	
2	1	8	97.7			2.286646	
3	2	13	84.9	1370		3.07471	
4	1	8	81.5			3.247643	
5	2	12	80.8	1542		4.048151	
6	2	7	64.1	1762		4.859113	
7	2	17	92.5	1783		5.891182	1
8	3	10	90.9	1758	1090	6.741755	
9	2	15	79.5	1740		7.395911	
10	2	19	99	1587		8.088195	
11	2	16	67.8	1646		9.387671	
12	2	17	73.7	1191		9.848582	
13	2	10	52.7	1907		10.83739	
14	3	9	55	1500	1857	11.34185	

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	80.2	1813		0.460994	
1	2	8	51.5	1948		0.936744	
2	1	9	92.7			1.710656	
3	2	13	93.9	1387		2.487034	
4	3	20	91.4	1628	1621	3.662	
5	2	17	52.4	1147		4.342072	
6	3	5	58.2	1269	1878	4.600645	
7	2	19	66.6	1323		5.525512	
8	1	19	51.3			6.633843	1
9	2	6	79.5	1216		7.118051	
10	2	11	87.8	1875		7.568181	
11	2	20	56.3	1514		8.905468	
12	2	14	54.8	1452		9.332234	
13	1	20	96.2			10.471669	
14	1	8	78.2			11.046717	
15	2	9	91.5	1890		11.603622	

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	9	74.6	1392	1182	0.23799	
1	2	9	97.5	1354		0.813139	
2	1	15	95.1			2.145462	
3	2	14	65.7	1727		2.632965	
4	1	16	93.3			3.964194	
5	1	13	53.8			4.552732	
6	1	14	95.5			5.188745	
7	2	5	76.8	1066		5.802507	1
8	1	19	66.5			6.935499	
9	1	12	80.9			7.6367	
10	2	12	56.3	1944		8.350976	
11	2	9	77.6	1971		9.120337	
12	3	14	52.7	1360	1461	9.714833	
13	2	18	95.5	1563		10.423878	
14	2	10	82.9	1095		11.703029	

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	9	67.3	1305		0.687983	
1	3	11	65.9	1971	1307	1.98091	
2	2	13	77.1	1472		2.541163	
3	2	14	55	1576		3.57747	
4	1	16	80.8			4.733021	
5	1	15	75.5			5.522027	1
6	2	11	77.1	1116		6.239265	
7	3	13	64.7	1257	1878	7.561535	
8	2	18	80.9	1658		8.384032	
9	2	15	76.5	1274		9.873637	
10	2	8	71.8	1333		10.719957	
11	2	12	99.8	1077		11.904955	

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	63.2	1731		0.207168	
1	3	18	52.5	1688	1324	0.964505	
2	2	19	54	1746		1.726241	
3	3	7	64.5	1661	1494	2.114994	
4	2	9	60.5	1200		2.54084	
5	2	14	93.5	1652		3.555668	
6	2	6	69.2	1559		4.144392	
7	2	8	66.5	1370		5.02654	
8	3	6	70.4	1065	1189	5.436126	
9	2	6	98.6	1999		6.15887	1
10	1	18	71.8			6.350273	
11	2	12	63.9	1919		7.029406	
12	3	6	71.5	1012	1126	7.656375	
13	1	15	64			8.345204	
14	2	9	76.6	1329		9.351371	
15	2	15	78.8	1220		9.709533	
16	2	16	95.7	1003		10.252802	
17	2	14	88.7	1575		11.331089	
18	1	16	62.1			11.910809	

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	8	55.2	1938		0.663231	
1	2	18	87.1	1882		1.302187	
2	1	14	72.5			1.999953	
3	3	20	94.3	1845	1285	2.742767	
4	2	8	68.4	1576		2.959294	
5	2	20	79.5	1336		3.715019	
6	2	19	87.3	1183		4.368103	
7	2	8	75.2	1823		5.190371	
8	3	15	94.6	1320	1481	5.98095	1
9	2	5	91	1798		7.027553	
10	1	12	70.9			7.423015	
11	1	12	91.4			8.047662	
12	2	6	67	1479		8.556414	
13	2	15	69.3	1429		9.616526	
14	3	6	86.8	1903	1786	10.529679	
15	2	9	69.7	1878		11.183584	
16	3	14	71.5	1054	1833	11.571554	

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	1	16	76.7			0.095415	
1	2	9	86.2	1940		1.087281	
2	2	14	70.2	1417		1.485486	
3	2	12	70.2	1885		1.957591	
4	2	19	69.9	1327		2.75972	
5	1	12	96.3			3.420287	
6	1	5	90.1			3.817576	
7	2	18	98.7	1175		5.002264	
8	1	11	72.6			5.546796	
9	2	20	87.2	1134		6.305285	1
10	3	17	95.8	1224	1976	6.443441	
11	1	19	75.5			7.518599	
12	1	9	82.9			8.024407	
13	2	6	56.7	1248		8.741138	
14	3	11	69.3	1138	1884	8.899667	
15	3	12	66	1845	1658	9.954004	
16	2	18	69.2	1321		10.163439	
17	2	17	57.4	1804		11.2875	
18	3	9	71.1	1615	1004	11.6008	

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	82.4	1420		0.792931	
1	1	16	95			1.21085	
2	1	15	63.2			2.393756	
3	3	8	96.2	1119	1890	3.154107	
4	2	15	90.9	1660		3.794005	
5	1	11	75			4.718561	
6	3	18	56.7	1372	1806	5.717306	1
7	3	17	55.5	1284	1543	6.637626	
8	3	18	92	1279	1946	7.400111	
9	2	11	95.6	1475		8.411674	
10	1	18	70.2			9.538921	
11	2	20	80.4	1341		10.837572	
12	2	6	53	1417		11.208558	

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	9	53	1170		0.952689	
1	1	11	83.8			1.734506	
2	2	8	94.4	1980		2.798962	
3	2	18	53.6	1746		3.671556	
4	1	5	63.8			5.193643	
5	1	16	50			5.611158	1
6	2	12	84	1898		6.575364	
7	3	16	86	1036	1263	7.650685	
8	2	11	75.2	1287		9.638943	
9	2	14	65	1967		10.883528	
10	1	17	67.2			11.395068	

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	16	55.7	1932	1544	0.172603	
1	2	15	88.6	1359		1.162788	
2	1	15	93			2.456343	
3	3	17	86.5	1071	1321	2.867748	
4	1	13	77.1			4.086288	
5	1	12	71.9			4.791848	
6	1	20	78.4			5.596327	
7	1	15	79.1			6.717634	1
8	2	15	86.8	1322		7.17156	
9	2	9	61.5	1871		7.889633	
10	2	10	64.9	1737		8.910756	
11	2	9	51.5	1110		10.079524	
12	2	7	73.8	1232		11.005388	
13	2	8	56.4	1225		11.170855	

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	3	10	78	1101	1998	0.512072	
1	2	15	68.9	1630		1.62244	
2	2	19	85.5	1189		2.738964	
3	2	14	52.8	1995		3.735917	
4	3	7	83.6	1230	1882	4.922267	
5	2	20	87.7	1452		5.191257	1
6	2	10	57.6	1429		6.884651	
7	3	8	92.9	1398	1595	7.143615	
8	2	13	95.7	1427		8.221695	
9	2	19	84.4	1414		9.624757	
10	1	8	54			10.251102	
11	2	17	78.6	1398		11.654979	

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	71.6			1.098901	
1	3	5	89.4	1415	1493	2.021985	
2	1	18	78.7			3.102764	
3	2	14	85.3	1981		4.71711	
4	1	15	96.5			6.536599	1
5	2	5	70.6	1896		7.404956	
6	3	9	53.7	1073	1499	9.092942	
7	3	6	74.4	1341	1808	10.355039	
8	2	8	85	1302		11.241029	

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	16	82.5	1618		0.224346	
1	3	11	95	1860	1153	0.987867	
2	1	15	77.3			1.535144	
3	2	12	56	1748		2.486768	
4	3	19	67.1	1680	1165	3.231313	
5	2	19	76.7	1578		3.750567	
6	2	5	88.9	1940		4.516103	
7	3	11	63.2	1387	1322	4.98973	
8	2	15	72.9	1073		5.839754	
9	2	10	96.6	1120		6.035179	1
10	1	18	62.5			6.732106	
11	1	19	68			7.355275	
12	3	17	92.3	1686	1150	8.027633	
13	2	8	50	1155		9.123024	
14	3	11	59.6	1436	1970	9.396392	
15	2	18	58	1790		10.513629	
16	1	9	51			11.08573	
17	1	18	54.7			11.472487	

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	2	7	56.5	1350		0.003004	
1	3	7	88.9	1178	1401	0.661784	
2	2	7	78.8	1639		1.635267	
3	2	16	64.8	1792		2.417822	
4	2	18	86.4	1490		2.609333	
5	1	6	61.2			3.691066	
6	1	6	66.8			4.044792	
7	2	6	59.7	1367		4.969861	
8	3	6	88	1609	1668	5.317577	
9	1	8	76			6.05316	1
10	2	9	80.3	1419		6.622906	
11	2	9	85.6	1712		7.559776	
12	2	5	97	1678		7.849649	
13	2	10	61.5	1122		8.631462	
14	3	19	63.1	1387	1257	9.181787	
15	2	17	76.4	1190		9.919024	
16	1	9	82.6			10.608199	
17	2	8	75.8	1998		11.189708	
18	2	19	81	1244		11.387373	

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	15	55			0.7822	
1	2	5	60.5	1091		1.616951	
2	2	8	70.6	1467		2.345506	
3	2	18	80	1871		2.915408	
4	2	18	74.5	1402		3.531369	
5	2	11	99.1	1748		4.893207	
6	2	15	51.3	1394		5.146178	
7	1	17	87.3			6.325981	1
8	1	19	74.2			7.007389	
9	2	18	67.2	1160		8.375273	
10	2	6	94.8	1498		8.849532	
11	2	14	75	1755		9.80661	
12	1	15	79.1			10.488311	
13	3	14	87.7	1147	1657	11.751722	

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	13	73.2	1920		0.007874	
1	3	19	67.2	1903	1253	1.035259	
2	3	13	93.1	1414	1042	1.864515	
3	2	9	59.7	1851		3.074165	
4	2	18	85.9	1715		3.656176	
5	2	17	98	1358		4.795523	
6	1	9	79			5.455424	1
7	1	6	61.7			6.51036	
8	2	14	91.5	1855		7.381313	
9	2	14	83.7	1794		7.891731	
10	3	7	96	1338	1900	8.632541	
11	3	15	84.4	1978	1009	9.861323	
12	1	12	97.1			10.803797	
13	1	12	70.2			11.90946	

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	6	50.4	1188		0.813579	
1	1	7	85			2.639163	
2	2	16	65.6	1072		3.355513	
3	1	14	52.7			5.358098	1
4	2	11	56	1909		6.397162	
5	2	10	65.7	1641		8.75477	
6	3	17	71.8	1390	1921	9.855122	
7	2	9	81.9	1654		11.297749	

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	3	9	71.8	1484	1839	0.04492	
1	1	17	87.1			1.111385	
2	2	12	87	1884		1.853244	
3	1	6	58.5			2.967195	
4	1	8	61.2			3.269048	
5	3	12	85.3	1364	1814	4.428694	
6	2	9	68.3	1068		4.537779	
7	1	15	92.4			5.667488	1
8	2	15	80.8	1744		6.615456	
9	1	16	82.9			7.042149	
10	1	8	92.8			8.127937	
11	1	8	87.1			8.471966	
12	2	12	84.7	1561		9.693995	
13	1	7	86.6			9.781493	
14	2	12	74.6	1726		11.13303	
15	2	7	70.3	1951		11.515478	

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	5581.0, 5714.0, 5435.0, 5260.0, 5562.0, 5438.0, 5656.0, 5477.0, 5677.0, 5723.0, 5606.0, 5406.0, 5327.0, 5511.0, 5277.0, 5428.0, 5515.0, 5554.0, 5353.0, 5630.0, 5534.0, 5274.0, 5312.0, 5462.0, 5298.0, 5352.0, 5255.0, 5584.0, 5611.0, 5576.0, 5526.0, 5574.0, 5492.0, 5568.0, 5455.0, 5676.0, 5670.0, 5503.0, 5289.0, 5448.0, 5557.0, 5587.0, 5343.0, 5402.0, 5699.0, 5323.0, 5498.0, 5344.0, 5284.0, 5706.0, 5531.0, 5704.0, 5491.0, 5389.0, 5441.0, 5500.0, 5565.0, 5567.0, 5368.0, 5482.0, 5635.0, 5680.0, 5485.0, 5386.0, 5461.0, 5436.0, 5412.0, 5452.0, 5426.0, 5338.0, 5602.0, 5331.0, 5532.0, 5359.0, 5625.0, 5350.0, 5665.0, 5454.0, 5317.0, 5580.0, 5701.0, 5713.0, 5398.0, 5261.0, 5336.0, 5651.0, 5558.0, 5361.0, 5456.0, 5512.0, 5641.0, 5683.0, 5657.0, 5546.0, 5313.0, 5622.0, 5358.0, 5603.0, 5696.0, 5421.0 (number of hits: 4)
2	5550	9	1	333	1	5705.0, 5670.0, 5567.0, 5592.0, 5326.0, 5338.0, 5638.0, 5646.0, 5536.0, 5635.0, 5321.0, 5578.0, 5311.0, 5460.0, 5382.0, 5276.0, 5441.0, 5262.0, 5484.0, 5666.0, 5588.0, 5272.0, 5468.0, 5461.0, 5574.0, 5637.0, 5458.0, 5498.0, 5609.0, 5259.0, 5551.0, 5330.0, 5463.0, 5650.0, 5566.0, 5513.0, 5718.0, 5508.0, 5279.0, 5648.0, 5377.0, 5331.0, 5407.0, 5709.0, 5457.0, 5685.0, 5380.0, 5591.0, 5660.0, 5594.0, 5681.0, 5521.0, 5623.0, 5668.0, 5476.0, 5558.0, 5687.0, 5608.0, 5569.0, 5625.0, 5418.0, 5423.0, 5671.0, 5446.0, 5565.0, 5356.0, 5528.0, 5539.0, 5568.0, 5369.0, 5478.0, 5373.0, 5263.0, 5656.0, 5674.0, 5554.0, 5264.0, 5601.0, 5672.0, 5396.0, 5411.0, 5483.0, 5421.0, 5406.0, 5491.0, 5424.0, 5399.0, 5334.0, 5267.0, 5596.0, 5707.0, 5349.0, 5315.0, 5651.0, 5381.0, 5374.0, 5553.0, 5631.0, 5644.0, 5527.0 (number of hits: 1)
3	5550	9	1	333	1	5275.0, 5702.0, 5359.0, 5577.0, 5267.0, 5484.0, 5366.0, 5475.0, 5469.0, 5681.0, 5358.0, 5615.0, 5429.0, 5441.0, 5547.0, 5672.0, 5600.0, 5565.0, 5260.0, 5622.0, 5630.0, 5449.0, 5535.0, 5362.0, 5327.0, 5635.0, 5453.0, 5331.0, 5670.0, 5290.0, 5419.0, 5476.0, 5719.0, 5304.0, 5723.0, 5428.0, 5647.0, 5382.0, 5678.0, 5617.0, 5445.0, 5376.0, 5437.0, 5330.0, 5272.0,

						5704.0, 5703.0, 5695.0, 5500.0, 5386.0, 5308.0, 5394.0, 5288.0, 5515.0, 5448.0, 5537.0, 5555.0, 5253.0, 5629.0, 5418.0, 5427.0, 5558.0, 5347.0, 5687.0, 5663.0, 5370.0, 5287.0, 5516.0, 5557.0, 5597.0, 5333.0, 5354.0, 5369.0, 5549.0, 5323.0, 5489.0, 5313.0, 5721.0, 5690.0, 5651.0, 5683.0, 5532.0, 5697.0, 5494.0, 5564.0, 5611.0, 5582.0, 5465.0, 5396.0, 5610.0, 5673.0, 5614.0, 5350.0, 5508.0, 5425.0, 5601.0, 5570.0, 5708.0, 5439.0, 5289.0 (number of hits: 7)
4	5550	9	1	333	1	5627.0, 5307.0, 5624.0, 5553.0, 5508.0, 5475.0, 5360.0, 5719.0, 5543.0, 5679.0, 5389.0, 5359.0, 5400.0, 5617.0, 5571.0, 5261.0, 5642.0, 5592.0, 5487.0, 5367.0, 5366.0, 5447.0, 5526.0, 5348.0, 5700.0, 5390.0, 5549.0, 5499.0, 5516.0, 5601.0, 5484.0, 5388.0, 5548.0, 5355.0, 5272.0, 5477.0, 5720.0, 5690.0, 5583.0, 5521.0, 5382.0, 5513.0, 5402.0, 5628.0, 5356.0, 5652.0, 5472.0, 5378.0, 5692.0, 5645.0, 5381.0, 5595.0, 5511.0, 5362.0, 5419.0, 5471.0, 5383.0, 5440.0, 5602.0, 5289.0, 5506.0, 5278.0, 5411.0, 5497.0, 5560.0, 5480.0, 5371.0, 5545.0, 5538.0, 5596.0, 5532.0, 5496.0, 5715.0, 5611.0, 5444.0, 5580.0, 5662.0, 5462.0, 5713.0, 5656.0, 5678.0, 5370.0, 5561.0, 5667.0, 5263.0, 5349.0, 5467.0, 5399.0, 5373.0, 5354.0, 5432.0, 5451.0, 5674.0, 5347.0, 5680.0, 5330.0, 5405.0, 5600.0, 5623.0, 5614.0 (number of hits: 2)
5	5550	9	1	333	1	5391.0, 5257.0, 5380.0, 5411.0, 5404.0, 5605.0, 5366.0, 5667.0, 5497.0, 5589.0, 5355.0, 5632.0, 5277.0, 5329.0, 5637.0, 5609.0, 5532.0, 5709.0, 5425.0, 5321.0, 5262.0, 5642.0, 5383.0, 5585.0, 5258.0, 5341.0, 5610.0, 5362.0, 5629.0, 5300.0, 5430.0, 5705.0, 5358.0, 5685.0, 5474.0, 5255.0, 5485.0, 5583.0, 5284.0, 5533.0, 5525.0, 5622.0, 5477.0, 5624.0, 5518.0, 5335.0, 5501.0, 5516.0, 5558.0, 5613.0, 5604.0, 5535.0, 5471.0, 5669.0, 5369.0, 5713.0, 5334.0, 5264.0, 5400.0, 5493.0, 5314.0, 5646.0, 5407.0, 5630.0, 5459.0, 5472.0, 5457.0, 5581.0, 5586.0, 5281.0, 5537.0, 5509.0, 5569.0, 5564.0, 5628.0, 5320.0, 5251.0, 5675.0, 5469.0, 5504.0, 5538.0, 5396.0, 5442.0, 5440.0, 5530.0, 5652.0, 5556.0, 5615.0, 5708.0, 5475.0, 5263.0, 5473.0, 5276.0, 5313.0, 5687.0, 5481.0, 5465.0, 5522.0, 5482.0, 5413.0 (number of hits: 3)
6	5550	9	1	333	1	5666.0, 5681.0, 5400.0, 5598.0, 5297.0, 5582.0, 5699.0, 5649.0, 5579.0, 5447.0, 5575.0, 5476.0, 5286.0, 5470.0, 5430.0,

						5456.0, 5489.0, 5606.0, 5658.0, 5314.0, 5595.0, 5669.0, 5409.0, 5632.0, 5461.0, 5553.0, 5457.0, 5668.0, 5393.0, 5515.0, 5546.0, 5501.0, 5383.0, 5529.0, 5402.0, 5418.0, 5310.0, 5672.0, 5288.0, 5605.0, 5536.0, 5311.0, 5680.0, 5280.0, 5619.0, 5440.0, 5414.0, 5312.0, 5281.0, 5424.0, 5434.0, 5296.0, 5511.0, 5578.0, 5381.0, 5445.0, 5657.0, 5264.0, 5587.0, 5295.0, 5270.0, 5321.0, 5339.0, 5405.0, 5433.0, 5675.0, 5292.0, 5492.0, 5397.0, 5596.0, 5369.0, 5329.0, 5349.0, 5490.0, 5305.0, 5294.0, 5478.0, 5510.0, 5384.0, 5560.0, 5540.0, 5509.0, 5416.0, 5713.0, 5291.0, 5364.0, 5612.0, 5555.0, 5654.0, 5363.0, 5507.0, 5714.0, 5323.0, 5366.0, 5326.0, 5421.0, 5337.0, 5678.0, 5527.0, 5319.0 (number of hits: 13)
7	5550	9	1	333	1	5610.0, 5499.0, 5402.0, 5500.0, 5306.0, 5433.0, 5639.0, 5486.0, 5330.0, 5656.0, 5657.0, 5686.0, 5289.0, 5280.0, 5631.0, 5431.0, 5333.0, 5263.0, 5295.0, 5365.0, 5353.0, 5530.0, 5489.0, 5361.0, 5571.0, 5559.0, 5534.0, 5674.0, 5710.0, 5669.0, 5517.0, 5705.0, 5484.0, 5309.0, 5616.0, 5388.0, 5607.0, 5300.0, 5377.0, 5457.0, 5642.0, 5615.0, 5509.0, 5367.0, 5442.0, 5487.0, 5503.0, 5312.0, 5677.0, 5647.0, 5713.0, 5474.0, 5303.0, 5336.0, 5424.0, 5470.0, 5310.0, 5653.0, 5488.0, 5507.0, 5648.0, 5578.0, 5376.0, 5689.0, 5662.0, 5285.0, 5497.0, 5723.0, 5576.0, 5458.0, 5409.0, 5450.0, 5644.0, 5291.0, 5261.0, 5436.0, 5637.0, 5693.0, 5685.0, 5696.0, 5632.0, 5566.0, 5617.0, 5343.0, 5496.0, 5363.0, 5383.0, 5350.0, 5351.0, 5525.0, 5687.0, 5286.0, 5515.0, 5533.0, 5643.0, 5451.0, 5627.0, 5394.0, 5498.0, 5469.0 (number of hits: 11)
8	5550	9	1	333	1	5348.0, 5371.0, 5563.0, 5252.0, 5268.0, 5586.0, 5380.0, 5388.0, 5403.0, 5547.0, 5667.0, 5700.0, 5672.0, 5658.0, 5276.0, 5486.0, 5570.0, 5360.0, 5352.0, 5650.0, 5649.0, 5257.0, 5399.0, 5534.0, 5562.0, 5508.0, 5462.0, 5527.0, 5262.0, 5620.0, 5584.0, 5395.0, 5377.0, 5694.0, 5641.0, 5385.0, 5445.0, 5512.0, 5550.0, 5278.0, 5553.0, 5522.0, 5468.0, 5637.0, 5370.0, 5275.0, 5480.0, 5365.0, 5296.0, 5327.0, 5437.0, 5413.0, 5483.0, 5488.0, 5274.0, 5449.0, 5319.0, 5623.0, 5668.0, 5285.0, 5359.0, 5436.0, 5691.0, 5441.0, 5427.0, 5250.0, 5461.0, 5683.0, 5556.0, 5444.0, 5270.0, 5433.0, 5471.0, 5487.0, 5589.0, 5647.0, 5615.0, 5318.0, 5340.0, 5405.0, 5425.0, 5548.0, 5297.0, 5284.0, 5475.0, 5571.0, 5509.0, 5465.0, 5708.0, 5519.0,

						5506.0, 5546.0, 5594.0, 5645.0, 5536.0, 5266.0, 5430.0, 5624.0, 5301.0, 5656.0 (number of hits: 4)
9	5550	9	1	333	1	5470.0, 5396.0, 5630.0, 5314.0, 5310.0, 5710.0, 5421.0, 5256.0, 5494.0, 5459.0, 5640.0, 5651.0, 5292.0, 5675.0, 5520.0, 5418.0, 5609.0, 5641.0, 5712.0, 5505.0, 5399.0, 5349.0, 5547.0, 5657.0, 5435.0, 5326.0, 5293.0, 5251.0, 5332.0, 5506.0, 5254.0, 5570.0, 5521.0, 5534.0, 5497.0, 5624.0, 5370.0, 5359.0, 5621.0, 5690.0, 5548.0, 5691.0, 5386.0, 5337.0, 5348.0, 5602.0, 5401.0, 5707.0, 5398.0, 5317.0, 5703.0, 5491.0, 5475.0, 5380.0, 5613.0, 5387.0, 5517.0, 5663.0, 5358.0, 5578.0, 5524.0, 5477.0, 5579.0, 5588.0, 5478.0, 5267.0, 5259.0, 5297.0, 5650.0, 5351.0, 5668.0, 5355.0, 5685.0, 5400.0, 5309.0, 5350.0, 5543.0, 5260.0, 5514.0, 5397.0, 5432.0, 5354.0, 5311.0, 5562.0, 5603.0, 5591.0, 5638.0, 5362.0, 5715.0, 5488.0, 5356.0, 5366.0, 5596.0, 5573.0, 5394.0, 5683.0, 5518.0, 5428.0, 5701.0, 5551.0 (number of hits: 7)
10	5550	9	1	333	1	5446.0, 5434.0, 5559.0, 5253.0, 5391.0, 5584.0, 5713.0, 5371.0, 5608.0, 5442.0, 5254.0, 5294.0, 5444.0, 5424.0, 5606.0, 5318.0, 5419.0, 5556.0, 5599.0, 5572.0, 5257.0, 5598.0, 5478.0, 5435.0, 5577.0, 5458.0, 5290.0, 5407.0, 5502.0, 5648.0, 5647.0, 5291.0, 5717.0, 5456.0, 5718.0, 5338.0, 5382.0, 5352.0, 5348.0, 5390.0, 5595.0, 5660.0, 5369.0, 5443.0, 5530.0, 5673.0, 5542.0, 5695.0, 5357.0, 5723.0, 5566.0, 5289.0, 5423.0, 5336.0, 5312.0, 5677.0, 5307.0, 5392.0, 5374.0, 5356.0, 5271.0, 5676.0, 5303.0, 5674.0, 5367.0, 5400.0, 5597.0, 5507.0, 5620.0, 5512.0, 5275.0, 5622.0, 5459.0, 5684.0, 5393.0, 5624.0, 5389.0, 5696.0, 5355.0, 5449.0, 5388.0, 5329.0, 5558.0, 5387.0, 5421.0, 5613.0, 5645.0, 5722.0, 5708.0, 5570.0, 5314.0, 5292.0, 5672.0, 5373.0, 5550.0, 5511.0, 5299.0, 5251.0, 5527.0, 5422.0 (number of hits: 10)
11	5550	9	1	333	1	5601.0, 5669.0, 5619.0, 5429.0, 5662.0, 5289.0, 5472.0, 5709.0, 5312.0, 5341.0, 5703.0, 5501.0, 5603.0, 5490.0, 5524.0, 5457.0, 5624.0, 5553.0, 5502.0, 5476.0, 5311.0, 5325.0, 5441.0, 5606.0, 5433.0, 5604.0, 5272.0, 5347.0, 5512.0, 5655.0, 5583.0, 5715.0, 5484.0, 5499.0, 5352.0, 5420.0, 5304.0, 5693.0, 5615.0, 5305.0, 5657.0, 5331.0, 5557.0, 5552.0, 5447.0, 5672.0, 5411.0, 5330.0, 5456.0, 5698.0, 5475.0, 5367.0, 5286.0, 5257.0, 5718.0, 5435.0, 5425.0, 5506.0, 5495.0, 5468.0,

						5319.0, 5680.0, 5317.0, 5625.0, 5582.0, 5349.0, 5327.0, 5605.0, 5556.0, 5478.0, 5647.0, 5361.0, 5281.0, 5293.0, 5570.0, 5437.0, 5356.0, 5697.0, 5394.0, 5646.0, 5681.0, 5523.0, 5566.0, 5354.0, 5723.0, 5344.0, 5535.0, 5413.0, 5407.0, 5442.0, 5370.0, 5522.0, 5454.0, 5685.0, 5533.0, 5687.0, 5711.0, 5594.0, 5626.0, 5609.0 (number of hits: 7)
12	5550	9	1	333	1	5640.0, 5671.0, 5351.0, 5693.0, 5647.0, 5487.0, 5627.0, 5473.0, 5565.0, 5609.0, 5561.0, 5321.0, 5558.0, 5563.0, 5393.0, 5316.0, 5595.0, 5656.0, 5509.0, 5457.0, 5525.0, 5663.0, 5380.0, 5681.0, 5600.0, 5343.0, 5603.0, 5706.0, 5694.0, 5452.0, 5651.0, 5530.0, 5466.0, 5279.0, 5386.0, 5617.0, 5611.0, 5518.0, 5502.0, 5407.0, 5299.0, 5364.0, 5692.0, 5283.0, 5417.0, 5412.0, 5718.0, 5346.0, 5489.0, 5345.0, 5644.0, 5698.0, 5633.0, 5300.0, 5639.0, 5535.0, 5683.0, 5524.0, 5400.0, 5673.0, 5252.0, 5715.0, 5290.0, 5533.0, 5601.0, 5339.0, 5612.0, 5437.0, 5634.0, 5286.0, 5717.0, 5467.0, 5301.0, 5296.0, 5256.0, 5376.0, 5667.0, 5439.0, 5628.0, 5599.0, 5411.0, 5658.0, 5652.0, 5631.0, 5358.0, 5575.0, 5402.0, 5528.0, 5442.0, 5624.0, 5277.0, 5258.0, 5443.0, 5553.0, 5318.0, 5312.0, 5638.0, 5333.0, 5686.0, 5331.0 (number of hits: 7)
13	5550	9	1	333	1	5287.0, 5368.0, 5347.0, 5477.0, 5362.0, 5550.0, 5487.0, 5712.0, 5623.0, 5433.0, 5626.0, 5313.0, 5595.0, 5715.0, 5611.0, 5384.0, 5671.0, 5467.0, 5573.0, 5294.0, 5682.0, 5471.0, 5256.0, 5386.0, 5305.0, 5396.0, 5457.0, 5469.0, 5643.0, 5370.0, 5540.0, 5612.0, 5597.0, 5593.0, 5557.0, 5327.0, 5549.0, 5706.0, 5278.0, 5285.0, 5280.0, 5665.0, 5551.0, 5688.0, 5473.0, 5673.0, 5466.0, 5398.0, 5601.0, 5491.0, 5375.0, 5610.0, 5705.0, 5356.0, 5274.0, 5333.0, 5291.0, 5380.0, 5378.0, 5538.0, 5446.0, 5699.0, 5656.0, 5312.0, 5275.0, 5498.0, 5678.0, 5454.0, 5311.0, 5320.0, 5415.0, 5399.0, 5334.0, 5565.0, 5255.0, 5286.0, 5314.0, 5318.0, 5377.0, 5440.0, 5522.0, 5607.0, 5615.0, 5686.0, 5694.0, 5460.0, 5722.0, 5345.0, 5600.0, 5684.0, 5283.0, 5637.0, 5644.0, 5476.0, 5539.0, 5620.0, 5332.0, 5709.0, 5401.0, 5277.0 (number of hits: 10)
14	5550	9	1	333	1	5464.0, 5319.0, 5337.0, 5439.0, 5603.0, 5310.0, 5653.0, 5598.0, 5313.0, 5566.0, 5507.0, 5717.0, 5261.0, 5631.0, 5362.0, 5607.0, 5633.0, 5405.0, 5497.0, 5617.0, 5616.0, 5268.0, 5654.0, 5273.0, 5560.0, 5398.0, 5467.0, 5485.0, 5264.0, 5402.0,

						5571.0, 5272.0, 5568.0, 5354.0, 5535.0, 5389.0, 5639.0, 5697.0, 5440.0, 5385.0, 5328.0, 5695.0, 5380.0, 5353.0, 5667.0, 5315.0, 5675.0, 5338.0, 5452.0, 5536.0, 5320.0, 5698.0, 5302.0, 5475.0, 5301.0, 5651.0, 5703.0, 5291.0, 5569.0, 5477.0, 5414.0, 5556.0, 5594.0, 5699.0, 5613.0, 5628.0, 5378.0, 5474.0, 5685.0, 5382.0, 5629.0, 5530.0, 5441.0, 5626.0, 5701.0, 5274.0, 5412.0, 5314.0, 5597.0, 5583.0, 5516.0, 5608.0, 5480.0, 5465.0, 5550.0, 5459.0, 5374.0, 5620.0, 5619.0, 5266.0, 5304.0, 5564.0, 5429.0, 5392.0, 5515.0, 5403.0, 5408.0, 5278.0, 5720.0, 5544.0 (number of hits: 7)
15	5550	9	1	333	1	5649.0, 5702.0, 5251.0, 5429.0, 5592.0, 5317.0, 5324.0, 5641.0, 5390.0, 5254.0, 5305.0, 5638.0, 5722.0, 5487.0, 5460.0, 5338.0, 5666.0, 5392.0, 5368.0, 5620.0, 5456.0, 5697.0, 5275.0, 5268.0, 5290.0, 5401.0, 5503.0, 5550.0, 5327.0, 5481.0, 5631.0, 5569.0, 5683.0, 5543.0, 5647.0, 5515.0, 5391.0, 5524.0, 5526.0, 5321.0, 5562.0, 5585.0, 5580.0, 5322.0, 5388.0, 5490.0, 5315.0, 5357.0, 5616.0, 5302.0, 5260.0, 5627.0, 5700.0, 5469.0, 5439.0, 5721.0, 5565.0, 5602.0, 5353.0, 5551.0, 5329.0, 5452.0, 5525.0, 5478.0, 5489.0, 5502.0, 5628.0, 5359.0, 5423.0, 5457.0, 5286.0, 5480.0, 5650.0, 5376.0, 5476.0, 5514.0, 5642.0, 5330.0, 5500.0, 5523.0, 5672.0, 5541.0, 5373.0, 5559.0, 5549.0, 5303.0, 5347.0, 5710.0, 5563.0, 5366.0, 5609.0, 5648.0, 5535.0, 5486.0, 5375.0, 5463.0, 5466.0, 5542.0, 5596.0, 5383.0 (number of hits: 5)
16	5550	9	1	333	1	5303.0, 5615.0, 5583.0, 5602.0, 5713.0, 5372.0, 5605.0, 5304.0, 5427.0, 5403.0, 5379.0, 5356.0, 5469.0, 5465.0, 5275.0, 5370.0, 5433.0, 5267.0, 5382.0, 5274.0, 5683.0, 5496.0, 5309.0, 5477.0, 5343.0, 5335.0, 5636.0, 5416.0, 5632.0, 5723.0, 5659.0, 5435.0, 5590.0, 5511.0, 5521.0, 5417.0, 5296.0, 5377.0, 5608.0, 5555.0, 5466.0, 5487.0, 5444.0, 5375.0, 5407.0, 5574.0, 5495.0, 5324.0, 5371.0, 5598.0, 5399.0, 5692.0, 5676.0, 5493.0, 5393.0, 5619.0, 5302.0, 5485.0, 5443.0, 5448.0, 5630.0, 5526.0, 5554.0, 5268.0, 5621.0, 5419.0, 5258.0, 5402.0, 5657.0, 5610.0, 5606.0, 5290.0, 5629.0, 5686.0, 5341.0, 5439.0, 5502.0, 5604.0, 5585.0, 5543.0, 5413.0, 5286.0, 5633.0, 5293.0, 5671.0, 5661.0, 5273.0, 5675.0, 5331.0, 5673.0, 5406.0, 5284.0, 5423.0, 5462.0, 5481.0, 5301.0, 5617.0, 5397.0, 5698.0, 5572.0 (number of hits: 9)

17	5550	9	1	333	1	5494.0, 5419.0, 5382.0, 5335.0, 5352.0, 5514.0, 5706.0, 5599.0, 5632.0, 5306.0, 5442.0, 5369.0, 5586.0, 5480.0, 5594.0, 5610.0, 5319.0, 5705.0, 5268.0, 5658.0, 5617.0, 5317.0, 5346.0, 5510.0, 5276.0, 5526.0, 5481.0, 5290.0, 5340.0, 5709.0, 5250.0, 5441.0, 5427.0, 5460.0, 5286.0, 5315.0, 5309.0, 5414.0, 5571.0, 5561.0, 5291.0, 5614.0, 5541.0, 5608.0, 5532.0, 5562.0, 5396.0, 5720.0, 5642.0, 5573.0, 5558.0, 5430.0, 5646.0, 5384.0, 5634.0, 5342.0, 5445.0, 5327.0, 5693.0, 5657.0, 5563.0, 5535.0, 5257.0, 5312.0, 5649.0, 5603.0, 5654.0, 5289.0, 5270.0, 5604.0, 5618.0, 5611.0, 5711.0, 5624.0, 5522.0, 5272.0, 5506.0, 5550.0, 5629.0, 5668.0, 5255.0, 5428.0, 5718.0, 5619.0, 5667.0, 5673.0, 5462.0, 5318.0, 5537.0, 5580.0, 5410.0, 5360.0, 5412.0, 5455.0, 5283.0, 5394.0, 5422.0, 5368.0, 5330.0, 5383.0 (number of hits: 7)
18	5550	9	1	333	1	5421.0, 5499.0, 5297.0, 5695.0, 5644.0, 5672.0, 5389.0, 5272.0, 5583.0, 5352.0, 5397.0, 5436.0, 5624.0, 5299.0, 5300.0, 5699.0, 5463.0, 5636.0, 5422.0, 5668.0, 5419.0, 5634.0, 5638.0, 5268.0, 5621.0, 5488.0, 5540.0, 5485.0, 5662.0, 5612.0, 5618.0, 5481.0, 5492.0, 5600.0, 5514.0, 5276.0, 5474.0, 5294.0, 5528.0, 5575.0, 5465.0, 5363.0, 5607.0, 5504.0, 5544.0, 5482.0, 5480.0, 5522.0, 5256.0, 5457.0, 5622.0, 5631.0, 5632.0, 5464.0, 5702.0, 5506.0, 5285.0, 5430.0, 5286.0, 5567.0, 5640.0, 5258.0, 5364.0, 5616.0, 5391.0, 5459.0, 5413.0, 5314.0, 5379.0, 5288.0, 5271.0, 5515.0, 5341.0, 5369.0, 5420.0, 5254.0, 5479.0, 5561.0, 5441.0, 5721.0, 5529.0, 5667.0, 5647.0, 5595.0, 5375.0, 5639.0, 5570.0, 5557.0, 5468.0, 5384.0, 5609.0, 5451.0, 5329.0, 5435.0, 5425.0, 5603.0, 5673.0, 5588.0, 5461.0, 5490.0 (number of hits: 8)
19	5550	9	1	333	1	5648.0, 5526.0, 5535.0, 5609.0, 5514.0, 5677.0, 5630.0, 5423.0, 5351.0, 5473.0, 5387.0, 5693.0, 5343.0, 5692.0, 5580.0, 5365.0, 5311.0, 5515.0, 5558.0, 5291.0, 5522.0, 5604.0, 5653.0, 5622.0, 5689.0, 5418.0, 5523.0, 5579.0, 5405.0, 5419.0, 5605.0, 5328.0, 5672.0, 5570.0, 5266.0, 5453.0, 5600.0, 5685.0, 5378.0, 5479.0, 5556.0, 5463.0, 5308.0, 5476.0, 5395.0, 5340.0, 5572.0, 5470.0, 5637.0, 5603.0, 5686.0, 5433.0, 5611.0, 5527.0, 5372.0, 5258.0, 5709.0, 5568.0, 5640.0, 5309.0, 5583.0, 5406.0, 5277.0, 5464.0, 5720.0, 5691.0, 5346.0, 5480.0, 5335.0, 5290.0, 5345.0, 5613.0, 5524.0, 5408.0, 5590.0,

						5519.0, 5461.0, 5668.0, 5353.0, 5446.0, 5380.0, 5552.0, 5559.0, 5517.0, 5332.0, 5529.0, 5584.0, 5492.0, 5586.0, 5281.0, 5276.0, 5596.0, 5505.0, 5342.0, 5319.0, 5626.0, 5298.0, 5495.0, 5650.0, 5712.0 (number of hits: 6)
20	5550	9	1	333	1	5482.0, 5388.0, 5690.0, 5641.0, 5506.0, 5336.0, 5271.0, 5659.0, 5413.0, 5711.0, 5498.0, 5622.0, 5267.0, 5302.0, 5576.0, 5455.0, 5511.0, 5525.0, 5663.0, 5618.0, 5631.0, 5299.0, 5545.0, 5298.0, 5332.0, 5516.0, 5418.0, 5358.0, 5594.0, 5557.0, 5250.0, 5433.0, 5583.0, 5532.0, 5617.0, 5458.0, 5374.0, 5380.0, 5555.0, 5573.0, 5627.0, 5449.0, 5668.0, 5355.0, 5714.0, 5502.0, 5342.0, 5317.0, 5406.0, 5282.0, 5712.0, 5597.0, 5564.0, 5527.0, 5600.0, 5425.0, 5434.0, 5475.0, 5381.0, 5671.0, 5382.0, 5677.0, 5501.0, 5648.0, 5706.0, 5549.0, 5571.0, 5414.0, 5638.0, 5397.0, 5426.0, 5315.0, 5644.0, 5435.0, 5323.0, 5377.0, 5365.0, 5451.0, 5401.0, 5550.0, 5606.0, 5456.0, 5626.0, 5577.0, 5390.0, 5309.0, 5379.0, 5586.0, 5680.0, 5356.0, 5257.0, 5472.0, 5640.0, 5307.0, 5565.0, 5443.0, 5328.0, 5670.0, 5543.0, 5429.0 (number of hits: 5)
21	5550	9	1	333	1	5498.0, 5668.0, 5414.0, 5407.0, 5685.0, 5484.0, 5530.0, 5315.0, 5308.0, 5514.0, 5390.0, 5471.0, 5567.0, 5554.0, 5585.0, 5701.0, 5443.0, 5654.0, 5588.0, 5696.0, 5331.0, 5490.0, 5453.0, 5266.0, 5445.0, 5582.0, 5282.0, 5653.0, 5602.0, 5533.0, 5519.0, 5389.0, 5467.0, 5716.0, 5294.0, 5360.0, 5629.0, 5327.0, 5338.0, 5441.0, 5632.0, 5566.0, 5320.0, 5658.0, 5489.0, 5549.0, 5402.0, 5486.0, 5704.0, 5720.0, 5560.0, 5502.0, 5466.0, 5359.0, 5715.0, 5258.0, 5456.0, 5289.0, 5592.0, 5504.0, 5577.0, 5303.0, 5492.0, 5672.0, 5457.0, 5687.0, 5542.0, 5718.0, 5623.0, 5388.0, 5619.0, 5392.0, 5276.0, 5306.0, 5295.0, 5572.0, 5383.0, 5558.0, 5515.0, 5717.0, 5257.0, 5382.0, 5551.0, 5375.0, 5265.0, 5699.0, 5507.0, 5618.0, 5428.0, 5528.0, 5546.0, 5357.0, 5708.0, 5376.0, 5413.0, 5637.0, 5264.0, 5690.0, 5431.0, 5624.0 (number of hits: 6)
22	5550	9	1	333	1	5482.0, 5578.0, 5451.0, 5721.0, 5302.0, 5501.0, 5517.0, 5435.0, 5534.0, 5659.0, 5568.0, 5525.0, 5272.0, 5269.0, 5511.0, 5623.0, 5574.0, 5308.0, 5668.0, 5560.0, 5352.0, 5683.0, 5420.0, 5300.0, 5473.0, 5475.0, 5696.0, 5334.0, 5366.0, 5387.0, 5452.0, 5456.0, 5555.0, 5718.0, 5346.0, 5276.0, 5526.0, 5685.0, 5372.0, 5498.0, 5677.0, 5539.0, 5282.0, 5676.0, 5625.0,

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23	5550	9	1	333	1	5387.0, 5713.0, 5536.0, 5486.0, 5703.0, 5371.0, 5512.0, 5406.0, 5704.0, 5626.0, 5398.0, 5574.0, 5351.0, 5353.0, 5321.0, 5554.0, 5313.0, 5480.0, 5273.0, 5336.0, 5696.0, 5335.0, 5489.0, 5567.0, 5550.0, 5537.0, 5620.0, 5616.0, 5503.0, 5661.0, 5607.0, 5642.0, 5251.0, 5674.0, 5589.0, 5457.0, 5562.0, 5606.0, 5262.0, 5412.0, 5450.0, 5442.0, 5370.0, 5561.0, 5629.0, 5470.0, 5264.0, 5304.0, 5641.0, 5474.0, 5389.0, 5617.0, 5666.0, 5326.0, 5431.0, 5564.0, 5610.0, 5595.0, 5573.0, 5690.0, 5293.0, 5394.0, 5685.0, 5281.0, 5516.0, 5557.0, 5385.0, 5427.0, 5421.0, 5380.0, 5340.0, 5667.0, 5502.0, 5644.0, 5381.0, 5647.0, 5680.0, 5464.0, 5416.0, 5490.0, 5401.0, 5471.0, 5459.0, 5665.0, 5534.0, 5519.0, 5316.0, 5252.0, 5483.0, 5500.0, 5594.0, 5511.0, 5417.0, 5525.0, 5286.0, 5697.0, 5360.0, 5568.0, 5306.0, 5605.0 (number of hits: 5)
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25	5550	9	1	333	1	5650.0, 5624.0, 5361.0, 5535.0, 5698.0, 5608.0, 5378.0, 5372.0, 5565.0, 5413.0, 5616.0, 5633.0, 5508.0, 5281.0, 5618.0,

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						5408.0, 5364.0, 5614.0, 5424.0, 5367.0, 5337.0, 5268.0, 5300.0, 5448.0, 5496.0, 5724.0, 5520.0, 5620.0, 5527.0, 5607.0, 5605.0, 5301.0, 5526.0, 5466.0, 5563.0, 5564.0, 5476.0, 5597.0, 5661.0, 5481.0, 5660.0, 5288.0, 5644.0, 5437.0, 5692.0, 5687.0, 5254.0, 5717.0, 5340.0, 5338.0, 5297.0, 5423.0, 5492.0, 5412.0, 5504.0, 5609.0, 5573.0, 5397.0, 5668.0, 5598.0, 5284.0, 5672.0, 5421.0, 5625.0, 5561.0, 5592.0, 5722.0, 5502.0, 5267.0, 5358.0, 5473.0, 5452.0, 5581.0, 5328.0, 5371.0, 5430.0, 5626.0, 5538.0, 5396.0, 5590.0, 5547.0, 5706.0, 5686.0, 5436.0, 5646.0, 5357.0, 5250.0, 5583.0, 5622.0, 5294.0, 5326.0, 5313.0, 5513.0, 5362.0, 5657.0, 5463.0, 5418.0, 5480.0, 5415.0, 5545.0 (number of hits: 6)
26	5550	9	1	333	1	5470.0, 5618.0, 5360.0, 5537.0, 5524.0, 5512.0, 5613.0, 5663.0, 5446.0, 5694.0, 5356.0, 5413.0, 5549.0, 5685.0, 5276.0, 5411.0, 5682.0, 5279.0, 5534.0, 5317.0, 5706.0, 5672.0, 5503.0, 5358.0, 5611.0, 5436.0, 5459.0, 5309.0, 5641.0, 5336.0, 5332.0, 5693.0, 5319.0, 5268.0, 5633.0, 5592.0, 5699.0, 5388.0, 5479.0, 5472.0, 5464.0, 5522.0, 5509.0, 5506.0, 5275.0, 5439.0, 5721.0, 5312.0, 5386.0, 5475.0, 5576.0, 5355.0, 5302.0, 5647.0, 5484.0, 5529.0, 5296.0, 5695.0, 5401.0, 5711.0, 5255.0, 5631.0, 5595.0, 5490.0, 5402.0, 5589.0, 5546.0, 5577.0, 5498.0, 5650.0, 5627.0, 5508.0, 5447.0, 5640.0, 5269.0, 5629.0, 5659.0, 5295.0, 5338.0, 5656.0, 5384.0, 5664.0, 5691.0, 5552.0, 5661.0, 5652.0, 5294.0, 5258.0, 5487.0, 5428.0, 5252.0, 5533.0, 5434.0, 5555.0, 5299.0, 5697.0, 5287.0, 5530.0, 5497.0, 5310.0 (number of hits: 9)
27	5550	9	1	333	1	5633.0, 5526.0, 5521.0, 5672.0, 5274.0, 5334.0, 5276.0, 5420.0, 5432.0, 5681.0, 5494.0, 5617.0, 5637.0, 5510.0, 5491.0, 5691.0, 5305.0, 5327.0, 5702.0, 5610.0, 5653.0, 5591.0, 5361.0, 5296.0, 5442.0, 5290.0, 5509.0, 5317.0, 5571.0, 5394.0, 5466.0, 5518.0, 5540.0, 5471.0, 5595.0, 5636.0, 5569.0, 5701.0, 5401.0, 5440.0, 5708.0, 5292.0, 5283.0, 5463.0, 5599.0, 5564.0, 5676.0, 5445.0, 5311.0, 5312.0, 5543.0, 5492.0, 5649.0, 5313.0, 5654.0, 5684.0, 5530.0, 5384.0, 5635.0, 5554.0, 5579.0, 5503.0, 5568.0, 5479.0, 5689.0, 5383.0, 5330.0, 5710.0, 5580.0, 5372.0, 5501.0, 5678.0, 5299.0, 5405.0, 5344.0, 5417.0, 5577.0, 5323.0, 5460.0, 5360.0, 5552.0, 5462.0, 5281.0, 5614.0, 5539.0, 5298.0, 5483.0, 5525.0, 5331.0, 5620.0,

						5375.0, 5544.0, 5396.0, 5690.0, 5415.0, 5677.0, 5407.0, 5641.0, 5269.0, 5413.0 (number of hits: 9)
28	5550	9	1	333	1	5482.0, 5595.0, 5343.0, 5320.0, 5575.0, 5536.0, 5416.0, 5550.0, 5561.0, 5544.0, 5341.0, 5611.0, 5547.0, 5345.0, 5379.0, 5647.0, 5566.0, 5361.0, 5372.0, 5486.0, 5295.0, 5579.0, 5314.0, 5639.0, 5707.0, 5402.0, 5603.0, 5567.0, 5635.0, 5594.0, 5263.0, 5441.0, 5300.0, 5508.0, 5715.0, 5444.0, 5675.0, 5718.0, 5633.0, 5364.0, 5543.0, 5687.0, 5593.0, 5524.0, 5661.0, 5658.0, 5591.0, 5403.0, 5410.0, 5702.0, 5484.0, 5406.0, 5417.0, 5329.0, 5319.0, 5469.0, 5694.0, 5626.0, 5386.0, 5709.0, 5535.0, 5352.0, 5395.0, 5459.0, 5693.0, 5654.0, 5355.0, 5342.0, 5462.0, 5643.0, 5455.0, 5311.0, 5631.0, 5420.0, 5493.0, 5616.0, 5619.0, 5515.0, 5574.0, 5534.0, 5663.0, 5696.0, 5670.0, 5385.0, 5537.0, 5705.0, 5513.0, 5564.0, 5602.0, 5533.0, 5376.0, 5592.0, 5610.0, 5332.0, 5258.0, 5667.0, 5422.0, 5571.0, 5650.0, 5660.0 (number of hits: 4)
29	5550	9	1	333	1	5527.0, 5324.0, 5494.0, 5336.0, 5484.0, 5534.0, 5407.0, 5692.0, 5538.0, 5515.0, 5633.0, 5326.0, 5698.0, 5389.0, 5587.0, 5363.0, 5512.0, 5577.0, 5406.0, 5360.0, 5601.0, 5709.0, 5458.0, 5439.0, 5558.0, 5434.0, 5451.0, 5449.0, 5654.0, 5398.0, 5435.0, 5542.0, 5315.0, 5529.0, 5475.0, 5595.0, 5662.0, 5469.0, 5362.0, 5673.0, 5599.0, 5694.0, 5335.0, 5502.0, 5514.0, 5482.0, 5653.0, 5408.0, 5436.0, 5571.0, 5343.0, 5427.0, 5525.0, 5532.0, 5723.0, 5274.0, 5380.0, 5405.0, 5658.0, 5715.0, 5652.0, 5471.0, 5675.0, 5641.0, 5354.0, 5334.0, 5506.0, 5377.0, 5419.0, 5382.0, 5597.0, 5341.0, 5293.0, 5481.0, 5370.0, 5263.0, 5329.0, 5533.0, 5485.0, 5598.0, 5348.0, 5711.0, 5433.0, 5696.0, 5392.0, 5473.0, 5445.0, 5693.0, 5352.0, 5678.0, 5318.0, 5707.0, 5535.0, 5631.0, 5313.0, 5268.0, 5276.0, 5623.0, 5338.0, 5289.0 (number of hits: 3)
30	5550	9	1	333	1	5356.0, 5423.0, 5409.0, 5306.0, 5649.0, 5719.0, 5274.0, 5713.0, 5488.0, 5645.0, 5657.0, 5608.0, 5614.0, 5340.0, 5692.0, 5688.0, 5375.0, 5272.0, 5715.0, 5437.0, 5603.0, 5700.0, 5593.0, 5626.0, 5254.0, 5572.0, 5518.0, 5469.0, 5284.0, 5647.0, 5654.0, 5486.0, 5483.0, 5360.0, 5461.0, 5539.0, 5343.0, 5520.0, 5309.0, 5680.0, 5354.0, 5456.0, 5391.0, 5377.0, 5337.0, 5534.0, 5352.0, 5414.0, 5378.0, 5631.0, 5616.0, 5504.0, 5459.0, 5565.0, 5579.0, 5351.0, 5533.0, 5660.0, 5532.0, 5556.0,

|						5293.0, 5682.0, 5342.0, 5392.0, 5435.0, 5526.0, 5442.0, 5283.0, 5404.0, 5672.0, 5576.0, 5328.0, 5315.0, 5669.0, 5530.0, 5703.0, 5393.0, 5663.0, 5554.0, 5412.0, 5656.0, 5482.0, 5662.0, 5277.0, 5266.0, 5387.0, 5330.0, 5549.0, 5465.0, 5407.0, 5671.0, 5411.0, 5546.0, 5255.0, 5652.0, 5358.0, 5366.0, 5595.0, 5543.0, 5499.0 (number of hits: 3)

10 Appendix A – Test Setup Photographs

10.1 Test Setup View
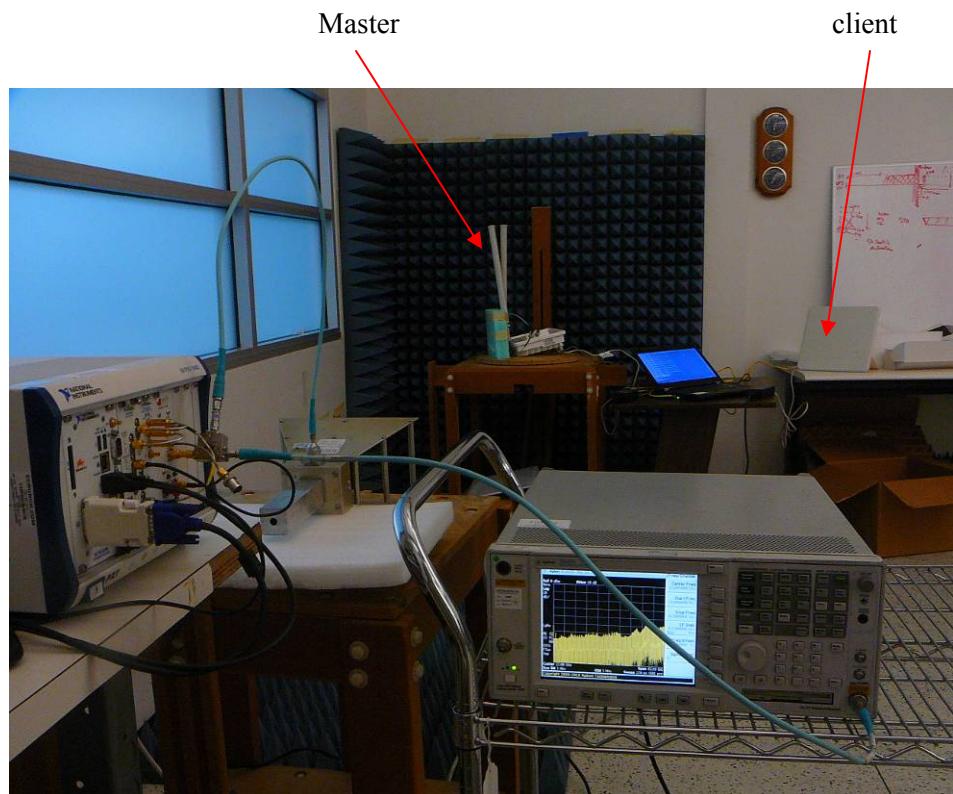
11 Appendix B - EUT Photographs

11.1 EUT – Top View
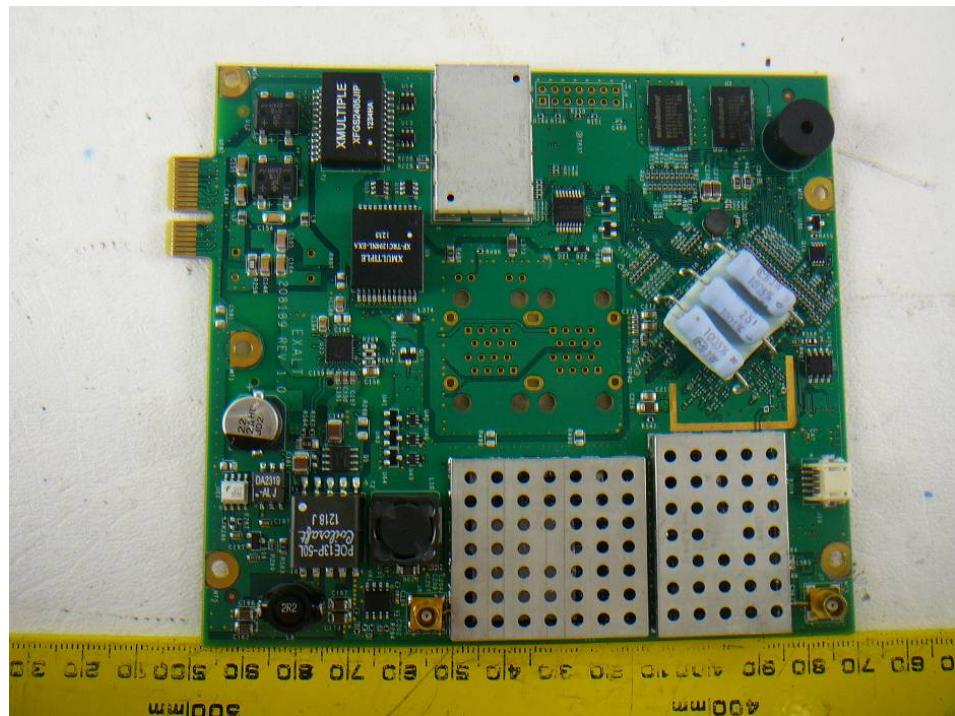

11.2 EUT – Bottom View
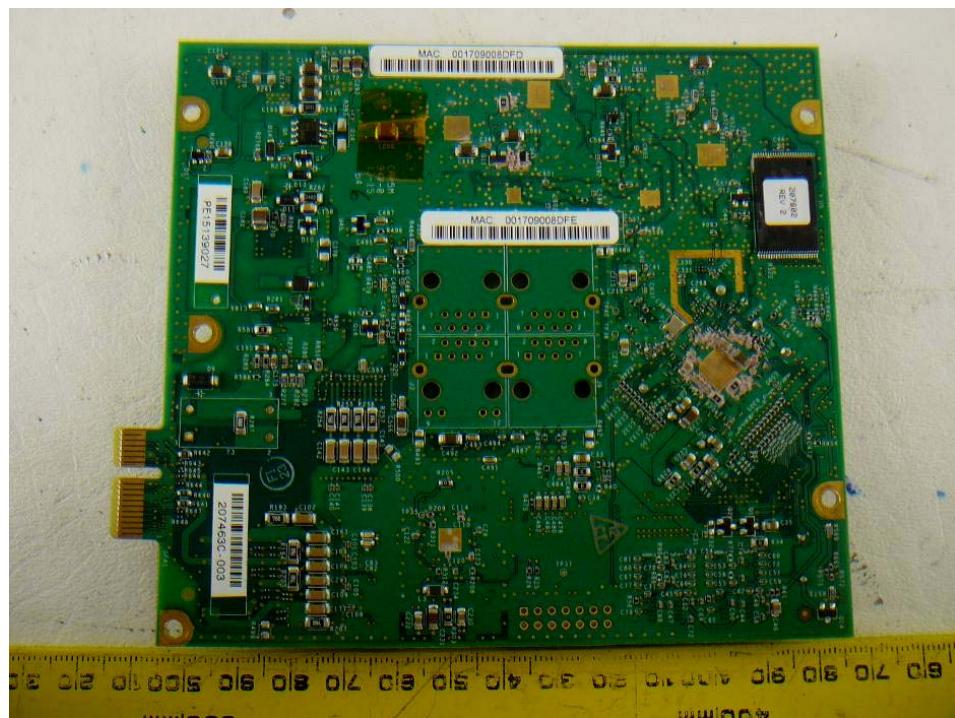
11.3   EUT – Connector Board Top View
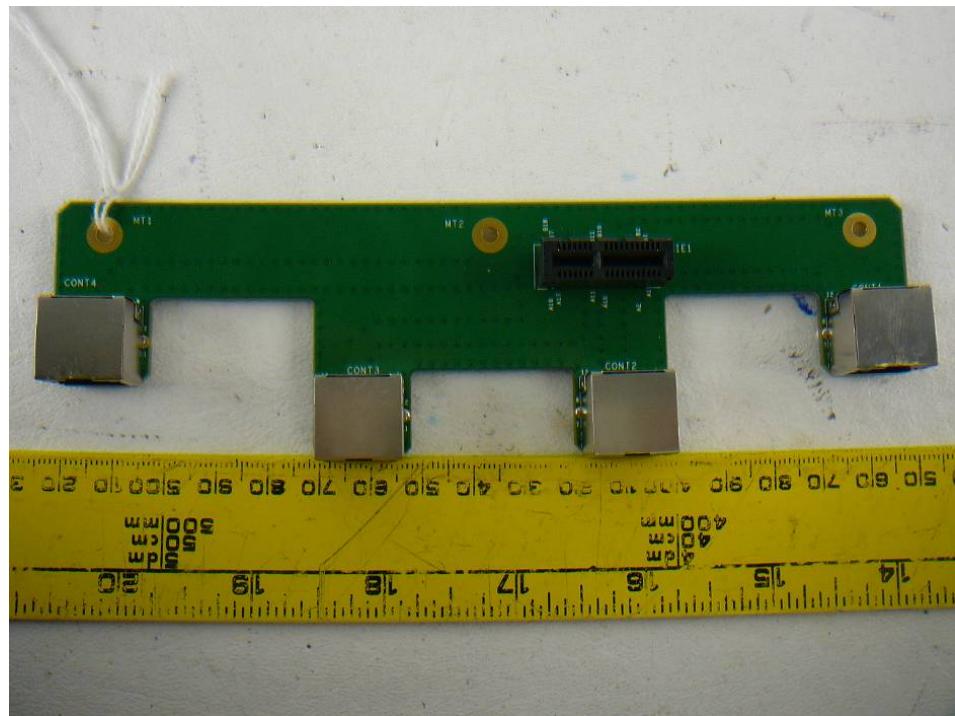

## 11.4   EUT – Connector Board Bottom View
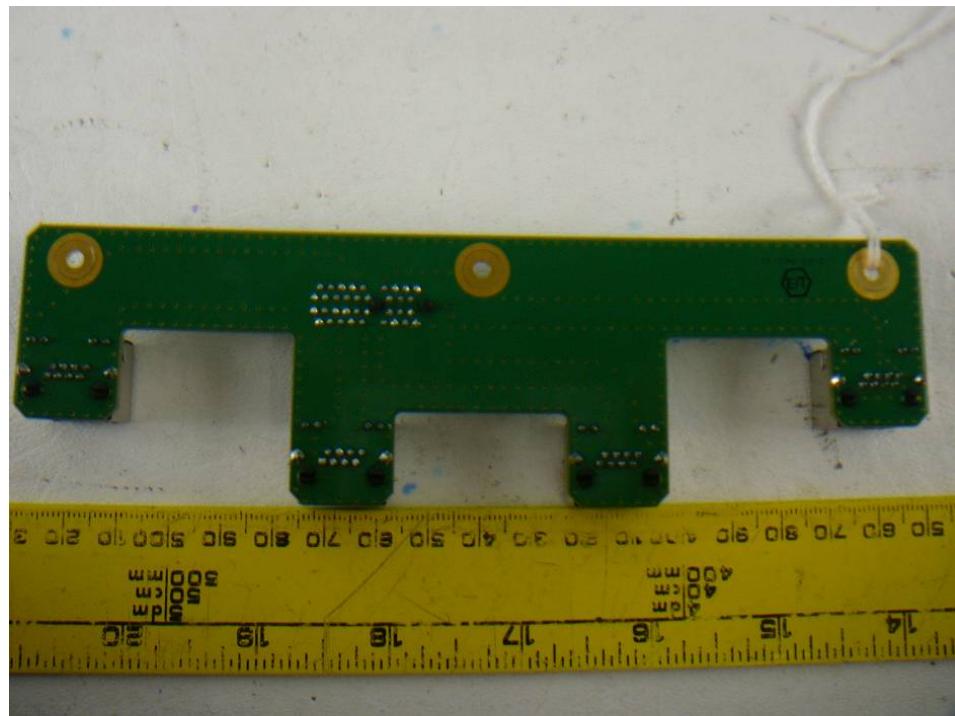
11.5 Host Unit Front View


11.6 Host Unit Bottom View
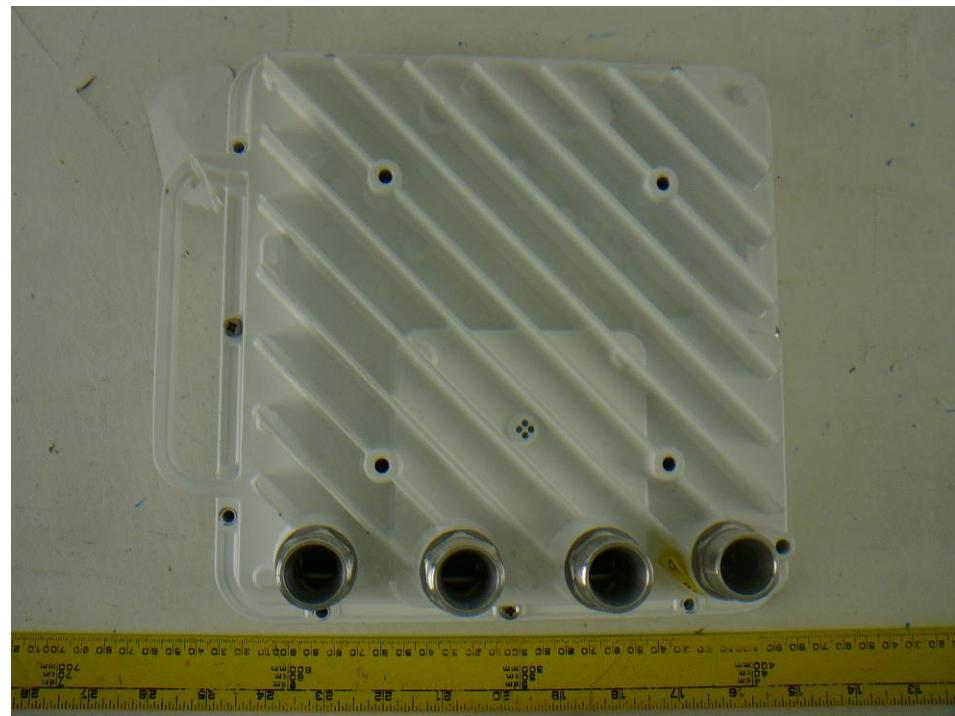
11.7 Host Unit Side View (1)
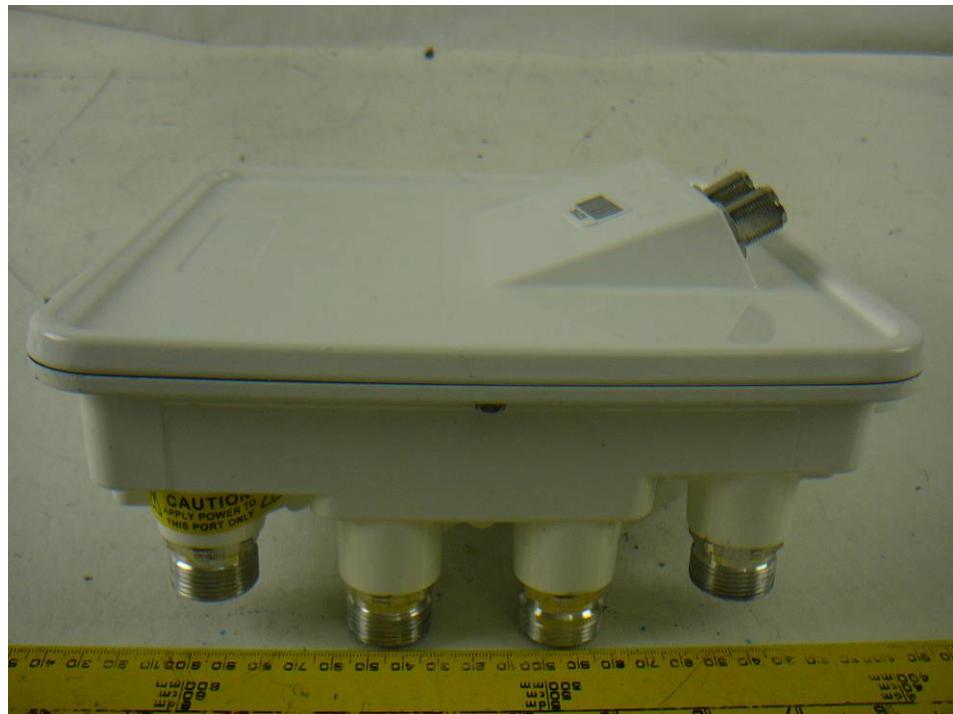
11.8 Host Unit Side View (2)

11.9 EUT – Rear View

11.10 Host Unit Cover off View

RF Module
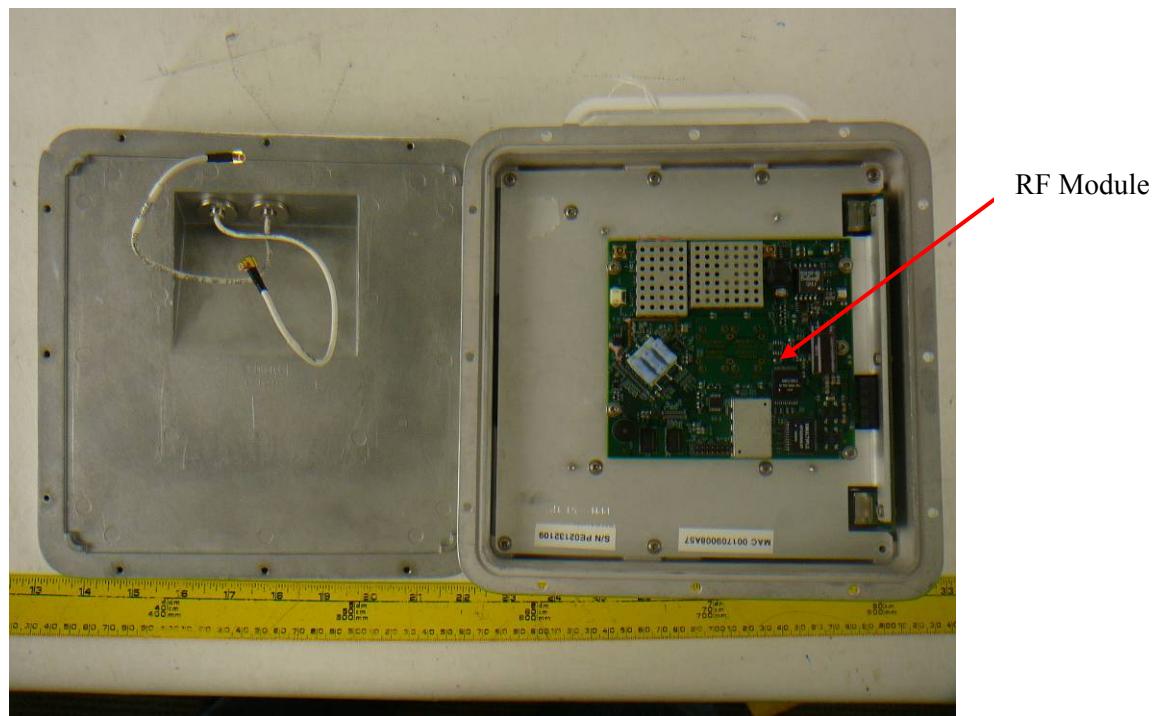
11.11 Host Unit 9 dBi Antenna View

11.12 AC/DC POE Adaptor

12 Appendix C – Antenna List

Manufacturer	P/N	Frequency Band	Gain	Polarization	Port to Port Isolation	AZ/EL BW	Cross Polarization Level	Front to Back Ratio	VSWR 50 Ohm	Maximum Input Power	Impedance	Size	Weight	Connector
		GHz	dBi (Min)		dB (Min)	Degree	dB (Max)	dB (Max)		Watt	50 Ohm	mm	Kg (Max)	
MTI	MT-484052/NVH	4.9 - 5.875	16	Dual Linear V+H	30	33/20	-15	-30	1.5:1	1	50 Ohm	190x190x30.3	0.7	2xN-Type F
MTI	MT-485005/VHN	5.25-5.875	18	Dual V+H	30	17/17	-20	-30	1.7:1	6	50 Ohm	190x190x30	0.7	2 x N-Type F
MTI	MT-485053/NVH	5.15-5.875	19.5	Dual V+H	30	17/17	-20	-30	1.5 :1	6	50 Ohm	190x190x30.5	0.7	2 x N-Type F
MTI	MT-465017/NVH	4.9 - 6.1	22.5	Dual V+H	25	10	DN3	-30	1.5:1	6	50 Ohm	305x305x15	1.2	2x N-Type F
MTI	MT-485049/NVH	4.9 - 6.0	23V/23H	Dual V+H	40	8-Aug	DN1-DN3	-35	1.7:1	6	50 Ohm	371x371x40	2	2x N-Type F
MTI	MT-485025/ND	5.15-6.0	23	Dual Slant ± 45°	40	9-Sep	DN1-DN3	35	1.5:1	6	50 Ohm	371x371x40	2.5	2 x N-Type F
MTI	MT–466010/NVH	4.9 – 6.425	27.5 @ 4.9–5.35 28 @ 5.35-6 27 @ 4.9–6 (Port H)	Dual V+H	-	5	DN2	-40	1.5:1	6	50 Ohm	600 x 600 x 51	5	2xN-Type F
MTI	MT-486013/NVH	4.9 – 6	28 @ 4.9-5.4 29 @ 5.5–6.0	Dual V+H	40	5.5	25 @ main beam	35	1.7 : 1	20	50 Ohm	Ø725x440 (depth)	6.3	2xN-Type F
MTI	MA-WA56-DP19	4.9-6.1	19 dBi	V + H	30	16/16	20	30	1.7 - 2	10	50 Ohm	200x200x33		N-type
MTI	MA-WA56-DP20	4.9-5.875	21	V + H	30	12-Dec	18	30	01:01.7	10	50 Ohm	305x305x15		N-type
MTI	MA-WA56-DP25N	4.9-5.875	23.5	V + H	30	7-Jul	25	30	01:01.7	5	50 Ohm	370x370x40		N-type
MTI	MA-QA56-DP28NB	4.7-6.425	28.5	V + H	30	4.7/4.7	23	30	01:01.7	10	50 Ohm	600x600x22m		N-type
MTI	MT-463013/NVH	4.9-5.95	15.5	Dual Linear V+H	25	60/8	-15	-20	1.7:1 (typical)	20		500 x 200 x 30	1.5	2 x N-Type Female
MTI	MT-463012/NVH	4.9-5.95	14	Dual Linear V+H	25	90/8	-15	-20	2.0:1	20		500 x 200 x 30	1.5	2 x N-Type Female
MTI	MT-484034/NV/I	4.9-6.0	15	Vertical	-	120/6	SS3	SS3	1.7:1	6		550x250x17	1.5	N-Type Female
MTI	MA-WC56-DP9	4.9-6.1	9	V + H	Not specified	60/35	15	Not specified	01:01.7	10	50 Ohm	100x100x30		N-Type
MTI	MA-W55-10NH	4.9-5.875	10	V	N/A	360/10	N/A	N/A	1.8-2	10 W	50 Ohm	315x40		N-Type
MTI	MT-462008/N/A	4.9-5.875	9.5 ±1	Vertical	-	360/7	N/A	N/A	2.0:1	6		460xØ28	0.7	N-Type Male

Manufacturer	P/N	Frequency Band GHz	Gain dBi	Polarization	Port to Port Isolation	AZ/EL BW	Cross Polarization Level	Front to Back Ratio	VSWR	Maximum Input Power	Impedance Ohm	Size mm	Weight kg	Connector
Mars	MA-WA56-DP19	4.9 -6.1	19 ±1	V&H or ±45°	-30	16/16	-20	TS2	1.7/2.1:1	10	50 Ohm	200x200x33	0.38	2 x N Type 2 x SMA RA
Mars	MA-WA56-DP20	4.9 -6.06	V-pol 4.9-5.875GHz 22.5 ±1 5.875-6.06 GHz 20.5±1 H-pol 4.9-5.5 GHz 21.5±1 5.5-6.06 GHz 23±1	V&H or ±45°	-30	12/12	4.9-5.875GHz -18 5.875-6.06 GHz -14	TS3	1.7:1	10	50 Ohm	305x305x15	0.9	2 x N Type 2 x SMA RA
Mars	MA-WA56-DP25N	4.9 -5.875	H24.5 ±1 V23.5 ±1	V&H or ±45°	-30	7-9/7-9	-25	TS3-5	1.7:1	5	50 Ohm	370x370x40	1.8	2 x N Type 2 x SMA RA
Mars	MA-WA56-DP28N	4.9 -6.425	4.7-4.9 GHz 28±1dBi 27±1dBi 4.9-5.15 GHz 28.5±0.5 dBi 28±0.5 dBi 5.15-5.875 GHz 29±0.5 dBi 28.5±0.5 dBi 5.875-6.1GHz 28.5±0.5dBi 28 ± 1 dBi 6.1-6.425 GHz 27.5±1 dBi 27 ± 1 dBi	V&H or ±45°	-30	5.5/5.5 5.2/5.2 4.7/4.7 4.4/4.4 5/5	V -26 H -23 V -26 H -25 V -23 H -23 V -23 H -20 V -23 H -15	TS3	2.3:1 2:1 1.7:1 2:1 2.3:1	10	50 Ohm	600x600x22	4.7	2 x N Type 2 x SMA RA
Mars	MA-WA62-DP24	5.7 – 6.425	24	V&H or ±45°	-32	8.5/8.5	-16	-35	1.7:1	10	50 Ohm	305x305x15	0.95	2 x N Type
Mars	MA-WA62-DP30	5.4-6.5	29 ±1	V&H ±45°	-25	4.5/4.5	-25	-40	1.7:1	10	50 Ohm	600x600x30	4.7	2 x N Type
Mars	MA-WC55-DS17	4.9 - 6.1	17	±45°	-30	60/8		-35	1.7:1	10	50 Ohm	370x370x40	2	2 x N Type
Mars	MA-WD55-DS16	4.9 - 6.1	16	±45°	-30	90/8		-30	1.7:1	10	50 Ohm	370x370x40	1.8	2 x N Type
Mars	MA-WD56-DP13	5.15 - 5.875	13	V&H	-20	90/15	-15	-30	1.7:1	10	50 Ohm	200x200x33	1	2 x N Type
Mars	MA-WC56-DP17	4.9 – 6.1	V18/H17	V&H	-40	60/8	-16	-30	1.7:1	10	50 Ohm	370x370x40	1.8	2 x N Type
Mars	MA-WD56-DP16	4.9 – 6.1	16	V&H	-30	90/8	-15	-30	1.7:1	10	50 Ohm	370x370x40	2	2 x N Type
Mars	MA-WD56-DSV16	4.9 – 6.1	16	V&±45°	-30	90/8		-30	1.7:1	10	50 Ohm	370x370x40	2.1	3 x N Type
Mars	MA-WE56-DP12	5.15 - 5.875	12	V&H	-20	120/15	-15	-30	1.7:1	10	50 Ohm	200x200x33	1	2 x N Type
Mars	MA-WE56-DP15	5.15 - 5.875	14.5	V&H	-25	120/8	-15	-30	1.7:1	10	50	370x370x40	2	2 x N Type
Mars	MA-WD62-DS16	5.7-6.425	16	±45°	-40	90/8.5	-15	-35	1.7:1	10	50 Ohm	370x370x40	1.8	2 x N Type
Mars	MA-WD62-DP16	5.7-6.425	16	V&H	-45	90/8.5	-18	-40	1.7:1	10	50 Ohm	370x370x40	2	2 x N Type
Mars	MA-WC62-DP17	5.7-6.425	17	V&H	-45	90/8.5	-18	-40	1.7:1	10	50 Ohm	370x370x40	2	2 x N Type

Manufacturer	P/N	Type-1	Type-2	Size-1	Size-2	Polarization	Gain	Frequency (MHz)
KBT	TDJ-5158BKR-C	Panel	Panel	1	ft	single	20	5150-5850
KBT	TDJ-5158BKT-C	Panel	Panel	1	ft	single	23	5150-5850
KBT	TDJ-5158BKR	Panel	Panel	1	ft	single	20	5150-5850
KBT	TDJ-5158BKR×2	Panel	Panel	1	ft	dual	18	5150-5850
KBT	TDJ-5158BFA90-Y	Panel	Panel	0.5	ft	single	11	5150-5851
KBT	TDJ-5158BKB	Panel	Panel	1	ft	single	20	5150-5850
KBT	TDJ-5158BKC	Panel	Panel	1	ft	single	18	5100-5850
KBT	TDJ-5158EB23	Panel	Panel	1	ft	single	23	5150-5850
KBT	KBT65VH15-5158RT0	Panel	Sector	1	ft	dual	2x15	5150-5850
KBT	KBT65VP15-5158RT0	Panel	Sector	1	ft	single	15	5150-5851
KBT	KBT65VP17-5158RT0	Panel	Sector	1	ft	single	17	5150-5850
KBT	KBT65DP17-5158RT0	Panel	Sector	1	ft	dual	2x17	5150-5851
KBT	KBT90VP16-5158RT0	Panel	Sector	1	ft	single	16	5150-5850
KBT	KBT90VP17-5158RT0	Panel	Sector	2	ft	single	17	5150-5850
KBT	KBT120VP12-5158RT0	Panel	Sector	1	ft	single	12	5150-5850
KBT	KBT120VP15-5158RT0	Panel	Sector	1	ft	single	15	5150-5851
KBT	TDJ-5158SPL4	Grid	Parabolic	1	ft	single	23.5	5150-5848
KBT	TDJ-5158SPL6	Grid	Parabolic	2	ft	single	26.5	5150-5849
KBT	TDJ-5158P4	Solid	Parabolic	1	ft	single	24	5150-5850
KBT	TDJ-5158P6	Solid	Parabolic	2	ft	single	28	5150-5850
KBT	TDJ-4958P6AC×2	Solid	Parabolic	2	ft	dual	28.5	4900-5900

Manufacturer	P/N	Type-1	Type-2	Size-1	Size-2	Polarization	Gain	Frequency (MHz)
General Dynamics	EPD1-52	Panel	Panel	1	ft	Single	23	5250-5850
RadioWaves	FPD1-5-24	Panel	Panel	1	ft	Dual	23.8	5150-5850
ARC Wireless	PD5823B88	Panel	Panel	1	ft	Dual	24	4940-5875
Laird	PA58-24	Panel	Panel	1	ft	Single	24	5150-5825
Laird	R2T58-24	Panel	Panel	1	ft	Single	24	4940-5850
RadioWaves	FP1-5-24	Panel	Panel	1	ft	Single	24.2	5150-5850
CommScope	UBP600-4-1	Panel	Panel	2	ft	Single	27.5	4900-5925
General Dynamics	EPD2-52	Panel	Panel	2	ft	Single	28	5250-5850
RadioWaves	FP2-5-28	Panel	Panel	2	ft	Single	28	5150-5850
Laird	GD5W-25P	Grid	Parabolic	2	ft	Single	25	4940-5850
Laird	GD53-25	Grid	Parabolic	2	ft	Single	25	5150-5350
Laird	GD57-25	Grid	Parabolic	2	ft	Single	25	5470-5725
Laird	HDGD58-26	Grid	Parabolic	2	ft	Single	26	5725-5850
Laird	GD58-26	Grid	Parabolic	2	ft	Single	26	5725-5850
Commscope	28T-5801-1	Grid	Parabolic	3	ft	Single	27	5700–5875
Laird	GD53-28	Grid	Parabolic	3	ft	Single	28	5150-5350
Laird	GD57-28	Grid	Parabolic	3	ft	Single	28	5400-5700
Laird	GD5W-28P	Grid	Parabolic	3	ft	Single	28	4940-5850
CommScope	UBG600-4-1	Grid	Parabolic	3	ft	Single	28.5	5150-6000
Laird	GD58-29	Grid	Parabolic	3	ft	Single	29	5150-5825
Laird	HDGD58-29	Grid	Parabolic	3	ft	Single	29	5725-5825
RadioWaves	G3-5.2	Grid	Parabolic	3	ft	Single	31.1	5250-5850
Wireless Beehive	5.8DP-26	Solid	Parabolic	1.5	ft	Dual	26	5200-5800
PC Tel	MPRC2449	Solid	Parabolic	2	ft	Single	27.7	4900-6000
L-Com	HG4958DP-30D	Solid	Parabolic	2	ft	Dual	28@ 4900-5300 30 dBi @ 5400-5850	4750-5850

General Dynamics	HQFD2-52	Solid	Parabolic	2	ft	Dual	28.1	5250-5850
PC Tel	MPRD2449	Solid	Parabolic	2	ft	Dual	27.5@4.9 28.1@5.15 29.4@5.875	4900-6000
General Dynamics	QFD2-52	Solid	Parabolic	2	ft	Dual	28.4	5250-5850
General Dynamics	HQF2-52	Solid	Parabolic	2	ft	Single	28.5	5250-5850
General Dynamics	QF2-52	Solid	Parabolic	2	ft	Single	28.5	5250-5850
L-Com	HG5158DP-29D	Solid	Parabolic	2	ft	Dual	28.5	5150-5850
RadioWaves	HPD2-5.2	Solid	Parabolic	2	ft	Dual	28.6	5250-5850
CommScope	HPX2F-52	Solid	Parabolic	2	ft	Dual	29	5250-5850
Laird	HDDA5W-29-DP	Solid	Parabolic	2	ft	Dual	29	4940-5875
Laird	HDDA5W-29-SP	Solid	Parabolic	2	ft	Single	29	4900-5875
RadioWaves	SPD2-5.2	Solid	Parabolic	2	ft	Dual	29	5250-5850
RadioWaves	SP2-5.2	Solid	Parabolic	2	ft	Single	29	5250-5850
Wireless Beehive	5.8DP-29	Solid	Parabolic	2	ft	Dual	29	5200-5800
CommScope	P2F-57W	Solid	Parabolic	2	ft	Single	29.3	5725-6425
CommScope	P2F-52	Solid	Parabolic	2	ft	Single	29.4	5250-5850
CommScope	PX2F-52	Solid	Parabolic	2	ft	Dual	29.4	5250-5850
ARC Wireless	DA5830SD1	Solid	Parabolic	2	ft	Dual	30	4940-5875
PC Tel	MPRC3649	Solid	Parabolic	3	ft	Single	30.4@4.9 31.2@5.25 32@5.8	4900-6000
L-Com	HG4958DP-34D	Solid	Parabolic	3	ft	Dual	31@4900-5300 34@5400-5800	4750-5850
PC Tel	MPRD3649	Solid	Parabolic	3	ft	Dual	29.8@4.9 31@5.15 32@5.875	4900-6000

Wireless Beehive	5.8DP-31	Solid	Parabolic	3	ft	Dual	31	5200-5800
General Dynamics	QFD2.5-52	Solid	Parabolic	2.5	ft	Dual	31.1	5250-5850
General Dynamics	QF2.5-52	Solid	Parabolic	2.5	ft	Single	31.1	5250-5850
RadioWaves	HPD3-5.2	Solid	Parabolic	3	ft	Dual	31.1	5250-5850
General Dynamics	HQFD2.5-52	Solid	Parabolic	2.5	ft	Dual	31.2	5250-5850
RadioWaves	HP2-5.2	Solid	Parabolic	2	ft	Single	31.4	5250-5850
RFS Cablewave	SPF3-52CN1S	Solid	Parabolic	3	ft	Single	31.4	5250-5850
Laird	HDDA5W-32	Solid	Parabolic	3	ft	Single	32	4900-5875
Laird	HDDA5W-32-DP	Solid	Parabolic	3	ft	Dual	32	4940-5875
L-Com	HG5158DP-32D	Solid	Parabolic	3	ft	Dual	32	5150-5850
RadioWaves	SPD3-5.2	Solid	Parabolic	3	ft	Dual	32.5	5250-5850
RadioWaves	HP3-5.2	Solid	Parabolic	3	ft	Single	32.5	5250-5850
RadioWaves	SP3-5.2	Solid	Parabolic	3	ft	Single	32.5	5250-5850
CommScope	PX3F-52	Solid	Parabolic	3	ft	Dual	33.4	5250-5850
CommScope	P3F-52	Solid	Parabolic	3	ft	Single	33.5	5250-5850
RFS Cablewave	SDF4-52BN1S1	Solid	Parabolic	4	ft	Single	33.9	5250-5850
General Dynamics	QFD4-52	Solid	Parabolic	4	ft	Dual	34.1	5250-5850
General Dynamics	SSP4-2357A	Solid	Parabolic	4	ft	Single	34.4	2300-2500, 5725-5850
RFS Cablewave	SPF4-52CN1S1R	Solid	Parabolic	4	ft	Single	34.4	5250-5850
CommScope	HPX4F-52	Solid	Parabolic	4	ft	Dual	34.5	5250-5850
General Dynamics	HQF4-52	Solid	Parabolic	4	ft	Single	34.7	5250-5850
General Dynamics	HQFD4-52	Solid	Parabolic	4	ft	Dual	34.8	5250-5850
General Dynamics	QF4-52	Solid	Parabolic	4	ft	Single	34.8	5250-5850
RadioWaves	HPD4-5.2	Solid	Parabolic	4	ft	Dual	34.8	5250-5850
CommScope	P4F-52	Solid	Parabolic	4	ft	Single	34.9	5250-5850
CommScope	PX4F-52	Solid	Parabolic	4	ft	Dual	34.9	5250-5850
RadioWaves	SP4-5.2	Solid	Parabolic	4	ft	Single	34.9	5250-5850

RadioWaves	SPD4-5.2	Solid	Parabolic	4	ft	Dual	34.9	5250-5850
RadioWaves	HP4-5.2	Solid	Parabolic	4	ft	Single	34.9	5250-5850
RFS Cablewave	DA4-W57BC1S1	Solid	Parabolic	4	ft	Single	35.5	5725-6875
RadioWaves	SP6-57	Solid	Parabolic	6	ft	Single	35.8	5725-6425
General Dynamics	QFD6-52	Solid	Parabolic	6	ft	Dual	37.4	5250-5850
CommScope	P6F-52	Solid	Parabolic	6	ft	Single	37.6	5250-5850
CommScope	PX6F-52	Solid	Parabolic	6	ft	Dual	37.6	5250-5850
General Dynamics	HQFD6-52	Solid	Parabolic	6	ft	Dual	37.8	5250-5850
General Dynamics	QF6-52	Solid	Parabolic	6	ft	Single	37.8	5250-5850
CommScope	PARX6-59	Solid	Parabolic	6	ft	Dual	37.9	5725-5850, 5925-6425
RadioWaves	HP6-5.2	Solid	Parabolic	6	ft	Single	37.9	5250-5850
RadioWaves	HPD6-5.2	Solid	Parabolic	6	ft	Dual	37.9	5250-5850
RadioWaves	SP6-5.2	Solid	Parabolic	6	ft	Single	37.9	5250-5850
RadioWaves	SPD6-5.2	Solid	Parabolic	6	ft	Dual	37.9	5250-5850

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