Lab Code: 200167-0

FCC PART 15.407, IC RSS-210 DYNAMIC FREQUENCY SELECTION TEST AND MEASUREMET REPORT

For

Ruckus Wireless, Inc.

880 West Maude Ave., Suite 101,

Sunnyvale, CA 94085, USA

FCC ID: S9G-ZF7762X
IC: 5912A-ZF7762X

Report Type:	**Product Type:**
CIIPC DFS Report	Dual Band Wireless 802.11a/b/g/n Access Point

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Report Number:	R1005051A-DFS
Report Date:	2011-06-23
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TABLE OF CONTENTS

1 GENERAL DESCRIPTION 5

1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) 5
1.2 MECHANICAL DESCRIPTION OF EUT 5
1.3 OBJECTIVE 5
1.4 RELATED SUBMITTAL(S)/GRANT(S) 5
1.5 TEST METHODOLOGY 5
1.6 TEST FACILITY 6

2 APPLICABLE STANDARDS 7

2.1 DFS REQUIREMENT 7
2.2 DFS MEASUREMENT SYSTEM 10
2.3 SYSTEM BLOCK DIAGRAM 10
2.4 CONDUCTED METHOD 11

3 SUMMARY OF TEST RESULTS 12

4 TEST RESULTS 13

4.1 DESCRIPTION OF EUT 13
4.2 TEST EQUIPMENT LIST AND DETAILS 13
4.3 TEST ENVIRONMENTAL CONDITIONS 14
4.4 RADAR WAVEFORM CALIBRATION BLOCK DIAGRAM 14
4.5 DFS DETECTION THRESHOLD PLOTS OF RADAR WAVEFORMS 15

5 CHANNEL AVAILABILITY CHECK TIME (CAC) 21

5.1 TEST PROCEDURE 21

6 CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME 34

6.1 TEST PROCEDURE 34
6.2 TEST RESULTS 34

7 NON-OCCUPANCY PERIOD 47

7.1 TEST PROCEDURE 47
7.2 TEST RESULTS 47

8 DETECTION BANDWIDTH 50

8.1 PROCEDURE 50
8.2 TEST RESULTS 50

9 IN-SERVICE MONITORING 55

9.1 TEST PROCEDURE 55
9.2 TEST RESULTS 55
9.3 5280 MHZ BANDWIDTH 20 MHZ STATISTICAL PERFORMANCE 58
9.4 5270 MHZ BANDWIDTH 40 MHZ STATISTICAL PERFORMANCE 89
9.5 5580 MHZ BANDWIDTH 20 MHZ STATISTICAL PERFORMANCE 121
9.6 5590 MHZ BANDWIDTH 40 MHZ STATISTICAL PERFORMANCE 151

10 EXHIBIT A – TEST SETUP PHOTOGRAPHS 183

10.1 SETUP - FRONT VIEW 183
10.2 SETUP - SIDE VIEW 183

11 EXHIBIT B - EUT PHOTOGRAPHS 184

11.1 EUT – TOP VIEW 184
11.2 EUT-BOTTOM VIEW 184
11.3 EUT-PORT VIEW 185
11.4 EUT-ANTENNA PORT VIEW 185
11.5 EUT- COVER OFF VIEW 186
11.6 EUT- ANTENNA BOARD TOP VIEW 186
11.7 EUT – ANTENNA BOARD SOLDER VIEW 187
11.8 EUT- MAIN BOARD TOP VIEW 187
11.9 EUT – MAIN BOARD SOLDER VIEW 188
11.10 EUT – 6 DBI ANTENNA 188
11.11 EUT – 16 DBI ANTENNA FRONT VIEW 189
11.12 EUT – 16 DBI ANTENNA FRONT VIEW 189
11.13 EUT – 23 DBI ANTENNA FRONT VIEW 190
11.14 EUT – 23 DBI ANTENNA FRONT VIEW 190
11.15 EUT – ADAPTER FOR POE 191
11.16 EUT – AC/DC POWER ADAPTER 191

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	R1005051-DFS	Original Report	2010-07-19
1	R1005051A-DFS	Updated Company Name	2011-06-23

1 General Description

1.1 Product Description for Equipment under Test (EUT)

This test and measurement report was prepared on behalf of *Ruckus Wireless, Inc*., and their product FCC ID: S9G-ZF7762X, IC: 5912A-ZF7762X, model: *ZF7762* or the "EUT" as referred on this report is a dual band Wireless 802.11a/b/g/n industrial access point. The EUT's DFS band operates at frequency range of 5250-5350 MHz and 5500-5700 MHz with 802.11 a/n modes and 20 MHz/40 MHz bandwidth.

1.2 Mechanical Description of EUT

The "EUT" measures approximately *24cm (L) x 19cm (W) x 6cm (H)*, and weighs approximately *1921.5*g.

The test data gathered are from typical production sample, serial number: 171055000005 provided by the manufacturer.

1.3 Objective

This report is prepared on behalf of *Ruckus Wireless, Inc.* in accordance with FCC §15.407 (h), FCC 06-96 Appendix and IC RSS-210 Annex 9.

The objective is to determine compliance with FCC and IC rules for Non-Occupancy Period, DFS Detection Threshold, Channel Availability Check Time, Uniform Spreading U-NII Detection Bandwidth, Channel Closing Transmission Time, and Channel Move time

1.4 Related Submittal(s)/Grant(s)

No Related Submittals.

1.5 Test Methodology

FCC Part15.407 (h)

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

IC RSS-210 Issues 7, June, 2007 Annex 9 - Local Area Network Devices

1.6 Test Facility

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

The test sites at BACL have been fully described in reports submitted to the Federal Communication Commission (FCC) and Voluntary Control Council for Interference (VCCI). The details of these reports has 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 facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

The Federal Communications Commission, Industry Canada, and Voluntary Control Council for Interference has the reports on file and is listed under FCC registration number: 90464, IC registration number: 3062A, and VCCI Registration Number: R-2463 and C-2698. The test site has been approved by the FCC, IC, and VCCI for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, BACL is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200167-0). The current scope of accreditations can be found at http://ts.nist.gov/Standards/scopes/2001670.htm

2 Applicable Standards

2.1 DFS Requirement

FCC §15.407 (h) and FCC 06-96 Appendix, and IC RSS-210 Annex 9

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

IC RSS-210 Issues 7, June, 2007 Annex 9

IC use similar limits as FCC; the deviation between IC and FCC is Annex 9.4 (iv) Channel closing time is set to 260 ms.

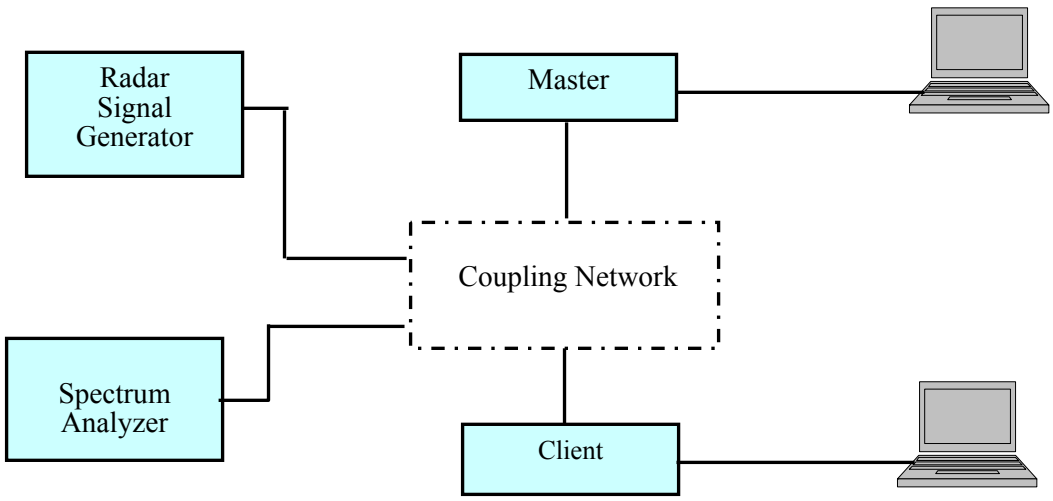
Additional requirements for the band 5600-5650 MHz: Until further notice, devices subject to this Section shall not be capable of transmitting in the band 5600-5650 MHz, so that Environment Canada weather satellites operating in this band are protected.

Test procedures for demonstrating compliance with the DFS radar detection requirements set out in this section are being evaluated by Industry Canada. As an interim measure, Industry Canada will, until further notice, accept utilization of the DFS test procedures published by the U.S. Federal Communications

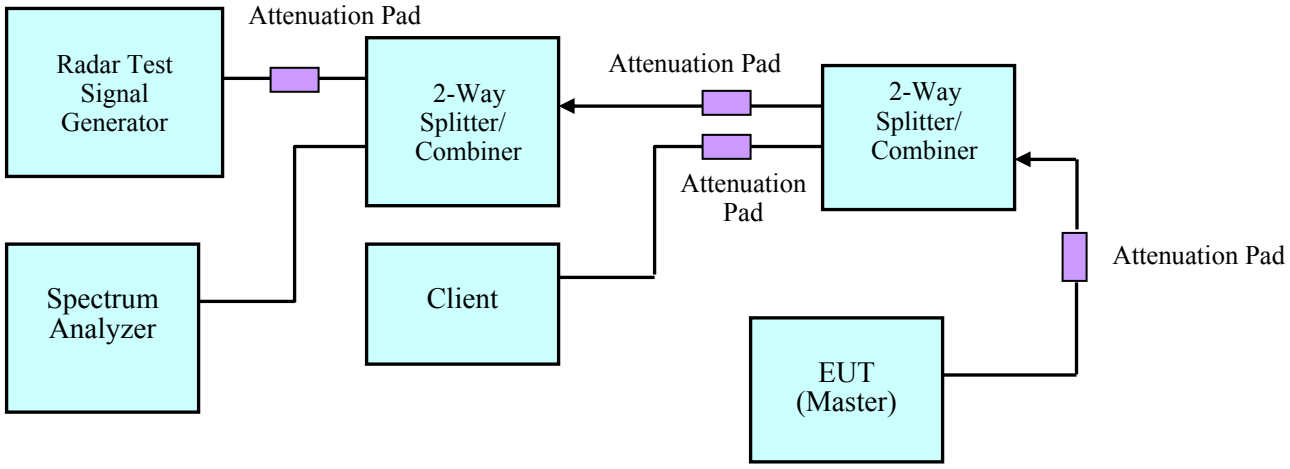
2.2 DFS Measurement System

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

2.3 System Block Diagram



2.4 Conducted Method



3 Summary of Test Results

The following result table represents the list of measurements required under the FCC Part15.407 (h), FCC 06-96 and IC RSS-210, Annex 9.

Test Items	Description of Test	Results
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 Test Results

4.1 Description of EUT

The EUT operates in 5250-5350 MHz and 5470-5725 MHz range.

The Highest antenna gain of the EUT is 23 dBi and the lowest antenna gain of the EUT is 6 dBi.

The rated output power of EUT is <23 dBm (EIRP), Therefore the required interference threshold level is -62 dBm, after correction for antenna gain and procedure adjustments, the required conducted threshold at antenna port is -62 + 6 = -56 dBm.

The calibrated conducted DFS detection threshold level is set to -56 dBm.

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

Test result show that the EUT requires 27.5 seconds to complete its initial power-up cycle.

4.2 Test Equipment List and Details

Equipment Description	Manufacturer	Model Number	S/N
NI PXI-1042 8-Slot chassis	National Instruments	PXI-1042	V08X01EE1
Arbitrary Waveform Generator	National Instruments	PXI-5421	N/A
RF Upconverter	National Instruments	PXI-5610	N/A
Upconverter	ASCOR	AS-7206	n/A
Spectrum Analyzer	Agilent	E4440A	MY44303352
Pre-Amplifier	Avantek	2-8 GHz Lab AMP	218
Pre-Amplifier	HP	8449B	3147A00400
Splitter/Combiner	Mini-Circuits	2FSC-2-10G	0349
Splitter/Combiner	Narada	4326B-2	03514
Attenuator	MIDWest	290-30	N/A
Attenuator	Mini-Circuits	BW-S30W2	N/A

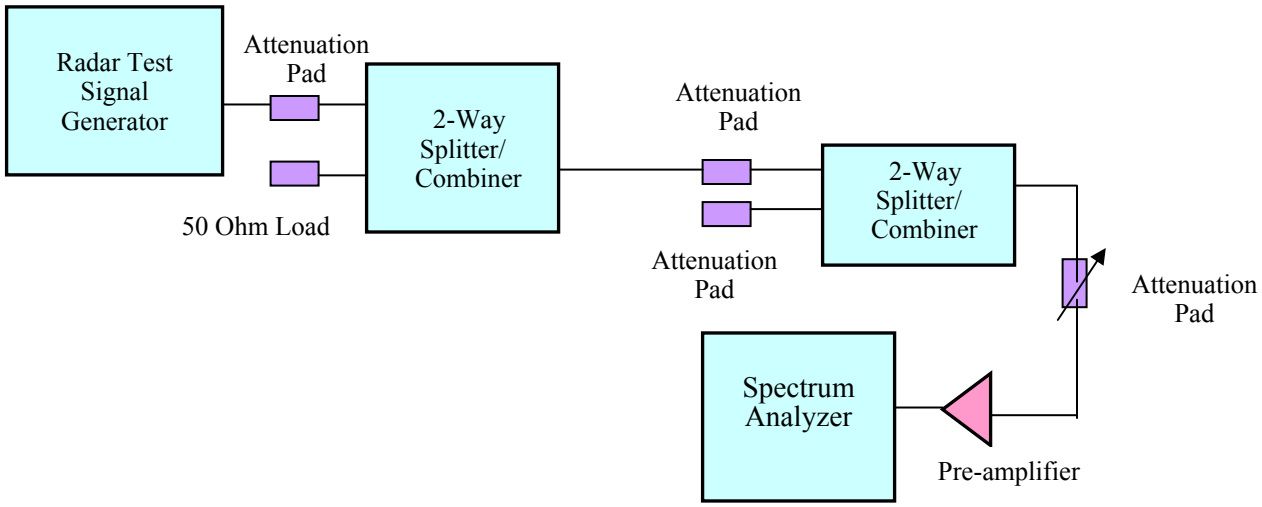
Statement of Traceability: BACL Corp. attests that all calibrations have been performed per the NVLAP requirements, traceable to the NIST.

4.3 Test Environmental Conditions

Temperature:	20-23 °C
Relative Humidity:	48%- 55%
ATM Pressure:	99.8 mbar

Testing was performed by Dennis Huang on 2010-06-14 to 2010-06-16 at the DFS site.

4.4 Radar Waveform Calibration Block Diagram

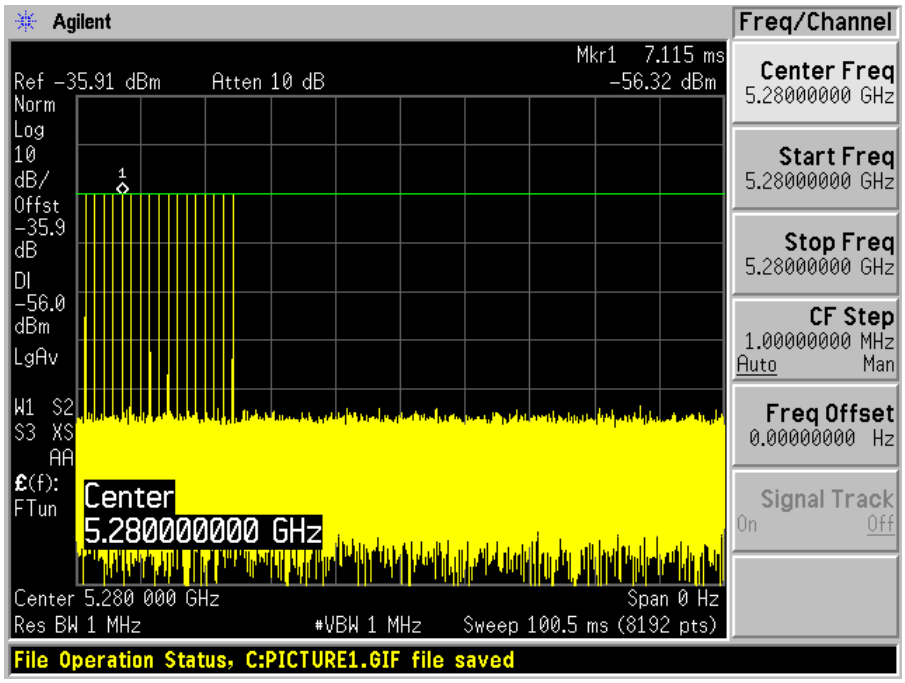


Conducted Calibration Setup Block Diagram

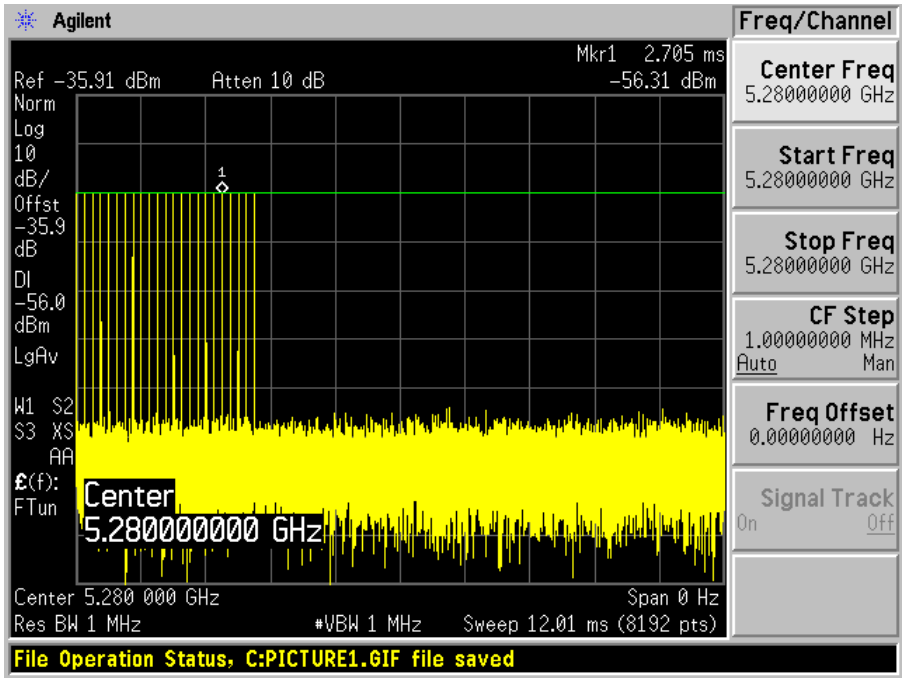
4.5 DFS Detection Threshold Plots of Radar Waveforms

5280 MHz

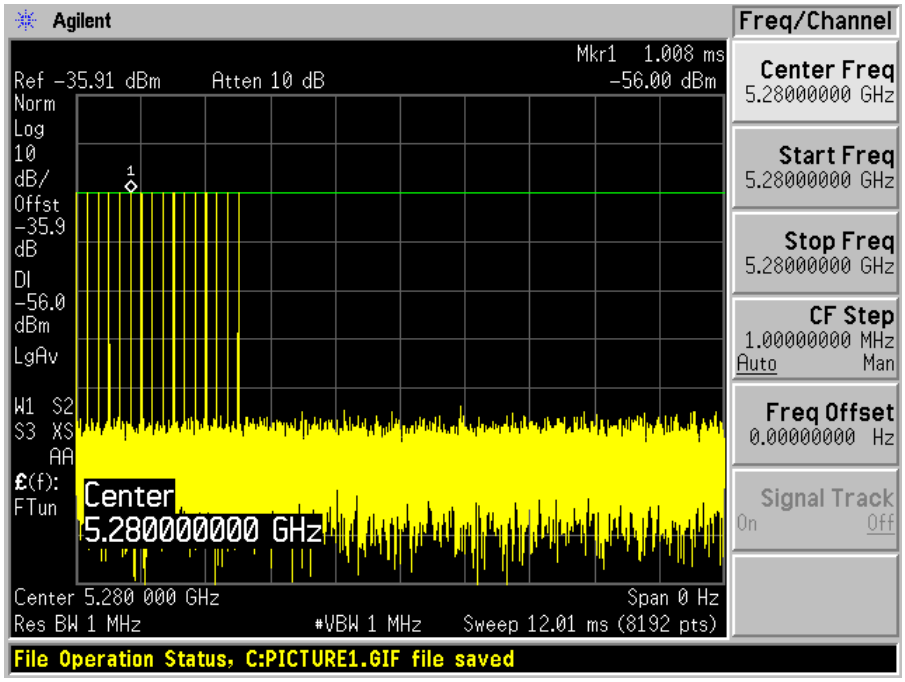
Radar Type 1



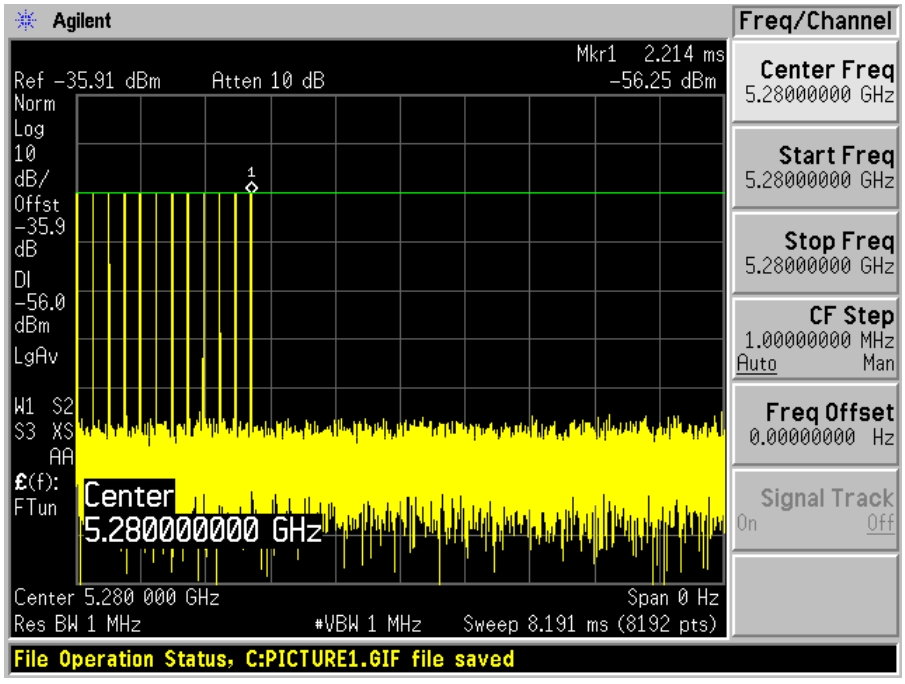
Radar Type 2



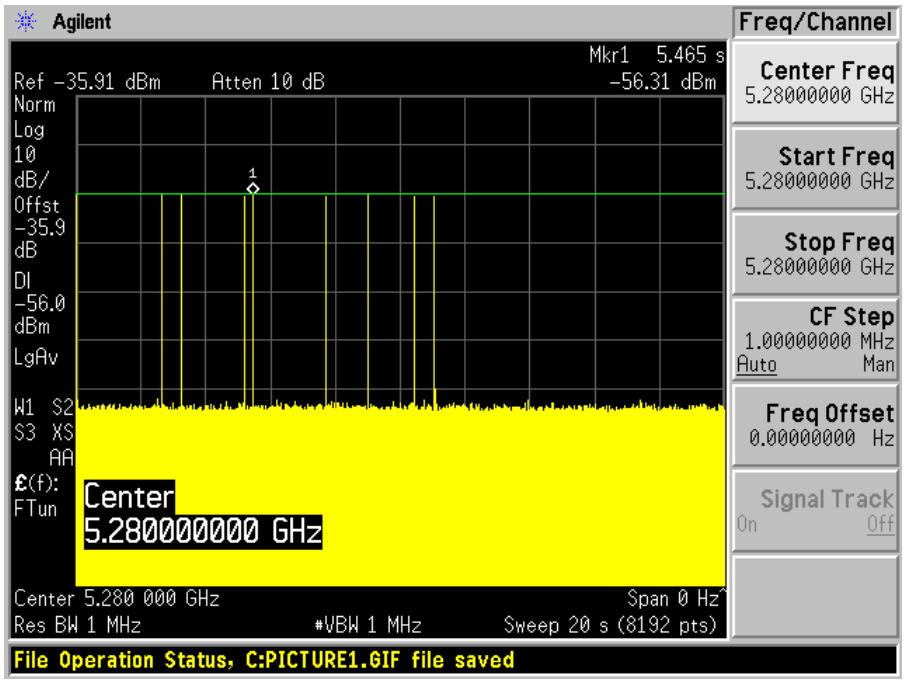
Radar Type 3



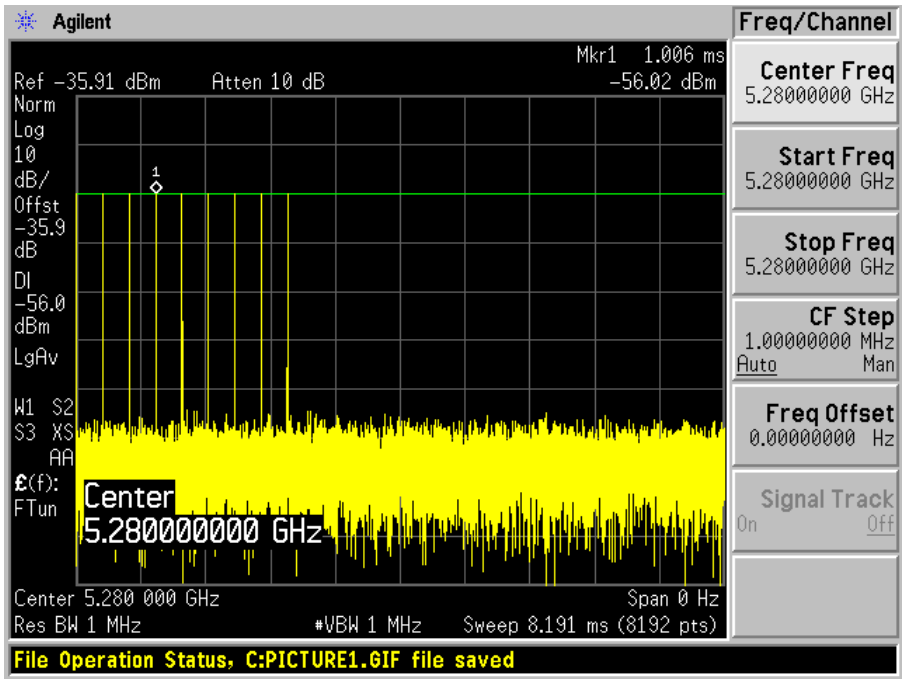
Radar Type 4



Radar Type 5

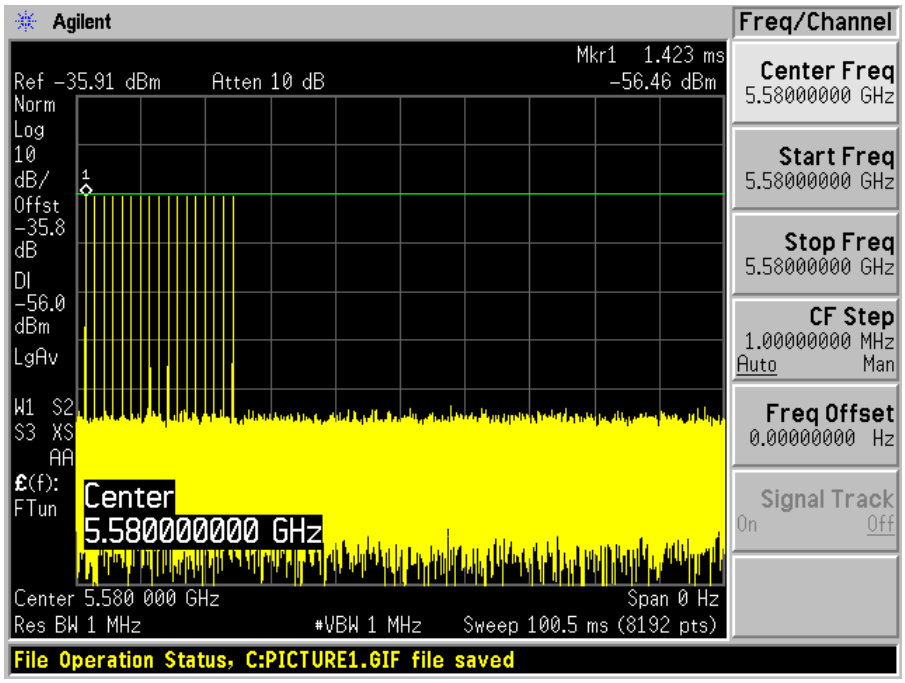


Radar Type 6

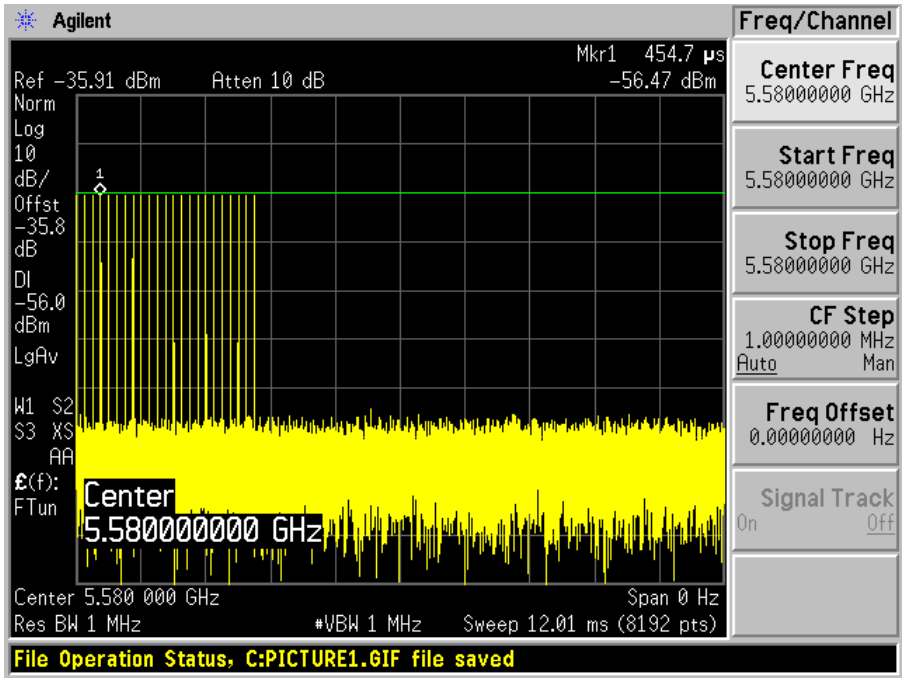


5580 MHz

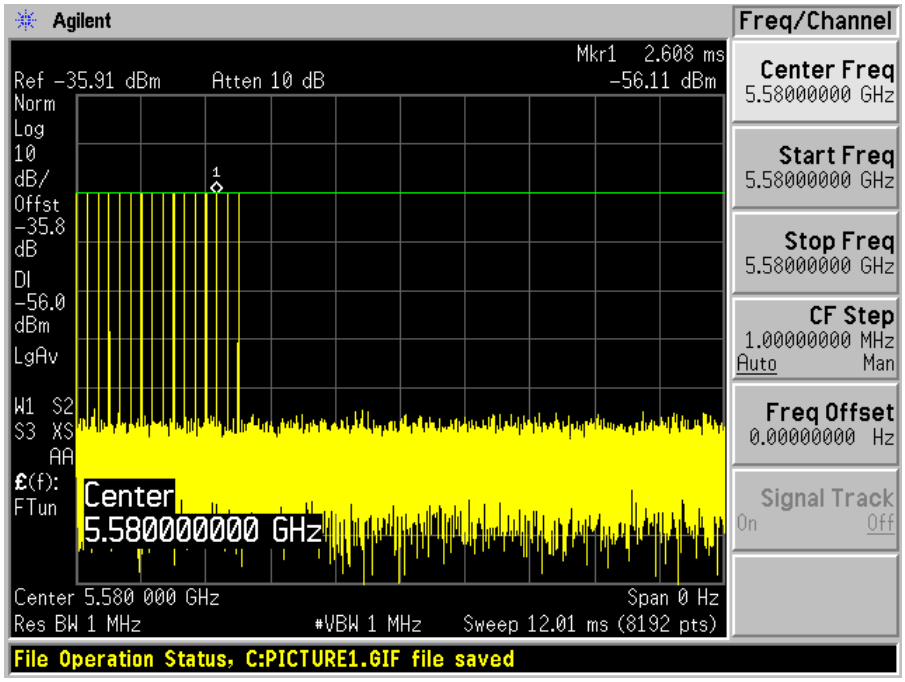
Radar Type 1



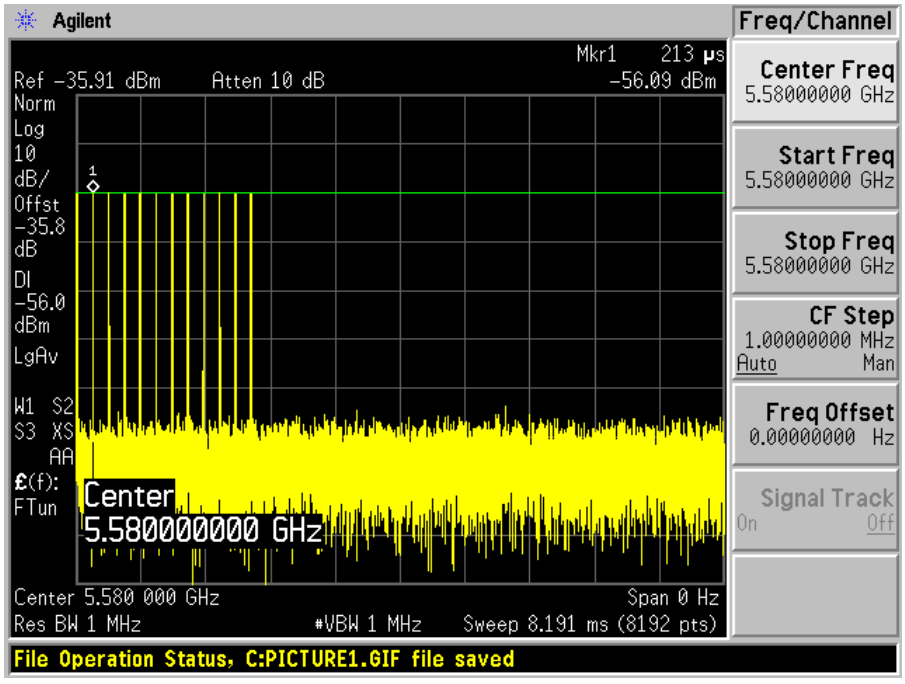
Radar Type 2



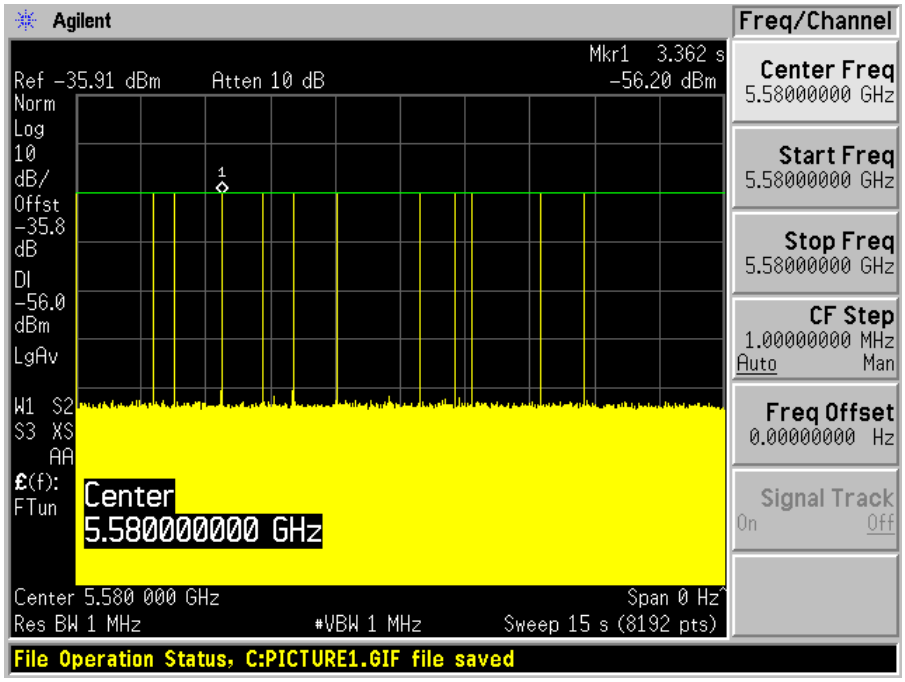
Radar Type 3



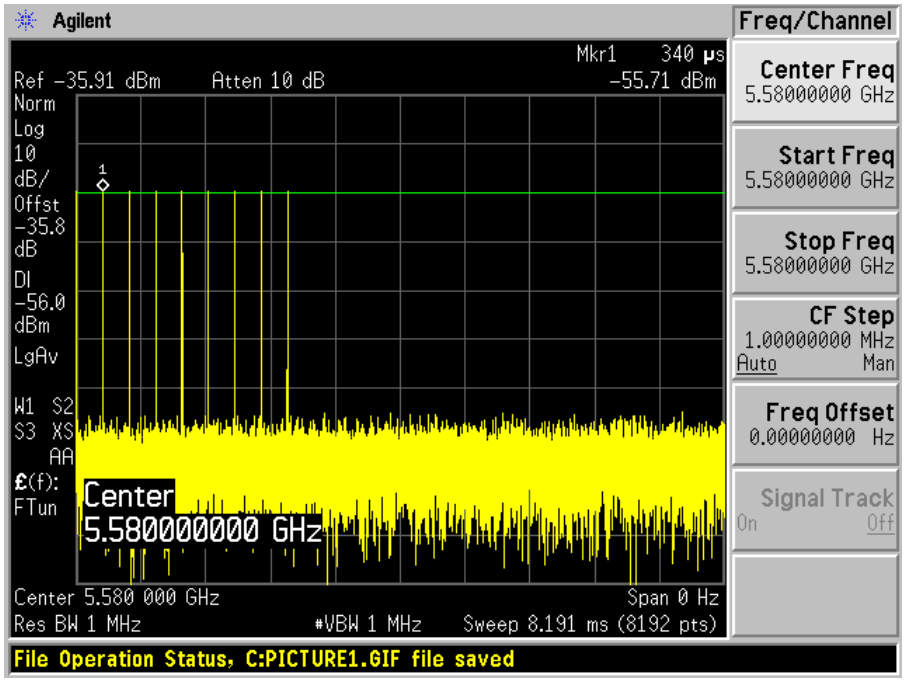
Radar Type 4



Radar Type 5



Radar Type 6



5 Channel Availability Check Time (CAC)

5.1 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 Bandwidth 20 MHz

EUT initial Power-up cycle (Second)
27.5

5580 MHz Bandwidth 20/40 MHz

EUT initial Power-up cycle (Second)
27.5

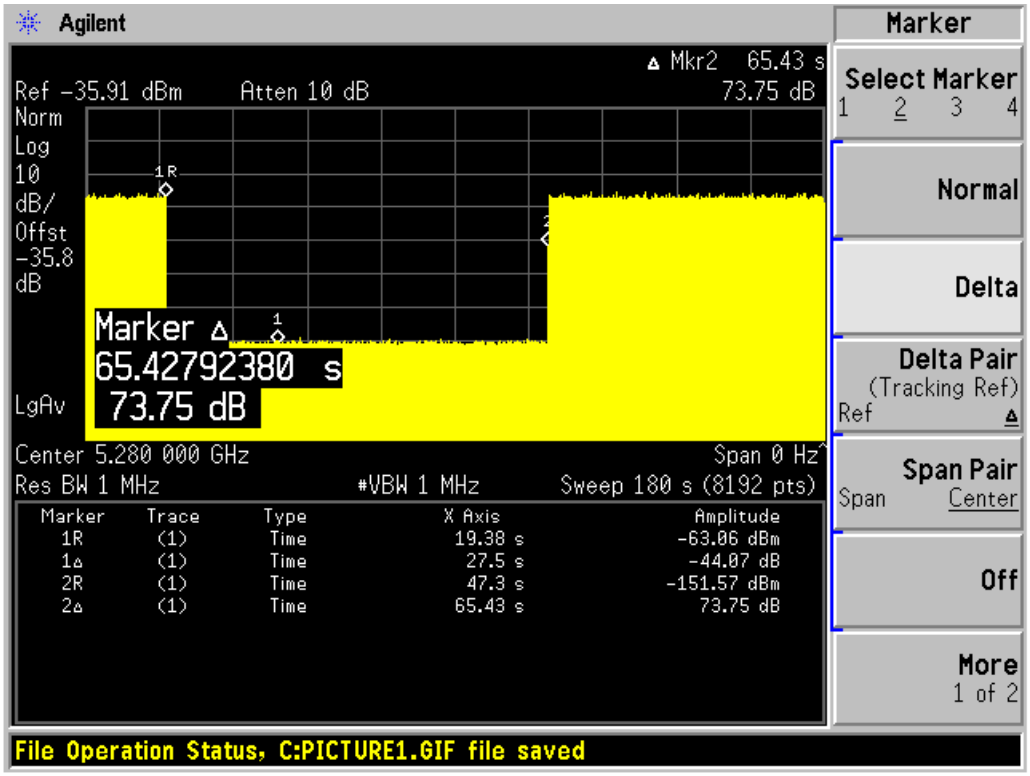
Results:

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

Please refer to the following plots.

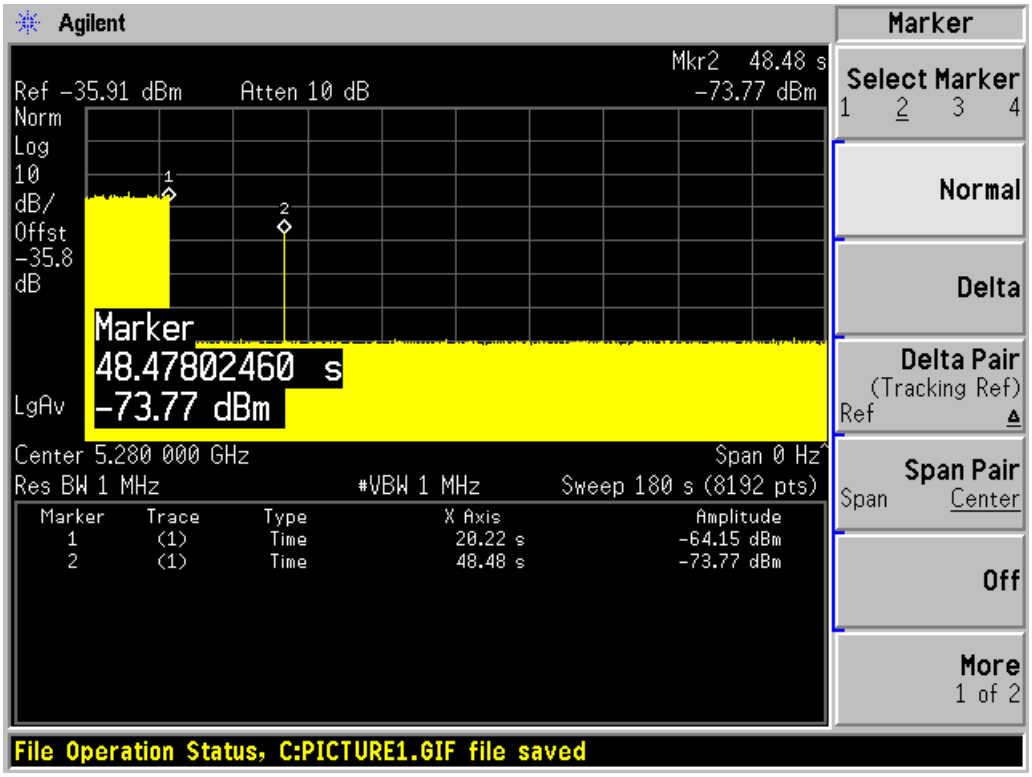
5280 MHz Bandwidth 20 MHz

Plot of without Radar signal applied



Note: The power-up cycle is 27.5 seconds

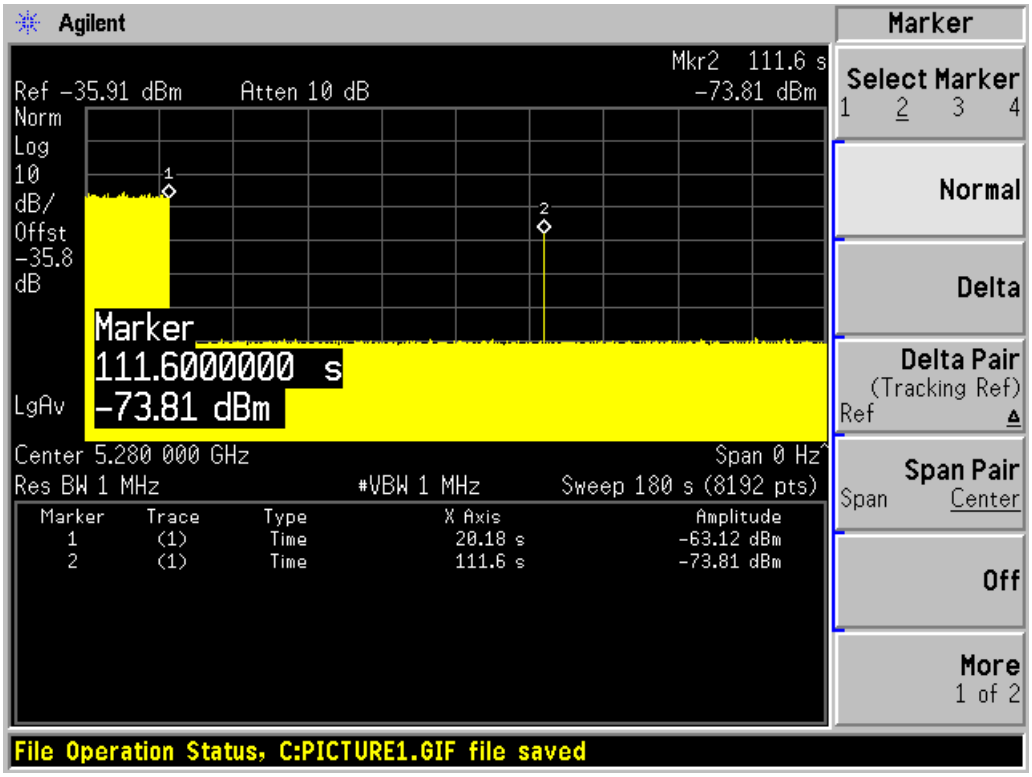
Plot of Radar signal applied within 2 seconds of start of CAC



Note: The radar signal applied 48.47 – 20.22 = 28.25 seconds after reboot, which is 28.25 – 27.5 = 0.75 seconds after start of CAC period.

No transmissions found after radar signal applied.

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

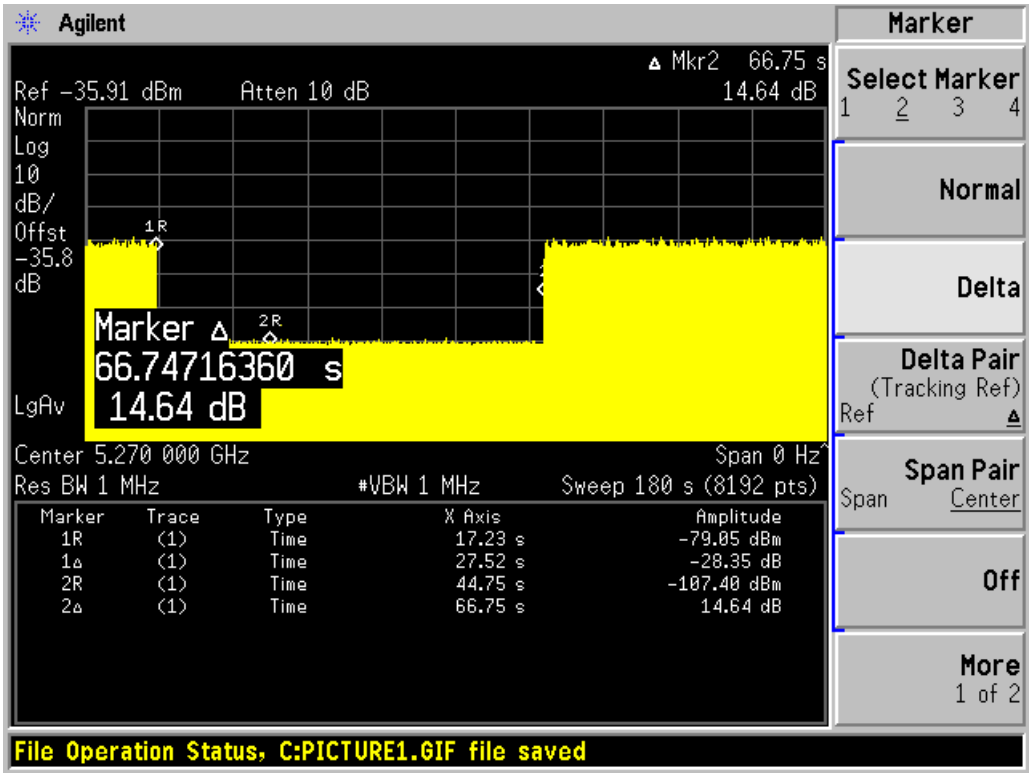


Note: Radar signal was applied 111.6 – 20.18 = 91.42 seconds after reboot, which is 91.42 – 27.5 = 63.92 seconds after the start of CAC period.

No transmissions found after radar signal applied.

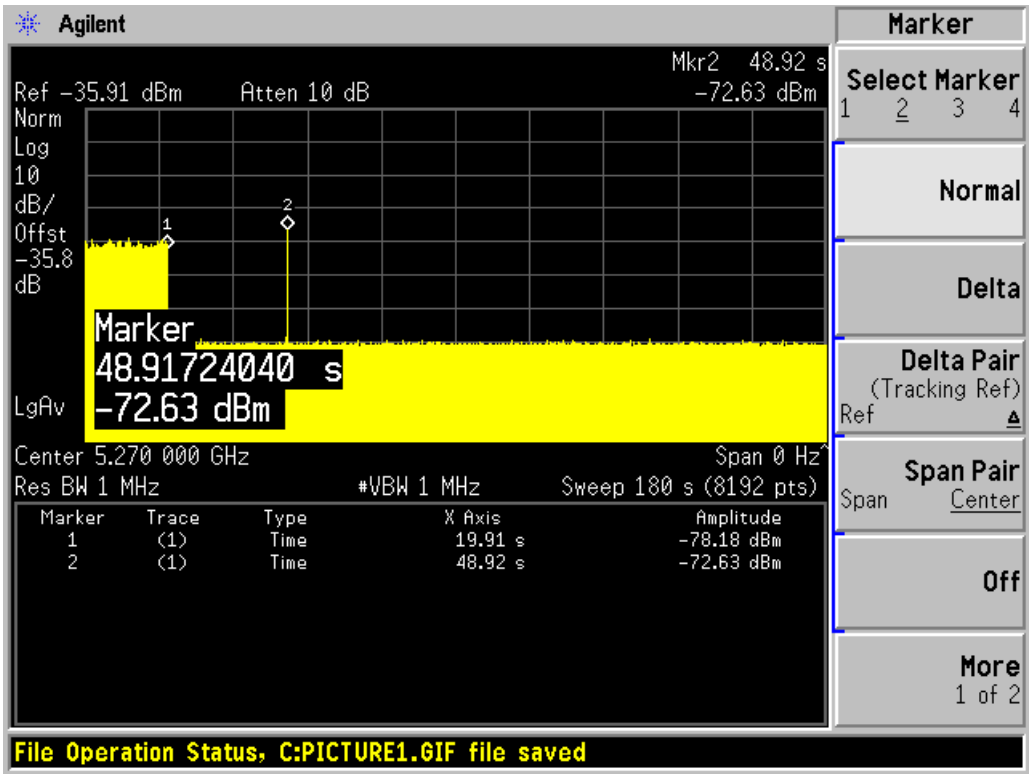
5270 MHz Bandwidth 40 MHz

Plot of without Radar signal applied



Note: The power-up cycle is 27.5 seconds

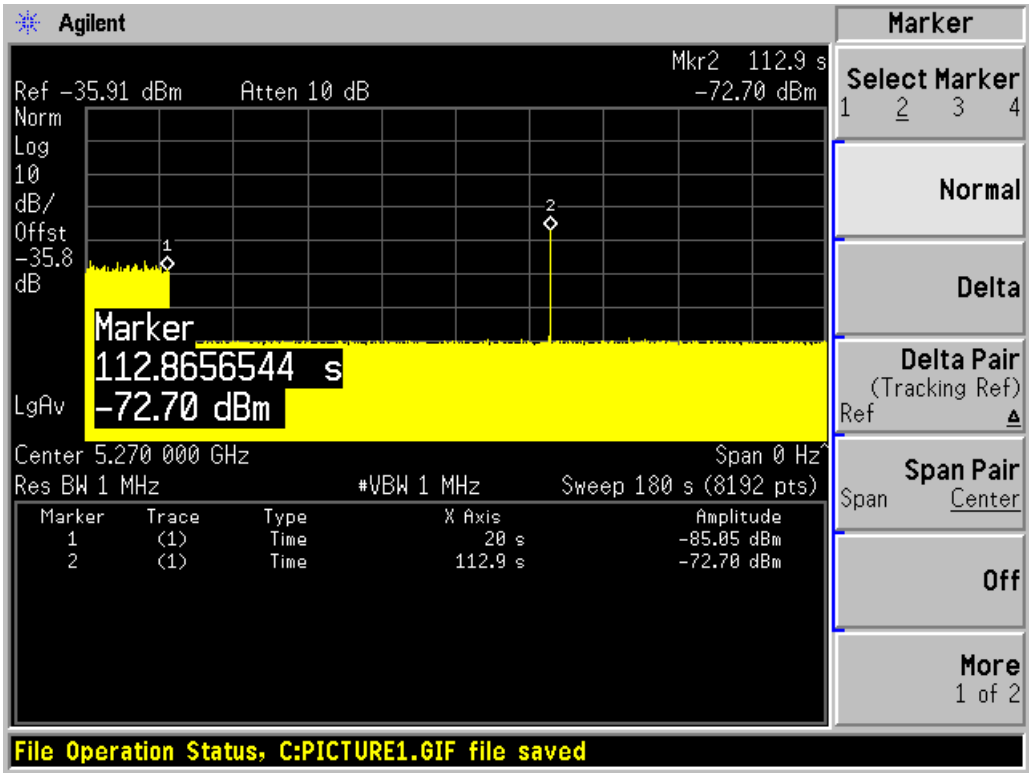
Plot of Radar signal applied within 2 seconds of start of CAC



Note: The radar signal applied 48.92 – 19.91 = 29.01 seconds after reboot, which is 29.01 – 27.5 = 1.51 seconds after start of CAC period.

No transmissions found after radar signal applied.

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

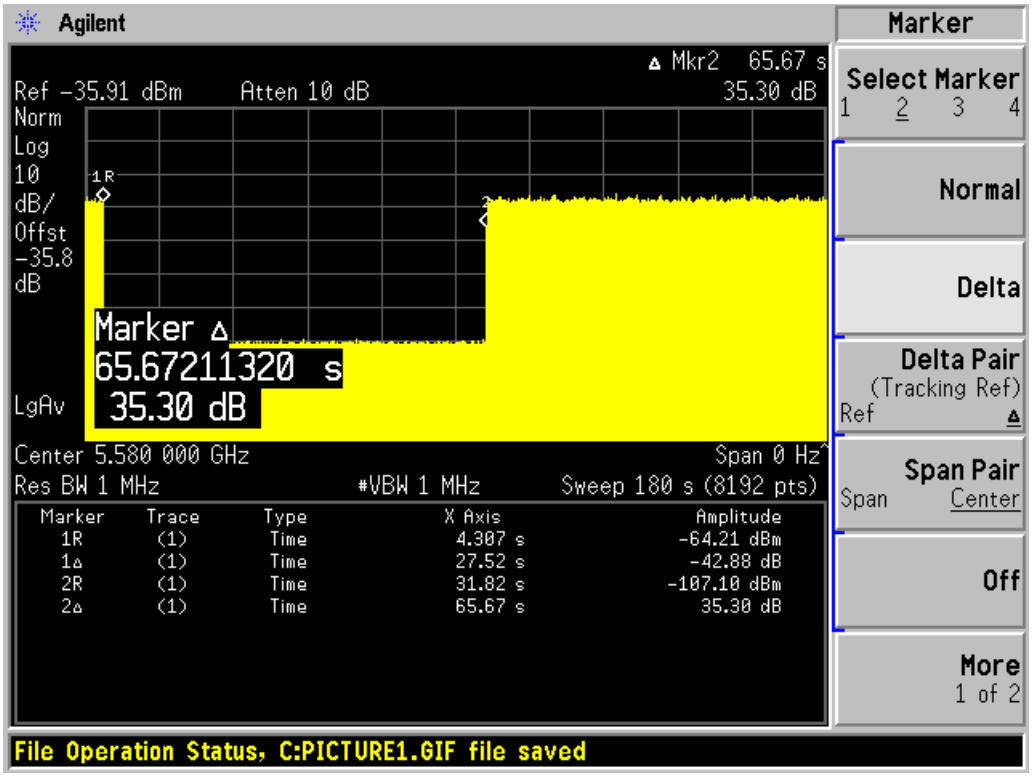


Note: Radar signal was applied 112.9 – 20.00 = 92.9 seconds after reboot, which is 92.9 – 27.5 = 65.4 seconds after the start of CAC period.

No transmissions found after radar signal applied.

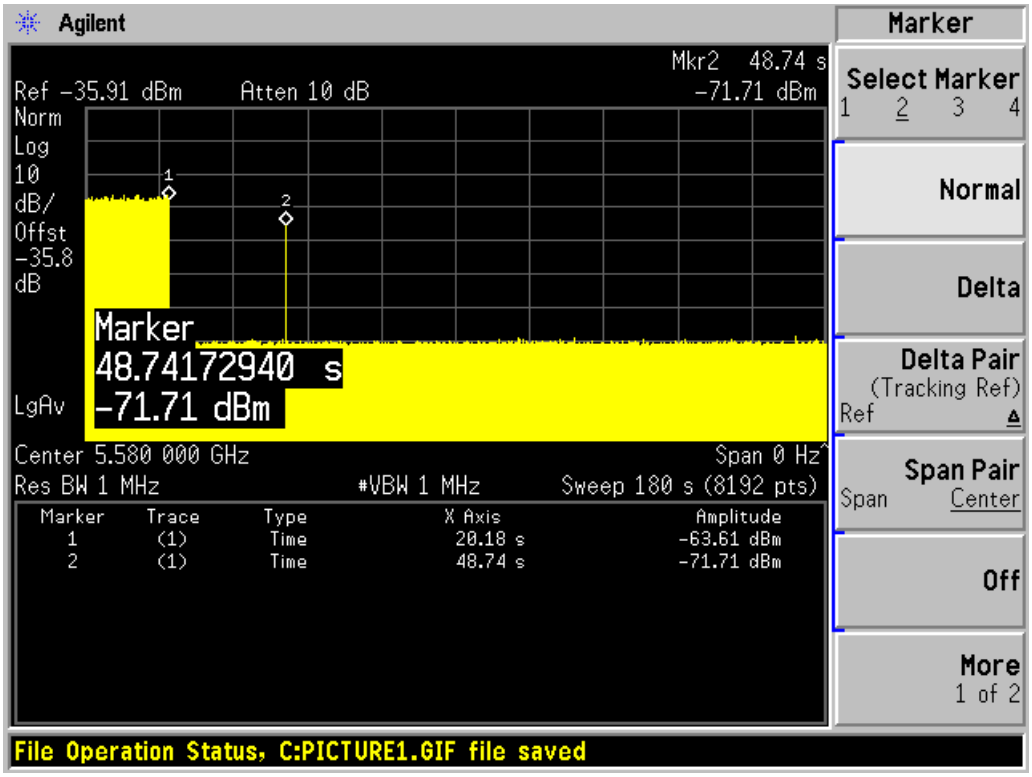
5580 MHz Bandwidth 20 MHz

Plot of without Radar signal applied



Note: The power-up cycle is 27.52 seconds

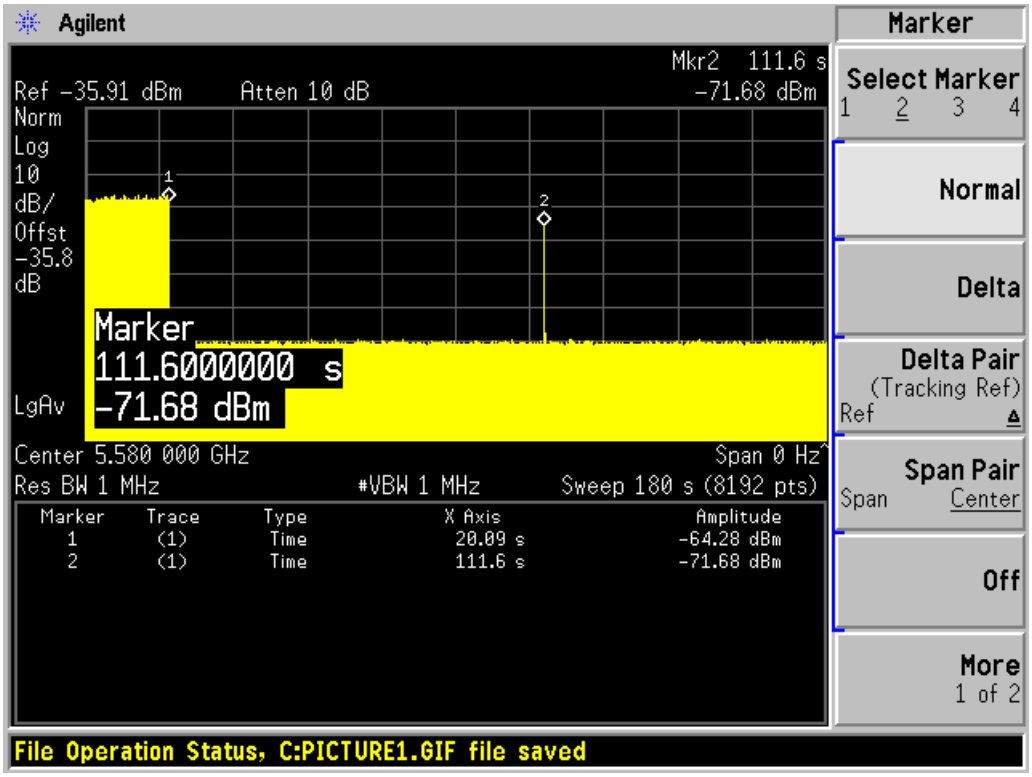
Plot of Radar signal applied within 2 seconds of start of CAC



Note: The radar signal applied 48.74 – 20.18 = 28.56 seconds after reboot, which is 28.56 – 27.5 = 3.5 seconds after start of CAC period.

No transmissions found after radar signal applied.

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

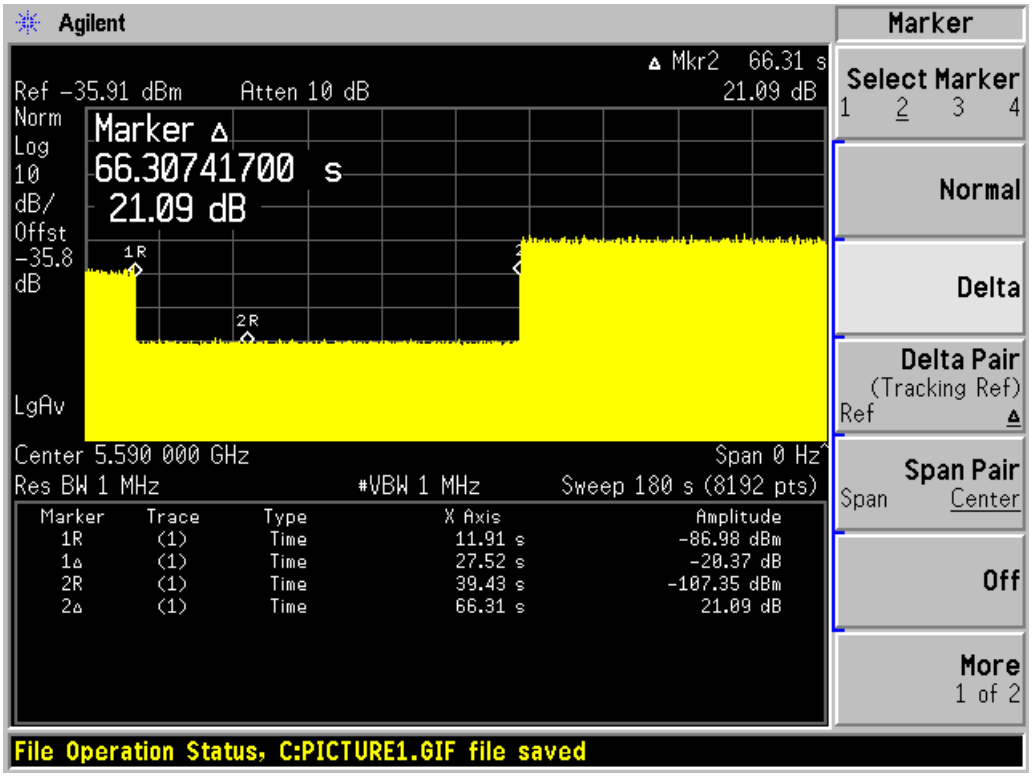


Note: Radar signal was applied 111.6 – 20.09 = 91.51 seconds after reboot, which is 91.51 – 27.5 = 64.01 seconds after the start of CAC period.

No transmissions found after radar signal applied.

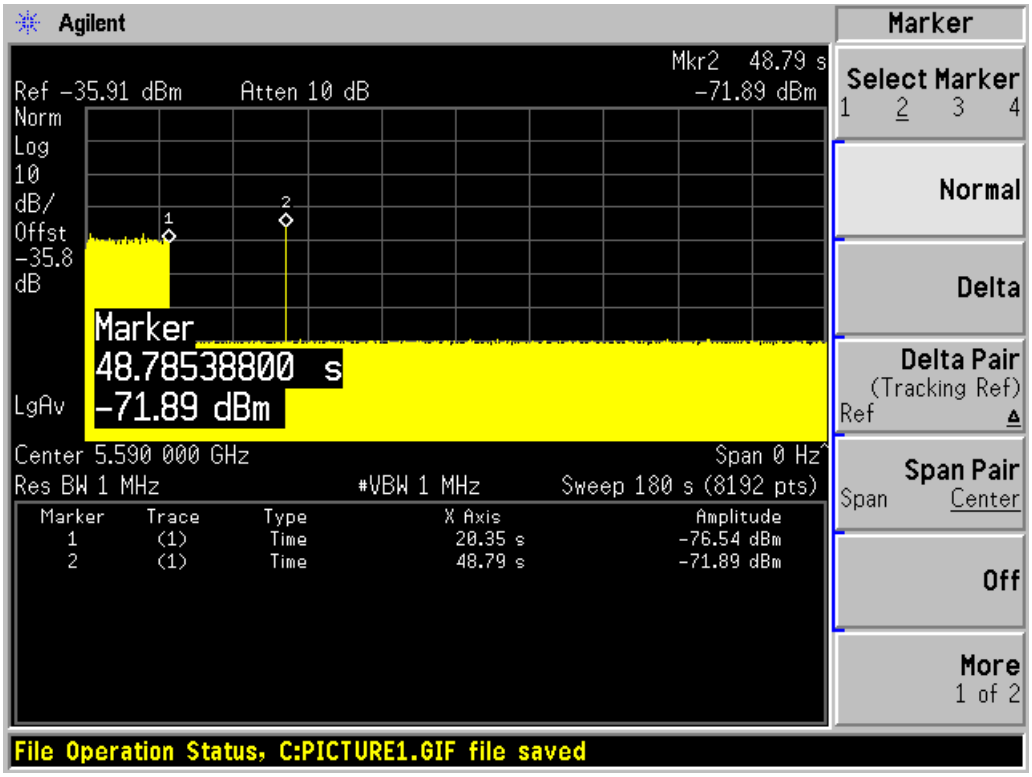
5590 MHz Bandwidth 40 MHz

Plot of without Radar signal applied



Note: The power-up cycle is 27.52 seconds

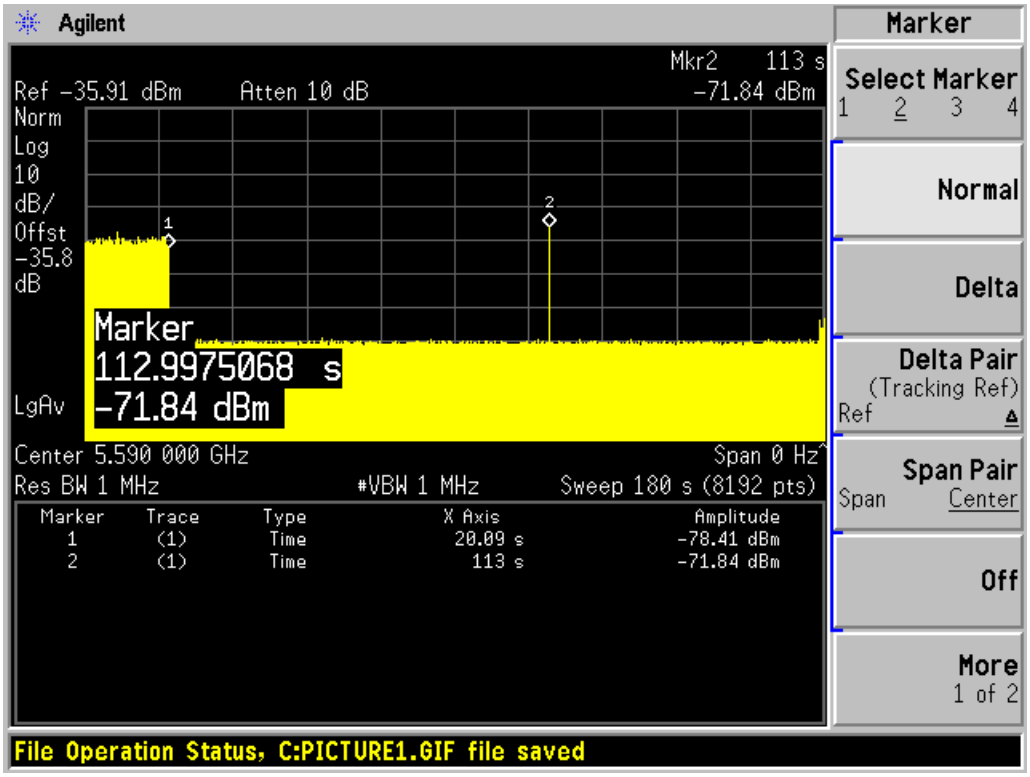
Plot of Radar signal applied within 2 seconds of start of CAC



Note: The radar signal applied 48.79 – 20.35 = 28.44 seconds after reboot, which is 28.44 – 27.5 = 0.94 seconds after start of CAC period.

No transmissions found after radar signal applied.

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



Note: Radar signal was applied 113 – 20.09 = 92.91 seconds after reboot, which is 92.91 – 27.5 = 65.41 seconds after the start of CAC period.

No transmissions found after radar signal applied.

6 Channel Move Time and Channel Closing Transmission Time

6.1 Test Procedure

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

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = N * Dwell Time

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

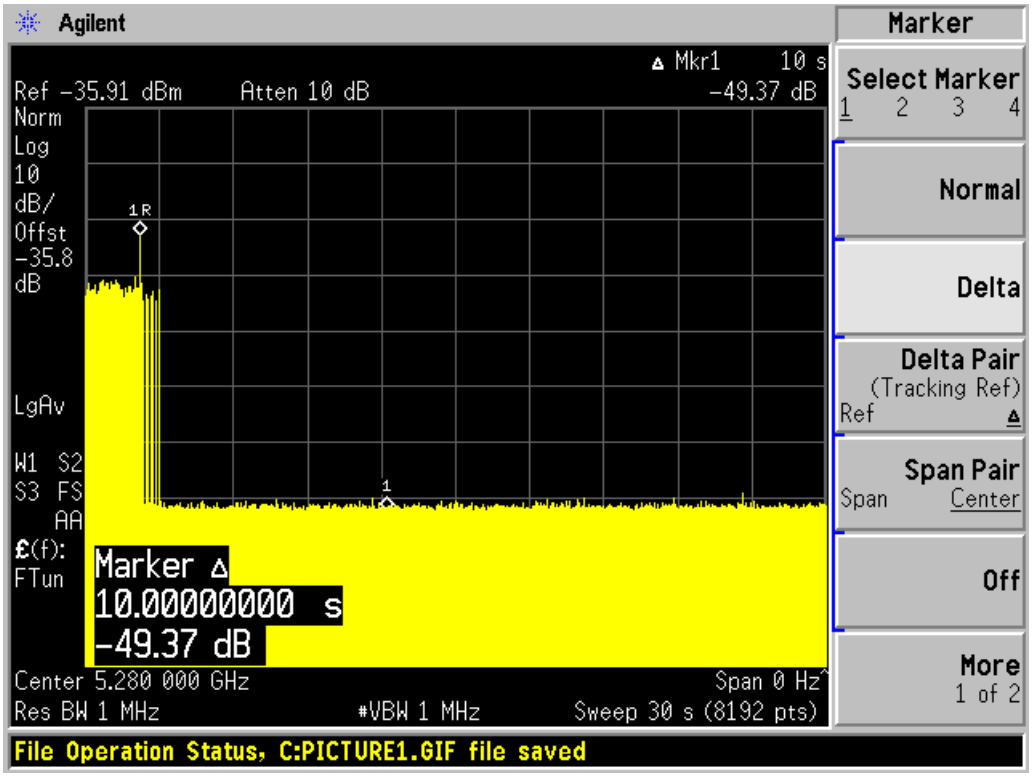
6.2 Test Results

Frequency (MHz)	Bandwidth (MHz)	Radar Type	Results
5280	20	Type 1	Compliant
		Type 5	Compliant
5270	40	Type 1	Compliant
		Type 5	Compliant
5580	20	Type 3	Compliant
		Type 5	Compliant
5590	40	Type 2	Compliant
		Type 5	Compliant

Please refer to the following tables and plots.

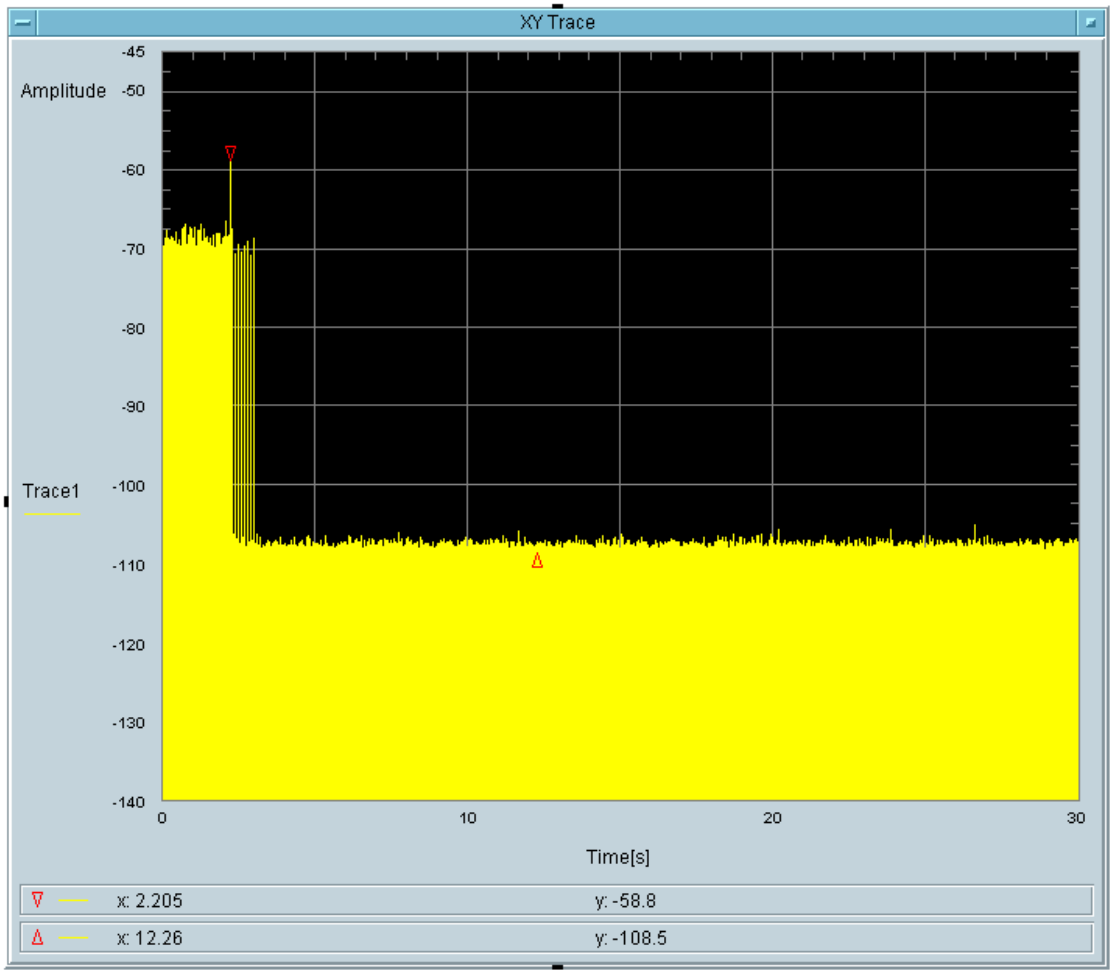
5280 MHz Bandwidth 20 MHz

Type 1 Radar Channel Move Time Result:



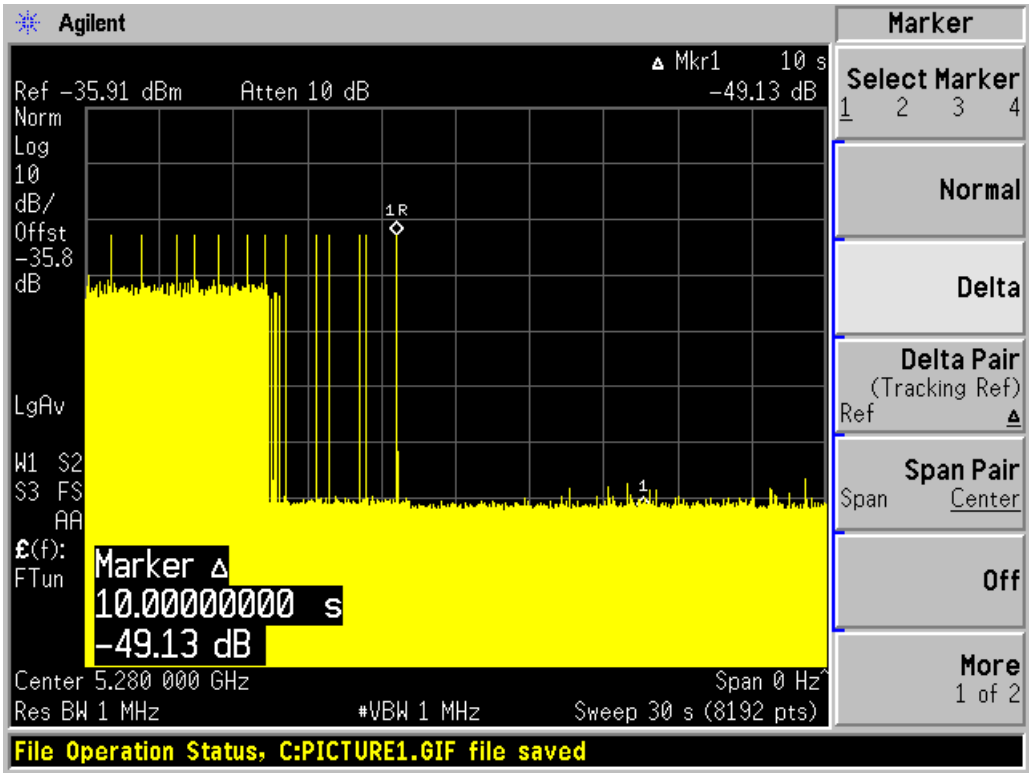
Type1 Radar Channel Closing Transmission Time Result:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
21.97	60	38.03



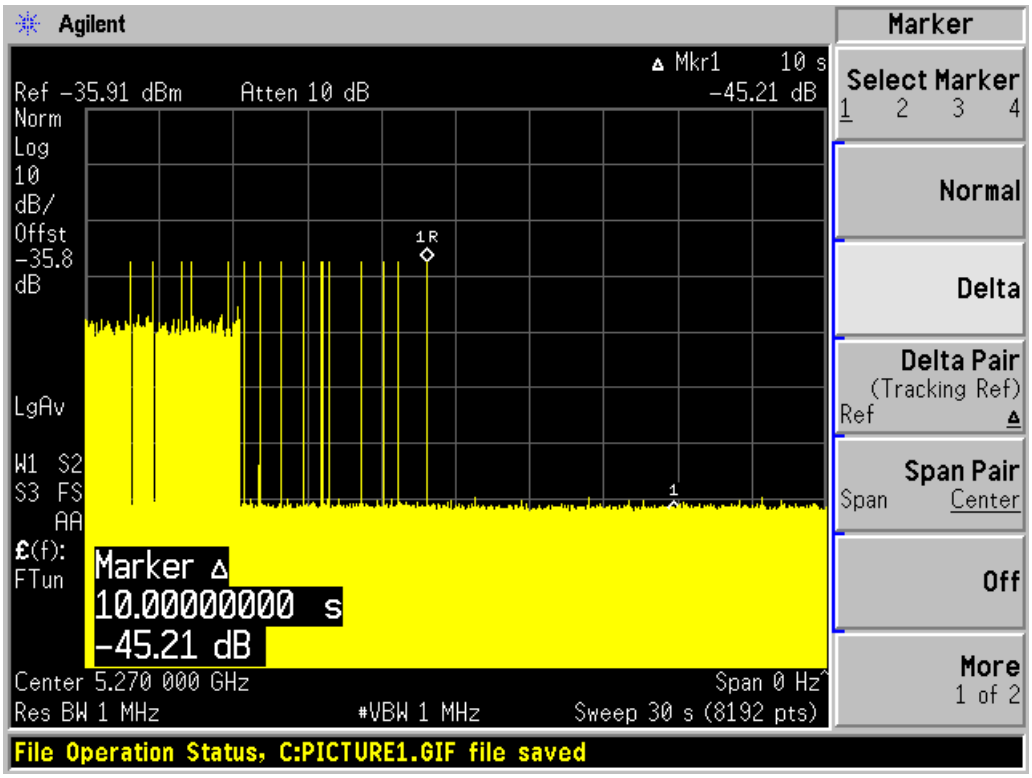
Type 5 radar channel move time result:

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



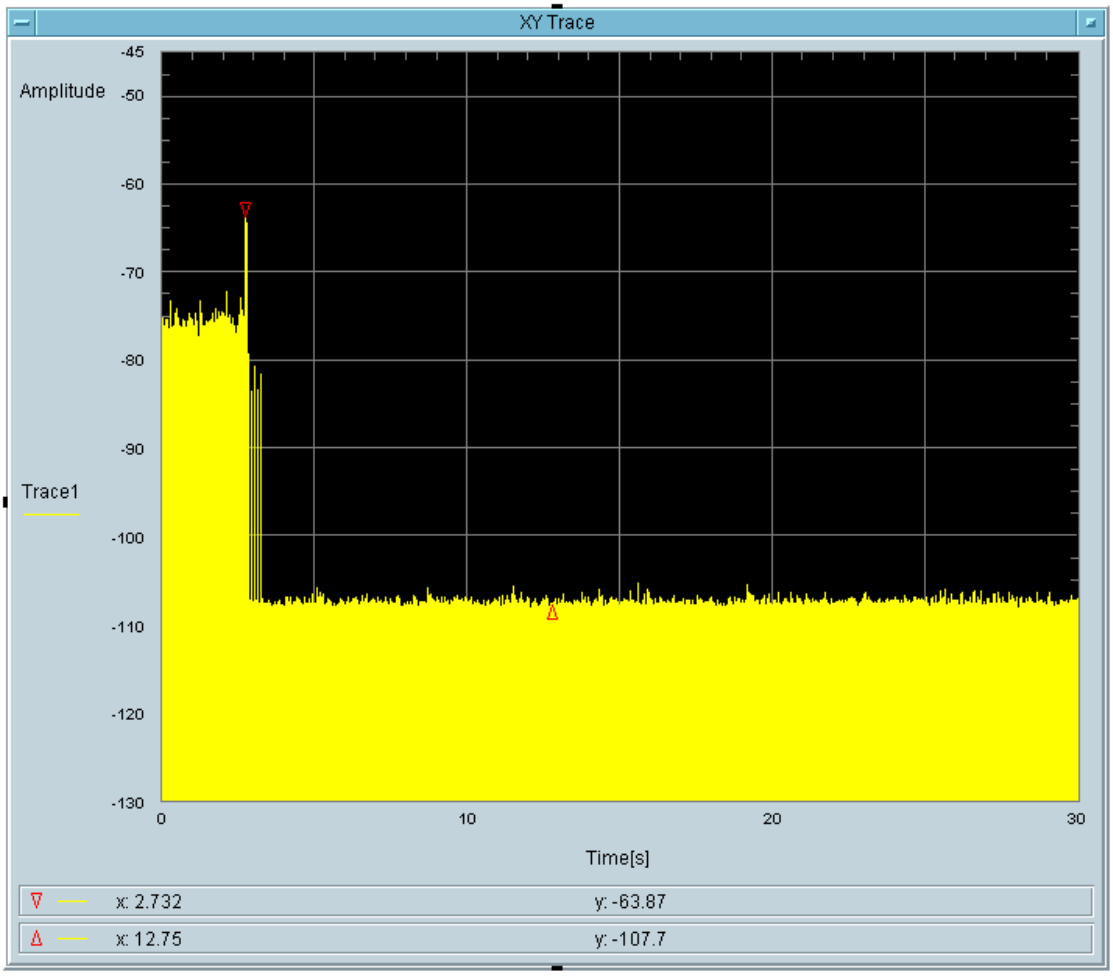
5270 MHz Bandwidth 40 MHz

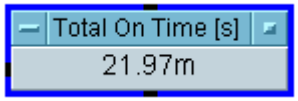
Type 1 Radar Channel Move Time Result:



Type1 Radar Channel Closing Transmission Time Result:

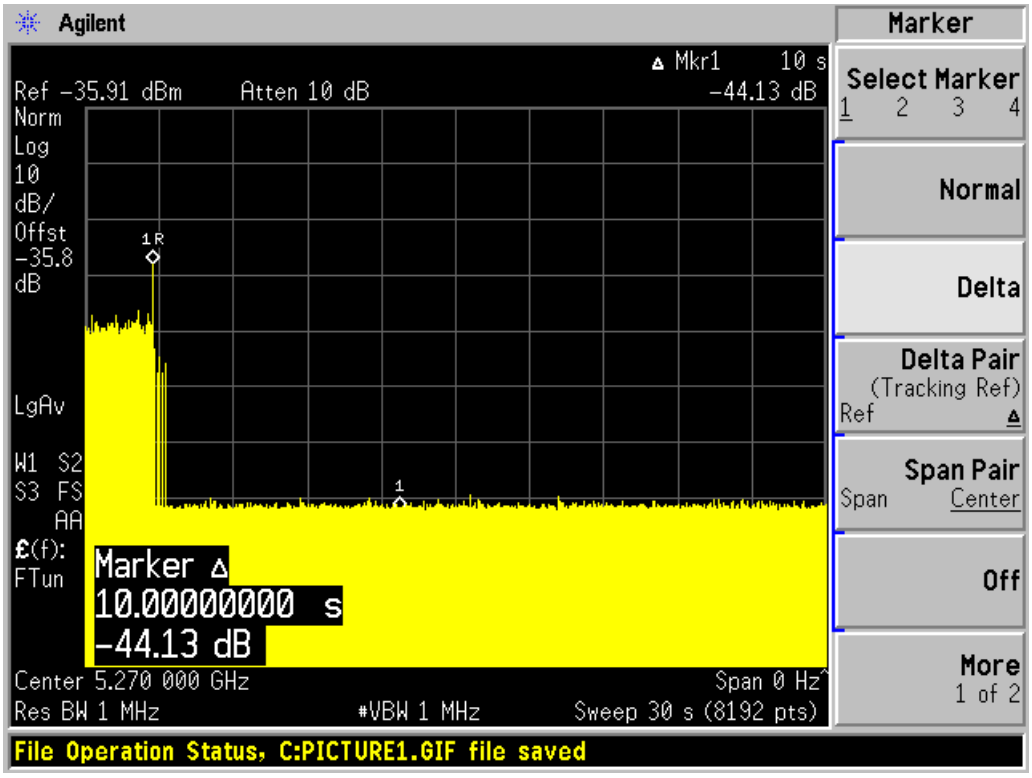
Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
10.99	60	49.01





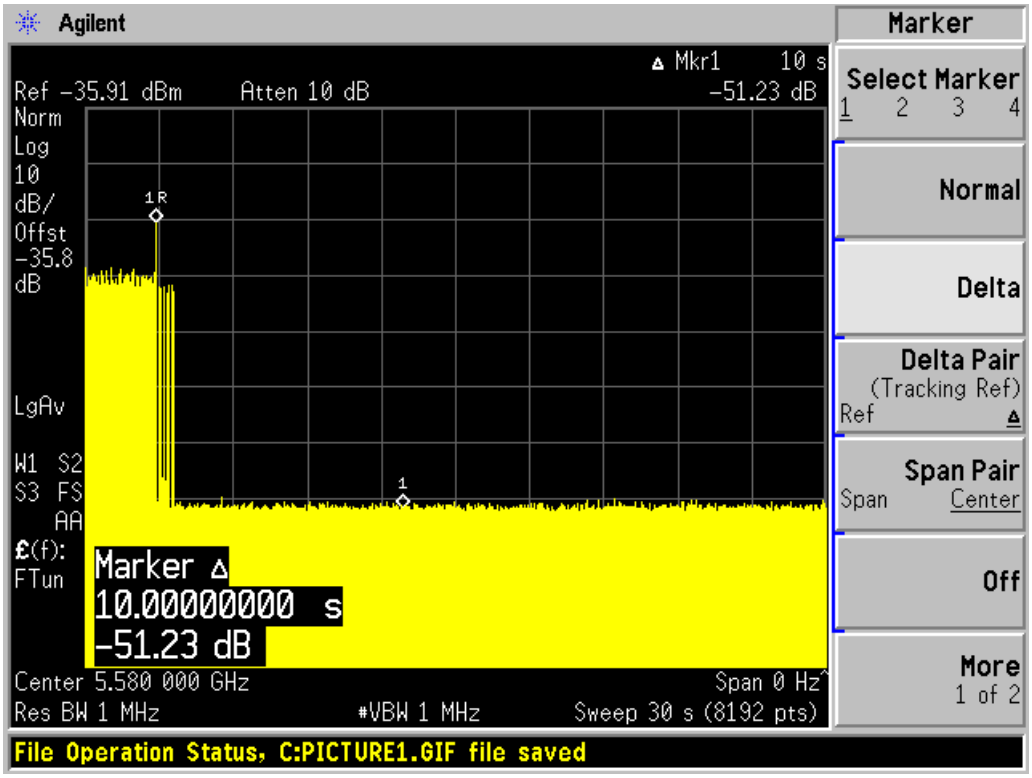
Type 5 radar channel move time result:

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



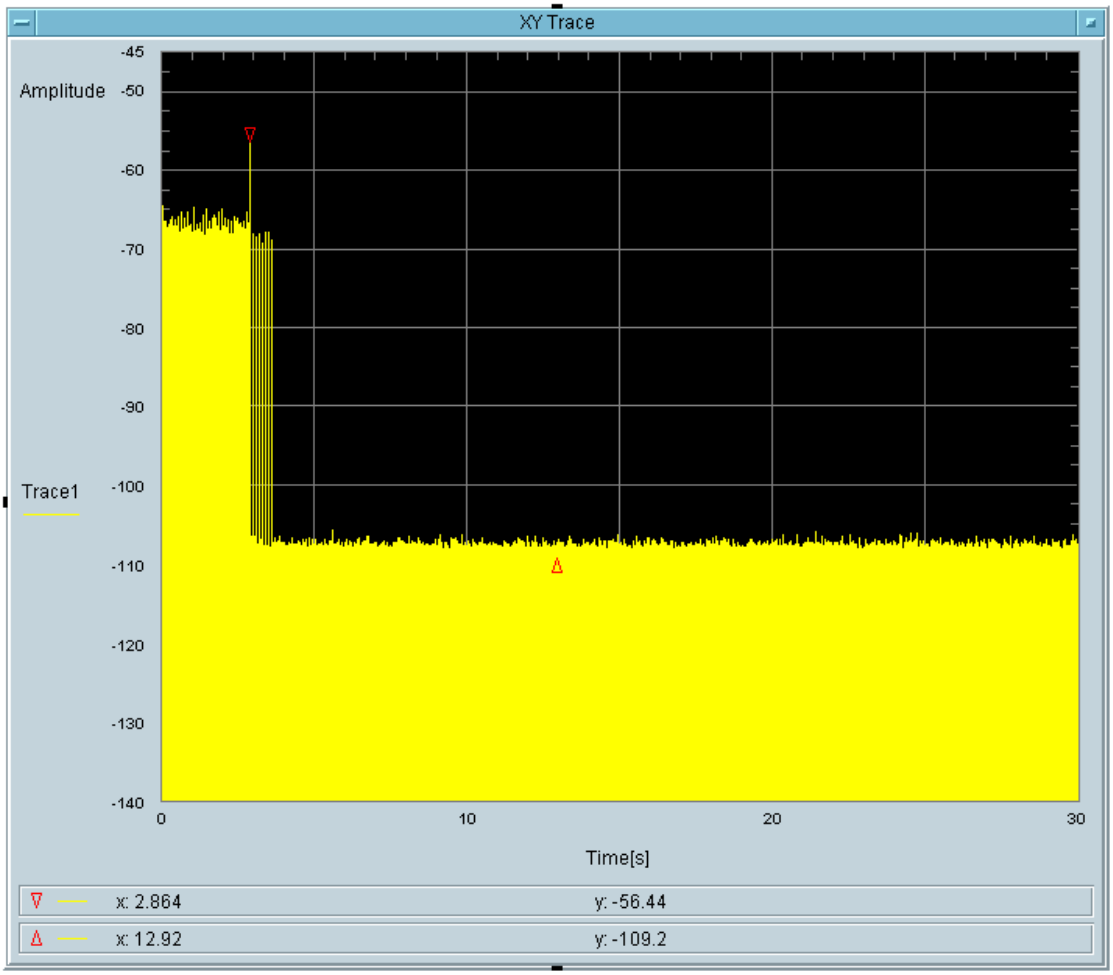
5580 MHz Bandwidth 20 MHz

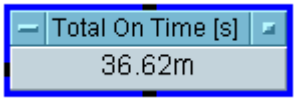
Type 3 Radar Channel Move Time Result:



Type 3 Radar Channel Closing Transmission Time Result:

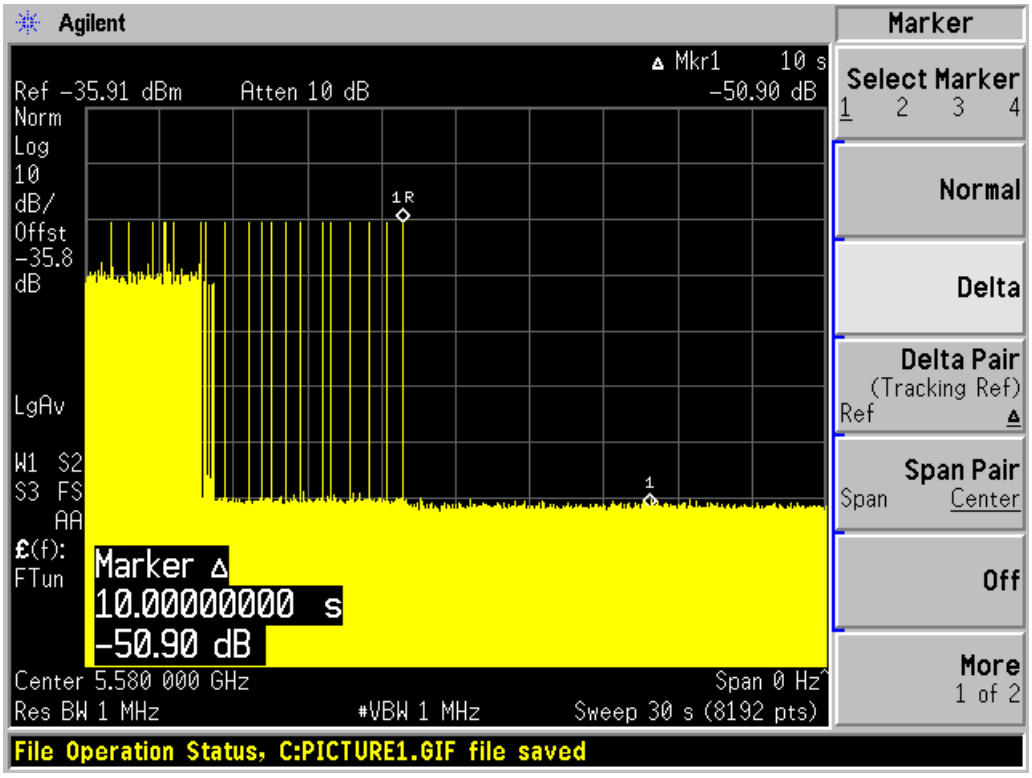
Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
25.64	60	34.36





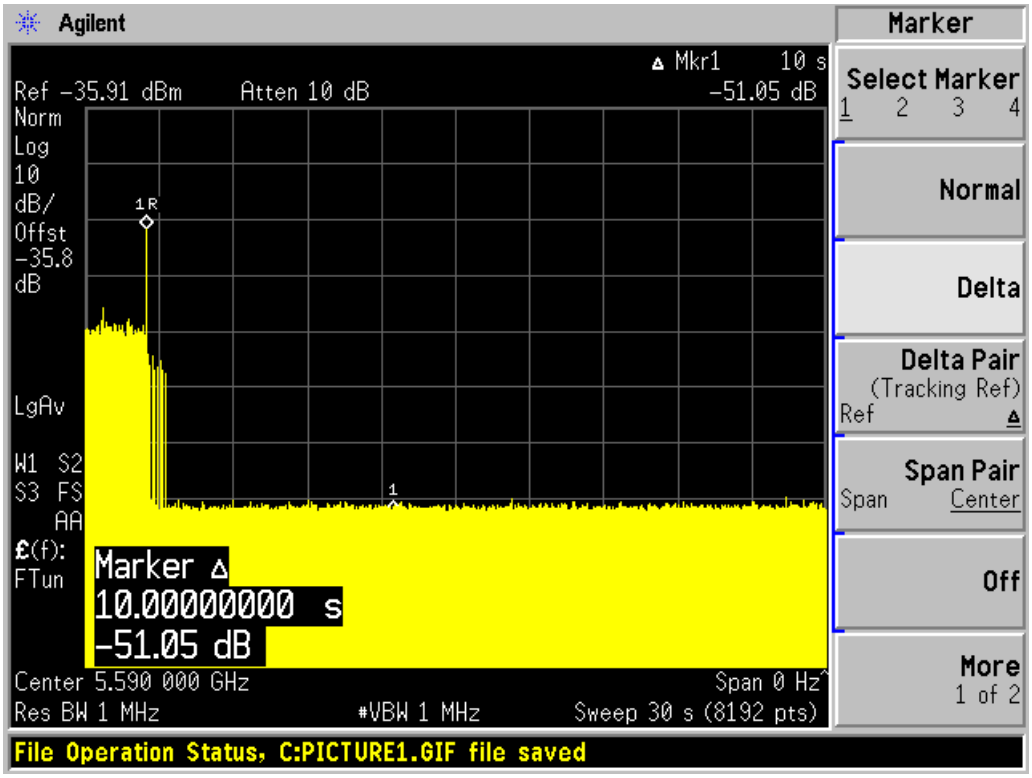
Type 5 radar channel move time result:

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



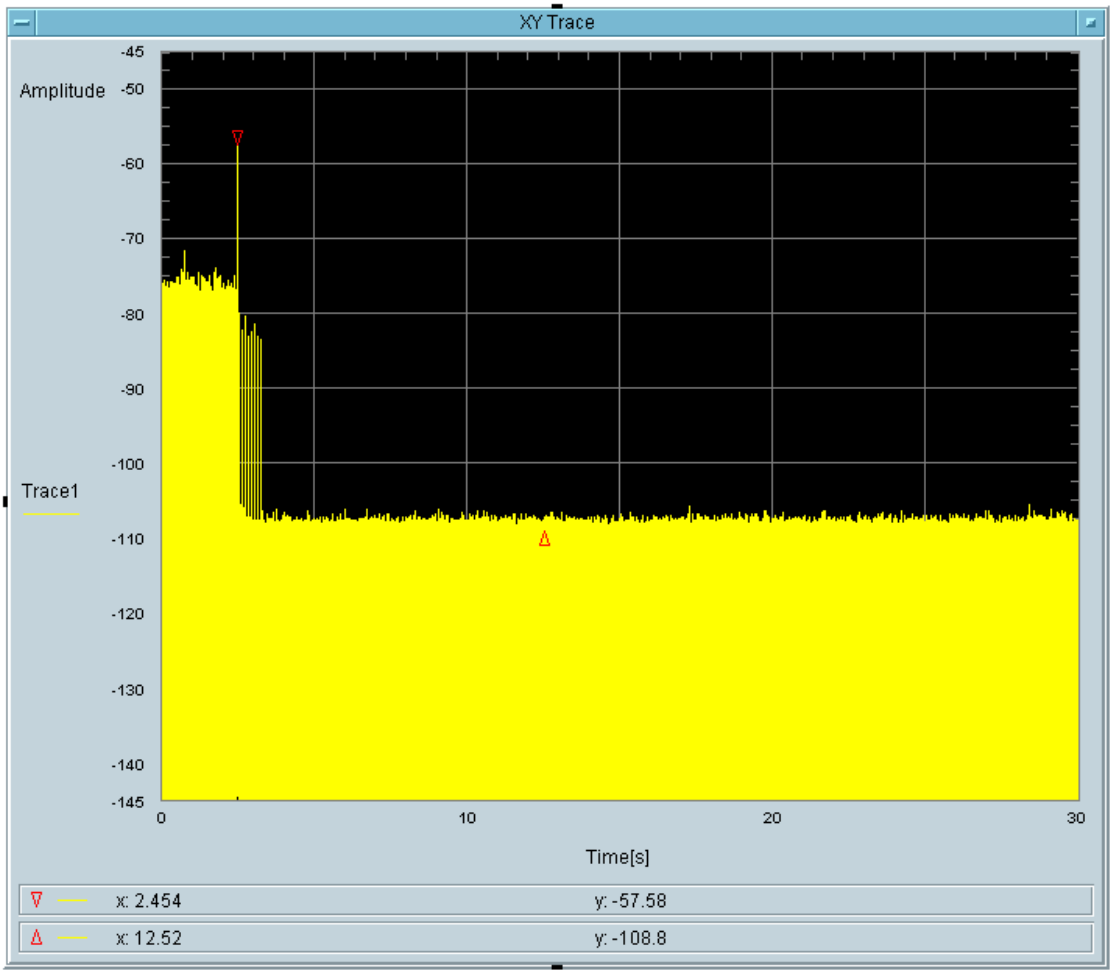
5590 MHz Bandwidth 40 MHz

Type 2 Radar Channel Move Time Result:



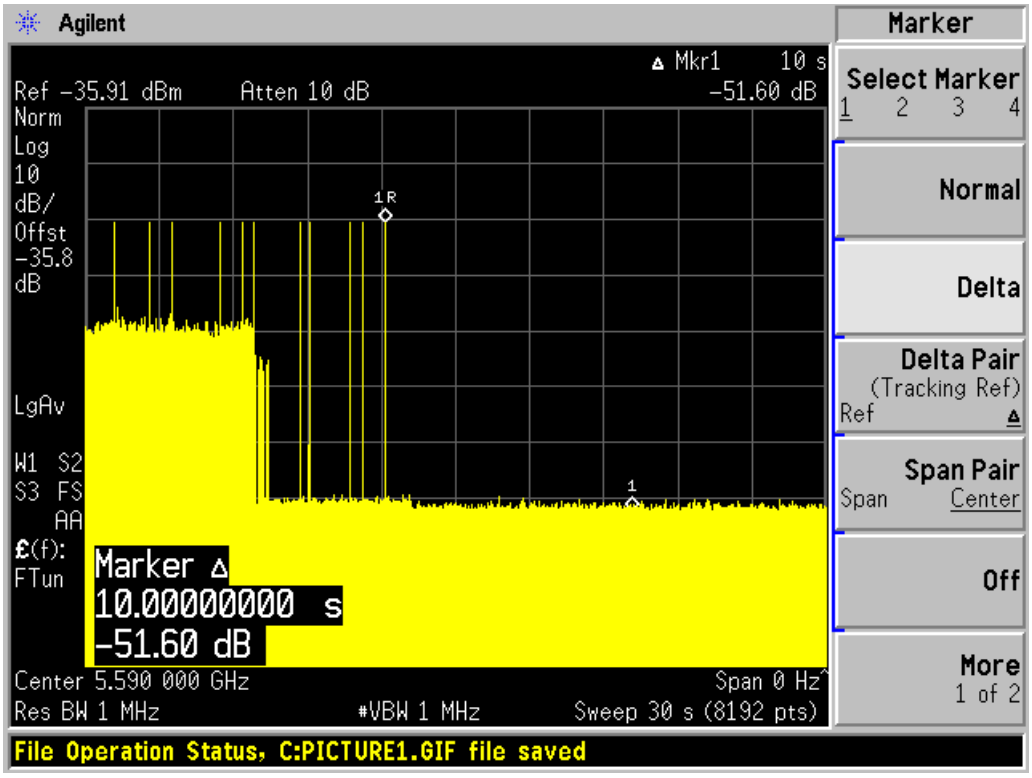
Type 2 Radar Channel Closing Transmission Time Result:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
21.97	60	38.03



Type 5 radar channel move time result:

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



7 Non-Occupancy Period

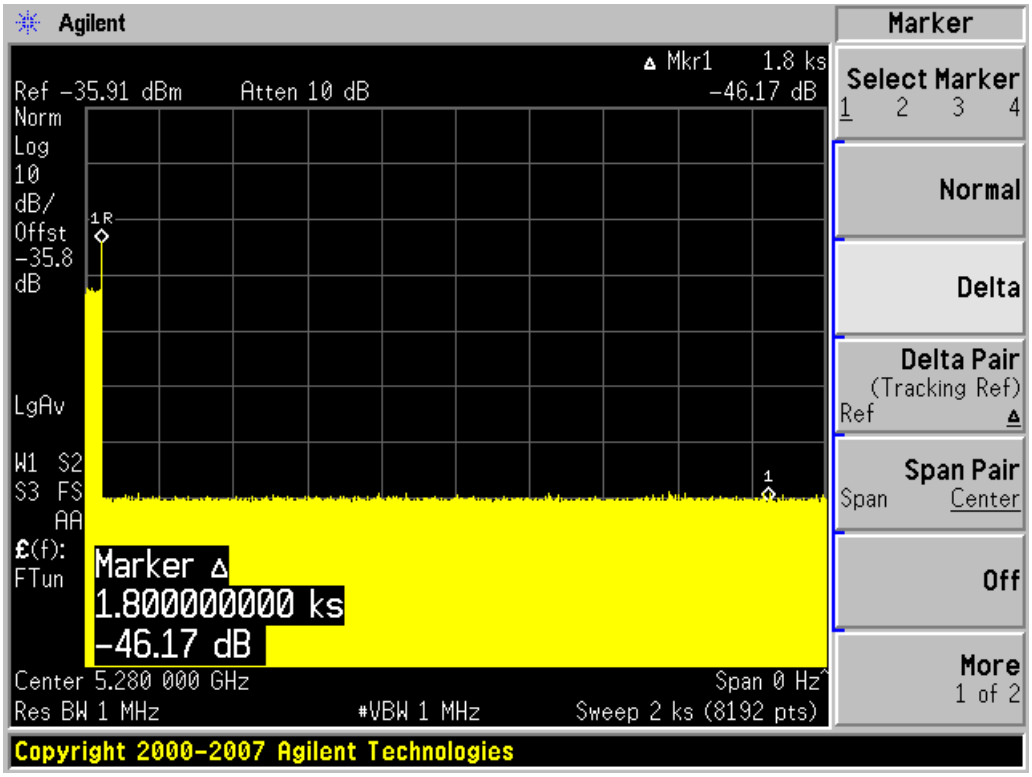
7.1 Test Procedure

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).

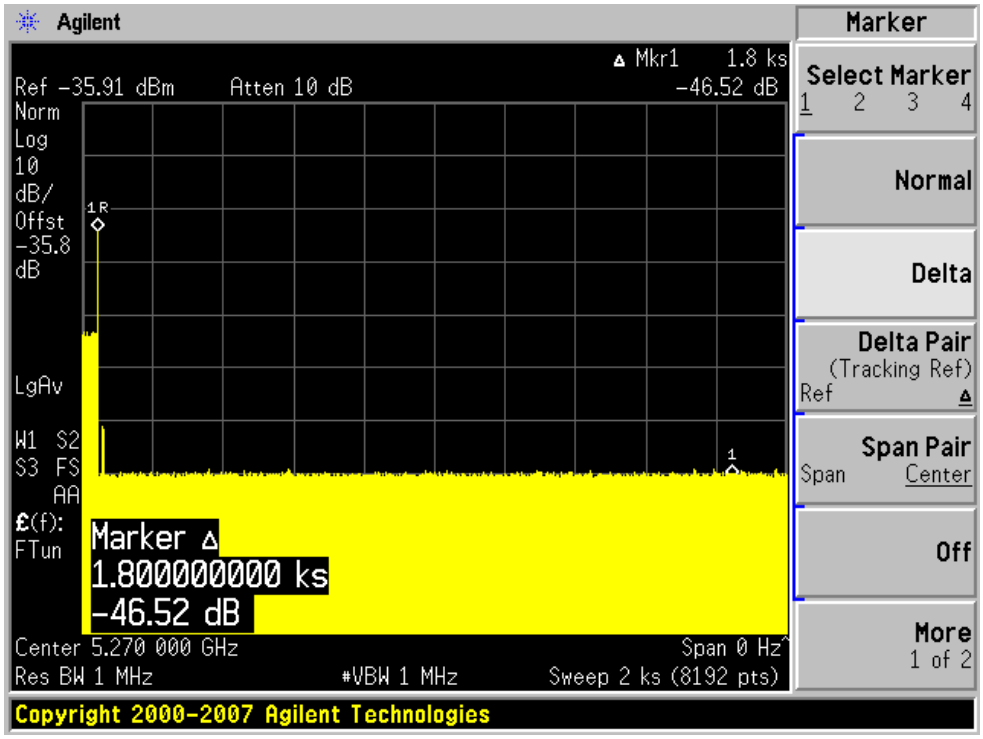
7.2 Test Results

Please refer to the following plots.

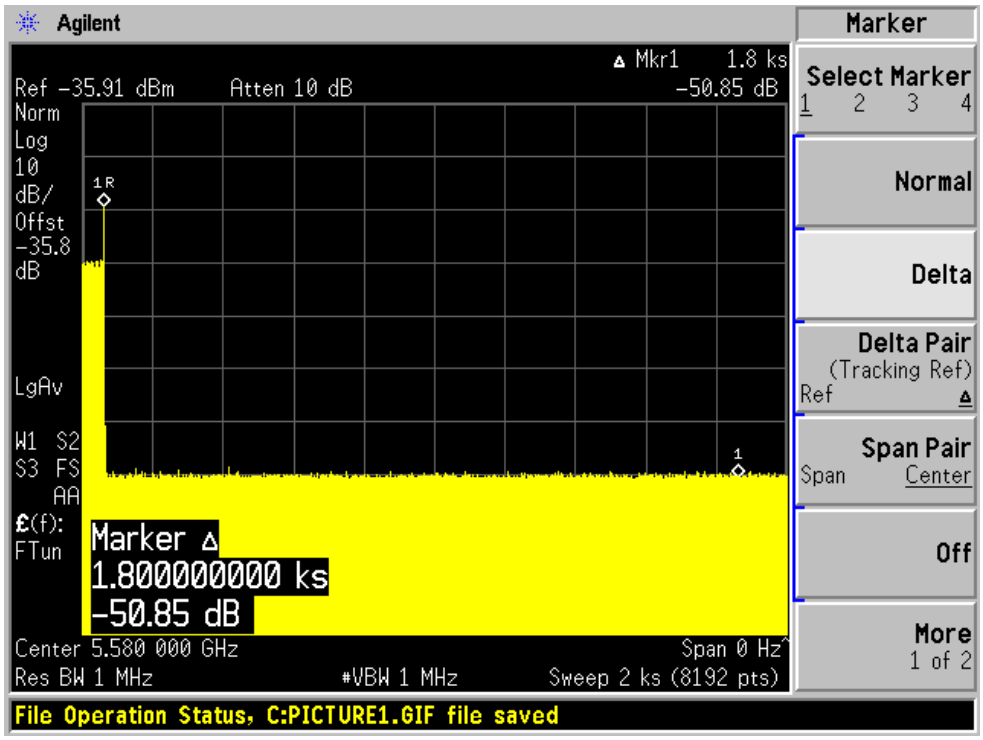
5280 MHz Bandwidth 20 MHz



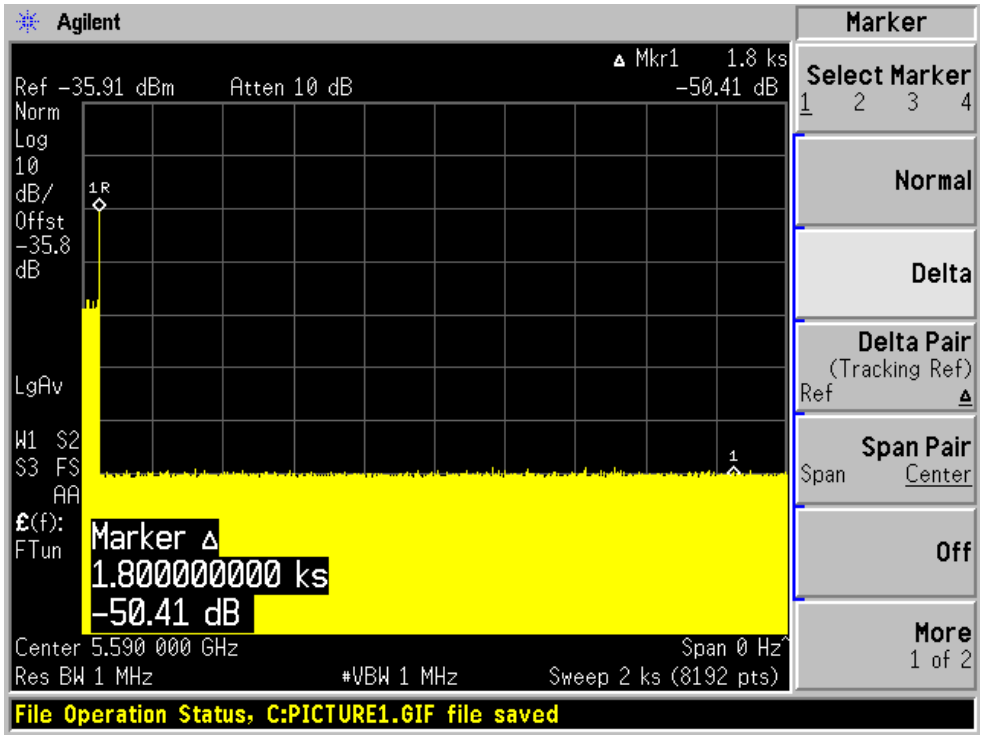
5270 MHz Bandwidth 40 MHz



5580 MHz Bandwidth 20 MHz



5590 MHz Bandwidth 40 MHz



8 Detection Bandwidth

8.1 Procedure

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

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

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

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

UNII Detection Bandwidth = F_H - F_L

8.2 Test Results

Frequency (MHz)	F_L (MHz)	F_H (MHz)	Detection Bandwidth (MHz)	99% Bandwidth (MHz)	Ratio of Detection BW to 99% BW	Minimum Limit	Result
5280	5270	5290	20	17.1677	116.49 %	80%	Compliant
5270	5250	5291	41	36.4309	112.54%	80%	Compliant
5580	5570	5590	20	17.1677	116.49 %	80%	Compliant
5590	5570	5610	40	36.4309	109.79%	80%	Compliant

Please refer to the following tables for test details.

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 (%)**
5269	0	0	0	0	0	0	1	0	0	0	10 %
5270(F_L)	1	1	1	1	1	1	1	1	1	1	100 %
5271	1	1	1	1	1	1	1	1	1	1	100 %
5272	1	1	1	1	1	1	1	1	1	1	100 %
5273	1	1	1	1	1	1	1	1	1	1	100 %
5274	1	1	1	1	1	1	1	1	1	1	100 %
5275	1	1	1	1	1	1	1	1	1	1	100 %
5276	1	1	1	1	1	1	1	1	1	1	100 %
5277	1	1	1	1	1	1	1	1	1	1	100 %
5278	1	1	1	1	1	1	1	1	1	1	100 %
5279	1	1	1	1	1	1	1	1	1	1	100 %
5280(Fc)	1	1	1	1	1	1	1	1	1	1	100 %
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	1	1	1	0	0	0	0	0	0	1	30 %
Detection Bandwidth = $F_H - F_L$ = 5290-5270 = 20 MHz											
EUT 99% BW = 17.1677 MHz; 17.1677 * 80% = 13.73 MHz									**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 (%)**
5248	1	0	0	0	0	0	0	0	0	0	10%
5249	1	1	1	0	0	0	0	1	1	1	60 %
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 %
5280(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	0	1	1	1	1	1	1	90 %
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(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
5292	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = $F_H - F_L$ = 5291-5250 = 41 MHz											
EUT 99% BW = 36.4309 MHz; 36.4309 * 80% = 29.144 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 (%)**
5569	0	0	0	0	0	0	0	0	0	0	0 %
5570(F_L)	1	1	1	1	1	1	1	1	1	1	100 %
5571	1	1	1	1	1	1	1	1	1	1	100 %
5572	1	1	1	1	1	1	1	1	1	1	100 %
5573	1	1	1	1	1	1	1	1	1	1	100 %
5574	1	1	1	1	1	1	1	1	1	1	100 %
5575	1	1	1	1	1	1	1	1	1	1	100 %
5576	1	1	1	1	1	1	1	1	1	1	100 %
5577	1	1	1	1	1	1	1	1	1	1	100 %
5578	1	1	1	1	1	1	1	1	1	1	100 %
5579	1	1	1	1	1	1	1	1	1	1	100 %
5580 (Fc)	1	1	1	1	1	1	1	1	1	1	100 %
5581	1	1	1	1	1	1	1	1	1	1	100 %
5582	1	1	1	1	1	1	1	1	1	1	100 %
5583	1	1	1	1	1	1	1	1	1	1	100 %
5584	1	1	1	1	1	1	1	1	1	1	100 %
5585	1	1	1	1	1	1	1	1	1	1	100 %
5586	1	1	1	1	1	1	1	1	1	1	100 %
5587	1	1	1	1	1	1	1	1	1	1	100%
5588	1	1	1	1	1	1	1	1	1	1	100 %
5589	1	1	1	1	1	1	1	1	1	1	100 %
5590(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
5591	0	0	1	0	0	0	1	0	0	0	20%
Detection Bandwidth = $F_H - F_L$ = 5590-5570 = 20 MHz											
EUT 99% BW = 17.1677 MHz; 17.1677 * 80% = 13.73 MHz									**Result:**		Pass

EUT Frequency = 5590 MHz											
DFS Detection Trials (1 = Detected, Blank = No Detected)											
Radar Frequency (MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5568	0	0	0	0	0	0	0	0	0	0	0%
5569	1	1	0	0	1	0	0	0	1	0	40 %
5570(F_L)	1	1	1	1	1	1	1	1	1	1	100 %
5572	1	1	1	1	1	1	1	1	1	1	100 %
5574	1	1	1	1	1	1	1	1	1	1	100 %
5576	1	1	1	1	1	1	1	1	1	1	100 %
5578	1	1	1	1	1	1	1	1	1	1	100 %
5580	1	1	1	1	1	1	1	1	1	1	100 %
5582	1	1	1	1	1	1	1	1	1	1	100 %
5584	1	1	1	1	1	1	1	1	1	1	100 %
5586	1	1	1	1	1	1	1	1	1	1	100 %
5588	1	1	1	1	1	1	1	1	1	1	100 %
5590 (Fc)	1	1	1	1	1	1	1	1	1	1	100 %
5592	1	1	1	1	1	1	1	1	1	1	100 %
5594	1	1	1	1	1	1	1	1	1	1	100 %
5596	1	1	1	1	1	1	1	1	1	1	100 %
5598	1	1	1	1	1	1	1	1	1	1	100 %
5600	1	1	1	1	1	1	1	1	1	1	100 %
5602	1	1	1	1	1	1	1	1	1	1	100 %
5604	1	1	1	1	1	1	1	1	1	1	100%
5606	1	1	1	1	1	1	1	1	1	1	100 %
5608	1	1	1	1	1	1	1	1	1	1	100 %
5610(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
5611	1	1	0	0	0	1	0	1	0	1	50%
5612	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth = $F_H - F_L$ = 5610-5570 = 40 MHz											
EUT 99% BW = 36.4309 MHz; 36.4309 * 80% = 29.144 MHz									**Result:**		Pass

9 In-Service Monitoring

9.1 Test 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%

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

9.2 Test Results

5280 MHz Bandwidth 20 MHz

Radar Signal Type	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1	30	100%	60%	Pass
Type 2	30	100%	60%	Pass
Type 3	30	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

5270 MHz Bandwidth 40 MHz

Radar Signal Type	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1	30	100%	60%	Pass
Type 2	30	100%	60%	Pass
Type 3	30	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

5580 MHz Bandwidth 20 MHz

Radar Signal Type	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1	30	100%	60%	Pass
Type 2	30	100%	60%	Pass
Type 3	30	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

5590 MHz Bandwidth 40 MHz

Radar Signal Type	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1	30	100%	60%	Pass
Type 2	30	100%	60%	Pass
Type 3	30	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:

9.3 5280 MHz Bandwidth 20 MHz Statistical Performance

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	23	3.7	183	1
2	5280	23	1.2	217	1
3	5280	23	1.8	199	1
4	5280	25	3.2	174	1
5	5280	28	4	166	1
6	5280	28	3.5	159	1
7	5280	29	4	195	1
8	5280	24	3.3	187	1
9	5280	28	3.1	207	1
10	5280	24	2.1	228	1
11	5280	28	4.3	226	1
12	5280	29	4.1	193	1
13	5280	27	3.7	157	1
14	5280	29	1.5	150	1
15	5280	29	4.1	224	1
16	5280	26	4.1	204	1
17	5280	24	2.2	175	1
18	5280	25	3	194	1
19	5280	25	4.5	223	1
20	5280	24	1.8	210	1
21	5280	29	1.4	162	1
22	5280	27	3.9	222	1
23	5280	28	1.1	210	1
24	5280	26	2	163	1
25	5280	26	3.6	163	1
26	5280	26	1.2	164	1
27	5280	26	2.6	223	1
28	5280	28	4.9	222	1
29	5280	26	1.1	201	1
30	5280	27	2.7	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	18	9.9	465	1
2	5280	17	7	300	1
3	5280	16	7.4	426	1
4	5280	18	9.5	237	1
5	5280	17	10	210	1
6	5280	17	9.7	281	1
7	5280	16	9.9	295	1
8	5280	18	9.9	455	1
9	5280	17	7.9	254	1
10	5280	17	7.4	357	1
11	5280	17	8.5	353	1
12	5280	18	9.5	441	1
13	5280	17	6.5	272	1
14	5280	16	8.3	410	1
15	5280	16	6.8	387	1
16	5280	18	6.5	315	1
17	5280	18	7.4	344	1
18	5280	17	8.9	347	1
19	5280	18	9.1	231	1
20	5280	16	9.4	447	1
21	5280	18	8.5	282	1
22	5280	17	6.7	459	1
23	5280	16	9.3	434	1
24	5280	16	7.2	494	1
25	5280	17	8.2	289	1
26	5280	18	9.5	462	1
27	5280	18	7.7	284	1
28	5280	16	8.9	210	1
29	5280	17	7.9	356	1
30	5280	17	9.1	437	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	12	15.4	495	1
2	5280	13	13.9	274	1
3	5280	13	17.4	218	1
4	5280	16	19	312	1
5	5280	16	17	328	1
6	5280	16	11.7	263	1
7	5280	16	19.1	375	1
8	5280	14	13	332	1
9	5280	15	11.3	248	1
10	5280	12	13.6	479	1
11	5280	16	14.8	459	1
12	5280	14	14	482	1
13	5280	13	15.6	275	1
14	5280	15	18.5	204	1
15	5280	12	16.3	218	1
16	5280	15	17.7	357	1
17	5280	15	14	281	1
18	5280	14	14.3	407	1
19	5280	14	12.3	270	1
20	5280	14	19.8	439	1
21	5280	14	16.3	410	1
22	5280	13	16	452	1
23	5280	13	15.7	435	1
24	5280	16	18.9	255	1
25	5280	16	16.4	403	1
26	5280	12	18.9	343	1
27	5280	15	11	376	1
28	5280	15	14.1	257	1
29	5280	13	19.1	467	1
30	5280	13	18.2	289	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	92.4	1225		0.696562	
1	1	10	87.6			1.411209	
2	3	11	69	1277	1713	2.318324	
3	2	14	71.1	1884		3.923799	
4	2	6	93.1	1330		5.442321	
5	2	18	65.3	1710		6.135451	1
6	3	7	62.1	1337	1387	6.80506	
7	2	12	58.1	1236		8.267734	
8	1	7	53.6			9.348214	
9	2	6	72.5	1961		9.83746	
10	2	13	59.9	1015		11.26448	

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	11	90.4	1087	1374	0.444297	
1	3	18	64	1123	1967	1.182539	
2	2	18	97.7	1281		2.444401	
3	1	10	59.7			2.923104	
4	3	14	68.8	1982	1374	3.712014	
5	2	12	98.3	1354		4.859674	
6	2	12	56.8	1684		5.616167	
7	2	14	97.6	1261		6.724394	1
8	2	15	65.6	1513		7.026297	
9	2	6	95.1	1827		8.315225	
10	2	7	86.7	1078		8.620879	
11	2	8	73.1	1978		9.533107	
12	3	5	75.5	1099	1493	10.99621	
13	3	6	81.2	1873	1833	11.89076	

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	17	68.3	1680		0.184956	
1	2	7	62.2	1164		0.851631	
2	2	9	50.7	1853		1.334866	
3	3	20	85.2	1057	1944	2.291337	
4	1	14	59.2			2.808889	
5	2	5	74.1	1753		3.390591	
6	3	16	79.7	1351	1840	3.88675	
7	2	10	88.9	1092		4.930057	
8	3	12	83.5	1323	1090	5.44713	
9	2	8	79.4	1899		5.735388	1
10	3	6	95.9	1207	1897	6.32542	
11	3	19	77.8	1093	1794	7.011771	
12	2	15	61.6	1428		7.913124	
13	3	11	74.7	1458	1798	8.364802	
14	1	5	92.4			9.398519	
15	3	7	72.5	1027	1667	9.931966	
16	2	13	62.2	1499		10.20188	
17	1	9	98.2			10.8741	
18	2	11	91.1	1996		11.96488	

Bin5 Statistics 4

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	17	59.8	1457	1451	0.038346	
1	2	11	61.9	1409		1.717058	
2	1	10	60.8			2.104749	
3	2	7	88.9	1904		3.026937	
4	2	16	78.6	1652		4.470017	1
5	2	8	64.7	1254		5.814552	
6	3	8	55.8	1087	1153	6.694084	
7	2	7	83.4	1050		7.549227	
8	2	11	68.5	1923		8.918404	

Bin5 Statistics 5

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	8	51.6			0.338666	
1	2	8	75.5	1308		0.746209	
2	2	18	54.4	1067		1.212205	
3	1	13	69.9			1.855036	
4	3	8	58.3	1956	1058	2.762562	
5	2	7	78.3	1592		3.391629	
6	3	15	77.9	1374	1963	3.93228	
7	1	12	88			4.587587	
8	2	11	73	1703		5.276473	
9	3	7	82.3	1292	1556	5.896556	1
10	2	6	96.5	1406		6.328588	
11	1	17	80.7			6.804667	
12	1	12	77.3			7.627382	
13	2	16	69.4	1899		8.0318	
14	2	5	86.2	1428		8.82337	
15	2	18	93.2	1135		9.360958	
16	3	13	52.7	1999	1828	9.831373	
17	2	7	69.2	1657		10.54383	
18	1	19	89.9			11.01309	
19	2	10	92.9	1321		11.82037	

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	17	99.9	1727	1330	0.875495	
1	2	12	90.2	1578		2.126766	
2	3	20	83.9	1881	1073	3.087087	
3	3	19	84.3	1785	1091	4.250514	
4	1	15	62.6			5.371201	1
5	3	7	94	1321	1367	6.867813	
6	1	10	78.9			7.993544	
7	1	19	70.5			9.096734	
8	1	18	55.6			10.53107	
9	3	14	94.4	1266	1265	11.80004	

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	65	1185		0.210865	
1	1	17	80.4			1.992175	
2	3	15	88.7	1004	1440	3.265335	
3	2	14	91.1	1132		3.605735	
4	3	13	61.9	1536	1062	4.616372	
5	2	10	90.4	1777		6.055916	1
6	3	8	94.8	1056	1826	6.782156	
7	2	5	85.1	1236		7.886329	
8	3	7	63.7	1800	1160	8.905136	
9	2	19	72.9	1010		10.88597	
10	2	8	64.7	1132		11.0661	

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	16	87	1189		0.452471	
1	2	12	52.3	1600		0.656992	
2	1	9	72.3			1.466575	
3	2	9	84.4	1652		1.931615	
4	2	10	58.9	1854		2.628866	
5	3	13	88.4	1874	1416	3.587196	
6	2	17	84.8	1674		4.108085	
7	1	6	61.4			5.029224	
8	1	13	64.8			5.222078	
9	1	20	86.6			6.140064	1
10	2	6	73.2	1218		6.622704	
11	3	10	94	1422	1780	7.297279	
12	1	11	77.8			8.088582	
13	1	18	65			8.452732	
14	3	18	93.4	1619	1513	8.93025	
15	3	8	58.6	1885	1430	10.05312	
16	2	7	69.9	1337		10.26399	
17	2	10	68.4	1867		10.92298	
18	2	20	88.9	1433		11.55785	

Bin5 Statistics 9

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	17	58.9	1175		0.521132	
1	3	15	80.1	1570	1033	1.54354	
2	2	12	79.1	1347		3.057133	
3	2	12	61.9	1480		5.001743	
4	1	7	65.7			5.883028	1
5	2	7	71	1168		6.796278	
6	1	16	90.7			9.10894	
7	2	16	91.9	1796		9.754618	
8	3	16	91.1	1581	1181	11.45577	

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	7	79	1128	1277	0.211639	
1	2	17	93.1	1369		1.122251	
2	2	17	60.6	1491		2.476977	
3	2	19	71.6	1391		3.387128	
4	1	16	63.3			3.469992	
5	2	5	52.7	1488		4.434793	
6	3	17	87	1688	1774	5.47671	
7	1	7	98.8			6.759102	1
8	3	19	91.2	1559	1097	7.241893	
9	1	20	78.5			8.42921	
10	2	18	86.6	1984		9.276712	
11	2	18	59.5	1044		9.701732	
12	2	17	65.2	1890		10.58796	
13	2	7	56.4	1567		11.76218	

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	17	57.9	1197		0.607252	
1	1	12	70.6			1.265405	
2	1	17	76.3			2.396809	
3	3	15	60.7	1565	1230	3.922007	
4	2	17	87.4	1298		4.670994	
5	2	15	57.2	1254		5.639043	1
6	2	12	76.7	1434		6.751363	
7	2	14	89.8	1467		7.736017	
8	1	9	69			9.752686	
9	3	18	96.1	1850	1610	10.22381	
10	3	10	86.3	1242	1219	11.28311	

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	19	84.8	1782		0.416412	
1	3	11	97.8	1669	1353	1.300029	
2	2	5	89.4	1750		2.312546	
3	3	11	59.3	1360	1785	3.519542	
4	1	8	73.6			5.245602	
5	2	11	98.9	1877		5.67299	1
6	3	12	70.7	1586	1795	7.515681	
7	3	20	72.9	1602	1358	7.830441	
8	2	10	98.1	1722		9.49984	
9	2	15	72.8	1811		9.939011	
10	3	20	73	1164	1285	11.45653	

Bin5 Statistics 13

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	19	54.8			0.662723	
1	2	18	56.1	1149		1.260486	
2	2	19	65	1729		2.08604	
3	1	16	59.8			2.845445	
4	3	20	80.7	1352	1070	3.58646	
5	3	11	61.4	1668	1213	4.235848	
6	2	16	67.9	1713		4.919144	
7	1	14	84.1			5.725447	1
8	2	10	90.7	1732		6.865578	
9	3	19	69.8	1133	1614	7.578977	
10	3	10	64.5	1878	1780	8.018636	
11	1	11	63.5			9.187652	
12	3	17	50.4	1084	1983	9.619031	
13	1	7	67.9			10.82245	
14	3	15	58.1	1891	1240	11.80849	

Bin5 Statistics 14

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	13	89.9	1792		0.758302	
1	1	7	90.7			1.038913	
2	3	18	73.7	1807	1150	2.749734	
3	1	10	76.5			2.939211	
4	2	6	99.9	1014		4.230578	
5	3	20	74.5	1150	1013	5.132866	
6	2	7	58	1973		6.045435	1
7	1	5	89.2			7.281687	
8	2	15	66.9	1369		7.678383	
9	2	10	61.2	1491		8.450528	
10	2	17	89.2	1721		9.237852	
11	1	17	58.4			11.04551	
12	2	15	97.8	1636		11.78587	

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	8	67.2	1582	1336	0.212089	1
1	2	6	64.1	1912		1.593293	
2	2	17	58.9	1019		2.249846	
3	1	13	73.5			3.197756	
4	1	8	90.3			3.708676	
5	3	15	56.5	1043	1775	4.584698	
6	1	6	89.4			5.971353	
7	2	15	63.8	1687		6.591202	
8	1	10	59.8			7.672579	
9	2	5	62.6	1335		8.56183	
10	2	12	94.5	1637		9.371354	
11	2	16	76.4	1483		9.542338	
12	2	10	77.6	1362		10.89876	
13	2	11	90.5	1473		11.38789	

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	12	99.5	1587		0.421018	1
1	1	11	88.7			1.085177	
2	1	10	76.8			1.968895	
3	2	18	61.7	1085		2.470509	
4	2	9	87	1792		3.176347	
5	2	18	72.8	1968		3.92128	
6	2	12	69.5	1100		4.504143	
7	1	12	67.1			4.917664	
8	3	18	88.5	1689	1318	5.937789	
9	3	11	86.4	1696	1064	6.215909	
10	1	10	80			7.118702	
11	1	13	78.9			7.766358	
12	1	11	88			8.040569	
13	2	14	89.9	1057		9.122092	
14	2	8	95.3	1330		9.520059	
15	1	20	80.4			10.48697	
16	3	5	54.1	1382	1779	10.97365	
17	3	19	92.5	1754	1375	11.66916	

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	7	86.2	1730	1756	0.297843	1
1	1	14	61.1			0.860307	
2	2	19	67.6	1297		1.612496	
3	3	10	81.1	1282	1872	2.722314	
4	3	20	86.4	1423	1337	3.395802	
5	3	18	82.3	1599	1399	4.163365	
6	2	17	75.5	1918		4.908789	
7	2	6	70	1795		5.675845	
8	2	17	82.8	1659		6.102297	
9	1	7	66			7.120087	
10	2	16	55.9	1836		7.632093	
11	1	6	93.4			8.806288	
12	1	17	81.8			9.213826	
13	2	7	52.9	1129		10.23337	
14	1	19	63.7			10.53325	
15	3	7	51.1	1790	1945	11.26105	

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	15	82.2	1959		0.955868	1
1	1	15	68.4			1.417671	
2	2	14	76.5	1316		2.634612	
3	3	14	92.9	1415	1959	3.877237	
4	1	17	79.6			4.772003	
5	2	8	70.9	1198		5.709713	
6	2	6	78.3	1514		6.556225	
7	1	12	79.1			7.95314	
8	3	14	83.5	1373	1677	8.985102	
9	2	11	59.7	1307		9.342767	
10	2	13	87.8	1259		10.4069	
11	2	8	58.9	1082		11.12457	

Bin5 Statistics 19

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	12	82.8	1557		0.208369	1
1	2	8	57.2	1834		1.891146	
2	3	18	78.5	1574	1968	2.315332	
3	2	5	86	1654		3.777722	
4	2	11	55	1118		4.161876	
5	2	18	50.3	1898		5.745046	
6	1	9	87.7			6.091219	
7	1	17	51.3			7.896621	
8	3	11	76.8	1663	1774	8.114335	
9	2	10	65.4	1300		9.591993	
10	2	10	74.5	1126		10.50885	
11	1	6	61			11.648	

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	9	72.8	1647		0.569477	1
1	3	14	75.5	1120	1995	1.738138	
2	2	8	54.4	1640		3.073959	
3	3	7	89	1137	1609	4.280505	
4	2	16	99	1112		5.008968	
5	1	7	90.5			6.443289	
6	3	14	94.2	1791	1834	7.615611	
7	1	9	80.1			7.680141	
8	2	14	70.4	1076		9.188	
9	3	16	95.2	1020	1876	9.975021	
10	2	6	91.2	1142		11.51553	

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	13	87.9	1772		0.624998	
1	2	13	92.8	1444		1.931677	
2	2	18	79.5	1968		3.37891	
3	2	14	79.4	1250		4.51519	
4	1	6	86.6			5.567583	1
5	3	20	74	1493	1397	6.963716	
6	2	13	77.3	1505		9.117424	
7	1	16	52.1			9.774763	
8	2	13	64.5	1848		11.90166	

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	7	86.1	1235	1320	0.395013	
1	2	19	54.5	1313		0.796715	
2	3	14	63.1	1906	1089	1.92746	
3	2	10	93.4	1034		2.678881	
4	3	7	60.1	1543	1823	3.406133	
5	3	20	80.2	1729	1833	4.006373	
6	2	15	87.1	1167		5.095936	
7	2	14	71.9	1516		5.923885	
8	2	8	61	1338		6.344024	1
9	1	14	94.5			7.166613	
10	2	10	59.4	1106		7.696751	
11	3	14	55.3	1052	1167	8.96941	
12	1	7	56.8			9.018596	
13	3	7	85.3	1224	1853	10.47167	
14	1	15	94.4			10.79862	
15	1	15	50.4			11.4441	

Bin5 Statistics 23

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	8	83.3	1825		0.265747	
1	1	8	89.6			1.267744	
2	2	19	70.3	1263		2.414932	
3	2	14	58.7	1291		3.570862	
4	3	8	95	1502	1238	4.342909	
5	2	17	84	1551		5.102378	
6	2	14	74.8	1160		6.320794	1
7	3	19	66.3	1645	1020	7.371117	
8	2	8	85.7	1035		7.422506	
9	2	19	69.6	1769		8.828871	
10	2	18	86.7	1524		9.329422	
11	1	10	64.3			10.56776	
12	2	15	53.1	1136		11.5583	

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	11	86.7			1.476733	
1	2	8	86.4	1319		2.132065	
2	2	6	53.7	1988		3.478475	
3	3	7	68.8	1832	1229	4.733189	
4	1	18	81.6			7.010186	1
5	1	13	95.1			7.971474	
6	2	11	56.7	1380		9.011344	
7	1	7	93.9			10.98998	

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	8	52.4	1640		0.264023	
1	3	12	80.6	1751	1642	0.959818	
2	1	7	59			1.613942	
3	3	12	88	1925	1679	2.092277	
4	1	18	71.3			2.582434	
5	2	12	75.4	1730		3.177738	
6	2	11	77.9	1243		4.174423	
7	1	6	84.5			4.612177	
8	2	10	85.8	1699		5.379308	
9	1	20	57.3			5.673472	1
10	1	7	89.9			6.533242	
11	2	18	87.7	1271		6.966652	
12	2	14	82.7	1119		7.290588	
13	3	7	89.5	1307	1014	8.389004	
14	1	13	86.3			8.974523	
15	3	13	88.6	1506	1476	9.383142	
16	2	13	91	1316		9.633648	
17	1	9	75.4			10.63768	
18	1	12	95.8			10.85162	
19	2	19	83.6	1121		11.54032	

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	8	50.9	1082		0.289192	
1	3	12	59.4	1797	1453	0.985555	
2	3	7	99.7	1945	1953	2.072028	
3	2	20	70.8	1626		2.541469	
4	2	5	86.8	1140		3.317394	
5	2	18	59.1	1570		4.416472	
6	2	9	72.5	1111		5.20516	
7	1	12	51.3			5.733828	1
8	3	15	52.7	1672	1881	6.240065	
9	2	10	97	1238		7.437507	
10	2	18	86.1	1774		7.552727	
11	3	17	61.5	1662	1087	8.74328	
12	3	12	72.6	1276	1304	9.338397	
13	2	18	96.3	1624		10.14137	
14	1	20	91.2			11.07038	
15	1	18	97.3			11.97622	

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	12	50.9			0.41545	
1	3	19	61.6	1111	1433	1.554661	
2	3	13	51.8	1990	1485	2.656204	
3	2	6	61	1755		3.651598	
4	2	19	54.5	1437		5.029397	
5	2	15	79.6	1255		5.874731	1
6	3	8	67.9	1058	1056	7.062074	
7	2	10	60.3	1784		8.058061	
8	2	9	90.8	1644		9.431668	
9	2	10	61.3	1819		9.979784	
10	1	16	84.8			10.98989	

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	16	59	1935		0.089348	
1	2	16	54.3	1703		1.056488	
2	1	13	71.5			1.450418	
3	2	6	68.7	1223		2.423731	
4	2	20	75.4	1256		3.044302	
5	3	16	58.2	1610	1340	3.383097	
6	3	11	50.2	1234	1448	3.928156	
7	3	12	72.1	1897	1342	4.882137	
8	1	20	57.3			5.43753	
9	2	18	90.1	1983		6.295586	1
10	1	7	53.7			6.570841	
11	2	15	91.7	1092		7.305206	
12	3	6	98.3	1865	1692	7.730274	
13	2	10	63.7	1134		8.46179	
14	3	13	78.8	1201	1722	9.194063	
15	2	17	75.7	1230		10.01647	
16	1	12	74			10.43291	
17	2	11	80.1	1284		11.32948	
18	1	12	85			11.99552	

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	13	72.6			0.320761	
1	3	12	63.6	1594	1735	0.959174	
2	3	18	69.4	1173	1927	2.693297	
3	1	19	90.4			2.899972	
4	1	18	75.5			3.812304	
5	3	6	82.1	1441	1736	5.10407	
6	2	8	79.4	1520		6.446331	1
7	1	8	81.5			7.251847	
8	2	17	64.2	1291		7.76656	
9	1	10	61			8.92209	
10	3	20	69.1	1253	1013	9.859426	
11	3	8	71.9	1094	1234	10.62357	
12	1	6	75.9			11.90269	

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	12	54	1655	1722	0.003927	
1	2	8	50.8	1221		1.808488	
2	2	6	71.2	1928		2.735348	
3	2	14	77	1032		3.569045	
4	3	8	53	1318	1020	4.584558	
5	2	11	90.2	1225		4.804405	
6	2	19	88.6	1805		6.404218	1
7	2	15	62	1145		7.224692	
8	3	15	65.9	1779	1433	7.876044	
9	3	13	79.1	1253	1916	9.197876	
10	3	13	77.3	1150	1091	9.707758	
11	3	17	68.8	1540	1386	11.01176	
12	2	11	78.8	1666		11.61934	

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	5565.0, 5709.0, 5514.0, 5363.0, 5494.0, 5448.0, 5622.0, 5450.0, 5500.0, 5579.0, 5316.0, 5341.0, 5534.0, 5345.0, 5346.0, 5330.0, 5581.0, 5273.0, 5559.0, 5558.0, 5384.0, 5673.0, 5318.0, 5681.0, 5576.0, 5302.0, 5669.0, 5511.0, 5541.0, 5480.0, 5353.0, 5297.0, 5505.0, 5629.0, 5385.0, 5634.0, 5552.0, 5322.0, 5319.0, 5704.0, 5501.0, 5542.0, 5484.0, 5280.0, 5361.0, 5532.0, 5520.0, 5533.0, 5356.0, 5637.0, 5445.0, 5627.0, 5269.0, 5649.0, 5401.0, 5492.0, 5326.0, 5641.0, 5539.0, 5355.0, 5573.0, 5417.0, 5377.0, 5338.0, 5623.0, 5497.0, 5523.0, 5406.0, 5405.0, 5722.0, 5347.0, 5572.0, 5354.0, 5587.0, 5267.0, 5324.0, 5275.0, 5262.0, 5309.0, 5495.0, 5466.0, 5421.0, 5656.0, 5513.0, 5686.0, 5626.0, 5680.0, 5598.0, 5387.0, 5609.0, 5426.0, 5658.0, 5288.0, 5715.0, 5515.0, 5444.0, 5529.0, 5272.0, 5359.0, 5640.0 (number of hits: 5)
2	5280	9	1	333	1	5469.0, 5389.0, 5653.0, 5360.0, 5539.0, 5684.0, 5533.0, 5345.0, 5352.0, 5578.0, 5286.0, 5721.0, 5645.0, 5319.0, 5511.0, 5510.0, 5530.0, 5306.0, 5423.0, 5638.0, 5312.0, 5654.0, 5342.0, 5367.0, 5298.0, 5442.0, 5641.0, 5362.0, 5679.0, 5633.0,

						5586.0, 5682.0, 5584.0, 5489.0, 5550.0, 5421.0, 5678.0, 5630.0, 5458.0, 5517.0, 5488.0, 5466.0, 5658.0, 5635.0, 5573.0, 5580.0, 5302.0, 5258.0, 5594.0, 5419.0, 5437.0, 5495.0, 5291.0, 5541.0, 5560.0, 5438.0, 5412.0, 5497.0, 5493.0, 5554.0, 5401.0, 5582.0, 5282.0, 5443.0, 5722.0, 5712.0, 5283.0, 5411.0, 5607.0, 5603.0, 5287.0, 5686.0, 5390.0, 5711.0, 5670.0, 5689.0, 5600.0, 5329.0, 5446.0, 5339.0, 5567.0, 5341.0, 5318.0, 5425.0, 5265.0, 5447.0, 5408.0, 5371.0, 5558.0, 5613.0, 5330.0, 5717.0, 5644.0, 5395.0, 5301.0, 5490.0, 5626.0, 5398.0, 5293.0, 5324.0 (number of hits: 4)
3	5280	9	1	333	1	5454.0, 5322.0, 5366.0, 5487.0, 5457.0, 5272.0, 5297.0, 5353.0, 5491.0, 5628.0, 5631.0, 5287.0, 5478.0, 5347.0, 5576.0, 5564.0, 5602.0, 5288.0, 5686.0, 5419.0, 5274.0, 5413.0, 5328.0, 5680.0, 5572.0, 5582.0, 5488.0, 5303.0, 5289.0, 5267.0, 5258.0, 5405.0, 5699.0, 5536.0, 5693.0, 5588.0, 5499.0, 5436.0, 5514.0, 5656.0, 5585.0, 5704.0, 5639.0, 5421.0, 5325.0, 5364.0, 5342.0, 5682.0, 5711.0, 5430.0, 5715.0, 5666.0, 5577.0, 5268.0, 5642.0, 5508.0, 5599.0, 5641.0, 5316.0, 5464.0, 5614.0, 5584.0, 5301.0, 5458.0, 5350.0, 5617.0, 5348.0, 5504.0, 5589.0, 5551.0, 5450.0, 5705.0, 5646.0, 5677.0, 5372.0, 5314.0, 5360.0, 5521.0, 5343.0, 5304.0, 5486.0, 5315.0, 5441.0, 5293.0, 5392.0, 5651.0, 5709.0, 5516.0, 5311.0, 5390.0, 5501.0, 5691.0, 5550.0, 5566.0, 5648.0, 5548.0, 5696.0, 5449.0, 5690.0, 5549.0 (number of hits: 5)
4	5280	9	1	333	1	5309.0, 5547.0, 5251.0, 5371.0, 5354.0, 5675.0, 5626.0, 5509.0, 5599.0, 5722.0, 5590.0, 5498.0, 5274.0, 5483.0, 5556.0, 5551.0, 5521.0, 5293.0, 5628.0, 5466.0, 5720.0, 5491.0, 5327.0, 5256.0, 5380.0, 5260.0, 5342.0, 5609.0, 5480.0, 5299.0, 5659.0, 5655.0, 5278.0, 5264.0, 5357.0, 5629.0, 5367.0, 5359.0, 5276.0, 5290.0, 5356.0, 5279.0, 5686.0, 5696.0, 5411.0, 5372.0, 5454.0, 5552.0, 5416.0, 5443.0, 5426.0, 5530.0, 5494.0, 5710.0, 5568.0, 5715.0, 5361.0, 5550.0, 5399.0, 5592.0, 5334.0, 5336.0, 5253.0, 5394.0, 5346.0, 5648.0, 5484.0, 5701.0, 5451.0, 5351.0, 5714.0, 5531.0, 5322.0, 5607.0, 5281.0, 5555.0, 5519.0, 5697.0, 5718.0, 5573.0, 5324.0, 5523.0, 5679.0, 5316.0, 5536.0, 5335.0, 5285.0, 5441.0, 5553.0, 5369.0, 5593.0, 5616.0, 5437.0, 5398.0, 5396.0, 5482.0, 5672.0, 5307.0, 5598.0, 5377.0 (number of hits: 6)
5	5280	9	1	333	1	5412.0, 5580.0, 5439.0, 5696.0, 5598.0, 5362.0, 5653.0, 5705.0, 5663.0, 5639.0,

						5473.0, 5341.0, 5416.0, 5484.0, 5683.0, 5722.0, 5357.0, 5537.0, 5560.0, 5254.0, 5667.0, 5468.0, 5699.0, 5413.0, 5605.0, 5506.0, 5297.0, 5428.0, 5390.0, 5595.0, 5614.0, 5655.0, 5276.0, 5648.0, 5448.0, 5379.0, 5516.0, 5330.0, 5676.0, 5608.0, 5281.0, 5629.0, 5308.0, 5305.0, 5632.0, 5283.0, 5607.0, 5637.0, 5422.0, 5681.0, 5618.0, 5259.0, 5365.0, 5686.0, 5591.0, 5478.0, 5359.0, 5562.0, 5483.0, 5553.0, 5482.0, 5443.0, 5312.0, 5270.0, 5515.0, 5252.0, 5353.0, 5604.0, 5454.0, 5661.0, 5636.0, 5507.0, 5347.0, 5687.0, 5486.0, 5292.0, 5299.0, 5617.0, 5541.0, 5609.0, 5650.0, 5631.0, 5488.0, 5700.0, 5361.0, 5433.0, 5723.0, 5303.0, 5677.0, 5555.0, 5407.0, 5417.0, 5296.0, 5273.0, 5334.0, 5408.0, 5469.0, 5587.0, 5510.0, 5674.0 (number of hits: 5)
6	5280	9	1	333	1	5601.0, 5275.0, 5673.0, 5272.0, 5464.0, 5502.0, 5633.0, 5688.0, 5637.0, 5579.0, 5293.0, 5580.0, 5393.0, 5610.0, 5412.0, 5635.0, 5617.0, 5414.0, 5436.0, 5613.0, 5456.0, 5304.0, 5426.0, 5717.0, 5471.0, 5419.0, 5375.0, 5712.0, 5704.0, 5564.0, 5716.0, 5586.0, 5475.0, 5387.0, 5643.0, 5595.0, 5399.0, 5700.0, 5313.0, 5687.0, 5469.0, 5312.0, 5672.0, 5581.0, 5513.0, 5284.0, 5596.0, 5265.0, 5463.0, 5445.0, 5532.0, 5506.0, 5283.0, 5492.0, 5656.0, 5359.0, 5484.0, 5570.0, 5302.0, 5552.0, 5257.0, 5318.0, 5707.0, 5625.0, 5446.0, 5444.0, 5524.0, 5558.0, 5582.0, 5515.0, 5466.0, 5642.0, 5462.0, 5604.0, 5406.0, 5714.0, 5693.0, 5481.0, 5696.0, 5549.0, 5721.0, 5300.0, 5369.0, 5578.0, 5517.0, 5681.0, 5680.0, 5450.0, 5328.0, 5703.0, 5477.0, 5461.0, 5518.0, 5385.0, 5379.0, 5346.0, 5413.0, 5287.0, 5424.0, 5669.0 (number of hits: 5)
7	5280	9	1	333	1	5325.0, 5262.0, 5582.0, 5427.0, 5547.0, 5285.0, 5653.0, 5663.0, 5322.0, 5602.0, 5598.0, 5636.0, 5521.0, 5599.0, 5277.0, 5320.0, 5524.0, 5432.0, 5611.0, 5543.0, 5669.0, 5615.0, 5480.0, 5714.0, 5462.0, 5350.0, 5604.0, 5706.0, 5359.0, 5580.0, 5426.0, 5269.0, 5318.0, 5258.0, 5708.0, 5656.0, 5597.0, 5410.0, 5629.0, 5430.0, 5532.0, 5443.0, 5719.0, 5312.0, 5647.0, 5608.0, 5686.0, 5329.0, 5549.0, 5675.0, 5694.0, 5607.0, 5261.0, 5294.0, 5360.0, 5253.0, 5446.0, 5583.0, 5479.0, 5697.0, 5369.0, 5383.0, 5558.0, 5508.0, 5539.0, 5682.0, 5390.0, 5311.0, 5399.0, 5339.0, 5667.0, 5485.0, 5600.0, 5551.0, 5342.0, 5300.0, 5626.0, 5657.0, 5475.0, 5481.0, 5447.0, 5621.0, 5405.0, 5546.0, 5538.0, 5336.0, 5512.0, 5684.0, 5700.0, 5358.0, 5640.0, 5688.0, 5310.0, 5490.0, 5509.0,

						5409.0, 5284.0, 5415.0, 5314.0, 5353.0 (number of hits: 3)
8	5280	9	1	333	1	5390.0, 5573.0, 5520.0, 5570.0, 5714.0, 5276.0, 5611.0, 5479.0, 5264.0, 5315.0, 5500.0, 5292.0, 5629.0, 5331.0, 5710.0, 5473.0, 5418.0, 5661.0, 5323.0, 5504.0, 5613.0, 5632.0, 5655.0, 5291.0, 5358.0, 5324.0, 5558.0, 5670.0, 5522.0, 5600.0, 5401.0, 5548.0, 5516.0, 5569.0, 5667.0, 5509.0, 5718.0, 5673.0, 5593.0, 5685.0, 5689.0, 5607.0, 5680.0, 5664.0, 5643.0, 5322.0, 5494.0, 5695.0, 5701.0, 5416.0, 5490.0, 5502.0, 5590.0, 5289.0, 5618.0, 5346.0, 5708.0, 5424.0, 5662.0, 5268.0, 5435.0, 5488.0, 5669.0, 5374.0, 5541.0, 5651.0, 5354.0, 5477.0, 5369.0, 5630.0, 5715.0, 5353.0, 5371.0, 5428.0, 5551.0, 5671.0, 5397.0, 5370.0, 5338.0, 5431.0, 5640.0, 5566.0, 5417.0, 5440.0, 5545.0, 5471.0, 5650.0, 5402.0, 5325.0, 5429.0, 5459.0, 5339.0, 5720.0, 5678.0, 5555.0, 5508.0, 5452.0, 5603.0, 5432.0, 5269.0 (number of hits: 2)
9	5280	9	1	333	1	5473.0, 5348.0, 5624.0, 5701.0, 5684.0, 5593.0, 5432.0, 5702.0, 5598.0, 5308.0, 5558.0, 5534.0, 5545.0, 5714.0, 5502.0, 5404.0, 5560.0, 5541.0, 5506.0, 5645.0, 5315.0, 5416.0, 5380.0, 5304.0, 5576.0, 5252.0, 5445.0, 5591.0, 5661.0, 5382.0, 5343.0, 5644.0, 5419.0, 5512.0, 5633.0, 5373.0, 5517.0, 5250.0, 5670.0, 5607.0, 5629.0, 5585.0, 5316.0, 5650.0, 5575.0, 5374.0, 5434.0, 5693.0, 5480.0, 5288.0, 5508.0, 5662.0, 5276.0, 5588.0, 5441.0, 5652.0, 5312.0, 5630.0, 5556.0, 5457.0, 5438.0, 5704.0, 5345.0, 5569.0, 5571.0, 5489.0, 5364.0, 5424.0, 5277.0, 5539.0, 5682.0, 5659.0, 5634.0, 5542.0, 5713.0, 5578.0, 5426.0, 5295.0, 5413.0, 5254.0, 5605.0, 5622.0, 5475.0, 5307.0, 5719.0, 5420.0, 5628.0, 5695.0, 5289.0, 5636.0, 5715.0, 5294.0, 5437.0, 5331.0, 5448.0, 5442.0, 5505.0, 5648.0, 5604.0, 5514.0 (number of hits: 4)
10	5280	9	1	333	1	5309.0, 5499.0, 5724.0, 5491.0, 5430.0, 5464.0, 5623.0, 5381.0, 5548.0, 5439.0, 5705.0, 5264.0, 5571.0, 5367.0, 5563.0, 5335.0, 5698.0, 5267.0, 5517.0, 5354.0, 5297.0, 5384.0, 5573.0, 5530.0, 5608.0, 5284.0, 5336.0, 5528.0, 5341.0, 5441.0, 5550.0, 5710.0, 5523.0, 5396.0, 5525.0, 5685.0, 5409.0, 5658.0, 5572.0, 5422.0, 5639.0, 5520.0, 5353.0, 5444.0, 5406.0, 5265.0, 5259.0, 5363.0, 5677.0, 5461.0, 5346.0, 5360.0, 5361.0, 5581.0, 5570.0, 5329.0, 5334.0, 5509.0, 5274.0, 5407.0, 5457.0, 5438.0, 5352.0, 5453.0, 5253.0, 5723.0, 5664.0, 5477.0, 5299.0, 5662.0, 5326.0, 5719.0, 5598.0, 5680.0, 5510.0,

						5678.0, 5397.0, 5445.0, 5386.0, 5443.0, 5647.0, 5485.0, 5408.0, 5585.0, 5637.0, 5688.0, 5273.0, 5602.0, 5489.0, 5695.0, 5665.0, 5693.0, 5415.0, 5402.0, 5356.0, 5712.0, 5466.0, 5459.0, 5302.0, 5371.0 (number of hits: 3)
11	5280	9	1	333	1	5397.0, 5438.0, 5460.0, 5534.0, 5525.0, 5673.0, 5478.0, 5602.0, 5265.0, 5707.0, 5593.0, 5268.0, 5475.0, 5364.0, 5617.0, 5310.0, 5719.0, 5627.0, 5537.0, 5531.0, 5547.0, 5630.0, 5320.0, 5360.0, 5426.0, 5386.0, 5432.0, 5542.0, 5608.0, 5611.0, 5330.0, 5615.0, 5500.0, 5621.0, 5492.0, 5688.0, 5293.0, 5446.0, 5641.0, 5600.0, 5282.0, 5702.0, 5620.0, 5336.0, 5429.0, 5270.0, 5595.0, 5561.0, 5549.0, 5388.0, 5496.0, 5250.0, 5546.0, 5504.0, 5573.0, 5530.0, 5276.0, 5465.0, 5287.0, 5384.0, 5335.0, 5577.0, 5589.0, 5612.0, 5501.0, 5700.0, 5635.0, 5515.0, 5570.0, 5331.0, 5406.0, 5445.0, 5675.0, 5311.0, 5400.0, 5569.0, 5334.0, 5594.0, 5269.0, 5454.0, 5450.0, 5431.0, 5489.0, 5441.0, 5554.0, 5683.0, 5424.0, 5261.0, 5259.0, 5354.0, 5463.0, 5609.0, 5513.0, 5514.0, 5480.0, 5499.0, 5668.0, 5703.0, 5631.0, 5266.0 (number of hits: 4)
12	5280	9	1	333	1	5560.0, 5545.0, 5553.0, 5382.0, 5646.0, 5645.0, 5279.0, 5287.0, 5424.0, 5686.0, 5680.0, 5708.0, 5542.0, 5505.0, 5295.0, 5468.0, 5682.0, 5413.0, 5577.0, 5478.0, 5425.0, 5704.0, 5689.0, 5651.0, 5421.0, 5558.0, 5619.0, 5622.0, 5494.0, 5657.0, 5637.0, 5710.0, 5503.0, 5358.0, 5516.0, 5321.0, 5354.0, 5294.0, 5288.0, 5655.0, 5417.0, 5471.0, 5692.0, 5521.0, 5669.0, 5404.0, 5480.0, 5588.0, 5336.0, 5693.0, 5535.0, 5357.0, 5467.0, 5376.0, 5368.0, 5583.0, 5272.0, 5656.0, 5498.0, 5705.0, 5591.0, 5416.0, 5251.0, 5621.0, 5254.0, 5643.0, 5299.0, 5356.0, 5548.0, 5610.0, 5648.0, 5717.0, 5342.0, 5364.0, 5275.0, 5420.0, 5623.0, 5675.0, 5302.0, 5700.0, 5579.0, 5319.0, 5281.0, 5519.0, 5481.0, 5455.0, 5590.0, 5262.0, 5616.0, 5484.0, 5627.0, 5696.0, 5531.0, 5688.0, 5594.0, 5252.0, 5685.0, 5515.0, 5564.0, 5361.0 (number of hits: 6)
13	5280	9	1	333	1	5262.0, 5557.0, 5533.0, 5360.0, 5298.0, 5344.0, 5468.0, 5300.0, 5614.0, 5411.0, 5698.0, 5385.0, 5480.0, 5418.0, 5400.0, 5647.0, 5579.0, 5434.0, 5403.0, 5626.0, 5301.0, 5367.0, 5320.0, 5585.0, 5347.0, 5592.0, 5352.0, 5389.0, 5351.0, 5252.0, 5696.0, 5446.0, 5368.0, 5703.0, 5667.0, 5665.0, 5568.0, 5573.0, 5476.0, 5538.0, 5715.0, 5485.0, 5430.0, 5649.0, 5486.0, 5396.0, 5322.0, 5507.0, 5672.0, 5264.0, 5450.0, 5491.0, 5295.0, 5575.0, 5435.0,

						5421.0, 5436.0, 5306.0, 5472.0, 5676.0, 5409.0, 5380.0, 5576.0, 5441.0, 5454.0, 5582.0, 5621.0, 5549.0, 5547.0, 5455.0, 5635.0, 5560.0, 5363.0, 5444.0, 5285.0, 5514.0, 5299.0, 5679.0, 5323.0, 5641.0, 5442.0, 5631.0, 5483.0, 5487.0, 5622.0, 5317.0, 5356.0, 5431.0, 5659.0, 5423.0, 5439.0, 5535.0, 5417.0, 5324.0, 5708.0, 5680.0, 5291.0, 5371.0, 5529.0, 5637.0 (number of hits: 1)
14	5280	9	1	333	1	5501.0, 5527.0, 5356.0, 5603.0, 5361.0, 5436.0, 5462.0, 5723.0, 5718.0, 5722.0, 5348.0, 5599.0, 5712.0, 5365.0, 5646.0, 5412.0, 5677.0, 5668.0, 5349.0, 5324.0, 5641.0, 5351.0, 5694.0, 5310.0, 5360.0, 5419.0, 5273.0, 5465.0, 5551.0, 5683.0, 5643.0, 5667.0, 5662.0, 5338.0, 5464.0, 5576.0, 5548.0, 5696.0, 5280.0, 5695.0, 5380.0, 5434.0, 5326.0, 5525.0, 5427.0, 5697.0, 5266.0, 5590.0, 5271.0, 5472.0, 5506.0, 5558.0, 5584.0, 5658.0, 5596.0, 5448.0, 5423.0, 5305.0, 5687.0, 5604.0, 5447.0, 5321.0, 5494.0, 5619.0, 5389.0, 5529.0, 5688.0, 5524.0, 5486.0, 5642.0, 5402.0, 5368.0, 5456.0, 5250.0, 5442.0, 5538.0, 5284.0, 5381.0, 5293.0, 5431.0, 5410.0, 5454.0, 5652.0, 5330.0, 5334.0, 5426.0, 5682.0, 5562.0, 5571.0, 5252.0, 5317.0, 5580.0, 5289.0, 5390.0, 5631.0, 5282.0, 5475.0, 5510.0, 5440.0, 5474.0 (number of hits: 6)
15	5280	9	1	333	1	5420.0, 5339.0, 5614.0, 5701.0, 5359.0, 5562.0, 5630.0, 5644.0, 5477.0, 5721.0, 5555.0, 5280.0, 5584.0, 5558.0, 5363.0, 5683.0, 5557.0, 5704.0, 5640.0, 5425.0, 5670.0, 5625.0, 5708.0, 5535.0, 5651.0, 5300.0, 5369.0, 5709.0, 5310.0, 5669.0, 5476.0, 5678.0, 5380.0, 5580.0, 5311.0, 5401.0, 5505.0, 5579.0, 5632.0, 5679.0, 5577.0, 5394.0, 5633.0, 5385.0, 5353.0, 5332.0, 5521.0, 5466.0, 5712.0, 5638.0, 5371.0, 5645.0, 5467.0, 5635.0, 5529.0, 5417.0, 5607.0, 5649.0, 5288.0, 5564.0, 5378.0, 5687.0, 5500.0, 5405.0, 5667.0, 5690.0, 5347.0, 5267.0, 5676.0, 5402.0, 5549.0, 5636.0, 5628.0, 5286.0, 5593.0, 5703.0, 5571.0, 5525.0, 5582.0, 5595.0, 5284.0, 5573.0, 5470.0, 5623.0, 5554.0, 5351.0, 5479.0, 5312.0, 5265.0, 5594.0, 5461.0, 5253.0, 5494.0, 5381.0, 5329.0, 5418.0, 5597.0, 5429.0, 5716.0, 5285.0 (number of hits: 5)
16	5280	9	1	333	1	5313.0, 5256.0, 5523.0, 5584.0, 5285.0, 5493.0, 5652.0, 5347.0, 5571.0, 5540.0, 5260.0, 5322.0, 5360.0, 5593.0, 5616.0, 5552.0, 5630.0, 5357.0, 5625.0, 5524.0, 5265.0, 5560.0, 5723.0, 5315.0, 5510.0, 5720.0, 5489.0, 5674.0, 5550.0, 5564.0, 5620.0, 5515.0, 5417.0, 5697.0, 5562.0,

						5451.0, 5671.0, 5304.0, 5468.0, 5396.0, 5299.0, 5574.0, 5415.0, 5472.0, 5283.0, 5603.0, 5559.0, 5609.0, 5291.0, 5545.0, 5448.0, 5327.0, 5317.0, 5366.0, 5266.0, 5332.0, 5692.0, 5605.0, 5473.0, 5314.0, 5488.0, 5411.0, 5497.0, 5549.0, 5456.0, 5319.0, 5705.0, 5588.0, 5722.0, 5578.0, 5491.0, 5592.0, 5446.0, 5685.0, 5622.0, 5373.0, 5714.0, 5712.0, 5316.0, 5507.0, 5619.0, 5565.0, 5717.0, 5678.0, 5643.0, 5541.0, 5405.0, 5567.0, 5259.0, 5633.0, 5553.0, 5613.0, 5536.0, 5323.0, 5597.0, 5476.0, 5392.0, 5704.0, 5684.0, 5570.0 (number of hits: 2)
17	5280	9	1	333	1	5281.0, 5263.0, 5558.0, 5588.0, 5342.0, 5585.0, 5628.0, 5373.0, 5350.0, 5465.0, 5589.0, 5686.0, 5692.0, 5331.0, 5660.0, 5359.0, 5368.0, 5578.0, 5326.0, 5357.0, 5568.0, 5303.0, 5611.0, 5367.0, 5457.0, 5488.0, 5516.0, 5347.0, 5422.0, 5663.0, 5277.0, 5409.0, 5278.0, 5256.0, 5463.0, 5468.0, 5389.0, 5279.0, 5577.0, 5594.0, 5721.0, 5407.0, 5617.0, 5650.0, 5593.0, 5622.0, 5595.0, 5656.0, 5500.0, 5265.0, 5430.0, 5623.0, 5470.0, 5565.0, 5536.0, 5400.0, 5680.0, 5582.0, 5420.0, 5714.0, 5482.0, 5530.0, 5273.0, 5609.0, 5271.0, 5351.0, 5319.0, 5418.0, 5553.0, 5546.0, 5320.0, 5704.0, 5455.0, 5318.0, 5483.0, 5257.0, 5677.0, 5309.0, 5294.0, 5606.0, 5412.0, 5386.0, 5601.0, 5445.0, 5652.0, 5344.0, 5600.0, 5419.0, 5505.0, 5432.0, 5655.0, 5703.0, 5687.0, 5535.0, 5701.0, 5495.0, 5346.0, 5521.0, 5424.0, 5512.0 (number of hits: 6)
18	5280	9	1	333	1	5699.0, 5695.0, 5586.0, 5705.0, 5435.0, 5689.0, 5536.0, 5604.0, 5416.0, 5317.0, 5602.0, 5286.0, 5492.0, 5349.0, 5657.0, 5264.0, 5507.0, 5257.0, 5332.0, 5377.0, 5309.0, 5592.0, 5635.0, 5274.0, 5711.0, 5506.0, 5545.0, 5645.0, 5698.0, 5653.0, 5509.0, 5580.0, 5648.0, 5617.0, 5600.0, 5625.0, 5515.0, 5395.0, 5663.0, 5609.0, 5499.0, 5573.0, 5641.0, 5567.0, 5718.0, 5565.0, 5482.0, 5599.0, 5293.0, 5713.0, 5432.0, 5451.0, 5428.0, 5469.0, 5670.0, 5347.0, 5704.0, 5652.0, 5276.0, 5639.0, 5655.0, 5422.0, 5579.0, 5389.0, 5411.0, 5439.0, 5328.0, 5502.0, 5514.0, 5275.0, 5465.0, 5326.0, 5464.0, 5461.0, 5562.0, 5594.0, 5628.0, 5421.0, 5478.0, 5316.0, 5571.0, 5605.0, 5307.0, 5463.0, 5414.0, 5458.0, 5647.0, 5337.0, 5500.0, 5691.0, 5682.0, 5631.0, 5544.0, 5370.0, 5619.0, 5489.0, 5279.0, 5481.0, 5593.0, 5634.0 (number of hits: 5)
19	5280	9	1	333	1	5675.0, 5467.0, 5614.0, 5390.0, 5633.0, 5661.0, 5443.0, 5510.0, 5268.0, 5309.0, 5253.0, 5365.0, 5722.0, 5482.0, 5417.0,

						5372.0, 5330.0, 5415.0, 5305.0, 5532.0, 5632.0, 5530.0, 5582.0, 5603.0, 5505.0, 5493.0, 5386.0, 5413.0, 5602.0, 5333.0, 5584.0, 5681.0, 5593.0, 5657.0, 5687.0, 5543.0, 5341.0, 5402.0, 5565.0, 5439.0, 5459.0, 5322.0, 5564.0, 5408.0, 5285.0, 5710.0, 5617.0, 5643.0, 5262.0, 5392.0, 5337.0, 5659.0, 5461.0, 5496.0, 5350.0, 5485.0, 5457.0, 5462.0, 5574.0, 5473.0, 5525.0, 5515.0, 5653.0, 5292.0, 5592.0, 5411.0, 5299.0, 5600.0, 5638.0, 5601.0, 5522.0, 5368.0, 5383.0, 5555.0, 5442.0, 5360.0, 5347.0, 5569.0, 5446.0, 5716.0, 5700.0, 5447.0, 5495.0, 5298.0, 5487.0, 5524.0, 5277.0, 5628.0, 5665.0, 5586.0, 5409.0, 5683.0, 5470.0, 5481.0, 5353.0, 5259.0, 5591.0, 5596.0, 5686.0, 5373.0 (number of hits: 2)
20	5280	9	1	333	1	5296.0, 5543.0, 5299.0, 5597.0, 5367.0, 5398.0, 5594.0, 5461.0, 5448.0, 5313.0, 5687.0, 5505.0, 5431.0, 5322.0, 5654.0, 5428.0, 5470.0, 5371.0, 5570.0, 5383.0, 5487.0, 5700.0, 5648.0, 5439.0, 5717.0, 5253.0, 5586.0, 5301.0, 5432.0, 5251.0, 5478.0, 5289.0, 5550.0, 5562.0, 5539.0, 5263.0, 5351.0, 5468.0, 5657.0, 5416.0, 5415.0, 5334.0, 5496.0, 5482.0, 5540.0, 5324.0, 5538.0, 5528.0, 5590.0, 5255.0, 5693.0, 5592.0, 5673.0, 5669.0, 5308.0, 5316.0, 5314.0, 5266.0, 5380.0, 5321.0, 5294.0, 5352.0, 5425.0, 5375.0, 5271.0, 5696.0, 5373.0, 5574.0, 5501.0, 5653.0, 5609.0, 5663.0, 5567.0, 5422.0, 5430.0, 5677.0, 5386.0, 5531.0, 5372.0, 5471.0, 5716.0, 5465.0, 5692.0, 5605.0, 5621.0, 5722.0, 5406.0, 5429.0, 5514.0, 5361.0, 5265.0, 5359.0, 5513.0, 5476.0, 5509.0, 5502.0, 5335.0, 5685.0, 5616.0, 5400.0 (number of hits: 2)
21	5280	9	1	333	1	5712.0, 5288.0, 5363.0, 5366.0, 5361.0, 5456.0, 5309.0, 5630.0, 5291.0, 5257.0, 5283.0, 5520.0, 5658.0, 5269.0, 5487.0, 5554.0, 5508.0, 5678.0, 5459.0, 5563.0, 5351.0, 5266.0, 5498.0, 5660.0, 5688.0, 5477.0, 5529.0, 5278.0, 5452.0, 5355.0, 5560.0, 5427.0, 5461.0, 5496.0, 5350.0, 5364.0, 5335.0, 5643.0, 5603.0, 5319.0, 5629.0, 5344.0, 5692.0, 5716.0, 5590.0, 5495.0, 5564.0, 5526.0, 5377.0, 5669.0, 5583.0, 5371.0, 5582.0, 5604.0, 5295.0, 5602.0, 5562.0, 5268.0, 5623.0, 5325.0, 5303.0, 5511.0, 5503.0, 5572.0, 5490.0, 5652.0, 5368.0, 5721.0, 5313.0, 5274.0, 5482.0, 5422.0, 5670.0, 5432.0, 5481.0, 5414.0, 5717.0, 5406.0, 5258.0, 5539.0, 5556.0, 5254.0, 5586.0, 5394.0, 5326.0, 5567.0, 5686.0, 5469.0, 5341.0, 5608.0, 5388.0, 5340.0, 5389.0, 5550.0, 5499.0, 5433.0, 5312.0, 5633.0, 5357.0, 5383.0

						(number of hits: 4)
22	5280	9	1	333	1	5552.0, 5366.0, 5431.0, 5373.0, 5315.0, 5445.0, 5610.0, 5425.0, 5499.0, 5626.0, 5451.0, 5363.0, 5615.0, 5687.0, 5489.0, 5671.0, 5297.0, 5481.0, 5483.0, 5257.0, 5632.0, 5349.0, 5557.0, 5367.0, 5440.0, 5554.0, 5613.0, 5280.0, 5269.0, 5639.0, 5302.0, 5543.0, 5294.0, 5476.0, 5612.0, 5590.0, 5339.0, 5362.0, 5696.0, 5616.0, 5537.0, 5276.0, 5413.0, 5347.0, 5640.0, 5594.0, 5675.0, 5719.0, 5592.0, 5521.0, 5460.0, 5461.0, 5454.0, 5260.0, 5390.0, 5555.0, 5350.0, 5268.0, 5699.0, 5323.0, 5580.0, 5559.0, 5531.0, 5607.0, 5681.0, 5329.0, 5459.0, 5340.0, 5648.0, 5587.0, 5524.0, 5717.0, 5370.0, 5703.0, 5338.0, 5480.0, 5502.0, 5662.0, 5656.0, 5655.0, 5501.0, 5398.0, 5313.0, 5714.0, 5598.0, 5379.0, 5458.0, 5710.0, 5720.0, 5620.0, 5332.0, 5335.0, 5549.0, 5617.0, 5570.0, 5386.0, 5685.0, 5404.0, 5647.0, 5709.0 (number of hits: 2)
23	5280	9	1	333	1	5333.0, 5550.0, 5479.0, 5450.0, 5392.0, 5531.0, 5526.0, 5350.0, 5686.0, 5671.0, 5274.0, 5708.0, 5559.0, 5485.0, 5711.0, 5338.0, 5376.0, 5590.0, 5425.0, 5389.0, 5572.0, 5354.0, 5678.0, 5681.0, 5279.0, 5374.0, 5276.0, 5361.0, 5641.0, 5387.0, 5336.0, 5519.0, 5432.0, 5321.0, 5332.0, 5420.0, 5542.0, 5366.0, 5566.0, 5527.0, 5602.0, 5709.0, 5409.0, 5514.0, 5556.0, 5636.0, 5465.0, 5308.0, 5628.0, 5593.0, 5403.0, 5608.0, 5626.0, 5456.0, 5328.0, 5310.0, 5562.0, 5448.0, 5629.0, 5315.0, 5643.0, 5428.0, 5406.0, 5690.0, 5639.0, 5573.0, 5473.0, 5265.0, 5322.0, 5271.0, 5286.0, 5644.0, 5373.0, 5584.0, 5637.0, 5353.0, 5618.0, 5424.0, 5648.0, 5697.0, 5325.0, 5506.0, 5717.0, 5557.0, 5676.0, 5388.0, 5451.0, 5441.0, 5455.0, 5516.0, 5377.0, 5395.0, 5319.0, 5493.0, 5412.0, 5692.0, 5677.0, 5679.0, 5497.0, 5273.0 (number of hits: 6)
24	5280	9	1	333	1	5618.0, 5485.0, 5405.0, 5497.0, 5643.0, 5283.0, 5390.0, 5716.0, 5671.0, 5709.0, 5600.0, 5428.0, 5281.0, 5647.0, 5416.0, 5528.0, 5723.0, 5276.0, 5481.0, 5292.0, 5489.0, 5697.0, 5530.0, 5681.0, 5593.0, 5685.0, 5438.0, 5282.0, 5455.0, 5639.0, 5450.0, 5667.0, 5615.0, 5272.0, 5348.0, 5665.0, 5717.0, 5547.0, 5289.0, 5366.0, 5473.0, 5441.0, 5565.0, 5447.0, 5372.0, 5261.0, 5631.0, 5444.0, 5662.0, 5365.0, 5598.0, 5327.0, 5580.0, 5543.0, 5458.0, 5332.0, 5314.0, 5500.0, 5654.0, 5537.0, 5603.0, 5254.0, 5720.0, 5271.0, 5705.0, 5334.0, 5285.0, 5504.0, 5439.0, 5397.0, 5523.0, 5604.0, 5469.0, 5652.0, 5706.0, 5361.0, 5356.0, 5275.0, 5710.0, 5564.0,

						5388.0, 5268.0, 5377.0, 5446.0, 5567.0, 5357.0, 5616.0, 5347.0, 5629.0, 5448.0, 5300.0, 5349.0, 5435.0, 5286.0, 5640.0, 5400.0, 5612.0, 5691.0, 5617.0, 5472.0 (number of hits: 10)
25	5280	9	1	333	1	5718.0, 5531.0, 5318.0, 5640.0, 5634.0, 5396.0, 5563.0, 5595.0, 5373.0, 5667.0, 5570.0, 5459.0, 5624.0, 5686.0, 5608.0, 5382.0, 5592.0, 5596.0, 5466.0, 5639.0, 5328.0, 5498.0, 5273.0, 5519.0, 5564.0, 5364.0, 5330.0, 5378.0, 5433.0, 5641.0, 5338.0, 5681.0, 5392.0, 5291.0, 5252.0, 5441.0, 5497.0, 5702.0, 5377.0, 5370.0, 5565.0, 5494.0, 5311.0, 5615.0, 5633.0, 5676.0, 5499.0, 5659.0, 5517.0, 5349.0, 5535.0, 5460.0, 5653.0, 5346.0, 5509.0, 5267.0, 5643.0, 5406.0, 5662.0, 5528.0, 5637.0, 5414.0, 5581.0, 5357.0, 5510.0, 5542.0, 5538.0, 5413.0, 5333.0, 5669.0, 5368.0, 5547.0, 5539.0, 5678.0, 5712.0, 5279.0, 5450.0, 5622.0, 5589.0, 5485.0, 5543.0, 5502.0, 5385.0, 5426.0, 5412.0, 5420.0, 5540.0, 5567.0, 5334.0, 5558.0, 5403.0, 5583.0, 5323.0, 5717.0, 5716.0, 5491.0, 5454.0, 5529.0, 5603.0, 5504.0 (number of hits: 2)
26	5280	9	1	333	1	5308.0, 5609.0, 5709.0, 5404.0, 5580.0, 5443.0, 5539.0, 5389.0, 5316.0, 5697.0, 5279.0, 5655.0, 5628.0, 5495.0, 5642.0, 5512.0, 5405.0, 5398.0, 5251.0, 5250.0, 5463.0, 5374.0, 5555.0, 5529.0, 5302.0, 5354.0, 5268.0, 5646.0, 5422.0, 5278.0, 5570.0, 5269.0, 5658.0, 5531.0, 5301.0, 5370.0, 5617.0, 5255.0, 5532.0, 5692.0, 5652.0, 5567.0, 5627.0, 5506.0, 5596.0, 5480.0, 5613.0, 5413.0, 5581.0, 5623.0, 5712.0, 5274.0, 5714.0, 5306.0, 5521.0, 5520.0, 5329.0, 5326.0, 5673.0, 5667.0, 5454.0, 5489.0, 5434.0, 5498.0, 5401.0, 5674.0, 5285.0, 5286.0, 5335.0, 5402.0, 5562.0, 5583.0, 5494.0, 5530.0, 5390.0, 5254.0, 5442.0, 5622.0, 5533.0, 5448.0, 5475.0, 5311.0, 5426.0, 5353.0, 5651.0, 5615.0, 5317.0, 5685.0, 5541.0, 5371.0, 5296.0, 5575.0, 5710.0, 5478.0, 5435.0, 5594.0, 5349.0, 5621.0, 5619.0, 5682.0 (number of hits: 5)
27	5280	9	1	333	1	5526.0, 5356.0, 5345.0, 5712.0, 5501.0, 5404.0, 5361.0, 5576.0, 5694.0, 5706.0, 5475.0, 5558.0, 5605.0, 5379.0, 5316.0, 5351.0, 5469.0, 5525.0, 5389.0, 5434.0, 5329.0, 5438.0, 5378.0, 5631.0, 5581.0, 5639.0, 5407.0, 5458.0, 5497.0, 5350.0, 5510.0, 5374.0, 5499.0, 5403.0, 5448.0, 5312.0, 5597.0, 5344.0, 5611.0, 5401.0, 5562.0, 5544.0, 5398.0, 5646.0, 5664.0, 5263.0, 5313.0, 5409.0, 5373.0, 5342.0, 5275.0, 5649.0, 5482.0, 5657.0, 5311.0, 5325.0, 5502.0, 5559.0, 5447.0, 5254.0,

						5520.0, 5266.0, 5676.0, 5653.0, 5349.0, 5250.0, 5368.0, 5486.0, 5541.0, 5432.0, 5675.0, 5618.0, 5684.0, 5517.0, 5446.0, 5394.0, 5464.0, 5470.0, 5600.0, 5360.0, 5367.0, 5647.0, 5420.0, 5273.0, 5606.0, 5625.0, 5288.0, 5467.0, 5308.0, 5589.0, 5682.0, 5324.0, 5722.0, 5466.0, 5400.0, 5701.0, 5628.0, 5683.0, 5303.0, 5453.0 (number of hits: 3)
28	5280	9	1	333	1	5571.0, 5394.0, 5388.0, 5582.0, 5341.0, 5282.0, 5464.0, 5430.0, 5599.0, 5578.0, 5663.0, 5635.0, 5488.0, 5695.0, 5465.0, 5650.0, 5318.0, 5554.0, 5272.0, 5588.0, 5392.0, 5445.0, 5613.0, 5489.0, 5699.0, 5648.0, 5407.0, 5378.0, 5372.0, 5280.0, 5518.0, 5592.0, 5411.0, 5427.0, 5463.0, 5455.0, 5431.0, 5504.0, 5433.0, 5380.0, 5669.0, 5467.0, 5528.0, 5334.0, 5264.0, 5268.0, 5311.0, 5416.0, 5662.0, 5403.0, 5492.0, 5636.0, 5377.0, 5692.0, 5685.0, 5667.0, 5508.0, 5315.0, 5688.0, 5413.0, 5526.0, 5330.0, 5476.0, 5258.0, 5603.0, 5349.0, 5525.0, 5516.0, 5704.0, 5506.0, 5370.0, 5451.0, 5696.0, 5373.0, 5560.0, 5686.0, 5689.0, 5715.0, 5494.0, 5348.0, 5529.0, 5619.0, 5363.0, 5350.0, 5657.0, 5444.0, 5419.0, 5414.0, 5274.0, 5531.0, 5544.0, 5344.0, 5313.0, 5300.0, 5553.0, 5399.0, 5521.0, 5539.0, 5439.0, 5697.0 (number of hits: 4)
29	5280	9	1	333	1	5545.0, 5587.0, 5527.0, 5621.0, 5561.0, 5496.0, 5322.0, 5495.0, 5318.0, 5579.0, 5563.0, 5640.0, 5540.0, 5288.0, 5298.0, 5691.0, 5379.0, 5314.0, 5574.0, 5427.0, 5408.0, 5542.0, 5284.0, 5600.0, 5421.0, 5343.0, 5424.0, 5445.0, 5680.0, 5462.0, 5468.0, 5702.0, 5518.0, 5384.0, 5392.0, 5290.0, 5523.0, 5705.0, 5720.0, 5326.0, 5458.0, 5497.0, 5524.0, 5464.0, 5541.0, 5599.0, 5264.0, 5655.0, 5270.0, 5560.0, 5340.0, 5601.0, 5272.0, 5357.0, 5477.0, 5605.0, 5433.0, 5275.0, 5304.0, 5432.0, 5582.0, 5607.0, 5695.0, 5629.0, 5369.0, 5449.0, 5619.0, 5434.0, 5652.0, 5700.0, 5472.0, 5260.0, 5345.0, 5675.0, 5618.0, 5393.0, 5429.0, 5289.0, 5378.0, 5648.0, 5707.0, 5543.0, 5533.0, 5312.0, 5370.0, 5403.0, 5509.0, 5505.0, 5718.0, 5544.0, 5614.0, 5684.0, 5358.0, 5323.0, 5517.0, 5660.0, 5367.0, 5572.0, 5365.0, 5681.0 (number of hits: 6)
30	5280	9	1	333	1	5327.0, 5490.0, 5671.0, 5649.0, 5566.0, 5466.0, 5311.0, 5454.0, 5667.0, 5397.0, 5513.0, 5421.0, 5320.0, 5606.0, 5279.0, 5413.0, 5518.0, 5386.0, 5540.0, 5389.0, 5263.0, 5398.0, 5356.0, 5416.0, 5377.0, 5688.0, 5366.0, 5505.0, 5287.0, 5659.0, 5422.0, 5410.0, 5261.0, 5301.0, 5392.0, 5474.0, 5580.0, 5409.0, 5714.0, 5702.0,

						5441.0, 5318.0, 5447.0, 5494.0, 5651.0, 5603.0, 5706.0, 5412.0, 5579.0, 5527.0, 5322.0, 5393.0, 5417.0, 5486.0, 5357.0, 5660.0, 5360.0, 5349.0, 5338.0, 5484.0, 5511.0, 5572.0, 5272.0, 5351.0, 5258.0, 5607.0, 5407.0, 5586.0, 5342.0, 5405.0, 5313.0, 5641.0, 5317.0, 5591.0, 5602.0, 5265.0, 5617.0, 5414.0, 5388.0, 5632.0, 5330.0, 5665.0, 5502.0, 5354.0, 5589.0, 5627.0, 5390.0, 5535.0, 5568.0, 5720.0, 5254.0, 5310.0, 5668.0, 5404.0, 5638.0, 5677.0, 5707.0, 5467.0, 5681.0, 5251.0 (number of hits: 3)

9.4 5270 MHz Bandwidth 40 MHz Statistical Performance

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	5280	27	4.9	159	1
2	5280	23	1.8	179	1
3	5280	23	2.4	227	1
4	5280	24	2.9	171	1
5	5280	29	2.2	210	1
6	5280	29	4.6	180	1
7	5280	25	2.3	170	1
8	5280	29	3.9	163	1
9	5280	29	4.5	228	1
10	5280	23	3.6	179	1
11	5280	25	2.8	174	1
12	5280	29	1.8	187	1
13	5280	24	2.2	209	1
14	5280	28	1.3	179	1
15	5280	24	4.2	185	1
16	5280	23	1.7	187	1
17	5280	25	4.9	230	1
18	5280	27	4.9	218	1
19	5280	29	4.7	164	1
20	5280	24	1.7	226	1
21	5280	24	1	230	1
22	5280	28	4.4	211	1
23	5280	25	3.1	211	1
24	5280	28	1.4	226	1
25	5280	28	3.8	158	1
26	5280	25	2.6	167	1
27	5280	23	1.5	197	1
28	5280	27	2.3	173	1
29	5280	26	4.3	215	1
30	5280	29	2.1	215	1
Detection Percentage: 100 % (>60%)					

Table-3 Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5280	16	7.7	499	1
2	5280	16	9.5	348	1
3	5280	18	6.9	366	1
4	5280	18	8.5	231	1
5	5280	17	6.5	286	1
6	5280	16	7.5	446	1
7	5280	16	6.7	450	1
8	5280	16	9.5	463	1
9	5280	16	9.1	492	1
10	5280	18	6.2	286	1
11	5280	17	6.9	368	1
12	5280	18	8.5	416	1
13	5280	16	7.7	295	1
14	5280	17	7.6	201	1
15	5280	16	7.2	464	1
16	5280	18	7.9	499	1
17	5280	17	9.5	385	1
18	5280	18	6.5	412	1
19	5280	16	6.3	299	1
20	5280	16	7.1	324	1
21	5280	18	9.8	426	1
22	5280	18	9.8	491	1
23	5280	18	7.2	241	1
24	5280	16	9.4	259	1
25	5280	17	8.1	298	1
26	5280	17	6.8	249	1
27	5280	18	6	427	1
28	5280	17	8.4	248	1
29	5280	18	6.9	489	1
30	5280	18	8.7	286	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	13	19	205	1
2	5280	14	17.8	390	1
3	5280	12	11.3	419	1
4	5280	12	14.7	355	1
5	5280	13	17.7	319	1
6	5280	16	13.9	442	1
7	5280	12	19.8	371	1
8	5280	15	14.6	335	1
9	5280	16	14.6	361	1
10	5280	13	12.4	395	1
11	5280	16	19.9	236	1
12	5280	13	15.6	343	1
13	5280	15	18.2	333	1
14	5280	13	17.2	304	1
15	5280	12	19.3	203	1
16	5280	12	11	342	1
17	5280	15	17	231	1
18	5280	12	18.5	204	1
19	5280	15	19.5	255	1
20	5280	13	16.4	426	1
21	5280	14	14.2	466	1
22	5280	12	16.2	391	1
23	5280	14	15.9	372	1
24	5280	14	15.7	252	1
25	5280	13	15	426	1
26	5280	12	18.5	466	1
27	5280	15	13.7	426	1
28	5280	15	14.2	399	1
29	5280	14	19.9	372	1
30	5280	13	15.5	373	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	13	55.6	1600	1838	0.430085	
1	2	14	99.5	1554		1.531347	
2	1	17	94.6			2.357639	
3	3	13	96.7	1655	1597	3.036127	
4	2	7	75.4	1382		3.579857	
5	1	6	58.1			4.367316	
6	1	20	52.8			5.027798	
7	3	13	94	1021	1114	5.683439	1
8	1	17	70.2			6.716771	
9	1	15	72.9			7.696328	
10	3	11	85.9	1530	1367	8.586671	
11	3	15	93.7	1793	1482	8.857029	
13	2	20	77.1	1491		9.856296	
14	2	12	84.4	1438		10.56156	
15	1	13	56.7			11.62272	

Bin5 Statistics 2

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	16	63.5	1606		0.304641	
1	2	11	81.1	1795		1.36894	
2	3	10	58.2	1771	1362	1.443879	
3	2	16	81	1008		2.718486	
4	3	20	95.4	1520	1423	3.358731	
5	3	20	82	1089	1858	3.699065	
6	2	14	89.9	1335		4.747411	
7	2	17	59.3	1278		5.464384	
8	2	6	95	1801		5.694381	1
9	1	6	69.8			6.887499	
10	1	11	56.2			7.065127	
11	2	8	63.2	1527		7.816524	
12	1	17	77.3			8.804351	
13	2	7	62.4	1868		9.309463	
14	2	8	94.9	1563		10.22733	
15	1	15	96.3			10.9226	
16	2	16	70.4	1261		11.64584	

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	18	79.4	1580		0.324389	1
1	3	20	92.9	1157	1747	1.235871	
2	2	9	58.5	1031		1.92621	
3	3	9	74.4	1058	1763	3.281467	
4	2	11	72.5	1508		3.973169	
5	3	9	53.9	1735	1771	4.348149	
6	1	12	54.8			5.374426	
7	3	10	68.7	1655	1177	6.263515	
8	1	6	74.2			7.192736	
9	1	7	52.5			8.429508	
10	1	6	68.2			8.950241	
11	1	17	72.2			10.23757	
12	2	17	65	1569		11.07144	
13	2	14	60.8	1214		11.85385	

Bin5 Statistics 4

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	11	98.7	1755		0.040926	1
1	2	14	56.8	1451		1.150084	
2	2	10	96.6	1239		1.530837	
3	2	7	92.7	1610		2.116402	
4	3	11	94.8	1435	1495	3.229366	
5	2	17	51.2	1666		3.560916	
6	1	12	75			4.172872	
7	2	10	69.9	1196		4.841231	
8	1	15	76.6			5.449449	
9	2	11	84.1	1267		6.176934	
10	2	15	61.6	1534		6.948491	
11	3	17	64.1	1886	1888	7.910324	
12	3	18	69.9	1062	1925	8.599412	
13	3	12	57.7	1768	1764	8.72118	
14	1	9	85.8			9.813161	
15	2	17	65	1844		10.40982	
16	3	20	96.5	1176	1216	11.14206	
17	2	7	65.9	1997		11.45934	

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	11	80.1	1386		0.525633	1
1	1	12	88.3			1.735707	
2	2	17	70.6	1968		2.851217	
3	1	19	87.7			3.887583	
4	2	7	91.3	1374		4.143589	
5	2	18	57.7	1366		5.262428	
6	1	12	77.4			6.238948	
7	2	8	75.2	1966		7.504094	
8	1	11	93			8.947139	
9	2	17	69.2	1177		9.57855	
10	1	5	58			10.47994	
11	3	17	70.5	1291	1689	11.72742	

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	13	98.9	1454		0.885648	1
1	2	20	76.5	1887		1.986599	
2	2	18	71.3	1950		2.103417	
3	3	6	72.8	1669	1923	3.963313	
4	2	6	63.2	1605		4.647536	
5	2	16	65.9	1385		5.110585	
6	1	12	66.7			6.383716	
7	2	17	86.8	1791		7.849924	
8	2	10	85.3	1581		8.29535	
9	2	6	92.1	1605		9.332482	
10	1	6	80.4			10.81801	
11	2	16	78.8	1381		11.77524	

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	8	88.9	1434	1144	0.712102	
1	2	9	59.4	1955		1.459805	
2	2	12	83.6	1135		1.796484	
3	2	13	91.3	1221		2.745958	
4	1	13	95.1			3.429455	
5	2	13	69.9	1835		4.532572	
6	2	9	66.5	1635		5.406598	1
7	3	18	98.4	1834	1628	6.168574	
8	2	12	84.2	1694		7.370895	
9	2	8	63.8	1609		8.05314	
10	1	19	71.4			8.862032	
11	1	20	92.8			9.452121	
12	3	5	81.6	1858	1006	11.1155	
13	3	15	75	1264	1709	11.57232	

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	8	98.4	1801	1084	0.157865	
1	1	15	60.8			1.815321	
2	2	8	88	1024		3.045446	
3	2	12	86.3	1746		3.480513	
4	3	14	50.9	1141	1914	4.91681	
5	3	17	92.1	1120	1213	6.197616	1
6	3	9	72	1597	1475	7.451004	
7	2	15	92.8	1189		7.638694	
8	2	14	73.7	1182		9.034866	
9	3	18	99	1348	1825	10.33495	
10	2	5	91.3	1669		11.52799	

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	1	19	76.6			0.219876	
1	1	6	56.2			1.228326	
2	1	12	62.6			1.911461	
3	3	12	68.3	1084	1650	2.274829	
4	2	7	99.6	1027		3.321047	
5	2	11	86.1	1903		3.855	
6	2	18	85.5	1857		5.157239	
7	3	17	73.5	1628	1186	5.901645	1
8	2	20	60.8	1872		6.339651	
9	2	19	95.2	1073		7.264524	
10	3	19	85.9	1904	1138	8.187275	
11	3	16	64.3	1457	1815	8.403921	
12	3	14	90.9	1291	1852	9.525965	
13	2	19	63.5	1979		10.42853	
14	3	9	64.7	1880	1781	10.68821	
15	1	18	79			11.93123	

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	18	54.8	1764	1363	0.01995	
1	2	9	95	1022		1.694946	
2	3	14	51.3	1505	1680	2.526111	
3	2	9	73.1	1665		2.838884	
4	1	16	84.6			4.458871	
5	1	18	54.2			5.081536	
6	1	14	80.1			6.209698	1
7	3	17	68.7	1240	1789	6.555622	
8	1	10	51.2			7.960605	
9	3	11	62.2	1220	1061	8.752794	
10	3	13	64.2	1185	1805	9.893937	
11	1	8	66			11.03391	
12	3	12	78.6	1392	1528	11.63765	

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	13	61.8	1959	1127	0.326389	
1	2	14	63	1243		1.18727	
2	2	13	60.1	1523		1.964239	
3	2	5	61.4	1413		2.692335	
4	2	16	72.5	1957		3.694013	
5	2	17	57.1	1586		4.199087	
6	1	13	83.9			5.229528	
7	2	17	60.1	1266		5.514389	
8	2	10	72.8	1851		6.598542	1
9	1	11	73.6			7.26798	
10	1	10	67.1			7.812737	
11	1	8	70.5			8.450908	
12	2	6	64.4	1268		9.596907	
13	2	8	65.4	1621		9.879582	
14	2	15	81.5	1983		10.63859	
15	2	15	91	1705		11.63342	

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	1	9	69.2			0.33325	
1	2	10	85.9	1284		1.119472	
2	3	12	65.8	1839	1444	1.752085	
3	2	9	63.1	1403		3.049229	
4	2	16	67.2	1679		4.171276	
5	3	18	81.4	1324	1755	4.463393	
6	2	9	98	1618		5.624904	
7	1	16	52.2			6.711674	1
8	2	11	86.6	1094		7.000257	
9	2	15	93.2	1948		8.519652	
10	1	15	91.4			8.851426	
11	3	9	79.1	1528	1598	9.904169	
12	1	15	91			10.3107	
13	2	20	65.8	1103		11.21117	

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	5	69.9	1293		0.832172	1
1	2	12	87.3	1193		1.086363	
2	3	18	81.7	1501	1598	2.903412	
3	1	19	55.1			3.246769	
4	2	8	66.2	1388		4.951986	
5	1	12	67			5.763874	
6	2	5	50.5	1474		6.168533	
7	3	6	57.3	1992	1018	7.245169	
8	1	16	80.9			8.336339	
9	3	16	62.7	1130	1448	9.549958	
10	1	7	82.1			10.84453	
11	1	10	86.9			11.64491	

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	11	62.9	1277		1.200406	1
1	2	14	95.9	1932		2.459711	
2	2	6	99.8	1822		2.83476	
3	1	7	64.5			5.024607	
4	2	15	61.1	1991		5.397158	
5	2	16	85.8	1605		7.92746	
6	2	11	69.2	1825		8.674302	
7	2	13	66.5	1283		10.40797	
8	3	11	88	1028	1529	11.25396	

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	11	60.8	1071	1628	0.379267	1
1	3	18	58.8	1048	1602	1.022362	
2	3	14	56.3	1285	1368	1.654729	
3	3	10	73.2	1461	1523	2.352794	
4	3	11	90.9	1251	1668	3.031071	
5	2	14	97.9	1079		3.719593	
6	2	14	52.4	1940		4.640908	
7	1	13	59.5			5.037386	
8	2	18	52.8	1909		5.781635	
9	2	9	66.5	1469		6.972035	
10	2	8	80.4	1123		7.67086	
11	1	5	80.2			8.157587	
12	3	13	59.1	1364	1055	8.923599	
13	1	17	67.9			9.591567	
14	2	12	82.5	1779		10.01508	
15	2	18	71.5	1228		11.15649	
16	3	9	73.1	1767	1037	11.57967	

Bin5 Statistics 16

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	14	68.8			0.013987	1
1	2	18	89.1	1139		1.992894	
2	2	8	56.6	1714		2.653408	
3	2	15	81.9	1892		3.972922	
4	1	13	91.5			4.295963	
5	2	13	74.1	1273		5.852226	
6	1	20	62.2			6.822291	
7	2	7	51.6	1630		7.932528	
8	2	14	53.1	1337		8.106045	
9	1	6	91.2			9.478208	
10	3	13	92.9	1895	1315	10.64273	
11	2	16	54.2	1411		11.44803	

Bin5 Statistics 17

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	18	87.9			0.517596	
1	3	8	50.3	1917	1311	0.948624	
2	1	14	59.3			1.514059	
3	3	15	71.1	1387	1194	2.129214	
4	3	6	60.2	1577	1941	2.943794	
5	3	16	70.6	1787	1102	3.670989	
6	2	18	89.1	1080		4.05731	
7	2	5	83.4	1300		4.538885	
8	2	10	74	1550		5.107345	
9	3	9	58.7	1903	1387	5.757819	1
10	2	14	81.5	1605		6.32698	
11	3	17	62.6	1286	1110	7.046514	
12	3	19	90.6	1084	1522	8.05091	
13	2	18	66.5	1587		8.362142	
14	2	7	58.6	1392		9.444162	
15	2	16	66.8	1390		9.76674	
16	2	17	94	1092		10.69696	
17	2	15	98.6	1792		11.07565	
18	3	8	57.9	1931	1536	11.81051	

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	94.2	1423		0.685524	
1	2	17	63.9	1156		1.224827	
2	2	19	92.4	1366		1.958747	
3	2	20	80.4	1168		2.339889	
4	2	12	87.1	1631		3.44021	
5	2	11	68.6	1574		4.014927	
6	2	8	81.6	1474		4.870749	
7	3	14	62.7	1818	1855	5.157298	
8	2	10	92.8	1456		5.788398	1
9	1	15	53.3			7.047121	
10	2	19	84.6	1009		7.475045	
11	1	10	52.9			7.902251	
12	2	18	83.2	1400		8.836866	
13	2	10	70.2	1282		9.61385	
14	2	9	98.7	1986		10.07392	
15	2	8	84.8	1519		10.94766	
16	3	5	58.1	1528	1542	11.44129	

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	15	70.6	1975	1470	0.680811	
1	3	12	57.2	1765	1885	1.112353	
2	3	16	71.8	1065	1771	2.097533	
3	1	16	74			2.679269	
4	3	13	75.8	1318	1930	3.029498	
5	2	10	86.2	1112		4.056551	
6	1	14	68.4			4.76796	
7	2	20	74.5	1563		5.630753	
8	1	10	69.3			6.103764	1
9	2	19	58.6	1545		6.664183	
10	3	12	92.3	1283	1899	7.494873	
11	2	16	92.8	1344		8.106421	
12	3	7	80.8	1535	1097	8.997494	
13	3	12	64.6	1051	1967	9.318348	
14	3	13	50.1	1791	1812	10.29215	
15	3	13	81.4	1479	1229	10.73437	
16	3	10	97.4	1415	1488	11.59406	

Bin5 Statistics 20

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	10	68.5	1180		0.680973	
1	2	17	66.6	1425		1.611763	
2	2	17	58.9	1789		1.855359	
3	3	7	98.1	1653	1504	3.369211	
4	3	15	67.2	1512	1061	4.491294	
5	3	20	61.9	1352	1268	5.280493	
6	2	16	71.5	1612		6.306051	1
7	2	9	52.8	1728		7.234957	
8	3	6	95.4	1360	1755	8.006875	
	2	20	79.4	1679		9.140098	
	2	11	97.2	1419		9.756173	
9	2	17	62.2	1785		10.62976	
10	2	14	77	1852		11.7278	

Bin5 Statistics 21

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	19	82.7			0.266745	
1	1	17	57.9			0.901303	
2	1	7	62.6			1.94833	
3	3	16	54	1595	1323	2.500794	
4	3	10	80	1900	1172	3.318086	
5	1	17	61.7			3.562206	
6	3	6	55.6	1927	1059	4.563772	
7	2	14	70.1	1079		5.026637	
8	2	19	51.9	1175		6.275078	1
9	2	6	51.7	1517		6.36488	
10	2	11	79.7	1805		7.319695	
11	1	11	68.1			7.957411	
12	2	6	86.1	1958		8.964035	
13	3	16	86.5	1624	1292	9.232081	
14	2	11	78.4	1416		10.17133	
15	3	16	62.8	1204	1722	11.09216	
16	2	19	81.9	1784		11.63085	

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	5	55.8			0.383597	1
1	2	14	96.4	1420		0.870159	
2	2	14	79.6	1749		2.088937	
3	3	7	71.9	1307	1037	2.778334	
4	2	19	71	1102		3.189859	
5	2	10	92.1	1062		4.429249	
6	2	13	70.3	1136		4.977901	
7	2	8	88.5	1798		5.810937	
8	2	9	80.4	1339		6.548349	
9	2	9	67.1	1717		6.870791	
10	1	5	82.3			8.03529	
11	2	13	73.6	1859		8.799069	
12	1	11	71.2			9.023317	
13	1	10	56.2			10.47645	
14	2	19	83.8	1128		11.09113	
15	2	14	68.8	1681		11.38433	

Bin5 Statistics 23

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	8	83.3	1825		0.265747	
1	1	8	89.6			1.267744	
2	2	19	70.3	1263		2.414932	
3	2	14	58.7	1291		3.570862	
4	3	8	95	1502	1238	4.342909	
5	2	17	84	1551		5.102378	
6	2	14	74.8	1160		6.320794	
7	3	19	66.3	1645	1020	7.371117	
8	2	8	85.7	1035		7.422506	
9							1
10							
11							
12							
13							
14	2	19	69.6	1769		8.828871	
15	2	18	86.7	1524		9.329422	
16	1	10	64.3			10.56776	
17	2	15	53.1	1136		11.5583	

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	3	10	91.7	1583	1769	0.025453	1
1	2	7	62.2	1370		0.884431	
2	3	18	63.2	1036	1326	1.595581	
3	2	13	63.4	1730		2.445554	
4	2	5	98.1	1257		3.119236	
5	2	9	80	1093		4.385122	
6	2	10	71	1979		4.759647	
7	2	8	55.1	1777		5.846259	
8	3	12	97.7	1577	1340	6.510182	
9	3	19	84.6	1447	1919	6.816549	
10	3	19	64.8	1360	1567	8.071728	
11	2	10	65.1	1434		8.803133	
12	2	5	64.8	1315		9.483604	
13	3	5	77.6	1288	1776	10.39778	
14	3	19	70.3	1682	1894	10.50379	
15	2	6	80	1385		11.34795	

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	5	75.5	1527		0.751535	1
1	1	16	82			1.25044	
2	2	9	96.1	1003		2.49017	
3	1	16	67.9			2.876575	
4	3	6	54.5	1771	1537	4.127856	
5	1	10	65.3			4.386048	
6	2	18	87.5	1638		5.381712	
7	3	11	59.6	1569	1939	6.075488	
8	2	16	98.3	1131		7.634328	
9	1	11	62.7			8.002751	
10	1	20	61.6			8.968129	
11	1	19	59.4			9.885693	
12	3	6	91.1	1775	1157	11.11817	
13	2	6	70.1	1685		11.70243	

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	13	65.3	1959	1928	0.818383	1
1	2	7	67.4	1316		1.54046	
2	1	5	52.6			2.802856	
3	3	16	70.9	1399	1898	4.560659	
4	1	17	81.9			5.300988	
5	2	9	99.4	1670		6.873264	
6	2	16	65.3	1657		7.401383	
7	3	15	72.6	1219	1286	9.072685	
8	3	20	53.7	1300	1020	10.28416	
9	3	11	77.5	1132	1314	11.8685	

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	14	92.5	1251		0.373899	1
1	2	13	80.5	1988		0.794671	
2	2	18	52.2	1889		1.684474	
3	2	9	56.4	1545		2.153352	
4	2	14	91.7	1792		2.598655	
5	1	14	80.5			3.48731	
6	3	7	77.5	1744	1792	4.355051	
7	1	8	85.3			4.723328	
8	2	13	65.5	1907		5.374996	
9	1	17	89.8			5.798788	
10	1	8	76.7			6.79205	
11	2	9	61.4	1718		7.217372	
12	2	17	99.2	1224		7.909799	
13	3	15	88.7	1483	1364	8.639202	
14	2	5	81.7	1473		9.46378	
15	2	12	77.2	1740		9.993006	
16	1	15	68.4			10.62416	
17	3	19	57.3	1297	1370	11.32673	
18	2	16	63.5	1029		11.51495	

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	6	83.1	1595		0.573335	1
1	1	19	96.9			1.108401	
2	1	20	99.1			2.079053	
3	2	8	83.5	1348		2.754121	
4	3	16	76.9	1095	1927	3.661073	
5	2	15	66.1	1954		4.766245	
6	3	8	54	1389	1338	5.885446	
7	3	19	71.4	1742	1435	6.673725	
8	1	13	77.7			7.566302	
9	2	8	98.8	1547		7.843191	
10	2	13	88.7	1279		9.018081	
11	1	8	92.1			9.675165	
12	2	11	65.6	1496		10.43831	
13	3	6	78.7	1321	1796	11.68547	

Bin5 Statistics 29

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	20	61.6	1418	1423	0.261789	1
1	3	17	94.9	1896	1152	1.778253	
2	2	10	94.4	1131		2.550997	
3	3	11	94.1	1286	1694	4.255672	
4	1	19	57.6			5.43737	
5	1	20	78			5.96237	
6	2	14	86.8	1438		6.892429	
7	1	11	83.7			8.508157	
8	1	11	90.6			8.826789	
9	1	7	54			10.75956	
10	2	10	56.5	1391		11.16019	

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	18	97.8	1235	1356	0.403874	
1	2	14	56.8	1915		2.462947	
2	1	14	99.9			3.309129	
3	3	18	71.4	1054	1919	5.233327	
4	1	9	89.9			5.455312	1
5	3	10	86.5	1419	1247	7.841127	
6	2	20	98	1712		8.215204	
7	1	19	85.4			10.55746	
8	2	11	83.8	1048		11.21448	

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	5458.0, 5447.0, 5523.0, 5503.0, 5654.0, 5720.0, 5454.0, 5356.0, 5314.0, 5489.0, 5521.0, 5534.0, 5580.0, 5342.0, 5697.0, 5587.0, 5471.0, 5712.0, 5571.0, 5543.0, 5274.0, 5544.0, 5302.0, 5598.0, 5548.0, 5459.0, 5619.0, 5682.0, 5393.0, 5584.0, 5331.0, 5557.0, 5706.0, 5358.0, 5348.0, 5309.0, 5569.0, 5653.0, 5533.0, 5387.0, 5284.0, 5602.0, 5453.0, 5670.0, 5563.0, 5643.0, 5674.0, 5384.0, 5610.0, 5708.0, 5407.0, 5648.0, 5445.0, 5657.0, 5716.0, 5638.0, 5685.0, 5484.0, 5524.0, 5560.0, 5340.0, 5665.0, 5416.0, 5630.0, 5285.0, 5717.0, 5272.0, 5658.0, 5479.0, 5288.0, 5259.0, 5402.0, 5487.0, 5694.0, 5687.0, 5443.0, 5270.0, 5275.0, 5279.0, 5704.0, 5627.0, 5308.0, 5582.0, 5411.0, 5392.0, 5589.0, 5462.0, 5336.0, 5440.0, 5492.0, 5675.0, 5575.0, 5662.0, 5699.0, 5530.0, 5362.0, 5707.0, 5251.0, 5664.0, 5709.0 (number of hits: 10)
2	5270	9	1	333	1	5261.0, 5551.0, 5583.0, 5636.0, 5315.0, 5655.0, 5294.0, 5724.0, 5684.0, 5580.0, 5340.0, 5624.0, 5401.0, 5326.0, 5476.0, 5302.0, 5526.0, 5314.0, 5714.0, 5527.0, 5622.0, 5571.0, 5713.0, 5492.0, 5355.0, 5438.0, 5359.0, 5635.0, 5641.0, 5333.0, 5296.0, 5510.0, 5522.0, 5285.0, 5365.0, 5667.0, 5553.0, 5653.0, 5411.0, 5707.0, 5318.0, 5366.0, 5436.0, 5303.0, 5460.0, 5673.0, 5389.0, 5439.0, 5681.0, 5623.0, 5472.0, 5518.0, 5692.0, 5426.0, 5521.0,

						5288.0, 5711.0, 5609.0, 5341.0, 5491.0, 5442.0, 5664.0, 5410.0, 5280.0, 5587.0, 5317.0, 5446.0, 5400.0, 5614.0, 5440.0, 5484.0, 5558.0, 5391.0, 5576.0, 5716.0, 5616.0, 5299.0, 5577.0, 5281.0, 5295.0, 5267.0, 5253.0, 5563.0, 5350.0, 5319.0, 5639.0, 5266.0, 5423.0, 5369.0, 5654.0, 5657.0, 5529.0, 5469.0, 5396.0, 5591.0, 5325.0, 5373.0, 5337.0, 5486.0, 5575.0 (number of hits: 8)
3	5270	9	1	333	1	5691.0, 5545.0, 5331.0, 5712.0, 5484.0, 5632.0, 5328.0, 5623.0, 5493.0, 5516.0, 5524.0, 5333.0, 5588.0, 5629.0, 5723.0, 5608.0, 5483.0, 5720.0, 5314.0, 5547.0, 5311.0, 5396.0, 5660.0, 5462.0, 5345.0, 5313.0, 5287.0, 5622.0, 5543.0, 5501.0, 5255.0, 5382.0, 5638.0, 5329.0, 5536.0, 5586.0, 5719.0, 5666.0, 5395.0, 5663.0, 5365.0, 5512.0, 5253.0, 5441.0, 5672.0, 5525.0, 5334.0, 5451.0, 5285.0, 5520.0, 5469.0, 5422.0, 5274.0, 5324.0, 5686.0, 5479.0, 5594.0, 5296.0, 5322.0, 5265.0, 5655.0, 5354.0, 5551.0, 5675.0, 5635.0, 5447.0, 5504.0, 5303.0, 5323.0, 5639.0, 5427.0, 5368.0, 5351.0, 5508.0, 5417.0, 5367.0, 5627.0, 5556.0, 5637.0, 5502.0, 5260.0, 5280.0, 5595.0, 5299.0, 5366.0, 5580.0, 5471.0, 5642.0, 5342.0, 5258.0, 5650.0, 5596.0, 5664.0, 5584.0, 5268.0, 5669.0, 5403.0, 5593.0, 5295.0, 5718.0 (number of hits: 10)
4	5270	9	1	333	1	5581.0, 5533.0, 5716.0, 5275.0, 5578.0, 5264.0, 5547.0, 5300.0, 5330.0, 5291.0, 5444.0, 5662.0, 5580.0, 5314.0, 5669.0, 5411.0, 5488.0, 5707.0, 5601.0, 5479.0, 5468.0, 5492.0, 5673.0, 5701.0, 5394.0, 5610.0, 5653.0, 5531.0, 5407.0, 5337.0, 5510.0, 5310.0, 5517.0, 5616.0, 5285.0, 5677.0, 5322.0, 5312.0, 5462.0, 5527.0, 5567.0, 5441.0, 5369.0, 5293.0, 5480.0, 5389.0, 5502.0, 5272.0, 5298.0, 5681.0, 5467.0, 5684.0, 5271.0, 5324.0, 5692.0, 5617.0, 5596.0, 5391.0, 5440.0, 5343.0, 5559.0, 5700.0, 5371.0, 5305.0, 5321.0, 5587.0, 5709.0, 5348.0, 5303.0, 5629.0, 5544.0, 5625.0, 5693.0, 5446.0, 5550.0, 5256.0, 5294.0, 5364.0, 5447.0, 5418.0, 5426.0, 5251.0, 5465.0, 5375.0, 5536.0, 5613.0, 5469.0, 5326.0, 5583.0, 5638.0, 5602.0, 5485.0, 5436.0, 5318.0, 5433.0, 5648.0, 5288.0, 5570.0, 5493.0, 5666.0 (number of hits: 8)
5	5270	9	1	333	1	5341.0, 5611.0, 5665.0, 5306.0, 5283.0, 5510.0, 5480.0, 5711.0, 5339.0, 5616.0, 5450.0, 5606.0, 5686.0, 5396.0, 5488.0, 5502.0, 5523.0, 5327.0, 5535.0, 5374.0, 5315.0, 5454.0, 5368.0, 5378.0, 5681.0, 5400.0, 5612.0, 5540.0, 5317.0, 5427.0, 5436.0, 5370.0, 5648.0, 5313.0, 5687.0,

						5522.0, 5639.0, 5667.0, 5414.0, 5647.0, 5694.0, 5379.0, 5513.0, 5376.0, 5590.0, 5386.0, 5294.0, 5684.0, 5322.0, 5290.0, 5651.0, 5424.0, 5497.0, 5672.0, 5345.0, 5601.0, 5685.0, 5278.0, 5359.0, 5432.0, 5465.0, 5695.0, 5503.0, 5576.0, 5712.0, 5631.0, 5405.0, 5291.0, 5720.0, 5304.0, 5670.0, 5284.0, 5584.0, 5572.0, 5545.0, 5273.0, 5342.0, 5387.0, 5627.0, 5565.0, 5355.0, 5526.0, 5440.0, 5678.0, 5439.0, 5557.0, 5515.0, 5643.0, 5632.0, 5693.0, 5713.0, 5364.0, 5362.0, 5610.0, 5360.0, 5706.0, 5267.0, 5392.0, 5592.0, 5332.0 (number of hits: 6)
6	5270	9	1	333	1	5703.0, 5363.0, 5343.0, 5267.0, 5624.0, 5532.0, 5595.0, 5634.0, 5342.0, 5265.0, 5670.0, 5570.0, 5411.0, 5453.0, 5523.0, 5708.0, 5651.0, 5308.0, 5618.0, 5552.0, 5599.0, 5406.0, 5694.0, 5374.0, 5574.0, 5288.0, 5663.0, 5269.0, 5519.0, 5661.0, 5477.0, 5692.0, 5446.0, 5462.0, 5447.0, 5660.0, 5386.0, 5427.0, 5700.0, 5272.0, 5494.0, 5679.0, 5384.0, 5367.0, 5397.0, 5479.0, 5315.0, 5291.0, 5282.0, 5336.0, 5635.0, 5284.0, 5413.0, 5409.0, 5608.0, 5600.0, 5260.0, 5513.0, 5625.0, 5375.0, 5490.0, 5512.0, 5435.0, 5520.0, 5567.0, 5604.0, 5531.0, 5481.0, 5307.0, 5352.0, 5722.0, 5461.0, 5290.0, 5270.0, 5314.0, 5614.0, 5306.0, 5578.0, 5684.0, 5351.0, 5723.0, 5518.0, 5638.0, 5287.0, 5434.0, 5372.0, 5350.0, 5340.0, 5441.0, 5706.0, 5530.0, 5468.0, 5603.0, 5257.0, 5619.0, 5718.0, 5280.0, 5621.0, 5647.0, 5688.0 (number of hits: 13)
7	5270	9	1	333	1	5369.0, 5718.0, 5343.0, 5698.0, 5406.0, 5396.0, 5463.0, 5524.0, 5605.0, 5714.0, 5398.0, 5261.0, 5560.0, 5546.0, 5586.0, 5483.0, 5574.0, 5439.0, 5255.0, 5629.0, 5575.0, 5446.0, 5345.0, 5616.0, 5554.0, 5292.0, 5270.0, 5423.0, 5520.0, 5351.0, 5656.0, 5413.0, 5487.0, 5381.0, 5622.0, 5361.0, 5297.0, 5706.0, 5609.0, 5372.0, 5307.0, 5669.0, 5281.0, 5317.0, 5631.0, 5331.0, 5536.0, 5291.0, 5712.0, 5472.0, 5522.0, 5289.0, 5571.0, 5655.0, 5283.0, 5275.0, 5451.0, 5678.0, 5416.0, 5674.0, 5640.0, 5544.0, 5582.0, 5541.0, 5296.0, 5334.0, 5374.0, 5721.0, 5516.0, 5389.0, 5634.0, 5513.0, 5320.0, 5355.0, 5274.0, 5426.0, 5695.0, 5470.0, 5506.0, 5687.0, 5627.0, 5604.0, 5612.0, 5328.0, 5658.0, 5453.0, 5373.0, 5568.0, 5393.0, 5532.0, 5432.0, 5454.0, 5700.0, 5603.0, 5388.0, 5683.0, 5659.0, 5696.0, 5400.0, 5628.0 (number of hits: 8)
8	5270	9	1	333	1	5649.0, 5537.0, 5458.0, 5396.0, 5490.0, 5538.0, 5311.0, 5546.0, 5672.0, 5607.0, 5506.0, 5274.0, 5253.0, 5279.0, 5318.0,

						5264.0, 5685.0, 5375.0, 5299.0, 5407.0, 5420.0, 5599.0, 5454.0, 5276.0, 5585.0, 5608.0, 5390.0, 5713.0, 5715.0, 5482.0, 5669.0, 5440.0, 5709.0, 5411.0, 5541.0, 5682.0, 5308.0, 5290.0, 5707.0, 5369.0, 5574.0, 5321.0, 5616.0, 5530.0, 5445.0, 5398.0, 5417.0, 5312.0, 5667.0, 5421.0, 5379.0, 5337.0, 5507.0, 5700.0, 5256.0, 5259.0, 5303.0, 5365.0, 5320.0, 5716.0, 5275.0, 5532.0, 5689.0, 5469.0, 5277.0, 5531.0, 5263.0, 5519.0, 5617.0, 5688.0, 5580.0, 5504.0, 5462.0, 5491.0, 5355.0, 5402.0, 5502.0, 5278.0, 5583.0, 5606.0, 5360.0, 5302.0, 5386.0, 5712.0, 5627.0, 5704.0, 5623.0, 5562.0, 5346.0, 5339.0, 5428.0, 5501.0, 5696.0, 5393.0, 5581.0, 5535.0, 5343.0, 5618.0, 5628.0, 5496.0 (number of hits: 12)
9	5270	9	1	333	1	5677.0, 5515.0, 5361.0, 5675.0, 5281.0, 5550.0, 5504.0, 5374.0, 5700.0, 5625.0, 5364.0, 5356.0, 5595.0, 5324.0, 5348.0, 5602.0, 5636.0, 5378.0, 5388.0, 5611.0, 5574.0, 5279.0, 5718.0, 5510.0, 5455.0, 5311.0, 5505.0, 5295.0, 5711.0, 5601.0, 5461.0, 5687.0, 5616.0, 5357.0, 5308.0, 5328.0, 5459.0, 5723.0, 5684.0, 5578.0, 5579.0, 5405.0, 5665.0, 5449.0, 5396.0, 5722.0, 5394.0, 5507.0, 5511.0, 5270.0, 5318.0, 5416.0, 5628.0, 5627.0, 5322.0, 5331.0, 5446.0, 5556.0, 5463.0, 5551.0, 5502.0, 5676.0, 5694.0, 5485.0, 5612.0, 5509.0, 5582.0, 5465.0, 5592.0, 5572.0, 5496.0, 5637.0, 5413.0, 5613.0, 5452.0, 5419.0, 5520.0, 5591.0, 5530.0, 5670.0, 5336.0, 5679.0, 5421.0, 5495.0, 5325.0, 5630.0, 5508.0, 5645.0, 5445.0, 5263.0, 5669.0, 5280.0, 5564.0, 5425.0, 5283.0, 5654.0, 5631.0, 5708.0, 5353.0, 5586.0 (number of hits: 6)
10	5270	9	1	333	1	5640.0, 5458.0, 5330.0, 5338.0, 5625.0, 5280.0, 5275.0, 5635.0, 5567.0, 5268.0, 5538.0, 5469.0, 5418.0, 5696.0, 5578.0, 5306.0, 5333.0, 5402.0, 5379.0, 5708.0, 5380.0, 5704.0, 5632.0, 5586.0, 5623.0, 5689.0, 5664.0, 5530.0, 5595.0, 5553.0, 5305.0, 5534.0, 5431.0, 5366.0, 5514.0, 5355.0, 5633.0, 5256.0, 5502.0, 5653.0, 5301.0, 5278.0, 5424.0, 5384.0, 5293.0, 5522.0, 5574.0, 5536.0, 5414.0, 5276.0, 5489.0, 5591.0, 5403.0, 5713.0, 5707.0, 5309.0, 5609.0, 5686.0, 5687.0, 5671.0, 5392.0, 5257.0, 5647.0, 5594.0, 5510.0, 5255.0, 5637.0, 5658.0, 5448.0, 5363.0, 5473.0, 5705.0, 5295.0, 5401.0, 5497.0, 5558.0, 5543.0, 5508.0, 5533.0, 5622.0, 5572.0, 5419.0, 5588.0, 5406.0, 5284.0, 5569.0, 5432.0, 5251.0, 5433.0, 5285.0, 5579.0, 5347.0, 5570.0, 5519.0, 5456.0, 5520.0, 5719.0, 5548.0, 5303.0, 5721.0

						(number of hits: 11)
11	5270	9	1	333	1	5261.0, 5399.0, 5435.0, 5507.0, 5557.0, 5462.0, 5281.0, 5657.0, 5550.0, 5481.0, 5365.0, 5703.0, 5538.0, 5371.0, 5437.0, 5362.0, 5453.0, 5573.0, 5646.0, 5584.0, 5585.0, 5396.0, 5341.0, 5506.0, 5315.0, 5499.0, 5302.0, 5672.0, 5356.0, 5564.0, 5330.0, 5622.0, 5340.0, 5678.0, 5326.0, 5468.0, 5535.0, 5344.0, 5397.0, 5530.0, 5594.0, 5325.0, 5688.0, 5596.0, 5558.0, 5679.0, 5440.0, 5615.0, 5716.0, 5391.0, 5485.0, 5644.0, 5554.0, 5613.0, 5670.0, 5263.0, 5636.0, 5664.0, 5469.0, 5513.0, 5427.0, 5294.0, 5642.0, 5304.0, 5406.0, 5409.0, 5710.0, 5269.0, 5621.0, 5504.0, 5459.0, 5511.0, 5614.0, 5680.0, 5472.0, 5311.0, 5348.0, 5301.0, 5571.0, 5561.0, 5681.0, 5370.0, 5497.0, 5318.0, 5682.0, 5404.0, 5402.0, 5694.0, 5659.0, 5684.0, 5721.0, 5265.0, 5653.0, 5591.0, 5617.0, 5502.0, 5381.0, 5258.0, 5295.0, 5421.0 (number of hits: 6)
12	5270	9	1	333	1	5482.0, 5354.0, 5573.0, 5614.0, 5706.0, 5529.0, 5450.0, 5316.0, 5687.0, 5525.0, 5579.0, 5645.0, 5373.0, 5489.0, 5387.0, 5517.0, 5295.0, 5540.0, 5301.0, 5709.0, 5343.0, 5297.0, 5655.0, 5276.0, 5337.0, 5287.0, 5257.0, 5662.0, 5455.0, 5526.0, 5664.0, 5444.0, 5538.0, 5625.0, 5707.0, 5581.0, 5346.0, 5452.0, 5562.0, 5710.0, 5547.0, 5416.0, 5608.0, 5605.0, 5582.0, 5522.0, 5703.0, 5454.0, 5679.0, 5268.0, 5402.0, 5378.0, 5691.0, 5339.0, 5305.0, 5492.0, 5324.0, 5259.0, 5457.0, 5630.0, 5389.0, 5695.0, 5649.0, 5550.0, 5629.0, 5408.0, 5495.0, 5622.0, 5310.0, 5427.0, 5333.0, 5375.0, 5716.0, 5612.0, 5512.0, 5466.0, 5481.0, 5311.0, 5487.0, 5684.0, 5498.0, 5483.0, 5288.0, 5312.0, 5420.0, 5677.0, 5617.0, 5398.0, 5628.0, 5531.0, 5413.0, 5355.0, 5473.0, 5606.0, 5501.0, 5651.0, 5530.0, 5418.0, 5397.0, 5407.0 (number of hits: 6)
13	5270	9	1	333	1	5676.0, 5683.0, 5532.0, 5399.0, 5611.0, 5481.0, 5665.0, 5453.0, 5326.0, 5599.0, 5358.0, 5629.0, 5400.0, 5269.0, 5262.0, 5501.0, 5551.0, 5719.0, 5472.0, 5413.0, 5675.0, 5708.0, 5442.0, 5644.0, 5494.0, 5514.0, 5293.0, 5428.0, 5338.0, 5341.0, 5657.0, 5410.0, 5468.0, 5622.0, 5266.0, 5604.0, 5250.0, 5363.0, 5674.0, 5447.0, 5635.0, 5507.0, 5467.0, 5569.0, 5641.0, 5584.0, 5449.0, 5649.0, 5591.0, 5518.0, 5307.0, 5342.0, 5713.0, 5686.0, 5711.0, 5557.0, 5538.0, 5452.0, 5281.0, 5396.0, 5337.0, 5515.0, 5434.0, 5474.0, 5323.0, 5393.0, 5547.0, 5394.0, 5594.0, 5333.0, 5596.0, 5274.0, 5523.0, 5360.0, 5310.0, 5511.0, 5601.0, 5497.0, 5264.0, 5340.0,

						5687.0, 5648.0, 5673.0, 5647.0, 5475.0, 5632.0, 5504.0, 5502.0, 5548.0, 5566.0, 5556.0, 5369.0, 5680.0, 5484.0, 5608.0, 5403.0, 5427.0, 5350.0, 5330.0, 5521.0 (number of hits: 7)
14	5270	9	1	333	1	5397.0, 5357.0, 5724.0, 5422.0, 5303.0, 5365.0, 5524.0, 5658.0, 5631.0, 5342.0, 5419.0, 5474.0, 5307.0, 5514.0, 5287.0, 5547.0, 5321.0, 5608.0, 5687.0, 5290.0, 5252.0, 5447.0, 5381.0, 5650.0, 5717.0, 5716.0, 5335.0, 5461.0, 5481.0, 5590.0, 5516.0, 5506.0, 5641.0, 5557.0, 5627.0, 5455.0, 5346.0, 5548.0, 5541.0, 5673.0, 5592.0, 5336.0, 5368.0, 5253.0, 5629.0, 5645.0, 5665.0, 5708.0, 5610.0, 5292.0, 5611.0, 5475.0, 5615.0, 5562.0, 5527.0, 5711.0, 5320.0, 5378.0, 5452.0, 5709.0, 5505.0, 5399.0, 5545.0, 5648.0, 5663.0, 5305.0, 5341.0, 5652.0, 5466.0, 5583.0, 5281.0, 5526.0, 5413.0, 5609.0, 5337.0, 5288.0, 5705.0, 5435.0, 5459.0, 5259.0, 5700.0, 5277.0, 5579.0, 5485.0, 5634.0, 5555.0, 5517.0, 5714.0, 5370.0, 5411.0, 5604.0, 5431.0, 5451.0, 5369.0, 5662.0, 5361.0, 5715.0, 5280.0, 5284.0, 5643.0 (number of hits: 10)
15	5270	9	1	333	1	5585.0, 5308.0, 5499.0, 5513.0, 5596.0, 5366.0, 5489.0, 5478.0, 5323.0, 5416.0, 5622.0, 5385.0, 5263.0, 5340.0, 5680.0, 5424.0, 5410.0, 5671.0, 5511.0, 5339.0, 5580.0, 5475.0, 5649.0, 5627.0, 5530.0, 5594.0, 5546.0, 5327.0, 5609.0, 5298.0, 5544.0, 5421.0, 5557.0, 5561.0, 5296.0, 5703.0, 5464.0, 5582.0, 5682.0, 5463.0, 5615.0, 5282.0, 5514.0, 5634.0, 5490.0, 5391.0, 5566.0, 5652.0, 5552.0, 5452.0, 5277.0, 5250.0, 5384.0, 5252.0, 5720.0, 5716.0, 5353.0, 5670.0, 5632.0, 5534.0, 5538.0, 5517.0, 5494.0, 5459.0, 5379.0, 5509.0, 5715.0, 5696.0, 5364.0, 5351.0, 5271.0, 5254.0, 5268.0, 5405.0, 5359.0, 5515.0, 5617.0, 5371.0, 5449.0, 5491.0, 5417.0, 5397.0, 5347.0, 5719.0, 5676.0, 5525.0, 5638.0, 5251.0, 5465.0, 5331.0, 5593.0, 5614.0, 5418.0, 5623.0, 5677.0, 5573.0, 5533.0, 5284.0, 5541.0, 5710.0 (number of hits: 10)
16	5270	9	1	333	1	5720.0, 5601.0, 5719.0, 5708.0, 5315.0, 5272.0, 5324.0, 5261.0, 5426.0, 5314.0, 5393.0, 5267.0, 5263.0, 5611.0, 5668.0, 5544.0, 5370.0, 5264.0, 5613.0, 5596.0, 5360.0, 5705.0, 5277.0, 5688.0, 5579.0, 5487.0, 5395.0, 5661.0, 5475.0, 5550.0, 5300.0, 5282.0, 5479.0, 5569.0, 5685.0, 5667.0, 5454.0, 5285.0, 5589.0, 5662.0, 5411.0, 5490.0, 5516.0, 5397.0, 5629.0, 5656.0, 5283.0, 5532.0, 5635.0, 5621.0, 5665.0, 5576.0, 5503.0, 5597.0, 5333.0, 5461.0, 5472.0, 5305.0, 5512.0, 5459.0,

						5430.0, 5405.0, 5651.0, 5378.0, 5462.0, 5548.0, 5392.0, 5721.0, 5684.0, 5427.0, 5554.0, 5509.0, 5696.0, 5451.0, 5374.0, 5591.0, 5436.0, 5543.0, 5396.0, 5302.0, 5538.0, 5343.0, 5552.0, 5682.0, 5556.0, 5501.0, 5709.0, 5564.0, 5646.0, 5713.0, 5329.0, 5693.0, 5417.0, 5518.0, 5339.0, 5365.0, 5419.0, 5332.0, 5266.0, 5642.0 (number of hits: 10)
17	5270	9	1	333	1	5639.0, 5520.0, 5615.0, 5480.0, 5651.0, 5280.0, 5451.0, 5276.0, 5526.0, 5339.0, 5593.0, 5579.0, 5544.0, 5519.0, 5317.0, 5434.0, 5525.0, 5367.0, 5700.0, 5293.0, 5430.0, 5320.0, 5468.0, 5325.0, 5361.0, 5260.0, 5668.0, 5290.0, 5600.0, 5508.0, 5291.0, 5394.0, 5540.0, 5264.0, 5375.0, 5431.0, 5594.0, 5657.0, 5638.0, 5706.0, 5493.0, 5481.0, 5284.0, 5628.0, 5553.0, 5435.0, 5285.0, 5621.0, 5340.0, 5555.0, 5477.0, 5391.0, 5338.0, 5288.0, 5679.0, 5518.0, 5683.0, 5684.0, 5656.0, 5505.0, 5581.0, 5584.0, 5318.0, 5496.0, 5390.0, 5416.0, 5702.0, 5701.0, 5486.0, 5384.0, 5366.0, 5631.0, 5577.0, 5487.0, 5605.0, 5686.0, 5573.0, 5666.0, 5310.0, 5608.0, 5437.0, 5374.0, 5559.0, 5558.0, 5429.0, 5436.0, 5376.0, 5401.0, 5413.0, 5674.0, 5645.0, 5655.0, 5400.0, 5345.0, 5441.0, 5500.0, 5689.0, 5613.0, 5333.0, 5704.0 (number of hits: 8)
18	5270	9	1	333	1	5295.0, 5535.0, 5572.0, 5649.0, 5676.0, 5384.0, 5414.0, 5300.0, 5721.0, 5470.0, 5393.0, 5304.0, 5517.0, 5390.0, 5620.0, 5695.0, 5643.0, 5270.0, 5359.0, 5636.0, 5518.0, 5466.0, 5255.0, 5254.0, 5648.0, 5651.0, 5287.0, 5576.0, 5722.0, 5327.0, 5716.0, 5674.0, 5277.0, 5320.0, 5709.0, 5400.0, 5526.0, 5485.0, 5685.0, 5624.0, 5292.0, 5574.0, 5494.0, 5259.0, 5596.0, 5458.0, 5251.0, 5692.0, 5657.0, 5507.0, 5550.0, 5312.0, 5455.0, 5418.0, 5560.0, 5694.0, 5317.0, 5437.0, 5545.0, 5391.0, 5465.0, 5559.0, 5632.0, 5684.0, 5608.0, 5502.0, 5510.0, 5445.0, 5365.0, 5575.0, 5513.0, 5666.0, 5404.0, 5496.0, 5705.0, 5706.0, 5379.0, 5561.0, 5310.0, 5355.0, 5532.0, 5407.0, 5529.0, 5508.0, 5487.0, 5682.0, 5297.0, 5450.0, 5637.0, 5439.0, 5451.0, 5655.0, 5322.0, 5700.0, 5464.0, 5476.0, 5719.0, 5281.0, 5314.0, 5646.0 (number of hits: 8)
19	5270	9	1	333	1	5402.0, 5397.0, 5441.0, 5307.0, 5619.0, 5493.0, 5459.0, 5559.0, 5365.0, 5494.0, 5627.0, 5272.0, 5415.0, 5269.0, 5384.0, 5421.0, 5334.0, 5398.0, 5649.0, 5361.0, 5664.0, 5510.0, 5282.0, 5635.0, 5430.0, 5377.0, 5639.0, 5253.0, 5698.0, 5303.0, 5413.0, 5318.0, 5390.0, 5466.0, 5426.0, 5662.0, 5520.0, 5712.0, 5540.0, 5317.0,

						5551.0, 5444.0, 5597.0, 5709.0, 5445.0, 5628.0, 5546.0, 5489.0, 5464.0, 5629.0, 5589.0, 5685.0, 5306.0, 5722.0, 5331.0, 5704.0, 5703.0, 5363.0, 5380.0, 5289.0, 5473.0, 5524.0, 5454.0, 5448.0, 5431.0, 5266.0, 5544.0, 5723.0, 5486.0, 5507.0, 5351.0, 5686.0, 5477.0, 5562.0, 5590.0, 5438.0, 5598.0, 5556.0, 5542.0, 5475.0, 5617.0, 5651.0, 5429.0, 5336.0, 5293.0, 5308.0, 5416.0, 5656.0, 5663.0, 5516.0, 5543.0, 5634.0, 5370.0, 5443.0, 5674.0, 5260.0, 5295.0, 5570.0, 5503.0, 5526.0 (number of hits: 7)
20	5270	9	1	333	1	5469.0, 5445.0, 5684.0, 5583.0, 5334.0, 5477.0, 5450.0, 5701.0, 5537.0, 5377.0, 5570.0, 5463.0, 5440.0, 5719.0, 5429.0, 5347.0, 5263.0, 5504.0, 5715.0, 5261.0, 5502.0, 5485.0, 5459.0, 5680.0, 5268.0, 5343.0, 5321.0, 5669.0, 5647.0, 5594.0, 5527.0, 5262.0, 5283.0, 5522.0, 5338.0, 5376.0, 5573.0, 5481.0, 5333.0, 5430.0, 5414.0, 5493.0, 5632.0, 5521.0, 5670.0, 5546.0, 5272.0, 5323.0, 5542.0, 5258.0, 5470.0, 5590.0, 5620.0, 5342.0, 5643.0, 5623.0, 5523.0, 5335.0, 5681.0, 5671.0, 5436.0, 5365.0, 5520.0, 5641.0, 5560.0, 5514.0, 5672.0, 5720.0, 5498.0, 5458.0, 5531.0, 5393.0, 5526.0, 5582.0, 5505.0, 5341.0, 5271.0, 5534.0, 5461.0, 5660.0, 5589.0, 5540.0, 5716.0, 5378.0, 5667.0, 5705.0, 5406.0, 5678.0, 5275.0, 5692.0, 5634.0, 5702.0, 5543.0, 5624.0, 5289.0, 5267.0, 5618.0, 5635.0, 5471.0, 5278.0 (number of hits: 12)
21	5270	9	1	333	1	5512.0, 5630.0, 5426.0, 5454.0, 5381.0, 5403.0, 5467.0, 5582.0, 5471.0, 5250.0, 5623.0, 5699.0, 5440.0, 5626.0, 5572.0, 5612.0, 5422.0, 5346.0, 5279.0, 5568.0, 5658.0, 5252.0, 5288.0, 5311.0, 5684.0, 5664.0, 5641.0, 5592.0, 5526.0, 5267.0, 5682.0, 5272.0, 5303.0, 5276.0, 5639.0, 5691.0, 5576.0, 5653.0, 5378.0, 5629.0, 5336.0, 5628.0, 5708.0, 5715.0, 5287.0, 5263.0, 5537.0, 5559.0, 5458.0, 5557.0, 5319.0, 5611.0, 5488.0, 5702.0, 5620.0, 5511.0, 5581.0, 5509.0, 5667.0, 5377.0, 5362.0, 5442.0, 5351.0, 5543.0, 5273.0, 5261.0, 5410.0, 5417.0, 5322.0, 5347.0, 5461.0, 5453.0, 5606.0, 5674.0, 5523.0, 5644.0, 5400.0, 5642.0, 5328.0, 5705.0, 5694.0, 5255.0, 5657.0, 5307.0, 5663.0, 5634.0, 5376.0, 5548.0, 5394.0, 5314.0, 5331.0, 5295.0, 5631.0, 5445.0, 5271.0, 5539.0, 5577.0, 5332.0, 5519.0, 5485.0 (number of hits: 13)
22	5270	9	1	333	1	5639.0, 5459.0, 5661.0, 5564.0, 5456.0, 5365.0, 5329.0, 5404.0, 5439.0, 5680.0, 5657.0, 5717.0, 5504.0, 5723.0, 5637.0, 5337.0, 5357.0, 5709.0, 5718.0, 5376.0,

						5392.0, 5342.0, 5288.0, 5291.0, 5458.0, 5398.0, 5662.0, 5336.0, 5355.0, 5475.0, 5358.0, 5370.0, 5543.0, 5251.0, 5389.0, 5324.0, 5258.0, 5557.0, 5465.0, 5290.0, 5430.0, 5693.0, 5497.0, 5300.0, 5539.0, 5574.0, 5552.0, 5562.0, 5575.0, 5536.0, 5676.0, 5315.0, 5375.0, 5466.0, 5261.0, 5277.0, 5631.0, 5341.0, 5550.0, 5498.0, 5626.0, 5333.0, 5414.0, 5491.0, 5511.0, 5694.0, 5448.0, 5590.0, 5386.0, 5356.0, 5463.0, 5387.0, 5566.0, 5537.0, 5530.0, 5535.0, 5383.0, 5281.0, 5547.0, 5510.0, 5441.0, 5272.0, 5617.0, 5304.0, 5629.0, 5660.0, 5582.0, 5571.0, 5270.0, 5627.0, 5344.0, 5274.0, 5433.0, 5495.0, 5335.0, 5407.0, 5432.0, 5641.0, 5600.0, 5549.0 (number of hits: 10)
23	5270	9	1	333	1	5288.0, 5461.0, 5268.0, 5400.0, 5421.0, 5640.0, 5445.0, 5502.0, 5318.0, 5376.0, 5706.0, 5644.0, 5541.0, 5326.0, 5452.0, 5621.0, 5406.0, 5713.0, 5518.0, 5651.0, 5373.0, 5329.0, 5711.0, 5441.0, 5499.0, 5594.0, 5551.0, 5371.0, 5584.0, 5639.0, 5611.0, 5629.0, 5641.0, 5635.0, 5589.0, 5481.0, 5488.0, 5586.0, 5324.0, 5315.0, 5607.0, 5483.0, 5367.0, 5472.0, 5593.0, 5691.0, 5412.0, 5466.0, 5665.0, 5303.0, 5693.0, 5368.0, 5285.0, 5530.0, 5722.0, 5352.0, 5413.0, 5446.0, 5677.0, 5705.0, 5295.0, 5519.0, 5252.0, 5458.0, 5694.0, 5409.0, 5627.0, 5557.0, 5254.0, 5582.0, 5479.0, 5314.0, 5696.0, 5346.0, 5699.0, 5440.0, 5658.0, 5294.0, 5620.0, 5290.0, 5350.0, 5353.0, 5662.0, 5523.0, 5372.0, 5405.0, 5513.0, 5428.0, 5468.0, 5509.0, 5383.0, 5650.0, 5719.0, 5616.0, 5495.0, 5491.0, 5265.0, 5707.0, 5559.0, 5365.0 (number of hits: 7)
24	5270	9	1	333	1	5478.0, 5418.0, 5551.0, 5556.0, 5330.0, 5696.0, 5605.0, 5691.0, 5258.0, 5440.0, 5523.0, 5639.0, 5489.0, 5697.0, 5708.0, 5308.0, 5251.0, 5394.0, 5371.0, 5480.0, 5288.0, 5304.0, 5452.0, 5391.0, 5426.0, 5353.0, 5554.0, 5381.0, 5617.0, 5370.0, 5410.0, 5259.0, 5560.0, 5644.0, 5318.0, 5316.0, 5442.0, 5544.0, 5404.0, 5461.0, 5477.0, 5347.0, 5321.0, 5695.0, 5487.0, 5522.0, 5356.0, 5397.0, 5405.0, 5499.0, 5622.0, 5599.0, 5690.0, 5459.0, 5396.0, 5434.0, 5276.0, 5473.0, 5319.0, 5290.0, 5614.0, 5377.0, 5575.0, 5378.0, 5280.0, 5619.0, 5634.0, 5358.0, 5398.0, 5642.0, 5578.0, 5419.0, 5675.0, 5543.0, 5340.0, 5513.0, 5266.0, 5498.0, 5424.0, 5390.0, 5625.0, 5279.0, 5448.0, 5455.0, 5399.0, 5722.0, 5363.0, 5586.0, 5505.0, 5364.0, 5529.0, 5435.0, 5657.0, 5407.0, 5389.0, 5679.0, 5302.0, 5667.0, 5626.0, 5526.0 (number of hits: 9)

25	5270	9	1	333	1	5684.0, 5466.0, 5377.0, 5592.0, 5477.0, 5294.0, 5646.0, 5300.0, 5606.0, 5679.0, 5711.0, 5675.0, 5420.0, 5364.0, 5363.0, 5347.0, 5591.0, 5457.0, 5623.0, 5554.0, 5332.0, 5395.0, 5483.0, 5531.0, 5381.0, 5579.0, 5367.0, 5682.0, 5615.0, 5708.0, 5337.0, 5482.0, 5401.0, 5333.0, 5411.0, 5505.0, 5339.0, 5352.0, 5416.0, 5365.0, 5318.0, 5510.0, 5491.0, 5314.0, 5459.0, 5628.0, 5374.0, 5720.0, 5406.0, 5524.0, 5633.0, 5463.0, 5357.0, 5412.0, 5273.0, 5408.0, 5456.0, 5553.0, 5326.0, 5451.0, 5597.0, 5391.0, 5468.0, 5280.0, 5705.0, 5669.0, 5634.0, 5690.0, 5702.0, 5348.0, 5277.0, 5578.0, 5588.0, 5626.0, 5261.0, 5371.0, 5429.0, 5542.0, 5384.0, 5635.0, 5305.0, 5310.0, 5648.0, 5594.0, 5387.0, 5547.0, 5564.0, 5664.0, 5707.0, 5442.0, 5556.0, 5461.0, 5612.0, 5425.0, 5573.0, 5663.0, 5360.0, 5517.0, 5677.0, 5389.0 (number of hits: 4)
26	5270	9	1	333	1	5346.0, 5636.0, 5420.0, 5480.0, 5484.0, 5703.0, 5507.0, 5712.0, 5487.0, 5373.0, 5427.0, 5273.0, 5262.0, 5378.0, 5508.0, 5716.0, 5670.0, 5699.0, 5348.0, 5461.0, 5610.0, 5643.0, 5409.0, 5434.0, 5506.0, 5347.0, 5265.0, 5408.0, 5291.0, 5274.0, 5511.0, 5623.0, 5364.0, 5646.0, 5671.0, 5443.0, 5328.0, 5400.0, 5455.0, 5696.0, 5361.0, 5311.0, 5570.0, 5306.0, 5499.0, 5616.0, 5498.0, 5720.0, 5341.0, 5651.0, 5622.0, 5376.0, 5658.0, 5367.0, 5496.0, 5259.0, 5530.0, 5547.0, 5294.0, 5715.0, 5614.0, 5589.0, 5515.0, 5682.0, 5584.0, 5567.0, 5387.0, 5686.0, 5590.0, 5534.0, 5365.0, 5256.0, 5433.0, 5478.0, 5663.0, 5437.0, 5607.0, 5692.0, 5424.0, 5277.0, 5637.0, 5634.0, 5458.0, 5257.0, 5505.0, 5717.0, 5619.0, 5621.0, 5342.0, 5577.0, 5542.0, 5393.0, 5633.0, 5459.0, 5493.0, 5322.0, 5359.0, 5441.0, 5267.0, 5695.0 (number of hits: 9)
27	5270	9	1	333	1	5441.0, 5355.0, 5581.0, 5386.0, 5350.0, 5714.0, 5361.0, 5434.0, 5644.0, 5583.0, 5646.0, 5404.0, 5462.0, 5288.0, 5659.0, 5364.0, 5476.0, 5319.0, 5685.0, 5373.0, 5257.0, 5641.0, 5704.0, 5486.0, 5301.0, 5594.0, 5520.0, 5377.0, 5665.0, 5406.0, 5609.0, 5336.0, 5552.0, 5598.0, 5464.0, 5295.0, 5528.0, 5563.0, 5419.0, 5586.0, 5423.0, 5353.0, 5514.0, 5322.0, 5467.0, 5611.0, 5596.0, 5332.0, 5456.0, 5297.0, 5687.0, 5498.0, 5674.0, 5675.0, 5503.0, 5623.0, 5453.0, 5413.0, 5438.0, 5661.0, 5268.0, 5473.0, 5381.0, 5529.0, 5422.0, 5605.0, 5519.0, 5532.0, 5561.0, 5550.0, 5260.0, 5566.0, 5252.0, 5631.0, 5483.0, 5478.0, 5505.0, 5457.0, 5651.0, 5392.0, 5559.0, 5610.0, 5316.0, 5618.0, 5451.0,

						5491.0, 5663.0, 5408.0, 5331.0, 5648.0, 5664.0, 5484.0, 5334.0, 5625.0, 5313.0, 5630.0, 5468.0, 5284.0, 5430.0, 5279.0 (number of hits: 7)
28	5270	9	1	333	1	5568.0, 5569.0, 5275.0, 5561.0, 5294.0, 5312.0, 5714.0, 5660.0, 5456.0, 5547.0, 5445.0, 5276.0, 5282.0, 5610.0, 5704.0, 5686.0, 5358.0, 5544.0, 5290.0, 5335.0, 5570.0, 5651.0, 5669.0, 5302.0, 5631.0, 5381.0, 5520.0, 5588.0, 5329.0, 5404.0, 5353.0, 5580.0, 5285.0, 5646.0, 5530.0, 5606.0, 5280.0, 5693.0, 5486.0, 5658.0, 5473.0, 5710.0, 5721.0, 5482.0, 5698.0, 5274.0, 5475.0, 5639.0, 5529.0, 5458.0, 5502.0, 5635.0, 5331.0, 5589.0, 5292.0, 5550.0, 5308.0, 5536.0, 5702.0, 5382.0, 5553.0, 5537.0, 5647.0, 5355.0, 5527.0, 5603.0, 5453.0, 5435.0, 5488.0, 5446.0, 5343.0, 5594.0, 5410.0, 5296.0, 5602.0, 5676.0, 5341.0, 5483.0, 5616.0, 5314.0, 5514.0, 5287.0, 5612.0, 5357.0, 5491.0, 5626.0, 5578.0, 5439.0, 5599.0, 5663.0, 5301.0, 5562.0, 5422.0, 5601.0, 5593.0, 5387.0, 5688.0, 5701.0, 5425.0, 5638.0 (number of hits: 8)
29	5270	9	1	333	1	5557.0, 5618.0, 5514.0, 5432.0, 5445.0, 5686.0, 5405.0, 5431.0, 5283.0, 5407.0, 5392.0, 5705.0, 5263.0, 5390.0, 5683.0, 5365.0, 5336.0, 5556.0, 5500.0, 5481.0, 5359.0, 5659.0, 5467.0, 5404.0, 5290.0, 5614.0, 5415.0, 5708.0, 5255.0, 5478.0, 5378.0, 5335.0, 5304.0, 5374.0, 5256.0, 5592.0, 5609.0, 5394.0, 5293.0, 5427.0, 5257.0, 5286.0, 5357.0, 5362.0, 5490.0, 5692.0, 5398.0, 5722.0, 5575.0, 5593.0, 5679.0, 5641.0, 5528.0, 5273.0, 5653.0, 5275.0, 5287.0, 5428.0, 5408.0, 5380.0, 5570.0, 5634.0, 5441.0, 5625.0, 5656.0, 5487.0, 5284.0, 5709.0, 5562.0, 5306.0, 5299.0, 5550.0, 5543.0, 5538.0, 5349.0, 5413.0, 5295.0, 5640.0, 5636.0, 5513.0, 5358.0, 5329.0, 5666.0, 5512.0, 5470.0, 5630.0, 5281.0, 5323.0, 5633.0, 5321.0, 5385.0, 5317.0, 5591.0, 5334.0, 5628.0, 5610.0, 5342.0, 5694.0, 5624.0, 5451.0 (number of hits: 12)
30	5270	9	1	333	1	5685.0, 5497.0, 5703.0, 5306.0, 5714.0, 5401.0, 5581.0, 5280.0, 5647.0, 5360.0, 5503.0, 5520.0, 5271.0, 5298.0, 5371.0, 5469.0, 5521.0, 5576.0, 5299.0, 5641.0, 5578.0, 5291.0, 5719.0, 5319.0, 5356.0, 5510.0, 5388.0, 5706.0, 5437.0, 5330.0, 5620.0, 5697.0, 5301.0, 5648.0, 5375.0, 5349.0, 5337.0, 5615.0, 5609.0, 5623.0, 5701.0, 5679.0, 5430.0, 5671.0, 5628.0, 5374.0, 5389.0, 5470.0, 5530.0, 5649.0, 5482.0, 5668.0, 5376.0, 5546.0, 5501.0, 5418.0, 5432.0, 5267.0, 5638.0, 5357.0, 5336.0, 5274.0, 5292.0, 5632.0, 5696.0,

						5595.0, 5259.0, 5528.0, 5702.0, 5653.0, 5258.0, 5467.0, 5491.0, 5415.0, 5669.0, 5670.0, 5256.0, 5563.0, 5317.0, 5427.0, 5577.0, 5303.0, 5465.0, 5607.0, 5550.0, 5643.0, 5410.0, 5504.0, 5616.0, 5542.0, 5708.0, 5601.0, 5640.0, 5451.0, 5621.0, 5571.0, 5346.0, 5308.0, 5533.0, 5395.0 (number of hits: 7)

9.5 5580 MHz Bandwidth 20 MHz Statistical Performance

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	1.4	172	1
2	5580	29	4	179	1
3	5580	25	2.1	201	1
4	5580	25	4.1	171	1
5	5580	25	1.1	217	1
6	5580	29	2.7	207	1
7	5580	26	3.6	222	1
8	5580	23	4.3	208	1
9	5580	28	1.1	220	1
10	5580	28	4.3	172	1
11	5580	27	1.7	177	1
12	5580	26	2.3	223	1
13	5580	23	3.1	213	1
14	5580	27	1.8	161	1
15	5580	23	1.7	177	1
16	5580	29	4.1	186	1
17	5580	23	4.3	150	1
18	5580	28	4.7	204	1
19	5580	24	1.6	214	1
20	5580	28	3.5	169	1
21	5580	24	1	219	1
22	5580	23	3	168	1
23	5580	29	4.3	201	1
24	5580	26	1.7	219	1
25	5580	23	2.1	194	1
26	5580	23	3	189	1
27	5580	25	4.2	164	1
28	5580	27	1.4	183	1
29	5580	29	3.9	159	1
30	5580	23	2	168	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	18	8.1	214	1
2	5580	16	6.7	304	1
3	5580	17	9.7	450	1
4	5580	18	8.3	286	1
5	5580	18	7.1	227	1
6	5580	16	9	398	1
7	5580	18	7.8	479	1
8	5580	18	9.3	423	1
9	5580	17	7.1	483	1
10	5580	18	9.7	229	1
11	5580	18	6.9	358	1
12	5580	16	8.6	363	1
13	5580	18	8.9	385	1
14	5580	17	8.6	358	1
15	5580	16	8	473	1
16	5580	16	9.8	440	1
17	5580	17	7.5	308	1
18	5580	16	8.7	236	1
19	5580	16	9.7	463	1
20	5580	16	7.9	488	1
21	5580	16	7.1	203	1
22	5580	18	8.6	238	1
23	5580	17	6.4	346	1
24	5580	16	8.8	486	1
25	5580	16	9.9	244	1
26	5580	18	6.7	247	1
27	5580	18	7	432	1
28	5580	17	8.5	277	1
29	5580	17	8.4	397	1
30	5580	18	8.6	429	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	16	12.8	272	1
2	5580	12	17.7	412	1
3	5580	13	11.8	206	1
4	5580	12	14.4	249	1
5	5580	13	11.1	487	1
6	5580	16	18.6	273	1
7	5580	15	15.6	210	1
8	5580	15	16.4	296	1
9	5580	15	14.1	279	1
10	5580	12	19.1	374	1
11	5580	15	15.4	445	1
12	5580	16	15	421	1
13	5580	16	18	363	1
14	5580	16	11.3	456	1
15	5580	16	18.9	321	1
16	5580	16	16.3	406	1
17	5580	16	17.1	428	1
18	5580	16	11.6	386	1
19	5580	12	20	266	1
20	5580	13	17.6	373	1
21	5580	13	19	472	1
22	5580	15	17.5	274	1
23	5580	12	19.1	218	1
24	5580	14	18.8	418	1
25	5580	12	15	395	1
26	5580	14	14.9	246	1
27	5580	12	12.6	254	1
28	5580	15	14	474	1
29	5580	13	12	275	1
30	5580	12	14.6	269	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	20	92.8	1022	1962	0.214048	
1	2	19	64	1946		1.253679	
2	2	7	96	1380		1.529158	
3	3	19	50.2	1245	1859	2.145966	
4	2	7	60.5	1199		3.478831	
5	2	19	96	1297		3.924785	
6	1	16	79.1			4.468923	
7	3	11	74.9	1008	1902	5.086065	
8	3	18	58.3	1476	1157	5.738198	1
9	2	16	92.7	1878		6.878967	
10	2	11	53	1820		7.363468	
11	3	18	81.1	1909	1942	7.930553	
13	3	10	67.5	1239	1764	8.710505	
14	2	5	93.2	1649		9.697918	
15	1	6	54.2			10.02336	
16	2	11	98.9	1869		11.18954	

Bin5 Statistics 2

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	9	99.5	1679		0.31782	
1	2	13	53.4	1470		1.950742	
2	1	19	51.3			3.012136	
3	1	17	82.9			4.085997	
4	2	19	71.1	1054		4.432355	
5	3	18	99.9	1485	1175	6.036997	1
6	2	19	89.2	1170		7.610841	
7	2	13	70.9	1113		8.294997	
8	1	16	52.5			8.749363	
9	3	14	85.8	1967	1037	10.57723	
10	1	19	88.2			11.84904	

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	10	82.4	1576		0.884804	
1	2	11	83.7	1424		2.059462	
2	2	11	81.4	1286		2.919894	
3	3	18	51.9	1156	1812	4.832633	
4	1	15	62.7			6.236999	1
5	2	8	90.6	1883		6.766177	
6	2	19	73.3	1341		8.992405	
7	2	6	87.6	1180		10.33359	
8	2	16	60.3	1404		11.82006	

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	6	69			0.487055	
1	3	17	53	1170	1748	1.069269	
2	1	5	78.6			1.645006	
3	2	6	51.7	1052		2.875885	
4	2	10	75.3	1606		3.39056	
5	3	15	98.2	1295	1300	4.43479	
6	3	12	77.5	1783	1715	4.648969	
7	2	19	69.5	1672		5.807029	
8	2	14	50.1	1585		6.119129	1
9	3	6	69.3	1738	1200	6.929647	
10	2	12	82.9	1903		7.509479	
11	2	8	92.1	1580		8.454443	
12	2	12	62.4	1877		9.485691	
13	1	17	76.9			9.859563	
14	3	11	69.2	1291	1411	11.15848	
15	2	11	92.8	1256		11.27149	

Bin5 Statistics 5

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	19	99	1709	1804	0.153819	1
1	3	14	89.7	1761	1819	1.266844	
2	2	14	58.6	1098		2.588092	
3	2	13	83.2	1298		4.613071	
4	1	20	76.8			5.650072	
5	1	13	62.1			6.389263	
6	2	15	56.6	1710		7.204853	
7	3	11	53.5	1744	1613	9.25803	
8	1	10	68.2			9.800072	
9	2	16	84.1	1986		10.91719	

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	59.8	1838	1088	0.703254	1
1	1	15	92.8			2.13033	
2	2	8	98	1040		2.931607	
3	2	15	72.8	1337		4.233179	
4	2	5	88.4	1770		5.77587	
5	2	6	91	1366		6.812186	
6	2	11	73.4	1549		8.979505	
7	1	10	68.3			9.368912	
8	2	19	68.8	1625		11.25478	

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	16	76.4	1453	1513	0.46874	
1	2	20	52.4	1465		1.532383	
2	2	16	71.3	1019		2.798139	
3	2	5	99.2	1747		3.816864	
4	2	18	55.2	1299		4.253415	
5	3	10	96.1	1037	1408	5.408705	1
6	2	10	92.2	1024		6.161945	
7	1	19	76.2			7.486496	
8	1	9	52.7			8.217511	
9	2	19	85.5	1241		9.217406	
10	1	10	52.2			10.36712	
11	3	9	59.6	1547	1471	11.09429	

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	15	68.6			0.78831	
1	1	10	58.5			1.514035	
2	1	16	72.1			2.05839	
3	2	16	90.9	1779		2.647261	
4	2	19	83.2	1425		3.87566	
5	2	15	75.5	1118		4.542154	
6	2	12	77.9	1746		5.089355	
7	2	19	59.5	1521		5.67806	1
8	1	14	96.3			6.722069	
9	1	17	86.8			7.328937	
10	3	14	92.8	1233	1591	8.057374	
11	1	17	73.2			8.957182	
12	2	13	83.9	1039		9.878772	
13	2	13	61.2	1705		11.099408	
14	2	13	55.4	1052		11.25673	

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	7	83.9	1424	1669	0.257352	
1	1	17	62.9			2.405762	
2	2	6	66	1130		3.765229	
3	3	6	54.6	1676	1499	4.034795	
4	2	6	95.3	1352		5.359334	1
5	1	6	62.3			6.922244	
6	2	8	60.8	1345		8.30571	
7	1	17	67.2			10.620817	
8	3	18	97.1	1698	1115	11.203536	

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	5	91.5	1665		0.653448	
1	1	20	73			1.388273	
2	3	9	66	1059	1789	1.516734	
3	1	15	59.1			2.903807	
4	2	11	51.1	1973		3.029261	
5	3	9	63.2	1559	1410	3.965498	
6	3	20	74.2	1150	1984	4.950797	
7	3	19	99.2	1094	1077	5.879585	
8	2	20	82.7	1016		6.545365	1
9	3	9	53.8	1420	1696	6.842571	
10	2	7	50.7	1255		7.641482	
11	1	10	68.6			8.446136	
12	2	16	52.9	1790		9.09047	
13	2	16	82.5	1432		10.447188	
14	1	7	92.4			11.002628	
15	1	13	80.4			11.867978	

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	14	85	1628	1253	0.261195	
1	2	12	91.2	1743		0.696533	
2	2	7	71.7	1873		1.727958	
3	2	20	61.4	1678		2.064387	
4	2	14	91.2	1278		2.883276	
5	3	6	54.4	1017	1642	3.655859	
6	1	16	86.7			4.285538	
7	2	6	68.8	1708		5.092155	
8	2	5	71.8	1267		5.440499	
9	1	9	70.3			6.292299	1
10	2	11	82.8	1953		7.116462	
11	1	8	62.6			7.796268	
12	1	7	56.2			8.389574	
13	2	9	61.6	1854		8.698718	
14	2	17	63.6	1391		9.729738	
15	2	14	64.3	1495		10.413561	
16	1	11	88.6			11.085429	
17	1	19	65.4			11.453966	

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	20	86.5	1961		0.929358	
1	1	9	82.1			1.117523	
2	2	7	58.3	1037		2.621239	
3	3	12	69.7	1542	1213	3.444983	
4	3	7	99.2	1748	1608	4.990245	
5	3	18	74.2	1459	1805	6.268517	1
6	1	7	90.2			6.930053	
7	2	6	59.1	1702		8.002935	
8	2	10	65.7	1847		9.473692	
9	2	18	50.2	1408		9.902704	
10	1	15	58.2			11.19224	

Bin5 Statistics 13

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	14	95.4			0.172475	1
1	1	11	76.1			1.097313	
2	2	8	68.1	1852		1.608203	
3	2	19	76.5	1984		2.963808	
4	3	19	51.3	1387	1603	3.300213	
5	3	10	93.4	1264	1532	4.131036	
6	3	6	85.2	1462	1822	4.746345	
7	2	15	88.4	1199		5.475475	
8	3	9	92.7	1513	1313	6.48483	
9	2	11	66.4	1465		7.281963	
10	2	19	80.7	1181		7.757615	
11	1	15	80.9			8.947946	
12	2	10	78	1248		9.012319	
13	2	13	96.1	1485		9.923278	
14	2	19	71.3	1957		10.909961	
15	1	14	98.2			11.409007	

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	16	82	1135		1.06752	1
1	2	7	96.2	1509		2.061496	
2	2	16	64.8	1428		2.640103	
3	3	15	88.6	1595	1287	4.686878	
4	2	16	60.6	1211		5.228256	
5	1	18	85.5			7.048456	
6	2	12	89.1	1827		7.258528	
7	2	15	58.4	1459		9.430392	
8	3	9	90	1570	1965	10.483918	
9	2	17	96.8	1722		11.677477	

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	14	97	1491		0.431418	1
1	3	15	97.5	1251	1174	1.652582	
2	2	14	78.6	1406		2.222353	
3	2	9	88.4	1789		3.526243	
4	2	14	69.2	1956		3.850976	
5	2	17	63.1	1177		4.829388	
6	3	8	94.3	1155	1589	6.138881	
7	3	20	89.4	1306	1566	7.0475	
8	2	15	55.4	1141		7.960083	
9	1	17	93.6			8.319455	
10	1	18	76.4			9.974244	
11	3	13	74.6	1559	1179	10.85493	
12	1	13	71.9			11.254716	

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	51.8	1981		0.716344	1
1	2	7	52.3	1479		1.254704	
2	3	9	63.7	1810	1068	2.51343	
3	1	10	77.9			3.798044	
4	2	11	84.6	1039		4.811321	
5	1	19	70.4			5.300908	
6	1	6	82.1			6.139871	
7	3	12	66.1	1981	1876	7.005865	
8	2	19	55.9	1270		8.444316	
9	3	18	86.9	1746	1953	9.729498	
10	2	7	50.7	1546		10.712797	
11	2	19	85.3	1978		11.548255	

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	11	97.8	1054		0.625866	1
1	1	14	73.9			1.278364	
2	2	10	65.8	1699		2.82588	
3	1	11	64			3.069158	
4	2	8	68.6	1272		4.172465	
5	2	10	55.6	1185		5.370987	
6	3	13	98.3	1721	1184	6.821668	
7	3	13	54.1	1263	1502	7.281396	
8	1	18	84.5			8.789431	
9	1	12	98.4			9.937532	
10	3	6	88.6	1807	1450	10.90934	
11	2	12	66.8	1098		11.482711	

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	68.3	1732	1290	0.349428	1
1	1	11	97.6			1.232446	
2	1	19	95.8			2.065853	
3	2	11	98.1	1039		3.051426	
4	2	9	53.7	1953		4.471642	
5	2	9	75.4	1054		5.447897	
6	3	15	88.7	1804	1886	5.694032	
7	1	14	78.7			7.089909	
8	2	5	82.5	1334		8.240671	
9	1	7	86.8			8.710404	
10	2	17	77.6	1559		9.516458	
11	1	17	65.8			10.931012	
12	3	13	68.3	1959	1964	11.294526	

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	13	67.5	1302		0.597167	
1	2	19	91.3	1004		0.93851	
2	1	13	67.9			2.139299	
3	2	11	98	1270		3.327387	
4	3	14	53.8	1728	1199	4.334685	
5	2	9	60.9	1243		5.517328	
6	2	6	88.6	1271		5.862414	1
7	3	15	98.5	1580	1323	7.141927	
8	3	7	82.5	1760	1868	7.917507	
9	2	14	51.2	1530		8.30779	
10	2	15	51.2	1762		9.890613	
11	1	9	90.1			10.38411	
12	3	14	58.6	1126	1819	11.342841	

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	5	55.5			0.750179	
1	2	15	74.4	1889		1.22231	
2	2	19	70.2	1036		1.895711	
3	1	11	89.3			2.883765	
4	2	5	67.1	1966		3.795003	
5	2	6	86.7	1382		4.630749	
6	2	14	61.9	1556		5.963744	1
7	1	7	59.3			6.269301	
8	1	14	67.1			7.210693	
9	3	13	67	1042	1653	8.192325	
10	2	14	90.5	1162		9.054288	
11	2	13	62.1	1183		10.219065	
12	1	9	80.9			10.929655	

Bin5 Statistics 21

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	17	97.7	1762	1955	0.008981	
1	2	7	74.5	1265		1.407812	
2	3	16	54.4	1782	1436	1.974359	
3	2	7	51.8	1255		2.716005	
4	1	6	62.4			3.369779	
5	3	10	94.6	1759	1136	4.583817	
6	2	15	95.3	1524		5.182632	
7	2	19	93	1899		6.203817	1
8	3	8	97.3	1327	1584	7.056465	
9	2	15	79.8	1112		7.942188	
10	1	20	94.1			8.233043	
11	1	16	59.7			9.51137	
12	1	20	82.2			10.130022	
13	2	13	68.3	1964		10.606642	
14	2	14	92.7	1301		11.273676	

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	18	81	1594		0.099604	
1	1	11	82.6			1.441499	
2	2	19	93.9	1870		2.720822	
3	2	11	75	1470		4.170087	
4	1	16	82.6			5.542552	1
5	3	11	86.5	1835	1352	7.741987	
6	2	19	83.9	1479		9.289047	
7	1	13	61			10.04674	
8	1	5	85.5			11.471077	

Bin5 Statistics 23

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	8	72.1	1642		0.885061	
1	2	11	87.6	1770		1.680909	
2	2	17	100	1163		3.945008	
3	1	14	69.7			4.732349	
4	1	9	87.8			5.650823	1
5	2	14	53.4	1856		6.766079	
6	3	12	88.4	1205	1264	9.064716	
7	2	15	85.5	1249		9.734838	
8	1	10	61.6			10.712096	

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	3	7	55	1288	1642	0.025608	
1	3	7	87.6	1322	1423	0.912668	
2	2	18	53.7	1369		2.126175	
3	2	5	98.3	1104		2.719829	
4	1	18	77.5			3.592972	
5	1	14	82.4			4.261285	
6	2	6	92.3	1522		4.517143	
7	1	12	64.2			5.678431	
8	2	7	72	1260		6.013264	1
9	1	8	94.3			7.465555	
10	2	8	96.4	1153		7.895759	
11	2	6	86.8	1397		8.871794	
12	3	13	65.1	1704	1089	9.721003	
13	2	20	71.4	1451		10.003218	
14	2	12	69.6	1172		10.608094	
15	2	18	86.2	1769		11.305158	

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	17	56.8	1946	1285	0.144583	
1	2	7	63.9	1869		1.80885	
2	2	18	68.9	1686		3.266551	
3	2	11	63.8	1736		5.058609	
4	2	14	98.1	1925		5.634698	1
5	1	18	62.9			7.507827	
6	1	12	70.7			8.813186	
7	2	14	83.4	1978		9.869841	
8	3	18	82.8	1059	1010	11.838555	

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	7	88.5	1501	1557	0.41829	
1	1	12	75.2			1.579108	
2	3	17	85	1360	1143	2.17478	
3	2	12	89.4	1997		2.635082	
4	3	17	87.3	1075	1238	3.846906	
5	2	11	86.2	1060		4.737009	
6	3	6	98.6	1365	1153	5.199584	
7	3	16	77.3	1357	1164	5.684176	1
8	1	16	56.4			6.592589	
9	3	12	82.3	1383	1934	7.386845	
10	2	17	88	1791		8.2678	
11	2	20	84.1	1745		9.551671	
12	3	10	57.4	1515	1943	10.151683	
13	2	8	88.2	1918		10.889183	
14	2	20	82.4	1698		11.678996	

Bin5 Statistics 27

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	7	76.8	1810	1821	0.347599	1
1	1	14	60.9			0.993487	
2	3	7	69.8	1493	1017	1.725646	
3	3	9	64.9	1665	1891	3.142339	
4	3	10	94.3	1912	1866	4.126732	
5	2	7	61.7	1803		4.419009	
6	1	18	94.7			5.325046	
7	1	13	81.6			6.487245	
8	2	6	64.1	1270		6.929809	
9	2	18	63	1145		7.767144	
10	2	20	58.4	1433		9.336813	
11	2	15	86.8	1157		9.886176	
12	1	14	60			10.774489	
13	1	7	92			11.500515	

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	7	75.8			0.247161	1
1	2	10	50.4	1029		1.567841	
2	1	17	72.2			2.137192	
3	2	15	82.3	1331		3.94994	
4	2	18	91.1	1495		4.906509	
5	2	20	59.3	1352		5.791897	
6	1	10	91.9			6.818857	
7	2	7	98.8	1025		7.819571	
8	2	17	57.1	1177		8.34619	
9	1	15	53.4			9.266829	
10	2	9	92.6	1484		10.94635	
11	3	18	59.9	1273	1884	11.92955	

Bin5 Statistics 29

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	6	76.6	1857	1021	0.015966	
1	3	8	86.8	1815	1063	1.407165	
2	2	17	89.7	1801		1.961481	
3	3	12	59.1	1552	1918	2.998162	
4	3	6	62.7	1498	1843	4.241165	
5	2	14	76.8	1974		5.114331	
6	2	18	81.7	1701		5.619847	1
7	3	8	71	1704	1227	6.508549	
8	2	11	71	1819		7.50451	
9	2	10	64.6	1440		7.924523	
10	1	17	92.9			8.871265	
11	2	9	92	1869		9.817575	
12	1	17	78.5			10.77795	
13	1	12	76.3			11.263947	

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	19	55.9	1290		0.347666	
1	1	14	51.7			1.165434	
2	2	15	89.8	1016		1.625238	
3	2	7	91.4	1875		1.899699	
4	2	19	60.7	1053		2.929291	
5	2	13	96.4	1975		3.487495	
6	2	13	99	1810		3.983608	
7	1	11	84.1			4.780061	
8	2	13	81	1827		5.356067	
9	1	12	95.2			5.540219	1
10	2	12	58	1517		6.511762	
11	2	7	58.3	1914		6.901859	
12	3	9	57.6	1776	1312	7.358617	
13	2	19	57.5	1746		7.99729	
14	3	13	64.5	1253	1917	8.541469	
15	3	20	99.7	1415	1514	9.173731	
16	3	10	78.3	1832	1927	9.682482	
17	1	6	69.3			10.615611	
18	2	14	56.6	1087		11.292212	

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	5309.0, 5583.0, 5290.0, 5260.0, 5351.0, 5345.0, 5333.0, 5713.0, 5342.0, 5261.0, 5282.0, 5431.0, 5308.0, 5584.0, 5263.0, 5626.0, 5609.0, 5443.0, 5409.0, 5301.0, 5500.0, 5599.0, 5617.0, 5343.0, 5658.0, 5313.0, 5536.0, 5708.0, 5624.0, 5691.0, 5370.0, 5356.0, 5392.0, 5628.0, 5296.0, 5695.0, 5399.0, 5605.0, 5648.0, 5262.0, 5656.0, 5643.0, 5614.0, 5667.0, 5435.0, 5693.0, 5622.0, 5265.0, 5311.0, 5325.0, 5336.0, 5404.0, 5478.0, 5472.0, 5387.0, 5659.0, 5368.0, 5503.0, 5471.0, 5463.0, 5418.0, 5661.0, 5369.0, 5507.0, 5613.0, 5479.0, 5451.0, 5291.0, 5365.0, 5460.0, 5459.0, 5621.0, 5627.0, 5608.0, 5288.0, 5569.0, 5329.0, 5538.0, 5559.0, 5641.0, 5717.0, 5542.0, 5287.0, 5339.0, 5464.0, 5279.0, 5381.0, 5271.0, 5588.0, 5469.0, 5660.0, 5250.0, 5553.0, 5676.0, 5403.0, 5383.0, 5683.0, 5619.0, 5687.0, 5347.0 (number of hits: 3)
2	5580	9	1	333	1	5652.0, 5462.0, 5438.0, 5698.0, 5569.0, 5607.0, 5632.0, 5282.0, 5296.0, 5667.0, 5432.0, 5293.0, 5625.0, 5334.0, 5297.0, 5416.0, 5415.0, 5608.0, 5651.0, 5629.0, 5455.0, 5682.0, 5310.0, 5443.0, 5342.0, 5422.0, 5423.0, 5635.0, 5382.0, 5541.0, 5550.0, 5530.0, 5254.0, 5521.0, 5601.0, 5535.0, 5366.0, 5639.0, 5627.0, 5374.0, 5464.0, 5441.0, 5453.0, 5425.0, 5621.0, 5488.0, 5269.0, 5349.0, 5347.0, 5500.0, 5305.0, 5307.0, 5610.0, 5613.0, 5317.0, 5623.0, 5399.0, 5688.0, 5256.0, 5316.0, 5391.0, 5405.0, 5579.0, 5712.0, 5348.0, 5471.0, 5447.0, 5573.0, 5564.0, 5339.0, 5536.0, 5263.0, 5267.0, 5657.0, 5581.0, 5395.0, 5402.0, 5546.0, 5330.0, 5540.0, 5578.0, 5619.0, 5663.0, 5516.0, 5523.0, 5685.0, 5340.0, 5519.0, 5475.0, 5337.0, 5363.0, 5580.0, 5626.0, 5252.0, 5353.0, 5451.0, 5563.0, 5345.0, 5417.0, 5597.0 (number of hits: 5)
3	5580	9	1	333	1	5295.0, 5305.0, 5637.0, 5277.0, 5366.0, 5491.0, 5484.0, 5697.0, 5706.0, 5582.0, 5600.0, 5385.0, 5532.0, 5680.0, 5617.0, 5258.0, 5278.0, 5618.0, 5285.0, 5505.0, 5596.0, 5308.0, 5468.0, 5472.0, 5666.0, 5616.0, 5319.0, 5641.0, 5322.0, 5357.0, 5475.0, 5477.0, 5361.0, 5262.0, 5485.0, 5500.0, 5611.0, 5280.0, 5370.0, 5432.0, 5642.0, 5266.0, 5517.0, 5495.0, 5459.0, 5540.0, 5633.0, 5382.0, 5331.0, 5559.0, 5624.0, 5436.0, 5324.0, 5551.0, 5520.0,

						5498.0, 5574.0, 5394.0, 5453.0, 5275.0, 5497.0, 5678.0, 5665.0, 5320.0, 5587.0, 5708.0, 5281.0, 5579.0, 5276.0, 5358.0, 5342.0, 5543.0, 5282.0, 5583.0, 5444.0, 5451.0, 5602.0, 5383.0, 5692.0, 5392.0, 5525.0, 5349.0, 5671.0, 5527.0, 5660.0, 5298.0, 5700.0, 5562.0, 5508.0, 5499.0, 5588.0, 5339.0, 5623.0, 5270.0, 5267.0, 5424.0, 5378.0, 5679.0, 5646.0, 5263.0 (number of hits: 6)
4	5580	9	1	333	1	5604.0, 5259.0, 5566.0, 5287.0, 5264.0, 5459.0, 5575.0, 5291.0, 5382.0, 5644.0, 5431.0, 5329.0, 5418.0, 5526.0, 5707.0, 5662.0, 5496.0, 5372.0, 5654.0, 5687.0, 5348.0, 5622.0, 5339.0, 5472.0, 5258.0, 5379.0, 5668.0, 5605.0, 5683.0, 5300.0, 5396.0, 5635.0, 5670.0, 5556.0, 5316.0, 5449.0, 5542.0, 5593.0, 5479.0, 5702.0, 5512.0, 5320.0, 5589.0, 5272.0, 5646.0, 5676.0, 5545.0, 5293.0, 5313.0, 5621.0, 5581.0, 5434.0, 5709.0, 5665.0, 5491.0, 5691.0, 5467.0, 5429.0, 5579.0, 5557.0, 5253.0, 5667.0, 5678.0, 5647.0, 5319.0, 5626.0, 5708.0, 5284.0, 5586.0, 5541.0, 5257.0, 5673.0, 5494.0, 5634.0, 5271.0, 5684.0, 5546.0, 5690.0, 5452.0, 5322.0, 5493.0, 5552.0, 5369.0, 5623.0, 5251.0, 5455.0, 5508.0, 5457.0, 5655.0, 5700.0, 5611.0, 5682.0, 5466.0, 5627.0, 5375.0, 5424.0, 5282.0, 5518.0, 5383.0, 5506.0 (number of hits: 5)
5	5580	9	1	333	1	5404.0, 5379.0, 5291.0, 5312.0, 5417.0, 5438.0, 5584.0, 5668.0, 5320.0, 5517.0, 5617.0, 5392.0, 5356.0, 5364.0, 5574.0, 5652.0, 5318.0, 5621.0, 5403.0, 5555.0, 5397.0, 5549.0, 5368.0, 5457.0, 5394.0, 5371.0, 5424.0, 5393.0, 5315.0, 5355.0, 5408.0, 5407.0, 5350.0, 5720.0, 5603.0, 5460.0, 5439.0, 5536.0, 5671.0, 5470.0, 5708.0, 5561.0, 5373.0, 5352.0, 5520.0, 5718.0, 5491.0, 5573.0, 5333.0, 5724.0, 5635.0, 5703.0, 5428.0, 5641.0, 5499.0, 5366.0, 5587.0, 5604.0, 5707.0, 5459.0, 5277.0, 5321.0, 5563.0, 5518.0, 5547.0, 5390.0, 5564.0, 5377.0, 5612.0, 5607.0, 5489.0, 5595.0, 5378.0, 5253.0, 5323.0, 5370.0, 5626.0, 5479.0, 5252.0, 5679.0, 5636.0, 5631.0, 5469.0, 5533.0, 5274.0, 5539.0, 5608.0, 5699.0, 5345.0, 5422.0, 5592.0, 5602.0, 5704.0, 5542.0, 5495.0, 5435.0, 5601.0, 5532.0, 5646.0, 5674.0 (number of hits: 4)
6	5580	9	1	333	1	5315.0, 5593.0, 5326.0, 5256.0, 5355.0, 5617.0, 5439.0, 5482.0, 5494.0, 5310.0, 5456.0, 5405.0, 5366.0, 5548.0, 5715.0, 5569.0, 5656.0, 5354.0, 5450.0, 5298.0, 5528.0, 5663.0, 5691.0, 5506.0, 5477.0, 5434.0, 5473.0, 5627.0, 5509.0, 5481.0, 5305.0, 5402.0, 5654.0, 5325.0, 5529.0,

						5445.0, 5283.0, 5688.0, 5559.0, 5294.0, 5666.0, 5502.0, 5702.0, 5448.0, 5419.0, 5373.0, 5312.0, 5511.0, 5694.0, 5269.0, 5505.0, 5535.0, 5464.0, 5718.0, 5484.0, 5577.0, 5339.0, 5562.0, 5436.0, 5625.0, 5660.0, 5371.0, 5693.0, 5422.0, 5377.0, 5416.0, 5395.0, 5645.0, 5350.0, 5721.0, 5374.0, 5306.0, 5524.0, 5713.0, 5518.0, 5302.0, 5341.0, 5359.0, 5370.0, 5685.0, 5383.0, 5597.0, 5273.0, 5420.0, 5708.0, 5382.0, 5676.0, 5413.0, 5362.0, 5623.0, 5683.0, 5348.0, 5321.0, 5409.0, 5495.0, 5376.0, 5387.0, 5491.0, 5722.0, 5671.0 (number of hits: 1)
7	5580	9	1	333	1	5703.0, 5383.0, 5542.0, 5511.0, 5660.0, 5537.0, 5428.0, 5349.0, 5512.0, 5409.0, 5393.0, 5620.0, 5486.0, 5654.0, 5301.0, 5529.0, 5506.0, 5675.0, 5296.0, 5713.0, 5586.0, 5332.0, 5438.0, 5642.0, 5294.0, 5429.0, 5415.0, 5342.0, 5367.0, 5425.0, 5275.0, 5634.0, 5635.0, 5616.0, 5312.0, 5484.0, 5288.0, 5374.0, 5644.0, 5568.0, 5584.0, 5526.0, 5461.0, 5573.0, 5613.0, 5443.0, 5645.0, 5307.0, 5449.0, 5499.0, 5524.0, 5510.0, 5437.0, 5385.0, 5361.0, 5452.0, 5287.0, 5721.0, 5306.0, 5388.0, 5611.0, 5571.0, 5619.0, 5562.0, 5433.0, 5538.0, 5598.0, 5493.0, 5414.0, 5683.0, 5564.0, 5407.0, 5565.0, 5303.0, 5534.0, 5612.0, 5716.0, 5593.0, 5656.0, 5673.0, 5709.0, 5265.0, 5687.0, 5530.0, 5459.0, 5430.0, 5631.0, 5372.0, 5302.0, 5680.0, 5602.0, 5274.0, 5670.0, 5254.0, 5638.0, 5589.0, 5465.0, 5539.0, 5478.0, 5399.0 (number of hits: 5)
8	5580	9	1	333	1	5296.0, 5468.0, 5291.0, 5371.0, 5430.0, 5527.0, 5276.0, 5598.0, 5701.0, 5558.0, 5338.0, 5677.0, 5355.0, 5545.0, 5566.0, 5306.0, 5536.0, 5343.0, 5455.0, 5560.0, 5540.0, 5611.0, 5335.0, 5614.0, 5595.0, 5312.0, 5390.0, 5670.0, 5633.0, 5682.0, 5544.0, 5722.0, 5600.0, 5275.0, 5646.0, 5316.0, 5315.0, 5439.0, 5502.0, 5359.0, 5533.0, 5376.0, 5356.0, 5638.0, 5514.0, 5375.0, 5483.0, 5499.0, 5665.0, 5399.0, 5563.0, 5262.0, 5267.0, 5444.0, 5438.0, 5320.0, 5500.0, 5370.0, 5698.0, 5604.0, 5578.0, 5287.0, 5425.0, 5517.0, 5673.0, 5596.0, 5716.0, 5645.0, 5520.0, 5518.0, 5650.0, 5284.0, 5403.0, 5256.0, 5686.0, 5667.0, 5629.0, 5437.0, 5261.0, 5525.0, 5703.0, 5313.0, 5507.0, 5318.0, 5298.0, 5289.0, 5309.0, 5368.0, 5602.0, 5680.0, 5515.0, 5718.0, 5664.0, 5282.0, 5409.0, 5621.0, 5324.0, 5413.0, 5713.0, 5521.0 (number of hits: 1)
9	5580	9	1	333	1	5541.0, 5336.0, 5441.0, 5634.0, 5511.0, 5300.0, 5621.0, 5506.0, 5433.0, 5431.0, 5577.0, 5703.0, 5679.0, 5612.0, 5285.0,

						5419.0, 5570.0, 5718.0, 5330.0, 5598.0, 5663.0, 5283.0, 5686.0, 5642.0, 5676.0, 5567.0, 5481.0, 5692.0, 5408.0, 5366.0, 5341.0, 5683.0, 5429.0, 5391.0, 5715.0, 5312.0, 5687.0, 5643.0, 5677.0, 5424.0, 5352.0, 5664.0, 5575.0, 5681.0, 5392.0, 5630.0, 5270.0, 5611.0, 5451.0, 5549.0, 5303.0, 5339.0, 5514.0, 5609.0, 5542.0, 5579.0, 5375.0, 5250.0, 5365.0, 5559.0, 5426.0, 5524.0, 5512.0, 5293.0, 5560.0, 5719.0, 5657.0, 5708.0, 5507.0, 5378.0, 5464.0, 5545.0, 5278.0, 5359.0, 5357.0, 5315.0, 5684.0, 5496.0, 5537.0, 5421.0, 5422.0, 5706.0, 5490.0, 5697.0, 5544.0, 5581.0, 5660.0, 5595.0, 5499.0, 5292.0, 5482.0, 5688.0, 5257.0, 5413.0, 5509.0, 5343.0, 5461.0, 5387.0, 5658.0, 5585.0 (number of hits: 6)
10	5580	9	1	333	1	5684.0, 5686.0, 5434.0, 5409.0, 5301.0, 5657.0, 5647.0, 5646.0, 5653.0, 5457.0, 5712.0, 5578.0, 5660.0, 5295.0, 5659.0, 5708.0, 5265.0, 5264.0, 5281.0, 5447.0, 5350.0, 5721.0, 5675.0, 5487.0, 5263.0, 5568.0, 5505.0, 5711.0, 5402.0, 5695.0, 5428.0, 5336.0, 5432.0, 5635.0, 5576.0, 5307.0, 5719.0, 5413.0, 5588.0, 5696.0, 5702.0, 5313.0, 5538.0, 5452.0, 5330.0, 5537.0, 5688.0, 5278.0, 5627.0, 5261.0, 5422.0, 5586.0, 5404.0, 5490.0, 5454.0, 5427.0, 5572.0, 5577.0, 5643.0, 5324.0, 5449.0, 5407.0, 5328.0, 5693.0, 5303.0, 5639.0, 5710.0, 5440.0, 5274.0, 5677.0, 5580.0, 5564.0, 5339.0, 5384.0, 5379.0, 5466.0, 5554.0, 5644.0, 5373.0, 5372.0, 5709.0, 5273.0, 5713.0, 5257.0, 5642.0, 5414.0, 5515.0, 5540.0, 5533.0, 5296.0, 5630.0, 5607.0, 5469.0, 5563.0, 5529.0, 5473.0, 5286.0, 5543.0, 5298.0, 5620.0 (number of hits: 7)
11	5580	9	1	333	1	5483.0, 5563.0, 5462.0, 5307.0, 5315.0, 5627.0, 5682.0, 5476.0, 5605.0, 5520.0, 5416.0, 5574.0, 5653.0, 5705.0, 5586.0, 5633.0, 5370.0, 5607.0, 5488.0, 5566.0, 5295.0, 5603.0, 5524.0, 5392.0, 5268.0, 5388.0, 5713.0, 5527.0, 5329.0, 5282.0, 5722.0, 5332.0, 5402.0, 5454.0, 5600.0, 5365.0, 5348.0, 5357.0, 5720.0, 5477.0, 5677.0, 5409.0, 5716.0, 5396.0, 5349.0, 5601.0, 5254.0, 5346.0, 5274.0, 5572.0, 5450.0, 5481.0, 5398.0, 5465.0, 5325.0, 5371.0, 5359.0, 5277.0, 5310.0, 5608.0, 5358.0, 5440.0, 5588.0, 5412.0, 5523.0, 5698.0, 5383.0, 5291.0, 5288.0, 5260.0, 5671.0, 5264.0, 5593.0, 5522.0, 5621.0, 5275.0, 5562.0, 5584.0, 5263.0, 5408.0, 5612.0, 5468.0, 5613.0, 5718.0, 5499.0, 5688.0, 5579.0, 5670.0, 5336.0, 5434.0, 5353.0, 5558.0, 5452.0, 5373.0, 5609.0, 5284.0, 5335.0, 5265.0, 5339.0, 5529.0

						(number of hits: 6)
12	5580	9	1	333	1	5665.0, 5522.0, 5361.0, 5290.0, 5608.0, 5456.0, 5260.0, 5395.0, 5419.0, 5298.0, 5269.0, 5439.0, 5574.0, 5363.0, 5604.0, 5603.0, 5261.0, 5707.0, 5401.0, 5398.0, 5258.0, 5516.0, 5438.0, 5555.0, 5577.0, 5512.0, 5717.0, 5609.0, 5369.0, 5329.0, 5677.0, 5407.0, 5498.0, 5513.0, 5412.0, 5556.0, 5263.0, 5551.0, 5428.0, 5559.0, 5657.0, 5487.0, 5638.0, 5642.0, 5477.0, 5712.0, 5715.0, 5495.0, 5440.0, 5282.0, 5266.0, 5557.0, 5592.0, 5686.0, 5527.0, 5580.0, 5342.0, 5643.0, 5474.0, 5668.0, 5598.0, 5466.0, 5409.0, 5338.0, 5330.0, 5443.0, 5659.0, 5427.0, 5501.0, 5418.0, 5485.0, 5678.0, 5664.0, 5676.0, 5606.0, 5673.0, 5347.0, 5305.0, 5422.0, 5504.0, 5250.0, 5692.0, 5579.0, 5370.0, 5541.0, 5491.0, 5333.0, 5296.0, 5623.0, 5337.0, 5380.0, 5667.0, 5303.0, 5540.0, 5558.0, 5639.0, 5661.0, 5567.0, 5408.0, 5352.0 (number of hits: 4)
13	5580	9	1	333	1	5573.0, 5476.0, 5584.0, 5544.0, 5448.0, 5565.0, 5506.0, 5511.0, 5361.0, 5659.0, 5572.0, 5265.0, 5507.0, 5386.0, 5689.0, 5473.0, 5714.0, 5653.0, 5337.0, 5719.0, 5686.0, 5663.0, 5574.0, 5721.0, 5677.0, 5551.0, 5276.0, 5558.0, 5414.0, 5294.0, 5527.0, 5720.0, 5554.0, 5610.0, 5667.0, 5371.0, 5487.0, 5327.0, 5417.0, 5644.0, 5468.0, 5347.0, 5516.0, 5664.0, 5602.0, 5266.0, 5412.0, 5723.0, 5692.0, 5489.0, 5397.0, 5306.0, 5436.0, 5420.0, 5369.0, 5390.0, 5308.0, 5344.0, 5320.0, 5581.0, 5669.0, 5283.0, 5646.0, 5286.0, 5297.0, 5561.0, 5352.0, 5681.0, 5501.0, 5281.0, 5395.0, 5427.0, 5271.0, 5488.0, 5652.0, 5552.0, 5703.0, 5463.0, 5313.0, 5419.0, 5533.0, 5537.0, 5440.0, 5379.0, 5330.0, 5351.0, 5375.0, 5626.0, 5601.0, 5332.0, 5630.0, 5493.0, 5690.0, 5485.0, 5334.0, 5616.0, 5695.0, 5665.0, 5329.0, 5354.0 (number of hits: 5)
14	5580	9	1	333	1	5629.0, 5643.0, 5546.0, 5721.0, 5579.0, 5382.0, 5615.0, 5571.0, 5288.0, 5413.0, 5468.0, 5560.0, 5667.0, 5476.0, 5373.0, 5315.0, 5594.0, 5619.0, 5663.0, 5271.0, 5645.0, 5687.0, 5300.0, 5578.0, 5569.0, 5390.0, 5511.0, 5642.0, 5706.0, 5375.0, 5612.0, 5466.0, 5680.0, 5525.0, 5343.0, 5604.0, 5322.0, 5465.0, 5265.0, 5450.0, 5319.0, 5591.0, 5534.0, 5454.0, 5688.0, 5716.0, 5714.0, 5583.0, 5325.0, 5567.0, 5327.0, 5513.0, 5723.0, 5379.0, 5593.0, 5626.0, 5334.0, 5555.0, 5445.0, 5278.0, 5679.0, 5417.0, 5581.0, 5270.0, 5418.0, 5377.0, 5279.0, 5517.0, 5263.0, 5355.0, 5433.0, 5395.0, 5444.0, 5530.0, 5480.0, 5673.0, 5575.0, 5347.0, 5324.0, 5362.0,

						5490.0, 5678.0, 5485.0, 5634.0, 5305.0, 5441.0, 5437.0, 5503.0, 5570.0, 5259.0, 5291.0, 5360.0, 5339.0, 5616.0, 5316.0, 5268.0, 5614.0, 5504.0, 5646.0, 5415.0 (number of hits: 7)
15	5580	9	1	333	1	5378.0, 5406.0, 5316.0, 5409.0, 5410.0, 5333.0, 5305.0, 5350.0, 5279.0, 5481.0, 5450.0, 5693.0, 5497.0, 5357.0, 5555.0, 5477.0, 5561.0, 5627.0, 5535.0, 5415.0, 5268.0, 5310.0, 5469.0, 5661.0, 5436.0, 5487.0, 5297.0, 5643.0, 5602.0, 5326.0, 5507.0, 5594.0, 5259.0, 5564.0, 5650.0, 5300.0, 5567.0, 5595.0, 5707.0, 5709.0, 5365.0, 5525.0, 5336.0, 5389.0, 5524.0, 5417.0, 5527.0, 5607.0, 5419.0, 5529.0, 5387.0, 5399.0, 5464.0, 5252.0, 5368.0, 5330.0, 5667.0, 5533.0, 5694.0, 5587.0, 5441.0, 5722.0, 5608.0, 5454.0, 5635.0, 5370.0, 5323.0, 5518.0, 5292.0, 5677.0, 5255.0, 5286.0, 5609.0, 5537.0, 5624.0, 5304.0, 5528.0, 5506.0, 5347.0, 5363.0, 5355.0, 5301.0, 5653.0, 5687.0, 5572.0, 5302.0, 5685.0, 5432.0, 5476.0, 5349.0, 5353.0, 5540.0, 5695.0, 5597.0, 5366.0, 5312.0, 5262.0, 5585.0, 5356.0, 5554.0 (number of hits: 3)
16	5580	9	1	333	1	5312.0, 5565.0, 5352.0, 5648.0, 5436.0, 5251.0, 5664.0, 5685.0, 5697.0, 5426.0, 5448.0, 5336.0, 5634.0, 5505.0, 5395.0, 5691.0, 5365.0, 5459.0, 5659.0, 5504.0, 5553.0, 5668.0, 5403.0, 5689.0, 5315.0, 5627.0, 5476.0, 5468.0, 5380.0, 5428.0, 5316.0, 5527.0, 5411.0, 5636.0, 5502.0, 5325.0, 5580.0, 5338.0, 5683.0, 5374.0, 5701.0, 5381.0, 5450.0, 5309.0, 5389.0, 5375.0, 5457.0, 5638.0, 5465.0, 5355.0, 5484.0, 5529.0, 5644.0, 5400.0, 5255.0, 5632.0, 5496.0, 5682.0, 5499.0, 5503.0, 5416.0, 5698.0, 5564.0, 5358.0, 5430.0, 5495.0, 5498.0, 5363.0, 5258.0, 5260.0, 5518.0, 5491.0, 5572.0, 5558.0, 5252.0, 5458.0, 5562.0, 5710.0, 5392.0, 5311.0, 5591.0, 5675.0, 5656.0, 5425.0, 5628.0, 5688.0, 5256.0, 5561.0, 5283.0, 5367.0, 5250.0, 5282.0, 5721.0, 5294.0, 5541.0, 5641.0, 5506.0, 5621.0, 5377.0, 5708.0 (number of hits: 2)
17	5580	9	1	333	1	5444.0, 5496.0, 5276.0, 5277.0, 5575.0, 5526.0, 5282.0, 5644.0, 5260.0, 5615.0, 5717.0, 5686.0, 5440.0, 5611.0, 5387.0, 5641.0, 5468.0, 5670.0, 5371.0, 5634.0, 5415.0, 5520.0, 5621.0, 5325.0, 5592.0, 5270.0, 5340.0, 5544.0, 5299.0, 5580.0, 5651.0, 5483.0, 5571.0, 5698.0, 5394.0, 5590.0, 5534.0, 5412.0, 5300.0, 5292.0, 5593.0, 5293.0, 5510.0, 5582.0, 5258.0, 5480.0, 5546.0, 5683.0, 5695.0, 5289.0, 5525.0, 5271.0, 5274.0, 5361.0, 5251.0, 5402.0, 5556.0, 5417.0, 5338.0, 5261.0,

						5317.0, 5401.0, 5280.0, 5598.0, 5636.0, 5609.0, 5303.0, 5524.0, 5302.0, 5645.0, 5557.0, 5306.0, 5298.0, 5250.0, 5269.0, 5678.0, 5435.0, 5648.0, 5494.0, 5445.0, 5663.0, 5425.0, 5569.0, 5639.0, 5281.0, 5377.0, 5674.0, 5479.0, 5396.0, 5470.0, 5342.0, 5696.0, 5668.0, 5689.0, 5304.0, 5547.0, 5381.0, 5278.0, 5379.0, 5653.0 (number of hits: 4)
18	5580	9	1	333	1	5260.0, 5361.0, 5501.0, 5428.0, 5565.0, 5370.0, 5279.0, 5586.0, 5347.0, 5584.0, 5263.0, 5653.0, 5662.0, 5342.0, 5658.0, 5483.0, 5640.0, 5560.0, 5721.0, 5648.0, 5526.0, 5339.0, 5521.0, 5327.0, 5345.0, 5550.0, 5689.0, 5443.0, 5259.0, 5411.0, 5604.0, 5636.0, 5420.0, 5368.0, 5607.0, 5306.0, 5459.0, 5298.0, 5638.0, 5593.0, 5264.0, 5705.0, 5267.0, 5707.0, 5324.0, 5536.0, 5516.0, 5519.0, 5680.0, 5374.0, 5412.0, 5475.0, 5334.0, 5266.0, 5527.0, 5380.0, 5492.0, 5427.0, 5674.0, 5579.0, 5307.0, 5296.0, 5417.0, 5690.0, 5326.0, 5620.0, 5592.0, 5378.0, 5545.0, 5398.0, 5697.0, 5530.0, 5635.0, 5270.0, 5329.0, 5649.0, 5651.0, 5691.0, 5549.0, 5440.0, 5447.0, 5456.0, 5253.0, 5465.0, 5265.0, 5511.0, 5506.0, 5404.0, 5283.0, 5414.0, 5363.0, 5512.0, 5317.0, 5261.0, 5284.0, 5309.0, 5254.0, 5595.0, 5433.0, 5269.0 (number of hits: 3)
19	5580	9	1	333	1	5717.0, 5631.0, 5558.0, 5321.0, 5581.0, 5270.0, 5320.0, 5386.0, 5350.0, 5667.0, 5408.0, 5533.0, 5392.0, 5347.0, 5543.0, 5445.0, 5330.0, 5281.0, 5678.0, 5250.0, 5588.0, 5561.0, 5517.0, 5305.0, 5488.0, 5496.0, 5604.0, 5680.0, 5434.0, 5310.0, 5463.0, 5560.0, 5263.0, 5610.0, 5620.0, 5593.0, 5597.0, 5274.0, 5655.0, 5390.0, 5510.0, 5409.0, 5340.0, 5703.0, 5500.0, 5651.0, 5329.0, 5612.0, 5509.0, 5418.0, 5354.0, 5443.0, 5430.0, 5724.0, 5514.0, 5403.0, 5476.0, 5677.0, 5693.0, 5427.0, 5454.0, 5272.0, 5542.0, 5614.0, 5516.0, 5435.0, 5260.0, 5348.0, 5264.0, 5280.0, 5306.0, 5648.0, 5596.0, 5365.0, 5301.0, 5544.0, 5289.0, 5380.0, 5674.0, 5713.0, 5360.0, 5324.0, 5457.0, 5640.0, 5344.0, 5447.0, 5639.0, 5346.0, 5494.0, 5564.0, 5338.0, 5316.0, 5377.0, 5483.0, 5266.0, 5367.0, 5295.0, 5650.0, 5519.0, 5261.0 (number of hits: 2)
20	5580	9	1	333	1	5350.0, 5621.0, 5613.0, 5587.0, 5528.0, 5556.0, 5322.0, 5584.0, 5627.0, 5559.0, 5651.0, 5695.0, 5405.0, 5677.0, 5333.0, 5300.0, 5718.0, 5558.0, 5286.0, 5626.0, 5693.0, 5692.0, 5261.0, 5314.0, 5622.0, 5702.0, 5582.0, 5489.0, 5272.0, 5470.0, 5694.0, 5392.0, 5542.0, 5579.0, 5533.0, 5366.0, 5573.0, 5339.0, 5252.0, 5527.0,

						5408.0, 5390.0, 5619.0, 5509.0, 5429.0, 5617.0, 5346.0, 5270.0, 5589.0, 5569.0, 5625.0, 5374.0, 5414.0, 5517.0, 5308.0, 5540.0, 5602.0, 5412.0, 5407.0, 5491.0, 5514.0, 5520.0, 5686.0, 5719.0, 5639.0, 5648.0, 5696.0, 5656.0, 5618.0, 5435.0, 5646.0, 5464.0, 5457.0, 5701.0, 5369.0, 5467.0, 5550.0, 5643.0, 5251.0, 5631.0, 5292.0, 5611.0, 5683.0, 5568.0, 5347.0, 5480.0, 5577.0, 5277.0, 5615.0, 5507.0, 5482.0, 5354.0, 5255.0, 5691.0, 5490.0, 5436.0, 5481.0, 5370.0, 5380.0, 5608.0 (number of hits: 7)
21	5580	9	1	333	1	5266.0, 5268.0, 5298.0, 5615.0, 5547.0, 5490.0, 5512.0, 5444.0, 5706.0, 5367.0, 5677.0, 5441.0, 5722.0, 5546.0, 5680.0, 5415.0, 5616.0, 5654.0, 5460.0, 5602.0, 5269.0, 5718.0, 5339.0, 5470.0, 5569.0, 5521.0, 5517.0, 5439.0, 5262.0, 5400.0, 5464.0, 5305.0, 5426.0, 5286.0, 5640.0, 5319.0, 5429.0, 5583.0, 5595.0, 5500.0, 5672.0, 5323.0, 5591.0, 5618.0, 5390.0, 5381.0, 5376.0, 5282.0, 5373.0, 5623.0, 5691.0, 5456.0, 5650.0, 5702.0, 5710.0, 5617.0, 5564.0, 5261.0, 5533.0, 5585.0, 5636.0, 5469.0, 5264.0, 5445.0, 5274.0, 5476.0, 5518.0, 5372.0, 5296.0, 5337.0, 5522.0, 5551.0, 5256.0, 5701.0, 5558.0, 5513.0, 5637.0, 5416.0, 5436.0, 5584.0, 5529.0, 5290.0, 5371.0, 5662.0, 5379.0, 5263.0, 5452.0, 5690.0, 5446.0, 5507.0, 5395.0, 5515.0, 5398.0, 5281.0, 5310.0, 5525.0, 5671.0, 5693.0, 5463.0, 5559.0 (number of hits: 3)
22	5580	9	1	333	1	5616.0, 5451.0, 5309.0, 5255.0, 5489.0, 5256.0, 5317.0, 5469.0, 5497.0, 5618.0, 5504.0, 5608.0, 5655.0, 5448.0, 5318.0, 5583.0, 5341.0, 5499.0, 5458.0, 5277.0, 5681.0, 5352.0, 5723.0, 5647.0, 5306.0, 5721.0, 5585.0, 5450.0, 5333.0, 5446.0, 5292.0, 5423.0, 5382.0, 5529.0, 5626.0, 5485.0, 5359.0, 5406.0, 5371.0, 5265.0, 5520.0, 5591.0, 5358.0, 5268.0, 5267.0, 5577.0, 5627.0, 5454.0, 5586.0, 5465.0, 5259.0, 5321.0, 5708.0, 5593.0, 5394.0, 5258.0, 5365.0, 5683.0, 5514.0, 5509.0, 5693.0, 5266.0, 5562.0, 5675.0, 5568.0, 5697.0, 5325.0, 5503.0, 5433.0, 5684.0, 5486.0, 5426.0, 5339.0, 5311.0, 5703.0, 5656.0, 5436.0, 5349.0, 5692.0, 5625.0, 5279.0, 5513.0, 5439.0, 5323.0, 5634.0, 5584.0, 5610.0, 5399.0, 5676.0, 5674.0, 5669.0, 5680.0, 5388.0, 5462.0, 5704.0, 5334.0, 5587.0, 5543.0, 5691.0, 5344.0 (number of hits: 6)
23	5580	9	1	333	1	5374.0, 5451.0, 5436.0, 5460.0, 5611.0, 5260.0, 5458.0, 5304.0, 5277.0, 5524.0, 5294.0, 5393.0, 5387.0, 5510.0, 5576.0, 5338.0, 5342.0, 5442.0, 5559.0, 5339.0,

						5573.0, 5677.0, 5633.0, 5700.0, 5262.0, 5566.0, 5312.0, 5557.0, 5325.0, 5675.0, 5401.0, 5536.0, 5717.0, 5350.0, 5334.0, 5649.0, 5502.0, 5398.0, 5572.0, 5519.0, 5638.0, 5543.0, 5478.0, 5422.0, 5297.0, 5252.0, 5707.0, 5522.0, 5716.0, 5313.0, 5544.0, 5415.0, 5648.0, 5292.0, 5486.0, 5564.0, 5403.0, 5365.0, 5373.0, 5506.0, 5482.0, 5667.0, 5448.0, 5587.0, 5720.0, 5485.0, 5444.0, 5371.0, 5340.0, 5464.0, 5285.0, 5428.0, 5694.0, 5582.0, 5400.0, 5287.0, 5588.0, 5549.0, 5291.0, 5381.0, 5625.0, 5550.0, 5574.0, 5654.0, 5479.0, 5345.0, 5279.0, 5571.0, 5678.0, 5602.0, 5619.0, 5594.0, 5680.0, 5467.0, 5499.0, 5635.0, 5608.0, 5357.0, 5551.0, 5513.0 (number of hits: 8)
24	5580	9	1	333	1	5670.0, 5391.0, 5569.0, 5397.0, 5561.0, 5422.0, 5604.0, 5340.0, 5498.0, 5703.0, 5668.0, 5538.0, 5444.0, 5542.0, 5679.0, 5614.0, 5654.0, 5407.0, 5354.0, 5433.0, 5589.0, 5261.0, 5476.0, 5350.0, 5483.0, 5383.0, 5328.0, 5412.0, 5436.0, 5301.0, 5311.0, 5474.0, 5389.0, 5719.0, 5484.0, 5512.0, 5630.0, 5368.0, 5699.0, 5472.0, 5418.0, 5330.0, 5626.0, 5549.0, 5570.0, 5360.0, 5390.0, 5274.0, 5395.0, 5496.0, 5524.0, 5601.0, 5607.0, 5517.0, 5579.0, 5443.0, 5297.0, 5386.0, 5377.0, 5587.0, 5448.0, 5277.0, 5326.0, 5288.0, 5638.0, 5617.0, 5435.0, 5537.0, 5585.0, 5720.0, 5534.0, 5489.0, 5504.0, 5453.0, 5586.0, 5469.0, 5363.0, 5355.0, 5575.0, 5691.0, 5553.0, 5296.0, 5364.0, 5645.0, 5452.0, 5662.0, 5680.0, 5471.0, 5709.0, 5562.0, 5677.0, 5547.0, 5430.0, 5265.0, 5258.0, 5518.0, 5264.0, 5266.0, 5306.0, 5675.0 (number of hits: 7)
25	5580	9	1	333	1	5272.0, 5289.0, 5438.0, 5469.0, 5300.0, 5599.0, 5606.0, 5331.0, 5377.0, 5514.0, 5329.0, 5452.0, 5565.0, 5540.0, 5367.0, 5319.0, 5579.0, 5706.0, 5569.0, 5347.0, 5479.0, 5340.0, 5502.0, 5654.0, 5395.0, 5602.0, 5575.0, 5529.0, 5429.0, 5261.0, 5570.0, 5346.0, 5665.0, 5457.0, 5490.0, 5317.0, 5626.0, 5630.0, 5567.0, 5265.0, 5724.0, 5610.0, 5326.0, 5449.0, 5290.0, 5470.0, 5632.0, 5406.0, 5629.0, 5694.0, 5523.0, 5288.0, 5678.0, 5685.0, 5270.0, 5308.0, 5692.0, 5573.0, 5423.0, 5497.0, 5545.0, 5292.0, 5640.0, 5553.0, 5596.0, 5618.0, 5338.0, 5461.0, 5524.0, 5561.0, 5704.0, 5376.0, 5552.0, 5459.0, 5384.0, 5434.0, 5585.0, 5594.0, 5556.0, 5296.0, 5616.0, 5366.0, 5691.0, 5612.0, 5467.0, 5580.0, 5447.0, 5386.0, 5577.0, 5304.0, 5661.0, 5628.0, 5253.0, 5682.0, 5333.0, 5416.0, 5264.0, 5696.0, 5448.0, 5499.0 (number of hits: 7)

26	5580	9	1	333	1	5515.0, 5629.0, 5459.0, 5445.0, 5436.0, 5311.0, 5604.0, 5361.0, 5373.0, 5514.0, 5454.0, 5345.0, 5561.0, 5484.0, 5620.0, 5606.0, 5617.0, 5685.0, 5632.0, 5642.0, 5304.0, 5264.0, 5466.0, 5664.0, 5365.0, 5722.0, 5639.0, 5702.0, 5597.0, 5278.0, 5286.0, 5305.0, 5492.0, 5330.0, 5434.0, 5576.0, 5323.0, 5463.0, 5526.0, 5503.0, 5399.0, 5284.0, 5359.0, 5389.0, 5672.0, 5570.0, 5582.0, 5327.0, 5392.0, 5408.0, 5600.0, 5393.0, 5270.0, 5569.0, 5411.0, 5347.0, 5363.0, 5310.0, 5255.0, 5251.0, 5313.0, 5382.0, 5671.0, 5480.0, 5683.0, 5441.0, 5294.0, 5689.0, 5517.0, 5353.0, 5281.0, 5518.0, 5474.0, 5274.0, 5656.0, 5706.0, 5357.0, 5403.0, 5460.0, 5402.0, 5548.0, 5637.0, 5473.0, 5316.0, 5329.0, 5377.0, 5678.0, 5592.0, 5283.0, 5291.0, 5556.0, 5256.0, 5349.0, 5426.0, 5322.0, 5343.0, 5599.0, 5420.0, 5415.0, 5273.0 (number of hits: 3)
27	5580	9	1	333	1	5253.0, 5528.0, 5621.0, 5298.0, 5357.0, 5409.0, 5351.0, 5491.0, 5708.0, 5420.0, 5580.0, 5343.0, 5388.0, 5457.0, 5291.0, 5681.0, 5302.0, 5305.0, 5721.0, 5430.0, 5445.0, 5272.0, 5524.0, 5278.0, 5564.0, 5713.0, 5710.0, 5304.0, 5346.0, 5431.0, 5266.0, 5526.0, 5644.0, 5691.0, 5565.0, 5435.0, 5684.0, 5284.0, 5469.0, 5364.0, 5638.0, 5452.0, 5293.0, 5676.0, 5711.0, 5562.0, 5695.0, 5287.0, 5474.0, 5397.0, 5341.0, 5699.0, 5398.0, 5507.0, 5639.0, 5561.0, 5436.0, 5315.0, 5334.0, 5670.0, 5279.0, 5570.0, 5306.0, 5342.0, 5704.0, 5525.0, 5508.0, 5489.0, 5700.0, 5584.0, 5310.0, 5449.0, 5587.0, 5673.0, 5688.0, 5485.0, 5722.0, 5471.0, 5339.0, 5308.0, 5630.0, 5385.0, 5267.0, 5423.0, 5496.0, 5664.0, 5309.0, 5464.0, 5714.0, 5428.0, 5557.0, 5717.0, 5652.0, 5545.0, 5369.0, 5614.0, 5454.0, 5323.0, 5265.0, 5504.0 (number of hits: 4)
28	5580	9	1	333	1	5566.0, 5414.0, 5377.0, 5648.0, 5652.0, 5683.0, 5686.0, 5628.0, 5391.0, 5620.0, 5589.0, 5311.0, 5602.0, 5388.0, 5493.0, 5376.0, 5462.0, 5485.0, 5338.0, 5334.0, 5254.0, 5712.0, 5375.0, 5436.0, 5442.0, 5638.0, 5515.0, 5310.0, 5271.0, 5623.0, 5724.0, 5453.0, 5520.0, 5553.0, 5400.0, 5680.0, 5265.0, 5645.0, 5261.0, 5584.0, 5342.0, 5614.0, 5365.0, 5654.0, 5698.0, 5399.0, 5711.0, 5540.0, 5585.0, 5362.0, 5304.0, 5629.0, 5551.0, 5665.0, 5259.0, 5588.0, 5633.0, 5373.0, 5397.0, 5667.0, 5506.0, 5579.0, 5574.0, 5321.0, 5409.0, 5627.0, 5526.0, 5317.0, 5425.0, 5630.0, 5383.0, 5361.0, 5707.0, 5621.0, 5398.0, 5299.0, 5402.0, 5309.0, 5430.0, 5337.0, 5608.0, 5664.0, 5530.0, 5600.0, 5300.0,

						5358.0, 5385.0, 5505.0, 5643.0, 5416.0, 5497.0, 5596.0, 5325.0, 5700.0, 5521.0, 5593.0, 5378.0, 5595.0, 5458.0, 5364.0 (number of hits: 6)
29	5580	9	1	333	1	5515.0, 5701.0, 5594.0, 5251.0, 5265.0, 5303.0, 5371.0, 5694.0, 5270.0, 5610.0, 5279.0, 5671.0, 5682.0, 5548.0, 5645.0, 5600.0, 5603.0, 5487.0, 5331.0, 5491.0, 5564.0, 5436.0, 5333.0, 5532.0, 5324.0, 5584.0, 5716.0, 5415.0, 5463.0, 5721.0, 5257.0, 5330.0, 5370.0, 5346.0, 5399.0, 5558.0, 5340.0, 5657.0, 5336.0, 5524.0, 5409.0, 5423.0, 5311.0, 5630.0, 5357.0, 5660.0, 5674.0, 5339.0, 5553.0, 5712.0, 5696.0, 5638.0, 5619.0, 5613.0, 5393.0, 5652.0, 5566.0, 5502.0, 5447.0, 5268.0, 5683.0, 5258.0, 5659.0, 5307.0, 5291.0, 5414.0, 5529.0, 5449.0, 5608.0, 5309.0, 5294.0, 5350.0, 5640.0, 5544.0, 5519.0, 5312.0, 5386.0, 5253.0, 5707.0, 5545.0, 5284.0, 5428.0, 5554.0, 5335.0, 5637.0, 5461.0, 5356.0, 5703.0, 5546.0, 5542.0, 5267.0, 5478.0, 5464.0, 5557.0, 5644.0, 5427.0, 5420.0, 5651.0, 5530.0, 5468.0 (number of hits: 1)
30	5580	9	1	333	1	5434.0, 5660.0, 5693.0, 5520.0, 5396.0, 5519.0, 5417.0, 5342.0, 5716.0, 5528.0, 5480.0, 5681.0, 5621.0, 5474.0, 5296.0, 5455.0, 5365.0, 5409.0, 5708.0, 5610.0, 5633.0, 5613.0, 5665.0, 5425.0, 5514.0, 5483.0, 5582.0, 5683.0, 5689.0, 5673.0, 5299.0, 5469.0, 5265.0, 5261.0, 5618.0, 5577.0, 5551.0, 5663.0, 5605.0, 5264.0, 5650.0, 5662.0, 5388.0, 5534.0, 5497.0, 5547.0, 5671.0, 5384.0, 5632.0, 5408.0, 5685.0, 5710.0, 5508.0, 5295.0, 5687.0, 5559.0, 5568.0, 5359.0, 5654.0, 5363.0, 5279.0, 5255.0, 5395.0, 5325.0, 5494.0, 5321.0, 5320.0, 5561.0, 5319.0, 5661.0, 5406.0, 5252.0, 5658.0, 5641.0, 5471.0, 5643.0, 5518.0, 5510.0, 5484.0, 5420.0, 5570.0, 5451.0, 5424.0, 5506.0, 5433.0, 5505.0, 5477.0, 5542.0, 5611.0, 5603.0, 5315.0, 5694.0, 5623.0, 5664.0, 5720.0, 5540.0, 5606.0, 5442.0, 5487.0, 5649.0 (number of hits: 3)

9.6 5590 MHz Bandwidth 40 MHz Statistical Performance

Table-1 Radar Type 1 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5590	18	1	1428	1
2	5590	18	1	1428	1
3	5590	18	1	1428	1
4	5590	18	1	1428	1
5	5590	18	1	1428	1
6	5590	18	1	1428	1
7	5590	18	1	1428	1
8	5590	18	1	1428	1
9	5590	18	1	1428	1
10	5590	18	1	1428	1
11	5590	18	1	1428	1
12	5590	18	1	1428	1
13	5590	18	1	1428	1
14	5590	18	1	1428	1
15	5590	18	1	1428	1
16	5590	18	1	1428	1
17	5590	18	1	1428	1
18	5590	18	1	1428	1
19	5590	18	1	1428	1
20	5590	18	1	1428	1
21	5590	18	1	1428	1
22	5590	18	1	1428	1
23	5590	18	1	1428	1
24	5590	18	1	1428	1
25	5590	18	1	1428	1
26	5590	18	1	1428	1
27	5590	18	1	1428	1
28	5590	18	1	1428	1
29	5590	18	1	1428	1
30	5590	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	5590	23	3.3	211	1
2	5590	27	2.5	193	1
3	5590	25	3.8	176	1
4	5590	23	1.3	165	1
5	5590	24	4.9	150	1
6	5590	29	2.8	164	1
7	5590	26	2.1	186	1
8	5590	27	2.4	210	1
9	5590	25	1.9	200	1
10	5590	29	3.6	194	1
11	5590	28	3.7	155	1
12	5590	26	1.5	153	1
13	5590	29	2.4	188	1
14	5590	25	2.8	213	1
15	5590	27	2	153	1
16	5590	26	1.8	205	1
17	5590	24	2.8	163	1
18	5590	23	3.4	186	1
19	5590	24	4	158	1
20	5590	29	1.5	206	1
21	5590	25	3.3	229	1
22	5590	28	3.1	202	1
23	5590	29	4.1	228	1
24	5590	23	4.8	224	1
25	5590	27	5	214	1
26	5590	24	2.2	174	1
27	5590	23	1.4	220	1
28	5590	27	4.8	167	1
29	5590	27	1.4	182	1
30	5590	28	2.8	179	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	5590	17	8.3	442	1
2	5590	18	9.8	212	1
3	5590	17	6.3	380	1
4	5590	17	8.6	451	1
5	5590	16	8.3	440	1
6	5590	16	8.9	473	1
7	5590	16	8.7	403	1
8	5590	17	6.6	456	1
9	5590	17	6.2	226	1
10	5590	16	9.7	348	1
11	5590	17	8.5	470	1
12	5590	18	6.4	455	1
13	5590	17	8.5	426	1
14	5590	17	7.9	226	1
15	5590	17	9.9	319	1
16	5590	16	9.8	413	1
17	5590	16	6.3	366	1
18	5590	16	8.2	429	1
19	5590	16	8	500	1
20	5590	16	8.6	306	1
21	5590	18	7.8	408	1
22	5590	18	8.3	317	1
23	5590	17	9.2	373	1
24	5590	16	9.6	400	1
25	5590	18	7	348	1
26	5590	16	6.8	311	1
27	5590	18	7.3	335	1
28	5590	17	9.5	234	1
29	5590	16	7.8	382	1
30	5590	17	10	458	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	5590	14	15.3	439	1
2	5590	16	12.6	319	1
3	5590	14	15.6	292	1
4	5590	13	11.7	320	1
5	5590	16	18.2	237	1
6	5590	13	17.9	348	1
7	5590	12	11.9	492	1
8	5590	15	19.3	385	1
9	5590	13	17.8	444	1
10	5590	14	17.3	254	1
11	5590	12	18.7	243	1
12	5590	15	11.6	330	1
13	5590	12	11.1	239	1
14	5590	13	11.2	417	1
15	5590	12	17	374	1
16	5590	13	11.1	439	1
17	5590	12	15.3	299	1
18	5590	16	16.2	465	1
19	5590	12	19.9	266	1
20	5590	14	16.4	437	1
21	5590	15	15.7	215	1
22	5590	13	14.8	395	1
23	5590	13	16	373	1
24	5590	14	14.9	422	1
25	5590	13	14.9	445	1
26	5590	14	18.2	342	1
27	5590	16	16.4	465	1
28	5590	16	13.6	314	1
29	5590	14	13.8	302	1
30	5590	13	12.9	245	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	85.3	1069		0.847272	1
1	1	13	92.1			1.623864	
2	2	9	85.1	1043		2.442459	
3	2	16	54.9	1460		3.305691	
4	2	10	80.7	1500		4.733103	
5	3	6	54.8	1417	1453	5.914363	
6	3	20	72.5	1116	1807	6.590186	
7	3	15	51.4	1139	1267	7.638405	
8	2	20	54.8	1942		8.763564	
9	2	6	67.7	1649		9.106533	
10	2	11	91	1998		10.836141	
11	1	5	73.7			11.537929	

Bin5 Statistics 2

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	17	70.4	1749		0.392382	1
1	2	19	85.4	1314		0.877468	
2	3	6	98.2	1560	1062	1.855603	
3	3	16	60.1	1819	1992	2.08375	
4	1	18	99.3			2.929238	
5	2	11	91.5	1156		3.278816	
6	3	11	62.4	1440	1970	4.3247	
7	3	5	81.3	1688	1437	5.035108	
8	3	10	83.6	1647	1712	5.328671	
9	3	11	56	1245	1604	6.070186	
10	2	14	66.6	1586		6.585013	
11	1	7	94.8			7.050698	
12	1	16	55.3			8.18301	
13	1	16	88.1			8.694305	
14	2	15	82.2	1296		9.031997	
15	2	13	56.3	1541		9.751431	
16	3	15	71.2	1080	1031	10.614891	
17	3	16	74.9	1899	1243	11.127822	
18	3	7	71.7	1677	1769	11.59705	

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	15	52.4	1089	1430	1.190295	1
1	2	6	86.1	1016		1.959251	
2	2	16	66.2	1664		3.042882	
3	3	10	57.5	1128	1843	4.556421	
4	2	12	55.2	1814		5.042185	
5	3	18	77	1851	1834	6.685463	
6	2	12	81.4	1715		8.209063	
7	2	13	50.2	1766		8.859253	
8	1	15	57.2			10.465384	
9	2	9	50	1576		11.288398	

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	19	96.3			0.729545	1
1	1	15	84.7			1.137451	
2	3	12	74.4	1166	1826	2.733513	
3	1	5	94.5			3.738759	
4	2	5	60.9	1031		4.7299	
5	2	14	78	1339		5.30178	
6	2	19	52.3	1338		6.532664	
7	2	13	97.3	1760		7.312694	
8	1	9	72.1			8.810178	
9	2	9	69.9	1617		9.021339	
10	2	14	77.1	1704		10.27103	
11	2	7	78.6	1126		11.676752	

Bin5 Statistics 5

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	13	58.6			0.541964	
1	2	13	89.8	1415		0.983181	
2	3	12	61.4	1057	1881	1.521526	
3	2	9	87.6	1000		2.534779	
4	3	13	98	1119	1784	2.875548	
5	2	14	58.3	1769		3.75113	
6	3	13	63.7	1548	1626	4.908636	
7	2	17	60.4	1043		5.309847	
8	1	16	97.3			6.019825	1
9	2	16	56.9	1187		6.429073	
9	3	16	78.3	1710	1332	7.666721	
10	2	17	61.7	1802		7.786976	
11	2	10	51.2	1876		9.164906	
12	1	17	98.8			9.780153	
13	1	14	89.5			10.317669	
14	1	5	53.3			11.265119	
15	1	6	94.1			11.509264	

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	20	59.8	1019		0.577751	
1	3	15	96.6	1381	1087	2.538507	
2	2	17	84.9	1369		3.229839	
3	3	15	99.7	1445	1864	4.939058	
4	1	7	87.8			5.601218	1
5	1	18	80.7			6.954477	
6	2	10	55.3	1940		8.50835	
7	2	8	74.3	1731		10.043733	
8	2	15	61.7	1860		11.126894	

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	10	54.1	1953		0.567662	1
1	2	12	75.6	1461		2.025926	
2	2	10	68.6	1605		3.160096	
3	3	8	83.8	1304	1316	5.817094	
4	1	10	73.6			6.170326	
5	2	10	96.4	1608		8.370159	
6	2	16	70.4	1898		9.803502	
7	3	12	71.7	1026	1875	11.540842	

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	63.6	1428	1791	0.272238	1
1	2	14	68.8	1669		1.11885	
2	3	14	55.1	1080	1768	2.708776	
3	2	20	68.9	1802		4.005665	
4	2	15	68.5	1367		5.442892	
5	2	7	80.7	1820		5.818753	
6	2	14	62.7	1203		7.115155	
7	1	19	95.2			8.591385	
8	2	7	97.2	1010		9.692506	
9	3	17	75.8	1502	1217	10.169994	
10	3	8	71.5	1782	1904	11.913007	

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	1	18	60.6			0.45409	
1	1	9	66.3			0.935748	
2	2	18	69.4	1980		2.282159	
3	1	18	78.9			2.656212	
4	2	14	85.9	1297		3.943653	
5	2	10	93.8	1911		4.511219	
6	1	17	77			4.926187	
7	2	11	62.3	1390		6.122806	1
8	1	9	76.2			7.059074	
9	3	16	88.6	1695	1559	7.952717	
10	1	17	64.2			8.11856	
11	3	12	80.7	1607	1369	9.497469	
12	2	6	68.4	1005		10.173666	
13	3	9	69.7	1949	1331	10.821301	
14	3	18	89	1627	1421	11.395818	

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	16	73.8	1776		0.4355	
1	1	18	78.5			1.708955	
2	2	15	90.9	1768		2.93759	
3	2	18	69.8	1132		4.266354	
4	2	17	57.2	1347		5.544995	1
5	1	14	82.7			7.558938	
6	3	13	78	1830	1110	8.597124	
7	3	18	84.5	1333	1364	9.740015	
8	3	13	96.5	1275	1069	11.302926	

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	11	54.2	1385		0.383796	1
1	3	18	53.8	1739	1375	2.285193	
2	1	8	68.3			3.073827	
3	2	12	99.2	1180		4.192449	
4	1	12	64.1			5.424334	
5	2	8	82.8	1493		6.352344	
6	1	7	94.4			7.603469	
7	3	16	93.2	1050	1163	8.652023	
8	2	14	80.4	1226		10.185081	
9	2	9	93	1111		11.636849	

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	5	51.4	1959		0.441301	1
1	3	19	98.7	1286	1548	0.850929	
2	3	9	80.5	1424	1087	1.628572	
3	2	13	68.8	1673		2.750414	
4	1	9	86.3			3.378535	
5	2	7	63.1	1915		4.347936	
6	2	10	53	1093		5.190839	
7	2	17	82.2	1914		5.851346	
8	1	9	60.2			6.475848	
9	1	12	77.5			7.979834	
10	1	16	68.5			8.554125	
11	2	8	82.4	1739		8.832777	
12	3	13	84.1	1253	1573	9.868564	
13	2	13	96.3	1740		10.96583	
14	2	17	65.3	1323		11.70478	

Bin5 Statistics 13

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	10	80.1			0.318673	
1	1	8	79.7			1.288148	
2	1	15	73.4			1.858932	
3	2	5	70	1261		3.128035	
4	2	7	99.1	1264		4.186406	
5	3	13	78.2	1456	1667	5.012132	
6	2	15	81.1	2000		5.622384	1
7	2	17	67.2	1605		6.608131	
8	1	19	77.9			8.212628	
9	3	16	96.5	1758	1066	9.131141	
10	2	6	65.7	1509		9.643004	
11	1	10	65.8			10.57412	
12	3	12	83.8	1705	1144	11.587545	

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	11	62.8			0.754123	
1	2	13	94	1876		1.364875	
2	2	19	58.4	1392		2.438586	
3	1	18	68.2			3.44414	
4	2	7	66.8	1895		5.336096	
5	2	16	86.1	1977		6.358511	1
6	2	17	74.8	1680		6.942025	
7	2	6	66.2	1698		8.131225	
8	3	12	95.2	1639	1289	8.924897	
9	2	6	75.8	1690		10.330991	
10	2	12	69.1	1122		11.549271	

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	19	66.9	1409		0.65918	1
1	1	18	69.2			0.77039	
2	1	11	58.7			1.972848	
3	2	9	86.4	1832		2.463754	
4	2	20	58	1293		3.293473	
5	2	5	62.3	1785		3.574229	
6	3	13	62.3	1121	1186	4.544242	
7	2	13	57.1	1588		5.210329	
8	2	16	72.3	1159		6.233289	
9	2	18	59.3	1709		6.391731	
10	2	6	99.6	1669		7.230691	
11	1	14	81.4			7.897824	
12	1	7	55.9			8.636472	
13	3	11	77	1357	1806	9.403867	
14	2	19	66.2	1206		10.128338	
15	3	11	93.8	1085	1158	11.059351	
16	1	5	91.4			11.352977	

Bin5 Statistics 16

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	8	64.1			0.503768	
1	2	17	75.8	1353		0.684694	
2	2	8	53	1652		1.757801	
3	1	10	63.3			2.267037	
4	2	6	78.9	1352		2.83585	
5	2	13	81.5	1586		3.111201	
6	2	5	86.9	1670		3.790983	
7	1	11	91.7			4.531918	
8	3	16	94.9	1570	1526	4.90191	
9	3	16	79.2	1484	1229	5.774181	1
10	3	12	83.5	1476	1558	6.375784	
11	3	13	63.3	1194	1581	7.049692	
12	1	7	67			7.381675	
13	1	19	68.1			7.859682	
14	1	11	79.4			8.596444	
15	3	15	52.3	1973	1725	9.014818	
16	1	16	58.3			10.119279	
17	2	9	66.8	1786		10.788816	
18	1	5	91.5			11.365697	
19	2	6	97.2	1843		11.624949	

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	10	59.8	1713		0.37518	
1	2	12	54.5	1342		1.201137	
2	1	12	54.8			2.331477	
3	2	11	74.5	1860		3.144116	
4	3	8	57.2	1793	1617	3.868525	
5	3	8	96.3	1647	1820	4.53667	
6	2	18	91.7	1612		5.278752	
7	2	13	90.8	1105		6.465265	1
8	2	18	98.2	1017		7.406674	
9	2	18	90.7	1158		8.421161	
10	1	5	73.9			8.821227	
11	1	16	66.6			9.843901	
12	1	16	86.1			11.009143	
13	1	8	86.6			11.326182	

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	56.4	1008		0.343751	
1	2	7	61.5	1174		1.319178	
2	1	9	56.9			1.696278	
3	2	12	87.9	1752		2.416911	
4	1	17	86.8			3.605907	
5	1	18	76.1			4.374829	
6	2	9	51.9	1936		4.857673	
7	2	12	74.5	1894		5.950048	1
8	3	11	94.2	1854	1319	6.444513	
9	3	16	53.8	1585	1931	7.630405	
10	2	15	70.7	1188		8.224201	
11	3	14	75.2	1369	1500	9.197167	
12	2	12	62.2	1612		9.909617	
13	2	18	97.4	1315		10.924675	
14	2	16	53.6	1862		11.913286	

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	18	94.8	1272		0.655459	
1	2	10	74.8	1522		1.735027	
2	2	14	52.8	1598		2.51897	
3	1	14	68.3			3.334038	
4	3	17	91.6	1112	1960	3.898996	
5	3	15	66	1530	1599	4.616657	
6	2	7	97.6	1382		5.895597	1
7	1	18	81.7			7.201851	
8	2	10	66.4	1477		7.742458	
9	2	7	76.6	1638		8.688854	
10	3	8	56	1749	1732	9.495109	
11	1	5	77.9			10.965819	
12	2	15	72.2	1972		11.855063	

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	14	68.1	1956	1433	0.152272	
1	1	6	71.5			1.206874	
2	2	10	79.5	1534		3.25876	
3	3	16	69.8	1738	1605	4.226222	
4	2	18	97.8	1876		4.677331	
5	2	7	53.9	1801		5.781147	1
6	1	8	50.6			7.131891	
7	2	6	51.4	1142		8.224708	
8	2	19	59.4	1690		9.296417	
9	1	20	54.2			10.096093	
10	2	5	85.5	1401		10.985356	

Bin5 Statistics 21

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	1	8	80.1			0.962392	
1	1	10	58.7			1.505557	
2	3	14	69.2	1434	1596	3.63834	
3	3	16	80.7	1218	1199	4.646917	
4	2	19	51.5	1750		5.507562	1
5	3	10	93.3	1296	1905	6.93387	
6	3	14	58.6	1848	1400	8.042536	
7	2	17	98.9	1726		10.547753	
8	1	16	71.9			11.727764	

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	64.4	1205		0.330126	
1	3	19	75.2	1776	1024	0.639639	
2	2	13	79	1131		1.570586	
3	2	6	68.9	1223		2.384774	
4	3	19	95.3	1896	1106	2.533652	
5	2	8	73.8	1887		3.280195	
6	3	17	87.6	1792	1844	3.856333	
7	2	10	62.7	1397		4.536216	
8	2	10	86.7	1216		4.957182	
9	2	20	99.1	1438		5.575177	1
10	3	17	50.1	1812	1165	6.104926	
11	2	12	57.4	1090		6.861382	
12	2	19	61.9	1381		7.648798	
13	1	9	96.4			7.913182	
14	3	15	72.2	1670	1072	8.562666	
15	1	17	76.8			9.568404	
16	3	7	71.4	1468	1084	10.048728	
17	1	14	54.1			10.522561	
18	2	18	70.4	1220		11.137555	
19	1	7	62.1			11.871798	

Bin5 Statistics 23

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	2	18	99.4	1225		0.927742	
1	2	11	91	1912		1.909104	
2	2	15	67.7	1882		2.921429	
3	2	7	67.4	1000		3.742463	
4	1	8	95.3			4.60759	
5	1	19	76			5.923472	1
6	2	14	56.9	1601		6.707227	
7	3	12	94.5	1923	1089	7.670343	
8	1	7	57			8.763729	
9	2	7	68.3	1778		10.165212	
10	3	5	72.2	1250	1765	11.352242	

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	3	8	69.5	1238	1892	0.420937	
1	2	11	99.8	1389		1.447047	
2	2	9	76.5	1169		2.575876	
3	2	16	64.4	1272		3.692155	
4	2	10	82.1	1430		4.385148	
5	2	17	71.6	1853		5.574127	1
6	2	14	73.2	1040		6.547287	
7	2	17	89.1	1168		7.527841	
8	3	18	71.7	1410	1816	8.072794	
9	3	16	83	1796	1229	9.151973	
10	1	9	63.4			10.257641	
11	1	15	95.1			11.651162	

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	9	60.1	1857		0.020183	
1	1	13	97			1.286536	
2	2	7	62.9	1307		1.620707	
3	2	8	72.4	1685		2.374141	
4	2	14	78.3	1450		2.842063	
5	3	13	63.2	1945	1638	3.835533	
6	1	13	85.1			4.222139	
7	2	17	83.2	1454		4.982841	
8	1	13	85.5			5.594225	1
9	1	13	59.1			6.050983	
10	2	14	72	1872		6.756254	
11	3	19	92.8	1209	1106	7.545263	
12	3	7	93	1498	1650	8.079596	
13	2	8	60.4	1834		9.153957	
14	3	10	63.7	1944	1817	9.917736	
15	1	14	73			10.637001	
16	3	16	74	1330	1237	10.964723	
17	3	7	71.9	1137	1494	11.488031	

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	6	93.2	1518		0.042156	
1	2	19	73.8	1048		0.784162	
2	2	15	99.6	1728		1.779772	
3	1	15	61.6			2.471152	
4	3	13	52.7	1734	1632	3.113836	
5	2	20	68.6	1625		3.594422	
6	1	7	96.1			4.894764	
7	1	19	70.6			5.614423	
8	3	15	91.9	1693	1377	6.109297	1
9	2	12	79.5	1635		6.556036	
10	2	9	77.4	1055		7.450193	
11	3	8	86.9	1909	1130	8.33826	
12	2	5	84.6	1047		8.91891	
13	3	19	78	1575	1941	9.609649	
14	3	10	63.6	1801	1412	10.397111	
15	1	13	75.9			11.099712	
16	2	9	53.1	1181		11.843795	

Bin5 Statistics 27

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	9	59.9	1170	1307	0.146665	
1	1	16	95.8			1.23035	
2	3	17	90.7	1854	1611	2.18511	
3	3	14	78.4	1796	1215	3.332452	
4	1	12	87			4.001569	
5	1	13	61.2			5.794148	
6	2	15	81.1	1545		6.536226	1
7	3	7	70.4	1681	1503	7.044155	
8	1	10	59.9			8.330873	
9	2	16	60.1	1922		9.616807	
10	2	13	59.5	1087		10.917307	
11	2	9	71.9	1765		11.255719	

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	9	76.4	1470		0.381228	
1	2	10	57.7	1398		1.745408	
2	2	16	84.6	1731		2.261703	
3	2	16	52.4	1488		3.225508	
4	1	17	86.6			4.429414	
5	2	8	52.6	1183		4.621791	
6	2	20	55.4	1433		5.789888	1
7	2	17	72.2	1759		6.656562	
8	3	11	56.4	1014	1641	7.655747	
9	2	14	56.8	1470		8.580943	
10	2	17	83.9	1700		9.353893	
11	3	15	75.6	1026	1961	10.696985	
12	2	15	74.7	1368		11.566673	

Bin5 Statistics 29

Trial #	Pulse	Chirp (MHz)	Pulse Width (µS)	Pulse 1-2 spacing (uS)	Pulse 2-3 spacing (uS)	Pulse Start(S)	Detection (1:yes; 0:no)
0	3	12	91.1	1287	1476	0.788117	
1	2	11	70.7	1272		1.689346	
2	3	18	60.3	1641	1315	2.100378	
3	2	15	62.2	1580		3.022839	
4	1	17	85.3			4.349866	
5	1	18	70.2			5.193938	
6	2	18	88.8	1697		5.895983	1
7	3	17	77.3	1491	1695	6.477527	
8	2	10	85.2	1708		8.017535	
9	2	13	79.1	1464		8.488291	
10	3	7	52.4	1816	1200	9.920207	
11	1	17	93.9			11.049938	
12	2	9	57.5	1031		11.099639	

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	14	94.7	1716	1100	0.827162	1
1	2	10	60.6	1128		1.389265	
2	2	14	77	1787		2.261952	
3	1	19	83.2			3.116285	
4	1	11	53.9			3.536987	
5	1	8	65.1			4.682585	
6	1	12	65.6			5.155493	
7	3	19	64.6	1630	1313	6.391839	
8	1	7	67.6			7.21628	
9	2	17	91.4	1867		8.476865	
10	3	18	63.6	1459	1107	9.406264	
11	3	5	72	1251	1455	9.59285	
12	2	16	93.8	1933		10.416697	
13	3	6	72	1152	1239	11.230573	

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	5590	9	1	333	1	5388.0, 5331.0, 5633.0, 5647.0, 5360.0, 5492.0, 5259.0, 5290.0, 5392.0, 5303.0, 5436.0, 5545.0, 5534.0, 5485.0, 5540.0, 5475.0, 5454.0, 5524.0, 5282.0, 5305.0, 5562.0, 5289.0, 5279.0, 5458.0, 5491.0, 5427.0, 5721.0, 5494.0, 5565.0, 5651.0, 5353.0, 5394.0, 5523.0, 5457.0, 5623.0, 5389.0, 5310.0, 5704.0, 5574.0, 5401.0, 5670.0, 5382.0, 5318.0, 5674.0, 5635.0, 5373.0, 5510.0, 5426.0, 5349.0, 5637.0, 5592.0, 5573.0, 5368.0, 5350.0, 5606.0, 5315.0, 5583.0, 5586.0, 5263.0, 5498.0, 5652.0, 5561.0, 5676.0, 5718.0, 5391.0, 5270.0, 5358.0, 5256.0, 5500.0, 5709.0, 5699.0, 5582.0, 5601.0, 5664.0, 5509.0, 5610.0, 5348.0, 5724.0, 5416.0, 5707.0, 5277.0, 5622.0, 5616.0, 5312.0, 5478.0, 5632.0, 5660.0, 5311.0, 5634.0, 5615.0, 5604.0, 5404.0, 5449.0, 5689.0, 5566.0, 5511.0, 5343.0, 5663.0, 5712.0, 5608.0 (number of hits: 10)
2	5590	9	1	333	1	5525.0, 5323.0, 5471.0, 5417.0, 5562.0, 5578.0, 5561.0, 5588.0, 5509.0, 5513.0, 5285.0, 5560.0, 5321.0, 5664.0, 5494.0, 5301.0, 5603.0, 5258.0, 5671.0, 5292.0, 5556.0, 5581.0, 5287.0, 5422.0, 5428.0, 5699.0, 5477.0, 5484.0, 5425.0, 5403.0, 5300.0, 5294.0, 5700.0, 5576.0, 5717.0, 5520.0, 5449.0, 5555.0, 5551.0, 5410.0, 5590.0, 5393.0, 5495.0, 5697.0, 5677.0, 5468.0, 5601.0, 5328.0, 5385.0, 5694.0, 5448.0, 5473.0, 5614.0, 5432.0, 5583.0, 5567.0, 5642.0, 5289.0, 5550.0, 5654.0, 5569.0, 5522.0, 5672.0, 5384.0, 5599.0, 5330.0, 5259.0, 5714.0, 5683.0, 5517.0, 5274.0, 5534.0, 5260.0, 5366.0, 5539.0, 5530.0, 5445.0, 5255.0, 5610.0, 5308.0, 5381.0, 5352.0, 5658.0, 5491.0, 5266.0, 5302.0, 5519.0, 5687.0, 5565.0, 5503.0, 5623.0, 5592.0, 5713.0, 5641.0, 5532.0, 5357.0, 5529.0, 5707.0, 5273.0, 5437.0 (number of hits: 10)
3	5590	9	1	333	1	5646.0, 5264.0, 5471.0, 5540.0, 5345.0, 5554.0, 5284.0, 5525.0, 5448.0, 5349.0, 5477.0, 5662.0, 5361.0, 5266.0, 5566.0, 5716.0, 5357.0, 5667.0, 5722.0, 5286.0, 5324.0, 5280.0, 5717.0, 5373.0, 5393.0, 5299.0, 5595.0, 5307.0, 5559.0, 5628.0, 5600.0, 5407.0, 5256.0, 5663.0, 5255.0, 5417.0, 5302.0, 5359.0, 5356.0, 5314.0, 5398.0, 5460.0, 5443.0, 5528.0, 5684.0, 5427.0, 5506.0, 5288.0, 5316.0, 5440.0, 5312.0, 5358.0, 5431.0, 5426.0, 5544.0,

						5711.0, 5702.0, 5522.0, 5589.0, 5480.0, 5612.0, 5381.0, 5618.0, 5526.0, 5705.0, 5441.0, 5706.0, 5451.0, 5551.0, 5672.0, 5547.0, 5708.0, 5724.0, 5529.0, 5479.0, 5489.0, 5291.0, 5599.0, 5499.0, 5403.0, 5340.0, 5363.0, 5578.0, 5325.0, 5435.0, 5338.0, 5311.0, 5317.0, 5463.0, 5387.0, 5560.0, 5392.0, 5688.0, 5310.0, 5362.0, 5401.0, 5378.0, 5372.0, 5527.0, 5710.0 (number of hits: 5)
4	5590	9	1	333	1	5554.0, 5259.0, 5611.0, 5276.0, 5517.0, 5321.0, 5626.0, 5483.0, 5562.0, 5667.0, 5723.0, 5469.0, 5368.0, 5441.0, 5643.0, 5300.0, 5439.0, 5705.0, 5686.0, 5376.0, 5420.0, 5406.0, 5421.0, 5274.0, 5253.0, 5501.0, 5397.0, 5269.0, 5604.0, 5666.0, 5664.0, 5495.0, 5572.0, 5600.0, 5520.0, 5603.0, 5699.0, 5472.0, 5526.0, 5590.0, 5509.0, 5557.0, 5328.0, 5491.0, 5331.0, 5303.0, 5607.0, 5485.0, 5560.0, 5548.0, 5361.0, 5628.0, 5561.0, 5642.0, 5576.0, 5398.0, 5295.0, 5594.0, 5539.0, 5284.0, 5307.0, 5289.0, 5597.0, 5334.0, 5301.0, 5402.0, 5544.0, 5641.0, 5360.0, 5668.0, 5651.0, 5582.0, 5310.0, 5268.0, 5384.0, 5566.0, 5323.0, 5462.0, 5296.0, 5512.0, 5437.0, 5592.0, 5614.0, 5305.0, 5352.0, 5719.0, 5447.0, 5528.0, 5399.0, 5624.0, 5383.0, 5672.0, 5680.0, 5477.0, 5281.0, 5478.0, 5518.0, 5418.0, 5490.0, 5586.0 (number of hits: 12)
5	5590	9	1	333	1	5295.0, 5694.0, 5251.0, 5303.0, 5361.0, 5265.0, 5422.0, 5322.0, 5504.0, 5567.0, 5581.0, 5689.0, 5559.0, 5384.0, 5357.0, 5693.0, 5632.0, 5580.0, 5271.0, 5715.0, 5311.0, 5658.0, 5545.0, 5293.0, 5429.0, 5390.0, 5547.0, 5681.0, 5479.0, 5363.0, 5569.0, 5617.0, 5649.0, 5393.0, 5577.0, 5544.0, 5409.0, 5709.0, 5656.0, 5523.0, 5376.0, 5465.0, 5368.0, 5513.0, 5412.0, 5310.0, 5610.0, 5491.0, 5256.0, 5301.0, 5720.0, 5320.0, 5548.0, 5344.0, 5304.0, 5319.0, 5589.0, 5622.0, 5431.0, 5418.0, 5433.0, 5679.0, 5597.0, 5362.0, 5722.0, 5533.0, 5484.0, 5434.0, 5542.0, 5263.0, 5367.0, 5571.0, 5468.0, 5690.0, 5528.0, 5327.0, 5397.0, 5267.0, 5666.0, 5492.0, 5551.0, 5677.0, 5456.0, 5503.0, 5425.0, 5416.0, 5419.0, 5421.0, 5395.0, 5369.0, 5437.0, 5435.0, 5642.0, 5283.0, 5578.0, 5324.0, 5599.0, 5525.0, 5307.0, 5651.0 (number of hits: 8)
6	5590	9	1	333	1	5636.0, 5482.0, 5581.0, 5307.0, 5509.0, 5315.0, 5667.0, 5378.0, 5346.0, 5717.0, 5278.0, 5379.0, 5712.0, 5354.0, 5705.0, 5575.0, 5568.0, 5555.0, 5590.0, 5501.0, 5707.0, 5275.0, 5423.0, 5358.0, 5401.0, 5310.0, 5713.0, 5537.0, 5279.0, 5567.0, 5487.0, 5658.0, 5263.0, 5409.0, 5492.0,

						5716.0, 5529.0, 5327.0, 5377.0, 5280.0, 5448.0, 5515.0, 5626.0, 5441.0, 5468.0, 5342.0, 5535.0, 5319.0, 5344.0, 5431.0, 5580.0, 5637.0, 5403.0, 5306.0, 5494.0, 5504.0, 5609.0, 5719.0, 5585.0, 5405.0, 5460.0, 5411.0, 5676.0, 5257.0, 5610.0, 5602.0, 5251.0, 5399.0, 5293.0, 5388.0, 5498.0, 5703.0, 5706.0, 5404.0, 5587.0, 5270.0, 5305.0, 5360.0, 5442.0, 5434.0, 5474.0, 5348.0, 5577.0, 5478.0, 5357.0, 5506.0, 5350.0, 5363.0, 5285.0, 5277.0, 5477.0, 5635.0, 5653.0, 5264.0, 5254.0, 5296.0, 5320.0, 5470.0, 5340.0, 5530.0 (number of hits: 9)
7	5590	9	1	333	1	5332.0, 5336.0, 5607.0, 5401.0, 5437.0, 5487.0, 5315.0, 5331.0, 5462.0, 5572.0, 5503.0, 5262.0, 5592.0, 5306.0, 5414.0, 5723.0, 5631.0, 5423.0, 5704.0, 5614.0, 5463.0, 5512.0, 5361.0, 5445.0, 5573.0, 5396.0, 5516.0, 5716.0, 5350.0, 5489.0, 5671.0, 5380.0, 5404.0, 5568.0, 5612.0, 5585.0, 5411.0, 5702.0, 5334.0, 5386.0, 5714.0, 5567.0, 5442.0, 5524.0, 5283.0, 5571.0, 5636.0, 5722.0, 5721.0, 5383.0, 5253.0, 5508.0, 5686.0, 5452.0, 5672.0, 5497.0, 5547.0, 5596.0, 5374.0, 5720.0, 5468.0, 5566.0, 5464.0, 5271.0, 5553.0, 5431.0, 5419.0, 5261.0, 5502.0, 5629.0, 5565.0, 5286.0, 5570.0, 5251.0, 5640.0, 5316.0, 5543.0, 5680.0, 5685.0, 5661.0, 5473.0, 5518.0, 5707.0, 5344.0, 5541.0, 5659.0, 5525.0, 5695.0, 5611.0, 5501.0, 5544.0, 5470.0, 5590.0, 5450.0, 5359.0, 5509.0, 5632.0, 5443.0, 5494.0, 5484.0 (number of hits: 9)
8	5590	9	1	333	1	5347.0, 5617.0, 5295.0, 5458.0, 5396.0, 5498.0, 5397.0, 5595.0, 5635.0, 5297.0, 5665.0, 5659.0, 5283.0, 5453.0, 5439.0, 5318.0, 5270.0, 5528.0, 5514.0, 5700.0, 5341.0, 5486.0, 5600.0, 5723.0, 5662.0, 5455.0, 5584.0, 5716.0, 5412.0, 5718.0, 5548.0, 5636.0, 5265.0, 5253.0, 5405.0, 5269.0, 5591.0, 5293.0, 5684.0, 5497.0, 5415.0, 5264.0, 5395.0, 5611.0, 5336.0, 5582.0, 5379.0, 5366.0, 5466.0, 5509.0, 5500.0, 5520.0, 5465.0, 5553.0, 5623.0, 5638.0, 5522.0, 5467.0, 5516.0, 5438.0, 5382.0, 5681.0, 5542.0, 5337.0, 5673.0, 5702.0, 5606.0, 5420.0, 5625.0, 5288.0, 5507.0, 5605.0, 5525.0, 5440.0, 5598.0, 5477.0, 5292.0, 5358.0, 5459.0, 5460.0, 5649.0, 5534.0, 5537.0, 5502.0, 5491.0, 5632.0, 5478.0, 5604.0, 5482.0, 5627.0, 5564.0, 5411.0, 5631.0, 5348.0, 5669.0, 5503.0, 5444.0, 5364.0, 5657.0, 5432.0 (number of hits: 9)
9	5590	9	1	333	1	5713.0, 5572.0, 5516.0, 5642.0, 5349.0, 5492.0, 5368.0, 5688.0, 5581.0, 5655.0, 5316.0, 5409.0, 5307.0, 5528.0, 5587.0,

						5264.0, 5261.0, 5639.0, 5352.0, 5614.0, 5609.0, 5505.0, 5293.0, 5313.0, 5471.0, 5623.0, 5599.0, 5363.0, 5430.0, 5596.0, 5660.0, 5410.0, 5622.0, 5510.0, 5408.0, 5512.0, 5283.0, 5588.0, 5326.0, 5476.0, 5665.0, 5504.0, 5438.0, 5678.0, 5289.0, 5521.0, 5439.0, 5508.0, 5517.0, 5305.0, 5365.0, 5597.0, 5377.0, 5481.0, 5666.0, 5453.0, 5384.0, 5342.0, 5465.0, 5506.0, 5659.0, 5269.0, 5646.0, 5501.0, 5637.0, 5405.0, 5607.0, 5442.0, 5603.0, 5632.0, 5511.0, 5303.0, 5499.0, 5257.0, 5413.0, 5518.0, 5323.0, 5324.0, 5443.0, 5295.0, 5719.0, 5310.0, 5709.0, 5367.0, 5375.0, 5491.0, 5359.0, 5467.0, 5717.0, 5543.0, 5398.0, 5437.0, 5379.0, 5693.0, 5559.0, 5449.0, 5497.0, 5348.0, 5482.0, 5451.0 (number of hits: 10)
10	5590	9	1	333	1	5499.0, 5497.0, 5455.0, 5322.0, 5333.0, 5258.0, 5370.0, 5471.0, 5275.0, 5291.0, 5607.0, 5649.0, 5379.0, 5517.0, 5289.0, 5683.0, 5532.0, 5326.0, 5659.0, 5478.0, 5400.0, 5515.0, 5559.0, 5625.0, 5575.0, 5527.0, 5338.0, 5456.0, 5531.0, 5382.0, 5661.0, 5359.0, 5299.0, 5418.0, 5523.0, 5394.0, 5651.0, 5386.0, 5312.0, 5399.0, 5669.0, 5295.0, 5500.0, 5483.0, 5632.0, 5267.0, 5706.0, 5459.0, 5627.0, 5610.0, 5341.0, 5668.0, 5345.0, 5340.0, 5513.0, 5432.0, 5622.0, 5324.0, 5251.0, 5493.0, 5498.0, 5360.0, 5676.0, 5554.0, 5545.0, 5673.0, 5285.0, 5538.0, 5395.0, 5410.0, 5536.0, 5271.0, 5381.0, 5411.0, 5402.0, 5551.0, 5572.0, 5445.0, 5618.0, 5529.0, 5268.0, 5583.0, 5678.0, 5570.0, 5283.0, 5555.0, 5723.0, 5451.0, 5376.0, 5467.0, 5366.0, 5708.0, 5509.0, 5458.0, 5714.0, 5549.0, 5546.0, 5314.0, 5294.0, 5703.0 (number of hits: 5)
11	5590	9	1	333	1	5290.0, 5706.0, 5253.0, 5359.0, 5336.0, 5362.0, 5546.0, 5674.0, 5590.0, 5319.0, 5419.0, 5618.0, 5480.0, 5381.0, 5481.0, 5551.0, 5401.0, 5330.0, 5397.0, 5417.0, 5558.0, 5516.0, 5435.0, 5638.0, 5296.0, 5561.0, 5641.0, 5583.0, 5721.0, 5407.0, 5301.0, 5499.0, 5406.0, 5455.0, 5392.0, 5284.0, 5443.0, 5383.0, 5653.0, 5497.0, 5597.0, 5361.0, 5302.0, 5535.0, 5707.0, 5389.0, 5250.0, 5353.0, 5437.0, 5426.0, 5629.0, 5624.0, 5369.0, 5659.0, 5346.0, 5610.0, 5614.0, 5291.0, 5496.0, 5278.0, 5539.0, 5615.0, 5632.0, 5382.0, 5349.0, 5687.0, 5371.0, 5536.0, 5552.0, 5686.0, 5636.0, 5315.0, 5403.0, 5627.0, 5411.0, 5634.0, 5640.0, 5598.0, 5714.0, 5398.0, 5285.0, 5415.0, 5340.0, 5672.0, 5378.0, 5613.0, 5711.0, 5271.0, 5531.0, 5376.0, 5650.0, 5570.0, 5695.0, 5449.0, 5704.0, 5676.0, 5630.0, 5573.0, 5488.0, 5689.0

						(number of hits: 6)
12	5590	9	1	333	1	5438.0, 5678.0, 5278.0, 5613.0, 5442.0, 5325.0, 5276.0, 5673.0, 5513.0, 5666.0, 5487.0, 5616.0, 5721.0, 5718.0, 5309.0, 5561.0, 5345.0, 5524.0, 5667.0, 5299.0, 5702.0, 5714.0, 5453.0, 5455.0, 5440.0, 5386.0, 5392.0, 5281.0, 5515.0, 5599.0, 5439.0, 5580.0, 5446.0, 5467.0, 5506.0, 5406.0, 5633.0, 5687.0, 5260.0, 5695.0, 5337.0, 5641.0, 5411.0, 5654.0, 5575.0, 5494.0, 5385.0, 5468.0, 5591.0, 5516.0, 5677.0, 5722.0, 5307.0, 5479.0, 5536.0, 5653.0, 5528.0, 5610.0, 5535.0, 5698.0, 5637.0, 5508.0, 5328.0, 5377.0, 5711.0, 5471.0, 5272.0, 5699.0, 5490.0, 5601.0, 5351.0, 5373.0, 5525.0, 5365.0, 5326.0, 5584.0, 5277.0, 5317.0, 5303.0, 5476.0, 5426.0, 5495.0, 5505.0, 5321.0, 5354.0, 5682.0, 5630.0, 5422.0, 5634.0, 5557.0, 5368.0, 5566.0, 5257.0, 5645.0, 5403.0, 5414.0, 5717.0, 5540.0, 5350.0, 5300.0 (number of hits: 6)
13	5590	9	1	333	1	5429.0, 5351.0, 5434.0, 5375.0, 5644.0, 5355.0, 5415.0, 5706.0, 5555.0, 5489.0, 5408.0, 5497.0, 5498.0, 5514.0, 5521.0, 5717.0, 5525.0, 5397.0, 5450.0, 5538.0, 5558.0, 5642.0, 5645.0, 5316.0, 5697.0, 5670.0, 5309.0, 5281.0, 5601.0, 5251.0, 5269.0, 5673.0, 5422.0, 5430.0, 5466.0, 5566.0, 5621.0, 5634.0, 5591.0, 5403.0, 5716.0, 5624.0, 5722.0, 5614.0, 5667.0, 5364.0, 5324.0, 5607.0, 5633.0, 5470.0, 5361.0, 5581.0, 5412.0, 5418.0, 5387.0, 5399.0, 5557.0, 5273.0, 5522.0, 5629.0, 5702.0, 5511.0, 5495.0, 5298.0, 5451.0, 5255.0, 5640.0, 5723.0, 5588.0, 5713.0, 5280.0, 5321.0, 5649.0, 5405.0, 5563.0, 5696.0, 5700.0, 5625.0, 5646.0, 5372.0, 5396.0, 5334.0, 5421.0, 5376.0, 5354.0, 5386.0, 5606.0, 5371.0, 5546.0, 5274.0, 5385.0, 5341.0, 5420.0, 5431.0, 5674.0, 5505.0, 5485.0, 5573.0, 5660.0, 5393.0 (number of hits: 7)
14	5590	9	1	333	1	5348.0, 5452.0, 5547.0, 5687.0, 5707.0, 5439.0, 5425.0, 5724.0, 5364.0, 5283.0, 5614.0, 5427.0, 5693.0, 5365.0, 5524.0, 5515.0, 5621.0, 5447.0, 5324.0, 5309.0, 5453.0, 5676.0, 5473.0, 5357.0, 5591.0, 5604.0, 5319.0, 5370.0, 5680.0, 5284.0, 5382.0, 5689.0, 5429.0, 5374.0, 5590.0, 5369.0, 5263.0, 5342.0, 5311.0, 5307.0, 5462.0, 5573.0, 5327.0, 5285.0, 5527.0, 5339.0, 5492.0, 5367.0, 5411.0, 5466.0, 5549.0, 5289.0, 5542.0, 5502.0, 5651.0, 5445.0, 5480.0, 5608.0, 5615.0, 5391.0, 5253.0, 5688.0, 5410.0, 5416.0, 5384.0, 5634.0, 5413.0, 5626.0, 5478.0, 5683.0, 5543.0, 5716.0, 5296.0, 5303.0, 5337.0, 5463.0, 5491.0, 5394.0, 5349.0, 5639.0,

						5650.0, 5438.0, 5330.0, 5352.0, 5350.0, 5695.0, 5519.0, 5545.0, 5455.0, 5584.0, 5529.0, 5677.0, 5310.0, 5616.0, 5377.0, 5560.0, 5483.0, 5578.0, 5649.0, 5399.0 (number of hits: 7)
15	5590	9	1	333	1	5534.0, 5252.0, 5447.0, 5442.0, 5326.0, 5548.0, 5251.0, 5506.0, 5404.0, 5514.0, 5321.0, 5593.0, 5486.0, 5624.0, 5384.0, 5474.0, 5545.0, 5484.0, 5673.0, 5554.0, 5266.0, 5495.0, 5539.0, 5454.0, 5516.0, 5572.0, 5656.0, 5316.0, 5373.0, 5521.0, 5642.0, 5701.0, 5463.0, 5283.0, 5349.0, 5348.0, 5678.0, 5704.0, 5578.0, 5480.0, 5461.0, 5320.0, 5646.0, 5460.0, 5430.0, 5479.0, 5551.0, 5616.0, 5564.0, 5498.0, 5648.0, 5449.0, 5720.0, 5509.0, 5706.0, 5654.0, 5330.0, 5458.0, 5538.0, 5407.0, 5686.0, 5264.0, 5279.0, 5660.0, 5585.0, 5577.0, 5667.0, 5396.0, 5420.0, 5677.0, 5302.0, 5715.0, 5259.0, 5364.0, 5633.0, 5362.0, 5611.0, 5688.0, 5549.0, 5535.0, 5369.0, 5413.0, 5357.0, 5257.0, 5558.0, 5452.0, 5286.0, 5437.0, 5303.0, 5445.0, 5399.0, 5579.0, 5652.0, 5507.0, 5710.0, 5366.0, 5605.0, 5681.0, 5383.0, 5258.0 (number of hits: 7)
16	5590	9	1	333	1	5596.0, 5343.0, 5669.0, 5605.0, 5306.0, 5491.0, 5597.0, 5389.0, 5719.0, 5441.0, 5600.0, 5653.0, 5695.0, 5423.0, 5388.0, 5483.0, 5532.0, 5634.0, 5251.0, 5271.0, 5445.0, 5404.0, 5697.0, 5403.0, 5523.0, 5408.0, 5655.0, 5402.0, 5305.0, 5700.0, 5650.0, 5688.0, 5307.0, 5275.0, 5460.0, 5506.0, 5573.0, 5560.0, 5561.0, 5406.0, 5659.0, 5316.0, 5362.0, 5595.0, 5284.0, 5550.0, 5298.0, 5252.0, 5342.0, 5545.0, 5645.0, 5461.0, 5314.0, 5364.0, 5437.0, 5370.0, 5322.0, 5554.0, 5627.0, 5701.0, 5285.0, 5680.0, 5282.0, 5548.0, 5414.0, 5405.0, 5557.0, 5527.0, 5279.0, 5410.0, 5562.0, 5463.0, 5392.0, 5373.0, 5339.0, 5704.0, 5505.0, 5424.0, 5321.0, 5467.0, 5485.0, 5516.0, 5672.0, 5384.0, 5720.0, 5656.0, 5568.0, 5391.0, 5611.0, 5432.0, 5684.0, 5489.0, 5541.0, 5413.0, 5608.0, 5304.0, 5471.0, 5398.0, 5556.0, 5552.0 (number of hits: 7)
17	5590	9	1	333	1	5390.0, 5288.0, 5573.0, 5493.0, 5567.0, 5309.0, 5272.0, 5562.0, 5270.0, 5658.0, 5661.0, 5547.0, 5555.0, 5543.0, 5508.0, 5303.0, 5513.0, 5447.0, 5621.0, 5697.0, 5369.0, 5377.0, 5354.0, 5509.0, 5421.0, 5332.0, 5265.0, 5470.0, 5662.0, 5486.0, 5531.0, 5618.0, 5282.0, 5480.0, 5656.0, 5615.0, 5412.0, 5350.0, 5677.0, 5379.0, 5649.0, 5709.0, 5711.0, 5559.0, 5385.0, 5254.0, 5479.0, 5624.0, 5630.0, 5550.0, 5453.0, 5250.0, 5673.0, 5663.0, 5398.0, 5431.0, 5530.0, 5339.0, 5252.0, 5694.0,

						5538.0, 5481.0, 5545.0, 5671.0, 5269.0, 5411.0, 5504.0, 5452.0, 5469.0, 5579.0, 5308.0, 5409.0, 5365.0, 5295.0, 5342.0, 5310.0, 5516.0, 5653.0, 5395.0, 5622.0, 5519.0, 5540.0, 5713.0, 5476.0, 5416.0, 5313.0, 5491.0, 5500.0, 5603.0, 5616.0, 5614.0, 5488.0, 5565.0, 5418.0, 5719.0, 5423.0, 5558.0, 5468.0, 5657.0, 5623.0 (number of hits: 3)
18	5590	9	1	333	1	5602.0, 5250.0, 5493.0, 5526.0, 5397.0, 5540.0, 5450.0, 5314.0, 5525.0, 5272.0, 5374.0, 5377.0, 5402.0, 5419.0, 5362.0, 5481.0, 5398.0, 5400.0, 5480.0, 5722.0, 5378.0, 5662.0, 5429.0, 5709.0, 5350.0, 5320.0, 5290.0, 5542.0, 5303.0, 5592.0, 5442.0, 5644.0, 5259.0, 5619.0, 5708.0, 5617.0, 5420.0, 5325.0, 5558.0, 5403.0, 5604.0, 5261.0, 5643.0, 5393.0, 5298.0, 5323.0, 5496.0, 5431.0, 5396.0, 5488.0, 5288.0, 5342.0, 5517.0, 5425.0, 5444.0, 5652.0, 5281.0, 5383.0, 5462.0, 5718.0, 5360.0, 5410.0, 5437.0, 5334.0, 5653.0, 5416.0, 5344.0, 5590.0, 5610.0, 5494.0, 5292.0, 5435.0, 5711.0, 5474.0, 5637.0, 5273.0, 5614.0, 5720.0, 5336.0, 5724.0, 5533.0, 5594.0, 5299.0, 5553.0, 5321.0, 5322.0, 5343.0, 5406.0, 5262.0, 5512.0, 5661.0, 5302.0, 5264.0, 5688.0, 5307.0, 5490.0, 5373.0, 5520.0, 5459.0, 5581.0 (number of hits: 6)
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21	5590	9	1	333	1	5362.0, 5583.0, 5648.0, 5441.0, 5644.0, 5560.0, 5477.0, 5573.0, 5581.0, 5430.0, 5584.0, 5497.0, 5401.0, 5312.0, 5554.0, 5527.0, 5552.0, 5534.0, 5428.0, 5603.0, 5317.0, 5337.0, 5671.0, 5624.0, 5495.0, 5507.0, 5376.0, 5659.0, 5357.0, 5266.0, 5588.0, 5413.0, 5668.0, 5352.0, 5353.0, 5458.0, 5625.0, 5431.0, 5688.0, 5415.0, 5262.0, 5609.0, 5696.0, 5557.0, 5669.0, 5543.0, 5264.0, 5558.0, 5718.0, 5488.0, 5720.0, 5280.0, 5630.0, 5606.0, 5421.0, 5715.0, 5532.0, 5475.0, 5470.0, 5521.0, 5575.0, 5324.0, 5343.0, 5528.0, 5257.0, 5253.0, 5657.0, 5298.0, 5307.0, 5335.0, 5347.0, 5332.0, 5389.0, 5471.0, 5367.0, 5484.0, 5549.0, 5499.0, 5325.0, 5629.0, 5329.0, 5712.0, 5574.0, 5491.0, 5438.0, 5634.0, 5418.0, 5662.0, 5492.0, 5255.0, 5500.0, 5643.0, 5394.0, 5623.0, 5506.0, 5661.0, 5562.0, 5542.0, 5676.0, 5434.0 (number of hits: 10)
22	5590	9	1	333	1	5368.0, 5466.0, 5601.0, 5333.0, 5430.0, 5384.0, 5571.0, 5259.0, 5338.0, 5431.0, 5606.0, 5349.0, 5292.0, 5268.0, 5649.0, 5524.0, 5581.0, 5355.0, 5377.0, 5554.0, 5659.0, 5609.0, 5714.0, 5656.0, 5549.0, 5544.0, 5308.0, 5435.0, 5528.0, 5332.0, 5260.0, 5565.0, 5685.0, 5278.0, 5455.0, 5340.0, 5365.0, 5641.0, 5498.0, 5480.0, 5460.0, 5351.0, 5702.0, 5691.0, 5424.0, 5614.0, 5450.0, 5473.0, 5275.0, 5403.0, 5444.0, 5633.0, 5326.0, 5682.0, 5428.0, 5446.0, 5298.0, 5331.0, 5303.0, 5521.0, 5402.0, 5337.0, 5389.0, 5671.0, 5272.0, 5412.0, 5693.0, 5283.0, 5390.0, 5676.0, 5570.0, 5560.0, 5477.0, 5414.0, 5425.0, 5463.0, 5661.0, 5312.0, 5710.0, 5643.0, 5610.0, 5309.0, 5325.0, 5630.0, 5388.0, 5640.0, 5564.0, 5639.0, 5577.0, 5620.0, 5281.0, 5385.0, 5507.0, 5307.0, 5660.0, 5291.0, 5541.0, 5690.0, 5257.0, 5254.0 (number of hits: 7)
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27	5590	9	1	333	1	5541.0, 5722.0, 5287.0, 5546.0, 5633.0, 5691.0, 5295.0, 5635.0, 5335.0, 5419.0, 5451.0, 5376.0, 5491.0, 5369.0, 5553.0, 5667.0, 5682.0, 5703.0, 5433.0, 5707.0, 5638.0, 5442.0, 5634.0, 5645.0, 5596.0, 5660.0, 5392.0, 5692.0, 5671.0, 5507.0, 5277.0, 5362.0, 5456.0, 5655.0, 5598.0, 5310.0, 5413.0, 5712.0, 5345.0, 5256.0, 5716.0, 5352.0, 5540.0, 5710.0, 5706.0, 5717.0, 5348.0, 5360.0, 5583.0, 5298.0, 5557.0, 5709.0, 5594.0, 5370.0, 5415.0, 5505.0, 5436.0, 5257.0, 5450.0, 5302.0, 5582.0, 5705.0, 5606.0, 5535.0, 5677.0, 5409.0, 5626.0, 5502.0, 5685.0, 5597.0, 5269.0, 5619.0, 5543.0, 5524.0, 5278.0, 5274.0, 5284.0, 5501.0, 5358.0, 5527.0, 5615.0, 5300.0, 5380.0, 5337.0, 5437.0, 5441.0, 5406.0, 5489.0, 5318.0, 5567.0, 5713.0, 5280.0, 5461.0, 5342.0, 5432.0, 5478.0, 5282.0, 5285.0, 5452.0, 5309.0 (number of hits: 7)
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						5384.0, 5392.0, 5681.0, 5281.0, 5540.0, 5425.0, 5434.0, 5502.0, 5693.0, 5520.0, 5465.0, 5457.0, 5355.0, 5666.0, 5273.0 (number of hits: 8)
29	5590	9	1	333	1	5254.0, 5506.0, 5454.0, 5560.0, 5373.0, 5703.0, 5368.0, 5601.0, 5270.0, 5590.0, 5595.0, 5456.0, 5314.0, 5659.0, 5445.0, 5555.0, 5396.0, 5675.0, 5504.0, 5686.0, 5685.0, 5286.0, 5424.0, 5300.0, 5348.0, 5428.0, 5321.0, 5369.0, 5287.0, 5400.0, 5574.0, 5354.0, 5374.0, 5573.0, 5423.0, 5461.0, 5416.0, 5549.0, 5309.0, 5468.0, 5469.0, 5346.0, 5475.0, 5258.0, 5362.0, 5713.0, 5375.0, 5297.0, 5538.0, 5256.0, 5394.0, 5639.0, 5450.0, 5338.0, 5388.0, 5306.0, 5580.0, 5542.0, 5292.0, 5680.0, 5681.0, 5674.0, 5407.0, 5615.0, 5717.0, 5709.0, 5613.0, 5418.0, 5491.0, 5345.0, 5566.0, 5626.0, 5636.0, 5557.0, 5323.0, 5593.0, 5457.0, 5623.0, 5648.0, 5679.0, 5723.0, 5308.0, 5381.0, 5702.0, 5383.0, 5534.0, 5446.0, 5322.0, 5272.0, 5343.0, 5708.0, 5377.0, 5392.0, 5401.0, 5295.0, 5331.0, 5347.0, 5488.0, 5588.0, 5472.0 (number of hits: 8)
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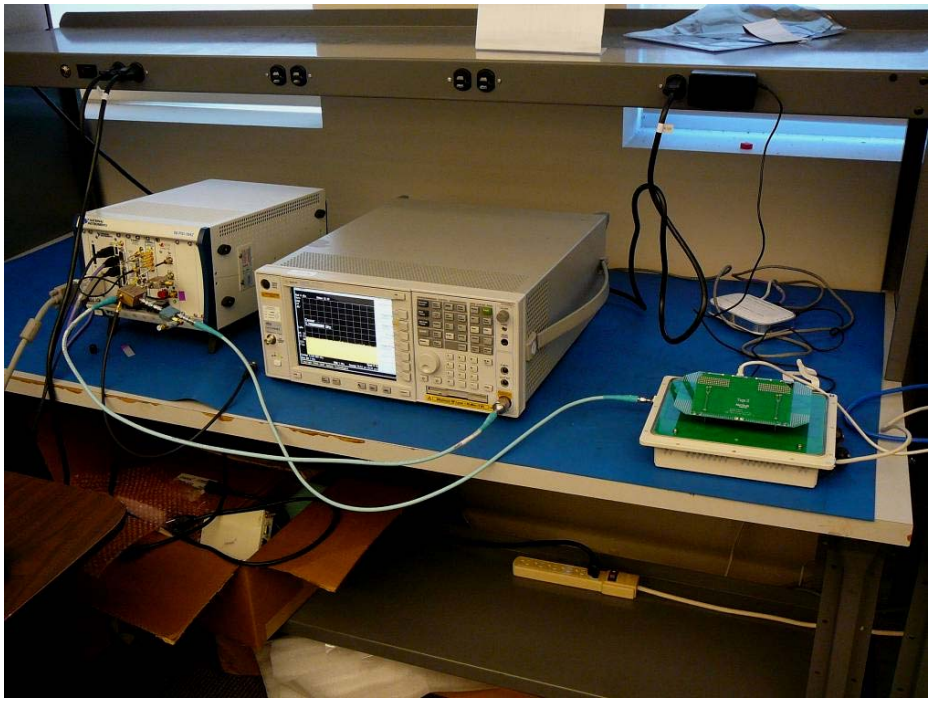
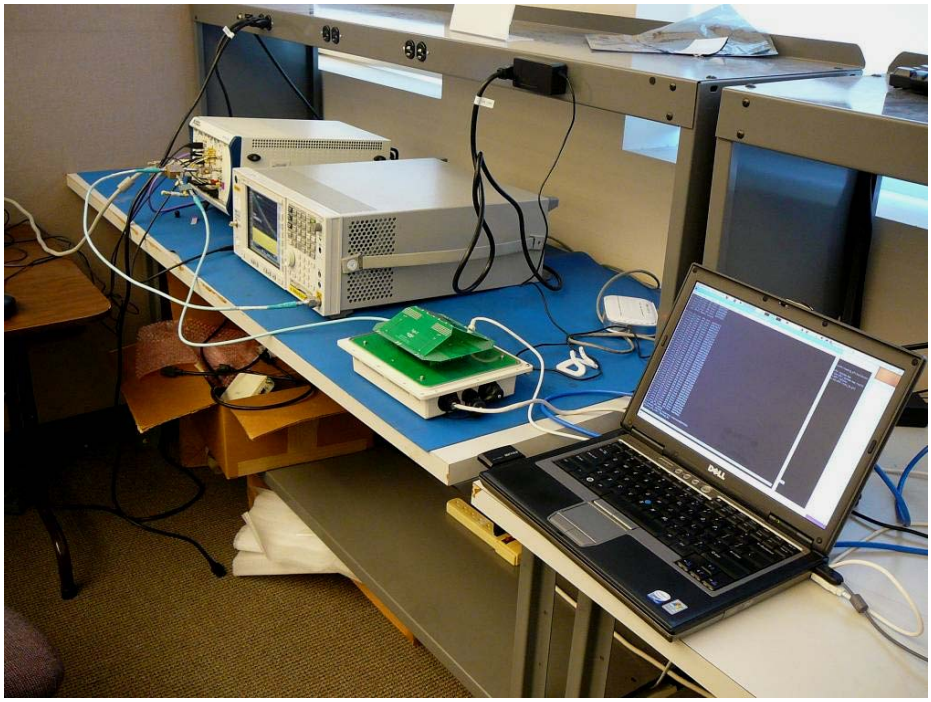
10 Exhibit A – Test Setup Photographs

10.1 Setup - Front View



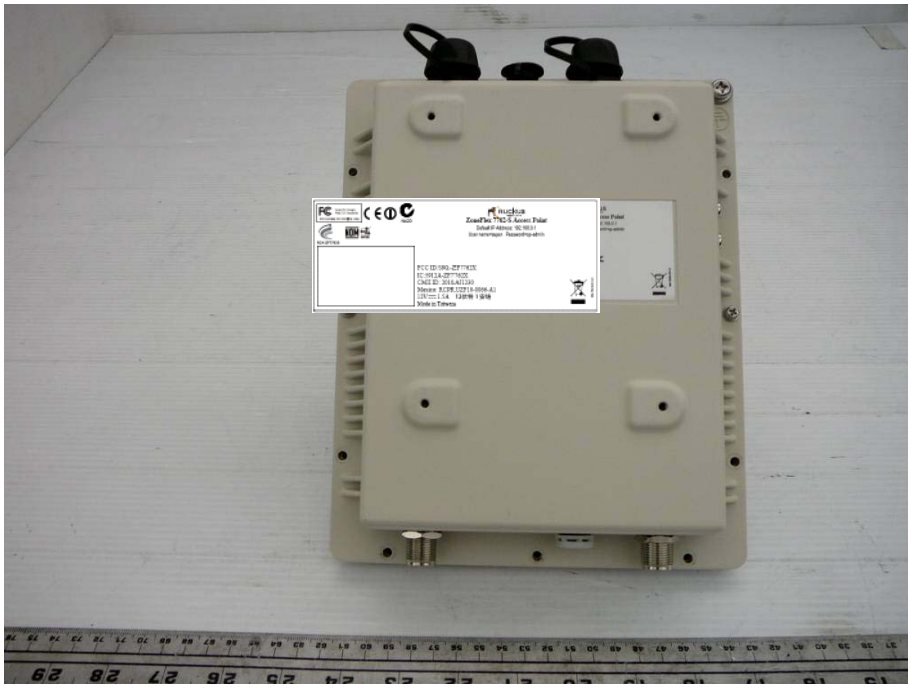
10.2 Setup - Side View



11 Exhibit B - EUT Photographs

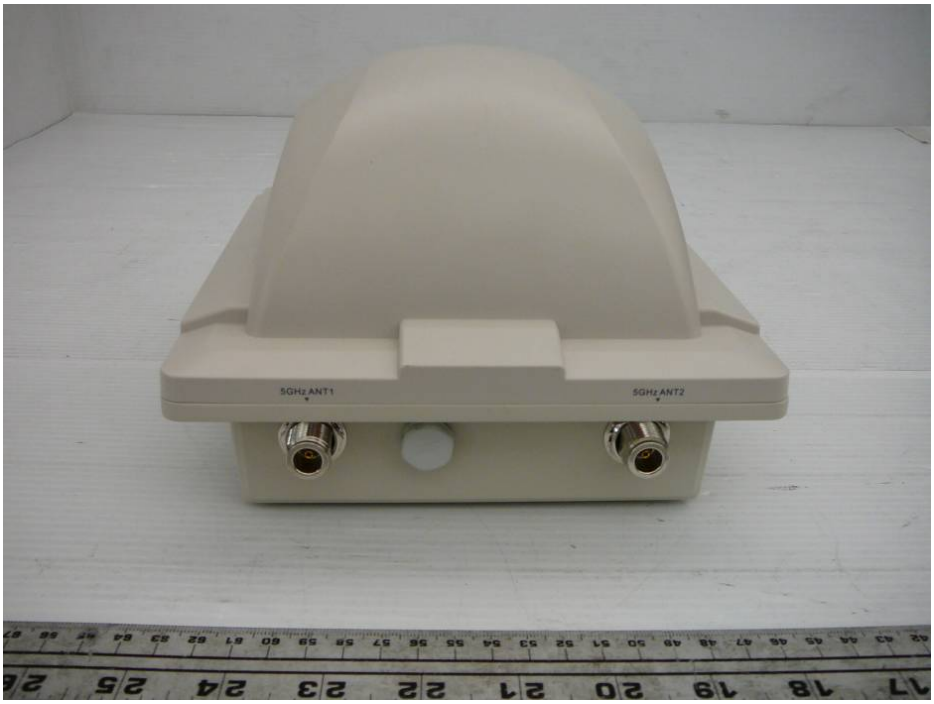
11.1 EUT – Top View

11.2 EUT-Bottom View

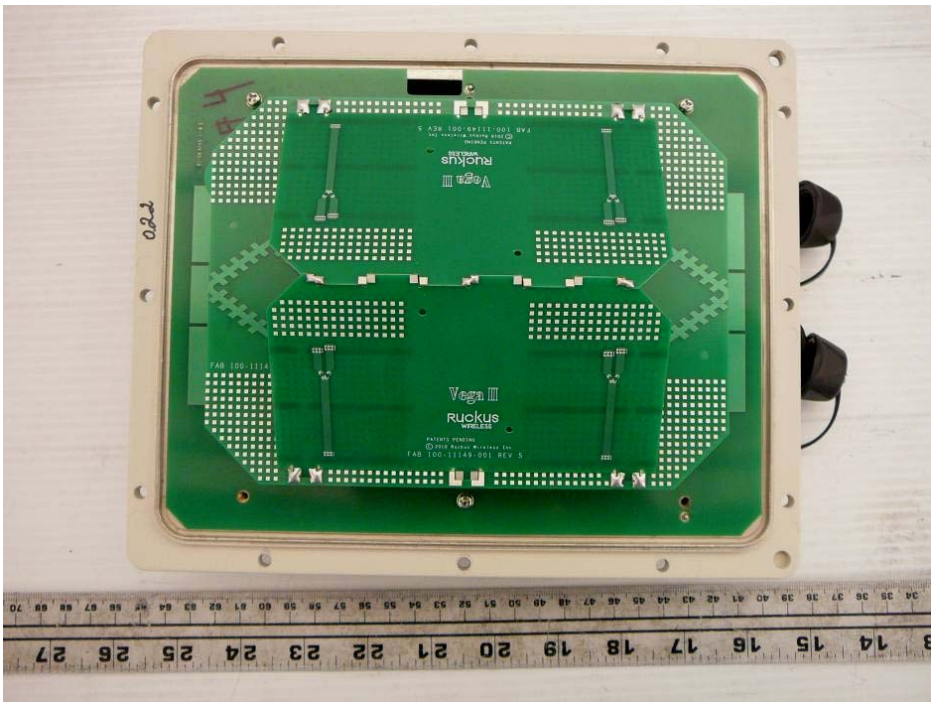


11.3 EUT-Port View

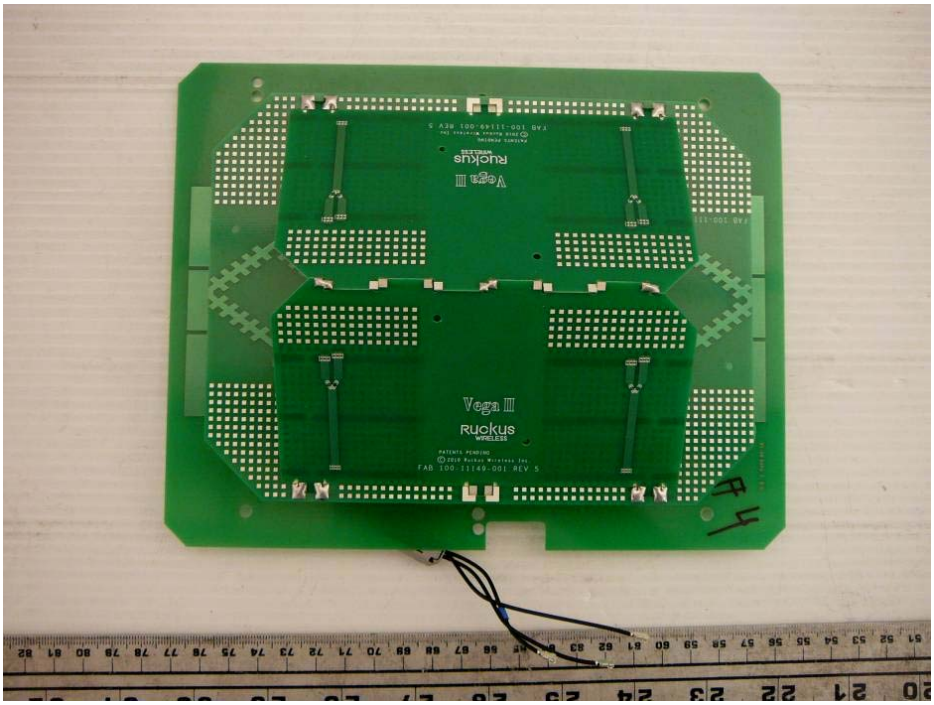
11.4 EUT-Antenna Port View



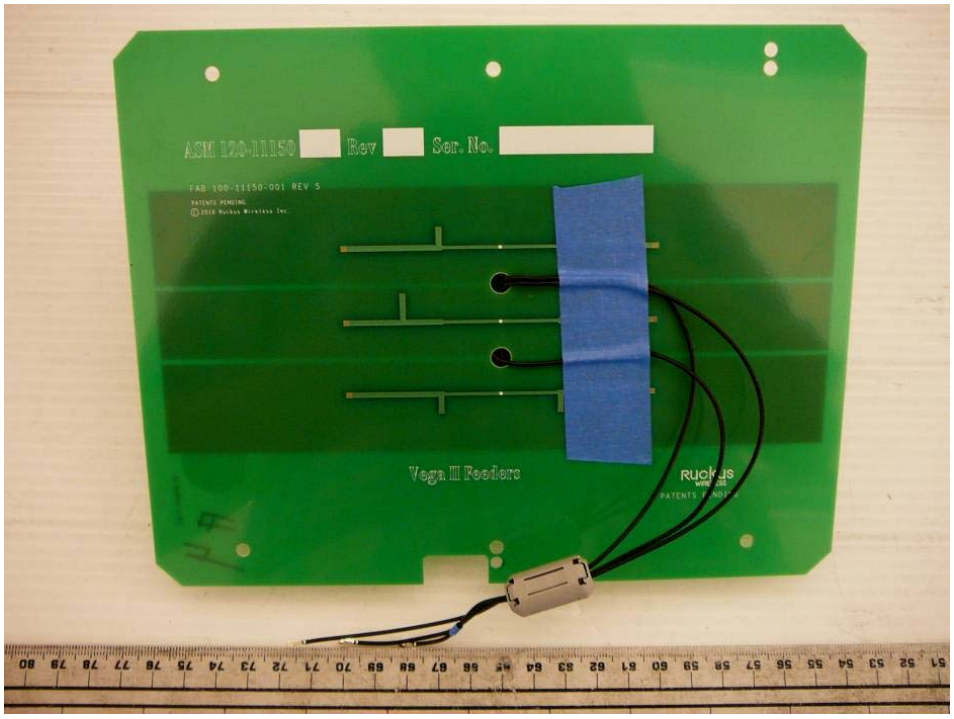
11.5 EUT- Cover off View



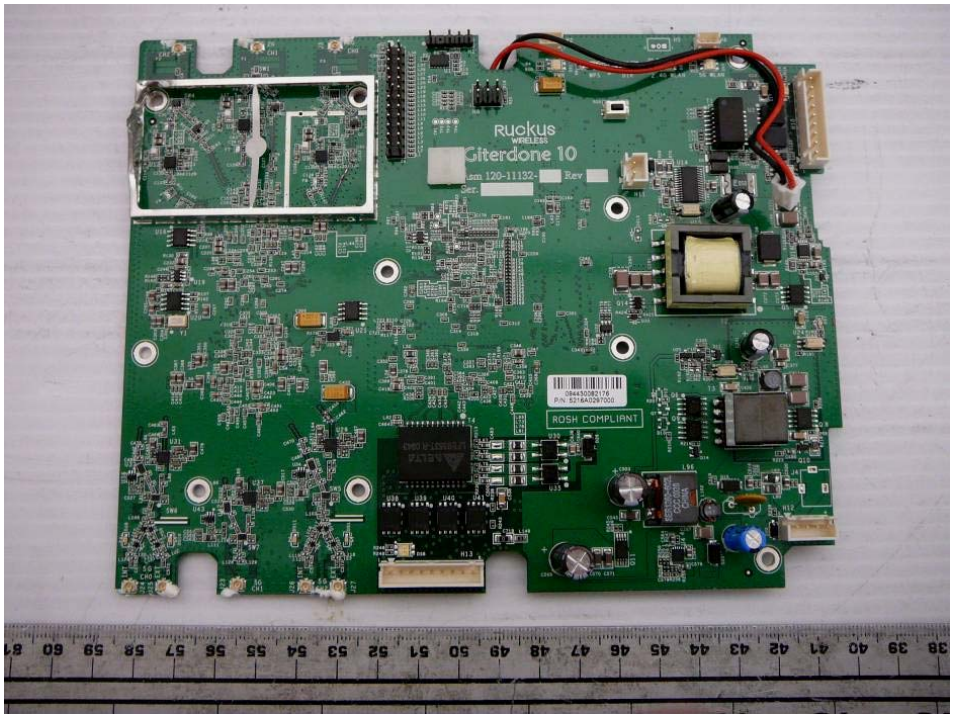
11.6 EUT- Antenna Board Top View



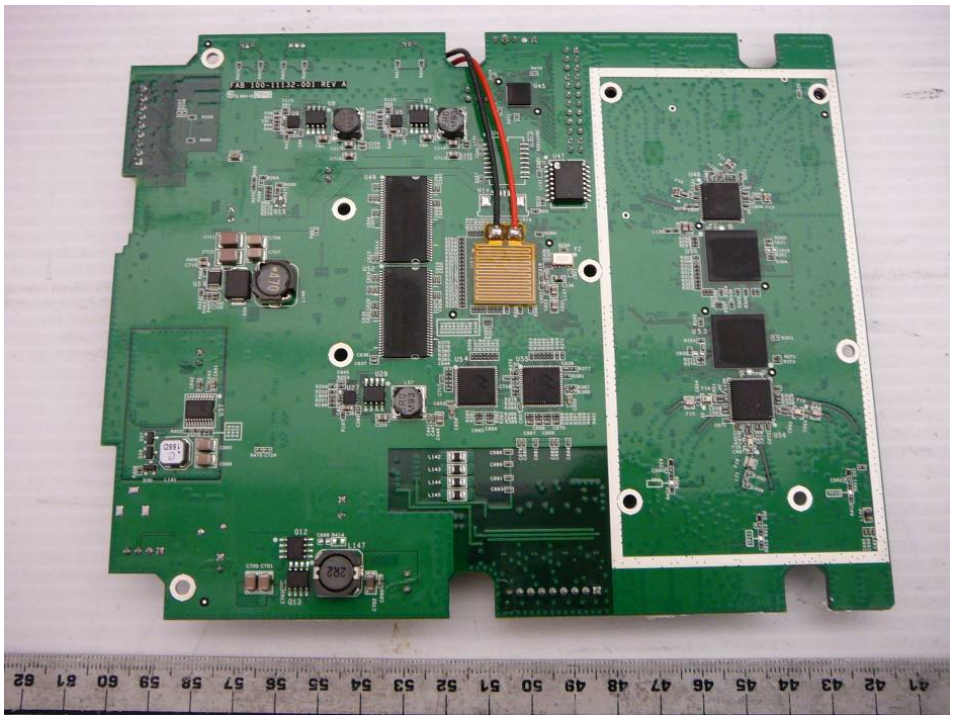
11.7 EUT – Antenna Board Solder View



11.8 EUT- Main Board Top View



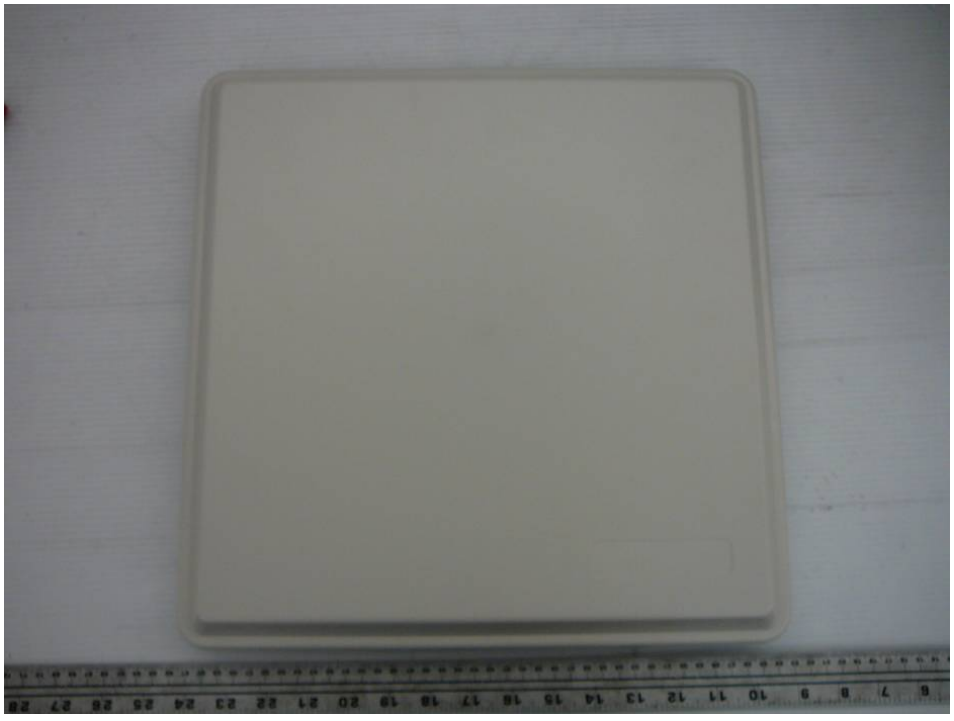
11.9 EUT – Main Board Solder View



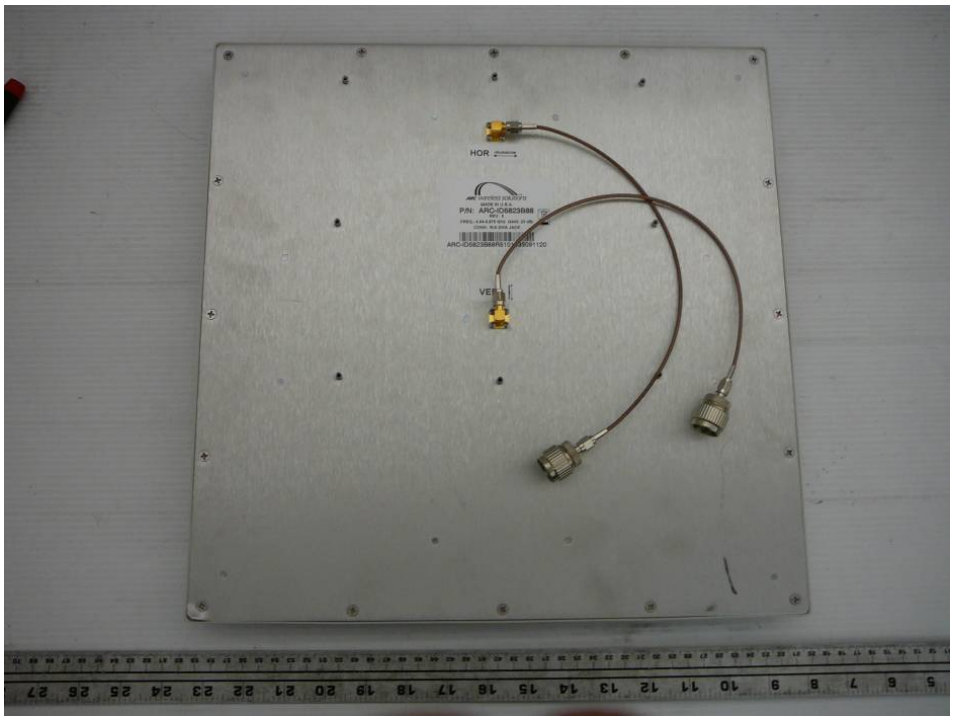
11.10 EUT – 6 dBi Antenna

11.11 EUT – 16 dBi Antenna front view

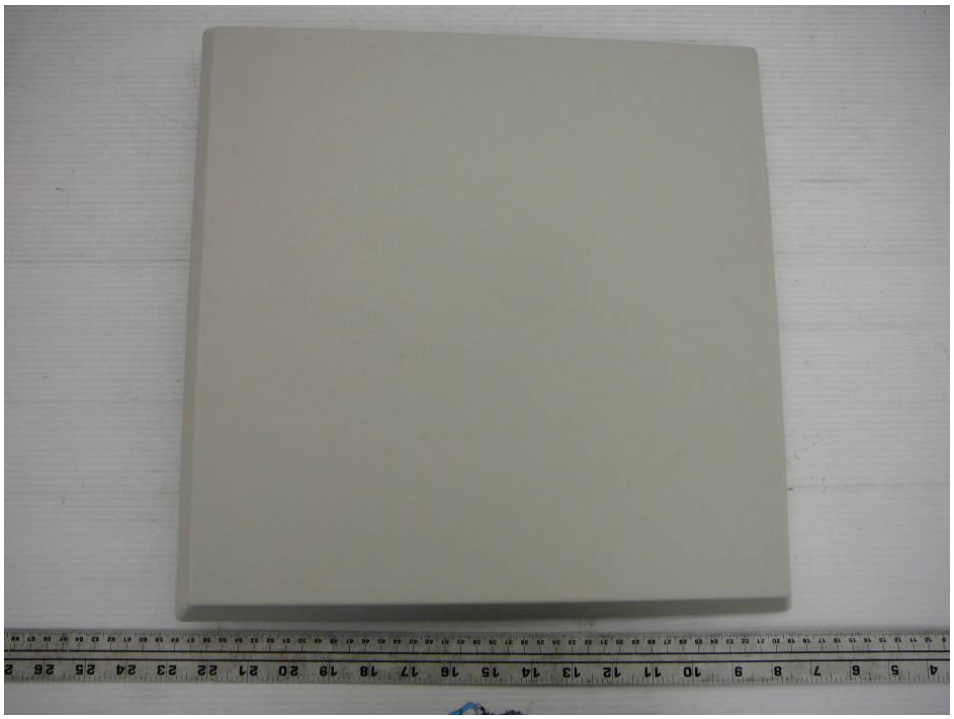
11.12 EUT – 16 dBi Antenna front view



11.13 EUT – 23 dBi Antenna front view

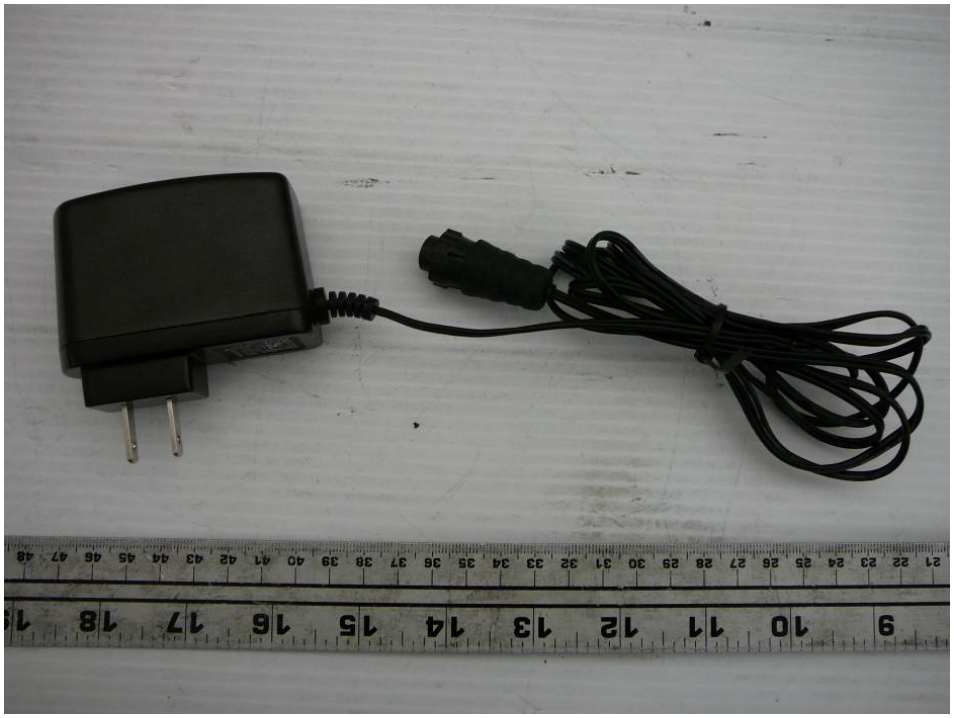


11.14 EUT – 23 dBi Antenna front view



11.15 EUT – Adapter for POE

11.16 EUT – AC/DC Power Adapter



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