FCC PART 15.407

DYNAMIC FREQUENCY SELECTION

TEST REPORT

For

INGENICO

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

FCC ID: XKB-EXSBASEW

Report Type: Original Report	**Product Type:** Smart POS Terminal BASE
Report Number:	XMDN210621-24577E-00D
Report Date:	2021-07-28
Reviewed By:	Rocky Xiao RF Engineer
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Dongguan) No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China Tel: +86-769-86858888 Fax: +86-769-86858891 www.baclcorp.com.cn

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

EUT Name:		Smart POS Terminal BASE
EUT Model:		AXIUM EX-SBASE-W
FCC Operation Frequency:		5150-5250 MHz, 5250-5350 MHz, 5470-5725MHz, 5725-5850 MHz
Maximum Output Power (Conducted):		18.13 dBm @5.2G, 17.92 dBm @5.3G, 17.92 dBm @5.6G, 17.67 dBm @5.8G
Maximum Output Power (EIRP):		20.45 dBm @5.2G, 21.5 dBm @5.3G, 21.27 dBm @5.6G, 20.3 dBm @5.8G
Antenna Gain▲:		2.32dBi@5.2G;3.58dBi@5.3G;3.35dBi@5.6G;2.63dBi@5.8G
Modulation Type:		OFDM
Rated Input Voltage:		DC 5V from Adapter
Adapter 1# Information	**Model:**	SW-0983
	Input:	100-240Vac 50/60Hz 0.5A
	Output:	5.0Vdc 2.0A
Adapter 2# Information	**Model:**	A8-050200U-US3
	Input:	100-240Vac 50/60Hz 0.35A
	Output:	5.0Vdc 2.0A
Serial Number:		XMDN210621-24577E -RF-S1
EUT Received Date:		2021.06.21
EUT Received Status:		Good

Objective

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

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

Test Methodology

FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 897218, the FCC Designation No. : CN1220.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

Declarations

BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "▲". Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

EUT Exercise Software

Software 'Lan test.exe' was used during test, to keep data communication.

Equipment Modifications

N/A

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Dell	Laptop	E6410	00426-OEM-8992662-00497
Apple	iPhone	A1524	FK1R96VYG5QT

External Cable

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
RJ45	NO	NO	1.5	EUT	Laptop

SUMMARY OF TEST RESULTS

The following result table represents the list of measurements required under the CFR §47 Part 15.407(h) KDB: 905462 D02 UNII DFS Compliance Procedures New Rules v02

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

APPLICABLE STANDARDS

DFS Requirement

CFR §47 Part 15.407(h)

FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	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 Device or Client with Radar Detection	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

Table 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. **Note 2:** Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. **Note3:** EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

Table 4: DFS Response Requirement Values

Parameter	Value
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 100% of the U-NII 99% transmission power bandwidth. See Note 3.
Note 1: *Channel Move Time* and the *Channel Closing Transmission Time* should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. **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 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

Table 5 – Short Pulse Radar Test Waveforms

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

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

For example if in Short Pulse Radar Type 1 Test B a PRI of 3066 usec is selected, the number of pulses would be $\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{3066}\right)\right\} = \text{Roundup}\{17.2\} = 18.$

Table 5a - Pulse Repetition Intervals Values for Test A

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

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

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

Table 6 – Long Pulse Radar Test Waveform

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

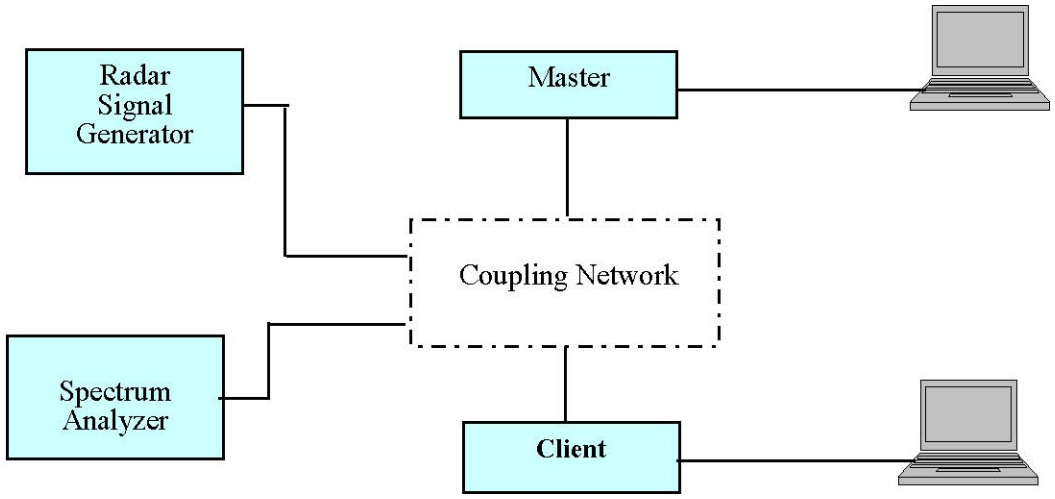
Table 7 – Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

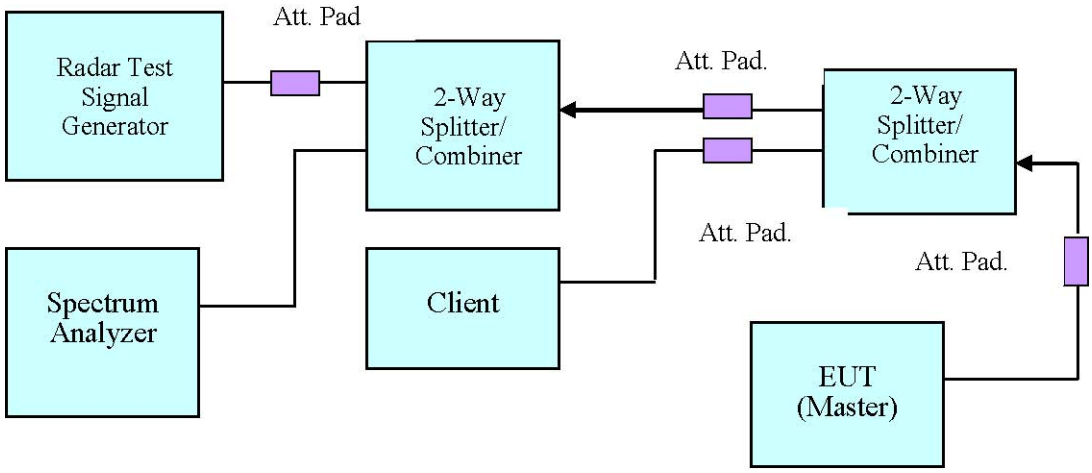
DFS Measurement System

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

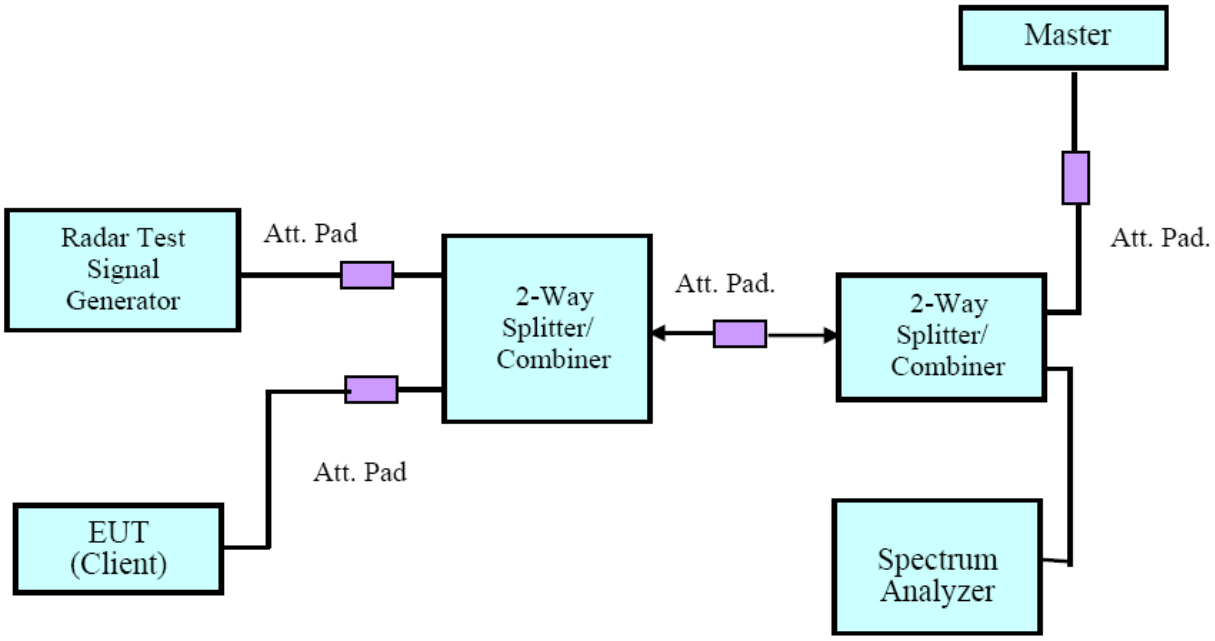
System Block Diagram



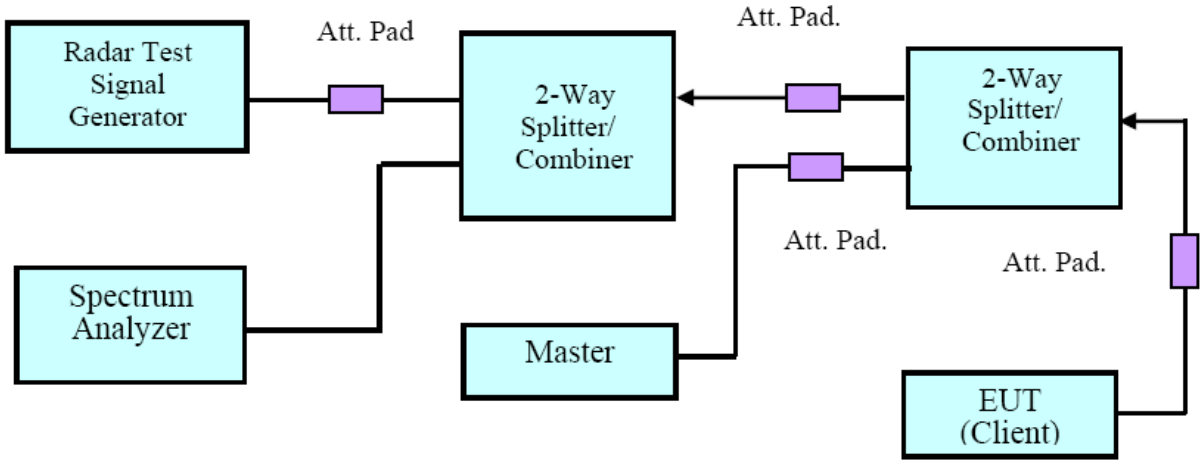
Conducted Method



Setup for Master with injection at the Master

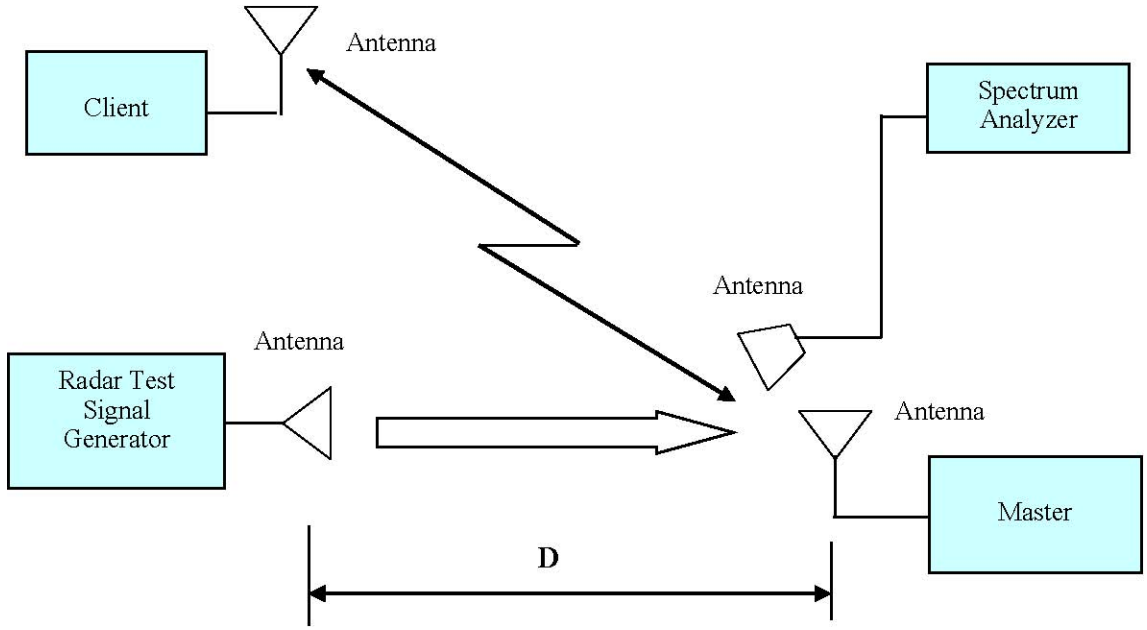


Setup for Client with injection at the Master



Setup for Client with injection at the Client

Radiated Method



Test Procedure

A spectrum analyzer is used as a monitor verifies that the EUT status including Channel Closing Transmission Time and Channel Move Time, and does not transmit on a Channel during the Non-Occupancy Period after the diction and Channel move. It is also used to monitor EUT transmissions during the Channel Availability Check Time.

TEST RESULTS

Description of EUT

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

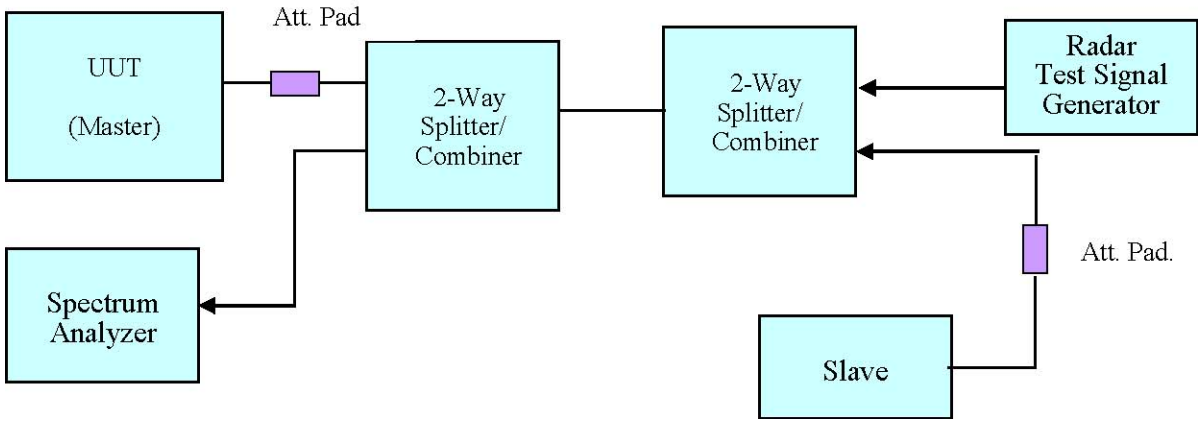
WLAN traffic is generated by streaming the video file TestFile.mpg, this file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. The file is streamed from the Access Point to the Client in full motion video mode using the media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

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
National Instruments	NI PXI-1042 8-Slot chassis	PXI-1042	VOBX40FBD	N/A	N/A
National Instruments	Arbitrary Waveform Generator	PXI-5421	N/A	N/A	N/A
National Instruments	RF Upconverter	PXI-5610	N/A	N/A	N/A
ASCOR	Upconverter	AS-7202	N/A	N/A	N/A
Agilent	Spectrum Analyzer	E4440A	SG43360054	2021-07-07	2022-07-07
Ditorn	Splitter/Combiner	D3C4080	SN2244	N/A	N/A

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

Radar Waveform Calibration



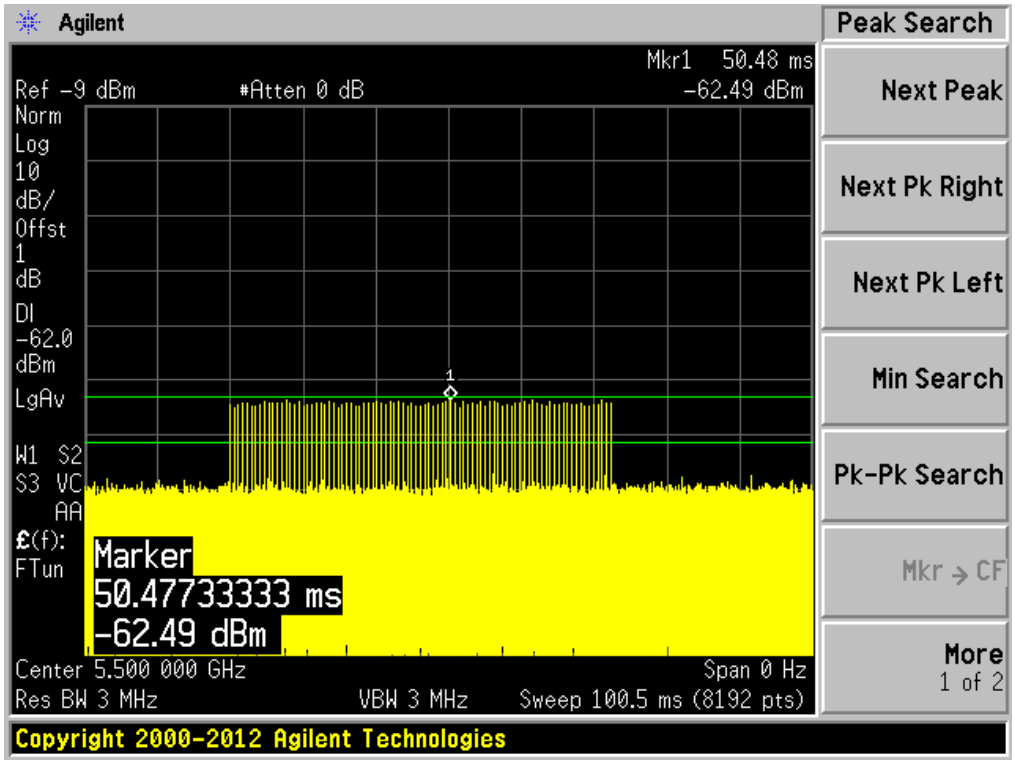
Test Environmental Conditions

Temperature:	26.8~29 °C
Relative Humidity:	55~71 %
ATM Pressure:	100~100.5 kPa
Tester:	Theshy Xie
Test Date:	2021-07-09~2021-07-23

Plots of Radar Waveforms

5500M

Radar Type 1A



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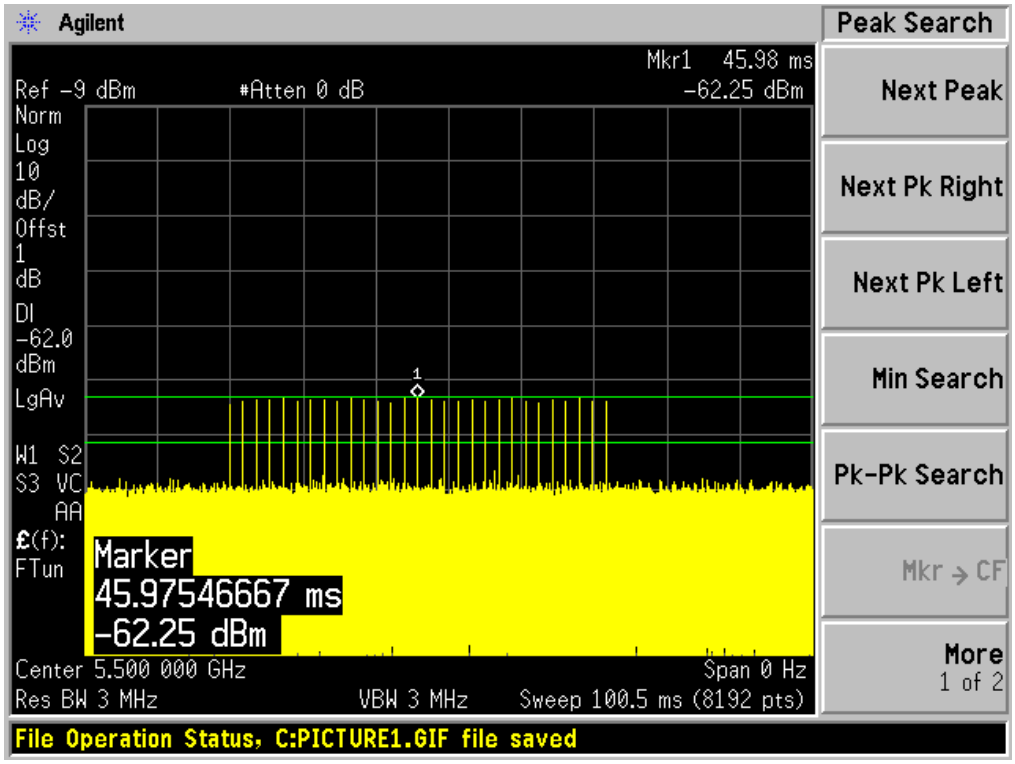
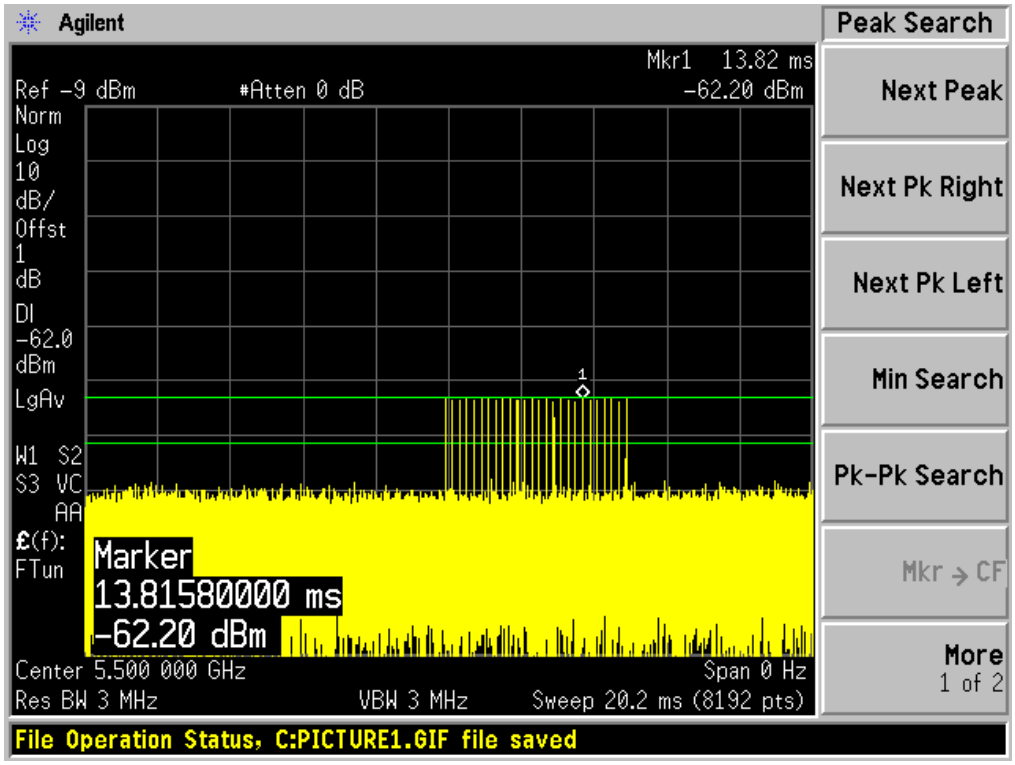


Radar Type 2



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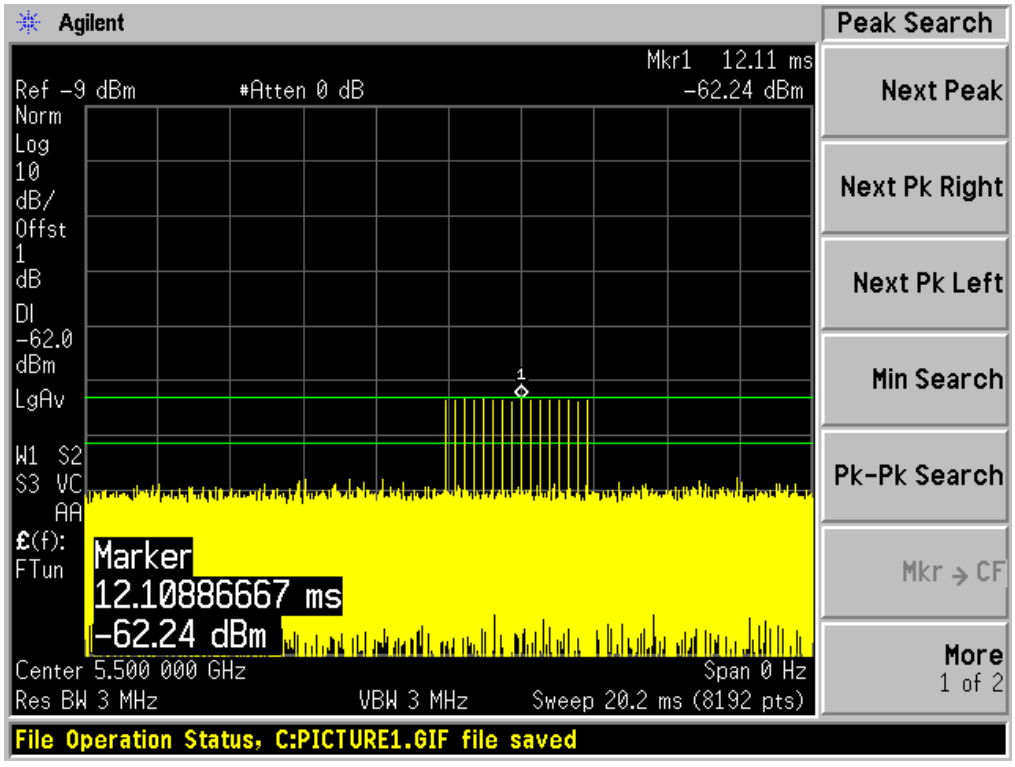

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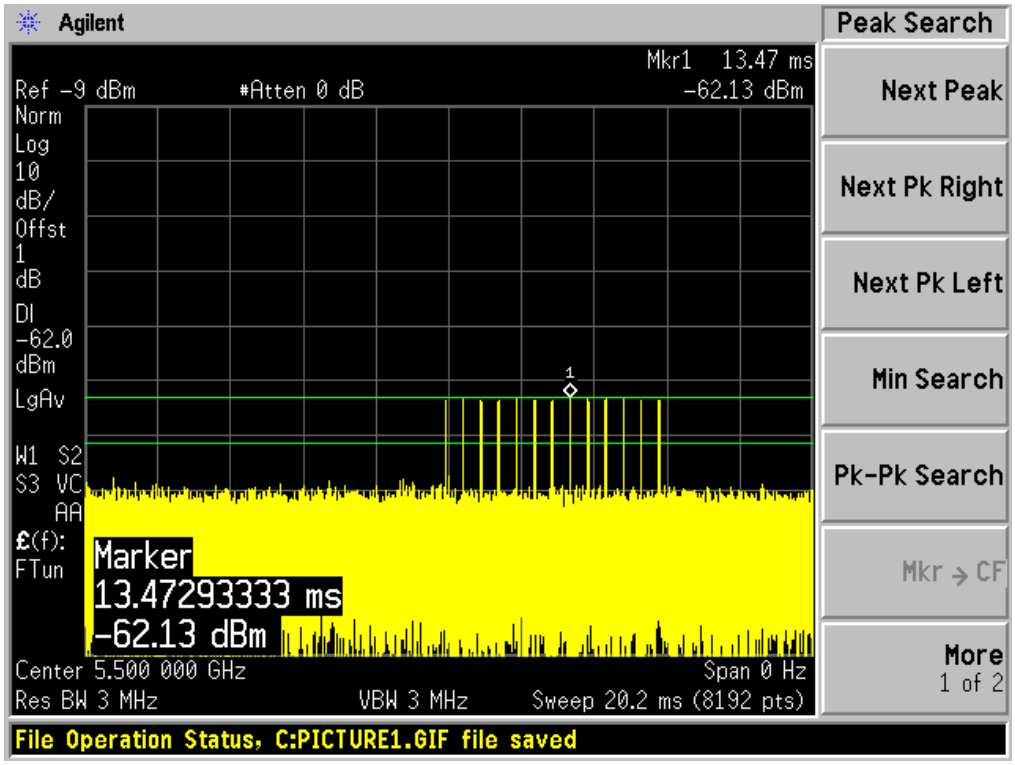

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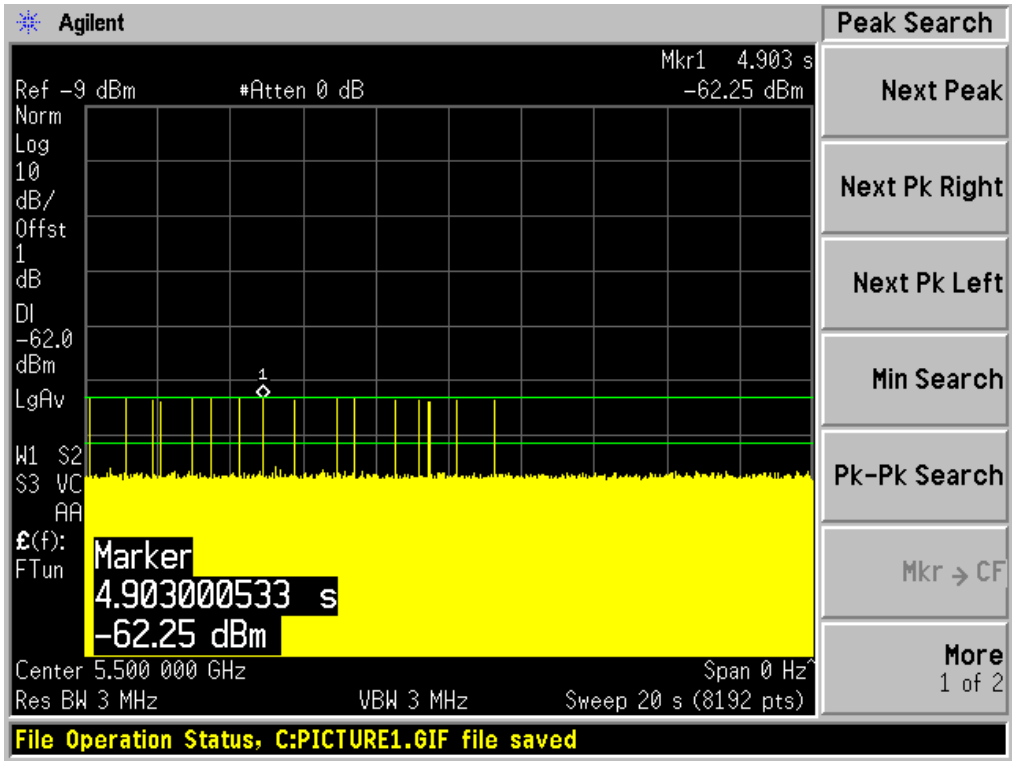

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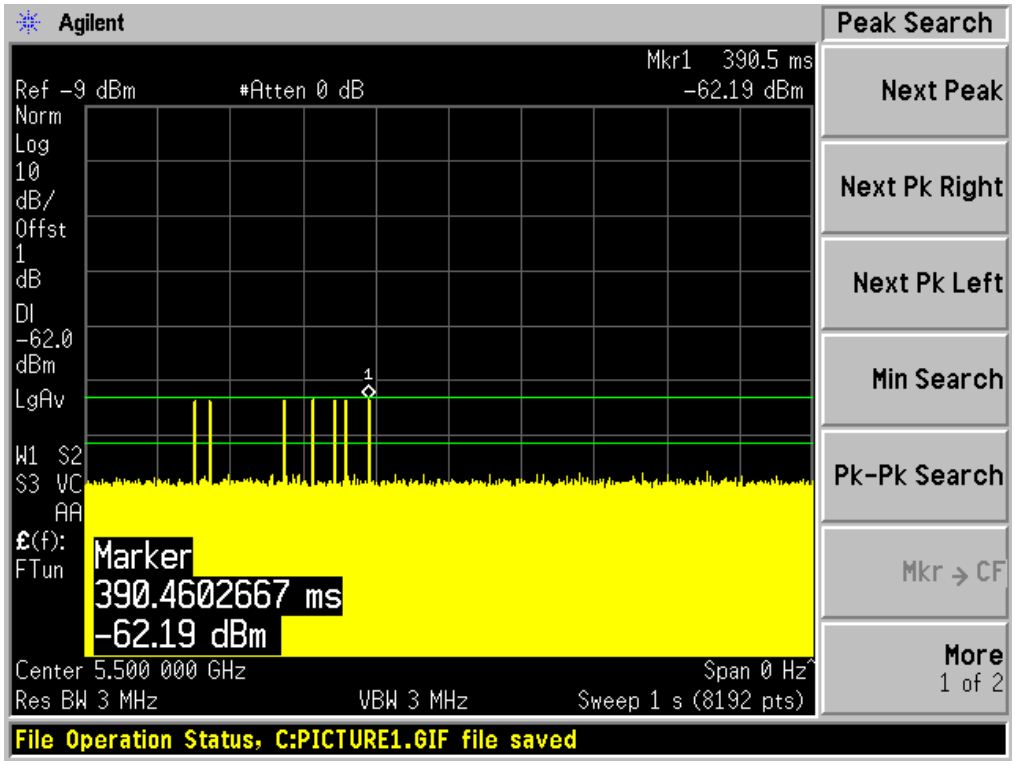
Agilent
Peak Search
Mkr1 390.5 ms
Ref -9 dBm
#Atten 0 dB
-62.19 dBm
Norm
Log
10
dB/
Offst
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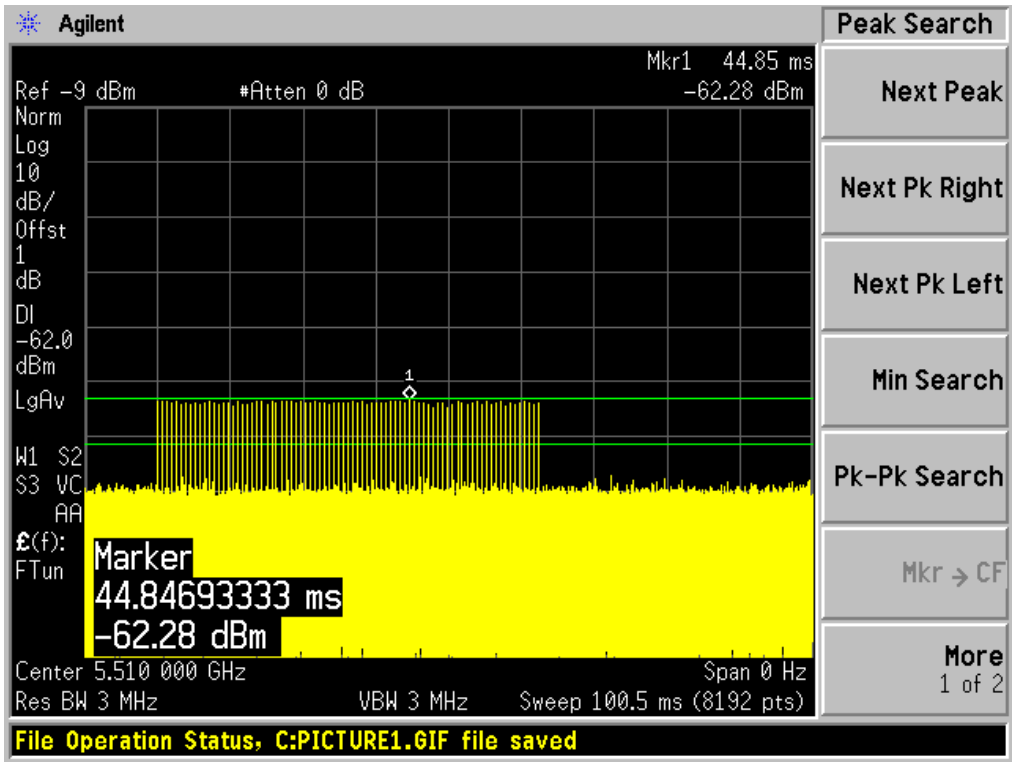
dB
Dl
-62.0
dBm
LgAv
W1 S2
S3 VC
AA
£(f):
FTun
Marker
390.4602667 ms
-62.19 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.500 000 GHz
Span 0 Hz
Res BW 3 MHz
VBW 3 MHz
Sweep 1 s (8192 pts)
File Operation Status, C:PICTURE1.GIF file saved

5510M

Radar Type 1A



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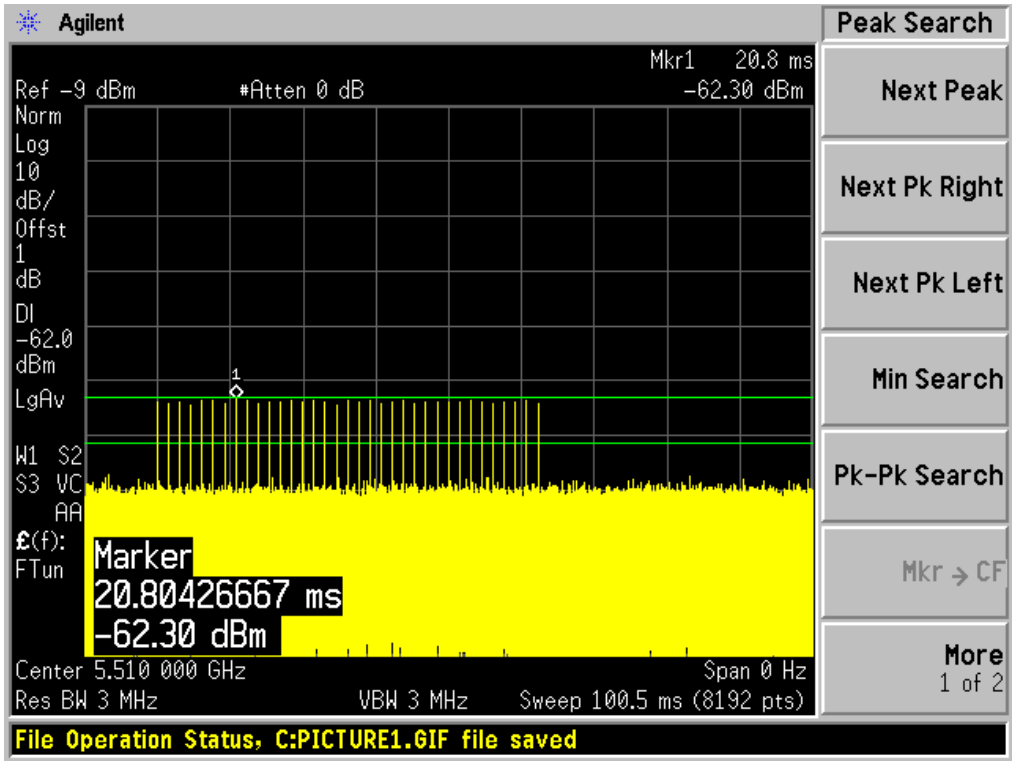

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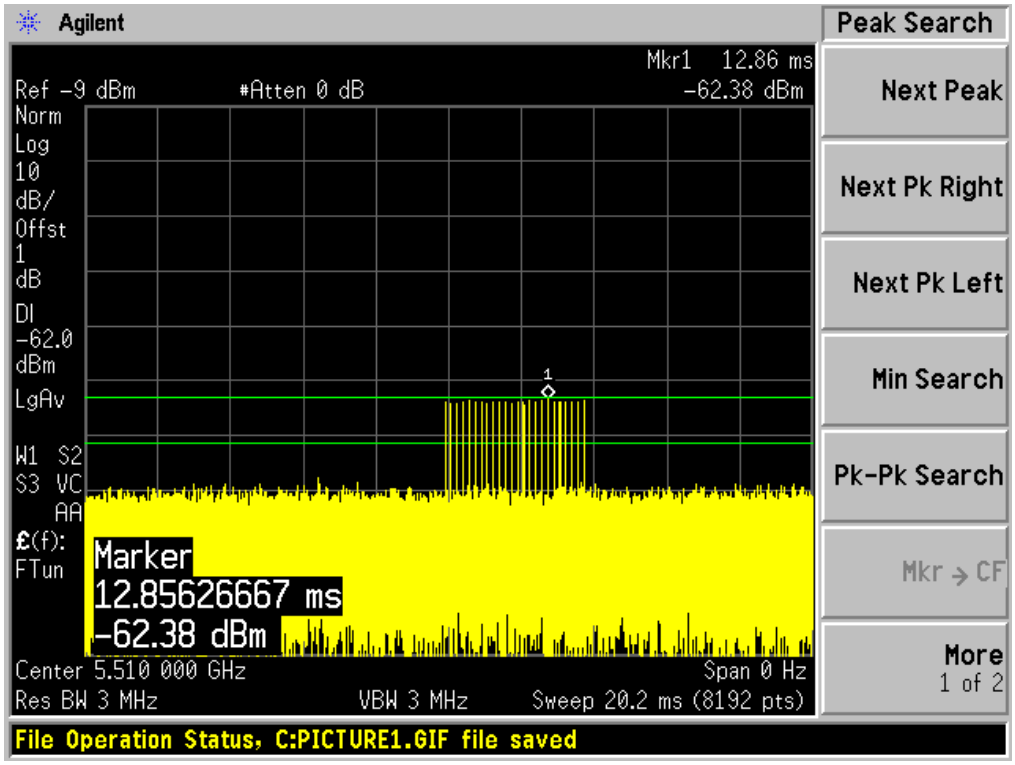

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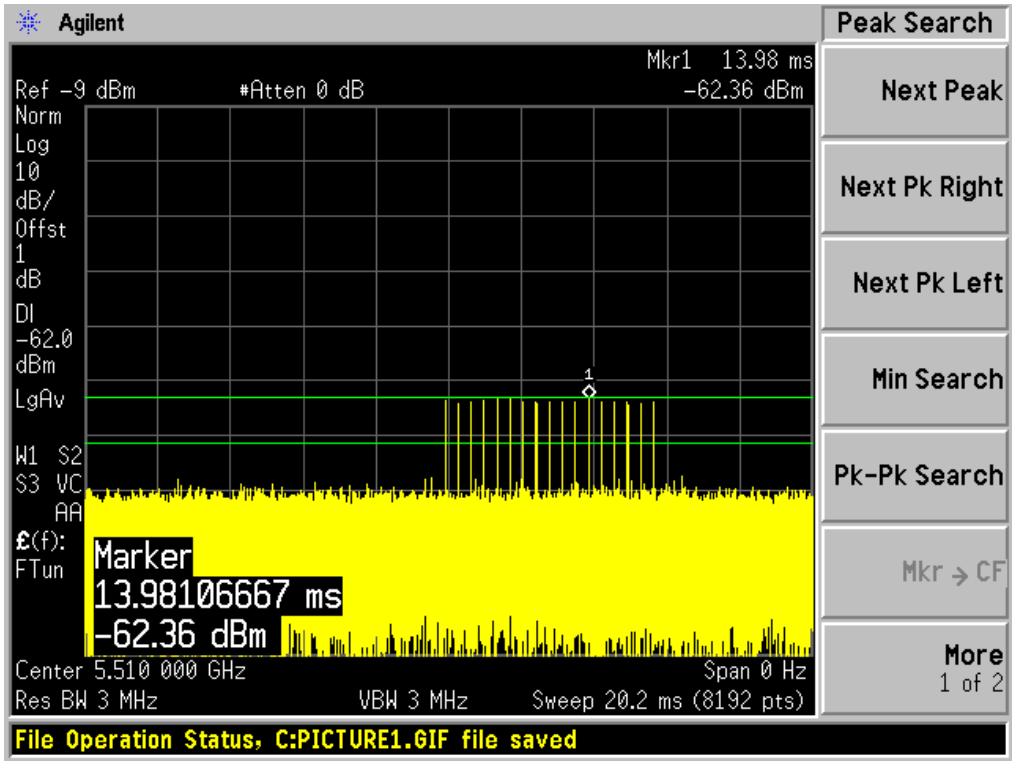

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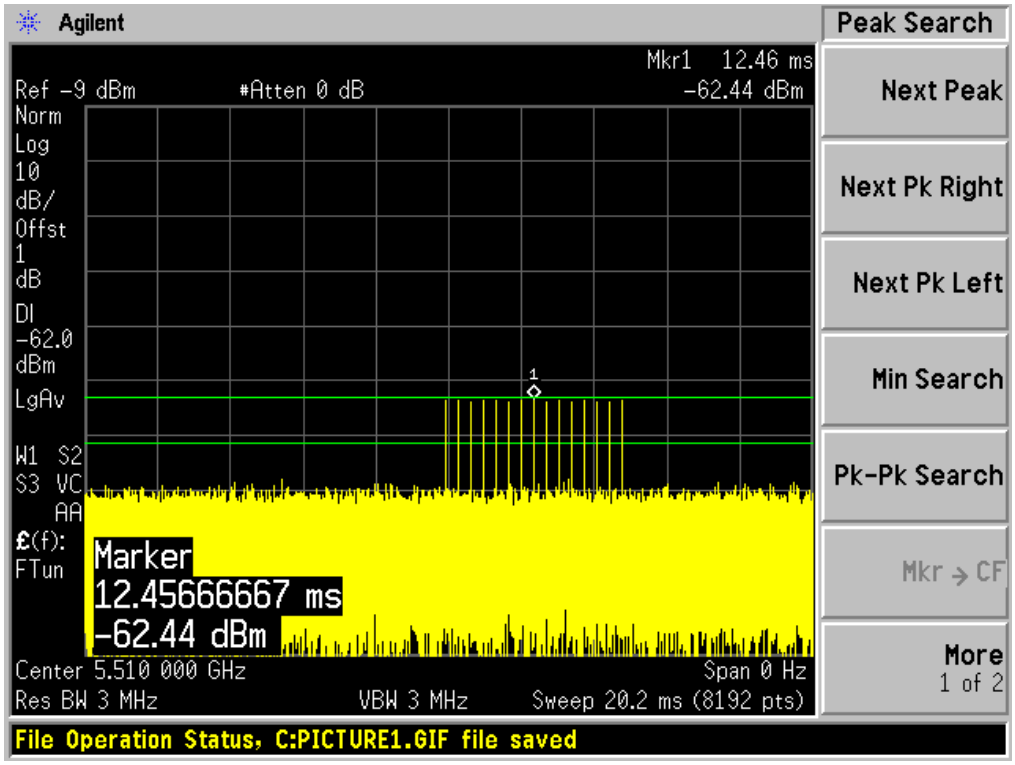

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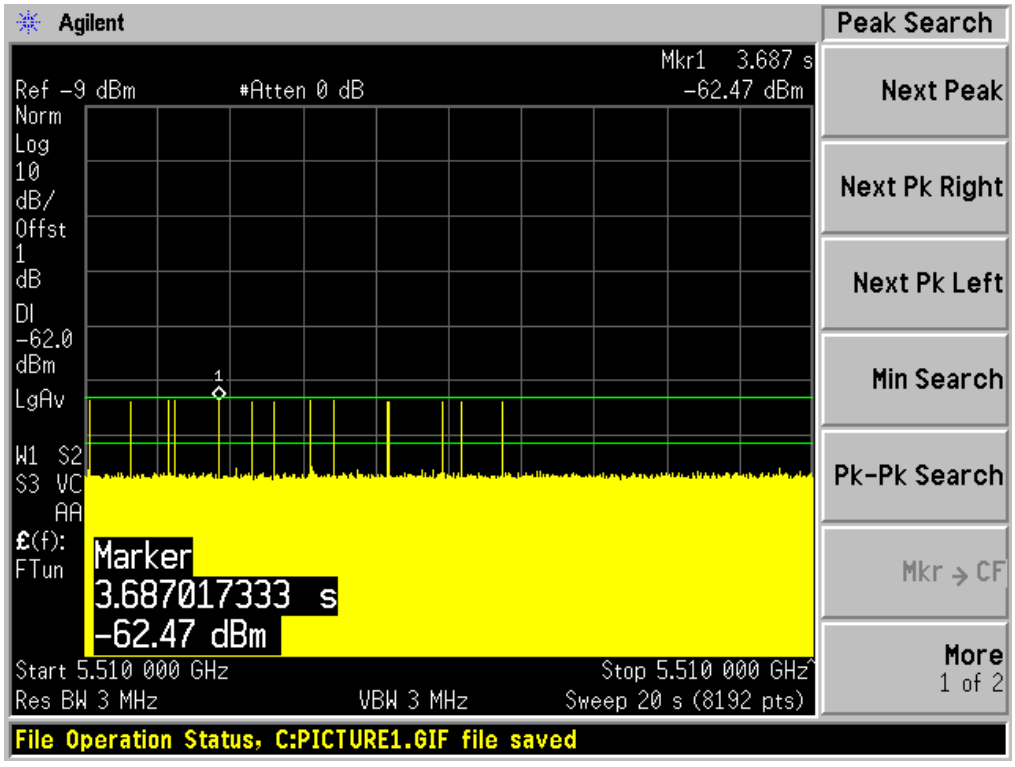
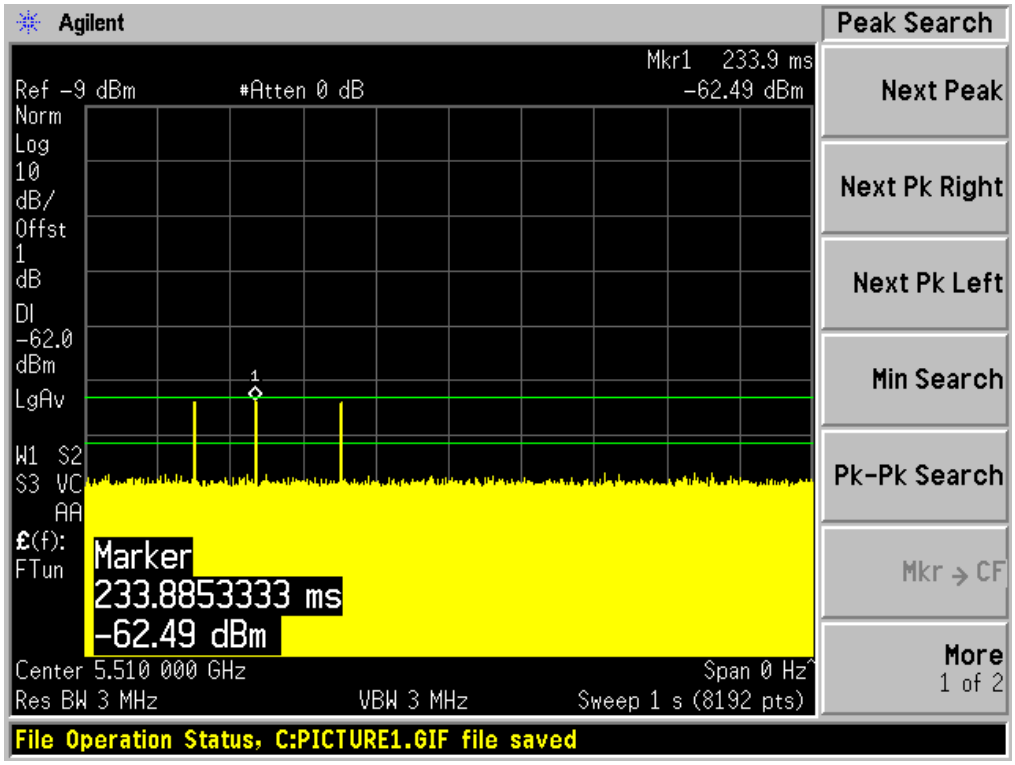


Radar Type 6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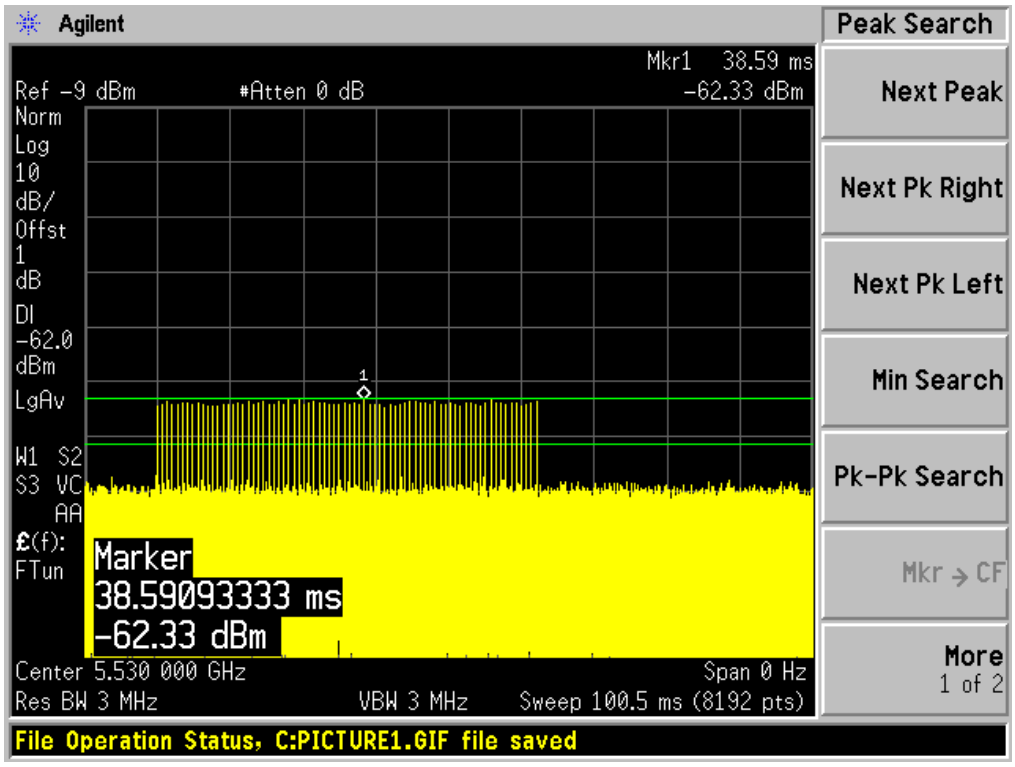
Peak Search
Mkr1 233.9 ms
Ref -9 dBm
#Atten 0 dB
-62.49 dBm
Norm
Log
10
dB/
Offst
1
dB
Dl
-62.0
dBm
LgAv
W1 S2
S3 VC
AA
£(f):
FTun
Marker
233.8853333 ms
-62.49 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.510 000 GHz
Span 0 Hz
Res BW 3 MHz
VBW 3 MHz
Sweep 1 s (8192 pts)
File Operation Status, C:PICTURE1.GIF file saved

5530M

Radar Type 1A



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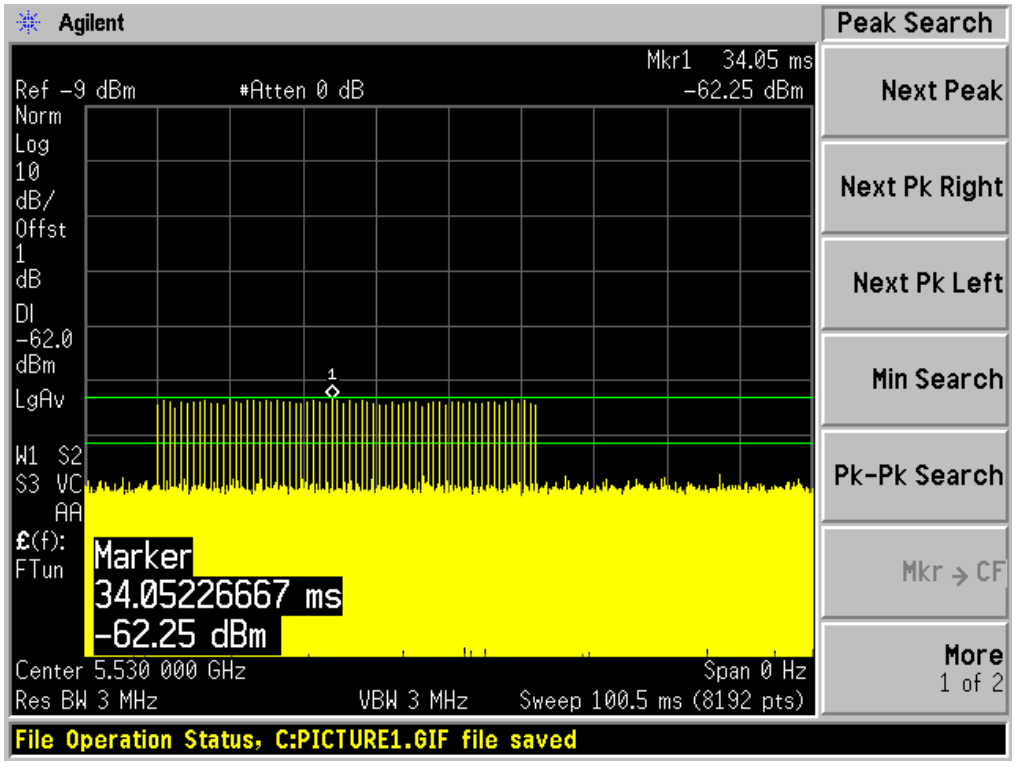

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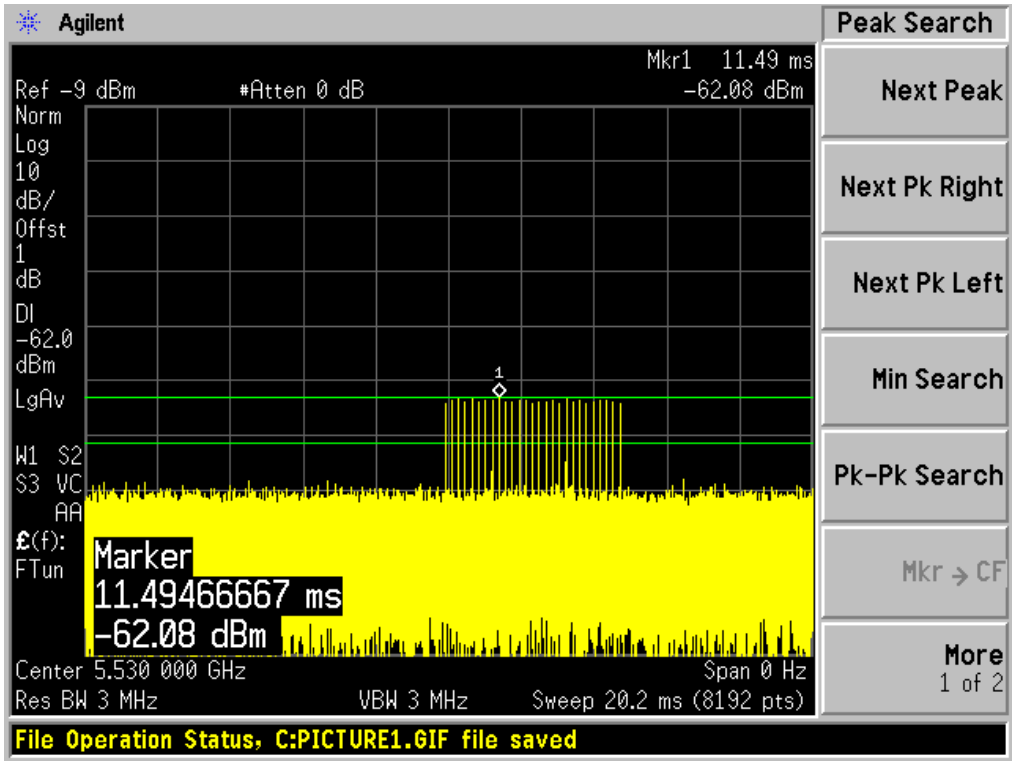

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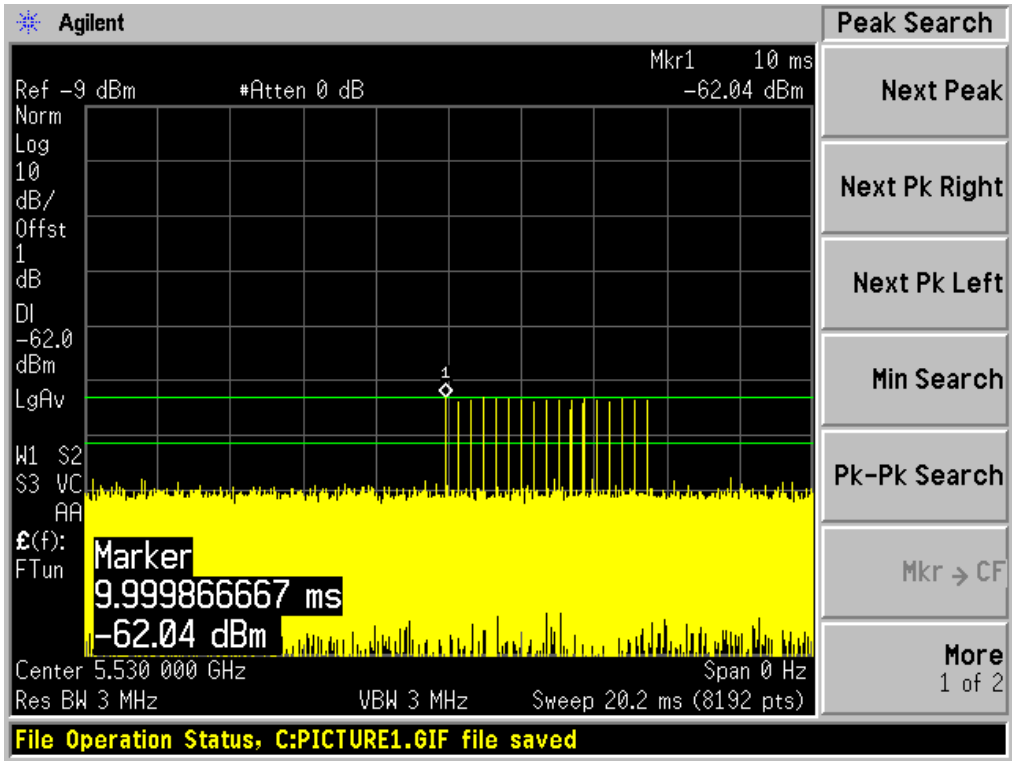

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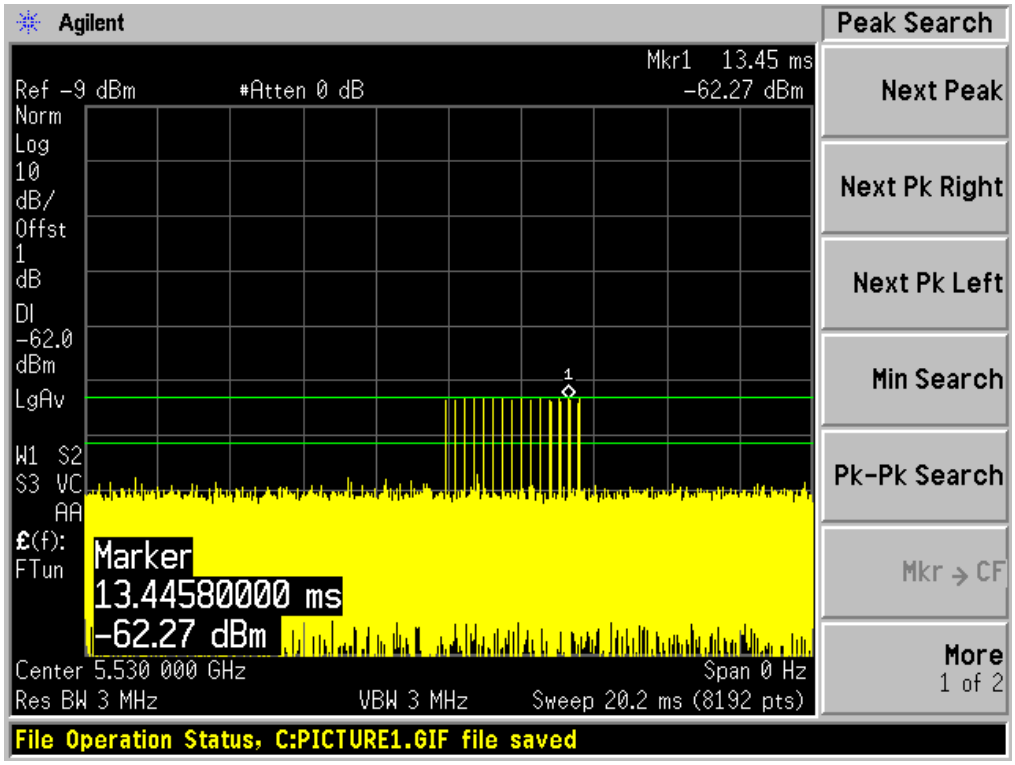
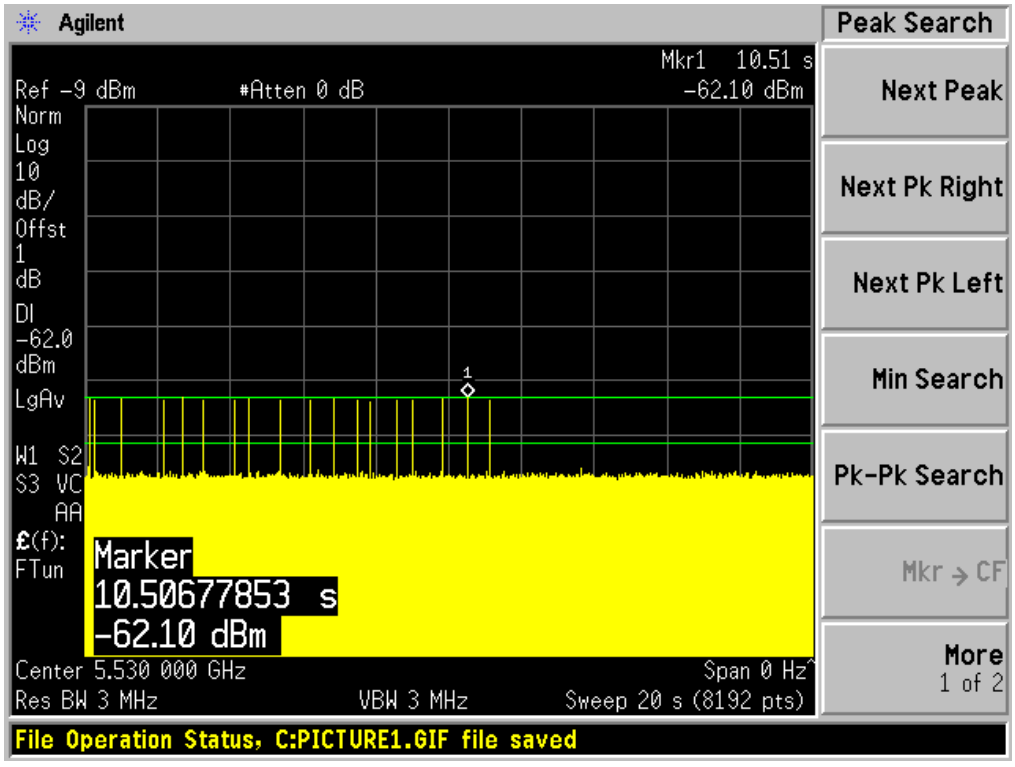


Radar Type 5 Case 1



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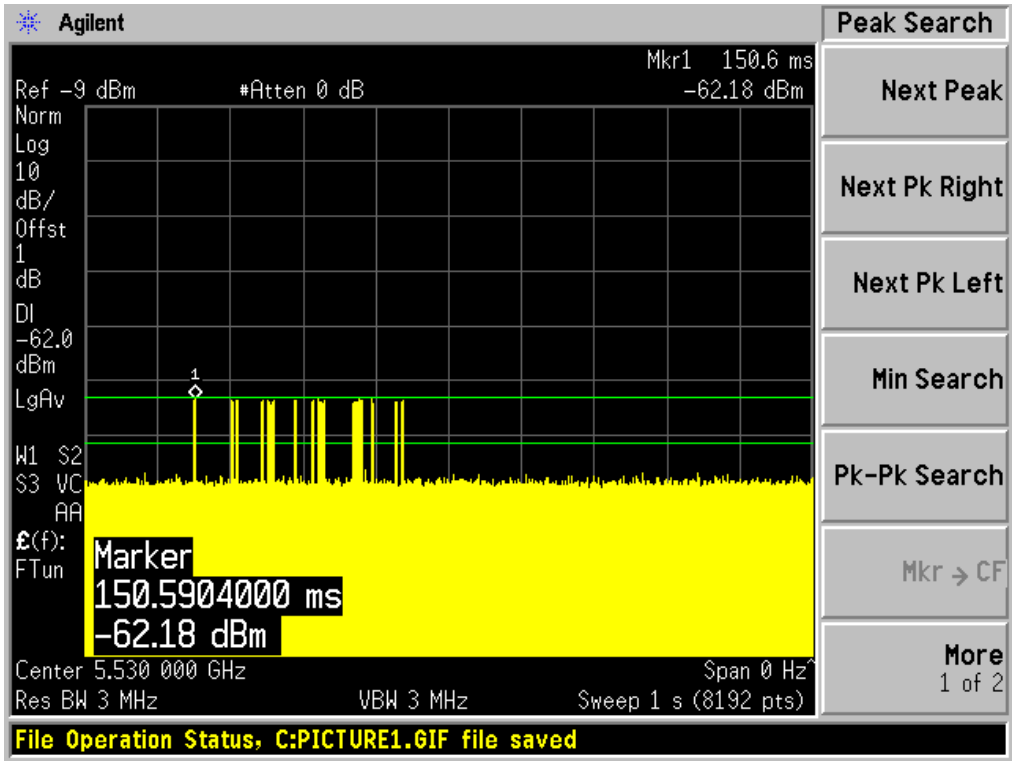
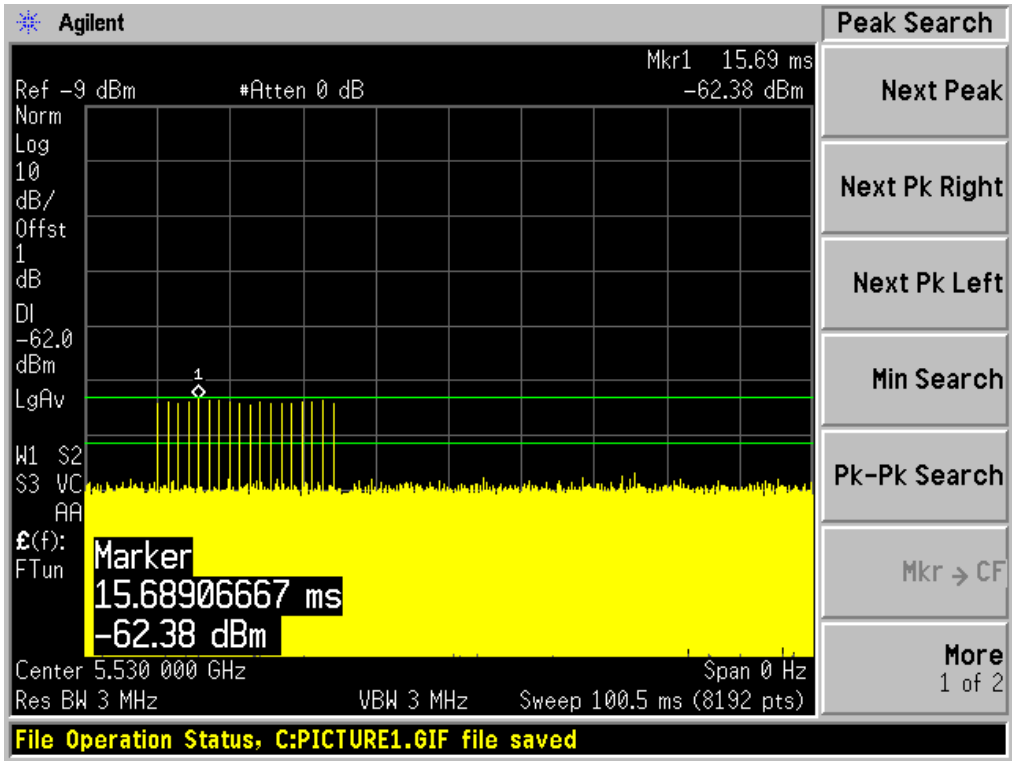


Radar Type 0



CHANNEL AVAILABILITY CHECK TIME (CAC)

Test Procedure

1) Channel Availability Check Time (CAC)

2) With link established on channel, apply a radar signal within 0~6 seconds after the initial power-up period; monitor the transmissions on channel from the spectrum analyzer.

3) Reboot EUT, with a link established on channel, apply a radar signal within 54~60 seconds after the initial power-up period, and monitor the transmission on channel from the spectrum analyzer.

EUT Initial power-up Cycle Time

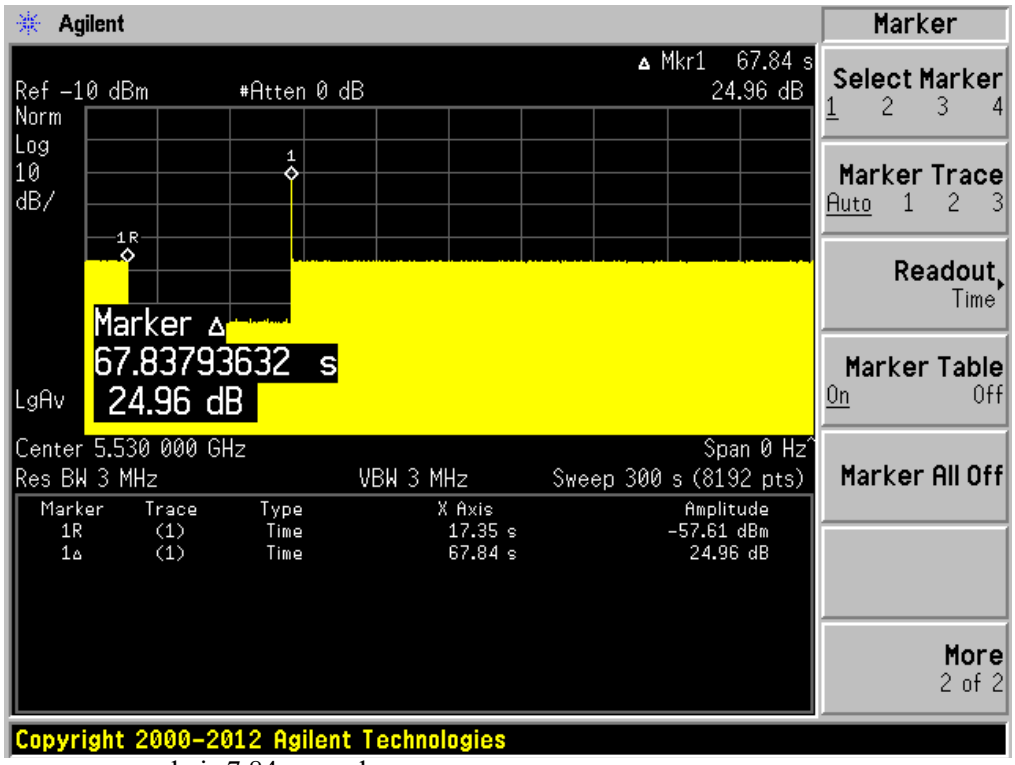
Test Frequency (MHz)	EUT initial Power-up cycle (Second)
5530	7.84

Results:

Timing of Radar Burst	Spectrum Analyzer Display
No Radar Triggered	Transmission begin after power-up cycle +60 seconds CAC
Within 6 seconds of the CAC starting	No transmission
Within the last 6 seconds of the CAC	No transmission

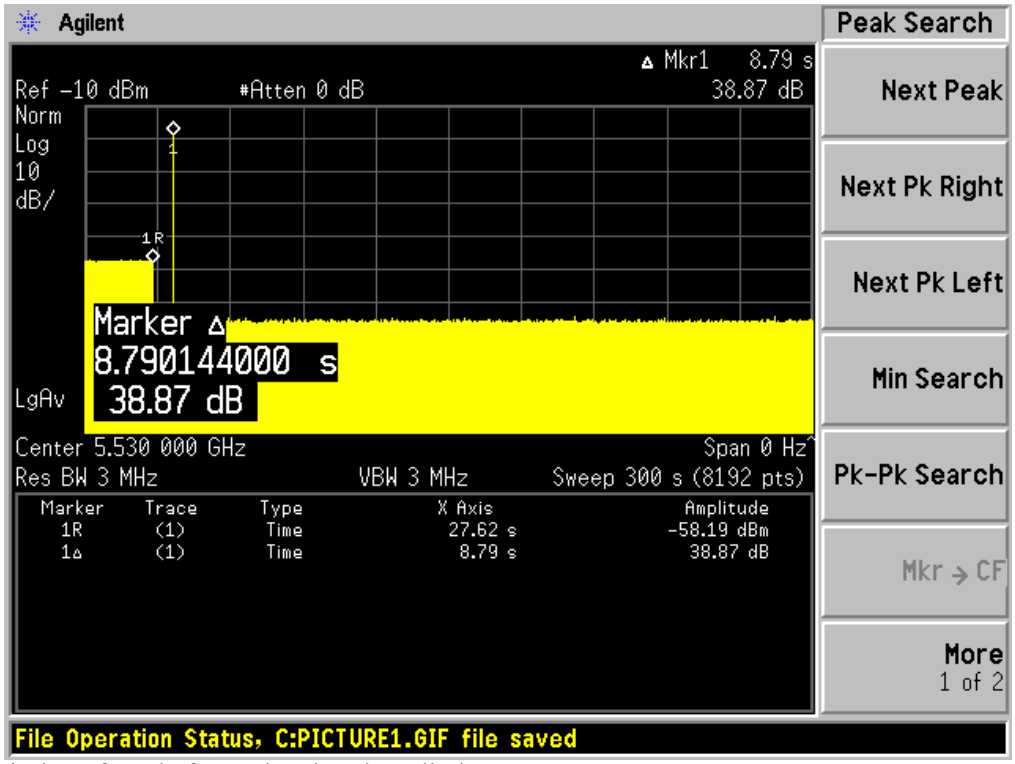
Please refer to the following plots.

Plot of without Radar signal applied



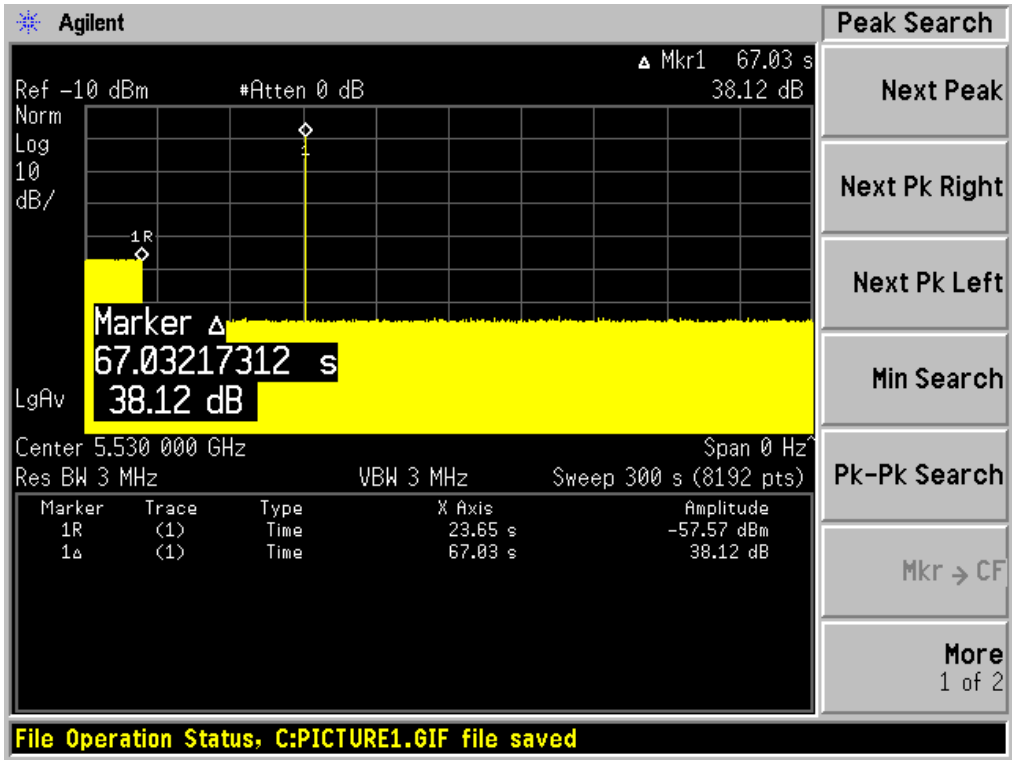
Note: The power-up cycle is 7.84 seconds.

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



No transmissions found after radar signal applied.

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



No transmissions found after radar signal applied.

CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME

Test Procedure

Perform type 0 short pulse radar waveform.
The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = N*Dwell Time

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

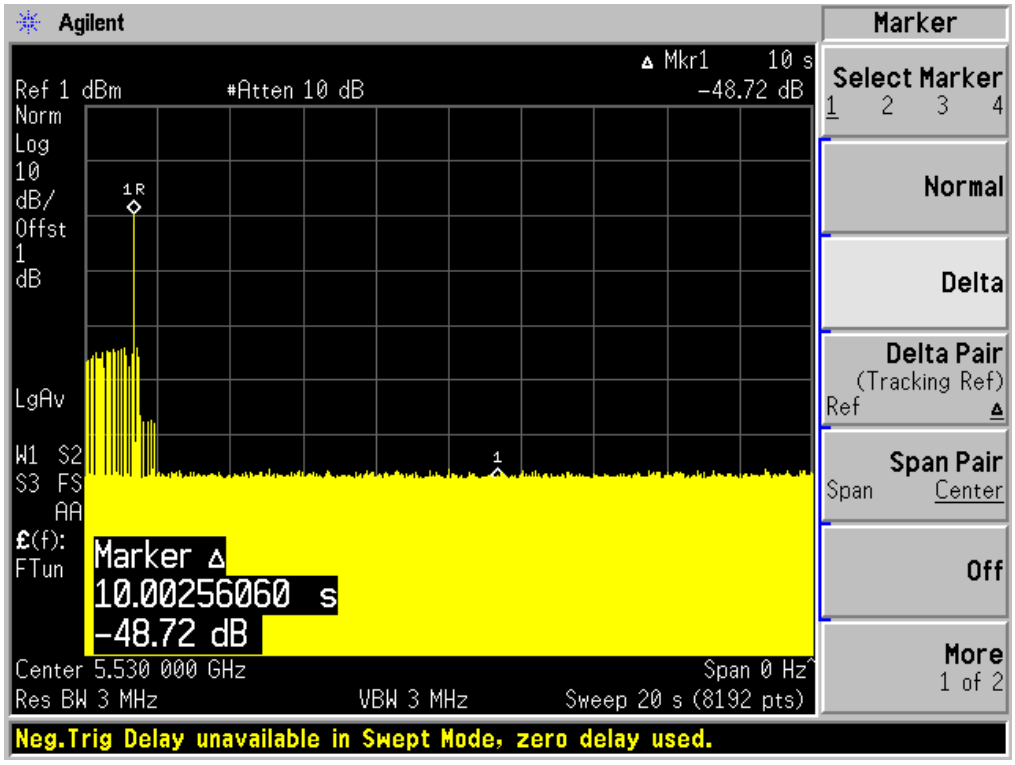
Test Results

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

Please refer to the following tables and plots.

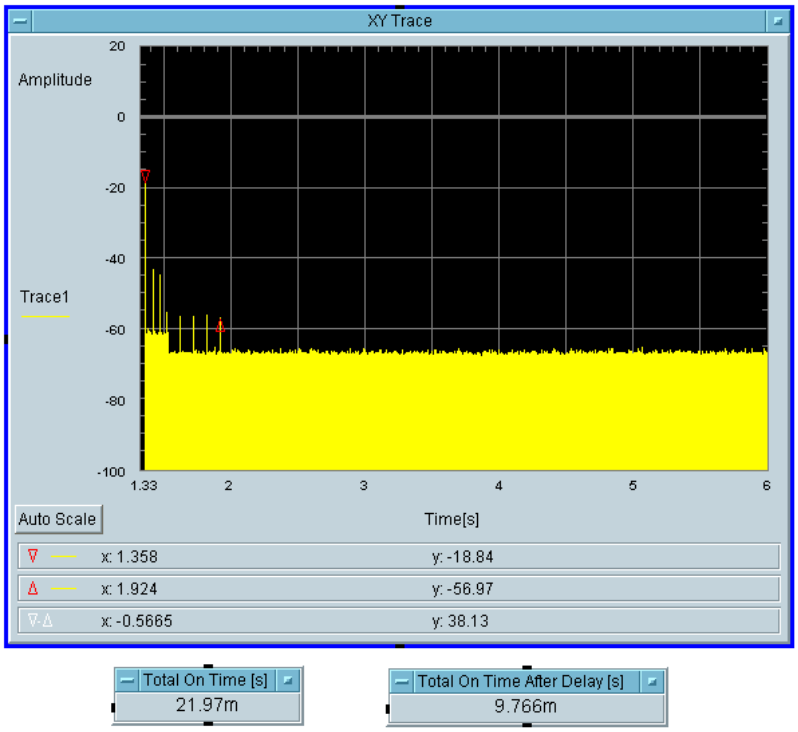
5530 MHz

Type 0 radar channel move time result:



Type0 radar channel closing transmission time result:

Transmission After 200ms	Aggregate Transmission Time After 200ms Delay (ms)	Limit for Aggregate Transmission Time After 200ms Delay (ms)	Result
YES	21.97	60	Pass



NON-OCCUPANCY PERIOD

Test Procedure

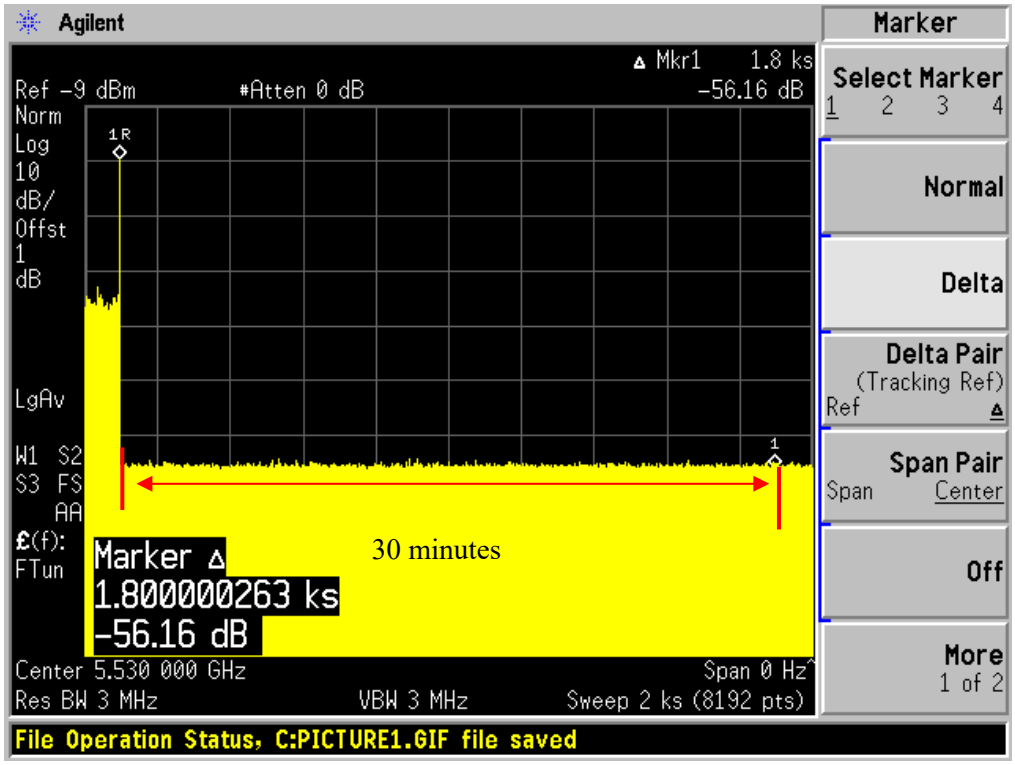
Measure the EUT for more than 30 minutes following the channel close/move time to very that the EUT does not resume any transmissions on this channel. Provide one plot to demonstrate no transmission on the channel for the non-occupancy period (30 minutes observation time)

Test Result

Frequency(MHz)	Bandwidth (MHz)	Spectrum Analyzer Display
5530	80	No transmission within 30 minutes

Please refer to the following plots.

5530 MHz



DETECTION BANDWIDTH

Test Procedure

Performed with Type 0 radar waveforms

Starting at the center frequency of the UUT operating *Channel*, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the *U-NII Detection Bandwidth* criterion specified in **Table 4**. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as F_H) at which detection is greater than or equal to the *U-NII Detection Bandwidth* criterion. Recording the detection rate at frequencies above F_H is not required to demonstrate compliance.
Starting at the center frequency of the UUT operating *Channel*, decrease the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the *U-NII Detection Bandwidth* criterion specified in **Table 4**. Repeat this measurement in 1MHz steps at frequencies 5 MHz above where the detection rate begins to fall. Record the lowest frequency (denote as F_L) at which detection is greater than or equal to the *U-NII Detection Bandwidth* criterion. Recording the detection rate at frequencies below F_L is not required to demonstrate compliance.

The *U-NII Detection Bandwidth* is calculated as follows:
U-NII Detection Bandwidth = $F_H - F_L$

The *U-NII Detection Bandwidth* must meet the *U-NII Detection Bandwidth* criterion specified in **Table 4**. Otherwise, the UUT does not comply with DFS requirements. This is essential to ensure that the UUT is capable of detecting *Radar Waveforms* across the same frequency spectrum that contains the significant energy from the system. In the case that the *U-NII Detection Bandwidth* is greater than or equal to the 99 percent power bandwidth for the measured F_H and F_L, the test can be truncated and the *U-NII Detection Bandwidth* can be reported as the measured F_H and F_L.

Test Result

Frequency (MHz)	Bandwidth Systems (MHz)	F_L (MHz)	F_H (MHz)	Detection Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Minimum Limit	Result
5500	20	5491	5509	18	17.645	100%	Compliance
5510	40	5491	5529	38	36.567	100%	Compliance
5530	80	5491	5569	78	76.008	100%	Compliance

Please refer to the following tables.

Results of Detection Bandwidth:

20MHz Bandwidth, EUT Frequency = 5500MHz											
DFS Detection Trials (1 = Detected, 0 = No Detected)											
Radar Frequency (MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5491(F_L)	1	1	1	1	1	1	1	1	1	1	100 %
5492	1	1	1	1	1	1	1	1	1	1	100 %
5493	1	1	1	1	1	1	1	1	1	1	100 %
5494	1	1	1	1	1	1	1	1	1	1	100 %
5495	1	1	1	1	1	1	1	1	1	1	100 %
5500	1	1	1	1	1	1	1	1	1	1	100 %
5505	1	1	1	1	1	1	1	1	1	1	100 %
5506	1	1	1	1	1	1	1	1	1	1	100 %
5507	1	1	1	1	1	1	1	1	1	1	100 %
5508	1	1	1	1	1	1	1	1	1	1	100 %
5509(FH)	1	1	1	1	1	1	1	1	1	1	100 %
Detection Bandwidth = $F_H - F_L$ = 5509-5491 = 18MHz											
EUT 99% BW = 17.645 MHz; **Result:** Pass											

40MHz Bandwidth, EUT Frequency = 5510MHz											
DFS Detection Trials (1 = Detected, 0 = No Detected)											
Radar Frequency (MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5491(F_L)	1	1	1	1	1	1	1	1	1	1	100 %
5492	1	1	1	1	1	1	1	1	1	1	100 %
5493	1	1	1	1	1	1	1	1	1	1	100 %
5494	1	1	1	1	1	1	1	1	1	1	100 %
5495	1	1	1	1	1	1	1	1	1	1	100 %
5500	1	1	1	1	1	1	1	1	1	1	100 %
5505	1	1	1	1	1	1	1	1	1	1	100 %
5510	1	1	1	1	1	1	1	1	1	1	100 %
5515	1	1	1	1	1	1	1	1	1	1	100 %
5520	1	1	1	1	1	1	1	1	1	1	100 %
5525	1	1	1	1	1	1	1	1	1	1	100 %
5526	1	1	1	1	1	1	1	1	1	1	100 %
5527	1	1	1	1	1	1	1	1	1	1	100 %
5528	1	1	1	1	0	1	1	1	1	1	90 %
5529(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
Detection Bandwidth = $F_H - F_L$ = 5529-5491 =38 MHz											
EUT 99% BW = 36.567 MHz; **Result:** Pass											

80MHz Bandwidth, EUT Frequency = 5530 MHz											
DFS Detection Trials (1 = Detected, 0 = No Detected)											
Radar Frequency (MHz)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**
5491(F_L)	1	1	1	1	1	1	1	0	1	1	90 %
5492	1	1	1	1	1	1	1	1	0	1	90 %
5493	1	1	1	1	1	1	1	1	1	1	100 %
5494	1	1	1	1	1	1	1	1	1	1	100 %
5495	1	1	1	1	1	1	1	1	1	1	100 %
5500	1	1	1	1	1	1	1	1	1	1	100 %
5505	1	1	1	1	1	1	1	1	1	1	100 %
5510	1	1	1	1	1	1	1	1	1	1	100 %
5515	1	1	1	1	1	1	1	1	1	1	100 %
5520	1	1	1	1	1	1	1	1	1	1	100 %
5525	1	1	1	1	1	1	1	1	1	1	100 %
5530	1	1	1	1	1	1	1	1	1	1	100 %
5535	1	1	1	1	1	1	1	1	1	1	100 %
5540	1	1	1	1	1	1	1	1	1	1	100 %
5545	1	1	1	1	1	1	1	1	1	1	100 %
5550	1	1	1	1	1	1	1	1	1	1	100 %
5555	1	1	1	1	1	1	1	1	1	1	100 %
5560	1	1	1	1	1	1	1	1	1	1	100 %
5565	1	1	1	1	1	1	1	1	1	1	100 %
5566	1	1	1	1	1	1	1	1	1	1	100 %
5567	1	1	1	1	1	1	1	1	1	1	100 %
5568	1	0	1	1	1	1	1	1	1	1	90 %
5569(F_H)	1	1	1	1	1	1	1	1	1	1	100 %
Detection Bandwidth = $F_H - F_L$ = 5569-5491 = 78 MHz											
EUT 99% BW = 76.008 MHz; **Result:** Pass											

STATISTICAL PERFORMANCE CHECK

Procedure:

The steps below define the procedure to determine the minimum percentage of successful detection requirements found in **Tables 5-7** when a radar burst with a level equal to the *DFS Detection Threshold* + 1dB is generated on the *Operating Channel* of the U-NII device *(In- Service Monitoring).*

a) One frequency will be chosen from the *Operating Channels* of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands.
b) In case the UUT is a U-NII device operating as a Client Device (with or without Radar Detection), a U-NII device operating as a Master Device will be used to allow the UUT (Client device) to Associate with the Master Device. In case the UUT is a Master Device, a U-NII device operating as a Client Device will be used and it is assumed that the Client will Associate with the UUT (Master). In both cases for conducted tests, the Radar Waveform generator will be connected to the Master Device. For radiated tests, the emissions of the Radar Waveform generator will be directed towards the Master Device. If the Master Device has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
c) Stream the channel loading test file from the *Master Device* to the Client Device on the test *Channel* for the entire period of the test.
d) At time T_0 the *Radar Waveform* generator sends the individual waveform for each of the Radar Types 1- 6 in **Tables 5-7**, at levels defined in **Table 3**, on the *Operating Channel*. An additional 1 dB is added to the radar test signal to ensure it is at or above the *DFS Detection Threshold*, accounting for equipment variations/errors.
e) Observe the transmissions of the UUT at the end of the Burst on the *Operating Channel* for duration greater than 10 seconds for Radar Type 0 to ensure detection occurs.
f) Observe the transmissions of the UUT at the end of the Burst on the *Operating Channel* for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs.
g) In case the UUT is a U-NII device operating as a *Client Device* with *In-Service Monitoring*, perform steps a) to f).

Result:

20MHz

Radar SignalType	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1A	15	86.7%	60%	Pass
Type 1B	15	80%	60%	Pass
Type 2	30	90 %	60%	Pass
Type 3	30	70 %	60%	Pass
Type 4	30	80 %	60%	Pass
Aggregate (Type1 to 4)	120	80.8 %	80%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	96.7 %	70%	Pass

Please refer to the following statistical tables:

5500MHz

Radar Type 1A Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5500	89	1	598	1
2	5500	65	1	818	1
3	5500	72	1	738	1
4	5500	95	1	558	1
5	5500	70	1	758	1
6	5500	78	1	678	1
7	5500	61	1	878	1
8	5500	63	1	838	1
9	5500	59	1	898	1
10	5500	68	1	778	0
11	5500	99	1	538	0
12	5500	81	1	658	1
13	5500	83	1	638	1
14	5500	62	1	858	1
15	5500	76	1	698	1
Detection Percentage: 86.7 % (>60%)					

Radar Type 1B Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5500	25	1	2140	1
2	5500	80	1	668	1
3	5500	99	1	537	1
4	5500	21	1	2531	0
5	5500	48	1	1120	0
6	5500	82	1	650	0
7	5500	26	1	2052	1
8	5500	32	1	1670	1
9	5500	27	1	1972	1
10	5500	19	1	2923	1
11	5500	55	1	965	1
12	5500	41	1	1289	1
13	5500	25	1	2153	1
14	5500	99	1	536	1
15	5500	75	1	712	1
Detection Percentage: 80 % (>60%)					

Radar Type 2 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5500	25	1.5	163	1
2	5500	29	1.9	222	1
3	5500	24	3.4	211	1
4	5500	24	4.5	153	0
5	5500	28	4.8	195	1
6	5500	26	2.3	192	1
7	5500	29	1.2	168	1
8	5500	24	2.9	228	1
9	5500	26	4.7	204	1
10	5500	25	2.8	203	1
11	5500	24	3.8	214	1
12	5500	24	4.7	169	0
13	5500	29	4	221	1
14	5500	26	4.4	194	1
15	5500	27	4	156	0
16	5500	29	1.5	184	1
17	5500	25	1.7	226	1
18	5500	26	1.5	188	1
19	5500	29	2.5	170	1
20	5500	26	3.7	191	1
21	5500	29	2.1	199	1
22	5500	27	2.4	167	1
23	5500	29	1.6	181	1
24	5500	26	4.2	188	1
25	5500	26	3.6	190	1
26	5500	26	2.6	177	1
27	5500	28	3.3	150	1
28	5500	28	3.1	188	1
29	5500	23	1.2	166	1
30	5500	23	1.3	174	1
Detection Percentage: 90% (>60%)					

Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5500	16	8.3	459	0
2	5500	17	7.6	302	1
3	5500	16	7.3	296	0
4	5500	18	6.4	472	1
5	5500	17	8.8	379	1
6	5500	17	9.8	363	1
7	5500	16	6	478	1
8	5500	16	9.1	402	1
9	5500	16	9	235	1
10	5500	18	6.3	214	0
11	5500	17	7	410	1
12	5500	18	6.5	439	1
13	5500	16	8.6	265	0
14	5500	18	6.6	296	1
15	5500	16	9.3	259	0
16	5500	17	8.7	309	0
17	5500	18	9.1	480	0
18	5500	16	7.6	493	1
19	5500	17	7.1	271	1
20	5500	16	6.5	378	1
21	5500	16	7.3	313	1
22	5500	18	8.7	367	1
23	5500	16	7.4	249	1
24	5500	18	9.2	340	1
25	5500	17	7.4	257	1
26	5500	17	6.8	436	1
27	5500	17	7.3	478	1
28	5500	18	9.3	434	0
29	5500	16	9.1	374	0
30	5500	16	7.3	346	1
Detection Percentage: 70 % (>60%)					

Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5500	18	1	1428	1
2	5500	18	1	1428	1
3	5500	18	1	1428	1
4	5500	18	1	1428	1
5	5500	18	1	1428	1
6	5500	18	1	1428	1
7	5500	18	1	1428	1
8	5500	18	1	1428	1
9	5500	18	1	1428	1
10	5500	18	1	1428	1
11	5500	18	1	1428	1
12	5500	18	1	1428	1
13	5500	18	1	1428	1
14	5500	18	1	1428	1
15	5500	18	1	1428	1
16	5500	18	1	1428	1
17	5500	18	1	1428	1
18	5500	18	1	1428	0
19	5500	18	1	1428	1
20	5500	18	1	1428	0
21	5500	18	1	1428	1
22	5500	18	1	1428	0
23	5500	18	1	1428	1
24	5500	18	1	1428	1
25	5500	18	1	1428	1
26	5500	18	1	1428	0
27	5500	18	1	1428	1
28	5500	18	1	1428	1
29	5500	18	1	1428	0
30	5500	18	1	1428	0
Detection Percentage: 80 % (>60%)					

Radar Type 5 Case 1 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5500.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	13	66	1070	1592	0.086002	
1	2	13	90.3	1319		1.093774	
2	1	13	66.1			1.874047	
3	2	13	91.3	1982		2.28772	
4	2	13	62.5	1475		2.992693	
5	3	13	58.2	1113	1260	3.595828	
6	2	13	100	1876		4.926365	
7	2	13	73.2	1662		5.00662	
8	1	13	71.2			6.134081	1
9	1	13	84.1			6.589187	
10	1	13	79.8			7.442981	
11	3	13	67.5	1572	1772	7.807796	
12	3	13	94.5	1281	1960	8.860156	
13	3	13	63.9	1751	1500	9.75185	
14	3	13	76.8	1732	1539	10.32596	
15	3	13	58.9	1436	1799	10.60018	
16	3	13	91.8	1593	1545	11.618413	

Statistics 2 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	6	88.9	1250	1680	0.950504	
1	3	6	58.5	1393	1203	1.331301	
2	2	6	84.6	1587		2.036045	
3	1	6	75.9			3.957477	
4	2	6	57.1	1665		4.65053	
5	3	6	50.7	1748	1154	5.4824	
6	2	6	53.3	1782		6.162366	1
7	2	6	81.3	1682		7.983894	
8	1	6	74.1			8.89253	
9	3	6	93.1	1901	1267	9.458748	
10	2	6	98.5	1569		10.09825	
11	1	6	81.3			11.11211	

Statistics 3 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	6	68.8			0.813462	1
1	1	6	51.7			1.247191	
2	2	6	69.9	1633		3.222372	
3	2	6	94.7	1094		3.638963	
4	2	6	81.9	1942		5.084768	
5	2	6	76	1160		6.514463	
6	1	6	58			8.281902	
7	2	6	95.1	1447		8.998614	
8	3	6	52.4	1625	1234	9.885194	
9	2	6	95.6	1498		11.98073	

Statistics 4 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	13	65.3	1950	1413	0.476427	1
1	3	13	72.5	1191	1315	2.0712	
2	2	13	77.5	1736		2.726022	
3	1	13	65.2			4.793608	
4	1	13	97.6			5.371189	
5	3	13	68.1	1608	1719	7.072796	
6	2	13	73.9	1093		7.559019	
7	2	13	57.1	1101		9.541108	
8	2	13	99.4	1104		10.63506	
9	2	13	67.4	1966		10.9319	

Statistics 5(ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	15	89.6	1260		0.612006	
1	1	15	57.7			1.088812	
2	2	15	92.6	1209		2.111068	
3	3	15	82.7	1107	1129	2.816314	
4	1	15	75.1			3.938961	
5	1	15	54.4			5.374075	
6	2	15	56.1	1107		6.378223	1
7	3	15	87.9	1538	1289	6.931755	
8	2	15	85.9	1062		7.860178	
9	3	15	75.5	1425	1836	8.374584	
10	2	15	54.4	1650		9.332081	
11	1	15	75.8			10.49488	
12	3	15	87.2	1295	1704	11.62233	

Statistics 6 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	8	99.4			0.535111	
1	3	8	53.6	1419	1529	1.458167	
2	2	8	56.9	1255		3.21003	
3	1	8	60.3			4.303806	
4	1	8	51.1			5.383038	
5	3	8	75.8	1874	1998	6.052146	1
6	2	8	80.9	1060		7.343974	
7	2	8	62.5	1693		8.049588	
8	3	8	89.6	1687	1966	9.066842	
9	1	8	68.9			10.25597	
10	2	8	62.9	1243		11.62949	

Statistics 7(ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	8	91.1			0.469421	1
1	2	8	95.9	1481		1.720781	
2	1	8	67.1			2.497901	
3	3	8	50.6	1286	1339	3.562803	
4	1	8	60.9			4.547433	
5	1	8	58			5.440584	
6	3	8	92	1074	1333	6.836339	
7	2	8	64.7	1073		7.273695	
8	2	8	78.5	1013		8.603666	
9	2	8	58.3	1384		9.896673	
10	1	8	66.5			10.79059	
11	3	8	80.9	1254	1538	11.96232	

Statistics 8 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	9	92.7	1918		0.616399	1
1	2	9	59.4	1942		1.319607	
2	1	9	55.4			2.819809	
3	3	9	59.9	1583	1284	3.473333	
4	2	9	61.2	1762		4.578478	
5	3	9	85.6	1528	1629	5.816941	
6	2	9	61.1	1785		6.011102	
7	2	9	62.3	1412		7.076318	
8	2	9	66.4	1452		8.32041	
9	1	9	92.7			9.31539	
10	3	9	50.7	1455	1180	10.28504	
11	3	9	54.5	1542	1546	11.28609	

Statistics 9 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	7	94.5	1515	1044	0.360349	
1	2	7	99.4	1826		1.31358	
2	1	7	77.6			2.667518	
3	2	7	52.8	1267		3.646132	
4	2	7	63.4	1027		3.986659	
5	1	7	69.8			5.395172	
6	2	7	71.6	1905		6.34826	1
7	3	7	59.6	1518	1909	6.843031	
8	1	7	74.3			7.898409	
9	2	7	52	1307		8.322559	
10	3	7	76.7	1513	1132	9.762459	
11	1	7	53.4			10.48274	
12	3	7	65.1	1128	1065	11.46865	

Statistics 10 (ChirpCenter Frequency: 5500.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	5	82.7	1752		1.287352	
1	2	5	75.7	1873		1.751589	
2	2	5	59.5	1070		3.275291	
3	2	5	80.7	1641		4.364852	
4	2	5	83.5	1637		6.513609	1
5	1	5	72			7.632475	
6	2	5	65.5	1114		8.725288	
7	2	5	94.6	1668		10.46867	
8	1	5	54.5			11.88917	

Radar Type 5 Case 2 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5497.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	17	56.8	1126		0.363066	1
1	1	17	61.9			1.071442	
2	1	17	71			1.306521	
3	2	17	93.5	1290		2.296666	
4	3	17	85.4	1972	1794	2.913574	
5	2	17	81.2	1452		3.035459	
6	2	17	65.4	1079		4.194911	
7	2	17	98.6	1596		4.721428	
8	2	17	56	1878		4.91083	
9	1	17	76.5			5.628158	
10	3	17	79.6	1105	1837	6.281579	
11	2	17	77.2	1450		7.172102	
12	2	17	94	1133		7.434998	
13	2	17	99.3	1852		8.031159	
14	2	17	55.9	1313		8.898404	
15	3	17	62.1	1291	1428	9.059095	
16	3	17	68.1	1676	1225	9.915887	
17	1	17	98.7			10.2347	
18	1	17	86.5			10.82798	
19	3	17	57.6	1556	1752	11.91703	

Statistics 2 (ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	11	86.9			0.495722	1
1	2	11	74.8	1504		1.017317	
2	2	11	84.7	1390		1.721696	
3	2	11	99.4	1094		2.087514	
4	2	11	97.7	1517		2.715758	
5	1	11	94.3			3.681411	
6	2	11	86.2	1502		3.889842	
7	2	11	56.2	1390		4.53624	
8	2	11	58.3	1166		5.346277	
9	3	11	88.2	1163	1190	6.005051	
10	3	11	84.5	1277	1134	6.459387	
11	2	11	99.8	1074		7.412481	
12	2	11	55.8	1106		7.658163	
13	1	11	98.7			8.473746	
14	3	11	61.1	1934	1098	9.160633	
15	3	11	80.2	1126	1764	9.836972	
16	3	11	82.3	1583	1603	10.18386	
17	2	11	95.2	1630		11.03816	
18	1	11	83.5			11.37124	

Statistics 3 (ChirpCenter Frequency: 5495.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	13	89.7	1559	1634	0.596091	1
1	2	13	82.1	1332		1.311135	
2	1	13	81.1			2.906096	
3	2	13	97.4	1903		3.615045	
4	1	13	56.8			4.900434	
5	2	13	95.6	1372		5.029918	
6	2	13	93.6	1579		6.755473	
7	2	13	80.6	1896		7.568093	
8	2	13	70.4	1657		8.330021	
9	2	13	94.9	1961		9.987118	
10	2	13	54.7	1489		10.5169	
11	2	13	77.9	1126		11.04691	

Statistics 4 (ChirpCenter Frequency: 5493.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	8	78.4			0.335867	1
1	3	8	57.9	1973	1576	1.278229	
2	2	8	82.3	1751		1.692301	
3	2	8	54.1	1839		2.180812	
4	2	8	95.4	1803		3.197058	
5	2	8	56.8	1741		4.067218	
6	3	8	63	1431	1569	4.764135	
7	3	8	66.2	1232	1845	4.971334	
8	3	8	81.8	1412	1570	6.32705	
9	2	8	81.5	1591		6.411438	
10	3	8	86.5	1756	1142	7.32981	
11	1	8	85.5			7.987549	
12	3	8	70.2	1301	1401	8.872055	
13	3	8	98.6	1410	1260	9.743838	
14	3	8	65.8	1817	1289	10.5458	
15	2	8	50.7	1669		10.85759	
16	2	8	56.5	1634		11.77348	

Statistics 5 (ChirpCenter Frequency: 5498.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	19	90.1			0.497572	
1	2	19	95	1129		1.1745	
2	3	19	81.4	1045	1065	1.764731	
3	1	19	53.8			2.251053	
4	1	19	74.1			3.708459	
5	2	19	73	1226		4.297105	
6	3	19	97.5	1156	1747	4.581961	
7	1	19	72.5			5.856443	
8	3	19	77.3	1607	1933	6.599057	1
9	2	19	70.9	1045		7.293559	
10	2	19	61.7	1149		7.98721	
11	2	19	56.1	1398		8.662389	
12	3	19	75.1	1575	1947	9.300551	
13	2	19	91.3	1430		9.888027	
14	2	19	82.2	1347		10.75925	
15	2	19	60.8	1433		11.4211	

Statistics 6 (ChirpCenter Frequency: 5497.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	17	50.1	1261		0.597289	
1	1	17	86.2			1.356571	
2	2	17	96.1	1132		1.780291	
3	3	17	56	1127	1385	2.203976	
4	1	17	70.1			2.935866	
5	3	17	90.8	1699	1865	3.756751	
6	2	17	96	1249		4.773258	
7	2	17	85.4	1341		4.992461	
8	2	17	76	1258		6.333436	1
9	2	17	74.6	1468		6.617054	
10	1	17	81.6			7.681334	
11	2	17	58.4	1851		8.126887	
12	1	17	97.7			8.613583	
13	1	17	84.8			9.374777	
14	2	17	93.8	1305		9.944809	
15	3	17	51.4	1056	1635	11.18502	
16	2	17	81.4	1371		11.53707	

Statistics 7 (ChirpCenter Frequency: 5493.0 MHz)

Trial #	Pulse	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	92.8	1852	1427	0.817802	1
1	3	8	86.1	1955	1257	1.284025	
2	2	8	56.9	1409		3.015068	
3	1	8	52.9			4.689371	
4	3	8	65	1500	1779	5.046005	
5	2	8	94.6	1370		6.922228	
6	2	8	84.5	1679		7.662974	
7	3	8	73.9	1284	1958	8.659762	
8	2	8	81.6	1203		10.05969	
9	2	8	56.9	1973		11.78346	

Statistics 8 (ChirpCenter Frequency: 5495.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	12	82.9	1378		0.15149	1
1	2	12	65.1	1741		1.270042	
2	1	12	98.4			1.426559	
3	3	12	82.9	1942	1406	2.268422	
4	2	12	55.7	1992		2.976118	
5	2	12	91.5	1394		3.56358	
6	3	12	95.9	1963	1763	4.063365	
7	2	12	75.7	1746		5.233982	
8	2	12	58.1	1542		5.766968	
9	3	12	87.3	1732	1441	6.383136	
10	2	12	72.5	1653		6.958169	
11	3	12	81.4	1520	1389	7.547788	
12	3	12	73.4	1454	1935	8.31468	
13	3	12	60.9	1157	1093	8.926888	
14	2	12	97.2	1827		9.985645	
15	1	12	66.1			10.04837	
16	2	12	60.8	1372		10.69541	
17	3	12	57.1	1348	1006	11.95192	

Statistics 9 (ChirpCenter Frequency: 5498.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	19	88.7	1291		0.202401	1
1	1	19	52.1			0.861416	
2	2	19	70.4	1755		1.974878	
3	2	19	71.3	1317		2.367353	
4	2	19	51.5	1408		3.18827	
5	1	19	97.8			3.418514	
6	2	19	96.3	1521		4.504737	
7	2	19	81.3	1002		5.235565	
8	1	19	77.9			5.749936	
9	3	19	61.2	1129	1988	6.487797	
10	2	19	63	1114		7.159895	
11	3	19	50.8	1764	1585	7.964923	
12	2	19	87	1520		8.255897	
13	3	19	65.9	1691	1139	8.770323	
14	2	19	96.9	1608		9.505736	
15	3	19	58.9	1641	1313	10.13374	
16	1	19	88.6			11.20306	
17	3	19	69.9	1524	1364	11.51646	

Statistics 10 (ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	10	83.3	1300		0.311307	1
1	2	10	70.4	1571		1.130969	
2	3	10	96.7	1882	1111	2.379699	
3	2	10	55.6	1175		3.427762	
4	2	10	94.4	1646		4.573876	
5	1	10	71.6			5.442774	
6	2	10	79.5	1597		5.590381	
7	1	10	98.4			7.100869	
8	3	10	85.3	1851	1829	7.553862	
9	2	10	76.6	1289		9.012603	
10	3	10	83.2	1935	1575	9.879908	
11	2	10	50.8	1420		10.69126	
12	1	10	82.4			11.60736	

Radar Type 5 Case 3 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5502.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	20	91.7			0.976416	
1	2	20	76.2	1869		1.821724	
2	1	20	99.5			3.417052	
3	2	20	97.1	1505		4.117463	
4	2	20	65.2	1634		5.864308	1
5	2	20	90.9	1967		7.262185	
6	3	20	53.5	1162	1972	9.185615	
7	3	20	80.6	1630	1677	9.615919	
8	1	20	66			10.98187	

Statistics 2 (ChirpCenter Frequency: 5506.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	11	77.8	1814		0.738533	
1	1	11	72.1			1.3885	
2	2	11	81.7	1861		2.268094	
3	1	11	73.7			3.929369	
4	1	11	52.5			4.912693	
5	2	11	81.4	1776		5.867598	1
6	2	11	99.4	1569		6.58584	
7	1	11	53.7			7.878738	
8	1	11	99.7			8.86736	
9	2	11	61.9	1199		9.901943	
10	2	11	70.5	1423		10.93119	

Statistics 3 (ChirpCenter Frequency: 5506.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	11	77.9	1885	1965	0.172946	1
1	2	11	68.7	1840		1.474164	
2	2	11	59.6	1855		2.860736	
3	2	11	83.7	1028		3.372129	
4	1	11	70.5			4.034971	
5	1	11	72.7			5.314747	
6	2	11	60	1975		6.231236	
7	2	11	51.3	1354		7.669047	
8	1	11	67.5			8.326119	
9	1	11	61.9			9.64922	
10	2	11	72.4	1990		10.30003	
11	2	11	66.5	1914		11.79	

Statistics 4 (ChirpCenter Frequency: 5505.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	12	66.2	1240	1354	0.507774	1
1	3	12	72.3	1366	1496	0.894862	
2	2	12	96.2	1371		1.361623	
3	1	12	81.8			2.417624	
4	1	12	98.9			2.883162	
5	1	12	73			3.419681	
6	1	12	72.4			4.191496	
7	2	12	51.3	1283		4.639504	
8	3	12	50.7	1304	1265	5.07742	
9	1	12	90.2			6.256533	
10	2	12	68.6	1280		6.87939	
11	1	12	66.4			7.382774	
12	1	12	93.8			7.998768	
13	2	12	97	1528		8.637591	
14	2	12	56.8	1658		9.254934	
15	3	12	69.4	1177	1677	9.832379	
16	2	12	66.9	1878		10.56735	
17	1	12	62.3			11.03194	
18	2	12	80.9	1387		11.83458	

Statistics 5 (ChirpCenter Frequency: 5506.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	11	85.6	1384	1583	0.583976	
1	2	11	99.1	1554		0.863216	
2	2	11	61.7	1413		1.602825	
3	2	11	82.4	1392		2.160634	
4	1	11	79.2			2.851893	
5	2	11	68.3	1595		3.67958	
6	2	11	98.2	1498		4.692634	
7	2	11	62.3	1973		5.287819	
8	1	11	63.3			6.117584	1
9	2	11	97.3	1007		6.664213	
10	1	11	75			7.662398	
11	2	11	90.2	1095		7.98934	
12	2	11	80.3	1006		8.726776	
13	2	11	61	1978		9.312556	
14	2	11	66.3	1640		10.23996	
15	2	11	58.6	1640		11.06795	
16	2	11	54.4	1467		11.975	

Statistics 6 (ChirpCenter Frequency: 5504.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	15	90.8	1056		0.352009	
1	1	15	65.4			2.256652	
2	1	15	67.7			3.462405	
3	2	15	83.7	1374		4.741207	
4	2	15	77.8	1114		5.147773	
5	1	15	78.1			7.064491	1
6	1	15	51			7.526465	
7	2	15	58.7	1569		8.590108	
8	3	15	70.1	1852	1865	9.675437	
9	1	15	89.8			11.82283	

Statistics 7 (ChirpCenter Frequency: 5504.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	16	78	1770		0.764531	
1	3	16	76.8	1883	1592	1.4769	
2	2	16	88	1366		3.352887	
3	2	16	73	1630		5.325792	
4	1	16	99.3			6.196	1
5	1	16	87.6			7.785319	
6	3	16	82	1360	1089	8.052455	
7	2	16	53.6	1211		9.736811	
8	2	16	74.7	1002		11.41026	

Statistics 8 (ChirpCenter Frequency: 5504.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	16	53.9			0.18692	
1	1	16	57.1			1.575053	
2	2	16	68.1	1234		2.551812	
3	2	16	63.2	1152		3.640146	
4	2	16	93.9	1532		4.816208	
5	2	16	81.2	1364		5.274017	
6	1	16	94			6.616479	1
7	3	16	62.5	1368	1704	7.228664	
8	2	16	92.2	1591		8.293343	
9	1	16	95.2			9.197761	
10	2	16	91.2	1548		10.30456	
11	2	16	78.5	1575		11.83578	

Statistics 9 (ChirpCenter Frequency: 5502.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	20	65.2	1628	1681	0.336608	1
1	2	20	82.1	1007		1.266852	
2	1	20	81.7			2.166487	
3	2	20	69.7	1236		2.877058	
4	1	20	52.8			3.428844	
5	1	20	92.7			5.069771	
6	3	20	68.2	1188	1327	5.752601	
7	1	20	59.9			6.0887	
8	3	20	85.4	1642	1192	7.265021	
9	2	20	82.8	1549		8.45911	

Statistics 10 (ChirpCenter Frequency: 5505.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	12	96.8	1531	1592	0.121267	1
1	3	12	94.2	1215	1119	1.595044	
2	3	12	54.2	1998	1176	2.279422	
3	2	12	92.3	1421		3.818654	
4	2	12	55.8	1685		4.834641	
5	1	12	82.7			5.690545	
6	1	12	86.6			6.99987	
7	1	12	55.3			8.582774	
8	2	12	80.6	1284		9.407394	
9	2	12	52.6	1139		10.12696	
10	2	12	60	1546		11.87876	

Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)	Hopping Sequence (MHz)
1	5500	9	1	333	1	5646.0, 5690.0, 5564.0, 5603.0, 5379.0, 5529.0, 5597.0, 5600.0, 5677.0, 5510.0, 5373.0, 5322.0, 5397.0, 5528.0, 5250.0, 5714.0, 5286.0, 5293.0, 5330.0, 5284.0, 5420.0, 5274.0, 5403.0, 5717.0, 5503.0, 5434.0, 5591.0, 5507.0, 5664.0, 5360.0, 5272.0, 5610.0, 5382.0, 5413.0, 5691.0, 5410.0, 5459.0, 5395.0, 5623.0, 5649.0, 5540.0, 5282.0, 5389.0, 5500.0, 5488.0, 5555.0, 5626.0, 5278.0, 5287.0, 5340.0, 5357.0, 5556.0, 5438.0, 5643.0, 5570.0, 5440.0, 5639.0, 5666.0, 5533.0, 5460.0, 5380.0, 5576.0, 5336.0, 5492.0, 5588.0, 5631.0, 5580.0, 5665.0, 5709.0, 5475.0, 5387.0, 5377.0, 5493.0, 5298.0, 5512.0, 5361.0, 5425.0, 5482.0, 5292.0, 5345.0, 5267.0, 5694.0, 5501.0, 5311.0, 5481.0, 5487.0, 5713.0, 5526.0, 5392.0, 5674.0, 5408.0, 5585.0, 5606.0, 5476.0, 5279.0, 5404.0, 5595.0, 5347.0, 5563.0, 5396.0
2	5500	9	1	333	1	5376.0, 5357.0, 5555.0, 5382.0, 5686.0, 5428.0, 5455.0, 5432.0, 5541.0, 5573.0, 5701.0, 5462.0, 5604.0, 5411.0, 5384.0, 5328.0, 5464.0, 5593.0, 5473.0, 5563.0, 5653.0, 5595.0, 5490.0, 5420.0, 5460.0, 5523.0, 5390.0, 5587.0, 5401.0, 5557.0, 5652.0, 5544.0, 5578.0, 5310.0, 5564.0, 5526.0, 5660.0, 5457.0, 5689.0, 5296.0, 5335.0, 5618.0, 5442.0, 5714.0, 5530.0, 5690.0, 5422.0, 5685.0, 5489.0, 5320.0, 5591.0, 5700.0, 5409.0, 5444.0, 5483.0, 5684.0, 5664.0, 5257.0, 5253.0, 5650.0, 5313.0, 5679.0, 5410.0, 5331.0, 5434.0, 5352.0, 5317.0, 5621.0, 5381.0, 5669.0, 5287.0, 5677.0, 5414.0, 5301.0, 5702.0, 5649.0, 5259.0, 5332.0, 5274.0, 5545.0, 5441.0, 5500.0, 5531.0, 5342.0, 5610.0, 5386.0, 5718.0, 5338.0, 5416.0, 5276.0, 5494.0, 5533.0, 5398.0, 5465.0, 5395.0, 5269.0, 5339.0, 5450.0, 5599.0, 5661.0
3	5500	9	1	333	1	5390.0, 5571.0, 5664.0, 5550.0, 5612.0, 5558.0, 5458.0, 5339.0, 5456.0, 5702.0, 5379.0, 5333.0, 5488.0, 5350.0, 5262.0, 5649.0, 5415.0, 5254.0, 5377.0, 5316.0, 5603.0, 5384.0, 5287.0, 5684.0, 5432.0, 5352.0, 5710.0, 5266.0, 5514.0, 5276.0, 5264.0, 5653.0, 5501.0, 5459.0, 5714.0, 5538.0, 5724.0, 5588.0, 5383.0, 5403.0, 5294.0, 5451.0, 5436.0, 5655.0, 5253.0, 5298.0, 5703.0, 5596.0, 5293.0, 5601.0, 5455.0, 5598.0, 5523.0, 5633.0, 5348.0, 5687.0, 5583.0, 5326.0, 5286.0, 5536.0, 5531.0, 5439.0, 5546.0, 5425.0, 5668.0,

						5487.0, 5363.0, 5250.0, 5478.0, 5698.0, 5358.0, 5666.0, 5258.0, 5340.0, 5563.0, 5645.0, 5705.0, 5593.0, 5405.0, 5509.0, 5597.0, 5311.0, 5552.0, 5511.0, 5292.0, 5625.0, 5521.0, 5594.0, 5582.0, 5529.0, 5541.0, 5305.0, 5271.0, 5308.0, 5557.0, 5499.0, 5527.0, 5555.0, 5512.0, 5639.0
4	5500	9	1	333	1	5696.0, 5508.0, 5415.0, 5261.0, 5641.0, 5643.0, 5585.0, 5649.0, 5385.0, 5511.0, 5577.0, 5566.0, 5411.0, 5614.0, 5433.0, 5449.0, 5276.0, 5642.0, 5306.0, 5336.0, 5303.0, 5304.0, 5397.0, 5315.0, 5631.0, 5480.0, 5520.0, 5405.0, 5400.0, 5290.0, 5581.0, 5638.0, 5462.0, 5380.0, 5695.0, 5556.0, 5708.0, 5528.0, 5579.0, 5494.0, 5314.0, 5432.0, 5537.0, 5700.0, 5424.0, 5687.0, 5376.0, 5507.0, 5483.0, 5265.0, 5518.0, 5352.0, 5605.0, 5355.0, 5622.0, 5596.0, 5386.0, 5418.0, 5611.0, 5710.0, 5521.0, 5332.0, 5357.0, 5662.0, 5473.0, 5647.0, 5627.0, 5504.0, 5540.0, 5461.0, 5653.0, 5368.0, 5457.0, 5663.0, 5587.0, 5498.0, 5358.0, 5634.0, 5672.0, 5575.0, 5514.0, 5441.0, 5516.0, 5609.0, 5565.0, 5469.0, 5588.0, 5291.0, 5342.0, 5574.0, 5339.0, 5668.0, 5590.0, 5666.0, 5712.0, 5446.0, 5407.0, 5474.0, 5603.0, 5305.0
5	5500	9	1	333	1	5370.0, 5561.0, 5431.0, 5271.0, 5680.0, 5392.0, 5655.0, 5448.0, 5415.0, 5441.0, 5682.0, 5312.0, 5511.0, 5275.0, 5460.0, 5252.0, 5713.0, 5579.0, 5474.0, 5596.0, 5513.0, 5440.0, 5309.0, 5659.0, 5471.0, 5401.0, 5497.0, 5625.0, 5701.0, 5378.0, 5631.0, 5326.0, 5529.0, 5510.0, 5364.0, 5482.0, 5702.0, 5409.0, 5640.0, 5653.0, 5302.0, 5685.0, 5507.0, 5269.0, 5602.0, 5576.0, 5582.0, 5597.0, 5566.0, 5556.0, 5288.0, 5654.0, 5407.0, 5708.0, 5307.0, 5629.0, 5568.0, 5660.0, 5618.0, 5423.0, 5377.0, 5298.0, 5332.0, 5265.0, 5333.0, 5354.0, 5551.0, 5495.0, 5637.0, 5573.0, 5663.0, 5572.0, 5583.0, 5311.0, 5468.0, 5277.0, 5559.0, 5542.0, 5712.0, 5350.0, 5462.0, 5481.0, 5342.0, 5537.0, 5509.0, 5711.0, 5330.0, 5715.0, 5707.0, 5598.0, 5403.0, 5308.0, 5560.0, 5565.0, 5539.0, 5534.0, 5665.0, 5274.0, 5416.0, 5705.0
6	5500	9	1	333	1	5264.0, 5515.0, 5722.0, 5265.0, 5366.0, 5669.0, 5698.0, 5383.0, 5301.0, 5609.0, 5480.0, 5689.0, 5491.0, 5688.0, 5561.0, 5437.0, 5642.0, 5256.0, 5514.0, 5659.0, 5426.0, 5349.0, 5528.0, 5574.0, 5352.0, 5386.0, 5252.0, 5521.0, 5584.0, 5568.0, 5430.0, 5586.0, 5540.0, 5453.0, 5397.0, 5295.0, 5330.0, 5321.0, 5372.0, 5351.0, 5636.0, 5671.0, 5457.0, 5326.0, 5313.0, 5267.0, 5718.0, 5691.0, 5401.0, 5311.0, 5296.0, 5427.0, 5631.0, 5623.0, 5422.0, 5566.0, 5593.0, 5328.0, 5336.0, 5407.0, 5468.0, 5702.0, 5356.0, 5471.0, 5307.0,

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7	5500	9	1	333	1	5630.0, 5316.0, 5522.0, 5686.0, 5336.0, 5702.0, 5363.0, 5703.0, 5562.0, 5647.0, 5267.0, 5718.0, 5713.0, 5333.0, 5448.0, 5464.0, 5694.0, 5390.0, 5339.0, 5255.0, 5413.0, 5285.0, 5485.0, 5406.0, 5639.0, 5344.0, 5663.0, 5549.0, 5526.0, 5490.0, 5690.0, 5565.0, 5652.0, 5429.0, 5619.0, 5432.0, 5320.0, 5579.0, 5583.0, 5678.0, 5294.0, 5613.0, 5491.0, 5382.0, 5260.0, 5451.0, 5416.0, 5442.0, 5539.0, 5679.0, 5722.0, 5612.0, 5252.0, 5373.0, 5315.0, 5563.0, 5587.0, 5389.0, 5614.0, 5581.0, 5723.0, 5646.0, 5399.0, 5632.0, 5551.0, 5575.0, 5343.0, 5569.0, 5303.0, 5578.0, 5318.0, 5456.0, 5450.0, 5386.0, 5387.0, 5617.0, 5356.0, 5520.0, 5515.0, 5641.0, 5319.0, 5337.0, 5309.0, 5547.0, 5506.0, 5608.0, 5599.0, 5419.0, 5466.0, 5430.0, 5555.0, 5665.0, 5519.0, 5384.0, 5398.0, 5348.0, 5540.0, 5499.0, 5283.0, 5610.0
8	5500	9	1	333	1	5464.0, 5287.0, 5469.0, 5579.0, 5425.0, 5580.0, 5629.0, 5327.0, 5695.0, 5684.0, 5367.0, 5721.0, 5519.0, 5499.0, 5668.0, 5380.0, 5470.0, 5263.0, 5687.0, 5712.0, 5466.0, 5313.0, 5458.0, 5573.0, 5581.0, 5540.0, 5378.0, 5705.0, 5489.0, 5639.0, 5260.0, 5556.0, 5392.0, 5663.0, 5479.0, 5335.0, 5381.0, 5622.0, 5710.0, 5437.0, 5670.0, 5459.0, 5527.0, 5599.0, 5316.0, 5420.0, 5284.0, 5609.0, 5690.0, 5593.0, 5696.0, 5512.0, 5680.0, 5384.0, 5357.0, 5604.0, 5391.0, 5315.0, 5596.0, 5654.0, 5500.0, 5521.0, 5699.0, 5468.0, 5508.0, 5350.0, 5633.0, 5646.0, 5541.0, 5291.0, 5520.0, 5446.0, 5608.0, 5396.0, 5501.0, 5261.0, 5614.0, 5538.0, 5322.0, 5451.0, 5279.0, 5292.0, 5632.0, 5328.0, 5498.0, 5676.0, 5711.0, 5306.0, 5624.0, 5330.0, 5428.0, 5516.0, 5594.0, 5506.0, 5674.0, 5422.0, 5277.0, 5272.0, 5709.0, 5532.0
9	5500	9	1	333	1	5340.0, 5408.0, 5547.0, 5653.0, 5536.0, 5255.0, 5446.0, 5601.0, 5292.0, 5493.0, 5617.0, 5402.0, 5620.0, 5642.0, 5389.0, 5571.0, 5679.0, 5329.0, 5723.0, 5656.0, 5254.0, 5618.0, 5495.0, 5334.0, 5641.0, 5459.0, 5331.0, 5414.0, 5694.0, 5516.0, 5347.0, 5554.0, 5691.0, 5301.0, 5666.0, 5475.0, 5307.0, 5707.0, 5598.0, 5378.0, 5342.0, 5449.0, 5350.0, 5524.0, 5390.0, 5599.0, 5714.0, 5451.0, 5644.0, 5683.0, 5252.0, 5517.0, 5595.0, 5555.0, 5526.0, 5596.0, 5701.0, 5488.0, 5316.0, 5309.0, 5325.0, 5552.0, 5673.0, 5703.0, 5693.0,

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10	5500	9	1	333	1	5287.0, 5467.0, 5535.0, 5274.0, 5463.0, 5596.0, 5402.0, 5585.0, 5460.0, 5458.0, 5474.0, 5417.0, 5586.0, 5572.0, 5435.0, 5723.0, 5509.0, 5695.0, 5340.0, 5282.0, 5543.0, 5534.0, 5627.0, 5601.0, 5457.0, 5520.0, 5541.0, 5713.0, 5368.0, 5571.0, 5514.0, 5605.0, 5610.0, 5656.0, 5429.0, 5421.0, 5549.0, 5641.0, 5619.0, 5383.0, 5691.0, 5359.0, 5574.0, 5602.0, 5640.0, 5708.0, 5403.0, 5680.0, 5392.0, 5280.0, 5676.0, 5712.0, 5496.0, 5697.0, 5710.0, 5693.0, 5487.0, 5718.0, 5473.0, 5324.0, 5508.0, 5665.0, 5369.0, 5354.0, 5661.0, 5703.0, 5709.0, 5673.0, 5607.0, 5376.0, 5482.0, 5634.0, 5333.0, 5464.0, 5527.0, 5456.0, 5529.0, 5384.0, 5413.0, 5598.0, 5299.0, 5650.0, 5382.0, 5319.0, 5276.0, 5308.0, 5702.0, 5552.0, 5330.0, 5423.0, 5293.0, 5648.0, 5472.0, 5700.0, 5335.0, 5512.0, 5357.0, 5408.0, 5621.0, 5513.0
11	5500	9	1	333	1	5718.0, 5283.0, 5691.0, 5454.0, 5386.0, 5630.0, 5714.0, 5325.0, 5329.0, 5570.0, 5464.0, 5603.0, 5553.0, 5704.0, 5409.0, 5438.0, 5305.0, 5359.0, 5489.0, 5623.0, 5627.0, 5319.0, 5659.0, 5260.0, 5690.0, 5527.0, 5323.0, 5520.0, 5697.0, 5293.0, 5699.0, 5530.0, 5262.0, 5397.0, 5342.0, 5349.0, 5590.0, 5645.0, 5470.0, 5327.0, 5398.0, 5584.0, 5556.0, 5259.0, 5368.0, 5569.0, 5709.0, 5467.0, 5364.0, 5655.0, 5509.0, 5318.0, 5708.0, 5441.0, 5643.0, 5322.0, 5624.0, 5429.0, 5597.0, 5575.0, 5724.0, 5336.0, 5716.0, 5491.0, 5692.0, 5288.0, 5537.0, 5396.0, 5650.0, 5366.0, 5376.0, 5572.0, 5705.0, 5450.0, 5258.0, 5717.0, 5482.0, 5518.0, 5589.0, 5401.0, 5558.0, 5656.0, 5521.0, 5463.0, 5615.0, 5434.0, 5601.0, 5607.0, 5269.0, 5298.0, 5388.0, 5357.0, 5498.0, 5473.0, 5266.0, 5391.0, 5424.0, 5320.0, 5495.0, 5535.0
12	5500	9	1	333	1	5527.0, 5408.0, 5678.0, 5547.0, 5718.0, 5402.0, 5306.0, 5268.0, 5375.0, 5637.0, 5710.0, 5493.0, 5308.0, 5486.0, 5337.0, 5609.0, 5253.0, 5344.0, 5254.0, 5277.0, 5270.0, 5586.0, 5509.0, 5497.0, 5720.0, 5702.0, 5389.0, 5536.0, 5435.0, 5596.0, 5409.0, 5523.0, 5440.0, 5330.0, 5388.0, 5446.0, 5656.0, 5708.0, 5262.0, 5426.0, 5469.0, 5327.0, 5326.0, 5556.0, 5664.0, 5354.0, 5438.0, 5675.0, 5530.0, 5630.0, 5605.0, 5681.0, 5357.0, 5418.0, 5275.0, 5613.0, 5671.0, 5359.0, 5665.0, 5704.0, 5321.0, 5265.0, 5291.0, 5352.0, 5604.0,

						5599.0, 5290.0, 5473.0, 5502.0, 5328.0, 5658.0, 5569.0, 5465.0, 5653.0, 5575.0, 5358.0, 5642.0, 5628.0, 5404.0, 5489.0, 5475.0, 5483.0, 5636.0, 5406.0, 5679.0, 5347.0, 5432.0, 5383.0, 5452.0, 5370.0, 5422.0, 5318.0, 5650.0, 5299.0, 5514.0, 5531.0, 5648.0, 5576.0, 5722.0, 5574.0
13	5500	9	1	333	1	5403.0, 5423.0, 5537.0, 5363.0, 5257.0, 5509.0, 5714.0, 5681.0, 5663.0, 5604.0, 5675.0, 5565.0, 5408.0, 5391.0, 5555.0, 5424.0, 5540.0, 5477.0, 5599.0, 5279.0, 5716.0, 5585.0, 5287.0, 5605.0, 5693.0, 5611.0, 5676.0, 5673.0, 5679.0, 5271.0, 5602.0, 5251.0, 5474.0, 5678.0, 5259.0, 5368.0, 5646.0, 5488.0, 5686.0, 5578.0, 5550.0, 5654.0, 5436.0, 5434.0, 5293.0, 5337.0, 5661.0, 5384.0, 5470.0, 5566.0, 5481.0, 5544.0, 5554.0, 5659.0, 5561.0, 5289.0, 5328.0, 5508.0, 5698.0, 5317.0, 5273.0, 5460.0, 5635.0, 5551.0, 5437.0, 5284.0, 5367.0, 5290.0, 5543.0, 5520.0, 5394.0, 5442.0, 5360.0, 5595.0, 5568.0, 5404.0, 5323.0, 5490.0, 5305.0, 5624.0, 5297.0, 5418.0, 5593.0, 5415.0, 5486.0, 5723.0, 5615.0, 5296.0, 5511.0, 5331.0, 5576.0, 5583.0, 5476.0, 5270.0, 5516.0, 5357.0, 5502.0, 5371.0, 5354.0, 5475.0
14	5500	9	1	333	1	5680.0, 5567.0, 5475.0, 5537.0, 5641.0, 5484.0, 5653.0, 5513.0, 5347.0, 5617.0, 5283.0, 5251.0, 5299.0, 5618.0, 5685.0, 5361.0, 5467.0, 5466.0, 5578.0, 5444.0, 5640.0, 5532.0, 5542.0, 5718.0, 5497.0, 5259.0, 5583.0, 5589.0, 5284.0, 5458.0, 5407.0, 5435.0, 5438.0, 5390.0, 5469.0, 5628.0, 5432.0, 5257.0, 5551.0, 5554.0, 5652.0, 5396.0, 5336.0, 5673.0, 5657.0, 5687.0, 5555.0, 5366.0, 5723.0, 5388.0, 5315.0, 5301.0, 5558.0, 5254.0, 5499.0, 5488.0, 5319.0, 5368.0, 5300.0, 5397.0, 5646.0, 5395.0, 5451.0, 5643.0, 5296.0, 5654.0, 5550.0, 5266.0, 5428.0, 5455.0, 5332.0, 5433.0, 5649.0, 5525.0, 5492.0, 5393.0, 5662.0, 5448.0, 5674.0, 5327.0, 5304.0, 5373.0, 5398.0, 5619.0, 5443.0, 5508.0, 5313.0, 5316.0, 5520.0, 5548.0, 5650.0, 5505.0, 5602.0, 5611.0, 5512.0, 5593.0, 5703.0, 5413.0, 5358.0, 5339.0
15	5500	9	1	333	1	5312.0, 5679.0, 5518.0, 5605.0, 5648.0, 5520.0, 5575.0, 5420.0, 5413.0, 5629.0, 5644.0, 5274.0, 5313.0, 5626.0, 5633.0, 5703.0, 5383.0, 5331.0, 5687.0, 5282.0, 5563.0, 5307.0, 5319.0, 5716.0, 5502.0, 5635.0, 5470.0, 5263.0, 5718.0, 5533.0, 5482.0, 5290.0, 5701.0, 5254.0, 5577.0, 5537.0, 5270.0, 5332.0, 5396.0, 5377.0, 5250.0, 5310.0, 5255.0, 5660.0, 5283.0, 5487.0, 5539.0, 5478.0, 5418.0, 5489.0, 5506.0, 5481.0, 5521.0, 5328.0, 5362.0, 5554.0, 5659.0, 5425.0, 5292.0, 5497.0, 5548.0, 5370.0, 5719.0, 5435.0, 5543.0,

						5369.0, 5517.0, 5416.0, 5343.0, 5631.0, 5593.0, 5336.0, 5471.0, 5685.0, 5714.0, 5651.0, 5570.0, 5444.0, 5320.0, 5591.0, 5341.0, 5464.0, 5306.0, 5692.0, 5382.0, 5610.0, 5542.0, 5311.0, 5294.0, 5625.0, 5448.0, 5438.0, 5601.0, 5278.0, 5614.0, 5376.0, 5330.0, 5259.0, 5441.0, 5309.0
16	5500	9	1	333	1	5273.0, 5262.0, 5512.0, 5693.0, 5649.0, 5356.0, 5584.0, 5595.0, 5497.0, 5565.0, 5454.0, 5660.0, 5457.0, 5722.0, 5704.0, 5560.0, 5312.0, 5310.0, 5286.0, 5587.0, 5716.0, 5644.0, 5337.0, 5632.0, 5410.0, 5456.0, 5688.0, 5257.0, 5709.0, 5524.0, 5332.0, 5486.0, 5285.0, 5682.0, 5548.0, 5362.0, 5594.0, 5358.0, 5278.0, 5261.0, 5459.0, 5387.0, 5407.0, 5519.0, 5627.0, 5348.0, 5596.0, 5489.0, 5496.0, 5557.0, 5364.0, 5603.0, 5568.0, 5461.0, 5270.0, 5266.0, 5610.0, 5409.0, 5613.0, 5648.0, 5444.0, 5673.0, 5566.0, 5638.0, 5672.0, 5396.0, 5602.0, 5250.0, 5712.0, 5656.0, 5686.0, 5460.0, 5275.0, 5532.0, 5428.0, 5689.0, 5277.0, 5371.0, 5377.0, 5579.0, 5633.0, 5600.0, 5290.0, 5622.0, 5432.0, 5705.0, 5412.0, 5663.0, 5513.0, 5282.0, 5436.0, 5388.0, 5636.0, 5623.0, 5450.0, 5372.0, 5541.0, 5669.0, 5482.0, 5390.0
17	5500	9	1	333	1	5338.0, 5252.0, 5553.0, 5529.0, 5618.0, 5275.0, 5505.0, 5565.0, 5653.0, 5581.0, 5365.0, 5336.0, 5590.0, 5331.0, 5616.0, 5482.0, 5312.0, 5398.0, 5368.0, 5339.0, 5543.0, 5650.0, 5671.0, 5313.0, 5637.0, 5654.0, 5435.0, 5525.0, 5657.0, 5495.0, 5679.0, 5632.0, 5342.0, 5353.0, 5362.0, 5514.0, 5417.0, 5487.0, 5297.0, 5537.0, 5558.0, 5434.0, 5598.0, 5701.0, 5359.0, 5499.0, 5289.0, 5540.0, 5606.0, 5587.0, 5264.0, 5347.0, 5722.0, 5269.0, 5719.0, 5335.0, 5457.0, 5645.0, 5413.0, 5545.0, 5427.0, 5614.0, 5388.0, 5492.0, 5712.0, 5382.0, 5460.0, 5595.0, 5267.0, 5393.0, 5263.0, 5670.0, 5272.0, 5627.0, 5708.0, 5420.0, 5561.0, 5407.0, 5635.0, 5508.0, 5568.0, 5418.0, 5282.0, 5443.0, 5624.0, 5344.0, 5692.0, 5300.0, 5551.0, 5547.0, 5677.0, 5544.0, 5534.0, 5552.0, 5549.0, 5290.0, 5605.0, 5490.0, 5307.0, 5406.0
18	5500	9	1	333	1	5512.0, 5608.0, 5691.0, 5401.0, 5263.0, 5441.0, 5360.0, 5580.0, 5619.0, 5357.0, 5379.0, 5640.0, 5484.0, 5620.0, 5283.0, 5282.0, 5349.0, 5327.0, 5602.0, 5449.0, 5473.0, 5561.0, 5355.0, 5598.0, 5693.0, 5316.0, 5521.0, 5289.0, 5606.0, 5638.0, 5488.0, 5557.0, 5648.0, 5537.0, 5435.0, 5551.0, 5268.0, 5434.0, 5474.0, 5611.0, 5497.0, 5575.0, 5653.0, 5509.0, 5294.0, 5454.0, 5686.0, 5293.0, 5324.0, 5274.0, 5506.0, 5494.0, 5330.0, 5578.0, 5591.0, 5343.0, 5411.0, 5687.0, 5498.0, 5346.0, 5655.0, 5582.0, 5265.0, 5381.0, 5479.0,

						5549.0, 5431.0, 5695.0, 5659.0, 5597.0, 5261.0, 5649.0, 5475.0, 5697.0, 5291.0, 5481.0, 5287.0, 5573.0, 5378.0, 5437.0, 5689.0, 5585.0, 5397.0, 5719.0, 5396.0, 5570.0, 5677.0, 5685.0, 5642.0, 5465.0, 5399.0, 5681.0, 5482.0, 5675.0, 5496.0, 5461.0, 5351.0, 5457.0, 5406.0, 5288.0
19	5500	9	1	333	1	5392.0, 5717.0, 5629.0, 5366.0, 5291.0, 5488.0, 5651.0, 5628.0, 5627.0, 5487.0, 5408.0, 5377.0, 5714.0, 5556.0, 5601.0, 5381.0, 5546.0, 5274.0, 5701.0, 5344.0, 5647.0, 5523.0, 5417.0, 5331.0, 5363.0, 5470.0, 5424.0, 5302.0, 5314.0, 5588.0, 5359.0, 5347.0, 5350.0, 5254.0, 5507.0, 5576.0, 5555.0, 5605.0, 5570.0, 5387.0, 5318.0, 5443.0, 5621.0, 5384.0, 5253.0, 5431.0, 5326.0, 5329.0, 5433.0, 5703.0, 5334.0, 5694.0, 5261.0, 5395.0, 5278.0, 5649.0, 5276.0, 5540.0, 5415.0, 5509.0, 5586.0, 5674.0, 5520.0, 5479.0, 5497.0, 5391.0, 5432.0, 5686.0, 5572.0, 5483.0, 5583.0, 5655.0, 5421.0, 5671.0, 5554.0, 5681.0, 5666.0, 5513.0, 5620.0, 5258.0, 5252.0, 5368.0, 5486.0, 5712.0, 5484.0, 5382.0, 5430.0, 5624.0, 5724.0, 5319.0, 5268.0, 5409.0, 5696.0, 5358.0, 5265.0, 5706.0, 5580.0, 5295.0, 5643.0, 5637.0
20	5500	9	1	333	1	5509.0, 5399.0, 5443.0, 5315.0, 5347.0, 5527.0, 5503.0, 5690.0, 5313.0, 5326.0, 5545.0, 5487.0, 5408.0, 5684.0, 5287.0, 5590.0, 5510.0, 5389.0, 5365.0, 5525.0, 5588.0, 5721.0, 5542.0, 5698.0, 5501.0, 5508.0, 5688.0, 5674.0, 5451.0, 5489.0, 5719.0, 5546.0, 5484.0, 5368.0, 5574.0, 5711.0, 5691.0, 5274.0, 5488.0, 5284.0, 5383.0, 5330.0, 5507.0, 5583.0, 5297.0, 5336.0, 5695.0, 5476.0, 5464.0, 5615.0, 5573.0, 5288.0, 5434.0, 5456.0, 5661.0, 5639.0, 5662.0, 5397.0, 5649.0, 5570.0, 5322.0, 5593.0, 5717.0, 5432.0, 5551.0, 5512.0, 5258.0, 5321.0, 5278.0, 5379.0, 5421.0, 5428.0, 5349.0, 5511.0, 5279.0, 5496.0, 5404.0, 5372.0, 5675.0, 5553.0, 5682.0, 5300.0, 5395.0, 5338.0, 5436.0, 5534.0, 5292.0, 5613.0, 5462.0, 5290.0, 5567.0, 5560.0, 5275.0, 5538.0, 5571.0, 5341.0, 5366.0, 5426.0, 5458.0, 5671.0
21	5500	9	1	333	1	5424.0, 5529.0, 5257.0, 5344.0, 5637.0, 5702.0, 5724.0, 5721.0, 5345.0, 5524.0, 5342.0, 5525.0, 5330.0, 5592.0, 5660.0, 5271.0, 5372.0, 5443.0, 5414.0, 5615.0, 5326.0, 5321.0, 5576.0, 5391.0, 5479.0, 5507.0, 5426.0, 5415.0, 5428.0, 5386.0, 5284.0, 5491.0, 5389.0, 5695.0, 5254.0, 5320.0, 5639.0, 5707.0, 5552.0, 5687.0, 5339.0, 5325.0, 5361.0, 5434.0, 5511.0, 5717.0, 5384.0, 5432.0, 5365.0, 5628.0, 5527.0, 5331.0, 5403.0, 5470.0, 5510.0, 5332.0, 5653.0, 5656.0, 5406.0, 5646.0, 5300.0, 5268.0, 5305.0, 5627.0, 5634.0,

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22	5500	9	1	333	1	5582.0, 5486.0, 5360.0, 5256.0, 5376.0, 5327.0, 5423.0, 5504.0, 5680.0, 5554.0, 5331.0, 5578.0, 5701.0, 5413.0, 5608.0, 5583.0, 5571.0, 5292.0, 5555.0, 5452.0, 5399.0, 5378.0, 5411.0, 5511.0, 5710.0, 5255.0, 5652.0, 5465.0, 5537.0, 5475.0, 5291.0, 5367.0, 5618.0, 5466.0, 5485.0, 5698.0, 5334.0, 5500.0, 5481.0, 5597.0, 5285.0, 5325.0, 5636.0, 5624.0, 5482.0, 5306.0, 5527.0, 5329.0, 5390.0, 5407.0, 5512.0, 5541.0, 5574.0, 5375.0, 5494.0, 5299.0, 5505.0, 5488.0, 5630.0, 5531.0, 5417.0, 5283.0, 5308.0, 5344.0, 5547.0, 5673.0, 5428.0, 5268.0, 5551.0, 5281.0, 5495.0, 5447.0, 5340.0, 5430.0, 5324.0, 5305.0, 5564.0, 5442.0, 5462.0, 5445.0, 5647.0, 5705.0, 5414.0, 5422.0, 5385.0, 5568.0, 5371.0, 5277.0, 5352.0, 5714.0, 5347.0, 5718.0, 5276.0, 5295.0, 5692.0, 5497.0, 5679.0, 5650.0, 5490.0, 5437.0
23	5500	9	1	333	1	5572.0, 5294.0, 5440.0, 5267.0, 5275.0, 5580.0, 5378.0, 5305.0, 5610.0, 5516.0, 5712.0, 5421.0, 5691.0, 5471.0, 5424.0, 5695.0, 5308.0, 5636.0, 5261.0, 5271.0, 5723.0, 5400.0, 5262.0, 5321.0, 5433.0, 5331.0, 5374.0, 5500.0, 5328.0, 5670.0, 5594.0, 5314.0, 5619.0, 5334.0, 5349.0, 5452.0, 5366.0, 5311.0, 5501.0, 5508.0, 5332.0, 5330.0, 5381.0, 5293.0, 5363.0, 5390.0, 5530.0, 5603.0, 5539.0, 5385.0, 5724.0, 5711.0, 5326.0, 5412.0, 5327.0, 5410.0, 5625.0, 5616.0, 5335.0, 5502.0, 5713.0, 5272.0, 5533.0, 5517.0, 5602.0, 5612.0, 5524.0, 5621.0, 5464.0, 5565.0, 5590.0, 5283.0, 5518.0, 5513.0, 5588.0, 5653.0, 5527.0, 5641.0, 5415.0, 5506.0, 5407.0, 5273.0, 5380.0, 5469.0, 5722.0, 5444.0, 5393.0, 5702.0, 5559.0, 5534.0, 5292.0, 5633.0, 5498.0, 5604.0, 5383.0, 5562.0, 5556.0, 5419.0, 5402.0, 5329.0
24	5500	9	1	333	1	5338.0, 5288.0, 5548.0, 5639.0, 5576.0, 5479.0, 5441.0, 5395.0, 5488.0, 5590.0, 5540.0, 5494.0, 5271.0, 5473.0, 5324.0, 5500.0, 5604.0, 5722.0, 5438.0, 5339.0, 5389.0, 5256.0, 5371.0, 5693.0, 5337.0, 5352.0, 5297.0, 5487.0, 5595.0, 5434.0, 5364.0, 5472.0, 5446.0, 5468.0, 5480.0, 5588.0, 5298.0, 5657.0, 5292.0, 5661.0, 5431.0, 5619.0, 5524.0, 5653.0, 5704.0, 5366.0, 5702.0, 5506.0, 5306.0, 5411.0, 5303.0, 5605.0, 5607.0, 5318.0, 5514.0, 5569.0, 5673.0, 5565.0, 5420.0, 5255.0, 5437.0, 5717.0, 5692.0, 5405.0, 5690.0,

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25	5500	9	1	333	1	5510.0, 5348.0, 5579.0, 5381.0, 5326.0, 5258.0, 5534.0, 5514.0, 5613.0, 5464.0, 5706.0, 5523.0, 5371.0, 5332.0, 5591.0, 5544.0, 5352.0, 5669.0, 5308.0, 5271.0, 5415.0, 5435.0, 5526.0, 5473.0, 5353.0, 5455.0, 5358.0, 5500.0, 5276.0, 5263.0, 5573.0, 5505.0, 5351.0, 5488.0, 5700.0, 5590.0, 5274.0, 5490.0, 5529.0, 5637.0, 5440.0, 5319.0, 5712.0, 5565.0, 5498.0, 5682.0, 5277.0, 5623.0, 5664.0, 5635.0, 5507.0, 5309.0, 5355.0, 5403.0, 5715.0, 5716.0, 5527.0, 5597.0, 5705.0, 5618.0, 5406.0, 5499.0, 5662.0, 5540.0, 5546.0, 5519.0, 5592.0, 5675.0, 5312.0, 5497.0, 5313.0, 5391.0, 5611.0, 5356.0, 5647.0, 5254.0, 5677.0, 5622.0, 5253.0, 5649.0, 5683.0, 5483.0, 5629.0, 5363.0, 5340.0, 5567.0, 5702.0, 5325.0, 5721.0, 5674.0, 5655.0, 5693.0, 5294.0, 5587.0, 5621.0, 5650.0, 5341.0, 5479.0, 5670.0, 5569.0
26	5500	9	1	333	1	5659.0, 5546.0, 5522.0, 5664.0, 5254.0, 5485.0, 5535.0, 5363.0, 5654.0, 5548.0, 5478.0, 5509.0, 5446.0, 5617.0, 5587.0, 5412.0, 5494.0, 5251.0, 5640.0, 5404.0, 5435.0, 5403.0, 5469.0, 5519.0, 5616.0, 5443.0, 5475.0, 5310.0, 5688.0, 5440.0, 5293.0, 5398.0, 5506.0, 5326.0, 5270.0, 5500.0, 5250.0, 5482.0, 5639.0, 5628.0, 5496.0, 5273.0, 5660.0, 5267.0, 5540.0, 5476.0, 5700.0, 5306.0, 5596.0, 5586.0, 5296.0, 5635.0, 5300.0, 5634.0, 5429.0, 5483.0, 5289.0, 5264.0, 5708.0, 5276.0, 5549.0, 5667.0, 5308.0, 5420.0, 5686.0, 5327.0, 5558.0, 5597.0, 5585.0, 5493.0, 5389.0, 5431.0, 5499.0, 5593.0, 5438.0, 5405.0, 5328.0, 5650.0, 5349.0, 5638.0, 5580.0, 5565.0, 5481.0, 5545.0, 5453.0, 5544.0, 5282.0, 5402.0, 5572.0, 5561.0, 5379.0, 5359.0, 5301.0, 5582.0, 5448.0, 5366.0, 5352.0, 5498.0, 5531.0, 5718.0
27	5500	9	1	333	1	5261.0, 5425.0, 5599.0, 5428.0, 5281.0, 5394.0, 5387.0, 5642.0, 5469.0, 5389.0, 5288.0, 5591.0, 5518.0, 5256.0, 5678.0, 5287.0, 5585.0, 5306.0, 5456.0, 5668.0, 5561.0, 5414.0, 5651.0, 5302.0, 5409.0, 5258.0, 5483.0, 5708.0, 5613.0, 5536.0, 5451.0, 5597.0, 5656.0, 5705.0, 5419.0, 5551.0, 5418.0, 5675.0, 5644.0, 5354.0, 5423.0, 5688.0, 5362.0, 5346.0, 5630.0, 5397.0, 5553.0, 5554.0, 5310.0, 5401.0, 5512.0, 5604.0, 5549.0, 5655.0, 5347.0, 5384.0, 5562.0, 5637.0, 5270.0, 5521.0, 5436.0, 5701.0, 5454.0, 5467.0, 5583.0,

						5286.0, 5352.0, 5252.0, 5372.0, 5511.0, 5265.0, 5595.0, 5608.0, 5293.0, 5330.0, 5266.0, 5371.0, 5721.0, 5563.0, 5348.0, 5388.0, 5516.0, 5570.0, 5682.0, 5592.0, 5430.0, 5533.0, 5633.0, 5284.0, 5341.0, 5689.0, 5290.0, 5321.0, 5448.0, 5634.0, 5658.0, 5474.0, 5432.0, 5391.0, 5509.0
28	5500	9	1	333	1	5687.0, 5652.0, 5683.0, 5257.0, 5586.0, 5532.0, 5484.0, 5717.0, 5365.0, 5565.0, 5282.0, 5594.0, 5706.0, 5616.0, 5328.0, 5485.0, 5432.0, 5667.0, 5398.0, 5344.0, 5516.0, 5406.0, 5684.0, 5611.0, 5545.0, 5707.0, 5688.0, 5500.0, 5671.0, 5626.0, 5495.0, 5295.0, 5268.0, 5397.0, 5368.0, 5523.0, 5708.0, 5322.0, 5496.0, 5492.0, 5451.0, 5427.0, 5291.0, 5658.0, 5561.0, 5300.0, 5511.0, 5592.0, 5448.0, 5267.0, 5704.0, 5313.0, 5572.0, 5407.0, 5659.0, 5673.0, 5325.0, 5330.0, 5570.0, 5263.0, 5360.0, 5679.0, 5590.0, 5488.0, 5450.0, 5317.0, 5430.0, 5521.0, 5262.0, 5269.0, 5533.0, 5552.0, 5309.0, 5514.0, 5510.0, 5473.0, 5639.0, 5566.0, 5428.0, 5316.0, 5401.0, 5433.0, 5341.0, 5529.0, 5696.0, 5550.0, 5251.0, 5438.0, 5536.0, 5378.0, 5675.0, 5480.0, 5470.0, 5600.0, 5304.0, 5578.0, 5537.0, 5690.0, 5665.0, 5299.0
29	5500	9	1	333	1	5553.0, 5676.0, 5632.0, 5619.0, 5502.0, 5439.0, 5440.0, 5679.0, 5496.0, 5415.0, 5328.0, 5297.0, 5331.0, 5253.0, 5278.0, 5592.0, 5519.0, 5280.0, 5650.0, 5460.0, 5682.0, 5677.0, 5576.0, 5334.0, 5624.0, 5649.0, 5398.0, 5599.0, 5436.0, 5504.0, 5558.0, 5520.0, 5622.0, 5597.0, 5313.0, 5446.0, 5466.0, 5582.0, 5361.0, 5298.0, 5695.0, 5607.0, 5454.0, 5665.0, 5565.0, 5412.0, 5324.0, 5386.0, 5364.0, 5555.0, 5318.0, 5517.0, 5709.0, 5367.0, 5714.0, 5713.0, 5608.0, 5392.0, 5700.0, 5397.0, 5284.0, 5581.0, 5593.0, 5417.0, 5390.0, 5691.0, 5389.0, 5693.0, 5343.0, 5359.0, 5388.0, 5675.0, 5560.0, 5595.0, 5684.0, 5685.0, 5445.0, 5687.0, 5718.0, 5643.0, 5549.0, 5688.0, 5562.0, 5270.0, 5376.0, 5377.0, 5516.0, 5509.0, 5305.0, 5533.0, 5371.0, 5569.0, 5281.0, 5701.0, 5518.0, 5657.0, 5492.0, 5479.0, 5437.0, 5425.0
30	5500	9	1	333	0	/

40MHz

Radar SignalType	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1A	15	93.3%	60%	pass
Type 1B	15	100%	60%	pass
Type 2	30	93.3%	60%	Pass
Type 3	30	93.3%	60%	Pass
Type 4	30	93.3%	60%	Pass
Aggregate (Type1 to 4)	120	94.2 %	80%	Pass
Type 5	30	100 %	80%	Pass
Type 6	30	100 %	70%	Pass

Please refer to the following statistical tables:

5510MHz:

Radar Type 1A Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5510	89	1	598	1
2	5510	86	1	618	1
3	5510	58	1	918	1
4	5510	70	1	758	1
5	5510	63	1	838	1
6	5510	78	1	678	1
7	5510	65	1	818	1
8	5510	83	1	638	1
9	5510	92	1	578	1
10	5510	81	1	658	1
11	5510	95	1	558	1
12	5510	68	1	778	1
13	5510	72	1	738	0
14	5510	99	1	538	1
15	5510	62	1	858	1
Detection Percentage: 93.3 % (>60%)					

Radar Type 1B Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5510	19	1	2838	1
2	5510	18	1	2973	1
3	5510	80	1	663	1
4	5510	60	1	884	1
5	5510	24	1	2255	1
6	5510	32	1	1682	1
7	5510	26	1	2058	1
8	5510	22	1	2414	1
9	5510	30	1	1767	1
10	5510	26	1	2050	1
11	5510	21	1	2584	1
12	5510	19	1	2787	1
13	5510	22	1	2512	1
14	5510	60	1	883	1
15	5510	20	1	2757	1
Detection Percentage: 100 % (>60%)					

Radar Type 2 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5510	24	3.2	209	1
2	5510	26	1.2	162	0
3	5510	23	3.1	174	1
4	5510	23	1.5	203	1
5	5510	29	1.5	209	1
6	5510	26	2.9	221	1
7	5510	29	1.6	162	1
8	5510	24	4.3	182	1
9	5510	29	4	170	1
10	5510	23	4	192	1
11	5510	25	2.3	225	1
12	5510	26	4.9	197	1
13	5510	23	2.2	191	1
14	5510	27	2.1	226	1
15	5510	27	3.7	211	0
16	5510	28	2.3	220	1
17	5510	27	4.5	208	1
18	5510	27	4	210	1
19	5510	25	1.4	186	1
20	5510	23	2.6	219	1
21	5510	26	4.4	227	1
22	5510	26	2.1	171	1
23	5510	25	1.3	224	1
24	5510	28	2.7	156	1
25	5510	29	2.7	189	1
26	5510	24	1.1	192	1
27	5510	23	3.2	150	1
28	5510	24	2.3	223	1
29	5510	28	4.8	206	1
30	5510	23	1.7	227	1
Detection Percentage: 93.3 % (>60%)					

Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5510	18	7.6	257	1
2	5510	17	6.5	205	1
3	5510	17	8.6	281	1
4	5510	17	9.4	264	1
5	5510	18	10	472	1
6	5510	17	8.4	421	1
7	5510	17	6.4	494	1
8	5510	18	7.9	484	1
9	5510	17	6.4	426	1
10	5510	18	7.7	349	1
11	5510	16	8.3	333	1
12	5510	16	6.9	462	1
13	5510	16	8.5	386	1
14	5510	17	6	468	1
15	5510	17	8	405	1
16	5510	18	6.3	422	1
17	5510	16	7.4	381	1
18	5510	17	7.7	499	1
19	5510	16	8.6	260	1
20	5510	18	9.7	454	1
21	5510	17	8.7	354	1
22	5510	16	8.8	418	0
23	5510	16	7.5	480	0
24	5510	17	8.2	357	1
25	5510	18	9.6	497	1
26	5510	16	6.9	290	1
27	5510	17	8.2	335	1
28	5510	18	9.7	439	1
29	5510	16	9.8	410	1
30	5510	17	8.8	324	1
Detection Percentage: 93.3 % (>60%)					

Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5510	15	17.1	396	1
2	5510	14	12	280	1
3	5510	13	16.7	457	1
4	5510	12	15.3	212	1
5	5510	13	17.2	460	1
6	5510	12	11.4	280	0
7	5510	15	12.5	270	1
8	5510	13	16.6	284	1
9	5510	15	17.9	326	1
10	5510	15	19.8	397	1
11	5510	13	19.9	244	1
12	5510	12	12.6	397	0
13	5510	13	12.7	487	1
14	5510	16	13.8	484	1
15	5510	16	16.2	466	1
16	5510	15	14.5	268	1
17	5510	15	13.8	313	1
18	5510	12	14.5	339	1
19	5510	13	16.7	215	1
20	5510	14	15.4	439	1
21	5510	14	11.2	281	1
22	5510	15	15.4	498	1
23	5510	14	15.9	341	1
24	5510	13	16.1	426	1
25	5510	12	12.2	325	1
26	5510	16	18.6	245	1
27	5510	15	19.6	485	1
28	5510	16	18.4	239	1
29	5510	15	13.1	323	1
30	5510	15	19.1	326	1
Detection Percentage: 93.3 % (>60%)					

Radar Type 5 Case 1 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5510.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	12	75.9			0.392352	1
1	2	12	83.7	1915		0.874185	
2	2	12	98.7	1060		1.745175	
3	3	12	97.9	1423	1350	2.257397	
4	2	12	98	1335		3.439292	
5	2	12	59.6	1397		3.996742	
6	2	12	85	1624		4.330179	
7	3	12	88.3	1772	1630	5.14925	
8	2	12	87.7	1928		5.896537	
9	2	12	73.1	1293		6.765204	
10	2	12	60.6	1097		7.47493	
11	1	12	64.6			7.941593	
12	3	12	52	1147	1011	9.06959	
13	3	12	58.9	1422	1897	9.478278	
14	3	12	90.4	1707	1976	10.3583	
15	1	12	59.4			11.05483	
16	2	12	78.6	1771		11.71869	

Statistics 2 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	8	83.8			1.108924	1
1	2	8	55.7	1592		1.59475	
2	2	8	77.6	1548		3.161807	
3	2	8	75.6	1283		5.873346	
4	3	8	80.7	1401	1480	7.01218	
5	2	8	90.8	1724		8.497045	
6	2	8	79.1	1312		9.03557	
7	3	8	51	1480	1739	10.95666	

Statistics 3 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	9	55.6	1349	1610	0.718342	1
1	1	9	91.3			1.464172	
2	1	9	89.8			2.214523	
3	1	9	90.1			2.609755	
4	1	9	87.7			3.584775	
5	1	9	64.9			4.15852	
6	1	9	67.3			5.112367	
7	2	9	85.9	1500		5.822187	
8	1	9	93.6			6.312006	
9	2	9	60.8	1745		7.018871	
10	2	9	73.1	1324		7.633901	
11	2	9	91	1269		8.691646	
12	3	9	56.6	1146	1265	9.180889	
13	1	9	58.4			10.10156	
14	3	9	78.8	1299	1379	10.65777	
15	2	9	93.4	1350		11.43698	

Statistics 4 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	11	66.7	1092		0.806918	1
1	2	11	97.2	1309		1.640048	
2	2	11	98.2	1634		2.532956	
3	1	11	79.7			3.551158	
4	2	11	71.5	1910		5.232899	
5	2	11	84.9	1674		5.678925	
6	2	11	87.8	1734		6.905741	
7	2	11	67.5	1841		7.770578	
8	2	11	59	1672		8.748432	
9	2	11	86.5	1474		9.95821	
10	3	11	90.1	1883	1093	11.20083	

Statistics 5(ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	15	85.7	1234		0.824374	1
1	2	15	74.5	1059		1.783875	
2	2	15	85	1895		2.665003	
3	2	15	70.6	1675		3.947363	
4	3	15	77.1	1610	1085	4.402502	
5	2	15	51.3	1856		5.040653	
6	3	15	92.3	1092	1497	6.170656	
7	2	15	87.1	1270		7.290768	
8	1	15	60.3			8.786347	
9	2	15	68	1116		9.420838	
10	3	15	64.2	1433	1115	10.21387	
11	2	15	79.3	1194		11.54591	

Statistics 6 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	12	70.9	1849	1445	0.496872	1
1	2	12	50.3	1190		0.863015	
2	3	12	71.3	1415	1502	2.018116	
3	2	12	65.1	1834		2.346958	
4	3	12	92.5	1358	1566	3.362855	
5	3	12	70.9	1808	1322	3.607224	
6	2	12	81.2	1271		4.792285	
7	2	12	82.6	1523		5.090416	
8	2	12	70.8	1212		5.734133	
9	2	12	87.7	1308		6.783372	
10	2	12	72.6	1855		7.629912	
11	3	12	99.8	1768	1694	8.353839	
12	3	12	64.9	1526	1066	9.087046	
13	1	12	75.4			9.257611	
14	1	12	58.7			9.882389	
15	1	12	62.8			10.70746	
16	3	12	62.7	1271	1051	11.29587	

Statistics 7(ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	11	60.9	1680		0.365134	
1	2	11	59.1	1600		0.820912	
2	2	11	75.3	1398		1.530945	
3	3	11	92.7	1389	1176	2.645372	
4	2	11	62.1	1405		3.317023	
5	2	11	65.7	1912		4.189475	
6	3	11	84.6	1308	1309	4.269563	
7	2	11	91	1923		5.020295	
8	3	11	79.4	1381	1782	6.017023	1
9	2	11	82.8	1280		6.498559	
10	1	11	54.8			7.060928	
11	1	11	89.7			7.901969	
12	2	11	85.5	1512		8.476084	
13	3	11	65.5	1161	1635	9.219433	
14	3	11	61.4	1478	1084	10.54441	
15	2	11	53	1373		11.06996	
16	3	11	83	1223	1394	11.56073	

Statistics 8 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	15	69.5			0.04538	
1	2	15	69	1545		1.375938	
2	2	15	88.8	1280		2.22859	
3	3	15	96.6	1929	1000	3.593091	
4	3	15	57	1540	1903	5.184024	
5	2	15	77.7	1657		6.039041	1
6	3	15	79	1969	1669	7.61358	
7	1	15	96.3			7.80415	
8	3	15	84.6	1607	1783	9.264254	
9	2	15	51	1650		10.36172	
10	3	15	56	1418	1019	11.56865	

Statistics 9 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	9	99.4	1626	1915	0.53605	
1	2	9	76.3	1941		1.383077	
2	2	9	50.7	1029		2.676633	
3	2	9	78.5	1503		2.780997	
4	2	9	89.8	1379		4.570738	
5	2	9	92.6	1071		5.370108	
6	1	9	77.9			5.990425	1
7	3	9	63.9	1416	1315	7.077444	
8	3	9	68.8	1971	1916	7.908225	
9	1	9	92			8.441545	
10	3	9	96.8	1541	1100	10.10379	
11	2	9	71.2	1941		10.89657	
12	1	9	94.4			11.96751	

Statistics 10 (ChirpCenter Frequency: 5510.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	11	87.1	1189		0.647193	
1	2	11	79.4	1584		0.955162	
2	3	11	57	1374	1662	1.647127	
3	3	11	73.6	1773	1080	2.272172	
4	1	11	90.9			3.153591	
5	3	11	80.2	1465	1926	3.87175	
6	2	11	65.2	1352		4.853694	
7	1	11	95.9			5.182413	
8	2	11	89.4	1972		5.931089	1
9	1	11	81.1			6.563928	
10	2	11	56.5	1081		7.069984	
11	2	11	59.2	1533		8.22439	
12	1	11	92.9			8.614058	
13	2	11	99.8	1450		9.720586	
14	2	11	75.3	1454		10.56965	
15	1	11	80.7			10.85886	
16	3	11	56.9	1204	1167	11.92774	

Radar Type 5 Case 2 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5492.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	10	70.4	1548		0.012958	1
1	2	10	76.5	1386		1.575648	
2	2	10	88.1	1185		2.023578	
3	1	10	64.4			3.753603	
4	3	10	77.3	1052	1427	4.890751	
5	2	10	73.7	1498		5.1026	
6	2	10	55.6	1271		6.709199	
7	1	10	53.7			7.228128	
8	1	10	80.3			8.590365	
9	2	10	57.4	1346		9.762838	
10	2	10	82.8	1358		10.20505	
11	3	10	97.4	1456	1565	11.88374	

Statistics 2 (ChirpCenter Frequency: 5493.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	8	52.1			0.755723	1
1	3	8	59.1	1496	1114	1.133233	
2	2	8	51.8	1910		2.12261	
3	1	8	69.2			3.444851	
4	3	8	98.5	1505	1563	4.932883	
5	2	8	82.7	1930		5.454421	
6	1	8	80.9			6.932988	
7	2	8	92.3	1102		7.060104	
8	2	8	79.8	1995		8.849343	
9	2	8	92.6	1413		9.259053	
10	2	8	53.1	1280		10.7296	
11	2	8	96	1463		11.62233	

Statistics 3 (ChirpCenter Frequency: 5497.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	17	62.4	1017	1052	0.342906	
1	2	17	98	1613		1.778861	
2	1	17	83.3			2.664971	
3	1	17	52.1			2.948182	
4	3	17	60.1	1572	1677	4.150266	
5	2	17	63.6	1346		5.351737	
6	1	17	98.8			5.918556	1
7	3	17	81.1	1230	1252	6.713561	
8	2	17	52.8	1964		8.106977	
9	2	17	53.1	1772		9.025941	
10	2	17	87.5	1788		9.814707	
11	1	17	86.4			10.20944	
12	2	17	90.6	1241		11.37307	

Statistics 4 (ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	12	56.9			0.652913	
1	2	12	87.7	1536		1.061102	
2	1	12	90.9			1.697606	
3	2	12	88.1	1628		3.067637	
4	3	12	63.4	1117	1213	3.847007	
5	3	12	58.3	1010	1019	4.250405	
6	3	12	81.4	1564	1837	5.27583	
7	1	12	82.5			6.107869	1
8	3	12	92.1	1323	1848	6.930349	
9	2	12	86.7	1259		7.852274	
10	3	12	66.9	1372	1874	8.475314	
11	1	12	93.3			8.843935	
12	2	12	82.8	1577		9.908198	
13	1	12	69.7			10.56543	
14	2	12	66.8	1563		11.80834	

Statistics 5(ChirpCenter Frequency: 5494.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	11	62.7	1504		0.349735	1
1	2	11	59.1	1426		0.859016	
2	1	11	94.8			1.963436	
3	1	11	74.9			2.620777	
4	3	11	78	1497	1259	3.079675	
5	3	11	65.7	1014	1085	3.997829	
6	1	11	88.8			4.826583	
7	2	11	70.7	1052		5.260127	
8	3	11	84.5	1258	1004	6.145759	
9	2	11	61.7	1839		7.020954	
10	2	11	91.1	1037		7.908643	
11	2	11	56.3	1365		8.417567	
12	3	11	66	1624	1986	9.549886	
13	1	11	72.3			9.768063	
14	2	11	56.8	1277		11.05006	
15	1	11	64.1			11.85146	

Statistics 6 (ChirpCenter Frequency: 5498.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	19	95.1			0.485426	1
1	2	19	68.8	1443		1.58014	
2	2	19	88.5	1981		2.513562	
3	2	19	55.7	1220		3.357881	
4	1	19	57.5			3.553939	
5	1	19	98			4.317069	
6	2	19	74.5	1339		5.744652	
7	3	19	79.1	1402	1348	6.276472	
8	3	19	77.8	1356	1892	7.23312	
9	2	19	53.3	1977		7.802213	
10	2	19	84	1615		9.410973	
11	2	19	97.8	1432		9.83594	
12	3	19	85.9	1934	1916	10.29022	
13	3	19	63.2	1292	1581	11.33312	

Statistics 7(ChirpCenter Frequency: 5493.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	7	52.5			0.007358	1
1	2	7	82.6	1655		2.943152	
2	2	7	83.1	1514		4.063986	
3	2	7	79.9	1851		5.027032	
4	3	7	83.3	1562	1955	7.156592	
5	2	7	71.1	1489		8.706444	
6	2	7	91	1193		9.972275	
7	3	7	62.7	1945	1130	11.3717	

Statistics 8 (ChirpCenter Frequency: 5497.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	18	54.3	1388		0.375588	1
1	3	18	70.9	1490	1901	1.665204	
2	2	18	96.5	1024		2.751353	
3	1	18	59.3			3.713057	
4	2	18	78.9	1511		4.745492	
5	2	18	85.8	1344		6.109451	
6	2	18	92.4	1315		7.184814	
7	2	18	50.7	1541		7.792751	
8	1	18	74.1			9.058144	
9	3	18	70.1	1545	1865	10.63752	
10	2	18	87.1	1069		11.20878	

Statistics 9 (ChirpCenter Frequency: 5493.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	7	93.1	1684	1587	0.987889	1
1	2	7	75.3	1378		1.792097	
2	2	7	59.6	1591		2.575138	
3	3	7	53.1	1976	1696	4.240607	
4	2	7	92.9	1238		5.984061	
5	3	7	88.1	1893	1566	7.159427	
6	2	7	87.2	1906		7.252183	
7	1	7	66.6			8.790101	
8	2	7	76	1595		9.750622	
9	2	7	50.4	1607		11.50663	

Statistics 10 (ChirpCenter Frequency: 5498.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	19	98.8	1587		0.101092	1
1	2	19	57.3	1076		2.28543	
2	2	19	54.2	1979		2.713742	
3	1	19	80.9			4.492401	
4	1	19	84			6.348222	
5	2	19	91.5	1042		6.805156	
6	3	19	67.5	1694	1982	8.58951	
7	2	19	76	1071		10.30269	
8	1	19	75.2			10.7555	

Radar Type 5 Case 3 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5528.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	6	79.7			0.338529	
1	2	6	60.4	1747		1.188178	
2	1	6	74.9			1.706348	
3	1	6	90.9			2.962517	
4	2	6	59.9	1946		3.469314	
5	3	6	67.4	1146	1391	4.338192	
6	2	6	79.8	1958		4.946641	
7	1	6	77.1			5.917102	1
8	2	6	81.3	1611		6.661855	
9	2	6	71.1	1040		7.992961	
10	2	6	57	1413		8.342713	
11	1	6	85.7			9.461341	
12	3	6	50.5	1208	1702	9.676753	
13	3	6	90.5	1952	1618	11.10002	
14	2	6	92.8	1157		11.43646	

Statistics 2 (ChirpCenter Frequency: 5524.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	14	99.1	1381		0.131905	
1	2	14	87.4	1784		1.42598	
2	3	14	66.4	1758	1320	1.894678	
3	3	14	97.1	1219	1942	2.592997	
4	1	14	55			4.030911	
5	2	14	92.3	1895		4.537249	
6	2	14	89	1617		5.358897	
7	2	14	52.3	1546		6.466932	1
8	2	14	59.1	1451		7.43332	
9	1	14	52.7			8.544851	
10	3	14	93.9	1340	1777	8.571469	
11	3	14	98.6	1166	1024	9.613231	
12	3	14	73.6	1569	1390	11.07094	
13	2	14	69.3	1374		11.89368	

Statistics 3 (ChirpCenter Frequency: 5526.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	11	84.5	1948		0.130532	
1	1	11	67			0.815414	
2	2	11	56.8	1846		2.032787	
3	3	11	55.5	1668	1730	2.415146	
4	2	11	99.7	1636		3.02726	
5	3	11	87.2	1816	1075	4.393866	
6	2	11	65.4	1103		4.604783	
7	3	11	55.1	1127	1575	5.330955	
8	2	11	54.7	1240		6.006595	1
9	2	11	70.1	1389		7.154082	
10	2	11	98.2	1971		7.593745	
11	2	11	76.8	1525		8.728955	
12	3	11	60.3	1603	1679	9.03149	
13	1	11	76.1			9.902197	
14	2	11	77.5	1435		11.21989	
15	2	11	61.3	1973		11.41002	

Statistics 4 (ChirpCenter Frequency: 5527.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	7	66	1816		0.287559	
1	2	7	68.7	1273		1.167809	
2	1	7	54			1.59466	
3	2	7	55.1	1972		2.315109	
4	2	7	73.2	1419		2.784822	
5	1	7	97.2			3.621528	
6	2	7	76.4	1806		3.904517	
7	3	7	76.9	1461	1289	4.808617	
8	2	7	78.6	1442		5.203048	
9	1	7	67.6			6.251121	1
10	1	7	96.5			6.673326	
11	1	7	66			7.271266	
12	1	7	66.6			7.604994	
13	3	7	52.8	1209	1561	8.733255	
14	1	7	53.9			9.375213	
15	2	7	60.8	1079		9.905415	
16	2	7	50.8	1104		10.33037	
17	1	7	91.5			11.25384	
18	2	7	59	1979		11.53292	

Statistics 5(ChirpCenter Frequency: 5523.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	17	87.7			0.346582	
1	3	17	89	1744	1121	0.664786	
2	2	17	61.2	1974		1.568145	
3	1	17	52.6			1.921356	
4	3	17	50.5	1895	1510	2.780079	
5	3	17	50.7	1048	1625	3.429145	
6	2	17	91.2	1455		4.264436	
7	2	17	61.7	1775		4.892913	
8	2	17	99.8	1337		5.599179	
9	1	17	71.3			6.297627	1
10	3	17	99.1	1450	1203	6.936806	
11	2	17	77.4	1120		7.293217	
12	1	17	86.4			7.797981	
13	3	17	86.9	1897	1794	8.676412	
14	3	17	91.2	1756	1205	9.257304	
15	3	17	79.6	1896	1822	9.682309	
16	2	17	95.1	1357		10.58352	
17	2	17	72	1208		11.25767	
18	2	17	74.8	1653		11.44159	

Statistics 6 (ChirpCenter Frequency: 5522.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	19	70.7			0.051795	
1	2	19	63.1	1950		1.664172	
2	2	19	99.2	1166		3.397172	
3	1	19	96			4.014299	
4	2	19	81	1883		5.360609	
5	1	19	86.4			6.924932	1
6	2	19	89.5	1450		8.213922	
7	3	19	75.5	1137	1891	8.515739	
8	2	19	60.2	1843		10.78931	
9	1	19	94			11.96928	

Statistics 7(ChirpCenter Frequency: 5527.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	7	62.9	1734	1070	0.348276	
1	1	7	64.5			1.037034	
2	2	7	88.7	1418		1.451208	
3	3	7	69.9	1753	1721	2.230635	
4	3	7	94.5	1581	1427	2.595947	
5	2	7	87.3	1941		3.596533	
6	1	7	61.7			3.920513	
7	2	7	81.8	1516		4.678142	
8	2	7	50.2	1153		5.550803	
9	1	7	68.4			6.275467	1
10	2	7	91.7	1668		6.658069	
11	1	7	90.1			7.538186	
12	3	7	93.5	1876	1137	7.587793	
13	2	7	91.1	1172		8.499591	
14	1	7	62.4			9.125893	
15	1	7	88.4			9.53244	
16	2	7	71.5	1539		10.69629	
17	2	7	92.8	1380		11.33624	
18	1	7	90.1			11.90384	

Statistics 8 (ChirpCenter Frequency: 5523.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	17	98.4	1592	1226	0.647571	
1	2	17	56.4	1759		2.144097	
2	2	17	80.4	1422		3.820927	
3	1	17	70.3			5.173991	
4	1	17	98.7			5.431777	1
5	1	17	93.9			7.73552	
6	2	17	86.7	1415		8.431892	
7	3	17	52.4	1626	1697	9.514075	
8	2	17	64.7	1472		11.23265	

Statistics 9 (ChirpCenter Frequency: 5528.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	6	59.8	1120		0.457632	
1	1	6	60.4			1.479051	
2	2	6	76.2	1262		2.224091	
3	2	6	81.4	1906		3.46191	
4	2	6	88.6	1889		4.171157	
5	2	6	86	1851		4.768562	
6	2	6	64.1	1274		5.593708	1
7	1	6	64.8			7.295937	
8	2	6	56.8	1548		8.043852	
9	2	6	65.5	1234		8.619677	
10	2	6	87.3	1813		9.901806	
11	1	6	93.6			10.48191	
12	1	6	79.1			11.87272	

Statistics 10 (ChirpCenter Frequency: 5528.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	6	61.4	1846		0.568402	
1	1	6	79.5			1.109016	
2	3	6	50.1	1405	1465	1.663721	
3	2	6	69.8	1018		2.241228	
4	3	6	84.5	1774	1768	3.118536	
5	1	6	87.7			3.8807	
6	1	6	79.7			4.51725	
7	3	6	99.9	1533	1206	4.875994	
8	3	6	64.9	1556	1970	5.447602	
9	2	6	58.3	1807		6.632733	1
10	3	6	62.3	1890	1185	6.748173	
11	2	6	56.2	1161		7.412792	
12	1	6	55.4			8.18413	
13	2	6	63.3	1700		9.262718	
14	2	6	84.5	1938		9.898125	
15	3	6	52.9	1416	1688	10.3258	
16	3	6	78.4	1666	1611	11.13209	
17	2	6	56.4	1399		11.83314	

Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)	Hopping Sequence (MHz)
1	5510	9	1	333	1	5692.0, 5497.0, 5543.0, 5617.0, 5663.0, 5253.0, 5402.0, 5715.0, 5290.0, 5720.0, 5590.0, 5721.0, 5436.0, 5305.0, 5680.0, 5540.0, 5423.0, 5549.0, 5266.0, 5460.0, 5600.0, 5648.0, 5293.0, 5683.0, 5562.0, 5405.0, 5654.0, 5254.0, 5584.0, 5572.0, 5473.0, 5257.0, 5433.0, 5272.0, 5564.0, 5274.0, 5527.0, 5268.0, 5487.0, 5315.0, 5531.0, 5326.0, 5628.0, 5422.0, 5470.0, 5342.0, 5700.0, 5616.0, 5463.0, 5508.0, 5287.0, 5319.0, 5407.0, 5618.0, 5332.0, 5371.0, 5288.0, 5574.0, 5411.0, 5662.0, 5653.0, 5439.0, 5317.0, 5626.0, 5355.0, 5302.0, 5389.0, 5512.0, 5530.0, 5335.0, 5467.0, 5353.0, 5579.0, 5619.0, 5536.0, 5678.0, 5588.0, 5488.0, 5625.0, 5447.0, 5464.0, 5479.0, 5410.0, 5475.0, 5435.0, 5504.0, 5639.0, 5252.0, 5358.0, 5544.0, 5711.0, 5301.0, 5431.0, 5613.0, 5360.0, 5327.0, 5481.0, 5367.0, 5421.0, 5682.0
2	5510	9	1	333	1	5505.0, 5609.0, 5301.0, 5381.0, 5616.0, 5314.0, 5620.0, 5543.0, 5699.0, 5319.0, 5294.0, 5372.0, 5602.0, 5604.0, 5362.0, 5347.0, 5306.0, 5717.0, 5333.0, 5456.0, 5545.0, 5589.0, 5324.0, 5689.0, 5587.0, 5410.0, 5614.0, 5297.0, 5481.0, 5516.0, 5629.0, 5450.0, 5691.0, 5576.0, 5715.0, 5374.0, 5487.0, 5535.0, 5661.0, 5458.0, 5417.0, 5444.0, 5676.0, 5681.0, 5341.0, 5540.0, 5605.0, 5346.0, 5323.0, 5373.0, 5645.0, 5414.0, 5654.0, 5515.0, 5430.0, 5371.0, 5465.0, 5415.0, 5506.0, 5685.0, 5260.0, 5361.0, 5356.0, 5397.0, 5537.0, 5642.0, 5513.0, 5394.0, 5716.0, 5557.0, 5315.0, 5404.0, 5547.0, 5491.0, 5490.0, 5590.0, 5344.0, 5339.0, 5624.0, 5409.0, 5569.0, 5566.0, 5279.0, 5433.0, 5613.0, 5555.0, 5382.0, 5447.0, 5259.0, 5635.0, 5683.0, 5595.0, 5353.0, 5571.0, 5503.0, 5329.0, 5608.0, 5692.0, 5440.0, 5489.0
3	5510	9	1	333	1	5469.0, 5338.0, 5603.0, 5433.0, 5570.0, 5420.0, 5632.0, 5263.0, 5482.0, 5381.0, 5518.0, 5661.0, 5301.0, 5289.0, 5415.0, 5462.0, 5404.0, 5722.0, 5678.0, 5514.0, 5516.0, 5454.0, 5658.0, 5581.0, 5692.0, 5428.0, 5575.0, 5668.0, 5306.0, 5602.0, 5659.0, 5667.0, 5377.0, 5648.0, 5388.0, 5489.0, 5677.0, 5627.0, 5391.0, 5541.0, 5515.0, 5329.0, 5539.0, 5258.0, 5610.0, 5650.0, 5569.0, 5672.0, 5585.0, 5701.0, 5426.0, 5353.0, 5662.0, 5657.0, 5384.0, 5459.0, 5555.0, 5429.0, 5299.0, 5567.0, 5281.0, 5351.0, 5323.0, 5487.0, 5611.0,

						5287.0, 5485.0, 5424.0, 5360.0, 5422.0, 5252.0, 5410.0, 5680.0, 5438.0, 5548.0, 5605.0, 5273.0, 5357.0, 5574.0, 5629.0, 5411.0, 5590.0, 5652.0, 5682.0, 5274.0, 5348.0, 5560.0, 5345.0, 5417.0, 5582.0, 5592.0, 5393.0, 5714.0, 5553.0, 5474.0, 5431.0, 5441.0, 5418.0, 5283.0, 5356.0
4	5510	9	1	333	1	5684.0, 5452.0, 5600.0, 5650.0, 5624.0, 5410.0, 5301.0, 5398.0, 5418.0, 5380.0, 5339.0, 5415.0, 5429.0, 5611.0, 5488.0, 5462.0, 5294.0, 5695.0, 5490.0, 5348.0, 5444.0, 5496.0, 5338.0, 5696.0, 5480.0, 5369.0, 5269.0, 5677.0, 5331.0, 5417.0, 5702.0, 5316.0, 5527.0, 5685.0, 5679.0, 5550.0, 5633.0, 5323.0, 5517.0, 5547.0, 5654.0, 5414.0, 5309.0, 5263.0, 5653.0, 5266.0, 5307.0, 5561.0, 5625.0, 5606.0, 5703.0, 5426.0, 5437.0, 5310.0, 5652.0, 5396.0, 5351.0, 5445.0, 5720.0, 5448.0, 5491.0, 5660.0, 5569.0, 5605.0, 5636.0, 5311.0, 5601.0, 5476.0, 5672.0, 5526.0, 5253.0, 5635.0, 5320.0, 5354.0, 5400.0, 5355.0, 5313.0, 5680.0, 5712.0, 5459.0, 5515.0, 5574.0, 5383.0, 5314.0, 5271.0, 5661.0, 5714.0, 5409.0, 5626.0, 5576.0, 5662.0, 5432.0, 5463.0, 5656.0, 5520.0, 5571.0, 5299.0, 5283.0, 5270.0, 5557.0
5	5510	9	1	333	1	5281.0, 5615.0, 5647.0, 5361.0, 5661.0, 5398.0, 5482.0, 5604.0, 5547.0, 5666.0, 5424.0, 5338.0, 5412.0, 5540.0, 5370.0, 5686.0, 5466.0, 5635.0, 5421.0, 5299.0, 5687.0, 5267.0, 5712.0, 5562.0, 5480.0, 5297.0, 5596.0, 5723.0, 5393.0, 5628.0, 5317.0, 5476.0, 5634.0, 5302.0, 5693.0, 5430.0, 5574.0, 5606.0, 5307.0, 5298.0, 5259.0, 5695.0, 5527.0, 5488.0, 5275.0, 5611.0, 5714.0, 5512.0, 5472.0, 5665.0, 5685.0, 5559.0, 5532.0, 5707.0, 5379.0, 5265.0, 5516.0, 5365.0, 5284.0, 5415.0, 5315.0, 5427.0, 5500.0, 5322.0, 5433.0, 5471.0, 5346.0, 5290.0, 5660.0, 5710.0, 5670.0, 5426.0, 5706.0, 5530.0, 5439.0, 5510.0, 5640.0, 5318.0, 5409.0, 5577.0, 5304.0, 5445.0, 5390.0, 5372.0, 5406.0, 5349.0, 5408.0, 5410.0, 5465.0, 5316.0, 5350.0, 5363.0, 5457.0, 5420.0, 5395.0, 5617.0, 5263.0, 5561.0, 5483.0, 5515.0
6	5510	9	1	333	1	5654.0, 5581.0, 5533.0, 5536.0, 5378.0, 5446.0, 5523.0, 5332.0, 5412.0, 5330.0, 5445.0, 5281.0, 5559.0, 5560.0, 5620.0, 5557.0, 5582.0, 5612.0, 5569.0, 5477.0, 5720.0, 5542.0, 5686.0, 5414.0, 5345.0, 5667.0, 5687.0, 5309.0, 5381.0, 5444.0, 5264.0, 5257.0, 5256.0, 5604.0, 5340.0, 5538.0, 5416.0, 5391.0, 5643.0, 5427.0, 5292.0, 5587.0, 5565.0, 5252.0, 5443.0, 5408.0, 5380.0, 5311.0, 5646.0, 5595.0, 5331.0, 5291.0, 5294.0, 5589.0, 5499.0, 5263.0, 5432.0, 5537.0, 5608.0, 5437.0, 5539.0, 5303.0, 5668.0, 5552.0, 5343.0,

						5397.0, 5469.0, 5624.0, 5553.0, 5428.0, 5625.0, 5566.0, 5475.0, 5472.0, 5415.0, 5335.0, 5269.0, 5326.0, 5283.0, 5653.0, 5301.0, 5297.0, 5709.0, 5350.0, 5485.0, 5433.0, 5317.0, 5577.0, 5527.0, 5360.0, 5561.0, 5543.0, 5255.0, 5530.0, 5601.0, 5483.0, 5396.0, 5665.0, 5708.0, 5673.0
7	5510	9	1	333	1	5722.0, 5523.0, 5347.0, 5270.0, 5283.0, 5686.0, 5362.0, 5672.0, 5372.0, 5293.0, 5273.0, 5454.0, 5404.0, 5255.0, 5653.0, 5336.0, 5261.0, 5598.0, 5704.0, 5715.0, 5430.0, 5637.0, 5275.0, 5524.0, 5364.0, 5271.0, 5631.0, 5382.0, 5507.0, 5313.0, 5439.0, 5636.0, 5608.0, 5549.0, 5616.0, 5534.0, 5319.0, 5302.0, 5353.0, 5635.0, 5603.0, 5650.0, 5427.0, 5374.0, 5614.0, 5485.0, 5301.0, 5436.0, 5578.0, 5251.0, 5442.0, 5697.0, 5394.0, 5623.0, 5297.0, 5519.0, 5506.0, 5472.0, 5329.0, 5597.0, 5315.0, 5262.0, 5422.0, 5492.0, 5579.0, 5675.0, 5285.0, 5295.0, 5681.0, 5516.0, 5671.0, 5615.0, 5517.0, 5670.0, 5467.0, 5678.0, 5621.0, 5256.0, 5298.0, 5693.0, 5373.0, 5546.0, 5252.0, 5716.0, 5323.0, 5520.0, 5588.0, 5385.0, 5706.0, 5462.0, 5448.0, 5318.0, 5308.0, 5503.0, 5294.0, 5407.0, 5335.0, 5342.0, 5268.0, 5694.0
8	5510	9	1	333	1	5660.0, 5429.0, 5661.0, 5317.0, 5434.0, 5402.0, 5689.0, 5318.0, 5591.0, 5618.0, 5470.0, 5454.0, 5360.0, 5691.0, 5261.0, 5433.0, 5532.0, 5642.0, 5475.0, 5684.0, 5578.0, 5558.0, 5692.0, 5353.0, 5455.0, 5416.0, 5424.0, 5297.0, 5464.0, 5654.0, 5519.0, 5573.0, 5405.0, 5274.0, 5393.0, 5375.0, 5715.0, 5662.0, 5672.0, 5314.0, 5276.0, 5458.0, 5541.0, 5271.0, 5640.0, 5517.0, 5387.0, 5576.0, 5436.0, 5623.0, 5310.0, 5441.0, 5411.0, 5490.0, 5407.0, 5693.0, 5256.0, 5592.0, 5507.0, 5698.0, 5585.0, 5548.0, 5435.0, 5656.0, 5559.0, 5564.0, 5354.0, 5694.0, 5609.0, 5708.0, 5717.0, 5315.0, 5459.0, 5603.0, 5590.0, 5316.0, 5285.0, 5445.0, 5621.0, 5676.0, 5483.0, 5299.0, 5664.0, 5309.0, 5671.0, 5466.0, 5330.0, 5534.0, 5268.0, 5293.0, 5349.0, 5369.0, 5604.0, 5675.0, 5251.0, 5371.0, 5319.0, 5632.0, 5255.0, 5332.0
9	5510	9	1	333	1	5710.0, 5565.0, 5489.0, 5407.0, 5693.0, 5433.0, 5328.0, 5714.0, 5325.0, 5386.0, 5498.0, 5480.0, 5519.0, 5610.0, 5648.0, 5532.0, 5569.0, 5676.0, 5625.0, 5391.0, 5302.0, 5573.0, 5354.0, 5652.0, 5653.0, 5261.0, 5606.0, 5662.0, 5615.0, 5304.0, 5474.0, 5296.0, 5639.0, 5293.0, 5583.0, 5269.0, 5507.0, 5491.0, 5387.0, 5436.0, 5588.0, 5453.0, 5541.0, 5678.0, 5477.0, 5283.0, 5299.0, 5415.0, 5685.0, 5271.0, 5454.0, 5616.0, 5504.0, 5481.0, 5554.0, 5360.0, 5601.0, 5692.0, 5511.0, 5345.0, 5514.0, 5355.0, 5536.0, 5338.0, 5712.0,

						5517.0, 5314.0, 5467.0, 5422.0, 5258.0, 5315.0, 5595.0, 5718.0, 5701.0, 5619.0, 5555.0, 5657.0, 5444.0, 5412.0, 5277.0, 5383.0, 5297.0, 5327.0, 5589.0, 5597.0, 5673.0, 5512.0, 5567.0, 5649.0, 5288.0, 5278.0, 5576.0, 5448.0, 5535.0, 5396.0, 5323.0, 5502.0, 5447.0, 5537.0, 5374.0
10	5510	9	1	333	1	5472.0, 5544.0, 5489.0, 5288.0, 5718.0, 5385.0, 5560.0, 5333.0, 5352.0, 5680.0, 5362.0, 5345.0, 5662.0, 5500.0, 5339.0, 5613.0, 5724.0, 5474.0, 5330.0, 5423.0, 5556.0, 5683.0, 5640.0, 5305.0, 5516.0, 5260.0, 5711.0, 5704.0, 5450.0, 5550.0, 5449.0, 5633.0, 5461.0, 5380.0, 5462.0, 5722.0, 5519.0, 5714.0, 5684.0, 5377.0, 5389.0, 5383.0, 5673.0, 5312.0, 5531.0, 5515.0, 5604.0, 5266.0, 5319.0, 5439.0, 5412.0, 5664.0, 5323.0, 5598.0, 5375.0, 5453.0, 5448.0, 5350.0, 5416.0, 5457.0, 5394.0, 5363.0, 5470.0, 5434.0, 5644.0, 5692.0, 5473.0, 5280.0, 5677.0, 5719.0, 5348.0, 5378.0, 5370.0, 5678.0, 5418.0, 5600.0, 5351.0, 5514.0, 5259.0, 5486.0, 5564.0, 5693.0, 5559.0, 5681.0, 5636.0, 5463.0, 5506.0, 5522.0, 5264.0, 5314.0, 5494.0, 5659.0, 5346.0, 5672.0, 5410.0, 5701.0, 5347.0, 5676.0, 5446.0, 5283.0
11	5510	9	1	333	1	5439.0, 5376.0, 5610.0, 5611.0, 5583.0, 5535.0, 5447.0, 5696.0, 5608.0, 5542.0, 5371.0, 5723.0, 5390.0, 5636.0, 5677.0, 5527.0, 5281.0, 5280.0, 5685.0, 5534.0, 5457.0, 5270.0, 5257.0, 5560.0, 5556.0, 5626.0, 5399.0, 5690.0, 5419.0, 5420.0, 5302.0, 5510.0, 5466.0, 5644.0, 5406.0, 5434.0, 5294.0, 5394.0, 5700.0, 5303.0, 5411.0, 5716.0, 5305.0, 5332.0, 5684.0, 5577.0, 5502.0, 5515.0, 5335.0, 5451.0, 5575.0, 5615.0, 5295.0, 5505.0, 5598.0, 5712.0, 5395.0, 5298.0, 5722.0, 5693.0, 5403.0, 5267.0, 5478.0, 5259.0, 5489.0, 5293.0, 5463.0, 5711.0, 5539.0, 5500.0, 5336.0, 5668.0, 5627.0, 5346.0, 5720.0, 5442.0, 5647.0, 5511.0, 5353.0, 5662.0, 5400.0, 5633.0, 5421.0, 5278.0, 5300.0, 5530.0, 5656.0, 5475.0, 5382.0, 5581.0, 5356.0, 5585.0, 5593.0, 5493.0, 5570.0, 5372.0, 5485.0, 5694.0, 5333.0, 5549.0
12	5510	9	1	333	1	5271.0, 5719.0, 5457.0, 5379.0, 5530.0, 5391.0, 5380.0, 5431.0, 5361.0, 5338.0, 5387.0, 5301.0, 5662.0, 5723.0, 5659.0, 5359.0, 5423.0, 5439.0, 5460.0, 5260.0, 5713.0, 5366.0, 5614.0, 5274.0, 5511.0, 5420.0, 5389.0, 5593.0, 5552.0, 5419.0, 5331.0, 5452.0, 5430.0, 5682.0, 5474.0, 5288.0, 5605.0, 5687.0, 5634.0, 5573.0, 5345.0, 5516.0, 5594.0, 5655.0, 5712.0, 5365.0, 5620.0, 5569.0, 5411.0, 5537.0, 5553.0, 5442.0, 5609.0, 5456.0, 5671.0, 5487.0, 5374.0, 5447.0, 5701.0, 5567.0, 5559.0, 5577.0, 5574.0, 5557.0, 5496.0,

						5433.0, 5592.0, 5268.0, 5468.0, 5717.0, 5448.0, 5478.0, 5692.0, 5476.0, 5396.0, 5561.0, 5504.0, 5583.0, 5269.0, 5679.0, 5279.0, 5590.0, 5562.0, 5543.0, 5364.0, 5691.0, 5556.0, 5572.0, 5685.0, 5519.0, 5341.0, 5695.0, 5363.0, 5616.0, 5314.0, 5626.0, 5531.0, 5441.0, 5381.0, 5554.0
13	5510	9	1	333	1	5693.0, 5584.0, 5607.0, 5661.0, 5624.0, 5593.0, 5433.0, 5314.0, 5549.0, 5437.0, 5284.0, 5276.0, 5629.0, 5507.0, 5442.0, 5552.0, 5419.0, 5492.0, 5336.0, 5613.0, 5515.0, 5456.0, 5362.0, 5457.0, 5643.0, 5282.0, 5683.0, 5465.0, 5383.0, 5651.0, 5689.0, 5487.0, 5449.0, 5658.0, 5611.0, 5348.0, 5286.0, 5706.0, 5690.0, 5686.0, 5303.0, 5352.0, 5356.0, 5310.0, 5633.0, 5451.0, 5270.0, 5325.0, 5649.0, 5494.0, 5334.0, 5612.0, 5486.0, 5566.0, 5363.0, 5667.0, 5324.0, 5444.0, 5704.0, 5652.0, 5599.0, 5453.0, 5506.0, 5615.0, 5468.0, 5518.0, 5418.0, 5272.0, 5484.0, 5669.0, 5285.0, 5558.0, 5409.0, 5569.0, 5530.0, 5601.0, 5401.0, 5523.0, 5670.0, 5699.0, 5674.0, 5581.0, 5463.0, 5388.0, 5497.0, 5714.0, 5422.0, 5347.0, 5443.0, 5662.0, 5359.0, 5438.0, 5268.0, 5709.0, 5275.0, 5682.0, 5608.0, 5462.0, 5351.0, 5590.0
14	5510	9	1	333	1	5253.0, 5648.0, 5675.0, 5418.0, 5467.0, 5475.0, 5261.0, 5321.0, 5435.0, 5313.0, 5591.0, 5653.0, 5339.0, 5531.0, 5394.0, 5405.0, 5625.0, 5319.0, 5440.0, 5577.0, 5695.0, 5251.0, 5722.0, 5614.0, 5306.0, 5363.0, 5279.0, 5667.0, 5593.0, 5391.0, 5254.0, 5610.0, 5659.0, 5657.0, 5322.0, 5386.0, 5262.0, 5662.0, 5360.0, 5275.0, 5559.0, 5620.0, 5378.0, 5417.0, 5501.0, 5461.0, 5423.0, 5719.0, 5312.0, 5252.0, 5720.0, 5445.0, 5431.0, 5409.0, 5709.0, 5485.0, 5701.0, 5263.0, 5681.0, 5425.0, 5496.0, 5690.0, 5504.0, 5277.0, 5420.0, 5337.0, 5484.0, 5724.0, 5505.0, 5367.0, 5347.0, 5520.0, 5619.0, 5326.0, 5514.0, 5498.0, 5618.0, 5671.0, 5370.0, 5579.0, 5523.0, 5388.0, 5259.0, 5718.0, 5595.0, 5509.0, 5567.0, 5336.0, 5691.0, 5674.0, 5421.0, 5491.0, 5581.0, 5379.0, 5296.0, 5443.0, 5376.0, 5584.0, 5512.0, 5434.0
15	5510	9	1	333	1	5617.0, 5377.0, 5582.0, 5630.0, 5323.0, 5704.0, 5542.0, 5266.0, 5688.0, 5596.0, 5284.0, 5703.0, 5435.0, 5515.0, 5524.0, 5499.0, 5574.0, 5545.0, 5366.0, 5378.0, 5536.0, 5591.0, 5678.0, 5600.0, 5717.0, 5572.0, 5324.0, 5676.0, 5320.0, 5460.0, 5701.0, 5668.0, 5316.0, 5702.0, 5506.0, 5518.0, 5674.0, 5632.0, 5645.0, 5653.0, 5513.0, 5464.0, 5619.0, 5643.0, 5253.0, 5592.0, 5302.0, 5349.0, 5666.0, 5589.0, 5543.0, 5321.0, 5526.0, 5463.0, 5557.0, 5525.0, 5577.0, 5664.0, 5715.0, 5498.0, 5410.0, 5486.0, 5353.0, 5336.0, 5306.0,

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16	5510	9	1	333	1	5415.0, 5457.0, 5504.0, 5483.0, 5659.0, 5527.0, 5361.0, 5367.0, 5651.0, 5553.0, 5289.0, 5285.0, 5372.0, 5312.0, 5518.0, 5453.0, 5339.0, 5414.0, 5276.0, 5634.0, 5456.0, 5478.0, 5597.0, 5590.0, 5667.0, 5620.0, 5472.0, 5493.0, 5682.0, 5398.0, 5534.0, 5389.0, 5594.0, 5592.0, 5477.0, 5509.0, 5521.0, 5612.0, 5629.0, 5653.0, 5635.0, 5720.0, 5422.0, 5251.0, 5353.0, 5515.0, 5582.0, 5467.0, 5355.0, 5403.0, 5503.0, 5326.0, 5524.0, 5584.0, 5366.0, 5645.0, 5473.0, 5449.0, 5681.0, 5644.0, 5290.0, 5500.0, 5662.0, 5261.0, 5506.0, 5547.0, 5603.0, 5675.0, 5465.0, 5540.0, 5385.0, 5708.0, 5498.0, 5442.0, 5425.0, 5716.0, 5625.0, 5523.0, 5552.0, 5459.0, 5395.0, 5358.0, 5569.0, 5721.0, 5481.0, 5632.0, 5324.0, 5544.0, 5474.0, 5573.0, 5702.0, 5686.0, 5327.0, 5707.0, 5337.0, 5451.0, 5254.0, 5433.0, 5402.0, 5315.0
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29	5510	9	1	333	1	5651.0, 5667.0, 5677.0, 5308.0, 5641.0, 5514.0, 5388.0, 5576.0, 5500.0, 5433.0, 5404.0, 5291.0, 5531.0, 5533.0, 5541.0, 5630.0, 5615.0, 5659.0, 5250.0, 5467.0, 5382.0, 5452.0, 5460.0, 5465.0, 5469.0, 5353.0, 5657.0, 5257.0, 5451.0, 5383.0, 5379.0, 5718.0, 5621.0, 5695.0, 5545.0, 5694.0, 5444.0, 5288.0, 5636.0, 5482.0, 5405.0, 5274.0, 5253.0, 5312.0, 5289.0, 5678.0, 5489.0, 5487.0, 5301.0, 5548.0, 5655.0, 5656.0, 5567.0, 5450.0, 5720.0, 5302.0, 5609.0, 5305.0, 5681.0, 5331.0, 5304.0, 5664.0, 5625.0, 5501.0, 5581.0, 5340.0, 5275.0, 5524.0, 5699.0, 5454.0, 5315.0, 5390.0, 5707.0, 5521.0, 5320.0, 5265.0, 5518.0, 5639.0, 5535.0, 5300.0, 5445.0, 5285.0, 5310.0, 5272.0, 5537.0, 5520.0, 5528.0, 5538.0, 5364.0, 5299.0, 5706.0, 5559.0, 5543.0, 5287.0, 5292.0, 5698.0, 5424.0, 5689.0, 5418.0, 5351.0
30	5510	9	1	333	1	5448.0, 5474.0, 5348.0, 5322.0, 5499.0, 5294.0, 5585.0, 5261.0, 5337.0, 5355.0, 5445.0, 5537.0, 5319.0, 5326.0, 5589.0, 5579.0, 5703.0, 5641.0, 5604.0, 5340.0, 5341.0, 5638.0, 5706.0, 5386.0, 5329.0, 5251.0, 5300.0, 5593.0, 5483.0, 5640.0, 5325.0, 5600.0, 5290.0, 5635.0, 5541.0, 5679.0, 5553.0, 5478.0, 5443.0, 5356.0, 5539.0, 5719.0, 5704.0, 5564.0, 5438.0, 5680.0, 5518.0, 5427.0, 5267.0, 5285.0, 5390.0, 5671.0, 5624.0, 5318.0, 5387.0, 5532.0, 5548.0, 5469.0, 5394.0, 5636.0, 5524.0, 5343.0, 5271.0, 5667.0, 5654.0,

						5430.0, 5399.0, 5570.0, 5505.0, 5673.0, 5648.0, 5696.0, 5360.0, 5306.0, 5520.0, 5652.0, 5437.0, 5262.0, 5462.0, 5354.0, 5620.0, 5461.0, 5481.0, 5551.0, 5628.0, 5473.0, 5629.0, 5577.0, 5633.0, 5503.0, 5598.0, 5263.0, 5559.0, 5623.0, 5350.0, 5664.0, 5403.0, 5422.0, 5401.0, 5278.0

80MHz

Radar SignalType	Waveform/Trial Number	Detection (%)	Limit (%)	Pass/Fail
Type 1A	15	100%	60%	pass
Type 1B	15	93.3%	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	99.2 %	80%	Pass
Type 5	30	96.7 %	80%	Pass
Type 6	30	100 %	70%	Pass

Please refer to the following statistical tables:

5530MHz

Radar Type 1A Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5530	62	1	858	1
2	5530	76	1	698	1
3	5530	72	1	738	1
4	5530	74	1	718	1
5	5530	86	1	618	1
6	5530	61	1	878	1
7	5530	95	1	558	1
8	5530	57	1	938	1
9	5530	78	1	678	1
10	5530	89	1	598	1
11	5530	99	1	538	1
12	5530	59	1	898	1
13	5530	83	1	638	1
14	5530	92	1	578	1
15	5530	65	1	818	1
Detection Percentage:100% (>60%)					

Radar Type 1B Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (μS)	PRI (μs)	Detection (1:yes; 0:no)
1	5530	81	1	655	1
2	5530	18	1	3017	1
3	5530	34	1	1581	1
4	5530	18	1	3019	1
5	5530	25	1	2179	1
6	5530	20	1	2737	1
7	5530	83	1	641	1
8	5530	25	1	2169	1
9	5530	25	1	2199	1
10	5530	27	1	2007	1
11	5530	20	1	2675	1
12	5530	28	1	1920	1
13	5530	22	1	2439	1
14	5530	35	1	1548	0
15	5530	26	1	2098	1
Detection Percentage: 93.3 % (>60%)					

Radar Type 2 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5530	25	3.8	153	1
2	5530	23	4.5	220	1
3	5530	26	4	212	1
4	5530	28	2.5	155	1
5	5530	26	2.4	150	1
6	5530	27	3.8	197	1
7	5530	29	2.7	211	1
8	5530	26	1.9	217	1
9	5530	29	3.4	188	1
10	5530	23	4.3	154	1
11	5530	24	2.3	216	1
12	5530	24	1.4	173	1
13	5530	29	3.4	164	1
14	5530	28	3.2	163	1
15	5530	24	2.8	225	1
16	5530	28	1.2	172	1
17	5530	25	3.7	218	1
18	5530	25	1.5	174	1
19	5530	28	3.7	215	1
20	5530	25	1.6	219	1
21	5530	26	3.9	154	1
22	5530	29	4.3	219	1
23	5530	26	4.4	162	1
24	5530	27	2.6	179	1
25	5530	26	2.3	181	1
26	5530	29	3.3	150	1
27	5530	28	3.1	176	1
28	5530	25	1.4	197	1
29	5530	29	1.2	213	1
30	5530	26	2	211	1
Detection Percentage: 100 % (>60%)					

Radar Type 3 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5530	17	9	243	1
2	5530	17	10	237	1
3	5530	18	8.9	493	1
4	5530	16	7.9	344	1
5	5530	18	6.7	424	1
6	5530	17	8.9	377	1
7	5530	18	6.3	450	1
8	5530	18	7.8	208	1
9	5530	16	9	297	1
10	5530	17	8.8	421	1
11	5530	17	9.9	479	1
12	5530	16	7.3	448	1
13	5530	17	8.9	470	1
14	5530	18	6.2	344	1
15	5530	17	8	399	1
16	5530	16	7.5	318	1
17	5530	17	8.4	243	1
18	5530	17	6.7	399	1
19	5530	18	6.8	304	1
20	5530	16	6.9	352	1
21	5530	18	7.1	347	1
22	5530	17	6.6	385	1
23	5530	17	7.7	268	1
24	5530	16	10	326	1
25	5530	17	9.8	255	1
26	5530	18	8.2	430	1
27	5530	17	6.3	208	1
28	5530	18	8.4	335	1
29	5530	18	9.9	247	1
30	5530	16	8.1	357	1
Detection Percentage: 100 % (>60%)					

Radar Type 4 Statistical Performance

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5530	15	15.2	203	1
2	5530	15	11.7	247	1
3	5530	12	18	494	1
4	5530	13	18.6	234	1
5	5530	12	16.3	345	1
6	5530	13	17.5	407	1
7	5530	13	11.3	203	1
8	5530	13	16.7	291	1
9	5530	13	14.4	431	1
10	5530	14	15.1	253	1
11	5530	14	14.5	334	1
12	5530	13	16.7	232	1
13	5530	16	13.3	395	1
14	5530	14	16.7	336	1
15	5530	16	15.7	417	1
16	5530	14	19.5	349	1
17	5530	14	13	352	1
18	5530	16	15.1	303	1
19	5530	13	13	425	1
20	5530	16	16.8	431	1
21	5530	15	17.7	286	1
22	5530	13	16.2	284	1
23	5530	13	19.2	397	1
24	5530	15	14.5	455	1
25	5530	15	14.9	260	1
26	5530	16	11.8	313	1
27	5530	16	19.4	215	1
28	5530	13	16.4	335	1
29	5530	16	18.8	264	1
30	5530	15	14.1	488	1
Detection Percentage: 100 % (>60%)					

Radar Type 5 Case 1 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5530.0MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	6	65.5	1372	1703	1.016584	
1	2	6	91.4	1159		2.266018	
2	2	6	94.7	1603		2.83144	
3	2	6	70.1	1189		4.773614	
4	2	6	80	1382		6.025463	1
5	1	6	95.3			7.457815	
6	2	6	97.1	1929		9.004932	
7	2	6	93	1832		9.837562	
8	2	6	80.6	1450		10.88489	

Statistics 2 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	13	93.6	1355		0.333556	
1	3	13	71.1	1493	1806	0.860576	
2	2	13	93.6	1731		2.033107	
3	2	13	86.9	1846		2.203752	
4	3	13	66.7	1294	1945	3.40108	
5	1	13	54.3			3.660065	
6	2	13	70.1	1607		4.591197	
7	3	13	68.2	1419	1943	5.634441	
8	2	13	76.4	1544		6.195917	
9	3	13	88.9	1630	1482	6.854772	1
10	3	13	68.6	1526	1053	7.180579	
11	1	13	90.4			7.963102	
12	3	13	81.4	1644	1203	8.949542	
13	2	13	55.9	1983		9.353966	
14	2	13	86.3	1331		10.37828	
15	2	13	86.8	1821		11.0262	
16	3	13	69.8	1204	1723	11.68985	

Statistics 3 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	14	88.2	1994	1884	0.531628	1
1	3	14	73.6	1474	1463	1.99331	
2	2	14	57.9	1324		3.380163	
3	2	14	92.9	1731		4.615817	
4	3	14	62.3	1057	1536	6.291512	
5	3	14	50.2	1322	1843	8.803165	
6	2	14	57.8	1464		9.601731	
7	3	14	90.6	1948	1918	11.71546	

Statistics 4 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	10	96.3	1031	1843	0.801397	1
1	2	10	94.2	1614		1.50792	
2	3	10	50.4	1102	1625	2.018045	
3	1	10	98.6			3.304962	
4	2	10	97.2	1060		3.786097	
5	1	10	99.4			5.517343	
6	3	10	56.3	1341	1521	5.698772	
7	2	10	70.1	1006		6.752543	
8	1	10	69.4			8.272379	
9	2	10	80.1	1511		8.32775	
10	2	10	97.4	1934		10.00782	
11	2	10	96.2	1262		10.80364	
12	1	10	84			11.30909	

Statistics 5(ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	10	68.5	1945		0.540694	1
1	3	10	72.3	1701	1129	0.947056	
2	2	10	79.5	1284		1.874027	
3	1	10	77			2.675937	
4	2	10	75.5	1377		3.528646	
5	2	10	64.1	1601		3.916072	
6	1	10	75.2			4.517052	
7	2	10	88.9	1356		5.252996	
8	2	10	96.4	1744		6.584052	
9	1	10	54.6			7.12788	
10	1	10	97.7			7.611471	
11	1	10	75.7			8.626499	
12	1	10	88.9			9.493138	
13	2	10	88.4	1057		10.21419	
14	2	10	77.3	1806		10.58506	
15	1	10	64.6			11.66169	

Statistics 6 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	7	77.6	1586		0.287412	1
1	2	7	74.4	1992		1.639262	
2	1	7	58.8			2.530992	
3	2	7	91.7	1901		3.185993	
4	3	7	56.3	1336	1942	4.367621	
5	3	7	64.9	1856	1088	5.775114	
6	3	7	83.7	1134	1862	6.761545	
7	2	7	94.8	1471		7.593941	
8	2	7	69.2	1279		8.849897	
9	2	7	85.9	1699		9.48031	
10	3	7	54.6	1199	1913	10.92291	
11	2	7	92.3	1920		11.04328	

Statistics 7(ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	7	76	1461		0.325867	1
1	2	7	65.4	1077		2.118728	
2	1	7	62			3.428045	
3	3	7	75.9	1034	1640	5.180358	
4	2	7	72.3	1092		7.176926	
5	3	7	99.7	1382	1950	8.02032	
6	3	7	88.5	1383	1047	9.801767	
7	2	7	79.1	1116		11.48471	

Statistics 8 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	7	77.3	1495		0.193463	1
1	2	7	89.2	1325		2.114218	
2	2	7	58.5	1008		2.623815	
3	2	7	94.7	1450		4.378952	
4	1	7	56.1			5.360548	
5	2	7	63.5	1047		6.940473	
6	3	7	52	1941	1624	7.335732	
7	2	7	56.8	1885		8.866104	
8	1	7	58			9.912469	
9	3	7	83.5	1148	1843	11.8421	

Statistics 9 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	8	72			0.447545	1
1	2	8	87.9	1052		1.477457	
2	1	8	81.6			1.804483	
3	2	8	91.2	1149		3.359535	
4	1	8	72.8			3.602299	
5	2	8	67.8	1950		4.505404	
6	3	8	56.3	1989	1356	5.685379	
7	3	8	75.4	1052	1894	6.396528	
8	2	8	53.3	1632		6.858836	
9	2	8	57.6	1444		8.087784	
10	2	8	87.8	1149		8.636266	
11	2	8	57.1	1664		9.604189	
12	2	8	82	1483		11.07204	
13	3	8	87	1723	1897	11.38045	

Statistics 10 (ChirpCenter Frequency: 5530.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	13	74.7	1817	1577	0.554324	1
1	2	13	62.9	1173		1.676867	
2	1	13	70			2.777032	
3	2	13	58.7	1464		4.0889	
4	1	13	76.6			5.589021	
5	2	13	98	1691		6.227474	
6	2	13	61.7	1118		7.317857	
7	2	13	65.6	1245		8.533197	
8	2	13	52	1007		9.847474	
9	1	13	82.3			11.9431	

Radar Type 5 Case 2 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5494 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	9	55.3			0.037887	
1	1	9	72.7			1.198701	
2	2	9	60.9	1625		1.519414	
3	3	9	79.2	1277	1397	2.127767	
4	1	9	57.4			2.856253	
5	2	9	80.3	1154		3.573699	
6	2	9	59	1664		4.661868	
7	2	9	95.1	1005		5.578868	
8	2	9	65.8	1206		6.255914	1
9	1	9	89.6			6.977288	
10	3	9	59.1	1142	1150	7.739932	
11	2	9	86.1	1059		7.851061	
12	2	9	98.6	1675		9.110616	
13	2	9	67.1	1091		9.628439	
14	1	9	96.3			10.12048	
15	2	9	86.6	1080		10.61836	
16	2	9	99.7	1559		11.53096	

Statistics 2 (ChirpCenter Frequency: 5492 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (μS)	Pulse 1-2 spacing(μS)	Pulse 2-3 spacing(μS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	6	50.1	1069		0.158252	
1	2	6	94.7	1954		1.786859	
2	2	6	50.2	1192		3.194703	
3	1	6	59.3			3.428486	
4	2	6	93.8	1176		5.029085	
5	2	6	63	1710		6.100118	1
6	1	6	61.8			7.617272	
7	2	6	86	1365		8.528665	
8	2	6	58.5	1765		9.249524	
9	3	6	92.1	1498	1140	10.43148	
10	2	6	73.2	1163		11.43914	

Statistics 3 (ChirpCenter Frequency: 5497 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	19	80.1	1565		0.03738	1
1	3	19	63.1	1080	1703	1.558913	
2	3	19	73	1576	1952	1.749029	
3	1	19	97.8			3.294194	
4	3	19	91.3	1674	1747	4.08288	
5	2	19	98.1	1178		4.381623	
6	2	19	61.1	1821		5.20259	
7	3	19	58.7	1172	1342	6.763187	
8	2	19	83.7	1515		6.936569	
9	3	19	66.8	1928	1577	7.89198	
10	1	19	67.7			9.397305	
11	1	19	51.9			9.63604	
12	2	19	51.1	1824		10.54149	
13	1	19	74.1			11.423	

Statistics 4 (ChirpCenter Frequency: 5494 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	10	51.1			0.211514	1
1	3	10	91.6	1017	1801	0.974505	
2	1	10	55.1			2.283127	
3	2	10	72.4	1815		2.99207	
4	1	10	75.4			3.913602	
5	2	10	96.3	1073		4.062716	
6	1	10	83.8			5.220102	
7	1	10	97.7			5.762299	
8	2	10	74.3	1556		7.116383	
9	3	10	71.7	1520	1821	7.702009	
10	2	10	82.6	1180		8.296853	
11	2	10	75.1	1514		9.088069	
12	1	10	65.5			10.23671	
13	1	10	58.2			10.89588	
14	2	10	81.4	1702		11.75319	

Statistics 5 (ChirpCenter Frequency: 5494 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	9	95.5	1613		0.567283	
1	2	9	96	1080		1.900203	
2	2	9	99.7	1223		3.663318	
3	2	9	89.9	1062		4.241203	
4	2	9	55.4	1282		6.378624	1
5	2	9	72.7	1519		7.433577	
6	3	9	75.6	1995	1419	9.236016	
7	2	9	97.4	1017		9.720526	
8	2	9	86.7	1407		11.95134	

Statistics 6 (ChirpCenter Frequency: 5496 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	16	84.9	1972	1554	0.739707	
1	2	16	97	1841		1.408738	
2	3	16	56.4	1898	1494	3.353758	
3	3	16	98.3	1167	1077	4.960932	
4	1	16	70.7			5.551203	1
5	2	16	69.1	1864		7.15771	
6	2	16	91.2	1380		8.466098	
7	2	16	94.9	1450		9.990941	
8	2	16	83.4	1042		11.23839	

Statistics 7 (ChirpCenter Frequency: 5496 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(uS)	Pulse 2-3 spacing(uS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	16	88.5			0.272658	1
1	1	16	80.4			0.950767	
2	2	16	76.9	1480		1.308478	
3	3	16	95.3	1933	1082	1.860771	
4	2	16	61.9	1630		2.898095	
5	2	16	67.2	1189		3.295955	
6	1	16	52.9			3.708836	
7	3	16	56.8	1428	1999	4.414291	
8	3	16	93.6	1082	1877	5.219058	
9	2	16	84.9	1944		5.432893	
10	2	16	75	1587		6.101265	
11	3	16	88.3	1091	1552	6.840103	
12	2	16	84.7	1820		7.336224	
13	3	16	87	1080	1719	7.983777	
14	2	16	74.2	1166		8.923969	
15	2	16	68.6	1228		9.097224	
16	3	16	89.5	1268	1893	9.92337	
17	3	16	85.8	1761	1726	10.39317	
18	2	16	73.3	1191		10.99909	
19	2	16	67.3	1330		11.77262	

Statistics 8 (ChirpCenter Frequency: 5493 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	7	74.2	1252	1298	0.711326	1
1	1	7	65.1			1.084953	
2	2	7	69.5	1705		2.399978	
3	2	7	55.3	1737		3.358769	
4	1	7	61.2			4.253502	
5	1	7	81.5			5.928877	
6	2	7	63.4	1227		6.789914	
7	2	7	64.9	1791		7.690053	
8	3	7	93.2	1395	1077	8.823866	
9	2	7	55.2	1539		9.493581	
10	2	7	82.4	1872		10.54565	
11	2	7	65.7	1391		11.41352	

Statistics 9 (ChirpCenter Frequency: 5497 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	18	55.6	1776	1255	0.469454	1
1	1	18	84.9			1.241014	
2	2	18	69.3	1220		2.022964	
3	1	18	92.1			2.433412	
4	2	18	82.6	1021		3.649349	
5	3	18	88.1	1521	1211	4.230606	
6	2	18	99.8	1090		4.904496	
7	2	18	51.7	1020		5.299506	
8	1	18	72.2			6.619748	
9	1	18	86.9			7.216122	
10	1	18	64.5			7.908234	
11	1	18	52.9			8.750547	
12	1	18	62.7			9.098802	
13	1	18	69			9.913788	
14	3	18	58.7	1322	1957	10.94547	
15	1	18	74.5			11.47443	

Statistics 10 (ChirpCenter Frequency: 5492 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	5	74.1			0.229705	1
1	1	5	51.5			0.95479	
2	3	5	73.5	1624	1770	1.804091	
3	2	5	63.5	1360		2.826497	
4	3	5	81.4	1113	1238	3.370968	
5	2	5	71.4	1912		4.662328	
6	2	5	98.2	1106		5.398296	
7	3	5	52	1204	1197	6.331605	
8	2	5	51	1760		7.022356	
9	2	5	98.8	1209		7.668414	
10	2	5	88.9	1812		8.406417	
11	2	5	77.8	1705		9.22722	
12	2	5	76.6	1736		10.28784	
13	3	5	93.6	1551	1366	10.80542	
14	1	5	55.2			11.6188	

Radar Type 5 Case 3 Statistical Performance

Statistics 1 (ChirpCenter Frequency: 5563.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	17	98.2	1654		0.319012	
1	2	17	92.2	1504		2.016917	
2	2	17	96.3	1070		2.844142	
3	2	17	51.5	1456		3.460433	
4	3	17	75.2	1028	1734	5.07039	
5	1	17	73.9			6.35727	1
6	2	17	92.5	1670		6.799632	
7	1	17	73.9			8.021392	
8	1	17	61			9.529192	
9	1	17	65.2			9.992694	
10	3	17	53.4	1534	1606	11.00727	

Statistics 2 (ChirpCenter Frequency: 5566.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	11	55.7	1165	1295	0.265788	
1	2	11	60.3	1505		1.76198	
2	1	11	67			2.519112	
3	2	11	64.6	1994		3.920793	
4	2	11	71.9	1731		5.380071	
5	2	11	85.5	1926		6.042964	1
6	3	11	77.2	1415	1558	7.232088	
7	2	11	92.9	1848		8.262863	
8	1	11	53.1			9.518765	
9	1	11	62.6			10.09374	
10	2	11	65	1175		11.78907	

Statistics 3 (ChirpCenter Frequency: 5565.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	12	79.3	1530		0.563293	
1	2	12	94.9	1422		1.41727	
2	1	12	87.3			2.150115	
3	2	12	76.6	1868		3.03535	
4	3	12	97	1298	1039	3.473665	
5	2	12	80.4	1763		4.27059	
6	2	12	80.4	1981		5.268168	
7	3	12	65.7	1679	1728	5.789252	1
8	3	12	59.6	1470	1210	6.444726	
9	2	12	69.7	1912		7.682304	
10	2	12	57	1085		8.402546	
11	2	12	80.3	1880		9.264094	
12	2	12	89	1646		9.788701	
13	2	12	63.1	1850		10.78585	
14	3	12	77.2	1154	1379	11.96773	

Statistics 4 (ChirpCenter Frequency: 5563.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	17	69.8	1543		1.034447	
1	3	17	53.7	1127	1910	1.429769	
2	2	17	74.4	1168		3.490894	
3	2	17	56.8	1559		4.310967	
4	2	17	80.2	1737		6.5857	1
5	3	17	70.3	1319	1478	7.858216	
6	2	17	73.8	1936		9.153537	
7	3	17	82.4	1088	1828	9.754954	
8	3	17	96	1298	1002	11.92146	

Statistics 5 (ChirpCenter Frequency: 5562.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	1	20	72.4			0.708672	
1	2	20	83.5	1383		1.062544	
2	1	20	85.4			2.364681	
3	2	20	94.5	1220		3.065884	
4	2	20	72.5	1235		3.471353	
5	2	20	64	1367		4.688325	
6	2	20	50.9	1983		5.850639	1
7	1	20	59.4			6.101645	
8	2	20	53.8	1829		7.561818	
9	1	20	77			7.961109	
10	3	20	74.4	1529	1022	9.025682	
11	3	20	62.2	1839	1190	9.439306	
12	3	20	79.3	1444	1482	11.11869	

Statistics 6 (ChirpCenter Frequency: 5566.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	9	53.5	1864		0.271416	
1	3	9	64.9	1980	1691	1.783438	
2	1	9	53.7			3.977777	
3	1	9	58.1			5.229503	1
4	2	9	55.2	1108		6.92278	
5	3	9	60.8	1460	1865	8.775571	
6	3	9	99.4	1438	1141	9.093893	

Statistics 7 (ChirpCenter Frequency: 5563.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	17	52.2	1387	1139	1.022627	
1	2	17	88.4	1325		1.806854	
2	2	17	73.1	1393		2.935757	
3	2	17	87.3	1310		4.540024	
4	3	17	58.6	1717	1278	6.353421	1
5	3	17	86.2	1417	1175	7.959861	
6	2	17	80.6	1430		8.230774	
7	2	17	93.6	1891		9.675355	
8	3	17	81.8	1518	1866	11.62763	

Statistics 8 (ChirpCenter Frequency: 5568.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	6	89	1301		0.307754	
1	2	6	54.2	1921		0.828662	
2	2	6	55	1721		1.794721	
3	2	6	53.9	1886		2.50146	
4	2	6	79.4	1777		3.139355	
5	2	6	88	1620		3.687656	
6	2	6	78.8	1465		4.331547	
7	2	6	74.8	1450		4.917334	
8	2	6	88.2	1802		5.541264	
9	3	6	74.6	1565	1909	6.246224	1
10	1	6	89.6			6.907551	
11	2	6	53	1974		7.853615	
12	3	6	61.4	1619	1332	8.034307	
13	3	6	69.2	1273	1062	9.003972	
14	2	6	57.5	1354		9.894897	
15	3	6	89.7	1887	1095	10.46753	
16	2	6	81.3	1442		11.10547	
17	1	6	75.8			11.70394	

Statistics 9 (ChirpCenter Frequency: 5566.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	2	10	67.4	1525		0.340754	0
1	1	10	62.7			1.561394	
2	3	10	85	1248	1446	1.897167	
3	2	10	71	1625		2.998017	
4	3	10	58.9	1856	1516	3.563658	
5	1	10	85.8			4.812883	
6	2	10	60.4	1093		5.931008	
7	2	10	83.5	1489		6.087379	
8	2	10	68.4	1659		7.62772	
9	2	10	87.5	1469		8.29553	
10	2	10	86.6	1068		9.408542	
11	3	10	57.5	1927	1590	9.680879	
12	2	10	76.7	1633		10.89059	
13	3	10	90.5	1367	1777	11.81868	

Statistics 10 (ChirpCenter Frequency: 5567.0 MHz)

Trial #	Pulse	Chirp(MHz)	Pulse Width (µS)	Pulse 1-2 spacing(µS)	Pulse 2-3 spacing(µS)	Pulse Start(S)	Detection (1:yes;0:no)
0	3	7	56.5	1345	1667	0.399118	1
1	2	7	63	1605		1.160838	
2	1	7	56.5			2.243852	
3	2	7	78.2	1445		3.040144	
4	2	7	67.9	1800		4.251495	
5	3	7	52.2	1758	1308	5.148547	
6	3	7	54.6	1130	1752	6.038197	
7	2	7	62.5	1934		7.368333	
8	1	7	93			8.455095	
9	2	7	66.6	1807		9.989593	
10	2	7	94.2	1803		10.07772	
11	2	7	71.2	1303		11.38441	

Radar Type 6 Statistical Performance

Trial #	Fc (MHz)	Pulse /Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)	Hopping Sequence (MHz)
1	5530	9	1	333	1	5688.0, 5398.0, 5601.0, 5366.0, 5537.0, 5551.0, 5717.0, 5382.0, 5328.0, 5341.0, 5356.0, 5442.0, 5545.0, 5299.0, 5330.0, 5290.0, 5413.0, 5542.0, 5704.0, 5350.0, 5313.0, 5500.0, 5652.0, 5701.0, 5600.0, 5430.0, 5609.0, 5620.0, 5515.0, 5302.0, 5361.0, 5448.0, 5602.0, 5683.0, 5400.0, 5555.0, 5586.0, 5323.0, 5623.0, 5591.0, 5497.0, 5618.0, 5593.0, 5648.0, 5472.0, 5286.0, 5708.0, 5344.0, 5423.0, 5629.0, 5547.0, 5660.0, 5289.0, 5643.0, 5633.0, 5408.0, 5592.0, 5721.0, 5325.0, 5474.0, 5525.0, 5317.0, 5348.0, 5695.0, 5635.0, 5357.0, 5266.0, 5468.0, 5254.0, 5420.0, 5668.0, 5406.0, 5308.0, 5414.0, 5663.0, 5569.0, 5503.0, 5610.0, 5375.0, 5407.0, 5686.0, 5469.0, 5576.0, 5359.0, 5314.0, 5334.0, 5614.0, 5331.0, 5285.0, 5437.0, 5612.0, 5498.0, 5506.0, 5358.0, 5658.0, 5393.0, 5557.0, 5718.0, 5441.0, 5723.0
2	5530	9	1	333	1	5424.0, 5682.0, 5437.0, 5433.0, 5640.0, 5574.0, 5557.0, 5394.0, 5532.0, 5597.0, 5384.0, 5470.0, 5466.0, 5286.0, 5516.0, 5625.0, 5721.0, 5678.0, 5602.0, 5608.0, 5595.0, 5359.0, 5297.0, 5320.0, 5685.0, 5660.0, 5350.0, 5325.0, 5344.0, 5681.0, 5502.0, 5438.0, 5665.0, 5472.0, 5522.0, 5639.0, 5281.0, 5309.0, 5699.0, 5719.0, 5254.0, 5477.0, 5426.0, 5318.0, 5642.0, 5492.0, 5313.0, 5474.0, 5648.0, 5276.0, 5365.0, 5529.0, 5307.0, 5637.0, 5251.0, 5274.0, 5341.0, 5360.0, 5448.0, 5585.0, 5294.0, 5447.0, 5445.0, 5383.0, 5414.0, 5527.0, 5458.0, 5695.0, 5457.0, 5425.0, 5654.0, 5525.0, 5405.0, 5461.0, 5441.0, 5305.0, 5530.0, 5722.0, 5669.0, 5423.0, 5407.0, 5531.0, 5715.0, 5506.0, 5612.0, 5668.0, 5611.0, 5518.0, 5347.0, 5292.0, 5698.0, 5409.0, 5382.0, 5373.0, 5482.0, 5605.0, 5523.0, 5310.0, 5415.0, 5601.0
3	5530	9	1	333	1	5387.0, 5527.0, 5580.0, 5285.0, 5289.0, 5400.0, 5299.0, 5615.0, 5622.0, 5588.0, 5320.0, 5435.0, 5493.0, 5653.0, 5609.0, 5259.0, 5661.0, 5616.0, 5449.0, 5394.0, 5452.0, 5610.0, 5274.0, 5565.0, 5445.0, 5370.0, 5604.0, 5396.0, 5709.0, 5462.0, 5605.0, 5691.0, 5443.0, 5637.0, 5499.0, 5699.0, 5645.0, 5339.0, 5432.0, 5331.0, 5487.0, 5406.0, 5295.0, 5415.0, 5371.0, 5424.0, 5665.0, 5465.0, 5558.0, 5303.0, 5302.0, 5674.0, 5393.0, 5551.0, 5577.0, 5635.0, 5536.0, 5408.0, 5271.0, 5535.0, 5660.0, 5574.0, 5617.0, 5282.0, 5688.0, 5345.0, 5639.0, 5268.0, 5478.0, 5341.0,

						5542.0, 5450.0, 5675.0, 5578.0, 5625.0, 5366.0, 5304.0, 5534.0, 5592.0, 5683.0, 5642.0, 5585.0, 5486.0, 5603.0, 5377.0, 5614.0, 5559.0, 5461.0, 5484.0, 5668.0, 5276.0, 5362.0, 5554.0, 5503.0, 5611.0, 5518.0, 5464.0, 5428.0, 5679.0, 5489.0
4	5530	9	1	333	1	5654.0, 5277.0, 5363.0, 5669.0, 5712.0, 5668.0, 5326.0, 5528.0, 5289.0, 5259.0, 5614.0, 5697.0, 5597.0, 5629.0, 5649.0, 5603.0, 5570.0, 5633.0, 5721.0, 5577.0, 5623.0, 5278.0, 5274.0, 5466.0, 5347.0, 5564.0, 5609.0, 5447.0, 5535.0, 5714.0, 5613.0, 5440.0, 5420.0, 5620.0, 5699.0, 5555.0, 5650.0, 5290.0, 5305.0, 5281.0, 5702.0, 5544.0, 5607.0, 5291.0, 5724.0, 5608.0, 5520.0, 5372.0, 5384.0, 5424.0, 5268.0, 5615.0, 5307.0, 5322.0, 5398.0, 5553.0, 5568.0, 5337.0, 5422.0, 5439.0, 5622.0, 5476.0, 5524.0, 5566.0, 5282.0, 5484.0, 5251.0, 5559.0, 5285.0, 5446.0, 5295.0, 5272.0, 5552.0, 5676.0, 5300.0, 5451.0, 5252.0, 5501.0, 5461.0, 5491.0, 5397.0, 5602.0, 5685.0, 5352.0, 5314.0, 5634.0, 5263.0, 5658.0, 5494.0, 5506.0, 5713.0, 5541.0, 5704.0, 5627.0, 5334.0, 5575.0, 5438.0, 5478.0, 5560.0, 5672.0
5	5530	9	1	333	1	5414.0, 5646.0, 5270.0, 5368.0, 5449.0, 5317.0, 5439.0, 5371.0, 5465.0, 5558.0, 5699.0, 5333.0, 5702.0, 5494.0, 5609.0, 5502.0, 5540.0, 5592.0, 5374.0, 5504.0, 5415.0, 5585.0, 5509.0, 5426.0, 5498.0, 5682.0, 5419.0, 5538.0, 5301.0, 5607.0, 5331.0, 5425.0, 5259.0, 5462.0, 5346.0, 5515.0, 5263.0, 5613.0, 5544.0, 5411.0, 5356.0, 5338.0, 5353.0, 5511.0, 5461.0, 5341.0, 5383.0, 5438.0, 5362.0, 5555.0, 5382.0, 5640.0, 5523.0, 5723.0, 5574.0, 5281.0, 5329.0, 5445.0, 5625.0, 5721.0, 5545.0, 5332.0, 5561.0, 5372.0, 5681.0, 5624.0, 5524.0, 5546.0, 5455.0, 5269.0, 5619.0, 5295.0, 5572.0, 5434.0, 5720.0, 5616.0, 5559.0, 5608.0, 5400.0, 5277.0, 5348.0, 5695.0, 5665.0, 5433.0, 5675.0, 5722.0, 5615.0, 5714.0, 5547.0, 5340.0, 5548.0, 5560.0, 5397.0, 5308.0, 5399.0, 5582.0, 5264.0, 5543.0, 5490.0, 5649.0
6	5530	9	1	333	1	5681.0, 5473.0, 5542.0, 5289.0, 5529.0, 5499.0, 5416.0, 5662.0, 5520.0, 5489.0, 5575.0, 5631.0, 5490.0, 5469.0, 5525.0, 5671.0, 5707.0, 5682.0, 5653.0, 5606.0, 5590.0, 5543.0, 5452.0, 5430.0, 5512.0, 5256.0, 5678.0, 5548.0, 5581.0, 5380.0, 5362.0, 5482.0, 5483.0, 5622.0, 5407.0, 5667.0, 5322.0, 5372.0, 5566.0, 5616.0, 5536.0, 5432.0, 5570.0, 5640.0, 5394.0, 5454.0, 5684.0, 5349.0, 5317.0, 5306.0, 5302.0, 5676.0, 5468.0, 5330.0, 5292.0, 5328.0, 5488.0, 5589.0, 5533.0, 5324.0, 5479.0, 5332.0, 5532.0, 5295.0, 5586.0, 5628.0, 5515.0, 5321.0, 5683.0, 5721.0,

						5313.0, 5555.0, 5384.0, 5427.0, 5276.0, 5387.0, 5545.0, 5633.0, 5496.0, 5296.0, 5309.0, 5361.0, 5282.0, 5597.0, 5293.0, 5523.0, 5477.0, 5494.0, 5591.0, 5461.0, 5455.0, 5715.0, 5278.0, 5358.0, 5310.0, 5448.0, 5360.0, 5304.0, 5657.0, 5713.0
7	5530	9	1	333	1	5454.0, 5305.0, 5303.0, 5508.0, 5659.0, 5550.0, 5316.0, 5268.0, 5390.0, 5293.0, 5455.0, 5251.0, 5516.0, 5384.0, 5528.0, 5623.0, 5258.0, 5310.0, 5270.0, 5484.0, 5545.0, 5531.0, 5642.0, 5507.0, 5323.0, 5271.0, 5477.0, 5654.0, 5603.0, 5606.0, 5449.0, 5361.0, 5425.0, 5279.0, 5491.0, 5302.0, 5573.0, 5713.0, 5548.0, 5686.0, 5536.0, 5538.0, 5337.0, 5688.0, 5504.0, 5403.0, 5658.0, 5559.0, 5400.0, 5269.0, 5472.0, 5584.0, 5418.0, 5401.0, 5357.0, 5710.0, 5537.0, 5651.0, 5602.0, 5554.0, 5300.0, 5414.0, 5515.0, 5506.0, 5572.0, 5542.0, 5448.0, 5307.0, 5640.0, 5607.0, 5370.0, 5389.0, 5563.0, 5631.0, 5318.0, 5259.0, 5358.0, 5649.0, 5697.0, 5445.0, 5637.0, 5571.0, 5255.0, 5415.0, 5551.0, 5465.0, 5655.0, 5715.0, 5502.0, 5458.0, 5427.0, 5344.0, 5441.0, 5473.0, 5287.0, 5520.0, 5503.0, 5533.0, 5708.0, 5422.0
8	5530	9	1	333	1	5470.0, 5688.0, 5455.0, 5647.0, 5490.0, 5253.0, 5569.0, 5254.0, 5527.0, 5289.0, 5578.0, 5680.0, 5330.0, 5545.0, 5543.0, 5474.0, 5488.0, 5583.0, 5626.0, 5643.0, 5555.0, 5571.0, 5403.0, 5315.0, 5603.0, 5630.0, 5608.0, 5335.0, 5638.0, 5584.0, 5493.0, 5645.0, 5434.0, 5664.0, 5617.0, 5633.0, 5266.0, 5425.0, 5658.0, 5333.0, 5677.0, 5662.0, 5259.0, 5612.0, 5607.0, 5433.0, 5346.0, 5568.0, 5537.0, 5340.0, 5549.0, 5686.0, 5694.0, 5557.0, 5713.0, 5291.0, 5479.0, 5579.0, 5252.0, 5436.0, 5661.0, 5659.0, 5499.0, 5438.0, 5696.0, 5292.0, 5491.0, 5719.0, 5454.0, 5437.0, 5413.0, 5376.0, 5317.0, 5698.0, 5430.0, 5435.0, 5322.0, 5450.0, 5539.0, 5367.0, 5704.0, 5339.0, 5536.0, 5375.0, 5613.0, 5385.0, 5395.0, 5405.0, 5382.0, 5556.0, 5319.0, 5257.0, 5513.0, 5446.0, 5721.0, 5531.0, 5585.0, 5567.0, 5614.0, 5699.0
9	5530	9	1	333	1	5416.0, 5357.0, 5406.0, 5689.0, 5397.0, 5342.0, 5340.0, 5609.0, 5334.0, 5529.0, 5365.0, 5632.0, 5298.0, 5703.0, 5415.0, 5507.0, 5358.0, 5666.0, 5274.0, 5363.0, 5386.0, 5652.0, 5569.0, 5359.0, 5662.0, 5447.0, 5362.0, 5443.0, 5430.0, 5591.0, 5665.0, 5349.0, 5450.0, 5705.0, 5435.0, 5526.0, 5331.0, 5437.0, 5519.0, 5378.0, 5636.0, 5475.0, 5346.0, 5673.0, 5723.0, 5567.0, 5326.0, 5402.0, 5560.0, 5501.0, 5586.0, 5658.0, 5708.0, 5675.0, 5497.0, 5588.0, 5602.0, 5664.0, 5565.0, 5361.0, 5680.0, 5313.0, 5506.0, 5647.0, 5473.0, 5266.0, 5380.0, 5469.0, 5644.0, 5555.0,

						5642.0, 5553.0, 5369.0, 5338.0, 5367.0, 5330.0, 5577.0, 5328.0, 5623.0, 5677.0, 5409.0, 5685.0, 5614.0, 5387.0, 5499.0, 5707.0, 5579.0, 5312.0, 5371.0, 5392.0, 5611.0, 5457.0, 5721.0, 5273.0, 5429.0, 5633.0, 5646.0, 5500.0, 5432.0, 5521.0
10	5530	9	1	333	1	5366.0, 5458.0, 5371.0, 5623.0, 5520.0, 5307.0, 5715.0, 5714.0, 5441.0, 5524.0, 5282.0, 5351.0, 5577.0, 5600.0, 5387.0, 5595.0, 5570.0, 5678.0, 5347.0, 5706.0, 5326.0, 5626.0, 5373.0, 5541.0, 5576.0, 5292.0, 5571.0, 5408.0, 5508.0, 5608.0, 5491.0, 5260.0, 5251.0, 5647.0, 5446.0, 5331.0, 5464.0, 5290.0, 5320.0, 5279.0, 5267.0, 5268.0, 5345.0, 5328.0, 5631.0, 5695.0, 5591.0, 5672.0, 5397.0, 5484.0, 5265.0, 5632.0, 5592.0, 5510.0, 5327.0, 5486.0, 5538.0, 5283.0, 5540.0, 5377.0, 5263.0, 5473.0, 5340.0, 5499.0, 5334.0, 5349.0, 5586.0, 5512.0, 5255.0, 5675.0, 5627.0, 5433.0, 5304.0, 5721.0, 5478.0, 5601.0, 5566.0, 5300.0, 5359.0, 5321.0, 5466.0, 5398.0, 5598.0, 5535.0, 5306.0, 5614.0, 5490.0, 5269.0, 5253.0, 5687.0, 5374.0, 5301.0, 5367.0, 5720.0, 5438.0, 5447.0, 5456.0, 5333.0, 5324.0, 5392.0
11	5530	9	1	333	1	5724.0, 5513.0, 5443.0, 5268.0, 5260.0, 5438.0, 5524.0, 5469.0, 5351.0, 5373.0, 5622.0, 5459.0, 5514.0, 5422.0, 5548.0, 5425.0, 5367.0, 5575.0, 5360.0, 5635.0, 5369.0, 5296.0, 5421.0, 5496.0, 5319.0, 5326.0, 5382.0, 5383.0, 5694.0, 5337.0, 5445.0, 5375.0, 5612.0, 5540.0, 5593.0, 5521.0, 5457.0, 5672.0, 5357.0, 5545.0, 5284.0, 5335.0, 5413.0, 5637.0, 5493.0, 5274.0, 5423.0, 5303.0, 5295.0, 5435.0, 5502.0, 5571.0, 5542.0, 5345.0, 5662.0, 5628.0, 5551.0, 5358.0, 5537.0, 5282.0, 5591.0, 5561.0, 5523.0, 5681.0, 5552.0, 5527.0, 5462.0, 5643.0, 5667.0, 5313.0, 5640.0, 5353.0, 5691.0, 5304.0, 5528.0, 5499.0, 5317.0, 5715.0, 5320.0, 5404.0, 5322.0, 5621.0, 5441.0, 5504.0, 5302.0, 5390.0, 5666.0, 5480.0, 5309.0, 5647.0, 5389.0, 5388.0, 5601.0, 5534.0, 5707.0, 5385.0, 5570.0, 5315.0, 5442.0, 5693.0
12	5530	9	1	333	1	5486.0, 5375.0, 5608.0, 5326.0, 5271.0, 5312.0, 5275.0, 5379.0, 5368.0, 5569.0, 5488.0, 5410.0, 5413.0, 5535.0, 5343.0, 5266.0, 5263.0, 5372.0, 5404.0, 5634.0, 5642.0, 5462.0, 5458.0, 5564.0, 5530.0, 5519.0, 5533.0, 5393.0, 5636.0, 5587.0, 5665.0, 5294.0, 5342.0, 5595.0, 5531.0, 5699.0, 5711.0, 5252.0, 5660.0, 5493.0, 5627.0, 5433.0, 5436.0, 5613.0, 5521.0, 5412.0, 5552.0, 5623.0, 5548.0, 5440.0, 5321.0, 5296.0, 5357.0, 5643.0, 5336.0, 5528.0, 5602.0, 5513.0, 5576.0, 5338.0, 5501.0, 5255.0, 5619.0, 5325.0, 5459.0, 5518.0, 5511.0, 5293.0, 5664.0, 5441.0,

						5429.0, 5477.0, 5692.0, 5281.0, 5626.0, 5716.0, 5673.0, 5581.0, 5497.0, 5559.0, 5542.0, 5406.0, 5360.0, 5356.0, 5524.0, 5347.0, 5337.0, 5254.0, 5704.0, 5655.0, 5669.0, 5308.0, 5526.0, 5364.0, 5382.0, 5284.0, 5683.0, 5612.0, 5485.0, 5695.0
13	5530	9	1	333	1	5666.0, 5637.0, 5467.0, 5503.0, 5513.0, 5306.0, 5327.0, 5488.0, 5293.0, 5505.0, 5259.0, 5284.0, 5395.0, 5706.0, 5474.0, 5262.0, 5521.0, 5364.0, 5702.0, 5267.0, 5372.0, 5719.0, 5642.0, 5256.0, 5381.0, 5580.0, 5418.0, 5693.0, 5336.0, 5647.0, 5316.0, 5610.0, 5419.0, 5544.0, 5421.0, 5707.0, 5271.0, 5266.0, 5630.0, 5633.0, 5658.0, 5408.0, 5613.0, 5496.0, 5374.0, 5386.0, 5295.0, 5542.0, 5480.0, 5588.0, 5528.0, 5292.0, 5427.0, 5367.0, 5659.0, 5696.0, 5452.0, 5679.0, 5697.0, 5389.0, 5661.0, 5286.0, 5305.0, 5453.0, 5595.0, 5692.0, 5490.0, 5258.0, 5650.0, 5345.0, 5558.0, 5567.0, 5569.0, 5376.0, 5446.0, 5405.0, 5652.0, 5486.0, 5662.0, 5660.0, 5414.0, 5396.0, 5470.0, 5515.0, 5620.0, 5670.0, 5279.0, 5311.0, 5440.0, 5564.0, 5638.0, 5391.0, 5276.0, 5507.0, 5504.0, 5359.0, 5304.0, 5716.0, 5531.0, 5525.0
14	5530	9	1	333	1	5605.0, 5262.0, 5312.0, 5694.0, 5450.0, 5459.0, 5467.0, 5306.0, 5696.0, 5607.0, 5448.0, 5322.0, 5481.0, 5644.0, 5292.0, 5472.0, 5367.0, 5283.0, 5705.0, 5269.0, 5637.0, 5686.0, 5423.0, 5336.0, 5363.0, 5461.0, 5260.0, 5417.0, 5255.0, 5600.0, 5526.0, 5394.0, 5626.0, 5529.0, 5286.0, 5573.0, 5597.0, 5265.0, 5489.0, 5654.0, 5366.0, 5669.0, 5304.0, 5523.0, 5493.0, 5428.0, 5569.0, 5453.0, 5339.0, 5581.0, 5342.0, 5658.0, 5345.0, 5395.0, 5259.0, 5692.0, 5321.0, 5291.0, 5392.0, 5648.0, 5602.0, 5298.0, 5446.0, 5471.0, 5341.0, 5302.0, 5409.0, 5533.0, 5279.0, 5374.0, 5338.0, 5275.0, 5443.0, 5296.0, 5548.0, 5687.0, 5399.0, 5633.0, 5716.0, 5414.0, 5612.0, 5490.0, 5583.0, 5576.0, 5505.0, 5544.0, 5498.0, 5578.0, 5643.0, 5350.0, 5580.0, 5620.0, 5546.0, 5337.0, 5503.0, 5272.0, 5274.0, 5532.0, 5309.0, 5681.0
15	5530	9	1	333	1	5345.0, 5312.0, 5415.0, 5565.0, 5674.0, 5263.0, 5653.0, 5661.0, 5403.0, 5492.0, 5668.0, 5301.0, 5505.0, 5390.0, 5718.0, 5601.0, 5515.0, 5615.0, 5537.0, 5338.0, 5401.0, 5664.0, 5259.0, 5426.0, 5323.0, 5253.0, 5318.0, 5513.0, 5450.0, 5314.0, 5440.0, 5392.0, 5642.0, 5438.0, 5545.0, 5410.0, 5261.0, 5651.0, 5313.0, 5461.0, 5397.0, 5561.0, 5721.0, 5287.0, 5456.0, 5669.0, 5566.0, 5709.0, 5592.0, 5589.0, 5626.0, 5479.0, 5328.0, 5469.0, 5448.0, 5590.0, 5293.0, 5660.0, 5407.0, 5495.0, 5332.0, 5275.0, 5406.0, 5269.0, 5317.0, 5675.0, 5291.0, 5596.0, 5693.0, 5326.0,

						5500.0, 5335.0, 5254.0, 5451.0, 5381.0, 5518.0, 5387.0, 5399.0, 5569.0, 5491.0, 5576.0, 5639.0, 5431.0, 5283.0, 5449.0, 5588.0, 5485.0, 5586.0, 5671.0, 5316.0, 5520.0, 5539.0, 5514.0, 5699.0, 5329.0, 5408.0, 5549.0, 5619.0, 5379.0, 5256.0
16	5530	9	1	333	1	5430.0, 5569.0, 5272.0, 5327.0, 5390.0, 5679.0, 5396.0, 5398.0, 5625.0, 5424.0, 5601.0, 5586.0, 5357.0, 5572.0, 5402.0, 5455.0, 5395.0, 5607.0, 5686.0, 5674.0, 5389.0, 5319.0, 5435.0, 5338.0, 5563.0, 5465.0, 5386.0, 5710.0, 5576.0, 5265.0, 5570.0, 5646.0, 5258.0, 5408.0, 5500.0, 5636.0, 5606.0, 5499.0, 5699.0, 5525.0, 5336.0, 5260.0, 5293.0, 5401.0, 5515.0, 5252.0, 5414.0, 5354.0, 5271.0, 5341.0, 5593.0, 5549.0, 5615.0, 5439.0, 5630.0, 5609.0, 5358.0, 5373.0, 5278.0, 5538.0, 5262.0, 5723.0, 5368.0, 5562.0, 5536.0, 5497.0, 5639.0, 5287.0, 5256.0, 5557.0, 5662.0, 5673.0, 5458.0, 5635.0, 5668.0, 5434.0, 5537.0, 5608.0, 5463.0, 5299.0, 5259.0, 5431.0, 5621.0, 5266.0, 5416.0, 5627.0, 5582.0, 5520.0, 5645.0, 5587.0, 5689.0, 5330.0, 5352.0, 5505.0, 5349.0, 5486.0, 5510.0, 5540.0, 5695.0, 5422.0
17	5530	9	1	333	1	5259.0, 5325.0, 5516.0, 5571.0, 5450.0, 5646.0, 5716.0, 5552.0, 5482.0, 5427.0, 5409.0, 5532.0, 5593.0, 5582.0, 5679.0, 5504.0, 5433.0, 5639.0, 5470.0, 5652.0, 5489.0, 5683.0, 5605.0, 5394.0, 5474.0, 5687.0, 5257.0, 5647.0, 5553.0, 5517.0, 5546.0, 5305.0, 5691.0, 5560.0, 5360.0, 5709.0, 5364.0, 5720.0, 5428.0, 5354.0, 5358.0, 5303.0, 5292.0, 5711.0, 5382.0, 5481.0, 5707.0, 5513.0, 5447.0, 5713.0, 5442.0, 5689.0, 5487.0, 5393.0, 5643.0, 5493.0, 5438.0, 5396.0, 5395.0, 5579.0, 5522.0, 5284.0, 5534.0, 5483.0, 5630.0, 5601.0, 5556.0, 5561.0, 5318.0, 5668.0, 5441.0, 5359.0, 5594.0, 5543.0, 5537.0, 5274.0, 5710.0, 5701.0, 5518.0, 5501.0, 5638.0, 5338.0, 5477.0, 5252.0, 5490.0, 5616.0, 5632.0, 5627.0, 5600.0, 5466.0, 5451.0, 5609.0, 5576.0, 5585.0, 5452.0, 5619.0, 5629.0, 5294.0, 5312.0, 5503.0
18	5530	9	1	333	1	5280.0, 5678.0, 5569.0, 5254.0, 5567.0, 5503.0, 5472.0, 5599.0, 5490.0, 5535.0, 5461.0, 5339.0, 5547.0, 5297.0, 5342.0, 5378.0, 5377.0, 5435.0, 5373.0, 5658.0, 5400.0, 5671.0, 5537.0, 5454.0, 5579.0, 5519.0, 5387.0, 5424.0, 5635.0, 5385.0, 5683.0, 5393.0, 5334.0, 5600.0, 5291.0, 5275.0, 5329.0, 5629.0, 5611.0, 5528.0, 5724.0, 5417.0, 5702.0, 5347.0, 5304.0, 5492.0, 5287.0, 5450.0, 5548.0, 5305.0, 5560.0, 5260.0, 5514.0, 5413.0, 5322.0, 5500.0, 5356.0, 5681.0, 5392.0, 5574.0, 5425.0, 5320.0, 5689.0, 5552.0, 5639.0, 5341.0, 5389.0, 5515.0, 5540.0, 5618.0,

						5623.0, 5415.0, 5384.0, 5345.0, 5673.0, 5455.0, 5447.0, 5633.0, 5261.0, 5679.0, 5437.0, 5474.0, 5602.0, 5603.0, 5386.0, 5360.0, 5272.0, 5721.0, 5258.0, 5444.0, 5550.0, 5594.0, 5486.0, 5685.0, 5382.0, 5302.0, 5283.0, 5631.0, 5370.0, 5295.0
19	5530	9	1	333	1	5566.0, 5291.0, 5561.0, 5474.0, 5349.0, 5314.0, 5409.0, 5257.0, 5274.0, 5577.0, 5345.0, 5604.0, 5493.0, 5699.0, 5513.0, 5297.0, 5453.0, 5457.0, 5626.0, 5494.0, 5389.0, 5256.0, 5589.0, 5272.0, 5463.0, 5361.0, 5516.0, 5304.0, 5665.0, 5308.0, 5385.0, 5395.0, 5680.0, 5381.0, 5344.0, 5609.0, 5608.0, 5310.0, 5705.0, 5442.0, 5619.0, 5253.0, 5600.0, 5311.0, 5266.0, 5498.0, 5450.0, 5692.0, 5438.0, 5614.0, 5651.0, 5714.0, 5695.0, 5616.0, 5495.0, 5439.0, 5336.0, 5632.0, 5370.0, 5591.0, 5657.0, 5686.0, 5332.0, 5539.0, 5378.0, 5467.0, 5449.0, 5258.0, 5267.0, 5428.0, 5288.0, 5447.0, 5716.0, 5271.0, 5484.0, 5369.0, 5342.0, 5386.0, 5500.0, 5418.0, 5481.0, 5325.0, 5351.0, 5625.0, 5410.0, 5593.0, 5476.0, 5681.0, 5250.0, 5368.0, 5261.0, 5550.0, 5691.0, 5618.0, 5337.0, 5505.0, 5391.0, 5427.0, 5659.0, 5701.0
20	5530	9	1	333	1	5520.0, 5362.0, 5332.0, 5299.0, 5588.0, 5331.0, 5448.0, 5280.0, 5454.0, 5418.0, 5307.0, 5290.0, 5711.0, 5390.0, 5396.0, 5296.0, 5660.0, 5654.0, 5266.0, 5595.0, 5664.0, 5594.0, 5719.0, 5702.0, 5690.0, 5499.0, 5636.0, 5688.0, 5565.0, 5426.0, 5347.0, 5624.0, 5389.0, 5369.0, 5631.0, 5461.0, 5704.0, 5272.0, 5527.0, 5559.0, 5708.0, 5598.0, 5469.0, 5317.0, 5253.0, 5353.0, 5621.0, 5583.0, 5541.0, 5526.0, 5464.0, 5511.0, 5436.0, 5254.0, 5534.0, 5334.0, 5543.0, 5288.0, 5304.0, 5402.0, 5261.0, 5351.0, 5357.0, 5682.0, 5291.0, 5549.0, 5540.0, 5562.0, 5431.0, 5417.0, 5545.0, 5509.0, 5597.0, 5303.0, 5600.0, 5623.0, 5449.0, 5625.0, 5406.0, 5295.0, 5325.0, 5338.0, 5398.0, 5484.0, 5714.0, 5649.0, 5318.0, 5473.0, 5415.0, 5286.0, 5492.0, 5278.0, 5467.0, 5570.0, 5429.0, 5360.0, 5696.0, 5536.0, 5658.0, 5463.0
21	5530	9	1	333	1	5479.0, 5687.0, 5417.0, 5284.0, 5538.0, 5610.0, 5721.0, 5544.0, 5500.0, 5368.0, 5407.0, 5413.0, 5404.0, 5416.0, 5706.0, 5468.0, 5628.0, 5454.0, 5332.0, 5693.0, 5527.0, 5474.0, 5371.0, 5300.0, 5262.0, 5315.0, 5600.0, 5669.0, 5425.0, 5707.0, 5542.0, 5378.0, 5358.0, 5276.0, 5539.0, 5362.0, 5662.0, 5555.0, 5465.0, 5649.0, 5384.0, 5350.0, 5464.0, 5564.0, 5713.0, 5436.0, 5287.0, 5295.0, 5583.0, 5405.0, 5329.0, 5451.0, 5548.0, 5643.0, 5502.0, 5637.0, 5710.0, 5621.0, 5349.0, 5438.0, 5414.0, 5593.0, 5627.0, 5288.0, 5665.0, 5453.0, 5556.0, 5672.0, 5629.0, 5337.0,

						5439.0, 5488.0, 5363.0, 5397.0, 5636.0, 5587.0, 5575.0, 5406.0, 5604.0, 5312.0, 5580.0, 5576.0, 5536.0, 5326.0, 5701.0, 5528.0, 5510.0, 5321.0, 5709.0, 5513.0, 5271.0, 5674.0, 5494.0, 5639.0, 5449.0, 5273.0, 5471.0, 5655.0, 5705.0, 5259.0
22	5530	9	1	333	1	5675.0, 5681.0, 5310.0, 5565.0, 5485.0, 5667.0, 5261.0, 5300.0, 5608.0, 5327.0, 5642.0, 5447.0, 5563.0, 5362.0, 5596.0, 5513.0, 5487.0, 5256.0, 5460.0, 5448.0, 5556.0, 5282.0, 5540.0, 5495.0, 5477.0, 5573.0, 5536.0, 5566.0, 5446.0, 5632.0, 5600.0, 5543.0, 5267.0, 5562.0, 5613.0, 5560.0, 5259.0, 5595.0, 5337.0, 5352.0, 5404.0, 5672.0, 5712.0, 5696.0, 5421.0, 5297.0, 5589.0, 5703.0, 5396.0, 5628.0, 5397.0, 5569.0, 5355.0, 5692.0, 5652.0, 5401.0, 5699.0, 5533.0, 5371.0, 5587.0, 5643.0, 5307.0, 5411.0, 5640.0, 5627.0, 5445.0, 5375.0, 5429.0, 5641.0, 5435.0, 5663.0, 5620.0, 5420.0, 5592.0, 5481.0, 5531.0, 5478.0, 5262.0, 5527.0, 5480.0, 5309.0, 5393.0, 5328.0, 5557.0, 5503.0, 5607.0, 5354.0, 5559.0, 5276.0, 5253.0, 5676.0, 5444.0, 5622.0, 5488.0, 5343.0, 5489.0, 5290.0, 5395.0, 5341.0, 5369.0
23	5530	9	1	333	1	5498.0, 5516.0, 5254.0, 5632.0, 5625.0, 5462.0, 5288.0, 5552.0, 5493.0, 5302.0, 5503.0, 5671.0, 5491.0, 5336.0, 5366.0, 5344.0, 5428.0, 5296.0, 5393.0, 5419.0, 5450.0, 5497.0, 5504.0, 5492.0, 5581.0, 5634.0, 5611.0, 5355.0, 5601.0, 5326.0, 5262.0, 5650.0, 5619.0, 5595.0, 5715.0, 5710.0, 5693.0, 5526.0, 5384.0, 5663.0, 5554.0, 5679.0, 5378.0, 5675.0, 5354.0, 5342.0, 5417.0, 5285.0, 5551.0, 5539.0, 5346.0, 5646.0, 5580.0, 5453.0, 5649.0, 5260.0, 5398.0, 5329.0, 5667.0, 5644.0, 5385.0, 5386.0, 5431.0, 5593.0, 5623.0, 5700.0, 5434.0, 5318.0, 5505.0, 5394.0, 5290.0, 5308.0, 5261.0, 5465.0, 5388.0, 5508.0, 5692.0, 5321.0, 5523.0, 5654.0, 5704.0, 5274.0, 5446.0, 5439.0, 5672.0, 5391.0, 5362.0, 5648.0, 5371.0, 5389.0, 5544.0, 5699.0, 5532.0, 5518.0, 5343.0, 5622.0, 5702.0, 5297.0, 5479.0, 5267.0
24	5530	9	1	333	1	5596.0, 5460.0, 5690.0, 5477.0, 5272.0, 5632.0, 5374.0, 5289.0, 5538.0, 5419.0, 5445.0, 5580.0, 5585.0, 5432.0, 5611.0, 5615.0, 5437.0, 5527.0, 5321.0, 5456.0, 5370.0, 5612.0, 5511.0, 5659.0, 5553.0, 5416.0, 5251.0, 5554.0, 5634.0, 5273.0, 5687.0, 5325.0, 5698.0, 5598.0, 5704.0, 5397.0, 5548.0, 5681.0, 5560.0, 5500.0, 5481.0, 5262.0, 5568.0, 5408.0, 5618.0, 5523.0, 5265.0, 5716.0, 5703.0, 5426.0, 5372.0, 5255.0, 5390.0, 5424.0, 5335.0, 5311.0, 5513.0, 5688.0, 5380.0, 5707.0, 5658.0, 5303.0, 5610.0, 5322.0, 5724.0, 5602.0, 5676.0, 5361.0, 5457.0, 5487.0,

						5633.0, 5474.0, 5528.0, 5718.0, 5539.0, 5696.0, 5486.0, 5286.0, 5720.0, 5371.0, 5657.0, 5310.0, 5652.0, 5536.0, 5497.0, 5316.0, 5535.0, 5699.0, 5532.0, 5309.0, 5290.0, 5420.0, 5410.0, 5270.0, 5271.0, 5278.0, 5334.0, 5375.0, 5501.0, 5717.0
25	5530	9	1	333	1	5325.0, 5535.0, 5278.0, 5457.0, 5610.0, 5450.0, 5432.0, 5599.0, 5595.0, 5368.0, 5304.0, 5497.0, 5401.0, 5719.0, 5316.0, 5279.0, 5413.0, 5620.0, 5533.0, 5657.0, 5287.0, 5323.0, 5604.0, 5434.0, 5540.0, 5615.0, 5547.0, 5630.0, 5309.0, 5503.0, 5408.0, 5656.0, 5564.0, 5587.0, 5708.0, 5378.0, 5449.0, 5500.0, 5538.0, 5268.0, 5518.0, 5647.0, 5652.0, 5343.0, 5594.0, 5589.0, 5448.0, 5612.0, 5642.0, 5678.0, 5374.0, 5569.0, 5490.0, 5716.0, 5554.0, 5665.0, 5435.0, 5468.0, 5631.0, 5617.0, 5611.0, 5565.0, 5600.0, 5315.0, 5329.0, 5525.0, 5676.0, 5297.0, 5495.0, 5372.0, 5534.0, 5364.0, 5308.0, 5328.0, 5299.0, 5541.0, 5414.0, 5513.0, 5549.0, 5555.0, 5445.0, 5548.0, 5407.0, 5381.0, 5521.0, 5419.0, 5603.0, 5253.0, 5671.0, 5486.0, 5669.0, 5367.0, 5575.0, 5662.0, 5622.0, 5265.0, 5559.0, 5264.0, 5623.0, 5273.0
26	5530	9	1	333	1	5260.0, 5409.0, 5300.0, 5398.0, 5406.0, 5484.0, 5437.0, 5377.0, 5718.0, 5392.0, 5455.0, 5261.0, 5446.0, 5496.0, 5699.0, 5681.0, 5597.0, 5304.0, 5457.0, 5404.0, 5434.0, 5333.0, 5334.0, 5487.0, 5323.0, 5537.0, 5711.0, 5589.0, 5654.0, 5679.0, 5645.0, 5342.0, 5540.0, 5721.0, 5507.0, 5649.0, 5443.0, 5280.0, 5617.0, 5254.0, 5265.0, 5466.0, 5312.0, 5717.0, 5350.0, 5620.0, 5588.0, 5544.0, 5296.0, 5698.0, 5660.0, 5490.0, 5327.0, 5639.0, 5427.0, 5636.0, 5472.0, 5381.0, 5703.0, 5483.0, 5338.0, 5499.0, 5407.0, 5399.0, 5691.0, 5656.0, 5396.0, 5336.0, 5310.0, 5503.0, 5328.0, 5277.0, 5414.0, 5647.0, 5388.0, 5638.0, 5583.0, 5386.0, 5641.0, 5609.0, 5536.0, 5272.0, 5693.0, 5478.0, 5652.0, 5539.0, 5433.0, 5689.0, 5351.0, 5429.0, 5293.0, 5632.0, 5273.0, 5276.0, 5251.0, 5255.0, 5643.0, 5685.0, 5444.0, 5275.0
27	5530	9	1	333	1	5601.0, 5501.0, 5322.0, 5630.0, 5644.0, 5667.0, 5319.0, 5646.0, 5538.0, 5374.0, 5276.0, 5405.0, 5610.0, 5316.0, 5283.0, 5446.0, 5682.0, 5378.0, 5545.0, 5360.0, 5656.0, 5400.0, 5513.0, 5455.0, 5306.0, 5351.0, 5408.0, 5690.0, 5451.0, 5548.0, 5583.0, 5676.0, 5259.0, 5613.0, 5575.0, 5272.0, 5295.0, 5489.0, 5403.0, 5605.0, 5383.0, 5530.0, 5344.0, 5487.0, 5341.0, 5684.0, 5476.0, 5614.0, 5703.0, 5604.0, 5559.0, 5349.0, 5398.0, 5469.0, 5578.0, 5566.0, 5370.0, 5502.0, 5317.0, 5650.0, 5401.0, 5318.0, 5459.0, 5518.0, 5706.0, 5554.0, 5326.0, 5359.0, 5534.0, 5712.0,

						5465.0, 5397.0, 5511.0, 5633.0, 5636.0, 5643.0, 5616.0, 5687.0, 5619.0, 5311.0, 5479.0, 5329.0, 5381.0, 5282.0, 5507.0, 5413.0, 5443.0, 5543.0, 5364.0, 5645.0, 5409.0, 5456.0, 5655.0, 5384.0, 5520.0, 5715.0, 5609.0, 5612.0, 5521.0, 5632.0
28	5530	9	1	333	1	5596.0, 5536.0, 5546.0, 5492.0, 5524.0, 5424.0, 5344.0, 5326.0, 5253.0, 5422.0, 5346.0, 5515.0, 5451.0, 5320.0, 5363.0, 5711.0, 5582.0, 5261.0, 5280.0, 5257.0, 5562.0, 5405.0, 5575.0, 5302.0, 5501.0, 5354.0, 5480.0, 5483.0, 5576.0, 5278.0, 5299.0, 5252.0, 5690.0, 5592.0, 5335.0, 5688.0, 5389.0, 5567.0, 5327.0, 5413.0, 5703.0, 5282.0, 5474.0, 5377.0, 5428.0, 5571.0, 5584.0, 5482.0, 5478.0, 5417.0, 5612.0, 5435.0, 5652.0, 5469.0, 5512.0, 5720.0, 5267.0, 5706.0, 5415.0, 5704.0, 5357.0, 5324.0, 5397.0, 5650.0, 5328.0, 5391.0, 5672.0, 5457.0, 5433.0, 5293.0, 5396.0, 5683.0, 5491.0, 5661.0, 5580.0, 5611.0, 5537.0, 5724.0, 5306.0, 5633.0, 5321.0, 5270.0, 5382.0, 5625.0, 5617.0, 5317.0, 5615.0, 5371.0, 5295.0, 5331.0, 5714.0, 5628.0, 5675.0, 5263.0, 5339.0, 5638.0, 5350.0, 5499.0, 5539.0, 5654.0
29	5530	9	1	333	1	5650.0, 5389.0, 5586.0, 5665.0, 5276.0, 5618.0, 5643.0, 5296.0, 5720.0, 5377.0, 5458.0, 5432.0, 5516.0, 5459.0, 5500.0, 5700.0, 5519.0, 5563.0, 5337.0, 5571.0, 5564.0, 5323.0, 5498.0, 5365.0, 5330.0, 5285.0, 5508.0, 5624.0, 5515.0, 5412.0, 5461.0, 5682.0, 5533.0, 5647.0, 5435.0, 5549.0, 5503.0, 5513.0, 5657.0, 5486.0, 5346.0, 5622.0, 5269.0, 5667.0, 5424.0, 5364.0, 5324.0, 5301.0, 5683.0, 5506.0, 5658.0, 5543.0, 5473.0, 5354.0, 5387.0, 5690.0, 5327.0, 5416.0, 5652.0, 5316.0, 5430.0, 5406.0, 5462.0, 5640.0, 5492.0, 5264.0, 5485.0, 5709.0, 5714.0, 5553.0, 5573.0, 5344.0, 5478.0, 5649.0, 5374.0, 5663.0, 5414.0, 5596.0, 5555.0, 5469.0, 5371.0, 5259.0, 5317.0, 5300.0, 5294.0, 5279.0, 5292.0, 5410.0, 5502.0, 5429.0, 5603.0, 5676.0, 5297.0, 5381.0, 5591.0, 5620.0, 5698.0, 5293.0, 5612.0, 5384.0
30	5530	9	1	333	1	5372.0, 5362.0, 5281.0, 5345.0, 5668.0, 5265.0, 5490.0, 5417.0, 5493.0, 5548.0, 5706.0, 5448.0, 5506.0, 5273.0, 5542.0, 5305.0, 5269.0, 5679.0, 5354.0, 5661.0, 5313.0, 5649.0, 5697.0, 5295.0, 5628.0, 5367.0, 5481.0, 5381.0, 5684.0, 5404.0, 5387.0, 5375.0, 5344.0, 5653.0, 5592.0, 5321.0, 5644.0, 5526.0, 5579.0, 5552.0, 5610.0, 5412.0, 5371.0, 5613.0, 5292.0, 5648.0, 5571.0, 5670.0, 5658.0, 5334.0, 5432.0, 5540.0, 5570.0, 5664.0, 5380.0, 5704.0, 5621.0, 5588.0, 5286.0, 5563.0, 5484.0, 5674.0, 5501.0, 5660.0, 5672.0, 5497.0, 5546.0, 5422.0, 5298.0, 5309.0,

						5678.0, 5285.0, 5488.0, 5513.0, 5723.0, 5287.0, 5368.0, 5395.0, 5348.0, 5271.0, 5251.0, 5652.0, 5597.0, 5291.0, 5446.0, 5324.0, 5440.0, 5641.0, 5638.0, 5378.0, 5302.0, 5394.0, 5533.0, 5413.0, 5690.0, 5320.0, 5722.0, 5627.0, 5390.0, 5655.0

BRIDGE AND/OR MESH MODE

Test Standard:

Networks Access Points with Bridge and/or MESH modes of operation are permitted to operate in the DFS bands but must employ a DFS function. The functionality of the Bridge mode as specified in §15.403(a) must be validated in the DFS test report. Devices operating as relays where they act as master and client must also employ DFS function for the master. The method used to validate the functionality must be documented and validation data must be documented. Bridge mode can be validated by performing a test statistical performance check (Section 7.8.4) on any one of the radar types. This is an abbreviated test to verify DFS functionality. MESH mode operational methodology must be submitted in the application for certification for evaluation by the FCC.

Test Result:

Test Mode: Bridge

Compliance, please refer the the below data.

Radar Type 3 Statistical Performance(Worst case)

Trial #	Fc (MHz)	Pulse/Burst	Pulse Width (µS)	PRI (µs)	Detection (1:yes; 0:no)
1	5500	16	8.6	302	1
2	5500	16	9.1	433	1
3	5500	18	8.5	214	1
4	5500	18	7.2	396	1
5	5500	18	8.0	478	1
6	5500	16	6.5	363	1
7	5500	18	9.5	339	1
8	5500	17	8.3	291	1
9	5500	18	9.6	480	1
10	5500	18	6.9	217	1
11	5500	18	8.0	307	1
12	5500	17	9.4	268	1
13	5500	16	6.1	304	1
14	5500	17	6.2	368	1
15	5500	16	8.3	350	1
16	5500	17	8.5	419	1
17	5500	18	7.8	240	1
18	5500	16	7.1	454	1
19	5500	16	9.9	410	1
20	5500	16	6.1	369	1
21	5500	18	9.4	204	1
22	5500	16	7.4	345	1
23	5500	16	7.6	301	1
24	5500	18	8.7	424	1
25	5500	17	8.8	233	1
26	5500	16	8.1	378	1
27	5500	16	7.6	201	1
28	5500	16	6.3	417	1
29	5500	16	8.1	489	1
30	5500	16	8.3	495	1
Detection Percentage: 100 % (>60%)					

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