



FCC DFS Test Report

Equipment : PMP450i/PTP450i
Brand Name : Cambium Networks
Model No. : C050045A015A/C050045B015A
FCC ID : QWP-50450I
Standard : 47 CFR FCC Part 15.407
Frequency Range : 5250 MHz – 5350 MHz
5470 MHz – 5725 MHz
Applicant : Cambium Networks Inc.
3800 Golf Road, Suite 360 Rolling Meadows, IL 60008,
USA
Operate Mode : Master and Client without radar detection

The product sample received on Nov. 28, 2016 and completely tested on Dec. 07, 2016. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.


Sam Chen
SPORTON INTERNATIONAL INC.





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Summary of Test Result

Conformance Test Specifications				
Report Clause	Ref. Std. Clause	Description	Limit	Result
3.3	FCC KDB 905462 7.8.1	DFS: UNII Detection Bandwidth Measurement	100% of the 99% BW	Complied
3.4	FCC KDB 905462 7.8.2.1	DFS: Initial Channel Availability Check Time	CAC ≥ 60 sec	Complied
3.4	FCC KDB 905462 7.8.2.2	DFS: Radar Burst at the Beginning of the Channel Availability Check Time	Detection Threshold: -53 dBm	Complied
3.4	FCC KDB 905462 7.8.2.3	DFS: Radar Burst at the End of the Channel Availability Check Time	Detection Threshold: -53 dBm	Complied
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Channel Move Time (CMT)	CMT ≤ 10sec	Complied
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Channel Closing Transmission Time (CCTT)	CCTT ≤ 60 ms starting at CMT 200ms	Complied
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Non-Occupancy Period (NOP)	NOP ≥ 30 min	Complied
3.6	FCC KDB 905462 7.8.4	DFS: Statistical Performance Check	Table 5 - 7 (KDB 905462)	Complied
3.1.4	FCC KDB 905462 8.1	User Access Restrictions	DFS controls	Complied



1 General Description

1.1 Information

1.1.1 RF General Information

Specification Items	Description
Product Type	WLAN (2TX, 2RX)
Radio Type	Intentional Transceiver
Power Type	From PoE
Modulation	OFDM
Channel Bandwidth	30/40 MHz operating channel bandwidth
Operating Mode	<input checked="" type="checkbox"/> Master
	<input type="checkbox"/> Client with radar detection
	<input checked="" type="checkbox"/> Client without radar detection
Communication Mode	<input type="checkbox"/> IP Based (Load Based) <input checked="" type="checkbox"/> Frame Based
Weather Band (5600~5650MHz)	<input checked="" type="checkbox"/> With 5600~5650MHz <input type="checkbox"/> Without 5600~5650MHz
Power-on cycle	<p>For Master test mode: 40MHz: Requires 61.792 seconds to complete its power-on cycle.</p> <p>For Client without radar detection test mode: NA (No Channel Availability Check Function)</p>
Software / Firmware Version	CANOPY 15.1(Build PAVEL_161110c) AP-None

1.1.2 Antenna Information

Ant.	Brand	P/N	Gain (dBi)
1	Laird	85009324001	17
2	Laird	85009324001	17

Note: The EUT has two antennas. (2TX/2RX)

1.1.3 Table for Multiple Listing

The equipment /model names in the following table are all refer to the identical product.

Brand Name	Equipment Name	Model Name	Description
Cambium Networks	PMP450i	C050045A015A	All the models are identical, the difference model for as marketing strategy.
	PTP450i	C050045B015A	



1.2 Accessories

N/A

1.3 Support Equipment

For Master test mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	DoC
2	Notebook	DELL	E4300	DoC
3	Device	Cambium	C050045B015A	QWP-50450I

For Client without radar detection test mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	DoC
2	Notebook	DELL	E4300	DoC
3	Device	Cambium	C050045A015A	QWP-50450I

1.4 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

1.5 Testing Location Information

Testing Location					
<input type="checkbox"/>	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-327-0973			
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085			
Test Condition	Test Site No.	Test Engineer	Test Mode	Test Environment	Test Date
DFS Site	DF01-CB	Jeff Wu	Master	20.6°C / 58%	Nov-28-16 ~ Dec.07-16
			Client without radar detection	25.4°C / 51%	

Test site Designation No. TW0006 with FCC

Test site registered number IC 4086D with Industry Canada.

2 Test Configuration of EUT

2.1 Test Channel Frequencies Configuration

Test Channel Frequencies Configuration	
IEEE Std.	Test Channel Freq. (MHz)
OFDM (30MHz)	5550 MHz
OFDM (40MHz)	5550 MHz

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	Dynamic Frequency Selection (DFS)
Test Condition	Conducted measurement at transmit chains The EUT shall be configured to operate at the highest transmitter output power setting. If more than one antenna assembly is intended for this power setting, the gain of the antenna assembly with the lowest gain shall be used.
Modulation Mode	OFDM (30MHz), OFDM (40MHz)

Note: All the specification of DFS test was based on customer's request.



3 Dynamic Frequency Selection (DFS) Test Result

3.1 General DFS Information

3.1.1 DFS Parameters

Table D.1: DFS requirement values	
Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds (Note 1).
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second periods. (Notes 1 and 2).
U-NII Detection Bandwidth	Minimum 100% of the 99% power bandwidth (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 Channel changes (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 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.

Table D.2: Interference threshold values	
Maximum Transmit Power	Value (see note)
EIRP ≥ 200 mW	-64 dBm
EIRP < 200 mW and PSD < 10dBm/MHz	-62 dBm
EIRP < 200 mW and PSD ≥ 10dBm/MHz	-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 662911D01.



3.1.2 Applicability of DFS Requirements Prior to Use of a Channel

Requirement	DFS Operational mode		
	Master	Client without radar detection	Client with radar detection
<i>Non-Occupancy Period</i>	Yes	Not required	Yes
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Availability Check Time</i>	Yes	Not required	Not required
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

3.1.3 Applicability of DFS Requirements during Normal Operation

Requirement	DFS Operational mode		
	Master	Client without radar detection	Client with radar detection
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Closing Transmission Time</i>	Yes	Yes	Yes
<i>Channel Move Time</i>	Yes	Yes	Yes
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

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.



3.1.4 User Access Restrictions

User Access Restrictions	
<input checked="" type="checkbox"/>	DFS controls (hardware or software) related to radar detection are NOT accessible to the user. Manufacturer statement confirming that information regarding the parameters of the detected Radar Waveforms is not available to the end user.

3.1.5 Channel Loading/Data Streaming

<input type="checkbox"/>	The data file (MPEG-4) has been transmitting in a streaming mode.
<input checked="" type="checkbox"/>	Software to ping the client is permitted to simulate data transfer with random ping intervals.
<input checked="" type="checkbox"/>	Minimum channel loading of approximately 17%.
<input type="checkbox"/>	Unicast protocol has been used.



3.2 Radar Test Waveform Calibration

3.2.1 Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Trials
0	1	1428	18	See Note 1	See Note 1
1A	1	15 unique PRI in KDB 905462 D02 Table 5a	$\text{Roundup}\left\{\left(\frac{1}{360}\right) \times \left(\frac{19 \times 10^6}{PRI}\right)\right\}$	60%	15
1B	1	15 unique PRI within 518-3066, Excluding 1A PRI		60%	15
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 1 through 4. If more than 30 waveforms are used for short pulse radar types 1 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. The aggregate is the average of the percentage of successful detections of short pulse radar types 1-4.

3.2.2 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 Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Each waveform is defined as follows:

- ♦ The transmission period for the Long Pulse Radar test signal is 12 seconds.
- ♦ There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst Count.
- ♦ Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each Burst within the 12 second sequence may have a different number of pulses.
- ♦ The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a Burst will have the same pulse width. Pulses in different Bursts may have different pulse widths.
- ♦ Each pulse has a linear FM chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a transmission period will have the same chirp width. The chirp is centered on the pulse. For example, with a radar frequency of 5300 MHz and a 20 MHz chirped signal, the chirp starts at 5290 MHz and ends at 5310 MHz.
- ♦ If more than one pulse is present in a Burst, the time between the pulses will be between 1000 and 2000 microseconds, with the time being randomly chosen. If three pulses are present in a Burst, the time

between the first and second pulses is chosen independently of the time between the second and third pulses.

- The 12 second transmission period is divided into even intervals. The number of intervals is equal to Burst Count. Each interval is of length $(12,000,000 / \text{Burst Count})$ microseconds. Each interval contains one Burst. The start time for the Burst, relative to the beginning of the interval, is between 1 and $[(12,000,000 / \text{Burst Count}) - (\text{Total Burst Length}) + (\text{One Random PRI Interval})]$ microseconds, with the start time being randomly chosen. The step interval for the start time is 1 microsecond. The start time for each Burst is chosen independently.

3.2.3 Frequency Hopping Radar Test Waveform

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

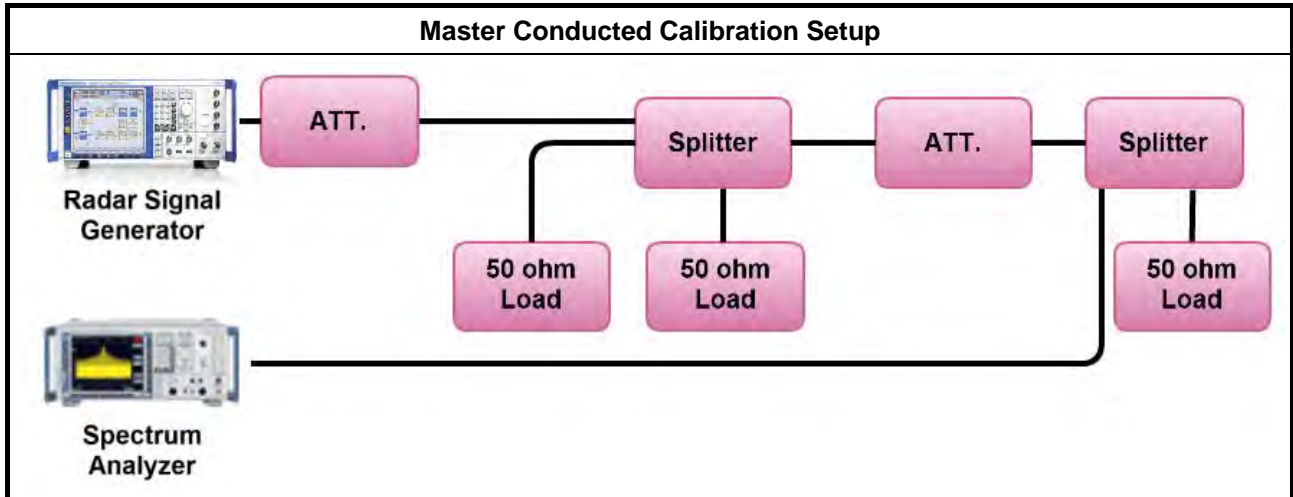
The FCC Type 6 waveform uses a static waveform with 100 bursts in the instruments ARB. In addition, the RF list mode is operated with a list containing 100 frequencies from a randomly generated list and it had be ensured that at least one of the random frequencies falls into the UNII Detection Bandwidth of the DUT. Each burst from the waveform file initiates a trigger pulse at the beginning that switches the RF list from one item to the next one.

3.2.4 DFS Threshold Level

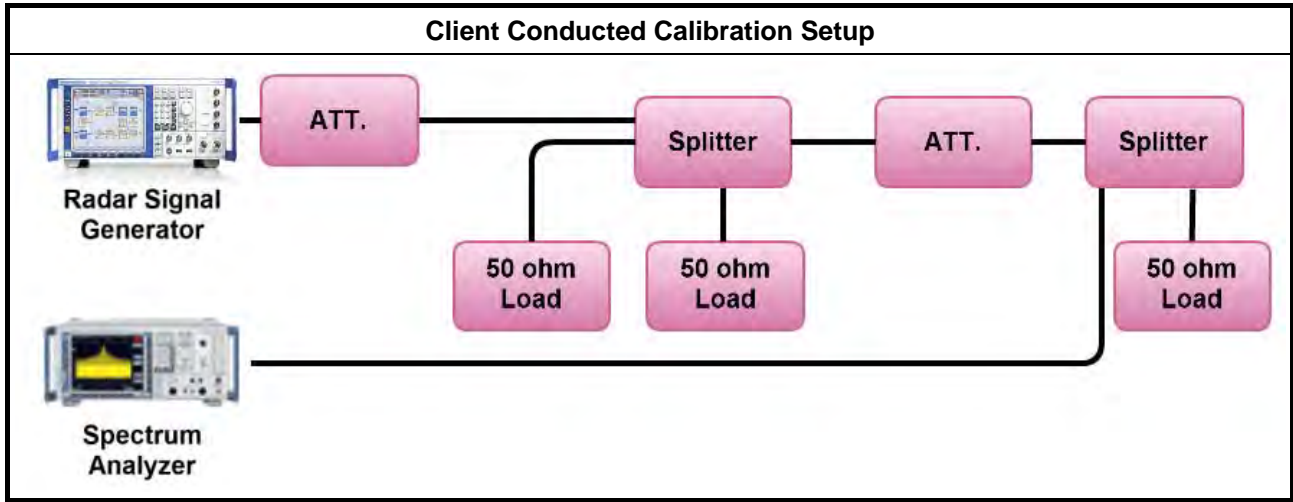
DFS Threshold Level	
DFS Threshold level: -53 dBm	<input checked="" type="checkbox"/> at the antenna connector
	<input type="checkbox"/> in front of the antenna
The Interference Radar Detection Threshold Level is is $-64 \text{ dBm} + 17 [\text{dBi}] + 1 \text{ dB} = -53 \text{ dBm}$. That had been taken into account the output power range and antenna gain.	

3.2.5 Calibration Setup

For Master test mode:



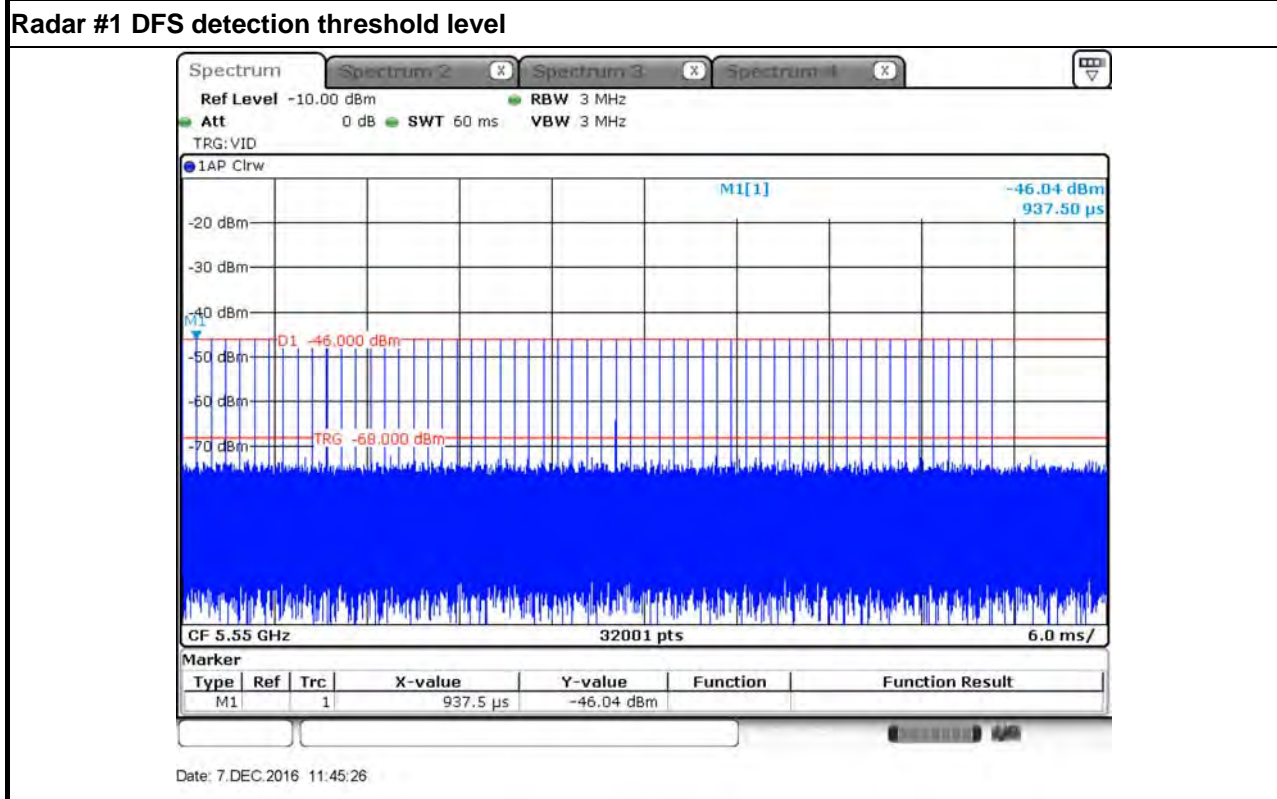
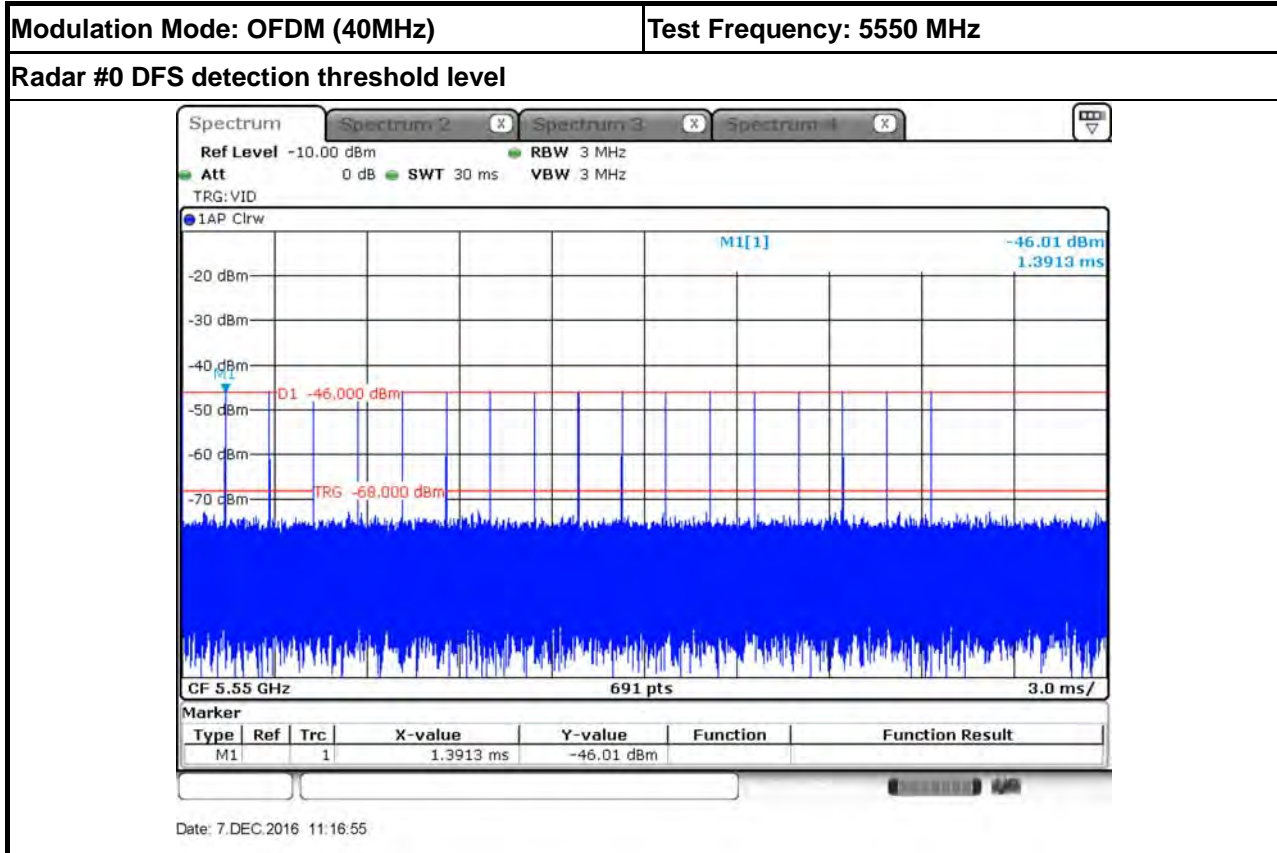
For Client without radar detection test mode:





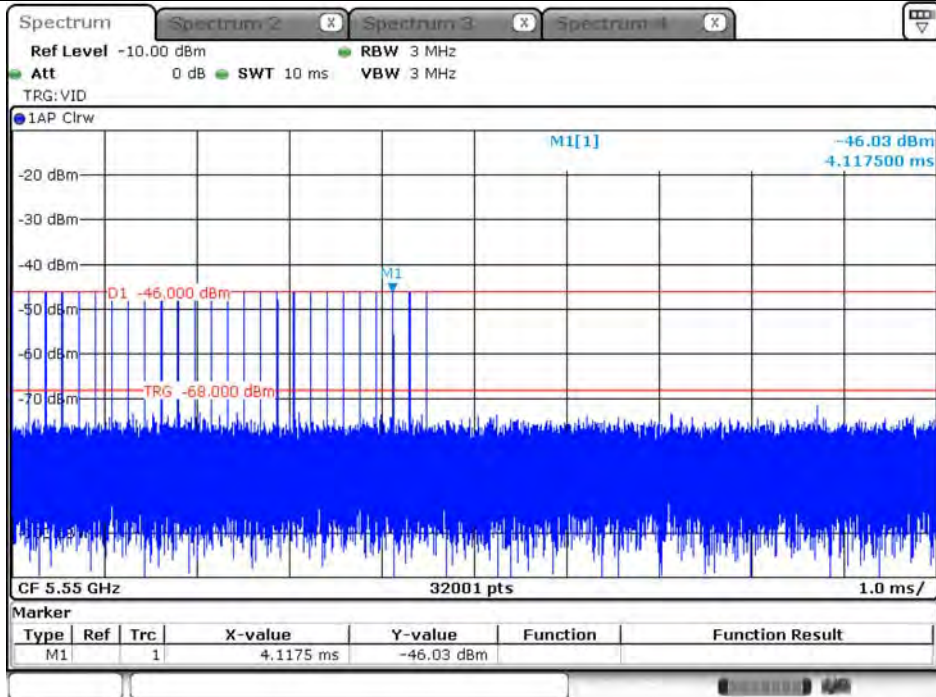
3.2.6 Radar Waveform calibration Plot

For Master test mode:



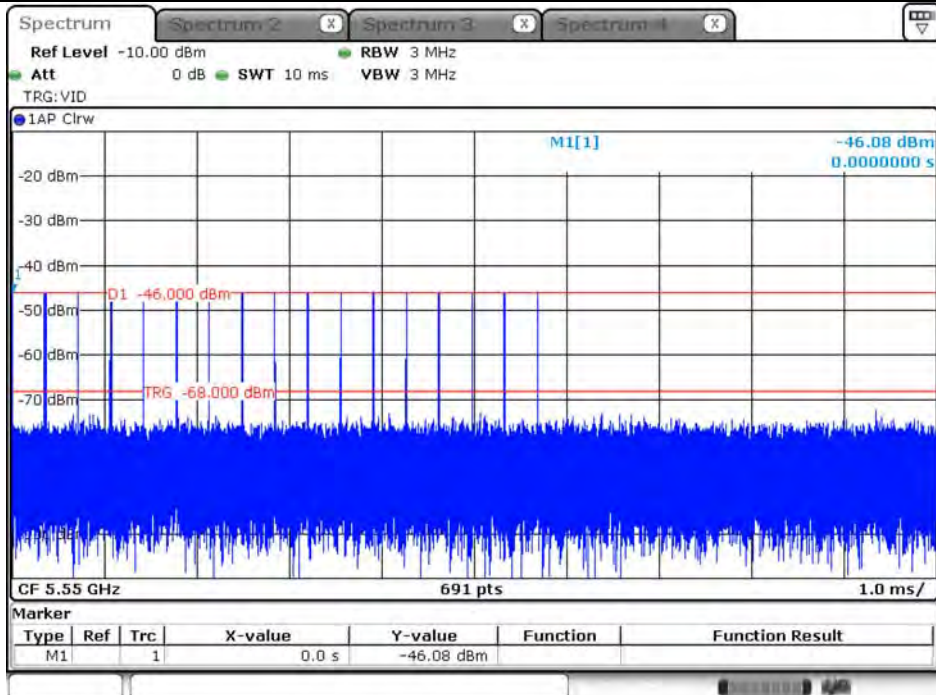


Radar #2 DFS detection threshold level



Date: 7.DEC.2016 11:44:40

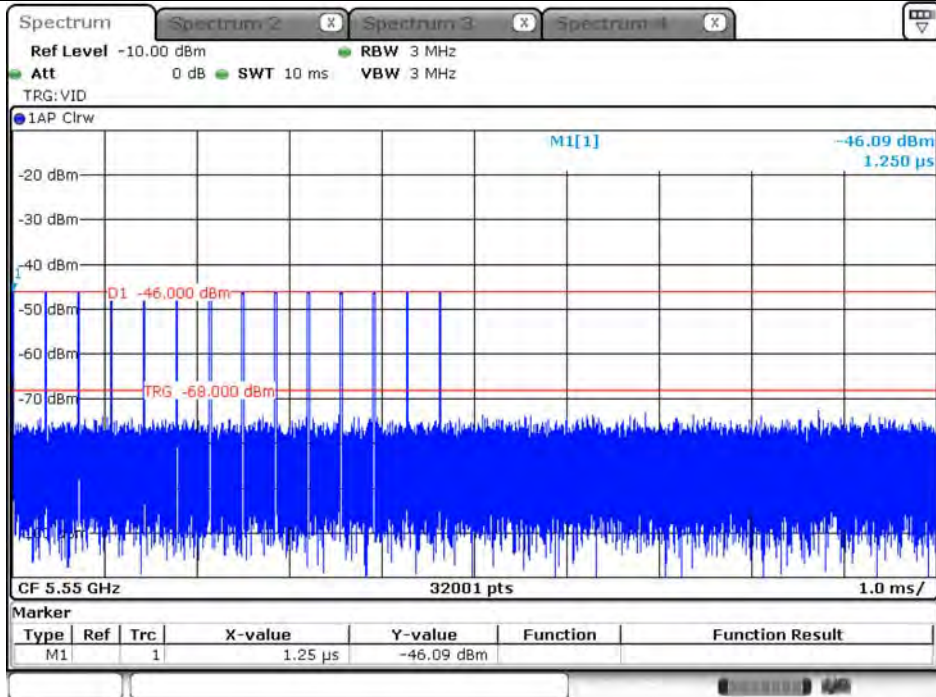
Radar #3 DFS detection threshold level



Date: 7.DEC.2016 11:20:21

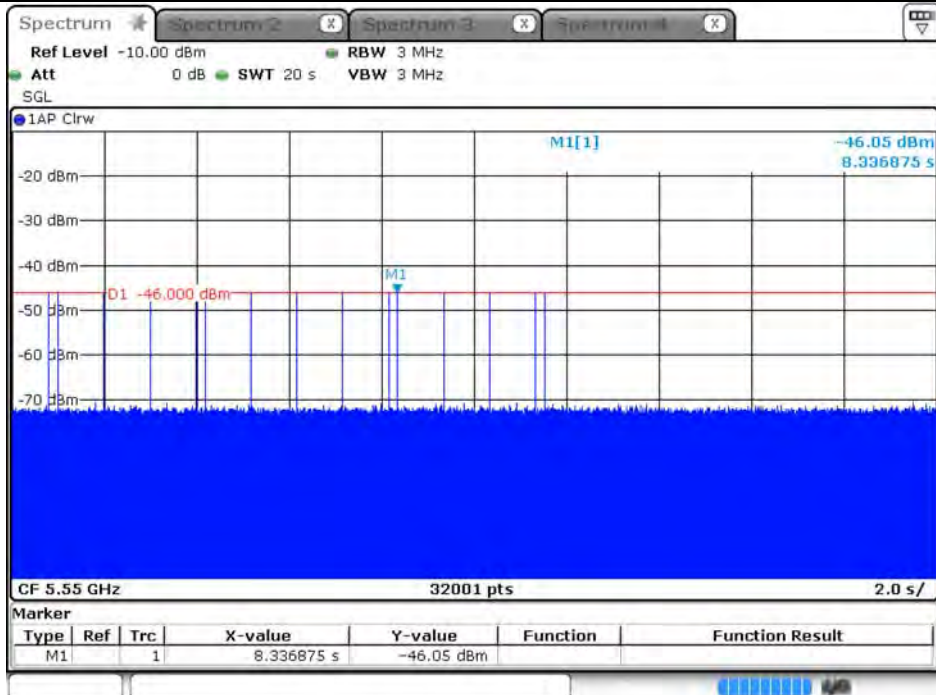


Radar #4 DFS detection threshold level



Date: 7.DEC.2016 11:46:08

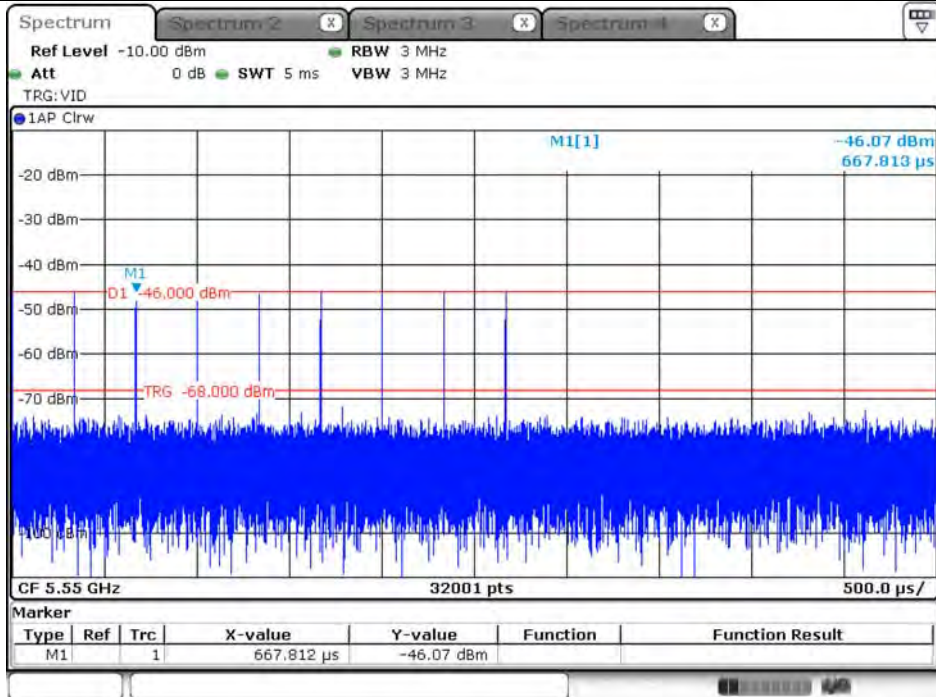
Radar #5 DFS detection threshold level



Date: 7.DEC.2016 11:47:50



Radar #6 DFS detection threshold level



Date: 7.DEC.2016 11:51:13



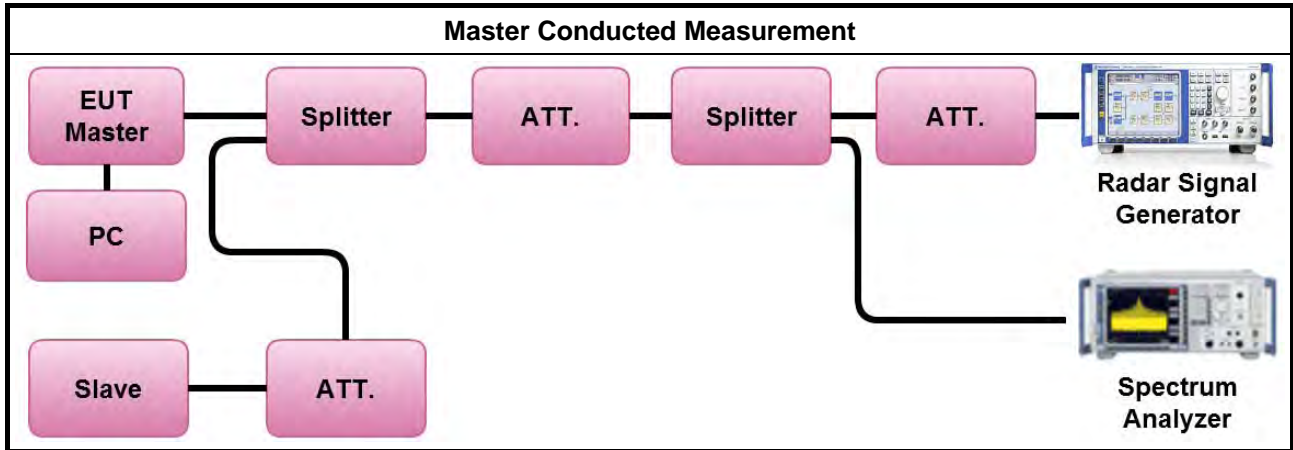
For Client without radar detection test mode:

Modulation Mode: OFDM (40MHz)	Test Frequency: 5550 MHz														
Radar #0 DFS detection threshold level															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>5.6957 ms</td> <td>-63.05 dBm</td> <td></td> <td></td> </tr> </tbody> </table>		Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	5.6957 ms	-63.05 dBm		
Type	Ref	Trc	X-value	Y-value	Function	Function Result									
M1		1	5.6957 ms	-63.05 dBm											
Date: 30.NOV.2016 18:41:56															

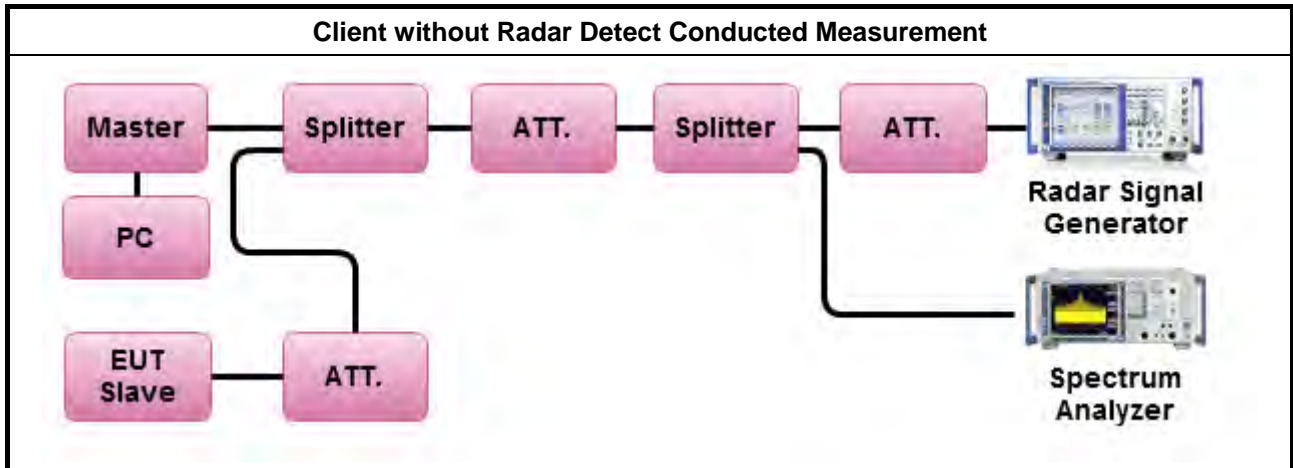
3.2.7 Test Setup

A spectrum analyzer is used as a monitor to verify that the EUT has vacated the Channel within the (Channel Closing Transmission Time and Channel Move Time, and does not transmit on a Channel during the Non-Occupancy Period after the detection and Channel move.

For Master test mode:



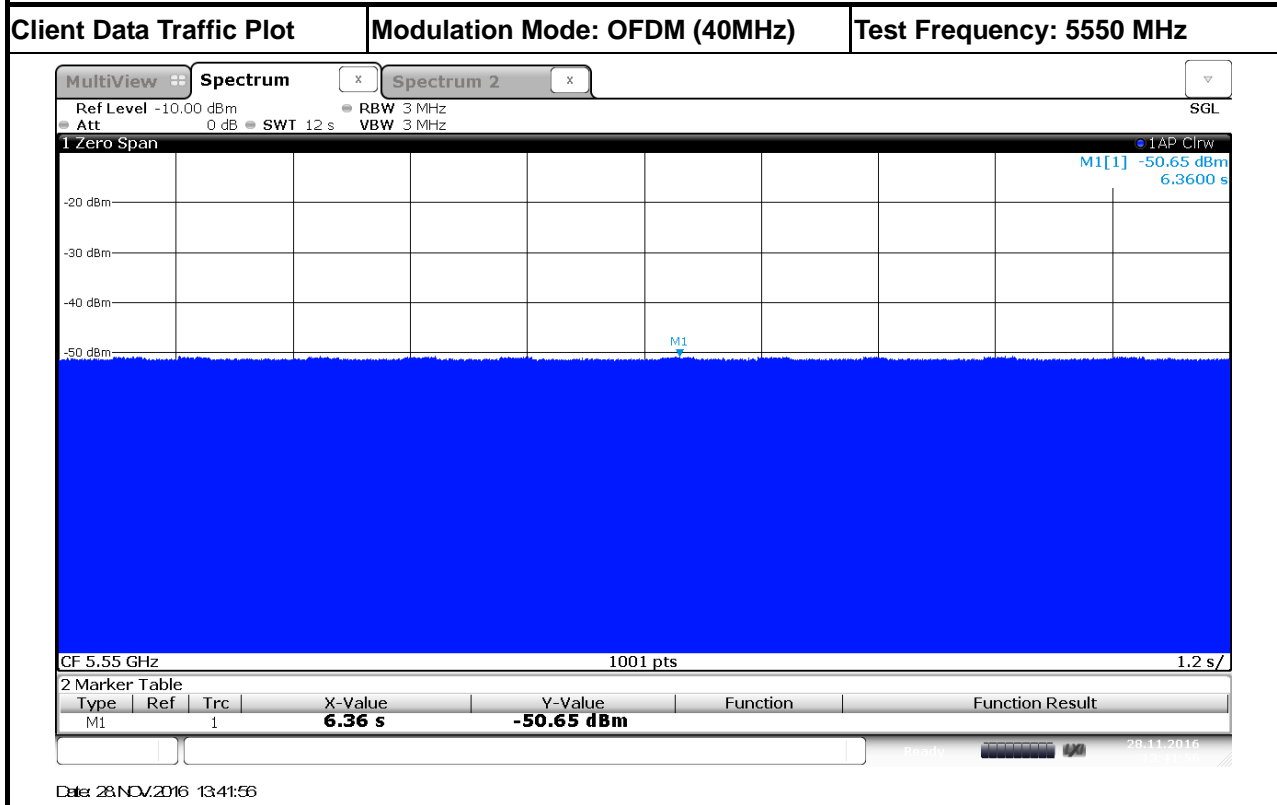
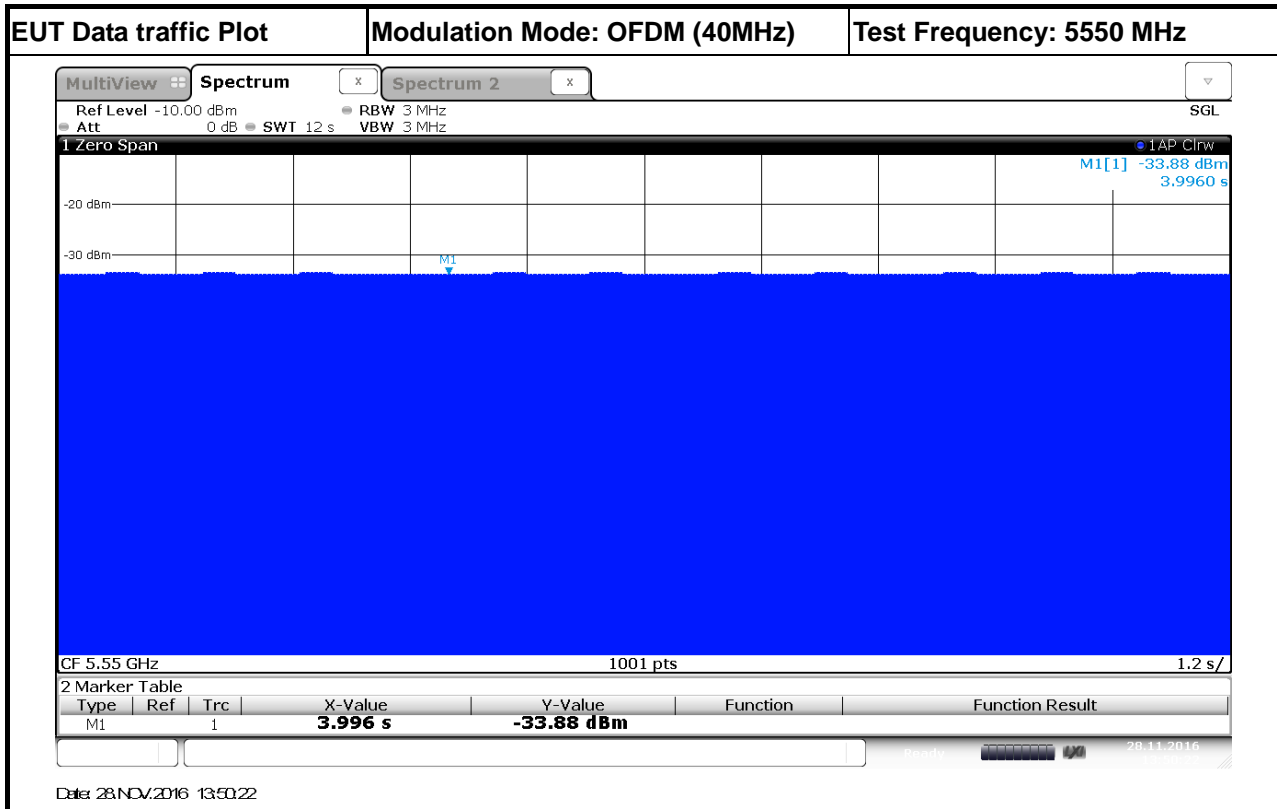
For Client without radar detection test mode:

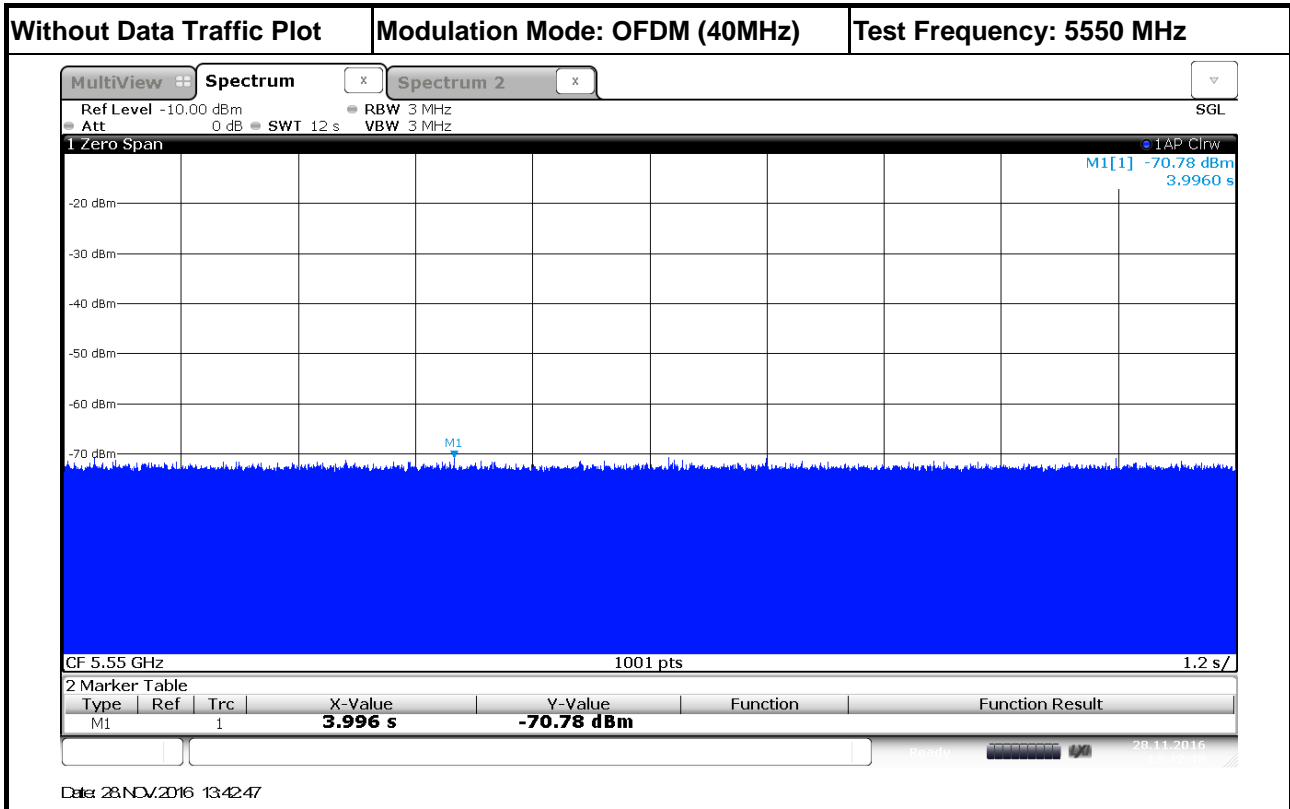




3.2.8 Data traffic Plot

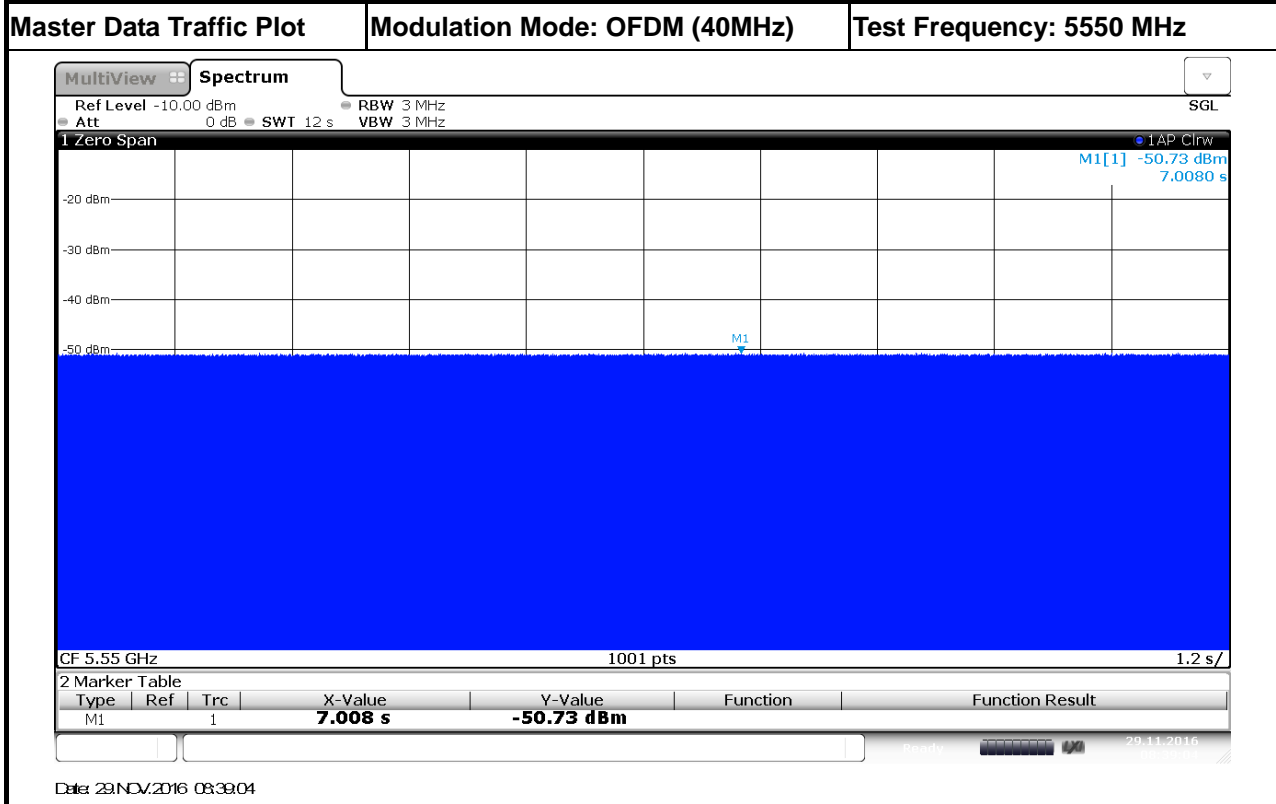
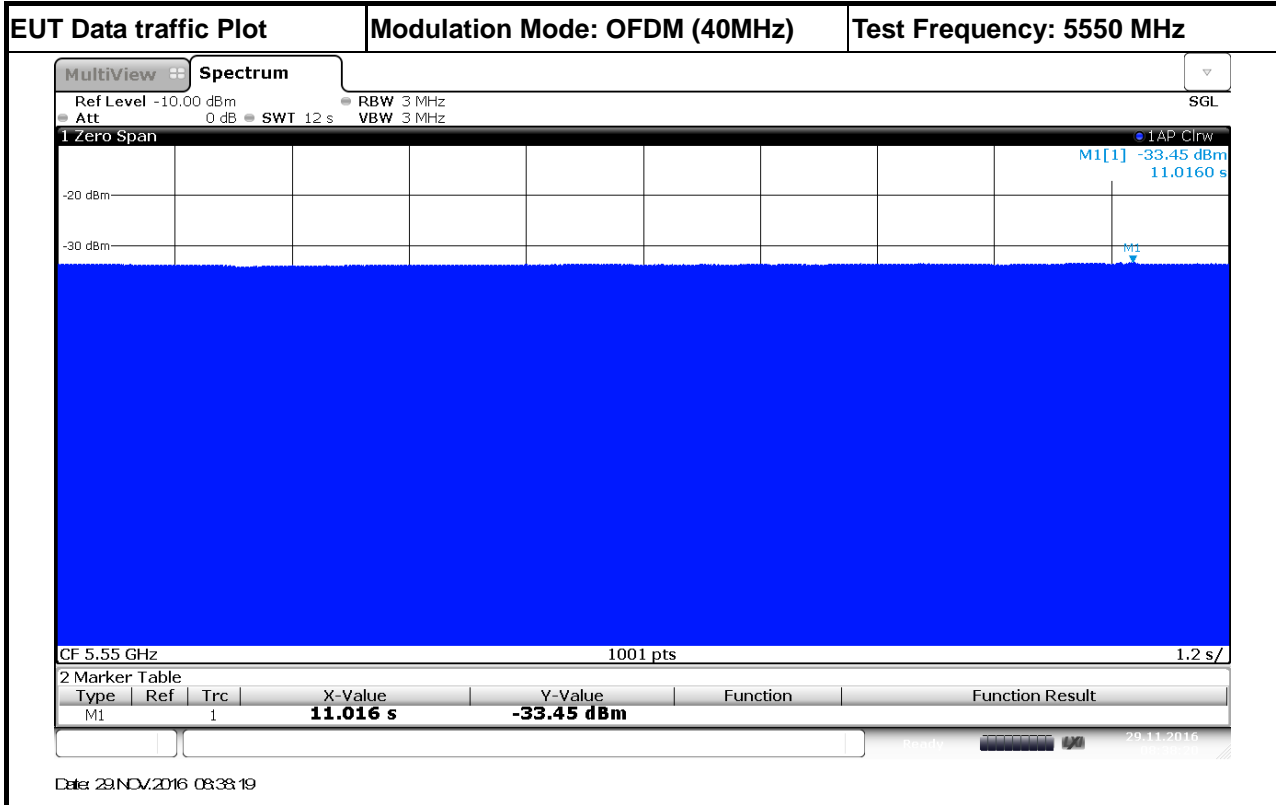
For Master test mode:

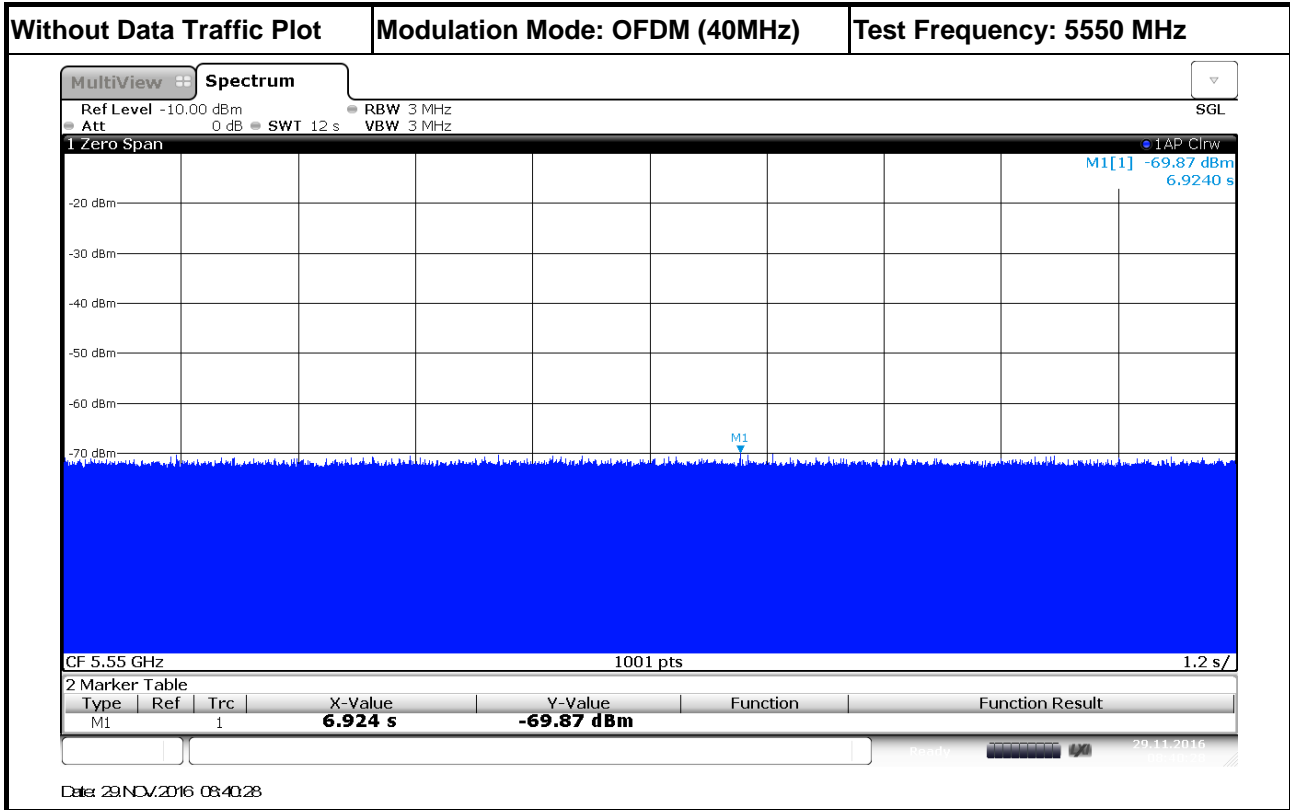






For Client without radar detection test mode:







3.3 UNII Detection Bandwidth

3.3.1 UNII Detection Bandwidth Limit

Channel Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	UNII Detection Bandwidth Min. Limit (MHz)
30	27.272	28
40	36.363	37

UNII Detection Bandwidth is minimum 100% of the 99% power bandwidth. A single radar Burst is generated for a minimum of 10 trials, and the response of the UUT is noted. The UUT must detect the Radar Waveform 90% or more of the time.

3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	During the U-NII Detection Bandwidth detection test, radar type 0 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic. The EUT is set up as a standalone device (no associated Client and no traffic). The radar frequency is increased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The highest frequency at which detection is greater than or equal to 90% is denoted as F_H . The radar frequency is decreased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The lowest frequency at which detection is greater than or equal to 90% is denoted as F_L . UNII Detection Bandwidth = $F_H - F_L$.



3.3.4 Test Result of UNII Detection Bandwidth

EUT Frequency=5550 MHz												
Channel Bandwidth (MHz)	30											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)	
	1	2	3	4	5	6	7	8	9	10		
5535	0	0	0	0	0	0	0	0	0	0	0	0
5536(FL)	1	1	1	1	1	1	1	1	1	0	1	90
5537	1	1	1	1	1	1	1	1	1	1	1	100
5538	1	1	1	1	1	1	1	1	1	1	1	100
5539	1	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	1	100
5550	1	1	1	1	1	1	1	1	1	1	1	100
5555	1	1	1	1	1	1	1	1	1	1	1	100
5560	1	1	1	1	1	1	1	1	1	1	1	100
5561	1	1	1	1	1	1	1	1	1	1	1	100
5562	1	1	1	1	1	1	1	1	1	1	1	100
5563	1	1	1	1	1	1	1	1	1	1	1	100
5564(FH)	1	1	1	1	1	0	1	1	1	1	1	90
5565	0	0	0	0	0	0	0	0	0	0	0	0
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5564MHz-5536MHz)=											28	
UNII Detection Bandwidth Min. Limit (MHz) =											28	
Test Result											Complied	



EUT Frequency=5550 MHz											
Channel Bandwidth (MHz)	40										
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5530	0	0	0	0	0	0	0	0	0	0	0
5531(FL)	1	1	1	0	1	1	1	1	1	1	1
5532	1	1	1	1	1	1	1	1	1	1	1
5533	1	1	1	1	1	1	1	1	1	1	1
5534	1	1	1	1	1	1	1	1	1	1	1
5535	1	1	1	1	1	1	1	1	1	1	1
5536	1	1	1	1	1	1	1	1	1	1	1
5537	1	1	1	1	1	1	1	1	1	1	1
5538	1	1	1	1	1	1	1	1	1	1	1
5539	1	1	1	1	1	1	1	1	1	1	1
5540	1	1	1	1	1	1	1	1	1	1	1
5550	1	1	1	1	1	1	1	1	1	1	1
5555	1	1	1	1	1	1	1	1	1	1	1
5560	1	1	1	1	1	1	1	1	1	1	1
5565	1	1	1	1	1	1	1	1	1	1	1
5566	1	1	1	1	1	1	1	1	1	1	1
5567	1	1	1	1	1	1	1	1	1	1	1
5568	1	1	1	1	1	1	1	1	1	1	1
5569(FH)	1	1	1	1	1	1	1	1	1	0	90
5570	0	0	0	0	0	0	0	0	0	0	0
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5569MHz-5531MHz)=											38
UNII Detection Bandwidth Min. Limit (MHz) =											37
Test Result											Complied



3.4 Channel Availability Check (CAC)

3.4.1 Channel Availability Check Limit

Channel Availability Check Limit	
<input checked="" type="checkbox"/>	The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute (60 sec) on the intended operating frequency.

3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

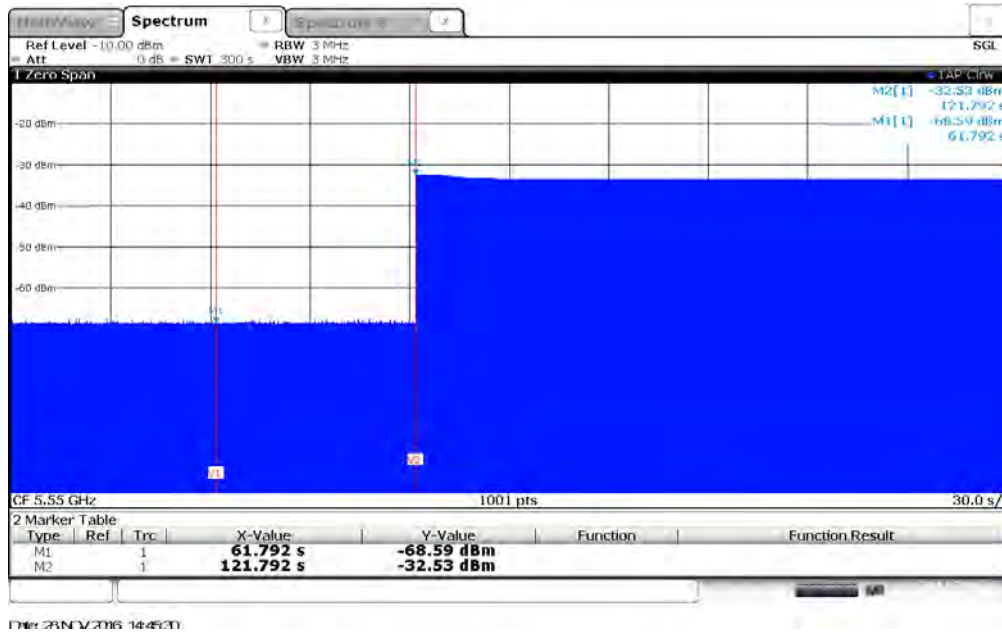
Test Method	
<input checked="" type="checkbox"/>	For Initial Channel Availability Check Time. The EUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the UNII device checks for Radar Waveforms for one minute on the test Channel. This test does not use any Radar Waveforms.
<input checked="" type="checkbox"/>	For Radar Burst at the Beginning of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the Beginning of the Channel Availability Check Time.
<input checked="" type="checkbox"/>	For Radar Burst at the End of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the End of the Channel Availability Check Time.



3.4.4 Test Result of Initial Channel Availability Check Time

Modulation Mode	Freq.	Radar Test Signal
OFDM (40MHz)	5550 MHz	N/A

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (61.792 sec). The initial power up time of the EUT is indicated by marker 1 (61.792 sec). Initial beacons/data transmissions are indicated by marker 2 (121.792 sec).



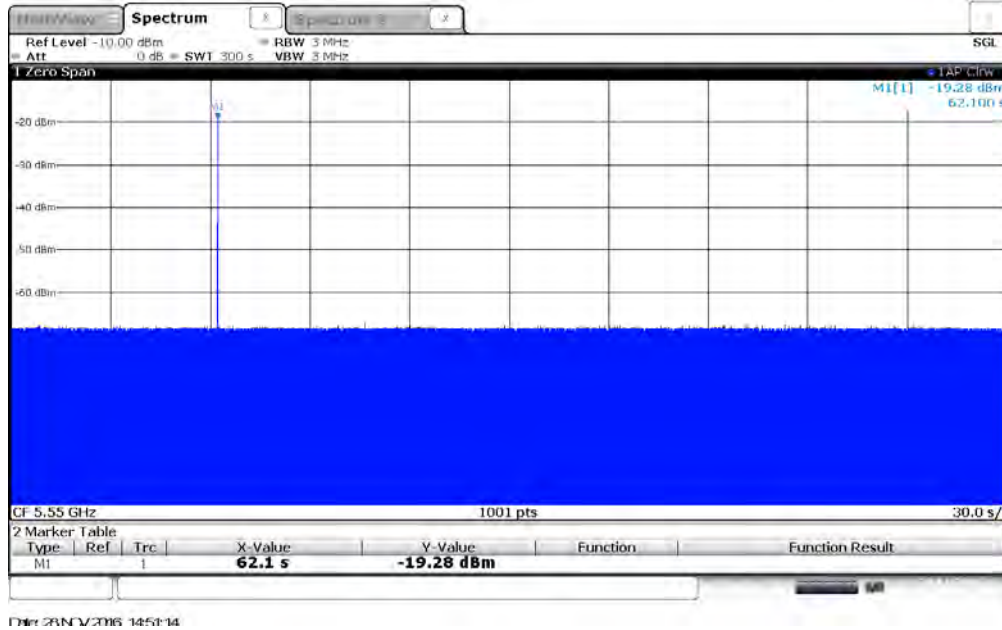
Test Result	Complied



3.4.5 Test Result of Radar Burst at the Beginning of the Channel Availability Check Time

Modulation Mode	Freq. (MHz)	Radar Type Signal
OFDM (40MHz)	5550 MHz	0

Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 237.9 seconds after the radar Burst has been generated. Verify that during the 300 seconds measurement window no EUT transmissions occurred.



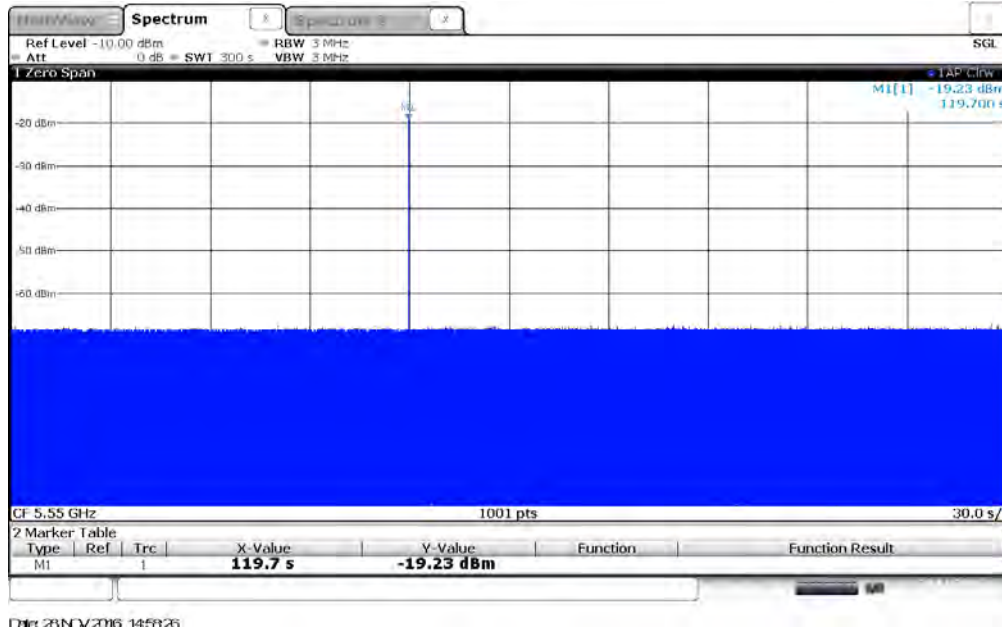
Test Result	Complied
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3.4.6 Test Result of Radar Burst at the End of the Channel Availability Check Time

Modulation Mode	Freq. (MHz)	Radar Type Signal
OFDM (40MHz)	5550 MHz	0

Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 180.3 seconds after the radar Burst has been generated. Verify that during the 300 seconds measurement window no EUT transmissions occurred.



Test Result	Complied
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3.5 In-service Monitoring

3.5.1 In-service Monitoring Limit

In-service Monitoring Limit	
Channel Move Time	10 sec
Channel Closing Transmission Time	200 ms + an aggregate of 60 ms over remaining 10 sec periods.
Non-occupancy period	Minimum 30 minutes

3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time. Client Device will associate with the EUT. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Channel Move Time). Compare the Channel Move Time and Channel Closing Transmission Time limits.
<input checked="" type="checkbox"/> Verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time. One 12 sec plot needs to be reported for the Short Pulse Radar Types 0. And zoom-in a 60 ms plot verified channel closing time for the aggregate transmission time starting from 200ms after the end of the radar signal to the completion of the channel move.
<input checked="" type="checkbox"/> Verified during In-Service Monitoring; Non-Occupancy Period. Client Device will associate with the EUT. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Non-Occupancy Period). Compare the Non-Occupancy Period limits.



3.5.4 Test Result of In-service Monitoring

For Master test mode:

Modulation Mode: OFDM (40MHz)

Parameter	Test Result	Limit
	Type 0	
Test Channel (MHz)	5550 MHz	-
Channel Move Time (sec.)	0	< 10s
Channel Closing Transmission Time (ms) (Note)	0	< 60ms
Non-Occupancy Period (min.)	≥ 30	≥ 30 min

Note: 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 seconds period. The aggregate duration of control signals will not count quiet periods in between transmissions.

For Client without radar detection test mode:

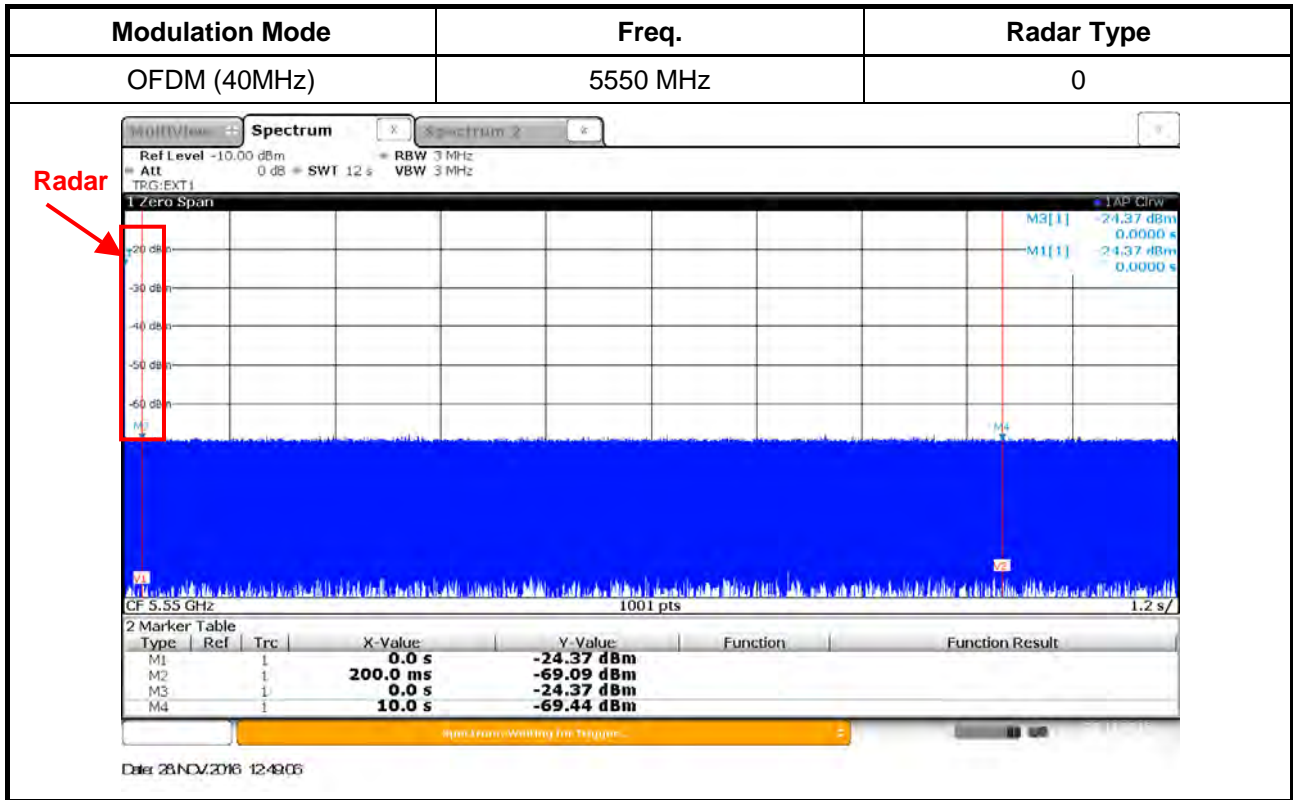
Modulation Mode: OFDM (40MHz)

Parameter	Test Result	Limit
	Type 0	
Test Channel (MHz)	5550 MHz	-
Channel Move Time (sec.)	0	< 10s
Channel Closing Transmission Time (ms) (Note)	0	< 60ms
Non-Occupancy Period (min.)	≥ 30	≥ 30 min

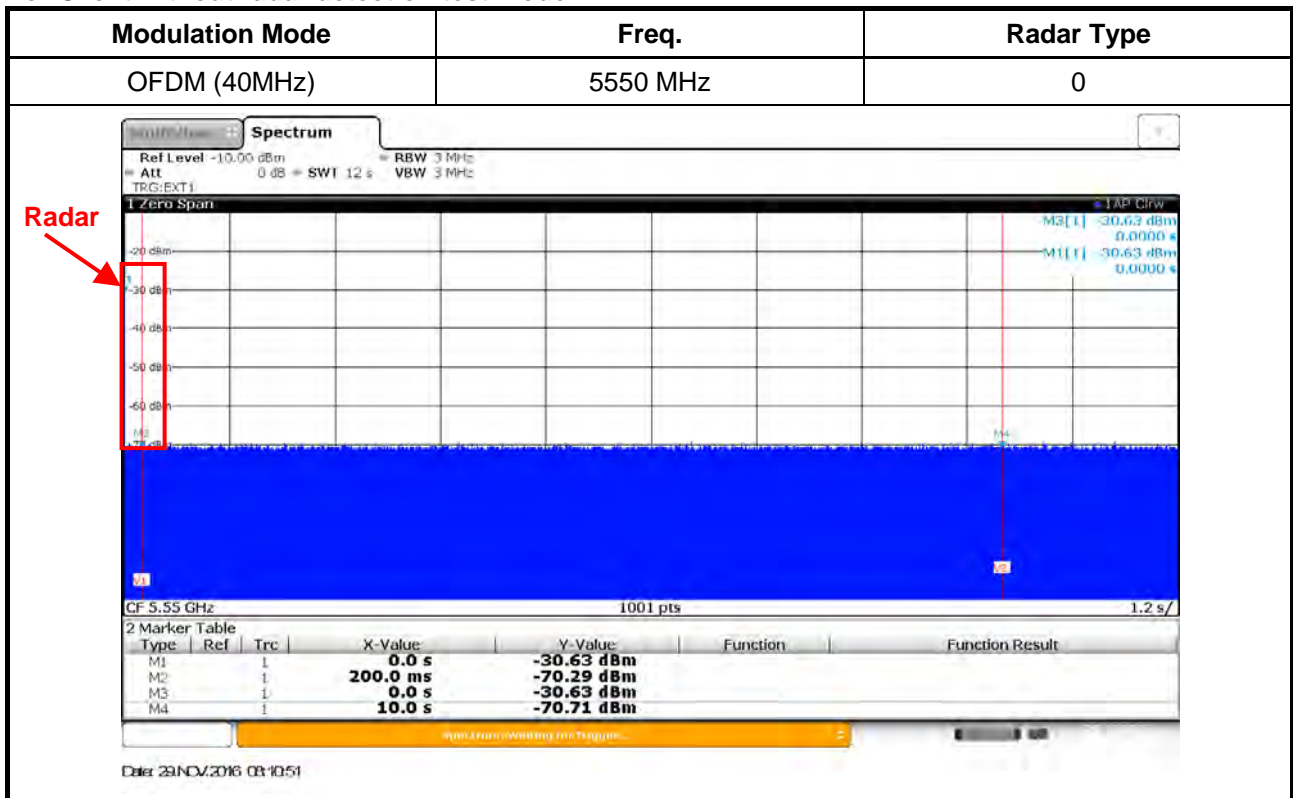
Note: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds period. The aggregate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

3.5.5 Test Plot of In-Service Monitoring for Channel Move Time

For Master test mode:

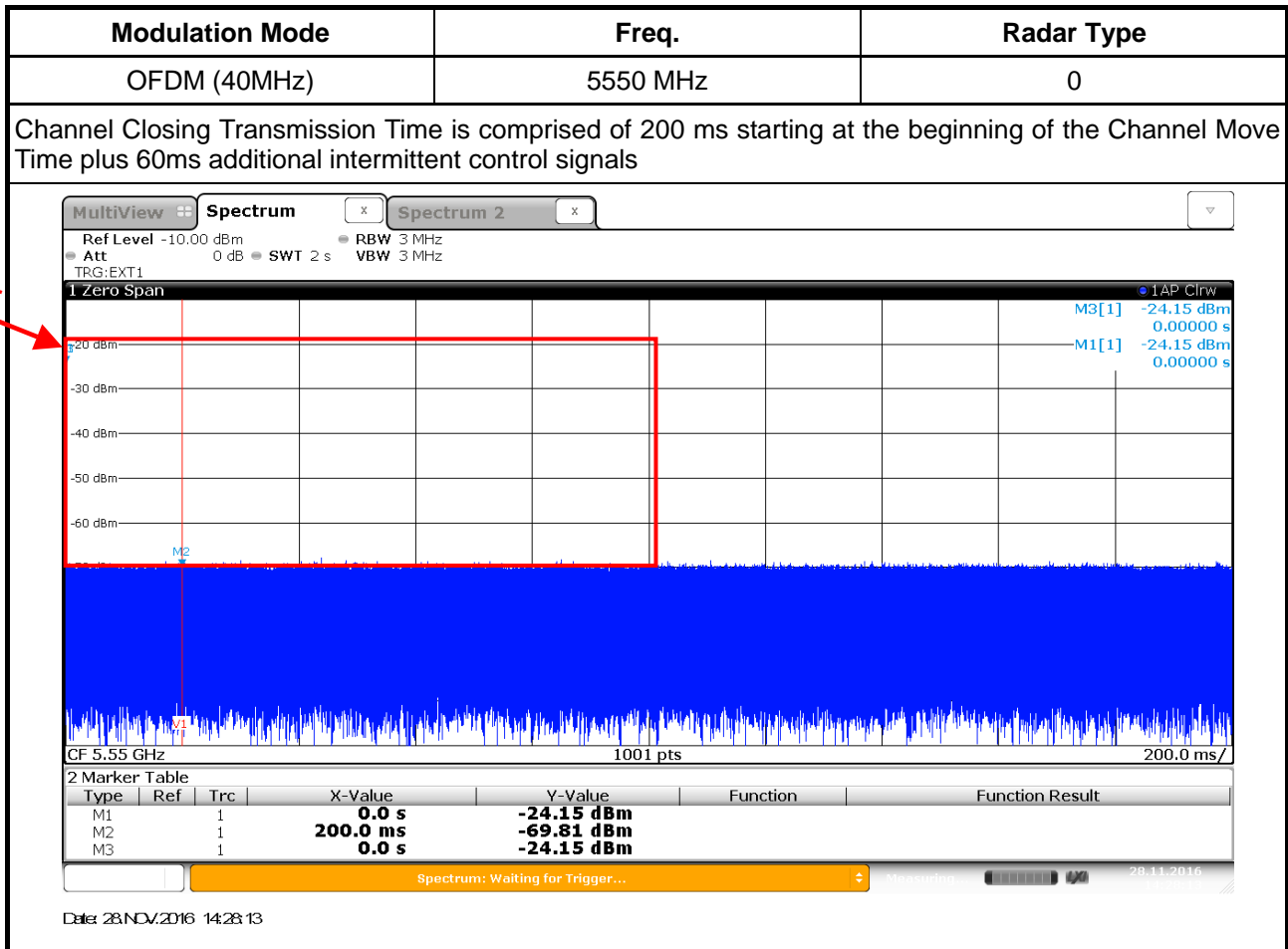


For Client without radar detection test mode:



3.5.6 Test Plot of In-Service Monitoring for Channel Closing Transmission Time

For Master test mode:



Dwell is the dwell time per spectrum analyzer sampling bin.

S is the sweep time

B is the number of spectrum analyzer sampling bins

C is the intermittent control signals of Channel Closing Transmission Time

N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission

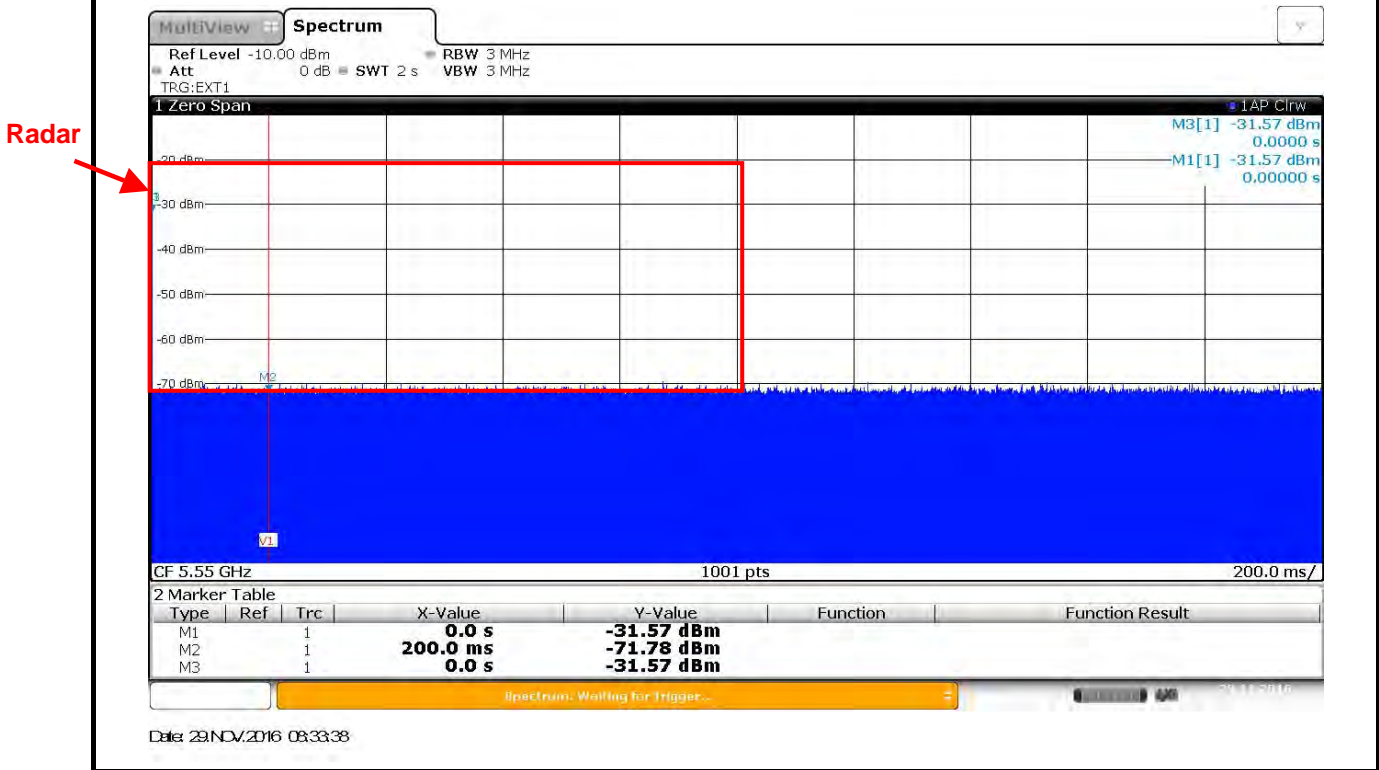
$$\text{Dwell (2 ms)} = \text{S (2000 ms)} / \text{B (1000)}$$

$$\text{C (0.0 ms)} = \text{N (0)} \times \text{Dwell (2 ms)}$$

For Client without radar detection test mode:

Modulation Mode	Freq.	Radar Type
OFDM (40MHz)	5550 MHz	0

Channel Closing Transmission Time is comprised of 200 ms starting at the beginning of the Channel Move Time plus 60ms additional intermittent control signals



Dwell is the dwell time per spectrum analyzer sampling bin.

S is the sweep time

B is the number of spectrum analyzer sampling bins

C is the intermittent control signals of Channel Closing Transmission Time

N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission

$$\text{Dwell (2 ms)} = \text{S (2000 ms)} / \text{B (1000)}$$

$$\text{C (0.0 ms)} = \text{N (0)} \times \text{Dwell (2 ms)}$$



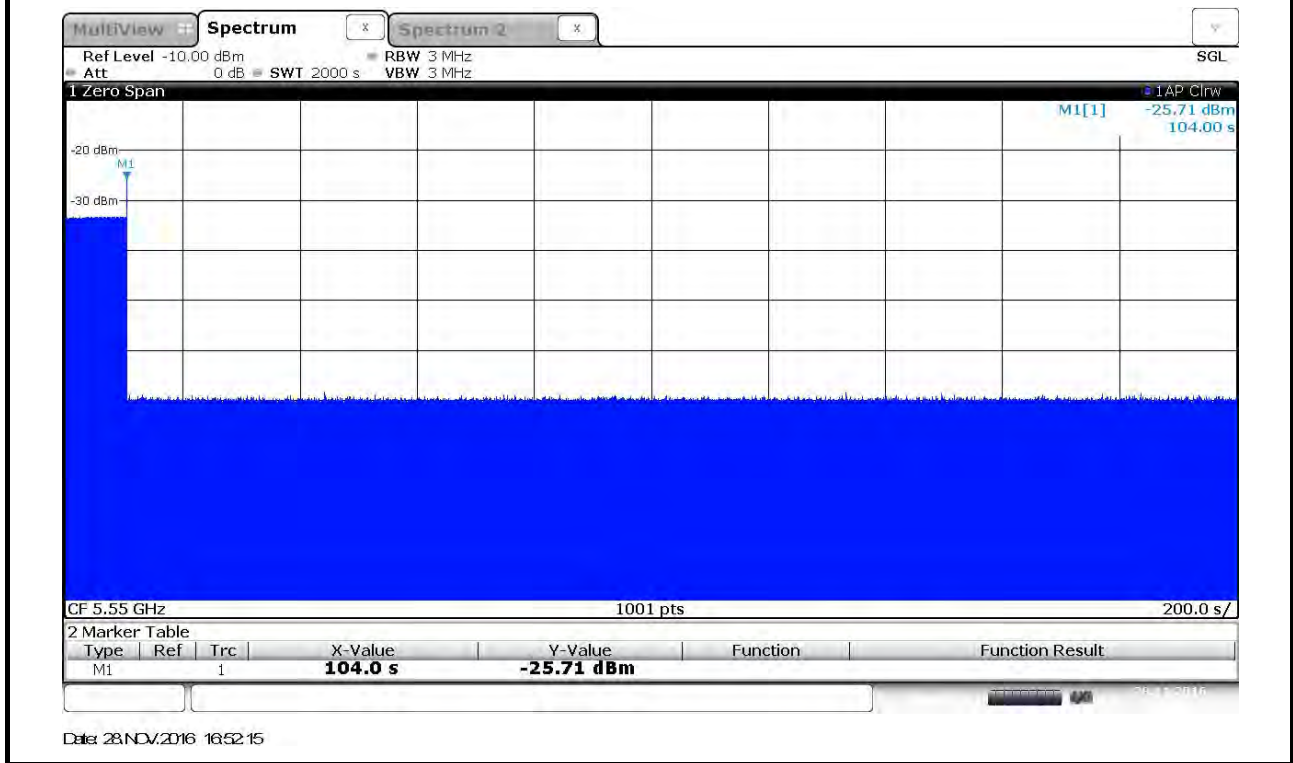
3.5.7 Test Plot of In-Service Monitoring for Non-Occupancy Period

For Master test mode:

Modulation Mode	Freq.
OFDM (40MHz)	5550 MHz

Non-Occupancy Period

During the 30 minutes observation time, UUT did not make any transmissions on a channel after a radar signal was detected on that channel by either the Channel Availability Check or the In-Service Monitoring.



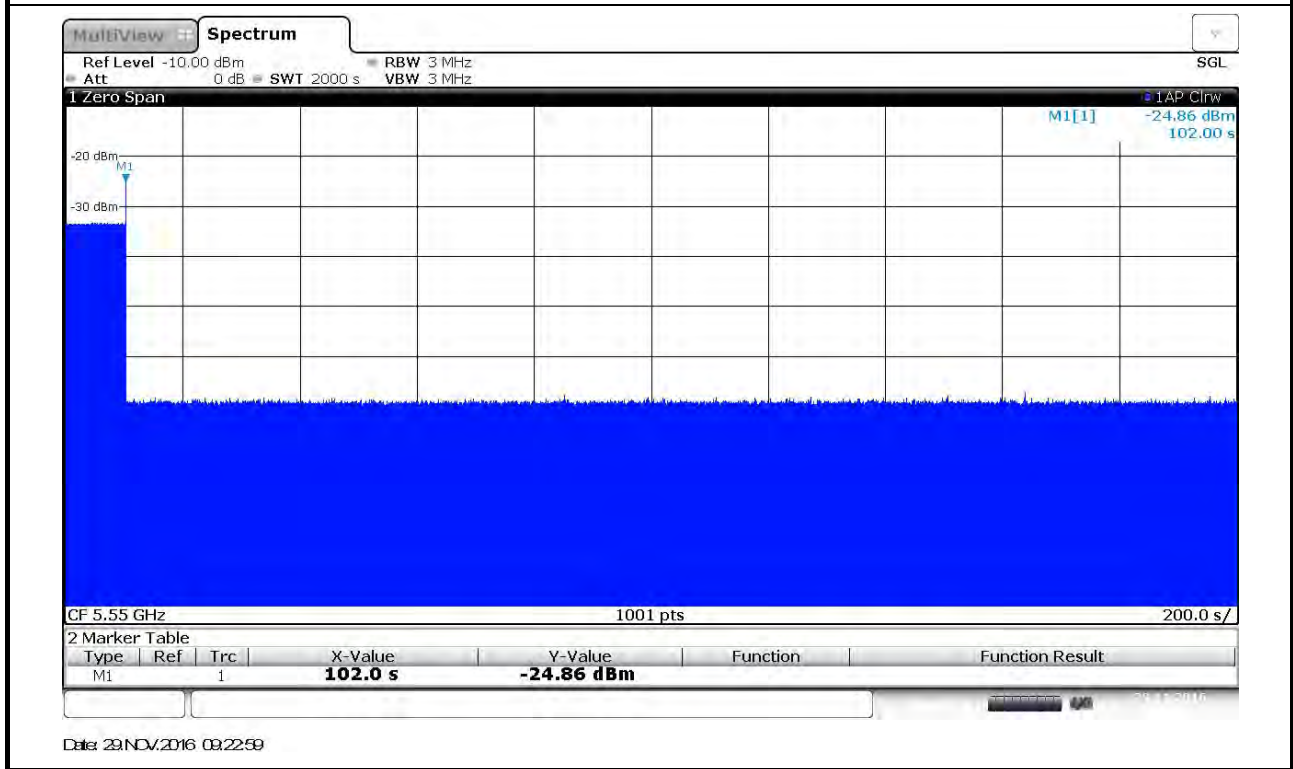


For Client without radar detection test mode:

Modulation Mode	Freq.
OFDM (40MHz)	5550 MHz

Non-Occupancy Period

During the 30 minutes observation time, UUT did not make any transmissions on a channel after a radar signal was detected on that channel by either the Channel Availability Check or the In-Service Monitoring.

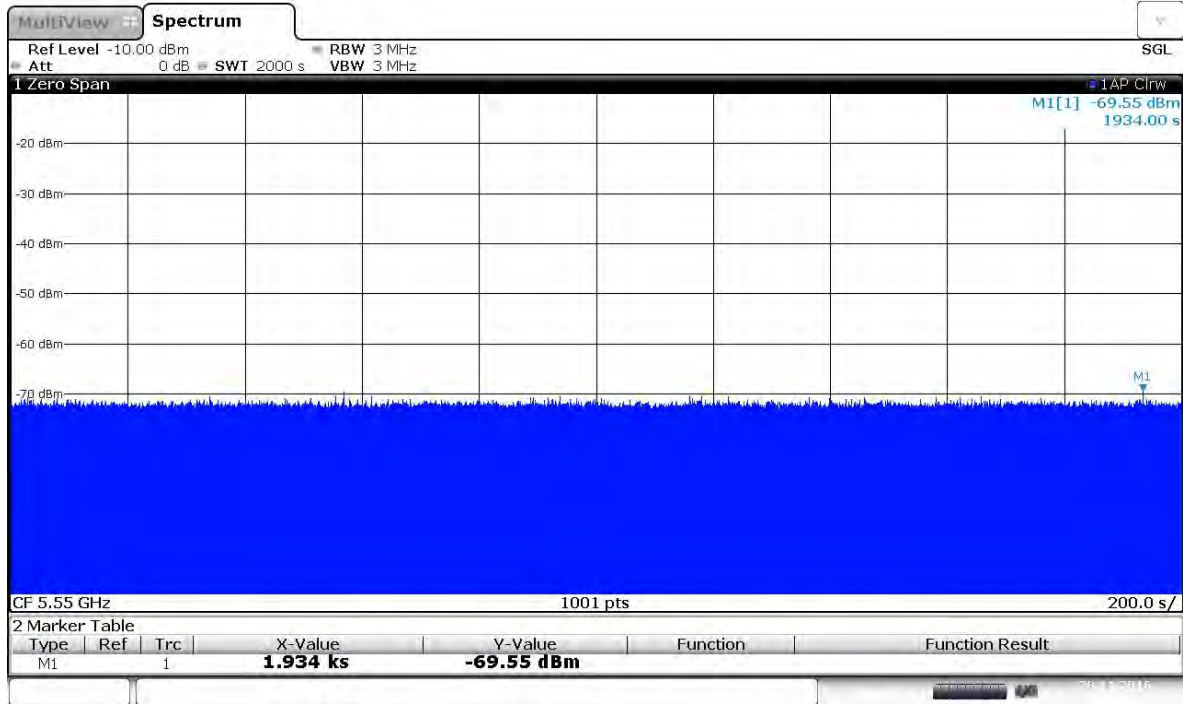




Non-associated test

Master was off.

During the 30 minutes observation time, The UUT did not make any transmissions in the DFS band after UUT power up.



Date: 28 NOV 2016 11:34:16



3.6 Statistical Performance Check

3.6.1 Statistical Performance Check Limit

Radar Type	Minimum Percentage of Successful Detection (Pd)	Minimum Trials
1	60%	30
2	60%	30
3	60%	30
4	60%	30
Aggregate (Radar Types 1-4)	80%	120
5	80%	30
6	70%	30

The percentage of successful detection is calculated by:

$$\frac{\text{TotalWaveformDetections}}{\text{TotalWaveformTrails}} \times 100 = \text{Probability of Detection Radar Waveform}$$

In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows:

$$\frac{Pd1 + Pd2 + Pd3 + Pd4}{4}$$

3.6.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> For Statistical Performance Check test. Demonstrating a minimum channel loading of approximately 17% or greater of the test. Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 1-4 and 6 to ensure detection occurs. Then 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. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.



3.6.4 Test Result of Statistical Performance Check

Modulation Mode: OFDM (30MHz)

Type 1 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulse Per Second)	PRI (us)	1=Detection 0=No Detection
1	5536	1	1930.5	518	1
2	5537	23	326.2	3066	1
3	5538	19	1139.0	878	1
4	5539	12	1355.0	738	1
5	5540	4	1730.1	578	1
6	5541	8	1519.8	658	0
7	5542	15	1253.1	798	1
8	5543	6	1618.1	618	1
9	5544	14	1285.3	778	1
10	5545	3	1792.1	558	1
11	5546	13	1319.3	758	1
12	5547	9	1474.9	678	1
13	5548	7	1567.4	638	1
14	5549	17	1193.3	838	1
15	5550	10	1432.7	698	1
16	5551	-	1692.0	591	1
17	5552	-	328.1	3048	1
18	5553	-	373.4	2678	1
19	5554	-	574.4	1741	1
20	5555	-	1216.5	822	1
21	5556	-	801.3	1248	1
22	5557	-	488.5	2047	1
23	5558	-	956.0	1046	1
24	5559	-	517.6	1932	0
25	5560	-	1422.5	703	1
26	5561	-	542.0	1845	1
27	5562	-	741.3	1349	1
28	5563	-	881.8	1134	1
29	5564	-	427.4	2340	1
30	5556	-	628.9	1590	1
Detection Percentage (%)					93.333
Limit					60%
Test Result					Complied



Type 2 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5537	2.6	221	23	1
2	5539	4.6	198	27	1
3	5540	1.1	184	29	1
4	5544	4.8	203	24	1
5	5550	2.4	162	25	1
6	5561	3.4	204	28	0
7	5562	2.3	170	27	1
8	5563	3.5	184	23	1
9	5539	4.9	150	27	1
10	5540	4.6	211	29	1
11	5550	2.9	158	23	1
12	5551	2.6	226	27	0
13	5552	1.6	204	26	1
14	5553	3.9	181	25	1
15	5554	4.6	202	24	1
16	5555	4.1	194	27	1
17	5556	2.3	193	28	1
18	5557	3.9	173	29	1
19	5558	4.3	188	23	1
20	5559	1.5	215	26	1
21	5560	4.9	227	27	0
22	5561	1.1	199	23	1
23	5562	4.5	155	29	1
24	5555	4.0	190	27	1
25	5544	2.4	151	23	1
26	5545	2.5	180	28	1
27	5546	2.5	228	23	1
28	5547	2.5	203	25	1
29	5548	1.5	188	25	1
30	5549	1.9	217	24	1
Detection Percentage (%)					90.000
Limit					60%
Test Result					Complied



Type 3 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection ; 0=No Detection
1	5542	8.0	205	16	1
2	5543	6.7	382	18	1
3	5544	8.6	418	16	1
4	5545	9.4	351	17	1
5	5546	7.4	383	18	1
6	5547	9.8	232	16	1
7	5548	9.1	377	17	1
8	5549	9.6	457	16	0
9	5550	8.0	471	18	1
10	5551	9.0	304	18	1
11	5552	8.0	316	17	1
12	5553	9.8	325	16	1
13	5536	8.0	409	17	0
14	5538	9.9	200	17	1
15	5555	8.8	458	16	1
16	5560	8.0	232	18	1
17	5561	8.3	250	16	1
18	5564	8.7	270	16	0
19	5560	7.7	350	17	1
20	5561	7.1	230	16	1
21	5562	7.3	416	18	1
22	5564	7.6	498	18	1
23	5541	7.3	286	17	1
24	5542	7.3	287	16	1
25	5543	7.5	462	17	0
26	5544	6.2	300	17	1
27	5545	6.4	323	18	1
28	5546	7.1	420	16	1
29	5547	7.2	395	18	1
30	5548	8.4	377	16	1
Detection Percentage (%)					86.667
Limit					60%
Test Result					Complied



Type 4 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5550	18.0	242	15	1
2	5551	19.9	279	12	1
3	5553	12.9	487	14	0
4	5557	15.0	452	13	0
5	5558	16.3	230	12	1
6	5559	19.8	238	13	1
7	5538	18.2	420	16	0
8	5537	16.3	452	15	1
9	5539	14.2	495	12	1
10	5544	17.8	228	16	1
11	5545	19.1	211	16	1
12	5546	18.4	283	15	1
13	5547	11.8	411	12	0
14	5548	14.2	284	13	1
15	5549	13.9	202	12	1
16	5550	17.8	340	14	0
17	5551	15.6	290	16	1
18	5552	14.6	250	16	1
19	5553	14.4	484	15	1
20	5554	18.9	387	13	1
21	5555	11.1	348	15	0
22	5556	13.8	291	16	1
23	5557	14.3	295	12	1
24	5558	12.5	300	12	0
25	5559	12.5	322	14	1
26	5536	12.5	383	13	1
27	5537	15.7	322	16	0
28	5540	19.8	469	13	1
29	5550	18.6	406	15	1
30	5553	15.9	238	14	1
Detection Percentage (%)					73.333
Limit					60%
Test Result					Complied



Total Type 1~4 Radar Statistical Performance

Radar Type #	Detection Percentage (%)
1	90.000
2	86.667
3	86.667
4	83.333
Aggregate (Radar Types 1-4)	86.667
Limit	80%
Test Result	Complied



Type 5 Radar Statistical Performance

Center Freq. (MHz)	Low Edge (MHz)	High Edge (MHz)	VSG Freq. (MHz)	Detection
Trial	Chirp	Offset		
1	5	0	5550	1
2	20	0	5550	1
3	7	0	5550	1
4	8	0	5550	1
5	9	0	5550	1
6	10	0	5550	1
7	11	0	5550	1
8	12	0	5550	1
9	13	0	5550	1
10	14	0	5550	1
11	15	6	5542	1
12	16	6.4	5542	1
13	17	6.8	5543	1
14	20	8	5544	1
15	19	7.6	5544	1
16	18	7.2	5543	1
17	17	6.8	5543	1
18	16	6.4	5542	1
19	15	6	5542	1
20	14	5.6	5542	1
21	13	5.2	5559	1
22	12	4.8	5559	1
23	11	4.4	5560	1
24	10	4	5560	1
25	9	3.6	5560	1
26	8	3.2	5561	1
27	18	7.2	5557	1
28	19	7.6	5556	0
29	20	8	5556	1
30	5	2	5562	1
Total				29
Detection Percentage (%)				97%
Limit				80%
Test Result				Complied



Trial Number							1
Number of Bursts in Trial							8
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	62.1	5	-	-	1091	
2	2	56	5	1729	-	133	
3	2	91.3	5	1230	-	1057	
4	3	50.7	5	1762	1616	1442	
5	2	92.6	5	1723	-	544	
6	2	87.3	5	1302	-	1089	
7	2	59.5	5	1291	-	1374	
8	2	52.2	5	1653	-	1237	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							2
Number of Bursts in Trial							9
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	3	90	20	1007	1326	30	
2	2	73.7	20	1785	-	979	
3	1	78.1	20	-	-	683	
4	2	92.4	20	1281	-	950	
5	1	61.2	20	-	-	612	
6	3	67.2	20	1525	1870	17	
7	1	78.5	20	-	-	429	
8	2	60.3	20	1931	-	936	
9	3	92.9	20	1403	1476	548	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							3
Number of Bursts in Trial							10
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	3	63.4	7	1574	1607	801	
2	1	98	7	-	-	966	
3	1	58.7	7	-	-	185	
4	1	88	7	-	-	1012	
5	3	79.5	7	1562	1370	943	
6	3	57.1	7	1900	1188	686	
7	2	64.4	7	1090	-	599	
8	1	78.7	7	-	-	1089	
9	1	69.3	7	-	-	188	
10	3	55.3	7	1375	1691	933	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							4
Number of Bursts in Trial							11
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	74.3	8	1642	-	24	
2	1	83.1	8	-	-	985	
3	2	59.5	8	1680	-	988	
4	2	59.8	8	1786	-	800	
5	2	77.6	8	1617	-	339	
6	2	79.9	8	1553	-	1040	
7	1	56	8	-	-	544	
8	3	71.4	8	1406	1927	452	
9	1	97.4	8	-	-	204	
10	2	98.3	8	1037	-	926	
11	1	63.6	8	-	-	1052	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							5
Number of Bursts in Trial							12
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	50	9	-	-	557	
2	2	62.5	9	1731	-	567	
3	2	55.4	9	1070	-	460	
4	1	65.7	9	-	-	4	
5	2	58	9	1512	-	64	
6	2	60.9	9	1230	-	650	
7	3	89.6	9	1598	1738	235	
8	3	84.4	9	1271	1617	873	
9	3	72.3	9	1498	1321	901	
10	1	58.9	9	-	-	663	
11	2	74.8	9	1584	-	919	
12	1	71.8	9	-	-	375	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							6
Number of Bursts in Trial							13
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	88.1	10	1257	-	846	
2	1	58.7	10	-	-	725	
3	2	97.1	10	1037	-	30	
4	3	83.1	10	1029	1106	490	
5	1	62.1	10	-	-	262	
6	2	71.4	10	1058	-	283	
7	2	86.3	10	1867	-	49	
8	3	77.3	10	1418	1876	634	
9	1	78.9	10	-	-	304	
10	3	79.2	10	1055	1572	564	
11	3	52	10	1582	1836	852	
12	3	56.5	10	1195	1542	525	
13	3	100	10	1638	1729	750	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							7
Number of Bursts in Trial							14
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	92.7	11	1208	-	231	
2	2	81.3	11	1144	-	804	
3	2	60.4	11	1555	-	34	
4	2	62.1	11	1320	-	427	
5	1	50	11	-	-	577	
6	3	65.9	11	1020	1365	3	
7	2	73.8	11	1308	-	51	
8	2	74.3	11	1143	-	360	
9	1	62.9	11	-	-	394	
10	2	74.8	11	1404	-	317	
11	2	69.7	11	1309	-	532	
12	2	69.8	11	1688	-	339	
13	2	77.4	11	1857	-	381	
14	1	55.1	11	-	-	426	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							8
Number of Bursts in Trial							15
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	91.7	12	-	-	776	
2	2	90	12	1196	-	187	
3	3	92.3	12	1486	1853	448	
4	2	66.8	12	1545	-	702	
5	1	64	12	-	-	403	
6	3	95.4	12	1123	1473	230	
7	3	66.8	12	1867	1401	604	
8	3	67.7	12	1472	1397	38	
9	1	68.2	12	-	-	735	
10	2	82.2	12	1297	-	610	
11	1	92.1	12	-	-	618	
12	2	57	12	1764	-	705	
13	2	58.5	12	1310	-	22	
14	3	85.5	12	1630	1447	641	
15	2	82.2	12	1371	-	109	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							9
Number of Bursts in Trial							16
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	74.4	13	1707	-	442	
2	2	63.6	13	1725	-	280	
3	2	71.3	13	1704	-	459	
4	3	77.6	13	1063	1405	197	
5	3	65.2	13	1731	1294	101	
6	3	55.1	13	1109	1549	17	
7	2	96.8	13	1034	-	131	
8	3	80.8	13	1533	1051	365	
9	1	60.4	13	-	-	222	
10	2	61.8	13	1312	-	371	
11	2	71.3	13	1657	-	33	
12	2	98.1	13	1024	-	291	
13	1	57.9	13	-	-	188	
14	1	91.8	13	-	-	163	
15	2	56.7	13	1259	-	426	
16	2	89.7	13	1690	-	606	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							10
Number of Bursts in Trial							17
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	74.4	14	1107	-	462	
2	1	87.6	14	-	-	653	
3	2	61.7	14	1741	-	457	
4	2	57.5	14	1566	-	388	
5	2	66.1	14	1855	-	63	
6	3	70.1	14	1044	1012	136	
7	1	66.4	14	-	-	343	
8	1	59.2	14	-	-	349	
9	2	88.3	14	1240	-	362	
10	1	64.7	14	-	-	221	
11	2	73	14	1703	-	144	
12	2	81.7	14	1450	-	671	
13	3	70.1	14	1741	1278	320	
14	1	63.6	14	-	-	196	
15	1	58.7	14	-	-	413	
16	2	65.9	14	1478	-	170	
17	1	72.7	14	-	-	564	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number			11			
Number of Bursts in Trial			18			
Chirp Center Frequency			5542			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	72.1	15	1193	-	130
2	3	76.3	15	1484	1390	114
3	1	86.1	15	-	-	14
4	1	73.2	15	-	-	604
5	1	81.2	15	-	-	548
6	2	99.5	15	1398	-	173
7	1	93.9	15	-	-	262
8	2	75.9	15	1921	-	38
9	3	79.2	15	1100	1429	84
10	3	77	15	1166	1799	610
11	1	91.8	15	-	-	339
12	3	56.8	15	1330	1556	580
13	2	83.1	15	1556	-	295
14	2	63	15	1552	-	156
15	1	65.7	15	-	-	439
16	1	64.5	15	-	-	188
17	1	88.5	15	-	-	419
18	1	60.6	15	-	-	205
Detection Check (1=Detection; 0=No Detection)						1



Trial Number			12			
Number of Bursts in Trial			19			
Chirp Center Frequency			5542			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	90.5	16	1299	-	381
2	2	88.4	16	1418	-	327
3	2	53.7	16	1055	-	536
4	1	80.5	16	-	-	285
5	1	50.4	16	-	-	398
6	2	61.2	16	1749	-	439
7	2	78.8	16	1065	-	129
8	3	75	16	1748	1820	325
9	2	96.7	16	1254	-	440
10	3	76.3	16	1848	1106	397
11	1	73.3	16	-	-	232
12	2	92.4	16	1317	-	91
13	2	92.4	16	1854	-	256
14	3	64.4	16	1240	1634	582
15	2	67.3	16	1473	-	117
16	2	84.1	16	1795	-	202
17	1	80.9	16	-	-	135
18	1	74.6	16	-	-	396
19	2	97.6	16	1805	-	615
Detection Check (1=Detection; 0=No Detection)						1



Trial Number							13
Number of Bursts in Trial							20
Chirp Center Frequency							5543
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	66.1	17	1417	-	388	
2	2	86.7	17	1693	-	348	
3	2	70.5	17	1263	-	215	
4	2	78	17	1446	-	28	
5	2	66	17	1185	-	585	
6	2	80.6	17	1855	-	65	
7	1	95.5	17	-	-	92	
8	1	98.8	17	-	-	68	
9	3	64.3	17	1641	1108	517	
10	1	75.1	17	-	-	121	
11	2	72.6	17	1499	-	448	
12	1	60.3	17	-	-	567	
13	2	54.9	17	1056	-	245	
14	2	98.8	17	1023	-	584	
15	2	60.9	17	1243	-	579	
16	2	62.7	17	1226	-	464	
17	1	80.1	17	-	-	89	
18	2	70.9	17	1711	-	153	
19	1	90.7	17	-	-	282	
20	1	98.9	17	-	-	71	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							14
Number of Bursts in Trial							8
Chirp Center Frequency							5544
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	67.5	20	1542	-	947	
2	3	83.6	20	1272	1696	124	
3	2	93.2	20	1877	-	701	
4	1	55.6	20	-	-	1123	
5	3	84.2	20	1733	1619	756	
6	3	69.1	20	1612	1071	1	
7	2	66.9	20	1905	-	7	
8	3	86.8	20	1697	1621	1082	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							15
Number of Bursts in Trial							9
Chirp Center Frequency							5544
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	62.2	19	1571	-	949	
2	2	85	19	1669	-	189	
3	2	64.5	19	1505	-	176	
4	2	50.4	19	1325	-	538	
5	2	66.1	19	1483	-	908	
6	2	71.2	19	1110	-	1017	
7	3	53.7	19	1445	1677	492	
8	3	62.5	19	1596	1341	349	
9	3	62	19	1929	1221	1105	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							16
Number of Bursts in Trial							10
Chirp Center Frequency							5543
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	80.5	18	1910	-	284	
2	2	64.2	18	1661	-	751	
3	2	90.1	18	1041	-	491	
4	2	69.8	18	1495	-	107	
5	1	73.1	18	-	-	490	
6	3	77.2	18	1418	1145	1155	
7	3	52.6	18	1732	1787	772	
8	2	71.4	18	1562	-	121	
9	2	89.8	18	1491	-	89	
10	2	76.4	18	1355	-	615	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							17
Number of Bursts in Trial							11
Chirp Center Frequency							5543
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	51.2	17	1236	-	740	
2	1	71.7	17	-	-	941	
3	2	74.7	17	1164	-	370	
4	2	50.9	17	1919	-	371	
5	2	65.2	17	1206	-	1033	
6	2	98	17	1182	-	346	
7	2	58.7	17	1612	-	639	
8	1	63.8	17	-	-	1056	
9	3	86.3	17	1545	1065	205	
10	1	94.4	17	-	-	753	
11	3	88.5	17	1699	1319	58	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							18
Number of Bursts in Trial							12
Chirp Center Frequency							5542
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	88.7	16	1405	-	448	
2	3	90.2	16	1544	1235	621	
3	1	96.5	16	-	-	512	
4	2	80.5	16	1090	-	321	
5	2	63.7	16	1268	-	798	
6	1	53.4	16	-	-	809	
7	2	52.3	16	1043	-	301	
8	3	54.7	16	1701	1104	796	
9	3	75.6	16	1923	1729	669	
10	2	59.2	16	1244	-	369	
11	1	56.3	16	-	-	51	
12	2	87.8	16	1608	-	733	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							19
Number of Bursts in Trial							13
Chirp Center Frequency							5542
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	68.2	15	1104	-	229	
2	2	58.4	15	1627	-	488	
3	3	74.7	15	1861	1015	137	
4	2	58.2	15	1593	-	520	
5	1	51.6	15	-	-	799	
6	2	94.7	15	1469	-	43	
7	2	70.7	15	1091	-	126	
8	2	82.9	15	1472	-	607	
9	3	62.7	15	1168	1453	527	
10	2	63.1	15	1529	-	143	
11	1	96.1	15	-	-	176	
12	2	57	15	1457	-	882	
13	3	95.6	15	1707	1501	214	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							20
Number of Bursts in Trial							14
Chirp Center Frequency							5542
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	95.7	14	-	-	117	
2	1	93.1	14	-	-	720	
3	1	55.8	14	-	-	297	
4	1	76.7	14	-	-	284	
5	2	68	14	1686	-	472	
6	3	94.1	14	1796	1393	264	
7	2	53.9	14	1293	-	525	
8	1	99.3	14	-	-	155	
9	2	73.3	14	1458	-	65	
10	2	93.3	14	1196	-	451	
11	3	55.8	14	1895	1034	243	
12	1	66.4	14	-	-	228	
13	2	65.6	14	1732	-	746	
14	2	76.5	14	1187	-	522	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							21
Number of Bursts in Trial							15
Chirp Center Frequency							5559
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	85.1	13	-	-	565	
2	2	72.5	13	1648	-	211	
3	1	67.5	13	-	-	348	
4	2	56.1	13	1360	-	156	
5	1	71.1	13	-	-	718	
6	2	93.1	13	1391	-	400	
7	1	56.5	13	-	-	482	
8	1	63.8	13	-	-	703	
9	2	67.4	13	1727	-	780	
10	1	52.3	13	-	-	102	
11	3	62.4	13	1228	1715	304	
12	2	53.3	13	1630	-	57	
13	2	83.1	13	1205	-	768	
14	2	93.7	13	1085	-	461	
15	2	90.7	13	1297	-	746	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							22
Number of Bursts in Trial							16
Chirp Center Frequency							5559
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	98.8	12	1439	-	95	
2	1	54.5	12	-	-	676	
3	2	80.5	12	1360	-	8	
4	2	55.9	12	1906	-	373	
5	2	72.1	12	1623	-	254	
6	2	84.4	12	1604	-	480	
7	1	78.5	12	-	-	663	
8	1	88	12	-	-	314	
9	2	74.7	12	1157	-	596	
10	2	97.1	12	1673	-	264	
11	1	81.6	12	-	-	740	
12	1	83.6	12	-	-	163	
13	3	87.6	12	1757	1322	628	
14	2	58.5	12	1372	-	132	
15	3	91.8	12	1767	1183	106	
16	2	58.8	12	1432	-	659	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							23
Number of Bursts in Trial							17
Chirp Center Frequency							5560
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	96	11	-	-	284	
2	2	92.5	11	1241	-	488	
3	2	89.5	11	1347	-	76	
4	2	74.8	11	1607	-	688	
5	2	60.6	11	1523	-	28	
6	2	71.5	11	1659	-	383	
7	2	71.1	11	1454	-	182	
8	1	98.7	11	-	-	20	
9	2	85.1	11	1770	-	576	
10	2	89.2	11	1086	-	410	
11	2	60.7	11	1101	-	458	
12	2	75.2	11	1719	-	348	
13	2	75.7	11	1799	-	481	
14	3	56.7	11	1132	1884	587	
15	2	65	11	1885	-	480	
16	2	64.6	11	1910	-	195	
17	3	69.9	11	1410	1190	396	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							24
Number of Bursts in Trial							18
Chirp Center Frequency							5560
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	3	83.8	10	1290	1021	536	
2	2	66.9	10	1112	-	44	
3	3	91	10	1220	1504	611	
4	2	86.1	10	1678	-	456	
5	3	65.5	10	1928	1222	330	
6	1	62.6	10	-	-	297	
7	3	68.7	10	1505	1200	351	
8	3	59.2	10	1452	1114	230	
9	1	73.9	10	-	-	222	
10	1	77.2	10	-	-	57	
11	2	96.4	10	1357	-	399	
12	2	99.9	10	1173	-	299	
13	2	99.9	10	1520	-	464	
14	1	86.7	10	-	-	294	
15	1	92.6	10	-	-	653	
16	1	77.1	10	-	-	550	
17	2	81.1	10	1664	-	566	
18	3	68.4	10	1536	1309	580	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number			25			
Number of Bursts in Trial			19			
Chirp Center Frequency			5560			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	68.2	9	1723	1868	471
2	3	83.7	9	1711	1405	368
3	2	69.7	9	1781	-	425
4	1	59.7	9	-	-	440
5	2	96.7	9	1484	-	123
6	2	95.8	9	1319	-	261
7	3	71.3	9	1095	1354	332
8	3	53.2	9	1527	1427	427
9	2	69.5	9	1771	-	397
10	3	63.9	9	1075	1447	67
11	2	93.4	9	1783	-	174
12	2	77.3	9	1564	-	17
13	2	73.1	9	1294	-	216
14	1	77.4	9	-	-	292
15	3	57.2	9	1722	1886	619
16	2	68.7	9	1629	-	233
17	1	60.8	9	-	-	226
18	3	69.7	9	1128	1224	599
19	1	62.2	9	-	-	433
Detection Check (1=Detection; 0=No Detection)						1



Trial Number							26
Number of Bursts in Trial							20
Chirp Center Frequency							5561
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	80.5	8	-	-	90	
2	3	62.6	8	1406	1343	319	
3	3	85.6	8	1190	1529	384	
4	2	83.9	8	1208	-	567	
5	2	92.4	8	1488	-	234	
6	2	54	8	1529	-	535	
7	3	81.3	8	1501	1812	325	
8	1	98.5	8	-	-	532	
9	1	85.8	8	-	-	272	
10	2	84.7	8	1593	-	182	
11	2	83.3	8	1705	-	134	
12	2	79.8	8	1567	-	286	
13	1	77.9	8	-	-	368	
14	3	98.4	8	1510	1569	290	
15	2	79.9	8	1588	-	231	
16	3	78	8	1140	1353	353	
17	3	55.2	8	1700	1327	53	
18	3	71.9	8	1081	1224	44	
19	1	62	8	-	-	298	
20	3	70.5	8	1888	1442	529	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							27
Number of Bursts in Trial							8
Chirp Center Frequency							5557
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	69.1	18	1076	-	1436	
2	2	62.1	18	1688	-	22	
3	2	94.8	18	1891	-	897	
4	1	75.8	18	-	-	1186	
5	2	65.4	18	1713	-	589	
6	2	97.7	18	1292	-	614	
7	3	98.1	18	1670	1711	506	
8	2	85.4	18	1672	-	776	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							28
Number of Bursts in Trial							9
Chirp Center Frequency							5556
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	3	82	19	1233	1713	679	
2	3	87.7	19	1554	1123	473	
3	2	98.9	19	1518	-	869	
4	1	55	19	-	-	719	
5	1	93.6	19	-	-	902	
6	2	58.7	19	1641	-	1243	
7	2	88.7	19	1387	-	410	
8	1	60.3	19	-	-	1154	
9	1	97.7	19	-	-	512	
Detection Check (1=Detection; 0=No Detection)							0

Trial Number							29
Number of Bursts in Trial							10
Chirp Center Frequency							5556
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	69.6	20	-	-	1131	
2	1	74.5	20	-	-	290	
3	1	60.9	20	-	-	895	
4	1	74.6	20	-	-	202	
5	2	99.3	20	1501	-	139	
6	2	95.3	20	1065	-	854	
7	2	91.9	20	1722	-	219	
8	2	51	20	1285	-	57	
9	2	87.7	20	1747	-	141	
10	1	87.2	20	-	-	596	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number			30			
Number of Bursts in Trial			11			
Chirp Center Frequency			5562			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	59.9	5	1901	1196	935
2	2	77.1	5	1590	-	1038
3	2	62.7	5	1227	-	690
4	1	77.1	5	-	-	547
5	3	99.8	5	1798	1790	551
6	2	61.5	5	1135	-	876
7	2	77.5	5	1583	-	448
8	2	57.3	5	1890	-	736
9	2	53.5	5	1757	-	362
10	1	66.6	5	-	-	836
11	3	80.7	5	1811	1289	410
Detection Check (1=Detection; 0=No Detection)						1



Type 6 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulses / Hop	Pulse Width (us)	PRI (us)	1=Detection 0=No Detection
1	5550	9	1	333	1
2	5550	9	1	333	1
3	5550	9	1	333	1
4	5550	9	1	333	1
5	5550	9	1	333	1
6	5550	9	1	333	1
7	5550	9	1	333	1
8	5550	9	1	333	1
9	5550	9	1	333	1
10	5550	9	1	333	1
11	5550	9	1	333	1
12	5550	9	1	333	1
13	5550	9	1	333	1
14	5550	9	1	333	1
15	5550	9	1	333	1
16	5550	9	1	333	1
17	5550	9	1	333	1
18	5550	9	1	333	1
19	5550	9	1	333	1
20	5550	9	1	333	1
21	5550	9	1	333	1
22	5550	9	1	333	1
23	5550	9	1	333	0
24	5550	9	1	333	0
25	5550	9	1	333	0
26	5550	9	1	333	0
27	5550	9	1	333	0
28	5550	9	1	333	1
29	5550	9	1	333	1
30	5550	9	1	333	1
Detection Percentage (%)					83.333
Limit					70%
Test Result					Complied



Modulation Mode: OFDM (40MHz)

Type 1 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulse Per Second)	PRI (us)	1=Detection 0=No Detection
1	5535	1	1930.5	518	1
2	5536	23	326.2	3066	1
3	5537	19	1139.0	878	1
4	5538	12	1355.0	738	1
5	5539	4	1730.1	578	0
6	5540	8	1519.8	658	1
7	5541	15	1253.1	798	1
8	5542	6	1618.1	618	1
9	5543	14	1285.3	778	0
10	5544	3	1792.1	558	1
11	5545	13	1319.3	758	1
12	5546	9	1474.9	678	1
13	5547	7	1567.4	638	1
14	5548	17	1193.3	838	1
15	5549	10	1432.7	698	1
16	5550	-	1692.0	591	1
17	5551	-	328.1	3048	1
18	5552	-	373.4	2678	1
19	5553	-	574.4	1741	1
20	5554	-	1216.5	822	1
21	5555	-	801.3	1248	1
22	5556	-	488.5	2047	1
23	5557	-	956.0	1046	1
24	5558	-	517.6	1932	0
25	5559	-	1422.5	703	1
26	5560	-	542.0	1845	1
27	5561	-	741.3	1349	1
28	5562	-	881.8	1134	1
29	5563	-	427.4	2340	1
30	5564	-	628.9	1590	1
Detection Percentage (%)					90.00
Limit					60%
Test Result					Complied



Type 2 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5535	2.6	221	23	1
2	5536	4.6	198	27	1
3	5537	1.1	184	29	1
4	5538	4.8	203	24	1
5	5539	2.4	162	25	1
6	5540	3.4	204	28	1
7	5541	2.3	170	27	1
8	5542	3.5	184	23	1
9	5543	4.9	150	27	1
10	5544	4.6	211	29	0
11	5545	2.9	158	23	1
12	5546	2.6	226	27	1
13	5547	1.6	204	26	1
14	5548	3.9	181	25	1
15	5549	4.6	202	24	1
16	5550	4.1	194	27	1
17	5551	2.3	193	28	1
18	5552	3.9	173	29	1
19	5553	4.3	188	23	1
20	5554	1.5	215	26	1
21	5555	4.9	227	27	1
22	5556	1.1	199	23	0
23	5560	4.5	155	29	1
24	5561	4.0	190	27	1
25	5562	2.4	151	23	1
26	5563	2.5	180	28	1
27	5564	2.5	228	23	1
28	5565	2.5	203	25	1
29	5550	1.5	188	25	1
30	5536	1.9	217	24	1
Detection Percentage (%)					93.333
Limit					60%
Test Result					Complied



Type 3 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5541	8.0	205	16	1
2	5542	6.7	382	18	1
3	5543	8.6	418	16	0
4	5544	9.4	351	17	1
5	5545	7.4	383	18	1
6	5546	9.8	232	16	1
7	5547	9.1	377	17	1
8	5548	9.6	457	16	0
9	5549	8.0	471	18	0
10	5550	9.0	304	18	1
11	5551	8.0	316	17	1
12	5552	9.8	325	16	1
13	5553	8.0	409	17	0
14	5554	9.9	200	17	1
15	5555	8.8	458	16	1
16	5556	8.0	232	18	0
17	5557	8.3	250	16	1
18	5558	8.7	270	16	1
19	5559	7.7	350	17	1
20	5560	7.1	230	16	1
21	5561	7.3	416	18	1
22	5562	7.6	498	18	0
23	5563	7.3	286	17	0
24	5535	7.3	287	16	1
25	5540	7.5	462	17	1
26	5549	6.2	300	17	1
27	5550	6.4	323	18	1
28	5551	7.1	420	16	0
29	5565	7.2	395	18	1
30	5566	8.4	377	16	1
Detection Percentage (%)					73.333
Limit					60%
Test Result					Complied



Type 4 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5536	18.0	242	15	1
2	5537	19.9	279	12	0
3	5538	12.9	487	14	1
4	5539	15.0	452	13	1
5	5540	16.3	230	12	1
6	5541	19.8	238	13	0
7	5542	18.2	420	16	1
8	5543	16.3	452	15	1
9	5544	14.2	495	12	0
10	5545	17.8	228	16	1
11	5546	19.1	211	16	1
12	5547	18.4	283	15	1
13	5548	11.8	411	12	1
14	5549	14.2	284	13	0
15	5550	13.9	202	12	0
16	5551	17.8	340	14	1
17	5552	15.6	290	16	1
18	5553	14.6	250	16	1
19	5554	14.4	484	15	0
20	5555	18.9	387	13	1
21	5556	11.1	348	15	1
22	5557	13.8	291	16	1
23	5558	14.3	295	12	0
24	5559	12.5	300	12	0
25	5560	12.5	322	14	1
26	5561	12.5	383	13	1
27	5562	15.7	322	16	1
28	5563	19.8	469	13	1
29	5564	18.6	406	15	0
30	5565	15.9	238	14	1
Detection Percentage (%)					70.000
Limit					60%
Test Result					Complied



Total Type 1~4 Radar Statistical Performance

Radar Type #	Detection Percentage (%)
1	90.000
2	93.333
3	73.333
4	70.000
Aggregate (Radar Types 1-4)	81.667
Limit	80%
Test Result	Complied



Type 5 Radar Statistical Performance

Center Freq. (MHz)	Low Edge (MHz)	High Edge (MHz)	VSG Freq. (MHz)	Detection
Trial	Chirp	Offset		
1	5	0	5550	1
2	20	0	5550	1
3	7	0	5550	1
4	8	0	5550	1
5	9	0	5550	1
6	10	0	5550	1
7	11	0	5550	1
8	12	0	5550	1
9	13	0	5550	1
10	14	0	5550	1
11	15	6	5537	1
12	16	6.4	5537	1
13	17	6.8	5538	1
14	20	8	5539	0
15	19	7.6	5539	1
16	18	7.2	5538	1
17	17	6.8	5538	1
18	16	6.4	5537	1
19	15	6	5537	1
20	14	5.6	5537	1
21	13	5.2	5564	1
22	12	4.8	5564	1
23	11	4.4	5565	1
24	10	4	5565	1
25	9	3.6	5565	1
26	8	3.2	5566	1
27	18	7.2	5562	1
28	19	7.6	5561	1
29	20	8	5561	1
30	5	2	5567	1
Total				29
Detection Percentage (%)				97%
Limit				80%
Test Result				Complied



Trial Number							1
Number of Bursts in Trial							8
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	62.1	5	-	-	1091	
2	2	56	5	1729	-	133	
3	2	91.3	5	1230	-	1057	
4	3	50.7	5	1762	1616	1442	
5	2	92.6	5	1723	-	544	
6	2	87.3	5	1302	-	1089	
7	2	59.5	5	1291	-	1374	
8	2	52.2	5	1653	-	1237	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							2
Number of Bursts in Trial							9
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	3	90	20	1007	1326	30	
2	2	73.7	20	1785	-	979	
3	1	78.1	20	-	-	683	
4	2	92.4	20	1281	-	950	
5	1	61.2	20	-	-	612	
6	3	67.2	20	1525	1870	17	
7	1	78.5	20	-	-	429	
8	2	60.3	20	1931	-	936	
9	3	92.9	20	1403	1476	548	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number			3			
Number of Bursts in Trial			10			
Chirp Center Frequency			5550			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	63.4	7	1574	1607	801
2	1	98	7	-	-	966
3	1	58.7	7	-	-	185
4	1	88	7	-	-	1012
5	3	79.5	7	1562	1370	943
6	3	57.1	7	1900	1188	686
7	2	64.4	7	1090	-	599
8	1	78.7	7	-	-	1089
9	1	69.3	7	-	-	188
10	3	55.3	7	1375	1691	933
Detection Check (1=Detection; 0=No Detection)						1

Trial Number			4			
Number of Bursts in Trial			11			
Chirp Center Frequency			5550			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	74.3	8	1642	-	24
2	1	83.1	8	-	-	985
3	2	59.5	8	1680	-	988
4	2	59.8	8	1786	-	800
5	2	77.6	8	1617	-	339
6	2	79.9	8	1553	-	1040
7	1	56	8	-	-	544
8	3	71.4	8	1406	1927	452
9	1	97.4	8	-	-	204
10	2	98.3	8	1037	-	926
11	1	63.6	8	-	-	1052
Detection Check (1=Detection; 0=No Detection)						1



Trial Number							5
Number of Bursts in Trial							12
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	50	9	-	-	557	
2	2	62.5	9	1731	-	567	
3	2	55.4	9	1070	-	460	
4	1	65.7	9	-	-	4	
5	2	58	9	1512	-	64	
6	2	60.9	9	1230	-	650	
7	3	89.6	9	1598	1738	235	
8	3	84.4	9	1271	1617	873	
9	3	72.3	9	1498	1321	901	
10	1	58.9	9	-	-	663	
11	2	74.8	9	1584	-	919	
12	1	71.8	9	-	-	375	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							6
Number of Bursts in Trial							13
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	88.1	10	1257	-	846	
2	1	58.7	10	-	-	725	
3	2	97.1	10	1037	-	30	
4	3	83.1	10	1029	1106	490	
5	1	62.1	10	-	-	262	
6	2	71.4	10	1058	-	283	
7	2	86.3	10	1867	-	49	
8	3	77.3	10	1418	1876	634	
9	1	78.9	10	-	-	304	
10	3	79.2	10	1055	1572	564	
11	3	52	10	1582	1836	852	
12	3	56.5	10	1195	1542	525	
13	3	100	10	1638	1729	750	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							7
Number of Bursts in Trial							14
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	92.7	11	1208	-	231	
2	2	81.3	11	1144	-	804	
3	2	60.4	11	1555	-	34	
4	2	62.1	11	1320	-	427	
5	1	50	11	-	-	577	
6	3	65.9	11	1020	1365	3	
7	2	73.8	11	1308	-	51	
8	2	74.3	11	1143	-	360	
9	1	62.9	11	-	-	394	
10	2	74.8	11	1404	-	317	
11	2	69.7	11	1309	-	532	
12	2	69.8	11	1688	-	339	
13	2	77.4	11	1857	-	381	
14	1	55.1	11	-	-	426	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							8
Number of Bursts in Trial							15
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	91.7	12	-	-	776	
2	2	90	12	1196	-	187	
3	3	92.3	12	1486	1853	448	
4	2	66.8	12	1545	-	702	
5	1	64	12	-	-	403	
6	3	95.4	12	1123	1473	230	
7	3	66.8	12	1867	1401	604	
8	3	67.7	12	1472	1397	38	
9	1	68.2	12	-	-	735	
10	2	82.2	12	1297	-	610	
11	1	92.1	12	-	-	618	
12	2	57	12	1764	-	705	
13	2	58.5	12	1310	-	22	
14	3	85.5	12	1630	1447	641	
15	2	82.2	12	1371	-	109	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							9
Number of Bursts in Trial							16
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	74.4	13	1707	-	442	
2	2	63.6	13	1725	-	280	
3	2	71.3	13	1704	-	459	
4	3	77.6	13	1063	1405	197	
5	3	65.2	13	1731	1294	101	
6	3	55.1	13	1109	1549	17	
7	2	96.8	13	1034	-	131	
8	3	80.8	13	1533	1051	365	
9	1	60.4	13	-	-	222	
10	2	61.8	13	1312	-	371	
11	2	71.3	13	1657	-	33	
12	2	98.1	13	1024	-	291	
13	1	57.9	13	-	-	188	
14	1	91.8	13	-	-	163	
15	2	56.7	13	1259	-	426	
16	2	89.7	13	1690	-	606	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							10
Number of Bursts in Trial							17
Chirp Center Frequency							5550
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	74.4	14	1107	-	462	
2	1	87.6	14	-	-	653	
3	2	61.7	14	1741	-	457	
4	2	57.5	14	1566	-	388	
5	2	66.1	14	1855	-	63	
6	3	70.1	14	1044	1012	136	
7	1	66.4	14	-	-	343	
8	1	59.2	14	-	-	349	
9	2	88.3	14	1240	-	362	
10	1	64.7	14	-	-	221	
11	2	73	14	1703	-	144	
12	2	81.7	14	1450	-	671	
13	3	70.1	14	1741	1278	320	
14	1	63.6	14	-	-	196	
15	1	58.7	14	-	-	413	
16	2	65.9	14	1478	-	170	
17	1	72.7	14	-	-	564	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number			11			
Number of Bursts in Trial			18			
Chirp Center Frequency			5537			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	72.1	15	1193	-	130
2	3	76.3	15	1484	1390	114
3	1	86.1	15	-	-	14
4	1	73.2	15	-	-	604
5	1	81.2	15	-	-	548
6	2	99.5	15	1398	-	173
7	1	93.9	15	-	-	262
8	2	75.9	15	1921	-	38
9	3	79.2	15	1100	1429	84
10	3	77	15	1166	1799	610
11	1	91.8	15	-	-	339
12	3	56.8	15	1330	1556	580
13	2	83.1	15	1556	-	295
14	2	63	15	1552	-	156
15	1	65.7	15	-	-	439
16	1	64.5	15	-	-	188
17	1	88.5	15	-	-	419
18	1	60.6	15	-	-	205
Detection Check (1=Detection; 0=No Detection)						1



Trial Number			12			
Number of Bursts in Trial			19			
Chirp Center Frequency			5537			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	90.5	16	1299	-	381
2	2	88.4	16	1418	-	327
3	2	53.7	16	1055	-	536
4	1	80.5	16	-	-	285
5	1	50.4	16	-	-	398
6	2	61.2	16	1749	-	439
7	2	78.8	16	1065	-	129
8	3	75	16	1748	1820	325
9	2	96.7	16	1254	-	440
10	3	76.3	16	1848	1106	397
11	1	73.3	16	-	-	232
12	2	92.4	16	1317	-	91
13	2	92.4	16	1854	-	256
14	3	64.4	16	1240	1634	582
15	2	67.3	16	1473	-	117
16	2	84.1	16	1795	-	202
17	1	80.9	16	-	-	135
18	1	74.6	16	-	-	396
19	2	97.6	16	1805	-	615
Detection Check (1=Detection; 0=No Detection)						1



Trial Number							13
Number of Bursts in Trial							20
Chirp Center Frequency							5538
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	66.1	17	1417	-	388	
2	2	86.7	17	1693	-	348	
3	2	70.5	17	1263	-	215	
4	2	78	17	1446	-	28	
5	2	66	17	1185	-	585	
6	2	80.6	17	1855	-	65	
7	1	95.5	17	-	-	92	
8	1	98.8	17	-	-	68	
9	3	64.3	17	1641	1108	517	
10	1	75.1	17	-	-	121	
11	2	72.6	17	1499	-	448	
12	1	60.3	17	-	-	567	
13	2	54.9	17	1056	-	245	
14	2	98.8	17	1023	-	584	
15	2	60.9	17	1243	-	579	
16	2	62.7	17	1226	-	464	
17	1	80.1	17	-	-	89	
18	2	70.9	17	1711	-	153	
19	1	90.7	17	-	-	282	
20	1	98.9	17	-	-	71	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							14
Number of Bursts in Trial							8
Chirp Center Frequency							5539
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	67.5	20	1542	-	947	
2	3	83.6	20	1272	1696	124	
3	2	93.2	20	1877	-	701	
4	1	55.6	20	-	-	1123	
5	3	84.2	20	1733	1619	756	
6	3	69.1	20	1612	1071	1	
7	2	66.9	20	1905	-	7	
8	3	86.8	20	1697	1621	1082	
Detection Check (1=Detection; 0=No Detection)							0



Trial Number							15
Number of Bursts in Trial							9
Chirp Center Frequency							5539
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	62.2	19	1571	-	949	
2	2	85	19	1669	-	189	
3	2	64.5	19	1505	-	176	
4	2	50.4	19	1325	-	538	
5	2	66.1	19	1483	-	908	
6	2	71.2	19	1110	-	1017	
7	3	53.7	19	1445	1677	492	
8	3	62.5	19	1596	1341	349	
9	3	62	19	1929	1221	1105	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							16
Number of Bursts in Trial							10
Chirp Center Frequency							5538
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	80.5	18	1910	-	284	
2	2	64.2	18	1661	-	751	
3	2	90.1	18	1041	-	491	
4	2	69.8	18	1495	-	107	
5	1	73.1	18	-	-	490	
6	3	77.2	18	1418	1145	1155	
7	3	52.6	18	1732	1787	772	
8	2	71.4	18	1562	-	121	
9	2	89.8	18	1491	-	89	
10	2	76.4	18	1355	-	615	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							17
Number of Bursts in Trial							11
Chirp Center Frequency							5538
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	51.2	17	1236	-	740	
2	1	71.7	17	-	-	941	
3	2	74.7	17	1164	-	370	
4	2	50.9	17	1919	-	371	
5	2	65.2	17	1206	-	1033	
6	2	98	17	1182	-	346	
7	2	58.7	17	1612	-	639	
8	1	63.8	17	-	-	1056	
9	3	86.3	17	1545	1065	205	
10	1	94.4	17	-	-	753	
11	3	88.5	17	1699	1319	58	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							18
Number of Bursts in Trial							12
Chirp Center Frequency							5537
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	88.7	16	1405	-	448	
2	3	90.2	16	1544	1235	621	
3	1	96.5	16	-	-	512	
4	2	80.5	16	1090	-	321	
5	2	63.7	16	1268	-	798	
6	1	53.4	16	-	-	809	
7	2	52.3	16	1043	-	301	
8	3	54.7	16	1701	1104	796	
9	3	75.6	16	1923	1729	669	
10	2	59.2	16	1244	-	369	
11	1	56.3	16	-	-	51	
12	2	87.8	16	1608	-	733	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							19
Number of Bursts in Trial							13
Chirp Center Frequency							5537
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	68.2	15	1104	-	229	
2	2	58.4	15	1627	-	488	
3	3	74.7	15	1861	1015	137	
4	2	58.2	15	1593	-	520	
5	1	51.6	15	-	-	799	
6	2	94.7	15	1469	-	43	
7	2	70.7	15	1091	-	126	
8	2	82.9	15	1472	-	607	
9	3	62.7	15	1168	1453	527	
10	2	63.1	15	1529	-	143	
11	1	96.1	15	-	-	176	
12	2	57	15	1457	-	882	
13	3	95.6	15	1707	1501	214	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							20
Number of Bursts in Trial							14
Chirp Center Frequency							5537
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	95.7	14	-	-	117	
2	1	93.1	14	-	-	720	
3	1	55.8	14	-	-	297	
4	1	76.7	14	-	-	284	
5	2	68	14	1686	-	472	
6	3	94.1	14	1796	1393	264	
7	2	53.9	14	1293	-	525	
8	1	99.3	14	-	-	155	
9	2	73.3	14	1458	-	65	
10	2	93.3	14	1196	-	451	
11	3	55.8	14	1895	1034	243	
12	1	66.4	14	-	-	228	
13	2	65.6	14	1732	-	746	
14	2	76.5	14	1187	-	522	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							21
Number of Bursts in Trial							15
Chirp Center Frequency							5564
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	85.1	13	-	-	565	
2	2	72.5	13	1648	-	211	
3	1	67.5	13	-	-	348	
4	2	56.1	13	1360	-	156	
5	1	71.1	13	-	-	718	
6	2	93.1	13	1391	-	400	
7	1	56.5	13	-	-	482	
8	1	63.8	13	-	-	703	
9	2	67.4	13	1727	-	780	
10	1	52.3	13	-	-	102	
11	3	62.4	13	1228	1715	304	
12	2	53.3	13	1630	-	57	
13	2	83.1	13	1205	-	768	
14	2	93.7	13	1085	-	461	
15	2	90.7	13	1297	-	746	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							22
Number of Bursts in Trial							16
Chirp Center Frequency							5564
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	98.8	12	1439	-	95	
2	1	54.5	12	-	-	676	
3	2	80.5	12	1360	-	8	
4	2	55.9	12	1906	-	373	
5	2	72.1	12	1623	-	254	
6	2	84.4	12	1604	-	480	
7	1	78.5	12	-	-	663	
8	1	88	12	-	-	314	
9	2	74.7	12	1157	-	596	
10	2	97.1	12	1673	-	264	
11	1	81.6	12	-	-	740	
12	1	83.6	12	-	-	163	
13	3	87.6	12	1757	1322	628	
14	2	58.5	12	1372	-	132	
15	3	91.8	12	1767	1183	106	
16	2	58.8	12	1432	-	659	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number							23
Number of Bursts in Trial							17
Chirp Center Frequency							5565
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	96	11	-	-	284	
2	2	92.5	11	1241	-	488	
3	2	89.5	11	1347	-	76	
4	2	74.8	11	1607	-	688	
5	2	60.6	11	1523	-	28	
6	2	71.5	11	1659	-	383	
7	2	71.1	11	1454	-	182	
8	1	98.7	11	-	-	20	
9	2	85.1	11	1770	-	576	
10	2	89.2	11	1086	-	410	
11	2	60.7	11	1101	-	458	
12	2	75.2	11	1719	-	348	
13	2	75.7	11	1799	-	481	
14	3	56.7	11	1132	1884	587	
15	2	65	11	1885	-	480	
16	2	64.6	11	1910	-	195	
17	3	69.9	11	1410	1190	396	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							24
Number of Bursts in Trial							18
Chirp Center Frequency							5565
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	3	83.8	10	1290	1021	536	
2	2	66.9	10	1112	-	44	
3	3	91	10	1220	1504	611	
4	2	86.1	10	1678	-	456	
5	3	65.5	10	1928	1222	330	
6	1	62.6	10	-	-	297	
7	3	68.7	10	1505	1200	351	
8	3	59.2	10	1452	1114	230	
9	1	73.9	10	-	-	222	
10	1	77.2	10	-	-	57	
11	2	96.4	10	1357	-	399	
12	2	99.9	10	1173	-	299	
13	2	99.9	10	1520	-	464	
14	1	86.7	10	-	-	294	
15	1	92.6	10	-	-	653	
16	1	77.1	10	-	-	550	
17	2	81.1	10	1664	-	566	
18	3	68.4	10	1536	1309	580	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number				25		
Number of Bursts in Trial				19		
Chirp Center Frequency				5565		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	68.2	9	1723	1868	471
2	3	83.7	9	1711	1405	368
3	2	69.7	9	1781	-	425
4	1	59.7	9	-	-	440
5	2	96.7	9	1484	-	123
6	2	95.8	9	1319	-	261
7	3	71.3	9	1095	1354	332
8	3	53.2	9	1527	1427	427
9	2	69.5	9	1771	-	397
10	3	63.9	9	1075	1447	67
11	2	93.4	9	1783	-	174
12	2	77.3	9	1564	-	17
13	2	73.1	9	1294	-	216
14	1	77.4	9	-	-	292
15	3	57.2	9	1722	1886	619
16	2	68.7	9	1629	-	233
17	1	60.8	9	-	-	226
18	3	69.7	9	1128	1224	599
19	1	62.2	9	-	-	433
Detection Check (1=Detection; 0=No Detection)						1



Trial Number							26
Number of Bursts in Trial							20
Chirp Center Frequency							5566
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	1	80.5	8	-	-	90	
2	3	62.6	8	1406	1343	319	
3	3	85.6	8	1190	1529	384	
4	2	83.9	8	1208	-	567	
5	2	92.4	8	1488	-	234	
6	2	54	8	1529	-	535	
7	3	81.3	8	1501	1812	325	
8	1	98.5	8	-	-	532	
9	1	85.8	8	-	-	272	
10	2	84.7	8	1593	-	182	
11	2	83.3	8	1705	-	134	
12	2	79.8	8	1567	-	286	
13	1	77.9	8	-	-	368	
14	3	98.4	8	1510	1569	290	
15	2	79.9	8	1588	-	231	
16	3	78	8	1140	1353	353	
17	3	55.2	8	1700	1327	53	
18	3	71.9	8	1081	1224	44	
19	1	62	8	-	-	298	
20	3	70.5	8	1888	1442	529	
Detection Check (1=Detection; 0=No Detection)							1

Trial Number							27
Number of Bursts in Trial							8
Chirp Center Frequency							5562
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	69.1	18	1076	-	1436	
2	2	62.1	18	1688	-	22	
3	2	94.8	18	1891	-	897	
4	1	75.8	18	-	-	1186	
5	2	65.4	18	1713	-	589	
6	2	97.7	18	1292	-	614	
7	3	98.1	18	1670	1711	506	
8	2	85.4	18	1672	-	776	
Detection Check (1=Detection; 0=No Detection)							1



Trial Number			28			
Number of Bursts in Trial			9			
Chirp Center Frequency			5561			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	82	19	1233	1713	679
2	3	87.7	19	1554	1123	473
3	2	98.9	19	1518	-	869
4	1	55	19	-	-	719
5	1	93.6	19	-	-	902
6	2	58.7	19	1641	-	1243
7	2	88.7	19	1387	-	410
8	1	60.3	19	-	-	1154
9	1	97.7	19	-	-	512
Detection Check (1=Detection; 0=No Detection)						1

Trial Number			29			
Number of Bursts in Trial			5561			
Chirp Center Frequency			5520			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	69.6	20	-	-	1131
2	1	74.5	20	-	-	290
3	1	60.9	20	-	-	895
4	1	74.6	20	-	-	202
5	2	99.3	20	1501	-	139
6	2	95.3	20	1065	-	854
7	2	91.9	20	1722	-	219
8	2	51	20	1285	-	57
9	2	87.7	20	1747	-	141
10	1	87.2	20	-	-	596
Detection Check (1=Detection; 0=No Detection)						1



Trial Number			30			
Number of Bursts in Trial			11			
Chirp Center Frequency			5567			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	59.9	5	1901	1196	935
2	2	77.1	5	1590	-	1038
3	2	62.7	5	1227	-	690
4	1	77.1	5	-	-	547
5	3	99.8	5	1798	1790	551
6	2	61.5	5	1135	-	876
7	2	77.5	5	1583	-	448
8	2	57.3	5	1890	-	736
9	2	53.5	5	1757	-	362
10	1	66.6	5	-	-	836
11	3	80.7	5	1811	1289	410
Detection Check (1=Detection; 0=No Detection)						1



Type 6 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulses / Hop	Pulse Width (us)	PRI (us)	1=Detection 0=No Detection
1	5550	9	1	333	1
2	5550	9	1	333	1
3	5550	9	1	333	1
4	5550	9	1	333	1
5	5550	9	1	333	1
6	5550	9	1	333	1
7	5550	9	1	333	1
8	5550	9	1	333	1
9	5550	9	1	333	1
10	5550	9	1	333	1
11	5550	9	1	333	1
12	5550	9	1	333	1
13	5550	9	1	333	1
14	5550	9	1	333	1
15	5550	9	1	333	1
16	5550	9	1	333	1
17	5550	9	1	333	1
18	5550	9	1	333	1
19	5550	9	1	333	1
20	5550	9	1	333	1
21	5550	9	1	333	1
22	5550	9	1	333	1
23	5550	9	1	333	1
24	5550	9	1	333	1
25	5550	9	1	333	1
26	5550	9	1	333	1
27	5550	9	1	333	1
28	5550	9	1	333	1
29	5550	9	1	333	1
30	5550	9	1	333	1
Detection Percentage (%)					100.00
Limit					70%
Test Result					Complied



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSV40	101026	9kHz~40GHz	Sep. 14, 2016	Conducted (DF01-CB)
Signal Generator	R&S	SMR40	100302	10MHz-40GHz	Jan. 08, 2016	Conducted (DF01-CB)
Signal generator	R&S	SMU200A	105352	25MHz-6GHz	Aug. 01, 2016	Conducted (DF01-CB)
RF Power Divider	ANAREN	2 Way	DFS-01-DV-02	1GHz ~ 6GHz	Oct. 24, 2016	Conducted (DF01-CB)
RF Power Divider	MTJ	2 Way	DFS-01-DV-03	1GHz ~ 6GHz	Oct. 24, 2016	Conducted (DF01-CB)
RF Power Divider	ANAREN	4 Way	DFS-01-DV-01	1GHz ~ 6GHz	Oct. 24, 2016	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-53	1 GHz ~18 GHz	Oct. 24, 2016	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-54	1 GHz ~18 GHz	Oct. 24, 2016	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-56	1 GHz ~18 GHz	Oct. 24, 2016	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-60	1 GHz ~18 GHz	Oct. 24, 2016	Conducted (DF01-CB)

Note: Calibration Interval of instruments listed above is one year.



5 Measurement Uncertainty

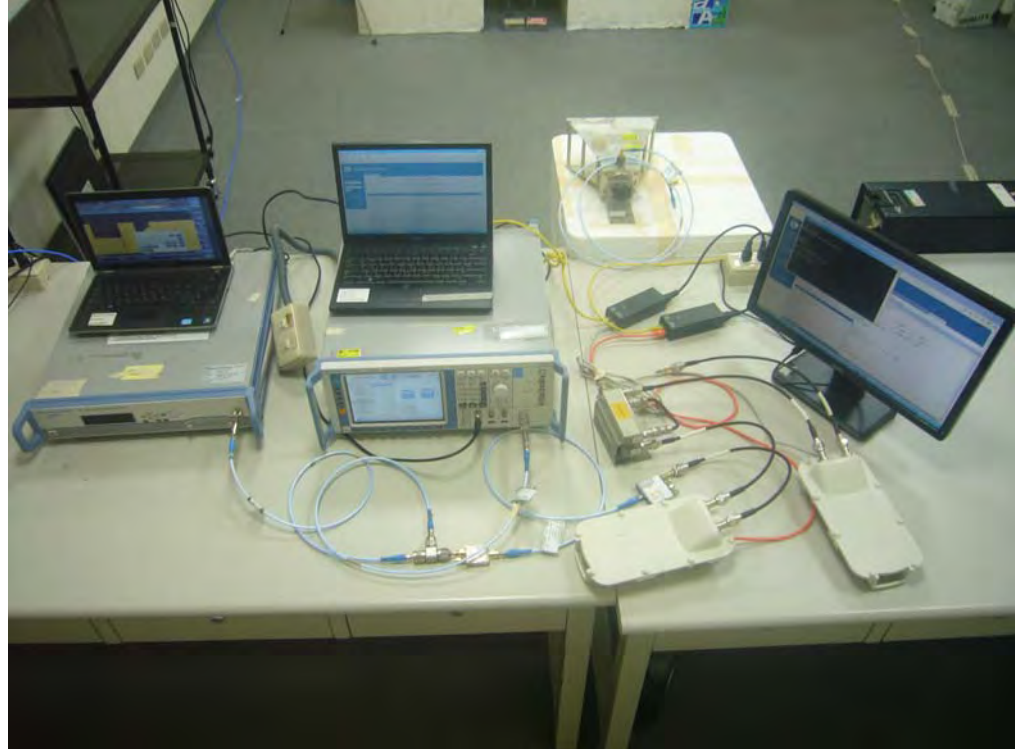
Test Items	Uncertainty	Remark
Conducted Emission	1.7 dB	Confidence levels of 95%

Appendix A. Test Photos

1. Photographs of Dynamic Frequency Selection Test Configuration

For Master test mode:

FRONT VIEW

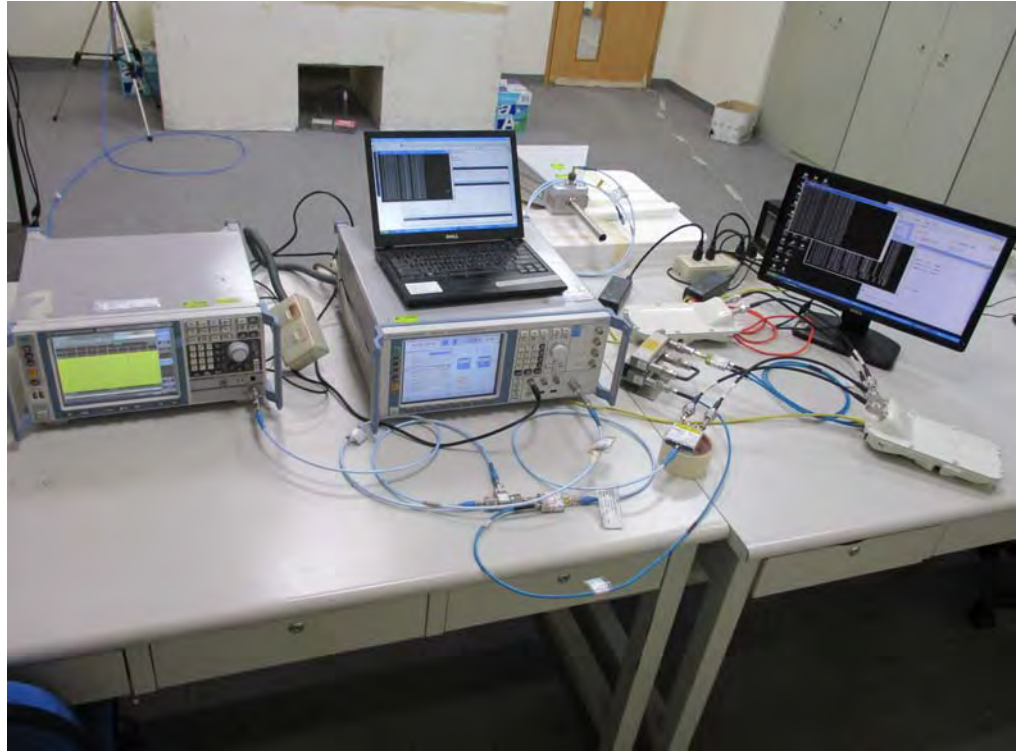


REAR VIEW



For Client without radar detection test mode:

FRONT VIEW



REAR VIEW

