

Report No.: FZ862827-02



# FCC DFS TEST REPORT

FCC ID : 2AHKM-HIVE2200

Equipment : 2x2 DBCC WiFi Extender

Brand Name : hitron

Model Name : HIXE12AWR

Applicant : Hitron Technologies Inc.

No. 1-8, Li-Hsin 1st Rd. Hsinchu Science Park,

Hsinchu 30078, Taiwan

Manufacturer : Hitron Technologies Inc.

No. 1-8, Li-Hsin 1st Rd. Hsinchu Science Park,

Hsinchu 30078, Taiwan

Standard: 47 CFR FCC Part 15.407

The product was received on Jan. 04, 2019, and testing was started from Jan. 28, 2019 and completed on Feb. 12, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Cliff Chang

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

TEL: 886-3-656-9065 FAX: 886-3-656-9085

Report Template No.: CB Ver1.0

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Photographs of EUT v01

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# History of this test report

Report No. : FZ862827-02

Report No.	Version	Description	Issued Date
FZ862827-02	01	Initial issue of report	Mar. 05, 2019

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# **Summary of Test Result**

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Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.3	FCC KDB 905462 7.8.1	DFS: UNII Detection Bandwidth Measurement	PASS	-
3.4	FCC KDB 905462 7.8.2.1	DFS: Initial Channel Availability Check Time	PASS	-
3.4	FCC KDB 905462 7.8.2.2	DFS: Radar Burst at the Beginning of the Channel Availability Check Time	PASS	-
3.4	FCC KDB 905462 7.8.2.3	DFS: Radar Burst at the End of the Channel Availability Check Time	PASS	-
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Channel Move Time (CMT)	PASS	-
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Channel Closing Transmission Time (CCTT)	PASS	-
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Non-Occupancy Period (NOP)	PASS	-
3.6	FCC KDB 905462 7.8.4	DFS: Statistical Performance Check	PASS	-
3.1.4	FCC KDB 905462 8.1	User Access Restrictions	PASS	-

Note: Extender mode, only Statistical Performance Check (Section 7.8.4) on one of the radar types is required to perform.

### **Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

## **Comments and Explanations:**

- 1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
- 2. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Cliff Chang Report Producer: Wendy Pan

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# 1 General Description

# 1.1 Information

# 1.1.1 RF General Information

Specification Items	Descript	ion		
Frequency Range	5250 MHz – 5350 MHz			
	5470 MHz – 5725 MHz			
Power Type	Internal power supply			
Channel Bandwidth	20/40/80 MHz operating channel bands	width		
Operating Mode				
	Client with radar detection			
	☐ Client without radar detection			
Communication Mode		☐ Frame Based		
TPC Function	With TPC	☐ Without TPC		
Weather Band (5600~5650MHz)	☐ With 5600~5650MHz	☑ Without 5600~5650MHz		
Power-on cycle	80MHz: Requires 56.187 seconds to complete its power-on cycle.			
Software / Firmware Version	2.0.3-32-stable-20181127213726			
	(ubuntu@jvm-asd-m-yocto-static-2-34) [Tue Nov 27 22:11:17 UTC 2018]			
<ul> <li>VHT20, VHT40, VHT80 use a modulation.</li> </ul>	a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation. use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM nanism and TPC have the capability to operate at least 6 dB below highest RF			
output power.	in and it o have the capability to opera	to at loads o ab bolow highlest Ki		

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#### **TPC Power Result**

Mode	Min Power	Max Power	Min EIRP	Max EIRP
	(dBm)	(dBm)	(dBm)	(dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-
5.25-5.35GHz	14.34	20.34	19.14	25.14
5.47-5.725GHz	12.41	18.41	17.81	23.81
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-
5.25-5.35GHz	13.81	19.81	18.61	24.61
5.47-5.725GHz	11.82	17.82	17.22	23.22
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-
5.25-5.35GHz	13.31	19.31	18.11	24.11
5.47-5.725GHz	11.94	17.94	17.34	23.34
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-
5.25-5.35GHz	9.55	15.55	14.35	20.35
5.47-5.725GHz	8.19	14.19	13.59	19.59
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-
5.25-5.35GHz	16.53	22.53	23.95	29.95
5.47-5.725GHz	15.49	21.49	23.65	29.65
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-
5.25-5.35GHz	16.33	22.33	23.75	29.75
5.47-5.725GHz	15.25	21.25	23.41	29.41
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-
5.25-5.35GHz	12.76	18.76	20.18	26.18
5.47-5.725GHz	9.59	15.59	17.75	23.75

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### 1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	P/N	Antenna Type	Connector	Gain (dBi)
1	1	Ethertronics	XE1v2	-	PCB Antenna	I-PEX	
2	2	Ethertronics	XE1v2	-	PCB Antenna	I-PEX	Note
3	1	PSA	-	RFECA3216060A1T	CERAMIC Antenna	N/A	

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#### Note 1:

	Gain (dBi)						
Ant.	Port	WLAN 2.4G	WLAN 5G Band 1	WLAN 5G Band 2	WLAN 5G Band 3	WLAN 5G Band 4	вт
1	1	4.4	4.8	4.8	5.4	5.5	-
2	2	3.1	3.8	4.0	4.9	3.8	-
3	1	-		-	-		2.09

Note 2: The EUT has three antennas.

Note 3: The above information was declared by manufacturer.

#### <For 2.4GHz Band>

### For IEEE 802.11b/g/n mode (2TX/2RX)

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

### <For 5GHz Band>

### For IEEE 802.11a/n/ac mode (2TX/2RX)

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

### <For Bluetooth>

### For BT function (1TX/1RX)

Only Port 1 can be used as transmitting/receiving antenna.

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# 1.1.3 DFS Band Carrier Frequencies

There are three bandwidth systems.

For 20MHz bandwidth systems, use Channel 52, 56, 60, 64, 100, 104, 108, 112, 116, 132, 136, 140.

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For 40MHz bandwidth systems, use Channel 54, 62, 102, 110, 134.

For 80MHz bandwidth systems, use Channel 58, 106.

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
	52	5260 MHz	60	5300 MHz
5250~5350 MHz	54	5270 MHz	62	5310 MHz
Band 2	56	5280 MHz	64	5320 MHz
	58	5290 MHz	-	-
	100	5500 MHz	116	5580 MHz
	102	5510 MHz	112	5560 MHz
5470~5725 MHz	104	5520 MHz	132	5660 MHz
Band 3	106	5530 MHz	134	5670 MHz
	108	5540 MHz	136	5680 MHz
	110	5550 MHz	140	5700 MHz

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# 1.1.4 Table for EUT Function

Function
AP Router
Extender
Mesh

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Note: The above information was declared by manufacturer.

# 1.1.5 Table for Class II Change

This product is an extension of original one reported under Sporton project number: 862827 Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking	
1. Updating the hardware version to "SR3" from		
"SR2".		
The detail differences as below.		
a) Updating the design for antenna.		
b) Change LED to DIP lamp from SMD chip	Do not affect the test results.	
c) Removing the absorber of the device.		
d) Adding U4 and U4 related components on the mother board.		
e) Change the opening size for pin header on the main frame.		
2. Adding beamforming for Band 1 ~ Band 4.		
3. Adding 5GHz band 2 and band 3 (5250~5350 MHz,	DFS	
5470~5725 MHz) for this device.	שרט	

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# 1.2 Accessories

N/A

# 1.3 Support Equipment

For AP Router (Master) Mode:

	Support Equipment									
No.	No. Equipment Brand Name Model Name FCC ID									
Α	Notebook	DELL	E4300	N/A						
В	Notebook	DELL	E4300	N/A						
L	WLAN Dongle	LINKSYS	AE6000	Q87-AE6000						

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For Extender (Master) Mode:

	Support Equipment							
No.	Equipment	Brand Name	Model Name	FCC ID				
Α	Notebook	DELL	E4300	N/A				
В	Notebook	DELL	E4300	N/A				
L	WLAN Dongle	LINKSYS	AE6000	Q87-AE6000				
S	WLAN AP	D-LINK	DIR860L	KA2IR860LA1				

# 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							
	HWA YA	ADD : No	o. 52, Huaya 1st Rd	, Guishan Dist., Taoyuan (	City, Taiwan (R.O.C.)			
		TEL : 88	6-3-327-3456	FAX : 886-3-327-097	73			
$\boxtimes$	JHUBEI	JHUBEI ADD: No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.						
		TEL : 88	6-3-656-9065	FAX : 886-3-656-908	35			
Tes	Test Condition							
DFS Site		DF01-CE	B DK Chang	22 ~ 25°C / 51 ~ 54%	Jan. 28, 2019 ~ Feb. 12, 2019			

Test site Designation No. TW0006 with FCC

Test site registered number IC 4086D with Industry Canada.

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# 2 Test Configuration of EUT

# 2.1 Test Channel Frequencies Configuration

Test Channel Frequencies Configuration					
IEEE Std.	Test Channel Freq. (MHz)				
802.11ac (VHT20)	5500 MHz				
802.11ac (VHT40)	5510 MHz				
802.11ac (VHT80)	5530 MHz				

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# 2.2 The Worst Case Measurement Configuration

Th	The Worst Case Mode for Following Conformance Tests							
Tests Item	Dyr	amic Frequency Selection (DFS)						
Test Condition	Radiated measurement 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. The DFS radar test signals have been aligned to the direction corresponding to the EUT's maximum antenna gain.							
Modulation Mode	802.11ac (VHT20), 802.11ac (VHT40), 802.11ac (VHT80)							
	1 AP Router (Master) Mode (All test items)							
Test Mode	2	Extender (Master) Mode (only Statistical Performance Check (Section 7.8.4) on one of the radar types)						

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# 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).					

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- 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.

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# 3.1.2 Applicability of DFS Requirements Prior to Use of a Channel

		DFS Operational mode					
Requirement	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				

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# 3.1.3 Applicability of DFS Requirements during Normal Operation

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

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### 3.1.4 User Access Restrictions

#### **User Access Restrictions**

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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

	The data file (MPEG-4) has been transmitting in a streaming mode.
$\boxtimes$	Software to ping the client is permitted to simulate data transfer with random ping intervals.
$\boxtimes$	Minimum channel loading of approximately 17%.
	Unicast protocol has been used.

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# 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	[( 1 ) (19×10 <sup>6</sup> )]	60%	15
1B	1	15 unique PRI within 518-3066, Excluding 1A PRI	$Roundup \left\{ \left( \frac{1}{360} \right) \times \left( \frac{19 \times 10^6}{PRI} \right) \right\}$	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
Aggrega	ate (Radar Type	80%	120		

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**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 <i>Burst</i>	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

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- 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.

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• 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 / 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 / Burst Count) – (Total Burst Length) + (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

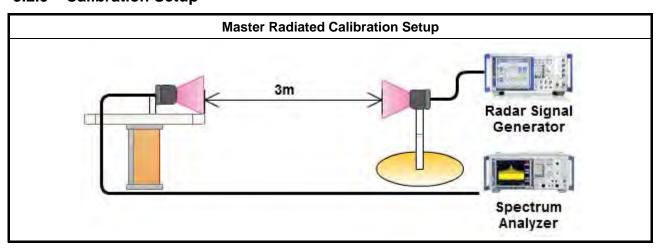
Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (ms)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	0.333	300	70%	30

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:	-63	dBm	at the antenna connector					
			in front of the antenna					
The Interference <b>Radar Detection Threshold Level</b> is is $-64  dBm + 0  [dBi] + 1  dB = -63  dBm$ . That had been taken into account the output power range and antenna gain.								

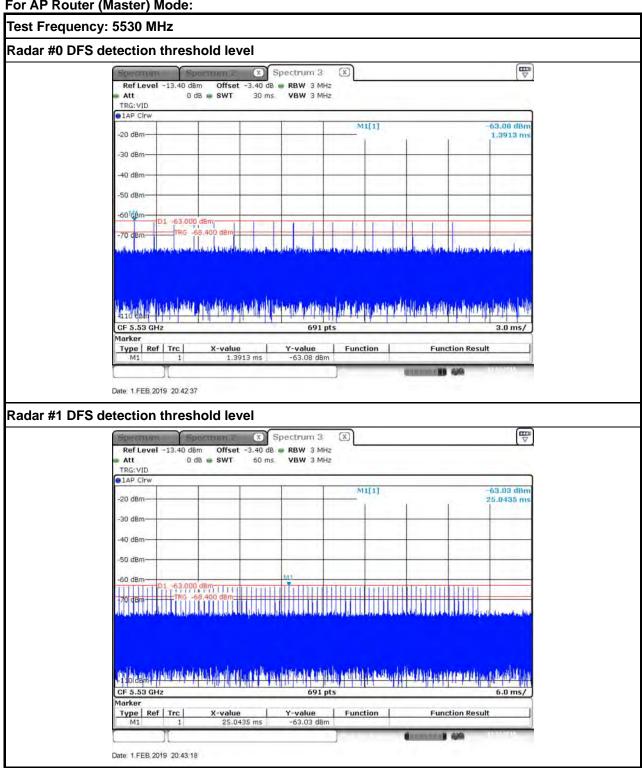
### 3.2.5 Calibration Setup



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#### Radar Waveform calibration Plot 3.2.6

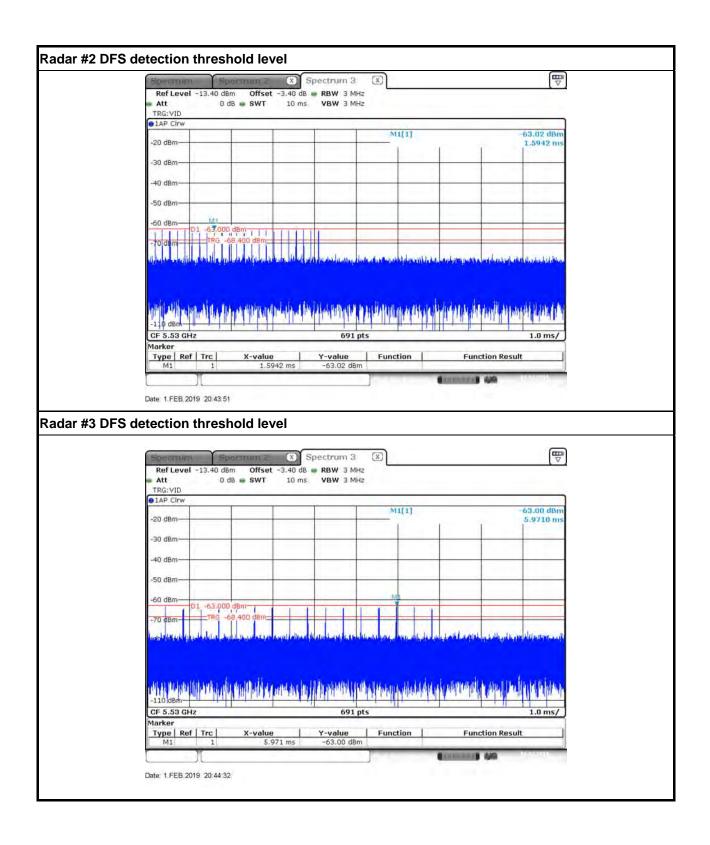
#### For AP Router (Master) Mode:



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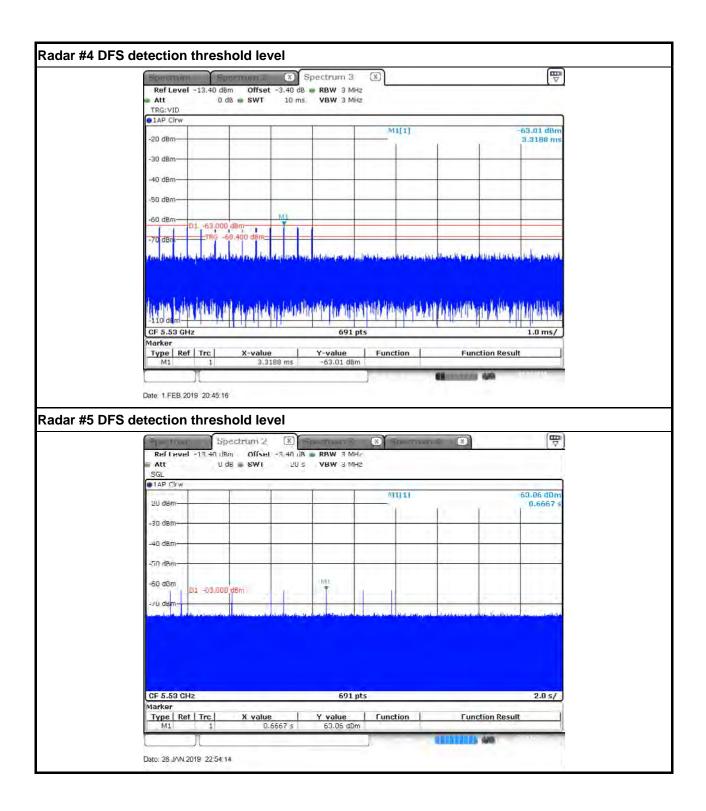
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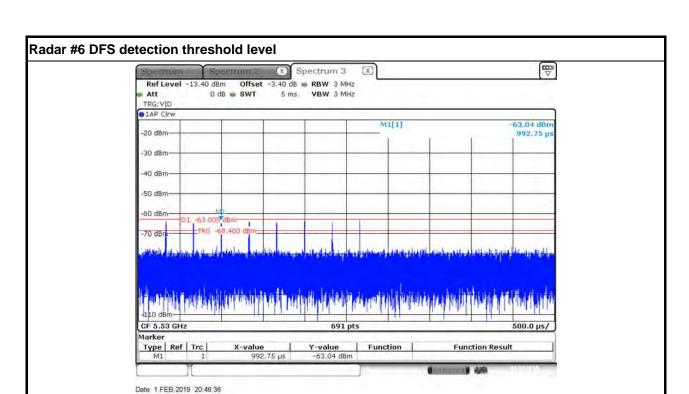


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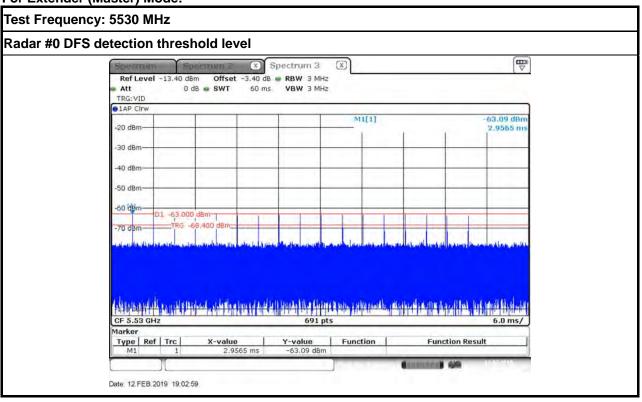
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# For Extender (Master) Mode:



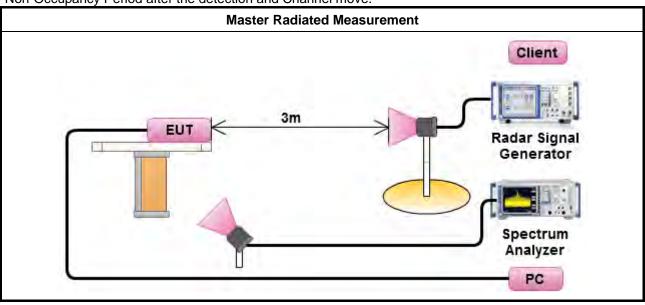
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# 3.2.7 Test Setup

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.

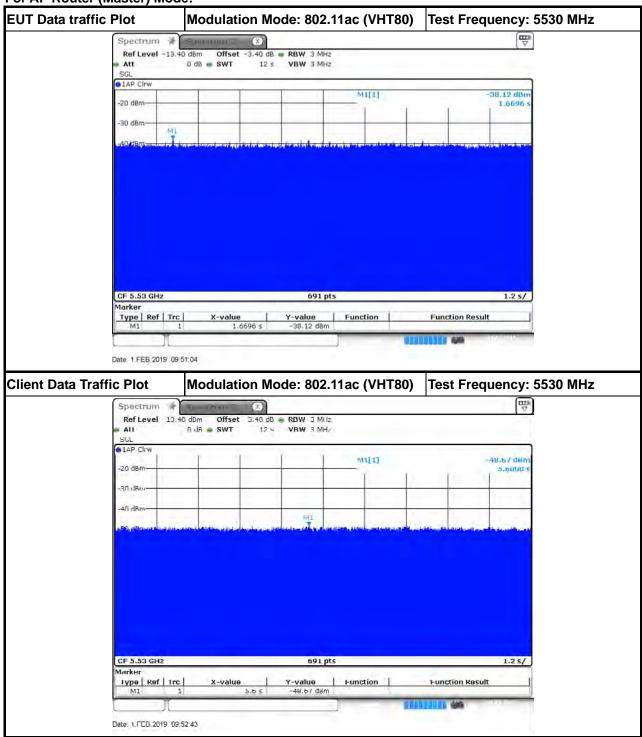
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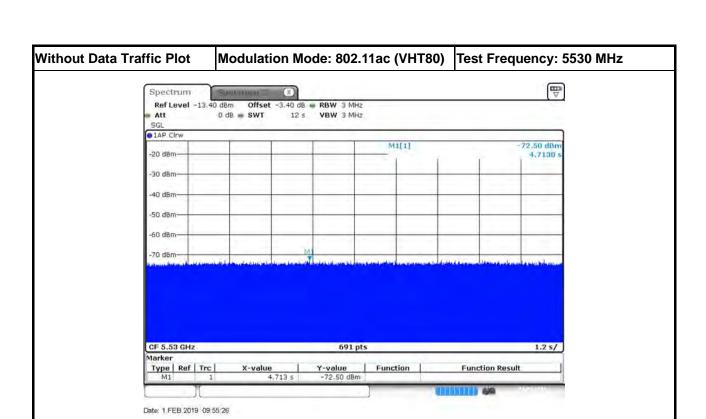
### 3.2.8 Data traffic Plot

### For AP Router (Master) Mode:



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### 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)		
20	19.797	20		
40	39.363	40		
80	76.121	77		

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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**

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<sub>H</sub>. 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<sub>L</sub>. UNII Detection Bandwidth = F<sub>H</sub> - F<sub>L</sub>.

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# 3.3.4 Test Result of UNII Detection Bandwidth

# For AP Router (Master) Mode:

For AP Router (Master) Mode:	EU	T Fre	auer	icv=5	5500	MHz					
Channel Bandwidth (MHz)	20			,							
` ,	DFS Detection Trials (1=Detection, 0= No Detection)										
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5489	0	0	0	0	0	0	0	0	0	0	0
5490 (FL)	1	0	1	1	1	1	1	1	1	1	90
5491	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	1	1	1	0	1	1	1	1	1	1	90
5510 (FH)	1	1	1	0	1	1	1	1	1	1	90
5511 0 0 0 0 0 0 0 0 0 0										0	
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5510MHz-5490MHz)=									20		
UNII Detection Bandwidth Min. Limit	JNII Detection Bandwidth Min. Limit (MHz) =								20		
Test Result	est Result							Complied			

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	FU	T Fre	auer	icv=	510	MHz					
Channel Bandwidth (MHz)	40		<b>.</b> quo.	<u>.</u>		····-					
Citation Danaman (iiii.z)	DFS Detection Trials (1=Detection, 0= No Detection)										
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490 (FL)	1	1	1	1	0	1	1	1	1	1	90
5491	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	1	1	1	1	1	1	100
5529	1	1	1	1	1	1	1	1	1	1	100
5530 (FH)	1	1	1	1	1	1	1	1	0	1	90
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5530MHz-5490MHz)=									40		
UNII Detection Bandwidth Min. Limit	(MHz	) =									40
Test Result											Complied

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	EU	T Fre	quer	icv=5	530	MHz					
Channel Bandwidth (MHz)	80										
,	DFS Detection Trials (1=Detection, 0= No Detection)										
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5489	0	0	0	0	0	0	0	0	0	0	0
5490 (FL)	1	1	1	0	1	1	1	1	1	1	90
5491	1	1	1	1	1	1	1	1	1	1	100
5492	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
5567	1	1	1	1	1	1	1	1	1	1	100
5568	1	1	1	1	1	1	1	1	1	1	100
5569	1	1	1	1	1	1	1	1	1	1	100
5570 (FH)	1	1	1	1	0	1	1	1	1	1	90
5571 0 0 0 0 0 0 0 0 0 0										0	0
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5570MHz-5490MHz)=									80		
UNII Detection Bandwidth Min. Limit	(MHz	) =									77
Test Result											Complied

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# 3.4 Channel Availability Check (CAC)

# 3.4.1 Channel Availability Check Limit

#### **Channel Availability Check Limit**

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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**

- 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.
- 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.
- 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.

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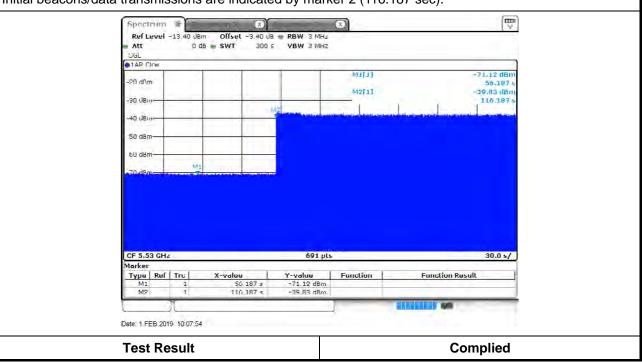
# 3.4.4 Test Result of Initial Channel Availability Check Time

### For AP Router (Master) Mode:

Modulation Mode	Freq.	Radar Test Signal		
802.11ac (VHT80)	5530 MHz	N/A		

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The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (56.187 sec). The initial CAC time of the EUT is indicated by marker 1 (56.187 sec). Initial beacons/data transmissions are indicated by marker 2 (116.187 sec).



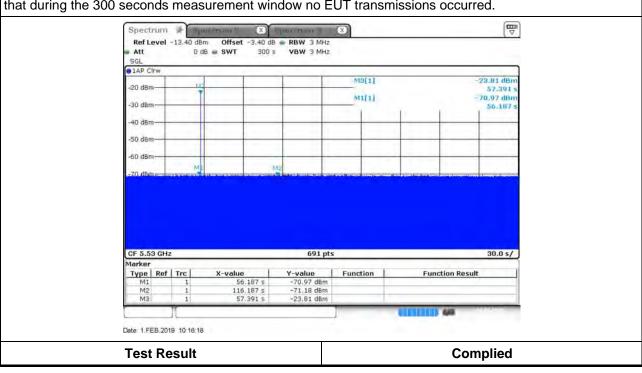
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# 3.4.5 Test Result of Radar Burst at the Beginning of the Channel Availability Check Time

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Modulation Mode	Freq. (MHz)	Radar Type Signal			
802.11ac (VHT80)	5530 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 242.609 seconds after the radar Burst has been generated. Verify that during the 300 seconds measurement window no EUT transmissions occurred.



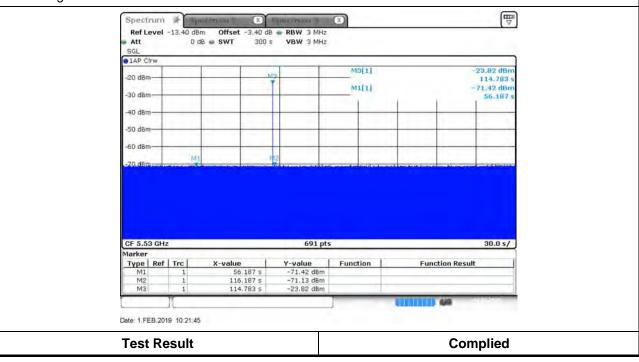
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# 3.4.6 Test Result of Radar Burst at the End of the Channel Availability Check Time

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Modulation Mode	Freq. (MHz)	Radar Type Signal		
802.11ac (VHT80)	5530 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 185.217 seconds after the radar Burst has been generated. Verify that during the 300 seconds measurement window no EUT transmissions occurred.



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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						

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## 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

#### **Test Method**

- ✓ 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.
- ✓ 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.
- ✓ 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.

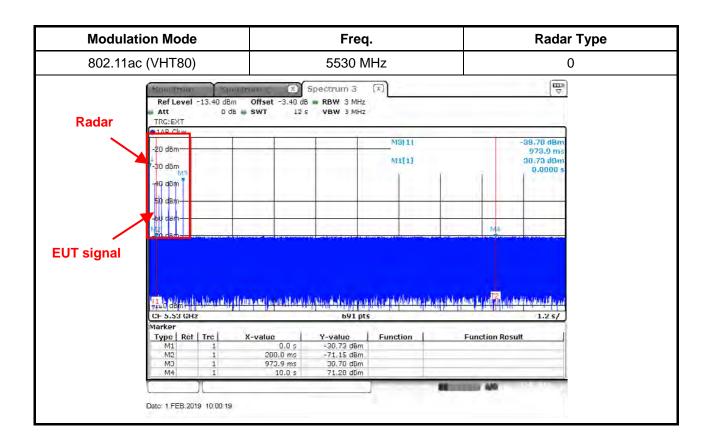
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# 3.5.4 Test Result of Channel Move Time

For AP Router (Master) Mode: Modulation Mode: 802.11ac (VHT80)

Parameter	Test Result	Limit	
Faranielei	Type 0	Limit	
Test Channel (MHz)	5530 MHz	-	
Channel Move Time (sec.)	0.973	< 10s	

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#### 3.5.5 **Test Result of Channel Closing Transmission Time**

For AP Router (Master) Mode: Modulation Mode: 802.11ac (VHT80)

**Test Result** 

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Daramotor		Limit
Parameter	Type 0	Limit
Test Channel (MHz)	5530 MHz	-
Channel Closing Transmission Time (ms) (Note)	17.391	< 60ms
Note: The Observat Observation Towns in Time 1		( ()

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.

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Мос	dulation Mode		Freq.			Radar Type
802	2.11ac (VHT80)	5	530 MI	Нz		0
	osing Transmission Time Oms additional intermitte			ms starting a	t the beginni	ng of the Channel Move
	Ref Level -13.40 dBm Of Att OdB SV	fset -3,40 dB · RBN	rum 3 🦼 W 3 MHz W 3 MHz	<b>x</b>		
Radar	-20 dBm -30 dBm -40 dBm -50 dBm -70 dBm		M3	M3[1]		-39.40 dBm 985.51 ms -29.75 dBm 0.00000 s
EUT signa	the Manager of the Residence of the Salar State of	Alti ekkeremen Heda	691 pts	Function	Function Res	200.0 ms/

-29.75 d8m -72.55 d8m

-39.40 dBm

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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

0.0 s 200.0 ms

985.51 ms

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

Dwell (2.899 ms)= S (2000 ms) / B (690)

МЗ

Date: 1.FEB.2019 10:09:24

C (17.391 ms) = N (6) X Dwell (2.899 ms)

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# 3.5.6 Test Result of Non-Occupancy Period

For AP Router (Master) Mode: Modulation Mode: 802.11ac (VHT80)

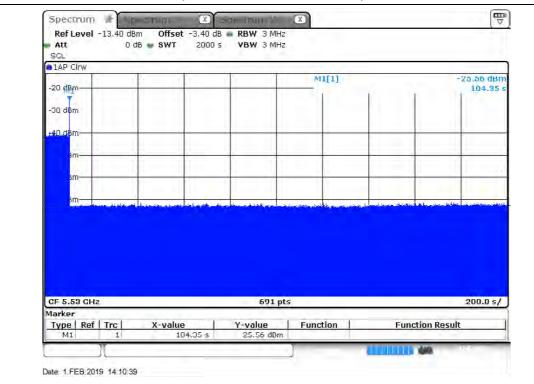
Parameter	Test Result	Limit	
r al allietei	Type 0		
Test Channel (MHz)	5530 MHz	-	
Non-Occupancy Period (min.)	≥30	≥ 30 min	

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Modulation Mode	Freq.	
802.11ac (VHT80)	5530 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.



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### 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

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The percentage of successful detection is calculated by:

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

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

Pd1 + Pd2 + Pd3 + Pd4

### 3.6.2 **Measuring Instruments**

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

#### 3.6.3 **Test Procedures**

### **Test Method**

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.

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# 3.6.4 Test Result of Statistical Performance Check

For AP Router (Master) Mode: Modulation Mode: 802.11ac (VHT20)

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	5503	1	1930.5	518	1
2	5502	23	326.2	3066	1
3	5506	19	1139.0	878	1
4	5503	12	1355.0	738	1
5	5510	4	1730.1	578	1
6	5510	8	1519.8	658	1
7	5500	15	1253.1	798	1
8	5492	6	1618.1	618	0
9	5505	14	1285.3	778	1
10	5507	3	1792.1	558	1
11	5491	13	1319.3	758	1
12	5499	9	1474.9	678	1
13	5510	7	1567.4	638	1
14	5497	17	1193.3	838	1
15	5509	10	1432.7	698	1
16	5500	-	1692.0	591	1
17	5490	-	328.1	3048	1
18	5494	-	373.4	2678	1
19	5491	-	574.4	1741	1
20	5500	-	1216.5	822	1
21	5494	-	801.3	1248	1
22	5492	-	488.5	2047	1
23	5509	-	956.0	1046	1
24	5508	-	517.6	1932	1
25	5493	-	1422.5	703	0
26	5491	-	542.0	1845	1
27	5492	-	741.3	1349	1
28	5492	-	881.8	1134	1
29	5499	-	427.4	2340	1
30	5504	-	628.9	1590	1
		Detection Percentage	(%)		93.333
Limit					60%
Test Res	ult		<u> </u>		Complied

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Type 2 Radar Statistical Performance								
Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection			
1	5502	2.6	221	23	1			
2	5507	4.6	198	27	1			
3	5502	1.1	184	29	1			
4	5499	4.8	203	24	1			
5	5509	2.4	162	25	0			
6	5493	3.4	204	28	1			
7	5490	2.3	170	27	1			
8	5498	3.5	184	23	1			
9	5500	4.9	150	27	1			
10	5490	4.6	211	29	1			
11	5506	2.9	158	23	1			
12	5499	2.6	226	27	1			
13	5507	1.6	204	26	0			
14	5493	3.9	181	25	1			
15	5506	4.6	202	24	1			
16	5493	4.1	194	27	1			
17	5507	2.3	193	28	1			
18	5507	3.9	173	29	1			
19	5492	4.3	188	23	1			
20	5493	1.5	215	26	1			
21	5498	4.9	227	27	1			
22	5497	1.1	199	23	1			
23	5490	4.5	155	29	0			
24	5490	4.0	190	27	1			
25	5501	2.4	151	23	1			
26	5498	2.5	180	28	 1			
27	5498	2.5	228	23	 1			
28	5506	2.5	203	25	 1			
29	5501	1.5	188	25	 1			
30	5506	1.9	217	24	1			
		etection Percentage (%		1	90.000			
Limit			,		60%			
Test Res	ult				Complied			

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Type 3 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection ; 0=No Detection
1	5494	8.0	205	16	1
2	5490	6.7	382	18	1
3	5506	8.6	418	16	1
4	5493	9.4	351	17	1
5	5498	7.4	383	18	1
6	5499	9.8	232	16	1
7	5498	9.1	377	17	0
8	5499	9.6	457	16	1
9	5503	8.0	471	18	1
10	5507	9.0	304	18	1
11	5498	8.0	316	17	1
12	5509	9.8	325	16	1
13	5507	8.0	409	17	1
14	5500	9.9	200	17	1
15	5510	8.8	458	16	1
16	5502	8.0	232	18	1
17	5496	8.3	250	16	1
18	5496	8.7	270	16	0
19	5500	7.7	350	17	1
20	5507	7.1	230	16	1
21	5509	7.3	416	18	1
22	5506	7.6	498	18	1
23	5490	7.3	286	17	1
24	5497	7.3	287	16	1
25	5510	7.5	462	17	1
26	5499	6.2	300	17	0
27	5509	6.4	323	18	1
28	5501	7.1	420	16	1
29	5490	7.2	395	18	1
30	5497	8.4	377	16	1
	De	etection Percentage (9	%) <u> </u>		90.000
Limit					60%
<b>Test Res</b>	ult				Complied

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Type 4 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5503	18.0	242	15	1
2	5495	19.9	279	12	<u> </u>
3	5493	12.9	487	14	1
4					
5	5501	15.0	452	13 12	0
	5496	16.3	230		1
6	5492	19.8	238	13	1
7	5494	18.2	420	16	1
8	5499	16.3	452	15	1
9	5499	14.2	495	12	1
10	5492	17.8	228	16	1
11	5491	19.1	211	16	1
12	5503	18.4	283	15	1
13	5500	11.8	411	12	0
14	5498	14.2	284	13	1
15	5491	13.9	202	12	1
16	5508	17.8	340	14	1
17	5499	15.6	290	16	1
18	5501	14.6	250	16	1
19	5508	14.4	484	15	1
20	5509	18.9	387	13	1
21	5493	11.1	348	15	0
22	5492	13.8	291	16	1
23	5494	14.3	295	12	1
24	5502	12.5	300	12	1
25	5491	12.5	322	14	1
26	5507	12.5	383	13	1
27	5508	15.7	322	16	0
28	5505	19.8	469	13	1
29	5494	18.6	406	15	1
30	5501	15.9	238	14	1
I.	86.667				
Limit		etection Percentage (%	,		60%
Test Resi	ult				Complied

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Total Type 1~4 Radar Statistical Performance

Radar Type #	Detection Percentage (%)
1	93.333
2	90.000
3	90.000
4	86.667
Aggregate (Radar Types 1-4)	90.000
Limit	80%
Test Result	Complied

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ype 5 Radar Statistic						
Center Freq. (MHz)	Low Edge (MHz)	High Edge (MHz)				
5500	5490	5510	VSG Freq. (MHz)	Detection		
Trial	Chirp	Offset				
1	5	2	5500	1		
2	20	8	5500	1		
3	7	2.8	5500	1		
4	8	3.2	5500	1		
5	9	3.6	5500	1		
6	10	4	5500	1		
7	11	4.4	5500	1		
8	12	4.8	5500	1		
9	13	5.2	5500	1		
10	14	5.6	5500	0		
11	15	6	5496	1		
12	16	6.4	5496	1		
13	17	6.8	5497	1		
14	20	8	5498	1		
15	19	7.6	5498	1		
16	18	7.2	5497	1		
17	17	6.8	5497	1		
18	16	6.4	5496	1		
19	15	6	5496	1		
20	14	5.6	5496	1		
21	13	5.2	5504	1		
22	12	4.8	5505	1		
23	11	4.4	5505	1		
24	10	4	5506	1		
25	9	3.6	5506	1		
26	8	3.2	5506	1		
27	18	7.2	5507	1		
28	19	7.6	5503	1		
29	20	8	5502	1		
30	5	2	5502	1		
Total						
	Detection Per			29 97		
imit				80%		
est Result				Complied		

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Trial Number	f		1				
Number of Bursts in Trial				8			
Chirp Center Frequency				55	00		
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 Che	eck (1=Detection; 0	=No Detection)				1	

Trial Number			2			
Number of Bursts in Trial			9			
Chirp Center Frequency				55	00	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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
<b>Detection Chec</b>	k (1=Detection; 0	=No Detection)				1

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Trial Number	•		3					
Number of Bursts in Trial Chirp Center Frequency				10				
				55	00			
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 Che	eck (1=Detection; 0	=No Detection)	•	•	•	1		

Trial Number				4	1		
Number of Bur	rsts in Trial			11			
Chirp Center F	Chirp Center Frequency			55	00		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Location Spacing (us) Spacing (us) Within Interval (r				
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	
<b>Detection Chec</b>	k (1=Detection; 0	=No Detection)				1	

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Trial Number	•			Į	5	
Number of B	ursts in Trial		12			
Chirp Center	Chirp Center Frequency			55	00	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Loc (MHz) Spacing (us) Spacing (us) Interv			
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 Che	eck (1=Detection; 0	=No Detection)				1

Trial Number			6				
Number of Bu	rsts in Trial			13			
Chirp Center F	Chirp Center Frequency			55	00		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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	
<b>Detection Chec</b>	ck (1=Detection; C	=No Detection)				1	

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Trial Number	r			7	7		
Number of B	ursts in Trial			14			
Chirp Center Frequency				55	00		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Location Spacing (us) Spacing (us) Within Interval (r				
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 Cho	eck (1=Detection; C	=No Detection)				1	

Trial Number			8				
Number of Bu	rsts in Trial			15			
Chirp Center I	Frequency			55	00		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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	
<b>Detection Ched</b>	ck (1=Detection; C	=No Detection)			·	1	

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2

Detection Check (1=Detection; 0=No Detection)

89.7

Trial Numbei	r			(	9			
Number of B	ursts in Trial		16					
Chirp Center	Frequency			5500				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Location (MHz) Spacing (us) Spacing (us) Within Interval of the control o					
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		
4.0		~~ -	4.0	4000	1	000		

13

1690

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17

Detection Check (1=Detection; 0=No Detection)

Trial Number				1	0			
Number of B	ursts in Trial			17				
Chirp Center	Frequency		5500					
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Location (MHz) Spacing (us) Spacing (us) Within Interval (us)					
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		

14

14

65.9

72.7

1478

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564

0

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18

Detection Check (1=Detection; 0=No Detection)

rial Numbe	r		11 18				
lumber of B	ursts in Trial						
hirp Center	Frequency		5496				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Locat (MHz) Spacing (us) Spacing (us) With			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	

15

15

88.5

60.6

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Detection Check (1=Detection; 0=No Detection)

74.6

97.6

**Trial Number Number of Bursts in Trial Chirp Center Frequency** Starting **Chirp Width Pulse Width** Pulse 1-to-2 Pulse 2-to-3 Location Burst No. of Pulses Within (MHz) Spacing (us) Spacing (us) (us) Interval (ms) 90.5 88.4 53.7 80.5 50.4 61.2 78.8 96.7 76.3 73.3 92.4 92.4 64.4 67.3 84.1 80.9 

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Detection Check (1=Detection; 0=No Detection)

rial Numbei	•			13				
umber of B	ursts in Trial		20					
hirp Center	Frequency			54	97			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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		

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Trial Number				14			
Number of Bu	ırsts in Trial			8	3		
Chirp Center	Chirp Center Frequency			54	.98		
Burst No. of Pulses Pulse Width (us)			Chirp Width (MHz)	Pulse 1-to-2 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				
<b>Detection Che</b>	ck (1=Detection; 0	=No Detection)				1	

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Trial Number				1	5		
Number of B	ursts in Trial			9			
Chirp Center Frequency				54	98		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Location Spacing (us) Spacing (us) Within Interval (n				
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 Che	eck (1=Detection; 0	=No Detection)				1	

Trial Number				16 10			
Number of Bu	ırsts in Trial						
Chirp Center Frequency				54	97		
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				
<b>Detection Che</b>	ck (1=Detection; 0	=No Detection)				1	

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<b>Trial Number</b>	•		17					
Number of B	ursts in Trial			11				
Chirp Center Frequency				5497				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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 Che	eck (1=Detection: 0	)=No Detection)				1		

Trial Number			18			
Number of Bui	rsts in Trial		12			
Chirp Center Frequency				54	96	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Location Spacing (us) Spacing (us) With Interval			
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
<b>Detection Chec</b>	k (1=Detection; 0	=No Detection)				1

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Trial Number				1	9	
Number of B	ursts in Trial		13			
hirp Center Frequency				54	96	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Location (MHz) Spacing (us) Spacing (us) Within			
	0	00.0	4.5	4404		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 Che	eck (1=Detection; 0	=No Detection)				1

Trial Number			20				
Number of Bu	rsts in Trial		14				
Chirp Center F	requency			54	96		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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	
<b>Detection Chec</b>	ck (1=Detection; 0	=No Detection)				1	

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rial Number	•			2	1		
lumber of B	ursts in Trial		15				
Chirp Center	hirp Center Frequency			5504			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Loca Spacing (us) Spacing (us) With Interva				
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 Che	eck (1=Detection; 0	=No Detection)				1	

Trial Number			22					
Number of Bui	rsts in Trial		16					
Chirp Center F	requency			5505				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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		
<b>Detection Chec</b>	k (1=Detection; 0	=No Detection)				1		

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Detection Check (1=Detection; 0=No Detection)

rial Numbei	r		23 17					
umber of B	ursts in Trial							
hirp Center	hirp Center Frequency			5505				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Locat (MHz) Spacing (us) Spacing (us) With Interval					
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		
		20.0	4.4	4.440	4400	222		

11

1410

1190

396

1

69.9

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3

Detection Check (1=Detection; 0=No Detection)

68.4

Trial Number	Ž.			2	24			
Number of B	Sursts in Trial			18				
Chirp Center	hirp Center Frequency			55	506			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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		
			1	1		1		

10

1536

1309

580

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19

Detection Check (1=Detection; 0=No Detection)

Trial Number				2	5			
Number of Bur	sts in Trial			19				
Chirp Center F	Chirp Center Frequency			55	06			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Spacing (us) Spacing (us) Startir Locati Spacing (us) Withi Interval					
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		

9

9

1128

1224

599

433

69.7

62.2

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Detection Check (1=Detection; 0=No Detection)

Trial Number	r			2	6			
Number of B	ursts in Trial			20				
Chirp Center	Frequency			55	06			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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		

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Trial Number				27 8			
Number of Bu	ırsts in Trial						
Chirp Center	Chirp Center Frequency			55	07		
Burst No. of Pulses Pulse Width (us)			Chirp Width (MHz)	Pulse 1-to-2 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	
<b>Detection Che</b>	ck (1=Detection; 0	=No Detection)	•			1	

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Trial Number							
Number of B	ursts in Trial						
Chirp Center Frequency				55	03		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Location (MHz) Spacing (us) Spacing (us) Within Interval (in the control of the co				
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 Che	eck (1=Detection; 0	=No Detection)				1	

Trial Number			29					
Number of Bu	Number of Bursts in Trial			10				
Chirp Center Frequency				55	02			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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		
<b>Detection Che</b>	ck (1=Detection; 0	=No Detection)				1		

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Detection Check (1=Detection; 0=No Detection)

Trial Number			30					
Number of Bu	Number of Bursts in Trial			11				
Chirp Center	Frequency			55	02			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Locat (MHz) Spacing (us) Spacing (us) With Interval					
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		

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Type 6 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulses / Hop	Pulse Width (us)	PRI (us)	1=Detection 0=No Detection
1	5500	9	1	333	1
2	5500	9	1	333	1
3	5500	9	1	333	1
4	5500	9	1	333	1
5	5500	9	1	333	1
6	5500	9	1	333	1
7	5500	9	1	333	1
8	5500	9	1	333	1
9	5500	9	1	333	1
10	5500	9	1	333	1
11	5500	9	1	333	1
12	5500	9	1	333	1
13	5500	9	1	333	1
14	5500	9	1	333	1
15	5500	9	1	333	1
16	5500	9	1	333	1
17	5500	9	1	333	1
18	5500	9	1	333	1
19	5500	9	1	333	1
20	5500	9	1	333	1
21	5500	9	1	333	1
22	5500	9	1	333	1
23	5500	9	1	333	1
24	5500	9	1	333	1
25	5500	9	1	333	1
26	5500	9	1	333	1
27	5500	9	1	333	1
28	5500	9	1	333	1
29	5500	9	1	333	1
30	5500	9	1	333	1
· ·	D	etection Percenta	ge (%)		100.000
imit			- , ,		70%
est Resi	ult				Complied

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Modulation Mode: 802.11ac (VHT40)

Type 1 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulse Per Second)		1=Detection 0=No Detection
1	5526	1	1930.5	518	1
2	5512	23	326.2	3066	1
3	5506	19	1139.0	878	1
4	5510	12	1355.0	738	1
5	5528	4	1730.1	578	1
6	5514	8	1519.8	658	1
7	5529	15	1253.1	798	1
8	5508	6	1618.1	618	1
9	5515	14	1285.3	778	1
10	5520	3	1792.1	558	0
11	5503	13	1319.3	758	1
12	5526	9	1474.9	678	1
13	5504	7	1567.4	638	1
14	5526	17	1193.3	838	0
15	5493	10	1432.7	698	1
16	5509	-	1692.0	591	1
17	5507	-	328.1	3048	1
18	5490	-	373.4	2678	1
19	5493	-	574.4	1741	1
20	5516	-	1216.5	822	1
21	5522	-	801.3	1248	1
22	5508	-	488.5	2047	1
23	5516	-	956.0	1046	1
24	5504	-	517.6	1932	1
25	5500	-	1422.5	703	1
26	5511	-	542.0	1845	1
27	5519	-	741.3	1349	1
28	5491	-	881.8	1134	1
29	5520	-	427.4	2340	1
30	5510	-	628.9	1590	1
		Detection Percentage	(%)		93.333
Limit					60%
<b>Test Res</b>	ult				Complied

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Type 2 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5520	2.6	221	23	1
2	5506	4.6	198	27	1
3	5510	1.1	184	29	1
4	5495	4.8	203	24	1
5	5517	2.4	162	25	1
6	5491	3.4	204	28	1
7	5509	2.3	170	27	1
8	5491	3.5	184	23	0
9	5501	4.9	150	27	1
10	5525	4.6	211	29	1
11	5527	2.9	158	23	1
12	5512	2.6	226	27	1
13	5494	1.6	204	26	1
14	5492	3.9	181	25	1
15	5490	4.6	202	24	1
16	5491	4.1	194	27	0
17	5514	2.3	193	28	1
18	5530	3.9	173	29	1
19	5519	4.3	188	23	1
20	5499	1.5	215	26	1
21	5521	4.9	227	27	1
22	5503	1.1	199	23	1
23	5523	4.5	155	29	1
24	5508	4.0	190	27	1
25	5520	2.4	151	23	1
26	5496	2.5	180	28	1
27	5505	2.5	228	23	1
28	5516	2.5	203	25	1
29	5499	1.5	188	25	1
30	5503	1.9	217	24	1
		etection Percentage (9	%)	,	93.333
imit		0 \	•		60%
est Resi	ılt				Complied

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Type 3 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5505	8.0	205	16	1
2	5519	6.7	382	18	1
3	5516	8.6	418	16	1
4	5517	9.4	351	17	1
5	5507	7.4	383	18	1
6	5490	9.8	232	16	1
7	5522	9.1	377	17	1
8	5516	9.6	457	16	1
9	5513	8.0	471	18	0
10	5494	9.0	304	18	1
11	5524	8.0	316	17	1
12	5506	9.8	325	16	1
13	5525	8.0	409	17	1
14	5491	9.9	200	17	1
15	5498	8.8	458	16	1
16	5509	8.0	232	18	0
17	5504	8.3	250	16	1
18	5492	8.7	270	16	1
19	5498	7.7	350	17	1
20	5503	7.1	230	16	1
21	5503	7.3	416	18	1
22	5494	7.6	498	18	1
23	5497	7.3	286	17	1
24	5510	7.3	287	16	1
25	5490	7.5	462	17	1
26	5499	6.2	300	17	1
27	5506	6.4	323	18	1
28	5524	7.1	420	16	1
29	5493	7.2	395	18	1
30	5507	8.4	377	16	1
		etection Percentage (9			93.333
imit		<b>5</b> - ( ·	,		60%
est Resi	ult				Complied

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Type 4 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5505	18.0	242	15	1
2	5528	19.9	279	12	1
3	5506	12.9	487	14	1
4	5515	15.0	452	13	0
5	5526	16.3	230	12	1
6	5516	19.8	238	13	1
7	5511	18.2	420	16	1
8	5517	16.3	452	15	1
9	5525	14.2	495	12	1
10	5514	17.8	228	16	1
11	5513	19.1	211	16	1
12	5530	18.4	283	15	1
13	5518	11.8	411	12	1
14	5492	14.2	284	13	1
15	5510	13.9	202	12	1
16	5527	17.8	340	14	1
17	5514	15.6	290	16	0
18	5493	14.6	250	16	0
19	5504	14.4	484	15	1
20	5521	18.9	387	13	1
21	5506	11.1	348	15	1
22	5523	13.8	291	16	1
23	5522	14.3	295	12	1
24	5503	12.5	300	12	0
25	5519	12.5	322	14	1
26	5519	12.5	383	13	1
27	5524	15.7	322	16	1
28	5515	19.8	469	13	1
29	5527	18.6	406	15	1
30	5492	15.9	238	14	1
	D	etection Percentage (%	6)		86.667
mit		<u> </u>	•		60%
est Resu	ılt				Complied

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Total Type 1~4 Radar Statistical Performance

Radar Type #	Detection Percentage (%)
1	93.333
2	93.333
3	93.333
4	86.667
Aggregate (Radar Types 1-4)	91.667
Limit	80%
Test Result	Complied

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Type 5 Radar Statistical Performance

enter Freq. (MHz)	Low Edge (MHz)	High Edge (MHz)		
5510	5490	5530	VSG Freq. (MHz)	Detection
Trial	Chirp	Offset		
1	5	2	5510	1
2	20	8	5510	1
3	7	2.8	5510	1
4	8	3.2	5510	1
5	9	3.6	5510	1
6	10	4	5510	1
7	11	4.4	5510	1
8	12	4.8	5510	1
9	13	5.2	5510	1
10	14	5.6	5510	1
11	15	6	5496	1
12	16	6.4	5496	1
13	17	6.8	5497	1
14	20	8	5498	1
15	19	7.6	5498	1
16	18	7.2	5497	1
17	17	6.8	5497	1
18	16	6.4	5496	1
19	15	6	5496	1
20	14	5.6	5496	1
21	13	5.2	5524	1
22	12	4.8	5525	1
23	11	4.4	5525	1
24	10	4	5526	1
25	9	3.6	5526	1
26	8	3.2	5526	1
27	18	7.2	5527	1
28	19	7.6	5523	1
29	20	8	5522	1
30	5	2	5522	1
	To	otal		30
	Detection Per	centage (%)		100%
it				80%
st Result				Complied

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Trial Number	Ī			1				
Number of B	ursts in Trial		8					
Chirp Center	Frequency		5510					
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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 Che	eck (1=Detection; 0	=No Detection)				1		

Trial Number			2				
Number of Bu	lumber of Bursts in Trial			9			
Chirp Center F	Chirp Center Frequency			55	10		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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	
<b>Detection Chec</b>	k (1=Detection; C	=No Detection)				1	

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Trial Number	•		3				
Number of B	ursts in Trial		10				
Chirp Center	Frequency			55	10		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Loc Spacing (us) Spacing (us) Interv				
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 Che	eck (1=Detection; 0	=No Detection)				1	

Trial Number			4			
Number of Bursts in Trial			11			
Chirp Center Frequency			5510			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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

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Trial Number				Ę	5	
Number of B	ursts in Trial		12			
Chirp Center	Frequency			55	10	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Location Spacing (us) Spacing (us) Within Interval (n			
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 Che	eck (1=Detection; 0	=No Detection)				1

Trial Number			6 13			
Number of Bu	rsts in Trial					
Chirp Center F	Chirp Center Frequency			55	10	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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 Chec	ck (1=Detection; C	=No Detection)				1

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Trial Number	•				7		
Number of B	ursts in Trial		14				
Chirp Center	Frequency			5510			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Loc Spacing (us) Spacing (us) Interv				
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 Che	eck (1=Detection; 0	=No Detection)				1	

Trial Number			8					
Number of Bu	rsts in Trial			15				
Chirp Center I	Frequency			55	10			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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		
<b>Detection Ched</b>	ck (1=Detection; C	=No Detection)			·	1		

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2

Detection Check (1=Detection; 0=No Detection)

89.7

Trial Number				Ç	9		
Number of Bur	sts in Trial		16				
Chirp Center F	requency		5510				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Location (MHz) Spacing (us) Spacing (us) Within Interval (				
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	

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Trial Numbe	•			1	0		
Number of B	ursts in Trial		17				
Chirp Center	Frequency			55	10		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Loca (MHz) Spacing (us) Spacing (us) With Interval				
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	

72.7

Detection Check (1=Detection; 0=No Detection)

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18

Detection Check (1=Detection; 0=No Detection)

Trial Number	•			1	1			
Number of B	ursts in Trial			18				
Chirp Center	Frequency			5496				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Spacing (us) Spacing (us) Startii Locati Spacing (us) Within Interval					
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		

15

15

15

64.5

88.5

60.6

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419

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1

Detection Check (1=Detection; 0=No Detection)

74.6

97.6

Trial Numbe	r			1	2			
Number of B	ursts in Trial			19				
Chirp Center	Frequency			54	96			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Local (MHz) Spacing (us) 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		

16

16

1805

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Detection Check (1=Detection; 0=No Detection)

Trial Numbei	r			1	3		
Number of B	Bursts in Trial		20				
Chirp Center	r Frequency			54	97		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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	

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Trial Number			14				
Number of Bu	ırsts in Trial			8	3		
Chirp Center Frequency				54	.98		
Burst No. of Pulses Pulse Width (us)			Chirp Width (MHz)	Pulse 1-to-2 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				
<b>Detection Che</b>	ck (1=Detection; 0	=No Detection)				1	

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Trial Number				15			
Number of Bu	ırsts in Trial			ę	9		
Chirp Center Frequency				54	98		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Loca (MHz) Spacing (us) Spacing (us) Interva				
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				
<b>Detection Che</b>	ck (1=Detection; C	=No Detection)				1	

Trial Number				16 10			
Number of Bu	ırsts in Trial						
Chirp Center Frequency				5497			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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 Ched	ck (1=Detection; 0	=No Detection)				1	

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Trial Number	,			17 11			
Number of B	ursts in Trial						
Chirp Center Frequency				5497			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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 Che	eck (1=Detection; 0	=No Detection)	•	•	•	1	

Trial Number			18			
Number of Bur	rsts in Trial		12			
Chirp Center F	Chirp Center Frequency			54	96	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Spacing (us) Star Loc Spacing (us) Wilnterv			
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
<b>Detection Chec</b>	k (1=Detection; 0	=No Detection)				1

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Trial Number	•			1	9		
Number of B	ursts in Trial		13				
Chirp Center	hirp Center Frequency			5496			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Location (MHz) Spacing (us) Spacing (us) Within				
	2	CO O	4.5	4404		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 Che	eck (1=Detection; 0	=No Detection)				1	

Trial Number			20				
Number of B	ursts in Trial		14				
Chirp Center	Frequency			5496			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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	
<b>Detection Che</b>	eck (1=Detection; C	=No Detection)			·	1	

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Trial Number			21			
Number of Bu	ırsts in Trial		15			
<b>Chirp Center</b>	Chirp Center Frequency			55	24	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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	-	ı	482
8	1	63.8	13	-	1	703
9	2	67.4	13	1727	ı	780
10	1	52.3	13	-	ı	102
11	3	62.4	13	1228	1715	304
12	2	53.3	13	1630	ı	57
13	2	83.1	13	1205	-	768
14	2	93.7	13	1085	1	461
15	2	90.7	13	1297	-	746
<b>Detection Che</b>	ck (1=Detection; 0	=No Detection)				1

Trial Number			22				
Number of Bui	rsts in Trial		16				
Chirp Center F	requency		5525				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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	
<b>Detection Chec</b>	k (1=Detection; 0	=No Detection)				1	

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Detection Check (1=Detection; 0=No Detection)

64.6

69.9

Trial Numbei				2	3			
Number of B	ursts in Trial			17 5525				
Chirp Center	Frequency							
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Locati Spacing (us) Spacing (us) Withi Interval					
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		

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3

Detection Check (1=Detection; 0=No Detection)

68.4

Trial Numbei	r			2	4			
Number of B	ursts in Trial		18					
Chirp Center	Frequency			5526				
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		

10

1536

1309

580

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19

Detection Check (1=Detection; 0=No Detection)

rial Numbe	r			2	5		
umber of B	ursts in Trial		19				
hirp Center	r Frequency			55	26		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width   Pulse 1-to-2   Pulse 2-to-3   Loca   Chirp Width   Spacing (us)   Spacing (us)   With the control of the control			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	

9

9

1128

1224

599

433

69.7

62.2

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Detection Check (1=Detection; 0=No Detection)

Trial Number	•			2	6		
Number of B	ursts in Trial		20				
Chirp Center	Frequency			55	26		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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	

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Trial Number			27				
Number of Bu	Number of Bursts in Trial Chirp Center Frequency			8			
Chirp Center				55	27		
Burst No. of Pulses Pulse Width (us)			Chirp Width (MHz)	Pulse 1-to-2 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				
<b>Detection Che</b>	ck (1=Detection; 0	=No Detection)				1	

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Trial Number	•			28				
Number of B	ursts in Trial			9				
Chirp Center Frequency				55	23			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Location (MHz) Spacing (us) Spacing (us) Within Interval (n					
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 Che	eck (1=Detection; 0	=No Detection)				1		

Trial Number			29				
Number of Bu	Number of Bursts in Trial			1	0		
Chirp Center	Chirp Center Frequency			55	22		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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	
<b>Detection Che</b>	ck (1=Detection; 0	=No Detection)				1	

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Detection Check (1=Detection; 0=No Detection)

Trial Number			30					
Number of B	Number of Bursts in Trial			11				
Chirp Center	Frequency			55	22			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Loca (MHz) Spacing (us) Spacing (us) Interva					
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		

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Type 6 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulses / Hop	Pulse Width (us)	PRI (us)	1=Detection 0=No Detection
1	5510	9	1	333	1
2	5510	9	1	333	1
3	5510	9	1	333	1
4	5510	9	1	333	1
5	5510	9	1	333	1
6	5510	9	1	333	1
7	5510	9	1	333	1
8	5510	9	1	333	1
9	5510	9	1	333	1
10	5510	9	1	333	1
11	5510	9	1	333	1
12	5510	9	1	333	1
13	5510	9	1	333	1
14	5510	9	1	333	1
15	5510	9	1	333	1
16	5510	9	1	333	1
17	5510	9	1	333	1
18	5510	9	1	333	1
19	5510	9	1	333	1
20	5510	9	1	333	1
21	5510	9	1	333	1
22	5510	9	1	333	1
23	5510	9	1	333	1
24	5510	9	1	333	1
25	5510	9	1	333	1
26	5510	9	1	333	1
27	5510	9	1	333	1
28	5510	9	1	333	1
29	5510	9	1	333	1
30	5510	9	1	333	1
		etection Percenta	age (%)		100.00
imit			<u> </u>		70%
est Res	ult				Complied

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Modulation Mode: 802.11ac (VHT80)

Type 1 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulse Per Second)		1=Detection 0=No Detection
1	5503	1	1930.5	518	1
2	5546	23	326.2	3066	1
3	5551	19	1139.0	878	1
4	5499	12	1355.0	738	1
5	5493	4	1730.1	578	1
6	5546	8	1519.8	658	1
7	5562	15	1253.1	798	1
8	5526	6	1618.1	618	1
9	5512	14	1285.3	778	1
10	5563	3	1792.1	558	1
11	5543	13	1319.3	758	1
12	5532	9	1474.9	678	1
13	5543	7	1567.4	638	1
14	5543	17	1193.3	838	1
15	5494	10	1432.7	698	1
16	5531	-	1692.0	591	1
17	5514	-	328.1	3048	1
18	5493	-	373.4	2678	1
19	5491	-	574.4	1741	1
20	5526	-	1216.5	822	1
21	5562	-	801.3	1248	1
22	5499	-	488.5	2047	1
23	5559	-	956.0	1046	1
24	5518	-	517.6	1932	1
25	5505	-	1422.5	703	1
26	5545	-	542.0	1845	1
27	5515	-	741.3	1349	1
28	5534	-	881.8	1134	1
29	5564	-	427.4	2340	1
30	5516	-	628.9	1590	1
		Detection Percentage	(%)		100.00
Limit					60%
Test Res	ult	<u> </u>			Complied

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Type 2 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5503	2.6	221	23	1
2	5537	4.6	198	27	1
3	5497	1.1	184	29	1
4	5503	4.8	203	24	1
5	5525	2.4	162	25	0
6	5530	3.4	204	28	1
7	5539	2.3	170	27	1
8	5516	3.5	184	23	1
9	5553	4.9	150	27	1
10	5512	4.6	211	29	0
11	5495	2.9	158	23	1
12	5496	2.6	226	27	1
13	5565	1.6	204	26	1
14	5532	3.9	181	25	1
15	5558	4.6	202	24	0
16	5534	4.1	194	27	1
17	5565	2.3	193	28	1
18	5523	3.9	173	29	0
19	5561	4.3	188	23	1
20	5504	1.5	215	26	1
21	5496	4.9	227	27	1
22	5506	1.1	199	23	1
23	5551	4.5	155	29	1
24	5520	4.0	190	27	1
25	5567	2.4	151	23	0
26	5515	2.5	180	28	1
27	5555	2.5	228	23	1
28	5505	2.5	203	25	1
29	5556	1.5	188	25	1
30	5513	1.9	217	24	1
	D	etection Percentage (9	%)		83.333
imit					60%
est Resi	ult				Complied

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Type 3 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5539	8.0	205	16	1
2	5559	6.7	382	18	1
3	5512	8.6	418	16	0
4	5554	9.4	351	17	1
5	5536	7.4	383	18	1
6	5535	9.8	232	16	1
7	5539	9.1	377	17	1
8	5560	9.6	457	16	1
9	5541	8.0	471	18	0
10	5530	9.0	304	18	1
11	5502	8.0	316	17	1
12	5506	9.8	325	16	1
13	5542	8.0	409	17	1
14	5510	9.9	200	17	1
15	5534	8.8	458	16	1
16	5549	8.0	232	18	1
17	5536	8.3	250	16	0
18	5502	8.7	270	16	1
19	5535	7.7	350	17	1
20	5515	7.1	230	16	1
21	5517	7.3	416	18	0
22	5523	7.6	498	18	1
23	5505	7.3	286	17	1
24	5555	7.3	287	16	1
25	5555	7.5	462	17	0
26	5509	6.2	300	17	1
27	5541	6.4	323	18	1
28	5522	7.1	420	16	1
29	5556	7.2	395	18	1
30	5495	8.4	377	16	1
	D	etection Percentage (9	%)		83.333
imit		<u> </u>			60%
est Resi	ult				Complied

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Type 4 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5511	18.0	242	15	1
2	5555	19.9	279	12	1
3	5498	12.9	487	14	0
4	5507	15.0	452	13	1
5	5522	16.3	230	12	1
6	5566	19.8	238	13	1
7	5549	18.2	420	16	1
8	5547	16.3	452	15	0
9	5556	14.2	495	12	1
10	5504	17.8	228	16	0
11	5506	19.1	211	16	1
12	5519	18.4	283	15	1
13	5534	11.8	411	12	0
14	5550	14.2	284	13	1
15	5568	13.9	202	12	1
16	5536	17.8	340	14	1
17	5554	15.6	290	16	1
18	5557	14.6	250	16	1
19	5565	14.4	484	15	1
20	5516	18.9	387	13	0
21	5498	11.1	348	15	1
22	5507	13.8	291	16	1
23	5537	14.3	295	12	1
24	5525	12.5	300	12	1
25	5523	12.5	322	14	1
26	5565	12.5	383	13	0
27	5499	15.7	322	16	1
28	5532	19.8	469	13	1
29	5528	18.6	406	15	1
30	5524	15.9	238	14	1
	D	etection Percentage (%	<u>(6)</u>		80.000
imit					60%
est Resi	ult				Complied

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Total Type 1~4 Radar Statistical Performance

Radar Type #	Detection Percentage (%)
1	100.000
2	83.333
3	83.333
4	80.000
Aggregate (Radar Types 1-4)	86.667
Limit	80%
Test Result	Complied

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Type 5 Radar Statistical Performance

Center Freq. (MHz)	Low Edge (MHz)			
5530	5490	5570	VSG Freq. (MHz)	Detection
Trial	Chirp	Offset		
1	5	2	5530	1
2	20	8	5530	1
3	7	2.8	5530	1
4	8	3.2	5530	1
5	9	3.6	5530	1
6	10	4	5530	1
7	11	4.4	5530	1
8	12	4.8	5530	1
9	13	5.2	5530	1
10	14	5.6	5530	1
11	15	6	5496	1
12	16	6.4	5496	1
13	17	6.8	5497	1
14	20	8	5498	0
15	19	7.6	5498	1
16	18	7.2	5497	1
17	17	6.8	5497	1
18	16	6.4	5496	1
19	15	6	5496	1
20	14	5.6	5496	1
21	13	5.2	5564	1
22	12	4.8	5565	1
23	11	4.4	5565	1
24	10	4	5566	1
25	9	3.6	5566	1
26	8	3.2	5566	0
27	18	7.2	5567	1
28	19	7.6	5563	1
29	20	8	5562	1
30	5	2	5562	1
		28		
		93%		
imit		80%		
Test Result		Complied		

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Trial Number			1				
Number of B	ursts in Trial		8				
Chirp Center	Frequency		5530				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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	
	2 eck (1=Detection; 0		5	1653	-	1237 1	

Trial Number			2					
Number of Bur	Number of Bursts in Trial			9				
Chirp Center F	requency			55	30			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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		
<b>Detection Chec</b>	k (1=Detection; 0	=No Detection)				1		

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<b>Trial Number</b>	•		3				
Number of B	ursts in Trial		10				
Chirp Center	Frequency			55	30		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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 Che	eck (1=Detection; 0	=No Detection)				1	

Trial Number			4				
Number of Bu	ırsts in Trial		11				
Chirp Center	hirp Center Frequency			55	30		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Spacing (us) Starting Location Spacing (us) Within Interval (n				
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	
<b>Detection Che</b>	ck (1=Detection; C	=No Detection)				1	

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Trial Number	•			Į	5	
Number of B	ursts in Trial		12			
Chirp Center	Chirp Center Frequency			55	30	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Log (MHz) Spacing (us) 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 Che	eck (1=Detection; 0	=No Detection)				1

Trial Number			6 13				
Number of Bu	rsts in Trial						
Chirp Center Frequency				5530			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Start Local Spacing (us) With Interval				
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	
<b>Detection Chec</b>	k (1=Detection; C	=No Detection)				1	

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Trial Number	•				7		
Number of B	ursts in Trial		14				
Chirp Center	hirp Center Frequency			5530			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Location Spacing (us) Spacing (us) Within Interval (				
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	
<b>Detection Che</b>	eck (1=Detection; C	=No Detection)	•			1	

Trial Number			8					
Number of Bur	sts in Trial		15					
Chirp Center F	requency			5530				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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		
<b>Detection Chec</b>	k (1=Detection; 0	=No Detection)	<u> </u>		<u> </u>	1		

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Detection Check (1=Detection; 0=No Detection)

89.7

Trial Number				Ç	9		
Number of B	ursts in Trial			16			
Chirp Center	Frequency			55	30		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Location (MHz) Spacing (us) Spacing (us) Within Interval (				
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	

13

1690

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Detection Check (1=Detection; 0=No Detection)

rial Numbe	r			1	0			
umber of B	ursts in Trial			17				
hirp Center	Frequency			5530				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Location (MHz) Spacing (us) Spacing (us) Within Interval of the control o					
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		
•								

14

72.7

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Detection Check (1=Detection; 0=No Detection)

Trial Number	r			1	I1		
Number of B	Bursts in Trial		18				
Chirp Center	Chirp Center Frequency			54	196		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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	
				1		1	

15

60.6

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Detection Check (1=Detection; 0=No Detection)

80.9

74.6

97.6

**Trial Number Number of Bursts in Trial Chirp Center Frequency** Starting **Chirp Width Pulse Width** Pulse 1-to-2 Pulse 2-to-3 Location Burst No. of Pulses Within (MHz) Spacing (us) Spacing (us) (us) Interval (ms) 90.5 88.4 53.7 80.5 50.4 61.2 78.8 96.7 76.3 73.3 92.4 92.4 64.4 67.3 84.1 

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Detection Check (1=Detection; 0=No Detection)

Trial Number	r			1	3		
Number of B	Bursts in Trial		20				
Chirp Center	Frequency			54	97		
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	

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Trial Number			14				
Number of Bu	ırsts in Trial			8	3		
Chirp Center Frequency				54	.98		
Burst No. of Pulses Pulse Width (us)			Chirp Width (MHz)	Pulse 1-to-2 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				
<b>Detection Che</b>	ck (1=Detection; 0	=No Detection)				0	

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<b>Trial Number</b>	Ī			1	5		
Number of B	ursts in Trial			Ç	9		
Chirp Center Frequency				54	.98		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Loca (MHz) Spacing (us) Spacing (us) With Intervals				
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 Che	eck (1=Detection; 0	=No Detection)				1	

Trial Number			16				
Number of Bu	ırsts in Trial			10			
Chirp Center Frequency				5497			
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	
<b>Detection Che</b>	ck (1=Detection; C	=No Detection)				1	

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Trial Number	,			17 11			
Number of B	ursts in Trial						
Chirp Center Frequency				5497			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Spacing (us) 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 Che	eck (1=Detection; 0	=No Detection)	•	•	•	1	

Trial Number			18				
Number of Bur	rsts in Trial			12			
Chirp Center F	Chirp Center Frequency			54	96		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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	
<b>Detection Chec</b>	k (1=Detection; 0	=No Detection)				1	

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Trial Number				1	9	
Number of B	ursts in Trial		13 5496			
Chirp Center	Frequency					
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Sta Loc Williams			
1	2	68.2	15	1104	-	Interval (ms) 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
<b>Detection Che</b>	eck (1=Detection; 0	=No Detection)		·	·	1

Trial Number				2	0			
Number of B	ursts in Trial		14					
Chirp Center	Frequency			5496				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	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 Che	eck (1=Detection; 0	=No Detection)				1		

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Trial Number	•			2	1		
Number of B	ursts 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 Che	eck (1=Detection; 0	=No Detection)	•	•	•	1	

Trial Number			22					
Number of Bui	rsts in Trial		16					
Chirp Center F	requency			5565				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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		
<b>Detection Chec</b>	k (1=Detection; 0	=No Detection)	•		•	1		

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rial Numbe	r			2	3		
lumber of B	Bursts in Trial		17				
hirp Center	r Frequency			5565			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width   Pulse 1-to-2   Pulse 2-to-3   L   Spacing (us)   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	
	_						

1410

1190

396

1

69.9

Detection Check (1=Detection; 0=No Detection)

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18

Detection Check (1=Detection; 0=No Detection)

Trial Number	•			2	4		
Number of B	ursts in Trial		18				
Chirp Center	nirp Center Frequency			5566			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Loc (MHz) Spacing (us) Spacing (us) W			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	

10

10

1664

1536

1309

81.1

68.4

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566

580

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Detection Check (1=Detection; 0=No Detection)

Trial Number				2	5			
Number of Bur	sts in Trial			19				
Chirp Center F	requency			55	66			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Star Local Spacing (us) With Interval Interval Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Star Local Chirp Width (MHz) Spacing (us) Star Local Chirp Width (us) Spacing (us) Spacin					
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		

9

9

1128

1224

599

433

69.7

62.2

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Detection Check (1=Detection; 0=No Detection)

rial Number	• 			2	6		
lumber of B	ursts in Trial		20				
Chirp Center	Frequency			55	66		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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	

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Trial Number				27				
Number of Bu	ırsts in Trial			8				
Chirp Center Frequency				5567				
Burst	urst No. of Pulses Pulse Width (us) Chirp Width Pulse 1-to-2 Spacing (us) 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		
<b>Detection Che</b>	ck (1=Detection; 0	=No Detection)				1		

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Trial Number	•		28					
Number of B	ursts in Trial			9				
Chirp Center Frequency				5563				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 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					
9	1	97.7	19	-	-	512		

Trial Number			29					
Number of Bursts in Trial			10					
Chirp Center Frequency			5562					
Burst No. of Pulses		Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 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)								

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Detection Check (1=Detection; 0=No Detection)

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)	1	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		

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Type 6 Radar Statistical Performance

Trial #	Test Freq. (MHz)	Pulses / Hop	Pulse Width (us)	PRI (us)	1=Detection 0=No Detection
1	5530	9	1	333	1
2	5530	9	1	333	1
3	5530	9	1	333	1
4	5530	9	1	333	1
5	5530	9	1	333	1
6	5530	9	1	333	1
7	5530	9	1	333	1
8	5530	9	1	333	1
9	5530	9	1	333	1
10	5530	9	1	333	1
11	5530	9	1	333	1
12	5530	9	1	333	1
13	5530	9	1	333	1
14	5530	9	1	333	1
15	5530	9	1	333	1
16	5530	9	1	333	1
17	5530	9	1	333	1
18	5530	9	1	333	1
19	5530	9	1	333	1
20	5530	9	1	333	1
21	5530	9	1	333	1
22	5530	9	1	333	1
23	5530	9	1	333	1
24	5530	9	1	333	1
25	5530	9	1	333	1
26	5530	9	1	333	1
27	5530	9	1	333	1
28	5530	9	1	333	1
29	5530	9	1	333	1
30	5530	9	1	333	1
'	100.00				
_imit		etection Percenta	-		70%
Test Resi	ult				Complied

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For Extender (Master) Mode:

Modulation Mode: 802.11ac (VHT80)

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	5516	1	1930.5	518	1
2	5569	23	326.2	3066	1
3	5534	19	1139.0	878	1
4	5501	12	1355.0	738	1
5	5493	4	1730.1	578	0
6	5497	8	1519.8	658	1
7	5531	15	1253.1	798	1
8	5492	6	1618.1	618	0
9	5502	14	1285.3	778	1
10	5510	3	1792.1	558	1
11	5512	13	1319.3	758	1
12	5557	9	1474.9	678	1
13	5509	7	1567.4	638	1
14	5536	17	1193.3	838	1
15	5499	10	1432.7	698	1
16	5511	-	1692.0	591	1
17	5564	-	328.1	3048	1
18	5547	-	373.4	2678	1
19	5518	-	574.4	1741	1
20	5523	-	1216.5	822	1
21	5520	-	801.3	1248	1
22	5550	-	488.5	2047	1
23	5558	-	956.0	1046	1
24	5507	-	517.6	1932	1
25	5492	-	1422.5	703	1
26	5504	-	542.0	1845	1
27	5516	-	741.3	1349	1
28	5517	-	881.8	1134	1
29	5553	-	427.4	2340	1
30	5562	-	628.9	1590	1
		etection Percentage	(%)		93.333
Limit					60%
Test Res	Complied				

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## 4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101026	9kHz~40GHz	Sep. 28, 2018	Sep. 27, 2019	Radiated (DF01-CB)
Signal generator	R&S	SMU200A	105352	25MHz-6GHz	Nov. 01, 2018	Oct. 31, 2019	Radiated (DF01-CB)
Horn Antenna	COM-POWER	AH-118	071187	1GHz – 18GHz	Jun. 29, 2018	Jun. 28, 2019	Radiated (DF01-CB)
Horn Antenna	COM-POWER	AH-118	071042	1GHz – 18GHz	Dec. 24, 2018	Dec. 23, 2019	Radiated (DF01-CB)
RF Power Divider	ANAREN	2 Way	DFS-01-DV-02	1GHz ~ 6GHz	Oct. 08, 2018	Oct. 07, 2019	Radiated (DF01-CB)
RF Power Divider	MTJ	2 Way	DFS-01-DV-03	1GHz ~ 6GHz	Oct. 08, 2018	Oct. 07, 2019	Radiated (DF01-CB)
RF Power Divider	ANAREN	4 Way	DFS-01-DV-01	1GHz ~ 6GHz	Oct. 08, 2018	Oct. 07, 2019	Radiated (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-57	1 GHz –18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiated (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-58	1 GHz –18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiated (DF01-CB)

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## 5 Measurement Uncertainty

Test Items	Uncertainty	Remark
Radiated Emission	2.9 dB	Confidence levels of 95%

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