

Report No.: FZ470106-01

Project No: CB10410196

FCC DFS Test Report

Equipment

: Wireless Cable Modem

Brand Name

: Ubee Interactive

Model No.

: DDW36C

FCC ID

: XCNDDW36C

Standard

: 47 CFR FCC Part 15.407

Frequency Range: 5250 MHz - 5350 MHz

5470 MHz - 5725 MHz

Applicant

: Ubee Interactive

10F-1, No. 5, Taiyuan 1st St. Jhubei City, Hsinchu County

302, Taiwan, R.O.C.

Operate Mode

: Master

The product sample received on Jun. 18, 2014 and completely tested on Sep. 24, 2015. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v01r02 and shown compliance with the applicable technical standards.

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

Sam Chen

SPORTON INTERNATIONAL INC.

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Summary of Test Result

	Conformance Test Specifications						
Report Clause	Ref. Std. Clause	Description	Limit	Result			
3.3	FCC KDB 905462 7.8.1	DFS: UNII Detection Bandwidth Measurement	100% of the 99% BW	Complied			
3.4	FCC KDB 905462 7.8.2.1	DFS: Initial Channel Availability Check Time	CAC ≥ 60 sec	Complied			
3.4	FCC KDB 905462 7.8.2.2	DFS: Radar Burst at the Beginning of the Channel Availability Check Time	Detection Threshold: -63 dBm	Complied			
3.4	FCC KDB 905462 7.8.2.3	DFS: Radar Burst at the End of the Channel Availability Check Time	Detection Threshold: -63 dBm	Complied			
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Channel Move Time (CMT)	CMT ≤ 10sec	Complied			
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Channel Closing Transmission Time (CCTT)	CCTT ≤ 60 ms starting at CMT 200ms	Complied			
3.5	FCC KDB 905462 7.8.3	DFS: In-Service Monitoring for Non-Occupancy Period (NOP)	NOP ≥ 30 min	Complied			
3.6	FCC KDB 905462 7.8.4	DFS: Statistical Performance Check	Table 5 - 7 (KDB 905462)	Complied			
3.1.4	FCC KDB 905462 8.1	User Access Restrictions	DFS controls	Complied			

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Revision History

Report No.	Version	Description	Issued Date
FZ470106-01	Rev. 01	Initial issue of report	Nov. 10, 2015

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1 General Description

1.1 Information

1.1.1 RF General Information

Specification Items	Description		
Product Type	WLAN (3TX, 3RX)		
Radio Type	Intentional Transceiver		
Power Type	From Internal Power		
Modulation	IEEE 802.11a: OFDM (BPSK / QP	SK / 16QAM / 64QAM)	
	IEEE 802.11n/ac: see the below ta	able	
Data Rate (Mbps)	IEEE 802.11a: OFDM (6/9/12/18/2	4/36/48/54)	
	IEEE 802.11n/ac: see the below ta	able	
Channel Bandwidth	20/40/80 MHz operating channel b	pandwidth	
Operating Mode	Client with radar detection		
	☐ Client without radar detection	-	
Communication Mode		☐ Frame Based	
TPC Function	With TPC ■ With TPC	☐ Without TPC	
Weather Band (5600~5650MHz)	With 5600~5650MHz ■ 1	☐ Without 5600~5650MHz	
Max. Con. Power (DFS band)	<for mode="" non-beamforming=""></for>		
	Band 2:		
	IEEE 802.11a: 19.02 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT	20): 19.87 dBm	
	IEEE 802.11ac MCS0/Nss1 (VHT	(40): 21.76 dBm	
	IEEE 802.11ac MCS0/Nss1 (VHT	80): 20.35 dBm	
	Band 3:		
	IEEE 802.11a: 21.28 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT	,	
	IEEE 802.11ac MCS0/Nss1 (VHT		
	IEEE 802.11ac MCS0/Nss1 (VHT	80): 23.98 dBm	
	<for beamforming="" mode=""></for>		
	Band 2:		
	IEEE 802.11ac MCS0/Nss1 (VHT20): 19.94 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT40): 20.72 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT	(80): 20.60 dBm	

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	Band 3:
	IEEE 802.11ac MCS0/Nss1 (VHT20): 20.88 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT40): 20.85 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT80): 20.76 dBm
Min. Con. Power (DFS band)	<pre><for mode="" non-beamforming=""></for></pre>
Min. Con. Fower (DF3 band)	Band 2:
	IEEE 802.11a: 13.02 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT20): 13.87 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT40): 15.76 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT80): 14.35 dBm Band 3:
	IEEE 802.11a: 15.28 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT20): 15.29 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT40): 17.04 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT80): 17.98 dBm
	<for beamforming="" mode=""></for>
	Band 2:
	IEEE 802.11ac MCS0/Nss1 (VHT20): 13.94 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT40): 14.72 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT80): 14.60 dBm
	Band 3:
	IEEE 802.11ac MCS0/Nss1 (VHT20): 14.88 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT40): 14.85 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT80): 14.76 dBm
Max. EIRP Power (DFS band)	<for mode="" non-beamforming=""></for>
	Band 2:
	IEEE 802.11a: 23.42 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT20): 24.27 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT40): 26.16 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT80): 24.75 dBm
	Band 3:
	IEEE 802.11a: 25.78 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT20): 25.79 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT40): 27.54 dBm
	IEEE 802.11ac MCS0/Nss1 (VHT80): 28.48 dBm

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	<for beamforming="" mode=""></for>		
	Band 2:		
	IEEE 802.11ac MCS0/Nss1 (VHT20): 29.04 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT40): 29.82 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT80): 29.70 dBm		
	Band 3:		
	IEEE 802.11ac MCS0/Nss1 (VHT20): 29.96 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT40): 29.93 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT80): 29.84 dBm		
Min. EIRP Power (DFS band)	<for mode="" non-beamforming=""></for>		
	Band 2:		
	IEEE 802.11a: 17.42 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT20): 18.27 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT40): 20.16 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT80): 18.75 dBm		
	Band 3:		
	IEEE 802.11a: 19.78 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT20): 19.79 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT40): 21.54 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT80): 22.48 dBm		
	<for beamforming="" mode=""></for>		
	Band 2:		
	IEEE 802.11ac MCS0/Nss1 (VHT20): 23.04 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT40): 23.82 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT80): 23.70 dBm		
	Band 3:		
	IEEE 802.11ac MCS0/Nss1 (VHT20): 23.96 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT40): 23.93 dBm		
	IEEE 802.11ac MCS0/Nss1 (VHT80): 23.84 dBm		
Power-on cycle	80MHz: Requires 74.928 seconds to complete its power-on cycle.		
Software / Firmware Version	8.22.2105DFSv6		
Note: EUT employ a TPC mechanis output power.	sm and TPC have the capability to operate at least 6 dB below highest RF		

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Antenna & Band width

Antenna	Three (TX)		
Band width Mode	20 MHz	40 MHz	80 MHz
IEEE 802.11a	V	X	X
IEEE 802.11n	V	V	X
IEEE 802.11ac	V	V	V

IEEE 11n/ac Spec.

Protocol	Number of Transmit Chains (NTX)	Data Rate / MCS
802.11n (HT20)	3	MCS0-23
802.11n (HT40)	3	MCS0-23
802.11ac (VHT20)	3	MCS 0-9/Nss1-3
802.11ac (VHT40)	3	MCS 0-9/Nss1-3
802.11ac (VHT80)	3	MCS 0-9/Nss1-3

Note 1: IEEE Std. 802.11n modulation consists of HT20 and HT40 (HT: High Throughput). Then EUT support HT20 and HT40.

Note 2: IEEE Std. 802.11ac modulation consists of VHT20, VHT40, VHT80 and VHT160 (VHT: Very High Throughput). Then EUT support VHT20, VHT40 and VHT80.

Note 3: Modulation modes consist of below configuration:

11a: IEEE 802.11a, HT20/HT40: IEEE 802.11n, VHT20/VHT40/VHT80: IEEE 802.11ac

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1.1.2 Antenna Information

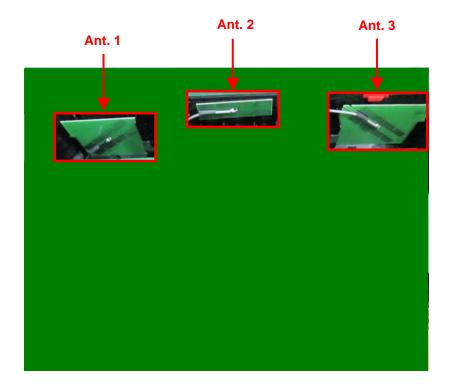
Ant.	Brand	Model Name	Antenna Type	Connector	5GHz Ga	ain (dBi)
Ant.	Brand	Woder Name	Antenna Type	Connector	Band 2	Band 3
1	M.gear	C107-511135-A	PCB Antenna	I-PEX	4.3	4.4
2	M.gear	C107-511136-A	PCB Antenna	I-PEX	4.3	4.5
3	M.gear	C107-511137-A	PCB Antenna	I-PEX	4.4	4.0

Note: The EUT has three antennas.

For IEEE 802.11a/n/ac mode (3TX/3RX):

Ant. 1, Ant. 2 and Ant. 3 can be used as transmitting/receiving antenna.

Ant. 1, Ant. 2 and Ant. 3 could transmit/receive simultaneously.



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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, 120, 124, 128, 132, 136, 140.

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For 40MHz bandwidth systems, use Channel 54, 62, 102, 110, 118, 126, 134.

For 80MHz bandwidth systems, use Channel 58, 106, 122.

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	120	5600 MHz
	102	5510 MHz	122	5610 MHz
	104	5520 MHz	124	5620 MHz
5470~5725 MHz	106	5530 MHz	126	5630 MHz
9470 ⁻⁹ 3723 Wil 12 Band 3	108	5540 MHz	128	5640 MHz
Dana 3	110	5550 MHz	132	5660 MHz
	112	5560 MHz	134	5670 MHz
	116	5580 MHz	136	5680 MHz
	118	5590 MHz	140	5700 MHz

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1.2 Accessories

	Accessories
Power cable, Non-shielded, 1.5m	

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1.3 Support Equipment

	Support Equipment						
No.	No. Equipment Brand Name Model Name FCC ID						
1	Notebook	DELL	E4300	DoC			
2	Notebook	DELL	E4300	DoC			
3	WLAN Dongle	CISCO	AE6000	Q87-AE6000			

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 v01r02

1.5 Testing Location Information

	Testing Location								
	HWA YA ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.								
	TEL: 886-3-327-3456 FAX: 886-3-327-0973								
\boxtimes	JHUBEI	JHUBEI ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.							
	TEL: 886-3-656-9065 FAX: 886-3-656-9085								
Test Condition Test Site No				est Site No.	Test Engineer	Test Environment	Test Date		
DFS Site				DF01-CB	Taka Hsu	22.8°C / 61%	10-Sep-15 ~ 24-Sep-15		

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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

The Worst Case Mode for Following Conformance Tests							
Tests Item Dynamic 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)						

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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 1 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				

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														
\boxtimes												accessible of the detect			
			not availabl		_		liOi	rregard	aling the pa	ııaııı	eleis (or the detect	leu	Rau	aı

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3.1.5 Channel Loading/Data Streaming

\boxtimes	IP Based (Load Based) - stream the test file from the Master to the Client.
	☐ The data file (MPEG-4) has been transmitting in a streaming mode.
	Software to ping the client is permitted to simulate data transfer with random ping intervals.
	Minimum channel loading of approximately 17%.
	Unicast protocol has been used.
	Frame Based - stream the test file from the Master to the Client.
	fixed talk/listen ratio, set the ratio to 45%/55%

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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	$Roundup \left\{ \left(\frac{1}{360} \right) \times \left(\frac{19 \times 10^6}{PRI} \right) \right\}$	60%	15
1B	1	15 unique PRI within 518-3066, Excluding 1A PRI		60%	15
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggrega	ate (Radar Type	s 1-4)		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 2 through 4. For short pulse radar type 1, the same waveform is used a minimum of 30 times. If more than 30 waveforms are used for short pulse radar types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. 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 $\overline{3}$ 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 Burst will have the same chirp width. Pulses in different Bursts may have different chirp widths. The chirp is centered on the pulse. For example, with a radar frequency of 5300 MHz and a 20 MHz chirped signal, the chirp starts at 5290 MHz and ends at 5310 MHz.
- If more than one pulse is present in a Burst, the time between the pulses will be between 1000 and 2000

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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

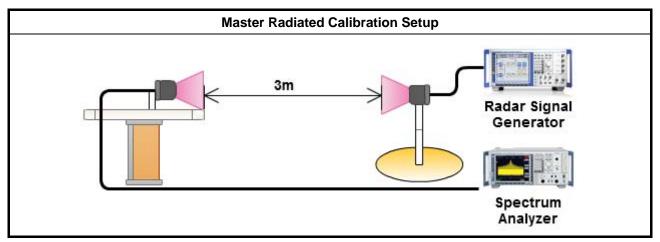
Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (ms)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	0.333	300	70%	30

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: -6	3 dBm	at the antenna connector								
		in front of the antenna								
The Interference Radar Detection Threshold Level 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



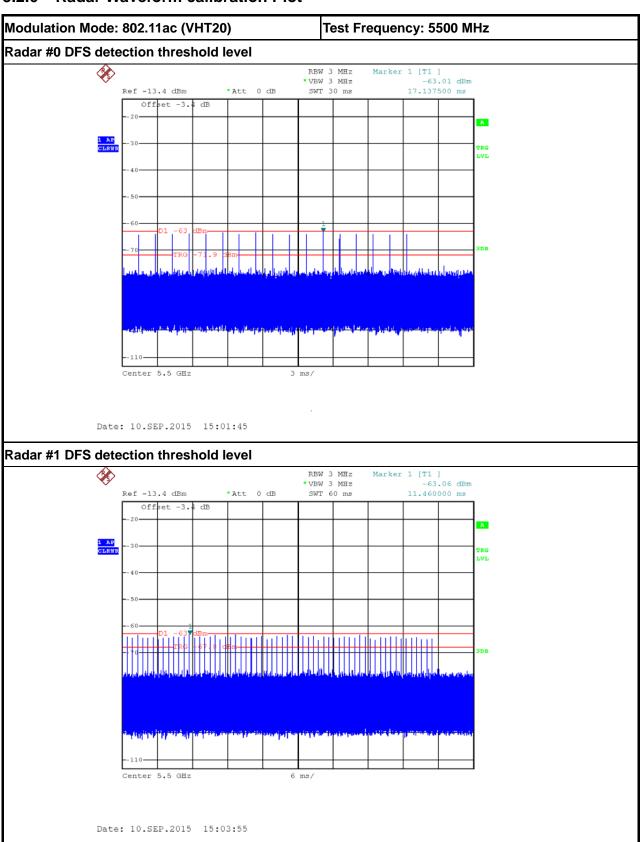
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3.2.6 Radar Waveform calibration Plot



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Radar #2 DFS detection threshold level RBW 3 MHz *VBW 3 MHz -63.06 dBm Ref -13.4 dBm ·Att 0 dB SWT 10 ms 3.128750 ms Offset -3. dB <u>معمد قدم بعلاق بين ومالة المخرجة بما يستان أو ماه البيار من أه بالمناف المنافع في يرمون أو أوارة</u> Center 5.5 GHz Date: 10.SEP.2015 15:04:45 Radar #3 DFS detection threshold level **%** RBW 3 MHz *VBW 3 MHz Marker 1 [T1] -63.04 dBm 4.042500 ms SWT 10 ms Offset -3.4 dB

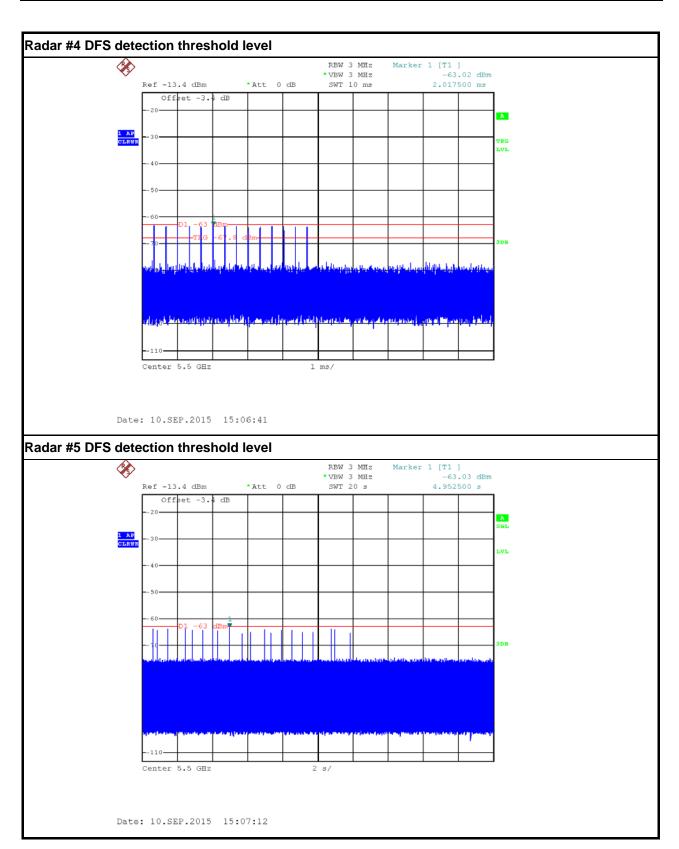
SPORTON INTERNATIONAL INC.

Center 5.5 GHz

Date: 10.SEP.2015 15:05:48

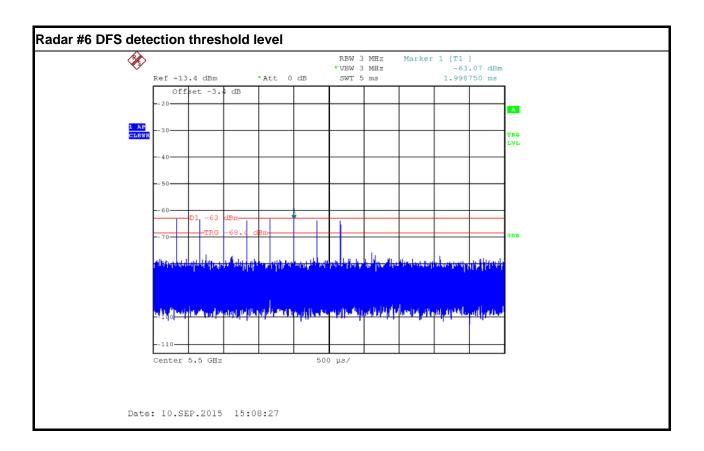
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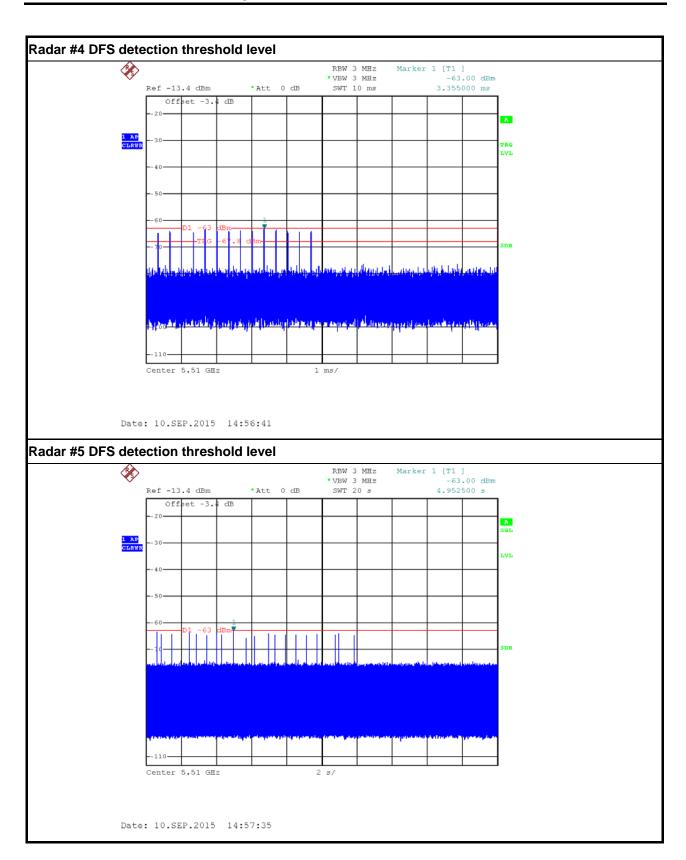
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Radar #2 DFS detection threshold level RBW 3 MHz *VBW 3 MHz Marker 1 [T1] -63.07 dBm *Att 0 dB SWT 10 ms Offset -3.4 dB 1 AP CLRWR Center 5.51 GHz Date: 10.SEP.2015 14:54:31 Radar #3 DFS detection threshold level RBW 3 MHz *VBW 3 MHz SWT 10 ms Marker 1 [T1] -63.00 dBm 241.250000 µs ·Att 0 dB Ref -13.4 dBm Offset -3.4 dB Center 5.51 GHz

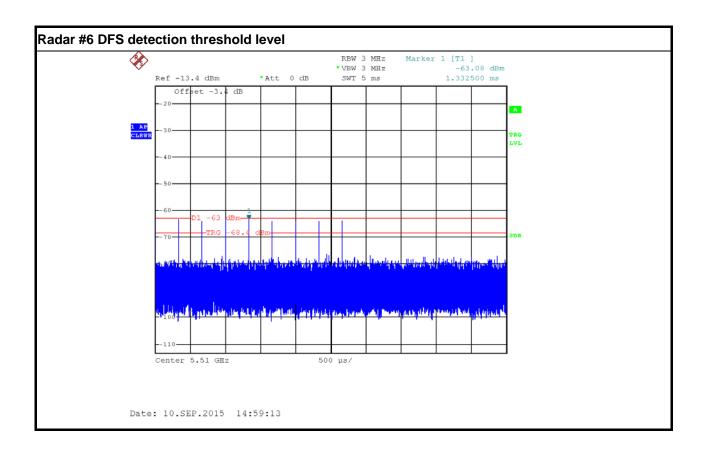
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Date: 10.SEP.2015 14:56:07

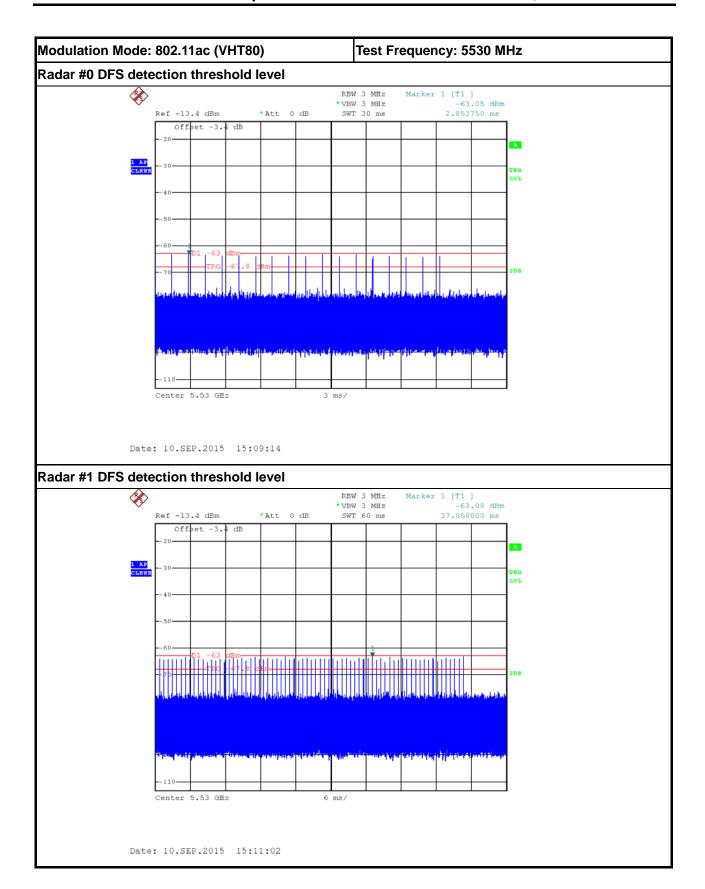
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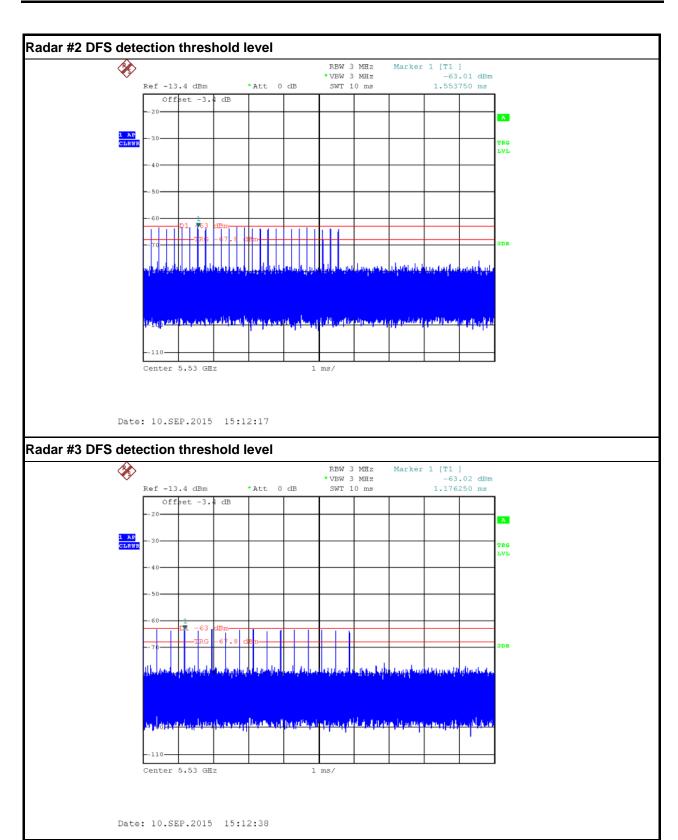


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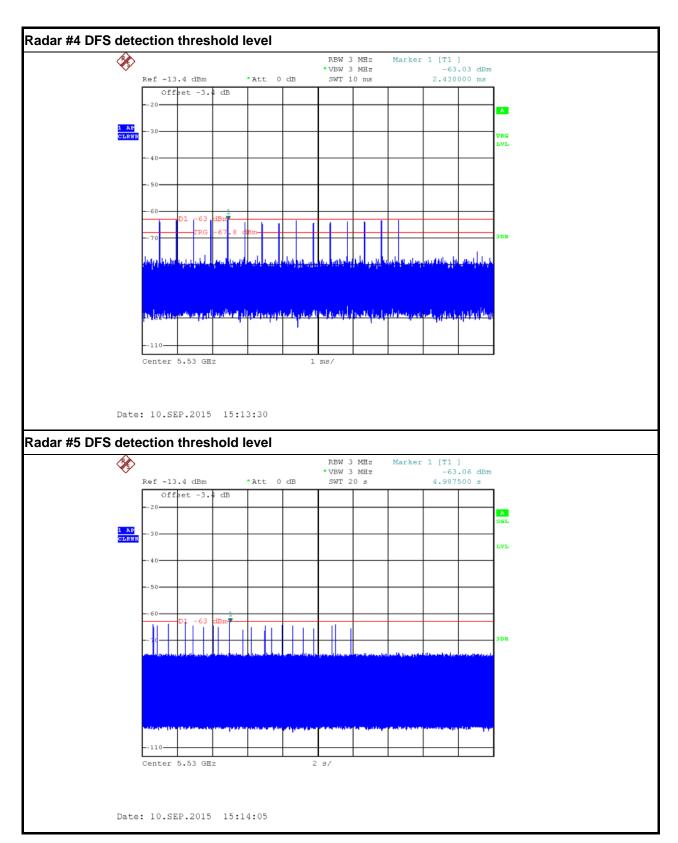
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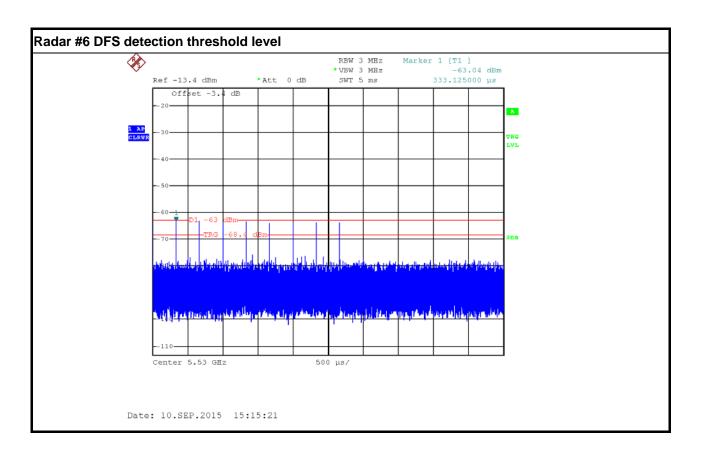


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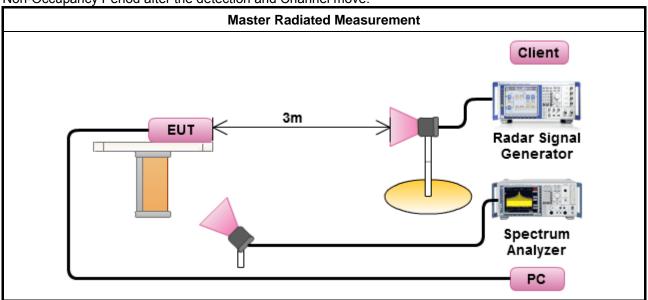


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3.2.7 Test Setup

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.

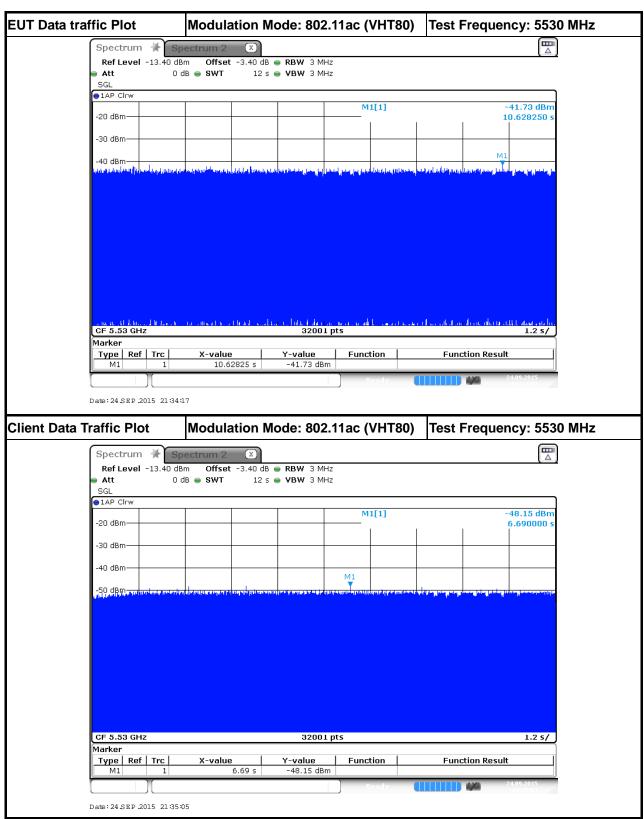


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3.2.8 Data traffic Plot



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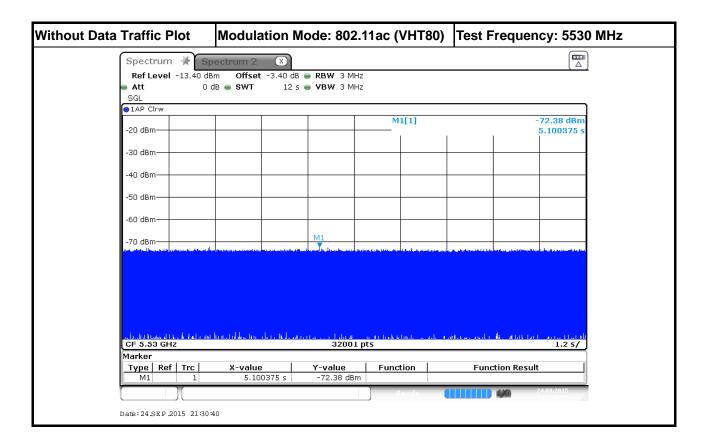
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3.3 UNII Detection Bandwidth

3.3.1 UNII Detection Bandwidth Limit

Channel Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	UNII Detection Bandwidth Min. Limit (MHz)	ISM Type 5 Limit (MHz)		
20	17.800	18	15		
40	36.900	37	30		
80	74.384	75	60		

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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.

The center frequency for each of the 30 trials of the Bin 5 radar shall be randomly selected within 80% of the Occupied Bandwidth.

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

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3.3.4 Test Result of UNII Detection Bandwidth

	EU	T Fre	quer	icy=5	500	MHz					
Channel Bandwidth (MHz)	20		•								
` ,	DFS Detection Trials (1=Detection, 0= No Detectio										
Radar Frequency (MHz)		2	3	4	5	6	7	8	9	10	Detection Rate
	1		3	4		Ů	′	٥	9		(%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5491(FL)-Type 0	1	1	1	0	1	1	1	1	1	1	90%
5492(FL)-Type 5	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%
5496	1	1	1	1	1	1	1	1	1	1	100%
5497	1	1	1	1	1	1	1	1	1	1	100%
5498	1	1	1	1	1	1	1	1	1	1	100%
5499	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5501	1	1	1	1	1	1	1	1	1	1	100%
5502	1	1	1	1	1	1	1	1	1	1	100%
5503	1	1	1	1	1	1	1	1	1	1	100%
5504	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(FH)-Type 5	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509(FH)-Type 0	1	1	1	1	1	1	0	1	1	1	90%
5510 0 0 0 0 0 0 0 0 0											0%
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5509MHz-5491MHz)=										18	
UNII Detection Bandwidth Min. Limit (MHz) =										18	
Radar Type 5-Detection Bandwidth (MHz) = (FH-FL) = (5507MHz-5492MHz)=											15
ISM Type 5 Limit (MHz) =									15		
Test Result								Complied			

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	EU	T Fre	quer	ncy={	5510	MHz						
Channel Bandwidth (MHz)	40		-	•								
, ,	DFS Detection Trials (1=Detection, 0= No Detection)											
Radar Frequency (MHz)		2	3	4	5	6	7	8	9	10	Detection Rate (%)	
5490	0	0	0	0	0	0	0	0	0	0	0%	
5491(FL)-Type 0	1	1	1	1	1	1	1	1	1	1	100%	
5492	1	1	1	0	1	1	1	1	1	1	90%	
5493	1	1	1	1	1	1	1	1	1	1	100%	
5494	1	1	1	1	1	1	1	1	1	1	100%	
5495(FL)-Type 5	1	1	1	1	1	1	1	1	1	1	100%	
5496	1	1	1	1	1	1	1	1	1	1	100%	
5497	1	1	1	1	1	1	1	1	1	1	100%	
5498	1	1	1	1	1	1	1	1	1	1	100%	
5499	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(FH)-Type 5	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(FH)-Type 0	1	1	1	1	1	1	1	1	1	1	100%	
5529	0	0	0	0	0	0	0	0	0	0	0%	
5530	5530 0 0 0 0 0 0 0 0 0								0%			
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5528MHz-5491MHz)=										37		
UNII Detection Bandwidth Min. Limit (MHz) =										37		
Radar Type 5-Detection Bandwidth (MHz) = (FH-FL) = (5525MHz-5495MHz)=									30			
SM Type 5 Limit (MHz) =									30			
Test Result	est Result										Complied	

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	EU	T Fre	auer	icv=5	530	MHz							
Channel Bandwidth (MHz)	80			,									
(,	DFS Detection Trials (1=Detection, 0= No Detection)												
Radar Frequency (MHz)						`					Detection Rate		
. , ,	1	2	3	4	5	6	7	8	9	10	(%)		
5490	0	0	0	0	0	0	0	0	0	0	0%		
5491(FL)-Type 0	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%		
5496	1	1	1	1	1	1	1	1	1	1	100%		
5497	1	1	1	1	1	1	1	1	1	1	100%		
5498	1	1	1	1	1	1	1	1	1	1	100%		
5499(FL)-Type 5	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%		
5561(FH)-Type 5	1	1	1	1	1	1	1	1	1	1	100%		
5562	1	1	1	1	1	1	1	1	1	1	100%		
5563	1	1	1	1	1	1	1	1	1	1	100%		
5564	1	1	1	1	1	1	1	1	1	1	100%		
5565	1	1	1	1	1	1	1	1	1	1	100%		
5568(FH)-Type 0	1	1	1	1	1	1	1	1	1	1	100%		
5569	0	0	0	0	0	0	0	0	0	0	0%		
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5568MHz-5491MHz)=										77			
UNII Detection Bandwidth Min. Limit (MHz) =											75		
Radar Type 5-Detection Bandwidth (MHz) = (FH-FL) = (5561MHz-5499MHz)=									62				
SM Type 5 Limit (MHz) =								60					
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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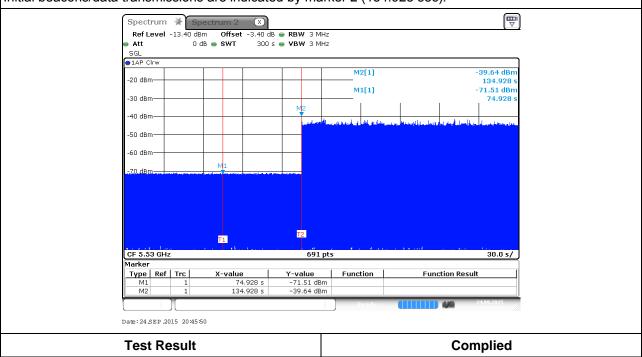
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3.4.4 Test Result of Initial Channel Availability Check Time

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

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (74.928 sec). The initial power up time of the EUT is indicated by marker 1 (74.928 sec). Initial beacons/data transmissions are indicated by marker 2 (134.928 sec).



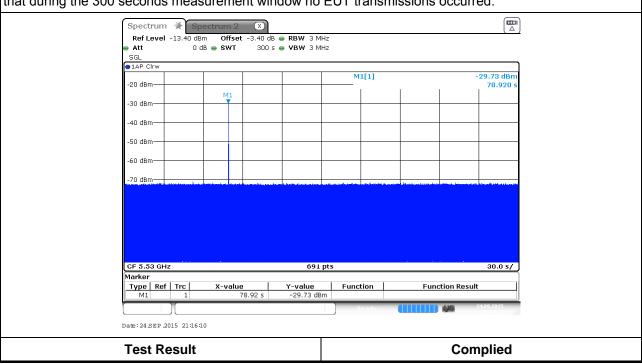
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3.4.5 Test Result of Radar Burst at the Beginning of the Channel Availability Check Time

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 221.080 seconds after the radar Burst has been generated. Verify that during the 300 seconds measurement window no EUT transmissions occurred.



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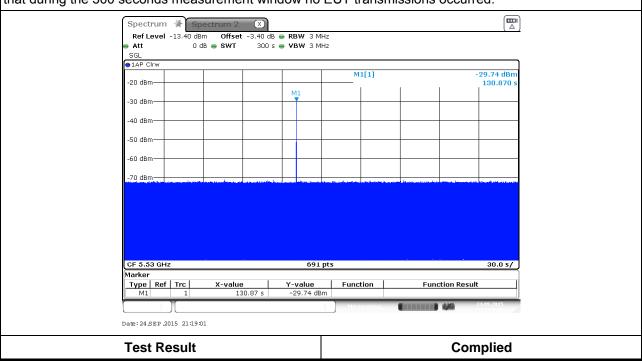
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3.4.6 Test Result of Radar Burst at the End of the Channel Availability Check Time

Modulation Mode	Freq. (MHz)	Radar Type Signal
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 169.130 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 In-service Monitoring

Modulation Mode: 802.11ac (VHT80)

Parameter	Test Result	Limit	
Farameter	Туре 0		
Test Channel (MHz)	5530 MHz	-	
Channel Move Time (sec.)	4.052	< 10s	
Channel Closing Transmission Time (ms) (Note)	23.438	< 60ms	
Non-Occupancy Period (min.)	≥30	≥ 30 min	

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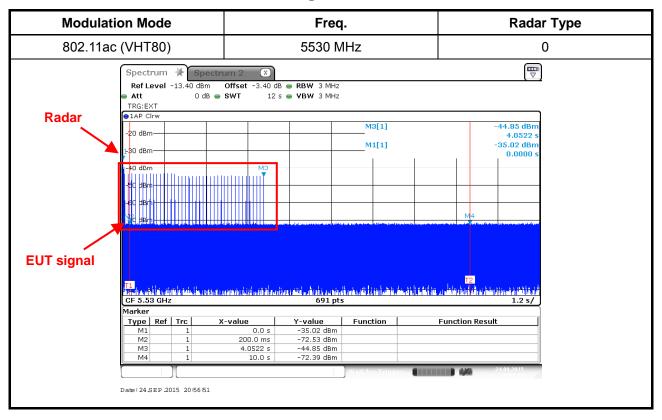
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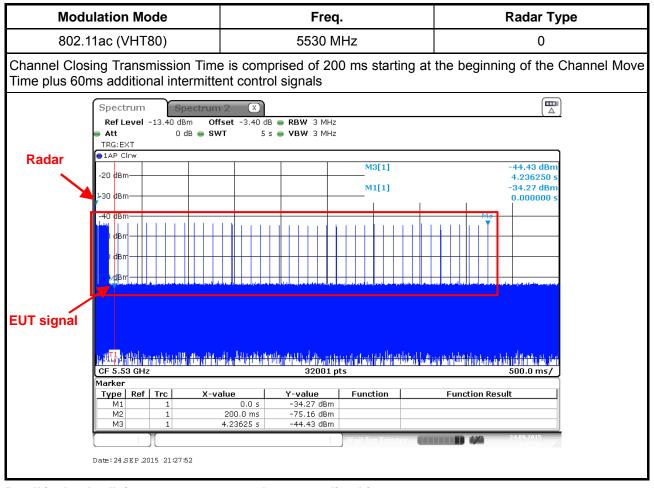
3.5.5 Test Plot of In-Service Monitoring for Channel Move Time



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



Dwell is the dwell time per spectrum analyzer sampling bin.

S is the sweep time

B is the number of spectrum analyzer sampling bins

C is the intermittent control signals of Channel Closing Transmission Time

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

Dwell (0.156 ms)= S (5000 ms) / B (32000)

C (23.438 ms) = N (150) X Dwell (0.156 ms)

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

Spectrum Spectrum 2 Sp		M	odulation	Mode				Freq.	
ng the 30 minutes observation time, UUT did not make any transmissions on a channel al was detected on that channel by either the Channel Availability Check or the In-Service Spectrum 2 S		80	02.11ac (VF	HT80)				5530 M	Hz
ng the 30 minutes observation time, UUT did not make any transmissions on a channel al was detected on that channel by either the Channel Availability Check or the In-Service Spectrum Spectrum 2 Spectrum 2	cui	oancy P	eriod						
Ref Level -13.40 dBm Offset -3.40 dB RBW 3 MHz Att 0 dB SWT 2000 s VBW 3 MHz SGL 101.45 s M1 -30 dBm 3m 3m	he	30 minu	utes observ						
Ref Level -13.40 dBm Offset -3.40 dB RBW 3 MHz Att 0 dB SWT 2000 s VBW 3 MHz SGL 120 dBm M1 -20 dBm M1 -30 dBm		Spec	trum 🕌 Sp	ectrum 2 (x)					
-20 dBm			Level -13,40 dBr	m Offset -3.40 dB	_				
-20 dBm		_	Cless						
3m -						M1[1]			
Mpg. Hem————————————————————————————————————		M:	1						101.103
3m-									
8m		144001	Sm						
			Jm						
			Jm-						
		1	m			James and the second second	danahan addiren deser		walter constraints was been all \$40
					691	pts			200.0 s/
CF 5.53 GHz 691 pts 200.0 s/		Туре	Ref Trc	X-value	Y-value	Function		Function Res	ult
Marker Type Ref Trc X-value Y-value Function Function Result		M:	1 1	101.45 s	-27.62 dBr	m			24.00.2015
Marker Type Ref Trc X-value Y-value Function Function Result						Ready		4,40	24.09.2015

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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

4

3.6.2 **Measuring Instruments**

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

3.6.3 **Test Procedures**

Test Method

For Statistical Performance Check test. Stream the MPEG test file from the Master Device to the Client Device on the test Channel for the entire period 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

Modulation Mode: 802.11ac (VHT20)

Type 1 Radar Statistical Performance

Trial #	Test Freq. (MHz)	(Pulse Per Second)		PRI (us)	1=Detection 0=No Detection
1	5493	1	1930.5	518	1
2	5491	23	326.2	3066	1
3	5495	19	1139.0	878	1
4	5496	12	1355.0	738	1
5	5497	4	1730.1	578	1
6	5498	8	1519.8	658	1
7	5499	15	1253.1	798	1
8	5500	6	1618.1	618	1
9	5501	14	1285.3	778	1
10	5502	3	1792.1	558	0
11	5503	13	1319.3	758	1
12	5504	9	1474.9	678	0
13	5505	7	1567.4	638	1
14	5506	17	1193.3	838	1
15	5507	10	1432.7	698	1
16	5506	-	1692.0	591	1
17	5505	-	328.1	3048	1
18	5504	-	373.4	2678	1
19	5503	-	574.4	1741	1
20	5509	-	1216.5	822	1
21	5501	-	801.3	1248	1
22	5500	-	488.5	2047	1
23	5499	-	956.0	1046	1
24	5498	-	517.6	1932	1
25	5497	-	1422.5	703	1
26	5496	-	542.0	1845	1
27	5495	-	741.3	1349	1
28	5494	-	881.8	1134	1
29	5493	-	427.4	2340	1
30	5494	-	628.9	1590	1
		Detection Percentage	(%)		93.33
Limit					60%
Test Res	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	5493	2.6	221	23	1
2	5491	4.6	198	27	1
3	5495	1.1	184	29	1
4	5496	4.8	203	24	1
5	5497	2.4	162	25	1
6	5498	3.4	204	28	1
7	5499	2.3	170	27	1
8	5500	3.5	184	23	1
9	5501	4.9	150	27	0
10	5502	4.6	211	29	1
11	5503	2.9	158	23	1
12	5504	2.6	226	27	1
13	5505	1.6	204	26	1
14	5506	3.9	181	25	1
15	5507	4.6	202	24	1
16	5506	4.1	194	27	1
17	5505	2.3	193	28	1
18	5504	3.9	173	29	1
19	5503	4.3	188	23	0
20	5509	1.5	215	26	1
21	5501	4.9	227	27	1
22	5500	1.1	199	23	1
23	5499	4.5	155	29	0
24	5498	4.0	190	27	1
25	5497	2.4	151	23	1
26	5496	2.5	180	28	1
27	5495	2.5	228	23	1
28	5494	2.5	203	25	1
29	5493	1.5	188	25	1
30	5494	1.9	217	24	1
		etection Percentage (%			90.00
imit	-	0 - (/	,		60%
est 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	5493	8.0	205	16	1
2	5491	6.7	382	18	0
3	5495	8.6	418	16	1
4	5496	9.4	351	17	1
5	5497	7.4	383	18	1
6	5498	9.8	232	16	1
7	5499	9.1	377	17	0
8	5500	9.6	457	16	1
9	5501	8.0	471	18	1
10	5502	9.0	304	18	1
11	5503	8.0	316	17	1
12	5504	9.8	325	16	1
13	5505	8.0	409	17	1
14	5506	9.9	200	17	1
15	5507	8.8	458	16	1
16	5506	8.0	232	18	0
17	5505	8.3	250	16	1
18	5504	8.7	270	16	0
19	5503	7.7	350	17	1
20	5509	7.1	230	16	1
21	5501	7.3	416	18	1
22	5500	7.6	498	18	1
23	5499	7.3	286	17	1
24	5498	7.3	287	16	1
25	5497	7.5	462	17	1
26	5496	6.2	300	17	1
27	5495	6.4	323	18	1
28	5494	7.1	420	16	1
29	5493	7.2	395	18	1
30	5494	8.4 etection Percentage (9	377	16	0
		83.33			
Limit					60%
Test Res	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	5493	18.0	242	15	1
2	5491	19.9	279	12	1
3	5495	12.9	487	14	0
4	5496	15.0	452	13	1
5	5497	16.3	230	12	1
6	5498	19.8	238	13	0
7	5499	18.2	420	16	1
8	5500	16.3	452	15	1
9	5501	14.2	495	12	1
10	5502	17.8	228	16	1
11	5503	19.1	211	16	1
12	5504	18.4	283	15	1
13	5505	11.8	411	12	1
14	5506	14.2	284	13	1
15	5507	13.9	202	12	1
16	5506	17.8	340	14	1
17	5505	15.6	290	16	1
18	5504	14.6	250	16	1
19	5503	14.4	484	15	1
20	5509	18.9	387	13	1
21	5501	11.1	348	15	1
22	5500	13.8	291	16	1
23	5499	14.3	295	12	0
24	5498	12.5	300	12	1
25	5497	12.5	322	14	1
26	5496	12.5	383	13	1
27	5495	15.7	322	16	1
28	5494	19.8	469	13	0
29	5493	18.6	406	15	1
30	5494	15.9	238	14	1
	De	etection Percentage (%	<u>(</u> 6)		86.67
Limit		60%			
Test Resi	ult				Complied

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Total Type 1~4 Radar Statistical Performance

Radar Type #	Detection Percentage (%)
1	93.33
2	90.00
3	83.33
4	86.67
Aggregate (Radar Types 1-4)	88.33
Limit	80%
Test Result	Complied

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Type 5 Radar Statistical Performance

Trial #	Test Freq. (MHz)	1=Detection 0=No Detection	Trial #	Test Freq. (MHz)	1=Detection 0=No Detection	Trial #	Test Freq. (MHz)	1=Detection 0=No Detection	
1	5491	1	11	5502	1	21	5509	0	
2	5492	0	12	5503	1	22	5495	1	
3	5493	1	13	5504	1	23	5504	1	
4	5494	1	14	5505	1	24	5503	1	
5	5496	1	15	5506	1	25	5502	1	
6	5497	1	16	5507	1	26	5501	1	
7	5498	1	17	5508	0	27	5500	1	
8	5499	0	18	5509	0	28	5499	1	
9	5500	1	19	5508	0	29	5498	1	
10	5501	1	20	5507	1	30	5497	1	
	Detection Percentage (%)								
Limit	Limit							80%	
Test R	Test Result								

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Trial Number				•	1			
Number of Bur	sts in Trial			8				
Chirp Center F	Chirp Center Frequency			54	91			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)				
1	1	62.3	8	-	-	346		
2	2	51.2	15	1745	-	1205		
3	3	93.6	5	957	1634	674		
4	3	68.2	12	1668	1573	384		
5	3	83.1	8	1188	1888	876		
6	1	56.7	18	-	-	376		
7	2	60.6	18	1874	-	1409		
8	3	75.5	13	1263	1683	1378		
Detection Chec	k (1=Detection; 0	=No Detection)				1		

Trial Number			2					
Number of B	ursts in Trial			9				
Chirp Center	Frequency			54	92			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)		Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)		
1	1	99.6	13	-	-	217		
2	2	54.8	15	1727	-	982		
3	3	91.1	15	1120	1826	941		
4	2	76.2	7	1638	-	477		
5	1	88.9	13	_	-	259		
6	1	83	9	_	-	892		
7	1	83.9	12	_	-	320		
8	2	55.9	15	1613	-	445		
9	1	96.1	13	_	-	779		
Detection Che	eck (1=Detection; 0	=No Detection)				0		

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Trial Number			3					
Number of Bui	rsts in Trial		10					
Chirp Center F	requency			5493				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)		Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)		
1	2	82	6	1246	-	1017		
2	1	93.2	13	-	-	760		
3	2	61.3	13	1175	-	327		
4	1	52.8	8	-	-	824		
5	3	70.6	19	929	1076	115		
6	1	80.3	17	-	-	325		
7	1	83.2	15	-	-	679		
8	2	94	9	1805	-	888		
9	2	67	8	1486	-	849		
10	1	56.4	20	-	-	813		
Detection Chec	k (1=Detection; 0	=No Detection)				1		

Trial Number			4				
Number of Bu	rsts in Trial		11				
Chirp Center F	requency		5494				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)	
1	3	90.5	8	1149	1612	35	
2	3	54.5	8	1094	1525	1014	
3	1	57.1	18	_	-	827	
4	2	98.6	20	1292	-	83	
5	2	62.9	12	1433	-	676	
6	1	71.1	15	_	-	708	
7	1	96.7	5	_	-	711	
8	1	64.3	5	_	-	484	
9	3	61.2	8	1075	1524	444	
10	2	79.2	13	1877	-	797	
11	2	79.3	20	1313	-	288	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

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Trial Number			5				
Number of Bur	rsts in Trial		12				
Chirp Center F	requency		5496				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	1	89.5	13	_	_	20	
2	3	71.8	11	1446	1549	117	
3	3	53.7	15	1100	1517	485	
4	2	99.3	11	1571	-	334	
5	3	56.8	6	1594	1280	468	
6	1	97.4	11	-	-	213	
7	2	67.6	13	1831	-	14	
8	3	77.1	8	1683	1337	267	
9	1	98.5	17	-	-	544	
10	3	58.3	13	1924	1829	159	
11	1	98.4	14	-	-	380	
12	1	79.3	11	-	-	257	
Detection Chec	k (1=Detection; C	=No Detection)				1	

Trial Number			6				
Number of Bu	rsts in Trial			1	3		
Chirp Center F	requency		5497				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)	
1	2	53.8	14	1631	-	768	
2	1	90	17	_	-	530	
3	3	87.2	18	1115	1297	157	
4	2	82	11	1728	-	892	
5	3	69.8	7	1641	1779	196	
6	2	63.1	20	1836	-	331	
7	1	59.8	6	_	-	495	
8	3	78.5	19	941	1921	546	
9	1	85.7	6	_	-	219	
10	3	67.7	9	1834	1450	534	
11	2	84.5	15	1376	-	282	
12	2	99.3	13	1570	-	486	
13	2	80.2	8	1088	-	67	
Detection Chec	ck (1=Detection; 0	=No Detection)				1	

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Trial Number					7		
Number of Bur	rsts in Trial			1	4		
Chirp Center F	requency		5498				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	3	80.8	10	1061	1124	389	
2	2	81	9	1479	-	234	
3	2	87.6	17	1247	-	577	
4	2	94.7	18	1041	-	572	
5	2	78	18	1267	-	313	
6	1	95.5	14	-	-	52	
7	2	97.6	15	1215	-	57	
8	3	88	9	1349	1598	171	
9	2	69.7	17	1711	-	769	
10	2	96.5	17	1431	-	168	
11	2	96.9	6	1871	-	124	
12	3	66.4	10	1824	1468	766	
13	1	78.8	10	-	-	537	
14	3	87.6	6	1080	1159	714	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

Trial Number			8				
Number of Bu	rsts in Trial		15				
Chirp Center I	Frequency		5499				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)	
1	2	71.8	14	1432	-	573	
2	2	65.9	19	1762	-	314	
3	2	74.7	6	1754	-	377	
4	3	81.7	5	1133	974	216	
5	3	57.8	14	1176	1712	129	
6	1	80.6	6	_	-	341	
7	3	99.3	17	1268	1876	165	
8	1	79.8	12	_	-	618	
9	3	83	11	990	1738	589	
10	3	71.5	11	1473	1255	6	
11	1	77.4	11	_	-	127	
12	2	84.8	12	1390	-	515	
13	2	64.6	12	1653	-	148	
14	2	92.9	12	1881	-	519	
15	1	71.3	6	_	-	301	
Detection Chec	ck (1=Detection; 0	=No Detection)				0	

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Trial Number			9					
Number of Bur	sts in Trial		16					
Chirp Center F	requency			5500				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)		
1	2	55.4	9	1318	-	383		
2	2	80.8	18	1710	-	534		
3	1	88.8	9	-	-	495		
4	2	78	12	1818	-	92		
5	1	78.5	12	-	-	108		
6	2	55	13	1219	-	123		
7	2	75.9	20	1004	-	123		
8	2	70.9	7	1820	-	546		
9	2	71.7	18	1559	-	476		
10	2	73.9	19	1232	-	235		
11	1	59.2	20	-	-	424		
12	1	55.7	9	-	-	391		
13	3	60.9	12	1144	1370	198		
14	2	60.8	14	990	-	16		
15	3	60.6	19	1526	1326	695		
16	2	89	5	1029	-	131		
Detection Check	k (1=Detection; 0	=No Detection)				1		

Trial Number			10				
Number of Bui	rsts in Trial		17				
Chirp Center F	requency		5501				
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	14	1119	-	488	
2	3	81.4	13	1142	961	451	
3	3	92.9	18	991	1147	565	
4	3	81.3	18	1793	1369	285	
5	3	76.4	20	1005	1793	79	
6	1	61.6	18	-	-	503	
7	1	66.6	19	-	-	181	
8	1	53.7	12	-	-	416	
9	2	58	8	1477	-	107	
10	2	64	18	1791	-	141	
11	2	80.3	12	1304	-	516	
12	3	77.3	5	1039	1668	372	
13	2	97.6	11	1593	-	163	
14	1	73	6	-	-	147	
15	3	65.1	8	1097	1927	102	
16	2	59.5	13	1569	-	182	
17	1	88.2	19	-	-	653	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

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Trial Number			11					
Number of Bu	rsts in Trial			18				
Chirp Center I	Frequency		5502					
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)		
1	2	56.1	12	1219	-	273		
2	1	83.3	7	-	-	298		
3	3	79.6	17	1218	1897	159		
4	2	95.8	7	1672	-	480		
5	2	79.6	8	920	-	387		
6	2	88.9	11	1779	-	5		
7	2	81.4	8	1645	-	201		
8	2	92	6	1454	-	80		
9	3	96	13	1518	1121	192		
10	2	65.6	11	1798	-	349		
11	2	98.7	5	1360	-	416		
12	2	52.9	15	1140	-	652		
13	2	76.5	8	1032	-	92		
14	3	73.8	18	1719	1383	502		
15	3	83.7	10	1270	1216	343		
16	2	89.6	10	1141	-	108		
17	2	67.2	20	1455	-	272		
18	3	55.7	14	1444	1475	566		
Detection Ched	ck (1=Detection; C	=No Detection)				1		

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Trial Number				1	2			
Number of Bu	rsts in Trial		19					
Chirp Center I	Frequency			55	03			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)					
1	2	70.6	15	1040	-	Interval (ms) 575		
2	2	72.9	13	1460	-	178		
3	3	88.9	5	1250	1629	191		
4	3	60.3	20	1757	1822	468		
5	3	92.1	19	1845	1198	476		
6	1	73	5	-	-	532		
7	1	50.4	15	-	-	69		
8	1	66.4	10	-	-	333		
9	1	79.1	18	-	-	437		
10	1	71.6	20	-	-	424		
11	2	95.6	13	1229	-	498		
12	1	74.4	9	-	-	363		
13	3	55.6	17	1263	1724	123		
14	2	78.3	13	1507	-	37		
15	3	54.1	13	1325	1249	192		
16	2	67.1	18	1584	-	311		
17	2	65.8	9	1195	-	243		
18	2	50.1	12	1755	-	48		
19	2	87.7	18	1359	-	180		
Detection Ched	ck (1=Detection; 0	=No Detection)				1		

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Trial Number	Trial Number			13				
Number of Bu	rsts in Trial			2	0			
Chirp Center F	requency			55	04			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)		
1	3	79.5	7	1808	1550	274		
2	2	76.7	20	1632	-	573		
3	3	85.9	12	1305	1496	18		
4	3	86.6	14	968	1172	133		
5	2	74.9	14	1348	-	48		
6	3	82.2	20	1692	1310	156		
7	2	53.9	13	1342	-	45		
8	3	62.7	15	1839	1651	76		
9	2	86.2	6	1165	-	91		
10	1	63.1	11	-	-	391		
11	2	82.4	6	1416	-	107		
12	1	95.8	18	-	-	248		
13	2	75.7	9	993	-	482		
14	3	70.1	18	1563	1020	354		
15	3	85.8	13	1420	1084	446		
16	1	63.2	7	-	-	265		
17	1	75.1	11	-		147		
18	2	69.5	5	1802	-	256		
19	1	51.8	19	-	-	422		
20	2	62.3	5	1449	-	304		
Detection Chec	ck (1=Detection; C	=No Detection)				1		

Trial Number	Trial Number			14			
Number of Bursts in Trial				3	3		
Chirp Center Frequency				55	05		
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 (ms)	
1	3	74.9	5	1314	1466	1289	
2	2	83.9	19	1442	-	1436	
3	2	55.8	6	1147	-	240	
4	2	59.4	6	1490	-	1455	
5	2	78.2	15	1665	-	1312	
6	2	57.3	15	1357	-	264	
7	2	76.2	11	1651	-	255	
8	3	59	7 1460 1109 1410				
Detection Chec	k (1=Detection; 0	=No Detection)				1	

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Trial Number			15			
Number of Bursts in Trial				ę)	
Chirp Center Frequency				55	06	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Locat Spacing (us) Spacing (us) With Interval			
1	3	77.7	19	1046	1568	17
2	2	98.2	20	1628	-	877
3	2	95.3	8	1540	-	1066
4	2	78.8	15	1341	-	822
5	2	52.8	20	988	-	1020
6	2	65.2	9	1480	-	602
7	2	99.5	10	1867	-	884
8	2	79.5	13	1148	-	342
9	3	50.6	13	1321		
Detection Chec	ck (1=Detection; 0	=No Detection)				1

Trial Number	r		16					
Number of B	ursts in Trial			10				
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	97.5	11	1357	-	764		
2	2	91.8	13	1896	-	298		
3	1	78.5	5	-	-	1117		
4	1	60.1	11	-	-	1069		
5	2	96.2	10	975	-	1157		
6	2	56.6	18	1626	-	701		
7	1	77.1	20	-	-	323		
8	2	96.3	8	1682	-	307		
9	2	52.2	13	1017	-	217		
10	1	92.8	15 316					
Detection Che	eck (1=Detection; 0	=No Detection)				1		

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Trial Number			17			
Number of Bur	sts in Trial		11			
Chirp Center Frequency				55	08	
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 (m			
1	2	57.3	8	1220	-	792
2	3	73.1	5	1717	1679	845
3	2	54.1	14	967	-	112
4	2	98.8	19	1137	-	715
5	3	85.5	8	1068	960	301
6	2	78.5	7	1387	-	827
7	2	77.9	12	1869	-	506
8	1	81.9	10	-	-	549
9	1	50.4	9	-	-	464
10	1	75.2	8	-	-	790
11	2	92.7	7	1770	-	967
Detection Check	k (1=Detection; C	=No Detection)				0

Trial Number	Trial Number			18			
Number of Bur	sts in Trial		12				
Chirp Center Frequency				55	09		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	2	79.1	6	1042	_	793	
2	3	55.7	9	1327	1744	159	
3	1	95	20	-	-	734	
4	1	88.4	5	-	-	523	
5	1	92.3	15	-	-	546	
6	1	93.6	6	-	-	208	
7	2	95.1	12	1044	-	894	
8	1	59.5	17	-	-	666	
9	2	98.7	17	1422	-	640	
10	2	65.1	5	1104	-	320	
11	1	60.2	5	-	-	60	
12	1	88.7	8	-	-	823	
Detection Chec	k (1=Detection; 0	=No Detection)	_	·		0	

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Trial Number	Trial Number			19			
Number of Bur	sts in Trial		13				
Chirp Center Frequency				55	08		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	1	53.9	10	-	-	226	
2	2	82.6	13	992	-	854	
3	1	87.7	8	_	-	303	
4	3	69	12	1696	1606	528	
5	1	68.6	12	-	-	220	
6	3	76.5	13	1333	1468	389	
7	2	95.8	17	1380	-	57	
8	2	55.6	19	1147	-	334	
9	2	78.6	14	1268	-	128	
10	2	65.4	17	1231	-	913	
11	2	76.6	18	1883	-	518	
12	1	93.2	6	_	-	596	
13	2	50.2	13	1836	-	61	
Detection Chec	k (1=Detection; C	=No Detection)				0	

Trial Number			20				
Number of Bur	rsts in Trial		14				
Chirp Center Frequency				55	07		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	1	60.9	13	-	-	142	
2	2	81.7	15	1831	-	522	
3	2	78.5	5	1396	-	790	
4	2	98.2	6	1652	-	3	
5	1	64.1	12	-	-	414	
6	3	53	18	1862	1902	157	
7	2	62.3	15	1490	-	248	
8	2	87	11	1411	-	576	
9	2	78.4	8	1090	-	737	
10	2	87.2	7	967	-	343	
11	3	71	13	1662	1841	105	
12	2	77.2	5	1557	-	601	
13	1	94.4	15	-	-	108	
14	1	90.6	13	_	-	506	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

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Trial Number	Trial Number			21				
Number of Bu	rsts in Trial		15					
Chirp Center Frequency				55	09			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)					
1	3	76.5	8	1870	1326	385		
2	2	95.3	13	1162	-	73		
3	3	58.9	9	1586	1909	742		
4	2	73.1	13	1460	-	330		
5	2	73.1	12	1488	-	25		
6	2	75.1	5	1331	-	418		
7	3	98.5	11	936	1532	214		
8	3	72.5	13	1110	1903	387		
9	3	67.4	12	1567	1513	80		
10	2	76.1	12	1005	ı	277		
11	2	94.3	17	1413	ı	314		
12	2	72.8	12	1778	-	66		
13	2	90.9	14	1793	-	147		
14	3	94.8	11	1012	1742	441		
15	3	95	12	912	1641	609		
Detection Chec	k (1=Detection; 0	=No Detection)				0		

Trial Number			22				
Number of Bur	rsts in Trial		16				
Chirp Center Frequency				54	95		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)	
1	1	96.7	9	-	-	308	
2	2	78.3	13	1045	-	27	
3	1	56.5	12	-	-	74	
4	3	88.5	14	1119	1020	629	
5	2	62.4	9	1436	-	548	
6	2	78.2	5	1147	-	341	
7	3	76.8	14	1069	1575	360	
8	2	91.6	18	978	-	602	
9	2	93.7	5	1130	-	623	
10	2	97.4	8	1100	-	256	
11	3	90.1	6	1629	1375	108	
12	2	79.9	18	1809	-	183	
13	2	83	10	1370	-	477	
14	2	89.1	13	1239	-	484	
15	2	58.3	8	1321	-	276	
16	1	85.2	13	-	-	22	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

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Trial Number			23					
Number of Bu	rsts in Trial		17					
Chirp Center Frequency				55	04			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Pulse 2-to-3 Spacing (us)				
1	3	60	10	1097	1748	56		
2	3	66.3	13	1391	1430	421		
3	2	88.5	15	1040	-	583		
4	2	72.1	8	1526	-	161		
5	1	72.3	8	_	-	450		
6	2	67.3	7	1022	-	48		
7	2	56.1	12	1325	-	661		
8	1	83.5	11	-	-	695		
9	3	99.4	13	1490	938	405		
10	1	54.2	12	-	-	126		
11	3	92.7	17	1251	1631	365		
12	3	95.1	17	1741	1162	57		
13	2	84	9	1597	-	167		
14	1	68.5	18	_	-	512		
15	1	76.5	20	_	-	185		
16	3	86.6	11	1774	1875	457		
17	2	62.2	9	1563	-	492		
Detection Chec	k (1=Detection; C	=No Detection)				1		

Trial Number			24				
Number of Bur	sts in Trial		18				
Chirp Center F	requency			55	03		
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	86.6	19	-	-	621	
2	2	95.3	17	926	-	128	
3	1	76.2	12	-	-	251	
4	3	71.4	19	1287	1404	269	
5	3	51.7	12	1564	1339	633	
6	2	77	5	1899	-	615	
7	1	87.5	12	-	-	375	
8	3	59	17	1327	1615	610	
9	2	78.3	15	1551	-	548	
10	2	89.7	5	1718	-	456	
11	2	92.1	7	1403	-	12	
12	2	97.3	14	1338	-	596	
13	3	80.3	20	1354	1563	484	
14	1	98.2	8	-	-	428	
15	3	94.4	13	1795	1829	512	
16	2	90.4	13	1105	-	342	
17	2	73.6	19	1787	-	292	
18	1	82.9	7	-	-	618	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

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Trial Number			25				
Number of Bu	rsts in Trial		19				
Chirp Center I	Frequency			55	02		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Spacing (us)			
1	1	90	18	-	-	Interval (ms) 173	
2	1	65.3	19	-	-	245	
3	2	82.6	10	1756	-	127	
4	2	93.9	18	1557	-	287	
5	2	50.5	13	1479	-	282	
6	1	68	7	-	-	176	
7	3	88.4	11	1244	1076	568	
8	3	66.8	11	1288	1909	448	
9	2	88	12	1450	-	527	
10	3	51.1	6	1797	1935	195	
11	2	93.8	13	1073	-	184	
12	1	83.5	10	-	-	506	
13	2	96.9	12	1047	-	267	
14	3	87.2	18	1521	1450	243	
15	2	60.1	8	1545	-	291	
16	3	98	10	1842	1402	554	
17	3	57	19	1665	1732	143	
18	1	74.3	14	-	-	31	
19	2	57.8	10	1576	-	609	
Detection Chec	ck (1=Detection; 0	=No Detection)				1	

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Trial Number			26				
Number of Bu	rsts in Trial		20				
Chirp Center F	requency			55	01		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Spacing (us)		Starting Location Within Interval (ms)	
1	2	92.8	9	1222	-	531	
2	2	52.4	8	1547	-	168	
3	3	56.8	7	1158	1184	193	
4	1	91.2	7	-	-	565	
5	3	61.2	10	1558	1664	387	
6	3	62	7	1518	1656	391	
7	2	69	5	1531	-	327	
8	2	67.3	18	1064	-	25	
9	1	94.1	5	_	-	78	
10	2	76	17	1190	-	222	
11	2	81.9	12	1815	-	96	
12	2	57.9	8	1594	-	277	
13	3	68.3	19	1427	1540	41	
14	2	53.3	7	1713	-	48	
15	2	85.3	15	1136	-	48	
16	1	65.3	20	_	-	57	
17	3	79.8	20	923	1259	48	
18	2	56.9	20	1357	-	483	
19	2	93	9	1686	-	73	
20	2	82.8	10	944	-	352	
Detection Chec	ck (1=Detection; 0	=No Detection)				1	

Trial Number			27					
Number of Bu	ırsts in Trial			8				
Chirp Center	Frequency			55	00			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Spacing (us)				
						Interval (ms)		
1	3	50.9	11	1106	1077	1293		
2	2	77.8	18	1836	-	1235		
3	3	60.7	5	1069	1635	1092		
4	2	77.2	13	1916	-	1343		
5	2	91.6	13	1465	-	1466		
6	2	56.8	17	1783	-	376		
7	1	59.5	20	_	-	131		
8	1	66.5	12	-	-	1024		
Detection Che	ck (1=Detection; 0	=No Detection)	•		•	1		

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Trial Number			28			
Number of Bur	rsts in Trial			9	9	
Chirp Center F	requency			54	99	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Spacing (us)			Starting Location Within Interval (ms)
1	2	72	9	1092	-	965
2	2	89.2	6	1550	-	1226
3	1	81.2	12	-	-	277
4	2	80.6	15	1616	-	458
5	2	62.8	10	1812	-	748
6	1	71	8	-	-	434
7	2	69.3	6	1027	-	1111
8	2	77.2	13	1076	-	638
9	2	65.4	5	1582	-	278
Detection Chec	k (1=Detection; 0	=No Detection)				1

Trial Number			29			
Number of Bu	Number of Bursts in Trial			1	0	
Chirp Center F	requency			54	98	
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	1	51.5	19	-	-	151
2	1	82.3	13	-	-	1071
3	3	78.3	8	1115	1740	646
4	2	99	14	1101	ı	709
5	3	98.8	7	1819	945	556
6	2	80.9	19	922	-	567
7	2	64	12	953	ı	581
8	1	79	20	-	-	798
9	1	68	8	-	-	112
10	2	50.4	13	1587	-	26
Detection Chec	ck (1=Detection; 0	=No Detection)				1

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Trial Number			30					
Number of B	ursts in Trial			11				
Chirp Center	Frequency			54	97			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)					
1	3	57.8	5	1324	1716	82		
2	2	70.1	20	1733	-	587		
3	2	95.2	13	1188	-	789		
4	3	84.6	20	1042	1259	1021		
5	3	96.5	7	1329	1596	16		
6	2	84.3	15	1606	-	708		
7	3	53.5	19	1783	1458	738		
8	3	74.9	5	1599	1891	466		
9	3	53.8	7	1494	1467	252		
10	2	60.5	14	1319	-	464		
11	1	73.3	10	-	-	845		
Detection Che	eck (1=Detection; 0	=No Detection)	•	•	•	1		

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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
	100				
Limit	70%				
Test Res	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)	PRI (us)	1=Detection 0=No Detection
1	5496	1	1930.5	518	1
2	5497	23	326.2	3066	1
3	5498	19	1139.0	878	1
4	5499	12	1355.0	738	1
5	5500	4	1730.1	578	0
6	5501	8	1519.8	658	1
7	5502	15	1253.1	798	1
8	5503	6	1618.1	618	1
9	5504	14	1285.3	778	0
10	5505	3	1792.1	558	1
11	5506	13	1319.3	758	1
12	5507	9	1474.9	678	1
13	5508	7	1567.4	638	0
14	5509	17	1193.3	838	1
15	5510	10	1432.7	698	1
16	5511	-	1692.0	591	0
17	5512	_	328.1	3048	1
18	5513	-	373.4	2678	1
19	5514	_	574.4	1741	1
20	5515	_	1216.5	822	1
21	5516	-	801.3	1248	1
22	5517	-	488.5	2047	0
23	5518	-	956.0	1046	1
24	5519	-	517.6	1932	1
25	5520	-	1422.5	703	1
26	5521	-	542.0	1845	0
27	5522	-	741.3	1349	1
28	5523	-	881.8	1134	1
29	5524	-	427.4	2340	1
30	5525		628.9	1590	1
		Detection Percentage ((%)		80.00
_imit					60%
Test Res	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	5496	2.6	221	23	1
2	5497	4.6	198	27	0
3	5498	1.1	184	29	1
4	5499	4.8	203	24	1
5	5500	2.4	162	25	1
6	5501	3.4	204	28	1
7	5502	2.3	170	27	1
8	5503	3.5	184	23	1
9	5504	4.9	150	27	1
10	5505	4.6	211	29	1
11	5506	2.9	158	23	1
12	5507	2.6	226	27	1
13	5508	1.6	204	26	1
14	5509	3.9	181	25	0
15	5510	4.6	202	24	1
16	5511	4.1	194	27	1
17	5512	2.3	193	28	1
18	5513	3.9	173	29	1
19	5514	4.3	188	23	1
20	5515	1.5	215	26	1
21	5516	4.9	227	27	1
22	5517	1.1	199	23	1
23	5518	4.5	155	29	0
24	5519	4.0	190	27	1
25	5520	2.4	151	23	1
26	5521	2.5	180	28	1
27	5522	2.5	228	23	1
28	5523	2.5	203	25	0
29	5524	1.5	188	25	0
30	5525	1.9	217	24	1
	D	etection Percentage (%)		83.33
Limit	60%				
Test Resi	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	5496	8.0	205	16	0
2	5497	6.7	382	18	1
3	5498	8.6	418	16	1
4	5499	9.4	351	17	0
5	5500	7.4	383	18	1
6	5501	9.8	232	16	0
7	5502	9.1	377	17	1
8	5503	9.6	457	16	1
9	5504	8.0	471	18	1
10	5505	9.0	304	18	1
11	5506	8.0	316	17	1
12	5507	9.8	325	16	1
13	5508	8.0	409	17	0
14	5509	9.9	200	17	1
15	5510	8.8	458	16	1
16	5511	8.0	232	18	1
17	5512	8.3	250	16	1
18	5529	8.7	270	16	1
19	5514	7.7	350	17	1
20	5515	7.1	230	16	1
21	5516	7.3	416	18	1
22	5517	7.6	498	18	1
23	5492	7.3	286	17	1
24	5519	7.3	287	16	1
25	5520	7.5	462	17	1
26	5521	6.2	300	17	1
27	5522	6.4	323	18	1
28	5523	7.1	420	16	0
29	5524	7.2	395	18	0
30	5525	8.4	377	16	1
•	D	etection Percentage (%)		80.00
Limit					60%
Test Resu	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	5496	18.0	242	15	1
2	5497	19.9	279	12	1
3	5498	12.9	487	14	1
4	5499	15.0	452	13	1
5	5500	16.3	230	12	1
6	5501	19.8	238	13	1
7	5502	18.2	420	16	1
8	5529	16.3	452	15	1
9	5504	14.2	495	12	1
10	5505	17.8	228	16	1
11	5506	19.1	211	16	1
12	5507	18.4	283	15	1
13	5508	11.8	411	12	1
14	5509	14.2	284	13	1
15	5510	13.9	202	12	1
16	5511	17.8	340	14	1
17	5512	15.6	290	16	1
18	5513	14.6	250	16	0
19	5514	14.4	484	15	1
20	5515	18.9	387	13	1
21	5516	11.1	348	15	0
22	5517	13.8	291	16	1
23	5518	14.3	295	12	1
24	5519	12.5	300	12	0
25	5520	12.5	322	14	1
26	5521	12.5	383	13	1
27	5522	15.7	322	16	0
28	5523	19.8	469	13	1
29	5524	18.6	406	15	1
30	5492	15.9	238	14	1
•	D	etection Percentage (9	%)		86.67
imit		<u> </u>			60%
est Resu			Complied		

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Total Type 1~4 Radar Statistical Performance

Radar Type #	Detection Percentage (%)
1	80.00
2	83.33
3	80.00
4	86.67
Aggregate (Radar Types 1-4)	82.50
Limit	80%
Test Result	Complied

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Type 5 Radar Statistical Performance

Trial #	Test Freq. (MHz)	1=Detection 0=No Detection	Trial #	Test Freq. (MHz)	1=Detection 0=No Detection	Trial #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5495	0	11	5506	1	21	5516	1
2	5497	1	12	5507	1	22	5517	1
3	5498	1	13	5508	1	23	5518	1
4	5499	1	14	5509	0	24	5519	1
5	5500	1	15	5510	0	25	5520	1
6	5501	1	16	5511	1	26	5521	1
7	5502	1	17	5512	1	27	5522	0
8	5503	1	18	5513	1	28	5523	1
9	5504	1	19	5514	1	29	5525	1
10	5505	1	20	5515	1	30	5496	1
	Detection Percentage (%)							
Limit							80%	
Test R	Test Result							Complied

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Trial Number	rial Number 1							
Number of Bur	sts in Trial		8					
Chirp Center Frequency				54	95			
Burst No. of Pulses Pulse Width (us) Chirp				Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)		
1	1	62.3	8	-	-	346		
2	2	51.2	15	1745	-	1205		
3	3	93.6	5	957	1634	674		
4	3	68.2	12	1668	1573	384		
5	3	83.1	8	1188	1888	876		
6	1	56.7	18	-	-	376		
7	2	60.6	18	1874	-	1409		
8	3	75.5	13 1263 1683 1378					
Detection Chec	k (1=Detection; 0	=No Detection)				0		

Trial Number	,		2					
Number of B	Number of Bursts in Trial			9				
Chirp Center Frequency				54	97			
Burst No. of Pulses Pulse Width (us)			Chirp Width (MHz)		Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)		
1	1	99.6	13	-	-	217		
2	2	54.8	15	1727	-	982		
3	3	91.1	15	1120	1826	941		
4	2	76.2	7	1638	-	477		
5	1	88.9	13	_	-	259		
6	1	83	9	_	-	892		
7	1	83.9	12	-	-	320		
8	2	55.9	15	1613	-	445		
9	1	96.1	13	_	-	779		
Detection Che	eck (1=Detection; 0	=No Detection)				1		

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Trial Number			3					
Number of Bu	Number of Bursts in Trial			10				
Chirp Center Frequency				54	98			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)				
1	2	82	6	1246	-	1017		
2	1	93.2	13	-	-	760		
3	2	61.3	13	1175	-	327		
4	1	52.8	8	-	-	824		
5	3	70.6	19	929	1076	115		
6	1	80.3	17	-	-	325		
7	1	83.2	15	-	-	679		
8	2	94	9	1805	-	888		
9	2	67	8	1486	-	849		
10	1	56.4	20	-	-	813		
Detection Chec	k (1=Detection; 0	=No Detection)				1		

Trial Number			4				
Number of Bu	ırsts in Trial		11				
Chirp Center Frequency				54	99		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	3	90.5	8	1149	1612	35	
2	3	54.5	8	1094	1525	1014	
3	1	57.1	18	-	-	827	
4	2	98.6	20	1292	-	83	
5	2	62.9	12	1433	-	676	
6	1	71.1	15	-	-	708	
7	1	96.7	5	-	-	711	
8	1	64.3	5	-	-	484	
9	3	61.2	8	1075	1524	444	
10	2	79.2	13	1877	-	797	
11	2	79.3	20	1313	-	288	
Detection Che	ck (1=Detection; 0	=No Detection)				1	

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Trial Number			5				
Number of Bur	sts in Trial		12				
Chirp Center Frequency				55	00		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	1	89.5	13	_	_	20	
2	3	71.8	11	1446	1549	117	
3	3	53.7	15	1100	1517	485	
4	2	99.3	11	1571	-	334	
5	3	56.8	6	1594	1280	468	
6	1	97.4	11	-	-	213	
7	2	67.6	13	1831	-	14	
8	3	77.1	8	1683	1337	267	
9	1	98.5	17	-	-	544	
10	3	58.3	13	1924	1829	159	
11	1	98.4	14	-	-	380	
12	1	79.3	11	-	-	257	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

Trial Number			6					
Number of Bu	rsts in Trial			13				
Chirp Center I	Chirp Center Frequency			55	01			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '				
1	2	53.8	14	1631	-	Interval (ms) 768		
2	1	90	17	-	-	530		
3	3	87.2	18	1115	1297	157		
4	2	82	11	1728	-	892		
5	3	69.8	7	1641	1779	196		
6	2	63.1	20	1836	-	331		
7	1	59.8	6	_	-	495		
8	3	78.5	19	941	1921	546		
9	1	85.7	6	_	-	219		
10	3	67.7	9	1834	1450	534		
11	2	84.5	15	1376	-	282		
12	2	99.3	13	1570	-	486		
13	2	80.2	8	1088	-	67		
Detection Ched	ck (1=Detection; C	=No Detection)				1		

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Trial Number			7					
Number of Bu	rsts in Trial		14					
Chirp Center Frequency				55	02			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)					
1	3	80.8	10	1061	1124	389		
2	2	81	9	1479	-	234		
3	2	87.6	17	1247	1	577		
4	2	94.7	18	1041	-	572		
5	2	78	18	1267	-	313		
6	1	95.5	14	-	-	52		
7	2	97.6	15	1215	-	57		
8	3	88	9	1349	1598	171		
9	2	69.7	17	1711	ı	769		
10	2	96.5	17	1431	1	168		
11	2	96.9	6	1871	ı	124		
12	3	66.4	10	1824	1468	766		
13	1	78.8	10	-	-	537		
14	3	87.6	6	1080	1159	714		
Detection Chec	k (1=Detection; 0	=No Detection)				1		

Trial Number			8					
Number of Bu	rsts in Trial		15					
Chirp Center Frequency				55	03			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)					
1	2	71.8	14	1432	-	Interval (ms) 573		
2	2	65.9	19	1762	-	314		
3	2	74.7	6	1754	-	377		
4	3	81.7	5	1133	974	216		
5	3	57.8	14	1176	1712	129		
6	1	80.6	6	-	•	341		
7	3	99.3	17	1268	1876	165		
8	1	79.8	12	-	•	618		
9	3	83	11	990	1738	589		
10	3	71.5	11	1473	1255	6		
11	1	77.4	11	-	•	127		
12	2	84.8	12	1390	•	515		
13	2	64.6	12	1653	-	148		
14	2	92.9	12	1881	-	519		
15	1	71.3	6	-	-	301		
Detection Chec	k (1=Detection; C	=No Detection)	•	•	•	1		

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Trial Number			9				
Number of Bui	rsts in Trial		16				
Chirp Center F	Chirp Center Frequency			55	04		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)		Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	55.4	9	1318	-	383	
2	2	80.8	18	1710	-	534	
3	1	88.8	9	-	-	495	
4	2	78	12	1818	-	92	
5	1	78.5	12	-	-	108	
6	2	55	13	1219	-	123	
7	2	75.9	20	1004	-	123	
8	2	70.9	7	1820	-	546	
9	2	71.7	18	1559	-	476	
10	2	73.9	19	1232	-	235	
11	1	59.2	20	-	-	424	
12	1	55.7	9	-	-	391	
13	3	60.9	12	1144	1370	198	
14	2	60.8	14	990	-	16	
15	3	60.6	19	1526	1326	695	
16	2	89	5	1029	-	131	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

Trial Number				10				
Number of Bui	rsts in Trial		17					
Chirp Center Frequency				55	05			
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	14	1119	-	488		
2	3	81.4	13	1142	961	451		
3	3	92.9	18	991	1147	565		
4	3	81.3	18	1793	1369	285		
5	3	76.4	20	1005	1793	79		
6	1	61.6	18	-	-	503		
7	1	66.6	19	-	-	181		
8	1	53.7	12	-	-	416		
9	2	58	8	1477	-	107		
10	2	64	18	1791	-	141		
11	2	80.3	12	1304	-	516		
12	3	77.3	5	1039	1668	372		
13	2	97.6	11	1593	-	163		
14	1	73	6	-	-	147		
15	3	65.1	8	1097	1927	102		
16	2	59.5	13	1569	-	182		
17	1	88.2	19	-	-	653		
Detection Chec	k (1=Detection; C	=No Detection)				1		

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Trial Number			11				
Number of Bu	rsts in Trial		18				
Chirp Center F	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	2	56.1	12	1219	-	273	
2	1	83.3	7	-	-	298	
3	3	79.6	17	1218	1897	159	
4	2	95.8	7	1672	-	480	
5	2	79.6	8	920	-	387	
6	2	88.9	11	1779	-	5	
7	2	81.4	8	1645	-	201	
8	2	92	6	1454	-	80	
9	3	96	13	1518	1121	192	
10	2	65.6	11	1798	-	349	
11	2	98.7	5	1360	-	416	
12	2	52.9	15	1140	-	652	
13	2	76.5	8	1032	-	92	
14	3	73.8	18	1719	1383	502	
15	3	83.7	10	1270	1216	343	
16	2	89.6	10	1141	-	108	
17	2	67.2	20	1455	-	272	
18	3	55.7	14	1444	1475	566	
Detection Chec	ck (1=Detection; 0	=No Detection)				1	

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Trial Number				12				
Number of Bu	ırsts in Trial		19					
Chirp Center Frequency				55	07			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)					
1	2	70.6	15	1040	-	Interval (ms) 575		
2	2	72.9	13	1460	-	178		
3	3	88.9	5	1250	1629	191		
4	3	60.3	20	1757	1822	468		
5	3	92.1	19	1845	1198	476		
6	1	73	5	_	-	532		
7	1	50.4	15	-	-	69		
8	1	66.4	10	-	-	333		
9	1	79.1	18	-	-	437		
10	1	71.6	20	-	-	424		
11	2	95.6	13	1229	-	498		
12	1	74.4	9	-	-	363		
13	3	55.6	17	1263	1724	123		
14	2	78.3	13	1507	-	37		
15	3	54.1	13	1325	1249	192		
16	2	67.1	18	1584	-	311		
17	2	65.8	9	1195	-	243		
18	2	50.1	12	1755	-	48		
19	2	87.7	18	1359	-	180		
Detection Che	ck (1=Detection; 0	=No Detection)				1		

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Trial Number			13 20				
Number of Bu	rsts in Trial						
Chirp Center F	Frequency			55	08		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)		Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	3	79.5	7	1808	1550	274	
2	2	76.7	20	1632	-	573	
3	3	85.9	12	1305	1496	18	
4	3	86.6	14	968	1172	133	
5	2	74.9	14	1348	-	48	
6	3	82.2	20	1692	1310	156	
7	2	53.9	13	1342	-	45	
8	3	62.7	15	1839	1651	76	
9	2	86.2	6	1165	-	91	
10	1	63.1	11	-	-	391	
11	2	82.4	6	1416	-	107	
12	1	95.8	18	-	-	248	
13	2	75.7	9	993	-	482	
14	3	70.1	18	1563	1020	354	
15	3	85.8	13	1420	1084	446	
16	1	63.2	7	-	-	265	
17	1	75.1	11	-		147	
18	2	69.5	5	1802	-	256	
19	1	51.8	19	-	-	422	
20	2	62.3	5	1449	-	304	
Detection Chec	ck (1=Detection; 0	=No Detection)				1	

Trial Number	Trial Number			14				
Number of Bursts in Trial				3	3			
Chirp Center F	Chirp Center Frequency			55	09			
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	74.9	5	1314	1466	1289		
2	2	83.9	19	1442	-	1436		
3	2	55.8	6	1147	-	240		
4	2	59.4	6	1490	-	1455		
5	2	78.2	15	1665	-	1312		
6	2	57.3	15	1357	-	264		
7	2	76.2	11	1651	-	255		
8	3	59	7 1460 1109 1410					
Detection Chec	k (1=Detection; 0	=No Detection)				0		

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Trial Number			15				
Number of Bursts in Trial				9	9		
Chirp Center F	requency			55	10		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)			Starting Location Within Interval (ms)	
1	3	77.7	19	1046	1568	17	
2	2	98.2	20	1628	-	877	
3	2	95.3	8	1540	-	1066	
4	2	78.8	15	1341	-	822	
5	2	52.8	20	988	-	1020	
6	2	65.2	9	1480	-	602	
7	2	99.5	10	1867	-	884	
8	2	79.5	13	1148	-	342	
9	3	50.6	13 1030 1525 1321				
Detection Chec	k (1=Detection; 0	=No Detection)				0	

Trial Number			16				
Number of Bursts in Trial				10			
Chirp Center Frequency				55	11		
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	97.5	11	1357	-	764	
2	2	91.8	13	1896	ı	298	
3	1	78.5	5	-	ı	1117	
4	1	60.1	11	-	ı	1069	
5	2	96.2	10	975	-	1157	
6	2	56.6	18	1626	-	701	
7	1	77.1	20	-	ı	323	
8	2	96.3	8	1682	ı	307	
9	2	52.2	13	1017	-	217	
10	1	92.8	15	-	-	316	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

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Trial Number			17			
Number of Bu	ırsts in Trial			1	1	
Chirp Center Frequency				55	12	
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	57.3	8	1220	-	792
2	3	73.1	5	1717	1679	845
3	2	54.1	14	967	-	112
4	2	98.8	19	1137	-	715
5	3	85.5	8	1068	960	301
6	2	78.5	7	1387	-	827
7	2	77.9	12	1869	-	506
8	1	81.9	10	-	-	549
9	1	50.4	9	-	-	464
10	1	75.2	8	-	-	790
11	2	92.7	7	1770	-	967
Detection Che	ck (1=Detection; 0	=No Detection)	•	•	•	1

Trial Number			18			
Number of Bur	sts in Trial		12			
Chirp Center Frequency				55	13	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)		
1	2	79.1	6	1042	_	793
2	3	55.7	9	1327	1744	159
3	1	95	20	-	-	734
4	1	88.4	5	-	-	523
5	1	92.3	15	-	-	546
6	1	93.6	6	-	-	208
7	2	95.1	12	1044	-	894
8	1	59.5	17	-	-	666
9	2	98.7	17	1422	-	640
10	2	65.1	5	1104	-	320
11	1	60.2	5	-	-	60
12	1	88.7	8	-	-	823
Detection Chec	k (1=Detection; 0	=No Detection)	_	·	_	1

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Trial Number	Trial Number			19				
Number of Bu	ırsts in Trial		13					
Chirp Center Frequency				55	14			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)				
1	1	53.9	10	-	-	226		
2	2	82.6	13	992	-	854		
3	1	87.7	8	_	-	303		
4	3	69	12	1696	1606	528		
5	1	68.6	12	-	-	220		
6	3	76.5	13	1333	1468	389		
7	2	95.8	17	1380	-	57		
8	2	55.6	19	1147	-	334		
9	2	78.6	14	1268	-	128		
10	2	65.4	17	1231	-	913		
11	2	76.6	18	1883	-	518		
12	1	93.2	6	-	-	596		
13	2	50.2	13	1836	-	61		
Detection Che	ck (1=Detection; 0	=No Detection)				1		

Trial Number			20				
Number of Bu	rsts in Trial		14				
Chirp Center F	Chirp Center Frequency			55	15		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)	
1	1	60.9	13	_	-	142	
2	2	81.7	15	1831	-	522	
3	2	78.5	5	1396	-	790	
4	2	98.2	6	1652	-	3	
5	1	64.1	12	-	-	414	
6	3	53	18	1862	1902	157	
7	2	62.3	15	1490	-	248	
8	2	87	11	1411	-	576	
9	2	78.4	8	1090	-	737	
10	2	87.2	7	967	-	343	
11	3	71	13	1662	1841	105	
12	2	77.2	5	1557	-	601	
13	1	94.4	15	-	-	108	
14	1	90.6	13	-	-	506	
Detection Chec	ck (1=Detection; 0	=No Detection)				1	

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Trial Number			21				
Number of Bu	rsts in Trial		15				
Chirp Center Frequency				55	16		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Chirp Width Pulse 1-to-2 Pulse 2-to-3			
1	3	76.5	8	1870	1326	385	
2	2	95.3	13	1162	-	73	
3	3	58.9	9	1586	1909	742	
4	2	73.1	13	1460	-	330	
5	2	73.1	12	1488	-	25	
6	2	75.1	5	1331	-	418	
7	3	98.5	11	936	1532	214	
8	3	72.5	13	1110	1903	387	
9	3	67.4	12	1567	1513	80	
10	2	76.1	12	1005	ı	277	
11	2	94.3	17	1413	ı	314	
12	2	72.8	12	1778	-	66	
13	2	90.9	14	1793	-	147	
14	3	94.8	11	1012	1742	441	
15	3	95	12	912	1641	609	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

Trial Number			22				
Number of Bu	ırsts in Trial		16				
Chirp Center	Chirp Center Frequency			55	17		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Chirp Width Pulse 1-to-2 Pulse 2-to-3			
1	1	96.7	9	-	-	308	
2	2	78.3	13	1045	-	27	
3	1	56.5	12	_	-	74	
4	3	88.5	14	1119	1020	629	
5	2	62.4	9	1436	-	548	
6	2	78.2	5	1147	-	341	
7	3	76.8	14	1069	1575	360	
8	2	91.6	18	978	-	602	
9	2	93.7	5	1130	-	623	
10	2	97.4	8	1100	-	256	
11	3	90.1	6	1629	1375	108	
12	2	79.9	18	1809	-	183	
13	2	83	10	1370	-	477	
14	2	89.1	13	1239	-	484	
15	2	58.3	8	1321	-	276	
16	1	85.2	13	22			
Detection Che	ck (1=Detection; 0	=No Detection)				1	

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Trial Number			23					
Number of Bui	rsts in Trial		17					
Chirp Center Frequency				55	18			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Pulse 2-to-3 Spacing (us)				
1	3	60	10	1097	1748	56		
2	3	66.3	13	1391	1430	421		
3	2	88.5	15	1040	-	583		
4	2	72.1	8	1526	-	161		
5	1	72.3	8	-	-	450		
6	2	67.3	7	1022	-	48		
7	2	56.1	12	1325	-	661		
8	1	83.5	11	-	-	695		
9	3	99.4	13	1490	938	405		
10	1	54.2	12	-	-	126		
11	3	92.7	17	1251	1631	365		
12	3	95.1	17	1741	1162	57		
13	2	84	9	1597	-	167		
14	1	68.5	18	-	-	512		
15	1	76.5	20	-	-	185		
16	3	86.6	11	1774	1875	457		
17	2	62.2	9 1563 - 492					
Detection Chec	k (1=Detection; 0	=No Detection)				1		

Trial Number			24					
Number of Bu	rsts in Trial		18					
Chirp Center F	Chirp Center Frequency			55	19			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)					
1	1	86.6	19	-	-	Interval (ms) 621		
2	2	95.3	17	926	-	128		
3	1	76.2	12	-	-	251		
4	3	71.4	19	1287	1404	269		
5	3	51.7	12	1564	1339	633		
6	2	77	5	1899	-	615		
7	1	87.5	12	-	-	375		
8	3	59	17	1327	1615	610		
9	2	78.3	15	1551	-	548		
10	2	89.7	5	1718	-	456		
11	2	92.1	7	1403	-	12		
12	2	97.3	14	1338	-	596		
13	3	80.3	20	1354	1563	484		
14	1	98.2	8	-	-	428		
15	3	94.4	13	1795	1829	512		
16	2	90.4	13	1105	-	342		
17	2	73.6	19	1787	-	292		
18	1	82.9	7	618				
Detection Chec	k (1=Detection; 0	=No Detection)				1		

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Trial Number			25					
Number of Bu	ırsts in Trial		19					
Chirp Center	Chirp Center Frequency			55	20			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)					
1	1	90	18	-	-	173		
2	1	65.3	19	-	-	245		
3	2	82.6	10	1756	-	127		
4	2	93.9	18	1557	-	287		
5	2	50.5	13	1479	-	282		
6	1	68	7	-	-	176		
7	3	88.4	11	1244	1076	568		
8	3	66.8	11	1288	1909	448		
9	2	88	12	1450	-	527		
10	3	51.1	6	1797	1935	195		
11	2	93.8	13	1073	ı	184		
12	1	83.5	10	-	ı	506		
13	2	96.9	12	1047	ı	267		
14	3	87.2	18	1521	1450	243		
15	2	60.1	8	1545	-	291		
16	3	98	10	1842	1402	554		
17	3	57	19	1665	1732	143		
18	1	74.3	14	-	-	31		
19	2	57.8	10 1576 - 609					
Detection Che	ck (1=Detection; 0	=No Detection)				1		

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Trial Number			26					
Number of Bu	rsts in Trial		20					
Chirp Center I	Frequency			55	21			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Chirp Width Pulse 1-to-2 Pulse 2-to-3				
1	2	92.8	9	1222	-	531		
2	2	52.4	8	1547	-	168		
3	3	56.8	7	1158	1184	193		
4	1	91.2	7	-	-	565		
5	3	61.2	10	1558	1664	387		
6	3	62	7	1518	1656	391		
7	2	69	5	1531	-	327		
8	2	67.3	18	1064	-	25		
9	1	94.1	5	-	-	78		
10	2	76	17	1190	-	222		
11	2	81.9	12	1815	-	96		
12	2	57.9	8	1594	-	277		
13	3	68.3	19	1427	1540	41		
14	2	53.3	7	1713	-	48		
15	2	85.3	15	1136	-	48		
16	1	65.3	20	-	-	57		
17	3	79.8	20	923	1259	48		
18	2	56.9	20	1357	-	483		
19	2	93	9	1686	-	73		
20	2	82.8	10	944	-	352		
Detection Ched	ck (1=Detection; 0	=No Detection)				1		

Trial Number			27				
Number of Bursts in Trial				3	3		
Chirp Center F	requency			55	22		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within			
						Interval (ms)	
1	3	50.9	11	1106	1077	1293	
2	2	77.8	18	1836	-	1235	
3	3	60.7	5	1069	1635	1092	
4	2	77.2	13	1916	-	1343	
5	2	91.6	13	1465	-	1466	
6	2	56.8	17	1783	-	376	
7	1	59.5	20 - 131				
8	1	66.5	12 - 1024				
Detection Chec	k (1=Detection; 0	=No Detection)				0	

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Trial Number			28					
Number of Bu	rsts in Trial			()			
Chirp Center I	Frequency			55	23			
Burst No. of Pulses Pulse Width (us)			Chirp Width (MHz)		Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)		
1	2	72	9	1092	-	965		
2	2	89.2	6	1550	-	1226		
3	1	81.2	12	-	-	277		
4	2	80.6	15	1616	-	458		
5	2	62.8	10	1812	-	748		
6	1	71	8	-	-	434		
7	2	69.3	6 1027 - 1					
8	2	77.2	13 1076 - 638					
9	2	65.4	5	278				
Detection Ched	ck (1=Detection; 0	=No Detection)				1		

Trial Number			29					
Number of Bu	Number of Bursts in Trial			10				
Chirp Center F	requency			55	25			
Burst	Pulse Width Chirn Width Pulse 1-to-2 Pulse 2-to-3				Starting Location Within Interval (ms)			
1	1	51.5	19	-	-	151		
2	1	82.3	13	-	-	1071		
3	3	78.3	8	1115	1740	646		
4	2	99	14	1101	-	709		
5	3	98.8	7	1819	945	556		
6	2	80.9	19	922	-	567		
7	2	64	12	953	-	581		
8	1	79	20	-	-	798		
9	1	68	8 112					
10	2	50.4	13	26				
Detection Chec	k (1=Detection; 0	=No Detection)				1		

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Trial Number	•		30					
Number of B	ursts in Trial			11				
Chirp Center Frequency				54	96			
Burst No. of Pulses Pulse Width (us)			Chirp Width (MHz)		Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)		
1	3	57.8	5	1324	1716	82		
2	2	70.1	20	1733	-	587		
3	2	95.2	13	1188	-	789		
4	3	84.6	20	1042	1259	1021		
5	3	96.5	7	1329	1596	16		
6	2	84.3	15	1606	-	708		
7	3	53.5	19	1783	1458	738		
8	3	74.9	5	1599	1891	466		
9	3	53.8	7	1494	1467	252		
10	2	60.5	14	1319	-	464		
11	1	73.3	10	-	-	845		
Detection Che	eck (1=Detection; 0	=No Detection)	•	•		1		

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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
	100				
Limit	70%				
Test Res	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)	PRI (us)	1=Detection 0=No Detection
1	5516	1	1930.5	518	1
2	5517	23	326.2	3066	1
3	5518	19	1139.0	878	1
4	5519	12	1355.0	738	1
5	5520	4	1730.1	578	0
6	5521	8	1519.8	658	1
7	5522	15	1253.1	798	1
8	5523	6	1618.1	618	1
9	5524	14	1285.3	778	1
10	5525	3	1792.1	558	1
11	5526	13	1319.3	758	1
12	5527	9	1474.9	678	1
13	5528	7	1567.4	638	1
14	5529	17	1193.3	838	1
15	5530	10	1432.7	698	1
16	5531	-	1692.0	591	0
17	5532	-	328.1	3048	1
18	5533	-	373.4	2678	1
19	5534	-	574.4	1741	1
20	5535	-	1216.5	822	1
21	5536	-	801.3	1248	1
22	5537	-	488.5	2047	1
23	5538	-	956.0	1046	0
24	5539	-	517.6	1932	1
25	5540	-	1422.5	703	1
26	5541	-	542.0	1845	1
27	5542	-	741.3	1349	1
28	5543	-	881.8	1134	0
29	5544	-	427.4	2340	1
30	5545	-	628.9	1590	1
		Detection Percentage			86.67
Limit	60%				
Test Res	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	5516	2.6	221	23	1
2	5517	4.6	198	27	0
3	5518	1.1	184	29	1
4	5519	4.8	203	24	1
5	5520	2.4	162	25	1
6	5521	3.4	204	28	1
7	5522	2.3	170	27	1
8	5523	3.5	184	23	1
9	5524	4.9	150	27	1
10	5525	4.6	211	29	1
11	5526	2.9	158	23	1
12	5527	2.6	226	27	1
13	5528	1.6	204	26	1
14	5529	3.9	181	25	1
15	5530	4.6	202	24	0
16	5531	4.1	194	27	1
17	5532	2.3	193	28	1
18	5533	3.9	173	29	1
19	5534	4.3	188	23	1
20	5535	1.5	215	26	0
21	5536	4.9	227	27	1
22	5537	1.1	199	23	1
23	5538	4.5	155	29	1
24	5539	4.0	190	27	1
25	5540	2.4	151	23	1
26	5541	2.5	180	28	1
27	5542	2.5	228	23	1
28	5543	2.5	203	25	0
29	5544	1.5	188	25	1
30	5545	1.9	217	24	1
	D	etection Percentage (%)		86.67
imit					60%
est Resi			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	5516	8.0	205	16	1
2	5517	6.7	382	18	0
3	5518	8.6	418	16	1
4	5519	9.4	351	17	1
5	5520	7.4	383	18	1
6	5521	9.8	232	16	1
7	5522	9.1	377	17	1
8	5523	9.6	457	16	1
9	5524	8.0	471	18	1
10	5525	9.0	304	18	1
11	5526	8.0	316	17	1
12	5527	9.8	325	16	1
13	5528	8.0	409	17	0
14	5529	9.9	200	17	1
15	5530	8.8	458	16	1
16	5531	8.0	232	18	1
17	5532	8.3	250	16	1
18	5533	8.7	270	16	1
19	5534	7.7	350	17	1
20	5535	7.1	230	16	1
21	5536	7.3	416	18	1
22	5537	7.6	498	18	0
23	5538	7.3	286	17	1
24	5539	7.3	287	16	1
25	5540	7.5	462	17	1
26	5541	6.2	300	17	1
27	5542	6.4	323	18	1
28	5543	7.1	420	16	1
29	5544	7.2	395	18	0
30	5545	8.4	377	16	1
•	D	etection Percentage (%)		86.67
Limit					60%
Test Resu	Complied				

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Type 4 Radar Statistical Performance

Trial #	dar Statistical Perfo	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5516	18.0	242	15	1
2	5517	19.9	279	12	1
3	5518	12.9	487	14	1
4	5519	15.0	452	13	0
5	5520	16.3	230	12	1
6	5521	19.8	238	13	1
7	5522	18.2	420	16	1
8	5523	16.3	452	15	1
9	5524	14.2	495	12	1
10	5525	17.8	228	16	1
11	5526	19.1	211	16	0
12	5527	18.4	283	15	1
13	5528	11.8	411	12	1
14	5529	14.2	284	13	1
15	5530	13.9	202	12	1
16	5531	17.8	340	14	1
17	5532	15.6	290	16	1
18	5533	14.6	250	16	1
19	5534	14.4	484	15	0
20	5535	18.9	387	13	1
21	5536	11.1	348	15	1
22	5537	13.8	291	16	1
23	5538	14.3	295	12	0
24	5539	12.5	300	12	1
25	5540	12.5	322	14	1
26	5541	12.5	383	13	1
27	5542	15.7	322	16	1
28	5543	19.8	469	13	0
29	5544	18.6	406	15	1
30	5545	15.9	238	14	1
	D	etection Percentage (%	<u></u>		83.33
Limit					60%
Test Resu	Complied				

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Total Type 1~4 Radar Statistical Performance

Radar Type #	Detection Percentage (%)
1	86.67
2	86.67
3	86.67
4	83.33
Aggregate (Radar Types 1-4)	85.83
Limit	80%
Test Result	Complied

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Type 5 Radar Statistical Performance

Trial #	Test Freq. (MHz)	1=Detection 0=No Detection	Trial #	Test Freq. (MHz)	1=Detection 0=No Detection	Trial #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5499	1	11	5520	0	21	5550	1
2	5500	1	12	5525	1	22	5553	1
3	5503	1	13	5528	1	23	5555	1
4	5505	1	14	5529	0	24	5524	1
5	5507	1	15	5514	1	25	5541	1
6	5508	1	16	5529	1	26	5530	1
7	5509	1	17	5532	1	27	5531	1
8	5505	1	18	5535	1	28	5527	1
9	5510	1	19	5540	1	29	5560	0
10	5515	0	20	5545	1	30	5562	1
	Detection Percentage (%)							
Limit							80%	
Test Result								Complied

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Trial Number			1				
Number of Bur	Number of Bursts in Trial			8			
Chirp Center F	Chirp Center Frequency			54	99		
Burst No. of Pulses Pulse Width (us)			Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)	
1	1	62.3	8	-	-	346	
2	2	51.2	15	1745	-	1205	
3	3	93.6	5	957	1634	674	
4	3	68.2	12	1668	1573	384	
5	3	83.1	8	1188	1888	876	
6	1	56.7	18	-	-	376	
7	2	60.6	18	1874	-	1409	
8	3	75.5	13	1378			
Detection Check	k (1=Detection; 0	=No Detection)				1	

Trial Number	Trial Number			2				
Number of Bu	ırsts in Trial		9					
Chirp Center Frequency				55	00			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)		Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)		
1	1	99.6	13	-	-	217		
2	2	54.8	15	1727	-	982		
3	3	91.1	15	1120	1826	941		
4	2	76.2	7	1638	-	477		
5	1	88.9	13	-	-	259		
6	1	83	9	-	-	892		
7	1	83.9	12	-	-	320		
8	2	55.9	15	1613	-	445		
9	1	96.1	13	779				
Detection Che	ck (1=Detection; 0	=No Detection)				1		

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Trial Number			3					
Number of Bu	rsts in Trial			10				
Chirp Center Frequency				55	03			
Burst No. of Pulses Pulse Width (us) Chirp Width Pulse 1-to-2 Spacing (us) Spacing (us)				Starting Location Within Interval (ms)				
1	2	82	6	1246	-	1017		
2	1	93.2	13	-	-	760		
3	2	61.3	13	1175	-	327		
4	1	52.8	8	-	-	824		
5	3	70.6	19	929	1076	115		
6	1	80.3	17	-	-	325		
7	1	83.2	15	-	-	679		
8	2	94	9	1805	-	888		
9	2	67	8	1486	-	849		
10	1	56.4	20	-	-	813		
Detection Chec	k (1=Detection; 0	=No Detection)				1		

Trial Number			4				
Number of Bur	sts in Trial		11				
Chirp Center Frequency				55	05		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	3	90.5	8	1149	1612	35	
2	3	54.5	8	1094	1525	1014	
3	1	57.1	18	-	-	827	
4	2	98.6	20	1292	-	83	
5	2	62.9	12	1433	-	676	
6	1	71.1	15	-	-	708	
7	1	96.7	5	-	-	711	
8	1	64.3	5	-	-	484	
9	3	61.2	8	1075	1524	444	
10	2	79.2	13	1877	-	797	
11	2	79.3	20	1313	-	288	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

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Trial Number			5			
Number of Bui	rsts in Trial		12			
Chirp Center Frequency				55	07	
Burst	No. of Pulses	Pulse Width (us)				
						Interval (ms)
1	1	89.5	13	-	-	20
2	3	71.8	11	1446	1549	117
3	3	53.7	15	1100	1517	485
4	2	99.3	11	1571	-	334
5	3	56.8	6	1594	1280	468
6	1	97.4	11	_	-	213
7	2	67.6	13	1831	-	14
8	3	77.1	8	1683	1337	267
9	1	98.5	17	_	-	544
10	3	58.3	13	1924	1829	159
11	1	98.4	14	-	-	380
12	1	79.3	11	-	-	257
Detection Chec	k (1=Detection; C	=No Detection)				1

Trial Number			6				
Number of Bur	lumber of Bursts in Trial 13				3		
Chirp Center Frequency				55	08		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)				
1	2	53.8	14	1631	-	768	
2	1	90	17	-	-	530	
3	3	87.2	18	1115	1297	157	
4	2	82	11	1728	-	892	
5	3	69.8	7	1641	1779	196	
6	2	63.1	20	1836	-	331	
7	1	59.8	6	-	-	495	
8	3	78.5	19	941	1921	546	
9	1	85.7	6	-	-	219	
10	3	67.7	9	1834	1450	534	
11	2	84.5	15	1376	-	282	
12	2	99.3	13	1570	-	486	
13	2	80.2	8	1088	-	67	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

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Trial Number			7					
Number of Bur	sts in Trial		14					
Chirp Center Frequency				55	09			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)					
1	3	80.8	10	1061	1124	389		
2	2	81	9	1479	-	234		
3	2	87.6	17	1247	-	577		
4	2	94.7	18	1041	-	572		
5	2	78	18	1267	-	313		
6	1	95.5	14	-	-	52		
7	2	97.6	15	1215	-	57		
8	3	88	9	1349	1598	171		
9	2	69.7	17	1711	-	769		
10	2	96.5	17	1431	ı	168		
11	2	96.9	6	1871	-	124		
12	3	66.4	10	1824	1468	766		
13	1	78.8	10	-	-	537		
14	3	87.6	6	1080	1159	714		
Detection Chec	k (1=Detection; 0	=No Detection)				1		

Trial Number				3	3		
Number of Bursts in Trial				15			
Chirp Center F	Chirp Center Frequency			55	05		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	2	71.8	14	1432	-	573	
2	2	65.9	19	1762	-	314	
3	2	74.7	6	1754	-	377	
4	3	81.7	5	1133	974	216	
5	3	57.8	14	1176	1712	129	
6	1	80.6	6	-	-	341	
7	3	99.3	17	1268	1876	165	
8	1	79.8	12	-	-	618	
9	3	83	11	990	1738	589	
10	3	71.5	11	1473	1255	6	
11	1	77.4	11	_	-	127	
12	2	84.8	12	1390	-	515	
13	2	64.6	12	1653	-	148	
14	2	92.9	12	1881	-	519	
15	1	71.3	6	-	-	301	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

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Trial Number				ę	9		
Number of Bui	rsts in Trial		16				
Chirp Center F	requency			5510			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	2	55.4	9	1318	-	383	
2	2	80.8	18	1710	-	534	
3	1	88.8	9	-	-	495	
4	2	78	12	1818	-	92	
5	1	78.5	12	-	-	108	
6	2	55	13	1219	-	123	
7	2	75.9	20	1004	-	123	
8	2	70.9	7	1820	-	546	
9	2	71.7	18	1559	-	476	
10	2	73.9	19	1232	-	235	
11	1	59.2	20	-	-	424	
12	1	55.7	9	-	-	391	
13	3	60.9	12	1144	1370	198	
14	2	60.8	14	990	-	16	
15	3	60.6	19	1526	1326	695	
16	2	89	5	1029	-	131	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

Trial Number				1	0		
Number of Bursts in Trial			17				
Chirp Center F	Chirp Center Frequency			55	15		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	2	72.1	14	1119	-	488	
2	3	81.4	13	1142	961	451	
3	3	92.9	18	991	1147	565	
4	3	81.3	18	1793	1369	285	
5	3	76.4	20	1005	1793	79	
6	1	61.6	18	_	-	503	
7	1	66.6	19	-	-	181	
8	1	53.7	12	-	-	416	
9	2	58	8	1477	-	107	
10	2	64	18	1791	-	141	
11	2	80.3	12	1304	-	516	
12	3	77.3	5	1039	1668	372	
13	2	97.6	11	1593	-	163	
14	1	73	6	_	-	147	
15	3	65.1	8	1097	1927	102	
16	2	59.5	13	1569	-	182	
17	1	88.2	19	-	-	653	
Detection Chec	k (1=Detection; C	=No Detection)				0	

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Trial Number				1	1				
Number of Bu	rsts in Trial		18						
Chirp Center I	Frequency			55	20				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)						
1	2	56.1	12	1219	-	273			
2	1	83.3	7	-	-	298			
3	3	79.6	17	1218	1897	159			
4	2	95.8	7	1672	-	480			
5	2	79.6	8	920	-	387			
6	2	88.9	11	1779	-	5			
7	2	81.4	8	1645	-	201			
8	2	92	6	1454	-	80			
9	3	96	13	1518	1121	192			
10	2	65.6	11	1798	-	349			
11	2	98.7	5	1360	-	416			
12	2	52.9	15	1140	-	652			
13	2	76.5	8	1032	-	92			
14	3	73.8	18	1719	1383	502			
15	3	83.7	10	1270	1216	343			
16	2	89.6	10	1141	-	108			
17	2	67.2	20	1455	-	272			
18	3	55.7	14	1444	1475	566			
Detection Ched	ck (1=Detection; C	=No Detection)				0			

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Trial Number				1	12			
Number of Bursts in Trial			19					
Chirp Center Frequency				55	25			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)				
1	2	70.6	15	1040	-	575		
2	2	72.9	13	1460	-	178		
3	3	88.9	5	1250	1629	191		
4	3	60.3	20	1757	1822	468		
5	3	92.1	19	1845	1198	476		
6	1	73	5	-	-	532		
7	1	50.4	15	-	-	69		
8	1	66.4	10	_	-	333		
9	1	79.1	18	_	-	437		
10	1	71.6	20	_	-	424		
11	2	95.6	13	1229	-	498		
12	1	74.4	9	-	-	363		
13	3	55.6	17	1263	1724	123		
14	2	78.3	13	1507	-	37		
15	3	54.1	13	1325	1249	192		
16	2	67.1	18	1584	-	311		
17	2	65.8	9	1195	-	243		
18	2	50.1	12	1755	-	48		
19	2	87.7	18	1359	-	180		
Detection Che	ck (1=Detection; 0	=No Detection)				1		

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Trial Number				1	3				
Number of Bu	Number of Bursts in Trial			20					
Chirp Center Frequency				55	28				
Burst	No. of Pulses	Pulse Width (us)							
1	3	79.5	7	1808	1550	274			
2	2	76.7	20	1632	-	573			
3	3	85.9	12	1305	1496	18			
4	3	86.6	14	968	1172	133			
5	2	74.9	14	1348	-	48			
6	3	82.2	20	1692	1310	156			
7	2	53.9	13	1342	-	45			
8	3	62.7	15	1839	1651	76			
9	2	86.2	6	1165	-	91			
10	1	63.1	11	-	-	391			
11	2	82.4	6	1416	-	107			
12	1	95.8	18	-	-	248			
13	2	75.7	9	993	-	482			
14	3	70.1	18	1563	1020	354			
15	3	85.8	13	1420	1084	446			
16	1	63.2	7	-	-	265			
17	1	75.1	11	-		147			
18	2	69.5	5	1802	-	256			
19	1	51.8	19	-	-	422			
20	2	62.3	5	1449	-	304			
Detection Chec	ck (1=Detection; 0	=No Detection)				1			

Trial Number				1	4				
Number of Bursts in Trial				3	3				
Chirp Center F	Chirp Center Frequency			5529					
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	3	74.9	5	1314	1466	1289			
2	2	83.9	19	1442	-	1436			
3	2	55.8	6	1147	-	240			
4	2	59.4	6	1490	-	1455			
5	2	78.2	15	1665	-	1312			
6	2	57.3	15	1357	-	264			
7	2	76.2	11	1651	-	255			
8	3	59	7	1460	1109	1410			
Detection Chec	k (1=Detection; 0	=No Detection)				0			

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Trial Number			15			
Number of Bursts in Trial				()	
Chirp Center Frequency				55	14	
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 (i			
1	3	77.7	19	1046	1568	17
2	2	98.2	20	1628	-	877
3	2	95.3	8	1540	-	1066
4	2	78.8	15	1341	-	822
5	2	52.8	20	988	-	1020
6	2	65.2	9	1480	-	602
7	2	99.5	10	1867	-	884
8	2	79.5	13	1148	-	342
9	3	50.6	13	1030	1525	1321
Detection Che	ck (1=Detection; 0	=No Detection)				1

Trial Number			16				
Number of Bui	rsts in Trial			10			
Chirp Center Frequency				55	29		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Locat Spacing (us) Spacing (us) With Interval				
1	2	97.5	11	1357	-	764	
2	2	91.8	13	1896	-	298	
3	1	78.5	5	-	ı	1117	
4	1	60.1	11	-	ı	1069	
5	2	96.2	10	975	-	1157	
6	2	56.6	18	1626	-	701	
7	1	77.1	20	-	ı	323	
8	2	96.3	8	1682	ı	307	
9	2	52.2	13	1017	-	217	
10	1	92.8	15	-	-	316	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

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Trial Number			17				
Number of Bu	ırsts in Trial			11			
Chirp Center Frequency				55	32		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Spacing (us) Starting Location Spacing (us) Within Interval (n				
1	2	57.3	8	1220	-	792	
2	3	73.1	5	1717	1679	845	
3	2	54.1	14	967	-	112	
4	2	98.8	19	1137	-	715	
5	3	85.5	8	1068	960	301	
6	2	78.5	7	1387	-	827	
7	2	77.9	12	1869	-	506	
8	1	81.9	10	-	-	549	
9	1	50.4	9	-	-	464	
10	1	75.2	8	-	-	790	
11	2	92.7	7	1770	-	967	
Detection Che	ck (1=Detection; C	=No Detection)	•	•		1	

Trial Number			18			
Number of Bur	sts in Trial		12			
Chirp Center Frequency				55	35	
Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Location (MHz) Spacing (us) Spacing (us) Within			
1	2	70.1	6	1042		Interval (ms)
1		79.1		1042	- 1744	793
2	3	55.7	9	1327	1744	159
3	1	95	20	-	-	734
4	1	88.4	5	-	-	523
5	1	92.3	15	-	-	546
6	1	93.6	6	-	-	208
7	2	95.1	12	1044	-	894
8	1	59.5	17	-	-	666
9	2	98.7	17	1422	-	640
10	2	65.1	5	1104	-	320
11	1	60.2	5	-	-	60
12	1	88.7	8	-	-	823
Detection Chec	k (1=Detection; 0	=No Detection)				1

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Trial Number	Trial Number			19			
Number of Bur	sts in Trial		13				
Chirp Center F	Chirp Center Frequency			55	40		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)			
1	1	53.9	10	-	-	226	
2	2	82.6	13	992	-	854	
3	1	87.7	8	-	-	303	
4	3	69	12	1696	1606	528	
5	1	68.6	12	-	-	220	
6	3	76.5	13	1333	1468	389	
7	2	95.8	17	1380	-	57	
8	2	55.6	19	1147	-	334	
9	2	78.6	14	1268	-	128	
10	2	65.4	17	1231	-	913	
11	2	76.6	18	1883	-	518	
12	1	93.2	6	-	-	596	
13	2	50.2	13	1836	-	61	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

Trial Number	Trial Number			20				
Number of Bur	sts in Trial		14					
Chirp Center F	Chirp Center Frequency			55	45			
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	1	60.9	13	-	-	142		
2	2	81.7	15	1831	-	522		
3	2	78.5	5	1396	-	790		
4	2	98.2	6	1652	-	3		
5	1	64.1	12	-	-	414		
6	3	53	18	1862	1902	157		
7	2	62.3	15	1490	-	248		
8	2	87	11	1411	-	576		
9	2	78.4	8	1090	-	737		
10	2	87.2	7	967	-	343		
11	3	71	13	1662	1841	105		
12	2	77.2	5	1557	-	601		
13	1	94.4	15	-	-	108		
14	1	90.6	13	-	-	506		
Detection Chec	k (1=Detection; 0	=No Detection)				1		

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Trial Number			21				
Number of Bu	rsts in Trial		15				
Chirp Center Frequency				55	50		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Local Spacing (us) Spacing (us) With Interval Interval Pulse 2-to-3 Pulse 2-to-3 Spacing (us) With Interval Interval Pulse 2-to-3				
1	3	76.5	8	1870	1326	385	
2	2	95.3	13	1162	-	73	
3	3	58.9	9	1586	1909	742	
4	2	73.1	13	1460	-	330	
5	2	73.1	12	1488	-	25	
6	2	75.1	5	1331	-	418	
7	3	98.5	11	936	1532	214	
8	3	72.5	13	1110	1903	387	
9	3	67.4	12	1567	1513	80	
10	2	76.1	12	1005	ı	277	
11	2	94.3	17	1413	ı	314	
12	2	72.8	12	1778	-	66	
13	2	90.9	14	1793	-	147	
14	3	94.8	11	1012	1742	441	
15	3	95	12	912	1641	609	
Detection Chec	ck (1=Detection; 0	=No Detection)				1	

Trial Number				2	2		
Number of Bu	ırsts in Trial		16				
Chirp Center Frequency				55	53		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)	
1	1	96.7	9	-	-	308	
2	2	78.3	13	1045	-	27	
3	1	56.5	12	_	-	74	
4	3	88.5	14	1119	1020	629	
5	2	62.4	9	1436	-	548	
6	2	78.2	5	1147	-	341	
7	3	76.8	14	1069	1575	360	
8	2	91.6	18	978	-	602	
9	2	93.7	5	1130	-	623	
10	2	97.4	8	1100	-	256	
11	3	90.1	6	1629	1375	108	
12	2	79.9	18	1809	-	183	
13	2	83	10	1370	-	477	
14	2	89.1	13	1239	-	484	
15	2	58.3	8	1321	-	276	
16	1	85.2	13	-	-	22	
Detection Che	ck (1=Detection; 0	=No Detection)				1	

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Trial Number			23				
Number of Bur	sts in Trial		17				
Chirp Center F	Chirp Center Frequency			55	55		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz) Pulse 1-to-2 Pulse 2-to-3 Local Spacing (us) Spacing (us) With Interval Interval Pulse 2-to-3 Pulse 2-to				
1	3	60	10	1097	1748	56	
2	3	66.3	13	1391	1430	421	
3	2	88.5	15	1040	ı	583	
4	2	72.1	8	1526	-	161	
5	1	72.3	8	-	-	450	
6	2	67.3	7	1022	-	48	
7	2	56.1	12	1325	-	661	
8	1	83.5	11	-	-	695	
9	3	99.4	13	1490	938	405	
10	1	54.2	12	-	-	126	
11	3	92.7	17	1251	1631	365	
12	3	95.1	17	1741	1162	57	
13	2	84	9	1597	-	167	
14	1	68.5	18	-	-	512	
15	1	76.5	20	-	-	185	
16	3	86.6	11	1774	1875	457	
17	2	62.2	9	1563	-	492	
Detection Chec	k (1=Detection; C	=No Detection)				1	

Trial Number	Trial Number			24				
Number of Bu	rsts in Trial		18					
Chirp Center F	Chirp Center Frequency			55	24			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)		Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)		
1	1	86.6	19	-	-	621		
2	2	95.3	17	926	-	128		
3	1	76.2	12	-	-	251		
4	3	71.4	19	1287	1404	269		
5	3	51.7	12	1564	1339	633		
6	2	77	5	1899	-	615		
7	1	87.5	12	-	-	375		
8	3	59	17	1327	1615	610		
9	2	78.3	15	1551	-	548		
10	2	89.7	5	1718	-	456		
11	2	92.1	7	1403	-	12		
12	2	97.3	14	1338	-	596		
13	3	80.3	20	1354	1563	484		
14	1	98.2	8	-	-	428		
15	3	94.4	13	1795	1829	512		
16	2	90.4	13	1105	-	342		
17	2	73.6	19	1787	-	292		
18	1	82.9	7	-	-	618		
Detection Chec	k (1=Detection; 0	=No Detection)				1		

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Trial Number				2	5		
Number of Bu	ursts in Trial		19				
Chirp Center	Frequency			55	41		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)		Starting Location Within Interval (ms)	
1	1	90	18	-	-	173	
2	1	65.3	19	-	-	245	
3	2	82.6	10	1756	-	127	
4	2	93.9	18	1557	-	287	
5	2	50.5	13	1479	-	282	
6	1	68	7	-	-	176	
7	3	88.4	11	1244	1076	568	
8	3	66.8	11	1288	1909	448	
9	2	88	12	1450	-	527	
10	3	51.1	6	1797	1935	195	
11	2	93.8	13	1073	-	184	
12	1	83.5	10	-	-	506	
13	2	96.9	12	1047	-	267	
14	3	87.2	18	1521	1450	243	
15	2	60.1	8	1545	-	291	
16	3	98	10	1842	1402	554	
17	3	57	19	1665	1732	143	
18	1	74.3	14	-	-	31	
19	2	57.8	10	1576	-	609	
Detection Che	ck (1=Detection; 0	=No Detection)				1	

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Trial Number				2	6		
Number of Bu	rsts in Trial		20				
Chirp Center F	requency			55	30		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)	
1	2	92.8	9	1222	-	531	
2	2	52.4	8	1547	-	168	
3	3	56.8	7	1158	1184	193	
4	1	91.2	7	-	-	565	
5	3	61.2	10	1558	1664	387	
6	3	62	7	1518	1656	391	
7	2	69	5	1531	-	327	
8	2	67.3	18	1064	-	25	
9	1	94.1	5	-	-	78	
10	2	76	17	1190	-	222	
11	2	81.9	12	1815	-	96	
12	2	57.9	8	1594	-	277	
13	3	68.3	19	1427	1540	41	
14	2	53.3	7	1713	-	48	
15	2	85.3	15	1136	-	48	
16	1	65.3	20	-	-	57	
17	3	79.8	20	923	1259	48	
18	2	56.9	20	1357	-	483	
19	2	93	9	1686	-	73	
20	2	82.8	10	944	-	352	
Detection Chec	k (1=Detection; 0	=No Detection)				1	

Trial Number Number of Bursts in Trial			27 8				
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	3	50.9	11	1106	1077	1293	
2	2	77.8	18	1836	-	1235	
3	3	60.7	5	1069	1635	1092	
4	2	77.2	13	1916	-	1343	
5	2	91.6	13	1465	-	1466	
6	2	56.8	17	1783	-	376	
7	1	59.5	20	-	-	131	
8	1	66.5	12 1024				
Detection Check (1=Detection; 0=No Detection)						1	

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Trial Number			28					
Number of Bursts in Trial			9					
Chirp Center Frequency				5527				
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)				
1	2	72	9	1092	-	965		
2	2	89.2	6	1550	-	1226		
3	1	81.2	12	-	-	277		
4	2	80.6	15	1616	-	458		
5	2	62.8	10	1812	-	748		
6	1	71	8	-	-	434		
7	2	69.3	6	1027	-	1111		
8	2	77.2	13	1076	-	638		
9	2	65.4	5 1582 - 278					
Detection Check (1=Detection; 0=No Detection)								

Trial Number Number of Bursts in Trial			29			
			10			
Chirp Center Frequency			5560			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Starting Location Within Interval (ms)		
1	1	51.5	19	-	-	151
2	1	82.3	13	-	-	1071
3	3	78.3	8	1115	1740	646
4	2	99	14	1101	-	709
5	3	98.8	7	1819	945	556
6	2	80.9	19	922	-	567
7	2	64	12	953	-	581
8	1	79	20	-		798
9	1	68	8	-		112
10	2	50.4	13	1587	-	26
Detection Ched	Detection Check (1=Detection; 0=No Detection)					

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Trial Number Number of Bursts in Trial Chirp Center Frequency			30 11 5562										
								Burst	No. of Pulses	Pulse Width (us)	Chirp Width Pulse 1-to-2 Pulse 2-to-3 Spacing (us)		Starting Location Within Interval (ms)
								1	3	57.8	5	1324	1716
2	2	70.1	20	1733	-	587							
3	2	95.2	13	1188	-	789							
4	3	84.6	20	1042	1259	1021							
5	3	96.5	7	1329	1596	16							
6	2	84.3	15	1606	-	708							
7	3	53.5	19	1783	1458	738							
8	3	74.9	5	1599	1891	466							
9	3	53.8	7	1494	1467	252							
10	2	60.5	14	1319	-	464							
11	1	73.3	10	-	-	845							
Detection Che	eck (1=Detection; C	=No Detection)	•	•	•	1							

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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				
Limit					70%
Test Resi	ult				Complied

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4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum analyzer	R&S	FSP40	100142	9kHz~40GHz	Oct. 15, 2014	DF01-CB
Signal generator	R&S	SMU200A	102782	25MHz-6GHz	Nov. 29, 2014	DF01-CB
RF Power Divider	ANAREN	2 Way	DFS-01-DV-02	1GHz ~ 6GHz	Jan. 10, 2015	DF01-CB
RF Power Divider	MTJ	2Way	DFS-01-DV-03	1GHz ~ 6GHz	Jan. 10, 2015	DF01-CB
RF Power Divider	ANAREN	4 Way	DFS-01-DV-01	1GHz ~ 6GHz	Jan. 10, 2015	DF01-CB
Horn Antenna	COM-POWER	AH-118	071187	1GHz – 18GHz	Jul. 24, 2015	DF01-CB
Horn Antenna	COM-POWER	AH-118	071042	1GHz – 18GHz	Dec. 03, 2014	DF01-CB
RF Cable-high	Woken	RG402	High Cable-57	1 GHz –18 GHz	Nov. 15, 2014	DF01-CB
RF Cable-high	Woken	RG402	High Cable-58	1 GHz –18 GHz	Nov. 15, 2014	DF01-CB

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

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5 Measurement Uncertainty

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

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