FCC DFS Test Report

Equipment	:	**Wireless-AC VPN Router**
Brand Name	:	**CISCO**
Model No.	:	**RV134W**
FCC ID	:	**PD5-RV134W**
Standard	:	**47 CFR FCC Part 15.407**
Applicant	:	**Delta Networks, Inc. No.252, Shang Ying Rd., Kuei San District, Taoyuan City 33341 Taiwan**
Operate Mode	:	**Master**

The product sample received on Jul. 31, 2015 and completely tested on Aug. 12, 2015. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 905462 D02 UNII DFS Compliance Procedures New Rules 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.

Reviewed by:

James Fan / Assistant Manager

Testing Laboratory
1190

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Summary of Test Result

Conformance Test Specifications (905462 D02 UNII DFS Compliance Procedures New Rules)					
Report Clause	**Ref. Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
3.3	7.8.1	DFS: UNII Detection Bandwidth Measurement	BW 20: 17.86 MHz BW 40: 36.94 MHz BW 80: 76.36 MHz	100% of the 99% BW	Complied
3.4	7.8.2.1	DFS: Initial Channel Availability Check Time	Power-on Cycle = 74.925 sec CAC = 60 sec	CAC ≥ 60 sec	Complied
3.4	7.8.2.2	DFS: Radar Burst at the Beginning of the Channel Availability Check Time	Detect Radar Signal	Detection Threshold: -64 dBm	Complied
3.4	7.8.2.3	DFS: Radar Burst at the End of the Channel Availability Check Time	Detect Radar Signal	Detection Threshold: -64 dBm	Complied
3.5	7.8.3	DFS: In-Service Monitoring for Channel Move Time (CMT)	CMT < 10sec	CMT ≤ 10sec	Complied
3.5	7.8.3	DFS: In-Service Monitoring for Channel Closing Transmission Time (CCTT)	CCTT < 60 ms	CCTT ≤ 60 ms starting at CMT 200ms	Complied
3.5	7.8.3	DFS: In-Service Monitoring for Non-Occupancy Period (NOP)	NOP > 30 min	NOP ≥ 30 min	Complied
3.6	7.8.4	DFS: Statistical Performance Check	All Pd > Table 5 - 7 (KDB 905462)	Table 5 - 7 (KDB 905462)	Complied
3.1.4	8.1	User Access Restrictions	Manufacturer attestation NOT accessible to user	DFS controls	Complied

Note: User can't access the control of DFS.

Revision History

Report No.	Version	Description	Issued Date
FZ581329	Rev. 01	Initial issue of report	Aug. 18, 2015

1 General Description

1.1 Information

1.1.1 RF General Information

IEEE Std. 802.11	Channel Bandwidth (MHz)
a, n (HT20), ac(VHT20)	20
n (HT40), ac(VHT40)	40
ac(VHT80)	80
Note 1: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation. Note 2: 802.11ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.	

1.1.2 Antenna Information

Antenna General Information				
No.	Ant. Cat.	Ant. Type	Gain (dBi)	Connector
1	Integral	Printed	3.91	NA

1.2 Accessories and Support Equipment

Accessories				
No.	Equipment	Brand Name	Model Name	Serial No.
1	-	-	-	-

Support Equipment				
No.	Equipment	Brand Name	Model Name	Serial No.
1	USB Dongle	edimax	EW-7822UAC	NDD9578221212
2	Notebook	DELL	LATITUDE-E6430	9ZFB4X1
3	Notebook	DELL	LATITUDE-E5420	B6FV9T1

1.3 Testing Applied Standards

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

- FCC Part 15.407
- FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v01r02
- FCC KDB 905462 D04 Operational Modes for DFS Testing v01
- FCC KDB 905462 D06 802 11 Channel Plans v01

1.4 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 : 886-3-318-0055			
Test Condition		**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
DFS Site		DFS01-HY	Jack Li	25°C / 60%	Jul. 31 ~ Aug. 12, 2015

2 Test Configuration of EUT

2.1 DFS and TPC Information

The DFS Related Operating Mode(s) of the Equipment			
☒ Master			
☐ Cilent with radar detection			
☐ Client without radar detection			
Software / Firmware Version		1.0.0.10	
Power-on Cycle. (Master)		74.925 sec	
Communication Mode		☒ IP Based (Load Based)	☐ Frame Based
IEEE Std. 802.11	**Frequency Range (MHz)**	**TPC (Transmit Power Control)**	**Active Scan**
a/n HT20/ac VHT20 n HT40/ac VHT40 ac VHT80	☒ 5250-5350	Yes	Yes
	☒ 5470-5725	Yes	Yes
	☐ 5600-5650	No	No

Note: 5600~5650 MHz band is disabled by software setting.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	Dynamic Frequency Selection (DFS)
Test Condition	☐Conducted measurement at transmit chains ☒Radiated measurement
Modulation Mode	VHT20, VHT40, VHT80

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. (See Note 1.)
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. (See Notes 1 and 2.)
U-NII Detection Bandwidth	Minimum 100% of the U- NII 99% transmission power bandwidth. (See Note 3.)
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

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

3.1.2 Applicability of DFS Requirements Prior to Use of a Channel

Requirement	DFS Operational mode		
	Master	Client without radar detection	Client with radar detection
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

Requirement	DFS Operational mode		
	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

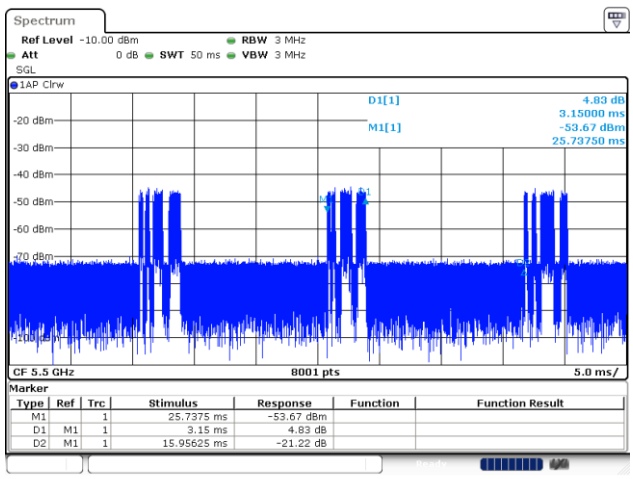
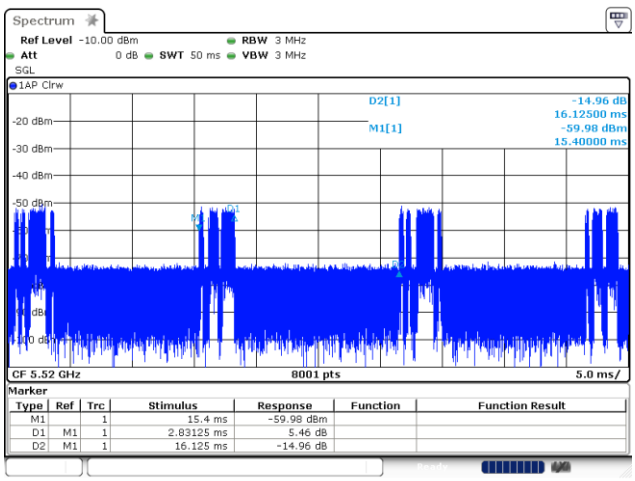
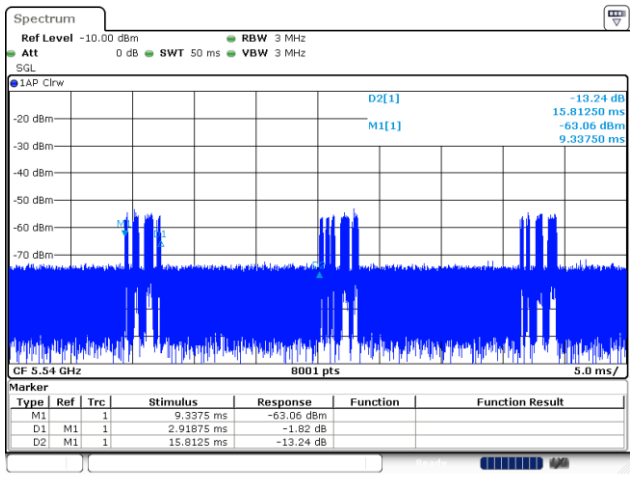
Additional requirements for devices with multiple bandwidth modes	Operational Mode	
	Master or Client With Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission 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 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 all 20 MHz channel blocks and a null frequencies between the bonded 20 MHz channel blocks.		

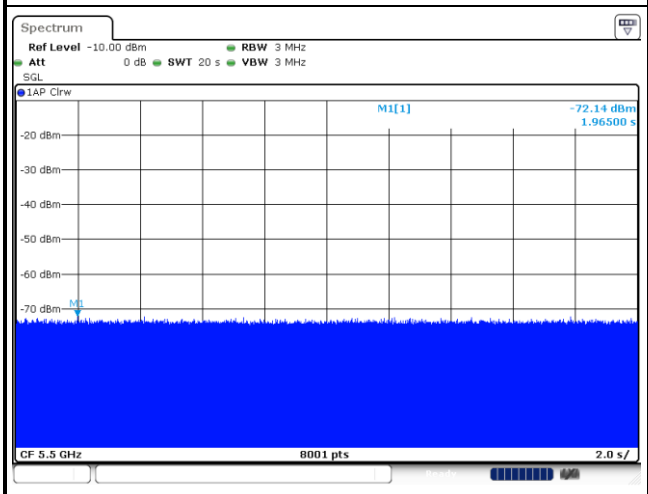
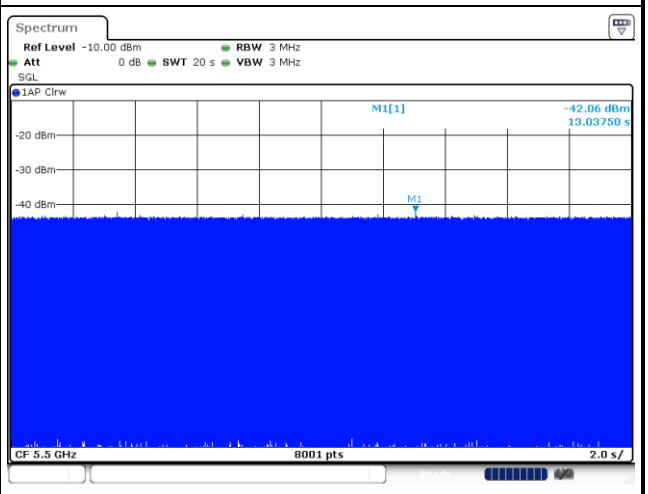
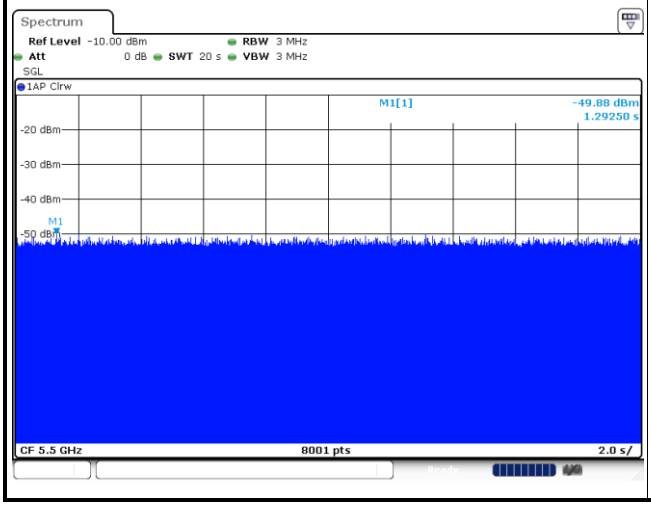
3.1.4 User Access Restrictions

User Access Restrictions
☒ DFS controls (hardware or software) related to radar detection are NOT accessible to the user. Manufacturer statement confirming that information regarding the parameters of the detected Radar Waveforms is not available to the end user.

3.1.5 Channel Loading/Data Streaming

☒	IP Based (Load Based) - stream the test file from the Master to the Client.
☐	The data file is of a type that is typical for the device and must generally be transmitting in a streaming mode
☐	Software to ping the client is permitted to simulate data transfer but must have random ping intervals
☒	Minimum channel loading of approximately 17 %
☐	Frame Based - stream the test file from the Master to the Client.
☐	The channel loading test file will be transferred from the Master Device to the Client Device for all test configurations. For frame based systems with a fixed talk/listen ratio, the ratio systems will be set to the worst case (maximum) that is user configurable during this test as specified by the manufacturer. For frame based systems that dynamically allocate the talk/listen ratio, the channel loading test file will be transferred from the Master Device to the Client Device for all test configurations.

VHT20 Channel Loading: 19.74%	VHT40 Channel Loading: 17.56%
	
VHT80 Channel Loading: 18.46%	**-**
	-

Without Data Traffic Plot (Noise Plot)	Master (EUT) Data Traffic Plot
	
Client Data Traffic Plot	**-**
	-

3.2 Radar Test Waveform Calibration

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

3.2.1 Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note1	See Note1
1		Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{\text{PRI}_{\mu\text{sec}}}\right)\right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μ sec, with a minimum increment of 1 µsec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

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

Pulse Repetition Intervals Values for Test A

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

3.2.2 Long Pulse Radar Test Waveform

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

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse Radar Type waveforms. If more than 30 waveforms are used for the Long Pulse Radar Type waveforms, then each additional waveform must also be unique and not repeated from the previous waveforms.

3.2.3 Frequency Hopping Radar Test Waveform

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

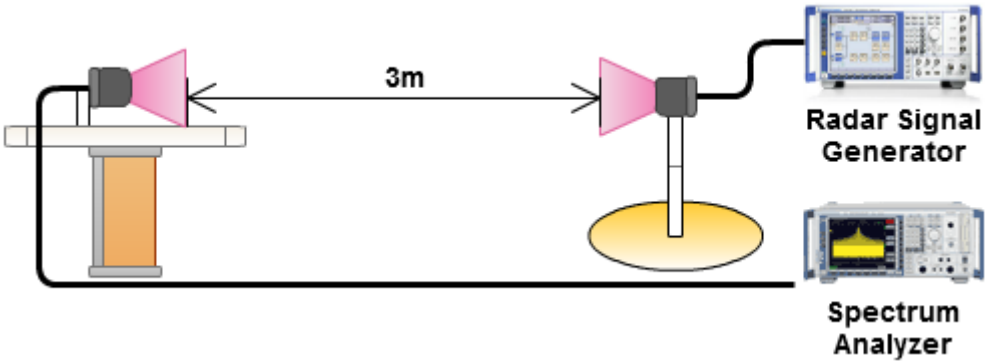
For the Frequency Hopping Radar Type, the same *Burst* parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm:

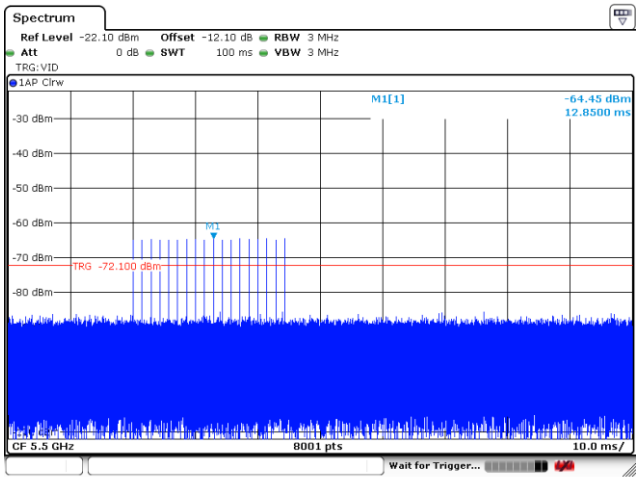
The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250 – 5724 MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues until all 475 frequencies are chosen for the set. For selection of a random frequency, the frequencies remaining within the group are always treated as equally likely

3.2.4 DFS Threshold Level

DFS Threshold Level	
☒Radiated measurement	
DFS Threshold level:	-64 dBm
The Interference **Radar Detection Threshold Level** is -64 dBm. That had been taken into account the output power range and antenna gain.	

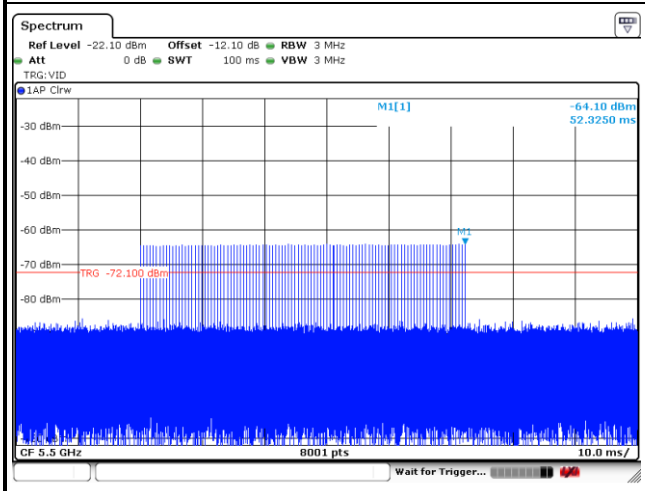
3.2.5 Calibration Setup

Radiated Calibration Setup


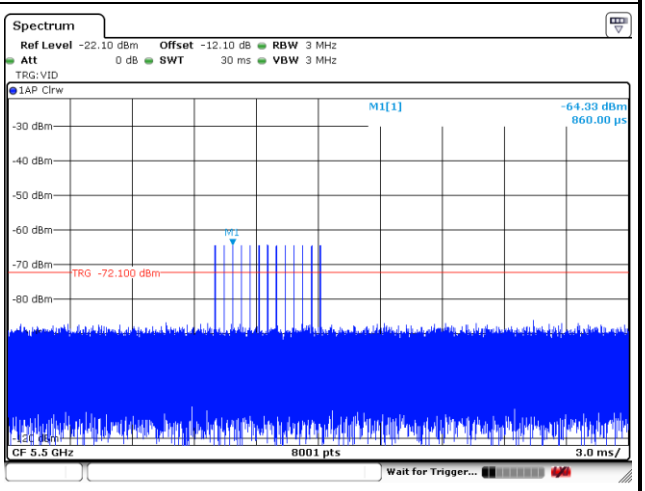
Calibration Plots
Radar #0 DFS detection threshold level


Calibration Plots

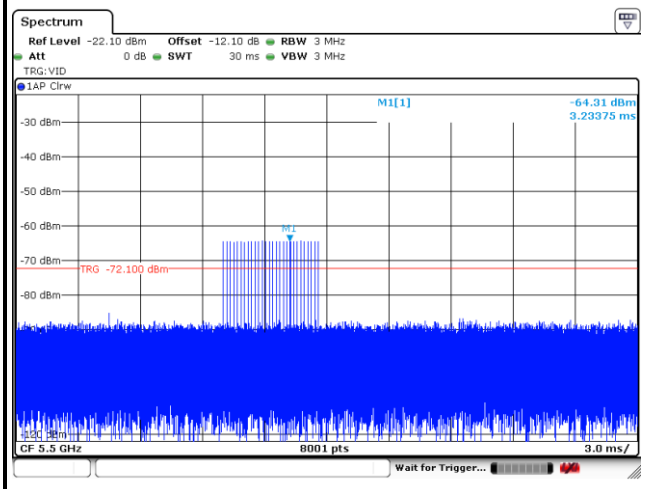
Radar #1 DFS detection threshold level



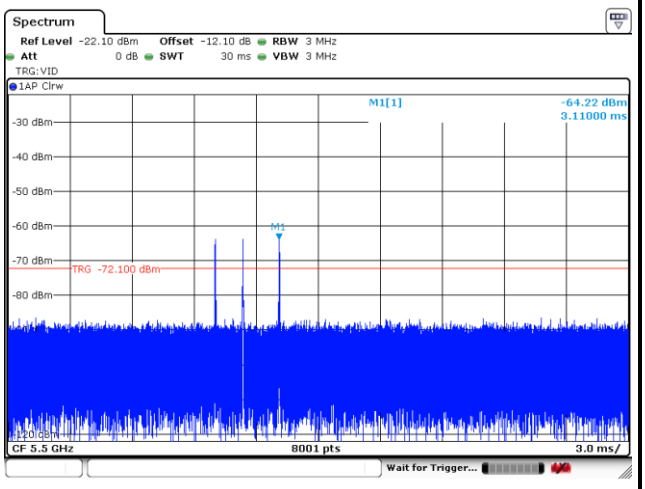
Radar #4 DFS detection threshold level



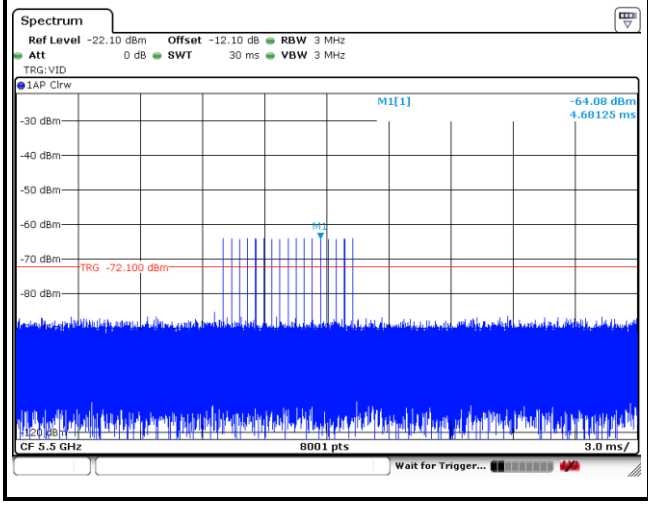
Radar #2 DFS detection threshold level



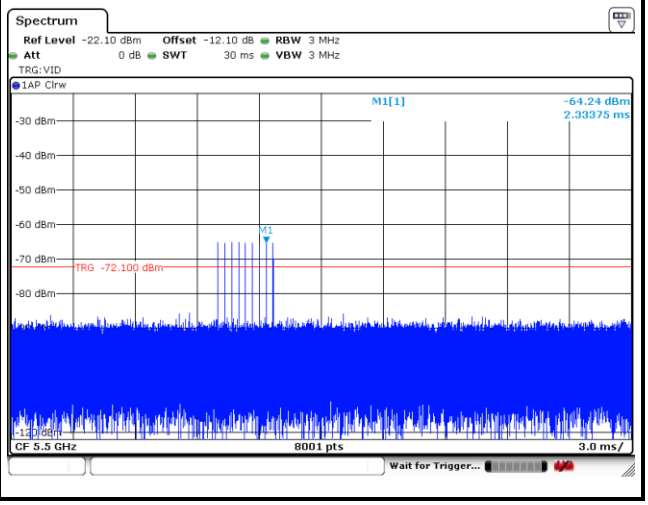
Radar #5 DFS detection threshold level



Radar #3 DFS detection threshold level



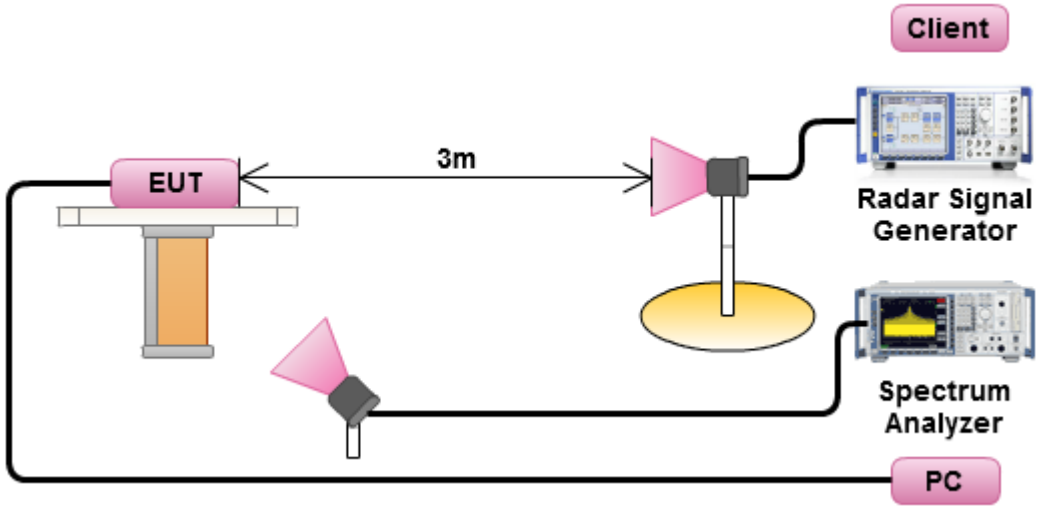
Radar #6 DFS detection threshold level



3.2.6 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.

Master Radiated Measurement



3.3 UNII Detection Bandwidth

3.3.1 UNII Detection Bandwidth Limit

Channel Bandwidth (MHz)	99% Power Bandwidth (MHz)
20	17.86
40	36.94
80	76.36
Minimum 100% of the 99% power bandwidth. During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

3.3.2 Measuring Instruments

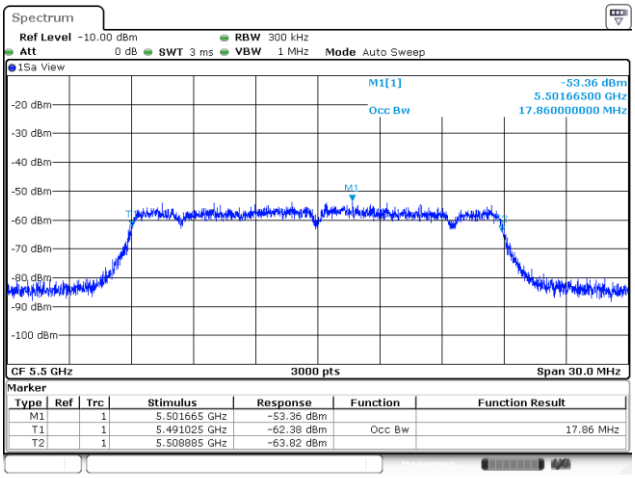
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

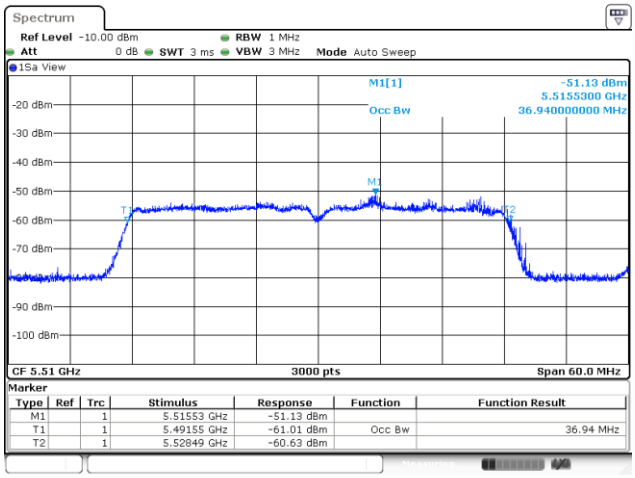
Test Method
☒ Refer as FCC KDB 905462 D02, clause 7.8.1 for UNII Detection Bandwidth test. During the U-NII Detection Bandwidth detection test, radar type 0 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic. The EUT is set up as a standalone device (no associated Client and no traffic). Starting at the center frequency of the UUT operating Channel, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as F_H) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies above FH is not required to demonstrate compliance. Starting at the center frequency of the UUT operating Channel, decrease the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion. Repeat this measurement in 1MHz steps at frequencies 5 MHz above where the detection rate begins to fall. Record the lowest frequency (denote as F_L) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies below FL is not required to demonstrate compliance. The U-NII Detection Bandwidth is calculated as follows: UNII Detection Bandwidth = F_H- F_L.

Emission Bandwidth Plots

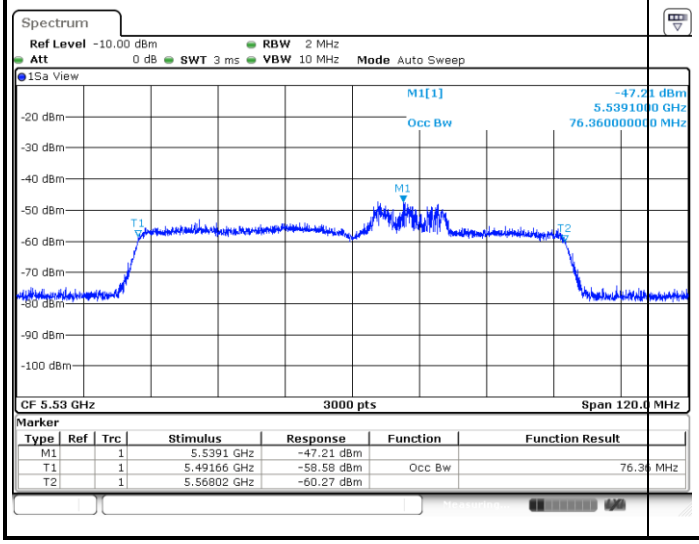
VHT20



VHT40



VHT80



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3.3.4 Test Result of UNII Detection Bandwidth

Channel Bandwidth 20MHz

UNII Detection Bandwidth Result												
Radar Type	0											
Channel Bandwidth (MHz)	20											
Test Frequency(MHz)	5500											
Radar Freq. (MHz)	**DFS Detection Trials (1=Detection, 0= No Detection)**											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**	**Detection Bandwidth(MHz)**
5490(F_L)	1	1	1	1	1	1	1	1	1	1	100	
5491	1	1	1	1	1	1	1	1	1	1	100	
5492	1	1	1	1	1	1	1	1	1	1	100	
5493	1	1	1	1	1	1	1	1	1	1	100	
5494	1	1	1	1	1	1	1	1	1	1	100	
5495	1	1	1	1	1	1	1	1	1	1	100	
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	20*
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	1	1	1	1	1	1	1	1	1	1	100	
5508	1	1	1	1	1	1	1	1	1	1	100	
5509	1	1	1	1	1	1	1	1	1	1	100	
5510(F_H)	1	1	1	1	1	1	1	1	1	1	100	
Limit (MHz)												**18**
Result												**Complied**

*Detection bandwidth = U-NII Detection Bandwidth = $F_H - F_L$

Channel Bandwidth 40MHz

UNII Detection Bandwidth Result												
Radar Type	0											
Channel Bandwidth (MHz)	40											
Test Frequency(MHz)	5510											
Radar Freq. (MHz)	**DFS Detection Trials (1=Detection, 0= No Detection)**											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**	**Detection Bandwidth (MHz)**
5490	0	0	0	0	0	0	0	0	0	0	0	
5491(F_L)	1	1	1	1	1	1	1	1	1	1	100	
5492~5502	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	1	1	1	1	1	1	1	1	1	1	100	
5508	1	1	1	1	1	1	1	1	1	1	100	
5509	1	1	1	1	1	1	1	1	1	1	100	
5510	1	1	1	1	1	1	1	1	1	1	100	38*
5511	1	1	1	1	1	1	1	1	1	1	100	
5512	1	1	1	1	1	1	1	1	1	1	100	
5513	1	1	1	1	1	1	1	1	1	1	100	
5514	1	1	1	1	1	1	1	1	1	1	100	
5515	1	1	1	1	1	1	1	1	1	1	100	
5516	1	1	1	1	1	1	1	1	1	1	100	
5517	1	1	1	1	1	1	1	1	1	1	100	
5518~5528	1	1	1	1	1	1	1	1	1	1	100	
5529(F_H)	1	1	1	1	1	1	1	1	1	1	100	
5530	0	0	0	0	0	0	0	0	0	0	0	
Limit (MHz)												**37**
Result												**Complied**

*Detection bandwidth = U-NII Detection Bandwidth = $F_H - F_L$

Channel Bandwidth 80MHz

UNII Detection Bandwidth Result												
Radar Type					0							
Channel Bandwidth (MHz)					80							
Test Frequency(MHz)					5530							
Radar Freq. (MHz)	**DFS Detection Trials (1=Detection, 0= No Detection)**											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Detection Rate (%)**	**Detection Bandwidth (MHz)**
5490(F_L)	1	1	1	1	1	1	1	1	1	1	100	
5491	1	1	1	1	1	1	1	1	1	1	100	
5492~5522	1	1	1	1	1	1	1	1	1	1	100	
5523	1	1	1	1	1	1	1	1	1	1	100	
5524	1	1	1	1	1	1	1	1	1	1	100	
5525	1	1	1	1	1	1	1	1	1	1	100	
5526	1	1	1	1	1	1	1	1	1	1	100	
5527	1	1	1	1	1	1	1	1	1	1	100	
5528	1	1	1	1	1	1	1	1	1	1	100	
5529	1	1	1	1	1	1	1	1	1	1	100	
5530	1	1	1	1	1	1	1	1	1	1	100	80*
5531	1	1	1	1	1	1	1	1	1	1	100	
5532	1	1	1	1	1	1	1	1	1	1	100	
5533	1	1	1	1	1	1	1	1	1	1	100	
5534	1	1	1	1	1	1	1	1	1	1	100	
5535	1	1	1	1	1	1	1	1	1	1	100	
5536	1	1	1	1	1	1	1	1	1	1	100	
5537	1	1	1	1	1	1	1	1	1	1	100	
5538~5568	1	1	1	1	1	1	1	1	1	1	100	
5569	1	1	1	1	1	1	1	1	1	1	100	
5570(F_H)	1	1	1	1	1	1	1	1	1	1	100	
Limit (MHz)												**77**
Result												**Complied**

*Detection bandwidth = U-NII Detection Bandwidth = $F_H - F_L$

3.4 Channel Availability Check (CAC)

3.4.1 Channel Availability Check Limit

Channel Availability Check Limit	
☒	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

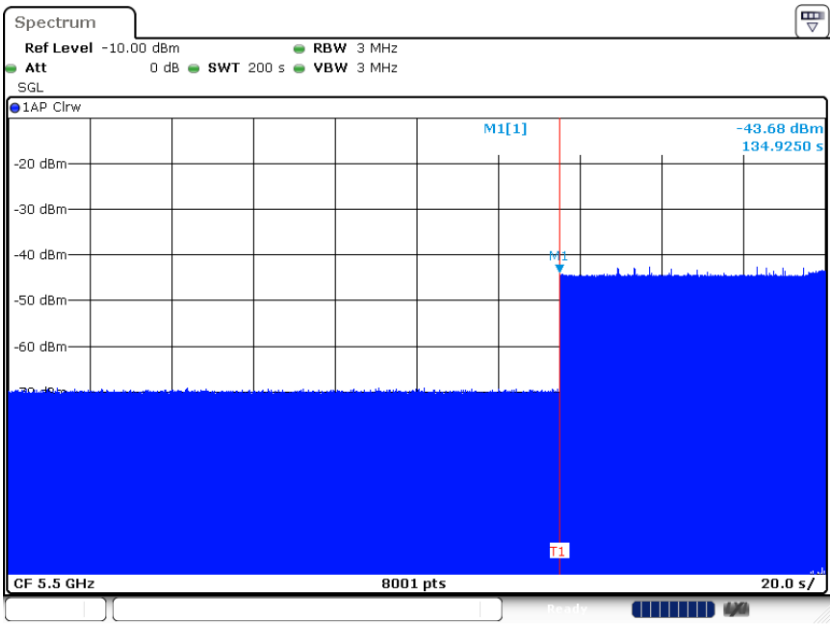
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method	
☒	Refer as FCC KDB 905462 D02, clause 7.8.2.1 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.
☒	Refer as FCC KDB 905462 D02, clause 7.8.2.2 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.
☒	Refer as FCC KDB 905462 D02, clause 7.8.2.3 for Radar Burst at the End of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the End of the Channel Availability Check Time.

3.4.4 Test Result of Channel Availability Check Time

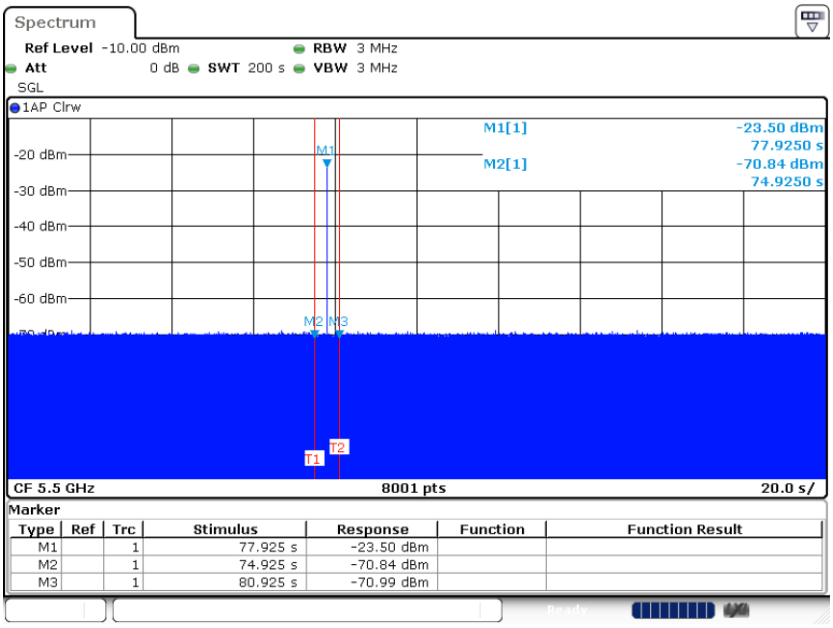
Initial Channel Availability Check Time Result					
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal**	**Power-on Cycle. (sec)**	**CAC Time (sec)**	**Observation Time (min)**
VHT20	5500	N/A	74.925	60	2.5
Result 200s Timing Plot			**Complied**		



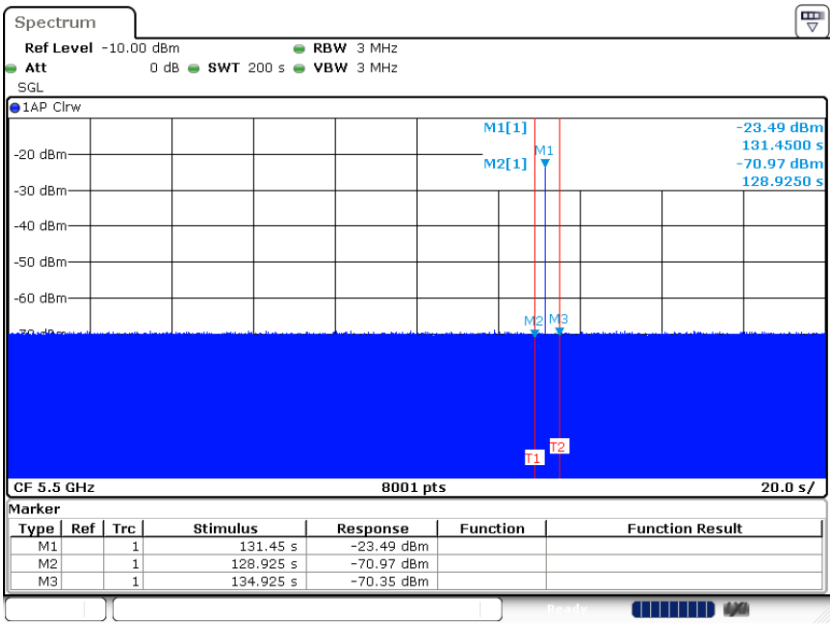
Note 1: This test does not use any Radar Waveforms.

Channel Availability Check Time Result					
Modulation Mode	**Freq. (MHz)**	**Radar Type Signal**	**Beginning CAC of Timing of radar burst (sec)**	**End CAC of Timing of radar burst (sec)**	**DFS Triggered (Yes/No)**
VHT20	5500	0	6	54	Yes
Result			**Complied**		

Beginning CAC of 200s Timing Plot



End CAC of 200s Timing Plot



3.5 In-service Monitoring

3.5.1 In-service Monitoring Limit

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

3.5.2 Measuring Instruments

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

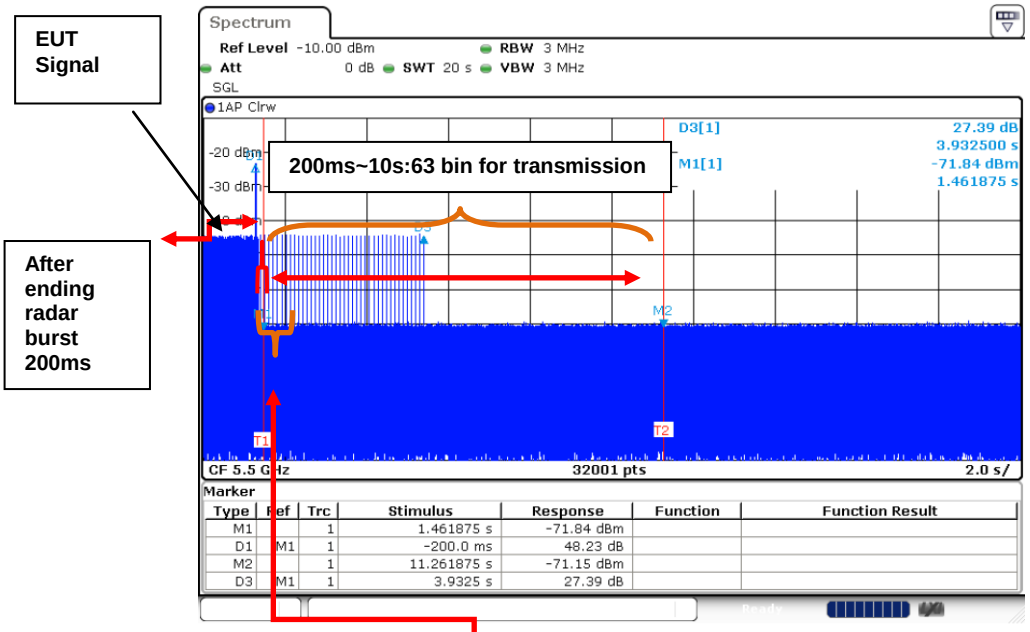
3.5.3 Test Procedures

Test Method	
☒	Refer as FCC KDB 905462 D02, clause 7.8.3 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.
☒	Refer as FCC KDB 905462 D02, clause 8.3 verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time. One 10 sec plot needs to be reported for the Short Pulse Radar Types 1-4 and one for the Long Pulse Radar Type in a 20 sec plot. And zoom-in a 600 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.
☒	Refer as FCC KDB 905462 D02, clause 7.8.3 verified during In-Service Monitoring; Non-Occupancy Period. Client Device will associate with the EUT. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Non-Occupancy Period). Compare the Non-Occupancy Period limits.

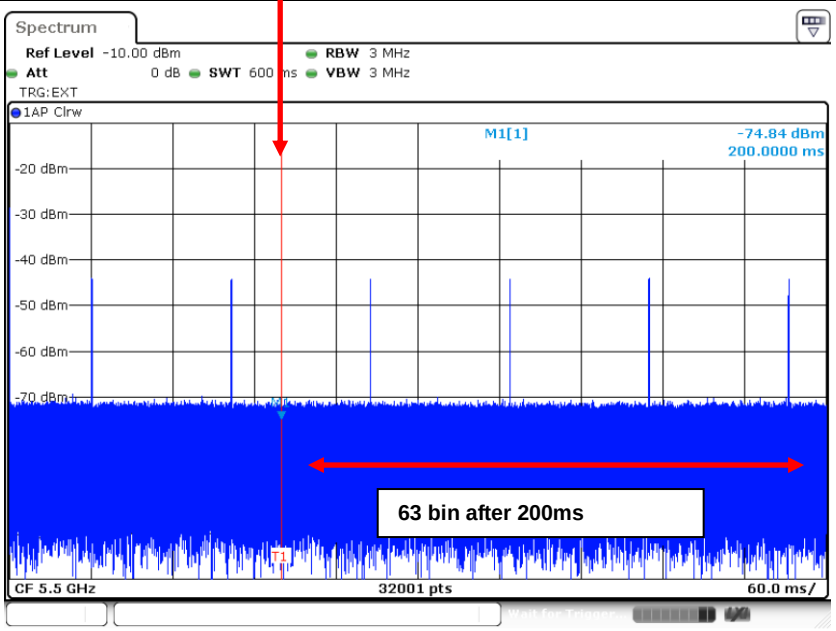
3.5.4 Test Result of In-service Monitoring

Channel Closing Transmission Time and Channel Move Time Result								
Modulation Mode	Freq. (MHz)	Radar Type	Channel Closing Transmission Time				Channel Move Time	
			Tx Time in 0-0.2s	Tx Limit in 0-0.2s	Tx Time in 0.2s-10s	Tx Limit in 0.2s-10s	Movie Time in 0s-10s	Limit
VHT20	5500	0	< 200ms	200ms	39.374ms	60ms	4.1325s	10 s
Total 32001 sample bin in 0-20s			transmission time bins: 63 [200ms~10s]					

20 sec Timing Plot

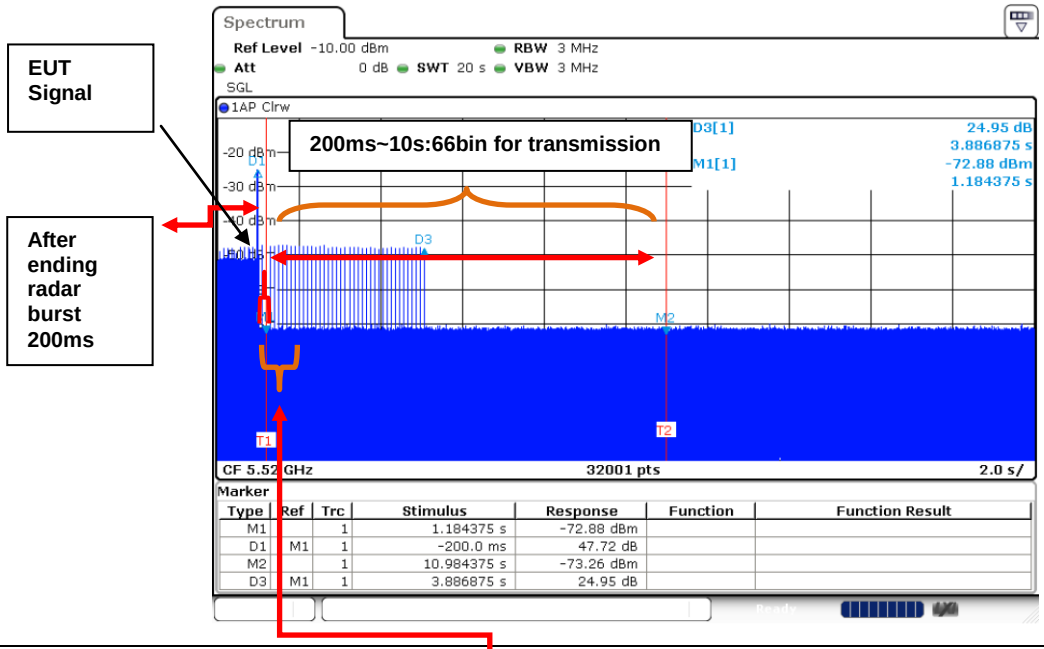


Zoom-in 600 ms Timing Plot

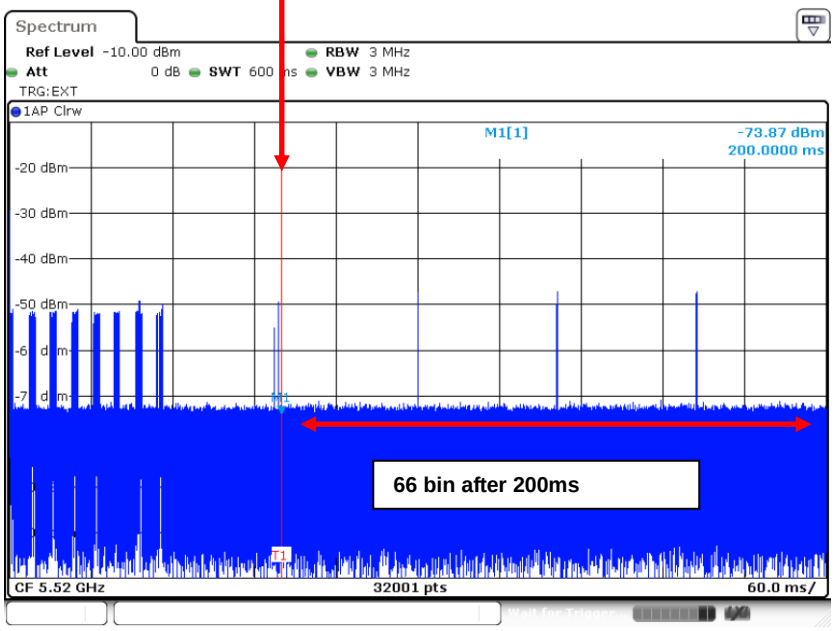


Channel Closing Transmission Time and Channel Move Time Result								
Modulation Mode	Freq. (MHz)	Radar Type	Channel Closing Transmission Time				Channel Move Time	
			Tx Time in 0-0.2s	Tx Limit in 0-0.2s	Tx Time in 0.2s-10s	Tx Limit in 0.2s-10s	Movie Time in 0s-10s	Limit
VHT40	5510	0	< 200ms	200ms	41.249ms	60ms	4.086875s	10s
Total 32001 sample bin in 0-20s			transmission time bins: 66 [200ms~10s]					

20 sec Timing Plot

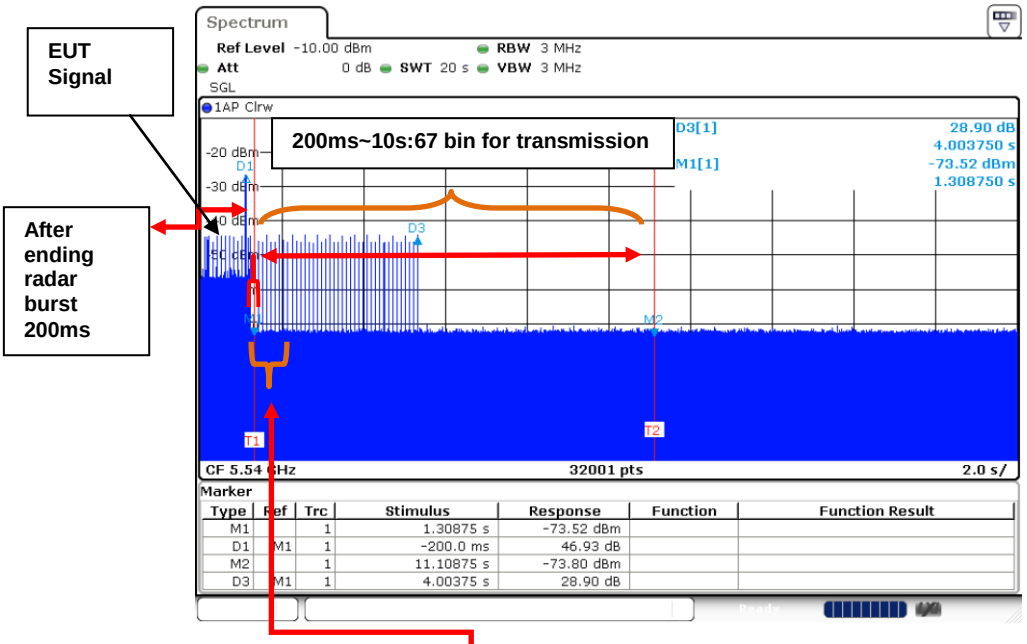


Zoom-in 600 ms Timing Plot

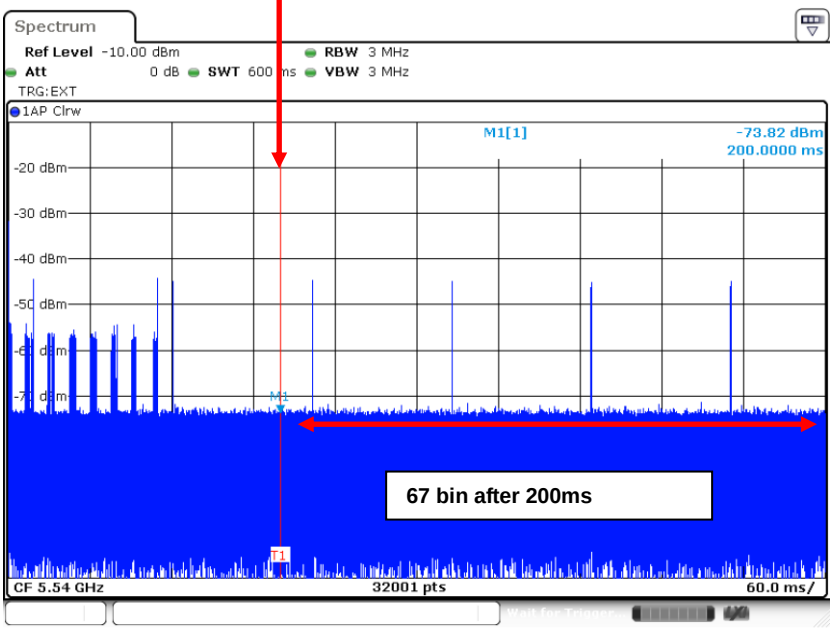


Channel Closing Transmission Time and Channel Move Time Result								
Modulation Mode	Freq. (MHz)	Radar Type	Channel Closing Transmission Time				Channel Move Time	
			Tx Time in 0-0.2s	Tx Limit in 0-0.2s	Tx Time in 0.2s-10s	Tx Limit in 0.2s-10s	Movie Time in 0s-10s	Limit
VHT80	5530	0	< 200ms	200ms	41.874ms	60ms	4.20375s	10s
Total 32001 sample bin in 0-20s			transmission time bins: 67 [200ms~10s]					

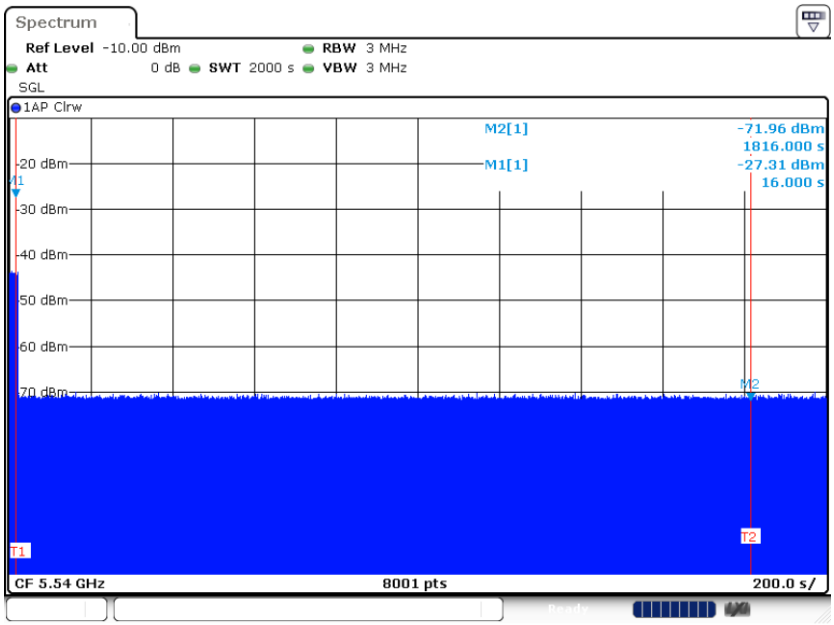
20 sec Timing Plot



Zoom-in 600 ms Timing Plot



Non-Occupancy Period Result				
Modulation Mode	Freq. (MHz)	Non-Occupancy Period		
		Measured	Limit	Result
VHT80	5530	>30min	30min	Complied
2000 sec Timing Plot				



3.6 Statistical Performance Check

3.6.1 Statistical Performance Check Limit

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

The percentage of successful detection is calculated by:

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

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

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

3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method
☒ Refer as FCC KDB 905462 D02, clause 7.8.4 for Statistical Performance Check test. Stream the channel loading test file from the Master Device to the Client Device on the test Channel for the entire period of the test. Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 1-4 and 6 to ensure detection occurs. Then Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.

3.6.4 Test Result of Statistical Performance Check

Statistical Performance Check Result – VHT20					
Radar Signal (#)	**Test Trail #**	**Detect Trail #**	**Pd (%)**	**Limit Pd (%)**	**Result**
1	30	30	100	60	Complied
2	30	29	96.67	60	Complied
3	30	29	96.67	60	Complied
4	30	26	86.67	60	Complied
Aggregate 1 - 4	120	114	95	80	Complied
5	30	29	96.67	80	Complied
6	30	30	100	70	Complied

Statistical Performance Check Result – VHT40					
Radar Signal (#)	**Test Trail #**	**Detect Trail #**	**Pd (%)**	**Limit Pd (%)**	**Result**
1	30	30	100	60	Complied
2	30	30	100	60	Complied
3	30	30	100	60	Complied
4	30	28	93.33	60	Complied
Aggregate 1 - 4	120	118	98.33	80	Complied
5	30	30	100	80	Complied
6	30	30	100	70	Complied

Statistical Performance Check Result – VHT80					
Radar Signal (#)	**Test Trail #**	**Detect Trail #**	**Pd (%)**	**Limit Pd (%)**	**Result**
1	30	30	100	60	Complied
2	30	30	100	60	Complied
3	30	29	96.67	60	Complied
4	30	29	96.67	60	Complied
Aggregate 1 - 4	120	118	98.33	80	Complied
5	30	29	96.67	80	Complied
6	30	30	100	70	Complied

3.6.5 Detection Data Sheet for Radar Types 1 (VHT20)

Radar Type	1				
Trail #	Test Frequency (MHz)	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)	VHT20*1
1	5491(FL)	Test A 1	1930.5	518	1
2	5504	Test A 2	1858.7	538	1
3	5502	Test A 3	1792.1	558	1
4	5505	Test A 4	1730.1	578	1
5	5495	Test A 5	1672.2	598	1
6	5498	Test A 6	1618.1	618	1
7	5501	Test A 7	1567.4	638	1
8	5496	Test A 8	1519.8	658	1
9	5506	Test A 9	1474.9	678	1
10	5519	Test A 10	1432.7	698	1
11	5499	Test A 11	1392.8	718	1
12	5507	Test A 12	1355	738	1
13	5498	Test A 13	1319.3	758	1
14	5509(FH)	Test A 14	1285.3	778	1
15	5495	Test A 23	326.2	3066	1
16	5508	Test B	1692	591	1
17	5509(FH)	Test B	328.1	3048	1
18	5506	Test B	373.4	2678	1
19	5501	Test B	574.4	1741	1
20	5497	Test B	1216.5	822	1
21	5494	Test B	801.3	1248	1
22	5500	Test B	488.5	2047	1
23	5508	Test B	956	1046	1
24	5496	Test B	517.6	1932	1
25	5494	Test B	1422.5	703	1
26	5491(FL)	Test B	542	1845	1
27	5501	Test B	741.3	1349	1
28	5507	Test B	881.8	1134	1
29	5504	Test B	427.4	2340	1
30	5507	Test B	628.9	1590	1
Detection Percentage (%)					100
Note 1: 1=Detection ;0=No Detection					

3.6.6 Detection Data Sheet for Radar Types 1 (VHT40)

Radar Type	1				
Trail #	Test Frequency (MHz)	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)	VHT40*1
1	5521	Test A 1	1930.5	518	1
2	5498	Test A 2	1858.7	538	1
3	5504	Test A 3	1792.1	558	1
4	5491(FL)	Test A 4	1730.1	578	1
5	5492	Test A 5	1672.2	598	1
6	5523	Test A 6	1618.1	618	1
7	5518	Test A 7	1567.4	638	1
8	5529(FH)	Test A 8	1519.8	658	1
9	5492	Test A 9	1474.9	678	1
10	5509	Test A 10	1432.7	698	1
11	5502	Test A 11	1392.8	718	1
12	5506	Test A 12	1355	738	1
13	5508	Test A 13	1319.3	758	1
14	5499	Test A 14	1285.3	778	1
15	5505	Test A 23	326.2	3066	1
16	5519	Test B	1692	591	1
17	5510	Test B	328.1	3048	1
18	5529	Test B	373.4	2678	1
19	5528	Test B	574.4	1741	1
20	5525	Test B	1216.5	822	1
21	5513	Test B	801.3	1248	1
22	5506	Test B	488.5	2047	1
23	5520	Test B	956	1046	1
24	5529(FH)	Test B	517.6	1932	1
25	5512	Test B	1422.5	703	1
26	5507	Test B	542	1845	1
27	5491(FL)	Test B	741.3	1349	1
28	5502	Test B	881.8	1134	1
29	5509	Test B	427.4	2340	1
30	5504	Test B	628.9	1590	1
Detection Percentage (%)					100
Note 1: 1=Detection ;0=No Detection					

3.6.7 Detection Data Sheet for Radar Types 1 (VHT80)

Radar Type	1				
Trail #	Test Frequency (MHz)	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)	VHT80$_{*1}$
1	5518	Test A 1	1930.5	518	1
2	5565	Test A 2	1858.7	538	1
3	5569(FH)	Test A 3	1792.1	558	1
4	5496	Test A 4	1730.1	578	1
5	5492	Test A 5	1672.2	598	1
6	5516	Test A 6	1618.1	618	1
7	5546	Test A 7	1567.4	638	1
8	5557	Test A 8	1519.8	658	1
9	5507	Test A 9	1474.9	678	1
10	5495	Test A 10	1432.7	698	1
11	5491(FL)	Test A 11	1392.8	718	1
12	5548	Test A 12	1355	738	1
13	5493	Test A 13	1319.3	758	1
14	5518	Test A 14	1285.3	778	1
15	5496	Test A 23	326.2	3066	1
16	5493	Test B	1692	591	1
17	5557	Test B	328.1	3048	1
18	5534	Test B	373.4	2678	1
19	5491(FL)	Test B	574.4	1741	1
20	5567	Test B	1216.5	822	1
21	5525	Test B	801.3	1248	1
22	5566	Test B	488.5	2047	1
23	5569(FH)	Test B	956	1046	1
24	5548	Test B	517.6	1932	1
25	5505	Test B	1422.5	703	1
26	5539	Test B	542	1845	1
27	5547	Test B	741.3	1349	1
28	5511	Test B	881.8	1134	1
29	5499	Test B	427.4	2340	1
30	5543	Test B	628.9	1590	1
Detection Percentage (%)					100
Note 1: 1=Detection ;0=No Detection					

3.6.8 Data Sheet for Radar Type 2 (VHT20)

Radar Type	2				
Trail #	Test Frequency (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	VHT20*1
1	5497	3.6	170	28	1
2	5503	4.7	179	27	1
3	5507	4.3	213	29	1
4	5508	2.1	200	27	1
5	5499	4.5	189	27	1
6	5506	2.3	230	28	1
7	5492	2.1	155	23	1
8	5496	4.2	168	26	1
9	5498	1.9	158	24	1
10	5497	2	221	23	0
11	5498	4	228	28	1
12	5495	2.1	189	27	1
13	5503	2	228	27	1
14	5498	4.9	210	27	1
15	5508	3.8	180	27	1
16	5509(FH)	1.9	190	25	1
17	5495	2.9	223	26	1
18	5501	1.7	169	26	1
19	5509(FH)	1.7	207	25	1
20	5505	1.7	175	28	1
21	5500	1.1	152	29	1
22	5491(FL)	1.6	168	27	1
23	5493	1.8	177	25	1
24	5504	2.8	198	27	1
25	5509(FH)	4	151	27	1
26	5492	3	155	28	1
27	5491(FL)	1.4	188	24	1
28	5505	2	178	25	1
29	5504	3.3	173	25	1
30	5497	2.8	208	28	1
Detection Percentage (%)					96.67
Note 1: 1=Detection ;0=No Detection					

3.6.9 Data Sheet for Radar Type 2 (VHT40)

Radar Type	2				
Trail #	**Test Frequency (MHz)**	**Pulse Width (us)**	**PRI (us)**	**Pulses / Burst**	**VHT40$_{*1}$**
1	5525	3.6	170	28	1
2	5508	4.7	179	27	1
3	5504	4.3	213	29	1
4	5494	2.1	200	27	1
5	5519	4.5	189	27	1
6	5529(FH)	2.3	230	28	1
7	5525	2.1	155	23	1
8	5501	4.2	168	26	1
9	5491(FL)	1.9	158	24	1
10	5498	2	221	23	1
11	5496	4	228	28	1
12	5526	2.1	189	27	1
13	5513	2	228	27	1
14	5529(FH)	4.9	210	27	1
15	5517	3.8	180	27	1
16	5493	1.9	190	25	1
17	5494	2.9	223	26	1
18	5526	1.7	169	26	1
19	5501	1.7	207	25	1
20	5492	1.7	175	28	1
21	5500	1.1	152	29	1
22	5491(FL)	1.6	168	27	1
23	5524	1.8	177	25	1
24	5499	2.8	198	27	1
25	5528	4	151	27	1
26	5500	3	155	28	1
27	5521	1.4	188	24	1
28	5496	2	178	25	1
29	5492	3.3	173	25	1
30	5496	2.8	208	28	1
Detection Percentage (%)					100
Note 1: 1=Detection ;0=No Detection					

3.6.10 Data Sheet for Radar Type 2 (VHT80)

Radar Type	2				
Trail #	Test Frequency (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	VHT80*1
1	5528	3.6	170	28	1
2	5564	4.7	179	27	1
3	5512	4.3	213	29	1
4	5530	2.1	200	27	1
5	5561	4.5	189	27	1
6	5497	2.3	230	28	1
7	5569(FH)	2.1	155	23	1
8	5537	4.2	168	26	1
9	5512	1.9	158	24	1
10	5519	2	221	23	1
11	5491(FL)	4	228	28	1
12	5503	2.1	189	27	1
13	5506	2	228	27	1
14	5569(FH)	4.9	210	27	1
15	5529	3.8	180	27	1
16	5509	1.9	190	25	1
17	5523	2.9	223	26	1
18	5551	1.7	169	26	1
19	5537	1.7	207	25	1
20	5536	1.7	175	28	1
21	5508	1.1	152	29	1
22	5519	1.6	168	27	1
23	5495	1.8	177	25	1
24	5556	2.8	198	27	1
25	5491(FL)	4	151	27	1
26	5539	3	155	28	1
27	5544	1.4	188	24	1
28	5533	2	178	25	1
29	5536	3.3	173	25	1
30	5515	2.8	208	28	1
Detection Percentage (%)					100
Note 1: 1=Detection ;0=No Detection					

3.6.11 Data Sheet for Radar Type 3 (VHT20)

Radar Type	3				
Trail #	Test Frequency (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	VHT20*1
1	5492	6.4	390	17	1
2	5507	9.1	410	17	1
3	5503	9.4	490	17	1
4	5493	7.6	395	17	1
5	5502	7.9	201	17	1
6	5499	9.1	227	16	1
7	5509(FH)	7.8	477	16	1
8	5497	7.2	497	16	1
9	5491(FL)	7.9	491	16	1
10	5495	8.5	304	16	1
11	5498	10	443	17	1
12	5496	8.1	264	18	1
13	5500	7.7	461	17	1
14	5508	6.1	242	17	1
15	5501	7.8	331	18	1
16	5509(FH)	7.8	481	17	1
17	5491	6.6	325	18	1
18	5495	6.6	239	17	1
19	5499	6	258	17	1
20	5493	6.8	464	18	1
21	5498	9.1	288	17	0
22	5495	6.1	375	17	1
23	5509(FH)	8.8	377	17	1
24	5502	9.5	293	17	1
25	5507	9.1	437	18	1
26	5505	6.7	290	17	1
27	5505	7.2	481	16	1
28	5491(FL)	9.4	315	18	1
29	5505	6.9	356	17	1
30	5506	9.6	385	16	1
Detection Percentage (%)					96.67
Note 1: 1=Detection ;0=No Detection					

3.6.12 Data Sheet for Radar Type 3 (VHT40)

Radar Type	3				
Trail #	Test Frequency (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	VHT40*1
1	5523	6.4	390	17	1
2	5491(FL)	9.1	410	17	1
3	5525	9.4	490	17	1
4	5509	7.6	395	17	1
5	5522	7.9	201	17	1
6	5528	9.1	227	16	1
7	5520	7.8	477	16	1
8	5498	7.2	497	16	1
9	5515	7.9	491	16	1
10	5523	8.5	304	16	1
11	5506	10	443	17	1
12	5517	8.1	264	18	1
13	5524	7.7	461	17	1
14	5529(FH)	6.1	242	17	1
15	5501	7.8	331	18	1
16	5521	7.8	481	17	1
17	5514	6.6	325	18	1
18	5525	6.6	239	17	1
19	5510	6	258	17	1
20	5503	6.8	464	18	1
21	5522	9.1	288	17	1
22	5529(FH)	6.1	375	17	1
23	5521	8.8	377	17	1
24	5524	9.5	293	17	1
25	5517	9.1	437	18	1
26	5509	6.7	290	17	1
27	5501	7.2	481	16	1
28	5528	9.4	315	18	1
29	5491(FL)	6.9	356	17	1
30	5493	9.6	385	16	1
Detection Percentage (%)					100
Note 1: 1=Detection ;0=No Detection					

3.6.13 Data Sheet for Radar Type 3 (VHT80)

Radar Type	3				
Trail #	Test Frequency (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	VHT80*1
1	5567	6.4	390	17	1
2	5568	9.1	410	17	1
3	5491(FL)	9.4	490	17	1
4	5563	7.6	395	17	1
5	5544	7.9	201	17	0
6	5521	9.1	227	16	1
7	5555	7.8	477	16	1
8	5546	7.2	497	16	1
9	5544	7.9	491	16	1
10	5525	8.5	304	16	1
11	5543	10	443	17	1
12	5558	8.1	264	18	1
13	5569(FH)	7.7	461	17	1
14	5533	6.1	242	17	1
15	5558	7.8	331	18	1
16	5566	7.8	481	17	1
17	5557	6.6	325	18	1
18	5530	6.6	239	17	1
19	5551	6	258	17	1
20	5567	6.8	464	18	1
21	5528	9.1	288	17	1
22	5491(FL)	6.1	375	17	1
23	5533	8.8	377	17	1
24	5532	9.5	293	17	1
25	5535	9.1	437	18	1
26	5500	6.7	290	17	1
27	5538	7.2	481	16	1
28	5569(FH)	9.4	315	18	1
29	5499	6.9	356	17	1
30	5545	9.6	385	16	1
Detection Percentage (%)					96.67
Note 1: 1=Detection ;0=No Detection					

3.6.14 Data Sheet for Radar Type 4 (VHT20)

Radar Type	4				
Trail #	Test Frequency (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	VHT20*1
1	5495	18.2	424	13	1
2	5491(FL)	17	283	15	1
3	5494	11.4	386	12	1
4	5508	14.2	471	13	1
5	5501	13.9	399	15	1
6	5502	18.7	252	14	1
7	5506	11.4	370	12	1
8	5508	17.5	283	15	1
9	5497	14.1	391	16	1
10	5509(FH)	16.4	229	15	1
11	5491(FL)	15.8	327	14	1
12	5493	18.8	317	15	1
13	5499	17.7	433	13	1
14	5501	16.3	312	15	0
15	5494	15	486	16	1
16	5505	16.9	393	14	1
17	5504	19.3	354	12	1
18	5495	15.2	353	13	1
19	5498	14	478	13	1
20	5492	16	408	16	1
21	5504	16.4	317	12	0
22	5509(FH)	19.2	464	14	0
23	5498	16.2	301	12	1
24	5500	11.1	226	14	0
25	5495	14	315	16	1
26	5505	15.7	293	12	1
27	5493	19.3	398	14	1
28	5497	15.7	324	15	1
29	5507	15.4	394	13	1
30	5508	15.5	376	13	1
Detection Percentage (%)					86.67
Note 1: 1=Detection ;0=No Detection					

3.6.15 Data Sheet for Radar Type 4 (VHT40)

Radar Type	4				
Trail #	Test Frequency (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	VHT40*1
1	5507	18.2	424	13	1
2	5527	17	283	15	1
3	5491(FL)	11.4	386	12	1
4	5493	14.2	471	13	1
5	5495	13.9	399	15	1
6	5505	18.7	252	14	1
7	5508	11.4	370	12	1
8	5517	17.5	283	15	1
9	5529(FH)	14.1	391	16	0
10	5511	16.4	229	15	1
11	5508	15.8	327	14	1
12	5513	18.8	317	15	1
13	5493	17.7	433	13	1
14	5506	16.3	312	15	1
15	5505	15	486	16	1
16	5514	16.9	393	14	1
17	5495	19.3	354	12	1
18	5504	15.2	353	13	1
19	5506	14	478	13	1
20	5491(FL)	16	408	16	1
21	5517	16.4	317	12	1
22	5498	19.2	464	14	1
23	5529(FH)	16.2	301	12	0
24	5526	11.1	226	14	1
25	5525	14	315	16	1
26	5507	15.7	293	12	1
27	5520	19.3	398	14	1
28	5522	15.7	324	15	1
29	5514	15.4	394	13	1
30	5516	15.5	376	13	1
Detection Percentage (%)					93.33
Note 1: 1=Detection ;0=No Detection					

3.6.16 Data Sheet for Radar Type 4 (VHT80)

Radar Type	4				
Trail #	Test Frequency (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	VHT80*1
1	5508	18.2	424	13	1
2	5563	17	283	15	1
3	5533	11.4	386	12	1
4	5569(FH)	14.2	471	13	0
5	5562	13.9	399	15	1
6	5512	18.7	252	14	1
7	5498	11.4	370	12	1
8	5536	17.5	283	15	1
9	5520	14.1	391	16	1
10	5512	16.4	229	15	1
11	5565	15.8	327	14	1
12	5567	18.8	317	15	1
13	5569(FH)	17.7	433	13	1
14	5525	16.3	312	15	1
15	5544	15	486	16	1
16	5550	16.9	393	14	1
17	5491(FL)	19.3	354	12	1
18	5504	15.2	353	13	1
19	5560	14	478	13	1
20	5519	16	408	16	1
21	5541	16.4	317	12	1
22	5523	19.2	464	14	1
23	5513	16.2	301	12	1
24	5491(FL)	11.1	226	14	1
25	5558	14	315	16	1
26	5520	15.7	293	12	1
27	5548	19.3	398	14	1
28	5533	15.7	324	15	1
29	5508	15.4	394	13	1
30	5530	15.5	376	13	1
Detection Percentage (%)					96.67
Note 1: 1=Detection ;0=No Detection					

3.6.17 Detection Data Sheet for Radar Types 5

Radar Type	5					
Trail #	Test Frequency (MHz)	VHT20*1	Test Frequency (MHz)	VHT40*1	Test Frequency (MHz)	VHT80*1
1	5503	1	5518	1	5553	1
2	5500	1	5504	1	5511	1
3	5508(FH)	1	5513	1	5530	1
4	5492(FL)	1	5518	1	5561(FH)	0
5	5503	1	5524	1	5547	1
6	5499	1	5505	1	5516	1
7	5500	1	5525(FH)	1	5559	1
8	5495	1	5507	1	5538	1
9	5499	1	5503	1	5557	1
10	5496	0	5519	1	5530	1
11	5503	1	5509	1	5535	1
12	5504	1	5513	1	5547	1
13	5500	1	5514	1	5499(FL)	1
14	5508(FH)	1	5500	1	5560	1
15	5506	1	5501	1	5512	1
16	5499	1	5523	1	5525	1
17	5492(FL)	1	5495(FL)	1	5532	1
18	5504	1	5498	1	5530	1
19	5496	1	5525(FH)	1	5532	1
20	5492(FL)	1	5502	1	5531	1
21	5502	1	5497	1	5519	1
22	5500	1	5502	1	5525	1
23	5498	1	5496	1	5528	1
24	5504	1	5519	1	5499(FL)	1
25	5505	1	5516	1	5506	1
26	5494	1	5517	1	5516	1
27	5496	1	5518	1	5509	1
28	5501	1	5500	1	5561(FH)	1
29	5506	1	5495(FL)	1	5554	1
30	5497	1	5523	1	5551	1
Pd (%)	-	96.67	-	100	-	96.67
Note 1: 1=Detection ;0=No Detection						

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

3.6.18 Detection Data Sheet for Radar Types 6

Radar Type	6		
Trail #	VHT20*1	VHT40*1	VHT80*1
1	1	1	1
2	1	1	1
3	1	1	1
4	1	1	1
5	1	1	1
6	1	1	1
7	1	1	1
8	1	1	1
9	1	1	1
10	1	1	1
11	1	1	1
12	1	1	1
13	1	1	1
14	1	1	1
15	1	1	1
16	1	1	1
17	1	1	1
18	1	1	1
19	1	1	1
20	1	1	1
21	1	1	1
22	1	1	1
23	1	1	1
24	1	1	1
25	1	1	1
26	1	1	1
27	1	1	1
28	1	1	1
29	1	1	1
30	1	1	1
Pd (%)	100	100	100
Note 1: 1=Detection ;0=No Detection			

Note: A test frequency as described in annex A.

3.6.19 Parameter Data Sheet for Radar Type 5

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	1	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	1	62.3	8			346
2	2	51.2	15	1745		2705
3	3	93.6	5	957	1634	3674
4	3	68.2	12	1668	1573	4884
5	3	83.1	8	1188	1888	6876
6	1	56.7	18			7876
7	2	60.6	18	1874		10409
8	3	75.5	13	1263	1683	11878

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	2	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	1	99.6	13			217
2	2	54.8	15	1727		2315.333
3	3	91.1	15	1120	1826	3607.666
4	2	76.2	7	1638		4476.999
5	1	88.9	13			5592.332
6	1	83	9			7558.665
7	1	83.9	12			8319.998
8	2	55.9	15	1613		9778.331
9	1	96.1	13			11445.664

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	3	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	82	6	1246		1017
2	1	93.2	13			1960
3	2	61.3	13	1175		2727
4	1	52.8	8			4424
5	3	70.6	19	929	1076	4915
6	1	80.3	17			6325
7	1	83.2	15			7879
8	2	94	9	1805		9288
9	2	67	8	1486		10449
10	1	56.4	20			11613

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	4	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	3	90.5	8	1149	1612	35
2	3	54.5	8	1094	1525	2104.909
3	1	57.1	18			3008.818
4	2	98.6	20	1292		3355.727
5	2	62.9	12	1433		5039.636
6	1	71.1	15			6162.545
7	1	96.7	5			7256.454
8	1	64.3	5			8120.363
9	3	61.2	8	1075	1524	9171.272
10	2	79.2	13	1877		10615.181
11	2	79.3	20	1313		11197.09

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	5	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	1	89.5	13			20
2	3	71.8	11	1446	1549	1117
3	3	53.7	15	1100	1517	2485
4	2	99.3	11	1571		3334
5	3	56.8	6	1594	1280	4468
6	1	97.4	11			5213
7	2	67.6	13	1831		6014
8	3	77.1	8	1683	1337	7267
9	1	98.5	17			8544
10	3	58.3	13	1924	1829	9159
11	1	98.4	14			10380
12	1	79.3	11			11257

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	6	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	53.8	14	1631		768
2	1	90	17			1453.077
3	3	87.2	18	1115	1297	2003.154
4	2	82	11	1728		3661.231
5	3	69.8	7	1641	1779	3888.308
6	2	63.1	20	1836		4946.385
7	1	59.8	6			6033.462
8	3	78.5	19	941	1921	7007.539
9	1	85.7	6			7603.616
10	3	67.7	9	1834	1450	8841.693
11	2	84.5	15	1376		9512.77
12	2	99.3	13	1570		10639.847
13	2	80.2	8	1088		11143.924

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	7	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	3	80.8	10	1061	1124	389
2	2	81	9	1479		1091.143
3	2	87.6	17	1247		2291.286
4	2	94.7	18	1041		3143.429
5	2	78	18	1267		3741.572
6	1	95.5	14			4337.715
7	2	97.6	15	1215		5199.858
8	3	88	9	1349	1598	6171.001
9	2	69.7	17	1711		7626.144
10	2	96.5	17	1431		7882.287
11	2	96.9	6	1871		8695.43
12	3	66.4	10	1824	1468	10194.573
13	1	78.8	10			10822.716
14	3	87.6	6	1080	1159	11856.859

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	8	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	71.8	14	1432		573
2	2	65.9	19	1762		1114
3	2	74.7	6	1754		1977
4	3	81.7	5	1133	974	2616
5	3	57.8	14	1176	1712	3329
6	1	80.6	6			4341
7	3	99.3	17	1268	1876	4965
8	1	79.8	12			6218
9	3	83	11	990	1738	6989
10	3	71.5	11	1473	1255	7206
11	1	77.4	11			8127
12	2	84.8	12	1390		9315
13	2	64.6	12	1653		9748
14	2	92.9	12	1881		10919
15	1	71.3	6			11501

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	9	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	55.4	9	1318		383
2	2	80.8	18	1710		1284
3	1	88.8	9			1995
4	2	78	12	1818		2342
5	1	78.5	12			3108
6	2	55	13	1219		3873
7	2	75.9	20	1004		4623
8	2	70.9	7	1820		5796
9	2	71.7	18	1559		6476
10	2	73.9	19	1232		6985
11	1	59.2	20			7924
12	1	55.7	9			8641
13	3	60.9	12	1144	1370	9198
14	2	60.8	14	990		9766
15	3	60.6	19	1526	1326	11195
16	2	89	5	1029		11381

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	10	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	72.1	14	1119		488
2	3	81.4	13	1142	961	1156.882
3	3	92.9	18	991	1147	1976.764
4	3	81.3	18	1793	1369	2402.646
5	3	76.4	20	1005	1793	2902.528
6	1	61.6	18			4032.41
7	1	66.6	19			4416.292
8	1	53.7	12			5357.174
9	2	58	8	1477		5754.056
10	2	64	18	1791		6493.938
11	2	80.3	12	1304		7574.82
12	3	77.3	5	1039	1668	8136.702
13	2	97.6	11	1593		8633.584
14	1	73	6			9323.466
15	3	65.1	8	1097	1927	9984.348
16	2	59.5	13	1569		10770.23
17	1	88.2	19			11947.112

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	11	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	56.1	12	1219		273
2	1	83.3	7			964.666
3	3	79.6	17	1218	1897	1492.333
4	2	95.8	7	1672		2480
5	2	79.6	8	920		3053.667
6	2	88.9	11	1779		3338.334
7	2	81.4	8	1645		4201.001
8	2	92	6	1454		4746.668
9	3	96	13	1518	1121	5525.335
10	2	65.6	11	1798		6349.002
11	2	98.7	5	1360		7082.669
12	2	52.9	15	1140		7985.336
13	2	76.5	8	1032		8092.003
14	3	73.8	18	1719	1383	9168.67
15	3	83.7	10	1270	1216	9676.337
16	2	89.6	10	1141		10108.004
17	2	67.2	20	1455		10938.671
18	3	55.7	14	1444	1475	11899.338

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	12	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	70.6	15	1040		575
2	2	72.9	13	1460		809.579
3	3	88.9	5	1250	1629	1454.158
4	3	60.3	20	1757	1822	2362.737
5	3	92.1	19	1845	1198	3002.316
6	1	73	5			3689.895
7	1	50.4	15			3858.474
8	1	66.4	10			4754.053
9	1	79.1	18			5489.632
10	1	71.6	20			6108.211
11	2	95.6	13	1229		6813.79
12	1	74.4	9			7310.369
13	3	55.6	17	1263	1724	7701.948
14	2	78.3	13	1507		8247.527
15	3	54.1	13	1325	1249	9034.106
16	2	67.1	18	1584		9784.685
17	2	65.8	9	1195		10348.264
18	2	50.1	12	1755		10784.843
19	2	87.7	18	1359		11548.422

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	13	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	3	79.5	7	1808	1550	274
2	2	76.7	20	1632		1173
3	3	85.9	12	1305	1496	1218
4	3	86.6	14	968	1172	1933
5	2	74.9	14	1348		2448
6	3	82.2	20	1692	1310	3156
7	2	53.9	13	1342		3645
8	3	62.7	15	1839	1651	4276
9	2	86.2	6	1165		4891
10	1	63.1	11			5791
11	2	82.4	6	1416		6107
12	1	95.8	18			6848
13	2	75.7	9	993		7682
14	3	70.1	18	1563	1020	8154
15	3	85.8	13	1420	1084	8846
16	1	63.2	7			9265
17	1	75.1	11			9747
18	2	69.5	5	1802		10456
19	1	51.8	19			11222
20	2	62.3	5	1449		11704

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	14	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	3	74.9	5	1314	1466	1289
2	2	83.9	19	1442		2936
3	2	55.8	6	1147		3240
4	2	59.4	6	1490		5955
5	2	78.2	15	1665		7312
6	2	57.3	15	1357		7764
7	2	76.2	11	1651		9255
8	3	59	7	1460	1109	11910

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	15	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	3	77.7	19	1046	1568	17
2	2	98.2	20	1628		2210.333
3	2	95.3	8	1540		3732.666
4	2	78.8	15	1341		4821.999
5	2	52.8	20	988		6353.332
6	2	65.2	9	1480		7268.665
7	2	99.5	10	1867		8883.998
8	2	79.5	13	1148		9675.331
9	3	50.6	13	1030	1525	11987.664

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	16	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	97.5	11	1357		764
2	2	91.8	13	1896		1498
3	1	78.5	5			3517
4	1	60.1	11			4669
5	2	96.2	10	975		5957
6	2	56.6	18	1626		6701
7	1	77.1	20			7523
8	2	96.3	8	1682		8707
9	2	52.2	13	1017		9817
10	1	92.8	15			11116

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	17	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	57.3	8	1220		792
2	3	73.1	5	1717	1679	1935.909
3	2	54.1	14	967		2293.818
4	2	98.8	19	1137		3987.727
5	3	85.5	8	1068	960	4664.636
6	2	78.5	7	1387		6281.545
7	2	77.9	12	1869		7051.454
8	1	81.9	10			8185.363
9	1	50.4	9			9191.272
10	1	75.2	8			10608.181
11	2	92.7	7	1770		11876.09

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	18	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	79.1	6	1042		793
2	3	55.7	9	1327	1744	1159
3	1	95	20			2734
4	1	88.4	5			3523
5	1	92.3	15			4546
6	1	93.6	6			5208
7	2	95.1	12	1044		6894
8	1	59.5	17			7666
9	2	98.7	17	1422		8640
10	2	65.1	5	1104		9320
11	1	60.2	5			10060
12	1	88.7	8			11823

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	19	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	1	53.9	10			226
2	2	82.6	13	992		1777.077
3	1	87.7	8			2149.154
4	3	69	12	1696	1606	3297.231
5	1	68.6	12			3912.308
6	3	76.5	13	1333	1468	5004.385
7	2	95.8	17	1380		5595.462
8	2	55.6	19	1147		6795.539
9	2	78.6	14	1268		7512.616
10	2	65.4	17	1231		9220.693
11	2	76.6	18	1883		9748.77
12	1	93.2	6			10749.847
13	2	50.2	13	1836		11137.924

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	20	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	1	60.9	13			142
2	2	81.7	15	1831		1379.143
3	2	78.5	5	1396		2504.286
4	2	98.2	6	1652		2574.429
5	1	64.1	12			3842.572
6	3	53	18	1862	1902	4442.715
7	2	62.3	15	1490		5390.858
8	2	87	11	1411		6576.001
9	2	78.4	8	1090		7594.144
10	2	87.2	7	967		8057.287
11	3	71	13	1662	1841	8676.43
12	2	77.2	5	1557		10029.573
13	1	94.4	15			10393.716
14	1	90.6	13			11648.859

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	21	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	3	76.5	8	1870	1326	385
2	2	95.3	13	1162		873
3	3	58.9	9	1586	1909	2342
4	2	73.1	13	1460		2730
5	2	73.1	12	1488		3225
6	2	75.1	5	1331		4418
7	3	98.5	11	936	1532	5014
8	3	72.5	13	1110	1903	5987
9	3	67.4	12	1567	1513	6480
10	2	76.1	12	1005		7477
11	2	94.3	17	1413		8314
12	2	72.8	12	1778		8866
13	2	90.9	14	1793		9747
14	3	94.8	11	1012	1742	10841
15	3	95	12	912	1641	11809

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	22	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	1	96.7	9			308
2	2	78.3	13	1045		777
3	1	56.5	12			1574
4	3	88.5	14	1119	1020	2879
5	2	62.4	9	1436		3548
6	2	78.2	5	1147		4091
7	3	76.8	14	1069	1575	4860
8	2	91.6	18	978		5852
9	2	93.7	5	1130		6623
10	2	97.4	8	1100		7006
11	3	90.1	6	1629	1375	7608
12	2	79.9	18	1809		8433
13	2	83	10	1370		9477
14	2	89.1	13	1239		10234
15	2	58.3	8	1321		10776
16	1	85.2	13			11272

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	23	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	3	60	10	1097	1748	56
2	3	66.3	13	1391	1430	1126.882
3	2	88.5	15	1040		1994.764
4	2	72.1	8	1526		2278.646
5	1	72.3	8			3273.528
6	2	67.3	7	1022		3577.41
7	2	56.1	12	1325		4896.292
8	1	83.5	11			5636.174
9	3	99.4	13	1490	938	6052.056
10	1	54.2	12			6478.938
11	3	92.7	17	1251	1631	7423.82
12	3	95.1	17	1741	1162	7821.702
13	2	84	9	1597		8637.584
14	1	68.5	18			9688.466
15	1	76.5	20			10067.348
16	3	86.6	11	1774	1875	11045.23
17	2	62.2	9	1563		11786.112

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	24	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	1	86.6	19			621
2	2	95.3	17	926		794.666
3	1	76.2	12			1584.333
4	3	71.4	19	1287	1404	2269
5	3	51.7	12	1564	1339	3299.667
6	2	77	5	1899		3948.334
7	1	87.5	12			4375.001
8	3	59	17	1327	1615	5276.668
9	2	78.3	15	1551		5881.335
10	2	89.7	5	1718		6456.002
11	2	92.1	7	1403		6678.669
12	2	97.3	14	1338		7929.336
13	3	80.3	20	1354	1563	8484.003
14	1	98.2	8			9094.67
15	3	94.4	13	1795	1829	9845.337
16	2	90.4	13	1105		10342.004
17	2	73.6	19	1787		10958.671
18	1	82.9	7			11951.338

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	25	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	1	90	18			173
2	1	65.3	19			876.579
3	2	82.6	10	1756		1390.158
4	2	93.9	18	1557		2181.737
5	2	50.5	13	1479		2808.316
6	1	68	7			3333.895
7	3	88.4	11	1244	1076	4357.474
8	3	66.8	11	1288	1909	4869.053
9	2	88	12	1450		5579.632
10	3	51.1	6	1797	1935	5879.211
11	2	93.8	13	1073		6499.79
12	1	83.5	10			7453.369
13	2	96.9	12	1047		7845.948
14	3	87.2	18	1521	1450	8453.527
15	2	60.1	8	1545		9133.106
16	3	98	10	1842	1402	10027.685
17	3	57	19	1665	1732	10248.264
18	1	74.3	14			10767.843
19	2	57.8	10	1576		11977.422

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	26	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	92.8	9	1222		531
2	2	52.4	8	1547		768
3	3	56.8	7	1158	1184	1393
4	1	91.2	7			2365
5	3	61.2	10	1558	1664	2787
6	3	62	7	1518	1656	3391
7	2	69	5	1531		3927
8	2	67.3	18	1064		4225
9	1	94.1	5			4878
10	2	76	17	1190		5622
11	2	81.9	12	1815		6096
12	2	57.9	8	1594		6877
13	3	68.3	19	1427	1540	7241
14	2	53.3	7	1713		7848
15	2	85.3	15	1136		8448
16	1	65.3	20			9057
17	3	79.8	20	923	1259	9648
18	2	56.9	20	1357		10683
19	2	93	9	1686		10873
20	2	82.8	10	944		11752

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	27	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	3	50.9	11	1106	1077	1293
2	2	77.8	18	1836		2735
3	3	60.7	5	1069	1635	4092
4	2	77.2	13	1916		5843
5	2	91.6	13	1465		7466
6	2	56.8	17	1783		7876
7	1	59.5	20			9131
8	1	66.5	12			11524

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	28	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	2	72	9	1092		965
2	2	89.2	6	1550		2559.333
3	1	81.2	12			2943.666
4	2	80.6	15	1616		4457.999
5	2	62.8	10	1812		6081.332
6	1	71	8			7100.665
7	2	69.3	6	1027		9110.998
8	2	77.2	13	1076		9971.331
9	2	65.4	5	1582		10944.664

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	29	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	1	51.5	19			151
2	1	82.3	13			2271
3	3	78.3	8	1115	1740	3046
4	2	99	14	1101		4309
5	3	98.8	7	1819	945	5356
6	2	80.9	19	922		6567
7	2	64	12	953		7781
8	1	79	20			9198
9	1	68	8			9712
10	2	50.4	13	1587		10826

Statistical Performance Check Result						
Radar Test Signal (#)		5		Trail #	30	
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Start Time (msec)
1	3	57.8	5	1324	1716	82
2	2	70.1	20	1733		1677.909
3	2	95.2	13	1188		2970.818
4	3	84.6	20	1042	1259	4293.727
5	3	96.5	7	1329	1596	4379.636
6	2	84.3	15	1606		6162.545
7	3	53.5	19	1783	1458	7283.454
8	3	74.9	5	1599	1891	8102.363
9	3	53.8	7	1494	1467	8979.272
10	2	60.5	14	1319		10282.181
11	1	73.3	10			11754.09

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSP7	100645	9kHz ~ 7GHz	Nov. 10, 2014	DFS01-HY
Vector Signal Generator	R&S	SMU200A	102098	100kHz ~ 6GHz	Dec. 28, 2014	DFS01-HY
Horn Antenna	COM-POWER	AH-118	711064	1GHz ~ 18GHz	Nov. 13, 2014	DFS01-HY
Horn Antenna	COM-POWER	AH-118	10094	1GHz ~ 18GHz	Apr. 15, 2015	DFS01-HY
RF Cable-3m	HUBER+SUHNER	SUCOFLEX_104	302338	1GHz ~ 26.5GHz	Dec. 02, 2014	DFS01-HY
RF Cable-8m	HUBER+SUHNER	SUCOFLEX_104	MY17172/4	0.05GHz ~ 26.5GHz	Dec. 02, 2014	DFS01-HY

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