DFS MEASUREMENT REPORT

FCC ID:	Q9DAPIN0735A
Applicant:	Hewlett Packard Enterprise Company
Product:	ACCESS POINT
Model No.:	APIN0735A
Trademark:	Hewlett Packard Enterprise , HPE aruba networking
FCC Classification:	Unlicensed National Information Infrastructure (NII)
FCC Rule Part(s):	Part 15 Subpart E (Section 15.407)
Type of Device:	Master
Result:	Complies
Received Date:	2024-09-26
Test Date:	2024-12-16 ~ 2024-12-24

Reviewed By: Jame Yuan

Approved By: Robin Wu

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

The test results relate only to the samples tested.
This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 905462. Test results reported herein relate only to the item(s) tested.
The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2409RSU050-U7	V01	Initial Report	2025-03-28	Valid

Note 1: The APIN0735A is a variation on the existing APIN0735. The APIN0735 is currently FCC certified under FCC ID: Q9DAPIN0735.

The APIN0735A differs from the APIN0735 in the following ways:

Part substitution for 5G and 6G passive filter

Note 2: Spot-check tests were done on Statistical Performance Check item for 802.11be-EHT160 channel 5250MHz and all other test data was referenced from the original report no. 2311RSU031-U7.

CONTENTS

1. General Information

1.1. Applicant

Hewlett Packard Enterprise Company

6280 America Center Drive, San Jose CA 95002, United States

1.2. Manufacturer

Hewlett Packard Enterprise Company

6280 America Center Drive, San Jose CA 95002, United States

1.3. Testing Facility

☒	**Test Site – MRT Suzhou Laboratory**				
	Laboratory Location (Suzhou - Wuzhong) D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China **Laboratory Location (Suzhou - SIP)** 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China				
	Laboratory Accreditations				
	A2LA: 3628.01		CNAS: L10551		
	FCC: CN1166		ISED: CN0001		
	VCCI:	☐R-20025	☐G-20034	☐C-20020	☐T-20020
		☐R-20141	☐G-20134	☐C-20103	☐T-20104
☐	**Test Site – MRT Shenzhen Laboratory**				
	Laboratory Location (Shenzhen) 1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China				
	Laboratory Accreditations				
	A2LA: 3628.02		CNAS: L10551		
	FCC: CN1284		ISED: CN0105		
☐	**Test Site – MRT Taiwan Laboratory**				
	Laboratory Location (Taiwan) No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)				
	Laboratory Accreditations				
	TAF: 3261				
	FCC: 291082, TW3261		ISED: TW3261		

1.4. Product Information

Product Name	ACCESS POINT
Model No.	APIN0735A
Serial No.	CNSTMKY00Q
Software Version	ArubaOS_Aquila_10.7.2.0_cshen_c2c_91591_1223
Wi-Fi Specification	802.11a/b/g/n/ac/ax/be
Bluetooth Specification	BLE only
ZigBee Specification	802.15.4
GNSS Specification	GPS, Galileo
Antenna Information	Refer to Section 1.8
Power Type	AC Adapter Input or PoE Input
Operating Environment	Indoor Use
Remark: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

1.5. Radio Specification under Test

Frequency Range	For 802.11a/n-HT20/ac-VHT20/ax-HE20/be-EHT20: 5260~5320MHz, 5500~5720MHz For 802.11n-HT40/ac-VHT40/ax-HE40/be-EHT40: 5270~5310MHz, 5510~5710MHz For 802.11ac-VHT80/ax-HE80/be-EHT80: 5290MHz, 5530MHz, 5610 MHz, 5690MHz For 802.11ac-VHT160/ax-HE160/be-EHT160: 5250MHz, 5570MHz
Type of Modulation	802.11a/n/ac: OFDM 802.11ax/be: OFDMA
Data Rate	802.11a: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 300Mbps 802.11ac: up to 1732Mbps 802.11ax: up to 2402Mbps 802.11be: up to 2882Mbps
Uniform Spreading (For DFS Frequency Band)	For the 5250-5350MHz, 5470-5725 MHz bands, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a random algorithm.

1.6. Working Frequencies

802.11a/n-HT20/ac-VHT20/ax-HE20/be-EHT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
52	5260 MHz	56	5280 MHz	60	5300 MHz
64	5320 MHz	100	5500 MHz	104	5520 MHz
108	5540 MHz	112	5560 MHz	116	5580 MHz
120	5600 MHz	124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680 MHz	140	5700 MHz
144	5720 MHz	--	--	--	--

802.11n-HT40/ac-VHT40/ax-HE40/be-EHT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz	102	5510 MHz
110	5550 MHz	118	5590 MHz	126	5630 MHz
134	5670 MHz	142	5710 MHz	--	--

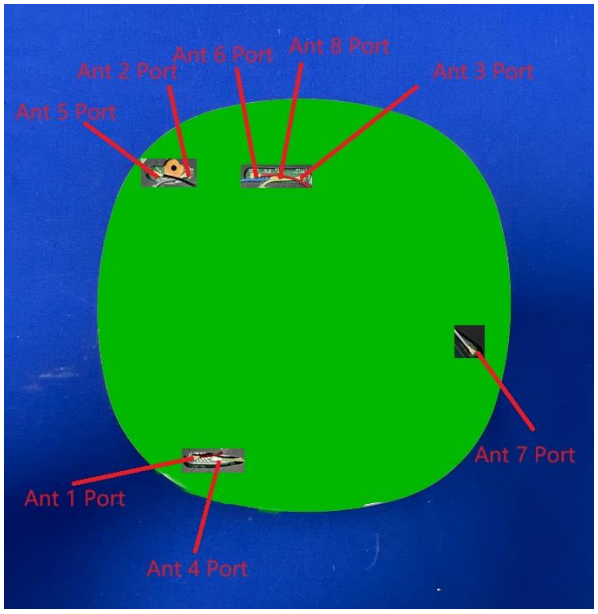
802.11ac-VHT80/ax-HE80/be-EHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
58	5290 MHz	106	5530 MHz	122	5610 MHz
138	5690 MHz	--	--	--	--

802.11ac-VHT160/ax-HE160/be-EHT160

Channel	Frequency	Channel	Frequency	Channel	Frequency
50	5250 MHz	114	5570 MHz	--	--

1.7. Description of Antenna RF Port



Antenna Port	RF Spec.			
	Wi-Fi 2.4G	Wi-Fi 5G	Wi-Fi 6G	BLE/ZigBee
Ant 1	--	--	● (Radio 2)	--
Ant 4	--	--	● (Radio 2)	--
Ant 2	● (Radio 0)	● (Radio 1)	--	--
Ant 5	● (Radio 0)	● (Radio 1)	--	--
Ant 3	--	--	--	● (Core 1)
Ant 6	--	--	--	● (Core 0)
Ant 8	--	--	--	● (Core 1)
Ant 7	GNSS			

1.8. Antenna Details

Antenna Type	Frequency Band (GHz)	T_X Paths	Directional Gain (dBi)	
			Uncorrelated	Correlated
Wi-Fi Antennas (Ant 2 & Ant 5)				
PIFA	5.15 ~ 5.9	2	4.08	4.08

Note:

1, The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.

2, The EUT also supports Beam Forming mode, and the Beam Forming support 802.11n/ac/ax/be, not include 802.11a/b/g.

3, For beamforming operation, Aruba OS automatically backs power down based on CDD power.

4, The antennas are cross-polarized, so the correlated gain equals to the uncorrelated gain.

5, The detail calculation method of directional gain refers to antenna specification provided by the applicant.

2. Test Configuration

2.1. Test Mode

Mode 1: Operating under AP mode

2.2. Test Channel

Test Mode	Test Channel	Test Frequency
802.11be-EHT160	50	5250 MHz

2.3. Applied Standards

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

- FCC Part 15.407 Section (h)(2)
- KDB 905462 D02v02
- KDB 905462 D04v01

2.4. Test Environment Condition

Ambient Temperature	15 ~ 35°C
Relative Humidity	20 ~ 75%RH

3. DFS Detection Thresholds and Radar Test Waveforms

3.1. Applicability

The following table from FCC KDB 905462 D02 NII DFS Compliance Procedures New Rules v02 lists the applicable requirements for the DFS testing.

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

Table 3-1: Applicability of DFS Requirements Prior to Use of a Channel

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

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

Table 3-2: Applicability of DFS Requirements during normal operation

3.2. DFS Devices Requirements

Per FCC KDB 905462 D02 NII DFS Compliance Procedures New Rules v02 the following are the requirements for Master Devices:

(a) The Master Device will use DFS in order to detect Radar Waveforms with received signal strength above the DFS Detection Threshold in the 5250 ~ 5350 MHz and 5470 ~ 5725 MHz bands. DFS is not required in the 5150 ~ 5250 MHz or 5725 ~ 5825 MHz bands.

(b) Before initiating a network on a Channel, the Master Device will perform a Channel Availability Check for a specified time duration (Channel Availability Check Time) to ensure that there is no radar system operating on the Channel, using DFS described under subsection a) above.

(c) The Master Device initiates a U-NII network by transmitting control signals that will enable other U-NII devices to Associate with the Master Device.

(d) During normal operation, the Master Device will monitor the Channel (In-Service Monitoring) to ensure that there is no radar system operating on the Channel, using DFS described under a).

(e) If the Master Device has detected a Radar Waveform during In-Service Monitoring as described under d), the Operating Channel of the U-NII network is no longer an Available Channel. The Master Device will instruct all associated Client Device(s) to stop transmitting on this Channel within the Channel Move Time. The transmissions during the Channel Move Time will be limited to the Channel Closing Transmission Time.

(f) Once the Master Device has detected a Radar Waveform it will not utilize the Channel for the duration of the Non-Occupancy Period.

(g) If the Master Device delegates the In-Service Monitoring to a Client Device, then the combination will be tested to the requirements described under d) through f) above.

Channel Move Time and Channel Closing Transmission Time requirements are listed in the following table.

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 3-3: DFS Response Requirements

3.3. DFS Detection Threshold Values

The DFS detection thresholds are defined for Master devices and Client Devices with In-service monitoring.

These detection thresholds are listed in the following table.

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

Table 3-4: Detection Thresholds for Master Devices and Client Devices with Radar Detection

3.4. Parameters of DFS Test Signals

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.

Short Pulse Radar Test Waveforms

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

Table 3-5: Parameters for Short Pulse Radar Waveforms

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.

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

Table 3-6: Pulse Repetition Intervals Values for Test A

Long Pulse Radar Test Waveform

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

Table 3-7: Parameters for Long Pulse Radar Waveforms

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.

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

Table 3-8: Parameters for Frequency Hopping Radar Waveforms

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 – 5724MHz. 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.

3.5. Conducted Test Setup

The FCC KDB 905462 D02 NII DFS Compliance Procedures New Rules v02 describes a radiated test setup and a conducted test setup. The conducted test setup was used for this testing. Figure 3-1 shows the typical test setup.

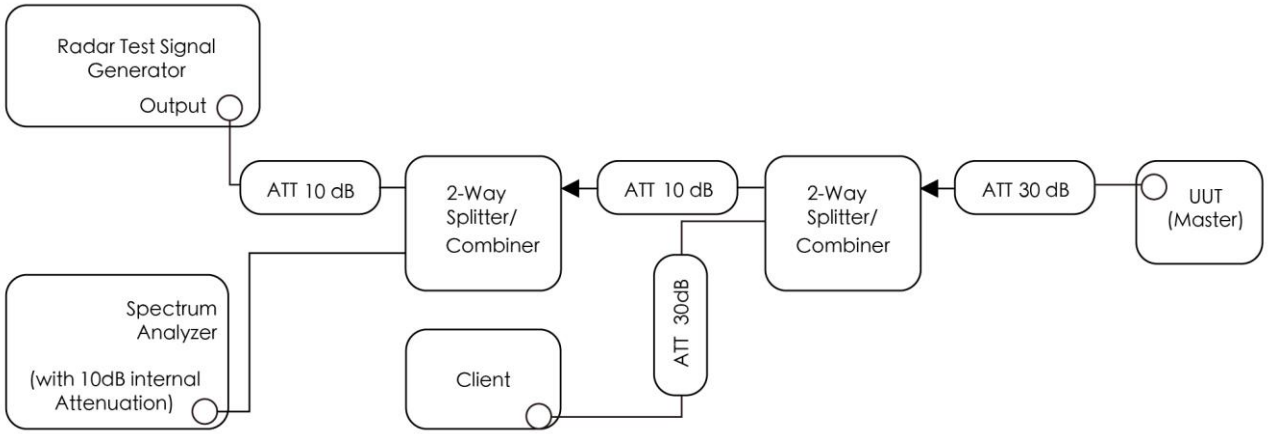


Figure 3-1: Conducted Test Setup where UUT is a Master and Radar Test Waveforms are injected into the Master

4. Measuring Instrument

Instrument Name	Manufacturer	Model No.	Asset No.	Cali. Interval	Cal. Due Date	Test Site
Shielding Room	HUAMING	WZ-SR4	MRTSUE06441	N/A	N/A	WZ-SR4
Signal Generator	Keysight	N5182B	MRTSUE06451	1 year	2025-06-03	WZ-SR4
Signal Analyzer	Keysight	N9010B	MRTSUE07027	1 year	2025-10-13	WZ-SR4
Thermohygrometer	testo	608-H1	MRTSUE11256	1 year	2025-10-16	WZ-SR4
Attenuator	MVE	MVE2213	MRTSUE11092	1 year	2025-06-05	WZ-SR4

Client Information

Instrument	Manufacturer	Type No.	Certification Number
Wi-Fi Module	Intel	BE200NGW	FCC ID: PD9BE200NG

Software	Version	Manufacturer	Function
DFS Tool	V 6.9.2	Agilent	DFS Test Software
Pulse Sequencer	V 2.0	R&S	DFS Test Software
Signal Studio	V2.2.0.0	Keysight	DFS Test Software

5. Test Result

5.1. Summary

Parameter	Verdict	Reference
NII Detection Bandwidth Measurement	Pass	Section 5.3
Initial Channel Availability Check Time	Pass	Section 5.4
Radar Burst at the Beginning of the Channel Availability Check Time	Pass	Section 5.5
Radar Burst at the End of the Channel Availability Check Time	Pass	Section 5.6
In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time	Pass	Section 5.7
Non-Occupancy Period	Pass	Section 5.7
Statistical Performance Check	Pass	Section 5.8

5.2. Radar Waveform Calibration Measurement

5.2.1. Calibration Setup

The conducted test setup was used for this calibration testing. Figure 3-2 shows the typical test setup.

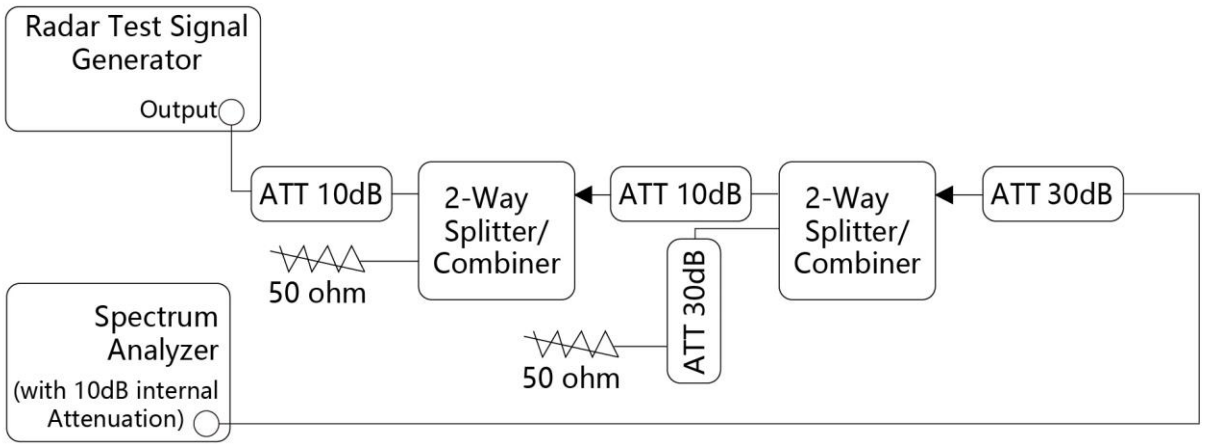


Figure 3-2: Conducted Test Setup

5.2.2. Calibration Procedure

The Interference Radar Detection Threshold Level is (-64dBm) + (4.08) [dBi] + 1 dB= -58.92 dBm that had been taken into account the output power range and antenna gain. The above equipment setup was used to calibrate the conducted Radar Waveform. A vector signal generator was utilized to establish the test signal level for each radar type. During this process there were replace 50ohm terminal form Master and Client device and no transmissions by either the Master or Client Device. The spectrum analyzer was switched to the zero span (Time Domain) at the frequency of the Radar Waveform generator. Peak detection was used. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to at least 3MHz. The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was lower than threshold level. Capture the spectrum analyzer plots on short pulse radar types, long pulse radar type and hopping radar waveform.

5.2.3. Calibration & Channel Loading Result

Refer to 2311RSU031-U7 Clause 5.2.3, spot check test data refer to Appendix A.1&A.2 in this report.

5.3. NII Detection Bandwidth Measurement

5.3.1. Test Limit

Minimum 100% of the NII 99% transmission power bandwidth. During the U-NII Detection Bandwidth detection test, each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

5.3.2. Test Procedure

1. Adjust the equipment to produce a single Burst of any one of the Short Pulse Radar Types 0-4 in Table 3-5 at the center frequency of the EUT Operating Channel at the specified DFS Detection Threshold level.
2. The generating equipment is configured as shown in the Conducted Test Setup above section 3.5.
3. The EUT is set up as a stand-alone device (no associated Client or Master, as appropriate) and no traffic. Frame based systems will be set to a talk/listen ratio reflecting the worst case (maximum) that is user configurable during this test.
4. Generate a single radar Burst, and note the response of the EUT. Repeat for a minimum of 10 trials. The EUT must detect the Radar Waveform using the specified U-NII Detection Bandwidth criterion shown in Table 3-5. In cases where the channel bandwidth may exceed past the DFS band edge on specific channels (i.e., 802.11ac or wideband frame based systems) select a channel that has the entire emission bandwidth within the DFS band. If this is not possible, test the detection BW to the DFS band edge.
5. Starting at the center frequency of the UUT operating Channel, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in Table 3-3. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as F_H) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies above F_H is not required to demonstrate compliance.
6. Starting at the center frequency of the EUT operating Channel, decrease the radar frequency in 1 MHz steps, repeating the above item 4 test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion. Record the lowest frequency (denote as F_L) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies below F_L is not required to demonstrate compliance.
7. The U-NII Detection Bandwidth is calculated as follows: U-NII Detection Bandwidth = $F_H – F_L$
8. The U-NII Detection Bandwidth must be at least 100% of the EUT transmitter 99% power, otherwise, the

EUT does not comply with DFS requirements.

5.3.3. Test Result

Refer to 2311RSU031-U7 Clause 5.3.3.

5.4. Initial Channel Availability Check Time Measurement

5.4.1. Test 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 on the intended operating frequency.

5.4.2. Test Procedure

1. The U-NII devices will be powered on and be instructed to operate on the appropriate U-NII Channel that must incorporate DFS functions. At the same time the EUT is powered on, the spectrum analyzer will be set to zero span mode with a 3 MHz RBW and 3 MHz VBW on the Channel occupied by the radar (Chr) with a 2.5 minutes sweep time. The spectrum analyzer's sweep will be started at the same time power is applied to the U-NII device.
2. The EUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.
3. Confirm that the EUT initiates transmission on the channel. Measurement system showing its nominal noise floor is marker1.

5.4.3. Test Result

Refer to 2311RSU031-U7 Clause 5.4.3.

5.5. Radar Burst at the Beginning of the Channel Availability Check Time Measurement

5.5.1. Test Limit

In beginning of the Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

5.5.2. Test Procedure

1. The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning of the Channel Availability Check Time.
2. The EUT is in completion power-up cycle (from T0 to T1). T1 denotes the instant when the EUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T1 and will end no sooner than T1 + 60 seconds. A single Burst of one of Short Pulse Radar Types 0-4 at DFS Detection Threshold + 1 dB will commence within a 6 second window starting at T1.
3. Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 2.5 minutes after the radar Burst has been generated. Verify that during the 2.5 minutes measurement window no EUT transmissions occurred.

5.5.3. Test Result

Refer to 2311RSU031-U7 Clause 5.5.3.

5.6. Radar Burst at the End of the Channel Availability Check Time Measurement

5.6.1. Test Limit

In the end of Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

5.6.2. Test Procedure

1. The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning of the Channel Availability Check Time.
2. The EUT is powered on at T0. T1 denotes the instant when the EUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T1 and will end no sooner thanT1 + 60 seconds. A single Burst of one of Short Pulse Radar Types 0-4 at DFS Detection Threshold + 1 dB will commence within a 6 second window starting at T1+ 54 seconds.
3. Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 2.5 minutes after the radar Burst has been generated. Verify that during the 2.5 minutes measurement window no EUT transmissions occurred.

5.6.3. Test Result

Refer to 2311RSU031-U7 Clause 5.6.3.

5.7. In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period Measurement

5.7.1. Test Limit

The EUT has In-Service Monitoring function to continuously monitor the radar signals. If the radar is detected, must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec. The total duration of Channel Closing Transmission Time is 260ms, consisting of data signals and the aggregate of control signals, by a U-NII device during the Channel Move Time. The Non-Occupancy Period time is 30 minutes during which a Channel will not be utilized after a Radar Waveform is detected on that Channel.

5.7.2. Test Procedure

1. The test should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0.
2. When the radar burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device. A U-NII device operating as a Master Device will associate with the Client Device at Channel. Stream the MPEG test file from the Master Device to the Client Device on the selected Channel for the entire period of the test. At time T0 the Radar Waveform generator sends a Burst of pulses for each of the radar types at Detection Threshold + 1dB.
3. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the EUT during the observation time (Channel Move Time).
4. Measurement of the aggregate duration of the Channel Closing Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (1.5ms) = S (12 sec) / B (8000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is the sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C = N X Dwell; where C is the Closing Time, N is the number of spectrum analyzer sampling bins showing a U-NII transmission and Dwell is the dwell time per bin.
5. Measure the EUT for more than 30 minutes following the channel close/move time to verify that the EUT does not resume any transmissions on this Channel.

5.7.3. Test Result

Refer to 2311RSU031-U7 Clause 5.7.3.

5.8. Statistical Performance Check Measurement

5.8.1. Test Limit

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

Radar Type	Minimum Number of Trails	Detection Probability
0	30	Pd ≥ 60%
1	30(15 of test A and 15 of test B)	Pd ≥ 60%
2	30	Pd ≥ 60%
3	30	Pd ≥ 60%
4	30	Pd ≥ 60%
Aggregate (Radar Types 1-4)	120	Pd ≥ 80%
5	30	Pd ≥ 80%
6	30	Pd ≥ 70%
Note: The percentage of successful detection is calculated by: (Total Waveform Detections / Total Waveform Trails) * 100 = 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: (Pd1 + Pd2 + Pd3 + Pd4) / 4.		

5.8.2. Test Procedure

1. Stream the MPEG test file from the Master Device to the Client Device on the test Channel for the entire period of the test.
2. At time T0 the Radar Waveform generator sends the individual waveform for each of the Radar Types 1-6, at levels equal to the DFS Detection Threshold + 1dB, on the Operating Channel.
3. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 0 to ensure detection occurs.
4. Observe the transmissions of the EUT 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.
5. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.
6. The Minimum number of trails, minimum percentage of successful detection and the average minimum percentage of successful detection are found in below table.

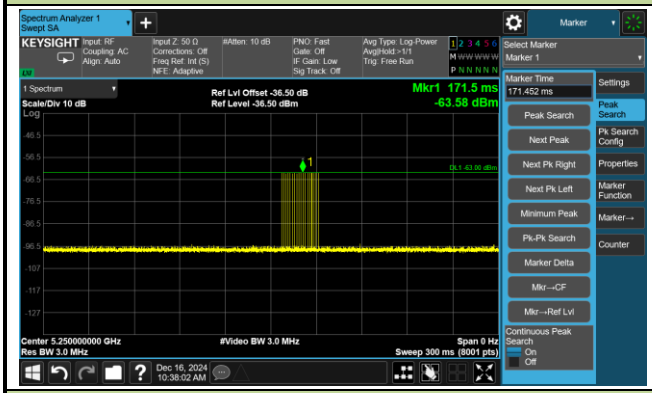
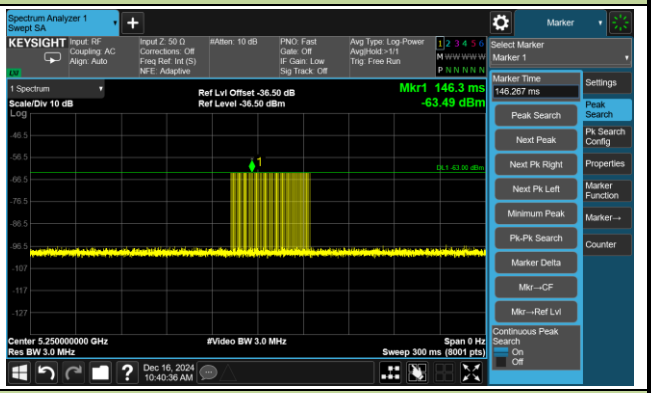
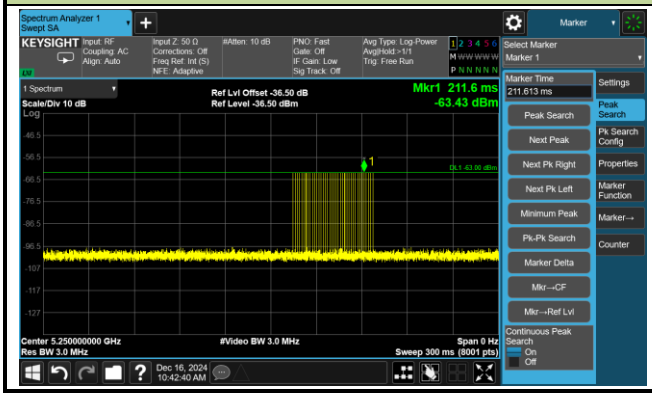
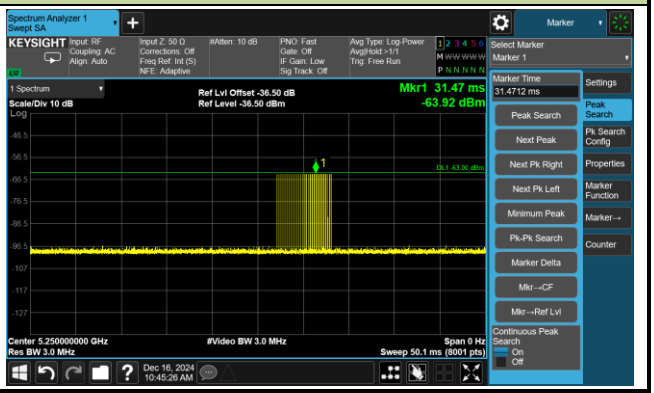
5.8.3. Test Result

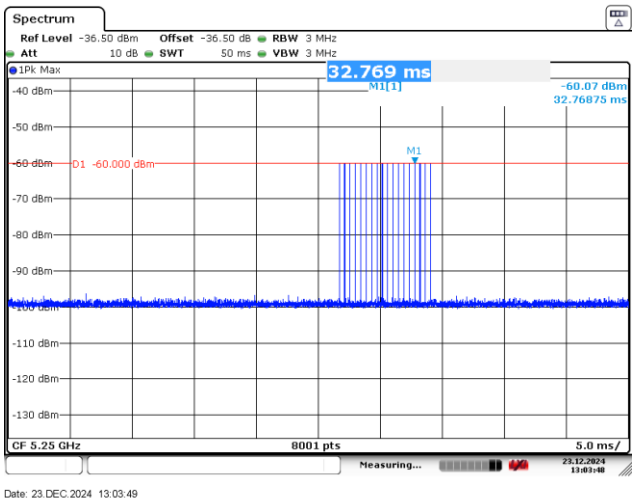
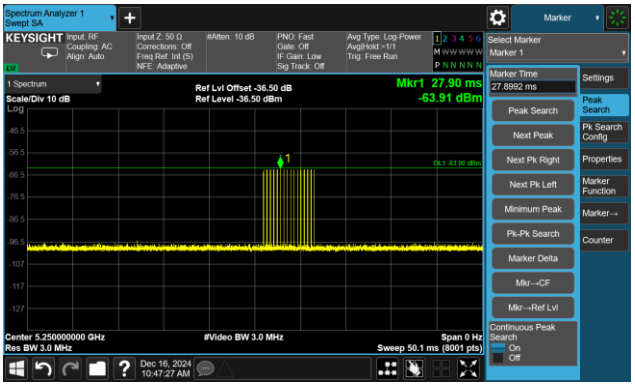
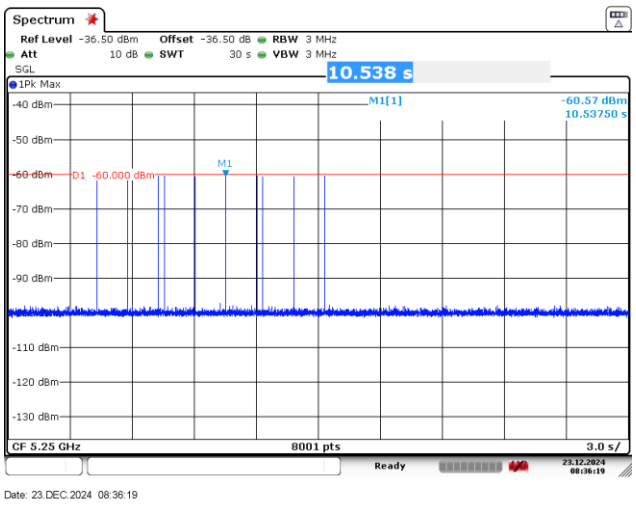
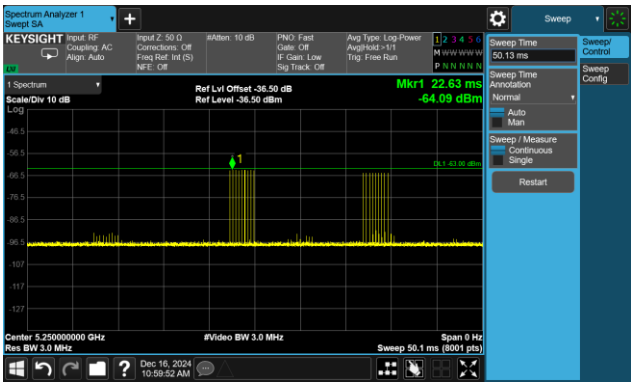
Refer to 2311RSU031-U7 Clause 5.8.3, spot check test data refer to Appendix A.3 in this report.

Appendix A – Test Result

A.1 Calibration Test Result

Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2024-12-16 ~ 2024-12-23	Test Item	Radar Waveform Calibration

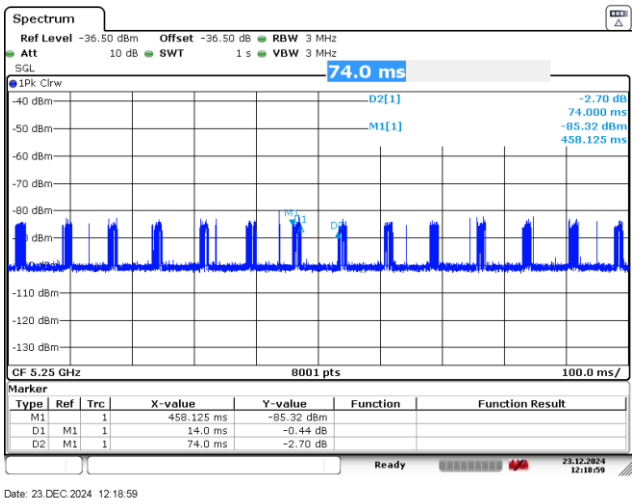
Radar Waveform Calibration	
Radar #0	Radar #1(Test A) PRI = 778us and the number of pulses = 68
	
Radar #1(Test B) PRI = 1420us and the number of pulses = 38	Radar #2
	

Radar #3	Radar #4
	
Radar #5	**Radar #6**
	

A.2 Channel Loading Test Result

Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2024-12-24	Test Item	Channel Loading

802.11be-EHT160 (5250MHz)



Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11be-EHT160	5250 MHz	18.92%	≥ 17%	Pass

Note: System testing was performed with the designated iperf test file. This file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. Packet ratio = Time On / (Time On + Off Time).

A.3 Statistical Performance Check

Test Site	WZ-SR4	Test Engineer	Jake Lan
Test Date	2024-12-24		
Test Item	Radar Statistical Performance Check (802.11be-EHT160 – 5250MHz)		

Radar Type 1-4 - Radar Statistical Performance								
Trial	Radar Type 1		Radar Type 2		Radar Type 3		Radar Type 4	
	Frequency (MHz)	1=detect 0=no detect	Frequency (MHz)	1=detect 0=no detect	Frequency (MHz)	1=detect 0=no detect	Frequency (MHz)	1=detect 0=no detect
0	5263	1	5303	1	5302	1	5294	1
1	5293	1	5250	0	5290	1	5330	0
2	5250	1	5318	1	5306	1	5255	1
3	5291	1	5290	1	5324	1	5287	1
4	5330	0	5320	1	5250	1	5290	0
5	5316	1	5330	0	5330	0	5323	1
6	5290	1	5288	1	5267	1	5265	1
7	5287	1	5316	1	5278	1	5250	1
8	5276	1	5321	0	5316	1	5295	1
9	5326	0	5263	1	5319	1	5272	1
Probability:	80.0%		70.0%		90.0%		80.0%	
Aggregate:	**80.0% (≥80%)**							

Radar Type 1 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 1	1.0	778.0	68	52904.0
Download	1	Type 1	1.0	878.0	61	53558.0
Download	2	Type 1	1.0	658.0	81	53298.0
Download	3	Type 1	1.0	898.0	59	52982.0
Download	4	Type 1	1.0	538.0	99	53262.0
Download	5	Type 1	1.0	738.0	72	53136.0
Download	6	Type 1	1.0	838.0	63	52794.0
Download	7	Type 1	1.0	618.0	86	53148.0
Download	8	Type 1	1.0	918.0	58	53244.0
Download	9	Type 1	1.0	718.0	74	53132.0

Radar Type 2 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 2	1.9	227.0	24	5448.0
Download	1	Type 2	4.4	174.0	28	4872.0
Download	2	Type 2	5.0	158.0	29	4582.0
Download	3	Type 2	1.6	195.0	24	4680.0
Download	4	Type 2	2.2	204.0	25	5100.0
Download	5	Type 2	1.0	203.0	23	4669.0
Download	6	Type 2	1.1	186.0	23	4278.0
Download	7	Type 2	4.9	213.0	29	6177.0
Download	8	Type 2	2.4	185.0	25	4625.0
Download	9	Type 2	3.4	167.0	27	4509.0

Radar Type 3 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 3	6.9	205.0	16	3280.0
Download	1	Type 3	9.4	489.0	18	8802.0
Download	2	Type 3	10.0	434.0	18	7812.0
Download	3	Type 3	6.6	426.0	16	6816.0
Download	4	Type 3	7.2	245.0	16	3920.0
Download	5	Type 3	6.0	301.0	16	4816.0
Download	6	Type 3	6.1	266.0	16	4256.0
Download	7	Type 3	9.9	312.0	18	5616.0
Download	8	Type 3	7.4	377.0	17	6409.0
Download	9	Type 3	8.4	387.0	17	6579.0

Radar Type 4 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 4	13.0	205.0	13	2665.0
Download	1	Type 4	18.6	489.0	16	7824.0
Download	2	Type 4	19.9	434.0	16	6944.0
Download	3	Type 4	12.4	426.0	12	5112.0
Download	4	Type 4	13.7	245.0	13	3185.0
Download	5	Type 4	11.1	301.0	12	3612.0
Download	6	Type 4	11.2	266.0	12	3192.0
Download	7	Type 4	19.7	312.0	16	4992.0
Download	8	Type 4	14.2	377.0	13	4901.0
Download	9	Type 4	16.5	387.0	15	5805.0

Radar Type 5 - Radar Statistical Performance		
Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
0	5290.0	1
1	5290.0	1
2	5290.0	1
3	5290.0	1
4	5254.4	1
5	5254.0	1
6	5252.0	1
7	5325.2	1
8	5323.6	1
9	5327.6	0
Detection Percentage (%)		**90%**

Type 5 Radar Waveform_0							
Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	562676.0	61.3	8	1	1413.0	-	-
1	851285.0	91.9	8	3	1873.0	1236.0	1234.0
2	1140278.0	99.5	8	3	1795.0	2000.0	1588.0
3	236096.0	58.0	8	1	1810.0	-	-
4	526690.0	65.2	8	1	1821.0	-	-
5	817781.0	50.6	8	1	1095.0	-	-
6	1108054.0	51.3	8	1	1635.0	-	-
7	199777.0	98.3	8	3	1762.0	1780.0	1400.0
8	490374.0	68.1	8	2	1208.0	1884.0	-
9	780800.0	80.4	8	2	1775.0	1105.0	-

Type 5 Radar Waveform_1							
Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	593575.0	69.2	18	2	1845.0	1435.0	-
1	91203.0	67.8	18	2	1221.0	1160.0	-
2	252644.0	53.1	18	1	1512.0	-	-
3	414252.0	65.0	18	1	1051.0	-	-
4	575714.0	55.6	18	1	1017.0	-	-
5	71437.0	53.7	18	1	1653.0	-	-
6	232663.0	62.3	18	1	1825.0	-	-
7	392140.0	93.2	18	3	1309.0	1985.0	1515.0
8	552450.0	93.5	18	3	1867.0	1575.0	1620.0
9	51587.0	62.8	18	1	1430.0	-	-
10	211638.0	97.4	18	3	1622.0	1900.0	1939.0
11	373347.0	75.9	18	2	1599.0	1470.0	-
12	533007.0	84.6	18	3	1289.0	1657.0	1716.0
13	31618.0	71.5	18	2	1742.0	1693.0	-
14	193155.0	54.4	18	1	1084.0	-	-
15	354337.0	66.1	18	1	1539.0	-	-
16	515644.0	59.4	18	1	1549.0	-	-
17	11799.0	74.9	18	2	1813.0	1905.0	-

Type 5 Radar Waveform_2

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	154898.0	87.0	20	3	1922.0	1138.0	1933.0
1	301098.0	53.3	20	1	1231.0	-	-
2	446004.0	64.8	20	1	1652.0	-	-
3	591691.0	52.4	20	1	1076.0	-	-
4	137131.0	86.2	20	3	1724.0	1997.0	1235.0
5	281764.0	90.2	20	3	1188.0	1987.0	1112.0
6	426645.0	94.8	20	3	1120.0	1148.0	1458.0
7	573840.0	55.3	20	1	1033.0	-	-
8	119814.0	75.0	20	2	1426.0	1237.0	-
9	263417.0	98.3	20	3	1838.0	1803.0	1890.0
10	409613.0	72.7	20	2	1556.0	1031.0	-
11	555272.0	56.4	20	1	1760.0	-	-
12	101955.0	73.0	20	2	1673.0	1072.0	-
13	246723.0	67.4	20	2	1220.0	1733.0	-
14	390986.0	90.2	20	3	1104.0	1012.0	1659.0
15	535268.0	89.8	20	3	1316.0	1630.0	1187.0
16	84033.0	83.2	20	2	1920.0	1389.0	-
17	228878.0	77.8	20	2	1799.0	1176.0	-
18	373777.0	70.7	20	2	1195.0	1617.0	-
19	519723.0	65.4	20	1	1535.0	-	-

Type 5 Radar Waveform_3

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	132878.0	67.1	7	2	1304.0	1145.0	-
1	423620.0	60.4	7	1	1604.0	-	-
2	712134.0	88.2	7	3	1798.0	1628.0	1759.0
3	1003402.0	78.9	7	2	1771.0	1640.0	-
4	97165.0	53.8	7	1	1668.0	-	-
5	387048.0	98.5	7	3	1590.0	1043.0	1354.0
6	677614.0	68.9	7	2	1453.0	1658.0	-
7	966564.0	85.4	7	3	1777.0	1757.0	1226.0
8	61394.0	57.3	7	1	1106.0	-	-
9	351668.0	77.9	7	2	1049.0	1745.0	-

Type 5 Radar Waveform_4

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	444781.0	70.6	11	2	1858.0	1484.0	-
1	667631.0	72.0	11	2	1672.0	1966.0	-
2	891506.0	80.4	11	2	1516.0	1211.0	-
3	194044.0	87.6	11	3	1251.0	1559.0	1460.0
4	417087.0	98.9	11	3	1132.0	1471.0	1218.0
5	639873.0	90.9	11	3	1240.0	1545.0	1269.0
6	862014.0	94.9	11	3	1642.0	1340.0	1872.0
7	166641.0	91.0	11	3	1540.0	1222.0	1256.0
8	390136.0	77.5	11	2	1325.0	1291.0	-
9	613216.0	81.7	11	2	1366.0	1491.0	-
10	836567.0	79.1	11	2	1618.0	1053.0	-
11	139448.0	82.3	11	2	1097.0	1179.0	-
12	363082.0	59.7	11	1	1487.0	-	-

Type 5 Radar Waveform_5

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	633770.0	85.6	10	3	1432.0	1175.0	1691.0
1	877412.0	57.5	10	1	1848.0	-	-
2	121116.0	67.5	10	2	1908.0	1811.0	-
3	363249.0	70.0	10	2	1075.0	1263.0	-
4	604972.0	68.1	10	2	1312.0	1423.0	-
5	846614.0	77.8	10	2	1804.0	1197.0	-
6	91444.0	71.3	10	2	1207.0	1518.0	-
7	333223.0	75.6	10	2	1614.0	1385.0	-
8	573893.0	94.6	10	3	1744.0	1260.0	1962.0
9	815106.0	98.1	10	3	1993.0	1321.0	1790.0
10	61735.0	52.1	10	1	1363.0	-	-
11	303947.0	66.0	10	1	1327.0	-	-

Type 5 Radar Waveform_6

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	818448.0	84.4	5	3	1039.0	1022.0	1370.0
1	1183171.0	64.7	5	1	1204.0	-	-
2	47771.0	100.0	5	3	1447.0	1938.0	1217.0
3	411170.0	54.7	5	1	1984.0	-	-
4	774919.0	61.8	5	1	1147.0	-	-
5	1135886.0	95.0	5	3	1600.0	1839.0	1068.0
6	3102.0	65.2	5	1	1816.0	-	-
7	366632.0	65.0	5	1	1109.0	-	-

Type 5 Radar Waveform_7

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	536459.0	83.1	12	2	1342.0	1365.0	-
1	745071.0	64.4	12	1	1117.0	-	-
2	96347.0	93.0	12	3	1177.0	1468.0	1229.0
3	303430.0	74.8	12	2	1578.0	1907.0	-
4	510546.0	68.2	12	2	1779.0	1576.0	-
5	717968.0	76.7	12	2	1602.0	1335.0	-
6	70771.0	93.6	12	3	1355.0	1670.0	1871.0
7	278654.0	55.9	12	1	1254.0	-	-
8	484843.0	73.7	12	2	1809.0	1893.0	-
9	690751.0	89.7	12	3	1685.0	1660.0	1687.0
10	45385.0	71.8	12	2	1631.0	1862.0	-
11	252399.0	73.1	12	2	1707.0	1865.0	-
12	459773.0	68.5	12	2	1680.0	1230.0	-
13	666903.0	69.0	12	2	1836.0	1136.0	-

Type 5 Radar Waveform_8

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	16372.0	78.6	16	2	1636.0	1346.0	-
1	187179.0	63.8	16	1	1734.0	-	-
2	357948.0	57.2	16	1	1753.0	-	-
3	528078.0	67.2	16	2	1164.0	1446.0	-
4	696180.0	90.7	16	3	1403.0	1722.0	1965.0
5	165526.0	85.3	16	3	1427.0	1829.0	1093.0
6	337246.0	52.8	16	1	1057.0	-	-
7	508171.0	51.4	16	1	1080.0	-	-
8	678653.0	59.3	16	1	1553.0	-	-
9	145069.0	53.2	16	1	1918.0	-	-
10	316192.0	61.2	16	1	1050.0	-	-
11	485933.0	78.1	16	2	1778.0	1013.0	-
12	657880.0	63.1	16	1	1265.0	-	-
13	123650.0	91.1	16	3	1390.0	1127.0	1609.0
14	293562.0	92.4	16	3	1664.0	1248.0	1898.0
15	465881.0	53.0	16	1	1351.0	-	-
16	636638.0	54.5	16	1	1478.0	-	-

Type 5 Radar Waveform_9

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	218987.0	81.6	6	2	1572.0	1860.0	-
1	582085.0	82.1	6	2	1926.0	1163.0	-
2	944464.0	89.9	6	3	1158.0	1089.0	1902.0
3	1309369.0	66.2	6	1	1729.0	-	-
4	174169.0	95.1	6	3	1615.0	1199.0	1550.0
5	537348.0	73.4	6	2	1362.0	1776.0	-
6	899976.0	81.5	6	2	1855.0	1961.0	-
7	1262909.0	94.7	6	3	1123.0	1375.0	1245.0

Radar Type 6 - Radar Statistical Performance	
Trail #	1=Detection 0=No Detection
0	1
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
Detection Percentage (%)	**100.0%**

Type 6 Radar Waveform_0

Frequency List (MHz)	0	1	2	3	4
0	5296	5443	5282	5323	5694
5	5652	5410	5459	5379	5355
10	5268	5458	5331	5418	5288
15	5264	5623	5713	5606	5345
20	5447	5536	5673	5423	5515
25	5522	5618	5637	5579	5408
30	5280	5568	5552	5677	5635
35	5393	5297	5356	5703	5584
40	5513	5364	5411	5455	5444
45	5504	5327	5383	5711	5303
50	5613	5671	5632	5334	5625
55	5526	5477	5566	5467	5501
60	5585	5525	5688	5336	5451
65	5697	5576	5607	5250	5486
70	5281	5519	5609	5315	5506
75	5425	5644	5541	5601	5690
80	5452	5489	5435	5392	5648
85	5493	5593	5701	5716	5588
90	5551	5277	5496	5578	5698
95	5385	5518	5719	5262	5460

Type 6 Radar Waveform_1

Frequency List (MHz)	0	1	2	3	4
0	5551	5682	5693	5484	5536
5	5316	5432	5534	5542	5562
10	5674	5722	5469	5613	5309
15	5352	5395	5629	5661	5323
20	5256	5477	5287	5396	5403
25	5471	5626	5671	5718	5394
30	5712	5686	5704	5497	5299
35	5568	5606	5617	5423	5596
40	5302	5651	5452	5285	5424
45	5587	5385	5436	5501	5654
50	5692	5434	5455	5656	5338
55	5383	5667	5628	5537	5666
60	5530	5357	5508	5634	5400
65	5258	5408	5402	5528	5558
70	5267	5522	5458	5291	5465
75	5297	5289	5684	5582	5467
80	5270	5599	5292	5368	5435
85	5286	5336	5708	5250	5361
90	5371	5442	5515	5300	5332
95	5428	5440	5502	5511	5601

Type 6 Radar Waveform_2

Frequency List (MHz)	0	1	2	3	4
0	5331	5446	5629	5645	5281
5	5358	5454	5609	5705	5391
10	5508	5608	5510	5333	5330
15	5440	5522	5257	5706	5515
20	5264	5682	5418	5279	5369
25	5669	5323	5354	5351	5285
30	5283	5426	5478	5317	5341
35	5575	5461	5284	5628	5359
40	5679	5618	5319	5449	5592
45	5404	5670	5443	5392	5388
50	5530	5393	5485	5374	5278
55	5600	5526	5337	5350	5250
60	5356	5572	5664	5334	5677
65	5360	5349	5672	5294	5709
70	5252	5253	5525	5685	5267
75	5424	5266	5409	5255	5563
80	5622	5288	5289	5299	5724
85	5528	5576	5301	5569	5607
90	5605	5549	5560	5344	5445
95	5495	5583	5506	5580	5371

Type 6 Radar Waveform_3

Frequency List (MHz)	0	1	2	3	4
0	5586	5685	5565	5331	5598
5	5400	5379	5587	5296	5439
10	5397	5551	5528	5351	5649
15	5360	5276	5329	5272	5373
20	5456	5368	5342	5557	5460
25	5455	5264	5327	5269	5626
30	5641	5630	5515	5480	5666
35	5257	5437	5542	5673	5384
40	5556	5559	5543	5521	5278
45	5404	5445	5653	5406	5569
50	5536	5463	5576	5447	5714
55	5291	5475	5644	5479	5517
60	5593	5635	5623	5658	5298
65	5708	5450	5564	5512	5324
70	5336	5625	5534	5621	5383
75	5613	5529	5398	5399	5588
80	5307	5355	5417	5286	5283
85	5299	5691	5309	5541	5255
90	5382	5389	5297	5611	5486
95	5442	5453	5550	5567	5462

Type 6 Radar Waveform_4

Frequency List (MHz)	0	1	2	3	4
0	5269	5449	5501	5492	5343
5	5539	5401	5662	5459	5330
10	5370	5661	5592	5626	5372
15	5519	5679	5463	5321	5521
20	5658	5442	5397	5360	5315
25	5348	5599	5663	5656	5298
30	5369	5633	5583	5381	5404
35	5335	5619	5282	5528	5687
40	5456	5512	5467	5494	5324
45	5540	5353	5364	5361	5462
50	5498	5660	5270	5587	5649
55	5302	5391	5427	5720	5665
60	5411	5686	5425	5558	5569
65	5384	5722	5359	5493	5322
70	5628	5383	5597	5582	5552
75	5444	5622	5651	5698	5563
80	5480	5283	5478	5677	5630
85	5272	5340	5409	5306	5533
90	5365	5617	5520	5465	5576
95	5605	5551	5441	5577	5496

Type 6 Radar Waveform_5

Frequency List (MHz)	0	1	2	3	4
0	5524	5688	5437	5653	5660
5	5581	5326	5262	5622	5537
10	5679	5450	5633	5346	5393
15	5607	5331	5566	5269	5713
20	5666	5608	5338	5449	5385
25	5711	5451	5391	5285	5332
30	5508	5522	5540	5499	5556
35	5533	5283	5373	5324	5365
40	5467	5351	5550	5432	5282
45	5722	5444	5520	5551	5330
50	5536	5446	5638	5263	5600
55	5615	5674	5380	5376	5407
60	5257	5384	5612	5682	5671
65	5683	5492	5251	5593	5565
70	5308	5253	5707	5573	5454
75	5672	5587	5603	5428	5333
80	5344	5640	5280	5295	5580
85	5472	5532	5374	5260	5306
90	5310	5530	5623	5457	5584
95	5574	5632	5675	5323	5680

Type 6 Radar Waveform_6

Frequency List (MHz)	0	1	2	3	4
0	5304	5452	5373	5339	5405
5	5623	5348	5337	5310	5366
10	5610	5714	5674	5541	5414
15	5695	5458	5572	5314	5430
20	5677	5376	5441	5358	5599
25	5400	5594	5389	5550	5508
30	5497	5330	5353	5325	5561
35	5692	5518	5381	5665	5633
40	5370	5707	5534	5686	5702
45	5527	5481	5604	5412	5622
50	5689	5352	5423	5657	5328
55	5628	5570	5479	5295	5669
60	5449	5564	5685	5558	5408
65	5620	5719	5521	5396	5259
70	5294	5256	5459	5549	5638
75	5317	5584	5680	5346	5600
80	5372	5703	5655	5490	5580
85	5627	5717	5311	5554	5605
90	5251	5491	5466	5683	5715
95	5616	5573	5302	5308	5417

Type 6 Radar Waveform_7

Frequency List (MHz)	0	1	2	3	4
0	5559	5691	5309	5403	5722
5	5665	5273	5412	5376	5573
10	5541	5503	5715	5261	5435
15	5308	5585	5675	5359	5622
20	5368	5317	5530	5331	5390
25	5252	5322	5493	5400	5592
30	5397	5454	5482	5551	5464
35	5652	5488	5293	5295	5601
40	5338	5472	5531	5518	5682
45	5610	5539	5657	5288	5323
50	5265	5441	5721	5504	5419
55	5582	5285	5298	5644	5706
60	5394	5396	5608	5569	5658
65	5534	5413	5577	5377	5356
70	5525	5597	5392	5437	5301
75	5565	5360	5456	5381	5439
80	5291	5685	5483	5253	5258
85	5344	5327	5328	5385	5257
90	5428	5251	5695	5724	5600
95	5471	5281	5411	5615	5543

Type 6 Radar Waveform_8

Frequency List (MHz)	0	1	2	3	4
0	5717	5455	5720	5564	5467
5	5329	5295	5487	5539	5305
10	5375	5389	5281	5456	5299
15	5712	5303	5307	5339	5593
20	5437	5258	5522	5304	5278
25	5676	5428	5694	5434	5256
30	5286	5411	5669	5371	5603
35	5268	5284	5446	5306	5440
40	5421	5721	5528	5447	5662
45	5693	5597	5613	5369	5542
50	5499	5316	5627	5448	5607
55	5536	5475	5592	5615	5452
60	5396	5325	5450	5432	5518
65	5269	5683	5380	5403	5363
70	5359	5632	5501	5556	5264
75	5557	5347	5546	5612	5566
80	5637	5451	5649	5405	5386
85	5570	5318	5439	5550	5575
90	5623	5263	5462	5608	5266
95	5350	5681	5466	5638	5514

Type 6 Radar Waveform_9

Frequency List (MHz)	0	1	2	3	4
0	5497	5694	5656	5250	5309
5	5371	5695	5562	5702	5609
10	5306	5653	5419	5554	5477
15	5387	5267	5406	5352	5531
20	5601	5603	5296	5611	5277
25	5544	5528	5631	5323	5468
30	5298	5272	5368	5312	5408
35	5569	5645	5359	5652	5599
40	5279	5504	5659	5380	5622
45	5642	5301	5558	5666	5634
50	5418	5675	5367	5716	5270
55	5295	5320	5490	5568	5314
60	5586	5581	5561	5381	5632
65	5357	5493	5633	5467	5255
70	5576	5478	5658	5572	5349
75	5459	5481	5515	5708	5580
80	5527	5389	5579	5292	5514
85	5646	5600	5386	5412	5281
90	5348	5346	5715	5269	5496
95	5393	5438	5283	5405	5665

Appendix B – Test Setup Photograph

Refer to “2409RSU050-UT” file.

Appendix C – EUT Photograph

Refer to “2409RSU050-UE” file.

The End