FCC TEST REPORT

For

Hot Pepper Mobile Inc.

Smart Phone

Test Model: HPPL67A

Prepared for	:	Hot Pepper Mobile Inc.
Address	:	350 10th Ave 1000 Ste San Diego CA 92101-8705
Prepared by	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Address	:	101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel	:	(+86)755-82591330
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Web	:	www.LCS-cert.com
Mail	:	webmaster@LCS-cert.com
Date of receipt of test sample	:	September 12, 2024
Number of tested samples	:	2
Sample No.	:	A240912009-1, A240912009-2
Serial number	:	Prototype
Date of Test	:	September 12, 2024 ~ September 24, 2024
Date of Report	:	September 25, 2024

FCC TEST REPORT FCC CFR 47 PART 15 E (15.407)		
Report Reference No.	:	**LCSA08074161EG**
Date of Issue.....	:	September 25, 2024
Testing Laboratory Name	:	**Shenzhen LCS Compliance Testing Laboratory Ltd.**
Address.....	:	101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Testing Location/ Procedure.....	:	Full application of Harmonised standards ■ Partial application of Harmonised standards □ Other standard testing method □
Applicant's Name.....	:	**Hot Pepper Mobile Inc.**
Address.....	:	350 10th Ave 1000 Ste San Diego CA 92101-8705
Test Specification		
Standard	:	FCC CFR 47 PART 15E (15.407)
Test Report Form No.....	:	TRF-4-E-150 A/0
TRF Originator	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF.....	:	Dated 2011-03

EUT Description.....	:	**Smart Phone**
Trade Mark.....	:	Hot Pepper
Test Model	:	HPPL67A
Ratings.....	:	Input: 5.0V⎓1000mA For Adapter: Input:100-240V~, 50/60Hz, 0.3A Adapter:Output: 5.0V⎓1000mA DC 3.8V by Rechargeable Li-ion Battery, 3000mAh
Result	:	**Positive**

Compiled by:	**Supervised by:**	**Approved by:**
Jack Liu/Administrator	Cary Luo/ Technique principal	Gavin Liang/ Manager

FCC -- TEST REPORT

Test Report No. : **LCSA08074161EG**	September 25, 2024 Date of issue

EUT.....	: Smart Phone
Test Model.....	: HPPL67A
Applicant.....	**: Hot Pepper Mobile Inc.**
Address.....	: 350 10th Ave 1000 Ste San Diego CA 92101-8705
Telephone.....	: /
Fax.....	: /
Manufacturer.....	**: Hot Pepper Mobile Inc.**
Address.....	: 350 10th Ave 1000 Ste San Diego CA 92101-8705
Telephone.....	: /
Fax.....	: /
Factory.....	**: /**
Address.....	: /
Telephone.....	: /
Fax.....	: /

Test Result:	**Positive**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Revision History

Report Version	Issue Date	Revision Content	Revised By
000	September 25, 2024	Initial Issue	---

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	Smart Phone
Test Model	:	HPPL67A
Ratings	:	Input: 5.0V⎓1000mA For Adapter: Input:100-240V~, 50/60Hz, 0.3A Adapter:Output: 5.0V⎓1000mA DC 3.8V by Rechargeable Li-ion Battery, 3000mAh
Hardware Version	:	H326_MB_V2
Software Version	:	HPP-L67A-1.0.2
Bluetooth	:	
Frequency Range	:	2402MHz~2480MHz
Channel Number	:	79 channels for Bluetooth V4.1 (DSS) 40 channels for Bluetooth V4.1 (DTS)
Channel Spacing	:	1MHz for Bluetooth V4.1 (DSS) 2MHz for Bluetooth V4.1 (DTS)
Modulation Type	:	GFSK, π/4-DQPSK, 8-DPSK for Bluetooth V4.1 (DSS) GFSK for Bluetooth V4.1 (DTS)
Bluetooth Version	:	V4.1
Antenna Description	:	PIFA Antenna, 1.57dBi(Max.)
WIFI(2.4G Band)	:	
Frequency Range	:	2412MHz~2462MHz
Channel Spacing	:	5MHz
Channel Number	:	11 Channels for 20MHz bandwidth (2412~2462MHz) 7 Channels for 40MHz bandwidth (2422~2452MHz)
Modulation Type	:	IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna Description	:	PIFA Antenna, 1.57dBi(Max.)
WIFI(5.2G Band)	:	
Frequency Range	:	5180MHz~5240MHz
Channel Number	:	4 Channels for 20MHz bandwidth(5180MHz~5240MHz) 2 channels for 40MHz bandwidth(5190MHz~5230MHz)
Modulation Type	:	IEEE 802.11a/n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description	:	PIFA Antenna, 2.0dBi(Max.)
WIFI(5.3G Band)	:	

Frequency Range	:	5260MHz~5320MHz
Channel Number	:	4 Channels for 20MHz bandwidth(5260MHz~5320MHz) 2 channels for 40MHz bandwidth(5270MHz~5310MHz)
Modulation Type	:	IEEE 802.11a/n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description	:	PIFA Antenna, 2.0dBi(Max.)
WIFI(5.8G Band)	:	
Frequency Range	:	5745MHz~5825MHz
Channel Number	:	5 channels for 20MHz bandwidth(5745MHz~5825MHz) 2 channels for 40MHz bandwidth(5755MHz~5795MHz)
Modulation Type	:	IEEE 802.11a/n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description	:	PIFA Antenna, 2.0dBi(Max.)
2G	:	
Support Band	:	☒GSM 900 (EU-Band) ☒DCS 1800 (EU-Band) ☒GSM 850 (U.S.-Band) ☒PCS 1900 (U.S.-Band)
Release Version	:	R9
GPRS Class	:	Class 12
EGPRS Class	:	Class 12
Type Of Modulation	:	GMSK for GSM/GPRS; GMSK/8PSK for EGPRS
Antenna Description	:	PIFA Antenna -1.79dBi (max.) For GSM 850 0.98dBi (max.) For PCS 1900
3G	:	
Support Band	:	☒WCDMA Band II (U.S.-Band) ☒WCDMA Band IV (U.S.-Band) ☒WCDMA Band V (U.S.-Band)
Release Version	:	R99
Type Of Modulation	:	QPSK,16QAM
Antenna Description	:	PIFA Antenna 0.98dBi (max.) For WCDMA Band II 1.06dBi (max.) For WCDMA Band IV -1.79dBi (max.) For WCDMA Band V
LTE	:	
Support Band	:	☒E-UTRA Band 2(U.S.-Band) ☒E-UTRA Band 4(U.S.-Band) ☒E-UTRA Band 5(U.S.-Band) ☒E-UTRA Band 12(U.S.-Band) ☒E-UTRA Band 17(U.S.-Band) ☒E-UTRA Band 41(U.S.-Band) ☒E-UTRA Band 66(U.S.-Band)

☒E-UTRA Band 71(U.S.-Band)

LTE Release Version	:	R10
Type Of Modulation	:	QPSK/16QAM
Antenna Description	:	PIFA Antenna 0.98dBi (max.) For E-UTRA Band 2 1.06dBi (max.) For E-UTRA Band 4 -1.79dBi (max.) For E-UTRA Band 5 -2.03dBi (max.) For E-UTRA Band 12 -2.03dBi (max.) For E-UTRA Band 17 -2.35dBi (max.) For E-UTRA Band 41 1.06dBi (max.) For E-UTRA Band 66 -5.71dBi (max.) For E-UTRA Band 71
Power Class	:	Class 3
Extreme temp. Tolerance	:	-30°C to +50°C
Extreme vol. Limits	:	3.23VDC to 4.3VDC (nominal: 3.8VDC)

1.2. Support equipment List

Manufacturer	Description	Model	Serial Number	Certificate
Chongqing Lianmao Electronics Co..Ltd	Travel Charger	LM-201U-050100U50FCC	---	FCC

1.3 External I/O Cable

I/O Port Description	Quantity	Cable
Type-C USB Port	1	N/A
3.5mm Jack	1	N/A

1.4. Description of Test Facility

NVLAP Accreditation Code is 600167-0.

FCC Designation Number is CN5024.

CAB identifier is CN0071.

CNAS Registration Number is L4595.

Test Firm Registration Number: 254912.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.4:2014 and CISPR 16-1-4:2010 SVSWR requirement for radiated emission above 1GHz.

1.5. Statement of the Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

1.6. Measurement Uncertainty

No.	Item	Uncertainty
1	DFS Threshold (radiated)	±1.50dB
2	DFS Threshold (conducted)	±1.45dB
3	Temperature	±0.5°C
4	Humidity	±2%

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.7. Description of Test Modes

The EUT has been tested under operating condition.

Worst-Case data rates were utilized from preliminary testing of the Chipset, worst-case data rates used during the testing are as follows:

IEEE 802.11a Mode: 6 Mbps, OFDM.

IEEE 802.11n HT20 Mode: MCS0, OFDM.

IEEE 802.11n HT40 Mode: MCS0, OFDM.

IEEE 802.11ac VHT20 Mode: MCS0

IEEE 802.11ac VHT40 Mode: MCS0, OFDM.

1.8. Channel List and Frequency

U-NI-2A

Frequency Band	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
5260~5320MHz	52	5260	60	5300
	54	5270	62	5310
	56	5280	64	5320
	58	5290	/	/
For IEEE 802.11a/n HT20/ac VHT20, Channel 52, 60 and 64 were tested. For IEEE 802.11n HT40/ac VHT40, Channel 54 and 62 were tested.				

1.9. Conduted Output Power and EIRP

Mode	Frequency Band (MHz)	Maximum Conducted Output Power (dBm)	Antenna Gain (dBi)	Maximum EIRP (dBm)	Maximum EIRP (mW)
IEEE 802.11a	5260 – 5320	12.86	2.0	14.86	30.6196
IEEE 802.11n HT20	5260 – 5320	12.04	2.0	14.04	25.3513
IEEE 802.11ac VHT20	5260 – 5320	10.85	2.0	12.85	19.2752
IEEE 802.11n HT40	5270 – 5310	11.58	2.0	13.58	22.8034
IEEE 802.11ac VHT40	5270 – 5310	10.75	2.0	12.75	18.8365

Remark:
1. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW;

2. TEST METHODOLOGY

This report has been prepared to demonstrate compliance with the requirements for Dynamic Frequency Selection (DFS) as stated in FCC CFR 47 PART 15E(15.407). Testing was performed in accordance with the measurement procedure described in FCC KDB 905462 D02 v02 and KDB 905462 D03.

3. SYSTEM TEST CONFIGURATION

3.1. EUT Exercise Software

The system was configured for testing in a continuous transmits condition and change test channels by Input adb command to send signal test provided by application.

3.2. Special Accessories

N/A

3.3. Block Diagram/Schematics

Please refer to the related document

3.4. Equipment Modifications

Shenzhen LCS Compliance Testing Laboratory Ltd. has not done any modification on the EUT.

3.5. Test Setup

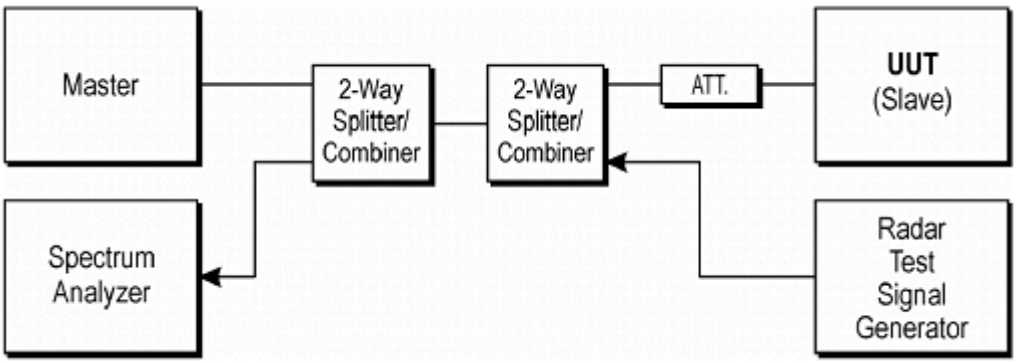


Figure 7-1. Test Setup

3.6. Procedure

The KDB905462 D02 v02 describes a conducted test setup. Each one channel selected between bands 2, band 3 is chosen for the testing.

1. The radar pulse generator is setup to provide a pulse at the frequency that the Master and Client are operating. A Type 0 radar pulse with a 1 μs pulse width and a 1428 μs PRI is used for the testing.
2. The vector signal generator is adjusted to provide the radar burst (18 pulses) at a level of approximately -62 dBm at the antenna of the Master device.
3. The Client Device (EUT) is set up per the diagram in Figure 3-1 and communications between the Master device and the Client is established.
4. The MPEG file specified by the FCC (”6½ Magic Hours”) is streamed from the “file computer” through the Master to the Slave Device and played in full motion video using Media Player Classic Ver.6.4.8.6 in order to properly load the network.

5. The spectrum analyzer is set to record about 15 sec window to any transmissions occurring up to and after 10 sec.
6. The system is again setup and the monitoring time is shortened in order to capture the Channel Closing Transmission Time. This time is measured to insure that the Client ceases transmission within 200 ms and the aggregate of emissions occurring after 200 ms up to 10 sec do not exceed 60 ms.

(Note: the channel may be different since the Master and Client have changed channels due to the detection of the initial radar pulse.)

7. After the initial radar burst the channel is monitored for 30 minutes to insure no transmissions or beacons occur. A second monitoring setup is used to verify that the Master and Client have both moved to different channels.

4. SUMMARY OF TEST RESULTS

Applied Standard: FCC CFR 47 PART 15.407				
Requirement	Operational Mode			RESULTS
	Master	Client with radar detection	Client without radar detection	
Non-Occupancy Period	Required	Required	Not required	Not required
DFS Detection Threshold	Required	Required	Not required	Not required
Channel Availability Check Time	Required	Not required	Not required	Not required
Channel Closing Transmission Time	Required	Required	Required	Pass
Channel Move Time	Required	Required	Required	Pass
U-NII Detection Bandwidth	Required	Required	Not required	Not required

Note:The device belongs to client without radar detection categorys.

5. DESCRIPTION OF DYNAMIC FREQUENCY SELECTION TEST

5.1. Requirements

KDB905462 D02 v02 (04/08/2016) the following are the requirements for Client Devices:

1) A Client Device will not transmit before having received appropriate control signals from a Master Device.

2) A Client Device will stop all its transmissions whenever instructed by a Master Device to which it is associated and will meet the Channel Move Time and Channel Closing Transmission Time requirements.

The Client Device will not resume any transmissions until it has again received control signals from a Master Device.

3) If a Client Device is performing In-Service Monitoring and detects a Radar Waveform above the DFS Detection Threshold, it will inform the Master Device. This is equivalent to the Master Device detecting the Radar Waveform and d) through f) of section 5.1.1(KDB905462 D02 v02) apply.

4) Irrespective of Client Device or Master Device detection the Channel Move Time and Channel Closing Transmission Time requirements remain the same.

5) Timing plots are required with calculations demonstrating a minimum channel loading of approximately 17% or greater.

5.2. Limit

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.

6. 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 and 2)
EIRP≥ 200 milliwatt	-64 dBm
EIRP< 200 milliwatt and Power pectral < 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 0dBi receive antenna.

Carlibration:

The EUT is slave equipment with a max gain is 2.0dBi;

For a detection threshold level of -62dBm and the master (Brand: Sanmsung), Model: S2LF812265, antenna gain is 3dBi, required detetion threshold is -59dBm (=-62+3)

Maximum transmit power is less than 200 milliwatt in this report, so detection threshold level is -62dBm.

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.

Note 3: EIRP is based on the highest antenna. For MIMO devices refer to KDB Publication 662911 D01.

7. DFS TEST SIGNALS

As the EUT is a Client Device with no Radar Detection only one type radar pulse is required for the testing. Radar Pulse type 0 was used in the evaluation of the Client device for the purpose of measuring the Channel Move Time and the Channel Closing Transmission Time.

Table 5 – 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 5a	Roundup $\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot10^6}{PRI_{\mu sec}}\right)\right\}$	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 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.

Table 6 – 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.

Table 7 – 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 5a - 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

Manufacturer's Statement Regarding Uniform Channel Spreading

The end product implements an automatic channel selection feature at startup such that operation commences on channels distributed across the entire set of allowed 5GHz channels. This feature will ensure uniform spreading is achieved while avoiding non-allowed channels due to prior radar events.

TEST AND MEASUREMENT SYSTEM

System Overview

The measurement system is based on a conducted test method.
The short pulse and long pulse signal generating system utilizes the NTIA software and the same manufacturer / model Vector Signal Generator as the NTIA. The hopping signal generating system utilizes the simulated hopping method.

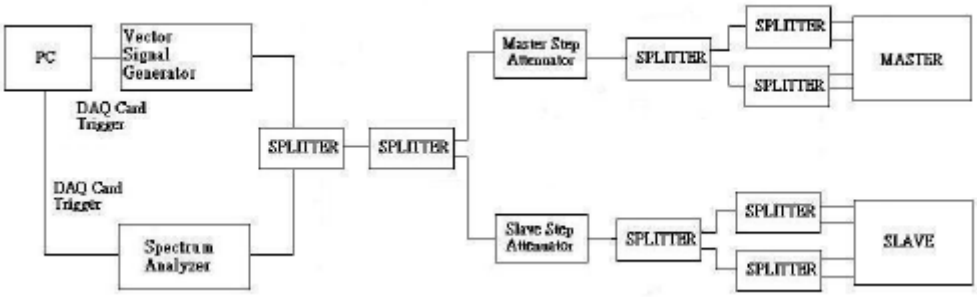
The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution. The short pulse types 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time. The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List, with the initial starting point randomized at run-time.

The signal monitoring equipment consists of a spectrum analyzer with the capacity to display 8192 bins on the horizontal axis. A time-domain resolution of 2 msec / bin is achievable with a 16 second sweep time, meeting the 10 second short pulse reporting criteria. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold. A time-domain resolution of 3 msec / bin is achievable with a 24 second sweep time, meeting the 22 second long pulse reporting criteria and allowing a minimum of 10 seconds after the end of the long pulse waveform.

Frequency Hopping Signal Generation

The hopping burst generator is a High Speed Digital I/O card plugged into the control computer. This card utilizes an independent hardware clock reference therefore the output pulse timing is unaffected by host computer operating system latency times.
The software selects the hopping sequence as a 100-length segment of the August 2005 NTIA hopping frequency list. This list contains 274 unique pseudorandom sequences. Each such sequence contains 475 frequencies ordered on a random without replacement basis. Each successive trial uses a contiguous 100-length segment from within each successive 475-length sequence in the list. The initial starting point within the list is randomized at run-time such that the first 100-length segment is entirely contained within the first 475-length sequence. The starting point of each successive trial is incremented by 475.
Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of FCC 06-96 APPENDIX. The frequency of the signal generator is incremented in 1 MHz steps from FL to FH for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

Conducted Method System Block Diagram



Measurement System Frequency Reference
Lock the signal generator and the spectrum analyzer to the same reference source as follows: Connect the 10 MHz OUT (SWITCHED) on the spectrum analyzer to the 10 MHz IN on the signal generator and set the spectrum analyzer 10 MHz Out to On.

System Calibration
Connect the spectrum analyzer to the test system in place of the master device. Set the signal generator to CW mode. Adjust the amplitude of the signal generator to yield a measured level of –62 dBm on the spectrum analyzer.
Without changing any of the instrument settings, reconnect the spectrum analyzer to the Common port of the Spectrum Analyzer Combiner/Divider and connect a 50 ohm load to the Master Device port of the test system. Measure the amplitude and calculate the difference from –62 dBm. Adjust the Reference Level Offset of the spectrum analyzer to this difference. Confirm that the signal is displayed at –62 dBm. Readjust the RBW and VBW to 3 MHz, set the span to 10 MHz, and confirm that the signal is still displayed at –62 dBm.
The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –62 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

Set the signal generator to produce a radar waveform, trigger a burst manually and measure the level on the spectrum analyzer. Readjust the amplitude of the signal generator as required so that the peak level of the waveform is at a displayed level equal to the required or desired interference detection threshold. Separate signal generator amplitude settings are determined as required for each radar type.

Interference Detection Threshold Adjustment

Download the applicable radar waveforms to the signal generator. Select the radar waveform, trigger a burst manually and measure the amplitude on the spectrum analyzer. Readjust the amplitude of the signal generator as required so that the peak level of the waveform is at a displayed level equal to the required or desired

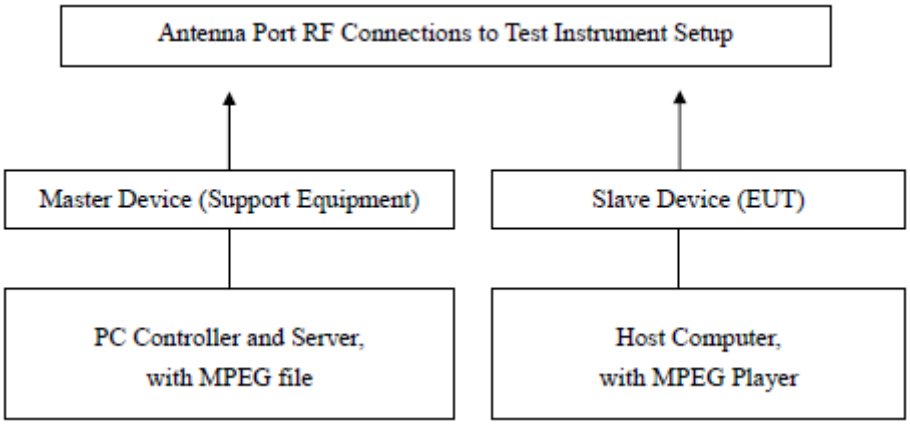
interference detection threshold. Separate signal generator amplitude settings are determined as required for each radar type.

Adjustment Of Displayed Traffic Level

Establish a link between the Master and Slave, adjusting the Link Step Attenuator as needed to provide a suitable received level at the Master and Slave devices. Stream the video test file to generate WLAN traffic. Confirm that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold. Confirm that the displayed traffic is from the Master Device. For Master Device testing confirm that the displayed traffic does not include Slave Device traffic. For Slave Device testing confirm that the displayed traffic does not include Master Device traffic.

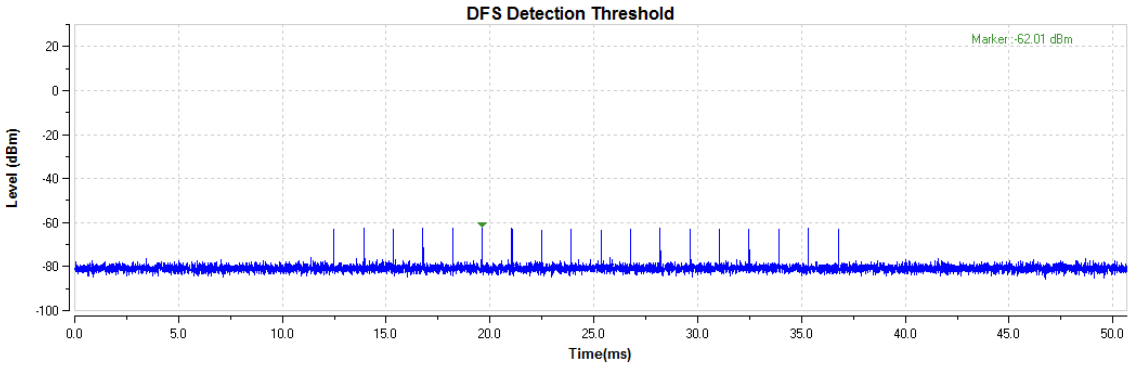
If a different setting of the Master Step Attenuator is required to meet the above conditions, perform a new System Calibration for the new Master Step Attenuator setting.

Test Setup

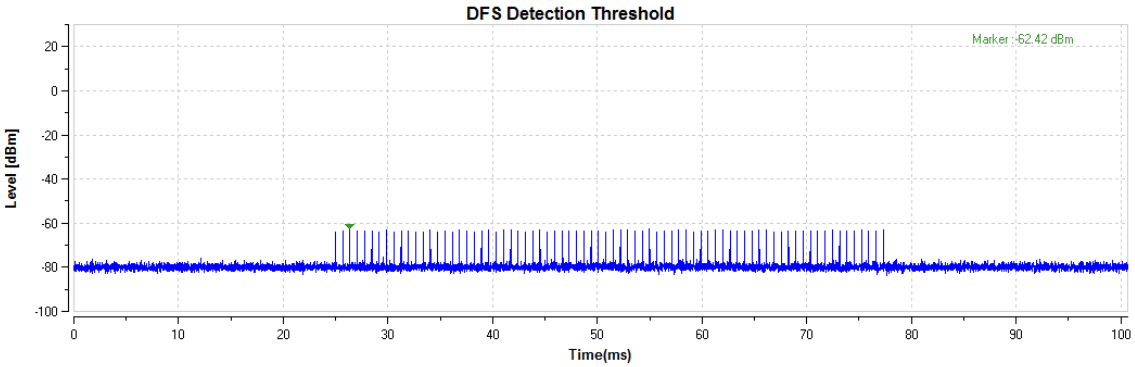


8. TEST RESULT

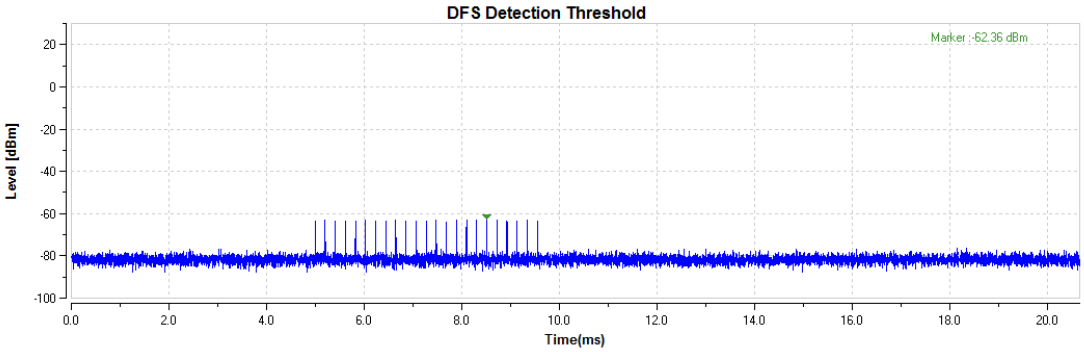
PLOTS OF RADAR WAVEFORMS



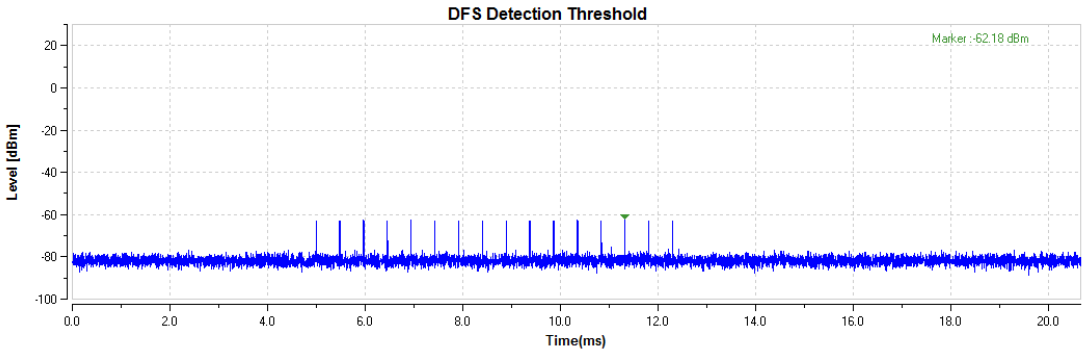
Radar Singal 0



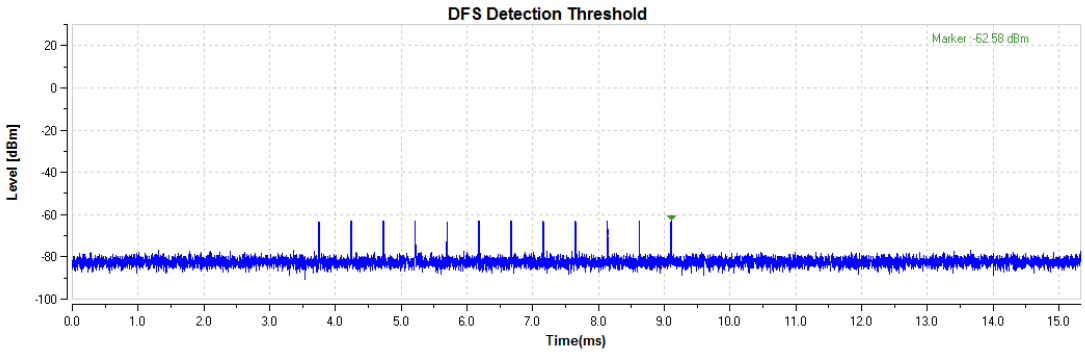
Radar Singal 1



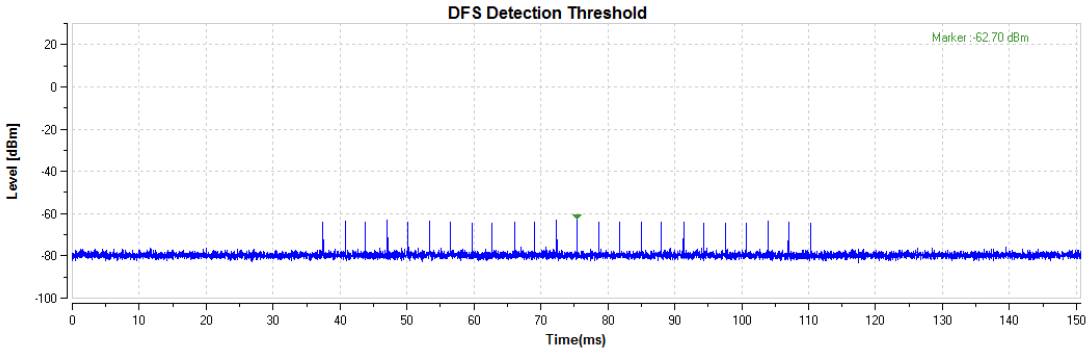
Radar Singal 2



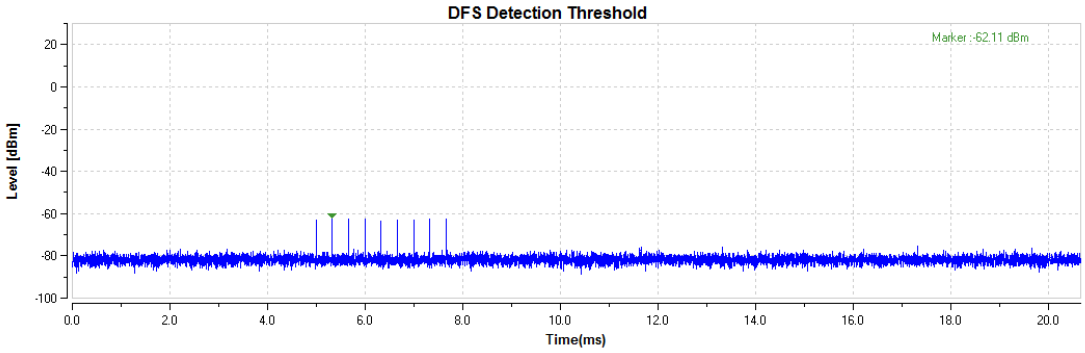
Radar Singal 3



Radar Singal 4



Radar Singal 5



Radar Singal 6

Radar Singal 0

Trial ID	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Legth (us)
0	Type 0	1	1414	18	25702
1	Type 0	1	1414	18	25702
2	Type 0	1	1414	18	25702
3	Type 0	1	1414	18	25702
4	Type 0	1	1414	18	25702
5	Type 0	1	1414	18	25702
6	Type 0	1	1414	18	25702
7	Type 0	1	1414	18	25702
8	Type 0	1	1414	18	25702
9	Type 0	1	1414	18	25702
10	Type 0	1	1414	18	25702
11	Type 0	1	1414	18	25702
12	Type 0	1	1414	18	25702
13	Type 0	1	1414	18	25702
14	Type 0	1	1414	18	25702
15	Type 0	1	1414	18	25702
16	Type 0	1	1414	18	25702
17	Type 0	1	1414	18	25702
18	Type 0	1	1414	18	25702
19	Type 0	1	1414	18	25702
20	Type 0	1	1414	18	25702
21	Type 0	1	1414	18	25702
22	Type 0	1	1414	18	25702
23	Type 0	1	1414	18	25702
24	Type 0	1	1414	18	25702
25	Type 0	1	1414	18	25702
26	Type 0	1	1414	18	25702
27	Type 0	1	1414	18	25702
28	Type 0	1	1414	18	25702
29	Type 0	1	1414	18	25702

Radar Singal 1

Trial ID	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Legth (us)	Pulse Repection Frequency (Pulses Per Second)	Pulse Repection Interval (Microseconds)
0	Type A	1	936	56	53464	1065.5	937.4
1	Type A	1	693	73	53043	1432.9	698.3
2	Type A	1	615	85	53145	1616.2	616.3
3	Type A	1	536	99	53259	1859.4	538.6
4	Type A	1	876	61	53556	1137.3	876.1
5	Type A	1	3063	16	55184	326.5	326.4
6	Type A	1	636	84	52952	1566.7	1566.5
7	Type A	1	913	55	53239	1088.7	1088.7
8	Type A	1	837	64	52793	1193.8	1193.9
9	Type A	1	853	59	53191	1164.0	1163.7
10	Type A	1	798	69	53466	1254.0	1254.0
11	Type A	1	713	70	53126	1390.6	1390.7
12	Type A	1	577	93	53175	1730.1	1730.5
13	Type A	1	593	85	53217	1671.3	1671.5
14	Type A	1	557	96	53009	1791.6	1791.4
15	Type B	1	2533	20	53253		
16	Type B	1	965	56	53129		
17	Type B	1	824	63	52925		
18	Type B	1	2498	21	55019		
19	Type B	1	2589	17	54489		
20	Type B	1	1113	49	53471		
21	Type B	1	1299	39	53378		
22	Type B	1	3046	21	54811		
23	Type B	1	1618	28	53587		
24	Type B	1	2879	22	54683		
25	Type B	1	1020	46	53398		
26	Type B	1	2484	23	54669		
27	Type B	1	1596	31	52797		
28	Type B	1	1170	46	53910		
29	Type B	1	1172	43	52962		

Radar Singal 2

Trial ID	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Legth (us)
0	Type 2	2.5	177	26	4652
1	Type 2	1.6	202	20	4756
2	Type 2	0.1	227	23	5518
3	Type 2	5.5	199	28	5800
4	Type 2	2.1	212	29	5993
5	Type 2	3.1	218	24	5770
6	Type 2	2.4	202	26	5303
7	Type 2	1.7	187	22	4795
8	Type 2	3.6	163	27	4265
9	Type 2	-0.5	151	20	3583
10	Type 2	4.7	210	30	5674
11	Type 2	2.7	193	25	5823
12	Type 2	3.3	161	27	4213
13	Type 2	1.5	192	22	4920
14	Type 2	4.0	162	30	4728
15	Type 2	3.6	201	25	5276
16	Type 2	3.6	167	30	4873
17	Type 2	3.4	214	24	5423
18	Type 2	0.8	188	25	4964
19	Type 2	2.4	160	22	4146
20	Type 2	2.8	149	28	4051
21	Type 2	1.2	171	22	4396
22	Type 2	5.9	196	32	5659
23	Type 2	1.6	196	23	5246
24	Type 2	3.9	177	26	4452
25	Type 2	0.6	199	18	4730
26	Type 2	4.0	154	28	4186
27	Type 2	3.5	153	26	4550
28	Type 2	1.5	222	26	5601
29	Type 2	4.5	156	27	4450

Radar Singal 3

Trial ID	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Legth (us)
0	Type 3	7.5	354	16	6034
1	Type 3	7.3	482	13	7787
2	Type 3	5.2	342	15	5502
3	Type 3	12.3	287	18	5182
4	Type 3	7.2	231	19	4141
5	Type 3	9.0	430	16	7339
6	Type 3	7.5	206	16	3519
7	Type 3	6.9	438	14	7526
8	Type 3	9.1	440	18	7464
9	Type 3	4.4	218	13	3563
10	Type 3	11.3	212	21	3748
11	Type 3	7.8	456	15	8329
12	Type 3	9.5	442	18	7498
13	Type 3	6.6	318	13	5163
14	Type 3	8.9	298	19	5347
15	Type 3	9.3	410	16	7002
16	Type 3	8.2	325	19	5833
17	Type 3	9.7	269	16	4605
18	Type 3	6.2	347	16	5931
19	Type 3	8.4	404	13	6539
20	Type 3	8.0	374	19	6715
21	Type 3	6.6	252	14	4060
22	Type 3	11.0	278	21	5936
23	Type 3	6.0	271	13	4719
24	Type 3	10.0	320	18	5390
25	Type 3	4.3	254	11	4152
26	Type 3	9.9	212	19	3799
27	Type 3	8.9	268	16	4892
28	Type 3	7.0	265	18	4489
29	Type 3	8.3	323	15	5108

Radar Singal 4

Trial ID	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Legth (us)
0	Type 4	15.3	353	15	4968
1	Type 4	12.6	482	9	5839
2	Type 4	11.7	343	12	4470
3	Type 4	21.8	287	16	4607
4	Type 4	15.7	231	16	3451
5	Type 4	16.5	429	12	6046
6	Type 4	15.4	205	14	2897
7	Type 4	13.7	438	10	5754
8	Type 4	17.0	440	15	6146
9	Type 4	9.9	218	109	2671
10	Type 4	19.7	212	18	3124
11	Type 4	17.0	458	12	7402
12	Type 4	17.1	442	15	6175
13	Type 4	13.5	318	10	4194
14	Type 4	18.1	298	17	4753
15	Type 4	16.6	410	13	5766
16	Type 4	17.9	325	17	5185
17	Type 4	16.3	269	12	3521
18	Type 4	13.3	347	13	4884
19	Type 4	14.9	404	28	5312
20	Type 4	16.7	374	152	5596
21	Type 4	12.9	249	10	3298
22	Type 4	21.0	278	19	4388
23	Type 4	13.5	273	9	3887
24	Type 4	16.8	318	14	4122
25	Type 4	9.3	252	7	3113
26	Type 4	18.4	212	16	3166
27	Type 4	18.5	268	14	4347
28	Type 4	13.5	265	14	3433
29	Type 4	19.3	281	13	4256

Radar Singal 5_5530MHz

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
0	Type 5	15	0.8	12	5.53	-		
	Burst ID	Pulse Width (us)	PRI (us)	Chirp Width(MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
	0	636185	77.8	13	2	1665	1477	-
	1	32674	51.9	13	1	1074	-	-
	2	226294	63.8	13	1	1584	-	-
	3	417976	96.6	13	3	1682	1786	1843
	4	611152	85.9	13	3	1795	1215	1729
	5	8789	73.7	13	2	1198	1549	-
	6	201917	77.2	13	2	1837	1819	-
	7	395530	68.4	13	2	1587	1114	-
	8	588564	76.7	13	2	2000	1155	-
	9	783794	53.2	13	1	1147	-	-
	10	177933	85.7	13	3	1433	1695	1394
	11	370624	94.3	13	3	1670	1426	1935
	12	564893	77.6	13	2	1294	1671	-
	13	759583	65.7	13	1	1512	-	-
	14	154262	93.5	13	3	1444	1130	1468
1	Type 5	8	1.5	12	5.53			
	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	653020	75	5	2	1880	1527	-
	1	1015643	99.4	5	3	1401	1262	1257
	2	1379398	67.4	5	2	1531	1403	-
	3	245489	73.6	5	2	1449	1041	-
	4	609113	65.9	5	1	1432	-	-
	5	970852	83.8	5	3	1356	1292	1419
	6	1335913	65.5	5	1	1543	-	-
	7	200406	98.6	5	3	1548	1796	1728

Trial ID	Radar Type	Number of Bursts	Burst Period(s)	Wave from Length (s)	Center Frequency(GHz)	-		
2	Type 5	11	1.090909	12	5.53			
	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	409565	73.8	9	2	1806	1538	-
	1	673692	69.5	9	2	1117	1649	-
	2	938562	51.9	9	1	1651	-	-
	3	113209	84.6	9	3	1976	1032	1271
	4	376726	95.4	9	3	1060	1903	1388
	5	641212	68	9	2	1368	1351	-
	6	903714	89.6	9	3	1338	1514	1573
	7	80863	81.9	9	2	1022	1689	-
	8	344067	88.3	9	3	1810	1330	1838
	9	609331	53.7	9	1	1597	-	-
	10	871542	91.3	9	3	1961	1106	1001
3	Type 5	20	0.6	12	5.53			
	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	26541	68.1	19	2	1339	1355	-
	1	171821	58.7	19	1	1251	-	-
	2	316229	75.3	19	2	1136	1640	-
	3	461864	56.4	19	1	1753	-	-
	4	8677	99.7	19	3	1196	1708	1159
	5	153995	57.7	19	1	1013	-	-
	6	299238	59.5	19	1	1072	-	-
	7	443177	80	19	2	1482	1369	-
	8	587671	82	19	2	1993	1197	-
	9	135674	82.8	19	2	1883	1005	-
	10	279928	88	19	3	1061	1928	1101
	11	424279	93.2	19	3	1207	1907	1223
	12	570132	70.4	19	2	1526	1360	-
	13	117439	95.3	19	3	1171	1955	1775
	14	262502	81.9	19	2	1690	1545	-
	15	406573	98.5	19	3	1975	1169	1062
	16	553328	65	19	1	1767	-	-
	17	99799	85.4	19	3	1011	1637	1425
	18	244095	91.6	19	3	1878	1445	1325
	19	390012	67.3	19	2	1091	1218	-

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
4	Type 5	17	0.705882	12	5.53			
	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	629614	67.9	16	2	1320	1133	-
	1	96856	62.3	16	1	1957	-	-
	2	267719	53.3	16	1	1592	-	-
	3	436784	90	16	3	1900	1153	1346
	4	608289	77.1	16	2	1166	1646	-
	5	75610	83.9	16	3	1278	1232	1459
	6	245638	89.1	16	3	1240	1384	1939
	7	416355	81.8	16	2	1833	1676	-
	8	588736	50.3	16	1	1075	-	-
	9	54571	87.1	16	3	1116	1996	1756
	10	225175	71.3	16	2	1225	1815	-
	11	394825	97.5	16	3	1884	1465	1132
	12	565361	90.6	16	3	1561	1040	1354
	13	33643	86.3	16	3	1596	1183	1792
	14	203957	97.6	16	3	1365	1073	1361
	15	373812	84.7	16	3	1021	1718	1854
	16	544060	99.7	16	3	1150	1244	1988

5	Type 5	14	0.857143	12	5.53			
	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	15438	92.9	12	3	1085	1564	1407
	1	222486	67.7	12	2	1744	1747	-
	2	430731	65.8	12	1	1092	-	-
	3	637784	56.3	12	1	1851	-	-
	4	845342	53.7	12	1	1727	-	-
	5	196720	83.5	12	3	1679	1930	1025
	6	404955	65.8	12	1	1519	-	-
	7	610711	85.9	12	3	1134	1034	1808
	8	818057	76.3	12	2	1606	1926	-
	9	171459	81.5	12	2	1891	1714	-
	10	377969	89.4	12	3	1310	1594	1827
	11	586875	63.4	12	1	1568	-	-
	12	792834	69.6	12	2	1307	1925	-
	13	146044	74.5	12	2	1264	1846	-

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
6	Type 5	15	0.8	12	5.53			
	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	329022	96.6	13	3	1182	1609	1581
	1	521718	96.7	13	3	1829	1799	1154
	2	714222	86.5	13	3	1923	1396	1865
	3	112450	73.3	13	2	1908	1318	-
	4	306283	55.8	13	1	1688	-	-
	5	500239	55.4	13	1	1145	-	-
	6	690932	85.3	13	3	1336	1504	1820
	7	88645	79.4	13	2	1344	1893	-
	8	282508	65.7	13	1	1476	-	-
	9	475842	68.6	13	2	1008	1028	-
	10	667887	77.7	13	2	1972	1835	-
	11	64845	79.6	13	2	1882	1331	-
	12	257755	94.9	13	3	1830	1070	1349
	13	452335	61.4	13	1	1451	-	-
	14	643395	90.6	13	3	1233	1562	1887
7	Type 5	12	1	12	5.53			
	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	51446	52.6	10	1	1210	-	-
	1	292696	84.1	10	3	1314	1725	1529
	2	533989	97.7	10	3	1139	1868	1805
	3	775564	97.3	10	3	1341	1446	1755
	4	21542	98.8	10	3	1544	1386	1302
	5	263385	72.2	10	2	1771	1184	-
	6	505581	67.6	10	2	1175	1027	-
	7	747058	75.7	10	2	1026	1871	-
	8	989976	60.9	10	1	1798	-	-
	9	234024	64.2	10	1	1138	-	-
	10	475207	78.8	10	2	1784	1604	-
	11	715825	87.5	10	3	1511	1712	1683

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
8	Type 5	14	0.857143	12	5.53			
	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	823112	54.1	13	1	1415	-	-
	1	174965	50.7	13	1	1221	-	-
	2	382216	52.3	13	1	1974	-	-
	3	587395	99.8	13	3	1558	1696	1949
	4	796897	68.4	13	2	1014	1099	-
	5	149042	80.8	13	2	1736	1505	-
	6	356750	62.5	13	1	1778	-	-
	7	563824	74.8	13	2	1149	1204	-
	8	772314	50.8	13	1	1049	-	-
	9	123796	54	13	1	1417	-	-
	10	331215	63	13	1	1730	-	-
	11	537402	91.8	13	3	1143	1270	1347
	12	744805	79.3	13	2	1274	1992	-
	13	98172	64.3	13	1	1937	-	-
9	Type 5	8	1.5	12	5.53			
	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	535615	63.4	6	1	1043	-	-
	1	898668	52	6	1	1863	-	-
	2	1259235	97.2	6	3	1973	1605	1583
	3	127106	78.7	6	2	1466	1743	-
	4	490358	74.2	6	2	1280	1219	-
	5	852409	88.7	6	3	1293	1934	1273
	6	1217152	54.3	6	1	1991	-	-
	7	82296	95.4	6	3	1580	1555	1791

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
10	Type 5	17	0.705882	12	5.4979			
	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	209249	73.7	16	2	1208	1497	-
	1	378386	97.4	16	3	1942	1754	1613
	2	548411	91.7	16	3	1999	1702	1462
	3	17733	66.2	16	1	1393	-	-
	4	187952	70.8	16	2	1968	1821	-
	5	359277	52.3	16	1	1740	-	-
	6	528886	78.9	16	2	1308	1984	-
	7	700166	70.9	16	2	1050	1358	-
	8	167197	75.6	16	2	1437	1430	-
	9	338262	59.1	16	1	1697	-	-
	10	508324	77	16	2	1397	1304	-
	11	678689	67.9	16	2	1803	1083	-
	12	146031	81.2	16	2	1720	1932	-
	13	316923	78.7	16	2	1247	1121	-
	14	488056	63.3	16	1	1634	-	-
	15	657326	68.9	16	2	1849	1423	-
	16	125509	59.3	16	1	1093	-	-

11	Type 5	19	0.631579	12	5.4991			
	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	263736	98.9	19	3	1381	1680	1488
	1	416459	82.3	19	2	1716	1855	-
	2	567902	86.7	19	3	1211	1400	1919
	3	92979	89.7	19	3	1861	1068	1282
	4	245155	98.6	19	3	1507	1194	1461
	5	397609	71.1	19	2	1921	1789	-
	6	551431	55.9	19	1	1947	-	-
	7	74413	67.9	19	2	1350	1372	-
	8	226559	84.4	19	3	1203	1107	1443
	9	380056	58.8	19	1	1715	-	-
	10	533408	65.6	19	1	1017	-	-
	11	55547	78.5	19	2	1911	1704	-
	12	207876	82.3	19	2	1845	1686	-
	13	359771	90.1	19	3	1938	1071	1266
	14	511297	90.2	19	3	1989	1089	1950
	15	36803	83.1	19	2	1943	1406	-
	16	189652	58.8	19	1	1742	-	-
	17	341809	77	19	2	1187	1657	-
	18	495737	55	19	1	1012	-	-

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
12	Type 5	15	0.8	12	5.4967			
	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	22911	58.1	13	1	1929	-	-
	1	216473	52.1	13	1	1910	-	-
	2	410004	59.9	13	1	1971	-	-
	3	603671	60.2	13	1	1812	-	-
	4	794160	95.9	13	3	1399	1906	1608
	5	192251	79.9	13	2	1626	1859	-
	6	385590	78.5	13	2	1238	1917	-
	7	579862	53.8	13	1	1763	-	-
	8	773423	64.7	13	1	1800	-	-
	9	168898	61.4	13	1	1390	-	-
	10	361606	83.2	13	2	1692	1858	-
	11	553866	84.7	13	3	1533	1677	1638
	12	747241	88.7	13	3	1703	1528	1058
	13	144710	78.3	13	2	1258	1951	-
	14	337856	69.3	13	2	1731	1717	-
13	Type 5	12	1	12	5.4955			
	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	664275	75.3	10	2	1994	1612	-
	1	907886	56.3	10	1	1456	-	-
	2	151316	67.7	10	2	1617	1185	-
	3	393746	55.6	10	1	1337	-	-
	4	635093	75.2	10	2	1421	1267	-
	5	876993	76.3	10	2	1359	1305	-
	6	121278	85.7	10	3	1547	1362	1924
	7	362696	98.4	10	3	1873	1550	1249
	8	604342	86.4	10	3	1779	1439	1046
	9	846453	93.6	10	3	1059	1031	1452
	10	91871	63.3	10	1	1328	-	-
	11	333050	92.4	10	3	1412	1673	1322

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
14	Type 5	19	0.631579	12	5.4987			
	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	361323	93.3	18	3	1983	1912	1535
	1	515261	69.1	18	2	1102	1794	-
	2	39025	86.9	18	3	1044	1152	1148
	3	190900	84.9	18	3	1894	1948	1118
	4	343941	72.3	18	2	1094	1916	-
	5	497624	51.7	18	1	1447	-	-
	6	20319	58.3	18	1	1429	-	-
	7	172999	60.8	18	1	1979	-	-
	8	325872	57.1	18	1	1641	-	-
	9	475841	88.9	18	3	1886	1964	1489
	10	1489	72	18	2	1909	1297	-
	11	153647	90.9	18	3	1261	1566	1370
	12	307096	59.8	18	1	1552	-	-
	13	458804	70	18	2	1759	1291	-
	14	610798	67.2	18	2	1625	1881	-
	15	134759	91.2	18	3	1382	1832	1661
	16	288306	56.5	18	1	1483	-	-
	17	441296	51.2	18	1	1237	-	-
	18	592780	74.1	18	2	1471	1245	-

15	Type 5	14	0.857143	12	5.4963			
	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	158286	76.9	12	2	1110	1140	-
	1	366024	50.2	12	1	1316	-	-
	2	573452	62.9	12	1	1520	-	-
	3	780619	64.7	12	1	1902	-	-
	4	132455	83.8	12	3	1410	1097	1621
	5	340207	65.4	12	1	1944	-	-
	6	548208	53.2	12	1	1024	-	-
	7	755333	51.7	12	1	1603	-	-
	8	107117	78.7	12	2	1804	1168	-
	9	314500	72.4	12	2	1030	1343	-
	10	522447	53.8	12	1	1327	-	-
	11	728517	73.6	12	2	1524	1553	-
	12	81611	66.7	12	2	1722	1122	-
	13	288948	82.5	12	2	1404	1019	-

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
16	Type 5	20	0.6	12	5.4995			
	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	345766	87.6	20	3	1565	1055	1840
	1	490019	85.2	20	3	1735	1541	1408
	2	39073	84.8	20	3	1534	1889	1463
	3	183923	77.9	20	2	1749	1460	-
	4	328777	76.5	20	2	1518	1485	-
	5	474728	60.9	20	1	1540	-	-
	6	21394	83	20	2	1080	1010	-
	7	165992	80.4	20	2	1824	1752	-
	8	310973	67.5	20	2	1764	1181	-
	9	456884	62.1	20	1	1495	-	-
	10	3515	86.4	20	3	1773	1966	1263
	11	147928	84.3	20	3	1593	1188	1788
	12	293225	76.9	20	2	1226	1537	-
	13	436922	95.8	20	3	1192	1298	1844
	14	584015	55.2	20	1	1644	-	-
	15	130832	59	20	1	1402	-	-
	16	274684	94.5	20	3	1296	1700	1283
	17	418579	91.9	20	3	1970	1978	1165
	18	563464	85.2	20	3	1732	1551	1189
	19	112787	69.5	20	2	1038	1224	-

17	Type 5	12	1	12	5.4955			
	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	429224	86.4	10	3	1259	1918	1455
	1	670241	92.2	10	3	1598	1719	1895
	2	912880	80.4	10	2	1816	1899	-
	3	158603	54.3	10	1	1335	-	-
	4	400824	53.1	10	1	1303	-	-
	5	641915	69.4	10	2	1503	1546	-
	6	883823	69.1	10	2	1279	1639	-
	7	128373	100	10	3	1375	1438	1595
	8	370379	79.6	10	2	1239	1705	-
	9	611194	88.4	10	3	1374	1579	1623
	10	855685	53.3	10	1	1016	-	-
	11	98897	65.3	10	1	1709	-	-

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
18	Type 5	14	0.857143	12	5.4963			
	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	292143	55.3	12	1	1920	-	-
	1	499633	58.3	12	1	1797	-	-
	2	706377	72.3	12	2	1610	1039	-
	3	58989	84.8	12	3	1131	1761	1721
	4	266161	82.5	12	2	1875	1431	-
	5	474469	63.3	12	1	1095	-	-
	6	680544	80	12	2	1119	1913	-
	7	33519	90.3	12	3	1660	1853	1123
	8	240319	91.1	12	3	1539	1783	1172
	9	447400	96.6	12	3	1525	1036	1385
	10	654516	82.7	12	2	1710	1990	-
	11	8083	50.7	12	1	1234	-	-
	12	215435	78.4	12	2	1047	1109	-
	13	421325	99.5	12	3	1299	1965	1869
19	Type 5	12	1	12	5.4955			
	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	733725	88.6	10	3	1501	1067	1927
	1	977882	57.4	10	1	1723	-	-
	2	221197	96.6	10	3	1086	1658	1324
	3	462915	69.7	10	2	1751	1945	-
	4	705071	77.9	10	2	1642	1317	-
	5	947923	62	10	1	1866	-	-
	6	191373	88.4	10	3	1997	1077	1366
	7	432561	97.3	10	3	1790	1896	1367
	8	674004	96.2	10	3	1391	1787	1672
	9	915842	95.4	10	3	1020	1892	1414
	10	162176	54.8	10	1	1084	-	-
	11	403553	80.4	10	2	1850	1436	-

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
20	Type 5	16	0.75	12	5.5625			
	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	483470	74.7	15	2	1619	1611	-
	1	666072	57.1	15	1	1560	-	-
	2	98810	91.9	15	3	1392	1475	1276
	3	279914	83.1	15	2	1809	1772	-
	4	462536	50.7	15	1	1003	-	-
	5	642324	79.2	15	2	1574	1600	-
	6	76831	58.7	15	1	1186	-	-
	7	257785	71	15	2	1521	1567	-
	8	438554	79	15	2	1777	1960	-
	9	620397	68.5	15	2	1284	1428	-
	10	54310	73.5	15	2	1904	1352	-
	11	235506	70.5	15	2	1864	1115	-
	12	417036	76.6	15	2	1045	1300	-
	13	597974	81.2	15	2	1160	1675	-
	14	32086	61.8	15	1	1277	-	-
	15	212751	94.9	15	3	1450	1206	1860
21	Type 5	12	1	12	5.5649			
	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	526149	78.5	9	2	1653	1698	-
	1	767135	89.8	9	3	1174	1962	1167
	2	12955	59.4	9	1	1982	-	-
	3	254612	79.6	9	2	1633	1890	-
	4	496588	76	9	2	1112	1811	-
	5	739728	53.6	9	1	1144	-	-
	6	980872	80.9	9	2	1220	1053	-
	7	225249	61.6	9	1	1724	-	-
	8	467279	53.4	9	1	1901	-	-
	9	709720	59.9	9	1	1379	-	-
	10	951847	60.4	9	1	1453	-	-
	11	194839	91.4	9	3	1768	1726	1227

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
22	Type 5	20	0.6	12	5.5605			
	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	261858	77	20	2	1191	1363	-
	1	407646	58.1	20	1	1248	-	-
	2	552319	62.1	20	1	1836	-	-
	3	99107	76.9	20	2	1334	1236	-
	4	243514	80	20	2	1914	1852	-
	5	389464	52	20	1	1701	-	-
	6	531093	88.6	20	3	1693	1995	1905
	7	81159	72.9	20	2	1922	1387	-
	8	225245	98.5	20	3	1839	1746	1389
	9	371906	57.9	20	1	1193	-	-
	10	514197	95.9	20	3	1659	1870	1066
	11	63561	53.5	20	1	1162	-	-
	12	207510	92	20	3	1745	1654	1458
	13	353638	57.3	20	1	1834	-	-
	14	497515	70.5	20	2	1684	1586	-
	15	45553	70	20	2	1042	1664	-
	16	189821	84	20	3	1765	1630	1176
	17	335330	76.1	20	2	1557	1057	-
	18	478825	93.2	20	3	1985	1018	1340
	19	27594	96.8	20	3	1760	1614	1817

23	Type 5	14	0.857143	12	5.5637			
	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	247117	50.1	12	1	1841	-	-
	1	453362	93.5	12	3	1590	1081	1413
	2	660875	68.8	12	2	1707	1577	-
	3	14140	56.3	12	1	1056	-	-
	4	220734	86	12	3	1953	1108	1987
	5	428367	75.2	12	2	1572	1536	-
	6	636681	54.4	12	1	1517	-	-
	7	843157	71.1	12	2	1329	1243	-
	8	195585	76.2	12	2	1940	1770	-
	9	403231	80.2	12	2	1098	1209	-
	10	610202	79.7	12	2	1588	1214	-
	11	815229	90.9	12	3	1615	1862	1601
	12	170267	68.7	12	2	1377	1441	-
	13	377306	67.4	12	2	1872	1313	-

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
24	Type 5	13	0.923077	12	5.5641			
	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	628071	94	11	3	1643	1748	1941
	1	853391	70.8	11	2	1177	1201	-
	2	156223	56.3	11	1	1006	-	-
	3	378734	96.7	11	3	1230	1163	1332
	4	601331	90.6	11	3	1217	1582	1498
	5	825462	74.5	11	2	1569	1281	-
	6	128265	92.6	11	3	1065	1669	1222
	7	351161	89	11	3	1493	1135	1380
	8	573425	96.5	11	3	1607	1822	1602
	9	798431	70.5	11	2	1141	1178	-
	10	100737	94	11	3	1009	1629	1956
	11	324661	55.8	11	1	1290	-	-
	12	546278	87.7	11	3	1435	1963	1164
25	Type 5	8	1.5	12	5.5665			
	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	1253842	68.6	5	2	1306	1161	-
	1	119486	83.1	5	2	1420	1315	-
	2	482958	60.9	5	1	1687	-	-
	3	845641	77.7	5	2	1776	1158	-
	4	1208428	77.4	5	2	1793	1510	-
	5	74748	66.8	5	2	1576	1323	-
	6	438300	63.7	5	1	1333	-	-
	7	800152	91.2	5	3	1409	1681	1275

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
26	Type 5	17	0.705882	12	5.5621			
	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	545865	83.6	16	3	1632	1195	1000
	1	14067	89.4	16	3	1173	1627	1656
	2	184953	55.8	16	1	1532	-	-
	3	353759	90.9	16	3	1981	1554	1998
	4	526388	54.7	16	1	1825	-	-
	5	694806	97.7	16	3	1734	1202	1250
	6	163568	67.5	16	2	1571	1434	-
	7	333410	96.7	16	3	1589	1469	1268
	8	504006	68.3	16	2	1750	1954	-
	9	675297	78.3	16	2	1591	1082	-
	10	142890	55	16	1	1427	-	-
	11	312479	84.9	16	3	1129	1936	1199
	12	482953	74.6	16	2	1959	1856	-
	13	655022	63.3	16	1	1885	-	-
	14	121457	99.8	16	3	1035	1515	1120
	15	292606	63.6	16	1	1647	-	-
	16	461322	87.3	16	3	1931	1051	1831

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
27	Type 5	19	0.631579	12	5.5609			
	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	565136	85.6	19	3	1946	1078	1015
	1	89970	68.6	19	2	1029	1780	-
	2	243121	54.2	19	1	1111	-	-
	3	396034	61.2	19	1	1104	-	-
	4	546225	97.1	19	3	1157	1969	1100
	5	70998	98.3	19	3	1142	1699	1622
	6	224093	62.4	19	1	1655	-	-
	7	376127	80.2	19	2	1126	1769	-
	8	527806	87.5	19	3	1216	1448	1179
	9	52247	85.8	19	3	1847	1348	1472
	10	204582	88.1	19	3	1023	1124	1631
	11	357941	65.3	19	1	1848	-	-
	12	510977	52.5	19	1	1470	-	-
	13	33698	52.3	19	1	1312	-	-
	14	186023	74.1	19	2	1915	1200	-
	15	339327	54.9	19	1	1479	-	-
	16	491053	76.2	19	2	1376	1502	-
	17	14858	60.4	19	1	1758	-	-
	18	167387	81.5	19	2	1491	1103	-

28	Type 5	12	1	12	5.5645			
	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	507709	50.5	10	1	1857	-	-
	1	750249	55.7	10	1	1246	-	-
	2	989003	85.8	10	3	1774	1002	1967
	3	235634	76.9	10	2	1125	1474	-
	4	477675	75.1	10	2	1254	1052	-
	5	718312	92.3	10	3	1180	1486	1492
	6	960895	78.1	10	2	1301	1757	-
	7	205370	92.2	10	3	1898	1252	1713
	8	446940	89	10	3	1260	1706	1411
	9	689225	70.9	10	2	1578	1620	-
	10	932305	63.1	10	1	1782	-	-
	11	176231	55.3	10	1	1522	-	-

Trial ID	Radar Type	Number of Bursts	Burst Peried(s)	Wave from Length (s)	Center Frequency(GHz)	-		
29	Type 5	18	0.666667	12	5.5617			
	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	277485	83.4	17	3	1454	1205	1801
	1	437880	97.3	17	3	1319	1826	1635
	2	598445	90.4	17	3	1079	1986	1674
	3	97088	91.8	17	3	1563	1151	1802
	4	257251	98.2	17	3	1876	1977	1766
	5	419893	59.5	17	1	1952	-	-
	6	580724	80	17	2	1253	1137	-
	7	77366	86.5	17	3	1054	1128	1828
	8	238032	91.1	17	3	1105	1599	1442
	9	398605	93.5	17	3	1867	1373	1087
	10	562025	60.7	17	1	1033	-	-
	11	57684	67.2	17	2	1288	1405	-
	12	219083	61.8	17	1	1585	-	-
	13	379234	79.4	17	2	1933	1667	-
	14	540896	81.4	17	2	1096	1464	-
	15	37916	65.7	17	1	1496	-	-
	16	198794	76	17	2	1733	1255	-
	17	359754	81	17	2	1326	1668	-

Radar Singal 6

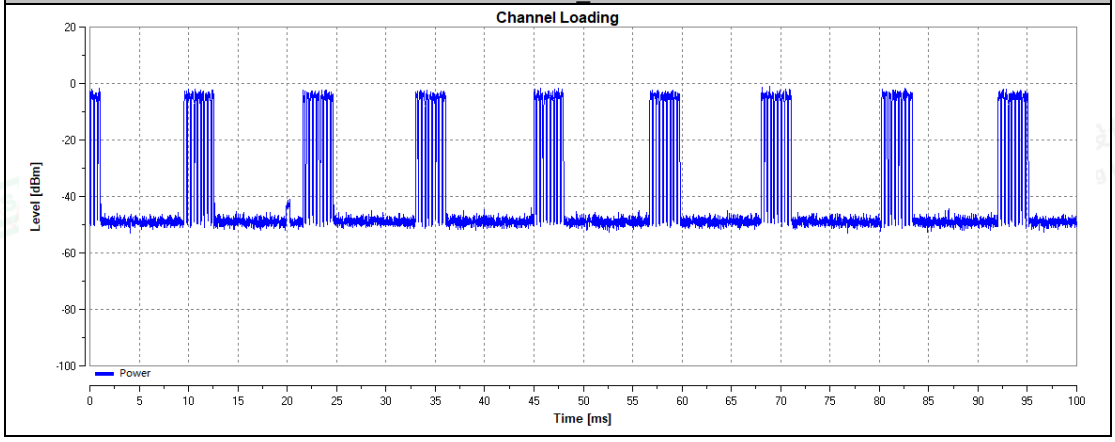
Trial ID	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Legth (us)	Pulse Repection Frequency (Pulses Per Second)	Pulse Repection Interval (Microseconds)
0	Type 6	1	335.6	9	0.3335	3000	15
1	Type 6	1	335.6	9	0.3335	3000	13
2	Type 6	1	335.6	9	0.3335	3000	17
3	Type 6	1	335.6	9	0.3335	3000	16
4	Type 6	1	335.6	9	0.3335	3000	11
5	Type 6	1	335.6	9	0.3335	3000	13
6	Type 6	1	335.6	9	0.3335	3000	12
7	Type 6	1	335.6	9	0.3335	3000	13
8	Type 6	1	335.6	9	0.3335	3000	15
9	Type 6	1	335.6	9	0.3335	3000	13
10	Type 6	1	335.6	9	0.3335	3000	20
11	Type 6	1	335.6	9	0.3335	3000	18
12	Type 6	1	335.6	9	0.3335	3000	22
13	Type 6	1	335.6	9	0.3335	3000	12
14	Type 6	1	335.6	9	0.3335	3000	16
15	Type 6	1	335.6	9	0.3335	3000	19
16	Type 6	1	335.6	9	0.3335	3000	18
17	Type 6	1	335.6	9	0.3335	3000	20
18	Type 6	1	335.6	9	0.3335	3000	15
19	Type 6	1	335.6	9	0.3335	3000	14
20	Type 6	1	335.6	9	0.3335	3000	20
21	Type 6	1	335.6	9	0.3335	3000	16
22	Type 6	1	335.6	9	0.3335	3000	25
23	Type 6	1	335.6	9	0.3335	3000	8
24	Type 6	1	335.6	9	0.3335	3000	17
25	Type 6	1	335.6	9	0.3335	3000	10
26	Type 6	1	335.6	9	0.3335	3000	15
27	Type 6	1	335.6	9	0.3335	3000	15
28	Type 6	1	335.6	9	0.3335	3000	18
29	Type 6	1	335.6	9	0.3335	3000	12

Channel Loading

TestMode	Channel	Result	Limit [%]	Verdict
IEEE 802.11ac	5310	20.13	17	PASS

Test Graphs

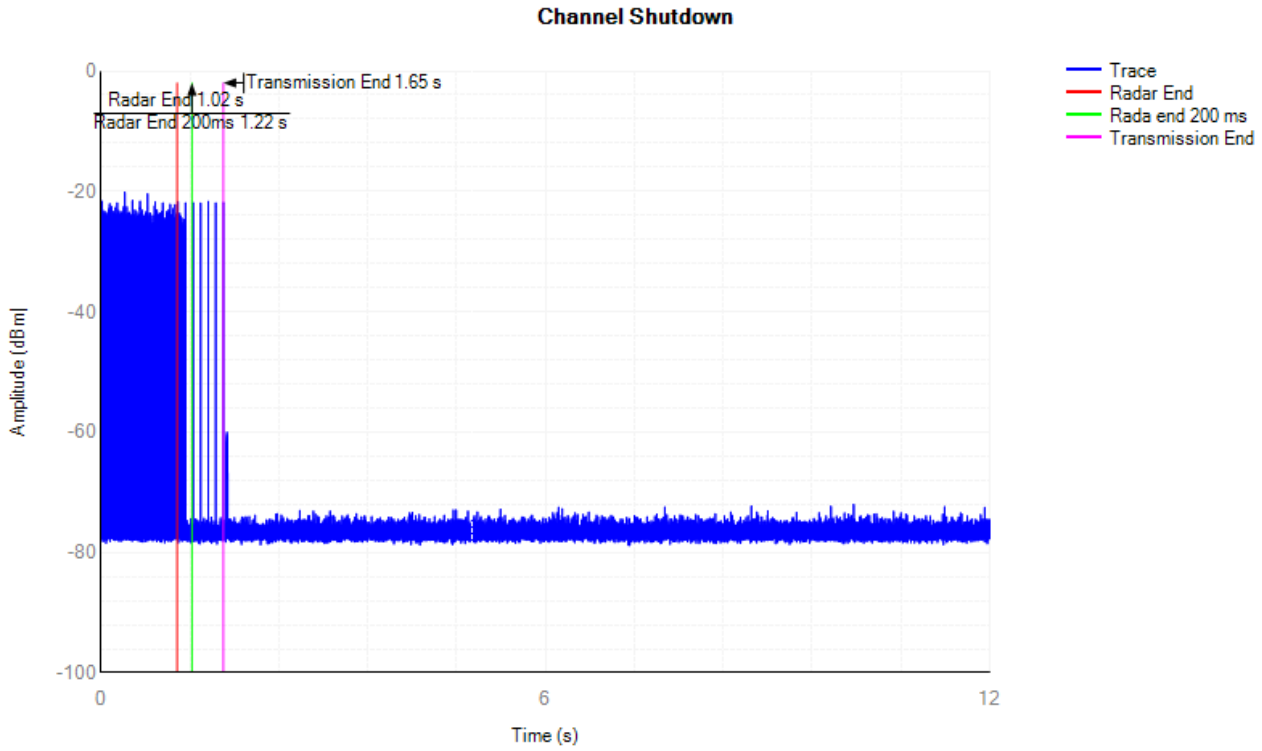
802.11ac _5310



Channel Move Time & Channel Closing Transmission Time

IEEE 802.11ac

Channel 62 / 5310 MHz



Channel Move Time	Limit
0.6253s	10s
Channel Close Time	Limit
4ms	60ms

Notes:A20/N40/AC 40 were tested, the report recorded the worst result of AC mode.

9. LIST OF MEASURING EQUIPMENTS

Manufacturer	Model / Equipment	Cal Date	Due Date	Serial No.
SAMSUNG ELECTRONICS	WEA453e / Wireless AP (Master Device)	N/A	N/A	S2LF812265
ADLINK	PXI/DFS Measurement System(S/G)	2024-03-19	2025-03-18	302581/735
ADLINK	PXI/DFS Measurement System(S/A)	2024-03-19	2025-03-18	303582/113
Agilent	N9020A / Signal Analyzer	2024-06-04	2025-06-03	MY52090906
Hewlett Packard	11636B/Power Divider	2024-02-18	2025-02-17	0531
Hewlett Packard	11667B / Power Splitter	2024-06-03	2025-06-02	05001
Agilent	8493C / Attenuator(10 dB)	2024-09-04	2025-09-03	07560
WEINSCHEL	2-3 / Attenuator(3 dB)	2024-08-07	2025-08-06	BR0617
Weinschel	AF9003-69-31 / Step Attenuator	2023-10-11	2024-10-10	5701
Cernex	CDPU5260404K / 4 Way Power Divider	2024-03-04	2025-03-03	14695
Narda	4426-4 / 4 Way Power Divider	2024-02-05	2025-02-04	11927

10. TEST SETUP PHOTOGRAPHS OF EUT

Please refer to separated files for Test Setup Photos of the EUT.

11. EXTERIOR PHOTOGRAPHS OF THE EUT

Please refer to separated files for External Photos of the EUT.

12. INTERIOR PHOTOGRAPHS OF THE EUT

Please refer to separated files for Internal Photos of the EUT.

----------THE END OF REPORT----------