FCC PART 15
TEST REPORT
No.I22Z61104-IOT01

for

TCL Communication Ltd.

LINKZONE

R228t

With

FCC ID: 2ACCJB182

Hardware Version: R228t-V1.0

Software Version: vdfeu_R228t_IZ_02.00_04

Issued Date: 2022-09-08

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S.Government.

Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191.

Tel:+86(0)10-62304633-2512, Fax:+86(0)10-62304633-2504

Email: cttl_terminals@caict.ac.cn, website: www.caict.ac.cn

REPORT HISTORY

Report Number	Revision	Description	Issue Date
I22Z61104-IOT01	Rev.0	1st edition	2022-09-08

CONTENTS

1. TEST LATORATORY

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0, and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (ISED#: 24849). The detail accreditation scope can be found on NVLAP website.

1.2. Testing Location

Conducted testing Location: CTTL(Huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China100191

1.3. Testing Environment

Normal Temperature: 15-35℃

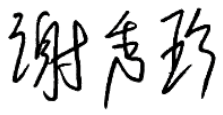
Relative Humidity: 20-75%

1.4. Project date

Testing Start Date: 2022-06-10

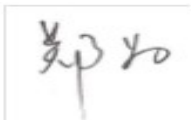
Testing End Date: 2022-08-18

1.5. Signature



Xie Xiuzhen

(Prepared this test report)



Zheng Wei

(Reviewed this test report)

Pang Shuai

(Approved this test report)

2. CLIENT INFORMATION

2.1. Applicant Information

Company Name:	TCL Communication Ltd.
Address:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
City:	Hong Kong
Postal Code:	/
Country:	China
Email:	nianxiang.jiang@tcl.com
Contact:	Nianxiang.jiang
Telephone:	+86 755 36611621
Fax:	+86 755 3661 2000-81722

2.2. Manufacturer Information

Company Name:	TCL Communication Ltd.
Address:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
City:	Hong Kong
Postal Code:	/
Country:	China
Email:	nianxiang.jiang@tcl.com
Contact:	Nianxiang.jiang
Telephone:	+86 755 36611621
Fax:	+86 755 3661 2000-81722

3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT(AE)

3.1. About EUT

Description	LINKZONE
Model name	R228t
FCC ID	2ACCJB182
WLAN Frequency Band	ISM Band: -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Extreme vol. Limits	4.0V
Device Type (DFS)	Master
Antenna gain	3.7dBi

3.2. Internal Identification of EUT used during the test

EUT ID*	S/N	HW Version	SW Version
EUT1	G456MS876K	R228t-V1.0	vdfeu_R228t_IZ_02.00_04

*EUT ID: is used to identify the test sample in the lab internally.

3.3. General Description

The Equipment Under Test (EUT) is a model of LINKZONE with integrated antenna. It consists of normal options: lithium battery, charger. Manual and specifications of the EUT were provided to fulfil the test.

4. REFERENCE DOCUMENTS

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

905462 D02	COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION	2016
FCC Part15 E	Title 47 of the Code of Federal Regulations; Chapter I Part 15.407	2020

5. LABORATORY ENVIRONMENT

Measurement is performed in shielding room.

6. SUMMARY OF TEST RESULTS

6.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	FCC Part 15.407	Verdict
Channel Availability Check	15.407(h)(2) (ii)	**P**
Channel move time and channel closing transmission time	15.407(h)(2) (iii)	**P**
DFS detection bandwidth	5.407(h)(2)	**P**
Non-Occupancy Period	15.407(h)(2) (iv)	**P**
Statistical Performance Check	5.407(h)(2)	**P**

Please refer to **ANNEX A** for detail.

Terms used in Verdict column

P	Pass, The EUT complies with the essential requirements in the standard.
NM	Not measured, The test was not measured by CTTL
NA	Not Applicable, The test was not applicable
F	Fail, The EUT does not comply with the essential requirements in the standard

6.2. Statements

CTTL has evaluated the test cases requested by the client/manufacturer as listed in section 6.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.1.

This report only deal with the UNII DFS functions among the features described in section 3, and The EUT met all requirements of the reference documents.

The end user is not available to get and modify the parameters of the detected Radar Waveforms in this product.

Test Conditions

T nom	Normal Temperature
T min	Low Temperature
T max	High Temperature
V nom	Normal Voltage
V min	Low Voltage
V max	High Voltage
H nom	Norm Humidity
A nom	Norm Air Pressure

For this report, all the test case listed above is tested under Normal Temperature and Normal Voltage, and also under norm humidity, the specific conditions as following:

Temperature	T nom	26℃
Voltage	V nom	4.0V
Humidity	H nom	44%
Air Pressure	A nom	1010hPa

7. TEST EQUIPMENTS UTILIZED

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Date	Calibration Due Date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	1 year	2023-05-15
2	Vector Signal Generator	SMU200A	103752	Rohde & Schwarz	1 year	2023-05-15
3	Vector Signal Generator	SMW200A	103421	Rohde & Schwarz	1 year	2023-05-15
4	Shielding Room	S81	/	ETS-Lindgren	/	/
5	Attenuator	30dB	/	Rosenberger	/	/

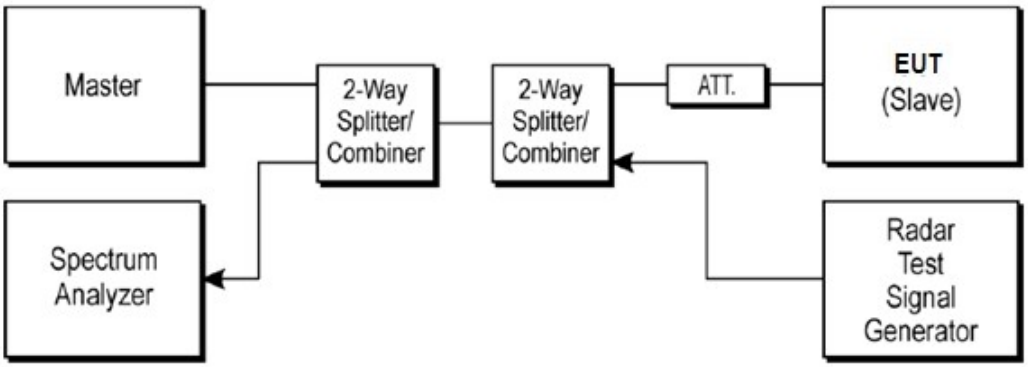
Instrument	Manufacturer	Serial Number
PC	DELL	GPL87W1

ANNEX A: MEASUREMENT RESULTS

A.1. Measurement Method

A.1.1. Conducted Measurements

The below figure shows the DFS setup, where the EUT is a RLAN device operating in slave mode, without Radar Interference Detection function. This setup also contains a device operating in master mode. The radar test signals are injected into the master device. The EUT (slave device) is associated with the master device. WLAN traffic is generated by streaming the mpeg file from the master to the slave in full monitor video mode using the media player.



Note:

1) All Measurements are performed with the EUT's narrowest channel bandwidth.
2) The slave device information is as follows
   Vendor: Dell
   Model: Dell wireless card.
3) The software of radar signal generator (R&S SMU200A) is completely designed based on KDB 905462 requirement.

A.1.2. Parameters of DFS test signal

1). Interference threshold values, master or client incorporation in service monitoring

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.	

2). DFS requirement values

Parameter	Value
Channel Availability Check Time	60 seconds (see note 1)
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.
Non-Occupancy Period	30 minutes
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.

3).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 $\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{PRI_{\mu sec}}\right)\right\}$	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.					

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

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

4).Measurement Uncertainty

Item	Measurement Uncertainty
Time	0.70 ms
Power	0.75 dBm

5). Operating Frequency and Channel List for this Report

802.11a/n-HT20/ac-VHT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
52	5260	108	5540	132	5660
56	5280	112	5560	136	5680

60	5300	116	5580	140	5700
64	5320	120	5600	144	5720
100	5500	124	5620	/	/
104	5520	128	5640	/	/

802.11n-HT40/ac-VHT40

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

802.11ac-VHT80

Channel	Frequency(MHz)	Channel	Frequency(MHz)
58	5290	122	5610
106	5530	138	5690

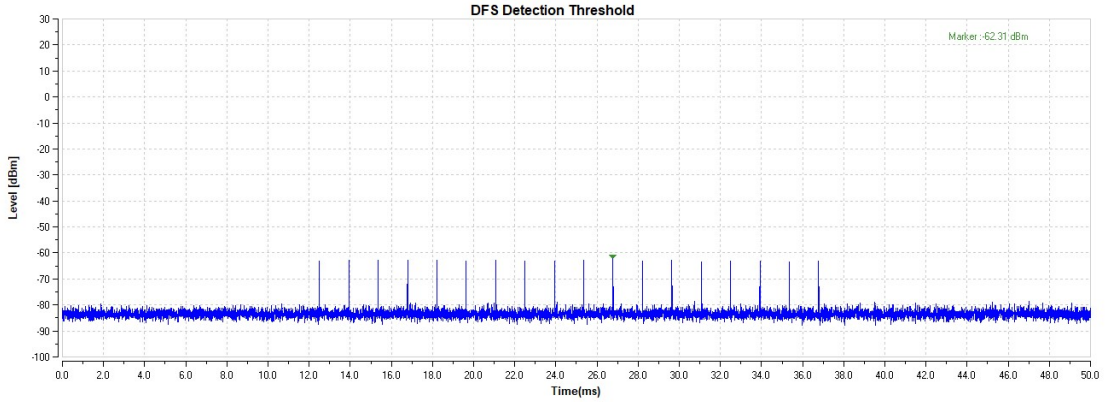
Test Channels for this Report

Test Mode	Test Channel	Test Frequency
802.11ac-VHT20	100	5500 MHz
802.11ac-VHT40	102	5510 MHz
802.11ac-VHT80	58	5290 MHz
802.11ac-VHT80	106	5530 MHz

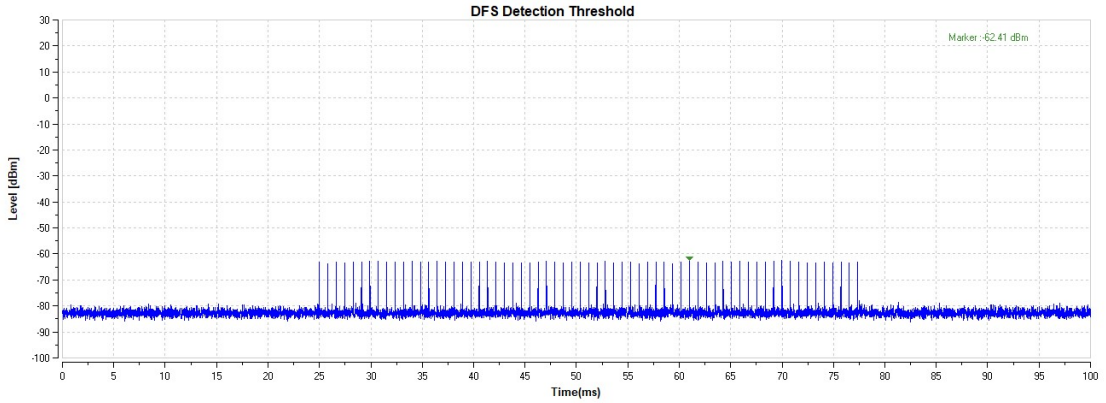
A.1.3. Radar Waveform Calibration

The Interference Radar Detection Threshold Level is (-64dBm) + (0) [dBi] + 1 dB= -63 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 (-64dBm) + (0) [dBi] + 1 dB= -63dBm. Capture the spectrum analyzer plots on short pulse radar types, long pulse radar type and hopping radar waveform.

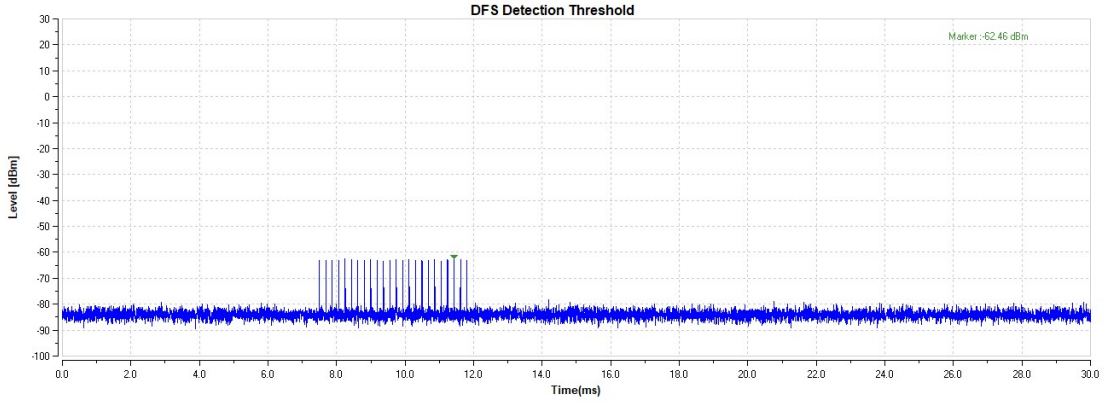
Radar #0



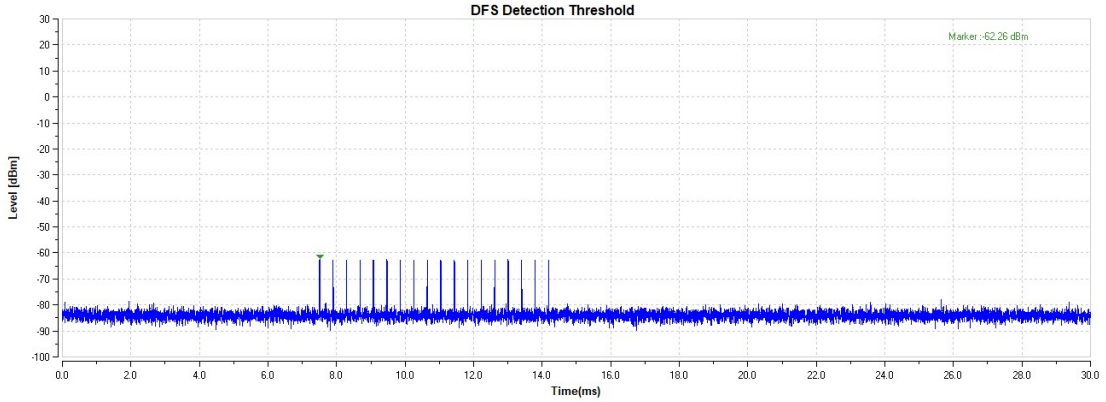
Radar #1



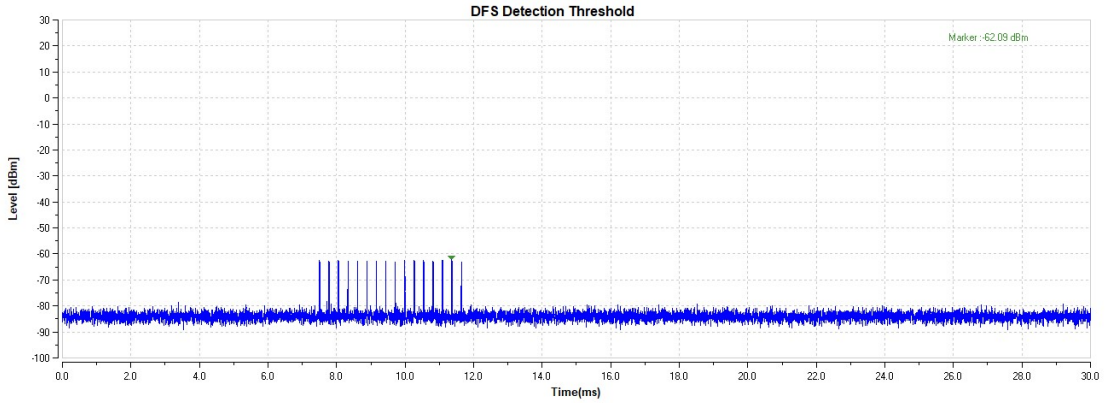
Radar #2



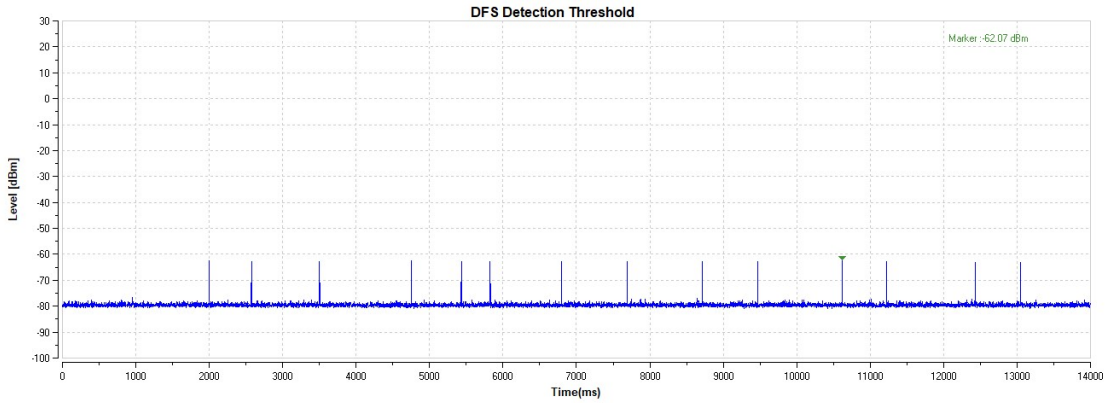
Radar #3



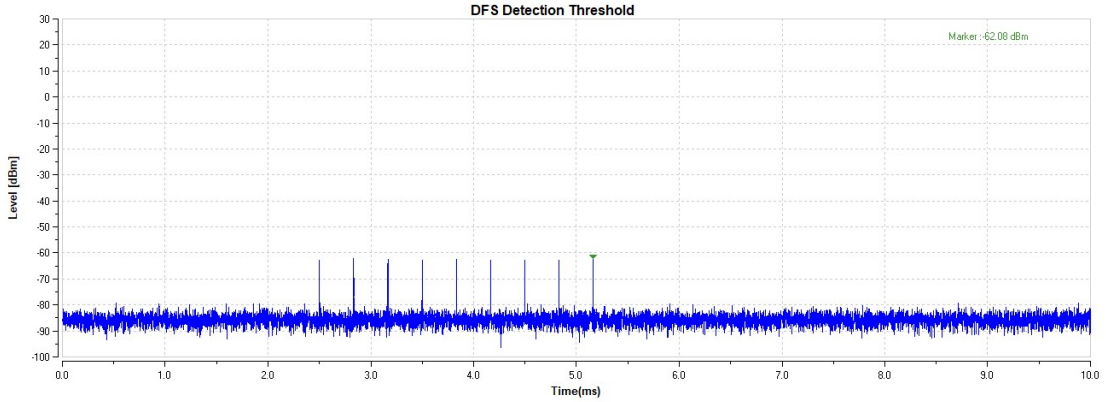
Radar #4



Radar #5



Radar #6



A.2. Channel Availability Check

Method of Measurement: See KDB 905462 7.8.2

The Initial *Channel Availability Check Time* tests that the UUT does not emit beacon, control, or data signals on the test *Channel* until the power-up sequence has been completed and the U-NII device checks for *Radar Waveforms* for one minute on the test *Channel*. This test does not use any *Radar Waveforms* and only needs to be performed one time.

a) 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 UUT 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 minute sweep time. The spectrum analyzer's sweep will be started at the same time power is applied to the U-NII device.

b) The UUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.

c) Confirm that the UUT initiates transmission on the channel

This measurement can be used to determine the length of the power-on cycle if it is not supplied by the manufacturer. If the spectrum analyzer sweep is started at the same time the UUT is powered on and the UUT does not begin transmissions until it has completed the cycle, the power-on time can be determined by comparing the two times.

The steps below define the procedure to verify successful radar detection on the test *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*.

a) The *Radar Waveform* generator and UUT are connected using the applicable test setup described in the sections on configuration for Conducted Tests (7.2) or Radiated Tests (7.3) and the power of the UUT is switched off.

b) The UUT is powered on at T0. T1 denotes the instant when the UUT has completed its power-up sequence (Tpower_up). The *Channel Availability Check Time* commences on Chr at instant T1 and will end no sooner than T1 + Tch_avail_check.

c) A single *Burst* of one of the Short Pulse Radar Types 0-4 will commence within a 6 second window starting at T1. An additional 1 dB is added to the radar test signal to ensure it is at or

above the *DFS Detection Threshold*, accounting for equipment variations/errors.

d) Visual indication or measured results on the UUT of successful detection of the radar *Burst* will be recorded and reported. Observation of Chr for UUT emissions will continue for 2.5 minutes after the radar *Burst* has been generated.

e) Verify that during the 2.5 minute measurement window no UUT transmissions occurred on Chr. The *Channel Availability Check* results will be recorded.

The steps below define the procedure to verify successful radar detection on the test *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* + 1dB occurs at the end of the *Channel Availability Check Time*.

a) The *Radar Waveform* generator and UUT are connected using the applicable test setup described in the sections for Conducted Tests (7.2) or Radiated Tests (7.3) and the power of the UUT is switched off.

b) The UUT is powered on at T0. T1 denotes the instant when the UUT has completed its power-up sequence (Tpower_up). The *Channel Availability Check Time* commences on Chr at instant T1 and will end no sooner than T1 + Tch_avail_check.

c) A single *Burst* of one of the Short Pulse Radar Types 0-4 will commence within a 6 second window starting at T1 + 54 seconds. An additional 1 dB is added to the radar test signal to ensure it is at or above the *DFS Detection Threshold*, accounting for equipment variations/errors.

d) Visual indication or measured results on the UUT of successful detection of the radar *Burst* will be recorded and reported. Observation of Chr for UUT emissions will continue for 2.5 minutes after the radar *Burst* has been generated.

e) Verify that during the 2.5 minute measurement window no UUT transmissions occurred on Chr. The *Channel Availability Check* results will be recorded.

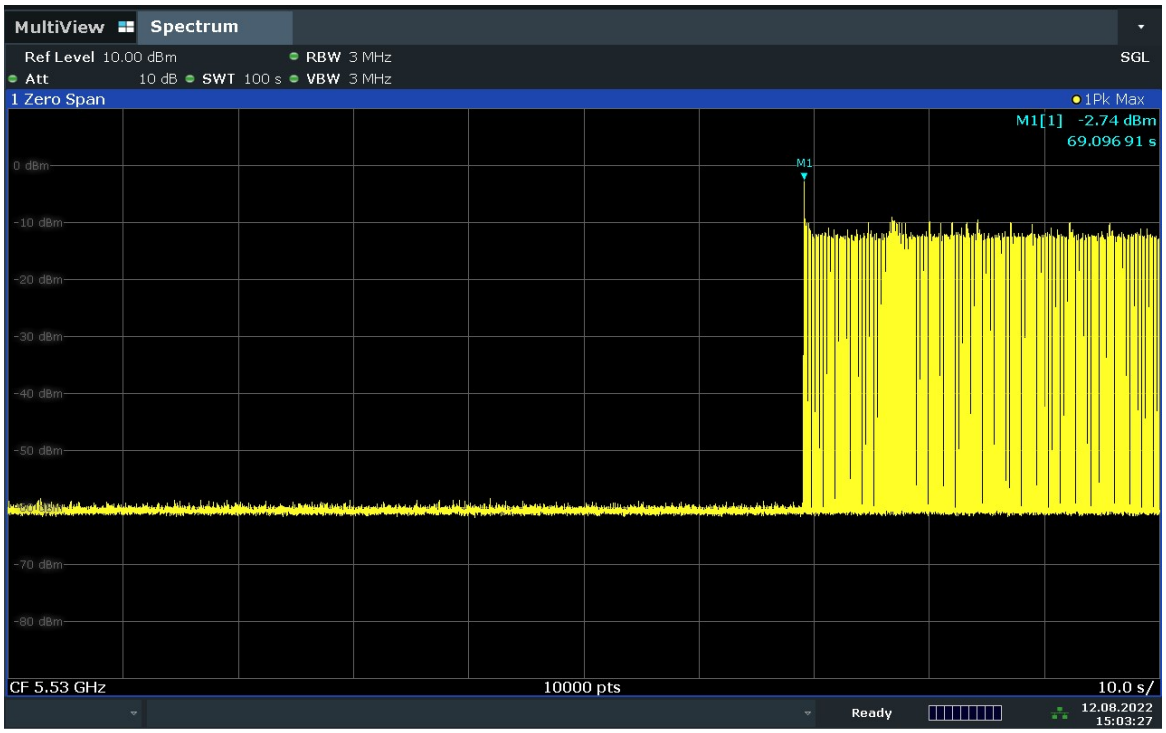
Measurement Limit:

Item	Limit
A. Initial Channel Availability Check Time	The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.
B. Tests with a radar burst at the beginning of the Channel Availability Check Time	Can detected.
C. Tests with radar burst at the end of the Channel Availability Check Time	Can Detected.

Measurement Results:

A. Initial Channel Availability Check Time

802.11ac-VHT80(5530MHz)



15:03:28 12.08.2022

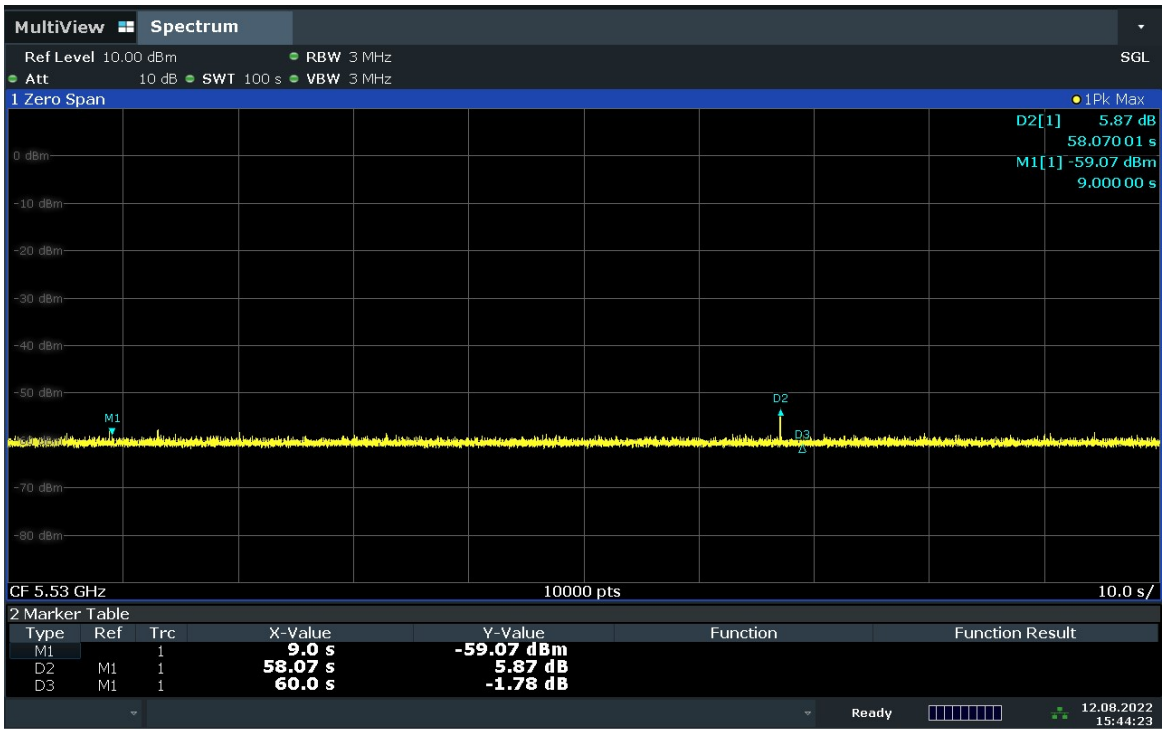
Note: The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.

B. Tests with a radar burst at the beginning of the Channel Availability Check Time
802.11ac-VHT80(5530MHz)

15:29:43 12.08.2022

C. Tests with radar burst at the end of the Channel Availability Check Time

802.11ac-VHT80(5530MHz)



15:44:23 12.08.2022

A.3. Channel move time and channel closing transmission time

Method of Measurement: See KDB 905462 7.8.3

The steps below define the procedure to determine the above mentioned parameters 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).*

a) One frequency will be chosen from the *Operating Channels* of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices, the test frequency must contain control signals. This can be verified by disabling channel loading and monitoring the spectrum analyzer. If no control signals are detected, another frequency must be selected within the emission bandwidth where control signals are detected.

b) In case the UUT is a U-NII device operating as a *Client Device* (with or without DFS), a U-NII device operating as a *Master Device* will be used to allow the UUT (Client device) to *Associate* with the *Master Device*. In case the UUT is a *Master Device*, a U-NII device operating as a *Client Device* will be used and it is assumed that the Client will *Associate* with the UUT (Master). In both cases for conducted tests, the *Radar Waveform* generator will be connected to the *Master Device*. For radiated tests, the emissions of the *Radar Waveform* generator will be directed towards the *Master Device*. If the *Master Device* has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.

c) Stream the channel loading test file from the *Master Device* to the *Client Device* on the test *Channel* for the entire period of the test.

d) At time T0 the *Radar Waveform* generator sends a *Burst* of pulses for one of the Radar Type 0 at levels defined, on the *Operating Channel*. An additional 1 dB is added to the radar test

signal to ensure it is at or above the *DFS Detection Threshold*, accounting for equipment variations/errors.

e) Observe the transmissions of the UUT at the end of the radar *Burst* on the *Operating Channel* for duration greater than 10 seconds. Measure and record the transmissions from the UUT during the observation time (*Channel Move Time)*. Measure and record the *Channel Move Time* and *Channel Closing Transmission Time* if radar detection occurs.

f) When operating as a *Master Device*, monitor the UUT for more than 30 minutes following instant T2 to verify that the UUT does not resume any transmissions on this *Channel*. Perform this test once and record the measurement result.

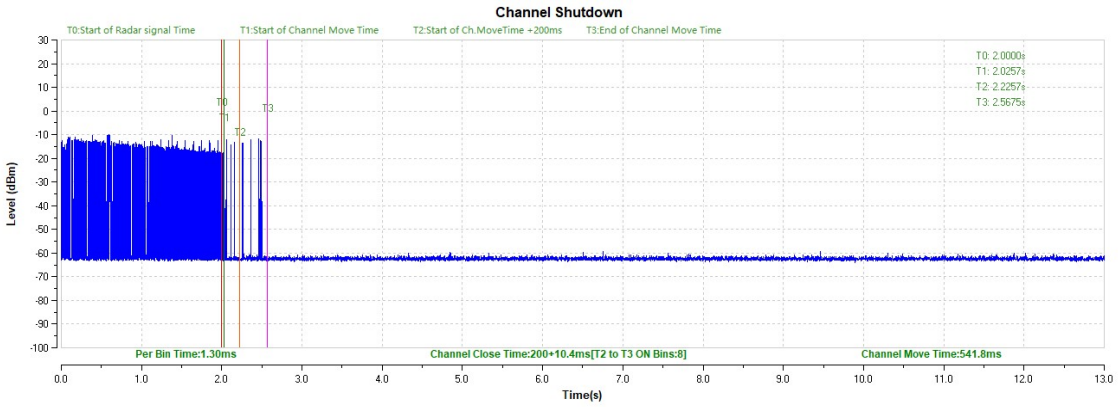
g) In case the UUT is a U-NII device operating as a *Client Device* with *In-Service Monitoring*, perform steps a) to f).

Measurement Limit:

Test Items	Limit
Channel move time	10 s
Channel Closing Transmission Time	200 ms + 60 ms

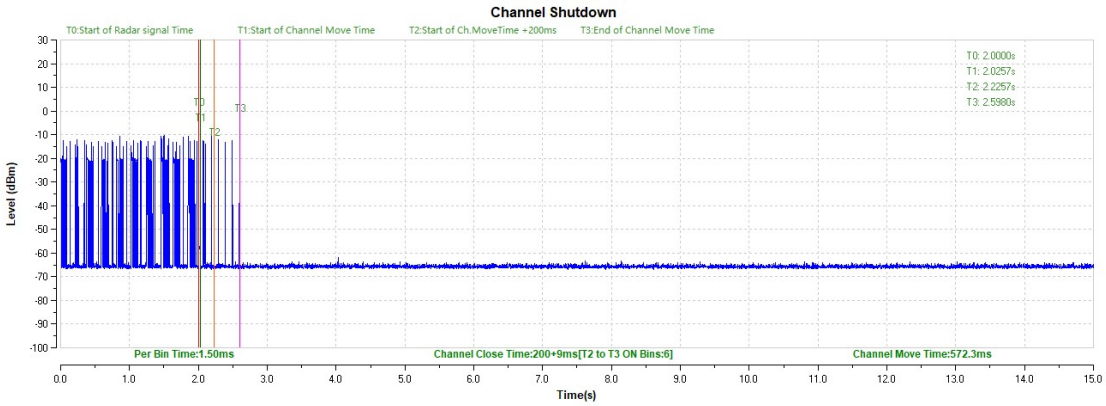
Measurement Results:

802.11ac-VHT80 5290MHz



Conclusion: PASS

802.11ac-VHT80 5530MHz



Conclusion: PASS

A.4. Non-Occupancy Period

Method of Measurement: See KDB 905462 7.8.3

The steps below define the procedure to determine the above mentioned parameters 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).*

a) One frequency will be chosen from the *Operating Channels* of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices, the test frequency must contain control signals. This can be verified by disabling channel loading and monitoring the spectrum analyzer. If no control signals are detected, another frequency must be selected within the emission bandwidth where control signals are detected.

b) In case the UUT is a U-NII device operating as a *Client Device* (with or without DFS), a U-NII device operating as a *Master Device* will be used to allow the UUT (Client device) to *Associate* with the *Master Device*. In case the UUT is a *Master Device*, a U-NII device operating as a *Client Device* will be used and it is assumed that the Client will *Associate* with the UUT (Master). In both cases for conducted tests, the *Radar Waveform* generator will be connected to the *Master Device*. For radiated tests, the emissions of the *Radar Waveform* generator will be directed towards the *Master Device*. If the *Master Device* has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.

c) Stream the channel loading test file from the *Master Device* to the *Client Device* on the test *Channel* for the entire period of the test.

d) At time T0 the *Radar Waveform* generator sends a *Burst* of pulses for one of the Radar Type 0 at levels defined, on the *Operating Channel*. An additional 1 dB is added to the radar test signal to ensure it is at or above the *DFS Detection Threshold*, accounting for equipment variations/errors.

e) Observe the transmissions of the UUT at the end of the radar *Burst* on the *Operating Channel* for duration greater than 10 seconds. Measure and record the transmissions from the UUT during the observation time (*Channel Move Time)*. Measure and record the *Channel Move Time* and *Channel Closing Transmission Time* if radar detection occurs.

f) When operating as a *Master Device*, monitor the UUT for more than 30 minutes following instant T2 to verify that the UUT does not resume any transmissions on this *Channel*. Perform this test once and record the measurement result.

g) In case the UUT is a U-NII device operating as a *Client Device* with *In-Service Monitoring*, perform steps a) to f).

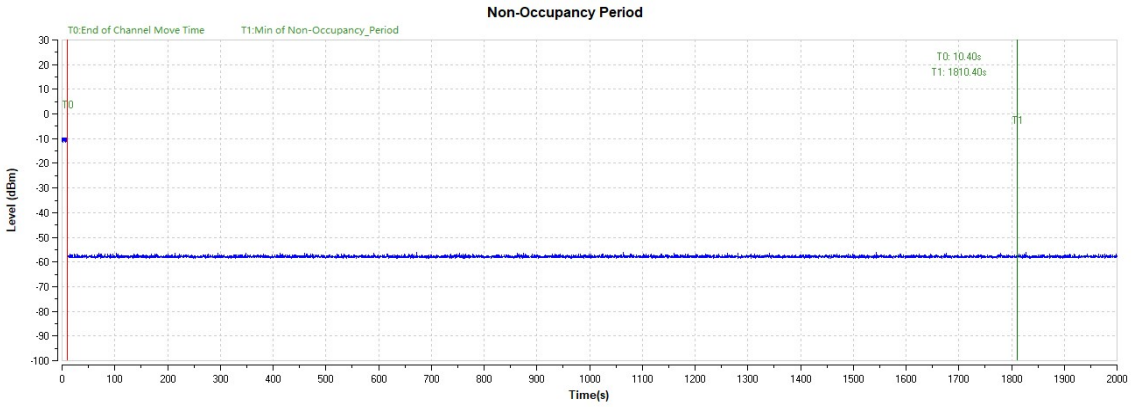
Measurement Limit:

Test Items	Limit
Non-Occupancy Period	> 1800 s

Measurement Results:

802.11ac-VHT80 5290MHz

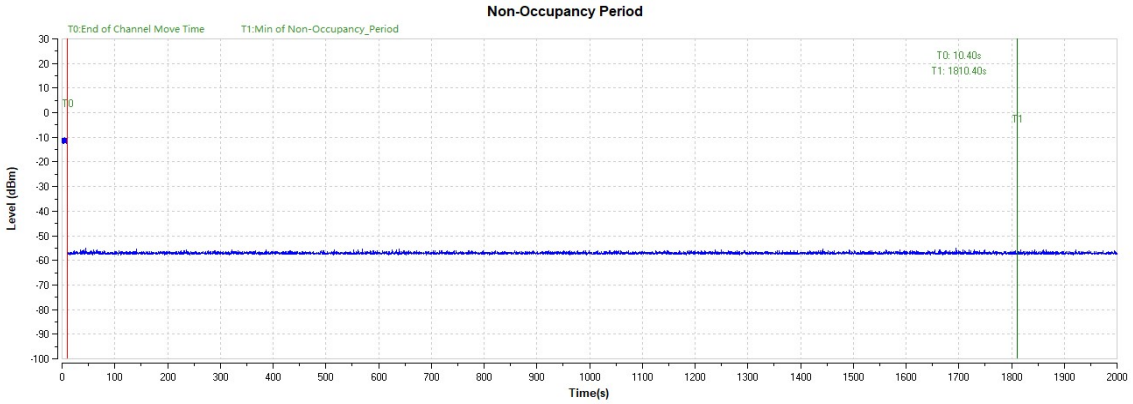
Associate the master and client, transmit specified stream between the master and client; monitor the analyzer on the operating frequency to make sure no beacons have been transmitted for 1800 seconds.



Conclusion: PASS

802.11ac-VHT80 5530MHz

Associate the master and client, transmit specified stream between the master and client; monitor the analyzer on the operating frequency to make sure no beacons have been transmitted for 1800 seconds.



Conclusion: PASS

A.5. DFS detection bandwidth

Method of Measurement: See KDB 905462 7.8.1

Set up the generating equipmen, or equivalent. Set up the DFS timing monitoring equipment. Set up the overall system for either radiated or conducted coupling to the UUT.

Adjust the equipment to produce a single *Burst* of any one of the Short Pulse Radar Types 0 – 4 at the center frequency of the UUT *Operating Channel* at the specified *DFS Detection Threshold* level found.

Set the UUT up as a standalone 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.

Generate a single radar *Burst*, and note the response of the UUT. Repeat for a minimum of 10 trials. The UUT must detect the *Radar Waveform* within the DFS band using the specified *U-NII Detection Bandwidth* criterion. 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.

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. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as FH) at which detection is greater than or equal to the *U-NII Detection Bandwidth* criterion. Recording the detection rate at frequencies above FH is not required to demonstrate compliance.

Starting at the center frequency of the UUT operating *Channel*, decrease the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the *U-NII Detection Bandwidth* criterion specified. Repeat this measurement in 1MHz steps at frequencies 5 MHz above where the detection rate begins to fall. Record the lowest frequency (denote as FL) at which detection is greater than or equal to the *U-NII Detection Bandwidth* criterion. Recording the detection rate at frequencies below FL is not required to demonstrate compliance.

The *U-NII Detection Bandwidth* is calculated as follows:

U-NII Detection Bandwidth = FH – FL

The *U-NII Detection Bandwidth* must meet the *U-NII Detection Bandwidth* criterion specified. Otherwise, the UUT does not comply with DFS requirements. This is essential to ensure that the UUT is capable of detecting *Radar Waveforms* across the same frequency spectrum that contains the significant energy from the system. In the case that the *U-NII Detection Bandwidth* is greater than or equal to the 99 percent power bandwidth for the measured FH and FL, the test can be truncated and the *U-NII Detection Bandwidth* can be reported as the measured FH and FL.

Measurement Limit:

Test Items	Limit
DFS detection bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth.

Measurement Results:

Test channel：802.11ac-VHT20 5500MHz

Radar Frequency (MHz)	DFS Detection trials (1 Detection; 0 No Detection)										Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5490.5-F_l	1	1	1	1	1	1	1	1	1	1	100%
5491	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5496	1	1	1	1	1	1	1	1	1	1	100%
5497	1	1	1	1	1	1	1	1	1	1	100%
5498	1	1	1	1	1	1	1	1	1	1	100%
5499	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5501	1	1	1	1	1	1	1	1	1	1	100%
5502	1	1	1	1	1	1	1	1	1	1	100%
5503	1	1	1	1	1	1	1	1	1	1	100%
5504	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509	1	1	1	1	1	1	1	1	1	1	100%
5509.5-F_h	1	1	1	1	1	1	1	1	1	1	100%
5510	0	0	0	0	0	0	0	1	1	0	20%

Detection Bandwidth=F_h-F_l=5509.5-5490.5=19.00MHz

the limit=EUT 99% bandwithx100% =18.55MHz

The test result: Pass

Test channel：802.11ac-VHT40 5510MHz

Radar Frequency (MHz)	DFS Detection trials (1 Detection; 0 No Detection)										Detection Rate (%)
5490	0	0	0	0	0	0	0	0	0	0	0%
5491-F_l	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5496	1	1	1	1	1	1	1	1	1	1	100%
5497	1	1	1	1	1	1	1	1	1	1	100%
5498	1	1	1	1	1	1	1	1	1	1	100%
5499	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5501	1	1	1	1	1	1	1	1	1	1	100%
5502	1	1	1	1	1	1	1	1	1	1	100%
5503	1	1	1	1	1	1	1	1	1	1	100%
5504	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5511	1	1	1	1	1	1	1	1	1	1	100%
5512	1	1	1	1	1	1	1	1	1	1	100%

5513	1	1	1	1	1	1	1	1	1	1	100%
5514	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	100%
5516	1	1	1	1	1	1	1	1	1	1	100%
5517	1	1	1	1	1	1	1	1	1	1	100%
5518	1	1	1	1	1	1	1	1	1	1	100%
5519	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%
5521	1	1	1	1	1	1	1	1	1	1	100%
5522	1	1	1	1	1	1	1	1	1	1	100%
5523	1	1	1	1	1	1	1	1	1	1	100%
5524	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%
5526	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	100%
5529-F_h	1	1	1	1	1	1	1	1	1	1	100%
5530	0	0	0	0	0	1	1	0	0	0	20%
Detection Bandwidth=F_h-F_l=5529-5491=38MHz											
the limit=EUT 99% bandwithx100% =36.32MHz											
The test result: Pass											

Test channel：802.11ac-VHT80 5530MHz											
Radar Frequency (MHz)	**DFS Detection trials (1 Detection; 0 No Detection)**										**Detection Rate (%)**
5490	0	0	0	0	0	0	0	1	0	0	10%
5491-F_l	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5496	1	1	1	1	1	1	1	1	1	1	100%
5497	1	1	1	1	1	1	1	1	1	1	100%
5498	1	1	1	1	1	1	1	1	1	1	100%
5499	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5501	1	1	1	1	1	1	1	1	1	1	100%
5502	1	1	1	1	1	1	1	1	1	1	100%
5503	1	1	1	1	1	1	1	1	1	1	100%
5504	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5511	1	1	1	1	1	1	1	1	1	1	100%
5512	1	1	1	1	1	1	1	1	1	1	100%
5513	1	1	1	1	1	1	1	1	1	1	100%
5514	1	1	1	1	1	1	1	1	1	1	100%

5515	1	1	1	1	1	1	1	1	1	1	100%
5516	1	1	1	1	1	1	1	1	1	1	100%
5517	1	1	1	1	1	1	1	1	1	1	100%
5518	1	1	1	1	1	1	1	1	1	1	100%
5519	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%
5521	1	1	1	1	1	1	1	1	1	1	100%
5522	1	1	1	1	1	1	1	1	1	1	100%
5523	1	1	1	1	1	1	1	1	1	1	100%
5524	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%
5526	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	100%
5529	1	1	1	1	1	1	1	1	1	1	100%
5530	1	1	1	1	1	1	1	1	1	1	100%
5531	1	1	1	1	1	1	1	1	1	1	100%
5532	1	1	1	1	1	1	1	1	1	1	100%
5533	1	1	1	1	1	1	1	1	1	1	100%
5534	1	1	1	1	1	1	1	1	1	1	100%
5535	1	1	1	1	1	1	1	1	1	1	100%
5536	1	1	1	1	1	1	1	1	1	1	100%
5537	1	1	1	1	1	1	1	1	1	1	100%
5538	1	1	1	1	1	1	1	1	1	1	100%
5539	1	1	1	1	1	1	1	1	1	1	100%
5540	1	1	1	1	1	1	1	1	1	1	100%
5541	1	1	1	1	1	1	1	1	1	1	100%
5542	1	1	1	1	1	1	1	1	1	1	100%

5543	1	1	1	1	1	1	1	1	1	1	100%
5544	1	1	1	1	1	1	1	1	1	1	100%
5545	1	1	1	1	1	1	1	1	1	1	100%
5546	1	1	1	1	1	1	1	1	1	1	100%
5547	1	1	1	1	1	1	1	1	1	1	100%
5548	1	1	1	1	1	1	1	1	1	1	100%
5549	1	1	1	1	1	1	1	1	1	1	100%
5550	1	1	1	1	1	1	1	1	1	1	100%
5551	1	1	1	1	1	1	1	1	1	1	100%
5552	1	1	1	1	1	1	1	1	1	1	100%
5553	1	1	1	1	1	1	1	1	1	1	100%
5554	1	1	1	1	1	1	1	1	1	1	100%
5555	1	1	1	1	1	1	1	1	1	1	100%
5556	1	1	1	1	1	1	1	1	1	1	100%
5557	1	1	1	1	1	1	1	1	1	1	100%
5558	1	1	1	1	1	1	1	1	1	1	100%
5559	1	1	1	1	1	1	1	1	1	1	100%
5560	1	1	1	1	1	1	1	1	1	1	100%
5561	1	1	1	1	1	1	1	1	1	1	100%
5562	1	1	1	1	1	1	1	1	1	1	100%
5563	1	1	1	1	1	1	1	1	1	1	100%
5564	1	1	1	1	1	1	1	1	1	1	100%
5565	1	1	1	1	1	1	1	1	1	1	100%
5566	1	1	1	1	1	1	1	1	1	1	100%
5567	1	1	1	1	1	1	1	1	1	1	100%
5568	1	1	1	1	1	1	1	1	1	1	100%
5569-F_h	1	1	1	1	1	1	1	1	1	1	100%
5570	0	0	0	0	0	0	0	1	0	0	10%

Detection Bandwidth=Fh-Fl=5569-5491=78MHz
the limit=EUT 99% bandwithx100% =76.88MHz
The test result: Pass

A.6. Statistical Performance Check

Method of Measurement: See KDB 905462 7.8.4

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.

Measurement Limit:

Radr Type	Number of Trails	Detection Probability
1	30	＞60%
2	30	＞60%
3	30	＞60%
4	30	＞60%
Aggregate (Radar Types 1-4)	120	＞80%
5	30	＞80%
6	30	＞70%

Measurement Results:

802.11ac-VHT20 5500MHz

Radar Type 1 - Radar Statistical Performance

RADAR TYPE 1					Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Test Freq. (MHz)**	**Number of Pulses per Burst**	**Pulse Width (μsec)**	**PRI (μs)**	**Detection (yes/no)**
1	5490.4	33	1	1630	1
2	5491.1	28	1	1940	1
3	5491.6	30	1	1791	1
4	5492.2	22	1	2433	1
5	5492.9	57	1	927	1
6	5493.1	77	1	686	1
7	5493.9	63	1	849	1
8	5493.2	64	1	836	0
9	5493.8	91	1	580	1
10	5494.5	23	1	2342	1
11	5495.7	19	1	2870	1
12	5496.2	41	1	1304	1
13	5497.4	18	1	3033	1
14	5498.1	21	1	2618	0
15	5498.9	48	1	1103	1
16	5499.3	27	1	1959	0
17	5500.1	21	1	2538	1
18	5501.2	58	1	916	1
19	5501.9	53	1	1002	0
20	5502.3	24	1	2281	1
21	5502.8	50	1	1064	1
22	5503.6	24	1	2285	1
23	5504.2	25	1	2147	1
24	5505.1	42	1	1268	1
25	5505.7	22	1	2425	1
26	5506.1	44	1	1204	0
27	5506.7	18	1	2938	1
28	5508.2	51	1	1040	0
29	5508.9	19	1	2899	1
30	5509.6	29	1	1823	1
Detection Percentage (%)	80.00%				

Radar Type 2 - Radar Statistical Performance

RADAR TYPE 2					Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Test Freq. (MHz)**	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	5490.4	26	3.8	193	1
2	5491.1	26	4.2	191	1
3	5491.6	27	1.3	204	1
4	5492.2	28	3.9	152	0
5	5492.9	24	2.6	178	1
6	5493.1	26	3.4	199	0
7	5493.9	28	1.3	206	1
8	5493.2	24	4.8	160	1
9	5493.8	27	2.6	175	0
10	5494.5	25	4.6	160	1
11	5495.7	27	1.6	185	1
12	5496.2	28	4.8	173	1
13	5497.4	28	3	158	1
14	5498.1	26	4.6	214	1
15	5498.9	24	1.1	222	1
16	5499.3	27	3.2	215	0
17	5500.1	26	2.5	167	0
18	5501.2	25	1.1	227	1
19	5501.9	27	2.1	172	1
20	5502.3	24	3	208	1
21	5502.8	23	2.2	227	1
22	5503.6	27	2.8	216	1
23	5504.2	28	2.4	157	1
24	5505.1	27	1.1	184	1
25	5505.7	25	1.4	219	0
26	5506.1	26	2.6	206	1
27	5506.7	24	1.4	184	1
28	5508.2	25	4.9	198	1
29	5508.9	25	1.8	159	1
30	5509.6	25	3.3	174	1
Detection Percentage (%)	80.00%				

Radar Type 3 - Radar Statistical Performance

RADAR TYPE 3					Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Test Freq. (MHz)**	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	5490.4	18	7.5	343	1
2	5491.1	17	7.5	239	1
3	5491.6	17	8.4	373	1
4	5492.2	16	7.1	362	1
5	5492.9	16	9.8	400	1
6	5493.1	18	7.8	235	1
7	5493.9	18	8.5	413	1
8	5493.2	17	9.9	259	1
9	5493.8	18	9.7	228	1
10	5494.5	18	9.4	455	1
11	5495.7	17	7.3	260	0
12	5496.2	18	6.9	492	0
13	5497.4	16	7.9	466	1
14	5498.1	16	7.7	440	1
15	5498.9	16	9.3	351	1
16	5499.3	18	6.5	382	1
17	5500.1	17	7.2	244	1
18	5501.2	16	7.3	323	0
19	5501.9	17	7.9	237	1
20	5502.3	17	9.5	265	1
21	5502.8	17	8.8	411	1
22	5503.6	16	6.2	370	1
23	5504.2	17	7.7	452	1
24	5505.1	16	9.2	338	1
25	5505.7	17	7.5	212	0
26	5506.1	18	9.1	241	1
27	5506.7	16	6.8	465	1
28	5508.2	17	6.1	401	1
29	5508.9	16	6.4	490	1
30	5509.6	18	9.8	350	1
Detection Percentage (%)	86.67%				

Radar Type 4 - Radar Statistical Performance

RADAR TYPE 4					Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Test Freq. (MHz)**	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	5490.4	13	13.2	346	1
2	5491.1	14	12.2	295	1
3	5491.6	14	18.8	424	1
4	5492.2	12	14.1	272	0
5	5492.9	14	13.8	256	1
6	5493.1	12	19.7	366	1
7	5493.9	13	11.1	261	1
8	5493.2	15	15.9	406	1
9	5493.8	15	13.4	452	1
10	5494.5	12	16.3	444	0
11	5495.7	13	19.8	395	1
12	5496.2	15	18.5	308	1
13	5497.4	14	14.6	422	1
14	5498.1	14	12	367	0
15	5498.9	13	15.4	335	1
16	5499.3	13	13.6	345	0
17	5500.1	13	15.7	476	1
18	5501.2	14	14.7	365	1
19	5501.9	14	15.8	302	1
20	5502.3	14	15.1	243	1
21	5502.8	14	19.2	320	1
22	5503.6	15	17.8	341	1
23	5504.2	14	11.9	304	1
24	5505.1	14	17.8	293	1
25	5505.7	15	16.7	211	1
26	5506.1	14	18.5	327	1
27	5506.7	16	18.6	269	0
28	5508.2	16	12	287	1
29	5508.9	15	17.6	379	1
30	5509.6	13	18.2	273	1
Detection Percentage (%)	83.33%				

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is as follows:

$\frac{p1+p2+p3+p4}{4}$=(80.00%+80.00%+86.67%+83.33%)/4=82.50%(>80%).

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5490.5	1	16	5500.0	1
2	5491.0	1	17	5501.4	1
3	5491.7	1	18	5501.8	0
4	5492.5	1	19	5502.4	1
5	5493.2	1	20	5503.0	1
6	5493.8	1	21	5503.6	1
7	5494.3	1	22	5504.2	0
8	5494.9	0	23	5504.8	1
9	5495.4	1	24	5505.6	1
10	5495.8	1	25	5506.1	1
11	5496.5	1	26	5506.8	1
12	5497.4	1	27	5507.6	1
13	5498.0	0	28	5508.2	1
14	5498.7	1	29	5508.9	1
15	5499.4	1	30	5509.5	1
Detection Percentage (%)					86.67%

Trial Number : 1						
Bursts in Trial: 14						
Burst	**Number of Pulses**	**Pulse Width (µsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 PRI (µsec)**	**Pulse 2-to-3 PRI (µsec)**	**Start Location Within Interval (msec)**
1	2	59.5	7	1120		606.109
2	2	77.9	7	1196		399.557
3	3	65	7	1984	1154	161.734
4	3	53.2	7	1624	1738	546.371
5	3	85.9	7	1502	1190	275.139
6	3	52.4	7	1524	1584	38.596
7	3	81.1	7	1221	1142	63.983
8	2	79.4	7	1375		811.77
9	1	84.9	7			777.977
10	1	59.9	7			94.824
11	1	85.7	7			153.251
12	1	55.7	7			643.729
13	3	97.8	7	1657	1772	781.086
14	2	58.3	7	1877		286.243

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 2						
Bursts in Trial: 20						
Burst	**Number of Pulses**	**Pulse Width (µsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 PRI (µsec)**	**Pulse 2-to-3 PRI (µsec)**	**Start Location Within Interval (msec)**
1	2	99.3	6	1375		147.942
2	1	67.6	6			17.97
3	3	61.6	6	1729	1363	191.97
4	2	62.1	6	1761		64.43
5	3	54.3	6	1996	1057	537.82
6	2	66.7	6	1917		333.16
7	2	76.7	6	1989		264.16

8	2	68.2	6	1912		347.01
9	2	63.4	6	1732		188.12
10	2	71.3	6	1174		269.08
11	2	53.9	6	1402		284.92
12	1	97.3	6			287.43
13	2	80.3	6	1480		294.71
14	2	68.7	6	1052		252.48
15	2	56.2	6	1811		287.88
16	2	97.5	6	1773		79.66
17	1	92	6			233.54
18	3	96.6	6	1828	1479	162.8
19	1	87.4	6			549.8
20	3	60.3	6	1589	1807	346.8

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 3

Bursts in Trial: 9

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	1	80.3	12			1190.38
2	2	76.1	12	1084		1256.627
3	3	65.9	12	1782	1119	818.023
4	2	64.2	12	1888		584.4
5	2	93.7	12	1745		1324.537
6	2	90.9	12	1651		244.773
7	2	88.8	12	1319		1266.78
8	1	93.7	12			348.507
9	2	60.1	12	1801		242.033

TYPE 5 PARAMETER

Rohde & Schwarz
Pulse Sequencer

SHEET

Trial Number : 4

Bursts in Trial: 9

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	1	89.9	18			1176.61
2	3	79.6	18	1418	1918	91.297
3	1	68.6	18			784.983
4	2	84	18	1414		975.81
5	3	98.7	18	1386	1711	1198.377
6	2	57.4	18	1732		737.983
7	1	91.8	18			437.43
8	2	56.7	18	1626		880.067
9	3	67.9	18	1292	1636	1275.033

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 5

Bursts in Trial: 15

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	89.3	7	1622		305.636
2	3	64.8	7	1580	1277	501.29
3	3	97.5	7	1839	1364	80.64
4	3	86	7	1038	1429	672.41
5	2	74.9	7	1213		3.73
6	2	94.7	7	1185		215.87
7	1	85	7			793.14
8	3	70.1	7	1228	1583	126.03
9	1	77.9	7			695.91
10	1	55.7	7			501.85

11	1	92.5	7			732.5
12	1	74.1	7			235.38
13	2	51.5	7	1007		132.37
14	2	88.8	7	1885		68.2
15	2	56.5	7	1228		115.7

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 6

Bursts in Trial: 15

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	85.4	19	1546		316.65
2	3	63	19	1315	1573	431.6
3	3	82.7	19	1216	1101	666.08
4	2	70.6	19	1357		166.98
5	2	50.1	19	1399		161.99
6	3	94.4	19	1552	1263	343.44
7	3	82.9	19	1125	1521	718.51
8	1	87	19			493.76
9	1	51.1	19			350.89
10	1	79.1	19			53.71
11	3	97.9	19	1619	1487	151.35
12	2	70.3	19	1437		94.32
13	2	71.6	19	1851		136.19
14	2	66.3	19	1069		324.6
15	2	97.2	19	1082		496.1

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 7

Bursts in Trial: 15						
Burst	**Number of Pulses**	**Pulse Width (µsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 PRI (µsec)**	**Pulse 2-to-3 PRI (µsec)**	**Start Location Within Interval (msec)**
1	3	68.7	5	1160	1995	253.327
2	1	96.2	5			614.91
3	3	88.3	5	1095	1922	234.42
4	2	73.9	5	1822		769.36
5	1	76.4	5			484.92
6	1	99	5			225.82
7	2	65.7	5	1021		314.65
8	3	82.6	5	1963	1345	224.11
9	2	75.9	5	1301		80.03
10	3	95.3	5	1273	1763	71.22
11	2	68.6	5	1923		489.86
12	3	89	5	1308	1019	54.83
13	2	51.7	5	1183		780.4
14	3	66.7	5	1570	1881	495.4
15	3	74.6	5	1776	1709	706.6

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 8

Bursts in Trial: 14						
Burst	**Number of Pulses**	**Pulse Width (µsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 Spacing (µsec)**	**Pulse 2-to-3 PRI (µsec)**	**Start Location Within Interval (msec)**
1	1	91.3	17			140.347
2	2	67.7	17	1185		664.797
3	2	54.7	17	1614		709.404
4	1	94.3	17			558.031
5	2	76.1	17	1626		524.649
6	2	94.7	17	1249		61.916
7	2	51.6	17	1949		672.913

8	3	72.9	17	1232	1808	444.5
9	2	51.1	17	1598		406.057
10	1	80.7	17			282.554
11	3	89.1	17	1108	1871	807.041
12	2	55.3	17	1555		213.539
13	1	69.1	17			755.886
14	3	54.6	17	1889	1904	437.543

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 9

Bursts in Trial: 13

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	3	88.4	18	1903	1705	167.846
2	3	68	18	1644	1476	178.163
3	2	88.9	18	1424		891.246
4	3	95.2	18	1794	1531	846.109
5	1	58.9	18			28.732
6	1	93.6	18			55.895
7	2	93.3	18	1796		469.318
8	3	99.3	18	1230	1656	431.082
9	2	67.3	18	1141		856.875
10	1	68.3	18			440.188
11	2	72.6	18	1524		626.871
12	1	56.2	18			115.654
13	2	85.4	18	1967		868.877

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 10						
Bursts in Trial: 17						
Burst	**Number of Pulses**	**Pulse Width (µsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 PRI (µsec)**	**Pulse 2-to-3 PRI (µsec)**	**Start Location Within Interval (msec)**
1	3	82.4	17	1653	1829	556.486
2	1	50.8	17			574.558
3	1	88	17			508.765
4	1	92.7	17			30.823
5	3	75.1	17	1479	1990	370.761
6	2	55.1	17	1501		288.868
7	2	74.6	17	1849		104.626
8	2	76.2	17	1160		489.194
9	2	64	17	1739		67.821
10	2	91.7	17	1870		583.369
11	2	70.1	17	1368		666.606
12	1	91.9	17			677.214
13	2	50.3	17	1912		608.232
14	2	73.7	17	1671		244.859
15	2	72.3	17	1647		135.547
16	3	86.5	17	1801	1768	196.265
17	3	56.7	17	1835	1537	283.382

TYPE 5

PARAMETER

SHEET

Rohde & Schwarz

Pulse Sequencer

Trial Number : 11							
Bursts in Trial: 16							
Burst		**Number of Pulses**	**Pulse Width (µsec)**	**Chirp Width (MHz)**	**Pulse 1-to-2 PRI (µsec)**	**Pulse 2-to-3 PRI (µsec)**	**Start Location Within Interval (msec)**
1		1	57.4	8			429.722
2		1	69.6	8			232.059
3		1	67.7	8			330.35
4		3	56.3	8	1565	1319	378.47

5		2	74.3	8	1674		101.69
6		2	95	8	1521		341.2
7		3	52	8	1664	1043	204.82
8		3	90.1	8	1721	1741	85.83
9		2	53.9	8	1480		560.89
10		1	62	8			261.09
11		2	88.6	8	1411		234.79
12		2	59.3	8	1979		369.8
13		3	94.9	8	1250	1718	621.42
14		3	80.6	8	1691	1320	265.5
15		3	98.3	8	1986	1473	512.4
16		2	62.6	8	1845		580.1

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 12

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	1	78.1	11			901.877
2	2	68.3	11	1377		470.551
3	1	54.2	11			659.242
4	1	56.2	11			28.923
5	2	54.6	11	1113		122.684
6	1	84.1	11			647.015
7	2	95.3	11	1506		526.885
8	3	59.7	11	1041	1147	806.136
9	3	51.6	11	1458	1253	315.147
10	2	55.6	11	1094		954.918
11	2	98.7	11	1504		136.409

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 13

Bursts in Trial: 14

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	99.4	15	1142		129.722
2	2	84.7	15	1450		119.426
3	3	89.2	15	1462	1828	98.574
4	2	61.4	15	1048		308.021
5	2	89.9	15	1546		418.999
6	3	91.7	15	1280	1460	414.116
7	2	87.2	15	1803		489.033
8	3	70.3	15	1736	1092	65.75
9	1	57.4	15			617.307
10	1	78.7	15			618.644
11	2	59	15	1120		490.791
12	2	85.8	15	1498		676.629
13	2	63.1	15	1791		581.886
14	3	97.6	15	1617	1781	701.043

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 14

Bursts in Trial: 18						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	80.8	16	1803		559.057
2	1	54.9	16			238.04
3	2	73.1	16	1683		213.377
4	2	88.3	16	1443		321.52
5	3	97	16	1080	1835	264.653
6	2	90.7	16	1578		508.897
7	2	90.5	16	1197		241.22
8	3	51.4	16	1936	1621	486.803
9	1	50	16			424.307
10	2	98.7	16	1401		657.49
11	3	74	16	1765	1240	189.203
12	3	79.3	16	1370	1300	138.417
13	2	55	16	1271		244.66
14	3	90.3	16	1898	1538	587.643
15	3	52.2	16	1199	1230	334.637
16	2	77	16	1617		65
17	1	84.8	16			252.233
18	3	80.9	16	1862	1383	632.567

TYPE 5

PARAMETER

SHEET

Rohde & Schwarz

Pulse Sequencer

Trial Number : 15						
Bursts in Trial: 13						
Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	1	66.6	11			247.287
2	2	84	11	1367		329.783
3	1	61.3	11			77.986
4	3	54.3	11	1214	1094	576.709

5	2	51.4	11	1298		339.692
6	2	60.2	11	1028		679.435
7	2	96.1	11	1679		526.428
8	1	99.5	11			710.342
9	2	98.5	11	1587		516.595
10	1	57.6	11			704.788
11	1	58.4	11			474.561
12	1	95.3	11			412.154
13	3	79.8	11	1298	1191	674.977

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 16

Bursts in Trial: 12

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	3	99.9	14	1230	1531	420.536
2	1	77.5	14			245.16
3	1	82.6	14			255.7
4	3	81.2	14	1820	1146	881.06
5	2	58.2	14	1423		425.76
6	1	87	14			19.46
7	3	92.7	14	1430	1627	271.2
8	3	90.5	14	1803	1278	129.96
9	3	83.1	14	1036	1205	705.03
10	3	65	14	1911	1193	587.85
11	3	50.8	14	1422	1987	712.8
12	3	59.3	14	1420	1050	281.2

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 17

Bursts in Trial: 12

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	84.1	11	1150		252.312
2	1	99	11			391.89
3	3	84.4	11	1366	1880	815.54
4	1	58.6	11			30.55
5	1	61.3	11			964.48
6	1	74.1	11			38.69
7	2	59.3	11	1831		291.65
8	3	65.3	11	1430	1720	733.24
9	2	77.8	11	1475		102.46
10	1	97.8	11			888.17
11	1	74	11			325.4
12	2	93.4	11	1368		374.5

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 18

Bursts in Trial: 10

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	61.7	11	1828		178.063
2	3	64.9	11	1248	1453	1062
3	2	78.2	11	1143		1048.04
4	1	86.9	11			125.03
5	2	57.5	11	1899		374.99
6	1	51.8	11			743.66
7	2	77	11	1514		559.64
8	3	79.3	11	1212	1616	771.32
9	3	65.4	11	1071	1528	755.3
10	2	62.3	11	1069		966

TYPE 5

PARAMETER

SHEET

Rohde & Schwarz

Pulse Sequencer

Trial Number : 19

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	3	82	6	1866	1684	803.179
2	2	85.9	6	1383		677.551
3	3	78.9	6	1918	1964	230.402
4	3	77.4	6	1357	1939	539.483
5	2	51.8	6	1257		308.414
6	1	52.8	6			127.845
7	1	73.2	6			63.875
8	2	77.8	6	1406		43.886
9	3	99.2	6	1805	1608	413.367
10	1	71.4	6			440.318
11	3	57.3	6	1281	1995	130.509

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 20

Bursts in Trial: 20

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	1	65	10			98.377
2	2	96.9	10	1727		405.56
3	2	59.6	10	1061		199.21
4	3	56.6	10	1154	1028	117.34
5	2	66.7	10	1059		233.55
6	1	59.4	10			423.62
7	3	66.4	10	1402	1520	527.24
8	2	64.1	10	1448		272.78
9	2	85	10	1685		250.21
10	2	78.7	10	1450		61.59
11	3	97.4	10	1902	1514	364.36
12	2	74.3	10	1313		516.55
13	3	51.7	10	1394	1968	78.96
14	2	54.7	10	1361		89
15	2	59.8	10	1476		272.85
16	3	84.1	10	1538	1893	426.73
17	2	85.2	10	1852		114.23
18	3	53	10	1085	1444	421.2
19	3	52.5	10	1658	1330	514.5
20	2	62.9	10	1018		13.4

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 21

Bursts in Trial: 19

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	1	94.3	6			69.576
2	1	92.7	6			577.321
3	2	95	6	1454		447.142
4	2	50.6	6	1136		477.093
5	2	52.9	6	1168		184.264
6	2	61.9	6	1067		254.785
7	2	77.7	6	1066		616.416
8	2	88	6	1591		221.167
9	2	75	6	1595		121.228
10	1	60.2	6			578.709
11	1	74.7	6			535.751
12	1	56.2	6			141.892
13	1	71.4	6			249.743
14	2	64.9	6	1727		242.424
15	3	91	6	1746	1493	612.375
16	2	89.8	6	1788		26.846
17	2	89.4	6	1216		547.837
18	3	70.1	6	1835	1838	237.158
19	1	93.8	6			321.979

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 22

Bursts in Trial: 10

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	90.2	6	1342		790.875
2	2	98.3	6	1496		744.49
3	2	63.4	6	1975		991.57
4	2	69.5	6	1137		577.55
5	2	82.4	6	1558		1123.06
6	2	95.9	6	1896		87.11
7	2	74.2	6	1094		595.39
8	3	73.6	6	1457	1094	329.45
9	2	67.3	6	1921		1135.9
10	2	78.5	6	1514		550.5

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 23

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	57.4	5	1887		701.743
2	2	61.4	5	1924		895.861
3	1	70.5	5			270.802
4	1	68.5	5			1061.993
5	3	61.1	5	1006	1372	763.644

6	1	97.6	5			287.805
7	1	98	5			315.115
8	3	57.3	5	1474	1006	175.906
9	2	99.7	5	1024		936.337
10	3	61.2	5	1418	1502	741.718
11	3	65.8	5	1123	1311	886.309

TYPE 5

PARAMETER

SHEET

Rohde & Schwarz

Pulse Sequencer

Trial Number : 24

Bursts in Trial: 14

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	60.1	18	1974		714.127
2	1	80.3	18			666.177
3	2	66	18	1352		744.044
4	1	96.9	18			257.071
5	3	85.3	18	1228	1403	578.639
6	2	94.2	18	1964		559.426
7	1	93.1	18			732.693
8	3	63.3	18	1859	1164	796.34
9	3	63.9	18	1783	1362	409.227
10	3	90.4	18	1371	1953	107.904
11	3	94.6	18	1415	1059	699.401
12	2	61.5	18	1506		637.829
13	1	93.8	18			402.286
14	2	93.7	18	1913		104.243

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 25

Bursts in Trial: 15

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	3	87.8	15	1688	1656	331.776
2	2	84.8	15	1791		264.65
3	1	54.8	15			687.04
4	3	77.6	15	1462	1865	294.92
5	1	92.3	15			556.91
6	2	70.6	15	1010		27.42
7	2	60.4	15	1059		239.29
8	2	85	15	1253		679.55
9	2	80.3	15	1172		536.65
10	1	68.8	15			364.5
11	2	95.2	15	1087		292.67
12	2	78.4	15	1064		715.62
13	2	98.8	15	1539		456.4
14	2	70.3	15	1261		402.9
15	1	94.6	15			630.2

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 26

Bursts in Trial: 14

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	1	57.5	6			71.215
2	3	86.8	6	1867	1600	776.147
3	2	55.4	6	1371		309.064
4	2	93.5	6	1083		408.961
5	3	78	6	1643	1872	251.399
6	3	80.8	6	1851	1169	327.416
7	2	73.2	6	1916		505.833
8	1	78.9	6			152.16
9	3	70.4	6	1896	1251	762.037
10	1	76.3	6			124.374
11	2	52.8	6	1516		196.151
12	2	65.7	6	1763		374.039
13	1	89.4	6			820.886
14	2	70.1	6	1729		651.543

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 27

Bursts in Trial: 12

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	3	75.6	14	1916	1838	580.677

2	2	59.6	14	1934		565.56
3	2	53	14	1954		808.61
4	1	67.5	14			731.79
5	1	52.2	14			560.9
6	2	65.4	14	1395		633.9
7	2	66.1	14	1989		103.77
8	2	88.3	14	1955		587.56
9	1	92.1	14			238.19
10	3	84.5	14	1369	1634	100.86
11	2	77.2	14	1633		883.4
12	2	98.5	14	1069		745.9

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 28

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	3	70.6	13	1240	1442	306.716
2	3	62.7	13	1704	1980	872.521
3	3	50.4	13	1905	1985	803.812
4	2	75.4	13	1359		717.283
5	2	86.1	13	1300		461.474
6	3	98.1	13	1479	1216	846.335
7	2	58	13	1250		639.505
8	3	81	13	1798	1877	259.656
9	1	63.5	13			548.417
10	2	61.4	13	1226		636.718
11	2	70.8	13	1574		318.909

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 29

Bursts in Trial: 11

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	1	60.9	16			208.419
2	1	73.6	16			510.781
3	3	63.3	16	1953	1503	30.482
4	3	91.8	16	1544	1017	186.623
5	2	95.5	16	1471		469.504
6	3	92.9	16	1225	1240	914.095
7	1	70.6	16			1004.705
8	1	86.7	16			475.616
9	3	51.6	16	1589	1114	223.147
10	2	96.7	16	1697		801.918
11	3	75.8	16	1809	1459	37.309

TYPE 5 PARAMETER SHEET

Rohde & Schwarz
Pulse Sequencer

Trial Number : 30

Bursts in Trial: 13

Burst	Number of Pulses	Pulse Width (µsec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (µsec)	Pulse 2-to-3 PRI (µsec)	Start Location Within Interval (msec)
1	2	89	12	1220		176.501
2	2	64.4	12	1630		593.373
3	2	58.5	12	1933		792.326
4	2	59.5	12	1230		387.809

5	2	77.9	12	1641		468.542
6	3	51.9	12	1875	1774	120.305
7	2	88.9	12	1638		0.918
8	1	88.5	12			711.642
9	1	98.2	12			258.165
10	2	87.1	12	1461		33.368
11	2	79.1	12	1269		710.451
12	3	56.4	12	1002	1115	857.254
13	2	63.8	12	1094		317.777

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5490.5	1	16	5500.0	1
2	5491.0	1	17	5501.4	1
3	5491.7	1	18	5501.8	1
4	5492.5	1	19	5502.4	1
5	5493.2	1	20	5503.0	0
6	5493.8	1	21	5503.6	0
7	5494.3	1	22	5504.2	1
8	5494.9	0	23	5504.8	1
9	5495.4	0	24	5505.6	1
10	5495.8	1	25	5506.1	1
11	5496.5	1	26	5506.8	1
12	5497.4	1	27	5507.6	1
13	5498.0	1	28	5508.2	1
14	5498.7	1	29	5508.9	1
15	5499.4	1	30	5509.5	1
Detection Percentage (%)					86.67%

Trial Number : 1			Trial Number : 2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5490	42	13	5493	39
25	5491	75	23	5495	69
45	5492	135	34	5496	102
87	5494	261	64	5497	192
/	/	/	87	5498	261
/	/	/	57	5501	171
/	/	/	98	5502	294

Trial Number : 3			Trial Number : 4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
13	5501	39	8	5505	24
45	5502	135	23	5491	69
67	5503	201	66	5494	198
88	5506	264	65	5492	195
/	/	/	53	5493	159
/	/	/	43	5496	129
/	/	/	85	5497	255
/	/	/	55	5499	165

Trial Number : 5			Trial Number : 6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
41	5490	123	42	5493	126
67	5492	201	35	5501	105
45	5494	135	58	5505	174
68	5496	204	78	5497	234
25	5498	75	57	5498	171
54	5500	162	40	5496	120
/	/	/	33	5506	99

Trial Number : 7			Trial Number : 8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
51	5500	153	57	5501	171
65	5506	195	75	5503	225
56	5504	168	36	5493	108
67	5492	201	55	5491	165

58	5495	174	43	5505	129
63	5498	189	89	5496	267
/	/	/	58	5507	174

Trial Number : 9			Trial Number : 10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
36	5493	108	35	5491	105
24	5494	72	27	5490	81
26	5495	78	26	5492	78
30	5498	90	65	5496	195
/	/	/	34	5497	102
/	/	/	22	5501	66
/	/	/	58	5502	174

Trial Number : 11			Trial Number : 12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
36	5501	108	46	5492	138
46	5493	138	67	5508	201
11	5491	33	32	5509	96
34	5501	102	42	5496	126
/	/	/	35	5495	105
/	/	/	22	5504	66

Trial Number : 13			Trial Number : 14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
31	5492	93	34	5491	102
56	5493	168	67	5504	201
88	5495	264	56	5505	168
67	5503	201	59	5494	177
/	/	/	68	5497	204
/	/	/	77	5502	231
/	/	/	39	5509	117

Trial Number : 15			Trial Number : 16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5496	63	35	5491	105
13	5491	39	54	5505	162