

DFS Test Report

Report No.: RF170503E08A-2

FCC ID: 2AHKM-CODA4589

Test Model: CODA-4589

Received Date: June 13, 2017

Test Date: July 24 to 31, 2017

Issued Date: Aug. 17, 2017

Applicant: HitronTechnologies

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Release Control Record

Issue No.	Description	Date Issued
RF170503E08A-2	Original release.	Aug. 17, 2017



Certificate of Conformity

Product: DOCSIS 3.1 WiFi Emta

Brand: Hitron

Test Model: CODA-4589

Sample Status: ENGINEERING SAMPLE

Applicant: HitronTechnologies

Test Date: July 24 to 31, 2017

Standards: FCC Part 15, Subpart E (Section 15.407)

KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

The above equipment has been tested by Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Wendy Wu / Specialist Aug. 17, 2017

Approved by : Date: Aug. 17, 2017

May Chen / Manager



EUT Information 2

Operating Frequency Bands and Mode of EUT 2.1

Table 1: Operating Frequency Bands and Mode of EUT

Operational Mode	Operating Fre	quency Range
Operational Mode	5250~5350MHz	5470~5725MHz
Master	✓	✓

2.2 **EUT Software and Firmware Version**

Table 2: The EUT Software/Firmware Version

No.	Product	Model No.	Software Version
1	DOCSIS 3.1 WiFi Emta	CODA-4589	2.0.10.16

Description of Available Antennas to the EUT 2.3

Table 3: Antenna List

Antenna Set.	Transmitter Circuit	Brand	Model	Antenna Net. Gain(dBi)	Frequency range (GHz)	Antenna Type	Connecter Type	Cable Length
A1	Chain (2)	AirGain	M2420SL0	3.69	2.4~2.4835	Dipole	i-pex(MHF)	50
A2	Chain (0)	AirGain	M2410CM	3.23	2.4~2.4835	Dipole	i-pex(MHF)	115
А3	Chain (1)	AirGain	M2420SL0	4.28	2.4~2.4835	Dipole	i-pex(MHF)	85
A4	Chain (2)	AirGain	M5X05C	4.51	5.15~5.85	Dipole	i-pex(MHF)	120
A5	Chain (1)	AirGain	M5X05C	6.1	5.15~5.85	Dipole	i-pex(MHF)	110
A6	Chain (0)	AirGain	M5X05C	4.94	5.15~5.85	Dipole	i-pex(MHF)	40
A7	Chain (3)	AirGain	M5X05C	4.83	5.15~5.85	Dipole	i-pex(MHF)	60

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2.4 Description of Channel Switching Algorithm

This device is IEEE 802.11ac and includes the ability to operate in an 80+80MHz mode.

The table is channel switching algorithm in mutil-channel operation.

THE table	, 13	channel swii	CHIII	iy a	ligoi	ICIII		IIIu	ui-C	Hall	1161			OH														
Bandwidtl	h /	Channel	36	40	44	48	52	56	60	64	10 0	10 4	10 8	11 2	11 6	12 0	12 4	12 8	13 2	1:			14 4	14 9			16 1	16 5
Mode	Combine / Band			GHz ~			5.25GHz ~ 5.35GHz			5.47~5.725 GHz								5.725~5.850GHz										
	T1	CH42 + CH155		52	210																			5775				
	T2	CH42 + CH58		52	210			52	90																			
	ТЗ	CH42 + CH106		52	210							55	30															
	T4	CH42 + CH122		52	10											56	10											
	T5	CH42 + CH138	5210																	,	5690							
	T6*	CH58+ CH106					5290				55	30																
	T7	CH58+ CH122					5290								56 ⁻	10												
AC80+80	Т8	CH58+ CH138						5290												ţ	5690							
Channels	Т9	CH58+ CH155					5290																	Ę	5775			
list	T 10	CH106 + CH122										5530 5610																
	T 11	CH106 + CH138									55	30			5690													
	T 12	CH106 + CH155										55	30												į	5775		
	T 13	CH122 + CH138														56 ⁻	10			;	5690							
	T 14	CH122 + CH155														56 ⁻	10								į	5775		
	T 15	CH138 + CH155																			5690					5775		

Note: The device subject to multi-channel operation conditionas, therefore some of test mode were selected for representative mode. These modes and test procedure have accepted by FCC.



2.5 EUT Maximum and Minimum Conducted Power

Table 4: The Measured Conducted Output Power

802.11a

CDD Mode

Frequency Band	MAX. F	Power	MIN. Power					
(MHz)	Output	Output	Output	Output				
	Power(dBm)	Power(mW)	Power(dBm)	Power(mW)				
5250~5350	18.58	72.182	12.58	18.113				
5470~5725	18.81	75.978	12.81	19.099				

802.11ac (VHT20)

CDD Mode

Frequency Band	MAX. F	Power	MIN. Power					
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)				
5250~5350	18.75	74.909	12.75	18.836				
5470~5725	18.85	76.79	12.85	19.275				

Beamforming Mode MCS0NSS1

Frequency Band	MAX. F	ower	MIN. F	Power
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)
5250~5350	18.75	74.909	12.75	18.836
5470~5725	18.85	76.79	12.85	19.275



802.11ac (VHT40)

CDD Mode

Frequency Band	MAX. F	Power	MIN. Power				
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)			
5250~5350	21.62	145.057	15.62	36.475			
5470~5725	21.73	148.928	15.73	37.411			

Beamforming Mode MCS0NSS1

Frequency Band	MAX. F	Power	MIN. Power					
(MHz)	Output	Output	Output	Output				
	Power(dBm)	Power(mW)	Power(dBm)	Power(mW)				
5250~5350	18.55	71.681	12.55	17.989				
5470~5725	18.67	73.58	12.67	18.493				

802.11ac (VHT80)

CDD Mode

Frequency Band	MAX. F	Power	MIN. Power					
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)				
5250~5350	22.52	178.546	16.52	44.875				
5470~5725	23.86	243.396	17.86	61.094				

Beamforming Mode MCS0NSS1

Frequency Band	MAX. Power		MIN. Power	
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)
5250~5350	18.46	70.067	12.46	17.620
5470~5725	18.78	75.456	12.78	18.967



802.11ac (VHT80+80)

CDD Mode

Frequency Band	MAX. F	Power	MIN. F	ower
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)
5250~5350	22.03	159.752	16.03	40.087
5470~5725	23.49	223.315	17.49	56.105

Beamforming Mode MCS0NSS1

Frequency Band	MAX. Power		MIN. Power	
(MHz)	Output	Output	Output	Output
	Power(dBm)	Power(mW)	Power(dBm)	Power(mW)
5250~5350	22.03	159.752	16.03	40.087
5470~5725	22.14	163.816	16.14	41.115



2.6 EUT Maximum and Minimum EIRP Power

Table 5: The EIRP Output Power List

802.11a

CDD Mode

Frequency Band	MAX. EIRP Power				MIN. EIR	P Power
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)		
5250~5350	24.68	294.055	18.68	73.790		
5470~5725	24.91	309.519	18.91	77.804		

802.11ac (VHT20)

CDD Mode

Frequency Band	MAX. EIRP Power		MIN. EIR	P Power
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)
5250~5350	24.85	305.164	18.85	76.736
5470~5725	24.95	312.827	18.95	78.524

Beamforming Mode MCS0NSS1

Frequency Band	MAX. EIRP Power		MIN. EIRP Power	
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)
5250~5350	29.89	973.944	23.89	244.906
5470~5725	29.99	998.400	23.99	250.611

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802.11ac (VHT40)

CDD Mode

Frequency Band	MAX. EIRP Power		MIN. EIR	P Power
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)
5250~5350	27.72	590.934	21.72	148.594
5470~5725	27.83	606.703	21.83	152.405

Beamforming Mode MCS0NSS1

Frequency Band	MAX. EIR	P Power	MIN. EIRP Power	
(MHz)	Output	Output	Output	Output
	Power(dBm)	Power(mW)	Power(dBm)	Power(mW)
5250~5350	29.69	931.975	23.69	233.884
5470~5725	29.81	956.665	23.81	240.436

802.11ac (VHT80)

CDD Mode

Frequency Band	MAX. EIRP Power				MIN. EIR	P Power
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)		
5250~5350	28.62	727.361	22.62	182.810		
5470~5725	29.96	991.547	23.96	248.886		

Beamforming Mode MCS0NSS1

Frequency Band	MAX. EIR	P Power	MIN. EIRP Power	
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)
5250~5350	29.60	910.990	23.60	229.087
5470~5725	29.92	981.056	23.92	246.604

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802.11ac (VHT80+80)

CDD Mode

Frequency Band	MAX. EIRP Power		MIN. EIR	P Power
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)
5250~5350	27.50	562.393	21.50	141.254
5470~5725	29.59	909.741	23.59	228.560

Beamforming Mode MCS0NSS1

Frequency Band	MAX. EIRP Power		MIN. EIRP Power	
(MHz)	Output Power(dBm)	Output Power(mW)	Output Power(dBm)	Output Power(mW)
5250~5350	29.95	988.643	23.95	248.313
5470~5725	29.85	967.092	23.85	242.661



2.7 Transmit Power Control (TPC)

U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

Applicable	EIRP	FCC 15.407 (h)(1)
\checkmark	>500mW	The TPC mechanism is required for system with an EIRP of above 500mW
<500mW		The TPC mechanism is not required for system with an EIRP of less 500mW

The UUT can adjust a transmitter's output power based on the signal level present at the receiver.TPC is auto controlled by software

2.8 Statement of Manufacturer

Manufacturer statement confirming that information regarding the parameters of the detected Radar Waveforms is not available to the end user.



3. U-NII DFS Rule Requirements

3.1 Working Modes and Required Test Items

The manufacturer shall state whether the UUT is capable of operating as a Master and/or a Client. If the UUT is capable of operating in more than one operating mode then each operating mode shall be tested separately. See tables 6 and 7 for the applicability of DFS requirements for each of the operational modes.

Table 6: Applicability of DFS Requirements Prior To Use a Channel

	Operational Mode			
Requirement	Master	Client without radar detection	Client with radar detection	
Non-Occupancy Period	✓	✓ note	✓	
DFS Detection Threshold	✓	Not required	✓	
Channel Availability Check Time	✓	Not required	Not required	
U-NII Detection Bandwidth	✓	Not required	✓	

Note: Per KDB 905462 D03 UNII Clients Without Radar Detection New Rules v01r02 section (b)(5/6), If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear. An analyzer plot that contains a single 30-minute sweep on the original channel.

Table 7: Applicability of DFS Requirements During Normal Operation.

	Operational Mode			
Requirement	Master or Client with radar detection	Client without radar detection		
DFS Detection Threshold	✓	Not required		
Channel Closing Transmission Time	✓	✓		
Channel Move Time	✓	✓		
U-NII Detection Bandwidth	✓	Not required		

Additional requirements for devices with multiple bandwidth modes	Master or Client with radar detection	Client without radar detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.



3.2 Test Limits And Radar Signal Parameters

Detection Threshold Values

Table 8: DFS Detection Thresholds For Master Devices And Client Devices With Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)	
EIRP ≥ 200 milliwatt	-64 dBm	
EIRP < 200 milliwatt and	-62 dBm	
power spectral density < 10 dBm/MHz		
EIRP < 200 milliwatt that do not meet the	0.4 JD	
power spectral density requirement	-64 dBm	

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.

Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

Table 9: DFS Response Requirement Values

Parameter	Value	
Non-occupancy period	Minimum 30 minutes	
Channel Availability Check Time	60 seconds	
Channel Move Time	10 seconds See Note 1.	
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3	

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

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Parameters of DFS Test Signals

Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Table 10: 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 Test B: 15 unique PRI values randomly selected within the range of 518-3066µ sec, with a minimum increment of 1µ sec, excluding PRI values selected in Test A	Roundup $ \begin{bmatrix} \frac{1}{360} \\ \frac{19 \cdot 10^6}{PRI_{\mu \text{ sec}}} \end{bmatrix} $	60%	30
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
Note 1: Sh		regate (Radar Types 1	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.



Table 11: 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

Three subsets of trials will be performed with a minimum of ten trials per subset. The subset of trials differ in where the Long Pulse Type 5 Signal is tuned in frequency.

- a) the Channel center frequency
- b) tuned frequencies such that 90% of the Long Pulse Type 5 frequency modulation is within the low edge of the UUT Occupied Bandwidth
- c) tuned frequencies such that 90% of the Long Pulse Type 5 frequency modulation is within the high edge of the UUT Occupied Bandwidth

It include 10 trails for every subset, the formula as below,

For subset case 1: the center frequency of the signal generator will remain fixed at the center of the UUT Channel.

For subset case 2: to retain 90% frequency overlap between the radar signal and the UUT Occupied Bandwidth, the center frequency of the signal generator will vary for each of the ten trials in subset case 2. The center frequency of the signal generator for each trial is calculated by:

 $FL+(0.4*Chirp\ Width\ [in\ MHz])$

For subset case 3: to retain 90% frequency overlap between the radar signal and the UUT Occupied Bandwidth, the center frequency of the signal generator will vary for each of the ten trials in subset case 3. The center frequency of the signal generator for each trial is calculated by:

FH-(0.4*Chirp Width [in MHz])

Table 12: 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

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4. Test & Support Equipment List

4.1 Test Instruments

Table 13: Test Instruments List

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSV40	100964	Jul. 01, 2017	Jun. 30, 2018
Vector Signal Generator Agilent	N5182B	MY53051263	Aug. 10, 2016	Aug. 09, 2017
Horn_Antenna EMCO	1018G	0001	Dec. 15, 2016	Dec. 14, 2017
DFS Control Box	BV-DFS-CB	001	Sep. 18, 2016	Sep. 17, 2017

4.2 Description of Support Units

Table 14: Support Unit Information.

No.	Product	Brand	Model No.	FCC ID	Spec
1	Wireless module	Qualcomm	QUALCOMM ATHEROS QCA		
	Inoduic		IPQ8064/AP161		

NOTE: This device was functioned as a ☐Master ☐Slave device during the DFS test.

Table 15: Software/Firmware Information.

No.	Product	Model No.	Software/Firmware Version
1	Wireless module	QUALCOMM ATHEROS QCA IPQ8064/AP161	OpenWrt Barrier Breaker r48529 /LuCl Trunk(git-63dae99)

Note: This module QUALCOMM ATHEROS QCA IPQ8064 was installed in the AP161.

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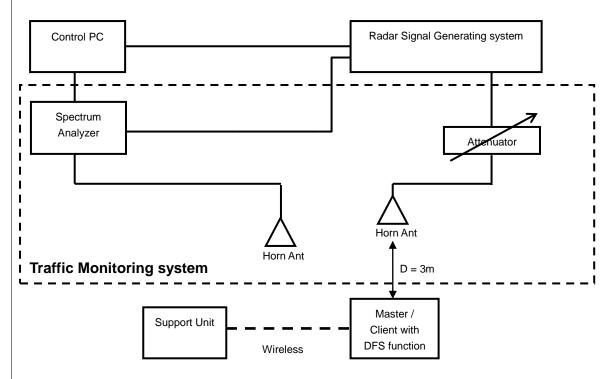


5. Test Procedure

5.1 DFS Measurement System

A complete DFS Measurement System consists of two subsystems: (1) the Radar Signal Generating system and (2) the Traffic Monitoring system. The control PC is necessary for generating the Radar waveforms in Table 10, 11 and 12. The traffic monitoring subsystem is specified to the type of unit under test (UUT).

Radiated Setup Configuration of DFS Measurement System



Channel Loading

System testing will be performed with channel-loading using means appropriate to the data types that are used by the unlicensed device. The following requirements apply:

i	a)	The data file must be of a type that is typical for the device (i.e., MPEG-2, MPEG-4, WAV, MP3, MP4, AVI, etc.) and must generally be transmitting in a streaming mode.	
	၁)	Software to ping the client is permitted to simulate data transfer but must have random ping intervals.	
•	c)	Timing plots are required with calculations demonstrating a minimum channel loading of approximately 17% or greater.	✓
(d)	Unicast or Multicast protocols are preferable but other protocols may be used. The appropriate protocol used must be described in the test procedures.	

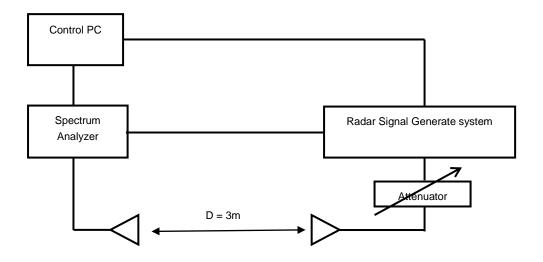


5.2 Calibration of DFS Detection Threshold Level

The measured channels are 5290MHz, 5500MHz, 5510MHz, 5530MHz and 5610MHz. The radar signal was the same as transmitted channels, and injected into the antenna of AP (master) or Client Device with Radar Detection, measured the channel closing transmission time and channel move time.

Radiated setup configuration of Calibration of DFS Detection Threshold Level

The calibrated conducted detection threshold level is set to -64dBm. The tested level is lower than required level hence it provides margin to the limit.



5.3 Deviation From Test Standard

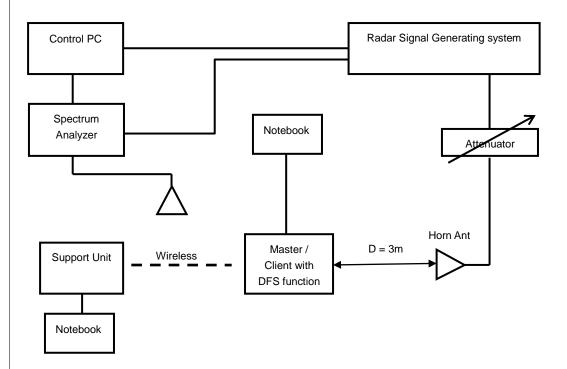
No deviation.



5.4 Radiated Test Setup Configuration

Master mode

The EUT is a U-NII Device operating in Master mode. The radar test signals are injected into the Master Device.



Note: The UUT main beam of the antenna is directly toward the radar emitter during testing.



6. Test Results

6.1 Summary of Test Results

Clause	Test Parameter	Remarks	Pass/Fail
15.407	DFS Detection Threshold	Applicable	Pass
15.407	Channel Availability Check Time	Applicable	Pass
15.407	Channel Move Time	Applicable	Pass
15.407	Channel Closing Transmission Time	Applicable	Pass
15.407	Non- Occupancy Period	Applicable	Pass
15.407	U-NII Detection Bandwidth	Applicable	Pass

Note: This device is IEEE 802.11ac and includes the ability to operate in an 80+80MHz mode; device subject to special conditionas, therefore test procedure were completed by KDB inquiry system.



6.2 Test Results

6.2.1 Test Mode: Device Operating In Master Mode.

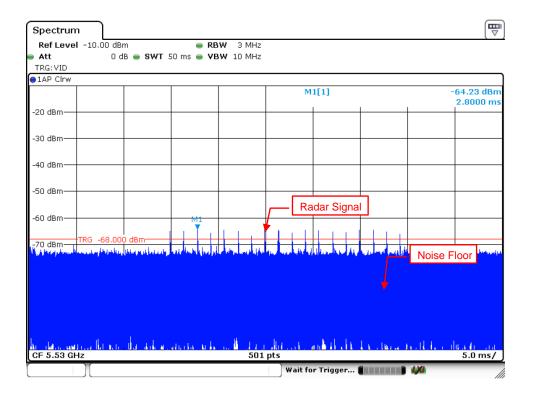
The radar test waveforms are injected into the Master.

This test was investigated for different bandwidth (20MHz \ 40MHz and 80MHz and 80MHz+80MHz).

The following plots was done on 80MHz as a representative

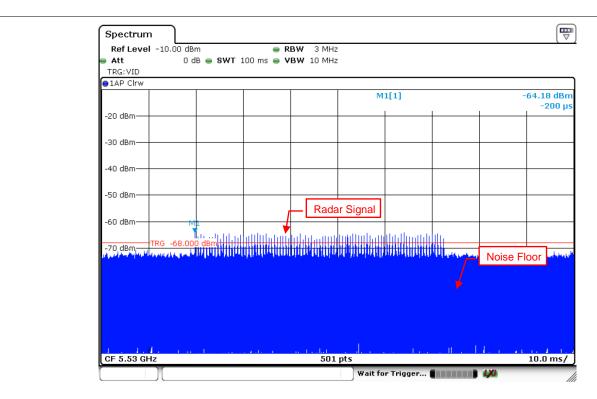
DFS Detection Threshold

For detection threshold level of -64dBm, the tested level is lower than required level for 1dB, hence it provides margin to the limit.

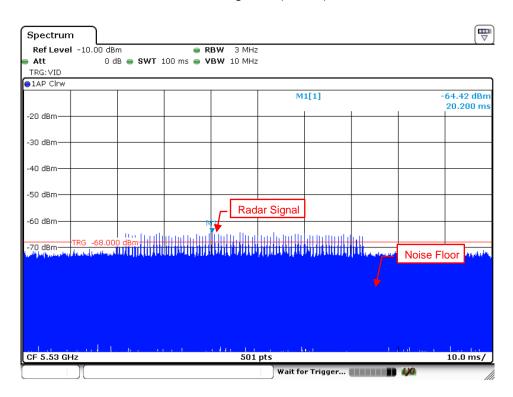


Radar Signal 0



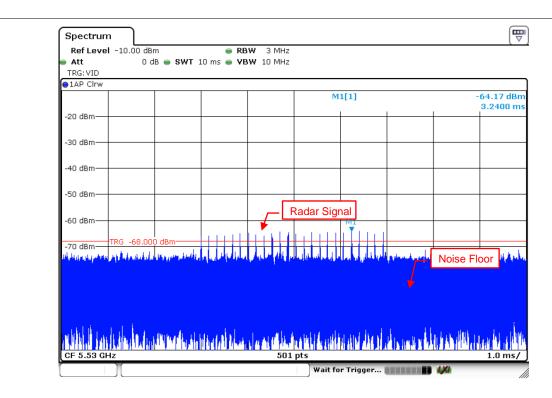


Radar Signal 1 (Test A)

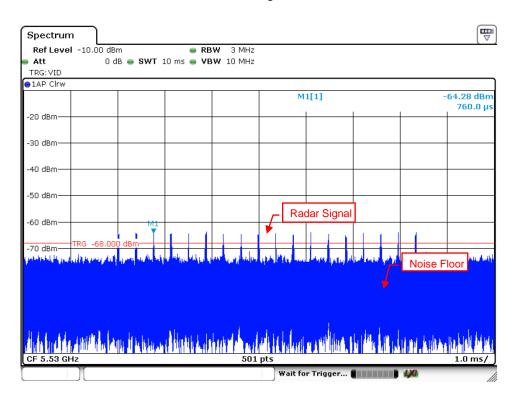


Radar Signal 1 (Test B)



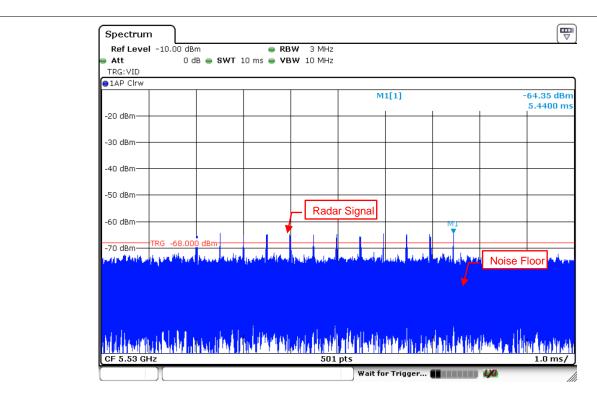


Radar Signal 2

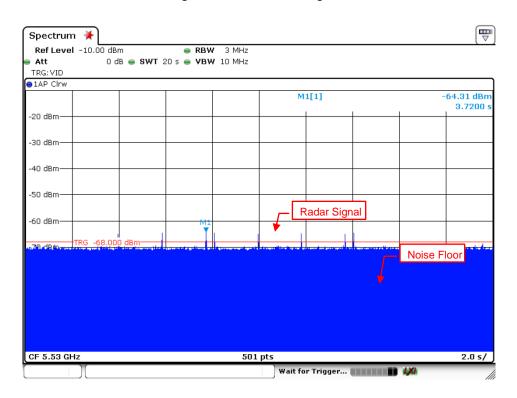


Radar Signal 3



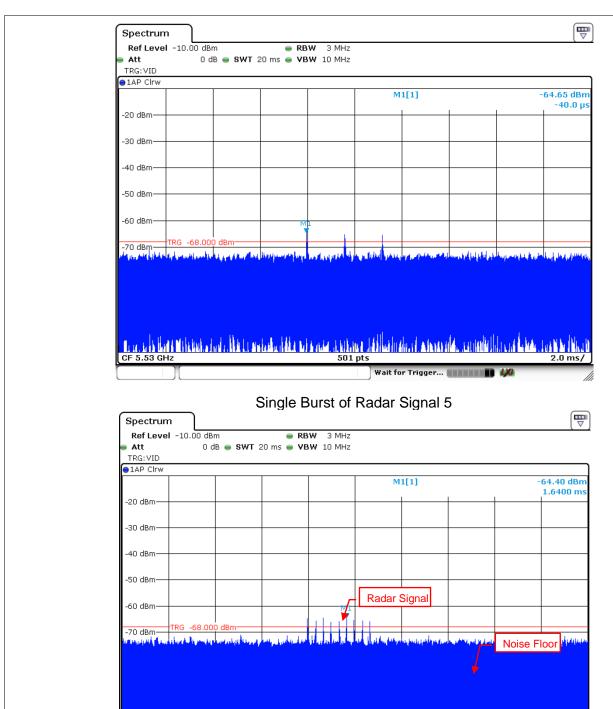


Single Burst of Radar Signal 4



Radar Signal 5





Radar Signal 6

Wait for Trigger...

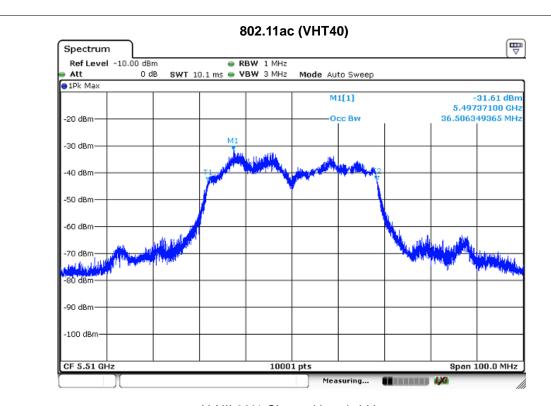


6.2.2 U-NII Detection Bandwidth

802.11ac (VHT20) Spectrum Ref Level -10.00 dBm RBW 300 kHz O dB SWT 50.8 µs ● VBW 1 MHz Mode Auto FFT ● 1Pk Max -38.05 dBm 5.49867410 GHz 17.710228977 MHz M1[1] Occ Bw -20 dBm -30 dBm -50 dBm -60 dBm -70 dBm--80 dBm -90 dBm -100 dBm CF 5.5 GHz 10001 pts Span 60.0 MHz

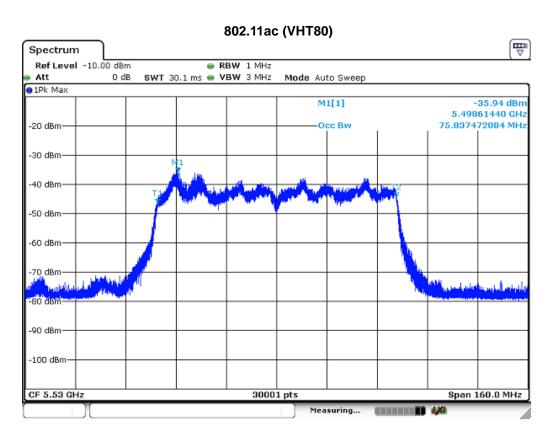
U-NII 99% Channel bandwidth





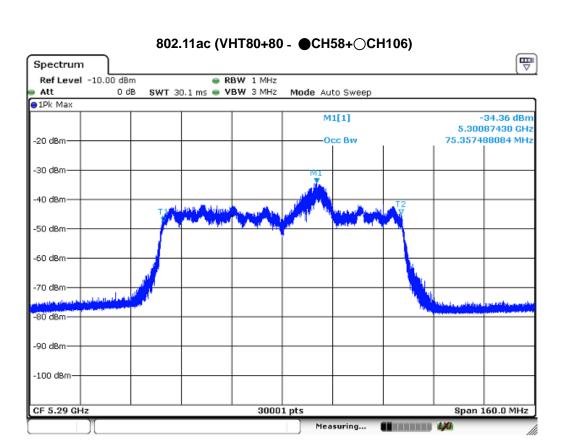
U-NII 99% Channel bandwidth



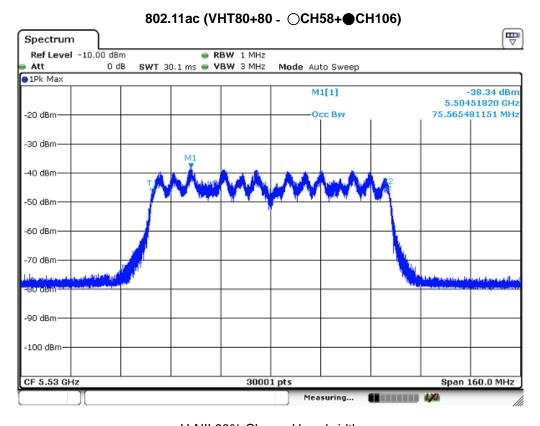


U-NII 99% Channel bandwidth





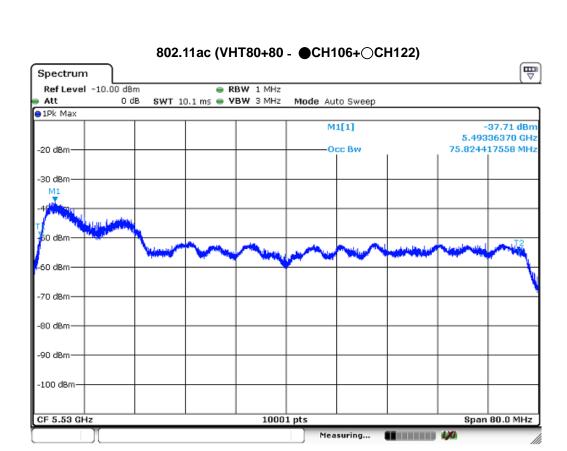
U-NII 99% Channel bandwidth



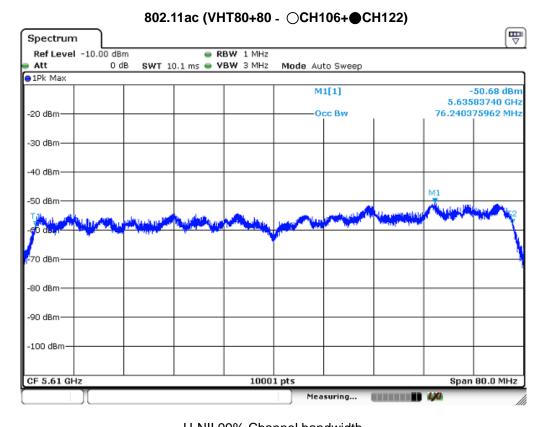
U-NII 99% Channel bandwidth

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U-NII 99% Channel bandwidth



U-NII 99% Channel bandwidth

Report No.: RF170503E08A-2 Reference No.: 170613E09 Page No. 32 / 165



Detection Bandwidth Test - 802.11ac (VHT20)

Radar Type 0

EUT Frequency: 5500MHz

EUT 99% Power bandwidth: 17.71MHz

Detection bandwidth limit (100% of EUT 99% Power bandwidth): 17.71MHz

Detection bandwidth (5509(FH) – 5491(FL)) : 18MHz Test Result : PASS

Test Result : PASS											
Radar				Trial N	Numbe	r / Det	ection				Detection
Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Rate (%)
5.491G(FL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.492G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.493G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.494G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.495G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.496G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.497G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.498G	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	90
5.499G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.500G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.501G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.502G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.503G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.504G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.505G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.506G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.507G	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	90
5.508G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.509G(FH)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100

Report No.: RF170503E08A-2 Reference No.: 170613E09

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Detection Bandwidth Test - 802.11ac (VHT40)

Radar Type 0

EUT Frequency: 5510MHz

EUT 99% Power bandwidth: 36.506MHz

Detection bandwidth limit (100% of EUT 99% Power bandwidth): 36.506MHz

Detection bandwidth (5529(FH) – 5491(FL)): 38MHz

Test Result : PASS

Radar Trial Number / Detection Detection											
	Trial Number / Detection									l	Detection
Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Rate (%)
5.491G(FL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.492G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.493G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.494G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.495G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.496G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.497G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.498G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.499G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.500G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.501G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.502G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.503G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.504G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.505G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.506G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.507G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	90
5.508G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.509G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.510G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.511G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.512G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.513G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.514G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.515G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.516G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.517G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.518G	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	90
5.519G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.520G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.521G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.522G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.523G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.524G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.525G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.526G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.527G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.528G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.529G(FH)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100



Detection Bandwidth Test - 802.11ac (VHT80)

Radar Type 0

EUT Frequency: 5530MHz

EUT 99% Power bandwidth: 75.837MHz

Detection bandwidth limit (100% of EUT 99% Power bandwidth): 75.837MHz

Detection bandwidth (5568(FH) - 5492(FL)): 76MHz

Test Result : PASS

Test Result : PASS Radar Trial Number / Detection											
Radar		Detection									
Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Rate (%)
5.492G(FL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.493G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.494G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.495G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.496G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.497G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.498G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.499G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.500G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.501G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.502G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.503G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.504G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.505G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.506G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.507G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.508G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.509G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.510G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.511G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.512G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.513G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.514G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.515G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.516G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.517G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.518G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.519G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.520G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.521G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.522G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.523G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.524G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.525G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.526G	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	90
5.527G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.528G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.529G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.530G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.531G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.532G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.533G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.534G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.535G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.536G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100



5.537G	Yes	100									
5.538G	Yes	100									
5.539G	Yes	100									
5.540G	Yes	100									
5.541G	Yes	100									
5.542G	Yes	100									
5.543G	Yes	100									
5.544G	Yes	100									
5.545G	Yes	100									
5.546G	Yes	100									
5.547G	Yes	100									
5.548G	Yes	100									
5.549G	Yes	100									
5.550G	Yes	100									
5.551G	Yes	100									
5.552G	Yes	100									
5.553G	Yes	100									
5.554G	Yes	100									
5.555G	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	90
5.556G	Yes	100									
5.557G	Yes	100									
5.558G	Yes	100									
5.559G	Yes	100									
5.560G	Yes	100									
5.561G	Yes	100									
5.562G	Yes	100									
5.563G	Yes	100									
5.564G	Yes	100									
5.565G	Yes	100									
5.566G	Yes	100									
5.567G	Yes	100									
5.568G(FH)	Yes	100									



Detection Bandwidth Test - 802.11ac (VHT80+80 - CH58+CH106)

Radar Type 0

EUT Frequency: 5290MHz

EUT 99% Power bandwidth: 75.357MHz

Detection bandwidth limit (100% of EUT 99% Power bandwidth): 75.357MHz

Detection bandwidth (5328(FH) – 5252(FL)) : 76MHz

Test Result : PASS

Radar	Trial Number / Detection										
Frequency											Detection
(MHz)	1	2	3	4	5	6	7	8	9	10	Rate (%)
5.252G(FL)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	90
5.253G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.254G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.255G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.256G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.257G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.258G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.259G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.260G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.261G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.262G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.263G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.264G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.265G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.266G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.267G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.268G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.269G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.270G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.271G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.272G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.273G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.274G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.275G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.276G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.277G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.278G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.279G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.280G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.281G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.282G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.283G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.284G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.285G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.286G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.287G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.288G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.289G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.290G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.291G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.292G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.293G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.294G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.295G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.296G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100



5.297G	Yes	100									
5.298G	Yes	100									
5.299G	Yes	100									
5.300G	Yes	100									
5.301G	Yes	100									
5.302G	Yes	100									
5.303G	Yes	100									
5.304G	Yes	100									
5.305G	Yes	100									
5.306G	Yes	100									
5.307G	Yes	100									
5.308G	Yes	100									
5.309G	Yes	100									
5.310G	Yes	100									
5.311G	Yes	100									
5.312G	Yes	100									
5.313G	Yes	100									
5.314G	Yes	100									
5.315G	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	90
5.316G	Yes	100									
5.317G	Yes	100									
5.318G	Yes	100									
5.319G	Yes	100									
5.320G	Yes	100									
5.321G	Yes	100									
5.322G	Yes	100									
5.323G	Yes	100									
5.324G	Yes	100									
5.325G	Yes	100									
5.326G	Yes	100									
5.327G	Yes	100									
5.328(FH)	Yes	No	Yes	90							



Detection Bandwidth Test - 802.11ac (VHT80+80 - ○CH58+●CH106)

Radar Type 0

EUT Frequency: 5530MHz

EUT 99% Power bandwidth: 75.565MHz

Detection bandwidth limit (100% of EUT 99% Power bandwidth): 75.565MHz

Detection bandwidth (5568(FH) – 5492(FL)): 76MHz

Test Result : PASS

	If : PASS Trial Number / Detection										
Radar		ı	1	Iriair	Numbe	r / Dete	ection	ı	ı	ı	Detection
Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Rate (%)
5.492G(FL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.493G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.494G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.495G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.496G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.497G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.498G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.499G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.500G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.501G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.502G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.503G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.504G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.505G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.506G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.507G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.508G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.509G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.510G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.511G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.512G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.513G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.514G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.515G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.516G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.517G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.518G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.519G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.520G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.521G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.522G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.523G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.524G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.525G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.526G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.527G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.528G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.529G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.530G	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	90
5.531G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.532G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.533G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.534G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.535G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.536G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100

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5.537G	Yes	100			
5.538G	Yes	100			
5.539G	Yes	100			
5.540G	Yes	100			
5.541G	Yes	100			
5.542G	Yes	100			
5.543G	Yes	100			
5.544G	Yes	100			
5.545G	Yes	100			
5.546G	Yes	100			
5.547G	Yes	100			
5.548G	Yes	100			
5.549G	Yes	100			
5.550G	Yes	100			
5.551G	Yes	100			
5.552G	Yes	100			
5.553G	Yes	100			
5.554G	Yes	100			
5.555G	Yes	100			
5.556G	Yes	100			
5.557G	Yes	100			
5.558G	Yes	100			
5.559G	Yes	100			
5.560G	Yes	100			
5.561G	Yes	100			
5.562G	Yes	100			
5.563G	Yes	100			
5.564G	Yes	100			
5.565G	Yes	100			
5.566G	Yes	100			
5.567G	Yes	100			
5.568G(FH)	Yes	Yes	No	Yes	90



Detection Bandwidth Test - 802.11ac (VHT80+80 - CH106+CH122)

Radar Type 0

EUT Frequency: 5530MHz

EUT 99% Power bandwidth: 75.565MHz

Detection bandwidth limit (100% of EUT 99% Power bandwidth): 75.824MHz

Detection bandwidth (5568(FH) – 5492(FL)) : 76MHz

Test Result : PASS

Radar	Trial Number / Detection											
Frequency											Detection	
(MHz)	1	2	3	4	5	6	7	8	9	10	Rate (%)	
5.492G(FL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.493G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.494G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.495G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.496G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.497G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.498G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.499G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.500G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.501G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.502G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.503G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.504G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.505G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.506G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.507G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.508G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.509G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.510G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.511G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.512G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.513G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.514G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.515G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.516G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.517G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.518G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.519G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.520G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.521G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.522G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.523G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.524G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.525G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.526G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.527G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.528G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.529G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.530G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.531G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.532G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.533G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.534G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.535G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
5.536G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	



5.537G	Yes	100			
5.538G	Yes	100			
5.539G	Yes	100			
5.540G	Yes	100			
5.541G	Yes	100			
5.542G	Yes	100			
5.543G	Yes	100			
5.544G	Yes	100			
5.545G	Yes	100			
5.546G	Yes	100			
5.547G	Yes	100			
5.548G	Yes	100			
5.549G	Yes	100			
5.550G	Yes	100			
5.551G	Yes	100			
5.552G	Yes	100			
5.553G	Yes	100			
5.554G	Yes	100			
5.555G	Yes	100			
5.556G	Yes	100			
5.557G	Yes	100			
5.558G	Yes	100			
5.559G	Yes	100			
5.560G	Yes	100			
5.561G	Yes	100			
5.562G	Yes	100			
5.563G	Yes	100			
5.564G	Yes	100			
5.565G	Yes	100			
5.566G	Yes	100			
5.567G	Yes	100			
5.568G(FH)	Yes	Yes	No	Yes	90



Detection Bandwidth Test - 802.11ac (VHT80+80 - ○CH106+●CH122)

Radar Type 0

EUT Frequency: 5610MHz

EUT 99% Power bandwidth: 76.24MHz

Detection bandwidth limit (100% of EUT 99% Power bandwidth): 76.24MHz

Detection bandwidth (5649(FH) – 5571(FL)): 78MHz
Test Result: PASS

Test Result : PASS											
Radar			Detection								
Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5.571G(FL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.572G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.573G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.574G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.575G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.576G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.577G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.578G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.579G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.580G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.581G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.582G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.583G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.584G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.585G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.586G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.587G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.588G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.589G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.590G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.591G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.592G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.593G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.594G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.595G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.596G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.597G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.598G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.599G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.600G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.601G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.602G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.603G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.604G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.605G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.606G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.607G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.608G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.609G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.610G	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	90
5.611G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.612G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.613G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.614G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.615G									Yes		
5.0156	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	162	Yes	100



5.616G	Yes	100									
5.617G	Yes	100									
5.618G	Yes	100									
5.619G	Yes	100									
5.620G	Yes	100									
5.621G	Yes	100									
5.622G	Yes	100									
5.623G	Yes	100									
5.624G	Yes	100									
5.625G	Yes	100									
5.626G	Yes	100									
5.627G	Yes	100									
5.628G	Yes	100									
5.629G	Yes	100									
5.630G	Yes	100									
5.631G	Yes	100									
5.632G	Yes	100									
5.633G	Yes	100									
5.634G	Yes	100									
5.635G	Yes	100									
5.636G	Yes	100									
5.637G	Yes	100									
5.638G	Yes	100									
5.639G	Yes	100									
5.640G	Yes	100									
5.641G	Yes	100									
5.642G	Yes	100									
5.643G	Yes	100									
5.644G	Yes	100									
5.645G	Yes	100									
5.646G	Yes	100									
5.647G	Yes	100									
5.648G	Yes	100									
5.649G(FH)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	90



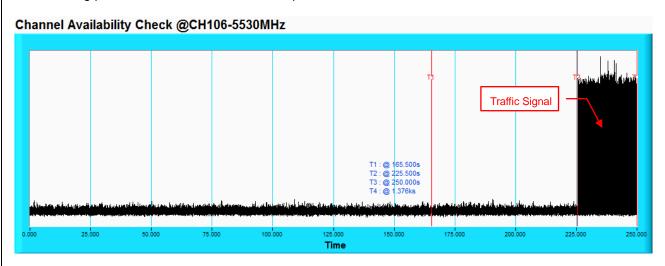
6.2.3 Channel Availability Check Time

If the EUT successfully detected the radar burst, it should be observed as the EUT has no transmissions occurred until the EUT starts transmitting on another channel.

		Observation
Timing of Radar Signal	EUT	Spectrum Analyzer
Within 1 to 6 second	Detected	No transmissions
Within 54 to 60 second	Detected	No transmissions

Initial Channel Availability Check Time

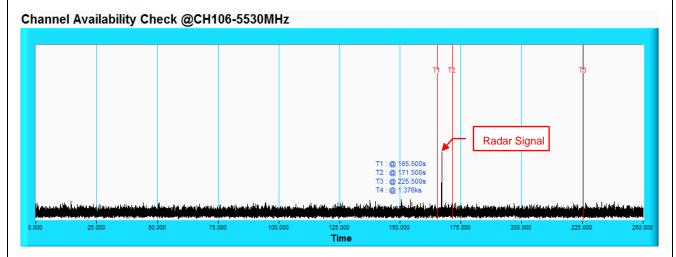
The following plots was done on 80MHz as a representative



NOTE: T1 denotes the end of power-up time period is 165.5th second. T2 denotes the end of Channel Availability Check time is 225.5th second. Channel Availability Check time is equal to (T2 – T1) 60 seconds.

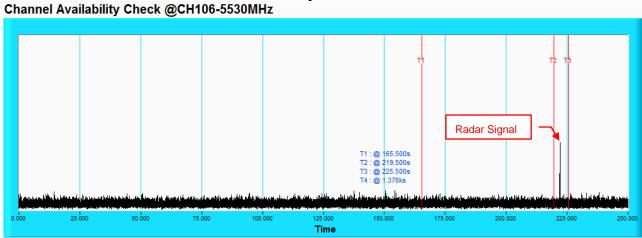


Radar Burst at the Beginning of the Channel Availability Check Time



NOTE: T1 denotes the end of power up time period is 165.5th second. T2 denotes 171.5th second and the radar burst was commenced within a 6 second window starting from the end of power-up sequence. T3 denotes the 225.5th second.





NOTE: T2 denotes the end of power up time period is 219.5th second.T3 denotes 225.5th second and the radar burst was commenced within 54th second to 60th second window starting from the end of power-up sequence. T1 denotes the 165.5th second.



6.2.4 Channel Closing Transmission and Channel Move Time

Wireless Traffic Loading

802.11ac (VHT20)



802.11ac (VHT40)



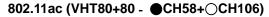
802.11ac (VHT80)

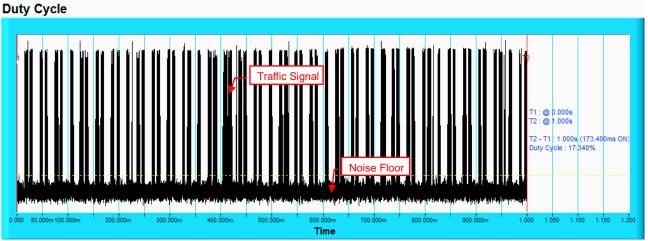


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802.11ac (VHT80+80 - ○CH58+●CH106)



802.11ac (VHT80+80 - CH106+CH122)





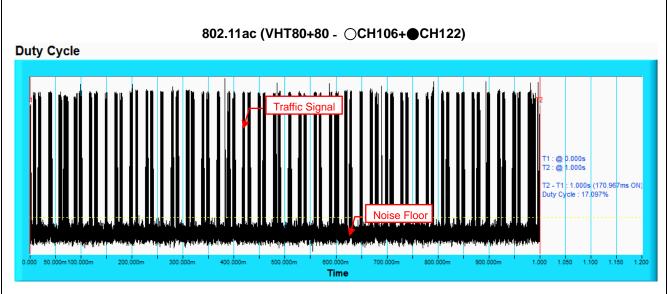




Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Number of Trials(Times)	Percentage of Successful Detection (%)
1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 µ sec, with a minimum increment of 1 µ sec, excluding PRI values selected in Test A	Roundup $ \begin{pmatrix} 1 \\ 360 \end{pmatrix} \cdot \begin{pmatrix} 19 \cdot 10^6 \\ PRI_{\mu \text{ sec}} \end{pmatrix} $	18	30	86.7
2	1-5	150-230	23-29	30	90
3	6-10	200-500	16-18	30	83.3
4	11-20	200-500	12-16	30	86.7
	Aggregate (Radar T	ypes 1-4)		120	86.67

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per Burst	Number of Bursts	Number of Trials(Times)	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	30	86.7



Table 3: Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Number of Trials(Times)	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	30	83.3



Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Number of Trials(Times)	Percentage of Successful Detection (%)
1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 µ sec, with a minimum increment of 1 µ sec, excluding PRI values selected in Test A	Roundup $ \left\{ \begin{array}{l} \frac{1}{360} \\ 19 \cdot 10^6 \\ \text{PRI}_{\mu \text{ sec}} \end{array} \right\}$	18	30	86.7
2	1-5	150-230	23-29	30	93.3
3	6-10	200-500	16-18	30	86.7
4	11-20	200-500	12-16	30	86.7
	Aggregate (Radar T	ypes 1-4)	-	120	88.33

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per Burst	Number of Bursts	Number of Trials(Times)	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	30	83.3



Table 3: Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Number of Trials(Times)	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	30	86.7



Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Number of Trials(Times)	Percentage of Successful Detection (%)
1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 µ sec, with a minimum increment of 1 µ sec, excluding PRI values selected in Test A	19 · 10 ⁶	18	30	86.7
2	1-5	150-230	23-29	30	86.7
3	6-10	200-500	16-18	30	83.3
4	11-20	200-500	12-16	30	86.7
	Aggregate (Radar T	ypes 1-4)	•	120	85.83

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per Burst	Number of Bursts	Number of Trials(Times)	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	30	86.7



Table 3: Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Number of Trials(Times)	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	30	83.3



802.11ac (VHT80+80 - • CH58+ CH106)

Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Number of Trials(Times)	Percentage of Successful Detection (%)
1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 µ sec, with a minimum increment of 1 µ sec, excluding PRI values selected in Test A	19 · 10 ⁶	18	30	86.7
2	1-5	150-230	23-29	30	93.3
3	6-10	200-500	16-18	30	83.3
4	11-20	200-500 12-16		30	83.3
	Aggregate (Radar T	ypes 1-4)		120	86.67

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per Burst	Number of Bursts	Number of Trials(Times)	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	30	86.7



Table 3: Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Number of Trials(Times)	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	30	83.3



802.11ac (VHT80+80 - ○CH58+●CH106)

Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Number of Trials(Times)	Percentage of Successful Detection (%)
1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 µ sec, with a minimum increment of 1 µ sec, excluding PRI values selected in Test A	19 · 10 ⁶	18	30	83.3
2	1-5	150-230	23-29	30	86.7
3	6-10	200-500	16-18	30	86.7
4	11-20	200-500 12-16		30	86.7
	Aggregate (Radar T	ypes 1-4)		120	85.83

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per Burst	Number of Bursts	Number of Trials(Times)	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	30	83.3



Table 3: Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Number of Trials(Times)	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	30	86.7

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802.11ac (VHT80+80 - CH106+ CH122)

Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Number of Trials(Times)	Percentage of Successful Detection (%)
1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 µ sec, with a minimum increment of 1 µ sec, excluding PRI values selected in Test A	Roundup $ \begin{cases} $	18	30	86.7
2	1-5	150-230	23-29	30	90
3	6-10	200-500	16-18	30	86.7
4	11-20	200-500	12-16	30	83.3
	Aggregate (Radar T	ypes 1-4)		120	86.67

Table 2: Long Pulse Radar Test Waveform

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



Table 3: Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Number of Trials(Times)	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	30	83.3



802.11ac (VHT80+80 - \(\times\)CH106+\(\times\)CH122)

Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Number of Trials(Times)	Percentage of Successful Detection (%)
1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 µ sec, with a minimum increment of 1 µ sec, excluding PRI values selected in Test A	19 · 10 ⁶	18	30	90
2	1-5	150-230	23-29	30	86.7
3	6-10	200-500	16-18	30	86.7
4	11-20	200-500	12-16	30	83.3
	Aggregate (Radar T	ypes 1-4)		120	86.67

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per Burst	Number of Bursts	Number of Trials(Times)	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	30	83.3



Table 3: Frequency Hopping Radar Test Waveform

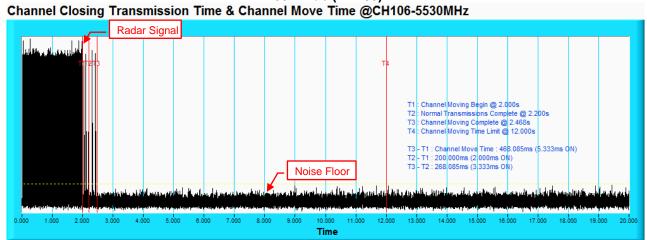
Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Number of Trials(Times)	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	30	86.7



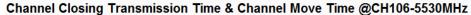
The following plots was done on 80MHz as a representative

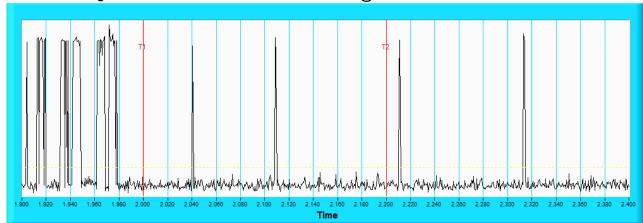
Radar signal 0

802.11ac (VHT80)



NOTE: T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.

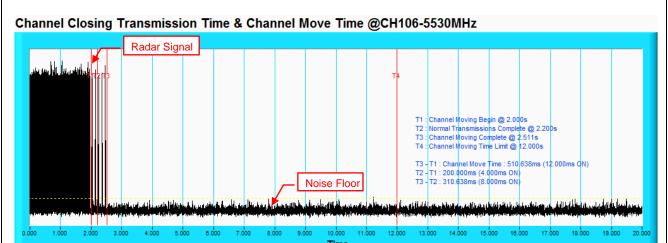




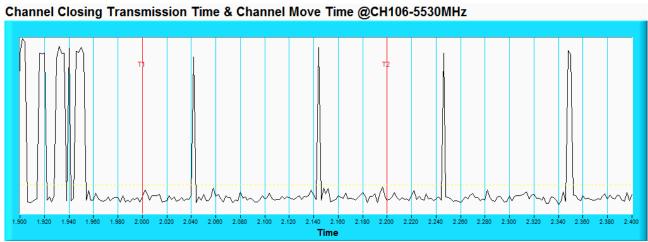


Radar signal 1

802.11ac (VHT80)



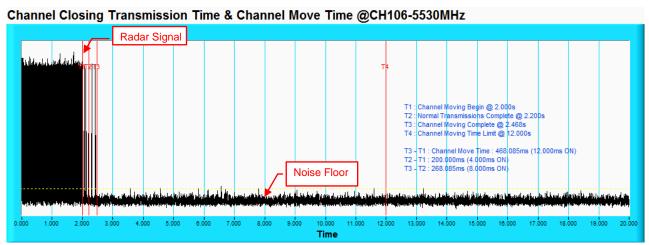
NOTE: T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.



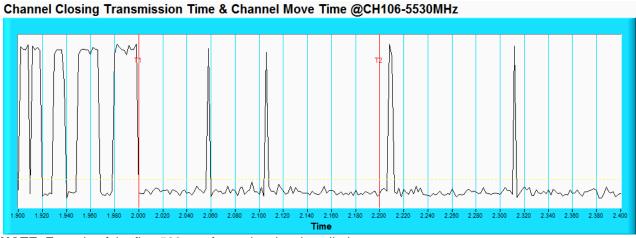


Radar signal 2

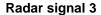
802.11ac (VHT80)

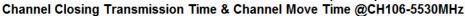


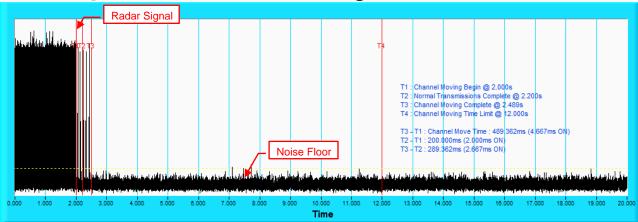
NOTE: T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.



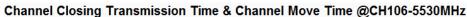


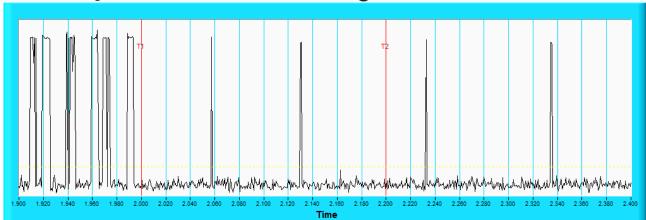






NOTE: T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.



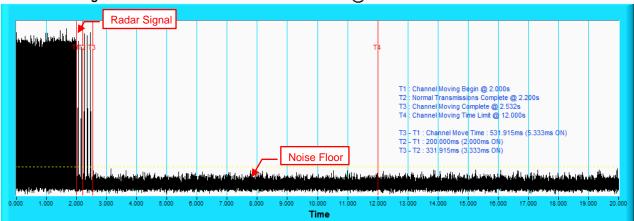




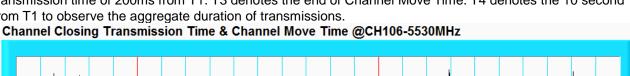
Radar signal 4

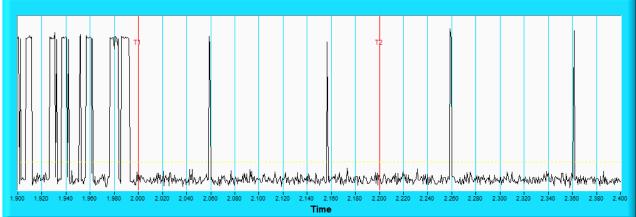
802.11ac (VHT80)

Channel Closing Transmission Time & Channel Move Time @CH106-5530MHz



NOTE: T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.





NOTE: Zoom in of the first 500ms after radar signal applied.



802.11ac (VHT20)

Type 1 Radar Statistical Performances									
Trial	Test	Pulse	Pulse	Pulses	Pulse	Detection			
#	Frequency	Repetition	Repetition	per	Repetition				
	(MHz)	Frequency	Frequency	Burst	Interval				
		Number (1	(Pulse per		(microseconds)				
		to 23)	seconds)						
1	5500	15	1253	67	798	Yes			
2	5498	16	1223	65	818	Yes			
3	5507	4	1730	92	578	Yes			
4	5505	11	1393	74	718	No			
5	5498	22	1066	57	938	Yes			
6	5496	7	1567	83	638	Yes			
7	5502	2	1859	99	538	Yes			
8	5497	8	1520	81	658	Yes			
9	5502	1	1931	102	518	Yes			
10	5493	19	1139	61	878	Yes			
11	5492	21	1089	58	918	No			
12	5500	23	326.2	18	3066	Yes			
13	5502	9	1475	78	678	Yes			
14	5505	5	1672	89	598	Yes			
15	5495	6	1618	86	618	Yes			
16	5494		1111	59	900	Yes			
17	5492		1024	55	977	Yes			
18	5503		625.8	34	1598	Yes			
19	5507		730.5	39	1369	Yes			
20	5500		1181	63	847	Yes			
21	5507		400.6	22	2496	Yes			
22	5507		529.4	28	1889	Yes			
23	5508		347.6	19	2877	No			
24	5509		641.4	34	1559	Yes			
25	5495		508.9	27	1965	Yes			
26	5497		345.4	19	2895	Yes			
27	5499		580.7	31	1722	Yes			
28	5503		786.8	42	1271	Yes			
29	5498		808.4	43	1237	Yes			
30	5505		517.1	28	1934	No			
	Detection Rate: 86.7 %								



Type 2 Radar Statistical Performances									
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection				
	Frequency	Burst	Width(us)	, ,					
	(MHz)		, ,						
1	5500	24	1.7	174	Yes				
2	5497	27	3.8	176	Yes				
3	5501	28	4	161	Yes				
4	5497	28	4.3	226	Yes				
5	5499	24	1.9	193	Yes				
6	5508	23	1.1	230	Yes				
7	5496	29	4.5	198	Yes				
8	5499	26	2.9	227	Yes				
9	5497	26	2.8	171	No				
10	5501	27	3.6	221	Yes				
11	5493	23	1.1	180	Yes				
12	5495	23	1.3	189	Yes				
13	5495	25	2.5	204	Yes				
14	5492	29	4.5	203	Yes				
15	5493	29	5	170	Yes				
16	5494	26	3.1	201	No				
17	5497	24	2.1	218	Yes				
18	5500	25	2.6	208	Yes				
19	5504	24	1.8	223	Yes				
20	5508	23	1.2	220	Yes				
21	5498	26	2.9	224	Yes				
22	5502	28	4	160	Yes				
23	5497	25	2.5	209	No				
24	5497	23	1	205	Yes				
25	5503	27	3.7	151	Yes				
26	5501	25	2.5	186	Yes				
27	5503	23	1.5	190	Yes				
28	5509	23	1.3	185	Yes				
29	5507	23	1.2	175	Yes				
30	5509	24	1.7	216	Yes				
	Detection Rate: 90 %								



Type 3	Radar Statistic	al Performance	es					
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection			
	Frequency	Burst	Width(us)					
	(MHz)							
1	5500	16	6.7	467	Yes			
2	5505	18	8.8	304	Yes			
3	5494	18	9	316	Yes			
4	5501	18	9.3	439	Yes			
5	5506	16	6.9	420	Yes			
6	5499	16	6.1	249	Yes			
7	5507	18	9.5	463	Yes			
8	5506	17	7.9	258	Yes			
9	5499	17	7.8	212	No			
10	5502	17	8.6	236	No			
11	5495	16	6.1	474	Yes			
12	5497	16	6.3	461	Yes			
13	5493	17	7.5	437	Yes			
14	5496	18	9.5	287	Yes			
15	5502	18	10	395	Yes			
16	5505	17	8.1	322	Yes			
17	5509	16	7.1	468	Yes			
18	5506	17	7.6	255	Yes			
19	5493	16	6.8	423	Yes			
20	5500	16	6.2	456	Yes			
21	5501	17	7.9	351	Yes			
22	5504	18	9	411	No			
23	5495	17	7.5	279	Yes			
24	5502	16	6	431	No			
25	5500	17	8.7	324	Yes			
26	5501	17	7.5	419	Yes			
27	5501	16	6.5	447	Yes			
28	5496	16	6.3	481	No			
29	5508	16	6.2	438	Yes			
30	5504	16	6.7	270	Yes			
	Detection Rate: 83.3 %							



Type 4	Radar Statistic	al Performance	es					
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection			
	Frequency	Burst	Width(us)	, ,				
	(MHz)		, ,					
1	5500	12	12.5	467	Yes			
2	5497	15	17.2	304	No			
3	5501	15	17.8	316	Yes			
4	5498	16	18.5	439	Yes			
5	5504	13	13.1	420	No			
6	5492	12	11.3	249	Yes			
7	5499	16	18.8	463	Yes			
8	5503	14	15.3	258	Yes			
9	5506	14	15.1	212	Yes			
10	5508	15	16.9	236	No			
11	5491	12	11.2	474	Yes			
12	5503	12	11.7	461	Yes			
13	5509	13	14.4	437	Yes			
14	5496	16	18.9	287	Yes			
15	5502	16	19.9	395	Yes			
16	5504	14	15.7	322	Yes			
17	5491	13	13.4	468	Yes			
18	5500	13	14.5	255	Yes			
19	5501	13	12.9	423	Yes			
20	5494	12	11.5	456	Yes			
21	5493	14	15.3	351	No			
22	5493	15	17.8	411	Yes			
23	5495	13	14.3	279	Yes			
24	5504	12	11.1	431	Yes			
25	5499	15	17	324	Yes			
26	5502	13	14.5	419	Yes			
27	5500	12	12.1	447	Yes			
28	5504	12	11.7	481	Yes			
29	5494	12	11.6	438	Yes			
30	5498	12	12.7	270	Yes			
Detection Rate: 86.7 %								



802.11ac (VHT20)

Type 5 Radar Statistical Performances										
Trial #	Minimum	Minimum Chirp Center Test Signal Name								
	Chirp Width(MHz)	Frequency(MHz)								
1	7	5500	LP_Signal_01	Yes						
2	15	5500	LP_Signal_02	Yes						
3	16	5500	LP_Signal_03	No						
4	18	5500	LP_Signal_04	Yes						
5	8	5500	LP_Signal_05	No						
6	5	5500	LP_Signal_06	Yes						
7	18	5500	LP_Signal_07	Yes						
8	12	5500	LP_Signal_08	Yes						
9	12	5500	LP_Signal_09	Yes						
10	15	5500	LP_Signal_10	Yes						
11	5	5493	LP_Signal_11	Yes						
12	6	5493	LP_Signal_12	Yes						
13	11	5495	LP_Signal_13	Yes						
14	18	5498	LP_Signal_14	Yes						
15	20	5499	LP_Signal_15	Yes						
16	13	5496	LP_Signal_16	Yes						
17	9	5495	LP_Signal_17	Yes						
18	11	5495	LP_Signal_18	Yes						
19	8	5494	LP_Signal_19	Yes						
20	5	5493	LP_Signal_20	No						
21	12	5504	LP_Signal_21	Yes						
22	17	5502	LP_Signal_22	Yes						
23	10	5505	LP_Signal_23	Yes						
24	5	5507	LP_Signal_24	Yes						
25	15	5503	LP_Signal_25	Yes						
26	11	5505	LP_Signal_26	Yes						
27	7	5506	LP_Signal_27	Yes						
28	6	5507	LP_Signal_28	No						
29	6	5507	LP_Signal_29	Yes						
30	8	5506	LP_Signal_30	Yes						
			Detection R	Detection Rate: 86.7 %						

The Long Pulse Radar pattern shown in Appendix A.1



Type 6 Radar Statistical Performances						
Trial #	Pulses per	Pulse Width(us)	PRI(us)	Detection		
	Burst					
1	9	1	333.3	No		
2	9	1	333.3	Yes		
3	9	1	333.3	Yes		
4	9	1	333.3	Yes		
5	9	1	333.3	Yes		
6	9	1	333.3	Yes		
7	9	1	333.3	No		
8	9	1	333.3	No		
9	9	1	333.3	Yes		
10	9	1	333.3	Yes		
11	9	1	333.3	Yes		
12	9	1	333.3	Yes		
13	9	1	333.3	Yes		
14	9	1	333.3	Yes		
15	9	1	333.3	Yes		
16	9	1	333.3	Yes		
17	9	1	333.3	Yes		
18	9	1	333.3	Yes		
19	9	1	333.3	Yes		
20	9	1	333.3	Yes		
21	9	1	333.3	Yes		
22	9	1	333.3	Yes		
23	9	1	333.3	Yes		
24	9	1	333.3	Yes		
25	9	1	333.3	No		
26	9	1	333.3	Yes		
27	9	1	333.3	Yes		
28	9	1	333.3	Yes		
29	9	1	333.3	No		
30	9	1	333.3	Yes		
Detection Rate: 83.3 %						



Type 6 Radar Statistical Performances					
Trial #	Hopping Frequency	Detection			
	Sequence Name				
1	HOP_FREQ_SEQ_01	No			
2	HOP_FREQ_SEQ_02	Yes			
3	HOP_FREQ_SEQ_03	Yes			
4	HOP_FREQ_SEQ_04	Yes			
5	HOP_FREQ_SEQ_05	Yes			
6	HOP_FREQ_SEQ_06	Yes			
7	HOP_FREQ_SEQ_07	No			
8	HOP_FREQ_SEQ_08	No			
9	HOP_FREQ_SEQ_09	Yes			
10	HOP_FREQ_SEQ_10	Yes			
11	HOP_FREQ_SEQ_11	Yes			
12	HOP_FREQ_SEQ_12	Yes			
13	HOP_FREQ_SEQ_13	Yes			
14	HOP_FREQ_SEQ_14	Yes			
15	HOP_FREQ_SEQ_15	Yes			
16	HOP_FREQ_SEQ_16	Yes			
17	HOP_FREQ_SEQ_17	Yes			
18	HOP_FREQ_SEQ_18	Yes			
19	HOP_FREQ_SEQ_19	Yes			
20	HOP_FREQ_SEQ_20	Yes			
21	HOP_FREQ_SEQ_21	Yes			
22	HOP_FREQ_SEQ_22	Yes			
23	HOP_FREQ_SEQ_23	Yes			
24	HOP_FREQ_SEQ_24	Yes			
25	HOP_FREQ_SEQ_25	No			
26	HOP_FREQ_SEQ_26	Yes			
27	HOP_FREQ_SEQ_27	Yes			
28	HOP_FREQ_SEQ_28	Yes			
29	HOP_FREQ_SEQ_29	No			
30	HOP_FREQ_SEQ_30	Yes			
Detection Rate: 83.3 %					

The Frequency Hopping Radar pattern shown in Appendix A.2



Type 1 Radar Statistical Performances							
Trial	Test	Pulse	Pulse	Pulses	Pulse	Detection	
#	Frequency	Repetition	Repetition	per	Repetition		
	(MHz)	Frequency	Frequency	Burst	Interval		
		Number (1	(Pulse per		(microseconds)		
		to 23)	seconds)				
1	5510	15	1253	67	798	Yes	
2	5520	16	1223	65	818	Yes	
3	5500	4	1730	92	578	Yes	
4	5513	11	1393	74	718	No	
5	5524	22	1066	57	938	Yes	
6	5500	7	1567	83	638	Yes	
7	5493	2	1859	99	538	Yes	
8	5509	8	1520	81	658	Yes	
9	5511	1	1931	102	518	Yes	
10	5496	19	1139	61	878	Yes	
11	5499	21	1089	58	918	Yes	
12	5498	23	326.2	18	3066	Yes	
13	5498	9	1475	78	678	Yes	
14	5518	5	1672	89	598	Yes	
15	5506	6	1618	86	618	Yes	
16	5503		1111	59	900	Yes	
17	5523		1024	55	977	Yes	
18	5526		625.8	34	1598	Yes	
19	5502		730.5	39	1369	Yes	
20	5519		1181	63	847	Yes	
21	5496		400.6	22	2496	Yes	
22	5505		529.4	28	1889	Yes	
23	5505		347.6	19	2877	Yes	
24	5508		641.4	34	1559	Yes	
25	5519		508.9	27	1965	Yes	
26	5511		345.4	19	2895	No	
27	5506		580.7	31	1722	Yes	
28	5518		786.8	42	1271	Yes	
29	5528		808.4	43	1237	No	
30	5519		517.1	28	1934	No	
Detection Rate: 86.7 %							



Type 2	Radar Statistic	al Performance	 es			
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection	
	Frequency	Burst	Width(us)			
	(MHz)					
1	5510	24	1.7	174	Yes	
2	5520	27	3.8	176	Yes	
3	5500	28	4	161	Yes	
4	5523	28	4.3	226	Yes	
5	5501	24	1.9	193	Yes	
6	5527	23	1.1	230	Yes	
7	5508	29	4.5	198	Yes	
8	5511	26	2.9	227	Yes	
9	5505	26	2.8	171	Yes	
10	5517	27	3.6	221	Yes	
11	5519	23	1.1	180	Yes	
12	5510	23	1.3	189	Yes	
13	5504	25	2.5	204	Yes	
14	5528	29	4.5	203	Yes	
15	5527	29	5	170	No	
16	5516	26	3.1	201	No	
17	5504	24	2.1	218	Yes	
18	5513	25	2.6	208	Yes	
19	5497	24	1.8	223	Yes	
20	5515	23	1.2	220	Yes	
21	5506	26	2.9	224	Yes	
22	5515	28	4	160	Yes	
23	5527	25	2.5	209	Yes	
24	5496	23	1	205	Yes	
25	5514	27	3.7	151	Yes	
26	5503	25	2.5	186	Yes	
27	5503	23	1.5	190	Yes	
28	5523	23	1.3	185	Yes	
29	5494	23	1.2	175	Yes	
30	5504	24	1.7	216	Yes	
Detection Rate: 93.3 %						



Type 3	Radar Statistic	al Performance	es			
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection	
	Frequency	Burst	Width(us)			
	(MHz)					
1	5510	16	6.7	467	Yes	
2	5520	18	8.8	304	Yes	
3	5500	18	9	316	Yes	
4	5505	18	9.3	439	Yes	
5	5491	16	6.9	420	No	
6	5522	16	6.1	249	No	
7	5524	18	9.5	463	Yes	
8	5507	17	7.9	258	Yes	
9	5518	17	7.8	212	Yes	
10	5522	17	8.6	236	No	
11	5514	16	6.1	474	Yes	
12	5503	16	6.3	461	Yes	
13	5529	17	7.5	437	Yes	
14	5519	18	9.5	287	No	
15	5492	18	10	395	Yes	
16	5520	17	8.1	322	Yes	
17	5500	16	7.1	468	Yes	
18	5516	17	7.6	255	Yes	
19	5511	16	6.8	423	Yes	
20	5513	16	6.2	456	Yes	
21	5529	17	7.9	351	Yes	
22	5525	18	9	411	Yes	
23	5498	17	7.5	279	Yes	
24	5505	16	6	431	Yes	
25	5493	17	8.7	324	Yes	
26	5516	17	7.5	419	Yes	
27	5496	16	6.5	447	Yes	
28	5505	16	6.3	481	Yes	
29	5496	16	6.2	438	Yes	
30	5526	16	6.7	270	Yes	
Detection Rate: 86.7 %						



Type 4 Radar Statistical Performances						
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection	
	Frequency	Burst	Width(us)	, ,		
	(MHz)		, ,			
1	5510	12	12.5	467	Yes	
2	5520	15	17.2	304	Yes	
3	5500	15	17.8	316	No	
4	5515	16	18.5	439	Yes	
5	5518	13	13.1	420	Yes	
6	5496	12	11.3	249	Yes	
7	5519	16	18.8	463	Yes	
8	5525	14	15.3	258	Yes	
9	5505	14	15.1	212	Yes	
10	5496	15	16.9	236	Yes	
11	5504	12	11.2	474	Yes	
12	5499	12	11.7	461	Yes	
13	5493	13	14.4	437	Yes	
14	5523	16	18.9	287	Yes	
15	5518	16	19.9	395	Yes	
16	5499	14	15.7	322	Yes	
17	5524	13	13.4	468	No	
18	5507	13	14.5	255	Yes	
19	5501	13	12.9	423	Yes	
20	5495	12	11.5	456	Yes	
21	5512	14	15.3	351	Yes	
22	5512	15	17.8	411	Yes	
23	5517	13	14.3	279	Yes	
24	5510	12	11.1	431	No	
25	5520	15	17	324	Yes	
26	5522	13	14.5	419	No	
27	5523	12	12.1	447	Yes	
28	5517	12	11.7	481	Yes	
29	5495	12	11.6	438	Yes	
30	5509	12	12.7	270	Yes	
Detection Rate: 86.7 %						



802.11ac (VH140)							
	Type 5 Radar Statistical Performances						
Trial #		Chirp Center	Test Signal Name	Detection			
	Chirp Width(MHz)	Frequency(MHz)					
1	7	5510	LP_Signal_01	Yes			
2	15	5510	LP_Signal_02	Yes			
3	16	5510	LP_Signal_03	No			
4	18	5510	LP_Signal_04	No			
5	8	5510	LP_Signal_05	Yes			
6	5	5510	LP_Signal_06	Yes			
7	18	5510	LP_Signal_07	Yes			
8	12	5510	LP_Signal_08	No			
9	12	5510	LP_Signal_09	Yes			
10	15	5510	LP_Signal_10	Yes			
11	5	5493	LP_Signal_11	Yes			
12	6	5493	LP_Signal_12	Yes			
13	11	5495	LP_Signal_13	Yes			
14	18	5498	LP_Signal_14	Yes			
15	20	5499	LP_Signal_15	Yes			
16	13	5496	LP_Signal_16	Yes			
17	9	5495	LP_Signal_17	No			
18	11	5495	LP_Signal_18	Yes			
19	8	5494	LP_Signal_19	Yes			
20	5	5493	LP_Signal_20	Yes			
21	12	5524	LP_Signal_21	Yes			
22	17	5522	LP_Signal_22	Yes			
23	10	5525	LP_Signal_23	Yes			
24	5	5527	LP_Signal_24	Yes			
25	15	5523	LP_Signal_25	Yes			
26	11	5525	LP_Signal_26	No			
27	7	5526	LP_Signal_27	Yes			
28	6	5527	LP_Signal_28	Yes			
29	6	5527	LP_Signal_29	Yes			
30	8	5526	LP_Signal_30	Yes			
Detection Rate: 83.3 %							

The Long Pulse Radar pattern shown in Appendix A.1



Type 6 Radar Statistical Performances						
Trial #	Pulses per	Pulse Width(us)	PRI(us)	Detection		
	Burst					
1	9	1	333.3	Yes		
2	9	1	333.3	Yes		
3	9	1	333.3	Yes		
4	9	1	333.3	Yes		
5	9	1	333.3	Yes		
6	9	1	333.3	Yes		
7	9	1	333.3	Yes		
8	9	1	333.3	Yes		
9	9	1	333.3	Yes		
10	9	1	333.3	No		
11	9	1	333.3	Yes		
12	9	1	333.3	Yes		
13	9	1	333.3	No		
14	9	1	333.3	Yes		
15	9	1	333.3	Yes		
16	9	1	333.3	Yes		
17	9	1	333.3	Yes		
18	9	1	333.3	Yes		
19	9	1	333.3	Yes		
20	9	1	333.3	Yes		
21	9	1	333.3	Yes		
22	9	1	333.3	No		
23	9	1	333.3	No		
24	9	1	333.3	Yes		
25	9	1	333.3	Yes		
26	9	1	333.3	Yes		
27	9	1	333.3	Yes		
28	9	1	333.3	Yes		
29	9	1	333.3	Yes		
30	9	1	333.3	Yes		
Detection Rate: 86.7 %						



Type 6 Radar Statistical Performances						
Trial #	Hopping Frequency	Detection				
	Sequence Name					
1	HOP_FREQ_SEQ_01	Yes				
2	HOP_FREQ_SEQ_02	Yes				
3	HOP_FREQ_SEQ_03	Yes				
4	HOP_FREQ_SEQ_04	Yes				
5	HOP_FREQ_SEQ_05	Yes				
6	HOP_FREQ_SEQ_06	Yes				
7	HOP_FREQ_SEQ_07	Yes				
8	HOP_FREQ_SEQ_08	Yes				
9	HOP_FREQ_SEQ_09	Yes				
10	HOP_FREQ_SEQ_10	No				
11	HOP_FREQ_SEQ_11	Yes				
12	HOP_FREQ_SEQ_12	Yes				
13	HOP_FREQ_SEQ_13	No				
14	HOP_FREQ_SEQ_14	Yes				
15	HOP_FREQ_SEQ_15	Yes				
16	HOP_FREQ_SEQ_16	Yes				
17	HOP_FREQ_SEQ_17	Yes				
18	HOP_FREQ_SEQ_18	Yes				
19	HOP_FREQ_SEQ_19	Yes				
20	HOP_FREQ_SEQ_20	Yes				
21	HOP_FREQ_SEQ_21	Yes				
22	HOP_FREQ_SEQ_22	No				
23	HOP_FREQ_SEQ_23	No				
24	HOP_FREQ_SEQ_24	Yes				
25	HOP_FREQ_SEQ_25	Yes				
26	HOP_FREQ_SEQ_26	Yes				
27	HOP_FREQ_SEQ_27	Yes				
28	HOP_FREQ_SEQ_28	Yes				
29	HOP_FREQ_SEQ_29	Yes				
30	HOP_FREQ_SEQ_30	Yes				
Detection Rate: 86.7 %						

The Frequency Hopping Radar pattern shown in Appendix A.2



802.11ac (VHT80)

Type 1 Radar Statistical Performances							
Trial	Test	Pulse	Pulse	Pulses	Pulse	Detection	
#	Frequency	Repetition	Repetition	per	Repetition		
	(MHz)	Frequency	Frequency	Burst	Interval		
		Number (1	(Pulse per		(microseconds)		
		to 23)	seconds)				
1	5530	15	1253	67	798	Yes	
2	5540	16	1223	65	818	Yes	
3	5560	4	1730	92	578	Yes	
4	5520	11	1393	74	718	Yes	
5	5500	22	1066	57	938	No	
6	5561	7	1567	83	638	Yes	
7	5538	2	1859	99	538	Yes	
8	5528	8	1520	81	658	Yes	
9	5522	1	1931	102	518	Yes	
10	5546	19	1139	61	878	Yes	
11	5556	21	1089	58	918	Yes	
12	5534	23	326.2	18	3066	Yes	
13	5494	9	1475	78	678	Yes	
14	5557	5	1672	89	598	Yes	
15	5494	6	1618	86	618	Yes	
16	5516		1111	59	900	Yes	
17	5533		1024	55	977	Yes	
18	5531		625.8	34	1598	No	
19	5495		730.5	39	1369	No	
20	5532		1181	63	847	Yes	
21	5527		400.6	22	2496	Yes	
22	5526		529.4	28	1889	Yes	
23	5538		347.6	19	2877	Yes	
24	5552		641.4	34	1559	Yes	
25	5495		508.9	27	1965	Yes	
26	5500		345.4	19	2895	Yes	
27	5496		580.7	31	1722	No	
28	5533		786.8	42	1271	Yes	
29	5494		808.4	43	1237	Yes	
30	5527		517.1	28	1934	Yes	
Detection Rate: 86.7 %							



802.11ac (VHT80)

Type 2	Radar Statistic	al Performance	 9s			
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection	
	Frequency	Burst	Width(us)			
	(MHz)		, ,			
1	5530	24	1.7	174	No	
2	5540	27	3.8	176	Yes	
3	5560	28	4	161	Yes	
4	5520	28	4.3	226	Yes	
5	5500	24	1.9	193	Yes	
6	5541	23	1.1	230	Yes	
7	5537	29	4.5	198	Yes	
8	5493	26	2.9	227	Yes	
9	5555	26	2.8	171	Yes	
10	5508	27	3.6	221	Yes	
11	5523	23	1.1	180	No	
12	5525	23	1.3	189	Yes	
13	5561	25	2.5	204	Yes	
14	5561	29	4.5	203	Yes	
15	5540	29	5	170	Yes	
16	5516	26	3.1	201	Yes	
17	5506	24	2.1	218	Yes	
18	5524	25	2.6	208	Yes	
19	5535	24	1.8	223	No	
20	5511	23	1.2	220	Yes	
21	5544	26	2.9	224	Yes	
22	5562	28	4	160	Yes	
23	5564	25	2.5	209	No	
24	5533	23	1	205	Yes	
25	5566	27	3.7	151	Yes	
26	5530	25	2.5	186	Yes	
27	5504	23	1.5	190	Yes	
28	5532	23	1.3	185	Yes	
29	5530	23	1.2	175	Yes	
30	5520	24	1.7	216	Yes	
Detection Rate: 86.7 %						



802.11ac (VHT80)

Type 3	Radar Statistic	al Performanc	es		
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection
	Frequency	Burst	Width(us)		
	(MHz)		, ,		
1	5530	16	6.7	467	No
2	5540	18	8.8	304	Yes
3	5560	18	9	316	Yes
4	5520	18	9.3	439	No
5	5500	16	6.9	420	Yes
6	5560	16	6.1	249	Yes
7	5508	18	9.5	463	Yes
8	5562	17	7.9	258	Yes
9	5507	17	7.8	212	Yes
10	5511	17	8.6	236	No
11	5532	16	6.1	474	Yes
12	5500	16	6.3	461	Yes
13	5537	17	7.5	437	Yes
14	5566	18	9.5	287	Yes
15	5531	18	10	395	Yes
16	5494	17	8.1	322	Yes
17	5523	16	7.1	468	No
18	5550	17	7.6	255	Yes
19	5520	16	6.8	423	Yes
20	5565	16	6.2	456	Yes
21	5521	17	7.9	351	Yes
22	5525	18	9	411	Yes
23	5530	17	7.5	279	Yes
24	5555	16	6	431	Yes
25	5538	17	8.7	324	Yes
26	5531	17	7.5	419	Yes
27	5535	16	6.5	447	Yes
28	5531	16	6.3	481	No
29	5495	16	6.2	438	Yes
30	5520	16	6.7	270	Yes
Detection Rate: 83.3 %					



Type 4	Type 4 Radar Statistical Performances				
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection
	Frequency	Burst	Width(us)		
	(MHz)				
1	5530	12	12.5	467	Yes
2	5540	15	17.2	304	Yes
3	5560	15	17.8	316	No
4	5520	16	18.5	439	Yes
5	5500	13	13.1	420	Yes
6	5522	12	11.3	249	Yes
7	5529	16	18.8	463	Yes
8	5495	14	15.3	258	Yes
9	5513	14	15.1	212	Yes
10	5528	15	16.9	236	Yes
11	5520	12	11.2	474	Yes
12	5529	12	11.7	461	Yes
13	5565	13	14.4	437	Yes
14	5494	16	18.9	287	Yes
15	5554	16	19.9	395	No
16	5565	14	15.7	322	Yes
17	5552	13	13.4	468	Yes
18	5493	13	14.5	255	No
19	5554	13	12.9	423	Yes
20	5536	12	11.5	456	Yes
21	5566	14	15.3	351	Yes
22	5527	15	17.8	411	Yes
23	5566	13	14.3	279	Yes
24	5564	12	11.1	431	Yes
25	5553	15	17	324	No
26	5521	13	14.5	419	Yes
27	5505	12	12.1	447	Yes
28	5501	12	11.7	481	Yes
29	5527	12	11.6	438	Yes
30	5499	12	12.7	270	Yes
Detection Rate: 86.7 %					



602.11ac (VH160)					
Type 5	Radar Statistical Po	erformances			
Trial #	Minimum	Chirp Center	Test Signal Name	Detection	
	Chirp Width(MHz)	Frequency(MHz)			
1	7	5530	LP_Signal_01	Yes	
2	15	5530	LP_Signal_02	Yes	
3	16	5530	LP_Signal_03	Yes	
4	18	5530	LP_Signal_04	Yes	
5	8	5530	LP_Signal_05	No	
6	5	5530	LP_Signal_06	Yes	
7	18	5530	LP_Signal_07	Yes	
8	12	5530	LP_Signal_08	Yes	
9	12	5530	LP_Signal_09	Yes	
10	15	5530	LP_Signal_10	Yes	
11	5	5494	LP_Signal_11	Yes	
12	6	5494	LP_Signal_12	Yes	
13	11	5496	LP_Signal_13	No	
14	18	5499	LP_Signal_14	Yes	
15	20	5500	LP_Signal_15	No	
16	13	5497	LP_Signal_16	Yes	
17	9	5496	LP_Signal_17	Yes	
18	11	5496	LP_Signal_18	No	
19	8	5495	LP_Signal_19	Yes	
20	5	5494	LP_Signal_20	Yes	
21	12	5563	LP_Signal_21	Yes	
22	17	5561	LP_Signal_22	Yes	
23	10	5564	LP_Signal_23	Yes	
24	5	5566	LP_Signal_24	Yes	
25	15	5562	LP_Signal_25	Yes	
26	11	5564	LP_Signal_26	Yes	
27	7	5565	LP_Signal_27	Yes	
28	6	5566	LP_Signal_28	Yes	
29	6	5566	LP_Signal_29	Yes	
30	8	5565	LP_Signal_30	Yes	
Detection Rate: 86.7 %					

The Long Pulse Radar pattern shown in Appendix A.1



Type 6 Radar Statistical Performances				
Trial #	Pulses per	Pulse Width(us)	PRI(us)	Detection
	Burst			
1	9	1	333.3	Yes
2	9	1	333.3	Yes
3	9	1	333.3	Yes
4	9	1	333.3	Yes
5	9	1	333.3	Yes
6	9	1	333.3	No
7	9	1	333.3	Yes
8	9	1	333.3	Yes
9	9	1	333.3	Yes
10	9	1	333.3	Yes
11	9	1	333.3	Yes
12	9	1	333.3	Yes
13	9	1	333.3	No
14	9	1	333.3	Yes
15	9	1	333.3	Yes
16	9	1	333.3	Yes
17	9	1	333.3	Yes
18	9	1	333.3	Yes
19	9	1	333.3	Yes
20	9	1	333.3	No
21	9	1	333.3	Yes
22	9	1	333.3	Yes
23	9	1	333.3	Yes
24	9	1	333.3	Yes
25	9	1	333.3	Yes
26	9	1	333.3	Yes
27	9	1	333.3	No
28	9	1	333.3	Yes
29	9	1	333.3	Yes
30	9	1	333.3	No
Detection Rate: 83.3%				



Type 6 Radar Sta	Type 6 Radar Statistical Performances			
Trial #	Hopping Frequency	Detection		
	Sequence Name			
1	HOP_FREQ_SEQ_01	Yes		
2	HOP_FREQ_SEQ_02	Yes		
3	HOP_FREQ_SEQ_03	Yes		
4	HOP_FREQ_SEQ_04	Yes		
5	HOP_FREQ_SEQ_05	Yes		
6	HOP_FREQ_SEQ_06	No		
7	HOP_FREQ_SEQ_07	Yes		
8	HOP_FREQ_SEQ_08	Yes		
9	HOP_FREQ_SEQ_09	Yes		
10	HOP_FREQ_SEQ_10	Yes		
11	HOP_FREQ_SEQ_11	Yes		
12	HOP_FREQ_SEQ_12	Yes		
13	HOP_FREQ_SEQ_13	No		
14	HOP_FREQ_SEQ_14	Yes		
15	HOP_FREQ_SEQ_15	Yes		
16	HOP_FREQ_SEQ_16	Yes		
17	HOP_FREQ_SEQ_17	Yes		
18	HOP_FREQ_SEQ_18	Yes		
19	HOP_FREQ_SEQ_19	Yes		
20	HOP_FREQ_SEQ_20	No		
21	HOP_FREQ_SEQ_21	Yes		
22	HOP_FREQ_SEQ_22	Yes		
23	HOP_FREQ_SEQ_23	Yes		
24	HOP_FREQ_SEQ_24	Yes		
25	HOP_FREQ_SEQ_25	Yes		
26	HOP_FREQ_SEQ_26	Yes		
27	HOP_FREQ_SEQ_27	No		
28	HOP_FREQ_SEQ_28	Yes		
29	HOP_FREQ_SEQ_29	Yes		
30	HOP_FREQ_SEQ_30	No		
	D€	etection Rate: 83.3 %		

The Frequency Hopping Radar pattern shown in Appendix A.2



802.11ac (VHT80+80 - CH58+CH106)

	•	atistical Perfe	•			
Trial		Pulse	Pulse	Pulses	Pulse	Detection
#	Frequency		Repetition	per	Repetition	
	(MHz)	Frequency	Frequency	Burst	Interval	
	,	Number (1	(Pulse per		(microseconds)	
		to 23) `	seconds)		,	
1	5290	15	1253	67	798	Yes
2	5300	16	1223	65	818	Yes
3	5320	4	1730	92	578	Yes
4	5280	11	1393	74	718	Yes
5	5260	22	1066	57	938	Yes
6	5252	7	1567	83	638	Yes
7	5263	2	1859	99	538	Yes
8	5262	8	1520	81	658	No
9	5320	1	1931	102	518	Yes
10	5310	19	1139	61	878	No
11	5323	21	1089	58	918	Yes
12	5286	23	326.2	18	3066	Yes
13	5305	9	1475	78	678	Yes
14	5315	5	1672	89	598	Yes
15	5323	6	1618	86	618	Yes
16	5282		1111	59	900	Yes
17	5315		1024	55	977	Yes
18	5268		625.8	34	1598	No
19	5265		730.5	39	1369	Yes
20	5307		1181	63	847	Yes
21	5304		400.6	22	2496	Yes
22	5301		529.4	28	1889	Yes
23	5303		347.6	19	2877	Yes
24	5254		641.4	34	1559	Yes
25	5256		508.9	27	1965	Yes
26	5257		345.4	19	2895	Yes
27	5263		580.7	31	1722	Yes
28	5256		786.8	42	1271	No
29	5283		808.4	43	1237	Yes
30	5257		517.1	28	1934	Yes
	Detection Rate: 86.7 %					



Type 2 Radar Statistical Performances					
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection
	Frequency	Burst	Width(us)		
	(MHz)				
1	5290	24	1.7	174	Yes
2	5300	27	3.8	176	Yes
3	5320	28	4	161	Yes
4	5280	28	4.3	226	Yes
5	5260	24	1.9	193	Yes
6	5326	23	1.1	230	Yes
7	5275	29	4.5	198	Yes
8	5310	26	2.9	227	Yes
9	5269	26	2.8	171	Yes
10	5313	27	3.6	221	Yes
11	5289	23	1.1	180	Yes
12	5324	23	1.3	189	No
13	5289	25	2.5	204	Yes
14	5309	29	4.5	203	Yes
15	5283	29	5	170	Yes
16	5319	26	3.1	201	Yes
17	5255	24	2.1	218	Yes
18	5318	25	2.6	208	No
19	5294	24	1.8	223	Yes
20	5303	23	1.2	220	Yes
21	5290	26	2.9	224	Yes
22	5287	28	4	160	Yes
23	5328	25	2.5	209	Yes
24	5320	23	1	205	Yes
25	5282	27	3.7	151	Yes
26	5259	25	2.5	186	Yes
27	5266	23	1.5	190	Yes
28	5282	23	1.3	185	Yes
29	5265	23	1.2	175	Yes
30	5282	24	1.7	216	Yes
Detection Rate: 93.3 %					



Type 3	Radar Statistic	al Performance	es		
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection
	Frequency	Burst	Width(us)	, , ,	
	(MHz)				
1	5290	16	6.7	467	Yes
2	5300	18	8.8	304	Yes
3	5320	18	9	316	No
4	5280	18	9.3	439	Yes
5	5260	16	6.9	420	No
6	5264	16	6.1	249	Yes
7	5278	18	9.5	463	Yes
8	5306	17	7.9	258	Yes
9	5263	17	7.8	212	Yes
10	5263	17	8.6	236	No
11	5293	16	6.1	474	Yes
12	5268	16	6.3	461	Yes
13	5306	17	7.5	437	No
14	5259	18	9.5	287	Yes
15	5257	18	10	395	Yes
16	5258	17	8.1	322	Yes
17	5281	16	7.1	468	Yes
18	5304	17	7.6	255	Yes
19	5306	16	6.8	423	Yes
20	5299	16	6.2	456	Yes
21	5293	17	7.9	351	Yes
22	5303	18	9	411	Yes
23	5269	17	7.5	279	Yes
24	5286	16	6	431	Yes
25	5327	17	8.7	324	Yes
26	5257	17	7.5	419	Yes
27	5269	16	6.5	447	No
28	5271	16	6.3	481	Yes
29	5293	16	6.2	438	Yes
30	5281	16	6.7	270	Yes
Detection Rate: 83.3 %					

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Type 4	Radar Statistic	al Performance	es		
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection
	Frequency	Burst	Width(us)	, ,	
	(MHz)				
1	5290	12	12.5	467	Yes
2	5300	15	17.2	304	No
3	5320	15	17.8	316	Yes
4	5280	16	18.5	439	Yes
5	5260	13	13.1	420	Yes
6	5279	12	11.3	249	Yes
7	5264	16	18.8	463	Yes
8	5310	14	15.3	258	Yes
9	5270	14	15.1	212	Yes
10	5289	15	16.9	236	Yes
11	5303	12	11.2	474	Yes
12	5297	12	11.7	461	Yes
13	5292	13	14.4	437	Yes
14	5291	16	18.9	287	Yes
15	5323	16	19.9	395	No
16	5279	14	15.7	322	No
17	5265	13	13.4	468	Yes
18	5295	13	14.5	255	Yes
19	5257	13	12.9	423	No
20	5281	12	11.5	456	Yes
21	5318	14	15.3	351	Yes
22	5289	15	17.8	411	Yes
23	5298	13	14.3	279	Yes
24	5288	12	11.1	431	Yes
25	5321	15	17	324	No
26	5319	13	14.5	419	Yes
27	5285	12	12.1	447	Yes
28	5312	12	11.7	481	Yes
29	5269	12	11.6	438	Yes
30	5284	12	12.7	270	Yes
Detection Rate: 83.3 %					

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Type 5	Radar Statistical Po	•		
			Toot Signal Name	Detection
Trial #		Chirp Center	Test Signal Name	Detection
4	Chirp Width(MHz)		ID Cianal 04	NIa
1	1	5290	LP_Signal_01	No
2	15	5290	LP_Signal_02	Yes
3	16	5290	LP_Signal_03	Yes
4	18	5290	LP_Signal_04	Yes
5	8	5290	LP_Signal_05	Yes
6	5	5290	LP_Signal_06	Yes
7	18	5290	LP_Signal_07	Yes
8	12	5290	LP_Signal_08	No
9	12	5290	LP_Signal_09	Yes
10	15	5290	LP_Signal_10	Yes
11	5	5254	LP_Signal_11	Yes
12	6	5254	LP_Signal_12	Yes
13	11	5256	LP_Signal_13	Yes
14	18	5259	LP_Signal_14	Yes
15	20	5260	LP_Signal_15	Yes
16	13	5257	LP_Signal_16	Yes
17	9	5256	LP_Signal_17	Yes
18	11	5256	LP_Signal_18	Yes
19	8	5255	LP_Signal_19	Yes
20	5	5254	LP_Signal_20	Yes
21	12	5323	LP_Signal_21	Yes
22	17	5321	LP_Signal_22	No
23	10	5324	LP_Signal_23	Yes
24	5	5326	LP Signal 24	Yes
25	15	5322	LP_Signal_25	Yes
26	11	5324	LP_Signal_26	Yes
27	7	5325	LP_Signal_27	Yes
28	6	5326	LP_Signal_28	Yes
29	6	5326	LP_Signal_29	No
30	8	5325	LP_Signal_30	Yes
	<u> </u>	0020	•	
Detection Rate: 86.7 %				

The Long Pulse Radar pattern shown in Appendix A.1



Type 6 Radar Statistical Performances				
Trial #	Pulses per	Pulse Width(us)	PRI(us)	Detection
	Burst	, ,		
1	9	1	333.3	Yes
2	9	1	333.3	Yes
3	9	1	333.3	Yes
4	9	1	333.3	Yes
5	9	1	333.3	Yes
6	9	1	333.3	Yes
7	9	1	333.3	Yes
8	9	1	333.3	Yes
9	9	1	333.3	Yes
10	9	1	333.3	Yes
11	9	1	333.3	Yes
12	9	1	333.3	Yes
13	9	1	333.3	Yes
14	9	1	333.3	Yes
15	9	1	333.3	No
16	9	1	333.3	Yes
17	9	1	333.3	No
18	9	1	333.3	Yes
19	9	1	333.3	Yes
20	9	1	333.3	Yes
21	9	1	333.3	Yes
22	9	1	333.3	Yes
23	9	1	333.3	Yes
24	9	1	333.3	No
25	9	1	333.3	No
26	9	1	333.3	Yes
27	9	1	333.3	Yes
28	9	1	333.3	No
29	9	1	333.3	Yes
30	9	1	333.3	Yes
Detection Rate: 83.3 %				



Type 6 Radar Sta	atistical Performances	
Trial #	Hopping Frequency	Detection
	Sequence Name	
1	HOP_FREQ_SEQ_01	Yes
2	HOP_FREQ_SEQ_02	Yes
3	HOP_FREQ_SEQ_03	Yes
4	HOP_FREQ_SEQ_04	Yes
5	HOP_FREQ_SEQ_05	Yes
6	HOP_FREQ_SEQ_06	Yes
7	HOP_FREQ_SEQ_07	Yes
8	HOP_FREQ_SEQ_08	Yes
9	HOP_FREQ_SEQ_09	Yes
10	HOP_FREQ_SEQ_10	Yes
11	HOP_FREQ_SEQ_11	Yes
12	HOP_FREQ_SEQ_12	Yes
13	HOP_FREQ_SEQ_13	Yes
14	HOP_FREQ_SEQ_14	Yes
15	HOP_FREQ_SEQ_15	No
16	HOP_FREQ_SEQ_16	Yes
17	HOP_FREQ_SEQ_17	No
18	HOP_FREQ_SEQ_18	Yes
19	HOP_FREQ_SEQ_19	Yes
20	HOP_FREQ_SEQ_20	Yes
21	HOP_FREQ_SEQ_21	Yes
22	HOP_FREQ_SEQ_22	Yes
23	HOP_FREQ_SEQ_23	Yes
24	HOP_FREQ_SEQ_24	No
25	HOP_FREQ_SEQ_25	No
26	HOP_FREQ_SEQ_26	Yes
27	HOP_FREQ_SEQ_27	Yes
28	HOP_FREQ_SEQ_28	No
29	HOP_FREQ_SEQ_29	Yes
30	HOP_FREQ_SEQ_30	Yes
	De	etection Rate: 83.3 %

The Frequency Hopping Radar pattern shown in Appendix A.2



Туре	1 Radar St	atistical Perf	ormances					
Trial		Pulse	Pulse	Pulses	Pulse	Detection		
#	Frequency	Repetition	Repetition	per	Repetition			
	(MHz)	Frequency	Frequency	Burst	Interval			
	,	Number (1	(Pulse per		(microseconds)			
		to 23) `	seconds)		,			
1	5530	15	1253	67	798	Yes		
2	5540	16	1223	65	818	No		
3	5560	4	1730	92	578	No		
4	5520	11	1393	74	718	Yes		
5	5500	22	1066	57	938	Yes		
6	5498	7	1567	83	638	Yes		
7	5502	2	1859	99	538	Yes		
8	5507	8	1520	81	658	Yes		
9	5498	1	1931	102	518	Yes		
10	5536	19	1139	61	878	Yes		
11	5565	21	1089	58	918	No		
12	5557	23	326.2	18	3066	Yes		
13	5502	9	1475	78	678	Yes		
14	5502	5	1672	89	598	Yes		
15	5557	6	1618	86	618	Yes		
16	5568		1111	59	900	Yes		
17	5542		1024	55	977	No		
18	5549		625.8	34	1598	No		
19	5509		730.5	39	1369	Yes		
20	5502		1181	63	847	Yes		
21	5551		400.6	22	2496	Yes		
22	5542		529.4	28	1889	Yes		
23	5565		347.6	19	2877	Yes		
24	5559		641.4	34	1559	Yes		
25	5493		508.9	27	1965	Yes		
26	5568		345.4	19	2895	Yes		
27	5527		580.7	31	1722	Yes		
28	5492		786.8	42	1271	Yes		
29	5565		808.4	43	1237	Yes		
30	5517		517.1	28	1934	Yes		
	Detection Rate: 83.3%							



Type 2 Radar Statistical Performances					
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection
	Frequency	Burst	Width(us)		
	(MHz)				
1	5530	24	1.7	174	Yes
2	5540	27	3.8	176	Yes
3	5560	28	4	161	Yes
4	5520	28	4.3	226	Yes
5	5500	24	1.9	193	Yes
6	5504	23	1.1	230	Yes
7	5530	29	4.5	198	No
8	5504	26	2.9	227	Yes
9	5561	26	2.8	171	Yes
10	5552	27	3.6	221	Yes
11	5566	23	1.1	180	Yes
12	5564	23	1.3	189	Yes
13	5539	25	2.5	204	Yes
14	5518	29	4.5	203	Yes
15	5562	29	5	170	No
16	5557	26	3.1	201	Yes
17	5529	24	2.1	218	Yes
18	5545	25	2.6	208	No
19	5523	24	1.8	223	Yes
20	5496	23	1.2	220	Yes
21	5532	26	2.9	224	Yes
22	5551	28	4	160	Yes
23	5558	25	2.5	209	Yes
24	5516	23	1	205	Yes
25	5501	27	3.7	151	Yes
26	5530	25	2.5	186	No
27	5567	23	1.5	190	Yes
28	5494	23	1.3	185	Yes
29	5529	23	1.2	175	Yes
30	5561	24	1.7	216	Yes
Detection Rate: 86.7 %					



Type 3 Radar Statistical Performances					
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection
	Frequency	Burst	Width(us)		
	(MHz)				
1	5530	16	6.7	467	No
2	5540	18	8.8	304	No
3	5560	18	9	316	Yes
4	5520	18	9.3	439	Yes
5	5500	16	6.9	420	Yes
6	5567	16	6.1	249	Yes
7	5532	18	9.5	463	Yes
8	5523	17	7.9	258	Yes
9	5518	17	7.8	212	No
10	5522	17	8.6	236	Yes
11	5564	16	6.1	474	Yes
12	5502	16	6.3	461	Yes
13	5523	17	7.5	437	Yes
14	5518	18	9.5	287	Yes
15	5529	18	10	395	Yes
16	5554	17	8.1	322	Yes
17	5548	16	7.1	468	Yes
18	5521	17	7.6	255	Yes
19	5543	16	6.8	423	Yes
20	5555	16	6.2	456	Yes
21	5556	17	7.9	351	Yes
22	5534	18	9	411	Yes
23	5501	17	7.5	279	Yes
24	5521	16	6	431	Yes
25	5544	17	8.7	324	Yes
26	5544	17	7.5	419	Yes
27	5536	16	6.5	447	No
28	5546	16	6.3	481	Yes
29	5564	16	6.2	438	Yes
30	5535	16	6.7	270	Yes
Detection Rate: 86.7 %					



Type 4 Radar Statistical Performances					
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection
	Frequency	Burst	Width(us)	, ,	
	(MHz)		, ,		
1	5530	12	12.5	467	Yes
2	5540	15	17.2	304	No
3	5560	15	17.8	316	Yes
4	5520	16	18.5	439	Yes
5	5500	13	13.1	420	Yes
6	5527	12	11.3	249	Yes
7	5547	16	18.8	463	Yes
8	5516	14	15.3	258	Yes
9	5563	14	15.1	212	Yes
10	5512	15	16.9	236	Yes
11	5544	12	11.2	474	Yes
12	5555	12	11.7	461	Yes
13	5512	13	14.4	437	Yes
14	5529	16	18.9	287	Yes
15	5518	16	19.9	395	Yes
16	5534	14	15.7	322	Yes
17	5558	13	13.4	468	Yes
18	5521	13	14.5	255	Yes
19	5527	13	12.9	423	Yes
20	5524	12	11.5	456	Yes
21	5537	14	15.3	351	Yes
22	5517	15	17.8	411	Yes
23	5557	13	14.3	279	No
24	5524	12	11.1	431	Yes
25	5545	15	17	324	Yes
26	5516	13	14.5	419	Yes
27	5560	12	12.1	447	Yes
28	5544	12	11.7	481	No
29	5543	12	11.6	438	Yes
30	5513	12	12.7	270	No
Detection Rate: 86.7 %					

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Type 5 Radar Statistical Performances						
Trial #		Chirp Center	Test Signal Name	Detection		
11101 11	Chirp Width(MHz)		root Oignai Haino	2010011011		
1	7	5530	LP_Signal_01	Yes		
2	15	5530	LP_Signal_02	Yes		
3	16	5530	LP_Signal_03	Yes		
4	18	5530	LP_Signal_04	Yes		
5	8	5530	LP_Signal_05	Yes		
6	5	5530	LP_Signal_06	Yes		
7	18	5530	LP_Signal_07	No		
8	12	5530	LP_Signal_08	Yes		
9	12	5530	LP_Signal_09	Yes		
10	15	5530	LP_Signal_10	Yes		
11	5	5494	LP_Signal_11	Yes		
12	6	5494	LP_Signal_12	Yes		
13	11	5496	LP_Signal_13	Yes		
14	18	5499	LP_Signal_14	Yes		
15	20	5500	LP_Signal_15	No		
16	13	5497	LP_Signal_16	Yes		
17	9	5496	LP_Signal_17	Yes		
18	11	5496	LP_Signal_18	Yes		
19	8	5495	LP_Signal_19	No		
20	5	5494	LP_Signal_20	Yes		
21	12	5563	LP_Signal_21	Yes		
22	17	5561	LP_Signal_22	Yes		
23	10	5564	LP_Signal_23	Yes		
24	5	5566	LP_Signal_24	Yes		
25	15	5562	LP_Signal_25	Yes		
26	11	5564	LP_Signal_26	No		
27	7	5565	LP_Signal_27	Yes		
28	6	5566	LP_Signal_28	Yes		
29	6	5566	LP_Signal_29	Yes		
30	8	5565	LP_Signal_30	No		
Detection Rate: 83.3 %						

The Long Pulse Radar pattern shown in Appendix A.1



Type 6 Radar Statistical Performances							
Trial #	Pulses per	Pulse Width(us)	PRI(us)	Detection			
	Burst	, ,	, ,				
1	9	1	333.3	Yes			
2	9	1	333.3	Yes			
3	9	1	333.3	No			
4	9	1	333.3	No			
5	9	1	333.3	Yes			
6	9	1	333.3	Yes			
7	9	1	333.3	Yes			
8	9	1	333.3	Yes			
9	9	1	333.3	Yes			
10	9	1	333.3	Yes			
11	9	1	333.3	Yes			
12	9	1	333.3	Yes			
13	9	1	333.3	Yes			
14	9	1	333.3	Yes			
15	9	1	333.3	Yes			
16	9	1	333.3	Yes			
17	9	1	333.3	Yes			
18	9	1	333.3	No			
19	9	1	333.3	Yes			
20	9	1	333.3	Yes			
21	9	1	333.3	Yes			
22	9	1	333.3	No			
23	9	1	333.3	Yes			
24	9	1	333.3	Yes			
25	9	1	333.3	Yes			
26	9	1	333.3	Yes			
27	9	1	333.3	Yes			
28	9	1	333.3	Yes			
29	9	1	333.3	Yes			
30	9	1	333.3	Yes			
Detection Rate: 86.7 %							



Type 6 Radar St	atistical Performances	
Trial #	Hopping Frequency	Detection
	Sequence Name	
1	HOP_FREQ_SEQ_01	Yes
2	HOP_FREQ_SEQ_02	Yes
3	HOP_FREQ_SEQ_03	No
4	HOP_FREQ_SEQ_04	No
5	HOP_FREQ_SEQ_05	Yes
6	HOP_FREQ_SEQ_06	Yes
7	HOP_FREQ_SEQ_07	Yes
8	HOP_FREQ_SEQ_08	Yes
9	HOP_FREQ_SEQ_09	Yes
10	HOP_FREQ_SEQ_10	Yes
11	HOP_FREQ_SEQ_11	Yes
12	HOP_FREQ_SEQ_12	Yes
13	HOP_FREQ_SEQ_13	Yes
14	HOP_FREQ_SEQ_14	Yes
15	HOP_FREQ_SEQ_15	Yes
16	HOP_FREQ_SEQ_16	Yes
17	HOP_FREQ_SEQ_17	Yes
18	HOP_FREQ_SEQ_18	No
19	HOP_FREQ_SEQ_19	Yes
20	HOP_FREQ_SEQ_20	Yes
21	HOP_FREQ_SEQ_21	Yes
22	HOP_FREQ_SEQ_22	No
23	HOP FREQ SEQ 23	Yes
24	HOP_FREQ_SEQ_24	Yes
25	HOP_FREQ_SEQ_25	Yes
26	HOP_FREQ_SEQ_26	Yes
27	HOP_FREQ_SEQ_27	Yes
28	HOP_FREQ_SEQ_28	Yes
29	HOP FREQ SEQ 29	Yes
30	HOP FREQ SEQ 30	Yes
		tection Rate: 86.7 %

The Frequency Hopping Radar pattern shown in Appendix A.2



802.11ac (VHT80+80 - CH106+CH122)

Туре	Type 1 Radar Statistical Performances							
Trial	Test	Pulse	Pulse	Pulses	Pulse	Detection		
#	Frequency	Repetition	Repetition	per	Repetition			
	(MHz)	Frequency	Frequency	Burst	Interval			
		Number (1	(Pulse per		(microseconds)			
		to 23)	seconds)		,			
1	5530	15	1253	67	798	Yes		
2	5540	16	1223	65	818	Yes		
3	5560	4	1730	92	578	Yes		
4	5520	11	1393	74	718	Yes		
5	5500	22	1066	57	938	Yes		
6	5559	7	1567	83	638	Yes		
7	5555	2	1859	99	538	No		
8	5527	8	1520	81	658	Yes		
9	5560	1	1931	102	518	Yes		
10	5548	19	1139	61	878	No		
11	5530	21	1089	58	918	Yes		
12	5542	23	326.2	18	3066	Yes		
13	5518	9	1475	78	678	Yes		
14	5525	5	1672	89	598	Yes		
15	5563	6	1618	86	618	Yes		
16	5514		1111	59	900	Yes		
17	5494		1024	55	977	No		
18	5517		625.8	34	1598	Yes		
19	5513		730.5	39	1369	Yes		
20	5501		1181	63	847	Yes		
21	5538		400.6	22	2496	Yes		
22	5521		529.4	28	1889	Yes		
23	5542		347.6	19	2877	Yes		
24	5523		641.4	34	1559	Yes		
25	5528		508.9	27	1965	No		
26	5513		345.4	19	2895	Yes		
27	5538		580.7	31	1722	Yes		
28	5506		786.8	42	1271	Yes		
29	5511		808.4	43	1237	Yes		
30	5565		517.1	28	1934	Yes		
	Detection Rate: 86.7 %							

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Type 2 Radar Statistical Performances					
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection
	Frequency	Burst	Width(us)		
	(MHz)				
1	5530	24	1.7	174	Yes
2	5540	27	3.8	176	Yes
3	5560	28	4	161	Yes
4	5520	28	4.3	226	Yes
5	5500	24	1.9	193	No
6	5534	23	1.1	230	Yes
7	5541	29	4.5	198	Yes
8	5530	26	2.9	227	Yes
9	5529	26	2.8	171	Yes
10	5519	27	3.6	221	Yes
11	5567	23	1.1	180	Yes
12	5539	23	1.3	189	Yes
13	5530	25	2.5	204	Yes
14	5541	29	4.5	203	Yes
15	5499	29	5	170	Yes
16	5512	26	3.1	201	Yes
17	5502	24	2.1	218	Yes
18	5518	25	2.6	208	Yes
19	5512	24	1.8	223	Yes
20	5531	23	1.2	220	Yes
21	5501	26	2.9	224	Yes
22	5499	28	4	160	No
23	5497	25	2.5	209	Yes
24	5503	23	1	205	Yes
25	5530	27	3.7	151	Yes
26	5496	25	2.5	186	Yes
27	5523	23	1.5	190	No
28	5518	23	1.3	185	Yes
29	5495	23	1.2	175	Yes
30	5515	24	1.7	216	Yes
Detection Rate: 90 %					

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Type 3 Radar Statistical Performances					
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection
	Frequency	Burst	Width(us)		
	(MHz)				
1	5530	16	6.7	467	Yes
2	5540	18	8.8	304	Yes
3	5560	18	9	316	No
4	5520	18	9.3	439	Yes
5	5500	16	6.9	420	Yes
6	5559	16	6.1	249	Yes
7	5538	18	9.5	463	Yes
8	5564	17	7.9	258	Yes
9	5517	17	7.8	212	Yes
10	5561	17	8.6	236	Yes
11	5529	16	6.1	474	No
12	5511	16	6.3	461	Yes
13	5522	17	7.5	437	Yes
14	5552	18	9.5	287	Yes
15	5527	18	10	395	Yes
16	5512	17	8.1	322	No
17	5523	16	7.1	468	Yes
18	5559	17	7.6	255	Yes
19	5502	16	6.8	423	Yes
20	5530	16	6.2	456	Yes
21	5556	17	7.9	351	Yes
22	5501	18	9	411	Yes
23	5537	17	7.5	279	Yes
24	5549	16	6	431	Yes
25	5552	17	8.7	324	No
26	5550	17	7.5	419	Yes
27	5538	16	6.5	447	Yes
28	5504	16	6.3	481	Yes
29	5534	16	6.2	438	Yes
30	5556	16	6.7	270	Yes
Detection Rate: 86.7 %					

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Type 4 Radar Statistical Performances					
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection
	Frequency	Burst	Width(us)		
	(MHz)				
1	5530	12	12.5	467	Yes
2	5540	15	17.2	304	Yes
3	5560	15	17.8	316	Yes
4	5520	16	18.5	439	No
5	5500	13	13.1	420	Yes
6	5511	12	11.3	249	Yes
7	5537	16	18.8	463	Yes
8	5529	14	15.3	258	Yes
9	5556	14	15.1	212	Yes
10	5521	15	16.9	236	Yes
11	5516	12	11.2	474	Yes
12	5502	12	11.7	461	Yes
13	5507	13	14.4	437	Yes
14	5514	16	18.9	287	Yes
15	5518	16	19.9	395	No
16	5523	14	15.7	322	No
17	5521	13	13.4	468	Yes
18	5514	13	14.5	255	Yes
19	5551	13	12.9	423	Yes
20	5514	12	11.5	456	Yes
21	5557	14	15.3	351	Yes
22	5514	15	17.8	411	Yes
23	5518	13	14.3	279	Yes
24	5492	12	11.1	431	No
25	5536	15	17	324	Yes
26	5566	13	14.5	419	Yes
27	5556	12	12.1	447	No
28	5559	12	11.7	481	Yes
29	5524	12	11.6	438	Yes
30	5495	12	12.7	270	Yes
Detection Rate: 83.3 %					

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Type 5	Type 5 Radar Statistical Performances						
Trial #		Chirp Center	Test Signal Name	Detection			
	Chirp Width(MHz)		rest olgilal Mairie	Detection			
1	7	5530	LP_Signal_01	Yes			
2	15	5530	LP_Signal_02	Yes			
3	16	5530	LP_Signal_03	No			
4	18	5530	LP_Signal_04	No			
5	8	5530	LP_Signal_05	Yes			
6	5	5530	LP_Signal_06	Yes			
7	18	5530	LP_Signal_07	Yes			
8	12	5530	LP_Signal_08	Yes			
9	12	5530	LP_Signal_09	Yes			
10	15	5530	LP_Signal_10	Yes			
11	5	5493	LP_Signal_11	Yes			
12	6	5493	LP_Signal_12	Yes			
13	11	5495	LP_Signal_13	Yes			
14	18	5498	LP_Signal_14	Yes			
15	20	5499	LP_Signal_15	Yes			
16	13	5496	LP_Signal_16	Yes			
17	9	5495	LP_Signal_17	Yes			
18	11	5495	LP_Signal_18	No			
19	8	5494	LP_Signal_19	Yes			
20	5	5493	LP_Signal_20	No			
21	12	5564	LP_Signal_21	Yes			
22	17	5562	LP_Signal_22	Yes			
23	10	5565	LP_Signal_23	Yes			
24	5	5567	LP_Signal_24	Yes			
25	15	5563	LP_Signal_25	Yes			
26	11	5565	LP_Signal_26	Yes			
27	7	5566	LP_Signal_27	No			
28	6	5567	LP_Signal_28	Yes			
29	6	5567	LP_Signal_29	No			
30	8	5566	LP_Signal_30	Yes			
	Detection Rate: 80 %						
The last Balance (and the control of							

The Long Pulse Radar pattern shown in Appendix A.1



Type 6 Radar Statistical Performances							
Trial #							
	Burst						
1	9	1	333.3	No			
2	9	1	333.3	Yes			
3	9	1	333.3	Yes			
4	9	1	333.3	Yes			
5	9	1	333.3	No			
6	9	1	333.3	Yes			
7	9	1	333.3	Yes			
8	9	1	333.3	Yes			
9	9	1	333.3	Yes			
10	9	1	333.3	Yes			
11	9	1	333.3	Yes			
12	9	1	333.3	Yes			
13	9	1	333.3	No			
14	9	1	333.3	Yes			
15	9	1	333.3	Yes			
16	9	1	333.3	Yes			
17	9	1	333.3	Yes			
18	9	1	333.3	Yes			
19	9	1	333.3	Yes			
20	9	1	333.3	Yes			
21	9	1	333.3	Yes			
22	9	1	333.3	Yes			
23	9	1	333.3	Yes			
24	9	1	333.3	No			
25	9	1	333.3	Yes			
26	9	1	333.3	Yes			
27	9	1	333.3	Yes			
28	9	1	333.3	Yes			
29	9	1	333.3	Yes			
30	9	1	333.3	No			
Detection Rate: 83.3 %							

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Type 6 Radar Statistical Performances						
Trial #	Hopping Frequency	Detection				
	Sequence Name					
1	HOP_FREQ_SEQ_01	No				
2	HOP_FREQ_SEQ_02	Yes				
3	HOP_FREQ_SEQ_03	Yes				
4	HOP_FREQ_SEQ_04	Yes				
5	HOP_FREQ_SEQ_05	No				
6	HOP_FREQ_SEQ_06	Yes				
7	HOP_FREQ_SEQ_07	Yes				
8	HOP_FREQ_SEQ_08	Yes				
9	HOP_FREQ_SEQ_09	Yes				
10	HOP_FREQ_SEQ_10	Yes				
11	HOP_FREQ_SEQ_11	Yes				
12	HOP_FREQ_SEQ_12	Yes				
13	HOP_FREQ_SEQ_13	No				
14	HOP_FREQ_SEQ_14	Yes				
15	HOP_FREQ_SEQ_15	Yes				
16	HOP_FREQ_SEQ_16	Yes				
17	HOP_FREQ_SEQ_17	Yes				
18	HOP_FREQ_SEQ_18	Yes				
19	HOP_FREQ_SEQ_19	Yes				
20	HOP_FREQ_SEQ_20	Yes				
21	HOP_FREQ_SEQ_21	Yes				
22	HOP_FREQ_SEQ_22	Yes				
23	HOP_FREQ_SEQ_23	Yes				
24	HOP_FREQ_SEQ_24	No				
25	HOP_FREQ_SEQ_25	Yes				
26	HOP_FREQ_SEQ_26	Yes				
27	HOP_FREQ_SEQ_27	Yes				
28	HOP_FREQ_SEQ_28	Yes				
29	HOP_FREQ_SEQ_29	Yes				
30	HOP_FREQ_SEQ_30	No				
	De	etection Rate: 83.3 %				

The Frequency Hopping Radar pattern shown in Appendix A.2



802.11ac (VHT80+80 - \(\circ\)CH106+\(\circ\)CH122)

Туре	Type 1 Radar Statistical Performances								
Trial	Test	Pulse	Pulse	Pulses	Pulse	Detection			
#	Frequency	Repetition	Repetition	per	Repetition				
	(MHz)	Frequency	Frequency	Burst	Interval				
		Number (1	(Pulse per		(microseconds)				
		to 23)	seconds)						
1	5610	15	1253	67	798	Yes			
2	5620	16	1223	65	818	Yes			
3	5640	4	1730	92	578	Yes			
4	5600	11	1393	74	718	Yes			
5	5580	22	1066	57	938	Yes			
6	5617	7	1567	83	638	No			
7	5613	2	1859	99	538	Yes			
8	5573	8	1520	81	658	Yes			
9	5589	1	1931	102	518	Yes			
10	5615	19	1139	61	878	Yes			
11	5633	21	1089	58	918	Yes			
12	5580	23	326.2	18	3066	Yes			
13	5629	9	1475	78	678	Yes			
14	5584	5	1672	89	598	Yes			
15	5635	6	1618	86	618	Yes			
16	5629		1111	59	900	Yes			
17	5627		1024	55	977	Yes			
18	5623		625.8	34	1598	Yes			
19	5646		730.5	39	1369	Yes			
20	5622		1181	63	847	Yes			
21	5602		400.6	22	2496	Yes			
22	5592		529.4	28	1889	Yes			
23	5640		347.6	19	2877	Yes			
24	5584		641.4	34	1559	No			
25	5583		508.9	27	1965	Yes			
26	5634		345.4	19	2895	Yes			
27	5634		580.7	31	1722	Yes			
28	5577		786.8	42	1271	No			
29	5609		808.4	43	1237	Yes			
30	5577		517.1	28	1934	Yes			
	Detection Rate: 90%								

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802.11ac (VHT80+80 - ○CH106+●CH122)

Type 2 Radar Statistical Performances							
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection		
	Frequency	Burst	Width(us)				
	(MHz)						
1	5610	24	1.7	174	Yes		
2	5620	27	3.8	176	Yes		
3	5640	28	4	161	Yes		
4	5600	28	4.3	226	Yes		
5	5580	24	1.9	193	Yes		
6	5645	23	1.1	230	No		
7	5593	29	4.5	198	Yes		
8	5587	26	2.9	227	Yes		
9	5589	26	2.8	171	Yes		
10	5578	27	3.6	221	Yes		
11	5618	23	1.1	180	Yes		
12	5621	23	1.3	189	Yes		
13	5606	25	2.5	204	Yes		
14	5585	29	4.5	203	Yes		
15	5603	29	5	170	No		
16	5581	26	3.1	201	Yes		
17	5591	24	2.1	218	Yes		
18	5648	25	2.6	208	No		
19	5612	24	1.8	223	Yes		
20	5595	23	1.2	220	Yes		
21	5595	26	2.9	224	Yes		
22	5585	28	4	160	Yes		
23	5571	25	2.5	209	No		
24	5591	23	1	205	Yes		
25	5580	27	3.7	151	Yes		
26	5594	25	2.5	186	Yes		
27	5604	23	1.5	190	Yes		
28	5642	23	1.3	185	Yes		
29	5640	23	1.2	175	Yes		
30	5627	24	1.7	216	Yes		
Detection Rate: 86.7 %							

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802.11ac (VHT80+80 - ○CH106+●CH122)

Type 3 Radar Statistical Performances						
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection	
	Frequency	Burst	Width(us)			
	(MHz)					
1	5610	16	6.7	467	No	
2	5620	18	8.8	304	No	
3	5640	18	9	316	Yes	
4	5600	18	9.3	439	Yes	
5	5580	16	6.9	420	Yes	
6	5619	16	6.1	249	Yes	
7	5580	18	9.5	463	Yes	
8	5626	17	7.9	258	Yes	
9	5631	17	7.8	212	Yes	
10	5593	17	8.6	236	Yes	
11	5581	16	6.1	474	Yes	
12	5573	16	6.3	461	Yes	
13	5622	17	7.5	437	Yes	
14	5598	18	9.5	287	Yes	
15	5641	18	10	395	Yes	
16	5573	17	8.1	322	Yes	
17	5584	16	7.1	468	Yes	
18	5640	17	7.6	255	Yes	
19	5637	16	6.8	423	Yes	
20	5576	16	6.2	456	Yes	
21	5604	17	7.9	351	No	
22	5602	18	9	411	Yes	
23	5622	17	7.5	279	No	
24	5631	16	6	431	Yes	
25	5633	17	8.7	324	Yes	
26	5621	17	7.5	419	Yes	
27	5586	16	6.5	447	Yes	
28	5631	16	6.3	481	Yes	
29	5586	16	6.2	438	Yes	
30	5610	16	6.7	270	Yes	
Detection Rate: 86.7 %						

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802.11ac (VHT80+80 - \(\circ\)CH106+\(\circ\)CH122)

Type 4 Radar Statistical Performances							
Trial #	Test	Pulses per	Pulse	PRI(us)	Detection		
	Frequency	Burst	Width(us)				
	(MHz)						
1	5610	12	12.5	467	Yes		
2	5620	15	17.2	304	Yes		
3	5640	15	17.8	316	Yes		
4	5600	16	18.5	439	Yes		
5	5580	13	13.1	420	No		
6	5590	12	11.3	249	No		
7	5607	16	18.8	463	Yes		
8	5615	14	15.3	258	Yes		
9	5648	14	15.1	212	Yes		
10	5620	15	16.9	236	Yes		
11	5590	12	11.2	474	Yes		
12	5606	12	11.7	461	Yes		
13	5601	13	14.4	437	No		
14	5614	16	18.9	287	Yes		
15	5580	16	19.9	395	No		
16	5613	14	15.7	322	Yes		
17	5585	13	13.4	468	Yes		
18	5609	13	14.5	255	Yes		
19	5631	13	12.9	423	Yes		
20	5593	12	11.5	456	Yes		
21	5632	14	15.3	351	Yes		
22	5610	15	17.8	411	Yes		
23	5592	13	14.3	279	Yes		
24	5625	12	11.1	431	Yes		
25	5580	15	17	324	Yes		
26	5609	13	14.5	419	Yes		
27	5580	12	12.1	447	Yes		
28	5634	12	11.7	481	Yes		
29	5632	12	11.6	438	Yes		
30	5604	12	12.7	270	No		
Detection Rate: 83.3 %							

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802.11ac (VHT80+80 - \(\circ\)CH106+\(\circ\)CH122)

	Type 5 Radar Statistical Performances							
Trial #		Chirp Center	Test Signal Name	Detection				
	Chirp Width(MHz)							
1	7	5610	LP_Signal_01	Yes				
2	15	5610	LP_Signal_02	Yes				
3	16	5610	LP_Signal_03	Yes				
4	18	5610	LP_Signal_04	Yes				
5	8	5610	LP_Signal_05	Yes				
6	5	5610	LP_Signal_06	Yes				
7	18	5610	LP_Signal_07	Yes				
8	12	5610	LP_Signal_08	Yes				
9	12	5610	LP_Signal_09	No				
10	15	5610	LP_Signal_10	Yes				
11	5	5573	LP_Signal_11	No				
12	6	5573	LP_Signal_12	Yes				
13	11	5575	LP_Signal_13	Yes				
14	18	5578	LP_Signal_14	Yes				
15	20	5579	LP_Signal_15	Yes				
16	13	5576	LP_Signal_16	Yes				
17	9	5575	LP_Signal_17	Yes				
18	11	5575	LP_Signal_18	No				
19	8	5574	LP_Signal_19	Yes				
20	5	5573	LP_Signal_20	No				
21	12	5644	LP_Signal_21	Yes				
22	17	5642	LP_Signal_22	Yes				
23	10	5645	LP_Signal_23	Yes				
24	5	5647	LP_Signal_24	No				
25	15	5643	LP_Signal_25	Yes				
26	11	5645	LP_Signal_26	Yes				
27	7	5646	LP_Signal_27	Yes				
28	6	5647	LP_Signal_28	Yes				
29	6	5647	LP_Signal_29	Yes				
30	8	5646	LP_Signal_30	Yes				
Detection Rate: 83.3 %								

The Long Pulse Radar pattern shown in Appendix A.1



802.11ac (VHT80+80 - \(\circ\)CH106+\(\circ\)CH122)

Type 6 Radar Statistical Performances								
Trial #	Pulses per	Pulse Width(us) PRI(us) Detect						
	Burst	, ,	, ,					
1	9	1	333.3	Yes				
2	9	1	333.3	Yes				
3	9	1	333.3	Yes				
4	9	1	333.3	Yes				
5	9	1	333.3	Yes				
6	9	1	333.3	Yes				
7	9	1	333.3	Yes				
8	9	1	333.3	Yes				
9	9	1	333.3	Yes				
10	9	1	333.3	Yes				
11	9	1	333.3	Yes				
12	9	1	333.3	Yes				
13	9	1	333.3	No				
14	9	1	333.3	No				
15	9	1	333.3	Yes				
16	9	1	333.3	No				
17	9	1	333.3	Yes				
18	9	1	333.3	Yes				
19	9	1	333.3	Yes				
20	9	1	333.3	No				
21	9	1	333.3	Yes				
22	9	1	333.3	Yes				
23	9	1	333.3	Yes				
24	9	1	333.3	Yes				
25	9	1	333.3	Yes				
26	9	1	333.3	Yes				
27	9	1	333.3	Yes				
28	9	1	333.3	Yes				
29	9	1	333.3	Yes				
30								
Detection Rate: 86.7 %								



802.11ac (VHT80+80 - ○CH106+●CH122)

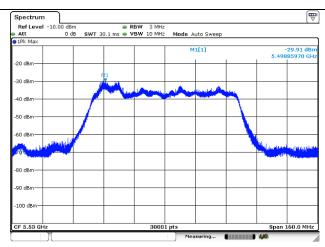
Type 6 Radar Sta	tistical Performances	
Trial #	Hopping Frequency	Detection
	Sequence Name	
1	HOP_FREQ_SEQ_01	Yes
2	HOP_FREQ_SEQ_02	Yes
3	HOP_FREQ_SEQ_03	Yes
4	HOP_FREQ_SEQ_04	Yes
5	HOP_FREQ_SEQ_05	Yes
6	HOP_FREQ_SEQ_06	Yes
7	HOP_FREQ_SEQ_07	Yes
8	HOP_FREQ_SEQ_08	Yes
9	HOP_FREQ_SEQ_09	Yes
10	HOP_FREQ_SEQ_10	Yes
11	HOP_FREQ_SEQ_11	Yes
12	HOP_FREQ_SEQ_12	Yes
13	HOP_FREQ_SEQ_13	No
14	HOP_FREQ_SEQ_14	No
15	HOP_FREQ_SEQ_15	Yes
16	HOP_FREQ_SEQ_16	No
17	HOP_FREQ_SEQ_17	Yes
18	HOP_FREQ_SEQ_18	Yes
19	HOP_FREQ_SEQ_19	Yes
20	HOP_FREQ_SEQ_20	No
21	HOP_FREQ_SEQ_21	Yes
22	HOP_FREQ_SEQ_22	Yes
23	HOP_FREQ_SEQ_23	Yes
24	HOP_FREQ_SEQ_24	Yes
25	HOP_FREQ_SEQ_25	Yes
26	HOP_FREQ_SEQ_26	Yes
27	HOP_FREQ_SEQ_27	Yes
28	HOP_FREQ_SEQ_28	Yes
29	HOP_FREQ_SEQ_29	Yes
30	HOP_FREQ_SEQ_30	Yes
	De	etection Rate: 86.7 %

The Frequency Hopping Radar pattern shown in Appendix A.2



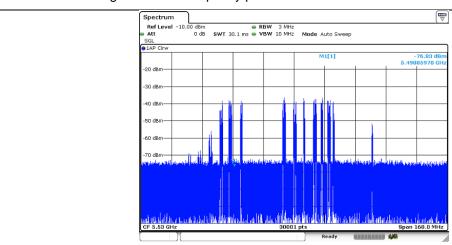
6.2.5 Non- Occupancy Period

1) Test results demonstrating an associated client link is established with the master on a test frequency.



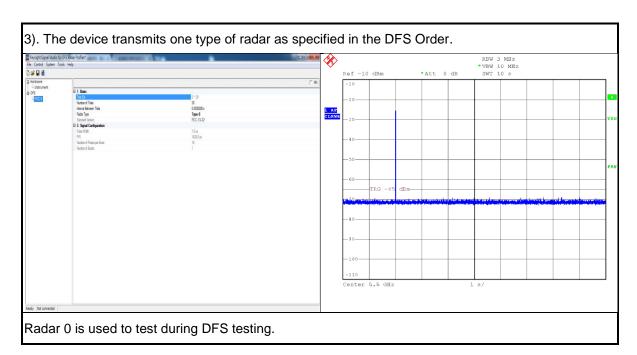
EUT (master) links with Client on 5530MHz

2) The master and DFS-certified client device are associated, and system testing will be performed with channel-loading for a non-occupancy period test.



Client performed with channel-loading via master.

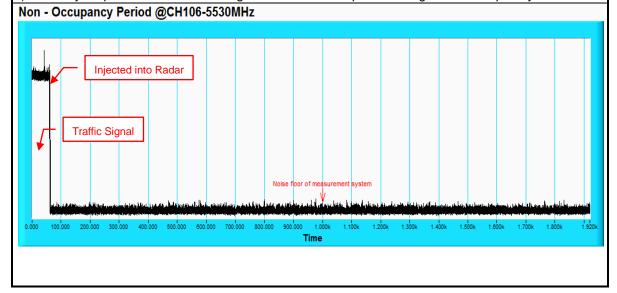




4) The test frequency has been monitored to ensure no transmission of any type has occurred for 30 minutes;

Note: If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear;

5) An analyzer plot that contains a single 30-minute sweep on the original test frequency.





7. Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab: Hsin Chu EMC/RF/Telecom Lab:

Tel: 886-2-26052180 Tel: 886-3-6668565 Fax: 886-2-26051924 Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab:

Tel: 886-3-3183232 Fax: 886-3-3270892

Email: <u>service.adt@tw.bureauveritas.com</u> **Web Site:** <u>www.bureauveritas-adt.com</u>

The address and road map of all our labs can be found in our web site also.

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8. APPENDIX-A

RADAR TEST SIGNAL

A.1 The Long Pulse Radar Pattern

Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_01
Number of Bursts in Trial: 10

INUITI	Dei Oi Duist	S III I IIai.	10			
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
1	1	7	58.7	1765	-	-
2	3	7	84.3	1452	1398	1571
3	3	7	87.4	1358	1377	1111
4	3	7	91.4	1554	1036	1662
5	1	7	61.8	1828	-	-
6	1	7	51.8	1621	-	-
7	3	7	93.4	1063	1317	1923
8	2	7	73.8	1804	1156	-
9	2	7	72.6	1935	1079	-
10	2	7	82.5	1049	1478	-
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_02

Num	Number of Bursts in Trial: 16						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)	
1	1	15	51.3	1713	-	-	
2	1	15	54	1485	-	-	
3	2	15	69.1	1043	1750	-	
4	3	15	93.8	1665	1844	1155	
5	3	15	99.1	1505	1825	1538	
6	2	15	76	1866	1508	-	
7	1	15	63.5	1889	-	-	
8	2	15	69.8	1024	1578	-	
9	1	15	60.9	1067	-	-	
10	1	15	52.9	1162	-	-	
11	2	15	73.7	1211	1581	-	
12	3	15	87.8	1516	1753	1473	
13	2	15	68.6	1029	1730	-	
14	1	15	50.9	1930	-	-	
15	2	15	83	1675	1303	-	
16	2	15	69.5	1296	1410	-	
17							
18							
19							
20							



Test Signal Name: LP_Signal_03 Number of Bursts in Trial: 17

Numl	Number of Bursts in Trial: 17							
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	1	16	56.4	1603	-	-		
2	1	16	53.9	1545	-	-		
3	1	16	53.5	1943	-	-		
4	1	16	59.4	1206	-	-		
5	2	16	78.5	1305	1969	-		
6	3	16	86.1	1355	1823	1948		
7	2	16	67	1788	1958	-		
8	2	16	74.5	1213	1124	-		
9	2	16	81.3	1215	1366	-		
10	2	16	81.5	1429	1293	-		
11	2	16	79.9	1345	1990	-		
12	1	16	50.5	1996	-	-		
13	3	16	88.4	1871	1121	1723		
14	1	16	65.7	1964	-	-		
15	3	16	93	1962	1265	1267		
16	1	16	63.6	1020	-	-		
17	2	16	78.1	1737	1422	-		
18								
19								
20								



Long Pulse Radar Test Signal Test Signal Name: LP_Signal_04

Number of Bursts in Trial: 18

Num	ber of Burst	s in Trial:	18			
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
1	2	18	76.8	1105	1462	-
2	2	18	72.6	1668	1188	-
3	2	18	70.4	1321	1820	-
4	1	18	57	1683	-	-
5	3	18	88.6	1721	1611	1967
6	1	18	55	1594	-	-
7	3	18	93.3	1624	1678	1625
8	3	18	86.7	1720	1540	1349
9	3	18	86.7	1816	1617	1754
10	1	18	57.7	1382	-	-
11	2	18	78.1	1561	1416	-
12	1	18	59.9	1734	-	-
13	2	18	71	1677	1220	-
14	1	18	65.7	1497	-	-
15	3	18	86.4	1957	1088	1054
16	1	18	58.3	1104	-	-
17	3	18	92.3	1589	1800	1189
18	3	18	95.4	1147	1801	1748
19						
20						



Test Signal Name: LP_Signal_05

Number of Bursts in Trial: 11

Num	Number of Bursts in Trial: 11							
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	3	8	89.4	1574	1736	1023		
2	2	8	70.2	1655	1500	-		
3	1	8	63.2	1445	-	-		
4	1	8	53.9	1098	-	-		
5	1	8	65.2	1918	-	-		
6	3	8	87.1	1453	1658	1236		
7	3	8	94.6	1896	1154	1456		
8	1	8	62.4	1646	-	-		
9	2	8	67.6	1600	1439	-		
10	3	8	96.2	1629	1909	1879		
11	1	8	62.9	1793	-	-		
12								
13								
14								
15								
16								
17								
18								
19								
20								



Test Signal Name: LP_Signal_06

Number of Bursts in Trial: 8

Numl	Number of Bursts in Trial: 8							
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	2	5	81.4	1413	1565	-		
2	3	5	95.3	1774	1131	1995		
3	1	5	60	1160	-	-		
4	1	5	60.1	1922	-	-		
5	1	5	59.6	1069	-	-		
6	3	5	91.8	1259	1810	1477		
7	2	5	78.4	1763	1487	-		
8	1	5	62.6	1122	-	-		
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								



Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_07
Number of Bursts in Trial: 19

Numl	Number of Bursts in Trial: 19							
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	1	18	62.4	1000	-	-		
2	2	18	67.9	1925	1039	-		
3	3	18	99	1890	1228	1326		
4	1	18	60.3	1210	-	-		
5	2	18	72.7	1688	1548	-		
6	3	18	91.9	1988	1503	1201		
7	2	18	78.3	1309	1198	-		
8	3	18	88.9	1080	1399	1115		
9	1	18	64.5	1087	-	-		
10	1	18	60.3	1133	-	-		
11	1	18	65.8	1579	-	-		
12	3	18	93.5	1619	1682	1758		
13	3	18	92.2	1533	1842	1979		
14	3	18	96.2	1672	1744	1971		
15	2	18	70.3	1414	1692	-		
16	1	18	53.5	1706	-	-		
17	3	18	93.4	1870	1242	1395		
18	1	18	64.9	1438	-	-		
19	2	18	72.9	1239	1817	-		
20								

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Test Signal Name: LP_Signal_08

Number of Bursts in Trial: 14

Numi	Number of Bursts in Trial: 14								
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)			
1	1	12	57.3	1698	-	-			
2	2	12	83.3	1700	1427	-			
3	1	12	62.5	1952	-	-			
4	2	12	76.1	1612	1397	-			
5	3	12	87.5	1139	1901	1400			
6	3	12	97.1	1352	1798	1636			
7	2	12	73.8	1496	1536	-			
8	1	12	55.2	1357	-	-			
9	1	12	62.5	1811	-	-			
10	2	12	68.1	1251	1843	-			
11	3	12	99.9	1819	1057	1017			
12	1	12	61.3	1342	-	-			
13	2	12	73.9	1725	1872	-			
14	1	12	58	1747	-	-			
15									
16									
17									
18									
19									
20									



Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_09

Number of Bursts in Trial: 13

Num	ber of Burst	s in Trial:	13			
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
1	3	12	95.8	1465	1975	1904
2	2	12	79.9	1764	1174	-
3	2	12	77.4	1235	1584	-
4	3	12	90.4	1114	1974	1027
5	1	12	59.9	1126	-	-
6	3	12	90.5	1275	1985	1845
7	1	12	62	1062	-	-
8	3	12	87	1463	1587	1887
9	3	12	98.3	1586	1187	1651
10	2	12	80.1	1277	1881	-
11	1	12	52.1	1330	-	-
12	1	12	51.7	1333	-	-
13	1	12	52.7	1867	-	-
14						
15						
16						
17						
18						
19						
20						



Test Signal Name: LP_Signal_10

Number of Bursts in Trial: 16

Numl	Number of Bursts in Trial: 16								
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)			
1	2	15	70.7	1934	1731	-			
2	3	15	85.3	1179	1751	1711			
3	2	15	75	1034	1261	-			
4	1	15	56.4	1954	-	-			
5	2	15	66.7	1243	1090	-			
6	3	15	94.8	1224	1970	1214			
7	2	15	68.8	1701	1280	-			
8	2	15	71	1563	1537	-			
9	2	15	79.4	1525	1389	-			
10	3	15	100	1717	1498	1740			
11	3	15	91.9	1295	1037	1829			
12	1	15	61.5	1949	-	-			
13	1	15	63.2	1596	-	-			
14	3	15	99	1254	1919	1073			
15	3	15	86.6	1606	1849	1202			
16	1	15	65.8	1635	-	-			
17									
18									
19									
20									



Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_11
Number of Bursts in Trial: 8

Num	per of Burst	s in Triai:	8			
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
1	2	5	70.7	1897	1749	-
2	1	5	64.6	1965	-	-
3	3	5	99	1012	1045	1772
4	3	5	91.9	1583	1466	1549
5	3	5	85.5	1420	1780	1459
6	3	5	96.5	1530	1924	1835
7	1	5	66.2	1550	-	-
8	3	5	92.9	1929	1335	1883
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_12
Number of Bursts in Trial: 9

INUM	Number of Bursts in Trial: 9							
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	1	6	63.1	1642	-	-		
2	3	6	83.5	1005	1981	1250		
3	2	6	74.5	1914	1474	-		
4	1	6	60.9	1430	-	-		
5	2	6	70.4	1680	1542	-		
6	3	6	85.1	1048	1127	1393		
7	2	6	82.4	1605	1282	-		
8	2	6	74	1108	1691	-		
9	3	6	85.7	1486	1976	1212		
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								



Long Pulse Radar Test Signal Test Signal Name: LP_Signal_13

Number of Bursts in Trial: 12

Num	Number of Bursts in Trial: 12								
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)			
1	3	11	94.4	1385	1336	1376			
2	1	11	53	1805	-	1			
3	2	11	70	1248	1558	1			
4	3	11	87.6	1403	1170	1315			
5	1	11	61.7	1042	-	-			
6	2	11	83.2	1100	1535	-			
7	1	11	66.6	1038	-	-			
8	1	11	55.1	1423	-	-			
9	3	11	87	1789	1306	1643			
10	1	11	66.4	1409	-	1			
11	2	11	80	1319	1094	-			
12	3	11	85.6	1891	1291	1529			
13									
14									
15									
16									
17									
18									
19									
20									



Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_14
Number of Bursts in Trial: 19

Num	Number of Bursts in Trial: 19								
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)			
1	2	18	78.9	1613	1263	-			
2	3	18	96.7	1627	1432	1986			
3	3	18	91.5	1472	1759	1784			
4	2	18	75.4	1274	1795	-			
5	2	18	71.1	1968	1444	-			
6	2	18	77.5	1588	1441	-			
7	1	18	65.4	1710	-	-			
8	1	18	53.1	1419	-	-			
9	1	18	59.9	1518	-	-			
10	2	18	67.3	1195	1168	-			
11	2	18	74.2	1386	1216	-			
12	2	18	69	1557	1132	-			
13	2	18	82.1	1987	1186	-			
14	3	18	93.3	1365	1032	1728			
15	2	18	83.3	1103	1568	-			
16	2	18	70.3	1699	1281	-			
17	1	18	57.9	1285	-	-			
18	1	18	50.6	1850	-	-			
19	3	18	94.3	1479	1218	1733			
20									



Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_15
Number of Bursts in Trial: 20

Num	Number of Bursts in Trial: 20								
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)			
1	2	20	67.5	1434	1117	-			
2	2	20	67.8	1567	1773	-			
3	2	20	75.9	1846	1362	ı			
4	2	20	68.9	1237	1818	-			
5	3	20	96	1339	1796	1852			
6	1	20	66.6	1289	-	ı			
7	2	20	78.3	1862	1856	-			
8	1	20	58.9	1412	-	ı			
9	2	20	81.5	1113	1591	•			
10	2	20	82.4	1059	1861	ı			
11	3	20	86.8	1797	1163	1320			
12	3	20	98.5	1268	1300	1868			
13	2	20	80.1	1086	1482	•			
14	3	20	86.3	1860	1407	1998			
15	1	20	57.2	1241	-	-			
16	3	20	84.3	1808	1873	1628			
17	3	20	86.8	1258	1302	1978			
18	2	20	83	1690	1378	-			
19	3	20	85.6	1327	1956	1311			
20	3	20	99.4	1112	1815	1262			



Test Signal Name: LP_Signal_16

Number of Bursts in Trial: 14

Num	ber of Burst	s in Trial:	14			
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
1	1	13	57.5	1379	-	-
2	2	13	67	1551	1620	-
3	2	13	70.9	1939	1083	-
4	2	13	75.7	1332	1476	-
5	2	13	77.1	1840	1010	-
6	2	13	78.8	1371	1618	-
7	1	13	51	1494	-	-
8	1	13	55.4	1794	-	-
9	2	13	68.5	1590	1266	-
10	3	13	100	1484	1314	1428
11	3	13	96.4	1363	1361	1292
12	3	13	97.2	1694	1480	1446
13	3	13	86.4	1447	1227	1102
14	2	13	72.1	1184	1638	-
15						
16						
17						
18						
19						
20						



Test Signal Name: LP_Signal_17

Number of Bursts in Trial: 11

Number of Bursts in Trial: 11							
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)	
1	1	9	62.4	1329	-	-	
2	2	9	67.8	1364	1937	-	
3	1	9	53	1790	-	-	
4	2	9	77.8	1546	1906	-	
5	3	9	95.6	1145	1743	1499	
6	1	9	58.8	1199	-	-	
7	3	9	92.8	1424	1408	1381	
8	2	9	68.5	1340	1972	-	
9	3	9	84	1607	1663	1270	
10	2	9	70.8	1468	1760	-	
11	2	9	73.1	1869	1515	-	
12						-	
13							
14							
15							
16							
17							
18							
19							
20							



Test Signal Name: LP_Signal_18

Number of Bursts in Trial: 13

Number of Bursts in Trial: 13								
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	2	11	68.8	1504	1973	-		
2	3	11	94.2	1920	1299	1467		
3	2	11	82.7	1003	1351	-		
4	2	11	74.8	1597	1457	-		
5	1	11	58.9	1874	-	-		
6	3	11	96.5	1838	1708	1328		
7	3	11	87.3	1405	1271	1687		
8	2	11	72.4	1200	1433	-		
9	1	11	51.3	1475	-	-		
10	3	11	86.8	1159	1652	1942		
11	1	11	50.4	1056	-	-		
12	3	11	97	1884	1876	1415		
13	1	11	50.1	1519	-	-		
14								
15								
16								
17								
18								
19								
20								



Test Signal Name: LP_Signal_19

Number of Bursts in Trial: 10

Number of Bursts in Trial: 10								
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	3	8	91.9	1301	1337	1645		
2	2	8	67.2	1983	1040	-		
3	1	8	65.5	1671	-	-		
4	2	8	72.8	1489	1016	-		
5	3	8	90.5	1552	1180	1064		
6	2	8	81.6	1807	1853	-		
7	3	8	86	1312	1905	1278		
8	3	8	89.6	1152	1068	1832		
9	1	8	62.1	1119	-	-		
10	1	8	58	1234	-	-		
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								



Test Signal Name: LP_Signal_20
Number of Bursts in Trial: 8

Num	ber of Burst	s in Trial:	8			
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
1	2	5	73.8	1071	1915	-
2	3	5	89.5	1294	1450	1025
3	2	5	81.2	1144	1146	-
4	1	5	59	1041	-	-
5	3	5	87.5	1096	1941	1018
6	2	5	76.7	1667	1947	-
7	1	5	56.5	1573	-	-
8	3	5	89	1033	1391	1304
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Test Signal Name: LP_Signal_21

Number of Bursts in Trial: 14

Number of Bursts in Trial: 14								
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	2	12	83.1	1762	1058	-		
2	1	12	50	1739	-	-		
3	1	12	52.6	1055	-	-		
4	1	12	58.2	1704	-	-		
5	3	12	84.6	1226	1177	1886		
6	2	12	68.3	1269	1851	-		
7	2	12	80.6	1814	1074	-		
8	1	12	59.5	1009	-	-		
9	1	12	53.4	1417	-	-		
10	1	12	59.1	1431	-	-		
11	2	12	74.8	1002	1394	-		
12	3	12	85	1670	1755	1158		
13	3	12	85.3	1307	1560	1078		
14	1	12	61.9	1197	-	-		
15								
16								
17								
18								
19								
20								



Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_22
Number of Bursts in Trial: 17

Number of Bursts in Trial: 17								
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	2	17	70.8	1022	1015	-		
2	1	17	52.9	1483	-	-		
3	3	17	86	1524	1308	1287		
4	2	17	78.4	1821	1406	-		
5	3	17	93.3	1991	1966	1290		
6	2	17	70	1858	1471	-		
7	2	17	78.1	1507	1705	-		
8	1	17	52.4	1060	-	-		
9	3	17	84.8	1859	1839	1993		
10	3	17	83.5	1150	1492	1443		
11	1	17	56.7	1208	-	-		
12	3	17	86.2	1674	1125	1053		
13	1	17	58.8	1436	-	-		
14	3	17	85.4	1686	1509	1577		
15	2	17	77.7	1297	1298	-		
16	3	17	87.4	1649	1894	1075		
17	3	17	99.8	1185	1167	1616		
18								
19								
20								



Test Signal Name: LP_Signal_23 Number of Bursts in Trial: 12

Number of Bursts in Trial: 12								
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	3	10	95.7	1353	1813	1028		
2	3	10	94.9	1735	1994	1084		
3	3	10	97.9	1354	1792	1418		
4	2	10	67.4	1348	1008	-		
5	3	10	96.9	1916	1425	1283		
6	3	10	97.6	1384	1050	1569		
7	3	10	83.6	1231	1219	1194		
8	2	10	82.6	1128	1346	-		
9	3	10	97.2	1142	1769	1173		
10	3	10	92.3	1181	1164	1458		
11	2	10	80.9	1222	1756	-		
12	2	10	78.1	1190	1999	-		
13								
14								
15								
16								
17								
18								
19								
20								



Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_24
Number of Bursts in Trial: 8

Num	ber of Burst	s in Trial:	8			
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
1	2	5	76.9	1564	1767	-
2	1	5	64.7	1437	-	-
3	2	5	77.1	1046	1944	-
4	2	5	72.7	1440	1374	-
5	1	5	61.9	1035	-	-
6	2	5	68.6	1205	1892	-
7	2	5	78.3	1047	1273	-
8	2	5	73.1	1426	1863	-
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Long Pulse Radar Test Signal Test Signal Name: LP_Signal_25

Number of Bursts in Trial: 16

Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
1	1	15	59.1	1718	-	-
2	3	15	83.5	1070	1129	1318
3	3	15	86.5	1176	1253	1442
4	1	15	60.8	1209	-	-
5	2	15	80.7	2000	1360	-
6	1	15	65.2	1101	-	-
7	2	15	69.1	1511	1030	-
8	1	15	51.5	1161	-	-
9	3	15	98.5	1061	1951	1812
10	1	15	59.5	1325	-	-
11	3	15	95.3	1284	1650	1169
12	2	15	81.8	1460	1077	-
13	1	15	66	1149	-	-
14	1	15	59.3	1373	-	-
15	2	15	79.2	1836	1534	-
16	3	15	90.2	1455	1738	1490
17						
18						
19						
20						



Long Pulse Radar Test Signal Test Signal Name: LP_Signal_26

Number of Bursts in Trial: Pulse Pulses per Chrip Burst PRI-3 (us) PRI-1 (us) PRI-2 (us) Burst (MHz) Width(us) 87.5 94.6 73.9 55.4 52.3 95.8 96.1 77.8 97.2 74.3 57.9 68.8 79.6



Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_27
Number of Bursts in Trial: 9

inum	Number of Bursts in Trial: 9							
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	1	7	63.4	1595	-	-		
2	3	7	97	1451	1660	1562		
3	2	7	66.7	1116	1544	-		
4	3	7	99.5	1553	1526	1768		
5	1	7	64.3	1107	-	-		
6	3	7	90.7	1992	1626	1899		
7	1	7	62.1	1630	-	-		
8	1	7	58.3	1676	-	-		
9	3	7	87	1726	1696	1464		
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								



Long Pulse Radar Test Signal Test Signal Name: LP_Signal_28

Number of Bursts in Trial: 9

Numl	Number of Bursts in Trial: 9							
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	3	6	86.8	1673	1383	1653		
2	2	6	81.7	1841	1911	-		
3	2	6	78.4	1900	1229	-		
4	2	6	82.1	1527	1072	-		
5	3	6	84.1	1893	1742	1491		
6	3	6	87.7	1247	1341	1955		
7	3	6	97	1559	1685	1572		
8	3	6	99.1	1641	1727	1848		
9	1	6	62	1245	-	-		
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								



Long Pulse Radar Test Signal Test Signal Name: LP_Signal_29

Number of Bursts in Trial: 8

Numl	Number of Bursts in Trial: 8							
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	2	6	67.5	1193	1182	-		
2	3	6	85.6	1221	1741	1338		
3	3	6	86.9	1580	1775	1809		
4	3	6	85.3	1082	1854	1095		
5	2	6	67.3	1898	1977	-		
6	3	6	94.8	1791	1350	1230		
7	2	6	72.9	1681	1323	-		
8	2	6	70.7	1709	1123	-		
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								



Long Pulse Radar Test Signal Test Signal Name: LP_Signal_30
Number of Bursts in Trial: 10

Numbe	Number of Bursts in Trial: 10							
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)		
1	1	8	63.3	1044	-	-		
2	3	8	87.4	1945	1602	1203		
3	1	8	58.7	1556	-	-		
4	1	8	63.6	1598	-	-		
5	1	8	56.3	1110	-	-		
6	1	8	57.2	1878	-	-		
7	1	8	50.3	1659	-	-		
8	2	8	71.9	1143	1724	-		
9	3	8	85.1	1404	1715	1449		
10	1	8	62.5	1276	-	-		
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								



A.2 The Frequency Hopping Radar pattern

Нор	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_01							
Frequency (MHz)	0	1	2	3	4			
0	5684	5647	5388	5528	5616			
5	5491	5605	5502	5588	5683			
10	5313	5430	5420	5521	5622			
15	5292	5485	5489	5387	5265			
20	5419	5271	5508	5386	5410			
25	5494	5600	5471	5711	5584			
30	5719	5342	5361	5308	5639			
35	5397	5580	5664	5667	5349			
40	5290	5541	5665	5322	5585			
45	5501	5330	5264	5350	5718			
50	5447	5378	5340	5445	5285			
55	5389	5252	5368	5469	5713			
60	5384	5516	5254	5689	5318			
65	5416	5459	5607	5475	5514			
70	5630	5542	5263	5379	5455			
75	5411	5550	5617	5554	5708			
80	5688	5619	5604	5258	5695			
85	5559	5301	5690	5596	5537			
90	5701	5448	5611	5658	5338			
95	5525	5327	5413	5555	5546			

Нор	ping Frequenc	cy Sequenc	ce Name: HOP_F	REQ_SEC	Q_02
Frequency (MHz)	0	1	2	3	4
0	5464	5411	5324	5689	5458
5	5630	5530	5577	5276	5415
10	5719	5316	5461	5619	5643
15	5380	5612	5592	5432	5554
20	5427	5340	5449	5475	5383
25	5382	5549	5674	5437	5618
30	5286	5706	5318	5523	5595
35	5264	5293	5460	5442	5263
40	5604	5624	5603	5562	5582
45	5430	5310	5347	5311	5296
50	5712	5254	5516	5496	5374
55	5687	5574	5556	5423	5331
60	5581	5487	5379	5723	5285
65	5650	5298	5463	5666	5337
70	5541	5548	5538	5668	5260
75	5526	5677	5586	5376	5669
80	5299	5277	5289	5255	5462
85	5384	5361	5407	5588	5474
90	5681	5395	5482	5396	5670
95	5355	5580	5700	5295	5658



Нор	ping Frequenc	cy Sequenc	ce Name: HOP_F	REQ_SEC	0_03
Frequency (MHz)	0	1	2	3	4
0	5719	5650	5260	5278	5678
5	5672	5552	5652	5439	5622
10	5580	5502	5339	5664	5371
15	5264	5695	5477	5271	5338
20	5506	5487	5467	5356	5648
25	5401	5402	5541	5425	5692
30	5275	5263	5565	5415	5306
35	5384	5256	5595	5540	5707
40	5327	5579	5359	5668	5430
45	5369	5252	5599	5605	5547
50	5560	5510	5518	5269	5280
55	5521	5400	5458	5512	5544
60	5305	5555	5586	5596	5499
65	5412	5689	5607	5344	5620
70	5524	5293	5636	5697	5422
75	5551	5337	5405	5441	5352
80	5610	5365	5701	5324	5429
85	5542	5722	5272	5498	5419
90	5304	5372	5635	5723	5598
95	5274	5286	5564	5281	5589

Нор	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_04							
Frequency (MHz)	0	1	2	3	4			
0	5499	5414	5671	5439	5520			
5	5714	5477	5252	5505	5451			
10	5484	5369	5543	5534	5685			
15	5459	5391	5323	5425	5463			
20	5346	5575	5428	5556	5329			
25	5536	5350	5605	5645	5686			
30	5467	5581	5707	5381	5717			
35	5710	5445	5475	5624	5273			
40	5663	5379	5412	5479	5470			
45	5673	5666	5648	5513	5427			
50	5305	5389	5481	5393	5598			
55	5649	5711	5365	5457	5709			
60	5694	5332	5641	5250	5387			
65	5509	5542	5700	5361	5424			
70	5622	5314	5510	5296	5336			
75	5478	5595	5342	5565	5631			
80	5328	5447	5661	5508	5415			
85	5724	5330	5640	5287	5297			
90	5593	5495	5567	5504	5453			
95	5635	5316	5486	5690	5376			



Нор	ping Frequen	cy Sequenc	ce Name: HOP_	FREQ_SEQ)_05
Frequency (MHz)	0	1	2	3	4
0	5657	5653	5607	5600	5265
5	5378	5499	5327	5668	5658
10	5415	5633	5681	5254	5706
15	5547	5421	5329	5470	5655
20	5354	5266	5369	5645	5302
25	5677	5333	5274	5720	5509
30	5664	5596	5491	5433	5584
35	5566	5420	5426	5577	5693
40	5495	5320	5710	5670	5595
45	5628	5388	5358	5276	5260
50	5569	5649	5263	5534	5309
55	5663	5513	5303	5295	5399
60	5316	5335	5488	5523	5310
65	5256	5294	5425	5386	5496
70	5299	5660	5454	5554	5462
75	5708	5612	5580	5460	5442
80	5672	5478	5624	5525	5268
85	5482	5347	5411	5262	5646
90	5290	5701	5510	5390	5503
95	5270	5313	5610	5492	5485

Нор	ping Frequen	cy Sequenc	ce Name: HOP_F	REQ_SEC	2_06
Frequency (MHz)	0	1	2	3	4
0	5437	5417	5543	5286	5582
5	5420	5424	5402	5356	5390
10	5346	5422	5722	5449	5252
15	5635	5548	5432	5515	5372
20	5265	5335	5407	5637	5275
25	5690	5529	5439	5475	5279
30	5551	5456	5621	5336	5643
35	5253	5626	5657	5691	5676
40	5491	5532	5578	5258	5667
45	5427	5608	5301	5446	5411
50	5541	5611	5270	5700	5352
55	5357	5631	5358	5617	5616
60	5710	5274	5327	5564	5712
65	5623	5636	5531	5724	5259
70	5466	5661	5606	5555	5579
75	5399	5509	5333	5513	5268
80	5485	5570	5698	5361	5638
85	5342	5646	5324	5310	5506
90	5605	5598	5419	5585	5391
95	5516	5302	5534	5520	5325

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Нор	ping Frequen	cy Sequenc	ce Name: HOP_F	FREQ_SEC)_07
Frequency (MHz)	0	1	2	3	4
0	5692	5656	5479	5447	5327
5	5462	5446	5477	5519	5694
10	5655	5308	5288	5547	5273
15	5723	5675	5535	5560	5564
20	5501	5348	5251	5578	5478
25	5642	5579	5313	5690	5345
30	5551	5417	5451	5290	5370
35	5487	5354	5502	5468	5283
40	5671	5618	5664	5356	5588
45	5384	5504	5464	5428	5276
50	5441	5575	5449	5571	5331
55	5529	5720	5456	5254	5657
60	5455	5559	5683	5652	5298
65	5409	5627	5565	5402	5358
70	5309	5472	5615	5605	5422
75	5609	5680	5525	5701	5537
80	5646	5263	5698	5473	5552
85	5667	5556	5619	5361	5562
90	5546	5380	5281	5287	5471
95	5503	5649	5548	5607	5467

Нор	ping Frequen	cy Sequenc	ce Name: HOP_F	REQ_SEC)_08
Frequency (MHz)	0	1	2	3	4
0	5472	5420	5415	5608	5644
5	5504	5371	5552	5585	5426
10	5586	5572	5329	5267	5294
15	5714	5327	5638	5508	5281
20	5667	5289	5718	5696	5369
25	5330	5370	5683	5347	5257
30	5709	5535	5669	5569	5271
35	5429	5461	5380	5507	5416
40	5307	5366	5609	5383	5661
45	5285	5568	5467	5465	5517
50	5693	5266	5622	5627	5381
55	5422	5637	5525	5521	5348
60	5594	5419	5602	5287	5385
65	5423	5273	5632	5688	5251
70	5687	5699	5551	5502	5431
75	5584	5250	5468	5652	5260
80	5592	5615	5549	5580	5333
85	5438	5506	5440	5603	5721
90	5625	5395	5444	5655	5651
95	5435	5362	5660	5353	5326



Нор	ping Frequen	cy Sequenc	e Name: HOP_	FREQ_SEQ	_09
Frequency (MHz)	0	1	2	3	4
0	5252	5659	5351	5294	5389
5	5643	5393	5627	5273	5633
10	5517	5361	5370	5462	5315
15	5327	5454	5266	5553	5473
20	5667	5261	5332	5669	5257
25	5279	5573	5312	5381	5299
30	5695	5492	5409	5343	5469
35	5568	5552	5651	5282	5330
40	5621	5449	5547	5623	5280
45	5592	5451	5550	5523	5580
50	5617	5323	5378	5716	5679
55	5366	5350	5479	5614	5545
60	5565	5714	5584	5594	5308
65	5466	5571	5581	5340	5618
70	5490	5537	5505	5434	5390
75	5611	5541	5328	5516	5281
80	5612	5452	5519	5510	5306
85	5557	5688	5326	5411	5631
90	5704	5289	5668	5346	5558
95	5429	5521	5657	5436	5339

Нор	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_10							
Frequency (MHz)	0	1	2	3	4			
0	5410	5423	5287	5358	5706			
5	5685	5318	5702	5436	5462			
10	5351	5625	5411	5657	5336			
15	5415	5484	5272	5598	5675			
20	5427	5268	5324	5642	5523			
25	5606	5301	5513	5438	5584			
30	5449	5624	5495	5289	5610			
35	5643	5447	5435	5341	5460			
40	5532	5485	5388	5277	5521			
45	5431	5633	5581	5526	5370			
50	5493	5499	5429	5330	5502			
55	5688	5538	5433	5329	5364			
60	5536	5368	5274	5589	5609			
65	5412	5297	5530	5663	5550			
70	5413	5293	5465	5620	5605			
75	5283	5712	5349	5425	5490			
80	5614	5445	5512	5269	5452			
85	5361	5356	5271	5511	5461			
90	5621	5576	5637	5366	5586			
95	5545	5553	5689	5719	5648			

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Нор	ping Frequen	cy Sequend	ce Name: HOP_	FREQ_SEQ	1_11
Frequency (MHz)	0	1	2	3	4
0	5665	5662	5698	5519	5451
5	5252	5340	5302	5599	5669
10	5282	5414	5452	5377	5357
15	5503	5611	5375	5643	5479
20	5683	5496	5684	5413	5615
25	5411	5458	5407	5617	5449
30	5480	5473	5406	5364	5269
35	5584	5274	5259	5588	5255
40	5299	5712	5423	5531	5353
45	5716	5542	5579	5257	5369
50	5675	5419	5325	5632	5251
55	5387	5658	5507	5400	5439
60	5534	5355	5435	5358	5498
65	5602	5382	5305	5474	5634
70	5606	5608	5607	5688	5308
75	5394	5513	5595	5570	5553
80	5609	5575	5509	5464	5678
85	5416	5614	5562	5709	5344
90	5266	5468	5410	5702	5600
95	5668	5635	5442	5372	5385

Нор	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_12							
Frequency (MHz)	0	1	2	3	4			
0	5445	5523	5634	5680	5293			
5	5294	5265	5377	5665	5401			
10	5591	5300	5493	5475	5378			
15	5494	5263	5478	5671	5594			
20	5662	5722	5405	5588	5677			
25	5407	5610	5721	5483	5522			
30	5459	5363	5482	5421	5307			
35	5413	5447	5611	5644	5710			
40	5320	5361	5296	5271	5282			
45	5391	5324	5600	5632	5623			
50	5376	5531	5605	5479	5439			
55	5341	5709	5477	5381	5529			
60	5604	5358	5304	5321	5428			
65	5638	5689	5575	5277	5706			
70	5592	5708	5456	5567	5267			
75	5266	5633	5371	5576	5347			
80	5561	5334	5676	5506	5659			
85	5258	5617	5379	5514	5579			
90	5516	5542	5431	5337	5253			
95	5519	5655	5395	5349	5647			



Нор	ping Frequen	cy Sequenc	ce Name: HOP_I	FREQ_SEC)_13
Frequency (MHz)	0	1	2	3	4
0	5700	5287	5570	5366	5513
5	5433	5452	5353	5705	5522
10	5564	5631	5670	5399	5582
15	5390	5581	5636	5388	5602
20	5256	5663	5494	5561	5565
25	5259	5338	5350	5517	5661
30	5348	5320	5697	5552	5538
35	5407	5516	5655	5549	5403
40	5677	5536	5268	5686	5371
45	5658	5685	5409	5499	5455
50	5694	5349	5423	5530	5295
55	5424	5674	5352	5294	5659
60	5347	5377	5370	5555	5400
65	5675	5711	5683	5543	5701
70	5710	5278	5514	5557	5502
75	5671	5590	5365	5323	5503
80	5379	5258	5459	5439	5706
85	5447	5567	5633	5362	5596
90	5277	5610	5531	5358	5722
95	5529	5460	5465	5334	5319

Нор	ping Frequen	cy Sequenc	ce Name: HOP_F	REQ_SEC	Q_14
Frequency (MHz)	0	1	2	3	4
0	5383	5526	5506	5527	5355
5	5475	5687	5516	5437	5453
10	5353	5672	5390	5420	5670
15	5517	5684	5681	5580	5610
20	5422	5604	5486	5534	5356
25	5683	5541	5551	5703	5334
30	5277	5347	5325	5594	5629
35	5678	5669	5569	5388	5583
40	5615	5301	5362	5518	5351
45	5490	5619	5263	5674	5375
50	5631	5633	5308	5647	5270
55	5718	5724	5614	5493	5323
60	5312	5459	5466	5423	5485
65	5293	5345	5326	5613	5256
70	5262	5358	5472	5661	5714
75	5532	5519	5660	5582	5398
80	5657	5538	5279	5371	5529
85	5386	5500	5574	5636	5402
90	5412	5521	5406	5560	5286
95	5283	5395	5640	5290	5363



Нор	ping Frequenc	cy Sequenc	ce Name: HOP_I	FREQ_SEC)_15
Frequency (MHz)	0	1	2	3	4
0	5638	5290	5442	5688	5575
5	5517	5709	5602	5679	5644
10	5287	5617	5713	5585	5441
15	5283	5547	5690	5629	5297
20	5521	5491	5545	5507	5719
25	5535	5269	5655	5270	5698
30	5652	5596	5620	5258	5720
35	5571	5444	5483	5702	5666
40	5553	5359	5447	5331	5573
45	5677	5316	5561	5251	5332
50	5684	5397	5470	5689	5431
55	5581	5329	5312	5294	5624
60	5411	5255	5408	5714	5546
65	5275	5649	5466	5532	5636
70	5641	5647	5339	5381	5495
75	5619	5551	5421	5703	5616
80	5531	5319	5627	5693	5449
85	5497	5391	5539	5715	5462
90	5518	5280	5572	5654	5380
95	5451	5289	5342	5277	5274

Нор	ping Frequen	cy Sequenc	ce Name: HOP_F	REQ_SEC	Q_16
Frequency (MHz)	0	1	2	3	4
0	5418	5529	5378	5374	5417
5	5559	5634	5677	5270	5473
10	5693	5406	5279	5305	5462
15	5274	5674	5318	5489	5657
20	5583	5567	5480	5607	5387
25	5375	5284	5619	5409	5587
30	5666	5295	5273	5343	5397
35	5336	5367	5597	5638	5491
40	5684	5356	5689	5656	5260
45	5272	5351	5505	5508	5293
50	5536	5535	5422	5509	5643
55	5314	5562	5709	5282	5369
60	5699	5588	5298	5424	5342
65	5713	5633	5705	5471	5578
70	5520	5541	5371	5308	5332
75	5408	5285	5512	5586	5539
80	5557	5425	5710	5720	5526
85	5427	5616	5392	5286	5400
90	5428	5513	5675	5676	5653
95	5495	5304	5724	5315	5698

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Нор	ping Frequen	cy Sequenc	ce Name: HOP_	FREQ_SEQ	_17
Frequency (MHz)	0	1	2	3	4
0	5673	5293	5314	5535	5637
5	5698	5656	5277	5433	5680
10	5624	5292	5320	5403	5483
15	5362	5326	5421	5719	5681
20	5537	5251	5524	5453	5398
25	5336	5578	5388	5556	5451
30	5573	5623	5510	5522	5638
35	5439	5427	5275	5408	5477
40	5357	5429	5449	5353	5683
45	5669	5264	5696	5325	5713
50	5381	5684	5311	5672	5494
55	5480	5332	5489	5612	5328
60	5614	5602	5479	5301	5394
65	5632	5703	5570	5648	5508
70	5694	5620	5310	5716	5442
75	5457	5350	5392	5661	5417
80	5560	5664	5306	5496	5485
85	5330	5588	5577	5675	5313
90	5419	5395	5523	5455	5412
95	5411	5303	5399	5273	5707

Нор	ping Frequen	cy Sequenc	ce Name: HOP_F	FREQ_SEC)_18
Frequency (MHz)	0	1	2	3	4
0	5453	5532	5250	5599	5479
5	5265	5581	5352	5596	5412
10	5458	5556	5361	5598	5504
15	5450	5524	5289	5495	5448
20	5417	5465	5648	5426	5286
25	5663	5306	5492	5590	5493
30	5462	5580	5296	5578	5615
35	5531	5525	5322	5316	5537
40	5367	5592	5350	5612	5649
45	5347	5279	5378	5503	5257
50	5385	5362	5317	5327	5520
55	5443	5622	5585	5256	5644
60	5343	5701	5393	5597	5660
65	5340	5586	5423	5702	5445
70	5326	5496	5560	5559	5337
75	5552	5613	5260	5391	5501
80	5345	5338	5522	5553	5374
85	5404	5301	5407	5540	5510
90	5309	5705	5406	5368	5444
95	5294	5313	5275	5519	5654



Нор	ping Frequen	cy Sequenc	ce Name: HOP_	FREQ_SEC)_19
Frequency (MHz)	0	1	2	3	4
0	5611	5296	5661	5285	5699
5	5307	5603	5427	5284	5619
10	5389	5345	5402	5318	5525
15	5538	5580	5627	5712	5687
20	5456	5583	5503	5262	5399
25	5552	5612	5509	5693	5624
30	5535	5351	5537	5368	5448
35	5656	5717	5706	5327	5678
40	5711	5630	5620	5305	5357
45	5444	5629	5430	5337	5431
50	5390	5608	5561	5413	5375
55	5615	5271	5708	5397	5517
60	5441	5556	5385	5334	5288
65	5595	5594	5546	5599	5550
70	5381	5701	5551	5688	5545
75	5302	5455	5426	5606	5540
80	5492	5565	5323	5388	5696
85	5655	5411	5617	5421	5582
90	5416	5539	5410	5516	5557
95	5477	5682	5587	5417	5366

Нор	ping Frequen	cy Sequenc	ce Name: HOP_F	REQ_SEC)_20
Frequency (MHz)	0	1	2	3	4
0	5391	5535	5597	5446	5444
5	5349	5625	5502	5447	5448
10	5698	5609	5540	5513	5546
15	5529	5610	5633	5282	5404
20	5464	5652	5254	5372	5440
25	5712	5322	5658	5674	5337
30	5494	5583	5697	5476	5381
35	5598	5356	5722	5469	5703
40	5621	5441	5373	5395	5484
45	5655	5387	5262	5438	5593
50	5324	5351	5707	5638	5430
55	5514	5596	5708	5462	5682
60	5320	5495	5635	5382	5651
65	5504	5720	5548	5479	5278
70	5414	5677	5449	5274	5521
75	5269	5675	5482	5369	5483
80	5385	5723	5594	5471	5334
85	5386	5536	5614	5704	5416
90	5318	5443	5574	5620	5461
95	5580	5566	5612	5615	5393



Нор	ping Frequen	cy Sequenc	ce Name: HOP_I	FREQ_SEC)_21
Frequency (MHz)	0	1	2	3	4
0	5646	5299	5533	5607	5286
5	5488	5550	5577	5513	5655
10	5629	5398	5581	5708	5567
15	5617	5262	5261	5327	5596
20	5375	5343	5385	5345	5706
25	5316	5426	5692	5716	5701
30	5451	5323	5374	5674	5423
35	5413	5394	5606	5636	5405
40	5408	5559	5362	5438	5680
45	5589	5356	5537	5542	5263
50	5515	5650	5639	5512	5305
55	5422	5457	5401	5643	5275
60	5294	5508	5584	5618	5444
65	5574	5592	5543	5685	5317
70	5282	5551	5328	5254	5373
75	5549	5569	5320	5502	5521
80	5310	5546	5285	5626	5436
85	5434	5526	5490	5620	5519
90	5255	5325	5637	5688	5675
95	5478	5448	5338	5556	5605

Нор	ping Frequen	cy Sequenc	ce Name: HOP_I	FREQ_SEC)_22
Frequency (MHz)	0	1	2	3	4
0	5426	5538	5469	5293	5506
5	5530	5572	5652	5676	5387
10	5560	5662	5622	5331	5588
15	5705	5389	5364	5372	5313
20	5383	5412	5423	5335	5318
25	5594	5265	5546	5251	5283
30	5590	5408	5623	5494	5562
35	5504	5287	5284	5550	5719
40	5491	5497	5505	5435	5609
45	5472	5679	5414	5493	5332
50	5614	5566	5264	5462	5384
55	5700	5259	5612	5276	5675
60	5451	5695	5601	5431	5344
65	5393	5610	5424	5338	5488
70	5486	5268	5651	5555	5518
75	5689	5463	5483	5298	5323
80	5519	5697	5282	5428	5626
85	5278	5621	5694	5541	5632
90	5559	5525	5289	5585	5271
95	5255	5526	5376	5427	5721



Нор	ping Frequen	cy Sequenc	ce Name: HOP_	FREQ_SEQ	_23
Frequency (MHz)	0	1	2	3	4
0	5584	5302	5405	5454	5348
5	5572	5497	5252	5364	5691
10	5394	5548	5663	5526	5609
15	5318	5516	5467	5320	5505
20	5391	5578	5424	5291	5482
25	5592	5274	5256	5285	5422
30	5576	5365	5656	5300	5692
35	5701	5558	5437	5561	5574
40	5435	5270	5432	5538	5452
45	5287	5472	5546	5694	5393
50	5315	5617	5353	5328	5413
55	5688	5705	5473	5721	5329
60	5616	5640	5433	5257	5573
65	5642	5342	5646	5634	5254
70	5654	5404	5390	5334	5606
75	5464	5550	5386	5672	5279
80	5623	5529	5457	5338	5562
85	5495	5641	5355	5724	5531
90	5380	5722	5310	5510	5371
95	5406	5349	5356	5649	5554

Нор	ping Frequen	cy Sequend	ce Name: HOP_	FREQ_SEC)_24
Frequency (MHz)	0	1	2	3	4
0	5364	5541	5341	5615	5568
5	5614	5519	5327	5527	5423
10	5325	5337	5704	5721	5630
15	5309	5643	5570	5365	5697
20	5302	5647	5305	5416	5264
25	5273	5477	5360	5319	5464
30	5465	5322	5396	5549	5512
35	5268	5308	5354	5687	5475
40	5397	5657	5373	5510	5526
45	5370	5432	5433	5599	5484
50	5269	5491	5668	5442	5583
55	5650	5601	5642	5420	5292
60	5692	5458	5306	5585	5362
65	5558	5368	5291	5466	5500
70	5569	5252	5715	5279	5253
75	5560	5250	5359	5357	5652
80	5542	5705	5543	5556	5453
85	5276	5440	5534	5517	5546
90	5414	5537	5260	5392	5591
95	5288	5452	5554	5408	5660



Нор	ping Frequen	cy Sequenc	ce Name: HOP_	FREQ_SEQ	_25
Frequency (MHz)	0	1	2	3	4
0	5619	5305	5277	5679	5410
5	5278	5444	5402	5593	5630
10	5256	5601	5270	5441	5651
15	5397	5673	5576	5511	5310
20	5338	5343	5505	5712	5636
25	5393	5680	5464	5353	5506
30	5451	5279	5611	5701	5710
35	5407	5399	5722	5365	5389
40	5333	5362	5311	5275	5523
45	5299	5412	5453	5491	5652
50	5371	5620	5667	5719	5628
55	5309	5594	5314	5596	5610
60	5586	5663	5587	5471	5627
65	5669	5481	5465	5666	5715
70	5621	5676	5295	5372	5324
75	5323	5282	5577	5536	5684
80	5328	5477	5320	5482	5556
85	5337	5617	5420	5273	5635
90	5432	5376	5480	5625	5395
95	5500	5662	5373	5579	5640

Нор	ping Frequen	cy Sequenc	ce Name: HOP_F	FREQ_SEC)_26
Frequency (MHz)	0	1	2	3	4
0	5399	5544	5688	5365	5630
5	5320	5466	5477	5281	5459
10	5565	5390	5311	5636	5672
15	5485	5325	5679	5455	5703
20	5318	5407	5284	5497	5685
25	5427	5720	5408	5568	5387
30	5645	5340	5711	5351	5475
35	5530	5546	5490	5518	5400
40	5647	5445	5724	5418	5520
45	5606	5392	5536	5549	5705
50	5496	5368	5295	5717	5607
55	5441	5405	5550	5634	5716
60	5572	5501	5307	5411	5286
65	5657	5508	5662	5553	5493
70	5309	5382	5329	5512	5643
75	5675	5597	5366	5504	5259
80	5666	5593	5306	5483	5648
85	5355	5335	5315	5540	5342
90	5360	5551	5435	5668	5269
95	5646	5706	5394	5610	5395

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Нор	ping Frequen	cy Sequenc	ce Name: HOP_	FREQ_SEC)_27
Frequency (MHz)	0	1	2	3	4
0	5557	5405	5624	5526	5472
5	5362	5391	5552	5444	5666
10	5496	5654	5352	5259	5693
15	5573	5452	5307	5403	5420
20	5704	5700	5586	5658	5315
25	5669	5514	5294	5421	5687
30	5668	5469	5627	5350	5685
35	5581	5314	5293	5486	5528
40	5662	5517	5535	5372	5619
45	5510	5283	5523	5275	5544
50	5346	5331	5430	5385	5593
55	5407	5515	5602	5508	5273
60	5326	5333	5608	5454	5710
65	5596	5718	5457	5356	5565
70	5295	5653	5488	5505	5644
75	5717	5509	5485	5511	5679
80	5374	5470	5643	5645	5550
85	5713	5632	5503	5437	5703
90	5683	5434	5652	5276	5622
95	5412	5530	5640	5438	5603

Нор	ping Frequen	cy Sequenc	ce Name: HOP_F	REQ_SEC)_28
Frequency (MHz)	0	1	2	3	4
0	5337	5644	5560	5687	5692
5	5501	5413	5627	5607	5398
10	5427	5540	5490	5454	5714
15	5564	5579	5410	5448	5612
20	5712	5264	5641	5578	5631
25	5581	5521	5717	5455	5254
30	5690	5625	5684	5401	5548
35	5252	5672	5585	5446	5703
40	5325	5611	5503	5423	5514
45	5367	5255	5702	5568	5313
50	5626	5720	5397	5420	5253
55	5707	5306	5361	5705	5421
60	5479	5402	5491	5462	5262
65	5531	5400	5416	5659	5632
70	5550	5349	5634	5637	5378
75	5485	5502	5464	5516	5362
80	5555	5466	5288	5314	5630
85	5706	5642	5270	5713	5571
90	5563	5629	5556	5359	5686
95	5599	5658	5677	5633	5256



Нор	ping Frequen	cy Sequenc	ce Name: HOP_I	FREQ_SEQ	1_29
Frequency (MHz)	0	1	2	3	4
0	5592	5408	5496	5373	5534
5	5543	5338	5702	5673	5261
10	5329	5531	5649	5260	5652
15	5706	5513	5493	5720	5333
20	5679	5667	5604	5469	5470
25	5445	5502	5489	5393	5579
30	5582	5424	5553	5368	5391
35	5385	5478	5599	5714	5639
40	5316	5441	5566	5608	5296
45	5710	5310	5626	5292	5675
50	5421	5448	5509	5454	5651
55	5494	5315	5420	5715	5450
60	5656	5504	5569	5357	5346
65	5617	5571	5285	5619	5437
70	5331	5364	5488	5351	5343
75	5423	5485	5698	5447	5443
80	5411	5701	5294	5562	5616
85	5413	5526	5724	5536	5510
90	5607	5409	5289	5664	5614
95	5418	5268	5446	5640	5464

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_30						
Frequency (MHz)	0	1	2	3	4	
0	5372	5647	5432	5534	5279	
5	5585	5360	5302	5361	5434	
10	5667	5593	5572	5369	5281	
15	5265	5261	5519	5441	5521	
20	5631	5499	5620	5659	5577	
25	5357	5322	5648	5606	5523	
30	5435	5468	5539	5639	5327	
35	5566	5530	5476	5274	5374	
40	5628	5575	5399	5379	5331	
45	5605	5700	5690	5393	5587	
50	5345	5465	5378	5597	5695	
55	5277	5498	5682	5269	5513	
60	5437	5421	5660	5346	5449	
65	5401	5280	5389	5440	5557	
70	5607	5592	5414	5715	5403	
75	5350	5491	5675	5319	5382	
80	5505	5366	5428	5390	5636	
85	5282	5255	5586	5404	5561	
90	5380	5704	5454	5292	5300	
95	5377	5560	5689	5595	5511	

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