

### **DFS TEST REPORT**

**REPORT NO.:** RF110607C27A-1

MODEL NO.: SWW1890R /27, SWW1810R /27,

WHD100R. WHD200R

FCC ID: YG7ZRF32200

IC ID: 9078A-ZRF32200

**RECEIVED:** Jun. 14, 2011

**TESTED:** Aug. 10, 2011

**ISSUED:** Aug. 22, 2011

**APPLICANT:** Zinwell Corporation

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**ISSUED BY:** Bureau Veritas Consumer Products Services (H.K.)

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## **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
Original release	N/A	Aug. 22, 2011



#### 1. LAB DECLARATION

PRODUCT: Wireless HD Net Connect Receiver / Wireless HD AV

Connect Receiver

MODEL: SWW1890R /27, SWW1810R /27, WHD100R, WHD200R

**BRAND: PHILIPS, ZINWELL** 

**APPLICANT:** Zinwell Corporation

**TESTED:** ENGINEERING SAMPLE

**TEST SAMPLE:** Aug. 10, 2011

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

FCC 06-96

Canada RSS-210 Issue 8 (2010-12)

Canada RSS-Gen Issue 3 (2010-12)

The above equipment (model: SWW1890R /27, SWW1810R /27, WHD100R, WHD200R) 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.

PREPARED BY : Tolly Chur, DATE: Aug. 22, 2011

Polly Chien / Specialist

**APPROVED BY** : , **DATE**: Aug. 22, 2011

Gary Chang //Technical Manager



### 2. EUT INFORMATION

### 2.1 OPERATING FREQUENCY BANDS AND MODE OF EUT

TABLE 1: OPERATING FREQUENCY BANDS AND MODE OF EUT.

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

The EUT has disabled the 5600 ~ 5650 MHz band

### 2.2 EUT SOFTWARE AND FIRMWARE VERSION

TABLE 2: THE EUT SOFTWARE/FIRMWARE VERSION.

NO.	PRODUCT	MODEL NO.	SOFTWARE/FIRMWARE VERSION
1	Wireless HD AV Connect Receiver	SWW1810R /27	SWW1810RU11114151

### 2.3 DESCRIPTION OF AVAILABLE ANTENNAS TO THE EUT

**TABLE 3: ANTENNA LIST.** 

ANT NO.	TYPE	OPERATION FREQUENCY RANGE(MHZ)	MAX. GAIN(DBI)
1	Printed	5250~5350	6.2
1	Printed	5470~5725	6.2



### 2.4 EUT MAXIMUM AND MINIMUM CONDUCTED POWER

### **TABLE 4: THE MEASURED CONDUCTED OUTPUT POWER**

### WHDI (40MHz)

ANT NO.	FREQUENCY BAND	MAX. POWER		MIN. POWER	
	(MHz)	OUTPUT POWER(dBm)	OUTPUT POWER(mW)	OUTPUT POWER(dBm)	OUTPUT POWER(mW)
1	5250~5350	19.0	79.4	16.0	39.8
1	5470~5725	19.0	79.4	16.0	39.8

### 2.5 EUT MAXIMUM AND MINIMUM E.I.R.P. POWER

TABLE 5: THE E.I.R.P OUTPUT POWER LIST

### WHDI (40MHz)

ANT	FREQUENCY BAND	MAX. POWER		MIN. P	OWER
NO.	(MHz)	OUTPUT POWER(dBm)	OUTPUT POWER(mW)	OUTPUT POWER(dBm)	OUTPUT POWER(mW)
1	5250~5350	25.2	331.1	22.2	166.0
1	5470~5725	25.2	331.1	22.2	166.0



### 3. U-NII DFS RULE REQUIREMENTS

#### 3.1 WORKING MODES AND REQUIRED TEST ITEMS

The manufacturer shall state whether the EUT is capable of operating as a Master and/or a Client. If the EUT is capable of operating in more than one operating mode then each operating mode shall be tested separately. See tables 1 and 2 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	✓	Not required	✓		
DFS Detection Threshold	✓	Not required	✓		
Channel Availability Check Time	✓	Not required	Not required		
Uniform Spreading	✓	Not required	Not required		
U-NII Detection Bandwidth	✓	Not required	✓		

TABLE 7: APPLICABILITY OF DFS REQUIREMENTS DURING NORMAL OPERATION.

	OPERATIONAL MODE				
REQUIREMENT	MASTER	CLIENT WITHOUT RADAR DETECTION	CLIENT WITH RADAR DETECTION		
DFS Detection Threshold	✓	Not required	✓		
Channel Closing Transmission Time	<b>√</b>	✓	✓		
Channel Move Time	✓	✓	✓		
U-NII Detection Bandwidth	✓	Not required	<b>√</b>		



#### 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 and 2)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 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.

#### **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 80% of the UNII 99% transmission power bandwidth.
	See Note 3.

**Note 1:** The instant that the Channel Move Time and the Channel Closing Transmission Time begins is as follows:

- For the Short Pulse Radar Test Signals this instant is the end of the Burst.
- For the Frequency Hopping radar Test Signal, this instant is the end of the last radar Burst generated.
- For the Long Pulse Radar Test Signal this instant is the end of the 12 second period defining the Radar Waveform.

**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 1 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.



### 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
1	1	1428	18	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
Aggregate (Radar Types 1-4)				80%	120

**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

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



### 4. TEST & SUPPORT EQUIPMENT LIST

### 4.1 TEST INSTRUMENTS

**TABLE 1: TEST INSTRUMENTS LIST.** 

DESCRIPTION & MANUFACTURER	MODEL NO.	BRAND	CALIBRATED UNTIL
R&S Spectrum analyzer	FSP40	R&S	2012/02/22
Signal generator	8645A	Agilent	2012/06/09
Oscilloscope	TDS 5104	Tektronix	2011/09/2
Control PC	Pavilion a320d	HP	
Horn antenna BBHA 9120D	BBHA 9120 D	Schwarzbeck	2011/09/6

### 4.2 DESCRIPTION OF SUPPORT UNITS

**TABLE 2: SUPPORT UNIT INFORMATION.** 

No.	Product	Brand	Model No.
1	Wireless HD AV Connect Transmitter	PHILIPS	SWW1810T /27

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

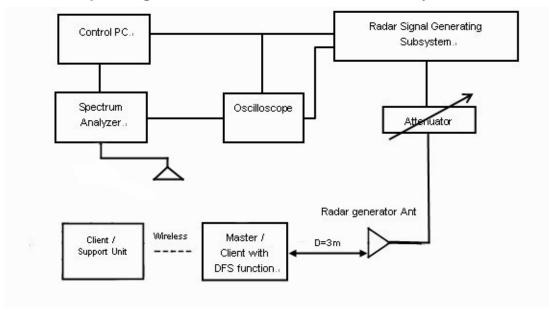


### 5. TEST PROCEDURE

#### 5.1 ADT DFS MEASUREMENT SYSTEM:

A complete ADT DFS Measurement System consists of two subsystems: (1) the Radar Signal Generating Subsystem and (2) the Traffic Monitoring Subsystem. 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 (EUT).

### Radiated setup configuration of ADT DFS Measurement System



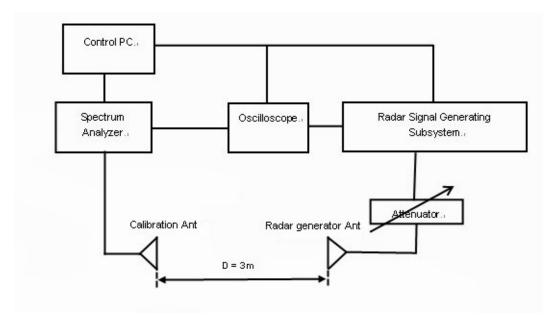
The test transmission will always be from the Master Device to the Client Device. While the Client device is set up to associate with the Master device and play the MPEG file (6  $\frac{1}{2}$  Magic Hours) from Master device, the designated MPEG test file and instructions are located at: http://ntiacsd.ntia.doc.gov/dfs/.



#### 5.2 CALIBRATION OF DFS DETECTION THRESHOLD LEVEL:

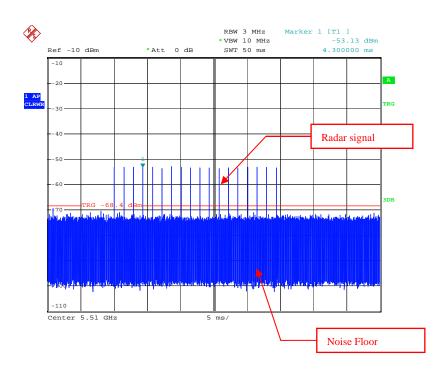
EIRP of EUT is >23dBm, so the threshold level is -64dbm. DFS test is using radiated not conducted. Calibration setup is as below and the threshold level is calibrated at calibration antenna. Gain of calibration antenna is 13dBi, cable loss is 2dBi. Adjust power level of Radar signal generation subsystem to let reading of spectrum is equal to -53dBm that means the power level of calibration antenna is equal to -64dBm. The measured channel is 5510MHz. The radar signal was the same as transmitted channels.

### Radiated setup configuration of Calibration of DFS Detection Threshold Level



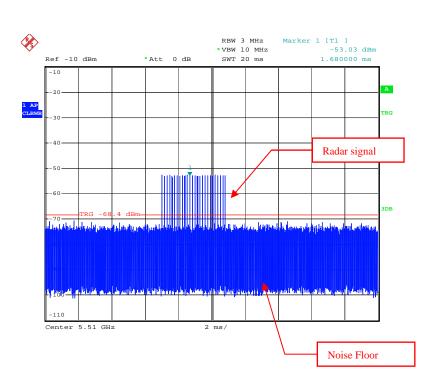


### Reading of spectrum analyzer

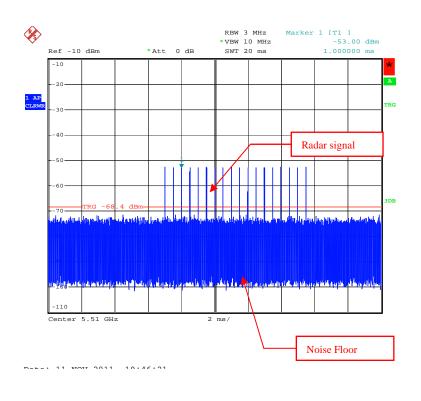


Radar Signal 1



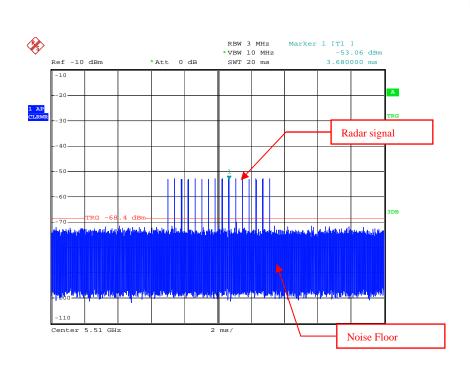


### Radar Signal 2

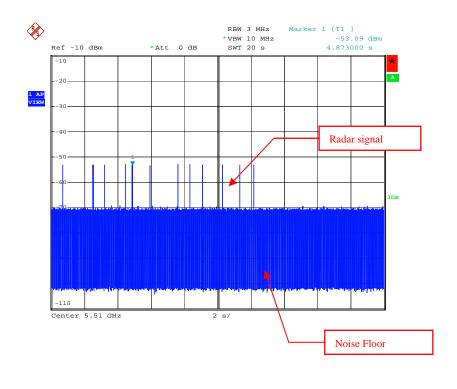


Radar Signal 3



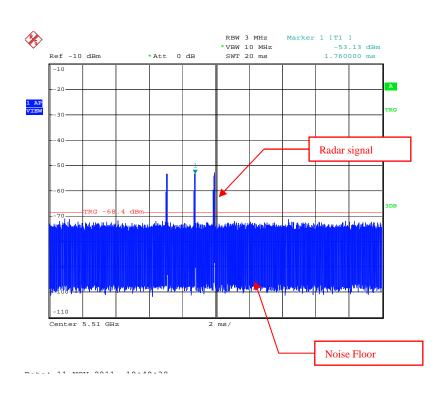


### Radar Signal 4

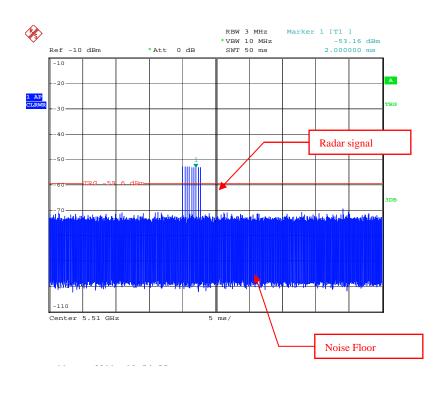


Radar Signal 5





### Single Burst of Radar Signal 5



Radar Signal 6

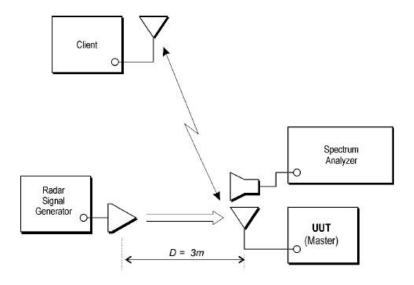


### 5.3 DEVIATION FROM TEST STANDARD

No deviation.

### 5.4 RADIATED TEST SETUP CONFIGURATION

Master with injection at the Master



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



### **6. TEST RESULTS**

### 6.1 SUMMARY OF TEST RESULT

Clause	Test Parameter	Remarks	Pass/Fail
15.407	DFS Detection Threshold	Applicable	Pass
15.407	U-NII Detection Bandwidth	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	Uniform Spreading	Applicable	Pass



### 6.2 DETELED TEST RESULTS

### 6.2.1 TEST MODE: DEVICE OPERATING IN MASTER MODE.

Master with injection at the Master. (Radar Test Waveforms are injected into the Master.

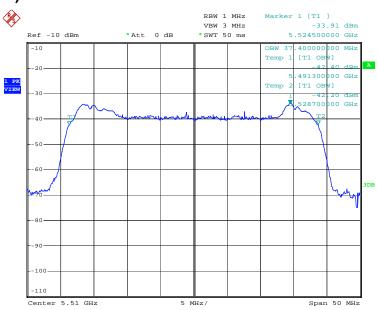
### 6.2.2 DFS DETECTION THRESHOLD

EIRP of EUT is >23dBm, so the threshold level is -64dbm.



### **6.2.3 U-NII DETECTION BANDWIDTH**

### WHDI (40MHz)



U-NII 99% Channel bandwidth



### Detection Bandwidth Test - WHDI (40MHz)

EUT Frequency: 5510MHz
EUT 99% Power bandwidth: 37.4MHz
Detection bandwidth limit (80% of EUT 99% Power bandwidth): 29.92MHz
Detection bandwidth (5530(FH) – 5490(FL)): 40MHz

Test Result : PASS

Radar	Radar Trial Number / Detection										
Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5489	N	N	N	N	N	N	N	N	N	N	0
5490(FL)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5491	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5492	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5493	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5494	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5495	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5496	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5497	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5498	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5499	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5500	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5501	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5502	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5503	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5504	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5505	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5506	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5507	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5508	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5509	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5510	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5511	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5512	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5513	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5514	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5515	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5516	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5517	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5518	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5519	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5520	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100



Detection Bandwidth Test - WHDI (40MHz)

EUT Frequency: 5510MHz

EUT 99% Power bandwidth: 37.4MHz

Detection bandwidth limit (80% of EUT 99% Power bandwidth): 29.92MHz

Detection bandwidth (5530(FH) – 5490(FL)): 40MHz

Test Result: PASS

rest result . I A	est Nesult . I AOS										
Radar		Trial Number / Detection									Detection
Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Rate (%)
5521	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5522	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5523	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5524	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5525	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5526	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5527	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5528	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5529	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5530(FH)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	100
5531	N	N	N	N	N	N	N	N	N	N	0

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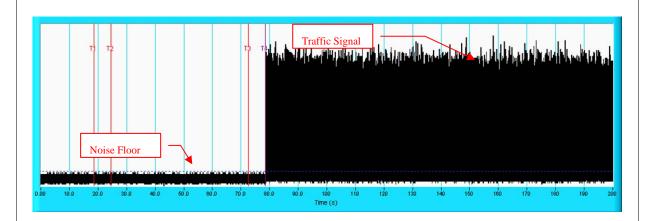


### 6.2.4 CHANNEL AVAILABILITY CHECK TIME

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.

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

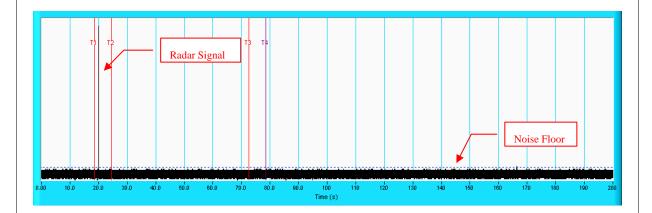
### **Initial Channel Availability Check Time**



**NOTE:** T1 denotes the end of power-up time period is 18 second. T4 denotes the end of Channel Availability Check time is 78 second. Channel Availability Check time is equal to (T4 - T1) 60 seconds.

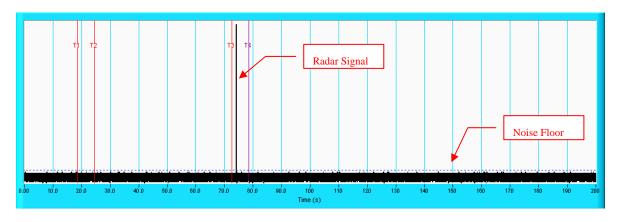


### Radar Burst at the Beginning of the Channel Availability Check Time



**NOTE:** T1 denotes the end of power up time period is 18 second. T2 denotes 24 second , the radar burst was commenced within a 6 second window starting from the end of power-up sequence. T4 denotes the 78 second.

### Radar Burst at the End of the Channel Availability Check Time

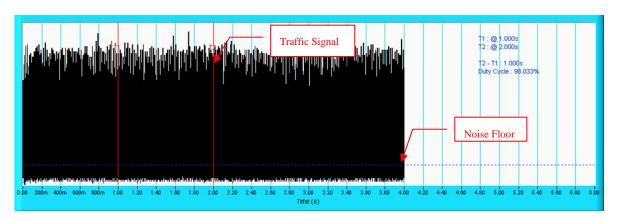


**NOTE:** T1 denotes the end of power up time period is 18 second. T3 denotes 72 second and radar burst was commenced within 54<sup>th</sup> second to 60<sup>th</sup> second window starting from the end of power-up sequence. T4 denotes the 78 second.



# **6.2.5 CHANNEL CLOSING TRANSMISSION AND CHANNEL MOVE TIME**Wireless Traffic Loading

### WHDI (40MHz)





### WHDI (40MHz)

### 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	1	1428	18	30	100
2	1-5	150-230	23-29	30	100
3	6-10	200-500	16-18	30	100
4	11-20	200-500	12-16	30	100
	Aggregate (Ra	120	100		

### **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	100

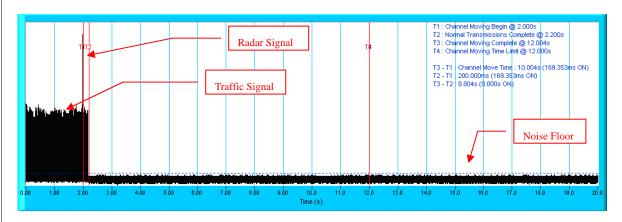
### **TABLE 3: FREQUENCY HOPPING RADAR TEST WAVEFORM**

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	100

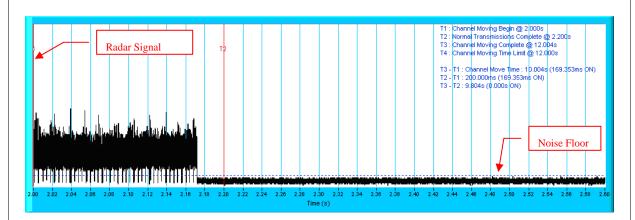
The Detailed Radar pattern and Statistical Performance showed in Annex A.



### Radar signal 1 WHDI (40MHz)



**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.

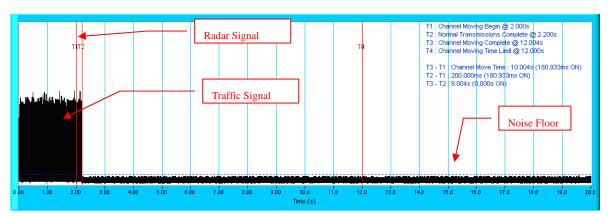


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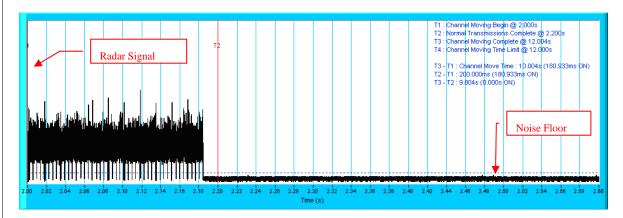


### Radar signal 2

### WHDI (40MHz)



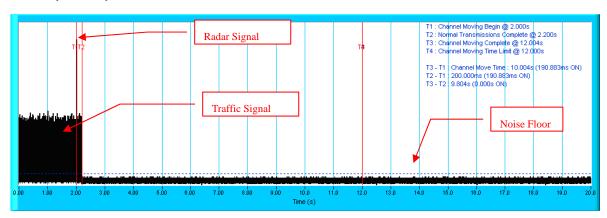
**NOTE:** T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.



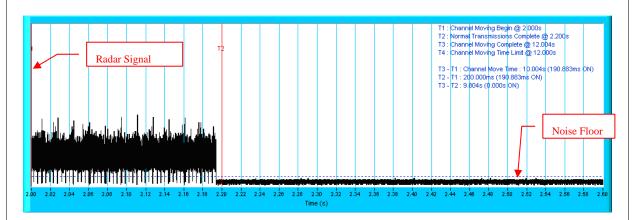


### Radar signal 3

### WHDI (40MHz)

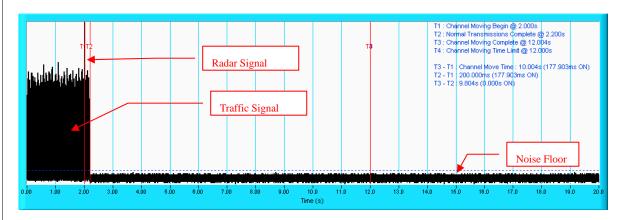


**NOTE:** T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.

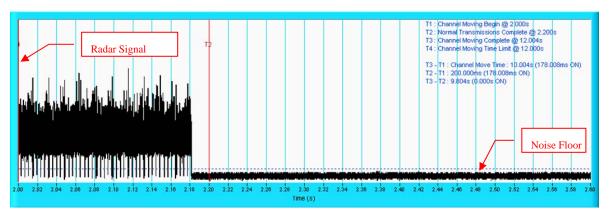




### Radar signal 4 WHDI (40MHz)



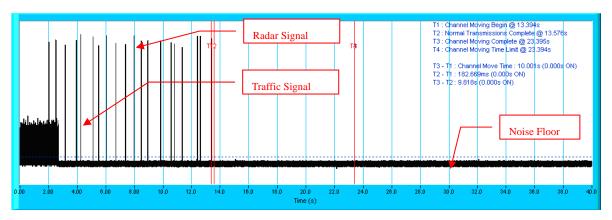
**NOTE:** T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.



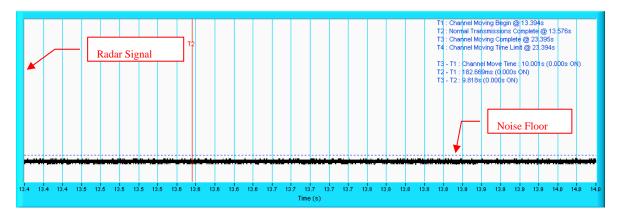


### Radar signal 5

### WHDI (40MHz)



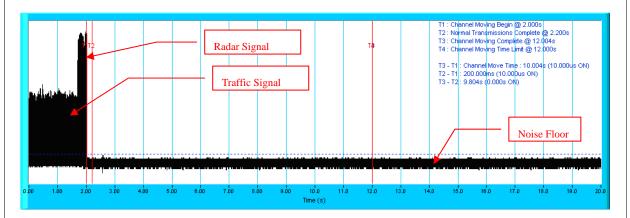
**NOTE:** T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.



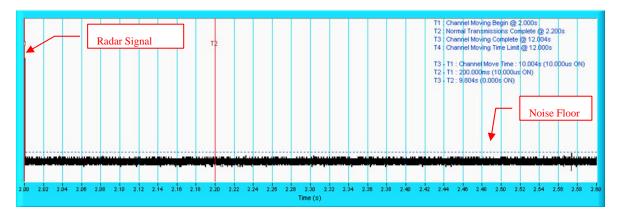


### Radar signal 6

### WHDI (40MHz)



**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.



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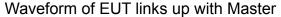


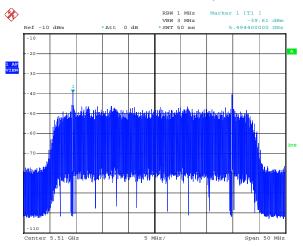
#### 6.2.6 NON-OCCUPANCY PERIOD

#### **Associate test:**

During the 30 minutes observation time, UUT did not make any transmissions on a channel after a radar signal was detected on that channel by either the Channel Availability Check or the In-Service Monitoring.

1) EUT (Master) links with client on 5510MHz.





2) Master plays specified files.

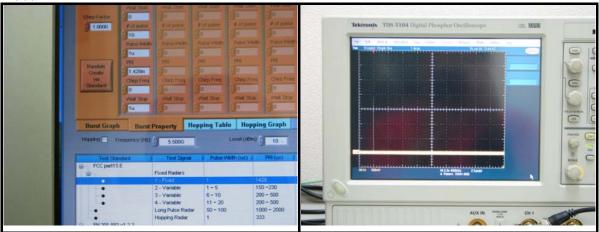
Waveform of transmission

REW 1 MHz Marker 1 [T1 ]
VBW 3 MHz -42.61 dBm
Ref -10 dBm \*Att 0 dB \*SWT 50 ms 5.49500000 GHz



3) Radar signal is applied to the Master device and WiFi traffic signal stop immediately.

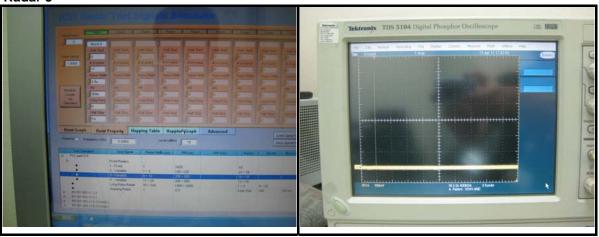
### Radar 1



### Radar 2

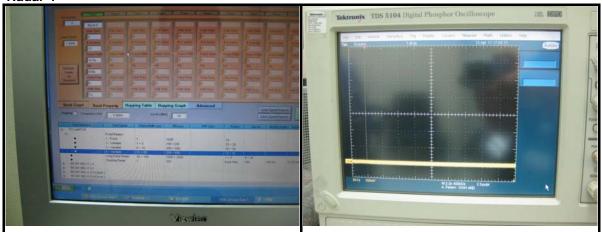


### Radar 3

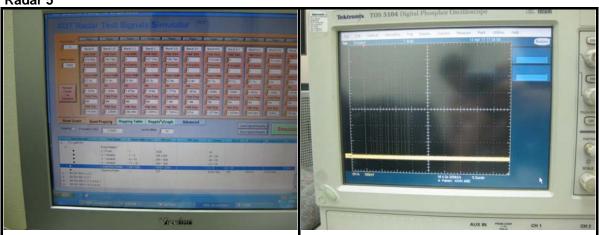




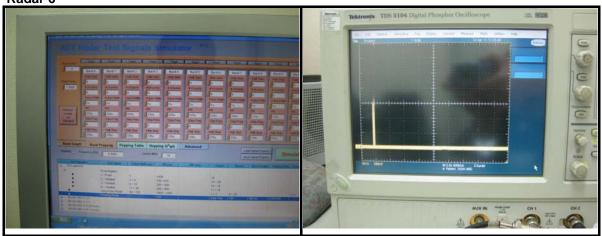
### Radar 4



### Radar 5



### Radar 6

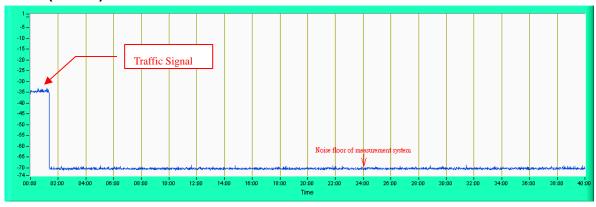




4) 5510MHz has been monitored in 30 minutes period. In this period, no any transmission occurs.

### Plot of 30minutes period

### WHDI (40MHz)



NOTE: Test setup are shown on Test set up photo. pdf

#### 6.2.7 UNIFORM SPREADING

The intention of the uniform spreading is to provide, on aggregate, a uniform loading of the spectrum. The EUT using the DFS bands 5250 to 5350MHz and 5470 to 5725 MHz channels so that the probability of selecting a given channel shall be the same for all channels.

The EUT will select channel by random mode and mark this channel after detecting radar signal, so that will select unused channel by random mode.

### **6.2.8 TRANSMIT POWER CONTROL (TPC)**

According to FCC 15.407(h)(1) the TPC mechanism is not required for system with an E.I.R.P. of less 500mW



#### 7. TESTING LABORATORIES INFORMATION

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 by the following approval agencies according to ISO/IEC 17025.

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

<u>www.adt.com.tw/index.5.phtml</u>. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:Hsin Chu EMC/RF Lab:Tel: 886-2-26052180Tel: 886-3-5935343Fax: 886-2-26051924Fax: 886-3-5935342

### Hwa Ya EMC/RF/Safety Telecom Lab:

Tel: 886-3-3183232 Fax: 886-3-3185050

Email: service.adt@tw.bureauveritas.com

Web Site: www.adt.com.tw

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

Report No.: RF110607C27A-1 Reference No.: 110614C20

**Annex-A**Annex A.1: The Detailed Radar pattern and Statistical Performance

# WHDI (40MHz)

Type 1 Radar Statistical Performances							
Trial #	Pulses per Burst		PRI (s)	Detection			
1	18	1.0u	1.428m	Yes			
2	18	1.0u	1.428m	Yes			
3	18	1.0u	1.428m	Yes			
4	18	1.0u	1.428m	Yes			
5	18	1.0u	1.428m	Yes			
6	18	1.0u	1.428m	Yes			
7	18	1.0u	1.428m	Yes			
8	18	1.0u	1.428m	Yes			
9	18	1.0u	1.428m	Yes			
10	18	1.0u	1.428m	Yes			
11	18	1.0u	1.428m	Yes			
12	18	1.0u	1.428m	Yes			
13	18	1.0u	1.428m	Yes			
14	18	1.0u	1.428m	Yes			
15	18	1.0u	1.428m	Yes			
16	18	1.0u	1.428m	Yes			
17	18	1.0u	1.428m	Yes			
18	18	1.0u	1.428m	Yes			
19	18	1.0u	1.428m	Yes			
20	18	1.0u	1.428m	Yes			
21	18	1.0u	1.428m	Yes			
22	18	1.0u	1.428m	Yes			
23	18	1.0u	1.428m	Yes			
24	18	1.0u	1.428m	Yes			
25	18	1.0u	1.428m	Yes			
26	18	1.0u	1.428m	Yes			
27	18	1.0u	1.428m	Yes			
28	18	1.0u	1.428m	Yes			
29	18	1.0u	1.428m	Yes			
30	18	1.0u	1.428m	Yes			
			Detection F	Rate: 100.0 %			

Type 2 Radar Statistical Performances							
Trial #	Pulses per Burst	Pulse Width (s)	PRI (s)	Detection			
1	24	3.8u	222.0u	Yes			
2	26	1.9u	224.0u	Yes			
3	26	1.8u	228.0u	Yes			
4	25	2.5u	203.0u	Yes			
5	27	4.2u	180.0u	Yes			
6	28	4.0u	187.0u	Yes			
7	26	2.2u	172.0u	Yes			
8	27	3.5u	166.0u	Yes			
9	24	1.4u	178.0u	Yes			
10	25	2.2u	227.0u	Yes			
11	23	3.6u	167.0u	Yes			
12	26	2.0u	167.0u	Yes			
13	28	2.1u	196.0u	Yes			
14	28	3.2u	224.0u	Yes			
15	24	4.6u	207.0u	Yes			
16	27	3.6u	166.0u	Yes			
17	25	4.6u	182.0u	Yes			
18	25	2.8u	169.0u	Yes			
19	28	2.5u	210.0u	Yes			
20	28	1.7u	178.0u	Yes			
21	27	1.3u	200.0u	Yes			
22	25	3.2u	162.0u	Yes			
23	24	4.1u	228.0u	Yes			
24	26	1.3u	172.0u	Yes			
25	27	3.1u	227.0u	Yes			
26	26	2.3u	163.0u	Yes			
27	26	4.1u	182.0u	Yes			
28	28	1.1u	211.0u	Yes			
29	27	3.6u	161.0u	Yes			
30	23	1.2u	176.0u	Yes			
	Detection Rate: 100.0 %						

Type 3 Radar Statistical Performances							
Trial #	Pulses per Burst	Pulse Width (s)	PRI (s)	Detection			
1	18	8.5u	205.0u	Yes			
2	16	6.9u	403.0u	Yes			
3	17	6.4u	279.0u	Yes			
4	18	6.1u	336.0u	Yes			
5	16	8.0u	336.0u	Yes			
6	18	7.7u	334.0u	Yes			
7	17	7.8u	456.0u	Yes			
8	17	9.0u	240.0u	Yes			
9	18	8.3u	327.0u	Yes			
10	17	8.6u	235.0u	Yes			
11	16	7.3u	284.0u	Yes			
12	17	9.9u	401.0u	Yes			
13	16	9.8u	336.0u	Yes			
14	17	7.2u	374.0u	Yes			
15	18	8.2u	373.0u	Yes			
16	16	10.0u	346.0u	Yes			
17	16	7.3u	295.0u	Yes			
18	17	9.0u	369.0u	Yes			
19	17	6.4u	372.0u	Yes			
20	18	6.5u	298.0u	Yes			
21	17	8.5u	242.0u	Yes			
22	18	7.5u	354.0u	Yes			
23	16	9.0u	203.0u	Yes			
24	18	9.5u	365.0u	Yes			
25	17	9.6u	398.0u	Yes			
26	16	6.5u	278.0u	Yes			
27	17	6.7u	345.0u	Yes			
28	18	9.0u	391.0u	Yes			
29	18	9.2u	207.0u	Yes			
30	17	7.1u	216.0u	Yes			
Detection Rate: 100.0 %							

Type 4 Radar Statistical Performances							
Trial #	Pulses per Burst	Pulse Width (s)	PRI (s)	Detection			
1	15	14.3u	455.0u	Yes			
2	16	15.3u	340.0u	Yes			
3	12	15.9u	492.0u	Yes			
4	16	16.2u	320.0u	Yes			
5	13	19.3u	426.0u	Yes			
6	12	19.6u	202.0u	Yes			
7	13	16.3u	484.0u	Yes			
8	13	14.1u	409.0u	Yes			
9	14	14.2u	261.0u	Yes			
10	13	14.2u	376.0u	Yes			
11	14	16.4u	256.0u	Yes			
12	16	11.3u	455.0u	Yes			
13	14	13.9u	254.0u	Yes			
14	12	14.1u	278.0u	Yes			
15	14	13.3u	349.0u	Yes			
16	16	13.8u	219.0u	Yes			
17	15	19.5u	231.0u	Yes			
18	15	19.2u	442.0u	Yes			
19	12	19.6u	304.0u	Yes			
20	14	13.2u	423.0u	Yes			
21	16	14.5u	456.0u	Yes			
22	13	11.7u	259.0u	Yes			
23	15	11.7u	319.0u	Yes			
24	14	13.9u	201.0u	Yes			
25	15	17.1u	265.0u	Yes			
26	14	15.8u	355.0u	Yes			
27	13	13.4u	389.0u	Yes			
28	15	16.8u	355.0u	Yes			
29	14	19.3u	289.0u	Yes			
30	14	12.1u	210.0u	Yes			
	Detection Rate: 100.0 %						

Type 5 Radar Statistical Performances						
Trial #	Test Signal Name	Detection				
1	LP_Signal_01	Yes				
2	LP_Signal_02	Yes				
3	LP_Signal_03	Yes				
4	LP_Signal_04	Yes				
5	LP_Signal_05	Yes				
6	LP_Signal_06	Yes				
7	LP_Signal_07	Yes				
8	LP_Signal_08	Yes				
9	LP_Signal_09	Yes				
10	LP_Signal_10	Yes				
11	LP_Signal_11	Yes				
12	LP_Signal_12	Yes				
13	LP_Signal_13	Yes				
14	LP_Signal_14	Yes				
15	LP_Signal_15	Yes				
16	LP_Signal_16	Yes				
17	LP_Signal_17	Yes				
18	LP_Signal_18	Yes				
19	LP_Signal_19	Yes				
20	LP_Signal_20	Yes				
21	LP_Signal_21	Yes				
22	LP_Signal_22	Yes				
23	LP_Signal_23	Yes				
24	LP_Signal_24	Yes				
25	LP_Signal_25	Yes				
26	LP_Signal_26	Yes				
27	LP_Signal_27	Yes				
28	LP_Signal_28	Yes				
29	LP_Signal_29	Yes				
30	LP_Signal_30	Yes				
		Detection Rate: 100.0 %				

The Long Pulse Radar pattern showed in Annex A.2

Type 6 Radar Statistical Performances							
Trial #	Pulses per Burst		PRI (s)	Detection			
1	9	1.0u	333.0ú	Yes			
2	9	1.0u	333.0u	Yes			
3	9	1.0u	333.0u	Yes			
4	9	1.0u	333.0u	Yes			
5	9	1.0u	333.0u	Yes			
6	9	1.0u	333.0u	Yes			
7	9	1.0u	333.0u	Yes			
8	9	1.0u	333.0u	Yes			
9	9	1.0u	333.0u	Yes			
10	9	1.0u	333.0u	Yes			
11	9	1.0u	333.0u	Yes			
12	9	1.0u	333.0u	Yes			
13	9	1.0u	333.0u	Yes			
14	9	1.0u	333.0u	Yes			
15	9	1.0u	333.0u	Yes			
16	9	1.0u	333.0u	Yes			
17	9	1.0u	333.0u	Yes			
18	9	1.0u	333.0u	Yes			
19	9	1.0u	333.0u	Yes			
20	9	1.0u	333.0u	Yes			
21	9	1.0u	333.0u	Yes			
22	9	1.0u	333.0u	Yes			
23	9	1.0u	333.0u	Yes			
24	9	1.0u	333.0u	Yes			
25	9	1.0u	333.0u	Yes			
26	9	1.0u	333.0u	Yes			
27	9	1.0u	333.0u	Yes			
28	9	1.0u	333.0u	Yes			
29	9	1.0u	333.0u	Yes			
30	9	1.0u	333.0u	Yes			
	Detection Rate: 100.0 %						

The Frequency Hopping Radar pattern showed in Annex A.3

## **Annex-A2: The Long Pulse Radar Pattern**

#### WHDI (40MHz)

Long Pulse Radar Test Signal Test Signal Name: LP Signal 01 Number of Bursts in Trial: 20 Burst Pulses Pulse Pulse 1 to 2 Pulse 2 to 3 Chrip Start per (Hz) Width (s) Spacing (s) Spacing (s) Location (s) Burst 1 3 6M 62.0u 998.0u 1.714m 302.2m 2 3 1.407m 16M 72.5u 1.631m 212.0m 3 2 8M 54.2u 1.639m 268.9m 4 3 57.3u 1.105m 9M 1.806m 431.3m 5 2 16M 70.7u 1.545m 151.8m 6 2 15M 80.3u 1.769m 406.9m 7 2 7M 78.2u 1.052m 194.1m 17M 8 2 148.6m 90.1u 1.048m 9 3 1.529m 1.636m 5M 64.9u 197.7m 10 3 9M 72.5u 1.347m 930.5u 283.4m 11 2 17M 1.057m 73.9u 286.9m 12 1 17M 170.4m 95.6u 13 3 1.565m 37.72m 8M 86.0u 1.154m 14 1 M8 50.3u 332.1m 15 2 6M 98.5u 1.577m 466.1m 16 3 17M 54.4u 1.773m 1.649m 95.28m 17 6M 57.0u 1.734m 1.033m 48.35m 3 18 1 14M 74.4u 506.9m 1.005m 19 3 16M 89.1u 1.885m 89.13m 20 2 13M 290.5m 56.8u 1.461m

Long Pulse Radar Test Signal									
	Test Signal Name: LP_Signal_02								
Numbe	er of Burst	ts in Trial:	11						
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start			
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)			
	Burst	, ,				, ,			
1	2	9M	66.1u	1.464m	-	595.9m			
2	3	12M	97.2u	1.335m	1.536m	965.3m			
3	3	13M	67.6u	1.382m	973.4u	732.1m			
4	3	16M	87.1u	1.208m	1.772m	935.4m			
5	3	20M	91.6u	1.683m	1.801m	187.0m			
6	2	8M	96.0u	1.563m	-	979.2m			
7	2	9M	89.3u	1.138m	-	734.6m			
8	3	15M	59.5u	1.087m	1.784m	533.2m			
9	2	5M	76.1u	1.414m	-	305.7m			
10	2	19M	99.7u	1.199m	-	530.5m			
11	3	7M	63.2u	1.206m	1.341m	455.7m			

Long F	Long Pulse Radar Test Signal							
Test Si	gnal Nam	ne: LP_Si	gnal_03					
Numbe	er of Burs	ts in Trial:	14					
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start		
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)		
	Burst							
1	2	11M	87.0u	928.0u	-	802.1m		
2	2	13M	58.8u	1.678m	-	743.8m		
3	2	20M	57.9u	1.403m	-	643.8m		
4	2	14M	98.1u	1.430m	-	697.7m		
5	2	9M	85.3u	1.217m	-	144.0m		
6	1	12M	72.5u	-	-	183.6m		
7	1	19M	65.1u	-	-	608.0m		
8	2	8M	67.0u	1.916m	-	233.0m		
9	2	18M	61.9u	1.782m	-	670.7m		
10	2	7M	56.0u	1.801m	-	435.3m		
11	1	16M	92.8u	-	-	11.13m		
12	1	15M	60.1u	-	-	854.8m		
13	2	12M	86.6u	1.368m	-	184.7m		
14	3	18M	86.5u	1.804m	1.677m	52.08m		

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_04 Number of Bursts in Trial: 11								
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start		
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)		
	Burst							
1	3	13M	73.2u	1.661m	970.8u	636.2m		
2	1	13M	72.5u	-	ı	1.085		
3	3	10M	84.4u	1.740m	935.6u	628.9m		
4	2	12M	93.1u	1.029m	-	506.3m		
5	1	6M	96.4u	-	-	428.1m		
6	3	12M	77.3u	1.873m	1.546m	158.5m		
7	3	6M	86.2u	1.436m	927.8u	1.086		
8	3	11M	57.2u	974.8u	1.244m	1.034		
9	2	6M	86.8u	1.136m	-	67.17m		
10	2	18M	85.8u	1.024m	-	787.2m		
11	2	10M	68.4u	1.846m	-	168.4m		

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_05 Number of Bursts in Trial: 16							
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start	
Barot	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)	
	Burst	(1.12)	**************************************	opaonig (o)	opacing (c)	200411011 (0)	
1	2	16M	63.0u	1.022m	-	249.6m	
2	3	14M	87.9u	1.304m	1.477m	664.5m	
3	3	11M	90.9u	1.523m	1.723m	727.9m	
4	2	5M	52.7u	1.440m	-	109.1m	
5	2	10M	78.5u	1.185m	-	152.6m	
6	2	14M	52.8u	1.292m	-	205.2m	
7	1	12M	81.6u	-	-	147.6m	
8	3	16M	72.3u	1.758m	1.409m	78.90m	
9	1	14M	97.4u	-	-	731.9m	
10	1	7M	98.2u	-	-	36.14m	
11	2	15M	71.8u	1.114m	-	127.9m	
12	1	18M	53.5u	-	-	550.6m	
13	3	11M	78.5u	1.593m	1.863m	487.6m	
14	2	18M	82.6u	1.505m	-	48.25m	
15	2	20M	80.5u	1.015m	-	370.7m	
16	2	7M	54.0u	1.188m	-	335.3m	

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_06 Number of Bursts in Trial: 18							
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start	
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)	
	Burst	( )	,			( )	
1	2	8M	91.8u	1.885m	-	545.1m	
2	3	18M	56.7u	1.460m	1.814m	389.1m	
3	3	19M	76.1u	1.237m	1.489m	349.3m	
4	3	14M	73.1u	1.096m	1.086m	629.4m	
5	2	9M	62.3u	1.455m	-	154.5m	
6	3	17M	76.8u	1.374m	969.2u	315.5m	
7	1	11M	88.2u	-	-	226.2m	
8	2	17M	50.9u	1.544m	-	397.2m	
9	2	11M	74.7u	1.234m	-	201.5m	
10	1	19M	92.8u	-	-	513.0m	
11	2	11M	92.4u	1.389m	-	540.8m	
12	2	17M	62.0u	1.589m	-	544.8m	
13	2	10M	90.2u	1.231m	-	50.12m	
14	2	8M	91.1u	1.269m	-	481.9m	
15	2	12M	57.1u	1.661m	-	579.1m	
16	2	18M	52.8u	1.373m	-	69.97m	
17	3	13M	54.5u	1.695m	1.079m	407.9m	

_	Long Pulse Radar Test Signal							
Test Si	ignal Nam	ne: LP_Siç	gnal_07					
Numbe	er of Burs	ts in Trial:	14					
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start		
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)		
	Burst							
1	2	6M	91.4u	1.626m	-	469.1m		
2	3	8M	57.6u	1.407m	1.104m	671.6m		
3	2	12M	71.9u	1.863m	-	449.3m		
4	2	9M	63.0u	1.150m	-	421.9m		
5	1	6M	80.9u	-	-	338.1m		
6	2	6M	74.1u	991.9u	-	828.4m		
7	2	15M	86.2u	1.071m	-	699.2m		
8	1	12M	59.1u	-	-	400.3m		
9	2	16M	85.1u	1.479m	-	753.4m		
10	2	5M	74.5u	1.025m	-	354.6m		
11	2	12M	87.2u	1.907m	-	519.6m		
12	2	10M	96.0u	1.203m	-	607.2m		
13	3	9M	65.0u	1.540m	1.896m	536.3m		
14	2	16M	79.0u	1.605m	-	398.4m		

18

16M

63.5u

76.90m

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_08 Number of Bursts in Trial: 18									
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start			
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)			
	Burst	, ,	,			( )			
1	2	13M	58.6u	1.284m	-	608.5m			
2	2	15M	70.9u	1.751m	-	229.9m			
3	3	11M	75.2u	1.296m	1.880m	360.1m			
4	3	10M	89.4u	1.505m	1.309m	615.5m			
5	1	18M	78.8u	-	-	328.4m			
6	1	5M	92.4u	-	ı	175.2m			
7	3	19M	60.8u	1.913m	1.600m	456.3m			
8	1	7M	92.5u	-	-	171.5m			
9	1	5M	65.4u	-	-	304.3m			
10	2	11M	91.3u	1.465m	-	108.8m			
11	1	18M	84.5u	-	-	143.1m			
12	1	15M	89.6u	-	-	25.21m			
13	3	5M	65.9u	1.000m	1.212m	494.8m			
14	2	10M	52.0u	1.293m	-	428.7m			
15	3	5M	79.0u	1.036m	1.037m	647.1m			
16	1	18M	90.9u	-	-	367.4m			
17	3	9M	80.0u	1.166m	1.017m	371.3m			
1									

1.440m

414.9m

2

9M

97.9u

18

Long Pulse Radar Test Signal								
Test Signal Name: LP_Signal_09								
Number of Bursts in Trial: 15								
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start		
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)		
	Burst	` ,	, ,		,	` ,		
1	2	20M	50.2u	1.421m	-	44.39m		
2	2	17M	86.9u	1.414m	-	170.1m		
3	3	8M	90.0u	1.808m	1.822m	400.9m		
4	2	10M	95.4u	1.210m	-	19.32m		
5	3	18M	54.9u	1.858m	1.809m	571.9m		
6	3	17M	56.1u	1.040m	1.755m	736.3m		
7	2	12M	85.5u	1.083m	-	52.81m		
8	2	6M	92.1u	1.059m	-	367.9m		
9	2	16M	82.1u	1.275m	-	404.2m		
10	2	8M	69.6u	1.654m	-	631.3m		
11	2	10M	97.6u	1.191m	-	353.9m		
12	2	6M	97.8u	943.2u	-	666.2m		
13	3	20M	56.5u	1.140m	1.221m	164.5m		
14	3	17M	55.0u	1.902m	1.703m	728.2m		
15	3	12M	50.6u	1.376m	1.233m	242.0m		

Long Pulse Radar Test Signal									
Test Signal Name: LP_Signal_10									
Numbe	Number of Bursts in Trial: 12								
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start			
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)			
	Burst								
1	2	16M	91.8u	1.363m	ı	76.54m			
2	3	8M	54.1u	1.713m	1.304m	37.88m			
3	1	11M	81.4u	-	-	365.9m			
4	2	14M	87.4u	1.422m	ı	826.7m			
5	2	8M	51.9u	1.300m	ı	865.2m			
6	3	16M	83.9u	1.871m	1.179m	266.1m			
7	1	19M	54.6u	-	ı	913.8m			
8	3	5M	55.4u	991.6u	1.111m	71.68m			
9	1	18M	56.2u	-	ı	727.7m			
10	2	10M	91.1u	986.9u	-	949.8m			
11	2	5M	68.9u	1.154m		687.4m			
12	3	7M	82.7u	1.615m	1.793m	65.35m			

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_11 Number of Bursts in Trial: 9									
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start			
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)			
	Burst								
1	3	13M	57.8u	1.119m	1.639m	355.8m			
2	2	6M	75.4u	1.439m	-	1.173			
3	2	7M	68.6u	1.293m	-	296.8m			
4	2	10M	81.9u	1.426m	-	593.2m			
5	1	6M	63.0u	-	-	731.5m			
6	3	14M	75.4u	1.414m	1.690m	791.3m			
7	1	17M	55.1u	-	-	37.45m			
8	2	19M	87.9u	1.322m	-	309.4m			
9	2	18M	53.8u	1.878m	-	238.2m			

Long Pulse Radar Test Signal									
Test Si	Test Signal Name: LP_Signal_12								
Numbe	Number of Bursts in Trial: 9								
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start			
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)			
	Burst								
1	3	15M	57.9u	1.057m	1.350m	505.1m			
2	1	9M	86.4u	-	-	275.5m			
3	2	8M	50.9u	1.511m	-	16.56m			
4	1	6M	59.1u	-	-	692.7m			
5	2	10M	86.7u	1.730m	-	280.9m			
6	2	17M	76.9u	1.774m	-	269.5m			
7	2	14M	84.8u	1.243m	-	153.8m			
8	3	12M	98.2u	1.655m	1.899m	710.3m			
9	2	19M	70.9u	1.193m	-	435.2m			

Long Pulse Radar Test Signal									
Test Signal Name: LP_Signal_13									
Numbe	Number of Bursts in Trial: 13								
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start			
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)			
	Burst								
1	1	19M	78.7u	-	-	611.5m			
2	2	14M	69.1u	1.763m	ı	655.3m			
3	2	9M	72.2u	1.353m	ı	810.1m			
4	3	9M	99.3u	1.701m	1.316m	117.8m			
5	2	8M	78.5u	1.746m	ı	755.1m			
6	3	15M	93.3u	1.822m	1.138m	678.9m			
7	2	19M	91.1u	1.222m	ı	904.0m			
8	1	7M	87.1u	-	-	740.2m			
9	2	10M	70.2u	1.414m	-	669.3m			
10	2	14M	99.0u	1.575m	-	276.1m			
11	2	15M	76.1u	1.616m	-	48.05m			
12	1	6M	58.1u	-	-	419.6m			
13	3	17M	83.3u	1.277m	1.491m	227.1m			

Long Pulse Radar Test Signal								
Test Signal Name: LP_Signal_14								
Number of Bursts in Trial: 19								
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start		
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)		
	Burst							
1	2	16M	65.6u	1.774m	-	138.3m		
2	2	16M	99.8u	961.2u	-	387.3m		
3	2	19M	81.1u	1.663m	-	95.45m		
4	2	6M	69.5u	1.410m	-	379.2m		
5	1	20M	86.2u	-	-	416.4m		
6	1	12M	93.1u	-	-	66.41m		
7	1	18M	71.6u	-	-	103.9m		
8	2	17M	99.2u	1.617m	-	485.6m		
9	2	16M	64.7u	1.308m	-	565.8m		
10	2	6M	50.3u	1.727m	-	56.50m		
11	2	10M	80.3u	1.836m	-	181.7m		
12	3	7M	66.2u	1.467m	996.8u	581.7m		
13	2	16M	96.3u	1.280m	-	321.7m		
14	2	9M	70.5u	1.771m	-	365.0m		
15	2	17M	99.9u	1.015m	-	472.2m		
16	2	13M	79.9u	1.793m	-	504.2m		
17	2	16M	66.1u	1.453m	-	282.3m		
18	2	8M	74.9u	1.643m	-	518.8m		
19	3	14M	55.8u	1.248m	1.236m	332.2m		

Long Pulse Radar Test Signal Test Signal Name: LP\_Signal\_15 Number of Bursts in Trial: 19 Pulse 1 to 2 Burst Pulses Pulse Pulse 2 to 3 Start Chrip per (Hz) Width (s) Spacing (s) Spacing (s) Location (s) Burst 17M 1 64.1u 1.017m 590.0m 2 2 3 6M 1.360m 1.190m 87.8u 254.6m 3 2 17M 87.4u 1.164m 104.1m 4 3 12M 89.6u 1.087m 1.250m 111.7m 5 1 18M 73.6u 493.9m 2 6 18M 51.8u 1.654m 176.7m 7 2 16M 207.3m 60.0u 1.602m 8 10M 81.2u 1 161.2m 9 3 17M 99.3u 1.341m 1.415m 136.9m 10 1 9M 73.6u 441.0m 11 2 5M 75.3u 1.307m 167.4m 12 1 13M 64.7u 444.0m 13 1 M8 94.9u 98.84m 14 2 14M 71.6u 1.226m 460.0m -15 19M 71.0u 367.7m 1 16 3 18M 64.0u 1.714m 1.435m 231.8m 17 2 19M 68.5u 1.027m 73.54m

1.226m

115.5m

519.4m

18

19

1

2

9M

16M

61.1u

81.3u

	Long Pulse Radar Test Signal								
Test Signal Name: LP_Signal_16									
Numbe	Number of Bursts in Trial: 16								
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start			
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)			
	Burst								
1	2	17M	70.0u	1.144m	ı	343.5m			
2	3	8M	88.2u	1.457m	1.692m	533.4m			
3	1	16M	95.1u	-	-	8.877m			
4	2	13M	73.3u	1.540m	-	521.2m			
5	2	9M	74.0u	1.170m	-	93.49m			
6	2	7M	95.3u	1.630m	-	651.6m			
7	1	16M	96.8u	-	ı	598.3m			
8	2	18M	51.4u	981.6u	-	551.8m			
9	1	12M	52.2u	-	-	319.9m			
10	2	13M	88.9u	1.526m	-	12.64m			
11	2	18M	63.8u	1.167m	-	43.62m			
12	3	12M	63.0u	1.047m	1.806m	539.2m			
13	3	9M	56.7u	1.208m	1.065m	52.73m			
14	2	6M	60.1u	1.764m	-	233.3m			
15	2	15M	55.9u	1.568m	-	500.4m			
16	3	12M	50.2u	1.830m	982.8u	193.5m			

Long Pulse Radar Test Signal								
Test Signal Name: LP_Signal_17								
Numbe	er of Burs	ts in Trial:	9					
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start		
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)		
	Burst							
1	3	18M	80.3u	1.806m	1.595m	64.20m		
2	2	18M	59.0u	1.389m	-	821.2m		
3	1	15M	68.4u	-	-	363.7m		
4	2	19M	87.3u	1.521m	-	251.9m		
5	2	12M	62.3u	1.698m	-	349.0m		
6	2	6M	63.2u	1.895m	-	570.4m		
7	3	14M	68.4u	1.149m	1.908m	240.2m		
8	2	9M	63.7u	1.503m	-	69.79m		
9	2	15M	95.3u	1.026m	-	567.4m		

Long Pulse Radar Test Signal								
Test Signal Name: LP_Signal_18								
Number of Bursts in Trial: 15								
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start		
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)		
	Burst	, ,	, ,			` ,		
1	3	16M	53.1u	1.598m	1.111m	228.8m		
2	1	11M	80.1u	-	-	652.1m		
3	1	9M	83.7u	-	-	698.7m		
4	2	11M	95.8u	1.468m	-	192.6m		
5	1	14M	90.1u	-	-	174.9m		
6	2	14M	52.6u	1.826m	-	9.548m		
7	2	7M	94.9u	1.023m	-	516.1m		
8	1	6M	59.7u	-	-	22.36m		
9	2	9M	94.0u	1.863m	-	112.4m		
10	2	15M	67.7u	1.561m	-	139.8m		
11	2	18M	96.4u	941.6u	-	715.8m		
12	2	11M	83.9u	1.576m	-	311.2m		
13	3	7M	85.9u	1.627m	1.298m	270.9m		
14	2	14M	92.8u	1.609m	-	195.3m		
15	2	15M	68.2u	954.8u	-	677.6m		

Long Pulse Radar Test Signal								
Test Signal Name: LP_Signal_19								
Number of Bursts in Trial: 12								
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start		
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)		
	Burst							
1	3	9M	75.4u	1.651m	933.6u	525.6m		
2	1	15M	56.0u	-	1	245.8m		
3	2	10M	72.8u	1.374m	-	810.4m		
4	3	12M	89.4u	1.248m	1.304m	349.6m		
5	2	11M	81.4u	1.145m	1	631.8m		
6	3	12M	66.3u	1.596m	1.903m	703.4m		
7	3	17M	73.9u	990.1u	1.193m	26.79m		
8	2	14M	81.0u	1.395m	ı	449.4m		
9	1	11M	76.9u	-	ı	545.0m		
10	1	16M	68.8u	-	-	844.4m		
11	3	17M	88.0u	1.155m	1.684m	523.7m		
12	1	11M	79.7u	-	-	930.7m		

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_20								
Number of Bursts in Trial: 12								
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start		
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)		
	Burst	` ,	. ,			` ,		
1	2	10M	73.8u	1.815m	-	473.0u		
2	2	17M	55.4u	1.366m	-	278.5m		
3	2	12M	65.8u	1.714m	-	840.4m		
4	2	19M	69.4u	1.804m	-	316.0m		
5	3	10M	99.4u	1.241m	1.826m	922.2m		
6	2	11M	95.6u	1.783m	-	249.4m		
7	3	14M	77.6u	1.110m	1.195m	805.3m		
8	1	18M	84.1u	-	-	115.4m		
9	1	12M	96.0u	-	-	421.8m		
10	3	5M	59.0u	1.775m	1.426m	967.7m		
11	1	20M	60.7u	-	-	253.1m		
12	1	5M	53.9u	-	-	50.62m		

	Long Pulse Radar Test Signal									
Test Si	Test Signal Name: LP_Signal_21									
Numbe	Number of Bursts in Trial: 11									
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2 Pulse 2 to 3 Start						
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)				
	Burst									
1	1	5M	88.2u	-	-	883.5m				
2	3	18M	56.9u	1.101m	1.133m	120.8m				
3	3	11M	73.9u	1.415m	968.1u	1.016				
4	1	18M	96.5u	-	-	645.5m				
5	3	18M	95.4u	1.778m	1.600m	208.8m				
6	2	14M	77.2u	1.880m	-	889.0m				
7	3	12M	59.7u	1.499m	1.392m	827.1m				
8	1	11M	81.1u	-	-	238.3m				
9	1	14M	50.2u	-	-	276.5m				
10	2	12M	83.1u	1.228m	-	947.0m				
11	2	11M	59.8u	1.133m	-	879.0m				

Long Pulse Radar Test Signal											
_			_								
	Test Signal Name: LP_Signal_22										
Number of Bursts in Trial: 13											
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start					
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)					
	Burst										
1	2	12M	81.9u	1.273m	-	101.9m					
2	2	11M	68.1u	1.067m	-	370.2m					
3	2	19M	64.6u	1.731m	-	647.9m					
4	1	19M	85.1u	-	ı	758.5m					
5	3	20M	53.2u	1.755m	1.434m	78.56m					
6	3	10M	76.5u	974.5u	1.625m	404.5m					
7	3	19M	80.5u	1.402m	1.154m	738.9m					
8	3	14M	66.9u	1.857m	1.913m	450.3m					
9	1	19M	54.9u	-	-	7.805m					
10	3	11M	74.4u	1.792m	1.815m	842.3m					
11	1	19M	76.5u	-	-	906.6m					
12	3	17M	78.5u	1.286m	1.375m	123.0m					
13	3	16M	96.2u	1.313m	1.526m	878.3m					

	Long Pulse Radar Test Signal									
	Test Signal Name: LP_Signal_23									
Numbe	er of Burs		20							
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start				
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)				
	Burst									
1	1	7M	85.8u	-	-	356.8m				
2	3	16M	73.2u	1.658m	1.359m	524.6m				
3	3	11M	80.1u	1.325m	1.485m	296.4m				
4	3	6M	83.8u	1.321m	939.2u	296.8m				
5	1	5M	79.5u	-	-	281.0m				
6	3	11M	76.1u	1.725m	1.104m	64.32m				
7	3	15M	93.3u	1.180m	1.099m	130.3m				
8	2	9M	86.0u	1.884m	-	349.0m				
9	2	20M	50.7u	1.869m	-	44.86m				
10	3	6M	81.5u	1.381m	1.659m	403.7m				
11	1	12M	94.4u	-	-	503.0m				
12	2	18M	50.4u	1.234m	-	218.1m				
13	1	17M	64.5u	-	-	294.9m				
14	3	10M	64.4u	1.794m	1.641m	292.5m				
15	2	6M	65.0u	1.149m	-	206.5m				
16	1	11M	63.0u	-	-	227.8m				
17	1	9M	65.5u	-	-	298.6m				
18	3	19M	54.1u	1.498m	1.361m	210.2m				
19	3	17M	73.9u	1.095m	1.033m	145.8m				
20	1	10M	95.8u	-	-	37.38m				

Long F	Long Pulse Radar Test Signal									
Test Si	Test Signal Name: LP_Signal_24									
Numbe	Number of Bursts in Trial: 8									
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start				
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)				
	Burst									
1	1	12M	75.9u	-	-	23.54m				
2	1	7M	72.2u	-	-	1.302				
3	2	9M	93.2u	1.749m	-	359.3m				
4	1	9M	66.5u	-	-	43.22m				
5	2	20M	84.7u	1.376m	-	580.2m				
6	2	9M	80.7u	1.539m	-	668.4m				
7	3	10M	61.8u	1.843m	1.064m	568.6m				
8	2	10M	64.0u	1.350m	-	1.350				

_	Long Pulse Radar Test Signal									
	ignal Nam		-							
Numbe	er of Burs		19							
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start				
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)				
	Burst									
1	1	17M	78.8u	-	-	231.6m				
2	1	7M	93.2u	-	-	90.18m				
3	2	18M	72.8u	1.050m	-	260.1m				
4	3	8M	97.0u	1.882m	1.142m	84.81m				
5	2	5M	90.3u	1.825m	ı	297.6m				
6	2	15M	73.9u	1.176m	ı	78.41m				
7	1	5M	67.7u	-	ı	303.8m				
8	3	9M	52.8u	1.335m	1.317m	264.6m				
9	1	15M	88.1u	-	-	239.8m				
10	2	15M	79.3u	1.512m	-	364.4m				
11	1	6M	98.8u	-	-	10.93m				
12	2	11M	52.5u	1.744m	-	533.1m				
13	2	6M	78.7u	1.626m	-	65.25m				
14	3	16M	58.6u	1.868m	1.251m	401.5m				
15	3	19M	60.8u	1.813m	1.642m	430.1m				
16	2	10M	91.5u	975.5u	-	502.4m				
17	3	6M	51.4u	1.585m	1.382m	329.6m				
18	1	17M	63.9u	-	-	106.9m				
19	2	16M	88.2u	1.193m	-	562.5m				

Long F	Long Pulse Radar Test Signal									
Test Si	Test Signal Name: LP_Signal_26									
Numbe	Number of Bursts in Trial: 9									
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start				
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)				
	Burst									
1	2	10M	96.9u	1.418m	-	108.2m				
2	1	14M	76.2u	-	-	534.5m				
3	3	11M	98.8u	1.346m	1.434m	577.4m				
4	1	9M	58.6u	-	-	382.6m				
5	1	9M	70.1u	-	-	357.3m				
6	2	14M	85.0u	1.782m	-	1.052				
7	2	8M	72.8u	1.081m	-	760.9m				
8	1	17M	95.8u	-	-	1.228				
9	2	16M	99.8u	1.074m	-	466.1m				

Test S	Long Pulse Radar Test Signal Test Signal Name: LP_Signal_27 Number of Bursts in Trial: 17									
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start				
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)				
	Burst	,	( )			, ,				
1	2	8M	87.5u	1.859m	-	650.3m				
2	2	16M	61.1u	1.486m	-	370.6m				
3	2	17M	79.6u	1.012m	-	184.1m				
4	1	5M	88.9u	-	-	74.76m				
5	1	10M	75.6u	-	-	55.41m				
6	1	17M	64.4u	-	-	232.6m				
7	2	14M	81.3u	1.021m	-	3.757m				
8	1	19M	67.6u	-	-	533.1m				
9	3	18M	89.5u	1.063m	1.168m	458.4m				
10	2	8M	67.0u	1.139m	-	53.85m				
11	3	10M	91.4u	1.342m	1.159m	536.1m				
12	1	16M	72.5u	-	-	201.4m				
13	3	9M	68.2u	1.320m	1.777m	396.4m				
14	3	11M	90.4u	1.322m	1.232m	576.4m				
15	3	17M	58.1u	1.712m	1.049m	671.2m				
16	1	10M	77.5u	-	-	353.2m				
17	3	13M	54.1u	1.282m	956.9u	512.7m				

Long F	Long Pulse Radar Test Signal									
Test Si	Test Signal Name: LP_Signal_28									
Numbe	Number of Bursts in Trial: 16									
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2 Pulse 2 to 3		Start				
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)				
	Burst									
1	1	6M	96.5u	-	-	672.8m				
2	2	19M	92.6u	1.608m	-	421.6m				
3	2	9M	75.7u	1.462m	-	582.0m				
4	2	20M	76.0u	1.310m	-	193.2m				
5	1	11M	75.3u	-	-	290.5m				
6	2	14M	97.9u	1.817m	-	43.25m				
7	3	13M	92.1u	1.584m	1.277m	314.1m				
8	1	11M	96.6u	-	-	514.3m				
9	3	9M	83.6u	1.817m	1.108m	42.02m				
10	2	15M	65.7u	997.3u	-	669.0m				
11	3	19M	69.2u	1.100m	1.153m	731.6m				
12	1	8M	70.1u	-	-	153.5m				
13	2	18M	93.8u	1.084m	-	73.66m				
14	2	8M	76.8u	1.576m	-	717.9m				
15	1	10M	88.7u	-	-	344.8m				
16	2	19M	60.1u	1.890m	-	74.76m				

_	Long Pulse Radar Test Signal									
	Test Signal Name: LP_Signal_29									
Number of Bursts in Trial: 15										
Burst	Pulses	Chrip	Pulse	Pulse 1 to 2	Pulse 2 to 3	Start				
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)				
	Burst									
1	2	7M	72.5u	973.5u	ı	642.2m				
2	2	12M	64.1u	1.833m	ı	431.8m				
3	3	6M	62.2u	1.401m	1.630m	361.3m				
4	2	19M	93.8u	1.777m	-	378.0m				
5	3	18M	74.6u	1.316m	1.908m	471.8m				
6	3	8M	79.6u	1.412m	1.386m	589.3m				
7	1	16M	86.4u	-	-	608.8m				
8	2	13M	93.4u	982.6u	-	633.4m				
9	3	19M	77.2u	1.865m	926.8u	412.2m				
10	2	19M	90.0u	1.145m	-	493.0u				
11	2	14M	87.8u	1.646m	-	474.7m				
12	2	10M	66.6u	1.719m	-	318.8m				
13	1	13M	94.3u	-	-	577.6m				
14	1	20M	74.0u	-	-	90.12m				
15	1	5M	78.2u	-	-	692.0m				

	Long Pulse Radar Test Signal									
	Test Signal Name: LP_Signal_30									
Number of Bursts in Trial: 13										
Burst	Pulses	Chrip	Pulse	ılse Pulse 1 to 2 Pulse 2 to 3 Star						
	per	(Hz)	Width (s)	Spacing (s)	Spacing (s)	Location (s)				
	Burst									
1	3	7M	59.7u	1.523m	1.204m	667.6m				
2	3	15M	88.9u	1.435m	1.022m	903.0m				
3	3	18M	85.3u	1.539m	1.061m	902.5m				
4	2	15M	75.3u	1.722m	-	876.6m				
5	3	16M	56.8u	1.159m	1.377m	832.8m				
6	2	19M	99.2u	1.104m	ı	191.5m				
7	3	6M	59.1u	1.499m	1.413m	345.4m				
8	1	12M	85.5u	-	ı	476.6m				
9	2	15M	52.0u	1.024m	-	850.7m				
10	3	15M	67.1u	1.486m	1.806m	833.2m				
11	2	16M	61.5u	1.713m	ı	326.8m				
12	3	19M	98.7u	1.021m	1.298m	189.4m				
13	3	8M	57.7u	1.400m	1.153m	260.3m				

**Annex-A3: The Frequency Hopping Radar Pattern** 

# WHDI (40MHz)

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_01									
							Гиолилован		
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency		
	(Hz)		(Hz)		(Hz)	_	(Hz)		
1	5.293G	2	5.699G	3	5.499G	4	5.356G		
5	5.564G	6	5.707G	7	5.443G	8	5.566G		
9	5.260G	10	5.281G	11	5.594G	12	5.647G		
13	5.306G	14	5.300G	15	5.422G	16	5.355G		
17	5.421G	18	5.608G	19	5.286G	20	5.329G		
21	5.496G	22	5.556G	23	5.666G	24	5.420G		
25	5.571G	26	5.685G	27	5.352G	28	5.689G		
29	5.601G	30	5.264G	31	5.273G	32	5.351G		
33	5.585G	34	5.318G	35	5.492G	36	5.623G		
37	5.622G	38	5.665G	39	5.426G	40	5.572G		
41	5.417G	42	5.695G	43	5.315G	44	5.539G		
45	5.317G	46	5.565G	47	5.653G	48	5.530G		
49	5.430G	50	5.285G	51	5.377G	52	5.554G		
53	5.334G	54	5.358G	55	5.274G	56	5.432G		
57	5.335G	58	5.703G	59	5.275G	60	5.322G		
61	5.671G	62	5.663G	63	5.401G	64	5.518G		
65	5.434G	66	5.327G	67	5.418G	68	5.277G		
69	5.577G	70	5.646G	71	5.573G	72	5.490G		
73	5.657G	74	5.323G	75	5.319G	76	5.476G		
77	5.303G	78	5.642G	79	5.269G	80	5.687G		
81	5.344G	82	5.497G	83	5.471G	84	5.458G		
85	5.619G	86	5.454G	87	5.606G	88	5.416G		
89	5.450G	90	5.570G	91	5.693G	92	5.527G		
93	5.364G	94	5.500G	95	5.674G	96	5.522G		
97	5.717G	98	5.551G	99	5.618G	100	5.302G		

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_02									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.671G	2	5.676G	3	5.581G	4	5.403G			
5	5.320G	6	5.323G	7	5.658G	8	5.563G			
9	5.669G	10	5.562G	11	5.529G	12	5.512G			
13	5.353G	14	5.344G	15	5.317G	16	5.495G			
17	5.597G	18	5.291G	19	5.504G	20	5.531G			
21	5.651G	22	5.315G	23	5.508G	24	5.713G			
25	5.397G	26	5.451G	27	5.390G	28	5.654G			
29	5.379G	30	5.644G	31	5.573G	32	5.579G			
33	5.445G	34	5.566G	35	5.598G	36	5.405G			
37	5.532G	38	5.711G	39	5.319G	40	5.692G			
41	5.362G	42	5.287G	43	5.688G	44	5.518G			
45	5.437G	46	5.497G	47	5.621G	48	5.460G			
49	5.453G	50	5.332G	51	5.647G	52	5.262G			
53	5.584G	54	5.255G	55	5.388G	56	5.301G			
57	5.376G	58	5.377G	59	5.459G	60	5.605G			
61	5.608G	62	5.709G	63	5.406G	64	5.599G			
65	5.401G	66	5.471G	67	5.664G	68	5.398G			
69	5.300G	70	5.557G	71	5.721G	72	5.517G			
73	5.528G	74	5.558G	75	5.550G	76	5.583G			
77	5.542G	78	5.361G	79	5.697G	80	5.267G			
81	5.469G	82	5.324G	83	5.565G	84	5.302G			
85	5.407G	86	5.498G	87	5.342G	88	5.699G			
89	5.259G	90	5.348G	91	5.420G	92	5.447G			
93	5.354G	94	5.367G	95	5.385G	96	5.427G			
97	5.553G	98	5.446G	99	5.339G	100	5.373G			

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_03									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.501G	2	5.698G	3	5.711G	4	5.261G			
5	5.422G	6	5.714G	7	5.325G	8	5.620G			
9	5.473G	10	5.438G	11	5.257G	12	5.580G			
13	5.409G	14	5.486G	15	5.417G	16	5.612G			
17	5.577G	18	5.563G	19	5.339G	20	5.432G			
21	5.444G	22	5.546G	23	5.655G	24	5.634G			
25	5.330G	26	5.272G	27	5.382G	28	5.491G			
29	5.703G	30	5.405G	31	5.282G	32	5.668G			
33	5.549G	34	5.694G	35	5.281G	36	5.550G			
37	5.658G	38	5.397G	39	5.548G	40	5.392G			
41	5.374G	42	5.700G	43	5.569G	44	5.467G			
45	5.421G	46	5.388G	47	5.390G	48	5.575G			
49	5.270G	50	5.294G	51	5.567G	52	5.562G			
53	5.622G	54	5.292G	55	5.650G	56	5.401G			
57	5.419G	58	5.274G	59	5.636G	60	5.674G			
61	5.329G	62	5.475G	63	5.536G	64	5.524G			
65	5.265G	66	5.667G	67	5.601G	68	5.310G			
69	5.431G	70	5.635G	71	5.472G	72	5.343G			
73	5.661G	74	5.647G	75	5.357G	76	5.258G			
77	5.500G	78	5.639G	79	5.507G	80	5.509G			
81	5.720G	82	5.302G	83	5.376G	84	5.447G			
85	5.710G	86	5.689G	87	5.322G	88	5.488G			
89	5.358G	90	5.719G	91	5.545G	92	5.537G			
93	5.288G	94	5.704G	95	5.642G	96	5.317G			
97	5.350G	98	5.375G	99	5.479G	100	5.340G			

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_04									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.559G	2	5.520G	3	5.354G	4	5.616G			
5	5.483G	6	5.466G	7	5.282G	8	5.633G			
9	5.518G	10	5.290G	11	5.521G	12	5.320G			
13	5.586G	14	5.375G	15	5.656G	16	5.484G			
17	5.337G	18	5.695G	19	5.676G	20	5.515G			
21	5.361G	22	5.580G	23	5.637G	24	5.305G			
25	5.522G	26	5.358G	27	5.643G	28	5.366G			
29	5.627G	30	5.335G	31	5.531G	32	5.357G			
33	5.278G	34	5.315G	35	5.426G	36	5.429G			
37	5.601G	38	5.661G	39	5.494G	40	5.681G			
41	5.319G	42	5.660G	43	5.488G	44	5.253G			
45	5.313G	46	5.648G	47	5.610G	48	5.254G			
49	5.705G	50	5.502G	51	5.678G	52	5.631G			
53	5.664G	54	5.644G	55	5.659G	56	5.512G			
57	5.675G	58	5.511G	59	5.640G	60	5.411G			
61	5.609G	62	5.669G	63	5.555G	64	5.468G			
65	5.368G	66	5.373G	67	5.577G	68	5.495G			
69	5.472G	70	5.400G	71	5.564G	72	5.258G			
73	5.572G	74	5.398G	75	5.332G	76	5.480G			
77	5.267G	78	5.611G	79	5.431G	80	5.408G			
81	5.280G	82	5.655G	83	5.367G	84	5.720G			
85	5.719G	86	5.465G	87	5.346G	88	5.501G			
89	5.528G	90	5.349G	91	5.422G	92	5.663G			
93	5.574G	94	5.622G	95	5.684G	96	5.417G			
97	5.265G	98	5.549G	99	5.343G	100	5.338G			

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_05									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.377G	2	5.315G	3	5.460G	4	5.504G			
5	5.488G	6	5.368G	7	5.583G	8	5.272G			
9	5.437G	10	5.608G	11	5.618G	12	5.493G			
13	5.318G	14	5.590G	15	5.704G	16	5.687G			
17	5.711G	18	5.536G	19	5.447G	20	5.689G			
21	5.467G	22	5.385G	23	5.620G	24	5.342G			
25	5.529G	26	5.457G	27	5.666G	28	5.598G			
29	5.684G	30	5.383G	31	5.507G	32	5.723G			
33	5.494G	34	5.283G	35	5.500G	36	5.484G			
37	5.393G	38	5.309G	39	5.652G	40	5.255G			
41	5.630G	42	5.627G	43	5.331G	44	5.717G			
45	5.442G	46	5.719G	47	5.503G	48	5.282G			
49	5.260G	50	5.455G	51	5.480G	52	5.577G			
53	5.386G	54	5.721G	55	5.695G	56	5.351G			
57	5.555G	58	5.375G	59	5.623G	60	5.338G			
61	5.665G	62	5.549G	63	5.305G	64	5.508G			
65	5.458G	66	5.700G	67	5.285G	68	5.612G			
69	5.324G	70	5.657G	71	5.628G	72	5.271G			
73	5.603G	74	5.372G	75	5.649G	76	5.685G			
77	5.311G	78	5.435G	79	5.485G	80	5.459G			
81	5.492G	82	5.284G	83	5.572G	84	5.382G			
85	5.668G	86	5.670G	87	5.258G	88	5.418G			
89	5.653G	90	5.706G	91	5.522G	92	5.656G			
93	5.592G	94	5.416G	95	5.259G	96	5.644G			
97	5.391G	98	5.527G	99	5.328G	100	5.579G			

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_06									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency		
	(Hz)		(Hz)		(Hz)		(Hz)		
1	5.424G	2	5.459G	3	5.495G	4	5.380G		
5	5.519G	6	5.638G	7	5.278G	8	5.488G		
9	5.299G	10	5.432G	11	5.621G	12	5.546G		
13	5.718G	14	5.556G	15	5.274G	16	5.281G		
17	5.615G	18	5.595G	19	5.529G	20	5.359G		
21	5.707G	22	5.328G	23	5.594G	24	5.271G		
25	5.525G	26	5.675G	27	5.416G	28	5.470G		
29	5.291G	30	5.444G	31	5.689G	32	5.423G		
33	5.484G	34	5.419G	35	5.351G	36	5.639G		
37	5.449G	38	5.460G	39	5.563G	40	5.571G		
41	5.710G	42	5.412G	43	5.642G	44	5.306G		
45	5.294G	46	5.587G	47	5.285G	48	5.368G		
49	5.636G	50	5.430G	51	5.657G	52	5.537G		
53	5.435G	54	5.508G	55	5.685G	56	5.667G		
57	5.559G	58	5.334G	59	5.496G	60	5.350G		
61	5.313G	62	5.704G	63	5.521G	64	5.403G		
65	5.599G	66	5.428G	67	5.436G	68	5.483G		
69	5.476G	70	5.566G	71	5.567G	72	5.608G		
73	5.548G	74	5.425G	75	5.600G	76	5.532G		
77	5.592G	78	5.547G	79	5.626G	80	5.683G		
81	5.252G	82	5.668G	83	5.324G	84	5.580G		
85	5.618G	86	5.282G	87	5.455G	88	5.700G		
89	5.457G	90	5.715G	91	5.696G	92	5.568G		
93	5.671G	94	5.493G	95	5.354G	96	5.526G		
97	5.507G	98	5.491G	99	5.637G	100	5.463G		

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_07									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.517G	2	5.680G	3	5.715G	4	5.399G			
5	5.603G	6	5.692G	7	5.352G	8	5.386G			
9	5.289G	10	5.285G	11	5.349G	12	5.554G			
13	5.570G	14	5.313G	15	5.273G	16	5.504G			
17	5.403G	18	5.468G	19	5.346G	20	5.565G			
21	5.668G	22	5.719G	23	5.602G	24	5.368G			
25	5.694G	26	5.329G	27	5.606G	28	5.657G			
29	5.279G	30	5.525G	31	5.691G	32	5.569G			
33	5.335G	34	5.684G	35	5.334G	36	5.292G			
37	5.463G	38	5.387G	39	5.339G	40	5.579G			
41	5.608G	42	5.641G	43	5.303G	44	5.266G			
45	5.416G	46	5.635G	47	5.673G	48	5.708G			
49	5.601G	50	5.306G	51	5.689G	52	5.564G			
53	5.465G	54	5.277G	55	5.514G	56	5.431G			
57	5.491G	58	5.591G	59	5.419G	60	5.454G			
61	5.328G	62	5.529G	63	5.623G	64	5.469G			
65	5.363G	66	5.718G	67	5.264G	68	5.359G			
69	5.500G	70	5.398G	71	5.707G	72	5.278G			
73	5.377G	74	5.415G	75	5.580G	76	5.297G			
77	5.678G	78	5.704G	79	5.318G	80	5.460G			
81	5.464G	82	5.254G	83	5.457G	84	5.543G			
85	5.698G	86	5.600G	87	5.573G	88	5.255G			
89	5.630G	90	5.516G	91	5.402G	92	5.599G			
93	5.679G	94	5.304G	95	5.518G	96	5.365G			
97	5.471G	98	5.584G	99	5.276G	100	5.609G			

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_08									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.551G	2	5.627G	3	5.418G	4	5.636G			
5	5.444G	6	5.680G	7	5.515G	8	5.531G			
9	5.692G	10	5.716G	11	5.348G	12	5.302G			
13	5.525G	14	5.371G	15	5.290G	16	5.420G			
17	5.328G	18	5.508G	19	5.450G	20	5.274G			
21	5.631G	22	5.529G	23	5.717G	24	5.329G			
25	5.638G	26	5.658G	27	5.389G	28	5.705G			
29	5.488G	30	5.376G	31	5.384G	32	5.602G			
33	5.669G	34	5.500G	35	5.423G	36	5.620G			
37	5.330G	38	5.599G	39	5.547G	40	5.617G			
41	5.593G	42	5.374G	43	5.600G	44	5.388G			
45	5.633G	46	5.670G	47	5.270G	48	5.397G			
49	5.381G	50	5.478G	51	5.579G	52	5.580G			
53	5.428G	54	5.464G	55	5.576G	56	5.605G			
57	5.366G	58	5.683G	59	5.501G	60	5.438G			
61	5.517G	62	5.510G	63	5.715G	64	5.536G			
65	5.475G	66	5.462G	67	5.691G	68	5.356G			
69	5.582G	70	5.647G	71	5.285G	72	5.265G			
73	5.609G	74	5.417G	75	5.283G	76	5.305G			
77	5.519G	78	5.407G	79	5.573G	80	5.634G			
81	5.402G	82	5.300G	83	5.477G	84	5.452G			
85	5.480G	86	5.587G	87	5.261G	88	5.486G			
89	5.574G	90	5.524G	91	5.391G	92	5.495G			
93	5.278G	94	5.405G	95	5.264G	96	5.303G			
97	5.472G	98	5.642G	99	5.432G	100	5.664G			

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_09									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.568G	2	5.639G	3	5.676G	4	5.450G			
5	5.617G	6	5.634G	7	5.326G	8	5.464G			
9	5.271G	10	5.471G	11	5.401G	12	5.539G			
13	5.331G	14	5.581G	15	5.407G	16	5.324G			
17	5.640G	18	5.311G	19	5.653G	20	5.650G			
21	5.303G	22	5.357G	23	5.696G	24	5.458G			
25	5.466G	26	5.288G	27	5.263G	28	5.520G			
29	5.353G	30	5.400G	31	5.268G	32	5.299G			
33	5.287G	34	5.436G	35	5.533G	36	5.343G			
37	5.618G	38	5.420G	39	5.560G	40	5.451G			
41	5.543G	42	5.531G	43	5.486G	44	5.548G			
45	5.460G	46	5.419G	47	5.521G	48	5.366G			
49	5.293G	50	5.642G	51	5.601G	52	5.286G			
53	5.670G	54	5.523G	55	5.526G	56	5.490G			
57	5.250G	58	5.667G	59	5.582G	60	5.717G			
61	5.563G	62	5.647G	63	5.504G	64	5.399G			
65	5.659G	66	5.379G	67	5.698G	68	5.304G			
69	5.689G	70	5.580G	71	5.434G	72	5.296G			
73	5.685G	74	5.272G	75	5.258G	76	5.346G			
77	5.597G	78	5.658G	79	5.493G	80	5.350G			
81	5.274G	82	5.364G	83	5.481G	84	5.594G			
85	5.282G	86	5.522G	87	5.255G	88	5.600G			
89	5.330G	90	5.540G	91	5.472G	92	5.428G			
93	5.339G	94	5.335G	95	5.384G	96	5.635G			
97	5.391G	98	5.510G	99	5.376G	100	5.438G			

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_10									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency		
	(Hz)		(Hz)		(Hz)		(Hz)		
1	5.672G	2	5.590G	3	5.650G	4	5.611G		
5	5.583G	6	5.301G	7	5.414G	8	5.394G		
9	5.572G	10	5.388G	11	5.659G	12	5.356G		
13	5.268G	14	5.598G	15	5.360G	16	5.403G		
17	5.503G	18	5.269G	19	5.250G	20	5.477G		
21	5.345G	22	5.573G	23	5.616G	24	5.574G		
25	5.644G	26	5.416G	27	5.581G	28	5.447G		
29	5.442G	30	5.509G	31	5.341G	32	5.521G		
33	5.576G	34	5.579G	35	5.612G	36	5.308G		
37	5.471G	38	5.453G	39	5.683G	40	5.383G		
41	5.589G	42	5.639G	43	5.280G	44	5.368G		
45	5.513G	46	5.274G	47	5.497G	48	5.498G		
49	5.545G	50	5.409G	51	5.358G	52	5.466G		
53	5.311G	54	5.451G	55	5.419G	56	5.330G		
57	5.292G	58	5.363G	59	5.417G	60	5.481G		
61	5.376G	62	5.436G	63	5.619G	64	5.688G		
65	5.314G	66	5.703G	67	5.455G	68	5.704G		
69	5.592G	70	5.658G	71	5.604G	72	5.647G		
73	5.478G	74	5.296G	75	5.355G	76	5.519G		
77	5.270G	78	5.621G	79	5.724G	80	5.425G		
81	5.307G	82	5.329G	83	5.552G	84	5.524G		
85	5.302G	86	5.435G	87	5.365G	88	5.454G		
89	5.591G	90	5.464G	91	5.326G	92	5.389G		
93	5.306G	94	5.564G	95	5.379G	96	5.391G		
97	5.323G	98	5.258G	99	5.549G	100	5.372G		

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_11									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.454G	2	5.700G	3	5.682G	4	5.471G			
5	5.662G	6	5.479G	7	5.510G	8	5.528G			
9	5.488G	10	5.457G	11	5.349G	12	5.414G			
13	5.337G	14	5.688G	15	5.616G	16	5.260G			
17	5.373G	18	5.498G	19	5.399G	20	5.629G			
21	5.495G	22	5.585G	23	5.447G	24	5.625G			
25	5.267G	26	5.601G	27	5.496G	28	5.469G			
29	5.411G	30	5.396G	31	5.478G	32	5.499G			
33	5.327G	34	5.541G	35	5.613G	36	5.643G			
37	5.501G	38	5.387G	39	5.634G	40	5.607G			
41	5.676G	42	5.503G	43	5.509G	44	5.436G			
45	5.275G	46	5.412G	47	5.628G	48	5.511G			
49	5.460G	50	5.648G	51	5.657G	52	5.448G			
53	5.697G	54	5.640G	55	5.271G	56	5.722G			
57	5.294G	58	5.694G	59	5.500G	60	5.492G			
61	5.549G	62	5.262G	63	5.574G	64	5.559G			
65	5.356G	66	5.679G	67	5.354G	68	5.573G			
69	5.557G	70	5.631G	71	5.263G	72	5.449G			
73	5.321G	74	5.417G	75	5.532G	76	5.473G			
77	5.602G	78	5.565G	79	5.298G	80	5.610G			
81	5.450G	82	5.429G	83	5.604G	84	5.664G			
85	5.392G	86	5.303G	87	5.300G	88	5.612G			
89	5.638G	90	5.394G	91	5.464G	92	5.283G			
93	5.544G	94	5.521G	95	5.611G	96	5.513G			
97	5.330G	98	5.671G	99	5.594G	100	5.305G			

Hopping	g Frequency	/ Sequer	nce Name: I	HOP_FF	REQ_SEQ_	12	
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency
	(Hz)		(Hz)		(Hz)		(Hz)
1	5.433G	2	5.454G	3	5.273G	4	5.257G
5	5.371G	6	5.276G	7	5.625G	8	5.445G
9	5.564G	10	5.500G	11	5.472G	12	5.438G
13	5.408G	14	5.283G	15	5.349G	16	5.280G
17	5.519G	18	5.600G	19	5.505G	20	5.316G
21	5.686G	22	5.639G	23	5.666G	24	5.521G
25	5.389G	26	5.370G	27	5.559G	28	5.452G
29	5.554G	30	5.669G	31	5.256G	32	5.574G
33	5.659G	34	5.679G	35	5.636G	36	5.696G
37	5.330G	38	5.434G	39	5.291G	40	5.275G
41	5.484G	42	5.513G	43	5.251G	44	5.522G
45	5.708G	46	5.398G	47	5.709G	48	5.517G
49	5.303G	50	5.700G	51	5.680G	52	5.464G
53	5.323G	54	5.339G	55	5.572G	56	5.648G
57	5.431G	58	5.382G	59	5.496G	60	5.377G
61	5.675G	62	5.400G	63	5.314G	64	5.577G
65	5.536G	66	5.453G	67	5.418G	68	5.650G
69	5.272G	70	5.426G	71	5.562G	72	5.614G
73	5.494G	74	5.552G	75	5.714G	76	5.502G
77	5.465G	78	5.395G	79	5.289G	80	5.657G
81	5.267G	82	5.263G	83	5.417G	84	5.538G
85	5.592G	86	5.688G	87	5.363G	88	5.671G
89	5.543G	90	5.548G	91	5.637G	92	5.603G
93	5.706G	94	5.593G	95	5.457G	96	5.672G
97	5.487G	98	5.640G	99	5.357G	100	5.707G

Hopping	g Frequency	/ Sequer	nce Name: I	HOP_FF	REQ_SEQ_	13	
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency
	(Hz)		(Hz)		(Hz)		(Hz)
1	5.268G	2	5.691G	3	5.526G	4	5.653G
5	5.707G	6	5.450G	7	5.492G	8	5.621G
9	5.542G	10	5.650G	11	5.514G	12	5.493G
13	5.652G	14	5.473G	15	5.420G	16	5.352G
17	5.463G	18	5.601G	19	5.506G	20	5.339G
21	5.623G	22	5.309G	23	5.456G	24	5.348G
25	5.496G	26	5.441G	27	5.588G	28	5.295G
29	5.323G	30	5.505G	31	5.446G	32	5.276G
33	5.330G	34	5.317G	35	5.508G	36	5.410G
37	5.367G	38	5.397G	39	5.607G	40	5.262G
41	5.555G	42	5.429G	43	5.254G	44	5.485G
45	5.377G	46	5.405G	47	5.333G	48	5.363G
49	5.617G	50	5.442G	51	5.693G	52	5.609G
53	5.438G	54	5.482G	55	5.638G	56	5.700G
57	5.365G	58	5.675G	59	5.599G	60	5.480G
61	5.382G	62	5.570G	63	5.384G	64	5.351G
65	5.256G	66	5.713G	67	5.571G	68	5.488G
69	5.633G	70	5.324G	71	5.275G	72	5.318G
73	5.371G	74	5.389G	75	5.353G	76	5.250G
77	5.478G	78	5.409G	79	5.523G	80	5.490G
81	5.658G	82	5.355G	83	5.271G	84	5.281G
85	5.664G	86	5.294G	87	5.645G	88	5.364G
89	5.507G	90	5.510G	91	5.346G	92	5.434G
93	5.366G	94	5.635G	95	5.519G	96	5.532G
97	5.400G	98	5.394G	99	5.604G	100	5.300G

Hopping	g Frequency	/ Sequer	nce Name: I	HOP_FF	REQ_SEQ_	14	
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency
	(Hz)		(Hz)		(Hz)		(Hz)
1	5.476G	2	5.664G	3	5.458G	4	5.484G
5	5.269G	6	5.271G	7	5.530G	8	5.520G
9	5.488G	10	5.570G	11	5.506G	12	5.406G
13	5.630G	14	5.560G	15	5.713G	16	5.363G
17	5.559G	18	5.335G	19	5.704G	20	5.613G
21	5.582G	22	5.710G	23	5.670G	24	5.627G
25	5.353G	26	5.517G	27	5.379G	28	5.650G
29	5.436G	30	5.341G	31	5.267G	32	5.331G
33	5.297G	34	5.445G	35	5.693G	36	5.420G
37	5.547G	38	5.347G	39	5.472G	40	5.464G
41	5.252G	42	5.319G	43	5.603G	44	5.298G
45	5.496G	46	5.344G	47	5.352G	48	5.250G
49	5.674G	50	5.694G	51	5.465G	52	5.417G
53	5.673G	54	5.468G	55	5.404G	56	5.608G
57	5.470G	58	5.475G	59	5.365G	60	5.318G
61	5.389G	62	5.610G	63	5.288G	64	5.556G
65	5.612G	66	5.469G	67	5.479G	68	5.594G
69	5.325G	70	5.652G	71	5.256G	72	5.522G
73	5.432G	74	5.677G	75	5.544G	76	5.477G
77	5.296G	78	5.562G	79	5.715G	80	5.635G
81	5.299G	82	5.490G	83	5.254G	84	5.617G
85	5.284G	86	5.459G	87	5.403G	88	5.434G
89	5.702G	90	5.277G	91	5.262G	92	5.394G
93	5.616G	94	5.279G	95	5.395G	96	5.542G
97	5.590G	98	5.576G	99	5.585G	100	5.680G

Hopping	g Frequency	/ Sequer	nce Name: I	HOP_FF	REQ_SEQ_	15	
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency
	(Hz)		(Hz)		(Hz)		(Hz)
1	5.328G	2	5.641G	3	5.576G	4	5.387G
5	5.251G	6	5.672G	7	5.638G	8	5.609G
9	5.413G	10	5.669G	11	5.388G	12	5.673G
13	5.455G	14	5.539G	15	5.267G	16	5.564G
17	5.528G	18	5.399G	19	5.549G	20	5.362G
21	5.299G	22	5.708G	23	5.441G	24	5.678G
25	5.256G	26	5.634G	27	5.582G	28	5.391G
29	5.676G	30	5.452G	31	5.373G	32	5.264G
33	5.717G	34	5.352G	35	5.353G	36	5.682G
37	5.492G	38	5.636G	39	5.518G	40	5.470G
41	5.320G	42	5.566G	43	5.382G	44	5.464G
45	5.621G	46	5.306G	47	5.280G	48	5.506G
49	5.525G	50	5.466G	51	5.559G	52	5.578G
53	5.349G	54	5.415G	55	5.360G	56	5.702G
57	5.307G	58	5.557G	59	5.345G	60	5.400G
61	5.540G	62	5.354G	63	5.300G	64	5.447G
65	5.402G	66	5.551G	67	5.313G	68	5.519G
69	5.597G	70	5.255G	71	5.650G	72	5.486G
73	5.655G	74	5.279G	75	5.507G	76	5.474G
77	5.722G	78	5.368G	79	5.410G	80	5.369G
81	5.476G	82	5.625G	83	5.290G	84	5.416G
85	5.514G	86	5.356G	87	5.538G	88	5.346G
89	5.511G	90	5.637G	91	5.494G	92	5.546G
93	5.575G	94	5.572G	95	5.558G	96	5.530G
97	5.488G	98	5.289G	99	5.649G	100	5.329G

Hopping	g Frequency	/ Seque	nce Name: I	HOP_FF	REQ_SEQ_	16	
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency
	(Hz)		(Hz)		(Hz)		(Hz)
1	5.429G	2	5.546G	3	5.424G	4	5.574G
5	5.528G	6	5.382G	7	5.329G	8	5.303G
9	5.291G	10	5.660G	11	5.655G	12	5.498G
13	5.718G	14	5.308G	15	5.468G	16	5.342G
17	5.716G	18	5.406G	19	5.532G	20	5.722G
21	5.613G	22	5.314G	23	5.635G	24	5.256G
25	5.508G	26	5.502G	27	5.273G	28	5.514G
29	5.594G	30	5.550G	31	5.420G	32	5.503G
33	5.463G	34	5.517G	35	5.330G	36	5.658G
37	5.634G	38	5.393G	39	5.525G	40	5.555G
41	5.667G	42	5.430G	43	5.359G	44	5.292G
45	5.436G	46	5.595G	47	5.670G	48	5.269G
49	5.306G	50	5.449G	51	5.351G	52	5.361G
53	5.305G	54	5.662G	55	5.680G	56	5.684G
57	5.700G	58	5.515G	59	5.524G	60	5.617G
61	5.400G	62	5.676G	63	5.487G	64	5.469G
65	5.685G	66	5.693G	67	5.337G	68	5.286G
69	5.415G	70	5.633G	71	5.579G	72	5.254G
73	5.663G	74	5.370G	75	5.387G	76	5.397G
77	5.678G	78	5.396G	79	5.399G	80	5.309G
81	5.414G	82	5.560G	83	5.472G	84	5.340G
85	5.500G	86	5.497G	87	5.338G	88	5.366G
89	5.543G	90	5.453G	91	5.492G	92	5.551G
93	5.687G	94	5.576G	95	5.618G	96	5.571G
97	5.298G	98	5.432G	99	5.322G	100	5.605G

Hopping	g Frequency	/ Sequer	nce Name: I	HOP_FF	REQ_SEQ_	17	
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency
	(Hz)		(Hz)		(Hz)		(Hz)
1	5.669G	2	5.652G	3	5.387G	4	5.685G
5	5.437G	6	5.675G	7	5.271G	8	5.699G
9	5.463G	10	5.497G	11	5.371G	12	5.427G
13	5.662G	14	5.444G	15	5.514G	16	5.641G
17	5.560G	18	5.318G	19	5.328G	20	5.647G
21	5.464G	22	5.700G	23	5.290G	24	5.608G
25	5.467G	26	5.612G	27	5.701G	28	5.602G
29	5.624G	30	5.443G	31	5.601G	32	5.321G
33	5.695G	34	5.567G	35	5.468G	36	5.362G
37	5.562G	38	5.273G	39	5.303G	40	5.338G
41	5.696G	42	5.518G	43	5.715G	44	5.459G
45	5.692G	46	5.558G	47	5.423G	48	5.496G
49	5.255G	50	5.481G	51	5.681G	52	5.501G
53	5.541G	54	5.296G	55	5.499G	56	5.574G
57	5.478G	58	5.659G	59	5.364G	60	5.266G
61	5.510G	62	5.718G	63	5.633G	64	5.451G
65	5.299G	66	5.527G	67	5.524G	68	5.351G
69	5.565G	70	5.722G	71	5.513G	72	5.359G
73	5.353G	74	5.581G	75	5.260G	76	5.302G
77	5.340G	78	5.676G	79	5.277G	80	5.597G
81	5.410G	82	5.646G	83	5.375G	84	5.342G
85	5.476G	86	5.556G	87	5.398G	88	5.315G
89	5.393G	90	5.586G	91	5.369G	92	5.270G
93	5.287G	94	5.697G	95	5.598G	96	5.714G
97	5.611G	98	5.528G	99	5.568G	100	5.259G

Hopping	g Frequency	/ Sequer	nce Name: I	HOP_FF	REQ_SEQ_	18	
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency
	(Hz)		(Hz)		(Hz)		(Hz)
1	5.256G	2	5.599G	3	5.454G	4	5.615G
5	5.610G	6	5.686G	7	5.415G	8	5.380G
9	5.703G	10	5.632G	11	5.259G	12	5.370G
13	5.547G	14	5.333G	15	5.689G	16	5.257G
17	5.290G	18	5.714G	19	5.287G	20	5.406G
21	5.426G	22	5.409G	23	5.341G	24	5.349G
25	5.626G	26	5.401G	27	5.708G	28	5.502G
29	5.346G	30	5.450G	31	5.713G	32	5.430G
33	5.607G	34	5.521G	35	5.483G	36	5.300G
37	5.608G	38	5.637G	39	5.528G	40	5.480G
41	5.268G	42	5.352G	43	5.715G	44	5.572G
45	5.358G	46	5.269G	47	5.525G	48	5.504G
49	5.618G	50	5.545G	51	5.294G	52	5.297G
53	5.444G	54	5.421G	55	5.481G	56	5.335G
57	5.307G	58	5.718G	59	5.277G	60	5.357G
61	5.583G	62	5.308G	63	5.313G	64	5.262G
65	5.537G	66	5.600G	67	5.635G	68	5.312G
69	5.677G	70	5.446G	71	5.384G	72	5.419G
73	5.345G	74	5.699G	75	5.457G	76	5.548G
77	5.460G	78	5.722G	79	5.656G	80	5.679G
81	5.578G	82	5.295G	83	5.597G	84	5.705G
85	5.506G	86	5.591G	87	5.567G	88	5.706G
89	5.543G	90	5.665G	91	5.546G	92	5.595G
93	5.261G	94	5.616G	95	5.645G	96	5.392G
97	5.570G	98	5.477G	99	5.663G	100	5.561G

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_19									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.327G	2	5.470G	3	5.435G	4	5.668G			
5	5.340G	6	5.602G	7	5.281G	8	5.395G			
9	5.562G	10	5.724G	11	5.450G	12	5.256G			
13	5.551G	14	5.479G	15	5.384G	16	5.720G			
17	5.659G	18	5.610G	19	5.408G	20	5.326G			
21	5.298G	22	5.569G	23	5.695G	24	5.591G			
25	5.559G	26	5.589G	27	5.302G	28	5.351G			
29	5.692G	30	5.490G	31	5.578G	32	5.293G			
33	5.716G	34	5.394G	35	5.283G	36	5.424G			
37	5.396G	38	5.667G	39	5.585G	40	5.332G			
41	5.524G	42	5.409G	43	5.502G	44	5.481G			
45	5.544G	46	5.577G	47	5.604G	48	5.648G			
49	5.634G	50	5.485G	51	5.265G	52	5.680G			
53	5.630G	54	5.469G	55	5.466G	56	5.352G			
57	5.586G	58	5.558G	59	5.425G	60	5.373G			
61	5.266G	62	5.258G	63	5.616G	64	5.462G			
65	5.442G	66	5.316G	67	5.654G	68	5.290G			
69	5.392G	70	5.547G	71	5.527G	72	5.507G			
73	5.633G	74	5.542G	75	5.338G	76	5.318G			
77	5.285G	78	5.701G	79	5.711G	80	5.635G			
81	5.451G	82	5.618G	83	5.588G	84	5.603G			
85	5.506G	86	5.390G	87	5.568G	88	5.427G			
89	5.513G	90	5.418G	91	5.679G	92	5.656G			
93	5.407G	94	5.684G	95	5.463G	96	5.417G			
97	5.448G	98	5.464G	99	5.270G	100	5.454G			

Hopping	g Frequency	/ Seque	nce Name: I	HOP_FF	REQ_SEQ_	20	
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency
	(Hz)		(Hz)		(Hz)		(Hz)
1	5.289G	2	5.380G	3	5.697G	4	5.283G
5	5.591G	6	5.672G	7	5.711G	8	5.673G
9	5.264G	10	5.492G	11	5.432G	12	5.706G
13	5.532G	14	5.274G	15	5.587G	16	5.401G
17	5.479G	18	5.642G	19	5.259G	20	5.667G
21	5.391G	22	5.594G	23	5.490G	24	5.720G
25	5.713G	26	5.477G	27	5.436G	28	5.663G
29	5.645G	30	5.631G	31	5.619G	32	5.626G
33	5.276G	34	5.627G	35	5.367G	36	5.614G
37	5.662G	38	5.309G	39	5.291G	40	5.443G
41	5.256G	42	5.452G	43	5.629G	44	5.348G
45	5.250G	46	5.721G	47	5.451G	48	5.312G
49	5.503G	50	5.703G	51	5.386G	52	5.622G
53	5.331G	54	5.268G	55	5.306G	56	5.330G
57	5.337G	58	5.605G	59	5.437G	60	5.512G
61	5.402G	62	5.286G	63	5.275G	64	5.457G
65	5.378G	66	5.260G	67	5.564G	68	5.568G
69	5.404G	70	5.719G	71	5.602G	72	5.570G
73	5.693G	74	5.523G	75	5.505G	76	5.454G
77	5.459G	78	5.398G	79	5.359G	80	5.423G
81	5.536G	82	5.434G	83	5.426G	84	5.346G
85	5.494G	86	5.687G	87	5.499G	88	5.387G
89	5.656G	90	5.338G	91	5.566G	92	5.617G
93	5.565G	94	5.270G	95	5.560G	96	5.412G
97	5.654G	98	5.660G	99	5.607G	100	5.618G

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_21									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.464G	2	5.600G	3	5.630G	4	5.528G			
5	5.374G	6	5.633G	7	5.680G	8	5.661G			
9	5.662G	10	5.558G	11	5.573G	12	5.346G			
13	5.704G	14	5.623G	15	5.505G	16	5.428G			
17	5.484G	18	5.457G	19	5.570G	20	5.265G			
21	5.432G	22	5.614G	23	5.601G	24	5.283G			
25	5.668G	26	5.293G	27	5.676G	28	5.667G			
29	5.479G	30	5.513G	31	5.605G	32	5.357G			
33	5.257G	34	5.258G	35	5.647G	36	5.624G			
37	5.663G	38	5.433G	39	5.610G	40	5.466G			
41	5.452G	42	5.450G	43	5.563G	44	5.694G			
45	5.546G	46	5.394G	47	5.482G	48	5.277G			
49	5.516G	50	5.303G	51	5.344G	52	5.582G			
53	5.597G	54	5.686G	55	5.719G	56	5.567G			
57	5.352G	58	5.263G	59	5.626G	60	5.413G			
61	5.358G	62	5.381G	63	5.636G	64	5.356G			
65	5.718G	66	5.321G	67	5.256G	68	5.677G			
69	5.403G	70	5.363G	71	5.512G	72	5.585G			
73	5.525G	74	5.391G	75	5.554G	76	5.388G			
77	5.617G	78	5.313G	79	5.580G	80	5.395G			
81	5.292G	82	5.592G	83	5.341G	84	5.724G			
85	5.483G	86	5.299G	87	5.656G	88	5.606G			
89	5.716G	90	5.340G	91	5.409G	92	5.628G			
93	5.415G	94	5.631G	95	5.351G	96	5.367G			
97	5.444G	98	5.564G	99	5.596G	100	5.711G			

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_22									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.314G	2	5.509G	3	5.717G	4	5.448G			
5	5.707G	6	5.348G	7	5.306G	8	5.719G			
9	5.325G	10	5.559G	11	5.477G	12	5.311G			
13	5.326G	14	5.422G	15	5.418G	16	5.327G			
17	5.617G	18	5.401G	19	5.518G	20	5.637G			
21	5.689G	22	5.341G	23	5.411G	24	5.706G			
25	5.630G	26	5.611G	27	5.683G	28	5.575G			
29	5.566G	30	5.716G	31	5.505G	32	5.381G			
33	5.322G	34	5.300G	35	5.274G	36	5.358G			
37	5.724G	38	5.350G	39	5.315G	40	5.503G			
41	5.700G	42	5.633G	43	5.664G	44	5.332G			
45	5.500G	46	5.463G	47	5.347G	48	5.374G			
49	5.268G	50	5.708G	51	5.482G	52	5.289G			
53	5.339G	54	5.582G	55	5.334G	56	5.445G			
57	5.262G	58	5.393G	59	5.456G	60	5.303G			
61	5.673G	62	5.536G	63	5.282G	64	5.674G			
65	5.461G	66	5.632G	67	5.705G	68	5.308G			
69	5.720G	70	5.251G	71	5.473G	72	5.631G			
73	5.375G	74	5.443G	75	5.666G	76	5.384G			
77	5.501G	78	5.468G	79	5.677G	80	5.298G			
81	5.275G	82	5.607G	83	5.594G	84	5.299G			
85	5.390G	86	5.548G	87	5.634G	88	5.277G			
89	5.693G	90	5.284G	91	5.570G	92	5.318G			
93	5.309G	94	5.270G	95	5.710G	96	5.556G			
97	5.542G	98	5.538G	99	5.642G	100	5.665G			

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_23									
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency			
	(Hz)		(Hz)		(Hz)		(Hz)			
1	5.584G	2	5.434G	3	5.252G	4	5.525G			
5	5.301G	6	5.647G	7	5.541G	8	5.537G			
9	5.634G	10	5.420G	11	5.253G	12	5.625G			
13	5.305G	14	5.499G	15	5.651G	16	5.285G			
17	5.406G	18	5.492G	19	5.494G	20	5.694G			
21	5.601G	22	5.646G	23	5.278G	24	5.325G			
25	5.569G	26	5.571G	27	5.430G	28	5.468G			
29	5.283G	30	5.686G	31	5.702G	32	5.723G			
33	5.549G	34	5.280G	35	5.276G	36	5.501G			
37	5.343G	38	5.559G	39	5.645G	40	5.370G			
41	5.339G	42	5.432G	43	5.291G	44	5.412G			
45	5.394G	46	5.302G	47	5.333G	48	5.326G			
49	5.720G	50	5.284G	51	5.385G	52	5.342G			
53	5.449G	54	5.332G	55	5.289G	56	5.296G			
57	5.596G	58	5.464G	59	5.393G	60	5.358G			
61	5.544G	62	5.524G	63	5.618G	64	5.441G			
65	5.715G	66	5.362G	67	5.340G	68	5.581G			
69	5.261G	70	5.620G	71	5.403G	72	5.674G			
73	5.402G	74	5.416G	75	5.437G	76	5.687G			
77	5.353G	78	5.461G	79	5.678G	80	5.648G			
81	5.482G	82	5.490G	83	5.408G	84	5.308G			
85	5.463G	86	5.444G	87	5.368G	88	5.354G			
89	5.586G	90	5.309G	91	5.556G	92	5.604G			
93	5.410G	94	5.563G	95	5.643G	96	5.598G			
97	5.521G	98	5.446G	99	5.445G	100	5.703G			

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_24								
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	
	(Hz)		(Hz)		(Hz)		(Hz)	
1	5.603G	2	5.451G	3	5.527G	4	5.314G	
5	5.279G	6	5.293G	7	5.330G	8	5.307G	
9	5.336G	10	5.651G	11	5.700G	12	5.663G	
13	5.517G	14	5.302G	15	5.387G	16	5.704G	
17	5.357G	18	5.326G	19	5.386G	20	5.680G	
21	5.688G	22	5.291G	23	5.433G	24	5.654G	
25	5.259G	26	5.383G	27	5.464G	28	5.462G	
29	5.706G	30	5.283G	31	5.584G	32	5.285G	
33	5.485G	34	5.255G	35	5.347G	36	5.512G	
37	5.256G	38	5.722G	39	5.724G	40	5.366G	
41	5.478G	42	5.276G	43	5.689G	44	5.596G	
45	5.618G	46	5.526G	47	5.648G	48	5.504G	
49	5.352G	50	5.342G	51	5.619G	52	5.408G	
53	5.697G	54	5.399G	55	5.528G	56	5.480G	
57	5.253G	58	5.595G	59	5.592G	60	5.612G	
61	5.541G	62	5.508G	63	5.360G	64	5.605G	
65	5.625G	66	5.284G	67	5.453G	68	5.678G	
69	5.355G	70	5.456G	71	5.525G	72	5.389G	
73	5.421G	74	5.358G	75	5.407G	76	5.281G	
77	5.629G	78	5.250G	79	5.594G	80	5.350G	
81	5.705G	82	5.551G	83	5.564G	84	5.589G	
85	5.650G	86	5.262G	87	5.378G	88	5.628G	
89	5.599G	90	5.339G	91	5.493G	92	5.550G	
93	5.505G	94	5.576G	95	5.477G	96	5.590G	
97	5.633G	98	5.392G	99	5.482G	100	5.371G	

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_25								
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency		
	(Hz)		(Hz)		(Hz)		(Hz)		
1	5.257G	2	5.253G	3	5.583G	4	5.417G		
5	5.546G	6	5.483G	7	5.575G	8	5.690G		
9	5.410G	10	5.270G	11	5.334G	12	5.436G		
13	5.327G	14	5.705G	15	5.315G	16	5.445G		
17	5.308G	18	5.330G	19	5.413G	20	5.314G		
21	5.458G	22	5.268G	23	5.353G	24	5.281G		
25	5.570G	26	5.544G	27	5.687G	28	5.382G		
29	5.340G	30	5.678G	31	5.707G	32	5.504G		
33	5.515G	34	5.665G	35	5.503G	36	5.343G		
37	5.419G	38	5.357G	39	5.338G	40	5.261G		
41	5.531G	42	5.520G	43	5.492G	44	5.466G		
45	5.396G	46	5.719G	47	5.572G	48	5.513G		
49	5.507G	50	5.514G	51	5.543G	52	5.418G		
53	5.647G	54	5.306G	55	5.463G	56	5.496G		
57	5.550G	58	5.628G	59	5.516G	60	5.547G		
61	5.721G	62	5.416G	63	5.576G	64	5.648G		
65	5.536G	66	5.481G	67	5.594G	68	5.685G		
69	5.319G	70	5.501G	71	5.591G	72	5.649G		
73	5.332G	74	5.414G	75	5.427G	76	5.552G		
77	5.297G	78	5.485G	79	5.263G	80	5.634G		
81	5.391G	82	5.459G	83	5.309G	84	5.497G		
85	5.533G	86	5.454G	87	5.549G	88	5.376G		
89	5.361G	90	5.333G	91	5.473G	92	5.670G		
93	5.643G	94	5.283G	95	5.606G	96	5.494G		
97	5.554G	98	5.603G	99	5.409G	100	5.444G		

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_26								
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency		
	(Hz)		(Hz)		(Hz)		(Hz)		
1	5.616G	2	5.675G	3	5.699G	4	5.408G		
5	5.399G	6	5.402G	7	5.601G	8	5.265G		
9	5.562G	10	5.367G	11	5.418G	12	5.580G		
13	5.415G	14	5.319G	15	5.322G	16	5.526G		
17	5.517G	18	5.332G	19	5.369G	20	5.497G		
21	5.473G	22	5.475G	23	5.499G	24	5.421G		
25	5.333G	26	5.671G	27	5.388G	28	5.659G		
29	5.454G	30	5.575G	31	5.642G	32	5.602G		
33	5.664G	34	5.309G	35	5.689G	36	5.442G		
37	5.654G	38	5.550G	39	5.446G	40	5.492G		
41	5.268G	42	5.389G	43	5.299G	44	5.356G		
45	5.641G	46	5.280G	47	5.281G	48	5.451G		
49	5.460G	50	5.663G	51	5.506G	52	5.621G		
53	5.374G	54	5.478G	55	5.272G	56	5.650G		
57	5.715G	58	5.262G	59	5.398G	60	5.638G		
61	5.509G	62	5.536G	63	5.250G	64	5.528G		
65	5.712G	66	5.632G	67	5.311G	68	5.557G		
69	5.279G	70	5.435G	71	5.314G	72	5.518G		
73	5.400G	74	5.701G	75	5.310G	76	5.393G		
77	5.328G	78	5.382G	79	5.615G	80	5.587G		
81	5.673G	82	5.634G	83	5.359G	84	5.347G		
85	5.452G	86	5.533G	87	5.569G	88	5.481G		
89	5.289G	90	5.267G	91	5.658G	92	5.649G		
93	5.270G	94	5.558G	95	5.646G	96	5.434G		
97	5.386G	98	5.512G	99	5.611G	100	5.349G		

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_27								
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency		
	(Hz)		(Hz)		(Hz)		(Hz)		
1	5.675G	2	5.685G	3	5.323G	4	5.356G		
5	5.545G	6	5.715G	7	5.495G	8	5.714G		
9	5.445G	10	5.280G	11	5.406G	12	5.589G		
13	5.474G	14	5.389G	15	5.594G	16	5.512G		
17	5.712G	18	5.286G	19	5.599G	20	5.590G		
21	5.486G	22	5.318G	23	5.705G	24	5.484G		
25	5.366G	26	5.336G	27	5.335G	28	5.641G		
29	5.510G	30	5.500G	31	5.618G	32	5.319G		
33	5.358G	34	5.468G	35	5.538G	36	5.380G		
37	5.467G	38	5.363G	39	5.655G	40	5.347G		
41	5.648G	42	5.717G	43	5.522G	44	5.254G		
45	5.306G	46	5.706G	47	5.698G	48	5.399G		
49	5.555G	50	5.383G	51	5.367G	52	5.623G		
53	5.395G	54	5.257G	55	5.485G	56	5.659G		
57	5.259G	58	5.568G	59	5.481G	60	5.477G		
61	5.565G	62	5.526G	63	5.392G	64	5.331G		
65	5.649G	66	5.403G	67	5.386G	68	5.456G		
69	5.677G	70	5.416G	71	5.722G	72	5.562G		
73	5.410G	74	5.521G	75	5.679G	76	5.578G		
77	5.442G	78	5.529G	79	5.478G	80	5.405G		
81	5.530G	82	5.458G	83	5.564G	84	5.703G		
85	5.251G	86	5.348G	87	5.258G	88	5.499G		
89	5.662G	90	5.640G	91	5.307G	92	5.414G		
93	5.591G	94	5.421G	95	5.621G	96	5.710G		
97	5.263G	98	5.550G	99	5.420G	100	5.349G		

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_28								
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency		
	(Hz)		(Hz)		(Hz)		(Hz)		
1	5.321G	2	5.572G	3	5.588G	4	5.531G		
5	5.315G	6	5.651G	7	5.292G	8	5.635G		
9	5.536G	10	5.663G	11	5.575G	12	5.515G		
13	5.318G	14	5.685G	15	5.375G	16	5.349G		
17	5.608G	18	5.618G	19	5.570G	20	5.477G		
21	5.520G	22	5.707G	23	5.650G	24	5.252G		
25	5.529G	26	5.275G	27	5.524G	28	5.720G		
29	5.414G	30	5.533G	31	5.420G	32	5.479G		
33	5.289G	34	5.273G	35	5.422G	36	5.484G		
37	5.451G	38	5.441G	39	5.255G	40	5.717G		
41	5.654G	42	5.693G	43	5.649G	44	5.648G		
45	5.374G	46	5.678G	47	5.365G	48	5.639G		
49	5.661G	50	5.408G	51	5.407G	52	5.335G		
53	5.680G	54	5.265G	55	5.388G	56	5.660G		
57	5.555G	58	5.633G	59	5.314G	60	5.480G		
61	5.666G	62	5.595G	63	5.563G	64	5.683G		
65	5.354G	66	5.566G	67	5.406G	68	5.589G		
69	5.711G	70	5.473G	71	5.363G	72	5.721G		
73	5.493G	74	5.519G	75	5.426G	76	5.697G		
77	5.576G	78	5.494G	79	5.332G	80	5.437G		
81	5.434G	82	5.286G	83	5.257G	84	5.681G		
85	5.277G	86	5.323G	87	5.713G	88	5.597G		
89	5.452G	90	5.586G	91	5.469G	92	5.446G		
93	5.435G	94	5.600G	95	5.392G	96	5.514G		
97	5.605G	98	5.556G	99	5.357G	100	5.467G		

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_29								
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency		
	(Hz)		(Hz)		(Hz)		(Hz)		
1	5.348G	2	5.559G	3	5.575G	4	5.302G		
5	5.552G	6	5.692G	7	5.508G	8	5.360G		
9	5.331G	10	5.544G	11	5.334G	12	5.716G		
13	5.640G	14	5.540G	15	5.309G	16	5.498G		
17	5.702G	18	5.390G	19	5.707G	20	5.341G		
21	5.329G	22	5.700G	23	5.424G	24	5.413G		
25	5.616G	26	5.686G	27	5.612G	28	5.644G		
29	5.396G	30	5.587G	31	5.333G	32	5.326G		
33	5.530G	34	5.536G	35	5.493G	36	5.262G		
37	5.524G	38	5.626G	39	5.437G	40	5.353G		
41	5.627G	42	5.254G	43	5.698G	44	5.263G		
45	5.255G	46	5.699G	47	5.256G	48	5.352G		
49	5.529G	50	5.399G	51	5.296G	52	5.304G		
53	5.414G	54	5.300G	55	5.579G	56	5.386G		
57	5.651G	58	5.497G	59	5.695G	60	5.391G		
61	5.568G	62	5.393G	63	5.458G	64	5.294G		
65	5.592G	66	5.368G	67	5.597G	68	5.347G		
69	5.547G	70	5.639G	71	5.654G	72	5.520G		
73	5.507G	74	5.462G	75	5.566G	76	5.426G		
77	5.346G	78	5.505G	79	5.257G	80	5.574G		
81	5.590G	82	5.289G	83	5.619G	84	5.460G		
85	5.499G	86	5.714G	87	5.322G	88	5.489G		
89	5.588G	90	5.645G	91	5.522G	92	5.279G		
93	5.664G	94	5.272G	95	5.711G	96	5.715G		
97	5.455G	98	5.447G	99	5.629G	100	5.509G		

Hopping	Hopping Frequency Sequence Name: HOP_FREQ_SEQ_30								
SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency	SEQ#	Frequency		
	(Hz)		(Hz)		(Hz)		(Hz)		
1	5.704G	2	5.262G	3	5.695G	4	5.709G		
5	5.613G	6	5.340G	7	5.503G	8	5.584G		
9	5.288G	10	5.721G	11	5.442G	12	5.693G		
13	5.629G	14	5.398G	15	5.374G	16	5.307G		
17	5.344G	18	5.363G	19	5.560G	20	5.699G		
21	5.588G	22	5.328G	23	5.376G	24	5.703G		
25	5.315G	26	5.298G	27	5.263G	28	5.669G		
29	5.672G	30	5.420G	31	5.476G	32	5.631G		
33	5.446G	34	5.702G	35	5.302G	36	5.445G		
37	5.526G	38	5.257G	39	5.409G	40	5.587G		
41	5.696G	42	5.369G	43	5.489G	44	5.385G		
45	5.583G	46	5.579G	47	5.410G	48	5.252G		
49	5.269G	50	5.514G	51	5.462G	52	5.487G		
53	5.350G	54	5.646G	55	5.505G	56	5.705G		
57	5.414G	58	5.455G	59	5.387G	60	5.559G		
61	5.253G	62	5.400G	63	5.416G	64	5.371G		
65	5.355G	66	5.643G	67	5.563G	68	5.520G		
69	5.284G	70	5.311G	71	5.418G	72	5.540G		
73	5.325G	74	5.620G	75	5.413G	76	5.527G		
77	5.519G	78	5.255G	79	5.468G	80	5.499G		
81	5.671G	82	5.572G	83	5.582G	84	5.506G		
85	5.357G	86	5.481G	87	5.574G	88	5.675G		
89	5.379G	90	5.486G	91	5.378G	92	5.517G		
93	5.549G	94	5.663G	95	5.670G	96	5.388G		
97	5.425G	98	5.471G	99	5.619G	100	5.304G		