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Wireless test report – 387159-1R1TRFWL

Applicant:

Mikrotiks SIA

Product type:

Wireless Access point

Model:

RBcAPGi-5acD2nD-US

FCC ID:

TV7CPGI5acD2nD

IC Registration number:

7442A-CPGI5ACD2ND

Specifications:

◆ **FCC 47 CFR Part 15 Subpart E, §15.407(h)**

Unlicensed National Information Infrastructure Devices
(2) Dynamic Frequency Selection (DFS)

◆ **RSS-247 Issue 2, February 2017, Section 6.3**

Licence-Exempt Local Area Network (LE-LAN) Devices. Dynamic Frequency Selection (DFS)
for Devices Operating in the Bands 5250–5350 MHz, 5470–5600 MHz and 5650–5725 MHz

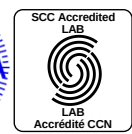
Date of issue: February 28, 2020

Test engineer(s): Kevin Rose, Wireless/EMC Specialist

Signature:

Reviewed by: Mark Libbrecht, Wireless/EMC Specialist

Signature:



Test location

Company name	Nemko Canada Inc.
Site name	Cambridge
Address	130 Saltsman Drive, Unit #1
City	Cambridge
Province	Ontario
Postal code	N3E 0B2
Country	Canada
Telephone	Tel: +1 519 680 4811
Facsimile	+1 613 737 9691
Toll free	+1 800 563 6336
Website	www.nemko.com
Site number (3 m SAC)	FCC/ ISED: CA0101

Limits of responsibility

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contain in this report are within Nemko Canada's ISO/IEC 17025 accreditation.

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Section 1. Report summary

1.1 Applicant and manufacturer

Company name	Mikrotiks SIA
Address	Brivibas gatve 214i, Riga, LV-1039, Latvia

1.2 Test specifications

FCC 47 CFR Part 15, Subpart E, Clause 15.407	Unlicensed National Information Infrastructure Devices
RSS-247 Issue 2, February 2017, Section 6.3	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

1.3 Test methods

789033 D02 General UNII Test Procedures New Rules v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
905462 D02 UNII DFS Compliance Procedures New Rules v02	Compliance measurement procedures for unlicensed – national information infrastructure devices operating in the 5250–5350 MHz and 5470–5725 MHz bands incorporating dynamic frequency selection

1.4 Statement of compliance

In the configuration tested, the EUT was found compliant.

Testing was completed against all relevant requirements of the test standard. Results obtained indicate that the product under test complies in full with the requirements tested. The test results relate only to the items tested.

See “Summary of test results” for full details.

1.5 Exclusions

None

1.6 Test report revision history

Revision #	Date of issue	Details of changes made to test report
TRF	February 28, 2020	Original report issued

Section 2. Summary of test results

2.1 FCC §15.407(h)(2), test results

KDB Section	Test description	Verdict
5.2	DFS detection threshold	Pass
7.8.1	U-NII detection bandwidth	Pass
7.8.2.1	Initial Channel Availability Check (CAC) time	Pass
7.8.2.2	In-service monitoring, radar burst at the beginning of the CAC	Pass
7.8.2.3	In-service monitoring, radar burst at the end of the CAC	Pass
7.8.3	Channel move time	Pass
7.8.3	Channel closing transmission time	Pass
7.8.3	Non-occupancy period	Pass
7.8.4.1	Statistical performance with short pulse radar test	Pass
7.8.4.2	Statistical performance with long pulse radar test	Pass
7.8.4.3	Statistical performance with frequency hopping radar test	Pass

2.2 RSS-247 Issue 2, test results

Section	Test description	Verdict
RSS-247 6.3.1	DFS radar signal detection threshold	Pass
KDB Section 7.8.1	U-NII detection bandwidth	Pass
RSS-247 6.3.2 (b)	Initial Channel Availability Check (CAC) time	Pass
RSS-247 6.3.2 (a)	In-service monitoring, radar burst at the beginning of the CAC	Pass
RSS-247 6.3.2 (a)	In-service monitoring, radar burst at the end of the CAC	Pass
RSS-247 6.3.2 (c)	Channel move time	Pass
RSS-247 6.3.2 (d)	Channel closing transmission time	Pass
RSS-247 6.3.2 (e)	Non-occupancy period	Pass
KDB Section 7.8.4.1	Statistical performance with short pulse radar test	Pass
KDB Section 7.8.4.2	Statistical performance with long pulse radar test	Pass
KDB Section 7.8.4.3	Statistical performance with frequency hopping radar test	Pass

Section 3. Equipment under test (EUT) details

3.1 Sample information

Receipt date	November 11, 2019
Nemko sample ID number	1

3.2 EUT information

Product name	Wireless Access point
Model	RBcAPGi-5acD2nD-US
Serial number	ADCC0A536E29/901/r2
Software version	RouterOS v6.46.3

3.3 Technical information

Operating band	5250–5350 MHz
Operating frequencies	20 MHz channel: 5260–5320 MHz; 40 MHz channel: 5270–5310 MHz; 80 MHz channel: 5290 MHz
Modulation type	OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) for 802.11a/n/ac
Channel bandwidth	20 MHz, 40 MHz, 80 MHz
Power requirements	12 V _{DC} (via external 100–240 V _{AC} , 50/60 Hz AC/DC adapter)
Antenna information	The EUT uses a unique antenna coupling/ non-detachable antenna to the intentional radiator. Antenna gain is 2.5 dBi.

3.4 Product description and theory of operation

The cAP ac is a very capable and powerful wireless access point that looks beautiful on both walls and ceilings. The concurrent dual band wireless radio supports dual chain 2 GHz 802.11b/g/n and 5 GHz in a/n/ac standards, and will provide coverage in 360 degrees around it.

3.5 EUT exercise details

EUT worked at wireless access point mode. EUT was controlled and monitored from laptop using web browser.

Section 4. Engineering considerations

4.1 Modifications incorporated in the EUT

There were no modifications performed to the EUT during this assessment.

4.2 Technical judgment

None

4.3 Deviations from laboratory tests procedures

No deviations were made from laboratory procedures.

Section 5. Test conditions

5.1 Atmospheric conditions

Temperature	15–30 °C
Relative humidity	20–75 %
Air pressure	860–1060 mbar

When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.

5.2 Power supply range

The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages $\pm 5\%$, for which the equipment was designed.

5.3 Uncertainty of measurement

Nemko Canada Inc. has calculated measurement uncertainty and is documented in EMC/MUC/001 “Uncertainty in EMC measurements.” Measurement uncertainty was calculated using the methods described in CISPR 16-4 Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC measurements; as well as described in UKAS LAB34: The expression of Uncertainty in EMC Testing. Measurement uncertainty calculations assume a coverage factor of $K=2$ with 95% certainty.

Section 6. Test equipment

6.1 Test equipment list

Table 6.1-1: Equipment list

Equipment	Manufacturer	Model no.	Asset no.	Cal cycle	Next cal.
DFS test box	Aeroflex	PXI	FA002628	1 year	September 18, 2020
Spectrum analyzer	Rohde & Schwarz	FSP	FA001920	1 year	September 19, 2020

Section 7. Test rules and requirements

7.1 FCC 15.407(h)(2) Radar Detection Function of Dynamic Frequency Selection (DFS)

(2) Radar Detection Function of Dynamic Frequency Selection (DFS). U-NII devices operating with any part of its 26 dB emission bandwidth in the 5.25–5.35 GHz and 5.47–5.725 GHz bands shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems. Operators shall only use equipment with a DFS mechanism that is turned on when operating in these bands. The device must sense for radar signals at 100 percent of its emission bandwidth. The minimum DFS detection threshold for devices with a maximum e.i.r.p. of 200 mW to 1 W (23–30 dBm) is –64 dBm. For devices that operate with less than 200 mW (23 dBm) e.i.r.p. and a power spectral density of less than 10 dBm in a 1 MHz band, the minimum detection threshold is –62 dBm. The detection threshold is the received power averaged over 1 microsecond referenced to a 0 dBi antenna. For the initial channel setting, the manufacturers shall be permitted to provide for either random channel selection or manual channel selection.

(i) Operational Modes. The DFS requirement applies to the following operational modes:

(A) The requirement for channel availability check time applies in the master operational mode.

(B) The requirement for channel move time applies in both the master and slave operational modes.

(ii) Channel Availability Check Time. A U-NII device shall check if there is a radar system already operating on the channel before it can initiate a transmission on a channel and when it has to move to a new channel. The U-NII device may start using the channel if no radar signal with a power level greater than the interference threshold values listed in paragraph (h)(2) of this section, is detected within 60 seconds.

(iii) Channel Move Time. After a radar's presence is detected, all transmissions shall cease on the operating channel within 10 seconds. Transmissions during this period shall consist of normal traffic for a maximum of 200 ms after detection of the radar signal. In addition, intermittent management and control signals can be sent during the remaining time to facilitate vacating the operating channel.

(iv) Non-occupancy Period. A channel that has been flagged as containing a radar system, either by a channel availability check or in-service monitoring, is subject to a non-occupancy period of at least 30 minutes. The non-occupancy period starts at the time when the radar system is detected.

Table 7.1-1: DFS Response Requirement Values

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

Notes: 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 transmission.

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 Channel changes (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.

³ During the *U-NII Detection Bandwidth* detection test, radar type 0 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.

Table 7.1-2: Short Pulse Radar Test Waveforms

Radar type	Pulse width, μs	Pulse Repetition Interval (PRI), μs	Number of pulses	Minimum percentage of successful detection	Minimum number of trials
0	1	1428	18	See note	See note
		Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in table below	Roundup $\{((1 \div 360) \times (19 \times 10^6 \div \text{PRI}_{\mu\text{s}}))\}$		
1	1	Test B: 15 unique PRI values randomly selected within the range of 518–3066 μs , with a minimum increment of 1 μs , excluding PRI values selected in Test A		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

Note: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.

Table 7.1-3: Pulse Repetition Intervals Values for Test A

Pulse Repetition Frequency number	Pulse Repetition Frequency, Pulses per second	Pulse Repetition Interval (PRI), μs
1	1930.5	518
2	1818.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355.0	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139.0	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

Table 7.1-4: Long Pulse Radar Test Waveforms

Radar type	Pulse width, μs	Chirp width, MHz	Pulse Repetition Interval (PRI), μs	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 7.1-5: Frequency Hopping Radar Test Waveforms

Radar type	Pulse width, μs	Pulse Repetition Interval (PRI), μs	Pulses per hop	Hopping rate, kHz	Hopping sequence length, ms	Minimum percentage of successful detection	Minimum number of trials
6	1	333	9	0.333	300	70%	30

Table 7.1-6: Summary of the requirements

Description	Radar type	Requirement	Notes
5.2 DFS Detection Threshold	Type 0	−64 dBm	Any BW
7.8.1 U-NII Detection Bandwidth	Type 0–4 (any)	100 % of 99 % BW	10 trials for each BW
7.8.2.1 Initial Channel Availability Check (CAC) Time	Type 0–4 (any)	≥60 s	Any BW
7.8.2.2 Radar Burst at the Beginning of the CAC	Type 0–4 (any)	No Tx	Any BW
7.8.2.3 Radar Burst at the End of the CAC	Type 0–4 (any)	No Tx	Any BW
7.8.3 Channel Move Time	Type 0	≤10 s	Widest BW
7.8.3 Channel Closing Transmission Time	Type 0	≤260 ms	Widest BW
7.8.3 Non-Occupancy Period	Type 0	>30 min	
7.8.4 Statistical Performance Check:	Type 1–6 (all)		Each BW; Each 20 MHz channels + center
7.8.4.1 Short Pulse Radar Test	Type 1–4 (all)	60% detection	30 trials (for each type)
7.8.4.2 Long Pulse Radar Test	Type 5	80% detection	30 trials
7.8.4.3 Frequency hopping Radar Test	Type 6	70% detection	30 trials

7.2 RSS-247 6.3 Radar Detection Function of Dynamic Frequency Selection (DFS)

Industry Canada requires the use of either the FCC KDB Procedure 905462 or the DFS test procedure in the ETSI EN 301 893 for demonstrating compliance with the DFS radar detection requirements set out in this section.

If any part of an operating device's emission bandwidth falls in the bands 5250–5350 MHz, 5470–5600 MHz or 5650–5725 MHz, the device shall comply with the following:

1) DFS radar signal detection threshold

Devices shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems. The device must detect radar signals within its entire emission bandwidth. The minimum DFS radar signal detection threshold is described below in Table below.

Table 7.2-1: DFS Detection Threshold for Master Devices and Slave Devices with Radar Detection

Devices' e.i.r.p. information	DFS Threshold
Devices with an e.i.r.p. < 200 mW AND a Power Spectral Density < 10 dBm/MHz	–62 dBm
Devices with $200 \text{ mW} \leq \text{e.i.r.p.} \leq 1 \text{ W}$	–64 dBm

Note: The detection threshold power is the received power, averaged over a 1-microsecond reference to a 0 dBi antenna.

2) Operational requirements

The requirement for channel availability check time applies in the master operational mode. The requirement for channel move time applies in both the master and slave operational modes. The requirement for in-service monitoring does not apply to slave devices without radar detection.

- i. **In-service monitoring:** an LE-LAN device shall be able to monitor the operating channel to check that a co-channel radar has not moved or started operation within range of the LE-LAN device. During in-service monitoring, the LE-LAN radar detection function continuously searches for radar signals between normal LE-LAN transmissions.
- ii. **Channel availability check time:** the device shall check whether there is a radar system already operating on the channel before it initiates a transmission on a channel and when it moves to a channel. The device may start using the channel if no radar signal with a power level greater than the interference threshold value specified in Section 6.3(1) above is detected within 60 seconds.
- iii. **Channel move time:** after a radar signal is detected, the device shall cease all transmissions on the operating channel within 10 seconds.
- iv. **Channel closing transmission time:** is comprised of 200 ms 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 ms) over the remaining 10-second period of the channel move time.
- v. **Non-occupancy period:** a channel that has been flagged as containing a radar signal, either by a channel availability check or in-service monitoring, is subject to a 30-minute non-occupancy period where the channel cannot be used by the LE-LAN device. The non-occupancy period starts from the time that the radar signal is detected.

Section 8. Testing data

8.1 Dynamic Frequency Selection (DFS) detection threshold

8.1.1 Definitions and limits

The minimum DFS detection threshold for devices with a maximum e.i.r.p. of 200 mW to 1 W (23–30 dBm) is –64 dBm. For devices that operate with less than 200 mW (23 dBm) e.i.r.p. and a power spectral density of less than 10 dBm in a 1 MHz band, the minimum detection threshold is –62 dBm. The detection threshold is the received power averaged over 1 microsecond referenced to a 0 dBi antenna. For the initial channel setting, the manufacturers shall be permitted to provide for either random channel selection or manual channel selection.

8.1.2 Test summary

Test date	November 27, 2019	Temperature	23 °C
Test engineer	Kevin Rose	Air pressure	995 mbar
Verdict	Pass	Relative humidity	33 %

8.1.3 Observations, settings and special notes

EUT operates with maximum EIRP of more than 200 mW (23 dBm); therefore, the minimum detection threshold limit is –64 dBm. The EUT has 4 antennas in the MIMO 4×4 mode, therefore total antenna gain was $2 + 6 = 8$ dBi. The minimum threshold is $-64 + 8$ dBi = –56 dBm. The signal level at the antenna port of the transmitter was around –56 dBm. This test was performed once on the widest channel BW, which is 80 MHz with the use of Radar type 0.

8.1.4 Test data

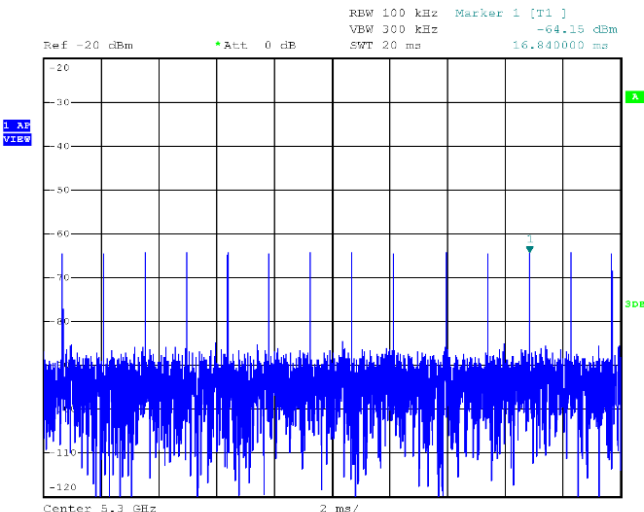


Figure 8.1-1: Detection threshold measurements of radar type 0

8.2 U-NII detection bandwidth

8.2.1 Definitions and limits

Minimum U-NII detection bandwidth is 100% of the U-NII 99% transmission power bandwidth.

8.2.2 Test summary

Test date	November 27, 2019	Temperature	23 °C
Test engineer	Kevin Rose	Air pressure	995 mbar
Verdict	Pass	Relative humidity	33 %

8.2.3 Observations, settings and special notes

Starting at the center frequency of the UUT operating Channel, the radar frequency was increased in 5 MHz steps, the test sequence was repeated until the detection rate fell below the U-NII Detection Bandwidth criterion.

This measurement was repeated than in 1 MHz steps at frequencies 5 MHz below where the detection rate began to fall. This highest frequency (denoted as F_H) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion was recorded. Recording the detection rate at frequencies above F_H is not required to demonstrate compliance.

Also, this measurement was repeated in 1 MHz steps at frequencies 5 MHz below where the detection rate began to fall. This lowest frequency (denoted as F_L) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion was recorded. Recording the detection rate at frequencies below F_L is not required to demonstrate compliance.

Radar type 0 was applied. Measurements were performed with no data traffic.

8.2.4 Test data

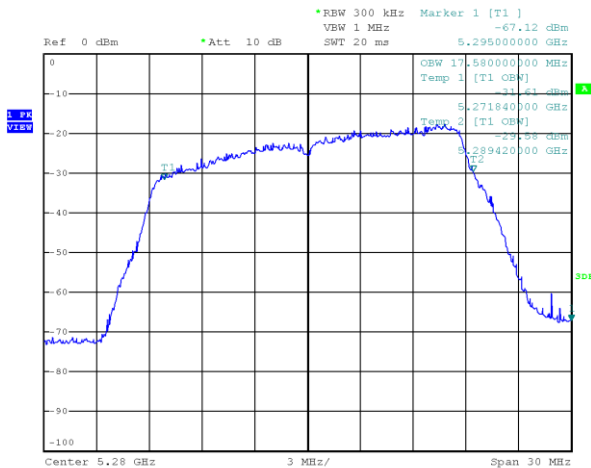


Figure 8.2-1: 99% bandwidth for 20MHz

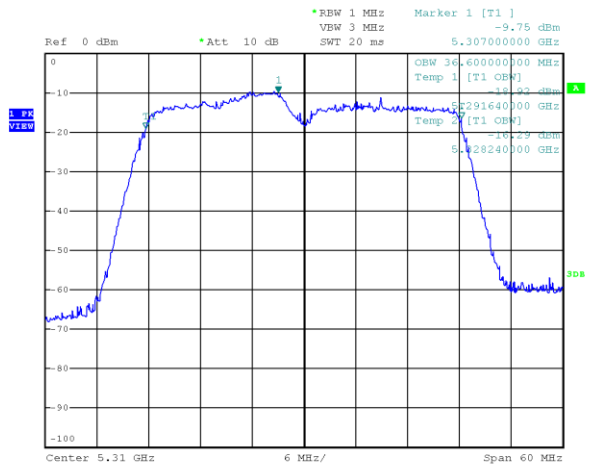


Figure 8.2-2: 99% bandwidth for 40MHz

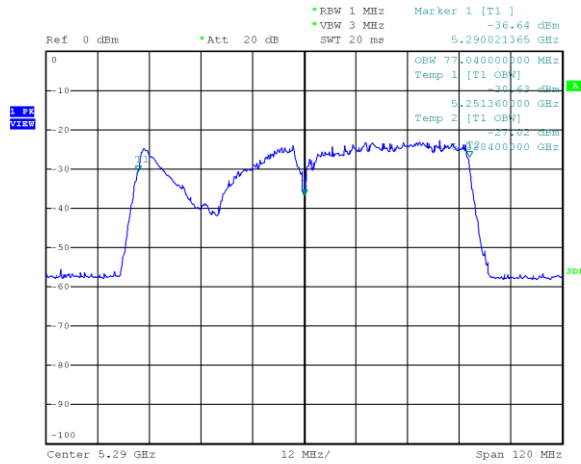


Figure 8.2-3: 99% bandwidth for 80MHz

Table 8.2-1: Detection bandwidth for 20MHz

U-NII Detection bandwidth, MHz	Minimum limit (99% power BW), MHz	Margin, MHz
20	18	2

Table 8.2-2: Detection bandwidth for 40MHz

U-NII Detection bandwidth, MHz	Minimum limit (99% power BW), MHz	Margin, MHz
40	37	3

Table 8.2-3: Detection bandwidth for 80MHz

U-NII Detection bandwidth, MHz	Minimum limit (99% power BW), MHz	Margin, MHz
80	77	3

Table 8.2-4: Radar detection bandwidth results 20MHz

Frequency, MHz	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Trial 6	Trial 7	Trial 8	Trial 9	Trial 10	Rate, %
5265	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5266	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5267	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5268	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5270(FL)	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5275	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5280	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5285	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5290(FH)	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5292	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5293	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5294	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5295	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0

Note: square with check mark denotes successful radar detection. Rate was calculated as follows: $100\% \times (\text{Total detections} \div \text{Total trials})$

U-NII Detection bandwidth = 5270 – 5290 = 20 MHz

Table 8.2-5: Radar detection bandwidth results 40MHz

Frequency, MHz	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Trial 6	Trial 7	Trial 8	Trial 9	Trial 10	Rate, %
5285	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5286	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5287	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5288	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5290(FL)	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5295	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5300	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5320	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5325	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5330(FH)	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5332	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5333	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5334	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5335	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0

Note: square with check mark denotes successful radar detection. Rate was calculated as follows: $100\% \times (\text{Total detections} \div \text{Total trials})$

U-NII Detection bandwidth = 5330 – 5290 = 40 MHz

Table 8.2-6: Radar detection bandwidth results 80MHz

Frequency, MHz	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Trial 6	Trial 7	Trial 8	Trial 9	Trial 10	Rate, %
5245	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5246	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5247	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5248	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5249	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5250 (FL)	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5255	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5260	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5320	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5325	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5330 (FH)	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	100
5331	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5332	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5333	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5334	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0
5335	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0

Note: square with check mark denotes successful radar detection. Rate was calculated as follows: $100\% \times (\text{Total detections} \div \text{Total trials})$

U-NII Detection bandwidth = 5330 – 5250 = 80MHz

8.3 Statistical performance for short pulse radars

8.3.1 Definitions and limits

For Radar types 1–4 (short pulse radars) minimum percentage of successful detection is 60 %. The aggregate limit is 80 %.

8.3.2 Test summary

Test date	November 26, 2019	Temperature	23 °C
Test engineer	Kevin Rose	Air pressure	995 mbar
Verdict	Pass	Relative humidity	35 %

8.3.3 Observations, settings and special notes

The percentage of successful detection is calculated by:

$$\frac{\text{Total waveform detections}}{\text{Total waveform trials}} \times 100\% = \text{Percentage of successful detection Radar waveform } N = P_d N$$

In addition, an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1–4 is required and is calculated as follows:

$$\frac{P_{d1} + P_{d2} + P_{d3} + P_{d4}}{4}$$

The minimum number of trails is 30.

For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

8.3.4 Test data

Table 8.3-1: Summary of the short radar detection probability results for 20MHz

Radar type	Detection probability (P_d), %	Minimum Limit, %	Margin, %
1	100	60	40
2	100	60	40
3	100	60	40
4	100	60	40
Aggregate	100	80	20

Table 8.3-2: Summary of the short radar detection probability results 40MHz

Radar type	Detection probability (P_d), %	Minimum Limit, %	Margin, %
1	100	60	40
2	100	60	40
3	100	60	40
4	100	60	40
Aggregate	100	80	20

Table 8.3-3: Summary of the short radar detection probability results for 80MHz

Radar type	Detection probability (P _d), %	Minimum Limit, %	Margin, %
1	100	60.00	40
2	100	60.00	40
3	100	60.00	40
4	100	60.00	40
Aggregate	100	80.00	20

Table 8.3-4: Radar type 1 detection probability results

Trial	20MHz		40MHz		80MHz	
	Detected	Radar Frequency, MHz	Detected	Radar Frequency, MHz	Detected	Radar Frequency, MHz
1	☒	5270	☒	5300	☒	5260
2	☒	5270	☒	5300	☒	5260
3	☒	5270	☒	5300	☒	5260
4	☒	5270	☒	5300	☒	5260
5	☒	5270	☒	5300	☒	5260
6	☒	5270	☒	5300	☒	5260
7	☒	5270	☒	5300	☒	5280
8	☒	5270	☒	5300	☒	5280
9	☒	5270	☒	5300	☒	5280
10	☒	5270	☒	5300	☒	5280
11	☒	5280	☒	5310	☒	5280
12	☒	5280	☒	5310	☒	5280
13	☒	5280	☒	5310	☒	5290
14	☒	5280	☒	5310	☒	5290
15	☒	5280	☒	5310	☒	5290
16	☒	5280	☒	5310	☒	5290
17	☒	5280	☒	5310	☒	5290
18	☒	5280	☒	5310	☒	5290
19	☒	5280	☒	5310	☒	5300
20	☒	5280	☒	5310	☒	5300
21	☒	5290	☒	5320	☒	5300
22	☒	5290	☒	5320	☒	5300
23	☒	5290	☒	5320	☒	5300
24	☒	5290	☒	5320	☒	5300
25	☒	5290	☒	5320	☒	5320
26	☒	5290	☒	5320	☒	5320
27	☒	5290	☒	5320	☒	5320
28	☒	5290	☒	5320	☒	5320
29	☒	5290	☒	5320	☒	5320
30	☒	5290	☒	5320	☒	5320

Total number of successful detections for 20MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Total number of successful detections for 40MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Total number of successful detections for 80MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Table 8.3-5: Radar type 1 trials' details

Trial number	Pulses/Bursts	Pulse width, μ s	PRI, μ s
1	102	1	518
2	101	1	526
3	95	1	558
4	92	1	578
5	89	1	598
6	86	1	618
7	83	1	638
8	78	1	678
9	74	1	718
10	70	1	758
11	68	1	778
12	67	1	798
13	62	1	858
14	61	1	878
15	58	1	910
16	57	1	937
17	57	1	938
18	50	1	1061
19	46	1	1164
20	28	1	1904
21	26	1	2076
22	24	1	2265
23	23	1	2311
24	22	1	2430
25	21	1	2575
26	21	1	2610
27	20	1	2727
28	19	1	2850
29	19	1	2890
30	18	1	3066

Table 8.3-6: Radar type 2 detection probability results

Trial	20MHz		40MHz		80MHz	
	Detected	Radar Frequency, MHz	Detected	Radar Frequency, MHz	Detected	Radar Frequency, MHz
1	☒	5270	☒	5300	☒	5260
2	☒	5270	☒	5300	☒	5260
3	☒	5270	☒	5300	☒	5260
4	☒	5270	☒	5300	☒	5260
5	☒	5270	☒	5300	☒	5260
6	☒	5270	☒	5300	☒	5260
7	☒	5270	☒	5300	☒	5280
8	☒	5270	☒	5300	☒	5280
9	☒	5270	☒	5300	☒	5280
10	☒	5270	☒	5300	☒	5280
11	☒	5280	☒	5310	☒	5280
12	☒	5280	☒	5310	☒	5280
13	☒	5280	☒	5310	☒	5290
14	☒	5280	☒	5310	☒	5290
15	☒	5280	☒	5310	☒	5290
16	☒	5280	☒	5310	☒	5290
17	☒	5280	☒	5310	☒	5290
18	☒	5280	☒	5310	☒	5290
19	☒	5280	☒	5310	☒	5300
20	☒	5280	☒	5310	☒	5300
21	☒	5290	☒	5320	☒	5300
22	☒	5290	☒	5320	☒	5300
23	☒	5290	☒	5320	☒	5300
24	☒	5290	☒	5320	☒	5300
25	☒	5290	☒	5320	☒	5320
26	☒	5290	☒	5320	☒	5320
27	☒	5290	☒	5320	☒	5320
28	☒	5290	☒	5320	☒	5320
29	☒	5290	☒	5320	☒	5320
30	☒	5290	☒	5320	☒	5320

Total number of successful detections for 20MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Total number of successful detections for 40MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Total number of successful detections for 80MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Table 8.3-7: Radar type 2 trials' details

Trial number	Pulses/Bursts	Pulse width, μ s	PRI, μ s
1	26	1.1	167
2	23	1.2	172
3	26	1.2	184
4	24	1.4	214
5	29	1.4	216
6	24	1.5	152
7	28	1.8	206
8	25	1.9	168
9	26	1.0	178
10	28	2.1	196
11	25	2.4	192
12	28	2.5	217
13	27	2.6	158
14	29	2.6	197
15	26	2.9	160
16	27	2.9	209
17	29	3.1	225
18	23	3.3	169
19	28	3.4	155
20	29	3.5	155
21	24	3.7	221
22	28	3.8	162
23	25	3.8	171
24	26	3.8	204
25	25	4.1	152
26	25	4.6	217
27	27	4.8	169
28	29	4.8	174
29	23	4.8	187
30	24	5.0	201

Table 8.3-8: Radar type 3 detection probability results

Trial	20MHz		40MHz		80MHz	
	Detected	Radar Frequency, MHz	Detected	Radar Frequency, MHz	Detected	Radar Frequency, MHz
1	☒	5270	☒	5300	☒	5260
2	☒	5270	☒	5300	☒	5260
3	☒	5270	☒	5300	☒	5260
4	☒	5270	☒	5300	☒	5260
5	☒	5270	☒	5300	☒	5260
6	☒	5270	☒	5300	☒	5260
7	☒	5270	☒	5300	☒	5280
8	☒	5270	☒	5300	☒	5280
9	☒	5270	☒	5300	☒	5280
10	☒	5270	☒	5300	☒	5280
11	☒	5280	☒	5310	☒	5280
12	☒	5280	☒	5310	☒	5280
13	☒	5280	☒	5310	☒	5290
14	☒	5280	☒	5310	☒	5290
15	☒	5280	☒	5310	☒	5290
16	☒	5280	☒	5310	☒	5290
17	☒	5280	☒	5310	☒	5290
18	☒	5280	☒	5310	☒	5290
19	☒	5280	☒	5310	☒	5300
20	☒	5280	☒	5310	☒	5300
21	☒	5290	☒	5320	☒	5300
22	☒	5290	☒	5320	☒	5300
23	☒	5290	☒	5320	☒	5300
24	☒	5290	☒	5320	☒	5300
25	☒	5290	☒	5320	☒	5320
26	☒	5290	☒	5320	☒	5320
27	☒	5290	☒	5320	☒	5320
28	☒	5290	☒	5320	☒	5320
29	☒	5290	☒	5320	☒	5320
30	☒	5290	☒	5320	☒	5320

Total number of successful detections for 20MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Total number of successful detections for 40MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Total number of successful detections for 80MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Table 8.3-9: Radar type 3 trial's details

Trial number	Pulses/Bursts	PR16.1, μ s	Pulse width, μ s
1	16	228	6.2
2	17	369	6.2
3	17	217	6.3
4	18	495	6.4
5	18	460	6.8
6	16	398	6.9
7	16	352	7.1
8	18	473	7.3
9	17	410	7.7
10	16	291	7.0
11	17	425	7.0
12	18	223	8.2
13	17	257	8.2
14	16	485	8.2
15	18	298	8.3
16	16	315	8.5
17	17	454	8.5
18	16	299	8.7
19	16	409	8.8
20	17	479	8.9
21	16	271	8.0
22	18	394	8.0
23	18	272	9.1
24	17	410	9.2
25	18	208	9.5
26	18	282	9.5
27	16	360	9.5
28	16	425	9.5
29	17	445	9.5
30	18	445	9.5

Table 8.3-10: Radar type 4 detection probability results

Trial	20MHz		40MHz		80MHz	
	Detected	Radar Frequency, MHz	Detected	Radar Frequency, MHz	Detected	Radar Frequency, MHz
1	☒	5270	☒	5300	☒	5260
2	☒	5270	☒	5300	☒	5260
3	☒	5270	☒	5300	☒	5260
4	☒	5270	☒	5300	☒	5260
5	☒	5270	☒	5300	☒	5260
6	☒	5270	☒	5300	☒	5260
7	☒	5270	☒	5300	☒	5280
8	☒	5270	☒	5300	☒	5280
9	☒	5270	☒	5300	☒	5280
10	☒	5270	☒	5300	☒	5280
11	☒	5280	☒	5310	☒	5280
12	☒	5280	☒	5310	☒	5280
13	☒	5280	☒	5310	☒	5290
14	☒	5280	☒	5310	☒	5290
15	☒	5280	☒	5310	☒	5290
16	☒	5280	☒	5310	☒	5290
17	☒	5280	☒	5310	☒	5290
18	☒	5280	☒	5310	☒	5290
19	☒	5280	☒	5310	☒	5300
20	☒	5280	☒	5310	☒	5300
21	☒	5290	☒	5320	☒	5300
22	☒	5290	☒	5320	☒	5300
23	☒	5290	☒	5320	☒	5300
24	☒	5290	☒	5320	☒	5300
25	☒	5290	☒	5320	☒	5320
26	☒	5290	☒	5320	☒	5320
27	☒	5290	☒	5320	☒	5320
28	☒	5290	☒	5320	☒	5320
29	☒	5290	☒	5320	☒	5320
30	☒	5290	☒	5320	☒	5320

Total number of successful detections for 20MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Total number of successful detections for 40MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Total number of successful detections for 80MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$

Table 8.3-11: Radar type 4 trial's details

Trial number	Pulses/Bursts	Pulse width, μ s	PRI, μ s
1	13	11.6	251
2	13	11.7	269
3	15	11.0	448
4	15	12.4	220
5	14	13.2	341
6	16	14.1	238
7	12	14.2	272
8	15	14.5	446
9	13	15.1	307
10	13	15.3	288
11	15	15.4	467
12	14	15.8	230
13	12	15.8	324
14	16	16.2	303
15	16	16.3	389
16	13	16.4	477
17	14	16.8	277
18	16	16.8	484
19	12	16.9	481
20	13	17.2	471
21	14	17.3	283
22	15	17.4	246
23	16	17.4	342
24	16	17.4	447
25	13	17.5	347
26	16	17.8	391
27	16	17.0	244
28	16	18.0	474
29	13	19.5	371
30	14	19.0	265

#	Time	Buffer	Topics	Message
224	Nov/25/2019 20:48:52	memory	system, info	device changed by admin
223	Nov/25/2019 20:48:51	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: disconnected, disabling
222	Nov/25/2019 20:46:43	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
221	Nov/25/2019 20:46:36	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
220	Nov/25/2019 20:46:31	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
219	Nov/25/2019 20:46:30	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
218	Nov/25/2019 20:46:24	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
217	Nov/25/2019 20:46:23	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
215	Nov/25/2019 20:46:18	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
216	Nov/25/2019 20:46:18	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
213	Nov/25/2019 20:46:13	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
214	Nov/25/2019 20:46:13	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
211	Nov/25/2019 20:46:10	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
212	Nov/25/2019 20:46:10	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
209	Nov/25/2019 19:35:47	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
210	Nov/25/2019 19:35:47	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
208	Nov/25/2019 19:35:43	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
206	Nov/25/2019 19:35:39	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
207	Nov/25/2019 19:35:39	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
205	Nov/25/2019 19:35:35	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
204	Nov/25/2019 19:35:30	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
203	Nov/25/2019 19:35:24	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE
198	Nov/25/2019 19:35:16	memory	wireless, info	wlan2: radar detected on 5280000, IGNORE

Figure 8.3-1: EUT response for Short Pulse Radars

8.4 Statistical performance for long pulse radars

8.4.1 Definitions and limits

For Radar type 5 (long pulse radars) minimum percentage of successful detection is 80 %.

8.4.2 Test summary

Test date	November 27, 2019	Temperature	21 °C
Test engineer	Kevin Rose	Air pressure	995 mbar
Verdict	Pass	Relative humidity	35 %

8.4.3 Observations, settings and special notes

The percentage of successful detection is calculated by:

$$\frac{\text{Total waveform detections}}{\text{Total waveform trials}} \times 100\%$$

The minimum number of trails is 30.

8.4.4 Test data

Table 8.4-1: Summary of the long radar detection probability results for 20MHz

Radar type	Detection probability (Pd), %	Minimum Limit, %	Margin, %
5	100	80	20

Table 8.4-2: Summary of the long radar detection probability results for 40MHz

Radar type	Detection probability (Pd), %	Minimum Limit, %	Margin, %
5	100	80	20

Table 8.4-3: Summary of the long radar detection probability results for 80MHz

Radar type	Detection probability (Pd), %	Minimum Limit, %	Margin, %
5	100	80	20

Table 8.4-4: Radar Type 5 detection probability test results for 20MHz

Trial	Chirp width, MHz	F _{OBL} , MHz	F _{OBH} , MHz	Radar pulse offset, MHz	Radar frequency, MHz	Detection
0	11	5271.8	5289.4	Center of channel	5280	☒
1	8	5271.8	5289.4	Center of channel	5280	☒
2	10	5271.8	5289.4	Center of channel	5280	☒
3	19	5271.8	5289.4	Center of channel	5280	☒
4	7	5271.8	5289.4	Center of channel	5280	☒
5	7	5271.8	5289.4	Center of channel	5280	☒
6	15	5271.8	5289.4	Center of channel	5280	☒
7	11	5271.8	5289.4	Center of channel	5280	☒
8	10	5271.8	5289.4	Center of channel	5280	☒
9	20	5271.8	5289.4	Center of channel	5280	☒
10	7	5271.8	5289.4	2.8	5274.6	☒
11	19	5271.8	5289.4	7.6	5279.4	☒
12	18	5271.8	5289.4	7.2	5279	☒
13	19	5271.8	5289.4	7.6	5279.4	☒
14	16	5271.8	5289.4	6.4	5278.2	☒
15	11	5271.8	5289.4	4.4	5276.2	☒
16	7	5271.8	5289.4	2.8	5274.6	☒
17	10	5271.8	5289.4	4	5275.8	☒
18	5	5271.8	5289.4	2	5273.8	☒
19	7	5271.8	5289.4	2.8	5274.6	☒
20	12	5271.8	5289.4	4.8	5294.2	☒
21	12	5271.8	5289.4	4.8	5294.2	☒
22	8	5271.8	5289.4	3.2	5292.6	☒
23	19	5271.8	5289.4	7.6	5297	☒
24	6	5271.8	5289.4	2.4	5291.8	☒
25	19	5271.8	5289.4	7.6	5297	☒
26	17	5271.8	5289.4	6.8	5296.2	☒
27	13	5271.8	5289.4	5.2	5294.6	☒
28	19	5271.8	5289.4	7.6	5297	☒
29	14	5271.8	5289.4	5.6	5295	☒

EXAMPLE:

The center frequency of the Radar signal calculation:

$$F_{C_Radar_L} = F_{OBL} + (0.4 * ChirpWidth)$$

$$F_{C_Radar_H} = F_{OBH} - (0.4 * ChirpWidth)$$

Example of Radar frequencies calculation:

Chirp width of Radar signal is 13 MHz

EUT F_{OBL} = 1000 MHz

$$F_{C_Radar_L} = 1000 + (0.4 \times 13) = 1000 + 5.2 = 1005.2 \text{ MHz}$$

Chirp width of Radar signal is 18 MHz

EUT F_{OBH} = 1000 MHz

$$F_{C_Radar_H} = 1000 - (0.4 \times 18) = 1000 - 7.2 = 992.8 \text{ MHz}$$

Table 8.4-5: Radar Type 5 detection probability test results for 40MHz

Trial	Chirp width, MHz	F _{OBL} , MHz	F _{OBH} , MHz	Radar pulse offset, MHz	Radar frequency, MHz	Detection
0	11	5291.6	5328.2	Center of channel	5310	☒
1	8	5291.6	5328.2	Center of channel	5310	☒
2	10	5291.6	5328.2	Center of channel	5310	☒
3	19	5291.6	5328.2	Center of channel	5310	☒
4	7	5291.6	5328.2	Center of channel	5310	☒
5	7	5291.6	5328.2	Center of channel	5310	☒
6	15	5291.6	5328.2	Center of channel	5310	☒
7	11	5291.6	5328.2	Center of channel	5310	☒
8	10	5291.6	5328.2	Center of channel	5310	☒
9	20	5291.6	5328.2	Center of channel	5310	☒
10	7	5291.6	5328.2	2.8	5294.4	☒
11	19	5291.6	5328.2	7.6	5299.2	☒
12	18	5291.6	5328.2	7.2	5298.8	☒
13	19	5291.6	5328.2	7.6	5299.2	☒
14	16	5291.6	5328.2	6.4	5298	☒
15	11	5291.6	5328.2	4.4	5296	☒
16	7	5291.6	5328.2	2.8	5294.4	☒
17	10	5291.6	5328.2	4	5295.6	☒
18	5	5291.6	5328.2	2	5293.6	☒
19	7	5291.6	5328.2	2.8	5294.4	☒
20	12	5291.6	5328.2	4.8	5333	☒
21	12	5291.6	5328.2	4.8	5333	☒
22	8	5291.6	5328.2	3.2	5331.4	☒
23	19	5291.6	5328.2	7.6	5335.8	☒
24	6	5291.6	5328.2	2.4	5330.6	☒
25	19	5291.6	5328.2	7.6	5335.8	☒
26	17	5291.6	5328.2	6.8	5335	☒
27	13	5291.6	5328.2	5.2	5333.4	☒
28	19	5291.6	5328.2	7.6	5335.8	☒
29	14	5291.6	5328.2	5.6	5333.8	☒

EXAMPLE:

The center frequency of the Radar signal calculation:

$$F_{C_Radar_L} = F_{OBL} + (0.4 * ChirpWidth)$$

$$F_{C_Radar_H} = F_{OBH} - (0.4 * ChirpWidth)$$

Example of Radar frequencies calculation:

Chirp width of Radar signal is 13 MHz

EUT F_{OBL} = 1000 MHz

$$F_{C_Radar_L} = 1000 + (0.4 \times 13) = 1000 + 5.2 = 1005.2 \text{ MHz}$$

Chirp width of Radar signal is 18 MHz

EUT F_{OBH} = 1000 MHz

$$F_{C_Radar_H} = 1000 - (0.4 \times 18) = 1000 - 7.2 = 992.8 \text{ MHz}$$

Table 8.4-6: Radar Type 5 detection probability test results for channel 52_80MHz

Trial	Chirp width, MHz	F _{OBL} , MHz	F _{OBH} , MHz	Radar pulse offset, MHz	Radar frequency, MHz	Detection
0	11	5251.4	5328.4	Center of channel	5290	☒
1	8	5251.4	5328.4	Center of channel	5290	☒
2	10	5251.4	5328.4	Center of channel	5290	☒
3	19	5251.4	5328.4	Center of channel	5290	☒
4	7	5251.4	5328.4	Center of channel	5290	☒
5	7	5251.4	5328.4	Center of channel	5290	☒
6	15	5251.4	5328.4	Center of channel	5290	☒
7	11	5251.4	5328.4	Center of channel	5290	☒
8	10	5251.4	5328.4	Center of channel	5290	☒
9	20	5251.4	5328.4	Center of channel	5290	☒
10	7	5251.4	5328.4	2.8	5254.2	☒
11	19	5251.4	5328.4	7.6	5259	☒
12	18	5251.4	5328.4	7.2	5258.6	☒
13	19	5251.4	5328.4	7.6	5259	☒
14	16	5251.4	5328.4	6.4	5257.8	☒
15	11	5251.4	5328.4	4.4	5255.8	☒
16	7	5251.4	5328.4	2.8	5254.2	☒
17	10	5251.4	5328.4	4	5255.4	☒
18	5	5251.4	5328.4	2	5253.4	☒
19	7	5251.4	5328.4	2.8	5254.2	☒
20	12	5251.4	5328.4	4.8	5333.2	☒
21	12	5251.4	5328.4	4.8	5333.2	☒
22	8	5251.4	5328.4	3.2	5331.6	☒
23	19	5251.4	5328.4	7.6	5336	☒
24	6	5251.4	5328.4	2.4	5330.8	☒
25	19	5251.4	5328.4	7.6	5336	☒
26	17	5251.4	5328.4	6.8	5335.2	☒
27	13	5251.4	5328.4	5.2	5333.6	☒
28	19	5251.4	5328.4	7.6	5336	☒
29	14	5251.4	5328.4	5.6	5334	☒

EXAMPLE:

The center frequency of the Radar signal calculation:

$$F_{C_Radar_L} = F_{OBL} + (0.4 * ChirpWidth)$$

$$F_{C_Radar_H} = F_{OBH} - (0.4 * ChirpWidth)$$

Example of Radar frequencies calculation:

Chirp width of Radar signal is 13 MHz

EUT F_{OBL} = 1000 MHz

$$F_{C_Radar_L} = 1000 + (0.4 \times 13) = 1000 + 5.2 = 1005.2 \text{ MHz}$$

Chirp width of Radar signal is 18 MHz

EUT F_{OBH} = 1000 MHz

$$F_{C_Radar_H} = 1000 - (0.4 \times 18) = 1000 - 7.2 = 992.8 \text{ MHz}$$

The screenshot shows the Mikrotik RouterOS v6.45.7 (stable) Log window. The log contains 926 items. The visible portion of the log shows several entries related to wireless radar detection on wlan2. The entries are as follows:

#	Time	Buffer	Topics	Message
923	Nov/26/2019 14:51:45	memory	wireless, info	wlan2: radar detected on 5300000, IGNORE
924	Nov/26/2019 14:51:45	memory	wireless, info	wlan2: radar detected on 5300000, IGNORE
925	Nov/26/2019 14:51:45	memory	wireless, info	wlan2: radar detected on 5300000, IGNORE
921	Nov/26/2019 14:51:07	memory	dhcp, info	defconf deassigned 192.168.88.254 from D8:68:C3:A7:36:21
922	Nov/26/2019 14:51:07	memory	dhcp, info	defconf assigned 192.168.88.254 to D8:68:C3:A7:36:21
920	Nov/26/2019 14:51:04	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: connected, signal strength -56
918	Nov/26/2019 14:49:37	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: disconnected, disabling
919	Nov/26/2019 14:49:37	memory	system, info	device changed by admin
915	Nov/26/2019 14:48:51	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
916	Nov/26/2019 14:48:51	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
917	Nov/26/2019 14:48:51	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
913	Nov/26/2019 14:48:44	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
914	Nov/26/2019 14:48:44	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
910	Nov/26/2019 14:48:38	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
911	Nov/26/2019 14:48:38	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
912	Nov/26/2019 14:48:38	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
907	Nov/26/2019 14:48:32	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
908	Nov/26/2019 14:48:32	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
909	Nov/26/2019 14:48:32	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
904	Nov/26/2019 14:48:25	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
905	Nov/26/2019 14:48:25	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
906	Nov/26/2019 14:48:25	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
903	Nov/26/2019 14:48:19	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE

Figure 8.4-1: EUT response for Long Pulse Radars

8.5 Statistical performance for frequency hopping radars

8.5.1 Definitions and limits

For Radar type 6 (frequency hopping radars) minimum percentage of successful detection is 70 %.

8.5.2 Test summary

Test date	November 27, 2019	Temperature	21 °C
Test engineer	Kevin Rose	Air pressure	995 mbar
Verdict	Pass	Relative humidity	35 %

8.5.3 Observations, settings and special notes

The percentage of successful detection is calculated by:

$$\frac{\text{Total waveform detections}}{\text{Total waveform trials}} \times 100\%$$

The minimum number of trails is 30.

Pulses per hop is 9; Pulse Repetition Interval (PRI) is 333 µs; Pulse width is 1 µs

8.5.4 Test data

Table 8.5-1: Summary of the frequency hopping radar detection probability results for channel 56_20MHz

Radar type	Detection probability (P _d), %	Minimum Limit, %	Margin, %
6	100	70	30

Table 8.5-2: Summary of the frequency hopping radar detection probability results for channel 60_40MHz

Radar type	Detection probability (P _d), %	Minimum Limit, %	Margin, %
6	100	70	30

Table 8.5-3: Summary of the frequency hopping radar detection probability results for channel 52_80MHz

Radar type	Detection probability (P _d), %	Minimum Limit, %	Margin, %
6	100	70	30

Table 8.5-4: Frequency hopping Radar results

Trial	<u>channel 56 20MHz</u>		<u>channel 60 40MHz</u>		<u>channel 52 80MHz</u>	
	Detected	Radar Frequency, MHz	Detected	Radar Frequency, MHz	Detected	Radar Frequency, MHz
0	☒	5280	☒	5310	☒	5290
1	☒	5280	☒	5310	☒	5290
2	☒	5280	☒	5310	☒	5290
3	☒	5280	☒	5310	☒	5290
4	☒	5280	☒	5310	☒	5290
5	☒	5280	☒	5310	☒	5290
6	☒	5280	☒	5310	☒	5290
7	☒	5280	☒	5310	☒	5290
8	☒	5280	☒	5310	☒	5290
9	☒	5280	☒	5310	☒	5290
10	☒	5280	☒	5310	☒	5290
11	☒	5280	☒	5310	☒	5290
12	☒	5280	☒	5310	☒	5290
13	☒	5280	☒	5310	☒	5290
14	☒	5280	☒	5310	☒	5290
15	☒	5280	☒	5310	☒	5290
16	☒	5280	☒	5310	☒	5290
17	☒	5280	☒	5310	☒	5290
18	☒	5280	☒	5310	☒	5290
19	☒	5280	☒	5310	☒	5290
20	☒	5280	☒	5310	☒	5290
21	☒	5280	☒	5310	☒	5290
22	☒	5280	☒	5310	☒	5290
23	☒	5280	☒	5310	☒	5290
24	☒	5280	☒	5310	☒	5290
25	☒	5280	☒	5310	☒	5290
26	☒	5280	☒	5310	☒	5290
27	☒	5280	☒	5310	☒	5290
28	☒	5280	☒	5310	☒	5290
29	☒	5280	☒	5310	☒	5290

The screenshot shows the MikroTik WinBox interface with the Log window open. The log contains 840 items. The visible entries are as follows:

#	Time	Buffer	Topics	Message
837	Nov/26/2019 14:45:15	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
838	Nov/26/2019 14:45:15	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
839	Nov/26/2019 14:45:15	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
834	Nov/26/2019 14:45:09	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
835	Nov/26/2019 14:45:09	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
836	Nov/26/2019 14:45:09	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
831	Nov/26/2019 14:45:02	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
832	Nov/26/2019 14:45:02	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
833	Nov/26/2019 14:45:02	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
830	Nov/26/2019 14:44:44	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
828	Nov/26/2019 14:44:43	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
829	Nov/26/2019 14:44:43	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
826	Nov/26/2019 14:44:11	memory	dhcp, info	defconf deassigned 192.168.88.254 from D8:68:C3:A7:36:21
827	Nov/26/2019 14:44:11	memory	dhcp, info	defconf assigned 192.168.88.254 to D8:68:C3:A7:36:21
825	Nov/26/2019 14:44:08	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: connected, signal strength -62
823	Nov/26/2019 14:41:54	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: disconnected, disabling
824	Nov/26/2019 14:41:54	memory	system, info	device changed by admin
821	Nov/26/2019 14:40:19	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
822	Nov/26/2019 14:40:19	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
820	Nov/26/2019 14:40:18	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
819	Nov/26/2019 14:36:15	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
818	Nov/26/2019 14:36:10	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE
817	Nov/26/2019 14:36:07	memory	wireless, info	wlan2: radar detected on 5260000, IGNORE

Figure 8.5-1: EUT response for Frequency Hopping Radars

8.6 Channel closing transmission and move time

8.6.1 Definitions and limits

Maximum channel closing transmission time is 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.
Maximum channel move time is 10 seconds.

8.6.2 Test summary

Test date	November 27, 2019	Temperature	21 °C
Test engineer	Kevin Rose	Air pressure	995 mbar
Verdict	Pass	Relative humidity	35 %

8.6.3 Observations, settings and special notes

The test was performed on the widest channel BW, which is 80 MHz with the use of Radar type 0.

8.6.4 Test data

Table 8.6-1: Channel closing transmission time results

Measured closing transmission time, ms	Limit, ms	Margin, ms
0.001	260.00	260.00

Table 8.6-2: Channel move time results

Measured move time, s	Limit, s	Margin, s
0.0257	10.00	9.97

Table 8.6-3: Channel closing transmission and move time measurement results

Region	Start, s	End, s	Measured, ms	Limit, ms
0	0	0.2	0.001	200
1	0.2	10	0	60
2	10	12	0	0



Figure 8.6-1: Channel closing transmission and move time

RouterOS v6.45.7 (stable)

Log

41 items

#	Time	Buffer	Topics	Message
39	Dec/04/2019 18:39:48	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: disconnected, disabling
40	Dec/04/2019 18:39:48	memory	system, info	device changed by admin
37	Dec/04/2019 18:09:38	memory	dhcp, info	defconf deassigned 192.168.88.254 from D8:68:C3:A7:36:21
38	Dec/04/2019 18:09:38	memory	dhcp, info	defconf assigned 192.168.88.254 to D8:68:C3:A7:36:21
36	Dec/04/2019 18:09:35	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: connected, signal strength -54
34	Dec/04/2019 18:09:17	memory	wireless, info	wlan2: radar detected on 5260000
35	Dec/04/2019 18:09:17	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: disconnected, disabling
32	Dec/04/2019 18:08:04	memory	dhcp, info	defconf deassigned 192.168.88.254 from D8:68:C3:A7:36:21
33	Dec/04/2019 18:08:04	memory	dhcp, info	defconf assigned 192.168.88.254 to D8:68:C3:A7:36:21
31	Dec/04/2019 18:08:01	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: connected, signal strength -55
30	Dec/04/2019 18:05:41	memory	system, info	device changed by admin
28	Dec/04/2019 18:05:31	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: disconnected, disabling
29	Dec/04/2019 18:05:31	memory	system, info	device changed by admin
26	Dec/04/2019 17:59:38	memory	dhcp, info	defconf deassigned 192.168.88.254 from D8:68:C3:A7:36:21
27	Dec/04/2019 17:59:38	memory	dhcp, info	defconf assigned 192.168.88.254 to D8:68:C3:A7:36:21
25	Dec/04/2019 17:59:34	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: connected, signal strength -48
23	Dec/04/2019 17:57:42	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: disconnected, disabling
24	Dec/04/2019 17:57:42	memory	system, info	device changed by admin
21	Dec/04/2019 17:25:45	memory	dhcp, info	defconf deassigned 192.168.88.254 from D8:68:C3:A7:36:21
22	Dec/04/2019 17:25:45	memory	dhcp, info	defconf assigned 192.168.88.254 to D8:68:C3:A7:36:21
20	Dec/04/2019 17:25:42	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: connected, signal strength -63
18	Dec/04/2019 17:25:24	memory	wireless, info	wlan2: radar detected on 5500000
19	Dec/04/2019 17:25:24	memory	wireless, info	D8:68:C3:A7:36:21@wlan2: disconnected, disabling

Figure 8.6-2: EUT response for Short Pulse Radar Type 0

8.7 Initial channel availability check time

8.7.1 Definitions and limits

The initial channel availability check (CAC) time tests that the EUT does not emit beacon, control, or data signals on the test channel until the power-up sequence has been completed and the U-NII device checks for Radar Waveforms for one minute on the test channel.

8.7.2 Test summary

Test date	November 27, 2019	Temperature	21 °C
Test engineer	Kevin Rose	Air pressure	995 mbar
Verdict	Pass	Relative humidity	35 %

8.7.3 Observations, settings and special notes

This test was performed once on the widest channel BW, which is 80 MHz with the use of Radar type 0.

8.7.4 Test data

Table 8.7-1: Initial CAC results

Measured CAC, s	Minimum limit, s	Margin, s
60.3	60.0	0.3

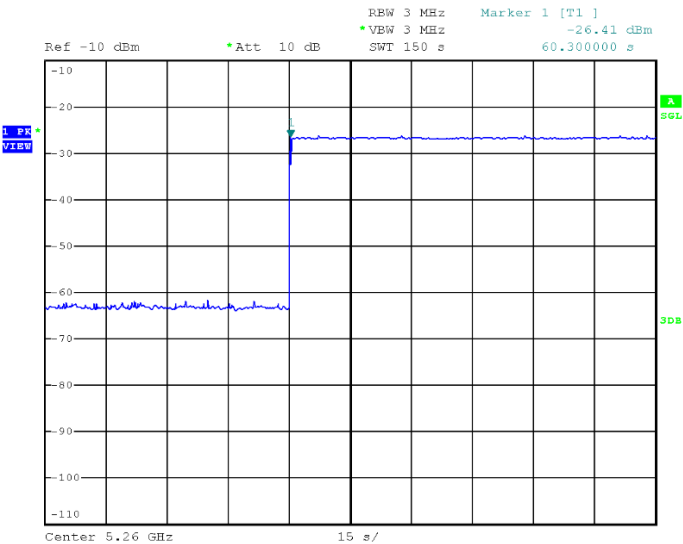


Figure 8.7-1: Initial CAC

8.8 In-service monitoring radar burst at the beginning of the CAC

8.8.1 Definitions and limits

This procedure is to verify successful radar detection on the test Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning (within first 6 seconds) of the Channel Availability Check Time.

8.8.2 Test summary

Test date	November 27, 2019	Temperature	21 °C
Test engineer	Kevin Rose	Air pressure	995 mbar
Verdict	Pass	Relative humidity	35 %

8.8.3 Observations, settings and special notes

This test was performed once on the widest channel BW, which is 80 MHz with the use of Radar type 0.

8.8.4 Test data



Figure 8.8-1: Radar burst at the beginning of the CAC

8.9 In-service monitoring radar burst at the end of the CAC

8.9.1 Definitions and limits

This procedure is to verify successful radar detection on the test Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the end (within last 6 seconds) of the Channel Availability Check Time.

8.9.2 Test summary

Test date	November 27, 2019	Temperature	21 °C
Test engineer	Kevin Rose	Air pressure	995 mbar
Verdict	Pass	Relative humidity	35 %

8.9.3 Observations, settings and special notes

This test was performed once on the widest channel BW, which is 80 MHz with the use of Radar type 0.

8.9.4 Test data



Figure 8.9-1: Radar burst at the end of the CAC

8.10 Non-occupancy period

8.10.1 Definitions and limits

Non-occupancy period minimum is 30 minutes.

8.10.2 Test summary

Test date	November 27, 2019	Temperature	21 °C
Test engineer	Kevin Rose	Air pressure	995 mbar
Verdict	Pass	Relative humidity	35 %

8.10.3 Observations, settings and special notes

The EUT was monitored for more than 30 minutes following instant T₂ (the end of Radar pulses) to verify that the EUT does not resume any transmissions on this Channel. This test was performed once on the widest channel BW, which is 80 MHz with the use of Radar type 0.

8.10.4 Test data

Table 8.10-1: Non-occupancy period results

Measured Non-occupancy period, min	Minimum limit, min	Margin, min
> 30	30	> 0

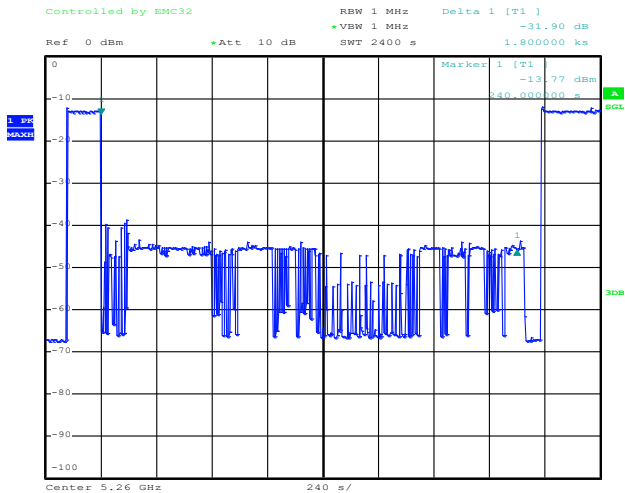
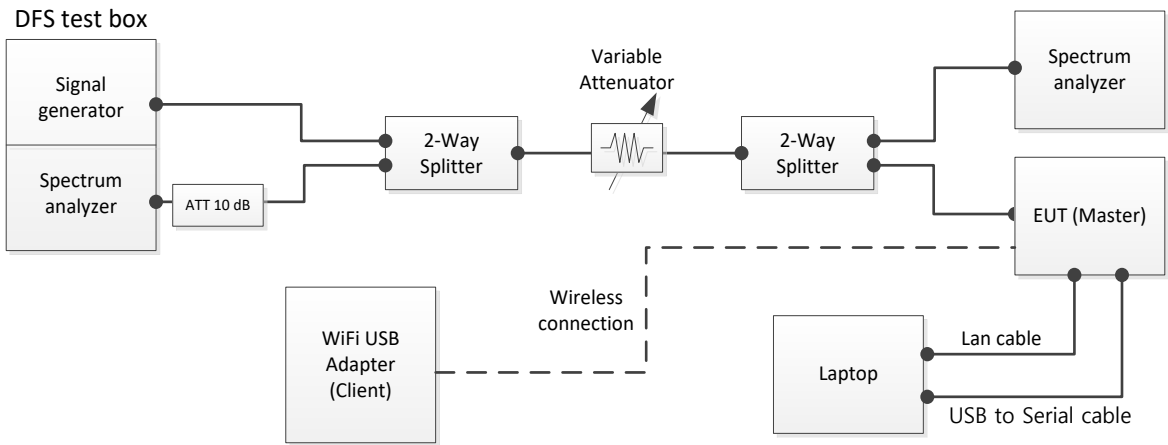


Figure 8.10-1: Non-occupancy period

Section 9. Block diagrams of test set-ups

9.1 Test set-up diagram



Section 10. Radar pulse details

10.1 Radar type 5 (long pulse radar) pulses

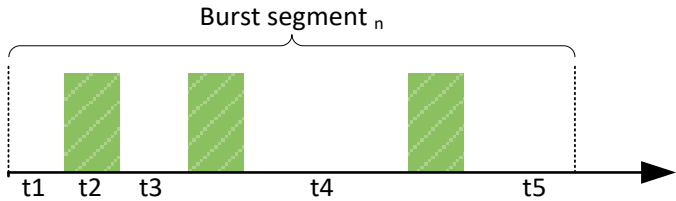


Figure 10.1-1: FCC Type 5 radar structure

Chirp on-time is t2, same for each pulse in a burst segment
If there was only one chirp pulse in a burst segment then only t1, t2 and t5 are active
If there were only two chirp pulses in a burst segment then only t1, t2, t3 and t5 are active
If all three chirp pulses are in a burst segment then t1, t2, t3, t4 and t5 are active

Table 10.1-1: Long Pulse Radar Waveforms, Trial number 0

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	1	11	1491809	94	0	0	8097	1500000
2	3	11	966283	50	1236	1656	530675	1500000
3	2	11	414133	87	1913	0	1083780	1500000
4	1	11	832405	69	0	0	667526	1500000
5	2	11	1188161	72	1179	0	310516	1500000
6	2	11	1327075	67	1756	0	171035	1500000
7	1	11	1262324	61	0	0	237615	1500000
8	1	11	1093125	89	0	0	406786	1500000

Table 10.1-2: Long Pulse Radar Waveforms, Trial number 1

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	1	8	386777	66	0	0	536233	923076
2	1	8	333962	79	0	0	589035	923076
3	2	8	240191	67	1775	0	680976	923076
4	2	8	491464	72	932	0	430536	923076
5	1	8	795169	88	0	0	127819	923076
6	3	8	357241	100	1103	1585	562847	923076
7	2	8	907381	53	1451	0	14138	923076
8	3	8	858996	75	1099	1103	61653	923076
9	3	8	867445	60	1435	1748	52268	923076
10	3	8	859027	55	1918	1052	60914	923076
11	3	8	349648	98	1039	1729	570366	923076
12	3	8	227580	76	1004	1014	693250	923076
13	3	8	738988	87	1128	1464	181235	923076

Table 10.1-3: Long Pulse Radar Waveforms, Trial number 2

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	3	10	119072	80	1339	933	628416	750000
2	2	10	177359	66	1527	0	570982	750000
3	2	10	628491	86	1107	0	120230	750000
4	3	10	572325	98	1793	1171	174417	750000
5	2	10	92496	76	1160	0	656192	750000
6	1	10	313058	71	0	0	436871	750000
7	1	10	55677	97	0	0	694226	750000
8	1	10	708323	100	0	0	41577	750000
9	1	10	416698	63	0	0	333239	750000
10	2	10	688527	69	1620	0	59715	750000
11	3	10	106839	64	1746	1170	640053	750000
12	2	10	187593	90	1798	0	560429	750000
13	2	10	707945	96	1745	0	40118	750000
14	3	10	487367	68	1089	1052	260288	750000
15	2	10	56396	100	1496	0	691908	750000
16	3	10	422378	62	1345	1184	324907	750000

Table 10.1-4: Long Pulse Radar Waveforms, Trial number 3

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	1	19	400206	71	0	0	305605	705882
2	1	19	5312	67	0	0	700503	705882
3	1	19	1148	86	0	0	704648	705882
4	3	19	585397	87	1545	1443	117236	705882
5	2	19	30954	57	1289	0	673525	705882
6	1	19	77269	82	0	0	628531	705882
7	2	19	489266	84	1797	0	214651	705882
8	1	19	392246	84	0	0	313552	705882
9	2	19	567294	92	1805	0	136599	705882
10	1	19	682499	99	0	0	23284	705882
11	1	19	450681	67	0	0	255134	705882
12	2	19	315788	89	1129	0	388787	705882
13	1	19	537579	84	0	0	168219	705882
14	2	19	208967	53	1189	0	495620	705882
15	1	19	143112	53	0	0	562717	705882
16	2	19	597401	54	1763	0	106610	705882
17	3	19	227849	85	1422	939	475417	705882

Table 10.1-5: Long Pulse Radar Waveforms, Trial number 4

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	1	7	741262	54	0	0	58684	800000
2	2	7	286780	78	1789	0	511275	800000
3	3	7	335327	86	1360	1298	461757	800000
4	2	7	94649	66	944	0	704275	800000
5	1	7	353030	63	0	0	446907	800000
6	1	7	613294	73	0	0	186633	800000
7	3	7	94375	70	1922	1075	702418	800000
8	2	7	457346	83	1049	0	341439	800000
9	2	7	754534	81	1214	0	44090	800000
10	2	7	397702	92	1712	0	400402	800000
11	2	7	282490	97	1193	0	516123	800000
12	3	7	424209	51	1610	1104	372924	800000
13	3	7	703467	78	1095	1690	93514	800000
14	2	7	311862	85	1322	0	486646	800000
15	2	7	597034	78	1345	0	201465	800000

Table 10.1-6: Long Pulse Radar Waveforms, Trial number 5

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	2	7	1191810	94	1838	0	306164	1500000
2	2	7	424750	68	1355	0	1073759	1500000
3	2	7	482532	88	977	0	1016315	1500000
4	1	7	1405943	71	0	0	93986	1500000
5	2	7	878208	66	1924	0	619736	1500000
6	2	7	1206306	54	1905	0	291681	1500000
7	2	7	805297	64	1539	0	693036	1500000
8	1	7	353818	65	0	0	1146117	1500000

Table 10.1-7: Long Pulse Radar Waveforms, Trial number 6

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	3	15	134509	57	1722	1826	1361772	1500000
2	3	15	426724	90	1070	1212	1070724	1500000
3	2	15	17448	50	1768	0	1480684	1500000
4	2	15	217906	100	1353	0	1280541	1500000
5	1	15	242119	72	0	0	1257809	1500000
6	2	15	102885	52	1565	0	1395446	1500000
7	2	15	1249686	75	1688	0	248476	1500000
8	1	15	440256	99	0	0	1059645	1500000

Table 10.1-8: Long Pulse Radar Waveforms, Trial number 7

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	2	11	41184	51	1584	0	707130	750000
2	1	11	149784	73	0	0	600143	750000
3	2	11	234771	65	1745	0	513354	750000
4	3	11	405990	88	1192	992	341562	750000
5	3	11	348497	58	1941	1584	397804	750000
6	2	11	609240	55	1106	0	139544	750000
7	3	11	56393	68	959	1258	691186	750000
8	1	11	242791	67	0	0	507142	750000
9	2	11	269305	80	1420	0	479115	750000
10	2	11	175025	93	1680	0	573109	750000
11	3	11	202801	54	1183	1249	544605	750000
12	2	11	217784	61	1621	0	530473	750000
13	2	11	32030	91	1204	0	716584	750000
14	3	11	180205	95	1829	1378	566303	750000
15	2	11	74354	55	1117	0	674419	750000
16	1	11	722178	75	0	0	27747	750000

Table 10.1-9: Long Pulse Radar Waveforms, Trial number 8

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	3	10	263935	79	1104	1266	590600	857142
2	1	10	626743	70	0	0	230329	857142
3	2	10	463769	93	1765	0	391422	857142
4	1	10	295864	56	0	0	561222	857142
5	1	10	429537	80	0	0	427525	857142
6	1	10	351981	64	0	0	505097	857142
7	3	10	250878	79	1808	1077	603142	857142
8	3	10	630501	53	1584	1803	223095	857142
9	2	10	472614	90	1146	0	383202	857142
10	1	10	118362	55	0	0	738725	857142
11	2	10	204138	53	1582	0	651316	857142
12	2	10	598061	53	1562	0	257413	857142
13	2	10	54684	99	1729	0	800531	857142
14	2	10	164709	100	1808	0	690425	857142

Table 10.1-10: Long Pulse Radar Waveforms, Trial number 9

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	1	20	113072	65	0	0	486863	600000
2	1	20	207530	78	0	0	392392	600000
3	1	20	73790	78	0	0	526132	600000
4	2	20	349762	87	1797	0	248267	600000
5	1	20	272345	97	0	0	327558	600000
6	1	20	387328	100	0	0	212572	600000
7	1	20	309307	62	0	0	290631	600000
8	1	20	511392	73	0	0	88535	600000
9	3	20	442324	61	1512	1149	154832	600000
10	2	20	357823	80	1195	0	240822	600000
11	1	20	569689	91	0	0	30220	600000
12	2	20	86068	76	1213	0	512567	600000
13	3	20	332945	97	1000	1858	263906	600000
14	2	20	114264	79	1057	0	484521	600000
15	3	20	421196	97	1450	1693	175370	600000
16	2	20	97318	51	1680	0	500900	600000
17	3	20	228248	55	1467	1300	368820	600000
18	1	20	364881	57	0	0	235062	600000
19	3	20	307200	57	1059	1447	290123	600000
20	2	20	206828	68	960	0	392076	600000

Table 10.1-11: Long Pulse Radar Waveforms, Trial number 10

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	2	7	519325	65	1257	0	279288	800000
2	2	7	408151	51	1692	0	390055	800000
3	1	7	713285	74	0	0	86641	800000
4	2	7	258145	90	1129	0	540546	800000
5	2	7	437330	59	1563	0	360989	800000
6	2	7	757944	50	1765	0	40191	800000
7	2	7	548426	72	947	0	250483	800000
8	2	7	607836	72	1118	0	190902	800000
9	2	7	181691	96	1756	0	616361	800000
10	3	7	267588	76	1385	1010	529789	800000
11	2	7	97577	79	1002	0	701263	800000
12	1	7	264671	77	0	0	535252	800000
13	1	7	646942	59	0	0	152999	800000
14	1	7	637968	70	0	0	161962	800000
15	1	7	550313	58	0	0	249629	800000

Table 10.1-12: Long Pulse Radar Waveforms, Trial number 11

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	2	7	519325	65	1257	0	279288	800000
2	2	7	408151	51	1692	0	390055	800000
3	1	7	713285	74	0	0	86641	800000
4	2	7	258145	90	1129	0	540546	800000
5	2	7	437330	59	1563	0	360989	800000
6	2	7	757944	50	1765	0	40191	800000
7	2	7	548426	72	947	0	250483	800000
8	2	7	607836	72	1118	0	190902	800000
9	2	7	181691	96	1756	0	616361	800000
10	3	7	267588	76	1385	1010	529789	800000
11	2	7	97577	79	1002	0	701263	800000
12	1	7	264671	77	0	0	535252	800000
13	1	7	646942	59	0	0	152999	800000
14	1	7	637968	70	0	0	161962	800000
15	1	7	550313	58	0	0	249629	800000

Table 10.1-13: Long Pulse Radar Waveforms, Trial number 12

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	2	18	815977	55	1666	0	39389	857142
2	2	18	622267	82	1221	0	233490	857142
3	3	18	316703	99	1320	1757	537065	857142
4	3	18	796234	91	1151	1360	58124	857142
5	2	18	179523	73	1792	0	675681	857142
6	2	18	368217	97	1423	0	487308	857142
7	3	18	475545	53	1239	1053	379146	857142
8	3	18	670726	78	1404	1900	182878	857142
9	3	18	809841	79	926	1893	44245	857142
10	3	18	306280	53	1360	1039	548304	857142
11	1	18	16783	80	0	0	840279	857142
12	1	18	689070	92	0	0	167980	857142
13	1	18	5891	100	0	0	851151	857142
14	2	18	370885	78	1715	0	484386	857142

Table 10.1-14: Long Pulse Radar Waveforms, Trial number 13

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	1	19	1100915	72	0	0	232346	1333333
2	2	19	1183665	73	1232	0	148290	1333333
3	3	19	1232069	51	1219	1815	98077	1333333
4	2	19	186297	76	1846	0	1145038	1333333
5	1	19	215864	92	0	0	1117377	1333333
6	2	19	181472	57	999	0	1150748	1333333
7	1	19	1097812	88	0	0	235433	1333333
8	2	19	291741	74	1529	0	1039915	1333333
9	1	19	1224818	57	0	0	108458	1333333

Table 10.1-15: Long Pulse Radar Waveforms, Trial number 14

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	2	16	958242	62	939	0	540695	1500000
2	1	16	909930	57	0	0	590013	1500000
3	3	16	869580	95	1883	1783	626469	1500000
4	2	16	662597	54	1181	0	836114	1500000
5	3	16	254073	63	1620	1695	1242423	1500000
6	1	16	987526	78	0	0	512396	1500000
7	2	16	580662	88	1325	0	917837	1500000
8	3	16	727703	54	1660	953	769522	1500000

Table 10.1-16: Long Pulse Radar Waveforms, Trial number 15

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	3	11	177214	56	1139	1052	487093	666666
2	2	11	190587	53	1198	0	474775	666666
3	3	11	243758	62	1012	1328	420382	666666
4	3	11	210653	61	1820	1175	452835	666666
5	2	11	228365	60	1622	0	436559	666666
6	1	11	482769	65	0	0	183832	666666
7	1	11	528680	59	0	0	137927	666666
8	1	11	63469	94	0	0	603103	666666
9	3	11	505926	84	1256	1235	157997	666666
10	1	11	151354	71	0	0	515241	666666
11	1	11	183723	52	0	0	482891	666666
12	3	11	13589	69	1608	953	650309	666666
13	1	11	555348	94	0	0	111224	666666
14	3	11	141777	58	1185	1148	522382	666666
15	3	11	206798	59	1748	1484	456459	666666
16	3	11	97656	73	949	931	566911	666666
17	2	11	304555	86	941	0	360998	666666
18	2	11	60120	86	1734	0	604640	666666

Table 10.1-17: Long Pulse Radar Waveforms, Trial number 16

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	2	7	576198	78	1544	0	345178	923076
2	3	7	396100	60	1097	1862	523837	923076
3	1	7	405992	97	0	0	516987	923076
4	2	7	530419	56	1484	0	391061	923076
5	2	7	212444	94	1822	0	708622	923076
6	2	7	221879	62	1717	0	699356	923076
7	1	7	916747	65	0	0	6264	923076
8	2	7	877588	71	1045	0	44301	923076
9	1	7	42297	90	0	0	880689	923076
10	3	7	774003	61	1504	1120	146266	923076
11	1	7	494853	86	0	0	428137	923076
12	2	7	876749	96	1124	0	45011	923076
13	1	7	846849	95	0	0	76132	923076

Table 10.1-18: Long Pulse Radar Waveforms, Trial number 17

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	3	10	96654	58	1156	1512	532082	631578
2	3	10	129191	69	1271	1330	499579	631578
3	2	10	92272	75	1239	0	537917	631578
4	3	10	201520	82	1336	1237	427239	631578
5	1	10	20484	58	0	0	611036	631578
6	3	10	548949	76	977	1585	79839	631578
7	1	10	29641	67	0	0	601870	631578
8	1	10	334172	83	0	0	297323	631578
9	3	10	298590	50	1853	1534	329451	631578
10	2	10	530370	72	1112	0	99952	631578
11	2	10	16713	96	1038	0	613635	631578
12	1	10	234726	88	0	0	396764	631578
13	1	10	367214	92	0	0	264272	631578
14	2	10	576021	94	1091	0	54278	631578
15	2	10	310582	85	1432	0	319394	631578
16	3	10	71221	68	937	1284	557932	631578
17	3	10	594599	100	1459	1040	34180	631578
18	1	10	420759	98	0	0	210721	631578
19	3	10	562254	92	1242	1498	66308	631578

Table 10.1-19: Long Pulse Radar Waveforms, Trial number 18

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	2	5	24619	55	1594	0	973677	1000000
2	1	5	57703	76	0	0	942221	1000000
3	2	5	529292	79	1012	0	469538	1000000
4	3	5	821806	98	1062	1434	175404	1000000
5	3	5	45920	54	1741	1150	951027	1000000
6	3	5	891716	81	1345	1171	105525	1000000
7	3	5	322747	86	959	1765	674271	1000000
8	2	5	109614	66	1423	0	888831	1000000
9	3	5	600510	86	1895	1056	396281	1000000
10	3	5	414438	66	1923	983	582458	1000000
11	1	5	506123	100	0	0	493777	1000000
12	2	5	499002	50	1448	0	499450	1000000

Table 10.1-20: Long Pulse Radar Waveforms, Trial number 19

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	3	7	1027386	83	1411	1140	303147	1333333
2	1	7	456162	80	0	0	877091	1333333
3	2	7	68436	86	1682	0	1263043	1333333
4	2	7	982301	73	977	0	349909	1333333
5	1	7	1264208	93	0	0	69032	1333333
6	1	7	963089	66	0	0	370178	1333333
7	3	7	1211255	79	931	997	119913	1333333
8	2	7	470310	68	975	0	861912	1333333
9	3	7	591812	69	1083	1439	738792	1333333

Table 10.1-21: Long Pulse Radar Waveforms, Trial number 20

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	1	12	7513	92	0	0	1083304	1090909
2	2	12	306194	86	1183	0	783360	1090909
3	2	12	496537	81	1434	0	592776	1090909
4	2	12	600737	95	1547	0	488435	1090909
5	3	12	1005418	92	1167	1844	82204	1090909
6	1	12	442425	85	0	0	648399	1090909
7	1	12	618896	99	0	0	471914	1090909
8	2	12	439472	98	1575	0	649666	1090909
9	3	12	704025	80	1357	1545	383742	1090909
10	1	12	874185	59	0	0	216665	1090909
11	1	12	315116	73	0	0	775720	1090909

Table 10.1-22: Long Pulse Radar Waveforms, Trial number 21

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	2	12	115162	98	1655	0	632987	750000
2	3	12	186298	63	1407	1247	560859	750000
3	2	12	383719	69	1207	0	364936	750000
4	2	12	108878	91	1463	0	639477	750000
5	3	12	413549	67	1625	1150	333475	750000
6	3	12	321075	58	1207	1938	425606	750000
7	3	12	474893	52	1197	1424	272330	750000
8	2	12	174744	62	948	0	574184	750000
9	1	12	491673	71	0	0	258256	750000
10	3	12	72161	60	1033	1652	674974	750000
11	1	12	100998	67	0	0	648935	750000
12	3	12	415602	68	1179	1796	331219	750000
13	3	12	76890	98	1140	1744	669932	750000
14	2	12	630261	95	1621	0	117928	750000
15	3	12	552663	63	1937	969	194242	750000
16	3	12	246869	63	1347	1524	500071	750000

Table 10.1-23: Long Pulse Radar Waveforms, Trial number 22

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	2	8	593129	74	1050	0	111555	705882
2	3	8	512170	55	1862	1806	189879	705882
3	2	8	647773	90	1295	0	56634	705882
4	3	8	91733	81	920	1088	611898	705882
5	2	8	583736	76	1864	0	120130	705882
6	2	8	44836	91	1621	0	659243	705882
7	1	8	608584	82	0	0	97216	705882
8	1	8	647252	89	0	0	58541	705882
9	1	8	202368	65	0	0	503449	705882
10	2	8	245840	55	1945	0	457987	705882
11	2	8	79436	99	1757	0	624491	705882
12	2	8	79788	74	1541	0	624405	705882
13	1	8	191251	54	0	0	514577	705882
14	1	8	483662	73	0	0	222147	705882
15	1	8	589992	65	0	0	115825	705882
16	1	8	91605	65	0	0	614212	705882
17	3	8	308858	90	1187	1909	393658	705882

Table 10.1-24: Long Pulse Radar Waveforms, Trial number 23

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	1	19	317479	81	0	0	482440	800000
2	1	19	135368	95	0	0	664537	800000
3	3	19	571255	59	1493	1025	226050	800000
4	1	19	77804	67	0	0	722129	800000
5	3	19	38514	63	1479	1528	758290	800000
6	1	19	739547	61	0	0	60392	800000
7	1	19	345651	72	0	0	454277	800000
8	3	19	553528	94	1565	1580	243045	800000
9	3	19	287743	84	1725	1518	508762	800000
10	2	19	306562	83	1869	0	491403	800000
11	1	19	403924	84	0	0	395992	800000
12	2	19	773122	61	1058	0	25698	800000
13	3	19	586317	51	1689	1474	210367	800000
14	2	19	514264	69	1190	0	284408	800000
15	1	19	756783	81	0	0	43136	800000

Table 10.1-25: Long Pulse Radar Waveforms, Trial number 24

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	1	6	357457	56	0	0	348369	705882
2	3	6	523316	61	982	1196	180205	705882
3	3	6	145527	72	1534	1518	557087	705882
4	3	6	546985	82	1645	1187	155819	705882
5	1	6	605628	73	0	0	100181	705882
6	3	6	316469	96	1052	1863	386210	705882
7	1	6	676013	78	0	0	29791	705882
8	1	6	503488	95	0	0	202299	705882
9	1	6	545669	65	0	0	160148	705882
10	2	6	700880	100	1698	0	3104	705882
11	1	6	149407	86	0	0	556389	705882
12	1	6	648736	64	0	0	57082	705882
13	1	6	293129	60	0	0	412693	705882
14	2	6	585683	96	963	0	119044	705882
15	2	6	325344	62	1153	0	379261	705882
16	1	6	634130	68	0	0	71684	705882
17	3	6	494163	88	1620	1698	208137	705882

Table 10.1-26: Long Pulse Radar Waveforms, Trial number 25

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	2	19	73212	95	1108	0	725490	800000
2	3	19	600485	74	1709	1181	196403	800000
3	2	19	183094	77	1551	0	615201	800000
4	3	19	32428	62	1805	1874	763707	800000
5	3	19	76400	53	1045	1935	720461	800000
6	1	19	512409	67	0	0	287524	800000
7	3	19	339487	61	1254	942	458134	800000
8	2	19	634041	87	939	0	164846	800000
9	1	19	417792	60	0	0	382148	800000
10	1	19	38699	79	0	0	761222	800000
11	2	19	735104	75	1494	0	63252	800000
12	2	19	420497	56	1029	0	378362	800000
13	3	19	392062	89	1657	1642	404372	800000
14	3	19	589165	68	1733	1824	207074	800000
15	1	19	451282	79	0	0	348639	800000

Table 10.1-27: Long Pulse Radar Waveforms, Trial number 26

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	1	17	534164	98	0	0	65738	600000
2	1	17	568216	50	0	0	31734	600000
3	2	17	230099	71	1781	0	367978	600000
4	1	17	295026	87	0	0	304887	600000
5	2	17	306234	69	1709	0	291919	600000
6	3	17	406316	85	1335	1145	190949	600000
7	3	17	300623	62	1170	1367	296654	600000
8	1	17	60581	89	0	0	539330	600000
9	1	17	251308	74	0	0	348618	600000
10	3	17	551845	67	1906	1617	44431	600000
11	1	17	144341	79	0	0	455580	600000
12	2	17	286383	95	1251	0	312176	600000
13	1	17	163847	94	0	0	436059	600000
14	2	17	453682	99	1477	0	144643	600000
15	3	17	51353	76	1444	1465	545510	600000
16	2	17	265521	99	1491	0	332790	600000
17	2	17	220597	82	1669	0	377570	600000
18	2	17	107160	66	1680	0	491028	600000
19	2	17	447370	54	1533	0	150989	600000
20	1	17	522870	59	0	0	77071	600000

Table 10.1-28: Long Pulse Radar Waveforms, Trial number 27

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	3	13	544263	59	1498	1171	119557	666666
2	3	13	596241	76	1181	1536	67480	666666
3	1	13	591017	91	0	0	75558	666666
4	1	13	317394	98	0	0	349174	666666
5	1	13	485505	96	0	0	181065	666666
6	1	13	632477	99	0	0	34090	666666
7	3	13	577283	56	1038	1027	87150	666666
8	3	13	430157	50	1709	1291	233359	666666
9	3	13	22188	79	1800	1715	640726	666666
10	1	13	540553	76	0	0	126037	666666
11	1	13	611526	55	0	0	55085	666666
12	2	13	353404	76	1295	0	311815	666666
13	1	13	180978	82	0	0	485606	666666
14	3	13	357550	63	1080	1582	306265	666666
15	3	13	489288	72	1358	1064	174740	666666
16	3	13	369639	77	1170	1776	293850	666666
17	2	13	106417	52	1264	0	558881	666666
18	1	13	614533	72	0	0	52061	666666

Table 10.1-29: Long Pulse Radar Waveforms, Trial number 28

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	3	19	557982	94	937	1218	362657	923076
2	3	19	679836	78	1736	1279	239991	923076
3	3	19	28962	53	1452	1055	891448	923076
4	1	19	556905	67	0	0	366104	923076
5	1	19	793656	89	0	0	129331	923076
6	3	19	867531	94	970	1771	52522	923076
7	1	19	826210	60	0	0	96806	923076
8	2	19	809738	92	963	0	112191	923076
9	1	19	620627	87	0	0	302362	923076
10	3	19	170216	56	1768	1358	749566	923076
11	1	19	468900	59	0	0	454117	923076
12	1	19	66782	74	0	0	856220	923076
13	3	19	772274	64	1035	1746	147829	923076

Table 10.1-30: Long Pulse Radar Waveforms, Trial number 29

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μ s	Pulse width (t2), μ s	t3, μ s	t4, μ s	t5, μ s	Total segment length, μ s
1	1	14	1480	61	0	0	665125	666666
2	3	14	223663	72	1591	1333	439863	666666
3	3	14	126495	95	1816	1631	536439	666666
4	1	14	239346	69	0	0	427251	666666
5	1	14	519504	61	0	0	147101	666666
6	2	14	339952	80	1643	0	324911	666666
7	2	14	579089	100	1277	0	86100	666666
8	2	14	440287	97	1699	0	224486	666666
9	3	14	333112	60	1201	1108	331065	666666
10	3	14	6016	91	1592	1070	657715	666666
11	3	14	229203	61	1232	1537	434511	666666
12	1	14	376210	90	0	0	290366	666666
13	3	14	120191	92	1496	968	543735	666666
14	1	14	476796	67	0	0	189803	666666
15	2	14	527477	99	971	0	138020	666666
16	1	14	81788	70	0	0	584808	666666
17	1	14	343394	96	0	0	323176	666666
18	3	14	301943	55	1825	1634	361099	666666

10.2 Radar type 6 (frequency hopping radar) pulses

Table 10.2-1: List of frequencies of hopping radar type 6 for Trial 0

Hop number	Hop frequency	Hop number	Hop frequency
1	5505.000000 MHz	51	5690.000000 MHz
2	5543.000000 MHz	52	5368.000000 MHz
3	5560.000000 MHz	53	5393.000000 MHz
4	5603.000000 MHz	54	5443.000000 MHz
5	5489.000000 MHz	55	5288.000000 MHz
6	5353.000000 MHz	56	5638.000000 MHz
7	5610.000000 MHz	57	5588.000000 MHz
8	5557.000000 MHz	58	5438.000000 MHz
9	5287.000000 MHz	59	5308.000000 MHz
10	5286.000000 MHz	60	5614.000000 MHz
11	5633.000000 MHz	61	5535.000000 MHz
12	5251.000000 MHz	62	5481.000000 MHz
13	5711.000000 MHz	63	5702.000000 MHz
14	5285.000000 MHz	64	5387.000000 MHz
15	5691.000000 MHz	65	5314.000000 MHz
16	5264.000000 MHz	66	5495.000000 MHz
17	5361.000000 MHz	67	5545.000000 MHz
18	5645.000000 MHz	68	5607.000000 MHz
19	5623.000000 MHz	69	5267.000000 MHz
20	5261.000000 MHz	70	5698.000000 MHz
21	5651.000000 MHz	71	5687.000000 MHz
22	5540.000000 MHz	72	5413.000000 MHz
23	5424.000000 MHz	73	5569.000000 MHz
24	5713.000000 MHz	74	5531.000000 MHz
25	5459.000000 MHz	75	5521.000000 MHz
26	5295.000000 MHz	76	5340.000000 MHz
27	5283.000000 MHz	77	5653.000000 MHz
28	5571.000000 MHz	78	5715.000000 MHz
29	5644.000000 MHz	79	5450.000000 MHz
30	5573.000000 MHz	80	5415.000000 MHz
31	5575.000000 MHz	81	5492.000000 MHz
32	5362.000000 MHz	82	5401.000000 MHz
33	5425.000000 MHz	83	5298.000000 MHz
34	5273.000000 MHz	84	5552.000000 MHz
35	5500.000000 MHz	85	5511.000000 MHz
36	5383.000000 MHz	86	5309.000000 MHz
37	5486.000000 MHz	87	5716.000000 MHz
38	5671.000000 MHz	88	5601.000000 MHz
39	5405.000000 MHz	89	5381.000000 MHz
40	5720.000000 MHz	90	5631.000000 MHz
41	5589.000000 MHz	91	5501.000000 MHz
42	5356.000000 MHz	92	5394.000000 MHz
43	5441.000000 MHz	93	5533.000000 MHz
44	5321.000000 MHz	94	5689.000000 MHz
45	5320.000000 MHz	95	5376.000000 MHz
46	5480.000000 MHz	96	5470.000000 MHz
47	5579.000000 MHz	97	5358.000000 MHz
48	5382.000000 MHz	98	5437.000000 MHz
49	5294.000000 MHz	99	5474.000000 MHz
50	5565.000000 MHz	100	5268.000000 MHz

Table 10.2-2: List of frequencies of hopping radar type 6 for Trial 1

Hop number	Hop frequency	Hop number	Hop frequency
1	5721.000000 MHz	51	5455.000000 MHz
2	5502.000000 MHz	52	5351.000000 MHz
3	5342.000000 MHz	53	5301.000000 MHz
4	5650.000000 MHz	54	5300.000000 MHz
5	5678.000000 MHz	55	5660.000000 MHz
6	5390.000000 MHz	56	5602.000000 MHz
7	5560.000000 MHz	57	5321.000000 MHz
8	5712.000000 MHz	58	5334.000000 MHz
9	5525.000000 MHz	59	5289.000000 MHz
10	5697.000000 MHz	60	5583.000000 MHz
11	5406.000000 MHz	61	5597.000000 MHz
12	5253.000000 MHz	62	5544.000000 MHz
13	5412.000000 MHz	63	5640.000000 MHz
14	5408.000000 MHz	64	5686.000000 MHz
15	5559.000000 MHz	65	5710.000000 MHz
16	5439.000000 MHz	66	5299.000000 MHz
17	5437.000000 MHz	67	5288.000000 MHz
18	5627.000000 MHz	68	5704.000000 MHz
19	5336.000000 MHz	69	5577.000000 MHz
20	5422.000000 MHz	70	5713.000000 MHz
21	5692.000000 MHz	71	5266.000000 MHz
22	5310.000000 MHz	72	5328.000000 MHz
23	5624.000000 MHz	73	5454.000000 MHz
24	5270.000000 MHz	74	5690.000000 MHz
25	5565.000000 MHz	75	5656.000000 MHz
26	5638.000000 MHz	76	5407.000000 MHz
27	5532.000000 MHz	77	5558.000000 MHz
28	5688.000000 MHz	78	5651.000000 MHz
29	5588.000000 MHz	79	5673.000000 MHz
30	5705.000000 MHz	80	5576.000000 MHz
31	5306.000000 MHz	81	5343.000000 MHz
32	5445.000000 MHz	82	5313.000000 MHz
33	5267.000000 MHz	83	5469.000000 MHz
34	5363.000000 MHz	84	5643.000000 MHz
35	5405.000000 MHz	85	5388.000000 MHz
36	5521.000000 MHz	86	5500.000000 MHz
37	5460.000000 MHz	87	5316.000000 MHz
38	5585.000000 MHz	88	5489.000000 MHz
39	5356.000000 MHz	89	5533.000000 MHz
40	5348.000000 MHz	90	5286.000000 MHz
41	5614.000000 MHz	91	5269.000000 MHz
42	5580.000000 MHz	92	5383.000000 MHz
43	5659.000000 MHz	93	5305.000000 MHz
44	5344.000000 MHz	94	5658.000000 MHz
45	5290.000000 MHz	95	5371.000000 MHz
46	5707.000000 MHz	96	5682.000000 MHz
47	5374.000000 MHz	97	5430.000000 MHz
48	5380.000000 MHz	98	5284.000000 MHz
49	5661.000000 MHz	99	5696.000000 MHz
50	5282.000000 MHz	100	5637.000000 MHz

Table 10.2-3: List of frequencies of hopping radar type 6 for Trial 2

Hop number	Hop frequency	Hop number	Hop frequency
1	5395.000000 MHz	51	5614.000000 MHz
2	5534.000000 MHz	52	5551.000000 MHz
3	5357.000000 MHz	53	5382.000000 MHz
4	5426.000000 MHz	54	5287.000000 MHz
5	5288.000000 MHz	55	5603.000000 MHz
6	5447.000000 MHz	56	5359.000000 MHz
7	5596.000000 MHz	57	5389.000000 MHz
8	5314.000000 MHz	58	5547.000000 MHz
9	5592.000000 MHz	59	5479.000000 MHz
10	5269.000000 MHz	60	5397.000000 MHz
11	5710.000000 MHz	61	5612.000000 MHz
12	5508.000000 MHz	62	5338.000000 MHz
13	5369.000000 MHz	63	5619.000000 MHz
14	5565.000000 MHz	64	5362.000000 MHz
15	5326.000000 MHz	65	5572.000000 MHz
16	5455.000000 MHz	66	5360.000000 MHz
17	5473.000000 MHz	67	5496.000000 MHz
18	5458.000000 MHz	68	5409.000000 MHz
19	5564.000000 MHz	69	5689.000000 MHz
20	5418.000000 MHz	70	5522.000000 MHz
21	5671.000000 MHz	71	5252.000000 MHz
22	5517.000000 MHz	72	5716.000000 MHz
23	5469.000000 MHz	73	5251.000000 MHz
24	5723.000000 MHz	74	5434.000000 MHz
25	5286.000000 MHz	75	5301.000000 MHz
26	5466.000000 MHz	76	5423.000000 MHz
27	5693.000000 MHz	77	5493.000000 MHz
28	5492.000000 MHz	78	5575.000000 MHz
29	5642.000000 MHz	79	5388.000000 MHz
30	5705.000000 MHz	80	5438.000000 MHz
31	5656.000000 MHz	81	5340.000000 MHz
32	5341.000000 MHz	82	5355.000000 MHz
33	5263.000000 MHz	83	5684.000000 MHz
34	5256.000000 MHz	84	5701.000000 MHz
35	5718.000000 MHz	85	5290.000000 MHz
36	5691.000000 MHz	86	5364.000000 MHz
37	5683.000000 MHz	87	5626.000000 MHz
38	5313.000000 MHz	88	5574.000000 MHz
39	5494.000000 MHz	89	5648.000000 MHz
40	5291.000000 MHz	90	5537.000000 MHz
41	5415.000000 MHz	91	5311.000000 MHz
42	5679.000000 MHz	92	5532.000000 MHz
43	5515.000000 MHz	93	5628.000000 MHz
44	5285.000000 MHz	94	5303.000000 MHz
45	5672.000000 MHz	95	5342.000000 MHz
46	5587.000000 MHz	96	5584.000000 MHz
47	5697.000000 MHz	97	5520.000000 MHz
48	5367.000000 MHz	98	5682.000000 MHz
49	5353.000000 MHz	99	5454.000000 MHz
50	5453.000000 MHz	100	5586.000000 MHz

Table 10.2-4: List of frequencies of hopping radar type 6 for Trial 3

Hop number	Hop frequency	Hop number	Hop frequency
1	5585.000000 MHz	51	5693.000000 MHz
2	5284.000000 MHz	52	5568.000000 MHz
3	5699.000000 MHz	53	5600.000000 MHz
4	5602.000000 MHz	54	5343.000000 MHz
5	5605.000000 MHz	55	5515.000000 MHz
6	5308.000000 MHz	56	5504.000000 MHz
7	5691.000000 MHz	57	5310.000000 MHz
8	5304.000000 MHz	58	5396.000000 MHz
9	5628.000000 MHz	59	5544.000000 MHz
10	5689.000000 MHz	60	5453.000000 MHz
11	5684.000000 MHz	61	5465.000000 MHz
12	5521.000000 MHz	62	5561.000000 MHz
13	5708.000000 MHz	63	5576.000000 MHz
14	5660.000000 MHz	64	5257.000000 MHz
15	5518.000000 MHz	65	5694.000000 MHz
16	5322.000000 MHz	66	5437.000000 MHz
17	5457.000000 MHz	67	5380.000000 MHz
18	5459.000000 MHz	68	5529.000000 MHz
19	5646.000000 MHz	69	5376.000000 MHz
20	5486.000000 MHz	70	5325.000000 MHz
21	5268.000000 MHz	71	5714.000000 MHz
22	5709.000000 MHz	72	5524.000000 MHz
23	5666.000000 MHz	73	5505.000000 MHz
24	5434.000000 MHz	74	5371.000000 MHz
25	5347.000000 MHz	75	5716.000000 MHz
26	5487.000000 MHz	76	5610.000000 MHz
27	5723.000000 MHz	77	5444.000000 MHz
28	5330.000000 MHz	78	5643.000000 MHz
29	5633.000000 MHz	79	5649.000000 MHz
30	5305.000000 MHz	80	5473.000000 MHz
31	5395.000000 MHz	81	5629.000000 MHz
32	5480.000000 MHz	82	5455.000000 MHz
33	5611.000000 MHz	83	5320.000000 MHz
34	5493.000000 MHz	84	5470.000000 MHz
35	5348.000000 MHz	85	5311.000000 MHz
36	5315.000000 MHz	86	5527.000000 MHz
37	5271.000000 MHz	87	5369.000000 MHz
38	5516.000000 MHz	88	5448.000000 MHz
39	5682.000000 MHz	89	5472.000000 MHz
40	5616.000000 MHz	90	5531.000000 MHz
41	5634.000000 MHz	91	5698.000000 MHz
42	5573.000000 MHz	92	5321.000000 MHz
43	5357.000000 MHz	93	5630.000000 MHz
44	5688.000000 MHz	94	5414.000000 MHz
45	5367.000000 MHz	95	5442.000000 MHz
46	5549.000000 MHz	96	5525.000000 MHz
47	5512.000000 MHz	97	5499.000000 MHz
48	5313.000000 MHz	98	5654.000000 MHz
49	5509.000000 MHz	99	5514.000000 MHz
50	5285.000000 MHz	100	5567.000000 MHz

Table 10.2-5: List of frequencies of hopping radar type 6 for Trial 4

Hop number	Hop frequency	Hop number	Hop frequency
1	5430.000000 MHz	51	5409.000000 MHz
2	5355.000000 MHz	52	5683.000000 MHz
3	5275.000000 MHz	53	5369.000000 MHz
4	5581.000000 MHz	54	5487.000000 MHz
5	5658.000000 MHz	55	5332.000000 MHz
6	5258.000000 MHz	56	5389.000000 MHz
7	5716.000000 MHz	57	5654.000000 MHz
8	5540.000000 MHz	58	5586.000000 MHz
9	5337.000000 MHz	59	5517.000000 MHz
10	5253.000000 MHz	60	5472.000000 MHz
11	5457.000000 MHz	61	5624.000000 MHz
12	5711.000000 MHz	62	5492.000000 MHz
13	5533.000000 MHz	63	5436.000000 MHz
14	5649.000000 MHz	64	5421.000000 MHz
15	5458.000000 MHz	65	5354.000000 MHz
16	5631.000000 MHz	66	5310.000000 MHz
17	5263.000000 MHz	67	5604.000000 MHz
18	5291.000000 MHz	68	5562.000000 MHz
19	5466.000000 MHz	69	5543.000000 MHz
20	5516.000000 MHz	70	5276.000000 MHz
21	5301.000000 MHz	71	5559.000000 MHz
22	5323.000000 MHz	72	5522.000000 MHz
23	5532.000000 MHz	73	5646.000000 MHz
24	5591.000000 MHz	74	5411.000000 MHz
25	5623.000000 MHz	75	5589.000000 MHz
26	5539.000000 MHz	76	5407.000000 MHz
27	5478.000000 MHz	77	5445.000000 MHz
28	5673.000000 MHz	78	5520.000000 MHz
29	5595.000000 MHz	79	5644.000000 MHz
30	5443.000000 MHz	80	5392.000000 MHz
31	5311.000000 MHz	81	5285.000000 MHz
32	5690.000000 MHz	82	5496.000000 MHz
33	5444.000000 MHz	83	5474.000000 MHz
34	5454.000000 MHz	84	5642.000000 MHz
35	5594.000000 MHz	85	5693.000000 MHz
36	5361.000000 MHz	86	5574.000000 MHz
37	5456.000000 MHz	87	5304.000000 MHz
38	5657.000000 MHz	88	5290.000000 MHz
39	5695.000000 MHz	89	5435.000000 MHz
40	5297.000000 MHz	90	5564.000000 MHz
41	5356.000000 MHz	91	5331.000000 MHz
42	5512.000000 MHz	92	5348.000000 MHz
43	5705.000000 MHz	93	5702.000000 MHz
44	5681.000000 MHz	94	5286.000000 MHz
45	5535.000000 MHz	95	5333.000000 MHz
46	5511.000000 MHz	96	5662.000000 MHz
47	5438.000000 MHz	97	5396.000000 MHz
48	5722.000000 MHz	98	5477.000000 MHz
49	5515.000000 MHz	99	5710.000000 MHz
50	5548.000000 MHz	100	5590.000000 MHz

Table 10.2-6: List of frequencies of hopping radar type 6 for Trial 5

Hop number	Hop frequency	Hop number	Hop frequency
1	5417.000000 MHz	51	5652.000000 MHz
2	5342.000000 MHz	52	5438.000000 MHz
3	5609.000000 MHz	53	5482.000000 MHz
4	5690.000000 MHz	54	5464.000000 MHz
5	5411.000000 MHz	55	5356.000000 MHz
6	5703.000000 MHz	56	5380.000000 MHz
7	5314.000000 MHz	57	5605.000000 MHz
8	5429.000000 MHz	58	5588.000000 MHz
9	5321.000000 MHz	59	5486.000000 MHz
10	5676.000000 MHz	60	5538.000000 MHz
11	5705.000000 MHz	61	5551.000000 MHz
12	5350.000000 MHz	62	5668.000000 MHz
13	5401.000000 MHz	63	5707.000000 MHz
14	5287.000000 MHz	64	5682.000000 MHz
15	5672.000000 MHz	65	5539.000000 MHz
16	5437.000000 MHz	66	5403.000000 MHz
17	5341.000000 MHz	67	5474.000000 MHz
18	5519.000000 MHz	68	5546.000000 MHz
19	5550.000000 MHz	69	5352.000000 MHz
20	5521.000000 MHz	70	5435.000000 MHz
21	5358.000000 MHz	71	5622.000000 MHz
22	5677.000000 MHz	72	5377.000000 MHz
23	5711.000000 MHz	73	5720.000000 MHz
24	5478.000000 MHz	74	5600.000000 MHz
25	5334.000000 MHz	75	5493.000000 MHz
26	5547.000000 MHz	76	5463.000000 MHz
27	5433.000000 MHz	77	5427.000000 MHz
28	5553.000000 MHz	78	5663.000000 MHz
29	5323.000000 MHz	79	5497.000000 MHz
30	5508.000000 MHz	80	5489.000000 MHz
31	5374.000000 MHz	81	5692.000000 MHz
32	5416.000000 MHz	82	5662.000000 MHz
33	5406.000000 MHz	83	5589.000000 MHz
34	5419.000000 MHz	84	5276.000000 MHz
35	5329.000000 MHz	85	5627.000000 MHz
36	5382.000000 MHz	86	5372.000000 MHz
37	5283.000000 MHz	87	5531.000000 MHz
38	5253.000000 MHz	88	5624.000000 MHz
39	5413.000000 MHz	89	5678.000000 MHz
40	5325.000000 MHz	90	5512.000000 MHz
41	5700.000000 MHz	91	5537.000000 MHz
42	5255.000000 MHz	92	5394.000000 MHz
43	5492.000000 MHz	93	5689.000000 MHz
44	5339.000000 MHz	94	5525.000000 MHz
45	5338.000000 MHz	95	5467.000000 MHz
46	5671.000000 MHz	96	5481.000000 MHz
47	5665.000000 MHz	97	5494.000000 MHz
48	5621.000000 MHz	98	5617.000000 MHz
49	5570.000000 MHz	99	5379.000000 MHz
50	5601.000000 MHz	100	5279.000000 MHz

Table 10.2-7: List of frequencies of hopping radar type 6 for Trial 6

Hop number	Hop frequency	Hop number	Hop frequency
1	5459.000000 MHz	51	5485.000000 MHz
2	5252.000000 MHz	52	5534.000000 MHz
3	5610.000000 MHz	53	5651.000000 MHz
4	5712.000000 MHz	54	5523.000000 MHz
5	5275.000000 MHz	55	5349.000000 MHz
6	5273.000000 MHz	56	5412.000000 MHz
7	5654.000000 MHz	57	5283.000000 MHz
8	5599.000000 MHz	58	5326.000000 MHz
9	5304.000000 MHz	59	5488.000000 MHz
10	5298.000000 MHz	60	5334.000000 MHz
11	5700.000000 MHz	61	5694.000000 MHz
12	5294.000000 MHz	62	5300.000000 MHz
13	5343.000000 MHz	63	5711.000000 MHz
14	5513.000000 MHz	64	5625.000000 MHz
15	5501.000000 MHz	65	5486.000000 MHz
16	5691.000000 MHz	66	5508.000000 MHz
17	5531.000000 MHz	67	5696.000000 MHz
18	5667.000000 MHz	68	5601.000000 MHz
19	5332.000000 MHz	69	5454.000000 MHz
20	5453.000000 MHz	70	5693.000000 MHz
21	5481.000000 MHz	71	5411.000000 MHz
22	5359.000000 MHz	72	5616.000000 MHz
23	5565.000000 MHz	73	5482.000000 MHz
24	5576.000000 MHz	74	5402.000000 MHz
25	5636.000000 MHz	75	5626.000000 MHz
26	5511.000000 MHz	76	5407.000000 MHz
27	5663.000000 MHz	77	5715.000000 MHz
28	5684.000000 MHz	78	5622.000000 MHz
29	5431.000000 MHz	79	5717.000000 MHz
30	5253.000000 MHz	80	5641.000000 MHz
31	5311.000000 MHz	81	5289.000000 MHz
32	5325.000000 MHz	82	5551.000000 MHz
33	5532.000000 MHz	83	5606.000000 MHz
34	5559.000000 MHz	84	5286.000000 MHz
35	5541.000000 MHz	85	5442.000000 MHz
36	5624.000000 MHz	86	5462.000000 MHz
37	5487.000000 MHz	87	5267.000000 MHz
38	5562.000000 MHz	88	5356.000000 MHz
39	5506.000000 MHz	89	5250.000000 MHz
40	5440.000000 MHz	90	5635.000000 MHz
41	5695.000000 MHz	91	5502.000000 MHz
42	5328.000000 MHz	92	5518.000000 MHz
43	5458.000000 MHz	93	5408.000000 MHz
44	5489.000000 MHz	94	5355.000000 MHz
45	5418.000000 MHz	95	5290.000000 MHz
46	5645.000000 MHz	96	5340.000000 MHz
47	5613.000000 MHz	97	5719.000000 MHz
48	5261.000000 MHz	98	5323.000000 MHz
49	5515.000000 MHz	99	5642.000000 MHz
50	5688.000000 MHz	100	5371.000000 MHz

Table 10.2-8: List of frequencies of hopping radar type 6 for Trial 7

Hop number	Hop frequency	Hop number	Hop frequency
1	5447.000000 MHz	51	5381.000000 MHz
2	5336.000000 MHz	52	5661.000000 MHz
3	5601.000000 MHz	53	5604.000000 MHz
4	5335.000000 MHz	54	5702.000000 MHz
5	5591.000000 MHz	55	5711.000000 MHz
6	5407.000000 MHz	56	5502.000000 MHz
7	5701.000000 MHz	57	5323.000000 MHz
8	5501.000000 MHz	58	5521.000000 MHz
9	5261.000000 MHz	59	5324.000000 MHz
10	5409.000000 MHz	60	5646.000000 MHz
11	5359.000000 MHz	61	5690.000000 MHz
12	5605.000000 MHz	62	5657.000000 MHz
13	5472.000000 MHz	63	5486.000000 MHz
14	5503.000000 MHz	64	5418.000000 MHz
15	5388.000000 MHz	65	5508.000000 MHz
16	5250.000000 MHz	66	5263.000000 MHz
17	5457.000000 MHz	67	5397.000000 MHz
18	5393.000000 MHz	68	5305.000000 MHz
19	5510.000000 MHz	69	5717.000000 MHz
20	5482.000000 MHz	70	5562.000000 MHz
21	5491.000000 MHz	71	5458.000000 MHz
22	5469.000000 MHz	72	5357.000000 MHz
23	5548.000000 MHz	73	5456.000000 MHz
24	5614.000000 MHz	74	5279.000000 MHz
25	5557.000000 MHz	75	5634.000000 MHz
26	5517.000000 MHz	76	5350.000000 MHz
27	5611.000000 MHz	77	5675.000000 MHz
28	5627.000000 MHz	78	5519.000000 MHz
29	5580.000000 MHz	79	5547.000000 MHz
30	5295.000000 MHz	80	5466.000000 MHz
31	5477.000000 MHz	81	5500.000000 MHz
32	5597.000000 MHz	82	5285.000000 MHz
33	5437.000000 MHz	83	5267.000000 MHz
34	5639.000000 MHz	84	5587.000000 MHz
35	5719.000000 MHz	85	5623.000000 MHz
36	5375.000000 MHz	86	5327.000000 MHz
37	5577.000000 MHz	87	5402.000000 MHz
38	5401.000000 MHz	88	5674.000000 MHz
39	5673.000000 MHz	89	5463.000000 MHz
40	5273.000000 MHz	90	5430.000000 MHz
41	5384.000000 MHz	91	5410.000000 MHz
42	5395.000000 MHz	92	5300.000000 MHz
43	5342.000000 MHz	93	5252.000000 MHz
44	5408.000000 MHz	94	5663.000000 MHz
45	5527.000000 MHz	95	5637.000000 MHz
46	5608.000000 MHz	96	5662.000000 MHz
47	5511.000000 MHz	97	5544.000000 MHz
48	5676.000000 MHz	98	5453.000000 MHz
49	5310.000000 MHz	99	5497.000000 MHz
50	5512.000000 MHz	100	5381.000000 MHz

Table 10.2-9: List of frequencies of hopping radar type 6 for Trial 8

Hop number	Hop frequency	Hop number	Hop frequency
1	5629.000000 MHz	51	5603.000000 MHz
2	5306.000000 MHz	52	5260.000000 MHz
3	5505.000000 MHz	53	5261.000000 MHz
4	5472.000000 MHz	54	5695.000000 MHz
5	5414.000000 MHz	55	5552.000000 MHz
6	5421.000000 MHz	56	5555.000000 MHz
7	5373.000000 MHz	57	5323.000000 MHz
8	5376.000000 MHz	58	5360.000000 MHz
9	5432.000000 MHz	59	5494.000000 MHz
10	5359.000000 MHz	60	5381.000000 MHz
11	5270.000000 MHz	61	5474.000000 MHz
12	5643.000000 MHz	62	5349.000000 MHz
13	5522.000000 MHz	63	5596.000000 MHz
14	5491.000000 MHz	64	5378.000000 MHz
15	5400.000000 MHz	65	5595.000000 MHz
16	5531.000000 MHz	66	5446.000000 MHz
17	5406.000000 MHz	67	5255.000000 MHz
18	5639.000000 MHz	68	5251.000000 MHz
19	5410.000000 MHz	69	5429.000000 MHz
20	5508.000000 MHz	70	5682.000000 MHz
21	5618.000000 MHz	71	5532.000000 MHz
22	5295.000000 MHz	72	5621.000000 MHz
23	5534.000000 MHz	73	5719.000000 MHz
24	5645.000000 MHz	74	5634.000000 MHz
25	5583.000000 MHz	75	5454.000000 MHz
26	5347.000000 MHz	76	5330.000000 MHz
27	5262.000000 MHz	77	5586.000000 MHz
28	5606.000000 MHz	78	5475.000000 MHz
29	5301.000000 MHz	79	5500.000000 MHz
30	5609.000000 MHz	80	5587.000000 MHz
31	5646.000000 MHz	81	5351.000000 MHz
32	5296.000000 MHz	82	5633.000000 MHz
33	5512.000000 MHz	83	5352.000000 MHz
34	5362.000000 MHz	84	5519.000000 MHz
35	5530.000000 MHz	85	5364.000000 MHz
36	5335.000000 MHz	86	5573.000000 MHz
37	5401.000000 MHz	87	5332.000000 MHz
38	5638.000000 MHz	88	5632.000000 MHz
39	5705.000000 MHz	89	5566.000000 MHz
40	5551.000000 MHz	90	5591.000000 MHz
41	5336.000000 MHz	91	5526.000000 MHz
42	5722.000000 MHz	92	5569.000000 MHz
43	5300.000000 MHz	93	5492.000000 MHz
44	5625.000000 MHz	94	5356.000000 MHz
45	5441.000000 MHz	95	5642.000000 MHz
46	5503.000000 MHz	96	5294.000000 MHz
47	5485.000000 MHz	97	5680.000000 MHz
48	5355.000000 MHz	98	5713.000000 MHz
49	5272.000000 MHz	99	5321.000000 MHz
50	5384.000000 MHz	100	5603.000000 MHz

Table 10.2-10: List of frequencies of hopping radar type 6 for Trial 9

Hop number	Hop frequency	Hop number	Hop frequency
1	5686.000000 MHz	51	5518.000000 MHz
2	5264.000000 MHz	52	5468.000000 MHz
3	5618.000000 MHz	53	5605.000000 MHz
4	5639.000000 MHz	54	5387.000000 MHz
5	5715.000000 MHz	55	5717.000000 MHz
6	5492.000000 MHz	56	5528.000000 MHz
7	5675.000000 MHz	57	5322.000000 MHz
8	5653.000000 MHz	58	5340.000000 MHz
9	5594.000000 MHz	59	5705.000000 MHz
10	5540.000000 MHz	60	5687.000000 MHz
11	5464.000000 MHz	61	5517.000000 MHz
12	5417.000000 MHz	62	5699.000000 MHz
13	5646.000000 MHz	63	5586.000000 MHz
14	5703.000000 MHz	64	5475.000000 MHz
15	5651.000000 MHz	65	5392.000000 MHz
16	5526.000000 MHz	66	5424.000000 MHz
17	5358.000000 MHz	67	5716.000000 MHz
18	5580.000000 MHz	68	5451.000000 MHz
19	5283.000000 MHz	69	5635.000000 MHz
20	5641.000000 MHz	70	5519.000000 MHz
21	5585.000000 MHz	71	5423.000000 MHz
22	5471.000000 MHz	72	5598.000000 MHz
23	5399.000000 MHz	73	5478.000000 MHz
24	5577.000000 MHz	74	5406.000000 MHz
25	5499.000000 MHz	75	5573.000000 MHz
26	5397.000000 MHz	76	5644.000000 MHz
27	5504.000000 MHz	77	5608.000000 MHz
28	5560.000000 MHz	78	5662.000000 MHz
29	5502.000000 MHz	79	5431.000000 MHz
30	5624.000000 MHz	80	5265.000000 MHz
31	5671.000000 MHz	81	5632.000000 MHz
32	5366.000000 MHz	82	5640.000000 MHz
33	5425.000000 MHz	83	5262.000000 MHz
34	5384.000000 MHz	84	5282.000000 MHz
35	5420.000000 MHz	85	5595.000000 MHz
36	5588.000000 MHz	86	5278.000000 MHz
37	5556.000000 MHz	87	5658.000000 MHz
38	5256.000000 MHz	88	5701.000000 MHz
39	5316.000000 MHz	89	5317.000000 MHz
40	5297.000000 MHz	90	5261.000000 MHz
41	5529.000000 MHz	91	5707.000000 MHz
42	5682.000000 MHz	92	5481.000000 MHz
43	5342.000000 MHz	93	5323.000000 MHz
44	5548.000000 MHz	94	5405.000000 MHz
45	5660.000000 MHz	95	5319.000000 MHz
46	5620.000000 MHz	96	5266.000000 MHz
47	5493.000000 MHz	97	5344.000000 MHz
48	5564.000000 MHz	98	5377.000000 MHz
49	5467.000000 MHz	99	5561.000000 MHz
50	5490.000000 MHz	100	5518.000000 MHz

Table 10.2-11: List of frequencies of hopping radar type 6 for Trial 10

Hop number	Hop frequency	Hop number	Hop frequency
1	5686.000000 MHz	51	5518.000000 MHz
2	5264.000000 MHz	52	5468.000000 MHz
3	5618.000000 MHz	53	5605.000000 MHz
4	5639.000000 MHz	54	5387.000000 MHz
5	5715.000000 MHz	55	5717.000000 MHz
6	5492.000000 MHz	56	5528.000000 MHz
7	5675.000000 MHz	57	5322.000000 MHz
8	5653.000000 MHz	58	5340.000000 MHz
9	5594.000000 MHz	59	5705.000000 MHz
10	5540.000000 MHz	60	5687.000000 MHz
11	5464.000000 MHz	61	5517.000000 MHz
12	5417.000000 MHz	62	5699.000000 MHz
13	5646.000000 MHz	63	5586.000000 MHz
14	5703.000000 MHz	64	5475.000000 MHz
15	5651.000000 MHz	65	5392.000000 MHz
16	5526.000000 MHz	66	5424.000000 MHz
17	5358.000000 MHz	67	5716.000000 MHz
18	5580.000000 MHz	68	5451.000000 MHz
19	5283.000000 MHz	69	5635.000000 MHz
20	5641.000000 MHz	70	5519.000000 MHz
21	5585.000000 MHz	71	5423.000000 MHz
22	5471.000000 MHz	72	5598.000000 MHz
23	5399.000000 MHz	73	5478.000000 MHz
24	5577.000000 MHz	74	5406.000000 MHz
25	5499.000000 MHz	75	5573.000000 MHz
26	5397.000000 MHz	76	5644.000000 MHz
27	5504.000000 MHz	77	5608.000000 MHz
28	5560.000000 MHz	78	5662.000000 MHz
29	5502.000000 MHz	79	5431.000000 MHz
30	5624.000000 MHz	80	5265.000000 MHz
31	5671.000000 MHz	81	5632.000000 MHz
32	5366.000000 MHz	82	5640.000000 MHz
33	5425.000000 MHz	83	5262.000000 MHz
34	5384.000000 MHz	84	5282.000000 MHz
35	5420.000000 MHz	85	5595.000000 MHz
36	5588.000000 MHz	86	5278.000000 MHz
37	5556.000000 MHz	87	5658.000000 MHz
38	5256.000000 MHz	88	5701.000000 MHz
39	5316.000000 MHz	89	5317.000000 MHz
40	5297.000000 MHz	90	5261.000000 MHz
41	5529.000000 MHz	91	5707.000000 MHz
42	5682.000000 MHz	92	5481.000000 MHz
43	5342.000000 MHz	93	5323.000000 MHz
44	5548.000000 MHz	94	5405.000000 MHz
45	5660.000000 MHz	95	5319.000000 MHz
46	5620.000000 MHz	96	5266.000000 MHz
47	5493.000000 MHz	97	5344.000000 MHz
48	5564.000000 MHz	98	5377.000000 MHz
49	5467.000000 MHz	99	5561.000000 MHz
50	5490.000000 MHz	100	5518.000000 MHz

Table 10.2-12: List of frequencies of hopping radar type 6 for Trial 11

Hop number	Hop frequency	Hop number	Hop frequency
1	5679.000000 MHz	51	5276.000000 MHz
2	5403.000000 MHz	52	5253.000000 MHz
3	5456.000000 MHz	53	5641.000000 MHz
4	5638.000000 MHz	54	5661.000000 MHz
5	5275.000000 MHz	55	5695.000000 MHz
6	5360.000000 MHz	56	5667.000000 MHz
7	5518.000000 MHz	57	5386.000000 MHz
8	5570.000000 MHz	58	5279.000000 MHz
9	5567.000000 MHz	59	5432.000000 MHz
10	5477.000000 MHz	60	5566.000000 MHz
11	5451.000000 MHz	61	5600.000000 MHz
12	5391.000000 MHz	62	5335.000000 MHz
13	5370.000000 MHz	63	5347.000000 MHz
14	5422.000000 MHz	64	5446.000000 MHz
15	5701.000000 MHz	65	5297.000000 MHz
16	5542.000000 MHz	66	5677.000000 MHz
17	5356.000000 MHz	67	5470.000000 MHz
18	5284.000000 MHz	68	5565.000000 MHz
19	5466.000000 MHz	69	5448.000000 MHz
20	5637.000000 MHz	70	5265.000000 MHz
21	5650.000000 MHz	71	5270.000000 MHz
22	5500.000000 MHz	72	5336.000000 MHz
23	5376.000000 MHz	73	5498.000000 MHz
24	5452.000000 MHz	74	5319.000000 MHz
25	5722.000000 MHz	75	5546.000000 MHz
26	5338.000000 MHz	76	5697.000000 MHz
27	5390.000000 MHz	77	5420.000000 MHz
28	5576.000000 MHz	78	5550.000000 MHz
29	5434.000000 MHz	79	5459.000000 MHz
30	5538.000000 MHz	80	5700.000000 MHz
31	5295.000000 MHz	81	5374.000000 MHz
32	5610.000000 MHz	82	5621.000000 MHz
33	5515.000000 MHz	83	5478.000000 MHz
34	5324.000000 MHz	84	5491.000000 MHz
35	5505.000000 MHz	85	5487.000000 MHz
36	5494.000000 MHz	86	5602.000000 MHz
37	5404.000000 MHz	87	5655.000000 MHz
38	5539.000000 MHz	88	5497.000000 MHz
39	5625.000000 MHz	89	5499.000000 MHz
40	5439.000000 MHz	90	5450.000000 MHz
41	5635.000000 MHz	91	5583.000000 MHz
42	5480.000000 MHz	92	5363.000000 MHz
43	5290.000000 MHz	93	5302.000000 MHz
44	5652.000000 MHz	94	5366.000000 MHz
45	5569.000000 MHz	95	5471.000000 MHz
46	5603.000000 MHz	96	5407.000000 MHz
47	5263.000000 MHz	97	5691.000000 MHz
48	5713.000000 MHz	98	5286.000000 MHz
49	5560.000000 MHz	99	5339.000000 MHz
50	5579.000000 MHz	100	5276.000000 MHz

Table 10.2-13: List of frequencies of hopping radar type 6 for Trial 12

Hop number	Hop frequency	Hop number	Hop frequency
1	5319.000000 MHz	51	5571.000000 MHz
2	5380.000000 MHz	52	5471.000000 MHz
3	5619.000000 MHz	53	5429.000000 MHz
4	5407.000000 MHz	54	5378.000000 MHz
5	5664.000000 MHz	55	5587.000000 MHz
6	5479.000000 MHz	56	5436.000000 MHz
7	5572.000000 MHz	57	5344.000000 MHz
8	5300.000000 MHz	58	5555.000000 MHz
9	5399.000000 MHz	59	5325.000000 MHz
10	5694.000000 MHz	60	5404.000000 MHz
11	5690.000000 MHz	61	5485.000000 MHz
12	5454.000000 MHz	62	5665.000000 MHz
13	5697.000000 MHz	63	5577.000000 MHz
14	5590.000000 MHz	64	5685.000000 MHz
15	5663.000000 MHz	65	5382.000000 MHz
16	5686.000000 MHz	66	5456.000000 MHz
17	5451.000000 MHz	67	5712.000000 MHz
18	5692.000000 MHz	68	5403.000000 MHz
19	5531.000000 MHz	69	5519.000000 MHz
20	5439.000000 MHz	70	5523.000000 MHz
21	5592.000000 MHz	71	5290.000000 MHz
22	5635.000000 MHz	72	5379.000000 MHz
23	5676.000000 MHz	73	5398.000000 MHz
24	5491.000000 MHz	74	5682.000000 MHz
25	5544.000000 MHz	75	5548.000000 MHz
26	5478.000000 MHz	76	5613.000000 MHz
27	5385.000000 MHz	77	5628.000000 MHz
28	5266.000000 MHz	78	5338.000000 MHz
29	5494.000000 MHz	79	5303.000000 MHz
30	5324.000000 MHz	80	5350.000000 MHz
31	5540.000000 MHz	81	5294.000000 MHz
32	5513.000000 MHz	82	5666.000000 MHz
33	5370.000000 MHz	83	5623.000000 MHz
34	5630.000000 MHz	84	5351.000000 MHz
35	5530.000000 MHz	85	5600.000000 MHz
36	5480.000000 MHz	86	5352.000000 MHz
37	5463.000000 MHz	87	5641.000000 MHz
38	5538.000000 MHz	88	5335.000000 MHz
39	5261.000000 MHz	89	5271.000000 MHz
40	5640.000000 MHz	90	5430.000000 MHz
41	5552.000000 MHz	91	5373.000000 MHz
42	5505.000000 MHz	92	5297.000000 MHz
43	5527.000000 MHz	93	5305.000000 MHz
44	5533.000000 MHz	94	5283.000000 MHz
45	5721.000000 MHz	95	5536.000000 MHz
46	5610.000000 MHz	96	5705.000000 MHz
47	5497.000000 MHz	97	5674.000000 MHz
48	5363.000000 MHz	98	5282.000000 MHz
49	5405.000000 MHz	99	5286.000000 MHz
50	5270.000000 MHz	100	5571.000000 MHz

Table 10.2-14: List of frequencies of hopping radar type 6 for Trial 13

Hop number	Hop frequency	Hop number	Hop frequency
1	5319.000000 MHz	51	5571.000000 MHz
2	5380.000000 MHz	52	5471.000000 MHz
3	5619.000000 MHz	53	5429.000000 MHz
4	5407.000000 MHz	54	5378.000000 MHz
5	5664.000000 MHz	55	5587.000000 MHz
6	5479.000000 MHz	56	5436.000000 MHz
7	5572.000000 MHz	57	5344.000000 MHz
8	5300.000000 MHz	58	5555.000000 MHz
9	5399.000000 MHz	59	5325.000000 MHz
10	5694.000000 MHz	60	5404.000000 MHz
11	5690.000000 MHz	61	5485.000000 MHz
12	5454.000000 MHz	62	5665.000000 MHz
13	5697.000000 MHz	63	5577.000000 MHz
14	5590.000000 MHz	64	5685.000000 MHz
15	5663.000000 MHz	65	5382.000000 MHz
16	5686.000000 MHz	66	5456.000000 MHz
17	5451.000000 MHz	67	5712.000000 MHz
18	5692.000000 MHz	68	5403.000000 MHz
19	5531.000000 MHz	69	5519.000000 MHz
20	5439.000000 MHz	70	5523.000000 MHz
21	5592.000000 MHz	71	5290.000000 MHz
22	5635.000000 MHz	72	5379.000000 MHz
23	5676.000000 MHz	73	5398.000000 MHz
24	5491.000000 MHz	74	5682.000000 MHz
25	5544.000000 MHz	75	5548.000000 MHz
26	5478.000000 MHz	76	5613.000000 MHz
27	5385.000000 MHz	77	5628.000000 MHz
28	5266.000000 MHz	78	5338.000000 MHz
29	5494.000000 MHz	79	5303.000000 MHz
30	5324.000000 MHz	80	5350.000000 MHz
31	5540.000000 MHz	81	5294.000000 MHz
32	5513.000000 MHz	82	5666.000000 MHz
33	5370.000000 MHz	83	5623.000000 MHz
34	5630.000000 MHz	84	5351.000000 MHz
35	5530.000000 MHz	85	5600.000000 MHz
36	5480.000000 MHz	86	5352.000000 MHz
37	5463.000000 MHz	87	5641.000000 MHz
38	5538.000000 MHz	88	5335.000000 MHz
39	5261.000000 MHz	89	5271.000000 MHz
40	5640.000000 MHz	90	5430.000000 MHz
41	5552.000000 MHz	91	5373.000000 MHz
42	5505.000000 MHz	92	5297.000000 MHz
43	5527.000000 MHz	93	5305.000000 MHz
44	5533.000000 MHz	94	5283.000000 MHz
45	5721.000000 MHz	95	5536.000000 MHz
46	5610.000000 MHz	96	5705.000000 MHz
47	5497.000000 MHz	97	5674.000000 MHz
48	5363.000000 MHz	98	5282.000000 MHz
49	5405.000000 MHz	99	5286.000000 MHz
50	5270.000000 MHz	100	5571.000000 MHz

Table 10.2-15: List of frequencies of hopping radar type 6 for Trial 14

Hop number	Hop frequency	Hop number	Hop frequency
1	5614.000000 MHz	51	5645.000000 MHz
2	5298.000000 MHz	52	5709.000000 MHz
3	5431.000000 MHz	53	5261.000000 MHz
4	5279.000000 MHz	54	5585.000000 MHz
5	5281.000000 MHz	55	5412.000000 MHz
6	5420.000000 MHz	56	5329.000000 MHz
7	5289.000000 MHz	57	5257.000000 MHz
8	5569.000000 MHz	58	5511.000000 MHz
9	5456.000000 MHz	59	5521.000000 MHz
10	5651.000000 MHz	60	5260.000000 MHz
11	5442.000000 MHz	61	5380.000000 MHz
12	5271.000000 MHz	62	5253.000000 MHz
13	5303.000000 MHz	63	5250.000000 MHz
14	5440.000000 MHz	64	5713.000000 MHz
15	5723.000000 MHz	65	5285.000000 MHz
16	5678.000000 MHz	66	5355.000000 MHz
17	5464.000000 MHz	67	5486.000000 MHz
18	5354.000000 MHz	68	5272.000000 MHz
19	5361.000000 MHz	69	5686.000000 MHz
20	5301.000000 MHz	70	5423.000000 MHz
21	5602.000000 MHz	71	5525.000000 MHz
22	5437.000000 MHz	72	5518.000000 MHz
23	5268.000000 MHz	73	5417.000000 MHz
24	5674.000000 MHz	74	5278.000000 MHz
25	5274.000000 MHz	75	5439.000000 MHz
26	5634.000000 MHz	76	5515.000000 MHz
27	5493.000000 MHz	77	5302.000000 MHz
28	5558.000000 MHz	78	5436.000000 MHz
29	5326.000000 MHz	79	5478.000000 MHz
30	5648.000000 MHz	80	5699.000000 MHz
31	5389.000000 MHz	81	5544.000000 MHz
32	5270.000000 MHz	82	5349.000000 MHz
33	5314.000000 MHz	83	5393.000000 MHz
34	5405.000000 MHz	84	5283.000000 MHz
35	5618.000000 MHz	85	5312.000000 MHz
36	5441.000000 MHz	86	5394.000000 MHz
37	5319.000000 MHz	87	5290.000000 MHz
38	5655.000000 MHz	88	5497.000000 MHz
39	5561.000000 MHz	89	5304.000000 MHz
40	5508.000000 MHz	90	5500.000000 MHz
41	5435.000000 MHz	91	5407.000000 MHz
42	5409.000000 MHz	92	5331.000000 MHz
43	5554.000000 MHz	93	5546.000000 MHz
44	5408.000000 MHz	94	5676.000000 MHz
45	5320.000000 MHz	95	5568.000000 MHz
46	5582.000000 MHz	96	5299.000000 MHz
47	5306.000000 MHz	97	5711.000000 MHz
48	5330.000000 MHz	98	5396.000000 MHz
49	5322.000000 MHz	99	5370.000000 MHz
50	5673.000000 MHz	100	5645.000000 MHz

Table 10.2-16: List of frequencies of hopping radar type 6 for Trial 15

Hop number	Hop frequency	Hop number	Hop frequency
1	5441.000000 MHz	51	5420.000000 MHz
2	5569.000000 MHz	52	5456.000000 MHz
3	5556.000000 MHz	53	5683.000000 MHz
4	5697.000000 MHz	54	5283.000000 MHz
5	5539.000000 MHz	55	5431.000000 MHz
6	5303.000000 MHz	56	5430.000000 MHz
7	5458.000000 MHz	57	5702.000000 MHz
8	5334.000000 MHz	58	5575.000000 MHz
9	5507.000000 MHz	59	5423.000000 MHz
10	5376.000000 MHz	60	5291.000000 MHz
11	5279.000000 MHz	61	5336.000000 MHz
12	5483.000000 MHz	62	5646.000000 MHz
13	5625.000000 MHz	63	5270.000000 MHz
14	5634.000000 MHz	64	5318.000000 MHz
15	5617.000000 MHz	65	5595.000000 MHz
16	5322.000000 MHz	66	5401.000000 MHz
17	5457.000000 MHz	67	5615.000000 MHz
18	5635.000000 MHz	68	5343.000000 MHz
19	5624.000000 MHz	69	5530.000000 MHz
20	5278.000000 MHz	70	5281.000000 MHz
21	5485.000000 MHz	71	5434.000000 MHz
22	5271.000000 MHz	72	5471.000000 MHz
23	5362.000000 MHz	73	5425.000000 MHz
24	5598.000000 MHz	74	5553.000000 MHz
25	5663.000000 MHz	75	5605.000000 MHz
26	5357.000000 MHz	76	5524.000000 MHz
27	5597.000000 MHz	77	5344.000000 MHz
28	5481.000000 MHz	78	5442.000000 MHz
29	5484.000000 MHz	79	5342.000000 MHz
30	5678.000000 MHz	80	5493.000000 MHz
31	5712.000000 MHz	81	5272.000000 MHz
32	5397.000000 MHz	82	5366.000000 MHz
33	5704.000000 MHz	83	5355.000000 MHz
34	5613.000000 MHz	84	5480.000000 MHz
35	5548.000000 MHz	85	5655.000000 MHz
36	5451.000000 MHz	86	5585.000000 MHz
37	5306.000000 MHz	87	5584.000000 MHz
38	5547.000000 MHz	88	5258.000000 MHz
39	5259.000000 MHz	89	5684.000000 MHz
40	5660.000000 MHz	90	5301.000000 MHz
41	5680.000000 MHz	91	5447.000000 MHz
42	5714.000000 MHz	92	5274.000000 MHz
43	5653.000000 MHz	93	5330.000000 MHz
44	5267.000000 MHz	94	5461.000000 MHz
45	5422.000000 MHz	95	5361.000000 MHz
46	5604.000000 MHz	96	5580.000000 MHz
47	5360.000000 MHz	97	5255.000000 MHz
48	5389.000000 MHz	98	5399.000000 MHz
49	5337.000000 MHz	99	5694.000000 MHz
50	5367.000000 MHz	100	5420.000000 MHz

Table 10.2-17: List of frequencies of hopping radar type 6 for Trial 16

Hop number	Hop frequency	Hop number	Hop frequency
1	5323.000000 MHz	51	5347.000000 MHz
2	5608.000000 MHz	52	5484.000000 MHz
3	5391.000000 MHz	53	5689.000000 MHz
4	5306.000000 MHz	54	5300.000000 MHz
5	5552.000000 MHz	55	5538.000000 MHz
6	5553.000000 MHz	56	5499.000000 MHz
7	5701.000000 MHz	57	5631.000000 MHz
8	5351.000000 MHz	58	5319.000000 MHz
9	5378.000000 MHz	59	5467.000000 MHz
10	5696.000000 MHz	60	5434.000000 MHz
11	5312.000000 MHz	61	5489.000000 MHz
12	5385.000000 MHz	62	5576.000000 MHz
13	5424.000000 MHz	63	5289.000000 MHz
14	5639.000000 MHz	64	5595.000000 MHz
15	5679.000000 MHz	65	5332.000000 MHz
16	5386.000000 MHz	66	5444.000000 MHz
17	5716.000000 MHz	67	5366.000000 MHz
18	5714.000000 MHz	68	5680.000000 MHz
19	5274.000000 MHz	69	5426.000000 MHz
20	5693.000000 MHz	70	5336.000000 MHz
21	5596.000000 MHz	71	5258.000000 MHz
22	5564.000000 MHz	72	5407.000000 MHz
23	5488.000000 MHz	73	5292.000000 MHz
24	5427.000000 MHz	74	5358.000000 MHz
25	5255.000000 MHz	75	5252.000000 MHz
26	5263.000000 MHz	76	5682.000000 MHz
27	5303.000000 MHz	77	5515.000000 MHz
28	5320.000000 MHz	78	5645.000000 MHz
29	5281.000000 MHz	79	5566.000000 MHz
30	5635.000000 MHz	80	5353.000000 MHz
31	5511.000000 MHz	81	5288.000000 MHz
32	5547.000000 MHz	82	5476.000000 MHz
33	5533.000000 MHz	83	5703.000000 MHz
34	5293.000000 MHz	84	5548.000000 MHz
35	5667.000000 MHz	85	5470.000000 MHz
36	5599.000000 MHz	86	5562.000000 MHz
37	5283.000000 MHz	87	5338.000000 MHz
38	5573.000000 MHz	88	5620.000000 MHz
39	5607.000000 MHz	89	5287.000000 MHz
40	5632.000000 MHz	90	5591.000000 MHz
41	5556.000000 MHz	91	5603.000000 MHz
42	5330.000000 MHz	92	5709.000000 MHz
43	5614.000000 MHz	93	5605.000000 MHz
44	5630.000000 MHz	94	5254.000000 MHz
45	5474.000000 MHz	95	5530.000000 MHz
46	5317.000000 MHz	96	5344.000000 MHz
47	5324.000000 MHz	97	5383.000000 MHz
48	5370.000000 MHz	98	5475.000000 MHz
49	5590.000000 MHz	99	5687.000000 MHz
50	5706.000000 MHz	100	5347.000000 MHz

Table 10.2-18: List of frequencies of hopping radar type 6 for Trial 17

Hop number	Hop frequency	Hop number	Hop frequency
1	5646.000000 MHz	51	5499.000000 MHz
2	5659.000000 MHz	52	5580.000000 MHz
3	5429.000000 MHz	53	5662.000000 MHz
4	5671.000000 MHz	54	5721.000000 MHz
5	5628.000000 MHz	55	5610.000000 MHz
6	5362.000000 MHz	56	5416.000000 MHz
7	5677.000000 MHz	57	5504.000000 MHz
8	5514.000000 MHz	58	5464.000000 MHz
9	5647.000000 MHz	59	5346.000000 MHz
10	5473.000000 MHz	60	5253.000000 MHz
11	5251.000000 MHz	61	5318.000000 MHz
12	5311.000000 MHz	62	5408.000000 MHz
13	5581.000000 MHz	63	5652.000000 MHz
14	5465.000000 MHz	64	5419.000000 MHz
15	5542.000000 MHz	65	5700.000000 MHz
16	5460.000000 MHz	66	5509.000000 MHz
17	5352.000000 MHz	67	5406.000000 MHz
18	5359.000000 MHz	68	5423.000000 MHz
19	5377.000000 MHz	69	5515.000000 MHz
20	5645.000000 MHz	70	5626.000000 MHz
21	5512.000000 MHz	71	5382.000000 MHz
22	5396.000000 MHz	72	5615.000000 MHz
23	5329.000000 MHz	73	5324.000000 MHz
24	5492.000000 MHz	74	5559.000000 MHz
25	5674.000000 MHz	75	5584.000000 MHz
26	5268.000000 MHz	76	5274.000000 MHz
27	5326.000000 MHz	77	5623.000000 MHz
28	5510.000000 MHz	78	5477.000000 MHz
29	5259.000000 MHz	79	5337.000000 MHz
30	5286.000000 MHz	80	5532.000000 MHz
31	5629.000000 MHz	81	5284.000000 MHz
32	5308.000000 MHz	82	5353.000000 MHz
33	5513.000000 MHz	83	5380.000000 MHz
34	5307.000000 MHz	84	5438.000000 MHz
35	5614.000000 MHz	85	5413.000000 MHz
36	5290.000000 MHz	86	5693.000000 MHz
37	5323.000000 MHz	87	5575.000000 MHz
38	5449.000000 MHz	88	5338.000000 MHz
39	5385.000000 MHz	89	5494.000000 MHz
40	5355.000000 MHz	90	5309.000000 MHz
41	5698.000000 MHz	91	5706.000000 MHz
42	5538.000000 MHz	92	5508.000000 MHz
43	5590.000000 MHz	93	5255.000000 MHz
44	5378.000000 MHz	94	5452.000000 MHz
45	5389.000000 MHz	95	5672.000000 MHz
46	5436.000000 MHz	96	5328.000000 MHz
47	5425.000000 MHz	97	5296.000000 MHz
48	5427.000000 MHz	98	5315.000000 MHz
49	5709.000000 MHz	99	5285.000000 MHz
50	5256.000000 MHz	100	5499.000000 MHz

Table 10.2-19: List of frequencies of hopping radar type 6 for Trial 18

Hop number	Hop frequency	Hop number	Hop frequency
1	5588.000000 MHz	51	5269.000000 MHz
2	5719.000000 MHz	52	5414.000000 MHz
3	5349.000000 MHz	53	5393.000000 MHz
4	5342.000000 MHz	54	5527.000000 MHz
5	5670.000000 MHz	55	5366.000000 MHz
6	5276.000000 MHz	56	5362.000000 MHz
7	5439.000000 MHz	57	5626.000000 MHz
8	5447.000000 MHz	58	5321.000000 MHz
9	5501.000000 MHz	59	5635.000000 MHz
10	5705.000000 MHz	60	5394.000000 MHz
11	5600.000000 MHz	61	5649.000000 MHz
12	5618.000000 MHz	62	5723.000000 MHz
13	5315.000000 MHz	63	5302.000000 MHz
14	5569.000000 MHz	64	5380.000000 MHz
15	5573.000000 MHz	65	5425.000000 MHz
16	5489.000000 MHz	66	5664.000000 MHz
17	5540.000000 MHz	67	5650.000000 MHz
18	5556.000000 MHz	68	5273.000000 MHz
19	5335.000000 MHz	69	5336.000000 MHz
20	5440.000000 MHz	70	5533.000000 MHz
21	5382.000000 MHz	71	5476.000000 MHz
22	5555.000000 MHz	72	5575.000000 MHz
23	5680.000000 MHz	73	5613.000000 MHz
24	5553.000000 MHz	74	5499.000000 MHz
25	5327.000000 MHz	75	5702.000000 MHz
26	5545.000000 MHz	76	5707.000000 MHz
27	5430.000000 MHz	77	5674.000000 MHz
28	5319.000000 MHz	78	5465.000000 MHz
29	5456.000000 MHz	79	5344.000000 MHz
30	5694.000000 MHz	80	5497.000000 MHz
31	5317.000000 MHz	81	5278.000000 MHz
32	5517.000000 MHz	82	5645.000000 MHz
33	5443.000000 MHz	83	5323.000000 MHz
34	5314.000000 MHz	84	5514.000000 MHz
35	5601.000000 MHz	85	5418.000000 MHz
36	5630.000000 MHz	86	5496.000000 MHz
37	5311.000000 MHz	87	5689.000000 MHz
38	5609.000000 MHz	88	5685.000000 MHz
39	5296.000000 MHz	89	5691.000000 MHz
40	5286.000000 MHz	90	5666.000000 MHz
41	5329.000000 MHz	91	5693.000000 MHz
42	5355.000000 MHz	92	5387.000000 MHz
43	5615.000000 MHz	93	5541.000000 MHz
44	5665.000000 MHz	94	5511.000000 MHz
45	5607.000000 MHz	95	5692.000000 MHz
46	5563.000000 MHz	96	5293.000000 MHz
47	5480.000000 MHz	97	5542.000000 MHz
48	5437.000000 MHz	98	5460.000000 MHz
49	5716.000000 MHz	99	5663.000000 MHz
50	5599.000000 MHz	100	5269.000000 MHz

Table 10.2-20: List of frequencies of hopping radar type 6 for Trial 19

Hop number	Hop frequency	Hop number	Hop frequency
1	5542.000000 MHz	51	5604.000000 MHz
2	5601.000000 MHz	52	5652.000000 MHz
3	5477.000000 MHz	53	5642.000000 MHz
4	5369.000000 MHz	54	5425.000000 MHz
5	5384.000000 MHz	55	5376.000000 MHz
6	5644.000000 MHz	56	5324.000000 MHz
7	5371.000000 MHz	57	5712.000000 MHz
8	5278.000000 MHz	58	5657.000000 MHz
9	5654.000000 MHz	59	5406.000000 MHz
10	5554.000000 MHz	60	5503.000000 MHz
11	5559.000000 MHz	61	5687.000000 MHz
12	5529.000000 MHz	62	5492.000000 MHz
13	5351.000000 MHz	63	5261.000000 MHz
14	5504.000000 MHz	64	5401.000000 MHz
15	5590.000000 MHz	65	5393.000000 MHz
16	5386.000000 MHz	66	5349.000000 MHz
17	5579.000000 MHz	67	5530.000000 MHz
18	5309.000000 MHz	68	5441.000000 MHz
19	5666.000000 MHz	69	5250.000000 MHz
20	5568.000000 MHz	70	5643.000000 MHz
21	5308.000000 MHz	71	5584.000000 MHz
22	5615.000000 MHz	72	5547.000000 MHz
23	5684.000000 MHz	73	5565.000000 MHz
24	5672.000000 MHz	74	5391.000000 MHz
25	5668.000000 MHz	75	5433.000000 MHz
26	5258.000000 MHz	76	5695.000000 MHz
27	5569.000000 MHz	77	5316.000000 MHz
28	5383.000000 MHz	78	5721.000000 MHz
29	5345.000000 MHz	79	5395.000000 MHz
30	5497.000000 MHz	80	5460.000000 MHz
31	5301.000000 MHz	81	5426.000000 MHz
32	5596.000000 MHz	82	5482.000000 MHz
33	5287.000000 MHz	83	5598.000000 MHz
34	5340.000000 MHz	84	5710.000000 MHz
35	5353.000000 MHz	85	5400.000000 MHz
36	5447.000000 MHz	86	5580.000000 MHz
37	5299.000000 MHz	87	5457.000000 MHz
38	5361.000000 MHz	88	5599.000000 MHz
39	5474.000000 MHz	89	5608.000000 MHz
40	5389.000000 MHz	90	5394.000000 MHz
41	5281.000000 MHz	91	5509.000000 MHz
42	5356.000000 MHz	92	5581.000000 MHz
43	5276.000000 MHz	93	5455.000000 MHz
44	5592.000000 MHz	94	5531.000000 MHz
45	5607.000000 MHz	95	5557.000000 MHz
46	5675.000000 MHz	96	5409.000000 MHz
47	5375.000000 MHz	97	5686.000000 MHz
48	5362.000000 MHz	98	5318.000000 MHz
49	5709.000000 MHz	99	5689.000000 MHz
50	5600.000000 MHz	100	5604.000000 MHz

Table 10.2-21: List of frequencies of hopping radar type 6 for Trial 20

Hop number	Hop frequency	Hop number	Hop frequency
1	5507.000000 MHz	51	5518.000000 MHz
2	5709.000000 MHz	52	5374.000000 MHz
3	5362.000000 MHz	53	5423.000000 MHz
4	5529.000000 MHz	54	5606.000000 MHz
5	5686.000000 MHz	55	5628.000000 MHz
6	5272.000000 MHz	56	5267.000000 MHz
7	5436.000000 MHz	57	5444.000000 MHz
8	5691.000000 MHz	58	5379.000000 MHz
9	5346.000000 MHz	59	5567.000000 MHz
10	5525.000000 MHz	60	5276.000000 MHz
11	5700.000000 MHz	61	5592.000000 MHz
12	5589.000000 MHz	62	5405.000000 MHz
13	5591.000000 MHz	63	5324.000000 MHz
14	5656.000000 MHz	64	5565.000000 MHz
15	5291.000000 MHz	65	5684.000000 MHz
16	5395.000000 MHz	66	5254.000000 MHz
17	5663.000000 MHz	67	5345.000000 MHz
18	5420.000000 MHz	68	5665.000000 MHz
19	5383.000000 MHz	69	5382.000000 MHz
20	5535.000000 MHz	70	5490.000000 MHz
21	5481.000000 MHz	71	5717.000000 MHz
22	5626.000000 MHz	72	5695.000000 MHz
23	5669.000000 MHz	73	5250.000000 MHz
24	5552.000000 MHz	74	5510.000000 MHz
25	5279.000000 MHz	75	5652.000000 MHz
26	5562.000000 MHz	76	5678.000000 MHz
27	5504.000000 MHz	77	5283.000000 MHz
28	5498.000000 MHz	78	5723.000000 MHz
29	5358.000000 MHz	79	5274.000000 MHz
30	5433.000000 MHz	80	5275.000000 MHz
31	5517.000000 MHz	81	5397.000000 MHz
32	5341.000000 MHz	82	5477.000000 MHz
33	5251.000000 MHz	83	5265.000000 MHz
34	5287.000000 MHz	84	5298.000000 MHz
35	5300.000000 MHz	85	5569.000000 MHz
36	5495.000000 MHz	86	5278.000000 MHz
37	5577.000000 MHz	87	5613.000000 MHz
38	5422.000000 MHz	88	5511.000000 MHz
39	5428.000000 MHz	89	5334.000000 MHz
40	5412.000000 MHz	90	5309.000000 MHz
41	5305.000000 MHz	91	5366.000000 MHz
42	5480.000000 MHz	92	5363.000000 MHz
43	5667.000000 MHz	93	5559.000000 MHz
44	5409.000000 MHz	94	5676.000000 MHz
45	5625.000000 MHz	95	5642.000000 MHz
46	5326.000000 MHz	96	5404.000000 MHz
47	5367.000000 MHz	97	5668.000000 MHz
48	5470.000000 MHz	98	5605.000000 MHz
49	5500.000000 MHz	99	5482.000000 MHz
50	5333.000000 MHz	100	5518.0C57:C9500000 MHz

Table 10.2-22: List of frequencies of hopping radar type 6 for Trial 21

Hop number	Hop frequency	Hop number	Hop frequency
1	5517.000000 MHz	51	5496.000000 MHz
2	5453.000000 MHz	52	5307.000000 MHz
3	5659.000000 MHz	53	5649.000000 MHz
4	5534.000000 MHz	54	5617.000000 MHz
5	5278.000000 MHz	55	5577.000000 MHz
6	5567.000000 MHz	56	5625.000000 MHz
7	5379.000000 MHz	57	5588.000000 MHz
8	5325.000000 MHz	58	5271.000000 MHz
9	5599.000000 MHz	59	5602.000000 MHz
10	5382.000000 MHz	60	5311.000000 MHz
11	5573.000000 MHz	61	5497.000000 MHz
12	5673.000000 MHz	62	5298.000000 MHz
13	5437.000000 MHz	63	5470.000000 MHz
14	5724.000000 MHz	64	5442.000000 MHz
15	5474.000000 MHz	65	5383.000000 MHz
16	5668.000000 MHz	66	5663.000000 MHz
17	5375.000000 MHz	67	5554.000000 MHz
18	5451.000000 MHz	68	5340.000000 MHz
19	5362.000000 MHz	69	5316.000000 MHz
20	5422.000000 MHz	70	5290.000000 MHz
21	5425.000000 MHz	71	5415.000000 MHz
22	5592.000000 MHz	72	5407.000000 MHz
23	5561.000000 MHz	73	5541.000000 MHz
24	5331.000000 MHz	74	5457.000000 MHz
25	5633.000000 MHz	75	5292.000000 MHz
26	5414.000000 MHz	76	5666.000000 MHz
27	5323.000000 MHz	77	5591.000000 MHz
28	5358.000000 MHz	78	5509.000000 MHz
29	5448.000000 MHz	79	5392.000000 MHz
30	5537.000000 MHz	80	5281.000000 MHz
31	5609.000000 MHz	81	5681.000000 MHz
32	5524.000000 MHz	82	5644.000000 MHz
33	5720.000000 MHz	83	5511.000000 MHz
34	5590.000000 MHz	84	5385.000000 MHz
35	5536.000000 MHz	85	5386.000000 MHz
36	5364.000000 MHz	86	5527.000000 MHz
37	5285.000000 MHz	87	5360.000000 MHz
38	5250.000000 MHz	88	5373.000000 MHz
39	5296.000000 MHz	89	5461.000000 MHz
40	5381.000000 MHz	90	5654.000000 MHz
41	5259.000000 MHz	91	5543.000000 MHz
42	5435.000000 MHz	92	5479.000000 MHz
43	5709.000000 MHz	93	5277.000000 MHz
44	5514.000000 MHz	94	5662.000000 MHz
45	5426.000000 MHz	95	5265.000000 MHz
46	5371.000000 MHz	96	5427.000000 MHz
47	5677.000000 MHz	97	5455.000000 MHz
48	5417.000000 MHz	98	5616.000000 MHz
49	5581.000000 MHz	99	5491.000000 MHz
50	5466.000000 MHz	100	5496.000000 MHz

Table 10.2-23: List of frequencies of hopping radar type 6 for Trial 22

Hop number	Hop frequency	Hop number	Hop frequency
1	5289.000000 MHz	51	5457.000000 MHz
2	5285.000000 MHz	52	5648.000000 MHz
3	5418.000000 MHz	53	5685.000000 MHz
4	5545.000000 MHz	54	5642.000000 MHz
5	5372.000000 MHz	55	5432.000000 MHz
6	5329.000000 MHz	56	5544.000000 MHz
7	5261.000000 MHz	57	5618.000000 MHz
8	5527.000000 MHz	58	5422.000000 MHz
9	5355.000000 MHz	59	5703.000000 MHz
10	5267.000000 MHz	60	5414.000000 MHz
11	5513.000000 MHz	61	5287.000000 MHz
12	5503.000000 MHz	62	5456.000000 MHz
13	5442.000000 MHz	63	5388.000000 MHz
14	5268.000000 MHz	64	5541.000000 MHz
15	5292.000000 MHz	65	5713.000000 MHz
16	5680.000000 MHz	66	5473.000000 MHz
17	5314.000000 MHz	67	5358.000000 MHz
18	5655.000000 MHz	68	5624.000000 MHz
19	5283.000000 MHz	69	5637.000000 MHz
20	5284.000000 MHz	70	5438.000000 MHz
21	5366.000000 MHz	71	5260.000000 MHz
22	5325.000000 MHz	72	5602.000000 MHz
23	5500.000000 MHz	73	5332.000000 MHz
24	5363.000000 MHz	74	5688.000000 MHz
25	5553.000000 MHz	75	5451.000000 MHz
26	5436.000000 MHz	76	5700.000000 MHz
27	5563.000000 MHz	77	5589.000000 MHz
28	5571.000000 MHz	78	5425.000000 MHz
29	5377.000000 MHz	79	5664.000000 MHz
30	5578.000000 MHz	80	5675.000000 MHz
31	5475.000000 MHz	81	5439.000000 MHz
32	5296.000000 MHz	82	5682.000000 MHz
33	5424.000000 MHz	83	5515.000000 MHz
34	5605.000000 MHz	84	5299.000000 MHz
35	5476.000000 MHz	85	5383.000000 MHz
36	5692.000000 MHz	86	5585.000000 MHz
37	5565.000000 MHz	87	5387.000000 MHz
38	5404.000000 MHz	88	5673.000000 MHz
39	5280.000000 MHz	89	5615.000000 MHz
40	5370.000000 MHz	90	5380.000000 MHz
41	5356.000000 MHz	91	5668.000000 MHz
42	5448.000000 MHz	92	5333.000000 MHz
43	5400.000000 MHz	93	5323.000000 MHz
44	5351.000000 MHz	94	5719.000000 MHz
45	5461.000000 MHz	95	5452.000000 MHz
46	5710.000000 MHz	96	5530.000000 MHz
47	5707.000000 MHz	97	5626.000000 MHz
48	5676.000000 MHz	98	5669.000000 MHz
49	5639.000000 MHz	99	5269.000000 MHz
50	5525.000000 MHz	100	5457.000000 MHz

Table 10.2-24: List of frequencies of hopping radar type 6 for Trial 23

Hop number	Hop frequency	Hop number	Hop frequency
1	5637.000000 MHz	51	5281.000000 MHz
2	5333.000000 MHz	52	5389.000000 MHz
3	5559.000000 MHz	53	5705.000000 MHz
4	5469.000000 MHz	54	5446.000000 MHz
5	5342.000000 MHz	55	5280.000000 MHz
6	5642.000000 MHz	56	5490.000000 MHz
7	5568.000000 MHz	57	5608.000000 MHz
8	5341.000000 MHz	58	5449.000000 MHz
9	5527.000000 MHz	59	5698.000000 MHz
10	5475.000000 MHz	60	5264.000000 MHz
11	5337.000000 MHz	61	5408.000000 MHz
12	5267.000000 MHz	62	5554.000000 MHz
13	5300.000000 MHz	63	5288.000000 MHz
14	5430.000000 MHz	64	5352.000000 MHz
15	5275.000000 MHz	65	5386.000000 MHz
16	5663.000000 MHz	66	5426.000000 MHz
17	5340.000000 MHz	67	5254.000000 MHz
18	5498.000000 MHz	68	5583.000000 MHz
19	5487.000000 MHz	69	5273.000000 MHz
20	5689.000000 MHz	70	5283.000000 MHz
21	5547.000000 MHz	71	5633.000000 MHz
22	5607.000000 MHz	72	5343.000000 MHz
23	5567.000000 MHz	73	5335.000000 MHz
24	5676.000000 MHz	74	5260.000000 MHz
25	5269.000000 MHz	75	5266.000000 MHz
26	5368.000000 MHz	76	5540.000000 MHz
27	5627.000000 MHz	77	5584.000000 MHz
28	5409.000000 MHz	78	5635.000000 MHz
29	5595.000000 MHz	79	5513.000000 MHz
30	5697.000000 MHz	80	5476.000000 MHz
31	5384.000000 MHz	81	5667.000000 MHz
32	5299.000000 MHz	82	5581.000000 MHz
33	5494.000000 MHz	83	5439.000000 MHz
34	5672.000000 MHz	84	5519.000000 MHz
35	5294.000000 MHz	85	5455.000000 MHz
36	5432.000000 MHz	86	5671.000000 MHz
37	5464.000000 MHz	87	5303.000000 MHz
38	5638.000000 MHz	88	5270.000000 MHz
39	5493.000000 MHz	89	5443.000000 MHz
40	5470.000000 MHz	90	5255.000000 MHz
41	5355.000000 MHz	91	5402.000000 MHz
42	5524.000000 MHz	92	5654.000000 MHz
43	5575.000000 MHz	93	5481.000000 MHz
44	5534.000000 MHz	94	5550.000000 MHz
45	5293.000000 MHz	95	5661.000000 MHz
46	5650.000000 MHz	96	5276.000000 MHz
47	5282.000000 MHz	97	5372.000000 MHz
48	5617.000000 MHz	98	5423.000000 MHz
49	5393.000000 MHz	99	5723.000000 MHz
50	5305.000000 MHz	100	5281.000000 MHz

Table 10.2-25: List of frequencies of hopping radar type 6 for Trial 24

Hop number	Hop frequency	Hop number	Hop frequency
1	5456.000000 MHz	51	5453.000000 MHz
2	5699.000000 MHz	52	5616.000000 MHz
3	5356.000000 MHz	53	5321.000000 MHz
4	5612.000000 MHz	54	5415.000000 MHz
5	5254.000000 MHz	55	5475.000000 MHz
6	5392.000000 MHz	56	5677.000000 MHz
7	5655.000000 MHz	57	5696.000000 MHz
8	5694.000000 MHz	58	5296.000000 MHz
9	5714.000000 MHz	59	5639.000000 MHz
10	5378.000000 MHz	60	5590.000000 MHz
11	5709.000000 MHz	61	5568.000000 MHz
12	5601.000000 MHz	62	5548.000000 MHz
13	5371.000000 MHz	63	5355.000000 MHz
14	5625.000000 MHz	64	5710.000000 MHz
15	5592.000000 MHz	65	5629.000000 MHz
16	5712.000000 MHz	66	5553.000000 MHz
17	5460.000000 MHz	67	5335.000000 MHz
18	5536.000000 MHz	68	5358.000000 MHz
19	5637.000000 MHz	69	5570.000000 MHz
20	5261.000000 MHz	70	5685.000000 MHz
21	5565.000000 MHz	71	5360.000000 MHz
22	5628.000000 MHz	72	5276.000000 MHz
23	5666.000000 MHz	73	5498.000000 MHz
24	5406.000000 MHz	74	5352.000000 MHz
25	5504.000000 MHz	75	5394.000000 MHz
26	5440.000000 MHz	76	5515.000000 MHz
27	5683.000000 MHz	77	5695.000000 MHz
28	5648.000000 MHz	78	5698.000000 MHz
29	5325.000000 MHz	79	5508.000000 MHz
30	5512.000000 MHz	80	5656.000000 MHz
31	5391.000000 MHz	81	5574.000000 MHz
32	5302.000000 MHz	82	5278.000000 MHz
33	5265.000000 MHz	83	5535.000000 MHz
34	5606.000000 MHz	84	5642.000000 MHz
35	5332.000000 MHz	85	5424.000000 MHz
36	5631.000000 MHz	86	5700.000000 MHz
37	5451.000000 MHz	87	5576.000000 MHz
38	5528.000000 MHz	88	5402.000000 MHz
39	5373.000000 MHz	89	5540.000000 MHz
40	5301.000000 MHz	90	5479.000000 MHz
41	5454.000000 MHz	91	5253.000000 MHz
42	5602.000000 MHz	92	5484.000000 MHz
43	5417.000000 MHz	93	5295.000000 MHz
44	5303.000000 MHz	94	5474.000000 MHz
45	5359.000000 MHz	95	5351.000000 MHz
46	5650.000000 MHz	96	5608.000000 MHz
47	5713.000000 MHz	97	5277.000000 MHz
48	5674.000000 MHz	98	5505.000000 MHz
49	5541.000000 MHz	99	5641.000000 MHz
50	5560.000000 MHz	100	5453.000000 MHz

Table 10.2-26: List of frequencies of hopping radar type 6 for Trial 25

Hop number	Hop frequency	Hop number	Hop frequency
1	5353.000000 MHz	51	5281.000000 MHz
2	5330.000000 MHz	52	5717.000000 MHz
3	5411.000000 MHz	53	5480.000000 MHz
4	5251.000000 MHz	54	5665.000000 MHz
5	5323.000000 MHz	55	5381.000000 MHz
6	5380.000000 MHz	56	5284.000000 MHz
7	5637.000000 MHz	57	5396.000000 MHz
8	5699.000000 MHz	58	5584.000000 MHz
9	5327.000000 MHz	59	5434.000000 MHz
10	5571.000000 MHz	60	5332.000000 MHz
11	5424.000000 MHz	61	5258.000000 MHz
12	5711.000000 MHz	62	5325.000000 MHz
13	5379.000000 MHz	63	5509.000000 MHz
14	5359.000000 MHz	64	5659.000000 MHz
15	5506.000000 MHz	65	5710.000000 MHz
16	5418.000000 MHz	66	5308.000000 MHz
17	5680.000000 MHz	67	5464.000000 MHz
18	5545.000000 MHz	68	5341.000000 MHz
19	5264.000000 MHz	69	5268.000000 MHz
20	5649.000000 MHz	70	5275.000000 MHz
21	5598.000000 MHz	71	5385.000000 MHz
22	5390.000000 MHz	72	5639.000000 MHz
23	5280.000000 MHz	73	5712.000000 MHz
24	5691.000000 MHz	74	5344.000000 MHz
25	5652.000000 MHz	75	5367.000000 MHz
26	5520.000000 MHz	76	5388.000000 MHz
27	5452.000000 MHz	77	5593.000000 MHz
28	5554.000000 MHz	78	5662.000000 MHz
29	5690.000000 MHz	79	5337.000000 MHz
30	5312.000000 MHz	80	5709.000000 MHz
31	5490.000000 MHz	81	5501.000000 MHz
32	5250.000000 MHz	82	5352.000000 MHz
33	5320.000000 MHz	83	5459.000000 MHz
34	5619.000000 MHz	84	5565.000000 MHz
35	5415.000000 MHz	85	5679.000000 MHz
36	5400.000000 MHz	86	5283.000000 MHz
37	5655.000000 MHz	87	5366.000000 MHz
38	5409.000000 MHz	88	5550.000000 MHz
39	5349.000000 MHz	89	5578.000000 MHz
40	5661.000000 MHz	90	5495.000000 MHz
41	5504.000000 MHz	91	5576.000000 MHz
42	5651.000000 MHz	92	5378.000000 MHz
43	5638.000000 MHz	93	5618.000000 MHz
44	5553.000000 MHz	94	5525.000000 MHz
45	5309.000000 MHz	95	5625.000000 MHz
46	5583.000000 MHz	96	5479.000000 MHz
47	5364.000000 MHz	97	5421.000000 MHz
48	5570.000000 MHz	98	5296.000000 MHz
49	5439.000000 MHz	99	5549.000000 MHz
50	5321.000000 MHz	100	5281.000000 MHz

Table 10.2-27: List of frequencies of hopping radar type 6 for Trial 26

Hop number	Hop frequency	Hop number	Hop frequency
1	5366.000000 MHz	51	5562.000000 MHz
2	5254.000000 MHz	52	5275.000000 MHz
3	5386.000000 MHz	53	5376.000000 MHz
4	5450.000000 MHz	54	5257.000000 MHz
5	5263.000000 MHz	55	5634.000000 MHz
6	5621.000000 MHz	56	5593.000000 MHz
7	5527.000000 MHz	57	5401.000000 MHz
8	5647.000000 MHz	58	5511.000000 MHz
9	5347.000000 MHz	59	5603.000000 MHz
10	5348.000000 MHz	60	5357.000000 MHz
11	5482.000000 MHz	61	5699.000000 MHz
12	5395.000000 MHz	62	5288.000000 MHz
13	5406.000000 MHz	63	5281.000000 MHz
14	5702.000000 MHz	64	5287.000000 MHz
15	5467.000000 MHz	65	5407.000000 MHz
16	5509.000000 MHz	66	5508.000000 MHz
17	5307.000000 MHz	67	5657.000000 MHz
18	5626.000000 MHz	68	5433.000000 MHz
19	5490.000000 MHz	69	5629.000000 MHz
20	5560.000000 MHz	70	5559.000000 MHz
21	5250.000000 MHz	71	5432.000000 MHz
22	5383.000000 MHz	72	5266.000000 MHz
23	5573.000000 MHz	73	5326.000000 MHz
24	5613.000000 MHz	74	5424.000000 MHz
25	5713.000000 MHz	75	5322.000000 MHz
26	5494.000000 MHz	76	5535.000000 MHz
27	5519.000000 MHz	77	5328.000000 MHz
28	5387.000000 MHz	78	5540.000000 MHz
29	5437.000000 MHz	79	5382.000000 MHz
30	5479.000000 MHz	80	5616.000000 MHz
31	5330.000000 MHz	81	5641.000000 MHz
32	5609.000000 MHz	82	5719.000000 MHz
33	5528.000000 MHz	83	5368.000000 MHz
34	5343.000000 MHz	84	5632.000000 MHz
35	5253.000000 MHz	85	5610.000000 MHz
36	5429.000000 MHz	86	5586.000000 MHz
37	5478.000000 MHz	87	5644.000000 MHz
38	5270.000000 MHz	88	5310.000000 MHz
39	5469.000000 MHz	89	5371.000000 MHz
40	5706.000000 MHz	90	5268.000000 MHz
41	5628.000000 MHz	91	5334.000000 MHz
42	5542.000000 MHz	92	5384.000000 MHz
43	5430.000000 MHz	93	5362.000000 MHz
44	5696.000000 MHz	94	5271.000000 MHz
45	5418.000000 MHz	95	5305.000000 MHz
46	5345.000000 MHz	96	5691.000000 MHz
47	5365.000000 MHz	97	5703.000000 MHz
48	5422.000000 MHz	98	5380.000000 MHz
49	5530.000000 MHz	99	5258.000000 MHz
50	5595.000000 MHz	100	5562.000000 MHz

Table 10.2-28: List of frequencies of hopping radar type 6 for Trial 27

Hop number	Hop frequency	Hop number	Hop frequency
1	5300.000000 MHz	51	5255.000000 MHz
2	5558.000000 MHz	52	5592.000000 MHz
3	5429.000000 MHz	53	5335.000000 MHz
4	5561.000000 MHz	54	5285.000000 MHz
5	5536.000000 MHz	55	5506.000000 MHz
6	5590.000000 MHz	56	5367.000000 MHz
7	5432.000000 MHz	57	5573.000000 MHz
8	5313.000000 MHz	58	5613.000000 MHz
9	5379.000000 MHz	59	5417.000000 MHz
10	5566.000000 MHz	60	5376.000000 MHz
11	5397.000000 MHz	61	5554.000000 MHz
12	5364.000000 MHz	62	5334.000000 MHz
13	5292.000000 MHz	63	5400.000000 MHz
14	5314.000000 MHz	64	5579.000000 MHz
15	5534.000000 MHz	65	5271.000000 MHz
16	5538.000000 MHz	66	5393.000000 MHz
17	5525.000000 MHz	67	5599.000000 MHz
18	5268.000000 MHz	68	5454.000000 MHz
19	5698.000000 MHz	69	5668.000000 MHz
20	5512.000000 MHz	70	5702.000000 MHz
21	5648.000000 MHz	71	5618.000000 MHz
22	5265.000000 MHz	72	5496.000000 MHz
23	5302.000000 MHz	73	5441.000000 MHz
24	5311.000000 MHz	74	5269.000000 MHz
25	5713.000000 MHz	75	5555.000000 MHz
26	5647.000000 MHz	76	5375.000000 MHz
27	5423.000000 MHz	77	5568.000000 MHz
28	5306.000000 MHz	78	5717.000000 MHz
29	5484.000000 MHz	79	5639.000000 MHz
30	5295.000000 MHz	80	5467.000000 MHz
31	5415.000000 MHz	81	5632.000000 MHz
32	5637.000000 MHz	82	5642.000000 MHz
33	5510.000000 MHz	83	5625.000000 MHz
34	5711.000000 MHz	84	5257.000000 MHz
35	5390.000000 MHz	85	5609.000000 MHz
36	5664.000000 MHz	86	5547.000000 MHz
37	5320.000000 MHz	87	5472.000000 MHz
38	5324.000000 MHz	88	5436.000000 MHz
39	5720.000000 MHz	89	5553.000000 MHz
40	5461.000000 MHz	90	5451.000000 MHz
41	5280.000000 MHz	91	5572.000000 MHz
42	5656.000000 MHz	92	5361.000000 MHz
43	5530.000000 MHz	93	5286.000000 MHz
44	5595.000000 MHz	94	5276.000000 MHz
45	5694.000000 MHz	95	5319.000000 MHz
46	5342.000000 MHz	96	5617.000000 MHz
47	5298.000000 MHz	97	5651.000000 MHz
48	5462.000000 MHz	98	5254.000000 MHz
49	5491.000000 MHz	99	5277.000000 MHz
50	5381.000000 MHz	100	5255.000000 MHz

Table 10.2-29: List of frequencies of hopping radar type 6 for Trial 28

Hop number	Hop frequency	Hop number	Hop frequency
1	5541.000000 MHz	51	5427.000000 MHz
2	5442.000000 MHz	52	5606.000000 MHz
3	5675.000000 MHz	53	5534.000000 MHz
4	5259.000000 MHz	54	5564.000000 MHz
5	5651.000000 MHz	55	5669.000000 MHz
6	5553.000000 MHz	56	5497.000000 MHz
7	5307.000000 MHz	57	5275.000000 MHz
8	5291.000000 MHz	58	5438.000000 MHz
9	5532.000000 MHz	59	5617.000000 MHz
10	5561.000000 MHz	60	5571.000000 MHz
11	5420.000000 MHz	61	5648.000000 MHz
12	5658.000000 MHz	62	5513.000000 MHz
13	5576.000000 MHz	63	5668.000000 MHz
14	5661.000000 MHz	64	5282.000000 MHz
15	5405.000000 MHz	65	5461.000000 MHz
16	5263.000000 MHz	66	5432.000000 MHz
17	5509.000000 MHz	67	5446.000000 MHz
18	5302.000000 MHz	68	5696.000000 MHz
19	5706.000000 MHz	69	5560.000000 MHz
20	5482.000000 MHz	70	5681.000000 MHz
21	5398.000000 MHz	71	5635.000000 MHz
22	5689.000000 MHz	72	5406.000000 MHz
23	5416.000000 MHz	73	5312.000000 MHz
24	5487.000000 MHz	74	5353.000000 MHz
25	5367.000000 MHz	75	5611.000000 MHz
26	5329.000000 MHz	76	5411.000000 MHz
27	5629.000000 MHz	77	5527.000000 MHz
28	5518.000000 MHz	78	5335.000000 MHz
29	5348.000000 MHz	79	5646.000000 MHz
30	5499.000000 MHz	80	5545.000000 MHz
31	5350.000000 MHz	81	5452.000000 MHz
32	5712.000000 MHz	82	5637.000000 MHz
33	5462.000000 MHz	83	5690.000000 MHz
34	5604.000000 MHz	84	5510.000000 MHz
35	5433.000000 MHz	85	5292.000000 MHz
36	5306.000000 MHz	86	5250.000000 MHz
37	5599.000000 MHz	87	5498.000000 MHz
38	5621.000000 MHz	88	5408.000000 MHz
39	5643.000000 MHz	89	5592.000000 MHz
40	5378.000000 MHz	90	5299.000000 MHz
41	5511.000000 MHz	91	5720.000000 MHz
42	5528.000000 MHz	92	5589.000000 MHz
43	5614.000000 MHz	93	5568.000000 MHz
44	5401.000000 MHz	94	5496.000000 MHz
45	5445.000000 MHz	95	5403.000000 MHz
46	5541.000000 MHz	96	5694.000000 MHz
47	5442.000000 MHz	97	5724.000000 MHz
48	5675.000000 MHz	98	5537.000000 MHz
49	5259.000000 MHz	99	5634.000000 MHz
50	5651.000000 MHz	100	5624.000000 MHz

Table 10.2-30: List of frequencies of hopping radar type 6 for Trial 29

Hop number	Hop frequency	Hop number	Hop frequency
1	5583.000000 MHz	51	5598.000000 MHz
2	5317.000000 MHz	52	5251.000000 MHz
3	5675.000000 MHz	53	5573.000000 MHz
4	5390.000000 MHz	54	5704.000000 MHz
5	5482.000000 MHz	55	5662.000000 MHz
6	5696.000000 MHz	56	5687.000000 MHz
7	5311.000000 MHz	57	5703.000000 MHz
8	5538.000000 MHz	58	5603.000000 MHz
9	5338.000000 MHz	59	5574.000000 MHz
10	5653.000000 MHz	60	5643.000000 MHz
11	5356.000000 MHz	61	5332.000000 MHz
12	5488.000000 MHz	62	5519.000000 MHz
13	5293.000000 MHz	63	5307.000000 MHz
14	5639.000000 MHz	64	5460.000000 MHz
15	5373.000000 MHz	65	5645.000000 MHz
16	5365.000000 MHz	66	5536.000000 MHz
17	5647.000000 MHz	67	5405.000000 MHz
18	5257.000000 MHz	68	5416.000000 MHz
19	5585.000000 MHz	69	5304.000000 MHz
20	5252.000000 MHz	70	5631.000000 MHz
21	5278.000000 MHz	71	5310.000000 MHz
22	5315.000000 MHz	72	5344.000000 MHz
23	5352.000000 MHz	73	5300.000000 MHz
24	5410.000000 MHz	74	5596.000000 MHz
25	5544.000000 MHz	75	5638.000000 MHz
26	5258.000000 MHz	76	5308.000000 MHz
27	5333.000000 MHz	77	5557.000000 MHz
28	5660.000000 MHz	78	5560.000000 MHz
29	5489.000000 MHz	79	5501.000000 MHz
30	5260.000000 MHz	80	5686.000000 MHz
31	5274.000000 MHz	81	5256.000000 MHz
32	5523.000000 MHz	82	5661.000000 MHz
33	5713.000000 MHz	83	5364.000000 MHz
34	5710.000000 MHz	84	5427.000000 MHz
35	5429.000000 MHz	85	5604.000000 MHz
36	5453.000000 MHz	86	5551.000000 MHz
37	5554.000000 MHz	87	5468.000000 MHz
38	5492.000000 MHz	88	5367.000000 MHz
39	5566.000000 MHz	89	5302.000000 MHz
40	5530.000000 MHz	90	5694.000000 MHz
41	5346.000000 MHz	91	5269.000000 MHz
42	5692.000000 MHz	92	5380.000000 MHz
43	5695.000000 MHz	93	5616.000000 MHz
44	5301.000000 MHz	94	5289.000000 MHz
45	5630.000000 MHz	95	5428.000000 MHz
46	5674.000000 MHz	96	5426.000000 MHz
47	5500.000000 MHz	97	5619.000000 MHz
48	5349.000000 MHz	98	5576.000000 MHz
49	5299.000000 MHz	99	5531.000000 MHz
50	5267.000000 MHz	100	5598.000000 MHz

End of test report