

Wireless test report – 368600-1R1TRFWL

Applicant:

KAON Media Co., Ltd.

Product type:

DOCSIS3.1 Gateway (IT)

Model:

CG3000

Model variants:

CG3000-LD42J, CG3000-LD4NJ, SR820ac

FCC ID:

WQTCG3000

IC Registration number:

24567-CG3000

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: September 11, 2019

Test engineer(s): **Alvin Liu, EMC/RF Specialist**

Signature:



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Site number (3 m SAC)	FCC: CA2040; ISED: 2040A-4	FCC: CA2041; ISED: 2040G-5	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	KAON Media Co., Ltd.
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City	Seongnam-si
Province/State	Gyeonggi-do
Postal/Zip code	13517
Country	South Korea

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	July 5, 2019	Original report issued
R1TRF	September 11, 2019	Revise IC Registration number

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	June 11, 2019
Nemko sample ID number	1

3.2 EUT information

Product name	DOCSIS3.1 Gateway (IT)
Model	CG3000
Serial number	GC3000 ICTC

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 dBi.

3.4 Product description and theory of operation

The EUT is the SISO, CDD, MIMO transceiver which is module supporting the 802.11a/b/g/n/ac mode (802.11a/b/g/n(20,40 MHz)/ac(20,40,80 MHz): 1TX/1RX, 4TX/4RX).

3.5 EUT exercise details

EUT worked as wireless access point mode. EUT was controlled and monitored from laptop using Tera Term.

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

Model of EUT is CG3000, with three variant models, CG3000-LD42J, CG3000-LD4NJ and SR820ac. Variant models are identical to basic model except for size of exterior. There are no any changes in antenna, PCB, electrical modifications to the applicable variant models

Items	Basic model	Variant model 1	Variant model 2	Variant model 3
1. PMN	CG3000	CG3000-LD42J	CG3000-LD4NJ	SR820ac
2. HVIN	V1.2	V1.2	V1.2	V1.2
3. FVIN	v1.1.0_RG1.01.00	v1.1.0_RG1.01.00	v1.1.0_RG1.01.00	v1.1.0_RG1.01.00
4. Hardware		NA (just adding model name)	Remove VoIP Port	Remove VoIP Port

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	Aug 26, 2019
Spectrum analyzer	Rohde & Schwarz	FSP	FA001920	1 year	Oct 26, 2019

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: ¹The 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.

²The *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.

³During 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	June 12, 2019	Temperature	23 °C
Test engineer	Kevin Rose and Alvin Liu	Air pressure	982 mbar
Verdict	Pass	Relative humidity	38 %

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 4x4 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

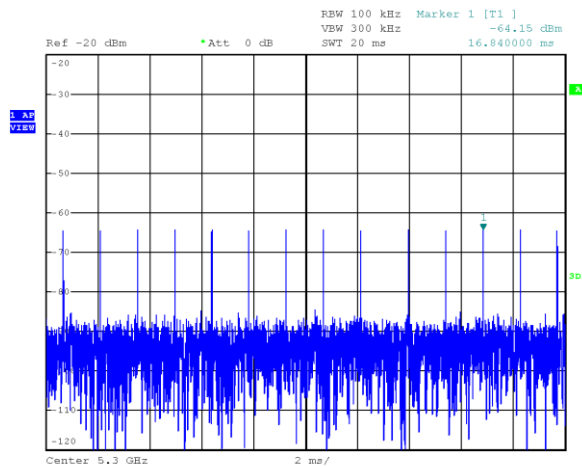


Figure 8.1-1: Detection threshold measurements of radar type 0

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	June 14, 2019	Temperature	24 °C
Test engineer	Kevin Rose and Alvin Liu	Air pressure	977 mbar
Verdict	Pass	Relative humidity	39 %

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

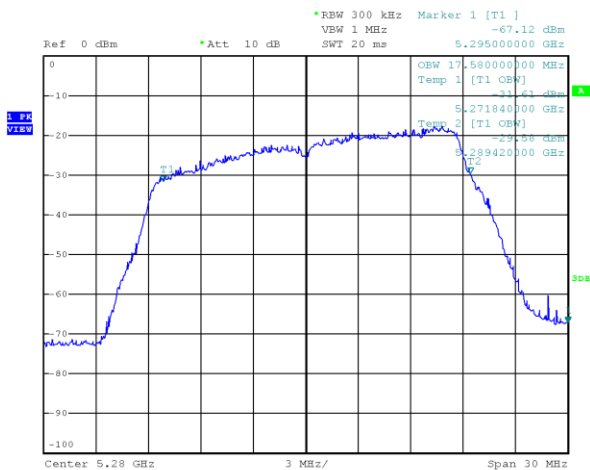


Figure 8.2-1: 99% bandwidth for channel 56_20MHz

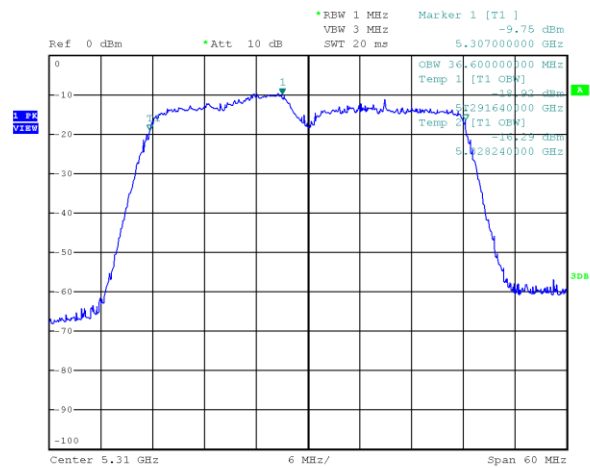


Figure 8.2-2: 99% bandwidth for channel 60_40MHz

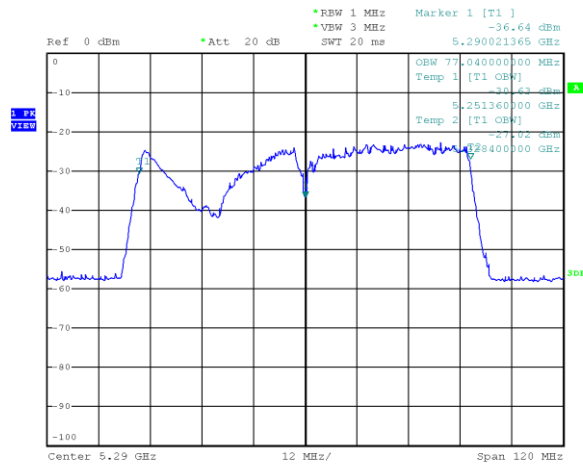


Figure 8.2-3: 99% bandwidth for channel 52_80MHz

Table 8.2-1: Detection bandwidth for channel 56_20MHz

U-NII Detection bandwidth, MHz	Minimum limit (99% power BW), MHz	Margin, MHz
24	18	6

Table 8.2-2: Detection bandwidth for channel 60_40MHz

U-NII Detection bandwidth, MHz	Minimum limit (99% power BW), MHz	Margin, MHz
44	37	7

Table 8.2-3: Detection bandwidth for channel 52_80MHz

U-NII Detection bandwidth, MHz	Minimum limit (99% power BW), MHz	Margin, MHz
82	77	5

Table 8.2-4: Radar detection bandwidth results channel 56_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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5266	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5267	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5268 (FL)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5270	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5275	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5280	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5285	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5290	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5292 (FH)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5293	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5294	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5295	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0

Note: square with check mark denotes successful radar detection. Rate was calculated as follows: 100% × (Total detections ÷ Total trials)

U-NII Detection bandwidth = 5292 - 5268 = 24 MHz



Table 8.2-5: Radar detection bandwidth results channel 60_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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5286	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5287	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5288 (FL)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5290	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5295	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5300	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5320	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5325	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5330	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5332 (FH)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5333	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5334	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5335	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 = 5332 – 5288 = 44 MHz

Table 8.2-6: Radar detection bandwidth results channel 52_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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5246	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5247	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5248	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5249 (FL)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5250	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5255	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5260	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5320	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5325	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5330	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5331 (FH)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100
5332	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5333	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5334	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
5335	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 = 5331 – 5249 = 82 MHz

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	June 18, 2019	Temperature	24 °C
Test engineer	Kevin Rose and Alvin Liu	Air pressure	978 mbar
Verdict	Pass	Relative humidity	42 %

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 channel 56_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 for channel 60_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 channel 52_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	channel 56 20MHz		channel 60 40MHz		channel 52 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 channel 56_20MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$
 Total number of successful detections for channel 60_40MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$
 Total number of successful detections for channel 52_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, μs	PRI, μs
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	channel 56_20MHz		channel 60_40MHz		channel 52_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 channel 56_20MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$
 Total number of successful detections for channel 60_40MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$
 Total number of successful detections for channel 52_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, μs	PRI, μs
1	28	1.1	187
2	23	1.3	161
3	24	1.5	171
4	23	1.5	209
5	26	1.5	214
6	28	1.8	190
7	29	1.9	167
8	29	2.2	173
9	25	2.5	150
10	26	2.5	203
11	23	2.6	208
12	24	2.8	202
13	29	2.8	218
14	26	3.1	152
15	28	3.1	177
16	28	3.4	199
17	24	3.7	191
18	26	3.7	199
19	23	3.9	153
20	29	3.0	226
21	23	4.1	162
22	29	4.1	225
23	26	4.2	226
24	24	4.3	175
25	26	4.3	211
26	29	4.5	184
27	27	4.8	189
28	24	4.9	168
29	26	4.9	179
30	23	5.0	160



Table 8.3-8: Radar type 3 detection probability results

Trial	channel 56_20MHz		channel 60_40MHz		channel 52_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 channel 56_20MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$
 Total number of successful detections for channel 60_40MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$
 Total number of successful detections for channel 52_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	PRI, μ s	Pulse width, μ s
1	17	6.1	345
2	16	6.2	337
3	18	6.3	268
4	16	6.3	330
5	16	6.3	334
6	18	6.7	409
7	17	6.8	263
8	16	6.9	283
9	17	6.9	431
10	17	7.1	241
11	17	7.1	451
12	18	7.4	255
13	16	7.5	286
14	18	7.5	363
15	17	7.8	484
16	17	7.0	324
17	18	8.1	333
18	17	8.5	445
19	17	8.6	431
20	17	8.7	393
21	17	9.1	248
22	17	9.1	278
23	18	9.1	467
24	16	9.2	366
25	16	9.3	323
26	18	9.4	482
27	18	9.0	200
28	18	9.0	219
29	16	9.0	222
30	18	9.0	352



Table 8.3-10: Radar type 4 detection probability results

Trial	channel 56_20MHz		channel 60_40MHz		channel 52_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 channel 56_20MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$
 Total number of successful detections for channel 60_40MHz is 30 out of 30 trials. Detection probability: $100\% \times (30 / 30) = 100\%$
 Total number of successful detections for channel 52_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	14	11.6	229
2	15	12.1	412
3	13	12.4	397
4	16	12.8	351
5	15	12.9	367
6	12	13.2	370
7	13	13.8	433
8	16	13.9	358
9	15	14.4	303
10	16	14.6	289
11	12	14.6	437
12	15	15.2	476
13	12	15.6	480
14	16	15.0	210
15	13	16.5	486
16	14	17.5	404
17	14	17.6	461
18	15	17.7	342
19	15	17.8	402
20	16	18.3	231
21	15	18.5	466
22	12	18.7	280
23	12	18.7	459
24	14	18.8	468
25	14	19.1	432
26	15	19.2	244
27	16	19.4	424
28	13	19.6	307
29	12	19.6	448
30	12	20.0	290

```

COM34:115200baud - Tera Term VT
File Edit Setup Control Window Help
I3390:RG I#
I3390:RG I# CONSOLE: 034364.962 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=188, subband_result=1, AT 754900MS
CONSOLE: 034368.862 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=186, subband_result=1, AT 754900MS
CONSOLE: 034369.812 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=186, subband_result=1, AT 754995MS
CONSOLE: 034372.312 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=189, subband_result=1, AT 755325MS
CONSOLE: 034375.462 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=183, subband_result=1, AT 755640MS
CONSOLE: 034377.862 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=188, subband_result=1, AT 755880MS
CONSOLE: 034381.462 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=182, subband_result=1, AT 756240MS
CONSOLE: 034385.362 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=184, subband_result=1, AT 756630MS
CONSOLE: 034395.262 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=182, subband_result=2, AT 757620MS
CONSOLE: 034397.662 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=182, subband_result=2, AT 757860MS
CONSOLE: 034401.262 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=183, subband_result=2, AT 758220MS
CONSOLE: 034403.812 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=182, subband_result=2, AT 758475MS
CONSOLE: 034407.412 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=173, subband_result=2, AT 758835MS
CONSOLE: 034407.562 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=180, subband_result=2, AT 758835MS
CONSOLE: 034410.112 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=177, subband_result=2, AT 759105MS
I3390:RG I#
I3390:RG I#
I3390:RG I# CONSOLE: 034431.262 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=126, subband_result=8, AT 761220MS
CONSOLE: 034431.412 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=122, subband_result=8, AT 761235MS
CONSOLE: 034434.412 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=124, subband_result=8, AT 761535MS
CONSOLE: 034437.712 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=128, subband_result=8, AT 761850MS
CONSOLE: 034447.612 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=130, subband_result=8, AT 762855MS
CONSOLE: 034451.962 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=127, subband_result=8, AT 763290MS
CONSOLE: 034460.962 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=127, subband_result=8, AT 764190MS
CONSOLE: 034464.112 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=138, subband_result=8, AT 764505MS
CONSOLE: 034478.862 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=138, subband_result=4, AT 765900MS
CONSOLE: 034481.963 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=138, subband_result=4, AT 766290MS
CONSOLE: 034485.262 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=138, subband_result=4, AT 766620MS
CONSOLE: 034487.512 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=142, subband_result=4, AT 766845MS
CONSOLE: 034491.262 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=145, subband_result=4, AT 767200MS
CONSOLE: 034494.412 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=148, subband_result=4, AT 767535MS
CONSOLE: 034497.862 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=142, subband_result=4, AT 767880MS
CONSOLE: 034501.462 WLO: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=143, subband_result=4, AT 768240MS
I3390:RG I#
  
```

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	June 18, 2019	Temperature	24 °C
Test engineer	Kevin Rose and Alvin Liu	Air pressure	978 mbar
Verdict	Pass	Relative humidity	42 %

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 channel 56_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 channel 60_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 channel 52_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 channel 56_20MHz

Trial	Chirp width, MHz	F _{OBL} , MHz	F _{OBH} , MHz	Radar pulse offset, MHz	Radar frequency, MHz	Detection
0	5	5271.8	5289.4	Center of channel	5280.0	☒
1	18	5271.8	5289.4	Center of channel	5280.0	☒
2	5	5271.8	5289.4	Center of channel	5280.0	☒
3	20	5271.8	5289.4	Center of channel	5280.0	☒
4	11	5271.8	5289.4	Center of channel	5280.0	☒
5	6	5271.8	5289.4	Center of channel	5280.0	☒
6	14	5271.8	5289.4	Center of channel	5280.0	☒
7	9	5271.8	5289.4	Center of channel	5280.0	☒
8	17	5271.8	5289.4	Center of channel	5280.0	☒
9	11	5271.8	5289.4	Center of channel	5280.0	☒
10	9	5271.8	5289.4	3.6	5275.4	☒
11	8	5271.8	5289.4	3.2	5275.0	☒
12	13	5271.8	5289.4	5.2	5277.0	☒
13	6	5271.8	5289.4	2.4	5274.2	☒
14	8	5271.8	5289.4	3.2	5275.0	☒
15	8	5271.8	5289.4	3.2	5275.0	☒
16	16	5271.8	5289.4	6.4	5278.2	☒
17	15	5271.8	5289.4	6.0	5277.8	☒
18	19	5271.8	5289.4	7.6	5279.4	☒
19	16	5271.8	5289.4	6.4	5278.2	☒
20	20	5271.8	5289.4	8.0	5281.4	☒
21	10	5271.8	5289.4	4.0	5285.4	☒
22	13	5271.8	5289.4	5.2	5284.2	☒
23	14	5271.8	5289.4	5.6	5283.8	☒
24	19	5271.8	5289.4	7.6	5281.8	☒
25	13	5271.8	5289.4	5.2	5284.2	☒
26	18	5271.8	5289.4	7.2	5282.2	☒
27	6	5271.8	5289.4	2.4	5287.0	☒
28	19	5271.8	5289.4	7.6	5281.8	☒
29	10	5271.8	5289.4	4.0	5285.4	☒

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 (Trial 12).

EUT F_{OBL} = 5271.8 MHz

$$F_{C_Radar_L} = 5271.8 + (0.4 \times 13) = 5271.8 + 5.2 = 5277.0 \text{ MHz}$$

Chirp width of Radar signal is 18 MHz (Trial 26).

EUT F_{OBH} = 5289.4 MHz

$$F_{C_Radar_H} = 5289.4 - (0.4 \times 18) = 5289.4 - 7.2 = 5282.2 \text{ MHz}$$

Table 8.4-5: Radar Type 5 detection probability test results for channel 60_40MHz

Trial	Chirp width, MHz	F _{OBL} , MHz	F _{OBH} , MHz	Radar pulse offset, MHz	Radar frequency, MHz	Detection
0	5	5291.6	5328.2	Center of channel	5310.0	☒
1	18	5291.6	5328.2	Center of channel	5310.0	☒
2	5	5291.6	5328.2	Center of channel	5310.0	☒
3	20	5291.6	5328.2	Center of channel	5310.0	☒
4	11	5291.6	5328.2	Center of channel	5310.0	☒
5	6	5291.6	5328.2	Center of channel	5310.0	☒
6	14	5291.6	5328.2	Center of channel	5310.0	☒
7	9	5291.6	5328.2	Center of channel	5310.0	☒
8	17	5291.6	5328.2	Center of channel	5310.0	☒
9	11	5291.6	5328.2	Center of channel	5310.0	☒
10	9	5291.6	5328.2	3.6	5295.2	☒
11	8	5291.6	5328.2	3.2	5294.8	☒
12	13	5291.6	5328.2	5.2	5296.8	☒
13	6	5291.6	5328.2	2.4	5294.0	☒
14	8	5291.6	5328.2	3.2	5294.8	☒
15	8	5291.6	5328.2	3.2	5294.8	☒
16	16	5291.6	5328.2	6.4	5298.0	☒
17	15	5291.6	5328.2	6.0	5297.6	☒
18	19	5291.6	5328.2	7.6	5299.2	☒
19	16	5291.6	5328.2	6.4	5298.0	☒
20	20	5291.6	5328.2	8.0	5320.2	☒
21	10	5291.6	5328.2	4.0	5324.2	☒
22	13	5291.6	5328.2	5.2	5323.0	☒
23	14	5291.6	5328.2	5.6	5322.6	☒
24	19	5291.6	5328.2	7.6	5320.6	☒
25	13	5291.6	5328.2	5.2	5323.0	☒
26	18	5291.6	5328.2	7.2	5321.0	☒
27	6	5291.6	5328.2	2.4	5325.8	☒
28	19	5291.6	5328.2	7.6	5320.6	☒
29	10	5291.6	5328.2	4.0	5324.2	☒

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 (Trial 12).

EUT F_{OBL} = 5291.6 MHz

$$F_{C_Radar_L} = 5291.6 + (0.4 \times 13) = 5291.6 + 5.2 = 5296.8 \text{ MHz}$$

Chirp width of Radar signal is 18 MHz (Trial 26).

EUT F_{OBH} = 5328.2 MHz

$$F_{C_Radar_H} = 5328.2 - (0.4 \times 18) = 5328.2 - 7.2 = 5321.0 \text{ MHz}$$

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	5	5251.4	5328.4	Center of channel	5290.0	☒
1	18	5251.4	5328.4	Center of channel	5290.0	☒
2	5	5251.4	5328.4	Center of channel	5290.0	☒
3	20	5251.4	5328.4	Center of channel	5290.0	☒
4	11	5251.4	5328.4	Center of channel	5290.0	☒
5	6	5251.4	5328.4	Center of channel	5290.0	☒
6	14	5251.4	5328.4	Center of channel	5290.0	☒
7	9	5251.4	5328.4	Center of channel	5290.0	☒
8	17	5251.4	5328.4	Center of channel	5290.0	☒
9	11	5251.4	5328.4	Center of channel	5290.0	☒
10	9	5251.4	5328.4	3.6	5255.0	☒
11	8	5251.4	5328.4	3.2	5254.6	☒
12	13	5251.4	5328.4	5.2	5256.6	☒
13	6	5251.4	5328.4	2.4	5253.8	☒
14	8	5251.4	5328.4	3.2	5254.6	☒
15	8	5251.4	5328.4	3.2	5254.6	☒
16	16	5251.4	5328.4	6.4	5257.8	☒
17	15	5251.4	5328.4	6.0	5257.4	☒
18	19	5251.4	5328.4	7.6	5259.0	☒
19	16	5251.4	5328.4	6.4	5257.8	☒
20	20	5251.4	5328.4	8.0	5320.4	☒
21	10	5251.4	5328.4	4.0	5324.4	☒
22	13	5251.4	5328.4	5.2	5323.2	☒
23	14	5251.4	5328.4	5.6	5322.8	☒
24	19	5251.4	5328.4	7.6	5320.8	☒
25	13	5251.4	5328.4	5.2	5323.2	☒
26	18	5251.4	5328.4	7.2	5321.2	☒
27	6	5251.4	5328.4	2.4	5326.0	☒
28	19	5251.4	5328.4	7.6	5320.8	☒
29	10	5251.4	5328.4	4.0	5324.4	☒

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 (Trial 12).

EUT F_{OBL} = 5251.4 MHz

$$F_{C_Radar_L} = 5251.4 + (0.4 \times 13) = 5251.4 + 5.2 = 5256.6 \text{ MHz}$$

Chirp width of Radar signal is 18 MHz (Trial 26).

EUT F_{OBH} = 5328.4 MHz

$$F_{C_Radar_H} = 5328.4 - (0.4 \times 18) = 5328.4 - 7.2 = 5321.2 \text{ MHz}$$

```

COM34:115200baud - Tera Term V1
File Edit Setup Control Window Help
I3390:RG1#
I3390:RG1# wl -i wl0 dfs status
state In-Service Monitoring(ISM) time elapsed 243150ms radar channel cleared by dfs channel 52/80 (0xE0B3A)
I3390:RG1#
I3390:RG1# CONSOLE: 027241.467 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 323250MS
CONSOLE: 027243.917 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 425700MS
CONSOLE: 027259.217 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 441900MS
CONSOLE: 027278.867 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 460650MS
CONSOLE: 027282.467 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 464250MS
CONSOLE: 027296.117 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 477900MS
CONSOLE: 027301.517 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 483300MS
CONSOLE: 027319.517 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 501300MS
CONSOLE: 027336.167 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 517950MS
CONSOLE: 027354.317 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 536100MS
CONSOLE: 027370.867 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 551850MS
I3390:RG1#
I3390:RG1# CONSOLE: 027393.167 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 574950MS
CONSOLE: 027408.317 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 590100MS
CONSOLE: 027428.267 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 610050MS
CONSOLE: 027433.367 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 615150MS
CONSOLE: 027453.617 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 641400MS
CONSOLE: 027475.967 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 657750MS
CONSOLE: 027480.467 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 662250MS
CONSOLE: 027514.967 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 696750MS
I3390:RG1#
I3390:RG1# CONSOLE: 027561.767 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 743550MS
CONSOLE: 027586.067 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 767850MS
CONSOLE: 027594.017 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 775800MS
CONSOLE: 027609.317 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 791100MS
CONSOLE: 027615.317 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 797100MS
I3390:RG1# CONSOLE: 027648.017 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 829800MS
CONSOLE: 027659.117 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 848900MS
I3390:RG1#
I3390:RG1# CONSOLE: 027688.817 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 870600MS
CONSOLE: 027702.617 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 884400MS
CONSOLE: 027707.117 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 888900MS
I3390:RG1#
I3390:RG1# CONSOLE: 027751.367 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 933150MS
CONSOLE: 027756.167 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 937950MS
I3390:RG1#
I3390:RG1# CONSOLE: 027762.017 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 943800MS
CONSOLE: 027775.067 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 956850MS
I3390:RG1#
I3390:RG1# CONSOLE: 027779.117 Ml0: DFS: FCC-5 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=0, subband_result=6, AT 960900MS
I3390:RG1#
I3390:RG1#
I3390:RG1#
I3390:RG1#

```

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	June 20, 2019	Temperature	25 °C
Test engineer	Kevin Rose and Alvin Liu	Air pressure	966 mbar
Verdict	Pass	Relative humidity	43 %

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 (Pd), %	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 (Pd), %	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 (Pd), %	Minimum Limit, %	Margin, %
6	100	70	30



Table 8.5-4: Frequency hopping Radar results

Trial	channel 56 20MHz		channel 60 40MHz		channel 52 80MHz	
	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

```
COM34:115200baud - Tera Term VT
File Edit Setup Control Window Help

I3390-RG1# wl -i wlo dfs status
state In-Service Monitoring(ISM) time elapsed 34650ms radar channel cleared by dfs channel 52/80 (0xE03A)
I3390-RG1#
I3390-RG1# CONSOLE: 026862.917 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=44, subband_result=15, AT 44700MS
CONSOLE: 026863.067 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 44850MS
CONSOLE: 026870.867 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 52650MS
CONSOLE: 026871.017 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 52800MS
CONSOLE: 026877.167 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=42, subband_result=15, AT 58950MS
CONSOLE: 026877.317 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 59100MS
CONSOLE: 026877.467 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 59250MS
CONSOLE: 026883.617 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=42, subband_result=15, AT 65400MS
CONSOLE: 026883.767 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 65550MS
CONSOLE: 026883.917 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 70850MS
CONSOLE: 026888.417 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 70900MS
CONSOLE: 026888.567 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=29, subband_result=15, AT 70350MS
CONSOLE: 026895.017 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 76800MS
CONSOLE: 026895.167 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 76950MS
CONSOLE: 026895.317 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 77100MS
CONSOLE: 026899.217 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 81000MS
CONSOLE: 026899.367 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=42, subband_result=15, AT 81150MS
CONSOLE: 026902.967 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=44, subband_result=15, AT 84750MS
CONSOLE: 026903.117 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 84900MS
CONSOLE: 026903.267 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 85050MS
CONSOLE: 026908.967 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 90750MS
CONSOLE: 026909.117 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 90900MS
CONSOLE: 026909.267 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 91050MS
CONSOLE: 026914.067 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=44, subband_result=15, AT 95850MS
CONSOLE: 026914.217 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=22, subband_result=15, AT 96000MS
CONSOLE: 026914.367 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=44, subband_result=15, AT 96150MS
CONSOLE: 026917.667 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=44, subband_result=15, AT 99450MS
CONSOLE: 026917.817 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 99600MS
CONSOLE: 026917.967 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 99750MS
CONSOLE: 026921.167 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=44, subband_result=15, AT 102900MS
CONSOLE: 026921.267 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 103050MS
CONSOLE: 026921.417 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 103200MS
CONSOLE: 026925.167 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=44, subband_result=15, AT 106950MS
CONSOLE: 026925.317 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 107100MS
CONSOLE: 026925.467 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 107250MS
CONSOLE: 026929.367 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=44, subband_result=15, AT 111150MS
CONSOLE: 026929.517 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 111300MS
CONSOLE: 026929.667 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=44, subband_result=15, AT 111450MS
I3390-RG1#
I3390-RG1# CONSOLE: 026977.217 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 159000MS
CONSOLE: 026977.367 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 159150MS
CONSOLE: 026977.517 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 159300MS
CONSOLE: 026982.767 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=43, subband_result=15, AT 164550MS
CONSOLE: 026982.917 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 164700MS
CONSOLE: 026983.067 WLO: DFS: JP4 ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pw=26, subband_result=15, AT 164850MS
I3390-RG1#
I3390-RG1# wl -i wlo dfs status
state In-Service Monitoring(ISM) time elapsed 180450ms radar channel cleared by dfs channel 52/80 (0xE03A)
I3390-RG1#
I3390-RG1#
```

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	June 12, 2019	Temperature	23 °C
Test engineer	Kevin Rose and Alvin Liu	Air pressure	982 mbar
Verdict	Pass	Relative humidity	38 %

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
0.03	260.00	259.97

Table 8.6-2: Channel move time results

Measured move time, s	Limit, s	Margin, s
0.79	10.00	9.21

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	200
1	0.2	10	0.03	60
2	10	12	0	0

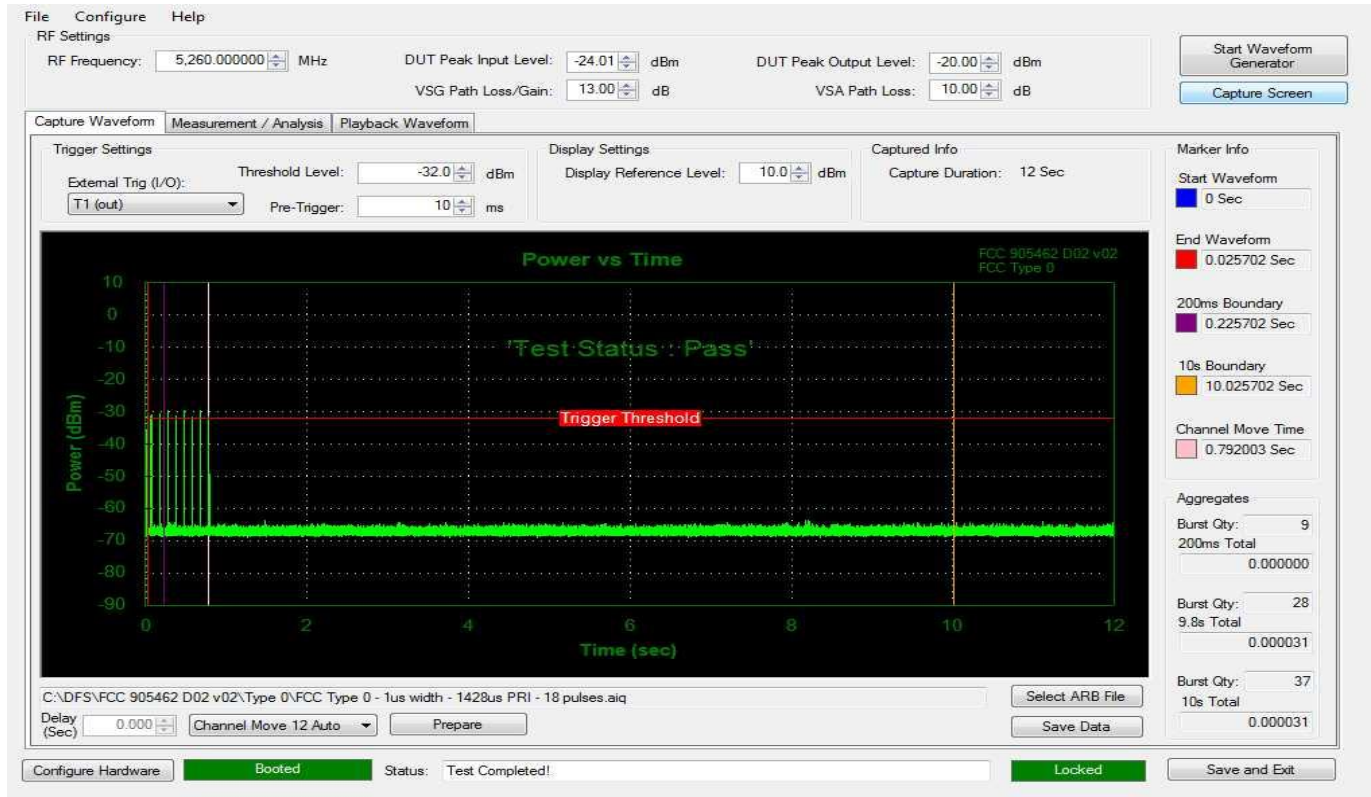


Figure 8.6-1: Channel closing transmission and move time

```

[3390:RC1H
[3390:RC1H
[3390:RC1H w1 -i w10 status
SSID: "NCTC-ERR-5G"
Mode: Managed RSSI: 0 dBm SNR: 0 dB noise: -85 dBm Channel: 52/80
BSSID: 44:FD:34:0E:60:11 Capability: ESS
Supported Rates: [ 6(b) 9 12(b) 18 24(b) 36 48 54 ]
UHT Capable:
  Chanspec: 5GHz channel 58 80MHz (0xe03a)
  Primary channel: 52
  HT Capabilities:
    Supported HT MCS: 0-31
    Supported UHT MCS:
      NSS1 Tx: 0-11 Rx: 0-11
      NSS2 Tx: 0-11 Rx: 0-11
      NSS3 Tx: 0-11 Rx: 0-11
      NSS4 Tx: 0-11 Rx: 0-11
[3390:RC1H console: 027174:159 v10: DFS: UNCLASSIFIED ##### RADAR DETECTED ON CHANNEL 52/80 ##### min_pu=34, subband_result=8, AT 355350MS
console: 027172:571 v10: vlc_ampdu_rx_recv_delta: AMPDU OFF: tid 0 initiator 0 reason 37
console: 027172:571 v10: vlc_ampdu_tx_recv_delta: AMPDU OFF: tid 0 initiator 0 reason 37
console: 027172:572 v10: vlc_ampdu_tx_recv_delta: AMPDU OFF: tid 6 initiator 0 reason 37
dhd_flow_rings_delete_for_peer: deleting flowid 263
dhd_prot_flow_ring_delete: Send Flow Delete Req RING ID 263 for peer 08:36:c9:22:08:39 prio 3 ifindex 0
dhd_prot_flow_ring_delete: deleting flowid 264
dhd_prot_flow_ring_delete: Send Flow Delete Req RING ID 264 for peer 08:36:c9:22:08:39 prio 0 ifindex 0
dhd_prot_flow_ring_delete_response_process: Flow Delete Response status = 0
dhd_prot_flow_ring_delete_response_process: Flow Delete Response status = 0
console: 027182:612 flow_create: bitmap_size=512 maxitens=512
console: 027182:615 v10: vlc_send_bar: seq 0x1 tid 6
Not BCH Event received. ignore
Not BCH Event received. ignore
console: 027192:667 flow_create: bitmap_size=512 maxitens=512
console: 027192:669 v10: vlc_send_bar: seq 0x1 tid 0
htpfd:error:536:549:da1Man_getManParameters_dev2:251:No matched Device.Routing.Router.(i).IPv6Forwarding.(i). to wan ip interface.
htpfd:error:536:550:da1Man_getManParameters_dev2:301:Device.IP.Interface.(i).IPv6Address.(i). to wan ip interface.
htpfd:error:536:551:da1Man_getSystemInfo_dev2:154:Could not get any Device.DNS.Client.Server.(i).. ret=9804
[3390:RC1H w1 -i w10 status
SSID: "NCTC-ERR-5G"
Mode: Managed RSSI: 0 dBm SNR: 0 dB noise: -89 dBm Channel: 149/80
BSSID: 44:FD:34:0E:60:11 Capability: ESS
Supported Rates: [ 6(b) 9 12(b) 18 24(b) 36 48 54 ]
UHT Capable:
  Chanspec: 5GHz channel 155 80MHz (0xe09b)
  Primary channel: 149
  HT Capabilities:
    Supported HT MCS: 0-31
    Supported UHT MCS:
      NSS1 Tx: 0-11 Rx: 0-11
      NSS2 Tx: 0-11 Rx: 0-11
      NSS3 Tx: 0-11 Rx: 0-11
      NSS4 Tx: 0-11 Rx: 0-11
[3390:RC1H w1 -i w10 dfs_status
state IDLE time elapsed 0ms radar channel cleared by dfs channel 52/80 (0xe03a)
[3390:RC1H
[3390:RC1H w1 -i w10 chan_info
Channel 36 A Band
Channel 40 A Band
Channel 44 A Band
Channel 48 A Band
Channel 52 A Band, RADAR Sensitive, Passive, Temporarily Out of Service for 27 minutes
Channel 56 A Band, RADAR Sensitive, Passive
Channel 60 A Band, RADAR Sensitive, Passive
Channel 64 A Band, RADAR Sensitive, Passive

```

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	June 13, 2019	Temperature	24 °C
Test engineer	Kevin Rose and Alvin Liu	Air pressure	967 mbar
Verdict	Pass	Relative humidity	43 %

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

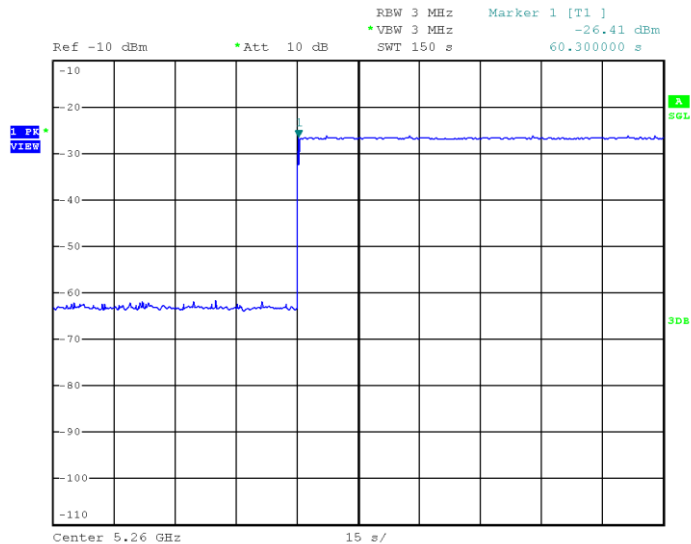


Figure 8.7-1: Initial CAC

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	June 13, 2019	Temperature	24 °C
Test engineer	Kevin Rose and Alvin Liu	Air pressure	967 mbar
Verdict	Pass	Relative humidity	43 %

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

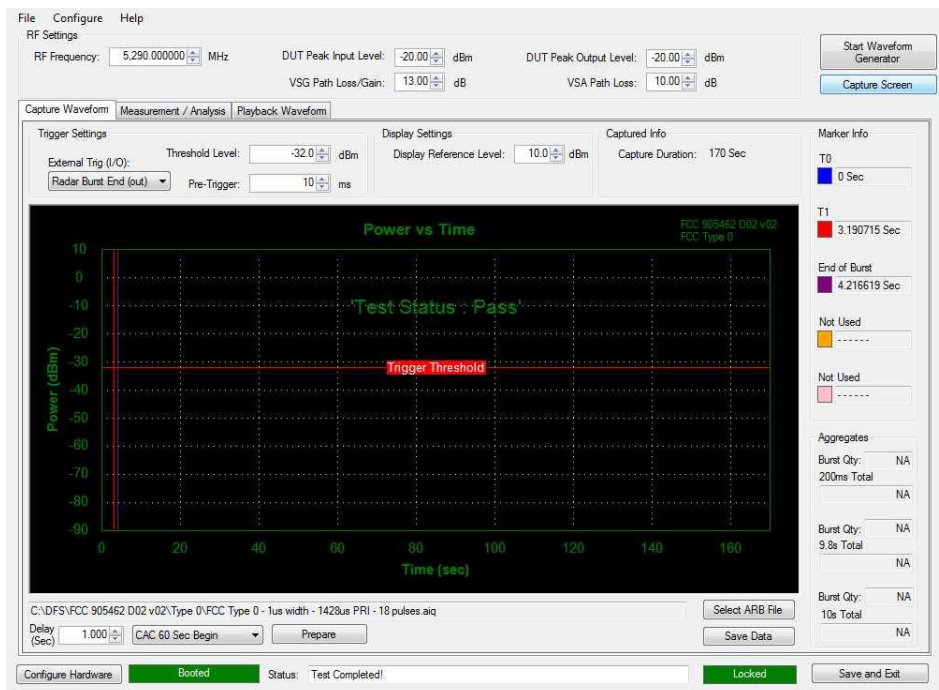


Figure 8.8-1: Radar burst at the beginning of the CAC

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	June 13, 2019	Temperature	24 °C
Test engineer	Kevin Rose and Alvin Liu	Air pressure	967 mbar
Verdict	Pass	Relative humidity	43 %

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	June 12, 2019	Temperature	23 °C
Test engineer	Kevin Rose and Alvin Liu	Air pressure	982 mbar
Verdict	Pass	Relative humidity	38 %

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

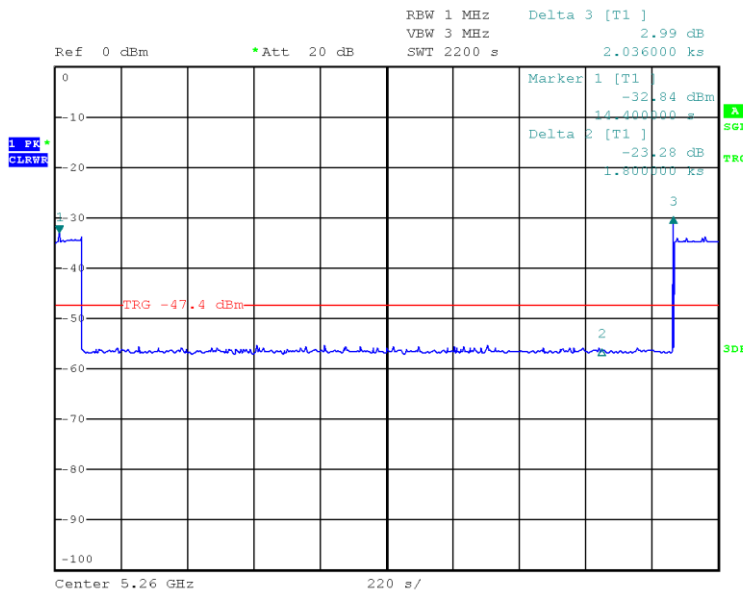
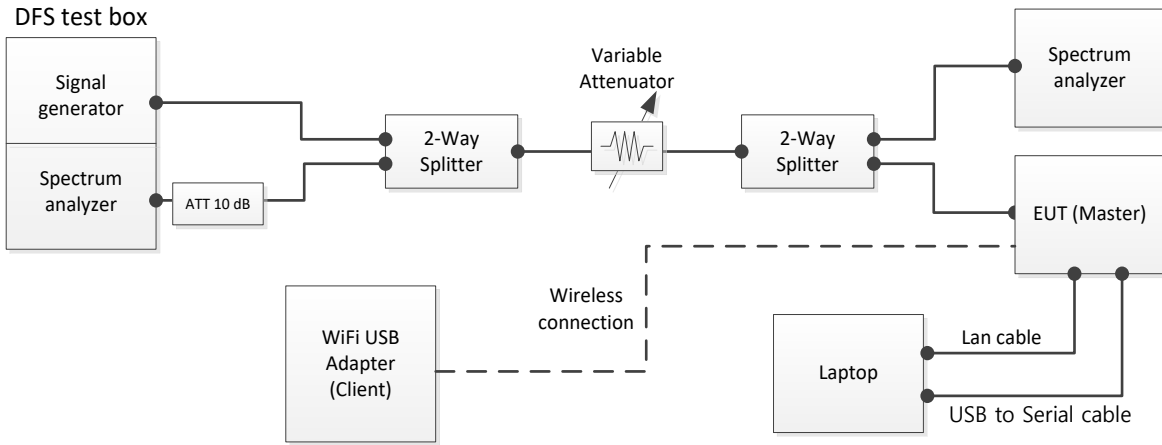


Figure 8.10-1: Non-occupancy period

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

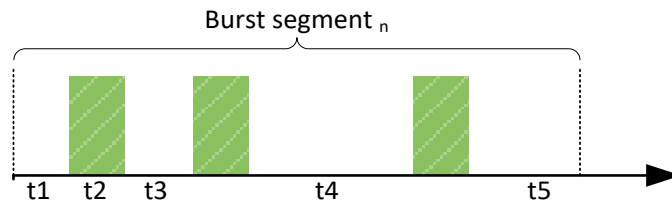


Figure 10.1-1: FCC Type 5 radar structure

Chirp on-time is t_2 , same for each pulse in a burst segment

If there was only one chirp pulse in a burst segment then only t_1 , t_2 and t_5 are active

If there were only two chirp pulses in a burst segment then only t_1 , t_2 , t_3 and t_5 are active

If all three chirp pulses are in a burst segment then t_1 , t_2 , t_3 , t_4 and t_5 are active

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

Burst segment	Number of pulses	Chirp width, MHz	Start time (t_1), μs	Pulse width (t_2), μs	t_3 , μs	t_4 , μs	t_5 , μs	Total segment length, μs
1	3	5	319964	60	1595	1143	600194	923076
2	3	5	131105	58	1355	1046	789396	923076
3	1	5	499956	72	0	0	423048	923076
4	3	5	548408	94	1633	1489	371264	923076
5	2	5	365212	80	1601	0	556103	923076
6	2	5	290933	89	1560	0	630405	923076
7	3	5	39606	99	1876	1382	879915	923076
8	1	5	276007	99	0	0	646970	923076
9	1	5	409993	94	0	0	512989	923076
10	1	5	213536	63	0	0	709477	923076
11	1	5	556374	86	0	0	366616	923076
12	2	5	225962	71	1403	0	695569	923076
13	3	5	137972	50	1663	1291	782000	923076

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	2	18	956496	68	1784	0	132493	1090909
2	2	18	207997	51	1806	0	881004	1090909
3	2	18	866113	81	1018	0	223616	1090909
4	2	18	5424	62	1884	0	1083477	1090909
5	1	18	364800	63	0	0	726046	1090909
6	1	18	1058891	75	0	0	31943	1090909
7	3	18	76799	94	1269	1081	1011478	1090909
8	3	18	972058	99	1162	1041	116351	1090909
9	3	18	27389	57	1878	1619	1059852	1090909
10	2	18	408276	89	1141	0	681314	1090909
11	3	18	673502	63	1917	1319	413982	1090909

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	5	487244	50	1380	1032	110194	600000
2	3	5	588937	66	1328	1502	8035	600000
3	2	5	521558	69	1893	0	76411	600000
4	1	5	290200	59	0	0	309741	600000
5	1	5	202410	92	0	0	397498	600000
6	1	5	587813	63	0	0	12124	600000
7	3	5	353775	74	1030	1870	243103	600000
8	3	5	106949	91	1391	1653	489734	600000
9	1	5	576019	52	0	0	23929	600000
10	3	5	482925	52	1025	1917	113977	600000
11	2	5	30072	55	983	0	568835	600000
12	2	5	405474	63	1439	0	192961	600000
13	1	5	105726	75	0	0	494199	600000
14	3	5	15428	83	1611	1584	581128	600000
15	3	5	441105	80	1631	962	156062	600000
16	3	5	119006	88	1416	1685	477629	600000
17	3	5	254747	91	1174	1256	342550	600000
18	1	5	316961	94	0	0	282945	600000
19	3	5	55788	58	1884	1609	540545	600000
20	3	5	190320	72	1844	1533	406087	600000

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	2	20	1017830	69	1313	0	71628	1090909
2	1	20	399763	73	0	0	691073	1090909
3	3	20	581225	53	1792	1302	506431	1090909
4	1	20	409234	59	0	0	681616	1090909
5	3	20	51704	71	1676	997	1036319	1090909
6	3	20	92129	56	1870	1450	995292	1090909
7	1	20	954628	75	0	0	136206	1090909
8	2	20	472824	91	999	0	616904	1090909
9	1	20	740441	91	0	0	350377	1090909
10	2	20	250818	72	1259	0	838688	1090909
11	3	20	1004981	88	1857	1370	82437	1090909

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	2	11	507029	95	1366	0	158081	666666
2	2	11	171999	93	1157	0	493324	666666
3	1	11	299078	69	0	0	367519	666666
4	3	11	326026	93	976	1865	337520	666666
5	1	11	502669	62	0	0	163935	666666
6	3	11	567863	67	1403	1448	95751	666666
7	1	11	344571	54	0	0	322041	666666
8	1	11	642105	64	0	0	24497	666666
9	3	11	436532	50	1651	1628	226705	666666
10	2	11	213251	71	1768	0	451505	666666
11	1	11	626418	59	0	0	40189	666666
12	3	11	319590	64	1006	1500	344378	666666
13	1	11	180586	50	0	0	486030	666666
14	2	11	587916	60	1110	0	77520	666666
15	1	11	257024	96	0	0	409546	666666
16	2	11	226683	76	1345	0	438486	666666
17	1	11	61721	99	0	0	604846	666666
18	3	11	273493	72	1104	1099	390754	666666

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	6	736773	97	1424	0	261609	1000000
2	2	6	783906	86	1140	0	214782	1000000
3	3	6	14348	80	1276	1015	983121	1000000
4	2	6	815516	73	1758	0	182580	1000000
5	2	6	808223	87	1130	0	190473	1000000
6	1	6	891912	95	0	0	107993	1000000
7	1	6	659836	99	0	0	340065	1000000
8	2	6	309312	81	1307	0	689219	1000000
9	3	6	284306	83	1111	1049	713285	1000000
10	2	6	201783	57	1617	0	796486	1000000
11	1	6	850339	91	0	0	149570	1000000
12	3	6	746376	100	951	1859	250514	1000000

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	2	14	150648	78	1595	0	938510	1090909
2	1	14	28834	58	0	0	1062017	1090909
3	2	14	62277	85	1345	0	1027117	1090909
4	2	14	316490	58	1227	0	773076	1090909
5	2	14	230322	72	1749	0	858694	1090909
6	1	14	732543	59	0	0	358307	1090909
7	3	14	504638	77	980	1913	583147	1090909
8	1	14	1074789	96	0	0	16024	1090909
9	1	14	341602	96	0	0	749211	1090909
10	1	14	813302	51	0	0	277556	1090909
11	1	14	1010333	76	0	0	80500	1090909

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	1	9	146500	72	0	0	453428	600000
2	1	9	395004	75	0	0	204921	600000
3	2	9	363948	77	1299	0	234599	600000
4	1	9	48480	77	0	0	551443	600000
5	2	9	81306	85	1546	0	516978	600000
6	1	9	425188	64	0	0	174748	600000
7	3	9	87111	86	1630	1336	509665	600000
8	2	9	326232	57	1199	0	272455	600000
9	2	9	150539	97	1798	0	447469	600000
10	3	9	233967	58	1169	1631	363059	600000
11	2	9	327919	66	1834	0	270115	600000
12	2	9	223669	69	1801	0	374392	600000
13	1	9	204945	79	0	0	394976	600000
14	1	9	259960	97	0	0	339943	600000
15	2	9	178423	62	1249	0	420204	600000
16	3	9	300378	91	1908	1069	296372	600000
17	1	9	506268	100	0	0	93632	600000
18	3	9	162386	62	1223	1101	435104	600000
19	2	9	314750	98	1646	0	283408	600000
20	3	9	202317	91	1308	1099	395003	600000

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	1	17	731831	79	0	0	68090	800000
2	2	17	196921	80	1416	0	601503	800000
3	1	17	691591	80	0	0	108329	800000
4	2	17	314648	94	1299	0	483865	800000
5	3	17	556542	80	1483	1608	240127	800000
6	2	17	240036	54	1015	0	558841	800000
7	3	17	557614	58	1138	1850	239224	800000
8	2	17	311206	96	1012	0	487590	800000
9	1	17	39851	61	0	0	760088	800000
10	3	17	145575	70	1485	1181	651549	800000
11	3	17	766111	64	1492	1343	30862	800000
12	1	17	105717	67	0	0	694216	800000
13	1	17	669178	61	0	0	130761	800000
14	2	17	545399	82	1846	0	252591	800000
15	1	17	26800	64	0	0	773136	800000

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	2	11	757280	77	1482	0	331993	1090909
2	3	11	374548	55	1543	1111	713542	1090909
3	3	11	561575	60	947	1376	526831	1090909
4	2	11	973037	90	1423	0	116269	1090909
5	3	11	629831	54	1791	1721	457404	1090909
6	1	11	661227	53	0	0	429629	1090909
7	3	11	694526	67	1477	941	393764	1090909
8	2	11	646552	65	1791	0	442436	1090909
9	2	11	708761	87	1775	0	380199	1090909
10	3	11	232434	74	1111	1714	855428	1090909
11	1	11	71934	92	0	0	1018883	1090909

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	3	9	213075	76	1313	1037	1117680	1333333
2	2	9	448057	91	1877	0	883217	1333333
3	2	9	343119	57	1303	0	988797	1333333
4	2	9	1115570	67	1201	0	216428	1333333
5	3	9	104019	79	1844	1098	1226135	1333333
6	2	9	827622	62	1006	0	504581	1333333
7	2	9	268177	100	1266	0	1063690	1333333
8	1	9	833703	77	0	0	499553	1333333
9	1	9	639686	83	0	0	693564	1333333

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	1	8	850631	65	0	0	240213	1090909
2	2	8	545532	69	1172	0	544067	1090909
3	2	8	492511	61	1502	0	596774	1090909
4	3	8	219736	59	1059	1426	868511	1090909
5	1	8	956768	90	0	0	134051	1090909
6	1	8	587833	52	0	0	503024	1090909
7	3	8	407048	92	1510	1043	681032	1090909
8	2	8	1044388	87	1130	0	45217	1090909
9	3	8	301677	50	1541	1523	786018	1090909
10	1	8	751829	85	0	0	338995	1090909
11	2	8	438316	87	1489	0	650930	1090909

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	13	73530	50	1077	0	1258626	1333333
2	2	13	802399	96	1767	0	528975	1333333
3	1	13	797773	60	0	0	535500	1333333
4	2	13	337847	98	1784	0	993506	1333333
5	3	13	804180	95	1663	906	526299	1333333
6	2	13	726383	97	1496	0	605260	1333333
7	1	13	572333	53	0	0	760947	1333333
8	1	13	539917	73	0	0	793343	1333333
9	2	13	388751	56	1740	0	942730	1333333

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	6	373407	78	0	0	826515	1200000
2	1	6	303962	54	0	0	895984	1200000
3	3	6	226704	69	1906	1797	969386	1200000
4	3	6	979705	72	1472	1779	216828	1200000
5	2	6	593199	75	1864	0	604787	1200000
6	2	6	436017	79	1769	0	762056	1200000
7	2	6	836074	88	1048	0	362702	1200000
8	3	6	837456	73	1543	1588	359194	1200000
9	1	6	403064	81	0	0	796855	1200000
10	2	6	410853	85	1423	0	787554	1200000

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	8	923431	67	1803	0	574632	1500000
2	3	8	1101244	97	1457	1553	395455	1500000
3	1	8	1029164	68	0	0	470768	1500000
4	3	8	1214846	83	1624	1865	281416	1500000
5	2	8	985275	55	1164	0	513451	1500000
6	2	8	169346	62	1467	0	1329063	1500000
7	1	8	772645	97	0	0	727258	1500000
8	2	8	892666	85	1899	0	605265	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	1	8	423395	75	0	0	433672	857142
2	3	8	70156	53	1160	1090	784577	857142
3	3	8	378781	65	1243	948	475975	857142
4	3	8	138282	82	1417	1808	715389	857142
5	1	8	467690	90	0	0	389362	857142
6	1	8	292556	54	0	0	564532	857142
7	2	8	33169	69	1931	0	821904	857142
8	1	8	273722	51	0	0	583369	857142
9	3	8	172075	60	1411	1593	681883	857142
10	2	8	773647	97	1176	0	82125	857142
11	1	8	674282	79	0	0	182781	857142
12	3	8	826263	61	1038	1796	27862	857142
13	3	8	316023	94	1715	1728	537394	857142
14	3	8	130331	84	1870	1330	723359	857142

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	1	16	804382	55	0	0	195563	1000000
2	3	16	968454	100	1451	1715	28080	1000000
3	1	16	45701	71	0	0	954228	1000000
4	3	16	967330	95	1226	1618	29541	1000000
5	1	16	120481	57	0	0	879462	1000000
6	2	16	152154	76	956	0	846738	1000000
7	2	16	386367	61	1436	0	612075	1000000
8	2	16	786257	90	1610	0	211953	1000000
9	1	16	577339	79	0	0	422582	1000000
10	3	16	941098	99	1672	998	55935	1000000
11	3	16	457650	64	1821	1601	538736	1000000
12	3	16	982881	93	1841	955	14044	1000000

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	1	15	680476	51	0	0	25355	705882
2	1	15	672230	59	0	0	33593	705882
3	2	15	115156	73	1423	0	589157	705882
4	1	15	425650	58	0	0	280174	705882
5	2	15	219442	88	1289	0	484975	705882
6	2	15	122335	87	1112	0	582261	705882
7	1	15	84114	72	0	0	621696	705882
8	2	15	405675	68	1625	0	298446	705882
9	2	15	362853	78	1260	0	341613	705882
10	1	15	373055	50	0	0	332777	705882
11	1	15	284376	81	0	0	421425	705882
12	2	15	448270	50	1320	0	256192	705882
13	2	15	498304	75	1897	0	205531	705882
14	1	15	58432	91	0	0	647359	705882
15	2	15	172581	81	1337	0	531802	705882
16	2	15	410220	75	973	0	294539	705882
17	3	15	579218	77	1737	1182	123514	705882



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	3	19	147643	90	996	1496	1182928	1333333
2	2	19	162108	89	1820	0	1169227	1333333
3	3	19	1254442	92	1445	1671	75499	1333333
4	1	19	408120	97	0	0	925116	1333333
5	3	19	1223905	75	1812	1868	105523	1333333
6	1	19	678418	79	0	0	654836	1333333
7	2	19	1152068	85	1678	0	179417	1333333
8	3	19	686850	88	1458	1456	643305	1333333
9	3	19	942903	58	1564	1418	387274	1333333

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	16	773891	65	1458	1612	22844	800000
2	1	16	557705	82	0	0	242213	800000
3	2	16	264223	75	1311	0	534316	800000
4	1	16	723601	100	0	0	76299	800000
5	2	16	503883	75	1001	0	294966	800000
6	3	16	767304	50	993	1376	30177	800000
7	1	16	197145	100	0	0	602755	800000
8	1	16	245922	99	0	0	553979	800000
9	3	16	183152	58	1830	1115	613729	800000
10	2	16	428941	88	1819	0	369064	800000
11	1	16	52821	52	0	0	747127	800000
12	1	16	298760	59	0	0	501181	800000
13	1	16	421993	67	0	0	377940	800000
14	3	16	62273	82	1036	1317	735128	800000
15	3	16	446780	86	1584	1784	349594	800000

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	20	666977	69	0	0	256030	923076
2	1	20	204773	84	0	0	718219	923076
3	2	20	257829	51	1708	0	663437	923076
4	3	20	683457	80	1459	1356	236564	923076
5	3	20	61873	90	1147	1499	858287	923076
6	2	20	303887	86	1399	0	617618	923076
7	1	20	79606	71	0	0	843399	923076
8	1	20	517120	73	0	0	405883	923076
9	3	20	143197	59	1453	1501	776748	923076
10	3	20	139421	67	1888	1444	780122	923076
11	3	20	794120	65	1704	1432	125625	923076
12	2	20	67115	93	1549	0	854226	923076
13	3	20	300889	95	1537	1878	618487	923076

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

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μs	Pulse width (t2), μs	t3, μs	t4, μs	t5, μs	Total segment length, μs
1	3	10	135282	70	1042	1176	862290	1000000
2	2	10	524311	78	1120	0	474413	1000000
3	2	10	279834	54	1926	0	718132	1000000
4	1	10	831856	80	0	0	168064	1000000
5	3	10	947808	72	1223	1279	49474	1000000
6	3	10	442744	73	1594	1498	553945	1000000
7	3	10	212920	85	1593	1037	784195	1000000
8	1	10	835492	62	0	0	164446	1000000
9	3	10	15958	98	1745	1166	980837	1000000
10	2	10	970572	87	1483	0	27771	1000000
11	1	10	880539	72	0	0	119389	1000000
12	2	10	50650	50	1120	0	948130	1000000

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

Burst segment	Number of pulses	Chirp width, MHz	Start time (t1), μs	Pulse width (t2), μs	t3, μs	t4, μs	t5, μs	Total segment length, μs
1	1	13	233473	99	0	0	398006	631578
2	3	13	434446	97	1349	1579	193913	631578
3	2	13	253420	94	1427	0	376543	631578
4	2	13	280148	95	1646	0	349594	631578
5	1	13	624791	82	0	0	6705	631578
6	2	13	385765	71	1825	0	243846	631578
7	2	13	144148	50	1148	0	486182	631578
8	3	13	393700	54	1945	1475	234296	631578
9	1	13	96588	84	0	0	534906	631578
10	1	13	550857	73	0	0	80648	631578
11	1	13	372053	70	0	0	259455	631578
12	1	13	550859	51	0	0	80668	631578
13	1	13	559431	79	0	0	72068	631578
14	2	13	443979	57	1860	0	185625	631578
15	2	13	71968	53	1390	0	558114	631578
16	1	13	624644	68	0	0	6866	631578
17	3	13	382509	87	1130	1899	245779	631578
18	2	13	116534	67	1828	0	513082	631578
19	3	13	265510	88	1385	1892	362527	631578

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	3	14	247722	54	1816	1687	498613	750000
2	2	14	412105	65	1625	0	336140	750000
3	1	14	3384	64	0	0	746552	750000
4	2	14	12589	89	1475	0	735758	750000
5	3	14	134122	74	1909	1222	612525	750000
6	2	14	400239	86	1566	0	348023	750000
7	1	14	136594	69	0	0	613337	750000
8	3	14	674071	84	1854	1198	72625	750000
9	2	14	199831	79	938	0	549073	750000
10	2	14	310912	83	1362	0	437560	750000
11	2	14	61026	72	1371	0	687459	750000
12	1	14	308501	66	0	0	441433	750000
13	1	14	421331	87	0	0	328582	750000
14	2	14	309178	72	1254	0	439424	750000
15	1	14	163295	69	0	0	586636	750000
16	1	14	45370	59	0	0	704571	750000

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	3	19	128978	61	949	1040	1202183	1333333
2	1	19	999931	77	0	0	333325	1333333
3	1	19	716613	91	0	0	616629	1333333
4	3	19	758588	83	1086	1190	572220	1333333
5	1	19	1297842	92	0	0	35399	1333333
6	1	19	139909	53	0	0	1193371	1333333
7	2	19	74155	92	1485	0	1257509	1333333
8	1	19	65441	82	0	0	1267810	1333333
9	2	19	379493	74	1310	0	952382	1333333

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	1	13	173304	53	0	0	576643	750000
2	1	13	445037	60	0	0	304903	750000
3	3	13	332155	63	1620	1840	414196	750000
4	3	13	2631	55	1052	1593	744559	750000
5	2	13	625869	54	1034	0	122989	750000
6	3	13	30790	90	1079	1435	716426	750000
7	3	13	253538	96	1605	1787	492782	750000
8	1	13	17861	80	0	0	732059	750000
9	2	13	726700	52	1447	0	21749	750000
10	2	13	61867	89	1360	0	686595	750000
11	3	13	220576	88	1851	1044	526265	750000
12	1	13	300988	76	0	0	448936	750000
13	2	13	147420	56	1241	0	601227	750000
14	3	13	527324	89	1333	1813	219263	750000
15	1	13	513185	65	0	0	236750	750000
16	1	13	257336	69	0	0	492595	750000

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	3	18	22925	74	975	1074	680686	705882
2	3	18	661641	66	1573	1687	40783	705882
3	1	18	277258	61	0	0	428563	705882
4	3	18	333846	85	1295	1214	369272	705882
5	1	18	281509	93	0	0	424280	705882
6	1	18	448672	93	0	0	257117	705882
7	2	18	322921	63	1341	0	381494	705882
8	3	18	132909	90	1362	1319	570022	705882
9	1	18	509653	78	0	0	196151	705882
10	2	18	261151	62	1313	0	443294	705882
11	3	18	268530	78	962	1752	434404	705882
12	3	18	213985	65	1380	1543	488779	705882
13	3	18	316531	96	1035	1798	386230	705882
14	2	18	387784	82	1332	0	316602	705882
15	3	18	666433	68	1796	1807	35642	705882
16	2	18	77609	82	959	0	627150	705882
17	1	18	635514	99	0	0	70269	705882

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	6	27415	94	1747	1096	1469460	1500000
2	1	6	1426603	97	0	0	73300	1500000
3	3	6	810536	93	1367	1732	686086	1500000
4	1	6	1248372	65	0	0	251563	1500000
5	1	6	97724	54	0	0	1402222	1500000
6	3	6	1023934	80	936	1032	473858	1500000
7	1	6	1126749	67	0	0	373184	1500000
8	2	6	945042	60	1197	0	553641	1500000

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	289965	64	949	1546	630424	923076
2	2	19	752617	58	1566	0	168777	923076
3	2	19	114825	50	1364	0	806787	923076
4	3	19	123291	68	1678	1210	796693	923076
5	3	19	758165	92	1252	1400	161983	923076
6	3	19	462412	58	1042	1621	457827	923076
7	1	19	647308	88	0	0	275680	923076
8	1	19	823272	52	0	0	99752	923076
9	3	19	679290	100	1182	1123	241181	923076
10	2	19	728750	96	982	0	193152	923076
11	2	19	890558	55	1214	0	31194	923076
12	2	19	852534	70	1815	0	68587	923076
13	1	19	524966	87	0	0	398023	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	2	10	171711	62	1390	0	626775	800000
2	3	10	553160	83	1245	986	244360	800000
3	3	10	291933	68	1164	1149	505550	800000
4	2	10	328993	52	1344	0	469559	800000
5	3	10	533594	63	1639	1139	263439	800000
6	3	10	328157	56	1232	1048	469395	800000
7	3	10	241666	79	1398	1408	555291	800000
8	2	10	615666	76	962	0	183220	800000
9	2	10	599211	77	1169	0	199466	800000
10	3	10	584364	97	1210	1815	212320	800000
11	1	10	336953	51	0	0	462996	800000
12	3	10	257437	87	1244	1551	539507	800000
13	2	10	450604	63	1512	0	347758	800000
14	1	10	442920	83	0	0	356997	800000
15	3	10	694224	62	1054	1253	103283	800000

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	5691.000000 MHz	51	5700.000000 MHz
2	5632.000000 MHz	52	5254.000000 MHz
3	5651.000000 MHz	53	5530.000000 MHz
4	5451.000000 MHz	54	5706.000000 MHz
5	5385.000000 MHz	55	5287.000000 MHz
6	5664.000000 MHz	56	5454.000000 MHz
7	5574.000000 MHz	57	5490.000000 MHz
8	5494.000000 MHz	58	5469.000000 MHz
9	5715.000000 MHz	59	5426.000000 MHz
10	5379.000000 MHz	60	5694.000000 MHz
11	5422.000000 MHz	61	5533.000000 MHz
12	5713.000000 MHz	62	5604.000000 MHz
13	5440.000000 MHz	63	5670.000000 MHz
14	5304.000000 MHz	64	5722.000000 MHz
15	5284.000000 MHz	65	5423.000000 MHz
16	5720.000000 MHz	66	5576.000000 MHz
17	5702.000000 MHz	67	5675.000000 MHz
18	5653.000000 MHz	68	5331.000000 MHz
19	5319.000000 MHz	69	5325.000000 MHz
20	5627.000000 MHz	70	5375.000000 MHz
21	5371.000000 MHz	71	5369.000000 MHz
22	5470.000000 MHz	72	5543.000000 MHz
23	5347.000000 MHz	73	5611.000000 MHz
24	5459.000000 MHz	74	5420.000000 MHz
25	5674.000000 MHz	75	5680.000000 MHz
26	5579.000000 MHz	76	5335.000000 MHz
27	5645.000000 MHz	77	5509.000000 MHz
28	5475.000000 MHz	78	5640.000000 MHz
29	5635.000000 MHz	79	5259.000000 MHz
30	5269.000000 MHz	80	5656.000000 MHz
31	5631.000000 MHz	81	5419.000000 MHz
32	5424.000000 MHz	82	5532.000000 MHz
33	5338.000000 MHz	83	5266.000000 MHz
34	5723.000000 MHz	84	5491.000000 MHz
35	5528.000000 MHz	85	5450.000000 MHz
36	5655.000000 MHz	86	5707.000000 MHz
37	5468.000000 MHz	87	5309.000000 MHz
38	5703.000000 MHz	88	5312.000000 MHz
39	5633.000000 MHz	89	5501.000000 MHz
40	5552.000000 MHz	90	5649.000000 MHz
41	5350.000000 MHz	91	5560.000000 MHz
42	5529.000000 MHz	92	5290.000000 MHz
43	5573.000000 MHz	93	5623.000000 MHz
44	5503.000000 MHz	94	5692.000000 MHz
45	5478.000000 MHz	95	5378.000000 MHz
46	5690.000000 MHz	96	5479.000000 MHz
47	5390.000000 MHz	97	5618.000000 MHz
48	5376.000000 MHz	98	5654.000000 MHz
49	5330.000000 MHz	99	5405.000000 MHz
50	5260.000000 MHz	100	5587.000000 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	5468.000000 MHz	51	5392.000000 MHz
2	5568.000000 MHz	52	5485.000000 MHz
3	5544.000000 MHz	53	5722.000000 MHz
4	5620.000000 MHz	54	5271.000000 MHz
5	5617.000000 MHz	55	5327.000000 MHz
6	5405.000000 MHz	56	5629.000000 MHz
7	5684.000000 MHz	57	5286.000000 MHz
8	5510.000000 MHz	58	5553.000000 MHz
9	5602.000000 MHz	59	5349.000000 MHz
10	5434.000000 MHz	60	5259.000000 MHz
11	5387.000000 MHz	61	5565.000000 MHz
12	5706.000000 MHz	62	5669.000000 MHz
13	5657.000000 MHz	63	5260.000000 MHz
14	5521.000000 MHz	64	5552.000000 MHz
15	5348.000000 MHz	65	5634.000000 MHz
16	5692.000000 MHz	66	5639.000000 MHz
17	5272.000000 MHz	67	5414.000000 MHz
18	5263.000000 MHz	68	5606.000000 MHz
19	5598.000000 MHz	69	5580.000000 MHz
20	5444.000000 MHz	70	5356.000000 MHz
21	5708.000000 MHz	71	5306.000000 MHz
22	5571.000000 MHz	72	5357.000000 MHz
23	5522.000000 MHz	73	5408.000000 MHz
24	5542.000000 MHz	74	5333.000000 MHz
25	5713.000000 MHz	75	5397.000000 MHz
26	5368.000000 MHz	76	5251.000000 MHz
27	5381.000000 MHz	77	5334.000000 MHz
28	5411.000000 MHz	78	5525.000000 MHz
29	5674.000000 MHz	79	5279.000000 MHz
30	5287.000000 MHz	80	5582.000000 MHz
31	5490.000000 MHz	81	5415.000000 MHz
32	5377.000000 MHz	82	5574.000000 MHz
33	5403.000000 MHz	83	5512.000000 MHz
34	5607.000000 MHz	84	5610.000000 MHz
35	5658.000000 MHz	85	5637.000000 MHz
36	5336.000000 MHz	86	5595.000000 MHz
37	5416.000000 MHz	87	5714.000000 MHz
38	5632.000000 MHz	88	5289.000000 MHz
39	5388.000000 MHz	89	5590.000000 MHz
40	5600.000000 MHz	90	5572.000000 MHz
41	5412.000000 MHz	91	5494.000000 MHz
42	5438.000000 MHz	92	5384.000000 MHz
43	5394.000000 MHz	93	5409.000000 MHz
44	5711.000000 MHz	94	5374.000000 MHz
45	5284.000000 MHz	95	5666.000000 MHz
46	5581.000000 MHz	96	5460.000000 MHz
47	5341.000000 MHz	97	5266.000000 MHz
48	5596.000000 MHz	98	5534.000000 MHz
49	5641.000000 MHz	99	5474.000000 MHz
50	5531.000000 MHz	100	5378.000000 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	5563.000000 MHz	51	5611.000000 MHz
2	5663.000000 MHz	52	5253.000000 MHz
3	5654.000000 MHz	53	5348.000000 MHz
4	5628.000000 MHz	54	5641.000000 MHz
5	5676.000000 MHz	55	5311.000000 MHz
6	5277.000000 MHz	56	5717.000000 MHz
7	5319.000000 MHz	57	5419.000000 MHz
8	5401.000000 MHz	58	5257.000000 MHz
9	5399.000000 MHz	59	5250.000000 MHz
10	5344.000000 MHz	60	5304.000000 MHz
11	5413.000000 MHz	61	5316.000000 MHz
12	5541.000000 MHz	62	5617.000000 MHz
13	5372.000000 MHz	63	5713.000000 MHz
14	5279.000000 MHz	64	5707.000000 MHz
15	5501.000000 MHz	65	5527.000000 MHz
16	5596.000000 MHz	66	5517.000000 MHz
17	5318.000000 MHz	67	5434.000000 MHz
18	5485.000000 MHz	68	5566.000000 MHz
19	5317.000000 MHz	69	5355.000000 MHz
20	5267.000000 MHz	70	5297.000000 MHz
21	5491.000000 MHz	71	5302.000000 MHz
22	5560.000000 MHz	72	5386.000000 MHz
23	5564.000000 MHz	73	5414.000000 MHz
24	5263.000000 MHz	74	5291.000000 MHz
25	5567.000000 MHz	75	5682.000000 MHz
26	5684.000000 MHz	76	5670.000000 MHz
27	5583.000000 MHz	77	5508.000000 MHz
28	5312.000000 MHz	78	5451.000000 MHz
29	5289.000000 MHz	79	5715.000000 MHz
30	5346.000000 MHz	80	5664.000000 MHz
31	5649.000000 MHz	81	5579.000000 MHz
32	5384.000000 MHz	82	5497.000000 MHz
33	5296.000000 MHz	83	5292.000000 MHz
34	5699.000000 MHz	84	5600.000000 MHz
35	5329.000000 MHz	85	5412.000000 MHz
36	5608.000000 MHz	86	5547.000000 MHz
37	5643.000000 MHz	87	5651.000000 MHz
38	5686.000000 MHz	88	5516.000000 MHz
39	5694.000000 MHz	89	5409.000000 MHz
40	5438.000000 MHz	90	5345.000000 MHz
41	5423.000000 MHz	91	5629.000000 MHz
42	5696.000000 MHz	92	5700.000000 MHz
43	5592.000000 MHz	93	5264.000000 MHz
44	5252.000000 MHz	94	5320.000000 MHz
45	5637.000000 MHz	95	5488.000000 MHz
46	5440.000000 MHz	96	5457.000000 MHz
47	5588.000000 MHz	97	5301.000000 MHz
48	5672.000000 MHz	98	5271.000000 MHz
49	5299.000000 MHz	99	5559.000000 MHz
50	5407.000000 MHz	100	5591.000000 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	5659.000000 MHz	51	5590.000000 MHz
2	5599.000000 MHz	52	5337.000000 MHz
3	5336.000000 MHz	53	5341.000000 MHz
4	5284.000000 MHz	54	5458.000000 MHz
5	5474.000000 MHz	55	5426.000000 MHz
6	5385.000000 MHz	56	5308.000000 MHz
7	5496.000000 MHz	57	5561.000000 MHz
8	5524.000000 MHz	58	5530.000000 MHz
9	5314.000000 MHz	59	5489.000000 MHz
10	5377.000000 MHz	60	5454.000000 MHz
11	5287.000000 MHz	61	5527.000000 MHz
12	5465.000000 MHz	62	5711.000000 MHz
13	5665.000000 MHz	63	5543.000000 MHz
14	5652.000000 MHz	64	5400.000000 MHz
15	5355.000000 MHz	65	5273.000000 MHz
16	5612.000000 MHz	66	5522.000000 MHz
17	5640.000000 MHz	67	5510.000000 MHz
18	5564.000000 MHz	68	5705.000000 MHz
19	5618.000000 MHz	69	5288.000000 MHz
20	5688.000000 MHz	70	5610.000000 MHz
21	5319.000000 MHz	71	5311.000000 MHz
22	5387.000000 MHz	72	5395.000000 MHz
23	5724.000000 MHz	73	5276.000000 MHz
24	5668.000000 MHz	74	5698.000000 MHz
25	5265.000000 MHz	75	5472.000000 MHz
26	5683.000000 MHz	76	5691.000000 MHz
27	5437.000000 MHz	77	5622.000000 MHz
28	5687.000000 MHz	78	5722.000000 MHz
29	5508.000000 MHz	79	5325.000000 MHz
30	5558.000000 MHz	80	5324.000000 MHz
31	5663.000000 MHz	81	5373.000000 MHz
32	5425.000000 MHz	82	5525.000000 MHz
33	5537.000000 MHz	83	5374.000000 MHz
34	5461.000000 MHz	84	5578.000000 MHz
35	5616.000000 MHz	85	5312.000000 MHz
36	5292.000000 MHz	86	5475.000000 MHz
37	5550.000000 MHz	87	5262.000000 MHz
38	5637.000000 MHz	88	5720.000000 MHz
39	5623.000000 MHz	89	5723.000000 MHz
40	5280.000000 MHz	90	5396.000000 MHz
41	5502.000000 MHz	91	5450.000000 MHz
42	5662.000000 MHz	92	5518.000000 MHz
43	5523.000000 MHz	93	5399.000000 MHz
44	5714.000000 MHz	94	5684.000000 MHz
45	5710.000000 MHz	95	5563.000000 MHz
46	5690.000000 MHz	96	5552.000000 MHz
47	5601.000000 MHz	97	5577.000000 MHz
48	5541.000000 MHz	98	5670.000000 MHz
49	5462.000000 MHz	99	5432.000000 MHz
50	5660.000000 MHz	100	5590.000000 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	5453.000000 MHz	51	5521.000000 MHz
2	5561.000000 MHz	52	5630.000000 MHz
3	5474.000000 MHz	53	5478.000000 MHz
4	5564.000000 MHz	54	5485.000000 MHz
5	5339.000000 MHz	55	5588.000000 MHz
6	5556.000000 MHz	56	5391.000000 MHz
7	5530.000000 MHz	57	5604.000000 MHz
8	5691.000000 MHz	58	5333.000000 MHz
9	5636.000000 MHz	59	5492.000000 MHz
10	5468.000000 MHz	60	5257.000000 MHz
11	5277.000000 MHz	61	5388.000000 MHz
12	5472.000000 MHz	62	5721.000000 MHz
13	5688.000000 MHz	63	5655.000000 MHz
14	5386.000000 MHz	64	5617.000000 MHz
15	5377.000000 MHz	65	5562.000000 MHz
16	5252.000000 MHz	66	5465.000000 MHz
17	5538.000000 MHz	67	5360.000000 MHz
18	5597.000000 MHz	68	5414.000000 MHz
19	5577.000000 MHz	69	5675.000000 MHz
20	5399.000000 MHz	70	5268.000000 MHz
21	5526.000000 MHz	71	5612.000000 MHz
22	5699.000000 MHz	72	5397.000000 MHz
23	5325.000000 MHz	73	5438.000000 MHz
24	5611.000000 MHz	74	5483.000000 MHz
25	5422.000000 MHz	75	5459.000000 MHz
26	5460.000000 MHz	76	5454.000000 MHz
27	5473.000000 MHz	77	5373.000000 MHz
28	5287.000000 MHz	78	5484.000000 MHz
29	5684.000000 MHz	79	5648.000000 MHz
30	5498.000000 MHz	80	5309.000000 MHz
31	5347.000000 MHz	81	5470.000000 MHz
32	5580.000000 MHz	82	5417.000000 MHz
33	5376.000000 MHz	83	5506.000000 MHz
34	5645.000000 MHz	84	5494.000000 MHz
35	5267.000000 MHz	85	5292.000000 MHz
36	5563.000000 MHz	86	5544.000000 MHz
37	5635.000000 MHz	87	5673.000000 MHz
38	5647.000000 MHz	88	5500.000000 MHz
39	5627.000000 MHz	89	5656.000000 MHz
40	5440.000000 MHz	90	5403.000000 MHz
41	5507.000000 MHz	91	5523.000000 MHz
42	5337.000000 MHz	92	5447.000000 MHz
43	5652.000000 MHz	93	5396.000000 MHz
44	5296.000000 MHz	94	5361.000000 MHz
45	5701.000000 MHz	95	5278.000000 MHz
46	5263.000000 MHz	96	5591.000000 MHz
47	5557.000000 MHz	97	5338.000000 MHz
48	5560.000000 MHz	98	5264.000000 MHz
49	5704.000000 MHz	99	5370.000000 MHz
50	5424.000000 MHz	100	5598.000000 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	5287.000000 MHz	51	5276.000000 MHz
2	5608.000000 MHz	52	5662.000000 MHz
3	5629.000000 MHz	53	5280.000000 MHz
4	5478.000000 MHz	54	5630.000000 MHz
5	5257.000000 MHz	55	5506.000000 MHz
6	5558.000000 MHz	56	5264.000000 MHz
7	5341.000000 MHz	57	5335.000000 MHz
8	5298.000000 MHz	58	5482.000000 MHz
9	5578.000000 MHz	59	5410.000000 MHz
10	5439.000000 MHz	60	5614.000000 MHz
11	5382.000000 MHz	61	5627.000000 MHz
12	5632.000000 MHz	62	5710.000000 MHz
13	5381.000000 MHz	63	5435.000000 MHz
14	5261.000000 MHz	64	5350.000000 MHz
15	5493.000000 MHz	65	5600.000000 MHz
16	5663.000000 MHz	66	5619.000000 MHz
17	5466.000000 MHz	67	5289.000000 MHz
18	5670.000000 MHz	68	5377.000000 MHz
19	5697.000000 MHz	69	5388.000000 MHz
20	5344.000000 MHz	70	5270.000000 MHz
21	5661.000000 MHz	71	5394.000000 MHz
22	5702.000000 MHz	72	5331.000000 MHz
23	5373.000000 MHz	73	5465.000000 MHz
24	5463.000000 MHz	74	5623.000000 MHz
25	5424.000000 MHz	75	5546.000000 MHz
26	5472.000000 MHz	76	5345.000000 MHz
27	5584.000000 MHz	77	5620.000000 MHz
28	5550.000000 MHz	78	5604.000000 MHz
29	5417.000000 MHz	79	5711.000000 MHz
30	5549.000000 MHz	80	5513.000000 MHz
31	5480.000000 MHz	81	5412.000000 MHz
32	5646.000000 MHz	82	5484.000000 MHz
33	5635.000000 MHz	83	5539.000000 MHz
34	5617.000000 MHz	84	5253.000000 MHz
35	5294.000000 MHz	85	5432.000000 MHz
36	5427.000000 MHz	86	5317.000000 MHz
37	5485.000000 MHz	87	5326.000000 MHz
38	5570.000000 MHz	88	5385.000000 MHz
39	5297.000000 MHz	89	5449.000000 MHz
40	5475.000000 MHz	90	5492.000000 MHz
41	5593.000000 MHz	91	5283.000000 MHz
42	5682.000000 MHz	92	5557.000000 MHz
43	5703.000000 MHz	93	5268.000000 MHz
44	5371.000000 MHz	94	5639.000000 MHz
45	5342.000000 MHz	95	5477.000000 MHz
46	5368.000000 MHz	96	5610.000000 MHz
47	5652.000000 MHz	97	5361.000000 MHz
48	5596.000000 MHz	98	5647.000000 MHz
49	5454.000000 MHz	99	5476.000000 MHz
50	5291.000000 MHz	100	5414.000000 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	5267.000000 MHz	51	5692.000000 MHz
2	5574.000000 MHz	52	5709.000000 MHz
3	5589.000000 MHz	53	5600.000000 MHz
4	5518.000000 MHz	54	5441.000000 MHz
5	5438.000000 MHz	55	5638.000000 MHz
6	5340.000000 MHz	56	5423.000000 MHz
7	5428.000000 MHz	57	5647.000000 MHz
8	5471.000000 MHz	58	5484.000000 MHz
9	5614.000000 MHz	59	5513.000000 MHz
10	5355.000000 MHz	60	5678.000000 MHz
11	5601.000000 MHz	61	5361.000000 MHz
12	5508.000000 MHz	62	5333.000000 MHz
13	5617.000000 MHz	63	5546.000000 MHz
14	5482.000000 MHz	64	5684.000000 MHz
15	5432.000000 MHz	65	5278.000000 MHz
16	5680.000000 MHz	66	5403.000000 MHz
17	5677.000000 MHz	67	5636.000000 MHz
18	5317.000000 MHz	68	5695.000000 MHz
19	5682.000000 MHz	69	5468.000000 MHz
20	5424.000000 MHz	70	5344.000000 MHz
21	5446.000000 MHz	71	5661.000000 MHz
22	5697.000000 MHz	72	5282.000000 MHz
23	5713.000000 MHz	73	5567.000000 MHz
24	5327.000000 MHz	74	5502.000000 MHz
25	5524.000000 MHz	75	5420.000000 MHz
26	5641.000000 MHz	76	5460.000000 MHz
27	5505.000000 MHz	77	5299.000000 MHz
28	5711.000000 MHz	78	5417.000000 MHz
29	5350.000000 MHz	79	5356.000000 MHz
30	5401.000000 MHz	80	5372.000000 MHz
31	5490.000000 MHz	81	5353.000000 MHz
32	5425.000000 MHz	82	5478.000000 MHz
33	5320.000000 MHz	83	5419.000000 MHz
34	5522.000000 MHz	84	5332.000000 MHz
35	5404.000000 MHz	85	5700.000000 MHz
36	5568.000000 MHz	86	5597.000000 MHz
37	5523.000000 MHz	87	5530.000000 MHz
38	5613.000000 MHz	88	5469.000000 MHz
39	5295.000000 MHz	89	5339.000000 MHz
40	5453.000000 MHz	90	5698.000000 MHz
41	5703.000000 MHz	91	5569.000000 MHz
42	5603.000000 MHz	92	5450.000000 MHz
43	5652.000000 MHz	93	5511.000000 MHz
44	5485.000000 MHz	94	5266.000000 MHz
45	5271.000000 MHz	95	5550.000000 MHz
46	5294.000000 MHz	96	5591.000000 MHz
47	5662.000000 MHz	97	5303.000000 MHz
48	5658.000000 MHz	98	5331.000000 MHz
49	5690.000000 MHz	99	5473.000000 MHz
50	5302.000000 MHz	100	5675.000000 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	5297.000000 MHz	51	5642.000000 MHz
2	5568.000000 MHz	52	5671.000000 MHz
3	5599.000000 MHz	53	5334.000000 MHz
4	5385.000000 MHz	54	5379.000000 MHz
5	5252.000000 MHz	55	5332.000000 MHz
6	5437.000000 MHz	56	5342.000000 MHz
7	5434.000000 MHz	57	5331.000000 MHz
8	5346.000000 MHz	58	5340.000000 MHz
9	5572.000000 MHz	59	5644.000000 MHz
10	5561.000000 MHz	60	5563.000000 MHz
11	5685.000000 MHz	61	5654.000000 MHz
12	5443.000000 MHz	62	5460.000000 MHz
13	5456.000000 MHz	63	5270.000000 MHz
14	5583.000000 MHz	64	5588.000000 MHz
15	5394.000000 MHz	65	5612.000000 MHz
16	5320.000000 MHz	66	5419.000000 MHz
17	5452.000000 MHz	67	5690.000000 MHz
18	5289.000000 MHz	68	5260.000000 MHz
19	5414.000000 MHz	69	5431.000000 MHz
20	5724.000000 MHz	70	5698.000000 MHz
21	5254.000000 MHz	71	5295.000000 MHz
22	5687.000000 MHz	72	5580.000000 MHz
23	5438.000000 MHz	73	5285.000000 MHz
24	5415.000000 MHz	74	5318.000000 MHz
25	5302.000000 MHz	75	5352.000000 MHz
26	5634.000000 MHz	76	5373.000000 MHz
27	5444.000000 MHz	77	5581.000000 MHz
28	5474.000000 MHz	78	5287.000000 MHz
29	5636.000000 MHz	79	5719.000000 MHz
30	5490.000000 MHz	80	5273.000000 MHz
31	5471.000000 MHz	81	5482.000000 MHz
32	5290.000000 MHz	82	5502.000000 MHz
33	5604.000000 MHz	83	5350.000000 MHz
34	5527.000000 MHz	84	5323.000000 MHz
35	5372.000000 MHz	85	5533.000000 MHz
36	5374.000000 MHz	86	5641.000000 MHz
37	5457.000000 MHz	87	5522.000000 MHz
38	5565.000000 MHz	88	5418.000000 MHz
39	5594.000000 MHz	89	5375.000000 MHz
40	5343.000000 MHz	90	5672.000000 MHz
41	5284.000000 MHz	91	5571.000000 MHz
42	5718.000000 MHz	92	5501.000000 MHz
43	5376.000000 MHz	93	5569.000000 MHz
44	5257.000000 MHz	94	5509.000000 MHz
45	5441.000000 MHz	95	5660.000000 MHz
46	5304.000000 MHz	96	5498.000000 MHz
47	5408.000000 MHz	97	5673.000000 MHz
48	5405.000000 MHz	98	5487.000000 MHz
49	5388.000000 MHz	99	5682.000000 MHz
50	5264.000000 MHz	100	5616.000000 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	5707.000000 MHz	51	5683.000000 MHz
2	5704.000000 MHz	52	5351.000000 MHz
3	5608.000000 MHz	53	5378.000000 MHz
4	5520.000000 MHz	54	5722.000000 MHz
5	5433.000000 MHz	55	5718.000000 MHz
6	5322.000000 MHz	56	5563.000000 MHz
7	5423.000000 MHz	57	5401.000000 MHz
8	5275.000000 MHz	58	5633.000000 MHz
9	5565.000000 MHz	59	5703.000000 MHz
10	5379.000000 MHz	60	5277.000000 MHz
11	5642.000000 MHz	61	5659.000000 MHz
12	5695.000000 MHz	62	5627.000000 MHz
13	5616.000000 MHz	63	5552.000000 MHz
14	5452.000000 MHz	64	5449.000000 MHz
15	5515.000000 MHz	65	5482.000000 MHz
16	5514.000000 MHz	66	5425.000000 MHz
17	5426.000000 MHz	67	5402.000000 MHz
18	5601.000000 MHz	68	5564.000000 MHz
19	5454.000000 MHz	69	5548.000000 MHz
20	5338.000000 MHz	70	5599.000000 MHz
21	5658.000000 MHz	71	5453.000000 MHz
22	5606.000000 MHz	72	5684.000000 MHz
23	5575.000000 MHz	73	5651.000000 MHz
24	5611.000000 MHz	74	5701.000000 MHz
25	5527.000000 MHz	75	5438.000000 MHz
26	5595.000000 MHz	76	5531.000000 MHz
27	5646.000000 MHz	77	5613.000000 MHz
28	5296.000000 MHz	78	5502.000000 MHz
29	5537.000000 MHz	79	5706.000000 MHz
30	5445.000000 MHz	80	5524.000000 MHz
31	5264.000000 MHz	81	5474.000000 MHz
32	5393.000000 MHz	82	5448.000000 MHz
33	5432.000000 MHz	83	5662.000000 MHz
34	5550.000000 MHz	84	5285.000000 MHz
35	5315.000000 MHz	85	5257.000000 MHz
36	5282.000000 MHz	86	5396.000000 MHz
37	5251.000000 MHz	87	5626.000000 MHz
38	5709.000000 MHz	88	5590.000000 MHz
39	5302.000000 MHz	89	5381.000000 MHz
40	5499.000000 MHz	90	5437.000000 MHz
41	5359.000000 MHz	91	5274.000000 MHz
42	5256.000000 MHz	92	5298.000000 MHz
43	5371.000000 MHz	93	5434.000000 MHz
44	5652.000000 MHz	94	5555.000000 MHz
45	5618.000000 MHz	95	5507.000000 MHz
46	5457.000000 MHz	96	5584.000000 MHz
47	5408.000000 MHz	97	5519.000000 MHz
48	5284.000000 MHz	98	5605.000000 MHz
49	5411.000000 MHz	99	5279.000000 MHz
50	5594.000000 MHz	100	5384.000000 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	5476.000000 MHz	51	5692.000000 MHz
2	5649.000000 MHz	52	5579.000000 MHz
3	5288.000000 MHz	53	5633.000000 MHz
4	5317.000000 MHz	54	5440.000000 MHz
5	5586.000000 MHz	55	5319.000000 MHz
6	5687.000000 MHz	56	5330.000000 MHz
7	5351.000000 MHz	57	5328.000000 MHz
8	5340.000000 MHz	58	5378.000000 MHz
9	5500.000000 MHz	59	5581.000000 MHz
10	5625.000000 MHz	60	5385.000000 MHz
11	5646.000000 MHz	61	5544.000000 MHz
12	5278.000000 MHz	62	5509.000000 MHz
13	5684.000000 MHz	63	5595.000000 MHz
14	5428.000000 MHz	64	5456.000000 MHz
15	5512.000000 MHz	65	5449.000000 MHz
16	5446.000000 MHz	66	5477.000000 MHz
17	5417.000000 MHz	67	5562.000000 MHz
18	5469.000000 MHz	68	5459.000000 MHz
19	5698.000000 MHz	69	5376.000000 MHz
20	5621.000000 MHz	70	5418.000000 MHz
21	5265.000000 MHz	71	5555.000000 MHz
22	5659.000000 MHz	72	5582.000000 MHz
23	5602.000000 MHz	73	5292.000000 MHz
24	5517.000000 MHz	74	5480.000000 MHz
25	5607.000000 MHz	75	5482.000000 MHz
26	5273.000000 MHz	76	5439.000000 MHz
27	5643.000000 MHz	77	5721.000000 MHz
28	5489.000000 MHz	78	5438.000000 MHz
29	5494.000000 MHz	79	5371.000000 MHz
30	5339.000000 MHz	80	5367.000000 MHz
31	5697.000000 MHz	81	5618.000000 MHz
32	5262.000000 MHz	82	5474.000000 MHz
33	5722.000000 MHz	83	5465.000000 MHz
34	5664.000000 MHz	84	5583.000000 MHz
35	5535.000000 MHz	85	5410.000000 MHz
36	5663.000000 MHz	86	5637.000000 MHz
37	5488.000000 MHz	87	5596.000000 MHz
38	5290.000000 MHz	88	5401.000000 MHz
39	5453.000000 MHz	89	5534.000000 MHz
40	5537.000000 MHz	90	5486.000000 MHz
41	5353.000000 MHz	91	5604.000000 MHz
42	5270.000000 MHz	92	5470.000000 MHz
43	5475.000000 MHz	93	5255.000000 MHz
44	5377.000000 MHz	94	5365.000000 MHz
45	5720.000000 MHz	95	5571.000000 MHz
46	5454.000000 MHz	96	5566.000000 MHz
47	5416.000000 MHz	97	5411.000000 MHz
48	5299.000000 MHz	98	5430.000000 MHz
49	5354.000000 MHz	99	5523.000000 MHz
50	5306.000000 MHz	100	5277.000000 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	5574.000000 MHz	51	5487.000000 MHz
2	5299.000000 MHz	52	5589.000000 MHz
3	5621.000000 MHz	53	5265.000000 MHz
4	5354.000000 MHz	54	5394.000000 MHz
5	5671.000000 MHz	55	5541.000000 MHz
6	5548.000000 MHz	56	5597.000000 MHz
7	5321.000000 MHz	57	5343.000000 MHz
8	5473.000000 MHz	58	5668.000000 MHz
9	5339.000000 MHz	59	5383.000000 MHz
10	5396.000000 MHz	60	5460.000000 MHz
11	5555.000000 MHz	61	5255.000000 MHz
12	5253.000000 MHz	62	5695.000000 MHz
13	5444.000000 MHz	63	5663.000000 MHz
14	5703.000000 MHz	64	5448.000000 MHz
15	5464.000000 MHz	65	5305.000000 MHz
16	5547.000000 MHz	66	5570.000000 MHz
17	5301.000000 MHz	67	5285.000000 MHz
18	5271.000000 MHz	68	5655.000000 MHz
19	5345.000000 MHz	69	5281.000000 MHz
20	5412.000000 MHz	70	5252.000000 MHz
21	5559.000000 MHz	71	5459.000000 MHz
22	5533.000000 MHz	72	5602.000000 MHz
23	5476.000000 MHz	73	5403.000000 MHz
24	5538.000000 MHz	74	5640.000000 MHz
25	5324.000000 MHz	75	5319.000000 MHz
26	5454.000000 MHz	76	5428.000000 MHz
27	5591.000000 MHz	77	5342.000000 MHz
28	5530.000000 MHz	78	5517.000000 MHz
29	5680.000000 MHz	79	5567.000000 MHz
30	5647.000000 MHz	80	5378.000000 MHz
31	5616.000000 MHz	81	5717.000000 MHz
32	5438.000000 MHz	82	5594.000000 MHz
33	5258.000000 MHz	83	5596.000000 MHz
34	5361.000000 MHz	84	5675.000000 MHz
35	5266.000000 MHz	85	5582.000000 MHz
36	5491.000000 MHz	86	5617.000000 MHz
37	5455.000000 MHz	87	5685.000000 MHz
38	5711.000000 MHz	88	5437.000000 MHz
39	5415.000000 MHz	89	5423.000000 MHz
40	5380.000000 MHz	90	5575.000000 MHz
41	5557.000000 MHz	91	5689.000000 MHz
42	5323.000000 MHz	92	5549.000000 MHz
43	5425.000000 MHz	93	5568.000000 MHz
44	5660.000000 MHz	94	5583.000000 MHz
45	5645.000000 MHz	95	5628.000000 MHz
46	5521.000000 MHz	96	5467.000000 MHz
47	5351.000000 MHz	97	5556.000000 MHz
48	5588.000000 MHz	98	5263.000000 MHz
49	5379.000000 MHz	99	5282.000000 MHz
50	5502.000000 MHz	100	5664.000000 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	5444.000000 MHz	51	5611.000000 MHz
2	5428.000000 MHz	52	5648.000000 MHz
3	5384.000000 MHz	53	5690.000000 MHz
4	5490.000000 MHz	54	5481.000000 MHz
5	5290.000000 MHz	55	5697.000000 MHz
6	5681.000000 MHz	56	5516.000000 MHz
7	5617.000000 MHz	57	5410.000000 MHz
8	5707.000000 MHz	58	5390.000000 MHz
9	5406.000000 MHz	59	5723.000000 MHz
10	5702.000000 MHz	60	5344.000000 MHz
11	5318.000000 MHz	61	5574.000000 MHz
12	5576.000000 MHz	62	5678.000000 MHz
13	5355.000000 MHz	63	5394.000000 MHz
14	5713.000000 MHz	64	5622.000000 MHz
15	5392.000000 MHz	65	5420.000000 MHz
16	5695.000000 MHz	66	5715.000000 MHz
17	5569.000000 MHz	67	5263.000000 MHz
18	5553.000000 MHz	68	5253.000000 MHz
19	5609.000000 MHz	69	5457.000000 MHz
20	5336.000000 MHz	70	5670.000000 MHz
21	5302.000000 MHz	71	5472.000000 MHz
22	5487.000000 MHz	72	5413.000000 MHz
23	5322.000000 MHz	73	5276.000000 MHz
24	5461.000000 MHz	74	5685.000000 MHz
25	5524.000000 MHz	75	5277.000000 MHz
26	5533.000000 MHz	76	5518.000000 MHz
27	5708.000000 MHz	77	5414.000000 MHz
28	5350.000000 MHz	78	5497.000000 MHz
29	5547.000000 MHz	79	5374.000000 MHz
30	5266.000000 MHz	80	5431.000000 MHz
31	5703.000000 MHz	81	5334.000000 MHz
32	5562.000000 MHz	82	5627.000000 MHz
33	5504.000000 MHz	83	5706.000000 MHz
34	5261.000000 MHz	84	5625.000000 MHz
35	5388.000000 MHz	85	5646.000000 MHz
36	5439.000000 MHz	86	5531.000000 MHz
37	5551.000000 MHz	87	5343.000000 MHz
38	5672.000000 MHz	88	5591.000000 MHz
39	5382.000000 MHz	89	5283.000000 MHz
40	5618.000000 MHz	90	5705.000000 MHz
41	5566.000000 MHz	91	5696.000000 MHz
42	5484.000000 MHz	92	5370.000000 MHz
43	5590.000000 MHz	93	5442.000000 MHz
44	5515.000000 MHz	94	5341.000000 MHz
45	5545.000000 MHz	95	5265.000000 MHz
46	5324.000000 MHz	96	5407.000000 MHz
47	5586.000000 MHz	97	5717.000000 MHz
48	5435.000000 MHz	98	5400.000000 MHz
49	5398.000000 MHz	99	5677.000000 MHz
50	5256.000000 MHz	100	5468.000000 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	5376.000000 MHz	51	5292.000000 MHz
2	5534.000000 MHz	52	5281.000000 MHz
3	5490.000000 MHz	53	5315.000000 MHz
4	5449.000000 MHz	54	5700.000000 MHz
5	5362.000000 MHz	55	5354.000000 MHz
6	5455.000000 MHz	56	5342.000000 MHz
7	5317.000000 MHz	57	5584.000000 MHz
8	5549.000000 MHz	58	5426.000000 MHz
9	5694.000000 MHz	59	5677.000000 MHz
10	5392.000000 MHz	60	5310.000000 MHz
11	5594.000000 MHz	61	5293.000000 MHz
12	5491.000000 MHz	62	5720.000000 MHz
13	5640.000000 MHz	63	5638.000000 MHz
14	5519.000000 MHz	64	5408.000000 MHz
15	5318.000000 MHz	65	5567.000000 MHz
16	5457.000000 MHz	66	5401.000000 MHz
17	5304.000000 MHz	67	5269.000000 MHz
18	5634.000000 MHz	68	5680.000000 MHz
19	5590.000000 MHz	69	5416.000000 MHz
20	5637.000000 MHz	70	5347.000000 MHz
21	5492.000000 MHz	71	5653.000000 MHz
22	5271.000000 MHz	72	5670.000000 MHz
23	5441.000000 MHz	73	5336.000000 MHz
24	5630.000000 MHz	74	5632.000000 MHz
25	5493.000000 MHz	75	5613.000000 MHz
26	5661.000000 MHz	76	5378.000000 MHz
27	5503.000000 MHz	77	5542.000000 MHz
28	5256.000000 MHz	78	5485.000000 MHz
29	5505.000000 MHz	79	5282.000000 MHz
30	5699.000000 MHz	80	5641.000000 MHz
31	5479.000000 MHz	81	5721.000000 MHz
32	5436.000000 MHz	82	5603.000000 MHz
33	5649.000000 MHz	83	5404.000000 MHz
34	5488.000000 MHz	84	5512.000000 MHz
35	5499.000000 MHz	85	5395.000000 MHz
36	5291.000000 MHz	86	5270.000000 MHz
37	5681.000000 MHz	87	5431.000000 MHz
38	5706.000000 MHz	88	5250.000000 MHz
39	5385.000000 MHz	89	5530.000000 MHz
40	5691.000000 MHz	90	5433.000000 MHz
41	5405.000000 MHz	91	5369.000000 MHz
42	5364.000000 MHz	92	5343.000000 MHz
43	5553.000000 MHz	93	5358.000000 MHz
44	5501.000000 MHz	94	5274.000000 MHz
45	5675.000000 MHz	95	5451.000000 MHz
46	5425.000000 MHz	96	5384.000000 MHz
47	5470.000000 MHz	97	5722.000000 MHz
48	5339.000000 MHz	98	5551.000000 MHz
49	5509.000000 MHz	99	5370.000000 MHz
50	5345.000000 MHz	100	5614.000000 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	5447.000000 MHz	51	5715.000000 MHz
2	5453.000000 MHz	52	5529.000000 MHz
3	5455.000000 MHz	53	5330.000000 MHz
4	5388.000000 MHz	54	5640.000000 MHz
5	5665.000000 MHz	55	5480.000000 MHz
6	5645.000000 MHz	56	5420.000000 MHz
7	5394.000000 MHz	57	5679.000000 MHz
8	5296.000000 MHz	58	5454.000000 MHz
9	5366.000000 MHz	59	5339.000000 MHz
10	5452.000000 MHz	60	5611.000000 MHz
11	5254.000000 MHz	61	5393.000000 MHz
12	5707.000000 MHz	62	5484.000000 MHz
13	5613.000000 MHz	63	5380.000000 MHz
14	5599.000000 MHz	64	5402.000000 MHz
15	5659.000000 MHz	65	5494.000000 MHz
16	5709.000000 MHz	66	5650.000000 MHz
17	5347.000000 MHz	67	5367.000000 MHz
18	5373.000000 MHz	68	5258.000000 MHz
19	5271.000000 MHz	69	5485.000000 MHz
20	5289.000000 MHz	70	5508.000000 MHz
21	5699.000000 MHz	71	5527.000000 MHz
22	5513.000000 MHz	72	5634.000000 MHz
23	5698.000000 MHz	73	5510.000000 MHz
24	5285.000000 MHz	74	5671.000000 MHz
25	5434.000000 MHz	75	5308.000000 MHz
26	5461.000000 MHz	76	5325.000000 MHz
27	5555.000000 MHz	77	5703.000000 MHz
28	5507.000000 MHz	78	5520.000000 MHz
29	5628.000000 MHz	79	5706.000000 MHz
30	5606.000000 MHz	80	5331.000000 MHz
31	5322.000000 MHz	81	5297.000000 MHz
32	5577.000000 MHz	82	5383.000000 MHz
33	5463.000000 MHz	83	5708.000000 MHz
34	5623.000000 MHz	84	5264.000000 MHz
35	5673.000000 MHz	85	5311.000000 MHz
36	5541.000000 MHz	86	5530.000000 MHz
37	5700.000000 MHz	87	5632.000000 MHz
38	5587.000000 MHz	88	5422.000000 MHz
39	5589.000000 MHz	89	5600.000000 MHz
40	5512.000000 MHz	90	5646.000000 MHz
41	5486.000000 MHz	91	5493.000000 MHz
42	5315.000000 MHz	92	5307.000000 MHz
43	5252.000000 MHz	93	5661.000000 MHz
44	5437.000000 MHz	94	5395.000000 MHz
45	5338.000000 MHz	95	5651.000000 MHz
46	5375.000000 MHz	96	5349.000000 MHz
47	5385.000000 MHz	97	5389.000000 MHz
48	5449.000000 MHz	98	5456.000000 MHz
49	5358.000000 MHz	99	5295.000000 MHz
50	5625.000000 MHz	100	5528.000000 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	5255.000000 MHz	51	5600.000000 MHz
2	5399.000000 MHz	52	5268.000000 MHz
3	5695.000000 MHz	53	5382.000000 MHz
4	5473.000000 MHz	54	5492.000000 MHz
5	5621.000000 MHz	55	5463.000000 MHz
6	5378.000000 MHz	56	5444.000000 MHz
7	5361.000000 MHz	57	5447.000000 MHz
8	5553.000000 MHz	58	5309.000000 MHz
9	5598.000000 MHz	59	5576.000000 MHz
10	5503.000000 MHz	60	5427.000000 MHz
11	5298.000000 MHz	61	5662.000000 MHz
12	5354.000000 MHz	62	5424.000000 MHz
13	5256.000000 MHz	63	5352.000000 MHz
14	5636.000000 MHz	64	5506.000000 MHz
15	5306.000000 MHz	65	5279.000000 MHz
16	5453.000000 MHz	66	5296.000000 MHz
17	5577.000000 MHz	67	5691.000000 MHz
18	5373.000000 MHz	68	5395.000000 MHz
19	5311.000000 MHz	69	5565.000000 MHz
20	5652.000000 MHz	70	5365.000000 MHz
21	5712.000000 MHz	71	5250.000000 MHz
22	5266.000000 MHz	72	5605.000000 MHz
23	5452.000000 MHz	73	5664.000000 MHz
24	5259.000000 MHz	74	5277.000000 MHz
25	5426.000000 MHz	75	5656.000000 MHz
26	5655.000000 MHz	76	5517.000000 MHz
27	5302.000000 MHz	77	5287.000000 MHz
28	5701.000000 MHz	78	5677.000000 MHz
29	5420.000000 MHz	79	5524.000000 MHz
30	5566.000000 MHz	80	5278.000000 MHz
31	5599.000000 MHz	81	5515.000000 MHz
32	5251.000000 MHz	82	5703.000000 MHz
33	5579.000000 MHz	83	5684.000000 MHz
34	5702.000000 MHz	84	5458.000000 MHz
35	5590.000000 MHz	85	5573.000000 MHz
36	5340.000000 MHz	86	5568.000000 MHz
37	5307.000000 MHz	87	5542.000000 MHz
38	5261.000000 MHz	88	5534.000000 MHz
39	5257.000000 MHz	89	5252.000000 MHz
40	5297.000000 MHz	90	5445.000000 MHz
41	5714.000000 MHz	91	5596.000000 MHz
42	5258.000000 MHz	92	5559.000000 MHz
43	5557.000000 MHz	93	5454.000000 MHz
44	5495.000000 MHz	94	5359.000000 MHz
45	5388.000000 MHz	95	5693.000000 MHz
46	5264.000000 MHz	96	5308.000000 MHz
47	5274.000000 MHz	97	5475.000000 MHz
48	5537.000000 MHz	98	5696.000000 MHz
49	5333.000000 MHz	99	5720.000000 MHz
50	5708.000000 MHz	100	5329.000000 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	5354.000000 MHz	51	5261.000000 MHz
2	5298.000000 MHz	52	5413.000000 MHz
3	5285.000000 MHz	53	5312.000000 MHz
4	5512.000000 MHz	54	5570.000000 MHz
5	5655.000000 MHz	55	5497.000000 MHz
6	5271.000000 MHz	56	5677.000000 MHz
7	5623.000000 MHz	57	5254.000000 MHz
8	5627.000000 MHz	58	5578.000000 MHz
9	5633.000000 MHz	59	5576.000000 MHz
10	5334.000000 MHz	60	5335.000000 MHz
11	5527.000000 MHz	61	5544.000000 MHz
12	5319.000000 MHz	62	5439.000000 MHz
13	5563.000000 MHz	63	5459.000000 MHz
14	5367.000000 MHz	64	5567.000000 MHz
15	5552.000000 MHz	65	5269.000000 MHz
16	5273.000000 MHz	66	5718.000000 MHz
17	5555.000000 MHz	67	5676.000000 MHz
18	5723.000000 MHz	68	5268.000000 MHz
19	5409.000000 MHz	69	5586.000000 MHz
20	5317.000000 MHz	70	5349.000000 MHz
21	5699.000000 MHz	71	5683.000000 MHz
22	5609.000000 MHz	72	5480.000000 MHz
23	5698.000000 MHz	73	5368.000000 MHz
24	5667.000000 MHz	74	5664.000000 MHz
25	5407.000000 MHz	75	5678.000000 MHz
26	5619.000000 MHz	76	5376.000000 MHz
27	5299.000000 MHz	77	5358.000000 MHz
28	5307.000000 MHz	78	5410.000000 MHz
29	5547.000000 MHz	79	5396.000000 MHz
30	5284.000000 MHz	80	5593.000000 MHz
31	5708.000000 MHz	81	5361.000000 MHz
32	5604.000000 MHz	82	5470.000000 MHz
33	5353.000000 MHz	83	5434.000000 MHz
34	5525.000000 MHz	84	5356.000000 MHz
35	5532.000000 MHz	85	5277.000000 MHz
36	5279.000000 MHz	86	5542.000000 MHz
37	5705.000000 MHz	87	5365.000000 MHz
38	5693.000000 MHz	88	5565.000000 MHz
39	5394.000000 MHz	89	5617.000000 MHz
40	5651.000000 MHz	90	5574.000000 MHz
41	5369.000000 MHz	91	5645.000000 MHz
42	5436.000000 MHz	92	5348.000000 MHz
43	5289.000000 MHz	93	5628.000000 MHz
44	5379.000000 MHz	94	5679.000000 MHz
45	5665.000000 MHz	95	5435.000000 MHz
46	5648.000000 MHz	96	5692.000000 MHz
47	5673.000000 MHz	97	5637.000000 MHz
48	5387.000000 MHz	98	5548.000000 MHz
49	5710.000000 MHz	99	5455.000000 MHz
50	5561.000000 MHz	100	5340.000000 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	5379.000000 MHz	51	5337.000000 MHz
2	5263.000000 MHz	52	5676.000000 MHz
3	5301.000000 MHz	53	5477.000000 MHz
4	5451.000000 MHz	54	5585.000000 MHz
5	5467.000000 MHz	55	5718.000000 MHz
6	5650.000000 MHz	56	5446.000000 MHz
7	5250.000000 MHz	57	5704.000000 MHz
8	5398.000000 MHz	58	5313.000000 MHz
9	5571.000000 MHz	59	5675.000000 MHz
10	5485.000000 MHz	60	5643.000000 MHz
11	5455.000000 MHz	61	5615.000000 MHz
12	5524.000000 MHz	62	5335.000000 MHz
13	5534.000000 MHz	63	5549.000000 MHz
14	5570.000000 MHz	64	5513.000000 MHz
15	5715.000000 MHz	65	5440.000000 MHz
16	5294.000000 MHz	66	5593.000000 MHz
17	5708.000000 MHz	67	5528.000000 MHz
18	5368.000000 MHz	68	5320.000000 MHz
19	5508.000000 MHz	69	5662.000000 MHz
20	5587.000000 MHz	70	5453.000000 MHz
21	5518.000000 MHz	71	5438.000000 MHz
22	5269.000000 MHz	72	5515.000000 MHz
23	5579.000000 MHz	73	5584.000000 MHz
24	5472.000000 MHz	74	5686.000000 MHz
25	5404.000000 MHz	75	5367.000000 MHz
26	5700.000000 MHz	76	5259.000000 MHz
27	5332.000000 MHz	77	5360.000000 MHz
28	5421.000000 MHz	78	5355.000000 MHz
29	5681.000000 MHz	79	5278.000000 MHz
30	5400.000000 MHz	80	5543.000000 MHz
31	5631.000000 MHz	81	5308.000000 MHz
32	5260.000000 MHz	82	5591.000000 MHz
33	5344.000000 MHz	83	5365.000000 MHz
34	5701.000000 MHz	84	5270.000000 MHz
35	5264.000000 MHz	85	5659.000000 MHz
36	5490.000000 MHz	86	5261.000000 MHz
37	5638.000000 MHz	87	5689.000000 MHz
38	5325.000000 MHz	88	5492.000000 MHz
39	5639.000000 MHz	89	5362.000000 MHz
40	5319.000000 MHz	90	5323.000000 MHz
41	5469.000000 MHz	91	5317.000000 MHz
42	5252.000000 MHz	92	5565.000000 MHz
43	5409.000000 MHz	93	5679.000000 MHz
44	5617.000000 MHz	94	5721.000000 MHz
45	5354.000000 MHz	95	5376.000000 MHz
46	5395.000000 MHz	96	5582.000000 MHz
47	5589.000000 MHz	97	5597.000000 MHz
48	5655.000000 MHz	98	5608.000000 MHz
49	5653.000000 MHz	99	5487.000000 MHz
50	5535.000000 MHz	100	5358.000000 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	5320.000000 MHz	51	5598.000000 MHz
2	5384.000000 MHz	52	5590.000000 MHz
3	5484.000000 MHz	53	5309.000000 MHz
4	5586.000000 MHz	54	5724.000000 MHz
5	5304.000000 MHz	55	5450.000000 MHz
6	5565.000000 MHz	56	5433.000000 MHz
7	5538.000000 MHz	57	5346.000000 MHz
8	5460.000000 MHz	58	5417.000000 MHz
9	5587.000000 MHz	59	5479.000000 MHz
10	5471.000000 MHz	60	5634.000000 MHz
11	5255.000000 MHz	61	5340.000000 MHz
12	5455.000000 MHz	62	5432.000000 MHz
13	5573.000000 MHz	63	5319.000000 MHz
14	5477.000000 MHz	64	5675.000000 MHz
15	5680.000000 MHz	65	5313.000000 MHz
16	5385.000000 MHz	66	5693.000000 MHz
17	5651.000000 MHz	67	5425.000000 MHz
18	5488.000000 MHz	68	5568.000000 MHz
19	5287.000000 MHz	69	5627.000000 MHz
20	5600.000000 MHz	70	5658.000000 MHz
21	5403.000000 MHz	71	5557.000000 MHz
22	5511.000000 MHz	72	5416.000000 MHz
23	5619.000000 MHz	73	5673.000000 MHz
24	5527.000000 MHz	74	5595.000000 MHz
25	5364.000000 MHz	75	5698.000000 MHz
26	5354.000000 MHz	76	5540.000000 MHz
27	5420.000000 MHz	77	5378.000000 MHz
28	5716.000000 MHz	78	5263.000000 MHz
29	5660.000000 MHz	79	5668.000000 MHz
30	5546.000000 MHz	80	5648.000000 MHz
31	5483.000000 MHz	81	5404.000000 MHz
32	5295.000000 MHz	82	5333.000000 MHz
33	5611.000000 MHz	83	5348.000000 MHz
34	5534.000000 MHz	84	5451.000000 MHz
35	5322.000000 MHz	85	5265.000000 MHz
36	5682.000000 MHz	86	5310.000000 MHz
37	5374.000000 MHz	87	5701.000000 MHz
38	5282.000000 MHz	88	5667.000000 MHz
39	5500.000000 MHz	89	5383.000000 MHz
40	5577.000000 MHz	90	5703.000000 MHz
41	5311.000000 MHz	91	5274.000000 MHz
42	5360.000000 MHz	92	5640.000000 MHz
43	5356.000000 MHz	93	5264.000000 MHz
44	5493.000000 MHz	94	5664.000000 MHz
45	5617.000000 MHz	95	5283.000000 MHz
46	5447.000000 MHz	96	5301.000000 MHz
47	5671.000000 MHz	97	5580.000000 MHz
48	5369.000000 MHz	98	5599.000000 MHz
49	5449.000000 MHz	99	5444.000000 MHz
50	5642.000000 MHz	100	5434.000000 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	5504.000000 MHz	51	5320.000000 MHz
2	5537.000000 MHz	52	5605.000000 MHz
3	5340.000000 MHz	53	5367.000000 MHz
4	5303.000000 MHz	54	5694.000000 MHz
5	5305.000000 MHz	55	5466.000000 MHz
6	5256.000000 MHz	56	5664.000000 MHz
7	5299.000000 MHz	57	5707.000000 MHz
8	5260.000000 MHz	58	5347.000000 MHz
9	5440.000000 MHz	59	5653.000000 MHz
10	5270.000000 MHz	60	5372.000000 MHz
11	5632.000000 MHz	61	5715.000000 MHz
12	5544.000000 MHz	62	5571.000000 MHz
13	5560.000000 MHz	63	5655.000000 MHz
14	5565.000000 MHz	64	5646.000000 MHz
15	5689.000000 MHz	65	5353.000000 MHz
16	5657.000000 MHz	66	5301.000000 MHz
17	5534.000000 MHz	67	5527.000000 MHz
18	5332.000000 MHz	68	5412.000000 MHz
19	5529.000000 MHz	69	5594.000000 MHz
20	5564.000000 MHz	70	5479.000000 MHz
21	5316.000000 MHz	71	5349.000000 MHz
22	5535.000000 MHz	72	5720.000000 MHz
23	5321.000000 MHz	73	5317.000000 MHz
24	5333.000000 MHz	74	5326.000000 MHz
25	5364.000000 MHz	75	5644.000000 MHz
26	5323.000000 MHz	76	5441.000000 MHz
27	5634.000000 MHz	77	5512.000000 MHz
28	5370.000000 MHz	78	5273.000000 MHz
29	5631.000000 MHz	79	5713.000000 MHz
30	5318.000000 MHz	80	5258.000000 MHz
31	5280.000000 MHz	81	5521.000000 MHz
32	5310.000000 MHz	82	5492.000000 MHz
33	5614.000000 MHz	83	5422.000000 MHz
34	5638.000000 MHz	84	5642.000000 MHz
35	5461.000000 MHz	85	5663.000000 MHz
36	5649.000000 MHz	86	5563.000000 MHz
37	5645.000000 MHz	87	5405.000000 MHz
38	5660.000000 MHz	88	5587.000000 MHz
39	5334.000000 MHz	89	5417.000000 MHz
40	5692.000000 MHz	90	5263.000000 MHz
41	5539.000000 MHz	91	5411.000000 MHz
42	5253.000000 MHz	92	5514.000000 MHz
43	5257.000000 MHz	93	5433.000000 MHz
44	5444.000000 MHz	94	5338.000000 MHz
45	5354.000000 MHz	95	5601.000000 MHz
46	5442.000000 MHz	96	5361.000000 MHz
47	5652.000000 MHz	97	5604.000000 MHz
48	5369.000000 MHz	98	5450.000000 MHz
49	5295.000000 MHz	99	5375.000000 MHz
50	5291.000000 MHz	100	5267.000000 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	5698.000000 MHz	51	5301.000000 MHz
2	5398.000000 MHz	52	5395.000000 MHz
3	5655.000000 MHz	53	5344.000000 MHz
4	5270.000000 MHz	54	5266.000000 MHz
5	5263.000000 MHz	55	5615.000000 MHz
6	5630.000000 MHz	56	5527.000000 MHz
7	5460.000000 MHz	57	5619.000000 MHz
8	5567.000000 MHz	58	5417.000000 MHz
9	5349.000000 MHz	59	5568.000000 MHz
10	5251.000000 MHz	60	5616.000000 MHz
11	5581.000000 MHz	61	5316.000000 MHz
12	5646.000000 MHz	62	5288.000000 MHz
13	5374.000000 MHz	63	5596.000000 MHz
14	5586.000000 MHz	64	5580.000000 MHz
15	5603.000000 MHz	65	5352.000000 MHz
16	5339.000000 MHz	66	5413.000000 MHz
17	5473.000000 MHz	67	5548.000000 MHz
18	5281.000000 MHz	68	5348.000000 MHz
19	5323.000000 MHz	69	5378.000000 MHz
20	5487.000000 MHz	70	5466.000000 MHz
21	5553.000000 MHz	71	5485.000000 MHz
22	5304.000000 MHz	72	5292.000000 MHz
23	5639.000000 MHz	73	5334.000000 MHz
24	5379.000000 MHz	74	5452.000000 MHz
25	5511.000000 MHz	75	5600.000000 MHz
26	5353.000000 MHz	76	5377.000000 MHz
27	5566.000000 MHz	77	5474.000000 MHz
28	5400.000000 MHz	78	5704.000000 MHz
29	5505.000000 MHz	79	5345.000000 MHz
30	5359.000000 MHz	80	5556.000000 MHz
31	5514.000000 MHz	81	5723.000000 MHz
32	5608.000000 MHz	82	5373.000000 MHz
33	5503.000000 MHz	83	5654.000000 MHz
34	5518.000000 MHz	84	5695.000000 MHz
35	5273.000000 MHz	85	5406.000000 MHz
36	5711.000000 MHz	86	5423.000000 MHz
37	5296.000000 MHz	87	5300.000000 MHz
38	5650.000000 MHz	88	5578.000000 MHz
39	5657.000000 MHz	89	5369.000000 MHz
40	5669.000000 MHz	90	5488.000000 MHz
41	5318.000000 MHz	91	5437.000000 MHz
42	5261.000000 MHz	92	5409.000000 MHz
43	5555.000000 MHz	93	5392.000000 MHz
44	5593.000000 MHz	94	5644.000000 MHz
45	5308.000000 MHz	95	5592.000000 MHz
46	5477.000000 MHz	96	5321.000000 MHz
47	5722.000000 MHz	97	5647.000000 MHz
48	5272.000000 MHz	98	5635.000000 MHz
49	5380.000000 MHz	99	5656.000000 MHz
50	5419.000000 MHz	100	5274.000000 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	5651.000000 MHz	51	5378.000000 MHz
2	5300.000000 MHz	52	5335.000000 MHz
3	5289.000000 MHz	53	5258.000000 MHz
4	5343.000000 MHz	54	5459.000000 MHz
5	5637.000000 MHz	55	5599.000000 MHz
6	5696.000000 MHz	56	5556.000000 MHz
7	5456.000000 MHz	57	5490.000000 MHz
8	5597.000000 MHz	58	5672.000000 MHz
9	5669.000000 MHz	59	5547.000000 MHz
10	5650.000000 MHz	60	5638.000000 MHz
11	5381.000000 MHz	61	5298.000000 MHz
12	5257.000000 MHz	62	5342.000000 MHz
13	5375.000000 MHz	63	5680.000000 MHz
14	5692.000000 MHz	64	5701.000000 MHz
15	5328.000000 MHz	65	5487.000000 MHz
16	5613.000000 MHz	66	5329.000000 MHz
17	5260.000000 MHz	67	5324.000000 MHz
18	5647.000000 MHz	68	5604.000000 MHz
19	5571.000000 MHz	69	5440.000000 MHz
20	5681.000000 MHz	70	5303.000000 MHz
21	5265.000000 MHz	71	5583.000000 MHz
22	5441.000000 MHz	72	5702.000000 MHz
23	5426.000000 MHz	73	5685.000000 MHz
24	5458.000000 MHz	74	5670.000000 MHz
25	5606.000000 MHz	75	5271.000000 MHz
26	5397.000000 MHz	76	5691.000000 MHz
27	5273.000000 MHz	77	5644.000000 MHz
28	5633.000000 MHz	78	5314.000000 MHz
29	5684.000000 MHz	79	5534.000000 MHz
30	5462.000000 MHz	80	5562.000000 MHz
31	5602.000000 MHz	81	5473.000000 MHz
32	5302.000000 MHz	82	5679.000000 MHz
33	5398.000000 MHz	83	5630.000000 MHz
34	5454.000000 MHz	84	5390.000000 MHz
35	5724.000000 MHz	85	5720.000000 MHz
36	5538.000000 MHz	86	5707.000000 MHz
37	5380.000000 MHz	87	5643.000000 MHz
38	5457.000000 MHz	88	5525.000000 MHz
39	5517.000000 MHz	89	5418.000000 MHz
40	5348.000000 MHz	90	5420.000000 MHz
41	5564.000000 MHz	91	5629.000000 MHz
42	5464.000000 MHz	92	5591.000000 MHz
43	5466.000000 MHz	93	5325.000000 MHz
44	5513.000000 MHz	94	5663.000000 MHz
45	5585.000000 MHz	95	5281.000000 MHz
46	5431.000000 MHz	96	5539.000000 MHz
47	5353.000000 MHz	97	5481.000000 MHz
48	5569.000000 MHz	98	5639.000000 MHz
49	5400.000000 MHz	99	5611.000000 MHz
50	5625.000000 MHz	100	5524.000000 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	5277.000000 MHz	51	5324.000000 MHz
2	5483.000000 MHz	52	5287.000000 MHz
3	5354.000000 MHz	53	5699.000000 MHz
4	5619.000000 MHz	54	5659.000000 MHz
5	5549.000000 MHz	55	5620.000000 MHz
6	5388.000000 MHz	56	5327.000000 MHz
7	5300.000000 MHz	57	5263.000000 MHz
8	5561.000000 MHz	58	5465.000000 MHz
9	5492.000000 MHz	59	5684.000000 MHz
10	5679.000000 MHz	60	5252.000000 MHz
11	5342.000000 MHz	61	5253.000000 MHz
12	5685.000000 MHz	62	5468.000000 MHz
13	5473.000000 MHz	63	5720.000000 MHz
14	5459.000000 MHz	64	5305.000000 MHz
15	5307.000000 MHz	65	5642.000000 MHz
16	5500.000000 MHz	66	5264.000000 MHz
17	5695.000000 MHz	67	5582.000000 MHz
18	5516.000000 MHz	68	5466.000000 MHz
19	5499.000000 MHz	69	5592.000000 MHz
20	5366.000000 MHz	70	5475.000000 MHz
21	5486.000000 MHz	71	5350.000000 MHz
22	5303.000000 MHz	72	5584.000000 MHz
23	5458.000000 MHz	73	5502.000000 MHz
24	5541.000000 MHz	74	5701.000000 MHz
25	5535.000000 MHz	75	5338.000000 MHz
26	5647.000000 MHz	76	5710.000000 MHz
27	5341.000000 MHz	77	5377.000000 MHz
28	5558.000000 MHz	78	5380.000000 MHz
29	5488.000000 MHz	79	5567.000000 MHz
30	5460.000000 MHz	80	5358.000000 MHz
31	5346.000000 MHz	81	5651.000000 MHz
32	5452.000000 MHz	82	5285.000000 MHz
33	5417.000000 MHz	83	5580.000000 MHz
34	5292.000000 MHz	84	5542.000000 MHz
35	5546.000000 MHz	85	5616.000000 MHz
36	5362.000000 MHz	86	5345.000000 MHz
37	5594.000000 MHz	87	5317.000000 MHz
38	5282.000000 MHz	88	5713.000000 MHz
39	5579.000000 MHz	89	5552.000000 MHz
40	5618.000000 MHz	90	5383.000000 MHz
41	5349.000000 MHz	91	5629.000000 MHz
42	5708.000000 MHz	92	5467.000000 MHz
43	5310.000000 MHz	93	5351.000000 MHz
44	5439.000000 MHz	94	5654.000000 MHz
45	5547.000000 MHz	95	5450.000000 MHz
46	5481.000000 MHz	96	5538.000000 MHz
47	5306.000000 MHz	97	5419.000000 MHz
48	5511.000000 MHz	98	5269.000000 MHz
49	5372.000000 MHz	99	5646.000000 MHz
50	5361.000000 MHz	100	5394.000000 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	5571.000000 MHz	51	5443.000000 MHz
2	5641.000000 MHz	52	5410.000000 MHz
3	5364.000000 MHz	53	5700.000000 MHz
4	5349.000000 MHz	54	5642.000000 MHz
5	5474.000000 MHz	55	5678.000000 MHz
6	5276.000000 MHz	56	5643.000000 MHz
7	5380.000000 MHz	57	5707.000000 MHz
8	5260.000000 MHz	58	5704.000000 MHz
9	5355.000000 MHz	59	5492.000000 MHz
10	5650.000000 MHz	60	5645.000000 MHz
11	5324.000000 MHz	61	5515.000000 MHz
12	5631.000000 MHz	62	5690.000000 MHz
13	5277.000000 MHz	63	5501.000000 MHz
14	5547.000000 MHz	64	5444.000000 MHz
15	5316.000000 MHz	65	5496.000000 MHz
16	5649.000000 MHz	66	5358.000000 MHz
17	5615.000000 MHz	67	5377.000000 MHz
18	5701.000000 MHz	68	5471.000000 MHz
19	5584.000000 MHz	69	5344.000000 MHz
20	5670.000000 MHz	70	5559.000000 MHz
21	5487.000000 MHz	71	5258.000000 MHz
22	5653.000000 MHz	72	5509.000000 MHz
23	5688.000000 MHz	73	5456.000000 MHz
24	5446.000000 MHz	74	5480.000000 MHz
25	5367.000000 MHz	75	5531.000000 MHz
26	5400.000000 MHz	76	5326.000000 MHz
27	5297.000000 MHz	77	5665.000000 MHz
28	5613.000000 MHz	78	5479.000000 MHz
29	5339.000000 MHz	79	5368.000000 MHz
30	5564.000000 MHz	80	5491.000000 MHz
31	5685.000000 MHz	81	5388.000000 MHz
32	5548.000000 MHz	82	5461.000000 MHz
33	5437.000000 MHz	83	5599.000000 MHz
34	5506.000000 MHz	84	5520.000000 MHz
35	5438.000000 MHz	85	5710.000000 MHz
36	5664.000000 MHz	86	5538.000000 MHz
37	5427.000000 MHz	87	5317.000000 MHz
38	5521.000000 MHz	88	5338.000000 MHz
39	5391.000000 MHz	89	5420.000000 MHz
40	5318.000000 MHz	90	5307.000000 MHz
41	5662.000000 MHz	91	5656.000000 MHz
42	5702.000000 MHz	92	5304.000000 MHz
43	5457.000000 MHz	93	5365.000000 MHz
44	5555.000000 MHz	94	5552.000000 MHz
45	5560.000000 MHz	95	5723.000000 MHz
46	5323.000000 MHz	96	5256.000000 MHz
47	5357.000000 MHz	97	5553.000000 MHz
48	5383.000000 MHz	98	5608.000000 MHz
49	5695.000000 MHz	99	5619.000000 MHz
50	5647.000000 MHz	100	5692.000000 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	5371.000000 MHz	51	5378.000000 MHz
2	5435.000000 MHz	52	5644.000000 MHz
3	5448.000000 MHz	53	5635.000000 MHz
4	5277.000000 MHz	54	5460.000000 MHz
5	5426.000000 MHz	55	5440.000000 MHz
6	5722.000000 MHz	56	5260.000000 MHz
7	5289.000000 MHz	57	5347.000000 MHz
8	5262.000000 MHz	58	5514.000000 MHz
9	5526.000000 MHz	59	5631.000000 MHz
10	5599.000000 MHz	60	5510.000000 MHz
11	5363.000000 MHz	61	5565.000000 MHz
12	5707.000000 MHz	62	5594.000000 MHz
13	5621.000000 MHz	63	5462.000000 MHz
14	5562.000000 MHz	64	5393.000000 MHz
15	5391.000000 MHz	65	5603.000000 MHz
16	5687.000000 MHz	66	5455.000000 MHz
17	5531.000000 MHz	67	5419.000000 MHz
18	5492.000000 MHz	68	5422.000000 MHz
19	5563.000000 MHz	69	5377.000000 MHz
20	5452.000000 MHz	70	5405.000000 MHz
21	5525.000000 MHz	71	5671.000000 MHz
22	5712.000000 MHz	72	5468.000000 MHz
23	5561.000000 MHz	73	5668.000000 MHz
24	5415.000000 MHz	74	5620.000000 MHz
25	5498.000000 MHz	75	5282.000000 MHz
26	5666.000000 MHz	76	5567.000000 MHz
27	5473.000000 MHz	77	5608.000000 MHz
28	5619.000000 MHz	78	5357.000000 MHz
29	5338.000000 MHz	79	5316.000000 MHz
30	5607.000000 MHz	80	5491.000000 MHz
31	5493.000000 MHz	81	5301.000000 MHz
32	5494.000000 MHz	82	5365.000000 MHz
33	5477.000000 MHz	83	5558.000000 MHz
34	5335.000000 MHz	84	5425.000000 MHz
35	5512.000000 MHz	85	5302.000000 MHz
36	5481.000000 MHz	86	5290.000000 MHz
37	5362.000000 MHz	87	5351.000000 MHz
38	5319.000000 MHz	88	5571.000000 MHz
39	5299.000000 MHz	89	5677.000000 MHz
40	5407.000000 MHz	90	5618.000000 MHz
41	5505.000000 MHz	91	5598.000000 MHz
42	5307.000000 MHz	92	5521.000000 MHz
43	5293.000000 MHz	93	5321.000000 MHz
44	5383.000000 MHz	94	5645.000000 MHz
45	5656.000000 MHz	95	5658.000000 MHz
46	5410.000000 MHz	96	5710.000000 MHz
47	5589.000000 MHz	97	5306.000000 MHz
48	5271.000000 MHz	98	5577.000000 MHz
49	5366.000000 MHz	99	5315.000000 MHz
50	5442.000000 MHz	100	5698.000000 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	5697.000000 MHz	51	5615.000000 MHz
2	5416.000000 MHz	52	5435.000000 MHz
3	5516.000000 MHz	53	5624.000000 MHz
4	5545.000000 MHz	54	5469.000000 MHz
5	5703.000000 MHz	55	5721.000000 MHz
6	5630.000000 MHz	56	5591.000000 MHz
7	5566.000000 MHz	57	5575.000000 MHz
8	5524.000000 MHz	58	5718.000000 MHz
9	5443.000000 MHz	59	5257.000000 MHz
10	5324.000000 MHz	60	5473.000000 MHz
11	5543.000000 MHz	61	5704.000000 MHz
12	5347.000000 MHz	62	5502.000000 MHz
13	5560.000000 MHz	63	5557.000000 MHz
14	5302.000000 MHz	64	5679.000000 MHz
15	5551.000000 MHz	65	5699.000000 MHz
16	5414.000000 MHz	66	5293.000000 MHz
17	5317.000000 MHz	67	5290.000000 MHz
18	5576.000000 MHz	68	5669.000000 MHz
19	5424.000000 MHz	69	5636.000000 MHz
20	5512.000000 MHz	70	5313.000000 MHz
21	5322.000000 MHz	71	5723.000000 MHz
22	5671.000000 MHz	72	5594.000000 MHz
23	5466.000000 MHz	73	5338.000000 MHz
24	5548.000000 MHz	74	5295.000000 MHz
25	5362.000000 MHz	75	5538.000000 MHz
26	5305.000000 MHz	76	5352.000000 MHz
27	5572.000000 MHz	77	5691.000000 MHz
28	5622.000000 MHz	78	5463.000000 MHz
29	5300.000000 MHz	79	5454.000000 MHz
30	5464.000000 MHz	80	5345.000000 MHz
31	5547.000000 MHz	81	5682.000000 MHz
32	5710.000000 MHz	82	5686.000000 MHz
33	5392.000000 MHz	83	5514.000000 MHz
34	5585.000000 MHz	84	5460.000000 MHz
35	5258.000000 MHz	85	5506.000000 MHz
36	5510.000000 MHz	86	5339.000000 MHz
37	5470.000000 MHz	87	5367.000000 MHz
38	5373.000000 MHz	88	5348.000000 MHz
39	5665.000000 MHz	89	5600.000000 MHz
40	5361.000000 MHz	90	5593.000000 MHz
41	5712.000000 MHz	91	5702.000000 MHz
42	5327.000000 MHz	92	5562.000000 MHz
43	5378.000000 MHz	93	5368.000000 MHz
44	5503.000000 MHz	94	5672.000000 MHz
45	5677.000000 MHz	95	5565.000000 MHz
46	5606.000000 MHz	96	5430.000000 MHz
47	5409.000000 MHz	97	5552.000000 MHz
48	5616.000000 MHz	98	5635.000000 MHz
49	5509.000000 MHz	99	5626.000000 MHz
50	5342.000000 MHz	100	5687.000000 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	5676.000000 MHz	51	5478.000000 MHz
2	5302.000000 MHz	52	5354.000000 MHz
3	5472.000000 MHz	53	5474.000000 MHz
4	5277.000000 MHz	54	5577.000000 MHz
5	5519.000000 MHz	55	5357.000000 MHz
6	5314.000000 MHz	56	5347.000000 MHz
7	5275.000000 MHz	57	5624.000000 MHz
8	5297.000000 MHz	58	5425.000000 MHz
9	5462.000000 MHz	59	5635.000000 MHz
10	5722.000000 MHz	60	5273.000000 MHz
11	5263.000000 MHz	61	5675.000000 MHz
12	5504.000000 MHz	62	5678.000000 MHz
13	5555.000000 MHz	63	5590.000000 MHz
14	5446.000000 MHz	64	5306.000000 MHz
15	5412.000000 MHz	65	5649.000000 MHz
16	5546.000000 MHz	66	5683.000000 MHz
17	5671.000000 MHz	67	5680.000000 MHz
18	5545.000000 MHz	68	5581.000000 MHz
19	5397.000000 MHz	69	5359.000000 MHz
20	5495.000000 MHz	70	5611.000000 MHz
21	5349.000000 MHz	71	5422.000000 MHz
22	5669.000000 MHz	72	5634.000000 MHz
23	5375.000000 MHz	73	5615.000000 MHz
24	5378.000000 MHz	74	5410.000000 MHz
25	5344.000000 MHz	75	5319.000000 MHz
26	5364.000000 MHz	76	5530.000000 MHz
27	5274.000000 MHz	77	5711.000000 MHz
28	5517.000000 MHz	78	5687.000000 MHz
29	5296.000000 MHz	79	5390.000000 MHz
30	5310.000000 MHz	80	5637.000000 MHz
31	5639.000000 MHz	81	5556.000000 MHz
32	5498.000000 MHz	82	5534.000000 MHz
33	5521.000000 MHz	83	5346.000000 MHz
34	5454.000000 MHz	84	5494.000000 MHz
35	5591.000000 MHz	85	5440.000000 MHz
36	5339.000000 MHz	86	5260.000000 MHz
37	5435.000000 MHz	87	5659.000000 MHz
38	5511.000000 MHz	88	5529.000000 MHz
39	5323.000000 MHz	89	5514.000000 MHz
40	5553.000000 MHz	90	5645.000000 MHz
41	5458.000000 MHz	91	5261.000000 MHz
42	5596.000000 MHz	92	5443.000000 MHz
43	5689.000000 MHz	93	5482.000000 MHz
44	5308.000000 MHz	94	5551.000000 MHz
45	5538.000000 MHz	95	5653.000000 MHz
46	5475.000000 MHz	96	5705.000000 MHz
47	5402.000000 MHz	97	5592.000000 MHz
48	5608.000000 MHz	98	5656.000000 MHz
49	5605.000000 MHz	99	5565.000000 MHz
50	5340.000000 MHz	100	5284.000000 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	5662.000000 MHz	51	5460.000000 MHz
2	5554.000000 MHz	52	5607.000000 MHz
3	5619.000000 MHz	53	5513.000000 MHz
4	5590.000000 MHz	54	5677.000000 MHz
5	5673.000000 MHz	55	5431.000000 MHz
6	5608.000000 MHz	56	5430.000000 MHz
7	5282.000000 MHz	57	5396.000000 MHz
8	5719.000000 MHz	58	5394.000000 MHz
9	5371.000000 MHz	59	5269.000000 MHz
10	5305.000000 MHz	60	5407.000000 MHz
11	5283.000000 MHz	61	5427.000000 MHz
12	5704.000000 MHz	62	5575.000000 MHz
13	5586.000000 MHz	63	5722.000000 MHz
14	5436.000000 MHz	64	5524.000000 MHz
15	5391.000000 MHz	65	5604.000000 MHz
16	5349.000000 MHz	66	5504.000000 MHz
17	5676.000000 MHz	67	5709.000000 MHz
18	5260.000000 MHz	68	5522.000000 MHz
19	5354.000000 MHz	69	5433.000000 MHz
20	5350.000000 MHz	70	5593.000000 MHz
21	5402.000000 MHz	71	5475.000000 MHz
22	5398.000000 MHz	72	5508.000000 MHz
23	5601.000000 MHz	73	5574.000000 MHz
24	5298.000000 MHz	74	5562.000000 MHz
25	5409.000000 MHz	75	5635.000000 MHz
26	5493.000000 MHz	76	5254.000000 MHz
27	5461.000000 MHz	77	5344.000000 MHz
28	5612.000000 MHz	78	5681.000000 MHz
29	5700.000000 MHz	79	5697.000000 MHz
30	5689.000000 MHz	80	5370.000000 MHz
31	5602.000000 MHz	81	5429.000000 MHz
32	5432.000000 MHz	82	5293.000000 MHz
33	5707.000000 MHz	83	5658.000000 MHz
34	5312.000000 MHz	84	5519.000000 MHz
35	5556.000000 MHz	85	5499.000000 MHz
36	5611.000000 MHz	86	5337.000000 MHz
37	5365.000000 MHz	87	5631.000000 MHz
38	5318.000000 MHz	88	5457.000000 MHz
39	5463.000000 MHz	89	5685.000000 MHz
40	5646.000000 MHz	90	5598.000000 MHz
41	5482.000000 MHz	91	5308.000000 MHz
42	5651.000000 MHz	92	5587.000000 MHz
43	5615.000000 MHz	93	5353.000000 MHz
44	5387.000000 MHz	94	5621.000000 MHz
45	5448.000000 MHz	95	5374.000000 MHz
46	5571.000000 MHz	96	5276.000000 MHz
47	5582.000000 MHz	97	5717.000000 MHz
48	5467.000000 MHz	98	5381.000000 MHz
49	5605.000000 MHz	99	5464.000000 MHz
50	5640.000000 MHz	100	5721.000000 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	5593.000000 MHz	51	5537.000000 MHz
2	5519.000000 MHz	52	5678.000000 MHz
3	5402.000000 MHz	53	5685.000000 MHz
4	5389.000000 MHz	54	5269.000000 MHz
5	5649.000000 MHz	55	5605.000000 MHz
6	5358.000000 MHz	56	5667.000000 MHz
7	5471.000000 MHz	57	5271.000000 MHz
8	5603.000000 MHz	58	5487.000000 MHz
9	5601.000000 MHz	59	5451.000000 MHz
10	5344.000000 MHz	60	5343.000000 MHz
11	5560.000000 MHz	61	5639.000000 MHz
12	5570.000000 MHz	62	5657.000000 MHz
13	5440.000000 MHz	63	5473.000000 MHz
14	5720.000000 MHz	64	5296.000000 MHz
15	5489.000000 MHz	65	5521.000000 MHz
16	5659.000000 MHz	66	5376.000000 MHz
17	5505.000000 MHz	67	5642.000000 MHz
18	5569.000000 MHz	68	5250.000000 MHz
19	5300.000000 MHz	69	5562.000000 MHz
20	5503.000000 MHz	70	5587.000000 MHz
21	5701.000000 MHz	71	5676.000000 MHz
22	5713.000000 MHz	72	5289.000000 MHz
23	5577.000000 MHz	73	5613.000000 MHz
24	5381.000000 MHz	74	5353.000000 MHz
25	5626.000000 MHz	75	5368.000000 MHz
26	5448.000000 MHz	76	5267.000000 MHz
27	5265.000000 MHz	77	5702.000000 MHz
28	5557.000000 MHz	78	5671.000000 MHz
29	5670.000000 MHz	79	5578.000000 MHz
30	5378.000000 MHz	80	5641.000000 MHz
31	5298.000000 MHz	81	5486.000000 MHz
32	5288.000000 MHz	82	5335.000000 MHz
33	5444.000000 MHz	83	5483.000000 MHz
34	5523.000000 MHz	84	5387.000000 MHz
35	5268.000000 MHz	85	5546.000000 MHz
36	5488.000000 MHz	86	5324.000000 MHz
37	5346.000000 MHz	87	5435.000000 MHz
38	5673.000000 MHz	88	5255.000000 MHz
39	5706.000000 MHz	89	5548.000000 MHz
40	5349.000000 MHz	90	5312.000000 MHz
41	5463.000000 MHz	91	5480.000000 MHz
42	5697.000000 MHz	92	5514.000000 MHz
43	5688.000000 MHz	93	5311.000000 MHz
44	5277.000000 MHz	94	5609.000000 MHz
45	5507.000000 MHz	95	5504.000000 MHz
46	5431.000000 MHz	96	5629.000000 MHz
47	5287.000000 MHz	97	5674.000000 MHz
48	5610.000000 MHz	98	5252.000000 MHz
49	5342.000000 MHz	99	5645.000000 MHz
50	5461.000000 MHz	100	5590.000000 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	5303.000000 MHz	51	5294.000000 MHz
2	5642.000000 MHz	52	5381.000000 MHz
3	5368.000000 MHz	53	5680.000000 MHz
4	5433.000000 MHz	54	5450.000000 MHz
5	5366.000000 MHz	55	5630.000000 MHz
6	5692.000000 MHz	56	5255.000000 MHz
7	5329.000000 MHz	57	5546.000000 MHz
8	5557.000000 MHz	58	5723.000000 MHz
9	5535.000000 MHz	59	5353.000000 MHz
10	5436.000000 MHz	60	5304.000000 MHz
11	5617.000000 MHz	61	5647.000000 MHz
12	5388.000000 MHz	62	5291.000000 MHz
13	5564.000000 MHz	63	5661.000000 MHz
14	5429.000000 MHz	64	5260.000000 MHz
15	5487.000000 MHz	65	5307.000000 MHz
16	5371.000000 MHz	66	5609.000000 MHz
17	5332.000000 MHz	67	5660.000000 MHz
18	5671.000000 MHz	68	5600.000000 MHz
19	5465.000000 MHz	69	5588.000000 MHz
20	5644.000000 MHz	70	5555.000000 MHz
21	5516.000000 MHz	71	5472.000000 MHz
22	5696.000000 MHz	72	5352.000000 MHz
23	5598.000000 MHz	73	5419.000000 MHz
24	5712.000000 MHz	74	5607.000000 MHz
25	5478.000000 MHz	75	5306.000000 MHz
26	5641.000000 MHz	76	5477.000000 MHz
27	5312.000000 MHz	77	5669.000000 MHz
28	5323.000000 MHz	78	5277.000000 MHz
29	5261.000000 MHz	79	5383.000000 MHz
30	5536.000000 MHz	80	5346.000000 MHz
31	5333.000000 MHz	81	5448.000000 MHz
32	5563.000000 MHz	82	5410.000000 MHz
33	5522.000000 MHz	83	5362.000000 MHz
34	5492.000000 MHz	84	5365.000000 MHz
35	5406.000000 MHz	85	5414.000000 MHz
36	5317.000000 MHz	86	5676.000000 MHz
37	5321.000000 MHz	87	5702.000000 MHz
38	5614.000000 MHz	88	5344.000000 MHz
39	5581.000000 MHz	89	5359.000000 MHz
40	5708.000000 MHz	90	5664.000000 MHz
41	5357.000000 MHz	91	5435.000000 MHz
42	5293.000000 MHz	92	5452.000000 MHz
43	5489.000000 MHz	93	5430.000000 MHz
44	5375.000000 MHz	94	5454.000000 MHz
45	5471.000000 MHz	95	5545.000000 MHz
46	5266.000000 MHz	96	5468.000000 MHz
47	5508.000000 MHz	97	5463.000000 MHz
48	5592.000000 MHz	98	5633.000000 MHz
49	5305.000000 MHz	99	5577.000000 MHz
50	5331.000000 MHz	100	5280.000000 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	5272.000000 MHz	51	5595.000000 MHz
2	5673.000000 MHz	52	5678.000000 MHz
3	5318.000000 MHz	53	5291.000000 MHz
4	5304.000000 MHz	54	5632.000000 MHz
5	5326.000000 MHz	55	5552.000000 MHz
6	5646.000000 MHz	56	5295.000000 MHz
7	5550.000000 MHz	57	5297.000000 MHz
8	5568.000000 MHz	58	5333.000000 MHz
9	5501.000000 MHz	59	5637.000000 MHz
10	5693.000000 MHz	60	5558.000000 MHz
11	5368.000000 MHz	61	5341.000000 MHz
12	5619.000000 MHz	62	5357.000000 MHz
13	5618.000000 MHz	63	5484.000000 MHz
14	5658.000000 MHz	64	5254.000000 MHz
15	5682.000000 MHz	65	5653.000000 MHz
16	5505.000000 MHz	66	5478.000000 MHz
17	5479.000000 MHz	67	5425.000000 MHz
18	5615.000000 MHz	68	5498.000000 MHz
19	5287.000000 MHz	69	5722.000000 MHz
20	5624.000000 MHz	70	5376.000000 MHz
21	5714.000000 MHz	71	5373.000000 MHz
22	5365.000000 MHz	72	5403.000000 MHz
23	5371.000000 MHz	73	5662.000000 MHz
24	5273.000000 MHz	74	5375.000000 MHz
25	5337.000000 MHz	75	5648.000000 MHz
26	5278.000000 MHz	76	5675.000000 MHz
27	5562.000000 MHz	77	5412.000000 MHz
28	5638.000000 MHz	78	5306.000000 MHz
29	5724.000000 MHz	79	5679.000000 MHz
30	5667.000000 MHz	80	5301.000000 MHz
31	5277.000000 MHz	81	5406.000000 MHz
32	5512.000000 MHz	82	5559.000000 MHz
33	5383.000000 MHz	83	5451.000000 MHz
34	5654.000000 MHz	84	5706.000000 MHz
35	5279.000000 MHz	85	5541.000000 MHz
36	5276.000000 MHz	86	5430.000000 MHz
37	5588.000000 MHz	87	5715.000000 MHz
38	5514.000000 MHz	88	5268.000000 MHz
39	5627.000000 MHz	89	5408.000000 MHz
40	5587.000000 MHz	90	5623.000000 MHz
41	5716.000000 MHz	91	5719.000000 MHz
42	5692.000000 MHz	92	5579.000000 MHz
43	5335.000000 MHz	93	5608.000000 MHz
44	5686.000000 MHz	94	5547.000000 MHz
45	5355.000000 MHz	95	5439.000000 MHz
46	5612.000000 MHz	96	5538.000000 MHz
47	5475.000000 MHz	97	5546.000000 MHz
48	5668.000000 MHz	98	5346.000000 MHz
49	5713.000000 MHz	99	5680.000000 MHz
50	5573.000000 MHz	100	5639.000000 MHz

End of test report