RADIO TEST REPORT

Test Report No. 14568085S-E-R3

Customer	**Sony Group Corporation**
Description of EUT	**IEEE 802.11 1X1 a/b/g/n/ac/ax Wireless LAN + Bluetooth 5.2 + 802.15.4 Tri-radio 12 x 12 LGA Module**
Model Number of EUT	**AW-XM553**
FCC ID	**AK8XM553**
Test Regulation	**FCC Part 15 Subpart E**
Test Result	**Complied (Refer to SECTION 3)**
Issue Date	**May 19, 2023**
Remarks	**WLAN (5 GHz band) part, DFS test only (*Master), with AW-AM510 (FCC ID: TLZ-AM510) for Master mode with Zero wait DFS function This EUT uses Bluetooth and IEEE 802.11 a/n (20 MHz / 40 MHz) only.**

Representative Test Engineer	Approved By
K. Adachi	T. Imamura
Kenichi Adachi Engineer	Toyokazu Imamura Leader

CERTIFICATE 1266.03

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☒ There is no testing item of "Non-accreditation".

Report Cover Page - Form-ULID-003532 (DCS:13-EM-F0429) Issue# 21.0

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- The information provided from the customer for this report is identified in Section 1.
- For test report(s) referred in this report, the latest version (including any revisions) is always referred.

REVISION HISTORY

Original Test Report No.: 14568085S-E

This report is a revised version of 14568085S-E-R2. 14568085S-E-R2 is replaced with this report.

Revision	Test Report No.	Date	Page Revised Contents
- (Original)	14568085S-E	April 3, 2023	-
1	14568085S-E-R1	May 8, 2023	p.5: Correction error. This CAC is that we called "Zero wait DFS function". to This CAC is called "Zero wait DFS function". p.9: Correction document number. "13-EM-W0422" to "ULID-003591 and ULID-003593". p.13: It corrected the value of the interfering signal level written in the calculation example to the value of the level at the time of the actual test. ("-62 + 1 + (-3.45) = -64.45 dBm") It corrected value of the minimum antenna gain. ("-2.53" to "-3.45") p.14: It corrected the value of the interfering signal level written in the calculation example to the value of the level at the time of the actual test. ("-62 + 1 + (-4.21) = -65.21 dBm") It corrected value of the minimum antenna gain. ("-2.83" to "-4.21") p.14: Added an example of converting the measured values described in other companies' reports with different antenna gain values to the antenna gain values in this report. p.70, p.86: Correction error. (p.70) 5500 MHz -> 5300 MHz (p.86) 5310 MHz -> 5670 MHz
2	14568085S-E-R2	May 16, 2023	p.5: Corrected the rating from “DC 3.3 V and DC 1.8 V” to “DC 3.3 V”. p.8: Corrected from “The RF Module has its own regulator. The RF Module is constantly provided with voltage through the regulator regardless of input voltage.” to “This EUT provides stable voltage constantly to RF Module regardless of input voltage.” p.9: Divided Table 1 into Table 1-1 (what is required by the standard) and Table 1-2 (what is not required by the standard). Added a sentence “Refer to “Update on U-NII Test Procedures for 802.11ax and DFS of TCB Workshop April, 2018 (2018-04-11-4.2 802.1ax DFS - DT.pdf)”.” to provide information not included in the standard requirements. p.13: Corrected report No. p.26: Corrected the 99 % occupied bandwidth value of 11n-40. p.38: Added remarks comment about off-channel CAC time. "*1) This test was decided to test time for 1 hour, since the off-channel CAC time continues indefinitely, and the test procedure that the test must continue for the full off-channel CAC time specified in EUT in the section 5.4.8.2.1.4.2 of EN 301 893 standard."
3	14568085S-E-R3	May 19, 2023	p.8: Corrected from “This EUT provides stable voltage constantly to RF Module regardless of input voltage.” to “The EUT is constantly provided with stable voltage from the host device regardless of input voltage.”

Reference: Abbreviations (Including words undescribed in this report)

A2LA	The American Association for Laboratory Accreditation	ICES	Interference-Causing Equipment Standard
AC	Alternating Current	IEC	International Electrotechnical Commission
AFH	Adaptive Frequency Hopping	IEEE	Institute of Electrical and Electronics Engineers
AM	Amplitude Modulation	IF	Intermediate Frequency
Amp, AMP	Amplifier	ILAC	International Laboratory Accreditation Conference
ANSI	American National Standards Institute	ISED	Innovation, Science and Economic Development Canada
Ant, ANT	Antenna	ISO	International Organization for Standardization
AP	Access Point	JAB	Japan Accreditation Board
ASK	Amplitude Shift Keying	LAN	Local Area Network
Atten., ATT	Attenuator	LIMS	Laboratory Information Management System
AV	Average	MCS	Modulation and Coding Scheme
BPSK	Binary Phase-Shift Keying	MRA	Mutual Recognition Arrangement
BR	Bluetooth Basic Rate	N/A	Not Applicable
BT	Bluetooth	NIST	National Institute of Standards and Technology
BT LE	Bluetooth Low Energy	NS	No signal detect.
BW	BandWidth	NSA	Normalized Site Attenuation
Cal Int	Calibration Interval	NVLAP	National Voluntary Laboratory Accreditation Program
CCK	Complementary Code Keying	OBW	Occupied Band Width
Ch., CH	Channel	OFDM	Orthogonal Frequency Division Multiplexing
CISPR	Comite International Special des Perturbations Radioelectriques	P/M	Power meter
CW	Continuous Wave	PCB	Printed Circuit Board
DBPSK	Differential BPSK	PER	Packet Error Rate
DC	Direct Current	PHY	Physical Layer
D-factor	Distance factor	PK	Peak
DFS	Dynamic Frequency Selection	PN	Pseudo random Noise
DQPSK	Differential QPSK	PRBS	Pseudo-Random Bit Sequence
DSSS	Direct Sequence Spread Spectrum	PSD	Power Spectral Density
EDR	Enhanced Data Rate	QAM	Quadrature Amplitude Modulation
EIRP, e.i.r.p.	Equivalent Isotropically Radiated Power	QP	Quasi-Peak
EMC	ElectroMagnetic Compatibility	QPSK	Quadrature Phase Shift Keying
EMI	ElectroMagnetic Interference	RBW	Resolution Band Width
EN	European Norm	RDS	Radio Data System
ERP, e.r.p.	Effective Radiated Power	RE	Radio Equipment
EU	European Union	RF	Radio Frequency
EUT	Equipment Under Test	RMS	Root Mean Square
Fac.	Factor	RSS	Radio Standards Specifications
FCC	Federal Communications Commission	Rx	Receiving
FHSS	Frequency Hopping Spread Spectrum	SA, S/A	Spectrum Analyzer
FM	Frequency Modulation	SG	Signal Generator
Freq.	Frequency	SVSWR	Site-Voltage Standing Wave Ratio
FSK	Frequency Shift Keying	TR	Test Receiver
GFSK	Gaussian Frequency-Shift Keying	Tx	Transmitting
GNSS	Global Navigation Satellite System	VBW	Video BandWidth
GPS	Global Positioning System	Vert.	Vertical
Hori.	Horizontal	WLAN	Wireless LAN

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SECTION 1: Customer Information

Company Name	Sony Group Corporation
Address	1-7-1 Konan Minato-ku, Tokyo, 108-0075 Japan
Contact Person	Kazuhiko Nagano

The information provided from the customer is as follows;
- Customer, Description of EUT, Model Number of EUT, FCC ID on the cover and other relevant pages
- Operating/Test Mode(s) (Mode(s)) on all the relevant pages
- SECTION 1: Customer Information
- SECTION 2: Equipment Under Test (EUT) other than the Receipt Date and Test Date
- SECTION 5: Operation of EUT during testing

* The laboratory is exempted from liability of any test results affected from the above information in SECTION 2 and 5.

SECTION 2: Equipment Under Test (EUT)

2.1 Identification of EUT

Description	IEEE 802.11 1X1 a/b/g/n/ac/ax Wireless LAN + Bluetooth 5.2 + 802.15.4 Tri-radio 12 x 12 LGA Module
Model Number	AW-XM553 *1)
Serial Number	Refer to SECTION 4.2
Condition	Engineering prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification	No Modification by the test lab
Receipt Date	February 3, 2023
Test Date	February 6, 2023 to February 14, 2023

*1)
Module: AW-XM553 is the module that performs the wireless communication operation of transmitting and receiving, and Module: AW-AM510 is the module that performs only reception.
And, Module: AW-AM510 performs CAC (channel availability check) operation to monitor for radar signals on another channel frequency while Module: AW-XM553 is operating the communication.
This CAC is called "Zero wait DFS function".
Zero wait DFS function is the function that can be used only when combined with module: AW-AM510.

2.2 Product Description

General Specification

[Module: AW-XM553]

Rating	DC 3.3 V
Operating temperature	0 deg. C to 70 deg. C

[Module: AW-AM510]

Rating	DC 3.3 V and DC 1.8 V
Operating temperature	0 deg. C to 70 deg. C

Radio Specification

[Module: AW-XM553]

Bluetooth (BR / EDR / Low Energy)

Equipment Type	Transceiver
Frequency of Operation	2402 MHz to 2480 MHz
Type of Modulation	BT: FHSS (GFSK, π/4 DQPSK, 8 DPSK) BT LE: GFSK
Antenna Type	Type D (IW611-IW620-D): Dipole Antenna Type G (IW611-IW620-G): Dipole Antenna
Antenna Gain	Type D (IW611-IW620-D): 0.38 dBi max (include 100 mm antenna cable) Type G (IW611-IW620-G): 0.29 dBi max (include 100 mm antenna cable)

WLAN (IEEE802.11a/11n-20/11n-40)

Equipment Type	Transceiver	
Frequency of Operation	20 MHz Band:	5180 MHz to 5240 MHz 5260 MHz to 5320 MHz 5500 MHz to 5700 MHz 5745 MHz to 5825 MHz
	40 MHz Band:	5190 MHz to 5230 MHz 5270 MHz to 5310 MHz 5510 MHz to 5670 MHz 5755 MHz to 5795 MHz
Type of Modulation	OFDM	
Antenna Type	Type D (IW611-IW620-D): Dipole Antenna Type G (IW611-IW620-G): Dipole Antenna	
Antenna Gain	Type D (IW611-IW620-D): 1.68 dBi max (include 100 mm antenna cable) Type G (IW611-IW620-G): 1.36 dBi max (include 100 mm antenna cable)	

* This test report applies to Wireless LAN (5GHz Band).

*Following channels are not used.
- 20 MHz Bandwidth (5600 MHz - 5640 MHz)
- 40 MHz Bandwidth (5590 MHz - 5630 MHz)

[Module: AW-AM510]

Bluetooth (BR / EDR / Low Energy)

Equipment Type	Transceiver
Frequency of Operation	2402 MHz to 2480 MHz
Type of Modulation	BT: FHSS (GFSK, π/4 DQPSK, 8 DPSK) BT LE: GFSK

WLAN (IEEE802.11b/11g/11n-20)

Equipment Type	Transceiver
Frequency of Operation	2412 MHz to 2462 MHz
Type of Modulation	DSSS, OFDM

WLAN (IEEE802.11a/11n-20/11n-40)

Equipment Type	Transceiver	
Frequency of Operation	20 MHz Band:	5180 MHz to 5240 MHz 5260 MHz to 5320 MHz 5500 MHz to 5700 MHz 5745 MHz to 5825 MHz
	40 MHz Band:	5190 MHz to 5230 MHz 5270 MHz to 5310 MHz 5510 MHz to 5670 MHz 5755 MHz to 5795 MHz
Type of Modulation	OFDM	
Antenna Type	Type D (IW416-D): Dipole Antenna Type G (IW416-G): Dipole Antenna	
Antenna Gain	Type D (IW416-D): 1.41 dBi max (include 100 mm antenna cable) Type G (IW416-G): 1.13 dBi max (include 100 mm antenna cable)	

* 2.4 GHz band (Bluetooth, WLAN): Not used.
* 5 GHz band: Receiving only.

*Following channels are not used.
- 20 MHz Bandwidth (5600 MHz - 5640 MHz)
- 40 MHz Bandwidth (5590 MHz - 5630 MHz)

SECTION 3: Scope of Report

This report only covers DFS requirement, as specified by the following referenced procedures.

SECTION 4: Test specification, Procedures & Results

4.1 Test Specification

Test Specification	FCC Part 15 Subpart E The latest version on the first day of the testing period
Title	FCC 47 CFR Part 15 Radio Frequency Device Subpart E Unlicensed National Information Infrastructure Devices Section 15.407 General technical requirements

Test Specification	KDB 905462 D02 UNII DFS Compliance Procedure New Rules v02
Title	COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350MHz AND 5470-5725MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION

Test Specification	KDB905462 D04 Operational Modes for DFS Testing New Rules v01
Title	OPERATIONAL MODES SUGGESTED FOR DFS TESTING

FCC Part 15.31 (e)
The EUT is constantly provided with stable voltage from the host device regardless of input voltage.
Therefore, this EUT complies with the requirement.

FCC Part 15.203/212 Antenna requirement
The EUT has a unique antenna connector (U.FL).
Therefore the equipment complies with the requirement of 15.203/212.

4.2 Procedures and Results

Table 1-1: Applicability of DFS Requirements
<Master mode>

Requirement	Operating Mode Master	Test Procedures & Limits	Deviation	Results
U-NII Detection Bandwidth	Yes	KDB905462 D02 UNII DFS Compliance Procedures New Rules v02	N/A	Complied a)
Initial Channel Availability Check Time	Yes	FCC15.407 (h) KDB905462 D02 UNII DFS Compliance Procedures New Rules v02 RSS-247 6.3	N/A	Complied b)
Radar Burst at the Beginning of the Channel Availability Check Time	Yes	FCC15.407 (h) KDB905462 D02 UNII DFS Compliance Procedures New Rules v02 RSS-247 6.3	N/A	Complied c)
Radar Burst at the End of the Channel Availability Check Time	Yes	FCC15.407 (h) KDB905462 D02 UNII DFS Compliance Procedures New Rules v02 RSS-247 6.3	N/A	Complied d)
In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time	Yes	FCC15.407 (h) KDB905462 D02 UNII DFS Compliance Procedures New Rules v02 RSS-247 6.3	N/A	Complied e)
In-Service Monitoring for Non-Occupancy period	Yes	FCC15.407 (h) KDB905462 D02 UNII DFS Compliance Procedures New Rules v02 RSS-247 6.3	N/A	Complied f)
Statistical Performance Check	Yes	FCC15.407 (h) KDB905462 D02 UNII DFS Compliance Procedures New Rules v02	N/A	Complied g)

Note: UL Japan, Inc.'s EMI Work Procedures: Work Instructions-ULID-003591 and Work Instructions-ULID-003593.
a) Refer to SECTION 6, clause 6.3
b) Refer to SECTION 7, clause 7.3
c) Refer to SECTION 8, clause 8.3
d) Refer to SECTION 9, clause 9.3
e) Refer to SECTION 10, clause 10.3
f) Refer to SECTION 11, clause 11.3
g) Refer to SECTION 12, clause 12.3

Table 1-2: Additional of DFS Requirements
<Master mode>

Requirement	Operating Mode Master	Test Procedures & Limits	Deviation	Results
Off-channel Channel Availability Check	Yes	none EN 301 893 v2.1.1 clause 4.2.6.2.3 & clause 5.4.8.2.1.4	N/A	Complied h)

Note: UL Japan, Inc.'s EMI Work Procedures: Work Instructions-ULID-003591 and Work Instructions-ULID-003593.

*) Refer to "Update on U-NII Test Procedures for 802.11ax and DFS of TCB Workshop April, 2018 (2018-04-11-4.2 802.1ax DFS - DT.pdf)".

h) Refer to SECTION 13, clause 13.3. This test is additional test for Zero wait DFS function.

* This report is master device mode only.

Table 2 DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

Maximum Transmit Power	Value (See Notes 1,2, and 3)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
< 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note 3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

Table 3 DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2
U-NII Detection Bandwidth	Minimum 100 % of the U-NII 99 % transmission power bandwidth See Note 3
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. **Note 2:** The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signal will not count quiet periods in between transmissions. **Note 3:** During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

Table 4 Short Pulse Radar Test Waveform

Radar Type	Pulse Width (µs)	PRI (µs)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a	Roundup{(1/360) * ($19*10^6$/PRI $_{us}$)}	60 %	30
		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			
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 (Rader Types 1-4)				80 %	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Table 5 Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µs)	Chip Width (MHz)	PRI (µs)	Number of Pulses per *Burst*	Number of *Burst*	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5 - 20	1000-2000	1-3	8-20	80 %	30

Table 6 Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µs)	PRI (µs)	Pulse per Hop (kHz)	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

4.3 Addition to Standard

No addition, exclusion nor deviation has been made from the standard.

4.4 Uncertainty

Measurement uncertainty is not taken into account when stating conformity with a specified requirement.
Note: When margins obtained from test results are less than the measurement uncertainty, the test results may exceed the limit.

The following uncertainties have been calculated to provide a confidence level of 95 % using a coverage factor *k*=2.

Time Measurement uncertainty for this test was: (±) 0.012 %

4.5 Test Location

UL Japan, Inc. Shonan EMC Lab.
1-22-3, Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 Japan
Telephone: +81-463-50-6400
A2LA Certificate Number: 1266.03
(FCC test firm registration number: 626366, ISED lab company number: 2973D / CAB identifier: JP0001)

Test site	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Maximum measurement distance
No.1 Semi-anechoic chamber	2973D-1	20.6 x 11.3 x 7.65	20.6 x 11.3	10 m
No.2 Semi-anechoic chamber	2973D-2	20.6 x 11.3 x 7.65	20.6 x 11.3	10 m
No.3 Semi-anechoic chamber	2973D-3	12.7 x 7.7 x 5.35	12.7 x 7.7	5 m
No.4 Semi-anechoic chamber	-	8.1 x 5.1 x 3.55	8.1 x 5.1	-
No.1 Shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
No.2 Shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
No.3 Shielded room	-	6.3 x 4.7 x 2.7	6.3 x 4.7	-
No.4 Shielded room	-	4.4 x 4.7 x 2.7	4.4 x 4.7	-
No.5 Shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
No.6 Shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
No.8 Shielded room	-	3.45 x 5.5 x 2.4	3.45 x 5.5	-
No.1 Measurement room	-	2.55 x 4.1 x 2.5	-	-

4.6 Test Data, Test Instruments, and Test Set Up

Refer to APPENDIX.

SECTION 5: Operation of EUT during testing

5.1 Operating Mode(s)

The EUT, which is a Master and Client Device without Radar detection capability, operates over the W53 and W56 Band.

< master mode >
Module: AW-XM553:

The highest power level is 17.21 [dBm] EIRP.
Power level(EIRP) of the EUT[dBm]

Power level (Max)	
20 MHz band	40 MHz band
17.21	17.19

Power level(Conducted power) of the EUT[dBm]

Power level (Max)	
20 MHz band	40 MHz band
15.53	15.51

The highest power spectral density level is 5.20 [dBm/MHz].
Power spectral density level (Conducted) of the EUT[dBm/MHz]

Power spectral density level (Max)	
20 MHz band	40 MHz band
5.20	1.85

*Refer to Report No.14568085S-D, FCC Part 15E (FCC 15.407) report for parts other than DFS.

The channel-loading of approximately 17 % or greater was used for testing, and its test data was transferred from the Master Device to the Client Device for all test configurations.
WLAN traffic is generated transmitting random data by iperf.exe from the Master to the Client.

The EUT utilizes the 802.11a/n architecture, with a 20 MHz and 40 MHz channel bandwidth.

The lowest antenna assembly gain of all available antenna assemblies is -3.45 dBi.

1. In case of Master mode
The rated output power of the Master unit is < 200 mW (23 dBm). Therefore the required interference threshold level is -62 dBm. After correction for antenna gain and procedural adjustments, the required conducted threshold at the antenna port is -62 + 1 + (-3.45) = -64.45 dBm (threshold level + additional 1 dB + antenna gain).

It is impossible for users to change DFS control, because the DFS function is written on the firmware and users cannot access it.

The EUT was set by the software as follows:
Software name & version: IW611 DFS Test Tool version 1.1

< master mode with Zero wait DFS function mode >

Module: AW-AM510:

* This module has an internal function to transmit data, although the firmware for this product forcibly disables this function. The following is a description of this transmission function.

The highest power level is 21.40 [dBm] EIRP.

Power level(EIRP) of the EUT[dBm]

Power level (Max)	
20 MHz band	40 MHz band
21.40	19.71

Power level(Conducted power) of the EUT[dBm]

Power level (Max)	
20 MHz band	40 MHz band
19.99	18.30

The highest power spectral density level is 7.77 [dBm/MHz].

Power spectral density level (Conducted) of the EUT[dBm/MHz]

Power spectral density level (Max)	
20 MHz band	40 MHz band
7.77	3.12

*Refer to Report No.FR131001AB, FCC Part 15E (FCC 15.407) report for parts other than DFS.

The above report was written with the data in the case of antenna gain 5.16 dBi.
Therefore, the above table shows the values recalculated as the values were corrected to the antenna gain of 1.41 dBi in this report.
for example)
EIRP result of 11n-20, 5300 MHz was 25.15 dBm in report FR1310001AB at antenna gain of 5.16 dBi.
25.15 - 5.16 = 19.99 dBm
Antenna gain of this report is 1.41 dBi
19.99 dBm + 1.41 dBi = 21.40 dBm
Power density result of 11a, 5300 MHz was 12.93 dBm/MHz in report FR1310001AB at antenna gain of 5.16 dBi.
12.93 - 5.16 = 7.77 dBm

The channel-loading of approximately 17 % or greater was used for testing, and its test data was transferred from the Master Device to the Client Device for all test configurations.
WLAN traffic is generated transmitting random data by iperf.exe from the Master to the Client.

The EUT utilizes the 802.11a/n architecture, with a 20 MHz and 40 MHz channel bandwidth.

The lowest antenna assembly gain of all available antenna assemblies is -4.21 dBi.

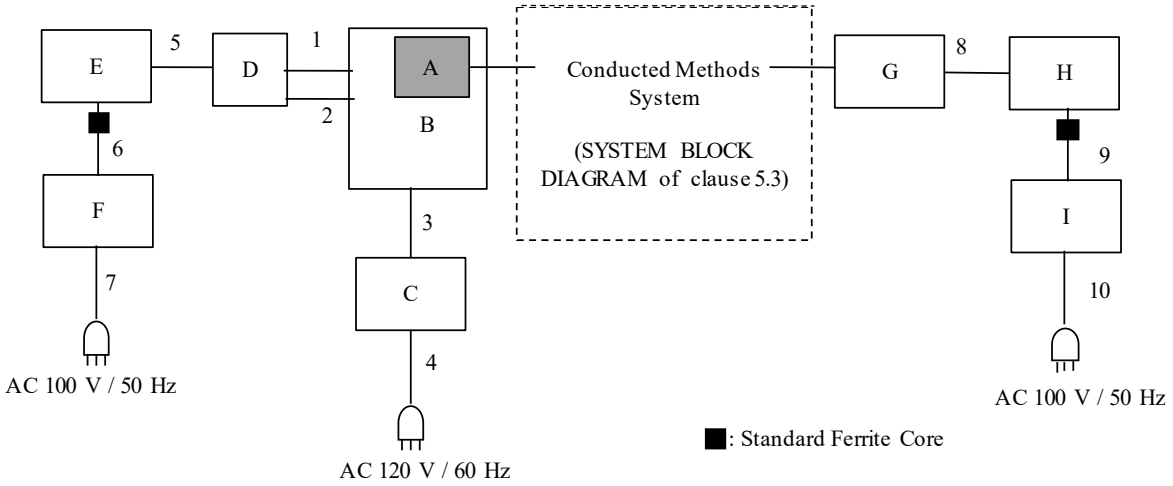
1. In case of Master mode
The rated output power of the Master unit is < 200 mW (23 dBm). Therefore the required interference threshold level is -62 dBm. After correction for antenna gain and procedural adjustments, the required conducted threshold at the antenna port is -62 + 1 + (-4.21) = -65.21 dBm (threshold level + additional 1 dB + antenna gain).

It is impossible for users to change DFS control, because the DFS function is written on the firmware and users cannot access it.

The EUT was set by the software as follows:
Software name & version: IW611/416 DFS Test Tool version 1.2

5.2 Configuration and peripherals

<Master mode>



* Cabling and setup(s) were taken into consideration and test data was taken under worse case conditions.

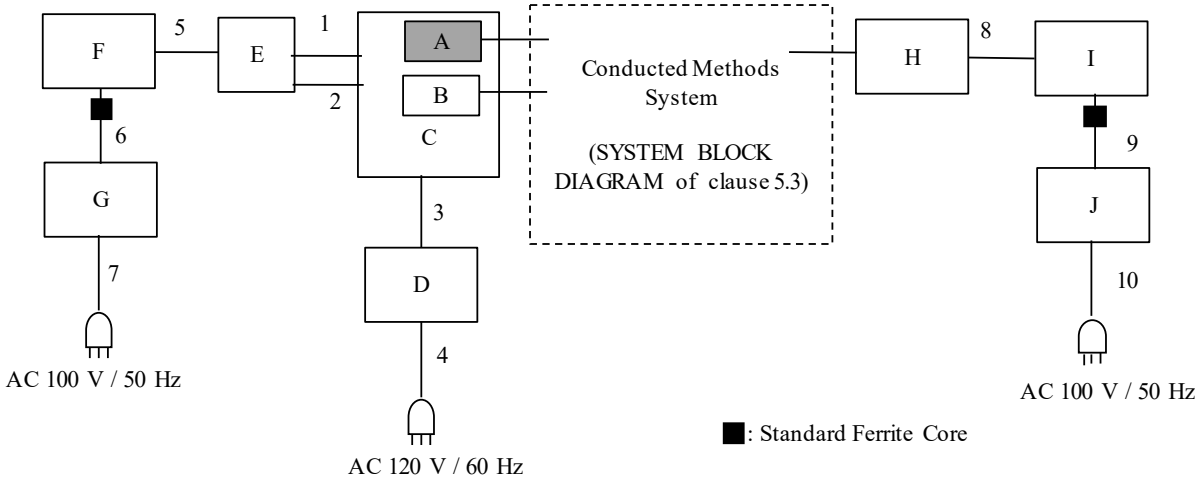
Description of EUT and Support Equipment

No.	Item	Model Number	Serial Number	Manufacturer	Remarks
A	IEEE 802.11 1X1 a/b/g/n/ac/ax Wireless LAN + Bluetooth 5.2 + 802.15.4 Tri-radio 12 x 12 LGA Module	AW-XM553	16:D4:24:DE:12:28	AzureWave	EUT
B	AE-C EVT	AE-C EVT	No.015	SONY	-
C	AC Adapter	AC-M1215WW	M2220096354	SONY	-
D	Jig Board	EBISU JIG	0001	SONY	-
E	Laptop Computer	ThinkPad E14 Gen2	PF397TS8	LENOVO	-
F	AC Adapter	ADLX65YCC2D	8SSA10R16922C2TJ19M0AZJ	LENOVO	-
G	Wireless LAN (11ac) station device	WN-AC1300UA	127K010653VU	I-O DATA	-
H	Laptop Computer	7666-77J	LV-B8PVT 08/05	Lenovo	-
I	AC Adapter	42T4422	11S42T4422Z1ZF3D9BV4XN	Lenovo	-

List of Cables Used

No.	Name	Length (m)	Shield		Remarks
			Cable	Connector	
1	Signal	0.2	Unshielded	Unshielded	-
2	Signal	0.2	Unshielded	Unshielded	-
3	DC	1.0	Unshielded	Unshielded	-
4	AC	0.6	Unshielded	Unshielded	-
5	USB	1.2	Shielded	Shielded	-
6	DC	1.8	Unshielded	Unshielded	-
7	AC	0.9	Unshielded	Unshielded	-
8	USB	1.0	Shielded	Shielded	-
9	DC	1.8	Unshielded	Unshielded	-
10	AC	0.9	Unshielded	Unshielded	-

<Master mode with Zero wait DFS function>



* Cabling and setup(s) were taken into consideration and test data was taken under worse case conditions.

Description of EUT and Support Equipment

No.	Item	Model Number	Serial Number	Manufacturer	Remarks
A	IEEE 802.11 1X1 a/b/g/n/ac/ax Wireless LAN + Bluetooth 5.2 + 802.15.4 Tri-radio 12 x 12 LGA Module	AW-XM553	16:D4:24:DE:12:28	AzureWave	EUT
B	IEEE 802.11 1X1 a/b/g/n Wireless LAN + Bluetooth 5.1 Combo 12 x 12 LGA Module	AW-AM510	EA:FB:1C:CD:C0:8D	AzureWave	-
C	AE-C EVT	AE-C EVT	No.015	SONY	-
D	AC Adapter	AC-M1215WW	M2220096354	SONY	-
E	Jig Board	EBISU JIG	0001	SONY	-
F	Laptop Computer	ThinkPad E14 Gen2	PF397TS8	LENOVO	-
G	AC Adapter	ADLX65YCC2D	8SSA10R16922C2TJ19M0AZJ	LENOVO	-
H	Wireless LAN (11ac) station device	WN-AC1300UA	127K010653VU	I-O DATA	-
I	Laptop Computer	7666-77J	LV-B8PVT 08/05	Lenovo	-
J	AC Adapter	42T4422	11S42T4422Z1ZF3D9BV4XN	Lenovo	-

List of Cables Used

No.	Name	Length (m)	Shield		Remarks
			Cable	Connector	
1	Signal	0.2	Unshielded	Unshielded	-
2	Signal	0.2	Unshielded	Unshielded	-
3	DC	1.0	Unshielded	Unshielded	-
4	AC	0.6	Unshielded	Unshielded	-
5	USB	1.2	Shielded	Shielded	-
6	DC	1.8	Unshielded	Unshielded	-
7	AC	0.9	Unshielded	Unshielded	-
8	USB	1.0	Shielded	Shielded	-
9	DC	1.8	Unshielded	Unshielded	-
10	AC	0.9	Unshielded	Unshielded	-

5.3 Test and Measurement System

SYSTEM OVERVIEW

The measurement system is based on a conducted test method.

The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution. The short pulse types 1, 2, 3, and 4, the long pulse type 5, and the frequency hopping type 6 parameters are randomized at run-time.

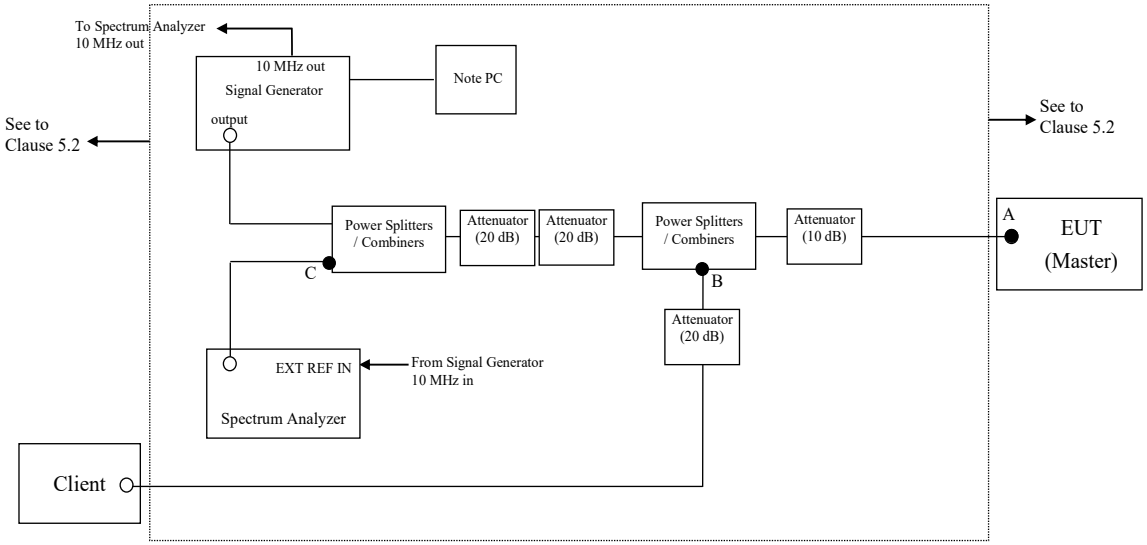
The signal monitoring equipment consists of a spectrum analyzer with the capacity to display 30001 bins on the horizontal axis. A time-domain resolution of 0.533 ms/bin is achievable with a 16 second sweep time, meeting the 10 seconds short pulse reporting criteria. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection.

FREQUENCY HOPPING RADAR WAVEFORM GENERATING SUBSYSTEM

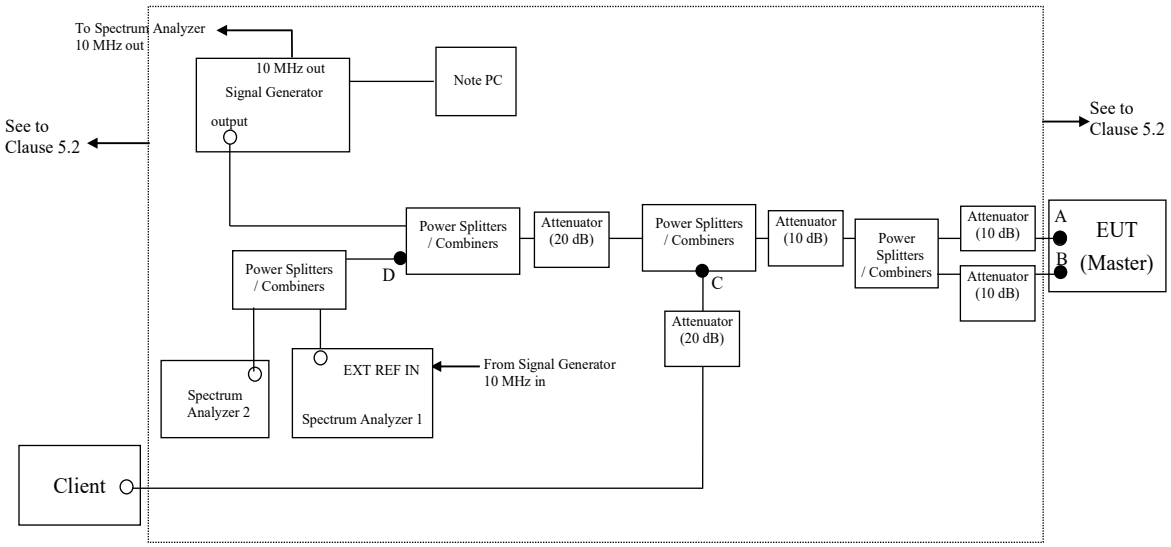
The first 100 frequencies are selected out of the hopping sequence of the randomized 475 hop frequencies.
Only a *Burst* that has the frequency falling within the receiver bandwidth of the tested U-NII device is selected among those frequencies. (Frequency-domain simulation). The radar waveform generated at the start time of the selected *Burst* (Time-domain simulation) is download to the Signal Generator.
If all of the randomly selected 100 frequencies do not fall within the receiver bandwidth of the U-NII device, the radar waveform is not used for the test.

CONDUCTED METHODS SYSTEM BLOCK DIAGRM

<Master mode>



<Master mode with Zero wait DFS function >



MEASUREMENT SYSTEM FREQUENCY REFERENCE

Lock the signal generator and the spectrum analyzer to the same reference sources as follows: Connect the 10 MHz OUT on the signal generator to the EXT REF IN on the spectrum analyzer and set the spectrum analyzer Ext to On.

SYSTEM CALIBRATION

<Master mode>
Step 1: Set the system as shown in Figure 2 of KDB905462 D02, 7.2.1.

Step 2: Adjust each attenuator to fulfill the following three conditions:
- WLAN can be communicated, and
- Rader detection threshold level is bigger than Client Device traffic level on the spectrum analyzer.

Step 3: Terminate 50 ohm at B , C and D points, and connect the spectrum analyzer to the point A. (See the figure on clause 5.2)
At the point A, adjust the signal generator and spectrum analyzer to the center frequency of the channel to be measured.
Download the applicable radar waveforms to the signal generator. Select the radar waveform, trigger a burst manually and measure the amplitude on the spectrum analyzer. Readjust the amplitude of the signal generator as required so that the peak level of the waveform is at a displayed level equal to the required or desired interference detection threshold.
Separate signal generator amplitude settings are determined as required for each radar type.

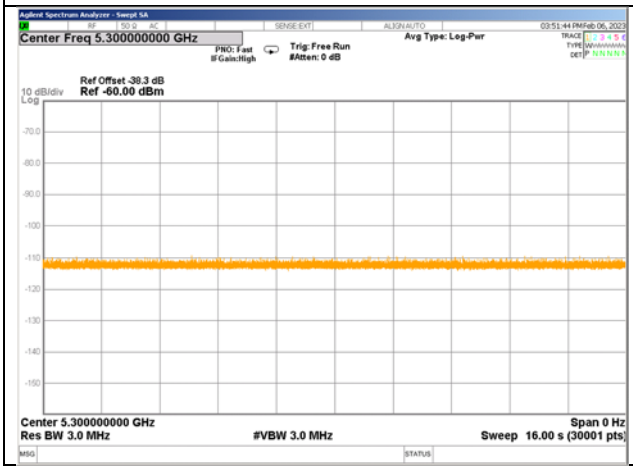
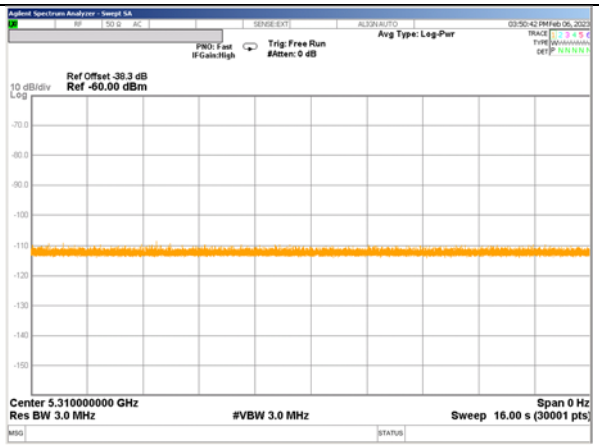
Step 4: Without changing any of the instrument settings, restore the system setting to Step 2 and adjust the Reference Level Offset of the spectrum analyzer to the level at Step 3.

By taking the above steps 1 to 4, the spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device.

See Clause 5.4 for Plots of Noise, Rader Waveforms, and WLAN signals.

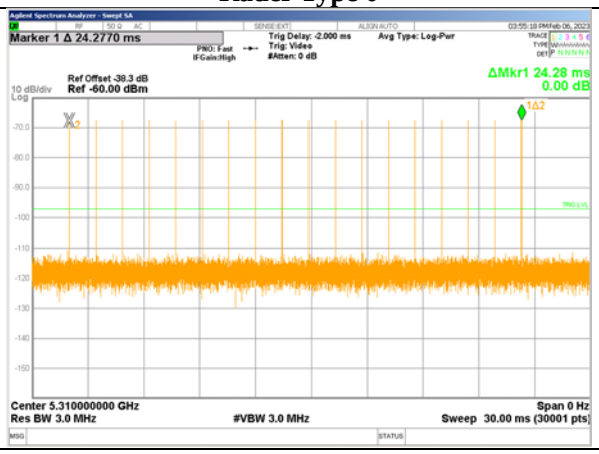
5.4 Plots of Noise, Rader Waveforms, and WLAN signals

<Master mode>

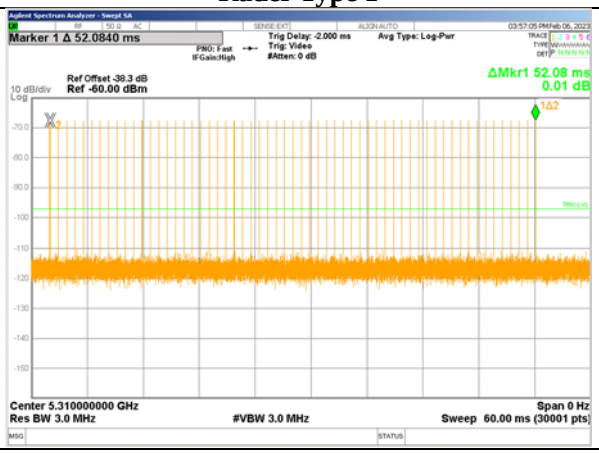
Plots of System Noise Floor	
11a	**11n-40**
	

Plots of Radar Waveforms

Rader Type 0

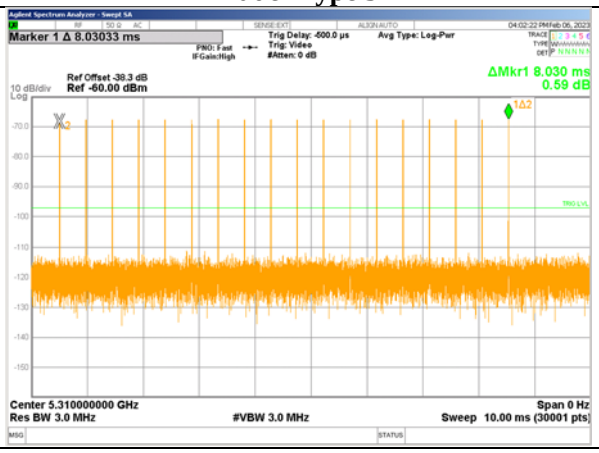


Rader Type 1

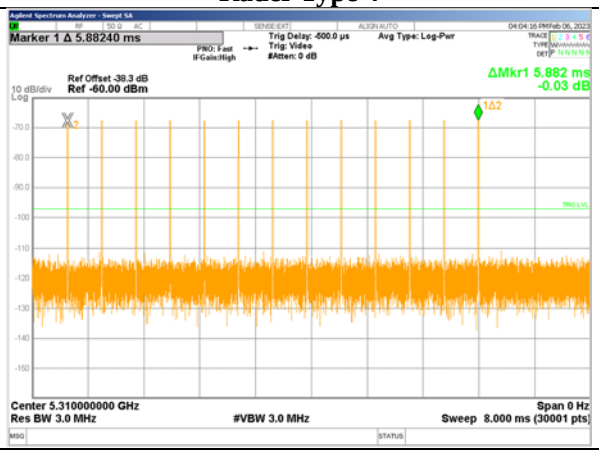


Rader Type 2

Rader Type 3



Rader Type 4



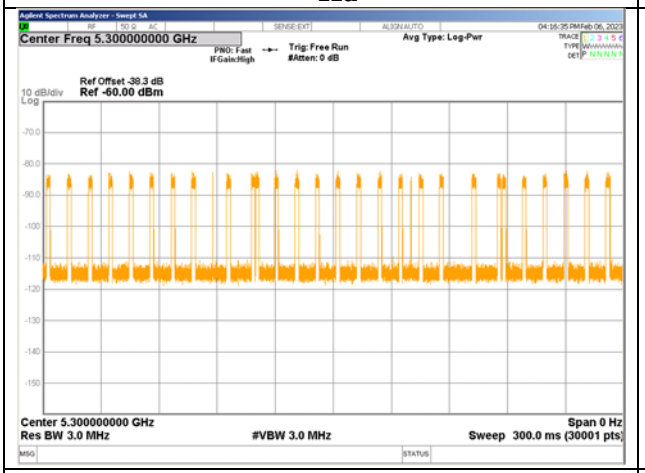
Rader Type 5

Plots of Radar Waveforms

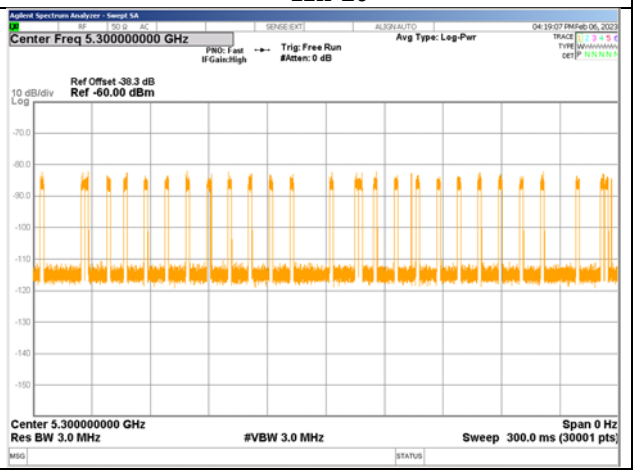
Rader Type 6

Plots of WLAN Traffic

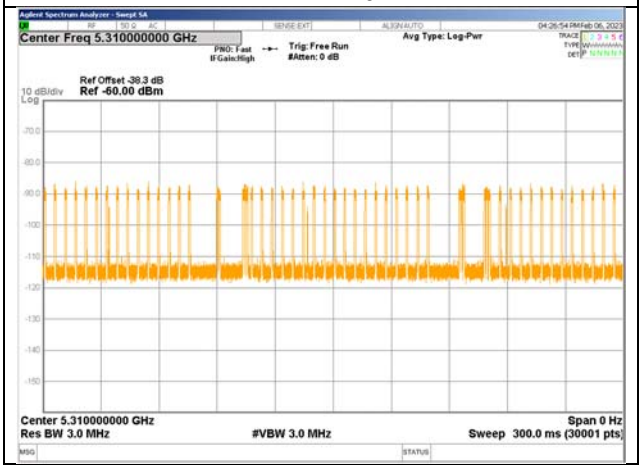
11a



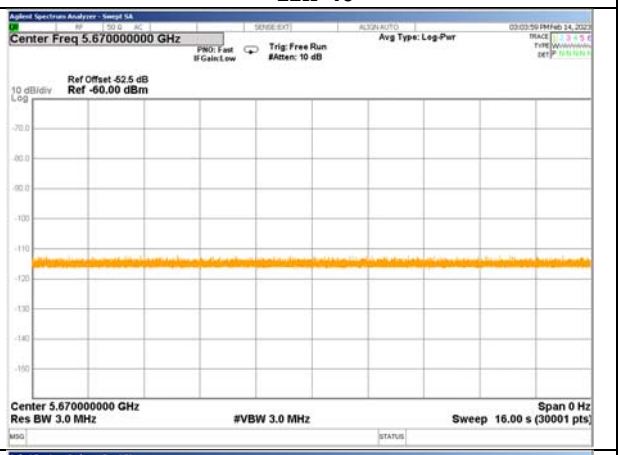
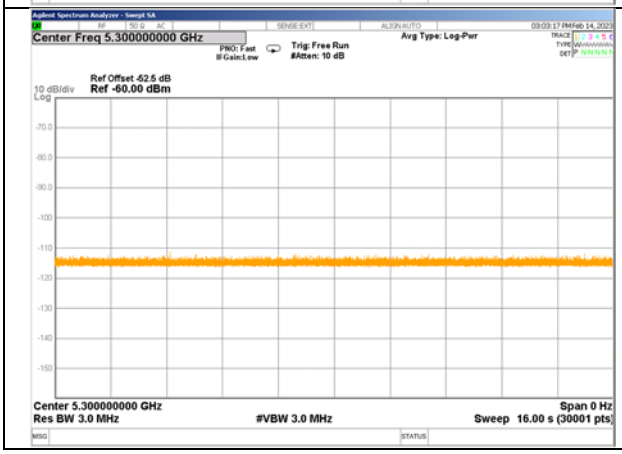
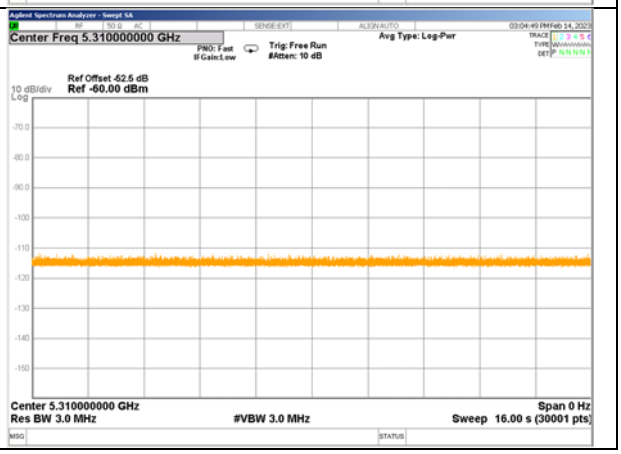
11n-20

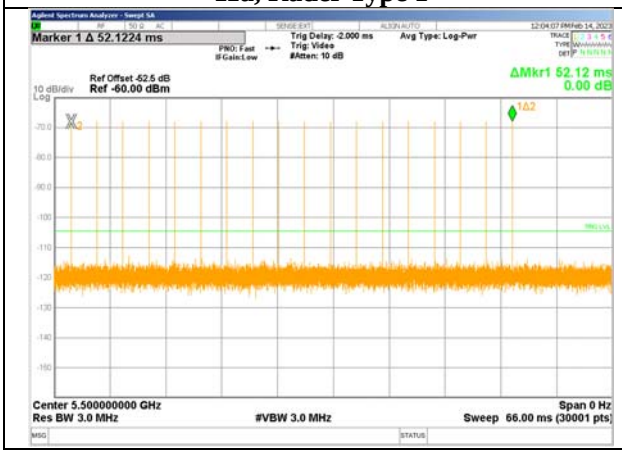


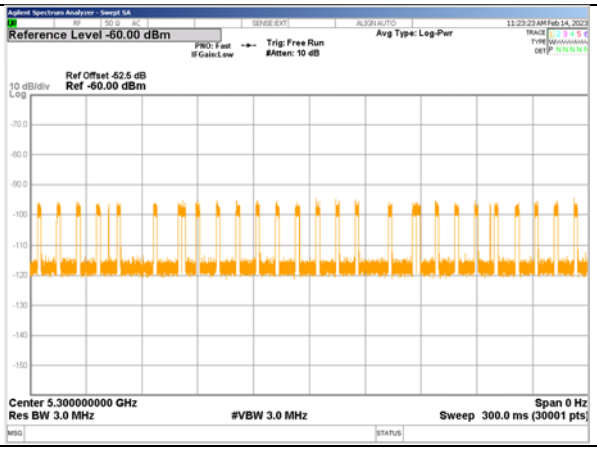
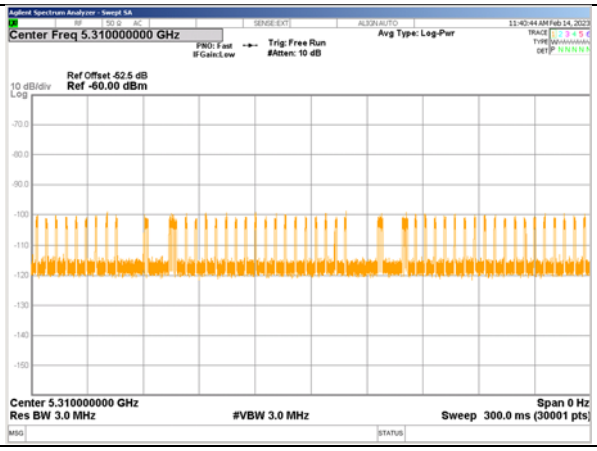
11n-40



<Master mode with Zero wait DFS function>

Plots of System Noise Floor	
11a	**11n-40**
	
	

Plots of Radar Waveforms	
11a, Rader Type 1	**11n-40, Rader Type 1**
	

Plots of WLAN Traffic	
11a	11n-40
	

SECTION 6: U-NII Detection Bandwidth

6.1 Operating environment

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	February 7, 2023
Temperature/ Humidity	23 deg. C / 28 % RH
Engineer	Kenichi Adachi
Mode	11a / 11n-20 / 11n-40

6.2 Test Procedure

Adjust the equipment to produce a single Burst of the Short Pulse Radar Type 0 at the center frequency of the EUT Operating Channel at the specified DFS Detection Threshold level.
Set the EUT up as a standalone device (no associated Client or Master, as appropriate) and no traffic. Frame based systems will be set to a talk/listen ratio reflecting the worst case (maximum) that is user configurable during this test.
Generate a single radar Burst, and note the response of the EUT. Repeat for a minimum of 10 trials. The EUT must detect the Radar Waveform within the DFS band using the specified U-NII Detection Bandwidth criterion.
In cases where the channel bandwidth may exceed past the DFS band edge on specific channels (i.e., 802.11ac or wideband frame based systems) select a channel that has the entire emission bandwidth within the DFS band. If this is not possible, test the detection BW to the DFS band edge.

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

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

The U-NII Detection Bandwidth is calculated as follows:
U-NII Detection Bandwidth = FH – FL

Radar detection is observed by two techniques.
a). Monitoring LAN traffic with Spectrum Analyzer.
b). Indicator of EUT and PC connected to EUT

6.3 Test data

5300 MHz (11a, 6 Mbps)
Waveform : Radar Type 0

FL [MHz]	FH [MHz]	Detection Bandwidth [MHz]	99 % Power Bandwidth [MHz]	Detection BW to 99 %	Limit [%]	Results
5288	5312	24	16.8485	142.4	100	Pass

5300 MHz (11n-20, MCS 0)
Waveform : Radar Type 0

FL [MHz]	FH [MHz]	Detection Bandwidth [MHz]	99 % Power Bandwidth [MHz]	Detection BW to 99 %	Limit [%]	Results
5288	5312	24	17.8988	134.1	100	Pass

5310 MHz (11n-40, MCS 0)
Waveform : Radar Type 0

FL [MHz]	FH [MHz]	Detection Bandwidth [MHz]	99 % Power Bandwidth [MHz]	Detection BW to 99 %	Limit [%]	Results
5289	5331	42	36.6116	114.7	100	Pass

99 % Occupied Bandwidth

* Refer to FCC part 15 subpart E report (except for DFS test) No. 14568085S-D.

(reference)

6.4 Test result

Test result: Pass

SECTION 7: Initial Channel Availability Check Time

7.1 Operating environment

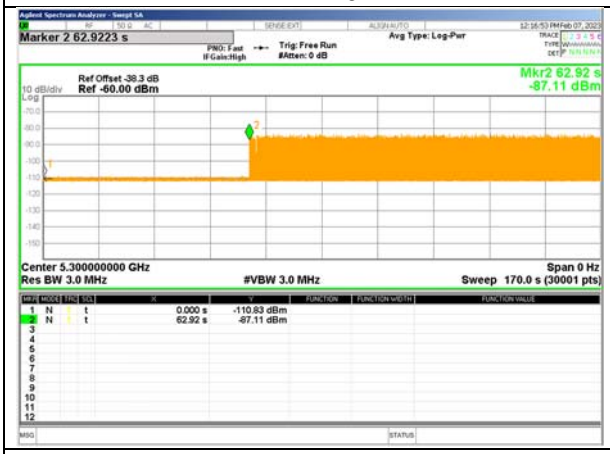
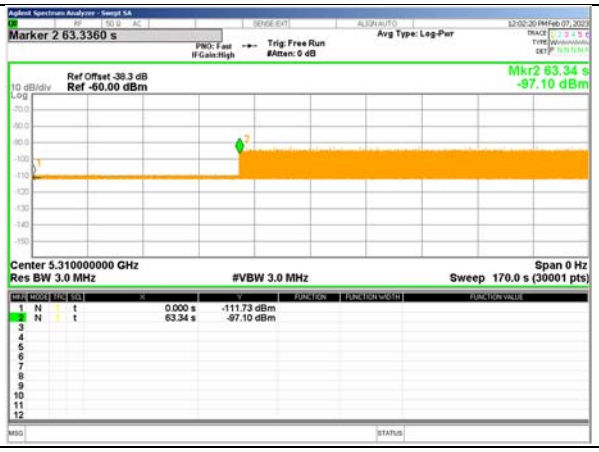
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	February 7, 2023
Temperature/ Humidity	23 deg. C / 28 % RH
Engineer	Kenichi Adachi
Mode	11a * / 11n-40

(* It tested with IEEE802.11a, since it cannot boot in IEEE802.11n mode.)

7.2 Test Procedure

The Initial Channel Availability Check 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.
This test does not use any Radar Waveforms and only needs to be performed one time.
The U-NII devices will be powered on and be instructed to operate on the appropriate U-NII Channel that must incorporate DFS functions. At the same time the EUT is powered on, the spectrum analyzer will be set to zero span mode with a 3 MHz RBW and 3 MHz VBW on the Channel occupied by the radar (Chr) with the 2.5 minutes sweep time.
The spectrum analyzer's sweep will be started at the same time power is applied to the U-NII device.
The EUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.

7.3 Test data

Initial Channel Availability Check Time	Initial Channel Availability Check Time
11a	11n-40
	
Marker 1 : Start of CAC : 0 s **Marker 2 : End of CAC : 62.92 s** **Channel Availability Check Time : 62.92 s**	**Marker 1 : Start of CAC : 0 s** **Marker 2 : End of CAC : 63.34 s** **Channel Availability Check Time : 63.34 s**

7.4 Test result

Test result: Pass

SECTION 8: Radar Burst at the Beginning of the Channel Availability Check Time

8.1 Operating environment

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	February 7, 2023
Temperature/ Humidity	23 deg. C / 28 % RH
Engineer	Kenichi Adachi
Mode	11n-40

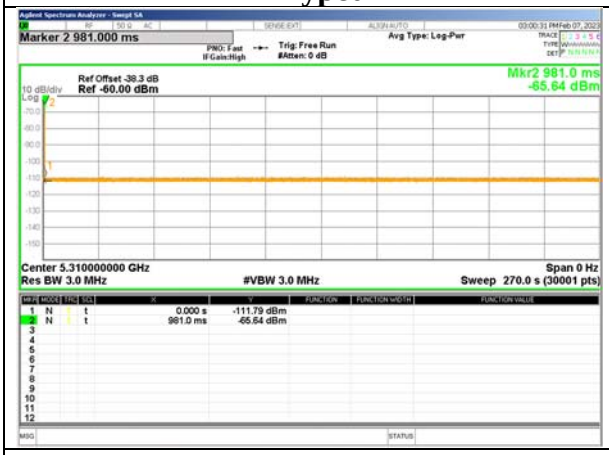
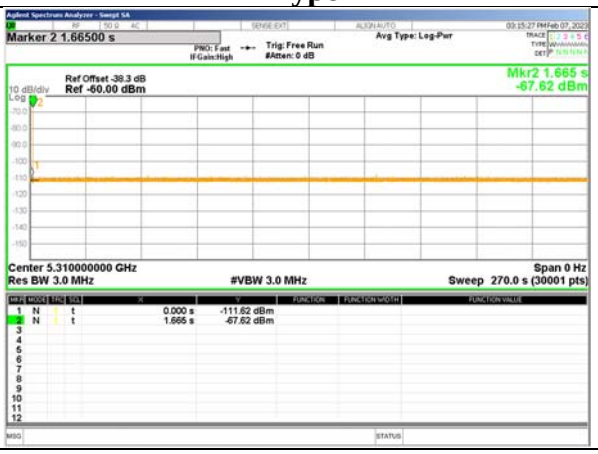
8.2 Test Procedure

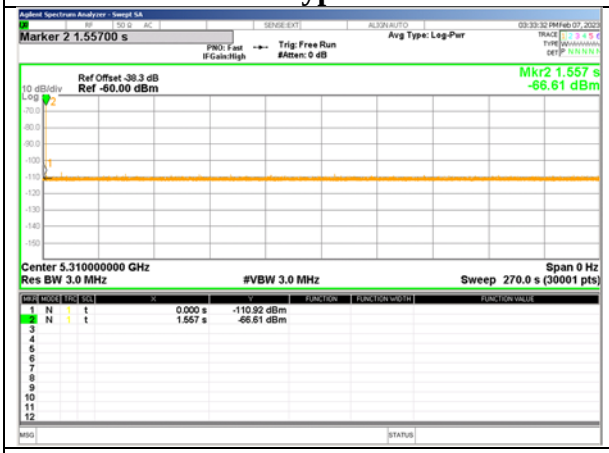
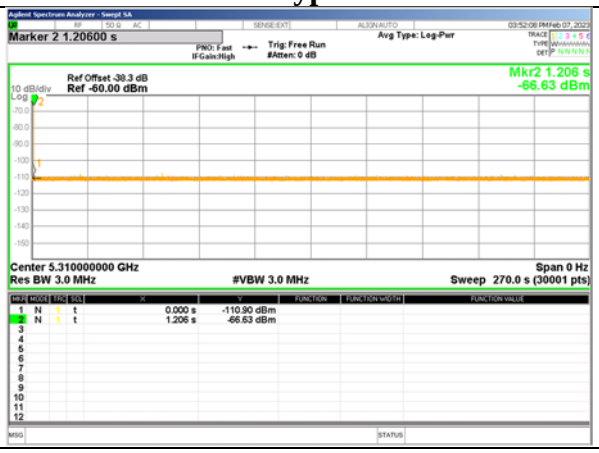
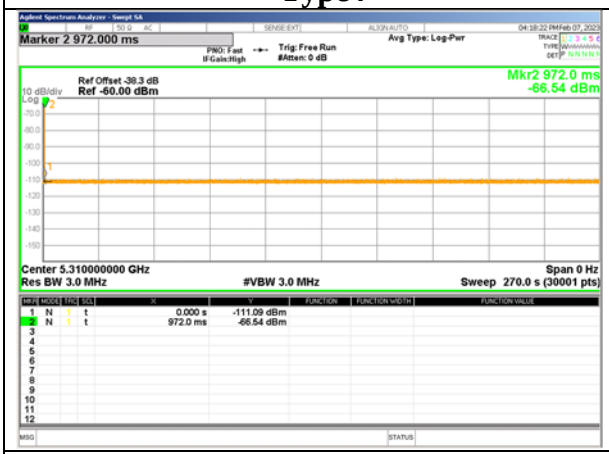
A single Burst of the Short Pulse Radar Types 0-4 will commence within a 6 second window starting at Start of CAC. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
Verify that during the 2.5 minutes measurement window no EUT transmissions occurred on Chr.

8.3 Test data

Radar Burst at the Beginning of the Channel Availability Check Time

11n-40

Type0	Type1
	
Marker 1 : Start of CAC : 0 s **Marker 2 : Radar Signal(Type 0) applied : 0.981 s**	**Marker 1 : Start of CAC : 0 s** **Marker 2 : Radar Signal(Type 1) applied : 1.665 s**

Radar Burst at the Beginning of the Channel Availability Check Time	
11n-40	
Type2	**Type3**
	
Marker 1 : Start of CAC : 0 s **Marker 2 : Radar Signal(Type 2) applied : 1.557 s**	**Marker 1 : Start of CAC : 0 s** **Marker 2 : Radar Signal(Type 3) applied : 1.206 s**
Type4	
	
Marker 1 : Start of CAC : 0 s **Marker 2 : Radar Signal(Type 4) applied : 0.972 s**	

8.4 Test result

Test result: Pass

SECTION 9: Radar Burst at the End of the Channel Availability Check Time

9.1 Operating environment

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	February 7, 2023
Temperature/ Humidity	23 deg. C / 28 % RH
Engineer	Kenichi Adachi
Mode	11n-40

9.2 Test Procedure

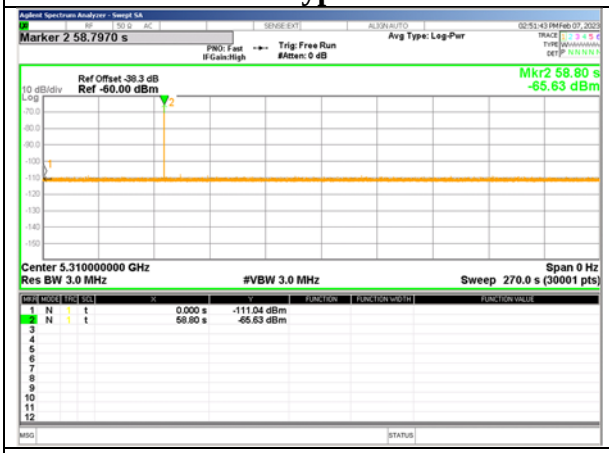
A single Burst of the Short Pulse Radar Types 0-4 will commence within a 6 second window starting at Start of CAC + 54 seconds. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
Verify that during the 2.5 minutes measurement window no EUT transmissions occurred on Chr.

9.3 Test data

Radar Burst at the End of the Channel Availability Check Time

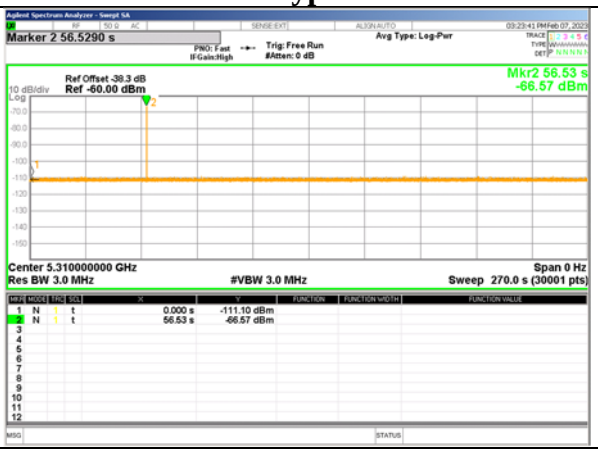
11n-40

Type0

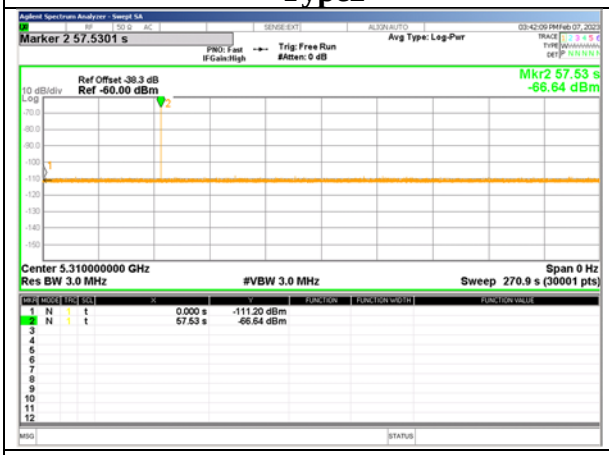
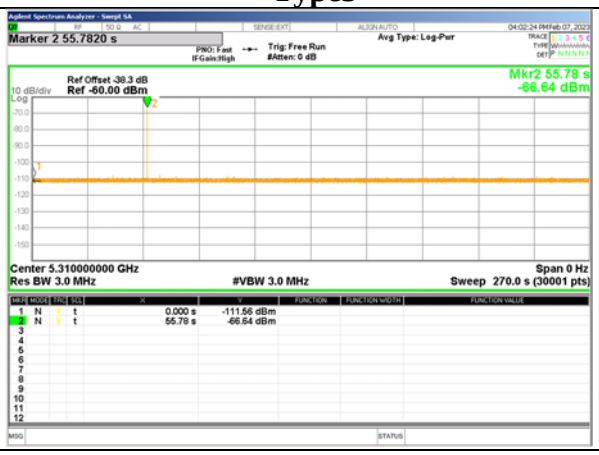
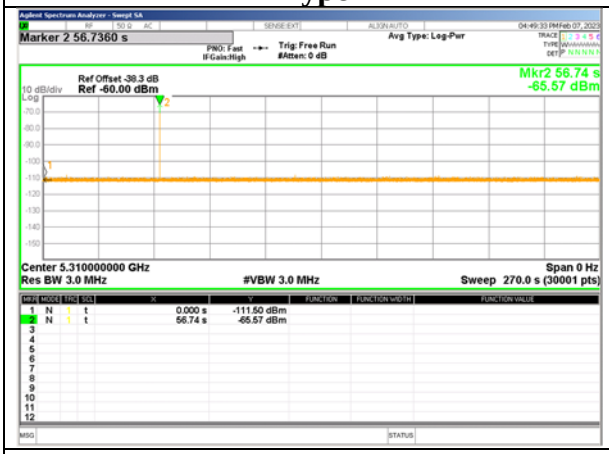


Marker 1 : Start of CAC : 0 s
Marker 2 : Radar Signal(Type 0) applied : 58.80 s

Type1



Marker 1 : Start of CAC : 0 s
Marker 2 : Radar Signal(Type 1) applied : 56.53 s

Radar Burst at the End of the Channel Availability Check Time	
11n-40	
Type2	Type3
	
Marker 1 : Start of CAC : 0 s **Marker 2 : Radar Signal(Type 2) applied : 57.53 s**	**Marker 1 : Start of CAC : 0 s** **Marker 2 : Radar Signal(Type 3) applied : 55.78 s**
Type4	
	
Marker 1 : Start of CAC : 0 s **Marker 2 : Radar Signal(Type 4) applied : 56.74 s**	

9.4 Test result

Test result: Pass

SECTION 10: Channel Move Time, Channel Closing Transmission Time

10.1 Operating environment

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	February 6, 2023
Temperature/ Humidity	23 deg. C / 26 % RH
Engineer	Kenichi Adachi
Mode	11n-40

10.2 Test Procedure

Transmit the data from the Master Device to the Client Device on the test Channel for the entire period of the test.
The Radar Waveform generator sends a Burst of pulses for one of the Radar Types 0 at levels defined on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds.

10.3 Test data

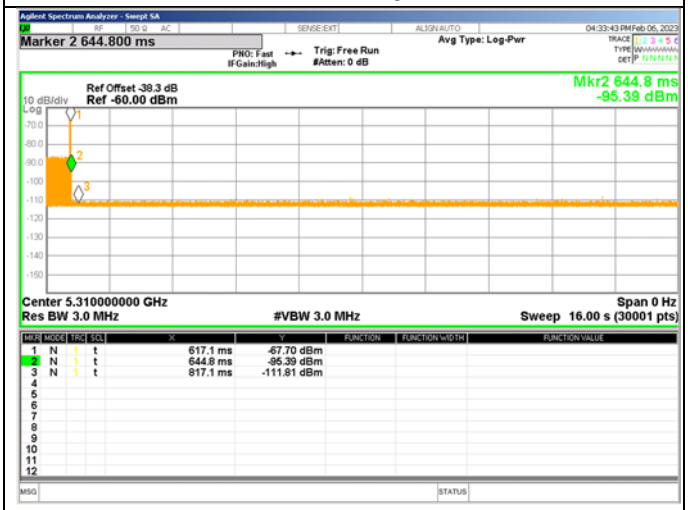
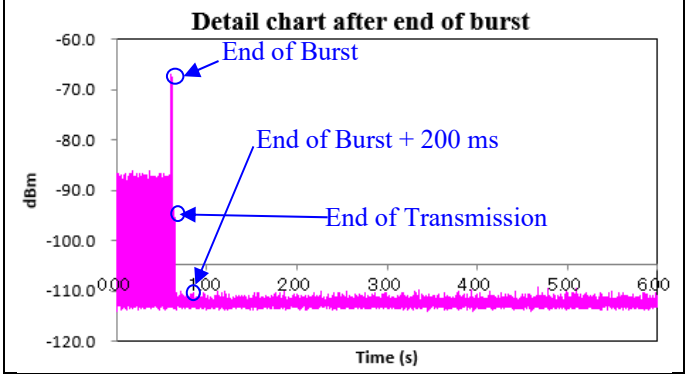
<Master Device>

11n-40

Test Item	Unit	Measurement Time	Limit	Results
Channel Move Time *1)	[s]	0.028	10.000	Pass
Channel Closing Transmission Time *2)	[ms]	0.000	60	Pass

*1) Channel Move Time is calculated as follows:
(Channel Move Time) = (End of Transmission) - (End of Burst) = 0.645-0.617
*2) Channel Closing Transmission Time is calculated from (End of Burst + 200 ms) to (End of Burst + 10 s)
(Channel Closing Transmission Time) = (Number of analyzer bins showing transmission) × (dwell time per bin)
= 0 × 0.533 [ms]

<Master mode>

Radar Type 0
11n-40
 **Marker 1 : End of Burst** **Marker 2 : End of Transmission**


10.4 Test result

Test result: Pass

SECTION 11: Non-Occupancy Period

11.1 Operating environment

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	February 6, 2023	February 7, 2023
Temperature/ Humidity	23 deg. C / 26 % RH	23 deg. C / 28 % RH
Engineer	Kenichi Adachi	Kenichi Adachi
Mode	11n-40	

11.2 Test Procedure

The following two tests are performed:

1). Transmit the data from the Master Device to the Client Device on the test Channel for the entire period of the test.
The Radar Waveform generator sends a Burst of pulses for one of the Radar Types 0-4(Master Device) or the Radar Types 0(Client Device) at levels defined on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
Observe the transmissions of the EUT after the Channel Move Time on the Operating Channel for duration greater than 30 minutes.

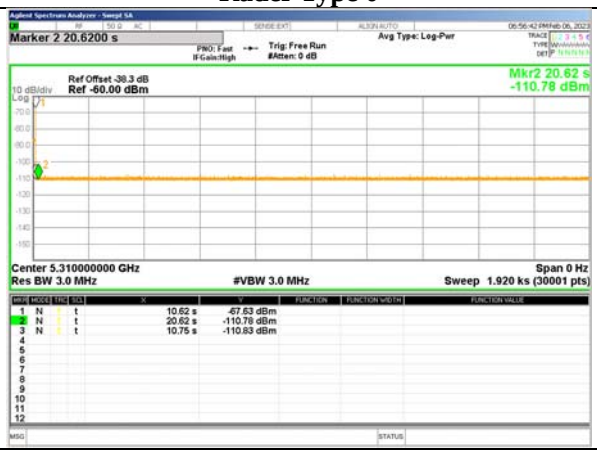
<Client mode only>
2). Transmit the data from the Master Device to the Client Device on the test Channel for the entire period of the test.
Observe the transmissions of the EUT on the Operating Channel for duration greater than 30 minutes after the Master Device is shut off.

11.3 Test data

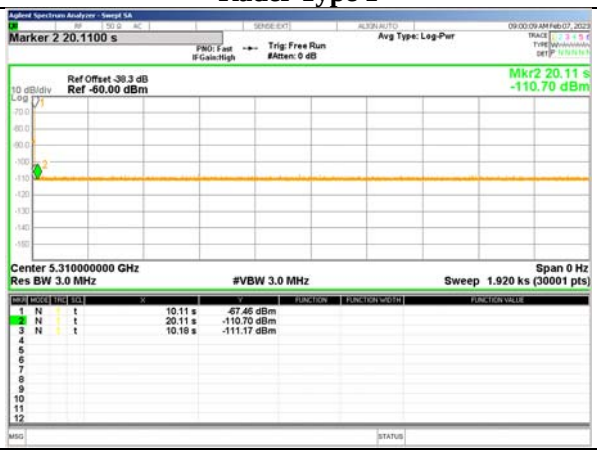
<Master mode>

Non-Occupancy Period

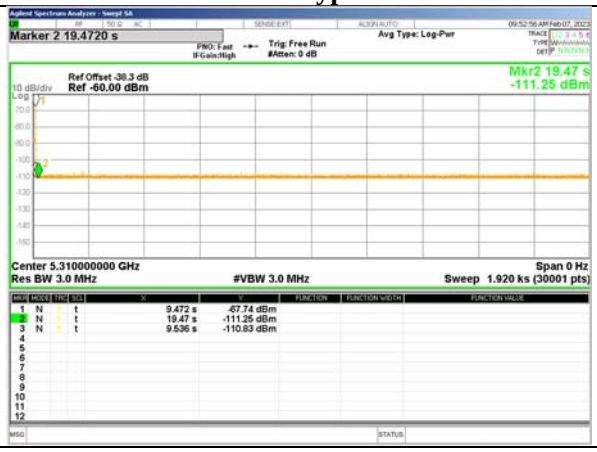
Rader Type 0



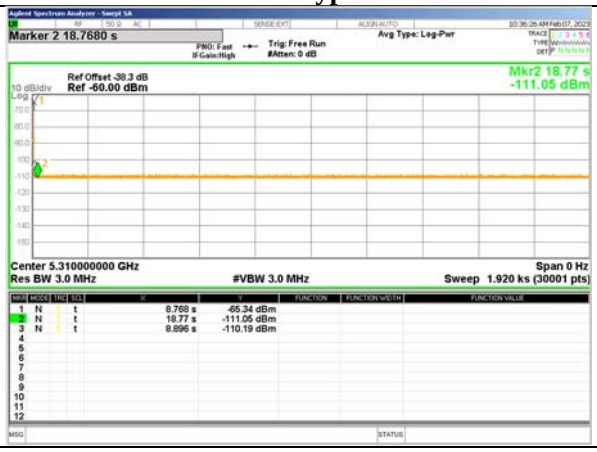
Rader Type 1



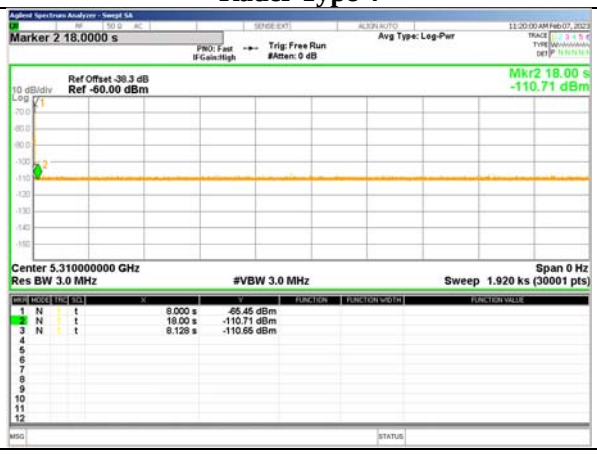
Rader Type 2



Rader Type 3



Rader Type 4



Marker 1: End of Burst, Marker 2: End of Burst + 10 s, Marker 3: End of transmission

11.4 Test result

Test result: Pass

SECTION 12: In-Service Monitoring (Statistical Performance Check)

12.1 Operating environment

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	February 8, 2023
Temperature/ Humidity	22 deg. C / 51 % RH
Engineer	Kenichi Adachi
Mode	11a / 11n-40

12.2 Test Procedure

Transmit the data from the Master Device to the Client Device on the test Channel for the entire period of the test.
Radar Waveform generator sends the individual waveform for each of the Radar Types 1-6, at levels defined, on the Operating Channel. An additional 1dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.

Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 1-4 and 6 to ensure detection occurs.
Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs.

Radar detection is observed by two techniques.
a). Monitoring LAN traffic with Spectrum Analyzer.
b). Indicator of PC connected to EUT

12.3 Test data

5300 MHz (11a)

Radar Type	Number of Trials	Number of Successful Detections	Percentage of Successful Detections [%]	Limit [%]	Results
1	30	30	100.00	60	Pass
2	30	30	100.00	60	Pass
3	30	30	100.00	60	Pass
4	30	25	83.33	60	Pass
Aggregate of 1 to 4	-	-	95.83	80	Pass
5	30	30	100.00	80	Pass
6	30	30	100.00	70	Pass

5310 MHz (11n-40)

Radar Type	Number of Trials	Number of Successful Detections	Percentage of Successful Detections [%]	Limit [%]	Results
1	30	30	100.00	60	Pass
2	30	30	100.00	60	Pass
3	30	30	100.00	60	Pass
4	30	25	83.33	60	Pass
Aggregate of 1 to 4	-	-	95.83	80	Pass
5	30	30	100.00	80	Pass
6	30	30	100.00	70	Pass

12.4 Test result

Test result: Pass

SECTION 13: Off-Channel Channel Availability Check Time

13.1 Operating environment

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	February 14, 2023
Temperature/ Humidity	25 deg. C / 37 % RH
Engineer	Kenichi Adachi
Mode	11a / 11n-40

13.2 Test Procedure

Transmit the data from the Master Device to the Client Device on the test Channel for the entire period of the test.
Radar Waveform generator sends the individual waveform for any of the Radar Types 1-6, at levels defined, on the off-channel frequency.
The off-channel is the channel that is scheduled to move next when the radar signal is detected.
An additional 1dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
The radar signal shall continue for the total duration of the off-channel CAC Time as declared by the manufacturer. The Burst Interval Time (BIT) during the test shall be varied between 45 s and 60 s.
The EUT shall detect the radar test signal before the end of the off-channel CAC Time and this shall be recorded.

Radar detection is observed by two techniques.
a). Monitoring LAN traffic with Spectrum Analyzer.
b). Indicator of PC connected to EUT

13.3 Test data

Operating: 5300 MHz (11a), Off-channel: 5500 MHz
Used radar Type 1
The off-channel CAC time: 1 hours *1)
Percentage of successful detections: 100 %
Limit: 60 %

Operating: 5310 MHz (11n-40), Off-channel: 5670 MHz
Used radar Type 1
The off-channel CAC time: 1 hours *1)
Percentage of successful detections: 100 %
Limit: 60 %

*1) This test was decided to test time for 1 hour, since the off-channel CAC time continues indefinitely, and the test procedure that the test must continue for the full off-channel CAC time specified in EUT in the section 5.4.8.2.1.4.2 of EN 301 893 standard.

13.4 Test result

Test result: Pass

APPENDIX 1: Data of DFS test

U-NII Detection Bandwidth

5300 MHz (11a)

Frequency [MHz]	Number of Trials [Times]	Number of Detected [Times]	Ratio of Detected [%]	Mark
5285	10	0	0	
5286	10	0	0	
5287	10	0	0	
5288	10	10	100	FL
5289	10	10	100	
5290	10	10	100	
5295	10	10	100	
5300	10	10	100	
5305	10	10	100	
5310	10	10	100	
5311	10	10	100	
5312	10	10	100	FH
5313	10	0	0	
5314	10	0	0	
5315	10	0	0	

5300 MHz (11n-20)

Frequency [MHz]	Number of Trials [Times]	Number of Detected [Times]	Ratio of Detected [%]	Mark
5285	10	0	0	
5286	10	0	0	
5287	10	0	0	
5288	10	10	100	FL
5289	10	10	100	
5290	10	10	100	
5295	10	10	100	
5300	10	10	100	
5305	10	10	100	
5310	10	10	100	
5311	10	10	100	
5312	10	10	100	FH
5313	10	0	0	
5314	10	0	0	
5315	10	0	0	

U-NII Detection Bandwidth

5310 MHz (11n-40)

Frequency [MHz]	Number of Trials [Times]	Number of Detected [Times]	Ratio of Detected [%]	Mark
5285	10	0	0	
5286	10	0	0	
5287	10	0	0	
5288	10	0	0	
5289	10	10	100	FL
5290	10	10	100	
5295	10	10	100	
5300	10	10	100	
5305	10	10	100	
5310	10	10	100	
5315	10	10	100	
5320	10	10	100	
5325	10	10	100	
5330	10	10	100	
5331	10	10	100	FH
5332	10	0	0	
5333	10	0	0	
5334	10	0	0	
5335	10	0	0	

Statistical Performance Check

5300 MHz (11a)

Trial #	Radar Type1	Radar Type2	Radar Type3	Radar Type4	Radar Type5	Radar Type6
	Detection	Detection	Detection	Detection	Detection	Detection
	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
1	Yes	Yes	Yes	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	Yes	Yes	Yes	Yes
5	Yes	Yes	Yes	No	Yes	Yes
6	Yes	Yes	Yes	Yes	Yes	Yes
7	Yes	Yes	Yes	Yes	Yes	Yes
8	Yes	Yes	Yes	Yes	Yes	Yes
9	Yes	Yes	Yes	Yes	Yes	Yes
10	Yes	Yes	Yes	Yes	Yes	Yes
11	Yes	Yes	Yes	No	Yes	Yes
12	Yes	Yes	Yes	Yes	Yes	Yes
13	Yes	Yes	Yes	Yes	Yes	Yes
14	Yes	Yes	Yes	No	Yes	Yes
15	Yes	Yes	Yes	Yes	Yes	Yes
16	Yes	Yes	Yes	Yes	Yes	Yes
17	Yes	Yes	Yes	Yes	Yes	Yes
18	Yes	Yes	Yes	Yes	Yes	Yes
19	Yes	Yes	Yes	Yes	Yes	Yes
20	Yes	Yes	Yes	Yes	Yes	Yes
21	Yes	Yes	Yes	Yes	Yes	Yes
22	Yes	Yes	Yes	Yes	Yes	Yes
23	Yes	Yes	Yes	Yes	Yes	Yes
24	Yes	Yes	Yes	Yes	Yes	Yes
25	Yes	Yes	Yes	Yes	Yes	Yes
26	Yes	Yes	Yes	Yes	Yes	Yes
27	Yes	Yes	Yes	No	Yes	Yes
28	Yes	Yes	Yes	Yes	Yes	Yes
29	Yes	Yes	Yes	Yes	Yes	Yes
30	Yes	Yes	Yes	No	Yes	Yes
EUT Test Frequency: 5300 MHz Radar Frequency: 5300 MHz						

Statistical Performance Check

5310MHz (11n-40)

Trial #	Radar Type1	Radar Type2	Radar Type3	Radar Type4	Radar Type5	Radar Type6
	Detection	Detection	Detection	Detection	Detection	Detection
	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
1	Yes	Yes	Yes	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	Yes	No	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes
6	Yes	Yes	Yes	No	Yes	Yes
7	Yes	Yes	Yes	Yes	Yes	Yes
8	Yes	Yes	Yes	Yes	Yes	Yes
9	Yes	Yes	Yes	Yes	Yes	Yes
10	Yes	Yes	Yes	Yes	Yes	Yes
11	Yes	Yes	Yes	Yes	Yes	Yes
12	Yes	Yes	Yes	Yes	Yes	Yes
13	Yes	Yes	Yes	No	Yes	Yes
14	Yes	Yes	Yes	Yes	Yes	Yes
15	Yes	Yes	Yes	Yes	Yes	Yes
16	Yes	Yes	Yes	Yes	Yes	Yes
17	Yes	Yes	Yes	No	Yes	Yes
18	Yes	Yes	Yes	Yes	Yes	Yes
19	Yes	Yes	Yes	Yes	Yes	Yes
20	Yes	Yes	Yes	No	Yes	Yes
21	Yes	Yes	Yes	Yes	Yes	Yes
22	Yes	Yes	Yes	Yes	Yes	Yes
23	Yes	Yes	Yes	Yes	Yes	Yes
24	Yes	Yes	Yes	Yes	Yes	Yes
25	Yes	Yes	Yes	Yes	Yes	Yes
26	Yes	Yes	Yes	Yes	Yes	Yes
27	Yes	Yes	Yes	Yes	Yes	Yes
28	Yes	Yes	Yes	Yes	Yes	Yes
29	Yes	Yes	Yes	Yes	Yes	Yes
30	Yes	Yes	Yes	Yes	Yes	Yes
EUT Test Frequency: 5310 MHz Radar Frequency: 5310 MHz						

Off-Channel Channel Availability Check Time

Operating: 5300 MHz (11a), Off-channel: 5500 MHz

Trial #	Radar Type1			
	injection timing [s]	injection timing	burst interval time (BIT) [s]	Detection Yes/No
1	5	13:35:05	5	Yes
2	60	13:36:05	55	Yes
3	110	13:36:55	50	Yes
4	155	13:37:40	45	Yes
5	205	13:38:30	50	Yes
6	260	13:39:25	55	Yes
7	320	13:40:25	60	Yes
8	375	13:41:20	55	Yes
9	425	13:42:10	50	Yes
10	470	13:42:55	45	Yes
11	520	13:43:45	50	Yes
12	575	13:44:40	55	Yes
13	635	13:45:40	60	Yes
14	690	13:46:35	55	Yes
15	740	13:47:25	50	Yes
16	785	13:48:10	45	Yes
17	835	13:49:00	50	Yes
18	890	13:49:55	55	Yes
19	950	13:50:55	60	Yes
20	1005	13:51:50	55	Yes
21	1055	13:52:40	50	Yes
22	1100	13:53:25	45	Yes
23	1150	13:54:15	50	Yes
24	1205	13:55:10	55	Yes
25	1265	13:56:10	60	Yes
26	1320	13:57:05	55	Yes
27	1370	13:57:55	50	Yes
28	1415	13:58:40	45	Yes
29	1465	13:59:30	50	Yes
30	1520	14:00:25	55	Yes
31	1580	14:01:25	60	Yes
32	1635	14:02:20	55	Yes
33	1685	14:03:10	50	Yes
34	1730	14:03:55	45	Yes
35	1780	14:04:45	50	Yes
36	1835	14:05:40	55	Yes
37	1895	14:06:40	60	Yes
38	1950	14:07:35	55	Yes
39	2000	14:08:25	50	Yes
40	2045	14:09:10	45	Yes
41	2095	14:10:00	50	Yes
42	2150	14:10:55	55	Yes
43	2210	14:11:55	60	Yes
44	2265	14:12:50	55	Yes
45	2315	14:13:40	50	Yes
46	2360	14:14:25	45	Yes
47	2410	14:15:15	50	Yes
48	2465	14:16:10	55	Yes
49	2525	14:17:10	60	Yes
50	2580	14:18:05	55	Yes
51	2630	14:18:55	50	Yes
52	2675	14:19:40	45	Yes
53	2725	14:20:30	50	Yes
54	2780	14:21:25	55	Yes
55	2840	14:22:25	60	Yes
56	2895	14:23:20	55	Yes
57	2945	14:24:10	50	Yes
58	2990	14:24:55	45	Yes
59	3040	14:25:45	50	Yes
60	3095	14:26:40	55	Yes
61	3155	14:27:40	60	Yes
62	3210	14:28:35	55	Yes
63	3260	14:29:25	50	Yes
64	3305	14:30:10	45	Yes
65	3355	14:31:00	50	Yes
66	3410	14:31:55	55	Yes
67	3470	14:32:55	60	Yes
68	3525	14:33:50	55	Yes
69	3575	14:34:40	50	Yes
70	3620	14:35:25	45	Yes
EUT Test Frequency: 5300 MHz Radar Frequency: 5500 MHz				

Off-Channel Channel Availability Check Time

Operating: 5310 MHz (11n-40), Off-channel: 5670 MHz

Trial #	Radar Type1			
	injection timing [s]	injection timing	burst interval time (BIT) [s]	Detection Yes/No
1	5	14:55:05	5	Yes
2	65	14:56:10	60	Yes
3	120	14:57:05	55	Yes
4	170	14:57:55	50	Yes
5	215	14:58:40	45	Yes
6	265	14:59:30	50	Yes
7	320	15:00:25	55	Yes
8	380	15:01:25	60	Yes
9	435	15:02:20	55	Yes
10	485	15:03:10	50	Yes
11	530	15:03:55	45	Yes
12	580	15:04:45	50	Yes
13	635	15:05:40	55	Yes
14	685	15:06:30	50	Yes
15	730	15:07:15	45	Yes
16	780	15:08:05	50	Yes
17	835	15:09:00	55	Yes
18	895	15:10:00	60	Yes
19	950	15:10:55	55	Yes
20	1000	15:11:45	50	Yes
21	1045	15:12:30	45	Yes
22	1095	15:13:20	50	Yes
23	1150	15:14:15	55	Yes
24	1210	15:15:15	60	Yes
25	1265	15:16:10	55	Yes
26	1315	15:17:00	50	Yes
27	1360	15:17:45	45	Yes
28	1410	15:18:35	50	Yes
29	1465	15:19:30	55	Yes
30	1525	15:20:30	60	Yes
31	1575	15:21:20	50	Yes
32	1630	15:22:15	55	Yes
33	1680	15:23:05	50	Yes
34	1725	15:23:50	45	Yes
35	1775	15:24:40	50	Yes
36	1830	15:25:35	55	Yes
37	1890	15:26:35	60	Yes
38	1935	15:27:20	45	Yes
39	1990	15:28:15	55	Yes
40	2040	15:29:05	50	Yes
41	2085	15:29:50	45	Yes
42	2135	15:30:40	50	Yes
43	2195	15:31:40	60	Yes
44	2250	15:32:35	55	Yes
45	2300	15:33:25	50	Yes
46	2345	15:34:10	45	Yes
47	2395	15:35:00	50	Yes
48	2450	15:35:55	55	Yes
49	2510	15:36:55	60	Yes
50	2555	15:37:40	45	Yes
51	2610	15:38:35	55	Yes
52	2660	15:39:25	50	Yes
53	2705	15:40:10	45	Yes
54	2760	15:41:05	55	Yes
55	2805	15:41:50	45	Yes
56	2860	15:42:45	55	Yes
57	2920	15:43:45	60	Yes
58	2975	15:44:40	55	Yes
59	3025	15:45:30	50	Yes
60	3070	15:46:15	45	Yes
61	3120	15:47:05	50	Yes
62	3175	15:48:00	55	Yes
63	3235	15:49:00	60	Yes
64	3290	15:49:55	55	Yes
65	3335	15:50:40	45	Yes
66	3390	15:51:35	55	Yes
67	3435	15:52:20	45	Yes
68	3490	15:53:15	55	Yes
69	3550	15:54:15	60	Yes
70	3605	15:55:10	55	Yes
EUT Test Frequency: 5310 MHz Radar Frequency: 5670 MHz				

Parameter Data sheet for Radar Type 1

5300 MHz (11a)

Radar Type1				
Trial #	Pulse Repetition Frequency Number(1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Number of Pulses	Pulse Repetition Interval (Microseconds)
1	20	1113.6	59	898
2	13	1319.3	70	758
3	6	1618.1	86	618
4	11	1392.8	74	718
5	3	1792.1	95	558
6	22	1066.1	57	938
7	16	1222.5	65	818
8	19	1139.0	61	878
9	4	1730.1	92	578
10	14	1285.3	68	778
11	10	1432.7	76	698
12	17	1193.3	63	838
13	1	1930.5	102	518
14	15	1253.1	67	798
15	7	1567.4	83	638
16	-	336.9	18	2968
17	-	342.2	19	2922
18	-	1043.8	56	958
19	-	346.4	19	2887
20	-	419.6	23	2383
21	-	501.8	27	1993
22	-	1100.1	59	909
23	-	363.9	20	2748
24	-	671.1	36	1490
25	-	374.7	20	2669
26	-	439.9	24	2273
27	-	413.1	22	2421
28	-	1150.7	61	869
29	-	715.3	38	1398
30	-	608.3	33	1644

Parameter Data sheet for Radar Type 1

5310 MHz (11n-40)

Radar Type1				
Trial #	Pulse Repetition Frequency Number(1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Number of Pulses	Pulse Repetition Interval (Microseconds)
1	1	1930.5	102	518
2	19	1139.0	61	878
3	8	1519.8	81	658
4	15	1253.1	67	798
5	4	1730.1	92	578
6	16	1222.5	65	818
7	22	1066.1	57	938
8	3	1792.1	95	558
9	7	1567.4	83	638
10	9	1474.9	78	678
11	13	1319.3	70	758
12	23	326.2	18	3066
13	21	1089.3	58	918
14	5	1672.2	89	598
15	12	1355.0	72	738
16	-	827.1	44	1209
17	-	1443.0	77	693
18	-	603.1	32	1658
19	-	530.8	29	1884
20	-	705.7	38	1417
21	-	906.6	48	1103
22	-	1123.6	60	890
23	-	791.1	42	1264
24	-	749.6	40	1334
25	-	498.5	27	2006
26	-	1026.7	55	974
27	-	1751.3	93	571
28	-	742.9	40	1346
29	-	647.7	35	1544
30	-	348.1	19	2873

Parameter Data sheet for Radar Type 2

5300 MHz (11a)

Radar Type2			
Trial #	Number Pulses per Burst	Pulse Width [us]	PRI [us]
1	28	4.3	196
2	29	4.7	152
3	25	2.4	206
4	24	2.1	192
5	28	4.3	208
6	27	3.6	179
7	26	3.2	173
8	26	3.2	224
9	27	3.4	227
10	26	2.8	212
11	27	3.8	207
12	26	3.3	155
13	29	4.5	183
14	29	4.9	221
15	26	2.8	214
16	29	5.0	182
17	27	3.3	165
18	24	1.9	209
19	29	4.8	203
20	24	1.9	189
21	29	4.7	164
22	24	1.7	156
23	27	3.5	178
24	28	4.2	200
25	23	1.3	229
26	29	4.7	228
27	27	3.8	166
28	27	3.8	180
29	28	3.9	186
30	25	2.2	226

Parameter Data sheet for Radar Type 2

5310 MHz (11n-40)

Radar Type2			
Trial #	Number Pulses per Burst	Pulse Width [us]	PRI [us]
1	25	2.2	189
2	27	3.4	187
3	24	1.6	174
4	29	4.9	204
5	23	1.4	165
6	25	2.7	216
7	24	1.6	206
8	29	4.5	227
9	25	2.4	173
10	24	1.8	164
11	23	1.2	158
12	27	3.8	180
13	25	2.4	168
14	23	1.0	205
15	26	2.8	221
16	29	4.6	192
17	27	3.6	170
18	24	1.9	172
19	25	2.4	154
20	27	3.7	177
21	26	2.9	191
22	24	1.9	167
23	25	2.7	219
24	27	3.6	199
25	27	3.7	175
26	26	3.2	193
27	27	3.6	156
28	27	3.5	152
29	29	4.9	195
30	25	2.5	208

Parameter Data sheet for Radar Type 3

5300 MHz (11a)

Radar Type3			
Trial #	Number Pulses per Burst	Pulse Width [us]	PRI [us]
1	18	9.3	472
2	18	9.7	475
3	17	7.4	234
4	16	7.1	206
5	18	9.3	310
6	17	8.6	324
7	17	8.2	353
8	17	8.2	453
9	17	8.4	460
10	17	7.8	476
11	18	8.8	269
12	17	8.3	467
13	18	9.5	366
14	18	9.9	401
15	17	7.8	487
16	18	10.0	322
17	17	8.3	221
18	16	6.9	384
19	18	9.8	399
20	16	6.9	230
21	18	9.7	259
22	16	6.7	268
23	17	8.5	425
24	18	9.2	279
25	16	6.3	367
26	18	9.7	488
27	18	8.8	480
28	18	8.8	312
29	18	8.9	485
30	16	7.2	454

Parameter Data sheet for Radar Type 3

5310 MHz (11n-40)

Radar Type3			
Trial #	Number Pulses per Burst	Pulse Width [us]	PRI [us]
1	16	7.2	241
2	17	8.4	204
3	16	6.6	464
4	18	9.9	336
5	16	6.4	417
6	17	7.7	221
7	16	6.6	253
8	18	9.5	423
9	17	7.4	437
10	16	6.8	412
11	16	6.2	233
12	18	8.8	403
13	17	7.4	258
14	16	6.0	236
15	17	7.8	229
16	18	9.6	285
17	17	8.6	353
18	16	6.9	370
19	17	7.4	361
20	17	8.7	457
21	17	7.9	424
22	16	6.9	481
23	17	7.7	425
24	17	8.6	337
25	18	8.7	476
26	17	8.2	450
27	17	8.6	328
28	17	8.5	250
29	18	9.9	343
30	17	7.5	416

Parameter Data sheet for Radar Type 4

5300 MHz (11a)

Radar Type4			
Trial #	Number Pulses per Burst	Pulse Width [us]	PRI [us]
1	13	14.0	490
2	13	12.9	331
3	12	11.4	484
4	14	15.4	379
5	13	13.3	236
6	14	15.7	420
7	16	20.0	436
8	12	11.3	475
9	15	17.6	383
10	16	18.4	242
11	14	15.0	335
12	13	14.1	246
13	14	16.0	418
14	14	15.3	445
15	12	12.4	499
16	15	16.5	255
17	16	20.0	210
18	16	18.7	226
19	16	19.7	423
20	15	16.5	455
21	12	11.3	416
22	14	14.8	298
23	15	18.1	333
24	12	12.2	422
25	12	12.5	471
26	14	16.0	327
27	14	16.0	332
28	13	13.8	474
29	16	20.0	415
30	12	11.9	464

Parameter Data sheet for Radar Type 4

5310 MHz (11n-40)

Radar Type4			
Trial #	Number Pulses per Burst	Pulse Width [us]	PRI [us]
1	16	18.4	260
2	16	19.1	363
3	16	18.7	413
4	12	12.5	206
5	14	16.0	344
6	13	13.7	317
7	15	16.4	336
8	13	14.4	445
9	14	15.2	360
10	14	16.1	480
11	15	18.1	300
12	14	15.4	484
13	12	11.4	310
14	14	15.8	281
15	12	12.4	241
16	14	15.6	218
17	12	11.6	341
18	16	18.7	212
19	13	14.4	385
20	12	11.4	379
21	15	16.5	280
22	14	15.4	209
23	14	16.3	475
24	12	11.0	391
25	15	18.0	229
26	12	12.7	469
27	14	15.6	404
28	13	13.1	202
29	13	13.1	346
30	12	12.5	476

Parameter Data sheet for Radar Type 5

5300 MHz (11a)

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
1	0	2	66.8	10.0	1645.2	-	577817	5300
	1	1	60.6	10.0	-	-	820714	5300
	2	1	52.7	10.0	-	-	64710	5300
	3	2	74.2	10.0	1783.8	-	306221	5300
	4	1	63.0	10.0	-	-	548744	5300
	5	2	76.0	10.0	1653.0	-	789947	5300
	6	3	99.6	10.0	1110.4	1323.4	34743	5300
	7	1	51.9	10.0	-	-	276945	5300
	8	3	86.4	10.0	1016.6	954.6	517888	5300
	9	3	90.7	10.0	1199.3	1387.3	759420	5300
	10	2	72.0	10.0	1627.0	-	5014	5300
	11	2	67.2	10.0	1602.8	-	246854	5300

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
2	0	2	78.0	8.0	1377.0	-	586886	5300
	1	2	74.0	8.0	1921.0	-	876555	5300
	2	1	58.0	8.0	-	-	1168577	5300
	3	2	80.6	8.0	1877.4	-	260392	5300
	4	3	100.0	8.0	1252.0	987.0	550249	5300
	5	3	92.6	8.0	1271.4	1505.4	840340	5300
	6	3	98.2	8.0	1316.8	1270.8	1130639	5300
	7	2	80.6	8.0	1036.4	-	224812	5300
	8	1	51.9	8.0	-	-	515586	5300
	9	2	71.0	8.0	1041.0	-	805633	5300

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
3	0	3	89.2	5.0	1493.8	1576.8	1368987	5300
	1	1	56.6	5.0	-	-	236700	5300
	2	1	58.6	5.0	-	-	600265	5300
	3	2	77.6	5.0	1916.4	-	962153	5300
	4	2	77.8	5.0	1333.2	-	1325866	5300
	5	1	65.9	5.0	-	-	191890	5300
	6	3	99.9	5.0	1195.1	1533.1	554190	5300
	7	1	55.0	5.0	-	-	918466	5300

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
4	0	1	65.8	12.0	-	-	732465	5300
	1	1	64.9	12.0	-	-	84025	5300
	2	3	98.4	12.0	1245.6	925.6	290605	5300
	3	3	92.4	12.0	1243.6	1558.6	497161	5300
	4	3	95.2	12.0	952.8	1340.8	704174	5300
	5	1	62.4	12.0	-	-	58476	5300
	6	1	53.0	12.0	-	-	265870	5300
	7	2	66.7	12.0	1357.3	-	472533	5300
	8	1	64.6	12.0	-	-	680936	5300
	9	3	91.8	12.0	1033.2	1539.2	32775	5300
	10	2	74.2	12.0	1735.8	-	239771	5300
	11	3	95.8	12.0	1358.2	1031.2	446354	5300
	12	3	91.1	12.0	1687.9	1464.9	652615	5300
	13	1	57.9	12.0	-	-	7333	5300

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
5	0	3	85.1	9.0	1292.9	1177.9	272763	5300
	1	3	89.0	9.0	1692.0	1804.0	535882	5300
	2	1	54.1	9.0	-	-	801625	5300
	3	2	74.1	9.0	1172.9	-	1065074	5300
	4	2	80.9	9.0	1775.1	-	240526	5300
	5	3	92.2	9.0	1203.8	1465.8	503786	5300
	6	3	83.5	9.0	1177.5	1422.5	767718	5300
	7	3	90.6	9.0	1395.4	1198.4	1030984	5300
	8	2	81.7	9.0	1533.3	-	208171	5300
	9	3	83.5	9.0	1060.5	1705.5	471481	5300
	10	2	81.8	9.0	1904.2	-	735429	5300

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
6	0	3	95.9	13.0	1778.1	1361.1	783518	5300
	1	2	71.5	13.0	1356.5	-	137926	5300
	2	3	96.1	13.0	1245.9	1204.9	344501	5300
	3	1	65.5	13.0	-	-	553414	5300
	4	3	85.5	13.0	1785.5	1045.5	758069	5300
	5	3	98.2	13.0	1790.8	1610.8	112093	5300
	6	3	83.7	13.0	1577.3	1639.3	319043	5300
	7	1	52.1	13.0	-	-	527415	5300
	8	2	81.3	13.0	988.7	-	734176	5300
	9	2	74.9	13.0	1653.1	-	86914	5300
	10	1	57.0	13.0	-	-	294426	5300
	11	2	68.9	13.0	1020.1	-	501591	5300
	12	3	85.6	13.0	1747.4	1526.4	706953	5300
	13	2	78.8	13.0	1510.2	-	61383	5300

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
7	0	3	95.6	20.0	1239.4	1018.4	187425	5300
	1	2	77.5	20.0	1363.5	-	332768	5300
	2	2	83.2	20.0	1756.8	-	477233	5300
	3	2	78.0	20.0	1301.0	-	25062	5300
	4	1	56.4	20.0	-	-	170229	5300
	5	1	56.3	20.0	-	-	315350	5300
	6	1	56.2	20.0	-	-	460597	5300
	7	2	80.0	20.0	1357.0	-	7228	5300
	8	2	81.2	20.0	1903.8	-	151872	5300
	9	2	71.6	20.0	1186.4	-	296858	5300
	10	2	69.7	20.0	1535.3	-	441185	5300
	11	2	73.4	20.0	1455.6	-	586549	5300
	12	1	53.7	20.0	-	-	134585	5300
	13	3	85.0	20.0	1480.0	1538.0	278163	5300
	14	1	57.6	20.0	-	-	424645	5300
	15	2	71.5	20.0	1835.5	-	568046	5300
	16	2	75.3	20.0	1577.7	-	116310	5300
	17	2	83.3	20.0	1198.7	-	261357	5300
	18	1	64.8	20.0	-	-	407232	5300
	19	1	60.6	20.0	-	-	552437	5300

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
8	0	3	99.4	5.0	1390.6	1661.6	246788	5300
	1	3	91.0	5.0	980.0	1797.0	609535	5300
	2	1	57.0	5.0	-	-	974315	5300
	3	1	51.2	5.0	-	-	1337854	5300
	4	2	79.2	5.0	1438.8	-	202248	5300
	5	3	93.6	5.0	1307.4	1885.4	564488	5300
	6	3	90.5	5.0	1420.5	1339.5	927752	5300
	7	3	93.6	5.0	1744.4	1055.4	1290289	5300

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
9	0	1	59.7	16.0	-	-	74092	5300
	1	2	83.1	16.0	966.9	-	244661	5300
	2	2	78.1	16.0	1757.9	-	414989	5300
	3	2	70.1	16.0	1553.9	-	585400	5300
	4	2	68.5	16.0	1205.5	-	53042	5300
	5	3	95.3	16.0	1064.7	1599.7	222943	5300
	6	3	85.4	16.0	1795.6	1798.6	392581	5300
	7	1	64.6	16.0	-	-	565966	5300
	8	1	50.3	16.0	-	-	32039	5300
	9	1	62.6	16.0	-	-	202940	5300
	10	2	75.3	16.0	1204.7	-	373179	5300
	11	2	77.1	16.0	1280.9	-	543364	5300
	12	2	75.5	16.0	1534.5	-	10988	5300
	13	1	65.8	16.0	-	-	181878	5300
	14	3	90.3	16.0	1010.7	1279.7	351508	5300
	15	2	74.5	16.0	1757.5	-	522350	5300
	16	3	95.9	16.0	1221.1	1266.1	691261	5300

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
10	0	1	62.0	18.0	-	-	151852	5300
	1	3	94.5	18.0	1726.5	1749.5	311406	5300
	2	3	98.8	18.0	1706.2	1189.2	472297	5300
	3	3	94.5	18.0	1597.5	1613.5	632613	5300
	4	1	59.7	18.0	-	-	132069	5300
	5	3	99.6	18.0	965.4	1701.4	292033	5300
	6	2	73.8	18.0	1499.2	-	453343	5300
	7	1	54.1	18.0	-	-	616283	5300
	8	2	75.0	18.0	1670.0	-	111789	5300
	9	2	79.4	18.0	1190.6	-	272746	5300
	10	1	54.5	18.0	-	-	434834	5300
	11	2	70.5	18.0	1411.5	-	594731	5300
	12	2	82.0	18.0	1824.0	-	91983	5300
	13	3	98.9	18.0	1607.1	1273.1	252453	5300
	14	1	62.8	18.0	-	-	414623	5300
	15	1	65.9	18.0	-	-	576315	5300
	16	1	62.6	18.0	-	-	72398	5300
	17	2	70.2	18.0	1669.8	-	233001	5300

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
11	0	3	98.2	12.0	1122.8	1762.8	545604	5295.8505
	1	3	93.6	12.0	1810.4	1627.4	767911	5295.8505
	2	3	99.6	12.0	1202.4	999.4	72544	5295.8505
	3	1	54.9	12.0	-	-	296268	5295.8505
	4	1	58.4	12.0	-	-	519735	5295.8505
	5	3	99.7	12.0	1144.3	1066.3	741155	5295.8505
	6	3	93.1	12.0	1183.9	1290.9	45097	5295.8505
	7	2	71.2	12.0	1880.8	-	268254	5295.8505
	8	1	62.7	12.0	-	-	492417	5295.8505
	9	1	57.9	12.0	-	-	715696	5295.8505
	10	3	87.7	12.0	1141.3	1237.3	17624	5295.8505
	11	3	85.1	12.0	1691.9	1333.9	240381	5295.8505
	12	3	83.6	12.0	1103.4	1694.4	463375	5295.8505

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
12	0	1	50.7	10.0	-	-	745665	5295.0505
	1	2	82.5	10.0	975.5	-	987223	5295.0505
	2	1	55.3	10.0	-	-	231526	5295.0505
	3	2	67.1	10.0	1204.9	-	473118	5295.0505
	4	3	99.2	10.0	1822.8	1287.8	713707	5295.0505
	5	3	91.8	10.0	1228.2	1529.2	954841	5295.0505
	6	3	99.2	10.0	900.8	1865.8	200973	5295.0505
	7	1	50.0	10.0	-	-	443856	5295.0505
	8	3	83.5	10.0	1875.5	960.5	684077	5295.0505
	9	1	54.2	10.0	-	-	928288	5295.0505
	10	1	65.9	10.0	-	-	171911	5295.0505
	11	3	93.5	10.0	1401.5	1743.5	412769	5295.0505

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
13	0	1	65.9	13.0	-	-	524483	5296.2505
	1	2	80.8	13.0	1392.2	-	717473	5296.2505
	2	3	94.1	13.0	943.9	1142.9	113181	5296.2505
	3	2	68.3	13.0	992.7	-	306999	5296.2505
	4	1	63.7	13.0	-	-	500817	5296.2505
	5	1	62.4	13.0	-	-	694132	5296.2505
	6	1	61.2	13.0	-	-	89650	5296.2505
	7	1	62.8	13.0	-	-	283352	5296.2505
	8	3	95.6	13.0	1879.4	1381.4	475189	5296.2505
	9	3	92.1	13.0	1459.9	1201.9	668576	5296.2505
	10	2	81.0	13.0	1004.0	-	65754	5296.2505
	11	3	96.3	13.0	1418.7	1244.7	258656	5296.2505
	12	1	57.1	13.0	-	-	453348	5296.2505
	13	3	86.0	13.0	1022.0	1578.0	644593	5296.2505
	14	3	99.2	13.0	1694.8	1839.8	41778	5296.2505

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
14	0	1	51.4	12.0	-	-	252385	5295.8505
	1	3	88.5	12.0	1315.5	1468.5	458712	5295.8505
	2	3	86.9	12.0	1762.1	1069.1	665011	5295.8505
	3	1	65.8	12.0	-	-	19427	5295.8505
	4	1	66.5	12.0	-	-	226822	5295.8505
	5	3	90.0	12.0	983.0	1110.0	433452	5295.8505
	6	3	95.9	12.0	1882.1	1380.1	639220	5295.8505
	7	1	53.8	12.0	-	-	849867	5295.8505
	8	3	88.1	12.0	1223.9	1844.9	200710	5295.8505
	9	2	76.6	12.0	1234.4	-	408378	5295.8505
	10	2	81.7	12.0	1525.3	-	615416	5295.8505
	11	1	63.7	12.0	-	-	824089	5295.8505
	12	2	74.1	12.0	1316.9	-	175549	5295.8505
	13	1	63.5	12.0	-	-	383224	5295.8505

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
15	0	2	70.2	7.0	1520.8	-	826828	5293.8505
	1	1	64.7	7.0	-	-	1118011	5293.8505
	2	3	89.3	7.0	1373.7	1121.7	209982	5293.8505
	3	3	83.7	7.0	1215.3	1764.3	499637	5293.8505
	4	1	61.4	7.0	-	-	791579	5293.8505
	5	3	92.6	7.0	1338.4	1754.4	1079299	5293.8505
	6	2	68.8	7.0	1347.2	-	174449	5293.8505
	7	3	99.0	7.0	1090.0	1796.0	464198	5293.8505
	8	1	52.8	7.0	-	-	756147	5293.8505
	9	3	99.0	7.0	1623.0	1855.0	1043538	5293.8505

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
16	0	3	95.6	14.0	1679.4	1820.4	92147	5296.6505
	1	2	76.4	14.0	1630.6	-	285670	5296.6505
	2	2	72.2	14.0	1205.8	-	479274	5296.6505
	3	3	88.0	14.0	1740.0	1019.0	671202	5296.6505
	4	1	58.7	14.0	-	-	68668	5296.6505
	5	1	51.5	14.0	-	-	262172	5296.6505
	6	1	59.1	14.0	-	-	455816	5296.6505
	7	1	60.0	14.0	-	-	649959	5296.6505
	8	1	63.1	14.0	-	-	44816	5296.6505
	9	3	92.7	14.0	1047.3	1016.3	237777	5296.6505
	10	3	97.7	14.0	1363.3	1665.3	430443	5296.6505
	11	1	61.6	14.0	-	-	625948	5296.6505
	12	3	96.6	14.0	1776.4	1347.4	20884	5296.6505
	13	3	88.5	14.0	1499.5	1794.5	213662	5296.6505
	14	3	99.5	14.0	1517.5	1821.5	406396	5296.6505

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
17	0	1	53.5	20.0	-	-	451043	5299.0505
	1	2	70.0	20.0	1630.0	-	594202	5299.0505
	2	2	77.0	20.0	1565.0	-	142591	5299.0505
	3	1	56.0	20.0	-	-	287975	5299.0505
	4	3	91.8	20.0	962.2	1728.2	431481	5299.0505
	5	2	82.1	20.0	1782.9	-	577109	5299.0505
	6	3	98.8	20.0	1504.2	1858.2	124337	5299.0505
	7	3	87.2	20.0	1162.8	1119.8	269134	5299.0505
	8	3	99.3	20.0	1583.7	1381.7	413202	5299.0505
	9	2	75.4	20.0	1506.6	-	558878	5299.0505
	10	2	77.3	20.0	1863.7	-	106881	5299.0505
	11	3	91.7	20.0	1144.3	1176.3	251251	5299.0505
	12	1	62.6	20.0	-	-	397321	5299.0505
	13	3	95.7	20.0	1592.3	922.3	540490	5299.0505
	14	3	93.5	20.0	1155.5	1552.5	88890	5299.0505
	15	2	80.3	20.0	1222.7	-	233958	5299.0505
	16	1	52.4	20.0	-	-	379676	5299.0505
	17	3	85.6	20.0	1328.4	1104.4	522124	5299.0505
	18	3	88.0	20.0	1486.0	1049.0	71134	5299.0505
	19	2	70.3	20.0	1115.7	-	216353	5299.0505

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
18	0	3	90.1	18.0	987.9	1477.9	379184	5298.2505
	1	2	67.7	18.0	1570.3	-	532432	5298.2505
	2	1	57.8	18.0	-	-	56426	5298.2505
	3	3	95.2	18.0	1073.8	1117.8	208574	5298.2505
	4	3	86.5	18.0	1164.5	1766.5	360218	5298.2505
	5	2	67.4	18.0	1038.6	-	513919	5298.2505
	6	2	71.6	18.0	1430.4	-	37486	5298.2505
	7	1	50.6	18.0	-	-	190358	5298.2505
	8	2	81.4	18.0	1604.6	-	342215	5298.2505
	9	1	65.8	18.0	-	-	495678	5298.2505
	10	1	58.6	18.0	-	-	18780	5298.2505
	11	2	68.1	18.0	1685.9	-	171239	5298.2505
	12	1	50.7	18.0	-	-	324219	5298.2505
	13	3	84.2	18.0	1320.8	1381.8	475087	5298.2505
	14	1	57.8	18.0	-	-	630477	5298.2505
	15	2	72.6	18.0	984.4	-	152494	5298.2505
	16	3	91.8	18.0	1417.2	1827.2	303803	5298.2505
	17	3	93.0	18.0	1729.0	1296.0	455919	5298.2505
	18	1	61.1	18.0	-	-	611019	5298.2505

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
19	0	2	66.8	20.0	1492.2	-	126994	5299.0505
	1	3	96.8	20.0	1832.2	1122.2	270951	5299.0505
	2	3	89.2	20.0	1098.8	1023.8	415743	5299.0505
	3	2	72.9	20.0	1100.1	-	561591	5299.0505
	4	1	62.6	20.0	-	-	109397	5299.0505
	5	2	81.4	20.0	1271.6	-	253890	5299.0505
	6	1	59.8	20.0	-	-	399769	5299.0505
	7	3	96.6	20.0	1790.4	983.4	542098	5299.0505
	8	1	64.3	20.0	-	-	91536	5299.0505
	9	2	69.6	20.0	950.4	-	236032	5299.0505
	10	1	62.4	20.0	-	-	381970	5299.0505
	11	3	95.3	20.0	1832.7	953.7	524364	5299.0505
	12	2	76.0	20.0	1904.0	-	73366	5299.0505
	13	1	58.6	20.0	-	-	218656	5299.0505
	14	2	68.2	20.0	1127.8	-	363391	5299.0505
	15	1	59.4	20.0	-	-	508922	5299.0505
	16	3	85.9	20.0	1796.1	1037.1	55387	5299.0505
	17	1	62.1	20.0	-	-	200700	5299.0505
	18	2	81.9	20.0	1383.1	-	345031	5299.0505
	19	2	69.6	20.0	1927.4	-	489807	5299.0505

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
20	0	2	74.3	14.0	1544.7	-	50345	5296.6505
	1	1	60.4	14.0	-	-	244055	5296.6505
	2	3	98.2	14.0	1777.8	1281.8	436088	5296.6505
	3	1	55.7	14.0	-	-	631588	5296.6505
	4	3	83.4	14.0	1462.6	947.6	26523	5296.6505
	5	2	66.8	14.0	1465.2	-	219982	5296.6505
	6	1	59.1	14.0	-	-	413947	5296.6505
	7	3	91.0	14.0	1612.0	1087.0	605689	5296.6505
	8	2	78.5	14.0	1363.5	-	2750	5296.6505
	9	3	87.9	14.0	1383.1	1417.1	195623	5296.6505
	10	2	70.9	14.0	1006.1	-	389491	5296.6505
	11	3	88.5	14.0	1096.5	1576.5	581824	5296.6505
	12	1	59.4	14.0	-	-	777335	5296.6505
	13	2	74.5	14.0	1350.5	-	172292	5296.6505
	14	2	71.1	14.0	949.9	-	365655	5296.6505

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
21	0	2	73.5	5.0	1077.5	-	1050085	5306.9495
	1	1	50.8	5.0	-	-	1414271	5306.9495
	2	3	94.8	5.0	1409.2	1801.2	278398	5306.9495
	3	3	95.3	5.0	1183.7	1816.7	640969	5306.9495
	4	1	63.7	5.0	-	-	1005791	5306.9495
	5	2	76.6	5.0	1027.4	-	1368640	5306.9495
	6	2	70.9	5.0	1144.1	-	234145	5306.9495
	7	1	57.2	5.0	-	-	597706	5306.9495

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
22	0	2	81.0	11.0	1844.0	-	589793	5304.5495
	1	2	69.0	11.0	1628.0	-	813019	5304.5495
	2	2	70.6	11.0	1083.4	-	116472	5304.5495
	3	2	82.6	11.0	1721.4	-	339464	5304.5495
	4	1	59.5	11.0	-	-	563546	5304.5495
	5	2	82.5	11.0	1182.5	-	785852	5304.5495
	6	2	74.8	11.0	1555.2	-	88898	5304.5495
	7	2	72.0	11.0	1331.0	-	311972	5304.5495
	8	1	60.4	11.0	-	-	535897	5304.5495
	9	1	59.9	11.0	-	-	759322	5304.5495
	10	2	73.4	11.0	1335.6	-	61425	5304.5495
	11	3	86.8	11.0	1645.2	1114.2	284035	5304.5495
	12	1	56.4	11.0	-	-	508706	5304.5495

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
23	0	3	98.7	17.0	1376.3	927.3	526335	5302.1495
	1	3	83.4	17.0	1689.6	1203.6	24405	5302.1495
	2	3	89.6	17.0	942.4	1690.4	184927	5302.1495
	3	3	95.8	17.0	999.2	1686.2	345408	5302.1495
	4	2	72.2	17.0	1070.8	-	507988	5302.1495
	5	2	68.9	17.0	1143.1	-	4638	5302.1495
	6	2	68.0	17.0	1329.0	-	165740	5302.1495
	7	2	76.5	17.0	1362.5	-	326827	5302.1495
	8	3	98.8	17.0	1020.2	1455.2	486470	5302.1495
	9	2	73.9	17.0	1874.1	-	647933	5302.1495
	10	3	85.8	17.0	1745.2	1716.2	145242	5302.1495
	11	1	51.5	17.0	-	-	307438	5302.1495
	12	3	87.6	17.0	1481.4	1120.4	466494	5302.1495
	13	3	94.8	17.0	1514.2	1312.2	627489	5302.1495
	14	1	58.5	17.0	-	-	126139	5302.1495
	15	3	91.1	17.0	1647.9	920.9	286543	5302.1495
	16	2	66.9	17.0	1282.1	-	447998	5302.1495
	17	2	68.2	17.0	1542.8	-	608804	5302.1495

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
24	0	3	93.0	7.0	1454.0	1894.0	212339	5306.1495
	1	1	53.3	7.0	-	-	535995	5306.1495
	2	1	53.2	7.0	-	-	858804	5306.1495
	3	2	67.1	7.0	1796.9	-	1180377	5306.1495
	4	3	86.8	7.0	1507.2	930.2	172764	5306.1495
	5	1	62.8	7.0	-	-	496225	5306.1495
	6	3	84.2	7.0	997.8	1221.8	817515	5306.1495
	7	3	99.7	7.0	1243.3	976.3	1140474	5306.1495
	8	1	58.4	7.0	-	-	133373	5306.1495

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
25	0	1	53.7	7.0	-	-	410561	5306.1495
	1	1	65.8	7.0	-	-	701377	5306.1495
	2	1	60.4	7.0	-	-	992295	5306.1495
	3	2	78.6	7.0	1250.4	-	84113	5306.1495
	4	3	86.1	7.0	1780.9	1493.9	373942	5306.1495
	5	3	87.7	7.0	1461.3	948.3	664405	5306.1495
	6	1	64.7	7.0	-	-	956321	5306.1495
	7	2	74.8	7.0	997.2	-	48357	5306.1495
	8	2	67.4	7.0	1344.6	-	338718	5306.1495
	9	1	55.2	7.0	-	-	629513	5306.1495

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
26	0	3	99.5	13.0	1035.5	1648.5	611208	5303.7495
	1	3	91.5	13.0	1005.5	1639.5	8371	5303.7495
	2	1	57.7	13.0	-	-	202114	5303.7495
	3	1	52.9	13.0	-	-	395565	5303.7495
	4	2	80.7	13.0	1153.3	-	588700	5303.7495
	5	2	82.2	13.0	1078.8	-	781712	5303.7495
	6	3	95.2	13.0	1180.8	1745.8	177424	5303.7495
	7	3	84.8	13.0	960.2	1817.2	370270	5303.7495
	8	2	81.1	13.0	1065.9	-	564725	5303.7495
	9	2	72.0	13.0	1387.0	-	757600	5303.7495
	10	3	87.8	13.0	1850.2	1463.2	153638	5303.7495
	11	1	66.2	13.0	-	-	347933	5303.7495
	12	2	80.9	13.0	1915.1	-	540083	5303.7495
	13	3	93.6	13.0	1006.4	1824.4	732124	5303.7495
	14	3	91.8	13.0	1783.2	1082.2	130006	5303.7495

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
27	0	2	80.4	13.0	1211.6	-	323501	5303.7495
	1	3	83.5	13.0	1786.5	1725.5	515361	5303.7495
	2	1	53.1	13.0	-	-	711098	5303.7495
	3	2	81.6	13.0	1874.4	-	106390	5303.7495
	4	3	96.7	13.0	1086.3	1498.3	299326	5303.7495
	5	2	76.7	13.0	1641.3	-	492943	5303.7495
	6	1	61.5	13.0	-	-	687218	5303.7495
	7	2	72.6	13.0	1531.4	-	82620	5303.7495
	8	1	60.4	13.0	-	-	276395	5303.7495
	9	1	64.3	13.0	-	-	469882	5303.7495
	10	1	60.7	13.0	-	-	663490	5303.7495
	11	3	88.3	13.0	1441.7	1911.7	58684	5303.7495
	12	3	95.3	13.0	1738.7	1571.7	251627	5303.7495
	13	3	99.8	13.0	1138.2	1171.2	444690	5303.7495
	14	1	63.8	13.0	-	-	639986	5303.7495

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
28	0	2	72.9	10.0	1561.1	-	43787	5304.9495
	1	2	69.9	10.0	1681.1	-	285410	5304.9495
	2	3	91.1	10.0	1255.9	1170.9	526578	5304.9495
	3	3	85.9	10.0	1378.1	1252.1	768491	5304.9495
	4	2	67.4	10.0	1469.6	-	14016	5304.9495
	5	2	76.7	10.0	1714.3	-	255781	5304.9495
	6	3	85.3	10.0	1624.7	1010.7	497035	5304.9495
	7	1	50.4	10.0	-	-	740734	5304.9495
	8	2	72.5	10.0	1753.5	-	980988	5304.9495
	9	3	84.9	10.0	1702.1	1361.1	225716	5304.9495
	10	3	91.6	10.0	943.4	1321.4	467415	5304.9495
	11	2	78.1	10.0	1541.9	-	709417	5304.9495

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
29	0	1	53.1	20.0	-	-	571415	5300.9495
	1	2	77.7	20.0	1551.3	-	117440	5300.9495
	2	2	70.6	20.0	1436.4	-	262279	5300.9495
	3	3	87.5	20.0	1587.5	1827.5	405993	5300.9495
	4	3	85.0	20.0	1634.0	1413.0	550633	5300.9495
	5	2	66.9	20.0	1525.1	-	99741	5300.9495
	6	3	86.9	20.0	1473.1	1112.1	244056	5300.9495
	7	1	55.7	20.0	-	-	390433	5300.9495
	8	1	54.1	20.0	-	-	535013	5300.9495
	9	1	61.5	20.0	-	-	82033	5300.9495
	10	3	93.3	20.0	1279.7	1210.7	226257	5300.9495
	11	2	70.8	20.0	985.2	-	371428	5300.9495
	12	2	78.5	20.0	1469.5	-	516424	5300.9495
	13	3	87.9	20.0	965.1	1106.1	63946	5300.9495
	14	2	68.9	20.0	1635.1	-	208794	5300.9495
	15	3	97.3	20.0	1050.7	1256.7	353107	5300.9495
	16	3	88.6	20.0	1026.4	1677.4	497456	5300.9495
	17	2	70.0	20.0	1035.0	-	46223	5300.9495
	18	3	94.0	20.0	1428.0	1564.0	190535	5300.9495
	19	3	100.0	20.0	1463.0	1334.0	334955	5300.9495

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
30	0	3	85.1	6.0	1859.9	1707.9	1069049	5306.5495
	1	2	67.2	6.0	1546.8	-	63155	5306.5495
	2	3	99.1	6.0	947.9	1010.9	385626	5306.5495
	3	2	67.9	6.0	935.1	-	708956	5306.5495
	4	2	75.2	6.0	1838.8	-	1030475	5306.5495
	5	3	95.0	6.0	1076.0	1876.0	23377	5306.5495
	6	2	76.2	6.0	1501.8	-	345961	5306.5495
	7	1	65.0	6.0	-	-	669411	5306.5495
	8	3	95.2	6.0	1427.8	1675.8	989709	5306.5495

Parameter Data sheet for Radar Type 5

5310 MHz (11n-40)

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
1	0	3	91.1	18.0	960.9	1835.9	42868	5310
	1	3	94.8	18.0	1561.2	1439.2	203541	5310
	2	3	92.7	18.0	1821.3	1132.3	364008	5310
	3	1	58.6	18.0	-	-	527146	5310
	4	2	77.9	18.0	1892.1	-	23153	5310
	5	1	65.0	18.0	-	-	184671	5310
	6	2	80.2	18.0	1498.8	-	345001	5310
	7	2	68.8	18.0	1031.2	-	506222	5310
	8	2	73.5	18.0	952.5	-	3341	5310
	9	2	78.2	18.0	948.8	-	164535	5310
	10	3	89.3	18.0	1433.7	1277.7	324562	5310
	11	2	74.4	18.0	1340.6	-	486208	5310
	12	1	52.4	18.0	-	-	648396	5310
	13	2	76.6	18.0	1631.4	-	144394	5310
	14	1	57.7	18.0	-	-	306067	5310
	15	2	75.8	18.0	1904.2	-	466091	5310
	16	1	53.5	18.0	-	-	628783	5310
	17	3	92.6	18.0	1292.4	1163.4	124362	5310

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
2	0	2	68.8	19.0	1101.2	-	270486	5310
	1	1	52.6	19.0	-	-	423833	5310
	2	2	80.7	19.0	1854.3	-	575235	5310
	3	2	74.4	19.0	1788.6	-	99205	5310
	4	2	79.2	19.0	1040.8	-	251863	5310
	5	1	50.1	19.0	-	-	405083	5310
	6	3	88.8	19.0	1823.2	1009.2	554946	5310
	7	1	59.4	19.0	-	-	80656	5310
	8	2	75.5	19.0	1651.5	-	232766	5310
	9	1	61.9	19.0	-	-	386315	5310
	10	1	61.9	19.0	-	-	539370	5310
	11	1	58.6	19.0	-	-	61863	5310
	12	1	57.6	19.0	-	-	214660	5310
	13	3	99.1	19.0	1280.9	1394.9	365563	5310
	14	2	69.5	19.0	1575.5	-	519193	5310
	15	3	93.1	19.0	1792.9	1318.9	42799	5310
	16	3	87.0	19.0	1762.0	1811.0	194669	5310
	17	3	95.9	19.0	1880.1	1087.1	347174	5310
	18	3	86.6	19.0	1247.4	1514.4	498927	5310

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
3	0	2	81.7	18.0	1069.3	-	24159	5310
	1	2	77.1	18.0	1422.9	-	176685	5310
	2	2	69.8	18.0	1008.2	-	329185	5310
	3	1	51.1	18.0	-	-	482351	5310
	4	2	73.9	18.0	1749.1	-	5384	5310
	5	1	62.5	18.0	-	-	158300	5310
	6	3	89.6	18.0	1379.4	1106.4	309887	5310
	7	1	57.4	18.0	-	-	464086	5310
	8	3	95.4	18.0	1204.6	947.6	614478	5310
	9	1	56.3	18.0	-	-	139331	5310
	10	2	80.8	18.0	1462.2	-	291580	5310
	11	1	57.8	18.0	-	-	445171	5310
	12	1	63.8	18.0	-	-	597401	5310
	13	3	95.4	18.0	1614.6	920.6	119996	5310
	14	3	97.6	18.0	1169.4	1679.4	271913	5310
	15	3	99.3	18.0	1580.7	1330.7	423815	5310
	16	2	70.8	18.0	1750.2	-	577728	5310
	17	3	84.1	18.0	1506.9	1228.9	101245	5310
	18	2	66.7	18.0	1927.3	-	253668	5310

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
4	0	1	65.6	7.0	-	-	774718	5310
	1	3	92.5	7.0	1852.5	1869.5	1061866	5310
	2	2	69.9	7.0	1781.1	-	157422	5310
	3	2	68.5	7.0	1324.5	-	447811	5310
	4	3	89.5	7.0	1488.5	968.5	737299	5310
	5	2	68.2	7.0	1055.8	-	1028527	5310
	6	1	56.8	7.0	-	-	121945	5310
	7	1	64.8	7.0	-	-	412647	5310
	8	2	70.6	7.0	1603.4	-	702501	5310
	9	3	90.3	7.0	1212.7	1628.7	991606	5310

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
5	0	1	54.8	13.0	-	-	57388	5310
	1	1	59.4	13.0	-	-	251090	5310
	2	3	89.6	13.0	1257.4	1046.4	443040	5310
	3	1	61.8	13.0	-	-	638031	5310
	4	3	89.3	13.0	1875.7	1671.7	33349	5310
	5	2	71.8	13.0	1508.2	-	226813	5310
	6	1	65.4	13.0	-	-	420701	5310
	7	3	99.1	13.0	1338.9	1683.9	611997	5310
	8	1	51.4	13.0	-	-	9658	5310
	9	1	56.7	13.0	-	-	203392	5310
	10	1	61.9	13.0	-	-	396891	5310
	11	3	89.7	13.0	920.3	1764.3	588835	5310
	12	3	92.7	13.0	1106.3	1070.3	781631	5310
	13	3	93.4	13.0	1381.6	1558.6	178818	5310
	14	1	53.0	13.0	-	-	372995	5310

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
6	0	3	94.8	9.0	1799.2	1545.2	770626	5310
	1	1	54.1	9.0	-	-	1037515	5310
	2	3	98.2	9.0	1861.8	1410.8	211716	5310
	3	1	63.3	9.0	-	-	476505	5310
	4	1	60.0	9.0	-	-	740887	5310
	5	3	99.8	9.0	925.2	942.2	1002766	5310
	6	3	98.8	9.0	1293.2	1357.2	179259	5310
	7	1	59.0	9.0	-	-	444004	5310
	8	2	70.3	9.0	1124.7	-	707592	5310
	9	2	80.2	9.0	1320.8	-	970903	5310
	10	3	94.1	9.0	1650.9	1538.9	146804	5310

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
7	0	1	61.8	14.0	-	-	301591	5310
	1	1	58.6	14.0	-	-	495427	5310
	2	2	80.3	14.0	1855.7	-	687553	5310
	3	2	83.0	14.0	1817.0	-	83810	5310
	4	2	67.1	14.0	1829.9	-	277153	5310
	5	3	97.7	14.0	1452.3	1207.3	469522	5310
	6	2	68.9	14.0	1775.1	-	663695	5310
	7	2	67.2	14.0	1587.8	-	60086	5310
	8	3	90.6	14.0	1283.4	1434.4	252966	5310
	9	3	97.0	14.0	1705.0	943.0	445746	5310
	10	3	91.2	14.0	1374.8	1400.8	639064	5310
	11	3	96.0	14.0	1380.0	1901.0	36192	5310
	12	2	74.6	14.0	1495.4	-	229512	5310
	13	2	73.5	14.0	1291.5	-	422885	5310
	14	2	82.1	14.0	1837.9	-	615649	5310

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
8	0	1	50.1	11.0	-	-	15617	5310
	1	2	69.3	11.0	1589.7	-	257314	5310
	2	2	77.3	11.0	1833.7	-	498941	5310
	3	1	54.8	11.0	-	-	741767	5310
	4	2	76.0	11.0	1672.0	-	982440	5310
	5	3	99.9	11.0	1008.1	1899.1	227179	5310
	6	2	76.6	11.0	1562.4	-	469400	5310
	7	1	65.4	11.0	-	-	712001	5310
	8	3	94.8	11.0	1207.2	1137.2	952125	5310
	9	1	64.0	11.0	-	-	198166	5310
	10	1	58.7	11.0	-	-	440307	5310
	11	1	51.4	11.0	-	-	682614	5310

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
9	0	1	60.5	12.0	-	-	791984	5310
	1	3	90.5	12.0	1496.5	1139.5	143709	5310
	2	1	56.0	12.0	-	-	351770	5310
	3	1	50.4	12.0	-	-	559307	5310
	4	2	69.3	12.0	1313.7	-	765611	5310
	5	2	81.7	12.0	1728.3	-	118375	5310
	6	3	95.2	12.0	1412.8	1530.8	325087	5310
	7	1	59.9	12.0	-	-	533760	5310
	8	1	56.8	12.0	-	-	740967	5310
	9	2	68.8	12.0	1931.2	-	92905	5310
	10	2	68.5	12.0	1422.5	-	300084	5310
	11	3	89.6	12.0	1255.4	1118.4	506583	5310
	12	1	64.2	12.0	-	-	715697	5310
	13	2	70.7	12.0	1608.3	-	67437	5310

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
10	0	2	75.5	14.0	1013.5	-	256346	5310
	1	1	52.7	14.0	-	-	450194	5310
	2	1	56.1	14.0	-	-	643896	5310
	3	1	53.5	14.0	-	-	39166	5310
	4	1	58.1	14.0	-	-	232884	5310
	5	2	73.5	14.0	1545.5	-	425642	5310
	6	3	89.9	14.0	921.1	1861.1	618166	5310
	7	2	77.9	14.0	1232.1	-	15286	5310
	8	3	99.6	14.0	1561.4	1485.4	208035	5310
	9	2	79.5	14.0	1674.5	-	401756	5310
	10	2	81.7	14.0	1237.3	-	595330	5310
	11	1	65.5	14.0	-	-	790132	5310
	12	1	54.2	14.0	-	-	185145	5310
	13	3	94.3	14.0	1077.7	1504.7	377602	5310
	14	3	85.3	14.0	1851.7	1655.7	569593	5310

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
11	0	3	93.3	17.0	1821.7	1759.7	634282	5298.494
	1	3	85.5	17.0	1039.5	1885.5	133794	5298.494
	2	2	68.9	17.0	1352.1	-	295010	5298.494
	3	1	58.3	17.0	-	-	457037	5298.494
	4	3	96.2	17.0	1589.8	1528.8	615009	5298.494
	5	1	58.4	17.0	-	-	114446	5298.494
	6	2	76.7	17.0	1094.3	-	275297	5298.494
	7	3	84.5	17.0	1760.5	1054.5	435289	5298.494
	8	3	96.6	17.0	1215.4	909.4	596275	5298.494
	9	2	71.9	17.0	1892.1	-	94327	5298.494
	10	1	64.3	17.0	-	-	255976	5298.494
	11	2	79.4	17.0	1249.6	-	416431	5298.494
	12	1	63.5	17.0	-	-	578520	5298.494
	13	2	75.3	17.0	1574.7	-	74515	5298.494
	14	2	81.4	17.0	1526.6	-	235416	5298.494
	15	1	50.8	17.0	-	-	397605	5298.494
	16	3	87.8	17.0	1097.2	1066.2	556430	5298.494
	17	3	90.6	17.0	1687.4	1497.4	54560	5298.494

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
12	0	1	55.2	12.0	-	-	278219	5296.494
	1	2	74.3	12.0	1404.7	-	484823	5296.494
	2	2	73.8	12.0	1052.2	-	692396	5296.494
	3	1	59.3	12.0	-	-	44999	5296.494
	4	3	91.3	12.0	1045.7	987.7	251727	5296.494
	5	1	55.9	12.0	-	-	459865	5296.494
	6	3	85.2	12.0	1896.8	1209.8	665388	5296.494
	7	1	61.6	12.0	-	-	19442	5296.494
	8	2	82.6	12.0	1772.4	-	226586	5296.494
	9	3	91.0	12.0	1268.0	1067.0	433420	5296.494
	10	2	76.6	12.0	972.4	-	640858	5296.494
	11	2	68.7	12.0	1826.3	-	847861	5296.494
	12	1	53.8	12.0	-	-	201340	5296.494
	13	2	77.4	12.0	1169.6	-	408373	5296.494

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
13	0	1	50.9	5.0	-	-	1079539	5293.694
	1	2	74.7	5.0	1094.3	-	1442144	5293.694
	2	1	63.5	5.0	-	-	307979	5293.694
	3	2	83.3	5.0	1265.7	-	670602	5293.694
	4	3	99.6	5.0	1495.4	1225.4	1032650	5293.694
	5	2	81.3	5.0	1603.7	-	1396851	5293.694
	6	2	68.0	5.0	1554.0	-	262811	5293.694
	7	1	62.3	5.0	-	-	626672	5293.694

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
14	0	3	98.9	13.0	1347.1	1627.1	563175	5296.894
	1	2	68.2	13.0	1092.8	-	772143	5296.894
	2	1	59.6	13.0	-	-	124636	5296.894
	3	2	81.7	13.0	1332.3	-	331533	5296.894
	4	3	93.9	13.0	1378.1	1217.1	537852	5296.894
	5	3	94.2	13.0	969.8	1158.8	745473	5296.894
	6	2	76.3	13.0	1878.7	-	98952	5296.894
	7	1	52.6	13.0	-	-	306773	5296.894
	8	2	68.2	13.0	1772.8	-	513057	5296.894
	9	2	78.6	13.0	1625.4	-	720500	5296.894
	10	3	94.0	13.0	1021.0	1351.0	73334	5296.894
	11	2	74.9	13.0	1847.1	-	280412	5296.894
	12	3	99.0	13.0	1314.0	1729.0	486708	5296.894
	13	2	70.0	13.0	1741.0	-	694442	5296.894

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
15	0	1	61.5	7.0	-	-	67273	5294.494
	1	3	83.9	7.0	1293.1	1271.1	357200	5294.494
	2	3	94.3	7.0	926.7	1570.7	647291	5294.494
	3	1	63.0	7.0	-	-	939257	5294.494
	4	2	73.1	7.0	1367.9	-	31413	5294.494
	5	3	84.6	7.0	1057.4	1765.4	321374	5294.494
	6	2	75.8	7.0	1624.2	-	612054	5294.494
	7	3	85.7	7.0	1508.3	1357.3	900831	5294.494
	8	1	57.9	7.0	-	-	1194415	5294.494
	9	2	77.8	7.0	1261.2	-	285917	5294.494

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
16	0	2	68.1	13.0	1021.9	-	411535	5296.894
	1	3	87.0	13.0	1908.0	1051.0	617172	5296.894
	2	2	78.5	13.0	1294.5	-	825931	5296.894
	3	3	88.9	13.0	1246.1	929.1	178435	5296.894
	4	1	61.7	13.0	-	-	386494	5296.894
	5	3	98.1	13.0	1163.9	1450.9	591927	5296.894
	6	1	51.2	13.0	-	-	801217	5296.894
	7	1	56.4	13.0	-	-	153312	5296.894
	8	2	72.5	13.0	1831.5	-	359811	5296.894
	9	3	93.0	13.0	1265.0	1306.0	566816	5296.894
	10	2	75.5	13.0	999.5	-	774697	5296.894
	11	1	55.5	13.0	-	-	127779	5296.894
	12	3	99.7	13.0	917.3	1863.3	334238	5296.894
	13	1	59.6	13.0	-	-	543059	5296.894

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
17	0	1	62.0	6.0	-	-	1314225	5294.094
	1	3	91.1	6.0	1136.9	1154.9	178672	5294.094
	2	3	85.4	6.0	1631.6	1066.6	541396	5294.094
	3	2	80.0	6.0	1431.0	-	905187	5294.094
	4	2	72.8	6.0	1281.2	-	1267933	5294.094
	5	3	98.1	6.0	998.9	1633.9	133877	5294.094
	6	2	74.8	6.0	1476.2	-	497218	5294.094
	7	2	78.9	6.0	1222.1	-	860149	5294.094

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
18	0	2	78.4	18.0	984.6	-	513961	5298.894
	1	2	81.0	18.0	1906.0	-	37455	5298.894
	2	1	63.2	18.0	-	-	190364	5298.894
	3	2	79.7	18.0	923.3	-	342806	5298.894
	4	3	89.1	18.0	1251.9	1556.9	493999	5298.894
	5	3	86.6	18.0	959.4	1760.4	18684	5298.894
	6	1	58.1	18.0	-	-	171466	5298.894
	7	3	83.5	18.0	1483.5	1435.5	323042	5298.894
	8	3	86.5	18.0	1457.5	1316.5	475056	5298.894
	9	1	63.1	18.0	-	-	630401	5298.894
	10	1	60.3	18.0	-	-	152814	5298.894
	11	2	81.9	18.0	1064.1	-	305001	5298.894
	12	1	63.5	18.0	-	-	458284	5298.894
	13	1	56.9	18.0	-	-	611678	5298.894
	14	1	65.6	18.0	-	-	133938	5298.894
	15	3	87.4	18.0	974.6	1328.6	285564	5298.894
	16	3	90.9	18.0	1345.1	1593.1	437627	5298.894
	17	2	70.1	18.0	1024.9	-	591154	5298.894
	18	2	77.4	18.0	1684.6	-	114787	5298.894

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
19	0	3	87.5	11.0	1156.5	949.5	423684	5296.094
	1	1	52.4	11.0	-	-	666687	5296.094
	2	1	56.0	11.0	-	-	908790	5296.094
	3	3	94.5	11.0	1673.5	1080.5	152102	5296.094
	4	1	55.9	11.0	-	-	394794	5296.094
	5	3	84.3	11.0	1322.7	1063.7	635594	5296.094
	6	3	84.6	11.0	1166.4	1831.4	875937	5296.094
	7	1	50.9	11.0	-	-	122704	5296.094
	8	2	82.0	11.0	1408.0	-	364272	5296.094
	9	3	99.3	11.0	1417.7	951.7	605335	5296.094
	10	3	95.9	11.0	1527.1	1670.1	846270	5296.094
	11	1	62.9	11.0	-	-	92932	5296.094

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
20	0	1	59.9	5.0	-	-	503037	5293.694
	1	1	52.9	5.0	-	-	866092	5293.694
	2	3	89.2	5.0	1665.8	1089.8	1226981	5293.694
	3	1	58.5	5.0	-	-	94720	5293.694
	4	3	97.6	5.0	1782.4	1769.4	456915	5293.694
	5	2	75.7	5.0	1047.3	-	820992	5293.694
	6	2	82.1	5.0	1805.9	-	1183476	5293.694
	7	1	58.9	5.0	-	-	49948	5293.694

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
21	0	1	64.7	14.0	-	-	220318	5322.706
	1	3	98.4	14.0	1772.6	1106.6	412436	5322.706
	2	3	89.0	14.0	1901.0	1469.0	605119	5322.706
	3	1	56.4	14.0	-	-	2755	5322.706
	4	1	62.3	14.0	-	-	196319	5322.706
	5	3	95.3	14.0	1108.7	1712.7	388417	5322.706
	6	2	67.8	14.0	1081.2	-	582770	5322.706
	7	3	96.1	14.0	1022.9	1545.9	775155	5322.706
	8	1	55.1	14.0	-	-	172588	5322.706
	9	2	75.5	14.0	1181.5	-	365721	5322.706
	10	3	98.0	14.0	1515.0	1334.0	558061	5322.706
	11	3	89.1	14.0	1077.9	979.9	751563	5322.706
	12	1	52.6	14.0	-	-	148702	5322.706
	13	2	70.6	14.0	1056.4	-	342006	5322.706
	14	3	87.4	14.0	1566.6	1724.6	533715	5322.706

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
22	0	2	76.5	12.0	1595.5	-	780095	5323.506
	1	2	72.4	12.0	932.6	-	133667	5323.506
	2	3	86.5	12.0	1714.5	1752.5	339943	5323.506
	3	1	57.2	12.0	-	-	548859	5323.506
	4	3	95.4	12.0	1411.6	1536.6	753431	5323.506
	5	1	54.5	12.0	-	-	108208	5323.506
	6	3	85.6	12.0	1482.4	970.4	314807	5323.506
	7	2	76.1	12.0	1741.9	-	522183	5323.506
	8	3	84.3	12.0	1593.7	1425.7	728039	5323.506
	9	3	90.7	12.0	1884.3	1481.3	82362	5323.506
	10	1	50.1	12.0	-	-	290032	5323.506
	11	1	50.4	12.0	-	-	497646	5323.506
	12	2	78.9	12.0	1405.1	-	703698	5323.506
	13	2	74.4	12.0	1347.6	-	57005	5323.506

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
23	0	3	98.4	14.0	1437.6	1648.6	245813	5322.706
	1	2	68.1	14.0	1768.9	-	439459	5322.706
	2	1	61.7	14.0	-	-	634376	5322.706
	3	1	58.8	14.0	-	-	29421	5322.706
	4	1	61.1	14.0	-	-	222984	5322.706
	5	1	62.6	14.0	-	-	416677	5322.706
	6	3	89.1	14.0	1725.9	1786.9	607471	5322.706
	7	1	63.4	14.0	-	-	5577	5322.706
	8	3	99.6	14.0	1381.4	1466.4	198422	5322.706
	9	2	82.2	14.0	1618.8	-	391917	5322.706
	10	1	60.6	14.0	-	-	586613	5322.706
	11	1	66.4	14.0	-	-	780455	5322.706
	12	3	88.6	14.0	1028.4	1493.4	174709	5322.706
	13	3	95.8	14.0	1357.2	1673.2	367415	5322.706
	14	1	56.5	14.0	-	-	562390	5322.706

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
24	0	1	51.2	5.0	-	-	1419127	5326.306
	1	1	56.7	5.0	-	-	284443	5326.306
	2	1	60.3	5.0	-	-	647594	5326.306
	3	3	89.3	5.0	1789.7	1748.7	1008751	5326.306
	4	1	65.6	5.0	-	-	1374558	5326.306
	5	1	62.7	5.0	-	-	239531	5326.306
	6	3	86.2	5.0	1212.8	1685.8	601625	5326.306
	7	1	61.0	5.0	-	-	966178	5326.306

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
25	0	2	68.4	17.0	1047.6	-	589095	5321.506
	1	3	86.7	17.0	1299.3	1253.3	86148	5321.506
	2	1	54.4	17.0	-	-	247673	5321.506
	3	2	79.1	17.0	1181.9	-	408401	5321.506
	4	2	72.2	17.0	1128.8	-	569553	5321.506
	5	1	54.7	17.0	-	-	66603	5321.506
	6	1	65.8	17.0	-	-	228097	5321.506
	7	1	62.1	17.0	-	-	389234	5321.506
	8	3	94.8	17.0	946.2	925.2	548834	5321.506
	9	3	89.0	17.0	1021.0	1878.0	46558	5321.506
	10	2	71.7	17.0	1744.3	-	207410	5321.506
	11	1	56.8	17.0	-	-	369509	5321.506
	12	1	57.3	17.0	-	-	530347	5321.506
	13	3	86.2	17.0	1399.8	1347.8	26760	5321.506
	14	2	80.3	17.0	951.7	-	187829	5321.506
	15	3	91.5	17.0	1536.5	1598.5	347828	5321.506
	16	1	57.9	17.0	-	-	510515	5321.506
	17	3	98.3	17.0	1563.7	1476.7	6966	5321.506

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
26	0	1	63.0	8.0	-	-	303383	5325.106
	1	2	72.8	8.0	1014.2	-	593601	5325.106
	2	1	54.2	8.0	-	-	884520	5325.106
	3	3	96.7	8.0	1347.3	1708.3	1172548	5325.106
	4	2	79.0	8.0	1914.0	-	266962	5325.106
	5	1	65.9	8.0	-	-	557999	5325.106
	6	3	89.9	8.0	982.1	1553.1	847092	5325.106
	7	2	69.6	8.0	1829.4	-	1137338	5325.106
	8	2	83.0	8.0	1688.0	-	231419	5325.106
	9	3	83.9	8.0	1715.1	1186.1	520905	5325.106

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
27	0	3	89.9	13.0	1724.1	987.1	578773	5323.106
	1	1	61.2	13.0	-	-	787524	5323.106
	2	1	63.3	13.0	-	-	139800	5323.106
	3	1	61.6	13.0	-	-	347514	5323.106
	4	1	62.2	13.0	-	-	554843	5323.106
	5	1	57.0	13.0	-	-	762245	5323.106
	6	3	93.4	13.0	1154.6	1598.6	113882	5323.106
	7	2	72.1	13.0	1280.9	-	321119	5323.106
	8	1	56.7	13.0	-	-	529505	5323.106
	9	3	83.6	13.0	1764.4	1238.4	734276	5323.106
	10	2	66.9	13.0	1750.1	-	88534	5323.106
	11	1	58.7	13.0	-	-	296362	5323.106
	12	3	83.7	13.0	998.3	1412.3	502225	5323.106
	13	2	70.0	13.0	1642.0	-	710257	5323.106

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
28	0	1	65.9	8.0	-	-	80409	5325.106
	1	2	77.5	8.0	1415.5	-	344188	5325.106
	2	2	66.8	8.0	1644.2	-	607985	5325.106
	3	3	89.0	8.0	1175.0	1845.0	870770	5325.106
	4	3	99.2	8.0	1577.8	1131.8	47727	5325.106
	5	1	65.0	8.0	-	-	312004	5325.106
	6	2	76.5	8.0	1207.5	-	575555	5325.106
	7	2	68.8	8.0	1734.2	-	839423	5325.106
	8	2	81.3	8.0	1176.7	-	15305	5325.106
	9	2	67.3	8.0	1017.7	-	279287	5325.106
	10	3	99.7	8.0	1839.3	1504.3	541880	5325.106

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
29	0	1	63.3	8.0	-	-	807764	5325.106
	1	1	56.8	8.0	-	-	1072321	5325.106
	2	2	71.8	8.0	1592.2	-	246542	5325.106
	3	1	57.6	8.0	-	-	511356	5325.106
	4	3	88.5	8.0	1336.5	1353.5	773413	5325.106
	5	3	89.3	8.0	1526.7	1127.7	1037117	5325.106
	6	1	52.6	8.0	-	-	214346	5325.106
	7	2	71.7	8.0	1635.3	-	477733	5325.106
	8	2	82.0	8.0	1197.0	-	741757	5325.106
	9	2	72.3	8.0	1857.7	-	1005556	5325.106
	10	3	83.6	8.0	1741.4	1914.4	181219	5325.106

Trial #	Burst Number	Number of Pulses	Pulse Width [us]	Chirp Width [MHz]	Pulse 1-to-2 Spacing [us]	Pulse 2-to-3 Spacing [us]	Starting Location Within Interval [us]	Center Frequency[MHz]
30	0	2	75.6	7.0	992.4	-	490322	5325.506
	1	1	60.0	7.0	-	-	781484	5325.506
	2	3	94.7	7.0	1849.3	1767.3	1068853	5325.506
	3	1	50.3	7.0	-	-	164363	5325.506
	4	3	92.9	7.0	1230.1	967.1	454137	5325.506
	5	1	58.1	7.0	-	-	745440	5325.506
	6	3	84.8	7.0	1310.2	1757.2	1033940	5325.506
	7	2	74.4	7.0	1309.6	-	128308	5325.506
	8	2	81.4	7.0	1770.6	-	418545	5325.506
	9	1	54.3	7.0	-	-	709782	5325.506

Parameter Data sheet for Radar Type 6

5300 MHz (11a)

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
1	10	27	5290
	29	84	5302

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
2	28	81	5291
	54	159	5299
	60	177	5295
	61	180	5310
	64	189	5292
	77	228	5308

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
3	40	117	5301
	53	156	5294

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
4	5	12	5303
	7	18	5307
	17	48	5302
	66	195	5301
	88	261	5294

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
5	9	24	5298
	29	84	5296
	54	159	5299
	84	249	5290

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
6	3	6	5303
	23	66	5297
	62	183	5300

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
7	10	27	5301
	48	141	5293
	65	192	5306
	83	246	5302

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
8	15	42	5290
	69	204	5295
	78	231	5300

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
9	35	102	5307

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
10	28	81	5296
	63	186	5290
	70	207	5294
	82	243	5304
	99	294	5295

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
11	39	114	5305
	79	234	5307
	98	291	5298

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
12	9	24	5295
	32	93	5290
	35	102	5306
	85	252	5301
	95	282	5304
	97	288	5294

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
13	5	12	5296
	14	39	5302
	17	48	5301
	26	75	5292
	43	126	5307
	79	234	5305
	83	246	5304

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
14	8	21	5303
	85	252	5301
	86	255	5310

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
15	3	6	5299
	23	66	5309
	29	84	5303
	46	135	5292
	69	204	5294
	81	240	5298
	95	282	5307

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
16	27	78	5306
	76	225	5303
	82	243	5295

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
17	11	30	5292
	13	36	5305

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
18	6	15	5306
	30	87	5308
	49	144	5301
	68	201	5291

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
19	29	84	5308
	57	168	5310
	58	171	5297
	60	177	5307
	64	189	5306
	68	201	5305
	76	225	5295
	88	261	5298

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
20	12	33	5310
	40	117	5297
	73	216	5291

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
21	33	96	5299
	35	102	5295
	47	138	5302
	73	216	5307
	79	234	5297
	86	255	5300

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
22	7	18	5305
	9	24	5306
	17	48	5300
	49	144	5302
	71	210	5310
	93	276	5294

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
23	1	0	5306
	10	27	5298
	33	96	5292
	37	108	5294
	59	174	5308

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
24	41	120	5306
	64	189	5302

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
25	12	33	5302
	60	177	5305
	84	249	5303
	98	291	5307

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
26	13	36	5294
	21	60	5301
	78	231	5298
	79	234	5299
	82	243	5295

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
27	21	60	5309
	25	72	5302
	40	117	5298
	42	123	5290
	44	129	5297
	83	246	5308

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
28	16	45	5304
	98	291	5292

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
29	9	24	5303
	71	210	5293
	79	234	5292
	81	240	5296
	89	264	5290
	95	282	5306

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
30	12	33	5294
	18	51	5303
	54	159	5302
	79	234	5298
	92	273	5309

Parameter Data sheet for Radar Type 6

5310 MHz (11n-40)

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
1	33	96	5299
	35	102	5295
	47	138	5302
	53	156	5318
	73	216	5307
	79	234	5297
	86	255	5300
	90	267	5312
	92	273	5319
	95	282	5326

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
2	3	6	5326
	7	18	5305
	9	24	5306
	17	48	5300
	49	144	5302
	71	210	5310
	93	276	5294
	94	279	5319

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
3	1	0	5306
	7	18	5327
	10	27	5298
	33	96	5292
	35	102	5313
	37	108	5294
	59	174	5308
	72	213	5317

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
4	41	120	5306
	64	189	5302
	93	276	5327

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
5	6	15	5319
	12	33	5302
	58	171	5324
	60	177	5305
	72	213	5318
	81	240	5315
	84	249	5303
	98	291	5307

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
6	11	30	5330
	13	36	5294
	19	54	5311
	21	60	5301
	25	72	5329
	31	90	5321
	48	141	5317
	64	189	5314
	78	231	5298
	79	234	5299
	82	243	5295

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
7	8	21	5328
	16	45	5313
	21	60	5309
	25	72	5302
	28	81	5316
	40	117	5298
	42	123	5290
	44	129	5297
	45	132	5325
	82	243	5315
	83	246	5308
	99	294	5327

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
8	16	45	5304
	20	57	5317
	21	60	5328
	60	177	5323
	62	183	5330
	63	186	5314
	64	189	5327
	70	207	5316
	98	291	5292

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
9	1	0	5314
	5	12	5317
	9	24	5303
	71	210	5293
	79	234	5292
	81	240	5296
	89	264	5290
	95	282	5306

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
10	12	33	5294
	18	51	5303
	54	159	5302
	63	186	5322
	78	231	5319
	79	234	5298
	92	273	5309
	94	279	5329

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
11	6	15	5290
	15	42	5298
	17	48	5307
	23	66	5325
	24	69	5299
	26	75	5306
	36	105	5321
	41	120	5323
	48	141	5313
	93	276	5296

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
12	14	39	5294
	15	42	5319
	22	63	5323
	30	87	5309
	31	90	5292
	37	108	5313
	50	147	5318
	54	159	5321
	65	192	5314
	78	231	5306
	89	264	5295
	97	288	5305
	98	291	5325

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
13	8	21	5303
	22	63	5304
	26	75	5302
	53	156	5322
	92	273	5309
	94	279	5293
	96	285	5316
	99	294	5310

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
14	33	96	5294
	42	123	5315
	61	180	5304
	67	198	5316
	80	237	5324
	87	258	5328
	98	291	5293

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
15	1	0	5322
	14	39	5307
	35	102	5295
	53	156	5323
	68	201	5290
	82	243	5325

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
16	9	24	5300
	13	36	5326
	22	63	5318
	34	99	5297
	54	159	5313
	63	186	5305
	80	237	5322
	93	276	5314
	98	291	5304

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
17	3	6	5316
	20	57	5294
	26	75	5293
	42	123	5302
	81	240	5319
	91	270	5317
	92	273	5326

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
18	5	12	5310
	6	15	5303
	53	156	5330
	56	165	5290
	67	198	5294
	71	210	5293
	72	213	5292
	79	234	5304
	88	261	5316

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
19	1	0	5295
	9	24	5314
	18	51	5300
	29	84	5305
	35	102	5308
	51	150	5301
	77	228	5298
	84	249	5290
	98	291	5323

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
20	11	30	5304
	22	63	5313
	35	102	5299
	48	141	5318
	77	228	5316
	79	234	5293
	85	252	5291

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
21	7	18	5325
	18	51	5292
	27	78	5307
	33	96	5314
	36	105	5323
	47	138	5298
	76	225	5290
	87	258	5319

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
22	16	45	5295
	18	51	5298
	41	120	5330
	73	216	5293
	88	261	5323
	90	267	5294
	94	279	5292

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
23	24	69	5304
	44	129	5320
	45	132	5292
	48	141	5325
	69	204	5307
	77	228	5296
	97	288	5311

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
24	7	18	5294
	11	30	5309
	20	57	5310
	24	69	5296
	25	72	5318
	41	120	5324
	55	162	5297
	56	165	5295
	70	207	5303
	78	231	5302

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
25	12	33	5319
	23	66	5291
	31	90	5296
	35	102	5313
	36	105	5309
	39	114	5308
	40	117	5325
	42	123	5290
	56	165	5302
	57	168	5316
	59	174	5321
	72	213	5295
	89	264	5312

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
26	8	21	5328
	9	24	5311
	19	54	5316
	28	81	5305
	30	87	5318
	51	150	5313
	67	198	5304
	93	276	5292

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
27	11	30	5323
	25	72	5321
	31	90	5326
	34	99	5295
	54	159	5329
	63	186	5293
	76	225	5319
	78	231	5328
	83	246	5301
	93	276	5330

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
28	61	180	5302
	62	183	5292
	69	204	5308

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
29	22	63	5320
	29	84	5315
	36	105	5291
	37	108	5295
	52	153	5321
	55	162	5298
	74	219	5311
	91	270	5300
	92	273	5316
	93	276	5296

Trial #	Hopping Number	Start Time [ms]	Frequency [MHz]
30	15	42	5330
	48	141	5305
	58	171	5302
	85	252	5300

Parameter Data sheet for Radar Type 1 for off-channel CAC time

5500 MHz (11a)

Radar Type1				
Trial #	Pulse Repetition Frequency Number(1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Number of Pulses	Pulse Repetition Interval (Microseconds)
1	23	326.2	18	3066
2	19	1139.0	61	878
3	8	1519.8	81	658
4	21	1089.3	58	918
5	14	1285.3	68	778
6	15	1253.1	67	798
7	10	1432.7	76	698
8	7	1567.4	83	638
9	9	1474.9	78	678
10	3	1792.1	95	558
11	20	1113.6	59	898
12	17	1193.3	63	838
13	12	1355.0	72	738
14	2	1858.7	99	538
15	13	1319.3	70	758
16	-	365.6	20	2735
17	-	812.3	43	1231
18	-	1270.6	68	787
19	-	371.7	20	2690
20	-	425.4	23	2351
21	-	1785.7	95	560
22	-	394.0	21	2538
23	-	428.8	23	2332
24	-	334.1	18	2993
25	-	466.4	25	2144
26	-	751.3	40	1331
27	-	1848.4	98	541
28	-	517.3	28	1933
29	-	1396.6	74	716
30	-	684.0	37	1462
31	-	1166.9	62	857
32	-	546.4	29	1830
33	-	387.7	21	2579
34	-	365.5	20	2736
35	-	668.9	36	1495

Radar Type1				
Trial #	Pulse Repetition Frequency Number(1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Number of Pulses	Pulse Repetition Interval (Microseconds)
36	-	399.8	22	2501
37	-	697.8	37	1433
38	-	535.0	29	1869
39	-	616.1	33	1623
40	-	442.1	24	2262
41	-	360.0	19	2778
42	-	548.5	29	1823
43	-	689.7	37	1450
44	-	1345.9	72	743
45	-	373.1	20	2680
46	-	597.4	32	1674
47	-	881.1	47	1135
48	-	654.9	35	1527
49	-	551.3	30	1814
50	-	375.5	20	2663
51	-	773.4	41	1293
52	-	352.4	19	2838
53	-	337.5	18	2963
54	-	464.9	25	2151
55	-	1157.4	62	864
56	-	478.0	26	2092
57	-	690.6	37	1448
58	-	337.2	18	2966
59	-	430.8	23	2321
60	-	476.9	26	2097
61	-	1034.1	55	967
62	-	492.4	26	2031
63	-	827.1	44	1209
64	-	583.4	31	1714
65	-	1733.1	92	577
66	-	392.2	21	2550
67	-	592.8	32	1687
68	-	1243.8	66	804
69	-	1142.9	61	875

Parameter Data sheet for Radar Type 1 for off-channel CAC time

5670 MHz (11n-40)

Radar Type1				
Trial #	Pulse Repetition Frequency Number(1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Number of Pulses	Pulse Repetition Interval (Microseconds)
1	18	1165.5	62	858
2	22	1066.1	57	938
3	9	1474.9	78	678
4	5	1672.2	89	598
5	21	1089.3	58	918
6	7	1567.4	83	638
7	2	1858.7	99	538
8	20	1113.6	59	898
9	12	1355.0	72	738
10	17	1193.3	63	838
11	10	1432.7	76	698
12	4	1730.1	92	578
13	16	1222.5	65	818
14	1	1930.5	102	518
15	13	1319.3	70	758
16	-	709.2	38	1410
17	-	375.5	20	2663
18	-	853.2	46	1172
19	-	619.2	33	1615
20	-	335.1	18	2984
21	-	728.3	39	1373
22	-	1148.1	61	871
23	-	682.6	37	1465
24	-	349.3	19	2863
25	-	684.0	37	1462
26	-	449.8	24	2223
27	-	335.5	18	2981
28	-	1477.1	78	677
29	-	1048.2	56	954
30	-	632.1	34	1582
31	-	1012.1	54	988
32	-	1141.6	61	876
33	-	697.8	37	1433
34	-	1105.0	59	905
35	-	882.6	47	1133

Radar Type1				
Trial #	Pulse Repetition Frequency Number(1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	Number of Pulses	Pulse Repetition Interval (Microseconds)
36	-	969.9	52	1031
37	-	878.0	47	1139
38	-	416.8	22	2399
39	-	685.9	37	1458
40	-	951.5	51	1051
41	-	516.5	28	1936
42	-	551.3	30	1814
43	-	541.7	29	1846
44	-	822.4	44	1216
45	-	1757.5	93	569
46	-	384.0	21	2604
47	-	332.4	18	3008
48	-	350.6	19	2852
49	-	333.8	18	2996
50	-	795.5	42	1257
51	-	360.8	20	2772
52	-	403.7	22	2477
53	-	639.4	34	1564
54	-	1776.2	94	563
55	-	627.4	34	1594
56	-	1602.6	85	624
57	-	1084.6	58	922
58	-	589.6	32	1696
59	-	1388.9	74	720
60	-	1529.1	81	654
61	-	786.8	42	1271
62	-	332.9	18	3004
63	-	710.7	38	1407
64	-	470.1	25	2127
65	-	351.5	19	2845
66	-	593.8	32	1684
67	-	1173.7	62	852
68	-	393.5	21	2541
69	-	342.9	19	2916

APPENDIX 2: Test Instruments

Test Equipment

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
DFS	COTS-SDFS-03	176615	Signal Studio for DFS Rader Profiles	EMC Instruments Corporation	N7607C	-	-	-
DFS	CSG-12	143677	Signal Generator	Keysight Technologies Inc	N5182B	MY53050599	2022/06/15	12
DFS	SAT10-16	160494	Attenuator	Weinschel Corp.	54A-10	83420	2022/12/01	12
DFS	SAT10-23	204927	Attenuator	Weinschel Corp.	54A-10	109972	2022/02/21	12
DFS	SAT10-24	204928	Attenuator	Weinschel Corp.	54A-10	109973	2022/02/21	12
DFS	SAT20-07	145155	Attenuator	Weinschel Corp.	54A-20	31484	2022/04/01	12
DFS	SAT20-12	160495	Attenuator	Weinschel Corp.	54A-20	86752	2022/12/02	12
DFS	SAT20-13	160496	Attenuator	Weinschel Corp.	54A-20	87636	2022/12/02	12
DFS	SCC-G12	145040	Coaxial Cable	Suhner	SUCOFLEX 102	30790/2	2022/03/02	12
DFS	SCC-G24	145181	Coaxial Cable	Suhner	141PE	-	2022/07/05	12
DFS	SCC-G25	145182	Coaxial Cable	Suhner	141PE	-	2022/07/05	12
DFS	SCC-G63	196946	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	803411/2	2022/03/01	12
DFS	SCC-G64	196945	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	803414/2	2022/03/01	12
DFS	SCC-H22	197396	Microwave cable	RS Pro	R-132G7210 100CO	-	2022/04/01	12
DFS	SCC-H29	202923	Microwave cable	RS Pro	R-132G7210 100CO	-	2022/11/11	12
DFS	SOS-27	191845	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2022/08/08	12
DFS	SPSC-08	146277	Power Splitters/Combiners	Mini-Circuits	ZFSC-2-10G+	-	2022/11/04	12
DFS	SPSC-14	157772	Power Splitters/Combiners	Mini-Circuits	ZFSC-2-10G-S+	-	2022/08/23	12
DFS	SPSC-15	157774	Power Splitters/Combiners	Mini-Circuits	ZFSC-2-10G-S+	-	2022/08/23	12
DFS	SPSC-16	157775	Power Splitters/Combiners	Mini-Circuits	ZN3PD-622W-S+	-	2022/08/23	12
DFS	SRE-258	220894	Wireless LAN(11ac) station device	I-O DATA	WN-AC1300UA	127K010653VU	-	-
DFS	SSA-01	146223	Spectrum Analyzer	Keysight Technologies Inc	N9010A-526	MY48031482	2022/09/22	12
DFS	SSA-03	145801	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY48250152	2022/08/04	12
DFS	STM-G6	146207	Terminator	JFW	50T-128	-	2022/11/11	12
DFS	STM-G7	171614	Terminator	Weinschel - API Technologies Corp	M1459A	88995	2022/05/12	12
DFS	STM-G8	171615	Terminator	Weinschel - API Technologies Corp	M1459A	88997	2022/05/20	12
DFS	STS-05	146212	Digital Hitester	HIOKI E.E. CORPORATION	3805-50	80997828	2022/09/20	12

***Hyphens for Last Calibration Date and Cal Int (month) are instruments that Calibration is not required (e.g. software), or instruments checked in advance before use.**

The expiration date of the calibration is the end of the expired month.
As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

Test item:

DFS: Dynamic Frequency Selection