



# RADIO TEST REPORT

**Test Report No. : 11232774H-C-R1**

**Applicant** : **silex technology, Inc.**  
**Type of Equipment** : **Wireless LAN PCI Express Mini Card Module**  
**Model No.** : **SX-PCEAN**  
**FCC ID** : **N6C-SXPCEAN**  
**Test regulation** : **FCC Part 15 Subpart E: 2015**  
**DFS test only**  
**(Class II permissive change)**  
\*This test report applies to Wireless LAN (5GHz W56 band (5500 MHz - 5700 MHz)) for Class II permissive change of W56 band addition.

**Test Result** : **Complied**

1. This test report shall not be reproduced in full or partial, without the written approval of UL Japan, Inc.
2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with above regulation.
4. The test results in this report are traceable to the national or international standards.
5. This test report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.
6. This test report covers Radio technical requirements. It does not cover administrative issues such as Manual or non-Radio test related Requirements. (if applicable)
7. This report is a revised version of 11232774H-C. 11232774H-C is replaced with this report.

**Date of test:** May 19 and 24, 2016

**Representative test engineer:**

Satofumi Matsuyama  
Engineer  
Consumer Technology Division

**Approved by:**

Tsubasa Takayama  
Engineer  
Consumer Technology Division



NVLAP LAB CODE: 200572-0

This laboratory is accredited by the NVLAP LAB CODE 200572-0, U.S.A. The tests reported herein have been performed in accordance with its terms of accreditation.

\*As for the range of Accreditation in NVLAP, you may refer to the WEB address,  
[http://japan.ul.com/resources/emc\\_accredited/](http://japan.ul.com/resources/emc_accredited/)



| <b>CONTENTS</b>                                                                            | <b>PAGE</b> |
|--------------------------------------------------------------------------------------------|-------------|
| <b>SECTION 1: Customer information.....</b>                                                | <b>4</b>    |
| <b>SECTION 2: Equipment under test (E.U.T.).....</b>                                       | <b>4</b>    |
| <b>SECTION 3: Scope of Report.....</b>                                                     | <b>5</b>    |
| <b>SECTION 4: Test specification, procedures &amp; results.....</b>                        | <b>5</b>    |
| <b>SECTION 5: Operation of E.U.T. during testing.....</b>                                  | <b>10</b>   |
| <b>SECTION 6: U-NII Detection Bandwidth.....</b>                                           | <b>18</b>   |
| <b>SECTION 7: Initial Channel Availability Check Time .....</b>                            | <b>20</b>   |
| <b>SECTION 8: Radar Burst at the Beginning of the Channel Availability Check Time.....</b> | <b>21</b>   |
| <b>SECTION 9: Radar Burst at the End of the Channel Availability Check Time .....</b>      | <b>23</b>   |
| <b>SECTION 10: Channel Move Time, Channel Closing Transmission Time .....</b>              | <b>25</b>   |
| <b>SECTION 11: Non-Occupancy Period .....</b>                                              | <b>27</b>   |
| <b>SECTION 12: In-Service Monitoring(Statistical Performance Check) .....</b>              | <b>29</b>   |
| <b>APPENDIX 1: Data of DFS test .....</b>                                                  | <b>31</b>   |
| <b>APPENDIX 2: Test instruments .....</b>                                                  | <b>86</b>   |
| <b>APPENDIX 3: Photographs of test setup .....</b>                                         | <b>87</b>   |

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## **SECTION 1: Customer information**

Company Name : silex technology, Inc.  
Address : 2-3-1 Hikaridai, Seika-cho, Kyoto 619-0237, Japan  
Telephone Number : +81-774-98-3878  
Facsimile Number : +81-774-98-3758  
Contact Person : Toshiro Kometani

## **SECTION 2: Equipment under test (E.U.T.)**

### **2.1 Identification of E.U.T.**

Type of Equipment : Wireless LAN PCI Express Mini Card Module  
Model No. : SX-SDMAN  
Serial No. : Refer to Section 4, Clause 4.2  
Rating : DC 3.3 V  
Receipt Date of Sample : April 12, 2016  
Country of Mass-production : Japan  
Condition of EUT : Production model  
Modification of EUT : No Modification by the test lab

### **2.2 Product Description**

#### **General Specification**

Clock frequency(ies) in the system : 40MHz

#### **Radio Specification**

Radio Type : Transceiver  
Method of Frequency Generation : Synthesizer  
Power Supply (inner) : DC1.2V

#### **Specification of Wireless LAN (IEEE802.11b/g/a/n-20/n-40)**

|                                | IEEE802.11b                                                        | IEEE802.11g                            | IEEE802.11a                                      | IEEE802.11n<br>(20 M band)                                         | IEEE802.11n<br>(40 M band)                                            |
|--------------------------------|--------------------------------------------------------------------|----------------------------------------|--------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------|
| Frequency of operation         | 2412-2462MHz                                                       | 2412-2462MHz                           | 5180-5320MHz<br>5500-5700 MHz*1)<br>5745-5825MHz | 2412 - 2462MHz<br>5180-5320MHz<br>5500-5700 MHz*1)<br>5745-5825MHz | 2422 - 2452MHz<br>5190 - 5310MHz<br>5510-5670MHz*1)<br>5755 - 5795MHz |
| Type of modulation             | DSSS<br>(CCK, DQPSK, DBPSK)                                        | OFDM-CCK<br>(64QAM, 16QAM, QPSK, BPSK) | OFDM<br>(64QAM, 16QAM, QPSK, BPSK)               |                                                                    |                                                                       |
| Channel spacing                | 5MHz                                                               |                                        | 20MHz                                            | 2.4GHz band<br>5MHz<br>5GHz band<br>20MHz                          | 2.4GHz band<br>5MHz<br>5GHz band<br>40MHz                             |
| Antenna type                   | Sleeve antenna (Omni-Directional)                                  |                                        |                                                  |                                                                    |                                                                       |
| Antenna Gain: G <sub>ANT</sub> | 1.5dBi@2.4GHz Band, 2.1dBi@5GHz Band                               |                                        |                                                  |                                                                    |                                                                       |
| Directional Gain               | 4.51dBi@2.4GHz Band, 5.11dBi@5GHz Band (G <sub>ANT</sub> + 10log2) |                                        |                                                  |                                                                    |                                                                       |
| Antenna Connector type         | U.FL Alternative connector                                         |                                        |                                                  |                                                                    |                                                                       |

\*1) W56 band is applied for this report.

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### **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: 2015, final revised on November 23, 2015<br>*Some parts are effective on and after December 17, 2015 or December 23, 2015. The revision does not affect the test specification applied to the EUT. |
| Title              | : | FCC 47CFR Part15 Radio Frequency Device<br>Subpart E Unlicensed National Information Infrastructure Devices<br>Section 15.407 General technical requirements                                                              |
| Test Specification | : | KDB905462 D02 UNII DFS Compliance Procedures New Rules v02                                                                                                                                                                |
| Title              | : | COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-<br>NATIONAL INFORMATION INFRASTRUCTURE DEVICES<br>OPERATING IN THE 5250-5350MHz AND 5470-5725MHz BANDS<br>INCORPORATING DYNAMIC FREQUENCY SELECTION                     |
| Test Specification | : | KDB905462 D04 Operational Modes for DFS Testing New Rules v01                                                                                                                                                             |
| Title              | : | OPERATIONAL MODES SUGGESTED FOR DFS TESTING                                                                                                                                                                               |

#### **FCC 15.31 (e)**

The RF Module has own regulator.

The RF Module is constantly provided voltage through own regulator regardless of input voltage (DC1.2V).

Therefore, this EUT complies with the requirement.

#### **FCC Part 15.203/212 Antenna requirement**

The EUT has a unique antenna connector (U.FL on the Module and Reverse SMA for Antenna itself).

Therefore the equipment complies with the requirement of 15.203/212.

## 4.2 Procedures and results

**Table 1: Applicability of DFS Requirements**

**<Master mode>**

| Requirement                                                                    | Operating Mode | Test Procedures               | Limits                           | Deviation | Results  |
|--------------------------------------------------------------------------------|----------------|-------------------------------|----------------------------------|-----------|----------|
|                                                                                | Master         |                               |                                  |           |          |
| U-NII Detection Bandwidth                                                      | Yes            | FCC/IC: KDB905462 D02 7.8.1   | FCC/IC:KDB905462 D02 5.3         | N/A       | Complied |
| Initial Channel Availability Check Time                                        | Yes            | FCC/IC: KDB905462 D02 7.8.2.1 | FCC:FCC15.407(h)(2)(ii)          | N/A       | Complied |
|                                                                                |                |                               | IC:RSS-247 6.3(2)(ii)            |           |          |
| Radar Burst at the Beginning of the Channel Availability Check Time            | Yes            | FCC/IC: KDB905462 D02 7.8.2.2 | FCC:FCC15.407(h)(2)(ii)          | N/A       | Complied |
|                                                                                |                |                               | IC:RSS-247 6.3(2)(ii)            |           |          |
| Radar Burst at the End of the Channel Availability Check Time                  | Yes            | FCC/IC: KDB905462 D02 7.8.2.3 | FCC:FCC15.407(h)(2)(ii)          | N/A       | Complied |
|                                                                                |                |                               | IC:RSS-247 6.3(2)(ii)            |           |          |
| In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time | Yes            | FCC/IC: KDB905462 D02 7.8.3   | FCC:FCC15.407(h)(2)(iii)         | N/A       | Complied |
|                                                                                |                |                               | IC:RSS-247 6.3(2)(iii)(iv)       |           |          |
| In-Service Monitoring for Non-Occupancy period                                 | Yes            | FCC/IC: KDB905462 D02 7.8.3   | FCC: FCC15.407(h)(2)(iv)         | N/A       | Complied |
|                                                                                |                |                               | IC:RSS-247 6.3(2)(v)             |           |          |
| Statistical Performance Check                                                  | Yes            | FCC/IC: KDB905462 D02 7.8.4   | FCC/IC:KDB905462 D02 6.1,6.2,6.3 | N/A       | Complied |
| Note: UL Japan, Inc.'s EMI Work Procedures No. 13-EM-W0422.                    |                |                               |                                  |           |          |

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**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 < 10dBm/MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | -62 dBm                      |
| < 200 milliwatt that do not meet the power spectral density requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                 | -64 dBm                      |
| <p>Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.</p> <p>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.</p> <p>Note 3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.</p> |                              |

**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<br>See Note 1                                                                                 |
| Channel Closing Transmission Time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.<br>See Notes 1 and 2 |
| U-NII Detection Bandwidth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Minimum 100% of the U-NII 99% transmission power bandwidth<br>See Note 3                                 |
| <p><b>Note 1:</b> 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.</p> <p><b>Note 2:</b> 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.</p> <p><b>Note 3:</b> 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.</p> |                                                                                                          |

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**Table 4 Short Pulse Radar Test Waveform**

| Radar Type                                                                                                                           | Pulse Width (μsec) | PRI (μsec)                                                                                                                                                                                                                                                 | Number of Pulses                                                     | Minimum Percentage of Successful Detection | Minimum Number of Trials |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------|--------------------------|
| 0                                                                                                                                    | 1                  | 1428                                                                                                                                                                                                                                                       | 18                                                                   | See Note 1                                 | See Note 1               |
| 1                                                                                                                                    | 1                  | Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a<br>Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A | $\text{Roundup}\{(1/360) * (19 * 10^6 / \text{PRI}_{\text{μsec}})\}$ | 60%                                        | 30                       |
| 2                                                                                                                                    | 1-5                | 150-230                                                                                                                                                                                                                                                    | 23-29                                                                | 60%                                        | 30                       |
| 3                                                                                                                                    | 6-10               | 200-500                                                                                                                                                                                                                                                    | 16-18                                                                | 60%                                        | 30                       |
| 4                                                                                                                                    | 11-20              | 200-500                                                                                                                                                                                                                                                    | 12-16                                                                | 60%                                        | 30                       |
| Aggregate (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 (μsec) | Chip Width (MHz) | PRI (μsec) | 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 (μsec) | PRI (μsec) | Pulse per Hop (kHz) | Hopping Rate (kHz) | Hopping Sequence Length (msec) | Minimum Percentage of Successful Detection | Minimum Number of Trials |
|------------|--------------------|------------|---------------------|--------------------|--------------------------------|--------------------------------------------|--------------------------|
| 6          | 1                  | 333        | 9                   | 0.333              | 300                            | 70%                                        | 30                       |

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### 4.3 Test Location

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|                            | IC Registration Number | Width x Depth x Height (m) | Size of reference ground plane (m) / horizontal conducting plane | Other rooms            |
|----------------------------|------------------------|----------------------------|------------------------------------------------------------------|------------------------|
| No.1 semi-anechoic chamber | 2973C-1                | 19.2 x 11.2 x 7.7m         | 7.0 x 6.0m                                                       | No.1 Power source room |
| No.2 semi-anechoic chamber | 2973C-2                | 7.5 x 5.8 x 5.2m           | 4.0 x 4.0m                                                       | -                      |
| No.3 semi-anechoic chamber | 2973C-3                | 12.0 x 8.5 x 5.9m          | 6.8 x 5.75m                                                      | No.3 Preparation room  |
| No.3 shielded room         | -                      | 4.0 x 6.0 x 2.7m           | N/A                                                              | -                      |
| No.4 semi-anechoic chamber | 2973C-4                | 12.0 x 8.5 x 5.9m          | 6.8 x 5.75m                                                      | No.4 Preparation room  |
| No.4 shielded room         | -                      | 4.0 x 6.0 x 2.7m           | N/A                                                              | -                      |
| No.5 semi-anechoic chamber | -                      | 6.0 x 6.0 x 3.9m           | 6.0 x 6.0m                                                       | -                      |
| No.6 shielded room         | -                      | 4.0 x 4.5 x 2.7m           | 4.0 x 4.5 m                                                      | -                      |
| No.6 measurement room      | -                      | 4.75 x 5.4 x 3.0m          | 4.75 x 4.15 m                                                    | -                      |
| No.7 shielded room         | -                      | 4.7 x 7.5 x 2.7m           | 4.7 x 7.5m                                                       | -                      |
| No.8 measurement room      | -                      | 3.1 x 5.0 x 2.7m           | N/A                                                              | -                      |
| No.9 measurement room      | -                      | 8.0 x 4.6 x 2.8m           | 2.4 x 2.4m                                                       | -                      |
| No.11 measurement room     | -                      | 6.2 x 4.7 x 3.0m           | 4.8 x 4.6m                                                       | -                      |

\* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1, No.2, No.3, and No.4 semi-anechoic chambers and No.3 and No.4 shielded rooms.

### 4.4 Uncertainty

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 Data of DFS test, Test instruments of DFS, Test set up

Refer to APPENDIX.

## **SECTION 5: Operation of E.U.T. during testing**

### **5.1 Operating Modes**

The EUT, which is a Master Device, operates over the 5500-5700MHz range.

Power level(EIRP) of the EUT[dBm]

| 5500-5700MHz Band* |        |
|--------------------|--------|
| Output Power (Max) |        |
| 11n-20             | 11n-40 |
| 18.43              | 16.27  |

\*Refer to 11232774H-A, FCC Part 15E (FCC 15.407) report for other parts 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.

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

WLAN traffic is generated by streaming the MPEG Test file “6 ½ Magic Hours” from the Master to the Client in full motion video mode.

#### **1. In case of Master mode**

The rated output power of the Master Device is <200mW(23dBm) and power spectral density of the Master Device is <10dBm/MHz. However, worst condition was selected for interference threshold level and antenna gain according to the customer's request. Therefore the required interference threshold level is -63 dBm. After correction for antenna gain and procedural adjustments, the required conducted threshold at the antenna port is  $-64 + 1 + 0 = -63$  dBm (threshold level + additional 1dB + 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: LSDK 9.2

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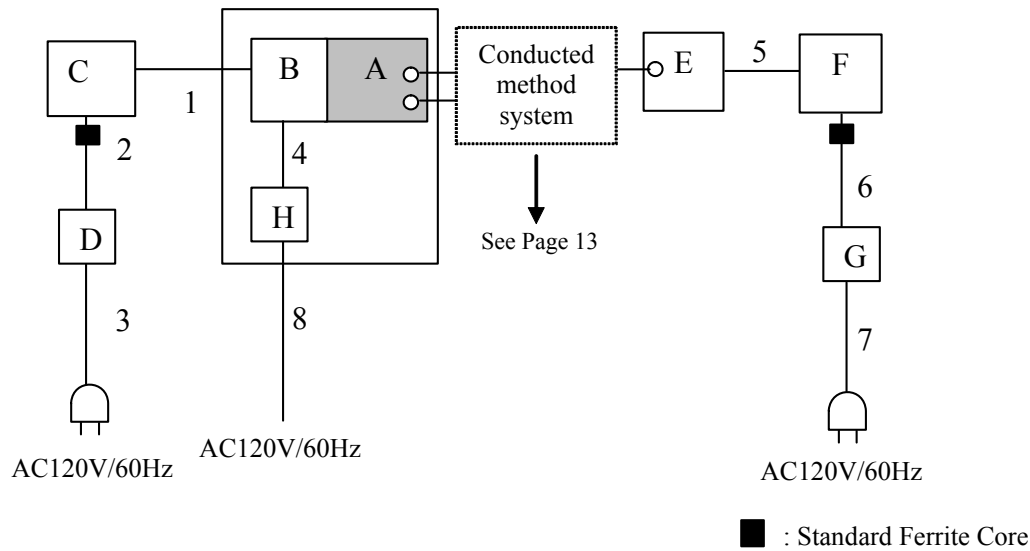
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## 5.2 Configuration and peripherals



### Description of EUT and Support equipment

| No. | Item                                      | Model number | Serial number            | Manufacturer           | Remarks |
|-----|-------------------------------------------|--------------|--------------------------|------------------------|---------|
| A   | Wireless LAN PCI Express Mini Card Module | SX-PCEAN     | 0080925C4F4E             | silex technology, Inc. | EUT     |
| B   | Jig Board                                 | W-L02686     | 0080925BBD24             | silex technology, Inc. | -       |
| C   | Laptop PC                                 | 7661CB9      | L3K0730                  | Lenovo                 | -       |
| D   | AC Adaptor                                | 42T4418      | 11S42T4418Z1ZWG0CA8D9    | Lenovo                 | -       |
| E   | USB wi-fi dongle                          | WI-U3-866D   | A40707                   | Buffalo                | -       |
| F   | Laptop PC                                 | 1952D65      | L3DM302                  | Lenovo                 | -       |
| G   | AC Adaptor                                | 92P1160      | 11S92P2P1160Z1ZBGH6B6DKV | Lenovo                 | -       |
| H   | DC Power                                  | ZWS10B-12/A  | -                        | TDK Lambda             | -       |

### List of cables used

| No. | Name      | Length (m) | Shield     |            | Remarks |
|-----|-----------|------------|------------|------------|---------|
|     |           |            | Cable      | Connector  |         |
| 1   | LAN Cable | 5.60       | Shielded   | Shielded   | -       |
| 2   | DC Cable  | 1.80       | Unshielded | Unshielded | -       |
| 3   | AC Cable  | 2.00       | Unshielded | Unshielded | -       |
| 4   | DC Cable  | 0.20       | Unshielded | Unshielded | -       |
| 5   | USB Cable | 0.60       | Shielded   | Shielded   | -       |
| 6   | DC Cable  | 1.80       | Unshielded | Unshielded | -       |
| 7   | AC Cable  | 1.00       | Unshielded | Unshielded | -       |
| 8   | AC Cable  | 6.50       | Unshielded | Unshielded | -       |

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## 5.3 Test and Measurement System

### SYSTEM OVERVIEW

The measurement system is based on a conducted test method.

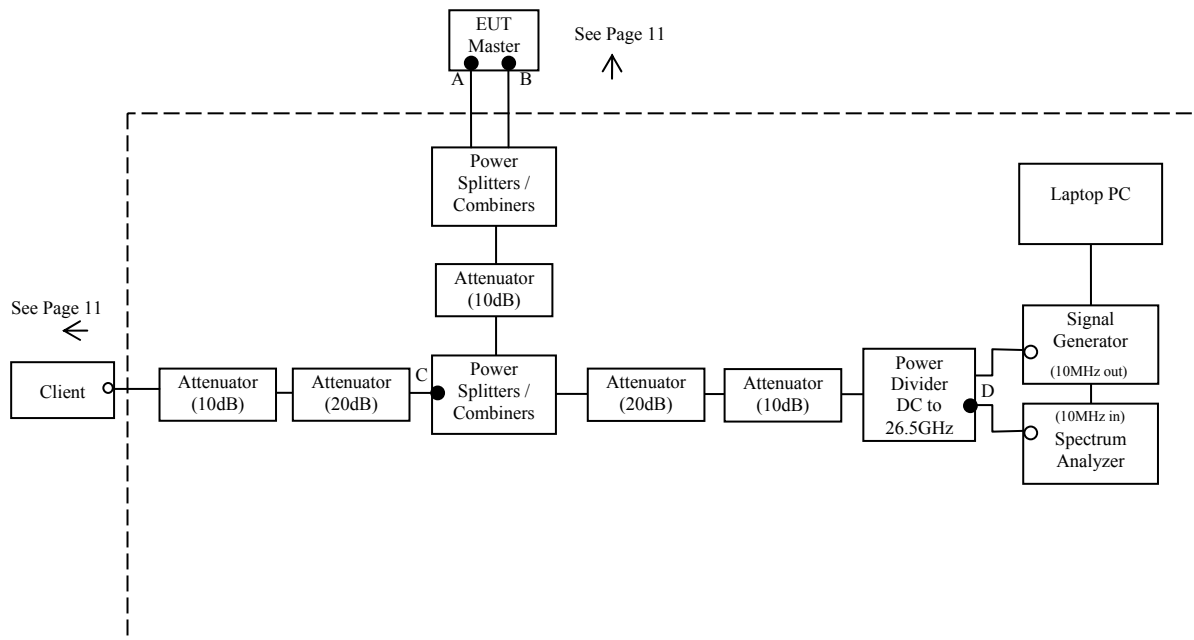
The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution. The short pulse types 1, 2, 3, and 4, the long pulse type 5, and the frequency hopping type 6 parameters are randomized at run-time.

The signal monitoring equipment consists of a spectrum analyzer with the capacity to display 8001 bins on the horizontal axis. A time-domain resolution of 2 msec/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 DIAGRAM



## MEASUREMENT SYSTEM FREQUENCY REFERENCE

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

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## **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
- Radar detection threshold level is bigger than Master Device traffic level on the spectrum analyzer, and
- Client Device traffic level is not displayed 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 page 13)

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.

Terminate at the points A, C, and D and confirm at the point B if it has the same value as point A.

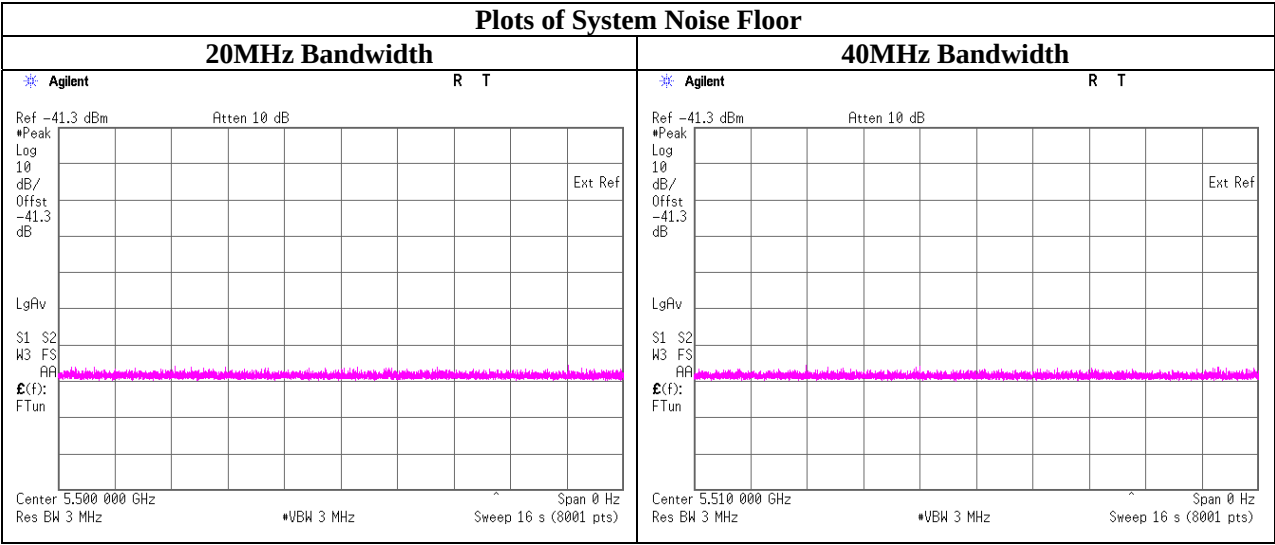
If necessary, add the attenuator to make the same level.

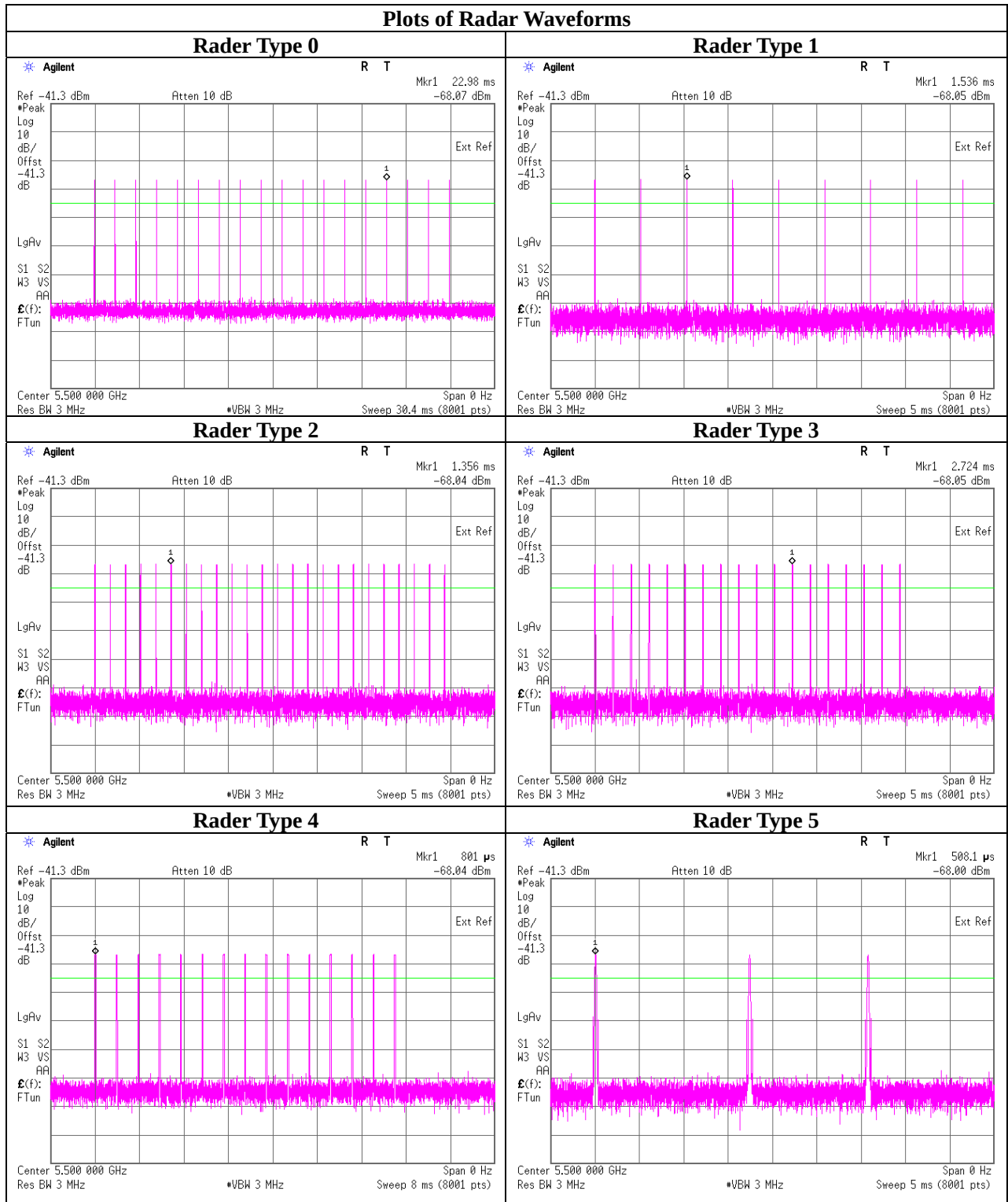
**Step 4:** Without changing any of the instrument settings, restore the system setting to Step 2 and adjust the Reference Level Offset of the spectrum analyzer to the level at Step 3.

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.

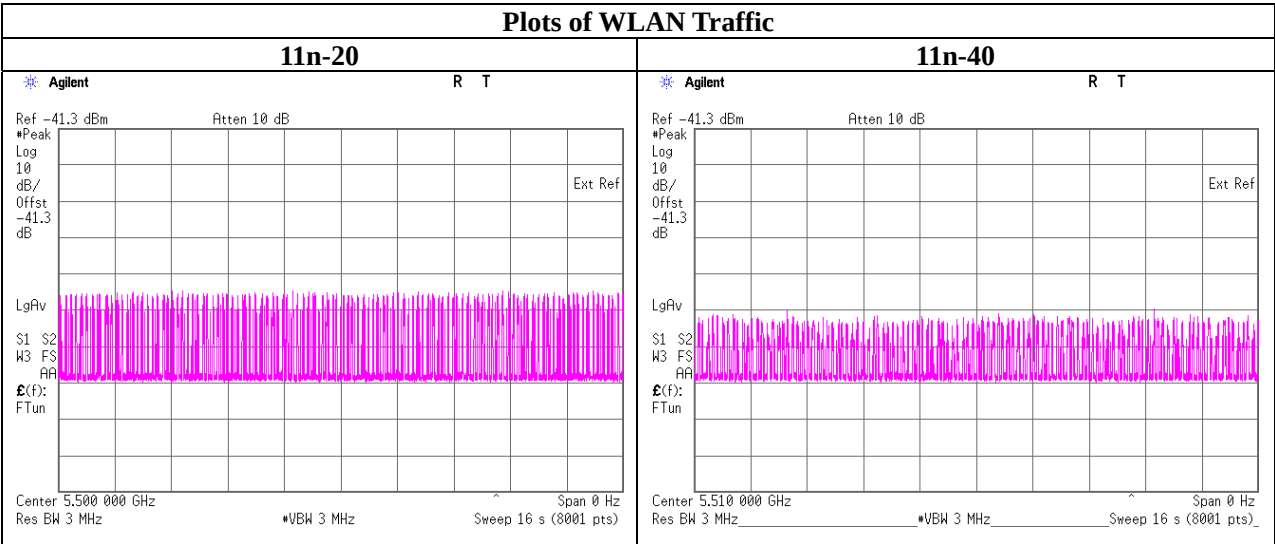
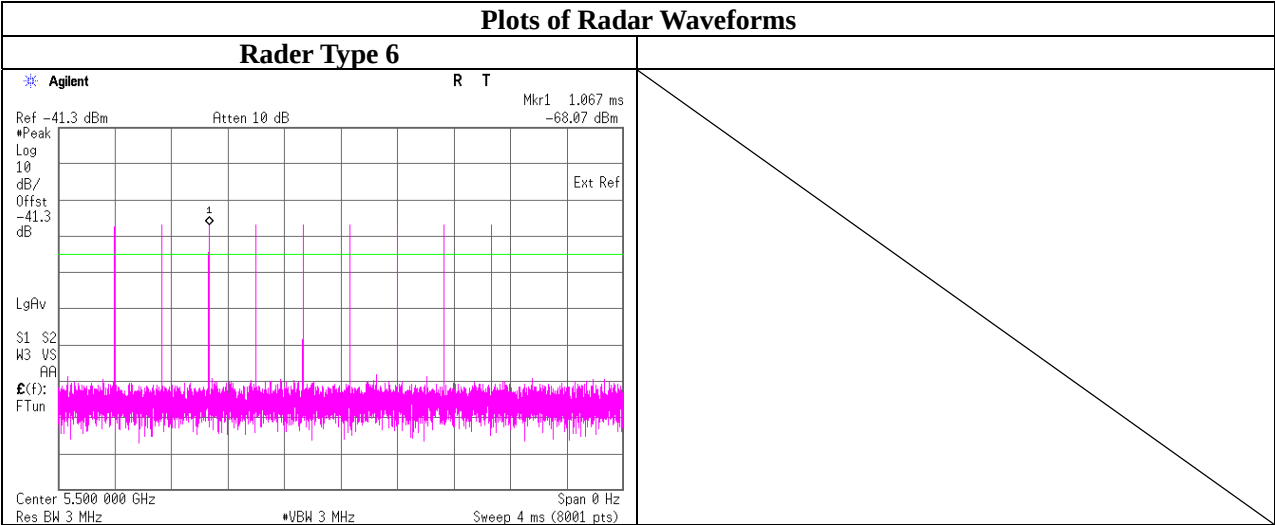
See Clause 5.4 for Plots of Noise, Radar Waveforms, and WLAN signals.

5.4 Plots of Noise, Rader Waveforms, and WLAN signals









11n-40

Agilent

R T

Ref -41.3 dBm  
Atten 10 dB

Ext Ref

LgAv

S1 S2  
W3 FS  
AR

E(f):  
FTun

Center 5.510 000 GHz  
Res BW 3 MHz

Span 0 Hz

Sweep 16 s (8001 pts)

## **SECTION 6: U-NII Detection Bandwidth**

### **6.1 Operating environment**

|                       |                                    |
|-----------------------|------------------------------------|
| Test place            | Ise EMC Lab. No.6 measurement room |
| Date                  | 05/24/2016                         |
| Temperature/ Humidity | 23deg. C / 47% RH                  |
| Engineer              | Satofumi Matsuyama                 |

### **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 1MHz 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

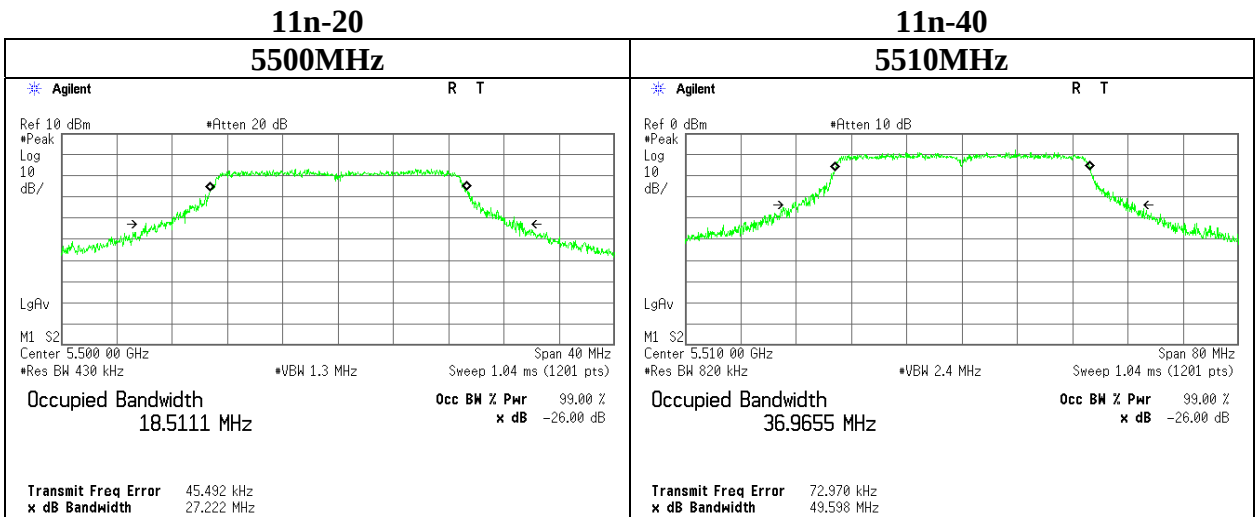
5500MHz (11n-20)  
Waveform : Radar Type 0

| FL<br>[MHz] | FH<br>[MHz] | Detection<br>Bandwidth<br>[MHz] | 99% Power<br>Bandwidth<br>[MHz] | Ratio of Detection BW<br>to 99% Power BW<br>[%] | Limit<br>[%] | Results |
|-------------|-------------|---------------------------------|---------------------------------|-------------------------------------------------|--------------|---------|
| 5490        | 5510        | 20                              | 18.5111                         | 108.0                                           | 100          | Pass    |

5510MHz (11n-40)  
Waveform : Radar Type 0

| FL<br>[MHz] | FH<br>[MHz] | Detection<br>Bandwidth<br>[MHz] | 99% Power<br>Bandwidth<br>[MHz] | Ratio of Detection BW<br>to 99% Power BW<br>[%] | Limit<br>[%] | Results |
|-------------|-------------|---------------------------------|---------------------------------|-------------------------------------------------|--------------|---------|
| 5490        | 5530        | 40                              | 36.9655                         | 108.2                                           | 100          | Pass    |

99% Occupied Bandwidth



6.4 Test result

Test result: Pass

## SECTION 7: Initial Channel Availability Check Time

### 7.1 Operating environment

|                       |                                    |
|-----------------------|------------------------------------|
| Test place            | Ise EMC Lab. No.6 measurement room |
| Date                  | 05/24/2016                         |
| Temperature/ Humidity | 23deg. C / 47% RH                  |
| Engineer              | Satofumi Matsuyama                 |

### 7.2 Test Procedure

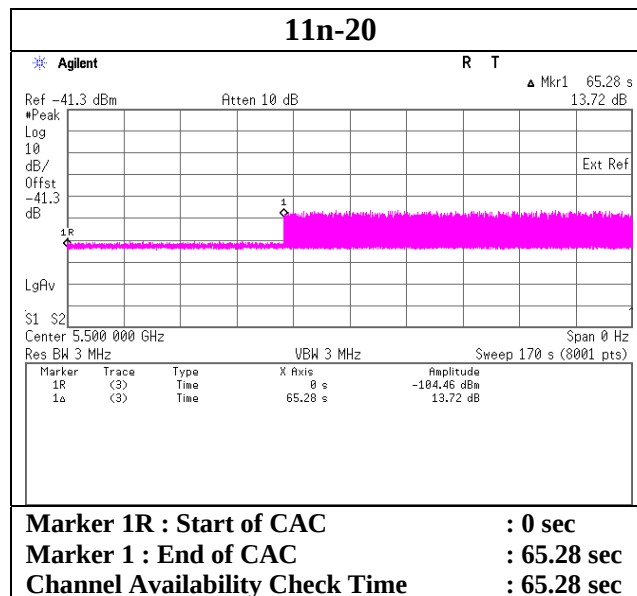
The Initial Channel Availability Check Time tests that the EUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the U-NII device checks for Radar Waveforms for one minute on the test Channel.

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 a 2.5 minute 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



### 7.4 Test result

Test result: Pass

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

### 8.1 Operating environment

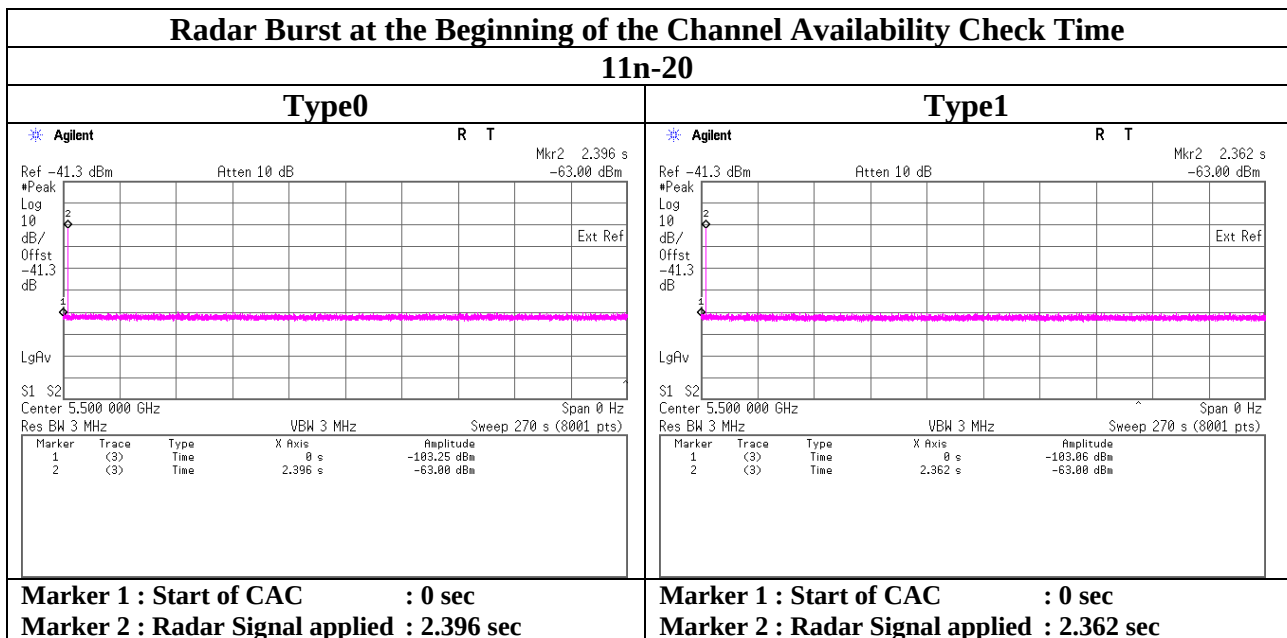
|                       |                                    |
|-----------------------|------------------------------------|
| Test place            | Ise EMC Lab. No.6 measurement room |
| Date                  | 05/24/2016                         |
| Temperature/ Humidity | 23deg. C / 47% RH                  |
| Engineer              | Satofumi Matsuyama                 |

### 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 minute measurement window no EUT transmissions occurred on Chr.

### 8.3 Test data



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

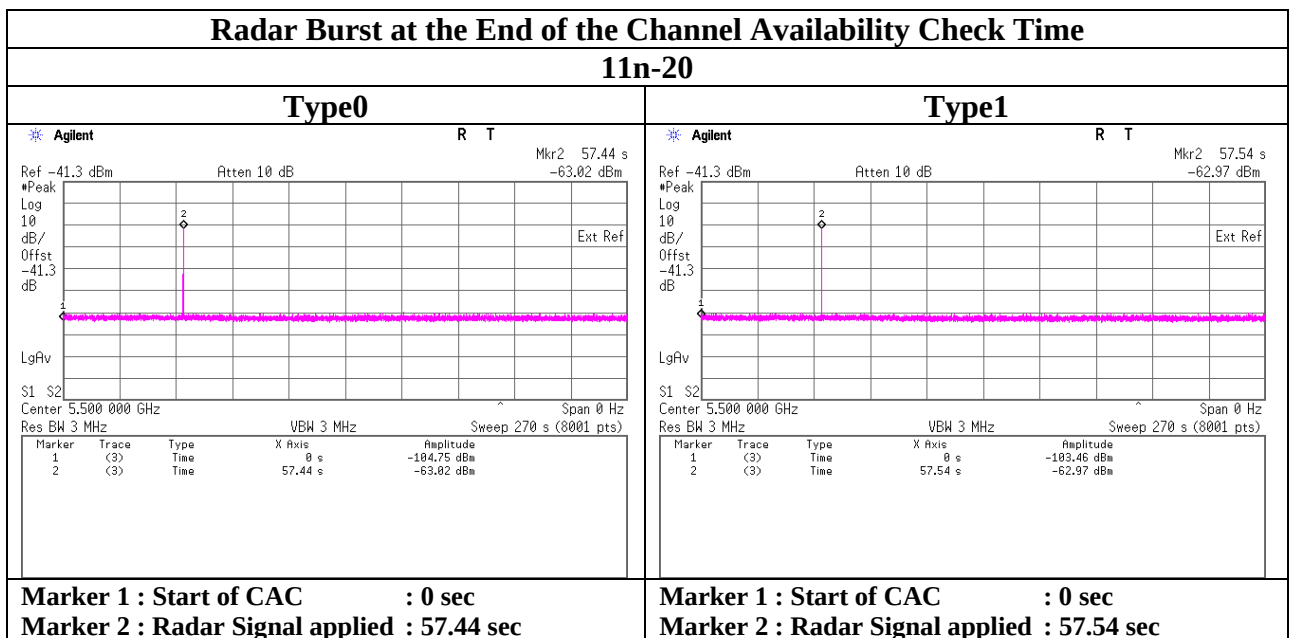
### 9.1 Operating environment

Test place : Ise EMC Lab. No.6 measurement room  
Date : 05/24/2016  
Temperature/ Humidity : 23deg. C / 47% RH  
Engineer : Satofumi Matsuyama

### 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 minute measurement window no EUT transmissions occurred on Chr.

### 9.3 Test data



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## **SECTION 10: Channel Move Time, Channel Closing Transmission Time**

### **10.1 Operating environment**

Test place : Ise EMC Lab. No.6 measurement room  
Date : 05/20/2016  
Temperature/ Humidity : 24deg. C / 51% RH  
Engineer : Satofumi Matsuyama  
Mode : 11n-40

### **10.2 Test Procedure**

Stream the MPEG test file 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)                 | [sec]  | 0.022            | 10.000 | Pass    |
| Channel Closing Transmission Time *2) | [msec] | 0                | 60     | Pass    |

\*1) Channel Move Time is calculated as follows:

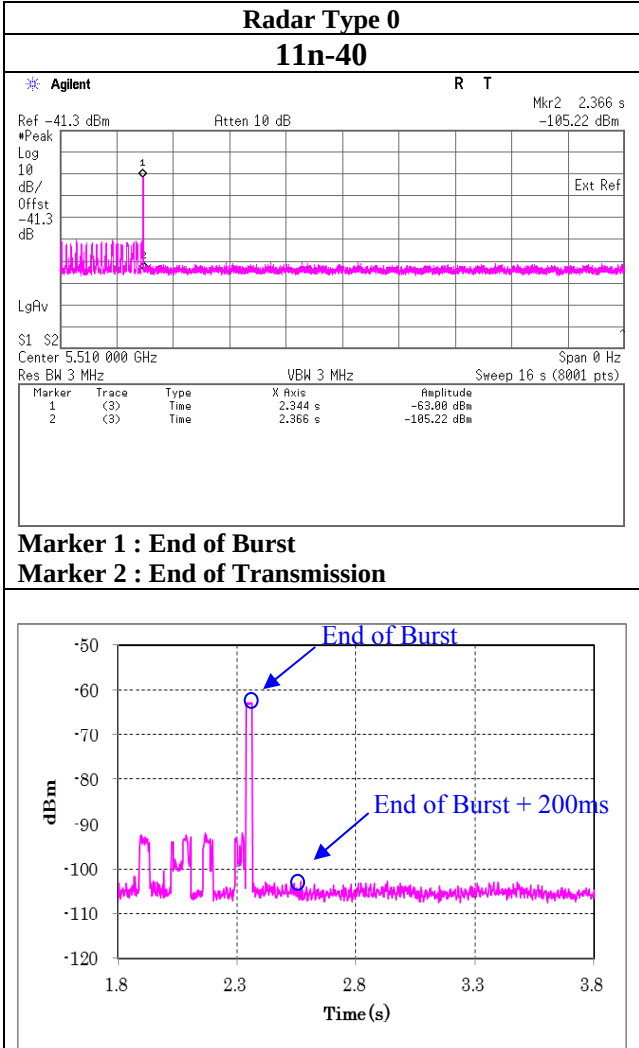
(Channel Move Time) = (End of Transmission) - (End of Burst) = 2.366-2.344

\*2) Channel Closing Transmission Time is calculated from (End of Burst + 200msec) to (End of Burst + 10sec )

(Channel Closing Transmission Time) = (Number of analyzer bins showing transmission) × (dwell time per bin)

= 0 × 2[msec]

<Master mode>



10.4 Test result

Test result: Pass

## **SECTION 11: Non-Occupancy Period**

### **11.1 Operating environment**

|                       |                                    |
|-----------------------|------------------------------------|
| Test place            | Ise EMC Lab. No.6 measurement room |
| Date                  | 05/20/2016                         |
| Temperature/ Humidity | 24deg. C / 51% RH                  |
| Engineer              | Satofumi Matsuyama                 |

### **11.2 Test Procedure**

The following two tests are performed:

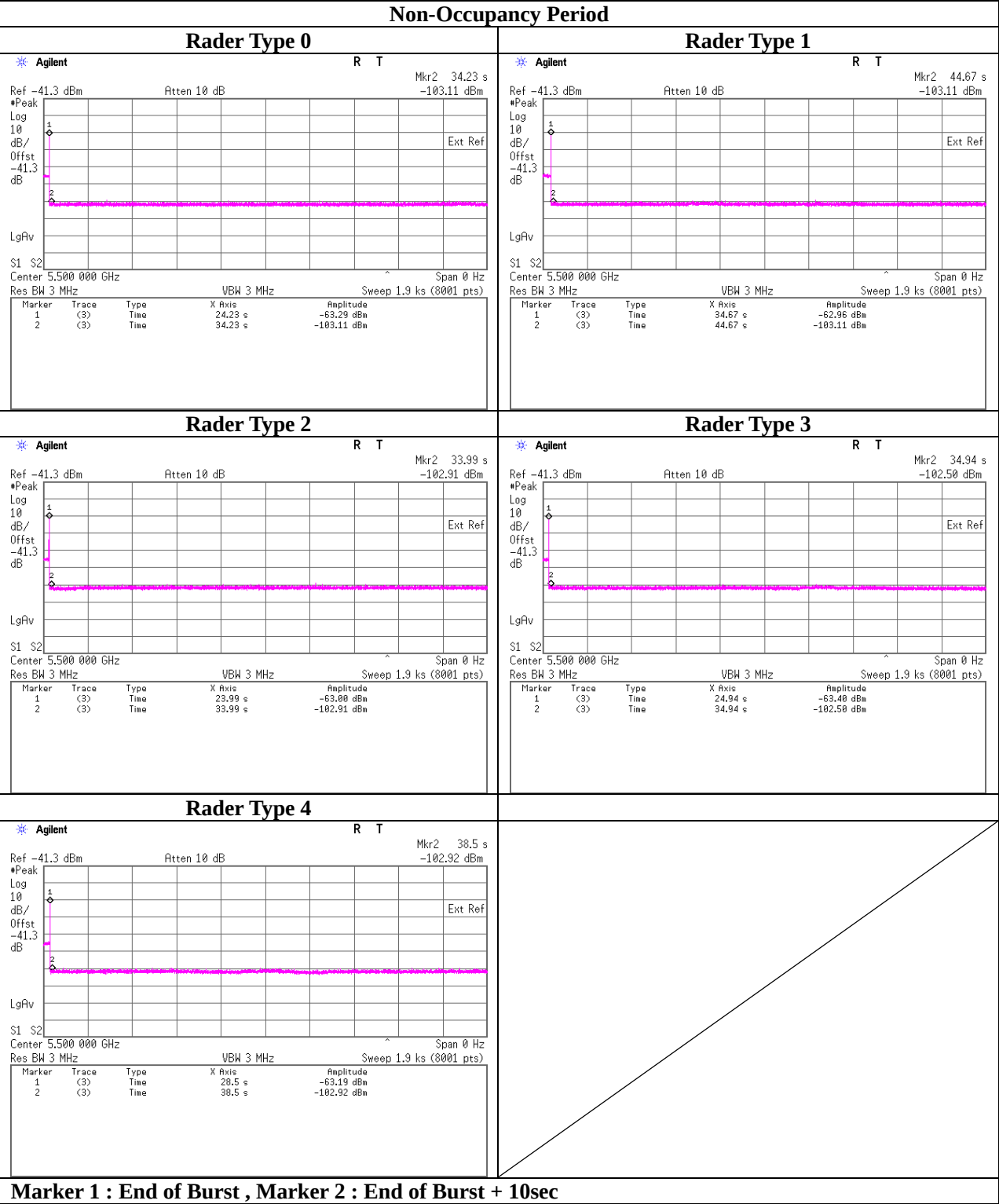
1).Stream the MPEG test file from the Master Device to the Client Device on the test Channel for the entire period of the test.

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.

11.3 Test data

<Master mode>



11.4 Test result

Test result: Pass

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

### **12.1 Operating environment**

Test place : Ise EMC Lab. No.6 measurement room  
Date : 05/23/2016  
Temperature/ Humidity : 26deg. C / 49% RH  
Engineer : Satofumi Matsuyama

### **12.2 Test Procedure**

Stream the MPEG test file 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.

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

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

Each center frequency calculated by:

the low edge of the UUT Occupied Bandwidth  $+(0.4 \times \text{Chirp Width [in MHz]})$

the high edge of the UUT Occupied Bandwidth  $-(0.4 \times \text{Chirp Width [in MHz]})$

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

#### 5500MHz (11n-20)

| Radar Type          | Number of Trials | Number of Successful Detections | Percentage of Successful Detections [%] | Limit [%] | Results | Remarks |
|---------------------|------------------|---------------------------------|-----------------------------------------|-----------|---------|---------|
| 1                   | 30               | 27                              | 90.00                                   | 60        | Pass    |         |
| 2                   | 30               | 26                              | 86.67                                   | 60        | Pass    |         |
| 3                   | 30               | 28                              | 93.33                                   | 60        | Pass    |         |
| 4                   | 30               | 24                              | 80.00                                   | 60        | Pass    |         |
| Aggregate of 1 to 4 | -                | -                               | 87.50                                   | 80        | Pass    |         |
| 5                   | 30               | 30                              | 100.00                                  | 80        | Pass    |         |
| 6                   | 30               | 29                              | 96.67                                   | 70        | Pass    |         |

#### 5510MHz (11n-40)

| Radar Type          | Number of Trials | Number of Successful Detections | Percentage of Successful Detections [%] | Limit [%] | Results | Remarks |
|---------------------|------------------|---------------------------------|-----------------------------------------|-----------|---------|---------|
| 1                   | 30               | 28                              | 93.33                                   | 60        | Pass    |         |
| 2                   | 30               | 25                              | 83.33                                   | 60        | Pass    |         |
| 3                   | 30               | 20                              | 66.67                                   | 60        | Pass    |         |
| 4                   | 30               | 24                              | 80.00                                   | 60        | Pass    |         |
| Aggregate of 1 to 4 | -                | -                               | 80.83                                   | 80        | Pass    |         |
| 5                   | 30               | 30                              | 100.00                                  | 80        | Pass    |         |
| 6                   | 30               | 28                              | 93.33                                   | 70        | Pass    |         |

### 12.4 Test result

Test result: Pass

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## **APPENDIX 1: Data of DFS test**

### **U-NII Detection Bandwidth**

#### **5500MHz (11n-20)**

| Frequency<br>[MHz] | Number of<br>Trials<br>[Times] | Number of<br>Detected<br>[Times] | Ratio of<br>Detected<br>[%] | Mark |
|--------------------|--------------------------------|----------------------------------|-----------------------------|------|
| 5490               | 10                             | 10                               | 100                         | FL   |
| 5491               | 10                             | 10                               | 100                         |      |
| 5492               | 10                             | 10                               | 100                         |      |
| 5493               | 10                             | 10                               | 100                         |      |
| 5494               | 10                             | 10                               | 100                         |      |
| 5495               | 10                             | 10                               | 100                         |      |
| 5500               | 10                             | 10                               | 100                         |      |
| 5505               | 10                             | 10                               | 100                         |      |
| 5506               | 10                             | 10                               | 100                         |      |
| 5507               | 10                             | 10                               | 100                         |      |
| 5508               | 10                             | 10                               | 100                         |      |
| 5509               | 10                             | 10                               | 100                         |      |
| 5510               | 10                             | 10                               | 100                         | FH   |

#### **5510MHz (11n-40)**

| Frequency<br>[MHz] | Number of<br>Trials<br>[Times] | Number of<br>Detected<br>[Times] | Ratio of<br>Detected<br>[%] | Mark |
|--------------------|--------------------------------|----------------------------------|-----------------------------|------|
| 5490               | 10                             | 10                               | 100                         | FL   |
| 5491               | 10                             | 10                               | 100                         |      |
| 5492               | 10                             | 10                               | 100                         |      |
| 5493               | 10                             | 10                               | 100                         |      |
| 5494               | 10                             | 10                               | 100                         |      |
| 5495               | 10                             | 10                               | 100                         |      |
| 5500               | 10                             | 10                               | 100                         |      |
| 5505               | 10                             | 10                               | 100                         |      |
| 5510               | 10                             | 10                               | 100                         |      |
| 5515               | 10                             | 10                               | 100                         |      |
| 5520               | 10                             | 10                               | 100                         |      |
| 5525               | 10                             | 10                               | 100                         |      |
| 5526               | 10                             | 10                               | 100                         |      |
| 5527               | 10                             | 10                               | 100                         |      |
| 5528               | 10                             | 10                               | 100                         |      |
| 5529               | 10                             | 10                               | 100                         |      |
| 5530               | 10                             | 10                               | 100                         | FH   |

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### Statistical Performance Check

#### 5500MHz (11n-20)

| 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         | NO          | YES         | YES         | YES         | YES         |
| 2                                                     | YES         | YES         | YES         | YES         | YES         | YES         |
| 3                                                     | YES         | YES         | NO          | YES         | YES         | YES         |
| 4                                                     | YES         | NO          | YES         | YES         | YES         | YES         |
| 5                                                     | YES         | NO          | YES         | YES         | YES         | YES         |
| 6                                                     | YES         | YES         | YES         | YES         | YES         | YES         |
| 7                                                     | YES         | YES         | YES         | NO          | 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         | NO          | YES         | NO          | YES         | YES         |
| 12                                                    | YES         | YES         | YES         | YES         | YES         | YES         |
| 13                                                    | YES         | YES         | YES         | NO          | YES         | YES         |
| 14                                                    | YES         | YES         | YES         | YES         | YES         | YES         |
| 15                                                    | NO          | YES         | YES         | NO          | YES         | YES         |
| 16                                                    | YES         | YES         | YES         | NO          | YES         | YES         |
| 17                                                    | YES         | YES         | YES         | YES         | YES         | YES         |
| 18                                                    | YES         | YES         | NO          | YES         | YES         | YES         |
| 19                                                    | NO          | 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         | NO          | 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                                                    | NO          | YES         | YES         | YES         | YES         | NO          |
| 29                                                    | YES         | YES         | YES         | YES         | YES         | YES         |
| 30                                                    | YES         | YES         | YES         | YES         | YES         | YES         |
| EUT Test Frequency:5500MHz<br>Radar Frequency:5500MHz |             |             |             |             |             |             |

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### Statistical Performance Check

#### 5510MHz (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         | NO          | YES         | YES         |
| 3       | YES         | YES         | NO          | YES         | YES         | YES         |
| 4       | YES         | YES         | YES         | YES         | YES         | YES         |
| 5       | YES         | NO          | YES         | YES         | YES         | YES         |
| 6       | YES         | YES         | NO          | YES         | YES         | YES         |
| 7       | YES         | YES         | NO          | NO          | YES         | YES         |
| 8       | YES         | YES         | YES         | YES         | YES         | YES         |
| 9       | YES         | NO          | 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         | NO          | NO          | NO          | YES         | YES         |
| 14      | YES         | YES         | NO          | YES         | YES         | YES         |
| 15      | YES         | YES         | YES         | YES         | YES         | YES         |
| 16      | YES         | YES         | NO          | NO          | YES         | YES         |
| 17      | YES         | NO          | YES         | YES         | YES         | YES         |
| 18      | YES         | YES         | YES         | NO          | YES         | NO          |
| 19      | YES         | YES         | YES         | YES         | YES         | NO          |
| 20      | YES         | YES         | NO          | NO          | YES         | YES         |
| 21      | YES         | YES         | NO          | YES         | YES         | YES         |
| 22      | YES         | YES         | YES         | YES         | YES         | YES         |
| 23      | NO          | NO          | YES         | YES         | YES         | YES         |
| 24      | YES         | YES         | NO          | YES         | YES         | YES         |
| 25      | NO          | YES         | YES         | YES         | YES         | YES         |
| 26      | YES         | YES         | YES         | YES         | YES         | YES         |
| 27      | YES         | YES         | NO          | 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:5510MHz

Radar Frequency:5510MHz

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## Parameter Data sheet for Radar Type 1

### 5500MHz (11n-20)

| Radar Type1 |                                               |                                                   |                  |                                             |
|-------------|-----------------------------------------------|---------------------------------------------------|------------------|---------------------------------------------|
| Trial #     | Pulse Repetition Frequency<br>Number(1 to 23) | Pulse Repetition Frequency<br>(Pulses Per Second) | Number of Pulses | Pulse Repetition Interval<br>(Microseconds) |
| 1           | 3                                             | 1792.1                                            | 95               | 558                                         |
| 2           | 2                                             | 1858.7                                            | 99               | 538                                         |
| 3           | 9                                             | 1474.9                                            | 78               | 678                                         |
| 4           | 15                                            | 1253.1                                            | 67               | 798                                         |
| 5           | 21                                            | 1089.3                                            | 58               | 918                                         |
| 6           | 1                                             | 1930.5                                            | 102              | 518                                         |
| 7           | 10                                            | 1432.7                                            | 76               | 698                                         |
| 8           | 14                                            | 1285.3                                            | 68               | 778                                         |
| 9           | 16                                            | 1222.5                                            | 65               | 818                                         |
| 10          | 5                                             | 1672.2                                            | 89               | 598                                         |
| 11          | 4                                             | 1730.1                                            | 92               | 578                                         |
| 12          | 7                                             | 1567.4                                            | 83               | 638                                         |
| 13          | 19                                            | 1139.0                                            | 61               | 878                                         |
| 14          | 17                                            | 1193.3                                            | 63               | 838                                         |
| 15          | 20                                            | 1113.6                                            | 59               | 898                                         |
| 16          | -                                             | 916.6                                             | 49               | 1091                                        |
| 17          | -                                             | 425.0                                             | 23               | 2353                                        |
| 18          | -                                             | 1049.3                                            | 56               | 953                                         |
| 19          | -                                             | 838.9                                             | 45               | 1192                                        |
| 20          | -                                             | 569.2                                             | 31               | 1757                                        |
| 21          | -                                             | 612.7                                             | 33               | 1632                                        |
| 22          | -                                             | 485.0                                             | 26               | 2062                                        |
| 23          | -                                             | 1321.0                                            | 70               | 757                                         |
| 24          | -                                             | 731.0                                             | 39               | 1368                                        |
| 25          | -                                             | 888.9                                             | 47               | 1125                                        |
| 26          | -                                             | 394.8                                             | 21               | 2533                                        |
| 27          | -                                             | 1466.3                                            | 78               | 682                                         |
| 28          | -                                             | 349.7                                             | 19               | 2860                                        |
| 29          | -                                             | 889.7                                             | 47               | 1124                                        |
| 30          | -                                             | 448.4                                             | 24               | 2230                                        |

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## Parameter Data sheet for Radar Type 1

### 5510MHz (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           | 21                                         | 1089.3                                         | 58               | 918                                      |
| 2           | 6                                          | 1618.1                                         | 86               | 618                                      |
| 3           | 14                                         | 1285.3                                         | 68               | 778                                      |
| 4           | 7                                          | 1567.4                                         | 83               | 638                                      |
| 5           | 15                                         | 1253.1                                         | 67               | 798                                      |
| 6           | 3                                          | 1792.1                                         | 95               | 558                                      |
| 7           | 2                                          | 1858.7                                         | 99               | 538                                      |
| 8           | 4                                          | 1730.1                                         | 92               | 578                                      |
| 9           | 11                                         | 1392.8                                         | 74               | 718                                      |
| 10          | 10                                         | 1432.7                                         | 76               | 698                                      |
| 11          | 16                                         | 1222.5                                         | 65               | 818                                      |
| 12          | 23                                         | 326.2                                          | 18               | 3066                                     |
| 13          | 8                                          | 1519.8                                         | 81               | 658                                      |
| 14          | 12                                         | 1355.0                                         | 72               | 738                                      |
| 15          | 9                                          | 1474.9                                         | 78               | 678                                      |
| 16          | -                                          | 481.0                                          | 26               | 2079                                     |
| 17          | -                                          | 450.0                                          | 24               | 2222                                     |
| 18          | -                                          | 1440.9                                         | 77               | 694                                      |
| 19          | -                                          | 863.6                                          | 46               | 1158                                     |
| 20          | -                                          | 386.8                                          | 21               | 2585                                     |
| 21          | -                                          | 639.8                                          | 34               | 1563                                     |
| 22          | -                                          | 637.3                                          | 34               | 1569                                     |
| 23          | -                                          | 335.5                                          | 18               | 2981                                     |
| 24          | -                                          | 1065.0                                         | 57               | 939                                      |
| 25          | -                                          | 526.6                                          | 28               | 1899                                     |
| 26          | -                                          | 535.6                                          | 29               | 1867                                     |
| 27          | -                                          | 1124.9                                         | 60               | 889                                      |
| 28          | -                                          | 648.9                                          | 35               | 1541                                     |
| 29          | -                                          | 486.1                                          | 26               | 2057                                     |
| 30          | -                                          | 404.9                                          | 22               | 2470                                     |

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**Parameter Data sheet for Radar Type 2**

**5500MHz (11n-20)**

| Radar Type2 |                         |                  |          |
|-------------|-------------------------|------------------|----------|
| Trial #     | Number Pulses per Burst | Pulse Width [us] | PRI [us] |
| 1           | 24                      | 4.7              | 171      |
| 2           | 28                      | 3.8              | 160      |
| 3           | 23                      | 3.9              | 184      |
| 4           | 25                      | 2.3              | 217      |
| 5           | 24                      | 3.3              | 223      |
| 6           | 25                      | 3.7              | 209      |
| 7           | 23                      | 4.1              | 207      |
| 8           | 28                      | 1.4              | 158      |
| 9           | 24                      | 1.6              | 193      |
| 10          | 29                      | 1.8              | 188      |
| 11          | 23                      | 4.0              | 195      |
| 12          | 25                      | 3.8              | 214      |
| 13          | 26                      | 3.0              | 225      |
| 14          | 28                      | 1.7              | 210      |
| 15          | 28                      | 2.9              | 229      |
| 16          | 26                      | 4.5              | 226      |
| 17          | 25                      | 1.8              | 192      |
| 18          | 27                      | 2.7              | 157      |
| 19          | 26                      | 3.8              | 165      |
| 20          | 29                      | 1.4              | 198      |
| 21          | 23                      | 1.6              | 156      |
| 22          | 23                      | 1.8              | 158      |
| 23          | 29                      | 3.0              | 153      |
| 24          | 23                      | 4.5              | 214      |
| 25          | 23                      | 3.0              | 215      |
| 26          | 29                      | 4.2              | 178      |
| 27          | 27                      | 2.6              | 152      |
| 28          | 23                      | 3.3              | 216      |
| 29          | 26                      | 4.3              | 164      |
| 30          | 25                      | 2.2              | 155      |

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**Parameter Data sheet for Radar Type 2**

**5510MHz (11n-40)**

| Radar Type2 |                         |                  |          |
|-------------|-------------------------|------------------|----------|
| Trial #     | Number Pulses per Burst | Pulse Width [us] | PRI [us] |
| 1           | 24                      | 2.7              | 201      |
| 2           | 29                      | 3.6              | 178      |
| 3           | 28                      | 4.5              | 221      |
| 4           | 28                      | 1.0              | 203      |
| 5           | 26                      | 4.6              | 225      |
| 6           | 27                      | 4.1              | 157      |
| 7           | 25                      | 1.3              | 206      |
| 8           | 26                      | 2.7              | 190      |
| 9           | 29                      | 1.0              | 161      |
| 10          | 26                      | 2.7              | 202      |
| 11          | 29                      | 3.2              | 219      |
| 12          | 27                      | 4.2              | 197      |
| 13          | 23                      | 2.5              | 200      |
| 14          | 24                      | 4.8              | 225      |
| 15          | 23                      | 2.8              | 203      |
| 16          | 24                      | 3.7              | 215      |
| 17          | 26                      | 2.3              | 205      |
| 18          | 28                      | 3.9              | 188      |
| 19          | 29                      | 3.5              | 185      |
| 20          | 23                      | 4.7              | 192      |
| 21          | 23                      | 4.7              | 195      |
| 22          | 27                      | 1.6              | 159      |
| 23          | 24                      | 2.4              | 206      |
| 24          | 23                      | 1.8              | 230      |
| 25          | 29                      | 4.5              | 171      |
| 26          | 24                      | 3.9              | 163      |
| 27          | 29                      | 1.8              | 156      |
| 28          | 23                      | 4.4              | 201      |
| 29          | 24                      | 4.4              | 152      |
| 30          | 25                      | 4.2              | 194      |

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**Parameter Data sheet for Radar Type 3**

**5500MHz (11n-20)**

| Radar Type3 |                         |                  |          |
|-------------|-------------------------|------------------|----------|
| Trial #     | Number Pulses per Burst | Pulse Width [us] | PRI [us] |
| 1           | 18                      | 8.3              | 202      |
| 2           | 18                      | 7.0              | 219      |
| 3           | 17                      | 8.4              | 342      |
| 4           | 17                      | 6.8              | 380      |
| 5           | 16                      | 6.5              | 485      |
| 6           | 16                      | 7.4              | 493      |
| 7           | 16                      | 8.0              | 398      |
| 8           | 16                      | 8.1              | 245      |
| 9           | 17                      | 6.7              | 223      |
| 10          | 16                      | 7.4              | 337      |
| 11          | 17                      | 9.4              | 469      |
| 12          | 16                      | 9.4              | 325      |
| 13          | 16                      | 7.7              | 399      |
| 14          | 17                      | 9.6              | 366      |
| 15          | 17                      | 6.5              | 281      |
| 16          | 18                      | 6.5              | 360      |
| 17          | 18                      | 9.0              | 251      |
| 18          | 18                      | 6.4              | 245      |
| 19          | 18                      | 8.7              | 274      |
| 20          | 17                      | 8.0              | 435      |
| 21          | 16                      | 9.6              | 405      |
| 22          | 18                      | 8.6              | 489      |
| 23          | 18                      | 7.7              | 348      |
| 24          | 17                      | 6.0              | 208      |
| 25          | 17                      | 7.3              | 463      |
| 26          | 17                      | 8.5              | 244      |
| 27          | 17                      | 6.9              | 355      |
| 28          | 16                      | 7.6              | 281      |
| 29          | 17                      | 7.9              | 488      |
| 30          | 17                      | 8.0              | 301      |

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**Parameter Data sheet for Radar Type 3**

**5510MHz (11n-40)**

| Radar Type3 |                         |                  |          |
|-------------|-------------------------|------------------|----------|
| Trial #     | Number Pulses per Burst | Pulse Width [us] | PRI [us] |
| 1           | 16                      | 7.1              | 411      |
| 2           | 17                      | 6.7              | 467      |
| 3           | 18                      | 7.1              | 479      |
| 4           | 16                      | 9.5              | 341      |
| 5           | 17                      | 9.1              | 455      |
| 6           | 16                      | 6.4              | 260      |
| 7           | 17                      | 9.3              | 473      |
| 8           | 16                      | 8.0              | 281      |
| 9           | 16                      | 7.1              | 446      |
| 10          | 18                      | 8.9              | 467      |
| 11          | 18                      | 9.2              | 274      |
| 12          | 17                      | 9.2              | 206      |
| 13          | 18                      | 7.6              | 484      |
| 14          | 16                      | 7.0              | 363      |
| 15          | 18                      | 8.2              | 422      |
| 16          | 18                      | 7.4              | 346      |
| 17          | 18                      | 9.3              | 344      |
| 18          | 17                      | 8.2              | 236      |
| 19          | 18                      | 7.7              | 240      |
| 20          | 18                      | 9.3              | 500      |
| 21          | 16                      | 7.8              | 402      |
| 22          | 17                      | 8.7              | 366      |
| 23          | 18                      | 9.9              | 311      |
| 24          | 17                      | 9.6              | 398      |
| 25          | 17                      | 7.5              | 353      |
| 26          | 16                      | 7.1              | 354      |
| 27          | 16                      | 7.1              | 399      |
| 28          | 18                      | 8.6              | 469      |
| 29          | 16                      | 6.6              | 318      |
| 30          | 17                      | 6.7              | 431      |

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## **Parameter Data sheet for Radar Type 4**

### **5500MHz (11n-20)**

| Radar Type4 |                         |                  |          |
|-------------|-------------------------|------------------|----------|
| Trial #     | Number Pulses per Burst | Pulse Width [us] | PRI [us] |
| 1           | 15                      | 19.2             | 385      |
| 2           | 14                      | 12.7             | 282      |
| 3           | 14                      | 14.4             | 255      |
| 4           | 13                      | 11.9             | 493      |
| 5           | 16                      | 12.6             | 485      |
| 6           | 13                      | 16.4             | 394      |
| 7           | 13                      | 12.8             | 379      |
| 8           | 15                      | 13.0             | 368      |
| 9           | 16                      | 12.1             | 295      |
| 10          | 16                      | 12.9             | 239      |
| 11          | 13                      | 19.5             | 441      |
| 12          | 13                      | 14.0             | 313      |
| 13          | 12                      | 14.7             | 217      |
| 14          | 12                      | 11.6             | 381      |
| 15          | 14                      | 19.8             | 438      |
| 16          | 13                      | 17.2             | 265      |
| 17          | 15                      | 13.4             | 310      |
| 18          | 12                      | 11.6             | 484      |
| 19          | 12                      | 18.7             | 297      |
| 20          | 12                      | 13.4             | 373      |
| 21          | 15                      | 16.5             | 209      |
| 22          | 15                      | 12.8             | 350      |
| 23          | 13                      | 20.0             | 240      |
| 24          | 15                      | 17.5             | 365      |
| 25          | 16                      | 13.9             | 433      |
| 26          | 13                      | 19.1             | 278      |
| 27          | 12                      | 19.2             | 410      |
| 28          | 14                      | 17.0             | 265      |
| 29          | 13                      | 19.8             | 201      |
| 30          | 15                      | 16.3             | 410      |

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**Parameter Data sheet for Radar Type 4**

**5510MHz (11n-40)**

| Radar Type4 |                         |                  |          |
|-------------|-------------------------|------------------|----------|
| Trial #     | Number Pulses per Burst | Pulse Width [us] | PRI [us] |
| 1           | 15                      | 12.3             | 333      |
| 2           | 15                      | 12.0             | 443      |
| 3           | 15                      | 11.2             | 481      |
| 4           | 12                      | 17.8             | 302      |
| 5           | 16                      | 16.3             | 498      |
| 6           | 12                      | 17.8             | 407      |
| 7           | 13                      | 16.0             | 379      |
| 8           | 13                      | 14.3             | 360      |
| 9           | 16                      | 18.3             | 228      |
| 10          | 13                      | 16.9             | 302      |
| 11          | 12                      | 19.6             | 211      |
| 12          | 16                      | 16.3             | 430      |
| 13          | 15                      | 19.9             | 473      |
| 14          | 13                      | 15.7             | 498      |
| 15          | 12                      | 17.6             | 319      |
| 16          | 13                      | 16.9             | 496      |
| 17          | 16                      | 13.9             | 309      |
| 18          | 12                      | 14.6             | 349      |
| 19          | 15                      | 11.2             | 283      |
| 20          | 14                      | 18.2             | 490      |
| 21          | 14                      | 14.7             | 375      |
| 22          | 13                      | 12.6             | 350      |
| 23          | 15                      | 17.3             | 427      |
| 24          | 16                      | 13.4             | 377      |
| 25          | 16                      | 19.6             | 219      |
| 26          | 12                      | 17.4             | 235      |
| 27          | 13                      | 12.8             | 242      |
| 28          | 16                      | 17.9             | 390      |
| 29          | 13                      | 19.1             | 259      |
| 30          | 15                      | 13.6             | 407      |

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## Parameter Data sheet for Radar Type 5

### 5500MHz (11n-20)

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 1       | 1            | 1                | 61                 | 12                |                             |                             | 750                                      | 5500                   |
|         | 2            | 2                | 91                 | 7                 | 1378                        |                             | 48026                                    | 5500                   |
|         | 3            | 3                | 55                 | 20                | 1061                        | 1772                        | 599080                                   | 5500                   |
|         | 4            | 2                | 58                 | 15                | 1070                        |                             | 344082                                   | 5500                   |
|         | 5            | 1                | 70                 | 10                |                             |                             | 639970                                   | 5500                   |
|         | 6            | 3                | 96                 | 12                | 1800                        | 1074                        | 704434                                   | 5500                   |
|         | 7            | 1                | 71                 | 9                 |                             |                             | 352295                                   | 5500                   |
|         | 8            | 3                | 95                 | 7                 | 1810                        | 1215                        | 180503                                   | 5500                   |
|         | 9            | 3                | 63                 | 16                | 1736                        | 1335                        | 493621                                   | 5500                   |
|         | 10           | 1                | 89                 | 12                |                             |                             | 440679                                   | 5500                   |
|         | 11           | 1                | 72                 | 10                |                             |                             | 791151                                   | 5500                   |
|         | 12           | 2                | 88                 | 5                 | 1121                        |                             | 190472                                   | 5500                   |
|         | 13           | 1                | 63                 | 12                |                             |                             | 37682                                    | 5500                   |
|         | 14           | 2                | 92                 | 8                 | 1908                        |                             | 432633                                   | 5500                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 2       | 1            | 1                | 82                 | 18                |                             |                             | 218                                      | 5500                   |
|         | 2            | 2                | 96                 | 17                | 1298                        |                             | 107123                                   | 5500                   |
|         | 3            | 1                | 76                 | 9                 |                             |                             | 778517                                   | 5500                   |
|         | 4            | 2                | 92                 | 19                | 1070                        |                             | 435502                                   | 5500                   |
|         | 5            | 3                | 55                 | 14                | 1862                        | 1343                        | 343178                                   | 5500                   |
|         | 6            | 1                | 56                 | 15                |                             |                             | 226975                                   | 5500                   |
|         | 7            | 2                | 82                 | 12                | 1289                        |                             | 431877                                   | 5500                   |
|         | 8            | 2                | 95                 | 14                | 1958                        |                             | 119075                                   | 5500                   |
|         | 9            | 3                | 62                 | 6                 | 1595                        | 1378                        | 422177                                   | 5500                   |
|         | 10           | 2                | 83                 | 15                | 1127                        |                             | 745443                                   | 5500                   |
|         | 11           | 1                | 52                 | 17                |                             |                             | 667561                                   | 5500                   |
|         | 12           | 1                | 58                 | 10                |                             |                             | 282288                                   | 5500                   |
|         | 13           | 2                | 96                 | 9                 | 1017                        |                             | 226630                                   | 5500                   |
|         | 14           | 2                | 60                 | 10                | 1140                        |                             | 389765                                   | 5500                   |
|         | 15           | 3                | 80                 | 14                | 1674                        | 1223                        | 548004                                   | 5500                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 3       | 1            | 2                | 64                 | 20                | 1000                        |                             | 405943                                   | 5500                   |
|         | 2            | 1                | 62                 | 18                |                             |                             | 329570                                   | 5500                   |
|         | 3            | 2                | 79                 | 16                | 1498                        |                             | 513617                                   | 5500                   |
|         | 4            | 3                | 92                 | 19                | 1588                        | 1126                        | 759562                                   | 5500                   |
|         | 5            | 2                | 75                 | 19                | 1944                        |                             | 748435                                   | 5500                   |
|         | 6            | 2                | 68                 | 17                | 1397                        |                             | 537788                                   | 5500                   |
|         | 7            | 3                | 69                 | 20                | 1645                        | 1159                        | 6398                                     | 5500                   |
|         | 8            | 3                | 79                 | 16                | 1949                        | 1043                        | 775049                                   | 5500                   |
|         | 9            | 3                | 96                 | 19                | 1194                        | 1987                        | 148105                                   | 5500                   |
|         | 10           | 3                | 92                 | 16                | 1149                        | 1099                        | 721912                                   | 5500                   |
|         | 11           | 1                | 57                 | 11                |                             |                             | 113344                                   | 5500                   |
|         | 12           | 3                | 85                 | 9                 | 1875                        | 1012                        | 158107                                   | 5500                   |
|         | 13           | 3                | 84                 | 16                | 1245                        | 1957                        | 571938                                   | 5500                   |
|         | 14           | 2                | 68                 | 7                 | 1119                        |                             | 51846                                    | 5500                   |
|         | 15           | 1                | 82                 | 15                |                             |                             | 231945                                   | 5500                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 4       | 1            | 2                | 60                 | 18                | 1000                        |                             | 158392                                   | 5500                   |
|         | 2            | 1                | 93                 | 7                 |                             |                             | 822776                                   | 5500                   |
|         | 3            | 2                | 53                 | 20                | 1927                        |                             | 675795                                   | 5500                   |
|         | 4            | 2                | 73                 | 18                | 1109                        |                             | 806569                                   | 5500                   |
|         | 5            | 1                | 83                 | 11                |                             |                             | 105139                                   | 5500                   |
|         | 6            | 2                | 66                 | 20                | 1921                        |                             | 504163                                   | 5500                   |
|         | 7            | 3                | 52                 | 8                 | 1229                        | 1137                        | 628807                                   | 5500                   |
|         | 8            | 3                | 67                 | 16                | 1735                        | 1506                        | 580204                                   | 5500                   |
|         | 9            | 2                | 72                 | 12                | 1274                        |                             | 526599                                   | 5500                   |
|         | 10           | 2                | 87                 | 20                | 1270                        |                             | 97349                                    | 5500                   |
|         | 11           | 2                | 84                 | 11                | 1318                        |                             | 224819                                   | 5500                   |
|         | 12           | 2                | 79                 | 20                | 1378                        |                             | 235660                                   | 5500                   |
|         | 13           | 2                | 87                 | 7                 | 1728                        |                             | 617692                                   | 5500                   |
|         | 14           | 1                | 67                 | 12                |                             |                             | 183780                                   | 5500                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 5       | 1            | 2                | 89                 | 17                | 1000                        |                             | 139197                                   | 5500                   |
|         | 2            | 3                | 84                 | 13                | 1034                        | 1546                        | 875793                                   | 5500                   |
|         | 3            | 1                | 60                 | 14                |                             |                             | 91402                                    | 5500                   |
|         | 4            | 1                | 68                 | 17                |                             |                             | 387185                                   | 5500                   |
|         | 5            | 3                | 56                 | 11                | 1327                        | 1496                        | 1056946                                  | 5500                   |
|         | 6            | 1                | 66                 | 20                |                             |                             | 334650                                   | 5500                   |
|         | 7            | 3                | 78                 | 20                | 1516                        | 1107                        | 965714                                   | 5500                   |
|         | 8            | 1                | 96                 | 14                |                             |                             | 283072                                   | 5500                   |
|         | 9            | 3                | 61                 | 15                | 1798                        | 1808                        | 962468                                   | 5500                   |
|         | 10           | 2                | 56                 | 8                 | 1140                        |                             | 1002259                                  | 5500                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 6       | 1            | 3                | 69                 | 16                | 1287                        | 1582                        | 623021                                   | 5500                   |
|         | 2            | 1                | 79                 | 18                |                             |                             | 142624                                   | 5500                   |
|         | 3            | 1                | 93                 | 17                |                             |                             | 519544                                   | 5500                   |
|         | 4            | 3                | 50                 | 20                | 1969                        | 1454                        | 93019                                    | 5500                   |
|         | 5            | 2                | 81                 | 12                | 2000                        |                             | 302176                                   | 5500                   |
|         | 6            | 3                | 77                 | 14                | 1414                        | 1355                        | 490580                                   | 5500                   |
|         | 7            | 1                | 96                 | 11                |                             |                             | 584321                                   | 5500                   |
|         | 8            | 3                | 77                 | 20                | 1992                        | 1311                        | 276486                                   | 5500                   |
|         | 9            | 2                | 63                 | 5                 | 1096                        |                             | 531792                                   | 5500                   |
|         | 10           | 2                | 61                 | 18                | 1915                        |                             | 603253                                   | 5500                   |
|         | 11           | 1                | 55                 | 9                 |                             |                             | 731119                                   | 5500                   |
|         | 12           | 2                | 99                 | 20                | 1411                        |                             | 728728                                   | 5500                   |
|         | 13           | 1                | 77                 | 9                 |                             |                             | 141613                                   | 5500                   |
|         | 14           | 2                | 68                 | 18                | 1922                        |                             | 170743                                   | 5500                   |
|         | 15           | 1                | 88                 | 20                |                             |                             | 98132                                    | 5500                   |
|         | 16           | 2                | 63                 | 15                | 1625                        |                             | 648535                                   | 5500                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 7       | 1            | 3                | 68                 | 16                | 1155                        | 1077                        | 1015033                                  | 5500                   |
|         | 2            | 1                | 76                 | 10                |                             |                             | 436586                                   | 5500                   |
|         | 3            | 1                | 69                 | 20                |                             |                             | 890562                                   | 5500                   |
|         | 4            | 3                | 78                 | 7                 | 1879                        | 1944                        | 23317                                    | 5500                   |
|         | 5            | 2                | 80                 | 8                 | 1149                        |                             | 504927                                   | 5500                   |
|         | 6            | 2                | 56                 | 16                | 1190                        |                             | 135605                                   | 5500                   |
|         | 7            | 3                | 68                 | 20                | 1278                        | 1944                        | 52078                                    | 5500                   |
|         | 8            | 2                | 80                 | 13                | 1023                        |                             | 1069464                                  | 5500                   |
|         | 9            | 1                | 86                 | 10                |                             |                             | 681750                                   | 5500                   |
|         | 10           | 2                | 73                 | 16                | 1218                        |                             | 186970                                   | 5500                   |
|         | 11           | 1                | 75                 | 17                |                             |                             | 469371                                   | 5500                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 8       | 1            | 1                | 58                 | 12                |                             |                             | 599                                      | 5500                   |
|         | 2            | 2                | 64                 | 10                | 1366                        |                             | 453006                                   | 5500                   |
|         | 3            | 2                | 95                 | 9                 | 1942                        |                             | 709308                                   | 5500                   |
|         | 4            | 1                | 86                 | 13                |                             |                             | 465769                                   | 5500                   |
|         | 5            | 2                | 72                 | 14                | 1272                        |                             | 387302                                   | 5500                   |
|         | 6            | 3                | 55                 | 13                | 1389                        | 1815                        | 359922                                   | 5500                   |
|         | 7            | 1                | 70                 | 15                |                             |                             | 660734                                   | 5500                   |
|         | 8            | 1                | 62                 | 7                 |                             |                             | 667432                                   | 5500                   |
|         | 9            | 3                | 55                 | 20                | 1411                        | 1516                        | 777093                                   | 5500                   |
|         | 10           | 1                | 61                 | 12                |                             |                             | 17491                                    | 5500                   |
|         | 11           | 2                | 93                 | 7                 | 1362                        |                             | 400789                                   | 5500                   |
|         | 12           | 1                | 66                 | 13                |                             |                             | 57616                                    | 5500                   |
|         | 13           | 1                | 59                 | 6                 |                             |                             | 186221                                   | 5500                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 9       | 1            | 3                | 67                 | 5                 | 1129                        | 1101                        | 661564                                   | 5500                   |
|         | 2            | 1                | 68                 | 15                |                             |                             | 289553                                   | 5500                   |
|         | 3            | 2                | 89                 | 6                 | 1971                        |                             | 193511                                   | 5500                   |
|         | 4            | 2                | 62                 | 12                | 1347                        |                             | 584939                                   | 5500                   |
|         | 5            | 2                | 88                 | 5                 | 1608                        |                             | 303869                                   | 5500                   |
|         | 6            | 3                | 80                 | 6                 | 1892                        | 1463                        | 296316                                   | 5500                   |
|         | 7            | 3                | 62                 | 17                | 1054                        | 1091                        | 450330                                   | 5500                   |
|         | 8            | 1                | 96                 | 15                |                             |                             | 695232                                   | 5500                   |
|         | 9            | 1                | 66                 | 14                |                             |                             | 676981                                   | 5500                   |
|         | 10           | 3                | 90                 | 10                | 1057                        | 1735                        | 315928                                   | 5500                   |
|         | 11           | 1                | 82                 | 18                |                             |                             | 495302                                   | 5500                   |
|         | 12           | 1                | 75                 | 15                |                             |                             | 427507                                   | 5500                   |
|         | 13           | 1                | 82                 | 19                |                             |                             | 296153                                   | 5500                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 10      | 1            | 2                | 62                 | 11                | 1000                        |                             | 250302                                   | 5500                   |
|         | 2            | 2                | 69                 | 14                | 1024                        |                             | 66413                                    | 5500                   |
|         | 3            | 2                | 81                 | 13                | 1753                        |                             | 28181                                    | 5500                   |
|         | 4            | 2                | 74                 | 17                | 1759                        |                             | 650363                                   | 5500                   |
|         | 5            | 1                | 54                 | 18                |                             |                             | 515383                                   | 5500                   |
|         | 6            | 2                | 84                 | 13                | 1255                        |                             | 398076                                   | 5500                   |
|         | 7            | 3                | 56                 | 5                 | 1075                        | 1359                        | 7659                                     | 5500                   |
|         | 8            | 2                | 85                 | 10                | 1276                        |                             | 481996                                   | 5500                   |
|         | 9            | 2                | 90                 | 5                 | 1985                        |                             | 474385                                   | 5500                   |
|         | 10           | 3                | 63                 | 20                | 1435                        | 1901                        | 277052                                   | 5500                   |
|         | 11           | 1                | 84                 | 15                |                             |                             | 632041                                   | 5500                   |
|         | 12           | 3                | 94                 | 8                 | 1992                        | 1160                        | 374717                                   | 5500                   |
|         | 13           | 2                | 69                 | 8                 | 1392                        |                             | 256378                                   | 5500                   |
|         | 14           | 1                | 76                 | 6                 |                             |                             | 254914                                   | 5500                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 11      | 1            | 3                | 86                 | 19                | 1647                        | 1017                        | 784161                                   | 5499                   |
|         | 2            | 3                | 93                 | 8                 | 1205                        | 1878                        | 1231913                                  | 5494                   |
|         | 3            | 3                | 96                 | 7                 | 1168                        | 1980                        | 1470270                                  | 5494                   |
|         | 4            | 3                | 96                 | 6                 | 1351                        | 1522                        | 1428842                                  | 5494                   |
|         | 5            | 2                | 54                 | 11                | 1198                        |                             | 679037                                   | 5496                   |
|         | 6            | 2                | 87                 | 8                 | 1359                        |                             | 905916                                   | 5494                   |
|         | 7            | 2                | 92                 | 9                 | 1989                        |                             | 677762                                   | 5495                   |
|         | 8            | 2                | 53                 | 14                | 1163                        |                             | 254006                                   | 5497                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 12      | 1            | 2                | 81                 | 14                | 1000                        |                             | 47301                                    | 5497                   |
|         | 2            | 1                | 59                 | 11                |                             |                             | 221676                                   | 5496                   |
|         | 3            | 3                | 57                 | 16                | 1405                        | 1563                        | 531838                                   | 5498                   |
|         | 4            | 1                | 54                 | 15                |                             |                             | 346095                                   | 5497                   |
|         | 5            | 1                | 51                 | 7                 |                             |                             | 87918                                    | 5494                   |
|         | 6            | 2                | 98                 | 13                | 1554                        |                             | 40872                                    | 5496                   |
|         | 7            | 2                | 58                 | 9                 | 1471                        |                             | 410576                                   | 5495                   |
|         | 8            | 2                | 98                 | 7                 | 1749                        |                             | 136269                                   | 5494                   |
|         | 9            | 3                | 54                 | 5                 | 1411                        | 1056                        | 101703                                   | 5493                   |
|         | 10           | 3                | 91                 | 7                 | 1775                        | 1307                        | 162685                                   | 5494                   |
|         | 11           | 2                | 64                 | 19                | 1043                        |                             | 474577                                   | 5499                   |
|         | 12           | 2                | 95                 | 20                | 1671                        |                             | 284199                                   | 5499                   |
|         | 13           | 1                | 68                 | 16                |                             |                             | 144395                                   | 5498                   |
|         | 14           | 1                | 74                 | 7                 |                             |                             | 441457                                   | 5494                   |
|         | 15           | 3                | 86                 | 17                | 1793                        | 1843                        | 495762                                   | 5498                   |
|         | 16           | 3                | 76                 | 6                 | 1445                        | 1374                        | 517613                                   | 5494                   |
|         | 17           | 3                | 75                 | 12                | 1186                        | 1610                        | 180262                                   | 5496                   |
|         | 18           | 3                | 89                 | 15                | 1806                        | 1361                        | 316242                                   | 5497                   |
|         | 19           | 3                | 84                 | 20                | 1517                        | 1949                        | 444265                                   | 5499                   |
|         | 20           | 1                | 55                 | 12                |                             |                             | 244574                                   | 5496                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 13      | 1            | 1                | 97                 | 11                |                             |                             | 499                                      | 5496                   |
|         | 2            | 3                | 66                 | 7                 | 1908                        | 1086                        | 321822                                   | 5494                   |
|         | 3            | 2                | 80                 | 8                 | 1866                        |                             | 105619                                   | 5494                   |
|         | 4            | 1                | 93                 | 12                |                             |                             | 249390                                   | 5496                   |
|         | 5            | 1                | 84                 | 20                |                             |                             | 311308                                   | 5499                   |
|         | 6            | 1                | 83                 | 14                |                             |                             | 546402                                   | 5497                   |
|         | 7            | 1                | 65                 | 19                |                             |                             | 535195                                   | 5499                   |
|         | 8            | 1                | 71                 | 11                |                             |                             | 678066                                   | 5496                   |
|         | 9            | 1                | 95                 | 9                 |                             |                             | 95467                                    | 5495                   |
|         | 10           | 3                | 62                 | 19                | 1787                        | 1587                        | 171066                                   | 5499                   |
|         | 11           | 3                | 96                 | 8                 | 1987                        | 1713                        | 472368                                   | 5494                   |
|         | 12           | 3                | 100                | 10                | 1472                        | 1232                        | 682631                                   | 5495                   |
|         | 13           | 2                | 68                 | 14                | 1288                        |                             | 131608                                   | 5497                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 14      | 1            | 1                | 78                 | 19                |                             |                             | 81                                       | 5499                   |
|         | 2            | 1                | 71                 | 10                |                             |                             | 829078                                   | 5495                   |
|         | 3            | 1                | 58                 | 20                |                             |                             | 1000917                                  | 5499                   |
|         | 4            | 2                | 69                 | 14                | 1192                        |                             | 1164886                                  | 5497                   |
|         | 5            | 2                | 70                 | 5                 | 1582                        |                             | 723311                                   | 5493                   |
|         | 6            | 2                | 90                 | 13                | 1846                        |                             | 761840                                   | 5496                   |
|         | 7            | 2                | 59                 | 18                | 1496                        |                             | 1132478                                  | 5498                   |
|         | 8            | 3                | 64                 | 14                | 1775                        | 1531                        | 1012143                                  | 5497                   |
|         | 9            | 3                | 50                 | 5                 | 1181                        | 1386                        | 180574                                   | 5493                   |
|         | 10           | 1                | 68                 | 10                |                             |                             | 470112                                   | 5495                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 15      | 1            | 2                | 96                 | 7                 | 1000                        |                             | 911879                                   | 5494                   |
|         | 2            | 1                | 70                 | 12                |                             |                             | 545087                                   | 5496                   |
|         | 3            | 3                | 75                 | 18                | 1985                        | 1608                        | 802780                                   | 5498                   |
|         | 4            | 1                | 89                 | 20                |                             |                             | 889721                                   | 5499                   |
|         | 5            | 1                | 59                 | 13                |                             |                             | 912431                                   | 5496                   |
|         | 6            | 2                | 71                 | 16                | 1573                        |                             | 548023                                   | 5498                   |
|         | 7            | 2                | 86                 | 7                 | 1124                        |                             | 1241708                                  | 5494                   |
|         | 8            | 3                | 60                 | 16                | 1579                        | 1959                        | 159319                                   | 5498                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 16      | 1            | 2                | 57                 | 17                | 1000                        |                             | 730863                                   | 5498                   |
|         | 2            | 2                | 99                 | 15                | 1797                        |                             | 79971                                    | 5497                   |
|         | 3            | 2                | 76                 | 11                | 1291                        |                             | 512824                                   | 5496                   |
|         | 4            | 3                | 94                 | 14                | 1265                        | 1984                        | 306345                                   | 5497                   |
|         | 5            | 1                | 89                 | 5                 |                             |                             | 840583                                   | 5493                   |
|         | 6            | 2                | 77                 | 16                | 1579                        |                             | 533943                                   | 5498                   |
|         | 7            | 1                | 52                 | 17                |                             |                             | 70313                                    | 5498                   |
|         | 8            | 2                | 81                 | 15                | 1269                        |                             | 62995                                    | 5497                   |
|         | 9            | 3                | 52                 | 6                 | 1006                        | 1661                        | 804683                                   | 5494                   |
|         | 10           | 1                | 77                 | 16                |                             |                             | 637185                                   | 5498                   |
|         | 11           | 3                | 70                 | 15                | 1140                        | 1290                        | 798926                                   | 5497                   |
|         | 12           | 2                | 67                 | 19                | 1947                        |                             | 711082                                   | 5499                   |
|         | 13           | 2                | 64                 | 8                 | 1779                        |                             | 870875                                   | 5494                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 17      | 1            | 2                | 91                 | 10                | 1000                        |                             | 420179                                   | 5495                   |
|         | 2            | 1                | 71                 | 19                |                             |                             | 348389                                   | 5499                   |
|         | 3            | 3                | 62                 | 15                | 1214                        | 1026                        | 523473                                   | 5497                   |
|         | 4            | 1                | 96                 | 11                |                             |                             | 203904                                   | 5496                   |
|         | 5            | 1                | 82                 | 16                |                             |                             | 482486                                   | 5498                   |
|         | 6            | 1                | 91                 | 17                |                             |                             | 98827                                    | 5498                   |
|         | 7            | 1                | 77                 | 19                |                             |                             | 592421                                   | 5499                   |
|         | 8            | 2                | 56                 | 7                 | 1956                        |                             | 618308                                   | 5494                   |
|         | 9            | 2                | 54                 | 7                 | 1835                        |                             | 586580                                   | 5494                   |
|         | 10           | 1                | 54                 | 17                |                             |                             | 191496                                   | 5498                   |
|         | 11           | 1                | 70                 | 10                |                             |                             | 79357                                    | 5495                   |
|         | 12           | 3                | 58                 | 16                | 1685                        | 1699                        | 397916                                   | 5498                   |
|         | 13           | 2                | 66                 | 15                | 1556                        |                             | 360743                                   | 5497                   |
|         | 14           | 2                | 57                 | 19                | 1585                        |                             | 567207                                   | 5499                   |
|         | 15           | 3                | 58                 | 16                | 1465                        | 1179                        | 486580                                   | 5498                   |
|         | 16           | 2                | 58                 | 17                | 1020                        |                             | 631941                                   | 5498                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 18      | 1            | 2                | 67                 | 13                | 1000                        |                             | 398851                                   | 5496                   |
|         | 2            | 3                | 95                 | 20                | 1045                        | 1868                        | 378141                                   | 5499                   |
|         | 3            | 3                | 50                 | 9                 | 1339                        | 1170                        | 357392                                   | 5495                   |
|         | 4            | 1                | 91                 | 10                |                             |                             | 541844                                   | 5495                   |
|         | 5            | 1                | 72                 | 12                |                             |                             | 464211                                   | 5496                   |
|         | 6            | 3                | 56                 | 19                | 1016                        | 1324                        | 214194                                   | 5499                   |
|         | 7            | 1                | 66                 | 9                 |                             |                             | 17782                                    | 5495                   |
|         | 8            | 2                | 68                 | 7                 | 1097                        |                             | 346593                                   | 5494                   |
|         | 9            | 3                | 58                 | 18                | 1596                        | 1860                        | 469747                                   | 5498                   |
|         | 10           | 2                | 57                 | 19                | 1511                        |                             | 159358                                   | 5499                   |
|         | 11           | 1                | 68                 | 5                 |                             |                             | 243967                                   | 5493                   |
|         | 12           | 3                | 67                 | 9                 | 1468                        | 1458                        | 524176                                   | 5495                   |
|         | 13           | 2                | 91                 | 13                | 1217                        |                             | 327487                                   | 5496                   |
|         | 14           | 3                | 85                 | 8                 | 1483                        | 1370                        | 234369                                   | 5494                   |
|         | 15           | 3                | 67                 | 10                | 1529                        | 1110                        | 94531                                    | 5495                   |
|         | 16           | 3                | 67                 | 11                | 1994                        | 1852                        | 326111                                   | 5496                   |
|         | 17           | 3                | 87                 | 8                 | 1038                        | 1656                        | 284052                                   | 5494                   |
|         | 18           | 1                | 73                 | 20                |                             |                             | 493727                                   | 5499                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 19      | 1            | 3                | 92                 | 15                | 1154                        | 1949                        | 391303                                   | 5497                   |
|         | 2            | 3                | 90                 | 14                | 1923                        | 1690                        | 201670                                   | 5497                   |
|         | 3            | 3                | 58                 | 15                | 1495                        | 1939                        | 549444                                   | 5497                   |
|         | 4            | 1                | 88                 | 6                 |                             |                             | 332660                                   | 5494                   |
|         | 5            | 2                | 67                 | 5                 | 1641                        |                             | 599516                                   | 5493                   |
|         | 6            | 2                | 60                 | 12                | 1351                        |                             | 14387                                    | 5496                   |
|         | 7            | 2                | 82                 | 19                | 1490                        |                             | 385479                                   | 5499                   |
|         | 8            | 1                | 66                 | 20                |                             |                             | 524897                                   | 5499                   |
|         | 9            | 3                | 98                 | 14                | 1683                        | 1715                        | 515942                                   | 5497                   |
|         | 10           | 1                | 98                 | 13                |                             |                             | 113493                                   | 5496                   |
|         | 11           | 1                | 59                 | 20                |                             |                             | 60018                                    | 5499                   |
|         | 12           | 2                | 100                | 7                 | 1111                        |                             | 47164                                    | 5494                   |
|         | 13           | 3                | 89                 | 19                | 1613                        | 1969                        | 328553                                   | 5499                   |
|         | 14           | 1                | 59                 | 17                |                             |                             | 518980                                   | 5498                   |
|         | 15           | 2                | 51                 | 8                 | 1895                        |                             | 551676                                   | 5494                   |
|         | 16           | 2                | 67                 | 16                | 1207                        |                             | 368282                                   | 5498                   |
|         | 17           | 1                | 80                 | 14                |                             |                             | 502662                                   | 5497                   |
|         | 18           | 2                | 60                 | 17                | 1503                        |                             | 234909                                   | 5498                   |
|         | 19           | 1                | 89                 | 12                |                             |                             | 92415                                    | 5496                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 20      | 1            | 3                | 85                 | 14                | 1406                        | 1478                        | 1246808                                  | 5497                   |
|         | 2            | 3                | 92                 | 11                | 1439                        | 1139                        | 1314064                                  | 5496                   |
|         | 3            | 1                | 60                 | 20                |                             |                             | 1257031                                  | 5499                   |
|         | 4            | 2                | 98                 | 9                 | 1970                        |                             | 190078                                   | 5495                   |
|         | 5            | 2                | 100                | 16                | 1399                        |                             | 1190594                                  | 5498                   |
|         | 6            | 1                | 82                 | 13                |                             |                             | 607665                                   | 5496                   |
|         | 7            | 2                | 78                 | 6                 | 1027                        |                             | 575659                                   | 5494                   |
|         | 8            | 2                | 51                 | 16                | 1516                        |                             | 14264                                    | 5498                   |
|         | 9            | 3                | 87                 | 15                | 1600                        | 1308                        | 378946                                   | 5497                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 21      | 1            | 3                | 55                 | 19                | 1251                        | 1023                        | 339102                                   | 5501                   |
|         | 2            | 3                | 94                 | 20                | 1642                        | 1458                        | 443778                                   | 5501                   |
|         | 3            | 2                | 90                 | 15                | 1392                        |                             | 936899                                   | 5503                   |
|         | 4            | 3                | 64                 | 13                | 1705                        | 1547                        | 129856                                   | 5504                   |
|         | 5            | 3                | 97                 | 12                | 1174                        | 1829                        | 529593                                   | 5504                   |
|         | 6            | 3                | 99                 | 17                | 1885                        | 1962                        | 56954                                    | 5502                   |
|         | 7            | 3                | 96                 | 11                | 1747                        | 1276                        | 340713                                   | 5504                   |
|         | 8            | 3                | 90                 | 7                 | 1693                        | 1687                        | 954979                                   | 5506                   |
|         | 9            | 1                | 68                 | 7                 |                             |                             | 631673                                   | 5506                   |
|         | 10           | 3                | 74                 | 7                 | 1944                        | 1460                        | 743676                                   | 5506                   |
|         | 11           | 3                | 82                 | 20                | 1697                        | 1701                        | 659084                                   | 5501                   |
|         | 12           | 1                | 67                 | 16                |                             |                             | 548548                                   | 5502                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 22      | 1            | 3                | 67                 | 18                | 1745                        | 1114                        | 725998                                   | 5502                   |
|         | 2            | 3                | 54                 | 19                | 1313                        | 1133                        | 439044                                   | 5501                   |
|         | 3            | 3                | 67                 | 11                | 1597                        | 1848                        | 380423                                   | 5504                   |
|         | 4            | 3                | 81                 | 16                | 1935                        | 1841                        | 276203                                   | 5502                   |
|         | 5            | 3                | 81                 | 14                | 1854                        | 1119                        | 758409                                   | 5503                   |
|         | 6            | 2                | 52                 | 19                | 1631                        |                             | 805691                                   | 5501                   |
|         | 7            | 3                | 91                 | 8                 | 1854                        | 1032                        | 794809                                   | 5506                   |
|         | 8            | 3                | 65                 | 16                | 1558                        | 1337                        | 316670                                   | 5502                   |
|         | 9            | 3                | 76                 | 18                | 1003                        | 1723                        | 822588                                   | 5502                   |
|         | 10           | 1                | 93                 | 20                |                             |                             | 540638                                   | 5501                   |
|         | 11           | 1                | 66                 | 19                |                             |                             | 494293                                   | 5501                   |
|         | 12           | 3                | 52                 | 10                | 1787                        | 1708                        | 324736                                   | 5505                   |
|         | 13           | 1                | 92                 | 15                |                             |                             | 671168                                   | 5503                   |
|         | 14           | 2                | 56                 | 19                | 1810                        |                             | 629648                                   | 5501                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 23      | 1            | 2                | 70                 | 20                | 1000                        |                             | 440502                                   | 5501                   |
|         | 2            | 2                | 68                 | 8                 | 1072                        |                             | 19600                                    | 5506                   |
|         | 3            | 1                | 51                 | 5                 |                             |                             | 13049                                    | 5507                   |
|         | 4            | 3                | 81                 | 15                | 1044                        | 1895                        | 412085                                   | 5503                   |
|         | 5            | 2                | 50                 | 19                | 1744                        |                             | 503075                                   | 5501                   |
|         | 6            | 1                | 75                 | 9                 |                             |                             | 361265                                   | 5505                   |
|         | 7            | 3                | 52                 | 6                 | 1186                        | 1778                        | 284592                                   | 5506                   |
|         | 8            | 1                | 78                 | 6                 |                             |                             | 182345                                   | 5506                   |
|         | 9            | 2                | 77                 | 9                 | 1480                        |                             | 564237                                   | 5505                   |
|         | 10           | 1                | 57                 | 6                 |                             |                             | 21663                                    | 5506                   |
|         | 11           | 2                | 95                 | 5                 | 1541                        |                             | 135882                                   | 5507                   |
|         | 12           | 2                | 50                 | 18                | 1106                        |                             | 550021                                   | 5502                   |
|         | 13           | 2                | 91                 | 14                | 1208                        |                             | 239983                                   | 5503                   |
|         | 14           | 3                | 72                 | 18                | 1193                        | 1870                        | 551028                                   | 5502                   |
|         | 15           | 1                | 74                 | 5                 |                             |                             | 201689                                   | 5507                   |
|         | 16           | 2                | 75                 | 18                | 1982                        |                             | 207102                                   | 5502                   |
|         | 17           | 3                | 91                 | 12                | 1936                        | 1961                        | 183560                                   | 5504                   |
|         | 18           | 3                | 92                 | 14                | 1181                        | 1478                        | 173416                                   | 5503                   |
|         | 19           | 1                | 89                 | 6                 |                             |                             | 475127                                   | 5506                   |
|         | 20           | 3                | 80                 | 12                | 1633                        | 1273                        | 151614                                   | 5504                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 24      | 1            | 3                | 72                 | 10                | 1860                        | 1552                        | 997971                                   | 5505                   |
|         | 2            | 1                | 90                 | 10                |                             |                             | 239805                                   | 5505                   |
|         | 3            | 3                | 52                 | 5                 | 1135                        | 1159                        | 519059                                   | 5507                   |
|         | 4            | 3                | 90                 | 10                | 1611                        | 1053                        | 1011723                                  | 5505                   |
|         | 5            | 3                | 88                 | 17                | 1180                        | 1468                        | 577712                                   | 5502                   |
|         | 6            | 1                | 72                 | 9                 |                             |                             | 48322                                    | 5505                   |
|         | 7            | 2                | 71                 | 17                | 1097                        |                             | 757448                                   | 5502                   |
|         | 8            | 2                | 57                 | 15                | 1048                        |                             | 353619                                   | 5503                   |
|         | 9            | 2                | 60                 | 17                | 1665                        |                             | 24782                                    | 5502                   |
|         | 10           | 2                | 91                 | 6                 | 1197                        |                             | 773989                                   | 5506                   |
|         | 11           | 1                | 62                 | 19                |                             |                             | 495448                                   | 5501                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 25      | 1            | 1                | 60                 | 10                |                             |                             | 294                                      | 5505                   |
|         | 2            | 3                | 65                 | 5                 | 1563                        | 1740                        | 452908                                   | 5507                   |
|         | 3            | 3                | 77                 | 13                | 1520                        | 1959                        | 237217                                   | 5504                   |
|         | 4            | 3                | 86                 | 10                | 1449                        | 1461                        | 121394                                   | 5505                   |
|         | 5            | 2                | 51                 | 16                | 1190                        |                             | 436733                                   | 5502                   |
|         | 6            | 2                | 94                 | 9                 | 1168                        |                             | 78316                                    | 5505                   |
|         | 7            | 3                | 65                 | 6                 | 1734                        | 1397                        | 147071                                   | 5506                   |
|         | 8            | 3                | 68                 | 9                 | 1709                        | 1129                        | 530734                                   | 5505                   |
|         | 9            | 3                | 74                 | 9                 | 1210                        | 1237                        | 63635                                    | 5505                   |
|         | 10           | 3                | 83                 | 19                | 1261                        | 1997                        | 449314                                   | 5501                   |
|         | 11           | 1                | 70                 | 6                 |                             |                             | 494861                                   | 5506                   |
|         | 12           | 1                | 71                 | 12                |                             |                             | 139234                                   | 5504                   |
|         | 13           | 1                | 67                 | 16                |                             |                             | 238444                                   | 5502                   |
|         | 14           | 1                | 72                 | 12                |                             |                             | 275247                                   | 5504                   |
|         | 15           | 3                | 81                 | 7                 | 1764                        | 1457                        | 527655                                   | 5506                   |
|         | 16           | 2                | 76                 | 15                | 1014                        |                             | 223586                                   | 5503                   |
|         | 17           | 2                | 63                 | 13                | 1937                        |                             | 15827                                    | 5504                   |
|         | 18           | 2                | 57                 | 15                | 1451                        |                             | 463597                                   | 5503                   |
|         | 19           | 3                | 93                 | 10                | 1690                        | 1167                        | 524388                                   | 5505                   |
|         | 20           | 1                | 99                 | 15                |                             |                             | 586711                                   | 5503                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 26      | 1            | 3                | 55                 | 10                | 1498                        | 1331                        | 707845                                   | 5505                   |
|         | 2            | 1                | 91                 | 17                |                             |                             | 420216                                   | 5502                   |
|         | 3            | 2                | 83                 | 14                | 1882                        |                             | 307327                                   | 5503                   |
|         | 4            | 1                | 82                 | 19                |                             |                             | 378323                                   | 5501                   |
|         | 5            | 1                | 80                 | 16                |                             |                             | 938618                                   | 5502                   |
|         | 6            | 2                | 89                 | 12                | 1858                        |                             | 401130                                   | 5504                   |
|         | 7            | 2                | 72                 | 18                | 1702                        |                             | 613010                                   | 5502                   |
|         | 8            | 1                | 77                 | 13                |                             |                             | 992455                                   | 5504                   |
|         | 9            | 3                | 86                 | 19                | 1340                        | 1113                        | 390273                                   | 5501                   |
|         | 10           | 3                | 83                 | 12                | 1553                        | 1989                        | 217203                                   | 5504                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 27      | 1            | 1                | 99                 | 15                |                             |                             | 284                                      | 5503                   |
|         | 2            | 3                | 74                 | 11                | 1911                        | 1987                        | 936473                                   | 5504                   |
|         | 3            | 2                | 97                 | 14                | 1435                        |                             | 319093                                   | 5503                   |
|         | 4            | 2                | 61                 | 10                | 1907                        |                             | 1112104                                  | 5505                   |
|         | 5            | 3                | 83                 | 20                | 1264                        | 1225                        | 131821                                   | 5501                   |
|         | 6            | 1                | 51                 | 6                 |                             |                             | 351420                                   | 5506                   |
|         | 7            | 3                | 69                 | 7                 | 1061                        | 1832                        | 848090                                   | 5506                   |
|         | 8            | 1                | 57                 | 18                |                             |                             | 319615                                   | 5502                   |
|         | 9            | 3                | 64                 | 19                | 1113                        | 1761                        | 460842                                   | 5501                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 28      | 1            | 3                | 58                 | 20                | 1173                        | 1716                        | 321784                                   | 5501                   |
|         | 2            | 2                | 57                 | 17                | 1268                        |                             | 697202                                   | 5502                   |
|         | 3            | 3                | 58                 | 16                | 1945                        | 1605                        | 235039                                   | 5502                   |
|         | 4            | 1                | 58                 | 8                 |                             |                             | 632320                                   | 5506                   |
|         | 5            | 3                | 83                 | 17                | 1785                        | 1602                        | 661553                                   | 5502                   |
|         | 6            | 1                | 80                 | 15                |                             |                             | 607014                                   | 5503                   |
|         | 7            | 1                | 68                 | 11                |                             |                             | 496640                                   | 5504                   |
|         | 8            | 3                | 82                 | 10                | 1431                        | 1738                        | 543181                                   | 5505                   |
|         | 9            | 1                | 52                 | 11                |                             |                             | 230059                                   | 5504                   |
|         | 10           | 3                | 72                 | 12                | 1816                        | 1738                        | 419053                                   | 5504                   |
|         | 11           | 3                | 98                 | 5                 | 1267                        | 1207                        | 8455                                     | 5507                   |
|         | 12           | 1                | 70                 | 12                |                             |                             | 859663                                   | 5504                   |
|         | 13           | 1                | 85                 | 16                |                             |                             | 92738                                    | 5502                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 29      | 1            | 3                | 56                 | 13                | 1758                        | 1162                        | 797476                                   | 5504                   |
|         | 2            | 1                | 80                 | 12                |                             |                             | 425366                                   | 5504                   |
|         | 3            | 2                | 99                 | 14                | 1463                        |                             | 1097251                                  | 5503                   |
|         | 4            | 2                | 95                 | 11                | 1396                        |                             | 139789                                   | 5504                   |
|         | 5            | 2                | 70                 | 5                 | 1352                        |                             | 715600                                   | 5507                   |
|         | 6            | 3                | 82                 | 16                | 1454                        | 1155                        | 1453713                                  | 5502                   |
|         | 7            | 1                | 90                 | 12                |                             |                             | 1039321                                  | 5504                   |
|         | 8            | 3                | 82                 | 13                | 1683                        | 1022                        | 1118154                                  | 5504                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 30      | 1            | 2                | 55                 | 14                | 1000                        |                             | 598840                                   | 5503                   |
|         | 2            | 3                | 67                 | 20                | 1808                        | 1134                        | 523187                                   | 5501                   |
|         | 3            | 3                | 95                 | 20                | 1936                        | 1307                        | 556733                                   | 5501                   |
|         | 4            | 2                | 61                 | 12                | 1000                        |                             | 370177                                   | 5504                   |
|         | 5            | 2                | 83                 | 15                | 1970                        |                             | 46954                                    | 5503                   |
|         | 6            | 2                | 54                 | 15                | 1068                        |                             | 374096                                   | 5503                   |
|         | 7            | 2                | 58                 | 7                 | 1694                        |                             | 458473                                   | 5506                   |
|         | 8            | 1                | 82                 | 19                |                             |                             | 103777                                   | 5501                   |
|         | 9            | 2                | 52                 | 12                | 1464                        |                             | 642061                                   | 5504                   |
|         | 10           | 3                | 66                 | 9                 | 1814                        | 1051                        | 20764                                    | 5505                   |
|         | 11           | 3                | 81                 | 20                | 1244                        | 1244                        | 27585                                    | 5501                   |
|         | 12           | 2                | 71                 | 5                 | 1373                        |                             | 426123                                   | 5507                   |
|         | 13           | 3                | 81                 | 20                | 1678                        | 1896                        | 621619                                   | 5501                   |
|         | 14           | 1                | 58                 | 7                 |                             |                             | 435293                                   | 5506                   |
|         | 15           | 3                | 92                 | 10                | 1962                        | 1602                        | 355013                                   | 5505                   |
|         | 16           | 2                | 93                 | 14                | 1407                        |                             | 515660                                   | 5503                   |
|         | 17           | 1                | 91                 | 8                 |                             |                             | 445259                                   | 5506                   |
|         | 18           | 3                | 69                 | 10                | 1905                        | 1265                        | 473468                                   | 5505                   |

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## Parameter Data sheet for Radar Type 5

### 5510MHz (11n-40)

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 1       | 1            | 3                | 56                 | 13                | 1484                        | 1321                        | 646023                                   | 5510                   |
|         | 2            | 2                | 52                 | 20                | 1456                        |                             | 500181                                   | 5510                   |
|         | 3            | 1                | 94                 | 8                 |                             |                             | 570743                                   | 5510                   |
|         | 4            | 1                | 91                 | 12                |                             |                             | 318158                                   | 5510                   |
|         | 5            | 3                | 54                 | 13                | 1904                        | 1506                        | 156501                                   | 5510                   |
|         | 6            | 2                | 99                 | 8                 | 1959                        |                             | 95198                                    | 5510                   |
|         | 7            | 1                | 64                 | 18                |                             |                             | 209852                                   | 5510                   |
|         | 8            | 1                | 73                 | 20                |                             |                             | 259316                                   | 5510                   |
|         | 9            | 1                | 56                 | 10                |                             |                             | 265789                                   | 5510                   |
|         | 10           | 2                | 75                 | 5                 | 1859                        |                             | 483447                                   | 5510                   |
|         | 11           | 1                | 55                 | 12                |                             |                             | 192129                                   | 5510                   |
|         | 12           | 1                | 81                 | 16                |                             |                             | 444429                                   | 5510                   |
|         | 13           | 1                | 58                 | 18                |                             |                             | 418809                                   | 5510                   |
|         | 14           | 1                | 72                 | 6                 |                             |                             | 83655                                    | 5510                   |
|         | 15           | 2                | 94                 | 19                | 1117                        |                             | 365919                                   | 5510                   |
|         | 16           | 2                | 72                 | 19                | 1321                        |                             | 127051                                   | 5510                   |
|         | 17           | 2                | 93                 | 12                | 1798                        |                             | 54264                                    | 5510                   |
|         | 18           | 3                | 67                 | 15                | 1178                        | 1549                        | 487757                                   | 5510                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 2       | 1            | 1                | 53                 | 6                 |                             |                             | 224                                      | 5510                   |
|         | 2            | 3                | 94                 | 10                | 1448                        | 1781                        | 472625                                   | 5510                   |
|         | 3            | 1                | 77                 | 11                |                             |                             | 265299                                   | 5510                   |
|         | 4            | 3                | 96                 | 11                | 1509                        | 1930                        | 447910                                   | 5510                   |
|         | 5            | 1                | 86                 | 17                |                             |                             | 725704                                   | 5510                   |
|         | 6            | 3                | 56                 | 16                | 1313                        | 1657                        | 257782                                   | 5510                   |
|         | 7            | 3                | 74                 | 19                | 1254                        | 1723                        | 141758                                   | 5510                   |
|         | 8            | 3                | 83                 | 14                | 1847                        | 1581                        | 484257                                   | 5510                   |
|         | 9            | 3                | 89                 | 18                | 1351                        | 1960                        | 638721                                   | 5510                   |
|         | 10           | 2                | 70                 | 11                | 1715                        |                             | 713039                                   | 5510                   |
|         | 11           | 2                | 56                 | 20                | 1606                        |                             | 441011                                   | 5510                   |
|         | 12           | 2                | 52                 | 17                | 1066                        |                             | 239876                                   | 5510                   |
|         | 13           | 1                | 56                 | 14                |                             |                             | 503484                                   | 5510                   |
|         | 14           | 3                | 90                 | 5                 | 1412                        | 1039                        | 131105                                   | 5510                   |
|         | 15           | 3                | 52                 | 14                | 1626                        | 1268                        | 205821                                   | 5510                   |
|         | 16           | 2                | 75                 | 15                | 1618                        |                             | 206463                                   | 5510                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 3       | 1            | 3                | 70                 | 19                | 1578                        | 1129                        | 237486                                   | 5510                   |
|         | 2            | 1                | 50                 | 19                |                             |                             | 666775                                   | 5510                   |
|         | 3            | 3                | 69                 | 13                | 1543                        | 1668                        | 700443                                   | 5510                   |
|         | 4            | 1                | 84                 | 6                 |                             |                             | 261964                                   | 5510                   |
|         | 5            | 3                | 54                 | 9                 | 1282                        | 1124                        | 750084                                   | 5510                   |
|         | 6            | 2                | 51                 | 18                | 1048                        |                             | 731459                                   | 5510                   |
|         | 7            | 3                | 78                 | 11                | 1233                        | 1090                        | 251403                                   | 5510                   |
|         | 8            | 1                | 96                 | 20                |                             |                             | 454066                                   | 5510                   |
|         | 9            | 1                | 83                 | 15                |                             |                             | 518283                                   | 5510                   |
|         | 10           | 3                | 51                 | 7                 | 1633                        | 1541                        | 430584                                   | 5510                   |
|         | 11           | 1                | 53                 | 16                |                             |                             | 60545                                    | 5510                   |
|         | 12           | 2                | 58                 | 17                | 1042                        |                             | 447625                                   | 5510                   |
|         | 13           | 2                | 58                 | 18                | 1158                        |                             | 56736                                    | 5510                   |
|         | 14           | 3                | 74                 | 14                | 1823                        | 1295                        | 324694                                   | 5510                   |
|         | 15           | 1                | 98                 | 6                 |                             |                             | 222452                                   | 5510                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 4       | 1            | 2                | 61                 | 19                | 1000                        |                             | 93755                                    | 5510                   |
|         | 2            | 3                | 70                 | 5                 | 1994                        | 1027                        | 16000                                    | 5510                   |
|         | 3            | 1                | 70                 | 16                |                             |                             | 558054                                   | 5510                   |
|         | 4            | 1                | 70                 | 11                |                             |                             | 85038                                    | 5510                   |
|         | 5            | 3                | 55                 | 5                 | 1057                        | 2000                        | 30339                                    | 5510                   |
|         | 6            | 1                | 59                 | 16                |                             |                             | 463509                                   | 5510                   |
|         | 7            | 3                | 85                 | 6                 | 1739                        | 1832                        | 601545                                   | 5510                   |
|         | 8            | 3                | 64                 | 20                | 1375                        | 1213                        | 194023                                   | 5510                   |
|         | 9            | 3                | 66                 | 18                | 1466                        | 1946                        | 478849                                   | 5510                   |
|         | 10           | 2                | 81                 | 19                | 1764                        |                             | 613525                                   | 5510                   |
|         | 11           | 1                | 56                 | 20                |                             |                             | 578235                                   | 5510                   |
|         | 12           | 3                | 77                 | 8                 | 1226                        | 1061                        | 336557                                   | 5510                   |
|         | 13           | 2                | 80                 | 10                | 1952                        |                             | 61456                                    | 5510                   |
|         | 14           | 2                | 93                 | 17                | 1432                        |                             | 170753                                   | 5510                   |
|         | 15           | 1                | 83                 | 8                 |                             |                             | 651221                                   | 5510                   |
|         | 16           | 1                | 62                 | 11                |                             |                             | 457935                                   | 5510                   |
|         | 17           | 3                | 83                 | 9                 | 1948                        | 1077                        | 32240                                    | 5510                   |
|         | 18           | 1                | 99                 | 7                 |                             |                             | 342082                                   | 5510                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 5       | 1            | 2                | 98                 | 7                 | 1000                        |                             | 546539                                   | 5510                   |
|         | 2            | 1                | 87                 | 10                |                             |                             | 1342480                                  | 5510                   |
|         | 3            | 3                | 56                 | 17                | 1583                        | 1987                        | 1463814                                  | 5510                   |
|         | 4            | 3                | 95                 | 5                 | 1588                        | 1332                        | 609253                                   | 5510                   |
|         | 5            | 2                | 88                 | 7                 | 1229                        |                             | 130154                                   | 5510                   |
|         | 6            | 1                | 64                 | 17                |                             |                             | 1444170                                  | 5510                   |
|         | 7            | 2                | 93                 | 7                 | 1904                        |                             | 882935                                   | 5510                   |
|         | 8            | 1                | 72                 | 16                |                             |                             | 141832                                   | 5510                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 6       | 1            | 2                | 55                 | 15                | 1000                        |                             | 215380                                   | 5510                   |
|         | 2            | 1                | 74                 | 16                |                             |                             | 204067                                   | 5510                   |
|         | 3            | 1                | 65                 | 6                 |                             |                             | 111004                                   | 5510                   |
|         | 4            | 3                | 80                 | 8                 | 1660                        | 1436                        | 408552                                   | 5510                   |
|         | 5            | 1                | 84                 | 15                |                             |                             | 508887                                   | 5510                   |
|         | 6            | 1                | 62                 | 18                |                             |                             | 768363                                   | 5510                   |
|         | 7            | 2                | 84                 | 10                | 1514                        |                             | 637129                                   | 5510                   |
|         | 8            | 2                | 66                 | 16                | 1387                        |                             | 20544                                    | 5510                   |
|         | 9            | 1                | 98                 | 7                 |                             |                             | 149755                                   | 5510                   |
|         | 10           | 1                | 64                 | 10                |                             |                             | 17411                                    | 5510                   |
|         | 11           | 1                | 75                 | 12                |                             |                             | 343020                                   | 5510                   |
|         | 12           | 2                | 95                 | 6                 | 1960                        |                             | 573669                                   | 5510                   |
|         | 13           | 2                | 90                 | 7                 | 1043                        |                             | 359631                                   | 5510                   |
|         | 14           | 1                | 77                 | 12                |                             |                             | 336366                                   | 5510                   |
|         | 15           | 3                | 94                 | 12                | 1604                        | 1829                        | 73975                                    | 5510                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 7       | 1            | 1                | 63                 | 15                |                             |                             | 693                                      | 5510                   |
|         | 2            | 2                | 92                 | 16                | 1443                        |                             | 416173                                   | 5510                   |
|         | 3            | 1                | 62                 | 13                |                             |                             | 73925                                    | 5510                   |
|         | 4            | 2                | 86                 | 15                | 1122                        |                             | 1064144                                  | 5510                   |
|         | 5            | 3                | 56                 | 12                | 1604                        | 1217                        | 491259                                   | 5510                   |
|         | 6            | 3                | 52                 | 8                 | 1579                        | 1469                        | 222275                                   | 5510                   |
|         | 7            | 1                | 71                 | 15                |                             |                             | 139270                                   | 5510                   |
|         | 8            | 3                | 95                 | 15                | 1578                        | 1541                        | 270426                                   | 5510                   |
|         | 9            | 3                | 99                 | 8                 | 1824                        | 1917                        | 419095                                   | 5510                   |
|         | 10           | 1                | 59                 | 17                |                             |                             | 941580                                   | 5510                   |
|         | 11           | 1                | 93                 | 11                |                             |                             | 514357                                   | 5510                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 8       | 1            | 2                | 61                 | 8                 | 1000                        |                             | 1080713                                  | 5510                   |
|         | 2            | 1                | 55                 | 18                |                             |                             | 88817                                    | 5510                   |
|         | 3            | 2                | 71                 | 7                 | 1554                        |                             | 901462                                   | 5510                   |
|         | 4            | 1                | 78                 | 9                 |                             |                             | 771692                                   | 5510                   |
|         | 5            | 1                | 79                 | 20                |                             |                             | 1250556                                  | 5510                   |
|         | 6            | 3                | 60                 | 5                 | 1296                        | 1463                        | 490373                                   | 5510                   |
|         | 7            | 3                | 72                 | 16                | 1790                        | 1442                        | 469541                                   | 5510                   |
|         | 8            | 2                | 64                 | 12                | 1757                        |                             | 613893                                   | 5510                   |
|         | 9            | 2                | 62                 | 6                 | 1113                        |                             | 392619                                   | 5510                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 9       | 1            | 1                | 98                 | 18                |                             |                             | 39                                       | 5510                   |
|         | 2            | 2                | 92                 | 11                | 1270                        |                             | 1218548                                  | 5510                   |
|         | 3            | 3                | 72                 | 16                | 1261                        | 1975                        | 764761                                   | 5510                   |
|         | 4            | 3                | 70                 | 6                 | 1593                        | 1090                        | 740446                                   | 5510                   |
|         | 5            | 1                | 51                 | 6                 |                             |                             | 250783                                   | 5510                   |
|         | 6            | 2                | 51                 | 15                | 1537                        |                             | 54017                                    | 5510                   |
|         | 7            | 1                | 75                 | 20                |                             |                             | 1336179                                  | 5510                   |
|         | 8            | 1                | 83                 | 6                 |                             |                             | 1250411                                  | 5510                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 10      | 1            | 3                | 77                 | 14                | 1959                        | 1439                        | 496544                                   | 5510                   |
|         | 2            | 3                | 98                 | 10                | 1613                        | 1736                        | 495566                                   | 5510                   |
|         | 3            | 3                | 80                 | 10                | 1826                        | 1247                        | 790360                                   | 5510                   |
|         | 4            | 2                | 55                 | 12                | 1011                        |                             | 1293490                                  | 5510                   |
|         | 5            | 3                | 100                | 12                | 1520                        | 1906                        | 176516                                   | 5510                   |
|         | 6            | 2                | 52                 | 12                | 1576                        |                             | 374318                                   | 5510                   |
|         | 7            | 2                | 93                 | 14                | 1108                        |                             | 424987                                   | 5510                   |
|         | 8            | 1                | 53                 | 8                 |                             |                             | 735226                                   | 5510                   |
|         | 9            | 2                | 80                 | 8                 | 1799                        |                             | 472068                                   | 5510                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 11      | 1            | 2                | 64                 | 11                | 1000                        |                             | 605321                                   | 5496                   |
|         | 2            | 2                | 62                 | 9                 | 1261                        |                             | 419349                                   | 5495                   |
|         | 3            | 1                | 80                 | 5                 |                             |                             | 202852                                   | 5494                   |
|         | 4            | 3                | 88                 | 7                 | 1009                        | 1219                        | 479385                                   | 5495                   |
|         | 5            | 2                | 94                 | 5                 | 1657                        |                             | 327076                                   | 5494                   |
|         | 6            | 3                | 92                 | 10                | 1436                        | 1728                        | 674472                                   | 5496                   |
|         | 7            | 1                | 64                 | 15                |                             |                             | 430023                                   | 5498                   |
|         | 8            | 2                | 76                 | 10                | 1019                        |                             | 478710                                   | 5496                   |
|         | 9            | 1                | 94                 | 15                |                             |                             | 366723                                   | 5498                   |
|         | 10           | 3                | 73                 | 11                | 1211                        | 1909                        | 24565                                    | 5496                   |
|         | 11           | 1                | 77                 | 14                |                             |                             | 383120                                   | 5497                   |
|         | 12           | 2                | 74                 | 11                | 1403                        |                             | 566422                                   | 5496                   |
|         | 13           | 3                | 58                 | 11                | 1256                        | 1122                        | 70248                                    | 5496                   |
|         | 14           | 2                | 91                 | 11                | 1006                        |                             | 267925                                   | 5496                   |
|         | 15           | 1                | 92                 | 13                |                             |                             | 328211                                   | 5497                   |
|         | 16           | 2                | 69                 | 6                 | 1721                        |                             | 569500                                   | 5494                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 12      | 1            | 2                | 56                 | 11                | 1000                        |                             | 742949                                   | 5496                   |
|         | 2            | 3                | 81                 | 15                | 1420                        | 1784                        | 284187                                   | 5498                   |
|         | 3            | 2                | 94                 | 12                | 1150                        |                             | 285988                                   | 5497                   |
|         | 4            | 3                | 51                 | 5                 | 1278                        | 1903                        | 364352                                   | 5494                   |
|         | 5            | 3                | 82                 | 17                | 1897                        | 1731                        | 348544                                   | 5499                   |
|         | 6            | 3                | 89                 | 18                | 1049                        | 1759                        | 575999                                   | 5499                   |
|         | 7            | 1                | 53                 | 12                |                             |                             | 817527                                   | 5497                   |
|         | 8            | 2                | 63                 | 17                | 1606                        |                             | 952873                                   | 5499                   |
|         | 9            | 3                | 87                 | 14                | 1401                        | 1656                        | 374829                                   | 5497                   |
|         | 10           | 2                | 51                 | 20                | 1430                        |                             | 596962                                   | 5500                   |
|         | 11           | 1                | 73                 | 7                 |                             |                             | 148698                                   | 5495                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 13      | 1            | 3                | 57                 | 8                 | 1298                        | 1590                        | 1157084                                  | 5495                   |
|         | 2            | 3                | 88                 | 8                 | 1104                        | 1890                        | 1018967                                  | 5495                   |
|         | 3            | 1                | 79                 | 11                |                             |                             | 811132                                   | 5496                   |
|         | 4            | 3                | 64                 | 11                | 1633                        | 1245                        | 437344                                   | 5496                   |
|         | 5            | 3                | 57                 | 6                 | 1739                        | 1735                        | 1158590                                  | 5494                   |
|         | 6            | 2                | 96                 | 17                | 1463                        |                             | 1224313                                  | 5499                   |
|         | 7            | 2                | 84                 | 20                | 1587                        |                             | 1040926                                  | 5500                   |
|         | 8            | 3                | 96                 | 12                | 1328                        | 1982                        | 1272846                                  | 5497                   |
|         | 9            | 1                | 75                 | 17                |                             |                             | 685734                                   | 5499                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 14      | 1            | 1                | 75                 | 12                |                             |                             | 706                                      | 5497                   |
|         | 2            | 2                | 61                 | 15                | 1072                        |                             | 178693                                   | 5498                   |
|         | 3            | 3                | 73                 | 20                | 1598                        | 1113                        | 598174                                   | 5500                   |
|         | 4            | 1                | 95                 | 7                 |                             |                             | 103908                                   | 5495                   |
|         | 5            | 1                | 52                 | 20                |                             |                             | 559348                                   | 5500                   |
|         | 6            | 1                | 57                 | 6                 |                             |                             | 161921                                   | 5494                   |
|         | 7            | 1                | 50                 | 7                 |                             |                             | 343418                                   | 5495                   |
|         | 8            | 1                | 96                 | 15                |                             |                             | 571580                                   | 5498                   |
|         | 9            | 1                | 56                 | 5                 |                             |                             | 692411                                   | 5494                   |
|         | 10           | 2                | 73                 | 15                | 1144                        |                             | 630726                                   | 5498                   |
|         | 11           | 3                | 74                 | 8                 | 1885                        | 1792                        | 70339                                    | 5495                   |
|         | 12           | 2                | 87                 | 13                | 1967                        |                             | 491202                                   | 5497                   |
|         | 13           | 3                | 61                 | 11                | 1810                        | 1345                        | 245913                                   | 5496                   |
|         | 14           | 3                | 69                 | 9                 | 1236                        | 1993                        | 439653                                   | 5495                   |
|         | 15           | 3                | 91                 | 14                | 1361                        | 1115                        | 398454                                   | 5497                   |
|         | 16           | 3                | 52                 | 8                 | 1177                        | 1740                        | 540712                                   | 5495                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 15      | 1            | 2                | 66                 | 13                | 1000                        |                             | 729282                                   | 5497                   |
|         | 2            | 2                | 94                 | 18                | 1707                        |                             | 775139                                   | 5499                   |
|         | 3            | 1                | 73                 | 10                |                             |                             | 576364                                   | 5496                   |
|         | 4            | 2                | 66                 | 6                 | 1988                        |                             | 549405                                   | 5494                   |
|         | 5            | 1                | 92                 | 8                 |                             |                             | 563013                                   | 5495                   |
|         | 6            | 2                | 52                 | 20                | 1364                        |                             | 101300                                   | 5500                   |
|         | 7            | 2                | 87                 | 11                | 1187                        |                             | 144648                                   | 5496                   |
|         | 8            | 1                | 85                 | 12                |                             |                             | 624576                                   | 5497                   |
|         | 9            | 1                | 57                 | 6                 |                             |                             | 655414                                   | 5494                   |
|         | 10           | 2                | 66                 | 17                | 1706                        |                             | 379501                                   | 5499                   |
|         | 11           | 2                | 95                 | 12                | 1622                        |                             | 186423                                   | 5497                   |
|         | 12           | 2                | 55                 | 17                | 1381                        |                             | 725653                                   | 5499                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 16      | 1            | 3                | 97                 | 5                 | 1202                        | 1224                        | 187491                                   | 5494                   |
|         | 2            | 1                | 65                 | 5                 |                             |                             | 153934                                   | 5494                   |
|         | 3            | 2                | 80                 | 11                | 1178                        |                             | 411254                                   | 5496                   |
|         | 4            | 1                | 64                 | 8                 |                             |                             | 508594                                   | 5495                   |
|         | 5            | 3                | 67                 | 11                | 1240                        | 1879                        | 334476                                   | 5496                   |
|         | 6            | 3                | 75                 | 5                 | 1803                        | 1931                        | 246611                                   | 5494                   |
|         | 7            | 2                | 62                 | 16                | 1713                        |                             | 818563                                   | 5498                   |
|         | 8            | 2                | 68                 | 17                | 1892                        |                             | 621114                                   | 5499                   |
|         | 9            | 1                | 55                 | 13                |                             |                             | 238930                                   | 5497                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency[MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|-----------------------|
| 17      | 1            | 2                | 59                 | 11                | 1000                        |                             | 112691                                   | 5496                  |
|         | 2            | 3                | 66                 | 17                | 1880                        | 1243                        | 549982                                   | 5499                  |
|         | 3            | 3                | 70                 | 7                 | 1220                        | 1393                        | 396750                                   | 5495                  |
|         | 4            | 2                | 91                 | 18                | 1895                        |                             | 240058                                   | 5499                  |
|         | 5            | 2                | 95                 | 18                | 1068                        |                             | 646329                                   | 5499                  |
|         | 6            | 1                | 57                 | 5                 |                             |                             | 6377                                     | 5494                  |
|         | 7            | 1                | 92                 | 12                |                             |                             | 278154                                   | 5497                  |
|         | 8            | 3                | 62                 | 13                | 1804                        | 1463                        | 275287                                   | 5497                  |
|         | 9            | 1                | 54                 | 18                |                             |                             | 139794                                   | 5499                  |
|         | 10           | 2                | 79                 | 5                 | 1718                        |                             | 254683                                   | 5494                  |
|         | 11           | 3                | 74                 | 8                 | 1484                        | 1418                        | 18377                                    | 5495                  |
|         | 12           | 2                | 92                 | 18                | 1476                        |                             | 64990                                    | 5499                  |
|         | 13           | 3                | 98                 | 15                | 1109                        | 1097                        | 464286                                   | 5498                  |
|         | 14           | 2                | 72                 | 9                 | 1855                        |                             | 282634                                   | 5495                  |
|         | 15           | 2                | 72                 | 12                | 1991                        |                             | 79860                                    | 5497                  |
|         | 16           | 3                | 82                 | 13                | 1431                        | 1764                        | 391013                                   | 5497                  |
|         | 17           | 1                | 72                 | 15                |                             |                             | 183221                                   | 5498                  |
|         | 18           | 2                | 58                 | 11                | 1727                        |                             | 316729                                   | 5496                  |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency[MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|-----------------------|
| 18      | 1            | 2                | 67                 | 19                | 1000                        |                             | 36628                                    | 5499                  |
|         | 2            | 2                | 93                 | 20                | 1377                        |                             | 603168                                   | 5500                  |
|         | 3            | 3                | 66                 | 18                | 1959                        | 1960                        | 583151                                   | 5499                  |
|         | 4            | 3                | 58                 | 16                | 1453                        | 1292                        | 722581                                   | 5498                  |
|         | 5            | 3                | 87                 | 18                | 1579                        | 1256                        | 771224                                   | 5499                  |
|         | 6            | 3                | 71                 | 14                | 1267                        | 1778                        | 744615                                   | 5497                  |
|         | 7            | 1                | 98                 | 16                |                             |                             | 218337                                   | 5498                  |
|         | 8            | 2                | 85                 | 16                | 1154                        |                             | 318232                                   | 5498                  |
|         | 9            | 2                | 99                 | 17                | 1256                        |                             | 537510                                   | 5499                  |
|         | 10           | 2                | 89                 | 14                | 1646                        |                             | 484187                                   | 5497                  |
|         | 11           | 2                | 57                 | 11                | 1439                        |                             | 176970                                   | 5496                  |
|         | 12           | 1                | 88                 | 5                 |                             |                             | 195                                      | 5494                  |
|         | 13           | 3                | 84                 | 7                 | 1785                        | 1887                        | 337766                                   | 5495                  |
|         | 14           | 3                | 62                 | 16                | 1585                        | 1097                        | 270750                                   | 5498                  |
|         | 15           | 2                | 69                 | 16                | 1475                        |                             | 89020                                    | 5498                  |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 19      | 1            | 3                | 64                 | 13                | 1990                        | 1197                        | 86287                                    | 5497                   |
|         | 2            | 2                | 69                 | 9                 | 1055                        |                             | 536458                                   | 5495                   |
|         | 3            | 2                | 59                 | 9                 | 1169                        |                             | 395357                                   | 5495                   |
|         | 4            | 2                | 60                 | 16                | 1451                        |                             | 928928                                   | 5498                   |
|         | 5            | 3                | 59                 | 10                | 1654                        | 1032                        | 76966                                    | 5496                   |
|         | 6            | 3                | 80                 | 17                | 1695                        | 1949                        | 1159336                                  | 5499                   |
|         | 7            | 1                | 84                 | 7                 |                             |                             | 410147                                   | 5495                   |
|         | 8            | 2                | 80                 | 10                | 1722                        |                             | 271347                                   | 5496                   |
|         | 9            | 3                | 58                 | 19                | 1736                        | 1728                        | 1060237                                  | 5499                   |
|         | 10           | 3                | 60                 | 15                | 1989                        | 1701                        | 29055                                    | 5498                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 20      | 1            | 1                | 68                 | 10                |                             |                             | 362                                      | 5496                   |
|         | 2            | 2                | 95                 | 17                | 1227                        |                             | 24631                                    | 5499                   |
|         | 3            | 3                | 57                 | 14                | 1993                        | 1382                        | 107383                                   | 5497                   |
|         | 4            | 3                | 65                 | 8                 | 1733                        | 1165                        | 114400                                   | 5495                   |
|         | 5            | 3                | 72                 | 12                | 1976                        | 1616                        | 62459                                    | 5497                   |
|         | 6            | 3                | 51                 | 16                | 1298                        | 1271                        | 128380                                   | 5498                   |
|         | 7            | 3                | 75                 | 17                | 1131                        | 1854                        | 214092                                   | 5499                   |
|         | 8            | 1                | 82                 | 20                |                             |                             | 524590                                   | 5500                   |
|         | 9            | 1                | 68                 | 15                |                             |                             | 411627                                   | 5498                   |
|         | 10           | 1                | 56                 | 7                 |                             |                             | 304060                                   | 5495                   |
|         | 11           | 3                | 77                 | 17                | 1761                        | 1584                        | 529662                                   | 5499                   |
|         | 12           | 2                | 82                 | 13                | 1161                        |                             | 150868                                   | 5497                   |
|         | 13           | 3                | 60                 | 19                | 1144                        | 1534                        | 569909                                   | 5499                   |
|         | 14           | 2                | 80                 | 10                | 1555                        |                             | 326083                                   | 5496                   |
|         | 15           | 2                | 57                 | 11                | 1520                        |                             | 42623                                    | 5496                   |
|         | 16           | 3                | 71                 | 5                 | 1399                        | 1779                        | 143712                                   | 5494                   |
|         | 17           | 2                | 74                 | 12                | 1911                        |                             | 365622                                   | 5497                   |
|         | 18           | 2                | 81                 | 10                | 1209                        |                             | 513011                                   | 5496                   |
|         | 19           | 2                | 76                 | 8                 | 1397                        |                             | 37220                                    | 5495                   |
|         | 20           | 3                | 81                 | 13                | 1382                        | 1249                        | 277524                                   | 5497                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 21      | 1            | 3                | 62                 | 16                | 1198                        | 1199                        | 104965                                   | 5522                   |
|         | 2            | 3                | 76                 | 16                | 1585                        | 1014                        | 249648                                   | 5522                   |
|         | 3            | 2                | 64                 | 8                 | 1646                        |                             | 616141                                   | 5525                   |
|         | 4            | 1                | 97                 | 9                 |                             |                             | 262256                                   | 5525                   |
|         | 5            | 1                | 92                 | 12                |                             |                             | 146884                                   | 5523                   |
|         | 6            | 2                | 72                 | 11                | 1743                        |                             | 716802                                   | 5524                   |
|         | 7            | 2                | 68                 | 11                | 1611                        |                             | 315556                                   | 5524                   |
|         | 8            | 2                | 61                 | 19                | 1490                        |                             | 131198                                   | 5521                   |
|         | 9            | 2                | 60                 | 6                 | 1219                        |                             | 964635                                   | 5526                   |
|         | 10           | 1                | 97                 | 12                |                             |                             | 596483                                   | 5523                   |
|         | 11           | 3                | 52                 | 18                | 1132                        | 1526                        | 824109                                   | 5521                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 22      | 1            | 2                | 60                 | 16                | 1000                        |                             | 1008216                                  | 5522                   |
|         | 2            | 3                | 75                 | 12                | 1340                        | 1860                        | 470962                                   | 5523                   |
|         | 3            | 3                | 73                 | 19                | 1620                        | 1692                        | 1235330                                  | 5521                   |
|         | 4            | 2                | 92                 | 9                 | 1137                        |                             | 995855                                   | 5525                   |
|         | 5            | 1                | 84                 | 16                |                             |                             | 726921                                   | 5522                   |
|         | 6            | 3                | 83                 | 14                | 1791                        | 1409                        | 632983                                   | 5523                   |
|         | 7            | 1                | 89                 | 9                 |                             |                             | 169877                                   | 5525                   |
|         | 8            | 1                | 93                 | 11                |                             |                             | 62128                                    | 5524                   |
|         | 9            | 3                | 73                 | 11                | 1331                        | 1782                        | 206602                                   | 5524                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 23      | 1            | 1                | 99                 | 11                |                             |                             | 116                                      | 5524                   |
|         | 2            | 2                | 100                | 6                 | 1878                        |                             | 576577                                   | 5526                   |
|         | 3            | 2                | 83                 | 10                | 1680                        |                             | 226191                                   | 5524                   |
|         | 4            | 3                | 76                 | 10                | 1807                        | 1352                        | 678266                                   | 5524                   |
|         | 5            | 1                | 84                 | 8                 |                             |                             | 62748                                    | 5525                   |
|         | 6            | 3                | 82                 | 14                | 1089                        | 1527                        | 351654                                   | 5523                   |
|         | 7            | 1                | 60                 | 19                |                             |                             | 666537                                   | 5521                   |
|         | 8            | 1                | 84                 | 10                |                             |                             | 412245                                   | 5524                   |
|         | 9            | 1                | 54                 | 6                 |                             |                             | 672525                                   | 5526                   |
|         | 10           | 2                | 72                 | 8                 | 1661                        |                             | 502597                                   | 5525                   |
|         | 11           | 3                | 55                 | 13                | 1453                        | 1924                        | 702981                                   | 5523                   |
|         | 12           | 3                | 95                 | 13                | 1279                        | 1591                        | 652833                                   | 5523                   |
|         | 13           | 2                | 87                 | 9                 | 1236                        |                             | 552475                                   | 5525                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 24      | 1            | 2                | 76                 | 6                 | 1000                        |                             | 272328                                   | 5526                   |
|         | 2            | 3                | 79                 | 6                 | 1988                        | 1152                        | 209652                                   | 5526                   |
|         | 3            | 1                | 58                 | 17                |                             |                             | 657923                                   | 5521                   |
|         | 4            | 2                | 62                 | 5                 | 1868                        |                             | 593170                                   | 5526                   |
|         | 5            | 3                | 100                | 11                | 1722                        | 1612                        | 619755                                   | 5524                   |
|         | 6            | 2                | 84                 | 12                | 1742                        |                             | 476606                                   | 5523                   |
|         | 7            | 2                | 66                 | 17                | 1777                        |                             | 649459                                   | 5521                   |
|         | 8            | 2                | 53                 | 10                | 1246                        |                             | 502193                                   | 5524                   |
|         | 9            | 3                | 66                 | 8                 | 1326                        | 1687                        | 390489                                   | 5525                   |
|         | 10           | 2                | 60                 | 7                 | 1907                        |                             | 254551                                   | 5525                   |
|         | 11           | 3                | 62                 | 11                | 1089                        | 1174                        | 3336                                     | 5524                   |
|         | 12           | 3                | 72                 | 18                | 1463                        | 1186                        | 90498                                    | 5521                   |
|         | 13           | 2                | 94                 | 5                 | 1017                        |                             | 464178                                   | 5526                   |
|         | 14           | 3                | 87                 | 7                 | 1391                        | 1076                        | 214057                                   | 5525                   |
|         | 15           | 3                | 60                 | 14                | 1497                        | 1500                        | 427389                                   | 5523                   |
|         | 16           | 1                | 93                 | 8                 |                             |                             | 413349                                   | 5525                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 25      | 1            | 1                | 69                 | 19                |                             |                             | 360                                      | 5521                   |
|         | 2            | 1                | 54                 | 17                |                             |                             | 95131                                    | 5521                   |
|         | 3            | 3                | 82                 | 11                | 1400                        | 1948                        | 565541                                   | 5524                   |
|         | 4            | 3                | 68                 | 12                | 1537                        | 1996                        | 157676                                   | 5523                   |
|         | 5            | 1                | 77                 | 7                 |                             |                             | 24057                                    | 5525                   |
|         | 6            | 2                | 63                 | 14                | 1457                        |                             | 51014                                    | 5523                   |
|         | 7            | 2                | 63                 | 12                | 1544                        |                             | 3060                                     | 5523                   |
|         | 8            | 2                | 89                 | 20                | 1800                        |                             | 325775                                   | 5520                   |
|         | 9            | 2                | 63                 | 18                | 1719                        |                             | 478296                                   | 5521                   |
|         | 10           | 3                | 86                 | 18                | 1017                        | 1455                        | 337116                                   | 5521                   |
|         | 11           | 3                | 69                 | 10                | 1590                        | 1169                        | 510563                                   | 5524                   |
|         | 12           | 2                | 88                 | 10                | 1099                        |                             | 277362                                   | 5524                   |
|         | 13           | 3                | 88                 | 14                | 1149                        | 1108                        | 344312                                   | 5523                   |
|         | 14           | 2                | 91                 | 13                | 1183                        |                             | 353653                                   | 5523                   |
|         | 15           | 1                | 84                 | 20                |                             |                             | 23658                                    | 5520                   |
|         | 16           | 1                | 54                 | 11                |                             |                             | 545856                                   | 5524                   |
|         | 17           | 1                | 93                 | 17                |                             |                             | 202399                                   | 5521                   |
|         | 18           | 2                | 99                 | 12                | 1375                        |                             | 168111                                   | 5523                   |
|         | 19           | 3                | 65                 | 9                 | 1035                        | 1960                        | 384121                                   | 5525                   |
|         | 20           | 1                | 75                 | 11                |                             |                             | 472910                                   | 5524                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 26      | 1            | 2                | 53                 | 17                | 1000                        |                             | 79888                                    | 5521                   |
|         | 2            | 3                | 95                 | 10                | 1270                        | 1413                        | 285649                                   | 5524                   |
|         | 3            | 1                | 81                 | 16                |                             |                             | 542673                                   | 5522                   |
|         | 4            | 3                | 79                 | 17                | 1767                        | 1436                        | 436175                                   | 5521                   |
|         | 5            | 1                | 76                 | 11                |                             |                             | 284557                                   | 5524                   |
|         | 6            | 2                | 78                 | 11                | 1485                        |                             | 201890                                   | 5524                   |
|         | 7            | 3                | 75                 | 17                | 1431                        | 1422                        | 235646                                   | 5521                   |
|         | 8            | 2                | 70                 | 14                | 1089                        |                             | 497553                                   | 5523                   |
|         | 9            | 3                | 74                 | 7                 | 1334                        | 1235                        | 565636                                   | 5525                   |
|         | 10           | 2                | 74                 | 13                | 1748                        |                             | 420261                                   | 5523                   |
|         | 11           | 2                | 64                 | 12                | 1082                        |                             | 362898                                   | 5523                   |
|         | 12           | 2                | 61                 | 17                | 1257                        |                             | 195402                                   | 5521                   |
|         | 13           | 3                | 71                 | 8                 | 1763                        | 1841                        | 17690                                    | 5525                   |
|         | 14           | 1                | 85                 | 9                 |                             |                             | 363273                                   | 5525                   |
|         | 15           | 2                | 87                 | 6                 | 1985                        |                             | 564206                                   | 5526                   |
|         | 16           | 2                | 73                 | 9                 | 1316                        |                             | 168741                                   | 5525                   |
|         | 17           | 3                | 67                 | 10                | 1910                        | 1628                        | 265949                                   | 5524                   |
|         | 18           | 1                | 95                 | 8                 |                             |                             | 641785                                   | 5525                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 27      | 1            | 3                | 90                 | 12                | 1605                        | 1537                        | 248099                                   | 5523                   |
|         | 2            | 2                | 54                 | 17                | 1712                        |                             | 252196                                   | 5521                   |
|         | 3            | 2                | 77                 | 7                 | 1788                        |                             | 23587                                    | 5525                   |
|         | 4            | 1                | 90                 | 18                |                             |                             | 584186                                   | 5521                   |
|         | 5            | 3                | 99                 | 6                 | 1538                        | 1703                        | 418817                                   | 5526                   |
|         | 6            | 2                | 61                 | 16                | 1453                        |                             | 221822                                   | 5522                   |
|         | 7            | 3                | 57                 | 16                | 1156                        | 1150                        | 609775                                   | 5522                   |
|         | 8            | 2                | 64                 | 18                | 1808                        |                             | 741847                                   | 5521                   |
|         | 9            | 2                | 81                 | 13                | 1420                        |                             | 192644                                   | 5523                   |
|         | 10           | 2                | 65                 | 5                 | 1155                        |                             | 64590                                    | 5526                   |
|         | 11           | 1                | 77                 | 5                 |                             |                             | 474689                                   | 5526                   |
|         | 12           | 2                | 67                 | 10                | 1751                        |                             | 262759                                   | 5524                   |
|         | 13           | 2                | 64                 | 14                | 1949                        |                             | 778381                                   | 5523                   |
|         | 14           | 3                | 58                 | 7                 | 1586                        | 1997                        | 97259                                    | 5525                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 28      | 1            | 2                | 62                 | 7                 | 1000                        |                             | 606646                                   | 5525                   |
|         | 2            | 1                | 88                 | 11                |                             |                             | 52072                                    | 5524                   |
|         | 3            | 1                | 50                 | 8                 |                             |                             | 295698                                   | 5525                   |
|         | 4            | 1                | 98                 | 14                |                             |                             | 93975                                    | 5523                   |
|         | 5            | 2                | 90                 | 9                 | 1071                        |                             | 706232                                   | 5525                   |
|         | 6            | 2                | 62                 | 19                | 1168                        |                             | 634929                                   | 5521                   |
|         | 7            | 1                | 100                | 20                |                             |                             | 663935                                   | 5520                   |
|         | 8            | 2                | 84                 | 17                | 1668                        |                             | 440997                                   | 5521                   |
|         | 9            | 1                | 50                 | 12                |                             |                             | 344911                                   | 5523                   |
|         | 10           | 1                | 86                 | 13                |                             |                             | 453693                                   | 5523                   |
|         | 11           | 3                | 62                 | 5                 | 1350                        | 1032                        | 203095                                   | 5526                   |
|         | 12           | 1                | 61                 | 19                |                             |                             | 198900                                   | 5521                   |
|         | 13           | 2                | 63                 | 11                | 1532                        |                             | 84149                                    | 5524                   |

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| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 29      | 1            | 1                | 77                 | 20                |                             |                             | 53                                       | 5520                   |
|         | 2            | 2                | 75                 | 13                | 1042                        |                             | 188103                                   | 5523                   |
|         | 3            | 3                | 56                 | 10                | 1557                        | 1359                        | 540489                                   | 5524                   |
|         | 4            | 1                | 95                 | 19                |                             |                             | 439663                                   | 5521                   |
|         | 5            | 1                | 53                 | 10                |                             |                             | 359144                                   | 5524                   |
|         | 6            | 1                | 73                 | 6                 |                             |                             | 1039906                                  | 5526                   |
|         | 7            | 3                | 54                 | 11                | 1583                        | 1137                        | 811423                                   | 5524                   |
|         | 8            | 2                | 64                 | 15                | 1221                        |                             | 318435                                   | 5522                   |
|         | 9            | 3                | 75                 | 15                | 1102                        | 1560                        | 151106                                   | 5522                   |

| Trial # | Burst Number | Number of Pulses | Pulse Width [usec] | Chirp Width [MHz] | Pulse 1-to-2 Spacing [usec] | Pulse 2-to-3 Spacing [usec] | Starting Location Within Interval [usec] | Center Frequency [MHz] |
|---------|--------------|------------------|--------------------|-------------------|-----------------------------|-----------------------------|------------------------------------------|------------------------|
| 30      | 1            | 1                | 93                 | 19                |                             |                             | 327                                      | 5521                   |
|         | 2            | 3                | 58                 | 9                 | 1514                        | 1120                        | 437688                                   | 5525                   |
|         | 3            | 3                | 89                 | 11                | 1096                        | 1662                        | 462273                                   | 5524                   |
|         | 4            | 2                | 92                 | 7                 | 1273                        |                             | 607354                                   | 5525                   |
|         | 5            | 2                | 61                 | 6                 | 1210                        |                             | 419675                                   | 5526                   |
|         | 6            | 2                | 83                 | 18                | 1854                        |                             | 373443                                   | 5521                   |
|         | 7            | 1                | 56                 | 18                |                             |                             | 160524                                   | 5521                   |
|         | 8            | 1                | 79                 | 14                |                             |                             | 415547                                   | 5523                   |
|         | 9            | 1                | 66                 | 20                |                             |                             | 273586                                   | 5520                   |
|         | 10           | 1                | 52                 | 19                |                             |                             | 282032                                   | 5521                   |
|         | 11           | 2                | 63                 | 17                | 1641                        |                             | 379818                                   | 5521                   |
|         | 12           | 3                | 97                 | 12                | 1042                        | 1828                        | 179722                                   | 5523                   |
|         | 13           | 1                | 80                 | 14                |                             |                             | 277390                                   | 5523                   |
|         | 14           | 3                | 96                 | 5                 | 1640                        | 1619                        | 317944                                   | 5526                   |
|         | 15           | 2                | 99                 | 20                | 1611                        |                             | 526463                                   | 5520                   |
|         | 16           | 2                | 81                 | 15                | 1808                        |                             | 362420                                   | 5522                   |
|         | 17           | 2                | 61                 | 7                 | 1998                        |                             | 297232                                   | 5525                   |
|         | 18           | 3                | 78                 | 14                | 1878                        | 1892                        | 559478                                   | 5523                   |
|         | 19           | 2                | 98                 | 5                 | 1429                        |                             | 383594                                   | 5526                   |

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**Parameter Data sheet for Radar Type 6**

**5500MHz (11n-20)**

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 1       | 4              | 9               | 5509            |
|         | 23             | 66              | 5495            |
|         | 28             | 81              | 5508            |
|         | 40             | 117             | 5497            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 2       | 37             | 108             | 5490            |
|         | 41             | 120             | 5507            |
|         | 52             | 153             | 5500            |
|         | 58             | 171             | 5505            |
|         | 62             | 183             | 5492            |
|         | 67             | 198             | 5491            |
|         | 70             | 207             | 5506            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 3       | 2              | 3               | 5493            |
|         | 24             | 69              | 5491            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 4       | 3              | 6               | 5508            |
|         | 11             | 30              | 5502            |
|         | 43             | 126             | 5501            |
|         | 56             | 165             | 5506            |
|         | 71             | 210             | 5496            |

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| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 5       | 11             | 30              | 5490            |
|         | 23             | 66              | 5493            |
|         | 54             | 159             | 5496            |
|         | 63             | 186             | 5509            |
|         | 82             | 243             | 5491            |
|         | 88             | 261             | 5501            |
|         | 92             | 273             | 5510            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 6       | 16             | 45              | 5492            |
|         | 30             | 87              | 5499            |
|         | 56             | 165             | 5508            |
|         | 95             | 282             | 5506            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 7       | 9              | 24              | 5507            |
|         | 36             | 105             | 5494            |
|         | 85             | 252             | 5498            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 8       | 3              | 6               | 5509            |
|         | 49             | 144             | 5498            |
|         | 67             | 198             | 5510            |
|         | 89             | 264             | 5500            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 9       | 43             | 126             | 5493            |
|         | 78             | 231             | 5490            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 10      | 26             | 75              | 5494            |
|         | 58             | 171             | 5496            |
|         | 86             | 255             | 5495            |
|         | 98             | 291             | 5502            |

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| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 11      | 7              | 18              | 5508            |
|         | 68             | 201             | 5492            |
|         | 73             | 216             | 5504            |
|         | 86             | 255             | 5494            |
|         | 88             | 261             | 5501            |
|         | 96             | 285             | 5491            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 12      | 8              | 21              | 5507            |
|         | 35             | 102             | 5503            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 13      | 14             | 39              | 5497            |
|         | 32             | 93              | 5506            |
|         | 63             | 186             | 5500            |
|         | 71             | 210             | 5508            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 14      | 9              | 24              | 5490            |
|         | 14             | 39              | 5505            |
|         | 25             | 72              | 5506            |
|         | 61             | 180             | 5491            |
|         | 85             | 252             | 5499            |
|         | 90             | 267             | 5509            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 15      | 36             | 105             | 5501            |
|         | 61             | 180             | 5500            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 16      | 41             | 120             | 5498            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 17      | 38             | 111             | 5492            |
|         | 39             | 114             | 5491            |
|         | 54             | 159             | 5509            |

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| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 18      | 59             | 174             | 5504            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 19      | 2              | 3               | 5507            |
|         | 14             | 39              | 5498            |
|         | 35             | 102             | 5492            |
|         | 37             | 108             | 5501            |
|         | 48             | 141             | 5510            |
|         | 64             | 189             | 5495            |
|         | 76             | 225             | 5493            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 20      | 10             | 27              | 5504            |
|         | 11             | 30              | 5505            |
|         | 18             | 51              | 5501            |
|         | 23             | 66              | 5496            |
|         | 28             | 81              | 5493            |
|         | 38             | 111             | 5495            |
|         | 54             | 159             | 5510            |
|         | 63             | 186             | 5490            |
|         | 76             | 225             | 5502            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 21      | 2              | 3               | 5509            |
|         | 16             | 45              | 5510            |
|         | 21             | 60              | 5494            |
|         | 23             | 66              | 5502            |
|         | 85             | 252             | 5491            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 22      | 9              | 24              | 5491            |
|         | 33             | 96              | 5496            |
|         | 37             | 108             | 5494            |
|         | 48             | 141             | 5497            |
|         | 52             | 153             | 5502            |
|         | 53             | 156             | 5495            |
|         | 59             | 174             | 5504            |
|         | 60             | 177             | 5490            |
|         | 75             | 222             | 5508            |
|         | 82             | 243             | 5507            |

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| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 23      | 3              | 6               | 5505            |
|         | 24             | 69              | 5506            |
|         | 29             | 84              | 5510            |
|         | 37             | 108             | 5499            |
|         | 52             | 153             | 5490            |
|         | 55             | 162             | 5508            |
|         | 68             | 201             | 5491            |
|         | 87             | 258             | 5502            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 24      | 8              | 21              | 5504            |
|         | 13             | 36              | 5502            |
|         | 48             | 141             | 5508            |
|         | 76             | 225             | 5510            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 25      | 22             | 63              | 5493            |
|         | 45             | 132             | 5510            |
|         | 67             | 198             | 5505            |
|         | 69             | 204             | 5498            |
|         | 89             | 264             | 5507            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 26      | 5              | 12              | 5503            |
|         | 14             | 39              | 5491            |
|         | 25             | 72              | 5494            |
|         | 39             | 114             | 5493            |
|         | 42             | 123             | 5500            |
|         | 75             | 222             | 5492            |
|         | 96             | 285             | 5496            |
|         | 99             | 294             | 5498            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 27      | 5              | 12              | 5490            |
|         | 13             | 36              | 5502            |
|         | 69             | 204             | 5510            |
|         | 80             | 237             | 5501            |

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| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 28      | 20             | 57              | 5492            |
|         | 37             | 108             | 5495            |
|         | 48             | 141             | 5496            |
|         | 74             | 219             | 5500            |
|         | 77             | 228             | 5505            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 29      | 60             | 177             | 5498            |
|         | 66             | 195             | 5509            |
|         | 68             | 201             | 5508            |
|         | 87             | 258             | 5507            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 30      | 39             | 114             | 5508            |
|         | 81             | 240             | 5493            |
|         | 91             | 270             | 5505            |

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## Parameter Data sheet for Radar Type 6

### 5510MHz (11n-40)

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 1       | 2              | 3               | 5528            |
|         | 4              | 9               | 5525            |
|         | 9              | 24              | 5501            |
|         | 18             | 51              | 5494            |
|         | 23             | 66              | 5521            |
|         | 33             | 96              | 5500            |
|         | 76             | 225             | 5506            |
|         | 95             | 282             | 5518            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 2       | 10             | 27              | 5525            |
|         | 14             | 39              | 5507            |
|         | 53             | 156             | 5495            |
|         | 61             | 180             | 5502            |
|         | 74             | 219             | 5496            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 3       | 28             | 81              | 5516            |
|         | 32             | 93              | 5503            |
|         | 41             | 120             | 5528            |
|         | 50             | 147             | 5521            |
|         | 66             | 195             | 5490            |
|         | 94             | 279             | 5493            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 4       | 17             | 48              | 5519            |
|         | 47             | 138             | 5518            |
|         | 48             | 141             | 5509            |
|         | 49             | 144             | 5517            |
|         | 85             | 252             | 5491            |
|         | 93             | 276             | 5503            |
|         | 96             | 285             | 5527            |

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| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 5       | 13             | 36              | 5510            |
|         | 16             | 45              | 5494            |
|         | 27             | 78              | 5496            |
|         | 30             | 87              | 5492            |
|         | 45             | 132             | 5502            |
|         | 51             | 150             | 5519            |
|         | 59             | 174             | 5504            |
|         | 60             | 177             | 5518            |
|         | 69             | 204             | 5520            |
|         | 78             | 231             | 5516            |
|         | 80             | 237             | 5523            |
|         | 88             | 261             | 5511            |
|         | 89             | 264             | 5498            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 6       | 5              | 12              | 5497            |
|         | 11             | 30              | 5510            |
|         | 18             | 51              | 5522            |
|         | 32             | 93              | 5500            |
|         | 43             | 126             | 5495            |
|         | 54             | 159             | 5518            |
|         | 60             | 177             | 5491            |
|         | 75             | 222             | 5509            |
|         | 84             | 249             | 5503            |
|         | 87             | 258             | 5526            |
|         | 91             | 270             | 5490            |
|         | 98             | 291             | 5511            |
|         | 100            | 297             | 5516            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 7       | 8              | 21              | 5504            |
|         | 26             | 75              | 5519            |
|         | 28             | 81              | 5521            |
|         | 33             | 96              | 5518            |
|         | 46             | 135             | 5514            |
|         | 92             | 273             | 5529            |

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| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 8       | 16             | 45              | 5510            |
|         | 52             | 153             | 5494            |
|         | 60             | 177             | 5522            |
|         | 66             | 195             | 5491            |
|         | 79             | 234             | 5515            |
|         | 80             | 237             | 5525            |
|         | 81             | 240             | 5495            |
|         | 91             | 270             | 5508            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 9       | 13             | 36              | 5518            |
|         | 22             | 63              | 5492            |
|         | 33             | 96              | 5529            |
|         | 57             | 168             | 5513            |
|         | 66             | 195             | 5495            |
|         | 91             | 270             | 5510            |
|         | 96             | 285             | 5524            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 10      | 13             | 36              | 5504            |
|         | 25             | 72              | 5511            |
|         | 34             | 99              | 5507            |
|         | 59             | 174             | 5512            |
|         | 60             | 177             | 5509            |
|         | 61             | 180             | 5517            |
|         | 68             | 201             | 5528            |
|         | 76             | 225             | 5500            |
|         | 77             | 228             | 5513            |
|         | 81             | 240             | 5520            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 11      | 15             | 42              | 5530            |
|         | 24             | 69              | 5521            |
|         | 32             | 93              | 5512            |
|         | 50             | 147             | 5525            |
|         | 72             | 213             | 5498            |

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| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 12      | 7              | 18              | 5508            |
|         | 11             | 30              | 5504            |
|         | 13             | 36              | 5515            |
|         | 38             | 111             | 5496            |
|         | 63             | 186             | 5503            |
|         | 68             | 201             | 5530            |
|         | 72             | 213             | 5525            |
|         | 75             | 222             | 5497            |
|         | 85             | 252             | 5517            |
|         | 94             | 279             | 5521            |
|         | 95             | 282             | 5509            |
|         | 98             | 291             | 5500            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 13      | 17             | 48              | 5490            |
|         | 41             | 120             | 5497            |
|         | 61             | 180             | 5503            |
|         | 73             | 216             | 5508            |
|         | 75             | 222             | 5512            |
|         | 84             | 249             | 5529            |
|         | 92             | 273             | 5509            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 14      | 10             | 27              | 5490            |
|         | 16             | 45              | 5497            |
|         | 21             | 60              | 5527            |
|         | 30             | 87              | 5505            |
|         | 41             | 120             | 5501            |
|         | 49             | 144             | 5512            |
|         | 77             | 228             | 5520            |
|         | 87             | 258             | 5523            |
|         | 91             | 270             | 5521            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 15      | 33             | 96              | 5513            |
|         | 50             | 147             | 5509            |
|         | 87             | 258             | 5525            |
|         | 91             | 270             | 5516            |
|         | 99             | 294             | 5530            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 16      | 7              | 18              | 5492            |
|         | 49             | 144             | 5524            |
|         | 89             | 264             | 5503            |
|         | 92             | 273             | 5498            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 17      | 9              | 24              | 5496            |
|         | 18             | 51              | 5512            |
|         | 26             | 75              | 5502            |
|         | 30             | 87              | 5513            |
|         | 35             | 102             | 5508            |
|         | 59             | 174             | 5522            |
|         | 60             | 177             | 5509            |
|         | 75             | 222             | 5518            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 18      | 11             | 30              | 5517            |
|         | 15             | 42              | 5507            |
|         | 20             | 57              | 5515            |
|         | 24             | 69              | 5496            |
|         | 31             | 90              | 5497            |
|         | 41             | 120             | 5503            |
|         | 49             | 144             | 5530            |
|         | 51             | 150             | 5513            |
|         | 78             | 231             | 5508            |
|         | 94             | 279             | 5500            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 19      | 4              | 9               | 5491            |
|         | 9              | 24              | 5514            |
|         | 18             | 51              | 5494            |
|         | 41             | 120             | 5501            |
|         | 42             | 123             | 5507            |
|         | 47             | 138             | 5495            |
|         | 56             | 165             | 5530            |
|         | 57             | 168             | 5512            |
|         | 84             | 249             | 5505            |
|         | 92             | 273             | 5527            |
|         | 97             | 288             | 5502            |

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| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 20      | 12             | 33              | 5526            |
|         | 14             | 39              | 5529            |
|         | 39             | 114             | 5527            |
|         | 42             | 123             | 5499            |
|         | 49             | 144             | 5490            |
|         | 50             | 147             | 5524            |
|         | 69             | 204             | 5511            |
|         | 76             | 225             | 5514            |
|         | 80             | 237             | 5504            |
|         | 92             | 273             | 5523            |
|         | 100            | 297             | 5493            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 21      | 17             | 48              | 5492            |
|         | 18             | 51              | 5494            |
|         | 28             | 81              | 5520            |
|         | 42             | 123             | 5526            |
|         | 53             | 156             | 5507            |
|         | 60             | 177             | 5510            |
|         | 67             | 198             | 5496            |
|         | 74             | 219             | 5491            |
|         | 75             | 222             | 5527            |
|         | 83             | 246             | 5498            |
|         | 86             | 255             | 5495            |
|         | 96             | 285             | 5523            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 22      | 12             | 33              | 5519            |
|         | 22             | 63              | 5520            |
|         | 43             | 126             | 5495            |
|         | 51             | 150             | 5510            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 23      | 3              | 6               | 5517            |
|         | 23             | 66              | 5498            |
|         | 37             | 108             | 5519            |
|         | 49             | 144             | 5507            |
|         | 50             | 147             | 5505            |
|         | 73             | 216             | 5497            |
|         | 78             | 231             | 5526            |
|         | 84             | 249             | 5491            |
|         | 85             | 252             | 5514            |

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| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 24      | 41             | 120             | 5496            |
|         | 68             | 201             | 5516            |
|         | 74             | 219             | 5497            |
|         | 94             | 279             | 5519            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 25      | 24             | 69              | 5523            |
|         | 46             | 135             | 5514            |
|         | 50             | 147             | 5504            |
|         | 59             | 174             | 5516            |
|         | 70             | 207             | 5506            |
|         | 74             | 219             | 5513            |
|         | 100            | 297             | 5502            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 26      | 2              | 3               | 5507            |
|         | 15             | 42              | 5502            |
|         | 26             | 75              | 5517            |
|         | 34             | 99              | 5512            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 27      | 8              | 21              | 5501            |
|         | 60             | 177             | 5511            |
|         | 82             | 243             | 5520            |
|         | 91             | 270             | 5504            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 28      | 30             | 87              | 5510            |
|         | 39             | 114             | 5504            |
|         | 43             | 126             | 5506            |
|         | 62             | 183             | 5501            |

| Trial # | Hopping Number | Start Time [ms] | Frequency [MHz] |
|---------|----------------|-----------------|-----------------|
| 29      | 44             | 129             | 5504            |
|         | 69             | 204             | 5500            |
|         | 73             | 216             | 5502            |
|         | 99             | 294             | 5503            |

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| Trial # | Hopping<br>Number | Start Time<br>[ms] | Frequency<br>[MHz] |
|---------|-------------------|--------------------|--------------------|
| 30      | 33                | 96                 | 5500               |
|         | 52                | 153                | 5514               |
|         | 83                | 246                | 5511               |

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## APPENDIX 2: Test instruments

### EMI Test Equipment

| Control No.  | Instrument                        | Manufacturer           | Model No            | Serial No       | Test Item | Calibration Date *<br>Interval(month) |
|--------------|-----------------------------------|------------------------|---------------------|-----------------|-----------|---------------------------------------|
| MOS-14       | Thermo-Hygrometer                 | Custom                 | CTH-201             | 1401            | DFS       | 2016/01/21 * 12                       |
| MSA-15       | Spectrum Analyzer                 | Agilent                | E4440A              | MY46187105      | DFS       | 2015/11/11 * 12                       |
| EST-48       | Signal Generator                  | Agilent                | E4438C              | MY45090353      | DFS       | 2015/12/30 * 12                       |
| COTS-MDFS-01 | Signal Studio Software for DFS    | Agilent                | N7620A-101          | 5010-7739       | DFS       | -                                     |
| COTS-MDFS-02 | Radar Generating Software for DFS | Agilent                | -                   | -               | DFS       | -                                     |
| MCC-67       | Microwave Cable 1G-40GHz          | Suhner                 | SUCOFLEX102         | 28635/2         | DFS       | 2016/04/18 * 12                       |
| MCC-190      | Microwave Cable                   | Junkosha               | MWX-221-02000DMSDMS | 1507S109        | DFS       | Pre Check                             |
| MPSC-04      | Power Splitters/Combiners         | Mini-Circuit           | ZFSC-2-10G          | 0326            | DFS       | 2015/09/18 * 12                       |
| MAT-57       | Attenuator(10dB)                  | Suhner                 | 6810.19.A           | -               | DFS       | 2016/01/18 * 12                       |
| MAT-60       | Attenuator(20dB)                  | Suhner                 | 6820.19.A           | -               | DFS       | Pre Check                             |
| MPSC-06      | Power Splitters/Combiners         | Pasternack Enterprises | ZFRSC-123-S+        | ZFRSC-123-00231 | DFS       | Pre Check                             |
| MAT-56       | Attenuator(10dB)                  | Suhner                 | 6810.19.A           | -               | DFS       | 2016/01/18 * 12                       |
| MCC-163      | Microwave Cable                   | Murata                 | MXGS83RK3000        | -               | DFS       | 2015/11/10 * 12                       |
| MCC-66       | Microwave Cable 1G-40GHz          | Suhner                 | SUCOFLEX102         | 28636/2         | DFS       | 2016/04/18 * 12                       |
| MAT-23       | Attenuator(10dB) 1-18GHz          | Orient Microwave       | BX10-0476-00        | -               | DFS       | 2016/03/18 * 12                       |
| MPS-03       | Power Splitter                    | Mini-Circuits          | ZN4PD1-63-S+        | 002             | DFS       | 2015/06/02 * 12                       |
| MCC-94       | Microwave Cable 1G-40GHz          | Suhner                 | SUCOFLEX102         | 30815/2         | DFS       | -                                     |
| MCC-100      | Microwave Cable 1G-40GHz          | Suhner                 | SUCOFLEX102         | 30821/2         | DFS       | -                                     |
| MAT-59       | Attenuator(20dB)                  | Suhner                 | 6820.19.A           | -               | DFS       | Pre Check                             |

**\*1) Signal generator is only used to generate radar test signal, and the wave form is confirmed with spectrum analyzer every time before the test.**

**The expiration date of the calibration is the end of the expired month.**

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

**As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.**

**DFS: Dynamic Frequency Selection**

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