



**Neutron Engineering Inc.**

# FCC&IC DFS Test Report

**FCC ID: SIB-SNB02-NV7A**

**IC: 6719D-SNB02NV7A**

This report concerns (check one): ☒ Original Grant ☐ Class II Change

**Issued Date** : Mar. 26, 2014  
**Project No.** : 1403C085  
**Equipment** : nabi Tablet  
**Model Name** : SNB02-NV7A  
**Applicant** : Foxconn International Inc.  
**Address** : No.2,Ziyou St.,Tucheng Dist., New Taipei  
City 236,Taiwan

**Tested by:** Neutron Engineering Inc. EMC Laboratory  
**Date of Receipt:** Mar. 13, 2014  
**Date of Test:** Mar. 13, 2014 ~ Mar. 25, 2014

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### **Declaration**

**Neutron** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C.**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

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**Neutron's** laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

### **Limitation**

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.



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**REPORT ISSUED HISTORY**

| Issued No.          | Description     | Issued Date   |
|---------------------|-----------------|---------------|
| NEI-FICP-6-1403C085 | Original Issue. | Mar. 26, 2014 |



## **1. CERTIFICATION**

Equipment : nabi Tablet  
Trade Name : nabi  
Model Name. : SNB02-NV7A  
Applicant : Foxconn International Inc.  
Manufacturer : FUHU INC  
Address : 909 N SEPULVEDA BLVD STE 540 EL SEGUNDO, CA 90245-2733  
Factory : Hongfujin precision industry(wuhan) Co.,Ltd.  
Address : 1#,2nd GUANG GU ROAD,DONGHU NEW TECHNOLOGY  
DEVELOPMENT DISTRICT,WUHAN CITY,HUBEI PROVINCE,CHINA  
Date of Test: : Mar. 13, 2014 ~ Mar. 25, 2014  
Test Item : ENGINEERING SAMPLE  
Standard(s) : FCC Part 15, Subpart E (Section 15.407) FCC 06-96  
Canada RSS-210:2010

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FICP-6-1403C085) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

## 2. EUT INFORMATION

### 2.1 EUT SPECIFICATION TABLE

Table 1: Specification of EUT

|                                  |                                                            |
|----------------------------------|------------------------------------------------------------|
| <b>Product name</b>              | nabi Tablet                                                |
| <b>Brand Name</b>                | nabi                                                       |
| <b>Model</b>                     | SNB02-NV7A                                                 |
| <b>Model Difference</b>          | A model for multiple appearance, only differ in the color. |
| <b>FCC ID</b>                    | SIB-SNB02-NV7A                                             |
| <b>IC</b>                        | 6719D-SNB02NV7A                                            |
| <b>Operational Mode</b>          | Slave                                                      |
| <b>Operating Frequency Range</b> | 5150MHz~5350MHz                                            |
| <b>Modulation</b>                | OFDM                                                       |

**Note:** This device was functioned as a ☐ Master ☒ Slave device during the DFS

### 2.2 DESCRIPTION OF AVAILABLE ANTENNAS TO THE EUT

Table 2: Antenna list.

#### Group 1

| Ant. | Brand  | Model Name | Antenna Type | Connector | Gain (dBi) | Note  |
|------|--------|------------|--------------|-----------|------------|-------|
| 1    | Cortec | NB0309-N2S | PIFA         | N/A       | 2.05       | TX/RX |

#### Group 2

| Ant. | Brand | Model Name      | Antenna Type | Connector | Gain (dBi) | Note  |
|------|-------|-----------------|--------------|-----------|------------|-------|
| 1    | 晶鈦    | AH-JT-0214N0304 | PIFA         | N/A       | 0.97       | TX/RX |

Note:

- (1) Group 1 and Group 2 are same type antenna, Group 2 is recorded as the worst case since which gain is lower than Group 1.



## 2.3 CONDUCTED OUTPUT POWER AND EIRP POWER

TABLE 3: THE CONDUCTED OUTPUT POWER LIST

TX (11a)

| FREQUENCY<br>BAND (MHz) | MAX. POWER        |                  |
|-------------------------|-------------------|------------------|
|                         | OUTPUT POWER(dBm) | OUTPUT POWER(mW) |
| 5150~5250               | 13.95             | 24.83            |
| 5250~5350               | 13.69             | 23.39            |

TX (11n 40MHz)

| FREQUENCY<br>BAND (MHz) | MAX. POWER        |                  |
|-------------------------|-------------------|------------------|
|                         | OUTPUT POWER(dBm) | OUTPUT POWER(mW) |
| 5150~5250               | 12.95             | 19.72            |
| 5250~5350               | 12.78             | 18.97            |



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

TABLE 4: THE MAX EIRP LIST

TX (11a)

| FREQUENCY<br>BAND (MHz) | MAX. POWER        |                  |
|-------------------------|-------------------|------------------|
|                         | OUTPUT POWER(dBm) | OUTPUT POWER(mW) |
| 5150~5250               | 14.92             | 31.05            |
| 5250~5350               | 14.66             | 29.24            |

TX (11n 40MHz)

| FREQUENCY<br>BAND (MHz) | MAX. POWER        |                  |
|-------------------------|-------------------|------------------|
|                         | OUTPUT POWER(dBm) | OUTPUT POWER(mW) |
| 5150~5250               | 13.92             | 24.66            |
| 5250~5350               | 13.75             | 23.71            |



### 3. U-NII DFS RULE REQUIREMENTS

#### 3.1 WORKING MODES AND REQUIRED TEST ITEMS

The manufacturer shall state whether the UUT is capable of operating as a Master and/or a Client. If the UUT is capable of operating in more than one operating mode then each operating mode shall be tested separately. See tables 1 and 2 for the applicability of DFS requirements for each of the operational modes.

Table 5: Applicability of DFS requirements prior to use a channel

| Requirement                     | Operational Mode |                                |                             |
|---------------------------------|------------------|--------------------------------|-----------------------------|
|                                 | Master           | Client without radar detection | Client with radar detection |
| Non-Occupancy Period            | ✓                | Not required                   | ✓                           |
| DFS Detection Threshold         | ✓                | Not required                   | ✓                           |
| Channel Availability Check Time | ✓                | Not required                   | Not required                |
| Uniform Spreading               | ✓                | Not required                   | Not required                |
| U-NII Detection Bandwidth       | ✓                | Not required                   | ✓                           |

Table 6: Applicability of DFS requirements during normal operation.

| Requirement                       | Operational Mode |                                |                             |
|-----------------------------------|------------------|--------------------------------|-----------------------------|
|                                   | Master           | Client without radar detection | Client with radar detection |
| DFS Detection Threshold           | ✓                | Not required                   | ✓                           |
| Channel Closing Transmission Time | ✓                | ✓                              | ✓                           |
| Channel Move Time                 | ✓                | ✓                              | ✓                           |
| U-NII Detection Bandwidth         | ✓                | Not required                   | ✓                           |



### 3.2 TEST LIMITS AND RADAR SIGNAL PARAMETERS

#### DETECTION THRESHOLD VALUES

Table 7: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection.

| Maximum Transmit Power | Value<br>(See Notes 1 and 2) |
|------------------------|------------------------------|
| $\geq 200$ milliwatt   | -64 dBm                      |
| $< 200$ milliwatt      | -62 dBm                      |

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.

Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

Table 8: DFS Response Requirement Values

| Parameter                         | Value                                                                                                  |
|-----------------------------------|--------------------------------------------------------------------------------------------------------|
| Non-occupancy period              | Minimum 30 minutes                                                                                     |
| Channel Availability Check Time   | 60 seconds                                                                                             |
| Channel Move Time                 | 10 seconds See Note 1.                                                                                 |
| Channel Closing Transmission Time | 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2. |
| U-NII Detection Bandwidth         | Minimum 80% of the UNII 99% transmission power bandwidth. See Note 3.                                  |

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

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

**Note 2:** The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

**Note 3:** During the U-NII Detection Bandwidth detection test, radar type 1 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.



## PARAMETERS OF DFS TEST SIGNALS

Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Table 9: Short Pulse Radar Test Waveforms.

| Radar Type                  | Pulse Width (μsec) | PRI (μsec) | Number of Pulses | Minimum Percentage of Successful Detection | Minimum Number of Trials |
|-----------------------------|--------------------|------------|------------------|--------------------------------------------|--------------------------|
| 1                           | 1                  | 1428       | 18               | 60%                                        | 30                       |
| 2                           | 1-5                | 150-230    | 23-29            | 60%                                        | 30                       |
| 3                           | 6-10               | 200-500    | 16-18            | 60%                                        | 30                       |
| 4                           | 11-20              | 200-500    | 12-16            | 60%                                        | 30                       |
| Aggregate (Radar Types 1-4) |                    |            |                  | 80%                                        | 120                      |

Table 10: Long Pulse Radar Test Waveform

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

Table 11: Frequency Hopping Radar Test Waveform

| Radar Type | Pulse Width (μsec) | Chirp Width (MHz) | PRI (μsec) | Number of Pulses per Burst | Number of Bursts | Minimum Percentage of Successful Detection | Minimum Number of Trials |
|------------|--------------------|-------------------|------------|----------------------------|------------------|--------------------------------------------|--------------------------|
| 6          | 1                  | 333               | 9          | 0.333                      | 300              | 70%                                        | 30                       |



#### 4. TEST INSTRUMENTS

Table 1: Test instruments list.

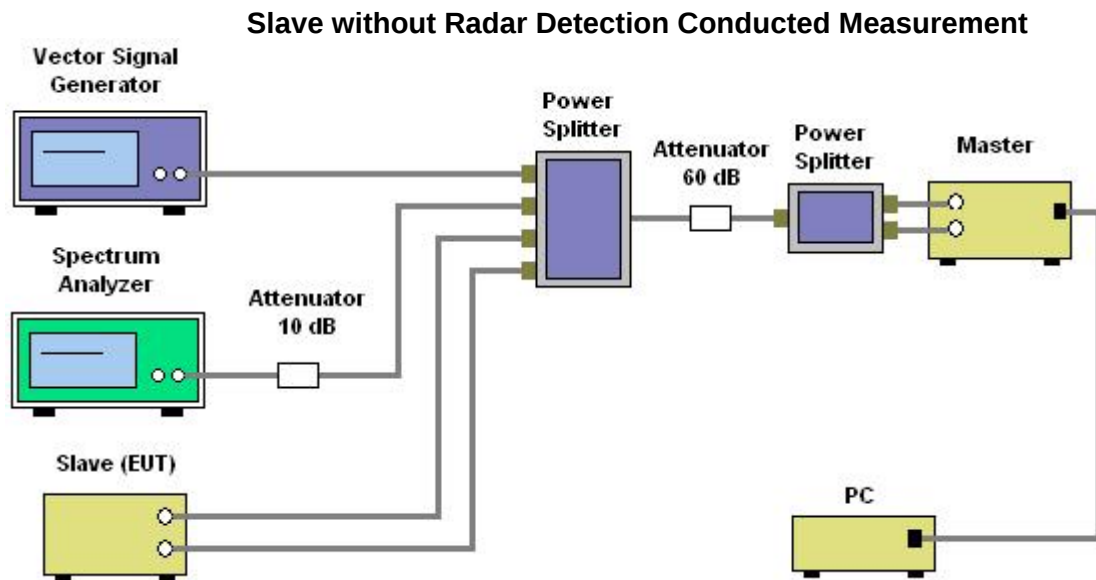
| DESCRIPTION           | MANUFACTURER  | MODEL NO.    | Serial No   | Calibration Until |
|-----------------------|---------------|--------------|-------------|-------------------|
| EXA Spectrum Analyzer | Agilent       | N9010A       | MY50520044  | 2014-04-25        |
| Signal Generator      | Agilent       | E4438C       | My49071316  | 2014-04-25        |
| POWER SPLITTER        | Mini-Circuits | ZFRSC-123-S+ | 331000910   | 2014-04-25        |
| POWER SPLITTER        | Mini-Circuits | ZN4PD1-63-S+ | SF933501045 | 2014-04-25        |
| POWER SPLITTER        | Mini-Circuits | ZN2PD-9G-S+  | SF012700714 | 2014-04-25        |
| attenuator            | Mini-Circuits | VAT-30+      | 30912       | 2014-04-25        |
| attenuator            | Mini-Circuits | VAT-10+      | 30909       | 2014-04-25        |
| Spectrum Analyzer     | R&S           | FSL6         | 1004423     | 2014-11-24        |
| PC                    | Dell 745      | DCSM         | G7K832X     | --                |
| Netbook               | Hp            | HSTNN-I69C-3 | CNU02203XG  | --                |

Note: Calibration interval of instruments listed above is one year.

## 5. EMC EMISSION TEST

### 5.1 DFS MEASUREMENT SYSTEM:

#### CONDUCTED METHOD SYSTEM BLOCK DIAGRAM



#### SYSTEM OVERVIEW

The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.



The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of FCC 06-96. The frequency of the signal generator is incremented in 1 MHz steps from FL to FH for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer set to display 8001 bins on the horizontal axis. The time-domain resolution is 2 msec / bin with a 16 second sweep time, meeting the 10 second 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 and max hold.

Should multiple RF ports be utilized for the Master and/or Slave devices (for example, for diversity or MIMO implementations), additional combiner/dividers are inserted between the Master Combiner/Divider and the pad connected to the Master Device (and/or between the Slave Combiner/Divider and the pad connected to the Slave Device). Additional pads are utilized such that there is one pad at each RF port on each EUT.



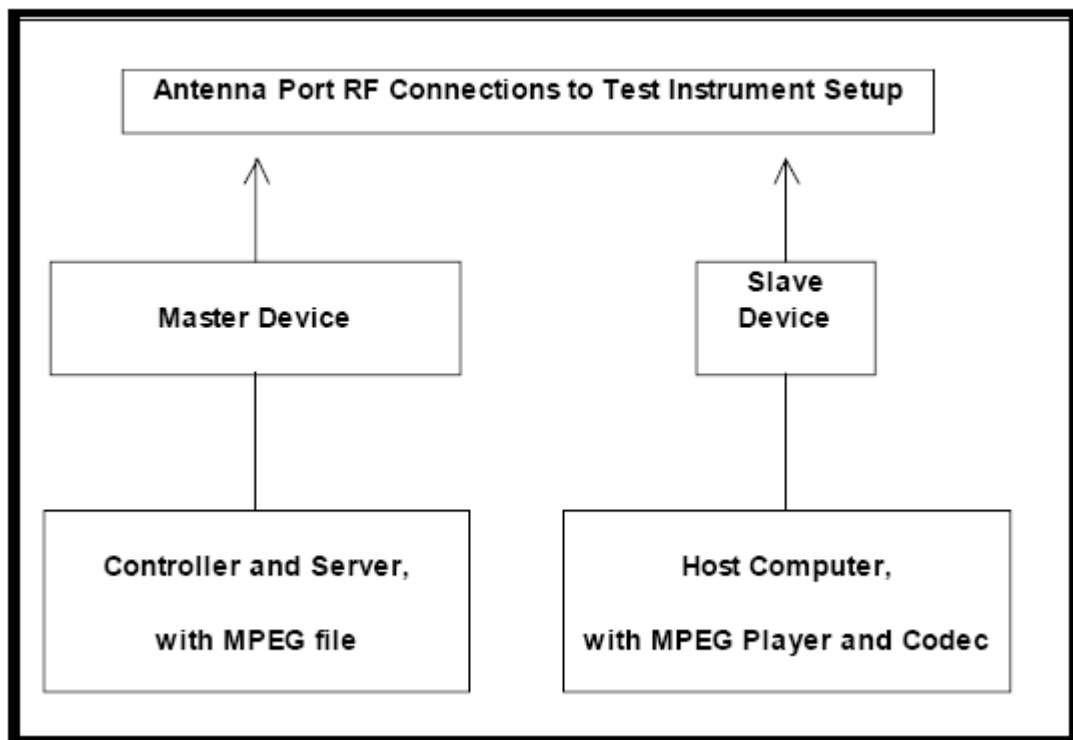
## 5.2 CALIBRATION OF DFS DETECTION THRESHOLD LEVEL:

A 50 ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected in place of the master device and the signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of  $-62$  dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. Measure the amplitude and calculate the difference from  $-62$  dBm. Adjust the Reference Level Offset of the spectrum analyzer to this difference.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of  $-62$  dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

Set the signal generator to produce a radar waveform, trigger a burst manually and measure the level 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.



## 5.3 DEVIATION FROM TEST STANDARD

No deviation.



## 6. TEST RESULTS

### 6.1 SUMMARY OF TEST RESULT

| Clause | Test Parameter                    | Remarks        | Pass/Fail |
|--------|-----------------------------------|----------------|-----------|
| 15.407 | DFS Detection Threshold           | No Applicable  | N/A       |
| 15.407 | Channel Availability Check Time   | Not Applicable | N/A       |
| 15.407 | Channel Move Time                 | Applicable     | Pass      |
| 15.407 | Channel Closing Transmission Time | Applicable     | Pass      |
| 15.407 | Non- Occupancy Period             | Not Applicable | N/A       |
| 15.407 | Uniform Spreading                 | Not Applicable | N/A       |
| 15.407 | U-NII Detection Bandwidth         | Not Applicable | N/A       |



## 6.2 DETELED TEST RESULTS

| Clause | Test Parameter                    | Remarks        | Pass/Fail |
|--------|-----------------------------------|----------------|-----------|
| 15.407 | DFS Detection Threshold           | No Applicable  | N/A       |
| 15.407 | Channel Availability Check Time   | Not Applicable | N/A       |
| 15.407 | Channel Move Time                 | Applicable     | Pass      |
| 15.407 | Channel Closing Transmission Time | Applicable     | Pass      |
| 15.407 | Non- Occupancy Period             | Not Applicable | N/A       |
| 15.407 | Uniform Spreading                 | Not Applicable | N/A       |
| 15.407 | U-NII Detection Bandwidth         | Not Applicable | N/A       |

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

The EUT is slave equipment, it need a master device when testing.

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

### 6.2.2 DFS DETECTION THRESHOLD

Calibration:

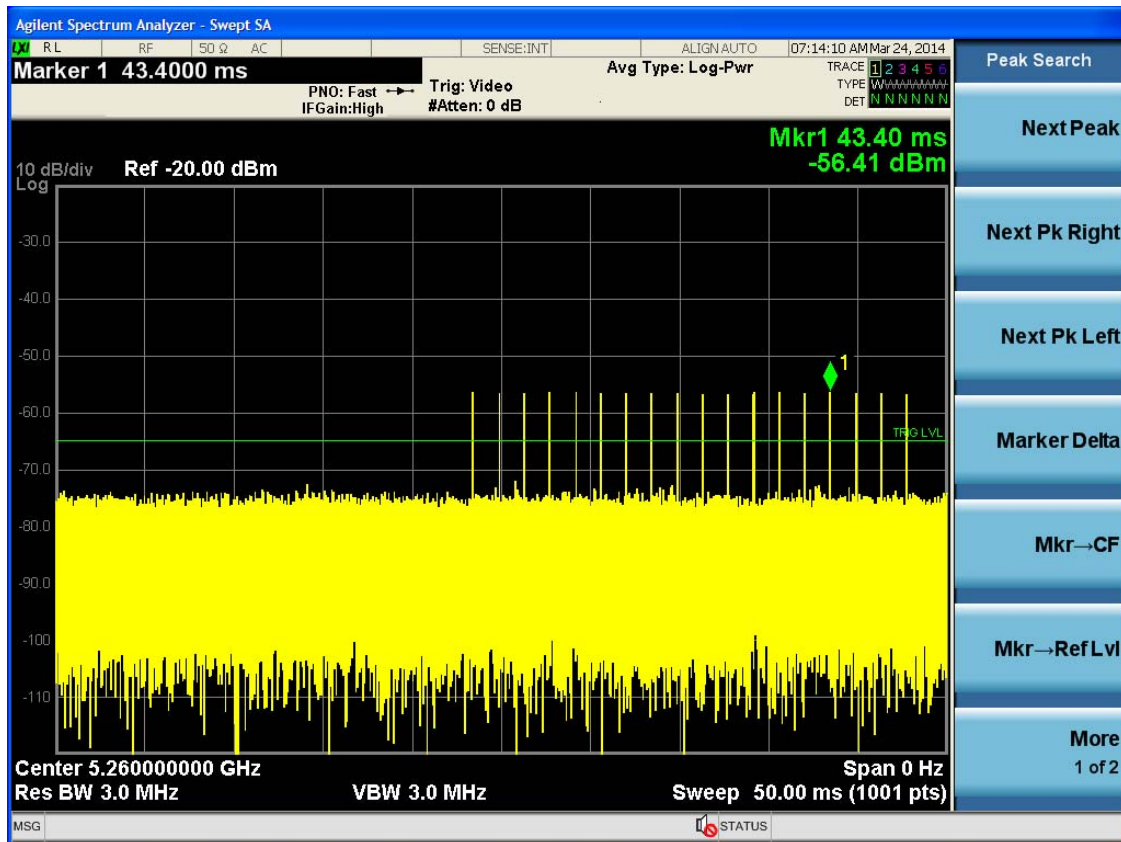
The EUT is slave equipment and it with a max gain is 2.05dBi

For a detection threshold level of -62dBm and the master antenna gain is 5.7dBi, required detection threshold is -56.3dBm ( $= -62+5.7$ ).

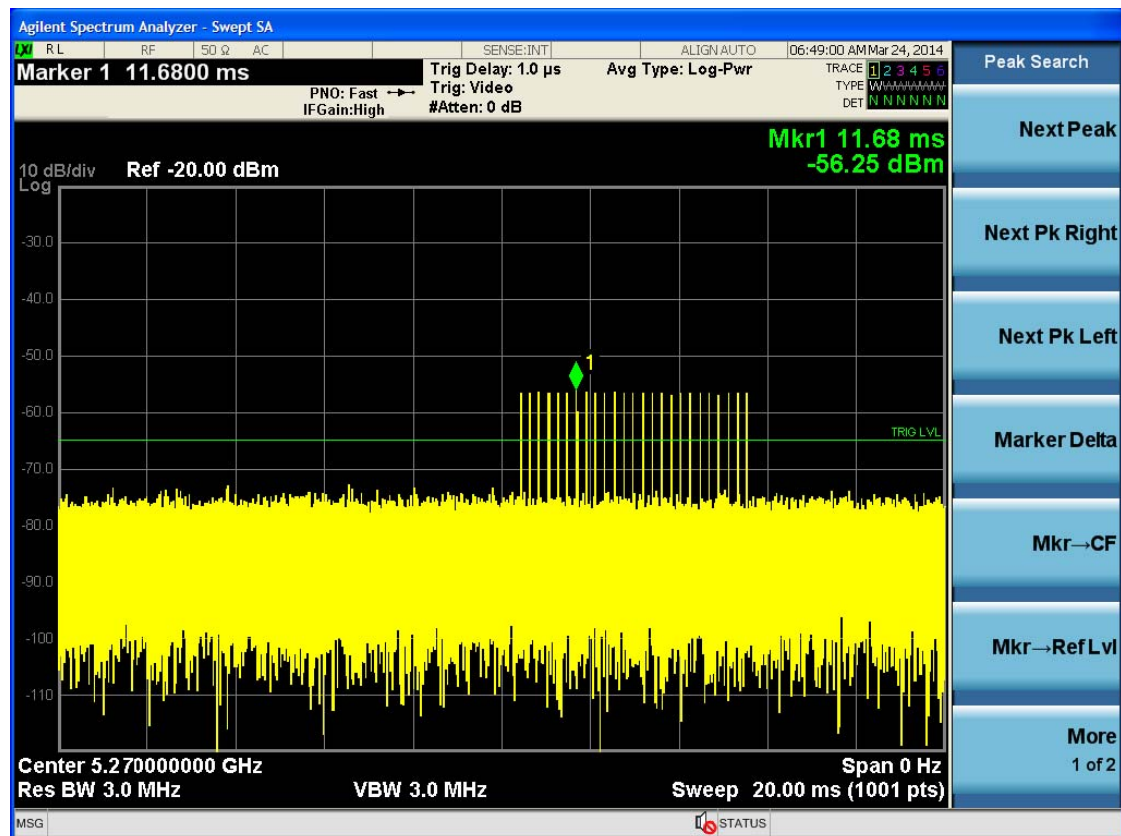
Note: Maximum Transmit Power is less than 200 milliwatt in this report, so detection threshold level is -62dBm (please refer to Table 7 [page 8]).



### Radar Signal 1

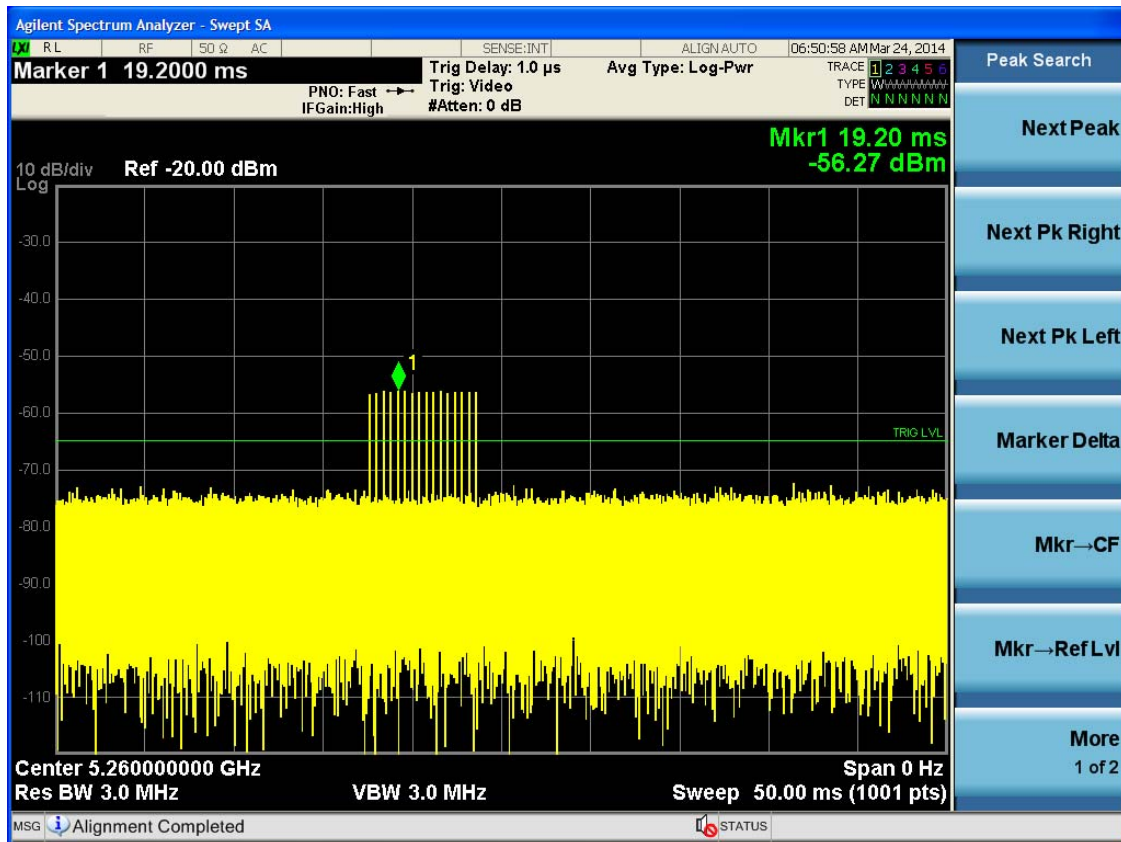


### Radar Signal 2

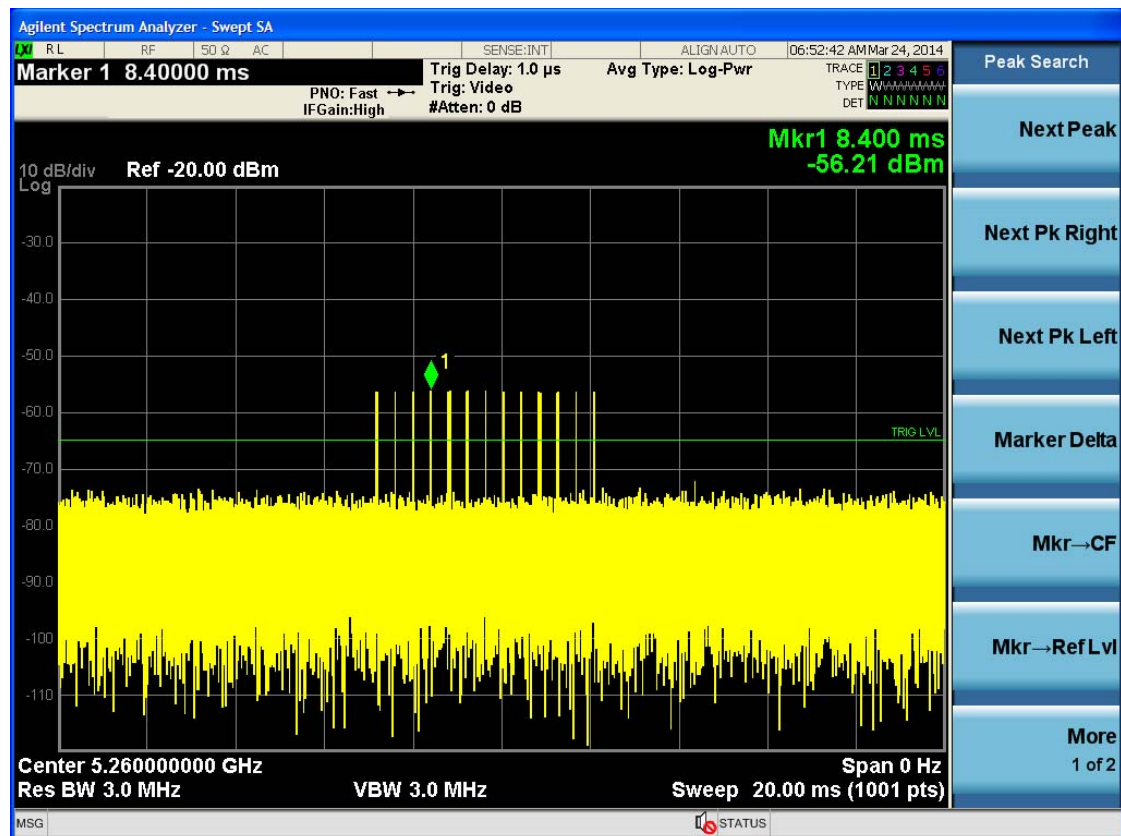




### Radar Signal 3

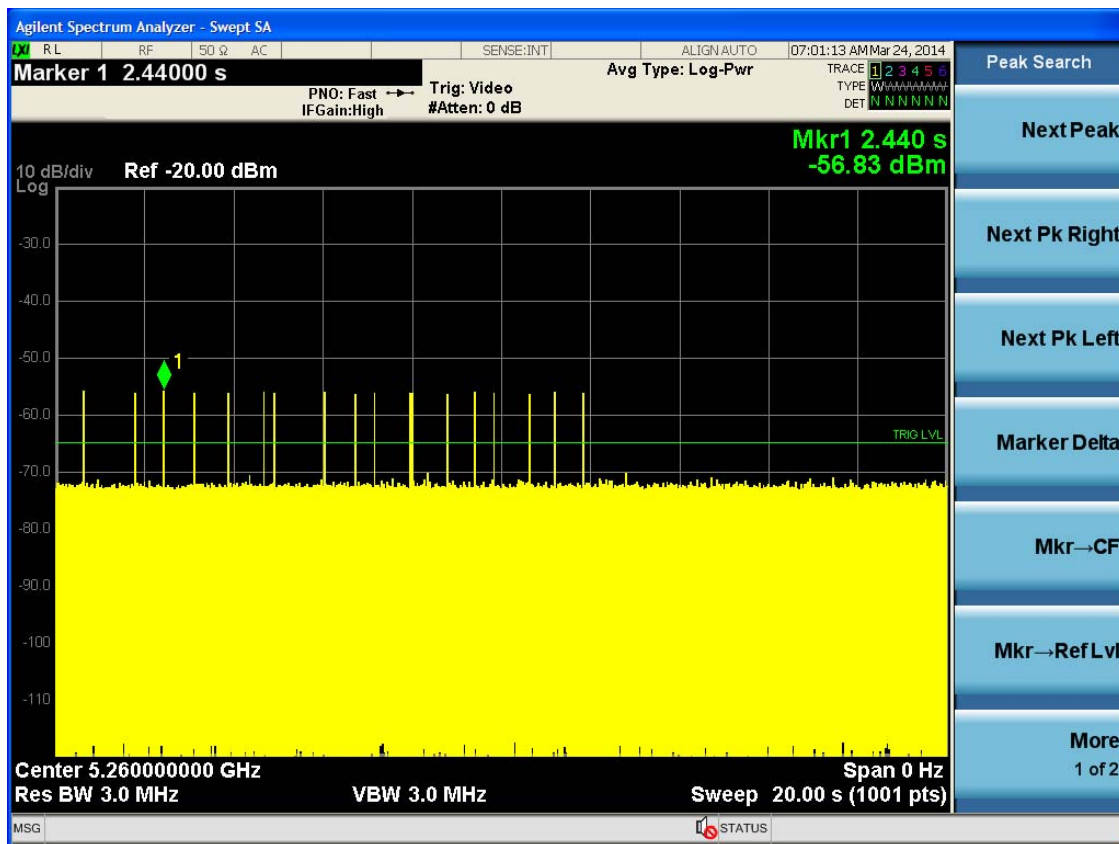


### Radar Signal 4

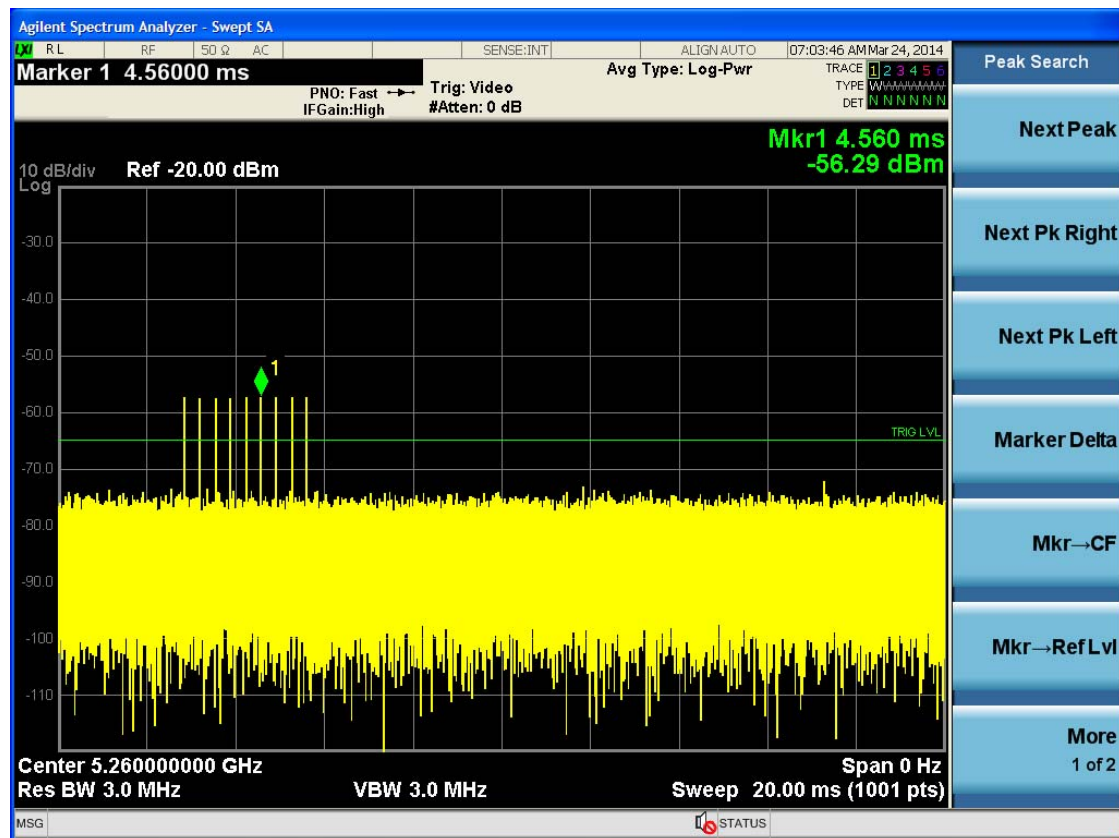




### Radar Signal 5



### Radar Signal 6





## 6.2.4 CHANNEL CLOSING TRANSMISSION AND CHANNEL MOVE TIME WLAN TRAFFIC

TX (11a Mode)

Table 1: Short Pulse Radar Test Waveforms.

| Radar Type                  | Pulse Width (μsec) | PRI (μsec) | Number of Pulses | Pass times | Fail times | Percentage of Successful Detection (%) |
|-----------------------------|--------------------|------------|------------------|------------|------------|----------------------------------------|
| 1                           | 1                  | 1428       | 18               | 27         | 3          | 90%                                    |
| 2                           | 1-5                | 150-230    | 23-29            | 28         | 2          | 93%                                    |
| 3                           | 6-10               | 200-500    | 16-18            | 28         | 2          | 93%                                    |
| 4                           | 11-20              | 200-500    | 12-16            | 27         | 3          | 90%                                    |
| Aggregate (Radar Types 1-4) |                    |            | -                | 110        | 10         | 92%                                    |

Table 2: Long Pulse Radar Test Waveform

| Radar Type | Pulse Width (μsec) | Chirp Width (MHz) | PRI (μsec) | Number of Pulses Per Burst | Number of Bursts | Pass times | Fail times | Percentage of Successful Detection (%) |
|------------|--------------------|-------------------|------------|----------------------------|------------------|------------|------------|----------------------------------------|
| 5          | 50-100             | 5-20              | 1000-2000  | 1-3                        | 8-20             | 30         | 0          | 100                                    |

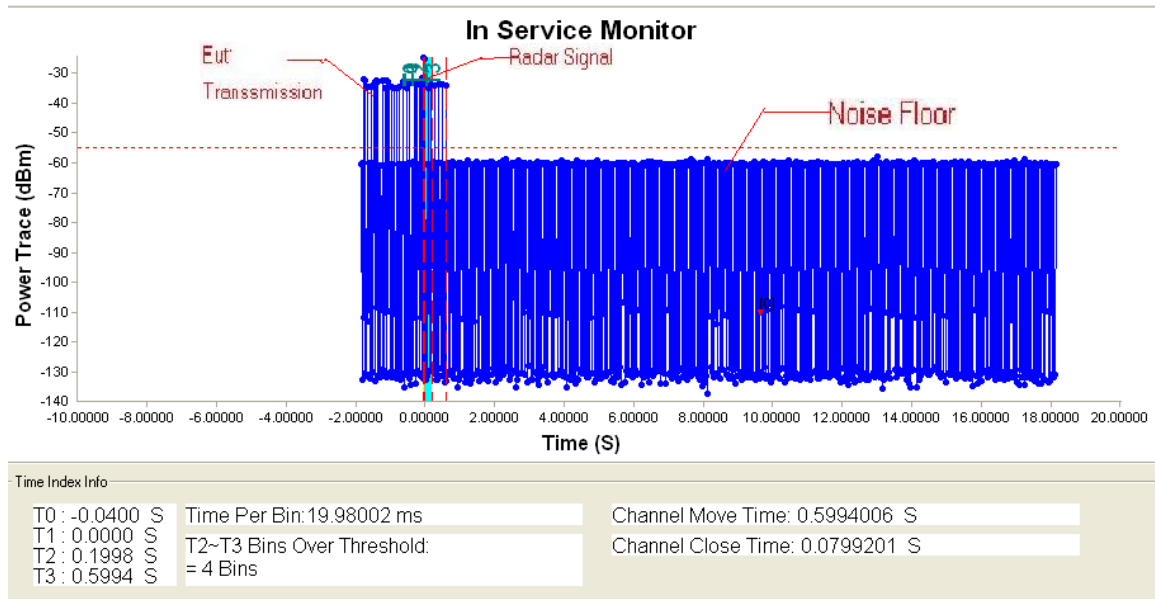
Table 3: Frequency Hopping Radar Test Waveform

| Radar Type | Pulse Width (μsec) | PRI (μsec) | Pulses per Hop | Hopping Rate (kHz) | Hopping Sequence Length (msec) | Pass times | Fail times | Percentage of Successful Detection (%) |
|------------|--------------------|------------|----------------|--------------------|--------------------------------|------------|------------|----------------------------------------|
| 6          | 1                  | 333        | 9              | 0.333              | 300                            | 29         | 1          | 97                                     |

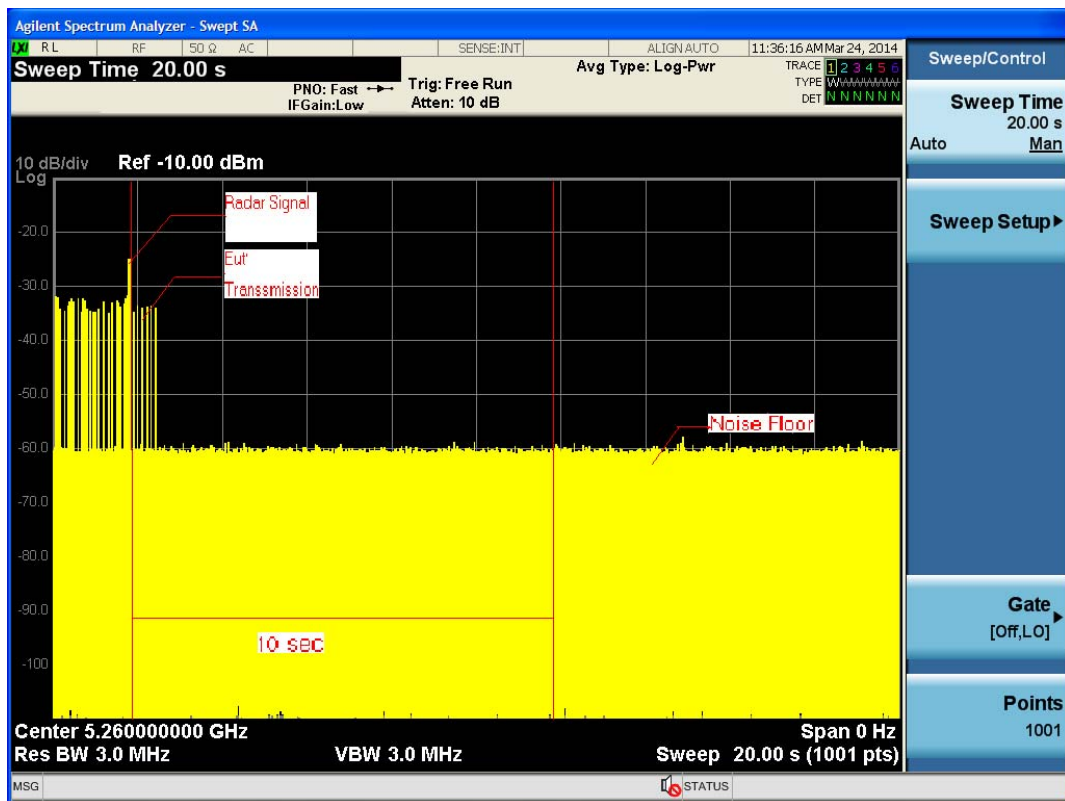


TX (11a Mode )

Radar signal 1



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

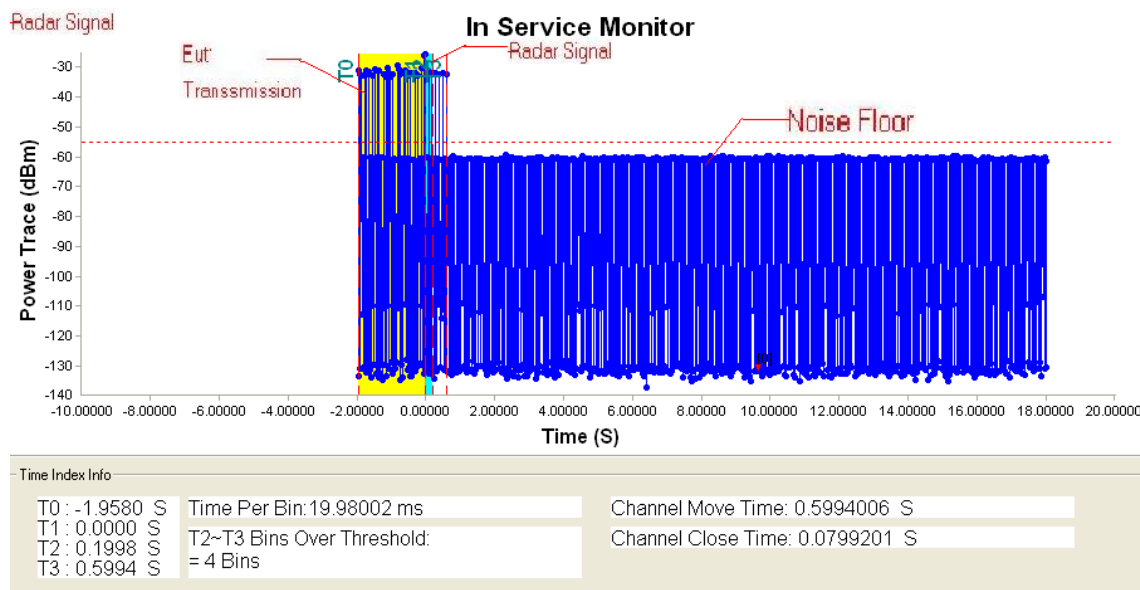


**Note:** An expanded plot for the device vacates the channel in the required 500ms

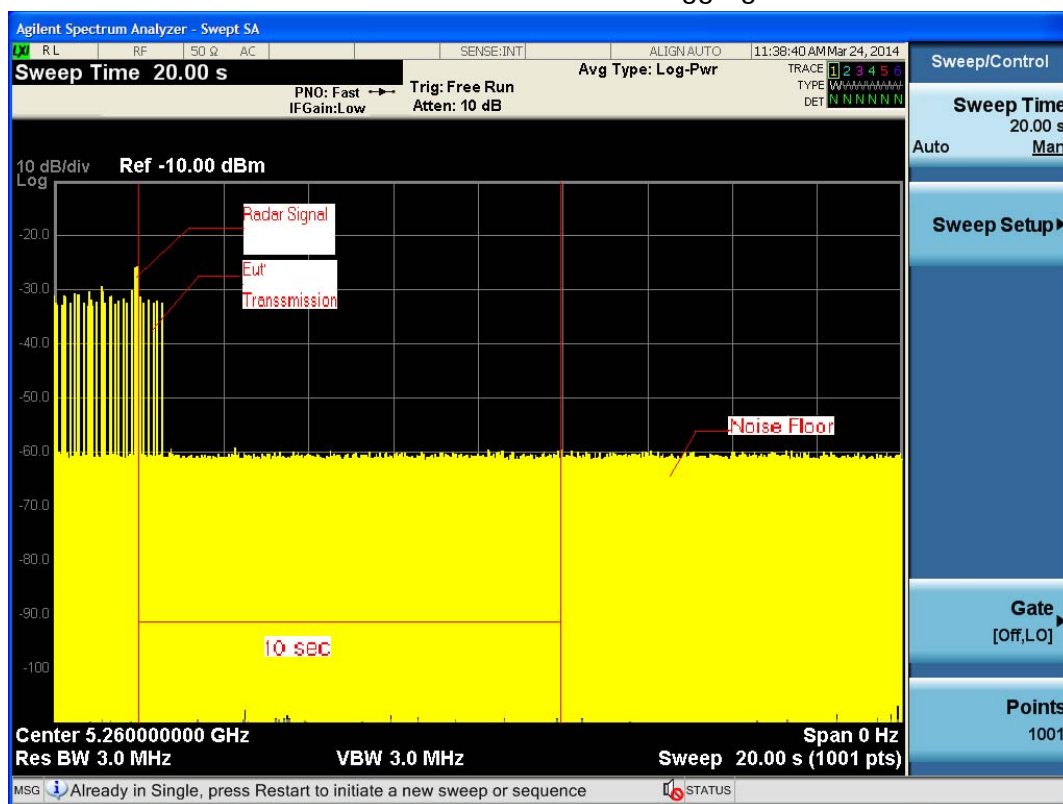


TX (11a Mode )

Radar signal 2



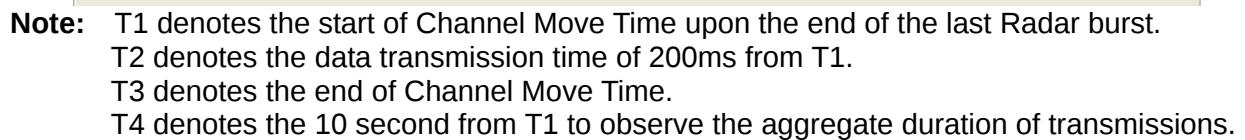
**Note:** T1 denotes the start of Channel Move Time upon the end of the last Radar burst.  
T2 denotes the data transmission time of 200ms from T1.  
T3 denotes the end of Channel Move Time.  
T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.



**Note:** An expanded plot for the device vacates the channel in the required 500ms



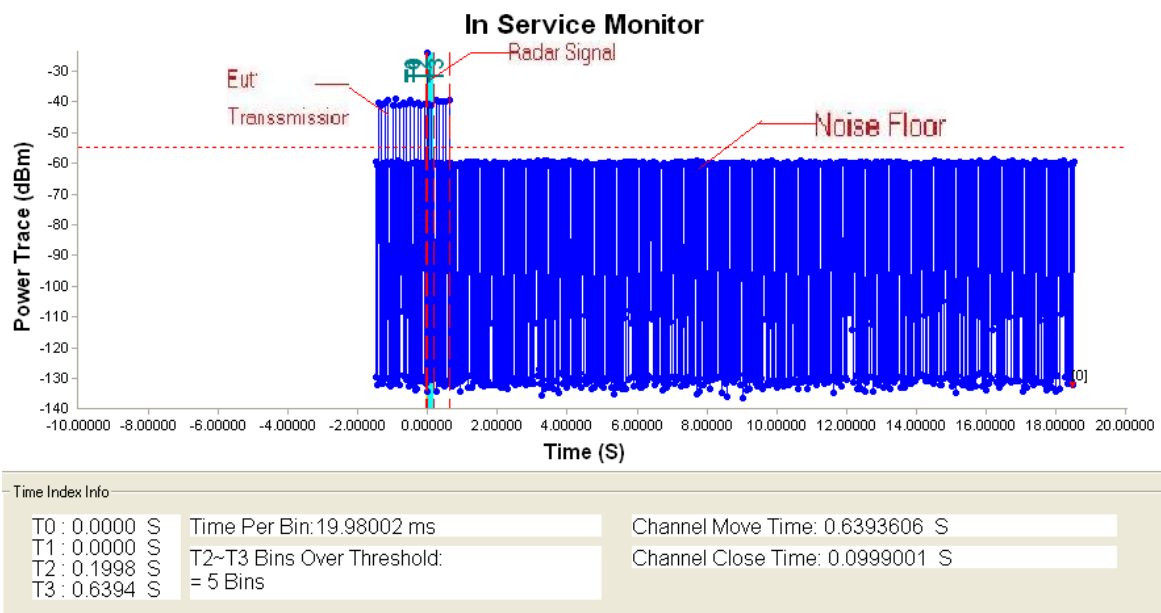
Radar signal 3





TX (11a Mode )

Radar signal 4



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

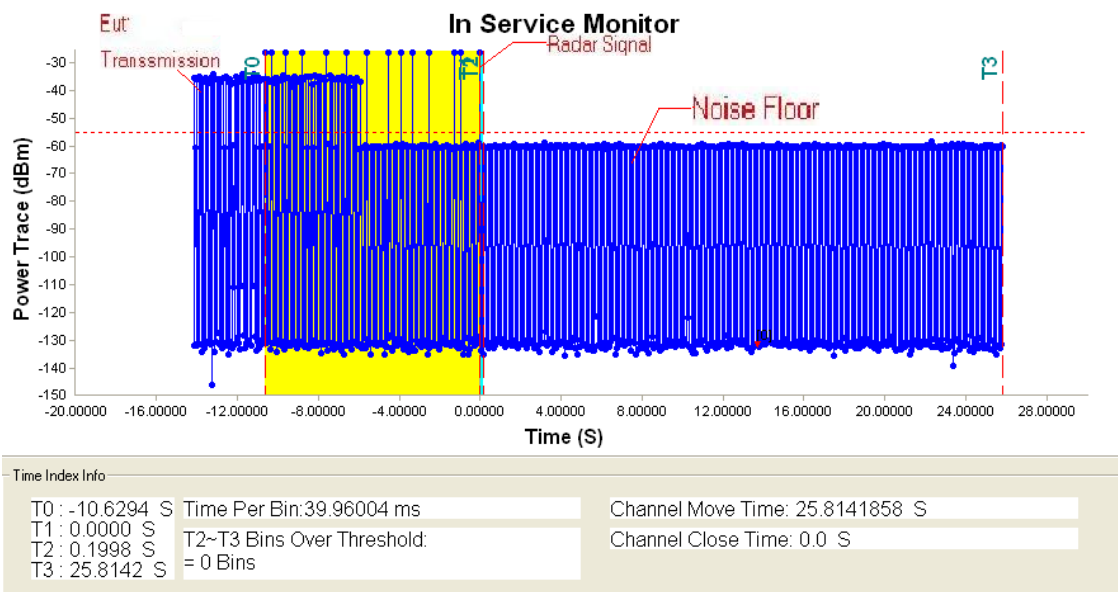


**Note:** An expanded plot for the device vacates the channel in the required 500ms

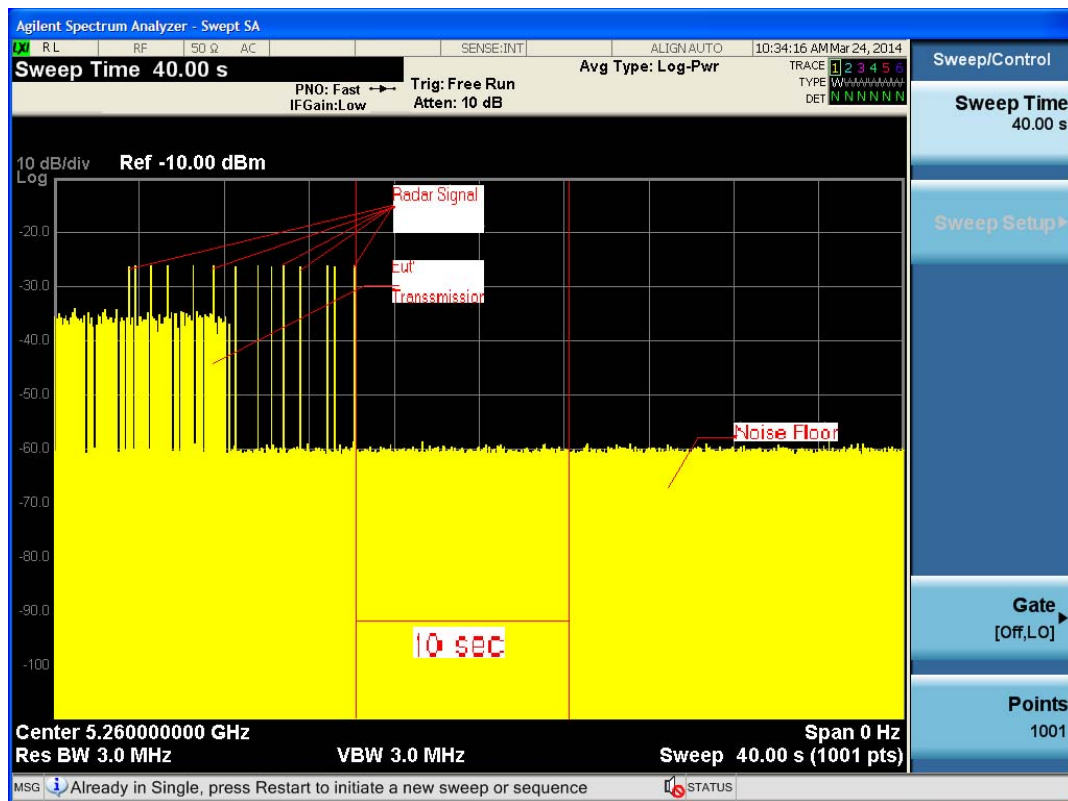


TX (11a Mode )

Radar signal 5



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

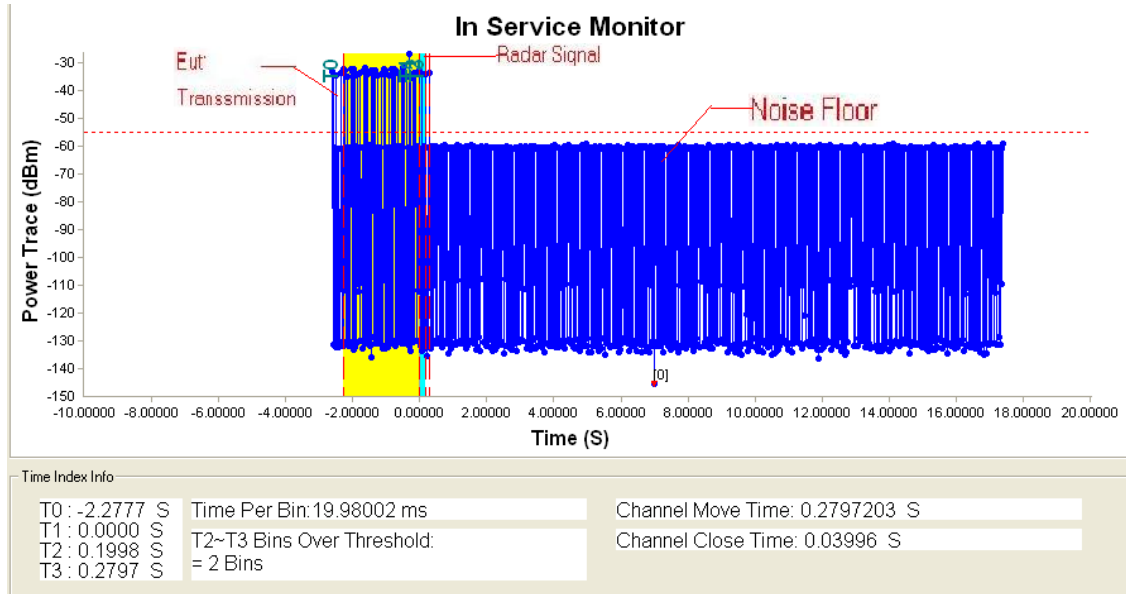


**Note:** An expanded plot for the device vacates the channel in the required 500ms

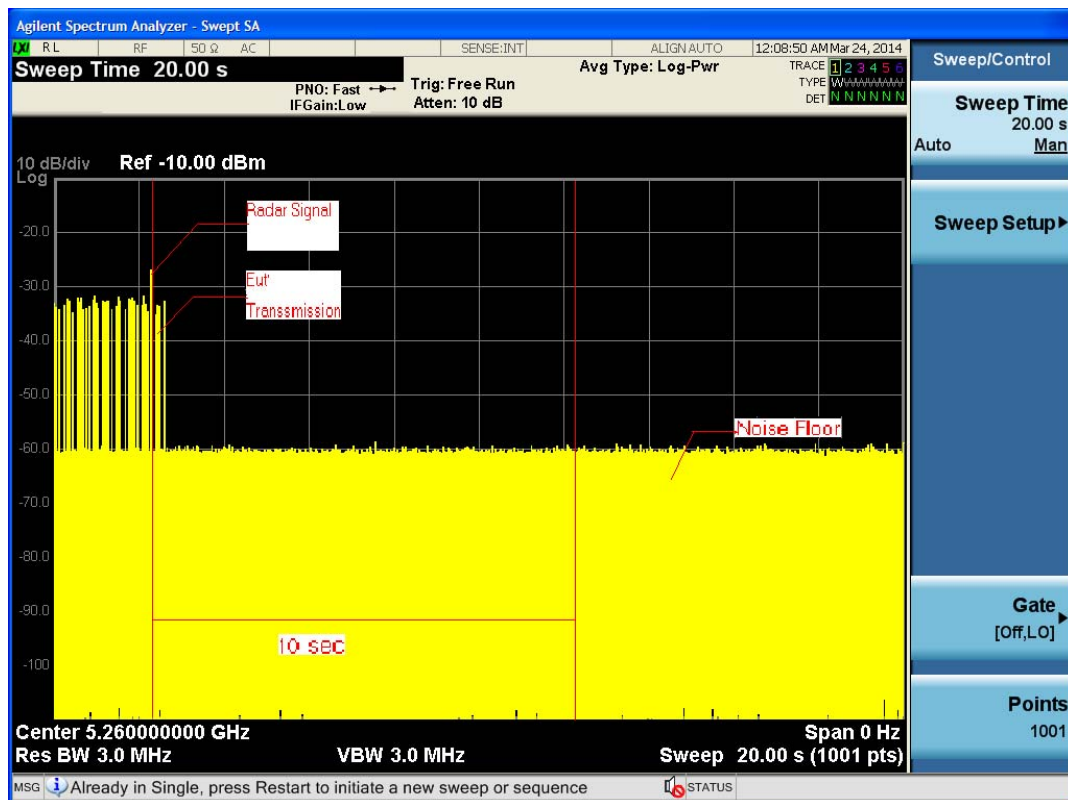


TX (11a Mode )

Radar signal 6



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



**Note:** An expanded plot for the device vacates the channel in the required 500ms



TX (11a Mode)

| Radar1 Statical Performances |                       |                    |         |                     |
|------------------------------|-----------------------|--------------------|---------|---------------------|
| Trial #                      | Pluse<br>per<br>Burst | Pluse<br>Width(us) | PRI(us) | Detection(Yes / No) |
| 1                            | 18                    | 1.0u               | 1.428   | YES                 |
| 2                            | 18                    | 1.0u               | 1.428   | YES                 |
| 3                            | 18                    | 1.0u               | 1.428   | YES                 |
| 4                            | 18                    | 1.0u               | 1.428   | YES                 |
| 5                            | 18                    | 1.0u               | 1.428   | YES                 |
| 6                            | 18                    | 1.0u               | 1.428   | YES                 |
| 7                            | 18                    | 1.0u               | 1.428   | YES                 |
| 8                            | 18                    | 1.0u               | 1.428   | YES                 |
| 9                            | 18                    | 1.0u               | 1.428   | YES                 |
| 10                           | 18                    | 1.0u               | 1.428   | YES                 |
| 11                           | 18                    | 1.0u               | 1.428   | YES                 |
| 12                           | 18                    | 1.0u               | 1.428   | YES                 |
| 13                           | 18                    | 1.0u               | 1.428   | YES                 |
| 14                           | 18                    | 1.0u               | 1.428   | NO                  |
| 15                           | 18                    | 1.0u               | 1.428   | YES                 |
| 16                           | 18                    | 1.0u               | 1.428   | YES                 |
| 17                           | 18                    | 1.0u               | 1.428   | NO                  |
| 18                           | 18                    | 1.0u               | 1.428   | YES                 |
| 19                           | 18                    | 1.0u               | 1.428   | YES                 |
| 20                           | 18                    | 1.0u               | 1.428   | YES                 |
| 21                           | 18                    | 1.0u               | 1.428   | NO                  |
| 22                           | 18                    | 1.0u               | 1.428   | YES                 |
| 23                           | 18                    | 1.0u               | 1.428   | YES                 |
| 24                           | 18                    | 1.0u               | 1.428   | YES                 |
| 25                           | 18                    | 1.0u               | 1.428   | YES                 |
| 26                           | 18                    | 1.0u               | 1.428   | YES                 |
| 27                           | 18                    | 1.0u               | 1.428   | YES                 |
| 28                           | 18                    | 1.0u               | 1.428   | YES                 |
| 29                           | 18                    | 1.0u               | 1.428   | YES                 |
| 30                           | 18                    | 1.0u               | 1.428   | YES                 |
| Detection Rate 90%           |                       |                    |         |                     |



| Radar2 Statical Performances |                       |                    |         |                     |
|------------------------------|-----------------------|--------------------|---------|---------------------|
| Trial #                      | Pluse<br>per<br>Burst | Pluse<br>Width(us) | PRI(us) | Detection(Yes / No) |
| 1                            | 28                    | 4.3u               | 208     | YES                 |
| 2                            | 28                    | 2.8u               | 160     | YES                 |
| 3                            | 26                    | 2.9u               | 184     | YES                 |
| 4                            | 24                    | 2.7u               | 190     | YES                 |
| 5                            | 28                    | 3.4u               | 172     | NO                  |
| 6                            | 28                    | 4.0u               | 170     | YES                 |
| 7                            | 27                    | 1.3u               | 220     | YES                 |
| 8                            | 28                    | 1.4u               | 168     | YES                 |
| 9                            | 25                    | 4.5u               | 209     | YES                 |
| 10                           | 24                    | 3.3u               | 204     | YES                 |
| 11                           | 26                    | 2.4u               | 229     | YES                 |
| 12                           | 27                    | 3.8u               | 224     | NO                  |
| 13                           | 23                    | 2.7u               | 207     | YES                 |
| 14                           | 24                    | 3.3u               | 204     | YES                 |
| 15                           | 26                    | 2.4u               | 229     | YES                 |
| 16                           | 27                    | 3.8u               | 224     | YES                 |
| 17                           | 29                    | 2.7u               | 226     | YES                 |
| 18                           | 29                    | 2.9u               | 210     | YES                 |
| 19                           | 27                    | 1.8u               | 190     | YES                 |
| 20                           | 26                    | 2.0u               | 198     | YES                 |
| 21                           | 23                    | 1.2u               | 151     | YES                 |
| 22                           | 25                    | 1.4u               | 168     | YES                 |
| 23                           | 25                    | 1.5u               | 193     | YES                 |
| 24                           | 27                    | 2.6u               | 228     | YES                 |
| 25                           | 26                    | 1.7u               | 216     | YES                 |
| 26                           | 23                    | 4.8u               | 225     | YES                 |
| 27                           | 28                    | 1.9u               | 221     | YES                 |
| 28                           | 26                    | 4.1u               | 227     | YES                 |
| 29                           | 26                    | 3.1u               | 169     | YES                 |
| 30                           | 27                    | 2.2u               | 208     | YES                 |
| Detection Rate 93%           |                       |                    |         |                     |



| Radar3 Statical Performances |                       |                    |         |                     |
|------------------------------|-----------------------|--------------------|---------|---------------------|
| Trial #                      | Pluse<br>per<br>Burst | Pluse<br>Width(us) | PRI(us) | Detection(Yes / No) |
| 1                            | 18                    | 8.6u               | 405     | YES                 |
| 2                            | 18                    | 8.4u               | 410     | YES                 |
| 3                            | 16                    | 9.3u               | 398     | YES                 |
| 4                            | 16                    | 8.0u               | 364     | YES                 |
| 5                            | 17                    | 9.6u               | 366     | YES                 |
| 6                            | 18                    | 8.0u               | 258     | YES                 |
| 7                            | 16                    | 9.3u               | 268     | YES                 |
| 8                            | 16                    | 8.2u               | 477     | NO                  |
| 9                            | 18                    | 8.7u               | 206     | YES                 |
| 10                           | 18                    | 9.0u               | 213     | YES                 |
| 11                           | 16                    | 9.8u               | 482     | YES                 |
| 12                           | 17                    | 7.9u               | 436     | YES                 |
| 13                           | 17                    | 7.0u               | 447     | YES                 |
| 14                           | 16                    | 7.6u               | 410     | YES                 |
| 15                           | 16                    | 8.2u               | 300     | YES                 |
| 16                           | 18                    | 7.4u               | 336     | YES                 |
| 17                           | 16                    | 9.3u               | 492     | NO                  |
| 18                           | 17                    | 7.5u               | 471     | YES                 |
| 19                           | 17                    | 7.9u               | 481     | YES                 |
| 20                           | 18                    | 8.0u               | 492     | YES                 |
| 21                           | 16                    | 9.9u               | 463     | NO                  |
| 22                           | 17                    | 8.5u               | 445     | YES                 |
| 23                           | 17                    | 8.0u               | 250     | YES                 |
| 24                           | 16                    | 8.0u               | 364     | YES                 |
| 25                           | 17                    | 7.2u               | 435     | YES                 |
| 26                           | 18                    | 6.5u               | 336     | YES                 |
| 27                           | 18                    | 6.8u               | 480     | YES                 |
| 28                           | 17                    | 7.2u               | 435     | YES                 |
| 29                           | 18                    | 6.5u               | 336     | YES                 |
| 30                           | 18                    | 6.8u               | 480     | YES                 |
| Detection Rate 90%           |                       |                    |         |                     |



| Radar4 Statical Performances |                       |                    |         |                     |
|------------------------------|-----------------------|--------------------|---------|---------------------|
| Trial #                      | Pluse<br>per<br>Burst | Pluse<br>Width(us) | PRI(us) | Detection(Yes / No) |
| 1                            | 13                    | 13.8u              | 482     | YES                 |
| 2                            | 15                    | 14.9u              | 436     | YES                 |
| 3                            | 15                    | 15.8u              | 447     | YES                 |
| 4                            | 15                    | 14.6u              | 410     | YES                 |
| 5                            | 14                    | 13.9u              | 481     | NO                  |
| 6                            | 14                    | 16.0u              | 492     | YES                 |
| 7                            | 15                    | 17.0u              | 463     | YES                 |
| 8                            | 12                    | 17.5u              | 445     | YES                 |
| 9                            | 12                    | 16.0u              | 442     | YES                 |
| 10                           | 13                    | 13.6u              | 405     | YES                 |
| 11                           | 16                    | 14.4u              | 440     | YES                 |
| 12                           | 16                    | 15.3u              | 398     | YES                 |
| 13                           | 13                    | 14.0u              | 364     | YES                 |
| 14                           | 16                    | 13.2u              | 477     | NO                  |
| 15                           | 12                    | 12.7u              | 206     | YES                 |
| 16                           | 13                    | 12.0u              | 213     | YES                 |
| 17                           | 15                    | 19.0u              | 300     | YES                 |
| 18                           | 13                    | 11.4u              | 336     | YES                 |
| 19                           | 16                    | 12.5u              | 330     | YES                 |
| 20                           | 13                    | 16.6u              | 463     | YES                 |
| 21                           | 13                    | 18.8u              | 445     | YES                 |
| 22                           | 15                    | 19.0u              | 442     | YES                 |
| 23                           | 15                    | 14.8u              | 405     | YES                 |
| 24                           | 15                    | 18.6u              | 409     | NO                  |
| 25                           | 15                    | 18.2u              | 441     | YES                 |
| 26                           | 12                    | 20.0u              | 332     | YES                 |
| 27                           | 14                    | 14.8u              | 478     | YES                 |
| 28                           | 13                    | 15.6u              | 367     | YES                 |
| 29                           | 14                    | 17.0u              | 258     | YES                 |
| 30                           | 15                    | 19.3u              | 270     | YES                 |
| Detection Rate 90%           |                       |                    |         |                     |



| Radar5 Statical Performances |                  |                     |
|------------------------------|------------------|---------------------|
| Trial #                      | Test Signal name | Detection(Yes / No) |
| 1                            | LP_Signal_01     | Yes                 |
| 2                            | LP_Signal_02     | Yes                 |
| 3                            | LP_Signal_03     | Yes                 |
| 4                            | LP_Signal_04     | Yes                 |
| 5                            | LP_Signal_05     | Yes                 |
| 6                            | LP_Signal_06     | Yes                 |
| 7                            | LP_Signal_07     | Yes                 |
| 8                            | LP_Signal_08     | Yes                 |
| 9                            | LP_Signal_09     | Yes                 |
| 10                           | LP_Signal_10     | Yes                 |
| 11                           | LP_Signal_11     | Yes                 |
| 12                           | LP_Signal_12     | Yes                 |
| 13                           | LP_Signal_13     | Yes                 |
| 14                           | LP_Signal_14     | Yes                 |
| 15                           | LP_Signal_15     | Yes                 |
| 16                           | LP_Signal_16     | Yes                 |
| 17                           | LP_Signal_17     | Yes                 |
| 18                           | LP_Signal_18     | Yes                 |
| 19                           | LP_Signal_19     | Yes                 |
| 20                           | LP_Signal_20     | Yes                 |
| 21                           | LP_Signal_21     | Yes                 |
| 22                           | LP_Signal_22     | Yes                 |
| 23                           | LP_Signal_23     | Yes                 |
| 24                           | LP_Signal_24     | Yes                 |
| 25                           | LP_Signal_25     | Yes                 |
| 26                           | LP_Signal_26     | Yes                 |
| 27                           | LP_Signal_27     | Yes                 |
| 28                           | LP_Signal_28     | Yes                 |
| 29                           | LP_Signal_29     | Yes                 |
| 30                           | LP_Signal_30     | Yes                 |
| Detection Rate               |                  | 100%                |



| Radar6 Statical Performances |                                |                     |
|------------------------------|--------------------------------|---------------------|
| Trial #                      | Hoping Frequency Sequence Name | Detection(Yes / No) |
| 1                            | HOP_FREQ_SEQ_01                | Yes                 |
| 2                            | HOP_FREQ_SEQ_02                | Yes                 |
| 3                            | HOP_FREQ_SEQ_03                | Yes                 |
| 4                            | HOP_FREQ_SEQ_04                | Yes                 |
| 5                            | HOP_FREQ_SEQ_05                | Yes                 |
| 6                            | HOP_FREQ_SEQ_06                | Yes                 |
| 7                            | HOP_FREQ_SEQ_07                | Yes                 |
| 8                            | HOP_FREQ_SEQ_08                | Yes                 |
| 9                            | HOP_FREQ_SEQ_09                | Yes                 |
| 10                           | HOP_FREQ_SEQ_10                | Yes                 |
| 11                           | HOP_FREQ_SEQ_11                | Yes                 |
| 12                           | HOP_FREQ_SEQ_12                | Yes                 |
| 13                           | HOP_FREQ_SEQ_13                | Yes                 |
| 14                           | HOP_FREQ_SEQ_14                | Yes                 |
| 15                           | HOP_FREQ_SEQ_15                | Yes                 |
| 16                           | HOP_FREQ_SEQ_16                | Yes                 |
| 17                           | HOP_FREQ_SEQ_17                | Yes                 |
| 18                           | HOP_FREQ_SEQ_18                | NO                  |
| 19                           | HOP_FREQ_SEQ_19                | Yes                 |
| 20                           | HOP_FREQ_SEQ_20                | Yes                 |
| 21                           | HOP_FREQ_SEQ_21                | Yes                 |
| 22                           | HOP_FREQ_SEQ_22                | Yes                 |
| 23                           | HOP_FREQ_SEQ_23                | Yes                 |
| 24                           | HOP_FREQ_SEQ_24                | Yes                 |
| 25                           | HOP_FREQ_SEQ_25                | Yes                 |
| 26                           | HOP_FREQ_SEQ_26                | Yes                 |
| 27                           | HOP_FREQ_SEQ_27                | Yes                 |
| 28                           | HOP_FREQ_SEQ_28                | Yes                 |
| 29                           | HOP_FREQ_SEQ_29                | Yes                 |
| 30                           | HOP_FREQ_SEQ_30                | Yes                 |
| Detection Rate               |                                | 97%                 |



TX (11n 40MHz Mode)

Table 1: Short Pulse Radar Test Waveforms.

| Radar Type                  | Pulse Width (μsec) | PRI (μsec) | Number of Pulses | Pass times | Fail times | Percentage of Successful Detection (%) |
|-----------------------------|--------------------|------------|------------------|------------|------------|----------------------------------------|
| 1                           | 1                  | 1428       | 18               | 28         | 2          | 93%                                    |
| 2                           | 1-5                | 150-230    | 23-29            | 27         | 3          | 90%                                    |
| 3                           | 6-10               | 200-500    | 16-18            | 27         | 3          | 93%                                    |
| 4                           | 11-20              | 200-500    | 12-16            | 28         | 2          | 93%                                    |
| Aggregate (Radar Types 1-4) |                    |            | -                | 110        | 10         | 93%                                    |

Table 2: Long Pulse Radar Test Waveform

| Radar Type | Pulse Width (μsec) | Chirp Width (MHz) | PRI (μsec) | Number of Pulses Per Burst | Number of Bursts | Pass times | Fail times | Percentage of Successful Detection (%) |
|------------|--------------------|-------------------|------------|----------------------------|------------------|------------|------------|----------------------------------------|
| 5          | 50-100             | 5-20              | 1000-2000  | 1-3                        | 8-20             | 29         | 1          | 97%                                    |

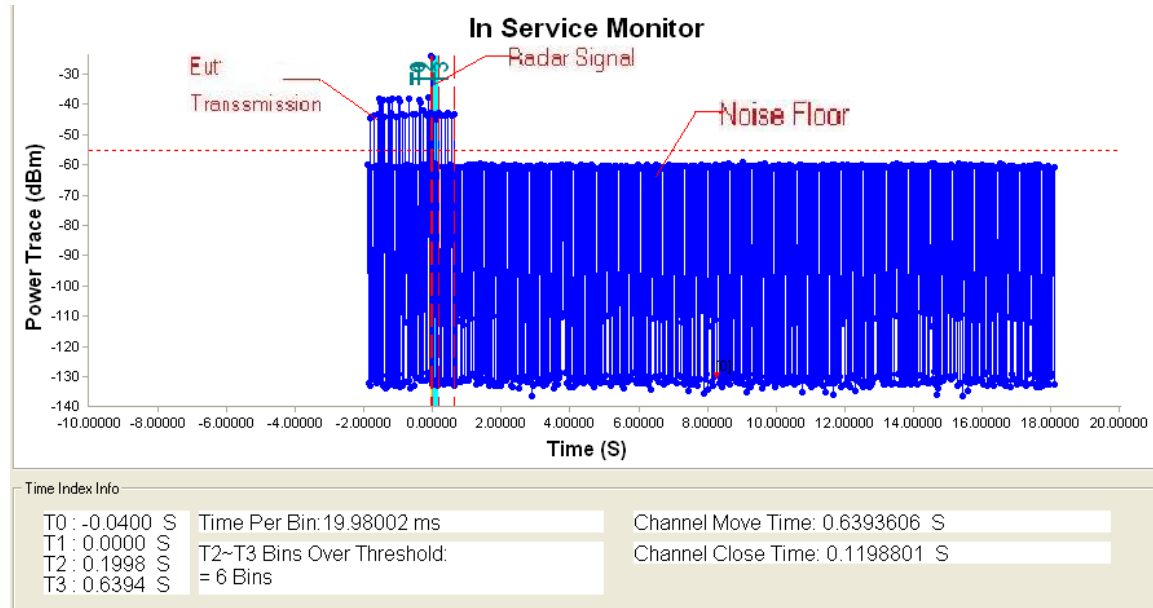
Table 3: Frequency Hopping Radar Test Waveform

| Radar Type | Pulse Width (μsec) | PRI (μsec) | Pulses per Hop | Hopping Rate (kHz) | Hopping Sequence Length (msec) | Pass times | Fail times | Percentage of Successful Detection (%) |
|------------|--------------------|------------|----------------|--------------------|--------------------------------|------------|------------|----------------------------------------|
| 6          | 1                  | 333        | 9              | 0.333              | 300                            | 28         | 2          | 93%                                    |

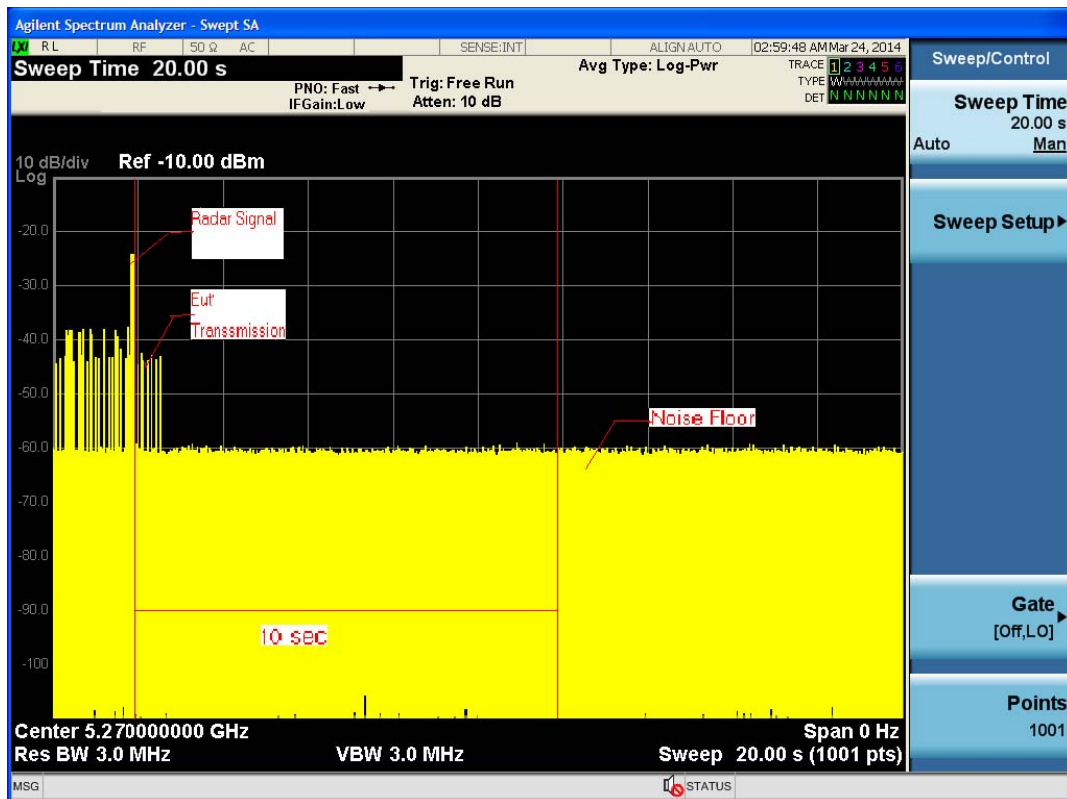


TX (11n 40MHz Mode )

Radar signal 1



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

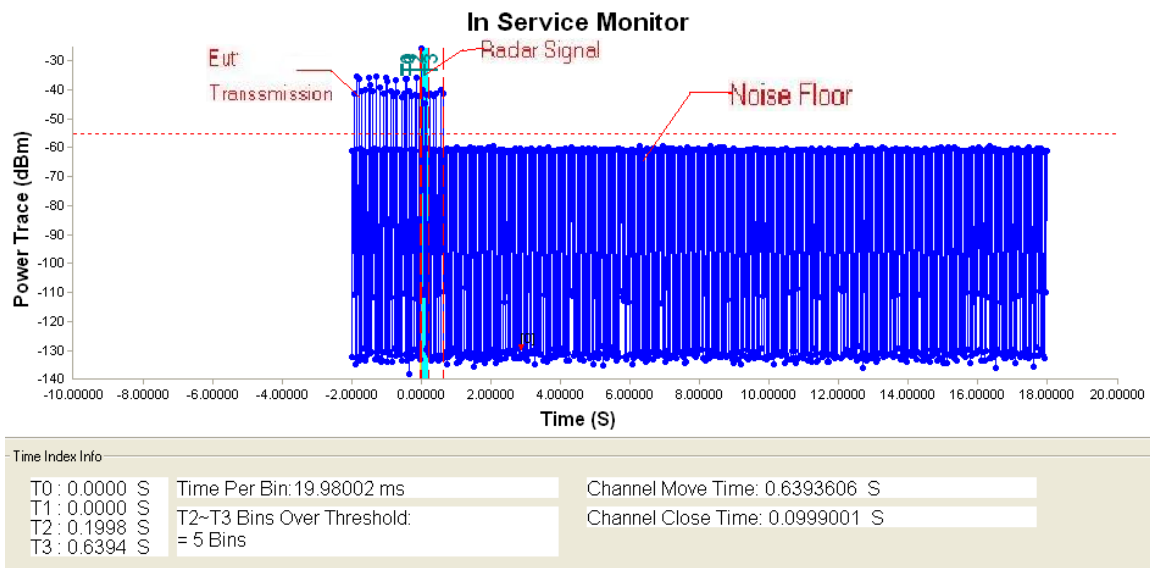


**Note:** An expanded plot for the device vacates the channel in the required 500ms

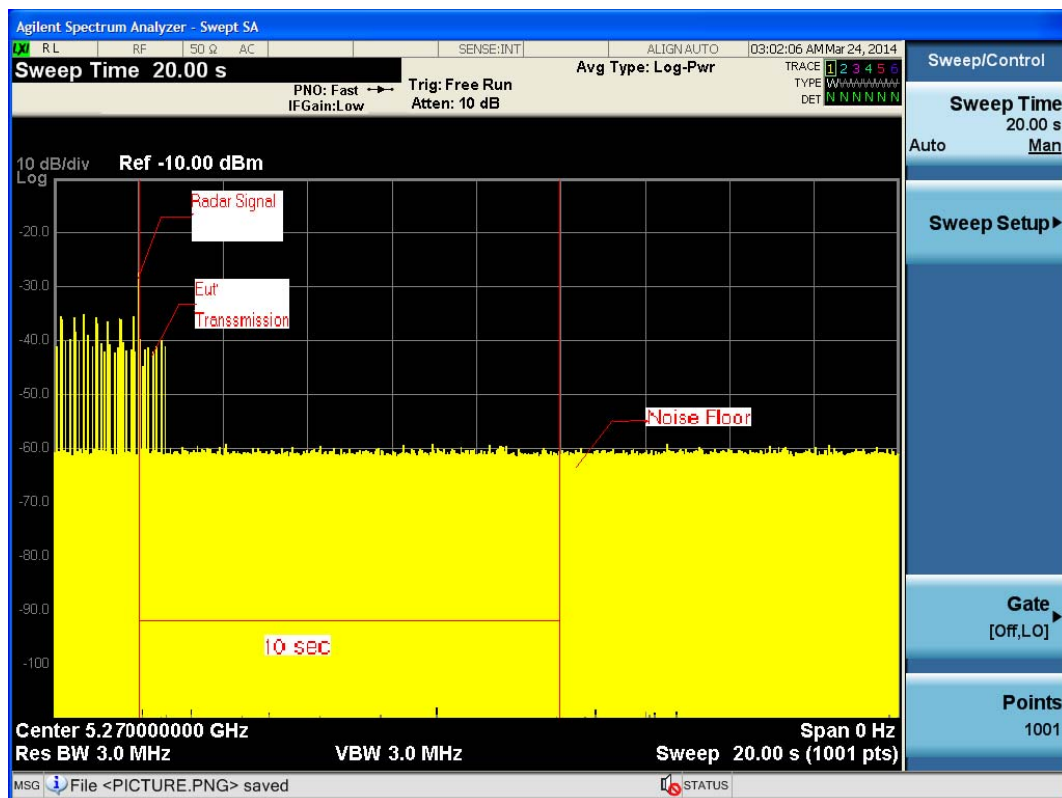


TX (11n 40MHz Mode )

Radar signal 2



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

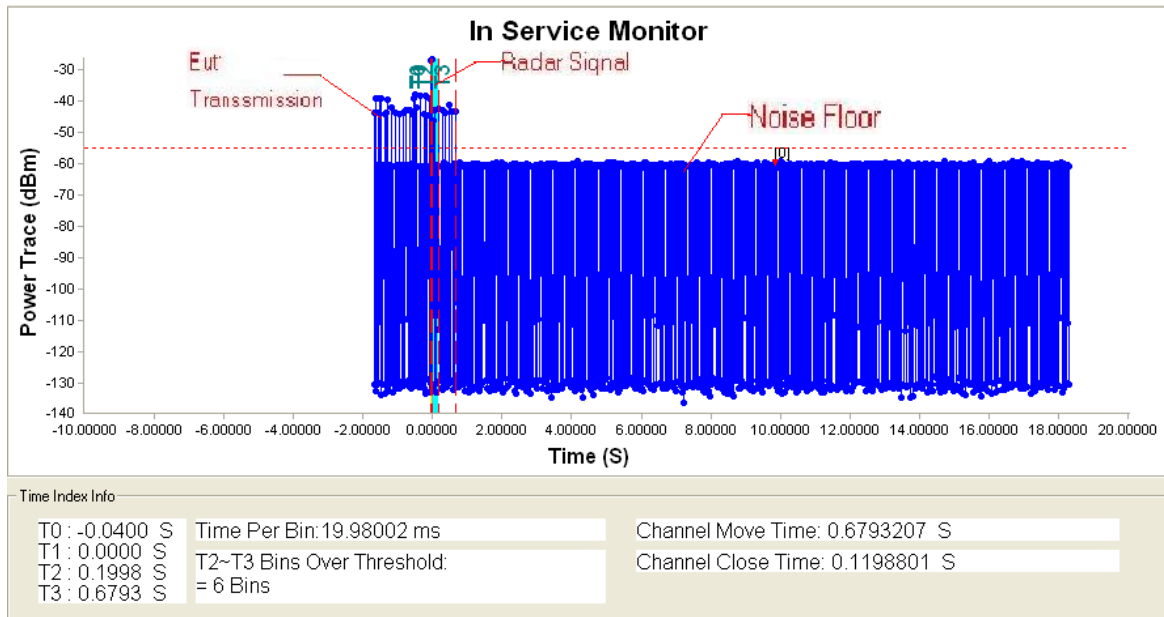


**Note:** An expanded plot for the device vacates the channel in the required 500ms

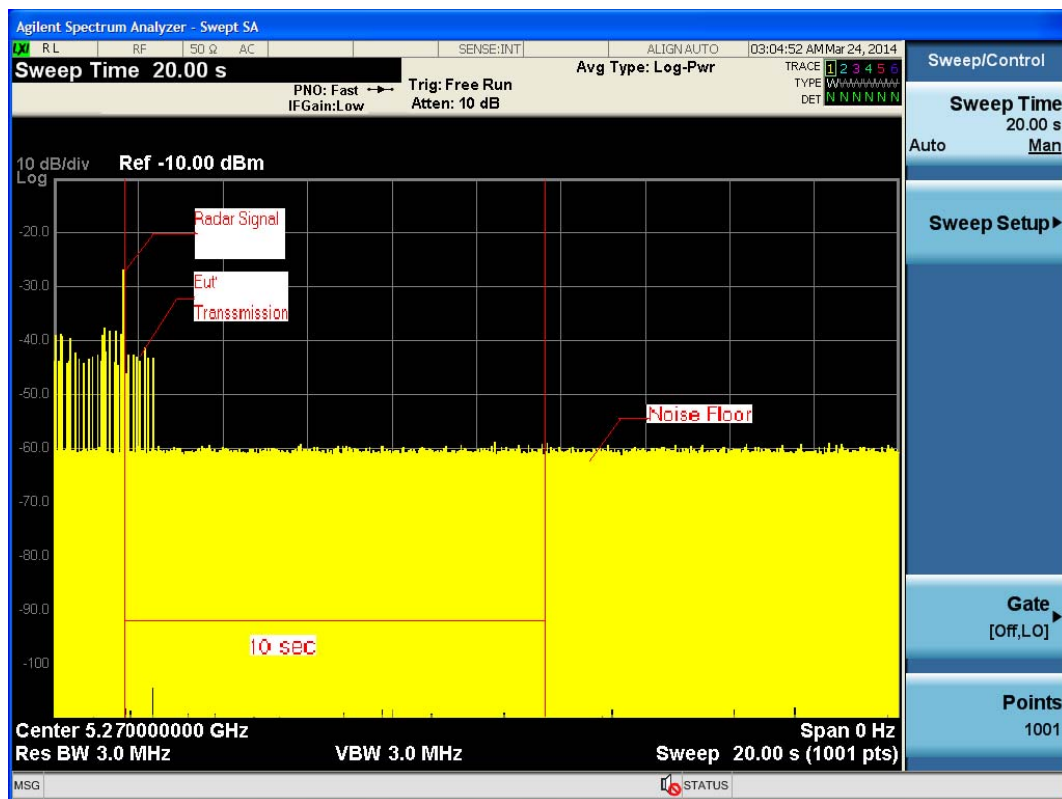


TX (11n 40MHz Mode )

Radarsignal 3



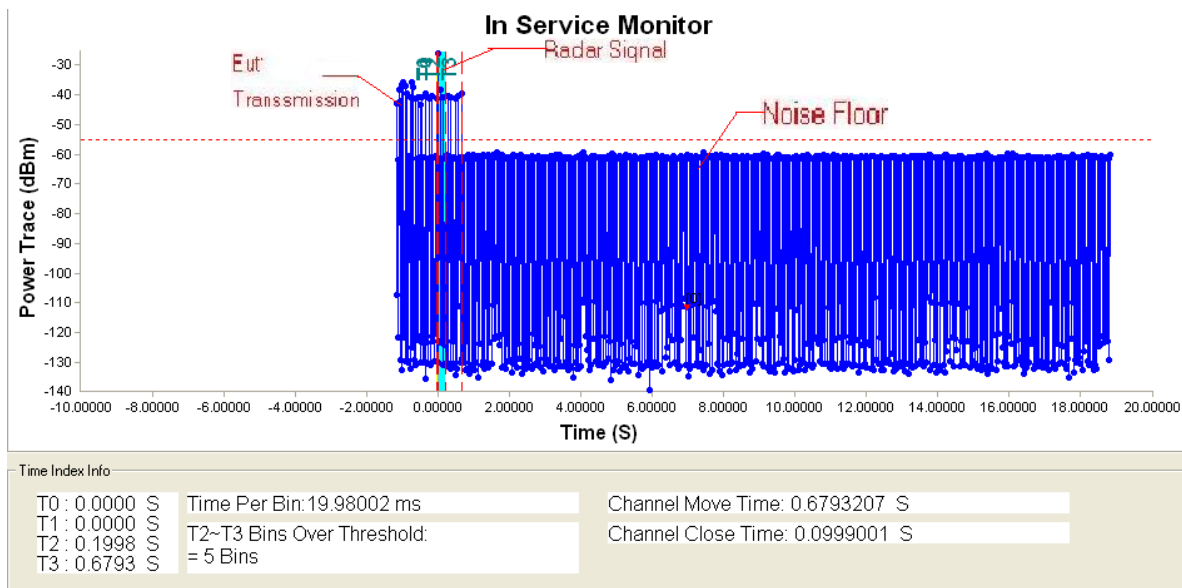
**Note:** T1 denotes the start of Channel Move Time upon the end of the last Radar burst.  
 T2 denotes the data transmission time of 200ms from T1.  
 T3 denotes the end of Channel Move Time.  
 T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.



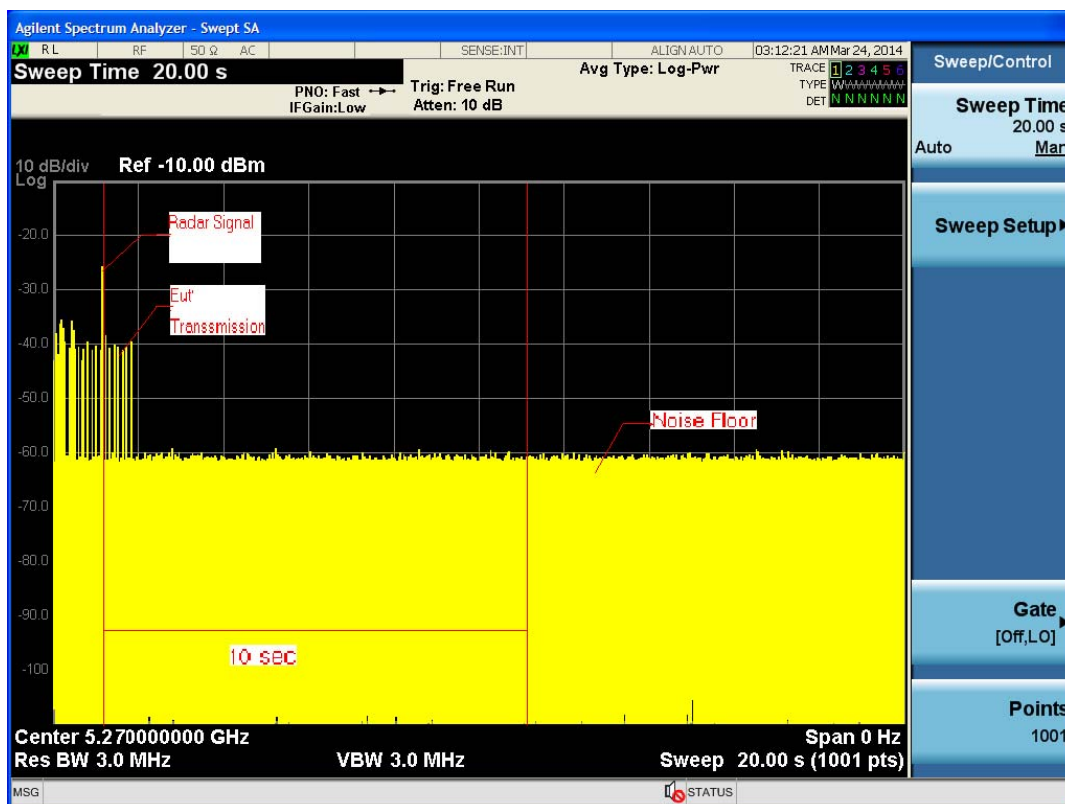
**Note:** An expanded plot for the device vacates the channel in the required 500ms



## Radar signal 4



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

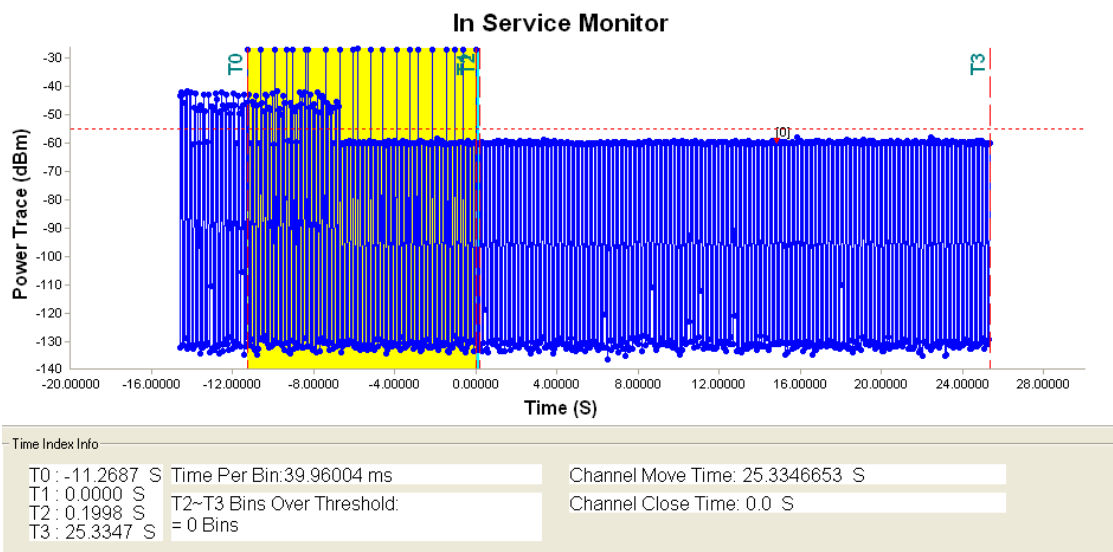


**Note:** An expanded plot for the device vacates the channel in the required 500ms

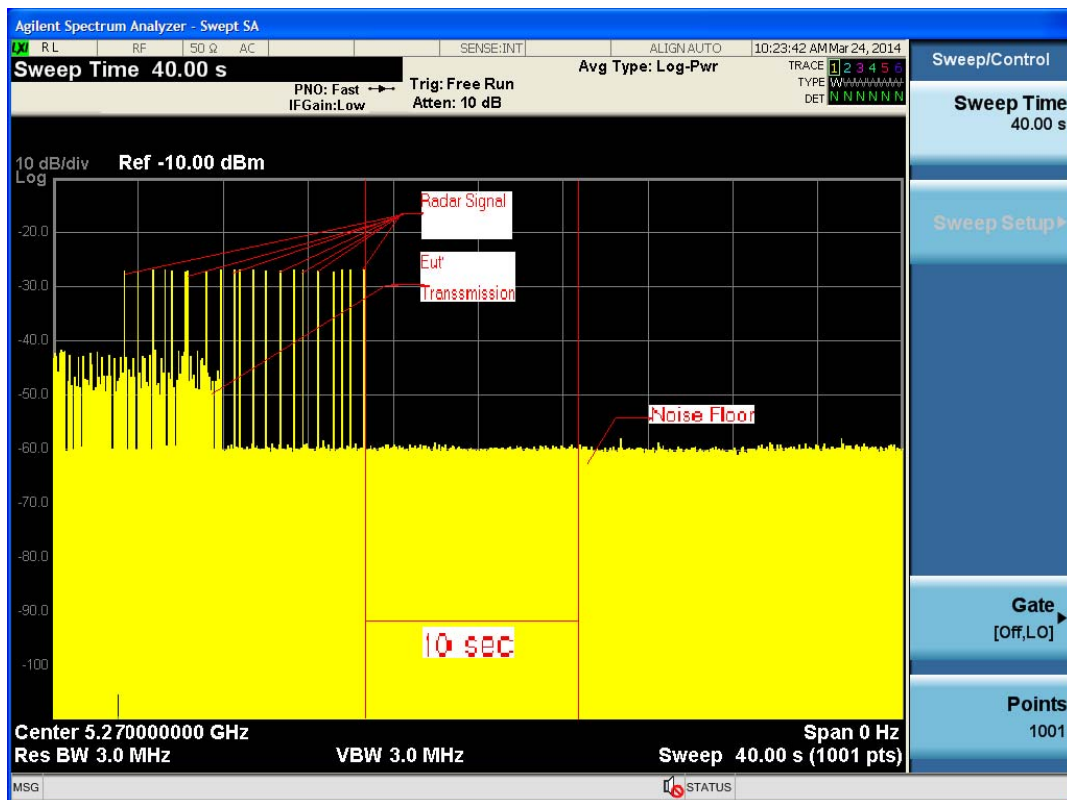


TX (11n 40MHz Mode )

Radar signal 5



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

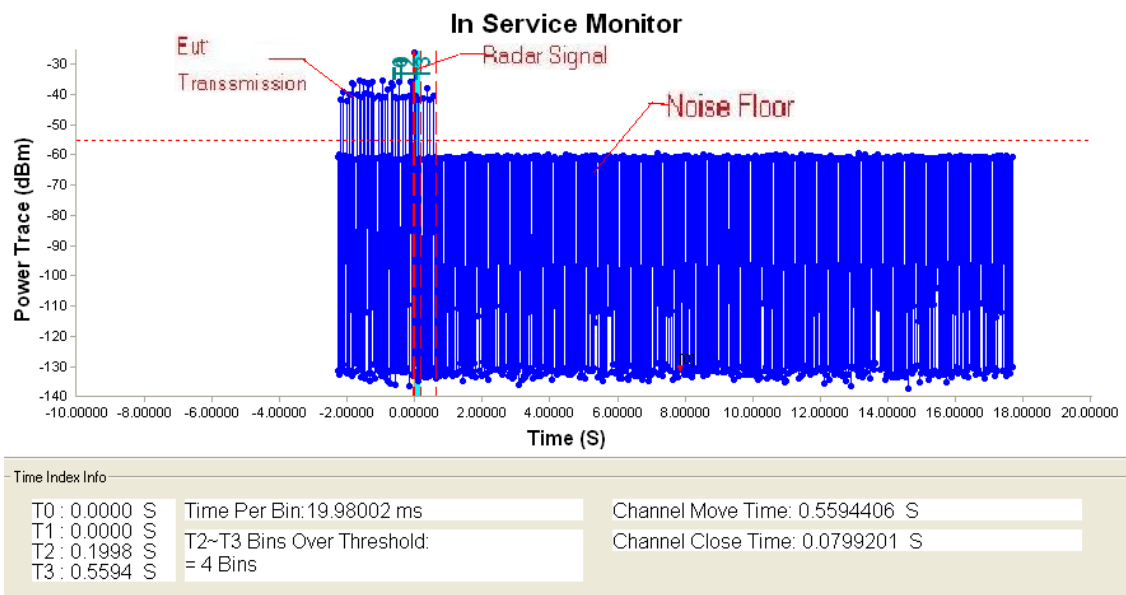


**Note:** An expanded plot for the device vacates the channel in the required 500ms



TX (11n 40MHz Mode )

Radar signal 6



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



**Note:** An expanded plot for the device vacates the channel in the required 500ms



TX (11n 40MHz Mode)

| Radar1 Statical Performances |                       |                    |         |                     |
|------------------------------|-----------------------|--------------------|---------|---------------------|
| Trial #                      | Pluse<br>per<br>Burst | Pluse<br>Width(us) | PRI(us) | Detection(Yes / No) |
| 1                            | 18                    | 1.0u               | 1.428   | YES                 |
| 2                            | 18                    | 1.0u               | 1.428   | YES                 |
| 3                            | 18                    | 1.0u               | 1.428   | YES                 |
| 4                            | 18                    | 1.0u               | 1.428   | YES                 |
| 5                            | 18                    | 1.0u               | 1.428   | YES                 |
| 6                            | 18                    | 1.0u               | 1.428   | NO                  |
| 7                            | 18                    | 1.0u               | 1.428   | YES                 |
| 8                            | 18                    | 1.0u               | 1.428   | YES                 |
| 9                            | 18                    | 1.0u               | 1.428   | YES                 |
| 10                           | 18                    | 1.0u               | 1.428   | YES                 |
| 11                           | 18                    | 1.0u               | 1.428   | YES                 |
| 12                           | 18                    | 1.0u               | 1.428   | YES                 |
| 13                           | 18                    | 1.0u               | 1.428   | YES                 |
| 14                           | 18                    | 1.0u               | 1.428   | YES                 |
| 15                           | 18                    | 1.0u               | 1.428   | YES                 |
| 16                           | 18                    | 1.0u               | 1.428   | YES                 |
| 17                           | 18                    | 1.0u               | 1.428   | YES                 |
| 18                           | 18                    | 1.0u               | 1.428   | YES                 |
| 19                           | 18                    | 1.0u               | 1.428   | YES                 |
| 20                           | 18                    | 1.0u               | 1.428   | NO                  |
| 21                           | 18                    | 1.0u               | 1.428   | YES                 |
| 22                           | 18                    | 1.0u               | 1.428   | YES                 |
| 23                           | 18                    | 1.0u               | 1.428   | YES                 |
| 24                           | 18                    | 1.0u               | 1.428   | YES                 |
| 25                           | 18                    | 1.0u               | 1.428   | YES                 |
| 26                           | 18                    | 1.0u               | 1.428   | YES                 |
| 27                           | 18                    | 1.0u               | 1.428   | YES                 |
| 28                           | 18                    | 1.0u               | 1.428   | YES                 |
| 29                           | 18                    | 1.0u               | 1.428   | YES                 |
| 30                           | 18                    | 1.0u               | 1.428   | YES                 |
| Detection Rate 93%           |                       |                    |         |                     |



| Radar2 Statical Performances |                 |                 |         |                     |
|------------------------------|-----------------|-----------------|---------|---------------------|
| Trial #                      | Pluse per Burst | Pluse Width(us) | PRI(us) | Detection(Yes / No) |
| 1                            | 23              | 1.4u            | 193     | YES                 |
| 2                            | 25              | 4.5u            | 230     | YES                 |
| 3                            | 27              | 3.3u            | 165     | YES                 |
| 4                            | 23              | 1.2u            | 151     | YES                 |
| 5                            | 25              | 1.4u            | 168     | YES                 |
| 6                            | 25              | 1.5u            | 193     | YES                 |
| 7                            | 26              | 2.6u            | 228     | NO                  |
| 8                            | 24              | 2.2u            | 216     | YES                 |
| 9                            | 27              | 1.3u            | 225     | YES                 |
| 10                           | 26              | 1.4u            | 221     | YES                 |
| 11                           | 28              | 4.5u            | 227     | YES                 |
| 12                           | 27              | 2.7u            | 169     | YES                 |
| 13                           | 26              | 2.9u            | 208     | YES                 |
| 14                           | 28              | 2.6u            | 207     | NO                  |
| 15                           | 23              | 1.7u            | 158     | YES                 |
| 16                           | 25              | 1.8u            | 208     | YES                 |
| 17                           | 25              | 2.7u            | 158     | YES                 |
| 18                           | 27              | 3.8u            | 184     | YES                 |
| 19                           | 29              | 2.7u            | 172     | YES                 |
| 20                           | 27              | 3.2u            | 170     | YES                 |
| 21                           | 24              | 4.3u            | 221     | YES                 |
| 22                           | 26              | 3.1u            | 203     | YES                 |
| 23                           | 23              | 2.2u            | 190     | YES                 |
| 24                           | 28              | 1.3u            | 198     | NO                  |
| 25                           | 23              | 2.5u            | 228     | YES                 |
| 26                           | 27              | 1.3u            | 170     | YES                 |
| 27                           | 18              | 1.4u            | 209     | YES                 |
| 28                           | 26              | 4.5u            | 204     | YES                 |
| 29                           | 25              | 2.7u            | 230     | YES                 |
| 30                           | 27              | 3.0u            | 224     | YES                 |
| Detection Rate 90%           |                 |                 |         |                     |



| Radar3 Statical Performances |                 |                 |         |                     |
|------------------------------|-----------------|-----------------|---------|---------------------|
| Trial #                      | Pluse per Burst | Pluse Width(us) | PRI(us) | Detection(Yes / No) |
| 1                            | 18              | 6.6u            | 213     | YES                 |
| 2                            | 16              | 8.5u            | 481     | YES                 |
| 3                            | 17              | 9.5u            | 436     | YES                 |
| 4                            | 17              | 9.8u            | 450     | YES                 |
| 5                            | 18              | 9.6u            | 410     | YES                 |
| 6                            | 17              | 9.9u            | 409     | NO                  |
| 7                            | 18              | 8.5u            | 398     | YES                 |
| 8                            | 16              | 8.0u            | 310     | YES                 |
| 9                            | 18              | 8.6u            | 336     | YES                 |
| 10                           | 16              | 8.8u            | 325     | YES                 |
| 11                           | 18              | 7.6u            | 408     | YES                 |
| 12                           | 18              | 7.9u            | 492     | YES                 |
| 13                           | 17              | 8.0u            | 463     | NO                  |
| 14                           | 17              | 9.9u            | 445     | YES                 |
| 15                           | 16              | 8.5u            | 442     | YES                 |
| 16                           | 16              | 10.0u           | 405     | YES                 |
| 17                           | 18              | 8.7u            | 409     | YES                 |
| 18                           | 16              | 9.0u            | 398     | YES                 |
| 19                           | 16              | 8.6u            | 364     | YES                 |
| 20                           | 18              | 8.2u            | 366     | YES                 |
| 21                           | 17              | 8.7u            | 258     | YES                 |
| 22                           | 16              | 9.0u            | 480     | NO                  |
| 23                           | 18              | 9.5u            | 210     | YES                 |
| 24                           | 16              | 7.6u            | 270     | YES                 |
| 25                           | 16              | 7.9u            | 431     | YES                 |
| 26                           | 18              | 8.0u            | 330     | YES                 |
| 27                           | 16              | 6.0u            | 440     | YES                 |
| 28                           | 16              | 6.0u            | 360     | YES                 |
| 29                           | 16              | 8.6u            | 366     | YES                 |
| 30                           | 18              | 8.8u            | 258     | YES                 |
| Detection Rate 93%           |                 |                 |         |                     |



| Radar4 Statical Performances |                       |                    |         |                     |
|------------------------------|-----------------------|--------------------|---------|---------------------|
| Trial #                      | Pluse<br>per<br>Burst | Pluse<br>Width(us) | PRI(us) | Detection(Yes / No) |
| 1                            | 16                    | 18.0u              | 420     | YES                 |
| 2                            | 16                    | 13.2u              | 447     | YES                 |
| 3                            | 14                    | 20.0u              | 258     | YES                 |
| 4                            | 14                    | 12.0u              | 270     | YES                 |
| 5                            | 13                    | 13.8u              | 441     | YES                 |
| 6                            | 16                    | 14.9u              | 330     | YES                 |
| 7                            | 15                    | 15.8u              | 478     | NO                  |
| 8                            | 12                    | 14.6u              | 442     | YES                 |
| 9                            | 14                    | 13.9u              | 405     | YES                 |
| 10                           | 15                    | 16.5u              | 441     | YES                 |
| 11                           | 15                    | 14.0u              | 332     | YES                 |
| 12                           | 13                    | 11.6u              | 478     | YES                 |
| 13                           | 13                    | 19.8u              | 410     | YES                 |
| 14                           | 14                    | 14.0u              | 481     | YES                 |
| 15                           | 14                    | 14.9u              | 492     | NO                  |
| 16                           | 15                    | 15.8u              | 463     | YES                 |
| 17                           | 16                    | 19.6u              | 445     | YES                 |
| 18                           | 12                    | 13.9u              | 442     | YES                 |
| 19                           | 13                    | 16.0u              | 482     | YES                 |
| 20                           | 13                    | 15.7u              | 477     | YES                 |
| 21                           | 12                    | 14.5u              | 210     | YES                 |
| 22                           | 12                    | 13.8u              | 206     | YES                 |
| 23                           | 16                    | 16.5u              | 334     | YES                 |
| 24                           | 15                    | 16.0u              | 216     | YES                 |
| 25                           | 15                    | 17.0u              | 315     | YES                 |
| 26                           | 14                    | 13.5u              | 328     | YES                 |
| 27                           | 15                    | 12.0u              | 445     | YES                 |
| 28                           | 16                    | 12.8u              | 442     | YES                 |
| 29                           | 12                    | 13.8u              | 405     | YES                 |
| 30                           | 13                    | 15.0u              | 409     | YES                 |
| Detection Rate 93%           |                       |                    |         |                     |



| Radar5 Statical Performances |                  |                     |
|------------------------------|------------------|---------------------|
| Trial #                      | Test Signal name | Detection(Yes / No) |
| 1                            | LP_Signal_01     | Yes                 |
| 2                            | LP_Signal_02     | Yes                 |
| 3                            | LP_Signal_03     | Yes                 |
| 4                            | LP_Signal_04     | Yes                 |
| 5                            | LP_Signal_05     | Yes                 |
| 6                            | LP_Signal_06     | Yes                 |
| 7                            | LP_Signal_07     | Yes                 |
| 8                            | LP_Signal_08     | Yes                 |
| 9                            | LP_Signal_09     | Yes                 |
| 10                           | LP_Signal_10     | Yes                 |
| 11                           | LP_Signal_11     | Yes                 |
| 12                           | LP_Signal_12     | Yes                 |
| 13                           | LP_Signal_13     | Yes                 |
| 14                           | LP_Signal_14     | NO                  |
| 15                           | LP_Signal_15     | Yes                 |
| 16                           | LP_Signal_16     | Yes                 |
| 17                           | LP_Signal_17     | Yes                 |
| 18                           | LP_Signal_18     | Yes                 |
| 19                           | LP_Signal_19     | Yes                 |
| 20                           | LP_Signal_20     | Yes                 |
| 21                           | LP_Signal_21     | Yes                 |
| 22                           | LP_Signal_22     | Yes                 |
| 23                           | LP_Signal_23     | Yes                 |
| 24                           | LP_Signal_24     | Yes                 |
| 25                           | LP_Signal_25     | Yes                 |
| 26                           | LP_Signal_26     | Yes                 |
| 27                           | LP_Signal_27     | Yes                 |
| 28                           | LP_Signal_28     | Yes                 |
| 29                           | LP_Signal_29     | Yes                 |
| 30                           | LP_Signal_30     | Yes                 |
| Detection Rate               |                  | 100%                |



| Radar6 Statical Performances |                                |                     |
|------------------------------|--------------------------------|---------------------|
| Trial #                      | Hoping Frequency Sequence Name | Detection(Yes / No) |
| 1                            | HOP_FREQ_SEQ_01                | Yes                 |
| 2                            | HOP_FREQ_SEQ_02                | Yes                 |
| 3                            | HOP_FREQ_SEQ_03                | Yes                 |
| 4                            | HOP_FREQ_SEQ_04                | Yes                 |
| 5                            | HOP_FREQ_SEQ_05                | Yes                 |
| 6                            | HOP_FREQ_SEQ_06                | Yes                 |
| 7                            | HOP_FREQ_SEQ_07                | Yes                 |
| 8                            | HOP_FREQ_SEQ_08                | Yes                 |
| 9                            | HOP_FREQ_SEQ_09                | NO                  |
| 10                           | HOP_FREQ_SEQ_10                | Yes                 |
| 11                           | HOP_FREQ_SEQ_11                | Yes                 |
| 12                           | HOP_FREQ_SEQ_12                | Yes                 |
| 13                           | HOP_FREQ_SEQ_13                | Yes                 |
| 14                           | HOP_FREQ_SEQ_14                | Yes                 |
| 15                           | HOP_FREQ_SEQ_15                | Yes                 |
| 16                           | HOP_FREQ_SEQ_16                | Yes                 |
| 17                           | HOP_FREQ_SEQ_17                | Yes                 |
| 18                           | HOP_FREQ_SEQ_18                | Yes                 |
| 19                           | HOP_FREQ_SEQ_19                | Yes                 |
| 20                           | HOP_FREQ_SEQ_20                | Yes                 |
| 21                           | HOP_FREQ_SEQ_21                | NO                  |
| 22                           | HOP_FREQ_SEQ_22                | Yes                 |
| 23                           | HOP_FREQ_SEQ_23                | Yes                 |
| 24                           | HOP_FREQ_SEQ_24                | Yes                 |
| 25                           | HOP_FREQ_SEQ_25                | Yes                 |
| 26                           | HOP_FREQ_SEQ_26                | Yes                 |
| 27                           | HOP_FREQ_SEQ_27                | Yes                 |
| 28                           | HOP_FREQ_SEQ_28                | Yes                 |
| 29                           | HOP_FREQ_SEQ_29                | Yes                 |
| 30                           | HOP_FREQ_SEQ_30                | Yes                 |
| Detection Rate               |                                | 93%                 |