



TEST REPORT

Applicant Name: Intellian Technologies, Inc.

Address: 18-7, Jinwisandan-ro, Jinwi-myeon (Chungho-ri),

Pyeongtaek-si, Gyeonggi-do 17709 Korea

Report Number: 2401X39055E-RF

FCC ID: XXZ-BL6066 IC 26236-BL6066

Test Standard (s)

FCC PART 15.407; RSS-247 ISSUE 3, AUGUST 2023

Sample Description

Product Type: CNX-Mobility

Model No.:

Multiple Model(s) No.:

Trade Mark:

Date Received:

Intellian

2024/09/25

Issue Date:

2024/11/07

Test Result: Pass▲

▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By: Approved By:

Wills yu Nang Wang

Wills Yu Nancy Wang
RF Engineer RF Supervisor

Note: The information marked * is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

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Bay Area Compliance Laboratories Corp. (Shenzhen)

5F(B-West), 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

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DOCUMENT REVISION HISTORY

| Revision Number | Report Number | Description of Revision | Date of Revision |
|-----------------|----------------|-------------------------|------------------|
| 0 | 2401X39055E-RF | Original Report | 2024/11/07 |

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

| HVIN | BL6066 |
|---------------------------------------|--|
| FVIN | BL6066 |
| Product | CNX-Mobility |
| Tested Model | BL6066 |
| Multiple Model(s) | N/A |
| Frequency Range | 5GHz Wi-Fi: 5250-5350 MHz; 5470-5725MHz Note: frequency range 5600-5650MHz can't be use in Canada |
| Mode | 802.11a/n20/n40/ac20/ac40/ac80/ac160/ax20/ax40/ax80/ax160 |
| Device Type | Master |
| Modulation Technique | OFDM, OFDMA |
| Maximum Conducted Average Ouput Power | 5250-5350MHz: 11.62dBm 5470-5725MHz: 17.61dBm |
| Maximum EIRP | 5250-5350MHz: 19.78dBm 5470-5725MHz: 25.77dBm |
| Antenna Specification [#] | ANT0: 5.0dBi, ANT1: 5.3dBi (It is provided by the applicant) |
| Voltage Range | DC 56V from adapter |
| Sample serial number | 2S2T-1 (Assigned by BACL, Shenzhen) |
| Sample/EUT Status | Good condition |
| Adapter Information | Model: ATM450A2-P560 Input: AC 100-240V, 50-60Hz, 5.3-2.2A Output: DC 56V, 8.05A, 450.8W |
| | |

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts E of the Federal Communications Commission's rules, and RSS-247 Issue 3, August 2023 of the Innovation, Science and Economic Development Canada...

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The objective is to determine compliance with FCC Part 15, Subpart E, section 15.407 Dynamic Frequency Selection (DFS) for devices operating in the bands 5250-5350 MHz, 5470-5725 MHz.

The objective is to determine compliance with Dynamic Frequency Selection (DFS) of the RSS-247 Issue 3, August 2023 of the Innovation, Science and Economic Development Canada for devices operating in the bands 5250-5350 MHz, 5470-5600MHz and 5650-5725 MHz.

Test Methodology

FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02.

Each test item follows test standards and with no deviation.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West), 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 715558, the FCC Designation No.: CN5045.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0023.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The EUT was configured for testing in an engineering mode which was provided by the manufacturer.

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EUT Exercise Software

"QRCT4" exercise software was used.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

| Manufacturer | Description | Model | Serial Number |
|--------------|--|-----------------|---------------|
| DELL | PC | Vostro 3690 | E569659A9981 |
| DELL | LED display | E2423H | CN-OPTM1T |
| DELL | Keyboard | KB1421 | E134780 |
| DELL | Mouse | WM-100 | Unknown |
| BIG FIELD | AXE5400 Wi-Fi 6E High Gain Wireless USB Adapter | Archer TXE70UH | Unknown |
| DELL | Notebook | DESKTOP-1630AQ3 | 9RVYFH2 |

External I/O Cable

| Cable Description | Length (m) | From Port | То |
|----------------------------------|------------|-----------|--|
| Un-shielded detachable AC cable | 1.2 | AC mains | Adapter |
| Un-shielded detachable DC Cable | 0.6 | Adapter | EUT |
| Shielded detachable RJ45 cable | 1.0 | Notebook | EUT |
| Un-shielded detachable USB cable | 1.0 | Notebook | AXE5400 Wi-Fi 6E High Gain Wireless USB Adapter |

SUMMARY OF TEST RESULTS

The following result table represents the list of measurements required under the CFR §47 Part 15.407(h), RSS-247 Issue 3 §6.3 and KDB: 905462 D02 UNII DFS Compliance Procedures New Rules v02

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| Items | Description of Test | Result |
|--------------------------------|---|-----------|
| Detection Bandwidth | UNII Detection Bandwidth | Compliant |
| D. C | Initial Channel Availability Check Time (CAC) | Compliant |
| Performance Requirements Check | Radar Burst at the Beginning of the CAC | Compliant |
| Cneck | Radar Burst at the End of the CAC | Compliant |
| | Channel Move Time | Compliant |
| In-Service Monitoring | Channel Closing Transmission Time | Compliant |
| | Non-Occupancy Period | Compliant |
| Radar Detection | Statistical Performance Check | Compliant |

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TEST EQUIPMENT LIST

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|-----------------|--------------------------------|----------|---------------|---------------------|-------------------------|
| Tonscend | RF control Unit | JS0806-2 | 19D8060154 | 2024/08/06 | 2025/08/05 |
| Rohde & Schwarz | Spectrum Analyzer | FSV40 | 101473 | 2024/01/16 | 2025/01/15 |
| Keysight | MXG Vector Signal Generator | N5182B | MY53051503 | 2024/01/08 | 2025/01/07 |
| Narda | 20dB Attenuator | 99899 | 0107 | 2024/06/27 | 2025/06/26 |
| narda | Power divider | SN5 | 100005 | 2024/06/27 | 2025/06/26 |
| Unknown | RF Cable | 65475 | 01670515 | 2024/06/27 | 2025/06/26 |

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^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

APPLICABLE STANDARDS

DFS Requirement

CFR §47 Part 15.407(h) & RSS-247 Issue 3, August 2023 section 6.3

FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

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| Requirement | Operational Mode | | |
|---------------------------------|------------------|---|--------------------------------------|
| | Master | Client Without Radar Detection | Client With Radar Detection |
| Non-Occupancy Period | Yes | Not required | Yes |
| DFS Detection Threshold | Yes | Not required | Yes |
| Channel Availability Check Time | Yes | Not required | Not required |
| U-NII Detection Bandwidth | Yes | Not required | Yes |

Table 2: Applicability of DFS requirements during normal operation

| Requirement | Operational Mode | | |
|-----------------------------------|---|-----------------------------------|--|
| | Master Device or Client with Radar Detection | Client Without Radar Detection | |
| DFS Detection Threshold | Yes | Not required | |
| Channel Closing Transmission Time | Yes | Yes | |
| Channel Move Time | Yes | Yes | |
| U-NII Detection Bandwidth | Yes | Not required | |

| Additional requirements for devices with multiple bandwidth modes | Master Device or Client with Radar Detection | Client Without Radar Detection |
|---|---|-----------------------------------|
| U-NII Detection Bandwidth and | All BW modes must be | Not required |
| Statistical Performance Check | tested | |
| Channel Move Time and Channel | Test using widest BW mode | Test using the widest |
| Closing Transmission Time | available | BW mode available |
| | | for the link |
| All other tests | Any single BW mode | Not required |

Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

Table 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar
Detection

| Maximum Transmit Power | Value |
|--|-------------------------|
| | (See Notes 1, 2, and 3) |
| EIRP ≥ 200 milliwatt | -64 dBm |
| EIRP < 200 milliwatt and | -62 dBm |
| power spectral density < 10 dBm/MHz | |
| EIRP < 200 milliwatt that do not meet the power spectral | -64 dBm |
| density requirement | |

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.

Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

Table 4: DFS Response Requirement Values

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

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

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

Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

Table 5 - Short Pulse Radar Test Waveforms

| Table 5 – Short Pulse Radar Test Waveforms | | | | | | |
|--|-------------|---|--|---------------|----------|--|
| Radar | Pulse | PRI | Number of Pulses | Minimum | Minimum | |
| Type | Width | (µsec) | | Percentage of | Number | |
| | (µsec) | | | Successful | of | |
| | | | | Detection | 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 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 | Roundup $ \left\{ \frac{1}{360} \right\} \cdot \left\{ \frac{1}{9 \cdot 10^6} \right\} $ | 60% | 30 | |
| 2 | 1-5 | selected in Test A 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 | 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.

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B.

For example if in Short Pulse Radar Type 1 Test B a PRI of 3066 usec is selected, the number of pulses

would be Roundup
$$\left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{3066} \right) \right\} = \text{Roundup} \left\{ 17.2 \right\} = 18.$$

Table 5a - Pulse Repetition Intervals Values for Test A

| Pulse Repetition Frequency Number | Pulse Repetition Frequency (Pulses Per Second) | Pulse Repetition Interval (Microseconds) |
|---|---|--|
| 1 | 1930.5 | 518 |
| 2 | 1858.7 | 538 |
| 3 | 1792.1 | 558 |
| 4 | 1730.1 | 578 |
| 5 | 1672.2 | 598 |
| 6 | 1618.1 | 618 |
| 7 | 1567.4 | 638 |
| 8 | 1519.8 | 658 |
| 9 | 1474.9 | 678 |
| 10 | 1432.7 | 698 |
| 11 | 1392.8 | 718 |
| 12 | 1355 | 738 |
| 13 | 1319.3 | 758 |
| 14 | 1285.3 | 778 |
| 15 | 1253.1 | 798 |
| 16 | 1222.5 | 818 |
| 17 | 1193.3 | 838 |
| 18 | 1165.6 | 858 |
| 19 | 1139 | 878 |
| 20 | 1113.6 | 898 |
| 21 | 1089.3 | 918 |
| 22 | 1066.1 | 938 |
| 23 | 326.2 | 3066 |

The aggregate is the average of the percentage of successful detections of Short Pulse Radar Types 1-4. For example, the following table indicates how to compute the aggregate of percentage of successful detections.

| Radar Type | Number of Trials | Number of Successful Detections | Minimum Percentage of Successful | |
|---|------------------|------------------------------------|----------------------------------|--|
| | | | Detection | |
| 1 | 35 | 29 | 82.9% | |
| 2 | 30 | 18 | 60% | |
| 3 | 30 | 27 | 90% | |
| 4 | 50 | 44 | 88% | |
| Aggregate (82.9% + 60% + 90% + 88%)/4 = 80.2% | | | | |

Table 6 - Long Pulse Radar Test Waveform

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

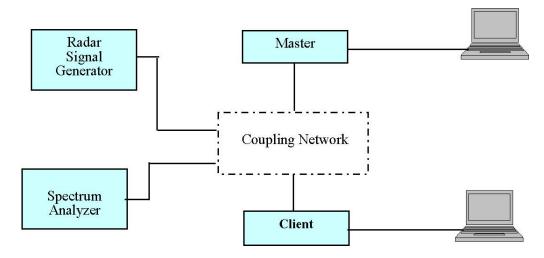
Table 7 - Frequency Hopping Radar Test Waveform

| Radar | Pulse | PRI | Pulses | Hopping | Hopping | Minimum | Minimum |
|-------|--------|--------|--------|---------|----------|---------------|-----------|
| Type | Width | (µsec) | per | Rate | Sequence | Percentage of | Number of |
| | (µsec) | | Hop | (kHz) | Length | Successful | Trials |
| | | | | | (msec) | Detection | |
| 6 | 1 | 333 | 9 | 0.333 | 300 | 70% | 30 |

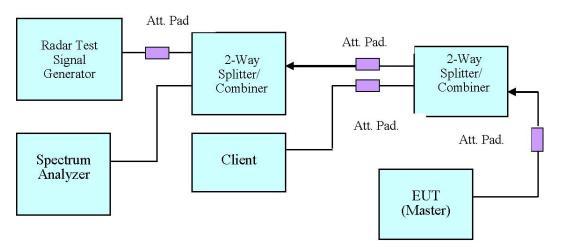
DFS Measurement System

BACL DFS measurement system consists of two subsystems: (1) The radar signal generating subsystem and (2) the traffic monitoring subsystem.

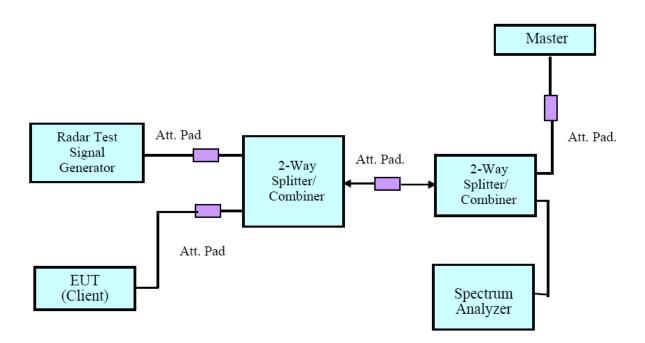
System Block Diagram



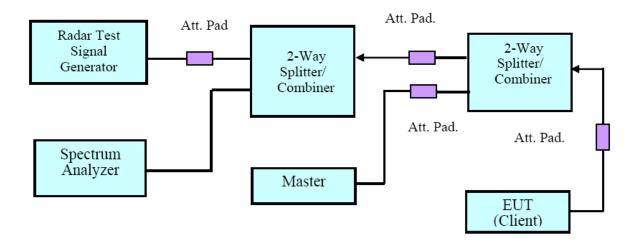
Conducted Method



Setup for Master with injection at the Master

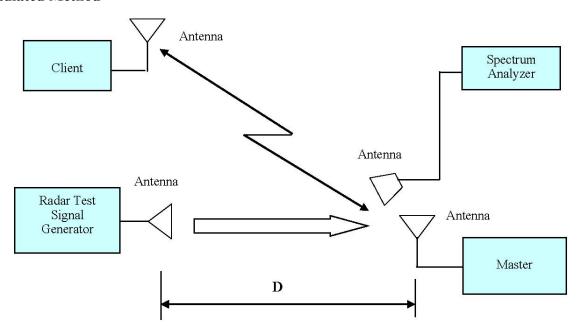


Setup for Client with injection at the Master



Setup for Client with injection at the Client

Radiated Method



Test Procedure

A spectrum analyzer is used as a monitor verifies that the EUT status including Channel Closing Transmission Time and Channel Move Time, and does not transmit on a Channel during the Non-Occupancy Period after the diction and Channel move. It is also used to monitor EUT transmissions during the Channel Availability Check Time.

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TEST RESULTS

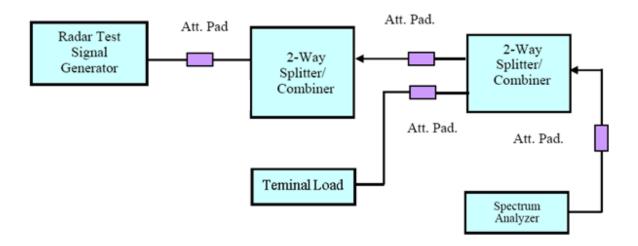
Description of EUT

For 5250-5350 MHz, the maximum EIRP is less than 200 mW. The calibrated radiated DFS detection threshold level is set to -62 dBm.

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For 5470-5725MHz, the maximum EIRP is great than 200mW. The calibrated radiated DFS detection threshold level is set to -64dBm.

Radar Waveform Calibration



Test Data

Environmental Conditions

| Temperature: | 25~26 °C |
|--------------------|----------|
| Relative Humidity: | 55~60 % |
| ATM Pressure: | 101 kPa |

The testing was performed by Lee Li and Tom Tan from 2024-10-01 to 2024-10-19.

EUT operation mode: Transmitting

Test Result: Compliant

CHANNEL AVAILABILITY CHECK TIME (CAC)

Test Procedure

1. Initial Channel Availability Check 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 UUT is powered on, the spectrum analyzer will be set to zero span and the spectrum analyzer's sweep will be started at the same time power is applied to the U-NII device.

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The UUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.

Confirm that the UUT initiates transmission on the channel

2. Radar Burst at the Beginning of the Channel Availability Check Time

A single Burst of one of the Short Pulse Radar Types 0-4 will commence within a 6 second window at the beginning of CAC time. Visual indication or measured results on the UUT of successful detection of the radar Burst will be recorded and reported.

3. Radar Burst at the End of the Channel Availability Check Time

A single Burst of one of the Short Pulse Radar Types 0-4 will commence within a 6 second window at the end of CAC time. Visual indication or measured results on the UUT of successful detection of the radar Burst will be recorded and reported.

Test Data

Environmental Conditions

| Temperature: | 25 ℃ |
|--------------------|---------|
| Relative Humidity: | 55 % |
| ATM Pressure: | 101 kPa |

The testing was performed by Lee Li on 2024-10-01.

EUT operation mode: Transmitting

Test Result: Compliant

CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME

Test Procedure

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. repeat using a long pulse radar type5 waveform.

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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.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = N*Dwell Time

N is the number of spectrum analyzer bins showing a device transmission Dwell Time is the dwell time per bin (i.e. Dwell Time = S/B, S is the sweep time and B is the number of bin, i.e. 8192)

Test Data

Environmental Conditions

| Temperature: | 25 °C |
|--------------------|---------|
| Relative Humidity: | 55 % |
| ATM Pressure: | 101 kPa |

The testing was performed by Lee Li on 2024-10-01.

EUT operation mode: Transmitting

Test Result: Compliant

NON-OCCUPANCY PERIOD

Test Procedure

Measure the EUT for more than 30 minutes following the channel close/move time to very that the EUT does not resume any transmissions on this channel. Provide one plot to demonstrate no transmission on the channel for the non-occupancy period (30 minutes observation time)

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Test Data

Environmental Conditions

| Temperature: | 25°C |
|--------------------|---------|
| Relative Humidity: | 55 % |
| ATM Pressure: | 101 kPa |

The testing was performed by Lee Li on 2024-10-01

EUT operation mode: Transmitting

Test Result: Compliant

DETECTION BANDWIDTH

Test Procedure

Performed with Type 0 radar waveforms

Starting at the center frequency of the UUT 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 specified in Table 4. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as F_H) at which detection is greater than or equal to the *U-NII Detection Bandwidth* criterion. Recording the detection rate at frequencies above F_H is not required to demonstrate compliance.

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Starting at the center frequency of the UUT 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 specified in Table 4. Repeat this measurement in 1MHz steps at frequencies 5 MHz above where the detection rate begins to fall. Record the lowest frequency (denote as F_L) at which detection is greater than or equal to the *U-NII Detection Bandwidth* criterion. Recording the detection rate at frequencies below F_L is not required to demonstrate compliance

The *U-NII Detection Bandwidth* is calculated as follows: *U-NII Detection Bandwidth* = F_H – F_L

The *U-NII Detection Bandwidth* must meet the *U-NII Detection Bandwidth* criterion specified in Table 4. Otherwise, the UUT does not comply with DFS requirements. This is essential to ensure that the UUT is capable of detecting *Radar Waveforms* across the same frequency spectrum that contains the significant energy from the system. In the case that the *U-NII Detection Bandwidth* is greater than or equal to the 99 percent power bandwidth for the measured F_H and F_L, the test can be truncated and the *U-NII Detection Bandwidth* can be reported as the measured F_H and F_L.

Test Data

Environmental Conditions

| Temperature: | 25~26 °C |
|--------------------|----------|
| Relative Humidity: | 55~60 % |
| ATM Pressure: | 101 kPa |

The testing was performed by Lee Li and Tom Tan from 2024-10-01 to 2024-10-19.

EUT operation mode: Transmitting

Test Result: Compliant

STATISTICAL PERFORMANCE CHECK

Test Procedure

The steps below define the procedure to determine the minimum percentage of successful detection requirements found in **Tables 5-7** when a radar burst with a level equal to the *DFS Detection Threshold* + 1dB is generated on the *Operating Channel* of the U-NII device (*In- Service Monitoring*).

a) One frequency will be chosen from the *Operating Channels* of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands.

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- b) In case the UUT is a U-NII device operating as a *Client Device* (with or without Radar Detection), a U-NII device operating as a *Master Device* will be used to allow the UUT (Client device) to *Associate* with the *Master Device*. In case the UUT is a *Master Device*, a U-NII device operating as a *Client Device* will be used and it is assumed that the Client will *Associate* with the UUT (Master). In both cases for conducted tests, the *Radar Waveform* generator will be connected to the *Master Device*. For radiated tests, the emissions of the *Radar Waveform* generator will be directed towards the *Master Device*. If the *Master Device* has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
- c) Stream the channel loading test file from the *Master Device* to the Client Device on the test *Channel* for the entire period of the test.
- d) At time To the *Radar Waveform* generator sends the individual waveform for each of the Radar Types 1-6 in **Tables 5-7**, at levels defined in **Table 3**, 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.
- e) Observe the transmissions of the UUT at the end of the Burst on the *Operating Channel* for duration greater than 10 seconds for Radar Type 0 to ensure detection occurs.
- f) Observe the transmissions of the UUT 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.
- g) In case the UUT is a U-NII device operating as a *Client Device* with *In-Service Monitoring*, perform steps a) to f).

Test Data

Environmental Conditions

| Temperature: | 25~26 °C |
|--------------------|----------|
| Relative Humidity: | 55~60 % |
| ATM Pressure: | 101 kPa |

The testing was performed by Lee Li and Tom Tan from 2024-10-01 to 2024-10-19.

EUT operation mode: Transmitting

Test Result: Compliant

BRIDGE AND/OR MESH MODE

Test Procedure

Networks Access Points with Bridge and/or MESH modes of operation are permitted to operate in the DFS bands but must employ a DFS function. The functionality of the Bridge mode as specified in ?15.403(a) must be validated in the DFS test report. Devices operating as relays where they act as master and client must also employ DFS function for the master. The method used to validate the functionality must be documented and validation data must be documented. Bridge mode can be validated by performing a test statistical performance check (Section 7.8.4) on any one of the radar types. This is an abbreviated test to verify DFS functionality. MESH mode operational methodology must be submitted in the application for certification for evaluation by the FCC.

Report No.: 2401X39055E-RF

Test Data

Environmental Conditions

| Temperature: | 25~26 °C |
|--------------------|----------|
| Relative Humidity: | 55~60 % |
| ATM Pressure: | 101 kPa |

The testing was performed by Lee Li and Tom Tan from 2024-10-01 to 2024-10-19.

EUT operation mode: Transmitting

Test Result: Compliant

| Bay Area Compliance Laboratories Corp. (Shenzhen) | Report No.: 2401X39055E-RF | | | |
|---|----------------------------|--|--|--|
| EUT PHOTOGRAPHS | | | | |
| | | | | |
| Please refer to the attachment 2405X57681E-RF External photo and 2405X57681E-RF Internal photo. | | | | |
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| Bay Area Compliance Laboratories Corp. (Shenzhen) | Report No.: 2401X39055E-RF |
|--|----------------------------|
| TEST SETUP PHOTOGRAPHS | |
| | uh .a. |
| Please refer to the attachment 2401X39055E-RF Test Setup | pnoto. |
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APPENDIX

Appendix A: DFS Detection Thresholds

Test Result

| Frequency[MHz] | Radar Type | Result[dBm] | Limit[dBm] | Verdict |
|----------------|------------|-------------|------------|---------|
| | Type0 | -62.30 | -62.00 | PASS |
| | Type1 | -62.32 | -62.00 | PASS |
| | Type2 | -62.44 | -62.00 | PASS |
| 5260 | Type3 | -62.38 | -62.00 | PASS |
| | Type4 | -62.25 | -62.00 | PASS |
| | Type5 | -62.45 | -62.00 | PASS |
| | Type6 | -62.20 | -62.00 | PASS |
| | Type0 | -64.34 | -64.00 | PASS |
| | Type1 | -64.35 | -64.00 | PASS |
| | Type2 | -64.26 | -64.00 | PASS |
| 5500 | Type3 | -64.26 | -64.00 | PASS |
| | Type4 | -64.10 | -64.00 | PASS |
| _ | Type5 | -64.27 | -64.00 | PASS |
| | Type6 | -64.17 | -64.00 | PASS |
| <u> </u> | Type0 | -62.11 | -62.00 | PASS |
| <u> </u> | Type1 | -62.46 | -62.00 | PASS |
| _ | Type2 | -62.01 | -62.00 | PASS |
| 5270 | Type3 | -62.36 | -62.00 | PASS |
| | Type4 | -62.30 | -62.00 | PASS |
| | Type5 | -62.27 | -62.00 | PASS |
| | Type6 | -62.48 | -62.00 | PASS |
| | Type0 | -64.00 | -64.00 | PASS |
| | Type1 | -64.13 | -64.00 | PASS |
| | Type2 | -64.25 | -64.00 | PASS |
| 5510 | Type3 | -64.36 | -64.00 | PASS |
| | Type4 | -64.25 | -64.00 | PASS |
| | Type5 | -64.28 | -64.00 | PASS |
| | Type6 | -64.01 | -64.00 | PASS |
| | Type0 | -62.03 | -62.00 | PASS |
| | Type1 | -62.23 | -62.00 | PASS |
| | Type2 | -62.12 | -62.00 | PASS |
| 5290 | Type3 | -62.17 | -62.00 | PASS |
| | Type4 | -62.49 | -62.00 | PASS |
| | Type5 | -62.28 | -62.00 | PASS |
| | Type6 | -62.35 | -62.00 | PASS |
| | Type0 | -64.37 | -64.00 | PASS |
| | Type1 | -64.37 | -64.00 | PASS |
| | Type2 | -64.38 | -64.00 | PASS |
| 5530 | Type3 | -64.07 | -64.00 | PASS |
| | Type4 | -64.32 | -64.00 | PASS |
| | Type5 | -64.30 | -64.00 | PASS |
| | Type6 | -64.26 | -64.00 | PASS |
| | Type0 | -62.10 | -62.00 | PASS |
| | Type1 | -62.20 | -62.00 | PASS |
| | Type2 | -62.19 | -62.00 | PASS |
| 5250 | Type3 | -62.32 | -62.00 | PASS |
| 0200 | Type4 | -62.29 | -62.00 | PASS |
| | Type5 | -62.11 | -62.00 | PASS |
| | Type6 | -62.23 | -62.00 | PASS |
| 5570 | Type0 | -64.20 | -64.00 | PASS |

| | Bay Area Compliance Laboratories Corp. (Shenzhen | Report No.: 2401X39055E-RF |
|---|--|----------------------------|
| _ | | |

| Type1 | -64.23 | -64.00 | PASS |
|-------|--------|--------|------|
| Type2 | -64.05 | -64.00 | PASS |
| Type3 | -64.37 | -64.00 | PASS |
| Type4 | -64.31 | -64.00 | PASS |
| Type5 | -64.08 | -64.00 | PASS |
| Type6 | -64.26 | -64.00 | PASS |

