

**FCC - TEST REPORT**Report Number : **709502608410-00B** Date of Issue: October 9, 2026Model : DBH D6 PROProduct Type : Monocular DBH D6 PROApplicant : Visir Inc.Address : 1004 N Ave Ste 100, Plano, TX 75074, United StatesManufacturer : Visir Inc.Address : 1004 N Ave Ste 100, Plano, TX 75074, United StatesTest Result : ☒ **Positive** ☐ **Negative**Total pages including  
Appendices : 85

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## 2 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

| Issue            | Description of Change | Date of Issue |
|------------------|-----------------------|---------------|
| 709502608410-00B | First Issue           | 10/09/2026    |

## 3 Details about the Test Laboratory

### Details about the Test Laboratory

#### Test Site 1

Company name: TÜV SÜD Products Testing (Shanghai) Co., Ltd.  
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FCC Designation Number: CN1183

ISED CAB identifier: CN0101

IC Registration No.: 31668

#### 4 Description of the Equipment under Test

|                            |                                                                                                                                                               |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product:                   | Monocular DBH D6 PRO                                                                                                                                          |
| Model no.:                 | DBH D6 PRO                                                                                                                                                    |
| FCC ID:                    | 2A7ZZ-DBH-05                                                                                                                                                  |
| Options and accessories:   | NA                                                                                                                                                            |
| Rating:                    | 5V DC by Type C<br>3.6V DC by rechargeable battery                                                                                                            |
| RF Transmission Frequency: | For 2.4G Wi-Fi:<br>802.11b/g/n-HT20: 2412~2462 MHz<br><br>For BLE: 2402~2480 MHz                                                                              |
| No. of Operated Channel:   | For 2.4G Wi-Fi:<br>11 for 802.11b/802.11g/802.11n(H20)<br><br>For BLE: 40                                                                                     |
| Modulation:                | For 2.4G Wi-Fi:<br>Direct Sequence Spread Spectrum (DSSS) for 802.11b<br>Orthogonal Frequency Division Multiplexing (OFDM) for 802.11g/n<br><br>For BLE: GFSK |
| Hardware Version:          | V1_0                                                                                                                                                          |
| Software Version:          | V1.0.11                                                                                                                                                       |
| Data speed:                | For 2.4G Wi-Fi:<br>11b 1-11Mbps<br>11g 6-54Mbps<br>11n(H20) 6.5-72.2Mbps<br><br>For BLE: 1Mbps                                                                |

Channel list: For 2.4G Wi-Fi:

| 802.11b/g/n(HT20) |          |    |          |
|-------------------|----------|----|----------|
| Ch                | Fre(MHz) | Ch | Fre(MHz) |
| 1                 | 2412     | 7  | 2442     |
| 2                 | 2417     | 8  | 2447     |

|   |      |    |      |
|---|------|----|------|
| 3 | 2422 | 9  | 2452 |
| 4 | 2427 | 10 | 2457 |
| 5 | 2432 | 11 | 2462 |
| 6 | 2437 |    |      |

## For BLE

| Ch | Fre(MHz) | Ch | Fre(MHz) | Ch | Fre(MHz) | Ch | Fre(MHz) |
|----|----------|----|----------|----|----------|----|----------|
| 0  | 2402     | 10 | 2422     | 20 | 2442     | 30 | 2462     |
| 1  | 2404     | 11 | 2424     | 21 | 2444     | 31 | 2464     |
| 2  | 2406     | 12 | 2426     | 22 | 2446     | 32 | 2466     |
| 3  | 2408     | 13 | 2428     | 23 | 2448     | 33 | 2468     |
| 4  | 2410     | 14 | 2430     | 24 | 2450     | 34 | 2470     |
| 5  | 2412     | 15 | 2432     | 25 | 2452     | 35 | 2472     |
| 6  | 2414     | 16 | 2434     | 26 | 2454     | 36 | 2474     |
| 7  | 2416     | 17 | 2436     | 27 | 2456     | 37 | 2476     |
| 8  | 2418     | 18 | 2438     | 28 | 2458     | 38 | 2478     |
| 9  | 2420     | 19 | 2440     | 29 | 2460     | 39 | 2480     |

Antenna Type: WIFI FPC Internal Antenna

Antenna Gain: 1.05 dBi

Description of the EUT: The Equipment Under Test (EUT) is a Monocular DBH D6 PRO with Wi-Fi & BLE Module. The EUT support Wi-Fi operated at 2.4GHz.

Test sample no.: SHA-1067985-2 (Radiated sample)  
SHA-1067985-3 (Conducted sample)

The sample's mentioned in this report is/are submitted/ supplied/ manufactured by client. The laboratory therefore assumes no responsibility for accuracy of information on the brand name, model number, origin of manufacture, consignment, antenna gain or any information supplied.



**5 Summary of Test Standards**

| Test Standards                             |                                                                        |
|--------------------------------------------|------------------------------------------------------------------------|
| FCC Part 15 Subpart C<br>10-1-2024 Edition | PART 15 - RADIO FREQUENCY DEVICES<br>Subpart C - Intentional Radiators |

All the test methods were according to KDB 558074 D01 15.247 Measurement Guidance v05r02 and ANSI C63.10-2020.



## 6 Summary of Test Results

| Technical Requirements         |                                             |            |                                     |                          |                                     |
|--------------------------------|---------------------------------------------|------------|-------------------------------------|--------------------------|-------------------------------------|
| FCC Part 15 Subpart C          |                                             |            |                                     |                          |                                     |
| Test Condition                 |                                             | Test Site  | Test Result                         |                          |                                     |
|                                |                                             |            | Pass                                | Fail                     | N/A                                 |
| §15.207                        | Conducted emission AC power port            | Site 1     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| §15.247 (b) (3)                | Conducted peak (average) output power       | Site 1     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| §15.247(a)(1)                  | 20dB bandwidth and 99% Occupied Bandwidth   | ---        | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| §15.247(a)(1)                  | Carrier frequency separation                | ---        | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| §15.247(a)(1)(iii)             | Number of hopping frequencies               | ---        | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| §15.247(a)(1)(iii)             | Dwell Time - Average Time of Occupancy      | ---        | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| §15.247(a)(2)                  | 6dB bandwidth and 99% Occupied Bandwidth    | Site 1     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| §15.247(e)                     | Power spectral density                      | Site 1     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| §15.247(d)                     | Spurious RF conducted emissions             | Site 1     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| §15.247(d)                     | Band edge                                   | Site 1     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| §15.247(d) & §15.209 & §15.205 | Spurious radiated emissions for transmitter | Site 1     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| §15.203                        | Antenna requirement                         | See note 1 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

Remark 1: N/A – Not Applicable.

Note 1: The EUT uses a WIFI FPC Internal Antenna, which gain is 1.05 dBi. In accordance to §15.203, It is considered sufficiently to comply with the provisions of this section.

15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. 15.247(c) (1)(i) requirement: (i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi



## 7 General Remarks

### Remarks

This submittal(s) (test report) is intended for FCC ID: 2A7ZZ-DBH-05, complies with Section 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C Rules.

This report is only for 2.4GHz Wi-Fi.

We tested it and listed the worst data in this report.

### SUMMARY:

All tests according to the regulations cited on page 7 were

■ - Performed

□ - **Not** Performed

The Equipment under Test

■ - **Fulfills** the general approval requirements.

□ - **Does not** fulfill the general approval requirements.

Sample Received Date: August 25, 2026

Testing Start Date: September 9, 2026

Testing End Date: September 24, 2026

- TÜV SÜD Products Testing (Shanghai) Co., Ltd.

Reviewed by:

Prepared by:

Tested by:



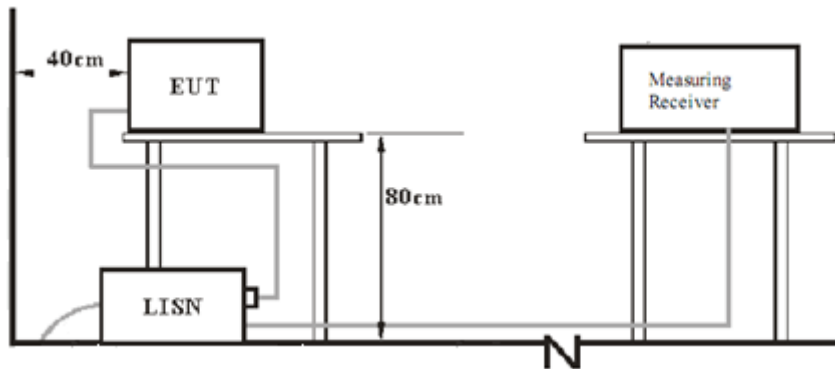
Hui TONG  
Review Engineer

Wenqiang LU  
Project Engineer

Doujun XU  
Test Engineer

## 8 Test Setups

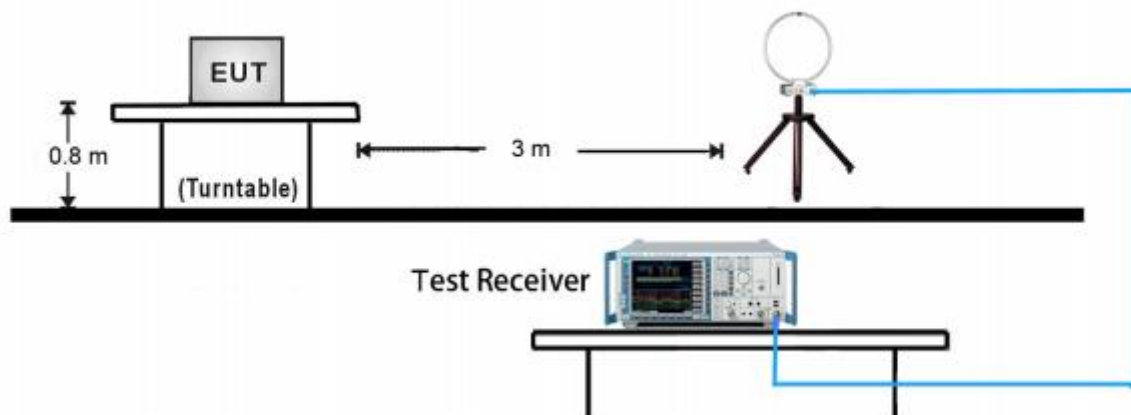
### 8.1 AC Power Line Conducted Emission test setups



Note: for floor-standing equipment, the supporting table (80 cm) shall be replaced by a insulating material (up to 12 mm thick).

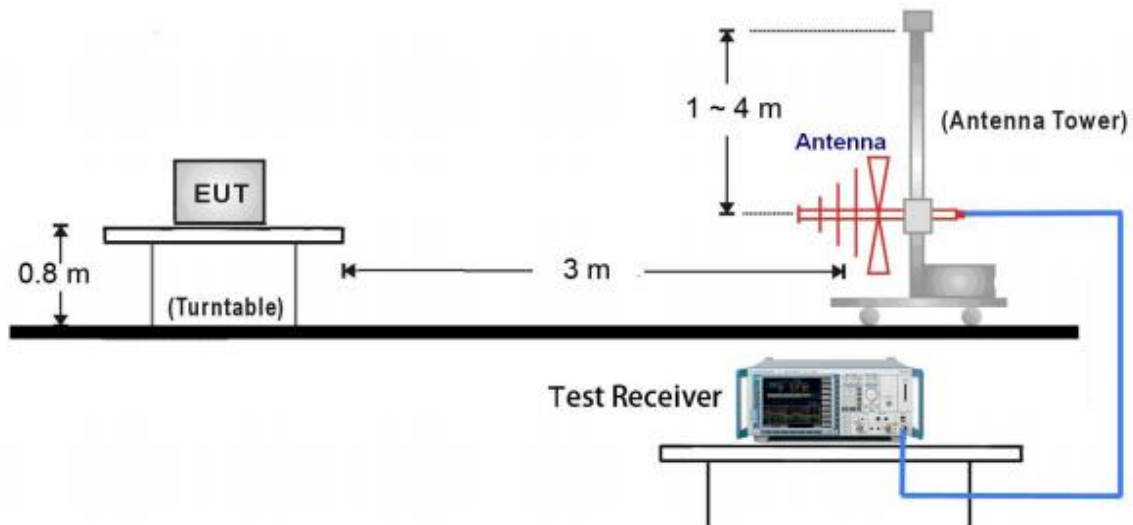
### 8.2 Radiated test setups

9kHz ~ 30MHz Test Setup:



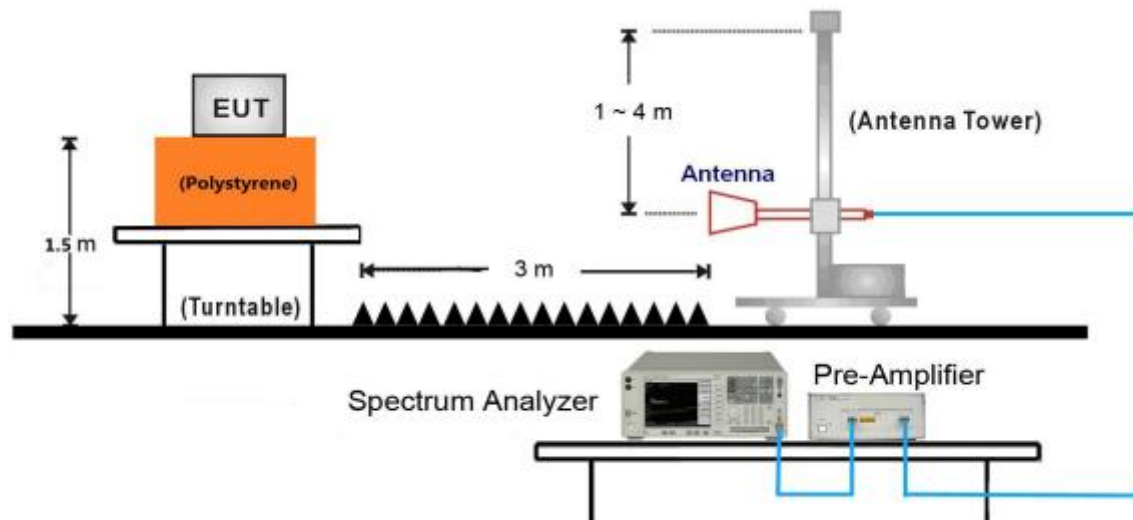
Note: for floor-standing equipment, the supporting table (80 cm) shall be replaced by a insulating material (up to 12 mm thick).

## 30MHz ~ 1GHz Test Setup:

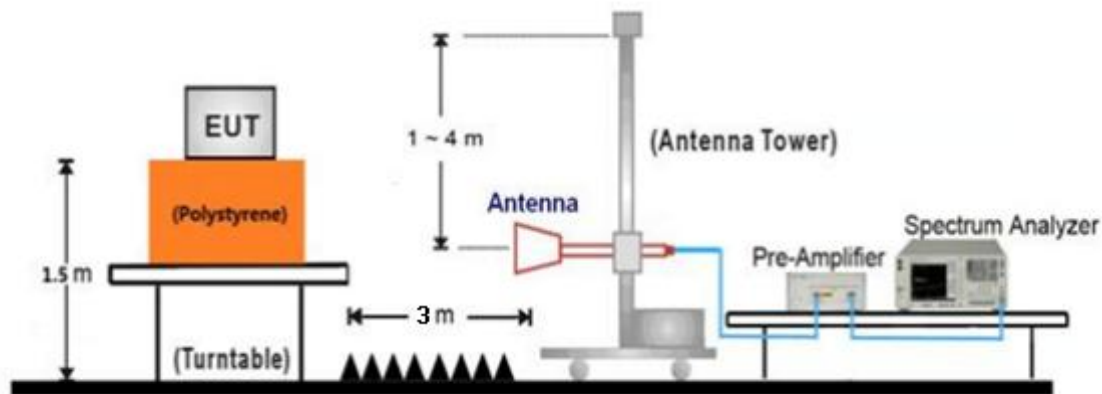


Note: for floor-standing equipment, the supporting table (80 cm) shall be replaced by a insulating material (up to 12 mm thick).

## 1GHz ~ 18GHz Test Setup:

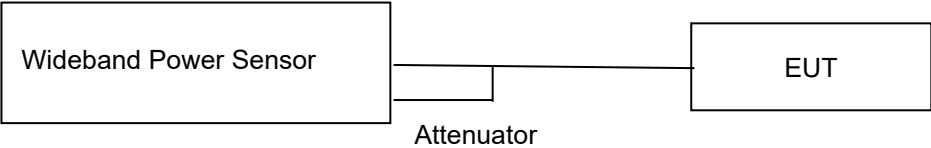


18GHz ~ 25GHz Test Setup:

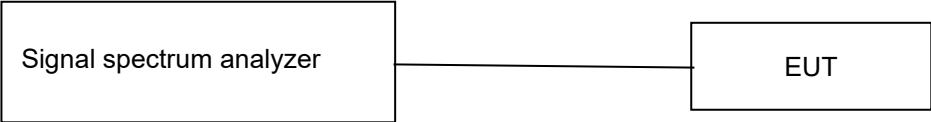


8.3 Conducted RF test setups

For Conducted peak output power



For other test items





## 9 Systems test configuration

Auxiliary Equipment Used during Test:

| DESCRIPTION | MANUFACTURER | MODEL NO.(SHIELD) | S/N(LENGTH)     |
|-------------|--------------|-------------------|-----------------|
| Notebook    | Lenove       | E470              | PF-OU5TS7 17/09 |

Test software: MobaXterm.exe, which used to control the EUT in continues transmitting mode.

The system was configured to 802.11b/g/n-HT20 channel 1(2412MHz), 6(2437MHz), and 11(2462MHz).

Test Mode Applicability and Tested Channel Detail:

| Mode         | Tested Channel | Data Rate (Mbps) | Modulation | Index Value (Power level setting) |
|--------------|----------------|------------------|------------|-----------------------------------|
| 802.11b      | 1              | 1                | CCK        | 16                                |
|              | 6              | 1                | CCK        | 16                                |
|              | 11             | 1                | CCK        | 16                                |
| 802.11g      | 1              | 6                | OFDM       | 14                                |
|              | 6              | 6                | OFDM       | 14                                |
|              | 11             | 6                | OFDM       | 14                                |
| 802.11n HT20 | 1              | MCS0 (6.5Mbps)   | OFDM       | 14                                |
|              | 6              | MCS0 (6.5Mbps)   | OFDM       | 14                                |
|              | 11             | MCS0 (6.5Mbps)   | OFDM       | 14                                |

Non-hopping mode: The system was configured to operate at a signal channel transmitting. The test software allows the configuration and operation at the worst-case duty and the highest transmit power.

## 10 Technical Requirement

### 10.1 Conducted Emission

#### Test Method

1. The EUT was placed on a table, which is 0.8m above ground plane
2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
3. Maximum procedure was performed to ensure EUT compliance
4. A EMI test receiver is used to test the emissions from both sides of AC line

#### Limit

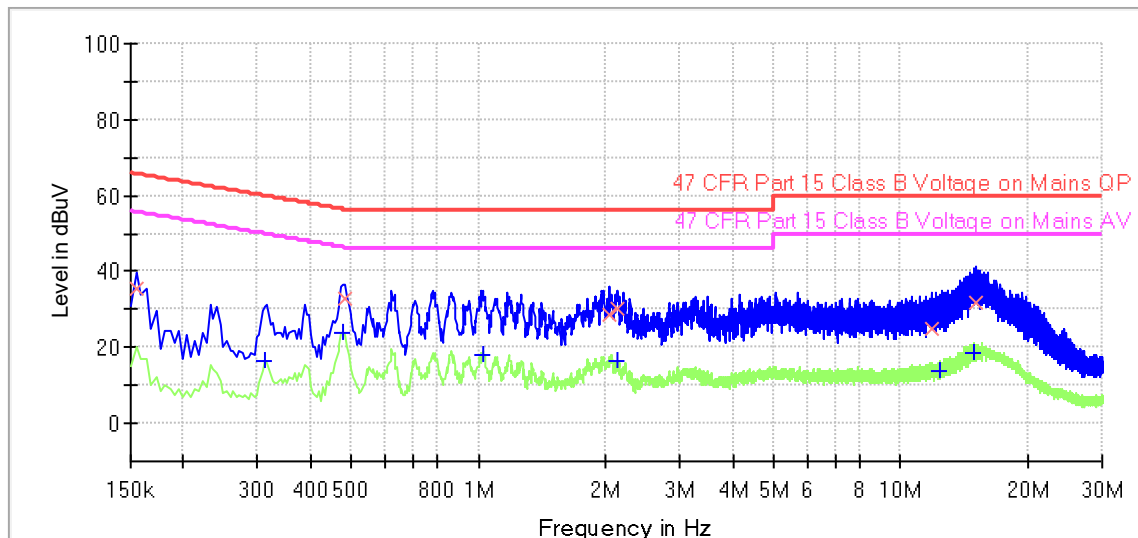
According to §15.207, conducted emissions limit as below:

| Frequency<br>MHz | QP Limit<br>dB $\mu$ V | AV Limit<br>dB $\mu$ V |
|------------------|------------------------|------------------------|
| 0.150-0.500      | 66-56*                 | 56-46*                 |
| 0.500-5          | 56                     | 46                     |
| 5-30             | 60                     | 50                     |

\*Decreasing linearly with logarithm of the frequency

## Conducted Emission

Product Type : Monocular DBH D6 PRO  
 M/N : DBH D6 PRO  
 Operating Condition : Transmit mode, 802.11b Tx\_2437MHz (worst case)  
 Test Specification : L-line  
 Comment : Charging mode by Adaptor 120V~, 60Hz



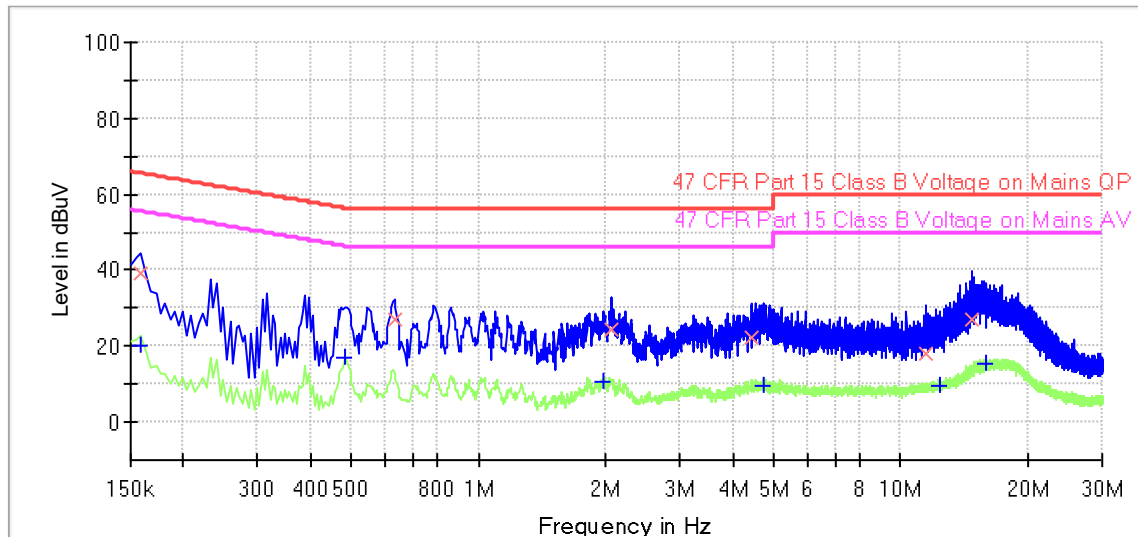
## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|-----------------|-----------------|------|------------|
| 0.154500        | 35.54            | ---             | 65.75        | 30.21       | 1000.0          | 9.000           | L1   | 19.5       |
| 0.312000        | ---              | 16.28           | 49.92        | 33.64       | 1000.0          | 9.000           | L1   | 19.4       |
| 0.478500        | ---              | 24.01           | 46.37        | 22.36       | 1000.0          | 9.000           | L1   | 19.4       |
| 0.483000        | 33.03            | ---             | 56.29        | 23.26       | 1000.0          | 9.000           | L1   | 19.4       |
| 1.023000        | ---              | 18.23           | 46.00        | 27.77       | 1000.0          | 9.000           | L1   | 19.4       |
| 2.044500        | 28.79            | ---             | 56.00        | 27.21       | 1000.0          | 9.000           | L1   | 19.4       |
| 2.134500        | 30.08            | ---             | 56.00        | 25.92       | 1000.0          | 9.000           | L1   | 19.4       |
| 2.143500        | ---              | 16.18           | 46.00        | 29.82       | 1000.0          | 9.000           | L1   | 19.4       |
| 11.832000       | 24.93            | ---             | 60.00        | 35.07       | 1000.0          | 9.000           | L1   | 19.6       |
| 12.354000       | ---              | 14.02           | 50.00        | 35.98       | 1000.0          | 9.000           | L1   | 19.7       |
| 14.905500       | ---              | 18.68           | 50.00        | 31.32       | 1000.0          | 9.000           | L1   | 19.7       |
| 15.135000       | 31.60            | ---             | 60.00        | 28.40       | 1000.0          | 9.000           | L1   | 19.7       |

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB) + 10dB Attenuator

Product Type : Monocular DBH D6 PRO  
 M/N : DBH D6 PRO  
 Operating Condition : Transmit mode, 802.11b Tx\_2437MHz (worst case)  
 Test Specification : N-line  
 Comment : Charging mode by Adaptor 120V~, 60Hz



## Final Result

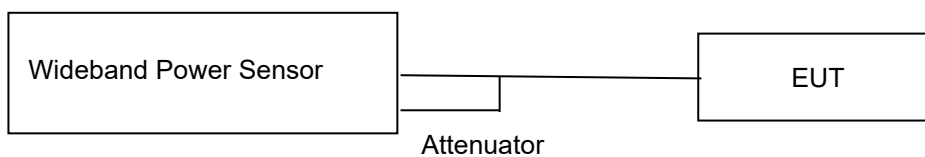
| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|-----------------|-----------------|------|------------|
| 0.159000        | 39.12            | ---             | 65.52        | 26.40       | 1000.0          | 9.000           | N    | 19.5       |
| 0.159000        | ---              | 20.34           | 55.52        | 35.18       | 1000.0          | 9.000           | N    | 19.5       |
| 0.483000        | ---              | 16.93           | 46.29        | 29.36       | 1000.0          | 9.000           | N    | 19.5       |
| 0.631500        | 27.12            | ---             | 56.00        | 28.88       | 1000.0          | 9.000           | N    | 19.5       |
| 1.981500        | ---              | 10.82           | 46.00        | 35.18       | 1000.0          | 9.000           | N    | 19.4       |
| 2.067000        | 24.48            | ---             | 56.00        | 31.52       | 1000.0          | 9.000           | N    | 19.4       |
| 4.456500        | 22.07            | ---             | 56.00        | 33.93       | 1000.0          | 9.000           | N    | 19.5       |
| 4.753500        | ---              | 9.66            | 46.00        | 36.34       | 1000.0          | 9.000           | N    | 19.5       |
| 11.499000       | 17.95            | ---             | 60.00        | 42.05       | 1000.0          | 9.000           | N    | 19.6       |
| 12.385500       | ---              | 9.81            | 50.00        | 40.19       | 1000.0          | 9.000           | N    | 19.7       |
| 14.788500       | 26.97            | ---             | 60.00        | 33.03       | 1000.0          | 9.000           | N    | 19.7       |
| 15.963000       | ---              | 15.22           | 50.00        | 34.78       | 1000.0          | 9.000           | N    | 19.8       |

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)  
 Factor (dB) = Cable Loss (dB) + LISN Factor (dB) + 10dB Attenuator

## 10.2 Conducted peak(average) output power

### Test Method for conducted peak power

- 1) The EUT is configured to transmit continuously, or to transmit with a constant duty cycle.
- 2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.
- 3) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- 4) Measure the peak power of the transmitter. This measurement is a peak over both the ON and OFF periods of the transmitter.



### Wideband Power Sensor conducted test setup

### Test Method for average power

1. Measure the duty cycle D of the transmitter output signal.
2. Set span to at least 1.5 times the OBW.
3. Set RBW = 1% to 5% of the OBW, not to exceed 1 MHz.
4. Set VBW  $\geq [3 \times \text{RBW}]$ .
5. Number of points in sweep  $\geq [2 \times \text{span} / \text{RBW}]$ . (This gives bin-to-bin spacing  $\leq \text{RBW} / 2$ , so that narrowband signals are not lost between frequency bins.)
6. Sweep time = auto.
7. Detector = RMS (i.e., power averaging), if available. Otherwise, use the sample detector mode.
8. Do not use sweep triggering. Allow the sweep to "free run."
9. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.
10. Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function with band limits set equal to the OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.
11. Add  $[10 \log (1 / D)]$ , where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission).



## Limits

According to §15.247 (b) (3), conducted peak output power limit as below:

|                                    | Frequency Range | Limit | Limit |
|------------------------------------|-----------------|-------|-------|
|                                    | MHz             | W     | dBm   |
| <b>Conducted peak output power</b> | 2400-2483.5     | ≤1    | ≤30   |

Test result (conducted peak) as below table

### B mode

| Frequency<br>(MHz) | Conducted Peak Output Power<br>(dBm)<br>§15.247 (b) (3) |       |         |
|--------------------|---------------------------------------------------------|-------|---------|
|                    | Result                                                  | limit | Verdict |
| 2412MHz            | 18.11                                                   | ≤30   | Pass    |
| 2437MHz            | 17.99                                                   | ≤30   | Pass    |
| 2462MHz            | 18.20                                                   | ≤30   | Pass    |

### G mode

| Frequency<br>(MHz) | Conducted Peak Output Power<br>(dBm)<br>§15.247 (b) (3) |       |         |
|--------------------|---------------------------------------------------------|-------|---------|
|                    | Result                                                  | limit | Verdict |
| 2412MHz            | 22.83                                                   | ≤30   | Pass    |
| 2437MHz            | 22.81                                                   | ≤30   | Pass    |
| 2462MHz            | 23.11                                                   | ≤30   | Pass    |

### N20 mode

| Frequency<br>(MHz) | Conducted Peak Output Power<br>(dBm)<br>§15.247 (b) (3) |       |         |
|--------------------|---------------------------------------------------------|-------|---------|
|                    | Result                                                  | limit | Verdict |
| 2412MHz            | 22.55                                                   | ≤30   | Pass    |
| 2437MHz            | 22.71                                                   | ≤30   | Pass    |
| 2462MHz            | 22.24                                                   | ≤30   | Pass    |



Test result (average power) as below table  
802.11B

| Frequency<br>MHz       | Duty cycle<br>Factor<br>dB | Conducted<br>Power<br>dBm | Total<br>Power(average)<br>dBm | Result |
|------------------------|----------------------------|---------------------------|--------------------------------|--------|
| Low channel 2412MHz    | 0                          | 15.46                     | 15.46                          | Pass   |
| Middle channel 2437MHz | 0                          | 15.55                     | 15.55                          | Pass   |
| High channel 2462MHz   | 0                          | 15.33                     | 15.33                          | Pass   |

802.11G

| Frequency<br>MHz       | Duty cycle<br>Factor<br>dB | Conducted<br>Power<br>dBm | Total<br>Power(average)<br>dBm | Result |
|------------------------|----------------------------|---------------------------|--------------------------------|--------|
| Low channel 2412MHz    | 0.3                        | 13.39                     | 13.69                          | Pass   |
| Middle channel 2437MHz | 0.3                        | 13.57                     | 13.87                          | Pass   |
| High channel 2462MHz   | 0.3                        | 13.31                     | 13.61                          | Pass   |

802.11N20

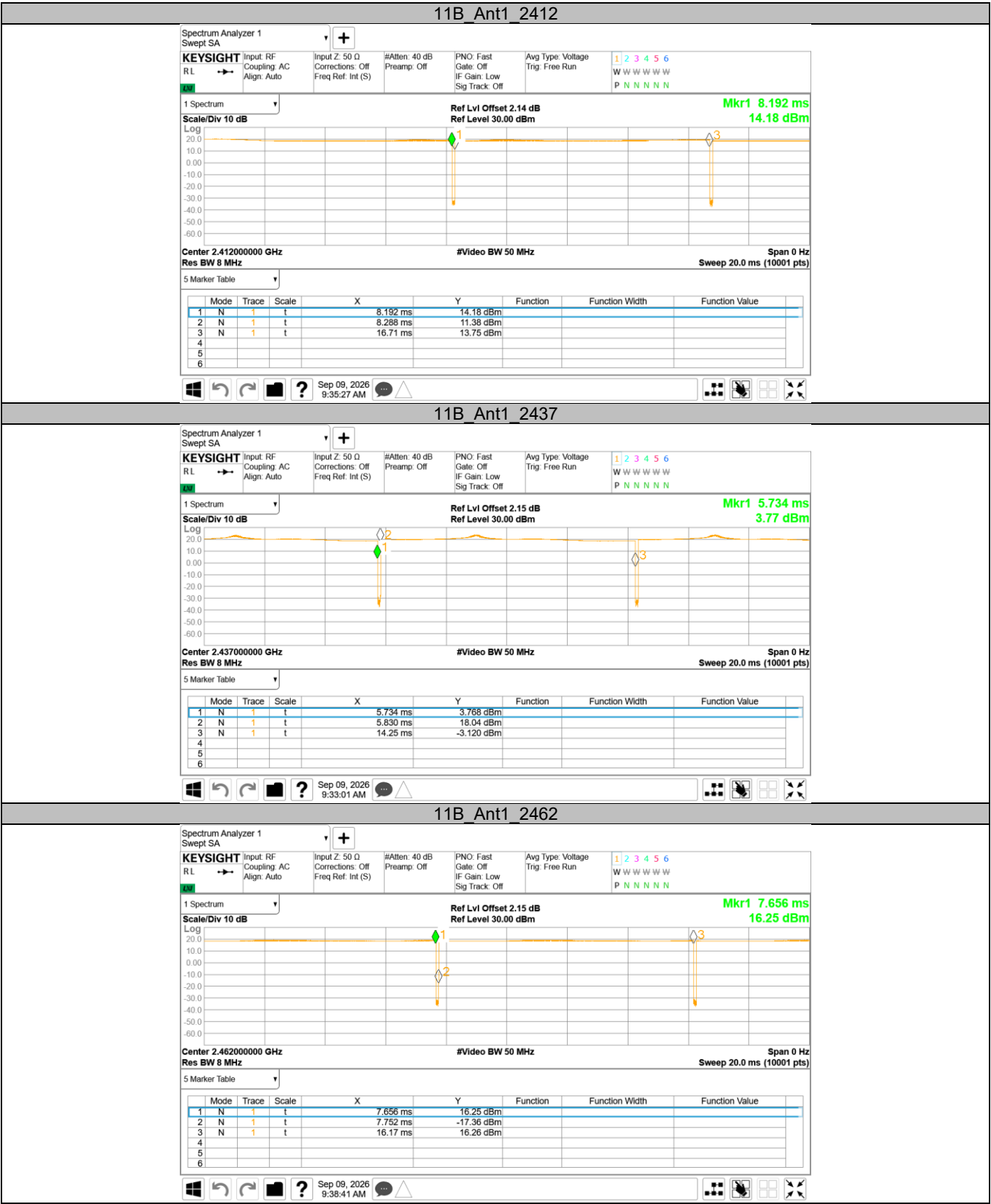
| Frequency<br>MHz       | Duty cycle<br>Factor<br>dB | Conducted<br>Power<br>dBm | Total<br>Power(average)<br>dBm | Result |
|------------------------|----------------------------|---------------------------|--------------------------------|--------|
| Low channel 2412MHz    | 0.32                       | 12.78                     | 13.1                           | Pass   |
| Middle channel 2437MHz | 0.32                       | 12.9                      | 13.22                          | Pass   |
| High channel 2462MHz   | 0.32                       | 12.56                     | 12.88                          | Pass   |

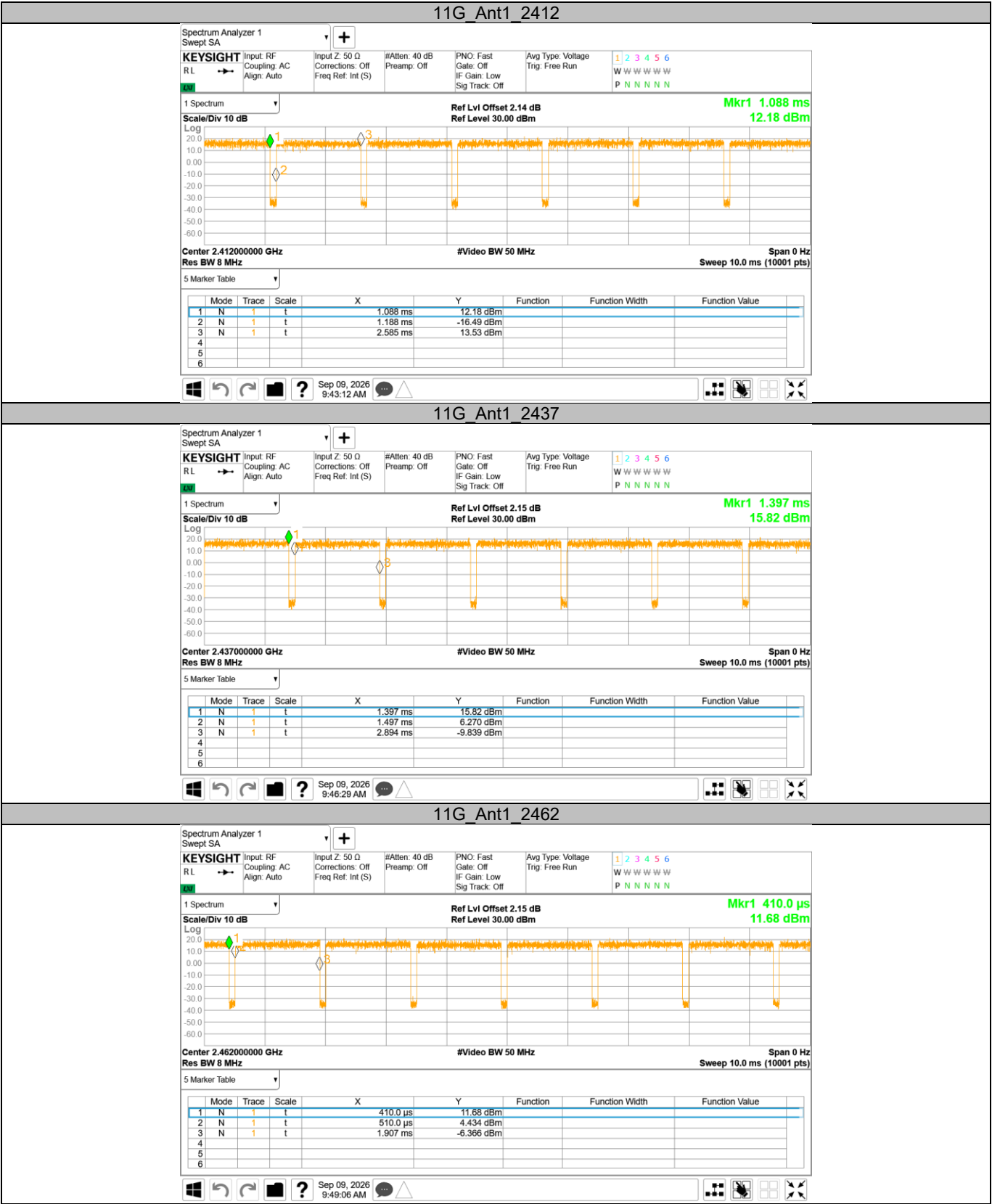
Duty Cycle

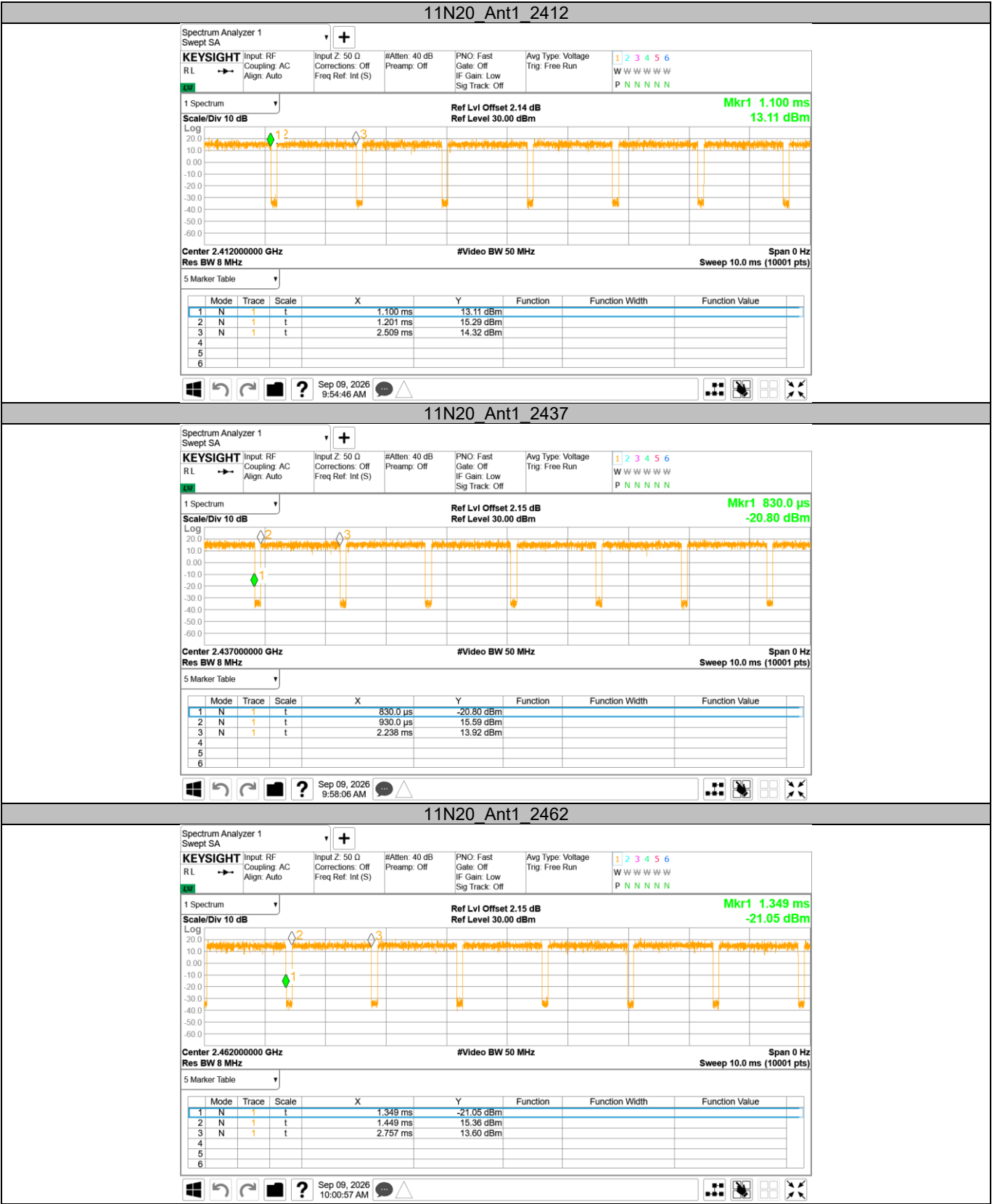
| Condition | Mode | Frequency<br>(MHz) | Antenna | Duty Cycle<br>(%) | Correction Factor<br>(dB) |
|-----------|------|--------------------|---------|-------------------|---------------------------|
| NVNT      | b    | 2412               | Ant1    | 98.87             | 0                         |
| NVNT      | b    | 2437               | Ant1    | 98.87             | 0                         |
| NVNT      | b    | 2462               | Ant1    | 98.87             | 0                         |
| NVNT      | g    | 2412               | Ant1    | 93.32             | 0.3                       |
| NVNT      | g    | 2437               | Ant1    | 93.32             | 0.3                       |
| NVNT      | g    | 2462               | Ant1    | 93.32             | 0.3                       |
| NVNT      | N20  | 2412               | Ant1    | 92.83             | 0.32                      |
| NVNT      | N20  | 2437               | Ant1    | 92.9              | 0.32                      |
| NVNT      | N20  | 2462               | Ant1    | 92.9              | 0.32                      |



Duty Cycle

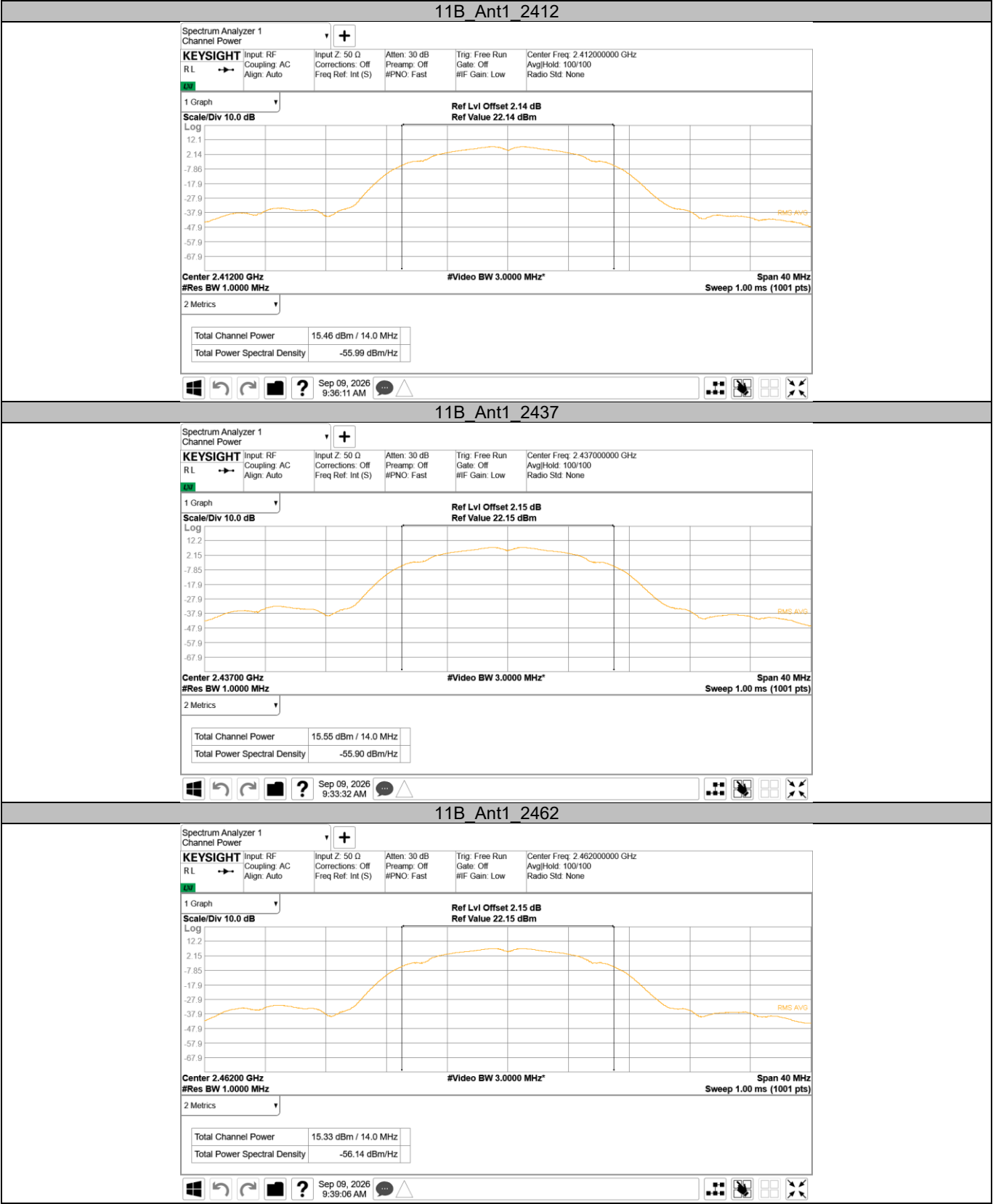








AV Power







## 10.3 6dB bandwidth and 99% Occupied Bandwidth

### Test Method for 6 dB Bandwidth

1. The RF output of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting, the instrument center frequency is set to the nominal EUT channel center frequency enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
4. RBW=1% to 5% of the occupied bandwidth but not less than 100kHz, VBW $\geq$ 3RBW, Sweep = auto, Detector function = peak, Trace = max hold
5. Use the automatic bandwidth measurement capability of an instrument, use the X dB bandwidth mode with X set to 6 dB.
6. Allow the trace to stabilize, record the 6 dB Bandwidth value.

### Test Method for 99 % Bandwidth

1. Connect EUT test port to spectrum analyzer.  
Use the following spectrum analyzer settings:  
RBW=1% to 5% of the actual occupied, VBW $\geq$ 3RBW, Sweep = auto,  
Detector function = peak, Trace = max hold
2. Use the occupied bandwidth measurement capability of test receiver.
3. Allow the trace to stabilize, record the occupied bandwidth value.

### Limit

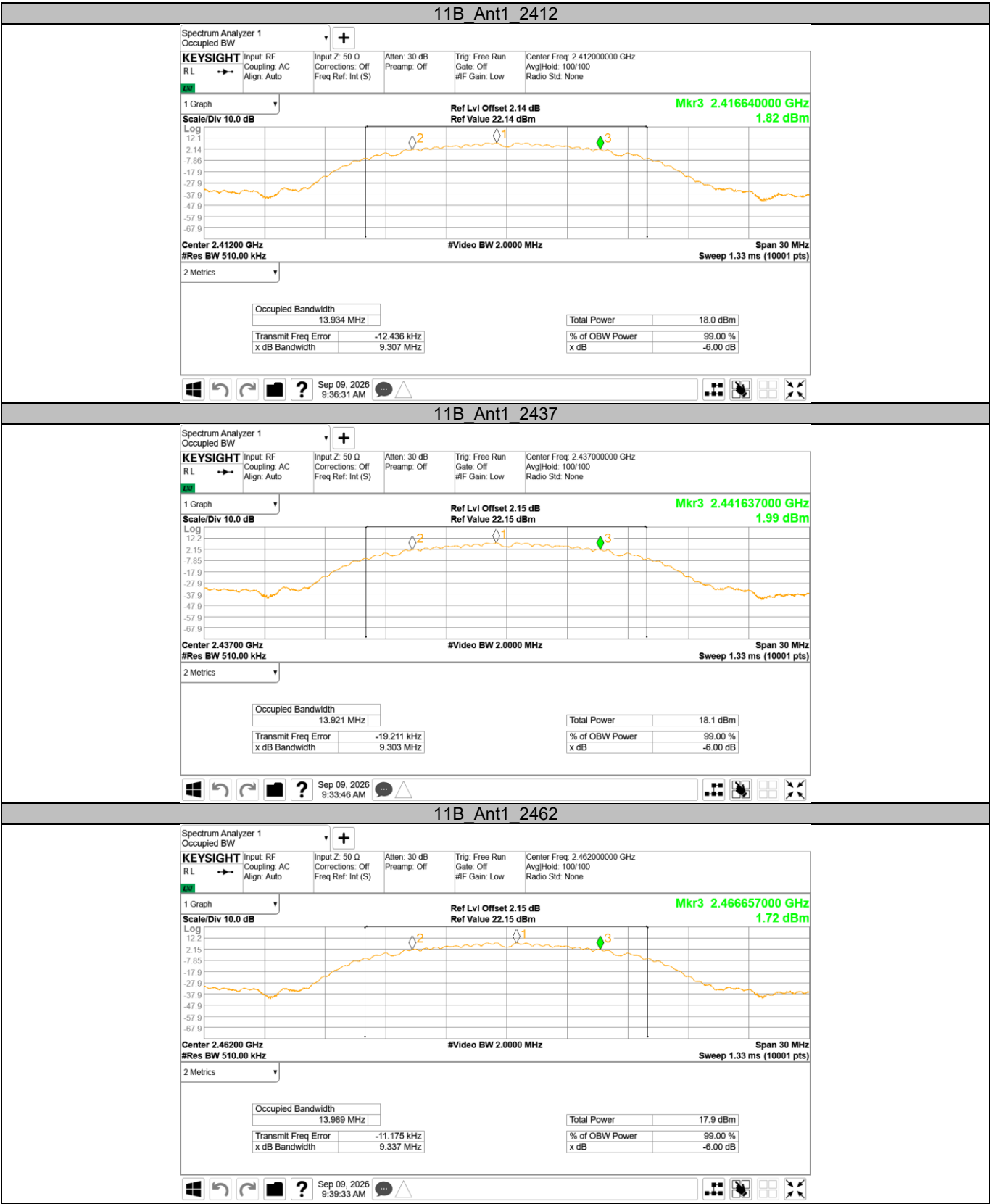
| 6dB bandwidth Limit [kHz] | 99% bandwidth Limit [kHz] |
|---------------------------|---------------------------|
| $\geq 500$                | --                        |

### Test Result

| Test Mode     | Frequency MHz | 6dB bandwidth (MHz) |            | Result  | 99% occupied bandwidth MHz |
|---------------|---------------|---------------------|------------|---------|----------------------------|
|               |               | result              | limit      | verdict |                            |
| 802.11b       | 2412          | 9.307               | $\geq 0.5$ | Pass    | 13.975                     |
|               | 2437          | 9.303               | $\geq 0.5$ | Pass    | 13.961                     |
|               | 2462          | 9.337               | $\geq 0.5$ | Pass    | 14.008                     |
| 802.11g       | 2412          | 15.184              | $\geq 0.5$ | Pass    | 16.31                      |
|               | 2437          | 15.783              | $\geq 0.5$ | Pass    | 16.323                     |
|               | 2462          | 15.841              | $\geq 0.5$ | Pass    | 16.33                      |
| 802.11n(HT20) | 2412          | 16.726              | $\geq 0.5$ | Pass    | 17.429                     |
|               | 2437          | 16.374              | $\geq 0.5$ | Pass    | 17.433                     |
|               | 2462          | 16.157              | $\geq 0.5$ | Pass    | 17.465                     |



6 dB Bandwidth









99% Occupied Bandwidth







## 10.4 Power spectral density

### Test Method

This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance:

1. The RF output of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting, the instrument center frequency is set to the nominal EUT channel center frequency enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
4. Set analyzer center frequency to DTS channel center frequency. RBW=3kHz, VBW $\geq$ 3RBW, Span=1.5 times DTS bandwidth, Detector=Peak, Sweep=auto, Trace= max hold.
5. Allow trace to fully stabilize, use the peak marker function to determine the maximum amplitude level within the RBW.
6. Repeat above procedures until other frequencies measured were completed.

### Limit

Limit [dBm/3KHz]  
 $\leq 8$

Test result  
802.11 B

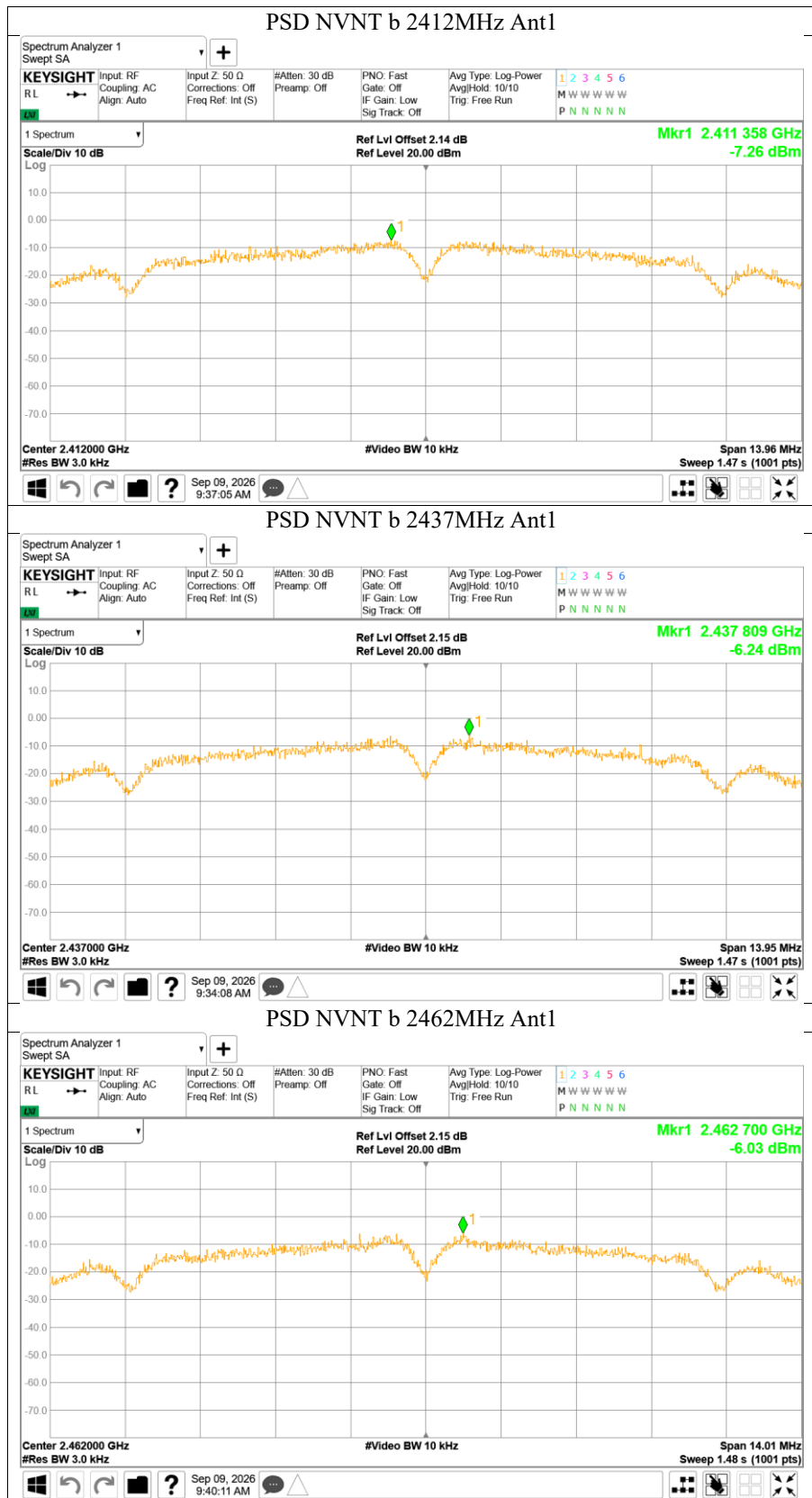
| Frequency<br>MHz       | Power spectral density<br>dBm/3kHz | Result |
|------------------------|------------------------------------|--------|
| Low channel 2412MHz    | -7.26                              | Pass   |
| Middle channel 2437MHz | -6.24                              | Pass   |
| High channel 2462MHz   | -6.03                              | Pass   |

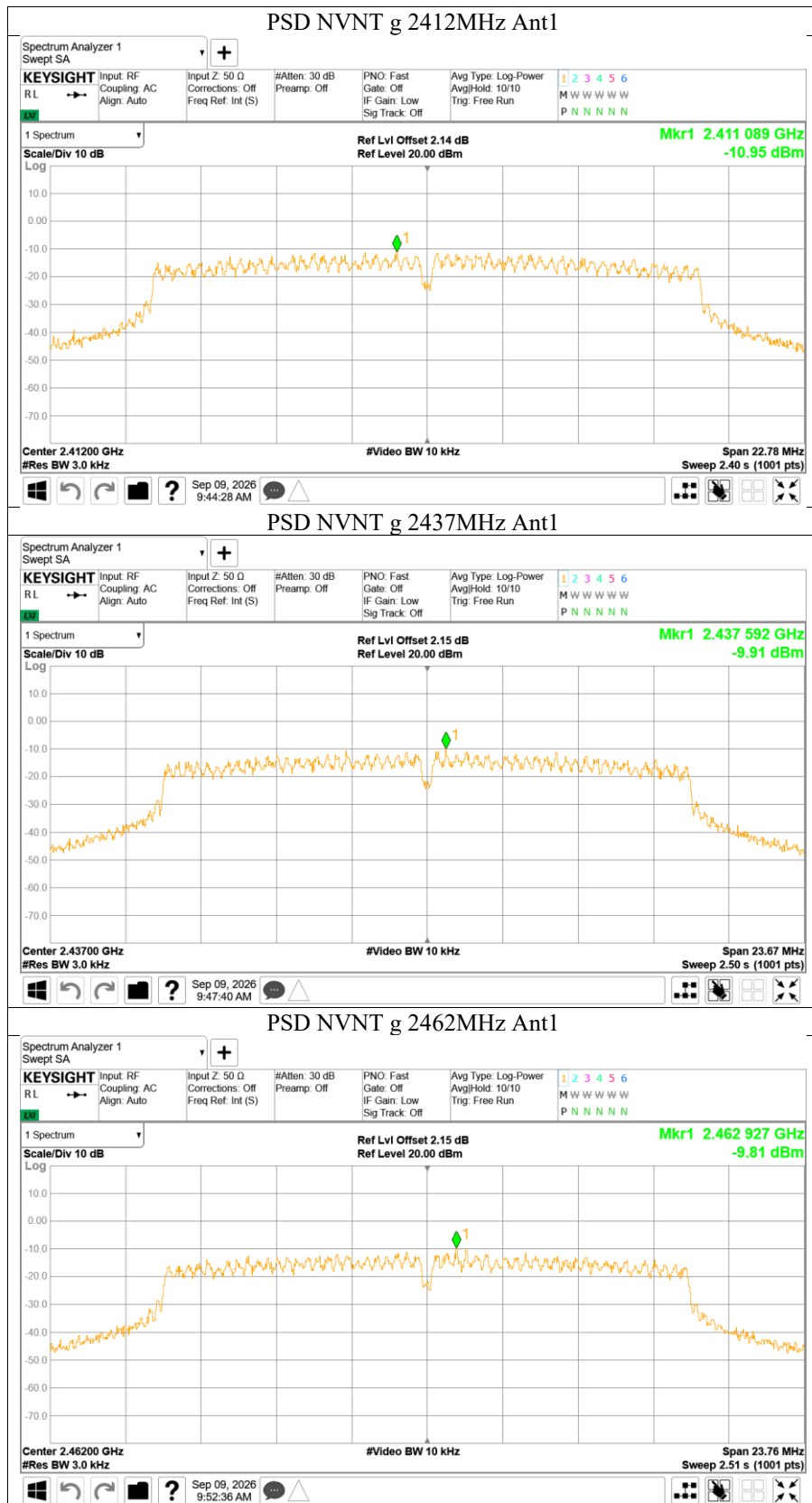
802.11 G

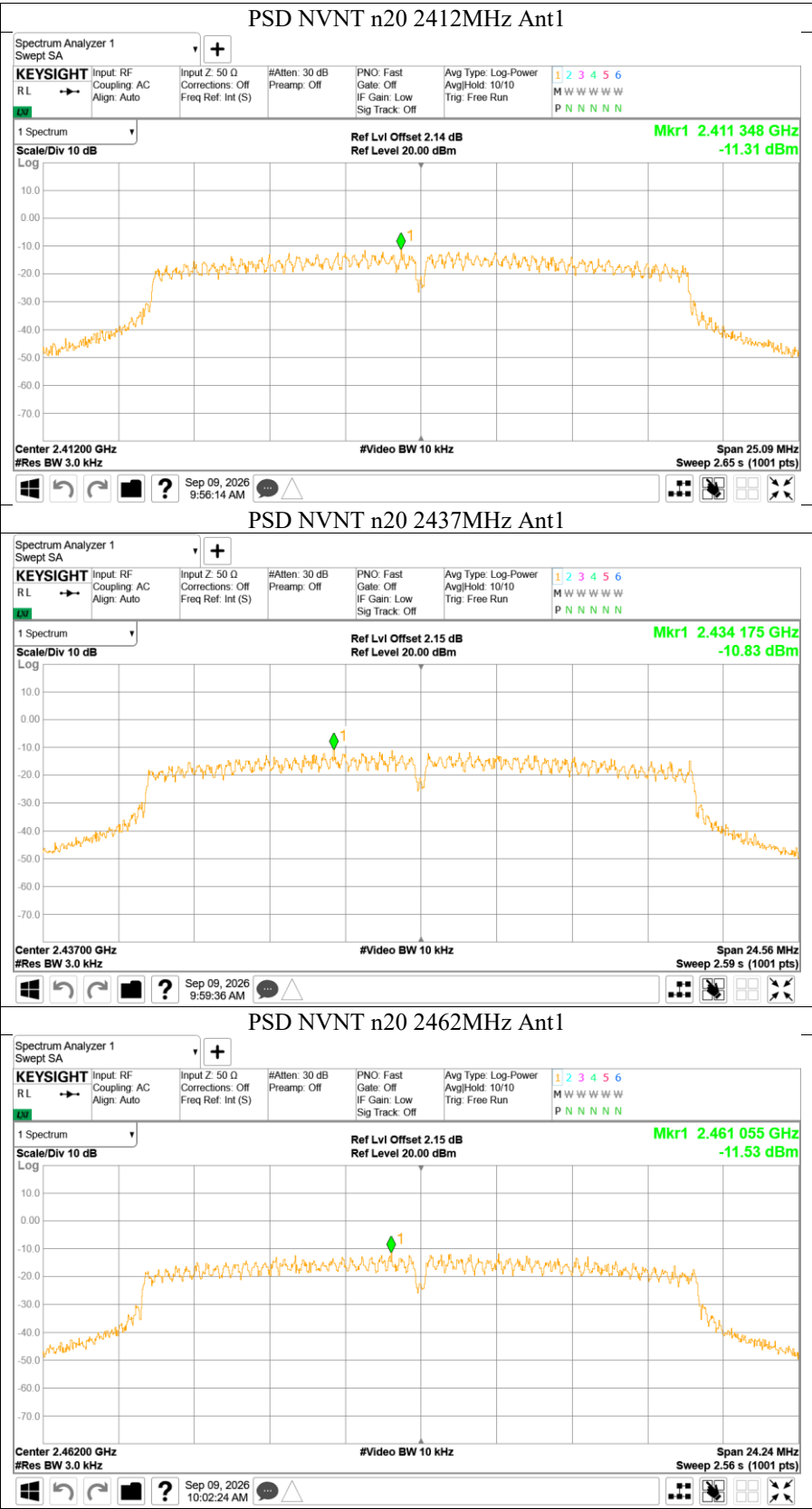
| Frequency<br>MHz       | Power spectral density<br>dBm/3kHz | Result |
|------------------------|------------------------------------|--------|
| Low channel 2412MHz    | -10.96                             | Pass   |
| Middle channel 2437MHz | -9.91                              | Pass   |
| High channel 2462MHz   | -9.81                              | Pass   |

802.11 N20

| Frequency<br>MHz       | Power spectral density<br>dBm/3kHz | Result |
|------------------------|------------------------------------|--------|
| Low channel 2412MHz    | -11.31                             | Pass   |
| Middle channel 2437MHz | -10.83                             | Pass   |
| High channel 2462MHz   | -11.53                             | Pass   |









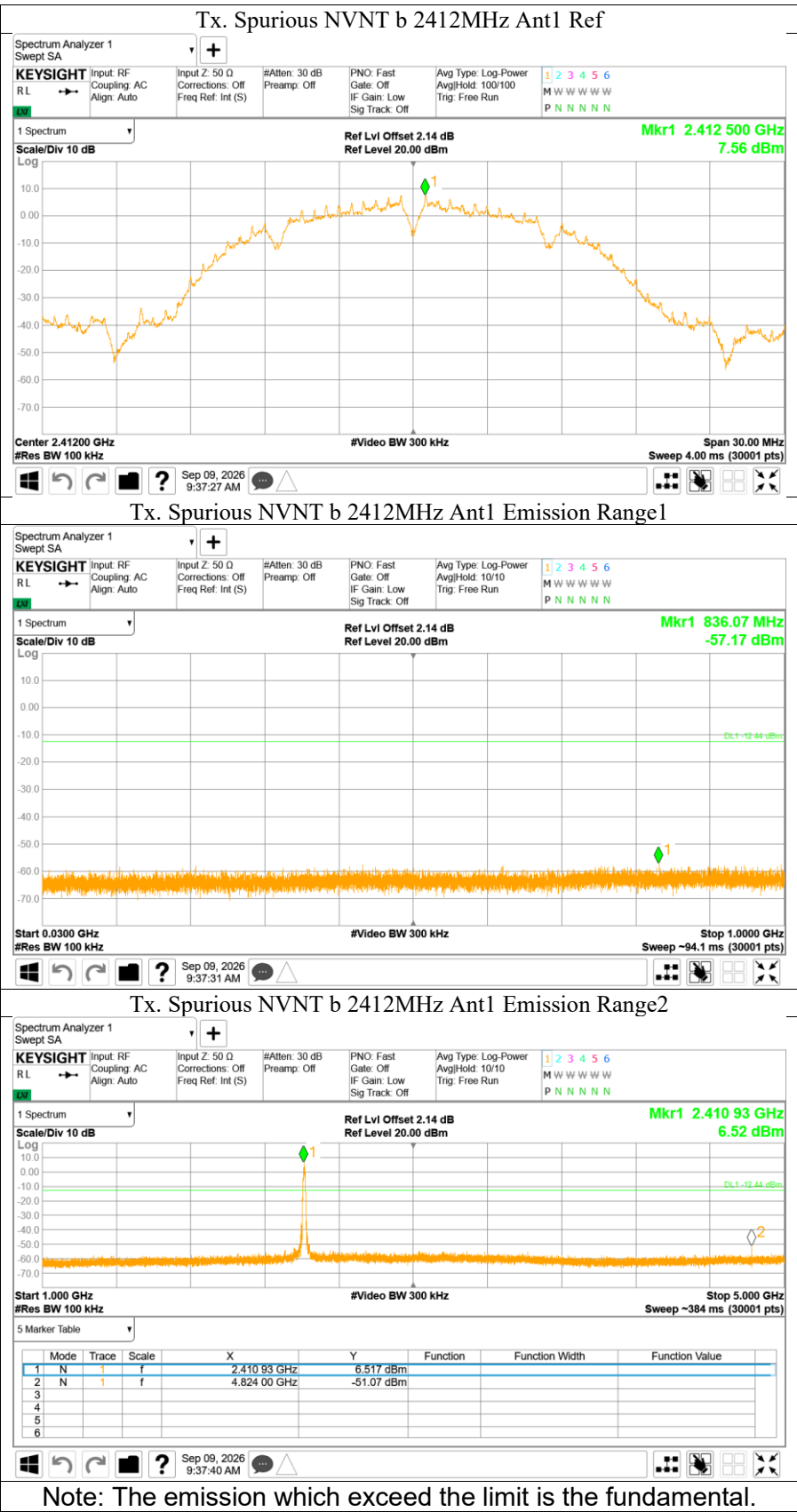
## 10.5 Spurious RF conducted emissions

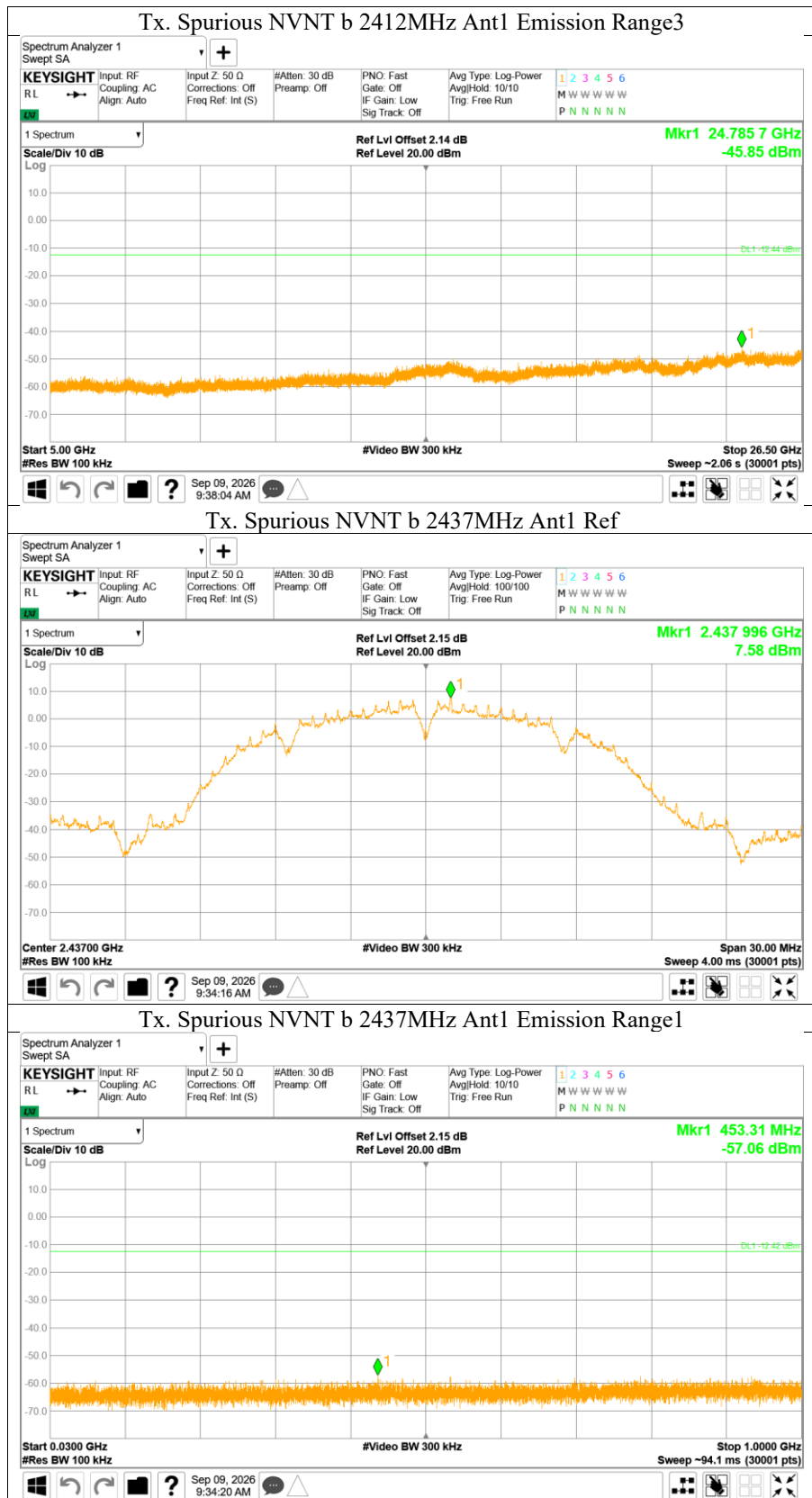
### Test Method

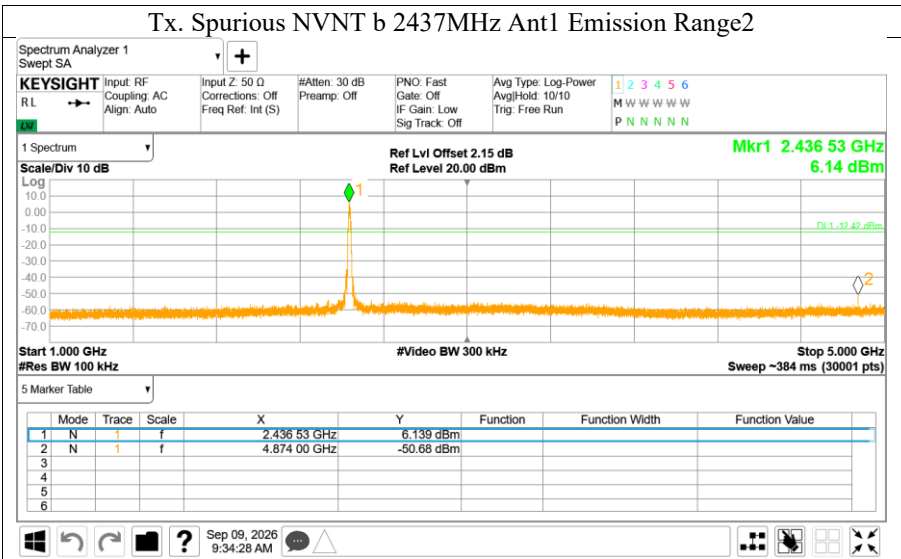
1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting, the instrument center frequency is set to the nominal EUT channel center frequency enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:  
Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10<sup>th</sup> harmonic. Typically, several plots are required to cover this entire span.  
RBW = 100 kHz, VBW $\geq$ 3RBW, Sweep = auto, Detector function = peak, Trace = max hold
4. Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded.
5. The level displayed must comply with the limit specified in this Section. Submit these plots.
6. Repeat above procedures until all frequencies measured were complete.

### Limit

| Frequency Range<br>MHz | Limit (dBc) |
|------------------------|-------------|
| 30-25000               | -20         |







Note: The emission which exceed the limit is the fundamental.

