



## FCC AND ISED CERTIFICATION TEST REPORT

|                                |   |                                                                                                                                                                                                                                                    |
|--------------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant</b>               | : | Harman International Industries, Inc.                                                                                                                                                                                                              |
| <b>Address of Applicant</b>    | : | 8500 Balboa Boulevard, Northridge, CA 91329,<br>UNITED STATES                                                                                                                                                                                      |
| <b>Manufacturer</b>            | : | Harman International Industries, Inc.                                                                                                                                                                                                              |
| <b>Address of Manufacturer</b> | : | 8500 Balboa Boulevard, Northridge, CA 91329,<br>UNITED STATES                                                                                                                                                                                      |
| <b>Equipment under Test</b>    | : | Multi-Channel Soundbar with wireless subwoofer                                                                                                                                                                                                     |
| <b>Model No.</b>               | : | BAR 500MK2                                                                                                                                                                                                                                         |
| <b>FCC ID</b>                  | : | APIBAR500MK2                                                                                                                                                                                                                                       |
| <b>IC</b>                      | : | 6132A-BAR500MK2                                                                                                                                                                                                                                    |
| <b>Test Standard(s)</b>        | : | FCC Rules and Regulations Part 15 Subpart E,<br>RSS-247 Issue 3 August 2023,<br>ANSI C63.10:2013,<br>789033 D02 General U-NII Test Procedures New<br>Rules v02r01,<br>662911 D01 Multiple Transmitter Output v02r01,<br>RSS-Gen Issue 5 April 2018 |
| <b>Report No.</b>              | : | DDT-RE24111413-2E05                                                                                                                                                                                                                                |
| <b>Issue Date</b>              | : | 2025/02/28                                                                                                                                                                                                                                         |
| <b>Issue By</b>                | : | Guangdong Dongdian Testing Service Co., Ltd.<br>Unit 2, Building 1, No. 17, Zongbu 2nd Road,<br>Songshan Lake Park, Dongguan, Guangdong, China,<br>523808                                                                                          |

# REPORT

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Test Report Declare

|                         |   |                                                            |
|-------------------------|---|------------------------------------------------------------|
| Applicant               | : | Harman International Industries, Inc.                      |
| Address of Applicant    | : | 8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES |
| Equipment under Test    | : | Multi-Channel Soundbar with wireless subwoofer             |
| Model No.               | : | BAR 500MK2                                                 |
| Manufacturer            | : | Harman International Industries, Inc.                      |
| Address of Manufacturer | : | 8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES |

Test Standard Used:

FCC Rules and Regulations Part 15 Subpart E,  
RSS-247 Issue 3 August 2023,  
ANSI C63.10:2013,  
789033 D02 General U-NII Test Procedures New Rules v02r01,  
662911 D01 Multiple Transmitter Output v02r01,  
RSS-Gen Issue 5 April 2018

We Declare:

The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

|                  |                     |               |                         |
|------------------|---------------------|---------------|-------------------------|
| Report No.:      | DDT-RE24111413-2E05 |               |                         |
| Date of Receipt: | 2024/11/14          | Date of Test: | 2024/11/14 - 2025/02/28 |

|                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Created: Bobo Chen                                                                  | Reviewed: Ella Gong                                                                 | Approved: Damon Hu                                                                    |
|  |  |  |
| 2025/02/28                                                                          | 2025/02/28                                                                          | 2025/02/28                                                                            |

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

| Rev. | Revisions     | Issue Date | Revised By |
|------|---------------|------------|------------|
| ---  | Initial issue | 2025/02/28 |            |
|      |               |            |            |

## 1. Summary of Test Results

| No.                                                                                                                                              | Test Parameter                     | Clause No.                                                                      | Condition | Result |
|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------------------------------------|-----------|--------|
| 1                                                                                                                                                | 6/26db Bandwidth and 99% Bandwidth | FCC 15.407 (e), RSS-247 Clause 6.2, RSS-GEN Clause 6.7                          | /         | Pass   |
| 2                                                                                                                                                | Output Power                       | FCC 15.407 (a) ; RSS-247 Clause 6.2                                             | /         | Pass   |
| 3                                                                                                                                                | Power Spectral Density             | FCC 15.407 (a) ; RSS-247 Clause 6.2                                             | /         | Pass   |
| 4                                                                                                                                                | Frequency Stability Measurement    | FCC 15.407 (g); RSS-247 Clause 6.2; RSS-GEN Clause 8.11                         | /         | Pass   |
| 5                                                                                                                                                | Radiated Emission                  | FCC 15.407 (b); FCC 15.209; FCC 15.205; RSS-247 Clause 6.2; RSS-GEN Clause 8.9  | /         | Pass   |
| 6                                                                                                                                                | Band Edge Compliance               | FCC 15.407 (b); FCC 15.209; FCC 15.205; RSS-247 Clause 6.2; RSS-GEN Clause 8.10 | /         | Pass   |
| 7                                                                                                                                                | Power Line Conducted Emissions     | FCC Part 15: 15.207(a), RSS-Gen Issue 5 clause 8.8                              | /         | Pass   |
| 8                                                                                                                                                | Antenna Requirement                | FCC Part 15: 15.203, RSS-Gen Issue 5 clause 6.8                                 | /         | Pass   |
| 9                                                                                                                                                | Dynamic Frequency Selection        | FCC 15.407 (h); RSS-247 Clause 6.8                                              | /         | Pass   |
| Note: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device or no need to test according to standard. |                                    |                                                                                 |           |        |

## 2. General Test Information

### 2.1. Description of EUT

|                          |                                                  |
|--------------------------|--------------------------------------------------|
| EUT Name                 | : Multi-Channel Soundbar with wireless subwoofer |
| Model Number             | : BAR 500MK2                                     |
| EUT Function Description | : Please reference user manual of this device    |
| Power Supply             | : AC 100-240V, 50/60Hz, 70W                      |

Note: This EUT support Bluetooth BR/EDR/LE, 2.4 GHz SRD, 2.4 GHz WLAN, 5 GHz WLAN, this report only for 5 GHz WLAN.

|                     |                                                                                                                                                                                                                                      |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Radio Technology    | : IEEE 802.11a/n/ac/ax                                                                                                                                                                                                               |
| Operation frequency | : U-NII-1: 5180 MHz to 5240 MHz<br>U-NII-2A: 5260 MHz to 5320 MHz<br>U-NII-2C: 5500 MHz to 5720 MHz<br>U-NII-3: 5745 MHz to 5825 MHz                                                                                                 |
| Modulation          | : IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK)<br>IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)<br>IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)<br>IEEE 802.11ax: OFDM, OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK) |

| Antenna information                              |                     |           |           |
|--------------------------------------------------|---------------------|-----------|-----------|
| Antenna Type                                     | FPC                 |           |           |
| Max Antenna Gain (dBi)                           |                     | Ant1 Gain | Ant2 Gain |
|                                                  | IEEE 802.11a        | 2.58      | 2.62      |
|                                                  | IEEE 802.11n HT20   | 2.58      | 2.62      |
|                                                  | IEEE 802.11n HT40   | 2.58      | 2.62      |
|                                                  | IEEE 802.11ac VHT20 | 2.58      | 2.62      |
|                                                  | IEEE 802.11ac VHT40 | 2.58      | 2.62      |
|                                                  | IEEE 802.11ac VHT80 | 2.58      | 2.62      |
|                                                  | IEEE 802.11ax HE20  | 2.58      | 2.62      |
|                                                  | IEEE 802.11ax HE40  | 2.58      | 2.62      |
|                                                  | IEEE 802.11ax HE80  | 2.58      | 2.62      |
| Note: This product does not support beamforming. |                     |           |           |

| Channel information   |                 |                       |                 |                       |                 |
|-----------------------|-----------------|-----------------------|-----------------|-----------------------|-----------------|
| IEEE 802.11a          |                 | IEEE 802.11n (HT40)   |                 | IEEE 802.11ac (VHT80) |                 |
| IEEE 802.11n (HT20)   |                 | IEEE 802.11ac (VHT40) |                 | IEEE 802.11ax (HE80)  |                 |
| IEEE 802.11ac (VHT20) |                 | IEEE 802.11ax (HE40)  |                 |                       |                 |
| IEEE 802.11ax (HE20)  |                 |                       |                 |                       |                 |
| UNII-1                |                 |                       |                 |                       |                 |
| CH                    | Frequency (MHz) | CH                    | Frequency (MHz) | CH                    | Frequency (MHz) |
| 36                    | 5180            | 38                    | 5190            | 42                    | 5210            |
| 40                    | 5200            | 46                    | 5230            | /                     | /               |
| 44                    | 5220            | /                     | /               | /                     | /               |



|                                                                 |      |     |      |     |      |
|-----------------------------------------------------------------|------|-----|------|-----|------|
| 48                                                              | 5240 | /   | /    | /   | /    |
| UNII-2A                                                         |      |     |      |     |      |
| 52                                                              | 5260 | 54  | 5270 | 58  | 5290 |
| 56                                                              | 5280 | 62  | 5310 |     | /    |
| 60                                                              | 5300 | /   | /    | /   | /    |
| 64                                                              | 5320 | /   | /    | /   | /    |
| UNII-2C                                                         |      |     |      |     |      |
| 100                                                             | 5500 | 102 | 5510 | 106 | 5530 |
| 104                                                             | 5520 | 110 | 5550 | 122 | 5610 |
| 108                                                             | 5540 | 118 | 5590 | 138 | 5690 |
| 112                                                             | 5560 | 126 | 5630 | /   | /    |
| 116                                                             | 5580 | 134 | 5670 | /   | /    |
| 120                                                             | 5600 | 142 | 5710 | /   | /    |
| 124                                                             | 5620 | /   | /    | /   | /    |
| 128                                                             | 5640 | /   | /    | /   | /    |
| 132                                                             | 5660 | /   | /    | /   | /    |
| 136                                                             | 5680 | /   | /    | /   | /    |
| 140                                                             | 5700 | /   | /    | /   | /    |
| 144                                                             | 5720 | /   | /    | /   | /    |
| UNII-3                                                          |      |     |      |     |      |
| 149                                                             | 5745 | 151 | 5755 | 155 | 5775 |
| 153                                                             | 5765 | 159 | 5795 | /   | /    |
| 157                                                             | 5785 | /   | /    | /   | /    |
| 161                                                             | 5805 | /   | /    | /   | /    |
| 165                                                             | 5825 | /   | /    | /   | /    |
| Note: Band 5600-5650MHz will be disabled when shipped to Canada |      |     |      |     |      |

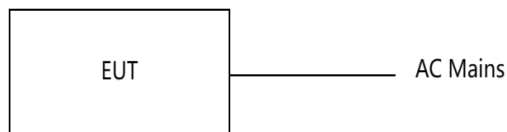
Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

“☒” means to be chosen or applicable; “☐” means don't to be chosen or not applicable; This note applies to entire report.

## 2.2. Accessories of EUT

| Accessories    | Manufacturer | Model number | Description                            |
|----------------|--------------|--------------|----------------------------------------|
| AC cable       | Harman       | N/A          | Length: 195cm                          |
| HDMI cable     | Harman       | N/A          | Length: 115cm, with two magnetic rings |
| Remote control | Harman       | N/A          | N/A                                    |

### 2.3. Block diagram of EUT configuration for test



### 2.4. Decision of final test mode

According pre-test, the worst test modes were reported as below:

Test software: adb.exe

The test software was used to control EUT work in Continuous Tx mode, and select test channel, wireless mode as below table.

The pathloss of external cable: 2 dB (According to the manufacturer's claims)

| Tested mode, channel, and data rate information |                  |      |                                |                |                    |
|-------------------------------------------------|------------------|------|--------------------------------|----------------|--------------------|
| Mode                                            | Setting Tx Power |      | Data rate (Mbps)<br>(see Note) | Channel        | Frequency<br>(MHz) |
|                                                 | ANT1             | ANT2 |                                |                |                    |
| IEEE<br>802.11a                                 | 12               | 12   | 6                              | Low: CH36      | 5180               |
|                                                 | 12               | 12   | 6                              | Middle: CH40   | 5200               |
|                                                 | 12               | 12   | 6                              | High: CH48     | 5240               |
|                                                 | 12               | 12   | 6                              | Low: CH52      | 5260               |
|                                                 | 12               | 12   | 6                              | Middle: CH56   | 5280               |
|                                                 | 12               | 12   | 6                              | High: CH64     | 5320               |
|                                                 | 12               | 12   | 6                              | Low: CH100     | 5500               |
|                                                 | 12               | 12   | 6                              | Middle: CH116  | 5580               |
|                                                 | 12               | 12   | 6                              | High: CH140    | 5700               |
|                                                 | 12               | 12   | 6                              | Straddle:CH144 | 5720               |
|                                                 | 12               | 12   | 6                              | Low: CH149     | 5745               |
|                                                 | 12               | 12   | 6                              | Middle: CH157  | 5785               |
|                                                 | 12               | 12   | 6                              | High: CH165    | 5825               |
|                                                 | 14               | 14   | MCS 8                          | Low: CH36      | 5180               |
| IEEE<br>802.11n<br>HT20                         | 14               | 14   | MCS 8                          | Middle: CH40   | 5200               |
|                                                 | 14               | 14   | MCS 8                          | High: CH48     | 5240               |
|                                                 | 14               | 14   | MCS 8                          | Low: CH52      | 5260               |
|                                                 | 14               | 14   | MCS 8                          | Middle: CH56   | 5280               |
|                                                 | 14               | 14   | MCS 8                          | High: CH64     | 5320               |
|                                                 | 14               | 14   | MCS 8                          | Low: CH100     | 5500               |
|                                                 | 14               | 14   | MCS 8                          | Middle: CH116  | 5580               |

|                            |    |    |       |                 |      |
|----------------------------|----|----|-------|-----------------|------|
|                            | 14 | 14 | MCS 8 | High: CH140     | 5700 |
|                            | 14 | 14 | MCS 8 | Straddle:CH144  | 5720 |
|                            | 14 | 14 | MCS 8 | Low: CH149      | 5745 |
|                            | 14 | 14 | MCS 8 | Middle: CH157   | 5785 |
|                            | 14 | 14 | MCS 8 | High: CH165     | 5825 |
| IEEE<br>802.11n<br>HT40    | 12 | 12 | MCS 8 | Low: CH38       | 5190 |
|                            | 12 | 12 | MCS 8 | Middle: CH46    | 5230 |
|                            | 12 | 12 | MCS 8 | High: CH54      | 5270 |
|                            | 12 | 12 | MCS 8 | Low: CH62       | 5310 |
|                            | 12 | 12 | MCS 8 | Middle: CH102   | 5510 |
|                            | 12 | 12 | MCS 8 | High: CH110     | 5550 |
|                            | 12 | 12 | MCS 8 | Low: CH134      | 5670 |
|                            | 12 | 12 | MCS 8 | Middle: CH151   | 5755 |
|                            | 12 | 12 | MCS 8 | High: CH159     | 5795 |
| IEEE<br>802.11ac<br>VHT20  | 11 | 11 | MCS 0 | Low: CH36       | 5180 |
|                            | 11 | 11 | MCS 0 | Middle: CH40    | 5200 |
|                            | 11 | 11 | MCS 0 | High: CH48      | 5240 |
|                            | 11 | 11 | MCS 0 | Low: CH52       | 5260 |
|                            | 11 | 11 | MCS 0 | Middle: CH56    | 5280 |
|                            | 11 | 11 | MCS 0 | High: CH64      | 5320 |
|                            | 11 | 11 | MCS 0 | Low: CH100      | 5500 |
|                            | 11 | 11 | MCS 0 | Middle: CH116   | 5580 |
|                            | 11 | 11 | MCS 0 | High: CH140     | 5700 |
|                            | 11 | 11 | MCS 0 | Straddle:CH144  | 5720 |
|                            | 11 | 11 | MCS 0 | Low: CH149      | 5745 |
|                            | 11 | 11 | MCS 0 | Middle: CH157   | 5785 |
|                            | 11 | 11 | MCS 0 | High: CH165     | 5825 |
|                            | 11 | 11 | MCS 0 | Low: CH38       | 5190 |
| IEEE<br>802.11 ac<br>VHT40 | 10 | 10 | MCS 0 | Middle: CH46    | 5230 |
|                            | 10 | 10 | MCS 0 | High: CH54      | 5270 |
|                            | 10 | 10 | MCS 0 | Low: CH62       | 5310 |
|                            | 10 | 10 | MCS 0 | Middle: CH102   | 5510 |
|                            | 10 | 10 | MCS 0 | High: CH110     | 5550 |
|                            | 10 | 10 | MCS 0 | Low: CH134      | 5670 |
|                            | 10 | 10 | MCS 0 | Straddle: CH142 | 5710 |
|                            | 10 | 10 | MCS 0 | Middle: CH151   | 5755 |
|                            | 10 | 10 | MCS 0 | High: CH159     | 5795 |
|                            | 10 | 10 | MCS 0 | CH42            | 5210 |
| IEEE<br>802.11ac<br>VHT80  | 10 | 10 | MCS 0 | CH58            | 5290 |
|                            | 10 | 10 | MCS 0 | CH106           | 5530 |
|                            | 10 | 10 | MCS 0 |                 |      |

|                          |                 |                 |       |                 |      |
|--------------------------|-----------------|-----------------|-------|-----------------|------|
|                          | 10              | 10              | MCS 0 | CH122           | 5610 |
|                          | 10              | 10              | MCS 0 | CH138           | 5690 |
|                          | 10              | 10              | MCS 0 | CH155           | 5775 |
| IEEE<br>802.11ax<br>HE20 | SU: 13<br>RU: 6 | SU: 13<br>RU: 6 | MCS 0 | Low: CH36       | 5180 |
|                          | SU: 13<br>RU: 6 | SU: 13<br>RU: 6 | MCS 0 | Middle: CH40    | 5200 |
|                          | SU: 13<br>RU: 6 | SU: 13<br>RU: 6 | MCS 0 | High: CH48      | 5240 |
|                          | SU: 13<br>RU: 9 | SU: 13<br>RU: 9 | MCS 0 | Low: CH52       | 5260 |
|                          | SU: 13<br>RU: 9 | SU: 13<br>RU: 9 | MCS 0 | Middle: CH56    | 5280 |
|                          | SU: 13<br>RU: 9 | SU: 13<br>RU: 9 | MCS 0 | High: CH64      | 5320 |
|                          | SU: 13<br>RU: 9 | SU: 13<br>RU: 9 | MCS 0 | Low: CH100      | 5500 |
|                          | SU: 13<br>RU: 9 | SU: 13<br>RU: 9 | MCS 0 | Middle: CH116   | 5580 |
|                          | SU: 13<br>RU: 9 | SU: 13<br>RU: 9 | MCS 0 | High: CH140     | 5700 |
|                          | SU: 13<br>RU: 9 | SU: 13<br>RU: 9 | MCS 0 | Straddle:CH144  | 5720 |
|                          | SU: 13<br>RU: 9 | SU: 13<br>RU: 9 | MCS 0 | Low: CH149      | 5745 |
|                          | SU: 13<br>RU: 9 | SU: 13<br>RU: 9 | MCS 0 | Middle: CH157   | 5785 |
|                          | SU: 13<br>RU: 9 | SU: 13<br>RU: 9 | MCS 0 | High: CH165     | 5825 |
| IEEE<br>802.11ax<br>HE40 | SU: 12<br>RU: 6 | SU: 12<br>RU: 6 | MCS 0 | Low: CH38       | 5190 |
|                          | SU: 12<br>RU: 6 | SU: 12<br>RU: 6 | MCS 0 | Middle: CH46    | 5230 |
|                          | SU: 12<br>RU: 9 | SU: 12<br>RU: 9 | MCS 0 | High: CH54      | 5270 |
|                          | SU: 12<br>RU: 9 | SU: 12<br>RU: 9 | MCS 0 | Low: CH62       | 5310 |
|                          | SU: 12<br>RU: 9 | SU: 12<br>RU: 9 | MCS 0 | Middle: CH102   | 5510 |
|                          | SU: 12<br>RU: 9 | SU: 12<br>RU: 9 | MCS 0 | High: CH110     | 5550 |
|                          | SU: 12<br>RU: 9 | SU: 12<br>RU: 9 | MCS 0 | Low: CH134      | 5670 |
|                          | SU: 12<br>RU: 9 | SU: 12<br>RU: 9 | MCS 0 | Straddle: CH142 | 5710 |
|                          | SU: 12<br>RU: 9 | SU: 12<br>RU: 9 | MCS 0 | Middle: CH151   | 5755 |
|                          | SU: 12<br>RU: 9 | SU: 12<br>RU: 9 | MCS 0 | High: CH159     | 5795 |
| IEEE<br>802.11ax<br>HE80 | SU: 10<br>RU: 6 | SU: 10<br>RU: 6 | MCS 0 | CH42            | 5210 |
|                          | SU: 10<br>RU: 9 | SU: 10<br>RU: 9 | MCS 0 | CH58            | 5290 |
|                          | SU: 10<br>RU: 9 | SU: 10<br>RU: 9 | MCS 0 | CH106           | 5530 |

|                                                                                                                                     |                 |       |       |      |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------|------|
| SU: 10<br>RU: 9                                                                                                                     | SU: 10<br>RU: 9 | MCS 0 | CH122 | 5610 |
| SU: 10<br>RU: 9                                                                                                                     | SU: 10<br>RU: 9 | MCS 0 | CH138 | 5690 |
| SU: 10<br>RU: 9                                                                                                                     | SU: 10<br>RU: 9 | MCS 0 | CH155 | 5775 |
| Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test. |                 |       |       |      |

## 2.5. Deviations of test standard

No deviation.

## 2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

|                    |                  |
|--------------------|------------------|
| Temperature range: | +15°C to +35 °C  |
| Humidity range:    | 20% to 75%       |
| Pressure range:    | 86 kPa to106 kPa |

Note: The specific temperature and humidity information of each test item refers to the temperature and humidity record in the corresponding test data.

## 2.7. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: [ddt@dgddt.com](mailto:ddt@dgddt.com).

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20240, G-20118

## 2.8. Measurement uncertainty

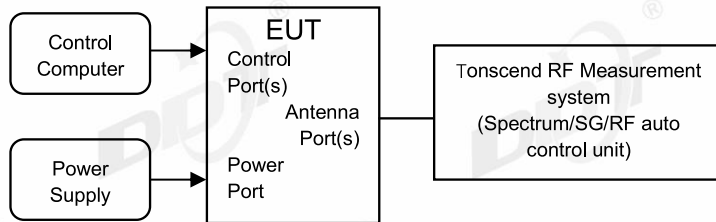
| Test Item                                                                                                                                     | Uncertainty                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bandwidth                                                                                                                                     | 1.1%                                                                                                                                                                    |
| Peak Output Power (Conducted) (Spectrum analyzer)                                                                                             | 0.86 dB ( $10 \text{ MHz} \leq f < 3.6 \text{ GHz}$ );<br>1.38 dB ( $3.6 \text{ GHz} \leq f < 8 \text{ GHz}$ )                                                          |
| Peak Output Power (Conducted) (Power Sensor)                                                                                                  | 0.74 dB                                                                                                                                                                 |
| Power Spectral Density                                                                                                                        | 0.74 dB ( $10 \text{ MHz} \leq f < 3.6 \text{ GHz}$ );<br>1.38 dB ( $3.6 \text{ GHz} \leq f < 8 \text{ GHz}$ )                                                          |
| Frequencies Stability                                                                                                                         | $6.7 \times 10^{-8}$ (Antenna couple method)<br>$5.5 \times 10^{-8}$ (Conducted method)                                                                                 |
| Conducted spurious emissions                                                                                                                  | 0.86 dB ( $10 \text{ MHz} \leq f < 3.6 \text{ GHz}$ );<br>1.40 dB ( $3.6 \text{ GHz} \leq f < 8 \text{ GHz}$ )<br>1.66 dB ( $8 \text{ GHz} \leq f < 26.5 \text{ GHz}$ ) |
| Uncertainty for radio frequency (RBW < 20 kHz)                                                                                                | $3 \times 10^{-8}$                                                                                                                                                      |
| Temperature                                                                                                                                   | 0.4 °C                                                                                                                                                                  |
| Humidity                                                                                                                                      | 2 %                                                                                                                                                                     |
| Uncertainty for Radiation Emission test<br>(9 kHz – 30 MHz)                                                                                   | 3.44 dB                                                                                                                                                                 |
| Uncertainty for Radiation Emission test<br>(30 MHz - 1 GHz)                                                                                   | 4.70 dB (Antenna Polarize: V)<br>4.84 dB (Antenna Polarize: H)                                                                                                          |
| Uncertainty for Radiation Emission test<br>(1 GHz - 40 GHz)                                                                                   | 4.10 dB (1 - 6 GHz)<br>4.40 dB (6 GHz - 18 GHz)<br>3.54 dB (18 GHz - 26 GHz)<br>4.30 dB (26 GHz - 40 GHz)                                                               |
| Uncertainty for Power line conduction emission test                                                                                           | 3.34dB (150KHz-30MHz)<br>3.72dB (9KHz-150KHz)                                                                                                                           |
| Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2. |                                                                                                                                                                         |

### 3. Equipment Used During Conductive Test

| Equipment                                     | Manufacturer | Model No.   | Serial Number | Due Date   |
|-----------------------------------------------|--------------|-------------|---------------|------------|
| ☑RF Connected Test (RF Measurement System 3#) |              |             |               |            |
| SIGNAL ANALYZER                               | R&S          | FSV40       | 101407        | 2025/07/08 |
| Wideband Radio Communication Tester           | R&S          | CMW500      | 117491        | 2025/03/31 |
| EXG Analog Signal Generator                   | KEYSIGHT     | N5173B      | MY62153058    | 2025/07/08 |
| MXG Vector Signal Generator                   | Agilent      | N5182A      | MY48180912    | 2025/03/31 |
| RF Control Unit                               | Tonscend     | JS0806-2    | 20C8060230    | 2025/03/31 |
| TEMP&HUMI Programmable Chamber                | ZHIXIANG     | ZXGDJS-150L | ZX170110-A    | 2025/04/22 |
| Test Software                                 | Tonscend     | JS1120-3    | Ver.3.2.22    | N/A        |

## 4. 26dB Bandwidth

### 4.1. Block diagram of test setup



### 4.2. Limits

| FCC Part15, Subpart E/ RSS-247 |       |                                                            |
|--------------------------------|-------|------------------------------------------------------------|
| Test Item                      | Limit | Frequency Range (MHz)                                      |
| 26 dB Bandwidth                | ---   | 5150 - 5250                                                |
|                                | ---   | 5250 - 5350                                                |
|                                | ---   | For FCC: 5470 - 5725<br>For IC: 5470 - 5600<br>5650 - 5725 |

### 4.3. Test procedure

Connect EUT's antenna output to spectrum analyzer by RF cable.

|                  |                                                |
|------------------|------------------------------------------------|
| Center Frequency | The center frequency of the channel under test |
| Detector         | Peak                                           |
| RBW              | approximately 1% of the emission bandwidth.    |
| VBW              | > RBW                                          |
| Trace            | Max hold                                       |
| Sweep            | Auto couple                                    |

Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the fundamental emission.



## 4.4. Test result

|                    |                         |                |                          |
|--------------------|-------------------------|----------------|--------------------------|
| Test Engineer:     | Zhongyao                | Test Site:     | RF Measurement System 3# |
| Ambient Condition: | 24.2-25.3℃,42.2-48.3%RH | Test Date:     | 2024.11.14-2025.02.10    |
| Test Power Supply: | AC 120V/60Hz            | Sample Number: | S24111413-003            |

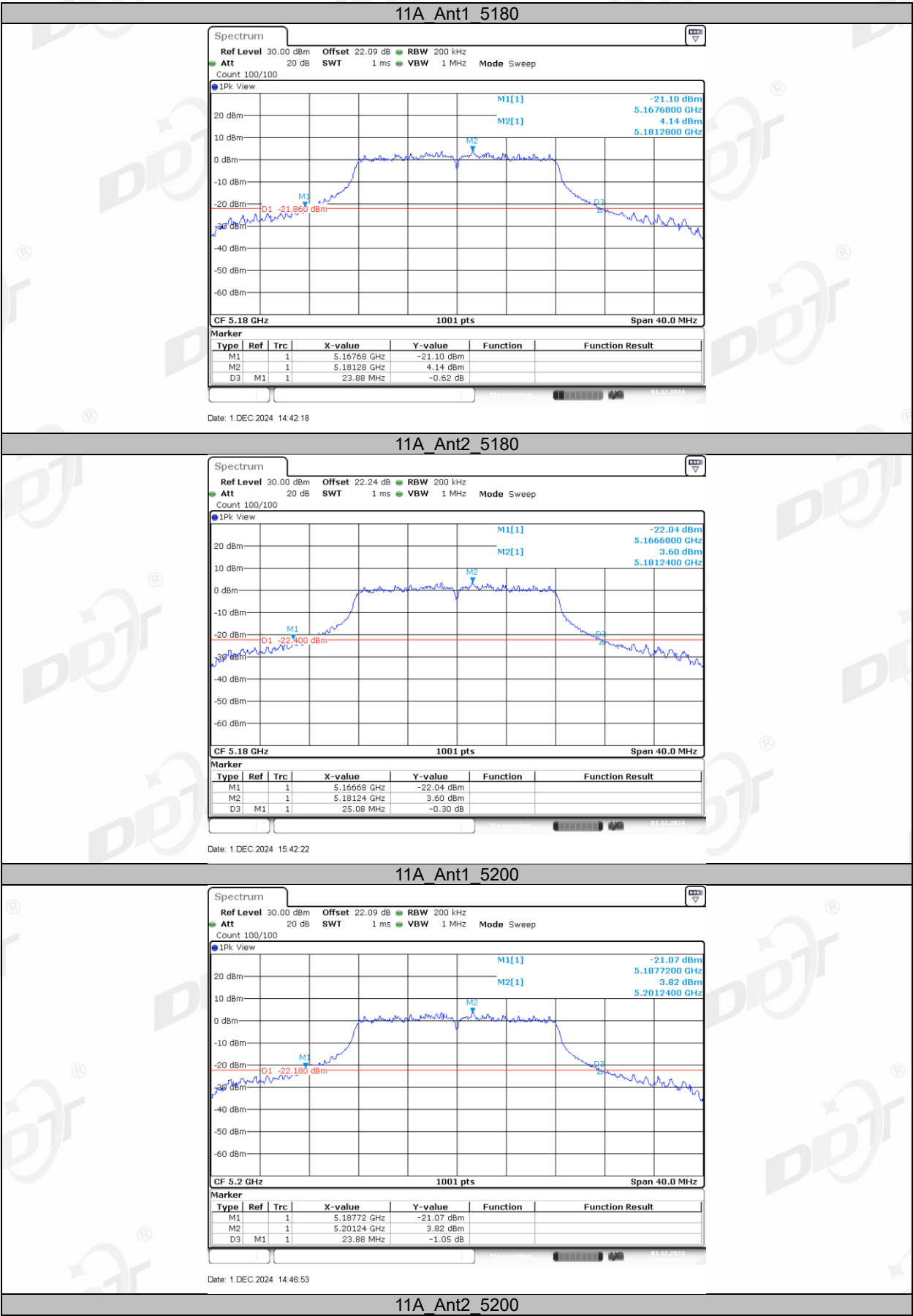
| Test Mode | Antenna | Frequency [MHz] | 26db EBW [MHz] | FL [MHz] | FH [MHz] | Limit [MHz] | Verdict |
|-----------|---------|-----------------|----------------|----------|----------|-------------|---------|
| 11A       | Ant1    | 5180            | 23.88          | 5167.68  | 5191.56  | ---         | ---     |
|           | Ant2    | 5180            | 25.08          | 5166.68  | 5191.76  | ---         | ---     |
|           | Ant1    | 5200            | 23.88          | 5187.72  | 5211.60  | ---         | ---     |
|           | Ant2    | 5200            | 24.56          | 5187.64  | 5212.20  | ---         | ---     |
|           | Ant1    | 5240            | 19.56          | 5230.16  | 5249.72  | ---         | ---     |
|           | Ant2    | 5240            | 19.60          | 5230.16  | 5249.76  | ---         | ---     |
|           | Ant1    | 5260            | 23.64          | 5248.08  | 5271.72  | ---         | ---     |
|           | Ant2    | 5260            | 23.52          | 5248.20  | 5271.72  | ---         | ---     |
|           | Ant1    | 5280            | 23.68          | 5267.88  | 5291.56  | ---         | ---     |
|           | Ant2    | 5280            | 23.60          | 5268.16  | 5291.76  | ---         | ---     |
|           | Ant1    | 5320            | 25.08          | 5306.72  | 5331.80  | ---         | ---     |
|           | Ant2    | 5320            | 23.92          | 5307.64  | 5331.56  | ---         | ---     |
|           | Ant1    | 5500            | 24.12          | 5487.64  | 5511.76  | ---         | ---     |
|           | Ant2    | 5500            | 25.04          | 5486.68  | 5511.72  | ---         | ---     |
|           | Ant1    | 5580            | 23.64          | 5568.04  | 5591.68  | ---         | ---     |
|           | Ant2    | 5580            | 23.52          | 5568.16  | 5591.68  | ---         | ---     |
|           | Ant1    | 5700            | 24.12          | 5687.60  | 5711.72  | ---         | ---     |
|           | Ant2    | 5700            | 24.08          | 5687.64  | 5711.72  | ---         | ---     |
|           | Ant1    | 5720            | 23.48          | 5708.16  | 5731.64  | ---         | ---     |
|           | Ant2    | 5720            | 23.60          | 5708.12  | 5731.72  | ---         | ---     |
|           | Ant1    | 5720 UNII-2C    | 16.84          | 5708.16  | 5725     | ---         | ---     |
|           | Ant2    | 5720 UNII-2C    | 16.88          | 5708.12  | 5725     | ---         | ---     |
|           | Ant1    | 5720 UNII-3     | 6.64           | 5725     | 5731.64  | ---         | ---     |
|           | Ant2    | 5720 UNII-3     | 6.72           | 5725     | 5731.72  | ---         | ---     |
|           | Ant1    | 5745            | 23.96          | 5732.76  | 5756.72  | ---         | ---     |
|           | Ant2    | 5745            | 23.40          | 5733.12  | 5756.52  | ---         | ---     |
|           | Ant1    | 5785            | 23.40          | 5773.24  | 5796.64  | ---         | ---     |
|           | Ant2    | 5785            | 23.36          | 5773.16  | 5796.52  | ---         | ---     |
|           | Ant1    | 5825            | 23.48          | 5813.24  | 5836.72  | ---         | ---     |
|           | Ant2    | 5825            | 23.64          | 5813.08  | 5836.72  | ---         | ---     |
| 11N20MIMO | Ant1    | 5180            | 23.84          | 5168.04  | 5191.88  | ---         | ---     |
|           | Ant2    | 5180            | 23.36          | 5167.88  | 5191.24  | ---         | ---     |
|           | Ant1    | 5200            | 24.88          | 5187.88  | 5212.76  | ---         | ---     |
|           | Ant2    | 5200            | 23.56          | 5187.92  | 5211.48  | ---         | ---     |
|           | Ant1    | 5240            | 20.00          | 5229.92  | 5249.92  | ---         | ---     |
|           | Ant2    | 5240            | 19.84          | 5230.00  | 5249.84  | ---         | ---     |
|           | Ant1    | 5260            | 25.40          | 5247.88  | 5273.28  | ---         | ---     |
|           | Ant2    | 5260            | 22.44          | 5248.84  | 5271.28  | ---         | ---     |
|           | Ant1    | 5280            | 24.16          | 5267.84  | 5292.00  | ---         | ---     |
|           | Ant2    | 5280            | 23.04          | 5268.68  | 5291.72  | ---         | ---     |
|           | Ant1    | 5320            | 24.84          | 5308.00  | 5332.84  | ---         | ---     |
|           | Ant2    | 5320            | 24.48          | 5307.92  | 5332.40  | ---         | ---     |
|           | Ant1    | 5500            | 24.68          | 5488.00  | 5512.68  | ---         | ---     |
|           | Ant2    | 5500            | 23.80          | 5487.88  | 5511.68  | ---         | ---     |
|           | Ant1    | 5580            | 24.44          | 5567.68  | 5592.12  | ---         | ---     |
|           | Ant2    | 5580            | 22.80          | 5568.84  | 5591.64  | ---         | ---     |
|           | Ant1    | 5700            | 24.08          | 5688.04  | 5712.12  | ---         | ---     |
|           | Ant2    | 5700            | 23.32          | 5687.96  | 5711.28  | ---         | ---     |
|           | Ant1    | 5720            | 24.20          | 5707.84  | 5732.04  | ---         | ---     |
|           | Ant2    | 5720            | 22.56          | 5708.92  | 5731.48  | ---         | ---     |
|           | Ant1    | 5720 UNII-2C    | 17.16          | 5707.84  | 5725     | ---         | ---     |
|           | Ant2    | 5720 UNII-2C    | 16.08          | 5708.92  | 5725     | ---         | ---     |
|           | Ant1    | 5720 UNII-3     | 7.04           | 5725     | 5732.04  | ---         | ---     |
|           | Ant2    | 5720 UNII-3     | 6.48           | 5725     | 5731.48  | ---         | ---     |
|           | Ant1    | 5745            | 24.80          | 5732.76  | 5757.56  | ---         | ---     |

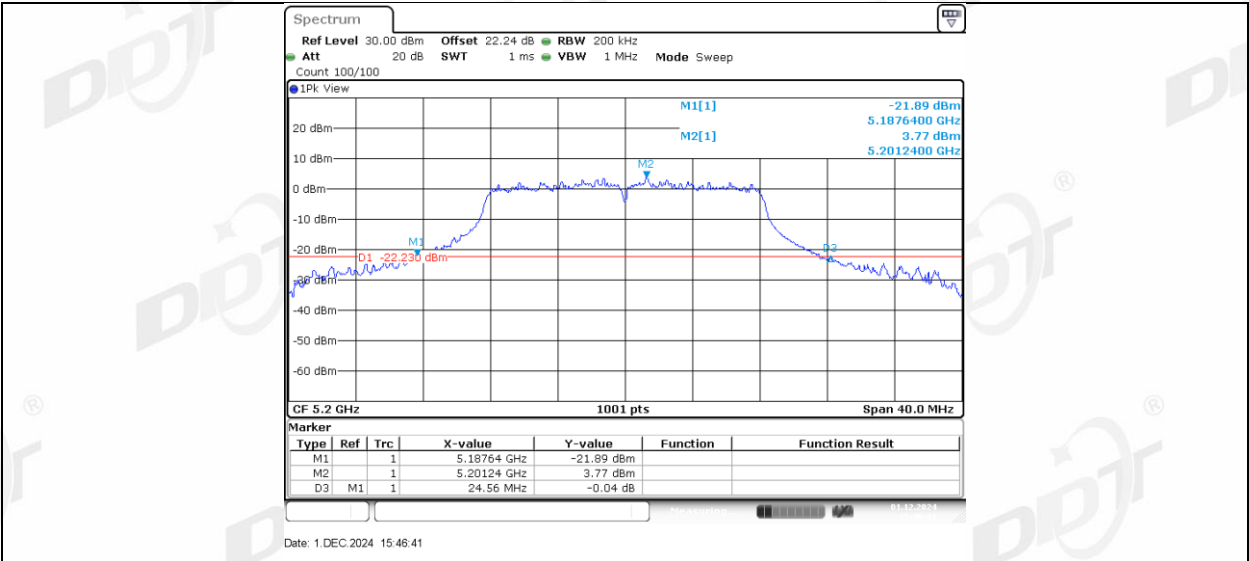
|            |      |              |       |         |         |     |     |
|------------|------|--------------|-------|---------|---------|-----|-----|
|            | Ant2 | 5745         | 23.00 | 5733.44 | 5756.44 | --- | --- |
|            | Ant1 | 5785         | 24.08 | 5772.76 | 5796.84 | --- | --- |
|            | Ant2 | 5785         | 22.84 | 5773.68 | 5796.52 | --- | --- |
|            | Ant1 | 5825         | 24.72 | 5812.64 | 5837.36 | --- | --- |
|            | Ant2 | 5825         | 22.84 | 5813.60 | 5836.44 | --- | --- |
| 11N40MIMO  | Ant1 | 5190         | 40.80 | 5169.60 | 5210.40 | --- | --- |
|            | Ant2 | 5190         | 39.84 | 5170.16 | 5210.00 | --- | --- |
|            | Ant1 | 5230         | 40.80 | 5209.68 | 5250.48 | --- | --- |
|            | Ant2 | 5230         | 39.76 | 5210.08 | 5249.84 | --- | --- |
|            | Ant1 | 5270         | 40.72 | 5249.68 | 5290.40 | --- | --- |
|            | Ant2 | 5270         | 40.08 | 5250.08 | 5290.16 | --- | --- |
|            | Ant1 | 5310         | 40.96 | 5289.60 | 5330.56 | --- | --- |
|            | Ant2 | 5310         | 39.84 | 5290.08 | 5329.92 | --- | --- |
|            | Ant1 | 5510         | 40.80 | 5489.60 | 5530.40 | --- | --- |
|            | Ant2 | 5510         | 40.00 | 5490.00 | 5530.00 | --- | --- |
|            | Ant1 | 5550         | 40.72 | 5529.68 | 5570.40 | --- | --- |
|            | Ant2 | 5550         | 39.84 | 5530.08 | 5569.92 | --- | --- |
|            | Ant1 | 5670         | 40.72 | 5649.68 | 5690.40 | --- | --- |
|            | Ant2 | 5670         | 39.84 | 5650.08 | 5689.92 | --- | --- |
|            | Ant1 | 5710         | 40.72 | 5689.60 | 5730.32 | --- | --- |
|            | Ant2 | 5710         | 40.16 | 5689.84 | 5730.00 | --- | --- |
|            | Ant1 | 5710 UNII-2C | 35.4  | 5689.60 | 5725    | --- | --- |
|            | Ant2 | 5710 UNII-2C | 35.16 | 5689.84 | 5725    | --- | --- |
|            | Ant1 | 5710 UNII-3  | 5.32  | 5725    | 5730.32 | --- | --- |
|            | Ant2 | 5710 UNII-3  | 5     | 5725    | 5730.00 | --- | --- |
|            | Ant1 | 5755         | 41.12 | 5734.44 | 5775.56 | --- | --- |
|            | Ant2 | 5755         | 39.68 | 5735.16 | 5774.84 | --- | --- |
|            | Ant1 | 5795         | 40.80 | 5774.60 | 5815.40 | --- | --- |
|            | Ant2 | 5795         | 40.08 | 5775.08 | 5815.16 | --- | --- |
| 11AC20MIMO | Ant1 | 5180         | 23.96 | 5168.08 | 5192.04 | --- | --- |
|            | Ant2 | 5180         | 23.20 | 5168.52 | 5191.72 | --- | --- |
|            | Ant1 | 5200         | 23.76 | 5188.04 | 5211.80 | --- | --- |
|            | Ant2 | 5200         | 24.68 | 5188.40 | 5213.08 | --- | --- |
|            | Ant1 | 5240         | 20.04 | 5229.92 | 5249.96 | --- | --- |
|            | Ant2 | 5240         | 19.88 | 5229.96 | 5249.84 | --- | --- |
|            | Ant1 | 5260         | 24.04 | 5248.04 | 5272.08 | --- | --- |
|            | Ant2 | 5260         | 22.96 | 5248.56 | 5271.52 | --- | --- |
|            | Ant1 | 5280         | 24.16 | 5267.88 | 5292.04 | --- | --- |
|            | Ant2 | 5280         | 22.80 | 5268.92 | 5291.72 | --- | --- |
|            | Ant1 | 5320         | 24.64 | 5308.08 | 5332.72 | --- | --- |
|            | Ant2 | 5320         | 23.04 | 5308.72 | 5331.76 | --- | --- |
|            | Ant1 | 5500         | 24.60 | 5488.12 | 5512.72 | --- | --- |
|            | Ant2 | 5500         | 22.92 | 5488.76 | 5511.68 | --- | --- |
|            | Ant1 | 5580         | 24.32 | 5567.76 | 5592.08 | --- | --- |
|            | Ant2 | 5580         | 22.68 | 5568.84 | 5591.52 | --- | --- |
|            | Ant1 | 5700         | 23.96 | 5688.08 | 5712.04 | --- | --- |
|            | Ant2 | 5700         | 22.44 | 5688.88 | 5711.32 | --- | --- |
|            | Ant1 | 5720         | 24.32 | 5707.80 | 5732.12 | --- | --- |
|            | Ant2 | 5720         | 22.88 | 5708.80 | 5731.68 | --- | --- |
|            | Ant1 | 5720 UNII-2C | 17.2  | 5707.80 | 5725    | --- | --- |
|            | Ant2 | 5720 UNII-2C | 16.2  | 5708.80 | 5725    | --- | --- |
|            | Ant1 | 5720 UNII-3  | 7.12  | 5725    | 5732.12 | --- | --- |
|            | Ant2 | 5720 UNII-3  | 6.68  | 5725    | 5731.68 | --- | --- |
|            | Ant1 | 5745         | 24.00 | 5733.08 | 5757.08 | --- | --- |
|            | Ant2 | 5745         | 22.48 | 5733.92 | 5756.40 | --- | --- |
|            | Ant1 | 5785         | 24.36 | 5772.88 | 5797.24 | --- | --- |
|            | Ant2 | 5785         | 23.32 | 5773.68 | 5797.00 | --- | --- |
|            | Ant1 | 5825         | 24.52 | 5812.76 | 5837.28 | --- | --- |
|            | Ant2 | 5825         | 22.88 | 5813.56 | 5836.44 | --- | --- |
| 11AC40MIMO | Ant1 | 5190         | 40.24 | 5169.84 | 5210.08 | --- | --- |
|            | Ant2 | 5190         | 39.84 | 5170.00 | 5209.84 | --- | --- |
|            | Ant1 | 5230         | 40.32 | 5209.84 | 5250.16 | --- | --- |
|            | Ant2 | 5230         | 39.84 | 5210.08 | 5249.92 | --- | --- |
|            | Ant1 | 5270         | 40.16 | 5249.92 | 5290.08 | --- | --- |

|            |      |              |       |         |         |     |     |
|------------|------|--------------|-------|---------|---------|-----|-----|
|            | Ant2 | 5270         | 39.68 | 5250.16 | 5289.84 | --- | --- |
|            | Ant1 | 5310         | 40.40 | 5289.84 | 5330.24 | --- | --- |
|            | Ant2 | 5310         | 39.84 | 5290.08 | 5329.92 | --- | --- |
|            | Ant1 | 5510         | 40.40 | 5489.84 | 5530.24 | --- | --- |
|            | Ant2 | 5510         | 39.84 | 5490.08 | 5529.92 | --- | --- |
|            | Ant1 | 5550         | 40.40 | 5529.76 | 5570.16 | --- | --- |
|            | Ant2 | 5550         | 39.68 | 5530.08 | 5569.76 | --- | --- |
|            | Ant1 | 5670         | 40.24 | 5649.92 | 5690.16 | --- | --- |
|            | Ant2 | 5670         | 39.68 | 5650.16 | 5689.84 | --- | --- |
|            | Ant1 | 5710         | 40.08 | 5690.00 | 5730.08 | --- | --- |
|            | Ant2 | 5710         | 39.68 | 5690.16 | 5729.84 | --- | --- |
|            | Ant1 | 5710 UNII-2C | 35    | 5690.00 | 5725    | --- | --- |
|            | Ant2 | 5710 UNII-2C | 34.84 | 5690.16 | 5725    | --- | --- |
|            | Ant1 | 5710 UNII-3  | 5.08  | 5725    | 5730.08 | --- | --- |
|            | Ant2 | 5710 UNII-3  | 4.84  | 5725    | 5729.84 | --- | --- |
|            | Ant1 | 5755         | 40.24 | 5734.84 | 5775.08 | --- | --- |
|            | Ant2 | 5755         | 39.76 | 5735.00 | 5774.76 | --- | --- |
|            | Ant1 | 5795         | 40.32 | 5774.84 | 5815.16 | --- | --- |
|            | Ant2 | 5795         | 39.76 | 5775.16 | 5814.92 | --- | --- |
| 11AC80MIMO | Ant1 | 5210         | 80.48 | 5169.84 | 5250.32 | --- | --- |
|            | Ant2 | 5210         | 79.36 | 5170.32 | 5249.68 | --- | --- |
|            | Ant1 | 5290         | 80.32 | 5249.84 | 5330.16 | --- | --- |
|            | Ant2 | 5290         | 79.36 | 5250.48 | 5329.84 | --- | --- |
|            | Ant1 | 5530         | 80.32 | 5489.84 | 5570.16 | --- | --- |
|            | Ant2 | 5530         | 79.36 | 5490.32 | 5569.68 | --- | --- |
|            | Ant1 | 5610         | 80.48 | 5569.84 | 5650.32 | --- | --- |
|            | Ant2 | 5610         | 79.52 | 5570.32 | 5649.84 | --- | --- |
|            | Ant1 | 5690         | 80.48 | 5649.84 | 5730.32 | --- | --- |
|            | Ant2 | 5690         | 79.52 | 5650.32 | 5729.84 | --- | --- |
|            | Ant1 | 5690 UNII-2C | 75.16 | 5649.84 | 5725    | --- | --- |
|            | Ant2 | 5690 UNII-2C | 74.68 | 5650.32 | 5725    | --- | --- |
|            | Ant1 | 5690 UNII-3  | 5.32  | 5725    | 5730.32 | --- | --- |
|            | Ant2 | 5690 UNII-3  | 4.84  | 5725    | 5729.84 | --- | --- |
|            | Ant1 | 5775         | 80.48 | 5734.84 | 5815.32 | --- | --- |
|            | Ant2 | 5775         | 79.52 | 5735.32 | 5814.84 | --- | --- |
| 11AX20MIMO | Ant1 | 5180         | 22.64 | 5168.28 | 5190.92 | --- | --- |
|            | Ant2 | 5180         | 25.84 | 5168.52 | 5194.36 | --- | --- |
|            | Ant1 | 5200         | 27.20 | 5187.36 | 5214.56 | --- | --- |
|            | Ant2 | 5200         | 24.00 | 5188.40 | 5212.40 | --- | --- |
|            | Ant1 | 5240         | 19.92 | 5229.96 | 5249.88 | --- | --- |
|            | Ant2 | 5240         | 19.88 | 5229.96 | 5249.84 | --- | --- |
|            | Ant1 | 5260         | 22.52 | 5248.56 | 5271.08 | --- | --- |
|            | Ant2 | 5260         | 21.96 | 5248.80 | 5270.76 | --- | --- |
|            | Ant1 | 5280         | 23.96 | 5268.64 | 5292.60 | --- | --- |
|            | Ant2 | 5280         | 22.68 | 5269.12 | 5291.80 | --- | --- |
|            | Ant1 | 5320         | 25.28 | 5308.24 | 5333.52 | --- | --- |
|            | Ant2 | 5320         | 23.32 | 5308.08 | 5331.40 | --- | --- |
|            | Ant1 | 5500         | 23.96 | 5488.24 | 5512.20 | --- | --- |
|            | Ant2 | 5500         | 23.60 | 5487.68 | 5511.28 | --- | --- |
|            | Ant1 | 5580         | 29.40 | 5568.40 | 5597.80 | --- | --- |
|            | Ant2 | 5580         | 22.88 | 5568.36 | 5591.24 | --- | --- |
|            | Ant1 | 5700         | 22.96 | 5688.64 | 5711.60 | --- | --- |
|            | Ant2 | 5700         | 22.16 | 5688.76 | 5710.92 | --- | --- |
|            | Ant1 | 5720         | 26.04 | 5706.56 | 5732.60 | --- | --- |
|            | Ant2 | 5720         | 21.68 | 5709.16 | 5730.84 | --- | --- |
|            | Ant1 | 5720 UNII-2C | 18.44 | 5706.56 | 5725    | --- | --- |
|            | Ant2 | 5720 UNII-2C | 15.84 | 5709.16 | 5725    | --- | --- |
|            | Ant1 | 5720 UNII-3  | 7.6   | 5725    | 5732.60 | --- | --- |
|            | Ant2 | 5720 UNII-3  | 5.84  | 5725    | 5730.84 | --- | --- |
|            | Ant1 | 5745         | 29.52 | 5729.40 | 5758.92 | --- | --- |
|            | Ant2 | 5745         | 21.72 | 5734.28 | 5756.00 | --- | --- |
|            | Ant1 | 5785         | 23.96 | 5772.84 | 5796.80 | --- | --- |
|            | Ant2 | 5785         | 22.08 | 5774.00 | 5796.08 | --- | --- |
|            | Ant1 | 5825         | 22.92 | 5813.56 | 5836.48 | --- | --- |

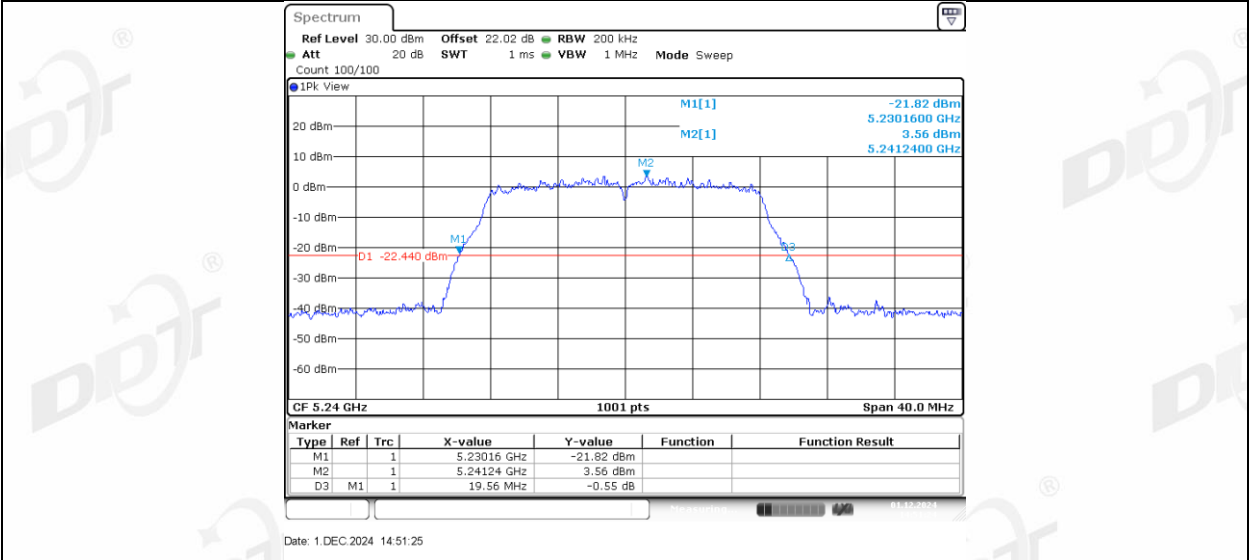
|            |      |              |       |         |         |     |     |
|------------|------|--------------|-------|---------|---------|-----|-----|
| 11AX40MIMO | Ant2 | 5825         | 22.80 | 5813.56 | 5836.36 | --- | --- |
|            | Ant1 | 5190         | 39.68 | 5170.16 | 5209.84 | --- | --- |
|            | Ant2 | 5190         | 39.68 | 5170.16 | 5209.84 | --- | --- |
|            | Ant1 | 5230         | 39.68 | 5210.16 | 5249.84 | --- | --- |
|            | Ant2 | 5230         | 39.76 | 5210.16 | 5249.92 | --- | --- |
|            | Ant1 | 5270         | 39.68 | 5250.16 | 5289.84 | --- | --- |
|            | Ant2 | 5270         | 39.76 | 5250.08 | 5289.84 | --- | --- |
|            | Ant1 | 5310         | 39.76 | 5290.08 | 5329.84 | --- | --- |
|            | Ant2 | 5310         | 39.76 | 5290.08 | 5329.84 | --- | --- |
|            | Ant1 | 5510         | 39.76 | 5490.16 | 5529.92 | --- | --- |
|            | Ant2 | 5510         | 39.76 | 5490.08 | 5529.84 | --- | --- |
|            | Ant1 | 5550         | 39.76 | 5530.08 | 5569.84 | --- | --- |
|            | Ant2 | 5550         | 39.76 | 5530.08 | 5569.84 | --- | --- |
|            | Ant1 | 5670         | 39.76 | 5650.08 | 5689.84 | --- | --- |
|            | Ant2 | 5670         | 39.76 | 5650.08 | 5689.84 | --- | --- |
|            | Ant1 | 5710         | 39.60 | 5690.16 | 5729.76 | --- | --- |
|            | Ant2 | 5710         | 39.76 | 5690.16 | 5729.92 | --- | --- |
|            | Ant1 | 5710_UNII-2C | 34.84 | 5690.16 | 5725    | --- | --- |
|            | Ant2 | 5710_UNII-2C | 34.84 | 5690.16 | 5725    | --- | --- |
|            | Ant1 | 5710_UNII-3  | 4.76  | 5725    | 5729.76 | --- | --- |
|            | Ant2 | 5710_UNII-3  | 4.92  | 5725    | 5729.92 | --- | --- |
|            | Ant1 | 5755         | 39.60 | 5735.16 | 5774.76 | --- | --- |
|            | Ant2 | 5755         | 39.60 | 5735.16 | 5774.76 | --- | --- |
|            | Ant1 | 5795         | 39.68 | 5775.16 | 5814.84 | --- | --- |
|            | Ant2 | 5795         | 39.60 | 5775.16 | 5814.76 | --- | --- |
| 11AX80MIMO | Ant1 | 5210         | 80.48 | 5169.84 | 5250.32 | --- | --- |
|            | Ant2 | 5210         | 80.48 | 5169.84 | 5250.32 | --- | --- |
|            | Ant1 | 5290         | 80.64 | 5249.68 | 5330.32 | --- | --- |
|            | Ant2 | 5290         | 80.32 | 5249.84 | 5330.16 | --- | --- |
|            | Ant1 | 5530         | 80.32 | 5489.84 | 5570.16 | --- | --- |
|            | Ant2 | 5530         | 80.32 | 5489.84 | 5570.16 | --- | --- |
|            | Ant1 | 5610         | 80.48 | 5569.84 | 5650.32 | --- | --- |
|            | Ant2 | 5610         | 80.48 | 5569.84 | 5650.32 | --- | --- |
|            | Ant1 | 5690         | 80.64 | 5649.68 | 5730.32 | --- | --- |
|            | Ant2 | 5690         | 80.48 | 5649.84 | 5730.32 | --- | --- |
|            | Ant1 | 5690_UNII-2C | 75.32 | 5649.68 | 5725    | --- | --- |
|            | Ant2 | 5690_UNII-2C | 75.16 | 5649.84 | 5725    | --- | --- |
|            | Ant1 | 5690_UNII-3  | 5.32  | 5725    | 5730.32 | --- | --- |
|            | Ant2 | 5690_UNII-3  | 5.32  | 5725    | 5730.32 | --- | --- |
|            | Ant1 | 5775         | 80.64 | 5734.68 | 5815.32 | --- | --- |
|            | Ant2 | 5775         | 80.64 | 5734.68 | 5815.32 | --- | --- |

4.5. Test graphs

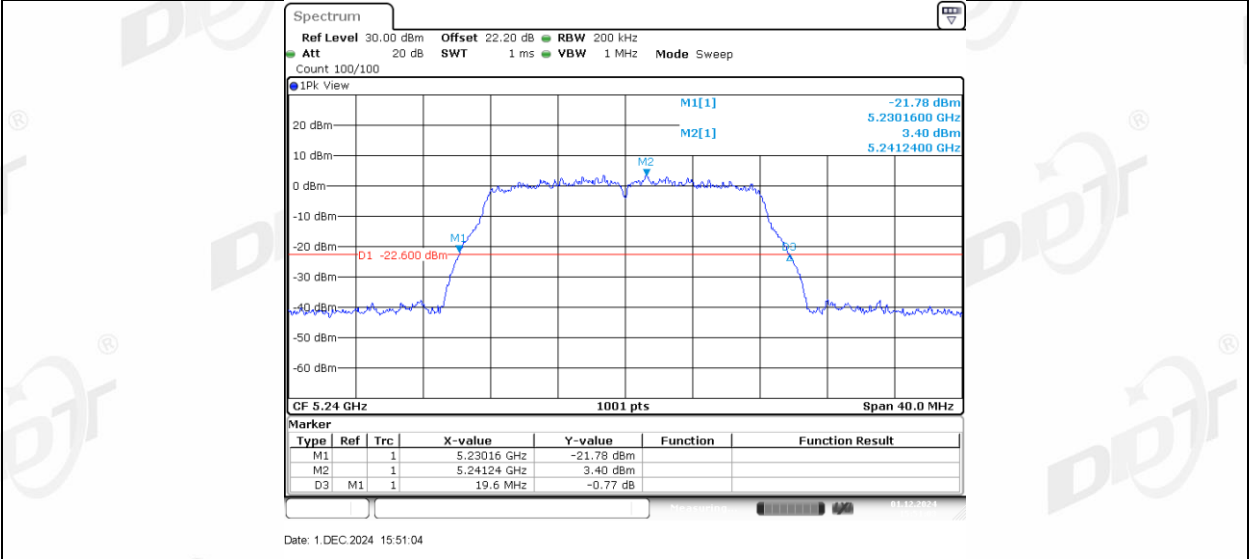




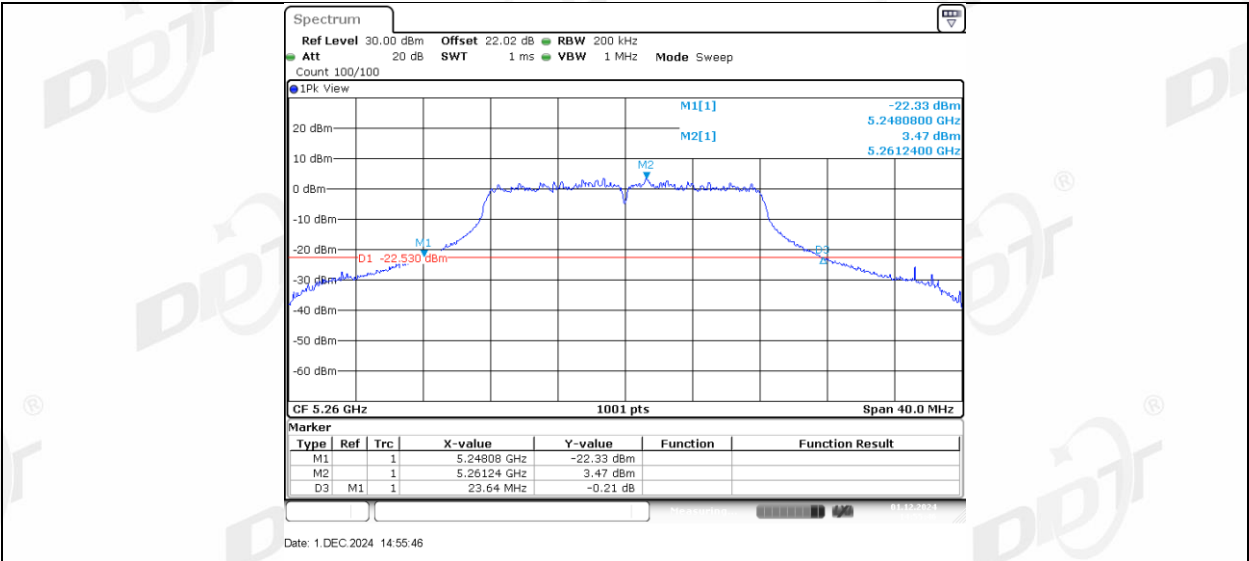
11A\_Ant1\_5240



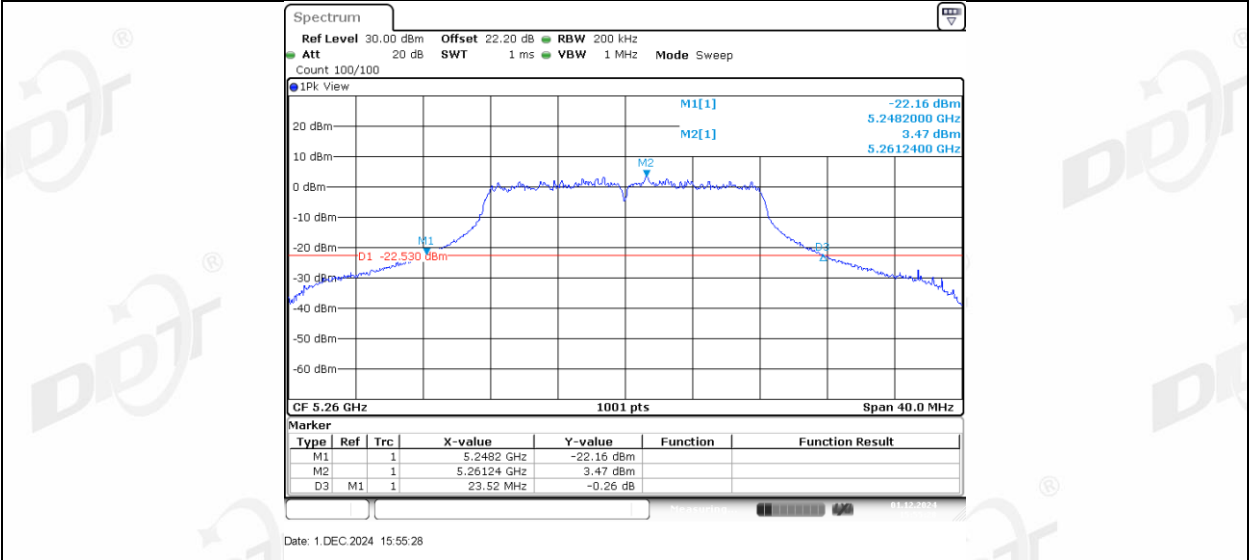
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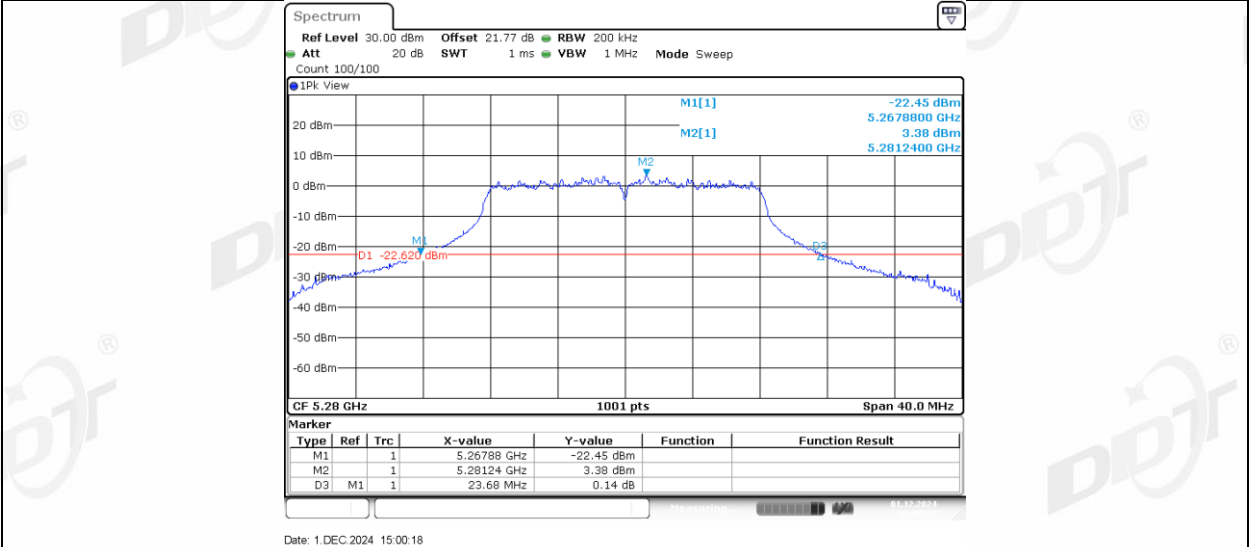
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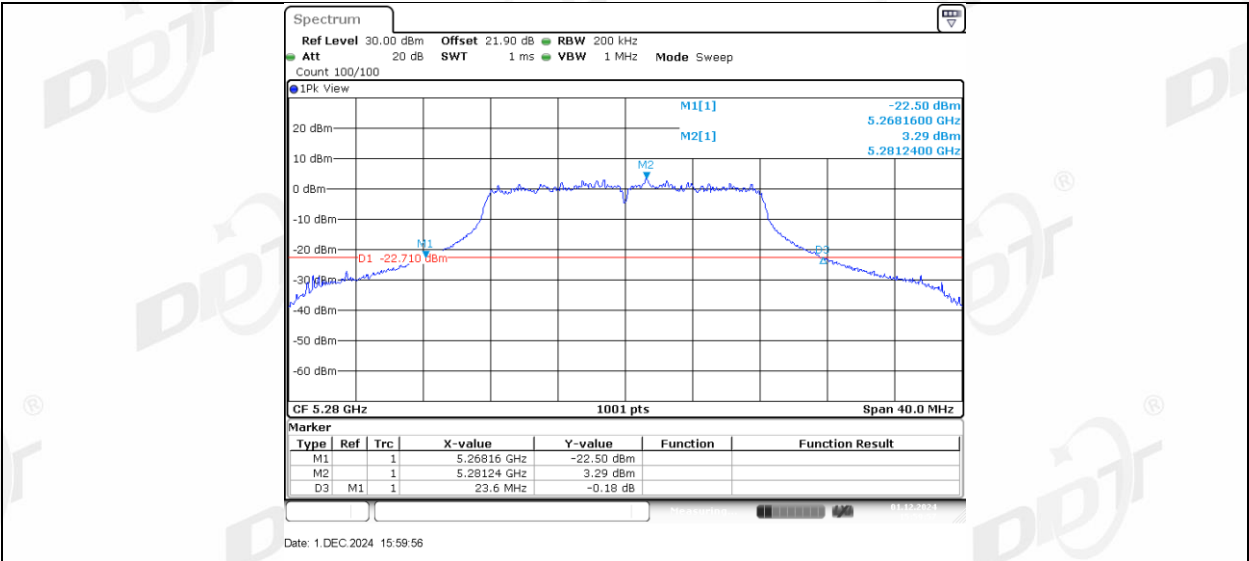
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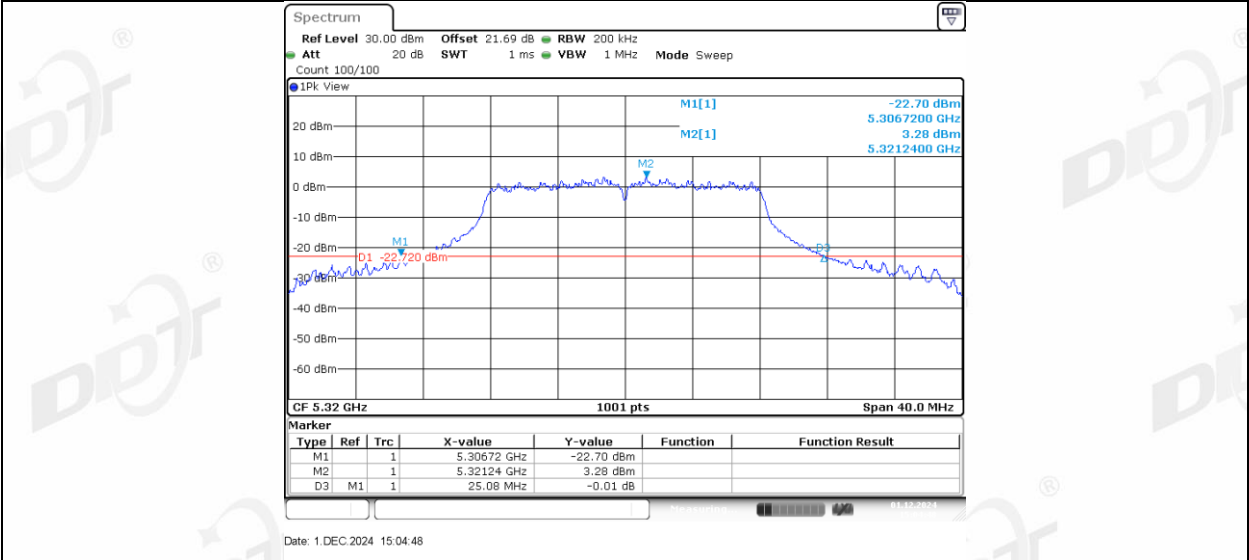
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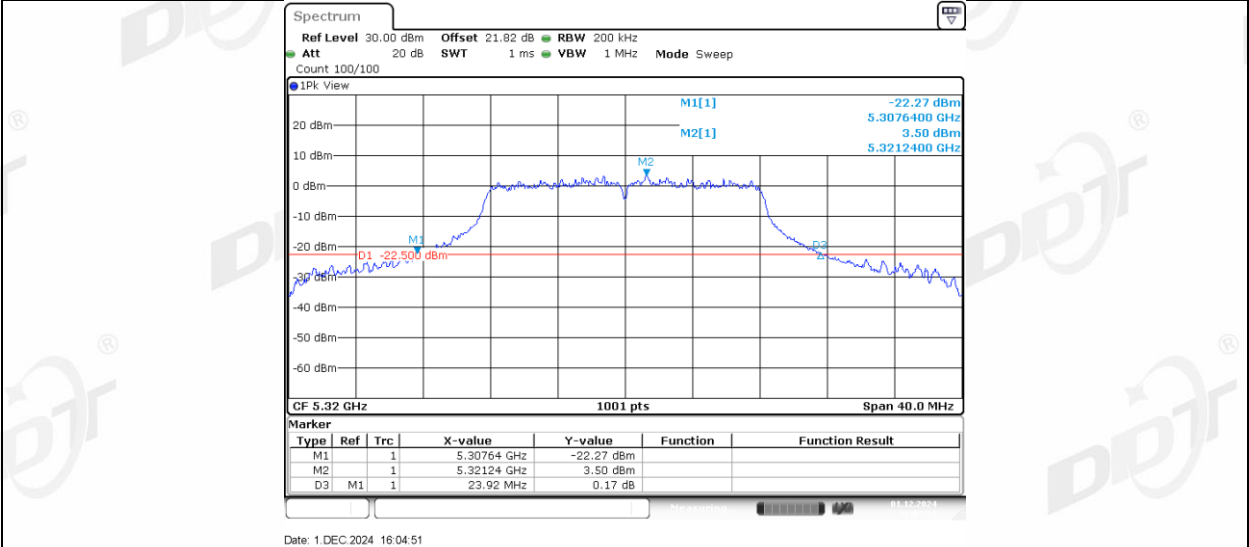
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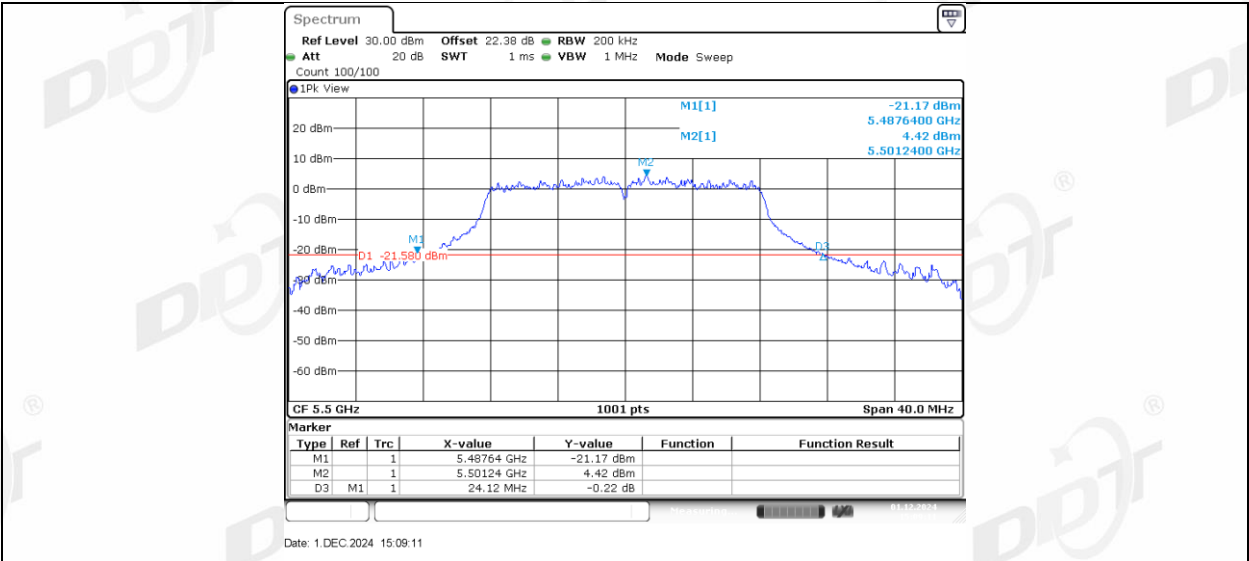


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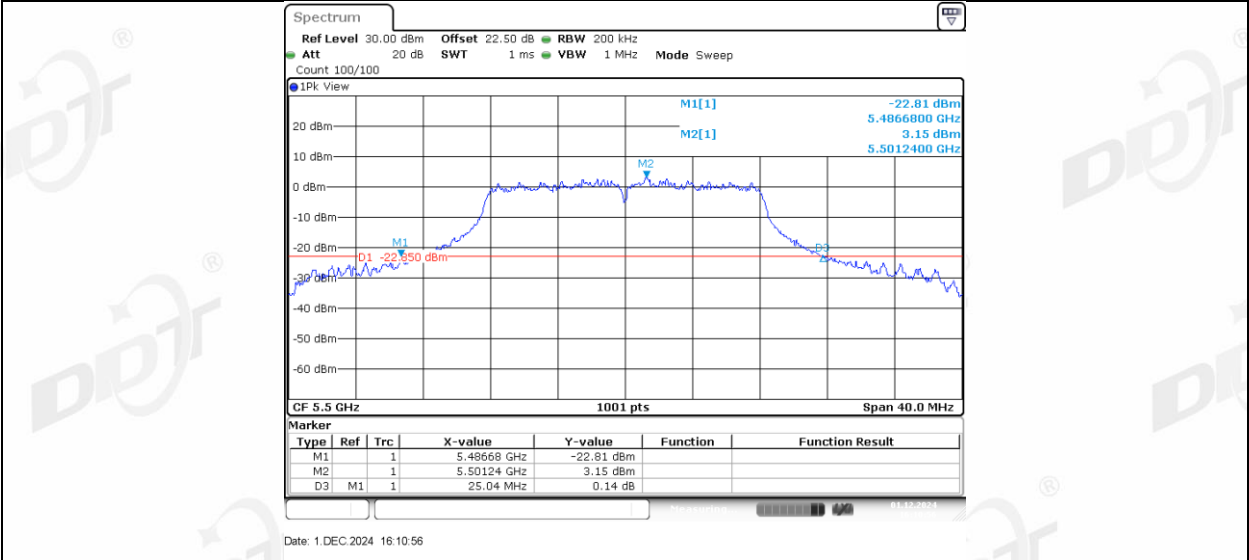


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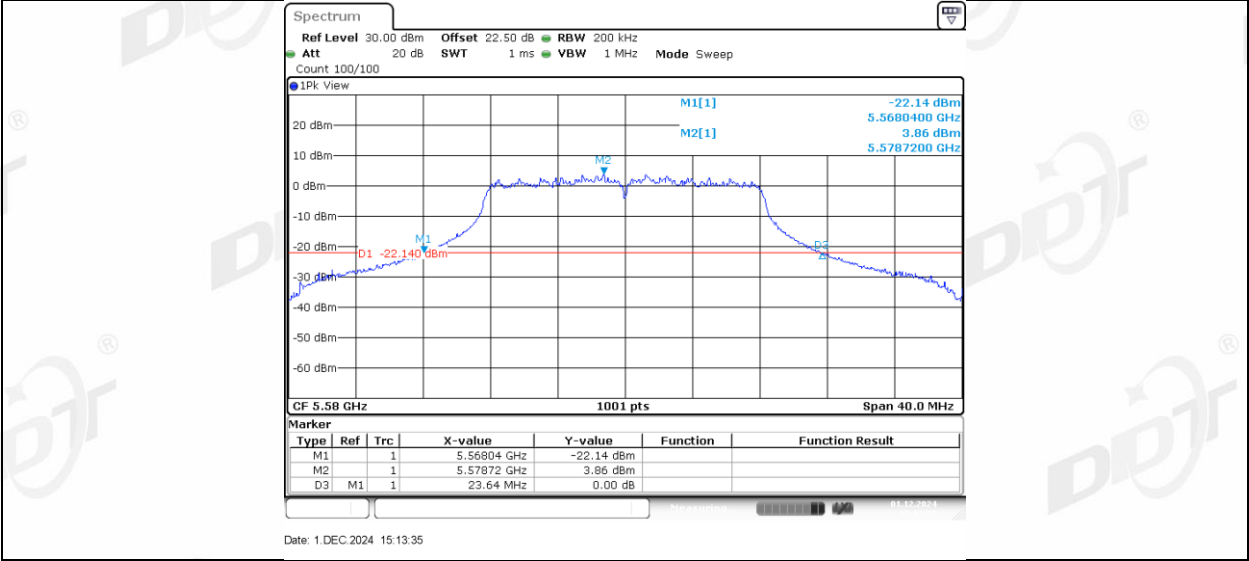




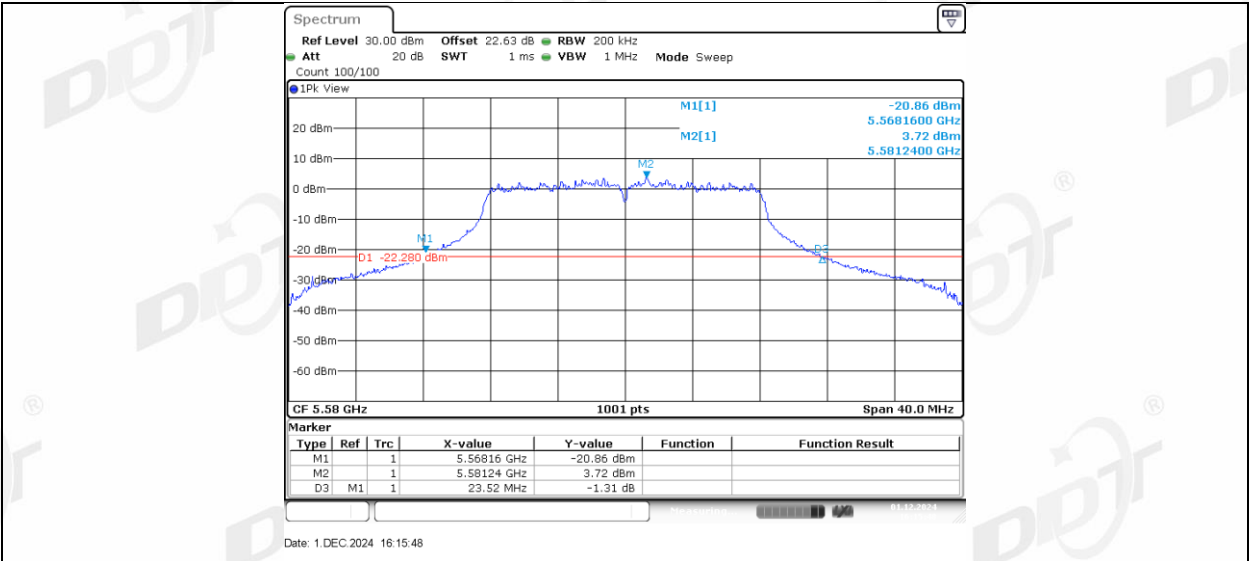
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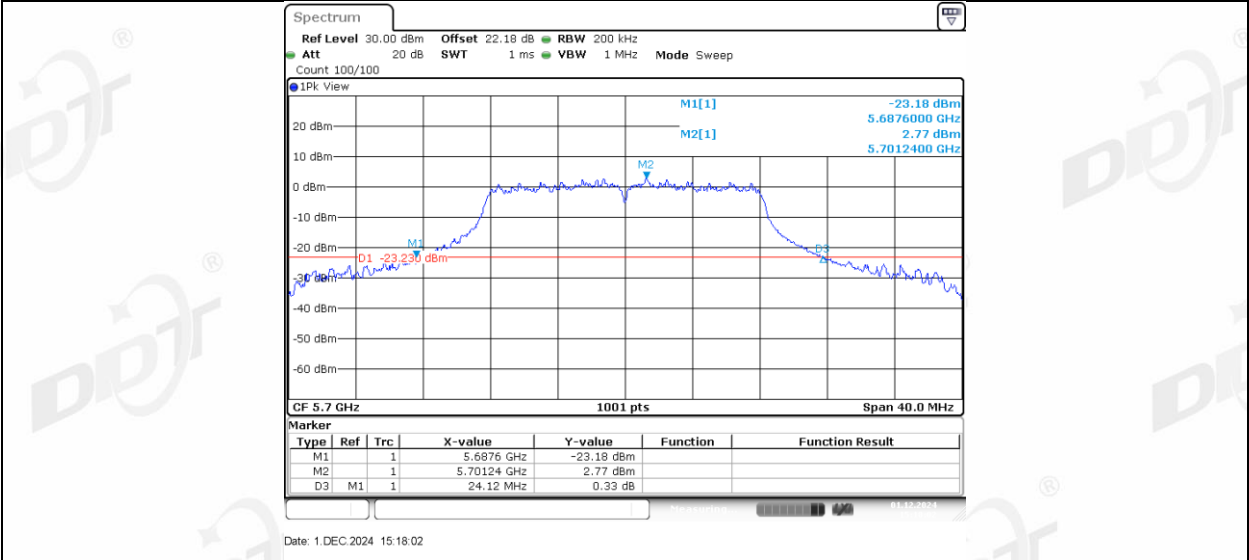
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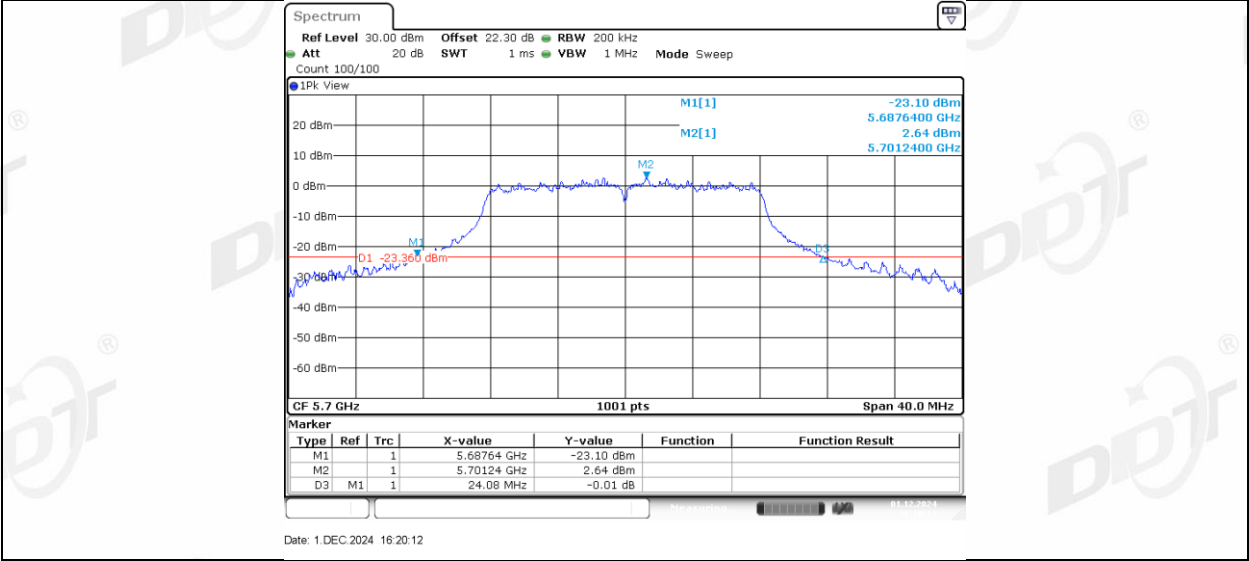
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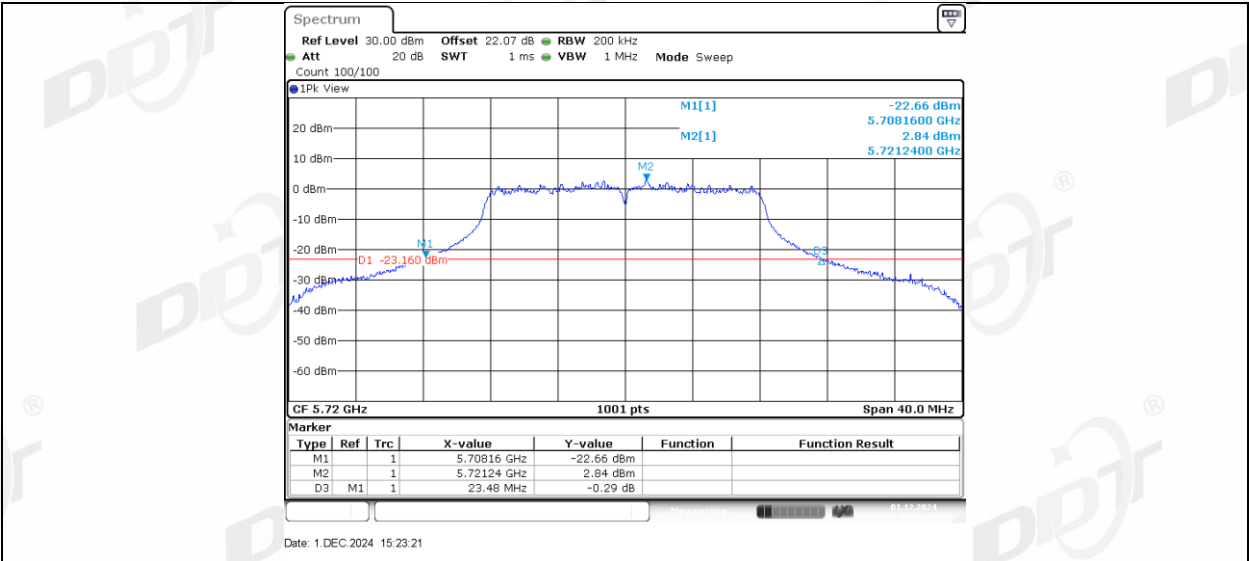
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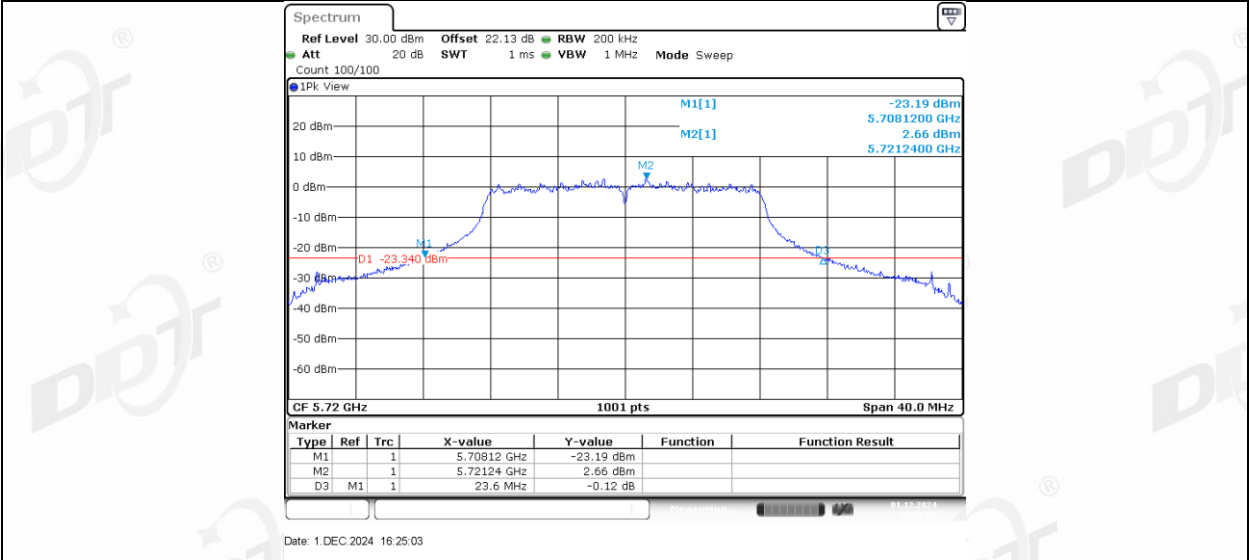
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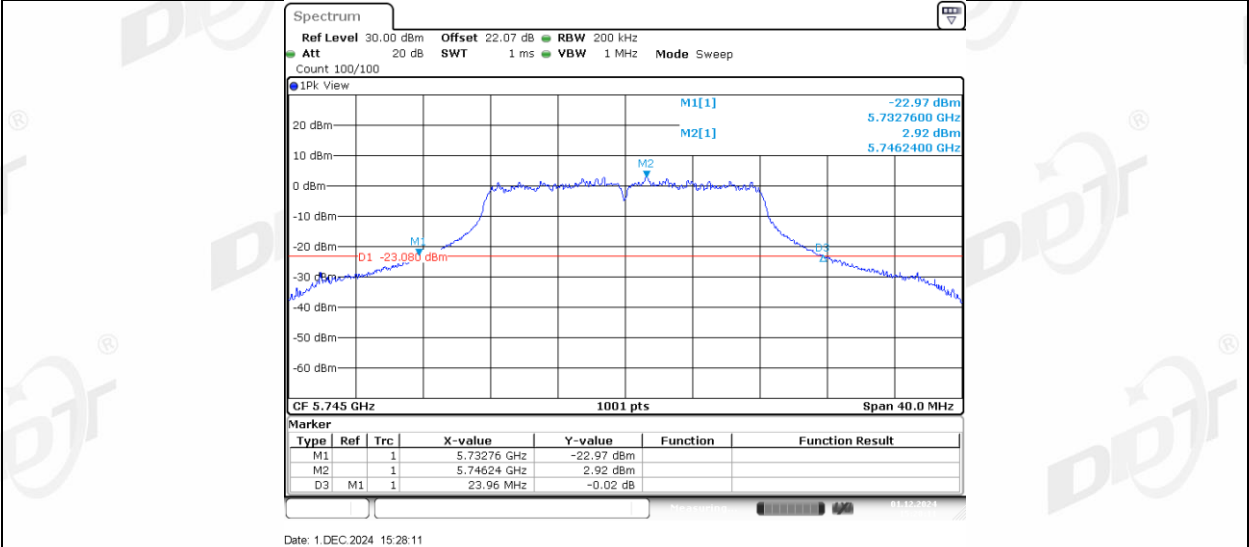
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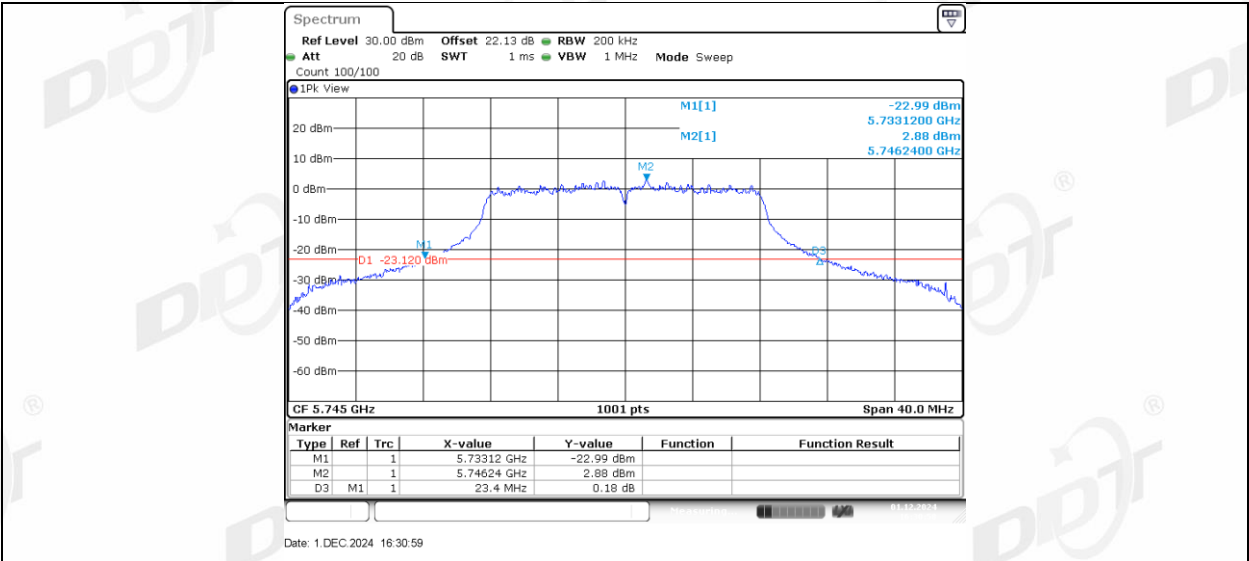
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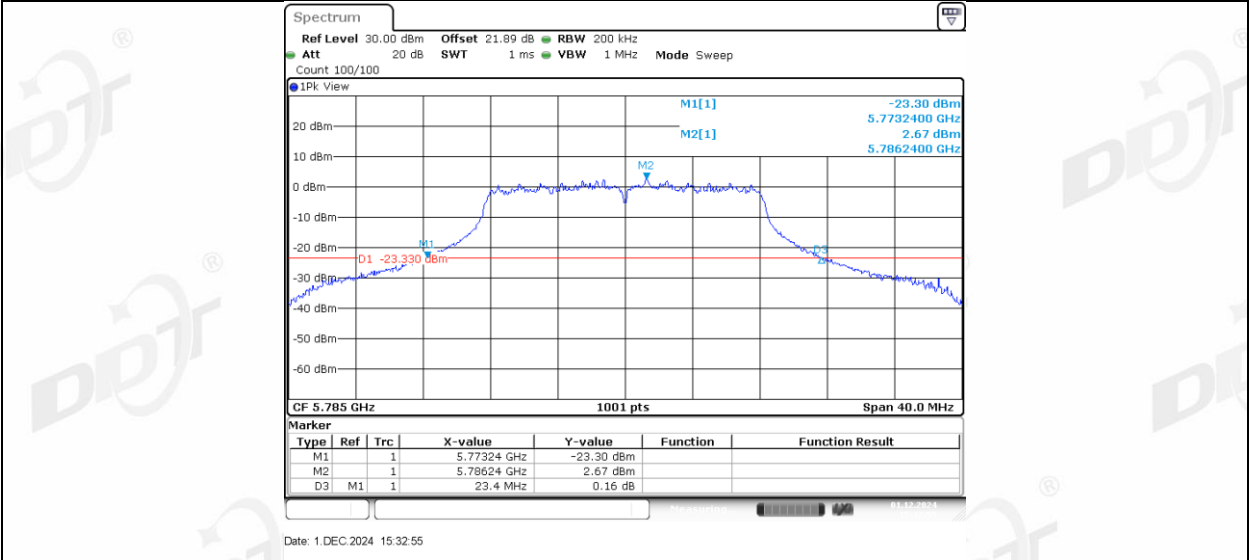
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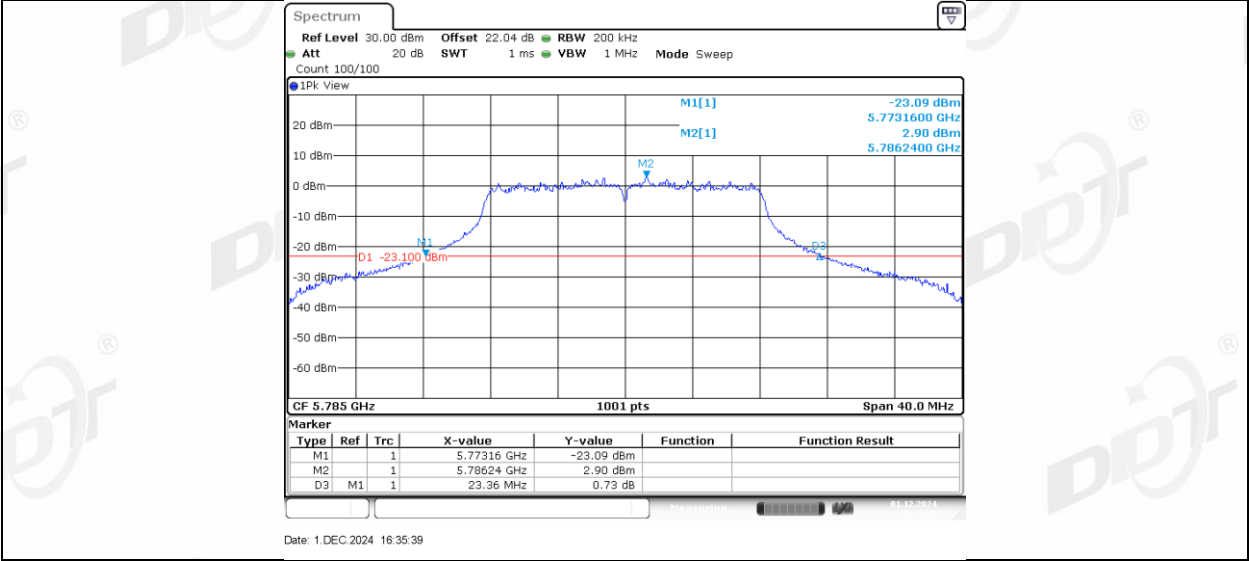
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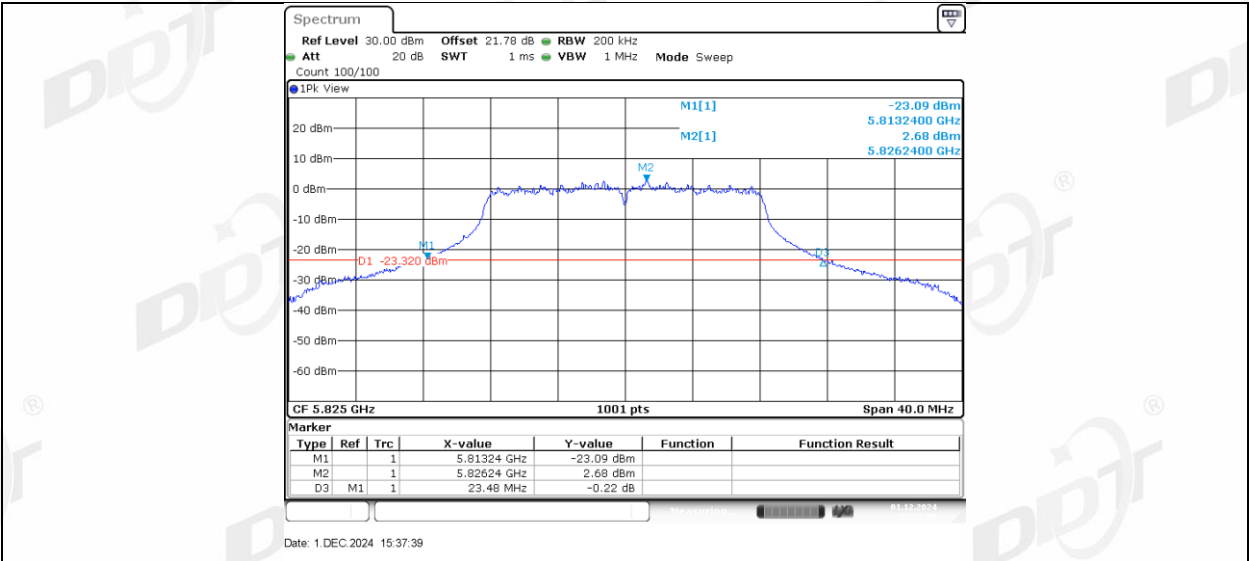
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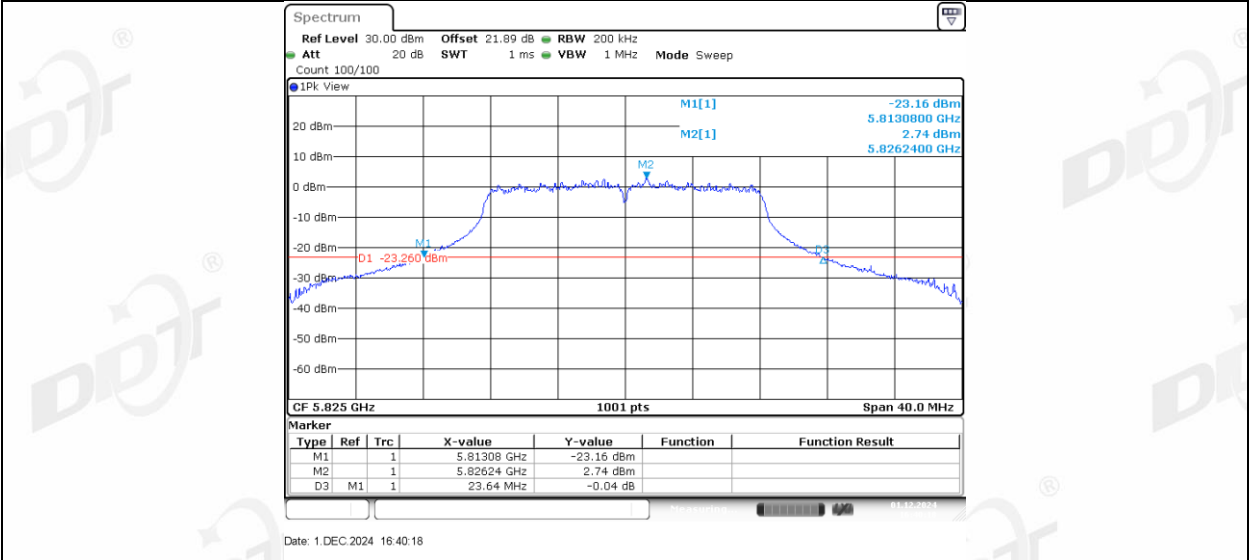
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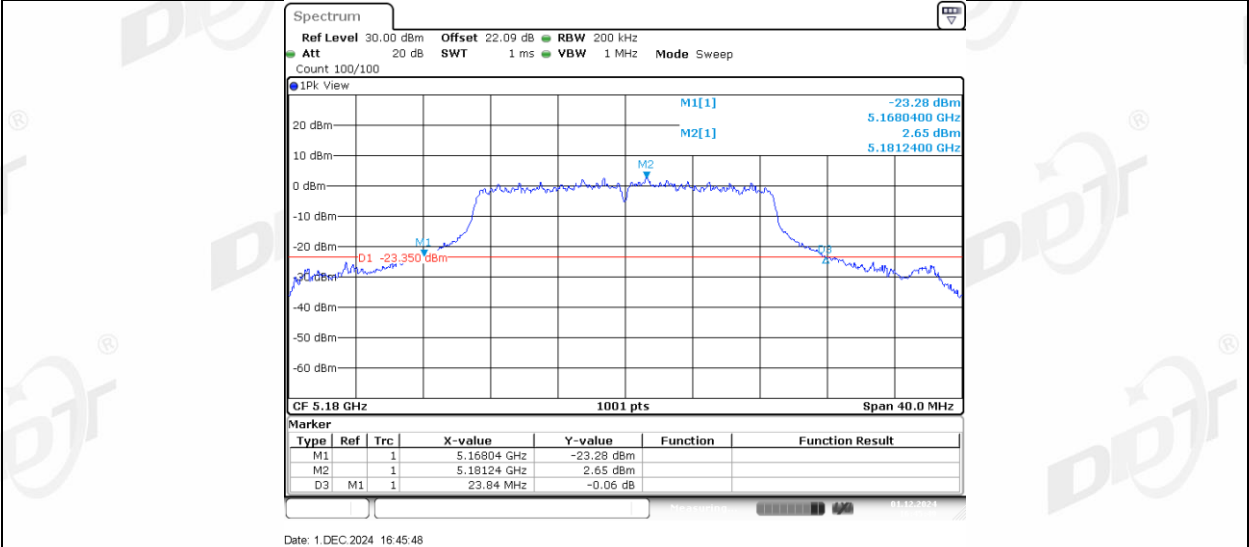
11A\_Ant1\_5825



11A\_Ant2\_5825



11N20MIMO\_Ant1\_5180



11N20MIMO\_Ant2\_5180

