

|            |       |      |       |        |      |
|------------|-------|------|-------|--------|------|
|            | Ant1  | 2437 | 23.15 | ≤30.00 | PASS |
|            | Ant2  | 2437 | 23.54 | ≤30.00 | PASS |
|            | total | 2437 | 26.36 | ≤30.00 | PASS |
|            | Ant1  | 2462 | 17.59 | ≤30.00 | PASS |
|            | Ant2  | 2462 | 17.95 | ≤30.00 | PASS |
|            | total | 2462 | 20.78 | ≤30.00 | PASS |
| 11AX40MIMO | Ant1  | 2422 | 16.68 | ≤30.00 | PASS |
|            | Ant2  | 2422 | 17.45 | ≤30.00 | PASS |
|            | total | 2422 | 20.09 | ≤30.00 | PASS |
|            | Ant1  | 2437 | 22.16 | ≤30.00 | PASS |
|            | Ant2  | 2437 | 22.95 | ≤30.00 | PASS |
|            | total | 2437 | 25.58 | ≤30.00 | PASS |
|            | Ant1  | 2452 | 17.26 | ≤30.00 | PASS |
|            | Ant2  | 2452 | 17.54 | ≤30.00 | PASS |
|            | total | 2452 | 20.41 | ≤30.00 | PASS |
| 11BE20MIMO | Ant1  | 2412 | 17.26 | ≤30.00 | PASS |
|            | Ant2  | 2412 | 18.41 | ≤30.00 | PASS |
|            | total | 2412 | 20.88 | ≤30.00 | PASS |
|            | Ant1  | 2437 | 22.14 | ≤30.00 | PASS |
|            | Ant2  | 2437 | 23.01 | ≤30.00 | PASS |
|            | total | 2437 | 25.61 | ≤30.00 | PASS |
|            | Ant1  | 2462 | 16.69 | ≤30.00 | PASS |
|            | Ant2  | 2462 | 17.34 | ≤30.00 | PASS |
|            | total | 2462 | 20.04 | ≤30.00 | PASS |
| 11BE40MIMO | Ant1  | 2422 | 15.59 | ≤30.00 | PASS |
|            | Ant2  | 2422 | 16.15 | ≤30.00 | PASS |
|            | total | 2422 | 18.89 | ≤30.00 | PASS |
|            | Ant1  | 2437 | 22.18 | ≤30.00 | PASS |
|            | Ant2  | 2437 | 23.88 | ≤30.00 | PASS |
|            | total | 2437 | 26.12 | ≤30.00 | PASS |
|            | Ant1  | 2452 | 16.24 | ≤30.00 | PASS |
|            | Ant2  | 2452 | 17.08 | ≤30.00 | PASS |
|            | total | 2452 | 19.69 | ≤30.00 | PASS |

Note: The duty cycle factor is compensated in the average conducted output power.

### 3.6 Power Spectral Density

#### 3.6.1 Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmitting.

#### 3.6.2 Test Procedure

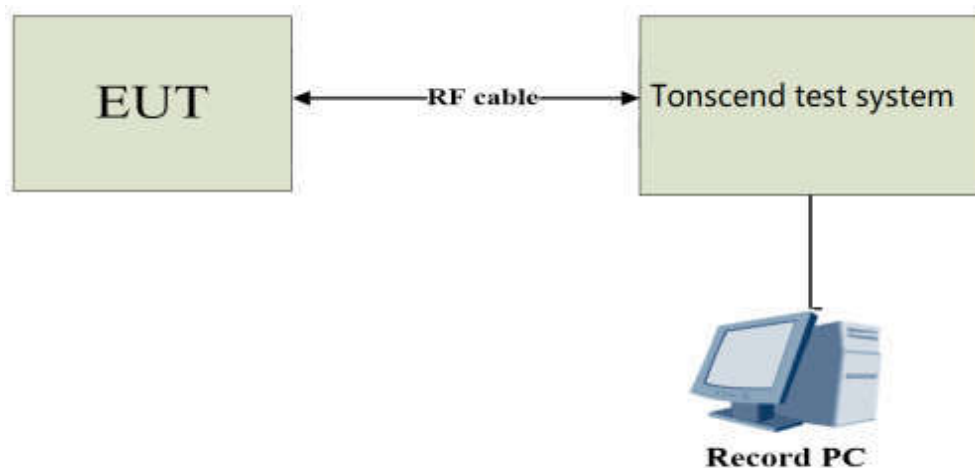
| Test Method                                                         |                                                  |
|---------------------------------------------------------------------|--------------------------------------------------|
| <input checked="" type="radio"/> Conducted Measurement              | <input type="radio"/> Radiated Measurement       |
| Test Channels                                                       |                                                  |
| <input checked="" type="radio"/> Lowest, Middle and Highest Channel | <input type="radio"/> Lowest and Highest Channel |
| Environmental conditions                                            |                                                  |
| <input checked="" type="radio"/> Normal                             | <input type="radio"/> Normal and Extreme         |
| Note: ● : Test    ○ : No Test                                       |                                                  |

a) The EUT was directly connected to the tonskend test system and antenna output port as show in the block diagram below.

b) Spectrum analyser settings as following:

| Spectrum Parameters | Setting                   |
|---------------------|---------------------------|
| Span Frequency      | 2 times the OBW bandwidth |
| RBW                 | 3 kHz                     |
| VBW                 | 10 kHz                    |
| Detector            | AVGPM                     |
| Trace               | Max Hold                  |
| Sweep Time          | Auto                      |

#### 3.6.3 Test Setup



### 3.6.4 The Result

| TestMode   | Antenna | Frequency[MHz] | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|------------|---------|----------------|----------------------|-----------------|---------|
| 11B-CDD    | Ant1    | 2412           | 2.89                 | ≤8.00           | PASS    |
|            | Ant2    | 2412           | 2.57                 | ≤8.00           | PASS    |
|            | Total   | 2412           | 5.74                 | ≤8.00           | PASS    |
|            | Ant1    | 2437           | 2.23                 | ≤8.00           | PASS    |
|            | Ant2    | 2437           | 1.76                 | ≤8.00           | PASS    |
|            | Total   | 2437           | 5.01                 | ≤8.00           | PASS    |
|            | Ant1    | 2462           | 3.47                 | ≤8.00           | PASS    |
|            | Ant2    | 2462           | 2.40                 | ≤8.00           | PASS    |
|            | Total   | 2462           | 5.98                 | ≤8.00           | PASS    |
| 11G-CDD    | Ant1    | 2412           | -4.65                | ≤8.00           | PASS    |
|            | Ant2    | 2412           | -5.29                | ≤8.00           | PASS    |
|            | Total   | 2412           | -1.95                | ≤8.00           | PASS    |
|            | Ant1    | 2437           | -5.74                | ≤8.00           | PASS    |
|            | Ant2    | 2437           | -5.35                | ≤8.00           | PASS    |
|            | Total   | 2437           | -2.53                | ≤8.00           | PASS    |
|            | Ant1    | 2462           | -5.54                | ≤8.00           | PASS    |
|            | Ant2    | 2462           | -5.50                | ≤8.00           | PASS    |
|            | Total   | 2462           | -2.51                | ≤8.00           | PASS    |
| 11N20MIMO  | Ant1    | 2412           | -4.89                | ≤8.00           | PASS    |
|            | Ant2    | 2412           | -3.68                | ≤8.00           | PASS    |
|            | Total   | 2412           | -1.23                | ≤8.00           | PASS    |
|            | Ant1    | 2437           | 0.00                 | ≤8.00           | PASS    |
|            | Ant2    | 2437           | -0.50                | ≤8.00           | PASS    |
|            | Total   | 2437           | 2.77                 | ≤8.00           | PASS    |
|            | Ant1    | 2462           | -4.83                | ≤8.00           | PASS    |
|            | Ant2    | 2462           | -4.37                | ≤8.00           | PASS    |
|            | Total   | 2462           | -1.58                | ≤8.00           | PASS    |
| 11N40MIMO  | Ant1    | 2422           | -9.09                | ≤8.00           | PASS    |
|            | Ant2    | 2422           | -8.63                | ≤8.00           | PASS    |
|            | Total   | 2422           | -5.84                | ≤8.00           | PASS    |
|            | Ant1    | 2437           | -4.32                | ≤8.00           | PASS    |
|            | Ant2    | 2437           | -3.84                | ≤8.00           | PASS    |
|            | Total   | 2437           | -1.06                | ≤8.00           | PASS    |
|            | Ant1    | 2452           | -8.91                | ≤8.00           | PASS    |
|            | Ant2    | 2452           | -8.62                | ≤8.00           | PASS    |
|            | Total   | 2452           | -5.75                | ≤8.00           | PASS    |
| 11AX20MIMO | Ant1    | 2412           | -5.82                | ≤8.00           | PASS    |
|            | Ant2    | 2412           | -5.30                | ≤8.00           | PASS    |
|            | Total   | 2412           | -2.54                | ≤8.00           | PASS    |
|            | Ant1    | 2437           | -1.52                | ≤8.00           | PASS    |

|            |       |      |        |       |      |
|------------|-------|------|--------|-------|------|
|            | Ant2  | 2437 | -1.41  | ≤8.00 | PASS |
|            | Total | 2437 | 1.55   | ≤8.00 | PASS |
|            | Ant1  | 2462 | -4.81  | ≤8.00 | PASS |
|            | Ant2  | 2462 | -4.19  | ≤8.00 | PASS |
|            | Total | 2462 | -1.48  | ≤8.00 | PASS |
| 11AX40MIMO | Ant1  | 2422 | -9.77  | ≤8.00 | PASS |
|            | Ant2  | 2422 | -8.09  | ≤8.00 | PASS |
|            | Total | 2422 | -5.84  | ≤8.00 | PASS |
|            | Ant1  | 2437 | -5.43  | ≤8.00 | PASS |
|            | Ant2  | 2437 | -3.64  | ≤8.00 | PASS |
|            | Total | 2437 | -1.43  | ≤8.00 | PASS |
|            | Ant1  | 2452 | -10.10 | ≤8.00 | PASS |
|            | Ant2  | 2452 | -8.39  | ≤8.00 | PASS |
|            | Total | 2452 | -6.15  | ≤8.00 | PASS |
| 11BE20MIMO | Ant1  | 2412 | -6.77  | ≤8.00 | PASS |
|            | Ant2  | 2412 | -5.88  | ≤8.00 | PASS |
|            | Total | 2412 | -3.29  | ≤8.00 | PASS |
|            | Ant1  | 2437 | -1.07  | ≤8.00 | PASS |
|            | Ant2  | 2437 | -0.45  | ≤8.00 | PASS |
|            | Total | 2437 | 2.26   | ≤8.00 | PASS |
|            | Ant1  | 2462 | -6.07  | ≤8.00 | PASS |
|            | Ant2  | 2462 | -5.27  | ≤8.00 | PASS |
|            | Total | 2462 | -2.64  | ≤8.00 | PASS |
| 11BE40MIMO | Ant1  | 2422 | -12.14 | ≤8.00 | PASS |
|            | Ant2  | 2422 | -9.81  | ≤8.00 | PASS |
|            | Total | 2422 | -7.81  | ≤8.00 | PASS |
|            | Ant1  | 2437 | -4.57  | ≤8.00 | PASS |
|            | Ant2  | 2437 | -3.65  | ≤8.00 | PASS |
|            | Total | 2437 | -1.08  | ≤8.00 | PASS |
|            | Ant1  | 2452 | -9.85  | ≤8.00 | PASS |
|            | Ant2  | 2452 | -10.11 | ≤8.00 | PASS |
|            | Total | 2452 | -6.97  | ≤8.00 | PASS |

Note: The line loss are compensated in the test graph.

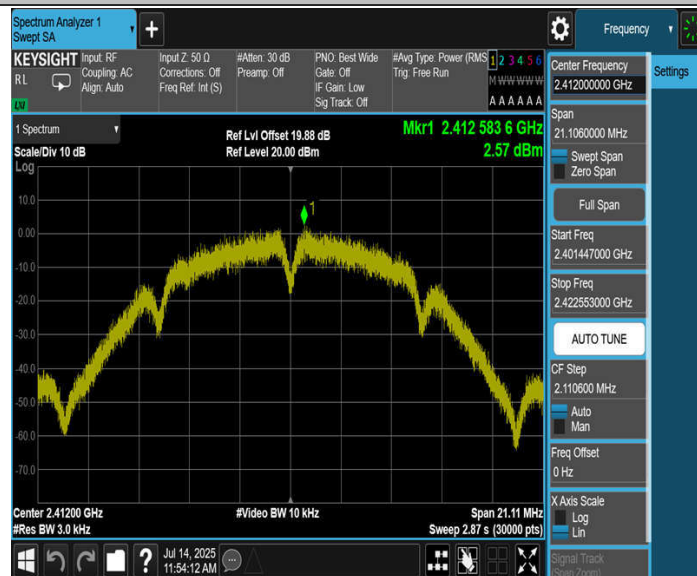
Beamforming conducted power less than no beamforming conducted power, so only no beamforming conducted power spectral density was recorded.

## Test Graphs

11B-CDD\_Ant1\_2412



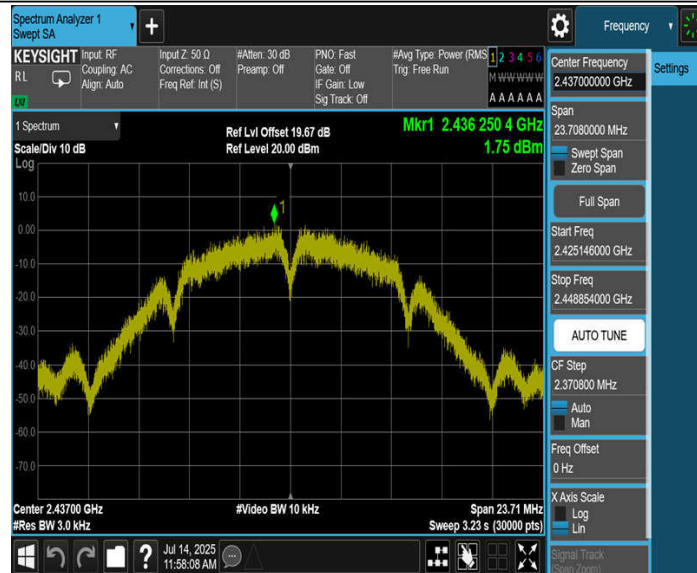
11B-CDD\_Ant2\_2412



11B-CDD\_Ant1\_2437



11B-CDD\_Ant2\_2437



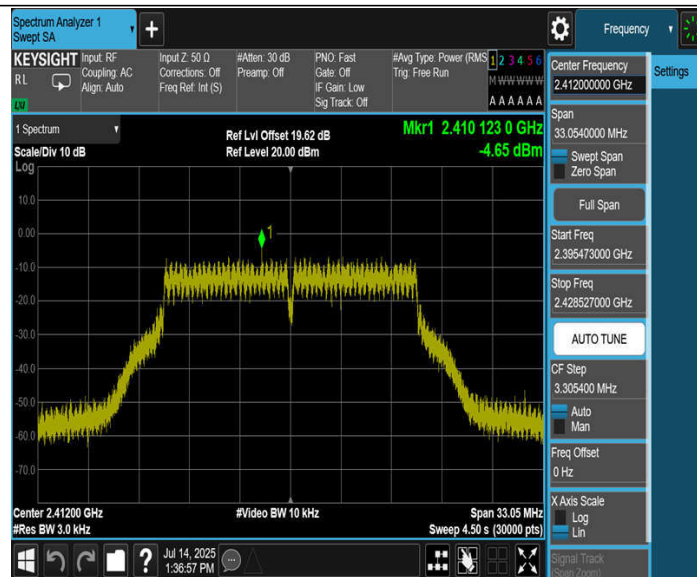
11B-CDD\_Ant1\_2462



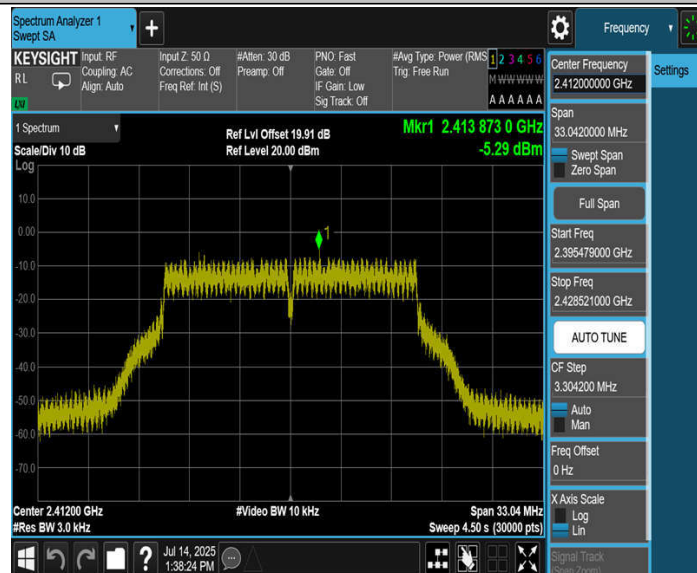
11B-CDD\_Ant2\_2462



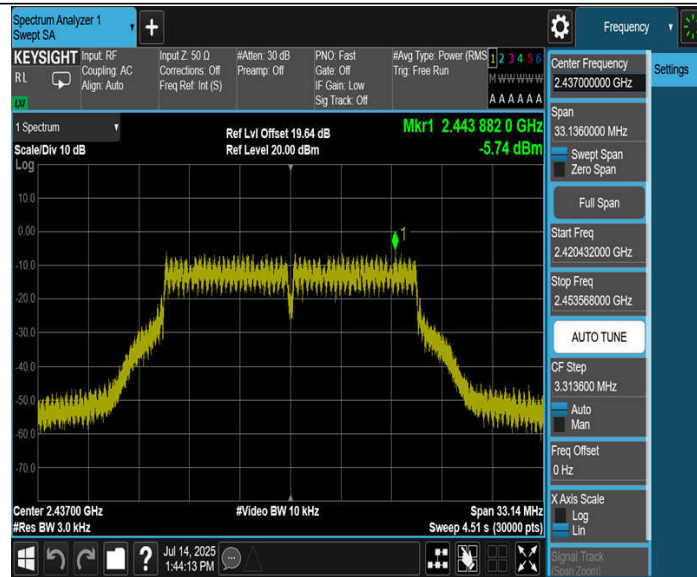
11G-CDD\_Ant1\_2412



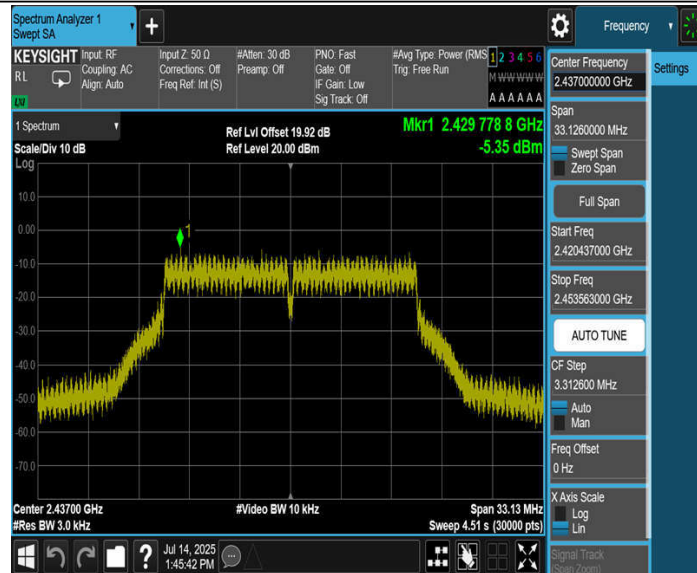
11G-CDD\_Ant2\_2412



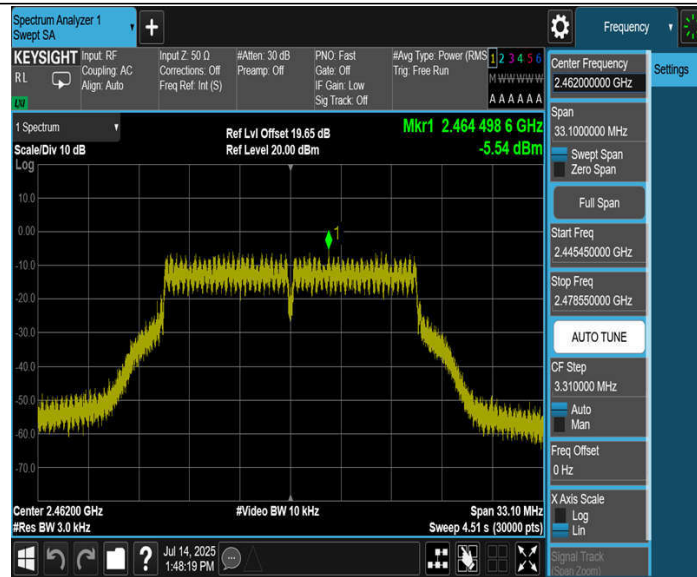
11G-CDD\_Ant1\_2437



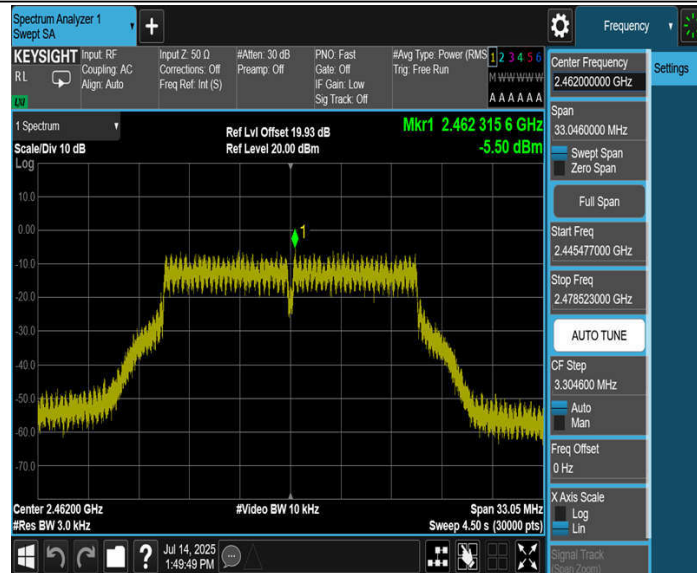
11G-CDD\_Ant2\_2437



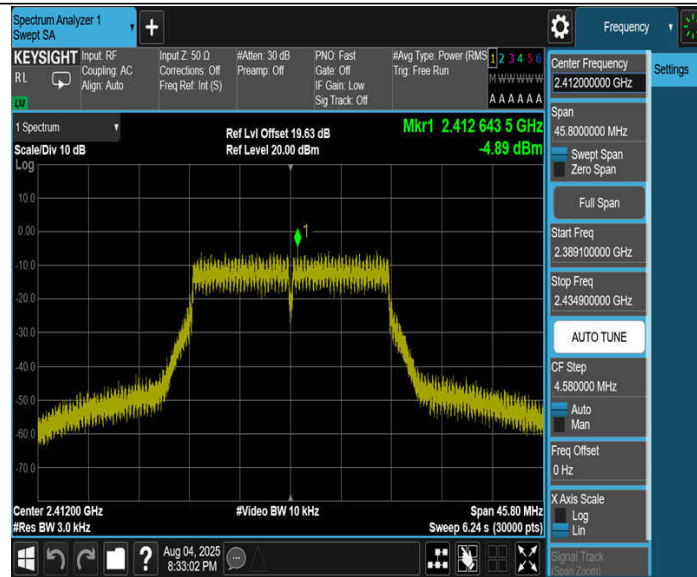
11G-CDD\_Ant1\_2462



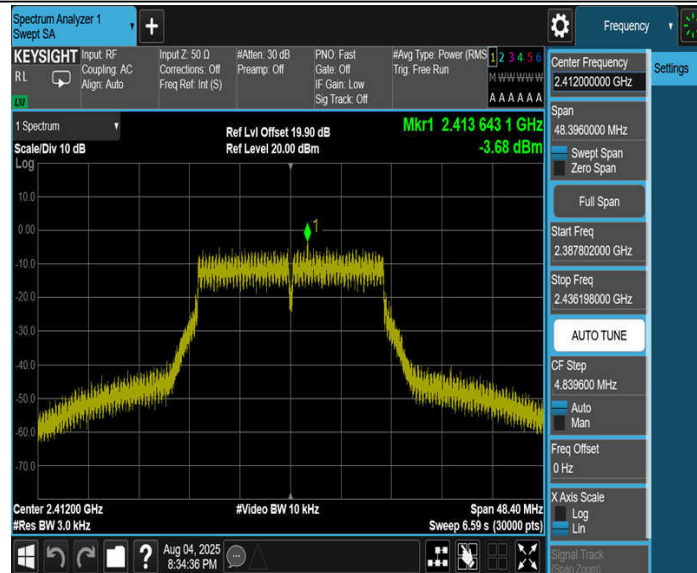
11G-CDD\_Ant2\_2462



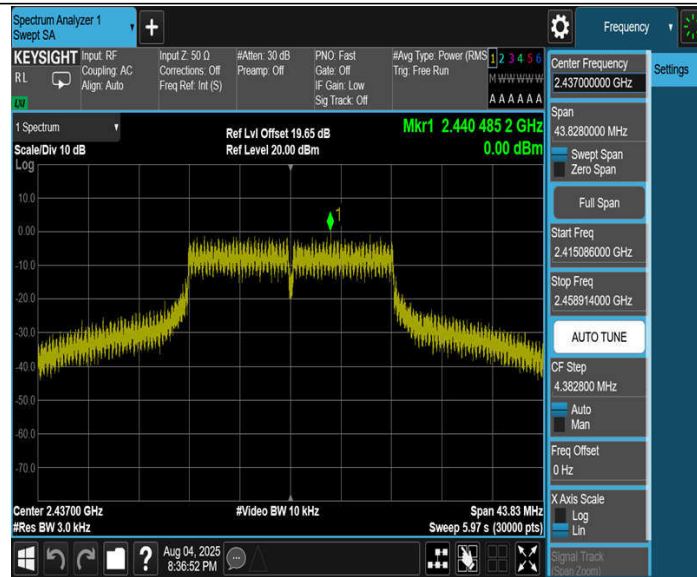
11N20MIMO\_Ant1\_2412



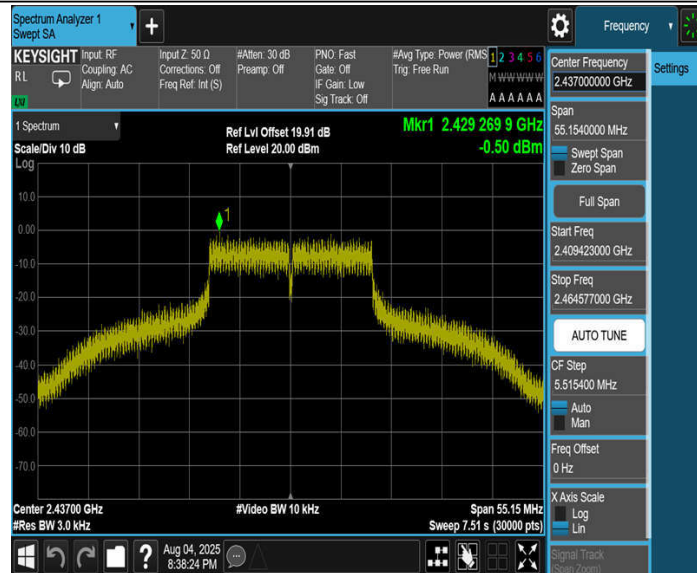
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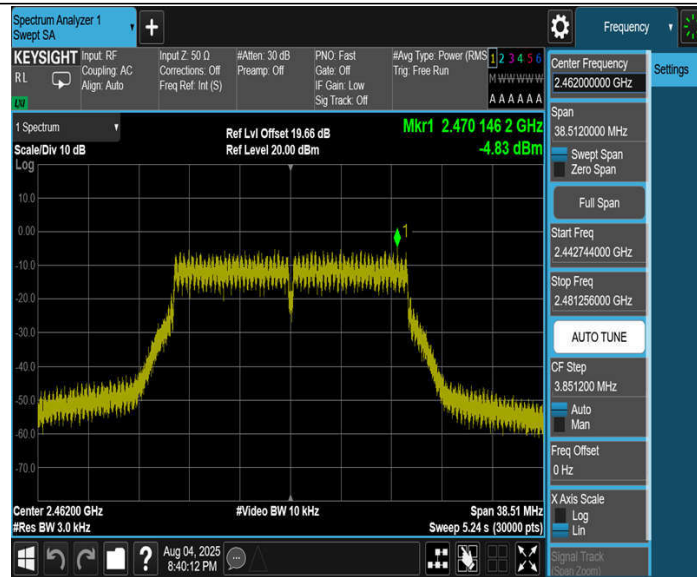
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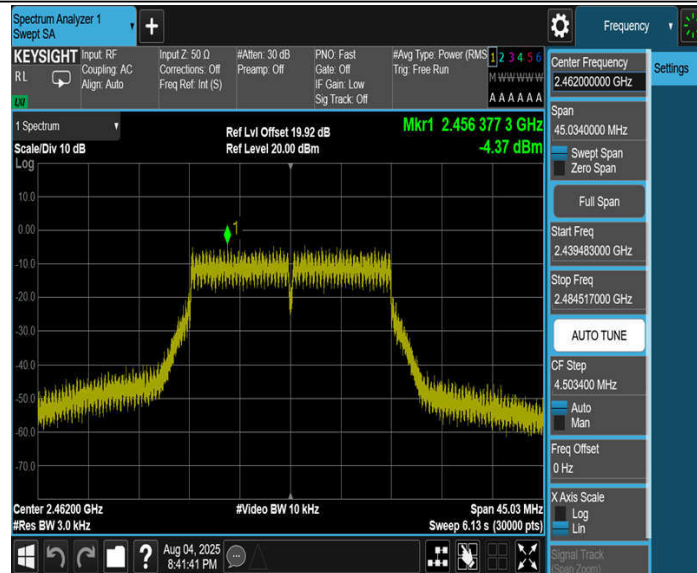
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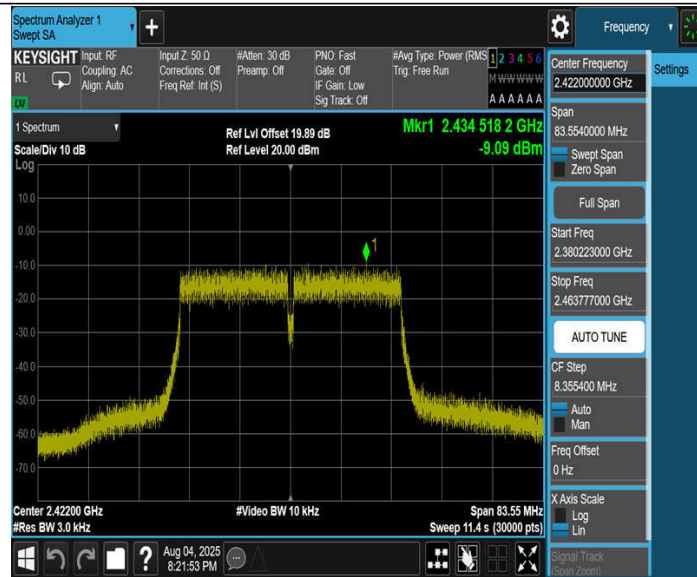
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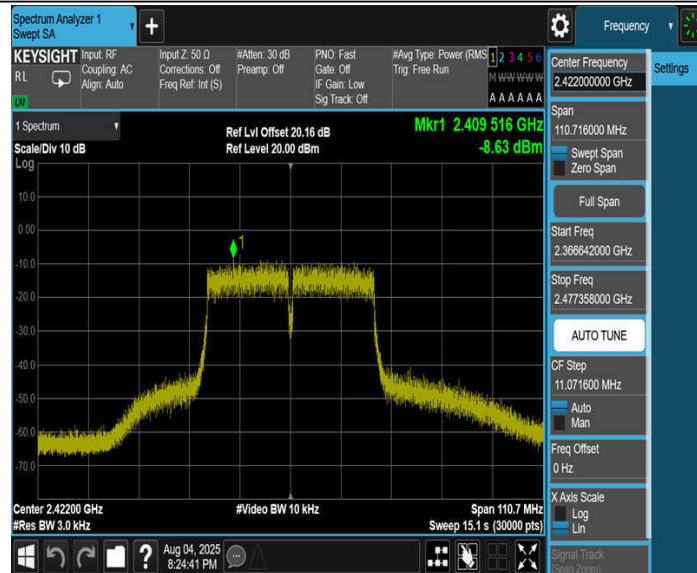
11N20MIMO\_Ant2\_2462



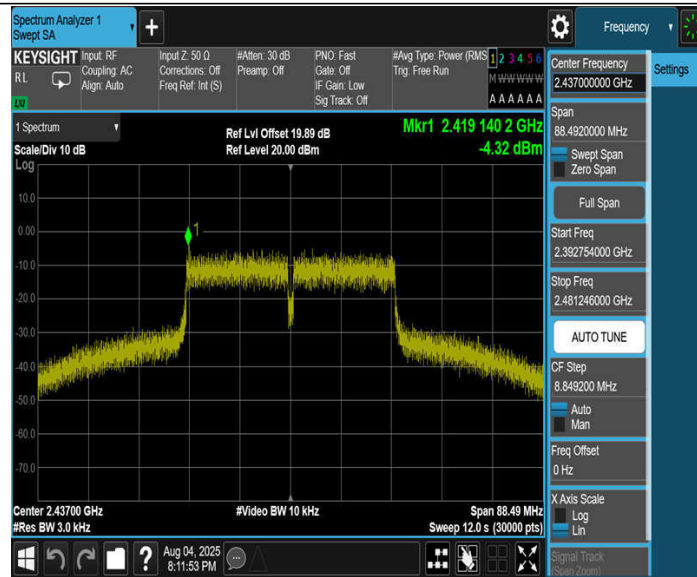
11N40MIMO\_Ant1\_2422



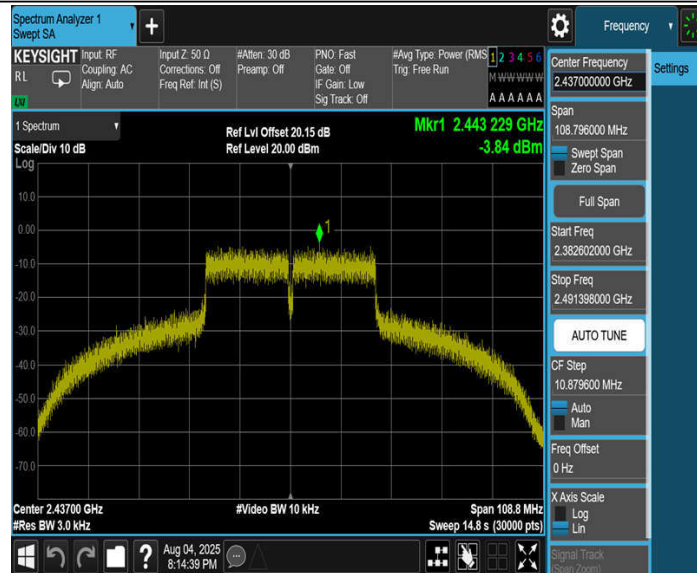
11N40MIMO\_Ant2\_2422



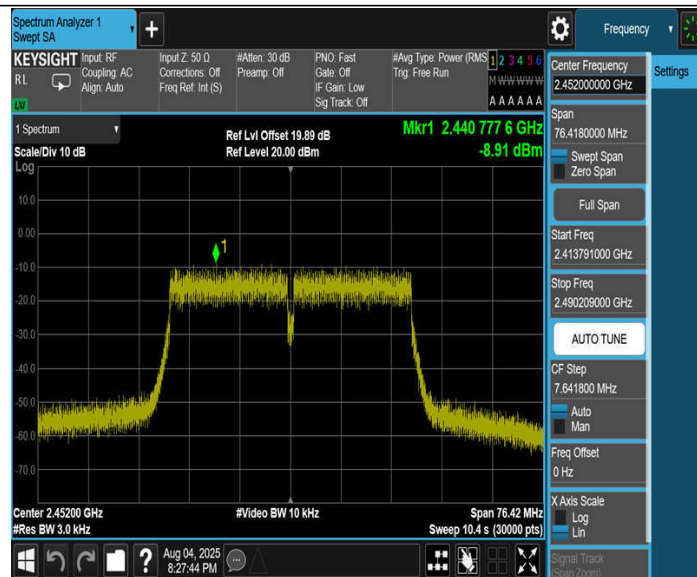
11N40MIMO\_Ant1\_2437



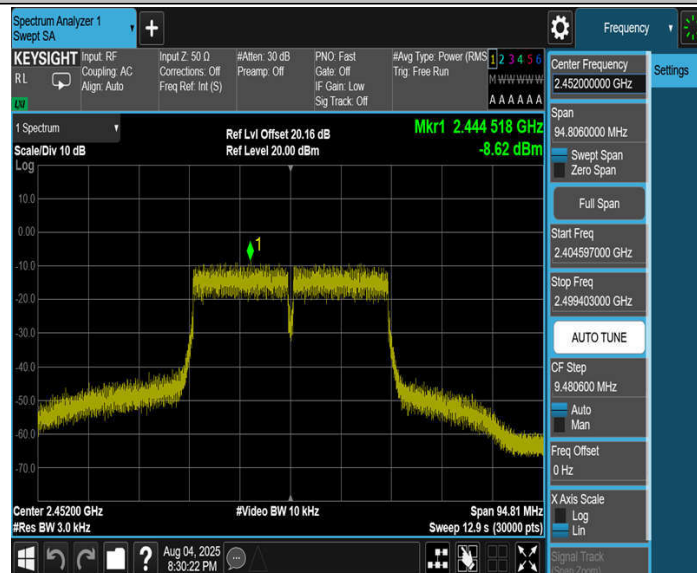
11N40MIMO\_Ant2\_2437



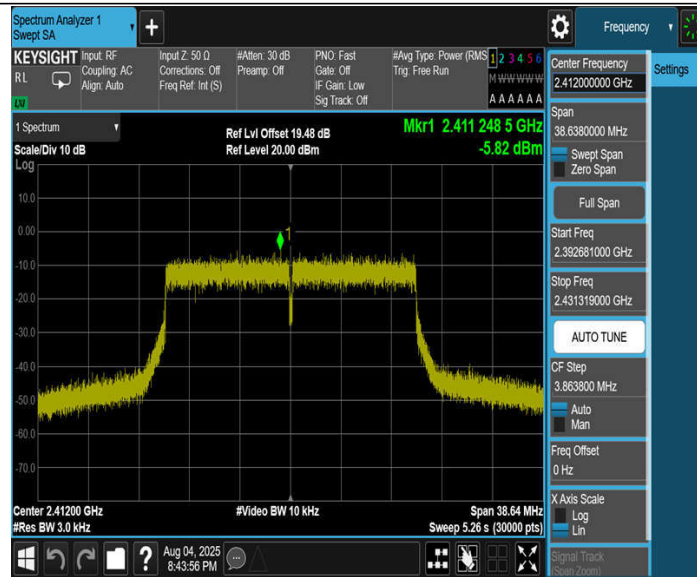
11N40MIMO\_Ant1\_2452



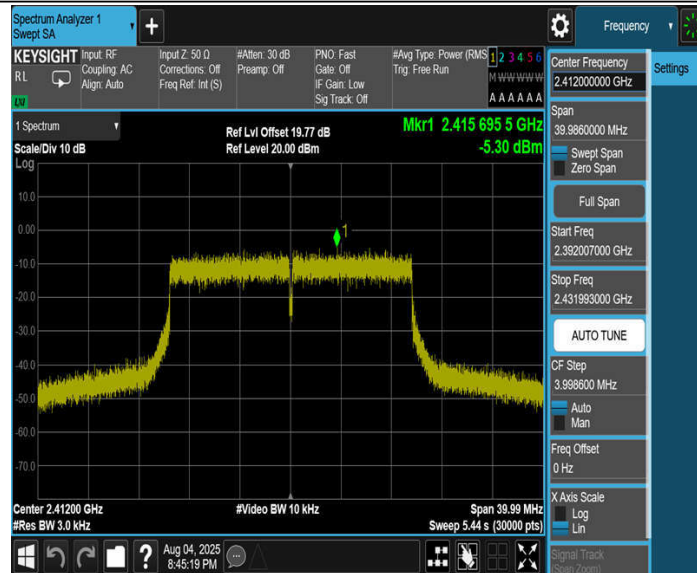
11N40MIMO\_Ant2\_2452



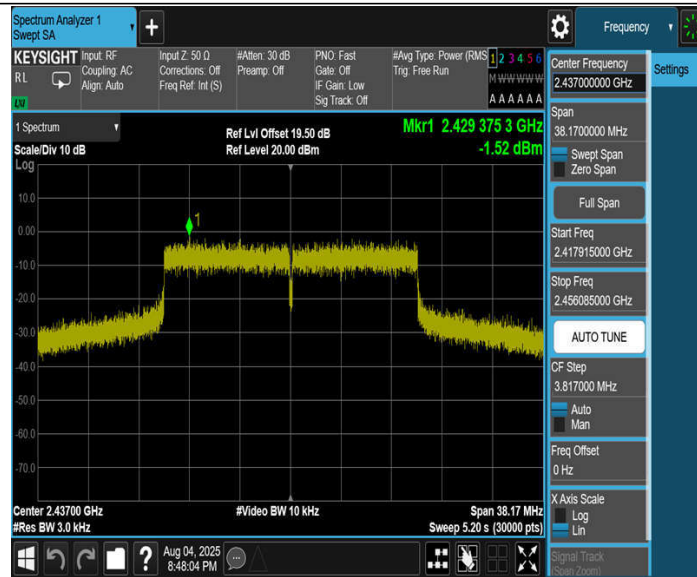
11AX20MIMO\_Ant1\_2412



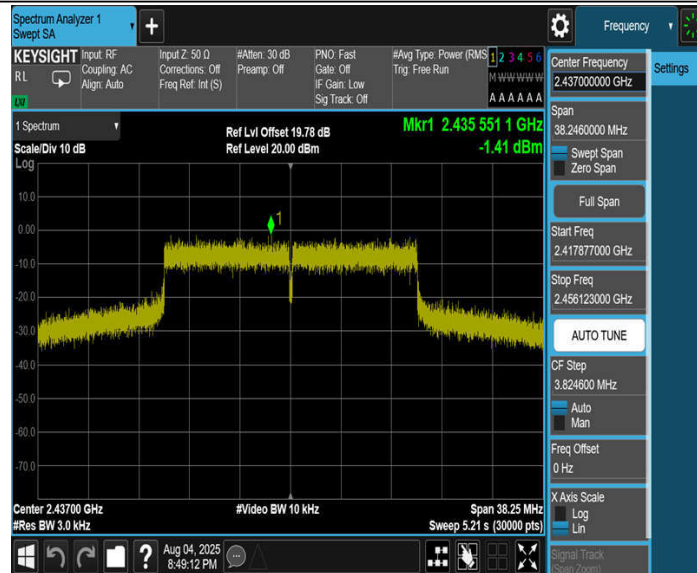
11AX20MIMO\_Ant2\_2412



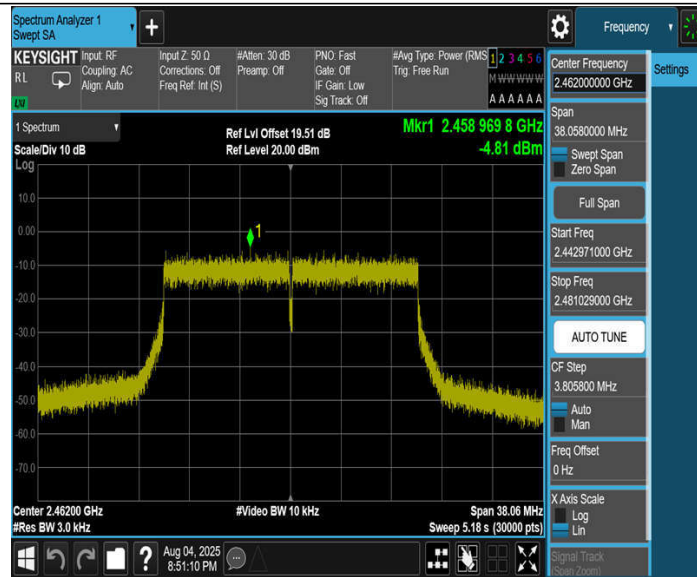
11AX20MIMO\_Ant1\_2437



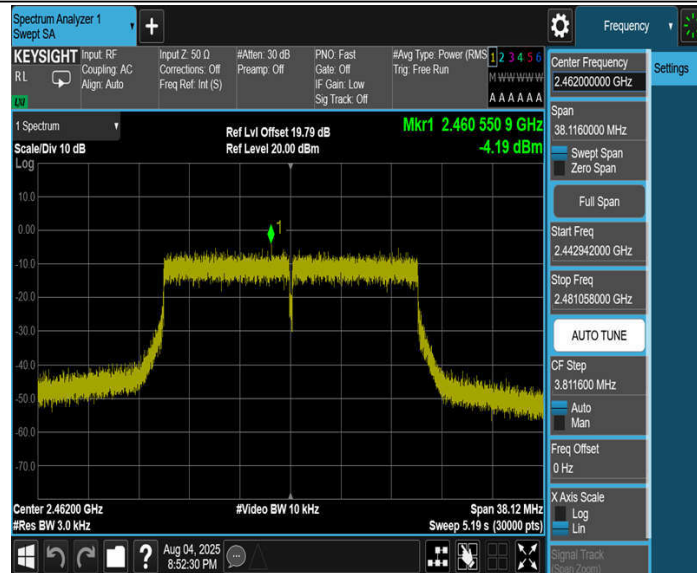
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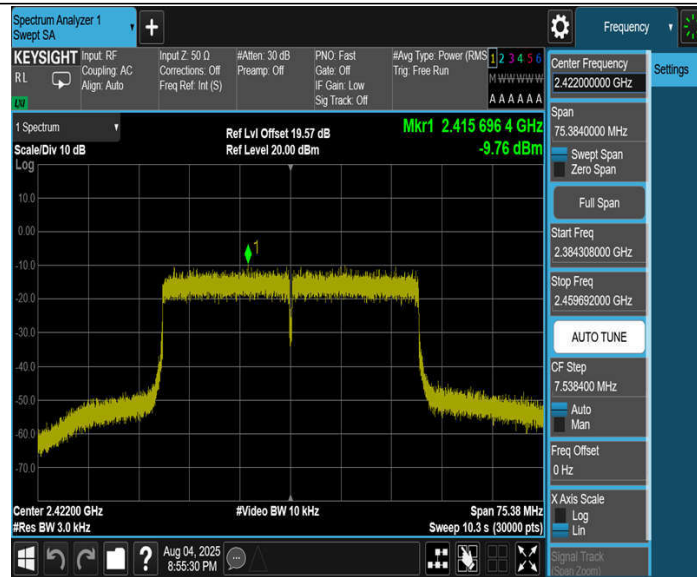
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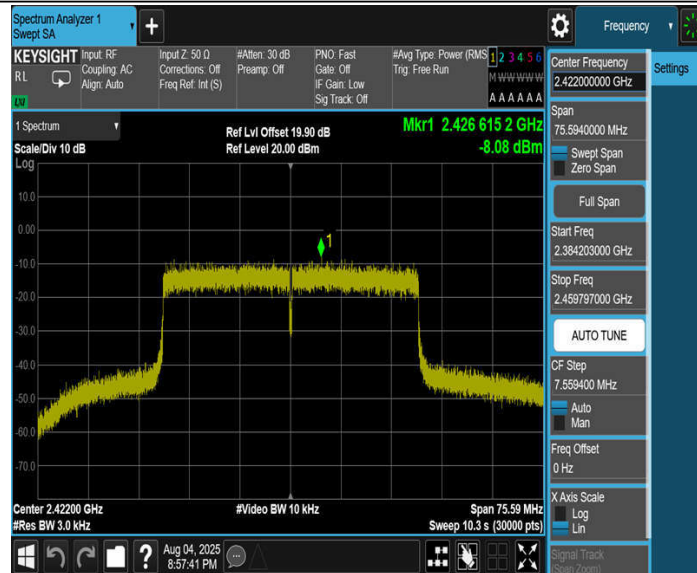
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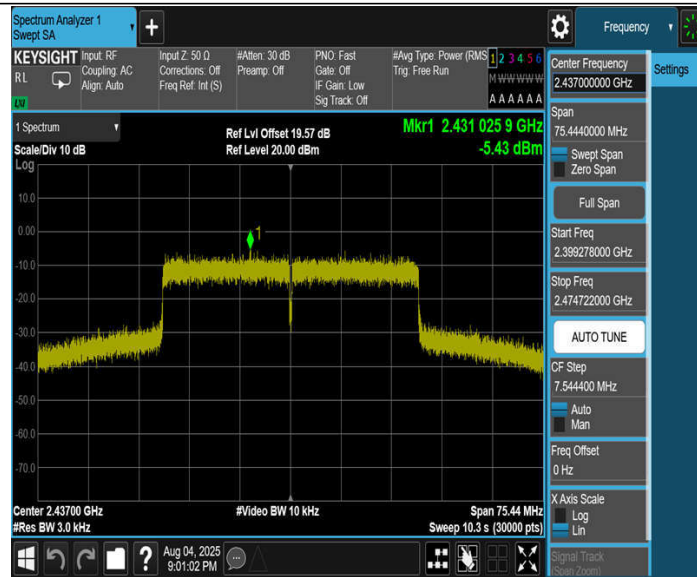
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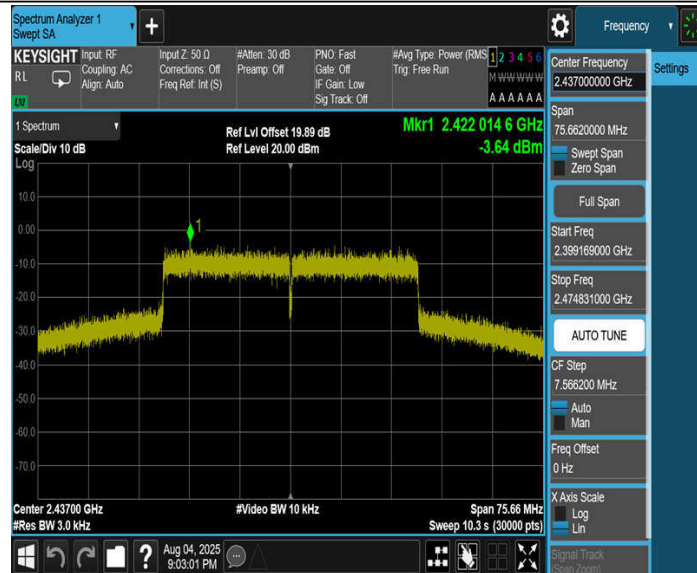
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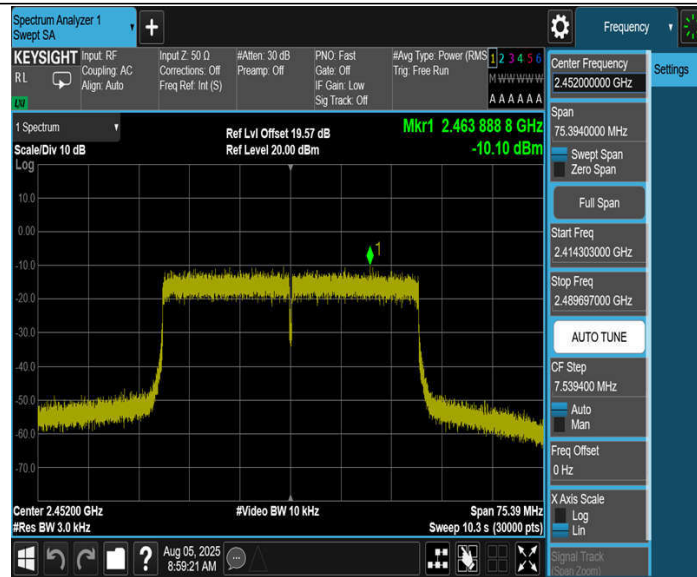
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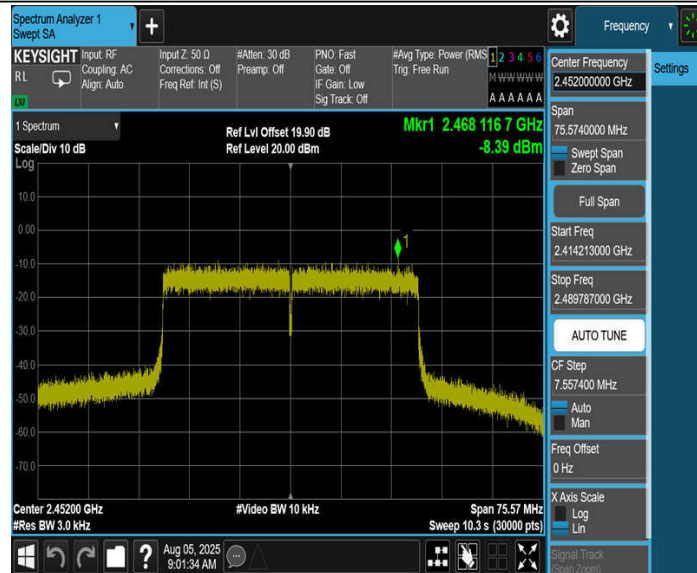
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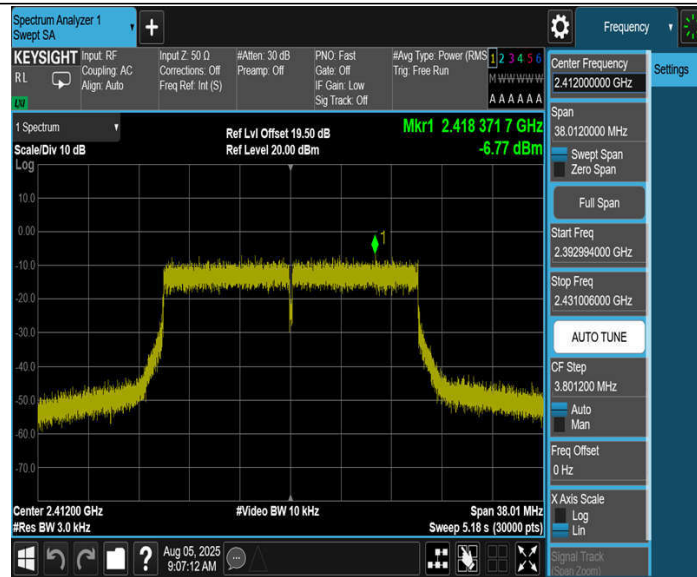
11AX40MIMO\_Ant1\_2452



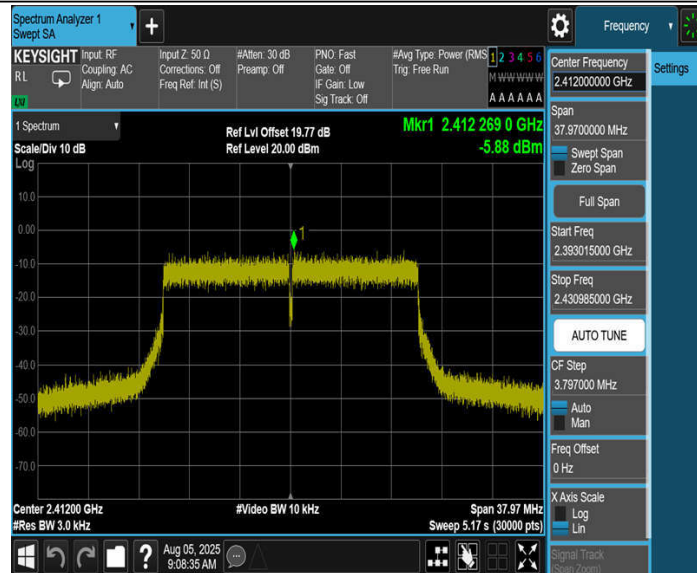
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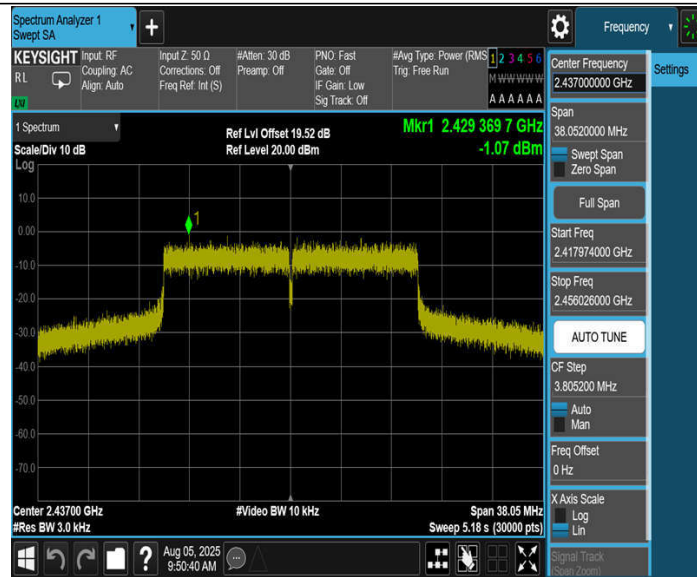
11BE20MIMO\_Ant1\_2412



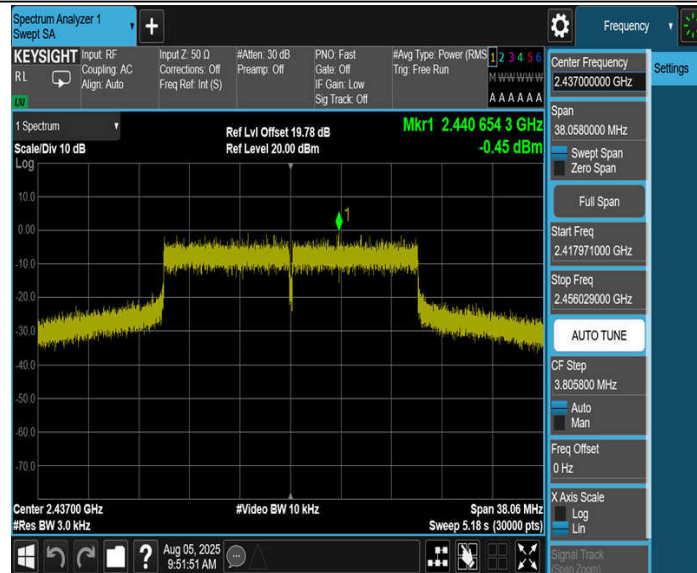
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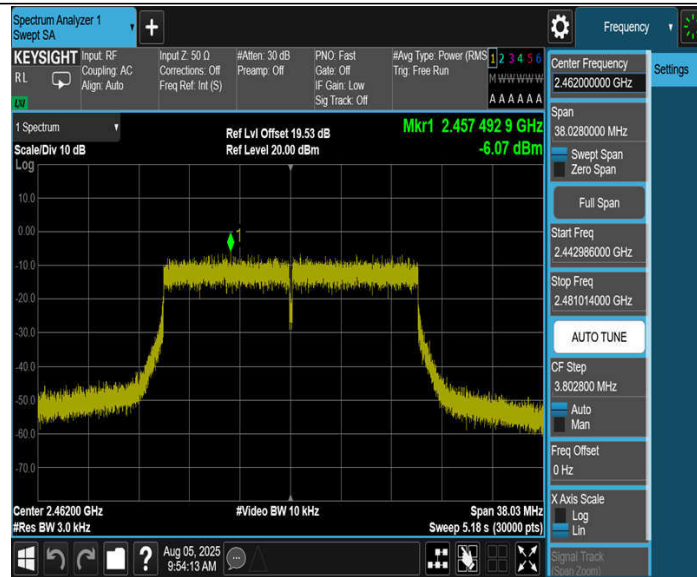
11BE20MIMO\_Ant1\_2437



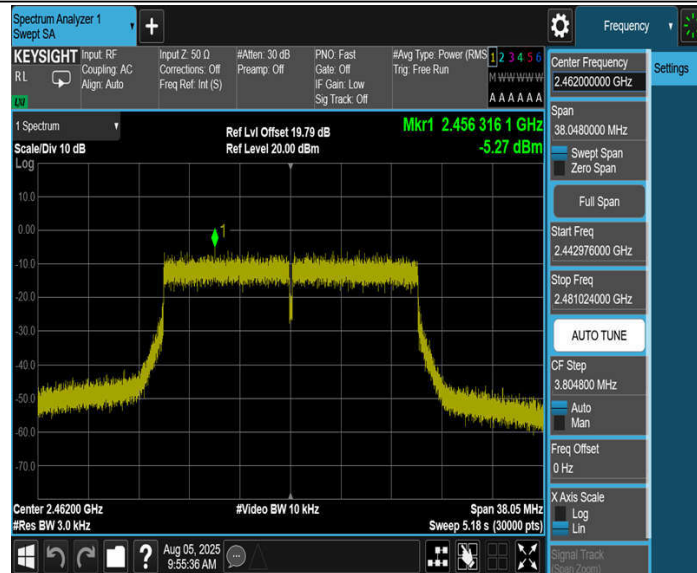
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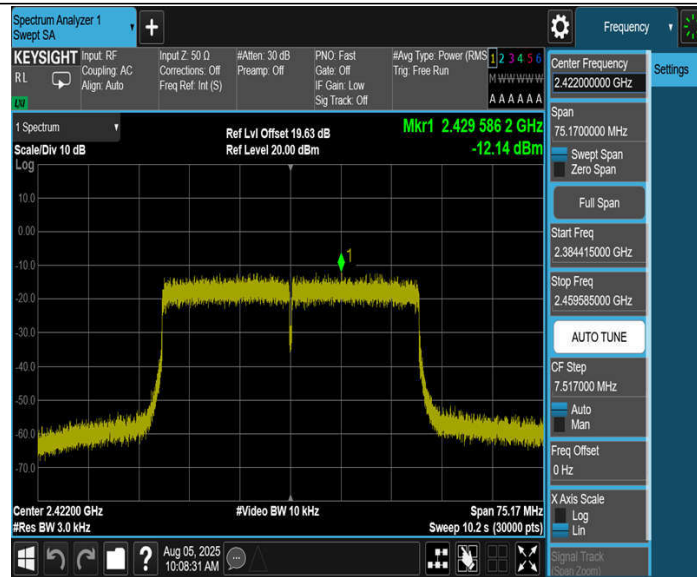
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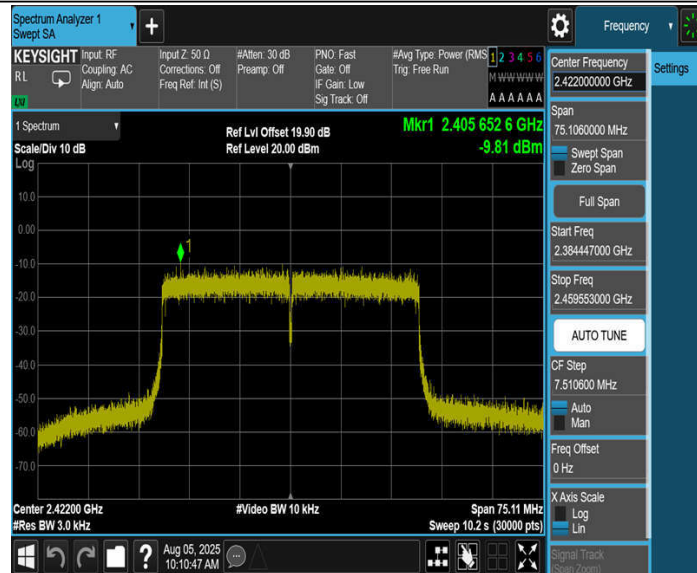
11BE20MIMO\_Ant2\_2462



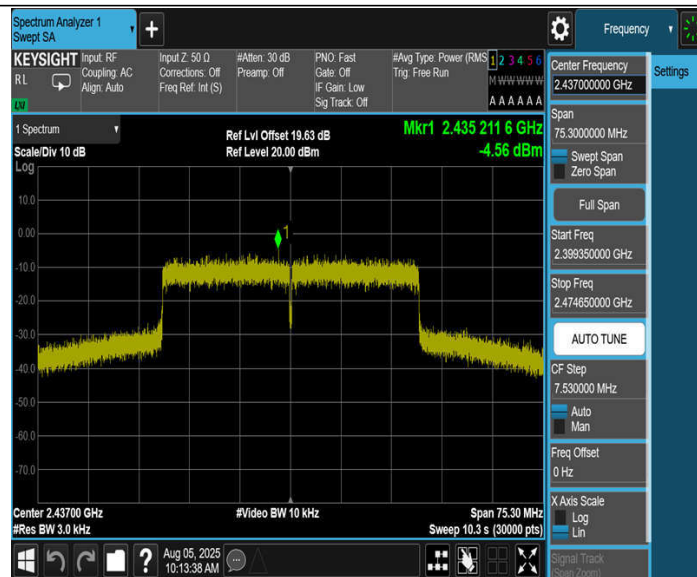
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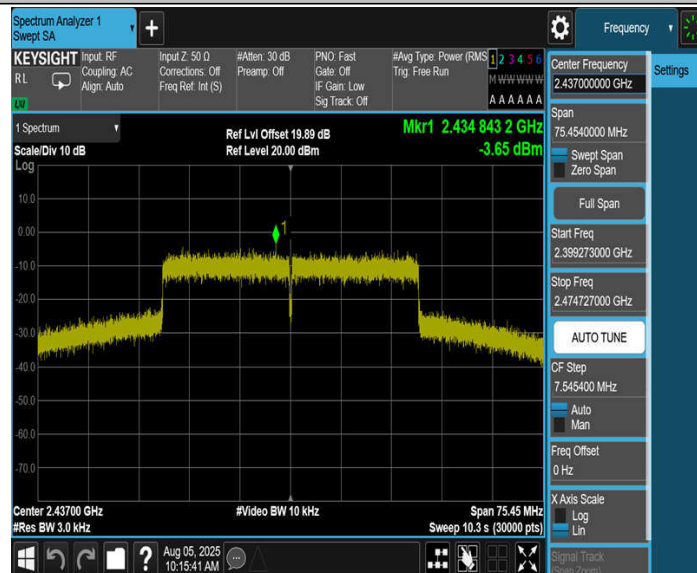
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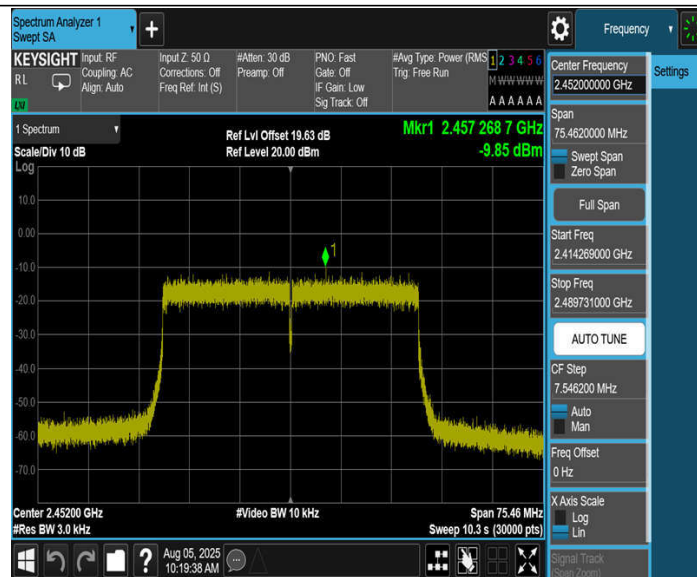
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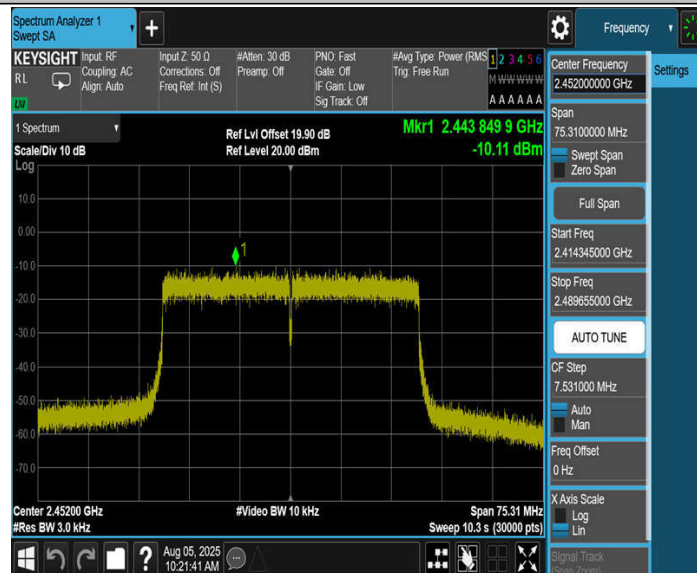
11BE40MIMO\_Ant2\_2437



11BE40MIMO\_Ant1\_2452



11BE40MIMO\_Ant2\_2452



## Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technical Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

## Shenzhen Haiyun Standard Technical Co., Ltd.

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Tel: 0755-26024411

Email: [service@hy-lab.cn](mailto:service@hy-lab.cn)

**End of Test Report**