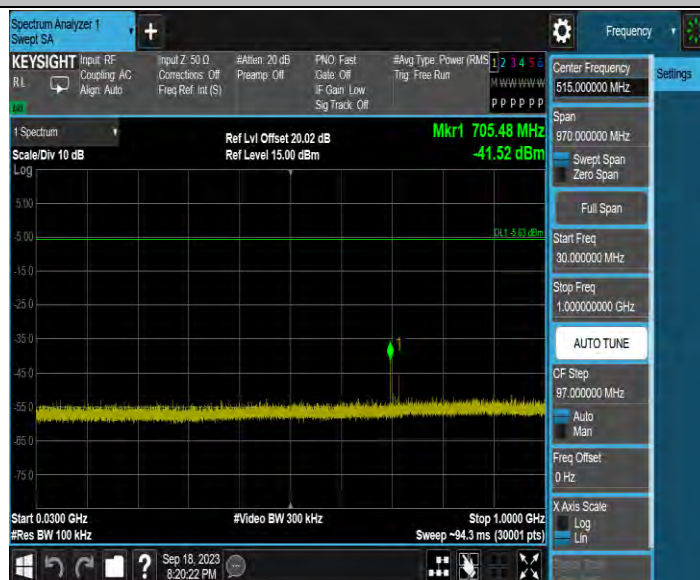




11B-MIMO\_Ant4\_2437\_30~1000



11B-MIMO\_Ant4\_2437\_1000~6000



11B-MIMO\_Ant4\_2437\_6000~26500



11B-MIMO\_Ant1\_2462\_0~Reference



11B-MIMO\_Ant1\_2462\_30~1000



11B-MIMO\_Ant1\_2462\_1000~6000



11B-MIMO\_Ant1\_2462\_6000~26500



11B-MIMO\_Ant4\_2462\_0~Reference



11B-MIMO\_Ant4\_2462\_30~1000



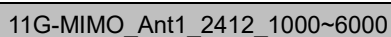
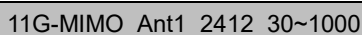
11B-MIMO\_Ant4\_2462\_1000~6000



11B-MIMO\_Ant4\_2462\_6000~26500



11G-MIMO\_Ant1\_2412\_0~Reference





11G-MIMO\_Ant1\_2412\_6000~26500



11G-MIMO\_Ant4\_2412\_0~Reference



11G-MIMO\_Ant4\_2412\_30~1000



11G-MIMO\_Ant4\_2412\_1000~6000



11G-MIMO\_Ant4\_2412\_6000~26500



11G-MIMO\_Ant1\_2437\_0~Reference



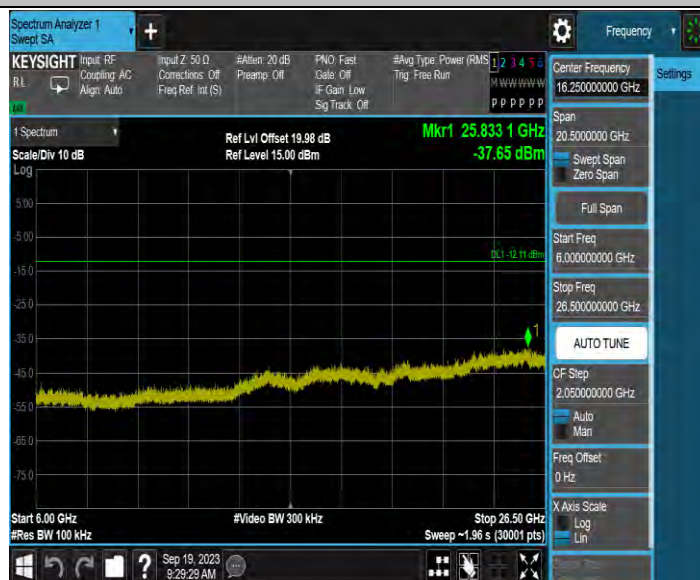
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11G-MIMO\_Ant1\_2437\_1000~6000



11G-MIMO\_Ant1\_2437\_6000~26500



11G-MIMO\_Ant4\_2437\_0~Reference



11G-MIMO\_Ant4\_2437\_30~1000



11G-MIMO\_Ant4\_2437\_1000~6000



11G-MIMO\_Ant4\_2437\_6000~26500



11G-MIMO\_Ant1\_2462\_0~Reference



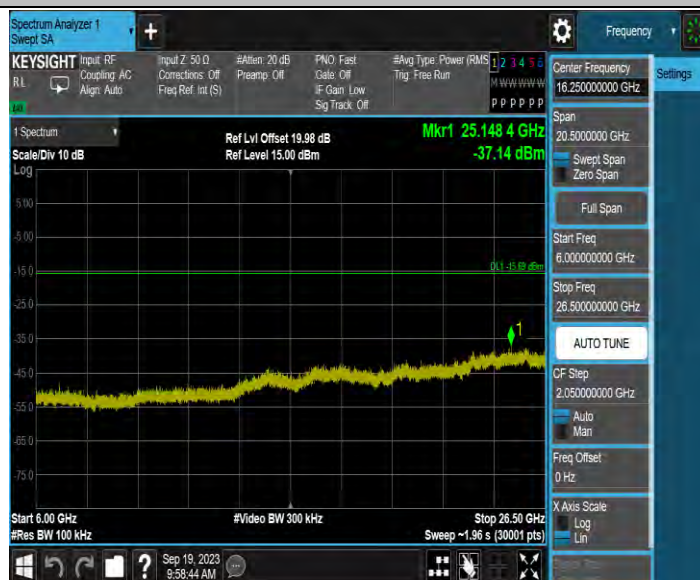
11G-MIMO\_Ant1\_2462\_30~1000



11G-MIMO\_Ant1\_2462\_1000~6000



11G-MIMO\_Ant1\_2462\_6000~26500



11G-MIMO\_Ant4\_2462\_0~Reference



11G-MIMO\_Ant4\_2462\_30~1000



11G-MIMO\_Ant4\_2462\_1000~6000



11G-MIMO\_Ant4\_2462\_6000~26500



11N20MIMO\_Ant1\_2412\_0~Reference



11N20MIMO\_Ant1\_2412\_30~1000



11N20MIMO\_Ant1\_2412\_1000~6000



11N20MIMO\_Ant1\_2412\_6000~26500



11N20MIMO\_Ant4\_2412\_0~Reference



11N20MIMO\_Ant4\_2412\_30~1000



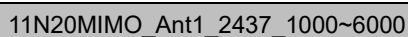
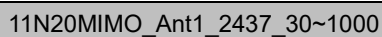
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11N20MIMO\_Ant4\_2412\_6000~26500



11N20MIMO\_Ant1\_2437\_0~Reference





11N20MIMO\_Ant1\_2437\_6000~26500



11N20MIMO\_Ant4\_2437\_0~Reference



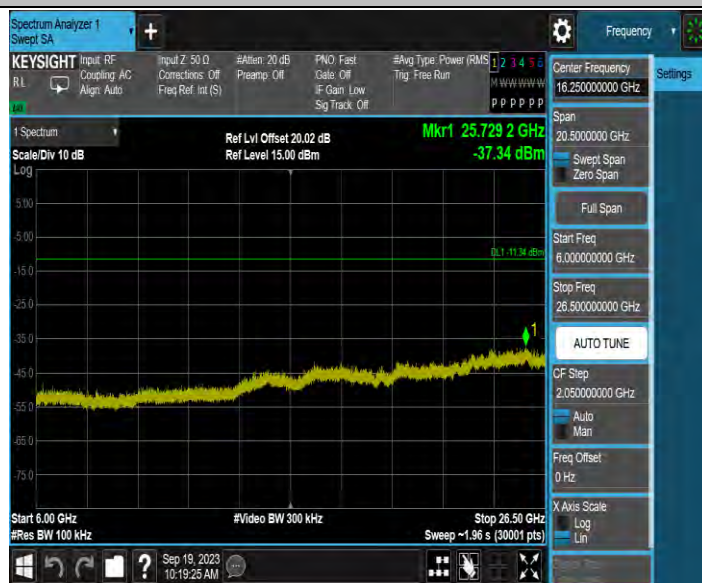
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11N20MIMO\_Ant4\_2437\_1000~6000



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11N20MIMO\_Ant1\_2462\_0~Reference



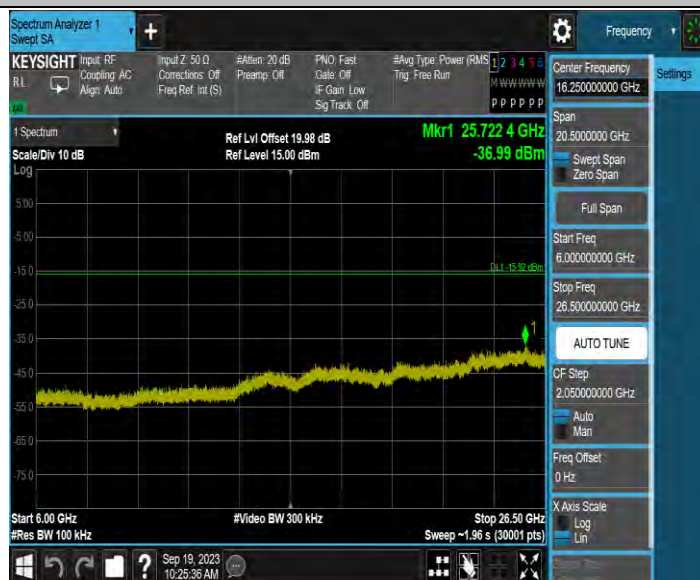
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11N20MIMO\_Ant1\_2462\_1000~6000



11N20MIMO\_Ant1\_2462\_6000~26500



11N20MIMO\_Ant4\_2462\_0~Reference



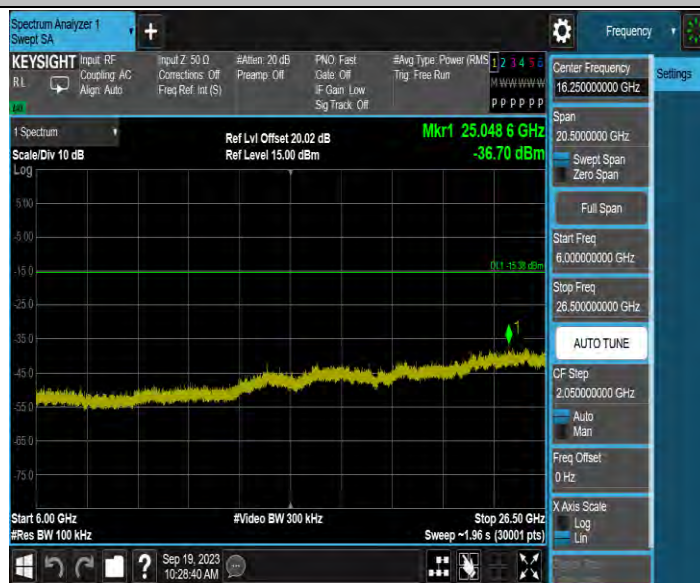
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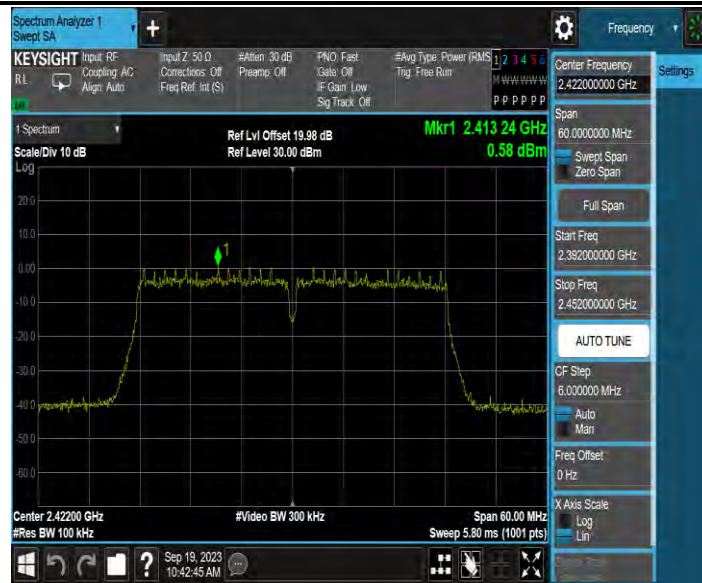
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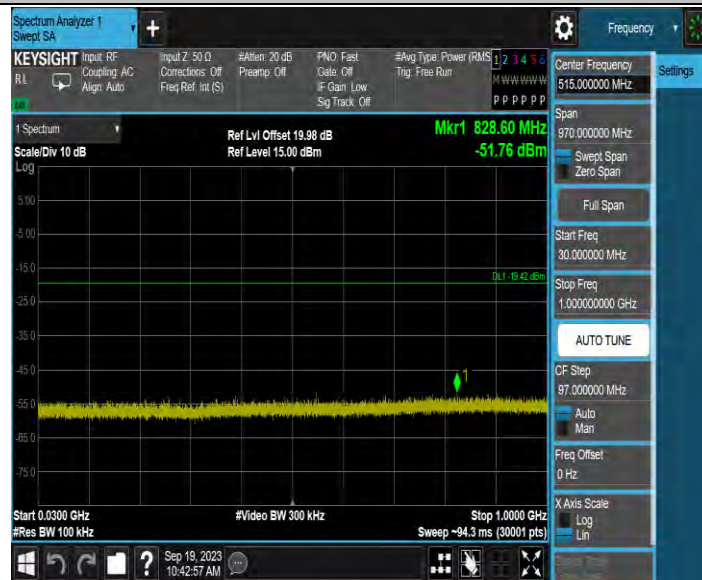
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11N40MIMO\_Ant1\_2422\_0~Reference



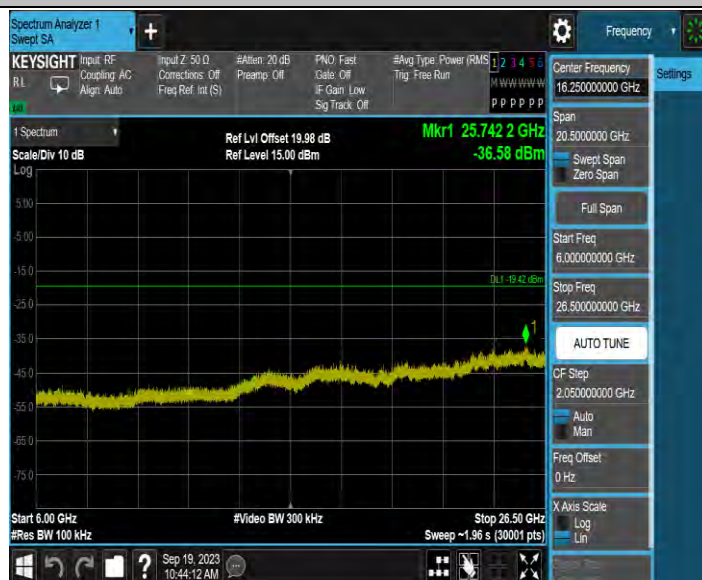
11N40MIMO\_Ant1\_2422\_30~1000



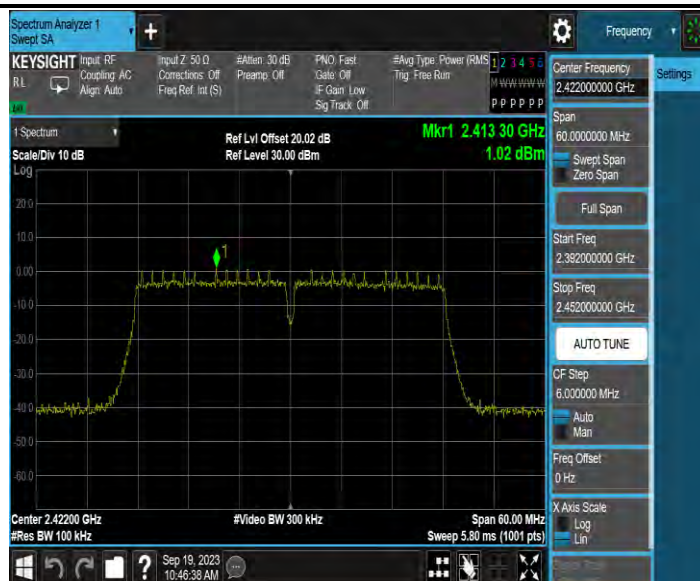
11N40MIMO\_Ant1\_2422\_1000~6000



11N40MIMO\_Ant1\_2422\_6000~26500



11N40MIMO\_Ant4\_2422\_0~Reference



11N40MIMO\_Ant4\_2422\_30~1000



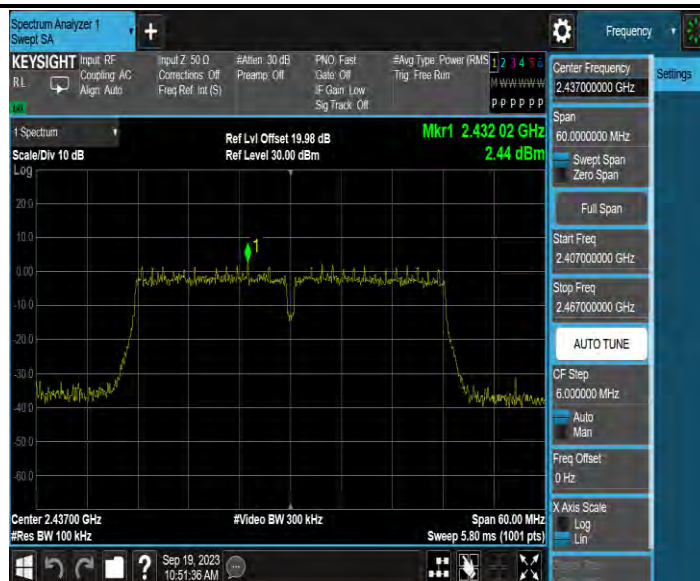
11N40MIMO\_Ant4\_2422\_1000~6000



11N40MIMO\_Ant4\_2422\_6000~26500



11N40MIMO\_Ant1\_2437\_0~Reference



11N40MIMO\_Ant1\_2437\_30~1000



11N40MIMO\_Ant1\_2437\_1000~6000



11N40MIMO\_Ant1\_2437\_6000~26500



11N40MIMO\_Ant4\_2437\_0~Reference



11N40MIMO\_Ant4\_2437\_30~1000



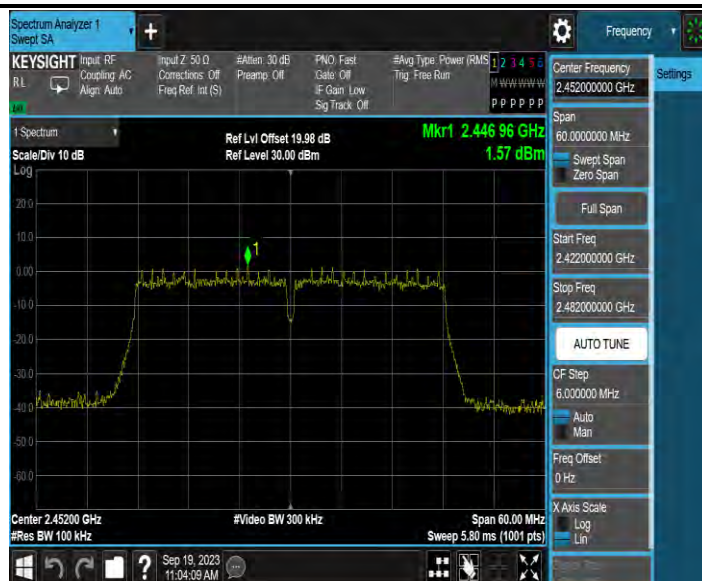
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11N40MIMO\_Ant4\_2437\_6000~26500



11N40MIMO\_Ant1\_2452\_0~Reference



11N40MIMO\_Ant1\_2452\_30~1000



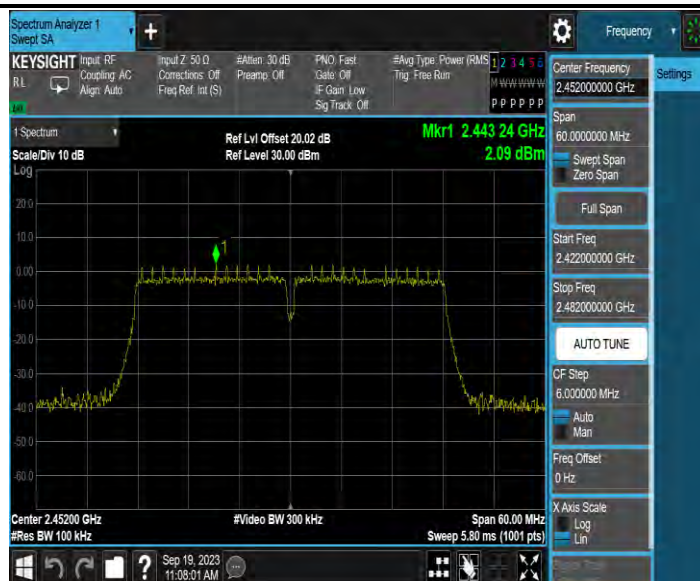
11N40MIMO\_Ant1\_2452\_1000~6000



11N40MIMO\_Ant1\_2452\_6000~26500



11N40MIMO\_Ant4\_2452\_0~Reference



11N40MIMO\_Ant4\_2452\_30~1000



11N40MIMO\_Ant4\_2452\_1000~6000



11N40MIMO\_Ant4\_2452\_6000~26500



11AX20MIMO\_Ant1\_2412\_0~Reference



11AX20MIMO\_Ant1\_2412\_30~1000



11AX20MIMO\_Ant1\_2412\_1000~6000



11AX20MIMO\_Ant1\_2412\_6000~26500



11AX20MIMO\_Ant4\_2412\_0~Reference



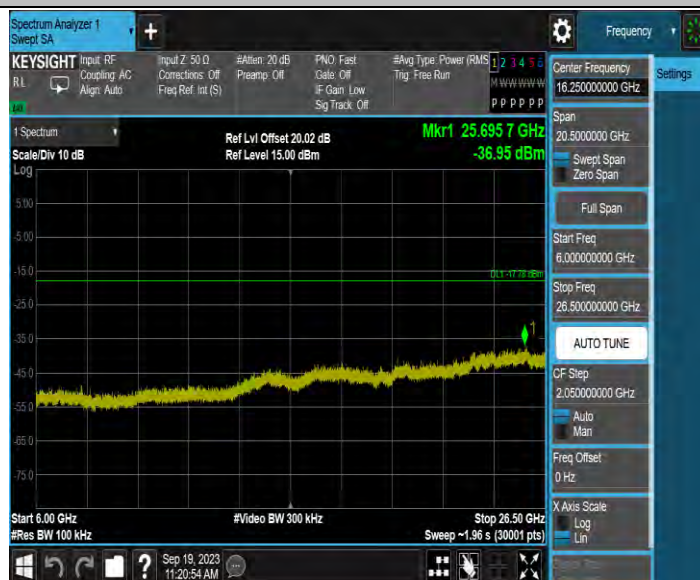
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11AX20MIMO\_Ant4\_2412\_1000~6000



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11AX20MIMO\_Ant1\_2437\_0~Reference



11AX20MIMO\_Ant1\_2437\_30~1000



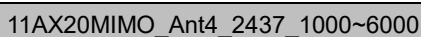
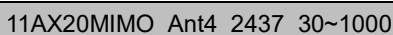
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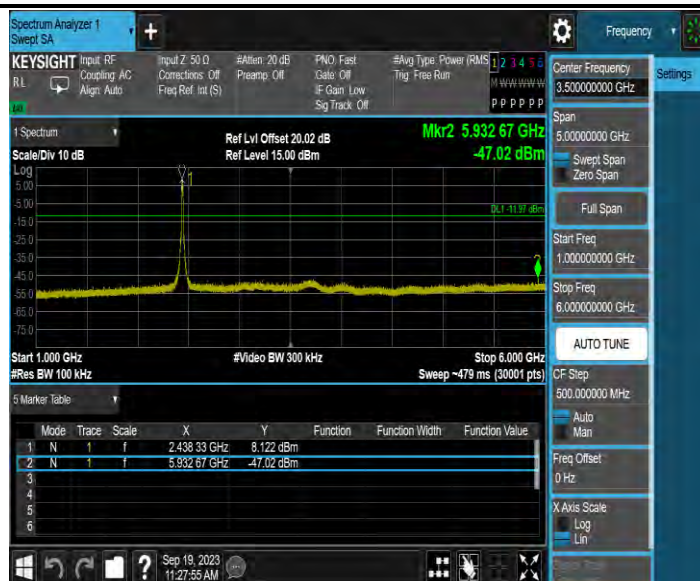


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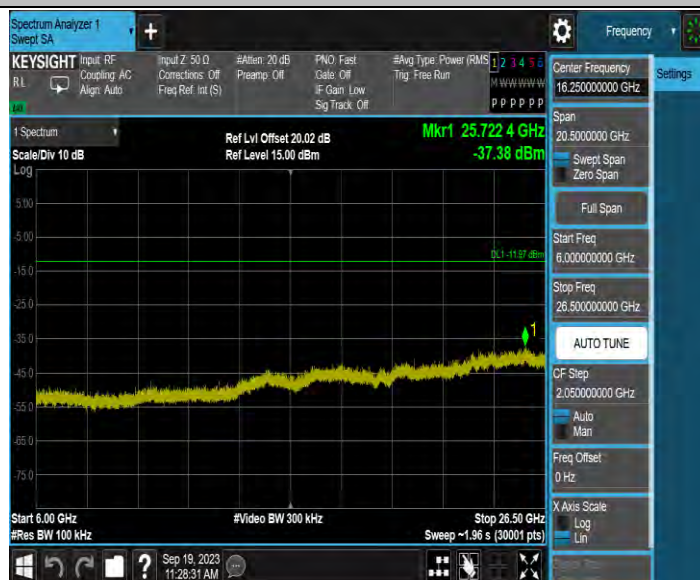


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11AX20MIMO\_Ant4\_2437\_6000~26500



11AX20MIMO\_Ant1\_2462\_0~Reference



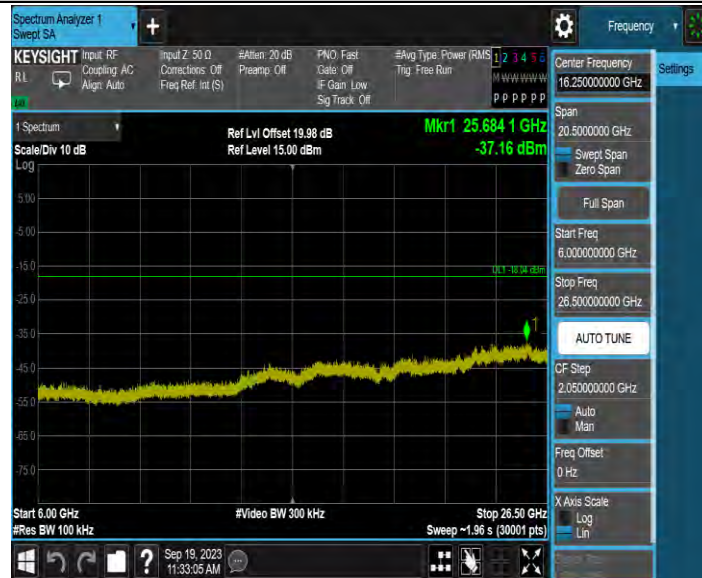
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11AX20MIMO\_Ant1\_2462\_1000~6000



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11AX20MIMO\_Ant4\_2462\_0~Reference



11AX20MIMO\_Ant4\_2462\_30~1000



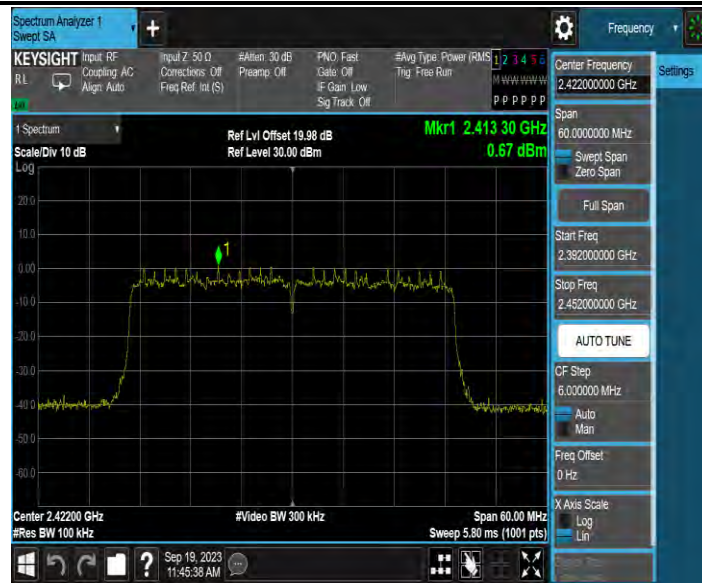
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11AX20MIMO\_Ant4\_2462\_6000~26500



11AX40MIMO\_Ant1\_2422\_0~Reference



11AX40MIMO\_Ant1\_2422\_30~1000



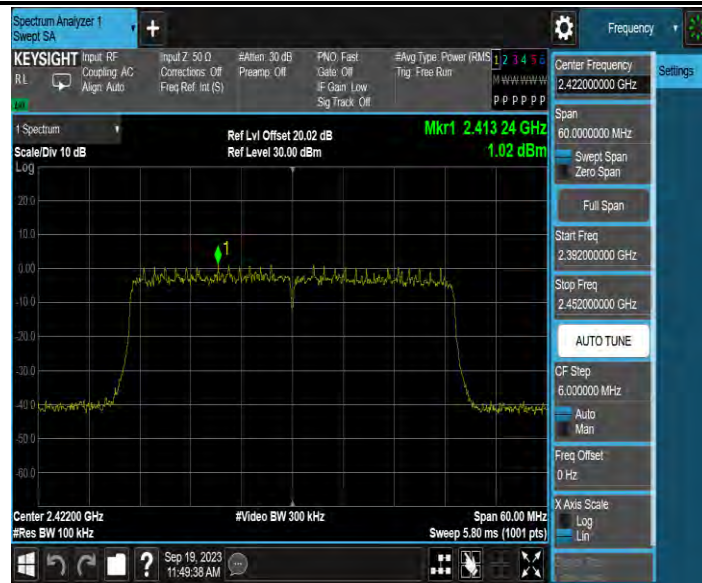
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11AX40MIMO\_Ant4\_2422\_0~Reference



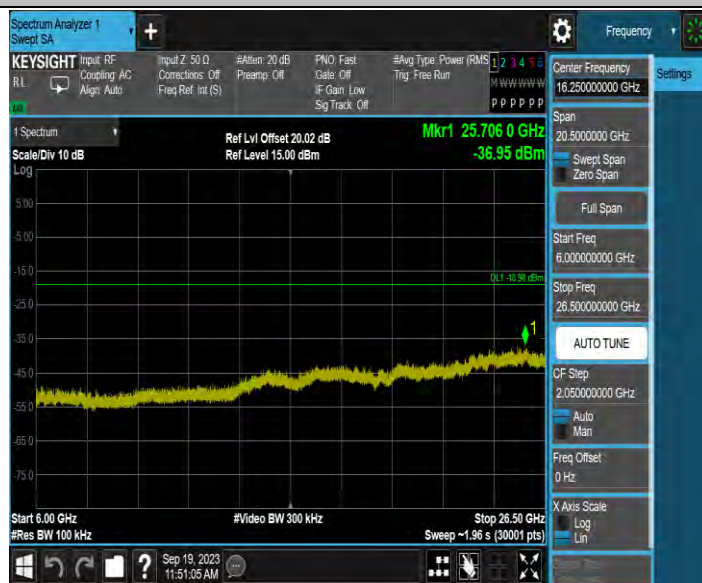
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11AX40MIMO\_Ant4\_2422\_1000~6000



11AX40MIMO\_Ant4\_2422\_6000~26500



11AX40MIMO\_Ant1\_2437\_0~Reference



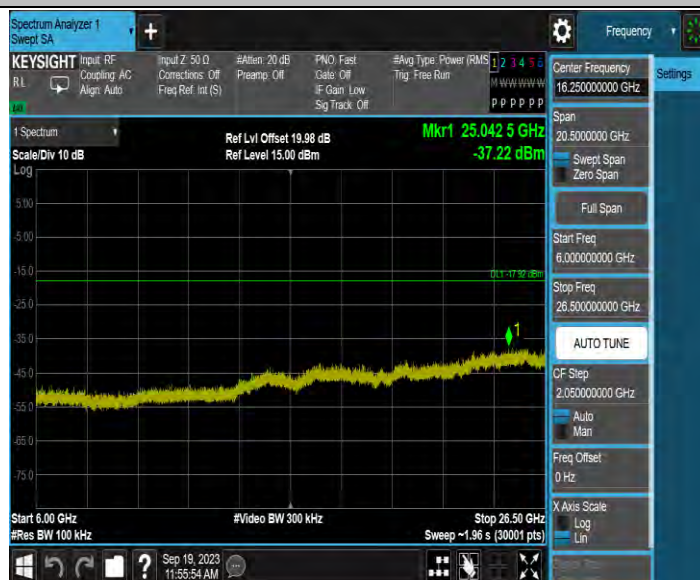
11AX40MIMO\_Ant1\_2437\_30~1000



11AX40MIMO\_Ant1\_2437\_1000~6000



11AX40MIMO\_Ant1\_2437\_6000~26500



11AX40MIMO\_Ant4\_2437\_0~Reference



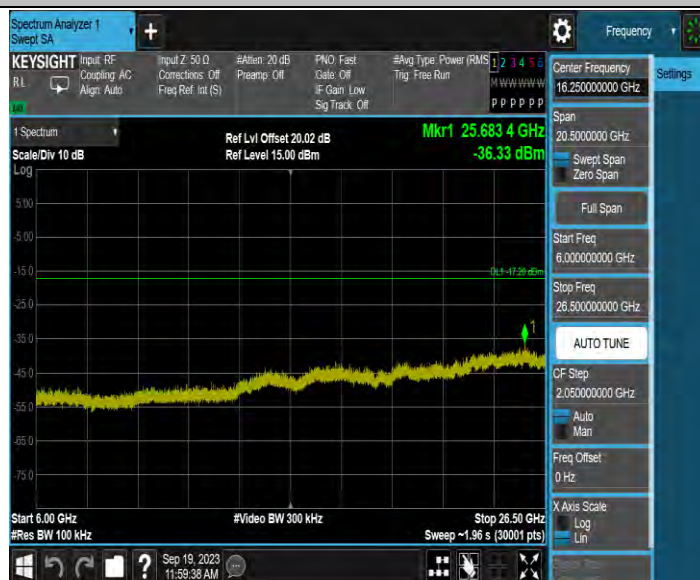
11AX40MIMO\_Ant4\_2437\_30~1000



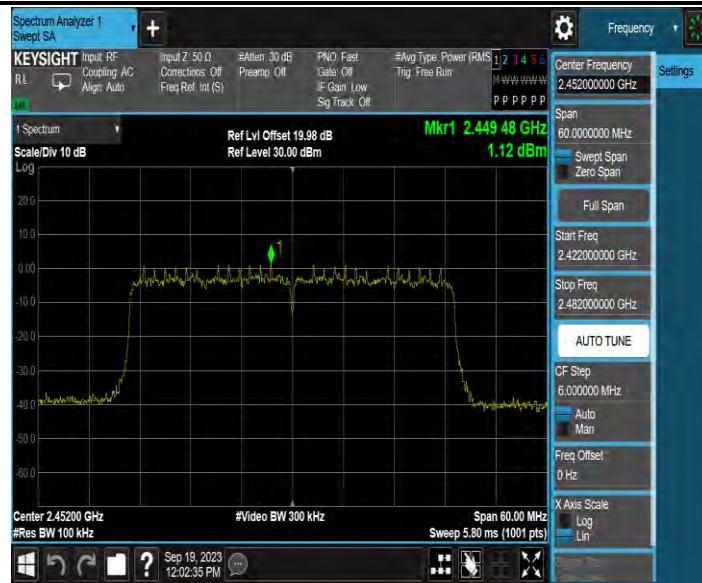
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11AX40MIMO\_Ant4\_2437\_6000~26500



11AX40MIMO\_Ant1\_2452\_0~Reference



11AX40MIMO\_Ant1\_2452\_30~1000



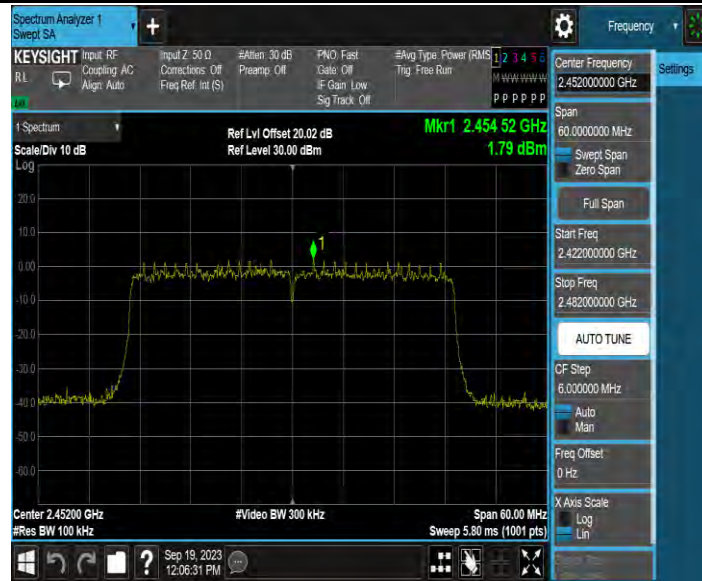
11AX40MIMO\_Ant1\_2452\_1000~6000



11AX40MIMO\_Ant1\_2452\_6000~26500



11AX40MIMO\_Ant4\_2452\_0~Reference



11AX40MIMO\_Ant4\_2452\_30~1000



11AX40MIMO\_Ant4\_2452\_1000~6000



11AX40MIMO\_Ant4\_2452\_6000~26500



### 3.4 6dB Bandwidth And 99% Occupied Bandwidth

#### 3.4.1 Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

#### 3.4.2 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: <input checked="" type="radio"/> : Test <input type="radio"/> : No Test |                                                  |

a) The EUT was connected to the tonscond test system, and the spectrum analyser is set as follow:

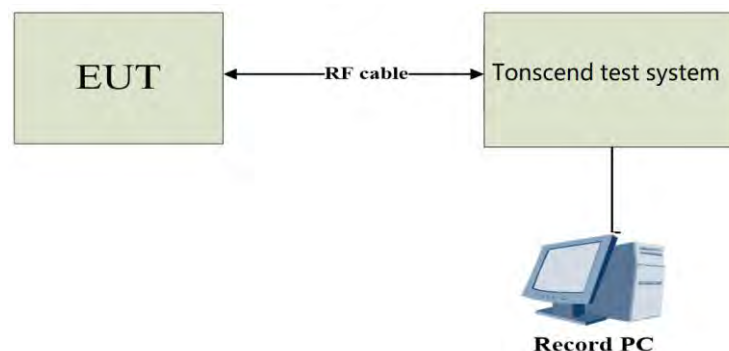
|                  |                                                                                                                    |
|------------------|--------------------------------------------------------------------------------------------------------------------|
| Centre Frequency | The centre frequency of the channel under test                                                                     |
| RBW              | For 6dB Bandwidth :100K<br>For 99% Occupied Bandwidth :1% to 5% of the occupied bandwidth                          |
| VBW              | For 6dB Bandwidth : $\geq 3 \times \text{RBW}$<br>For 99% Occupied Bandwidth : approximately $3 \times \text{RBW}$ |
| Frequency span   | 2x Nominal Channel Bandwidth                                                                                       |
| Detector Mode    | Peak                                                                                                               |
| Trace Mode       | Max Hold                                                                                                           |
| Sweep Time       | Auto Couple                                                                                                        |

b) Wait for the trace to stabilize then find the peak value of the trace and place the analyser marker on this peak.

c) Use the -6dB bandwidth function of the spectrum analyser to measure the 6dB Bandwidth of the EUT. This value shall be recorded.

d) Make sure that the power envelope is sufficiently above the noise floor of the analyser to avoid the noise signals left and right from the power envelope being taken into account by this measurement.

#### 3.4.3 Test Setup



### 3.4.4 Test Result

#### DTS Bandwidth

| TestMode   | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|------------|---------|----------------|--------------|----------|----------|------------|---------|
| 11B-MIMO   | Ant1    | 2412           | 7.080        | 2408.440 | 2415.520 | 0.5        | PASS    |
|            |         | 2437           | 7.040        | 2433.480 | 2440.520 | 0.5        | PASS    |
|            | Ant4    | 2437           | 6.560        | 2433.480 | 2440.040 | 0.5        | PASS    |
|            | Ant1    | 2462           | 7.040        | 2458.480 | 2465.520 | 0.5        | PASS    |
|            | Ant4    | 2462           | 7.000        | 2458.520 | 2465.520 | 0.5        | PASS    |
| 11G-MIMO   | Ant1    | 2412           | 16.360       | 2403.800 | 2420.160 | 0.5        | PASS    |
|            | Ant4    | 2412           | 16.360       | 2403.800 | 2420.160 | 0.5        | PASS    |
|            | Ant1    | 2437           | 16.360       | 2428.800 | 2445.160 | 0.5        | PASS    |
|            | Ant4    | 2437           | 16.360       | 2428.800 | 2445.160 | 0.5        | PASS    |
|            | Ant1    | 2462           | 16.320       | 2453.840 | 2470.160 | 0.5        | PASS    |
|            | Ant4    | 2462           | 16.320       | 2453.840 | 2470.160 | 0.5        | PASS    |
| 11N20MIMO  | Ant1    | 2412           | 17.600       | 2403.200 | 2420.800 | 0.5        | PASS    |
|            | Ant4    | 2412           | 17.560       | 2403.200 | 2420.760 | 0.5        | PASS    |
|            | Ant1    | 2437           | 17.560       | 2428.200 | 2445.760 | 0.5        | PASS    |
|            | Ant4    | 2437           | 17.600       | 2428.200 | 2445.800 | 0.5        | PASS    |
|            | Ant1    | 2462           | 17.600       | 2453.200 | 2470.800 | 0.5        | PASS    |
|            | Ant4    | 2462           | 17.600       | 2453.200 | 2470.800 | 0.5        | PASS    |
| 11N40MIMO  | Ant1    | 2422           | 36.320       | 2403.840 | 2440.160 | 0.5        | PASS    |
|            | Ant4    | 2422           | 36.320       | 2403.840 | 2440.160 | 0.5        | PASS    |
|            | Ant1    | 2437           | 36.320       | 2418.840 | 2455.160 | 0.5        | PASS    |
|            | Ant4    | 2437           | 36.320       | 2418.840 | 2455.160 | 0.5        | PASS    |
|            | Ant1    | 2452           | 36.320       | 2433.840 | 2470.160 | 0.5        | PASS    |
|            | Ant4    | 2452           | 36.160       | 2433.840 | 2470.000 | 0.5        | PASS    |
| 11AX20MIMO | Ant1    | 2412           | 18.840       | 2402.640 | 2421.480 | 0.5        | PASS    |
|            | Ant4    | 2412           | 18.960       | 2402.520 | 2421.480 | 0.5        | PASS    |
|            | Ant1    | 2437           | 18.720       | 2427.760 | 2446.480 | 0.5        | PASS    |
|            | Ant4    | 2437           | 18.920       | 2427.520 | 2446.440 | 0.5        | PASS    |
|            | Ant1    | 2462           | 18.920       | 2452.560 | 2471.480 | 0.5        | PASS    |
|            | Ant4    | 2462           | 19.040       | 2452.480 | 2471.520 | 0.5        | PASS    |
| 11AX40MIMO | Ant1    | 2422           | 36.960       | 2403.280 | 2440.240 | 0.5        | PASS    |
|            | Ant4    | 2422           | 37.520       | 2403.200 | 2440.720 | 0.5        | PASS    |
|            | Ant1    | 2437           | 37.280       | 2418.200 | 2455.480 | 0.5        | PASS    |
|            | Ant4    | 2437           | 37.600       | 2418.200 | 2455.800 | 0.5        | PASS    |
|            | Ant1    | 2452           | 37.200       | 2433.360 | 2470.560 | 0.5        | PASS    |
|            | Ant4    | 2452           | 37.600       | 2433.200 | 2470.800 | 0.5        | PASS    |

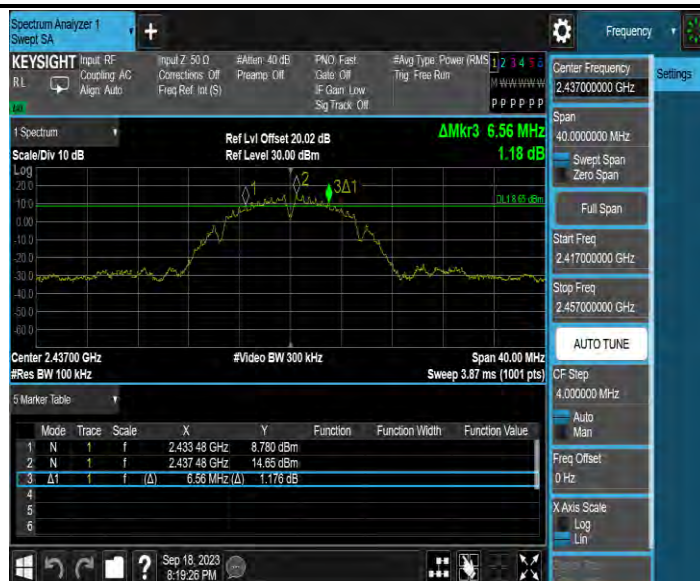
### 11B-MIMO\_Ant1\_2412



### 11B-MIMO\_Ant1\_2437



### 11B-MIMO\_Ant4\_2437



11B-MIMO\_Ant1\_2462



11B-MIMO\_Ant4\_2462



11G-MIMO\_Ant1\_2412



11G-MIMO\_Ant4\_2412