

### 11N20MIMO\_Ant3\_2462\_1000~26500



### 11N40MIMO\_Ant1\_2422\_0~Reference



# 11N40MIMO\_Ant1\_2422\_30~1000



# 11N40MIMO\_Ant1\_2422\_1000~26500





# 11N40MIMO\_Ant2\_2422\_0~Reference



# 11N40MIMO\_Ant2\_2422\_30~1000



### 11N40MIMO\_Ant2\_2422\_1000~26500

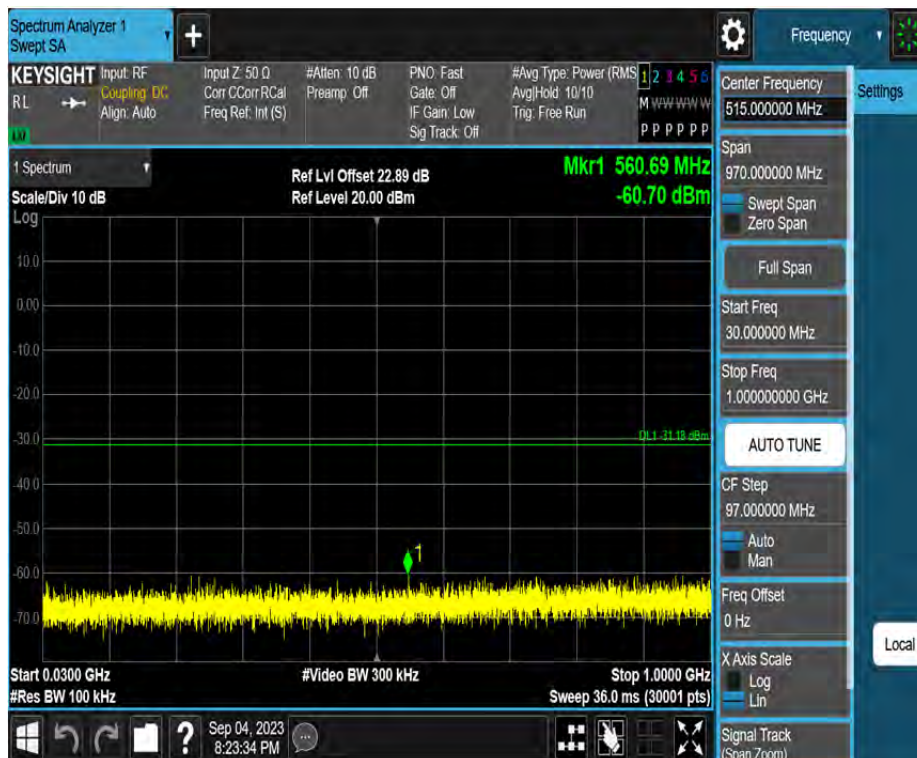


### 11N40MIMO\_Ant3\_2422\_0~Reference





# 11N40MIMO\_Ant3\_2422\_30~1000



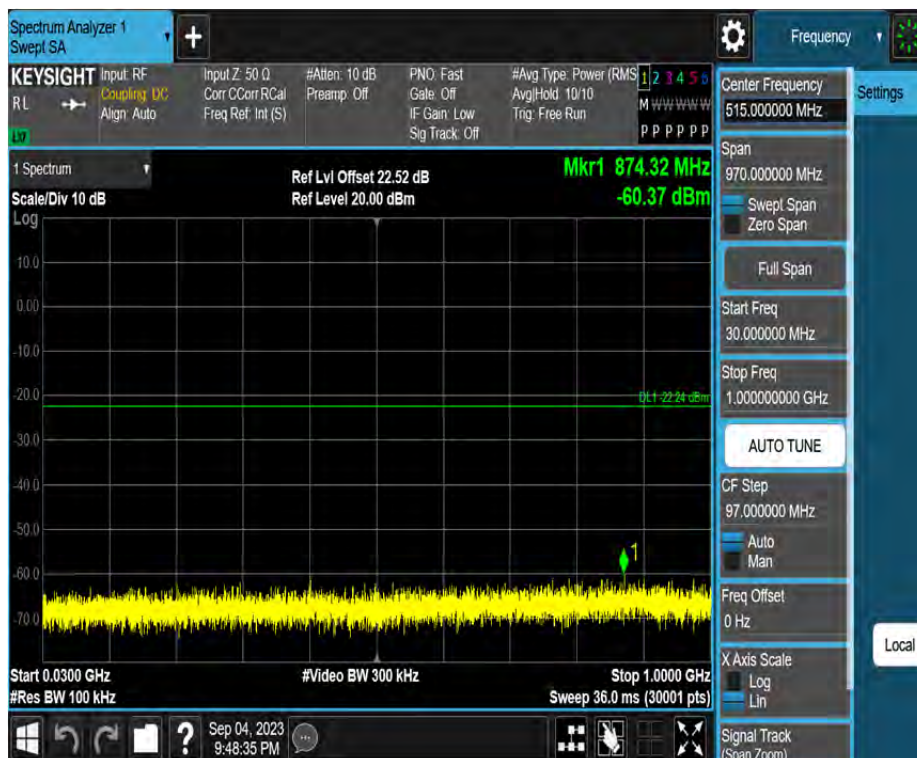
# 11N40MIMO\_Ant3\_2422\_1000~26500



### 11N40MIMO\_Ant1\_2437\_0~Reference



### 11N40MIMO\_Ant1\_2437\_30~1000





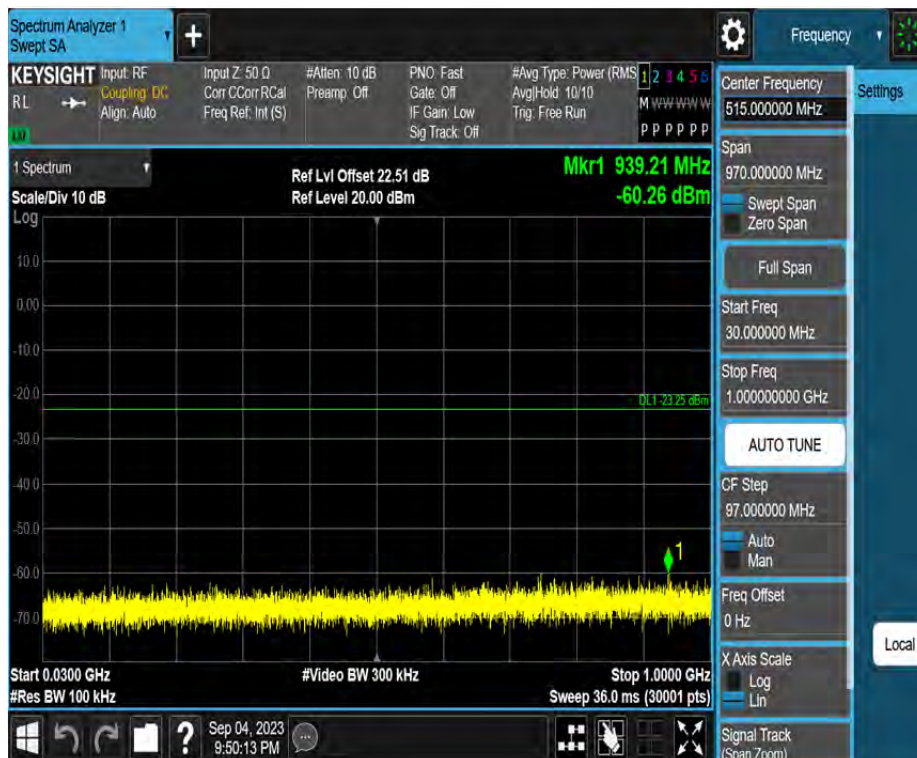
### 11N40MIMO\_Ant1\_2437\_1000~26500



### 11N40MIMO\_Ant2\_2437\_0~Reference



# 11N40MIMO\_Ant2\_2437\_30~1000



# 11N40MIMO\_Ant2\_2437\_1000~26500

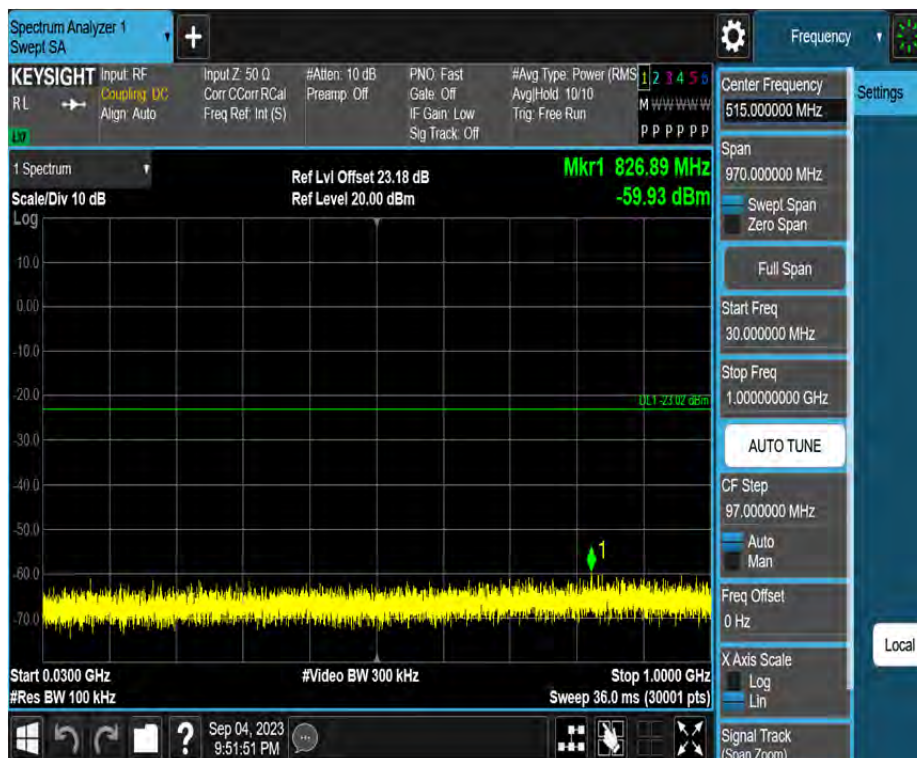




### 11N40MIMO\_Ant3\_2437\_0~Reference



### 11N40MIMO\_Ant3\_2437\_30~1000



### 11N40MIMO\_Ant3\_2437\_1000~26500

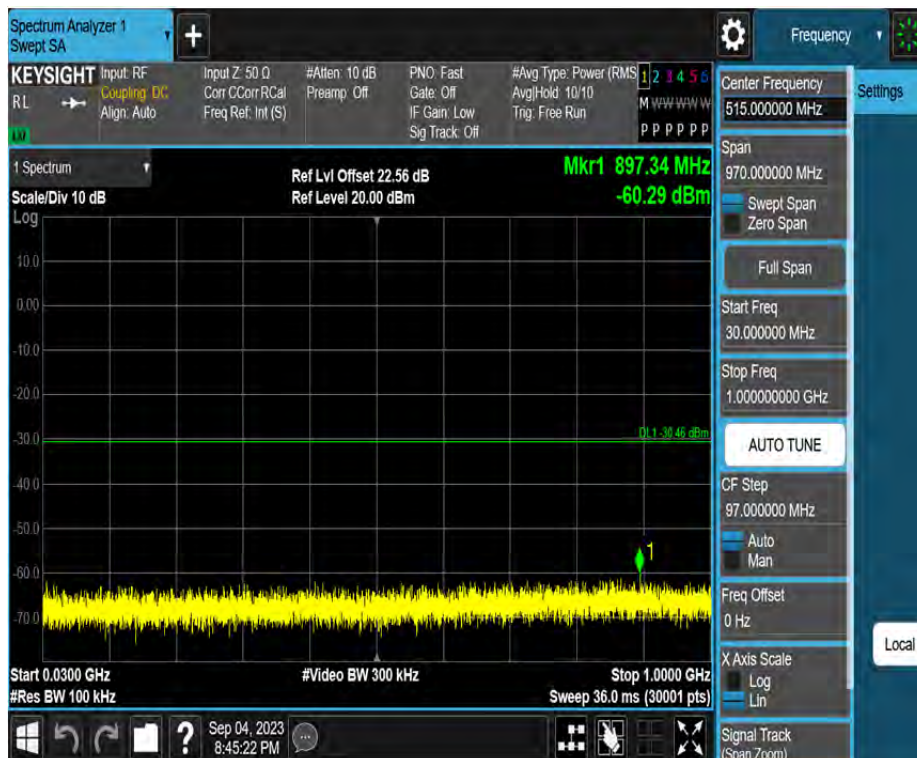


### 11N40MIMO\_Ant1\_2452\_0~Reference





# 11N40MIMO\_Ant1\_2452\_30~1000



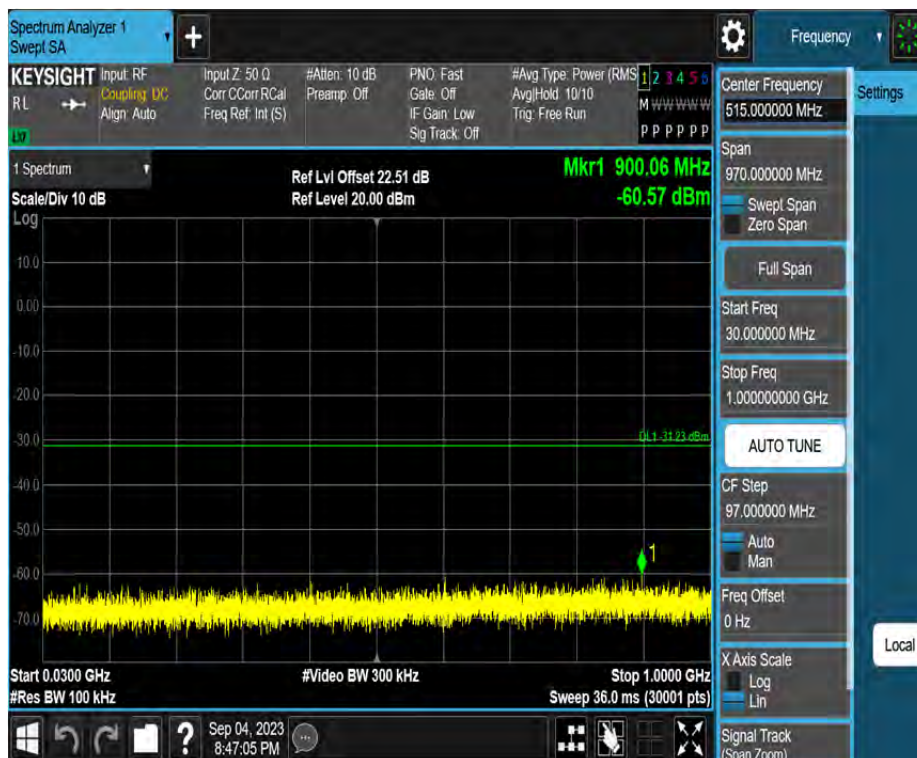
# 11N40MIMO\_Ant1\_2452\_1000~26500



### 11N40MIMO\_Ant2\_2452\_0~Reference



### 11N40MIMO\_Ant2\_2452\_30~1000





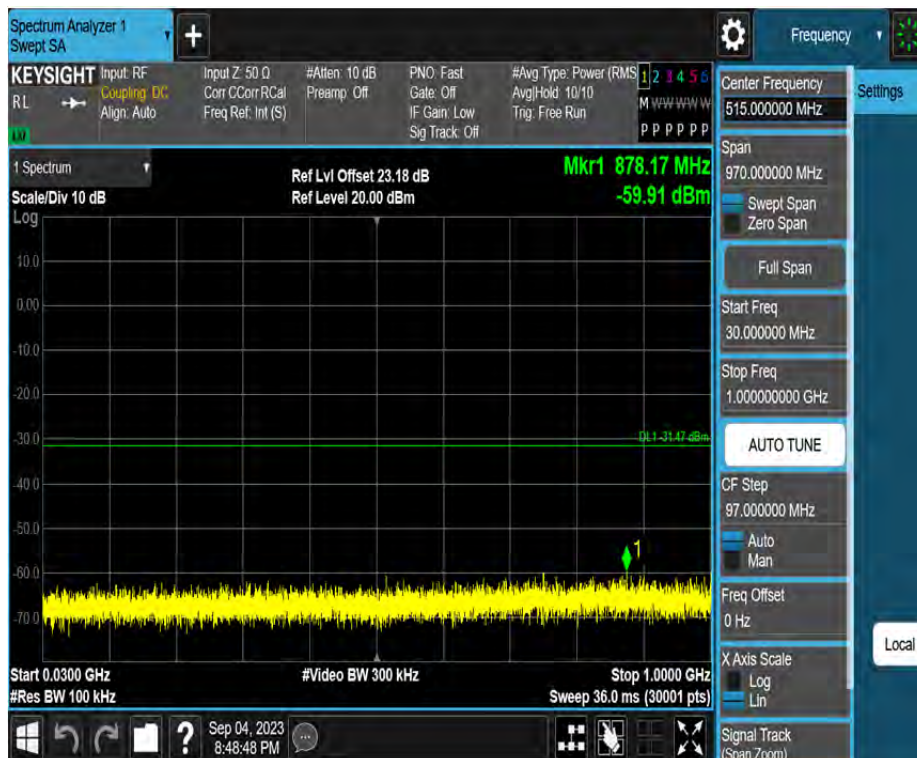
### 11N40MIMO\_Ant2\_2452\_1000~26500



### 11N40MIMO\_Ant3\_2452\_0~Reference



### 11N40MIMO\_Ant3\_2452\_30~1000



### 11N40MIMO\_Ant3\_2452\_1000~26500





11AX20MIMO\_Ant1\_2412\_0~Reference



11AX20MIMO\_Ant1\_2412\_30~1000



# 11AX20MIMO\_Ant1\_2412\_1000~26500



# 11AX20MIMO\_Ant2\_2412\_0~Reference





### 11AX20MIMO\_Ant2\_2412\_30~1000



### 11AX20MIMO\_Ant2\_2412\_1000~26500



# 11AX20MIMO\_Ant3\_2412\_0~Reference



# 11AX20MIMO\_Ant3\_2412\_30~1000





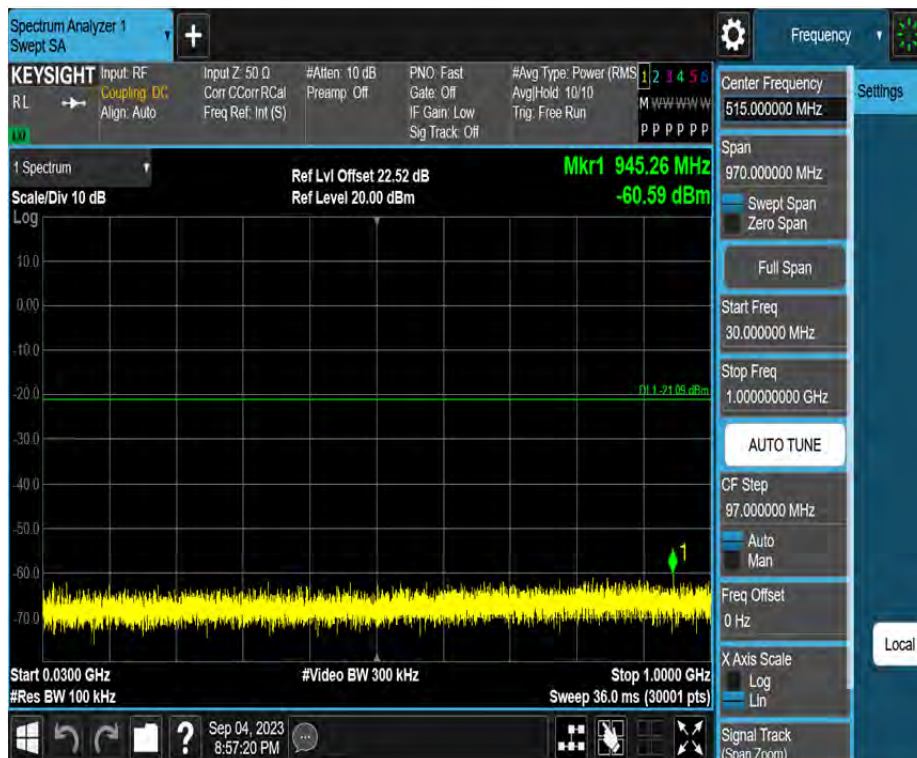
# 11AX20MIMO\_Ant3\_2412\_1000~26500



# 11AX20MIMO\_Ant1\_2437\_0~Reference



# 11AX20MIMO\_Ant1\_2437\_30~1000



# 11AX20MIMO\_Ant1\_2437\_1000~26500

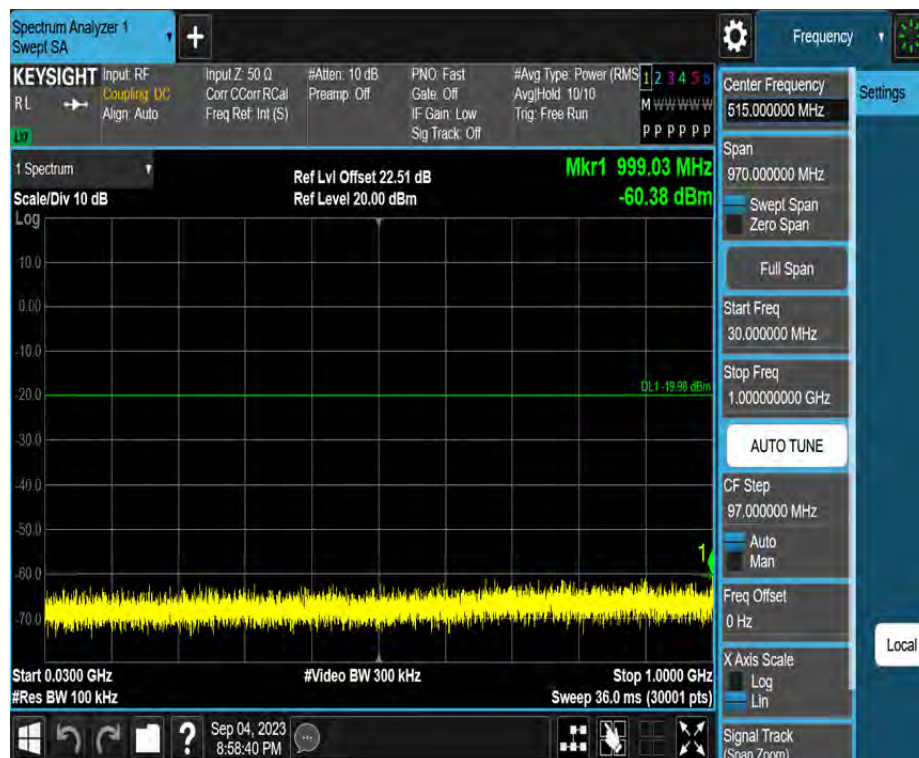




# 11AX20MIMO\_Ant2\_2437\_0~Reference



# 11AX20MIMO\_Ant2\_2437\_30~1000



# 11AX20MIMO\_Ant2\_2437\_1000~26500

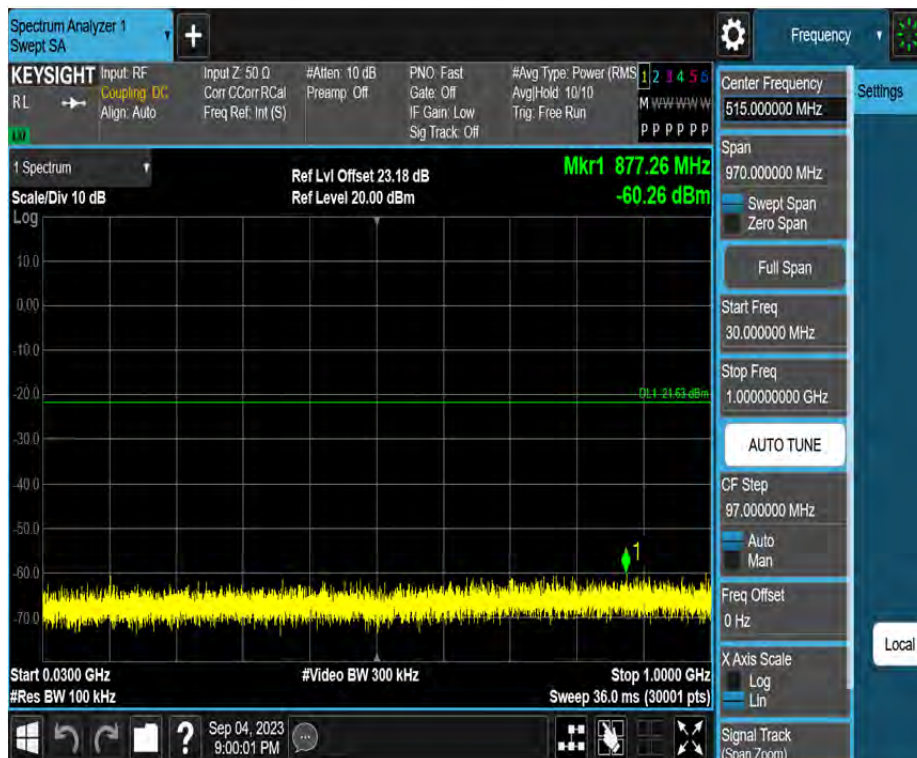


# 11AX20MIMO\_Ant3\_2437\_0~Reference





### 11AX20MIMO\_Ant3\_2437\_30~1000



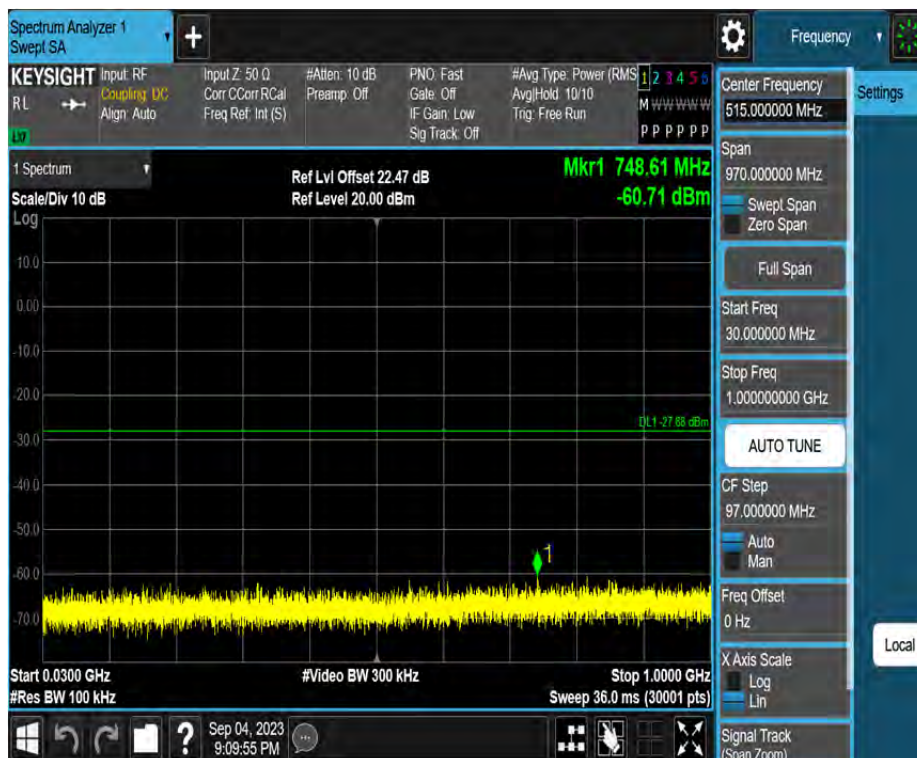
### 11AX20MIMO\_Ant3\_2437\_1000~26500



# 11AX20MIMO\_Ant1\_2462\_0~Reference



# 11AX20MIMO\_Ant1\_2462\_30~1000





# 11AX20MIMO\_Ant1\_2462\_1000~26500



# 11AX20MIMO\_Ant2\_2462\_0~Reference



# 11AX20MIMO\_Ant2\_2462\_30~1000



# 11AX20MIMO\_Ant2\_2462\_1000~26500

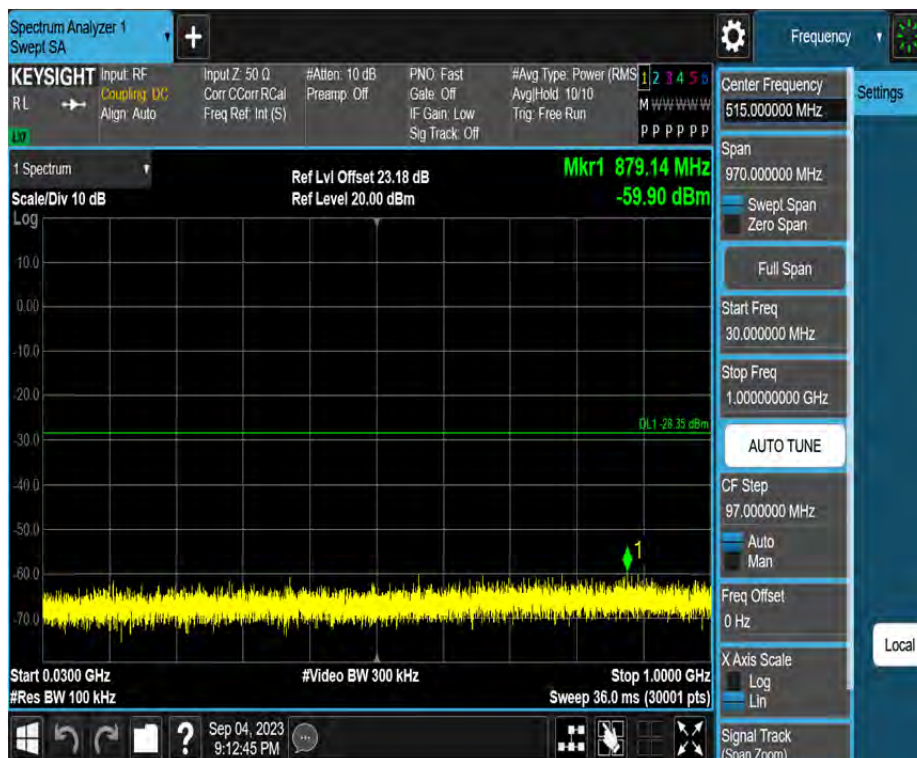




# 11AX20MIMO\_Ant3\_2462\_0~Reference



# 11AX20MIMO\_Ant3\_2462\_30~1000



### 11AX20MIMO\_Ant3\_2462\_1000~26500

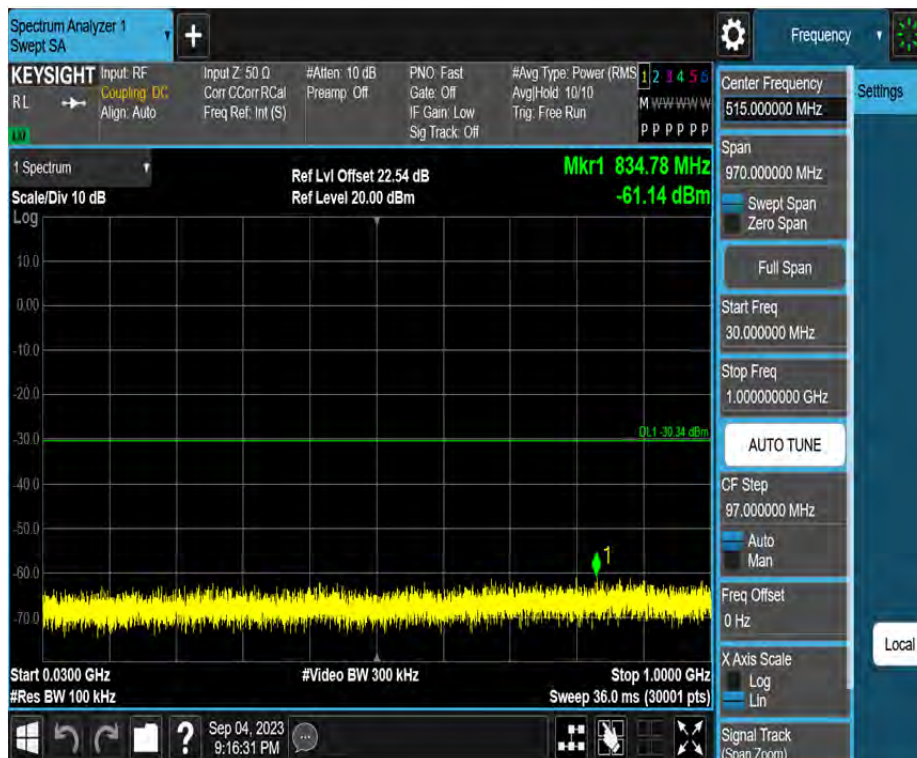


### 11AX40MIMO\_Ant1\_2422\_0~Reference





# 11AX40MIMO\_Ant1\_2422\_30~1000



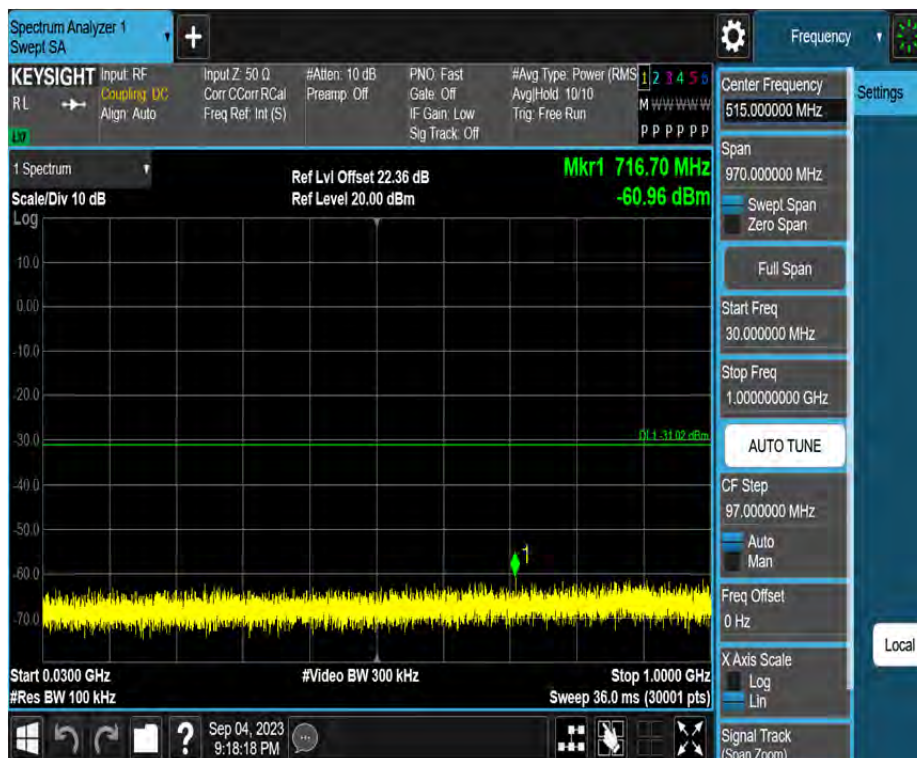
# 11AX40MIMO\_Ant1\_2422\_1000~26500



# 11AX40MIMO\_Ant2\_2422\_0~Reference



# 11AX40MIMO\_Ant2\_2422\_30~1000





# 11AX40MIMO\_Ant2\_2422\_1000~26500



# 11AX40MIMO\_Ant3\_2422\_0~Reference



### 11AX40MIMO\_Ant3\_2422\_30~1000



### 11AX40MIMO\_Ant3\_2422\_1000~26500





# 11AX40MIMO\_Ant1\_2437\_0~Reference



# 11AX40MIMO\_Ant1\_2437\_30~1000



### 11AX40MIMO\_Ant1\_2437\_1000~26500

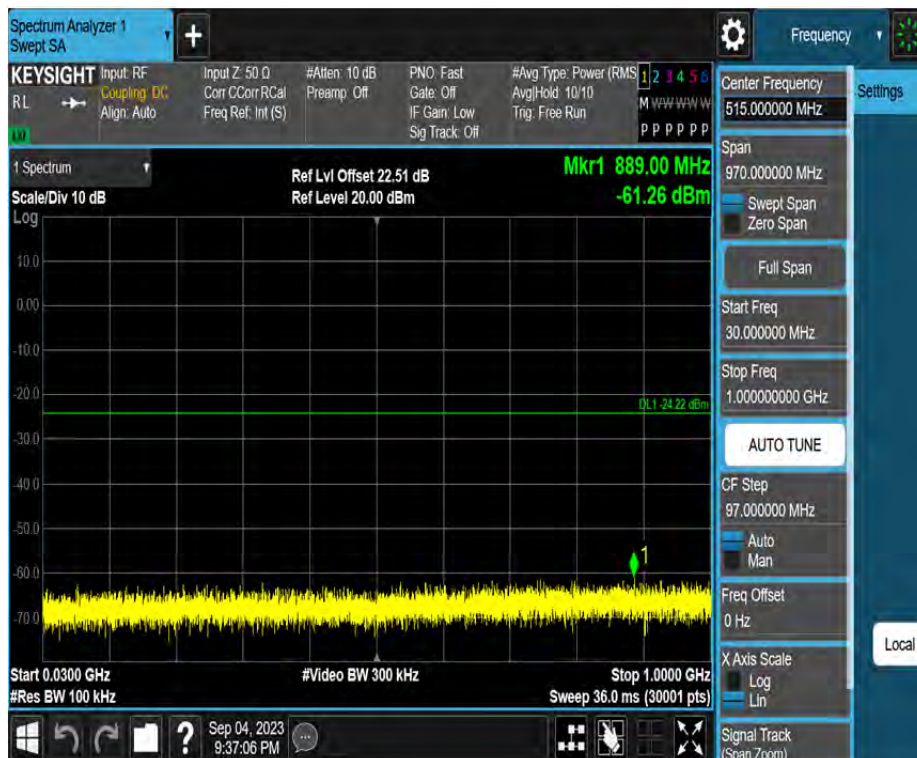


### 11AX40MIMO\_Ant2\_2437\_0~Reference





### 11AX40MIMO\_Ant2\_2437\_30~1000



### 11AX40MIMO\_Ant2\_2437\_1000~26500



# 11AX40MIMO\_Ant3\_2437\_0~Reference



# 11AX40MIMO\_Ant3\_2437\_30~1000





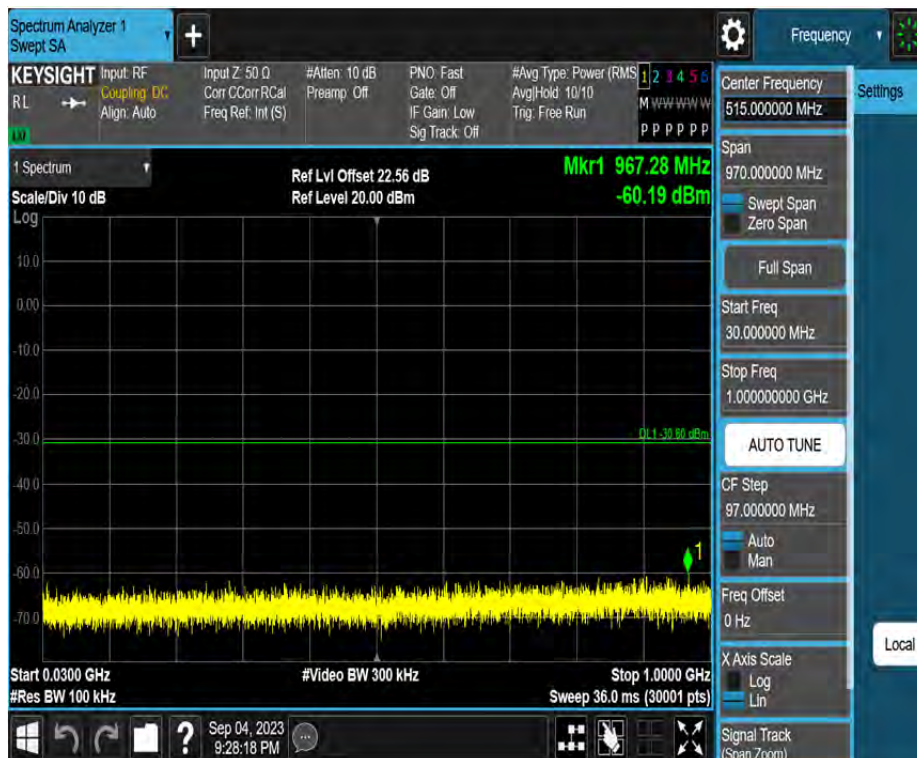
# 11AX40MIMO\_Ant3\_2437\_1000~26500



# 11AX40MIMO\_Ant1\_2452\_0~Reference



### 11AX40MIMO\_Ant1\_2452\_30~1000



### 11AX40MIMO\_Ant1\_2452\_1000~26500

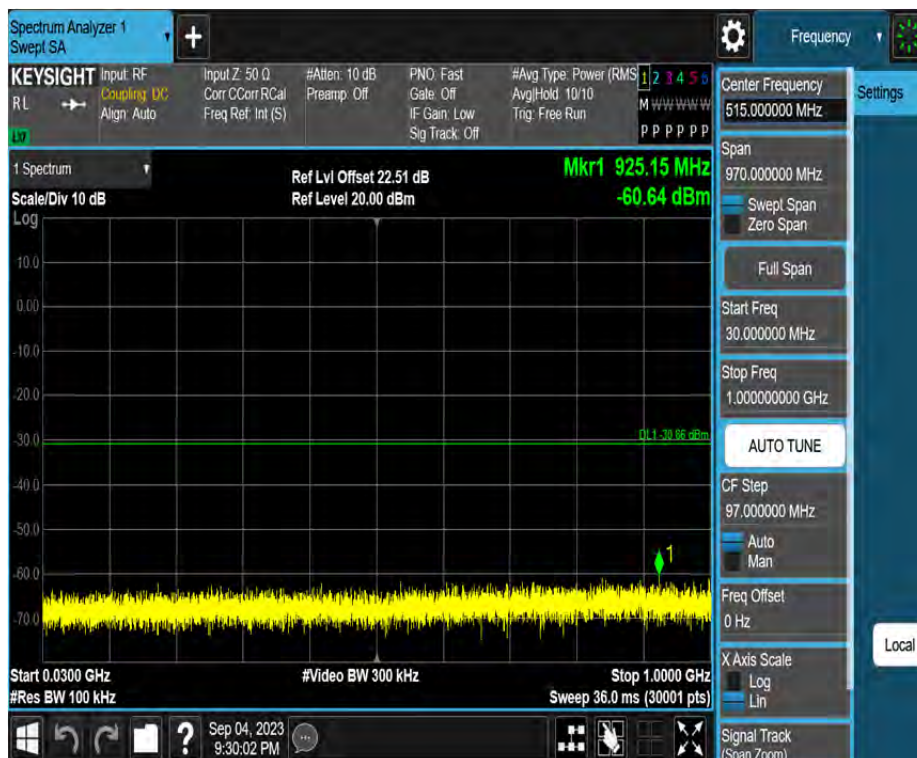




# 11AX40MIMO\_Ant2\_2452\_0~Reference



# 11AX40MIMO\_Ant2\_2452\_30~1000



### 11AX40MIMO\_Ant2\_2452\_1000~26500

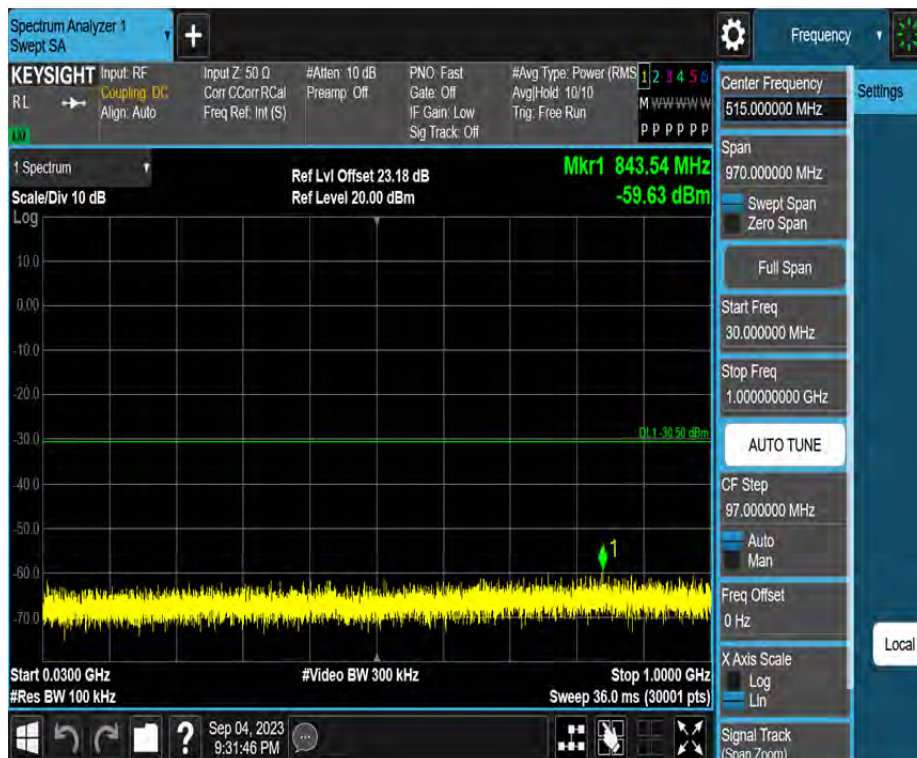


### 11AX40MIMO\_Ant3\_2452\_0~Reference





### 11AX40MIMO\_Ant3\_2452\_30~1000



### 11AX40MIMO\_Ant3\_2452\_1000~26500



## Band edge

11B\_Ant1\_Low\_2412



11B\_Ant2\_Low\_2412





### 11B\_Ant3\_Low\_2412



### 11B\_Ant1\_High\_2462



11B\_Ant2\_High\_2462



11B\_Ant3\_High\_2462





### 11G\_Ant1\_Low\_2412



### 11G\_Ant2\_Low\_2412



### 11G\_Ant3\_Low\_2412



### 11G\_Ant1\_High\_2462





### 11G\_Ant2\_High\_2462



### 11G\_Ant3\_High\_2462



### 11N20MIMO\_Ant1\_Low\_2412



### 11N20MIMO\_Ant2\_Low\_2412





### 11N20MIMO\_Ant3\_Low\_2412



### 11N20MIMO\_Ant1\_High\_2462



### 11N20MIMO\_Ant2\_High\_2462



### 11N20MIMO\_Ant3\_High\_2462





### 11N40MIMO\_Ant1\_Low\_2422



### 11N40MIMO\_Ant2\_Low\_2422



### 11N40MIMO\_Ant3\_Low\_2422



### 11N40MIMO\_Ant1\_High\_2452





### 11N40MIMO\_Ant2\_High\_2452



### 11N40MIMO\_Ant3\_High\_2452



### 11AX20MIMO\_Ant1\_Low\_2412



### 11AX20MIMO\_Ant2\_Low\_2412





### 11AX20MIMO\_Ant3\_Low\_2412



### 11AX20MIMO\_Ant1\_High\_2462



### 11AX20MIMO\_Ant2\_High\_2462



### 11AX20MIMO\_Ant3\_High\_2462





### 11AX40MIMO\_Ant1\_Low\_2422



### 11AX40MIMO\_Ant2\_Low\_2422



### 11AX40MIMO\_Ant3\_Low\_2422



### 11AX40MIMO\_Ant1\_High\_2452





### 11AX40MIMO\_Ant2\_High\_2452



### 11AX40MIMO\_Ant3\_High\_2452



### 3.4 6dB 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:

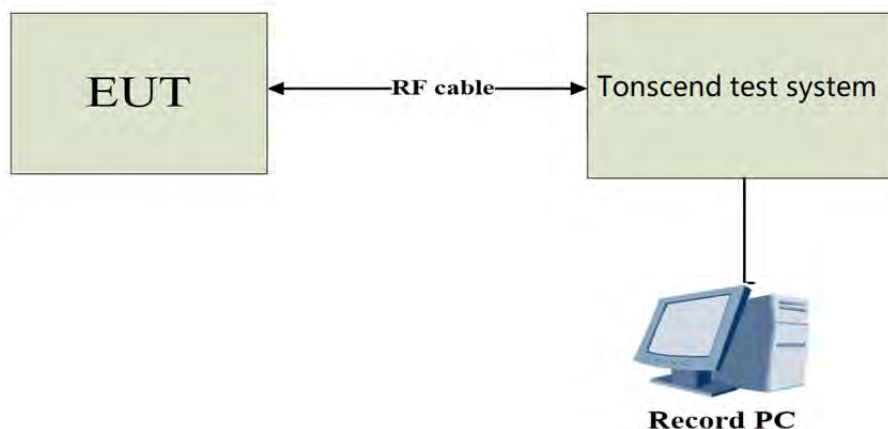
|                  |                                                |
|------------------|------------------------------------------------|
| Centre Frequency | The centre frequency of the channel under test |
| RBW              | 100kHz                                         |
| VBW              | 300kHz                                         |
| 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

| Test Mode  | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|------------|---------|----------------|--------------|----------|----------|------------|---------|
| 11B-CDD    | Ant1    | 2412           | 6.560        | 2408.480 | 2415.040 | 0.5        | PASS    |
|            | Ant2    | 2412           | 7.000        | 2408.480 | 2415.480 | 0.5        | PASS    |
|            | Ant3    | 2412           | 6.080        | 2408.960 | 2415.040 | 0.5        | PASS    |
|            | Ant1    | 2437           | 6.560        | 2433.960 | 2440.520 | 0.5        | PASS    |
|            | Ant2    | 2437           | 6.560        | 2433.960 | 2440.520 | 0.5        | PASS    |
|            | Ant3    | 2437           | 6.560        | 2433.480 | 2440.040 | 0.5        | PASS    |
|            | Ant1    | 2462           | 6.520        | 2458.520 | 2465.040 | 0.5        | PASS    |
|            | Ant2    | 2462           | 7.040        | 2458.480 | 2465.520 | 0.5        | PASS    |
|            | Ant3    | 2462           | 6.040        | 2458.960 | 2465.000 | 0.5        | PASS    |
| 11G-CDD    | Ant1    | 2412           | 16.000       | 2403.880 | 2419.880 | 0.5        | PASS    |
|            | Ant2    | 2412           | 15.720       | 2404.440 | 2420.160 | 0.5        | PASS    |
|            | Ant3    | 2412           | 16.280       | 2403.880 | 2420.160 | 0.5        | PASS    |
|            | Ant1    | 2437           | 16.040       | 2429.120 | 2445.160 | 0.5        | PASS    |
|            | Ant2    | 2437           | 15.720       | 2429.440 | 2445.160 | 0.5        | PASS    |
|            | Ant3    | 2437           | 16.280       | 2428.880 | 2445.160 | 0.5        | PASS    |
|            | Ant1    | 2462           | 16.040       | 2454.120 | 2470.160 | 0.5        | PASS    |
|            | Ant2    | 2462           | 16.280       | 2453.880 | 2470.160 | 0.5        | PASS    |
|            | Ant3    | 2462           | 16.280       | 2453.880 | 2470.160 | 0.5        | PASS    |
| 11N20MIMO  | Ant1    | 2412           | 17.280       | 2403.240 | 2420.520 | 0.5        | PASS    |
|            | Ant2    | 2412           | 17.560       | 2403.240 | 2420.800 | 0.5        | PASS    |
|            | Ant3    | 2412           | 17.200       | 2403.600 | 2420.800 | 0.5        | PASS    |
|            | Ant1    | 2437           | 16.920       | 2428.880 | 2445.800 | 0.5        | PASS    |
|            | Ant2    | 2437           | 17.560       | 2428.240 | 2445.800 | 0.5        | PASS    |
|            | Ant3    | 2437           | 17.560       | 2428.240 | 2445.800 | 0.5        | PASS    |
|            | Ant1    | 2462           | 17.560       | 2453.240 | 2470.800 | 0.5        | PASS    |
|            | Ant2    | 2462           | 17.560       | 2453.240 | 2470.800 | 0.5        | PASS    |
|            | Ant3    | 2462           | 17.560       | 2453.240 | 2470.800 | 0.5        | PASS    |
| 11N40MIMO  | Ant1    | 2422           | 35.920       | 2403.840 | 2439.760 | 0.5        | PASS    |
|            | Ant2    | 2422           | 35.760       | 2404.080 | 2439.840 | 0.5        | PASS    |
|            | Ant3    | 2422           | 35.840       | 2403.920 | 2439.760 | 0.5        | PASS    |
|            | Ant1    | 2437           | 35.760       | 2419.400 | 2455.160 | 0.5        | PASS    |
|            | Ant2    | 2437           | 35.920       | 2418.840 | 2454.760 | 0.5        | PASS    |
|            | Ant3    | 2437           | 35.520       | 2419.240 | 2454.760 | 0.5        | PASS    |
|            | Ant1    | 2452           | 35.360       | 2434.400 | 2469.760 | 0.5        | PASS    |
|            | Ant2    | 2452           | 36.240       | 2433.920 | 2470.160 | 0.5        | PASS    |
|            | Ant3    | 2452           | 35.360       | 2434.400 | 2469.760 | 0.5        | PASS    |
| 11AX20MIMO | Ant1    | 2412           | 18.200       | 2402.960 | 2421.160 | 0.5        | PASS    |
|            | Ant2    | 2412           | 18.160       | 2403.200 | 2421.360 | 0.5        | PASS    |

|            |      |      |        |          |          |     |      |
|------------|------|------|--------|----------|----------|-----|------|
|            | Ant3 | 2412 | 18.480 | 2402.840 | 2421.320 | 0.5 | PASS |
|            | Ant1 | 2437 | 18.280 | 2427.600 | 2445.880 | 0.5 | PASS |
|            | Ant2 | 2437 | 18.360 | 2427.920 | 2446.280 | 0.5 | PASS |
|            | Ant3 | 2437 | 18.280 | 2427.960 | 2446.240 | 0.5 | PASS |
|            | Ant1 | 2462 | 18.600 | 2452.680 | 2471.280 | 0.5 | PASS |
|            | Ant2 | 2462 | 18.720 | 2452.560 | 2471.280 | 0.5 | PASS |
|            | Ant3 | 2462 | 18.520 | 2452.840 | 2471.360 | 0.5 | PASS |
| 11AX40MIMO | Ant1 | 2422 | 37.280 | 2403.200 | 2440.480 | 0.5 | PASS |
|            | Ant2 | 2422 | 37.280 | 2403.520 | 2440.800 | 0.5 | PASS |
|            | Ant3 | 2422 | 36.800 | 2403.200 | 2440.000 | 0.5 | PASS |
|            | Ant1 | 2437 | 36.960 | 2418.520 | 2455.480 | 0.5 | PASS |
|            | Ant2 | 2437 | 36.720 | 2418.760 | 2455.480 | 0.5 | PASS |
|            | Ant3 | 2437 | 37.280 | 2418.200 | 2455.480 | 0.5 | PASS |
|            | Ant1 | 2452 | 37.200 | 2433.200 | 2470.400 | 0.5 | PASS |
|            | Ant2 | 2452 | 36.720 | 2433.760 | 2470.480 | 0.5 | PASS |
|            | Ant3 | 2452 | 36.960 | 2433.200 | 2470.160 | 0.5 | PASS |



11B\_Ant1\_2412



11B\_Ant2\_2412



### 11B\_Ant3\_2412



### 11B\_Ant1\_2437





11B\_Ant2\_2437



11B\_Ant3\_2437



11B\_Ant1\_2462



11B\_Ant2\_2462





### 11B\_Ant3\_2462



### 11G\_Ant1\_2412

