



11BE40MIMO_Ant2_Low_2422



11BE40MIMO_Ant1_High_2452



11BE40MIMO_Ant2_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	
☒ Conducted Measurement	☐ Radiated Measurement
Test Channels	
☒ Lowest, Middle and Highest Channel	☐ Lowest and Highest Channel
Environmental conditions	
☒ Normal	☐ Normal and Extreme
Note: ● : Test ○ : No Test	

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

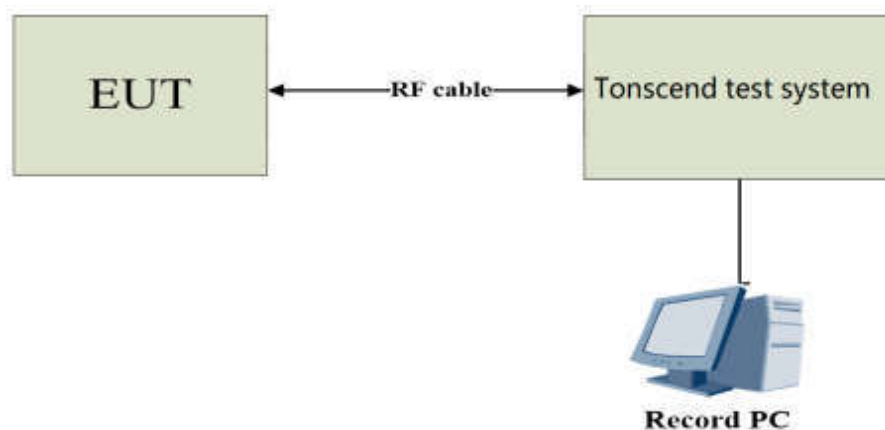
Centre Frequency	The centre frequency of the channel under test
RBW	100kHz
VBW	300kHz
Frequency span	2x Nominal Channel Bandwidth
Detector Mode	Peak
Trace Mode	Max Hold
Sweep Time	Auto Couple

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

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B-CDD	Ant1	2412	7.560	2408.480	2416.040	0.5	PASS
	Ant2	2412	7.080	2408.480	2415.560	0.5	PASS
	Ant1	2437	7.520	2433.040	2440.560	0.5	PASS
	Ant2	2437	8.040	2433.000	2441.040	0.5	PASS
	Ant1	2462	7.080	2458.480	2465.560	0.5	PASS
	Ant2	2462	7.080	2458.480	2465.560	0.5	PASS
11G-CDD	Ant1	2412	16.360	2403.840	2420.200	0.5	PASS
	Ant2	2412	16.360	2403.840	2420.200	0.5	PASS
	Ant1	2437	16.360	2428.840	2445.200	0.5	PASS
	Ant2	2437	16.360	2428.840	2445.200	0.5	PASS
	Ant1	2462	16.360	2453.840	2470.200	0.5	PASS
	Ant2	2462	16.360	2453.840	2470.200	0.5	PASS
11N20MIMO	Ant1	2412	17.560	2403.240	2420.800	0.5	PASS
	Ant2	2412	17.600	2403.240	2420.840	0.5	PASS
	Ant1	2437	17.560	2428.240	2445.800	0.5	PASS
	Ant2	2437	17.600	2428.240	2445.840	0.5	PASS
	Ant1	2462	17.640	2453.200	2470.840	0.5	PASS
	Ant2	2462	17.600	2453.200	2470.800	0.5	PASS
11N40MIMO	Ant1	2422	36.240	2403.920	2440.160	0.5	PASS
	Ant2	2422	35.920	2404.240	2440.160	0.5	PASS
	Ant1	2437	36.320	2418.840	2455.160	0.5	PASS
	Ant2	2437	36.320	2418.840	2455.160	0.5	PASS
	Ant1	2452	36.320	2433.840	2470.160	0.5	PASS
	Ant2	2452	36.320	2433.840	2470.160	0.5	PASS
11AX20MIMO	Ant1	2412	19.000	2402.520	2421.520	0.5	PASS
	Ant2	2412	19.000	2402.520	2421.520	0.5	PASS
	Ant1	2437	18.960	2427.560	2446.520	0.5	PASS
	Ant2	2437	19.000	2427.520	2446.520	0.5	PASS
	Ant1	2462	19.000	2452.520	2471.520	0.5	PASS
	Ant2	2462	19.040	2452.440	2471.480	0.5	PASS
11AX40MIMO	Ant1	2422	37.920	2403.040	2440.960	0.5	PASS
	Ant2	2422	37.600	2403.200	2440.800	0.5	PASS
	Ant1	2437	37.840	2418.040	2455.880	0.5	PASS
	Ant2	2437	37.840	2418.040	2455.880	0.5	PASS
	Ant1	2452	37.760	2433.040	2470.800	0.5	PASS
	Ant2	2452	37.760	2433.040	2470.800	0.5	PASS
11BE20MIMO	Ant1	2412	18.960	2402.560	2421.520	0.5	PASS
	Ant2	2412	18.920	2402.560	2421.480	0.5	PASS
	Ant1	2437	19.000	2427.520	2446.520	0.5	PASS

	Ant2	2437	18.960	2427.520	2446.480	0.5	PASS
	Ant1	2462	19.040	2452.480	2471.520	0.5	PASS
	Ant2	2462	19.000	2452.520	2471.520	0.5	PASS
11BE40MIMO	Ant1	2422	37.680	2403.200	2440.880	0.5	PASS
	Ant2	2422	37.280	2403.520	2440.800	0.5	PASS
	Ant1	2437	37.600	2418.120	2455.720	0.5	PASS
	Ant2	2437	37.680	2418.120	2455.800	0.5	PASS
	Ant1	2452	37.840	2433.040	2470.880	0.5	PASS
	Ant2	2452	37.760	2433.040	2470.800	0.5	PASS

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



11N20MIMO_Ant2_2412



11N20MIMO_Ant1_2437



11N20MIMO_Ant2_2437



11N20MIMO_Ant1_2462



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



11AX20MIMO_Ant2_2437



11AX20MIMO_Ant1_2462



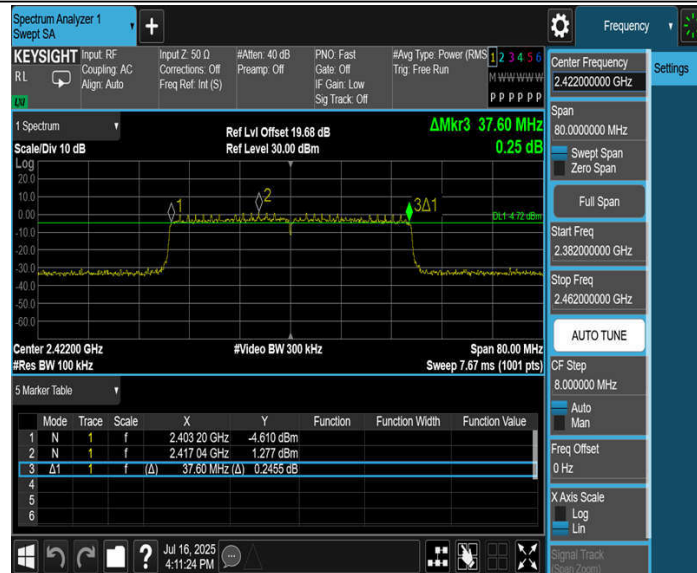
11AX20MIMO_Ant2_2462



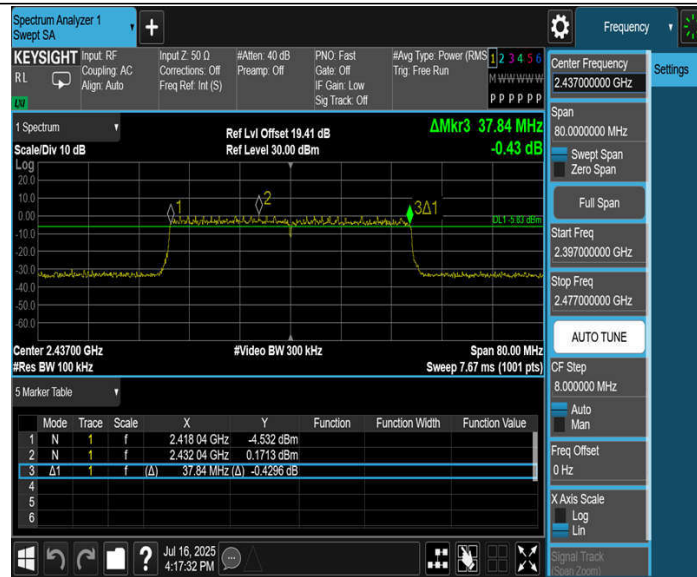
11AX40MIMO_Ant1_2422



11AX40MIMO_Ant2_2422



11AX40MIMO_Ant1_2437



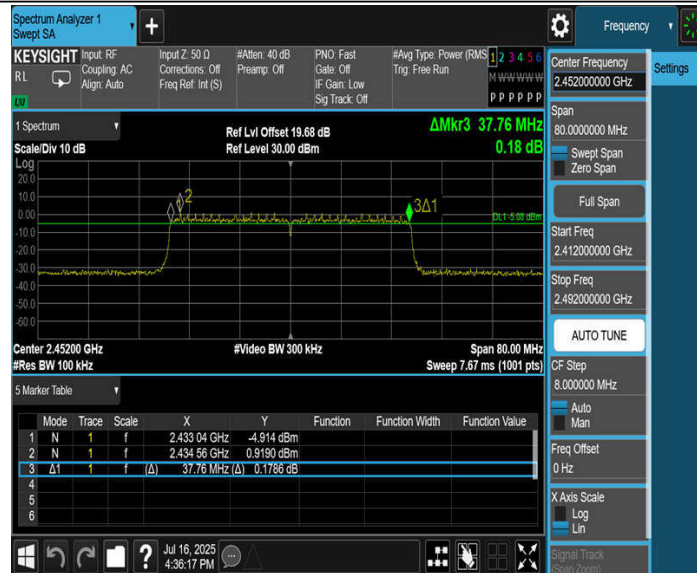
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11AX40MIMO_Ant1_2452



11AX40MIMO_Ant2_2452



11BE20MIMO_Ant1_2412



11BE20MIMO_Ant2_2412



11BE20MIMO_Ant1_2437



11BE20MIMO_Ant2_2437



11BE20MIMO_Ant1_2462



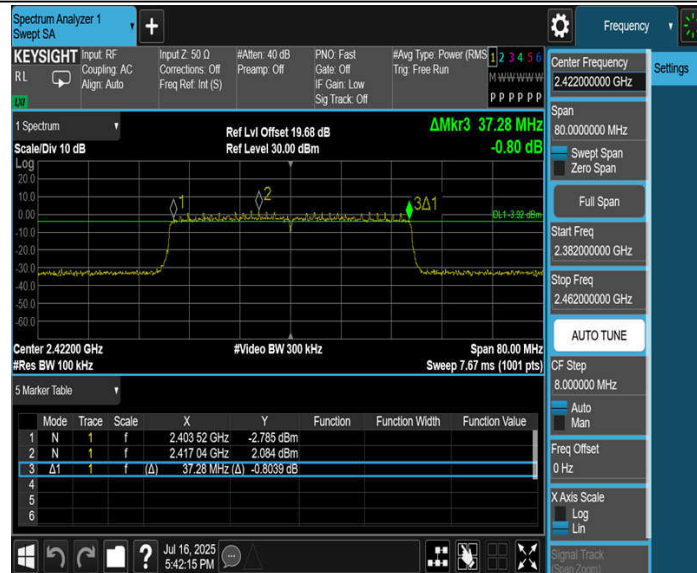
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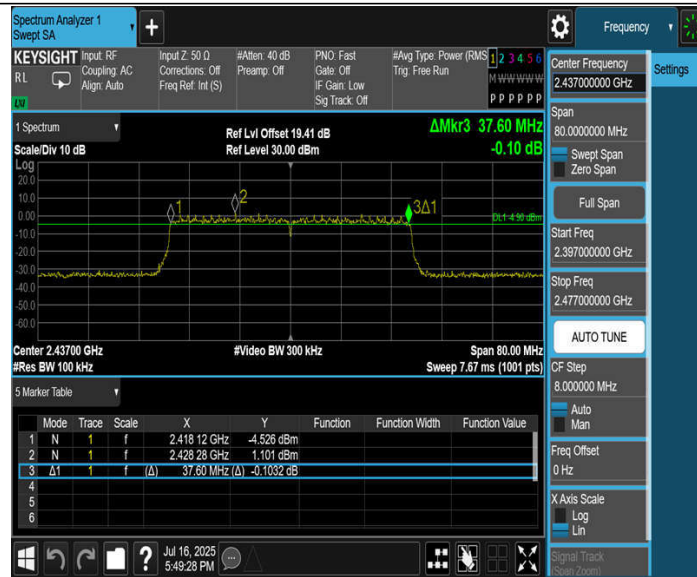
11BE40MIMO_Ant1_2422



11BE40MIMO_Ant2_2422



11BE40MIMO_Ant1_2437



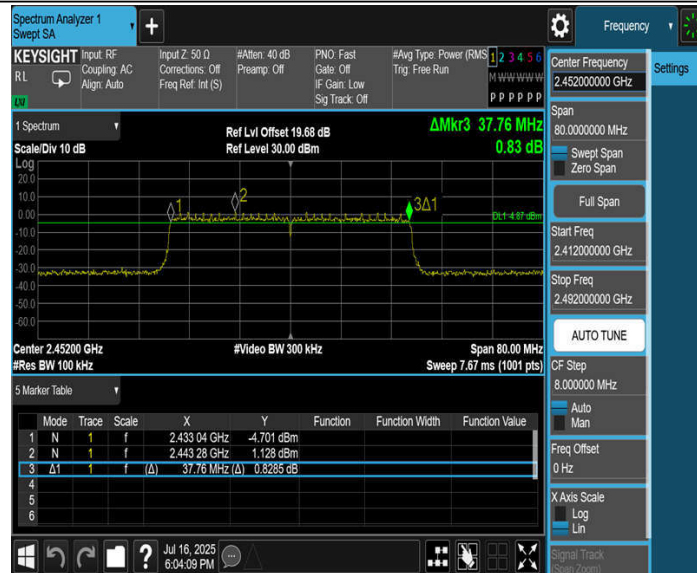
11BE40MIMO_Ant2_2437



11BE40MIMO_Ant1_2452



11BE40MIMO_Ant2_2452



Occupied Channel Bandwidth

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B-CDD	Ant1	2412	10.735	2406.6987	2417.4337	---	---
	Ant2	2412	10.746	2406.7238	2417.4698	---	---
	Ant1	2437	11.902	2431.0442	2442.9462	---	---
	Ant2	2437	12.222	2430.8625	2443.0845	---	---
	Ant1	2462	10.264	2456.8790	2467.1430	---	---
	Ant2	2462	10.247	2456.8867	2467.1337	---	---
11G-CDD	Ant1	2412	16.545	2403.7541	2420.2991	---	---
	Ant2	2412	16.526	2403.7856	2420.3116	---	---
	Ant1	2437	16.561	2428.7289	2445.2899	---	---
	Ant2	2437	16.552	2428.7403	2445.2923	---	---
	Ant1	2462	17.552	2453.1885	2470.7405	---	---
	Ant2	2462	17.224	2453.3775	2470.6015	---	---
11N20MIMO	Ant1	2412	17.733	2403.1620	2420.8950	---	---
	Ant2	2412	17.705	2403.1950	2420.9000	---	---
	Ant1	2437	17.765	2428.1320	2445.8970	---	---
	Ant2	2437	17.737	2428.1449	2445.8819	---	---
	Ant1	2462	17.749	2453.1539	2470.9029	---	---
	Ant2	2462	17.736	2453.1452	2470.8812	---	---
11N40MIMO	Ant1	2422	36.185	2403.9273	2440.1123	---	---
	Ant2	2422	36.183	2403.9332	2440.1162	---	---
	Ant1	2437	36.226	2418.8814	2455.1074	---	---
	Ant2	2437	36.236	2418.8834	2455.1194	---	---
	Ant1	2452	36.240	2433.8817	2470.1217	---	---
	Ant2	2452	36.254	2433.8784	2470.1324	---	---
11AX20MIMO	Ant1	2412	18.973	2402.5510	2421.5240	---	---
	Ant2	2412	19.005	2402.5389	2421.5439	---	---
	Ant1	2437	19.031	2427.4976	2446.5286	---	---
	Ant2	2437	19.030	2427.4988	2446.5288	---	---
	Ant1	2462	19.017	2452.5063	2471.5233	---	---
	Ant2	2462	18.997	2452.5158	2471.5128	---	---
11AX40MIMO	Ant1	2422	37.633	2403.2085	2440.8415	---	---
	Ant2	2422	37.626	2403.2086	2440.8346	---	---
	Ant1	2437	37.657	2418.1807	2455.8377	---	---
	Ant2	2437	37.703	2418.1439	2455.8469	---	---
	Ant1	2452	37.692	2433.1600	2470.8520	---	---
	Ant2	2452	37.719	2433.1471	2470.8661	---	---
11BE20MIMO	Ant1	2412	18.989	2402.5351	2421.5241	---	---
	Ant2	2412	18.991	2402.5394	2421.5304	---	---
	Ant1	2437	19.013	2427.5097	2446.5227	---	---