

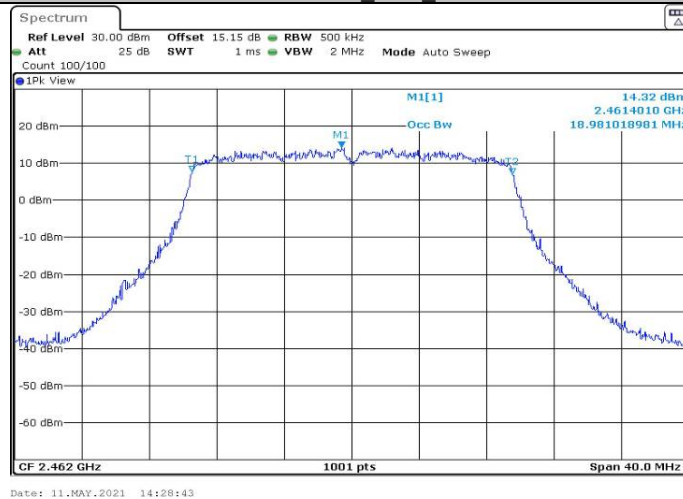
11AX20MIMO_Ant1_2412



11AX20MIMO_Ant1_2437



11AX20MIMO_Ant1_2462



11AX40MIMO_Ant1_2422



11AX40MIMO_Ant1_2437



11AX40MIMO_Ant1_2452



Appendix C: Maximum conducted Peak output power Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B-MIMO	Ant1	2412	20.43	<=29.5	PASS
	Ant2	2412	20.14	<=29.5	PASS
	total	2412	23.3	<=29.5	PASS
	Ant1	2437	20.43	<=29.5	PASS
	Ant2	2437	19.92	<=29.5	PASS
	total	2437	23.2	<=29.5	PASS
	Ant1	2462	20.92	<=29.5	PASS
	Ant2	2462	20.08	<=29.5	PASS
11G-MIMO	total	2462	23.5	<=29.5	PASS
	Ant1	2412	22.07	<=29.5	PASS
	Ant2	2412	21.81	<=29.5	PASS
	total	2412	25.0	<=29.5	PASS
	Ant1	2437	22.52	<=29.5	PASS
	Ant2	2437	21.50	<=29.5	PASS
	total	2437	25.1	<=29.5	PASS
	Ant1	2462	22.73	<=29.5	PASS
11N20MIMO	Ant2	2462	21.62	<=29.5	PASS
	total	2462	25.2	<=29.5	PASS
	Ant1	2412	21.29	<=29.5	PASS
	Ant2	2412	21.03	<=29.5	PASS
	total	2412	24.2	<=29.5	PASS
	Ant1	2437	21.48	<=29.5	PASS
	Ant2	2437	20.79	<=29.5	PASS
	total	2437	24.2	<=29.5	PASS
11N40MIMO	Ant1	2462	21.48	<=29.5	PASS
	Ant2	2462	20.89	<=29.5	PASS
	total	2462	24.2	<=29.5	PASS
	Ant1	2422	19.77	<=29.5	PASS
	Ant2	2422	19.56	<=29.5	PASS
	total	2422	22.7	<=29.5	PASS
	Ant1	2437	20.23	<=29.5	PASS
	Ant2	2437	19.20	<=29.5	PASS
11AX20MIMO	total	2437	22.8	<=29.5	PASS
	Ant1	2452	20.00	<=29.5	PASS
	Ant2	2452	19.34	<=29.5	PASS
	total	2452	22.7	<=29.5	PASS
	Ant1	2412	21.84	<=29.5	PASS
	Ant2	2412	21.13	<=29.5	PASS
	total	2412	24.5	<=29.5	PASS
	Ant1	2437	22.29	<=29.5	PASS
11AX40MIMO	Ant2	2437	21.36	<=29.5	PASS
	total	2437	24.9	<=29.5	PASS
	Ant1	2462	22.62	<=29.5	PASS
	Ant2	2462	21.40	<=29.5	PASS
	total	2462	25.1	<=29.5	PASS
	Ant1	2422	20.94	<=29.5	PASS
	Ant2	2422	20.10	<=29.5	PASS
	total	2422	23.6	<=29.5	PASS
	Ant1	2437	21.19	<=29.5	PASS
	Ant2	2437	20.11	<=29.5	PASS
	total	2437	23.7	<=29.5	PASS
	Ant1	2452	20.82	<=29.5	PASS

	Ant2	2452	20.90	<=29.5	PASS
	total	2452	23.9	<=29.5	PASS

Note:

The maximum antenna gain is 3.5dBi. And EUT support beamforming, the worst case for the limit as below:

Directional gain = $G_{ANT} + \text{Array Gain}$

Array Gain = $10 * \log(N_{ant}/N_{ss})$ dB

For the worst case, $N_{ss}=1$, so:

Directional gain = $3.5\text{dBi} + 10 * \log(2/1)\text{dB} = 6.5\text{dBi} > 6\text{dBi}$

So the limit should be reduce $(6.5-6)\text{dB} = 0.5\text{dB}$

The directional gain is 6.5dBi, the maximum conducted output power is 25.2dBm, the maximum EIRP is $25.2\text{dBm} + 6.5\text{dBi} = 31.7\text{dBm} < 36\text{dBm}$, so it's compliance with ISED EIRP limit.

Appendix D: Maximum power spectral density Test Result

TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B-MIMO	Ant1	2412	-3.55	<=7.5	PASS
	Ant2	2412	-3.42	<=7.5	PASS
	total	2412	-0.47	<=7.5	PASS
	Ant1	2437	-2.72	<=7.5	PASS
	Ant2	2437	-5.07	<=7.5	PASS
	total	2437	-0.73	<=7.5	PASS
	Ant1	2462	-1.26	<=7.5	PASS
	Ant2	2462	-3.02	<=7.5	PASS
11G-MIMO	total	2462	0.96	<=7.5	PASS
	Ant1	2412	-8.67	<=7.5	PASS
	Ant2	2412	-9.64	<=7.5	PASS
	total	2412	-6.12	<=7.5	PASS
	Ant1	2437	-7.75	<=7.5	PASS
	Ant2	2437	-9.84	<=7.5	PASS
	total	2437	-5.66	<=7.5	PASS
	Ant1	2462	-7.25	<=7.5	PASS
11N20MIMO	Ant2	2462	-10.01	<=7.5	PASS
	total	2462	-5.40	<=7.5	PASS
	Ant1	2412	-8.1	<=7.5	PASS
	Ant2	2412	-9.79	<=7.5	PASS
	total	2412	-5.85	<=7.5	PASS
	Ant1	2437	-7.93	<=7.5	PASS
	Ant2	2437	-9.58	<=7.5	PASS
	total	2437	-5.67	<=7.5	PASS
11N40MIMO	Ant1	2462	-7.9	<=7.5	PASS
	Ant2	2462	-9.86	<=7.5	PASS
	total	2462	-5.76	<=7.5	PASS
	Ant1	2422	-10.26	<=7.5	PASS
	Ant2	2422	-12.82	<=7.5	PASS
	total	2422	-8.34	<=7.5	PASS
	Ant1	2437	-9.85	<=7.5	PASS
	Ant2	2437	-13.03	<=7.5	PASS
11AX20MIMO	total	2437	-8.14	<=7.5	PASS
	Ant1	2452	-10.36	<=7.5	PASS
	Ant2	2452	-12.66	<=7.5	PASS
	total	2452	-8.35	<=7.5	PASS
	Ant1	2412	-8.6	<=7.5	PASS
	Ant2	2412	-10.77	<=7.5	PASS
	total	2412	-6.54	<=7.5	PASS
	Ant1	2437	-7.4	<=7.5	PASS
11AX40MIMO	Ant2	2437	-9.58	<=7.5	PASS
	total	2437	-5.34	<=7.5	PASS
	Ant1	2462	-8.28	<=7.5	PASS
	Ant2	2462	-10.69	<=7.5	PASS
	total	2462	-6.31	<=7.5	PASS
	Ant1	2422	-9.46	<=7.5	PASS
	Ant2	2422	-12.52	<=7.5	PASS
	total	2422	-7.72	<=7.5	PASS
	Ant1	2437	-9.94	<=7.5	PASS
	Ant2	2437	-12.2	<=7.5	PASS
	total	2437	-7.91	<=7.5	PASS
	Ant1	2452	-10.53	<=7.5	PASS

	Ant2	2452	-12.44	<=7.5	PASS
	total	2452	-8.37	<=7.5	PASS

Note:

The maximum antenna gain is 3.5dBi. And EUT support beamforming, the worst case for the limit as below:

Directional gain = $G_{ANT} + \text{Array Gain}$

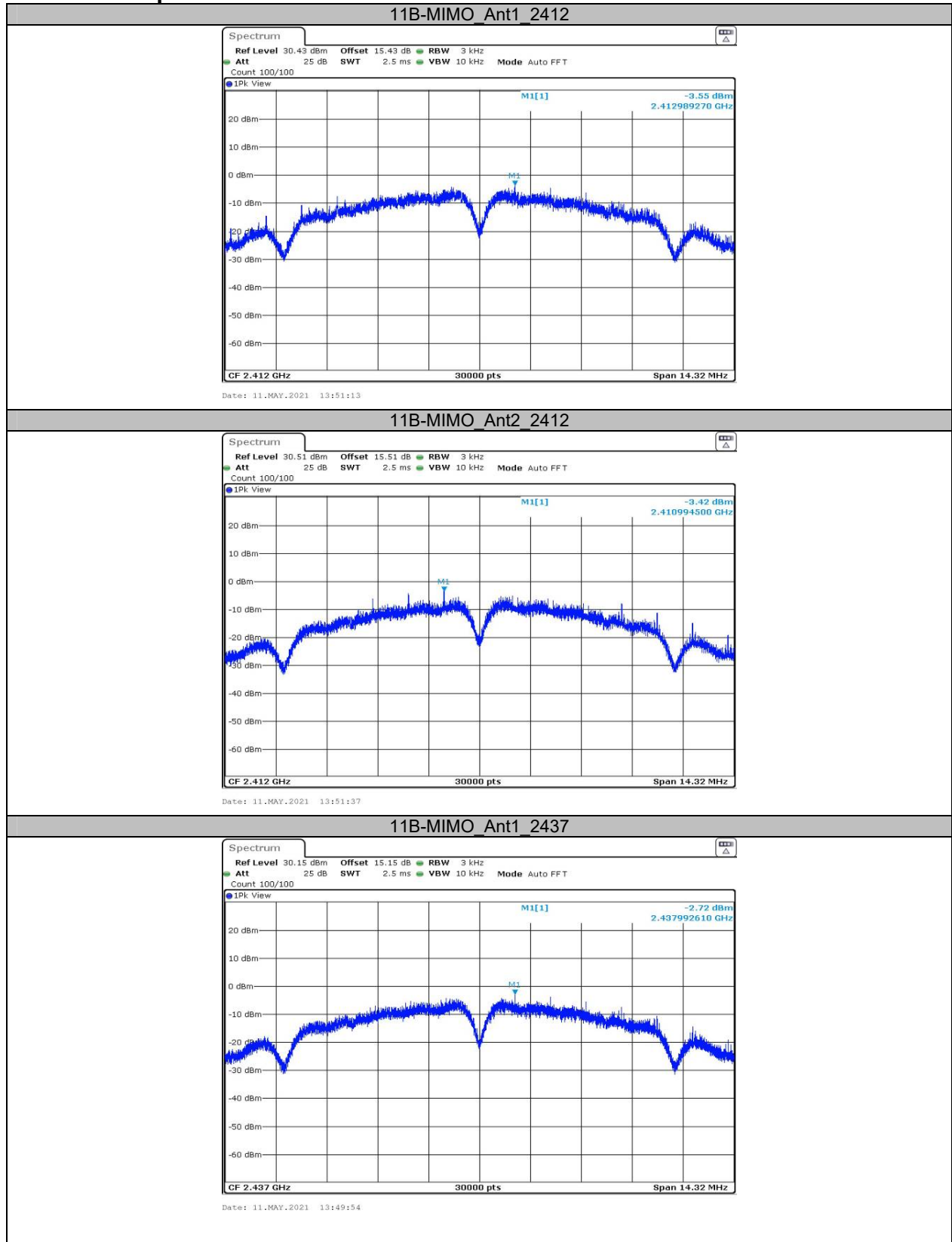
Array Gain = $10 \cdot \log(N_{ant}/N_{ss})$ dB

For the worst case, $N_{ss}=1$, so:

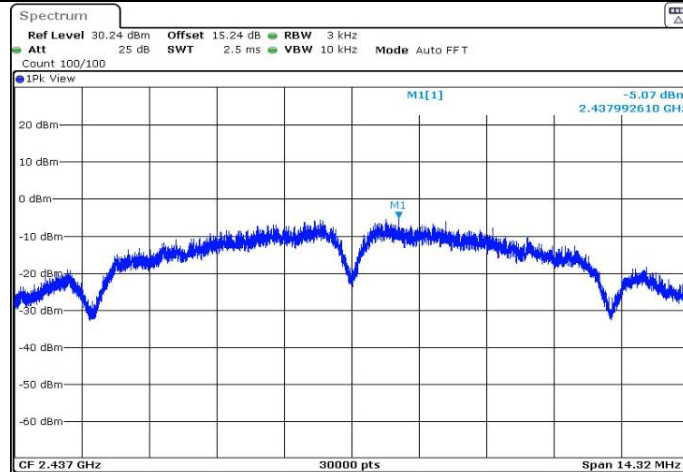
Directional gain = $3.5\text{dBi} + 10 \cdot \log(2/1)\text{dB} = 6.5\text{dBi} > 6\text{dBi}$

So the limit should be reduce $(6.5-6)\text{dB} = 0.5\text{dB}$

Test Graphs

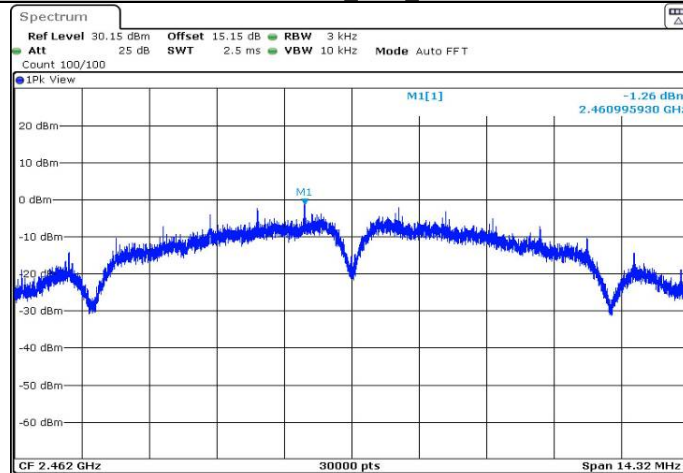


11B-MIMO_Ant2_2437



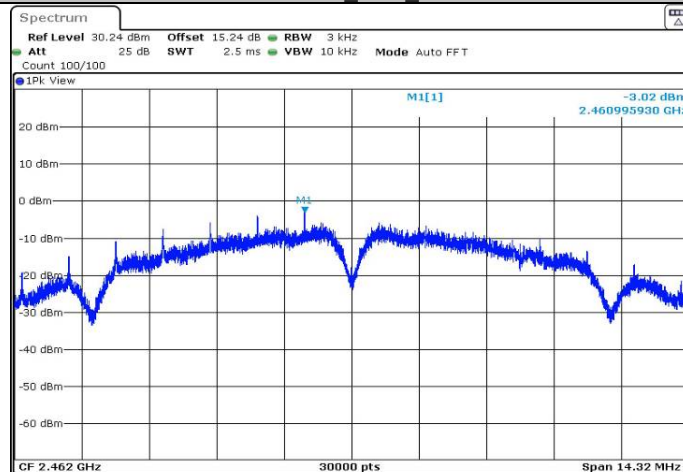
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11B-MIMO_Ant1_2462



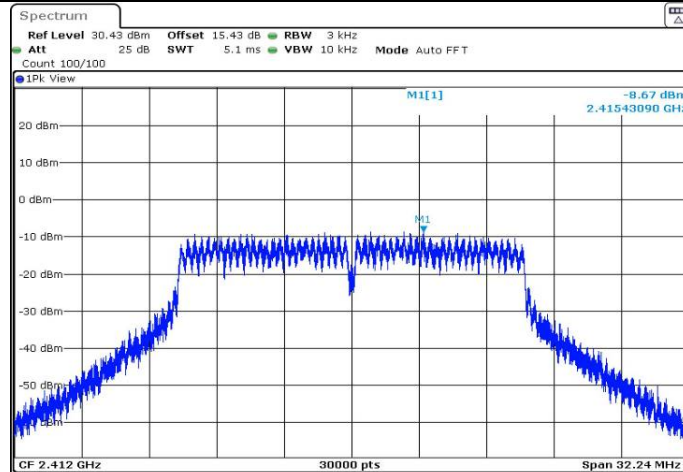
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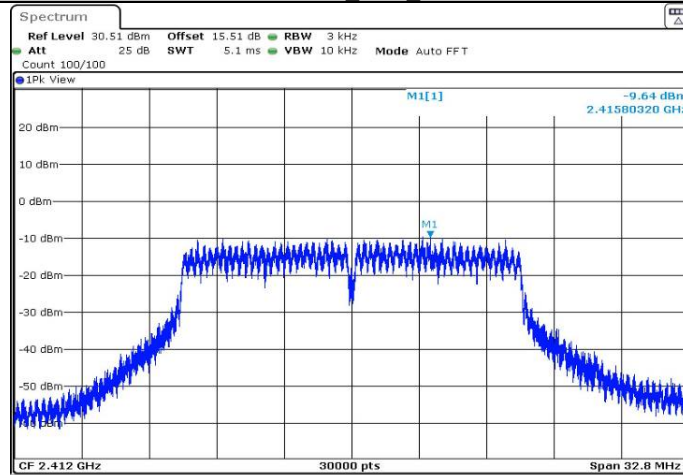
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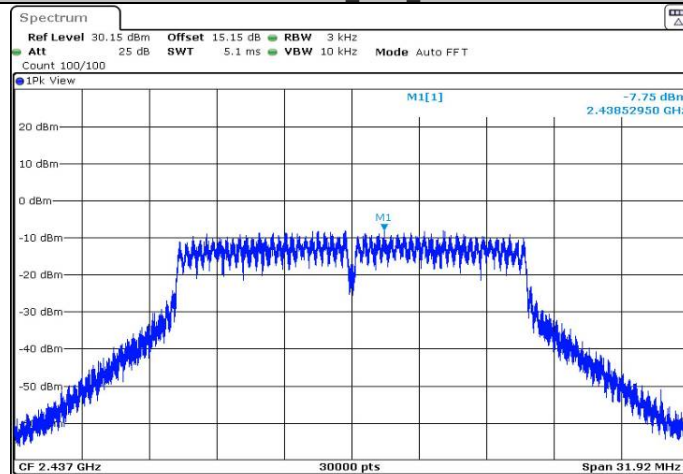
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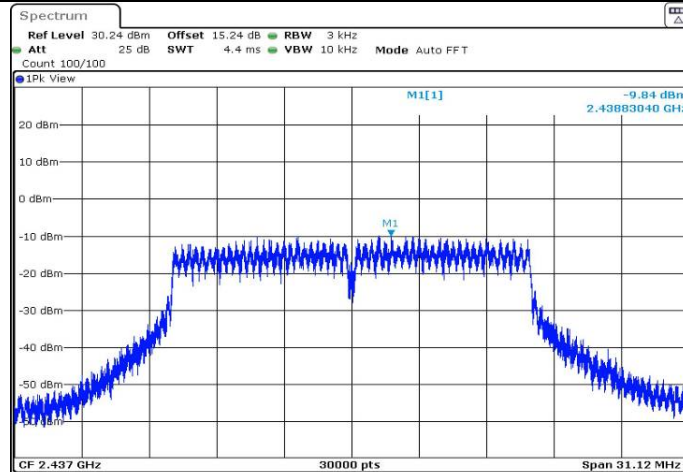
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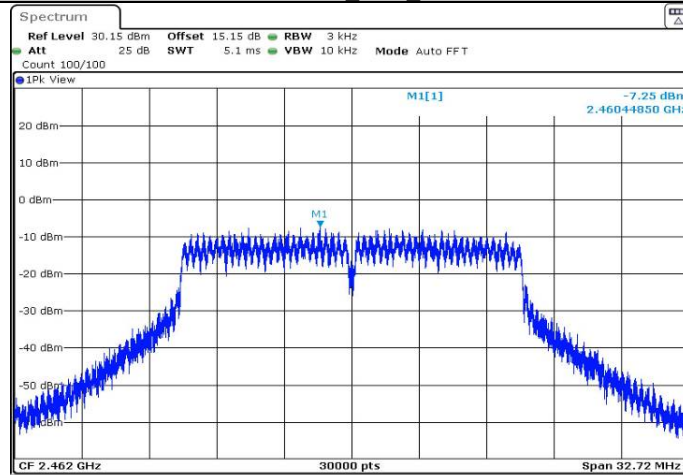
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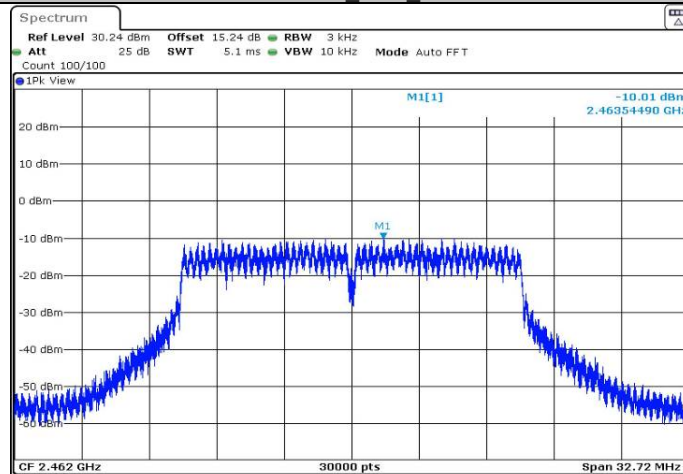
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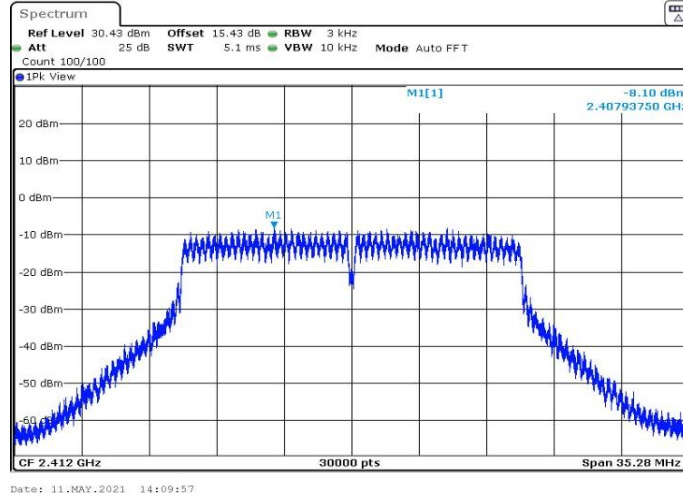
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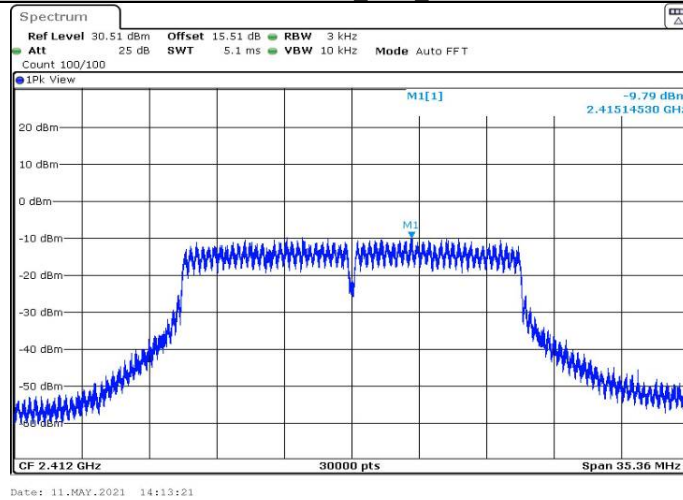


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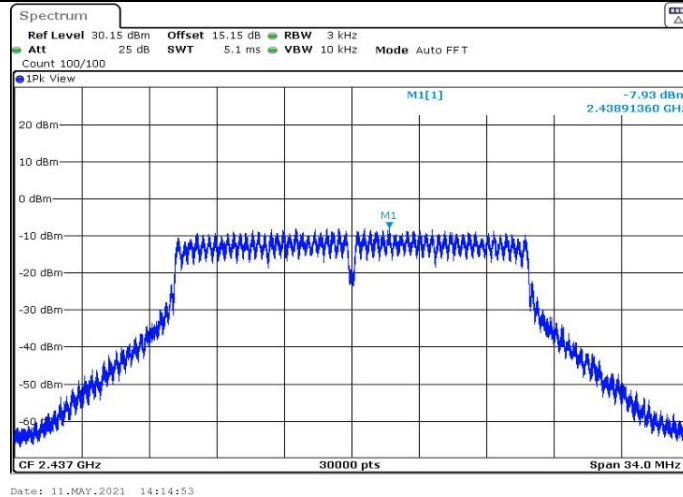
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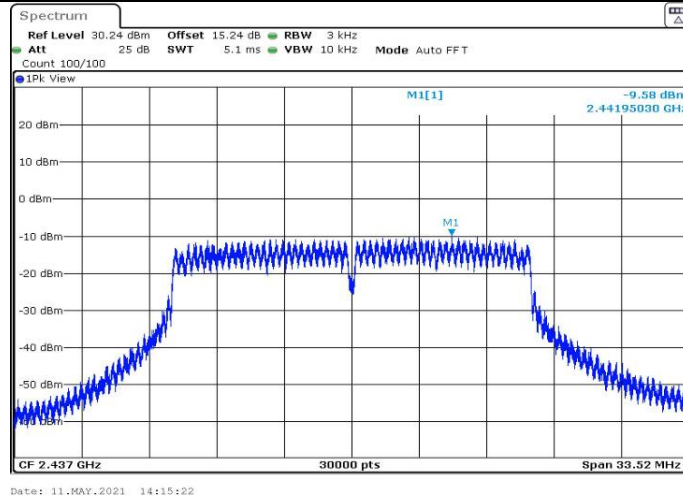
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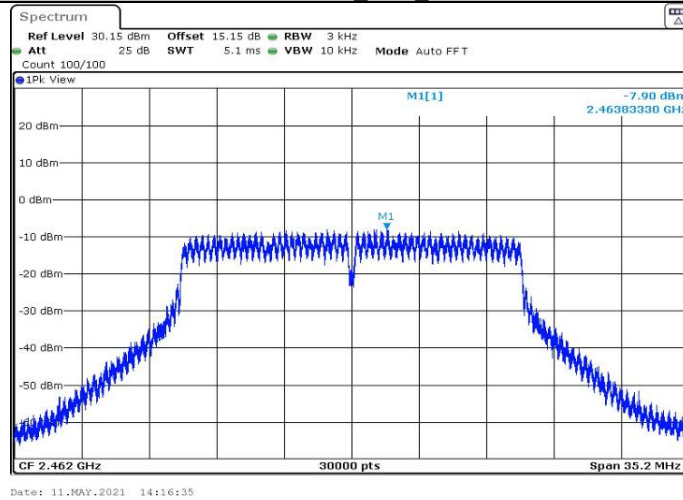
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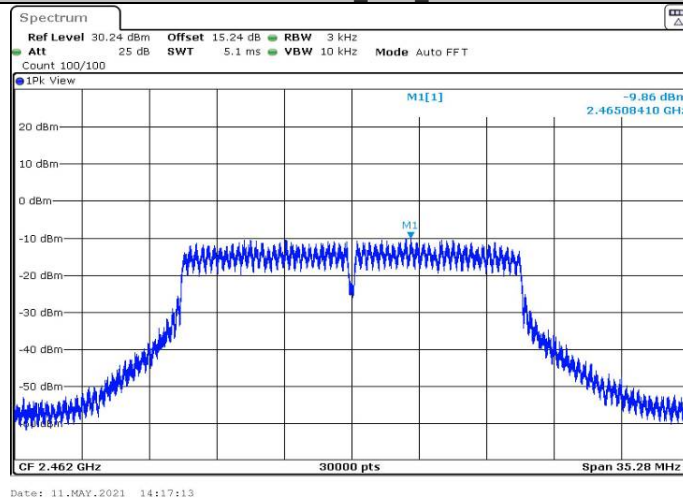
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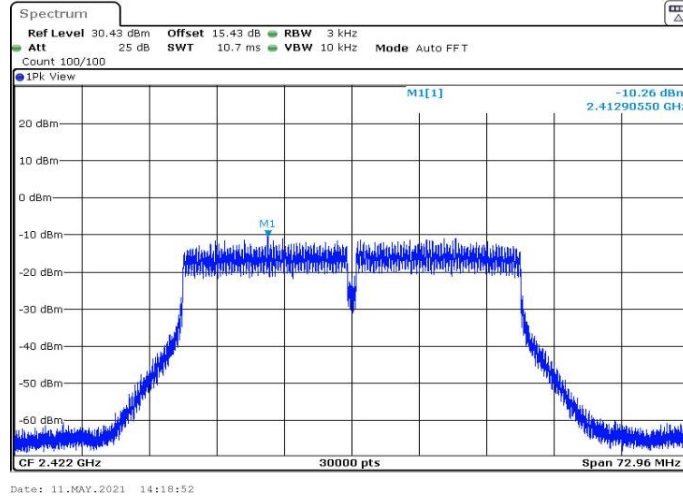
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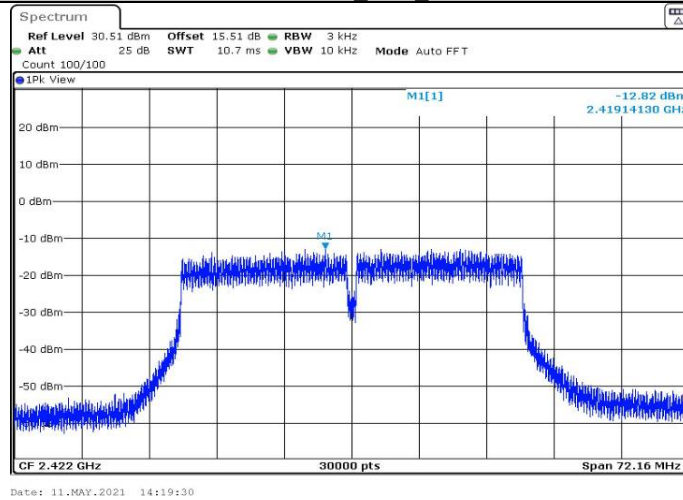
11N20MIMO_Ant2_2462



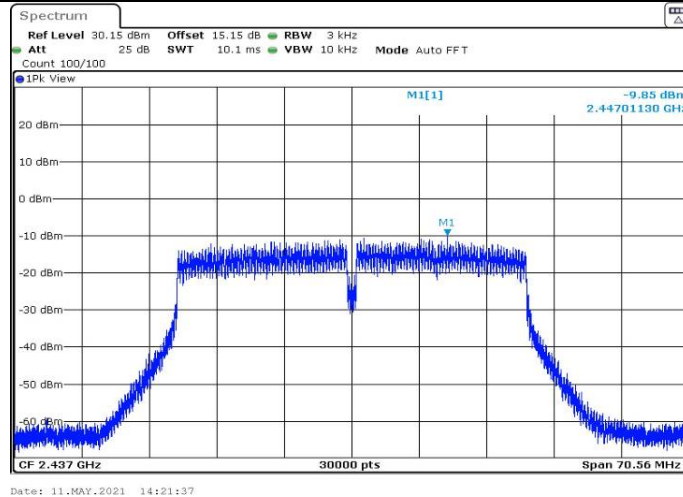
11N40MIMO_Ant1_2422



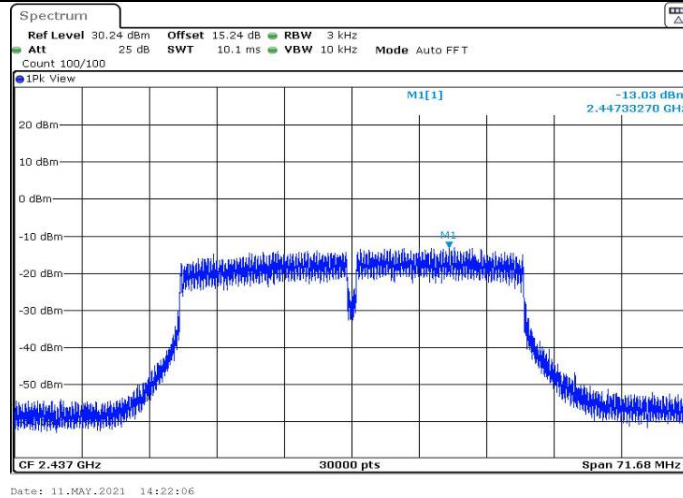
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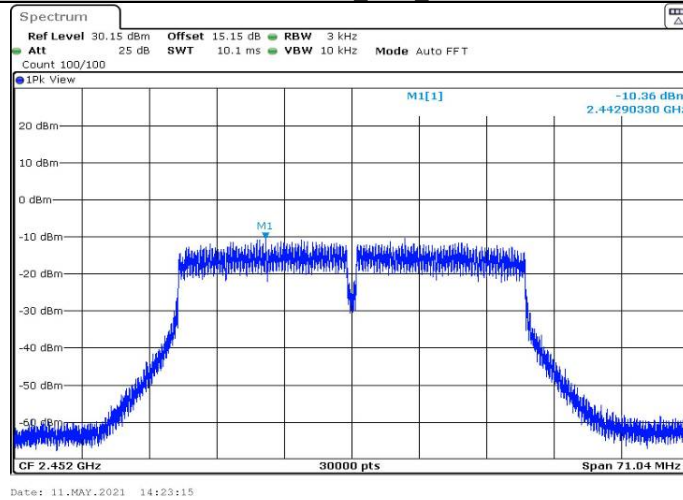
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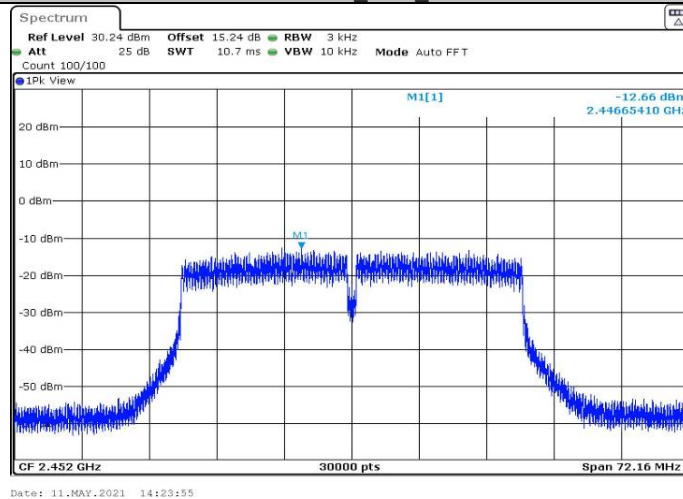
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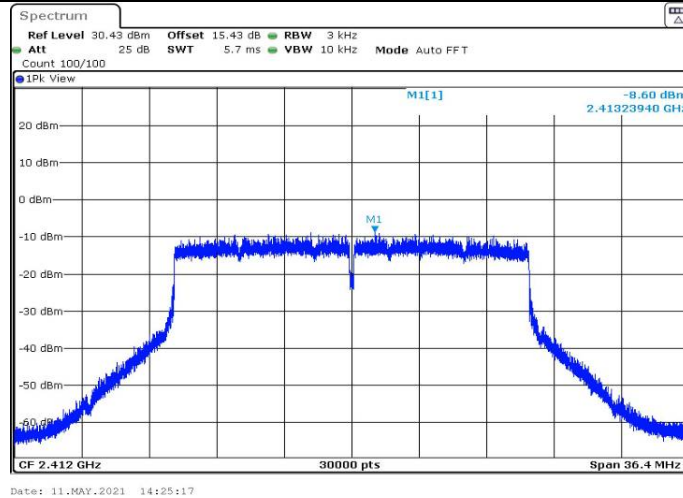
11N40MIMO_Ant1_2452



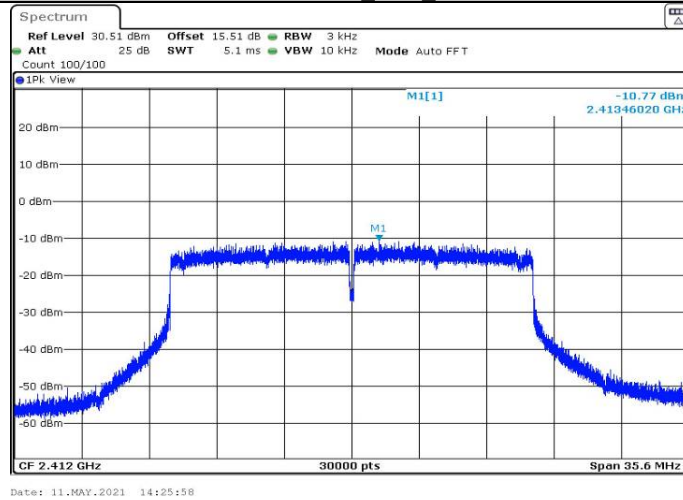
11N40MIMO_Ant2_2452



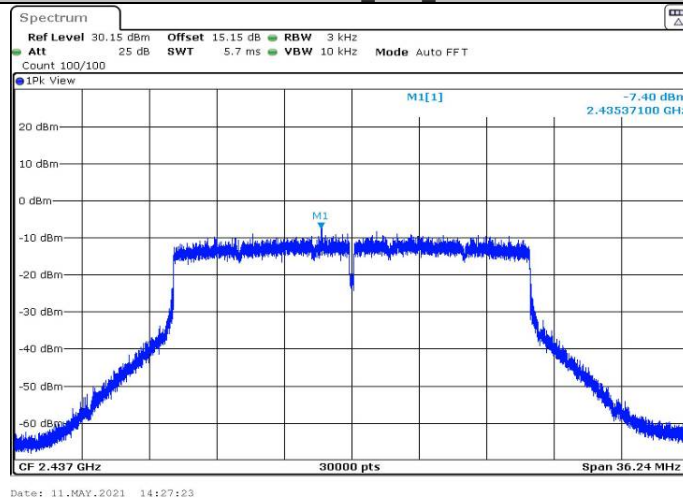
11AX20MIMO_Ant1_2412



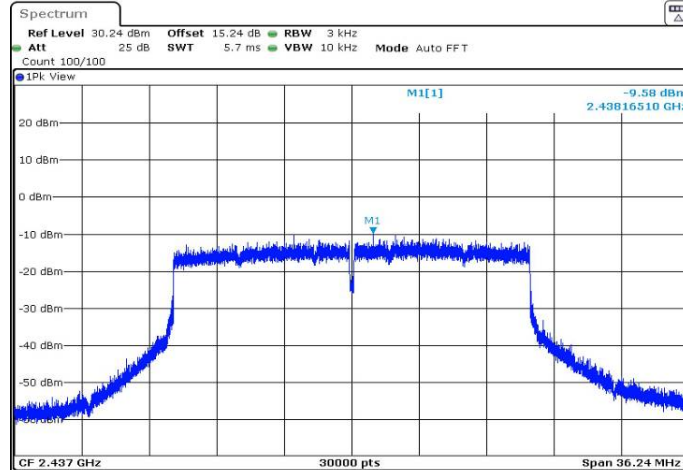
11AX20MIMO_Ant2_2412



11AX20MIMO_Ant1_2437

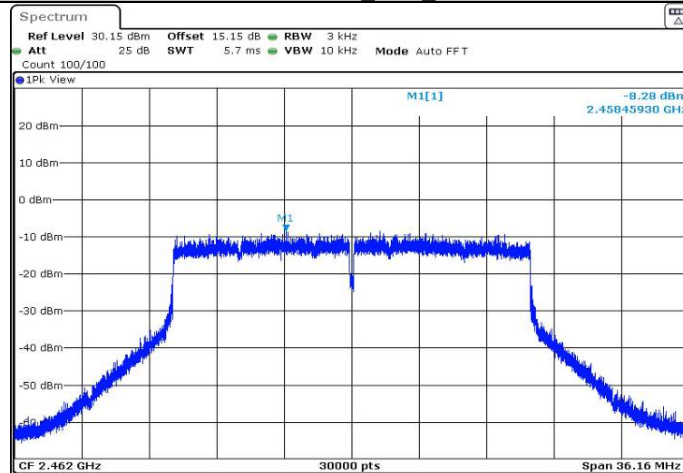


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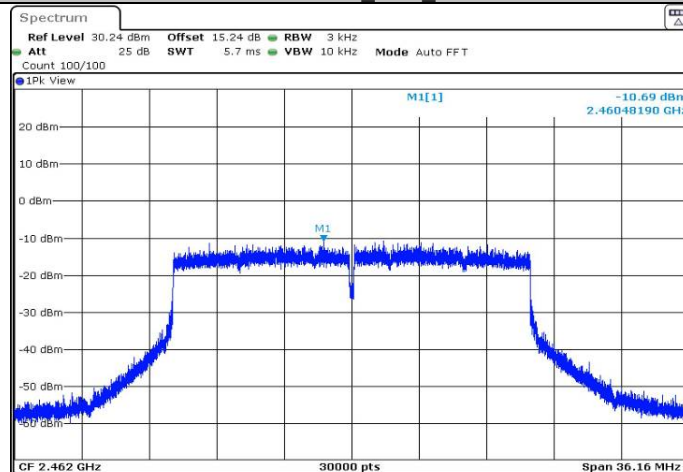
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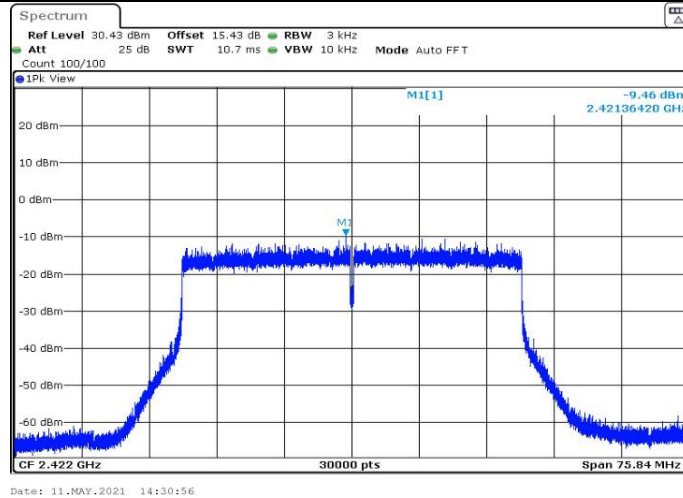
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11AX20MIMO_Ant2_2462

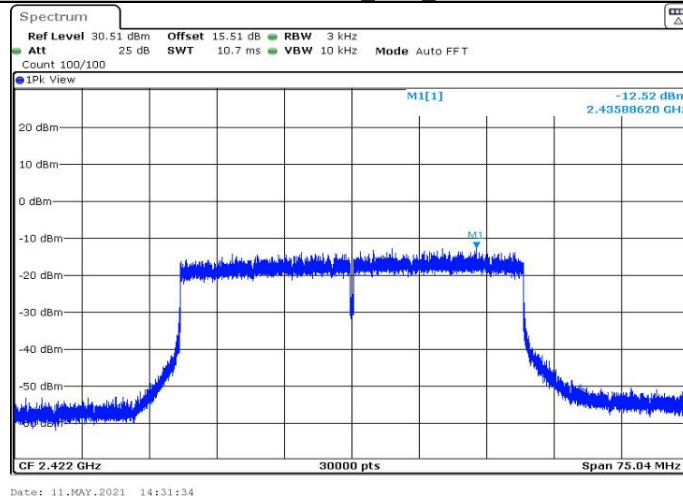


Date: 11.MAY.2021 14:29:40

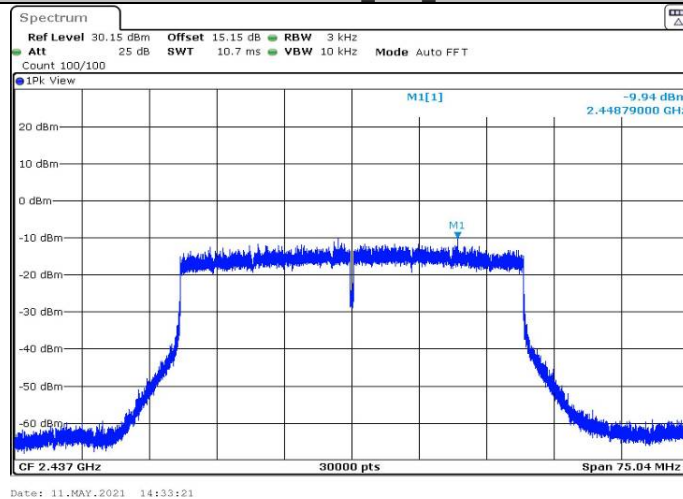
11AX40MIMO_Ant1_2422



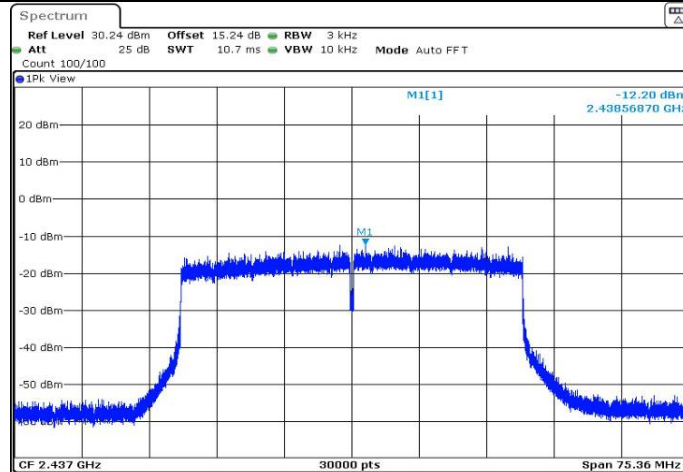
11AX40MIMO_Ant2_2422



11AX40MIMO_Ant1_2437

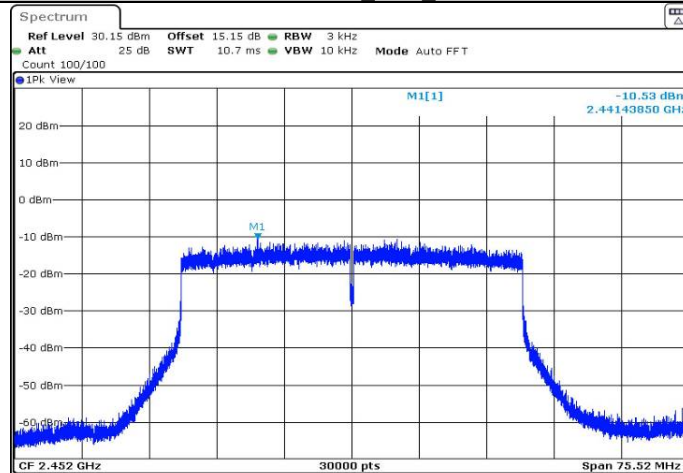


11AX40MIMO_Ant2_2437



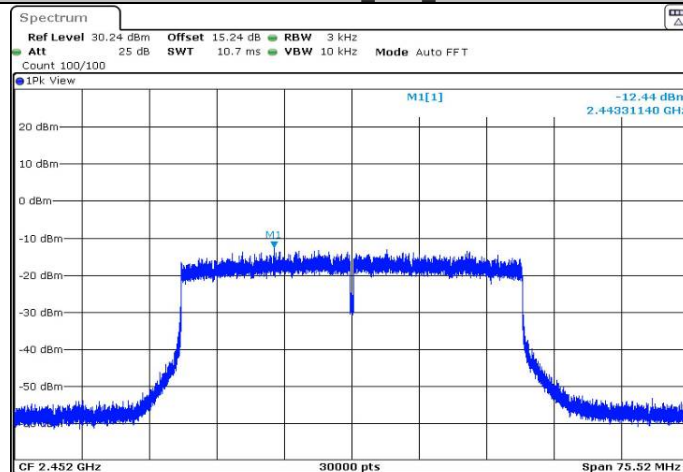
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11AX40MIMO_Ant1_2452



Date: 11.MAY.2021 14:35:03

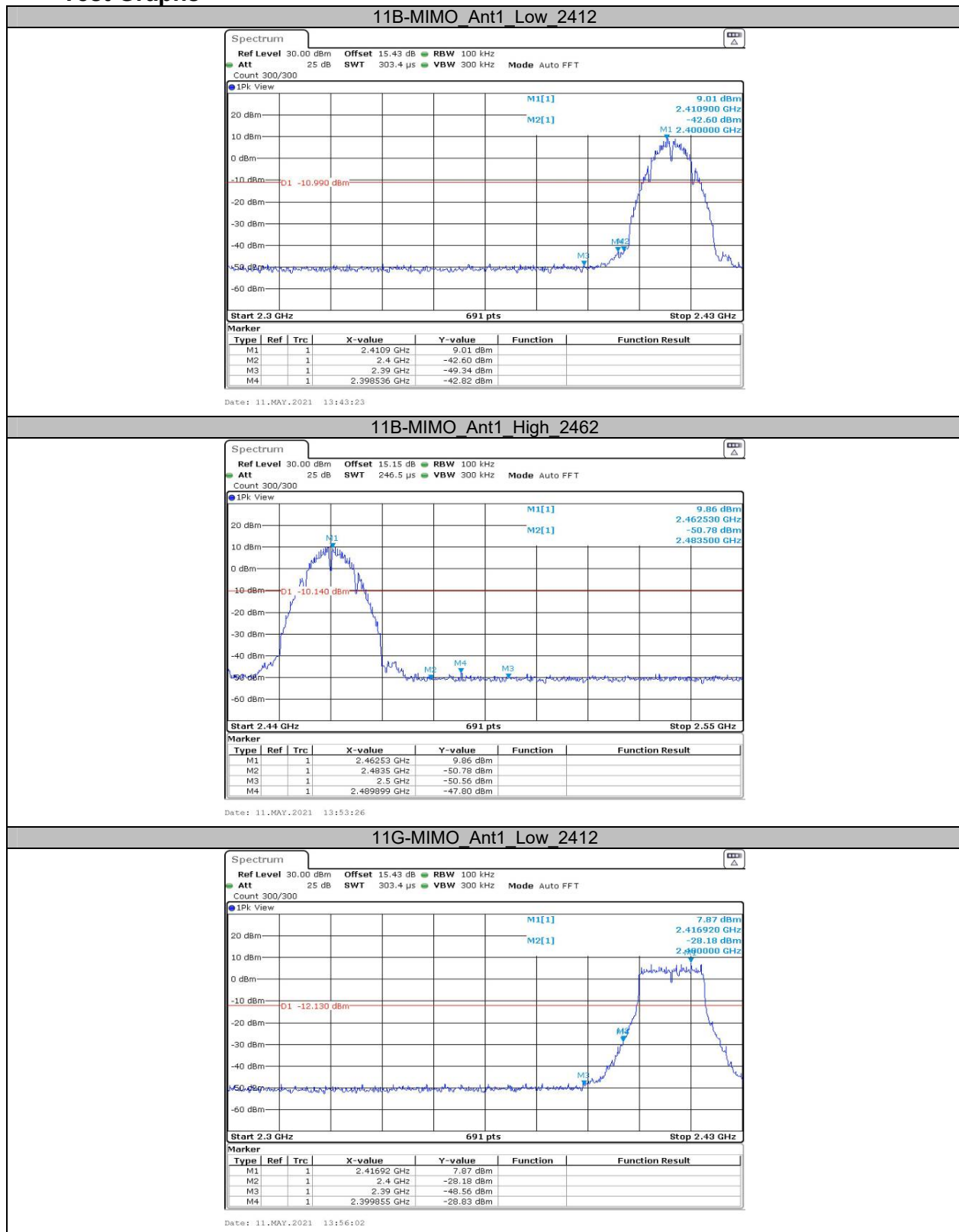
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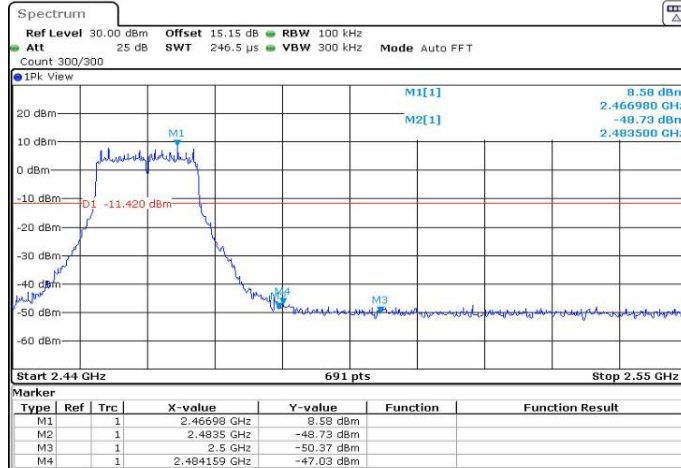
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Appendix E: Band edge measurements

Test Graphs



11G-MIMO Ant1 High 2462



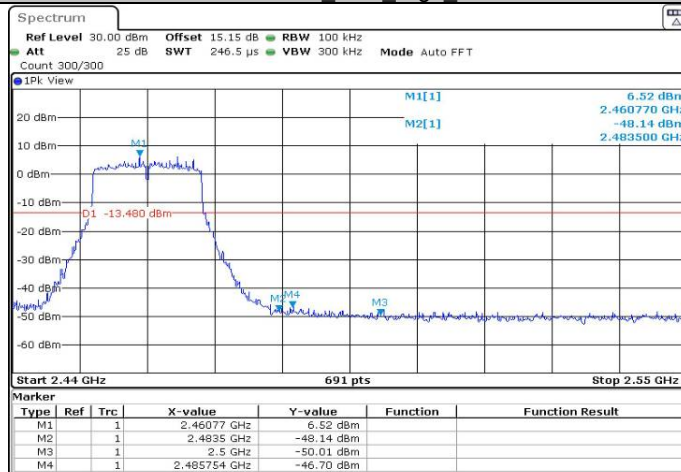
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11N20MIMO Ant1 Low 2412



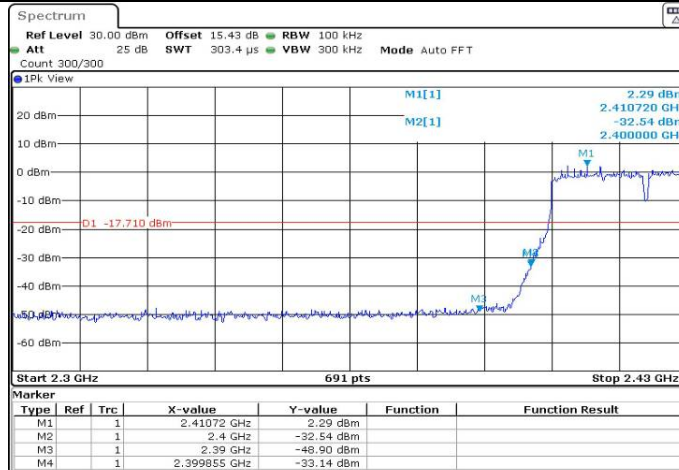
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11N20MIMO Ant1 High 2462



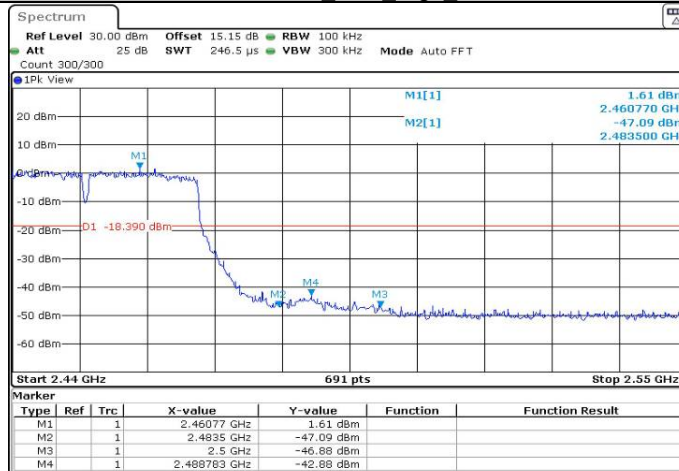
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11N40MIMO Ant1 Low 2422



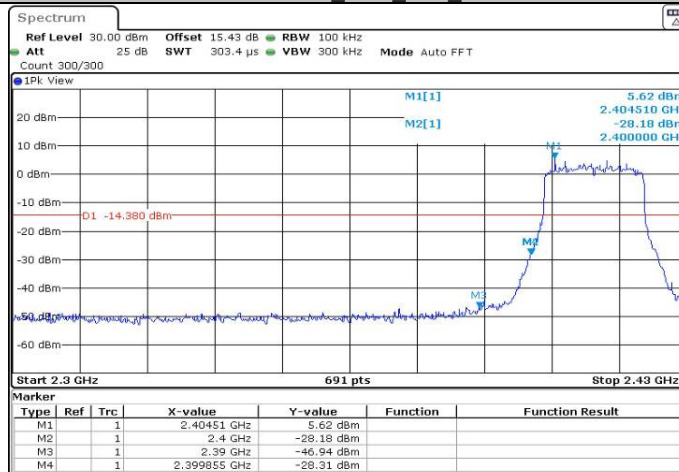
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11N40MIMO Ant1 High 2452



Date: 11.MAY.2021 14:23:24

11AX20MIMO Ant1 Low 2412



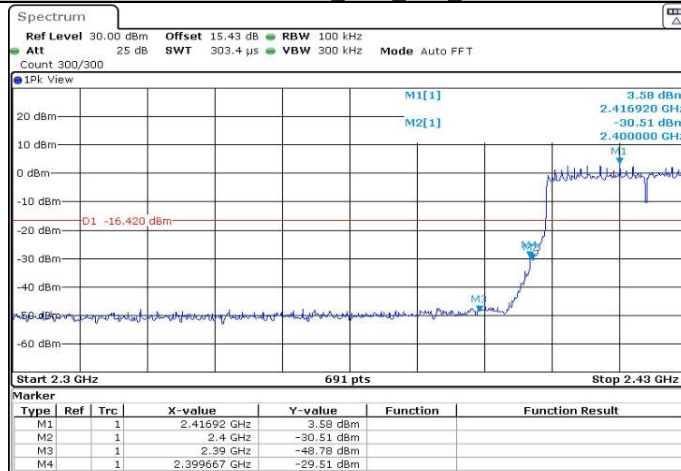
Date: 11.MAY.2021 14:25:25

11AX20MIMO Ant1 High 2462



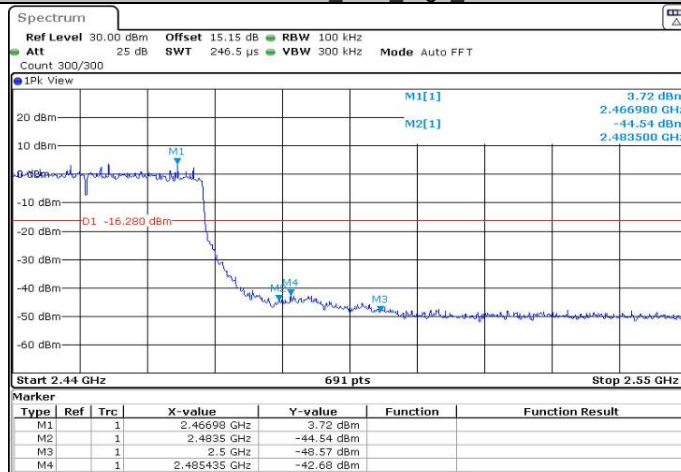
Date: 11.MAY.2021 14:29:10

11AX40MIMO Ant1 Low 2422



Date: 11.MAY.2021 14:31:05

11AX40MIMO Ant1 High 2452

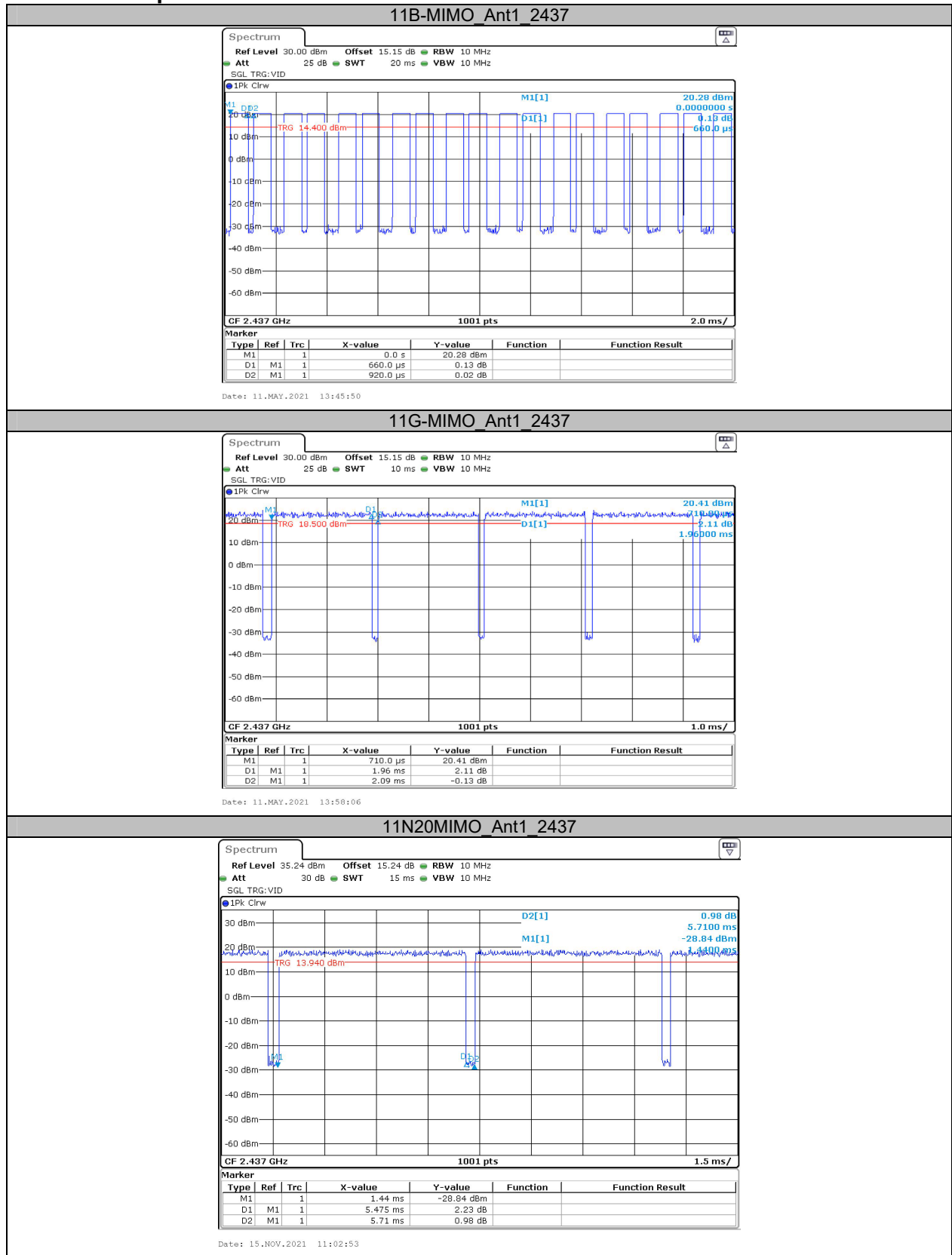


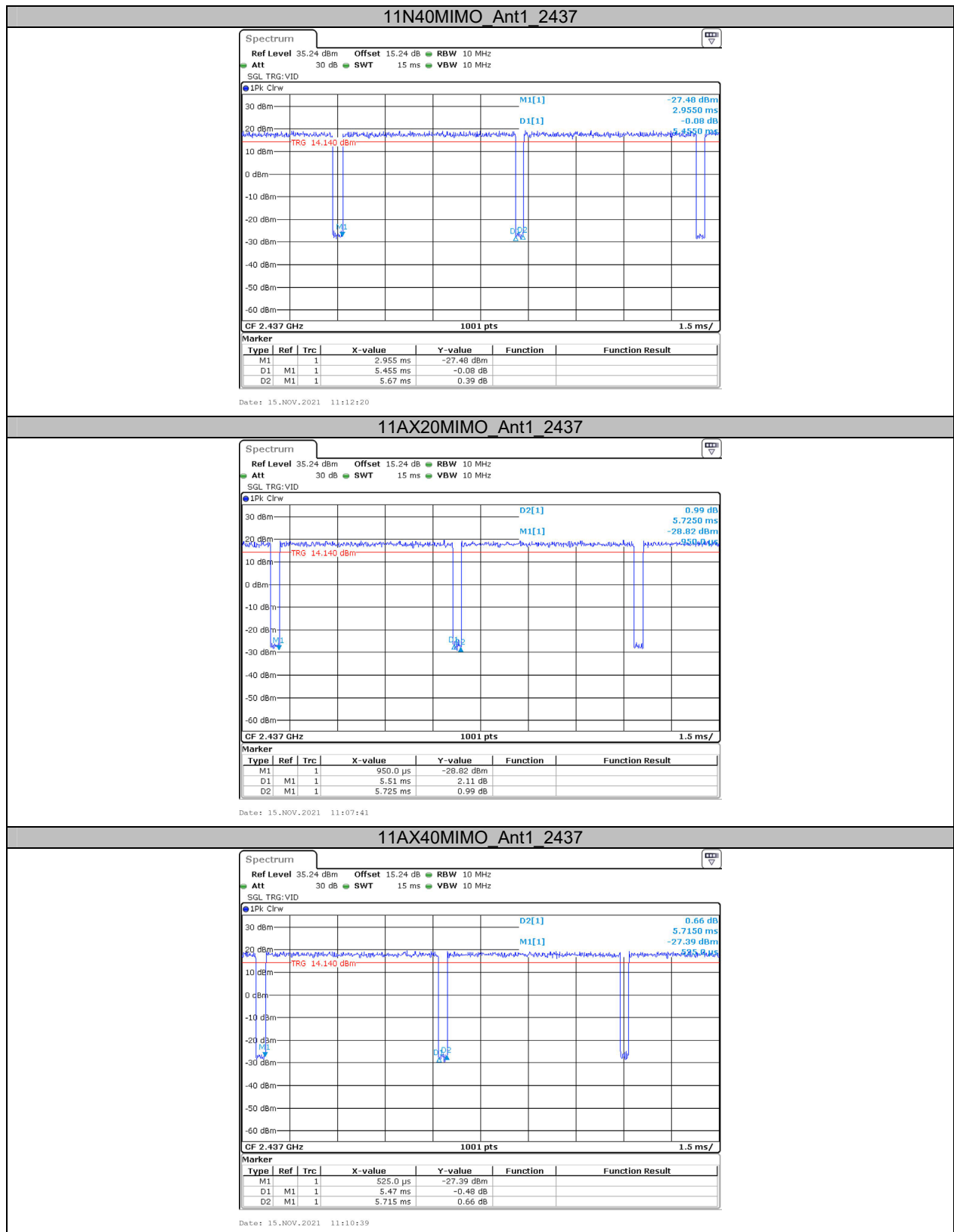
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AppendixG: DutyCycle**Test Result**

TestMode	Antenna	Channel	TransmissionDuration [ms]	Transmission Period [ms]	Duty Cycle [%]
11B-MIMO	Ant1	2437	0.66	0.92	71.74
11G-MIMO	Ant1	2437	1.96	2.09	93.78
11N20MIMO	Ant1	2437	5.48	5.71	95.97
11N40MIMO	Ant1	2437	5.46	5.67	96.30
11AX20MIMO	Ant1	2437	5.51	5.73	96.16
11AX40MIMO	Ant1	2437	5.47	5.72	95.63

Test Graphs





***** END OF REPORT *****