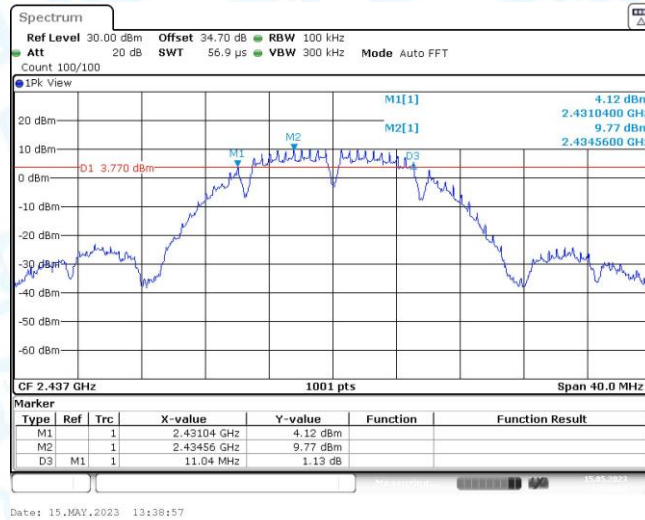
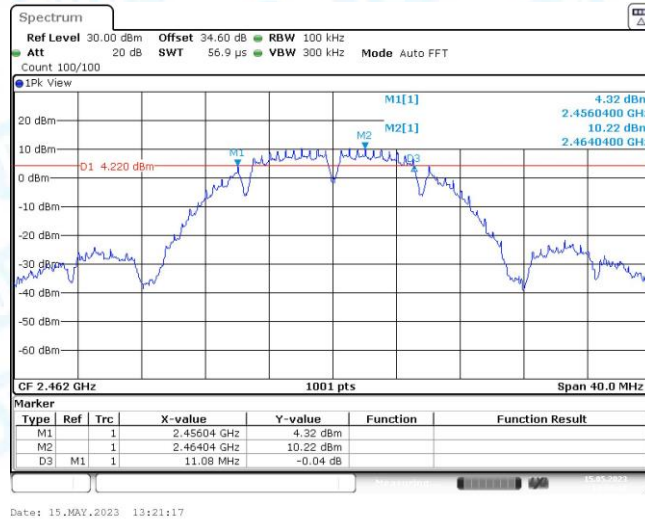
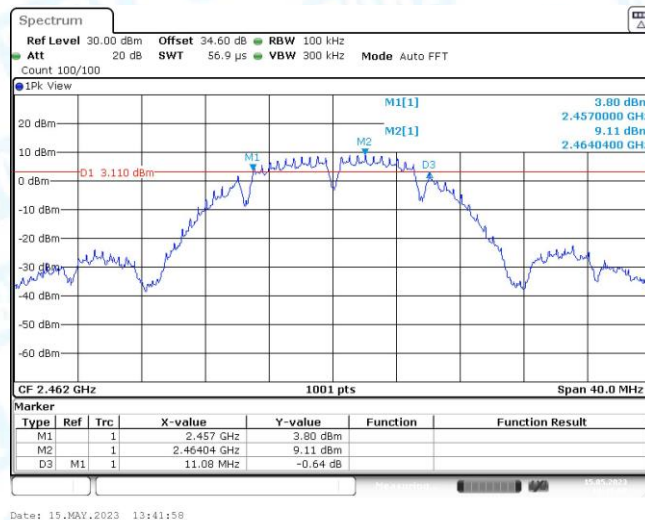




11B_Ant2_2437-6dB DTS

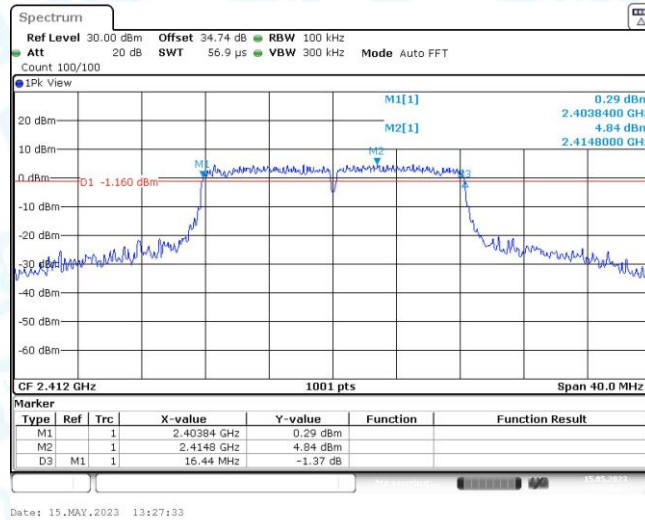


11B_Ant1_2462-6dB DTS

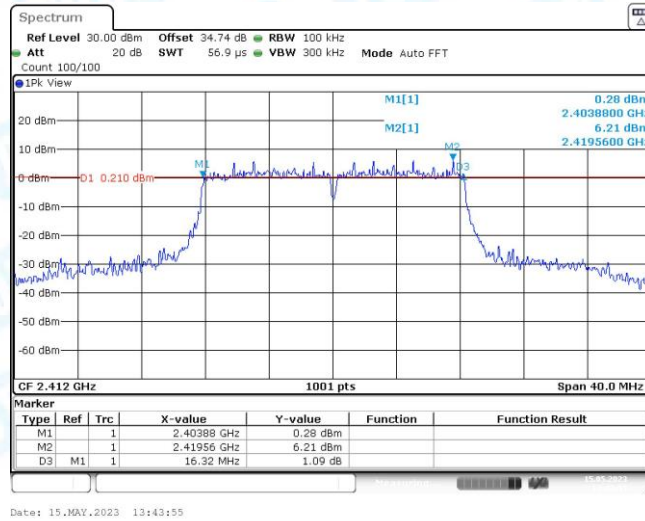


11B_Ant2_2462-6dB DTS

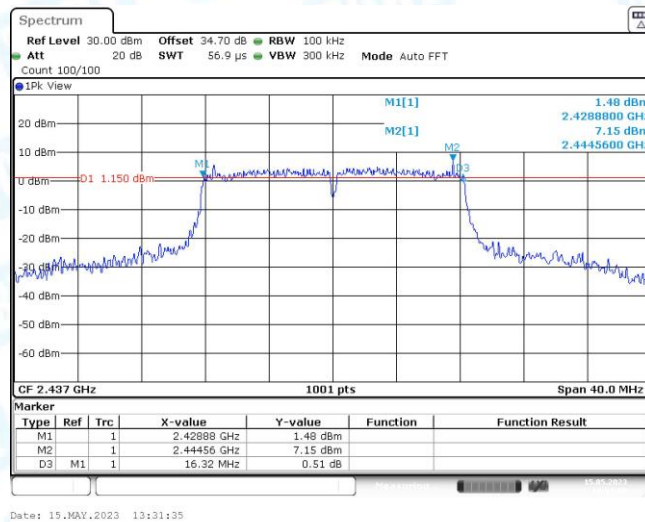




11G_Ant1_2412-6dB DTS

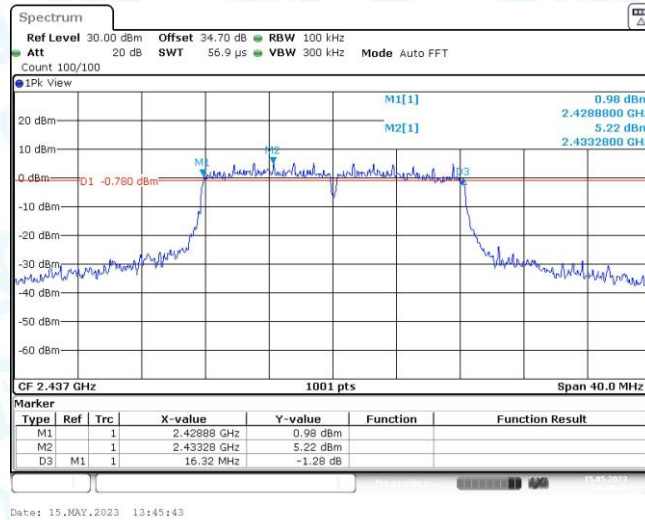


11G_Ant2_2412-6dB DTS

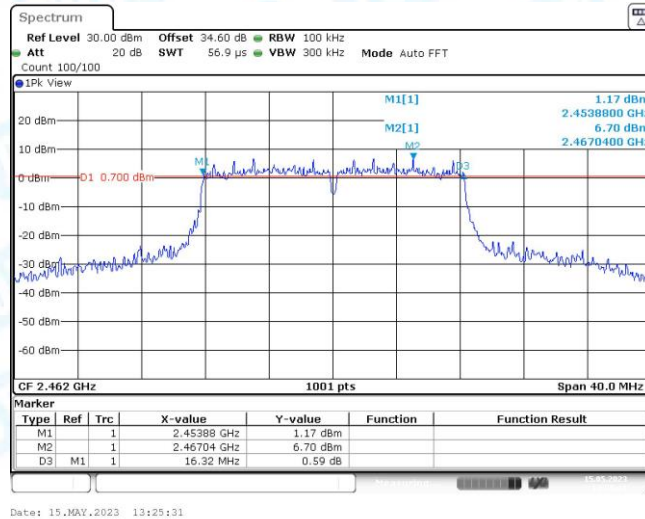


11G_Ant1_2437-6dB DTS

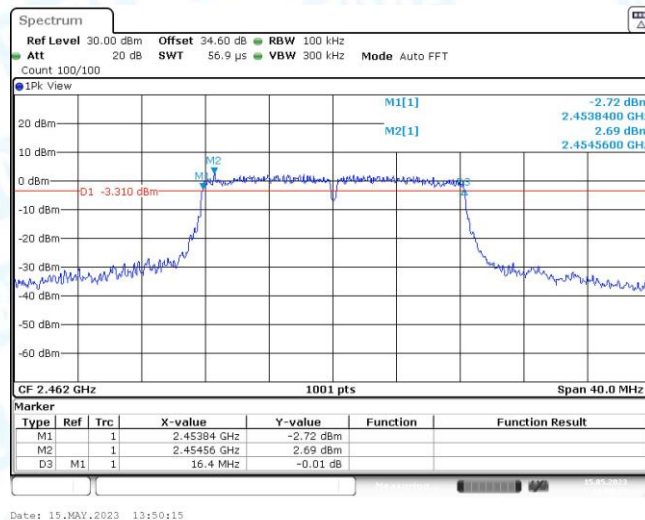




11G_Ant2_2437-6dB DTS

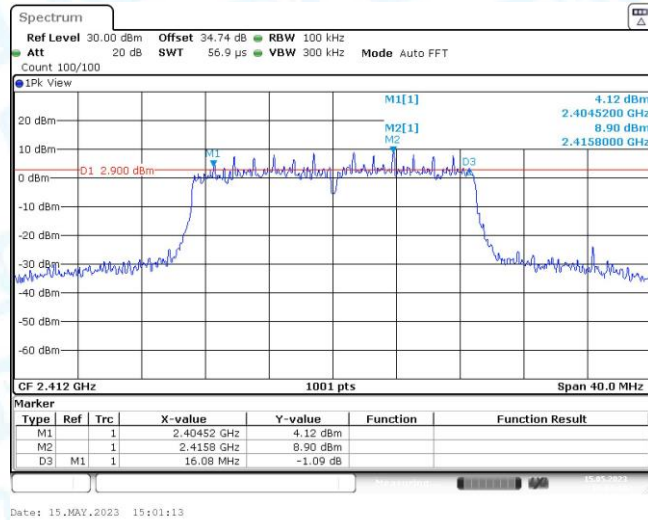


11G_Ant1_2462-6dB DTS

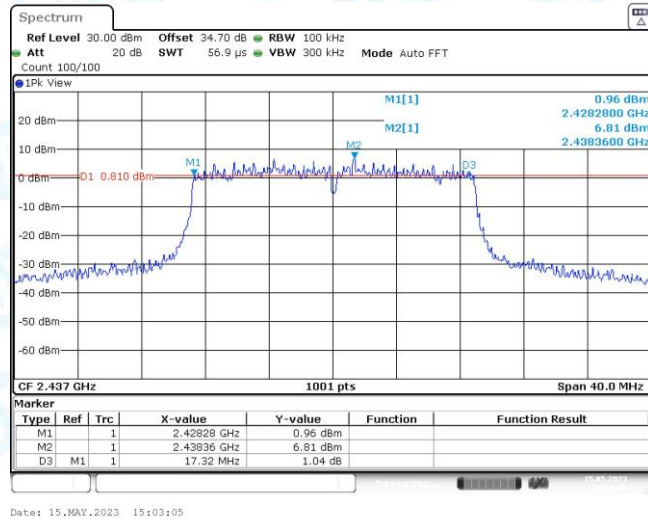


11G_Ant2_2462-6dB DTS

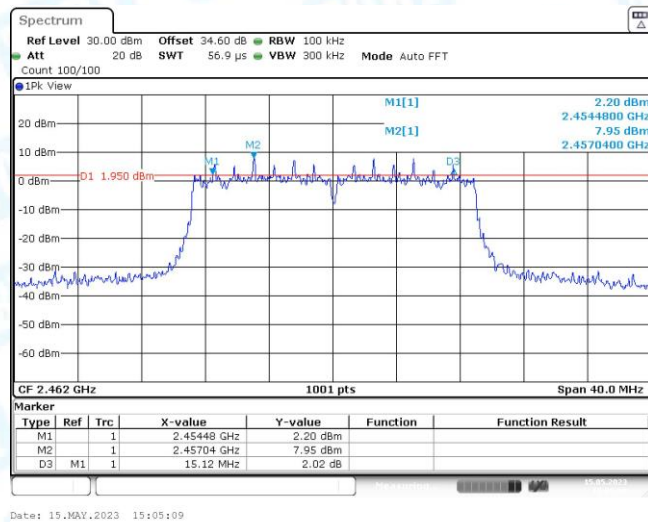




11N20MIMO_Ant1&Ant2_2412-6dB DTS

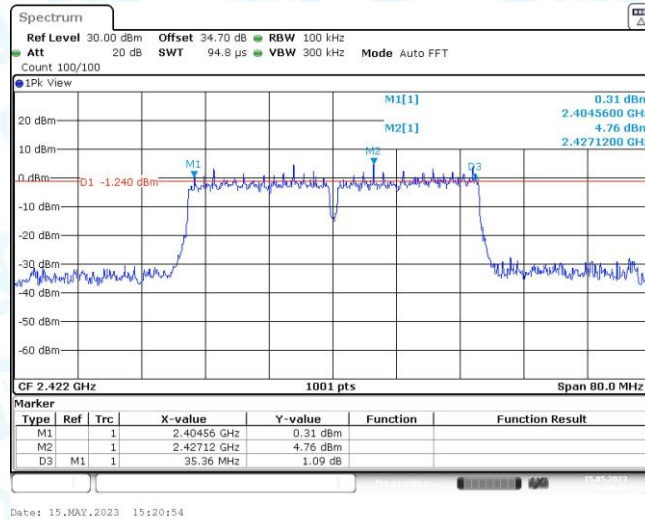


11N20MIMO_Ant1&Ant2_2437-6dB DTS

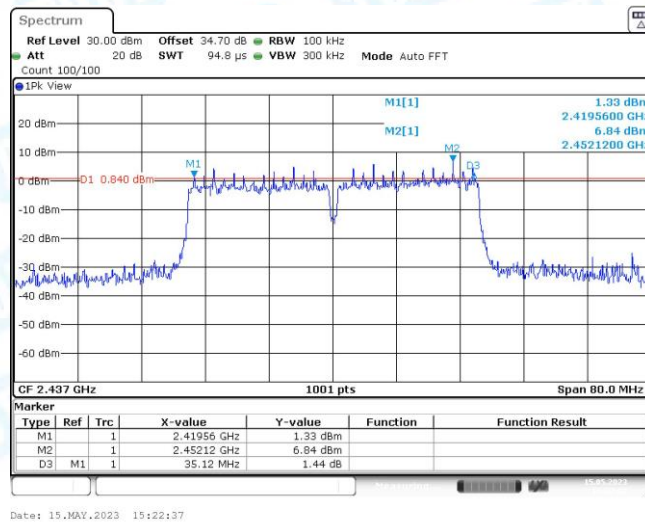


11N20MIMO_Ant1&Ant2_2462-6dB DTS

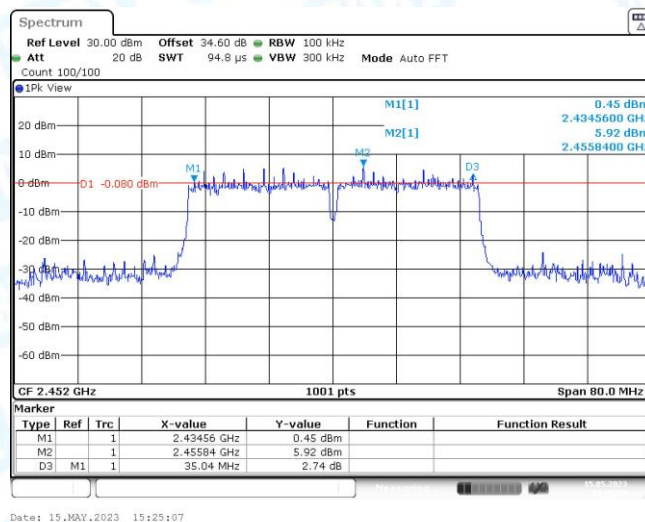




11N40MIMO_Ant1&Ant2_2422-6dB DTS

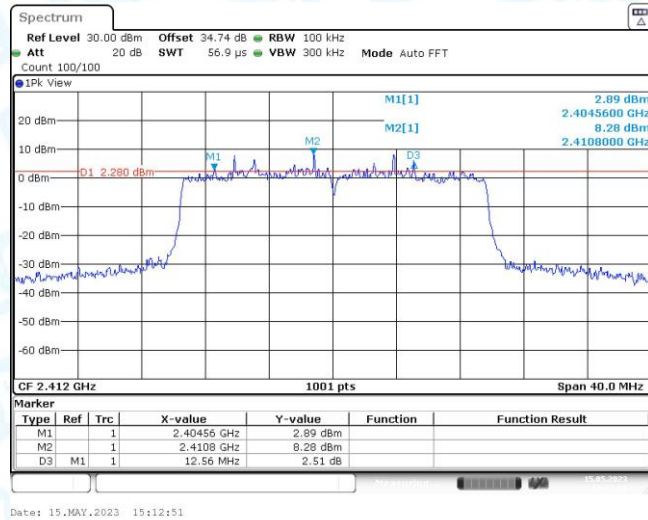


11N40MIMO_Ant1&Ant2_2437-6dB DTS

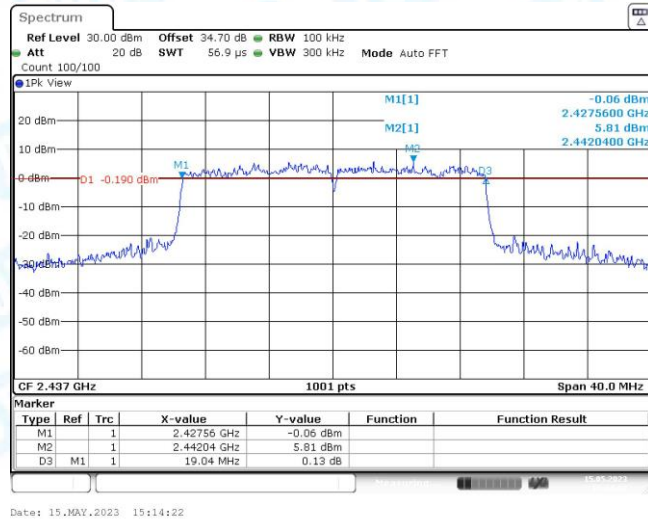


11N40MIMO_Ant1&Ant2_2452-6dB DTS

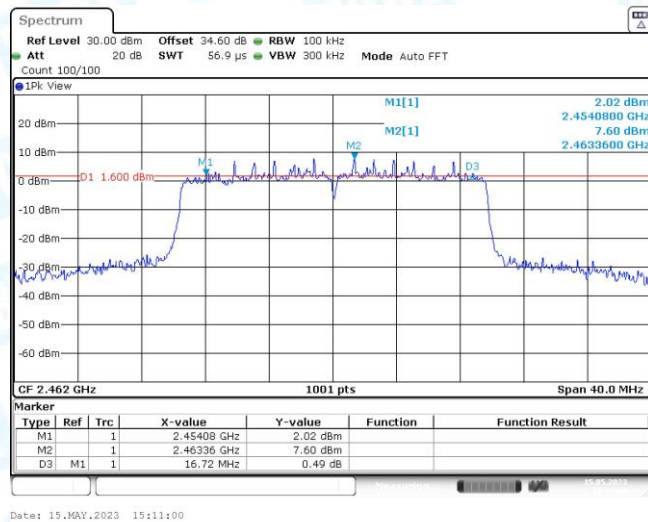




11AX20MIMO_Ant1&Ant2_2412-6dB DTS

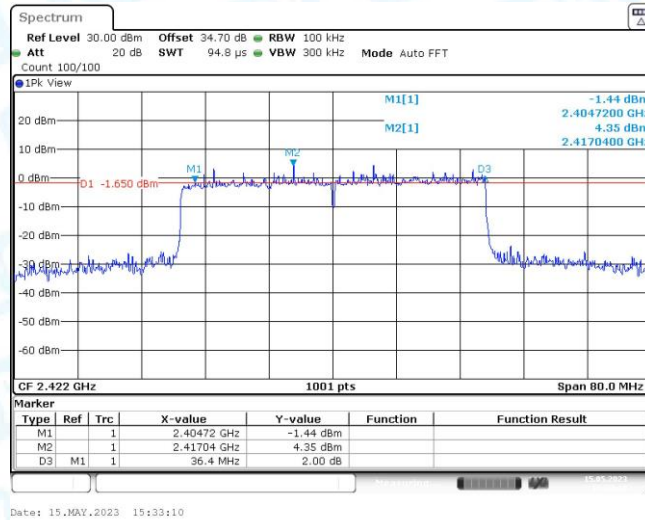


11AX20MIMO_Ant1&Ant2_2437-6dB DTS

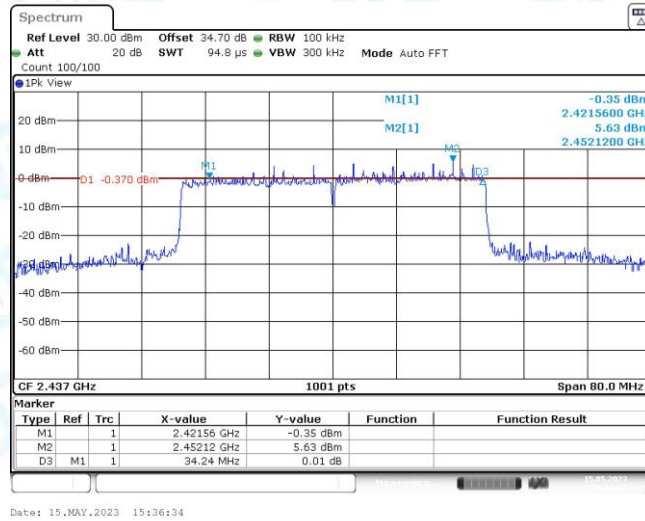


11AX20MIMO_Ant1&Ant2_2462-6dB DTS

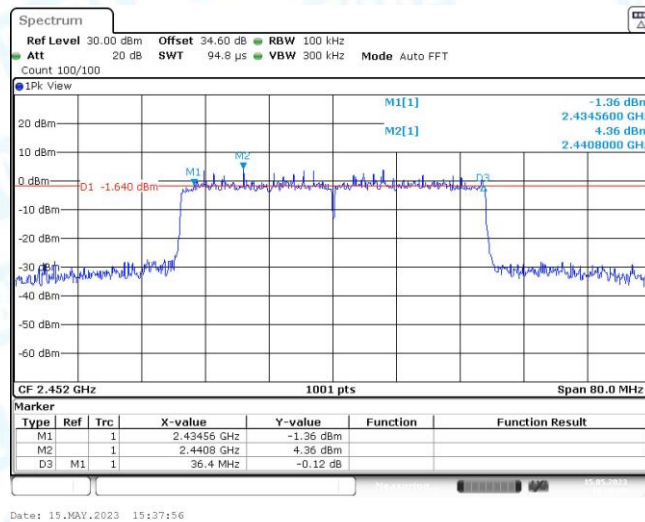




11AX40MIMO_Ant1&Ant2_2422-6dB DTS



11AX40MIMO_Ant1&Ant2_2437-6dB DTS



11AX40MIMO_Ant1&Ant2_2452-6dB DTS



9. RF Output Power

9.1 Test Standard and Limit

9.1.1 Test Standard

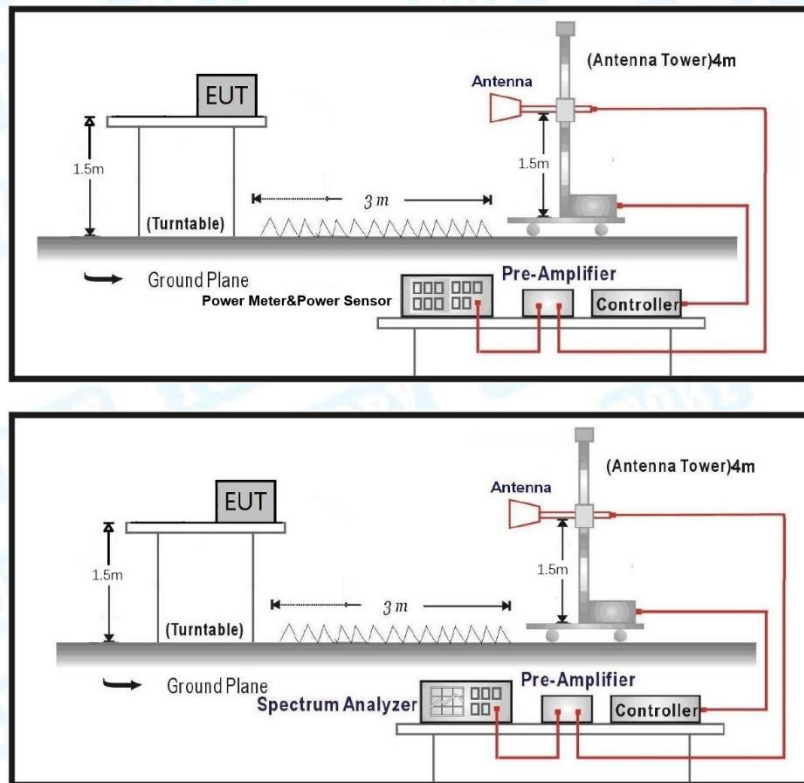
RSS 247 5.4

FCC Part 15.247(b)(3)

9.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
RF Output Power	not exceed 1 W or 30dBm	2400~2483.5
E.I.R.P	not exceed 4 W or 36dBm	

9.2 Test Setup



9.3 Test Procedure

- The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.

9.4 Deviation From Test Standard

No deviation

9.5 EUT Operating Mode

Please refer to the description of test mode.

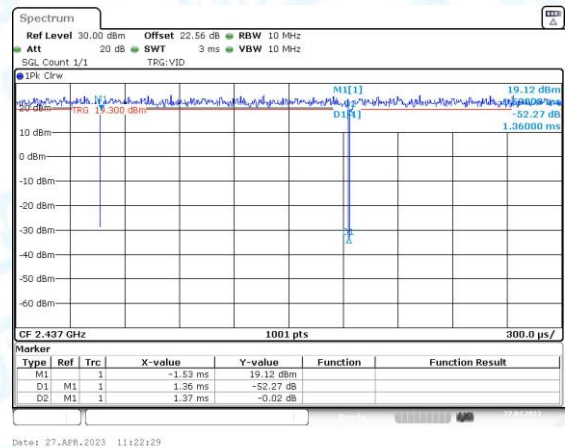
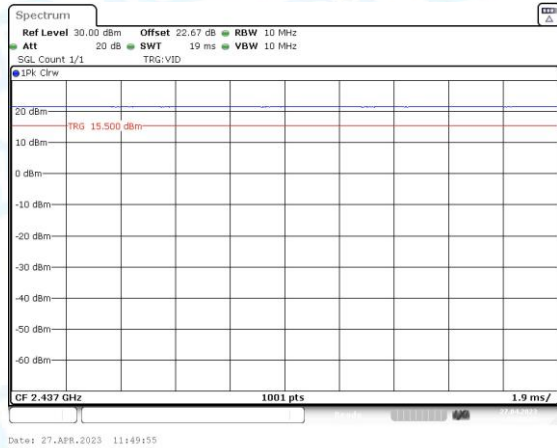
9.6 Test Data

Please refer to the following pages.



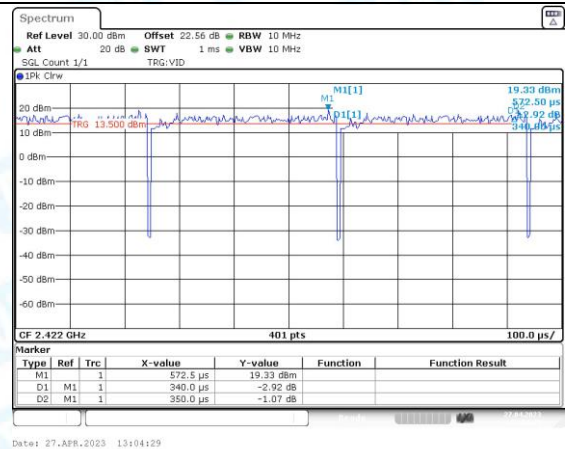
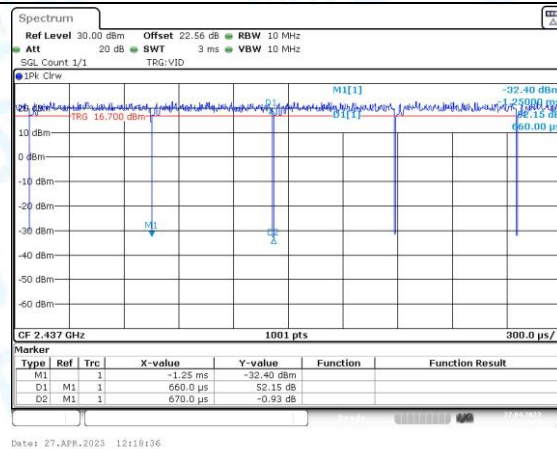
---Peak Output Power (Radiation Measurements)

Test Mode	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
11B	19.00	19.00	100.00	0.05
11G	1.36	1.37	99.27	0.74
11N20	0.66	0.67	98.51	1.52
11N40	0.34	0.35	97.14	2.94
11AX20	19.00	19.00	100.0	0.05
11AX40	19.00	19.00	100.0	0.05



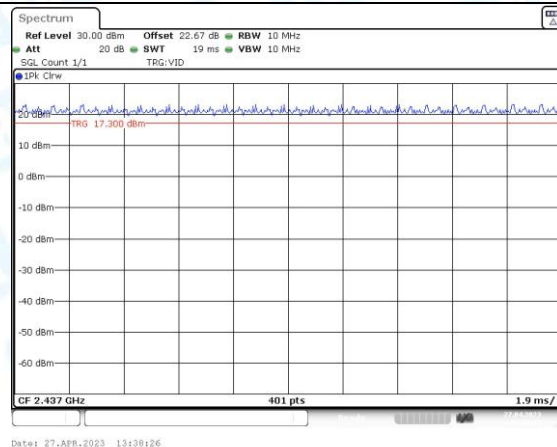
11B

11G



11N20

11N40



11AX20

11AX40



Test Mode	Antenna	Channel	EIRP [dBm]	Gain [dBi]	Conducted power [dBm]	EIRP Limit [dBm]	Conducted power Limit[dBm]	Verdict
11B-SISO	Ant1	2412	22.61	1.92	20.69	36	30	PASS
	Ant2	2412	21.44	2.20	19.24	36	30	PASS
	Ant1	2437	21.95	1.92	20.03	36	30	PASS
	Ant2	2437	21.10	2.20	18.90	36	30	PASS
	Ant1	2462	22.02	1.92	20.10	36	30	PASS
	Ant2	2462	20.52	2.20	18.32	36	30	PASS
11G-SISO	Ant1	2412	20.55	1.92	18.63	36	30	PASS
	Ant2	2412	19.02	2.20	16.82	36	30	PASS
	Ant1	2437	20.46	1.92	18.54	36	30	PASS
	Ant2	2437	18.99	2.20	16.79	36	30	PASS
	Ant1	2462	19.93	1.92	18.01	36	30	PASS
	Ant2	2462	18.23	2.20	16.03	36	30	PASS
11N20-MIMO	Ant1& Ant2	2412	18.75	5.07	13.68	36	30	PASS
		2437	18.66	5.07	13.59	36	30	PASS
		2462	18.78	5.07	13.71	36	30	PASS
11N40-MIMO	Ant1& Ant2	2422	18.44	5.07	13.37	36	30	PASS
		2437	18.99	5.07	13.92	36	30	PASS
		2452	19.36	5.07	14.29	36	30	PASS
11AX20-MIMO	Ant1& Ant2	2412	18.66	5.07	13.59	36	30	PASS
		2437	18.87	5.07	13.80	36	30	PASS
		2462	18.58	5.07	13.51	36	30	PASS
11AX40-MIMO	Ant1& Ant2	2422	18.22	5.07	13.15	36	30	PASS
		2437	19.18	5.07	14.11	36	30	PASS
		2452	19.19	5.07	14.12	36	30	PASS
Note: The EUT incorporates a MIMO function. Physically, the EUT provides three antennas for transmitting and receiving. When ANT. 1(1.92dBi) and ANT. 2(2.20dBi) transmitting simultaneously, so the Directional Gain=5.07dBi<6dBi. So $P_{out} = P_{limit}$								
Note: Conducted Power=E.I.R.P.-Gain								



10. Power Spectral Density

10.1 Test Standard and Limit

10.1.1 Test Standard

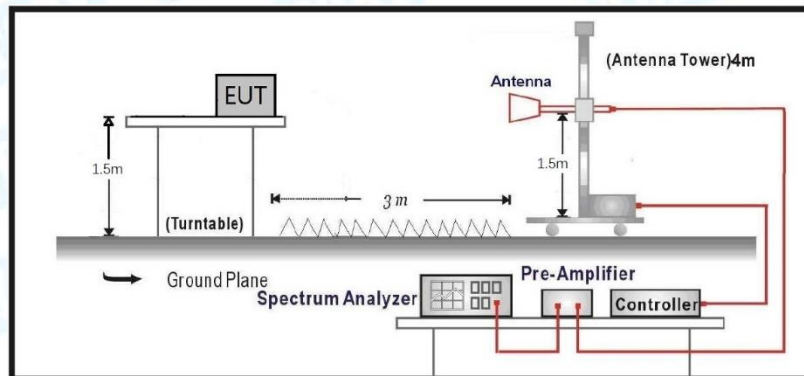
RSS 247 5.2(b)

FCC Part 15.247(e)

10.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5

10.2 Test Setup



10.3 Test Procedure

● The following procedure shall be used if maximum peak conducted output power was used to determine compliance, and it is optional if the maximum conducted (average) output power was used to determine compliance:

- Set analyzer center frequency to DTS channel center frequency.
- Set the span to 1.5 times the DTS bandwidth.
- Set the RBW to $3\text{ kHz} \leq \text{RBW} \leq 100\text{ kHz}$.
- Set the VBW $\geq [3 \times \text{RBW}]$.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level within the RBW.
- If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

10.4 Deviation From Test Standard

No deviation

10.5 Antenna Connected Construction

Please refer to the description of test mode.

10.6 Test Data

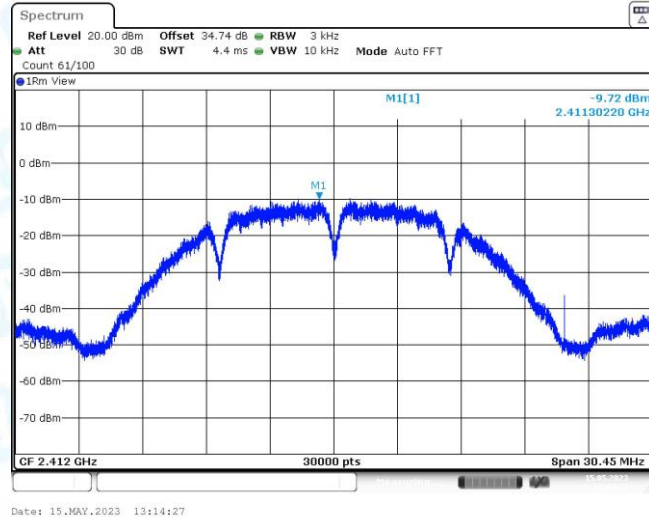
Please refer to the following pages.



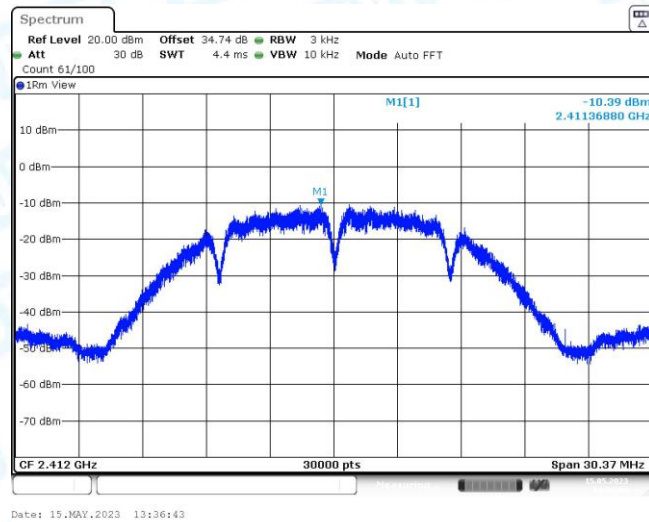
---Power Spectral Density (Radiation Measurements)

Test Mode	Antenna	Channel	EIRP PSD Result [dBm/3kHz]	Gain [dBi]	Conducted PSD [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B-SISO	Ant1	2412	-9.72	1.92	-11.64	≤8.00	PASS
	Ant2	2412	-10.39	2.20	-12.59	≤8.00	PASS
	Ant1	2437	-10.26	1.92	-12.18	≤8.00	PASS
	Ant2	2437	-10.84	2.20	-13.04	≤8.00	PASS
	Ant1	2462	-10.81	1.92	-12.73	≤8.00	PASS
	Ant2	2462	-12.05	2.20	-14.25	≤8.00	PASS
11G-SISO	Ant1	2412	-12.63	1.92	-14.55	≤8.00	PASS
	Ant2	2412	-14.13	2.20	-16.33	≤8.00	PASS
	Ant1	2437	-12.73	1.92	-14.65	≤8.00	PASS
	Ant2	2437	-14.23	2.20	-16.43	≤8.00	PASS
	Ant1	2462	-13.36	1.92	-15.28	≤8.00	PASS
	Ant2	2462	-15.19	2.20	-17.39	≤8.00	PASS
11N20-MIMO	Ant1&Ant2	2412	-13.55	5.07	-18.62	≤8.00	PASS
		2437	-15.39	5.07	-20.46	≤8.00	PASS
		2462	-14.21	5.07	-19.28	≤8.00	PASS
11N40-MIMO	Ant1&Ant2	2422	-15.21	5.07	-20.28	≤8.00	PASS
		2437	-14.36	5.07	-19.43	≤8.00	PASS
		2452	-14.38	5.07	-19.45	≤8.00	PASS
11AX20-MIMO	Ant1&Ant2	2412	-14.53	5.07	-19.60	≤8.00	PASS
		2437	-14.64	5.07	-19.71	≤8.00	PASS
		2462	-14.18	5.07	-19.25	≤8.00	PASS
11AX40-MIMO	Ant1&Ant2	2422	-16.53	5.07	-21.60	≤8.00	PASS
		2437	-15.15	5.07	-20.22	≤8.00	PASS
		2452	-16.07	5.07	-21.14	≤8.00	PASS

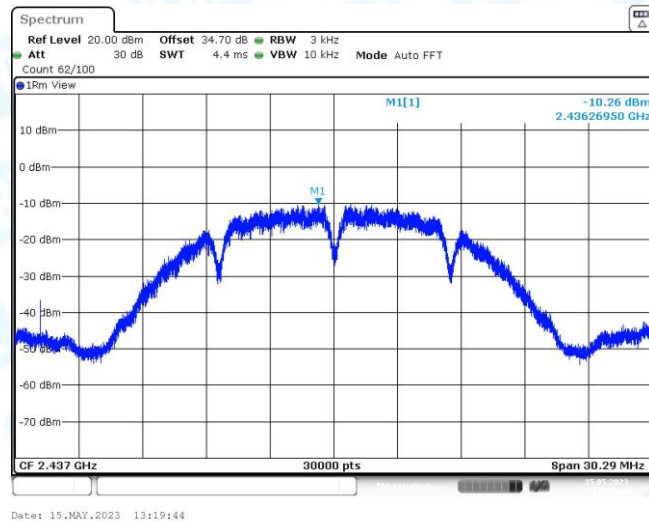




11B_Ant1_2412

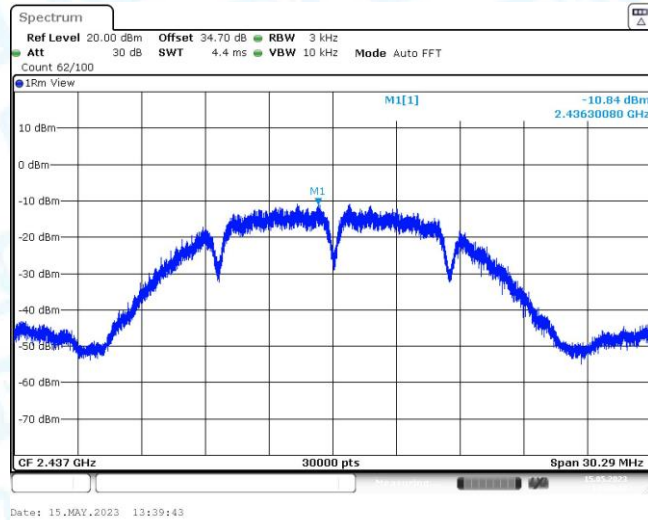


11B_Ant2_2412

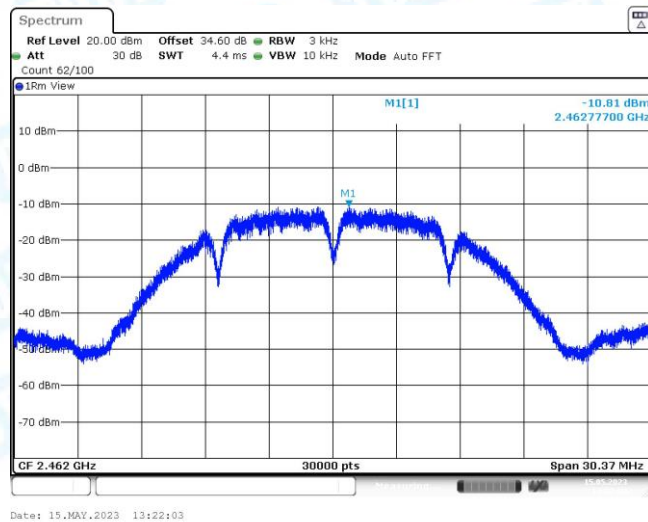


11B_Ant1_2437

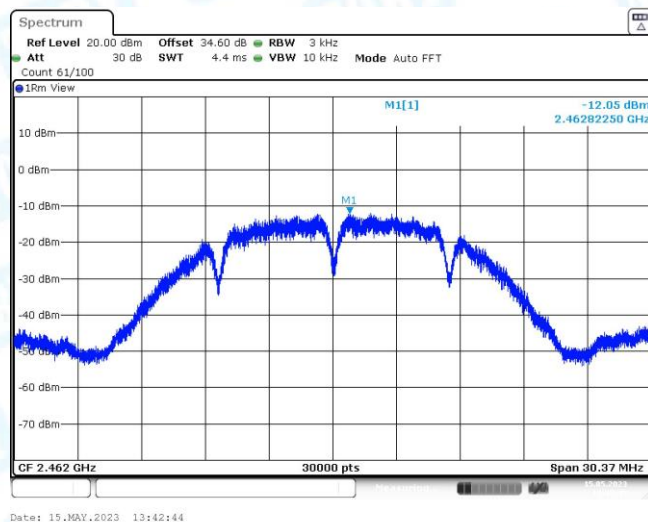




11B_Ant2_2437

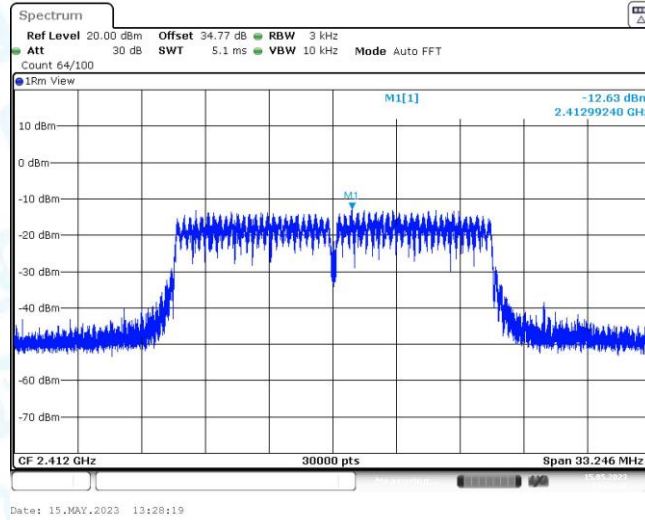


11B_Ant1_2462

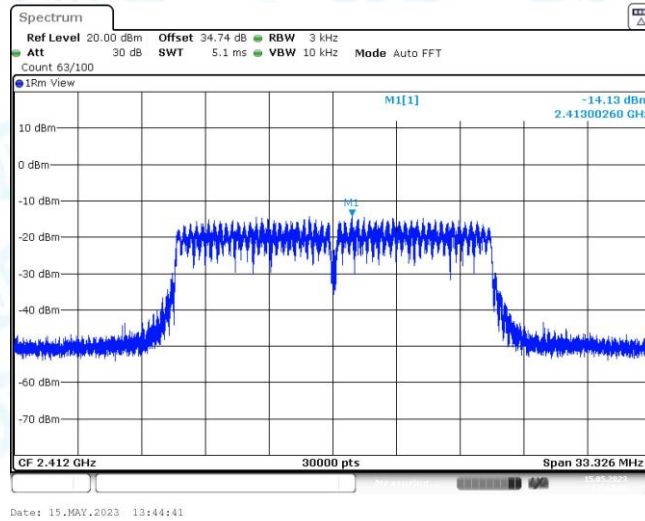


11B_Ant2_2462

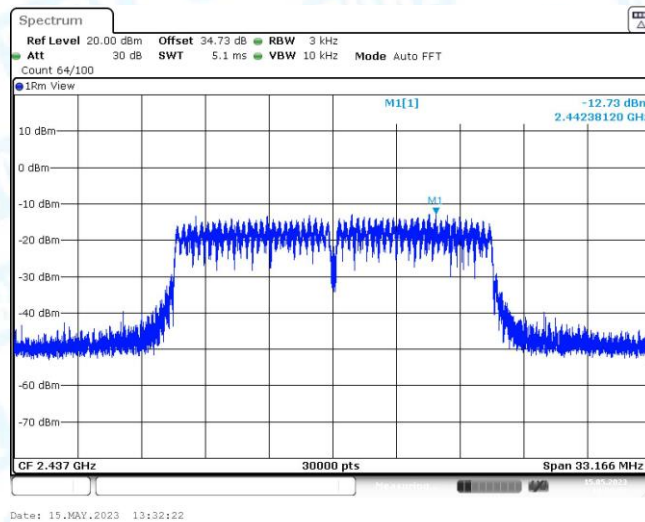




11G_Ant1_2412

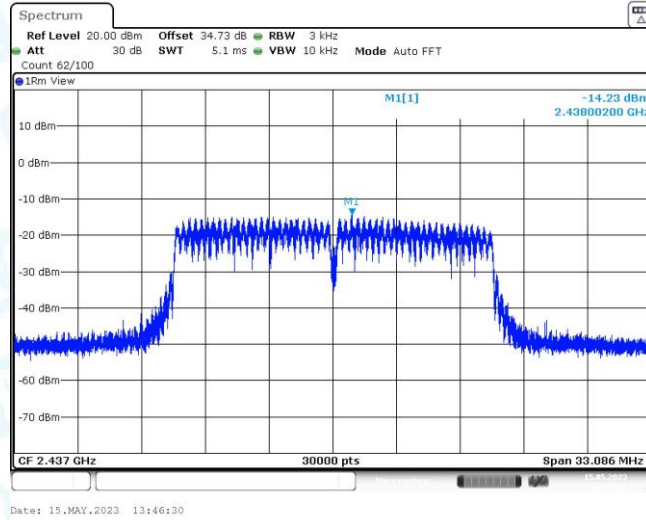


11G_Ant2_2412

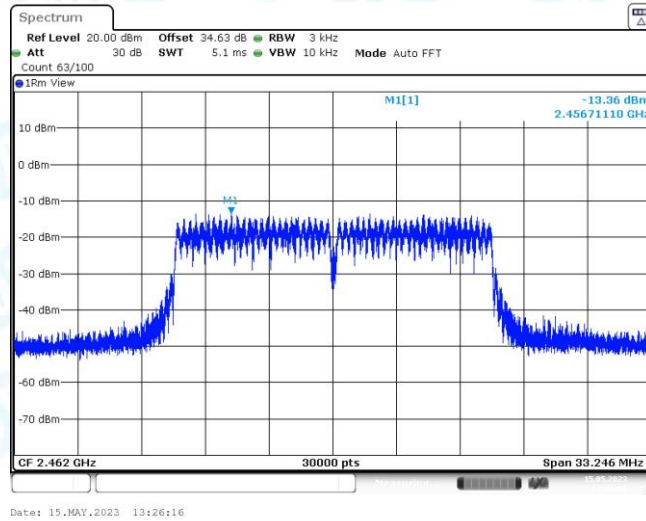


11G_Ant1_2437

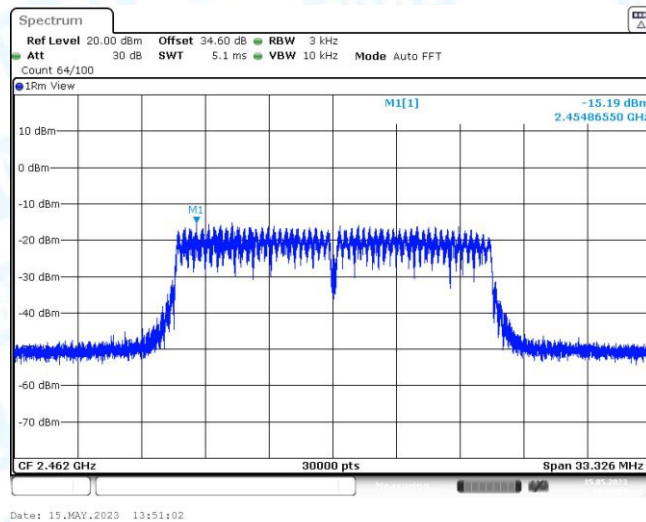




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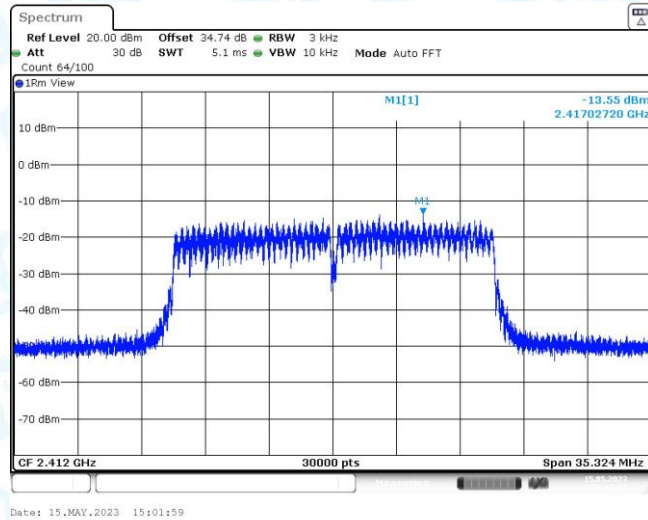


11G_Ant1_2462

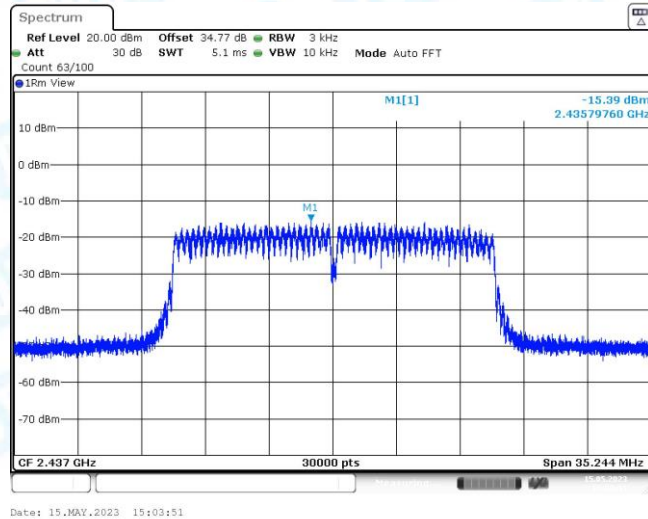


11G_Ant2_2462

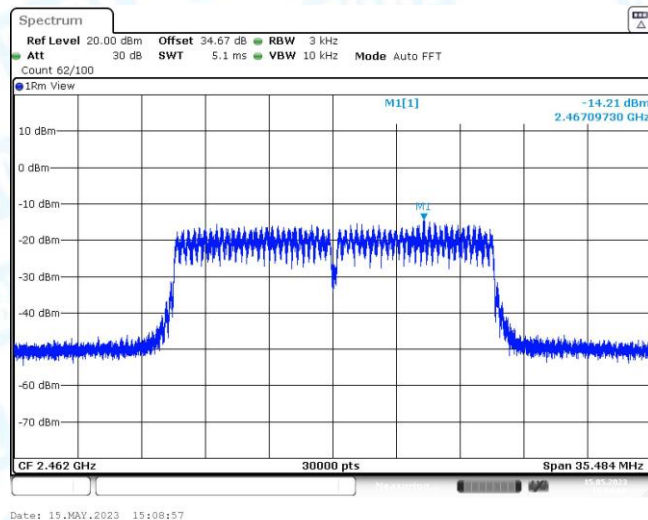




11N20MIMO_Ant1&Ant2_2412

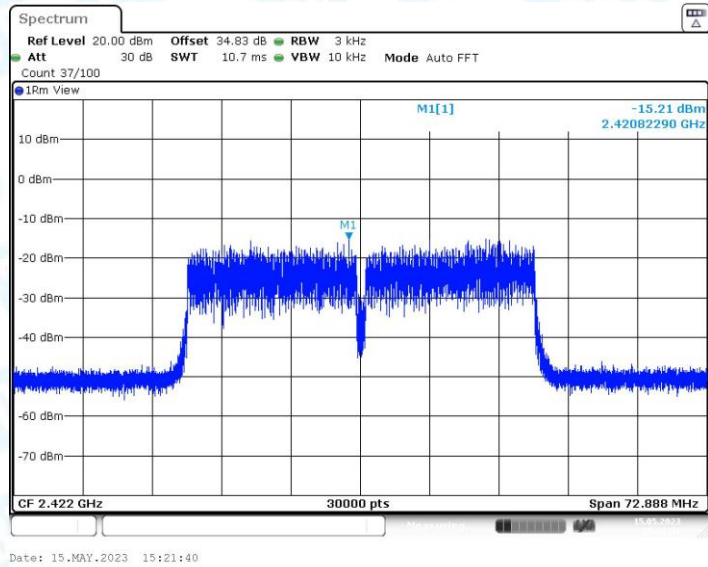


11N20MIMO_Ant1&Ant2_2437

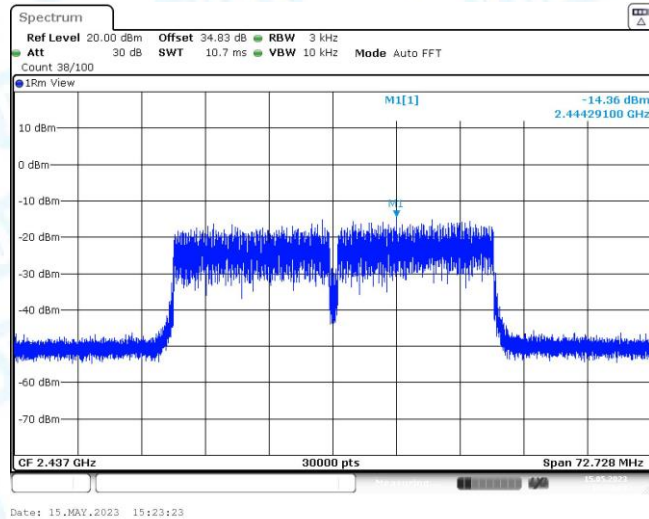


11N20MIMO_Ant1&Ant2_2462

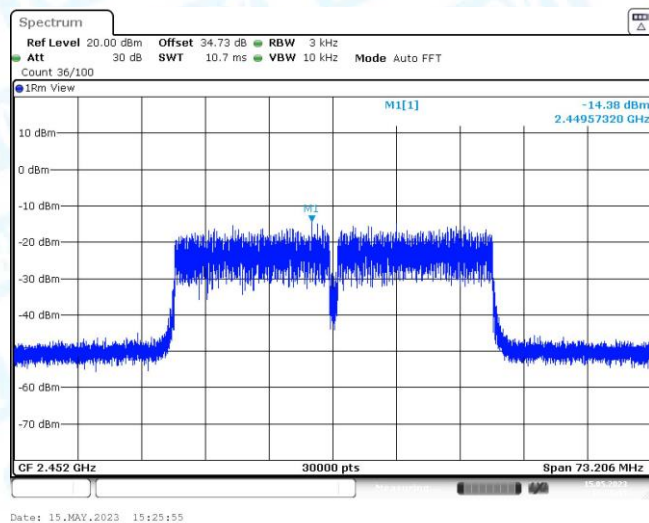




11N40MIMO_Ant1&Ant2_2422

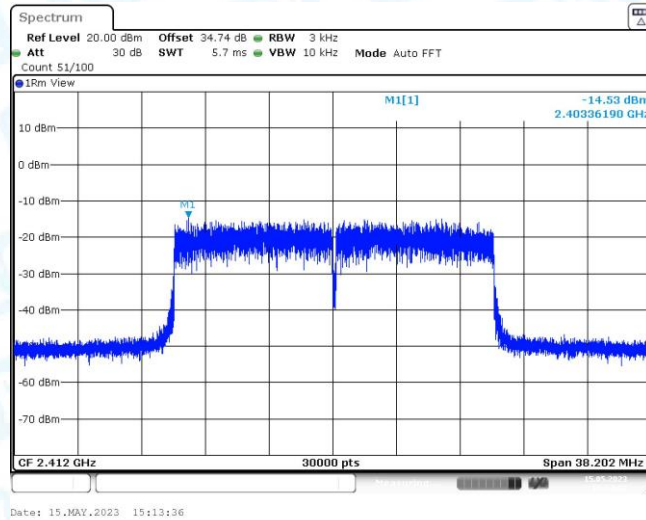


11N40MIMO_Ant1&Ant2_2437

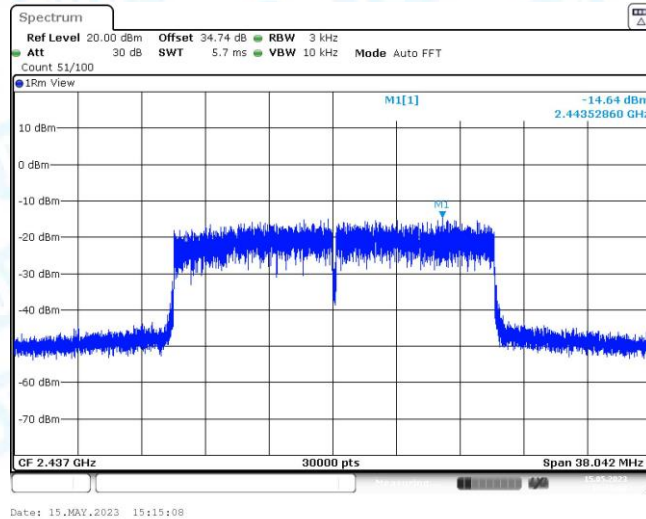


11N40MIMO_Ant1&Ant2_2452

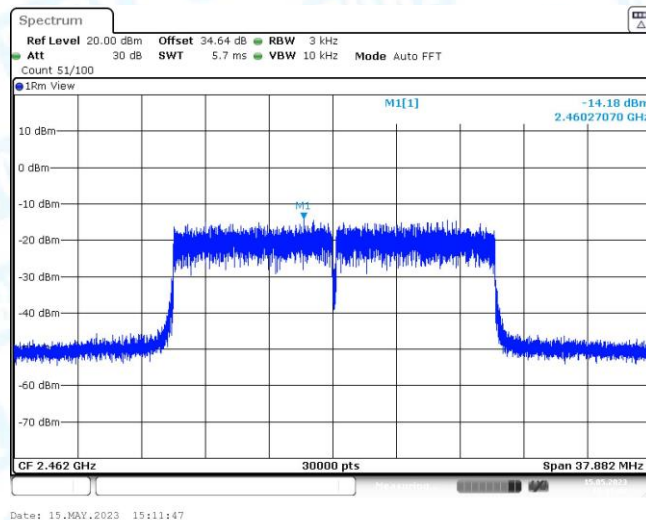




11AX20MIMO_Ant1&Ant2_2412

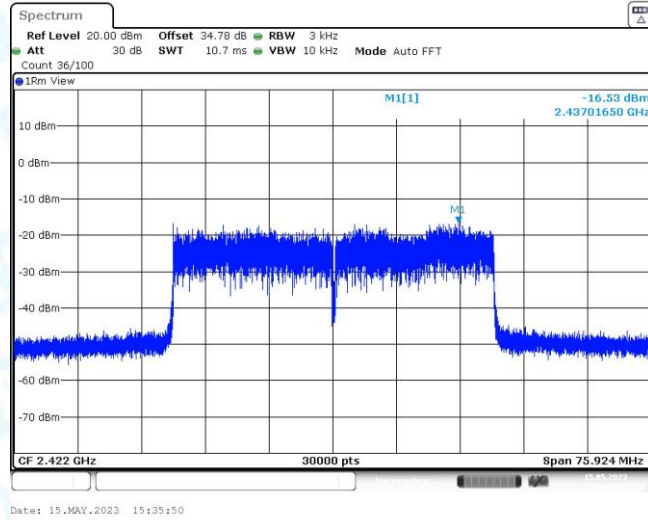


11AX20MIMO_Ant1&Ant2_2437

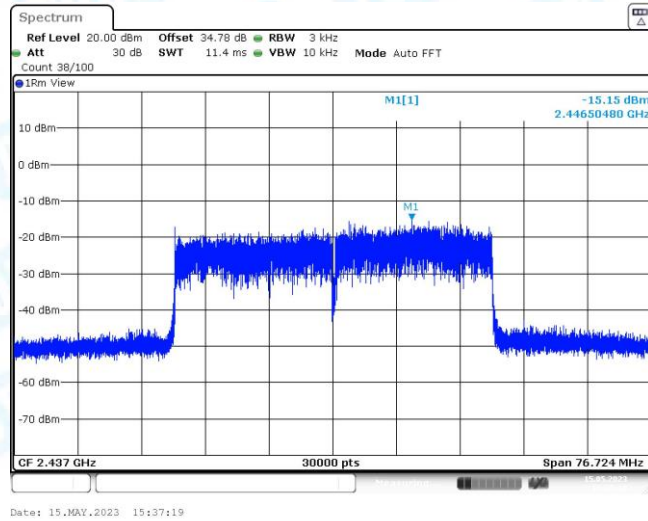


11AX20MIMO_Ant1&Ant2_2462

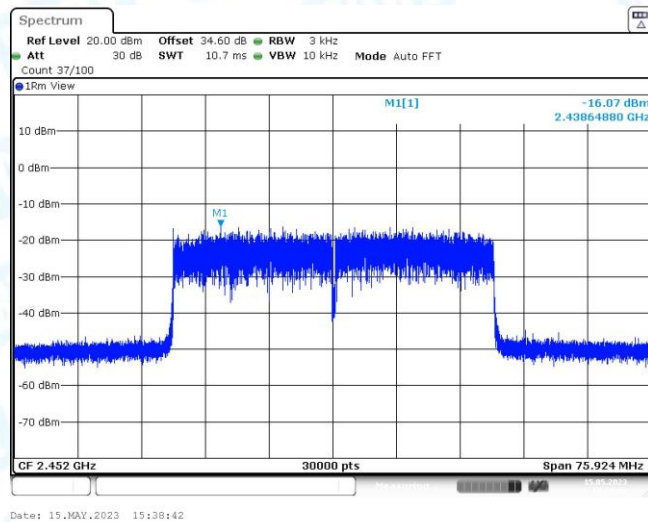




11AX40MIMO_Ant1&Ant2_2422



11AX40MIMO_Ant1&Ant2_2437



11AX40MIMO_Ant1&Ant2_2452



11. Antenna Requirement

11.1 Test Standard and Limit

11.1.1 Test Standard

RSS 247 6.8

FCC Part 15.203

11.1.2 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

11.2 Deviation From Test Standard

No deviation

11.3 Antenna Connected Construction

The gains of the antenna used for transmitting is Ant.1:1.92dBi, Ant.2:2.20dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

11.4 Test Data

The EUT antenna is a PIFA Antenna. It complies with the standard requirement.

Antenna Type	
☒	Permanent attached antenna
☐	Unique connector antenna
☐	Professional installation antenna

-----END OF THE REPORT-----

