

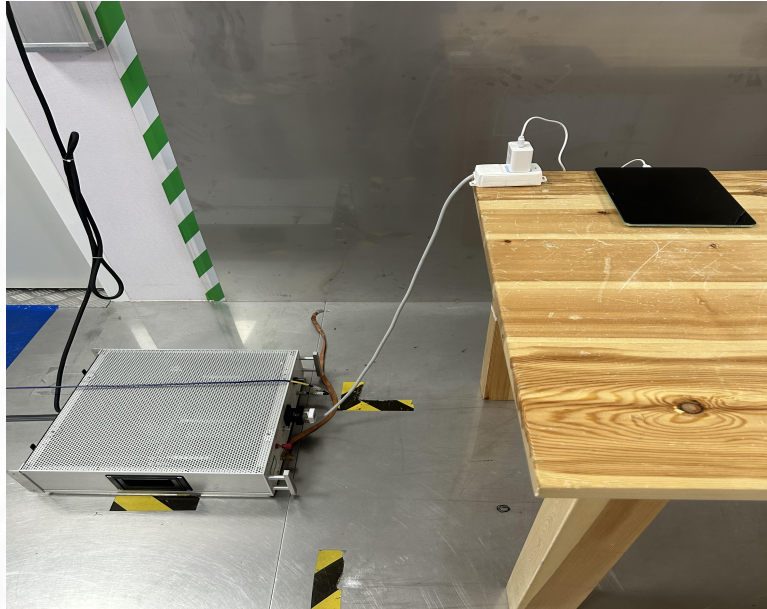
Test Mode: IEEE 802.11g TX Low									
Freq (MHz)	Read Level (dBuV/m)	Polar (H/V)	Antenna Factor (dB/m)	Cable loss(dB)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4824		V	33.93	10.18	34.26	58.57	74	-15.43	PK
4824	36.08	V	33.93	10.18	34.26	45.93	54	-8.07	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
4824	47.16	H	33.93	10.18	34.26	57.01	74	-16.99	PK
4824	35.97	H	33.93	10.18	34.26	45.82	54	-8.18	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11g TX Mid									
4874	49.19	V	33.95	10.20	34.26	59.08	74	-14.92	PK
4874	35.18	V	33.95	10.20	34.26	45.07	54	-8.93	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
4874	48.62	H	33.95	10.20	34.26	58.51	74	-15.49	PK
4874	34.44	H	33.95	10.20	34.26	44.33	54	-9.67	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11g TX High									
4924	47.30	V	33.98	10.22	34.25	57.25	74	-16.75	PK
4924	33.04	V	33.98	10.22	34.25	42.99	54	-11.01	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
4924	46.89	H	33.98	10.22	34.25	56.84	74	-17.16	PK
4924	32.71	H	33.98	10.22	34.25	42.66	54	-11.34	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
Note:									
1, Result = Read level + Antenna factor + cable loss-Amp factor									
2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.									

Test Mode: IEEE 802.11n HT20 TX Low									
Freq (MHz)	Read Level (dBuV/m)	Polar (H/V)	Antenna Factor (dB/m)	Cable loss(dB)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4824	48.80	V	33.93	10.18	34.26	58.65	74	-15.35	PK
4824	36.99	V	33.93	10.18	34.26	46.84	54	-7.16	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
4824	47.28	H	33.93	10.18	34.26	57.13	74	-16.87	PK
4824	35.40	H	33.93	10.18	34.26	45.25	54	-8.75	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11n HT20 TX Mid									
4874	49.29	V	33.95	10.20	34.26	59.18	74	-14.82	PK
4874	35.47	V	33.95	10.20	34.26	45.36	54	-8.64	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
4874	48.79	H	33.95	10.20	34.26	58.68	74	-15.32	PK
4874	34.23	H	33.95	10.20	34.26	44.12	54	-9.88	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11n HT20 TX High									
4924	47.17	V	33.98	10.22	34.25	57.12	74	-16.88	PK
4924	33.88	V	33.98	10.22	34.25	43.83	54	-10.17	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
4924	46.84	H	33.98	10.22	34.25	56.79	74	-17.21	PK
4924	32.83	H	33.98	10.22	34.25	42.78	54	-11.22	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
Note:									
1, Result = Read level + Antenna factor + cable loss-Amp factor									
2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.									

Test Mode: IEEE 802.11n HT40 TX Low									
Freq (MHz)	Read Level (dBuV/m)	Polar (H/V)	Antenna Factor (dB/m)	Cable loss(dB)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4824	48.49	V	33.93	10.18	34.26	58.34	74	-15.66	PK
4824	36.23	V	33.93	10.18	34.26	46.08	54	-7.92	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
4824	47.68	H	33.93	10.18	34.26	57.53	74	-16.47	PK
4824	35.21	H	33.93	10.18	34.26	45.06	54	-8.94	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11n HT40 TX Mid									
4874	49.11	V	33.95	10.20	34.26	59.00	74	-15.00	PK
4874	35.95	V	33.95	10.20	34.26	45.84	54	-8.16	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
4874	48.26	H	33.95	10.20	34.26	58.15	74	-15.85	PK
4874	34.41	H	33.95	10.20	34.26	44.30	54	-9.70	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11n HT40 TX High									
4924	47.53	V	33.98	10.22	34.25	57.48	74	-16.52	PK
4924	33.93	V	33.98	10.22	34.25	43.88	54	-10.12	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
4924	46.19	H	33.98	10.22	34.25	56.14	74	-17.86	PK
4924	32.10	H	33.98	10.22	34.25	42.05	54	-11.95	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
Note:									
1, Result = Read level + Antenna factor + cable loss-Amp factor									
2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.									

7 Test Setup Photos

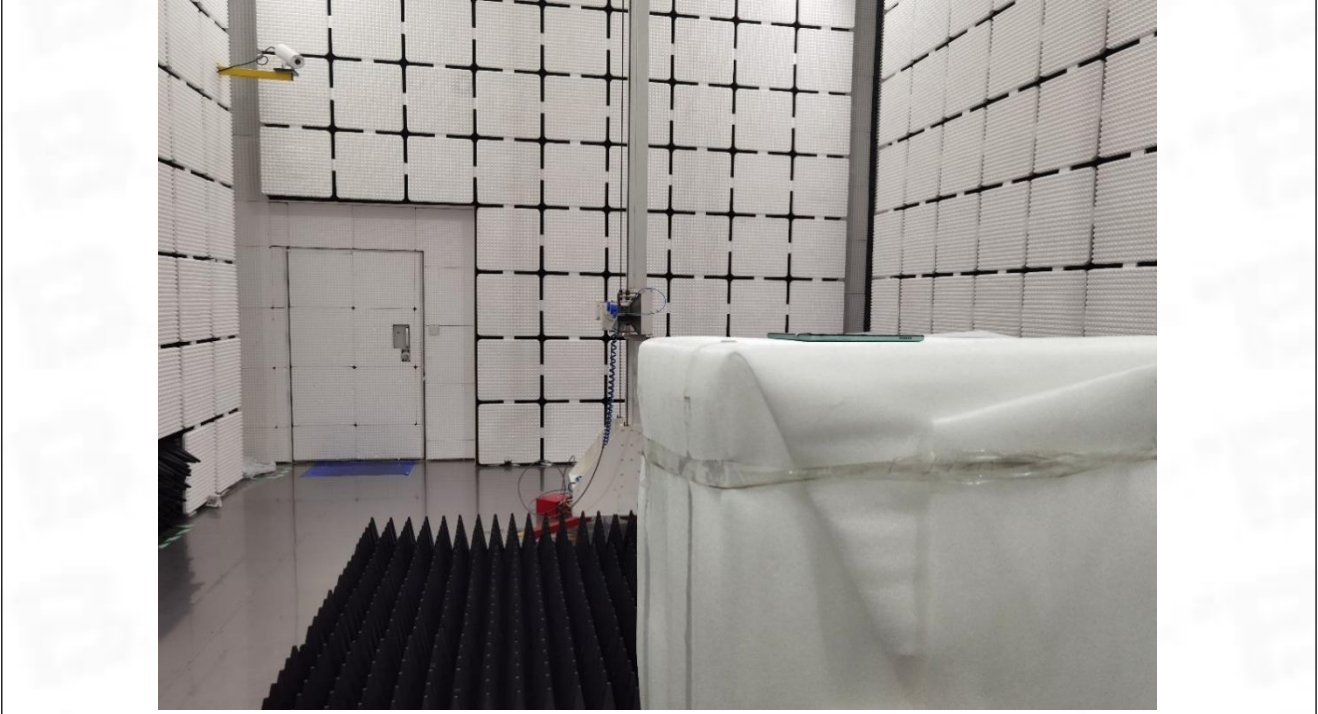
Conducted Emission at AC power line



Occupied Bandwidth
Maximum Conducted Output Power
Power Spectral Density
Emissions in non-restricted frequency bands



Band edge emissions (Radiated)
Emissions in restricted frequency bands (above 1GHz)



Emissions in restricted frequency bands (below 1GHz)



8 EUT Constructional Details (EUT Photos)

Please refer to the report No. BTF230710R00301

Appendix

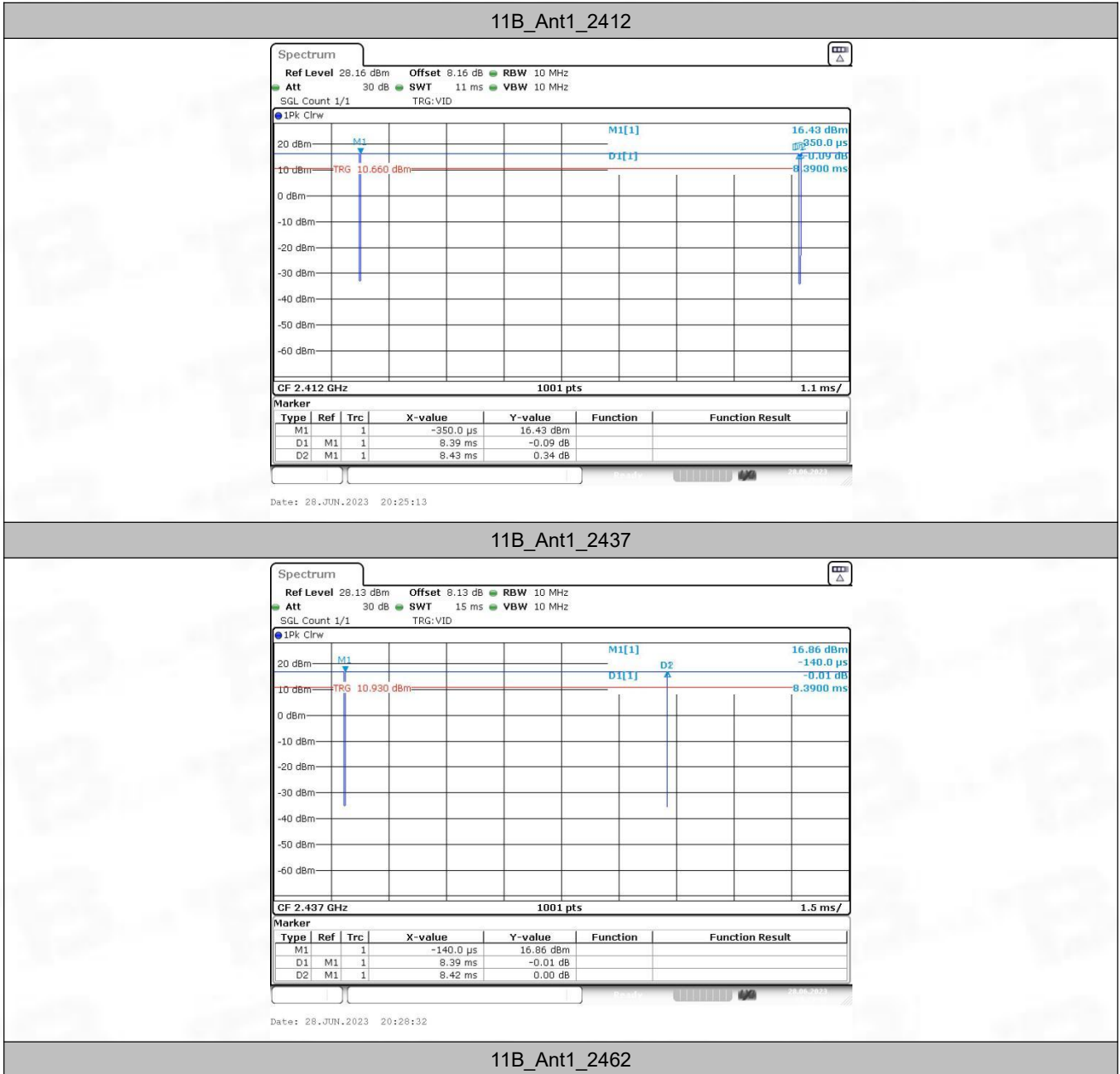
1. Duty Cycle

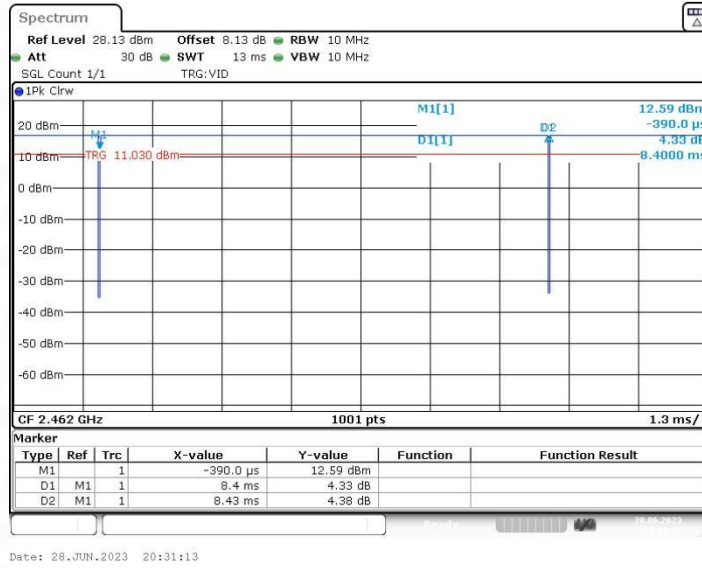
1.1 Ant1

1.1.1 Test Result

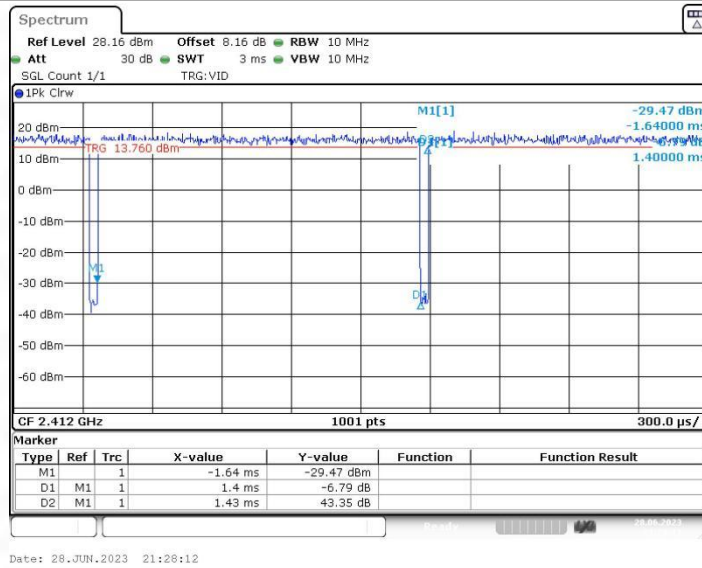
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11B	Ant1	2412	8.39	8.43	99.53
		2437	8.39	8.42	99.64
		2462	8.40	8.43	99.64
11G	Ant1	2412	1.40	1.43	97.90
		2437	1.39	1.43	97.20
		2462	1.39	1.43	97.20
11N20SISO	Ant1	2412	1.30	1.33	97.74
		2437	1.30	1.33	97.74
		2462	1.29	1.33	96.99
11N40SISO	Ant1	2422	0.65	0.68	95.59
		2437	0.65	0.69	94.20
		2452	0.65	0.69	94.20

1.1.2 Test Graph

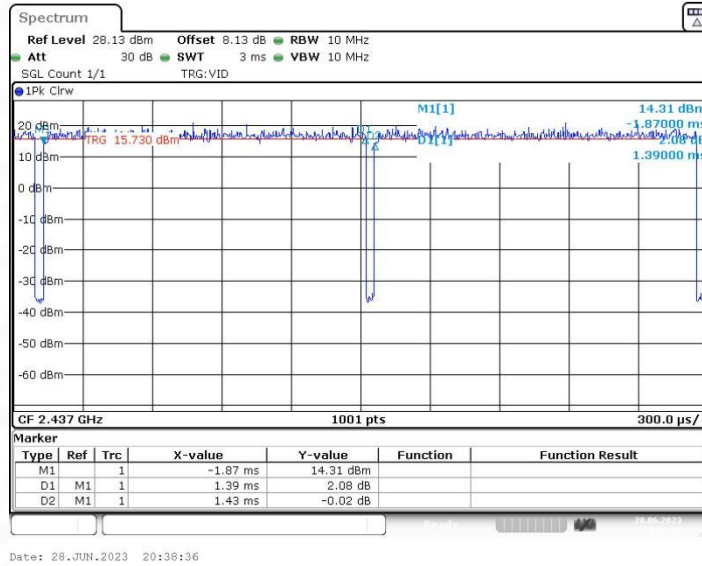




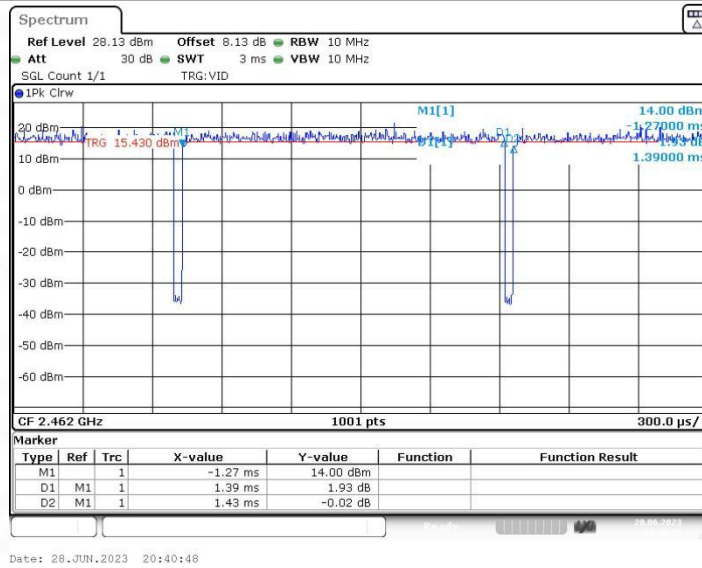
11G_Ant1_2412



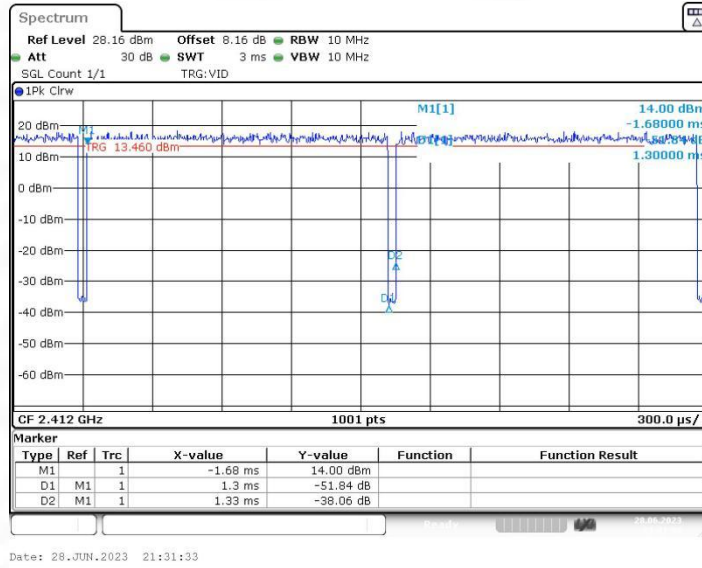
11G_Ant1_2437



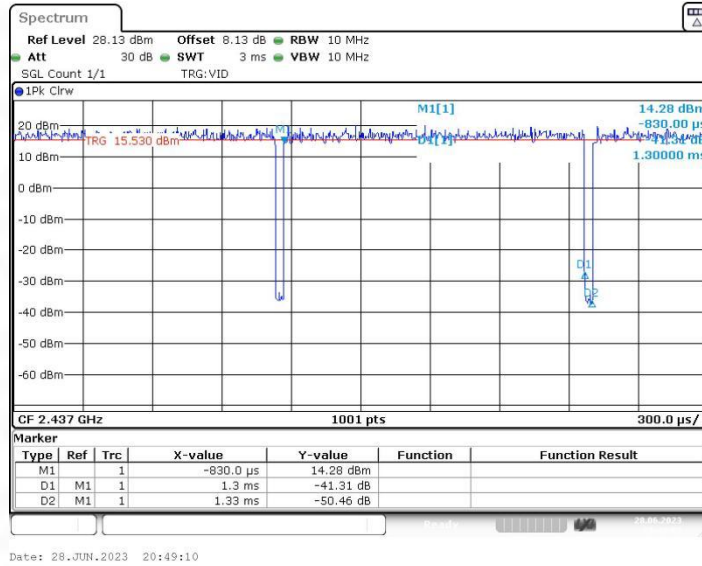
11G_Ant1_2462



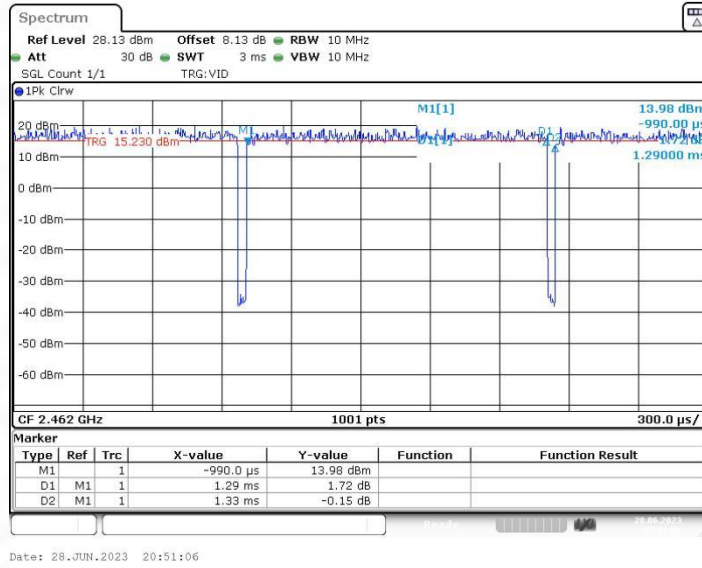
11N20SISO_Ant1_2412



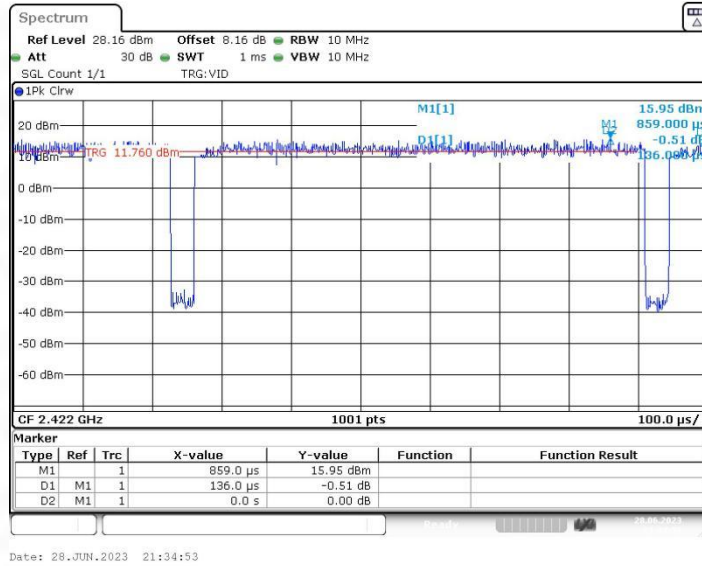
11N20SISO_Ant1_2437



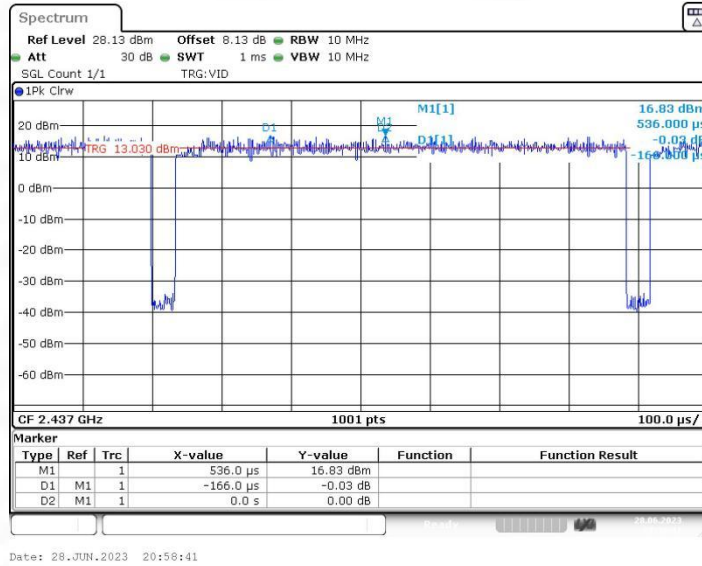
11N20SISO_Ant1_2462



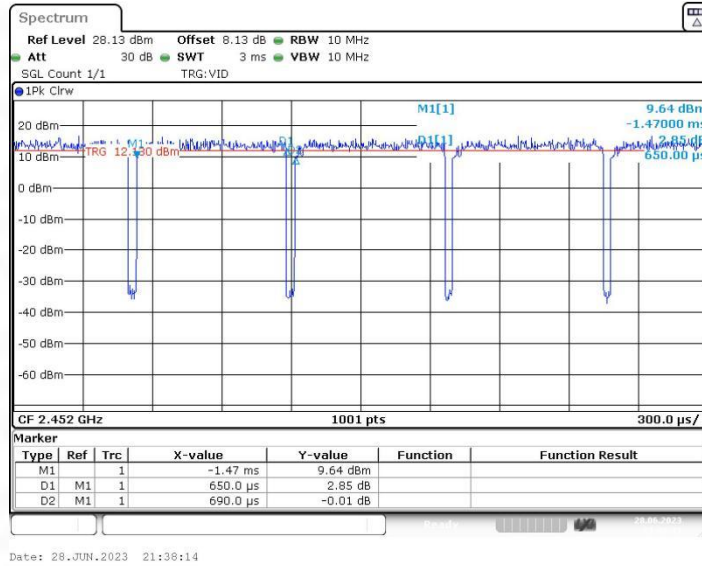
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



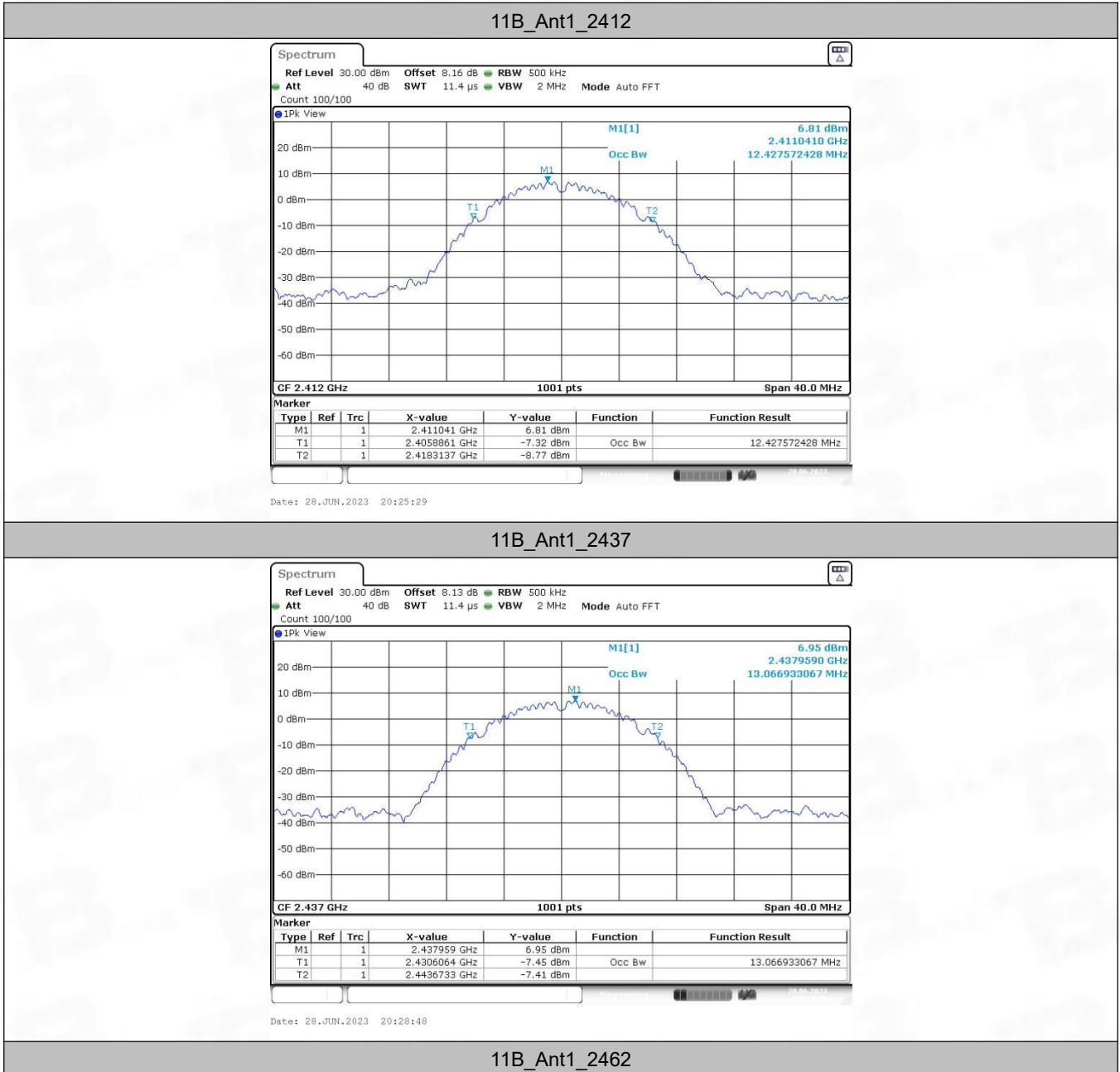
2. Bandwidth

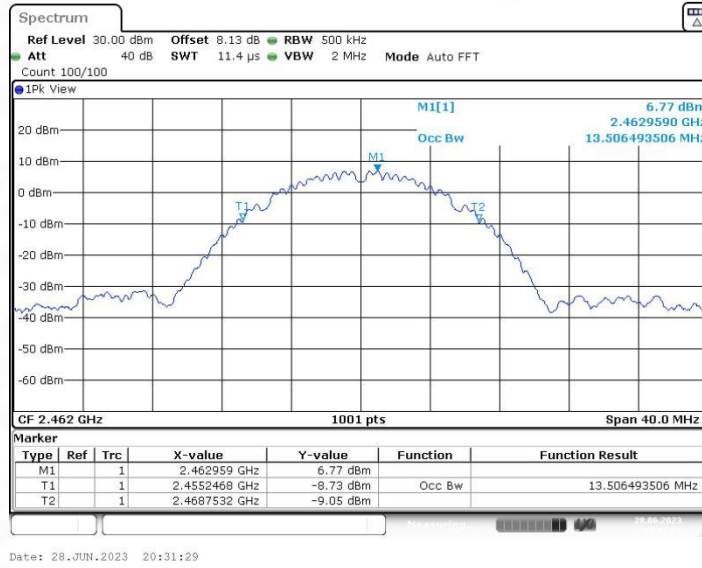
2.1 OBW

2.1.1 Test Result

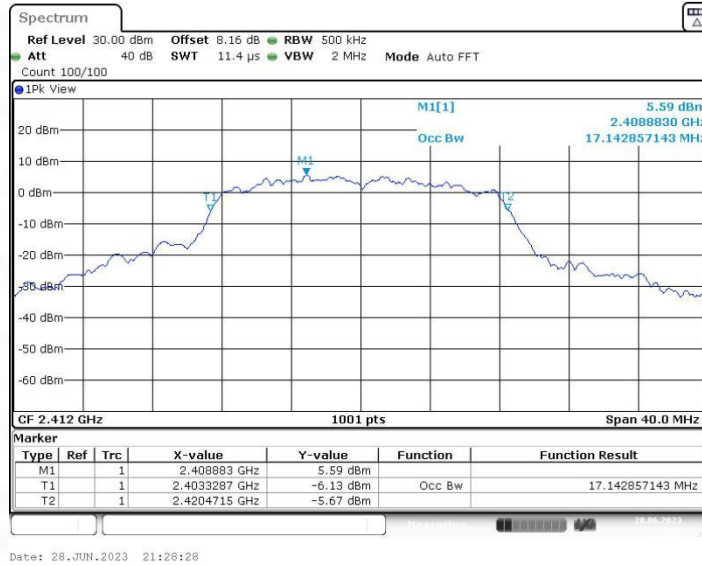
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.428	2405.8861	2418.3137	---	---
		2437	13.067	2430.6064	2443.6733	---	---
		2462	13.506	2455.2468	2468.7532	---	---
11G	Ant1	2412	17.143	2403.3287	2420.4715	---	---
		2437	16.943	2428.5285	2445.4715	---	---
		2462	17.063	2453.4885	2470.5514	---	---
11N20SISO	Ant1	2412	17.862	2402.9690	2420.8312	---	---
		2437	18.062	2428.0090	2446.0709	---	---
		2462	18.142	2452.9690	2471.1109	---	---
11N40SISO	Ant1	2422	36.044	2404.2577	2440.3017	---	---
		2437	35.804	2418.8581	2454.6623	---	---
		2452	36.523	2433.8581	2470.3816	---	---

2.1.2 Test Graph

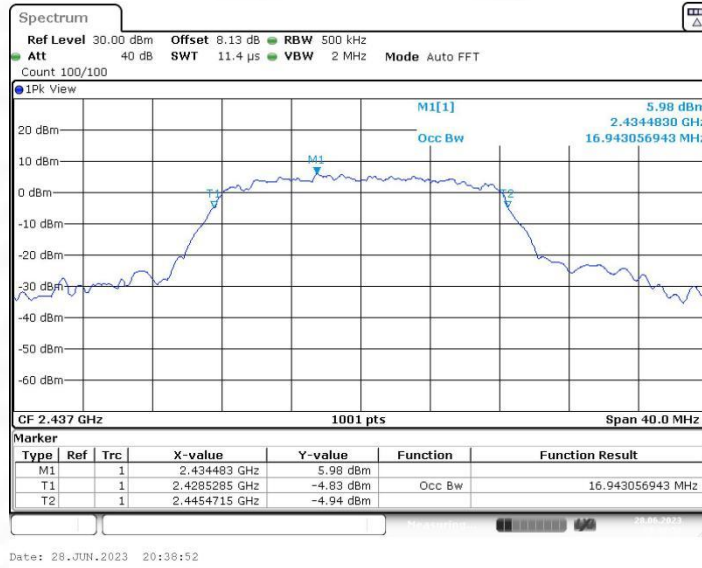




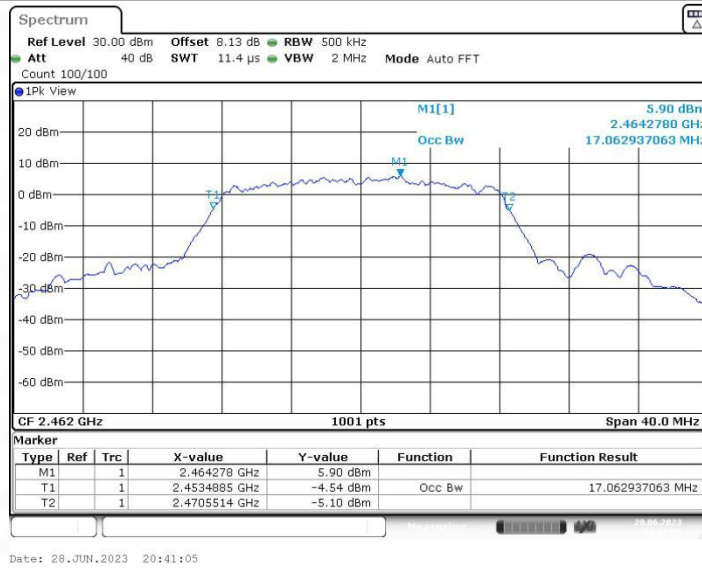
11G_Ant1_2412



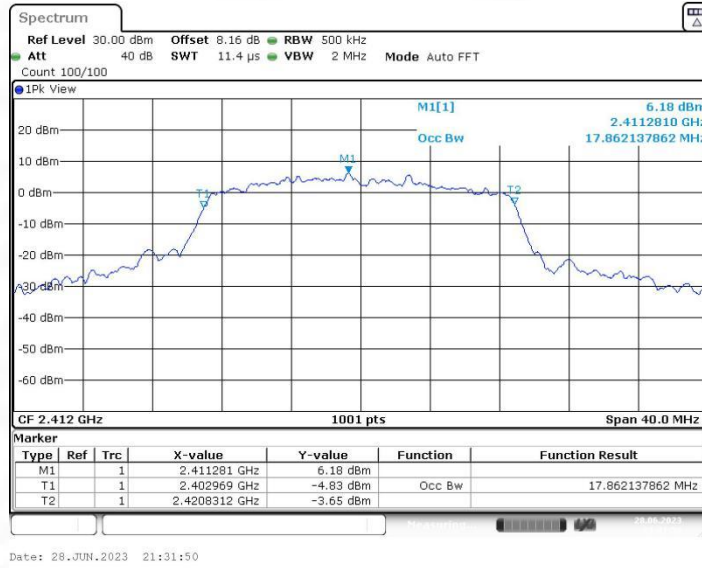
11G_Ant1_2437



11G_Ant1_2462



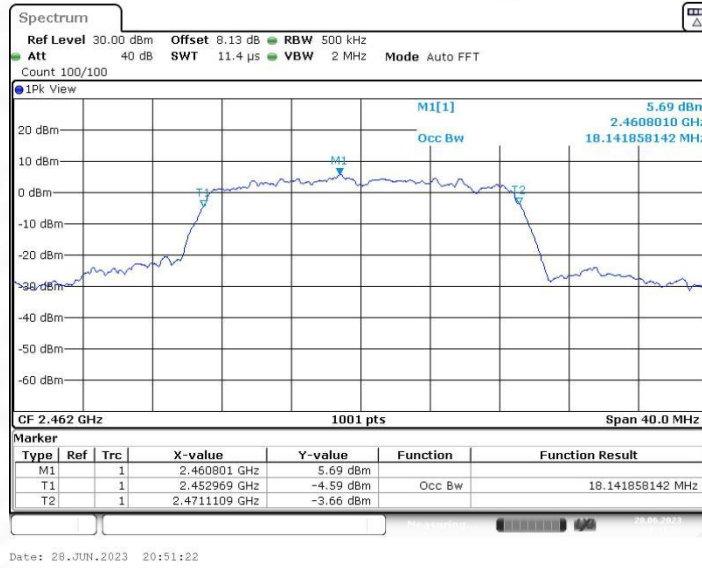
11N20SISO_Ant1_2412



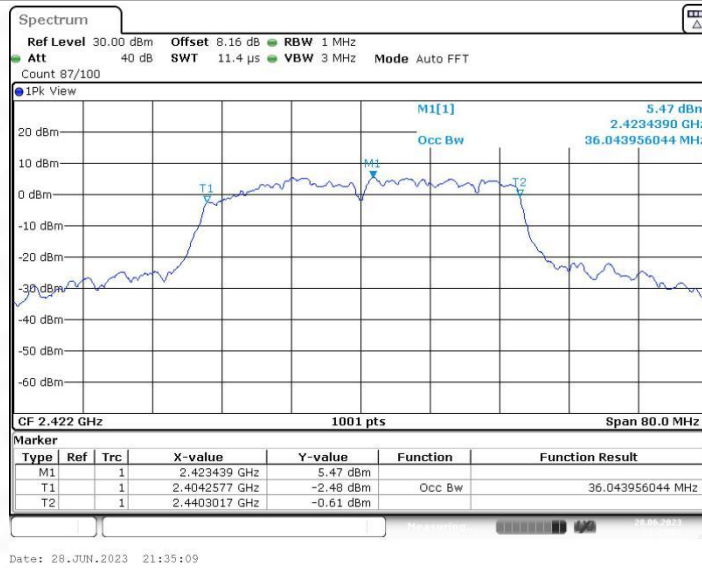
11N20SISO_Ant1_2437



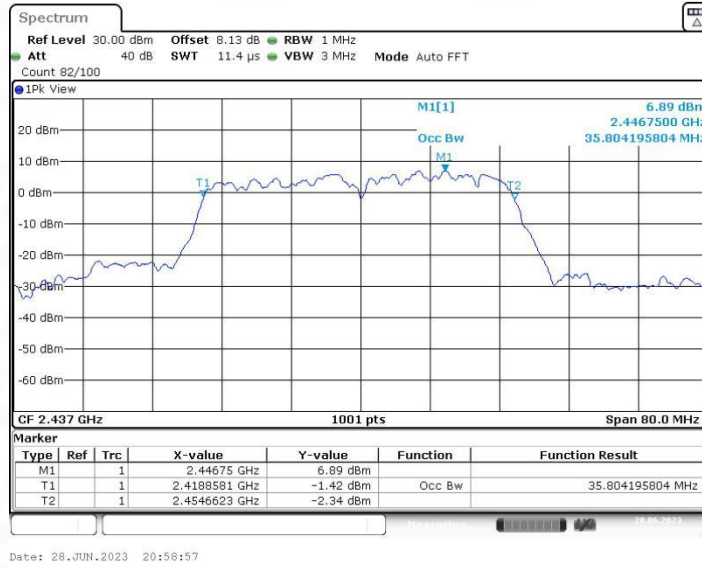
11N20SISO_Ant1_2462



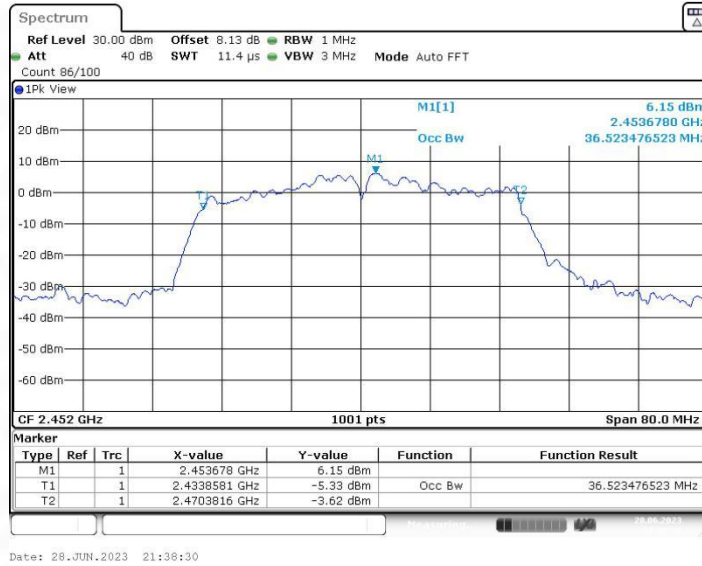
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

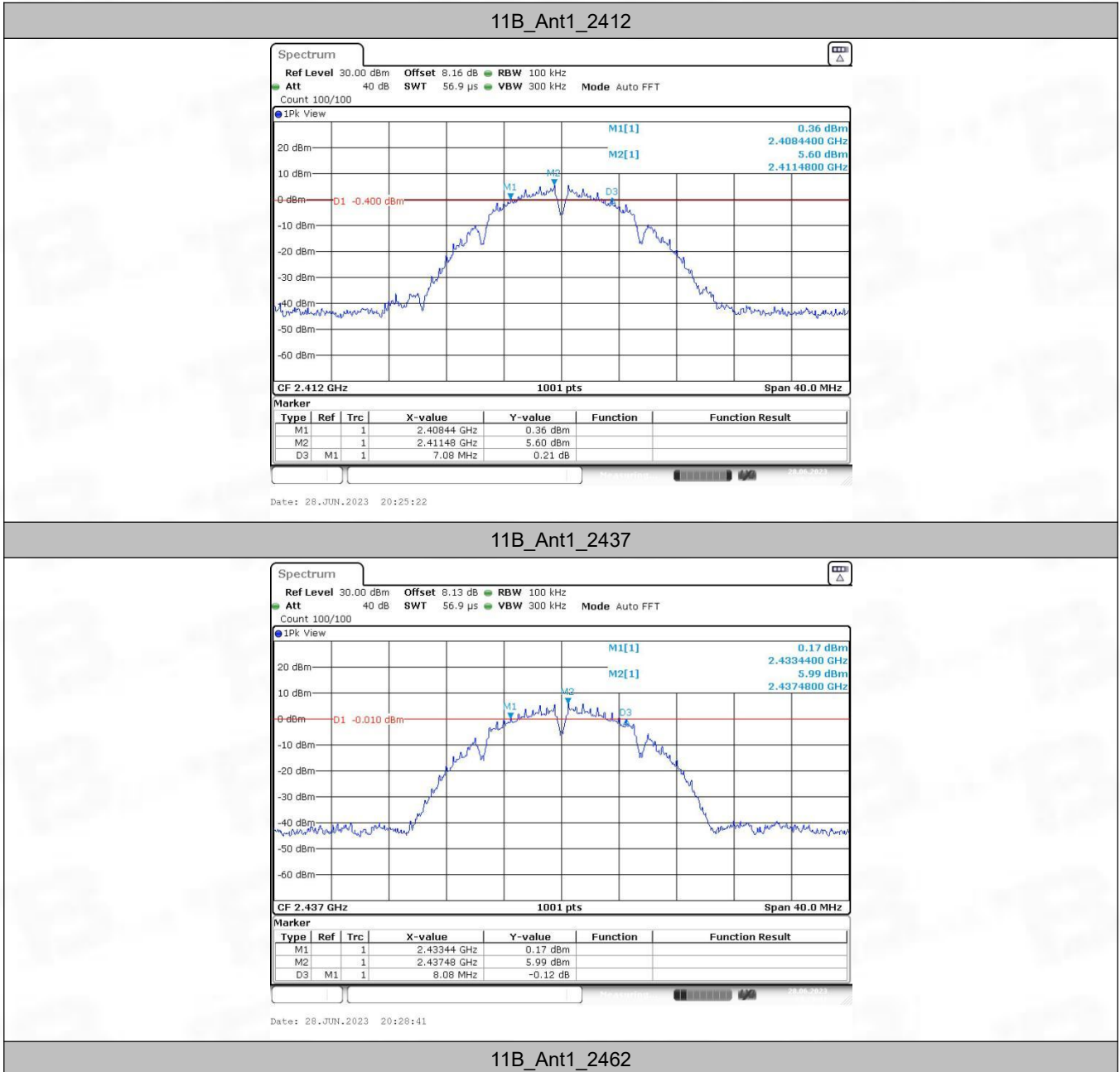


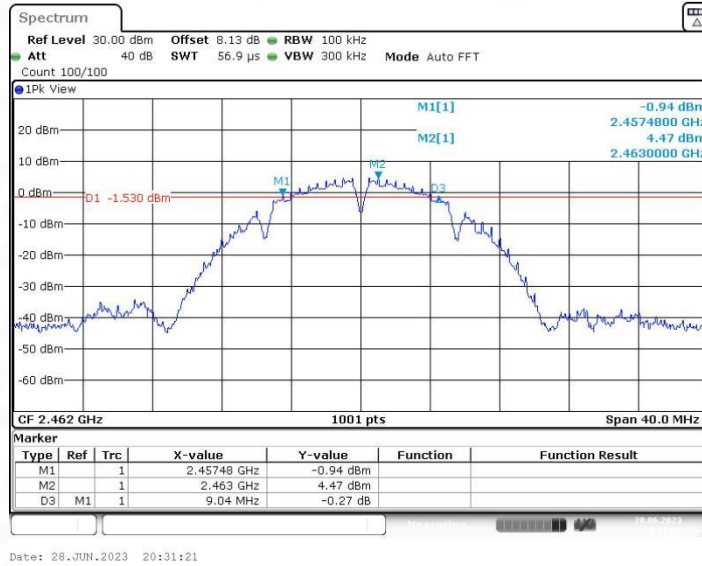
2.2 6dB BW

2.2.1 Test Result

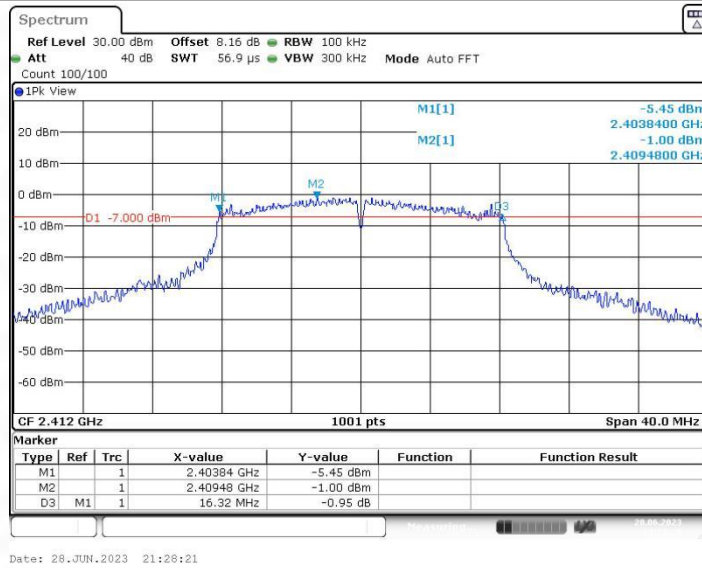
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	7.08	2408.44	2415.52	0.5	PASS
		2437	8.08	2433.44	2441.52	0.5	PASS
		2462	9.04	2457.48	2466.52	0.5	PASS
11G	Ant1	2412	16.32	2403.84	2420.16	0.5	PASS
		2437	13.88	2429.44	2443.32	0.5	PASS
		2462	15.28	2454.48	2469.76	0.5	PASS
11N20SISO	Ant1	2412	17.16	2403.24	2420.40	0.5	PASS
		2437	13.84	2430.68	2444.52	0.5	PASS
		2462	15.08	2454.44	2469.52	0.5	PASS
11N40SISO	Ant1	2422	34.48	2405.68	2440.16	0.5	PASS
		2437	35.12	2419.40	2454.52	0.5	PASS
		2452	25.04	2444.48	2469.52	0.5	PASS

2.2.2 Test Graph

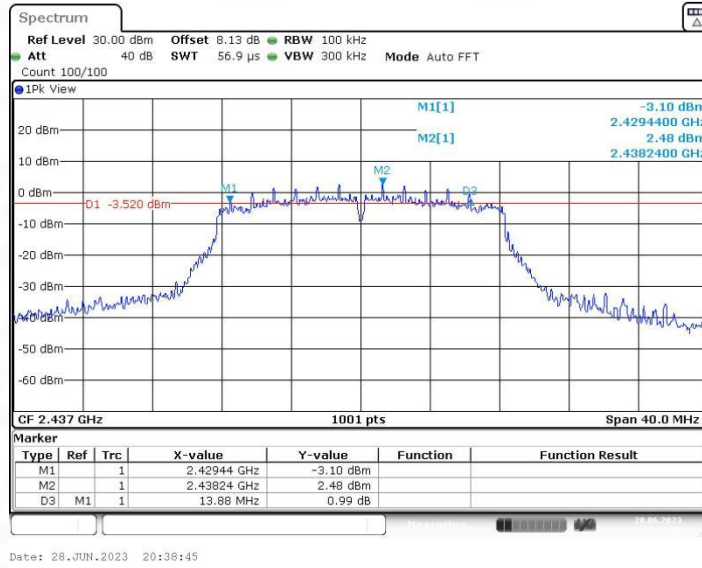




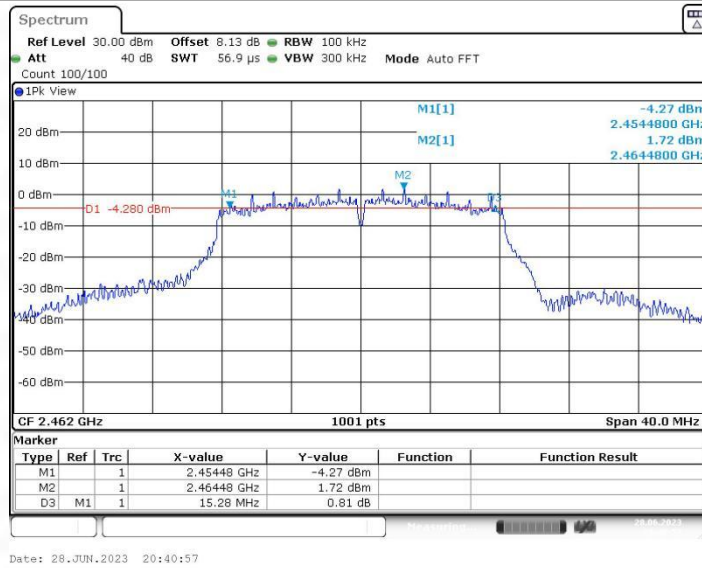
11G_Ant1_2412



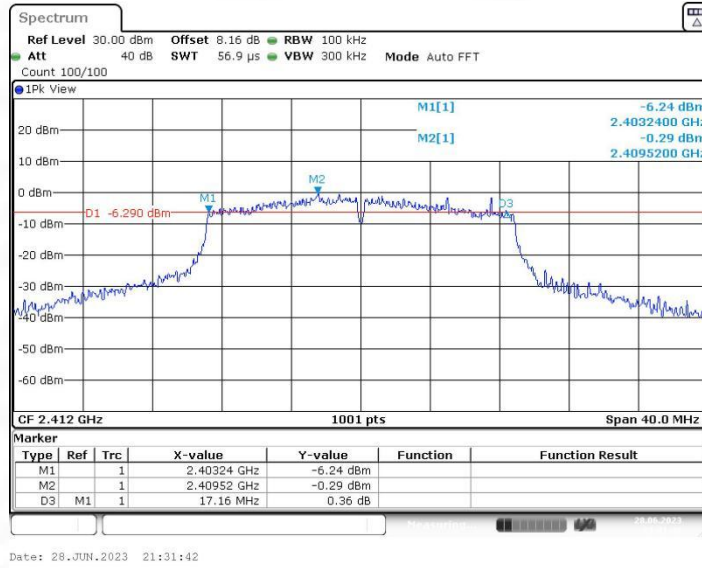
11G_Ant1_2437



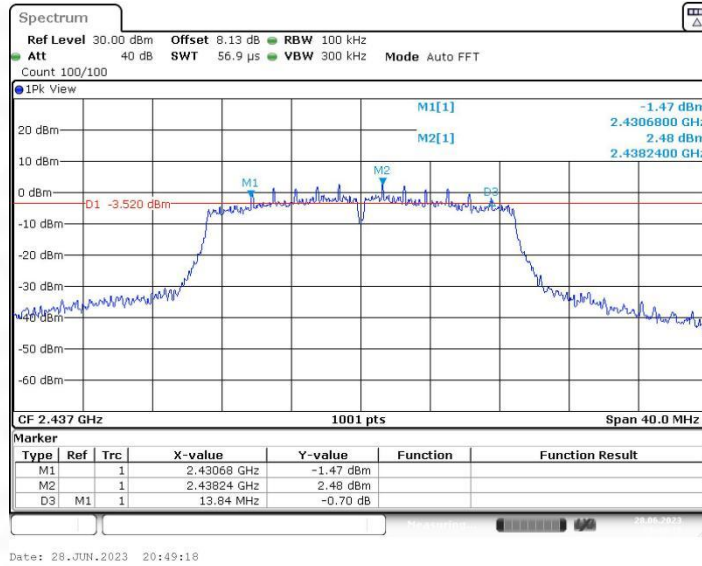
11G_Ant1_2462



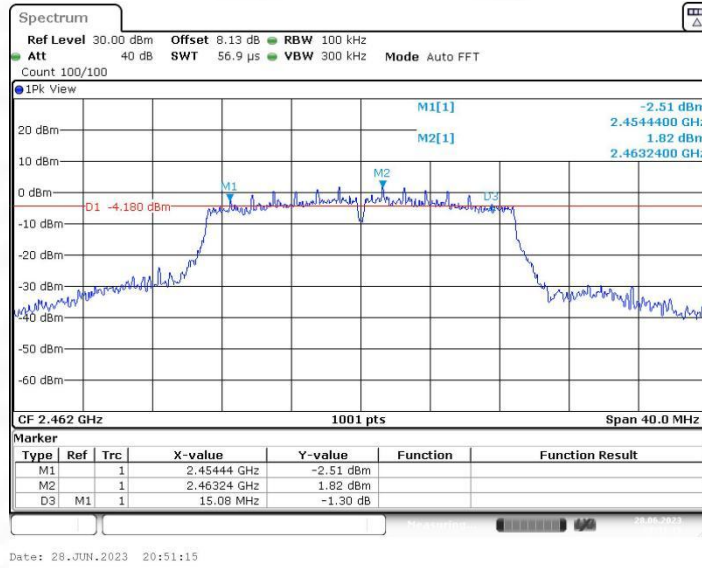
11N20SISO_Ant1_2412



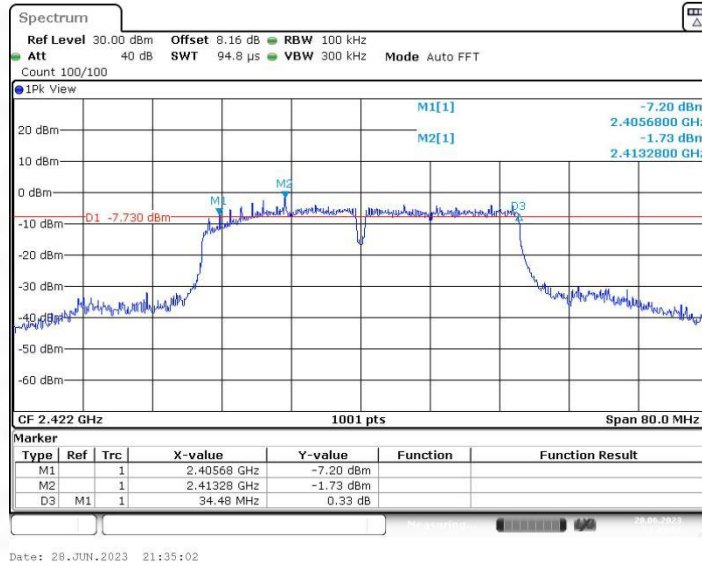
11N20SISO_Ant1_2437



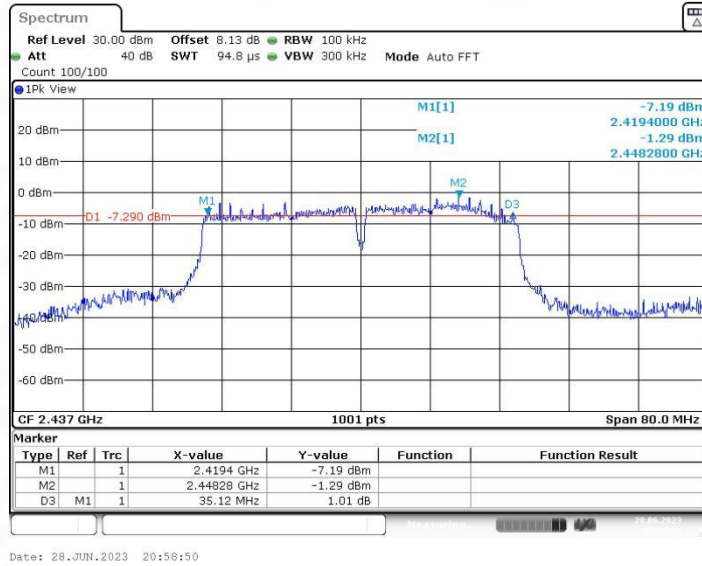
11N20SISO_Ant1_2462



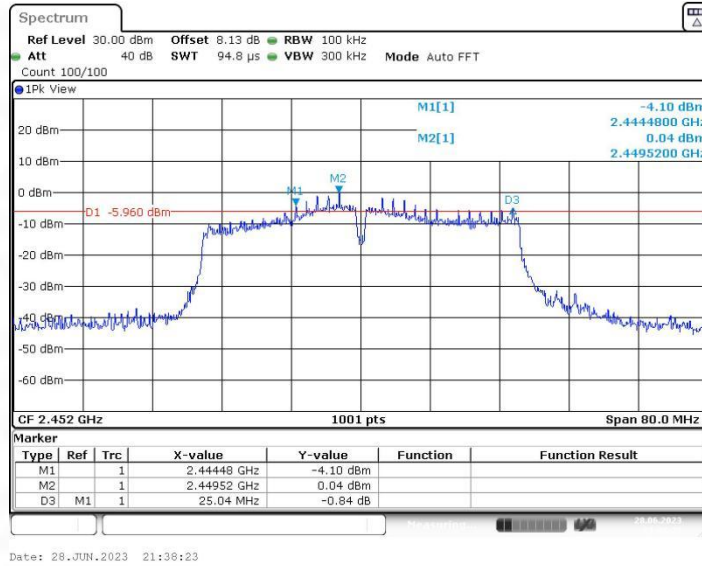
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



3. Maximum Conducted Output Power

3.1 Power

3.1.1 Test Result

Test Mode	Frequency [MHz]	Average power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]
11B	2412	13.95	99.53	0.02	13.97	≤30.00
	2437	14.54	99.64	0.02	14.56	≤30.00
	2462	14.75	99.64	0.02	14.77	≤30.00
11G	2412	12.06	97.90	0.09	12.15	≤30.00
	2437	12.88	97.20	0.12	13.00	≤30.00
	2462	12.70	97.20	0.12	12.82	≤30.00
11N20SISO	2412	11.97	97.74	0.10	12.07	≤30.00
	2437	12.79	97.74	0.10	12.89	≤30.00
	2462	12.64	96.99	0.13	12.77	≤30.00
11N40SISO	2422	12.43	95.59	0.20	12.63	≤30.00
	2437	12.83	94.20	0.26	13.09	≤30.00
	2452	11.16	94.20	0.26	11.42	≤30.00

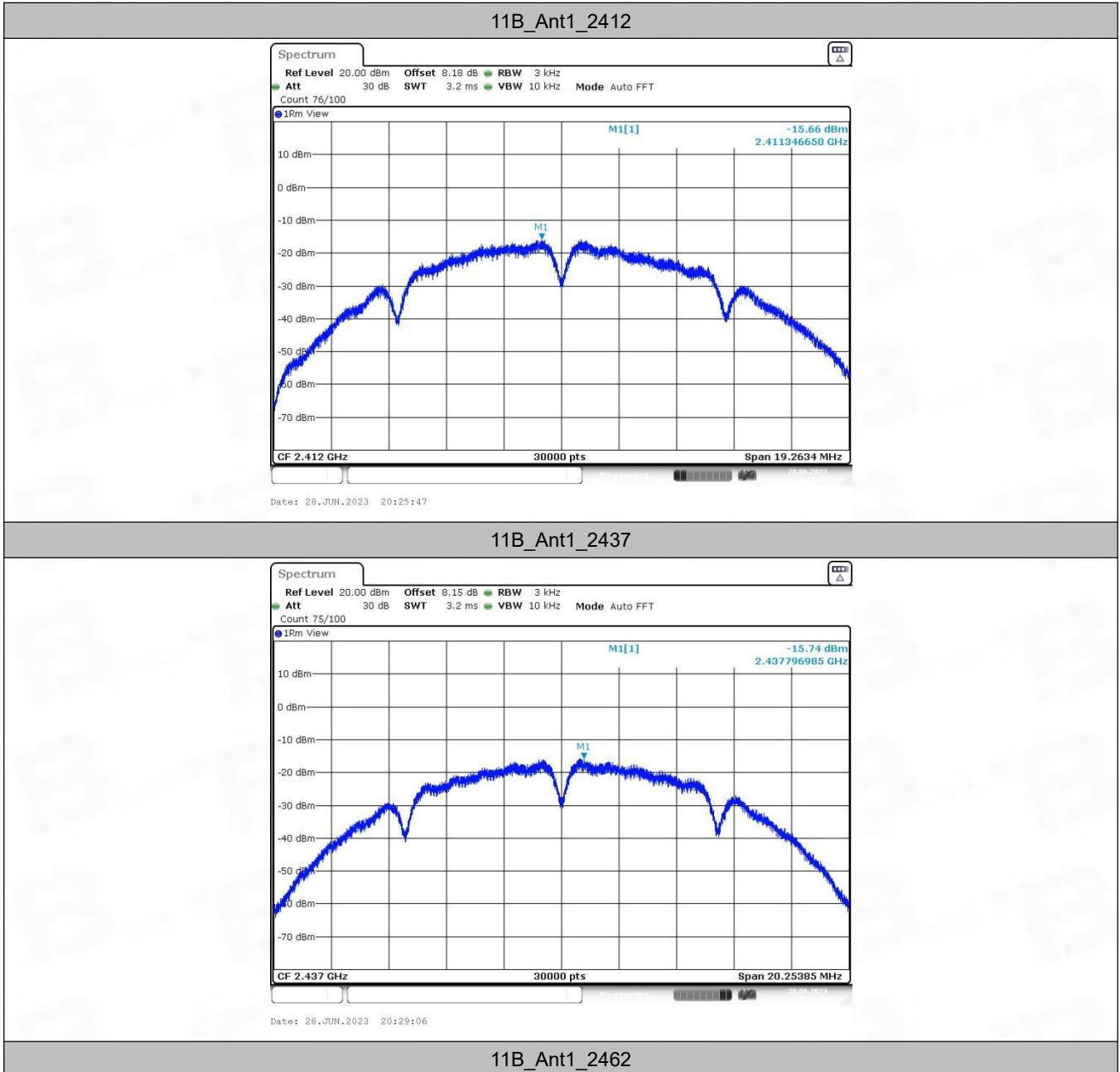
4. Maximum Power Spectral Density

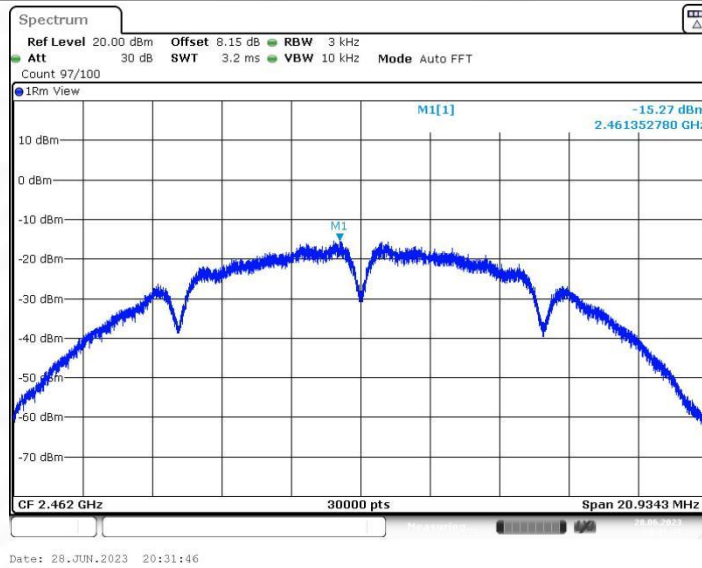
4.1 PSD

4.1.1 Test Result

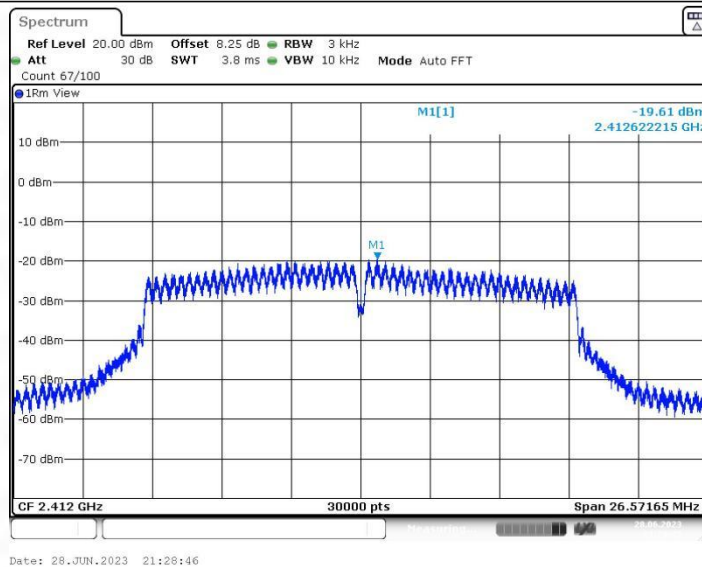
TestMode	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	2412	-15.66	≤8.00	PASS
	2437	-15.74	≤8.00	PASS
	2462	-15.27	≤8.00	PASS
11G	2412	-19.61	≤8.00	PASS
	2437	-19.22	≤8.00	PASS
	2462	-19.23	≤8.00	PASS
11N20SISO	2412	-19.77	≤8.00	PASS
	2437	-19.62	≤8.00	PASS
	2462	-18.75	≤8.00	PASS
11N40SISO	2422	-21.16	≤8.00	PASS
	2437	-19.9	≤8.00	PASS
	2452	-21.7	≤8.00	PASS

4.1.2 Test Graph





11G_Ant1_2412



11G_Ant1_2437