

## Test Result

### ANT 1:

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-26.82	≤8	PASS
		2437	-25.26	≤8	PASS
		2462	-26.43	≤8	PASS
11G	Ant1	2412	-23.07	≤8	PASS
		2437	-21.82	≤8	PASS
		2462	-22.52	≤8	PASS
11N20SISO	Ant1	2412	-26.34	≤8	PASS
		2437	-25.13	≤8	PASS
		2462	-25.82	≤8	PASS
11N40SISO	Ant1	2422	-25.52	≤8	PASS
		2437	-24.65	≤8	PASS
		2452	-24.93	≤8	PASS

### ANT 2:

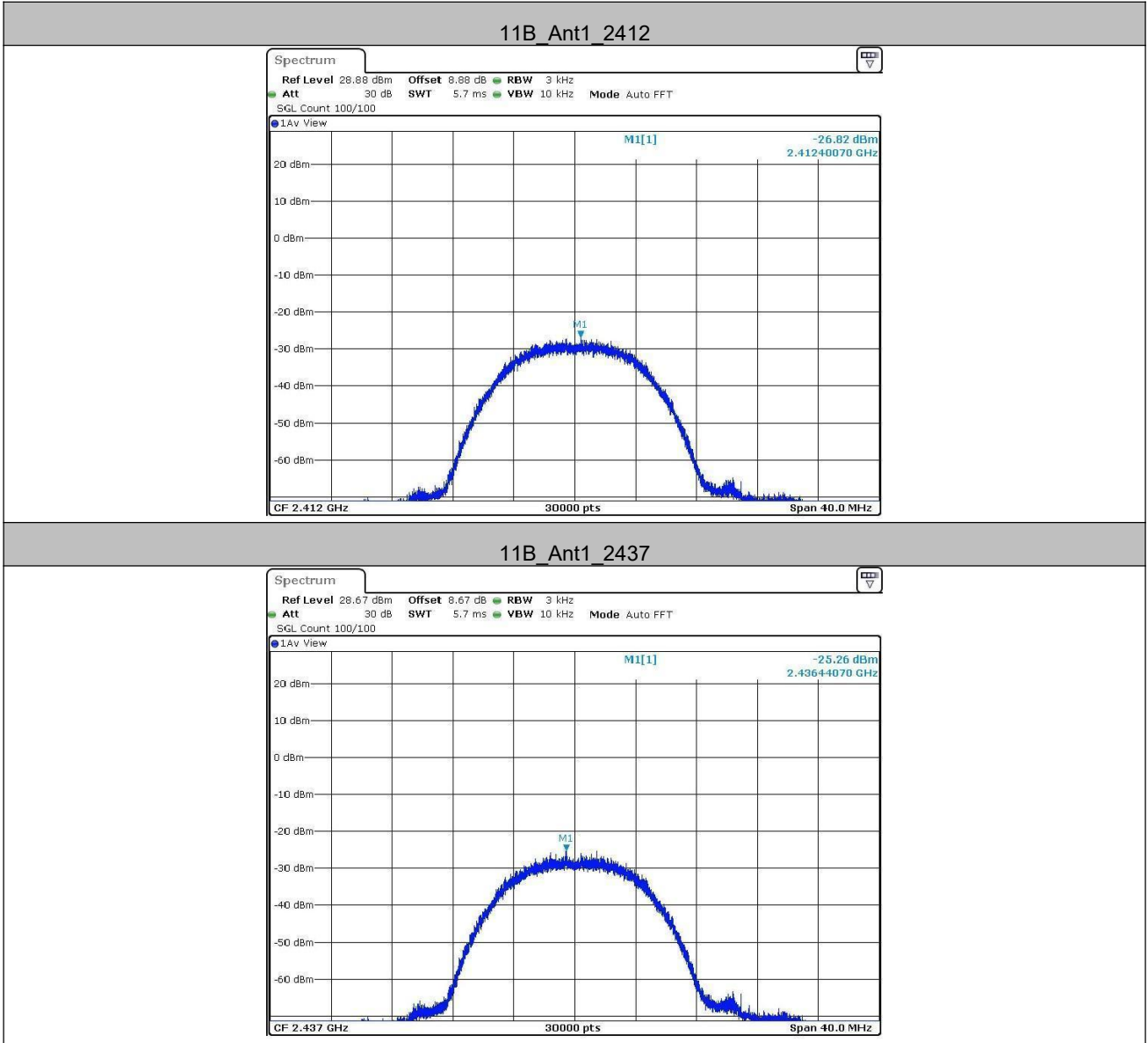
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant2	2412	-25.1	≤8	PASS
		2437	-23.42	≤8	PASS
		2462	-23.5	≤8	PASS
11G	Ant2	2412	-20.19	≤8	PASS
		2437	-18.56	≤8	PASS
		2462	-19.06	≤8	PASS
11N20SISO	Ant2	2412	-23.47	≤8	PASS
		2437	-22.18	≤8	PASS
		2462	-22.8	≤8	PASS
11N40SISO	Ant2	2422	-22.56	≤8	PASS
		2437	-21.75	≤8	PASS
		2452	-22.46	≤8	PASS

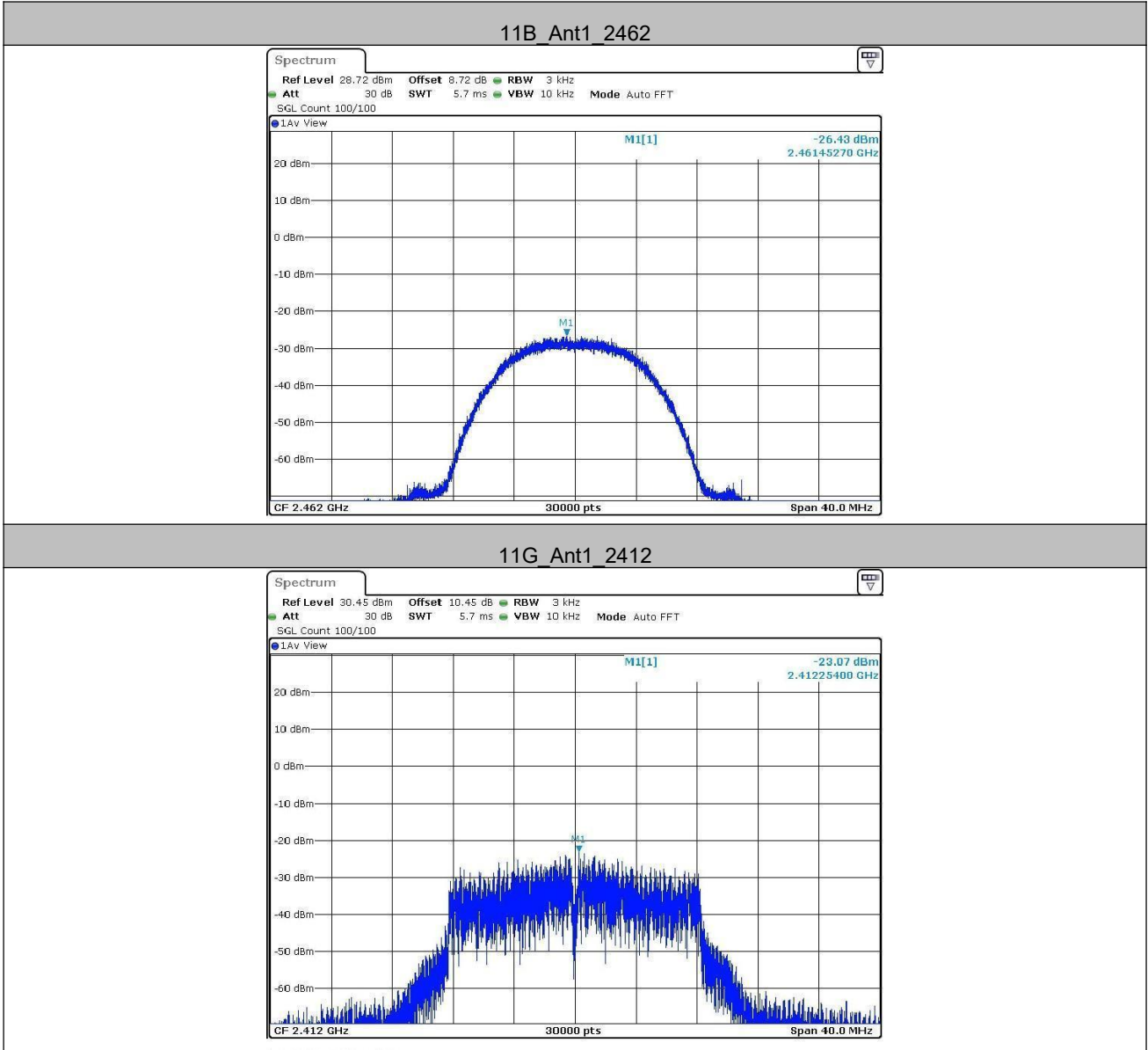
ANT1+ANT2:

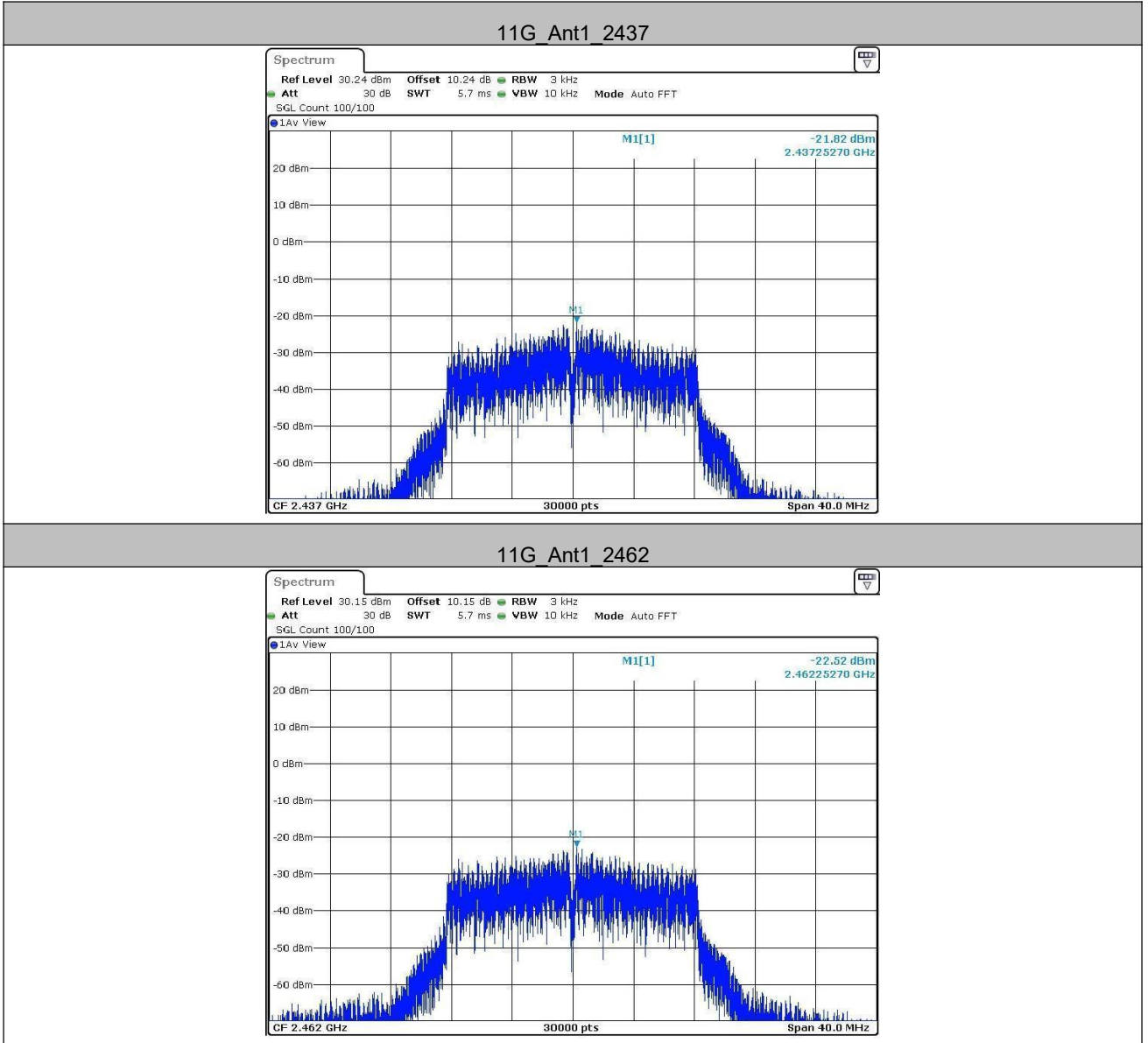
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11N20SISO	Ant1+Ant2	2412	-21.66	≤5.99	PASS
		2437	-20.40	≤5.99	PASS
		2462	-21.04	≤5.99	PASS
11N40SISO	Ant1+Ant2	2422	-20.78	≤5.99	PASS
		2437	-19.95	≤5.99	PASS
		2452	-20.51	≤5.99	PASS

Test Graphs

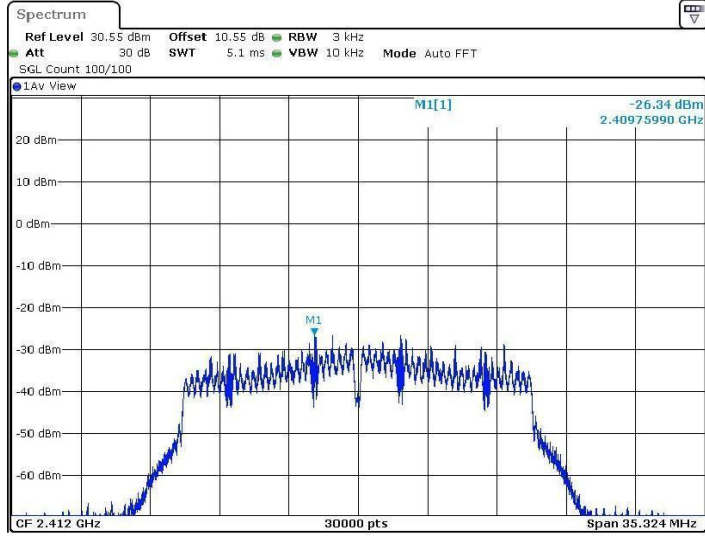
ANT 1:



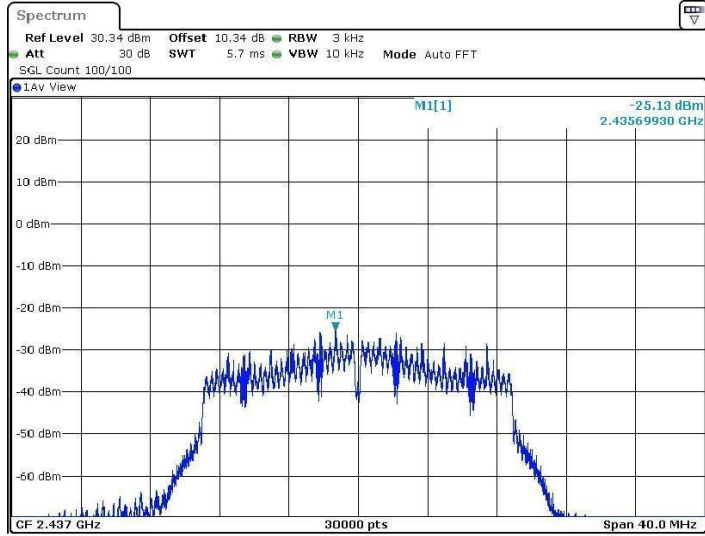




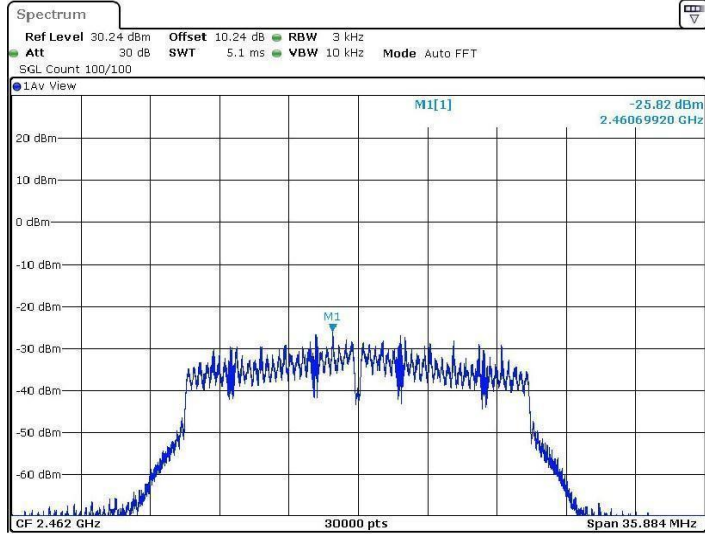
11N20SISO\_Ant1\_2412



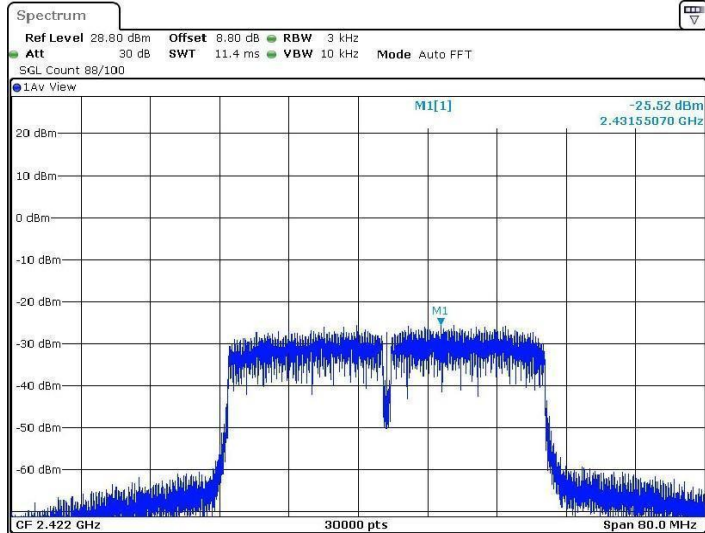
11N20SISO\_Ant1\_2437



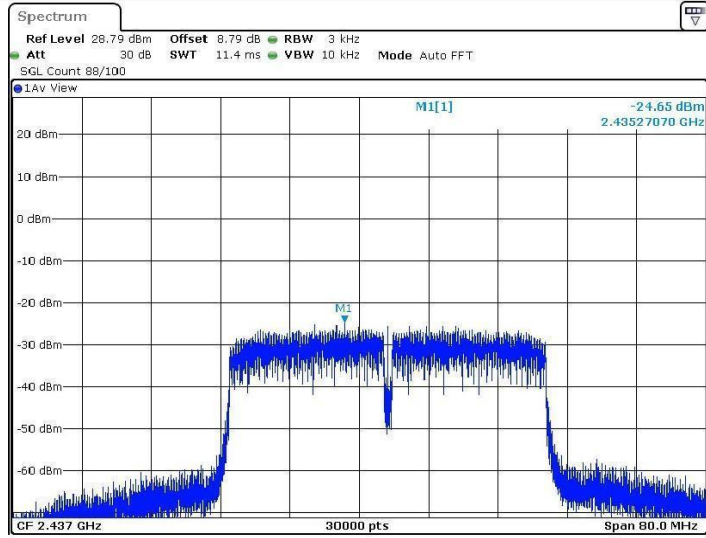
11N20SISO\_Ant1\_2462



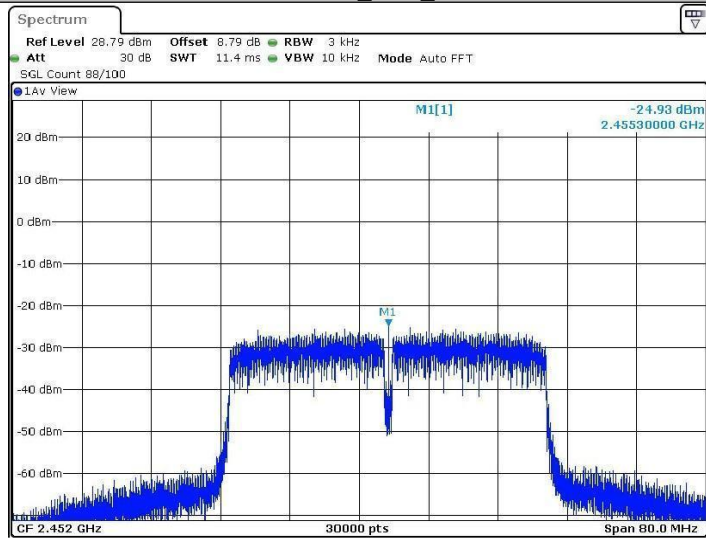
11N40SISO\_Ant1\_2422



11N40SISO\_Ant1\_2437

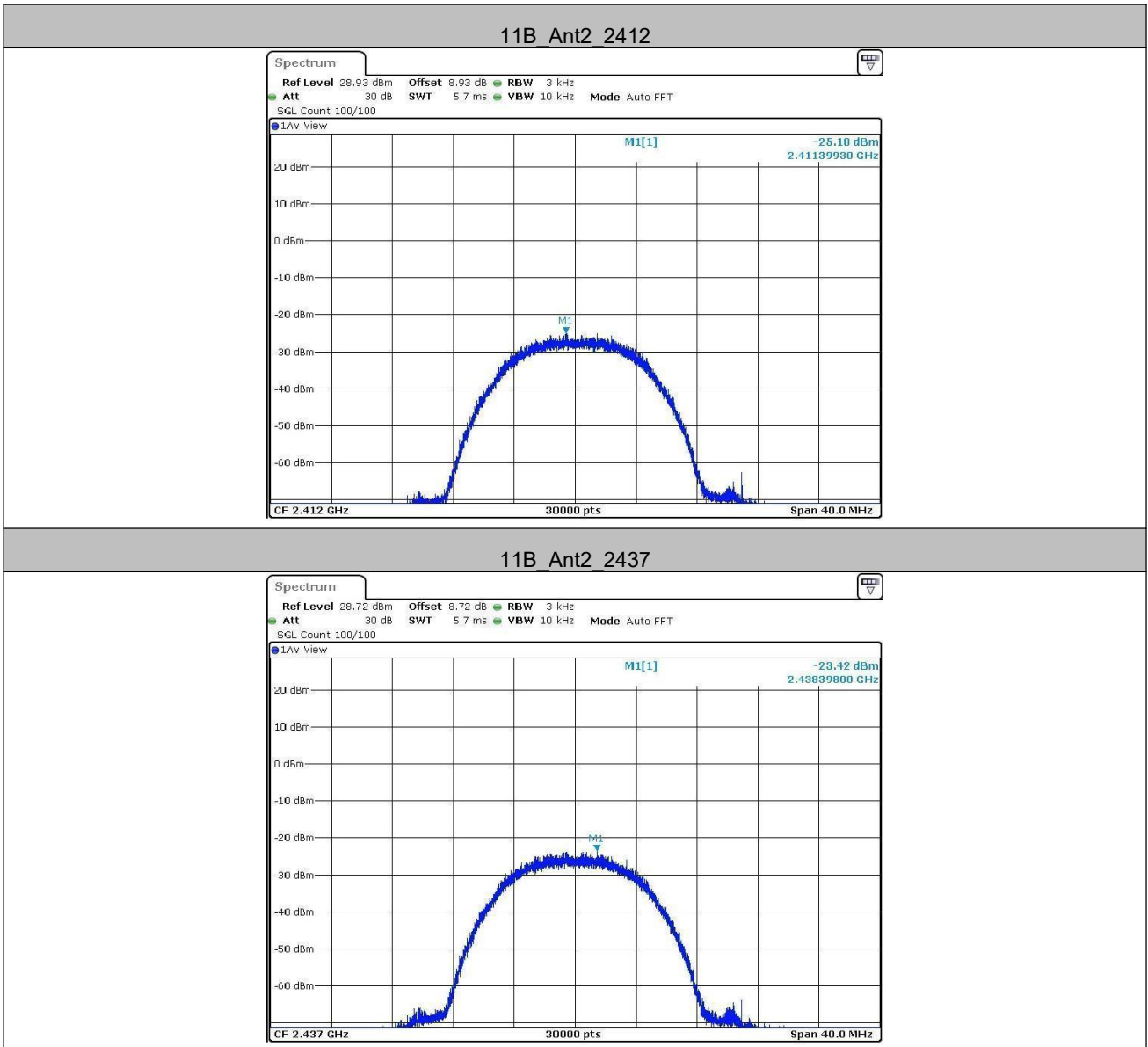


11N40SISO\_Ant1\_2452

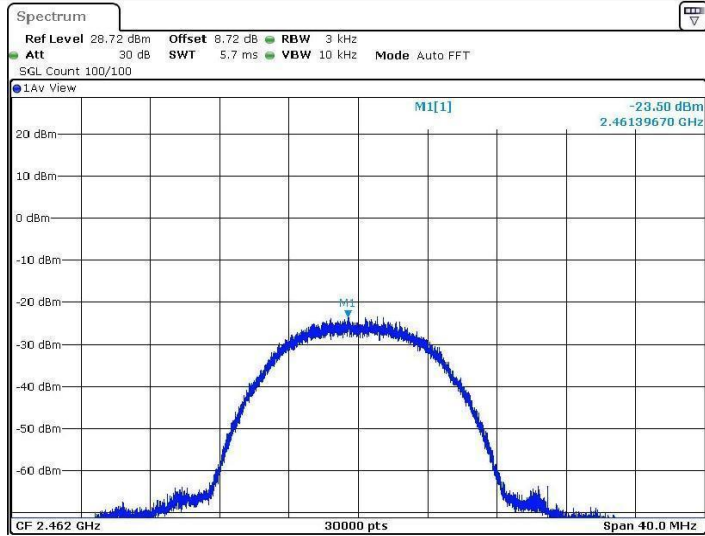




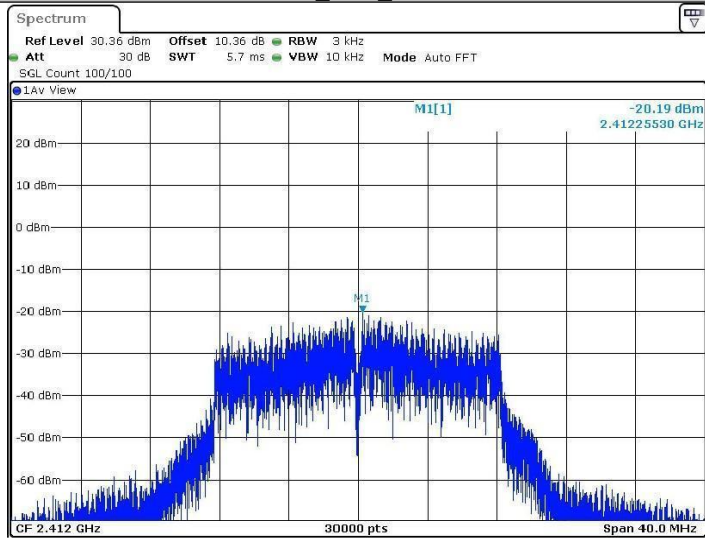
ANT 2:



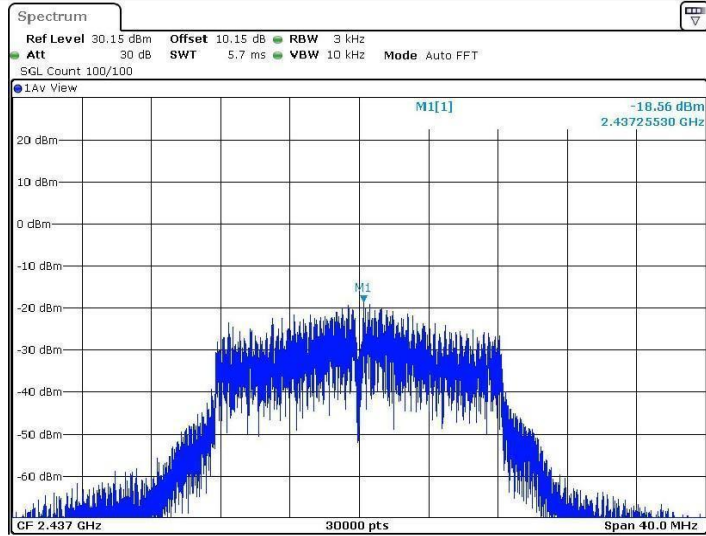
11B\_Ant2\_2462



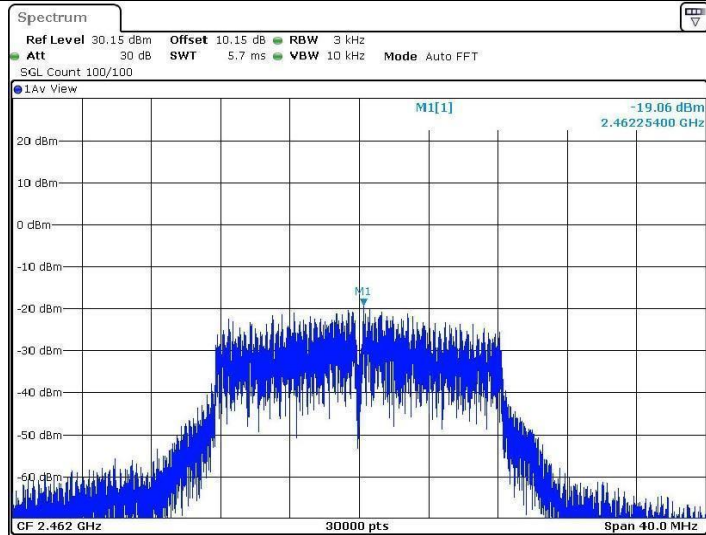
11G\_Ant2\_2412



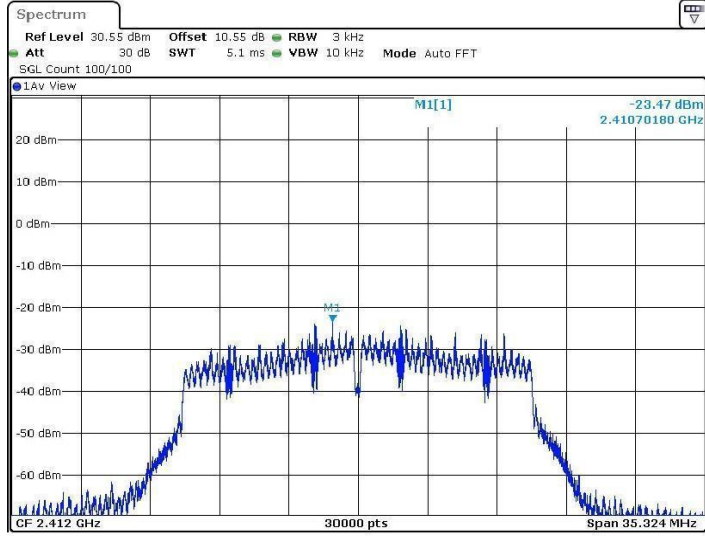
11G\_Ant2\_2437



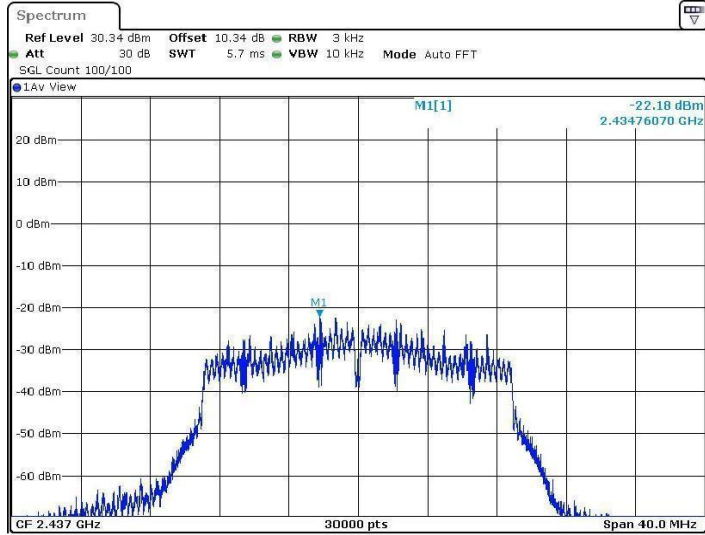
11G\_Ant2\_2462



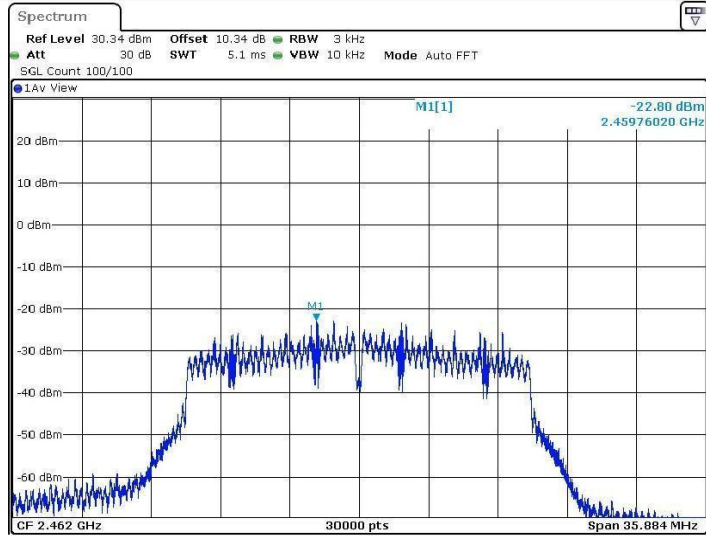
11N20SISO\_Ant2\_2412



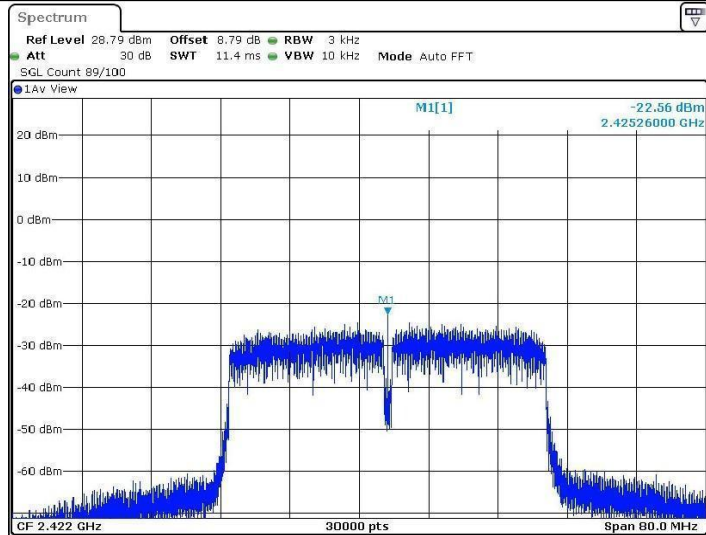
11N20SISO\_Ant2\_2437



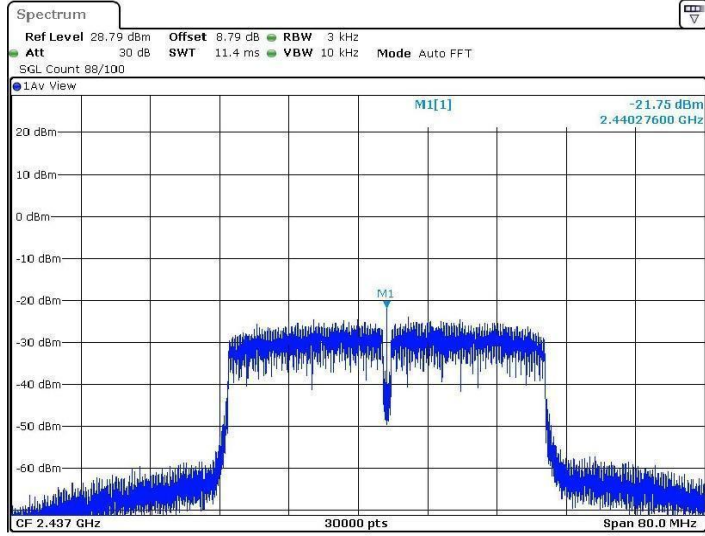
11N20SISO\_Ant2\_2462



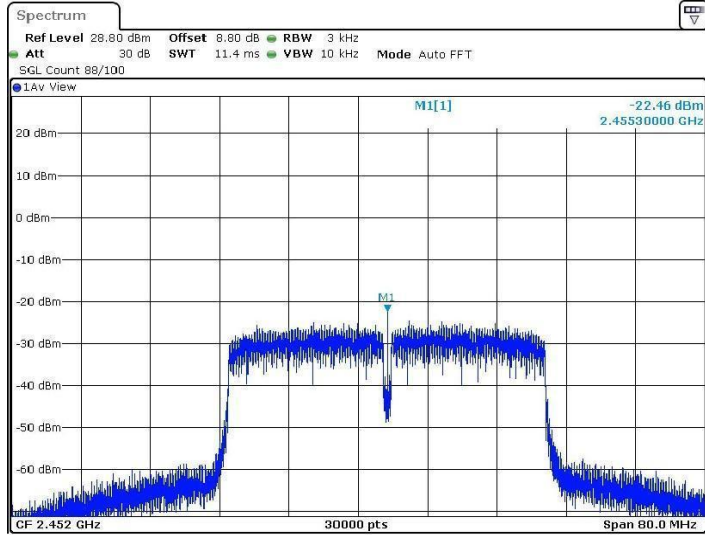
11N40SISO\_Ant2\_2422



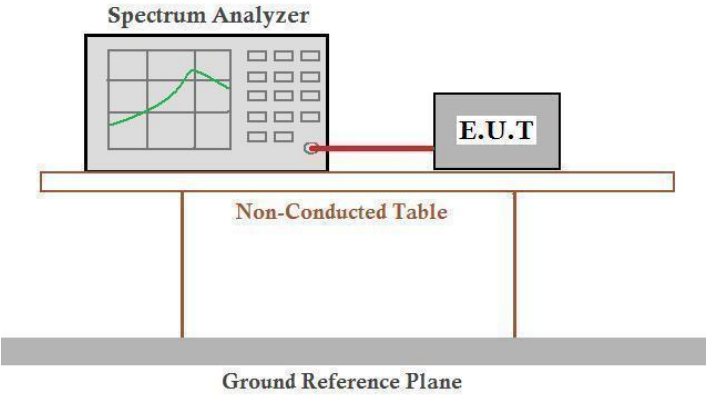
11N40SISO\_Ant2\_2437



11N40SISO\_Ant2\_2452



## 5.6 Band-edge for RF Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10: 2013
Test Setup:	 <p>Offset=cable loss+ attenuation factor</p>
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40). Only the worst case is recorded in the report.
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Test Results:	Pass

## Test Result

ANT 1:

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.43	-46.86	≤-28.57	PASS
		High	2462	-0.04	-47.14	≤-30.04	PASS
11G	Ant1	Low	2412	-7.94	-44.97	≤-37.94	PASS
		High	2462	-9.96	-47.49	≤-39.96	PASS
11N20SISO	Ant1	Low	2412	-5.40	-43.93	≤-35.4	PASS
		High	2462	-7.34	-46.92	≤-37.34	PASS
11N40SISO	Ant1	Low	2422	-6.26	-46.93	≤-36.26	PASS
		High	2452	-5.66	-43.29	≤-35.66	PASS

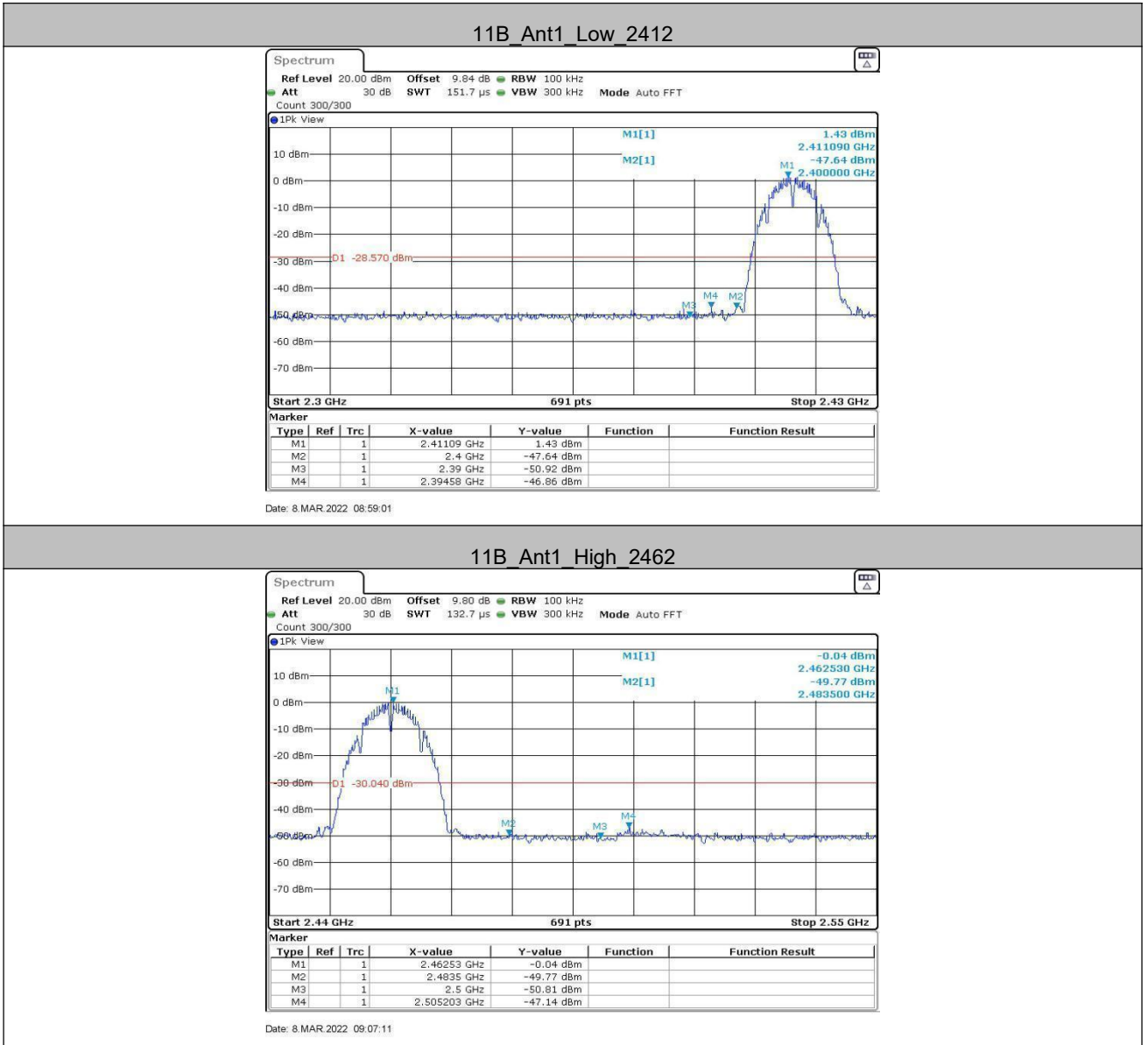
ANT 2:

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant2	Low	2412	2.15	-44.58	≤-27.85	PASS
		High	2462	3.18	-47.8	≤-26.82	PASS
11G	Ant2	Low	2412	-5.04	-39.11	≤-35.04	PASS
		High	2462	-5.15	-46.69	≤-35.15	PASS
11N20SISO	Ant2	Low	2412	-3.66	-38.43	≤-33.66	PASS
		High	2462	-2.42	-47.5	≤-32.42	PASS
11N40SISO	Ant2	Low	2422	-5.43	-45.89	≤-35.43	PASS
		High	2452	-4.25	-41.29	≤-34.25	PASS

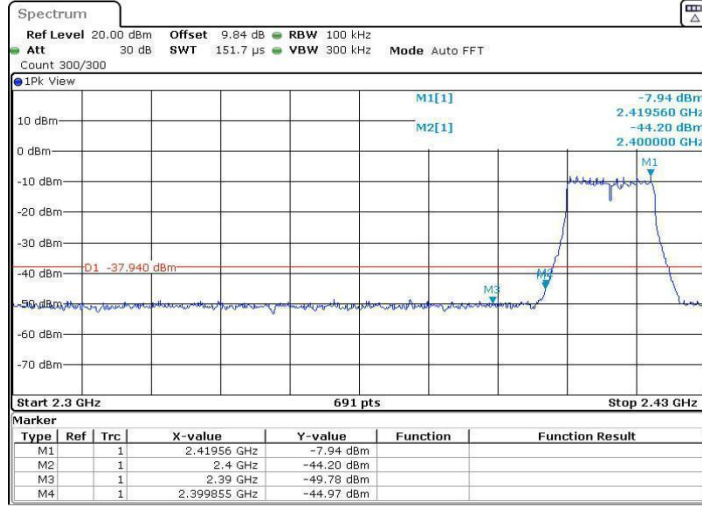


5.6.1 Test Graphs

ANT 1:

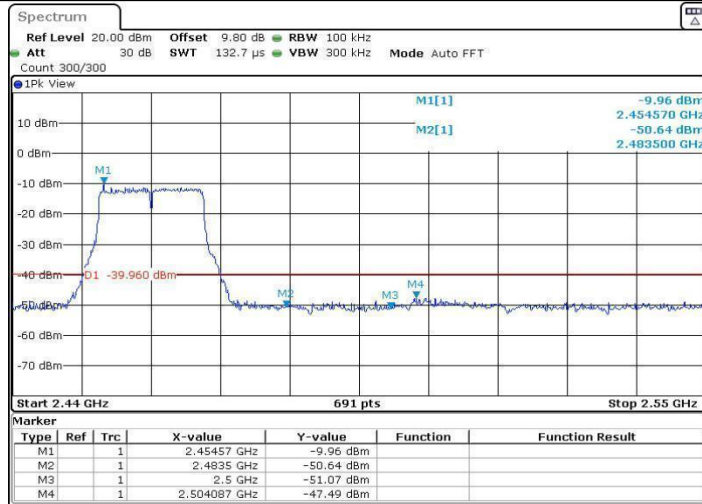


11G Ant1 Low 2412



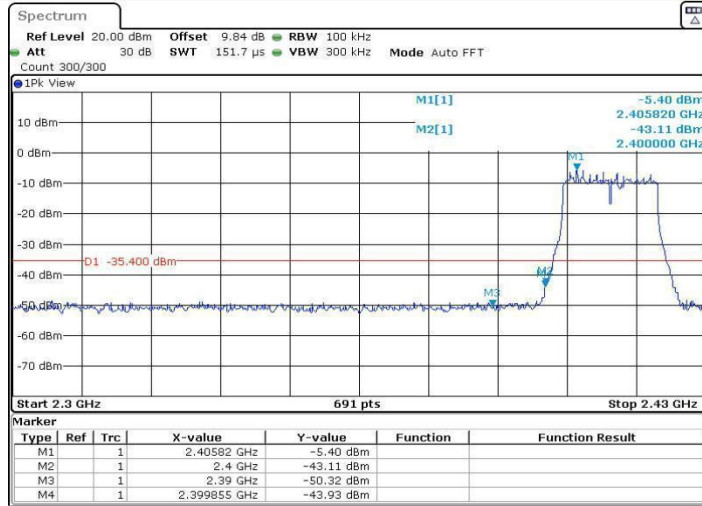
Date: 8.MAR.2022 09:15:56

11G Ant1 High 2462



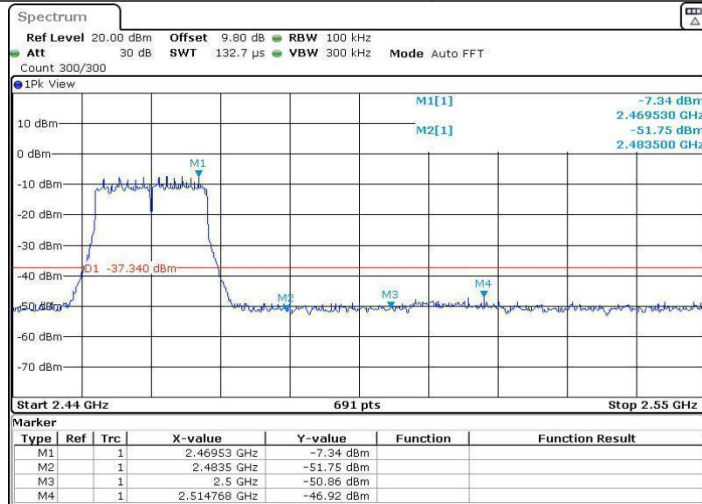
Date: 8.MAR.2022 09:22:02

11N20SISO\_Ant1\_Low\_2412



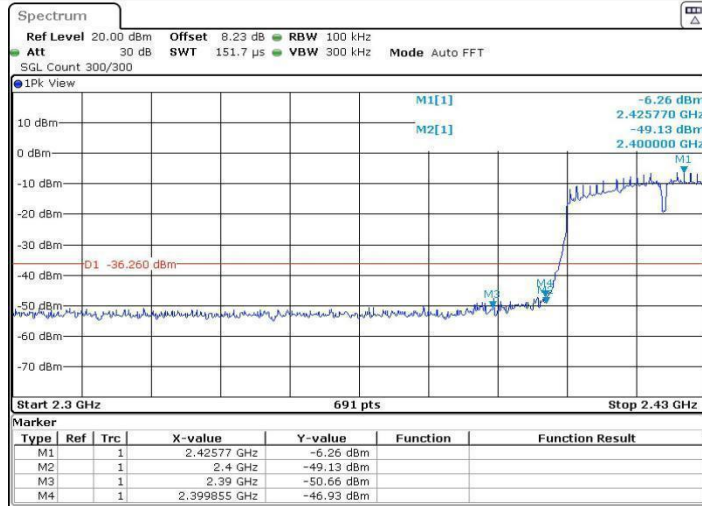
Date: 8.MAR.2022 09:25:51

11N20SISO\_Ant1\_High\_2462



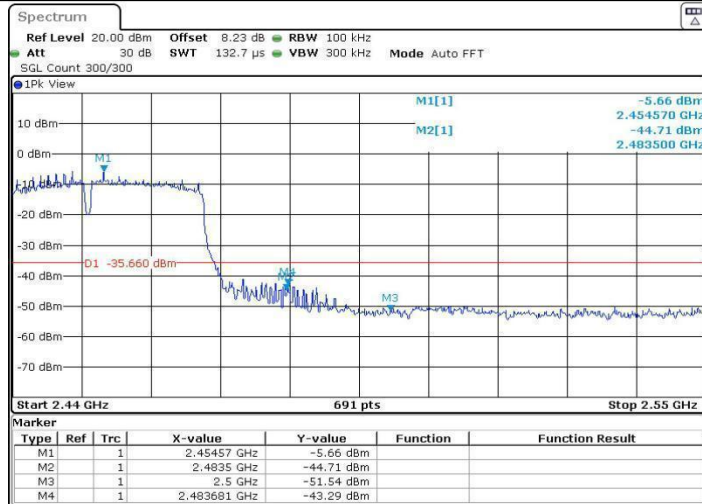
Date: 8.MAR.2022 09:34:25

11N40SISO\_Ant1\_Low\_2422



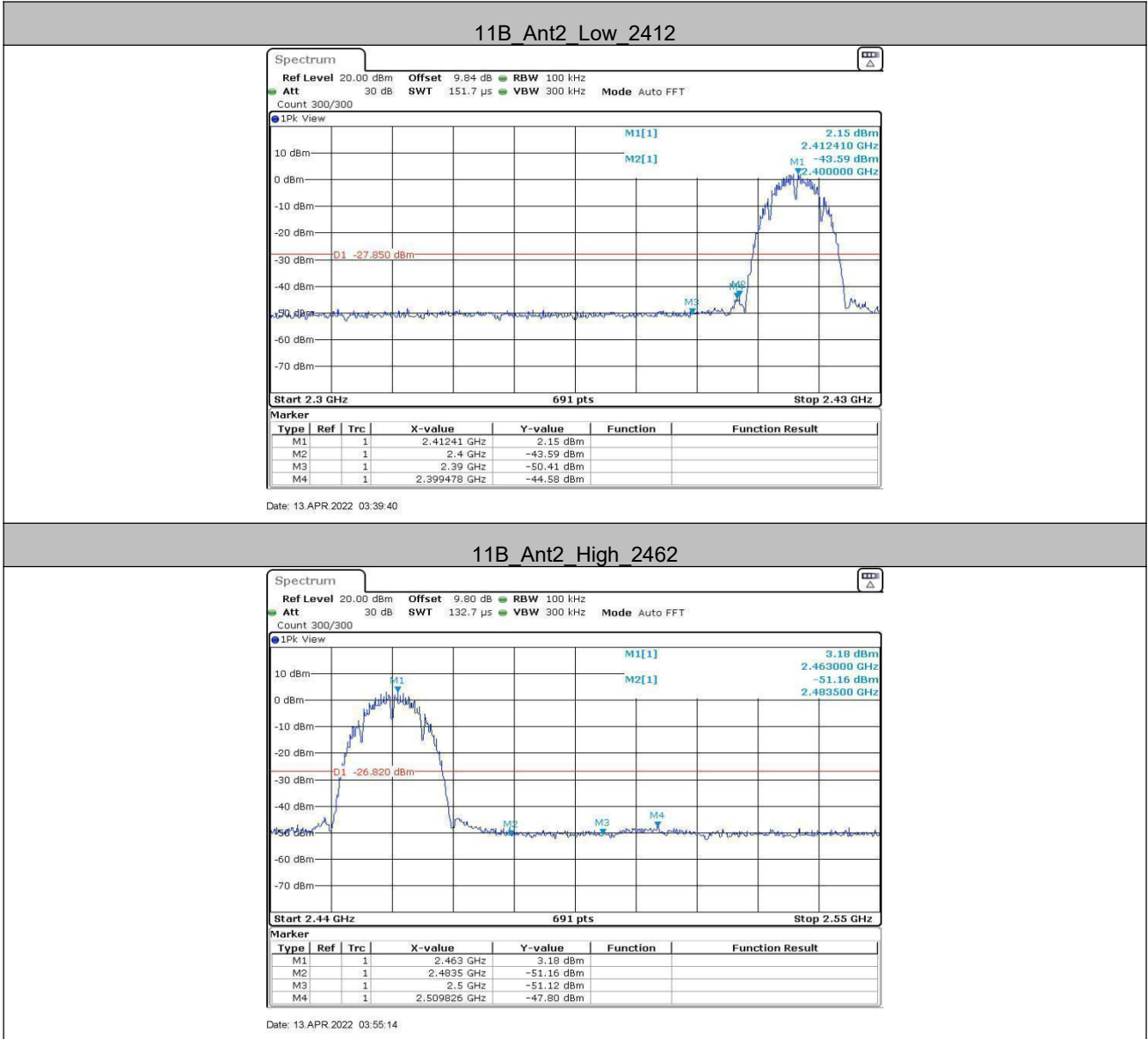
Date: 19 SEP 2022 07:44:11

11N40SISO\_Ant1\_High\_2452

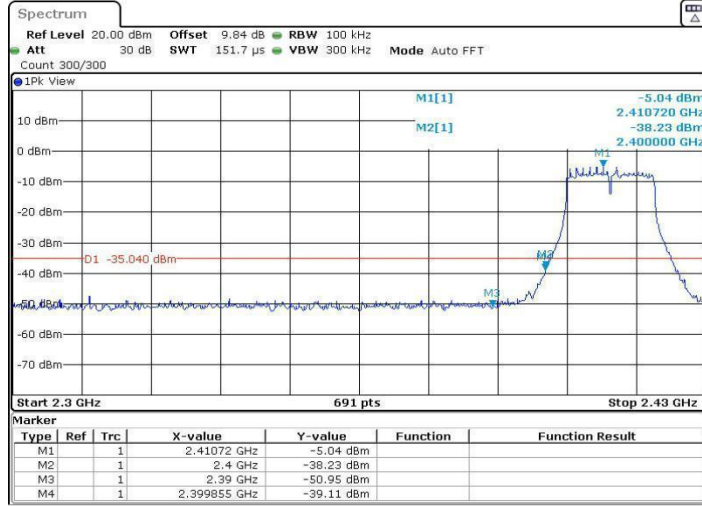


Date: 19 SEP 2022 07:48:45

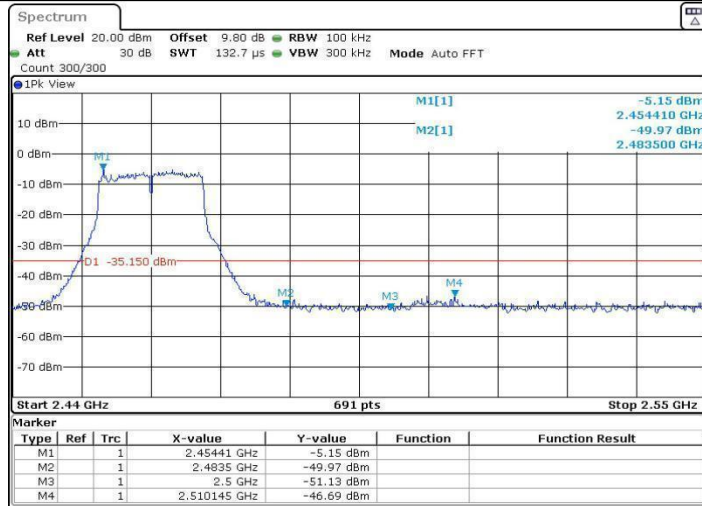
ANT 2:



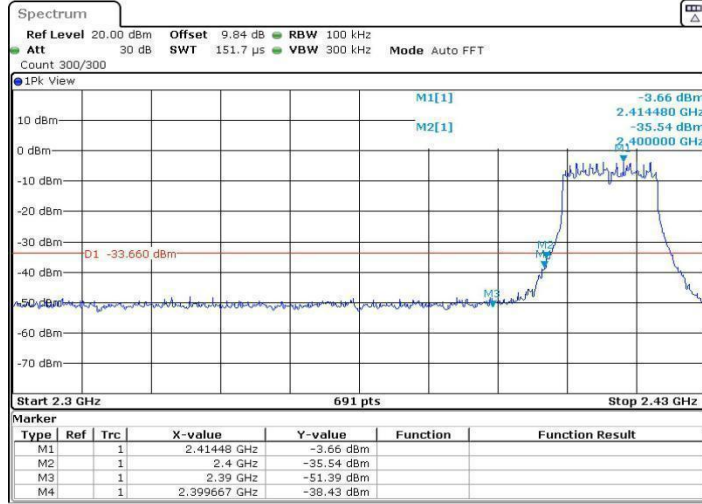
11G Ant2 Low 2412



11G Ant2 High 2462

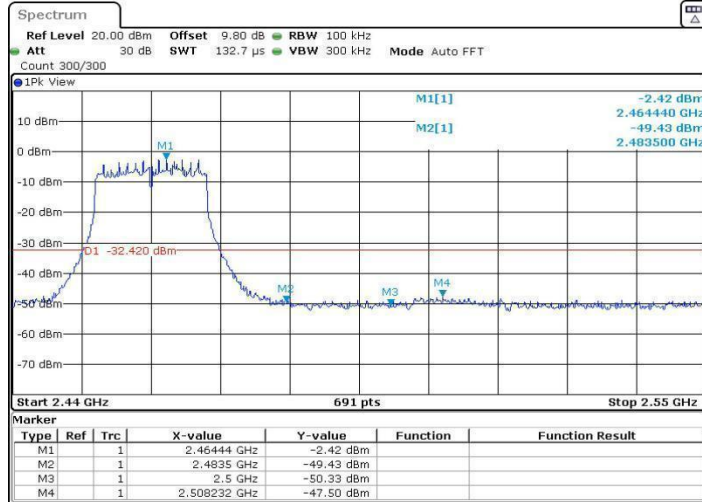


11N20SISO\_Ant2\_Low\_2412



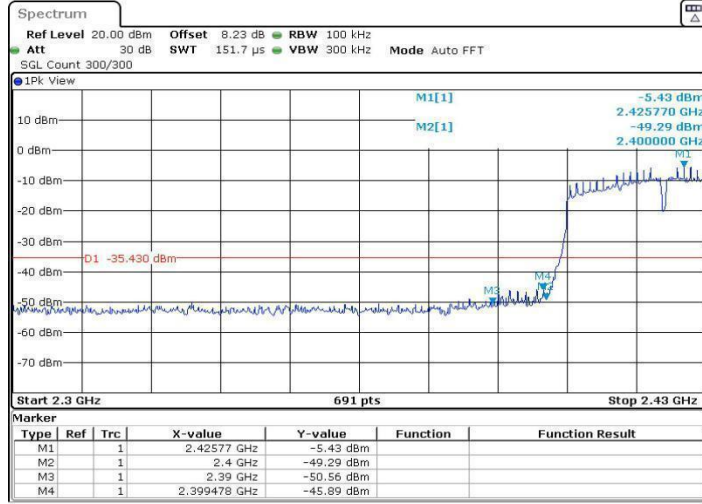
Date: 13 APR 2022 04:24:57

11N20SISO\_Ant2\_High\_2462



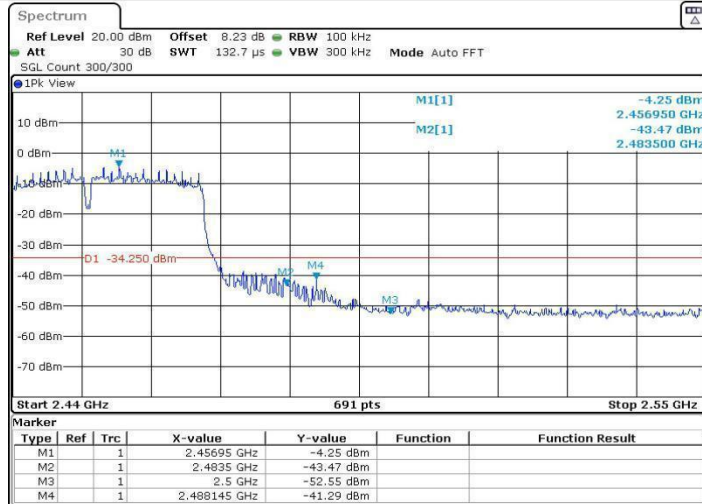
Date: 13 APR 2022 04:31:22

11N40SISO\_Ant2\_Low\_2422



Date: 19 SEP.2022 08:44:31

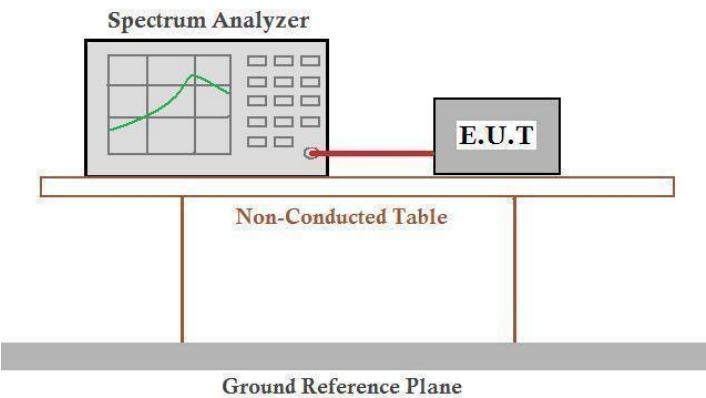
11N40SISO\_Ant2\_High\_2452



Date: 19 SEP.2022 08:53:38



## 5.7 RF Conducted Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10: 2013
Test Setup:	 <p>The diagram illustrates the test setup for RF conducted spurious emissions. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both are placed on a Non-Conducted Table, which is supported by two vertical legs. Below the table is a Ground Reference Plane, represented by a thick grey bar.</p> <p>Offset=cable loss+ attenuation factor</p>
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40). Only the worst case is recorded in the report.
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Test Results:	Pass

Test Result

ANT 1:

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.60	1.60	---	PASS
			30~1000	1.60	-56.37	≤-28.4	PASS
			1000~26500	1.60	-52.6	≤-28.4	PASS
		2437	Reference	2.13	2.13	---	PASS
			30~1000	2.13	-56.82	≤-27.87	PASS
			1000~26500	2.13	-52.01	≤-27.87	PASS
		2462	Reference	-0.11	-0.11	---	PASS
			30~1000	-0.11	-56.03	≤-30.11	PASS
			1000~26500	-0.11	-53.23	≤-30.11	PASS
11G	Ant1	2412	Reference	-6.87	-6.87	---	PASS
			30~1000	-6.87	-56.29	≤-36.87	PASS
			1000~26500	-6.87	-53.76	≤-36.87	PASS
		2437	Reference	-6.48	-6.48	---	PASS
			30~1000	-6.48	-55.99	≤-36.48	PASS
			1000~26500	-6.48	-53.74	≤-36.48	PASS
		2462	Reference	-8.05	-8.05	---	PASS
			30~1000	-8.05	-56.89	≤-38.05	PASS
			1000~26500	-8.05	-52.63	≤-38.05	PASS
11N20SISO	Ant1	2412	Reference	-5.24	-5.24	---	PASS
			30~1000	-5.24	-56.87	≤-35.24	PASS
			1000~26500	-5.24	-52.85	≤-35.24	PASS
		2437	Reference	-5.13	-5.13	---	PASS
			30~1000	-5.13	-56.51	≤-35.13	PASS
			1000~26500	-5.13	-53.61	≤-35.13	PASS
		2462	Reference	-7.22	-7.22	---	PASS
			30~1000	-7.22	-57.02	≤-37.22	PASS
			1000~26500	-7.22	-53.59	≤-37.22	PASS
11N40SISO	Ant1	2422	Reference	-5.64	-5.64	---	PASS
			30~1000	-5.64	-58.84	≤-35.64	PASS
			1000~26500	-5.64	-55.34	≤-35.64	PASS
		2437	Reference	-5.42	-5.42	---	PASS
			30~1000	-5.42	-58.21	≤-35.42	PASS
			1000~26500	-5.42	-54.54	≤-35.42	PASS

		2452	Reference	-5.15	-5.15	---	PASS
			30~1000	-5.15	-58.8	≤-35.15	PASS
			1000~26500	-5.15	-54.83	≤-35.15	PASS

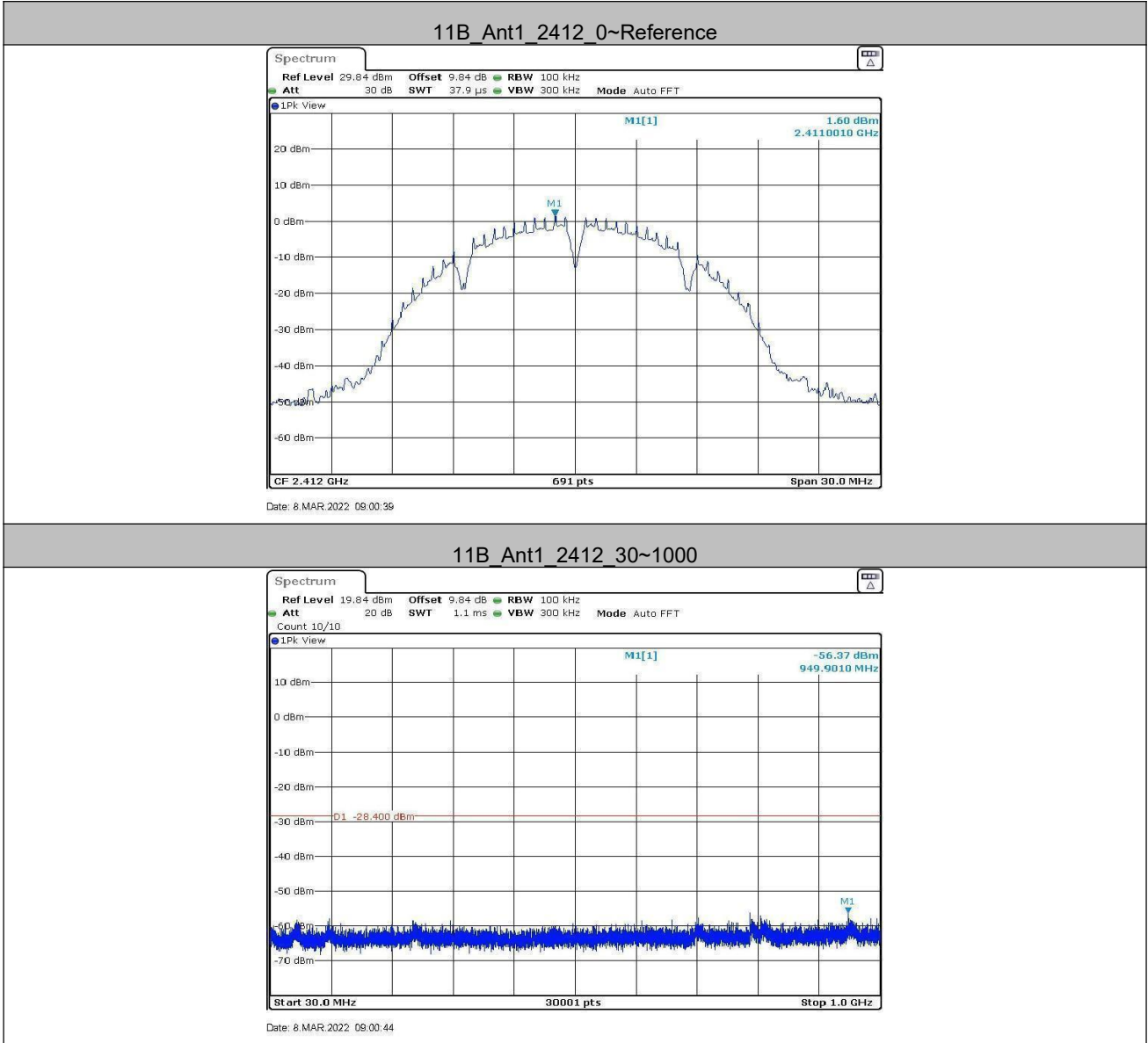
## ANT 2:

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.19	2.19	---	PASS
			30~1000	2.19	-56.15	≤-27.81	PASS
			1000~26500	2.19	-52.58	≤-27.81	PASS
		2437	Reference	3.84	3.84	---	PASS
			30~1000	3.84	-56.36	≤-26.16	PASS
			1000~26500	3.84	-53.4	≤-26.16	PASS
		2462	Reference	3.12	3.12	---	PASS
			30~1000	3.12	-57.22	≤-26.88	PASS
			1000~26500	3.12	-53.51	≤-26.88	PASS
11G	Ant1	2412	Reference	-4.04	-4.04	---	PASS
			30~1000	-4.04	-57.6	≤-34.04	PASS
			1000~26500	-4.04	-53.26	≤-34.04	PASS
		2437	Reference	-2.77	-2.77	---	PASS
			30~1000	-2.77	-56.6	≤-32.77	PASS
			1000~26500	-2.77	-52.91	≤-32.77	PASS
		2462	Reference	-3.14	-3.14	---	PASS
			30~1000	-3.14	-56.9	≤-33.14	PASS
			1000~26500	-3.14	-53.55	≤-33.14	PASS
11N20SISO	Ant1	2412	Reference	-3.42	-3.42	---	PASS
			30~1000	-3.42	-56.88	≤-33.42	PASS
			1000~26500	-3.42	-52.82	≤-33.42	PASS
		2437	Reference	-2.18	-2.18	---	PASS
			30~1000	-2.18	-57.01	≤-32.18	PASS
			1000~26500	-2.18	-53.19	≤-32.18	PASS
		2462	Reference	-2.48	-2.48	---	PASS
			30~1000	-2.48	-55.97	≤-32.48	PASS
			1000~26500	-2.48	-53.97	≤-32.48	PASS
11N40SISO	Ant1	2422	Reference	-5.54	-5.54	---	PASS
			30~1000	-5.54	-59.19	≤-35.54	PASS
			1000~26500	-5.54	-55.9	≤-35.54	PASS

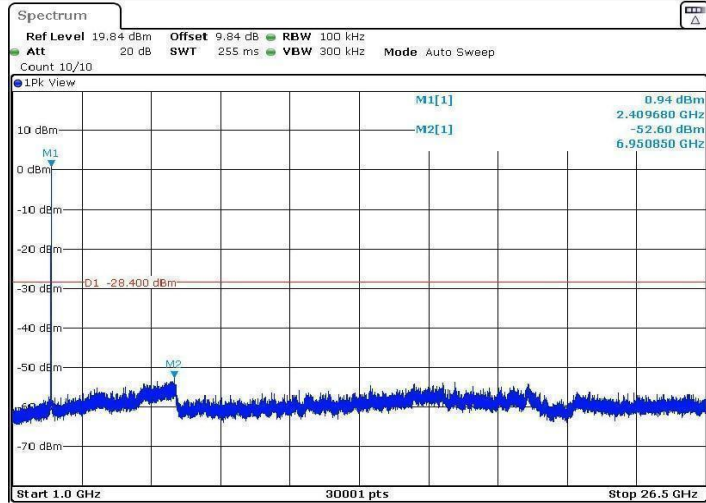
		2437	Reference	-5.19	-5.19	---	PASS
			30~1000	-5.19	-58.54	$\leq -35.19$	PASS
			1000~26500	-5.19	-54.47	$\leq -35.19$	PASS
		2452	Reference	2.19	2.19	---	PASS
			30~1000	2.19	-56.15	$\leq -27.81$	PASS
			1000~26500	2.19	-52.58	$\leq -27.81$	PASS

Test Graphs

ANT 1:

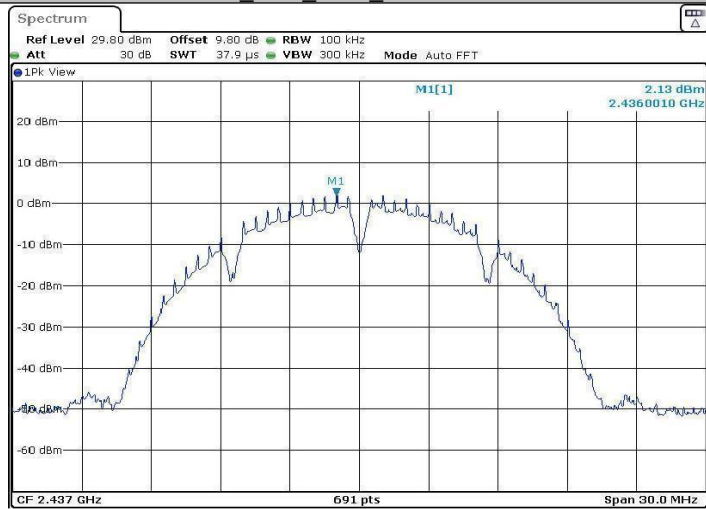


11B\_Ant1\_2412\_1000~26500



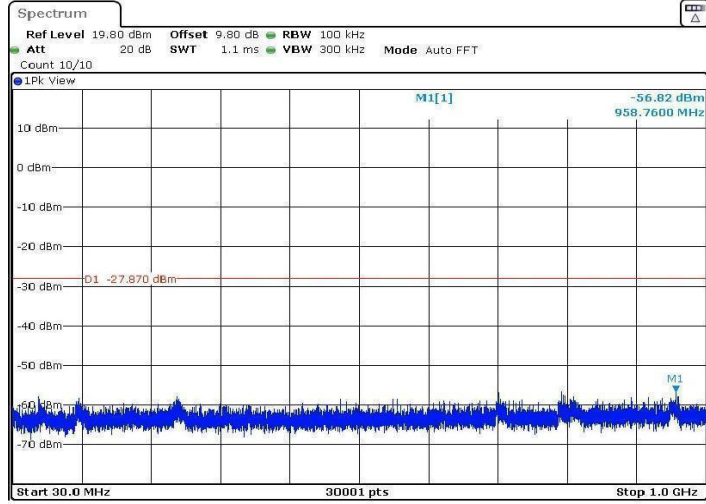
Date: 8.MAR.2022 09:01:06

11B\_Ant1\_2437\_0~Reference



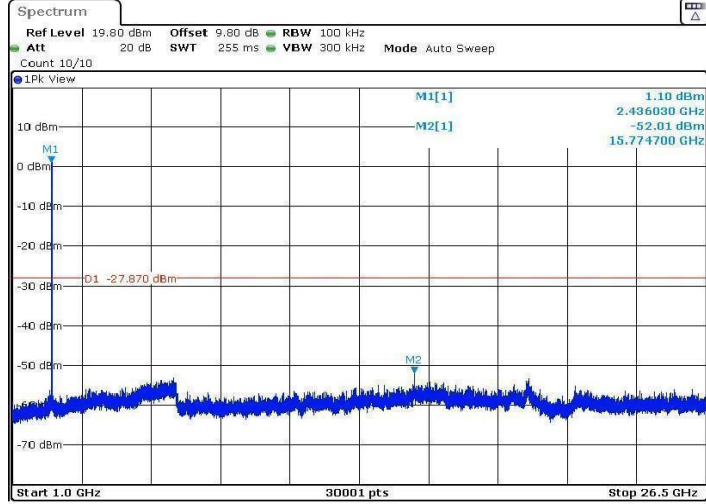
Date: 8.MAR.2022 09:05:02

11B\_Ant1\_2437\_30~1000



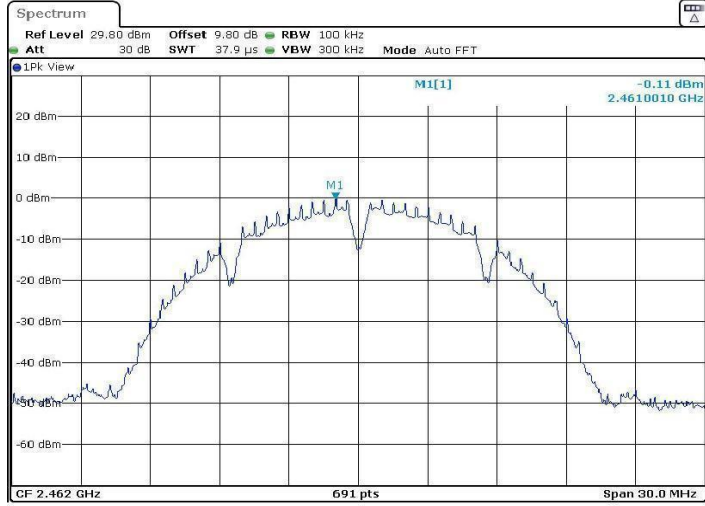
Date: 8.MAR.2022 09:05:06

11B\_Ant1\_2437\_1000~26500



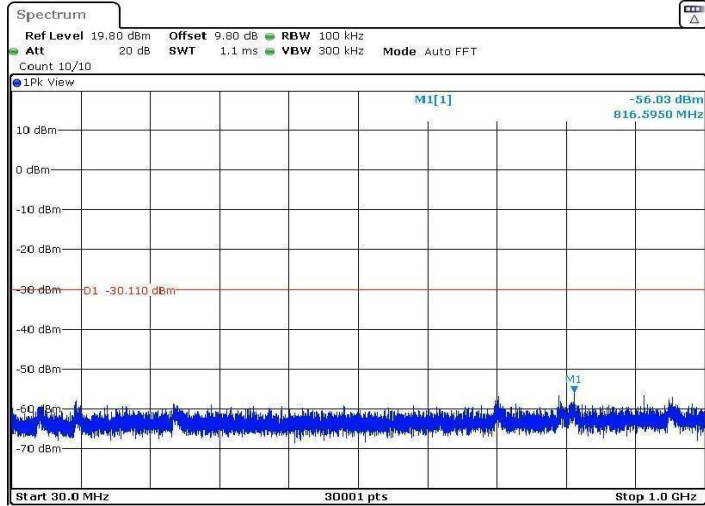
Date: 8.MAR.2022 09:05:28

11B\_Ant1\_2462\_0~Reference



Date: 8.MAR.2022 09:08:14

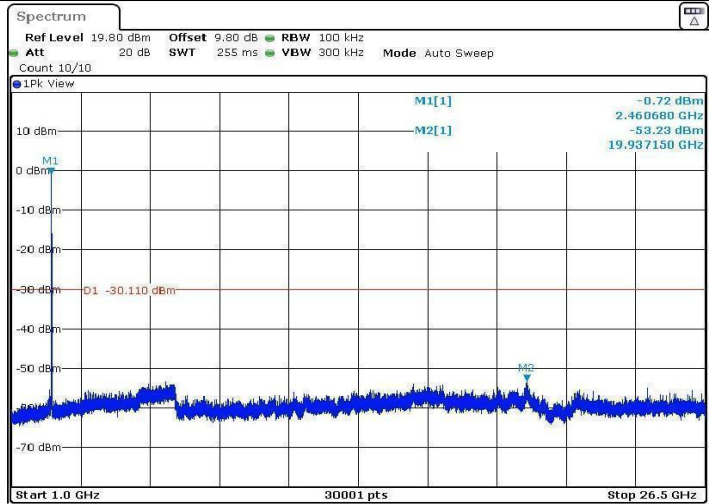
11B\_Ant1\_2462\_30~1000



Date: 8.MAR.2022 09:08:18

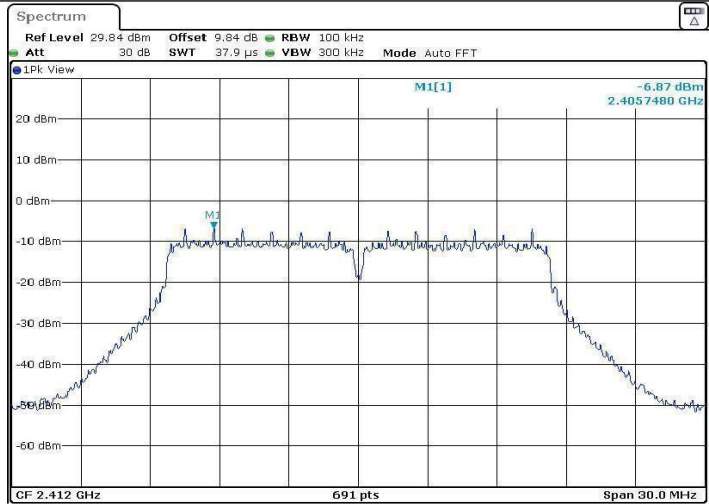


11B\_Ant1\_2462\_1000~26500



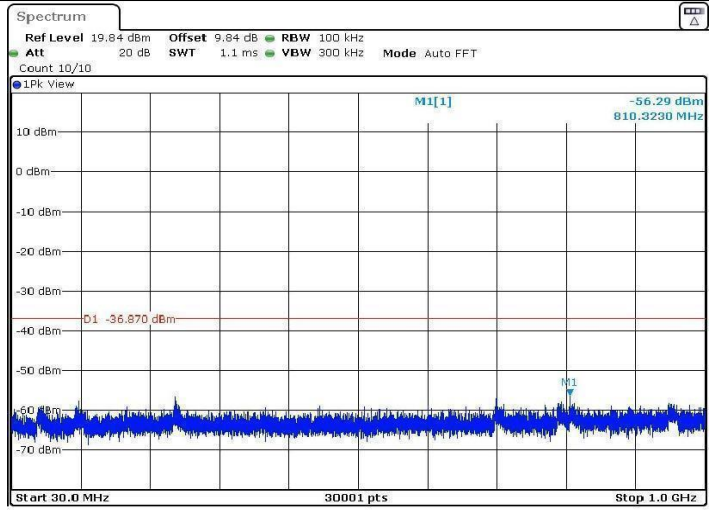
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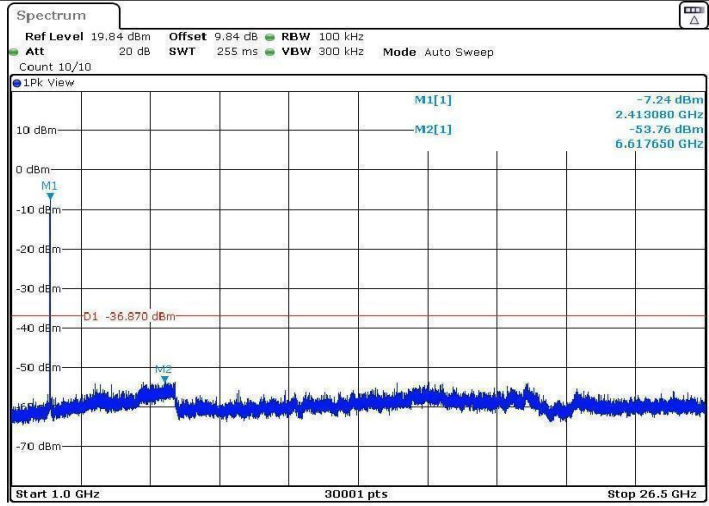
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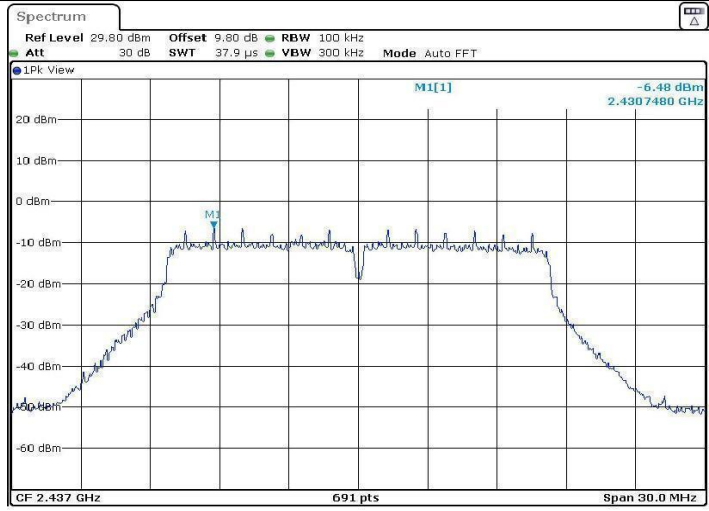
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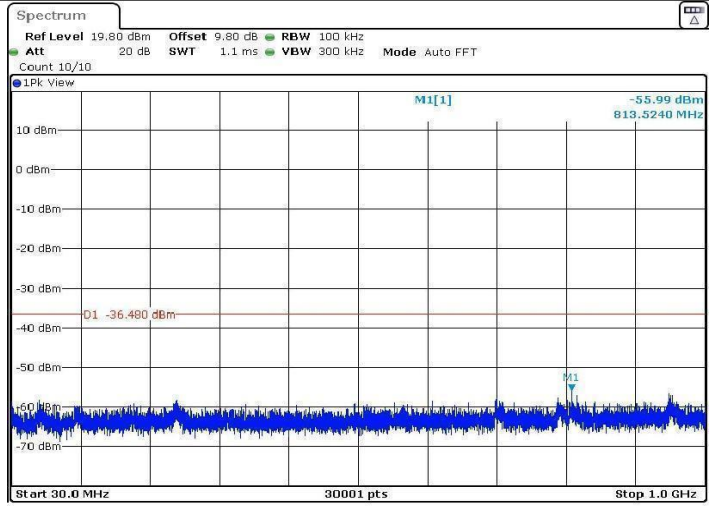
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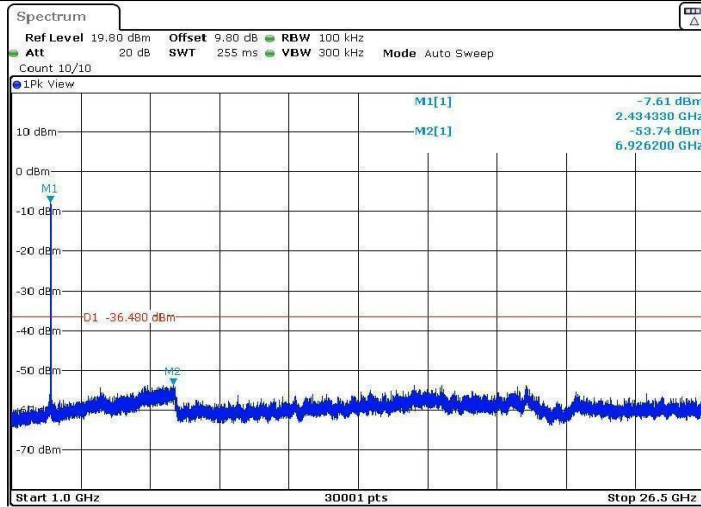
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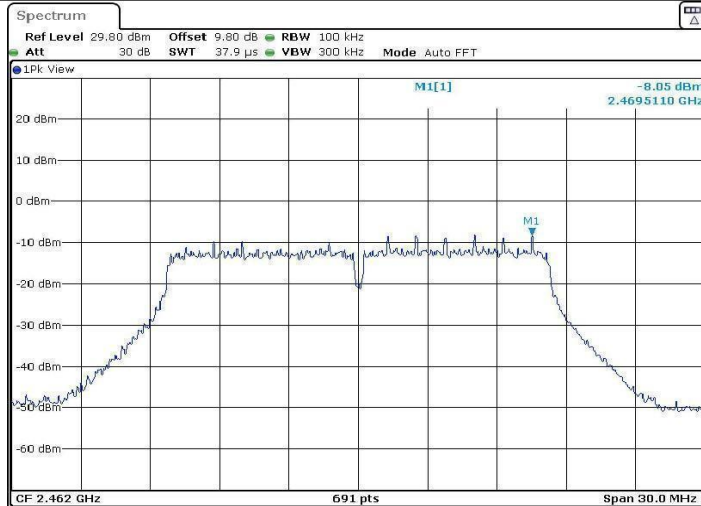
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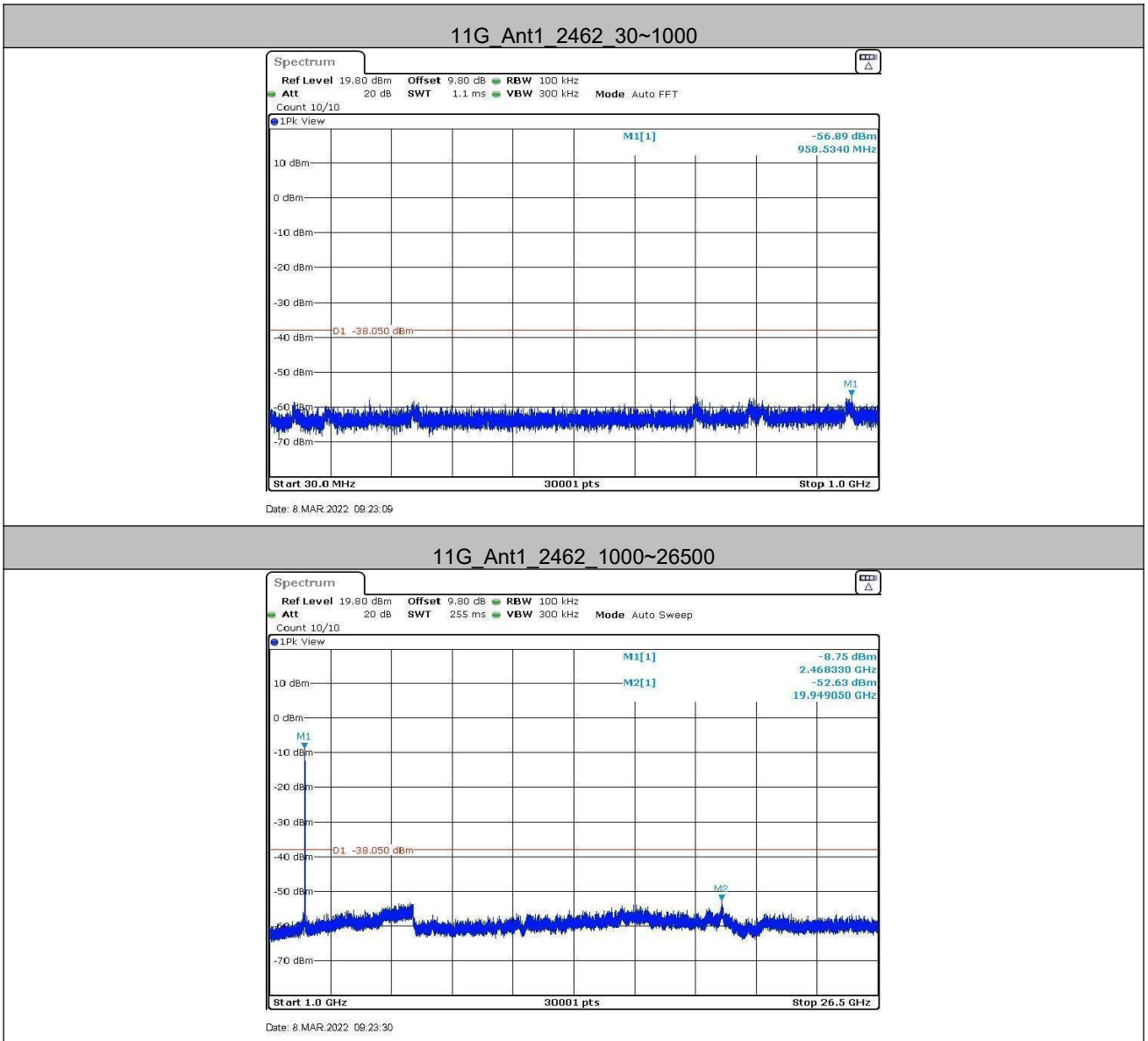


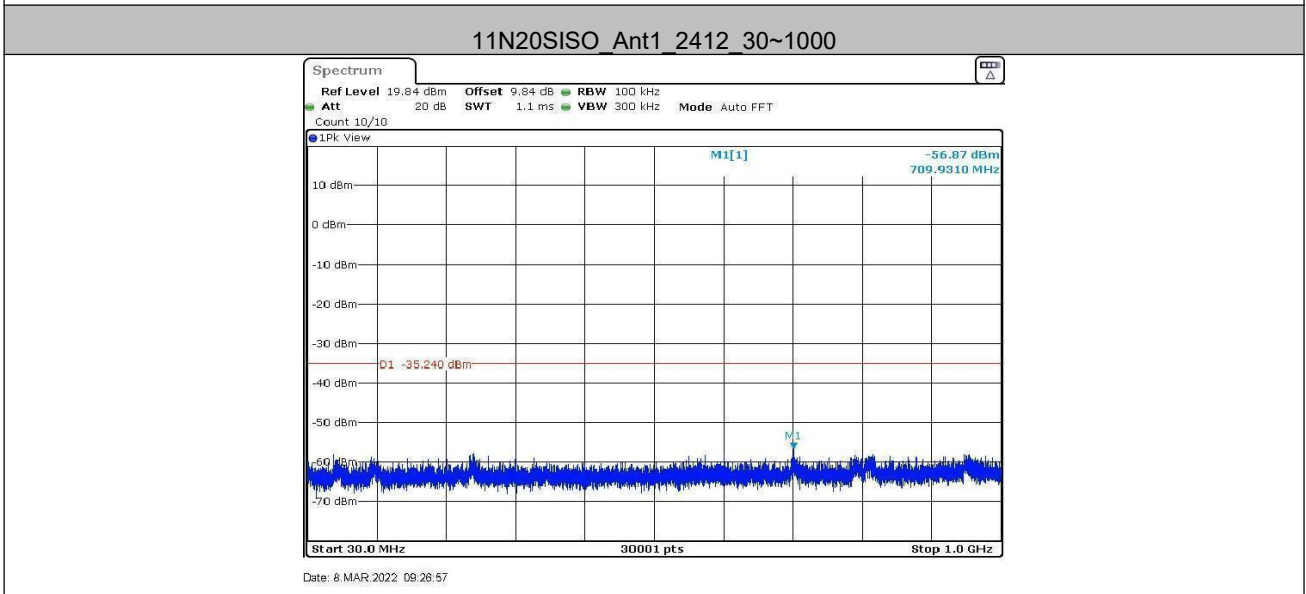
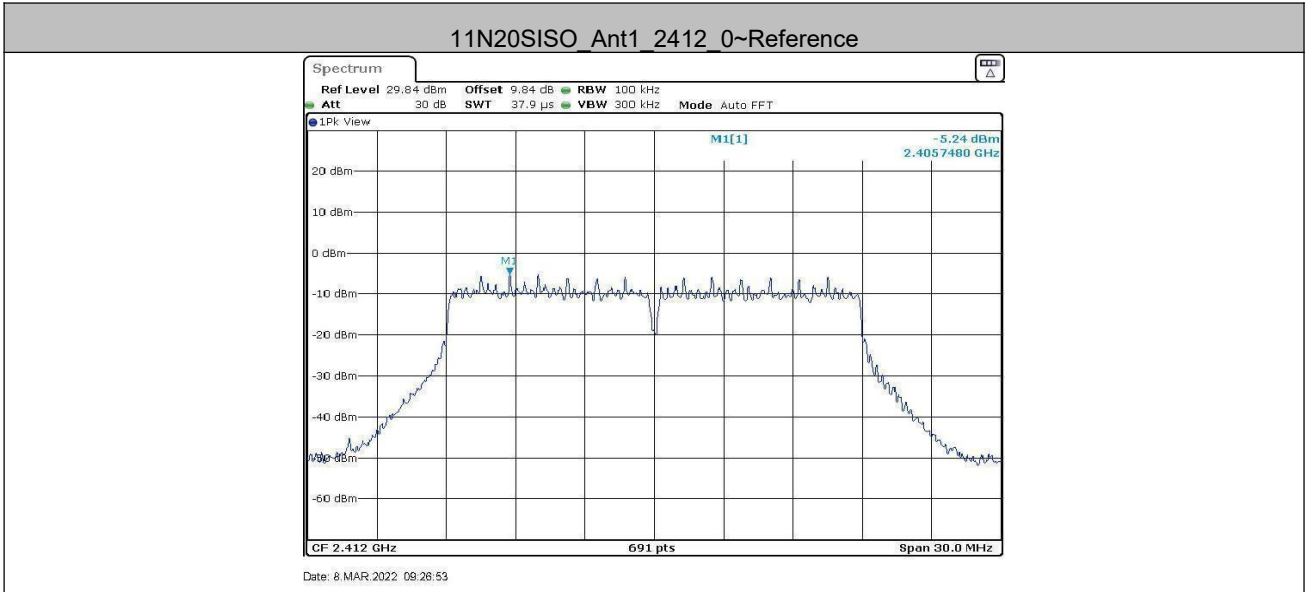
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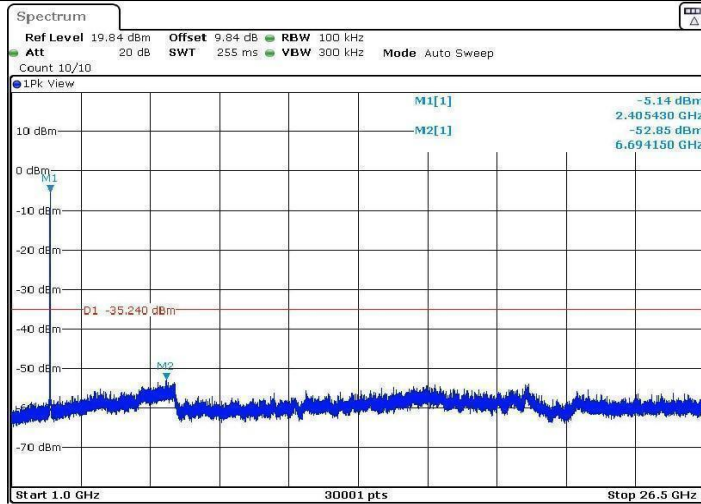


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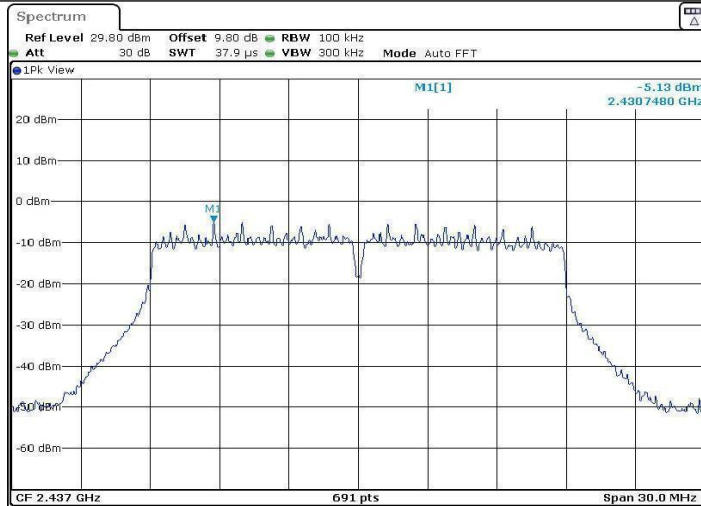


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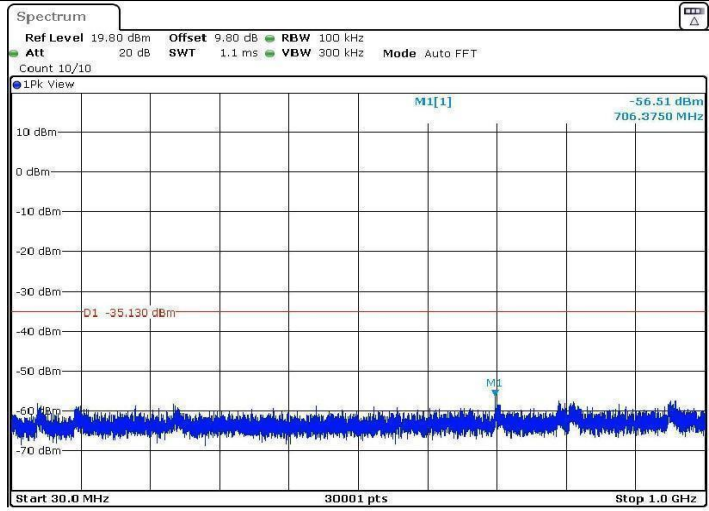
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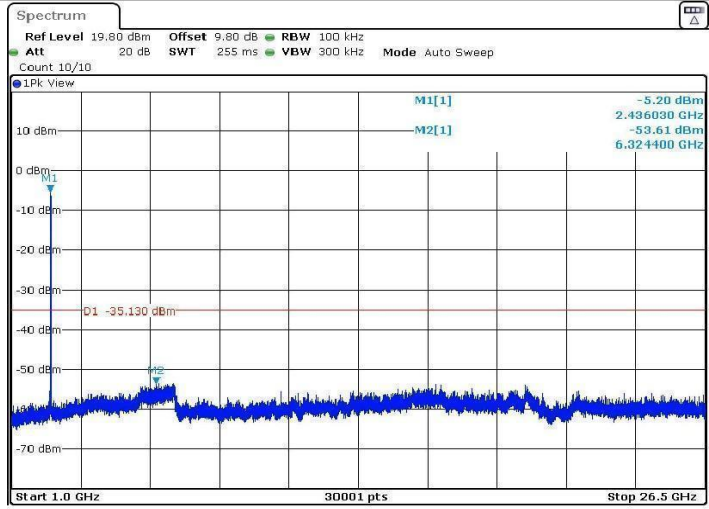
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Date: 8 MAR 2022 09:32:17