

Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Wi-Fi Hub

Test Model: GWB03

Environmental Conditions

Temperature:	24.3°C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

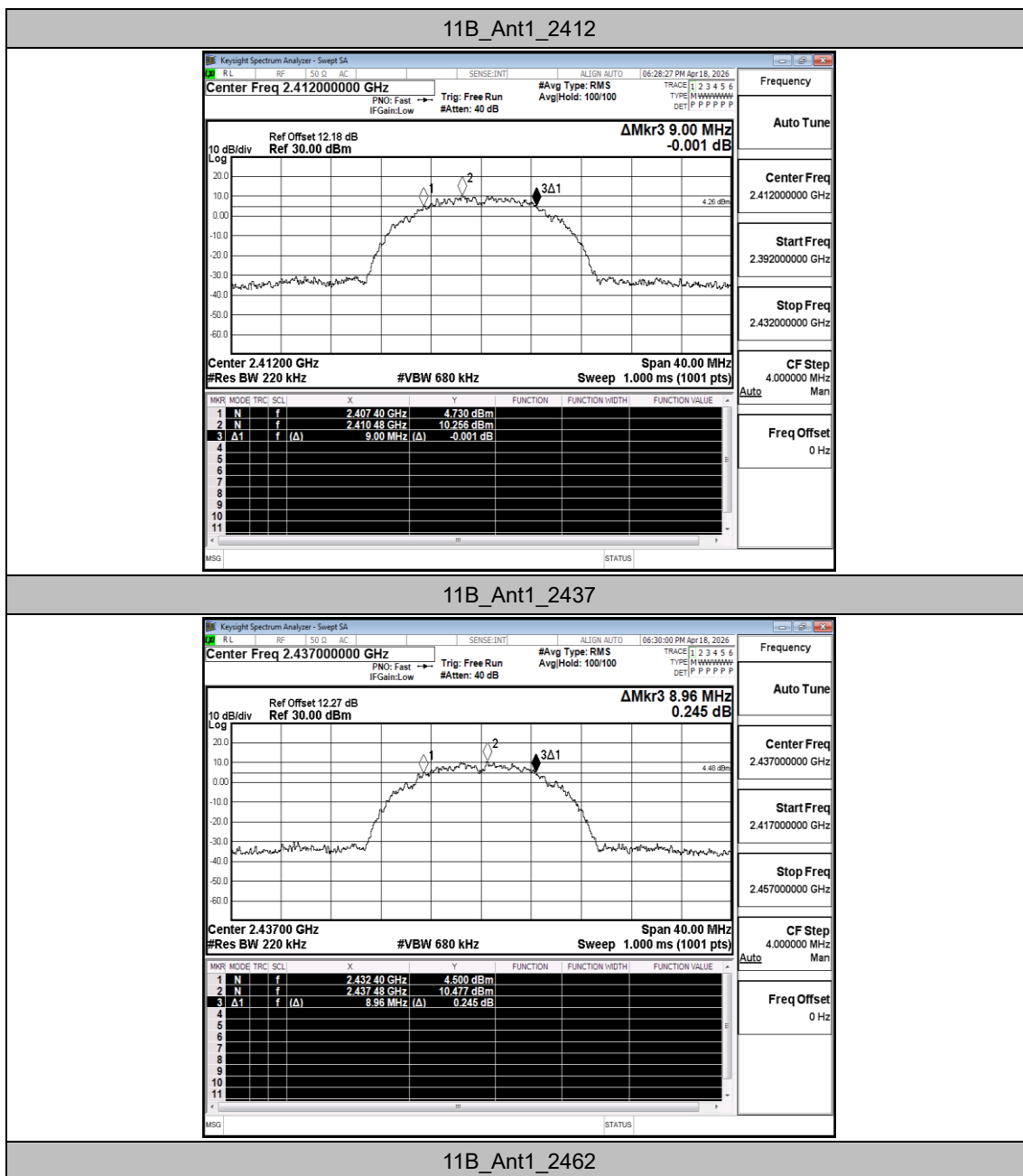
C.1 DTS Bandwidth

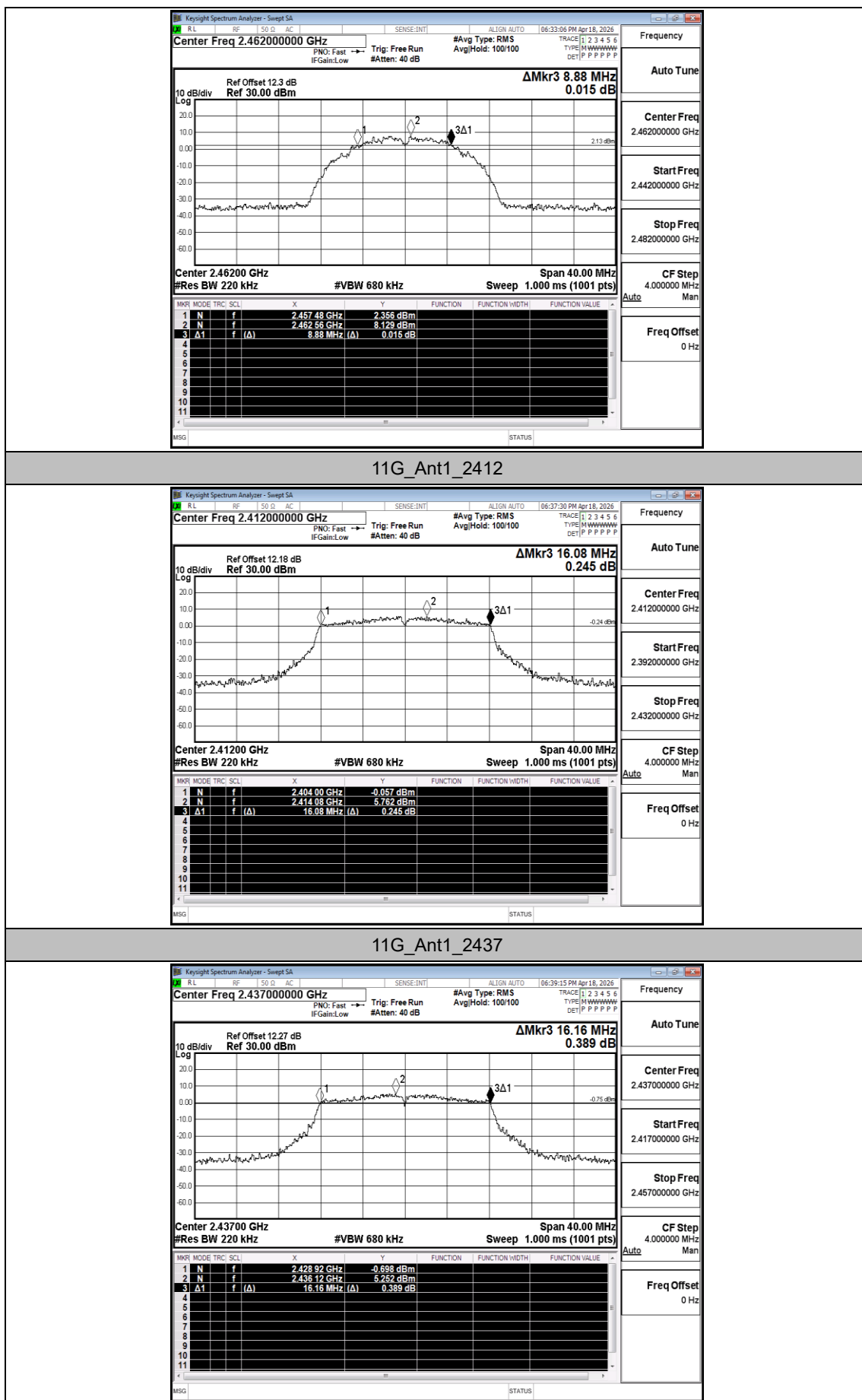
Test Result

TestMode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	9.000	2407.400	2416.400	0.5	PASS
		2437	8.960	2432.400	2441.360	0.5	PASS
		2462	8.880	2457.480	2466.360	0.5	PASS
11G	Ant1	2412	16.080	2404.000	2420.080	0.5	PASS
		2437	16.160	2428.920	2445.080	0.5	PASS
		2462	15.920	2454.040	2469.960	0.5	PASS
11N20SISO	Ant1	2412	17.240	2403.360	2420.600	0.5	PASS
		2437	17.320	2428.320	2445.640	0.5	PASS
		2462	17.000	2453.480	2470.480	0.5	PASS

Note: offset=System attenuation +caba loss

Test Graphs



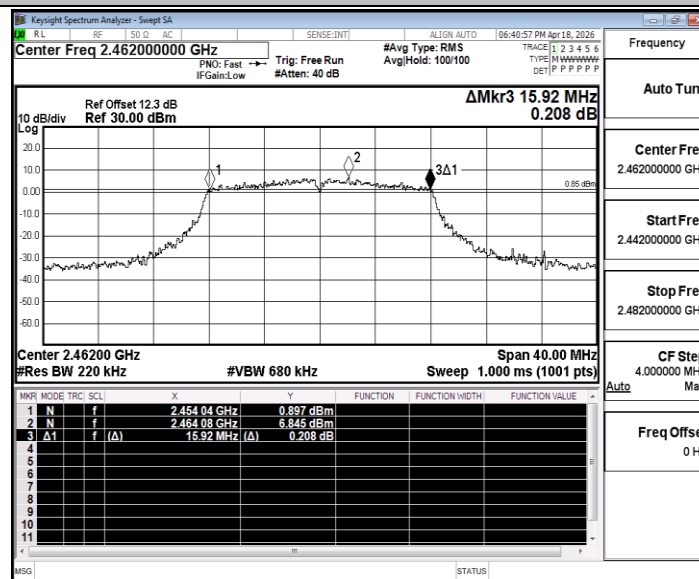


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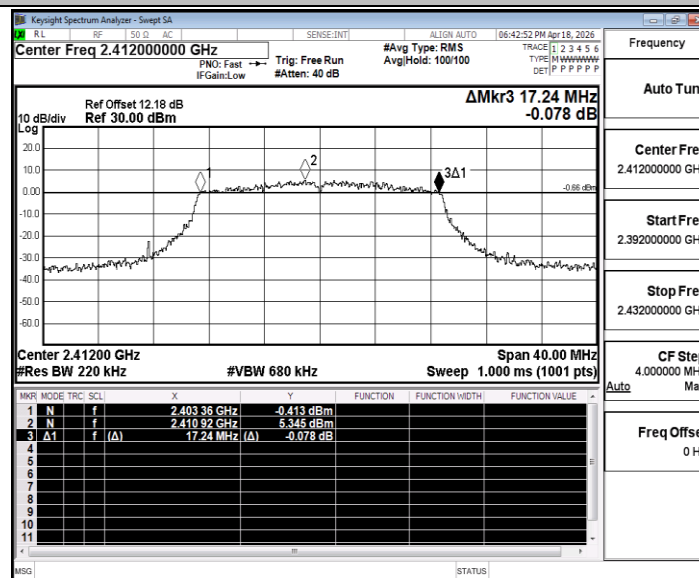
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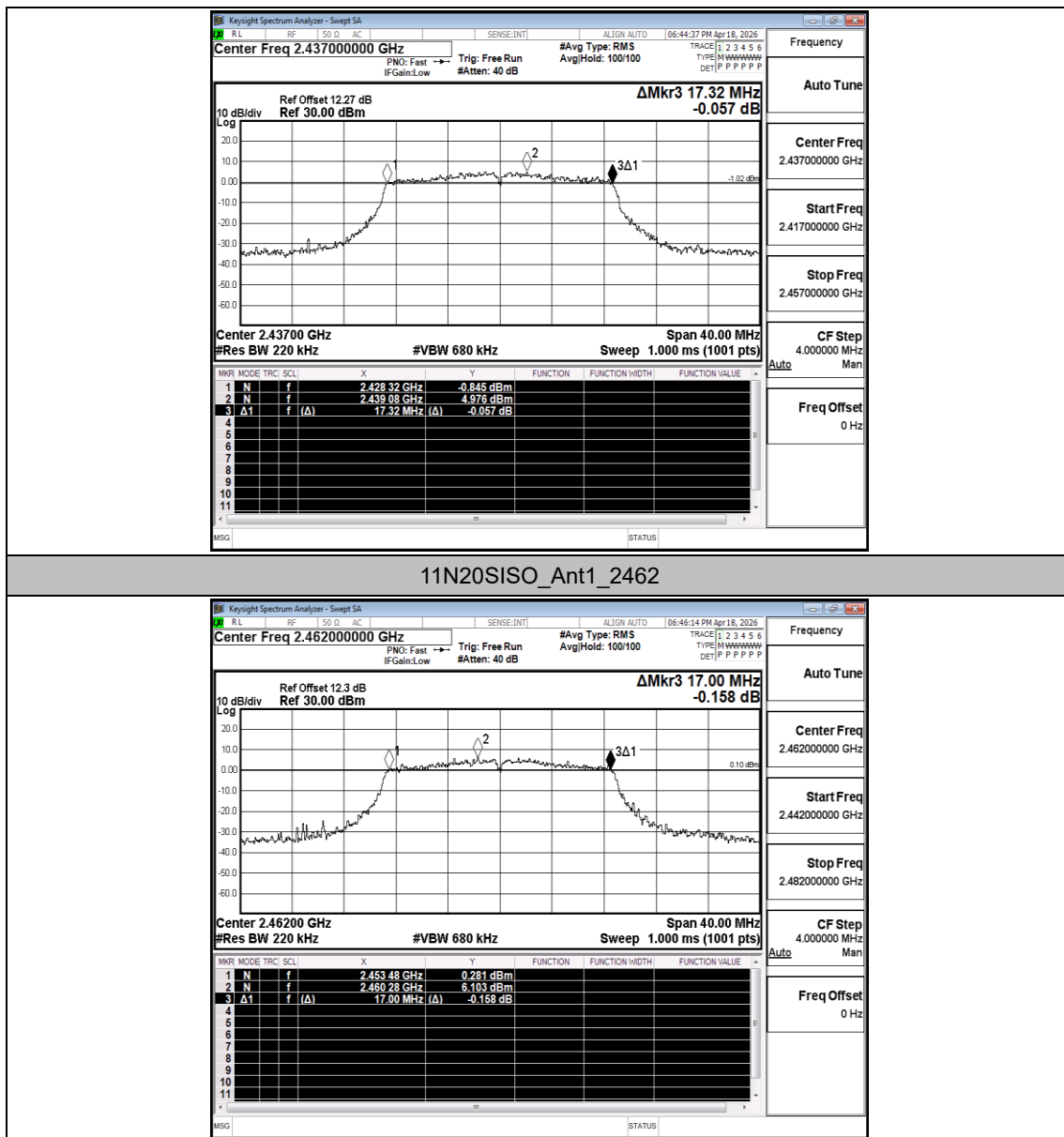
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



C.2 Maximum Average conducted output power

Test Result Average

TestMode	Antenna	Frequency [MHz]	Measured Power	DC Factor [dB]	AV Power [dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	15.57	0.00	15.57	≤30.00	PASS
		2437	15.14	0.00	15.14	≤30.00	PASS
		2462	14.75	0.00	14.75	≤30.00	PASS
11G	Ant1	2412	15.14	0.04	15.18	≤30.00	PASS
		2437	14.72	0.04	14.76	≤30.00	PASS
		2462	15.23	0.04	15.27	≤30.00	PASS
11N20SISO	Ant1	2412	15.17	0.04	15.21	≤30.00	PASS
		2437	14.77	0.04	14.81	≤30.00	PASS
		2462	15.26	0.04	15.30	≤30.00	PASS

Note: offset=System attenuation +cabel loss

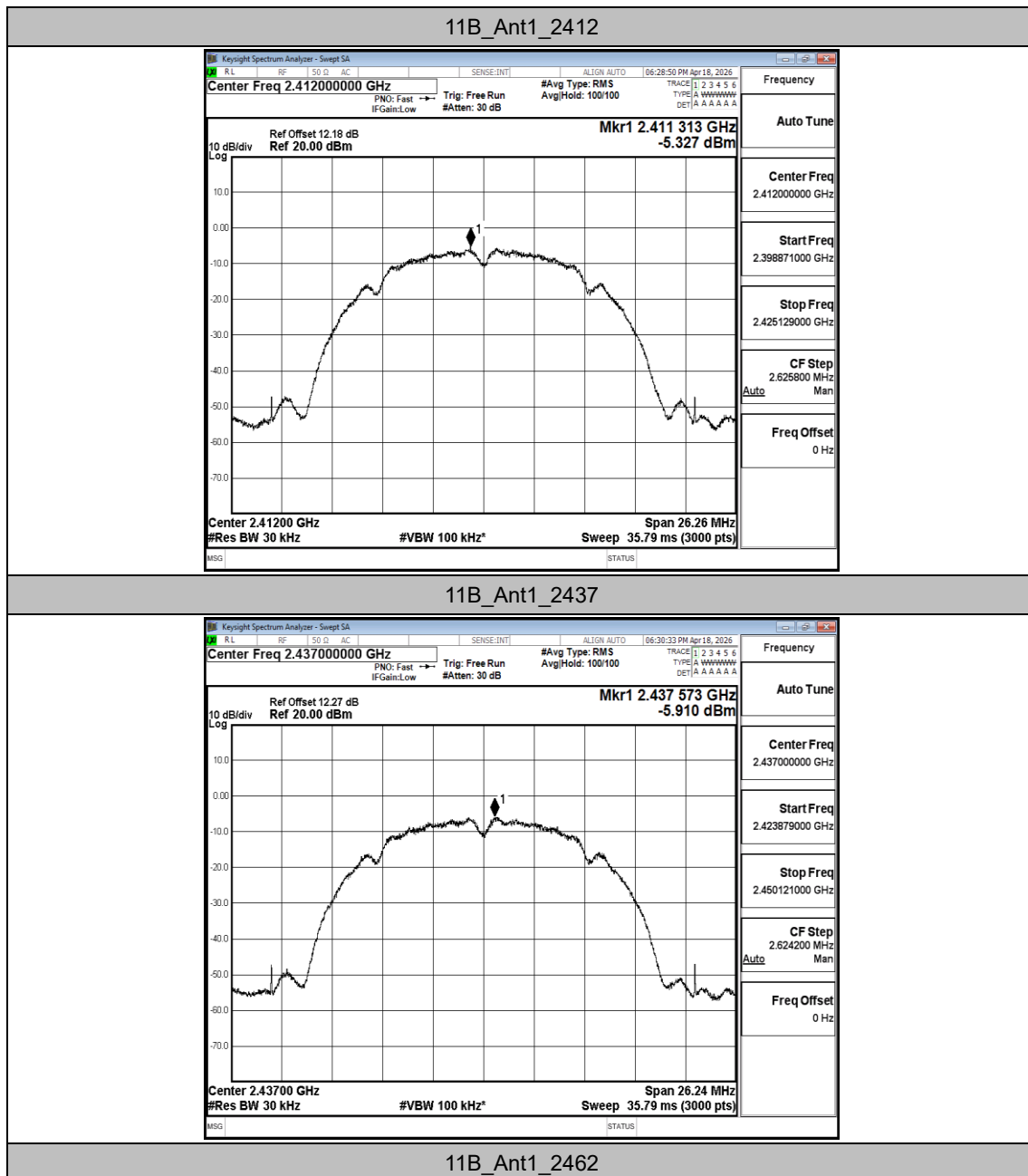
C.3 Maximum power spectral density

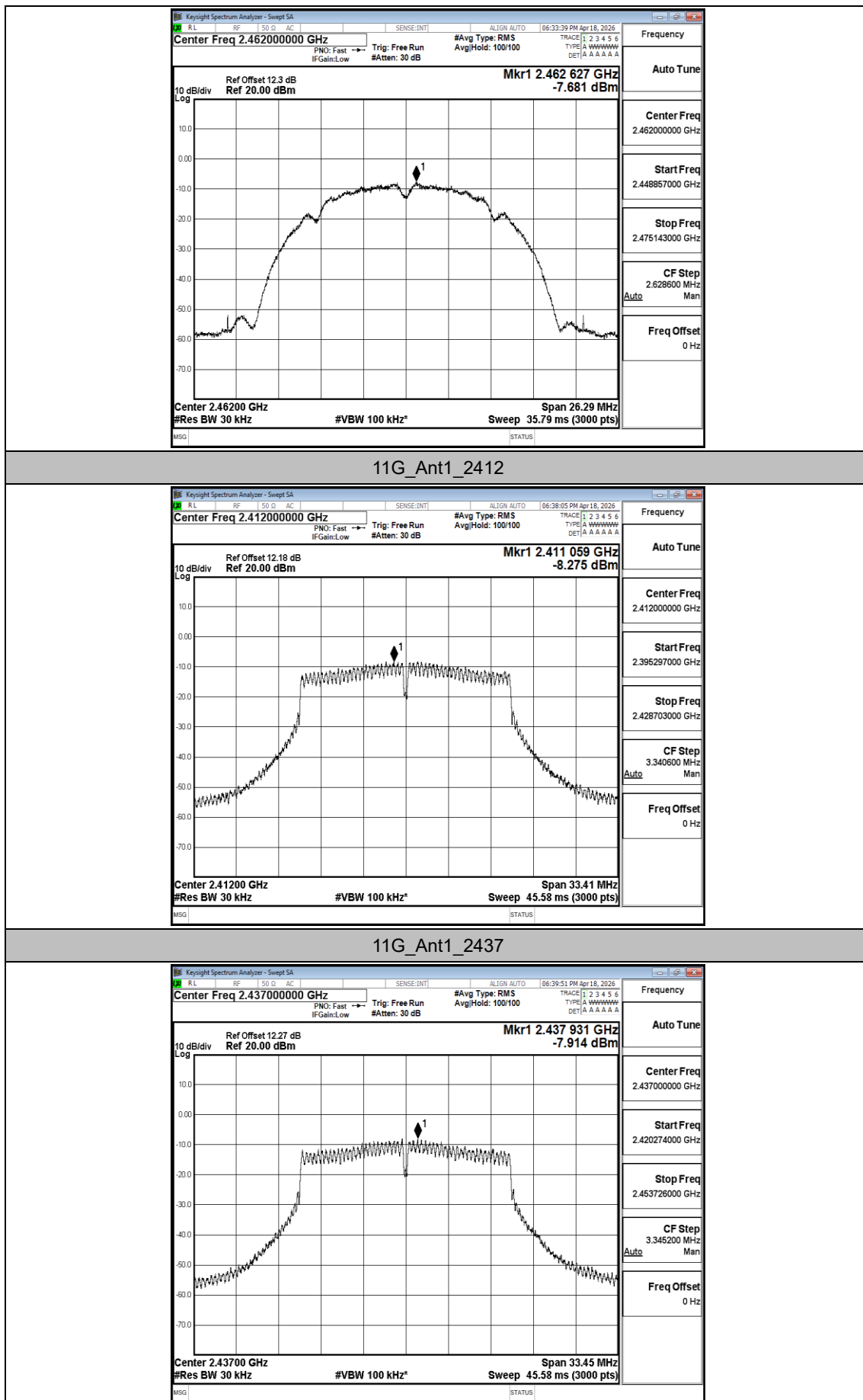
Test Result

TestMode	Antenna	Frequency [MHz]	Measured PSD [dBm/3kHz]	DC Factor [dB]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-5.33	0.00	-5.33	≤8.00	PASS
		2437	-5.91	0.00	-5.91	≤8.00	PASS
		2462	-7.68	0.00	-7.68	≤8.00	PASS
11G	Ant1	2412	-8.28	0.05	-8.23	≤8.00	PASS
		2437	-7.91	0.04	-7.87	≤8.00	PASS
		2462	-7.27	0.05	-7.22	≤8.00	PASS
11N20SISO	Ant1	2412	-8.32	0.04	-8.28	≤8.00	PASS
		2437	-8.78	0.04	-8.74	≤8.00	PASS
		2462	-7.81	0.04	-7.77	≤8.00	PASS

Note: offset=System attenuation +cabel loss

Test Graphs



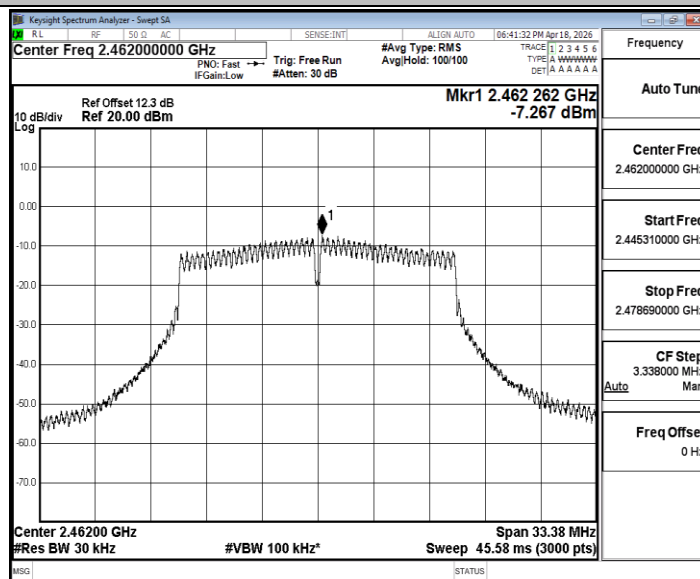


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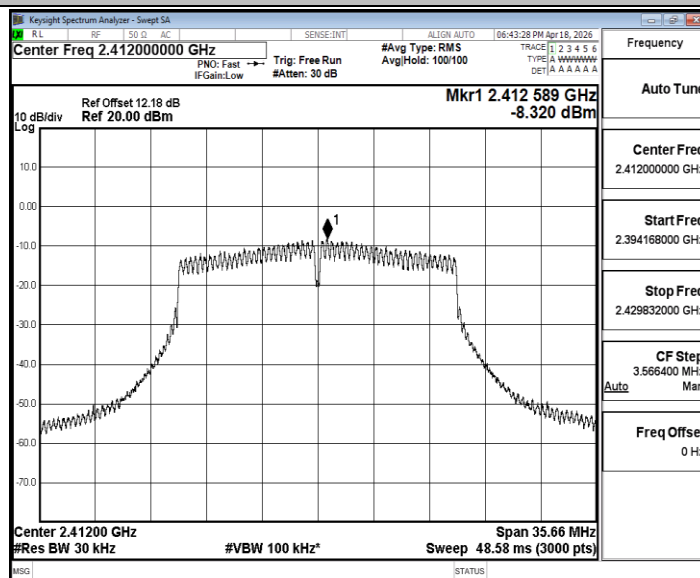
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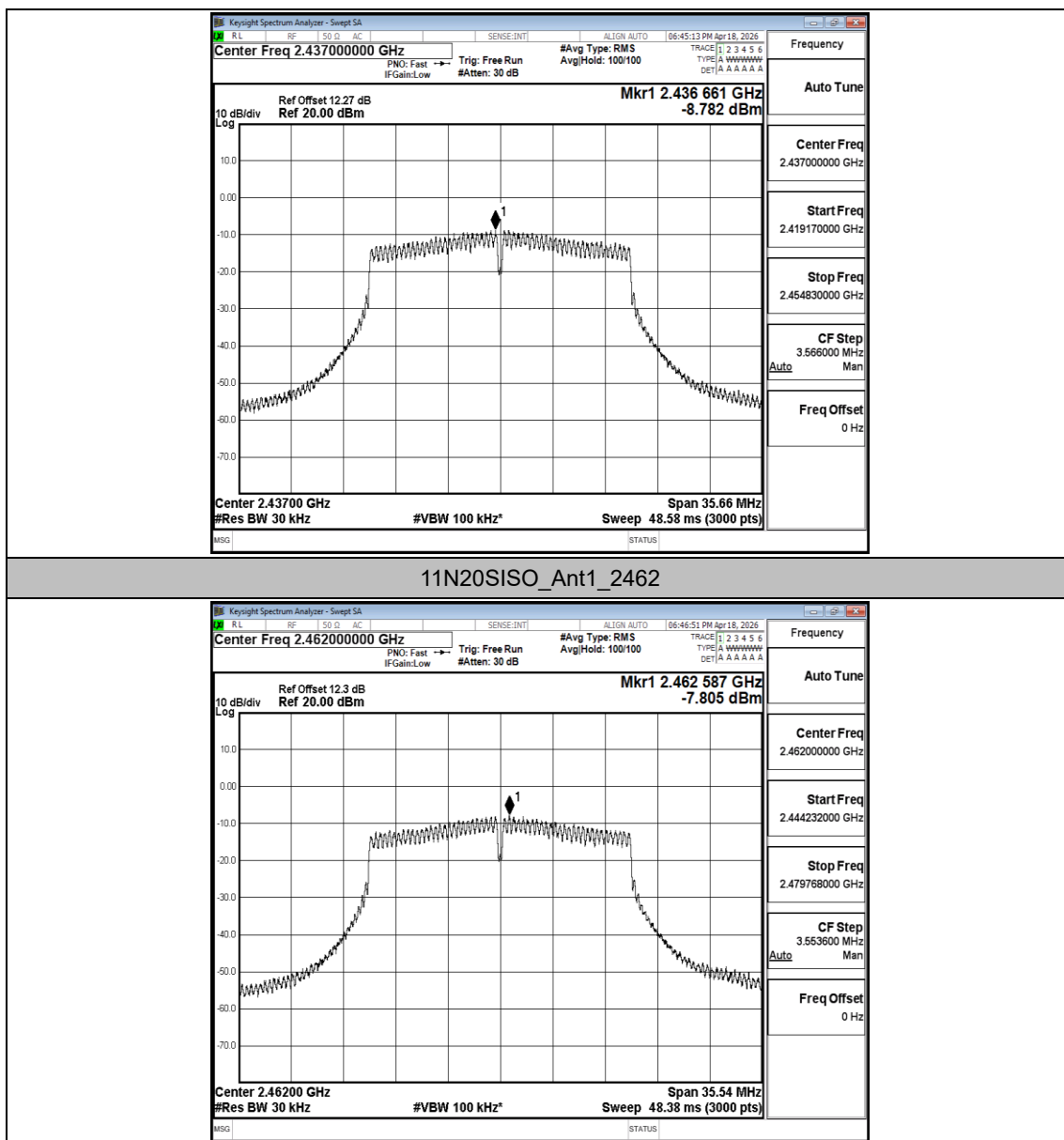
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



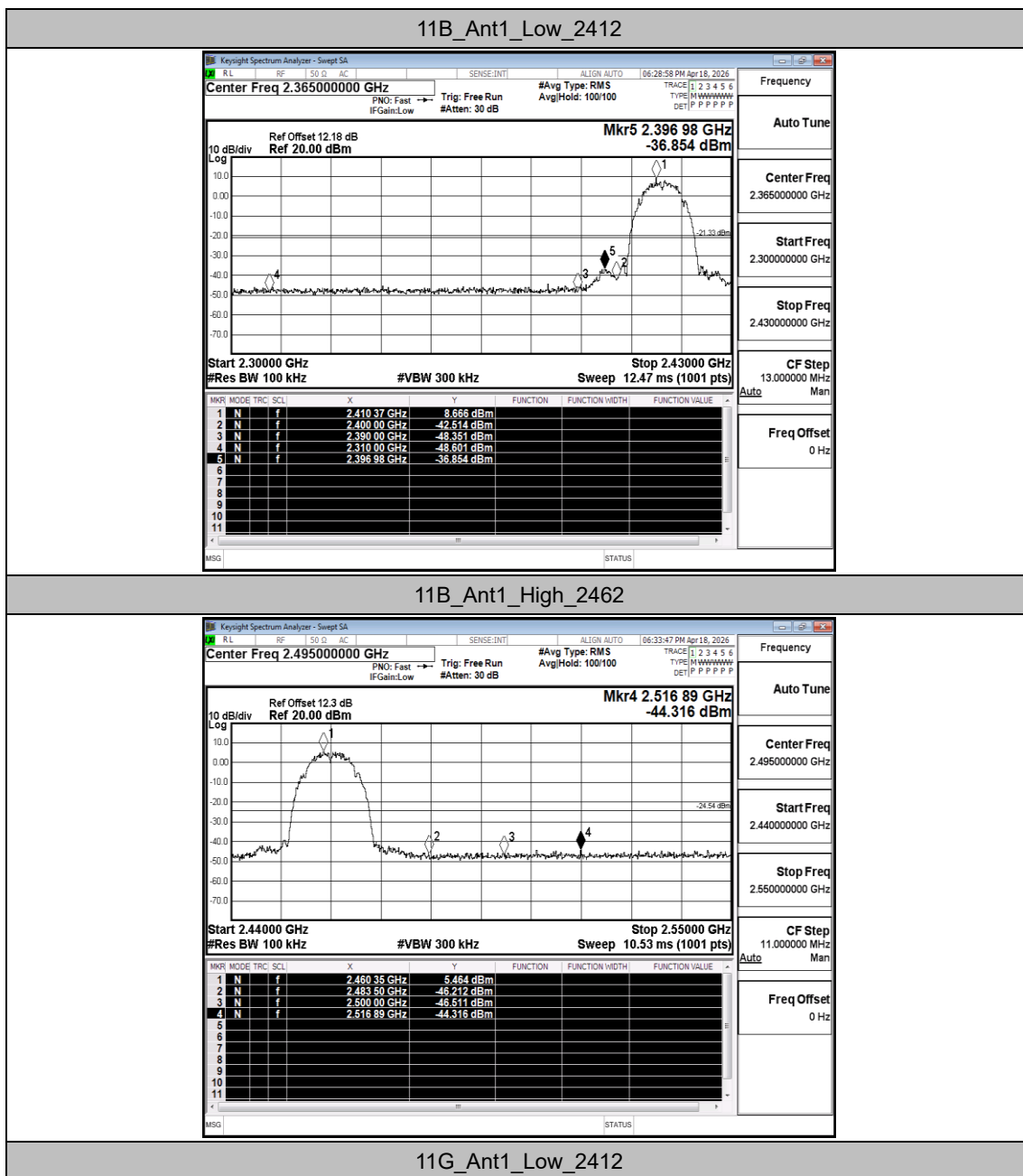
C.4 Band edge measurements

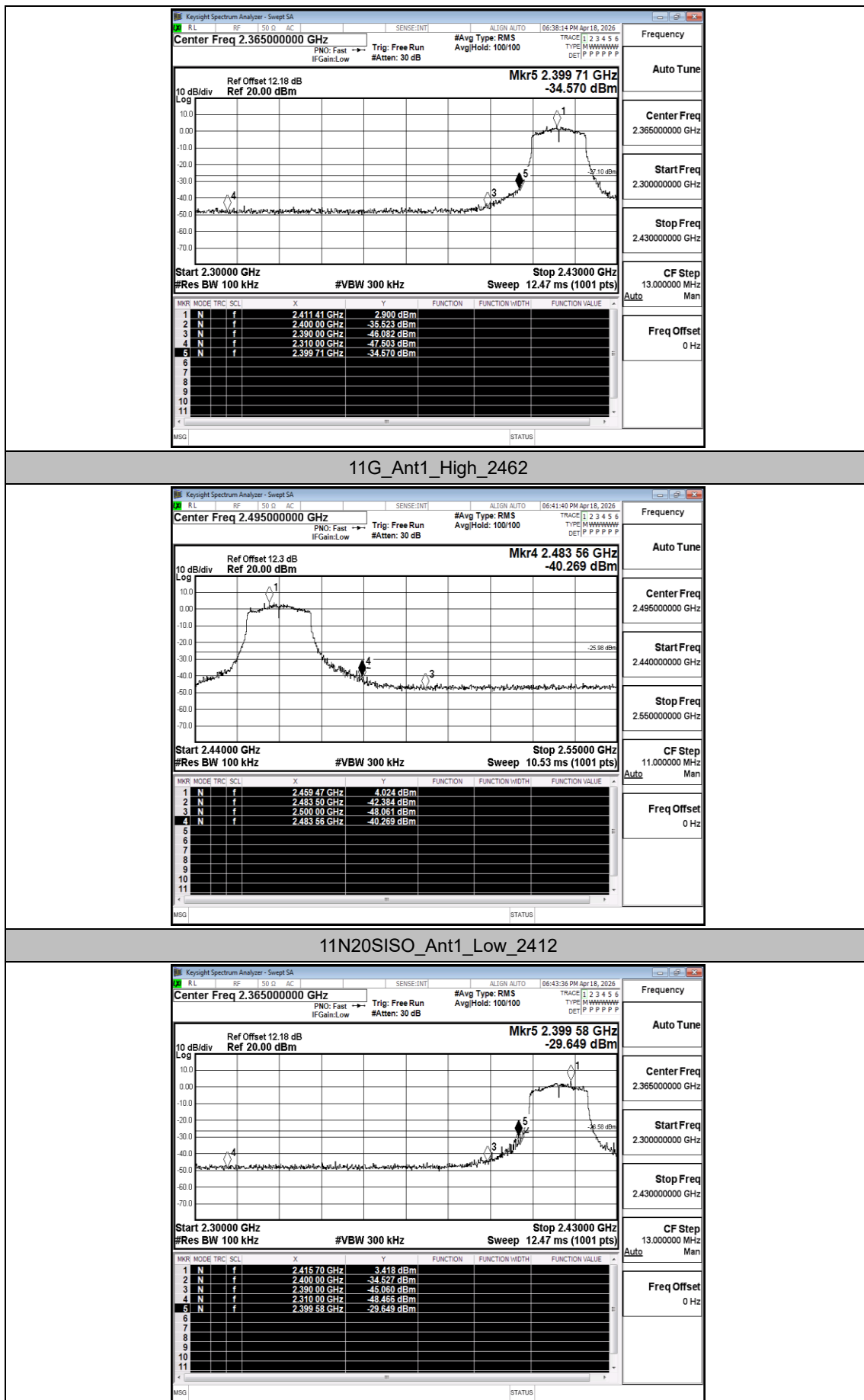
Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.67	-36.85	≤-21.33	PASS
		High	2462	5.46	-44.32	≤-24.54	PASS
11G	Ant1	Low	2412	2.90	-34.57	≤-27.1	PASS
		High	2462	4.02	-40.27	≤-25.98	PASS
11N20SISO	Ant1	Low	2412	3.42	-29.65	≤-26.58	PASS
		High	2462	3.57	-40.38	≤-26.43	PASS

Note: offset=System attenuation +cabel loss

Test Graphs

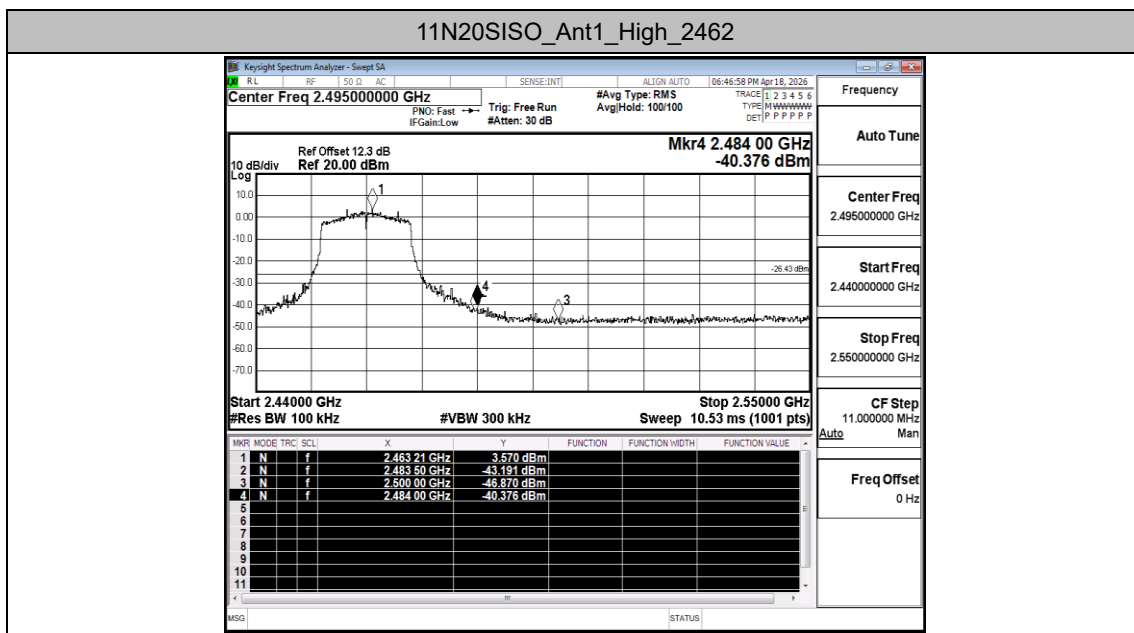




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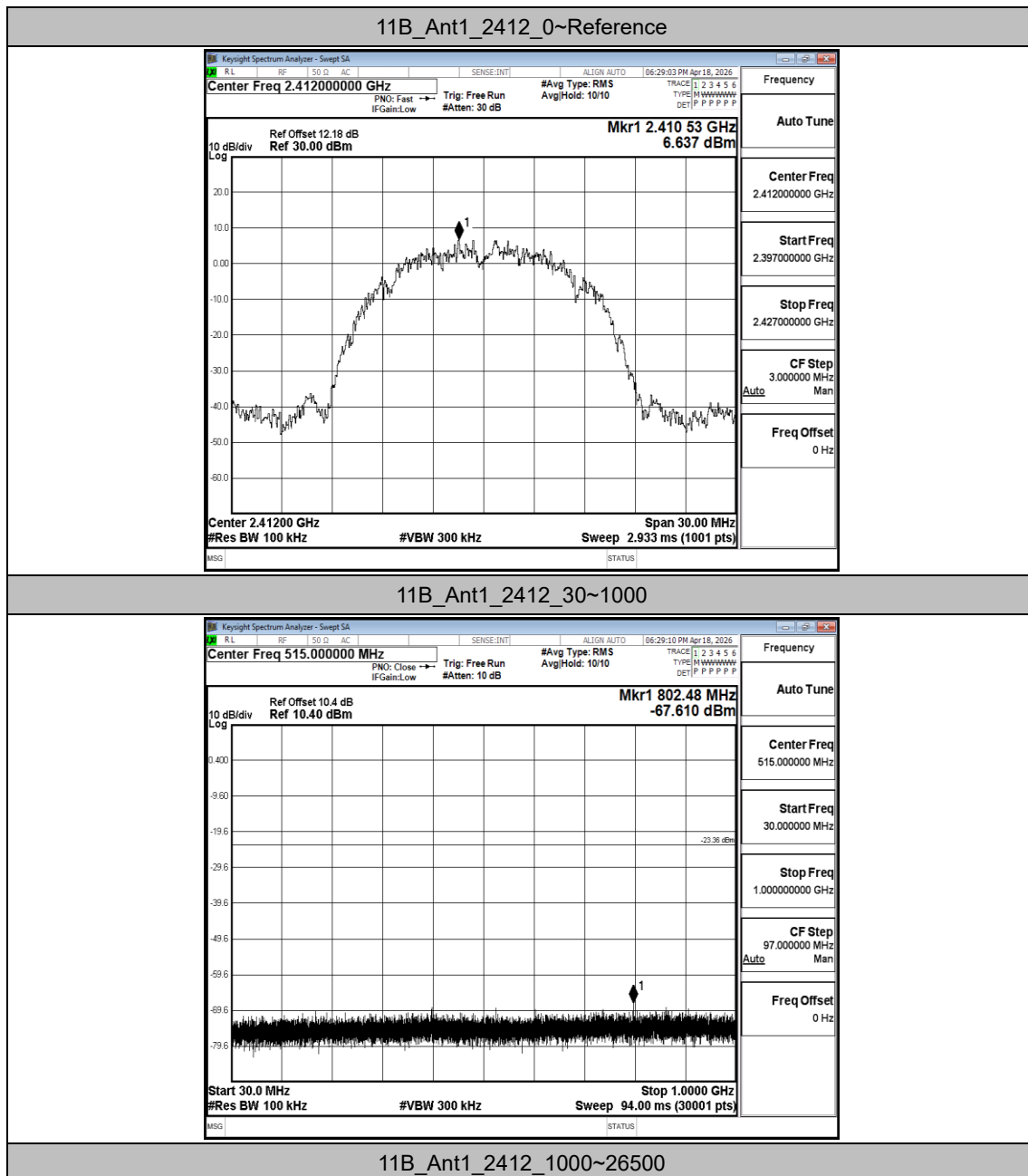
C.5 Conducted Spurious Emission

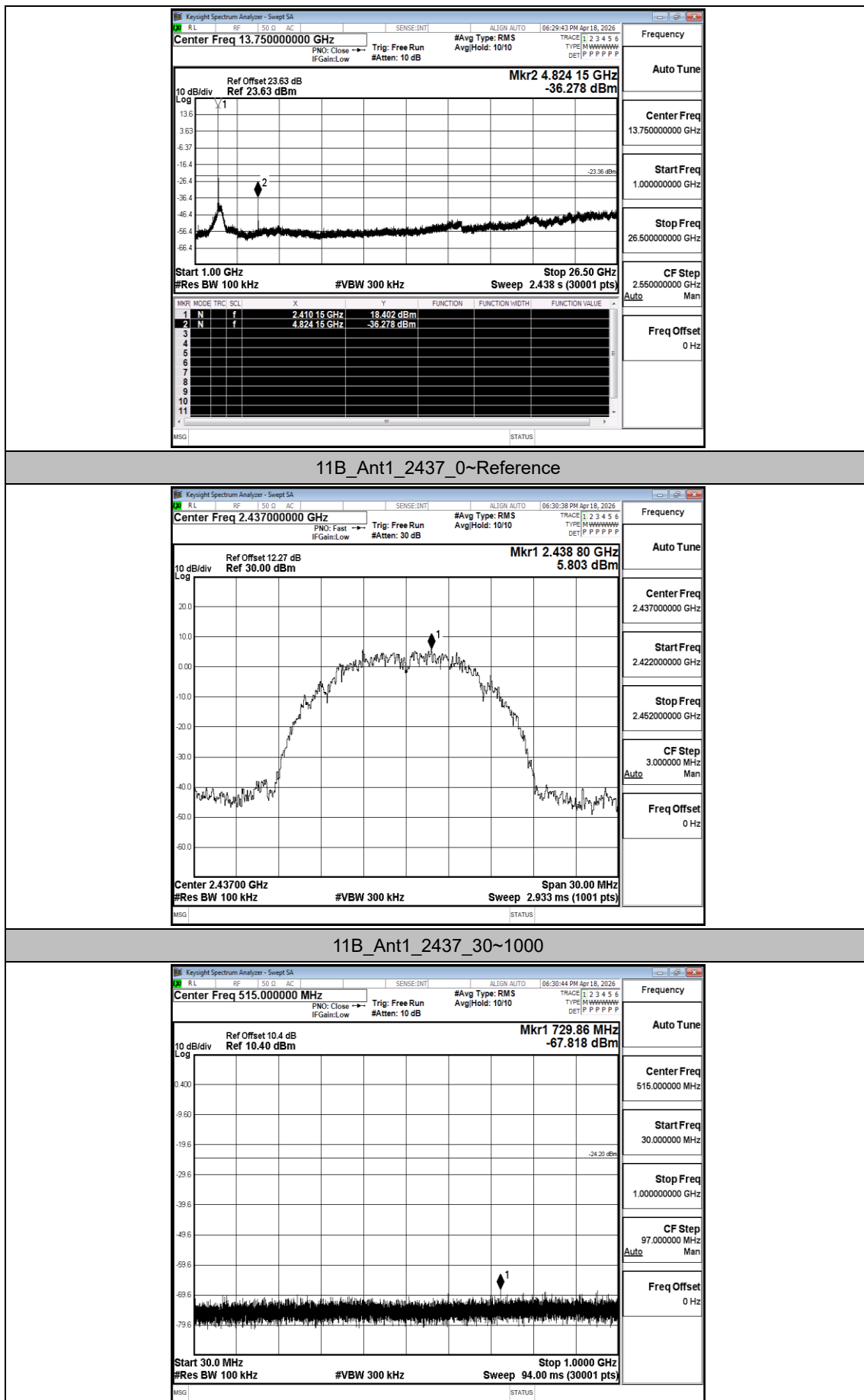
Test Result

TestMode	Antenna	Frequency [MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	6.64	6.64	---	PASS
			30~1000	6.64	-67.61	≤-23.36	PASS
			1000~26500	6.64	-36.28	≤-23.36	PASS
		2437	Reference	5.80	5.80	---	PASS
			30~1000	5.80	-67.82	≤-24.2	PASS
			1000~26500	5.80	-38.59	≤-24.2	PASS
		2462	Reference	4.38	4.38	---	PASS
			30~1000	4.38	-67.88	≤-25.62	PASS
			1000~26500	4.38	-42.54	≤-25.62	PASS
11G	Ant1	2412	Reference	1.62	1.62	---	PASS
			30~1000	1.62	-67.33	≤-28.38	PASS
			1000~26500	1.62	-41.47	≤-28.38	PASS
		2437	Reference	1.43	1.43	---	PASS
			30~1000	1.43	-68.7	≤-28.57	PASS
			1000~26500	1.43	-40.95	≤-28.57	PASS
		2462	Reference	2.65	2.65	---	PASS
			30~1000	2.65	-68.84	≤-27.35	PASS
			1000~26500	2.65	-39.75	≤-27.35	PASS
11N20SISO	Ant1	2412	Reference	0.99	0.99	---	PASS
			30~1000	0.99	-68.78	≤-29.01	PASS
			1000~26500	0.99	-41.4	≤-29.01	PASS
		2437	Reference	1.35	1.35	---	PASS
			30~1000	1.35	-68.25	≤-28.65	PASS
			1000~26500	1.35	-41.16	≤-28.65	PASS
		2462	Reference	2.10	2.10	---	PASS
			30~1000	2.10	-68.48	≤-27.9	PASS
			1000~26500	2.10	-41.43	≤-27.9	PASS

Note: Regarding the spurious emissions from 30MHz to 26.5GHz, the cable lose have been set in the CORREC' of the Spectrum Analyzer during the test.

Test Graphs



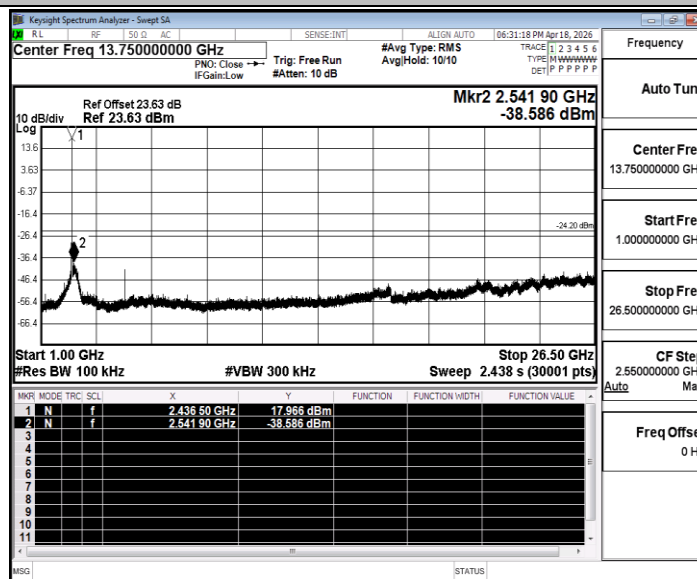


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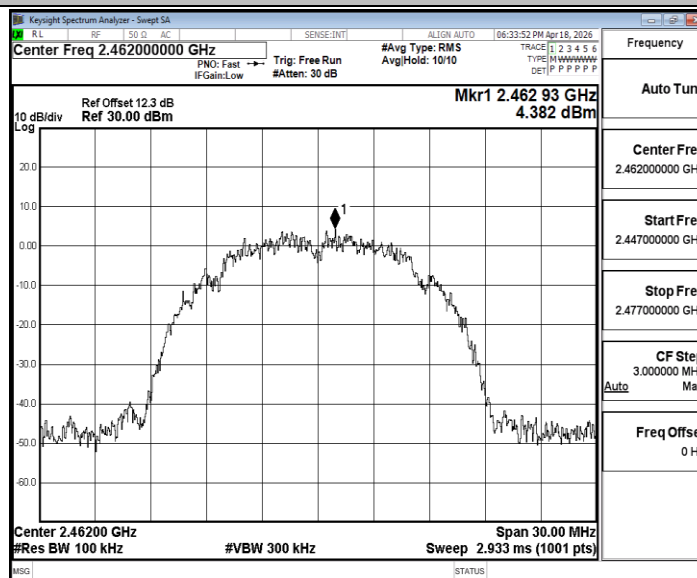
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11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000