



Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Laptop computer

Test Model: DS133

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li Huan





C.1 6dB Bandwidth

Test Result

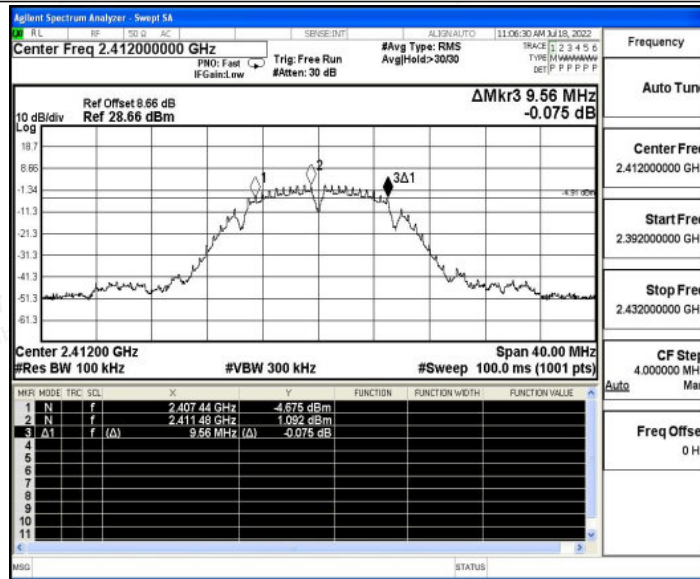
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.560	2407.440	2417.000	0.5	PASS
		2437	10.000	2431.960	2441.960	0.5	PASS
		2462	10.040	2456.960	2467.000	0.5	PASS
11G	Ant1	2412	15.600	2404.120	2419.720	0.5	PASS
		2437	16.360	2428.800	2445.160	0.5	PASS
		2462	15.080	2454.440	2469.520	0.5	PASS
11N20SISO	Ant1	2412	17.560	2403.200	2420.760	0.5	PASS
		2437	17.560	2428.200	2445.760	0.5	PASS
		2462	17.560	2453.200	2470.760	0.5	PASS
11N40SISO	Ant1	2422	35.680	2404.080	2439.760	0.5	PASS
		2437	36.000	2419.080	2455.080	0.5	PASS
		2452	36.000	2434.080	2470.080	0.5	PASS



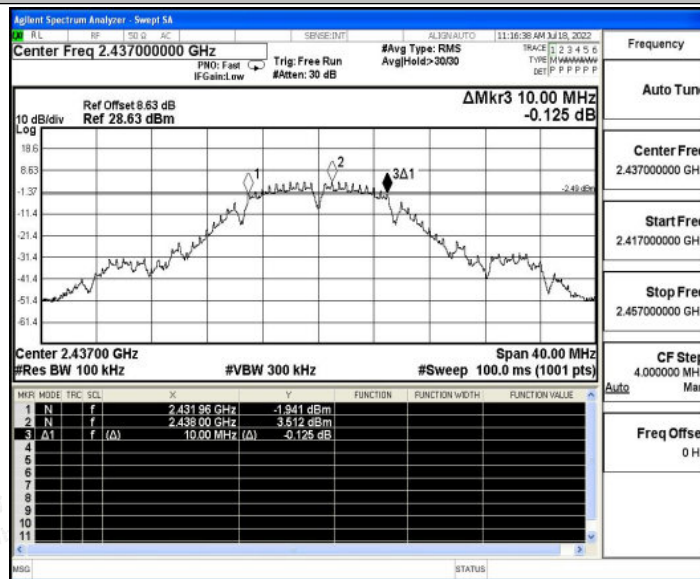


Test Graphs

11B_Ant1_2412

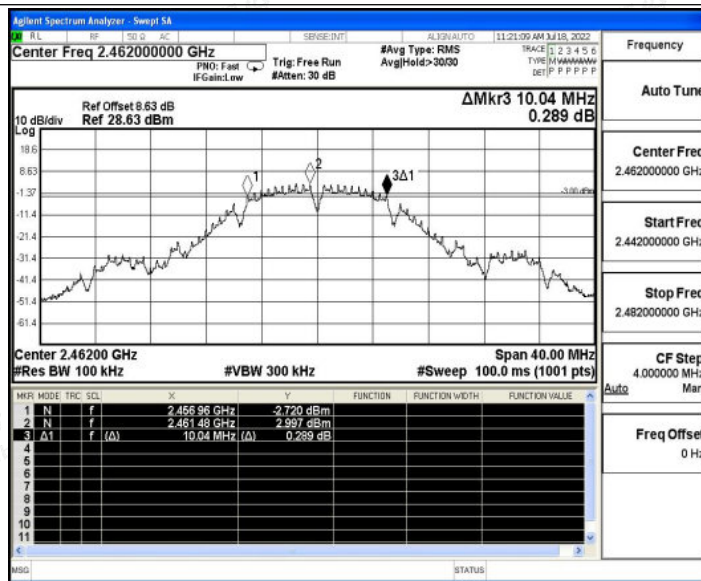


11B_Ant1_2437

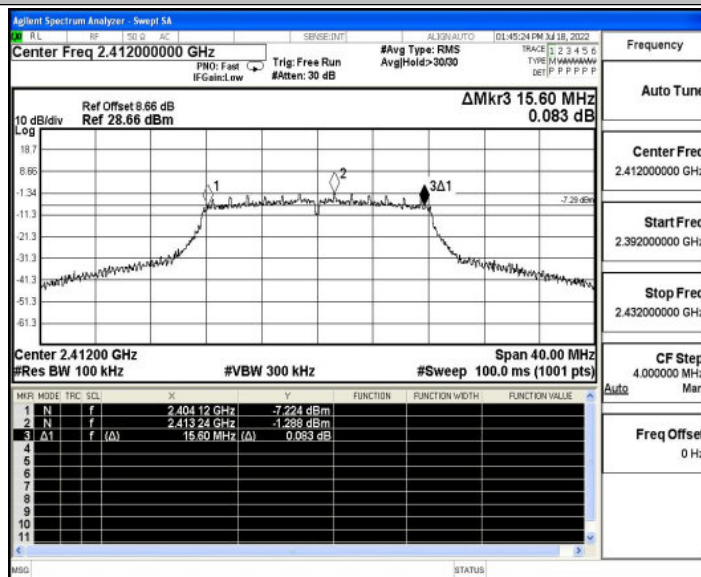


11B_Ant1_2462





11G_Ant1_2412



11G_Ant1_2437

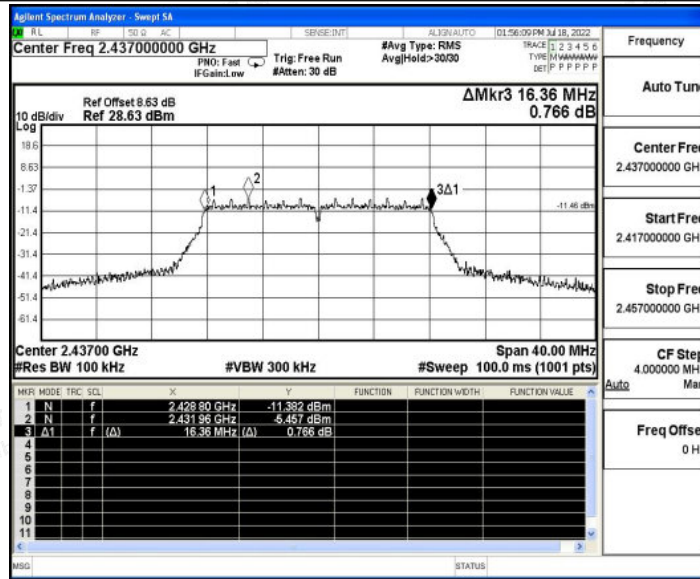


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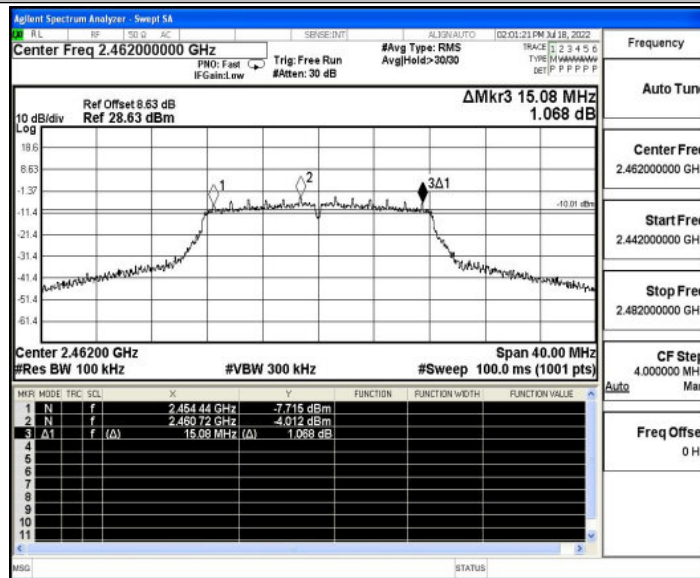
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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11G_Ant1_2462



11N20SISO_Ant1_2412

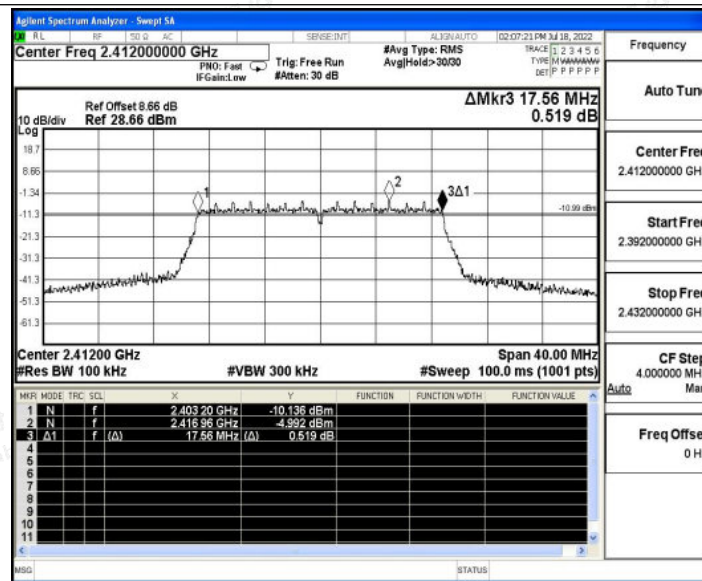


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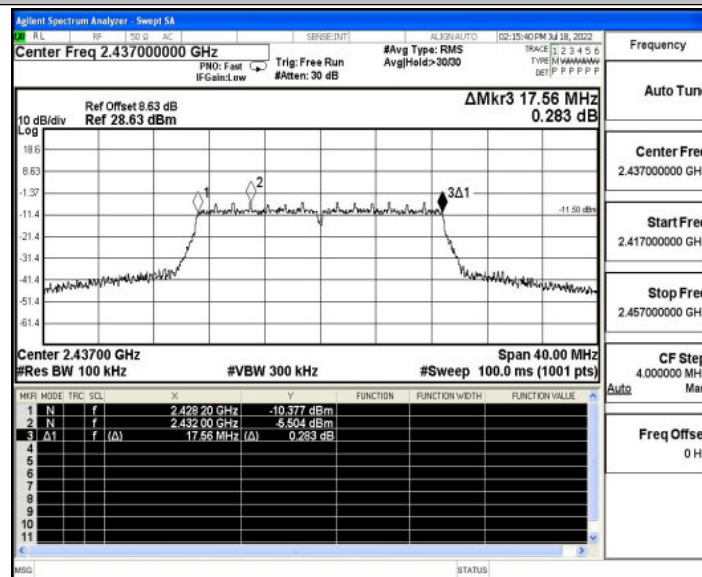
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11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

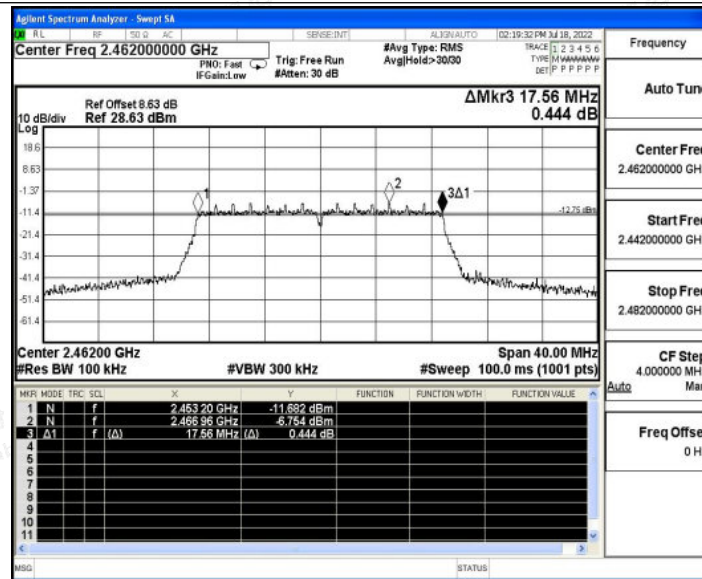


Shenzhen LCS Compliance Testing Laboratory Ltd.

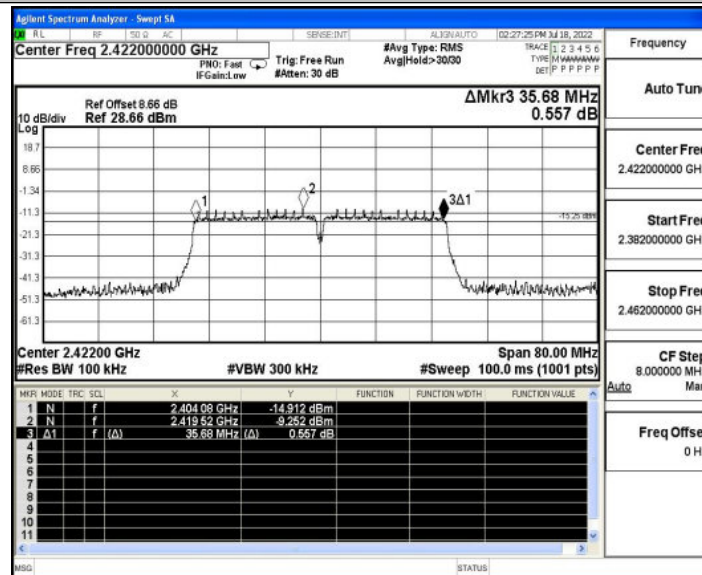
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

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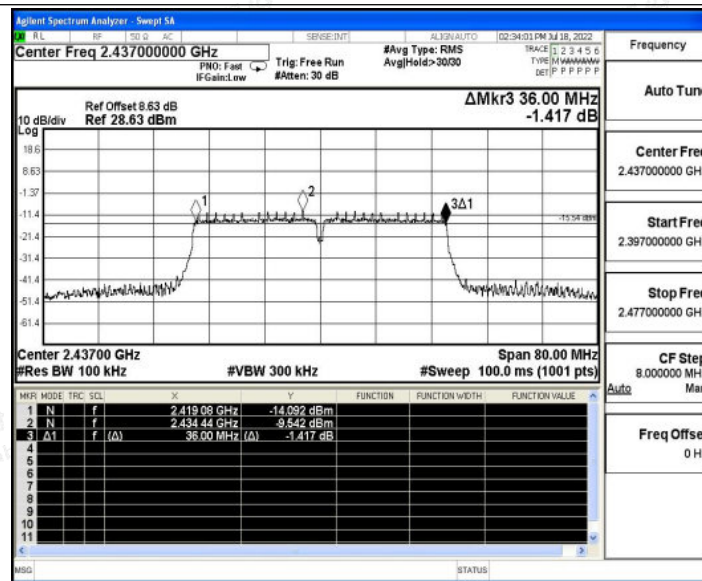


11N40SISO_Ant1_2422

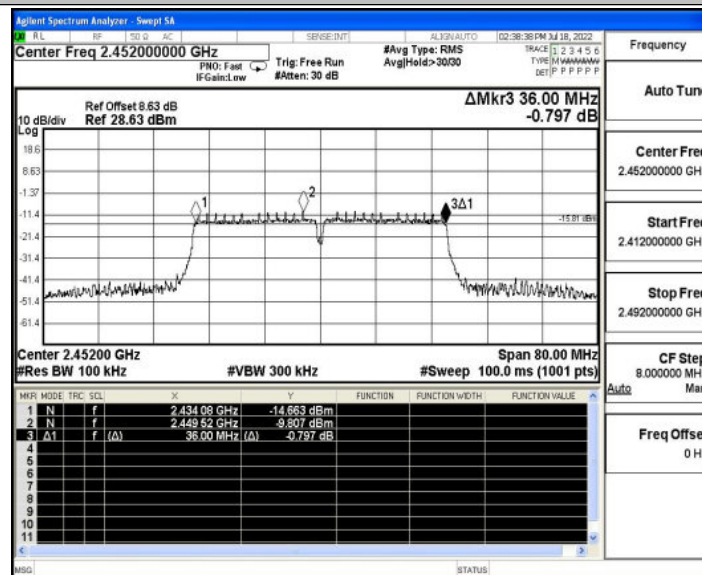


11N40SISO_Ant1_2437





11N40SISO_Ant1_2452



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C.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.79	≤30.00	PASS
		2437	15.39	≤30.00	PASS
		2462	15.39	≤30.00	PASS
11G	Ant1	2412	14.49	≤30.00	PASS
		2437	14.71	≤30.00	PASS
		2462	14.53	≤30.00	PASS
11N20SISO	Ant1	2412	13.07	≤30.00	PASS
		2437	13.99	≤30.00	PASS
		2462	13.29	≤30.00	PASS
11N40SISO	Ant1	2422	12.98	≤30.00	PASS
		2437	12.63	≤30.00	PASS
		2452	12.56	≤30.00	PASS





C.3 Maximum power spectral density

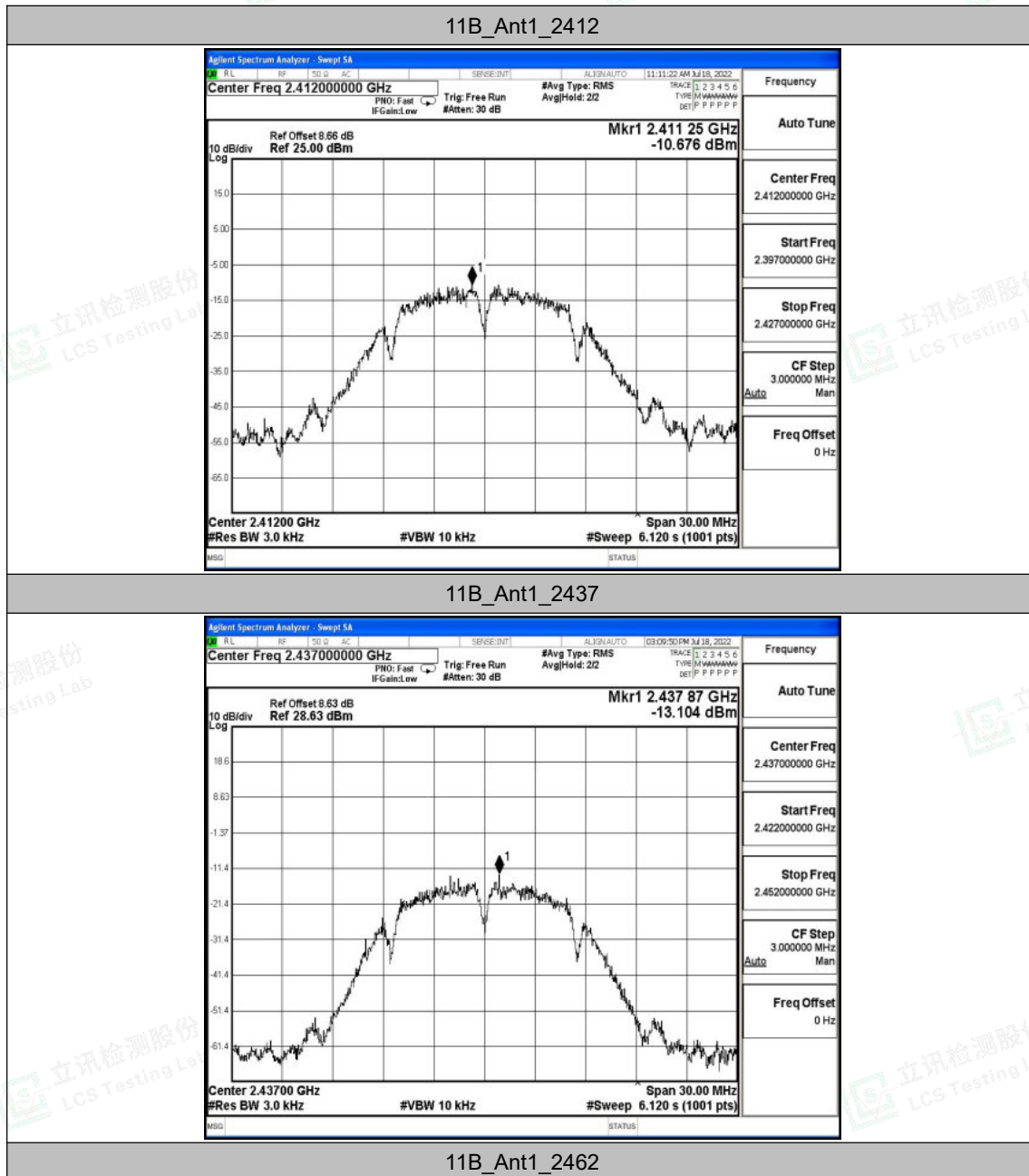
Test Result

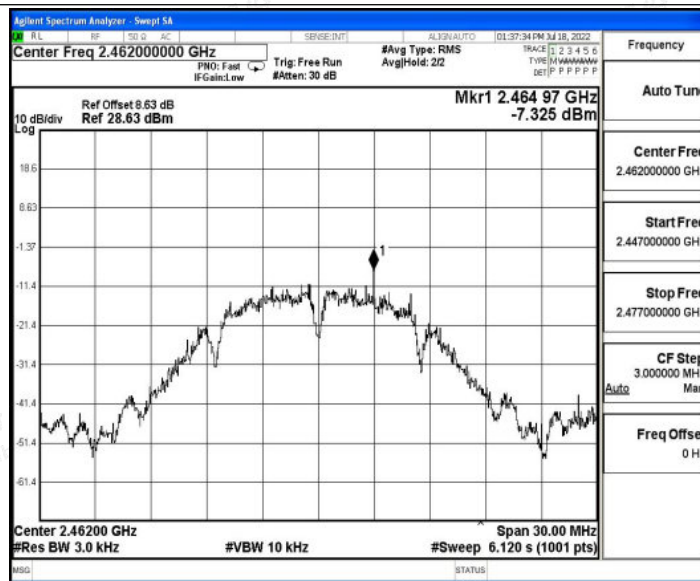
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-10.68	≤8.00	PASS
		2437	-13.1	≤8.00	PASS
		2462	-7.33	≤8.00	PASS
11G	Ant1	2412	-19.05	≤8.00	PASS
		2437	-17.7	≤8.00	PASS
		2462	-18.28	≤8.00	PASS
11N20SISO	Ant1	2412	-20.72	≤8.00	PASS
		2437	-20.07	≤8.00	PASS
		2462	-19.43	≤8.00	PASS
11N40SISO	Ant1	2422	-23.81	≤8.00	PASS
		2437	-24.4	≤8.00	PASS
		2452	-22.68	≤8.00	PASS



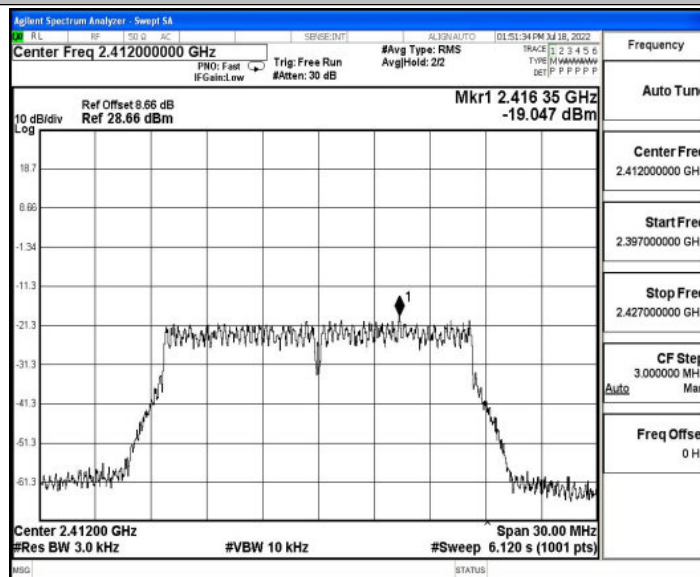


Test Graphs



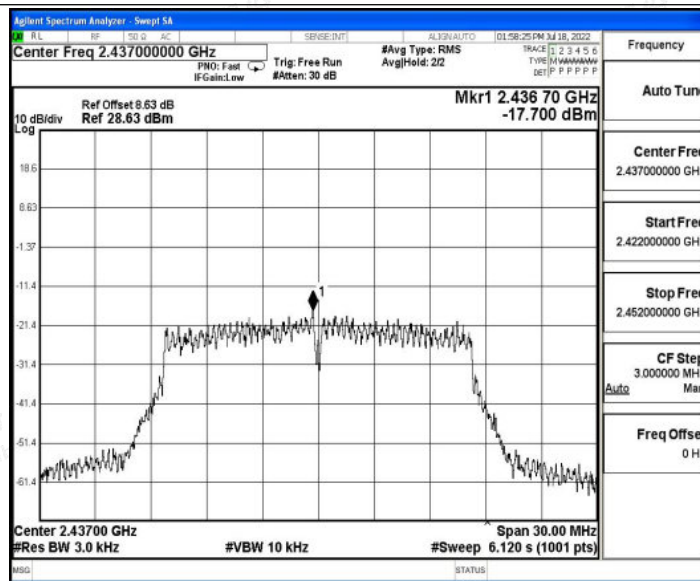


11G_Ant1_2412

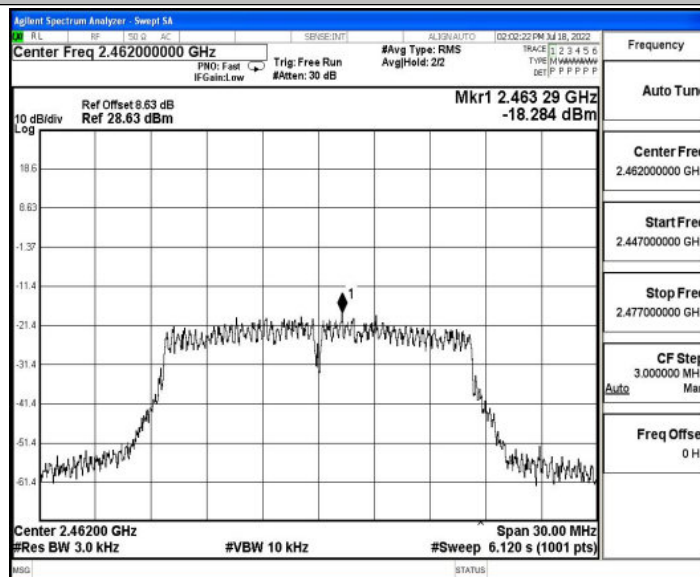


11G_Ant1_2437



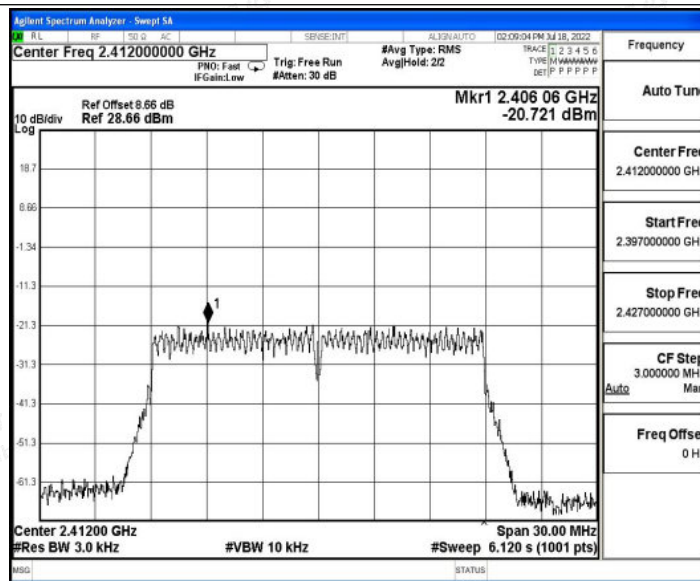


11G_Ant1_2462

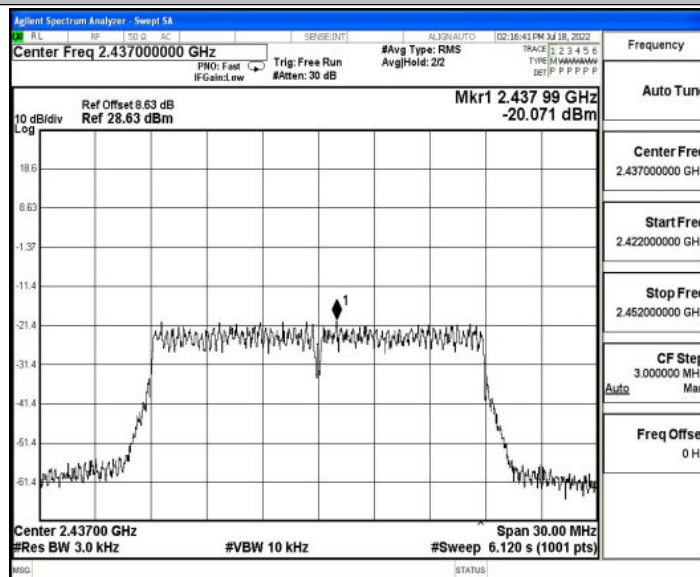


11N20SISO_Ant1_2412



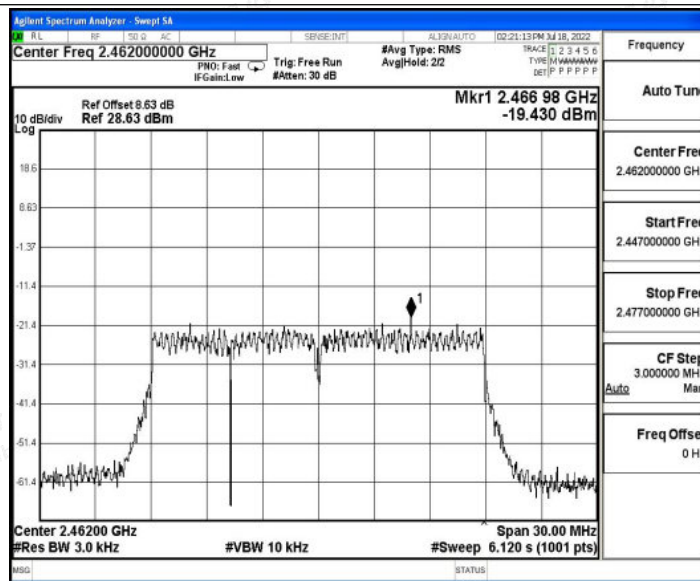


11N20SISO_Ant1_2437

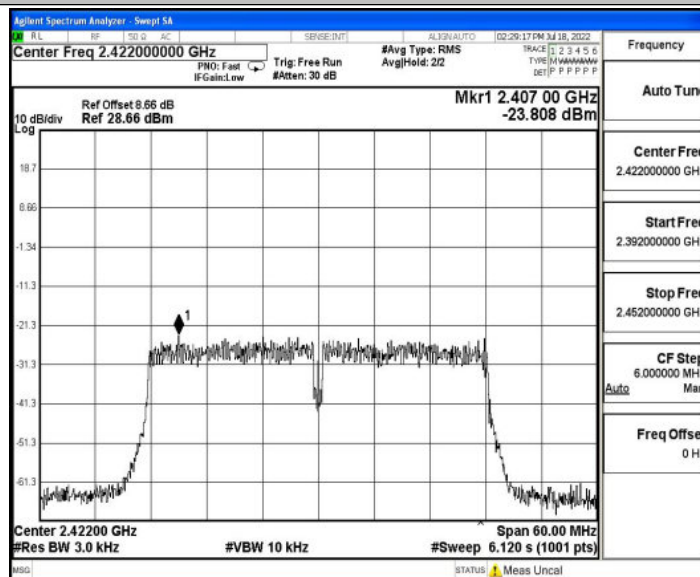


11N20SISO_Ant1_2462



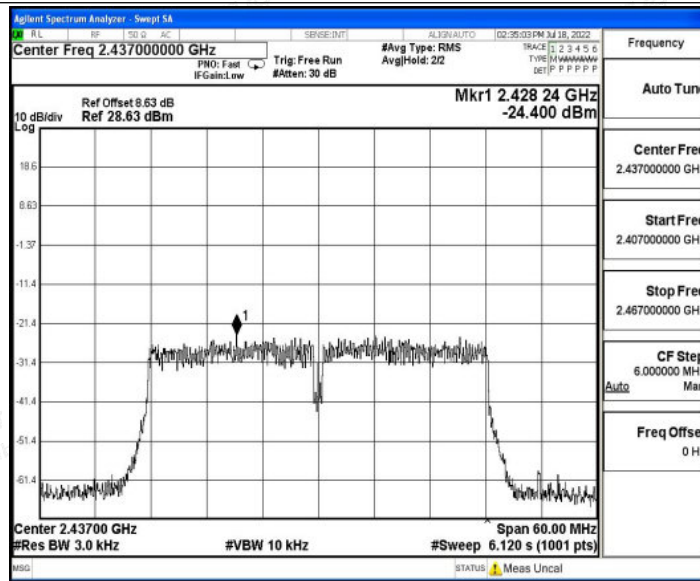


11N40SISO_Ant1_2422

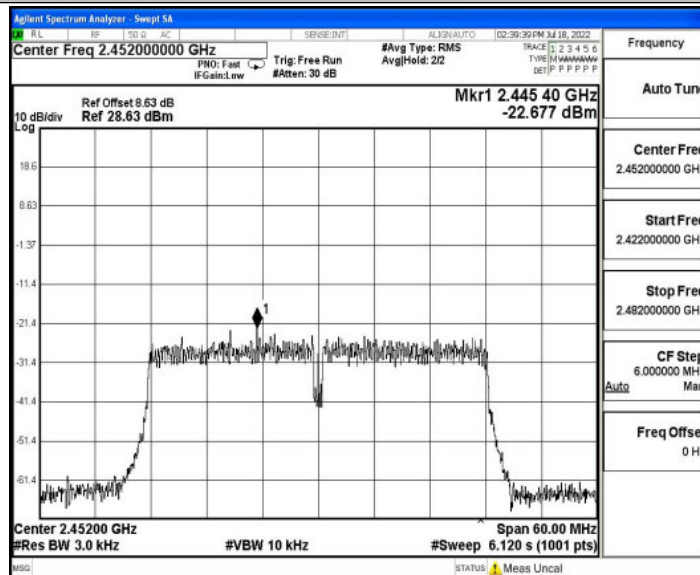


11N40SISO_Ant1_2437





11N40SISO_Ant1_2452





C.4 Band edge measurements

Test Result

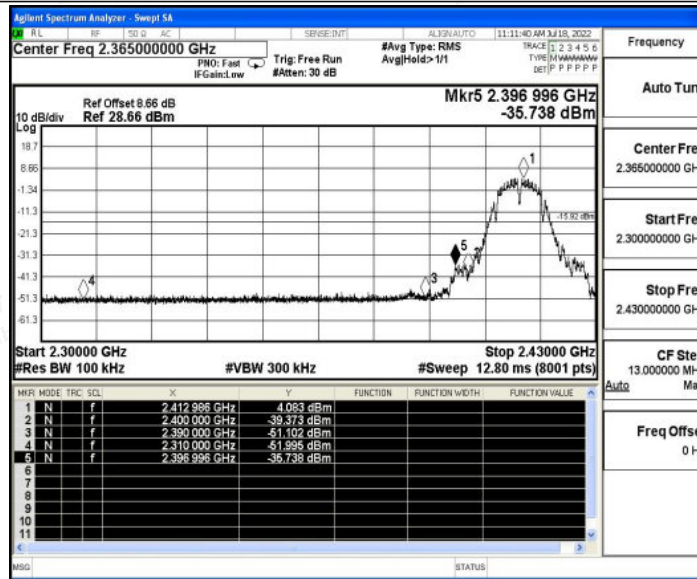
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.08	-35.74	≤-15.92	PASS
		High	2462	3.32	-43.67	≤-16.68	PASS
11G	Ant1	Low	2412	-2.72	-37.63	≤-22.72	PASS
		High	2462	-3.54	-47.85	≤-23.54	PASS
11N20SISO	Ant1	Low	2412	-6.00	-44.16	≤-26	PASS
		High	2462	-5.72	-47.61	≤-25.72	PASS
11N40SISO	Ant1	Low	2422	-9.04	-42.64	≤-29.04	PASS
		High	2452	-9.62	-43.04	≤-29.62	PASS



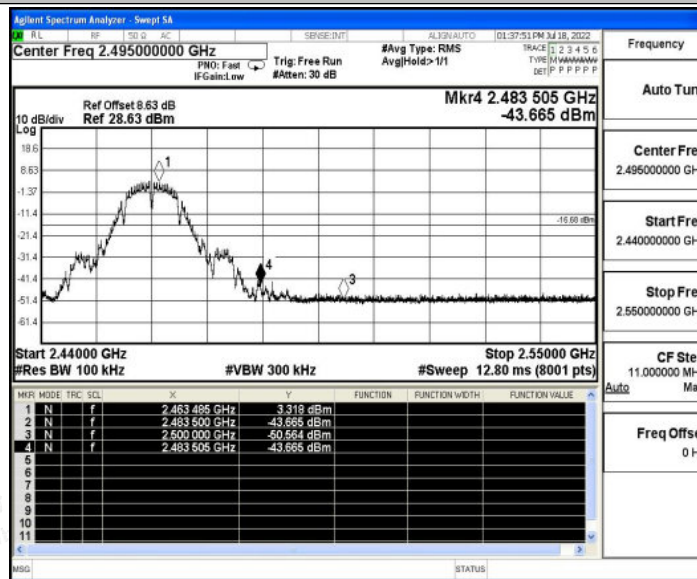


Test Graphs

11B_Ant1_Low_2412

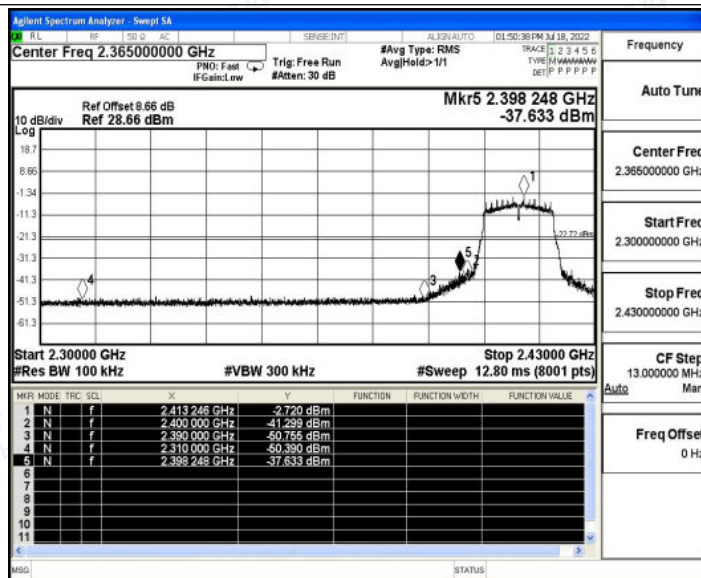


11B_Ant1_High_2462

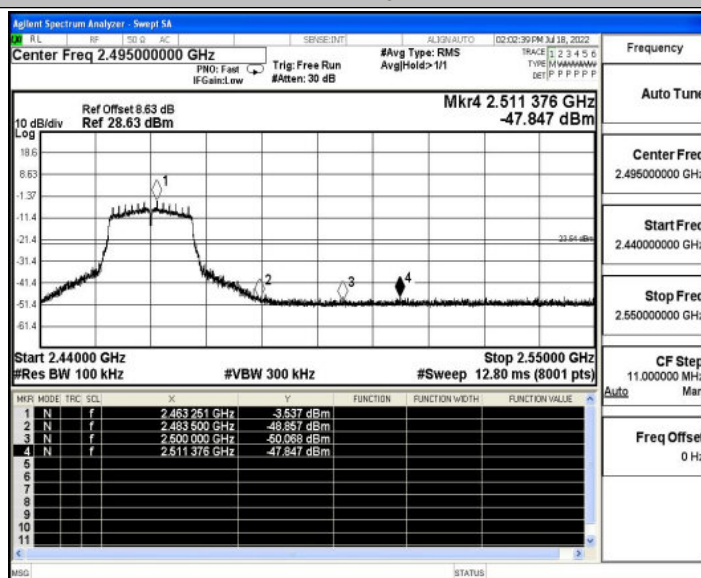


11G_Ant1_Low_2412



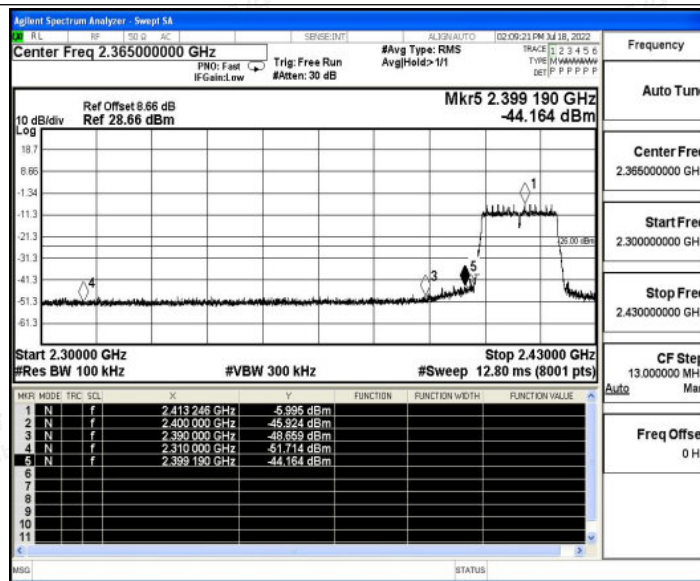


11G_Ant1_High_2462

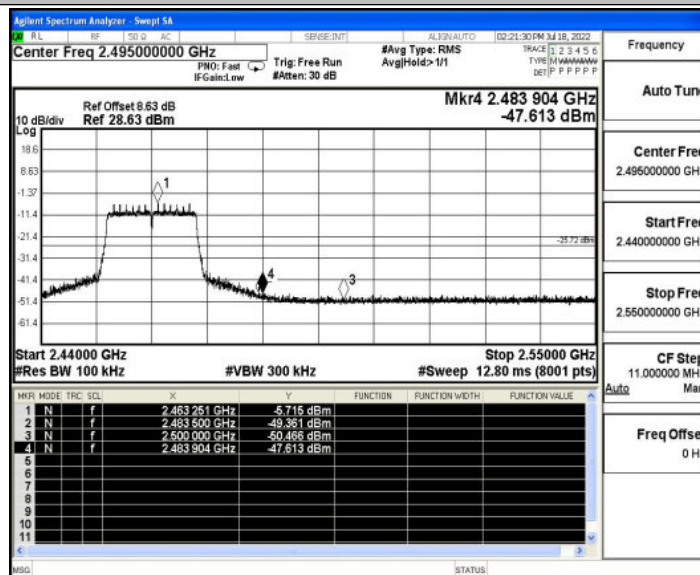


11N20SISO_Ant1_Low_2412



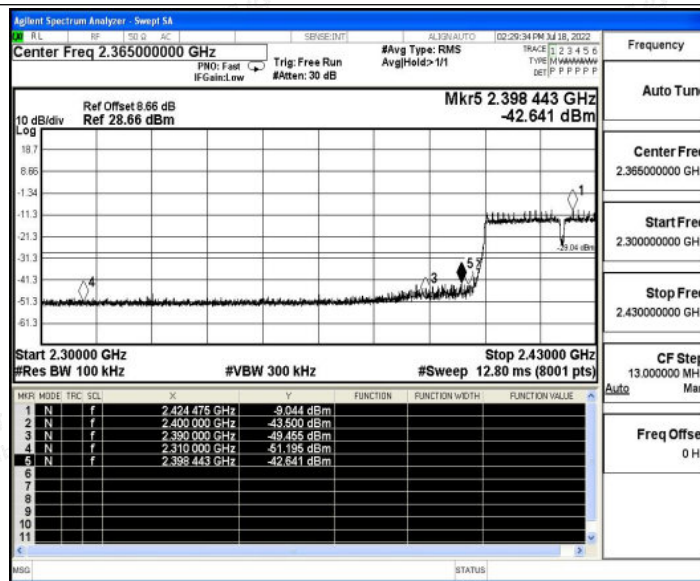


11N20ISO_Ant1_High_2462

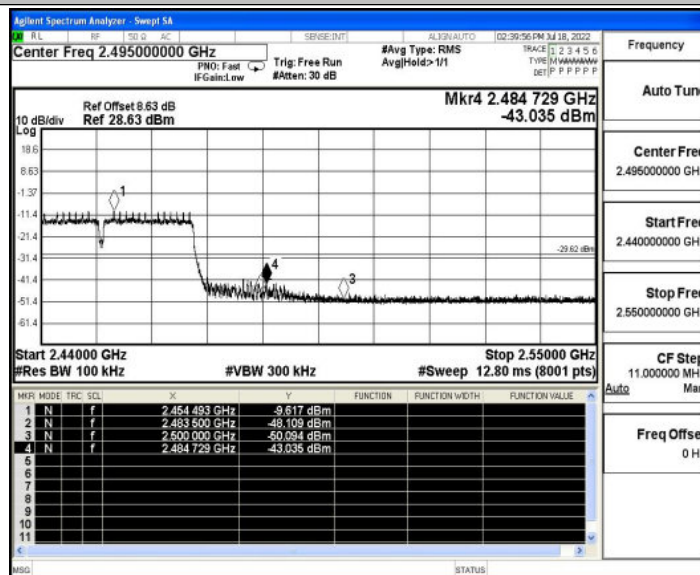


11N40ISO_Ant1_Low_2422





11N40SISO_Ant1_High_2452





C.5 Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	0.61	0.61	---	PASS
			30~1000	4.09	-41.97	≤-15.91	PASS
			1000~26500	4.09	-46.09	≤-15.91	PASS
		2437	Reference	0.28	0.28	---	PASS
			30~1000	0.28	-60.6	≤-19.72	PASS
			1000~26500	3.36	-46.29	≤-16.64	PASS
		2462	Reference	3.31	3.31	---	PASS
			30~1000	3.31	-60.61	≤-16.69	PASS
			1000~26500	3.31	-46.46	≤-16.69	PASS
11G	Ant1	2412	Reference	-4.72	-4.72	---	PASS
			30~1000	-4.72	-60.52	≤-24.72	PASS
			1000~26500	-4.72	-45.49	≤-24.72	PASS
		2437	Reference	-3.29	-3.29	---	PASS
			30~1000	-3.29	-60.7	≤-23.29	PASS
			1000~26500	-3.29	-46.33	≤-23.29	PASS
		2462	Reference	-4.06	-4.06	---	PASS
			30~1000	-4.06	-61.05	≤-24.06	PASS
			1000~26500	-4.06	-45.78	≤-24.06	PASS
11N20SISO	Ant1	2412	Reference	-6.34	-6.34	---	PASS
			30~1000	-6.34	-60.09	≤-26.34	PASS
			1000~26500	-6.34	-45.69	≤-26.34	PASS
		2437	Reference	-4.97	-4.97	---	PASS
			30~1000	-4.97	-60.64	≤-24.97	PASS
			1000~26500	-4.97	-46.34	≤-24.97	PASS
		2462	Reference	-5.57	-5.57	---	PASS
			30~1000	-5.57	-60.54	≤-25.57	PASS
			1000~26500	-5.57	-46.22	≤-25.57	PASS
11N40SISO	Ant1	2422	Reference	-9.13	-9.13	---	PASS
			30~1000	-9.13	-60.64	≤-29.13	PASS
			1000~26500	-9.13	-46.47	≤-29.13	PASS
		2437	Reference	-9.58	-9.58	---	PASS
			30~1000	-9.58	-60.46	≤-29.58	PASS
			1000~26500	-9.58	-46.41	≤-29.58	PASS
		2452	Reference	-9.63	-9.63	---	PASS
			30~1000	-9.63	-60.88	≤-29.63	PASS



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			1000~26500	-9.63	-45.84	≤-29.63	PASS
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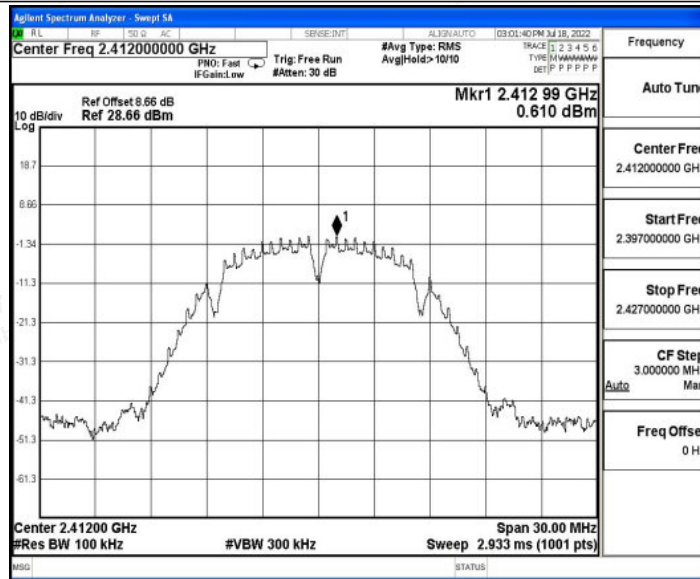


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518000, China
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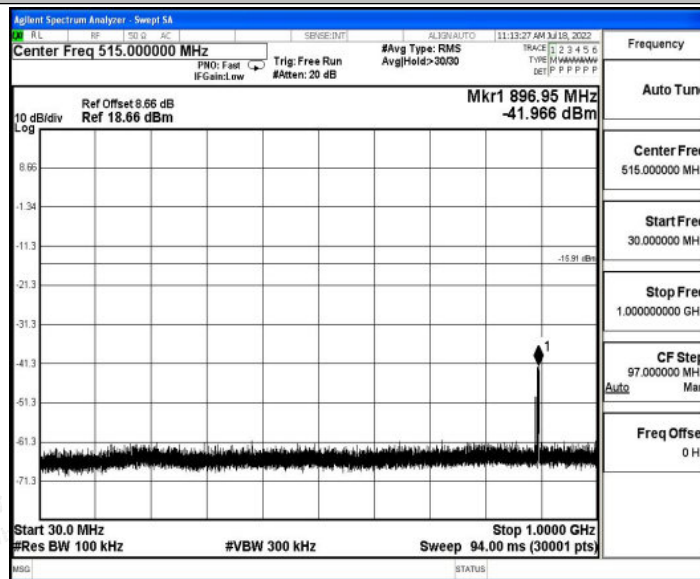


Test Graphs

11B_Ant1_2412_0~Reference

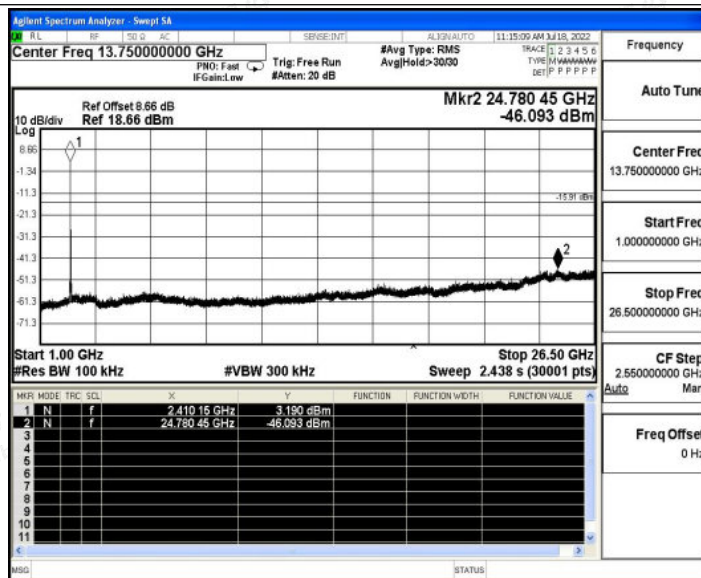


11B_Ant1_2412_30~1000

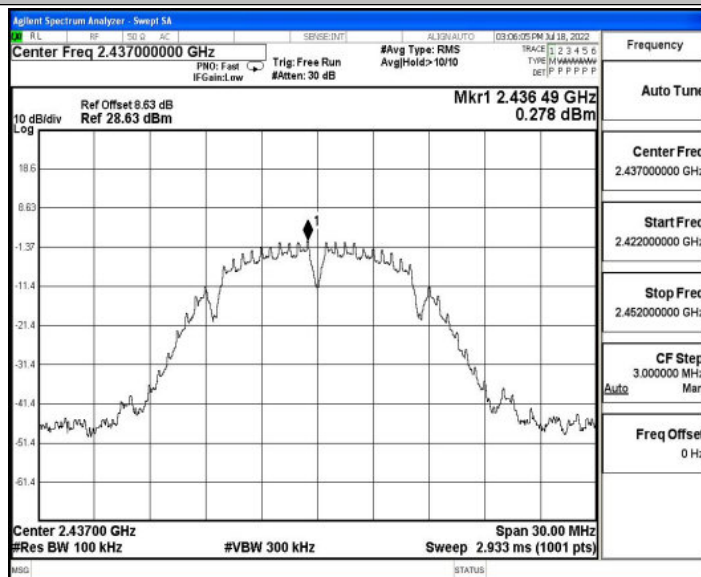


11B_Ant1_2412_1000~26500



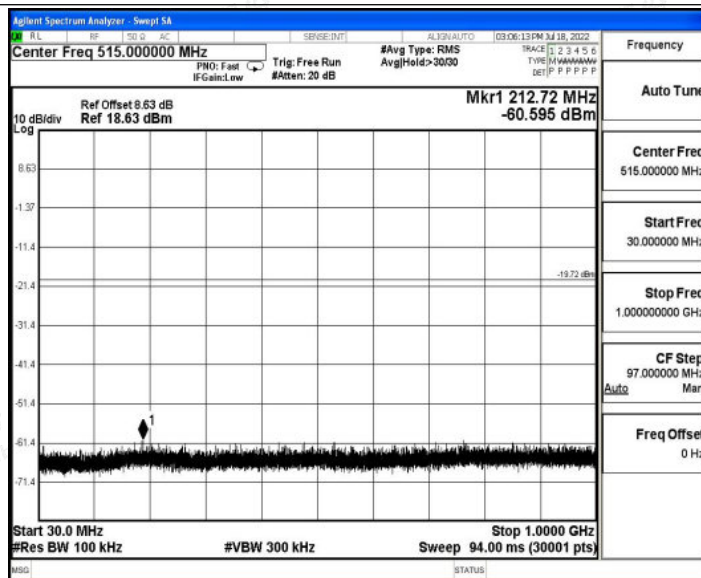


11B_Ant1_2437_0~Reference

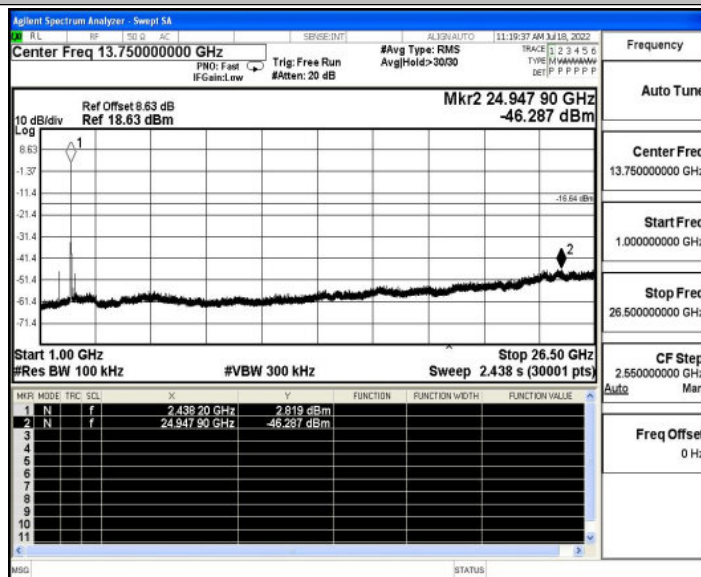


11B_Ant1_2437_30~1000



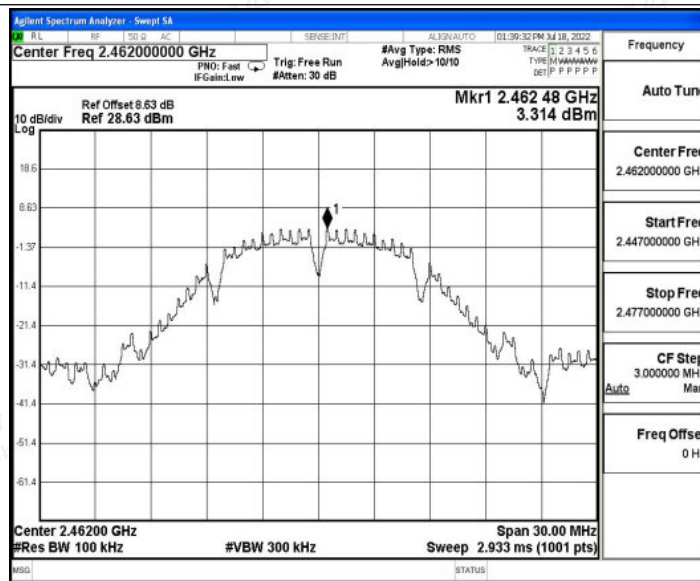


11B_Ant1_2437_1000~26500

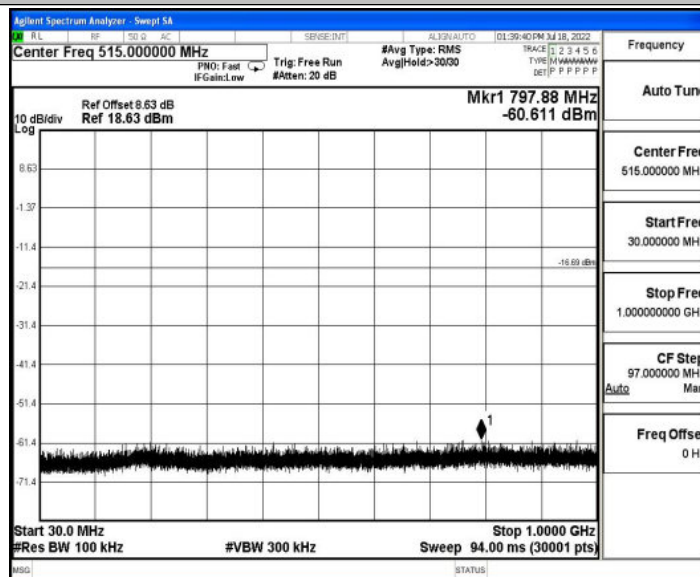


11B_Ant1_2462_0~Reference



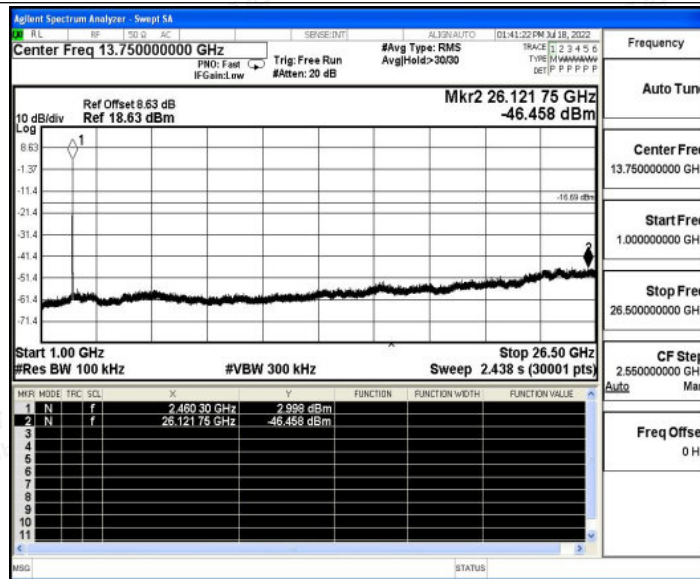


11B_Ant1_2462_30~1000

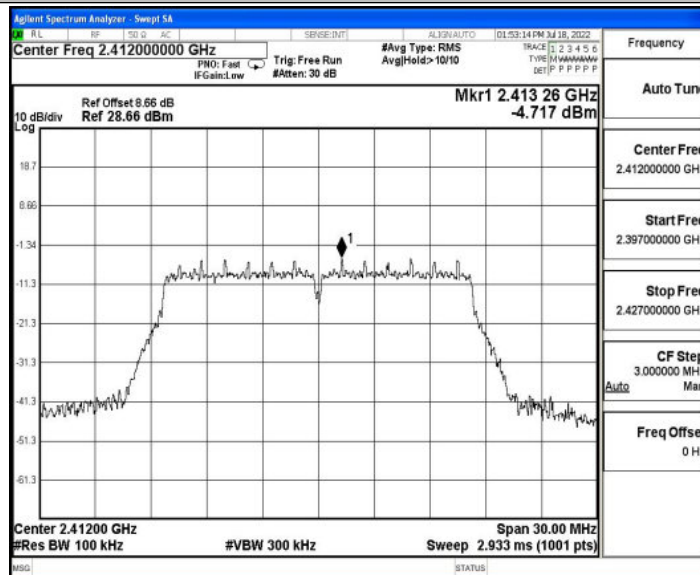


11B_Ant1_2462_1000~26500



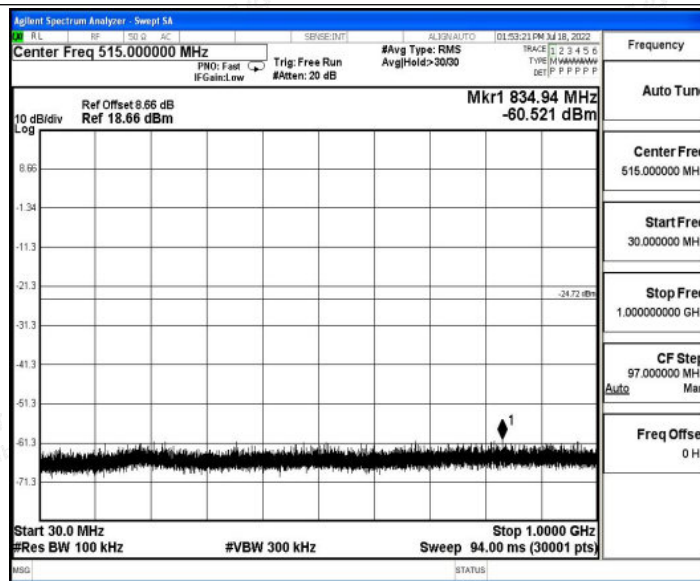


11G_Ant1_2412_0~Reference

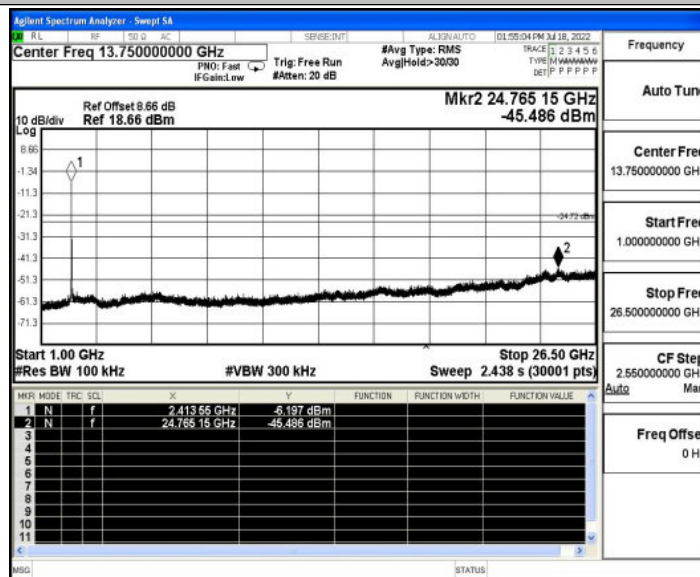


11G_Ant1_2412_30~1000



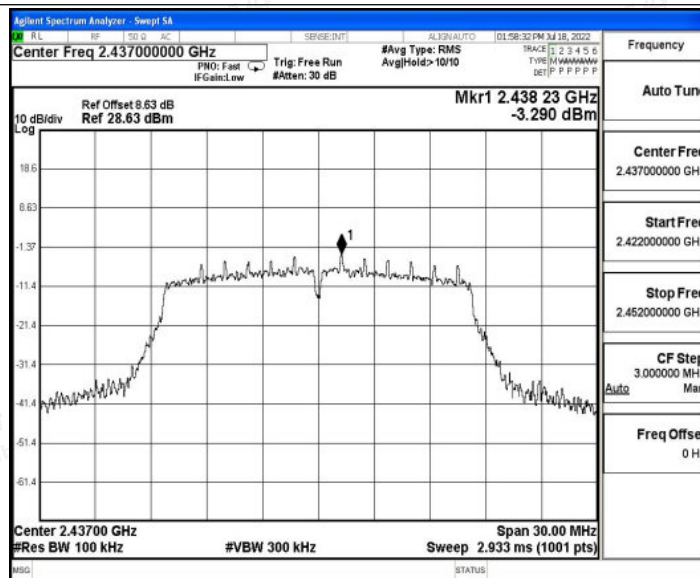


11G_Ant1_2412_1000~26500

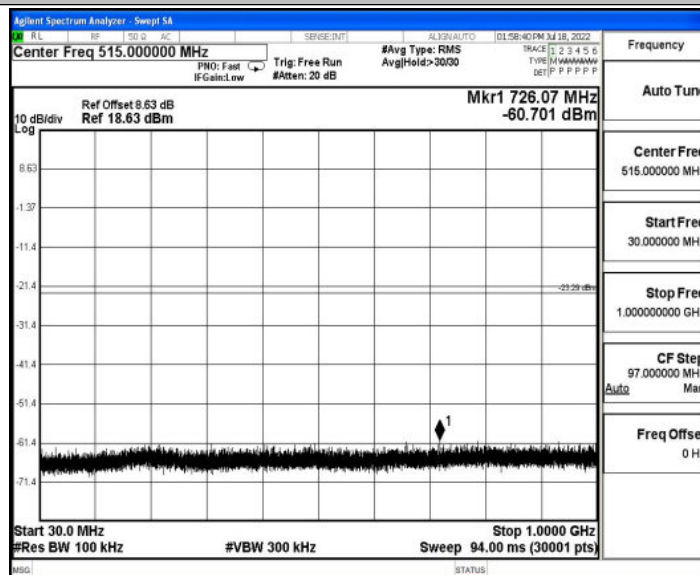


11G_Ant1_2437_0~Reference



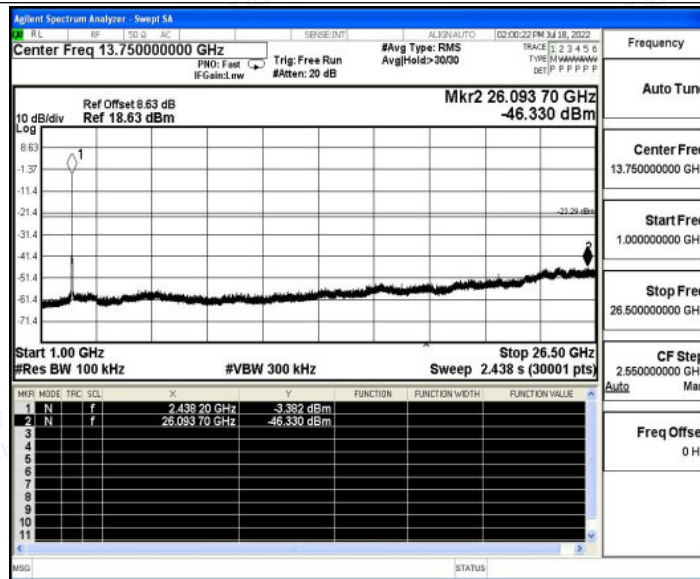


11G_Ant1_2437_30~1000

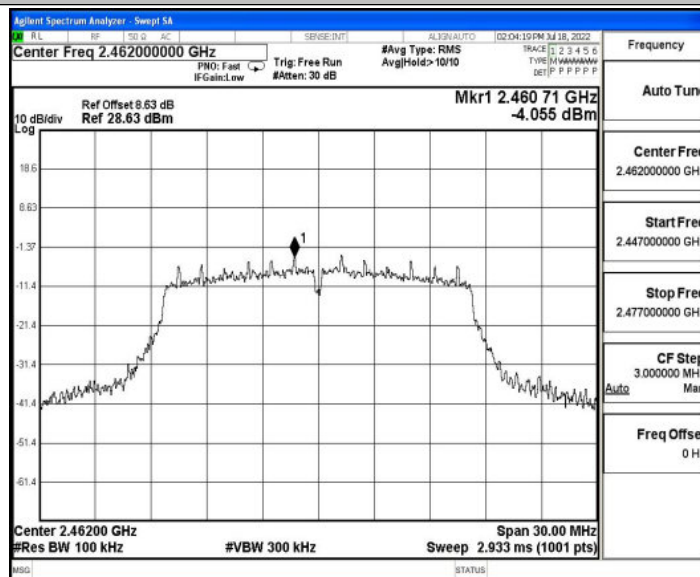


11G_Ant1_2437_1000~26500



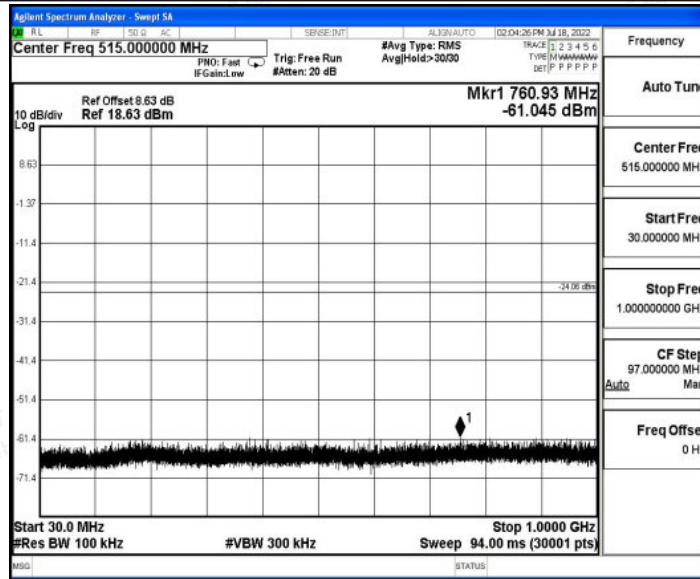


11G_Ant1_2462_0~Reference

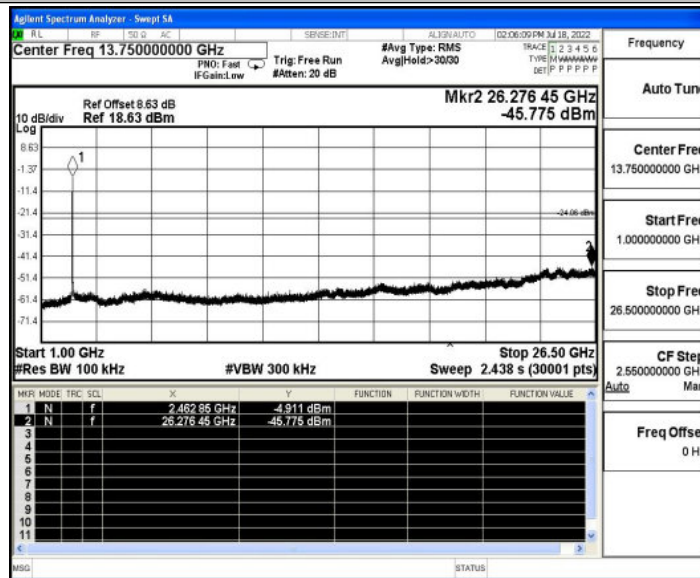


11G_Ant1_2462_30~1000



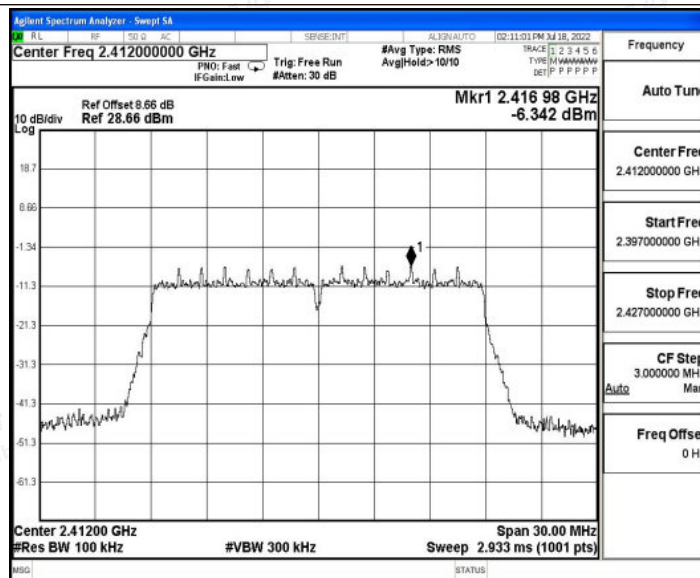


11G_Ant1_2462_1000~26500

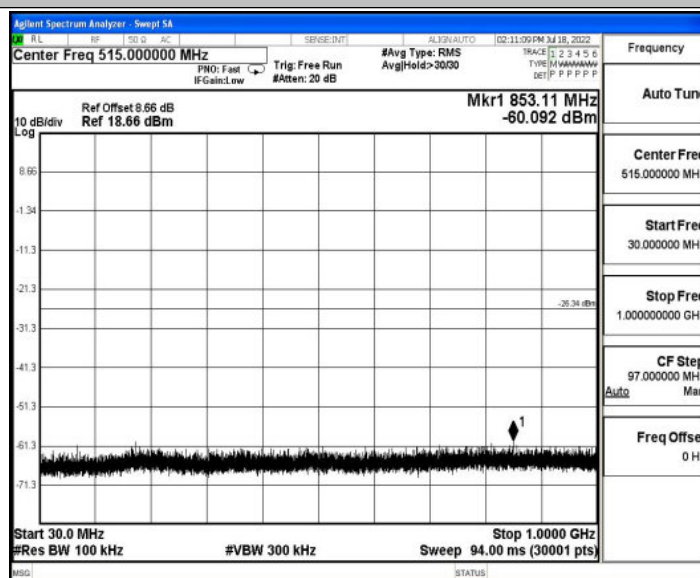


11N20SISO_Ant1_2412_0~Reference



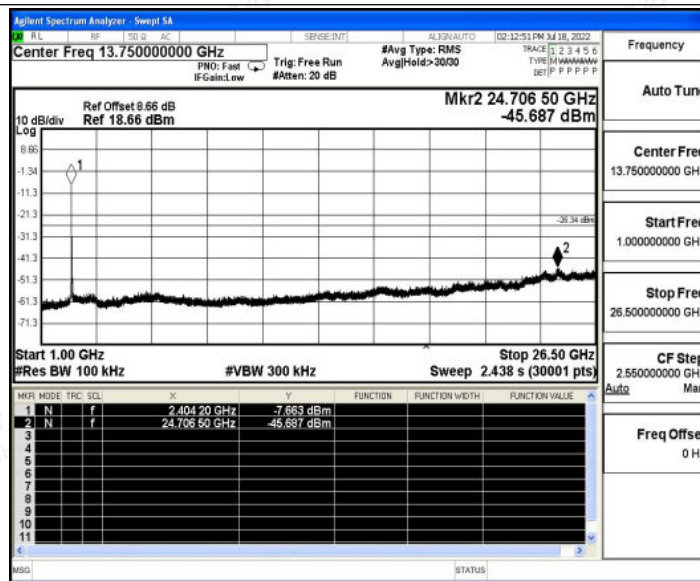


11N20SISO_Ant1_2412_30~1000

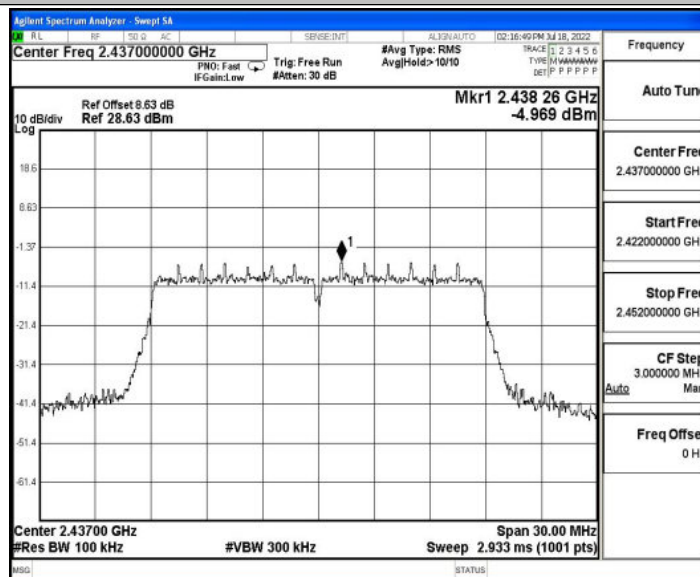


11N20SISO_Ant1_2412_1000~26500



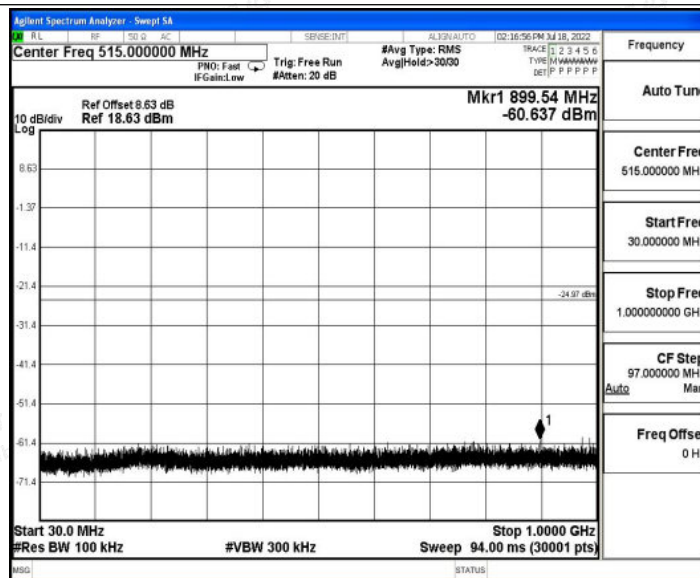


11N20SISO_Ant1_2437_0~Reference

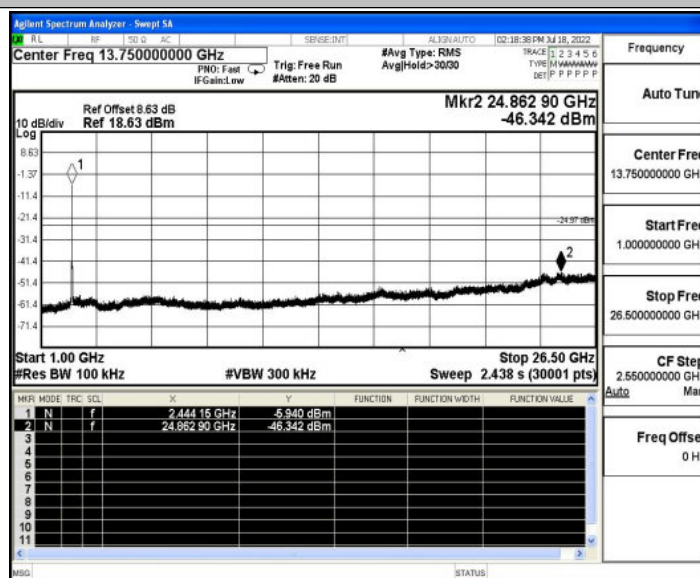


11N20SISO_Ant1_2437_30~1000



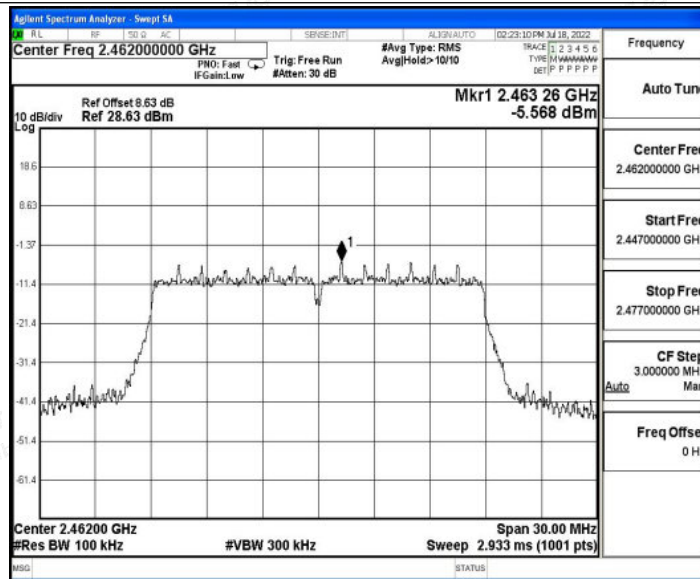


11N20SISO_Ant1_2437_1000~26500

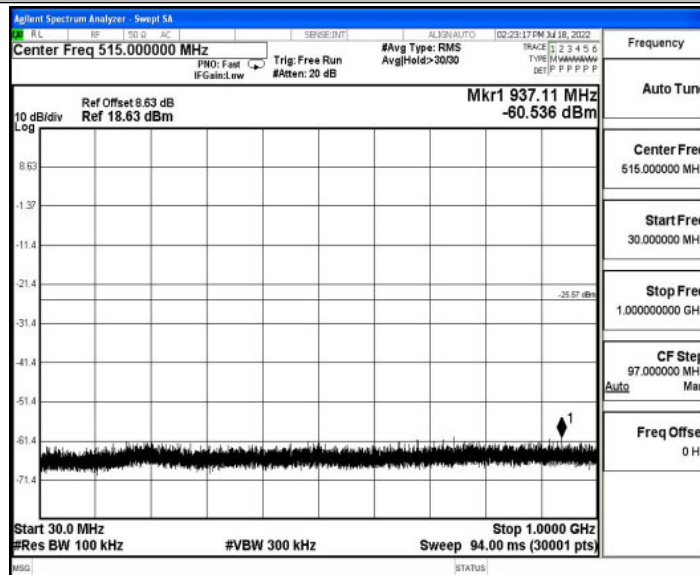


11N20SISO_Ant1_2462_0~Reference





11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500

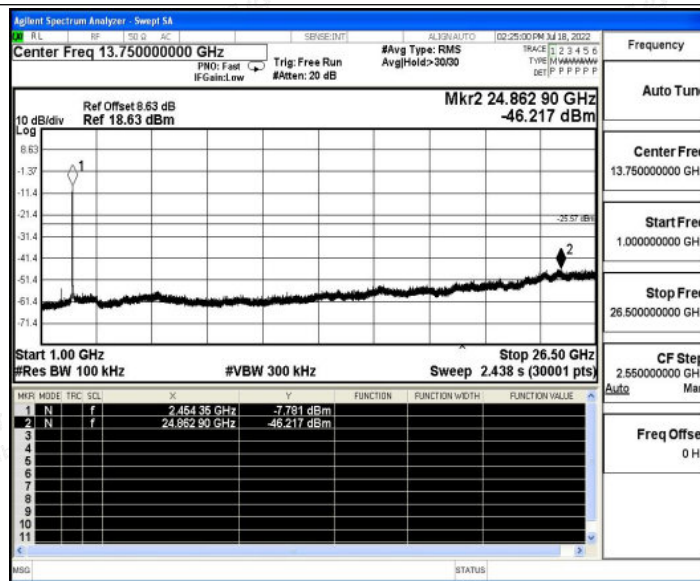


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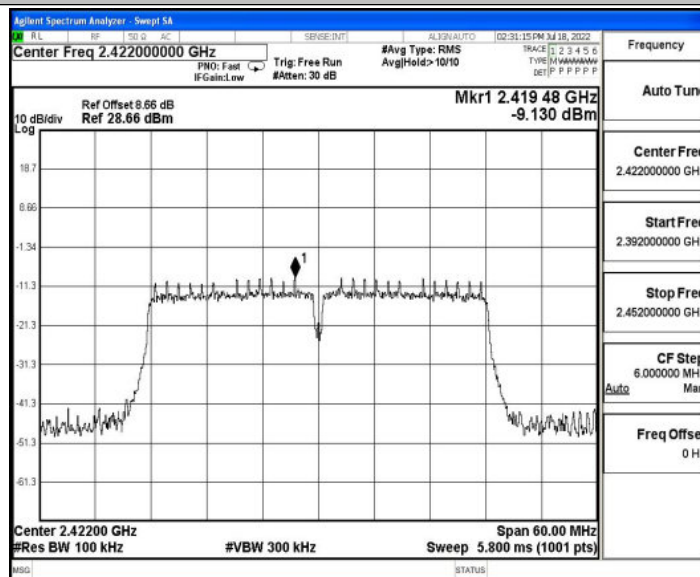
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

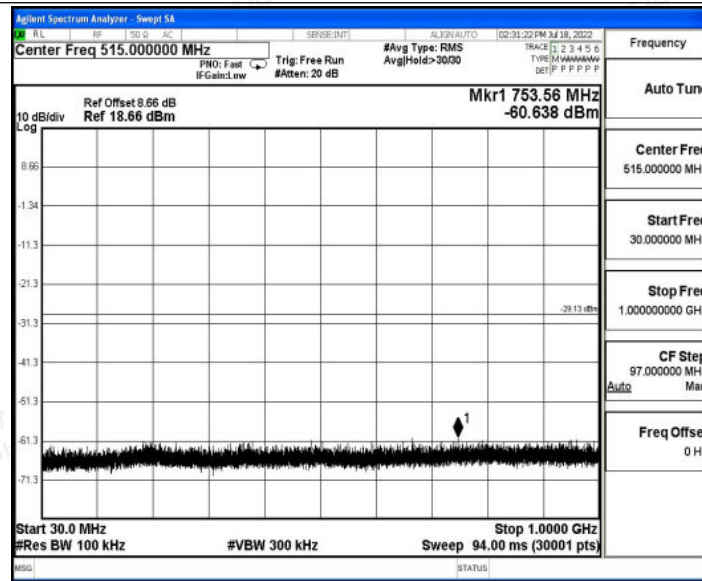


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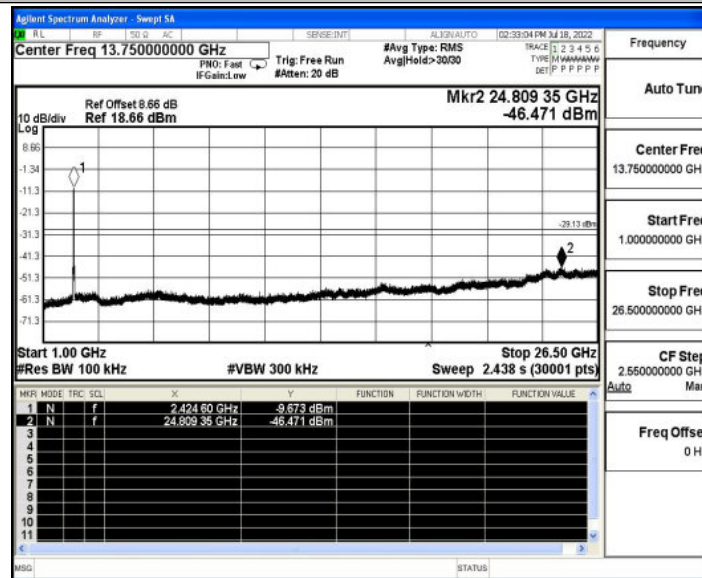


11N40SISO_Ant1_2422_30~1000



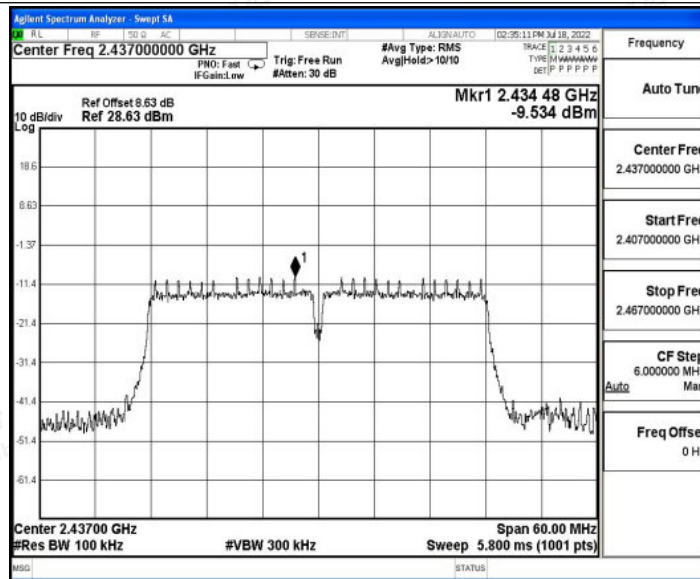


11N40SISO_Ant1_2422_1000~26500

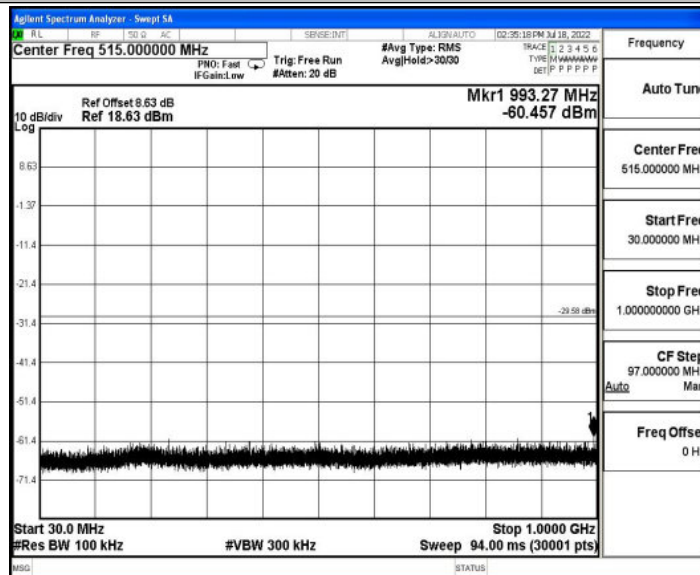


11N40SISO_Ant1_2437_0~Reference





11N40SISO_Ant1_2437_30~1000



11N40SISO_Ant1_2437_1000~26500

