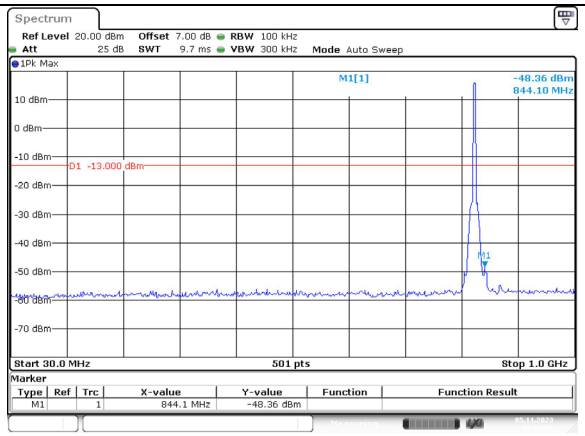
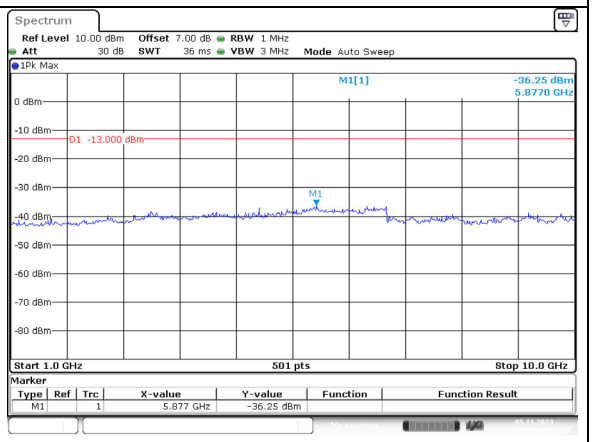
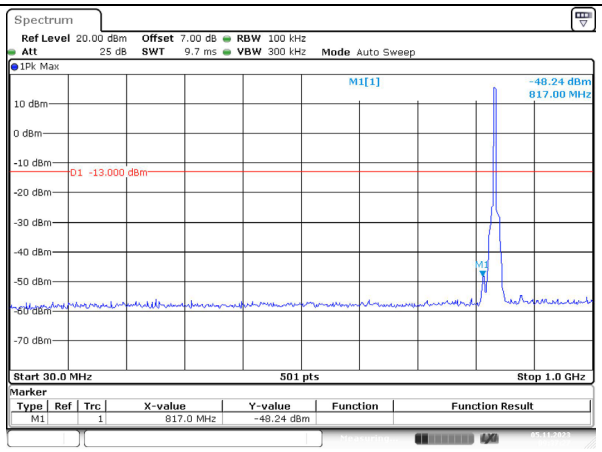
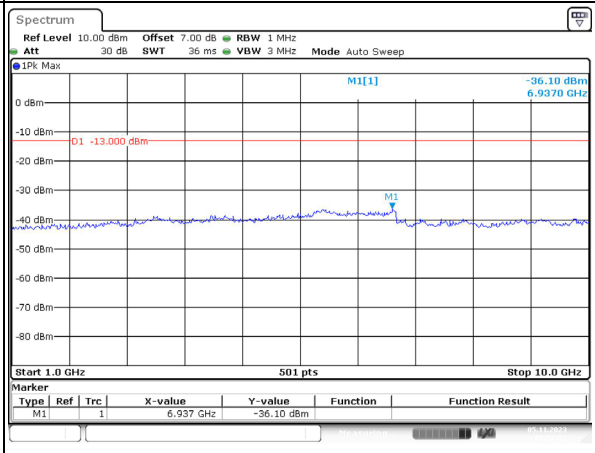
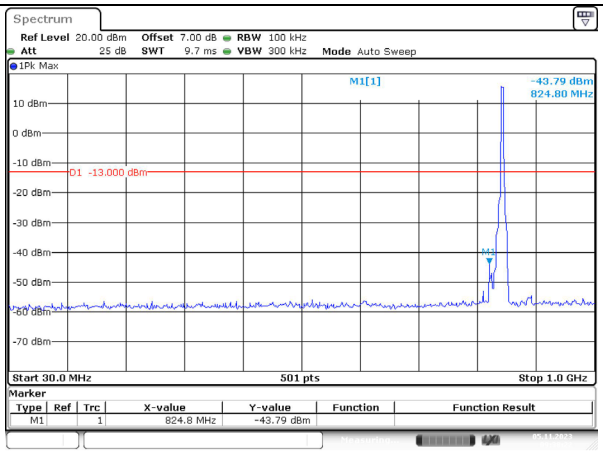
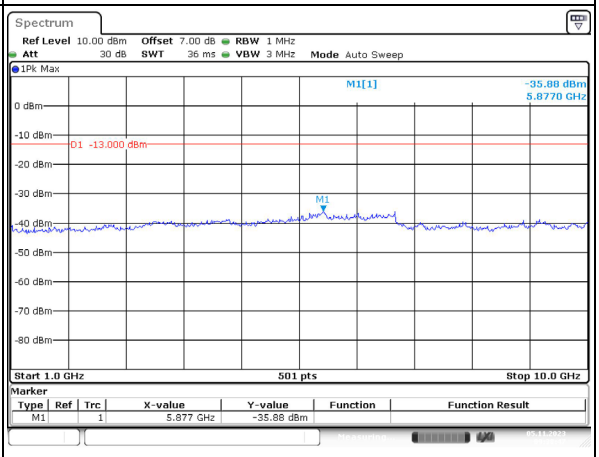
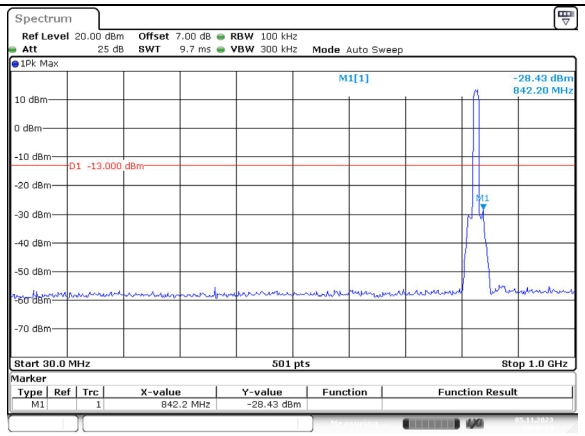
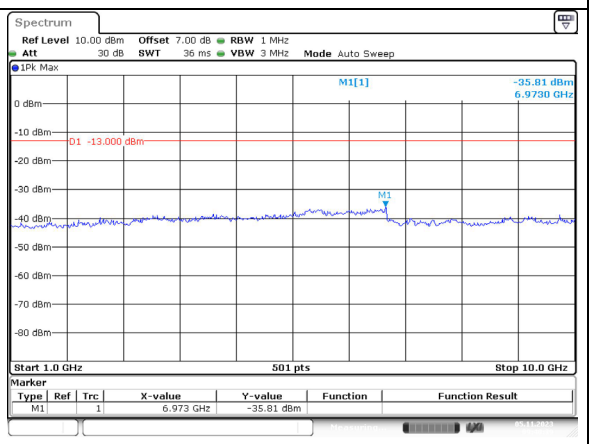
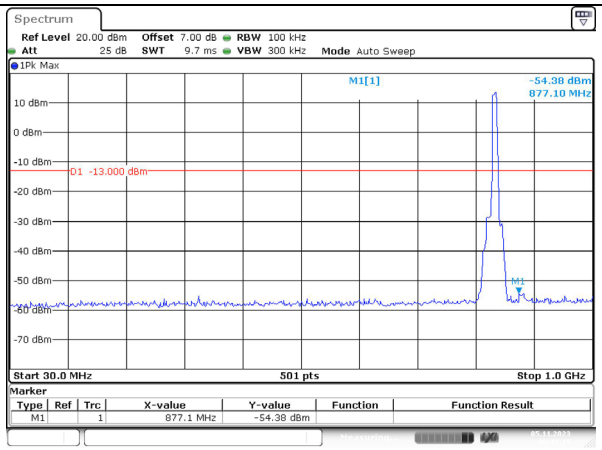
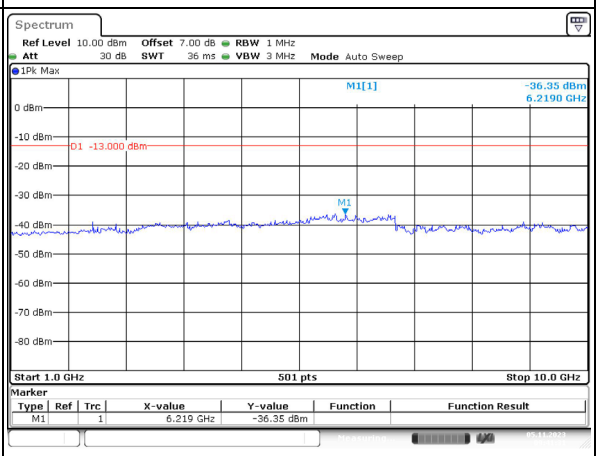
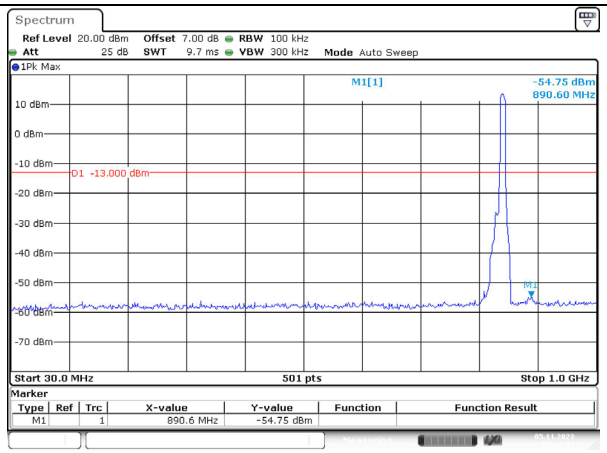
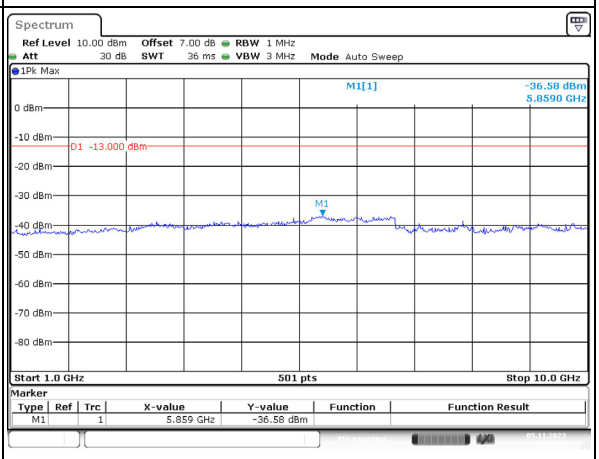
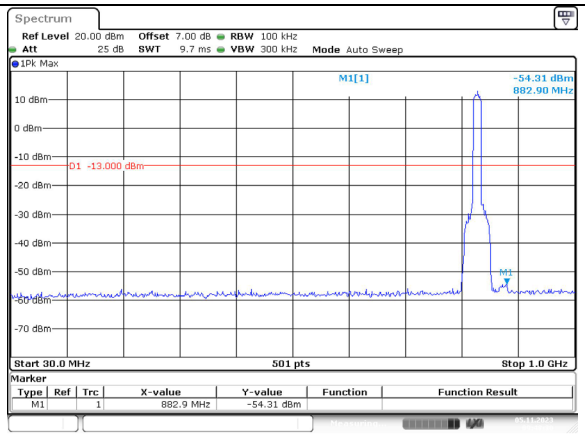
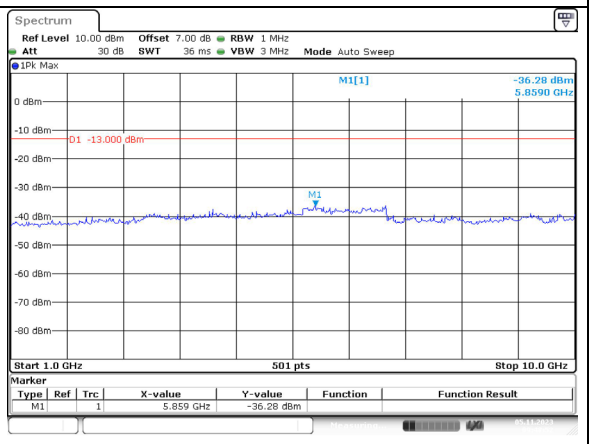
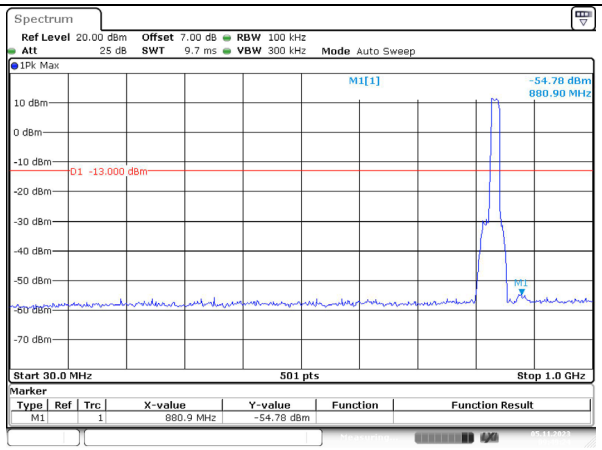
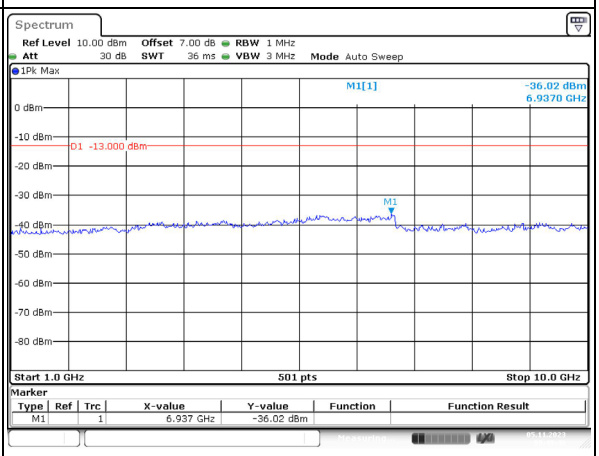
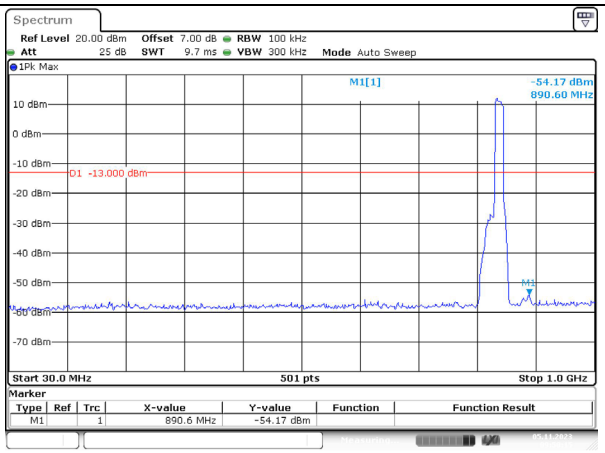
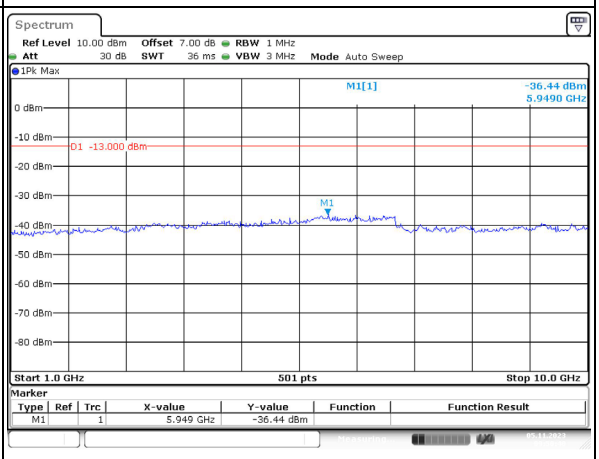
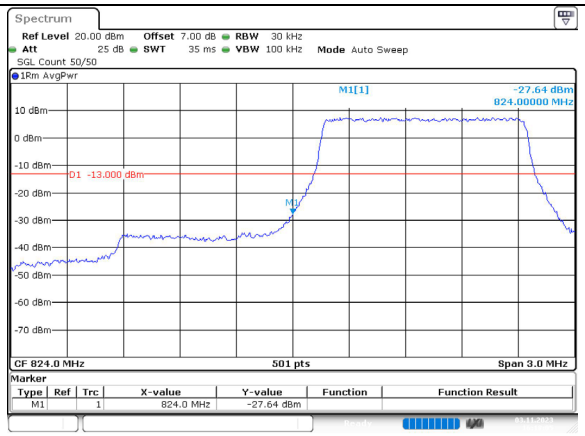
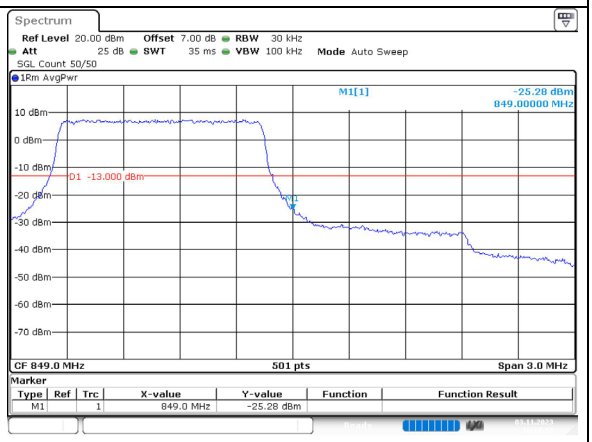
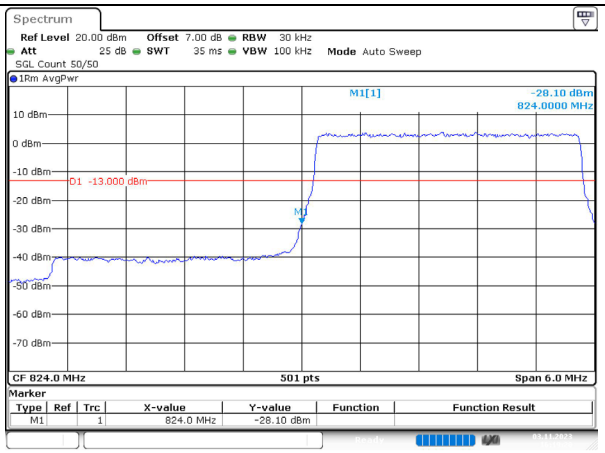
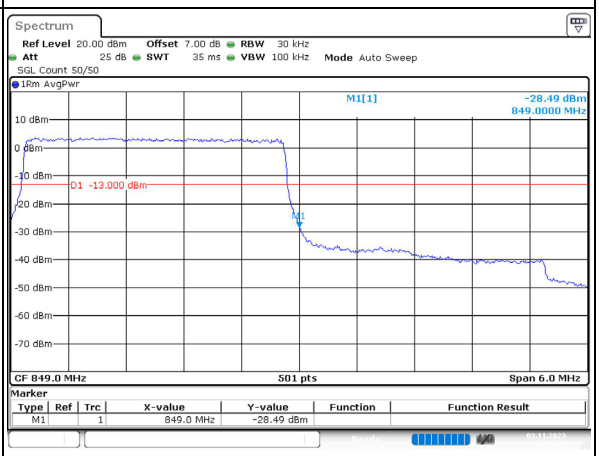
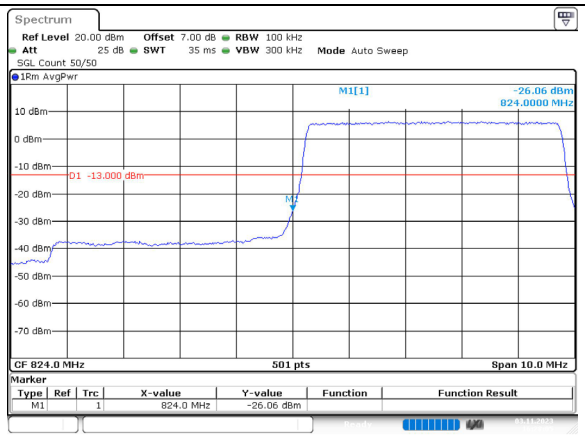
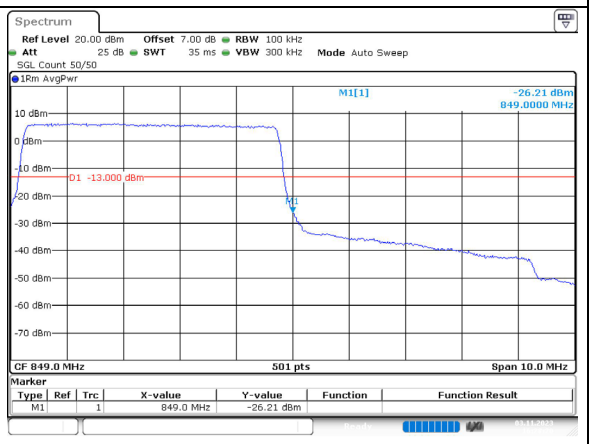
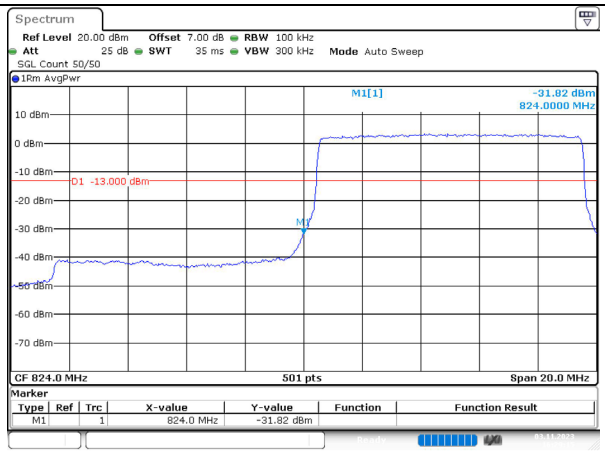
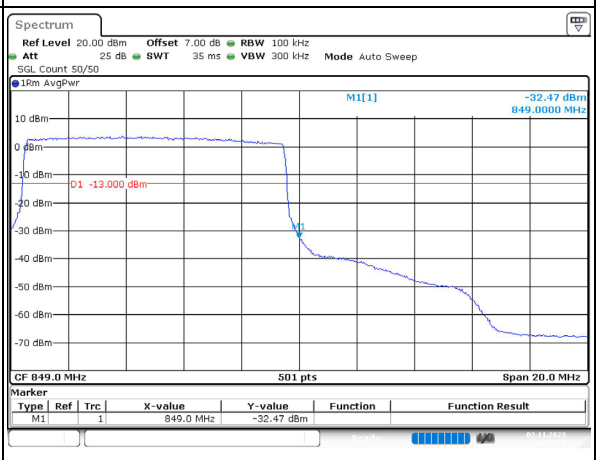
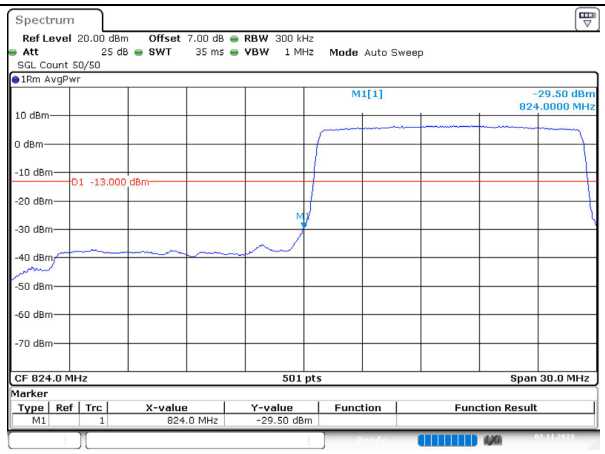
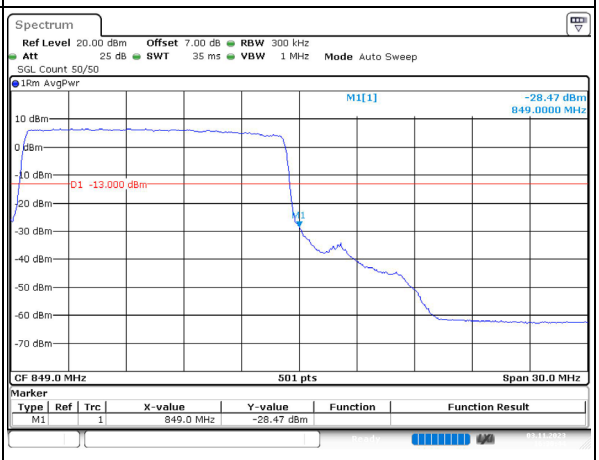
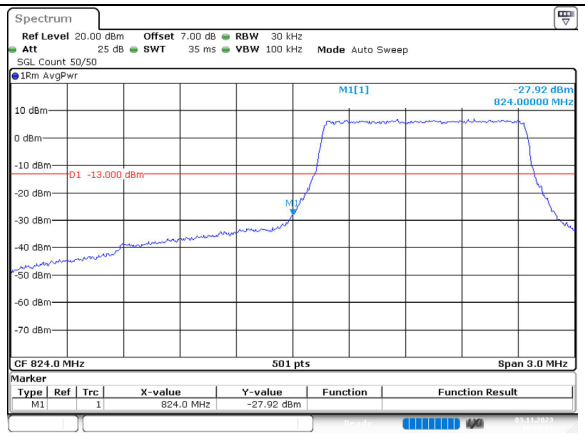
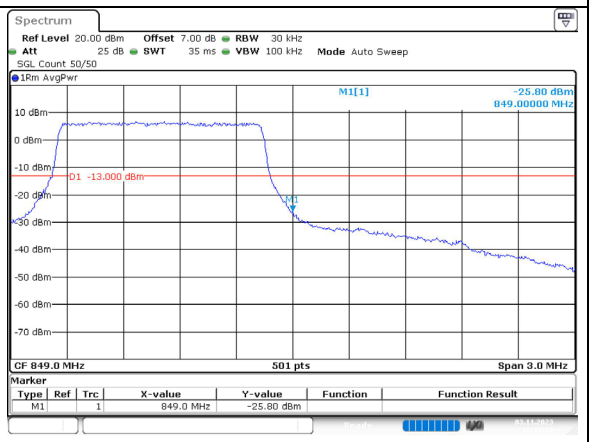
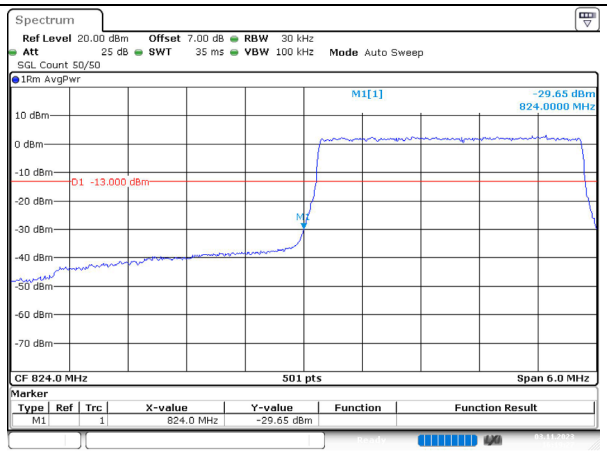
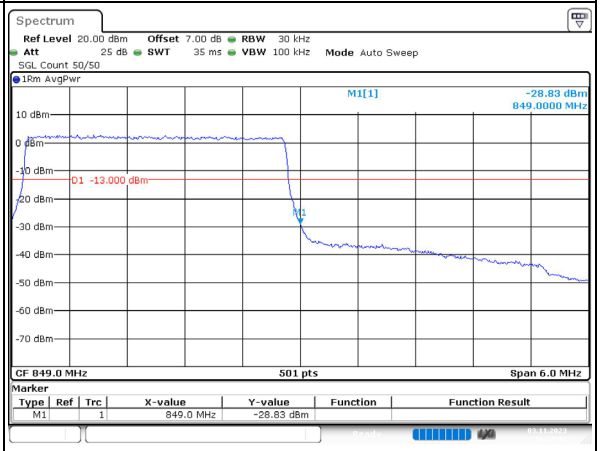
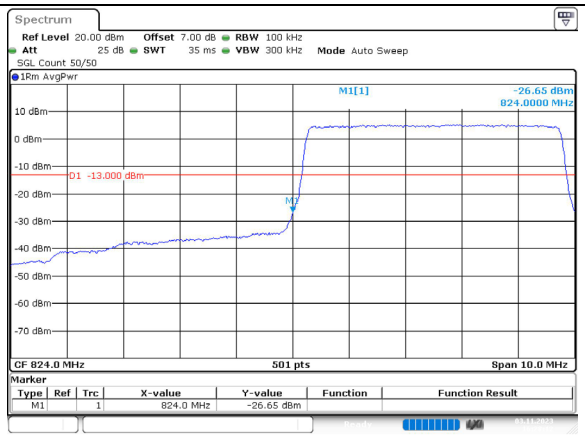
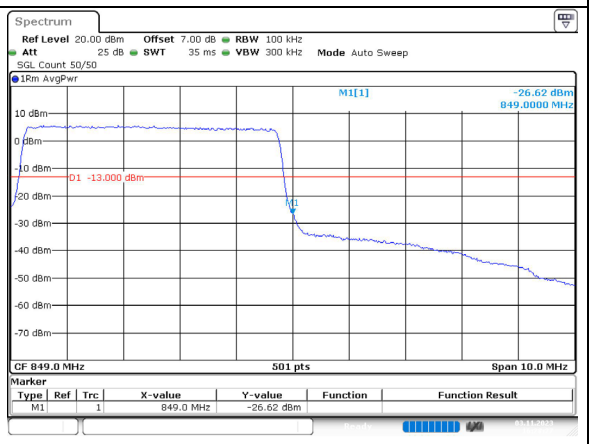
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest For 22H		
Middle For 22H		
Highest For 22H		

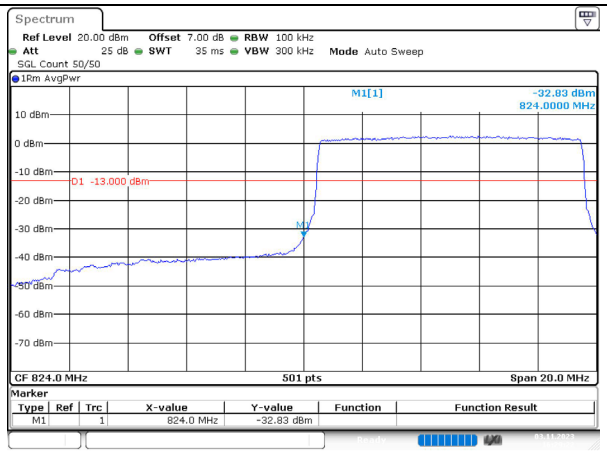
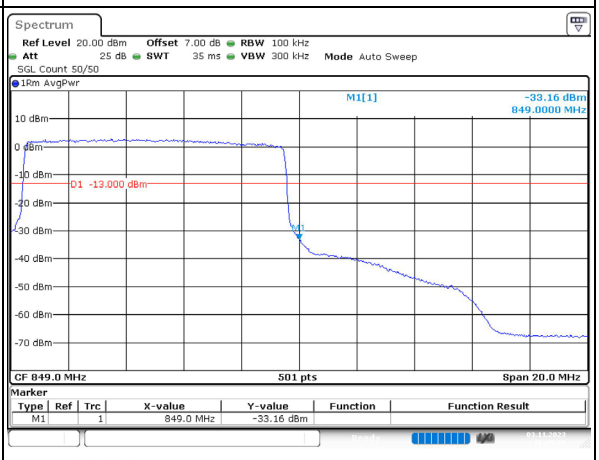
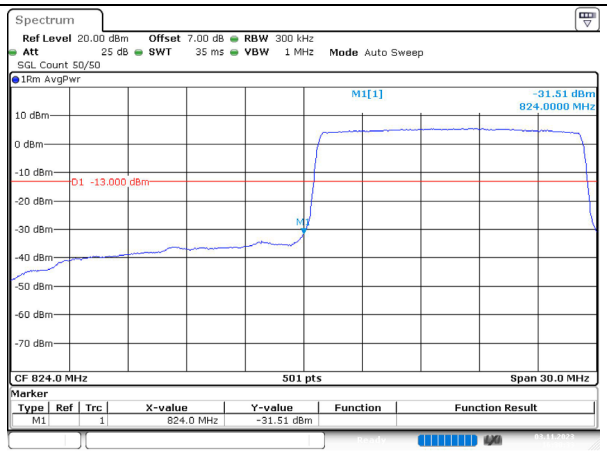
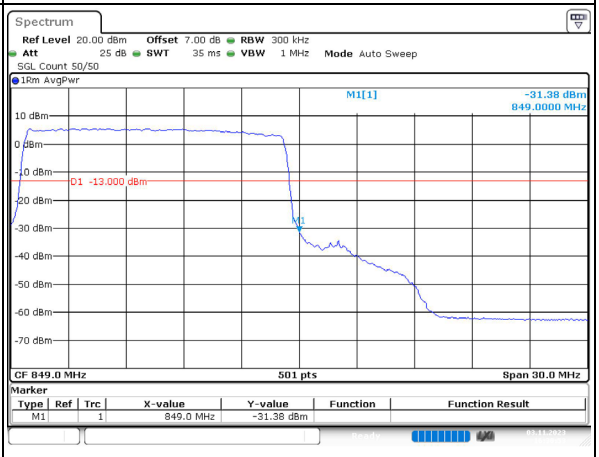
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest For 22H		
Middle For 22H		
Highest For 22H		

Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest For 22H		
Middle For 22H		
Highest For 22H		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 1.4MHz For 22H		
QPSK 3MHz For 22H		
QPSK 5MHz For 22H		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 10MHz For 22H		
QPSK 15MHz For 22H		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 1.4MHz For 22H		
16QAM 3MHz For 22H		
16QAM 5MHz For 22H		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 10MHz For 22H		
16QAM 15MHz For 22H		

4.12 Antenna Port Test Data and Results for LTE Band 38

Serial Number:	2C04-3	Test Date:	2023/10/29-2023/12/12
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	24.3-25.6	Relative Humidity: (%)	45-58	ATM Pressure: (kPa)	101-101.54

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101590	2022/11/23	2023/11/24
zhuoxiang	Coaxial Cable	SMA-178	211003	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
Unknown	Coaxial tee connector	Unknown	2204004	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/28	2024/9/27
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A
R&S	Spectrum Analyzer	FSV40	101590	2023/11/16	2024/11/15

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Frequency For Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
5MHz	2572.5	2595	2617.5
10MHz	2575	2595	2615
15MHz	2577.5	2595	2612.5
20MHz	2580	2595	2610

Test Data:

RF Output Power						
Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	22.06	21.71	21.54	23.09	33
	RB1#13	22.09	21.58	21.57		
	RB1#24	**22.1**	21.67	21.71		
	RB15#0	21.16	20.84	20.83		
	RB15#10	21.13	20.8	20.7		
	RB25#0	21.34	20.89	20.67		
5MHz 16QAM	RB1#0	21.07	20.61	21.24	22.25	33
	RB1#13	21.23	20.48	21.25		
	RB1#24	**21.26**	20.41	20.94		
	RB15#0	20	19.68	19.75		
	RB15#10	19.92	19.63	19.6		
	RB25#0	19.96	19.86	19.85		
10MHz QPSK	RB1#0	22.09	21.88	22.07	23.15	33
	RB1#25	22.1	21.66	21.78		
	RB1#49	22.03	**22.16**	22		
	RB25#0	21.17	20.95	20.85		
	RB25#25	21.12	20.88	20.67		
	RB50#0	21.13	20.91	20.82		
10MHz 16QAM	RB1#0	21.4	20.66	21.19	22.43	33
	RB1#25	**21.44**	20.75	21.19		
	RB1#49	21	20.83	20.73		
	RB25#0	20.42	19.74	19.87		
	RB25#25	20.42	19.8	19.79		
	RB50#0	20.13	19.89	19.83		
15MHz QPSK	RB1#0	**22.14**	21.98	21.72	23.13	33
	RB1#38	21.95	21.8	21.69		
	RB1#74	22.07	21.75	21.69		
	RB36#0	21.18	20.85	20.85		
	RB36#39	21.04	20.9	21.05		
	RB75#0	21.24	21.02	20.69		
15MHz 16QAM	RB1#0	**21.66**	21.49	20.87	22.65	33
	RB1#38	21.13	21.18	20.93		
	RB1#74	20.8	21.25	20.96		
	RB36#0	20.06	19.97	19.62		
	RB36#39	19.95	19.93	19.79		
	RB75#0	20.2	19.98	19.76		
20MHz QPSK	RB1#0	**22.27**	21.52	21.96	23.26	33
	RB1#50	22.13	21.5	22		
	RB1#99	22.02	21.61	21.78		

	RB50#0	21.1	20.97	20.84		
	RB50#50	20.92	20.91	20.67		
	RB100#0	21.03	21	20.8		
20MHz 16QAM	RB1#0	21.6	21.4	20.75	22.77	33
	RB1#50	**21.78**	20.99	20.68		
	RB1#99	21.45	21.02	20.63		
	RB50#0	20.29	20	19.9		
	RB50#50	19.95	19.97	19.71		
	RB100#0	20.14	19.98	19.71		
Note: EIRP=Conducted Power(dBm) - L_C(dB) + G_T(dBi)						
					Result:	**Pass**

Peak-to-average Ratio(PAR)					
Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	7.83	7.65	7.33	13
	RB100#0	7.88	7.83	7.8	13
20MHz 16QAM	RB1#0	8.64	8.29	8.55	13
	RB100#0	9.59	9.54	9.54	13
				Result:	**Pass**

Occupied Bandwidth						
Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
5MHz QPSK	4.511	4.511	4.491	4.98	4.98	4.98
5MHz 16QAM	4.511	4.511	4.511	5	5	5.02
10MHz QPSK	8.942	8.942	8.942	10	9.72	9.6
10MHz 16QAM	8.942	8.942	8.942	9.6	9.56	9.68
15MHz QPSK	13.413	13.413	13.413	14.64	16.52	14.64
15MHz 16QAM	13.473	13.473	13.473	14.7	16.74	14.58
20MHz QPSK	17.884	17.804	17.804	19.2	19.2	19.12
20MHz 16QAM	17.884	17.964	17.884	19.28	19.6	19.12
Note: The test plots please refer to the Plots of Occupied Bandwidth						

Spurious Emissions at Antenna Terminal	
Result:	**Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.**

Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

Frequency Stability						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	7.6	2570.291	2570.00	2619.455	2620
	-20	7.6	2570.242	2570.00	2619.502	2620
	-10	7.6	2570.359	2570.00	2619.503	2620
	0	7.6	2570.282	2570.00	2619.426	2620
	10	7.6	2570.298	2570.00	2619.606	2620
	20	7.6	2570.320	2570.00	2619.520	2620
	30	7.6	2570.338	2570.00	2619.591	2620
	40	7.6	2570.365	2570.00	2619.457	2620
	50	7.6	2570.404	2570.00	2619.512	2620
Frequency Stability vs. Voltage	20	6.8	2570.317	2570.00	2619.424	2620
	20	8.7	2570.334	2570.00	2619.569	2620
					Result:	**Pass**

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	7.6	2570.164	2570.00	2619.518	2620
	-20	7.6	2570.287	2570.00	2619.446	2620
	-10	7.6	2570.249	2570.00	2619.515	2620
	0	7.6	2570.146	2570.00	2619.478	2620
	10	7.6	2570.149	2570.00	2619.423	2620
	20	7.6	2570.240	2570.00	2619.440	2620
	30	7.6	2570.214	2570.00	2619.402	2620
	40	7.6	2570.142	2570.00	2619.404	2620
	50	7.6	2570.247	2570.00	2619.390	2620
Frequency Stability vs. Voltage	20	6.8	2570.205	2570.00	2619.405	2620
	20	8.7	2570.234	2570.00	2619.504	2620
					Result:	**Pass**