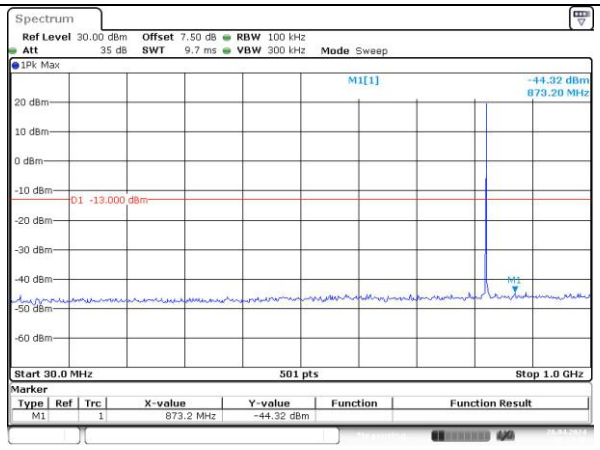
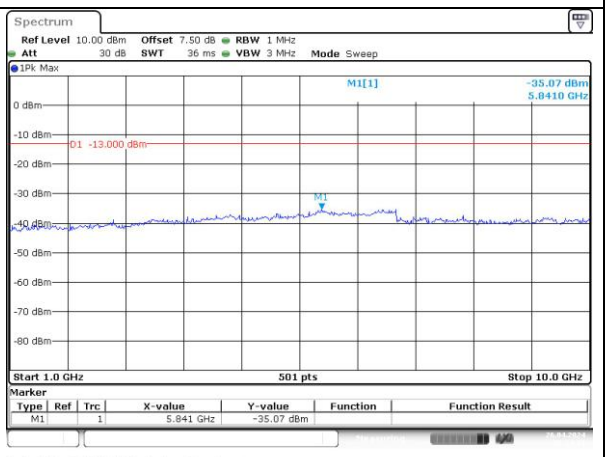
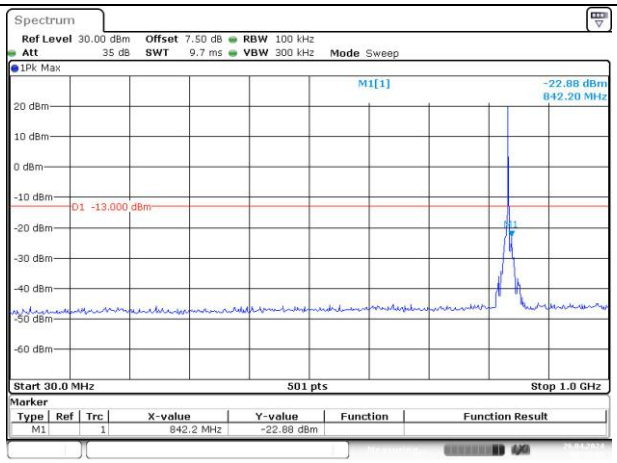
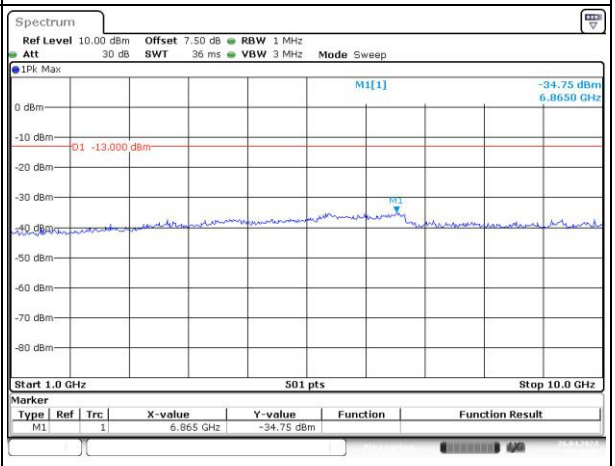
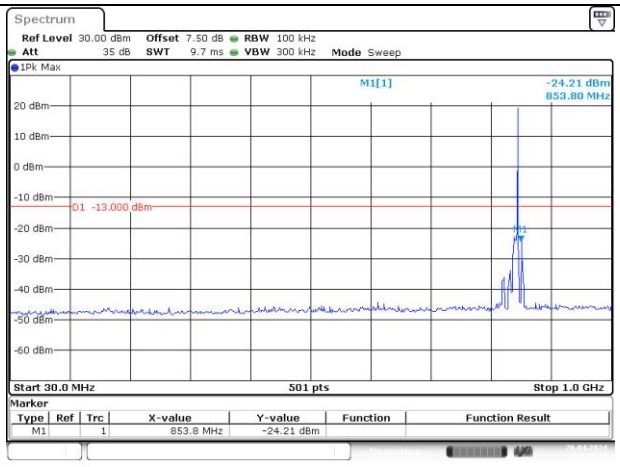
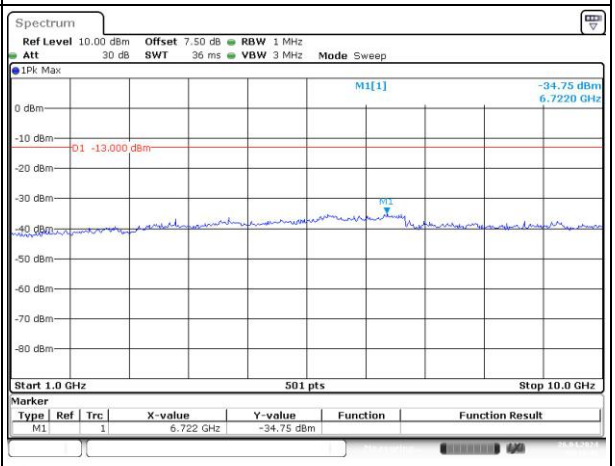
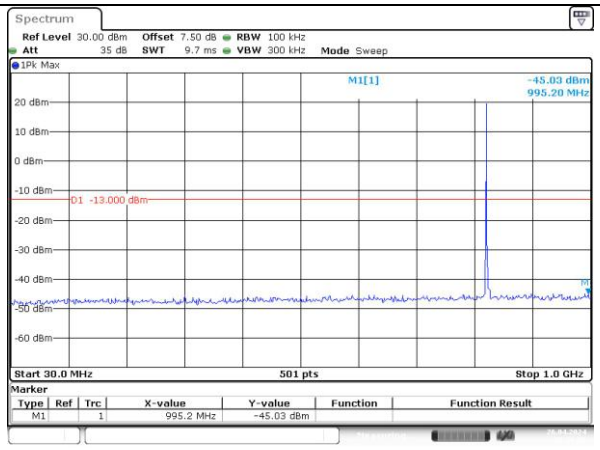
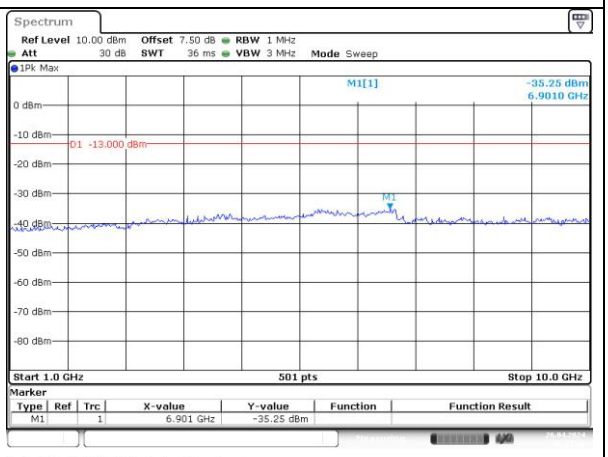
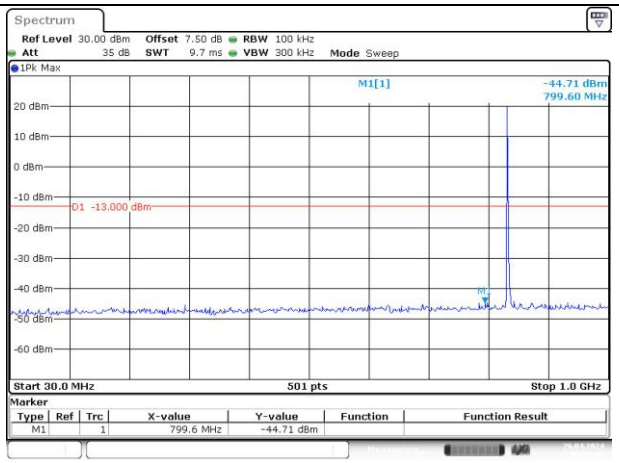
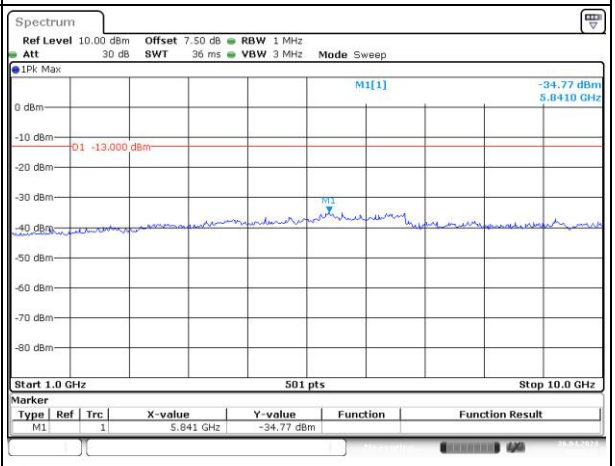
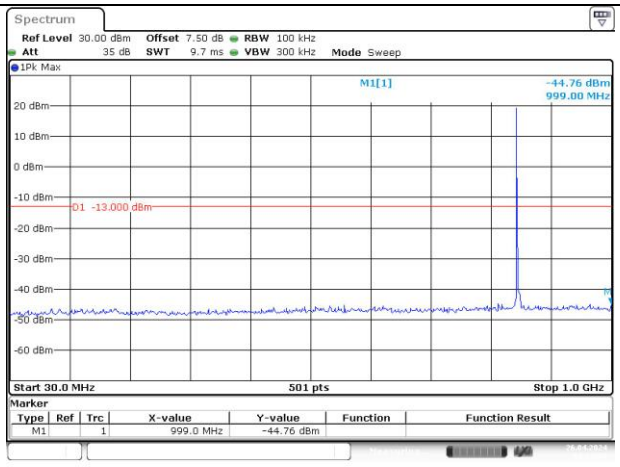
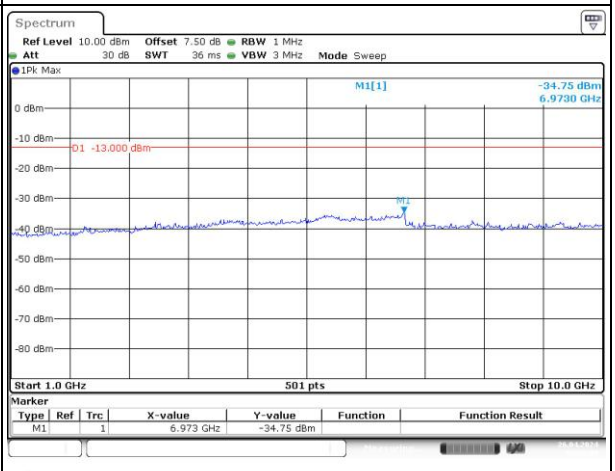
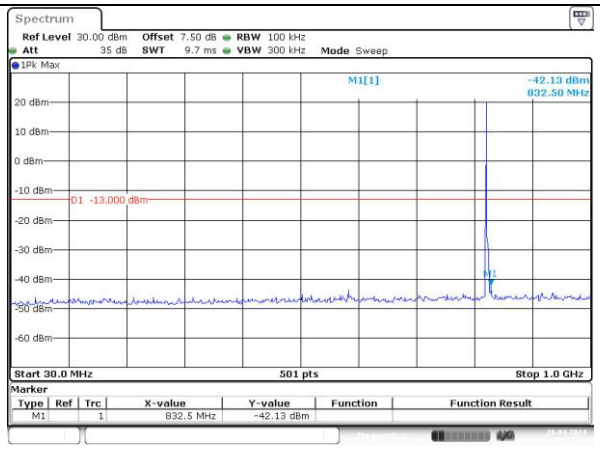
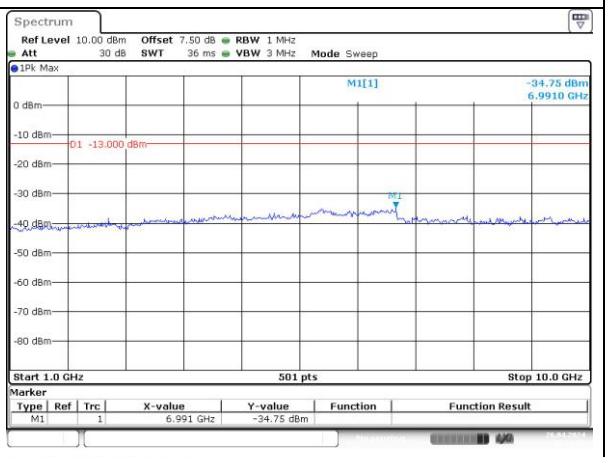
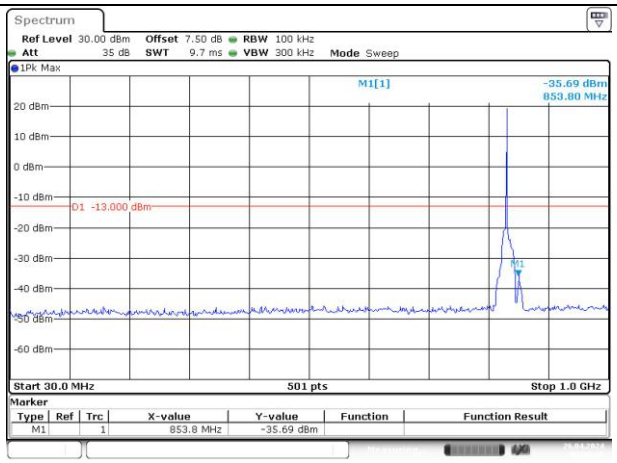
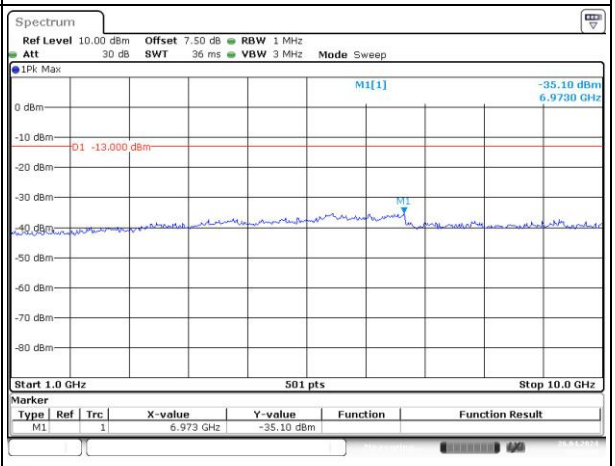
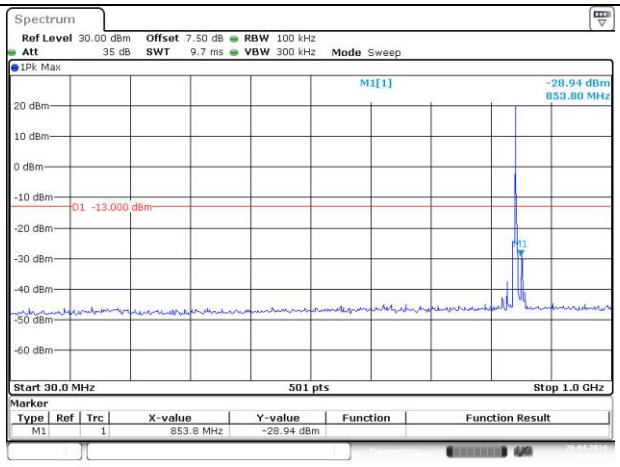
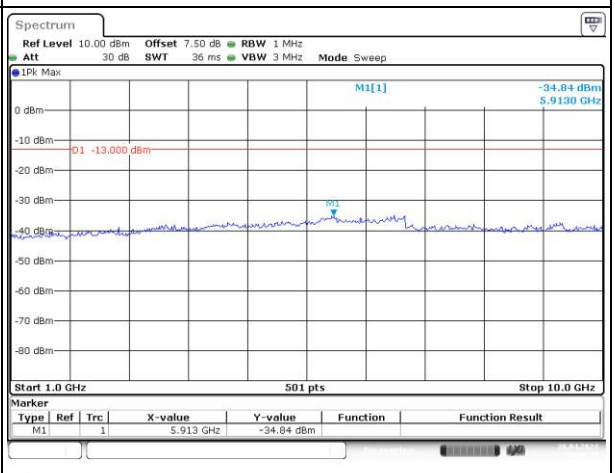
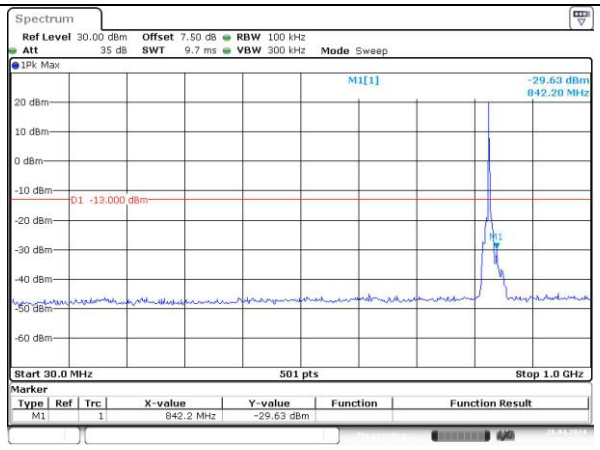
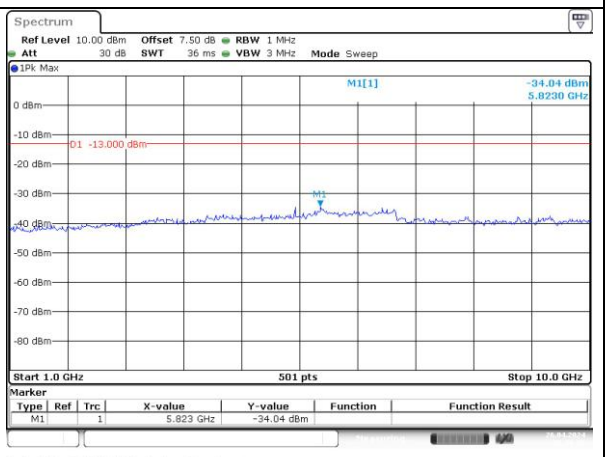
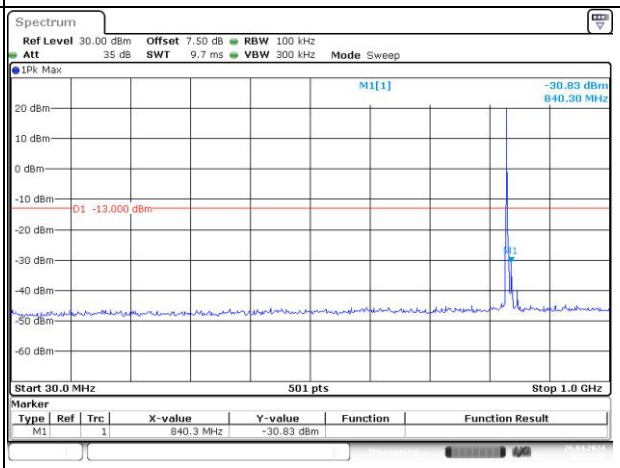
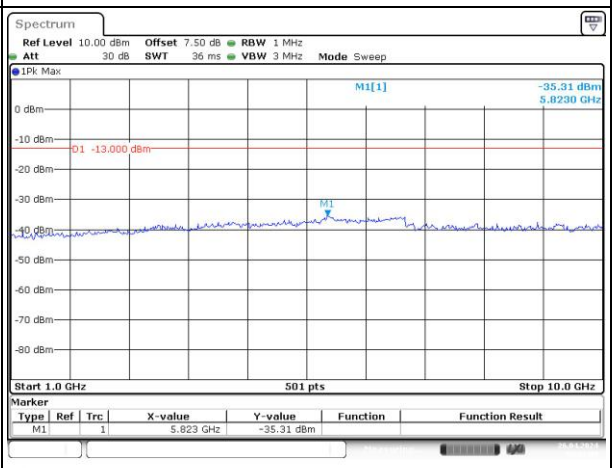
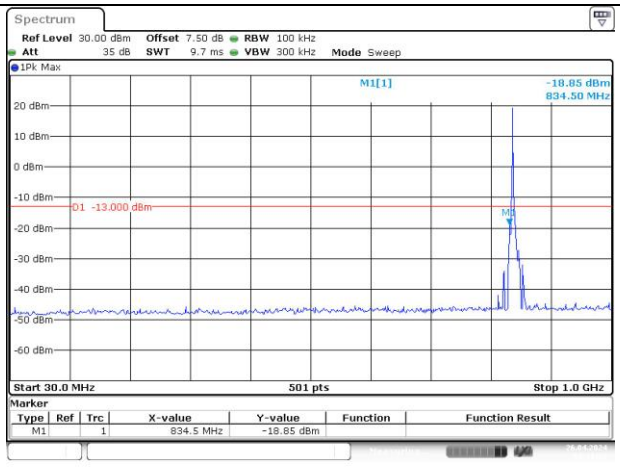
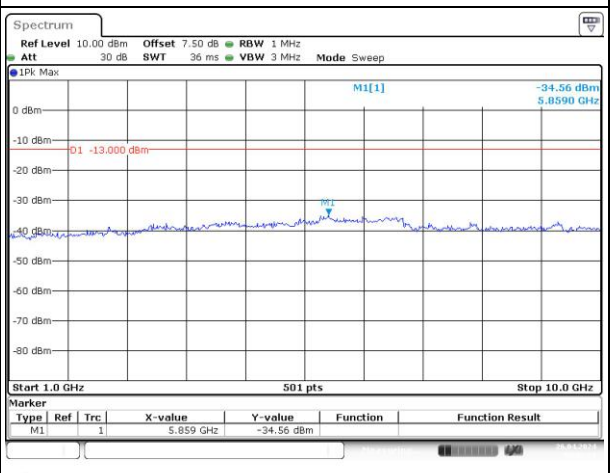
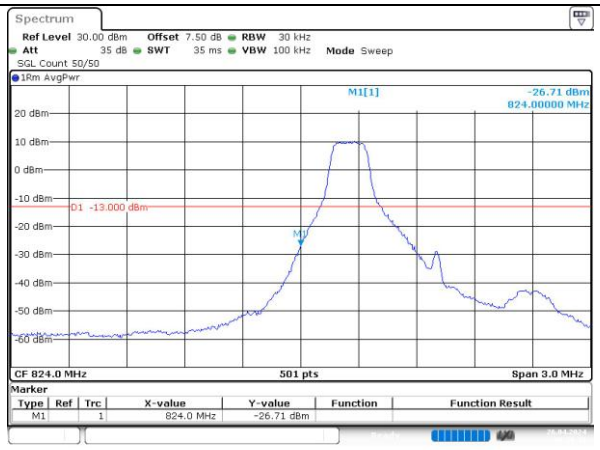
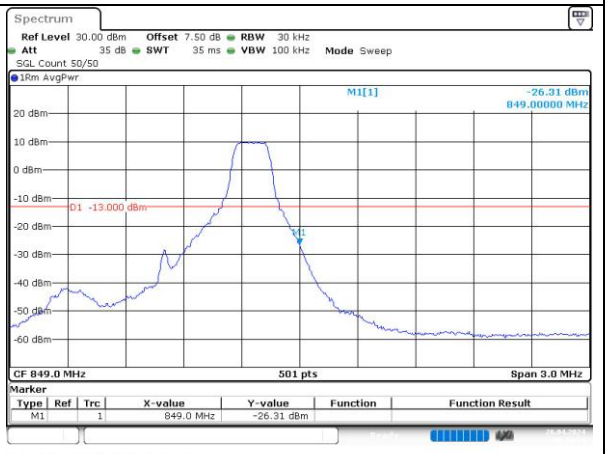
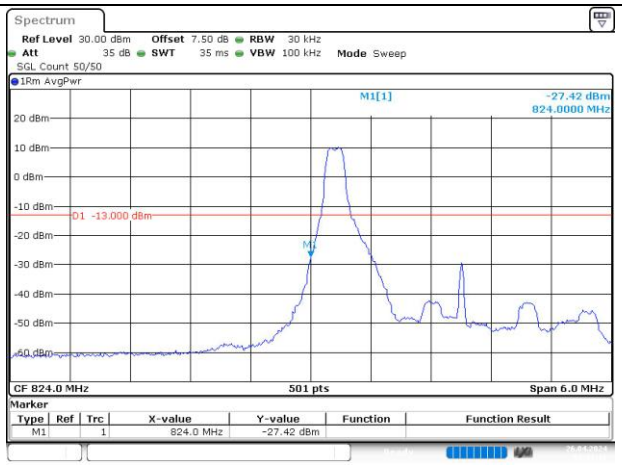
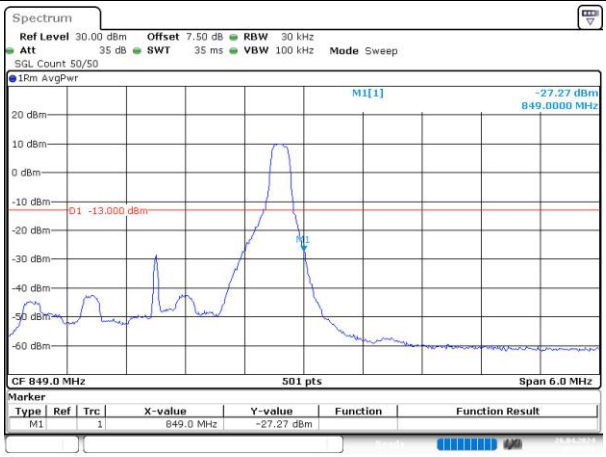
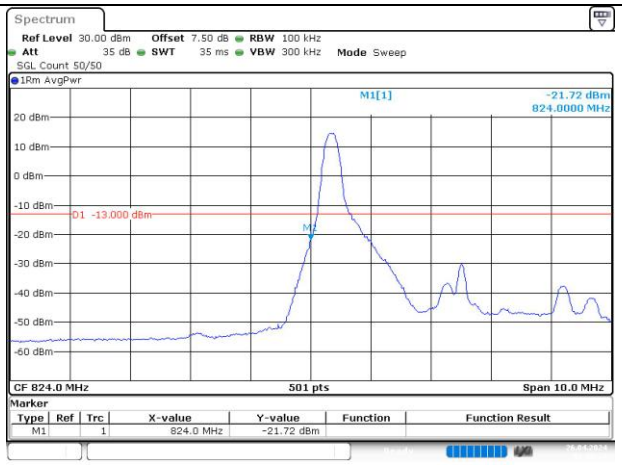
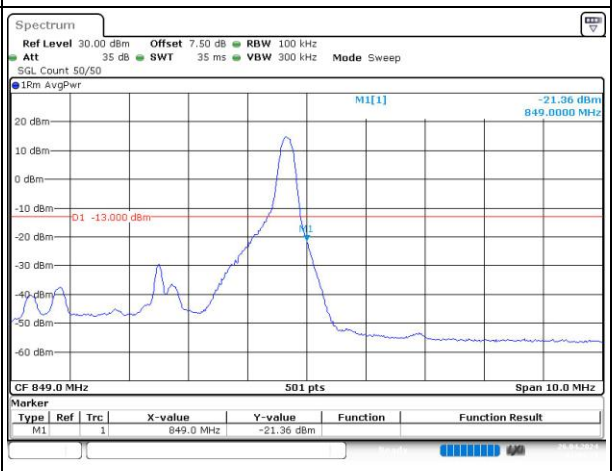
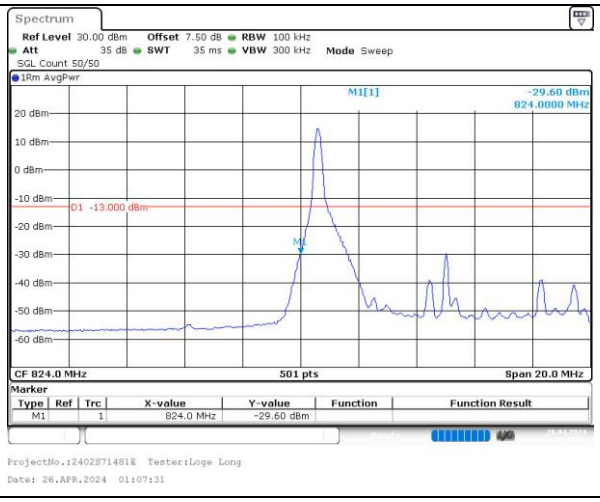
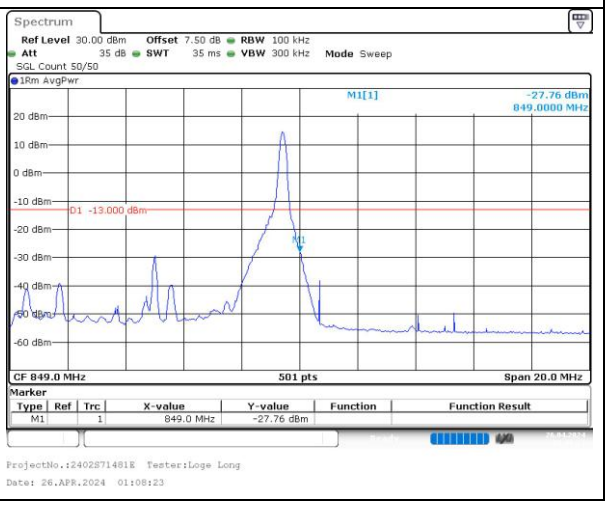
Spurious Emissions at Antenna Terminal		
Channel	**1.4MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

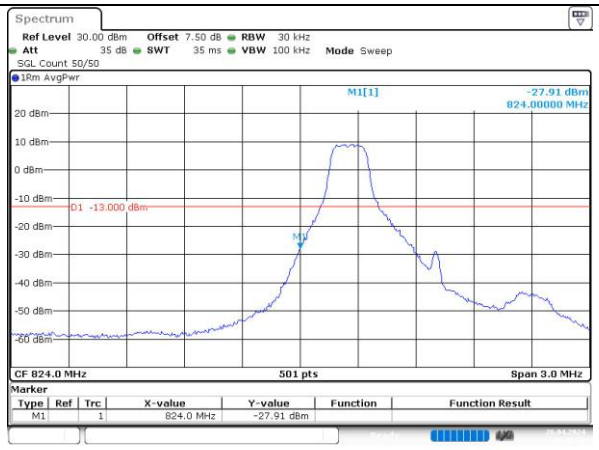
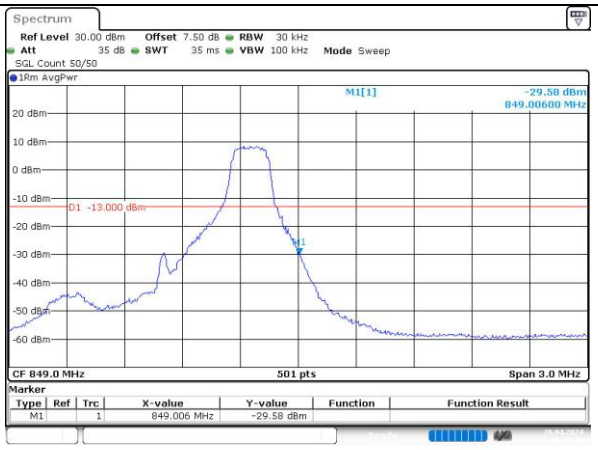
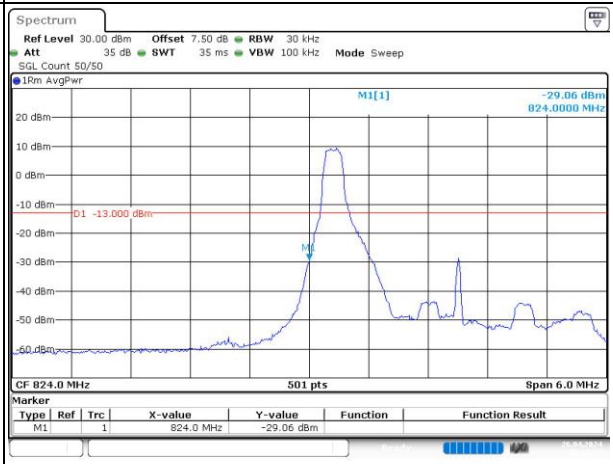
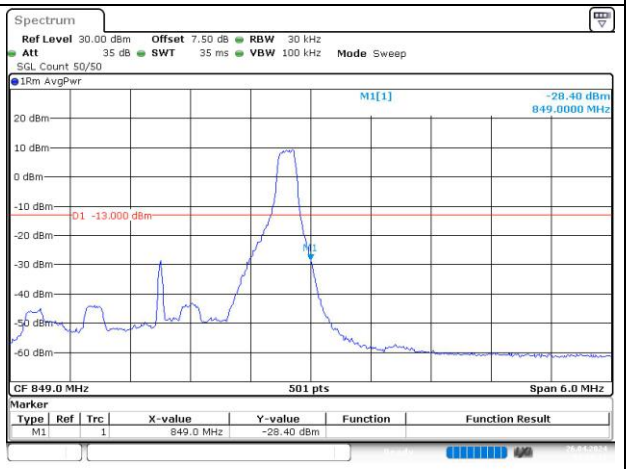
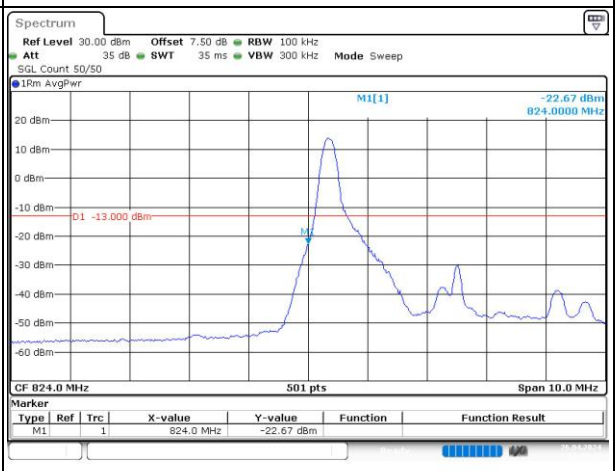
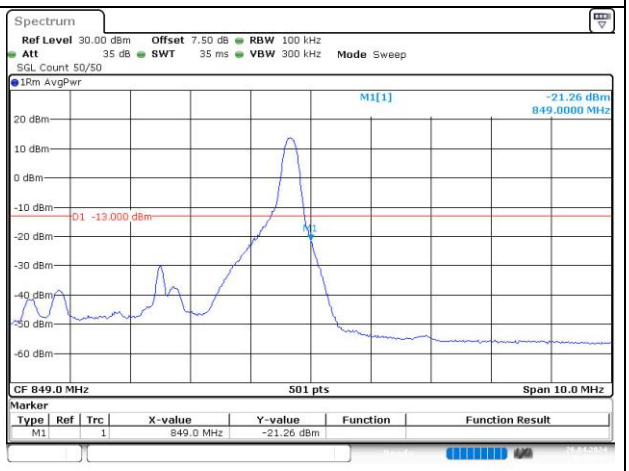
Spurious Emissions at Antenna Terminal		
Channel	**3MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

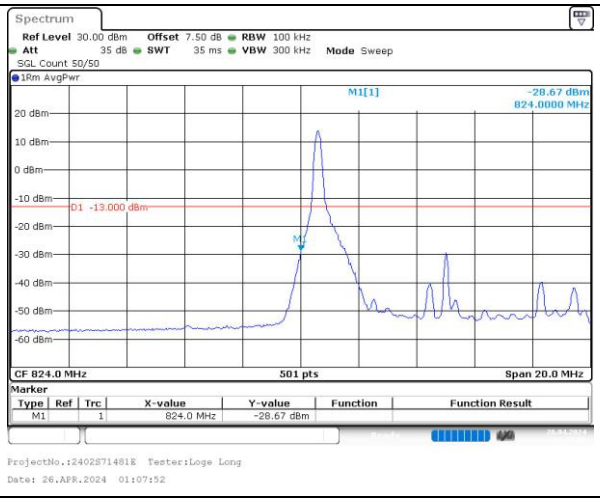
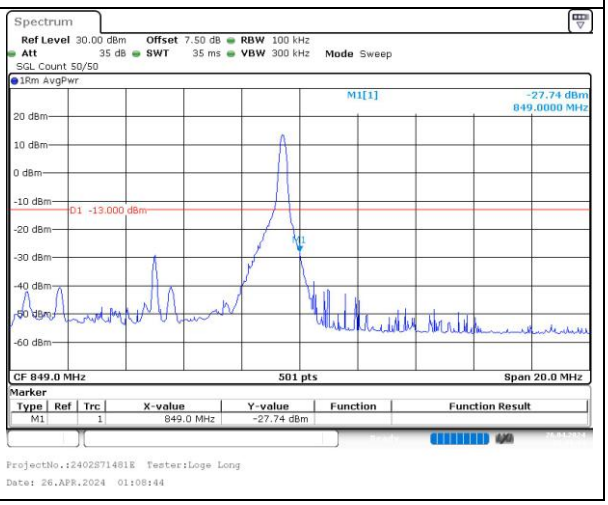
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

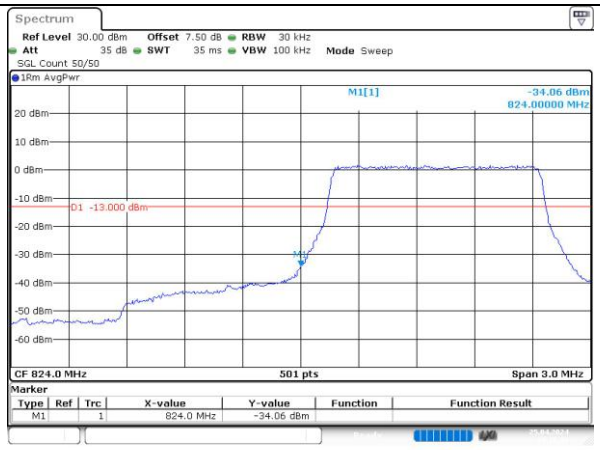
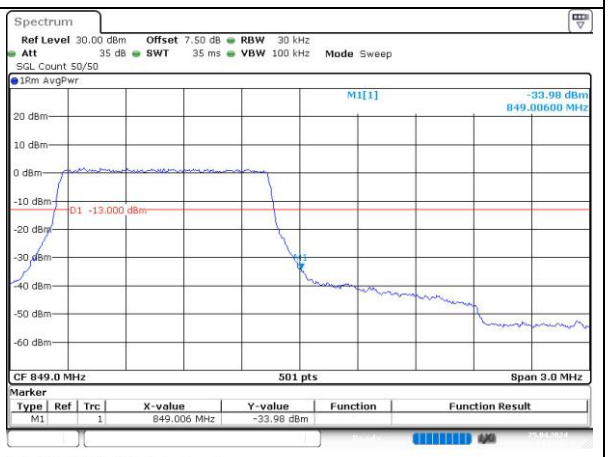
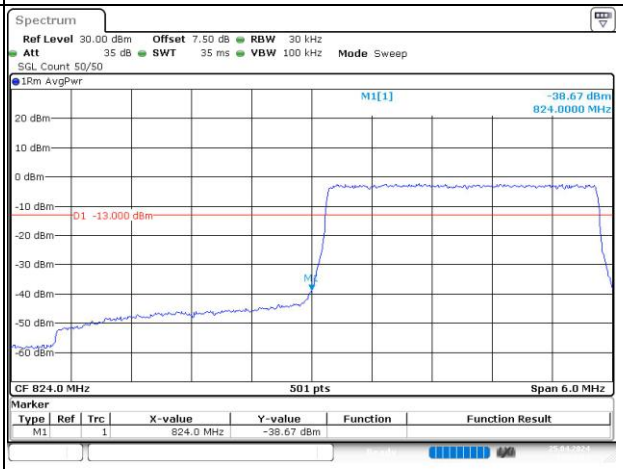
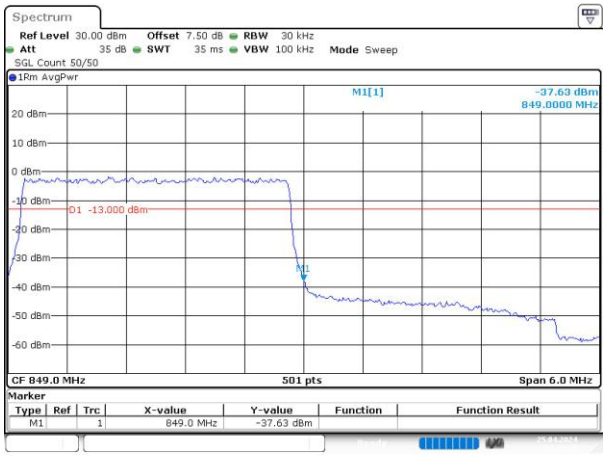
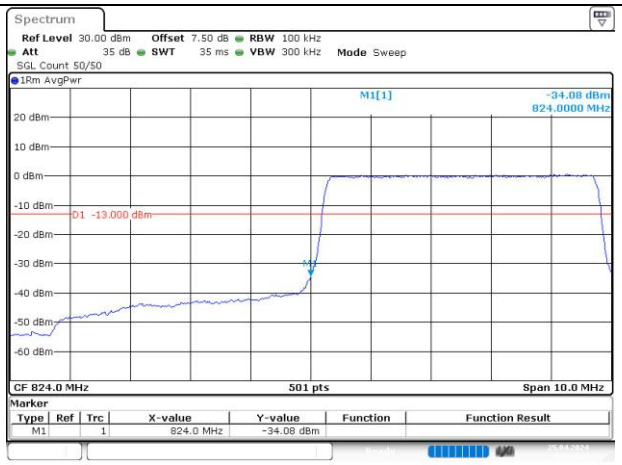
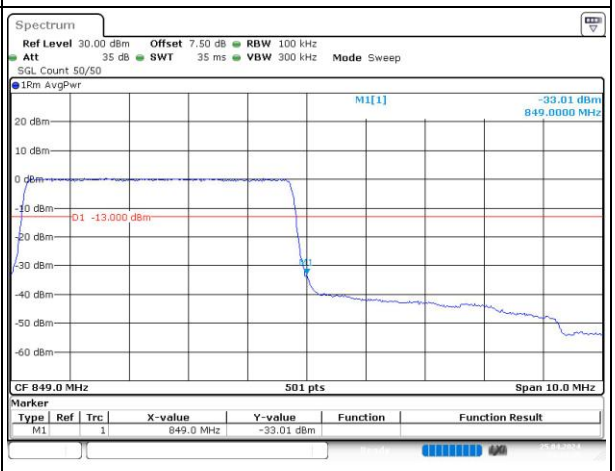
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

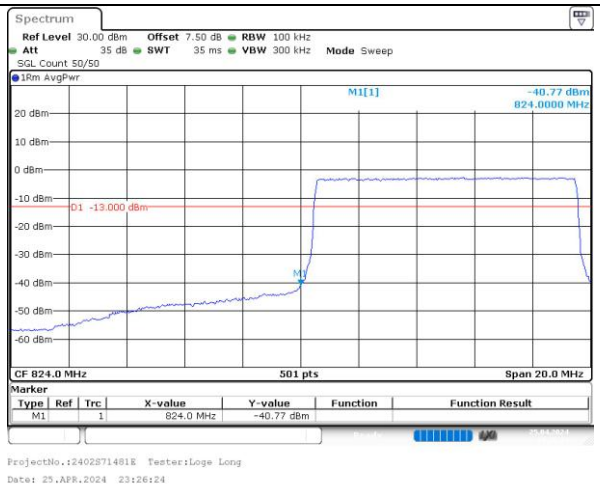
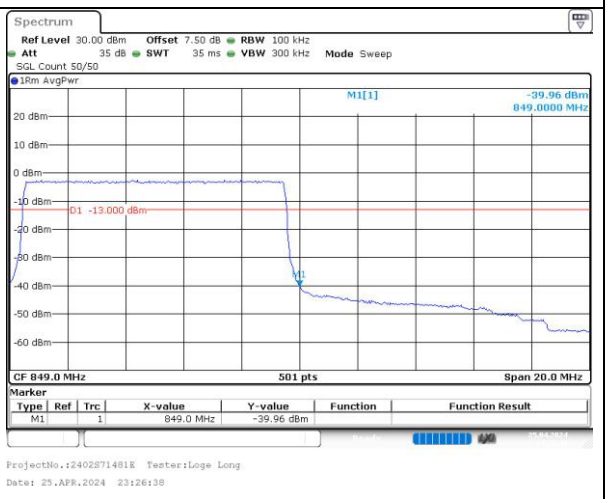
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
QPSK 1.4MHz		
QPSK 3MHz		
QPSK 5MHz		

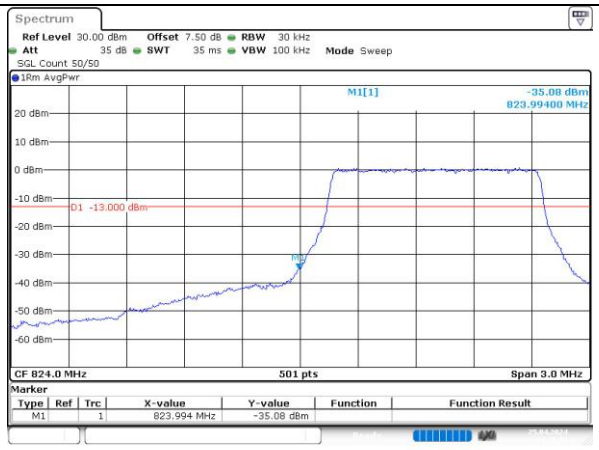
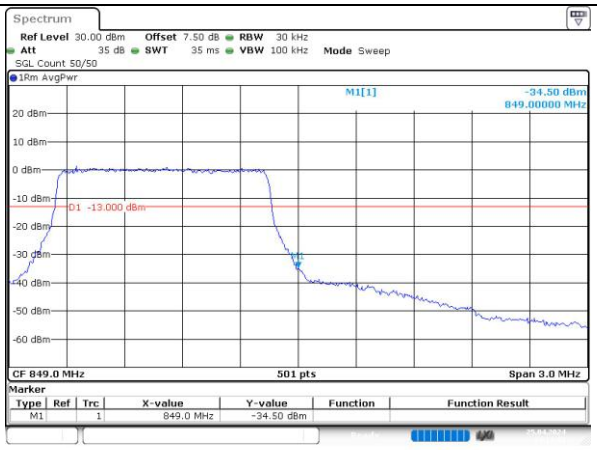
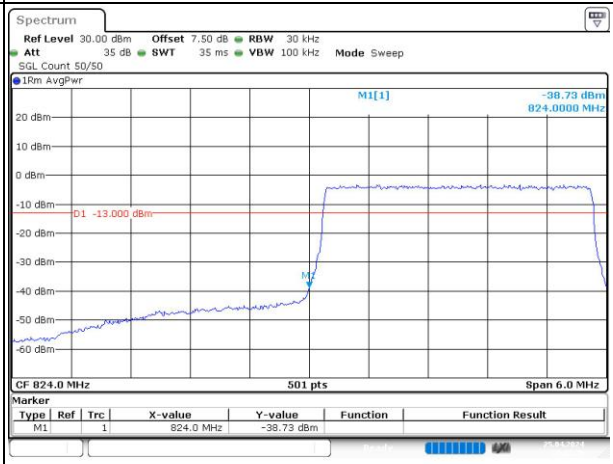
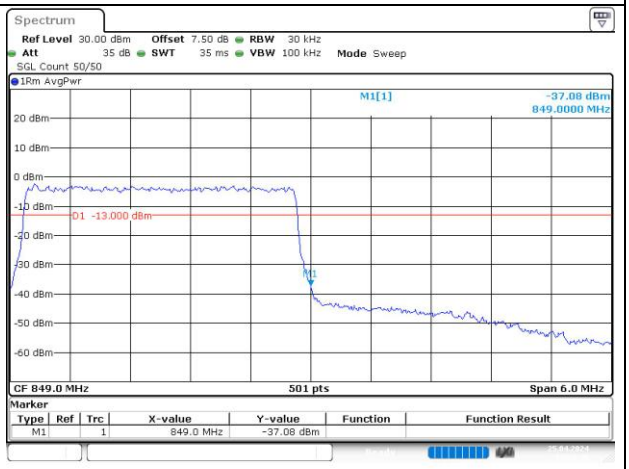
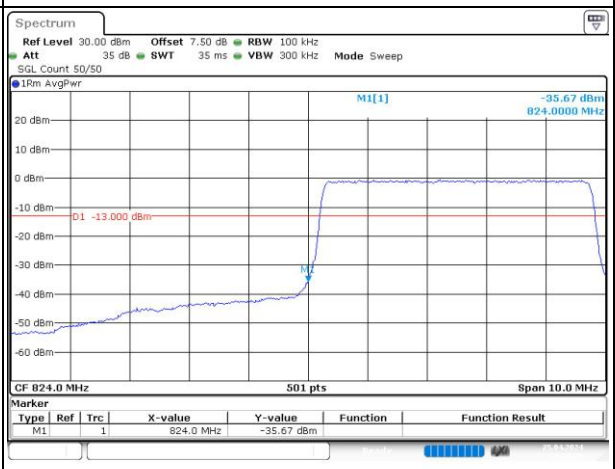
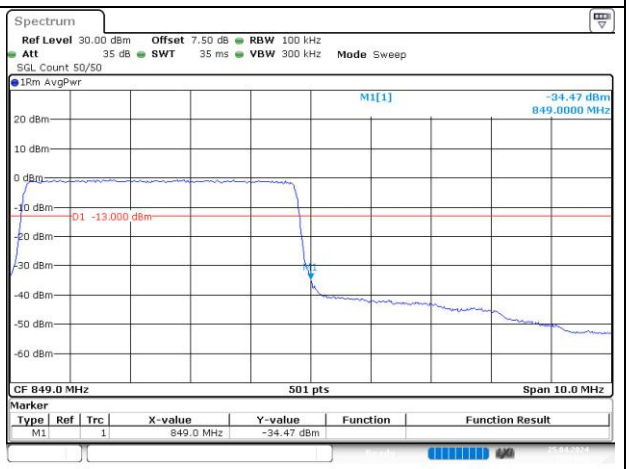
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
QPSK 10MHz		

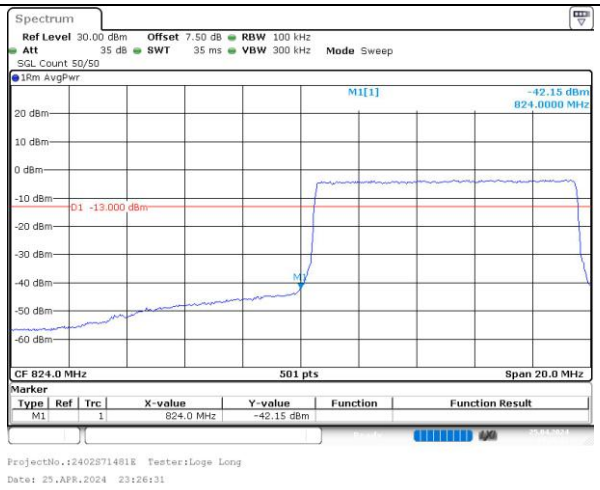
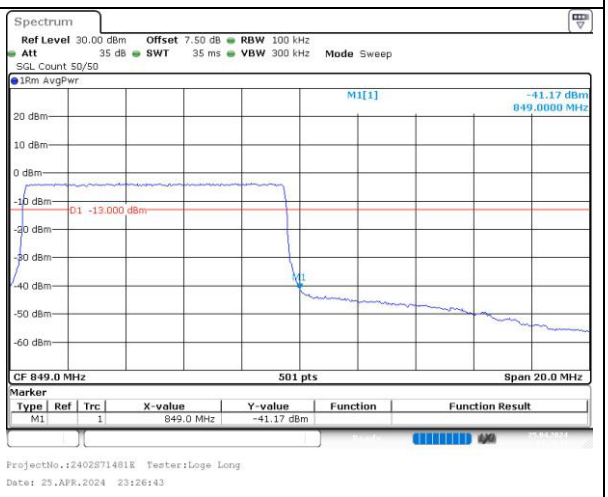
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
16QAM 1.4MHz		
16QAM 3MHz		
16QAM 5MHz		

Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
16QAM 10MHz		

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
QPSK 1.4MHz		
QPSK 3MHz		
QPSK 5MHz		

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
QPSK 10MHz		

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
16QAM 1.4MHz		
16QAM 3MHz		
16QAM 5MHz		

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
16QAM 10MHz		

5.9 Antenna Port Test Data and Results for LTE Band 7

Serial Number:	OSEB119574-2	Test Date:	2024/5/5
Test Site:	RF	Test Mode:	Transmitting
Tester:	Karl Liang, Loge Long	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	24.5	Relative Humidity: (%)	64	ATM Pressure: (kPa)	100.3

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101461	2023/11/27	2024/11/26
Micro-Coax	Coaxial Cable	UFB205A	323308-024	2024/1/2	2025/1/1
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM502	2023/9/10	2024/9/9
Minl-Clrcuits	Coaxial Power Splitters & Combiner	ZFRSC-183-S+	SF448201614	2024/2/25	2025/2/24
R&S	Wideband Radio Communication Tester	CMW500	144976	2023/10/18	2024/10/17
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30173	2023/10/18	2024/10/17
All-sun	Clamp Meter	EM305A	8348897	2023/8/3	2024/8/2
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1	N/A	N/A

** Statement of Traceability: Bay Area Compliance Laboratories Corp. (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	2502.5	2535	2567.5
10MHz	2505	2535	2565
15MHz	2507.5	2535	2562.5
20MHz	2510	2535	2560

Test Data:

FCC §2.1046; § 27.50(h)(2)

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	14.71	14.6	14.66	11.71	33
	RB1#13	14.69	14.58	14.68		
	RB1#24	14.71	14.59	14.69		
	RB15#0	13.76	13.69	13.77		
	RB15#10	13.73	13.62	13.66		
	RB25#0	13.76	13.63	13.73		
5MHz 16QAM	RB1#0	14.08	13.76	13.58	11.08	33
	RB1#13	14.04	13.74	13.61		
	RB1#24	14.04	13.73	13.64		
	RB15#0	12.69	12.7	12.8		
	RB15#10	12.72	12.62	12.68		
	RB25#0	12.74	12.66	12.78		
10MHz QPSK	RB1#0	14.65	14.6	14.63	11.7	33
	RB1#25	14.65	14.63	14.69		
	RB1#49	14.63	14.61	14.7		
	RB25#0	13.65	13.76	13.74		
	RB25#25	13.71	13.73	13.69		
	RB50#0	13.73	13.73	13.71		
10MHz 16QAM	RB1#0	13.68	14.31	13.79	11.34	33
	RB1#25	13.72	14.34	13.86		
	RB1#49	13.66	14.32	13.85		
	RB25#0	12.75	12.81	12.74		
	RB25#25	12.81	12.73	12.72		
	RB50#0	12.74	12.73	12.73		
15MHz QPSK	RB1#0	14.56	14.55	14.52	11.6	33
	RB1#38	14.6	14.6	14.59		
	RB1#74	14.53	14.55	14.58		
	RB36#0	13.64	13.69	13.63		
	RB36#39	13.7	13.65	13.66		
	RB75#0	13.7	13.73	13.69		
15MHz 16QAM	RB1#0	14.1	14.3	13.74	11.32	33
	RB1#38	14.1	14.32	13.79		
	RB1#74	14.05	14.26	13.79		
	RB36#0	12.67	12.7	12.65		
	RB36#39	12.62	12.64	12.71		
	RB75#0	12.66	12.7	12.69		

20MHz QPSK	RB1#0	14.53	14.61	14.63	11.71	33
	RB1#50	14.61	14.71	14.66		
	RB1#99	14.51	14.57	14.65		
	RB50#0	13.68	13.77	13.76		
	RB50#50	13.62	13.69	13.64		
	RB100#0	13.64	13.71	13.65		
20MHz 16QAM	RB1#0	14.15	14	13.9	11.21	33
	RB1#50	14.21	14.07	13.92		
	RB1#99	14.16	13.97	13.91		
	RB50#0	12.65	12.75	12.72		
	RB50#50	12.65	12.67	12.62		
	RB100#0	12.59	12.74	12.64		
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	5.94	6.2	6.32	13
	RB100#0	4.38	4.43	4.41	13
20MHz 16QAM	RB1#0	6.32	6.81	7.45	13
	RB100#0	5.97	6	6.03	13
				Result:	**Pass**

FCC §2.1049, §27.53: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	4.491	4.531	5	4.96	5
5MHz 16QAM	4.531	4.531	4.511	4.98	5	4.96
10MHz QPSK	8.942	8.942	8.942	9.68	9.6	9.68
10MHz 16QAM	8.942	8.942	8.942	9.64	9.68	9.68
15MHz QPSK	13.473	13.473	13.473	14.88	14.88	14.76
15MHz 16QAM	13.473	13.473	13.473	14.7	14.76	14.76
20MHz QPSK	17.964	17.964	17.884	19.28	19.6	19.36
20MHz 16QAM	17.964	17.964	17.964	19.44	19.36	19.36
Note: The test plots please refer to the Plots of Occupied Bandwidth						

FCC §2.1051, §27.53:Spurious Emissions at Antenna Terminal	
Result:	**Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.**

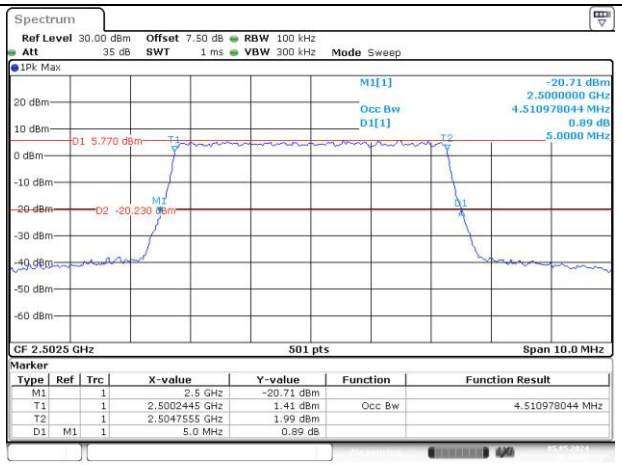
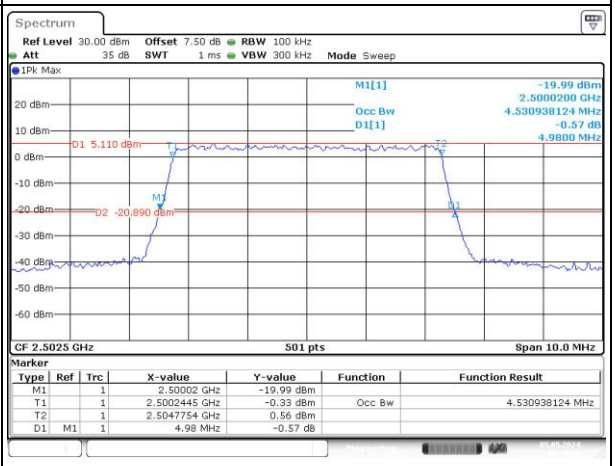
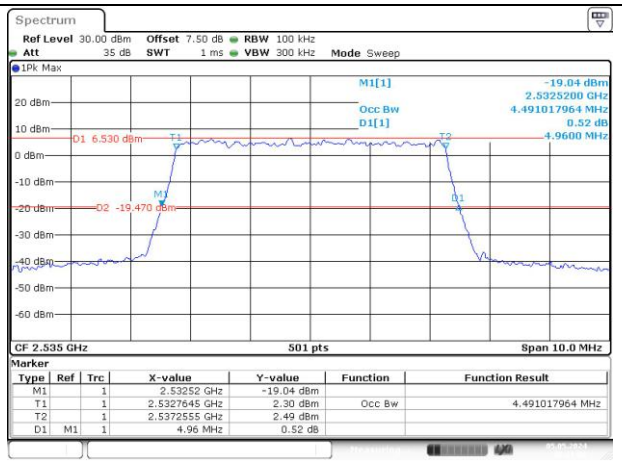
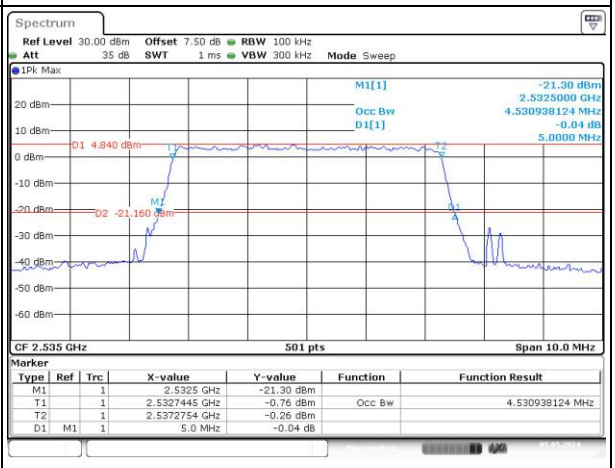
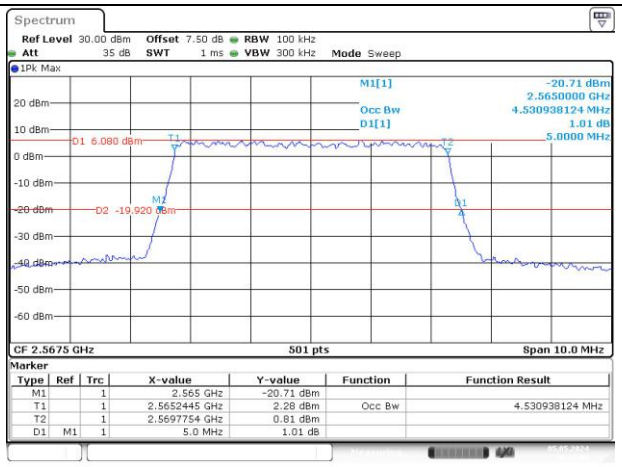
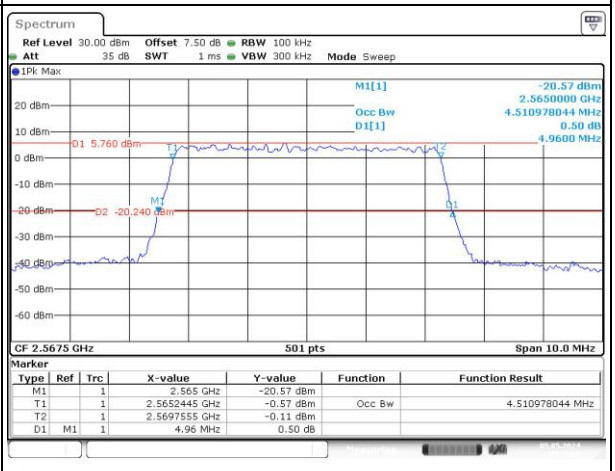
FCC §2.1051, §27.53:Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

FCC §2.1055, §27.54: Frequency Stability

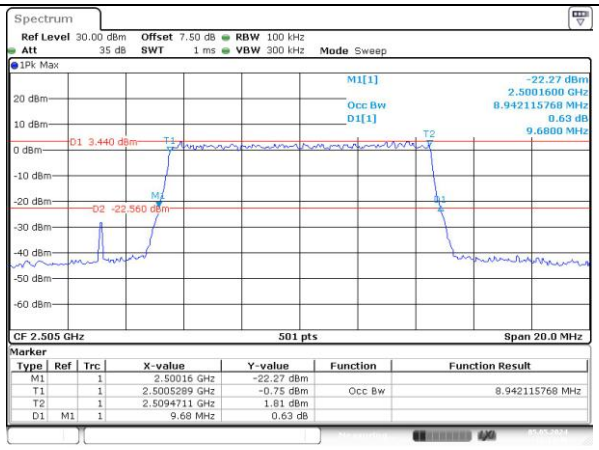
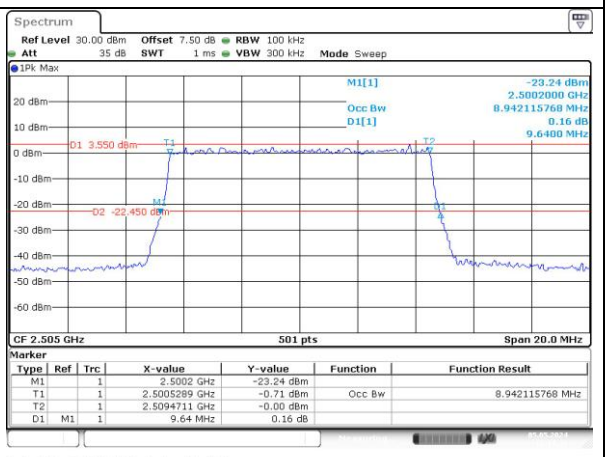
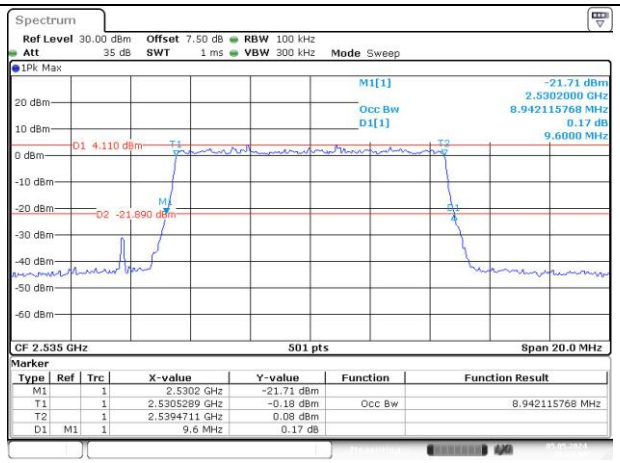
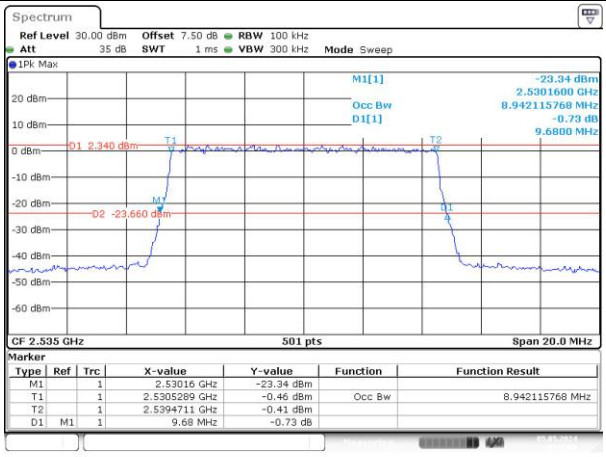
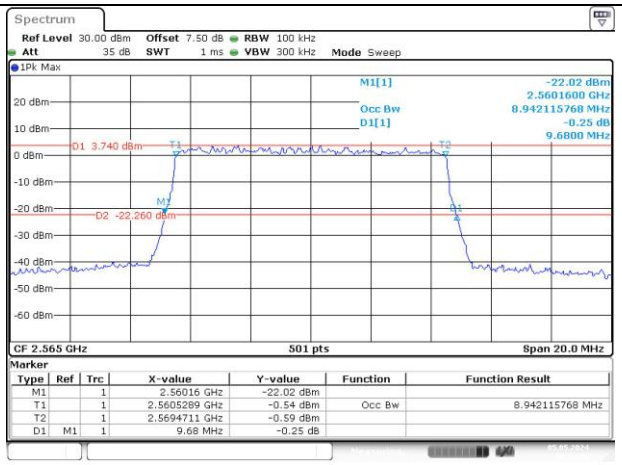
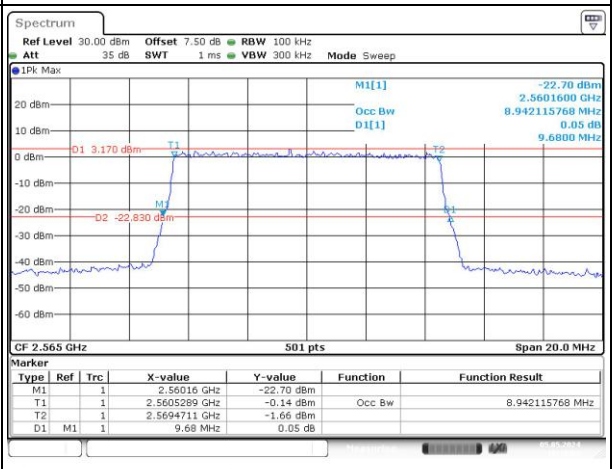
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.91	2501.028	2500.00	2568.915	2570
	-20	3.91	2501.055	2500.00	2568.924	2570
	-10	3.91	2501.034	2500.00	2568.936	2570
	0	3.91	2501.037	2500.00	2568.939	2570
	10	3.91	2501.034	2500.00	2568.924	2570
	20	3.91	2501.058	2500.00	2568.942	2570
	30	3.91	2501.073	2500.00	2568.966	2570
	40	3.91	2501.061	2500.00	2568.948	2570
	50	3.91	2501.064	2500.00	2568.957	2570
Frequency Stability vs. Voltage	20	3.45	2501.061	2500.00	2568.957	2570
	20	4.5	2501.085	2500.00	2568.945	2570
					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	3.91	2501.043	2500.00	2569.007	2570
	-20	3.91	2501.055	2500.00	2568.998	2570
	-10	3.91	2501.049	2500.00	2568.998	2570
	0	3.91	2501.031	2500.00	2569.010	2570
	10	3.91	2501.052	2500.00	2569.019	2570
	20	3.91	2501.058	2500.00	2569.022	2570
	30	3.91	2501.079	2500.00	2569.046	2570
	40	3.91	2501.082	2500.00	2569.025	2570
	50	3.91	2501.064	2500.00	2569.031	2570
Frequency Stability vs. Voltage	20	3.45	2501.079	2500.00	2569.046	2570
	20	4.5	2501.061	2500.00	2569.025	2570
					Result:	**Pass**

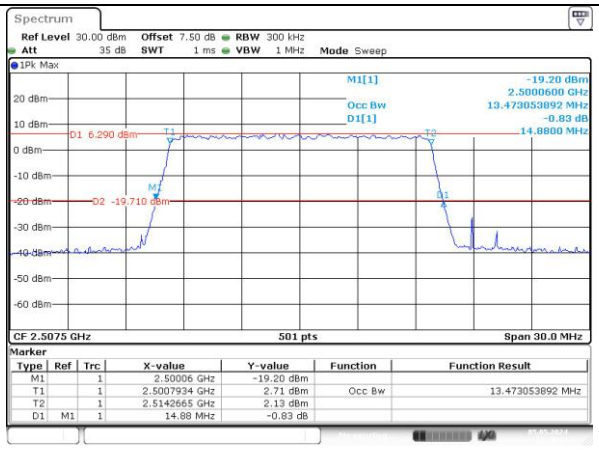
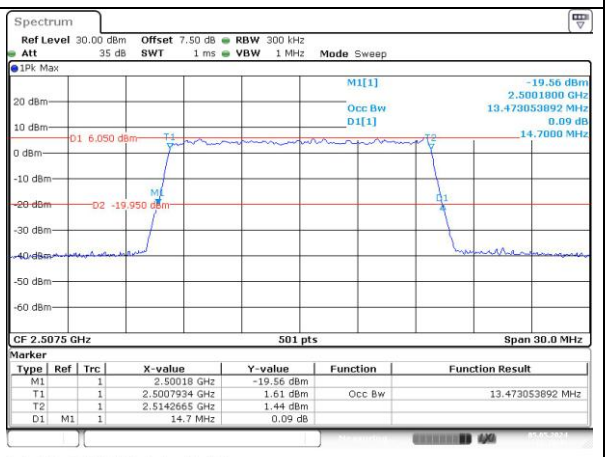
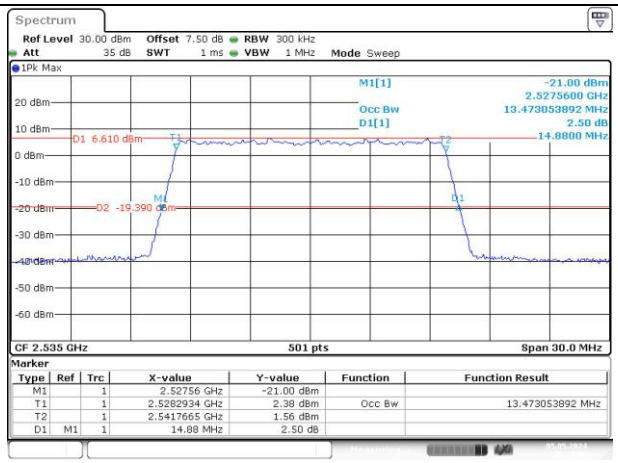
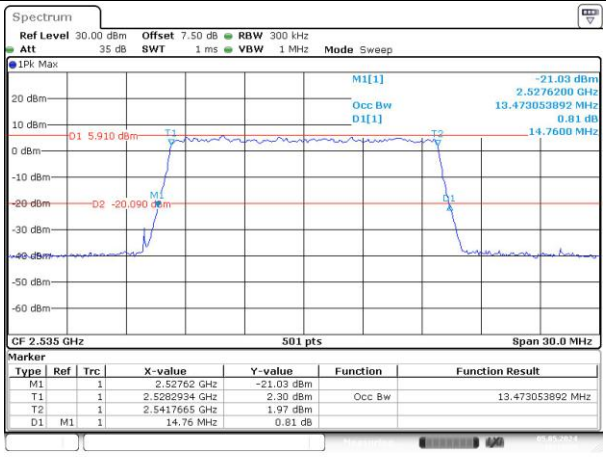
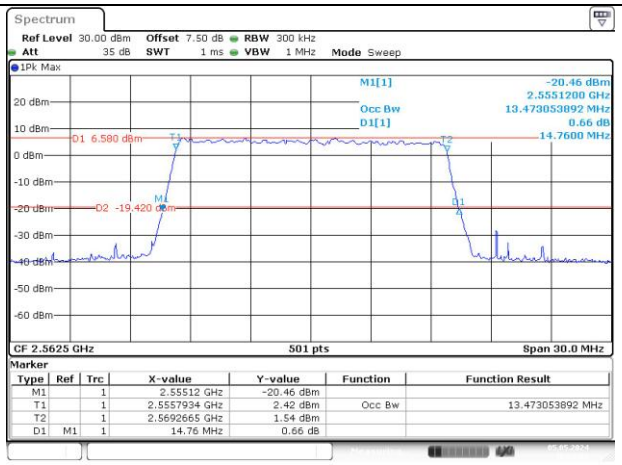
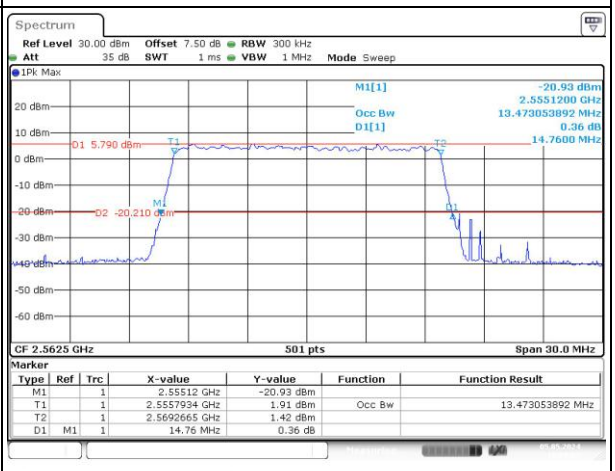
Test Plots:

Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

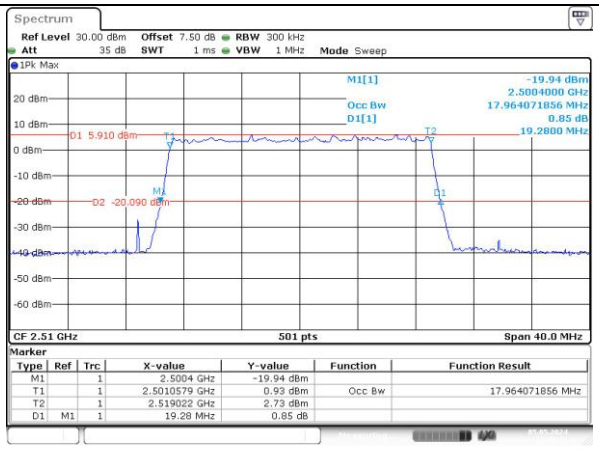
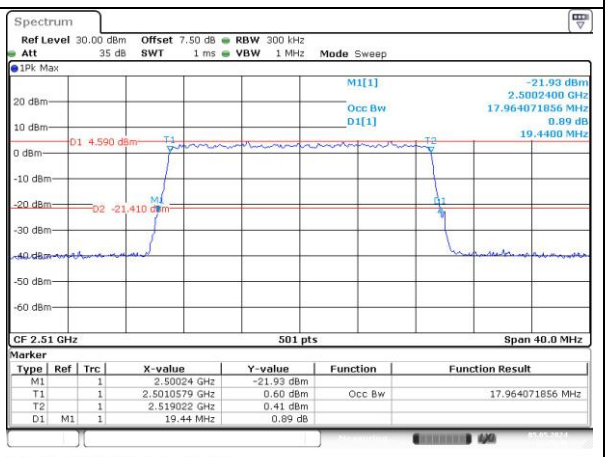
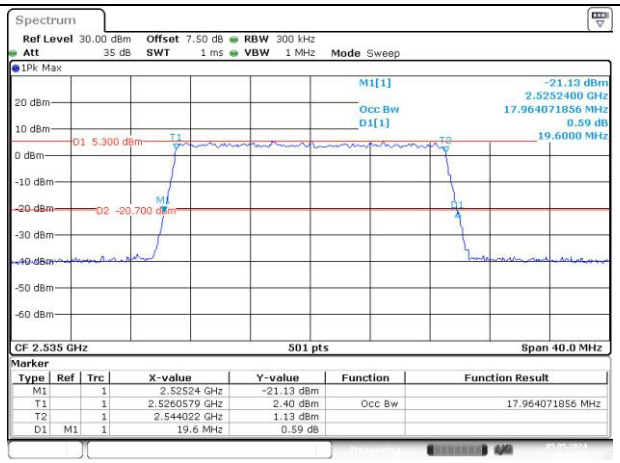
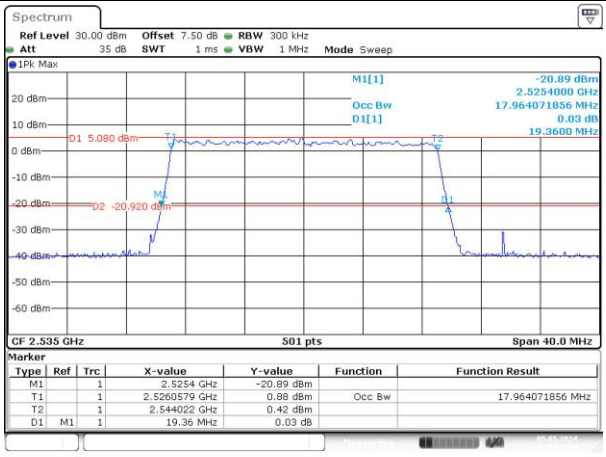
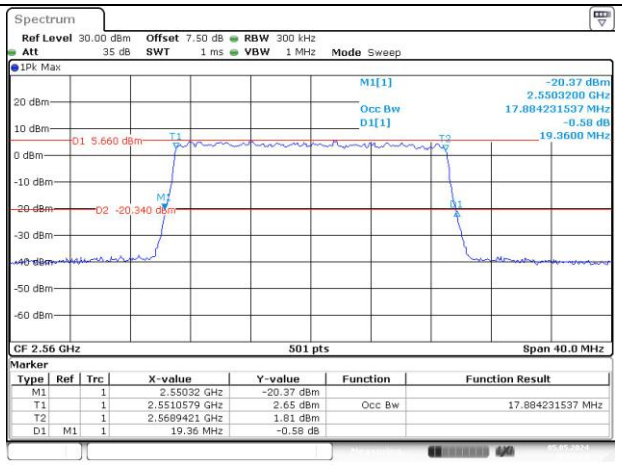
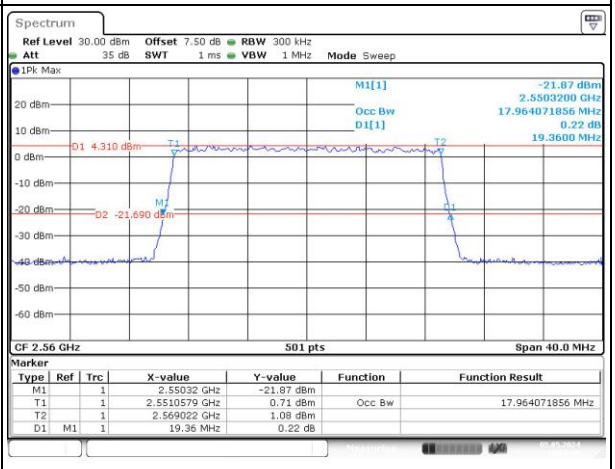
Occupied Bandwidth

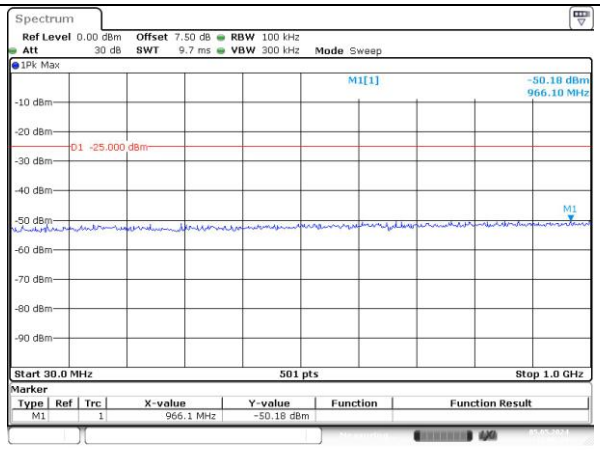
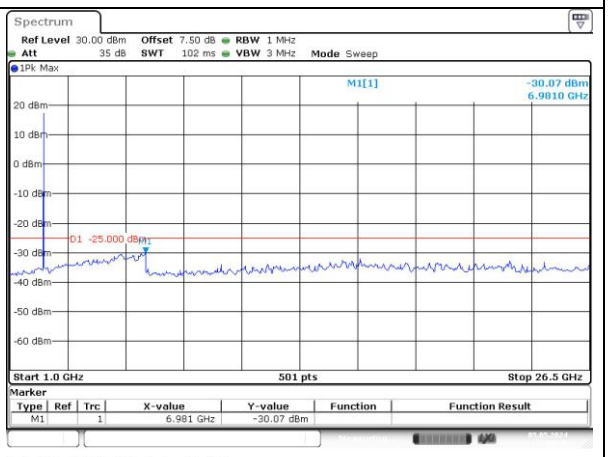
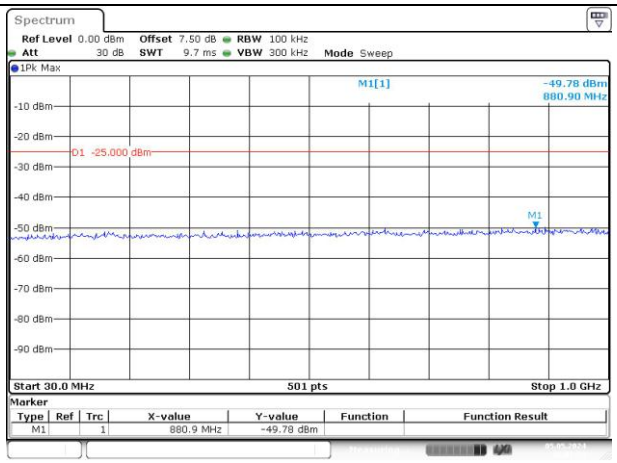
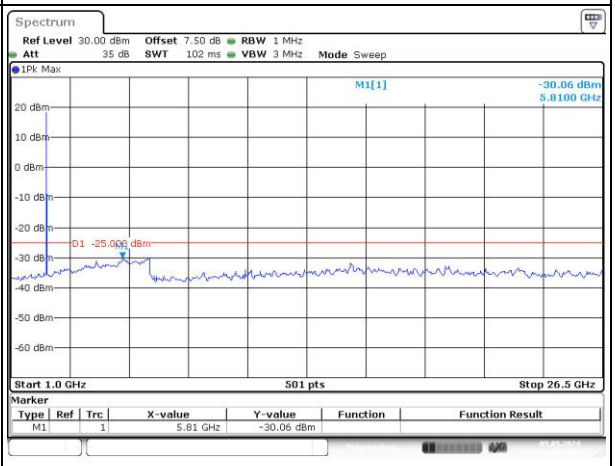
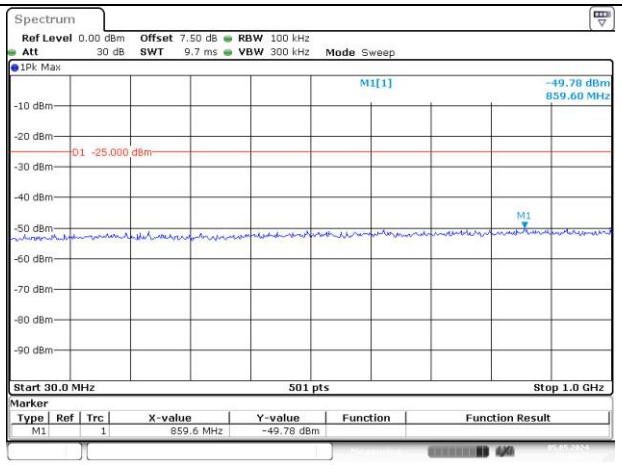
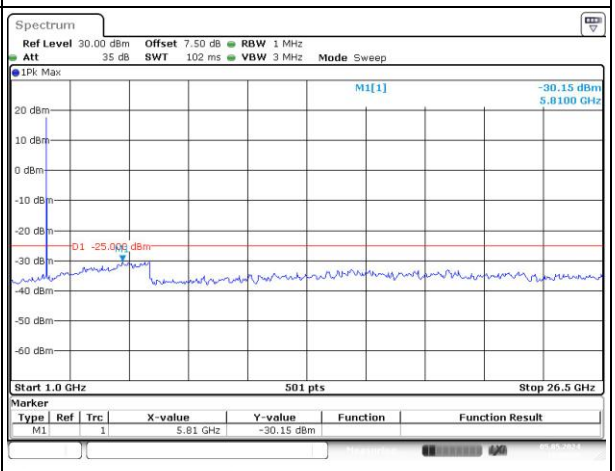
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

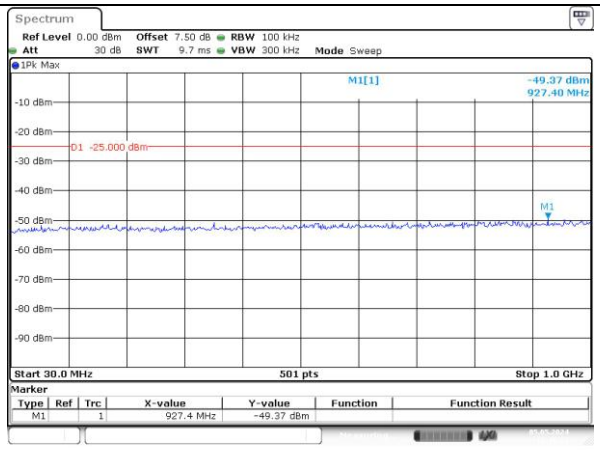
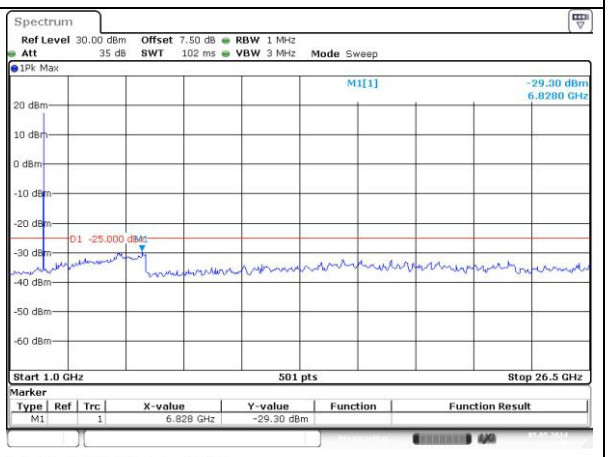
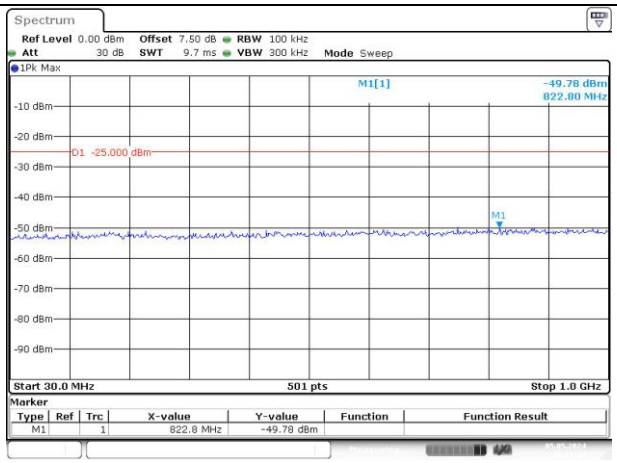
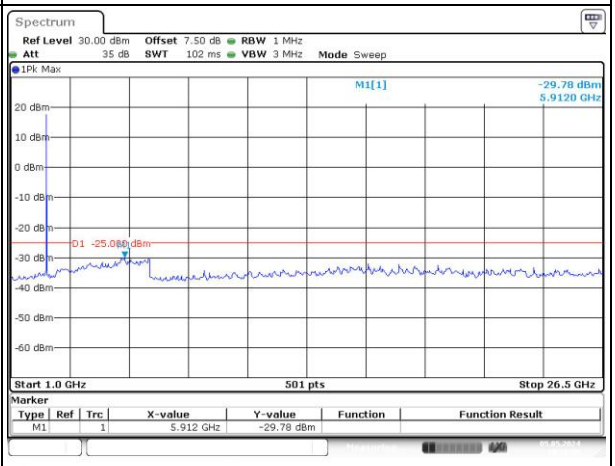
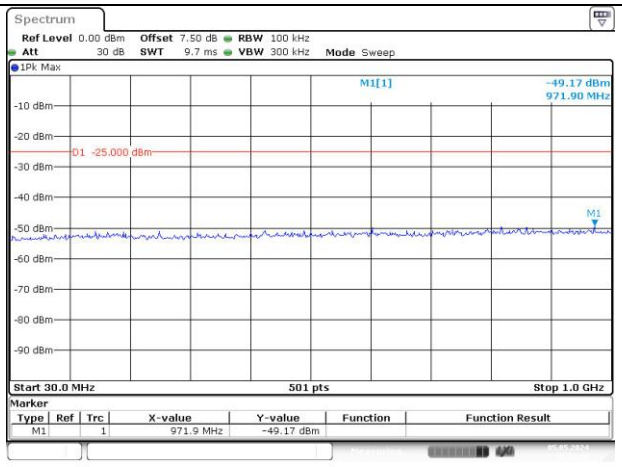
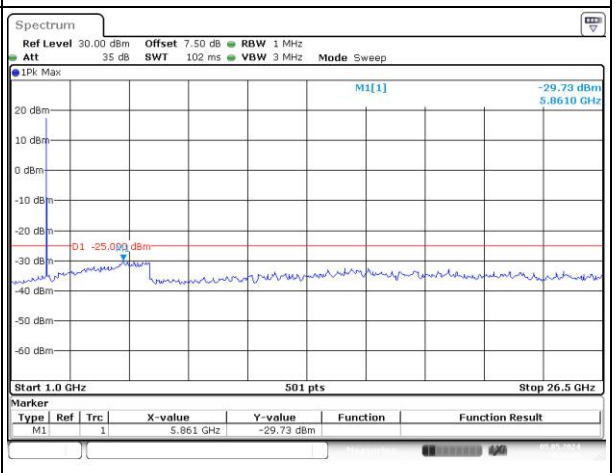
Occupied Bandwidth

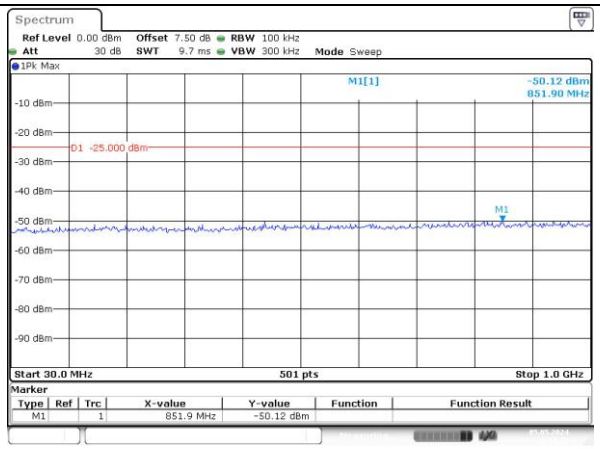
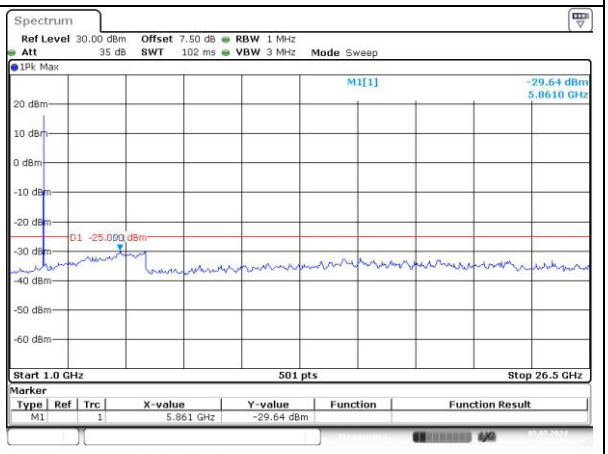
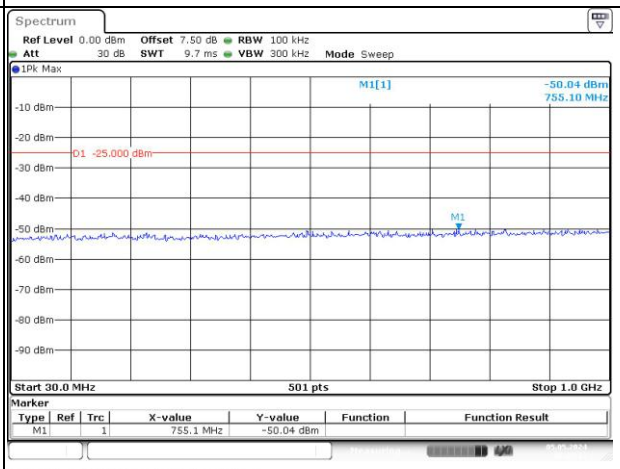
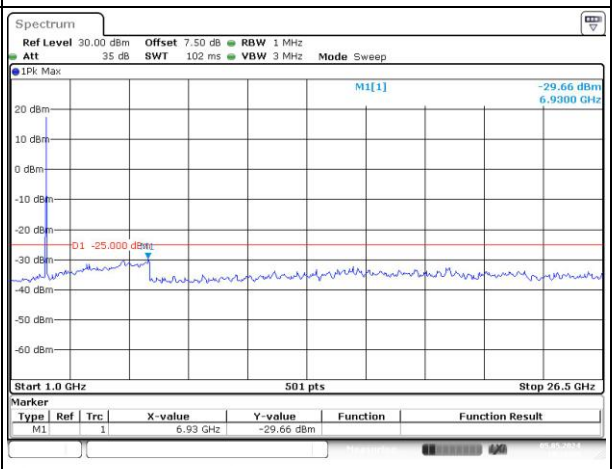
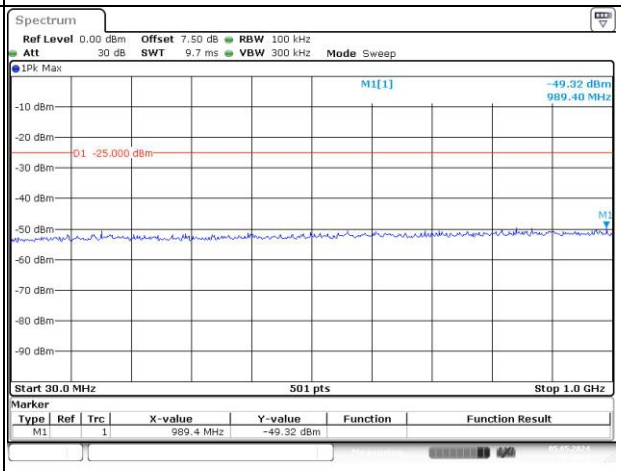
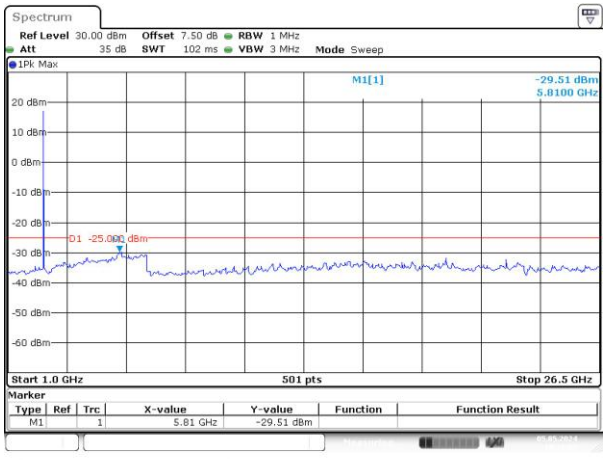
Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

Occupied Bandwidth

Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

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

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

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