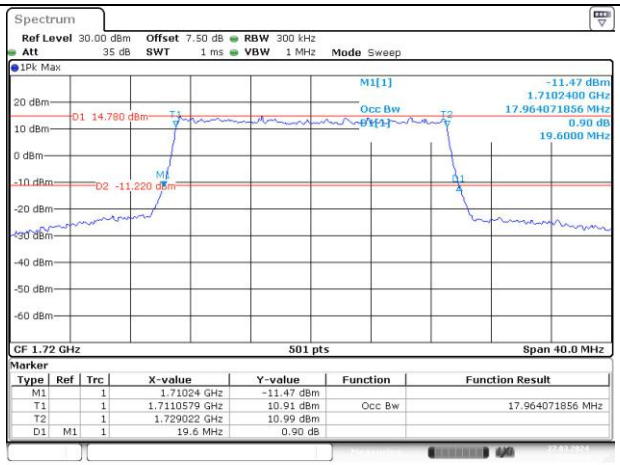
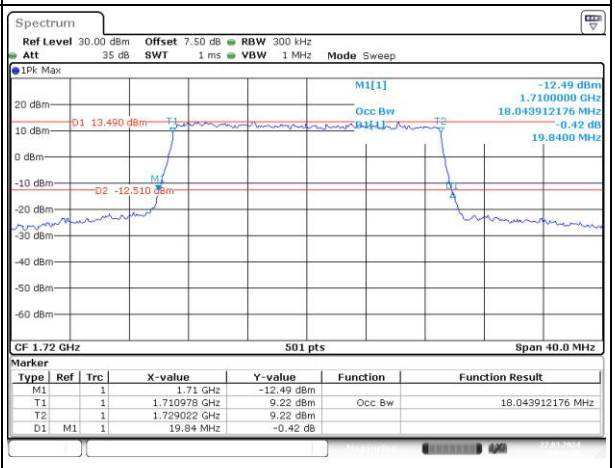
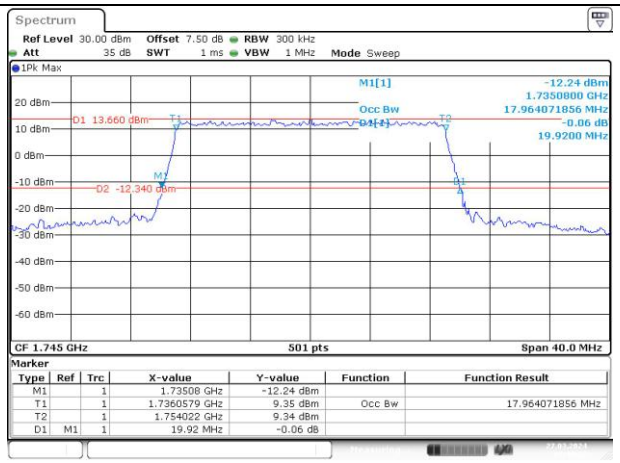
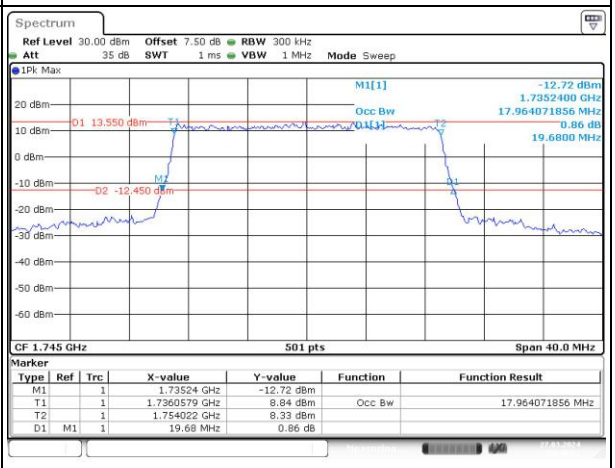
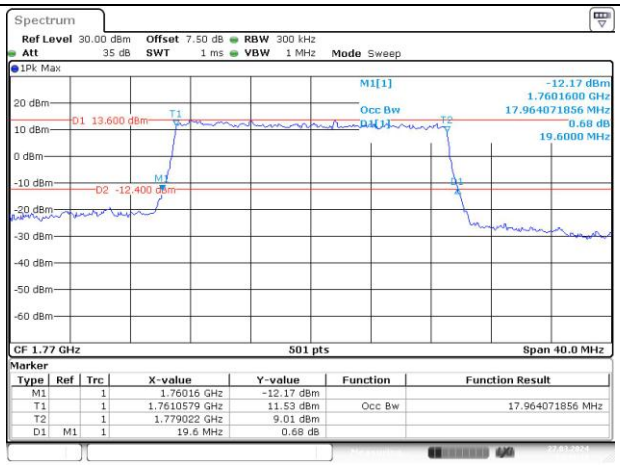
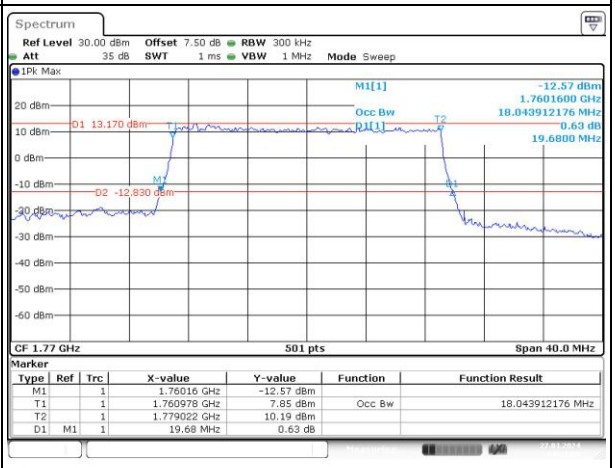
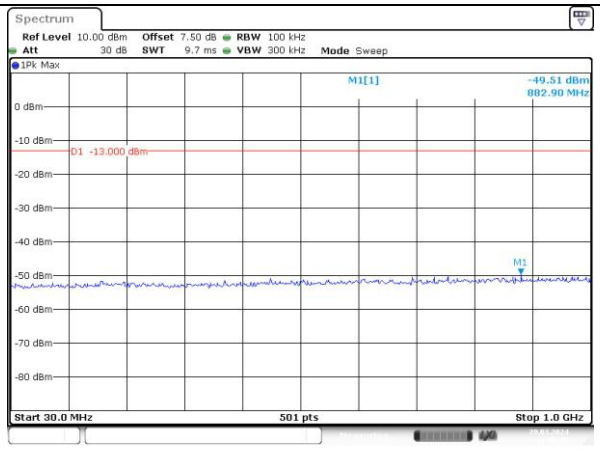
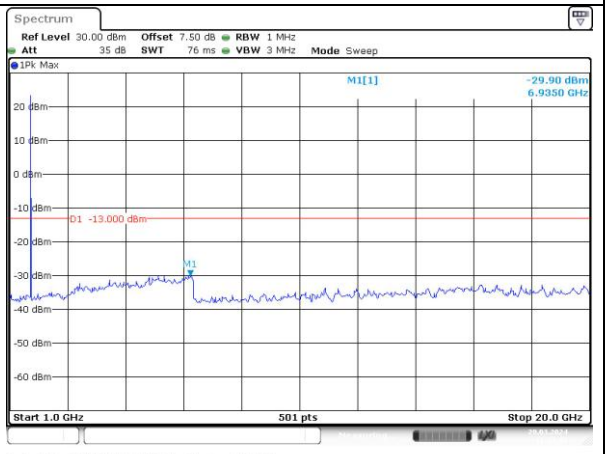
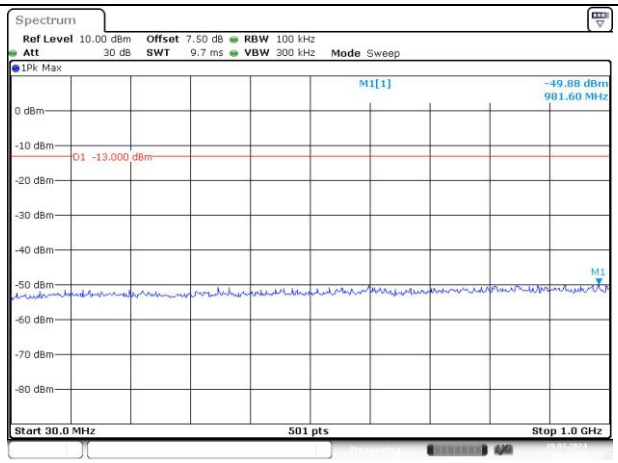
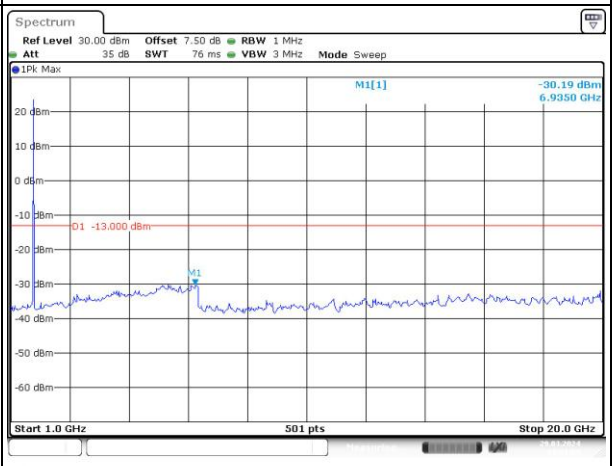
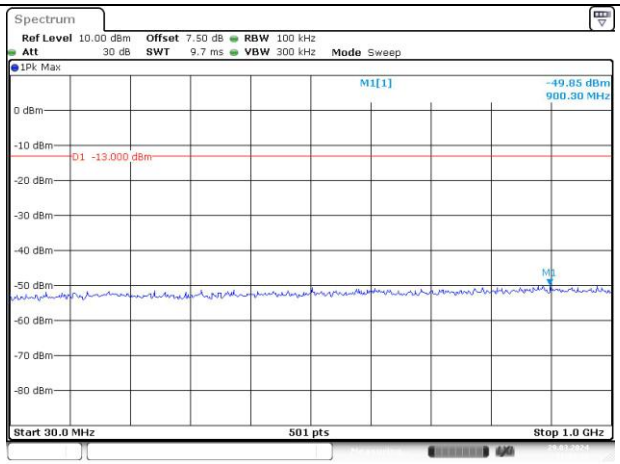
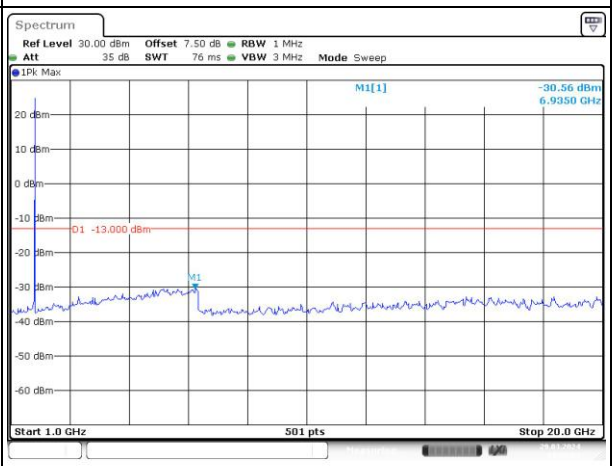
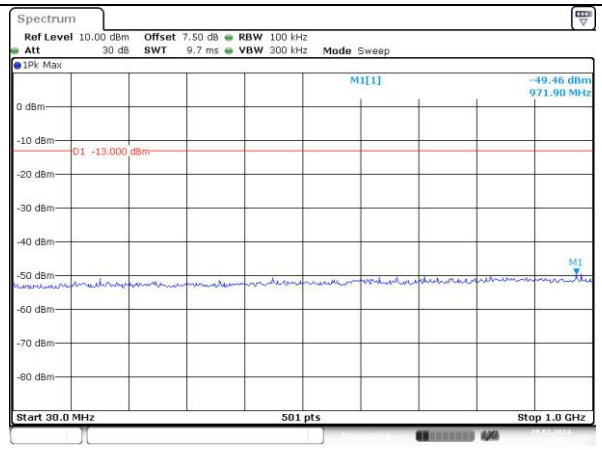
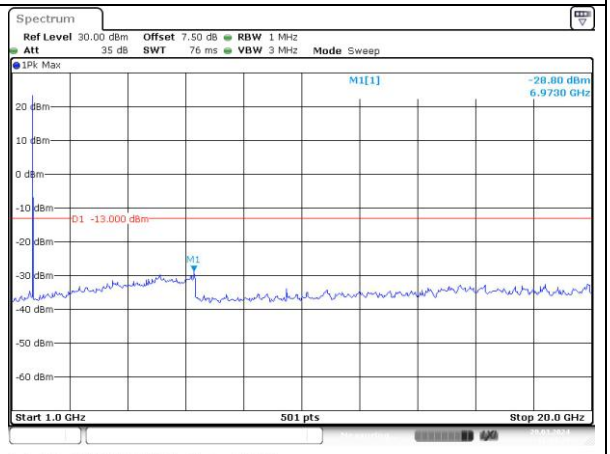
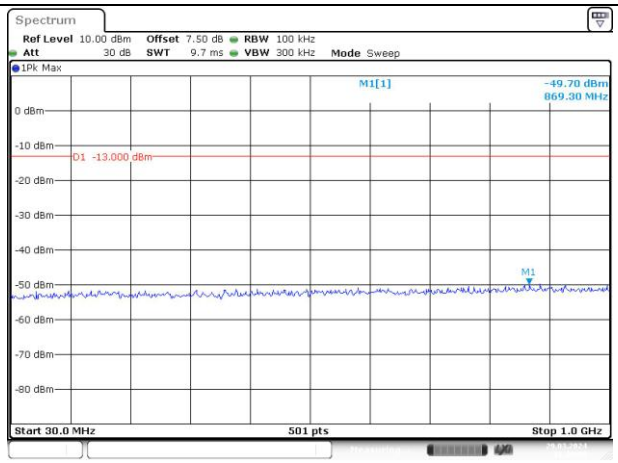
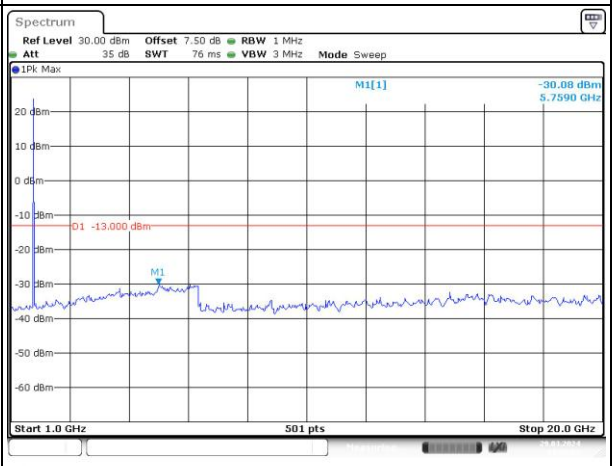
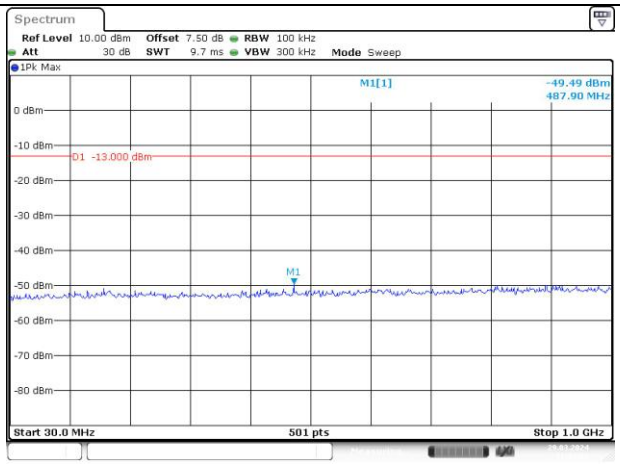
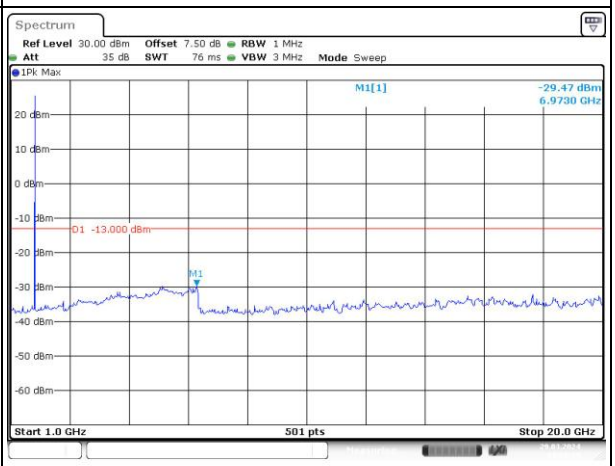
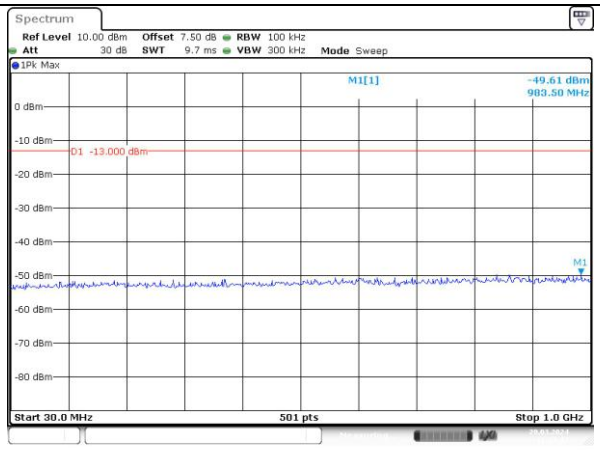
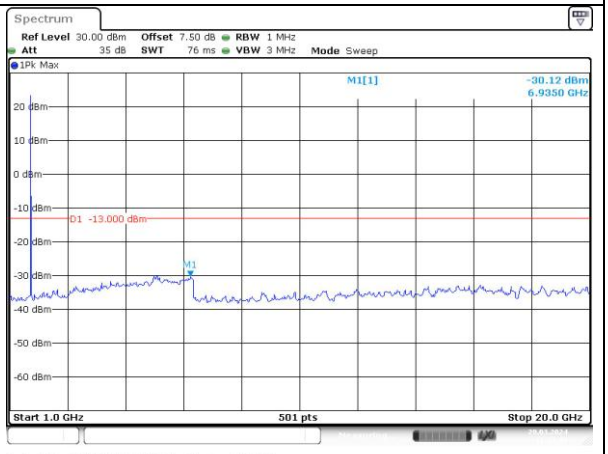
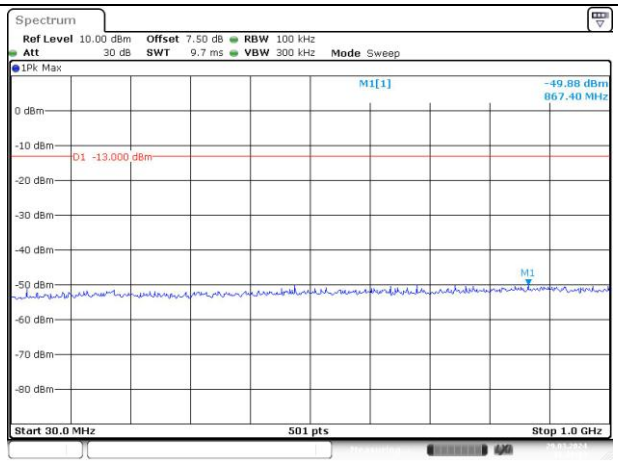
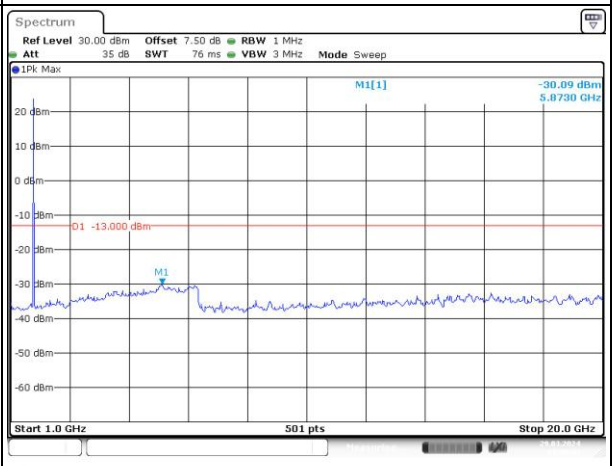
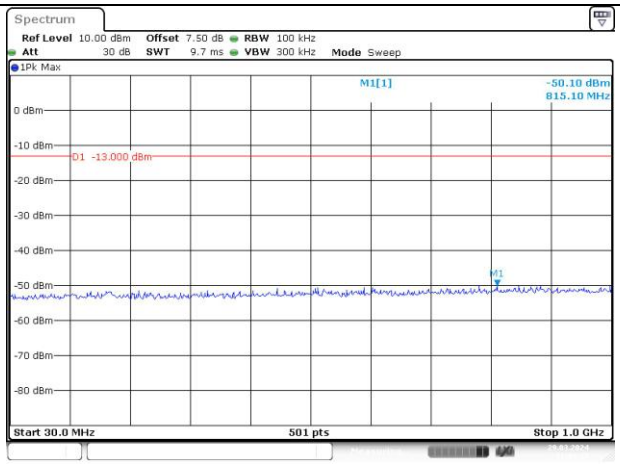
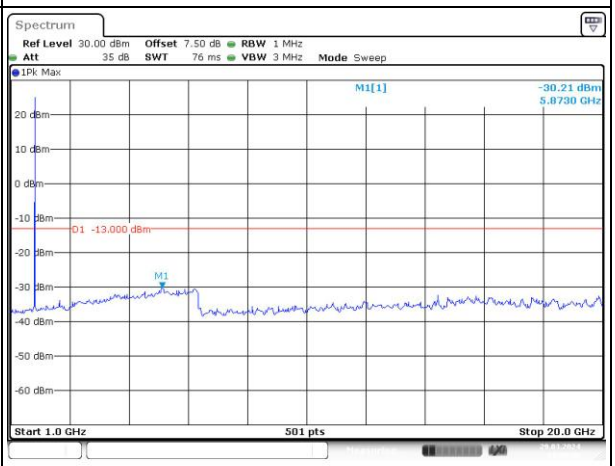
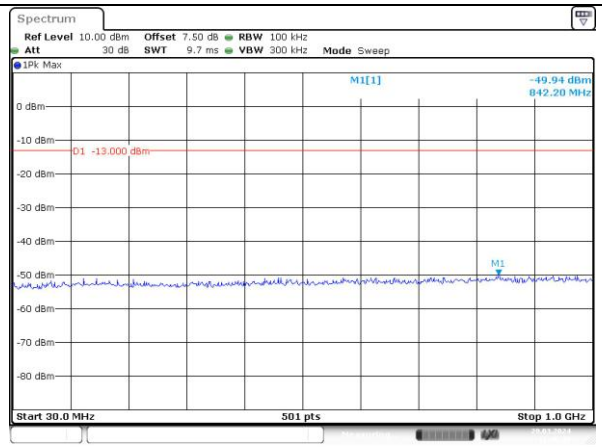
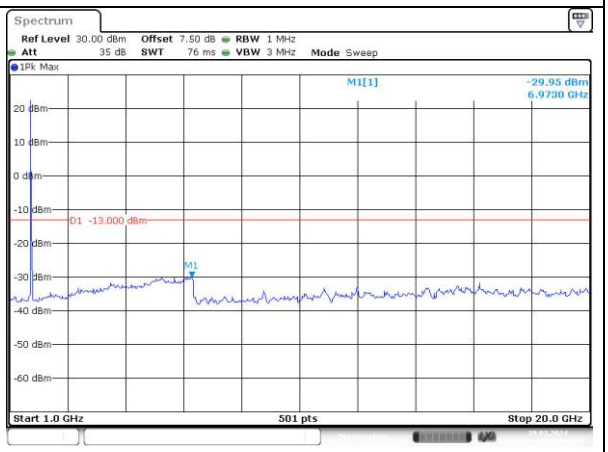
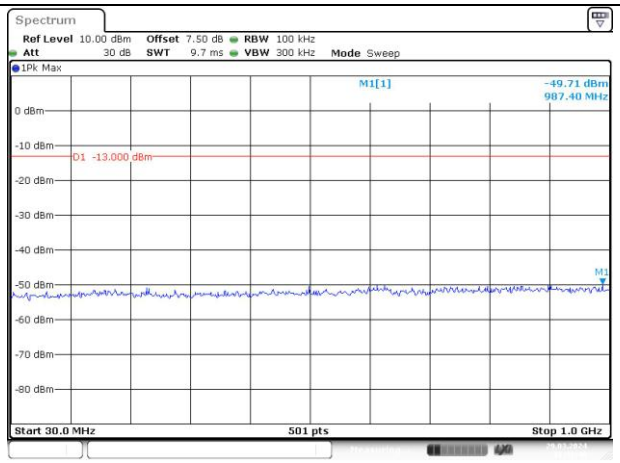
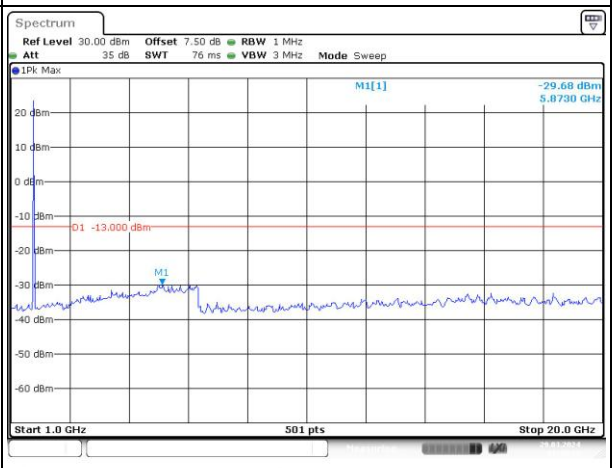
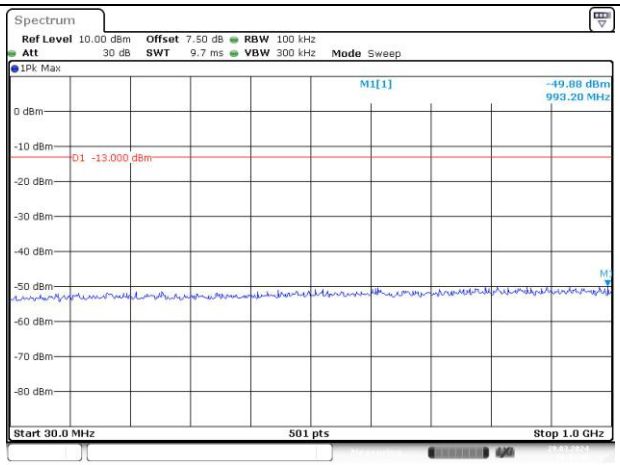
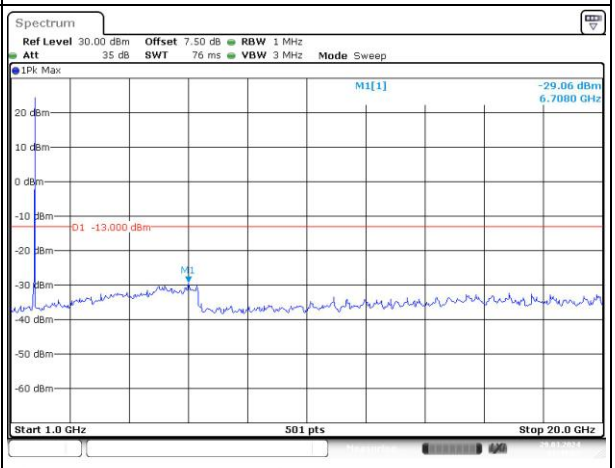
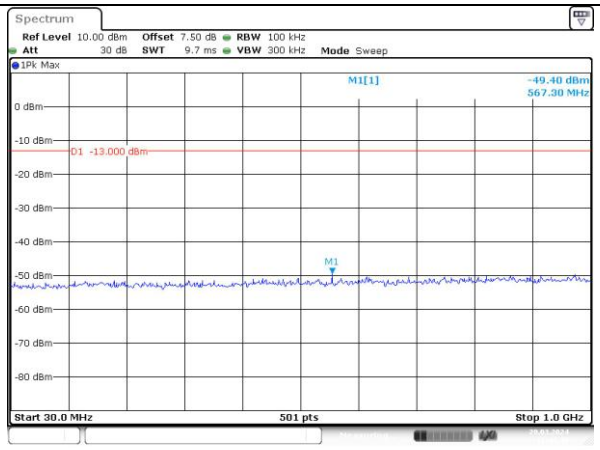
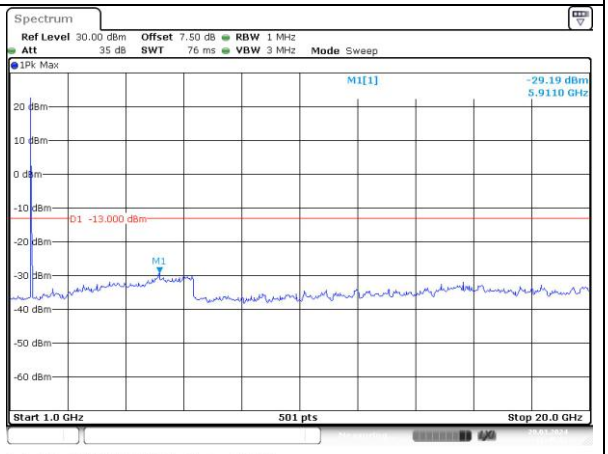
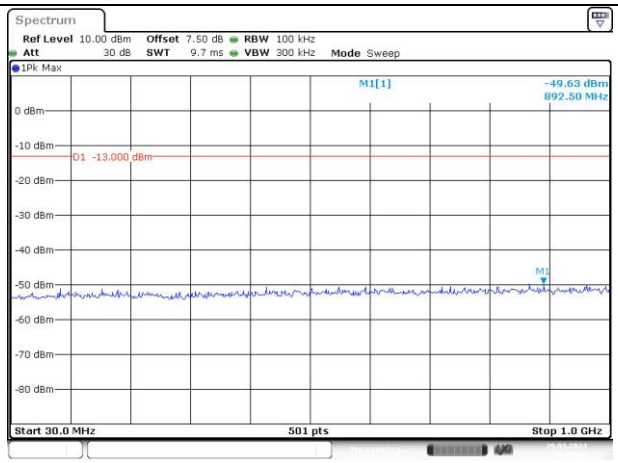
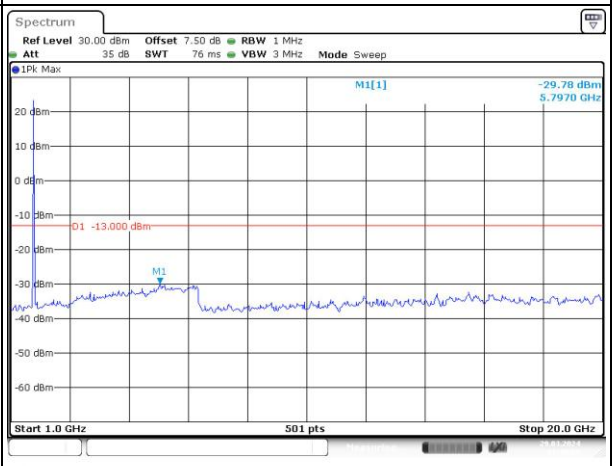
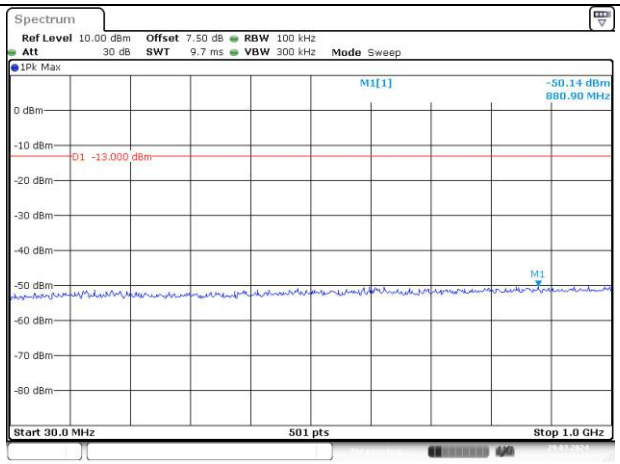
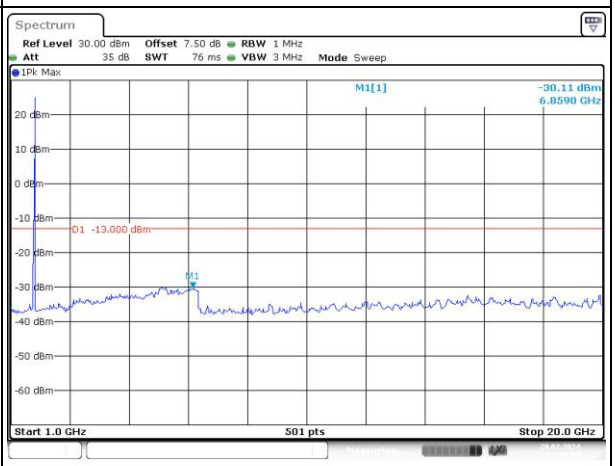
Occupied Bandwidth		
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

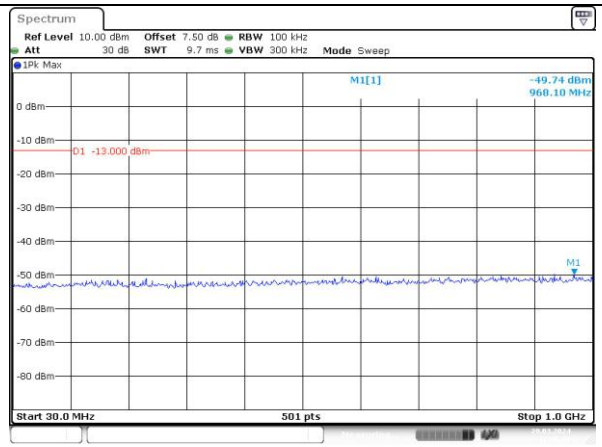
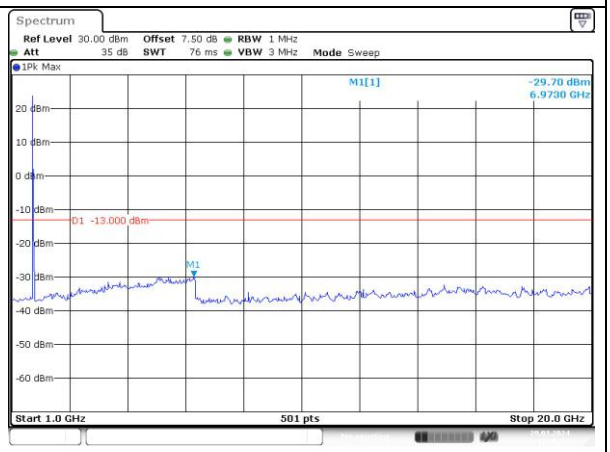
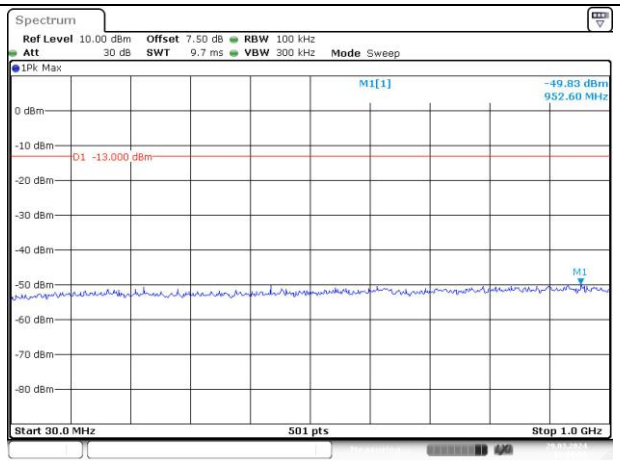
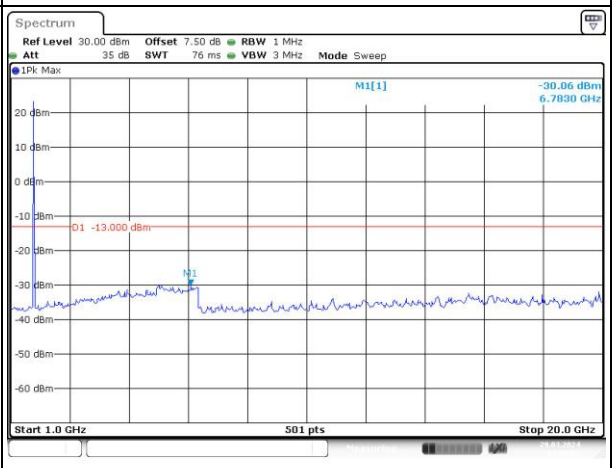
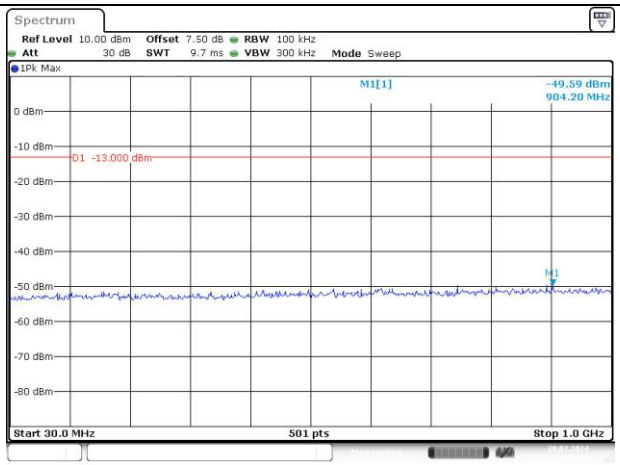
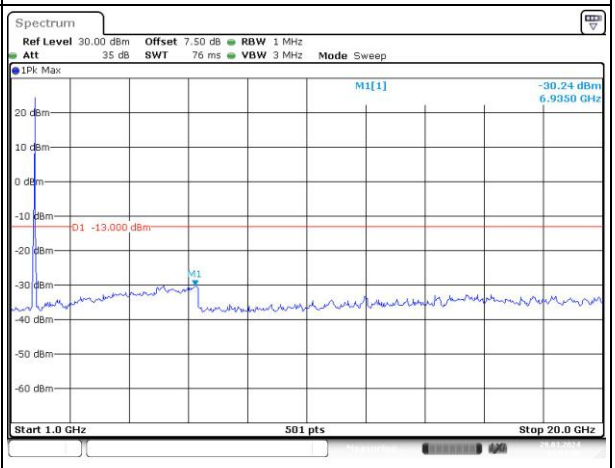
Spurious Emissions at Antenna Terminal		
Channel	**1.4MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

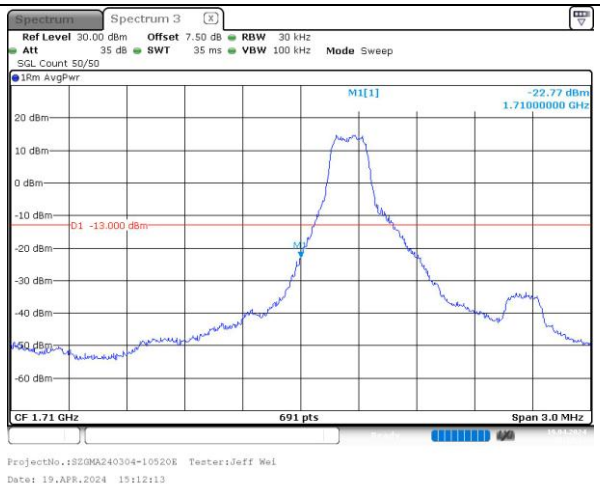
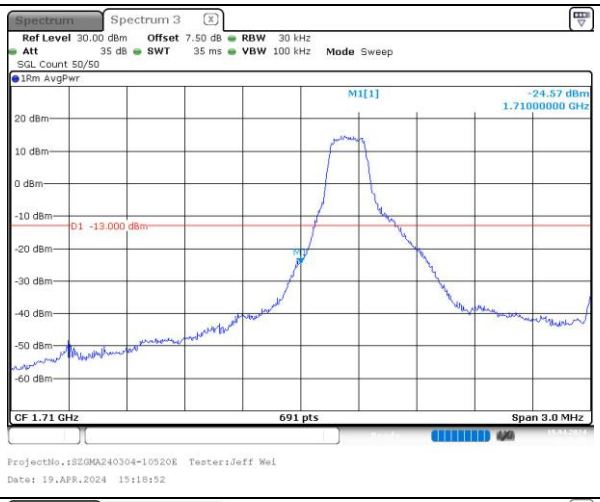
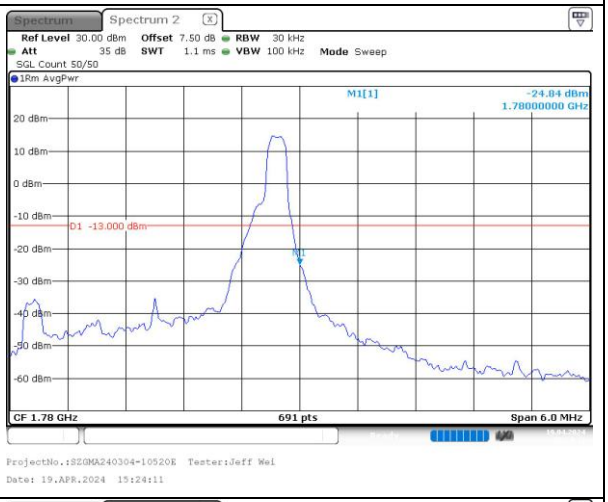
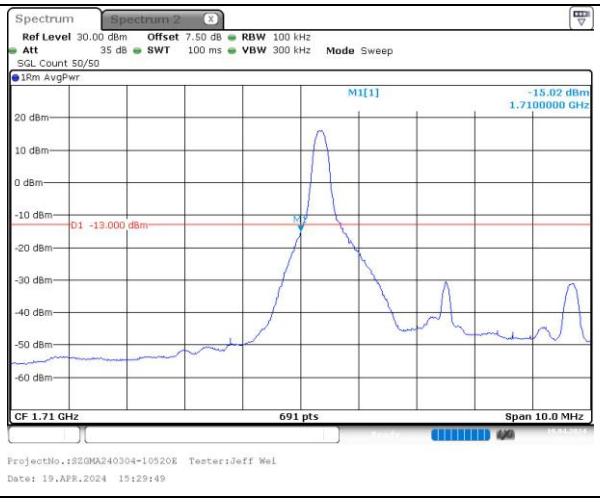
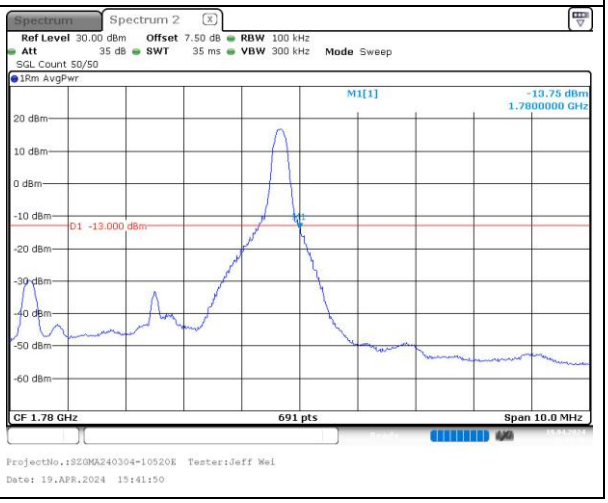
Spurious Emissions at Antenna Terminal		
Channel	**3MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

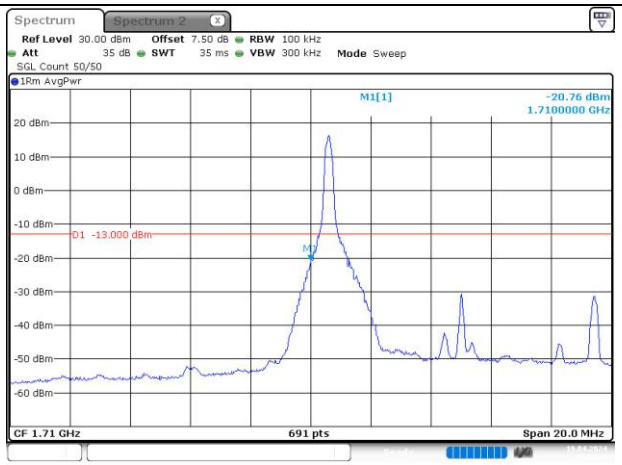
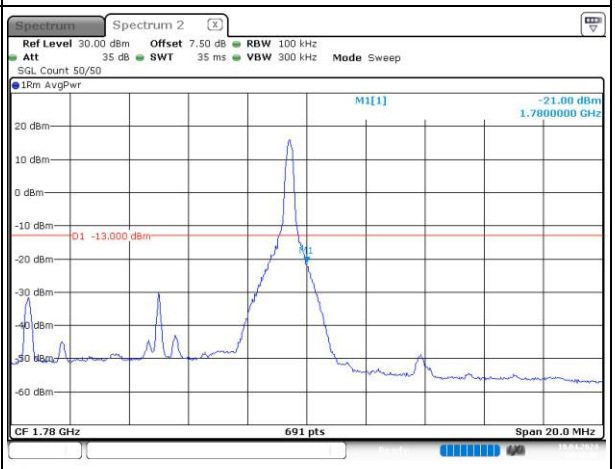
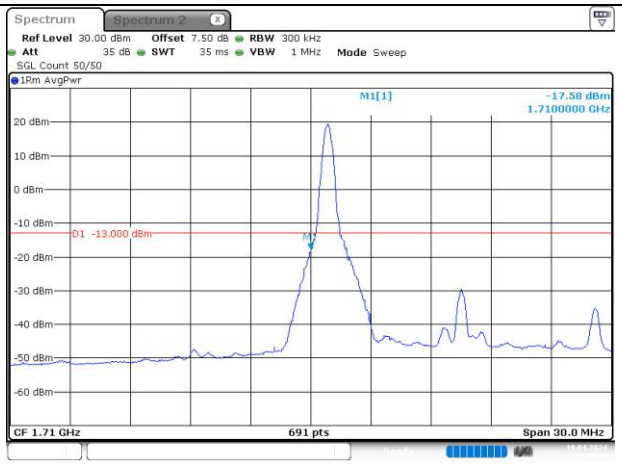
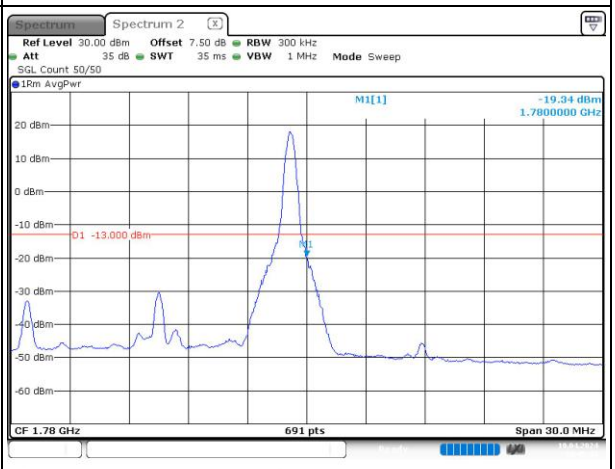
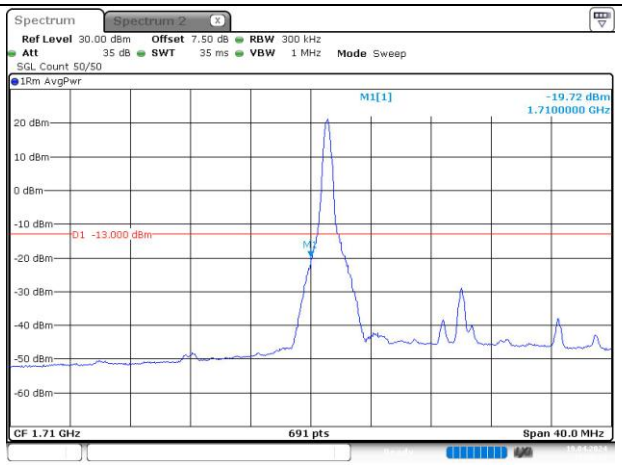
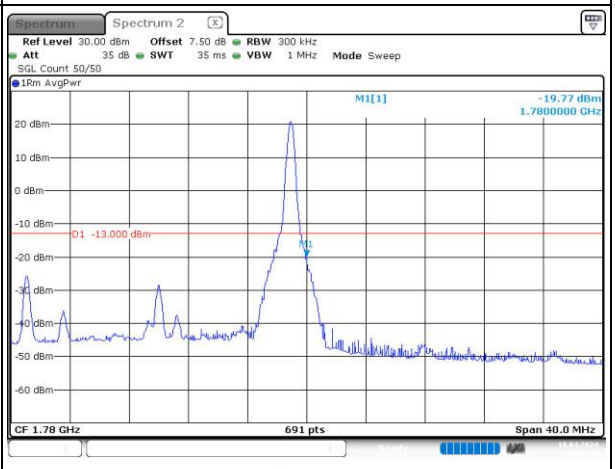
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

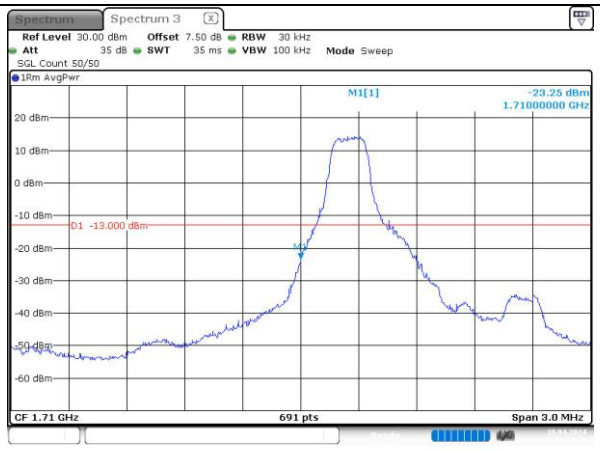
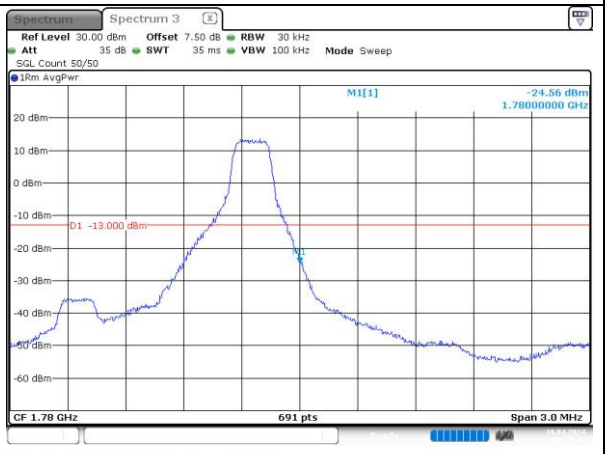
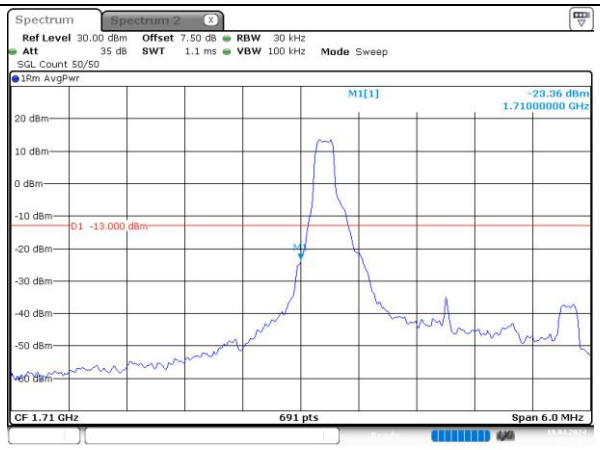
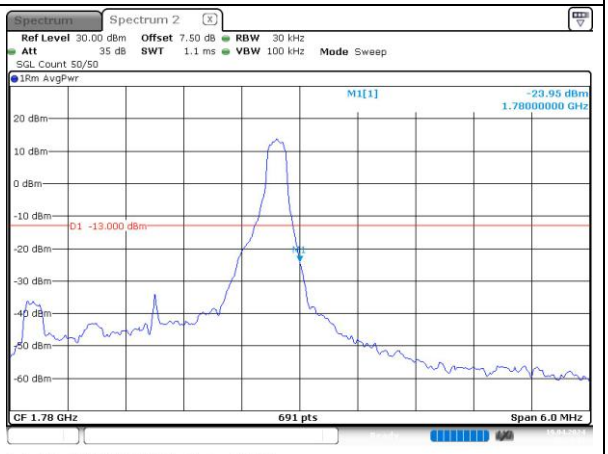
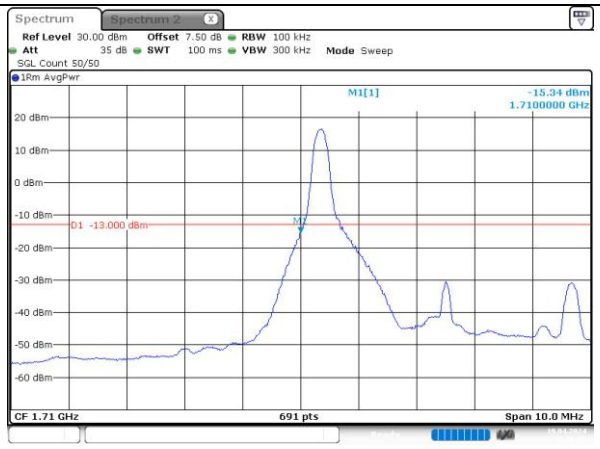
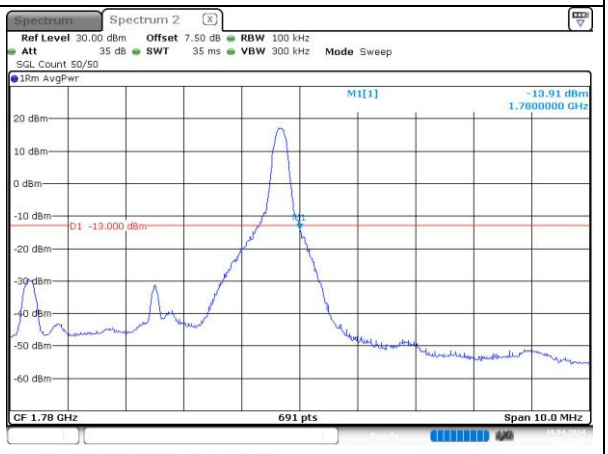
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

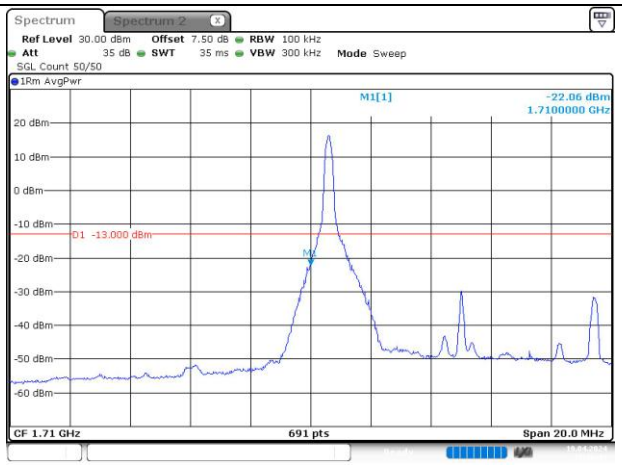
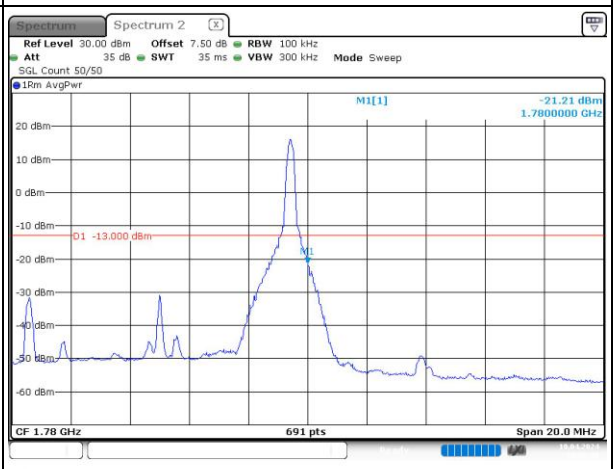
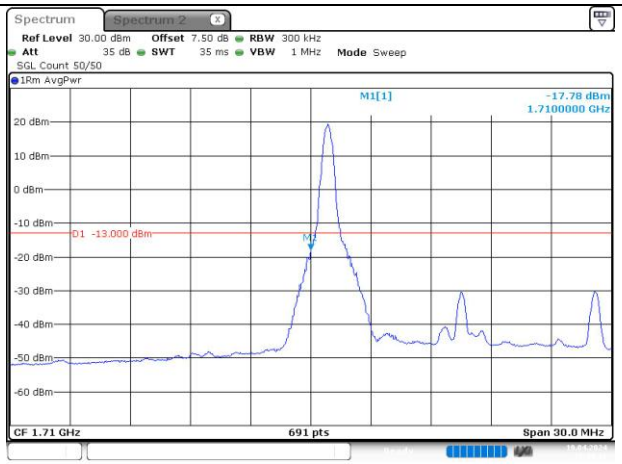
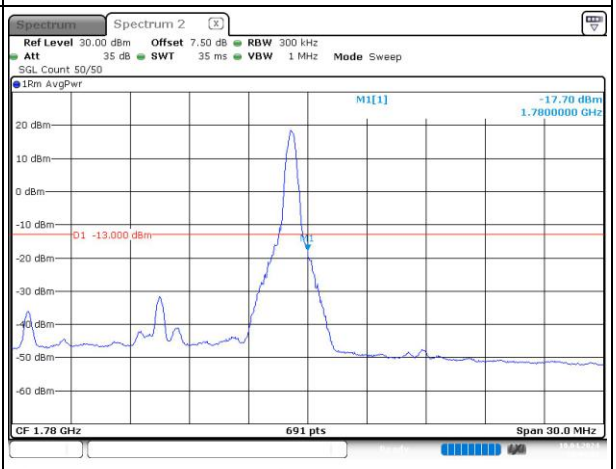
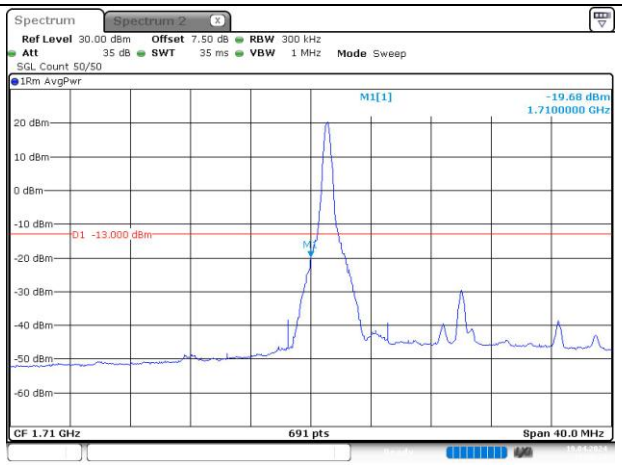
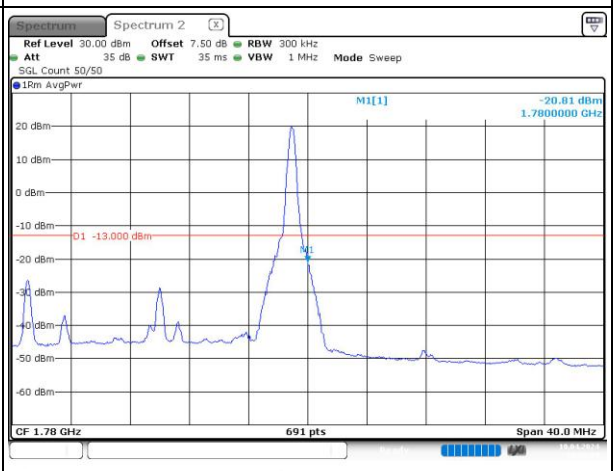
Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

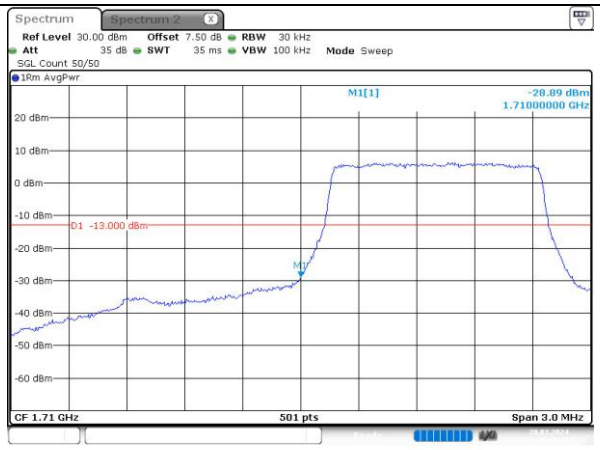
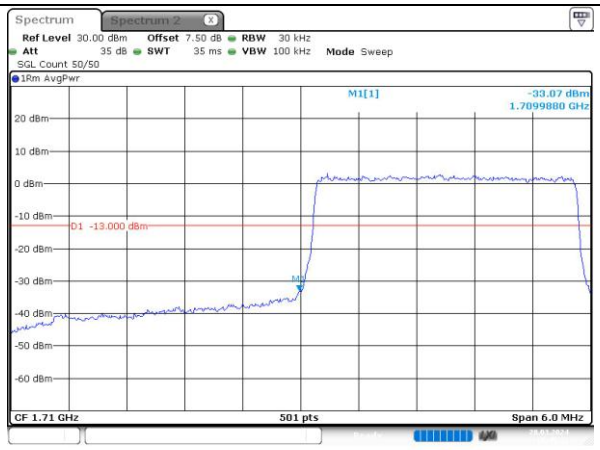
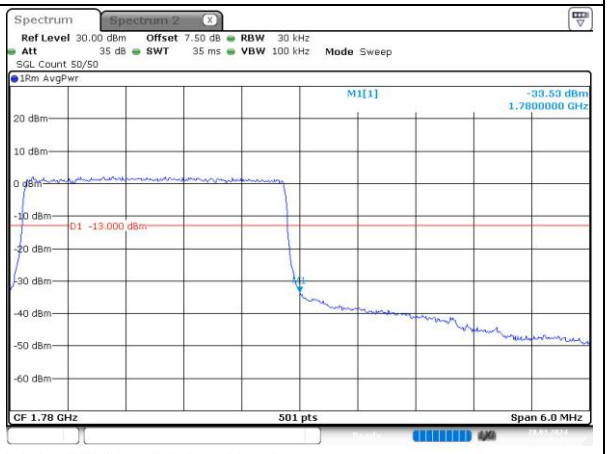
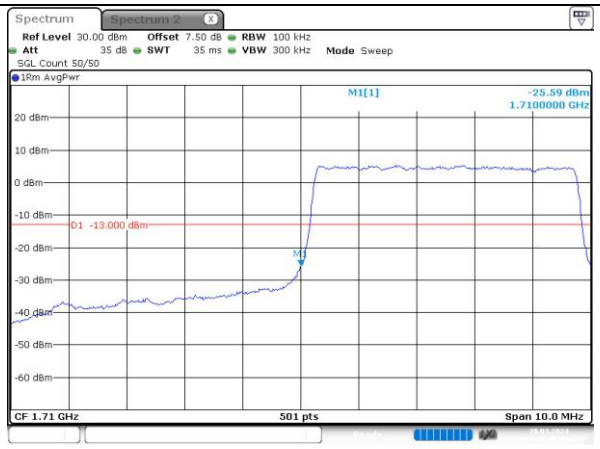
Spurious Emissions at Antenna Terminal		
Channel	**20MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

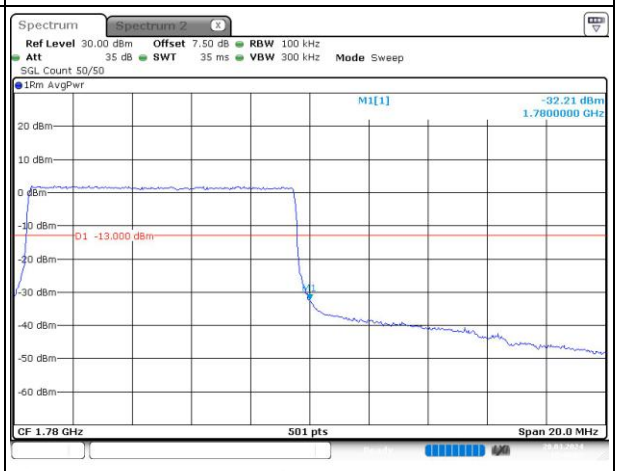
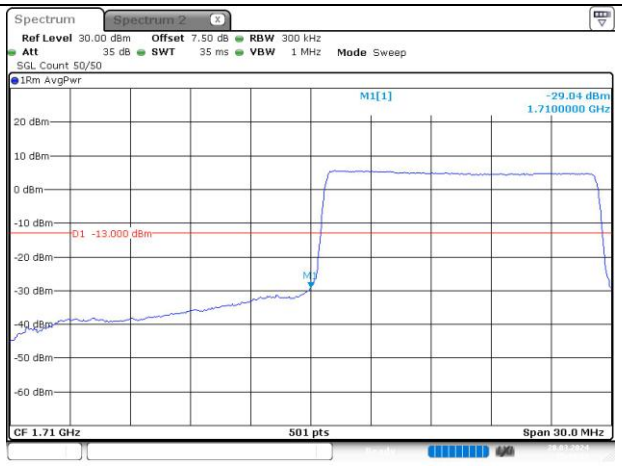
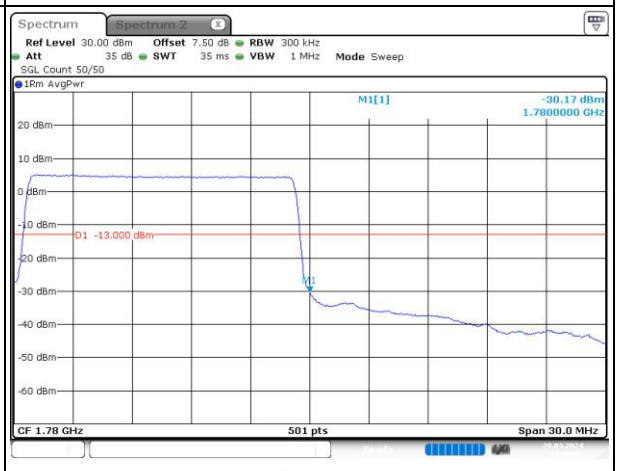
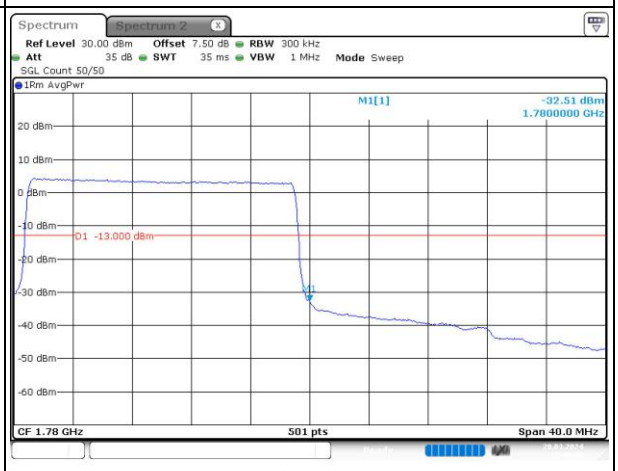
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
QPSK 1.4MHz		
QPSK 3MHz		
QPSK 5MHz		

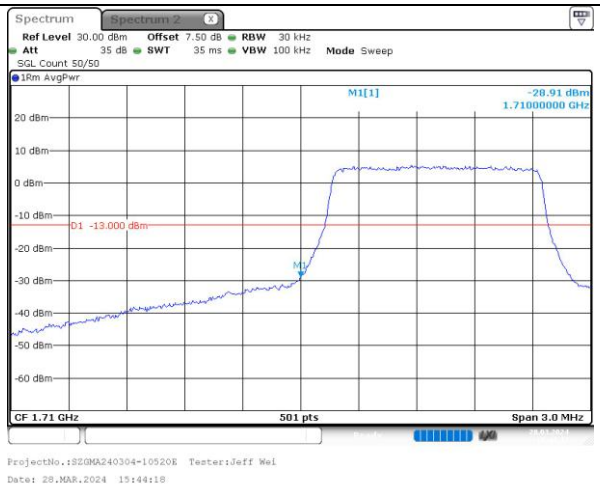
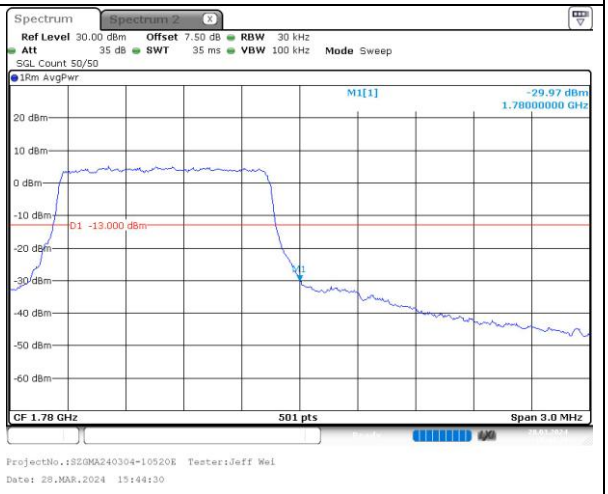
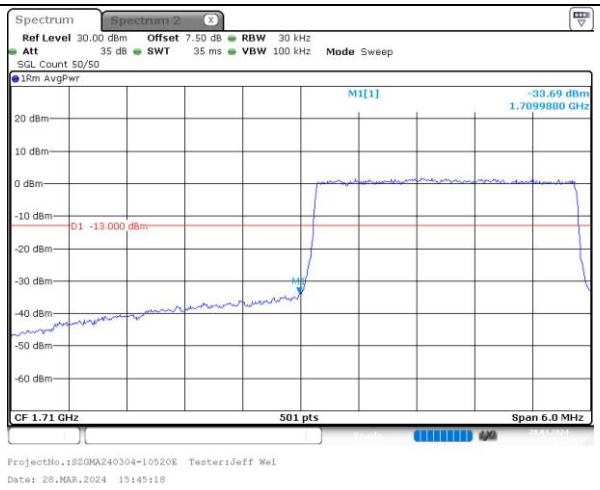
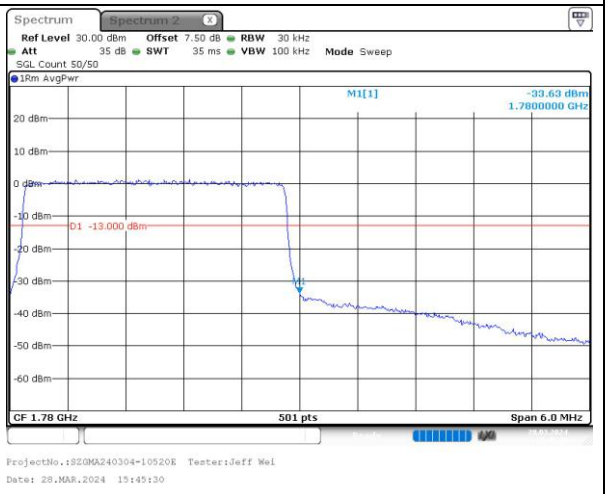
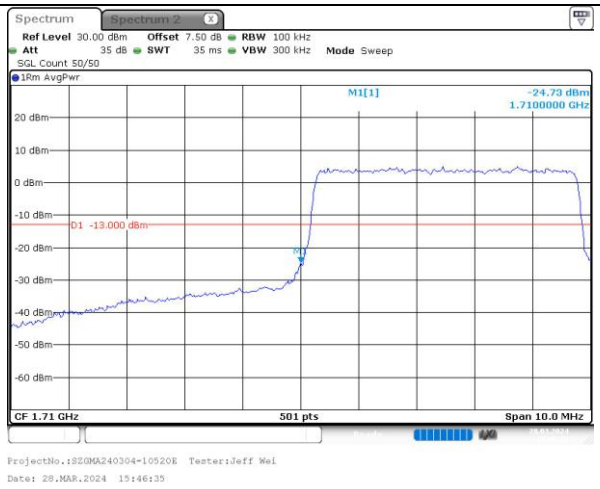
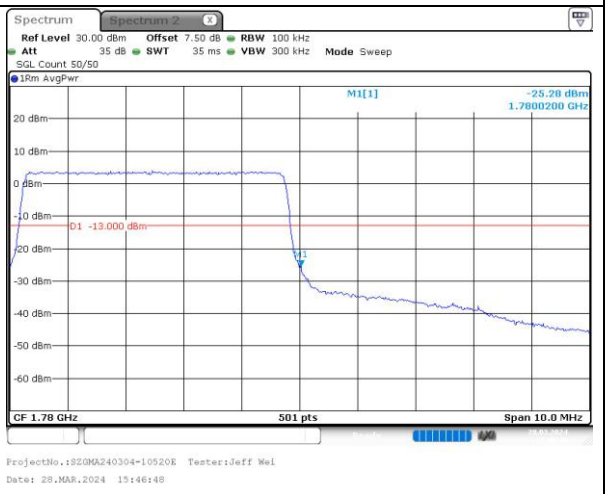
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
QPSK 10MHz		
QPSK 15MHz		
QPSK 20MHz		

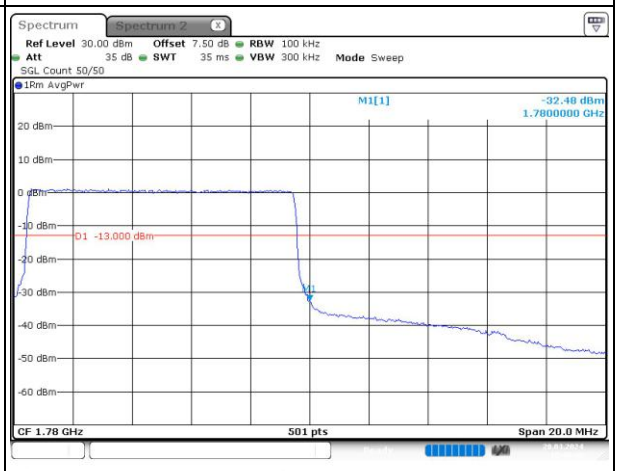
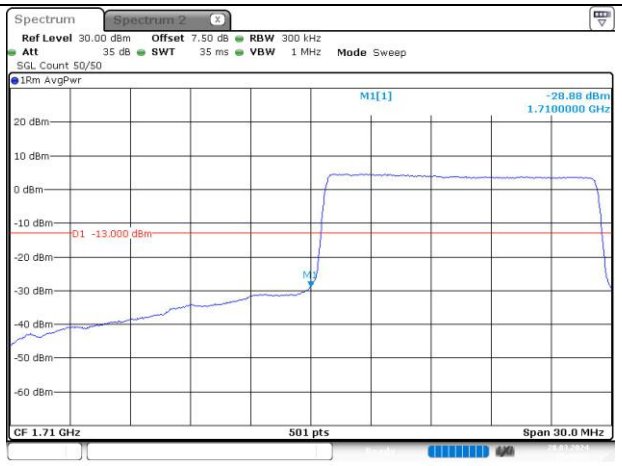
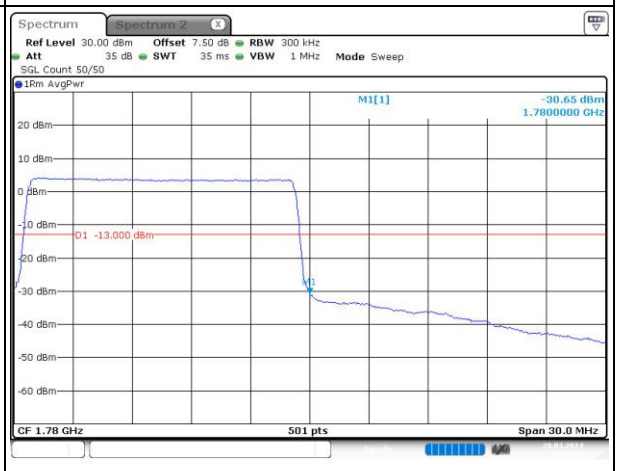
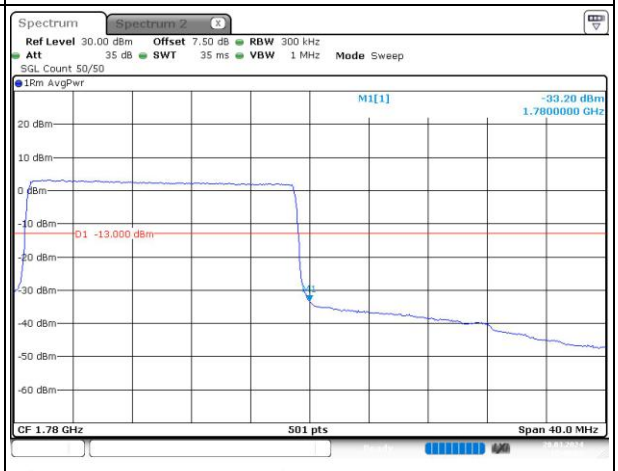
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
16QAM 1.4MHz		
16QAM 3MHz		
16QAM 5MHz		

Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
16QAM 10MHz		
16QAM 15MHz		
16QAM 20MHz		

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		
QPSK 15MHz		
QPSK 20MHz		

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		
16QAM 15MHz		
16QAM 20MHz		

5.15 Antenna Port Test Data and Results for LTE Band 71

Serial Number:	2I92-2	Test Date:	2024/3/27~2024/4/18
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jeff Wei	Test Result:	**Pass**

Environmental Conditions:			
Temperature: (℃)	24.7~27.2	49~72	100.2~101.2

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	UFA210A	94089550	2023/9/1	2024/8/31
Minl-Clrcuits	Coaxial Power Splitters & Combiner	ZFRSC-183-S+	SF448201614	2024/2/25	2025/2/24
R&S	Wideband Radio Communication Tester	CMW500	149216	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	665.5	680.5	695.5
10MHz	668	680.5	693
15MHz	670.5	680.5	690.5
20MHz	673	680.5	688

Test Data:

FCC §2.1046; § 27.50(c) (10)

RF Output Power:

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	23.82	23.59	23.49	18.31	34.77
	RB1#13	23.84	23.51	23.6		
	RB1#24	23.76	23.23	23.35		
	RB15#0	22.79	22.44	22.29		
	RB15#10	22.8	22.22	22.32		
	RB25#0	22.73	22.51	22.38		
5MHz 16QAM	RB1#0	22.38	22.28	22.5	17.11	34.77
	RB1#13	22.45	22.53	22.64		
	RB1#24	22.37	22.1	22.54		
	RB15#0	21.39	21.59	21.43		
	RB15#10	21.6	21.53	21.6		
	RB25#0	21.51	21.87	21.65		
10MHz QPSK	RB1#0	23.85	23.71	23.34	18.46	34.77
	RB1#25	23.99	23.67	23.46		
	RB1#49	23.88	23.25	23.3		
	RB25#0	22.94	22.85	22.3		
	RB25#25	22.94	22.47	22.33		
	RB50#0	22.97	22.89	22.38		
10MHz 16QAM	RB1#0	22.85	23.3	22.42	17.77	34.77
	RB1#25	22.94	23.12	22.59		
	RB1#49	22.91	22.87	22.5		
	RB25#0	21.99	22.04	21.38		
	RB25#25	22.01	21.52	21.45		
	RB50#0	21.87	21.97	21.6		
15MHz QPSK	RB1#0	23.81	23.66	23.18	18.33	34.77
	RB1#38	23.86	23.69	23.3		
	RB1#74	23.72	23.21	23.2		
	RB36#0	22.96	22.65	22.31		
	RB36#39	23.02	22.48	22.38		
	RB75#0	22.98	22.83	22.34		
15MHz 16QAM	RB1#0	23.11	22.82	22.3	17.71	34.77
	RB1#38	23.24	22.92	22.42		
	RB1#74	23.07	22.77	22.38		
	RB36#0	21.99	21.63	21.34		
	RB36#39	22.02	21.65	21.45		
	RB75#0	21.95	21.81	21.44		
20MHz QPSK	RB1#0	23.6	23.23	23.04	18.3	34.77
	RB1#50	23.83	23.45	23.51		
	RB1#99	23.61	23.07	23.11		

	RB50#0	22.86	22.46	22.45		
	RB50#50	22.71	22.34	22.42		
	RB100#0	22.76	22.47	22.44		
20MHz 16QAM	RB1#0	23.1	22.41	22.25	18.01	34.77
	RB1#50	23.54	22.7	22.72		
	RB1#99	22.88	22.36	22.29		
	RB50#0	21.87	21.28	21.54		
	RB50#50	21.8	21.46	21.48		
	RB100#0	21.79	21.35	21.54		
Note: ERP= Conducted Power(dBm) - L_C(dB) + G_T(dBd) G_T(dBd)=G_T(dBi)-2.15						
Note: ERP=Conducted Power(dBm) - Cable loss(dB) + Antenna Gain(dBd)						
					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	4.43	5.25	8.46	13
	RB100#0	4.23	4.41	4.99	13
20MHz 16QAM	RB1#0	5.13	5.71	8.49	13
	RB100#0	5.88	5.86	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	4.551	4.511	5.14	5.2	5.2
5MHz 16QAM	4.531	4.531	4.531	5.16	5.18	5.18
10MHz QPSK	8.982	8.982	8.942	9.88	9.92	9.92
10MHz 16QAM	8.982	8.982	8.942	9.84	9.88	9.76
15MHz QPSK	13.473	13.533	13.593	15.18	15.24	15.3
15MHz 16QAM	13.533	13.533	13.533	15.12	15.06	15.12
20MHz QPSK	17.884	17.964	18.044	19.52	19.84	19.68
20MHz 16QAM	17.964	17.964	17.964	19.76	19.76	19.76
Note: The test plots please refer to the Plots of Occupied Bandwidth						

FCC §2.1051, §27.53:Spurious Emissions at Antenna Terminal

Result:	**Pass, Test was performed at RB1#0, please refer to the test plots of Spurious Emissions at Antenna Terminal.**

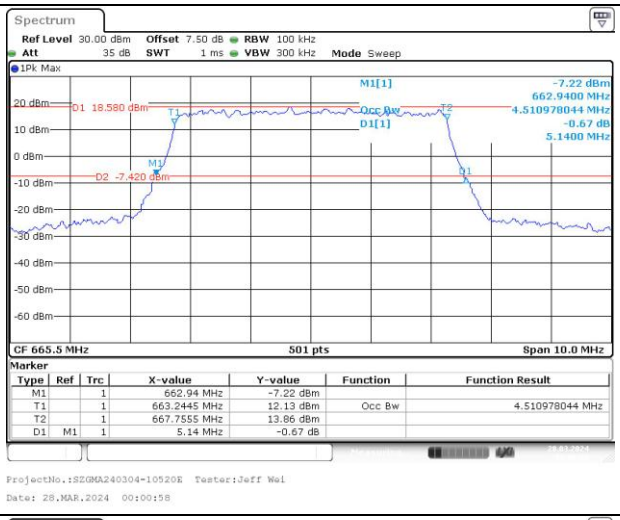
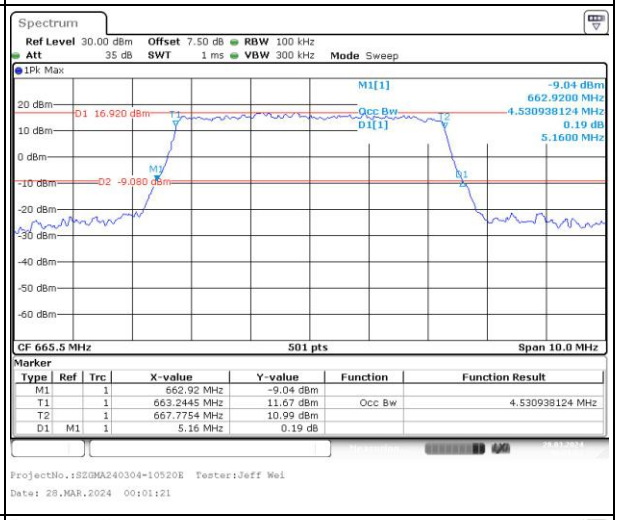
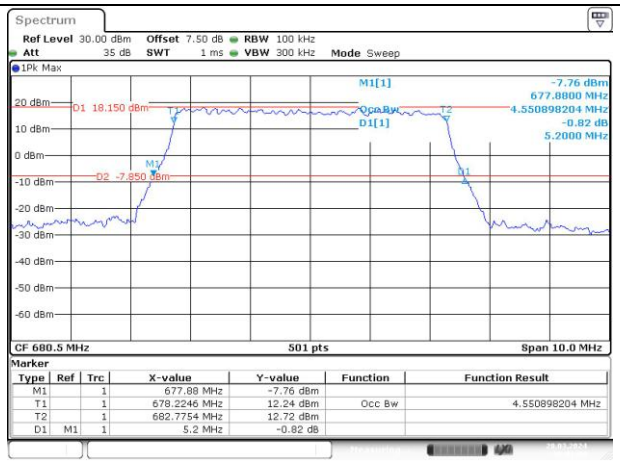
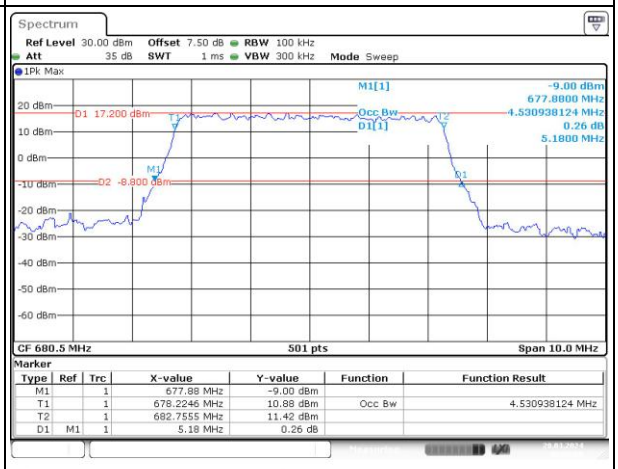
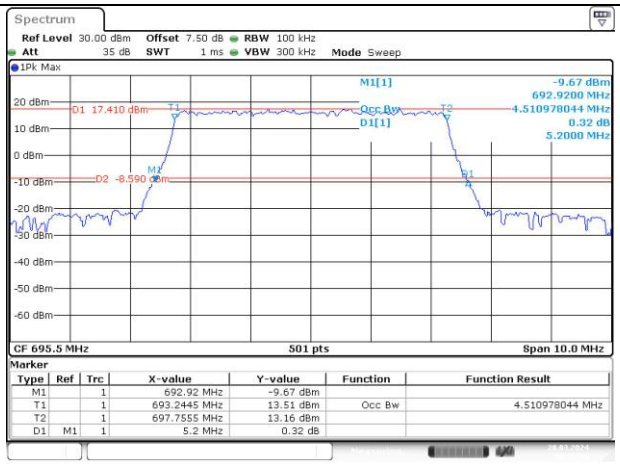
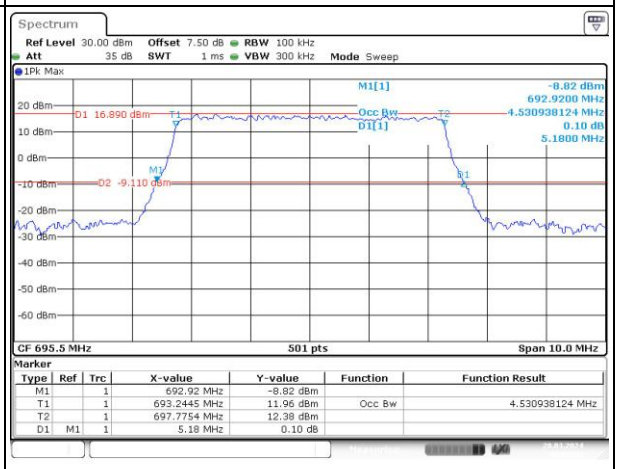
FCC §2.1051, §27.53:Out of band emission, Band Edge

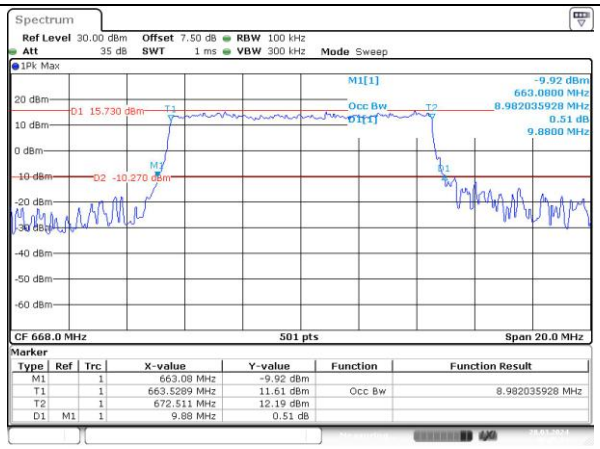
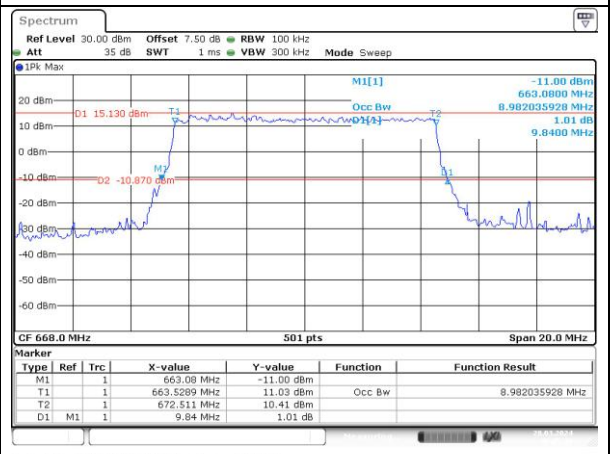
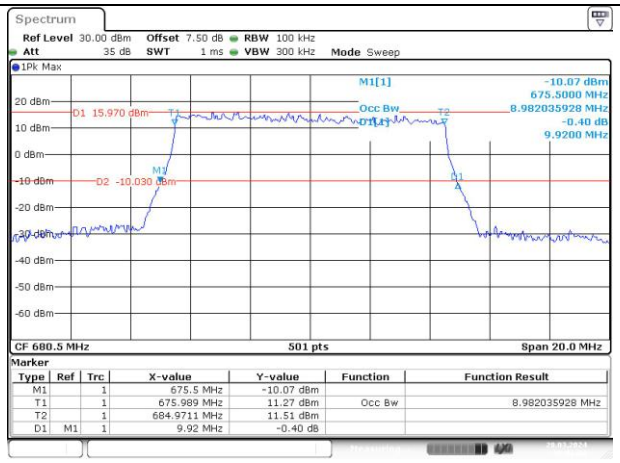
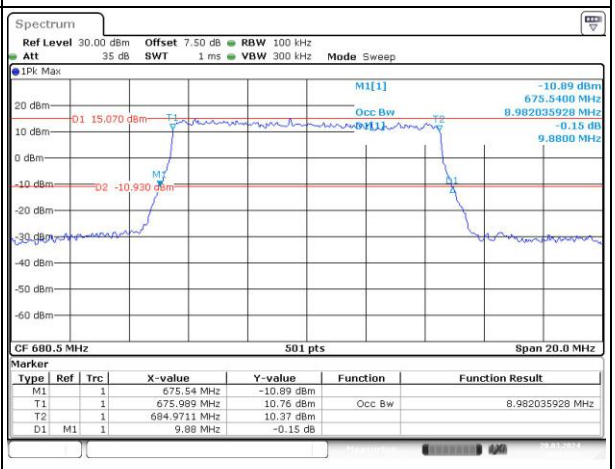
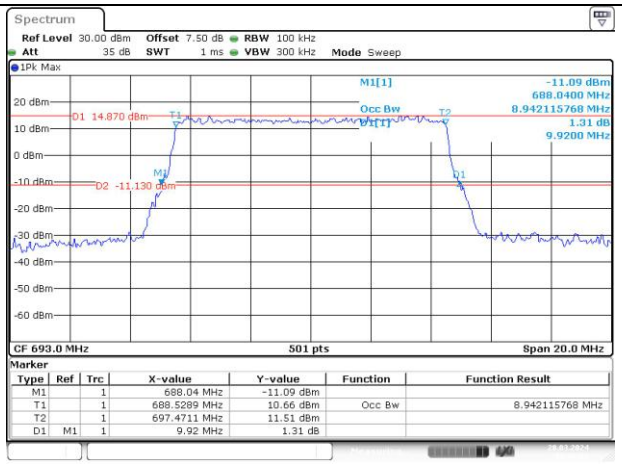
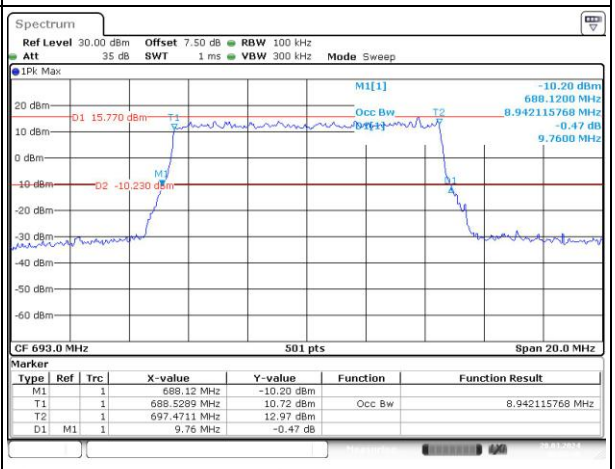
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

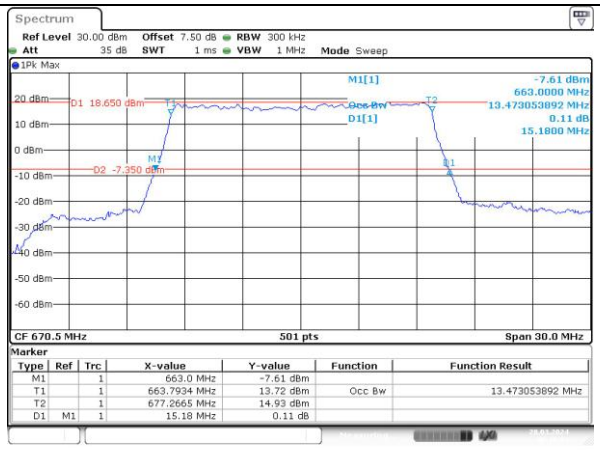
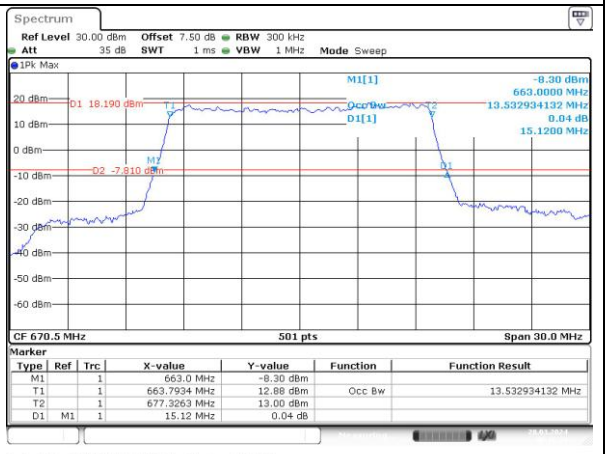
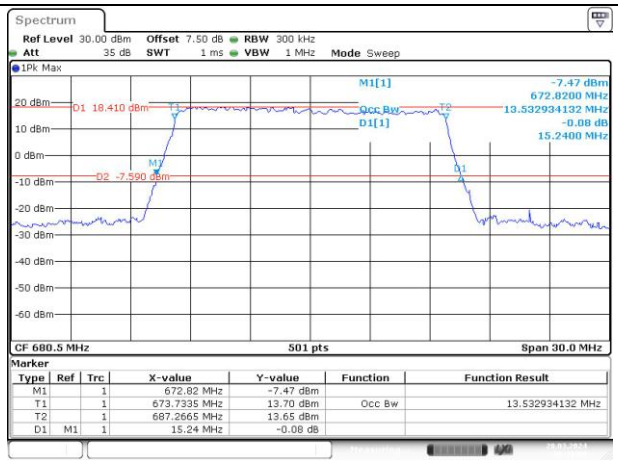
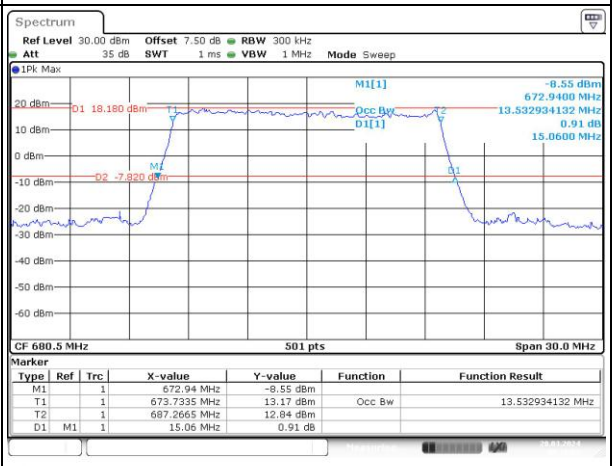
FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	664.028	663.00	697.013	698.00
	-20	3.85	664.034	663.00	697.004	698.00
	-10	3.85	664.037	663.00	696.995	698.00
	0	3.85	664.049	663.00	696.998	698.00
	10	3.85	664.046	663.00	697.016	698.00
	20	3.85	664.058	663.00	697.022	698.00
	30	3.85	664.082	663.00	697.049	698.00
	40	3.85	664.061	663.00	697.034	698.00
	50	3.85	664.076	663.00	697.049	698.00
Frequency Stability vs. Voltage	20	3.6	664.079	663.00	697.046	698.00
	20	4.4	664.076	663.00	697.025	698.00
					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	3.85	664.031	663.00	697.010	698.00
	-20	3.85	664.037	663.00	696.995	698.00
	-10	3.85	664.043	663.00	697.001	698.00
	0	3.85	664.037	663.00	696.998	698.00
	10	3.85	664.040	663.00	697.007	698.00
	20	3.85	664.058	663.00	697.022	698.00
	30	3.85	664.079	663.00	697.049	698.00
	40	3.85	664.076	663.00	697.031	698.00
	50	3.85	664.064	663.00	697.049	698.00
Frequency Stability vs. Voltage	20	3.6	664.085	663.00	697.034	698.00
	20	4.4	664.061	663.00	697.049	698.00
					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