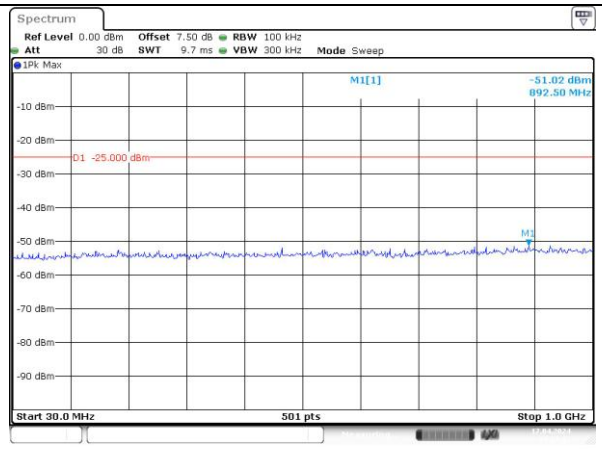
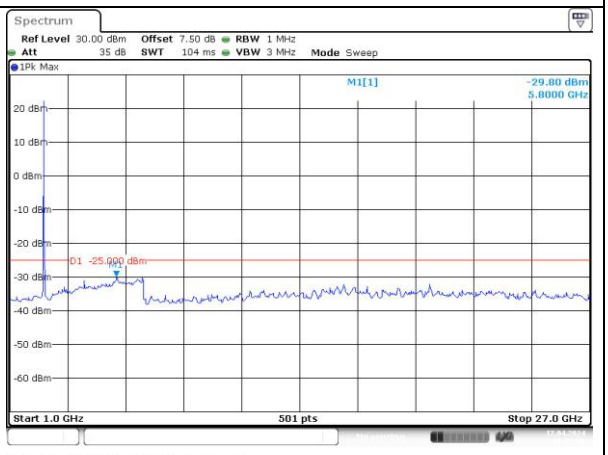
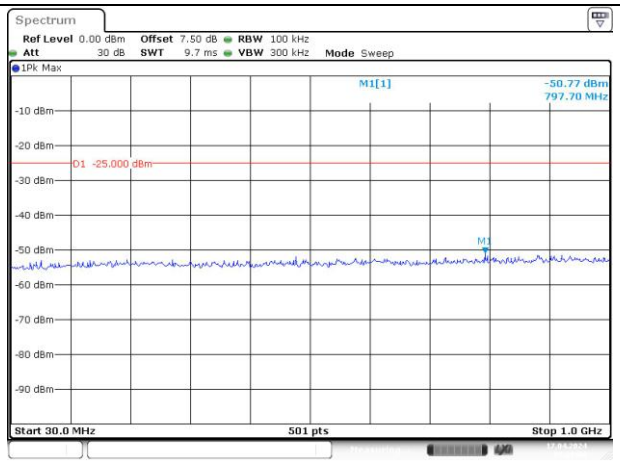
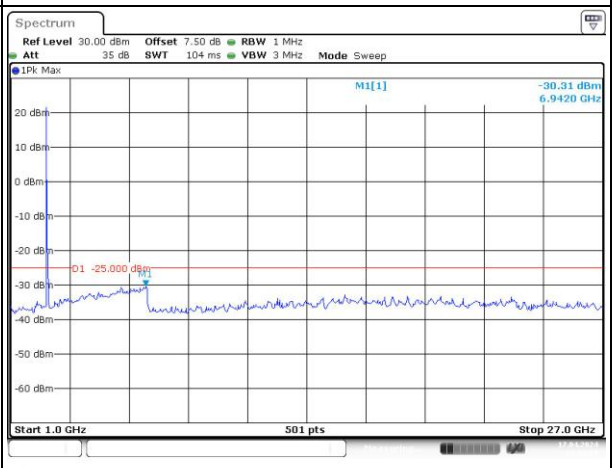
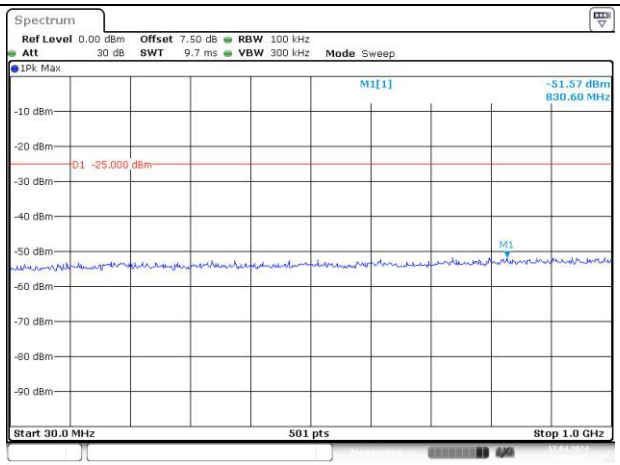
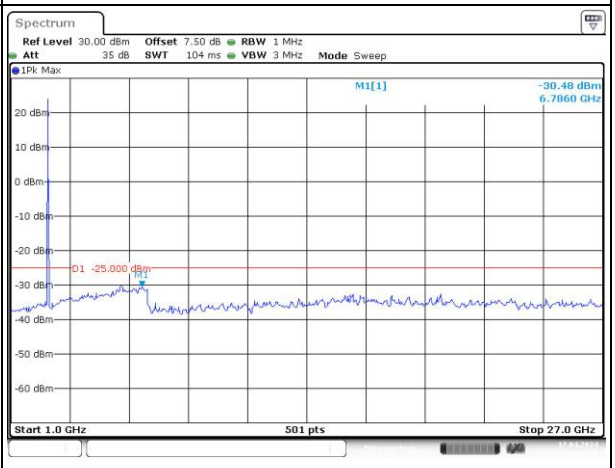
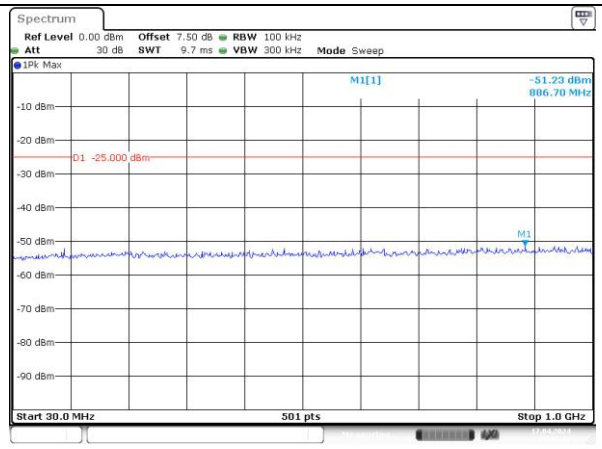
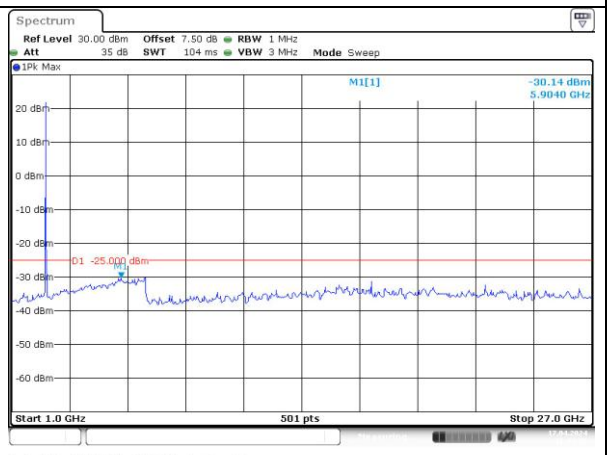
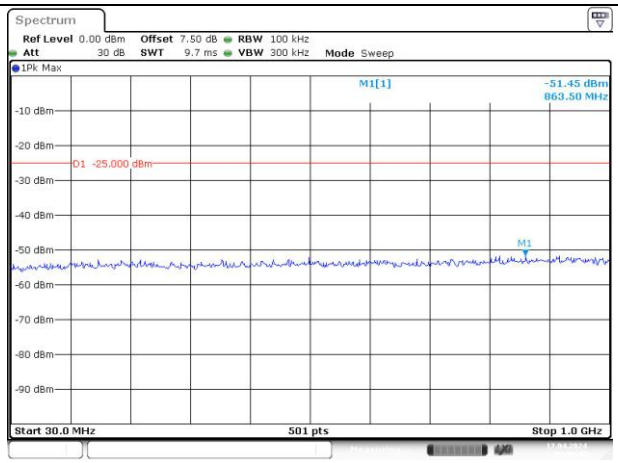
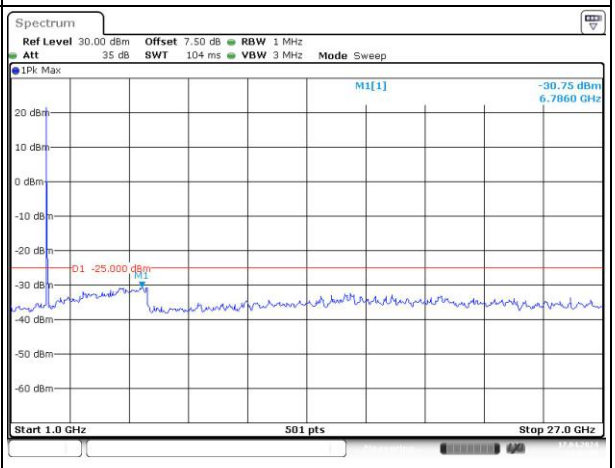
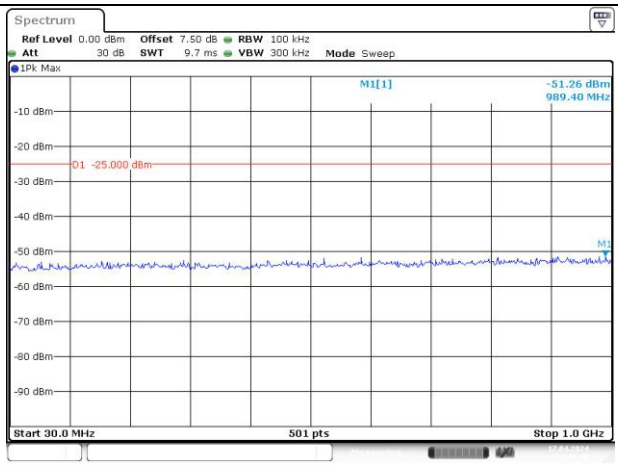
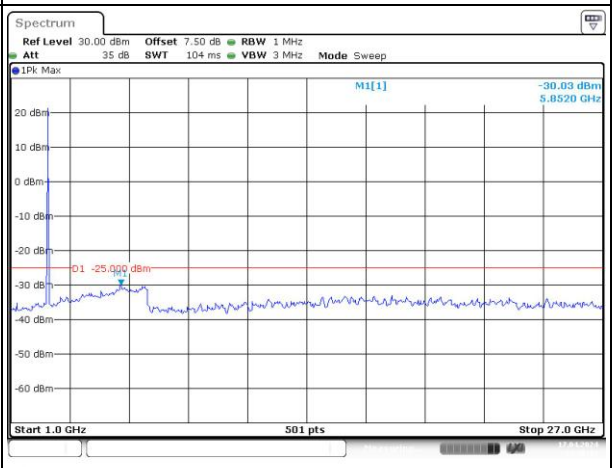
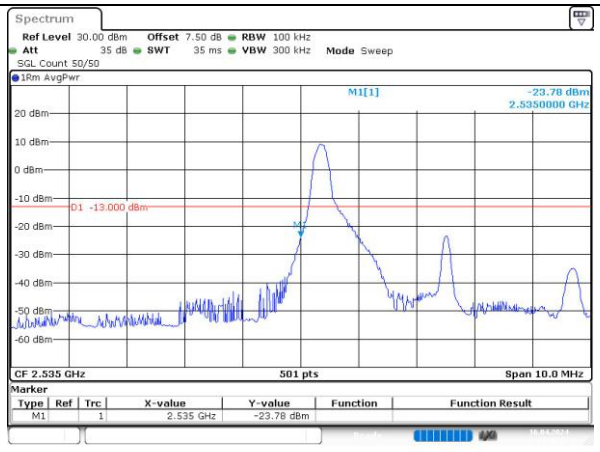
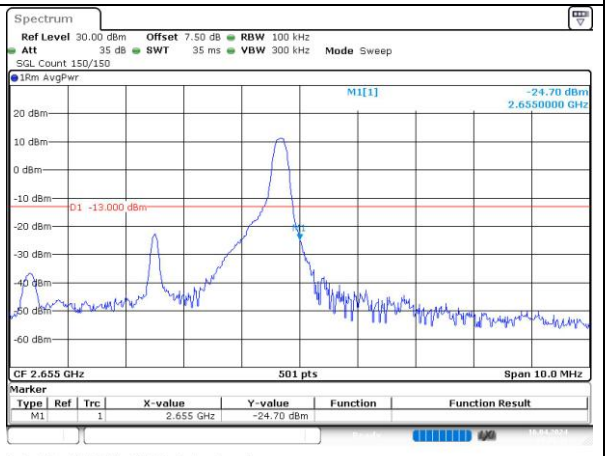
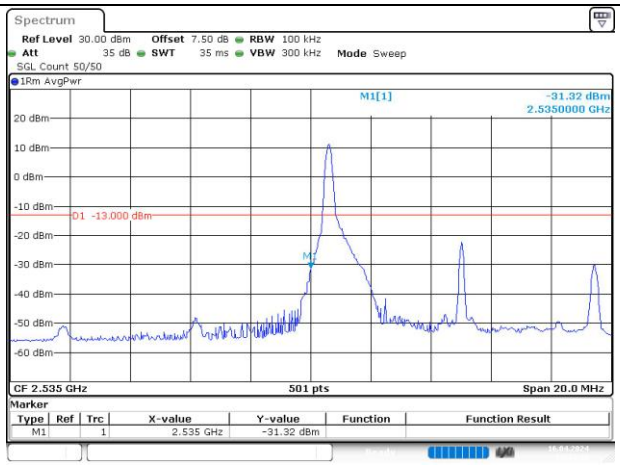
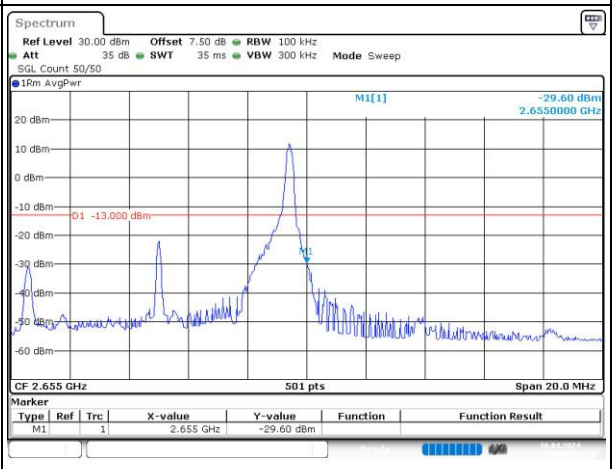
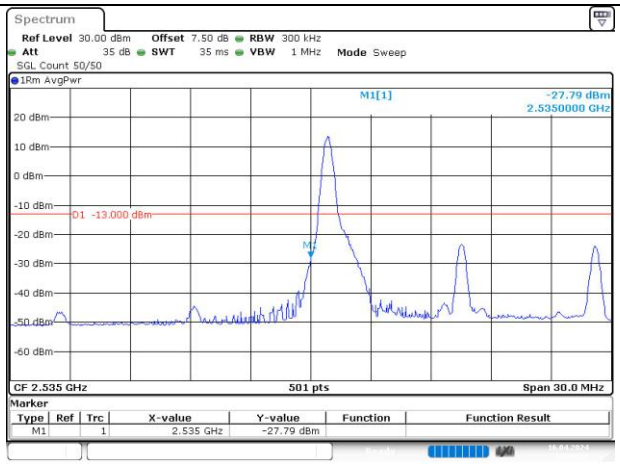
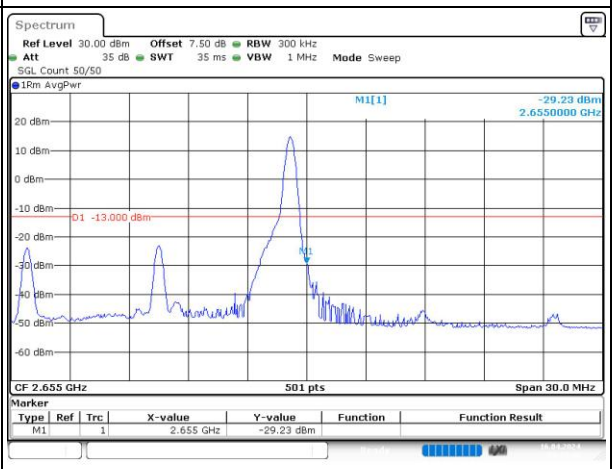
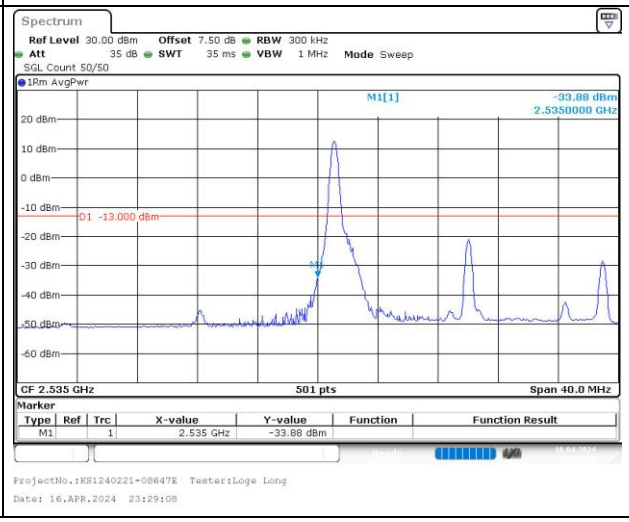
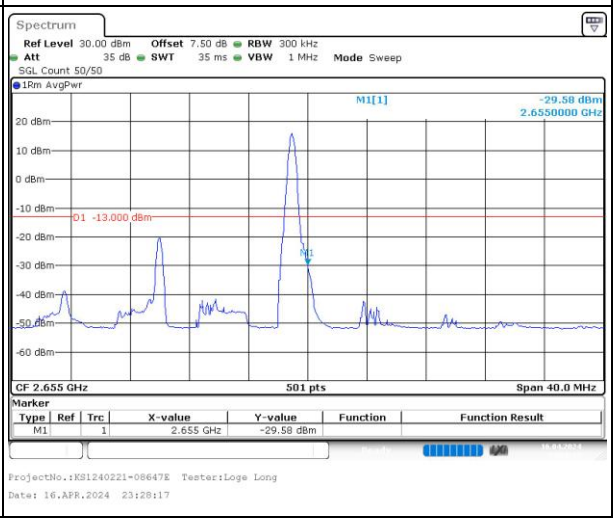
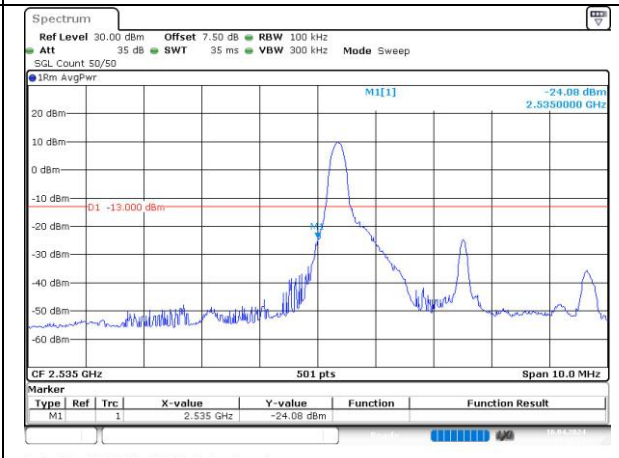
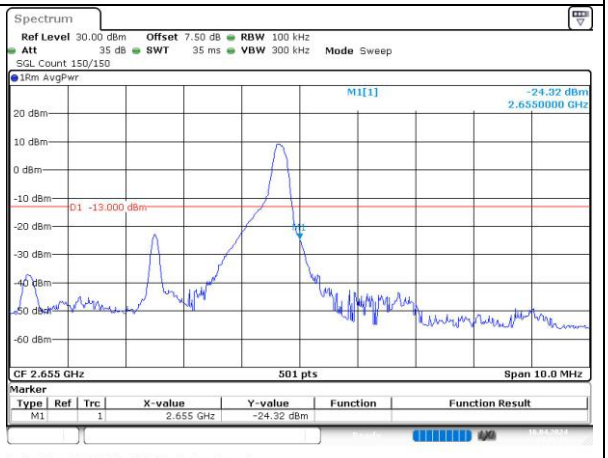
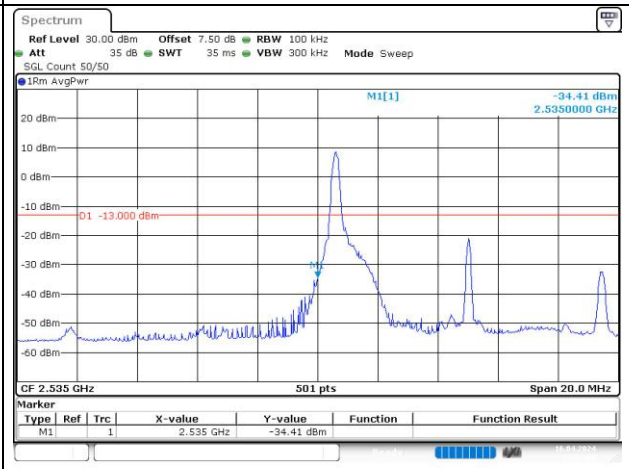
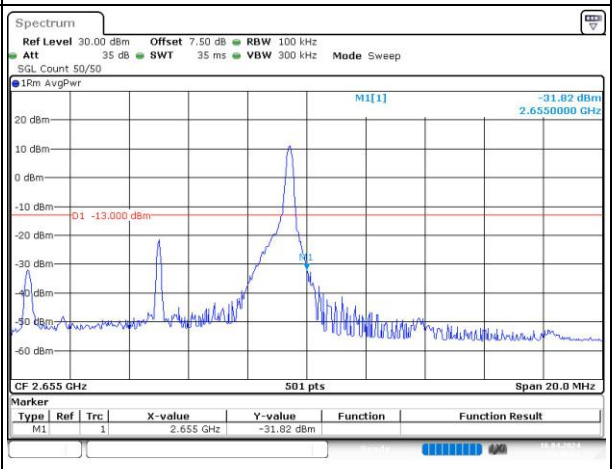
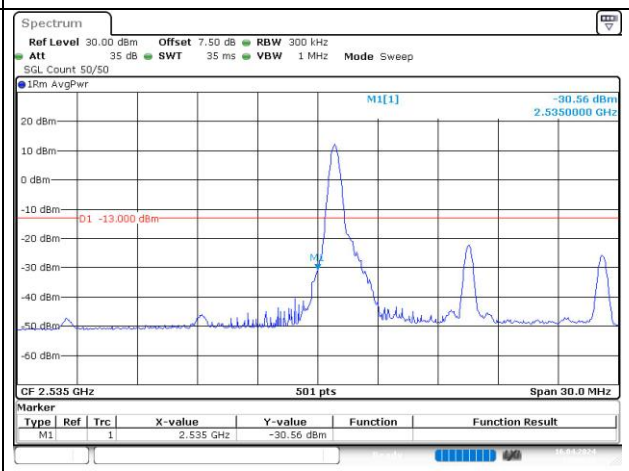
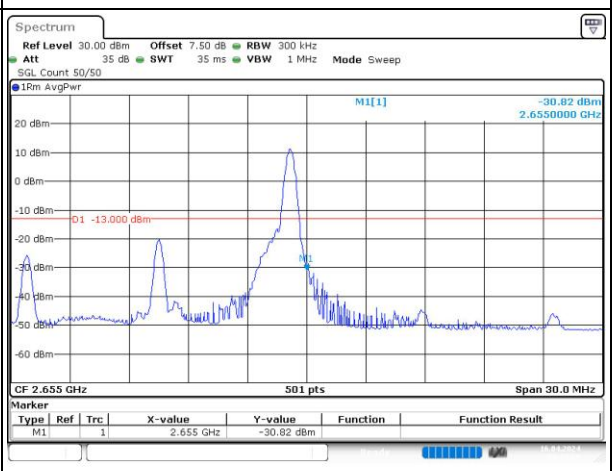
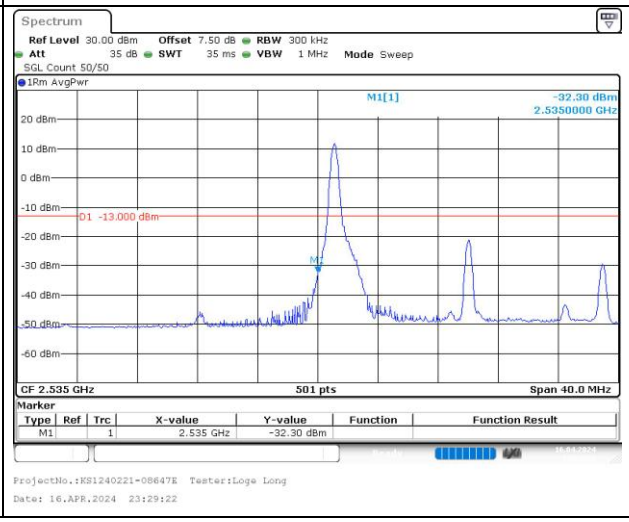
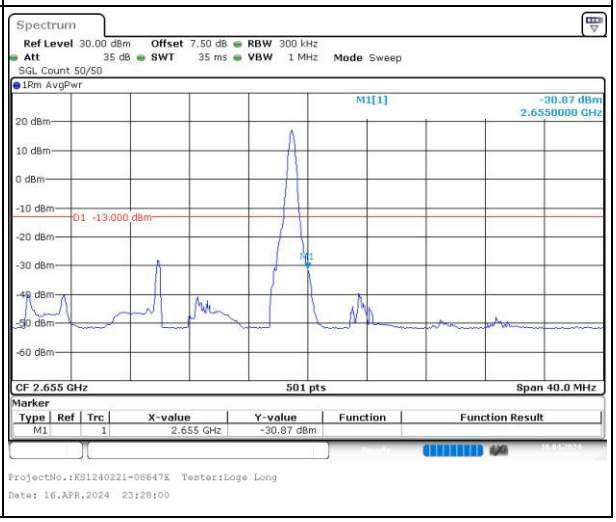
Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

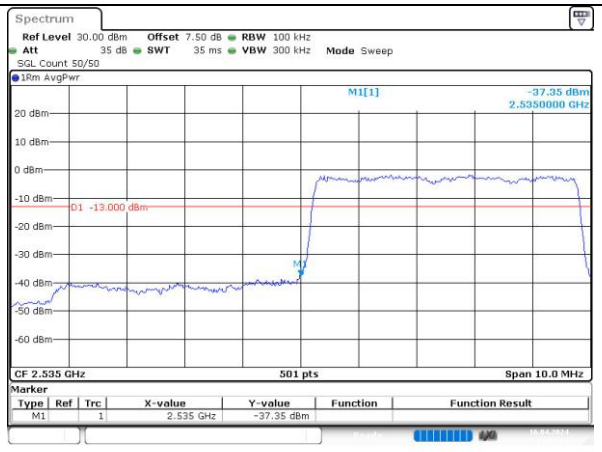
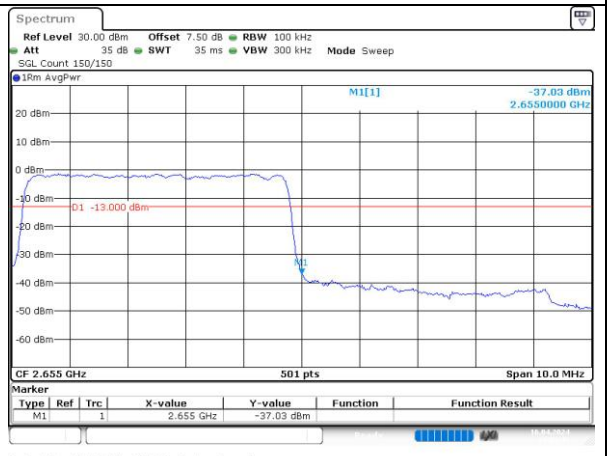
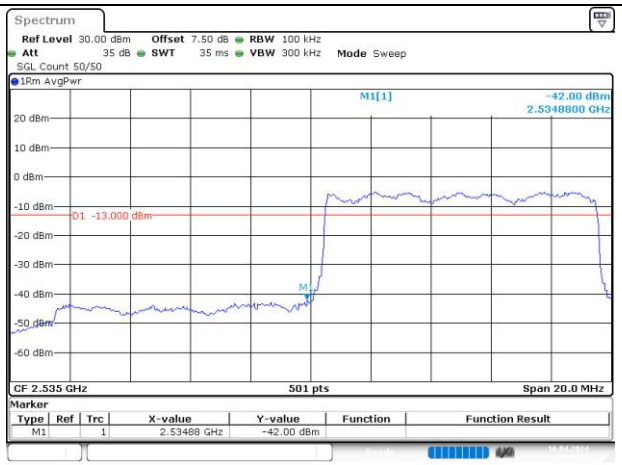
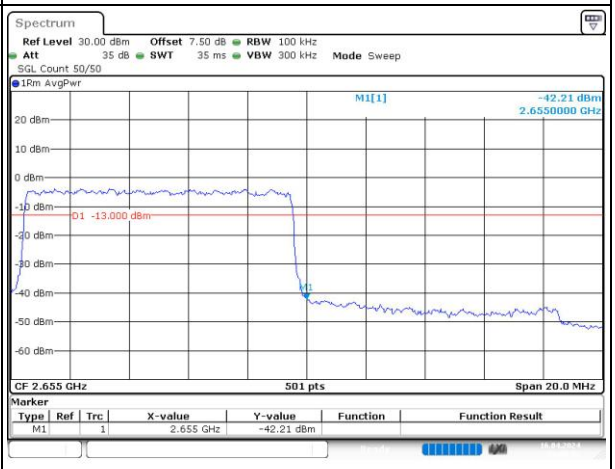
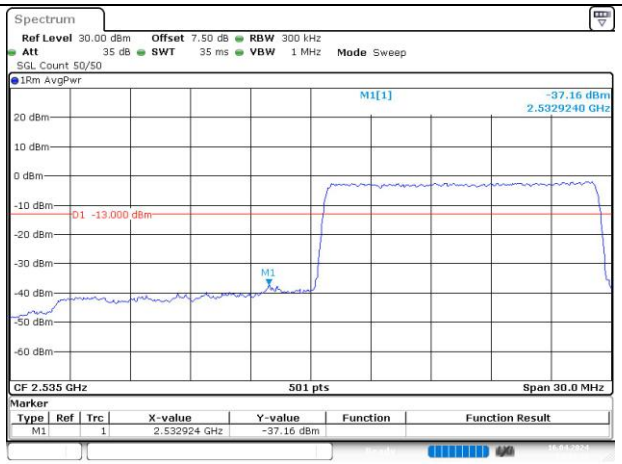
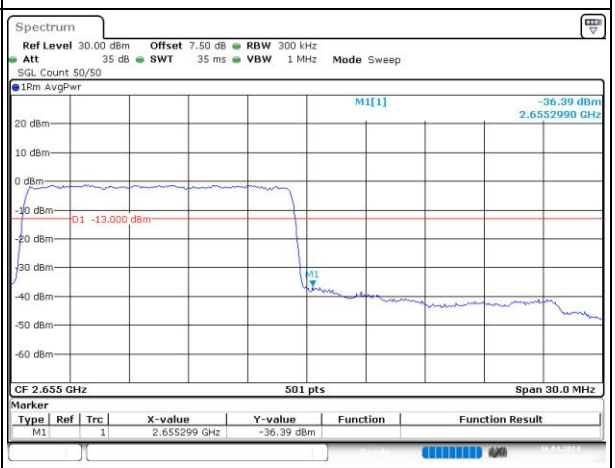
Spurious Emissions at Antenna Terminal		
Channel	**20MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

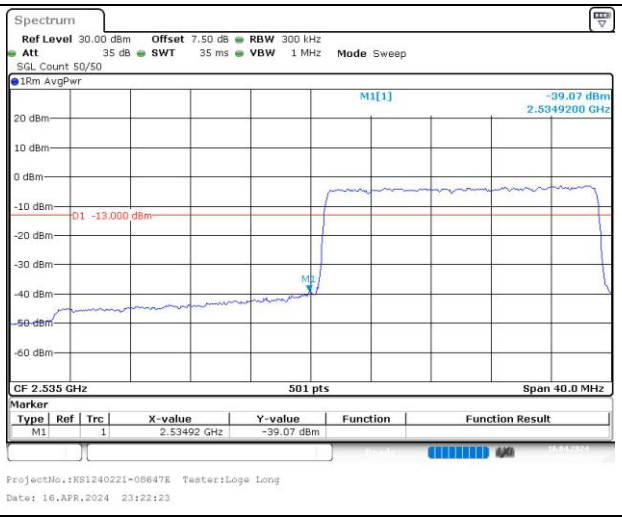
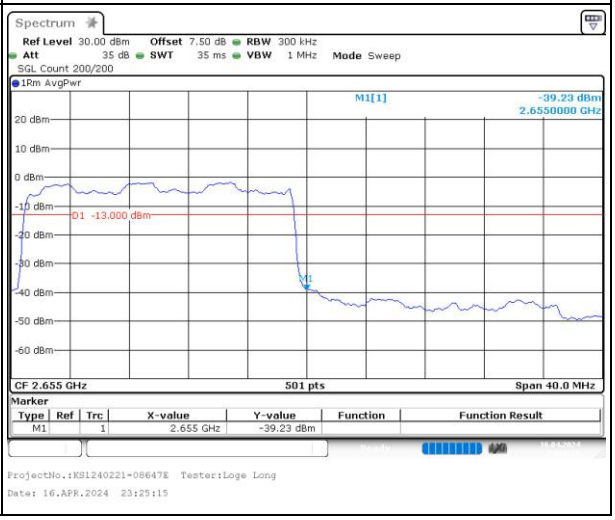
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
QPSK 5MHz		
QPSK 10MHz		
QPSK 15MHz		

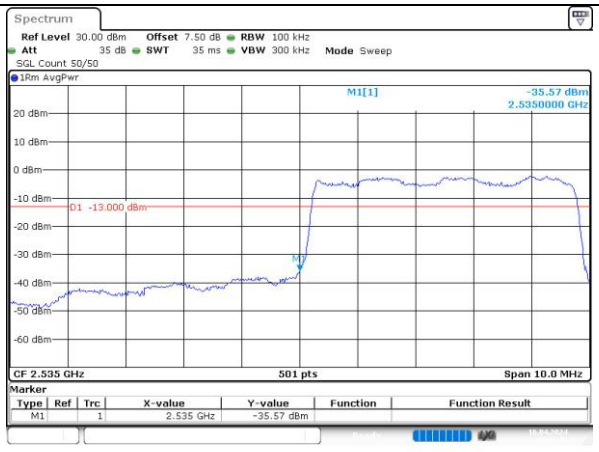
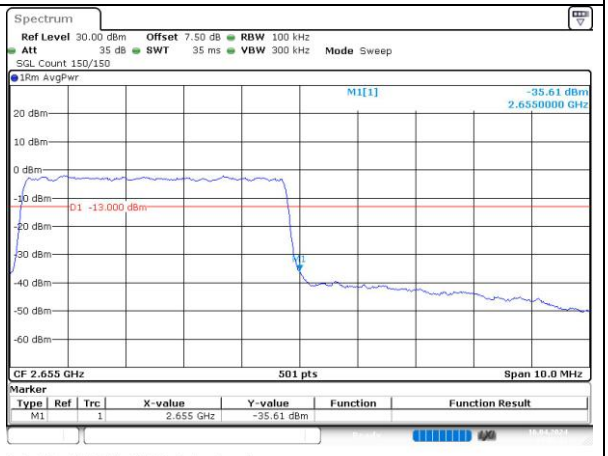
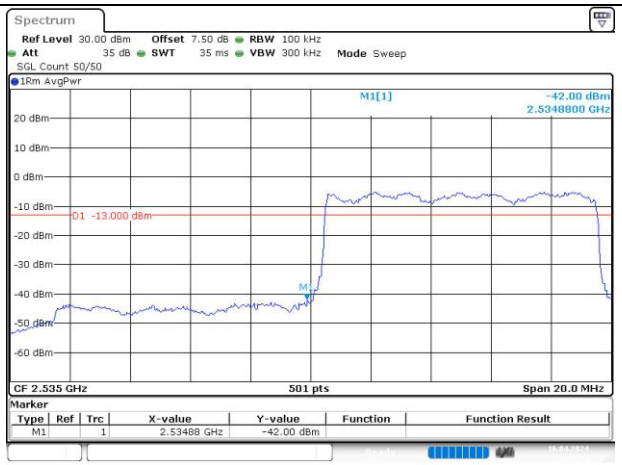
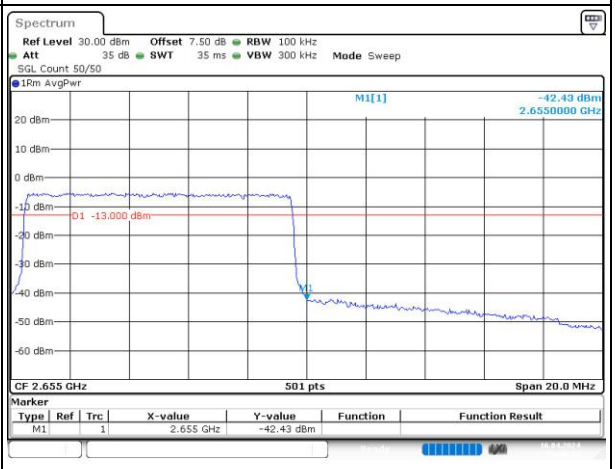
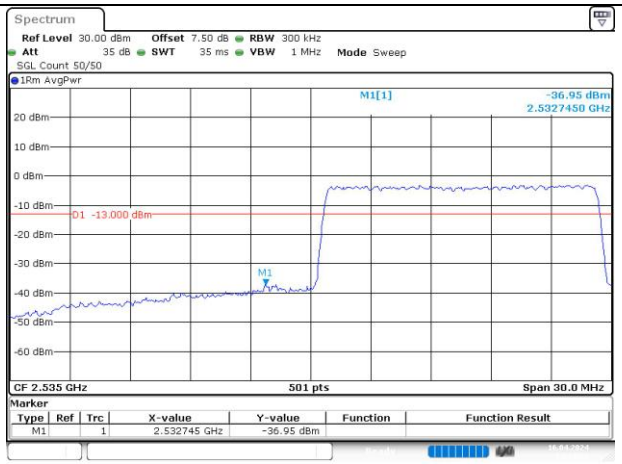
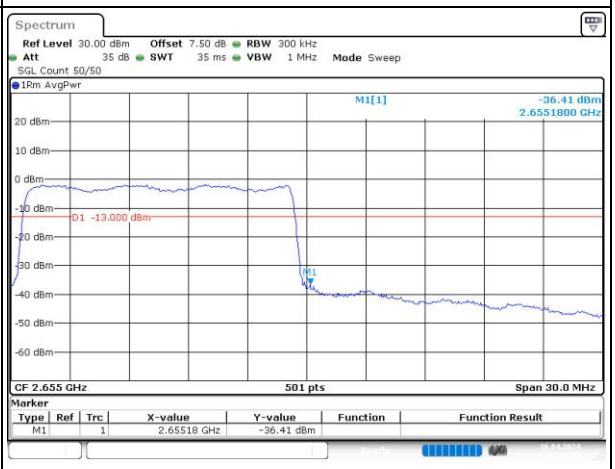
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
QPSK 20MHz		

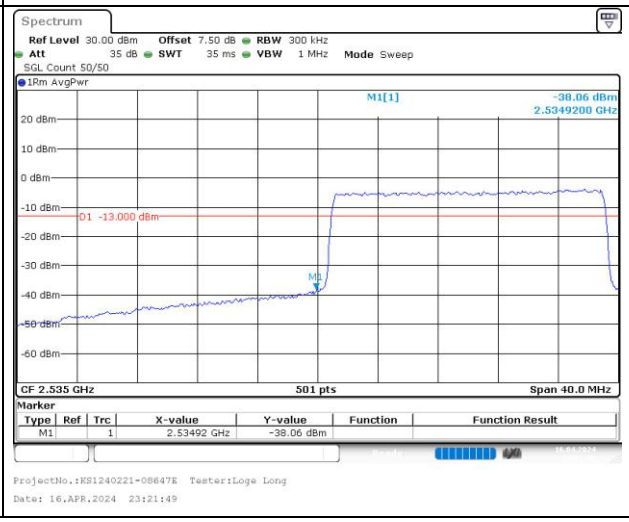
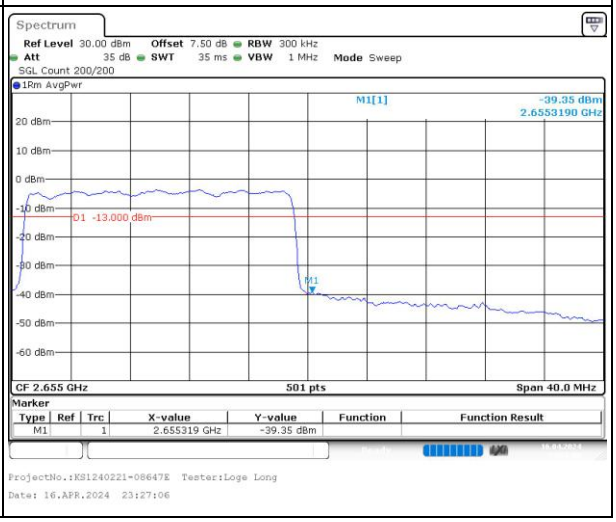
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
16QAM 5MHz		
16QAM 10MHz		
16QAM 15MHz		

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

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
QPSK 5MHz		
QPSK 10MHz		
QPSK 15MHz		

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
QPSK 20MHz		

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
16QAM 5MHz		
16QAM 10MHz		
16QAM 15MHz		

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
16QAM 20MHz		

5.16 Antenna Port Test Data and Results for LTE Band 66

Serial Number:	2HV7-2	Test Date:	2024/4/16~2024/4/19
Test Site:	RF	Test Mode:	Transmitting
Tester:	Loge Long	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	26.4~28.1	Relative Humidity: (%)	46~61	ATM Pressure: (kPa)	100.1~100.5

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
Minl-Clrcuits	Coaxial Power Splitters & Combiner	ZFRSC-183-S+	SF448201614	2024/2/25	2025/2/24
R&S	Wideband Radio Communication Tester	CMW500	110479	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
Micro-Coax	Coaxial Cable	UFB205A	323308-024	2024/1/2	2025/1/1
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1	N/A	N/A

Test Frequency For Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
1.4MHz	1710.7	1745	1779.3
3MHz	1711.5	1745	1778.5
5MHz	1712.5	1745	1777.5
10MHz	1715	1745	1775
15MHz	1717.5	1745	1772.5
20MHz	1720	1745	1770

Test Data:

FCC §2.1046; § 27.50(d)(4)

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		
1.4MHz QPSK	RB1#0	22.91	22.15	21.92	25.07	30
	RB1#3	23.09	22.34	22.10		
	RB1#5	22.88	22.14	21.96		
	RB3#0	22.91	22.13	21.91		
	RB3#3	22.89	22.15	21.88		
	RB6#0	21.61	21.29	21.05		
1.4MHz 16QAM	RB1#0	21.50	21.07	20.97	23.72	30
	RB1#3	21.74	21.28	21.15		
	RB1#5	21.61	21.08	20.94		
	RB3#0	21.66	21.20	20.78		
	RB3#3	21.66	21.18	20.75		
	RB6#0	20.61	20.17	19.99		
3MHz QPSK	RB1#0	22.99	22.23	21.97	24.97	30
	RB1#8	22.96	22.16	21.95		
	RB1#14	22.90	22.18	21.93		
	RB6#0	21.87	21.21	20.94		
	RB6#9	21.84	21.20	20.93		
	RB15#0	21.85	21.16	20.87		
3MHz 16QAM	RB1#0	21.84	21.53	20.95	23.82	30
	RB1#8	21.49	21.49	20.97		
	RB1#14	21.50	21.52	20.97		
	RB6#0	20.39	20.16	19.90		
	RB6#9	20.38	20.18	19.91		
	RB15#0	20.54	20.17	19.80		
5MHz QPSK	RB1#0	22.78	22.07	21.76	24.83	30
	RB1#13	22.85	22.13	21.89		
	RB1#24	22.74	22.02	21.82		
	RB15#0	21.84	21.09	20.86		
	RB15#10	21.82	21.04	20.79		
	RB25#0	21.78	21.04	20.76		
5MHz 16QAM	RB1#0	21.62	21.22	20.79	23.7	30
	RB1#13	21.72	21.31	20.85		
	RB1#24	21.58	21.19	20.77		
	RB15#0	20.72	20.04	19.85		
	RB15#10	20.48	20.03	19.76		
	RB25#0	20.50	20.02	19.80		
10MHz QPSK	RB1#0	22.84	22.63	22.33	25.03	30
	RB1#25	23.05	22.74	22.53		
	RB1#49	22.78	22.55	22.35		

	RB25#0	21.83	21.58	21.35		
	RB25#25	21.84	21.52	21.29		
	RB50#0	21.86	21.51	21.30		
10MHz 16QAM	RB1#0	21.79	21.91	21.47	24.06	30
	RB1#25	21.95	22.08	21.51		
	RB1#49	21.75	21.95	21.40		
	RB25#0	20.93	20.58	20.35		
	RB25#25	20.94	20.53	20.25		
	RB50#0	20.89	20.52	20.30		
15MHz QPSK	RB1#0	22.76	22.53	22.25	24.76	30
	RB1#38	22.78	22.54	22.32		
	RB1#74	22.70	22.37	21.84		
	RB36#0	21.92	21.70	20.94		
	RB36#39	21.89	21.60	20.91		
	RB75#0	21.91	21.62	20.90		
15MHz 16QAM	RB1#0	22.19	21.53	21.20	24.32	30
	RB1#38	22.34	21.55	21.19		
	RB1#74	22.20	21.44	21.01		
	RB36#0	20.82	20.55	19.85		
	RB36#39	20.87	20.46	19.81		
	RB75#0	20.85	20.54	19.84		
20MHz QPSK	RB1#0	22.49	22.29	22.08	24.85	30
	RB1#50	22.87	22.64	22.41		
	RB1#99	22.51	22.18	22.02		
	RB50#0	21.76	21.58	21.22		
	RB50#50	21.80	21.39	21.25		
	RB100#0	21.78	21.50	21.24		
20MHz 16QAM	RB1#0	21.72	21.70	21.38	24.03	30
	RB1#50	22.05	22.00	21.66		
	RB1#99	21.62	21.67	21.17		
	RB50#0	20.74	20.53	20.19		
	RB50#50	20.75	20.42	20.09		
	RB100#0	20.80	20.47	20.07		
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	4.32	3.51	5.04	13
	RB100#0	4.00	3.59	3.91	13
20MHz 16QAM	RB1#0	5.13	4.55	5.57	13
	RB100#0	5.68	5.25	5.57	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
1.4MHz QPSK	1.108	1.102	1.102	1.332	1.338	1.374
1.4MHz 16QAM	1.096	1.102	1.096	1.284	1.314	1.296
3MHz QPSK	2.695	2.695	2.683	2.868	2.880	2.904
3MHz 16QAM	2.683	2.683	2.683	2.892	2.880	2.880
5MHz QPSK	4.531	4.511	4.511	5.220	5.180	5.180
5MHz 16QAM	4.511	4.551	4.551	5.140	5.200	5.220
10MHz QPSK	9.022	8.942	8.942	10.200	9.840	9.760
10MHz 16QAM	8.982	8.942	8.942	10.000	9.880	9.840
15MHz QPSK	13.533	13.593	13.473	15.360	15.420	15.180
15MHz 16QAM	13.533	13.593	13.533	15.240	15.180	15.180
20MHz QPSK	17.964	17.964	18.044	19.680	19.680	20.000
20MHz 16QAM	18.044	18.044	17.964	19.920	20.480	19.680
Note: The test plots please refer to the Plots of Occupied Bandwidth						

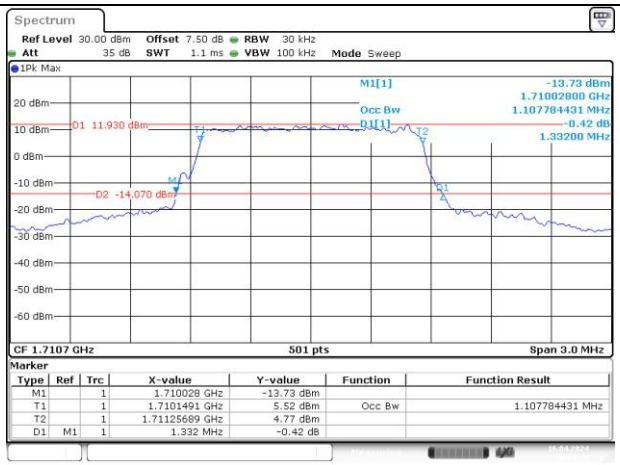
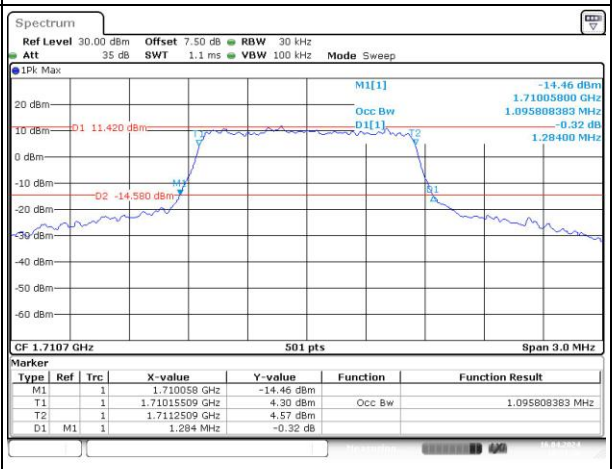
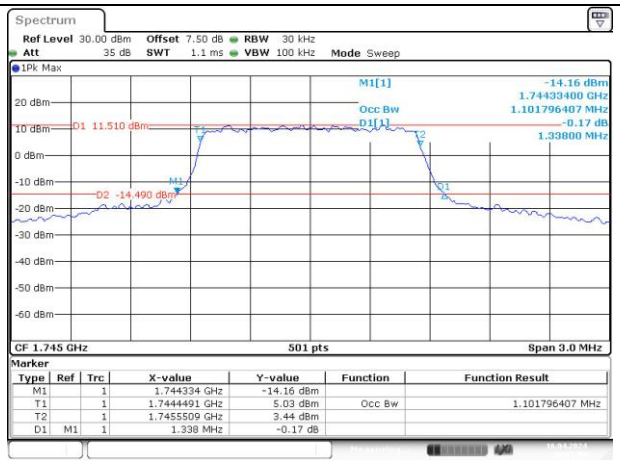
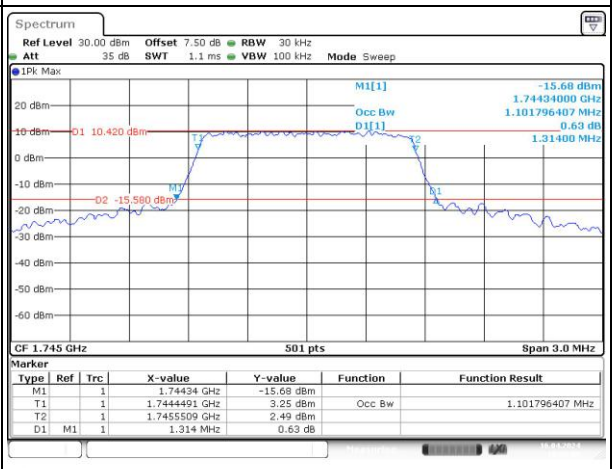
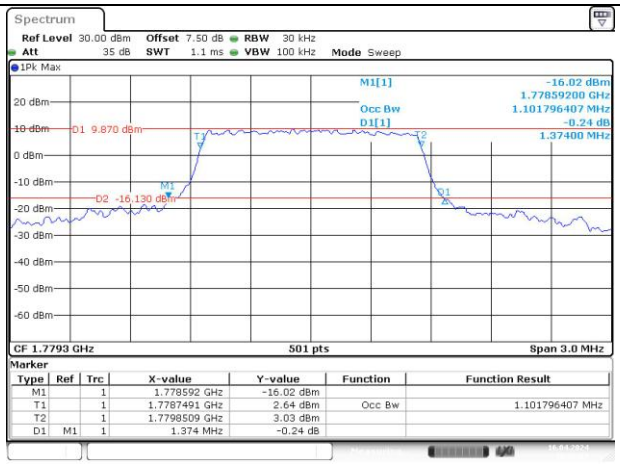
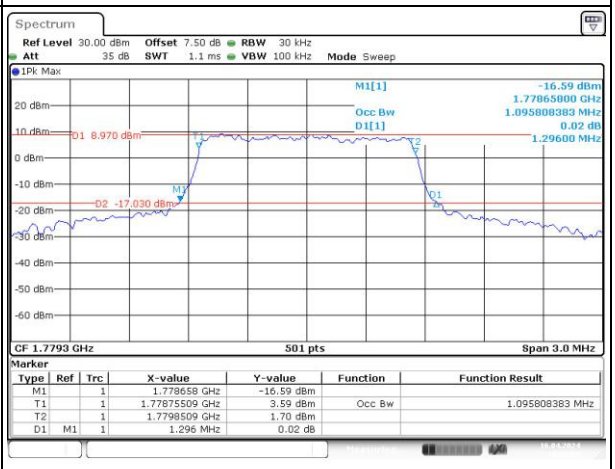
FCC §2.1051, §27.53:Spurious Emissions at Antenna Terminal	
Result:	**Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.**

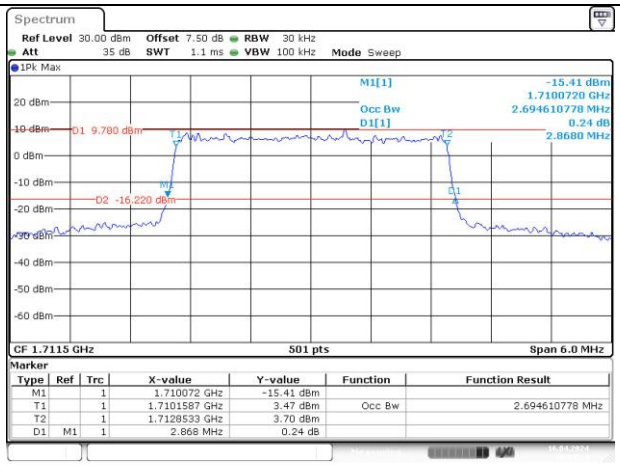
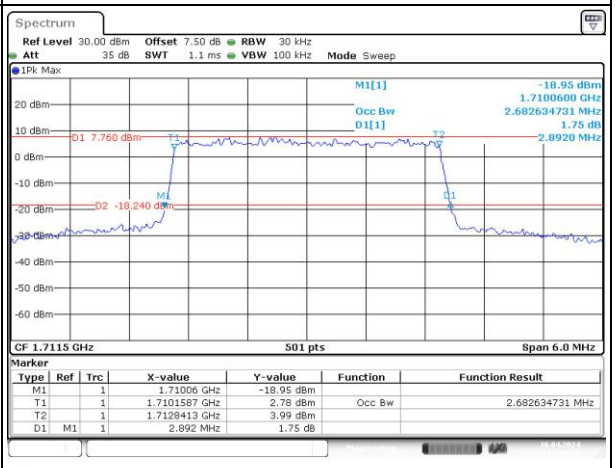
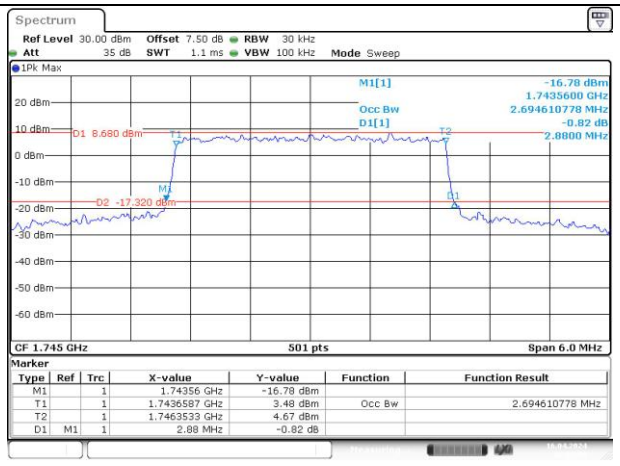
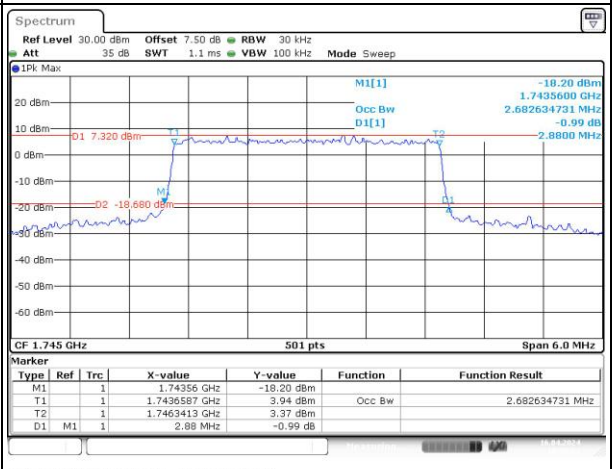
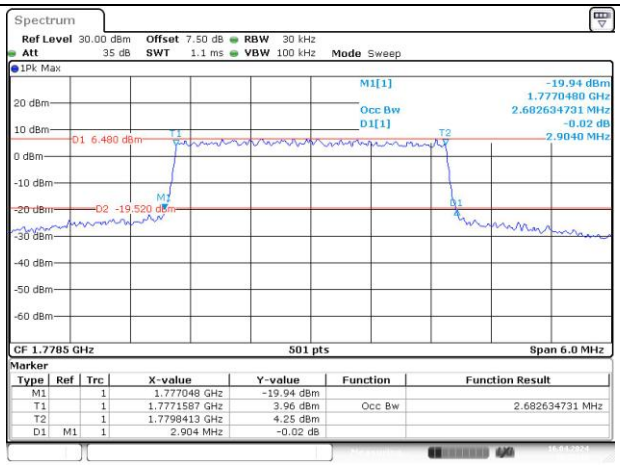
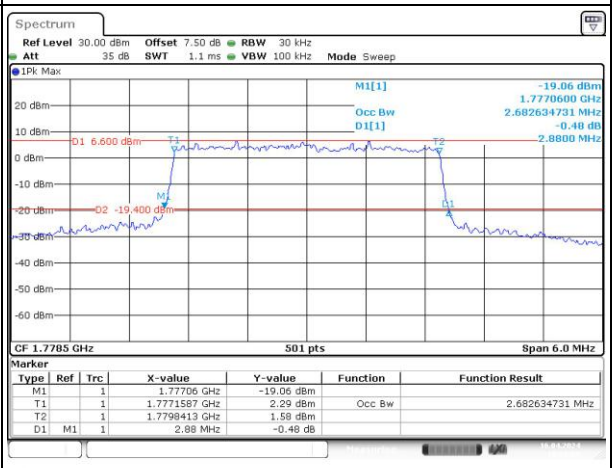
FCC §2.1051, §27.53:Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

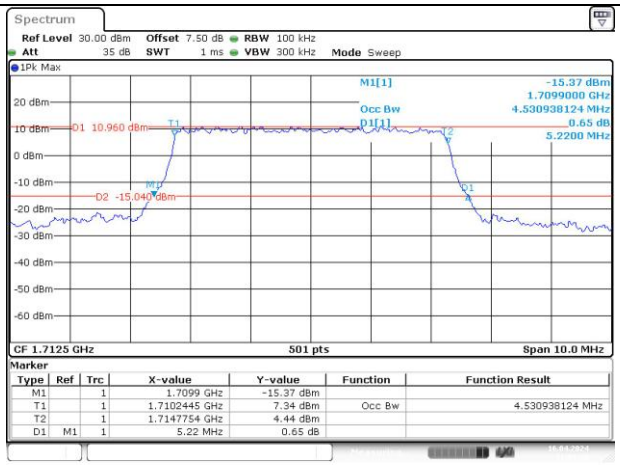
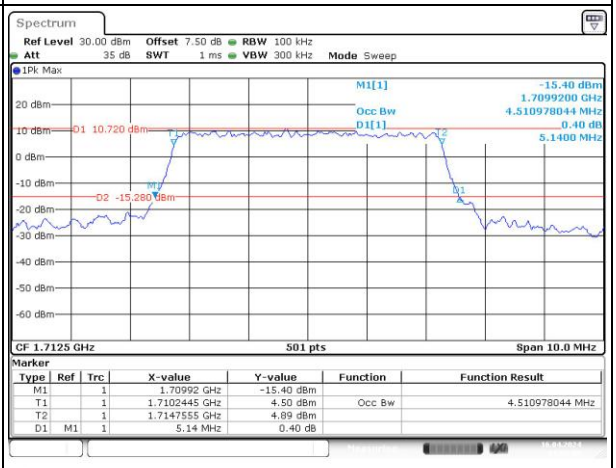
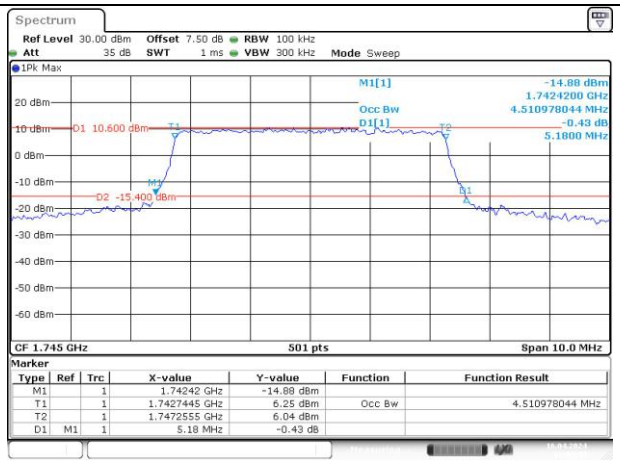
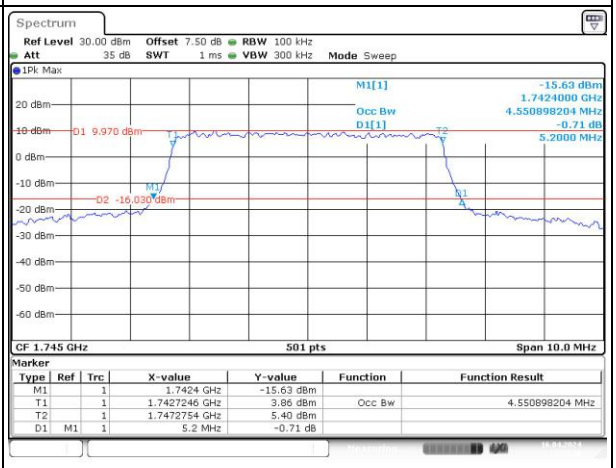
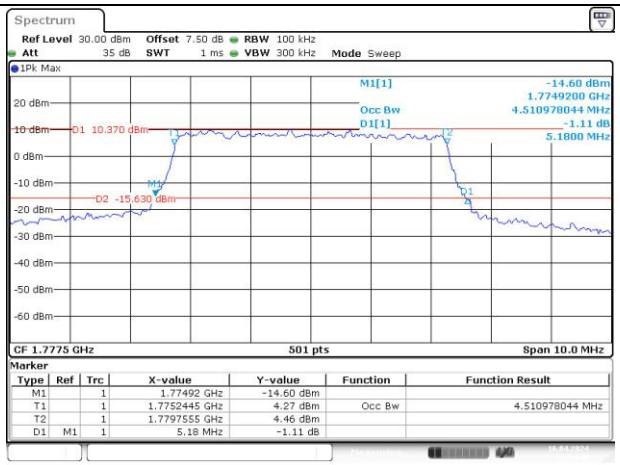
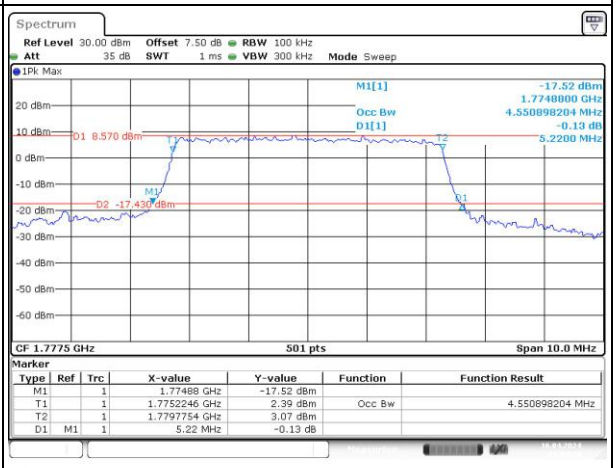
FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	1711.046	1710.00	1779.013	1780
	-20	3.8	1711.034	1710.00	1779.001	1780
	-10	3.8	1711.043	1710.00	1779.019	1780
	0	3.8	1711.040	1710.00	1778.995	1780
	10	3.8	1711.049	1710.00	1778.998	1780
	20	3.8	1711.058	1710.00	1779.022	1780
	30	3.8	1711.073	1710.00	1779.046	1780
	40	3.8	1711.064	1710.00	1779.043	1780
	50	3.8	1711.064	1710.00	1779.043	1780
Frequency Stability vs. Voltage	20	3.4	1711.076	1710.00	1779.028	1780
	20	4.35	1711.076	1710.00	1779.031	1780
					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	3.8	1711.052	1710.00	1779.019	1780
	-20	3.8	1711.046	1710.00	1779.019	1780
	-10	3.8	1711.043	1710.00	1779.010	1780
	0	3.8	1711.046	1710.00	1779.019	1780
	10	3.8	1711.040	1710.00	1778.995	1780
	20	3.8	1711.058	1710.00	1779.022	1780
	30	3.8	1711.085	1710.00	1779.037	1780
	40	3.8	1711.073	1710.00	1779.031	1780
	50	3.8	1711.061	1710.00	1779.049	1780
Frequency Stability vs. Voltage	20	3.4	1711.082	1710.00	1779.043	1780
	20	4.35	1711.076	1710.00	1779.025	1780
					Result:	**Pass**

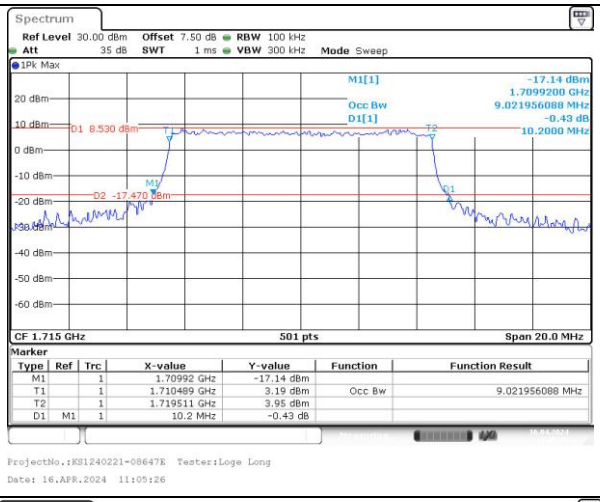
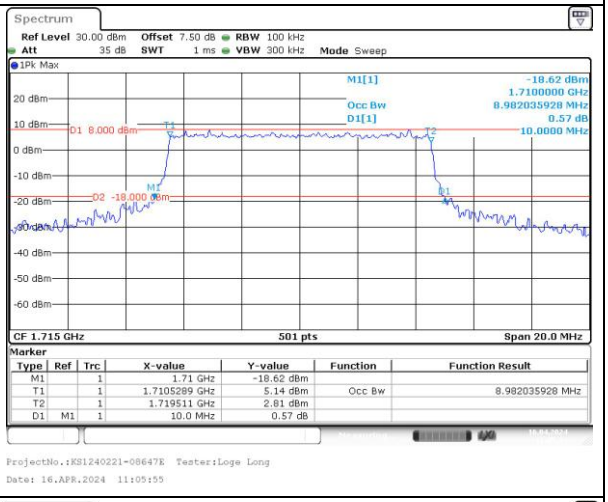
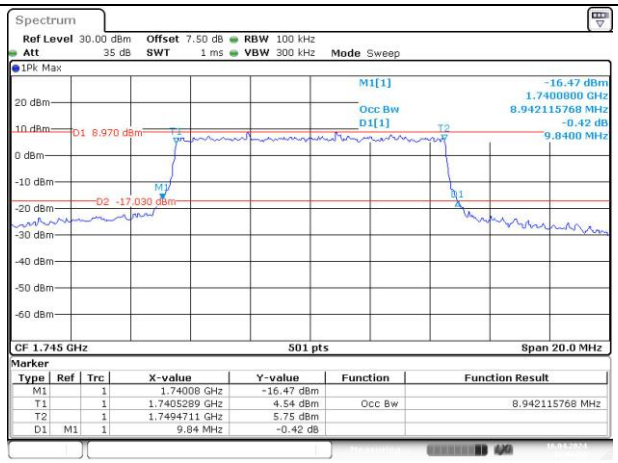
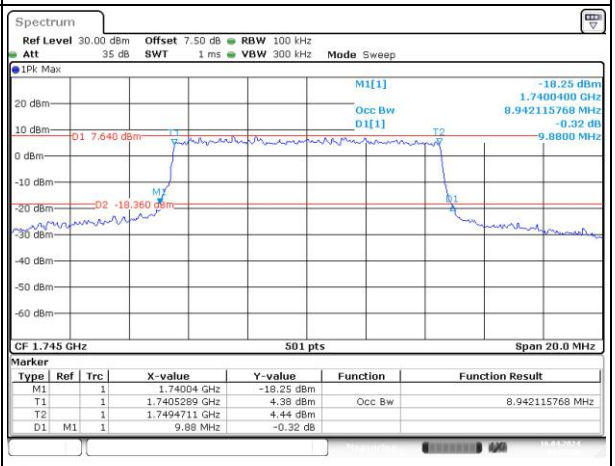
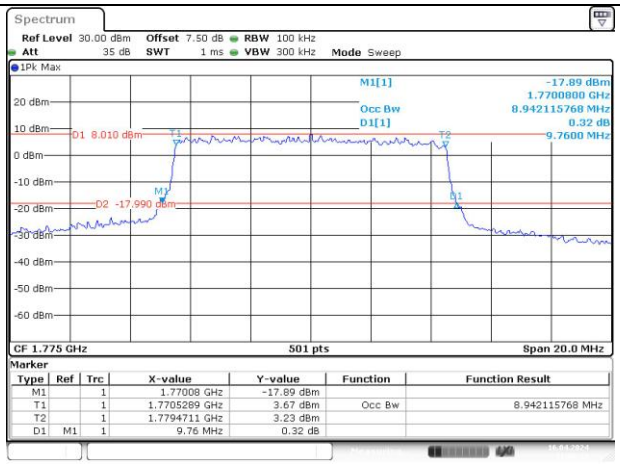
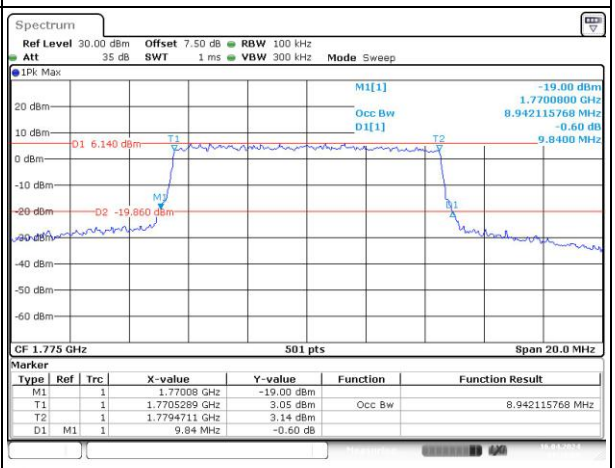
Test Plots:

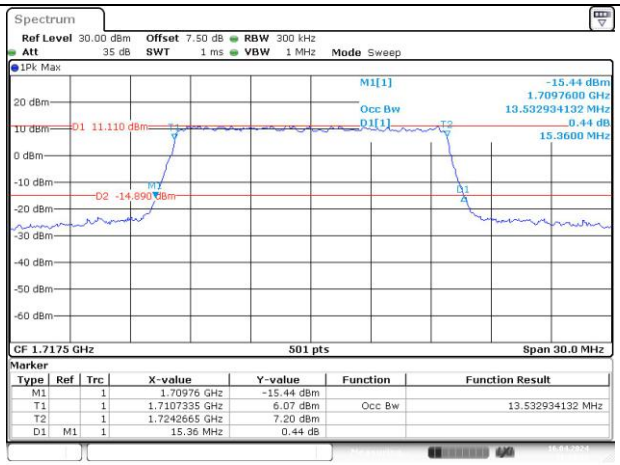
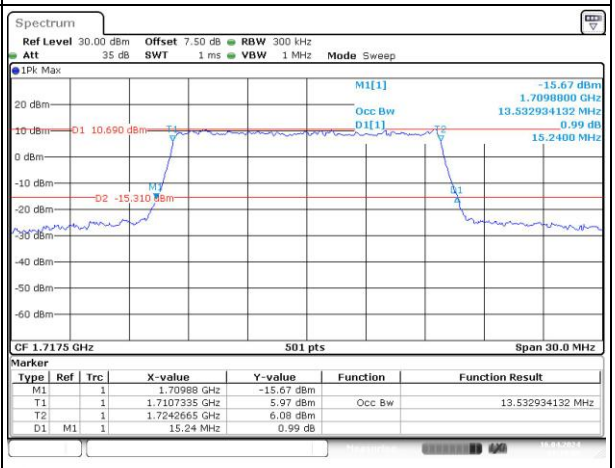
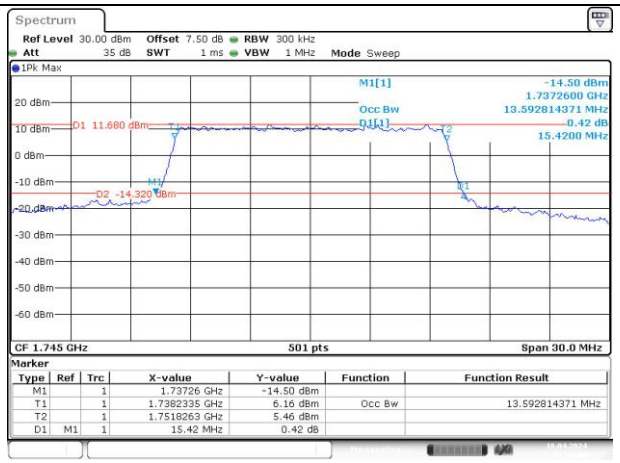
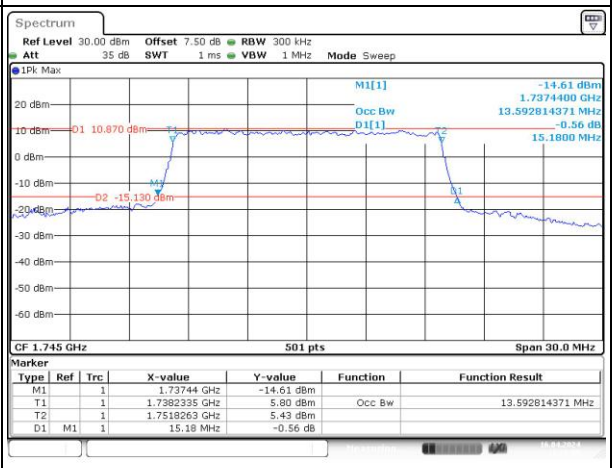
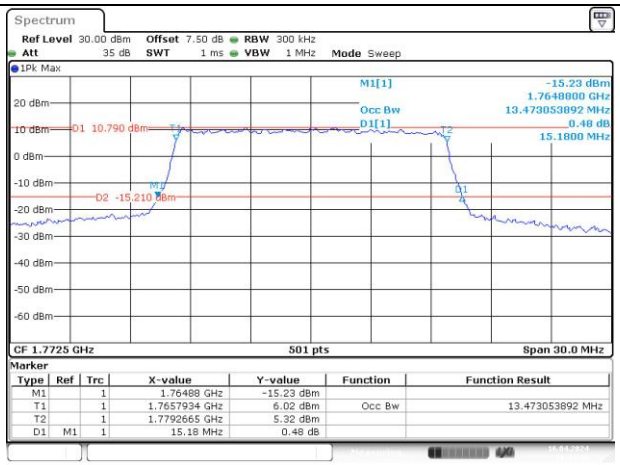
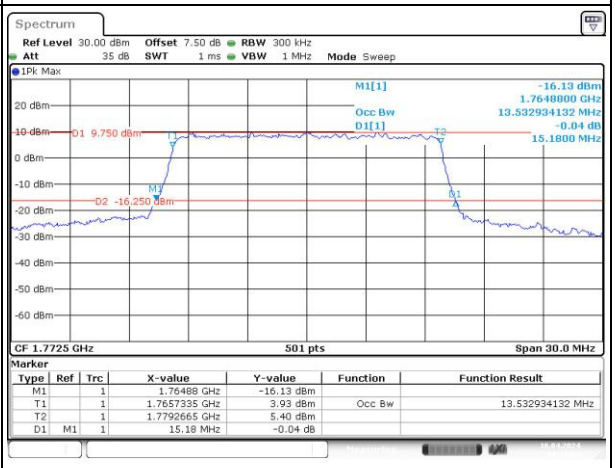
Occupied Bandwidth		
Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

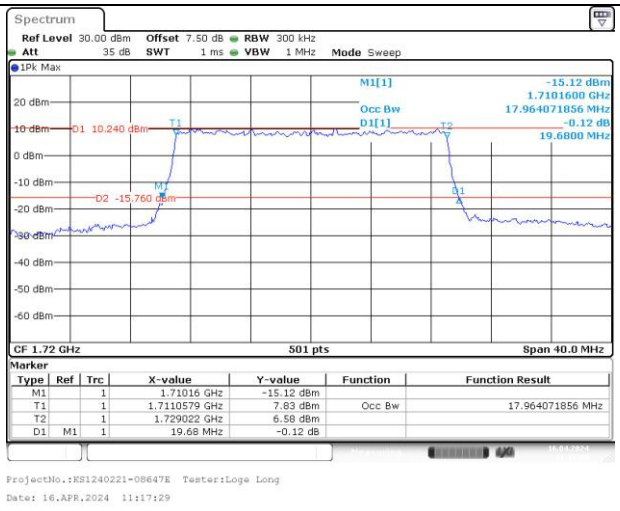
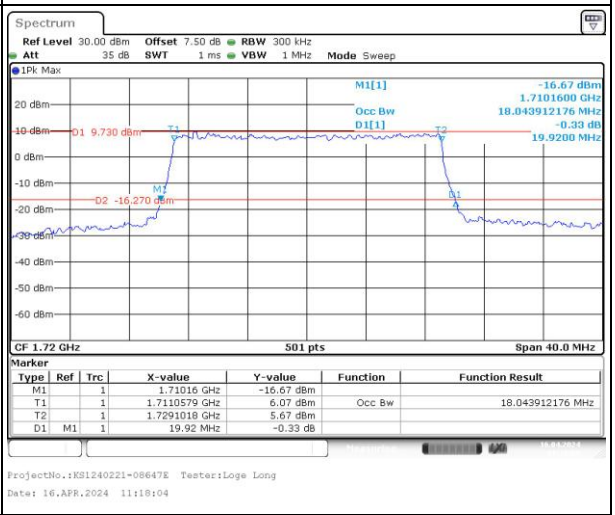
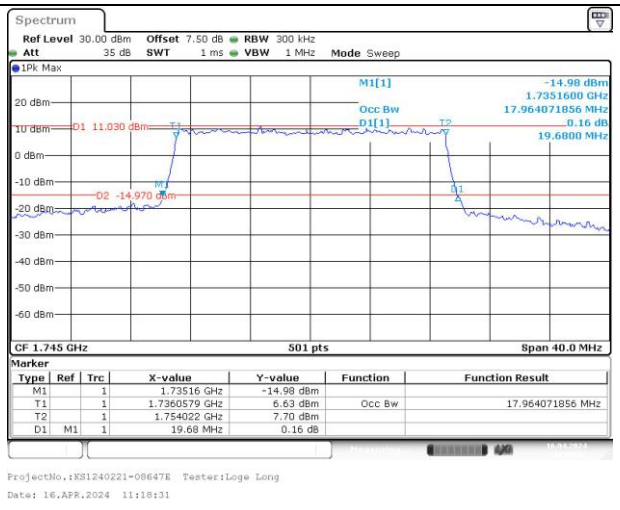
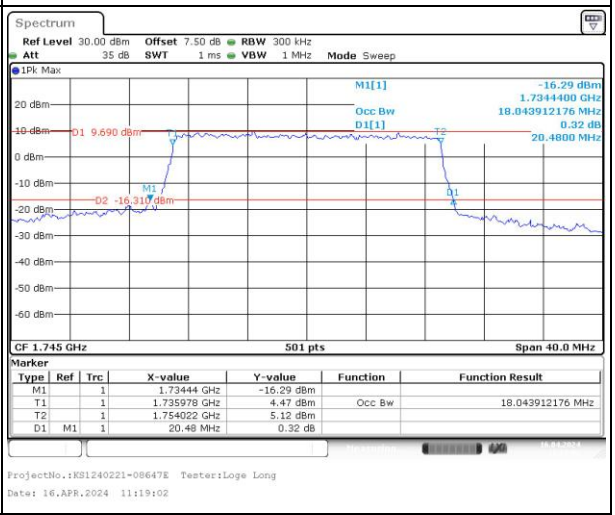
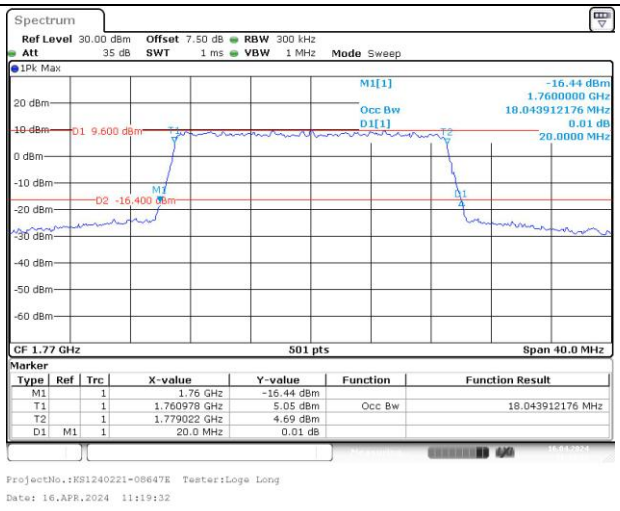
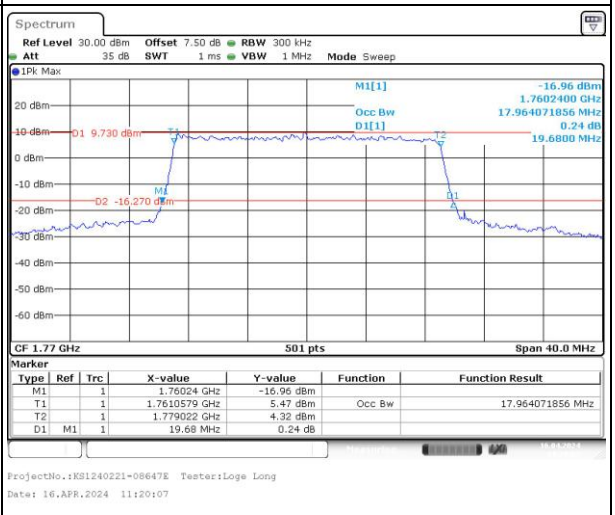
Occupied Bandwidth		
Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

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

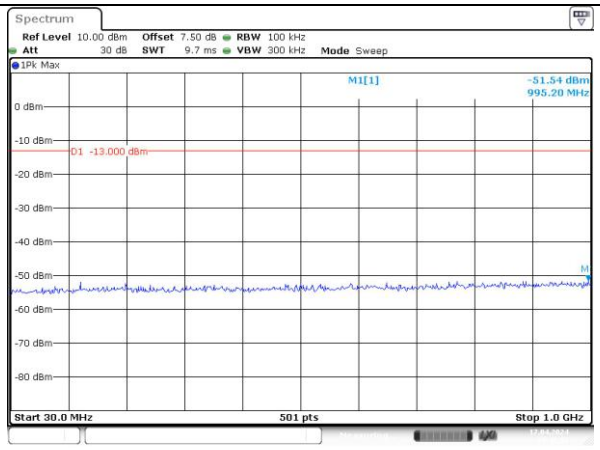
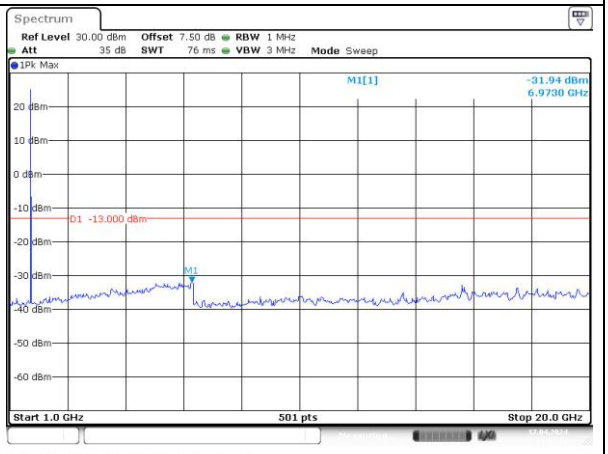
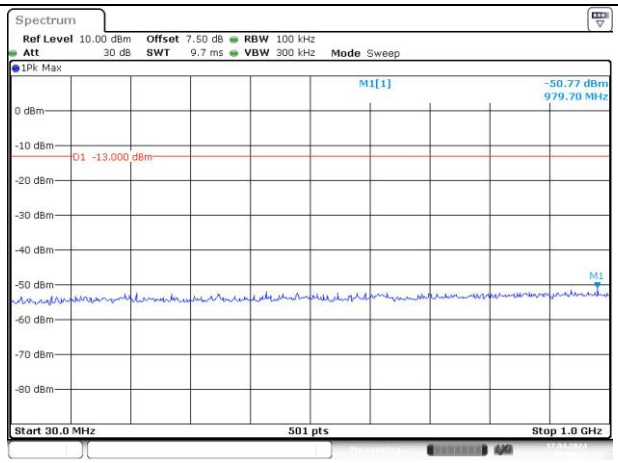
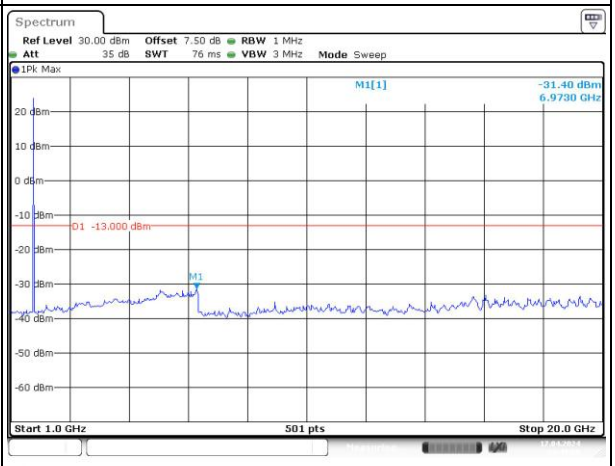
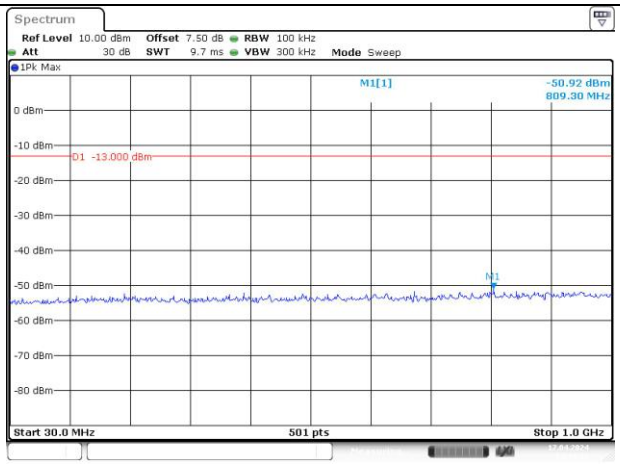
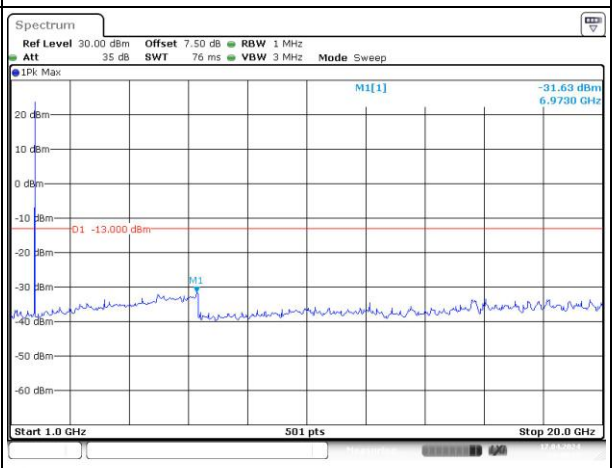
Occupied Bandwidth

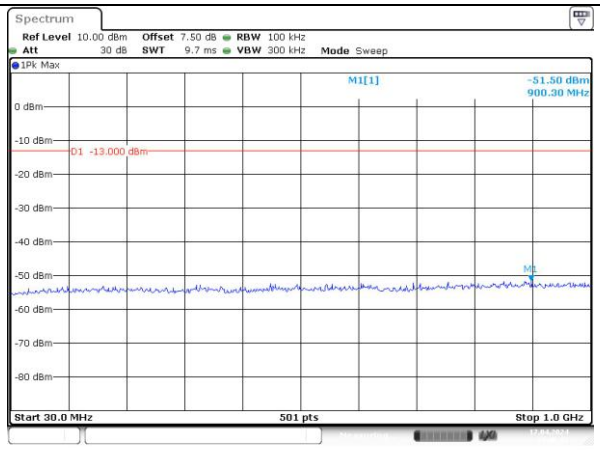
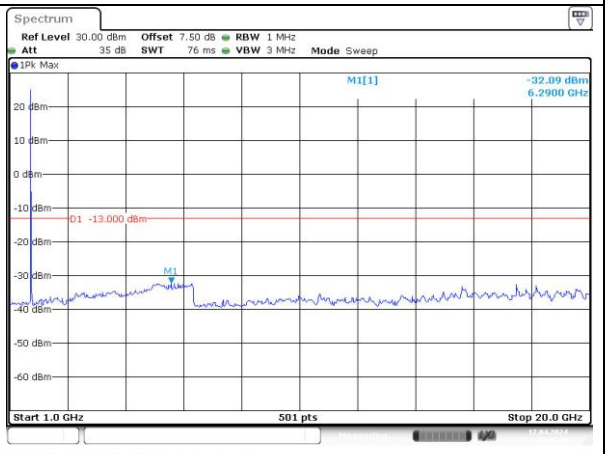
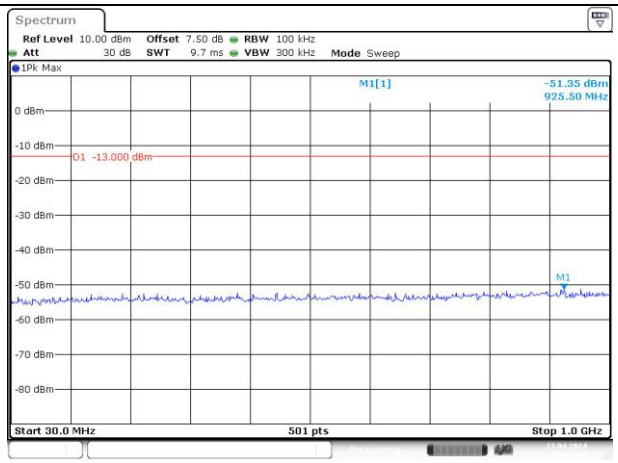
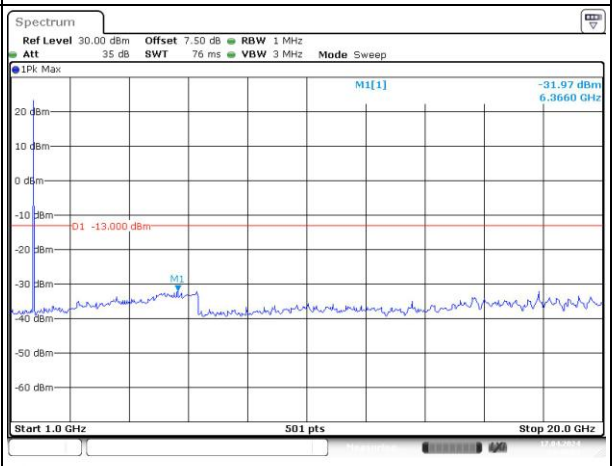
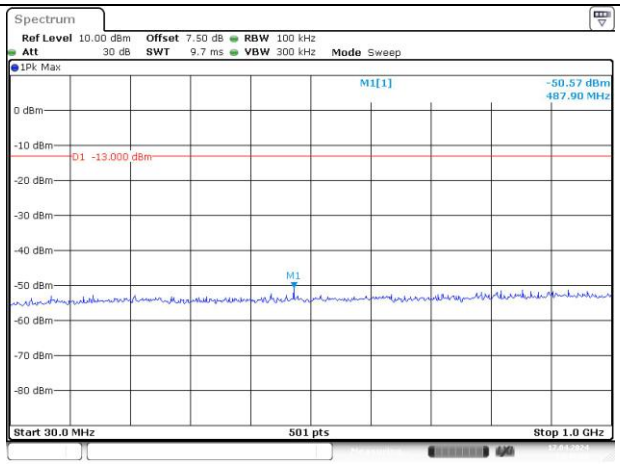
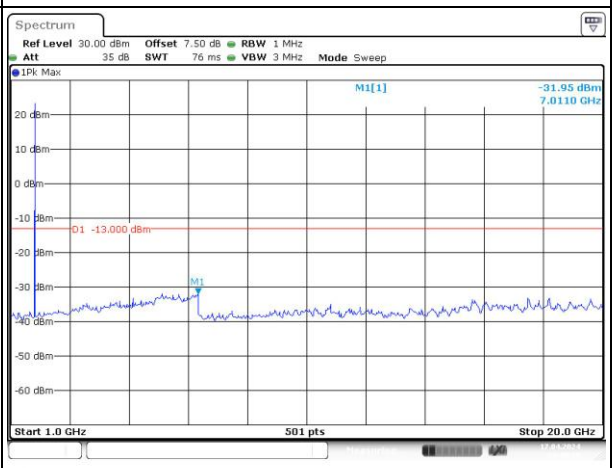
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

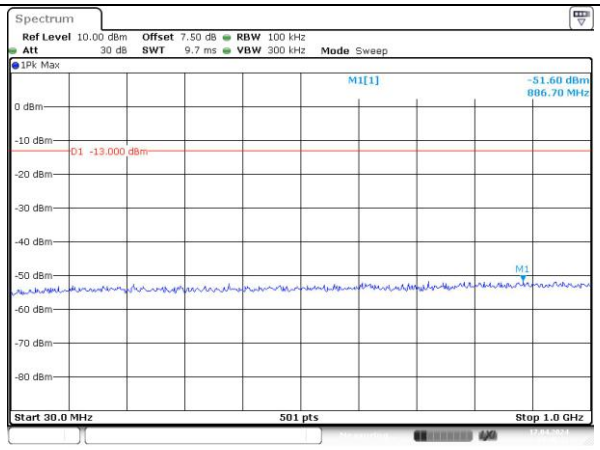
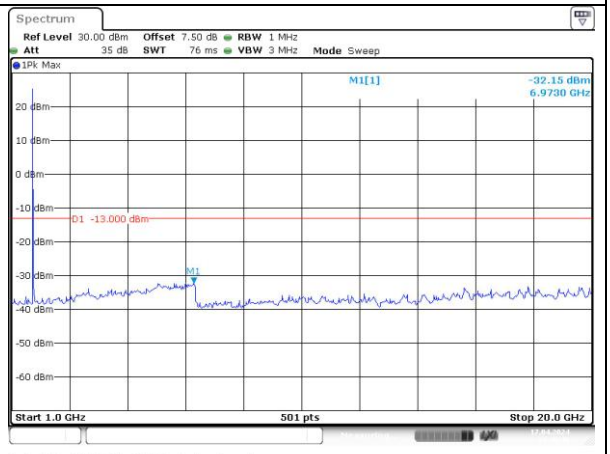
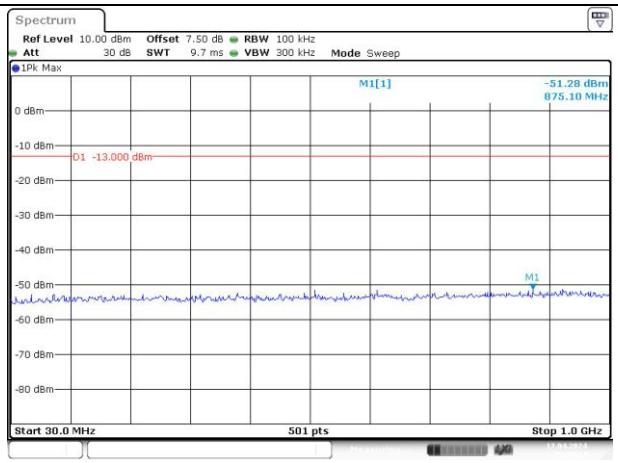
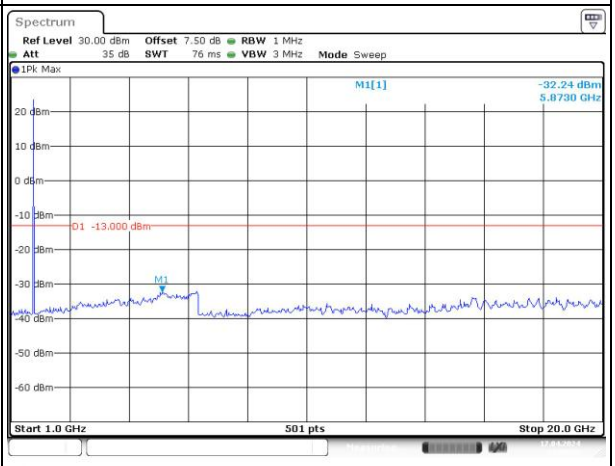
Occupied Bandwidth		
Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

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

1RB:

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