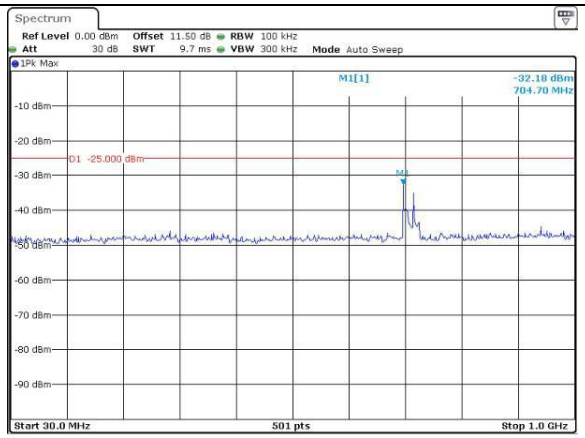
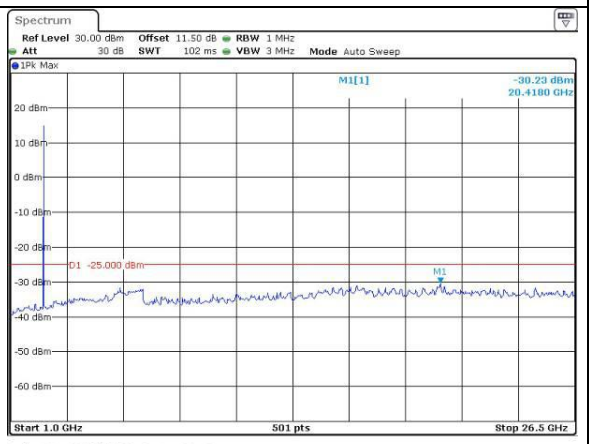
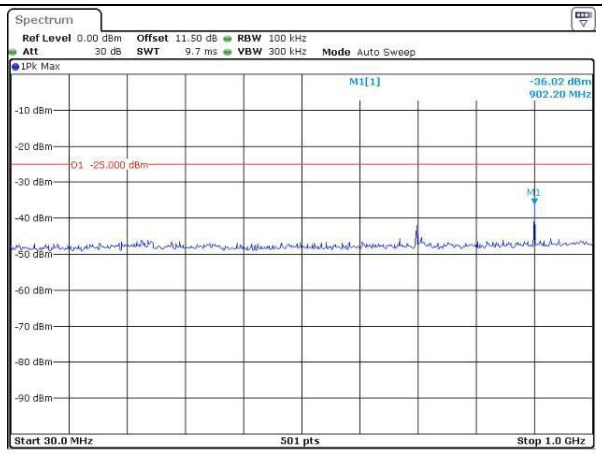
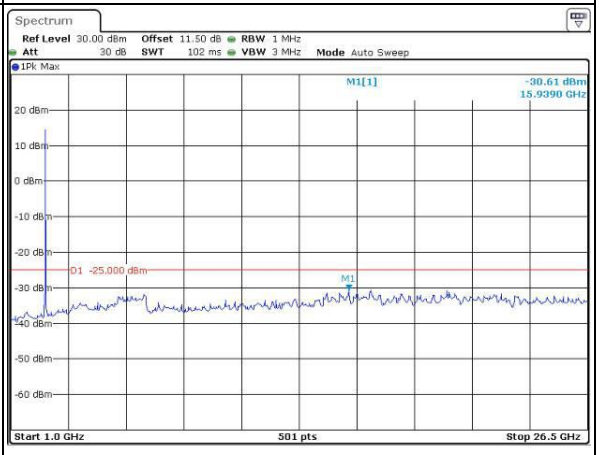
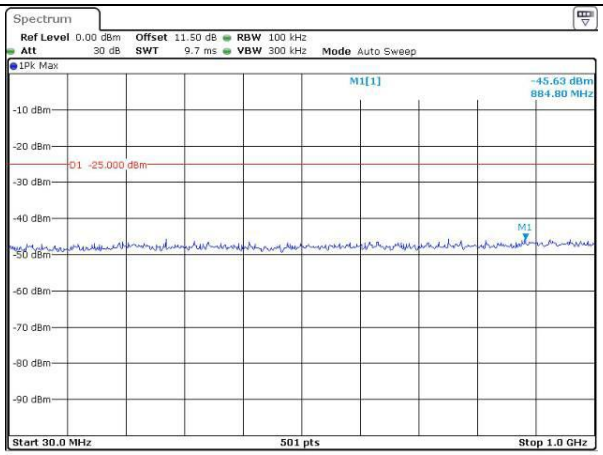
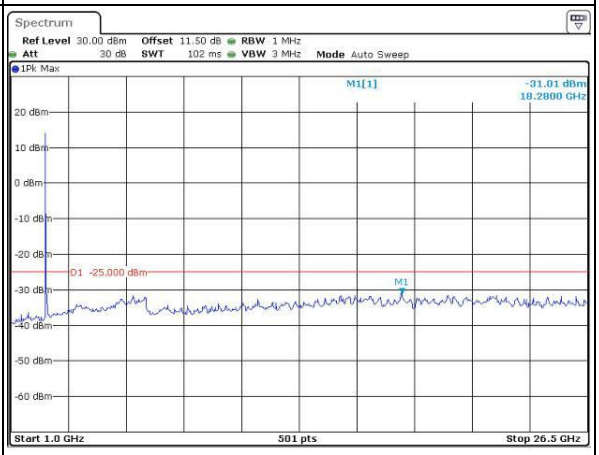
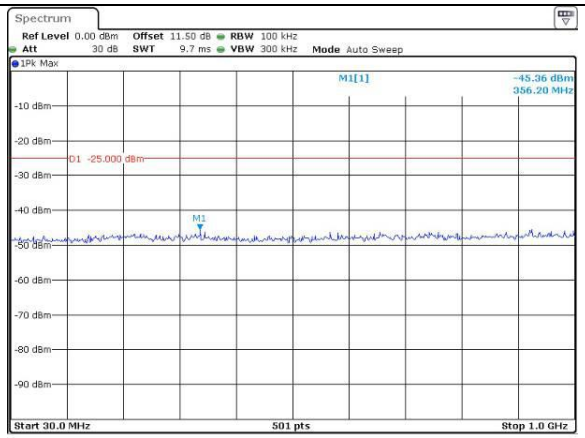
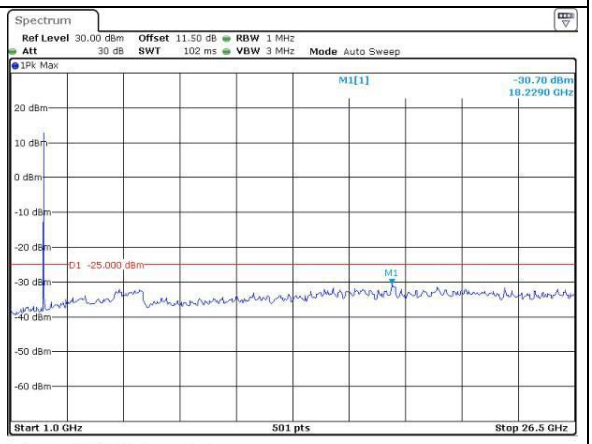
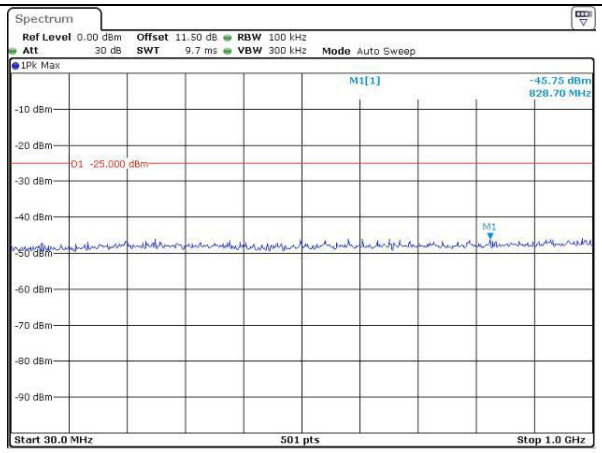
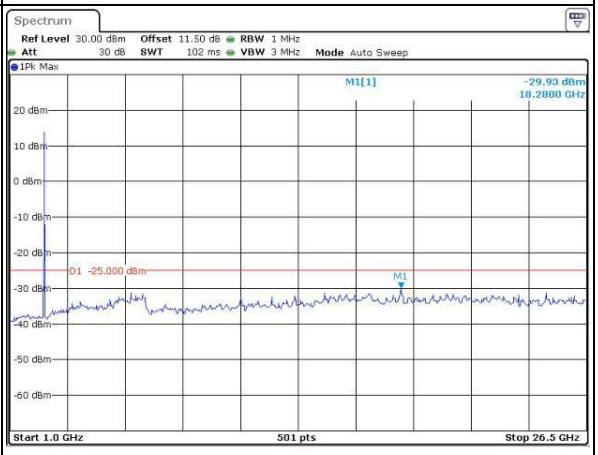
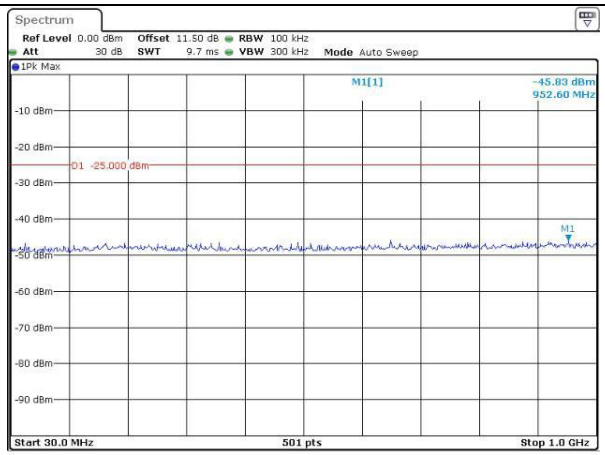
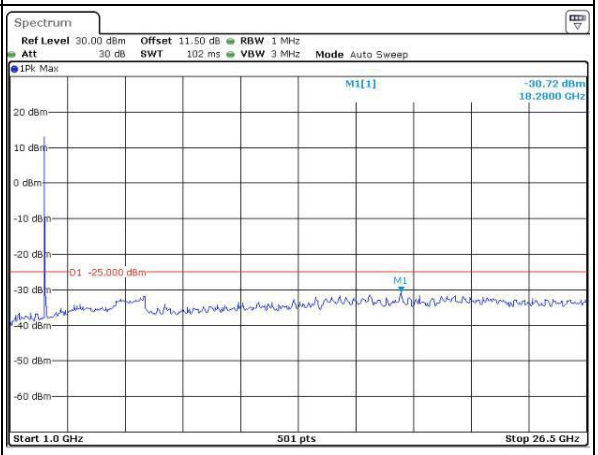
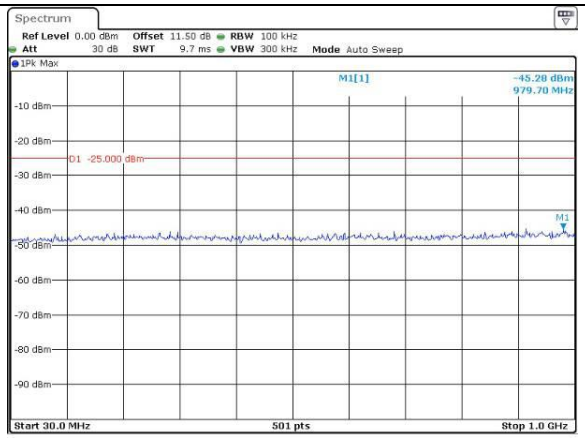
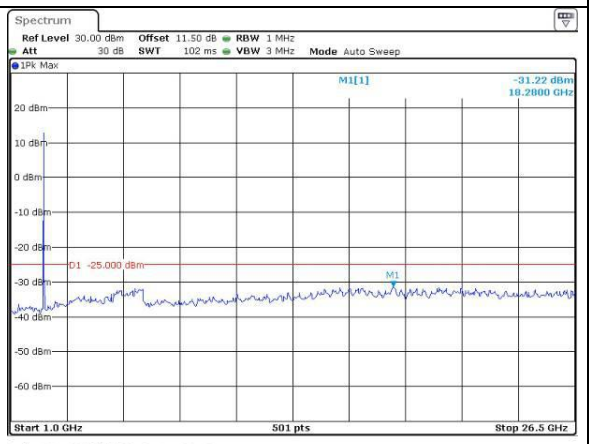
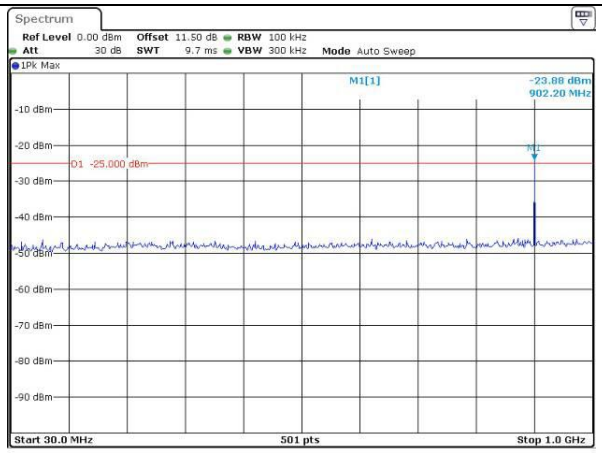
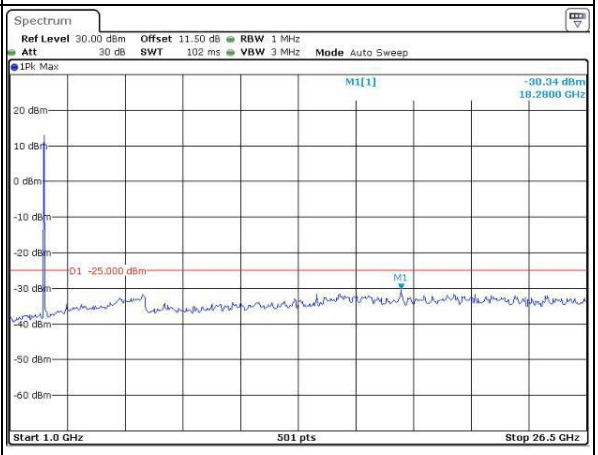
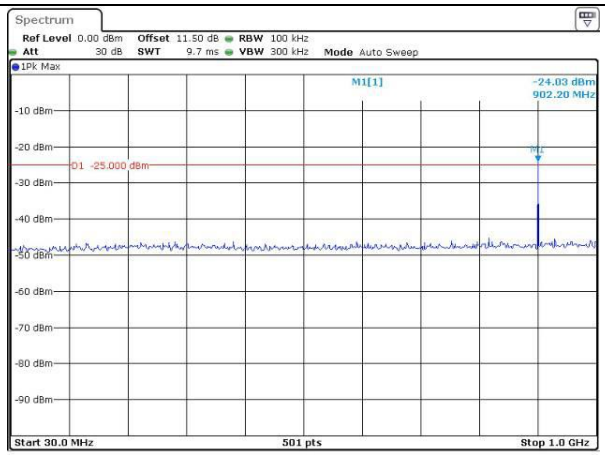
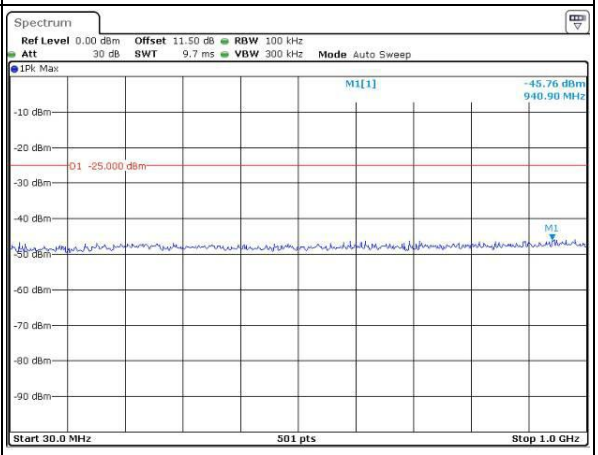
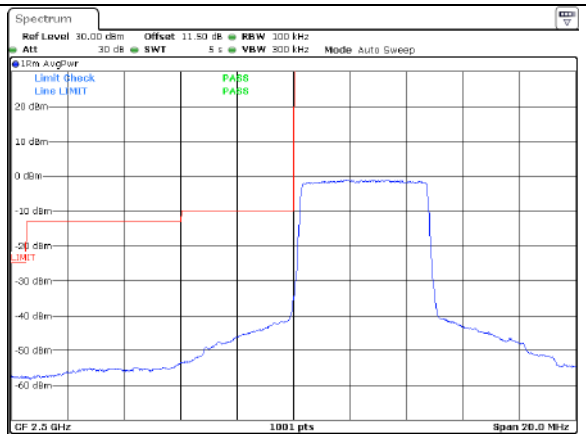
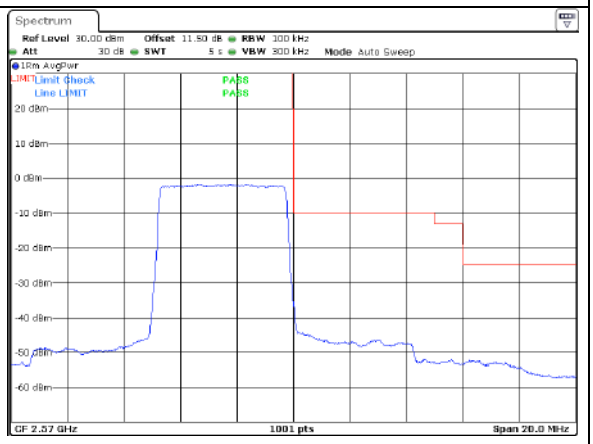
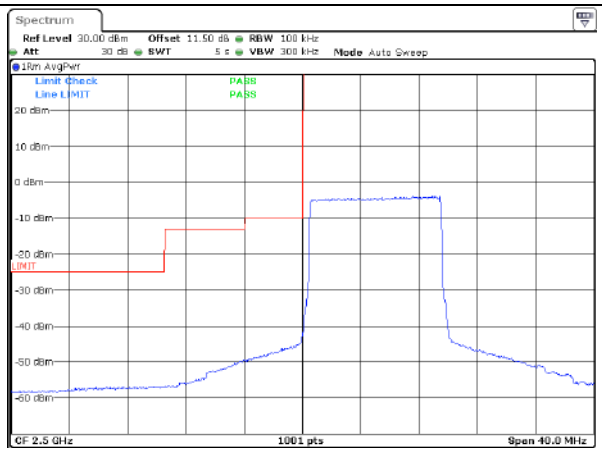
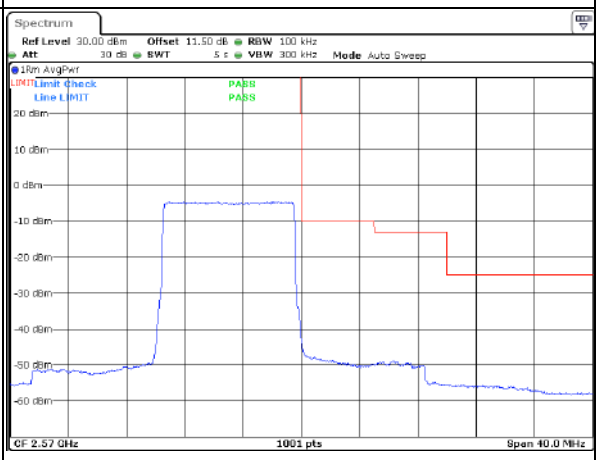
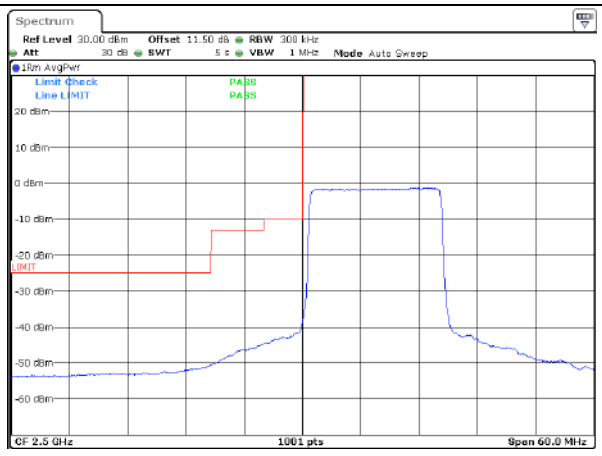
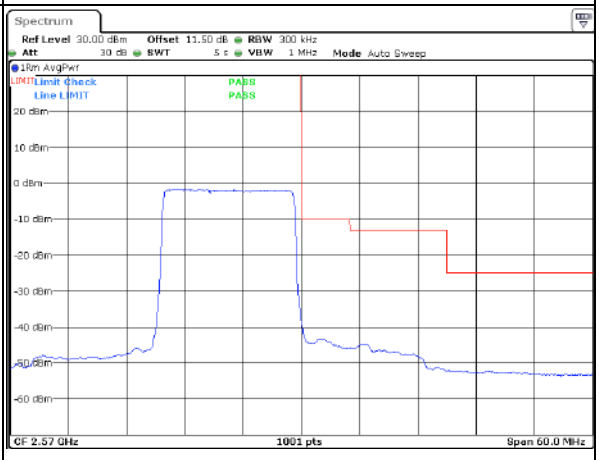
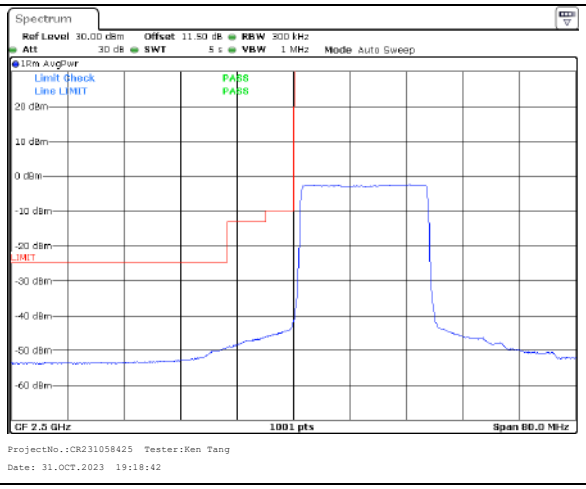
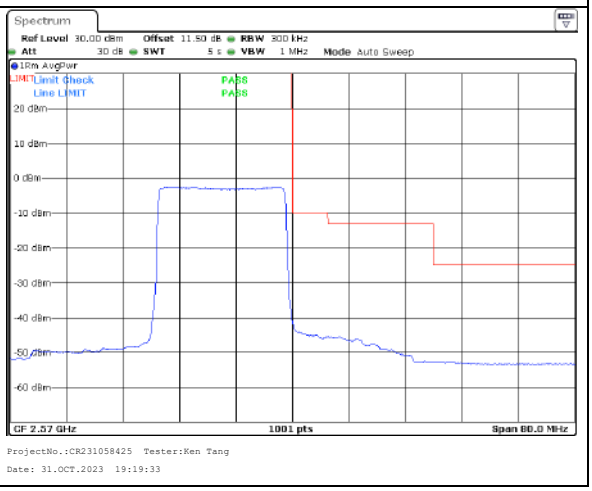
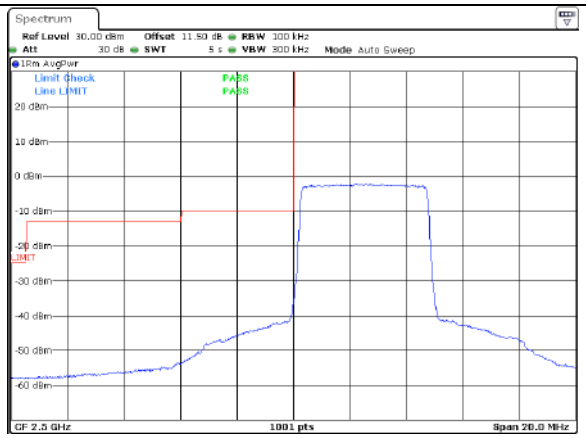
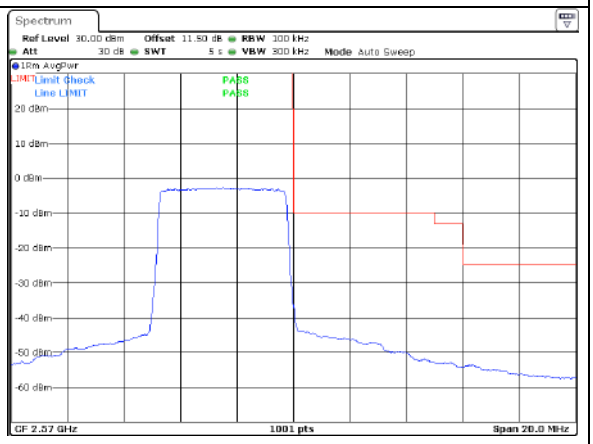
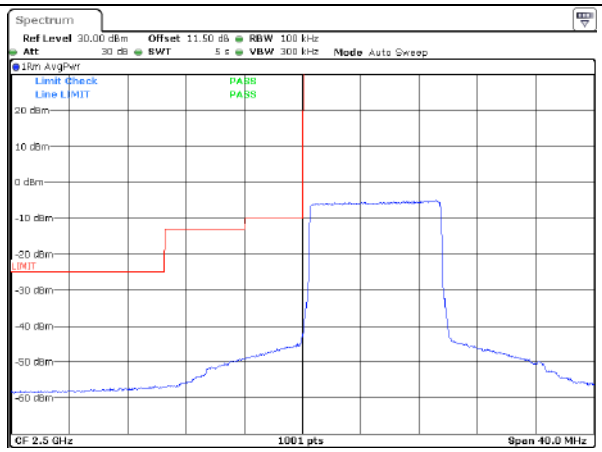
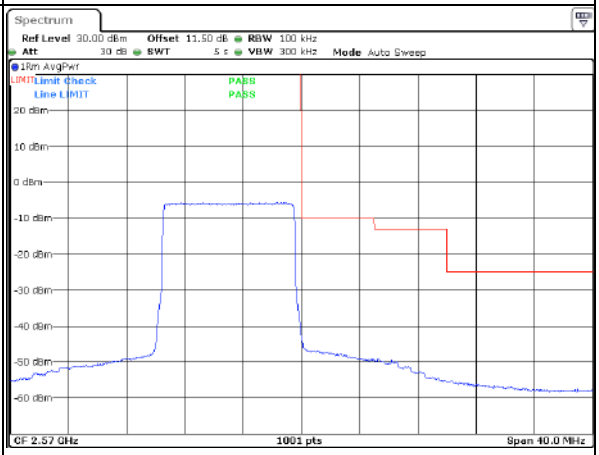
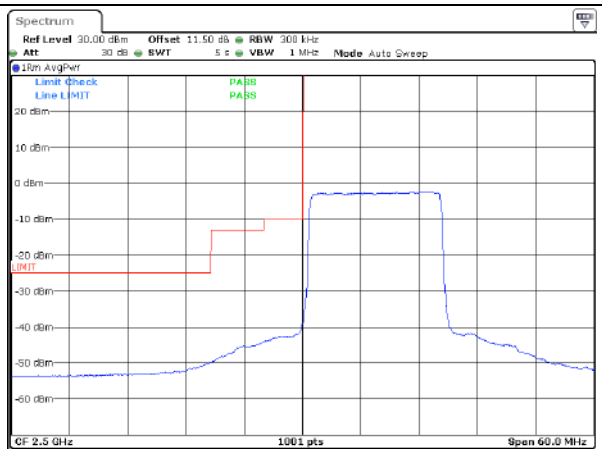
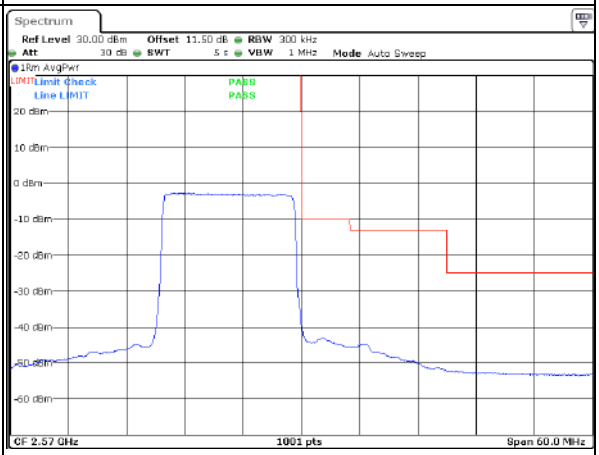
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

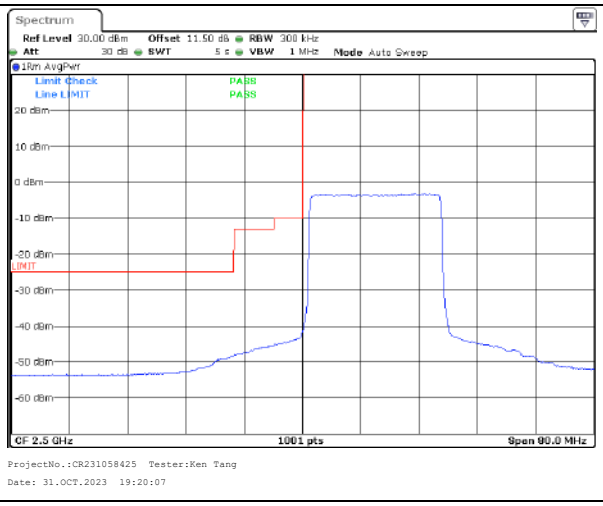
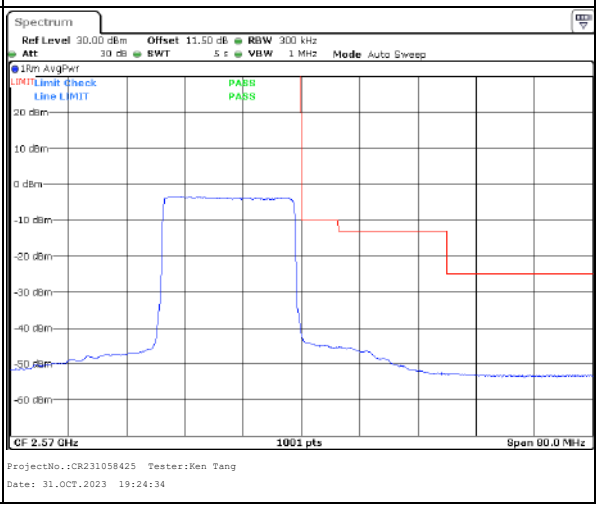
Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

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

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

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

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

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

4.10 Antenna Port Test Data and Results for LTE Band 12

Serial Number:	2BYR-5	Test Date:	2023/10/29
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ken Tang	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	25.1	Relative Humidity: (%)	60	ATM Pressure: (kPa)	100.5

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101943	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
Minl-Clrcuits	Power Splitter	ZFRSC-183-S+	S F448201619	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/28	2024/9/27
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A

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

Test Frequency for Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
1.4MHz	699.7	707.5	715.3
3MHz	700.5	707.5	714.5
5MHz	701.5	707.5	713.5
10MHz	704	707.5	711

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		
1.4MHz QPSK	RB1#0	23.60	23.09	23.13	**15.25**	34.77
	RB1#3	23.42	23.04	23.11		
	RB1#5	23.30	22.94	23.13		
	RB3#0	23.55	23.15	23.50		
	RB3#3	23.50	23.19	23.20		
	RB6#0	22.47	22.04	22.20		
1.4MHz 16QAM	RB1#0	22.56	21.84	22.59	14.25	34.77
	RB1#3	22.51	21.77	22.53		
	RB1#5	22.60	21.78	22.55		
	RB3#0	22.45	22.22	22.29		
	RB3#3	22.47	22.15	22.33		
	RB6#0	21.54	21.31	21.41		
3MHz QPSK	RB1#0	23.43	23.12	23.22	15.10	34.77
	RB1#8	23.35	23.03	23.24		
	RB1#14	23.45	23.07	23.23		
	RB6#0	22.45	22.16	22.20		
	RB6#9	22.48	22.07	22.22		
	RB15#0	22.46	22.04	22.27		
3MHz 16QAM	RB1#0	23.11	21.89	22.63	**14.79**	34.77
	RB1#8	23.14	21.77	22.54		
	RB1#14	23.11	21.71	22.42		
	RB6#0	21.45	21.37	21.33		
	RB6#9	21.43	21.27	21.26		
	RB15#0	21.42	21.09	21.23		
5MHz QPSK	RB1#0	23.58	23.23	23.27	15.25	34.77
	RB1#13	23.60	23.08	23.28		
	RB1#24	23.49	22.94	23.24		
	RB15#0	22.46	22.29	22.25		
	RB15#10	22.43	22.05	22.24		
	RB25#0	22.46	22.15	22.31		
5MHz 16QAM	RB1#0	22.33	21.79	21.28	13.98	34.77
	RB1#13	22.31	21.56	21.28		
	RB1#24	22.22	21.62	21.31		
	RB15#0	21.33	21.22	21.32		
	RB15#10	21.31	21.07	21.29		
	RB25#0	21.36	20.98	21.41		

10MHz QPSK	RB1#0	23.51	23.35	23.16	15.16	34.77
	RB1#25	23.41	23.17	23.05		
	RB1#49	23.28	23.18	23.10		
	RB25#0	22.45	22.19	22.11		
	RB25#25	22.30	22.16	22.26		
	RB50#0	22.21	22.11	22.13		
10MHz 16QAM	RB1#0	22.45	21.86	22.27	14.10	34.77
	RB1#25	22.45	21.57	22.12		
	RB1#49	22.20	21.70	22.35		
	RB25#0	21.47	21.35	21.06		
	RB25#25	21.30	21.63	21.28		
	RB50#0	21.26	21.15	21.53		
Note: ERP= Conducted Power(dBm) - L_C(dB) + G_T(dBd)G_T(dBd)=G_T(dBi)-2.15						
					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	
10MHz QPSK	RB1#0	9.40	7.28	9.95	13
	RB50#0	8.87	6.05	6.35	13
10MHz 16QAM	RB1#0	8.62	9.65	8.37	13
	RB50#0	6.41	7.31	7.77	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	1.102	1.102	1.096	1.260	1.254	1.254
1.4MHz 16QAM	1.09	1.102	1.102	1.25	1.254	1.260
3MHz QPSK	2.695	2.695	2.695	3.000	3.000	2.988
3MHz 16QAM	2.683	2.695	2.683	2.988	3.024	3.012
5MHz QPSK	4.511	4.511	4.531	4.920	4.920	4.980
5MHz 16QAM	4.511	4.531	4.491	4.840	5.020	4.980
10MHz QPSK	8.942	8.982	8.942	9.760	9.840	9.760
10MHz 16QAM	8.942	8.942	8.942	9.800	9.880	9.800
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.**

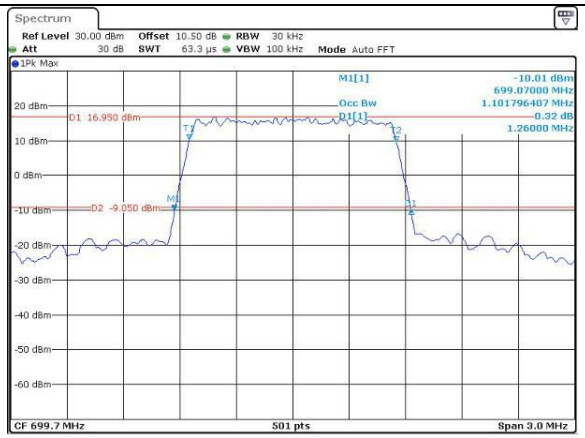
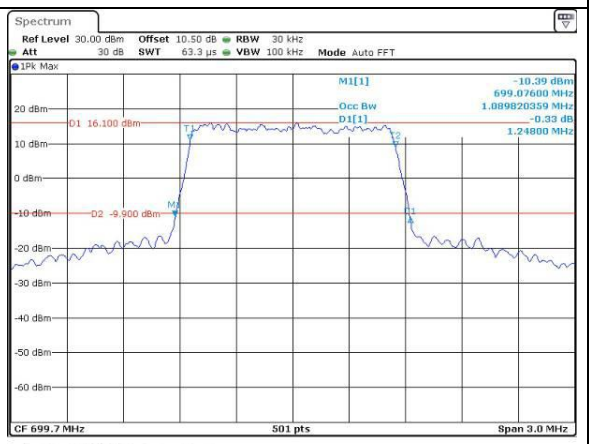
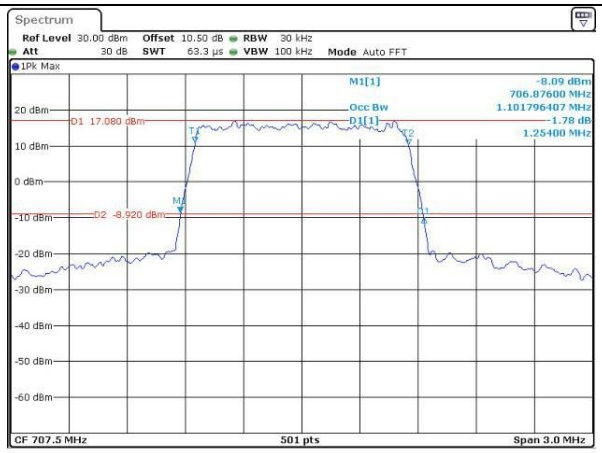
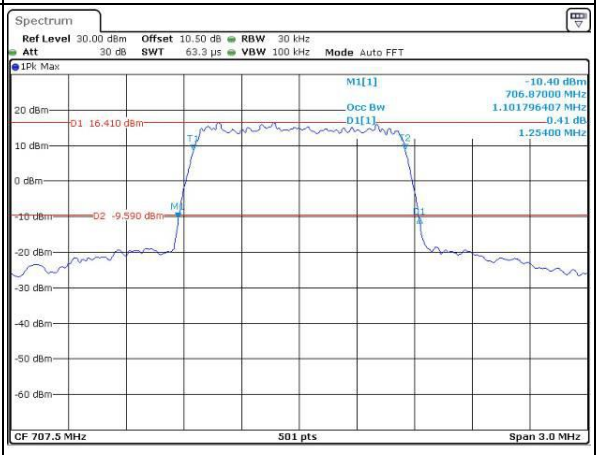
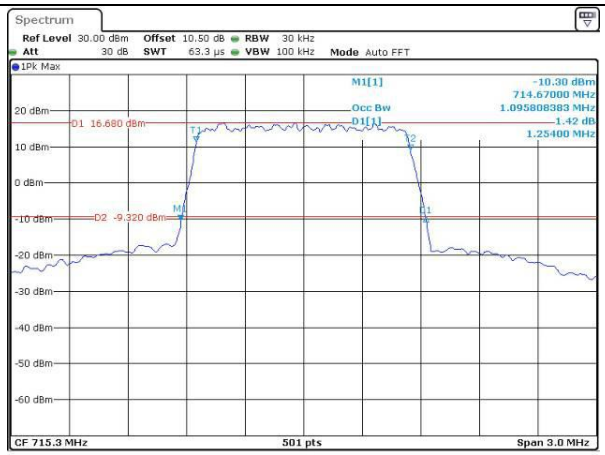
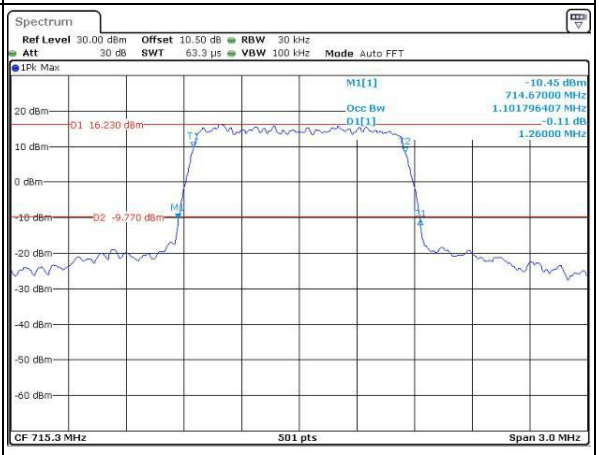
FCC §2.1051, §27.53:Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

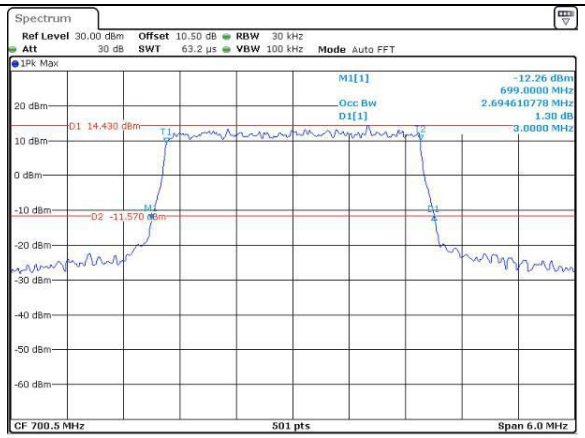
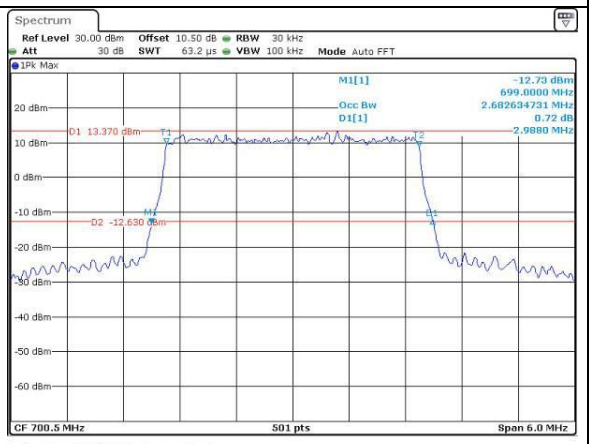
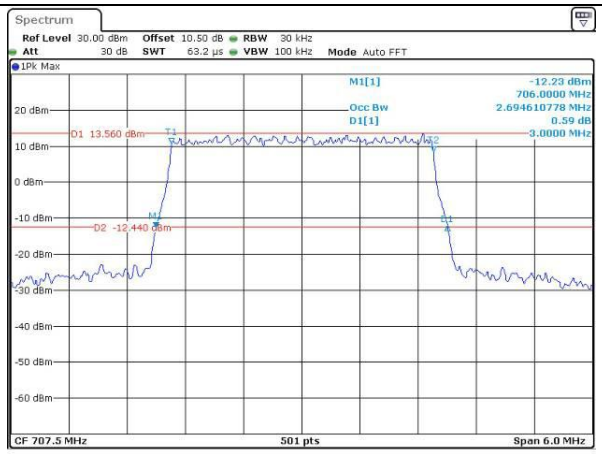
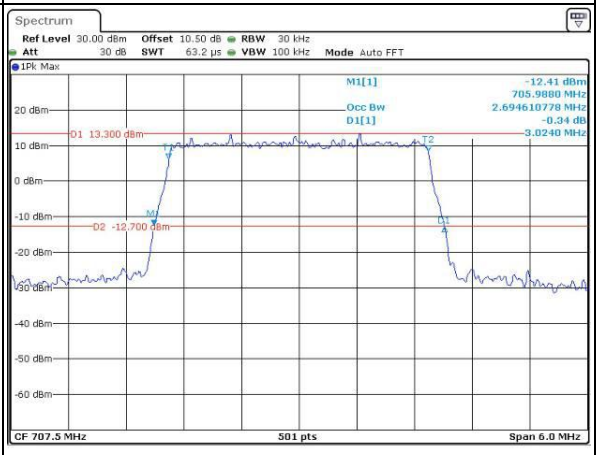
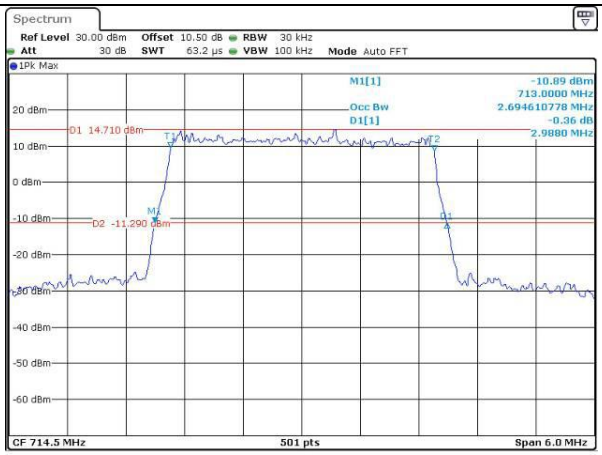
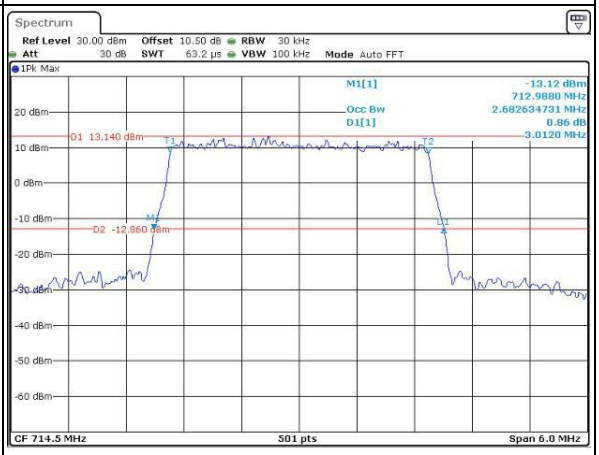
FCC §2.1055, §27.54: Frequency Stability

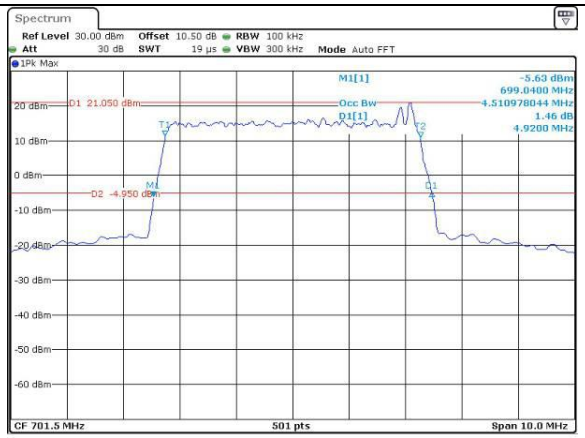
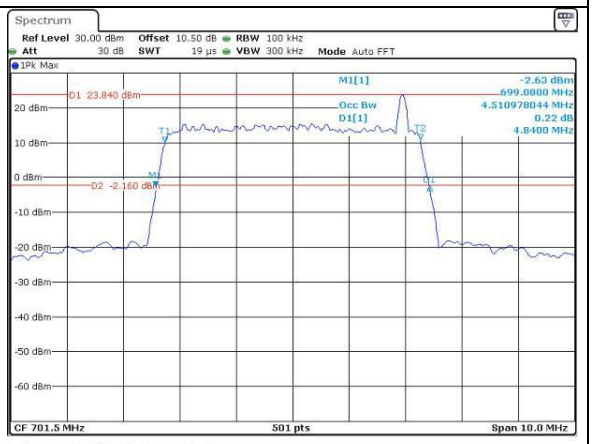
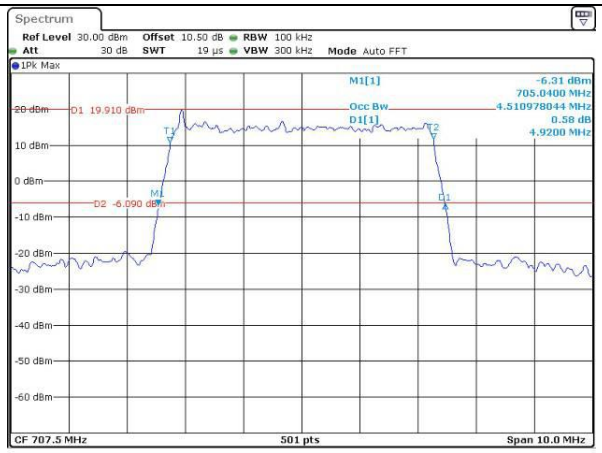
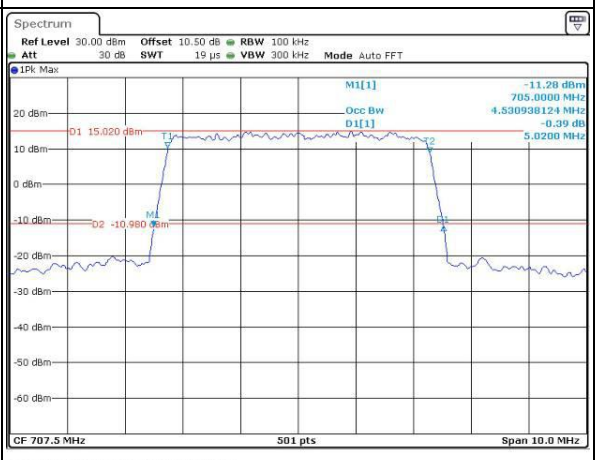
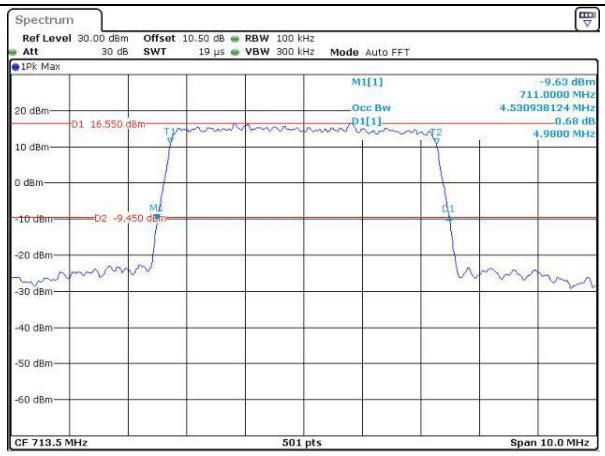
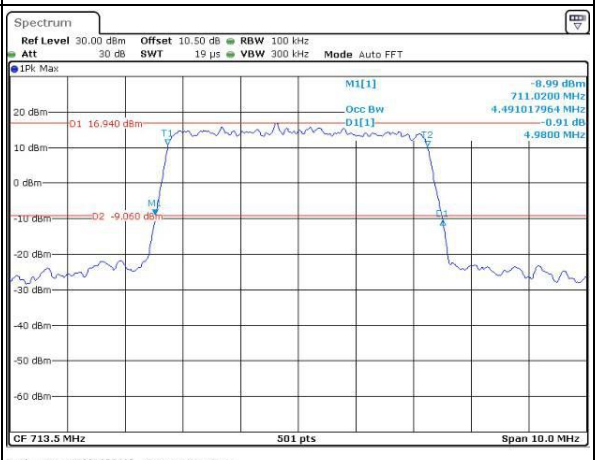
Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	699.021	699.00	715.981	716.00
	-20	3.85	699.004	699.00	715.979	716.00
	-10	3.85	699.028	699.00	715.970	716.00
	0	3.85	699.011	699.00	715.979	716.00
	10	3.85	699.010	699.00	715.979	716.00
	20	3.85	699.026	699.00	715.995	716.00
	30	3.85	699.023	699.00	715.995	716.00
	40	3.85	699.011	699.00	715.972	716.00
	50	3.85	699.008	699.00	715.360	716.00
Frequency Stability vs. Voltage	20	3.35	699.010	699.00	715.750	716.00
	20	4.4	699.014	699.00	715.984	716.00
					Result:	**Pass**

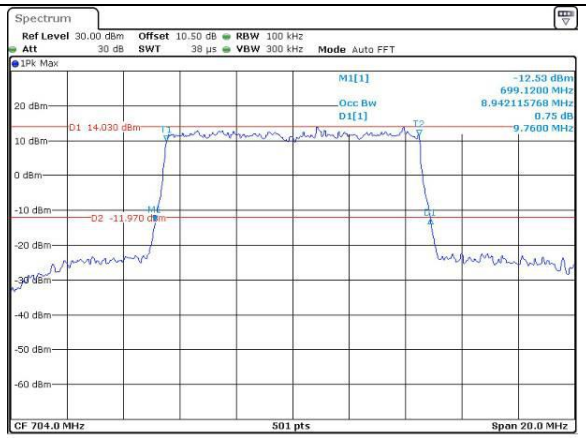
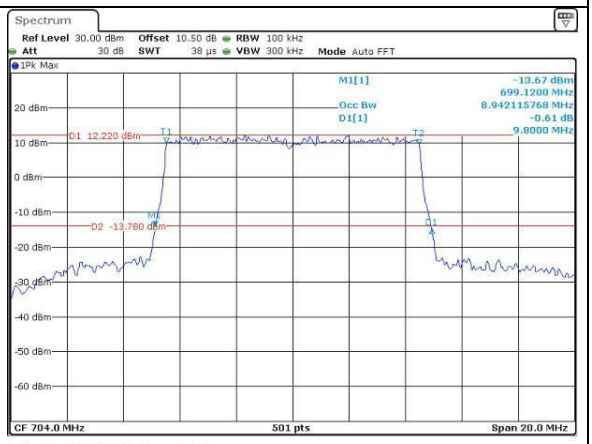
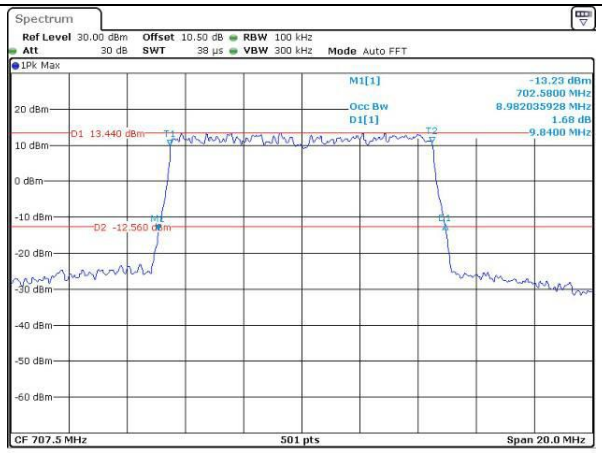
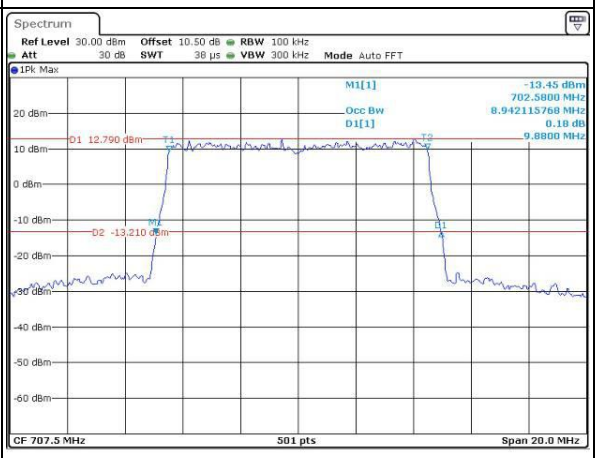
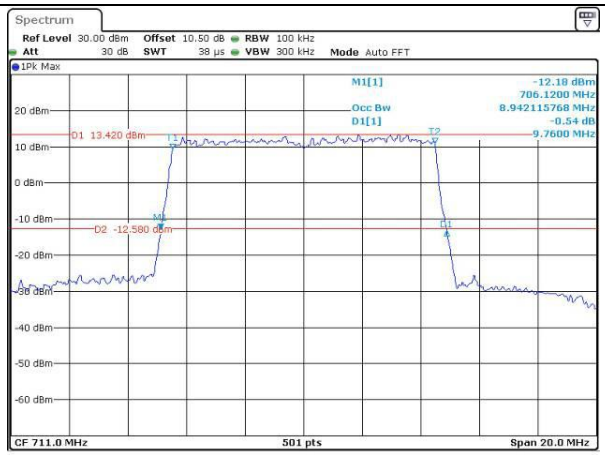
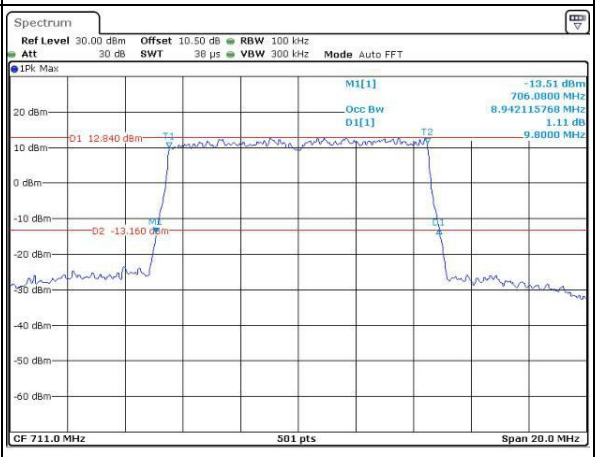
Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	699.002	699.00	715.974	716.00
	-20	3.85	699.006	699.00	715.984	716.00
	-10	3.85	699.024	699.00	715.987	716.00
	0	3.85	699.017	699.00	715.987	716.00
	10	3.85	699.220	699.00	715.981	716.00
	20	3.85	699.029	699.00	715.991	716.00
	30	3.85	699.003	699.00	715.993	716.00
	40	3.85	699.005	699.00	715.994	716.00
	50	3.85	699.009	699.00	715.994	716.00
Frequency Stability vs. Voltage	20	3.35	699.017	699.00	715.989	716.00
	20	4.4	699.001	699.00	715.976	716.00
					Result:	**Pass**

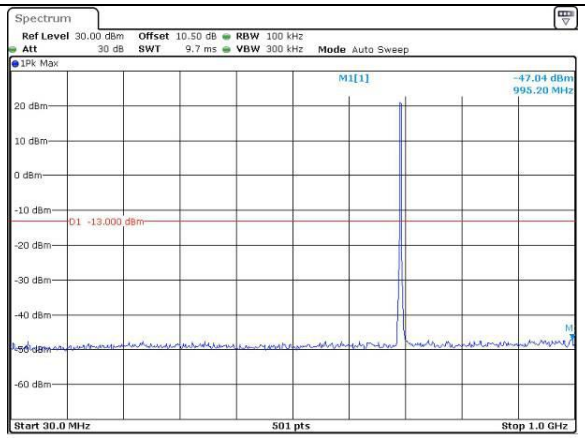
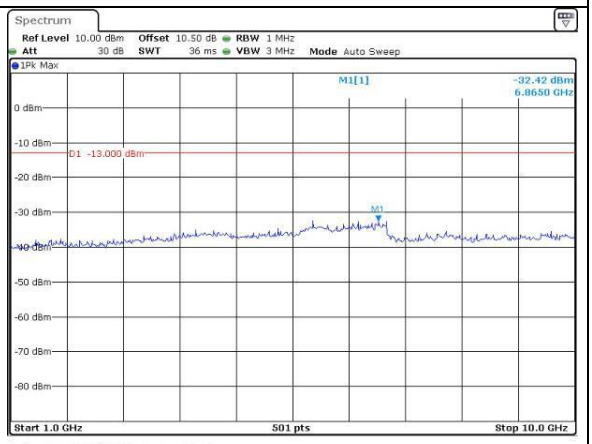
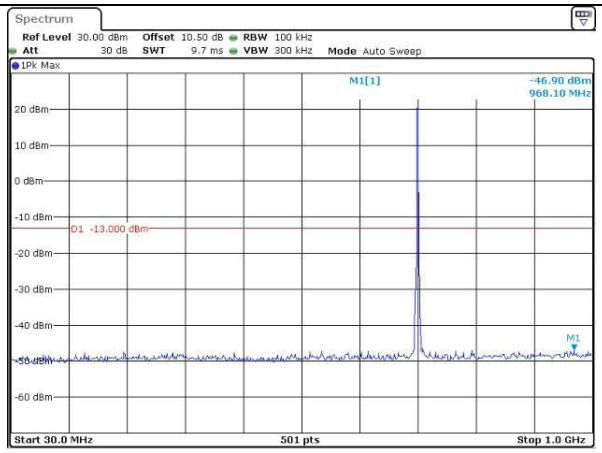
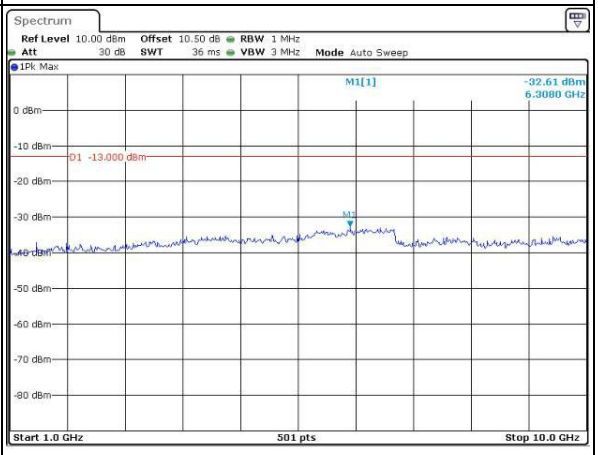
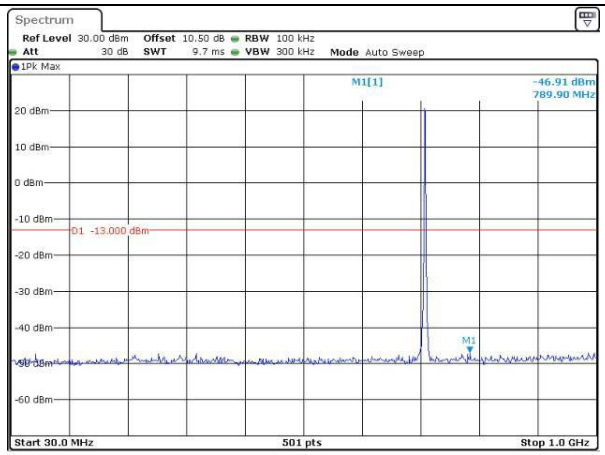
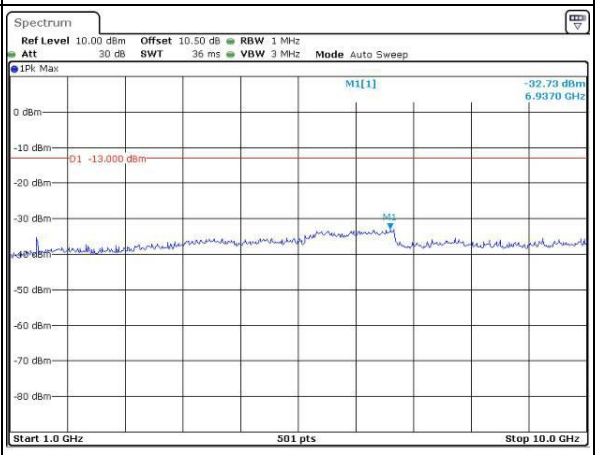
Test Plots (Note: The 10.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

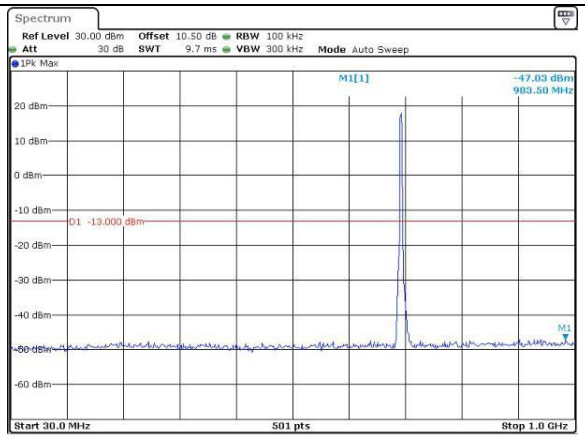
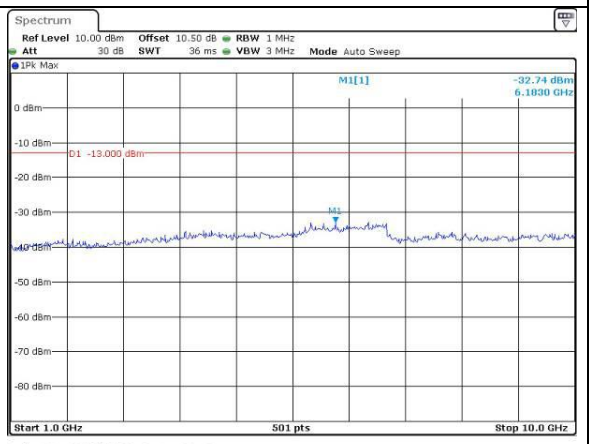
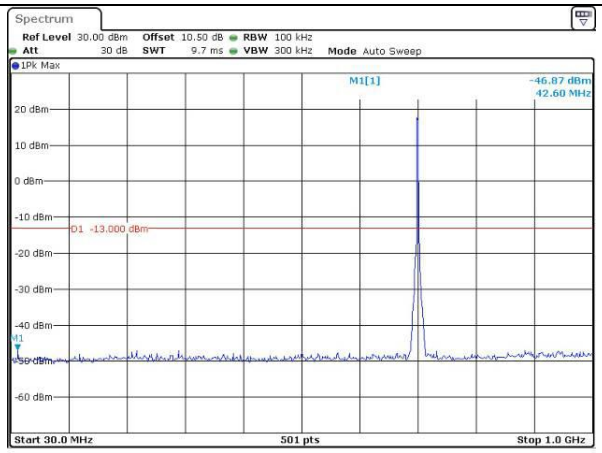
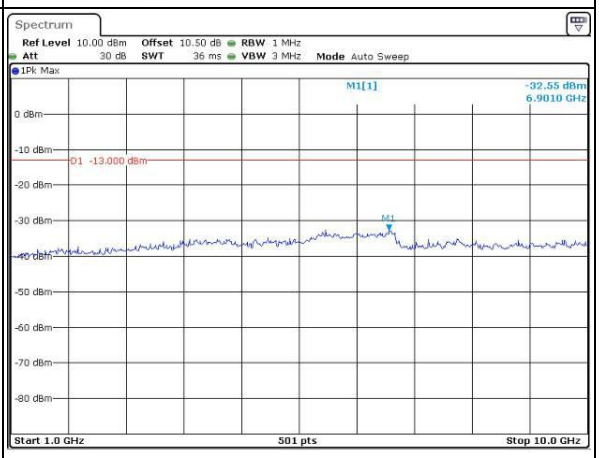
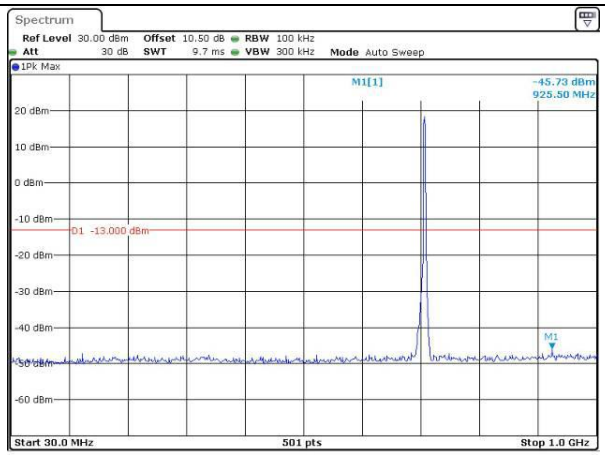
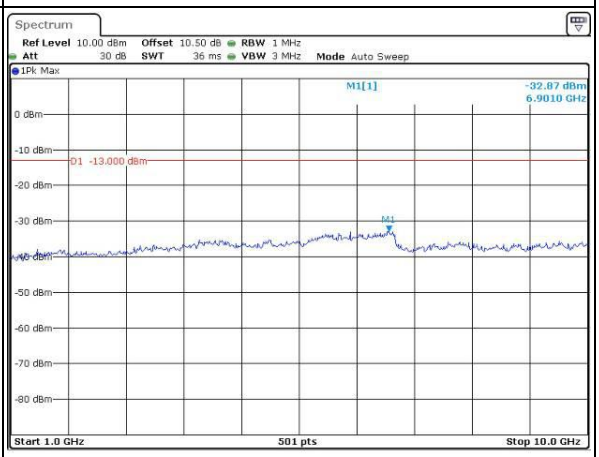
Occupied Bandwidth		
Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

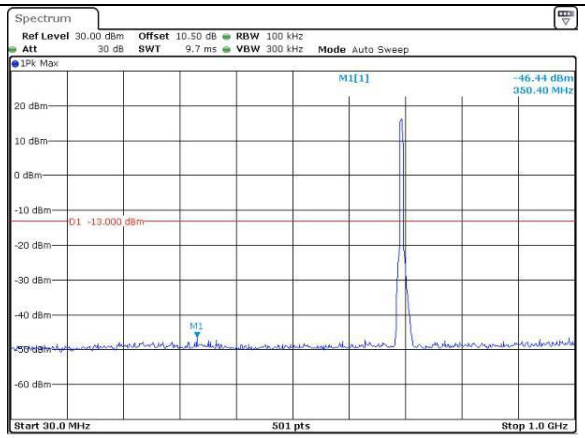
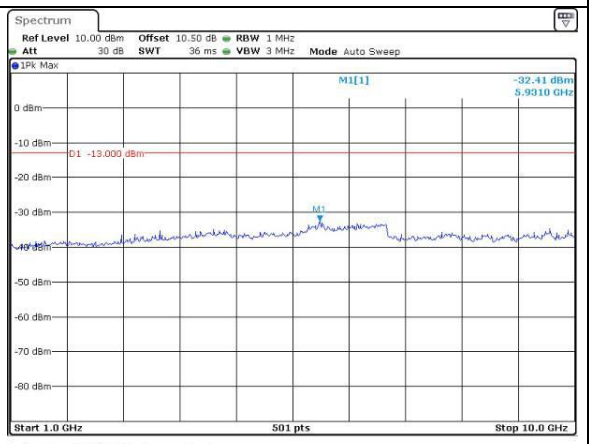
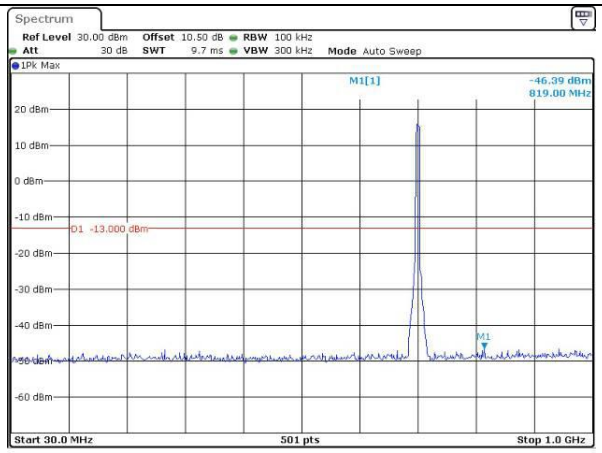
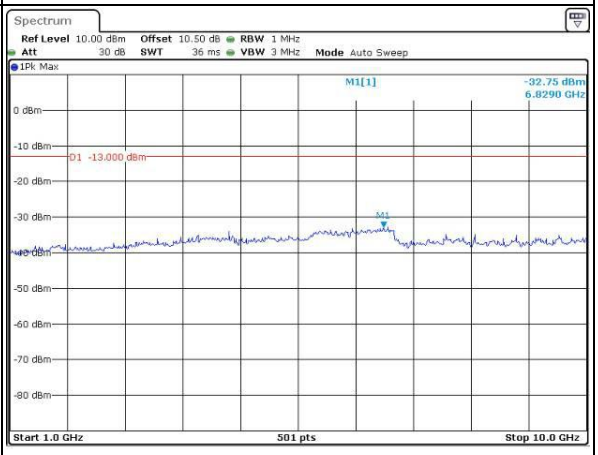
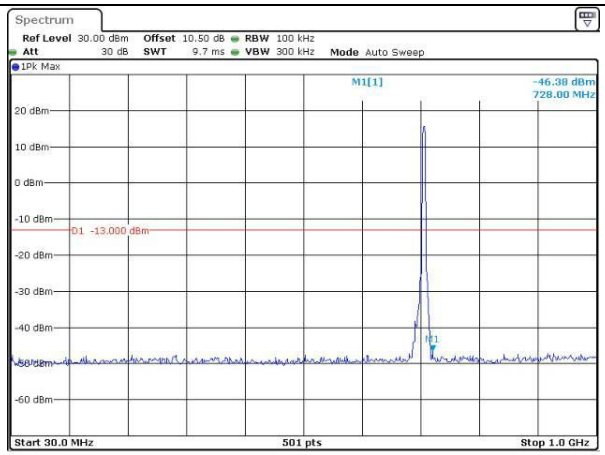
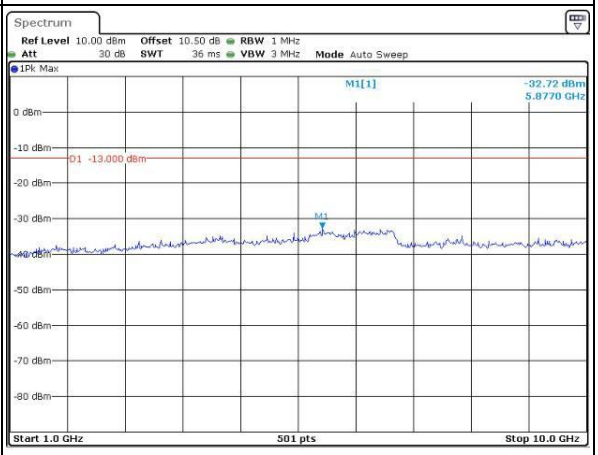
Occupied Bandwidth		
Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

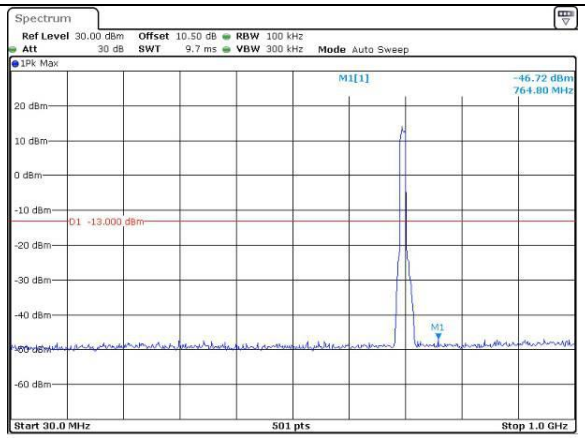
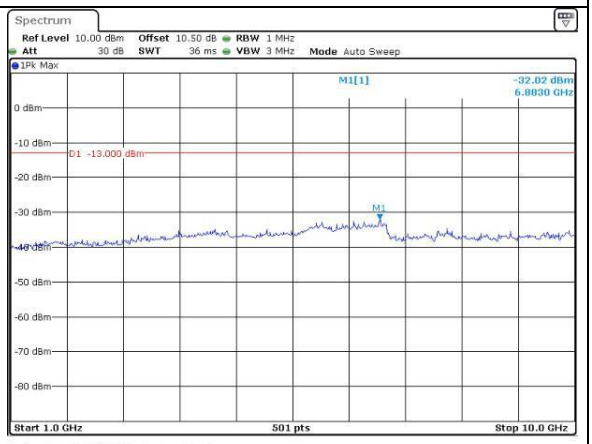
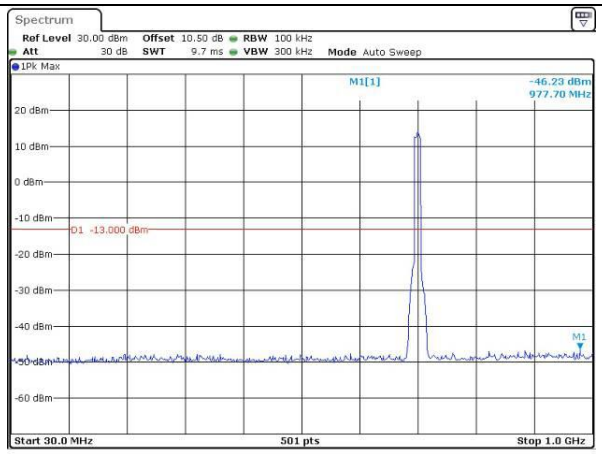
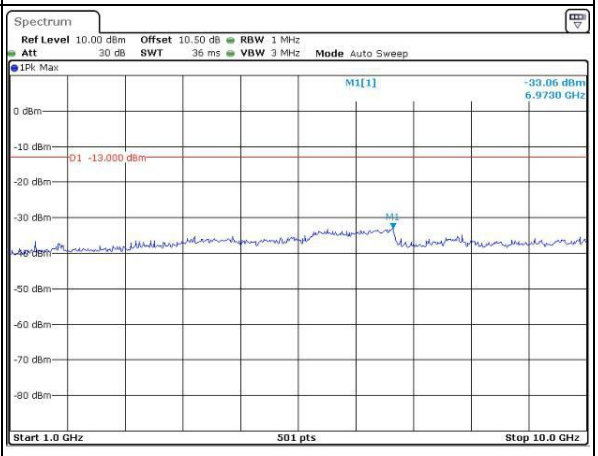
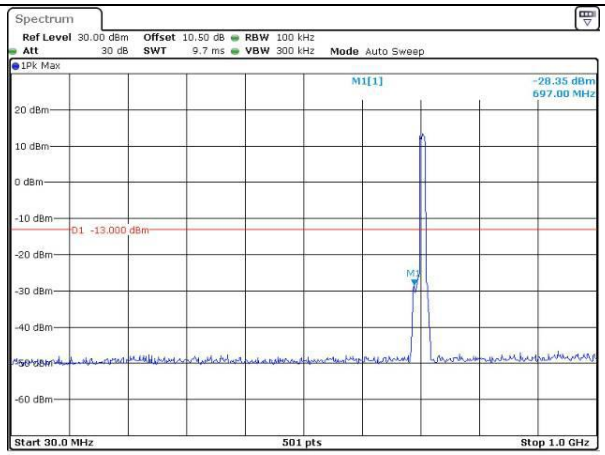
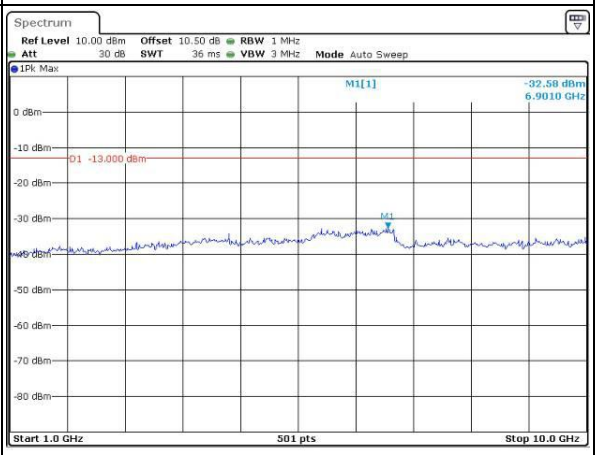
Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

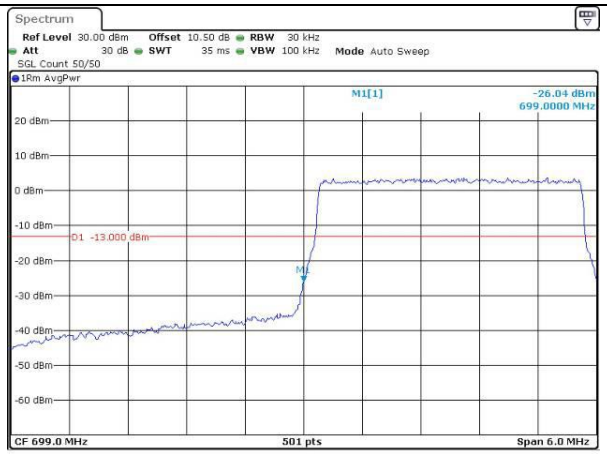
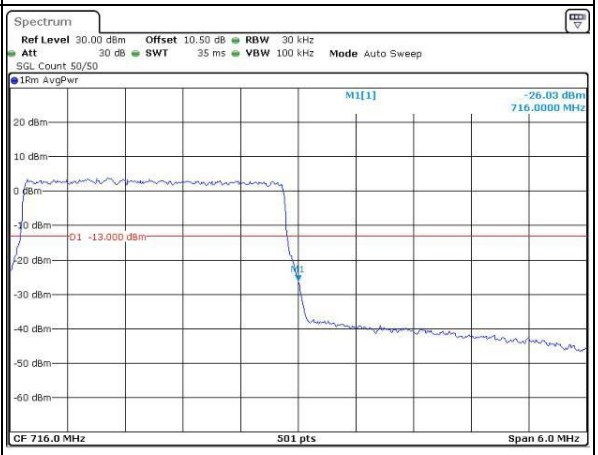
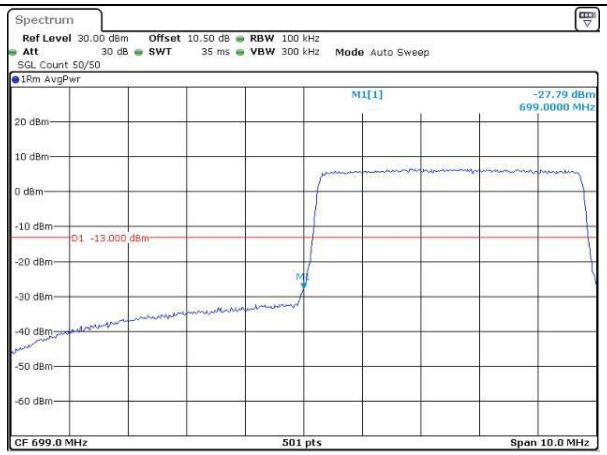
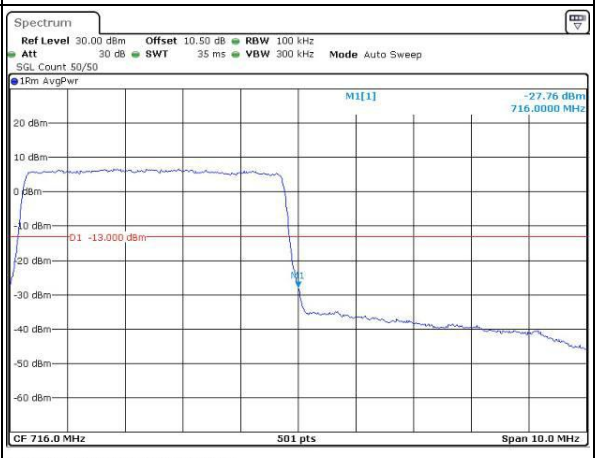
Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

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

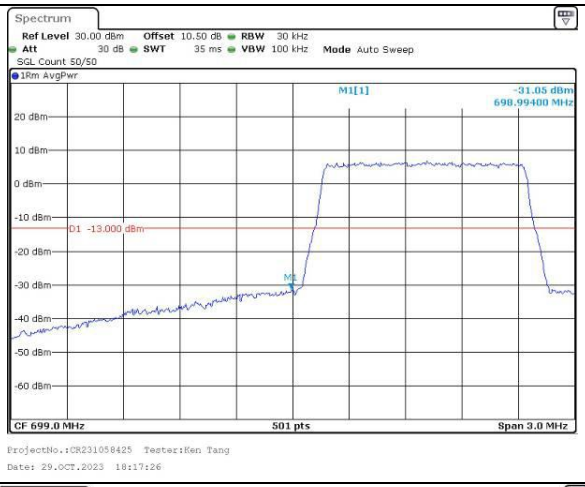
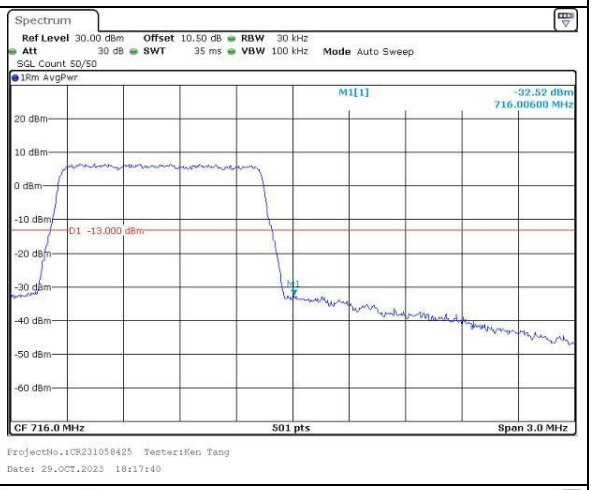
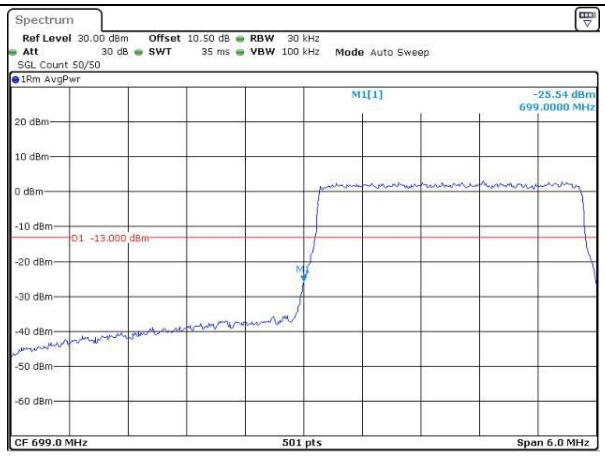
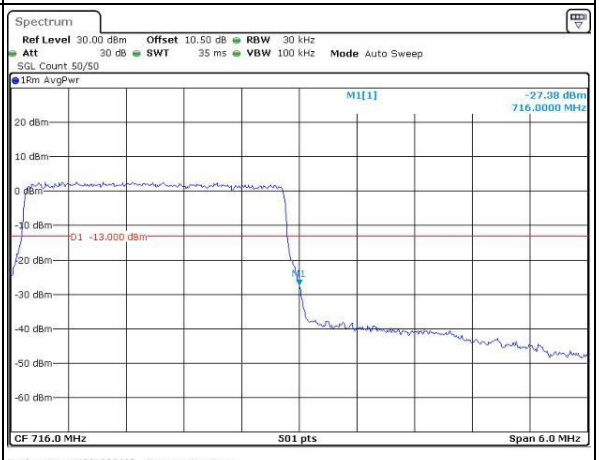
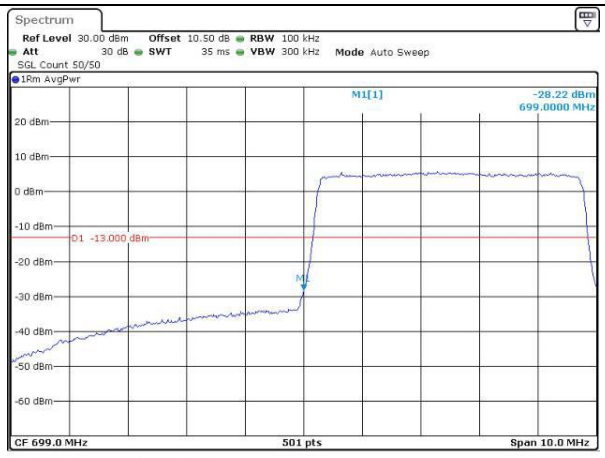
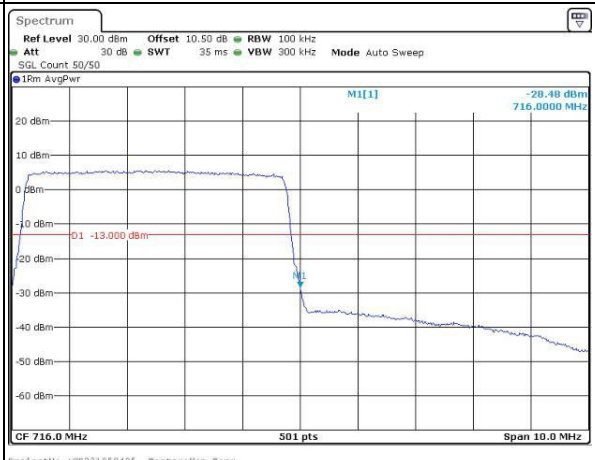
Spurious Emissions at Antenna Terminal		
Channel	**3MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

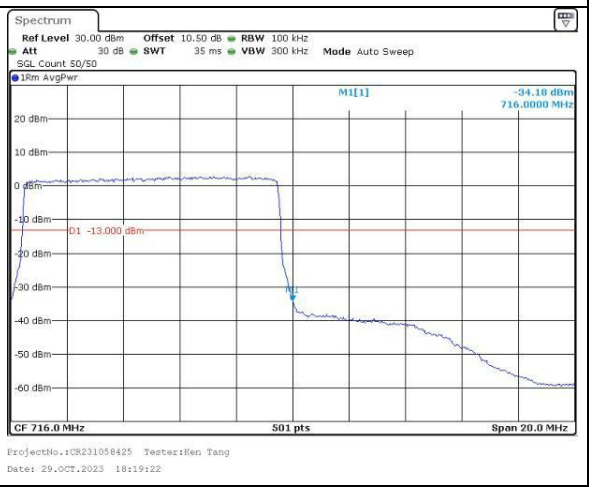
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

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

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

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

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

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

4.11 Antenna Port Test Data and Results for LTE Band 13

Serial Number:	2BYR-5	Test Date:	2023/10/29-2023/11/06
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ken Tang, Len Huang	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	24.5-25.3	Relative Humidity: (%)	60-62	ATM Pressure: (kPa)	100.5-100.9

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101943	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
Minl-Clrcuits	Power Splitter	ZFRSC-183-S+	S F448201619	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/28	2024/9/27
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A

Test Frequency For Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
5MHz	779.5	/	784.5
10MHz	/	782	/

Test Data:

FCC§2.1046;§ 27.50(b) (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	23.04	/	22.50	**14.69**	34.77
	RB1#13	22.93	/	22.59		
	RB1#24	22.68	/	22.73		
	RB15#0	21.85	/	21.83		
	RB15#10	21.78	/	21.75		
	RB25#0	21.84	/	21.72		
5MHz 16QAM	RB1#0	21.94	/	20.74	**13.59**	34.77
	RB1#13	21.92	/	20.93		
	RB1#24	21.65	/	20.92		
	RB15#0	20.73	/	20.88		
	RB15#10	20.71	/	21.04		
	RB25#0	20.89	/	20.92		
10MHz QPSK	RB1#0	/	22.77	/	14.42	34.77
	RB1#25	/	22.44	/		
	RB1#49	/	22.57	/		
	RB25#0	/	21.55	/		
	RB25#25	/	21.56	/		
	RB50#0	/	21.56	/		
10MHz 16QAM	RB1#0	/	21.50	/	13.15	34.77
	RB1#25	/	21.10	/		
	RB1#49	/	21.45	/		
	RB25#0	/	20.59	/		
	RB25#25	/	20.54	/		
	RB50#0	/	20.45	/		

Note:
ERP= Conducted Power(dBm) - L_C(dB) + G_T(dBd)
G_T(dBd)=G_T(dBi)-2.15

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	
10MHz QPSK	RB1#0	/	9.53	/	13
	RB50#0	/	6.48	/	13
10MHz 16QAM	RB1#0	/	7.73	/	13
	RB50#0	/	6.61	/	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	/	4.531	5.020	/	4.980
5MHz 16QAM	4.511	/	4.511	4.860	/	4.980
10MHz QPSK	/	8.942	/	/	9.760	/
10MHz 16QAM	/	8.942	/	/	9.760	/
Note: The test plots please refer to the Plots of Occupied Bandwidth						

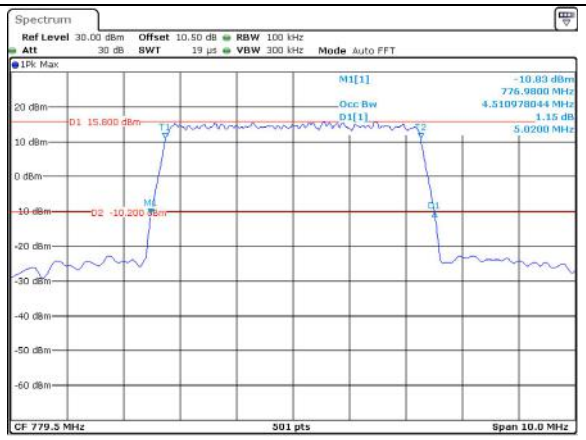
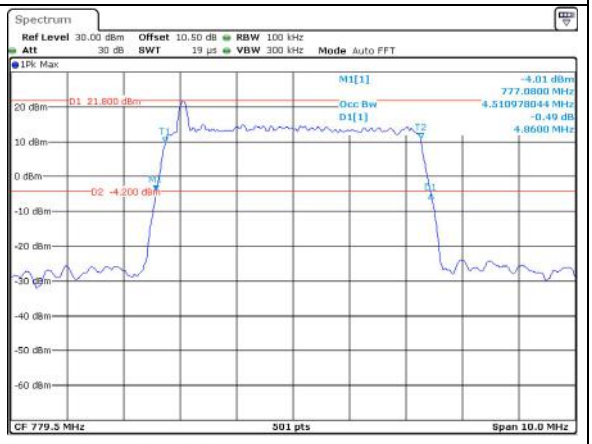
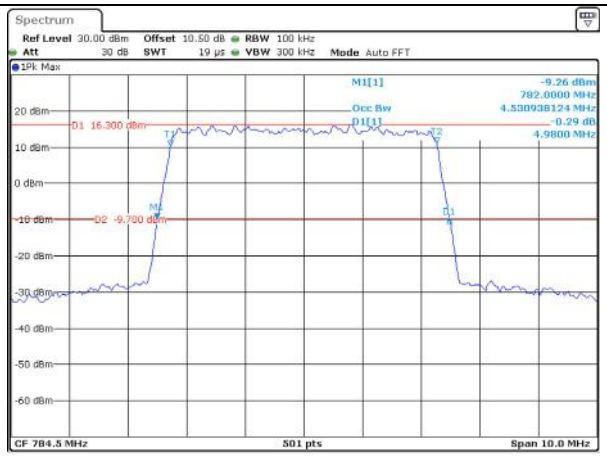
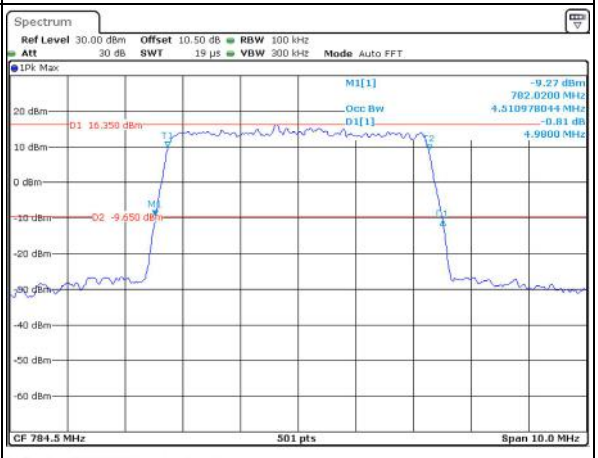
FCC §2.1051, §27.53:Spurious Emissions at Antenna Terminal	
Result:	**Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.**

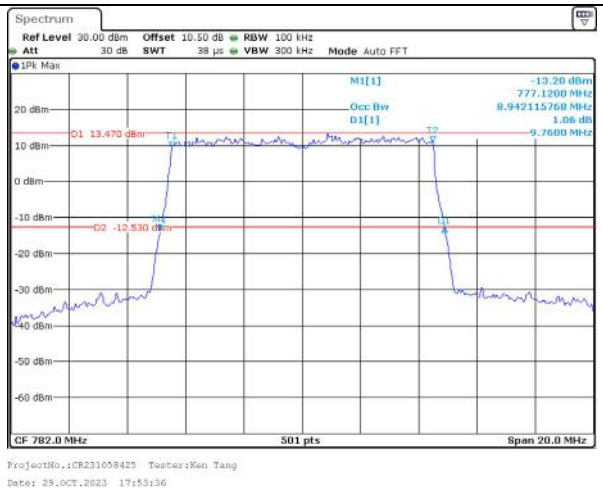
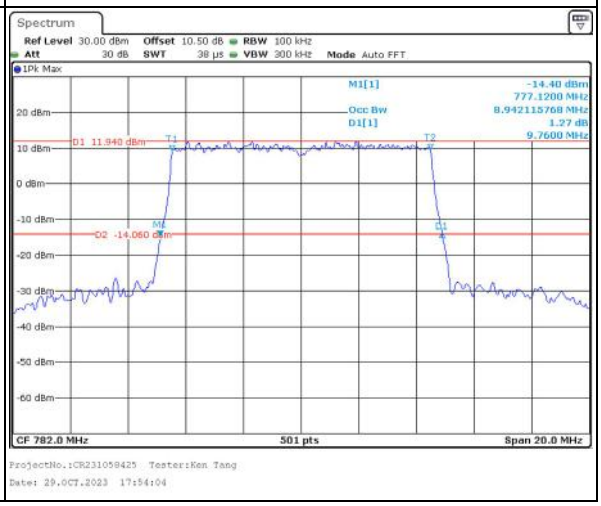
FCC §2.1051, §27.53:Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

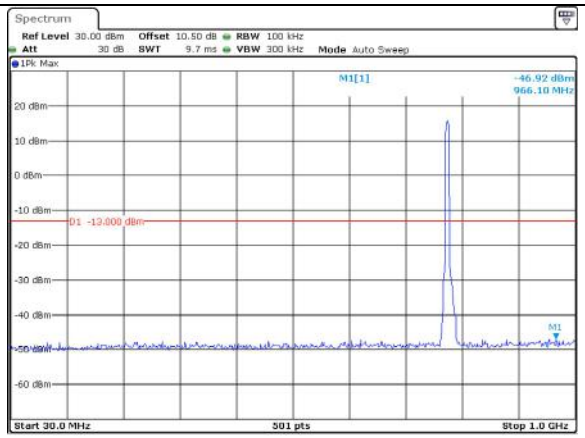
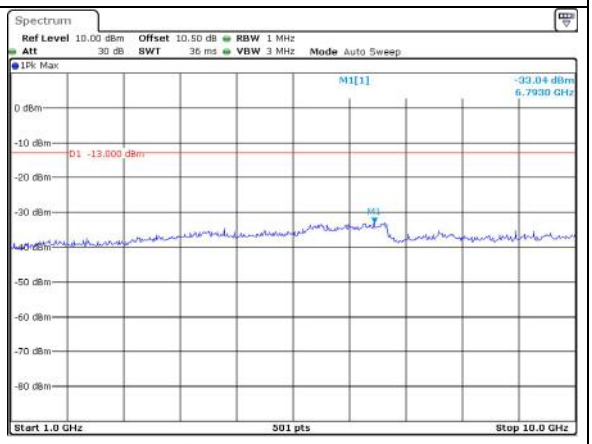
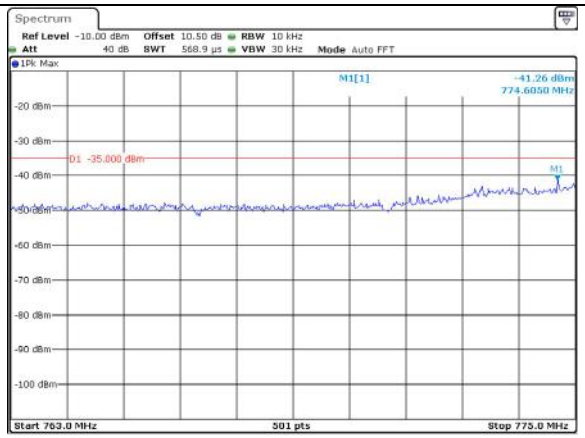
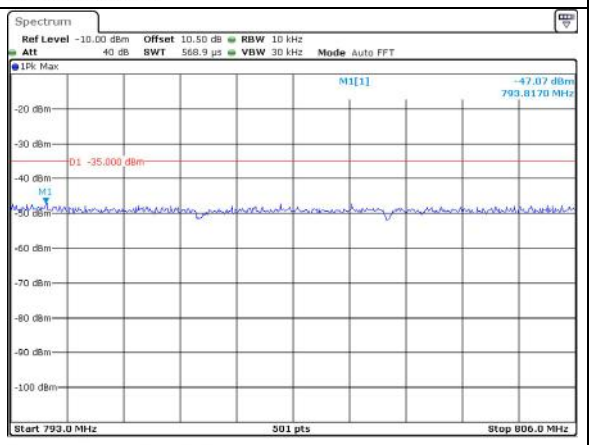
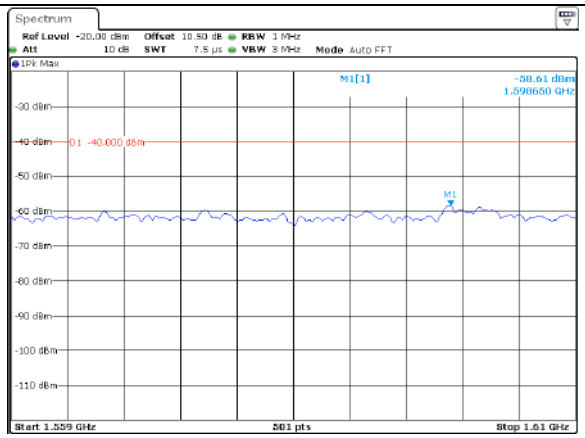
FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	777.012	777.00	786.976	787.00
	-20	3.85	777.003	777.00	786.989	787.00
	-10	3.85	777.021	777.00	786.984	787.00
	0	3.85	777.020	777.00	786.991	787.00
	10	3.85	777.011	777.00	786.978	787.00
	20	3.85	777.007	777.00	786.985	787.00
	30	3.85	777.022	777.00	786.977	787.00
	40	3.85	777.018	777.00	786.989	787.00
	50	3.85	777.013	777.00	786.970	787.00
Frequency Stability vs. Voltage	20	3.35	777.011	777.00	786.988	787.00
	20	4.4	777.023	777.00	786.979	787.00
					Result:	**Pass**

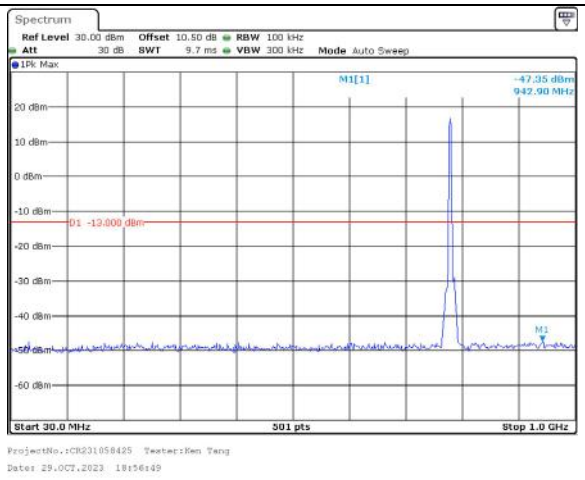
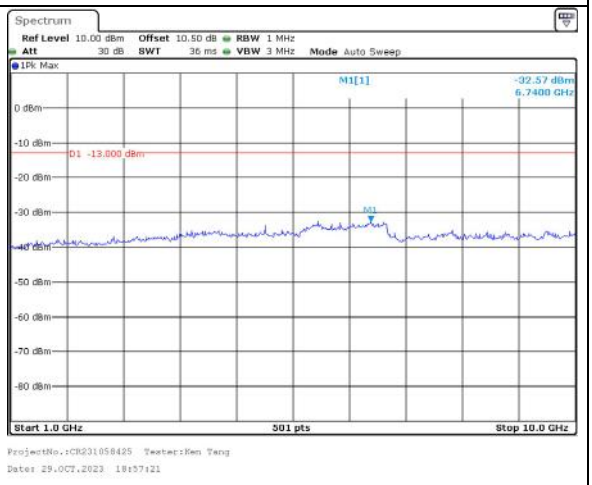
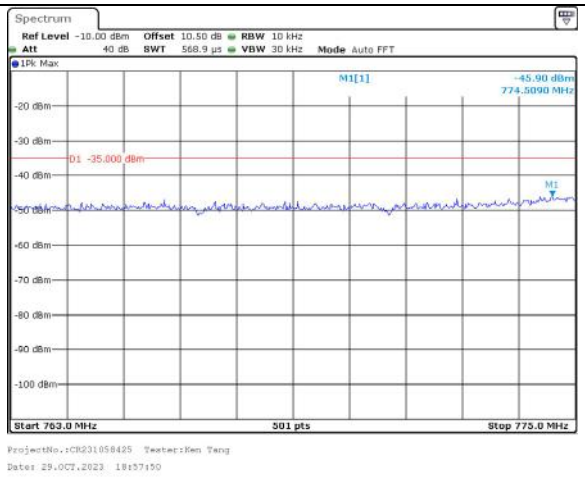
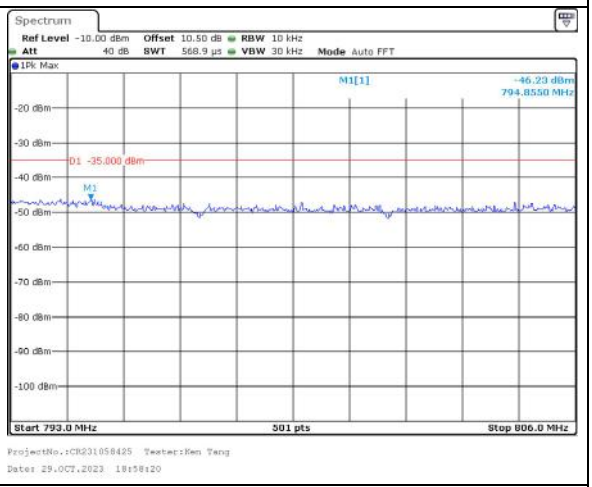
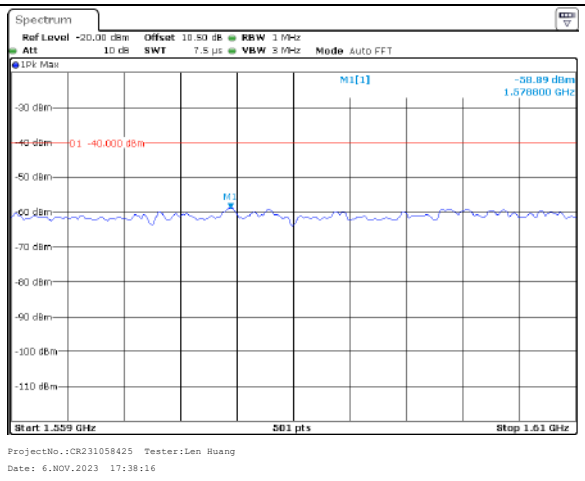
Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	777.001	777.00	786.974	787.00
	-20	3.85	777.029	777.00	786.980	787.00
	-10	3.85	777.021	777.00	786.979	787.00
	0	3.85	777.023	777.00	786.980	787.00
	10	3.85	777.028	777.00	786.987	787.00
	20	3.85	777.009	777.00	786.974	787.00
	30	3.85	777.024	777.00	786.990	787.00
	40	3.85	777.008	777.00	786.983	787.00
	50	3.85	777.018	777.00	786.994	787.00
Frequency Stability vs. Voltage	20	3.35	777.016	777.00	786.985	787.00
	20	4.4	777.028	777.00	786.996	787.00
					Result:	**Pass**

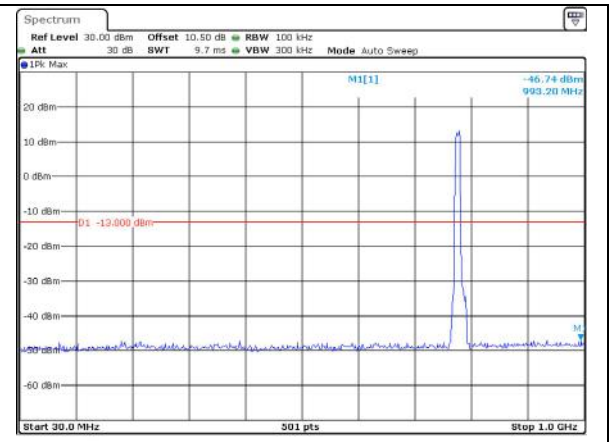
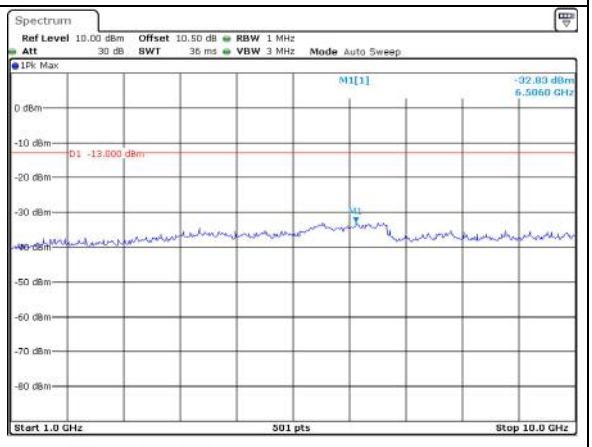
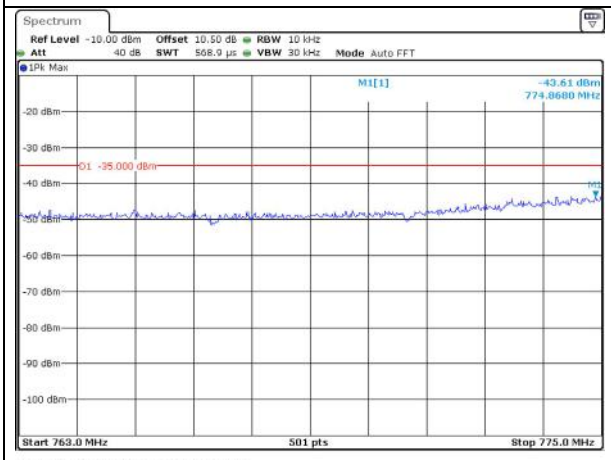
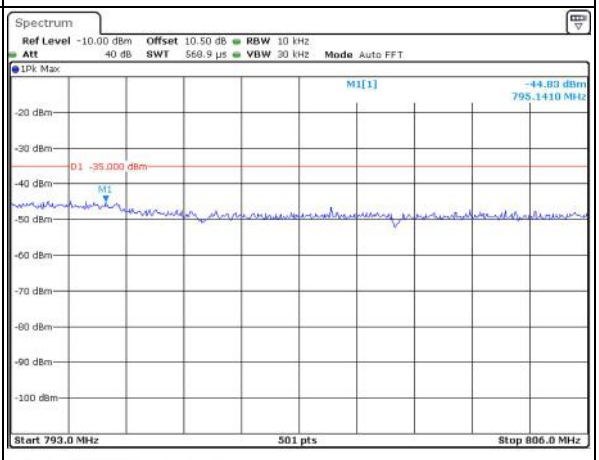
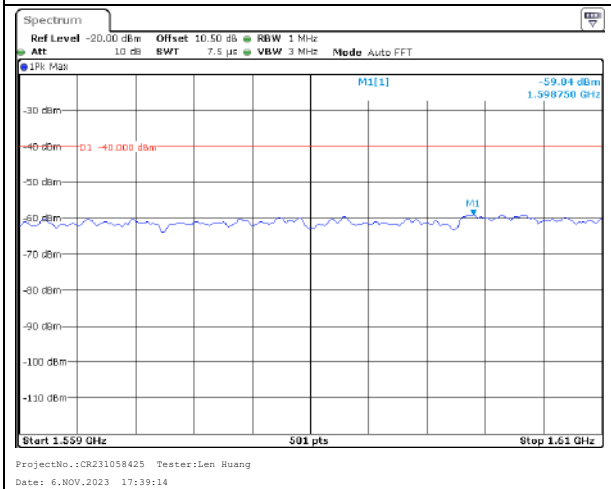
Test Plots (Note: The 10.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

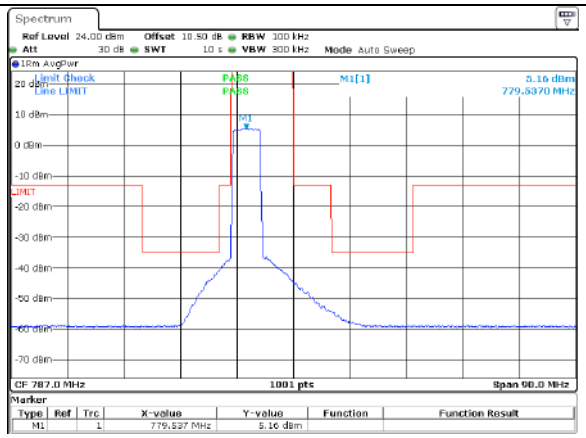
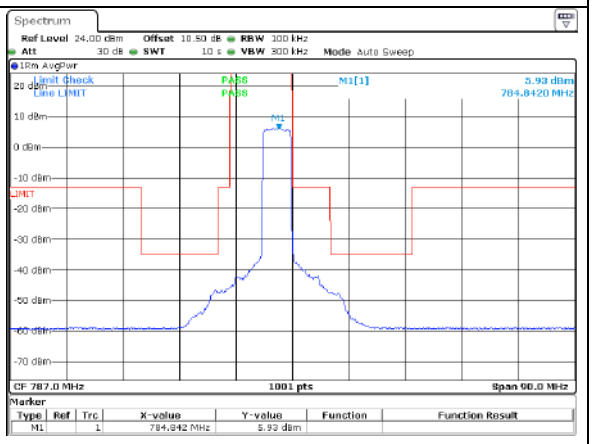
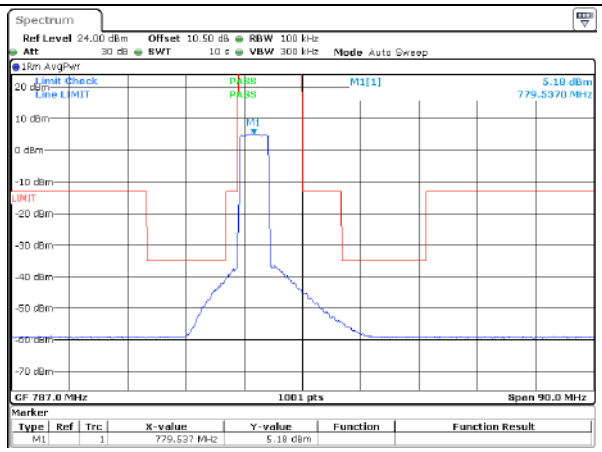
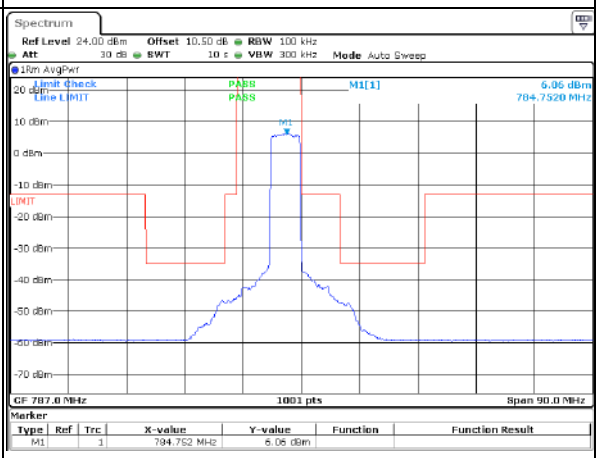
Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest		
Highest		

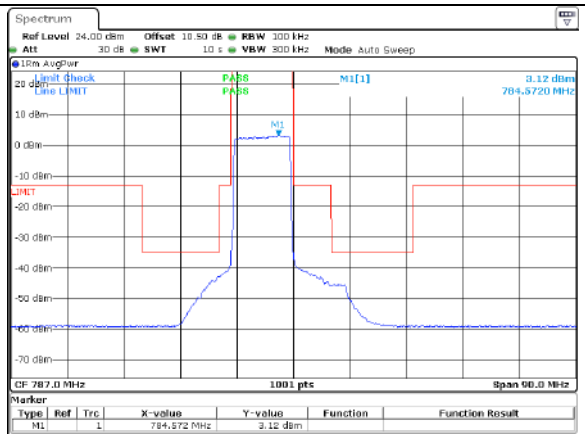
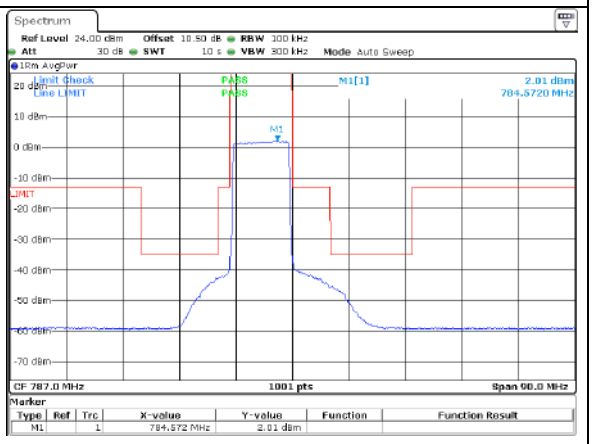
Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Middle		

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

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

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

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 5MHz		
16QAM 5MHz		

Out of band emission, Band Edge		
Mode	QPSK	16QAM
10MHz		

4.12 Antenna Port Test Data and Results for LTE Band 17

Serial Number:	2BYR-5	Test Date:	2023/10/29~2023/11/07
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ken Tang	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	24.5~25.3	Relative Humidity: (%)	60~62	ATM Pressure: (kPa)	100.5~100.9

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101943	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
Minl-Clrcuits	Power Splitter	ZFRSC-183-S+	S F448201619	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/28	2024/9/27
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A

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

Test Frequency for Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
5MHz	706.5	710	713.5
10MHz	709	710	711

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	23.34	23.05	23.24	14.99	34.77
	RB1#13	23.24	22.99	23.28		
	RB1#24	23.21	22.98	23.24		
	RB15#0	22.17	22.09	22.28		
	RB15#10	22.18	22.09	22.26		
	RB25#0	22.30	21.99	22.30		
5MHz 16QAM	RB1#0	22.29	21.57	21.25	13.94	34.77
	RB1#13	22.15	21.54	21.37		
	RB1#24	22.07	21.70	21.33		
	RB15#0	21.15	21.68	21.32		
	RB15#10	20.95	21.52	21.29		
	RB25#0	21.20	21.39	21.41		
10MHz QPSK	RB1#0	23.41	23.20	23.17	**15.06**	34.77
	RB1#25	23.25	23.09	23.01		
	RB1#49	23.37	23.23	23.16		
	RB25#0	22.20	22.23	22.10		
	RB25#25	22.24	22.12	22.25		
	RB50#0	22.15	22.13	22.12		
10MHz 16QAM	RB1#0	22.32	21.73	22.51	**14.22**	34.77
	RB1#25	22.23	21.57	22.37		
	RB1#49	22.33	21.74	22.57		
	RB25#0	21.30	21.19	21.08		
	RB25#25	21.31	21.37	21.21		
	RB50#0	21.15	21.59	21.48		

Note: ERP= Conducted Power(dBm) - L_C(dB) + G_T(dBd)
G_T(dBd)=G_T(dBi)-2.15

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	
10MHz QPSK	RB1#0	8.36	9.17	8.91	13
	RB50#0	8.64	6.49	8.59	13
10MHz 16QAM	RB1#0	6.83	6.88	7.78	13
	RB50#0	6.81	6.54	7.08	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	4.511	4.511	5.040	5.000	4.980
5MHz 16QAM	4.531	4.551	4.491	5.020	5.040	4.840
10MHz QPSK	8.942	8.942	8.942	9.760	9.800	9.760
10MHz 16QAM	8.982	8.942	8.942	9.840	9.760	9.800
Note: The test plots please refer to the Plots of Occupied Bandwidth						

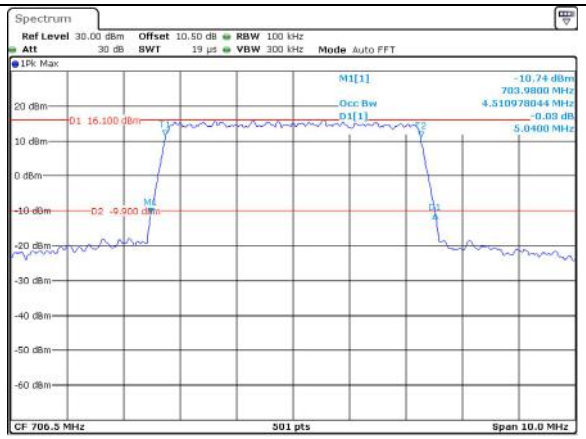
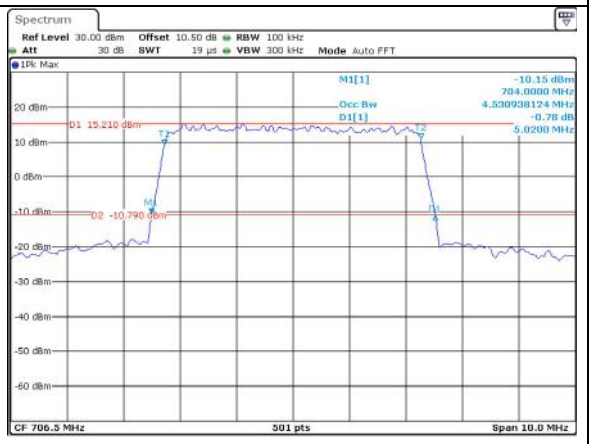
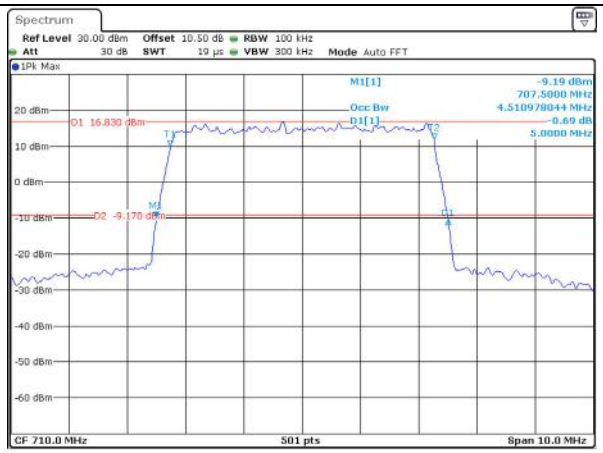
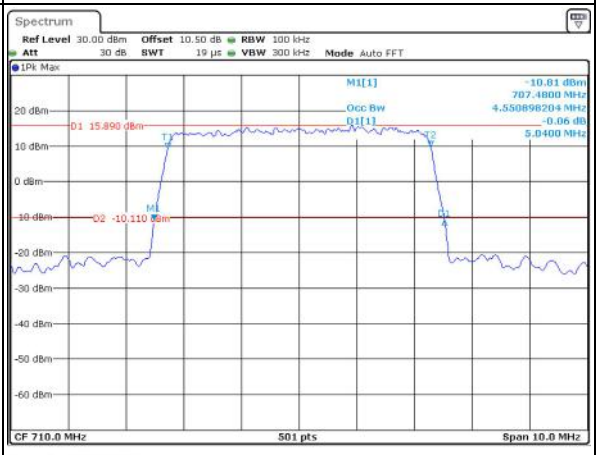
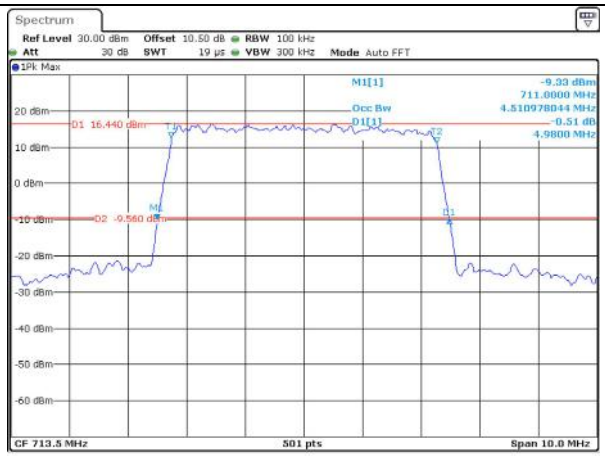
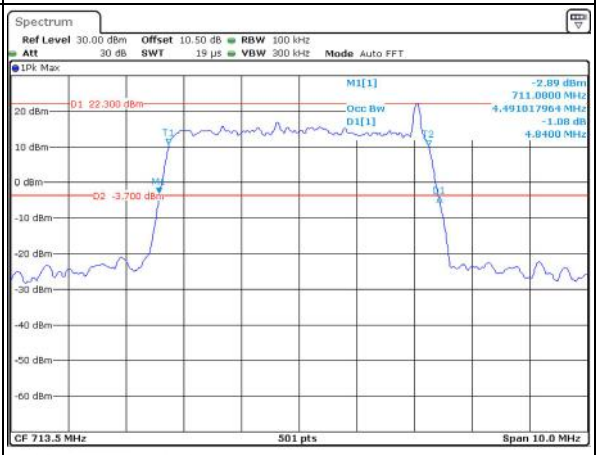
FCC §2.1051, §27.53:Spurious Emissions at Antenna Terminal	
Result:	**Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.**

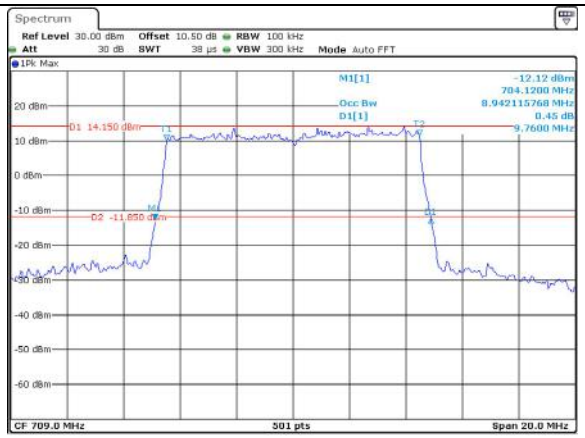
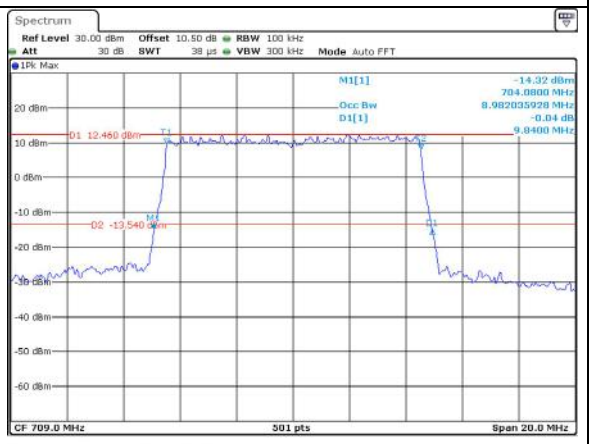
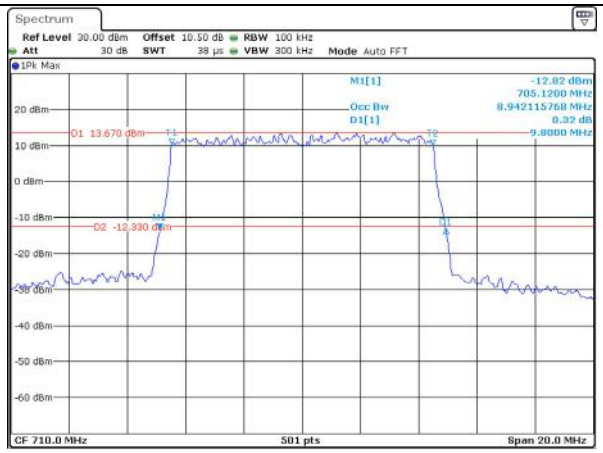
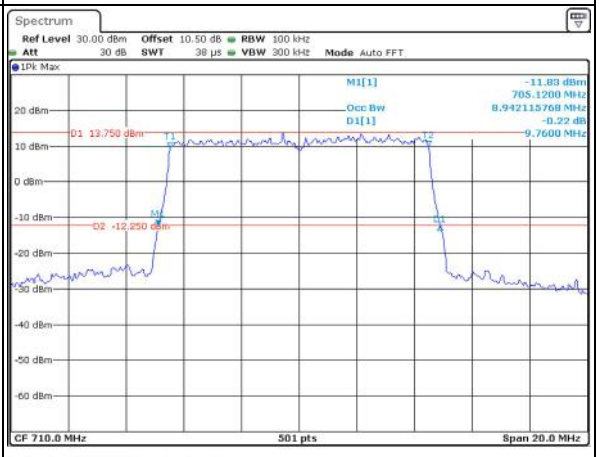
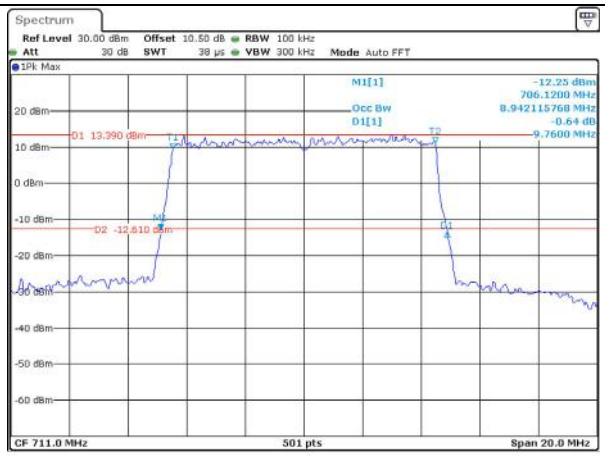
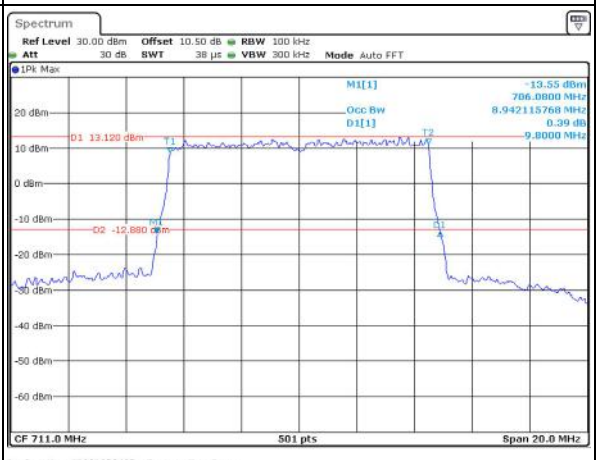
FCC §2.1051, §27.53:Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

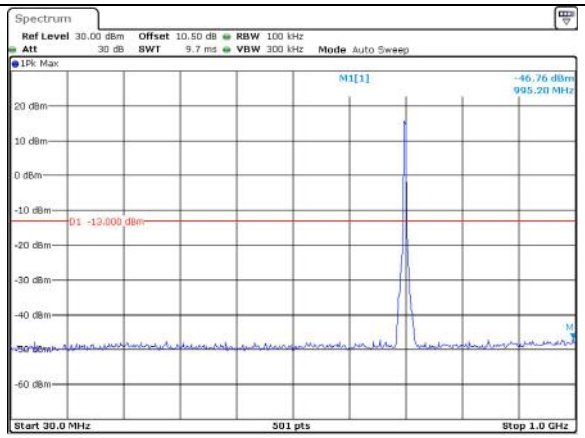
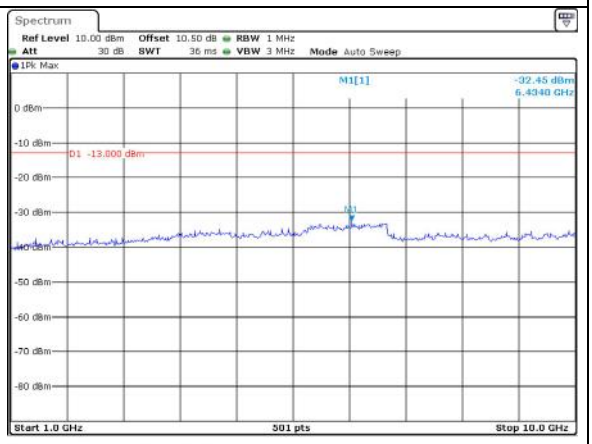
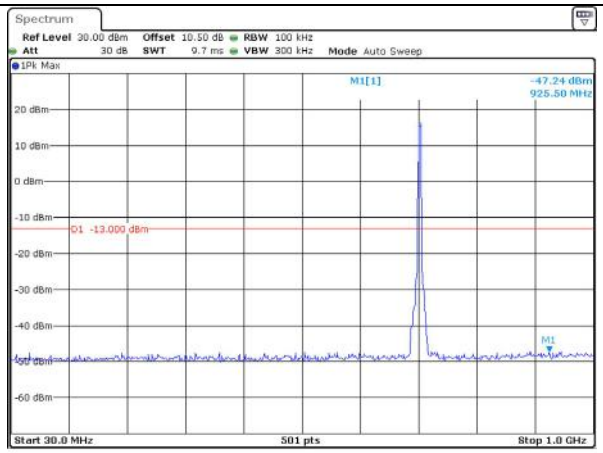
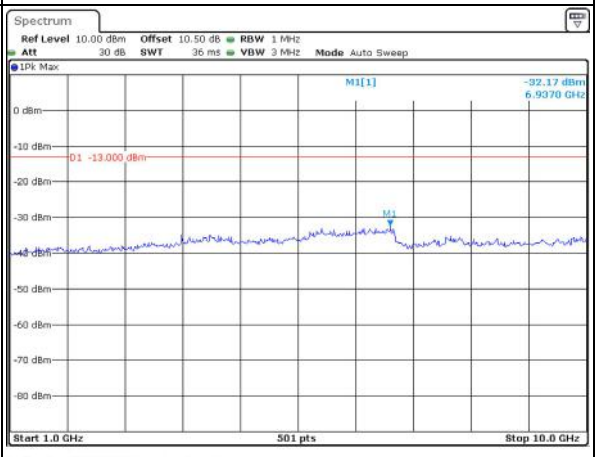
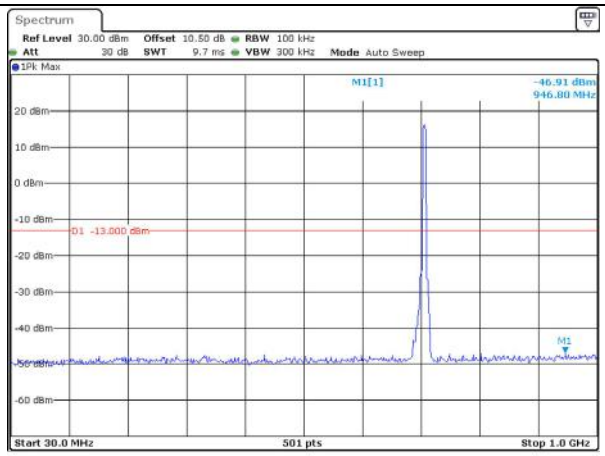
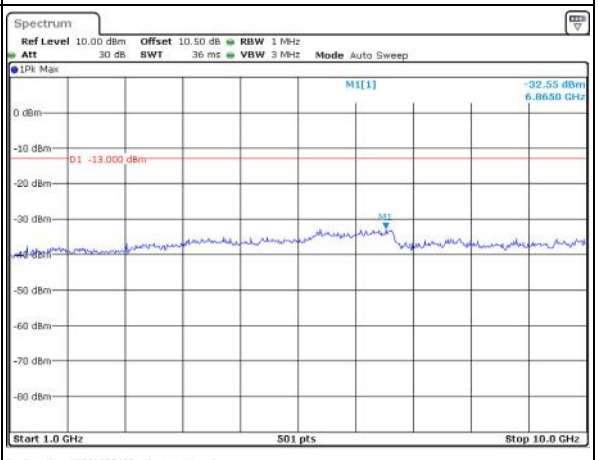
FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	704.023	704.00	715.987	716.00
	-20	3.85	704.029	704.00	715.972	716.00
	-10	3.85	704.026	704.00	715.977	716.00
	0	3.85	704.023	704.00	715.981	716.00
	10	3.85	704.025	704.00	715.979	716.00
	20	3.85	704.008	704.00	715.998	716.00
	30	3.85	704.002	704.00	715.984	716.00
	40	3.85	704.017	704.00	715.992	716.00
	50	3.85	704.003	704.00	715.978	716.00
Frequency Stability vs. Voltage	20	3.35	704.028	704.00	715.994	716.00
	20	3.85	704.023	704.00	715.987	716.00
					Result:	**Pass**

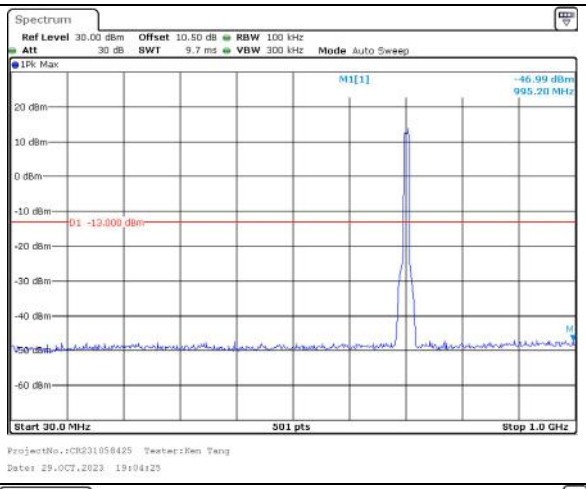
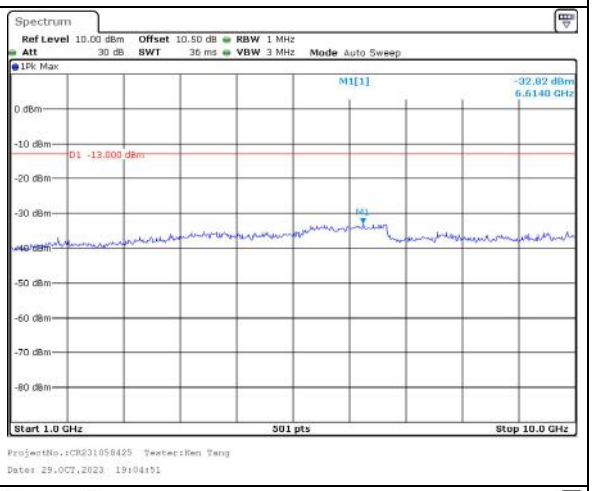
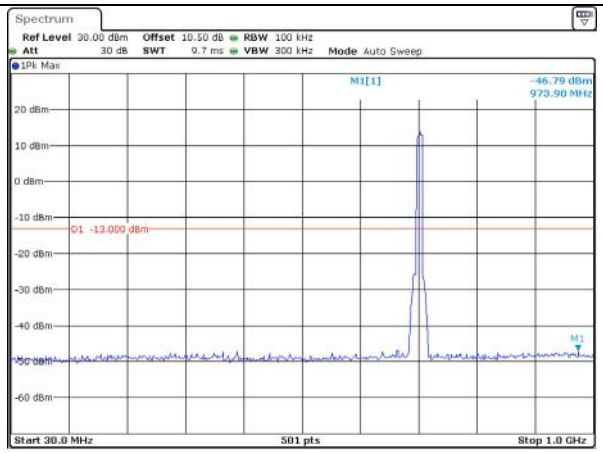
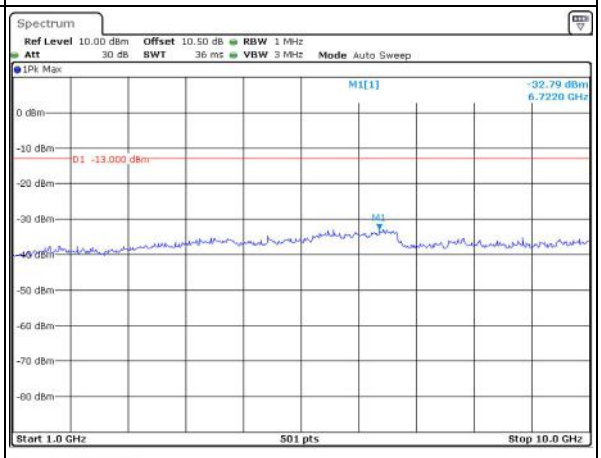
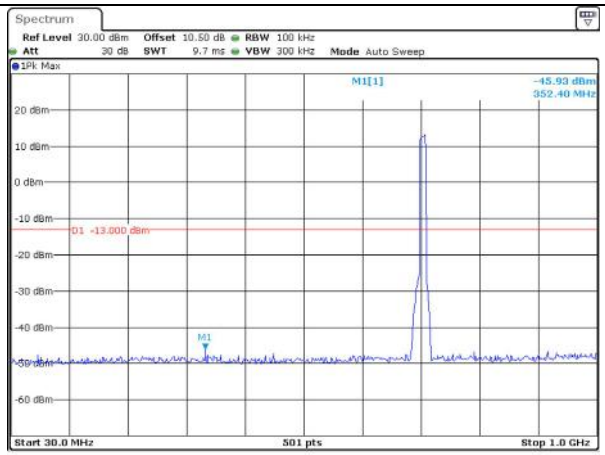
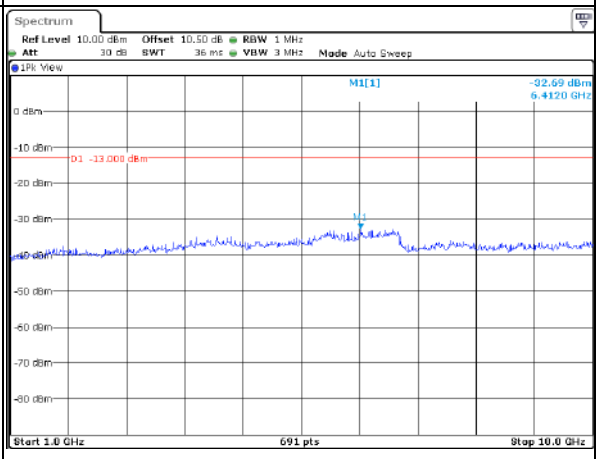
Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	704.004	704.00	715.991	716.00
	-20	3.85	704.016	704.00	715.973	716.00
	-10	3.85	704.009	704.00	715.979	716.00
	0	3.85	704.024	704.00	715.985	716.00
	10	3.85	704.011	704.00	715.984	716.00
	20	3.85	704.023	704.00	715.975	716.00
	30	3.85	704.016	704.00	715.991	716.00
	40	3.85	704.015	704.00	715.987	716.00
	50	3.85	704.003	704.00	715.987	716.00
Frequency Stability vs. Voltage	20	3.35	704.007	704.00	715.973	716.00
	20	4.4	704.020	704.00	715.975	716.00
					Result:	**Pass**

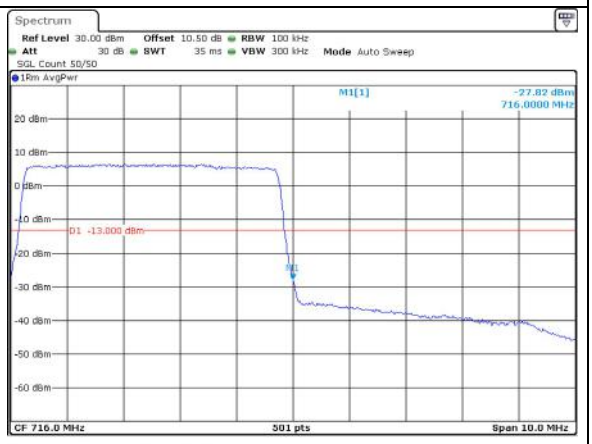
Test Plots (Note: The 10.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

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

Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz 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	 

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 5MHz		
QPSK 10MHz		
16QAM 5MHz