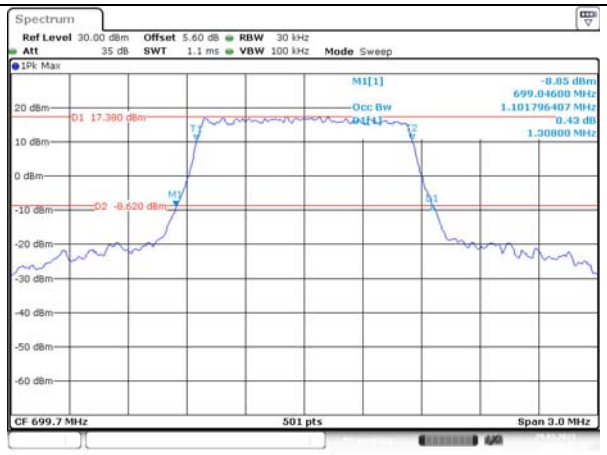
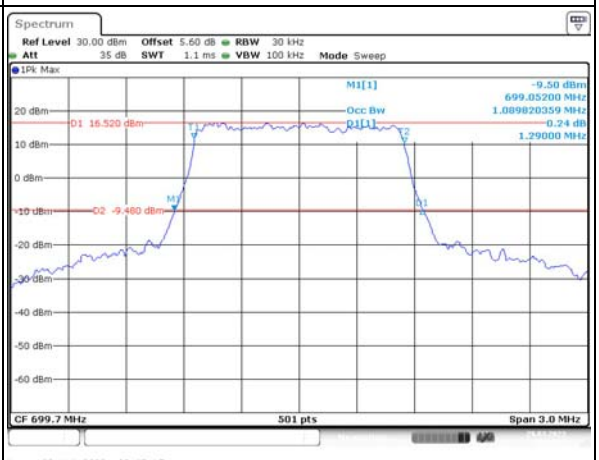
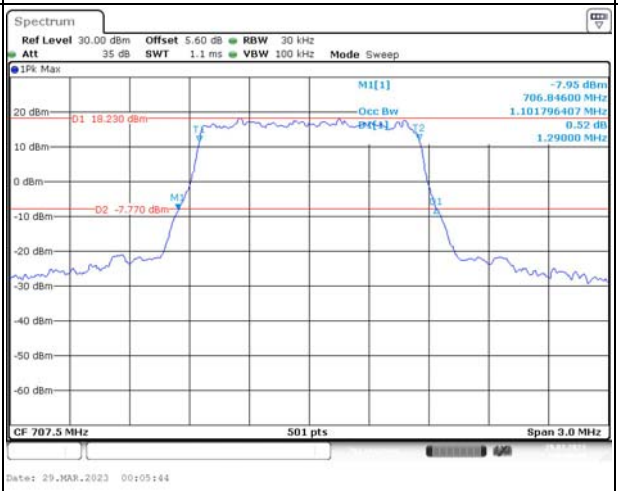
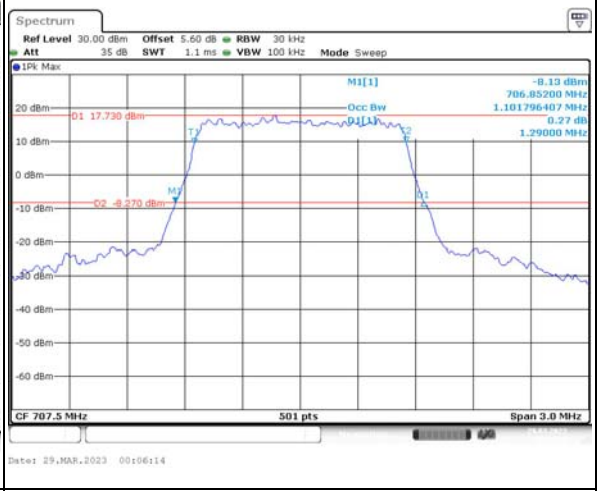
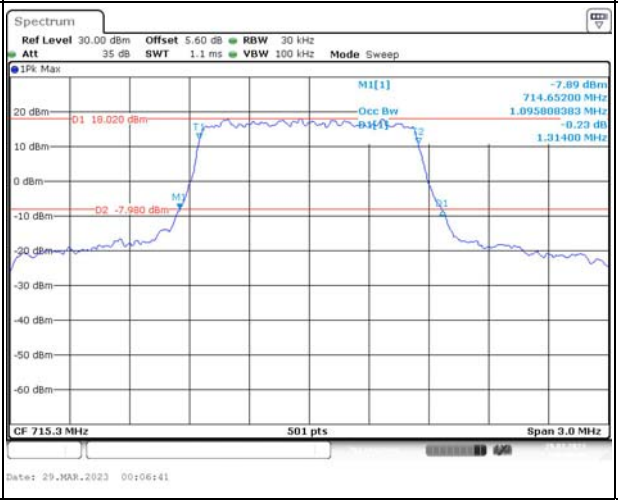
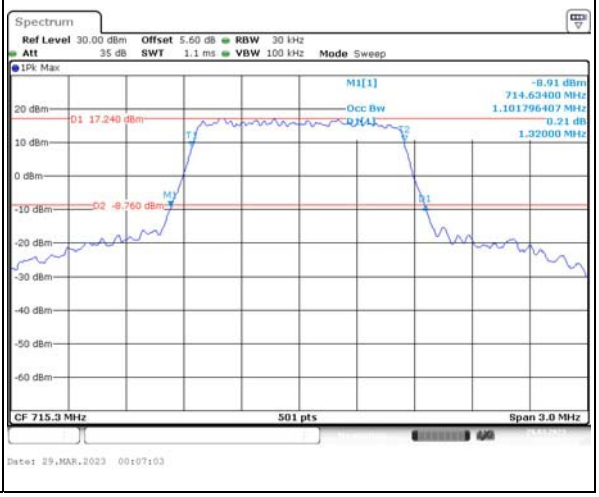
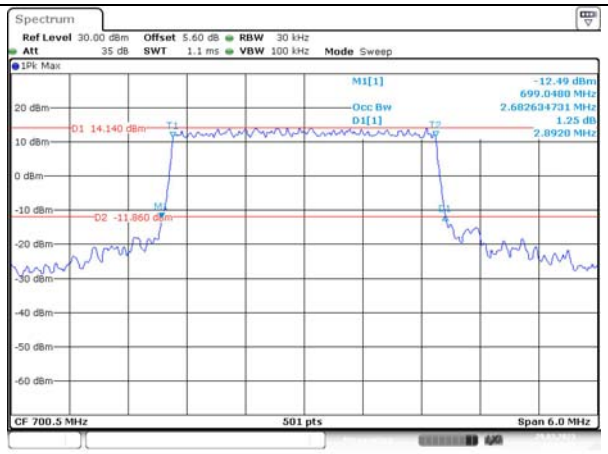
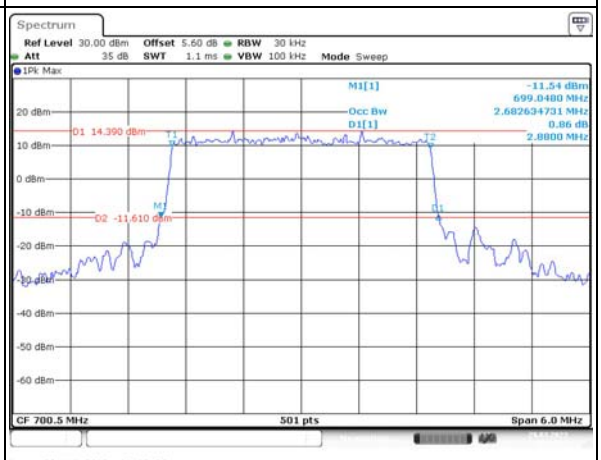
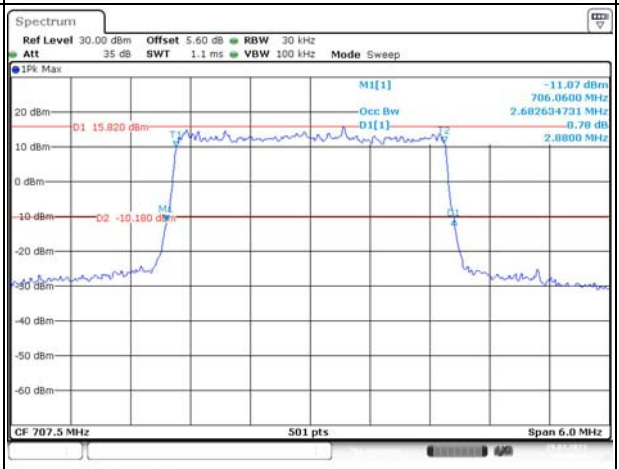
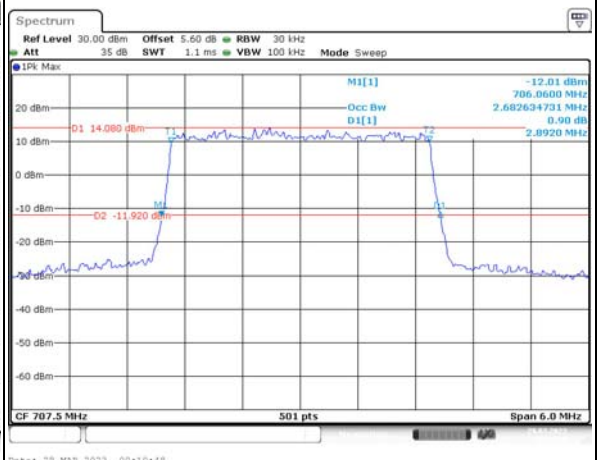
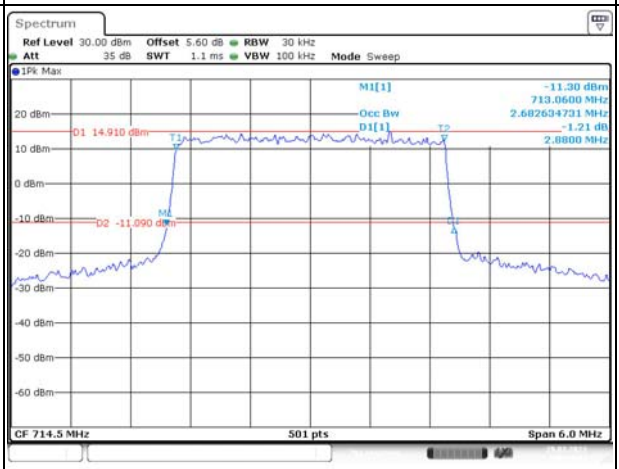
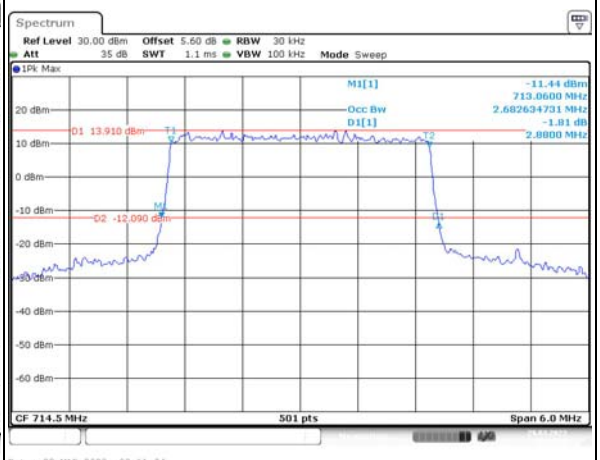
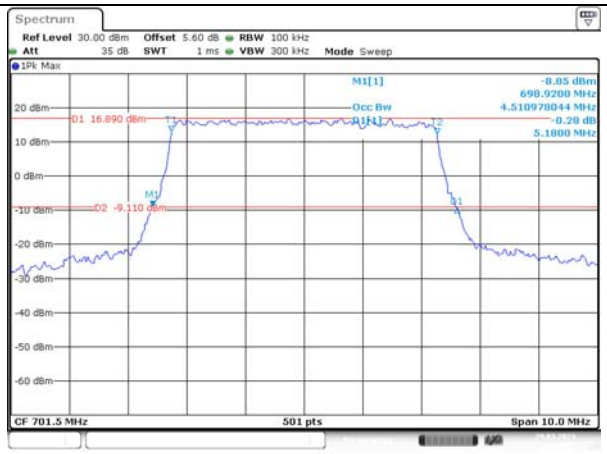
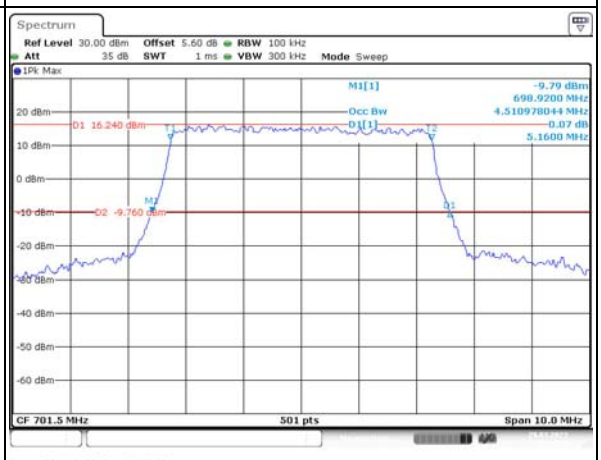
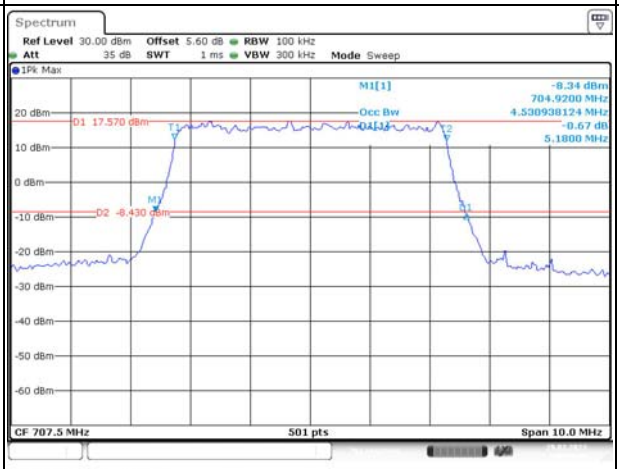
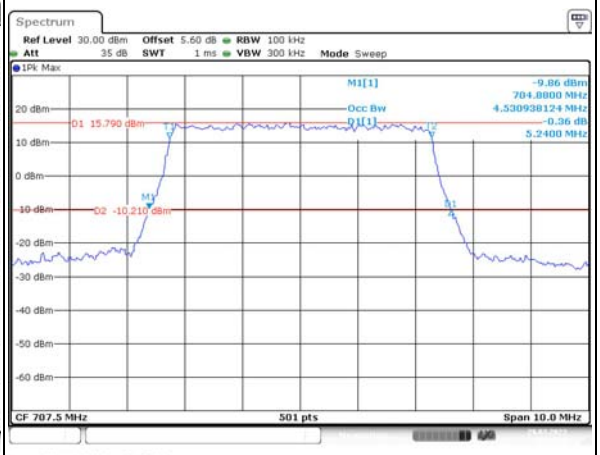
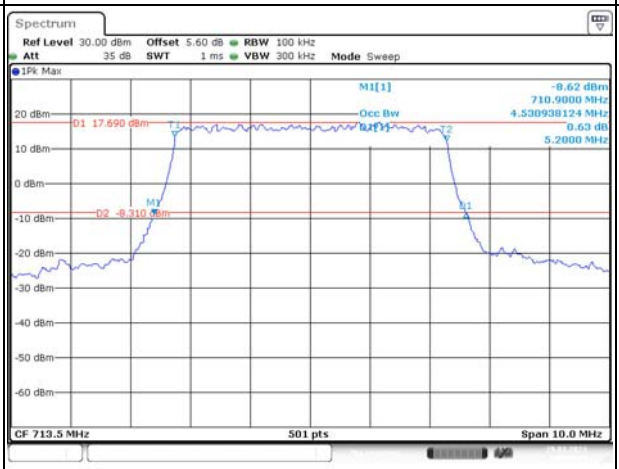
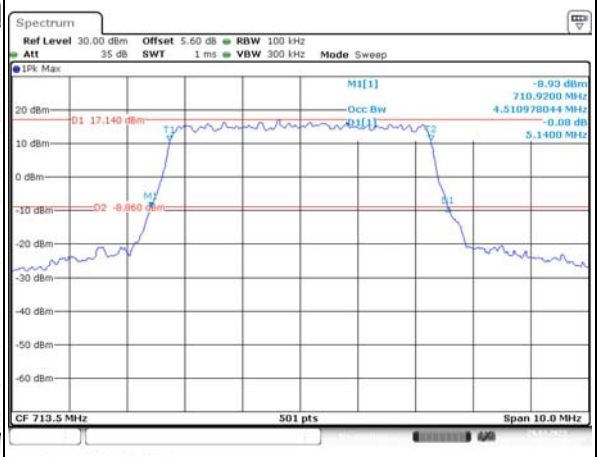
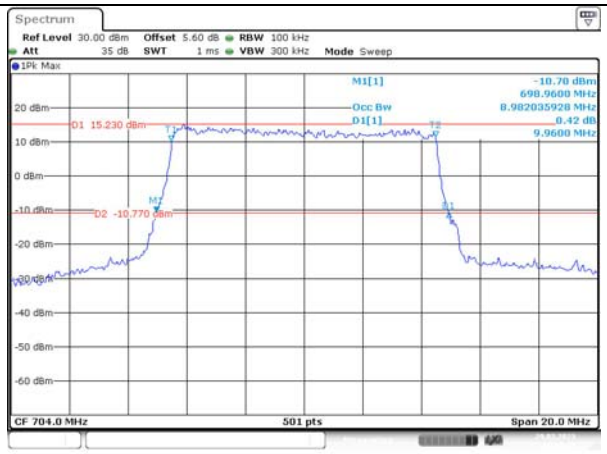
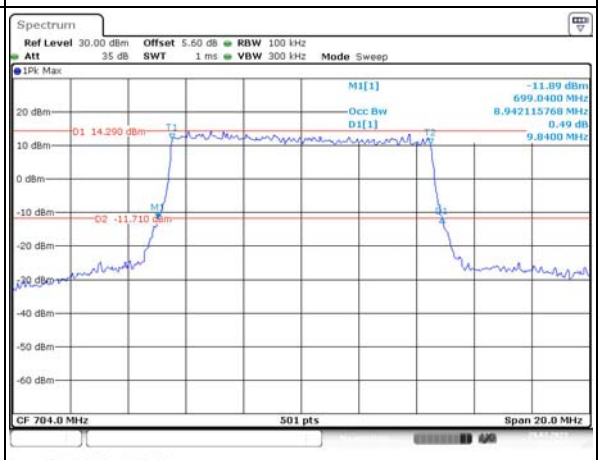
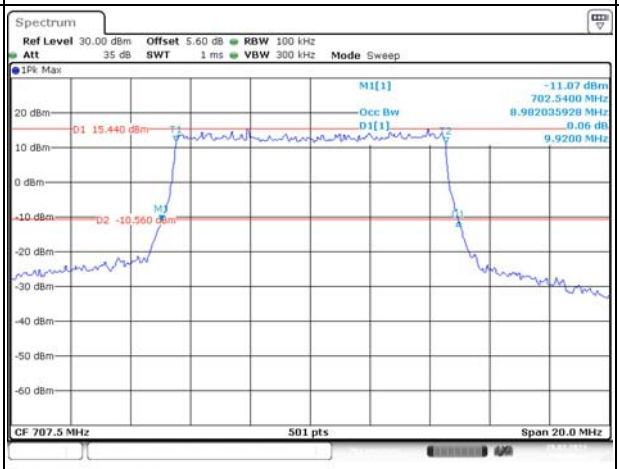
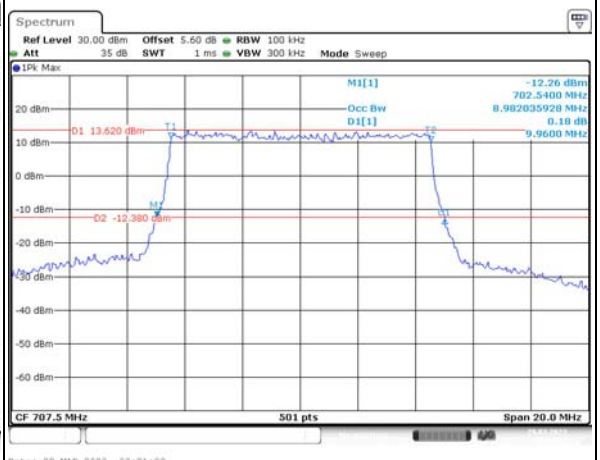
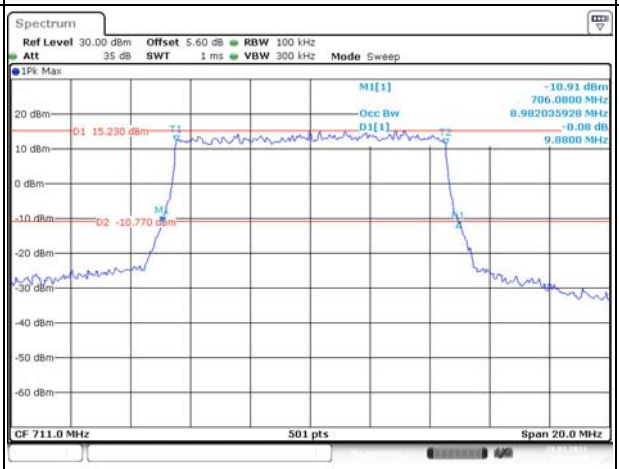
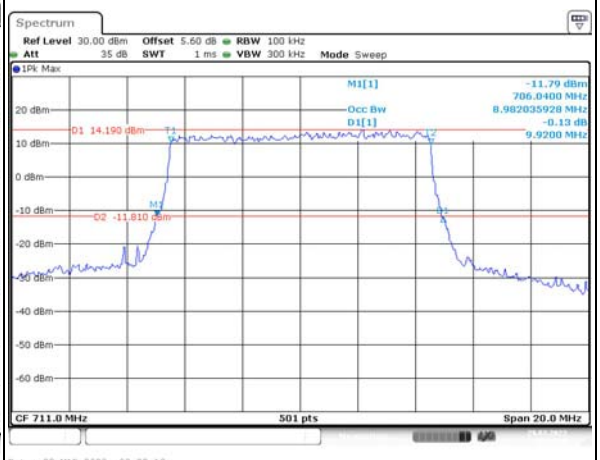
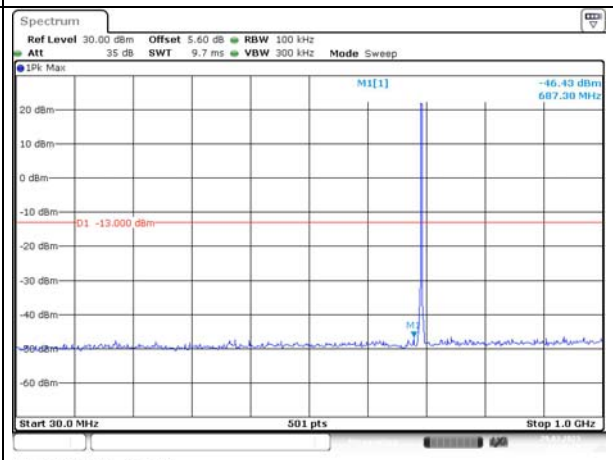
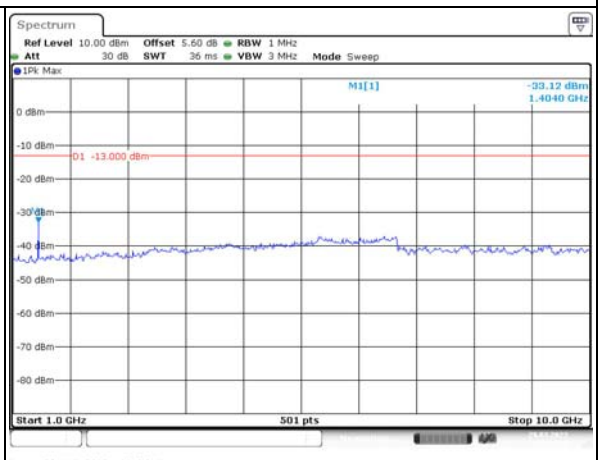
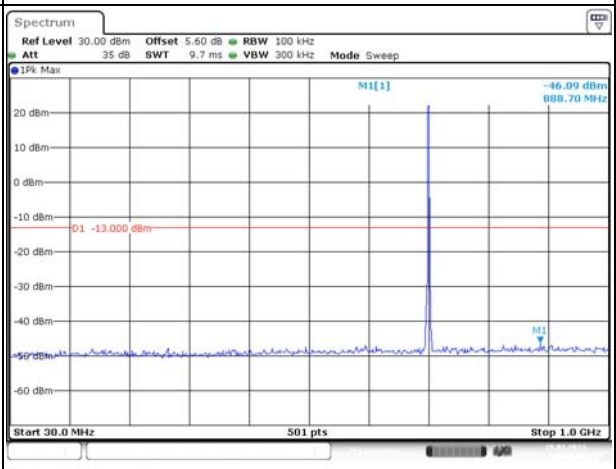
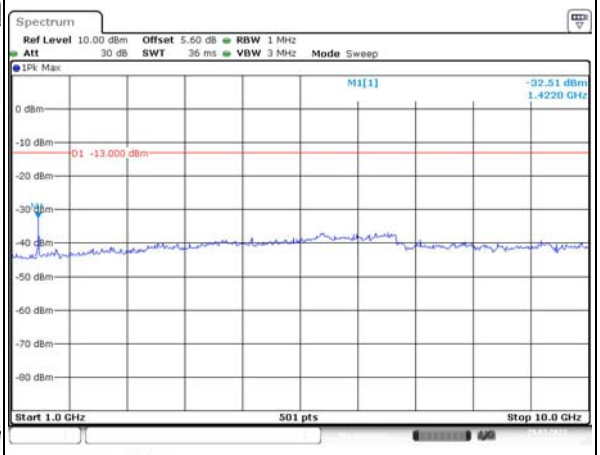
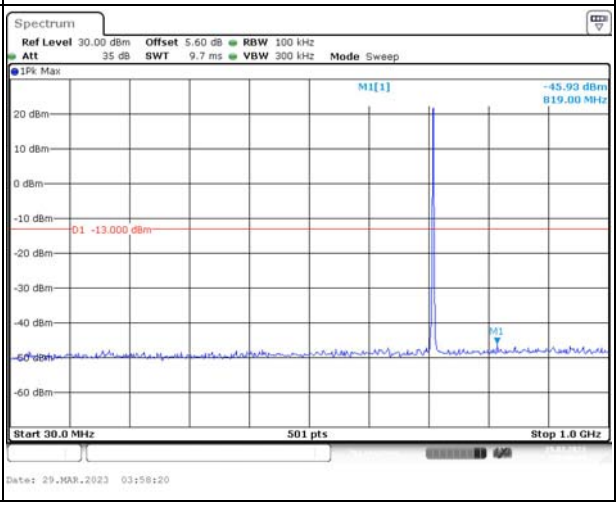
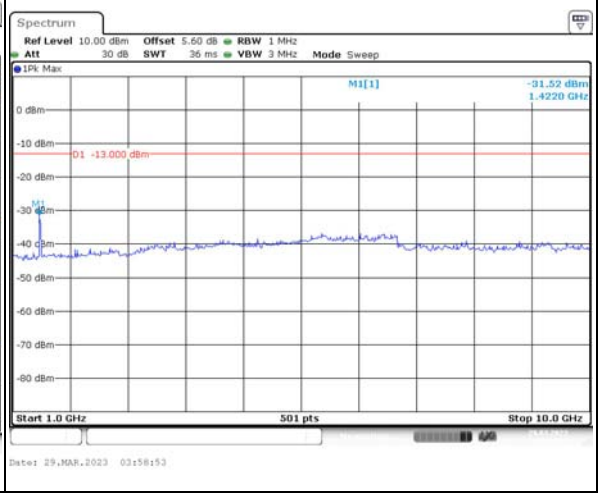
Test Plots(Note: The 5.6 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

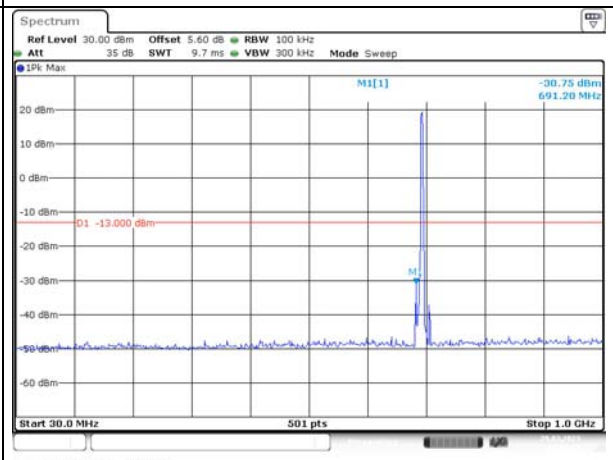
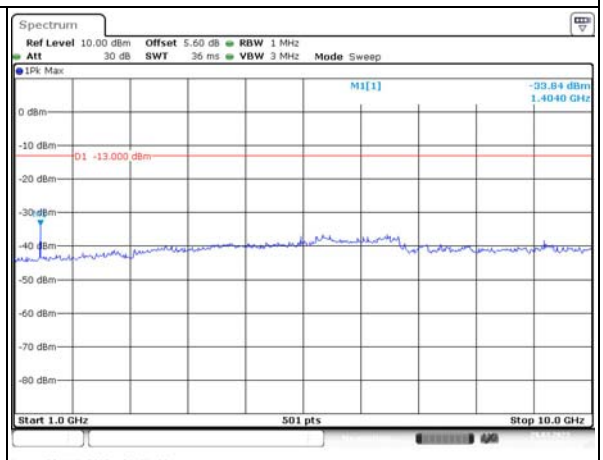
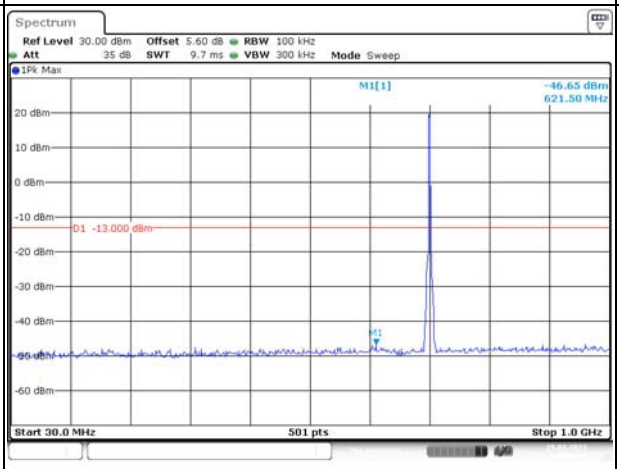
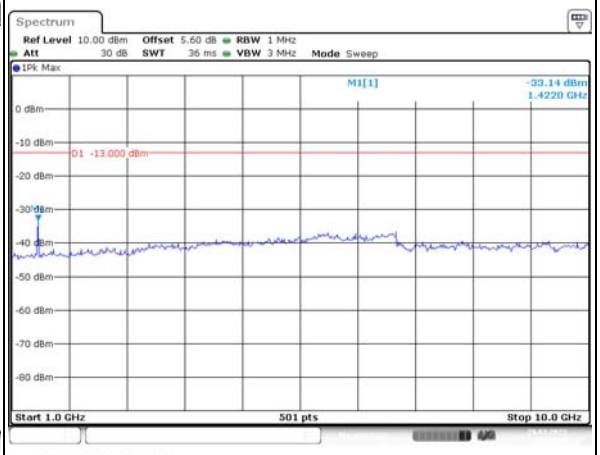
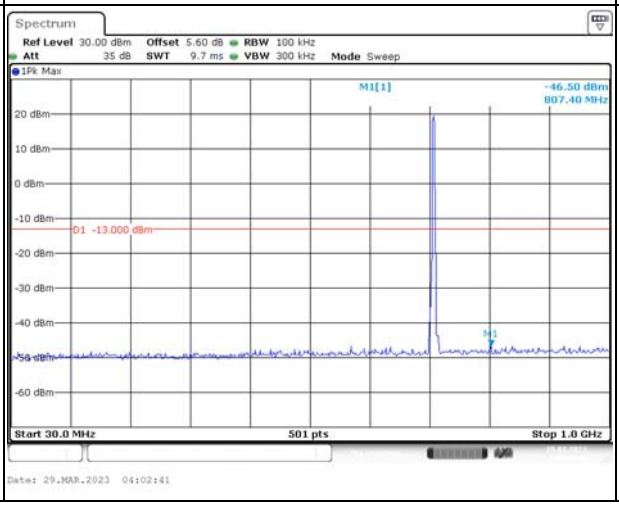
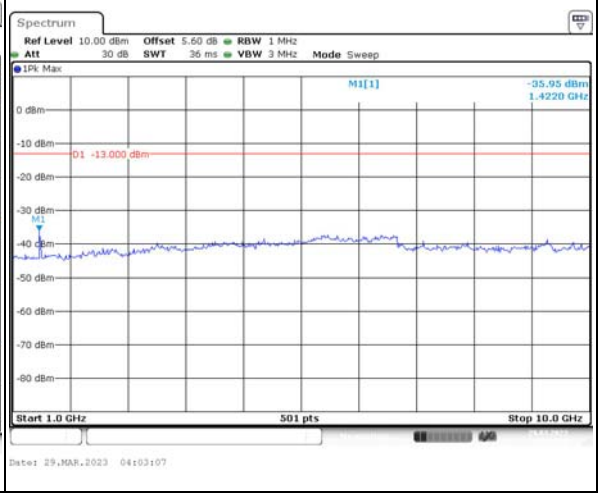
Occupied Bandwidth		
Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

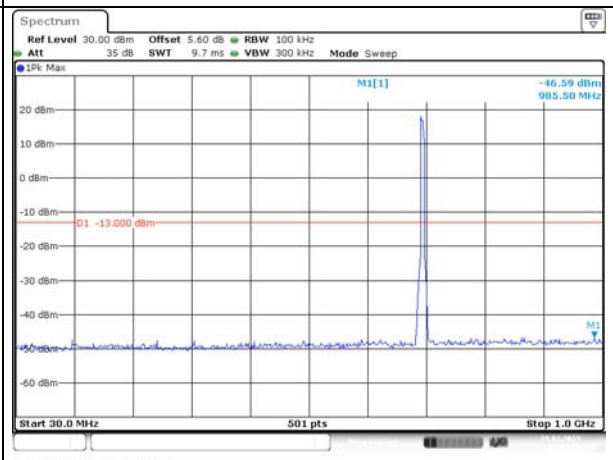
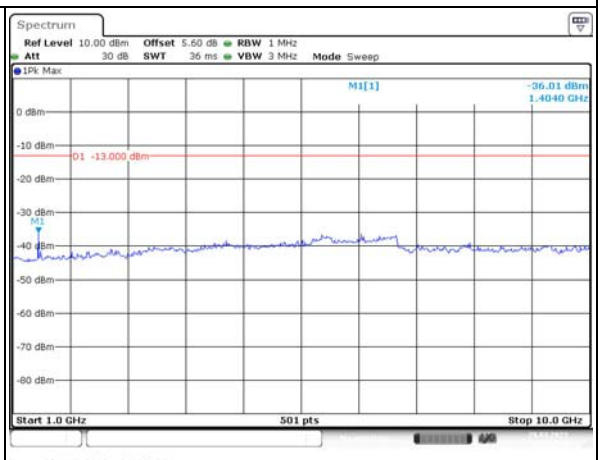
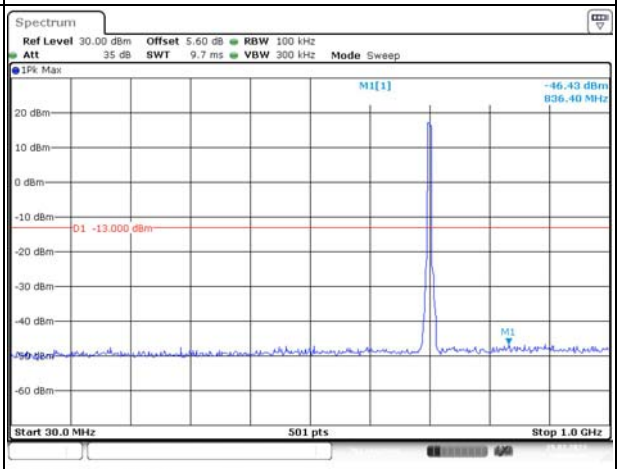
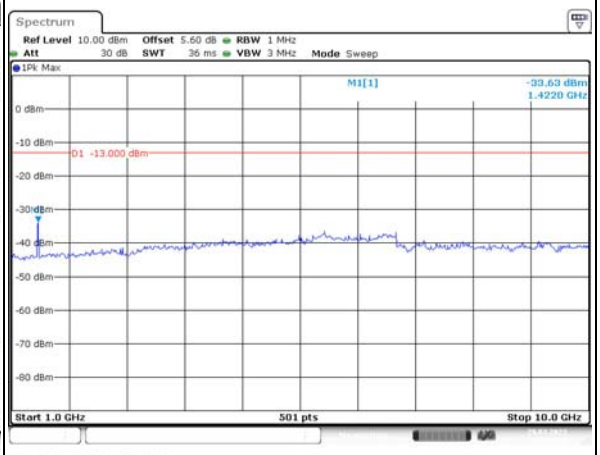
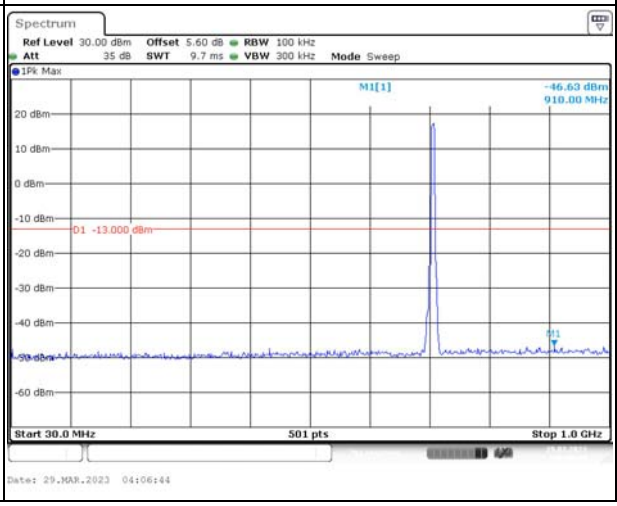
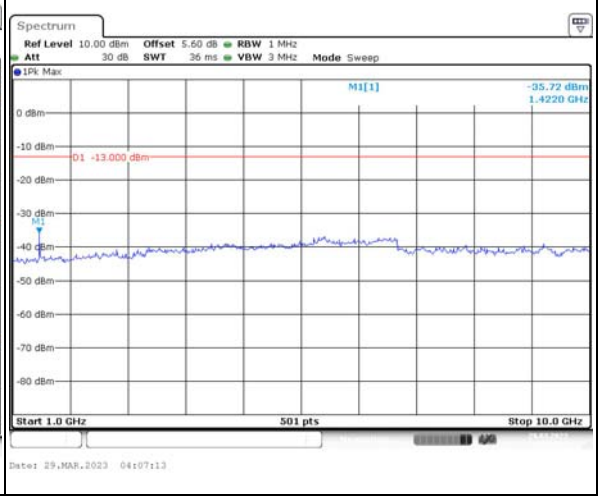
Occupied Bandwidth		
Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

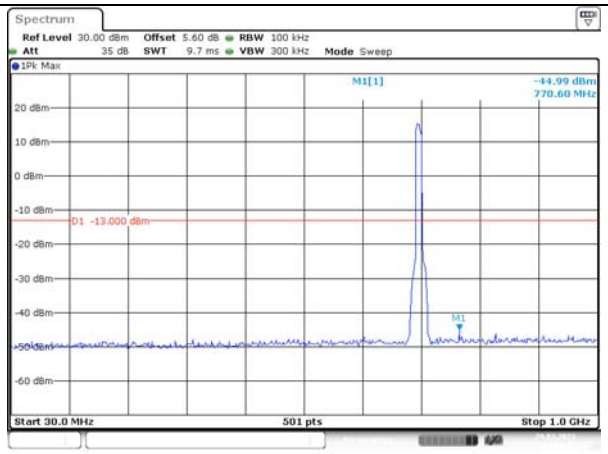
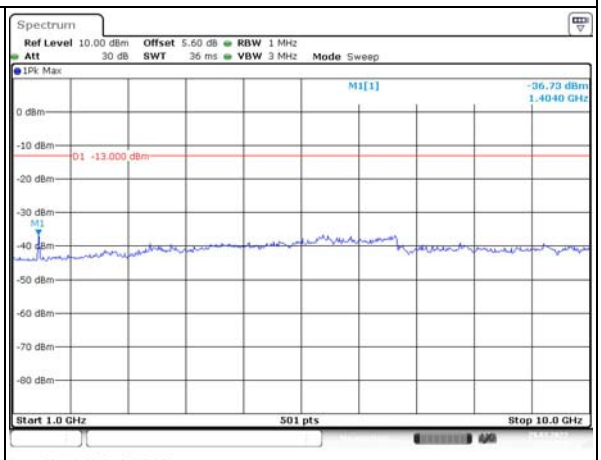
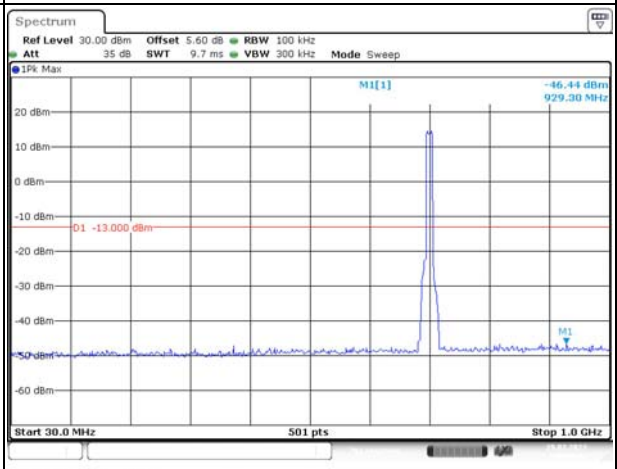
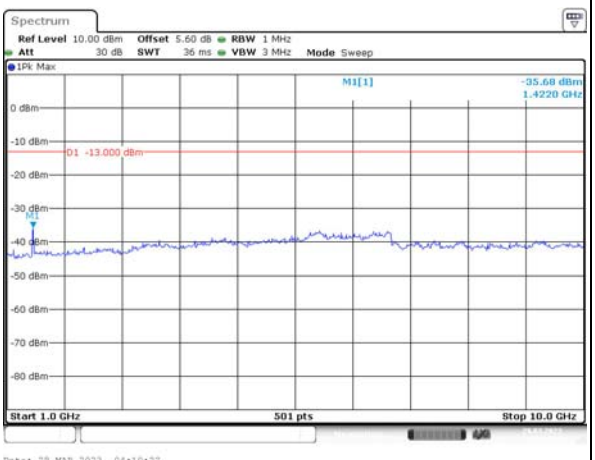
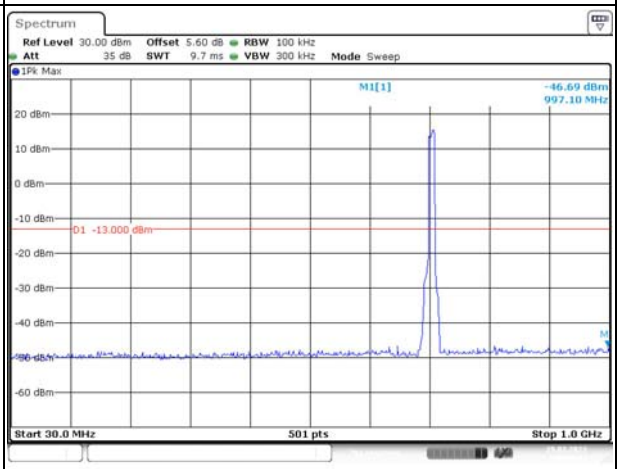
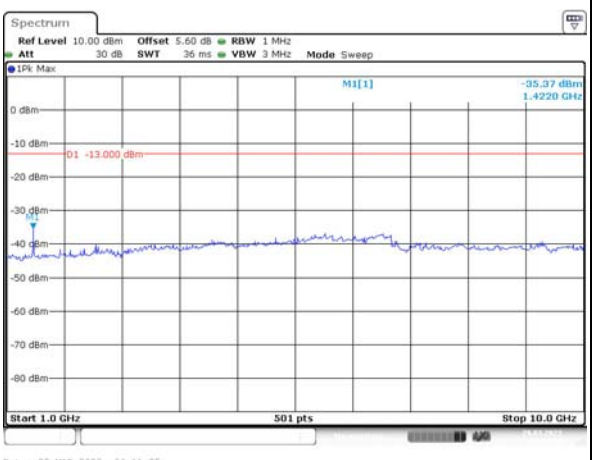
Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

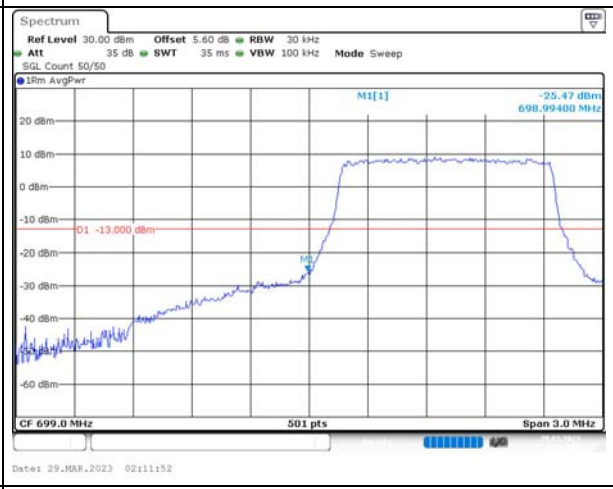
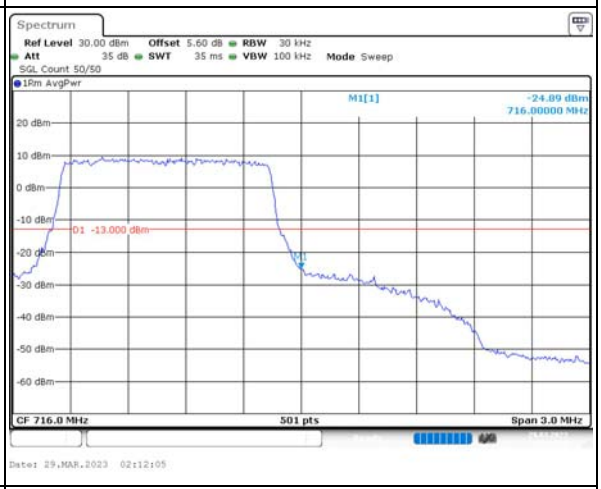
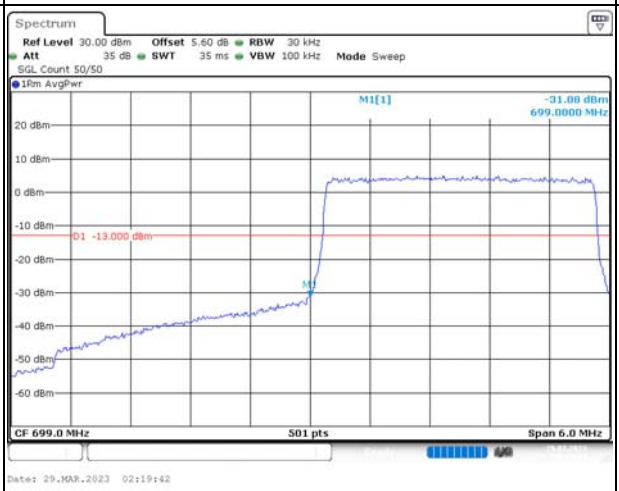
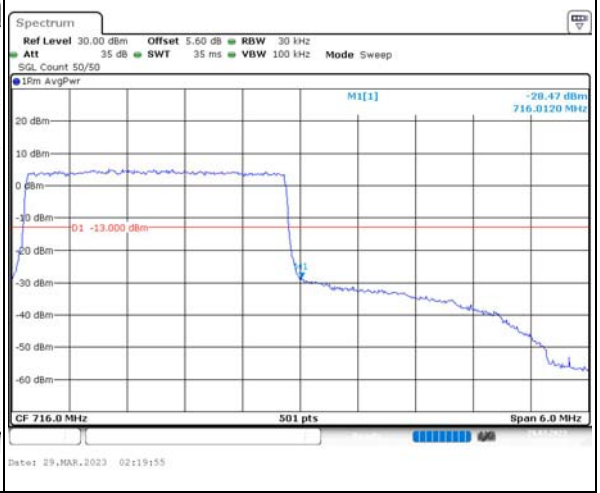
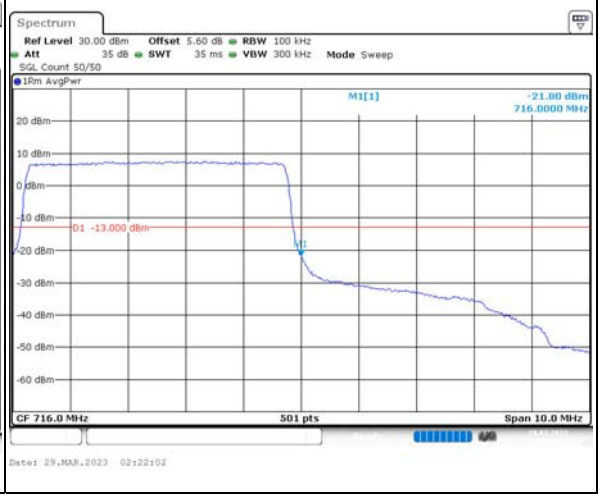
Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

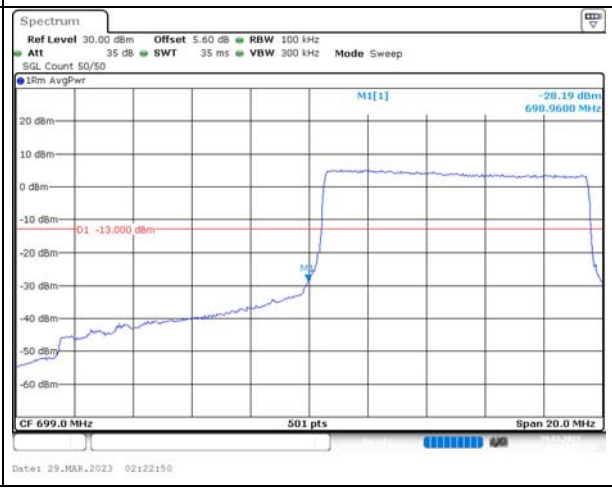
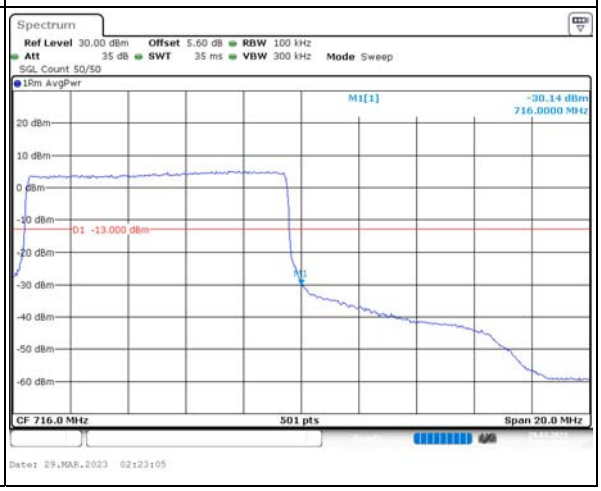
Spurious Emissions at Antenna Terminal		
Channel	**1.4MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

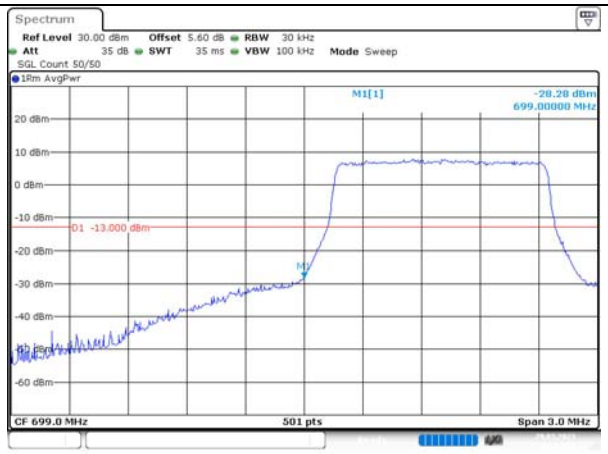
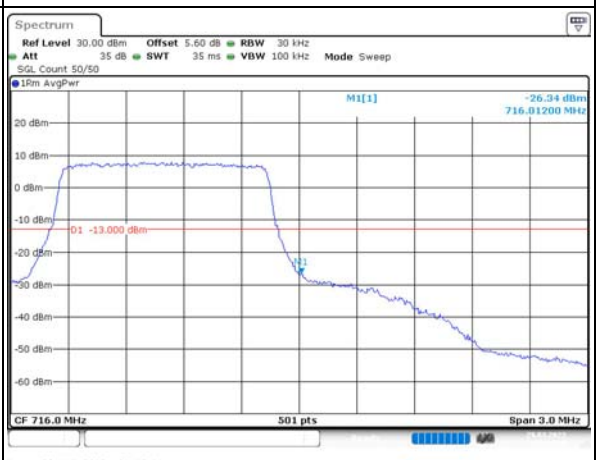
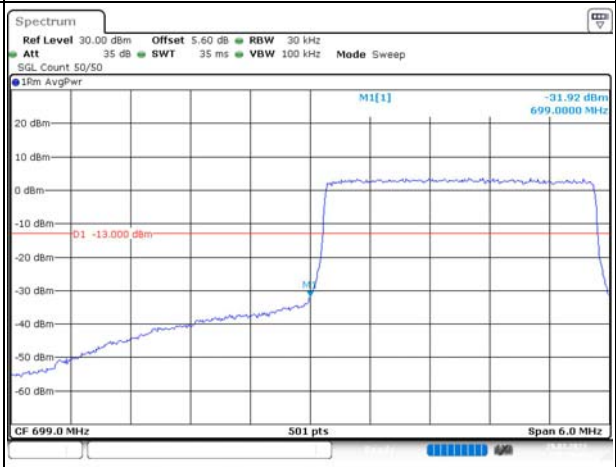
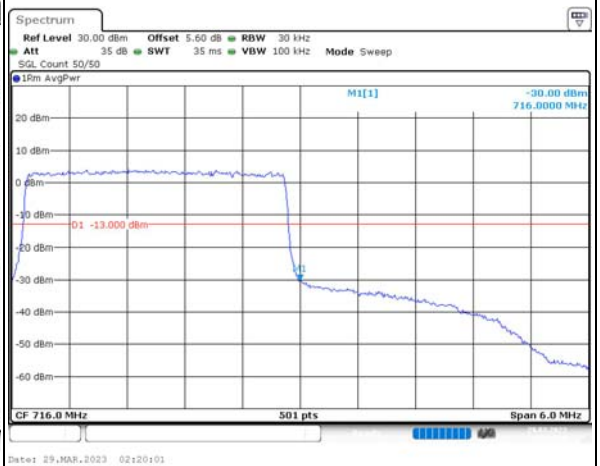
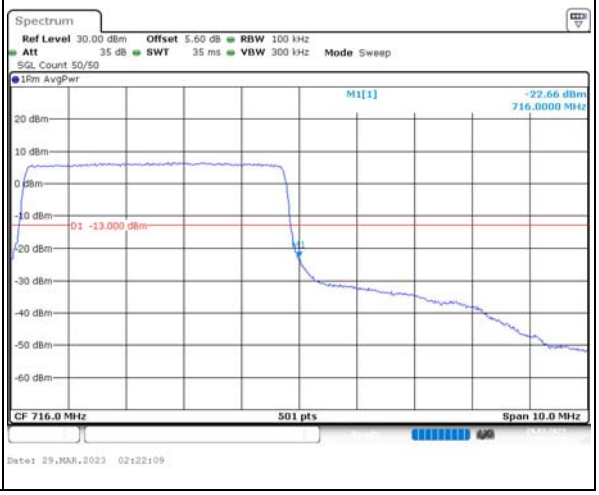
Spurious Emissions at Antenna Terminal		
Channel	**3MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

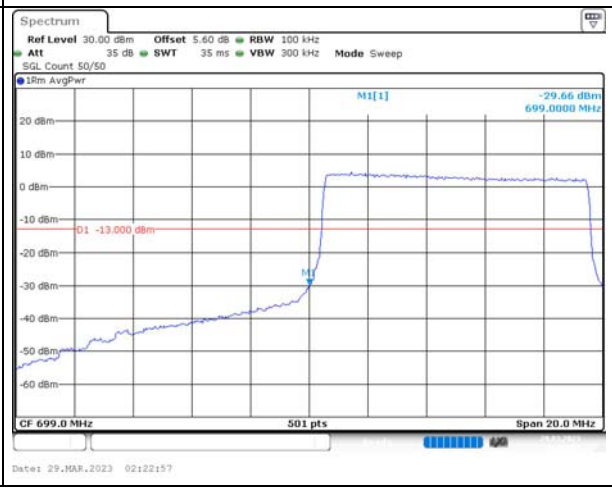
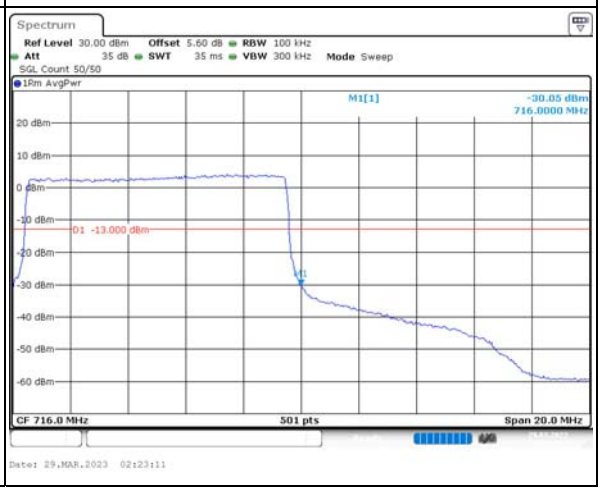
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

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		

4.10 Antenna Port Test Data and Results for LTE Band 17

Serial Number:	23CF-1	Test Date:	2023/3/29~2023/4/12
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jou Zhou	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	24.3~25.6	Relative Humidity: (%)	26~45	ATM Pressure: (kPa)	100.3~101.4

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100004	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554404	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
Weinschel	Power splitter	1515	RA915	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149218	2022/7/15	2023/7/14
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022/3/31	2023/3/30
R&S	Spectrum Analyzer	FSV40	101474	2022/7/15	2023/7/14
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
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:

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	22.46	21.78	21.56	18.45	34.77
	RB1#13	22.2	21.59	21.76		
	RB1#24	21.73	21.67	21.69		
	RB15#0	21.37	20.65	20.83		
	RB15#10	21.01	20.7	20.97		
	RB25#0	21.18	20.69	20.88		
5MHz 16QAM	RB1#0	21.72	20.8	20.5	17.71	34.77
	RB1#13	21.44	20.6	20.8		
	RB1#24	21.03	20.77	20.66		
	RB15#0	20.31	19.55	19.83		
	RB15#10	19.94	19.72	20.02		
	RB25#0	20.15	19.71	19.88		
10MHz QPSK	RB1#0	22.59	22.28	22.11	18.58	34.77
	RB1#25	21.93	21.71	21.86		
	RB1#49	22.08	22.16	22.21		
	RB25#0	21.26	20.96	20.73		
	RB25#25	20.96	20.99	21.03		
	RB50#0	21.11	20.99	20.9		
10MHz 16QAM	RB1#0	21.49	21.82	21.19	17.81	34.77
	RB1#25	20.94	21.3	20.96		
	RB1#49	20.99	21.58	21.3		
	RB25#0	20.31	19.95	19.71		
	RB25#25	20.02	20.03	20.01		
	RB50#0	20.13	19.98	19.88		

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	4.7	4.84	5.28	13
	RB50#0	5.25	5.19	5.13	13
10MHz 16QAM	RB1#0	5.65	5.51	6.2	13
	RB50#0	6.09	6.06	6	13
				Result:	**Pass**

Occupied Bandwidth						
Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
5MHz QPSK	4.531	4.531	4.531	5.2	5.14	5.18
5MHz 16QAM	4.551	4.551	4.511	5.2	5.24	5.14
10MHz QPSK	8.982	8.982	8.982	10	10.04	9.8
10MHz 16QAM	8.982	8.982	8.982	10	9.76	9.96
Note: The test plots please refer to the Plots of Occupied Bandwidth						

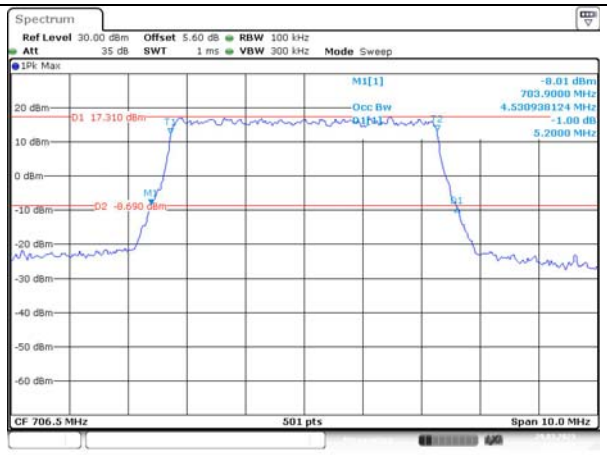
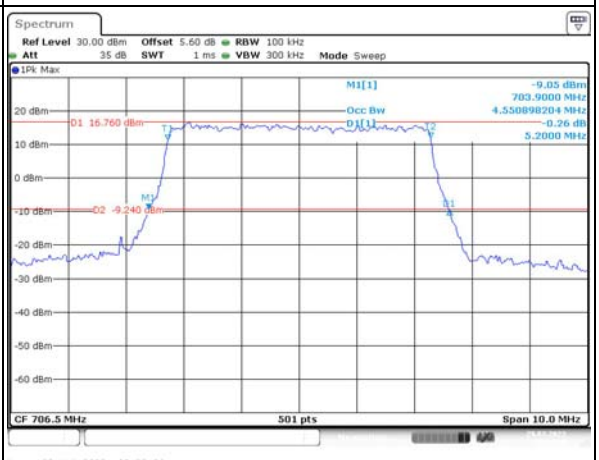
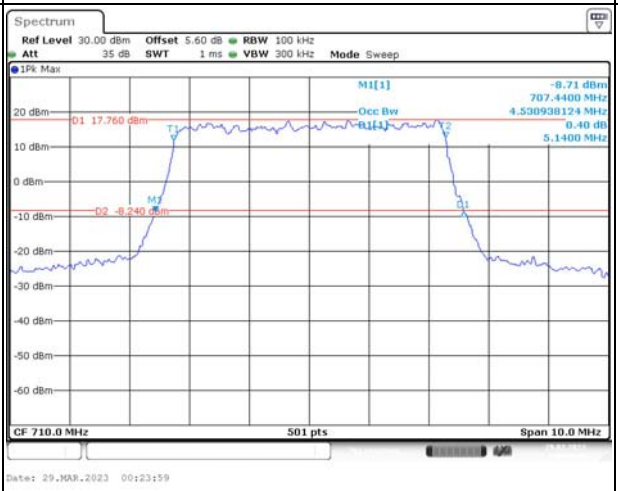
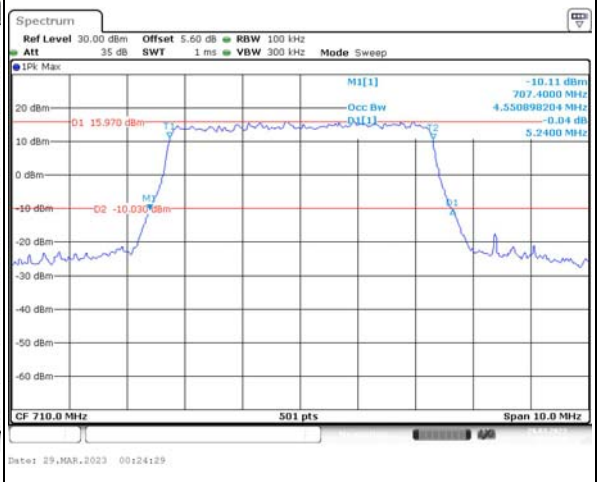
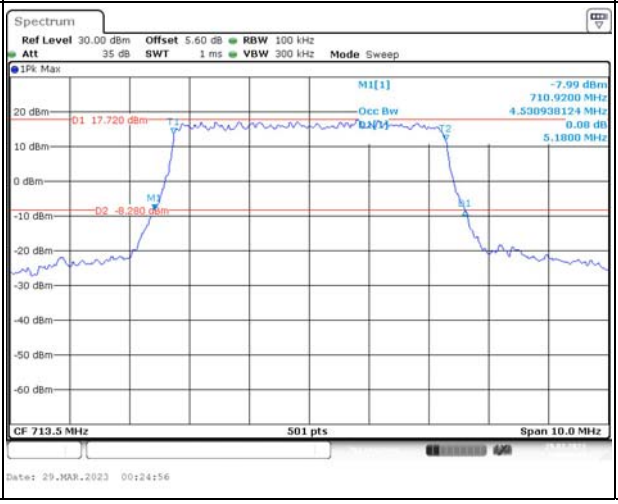
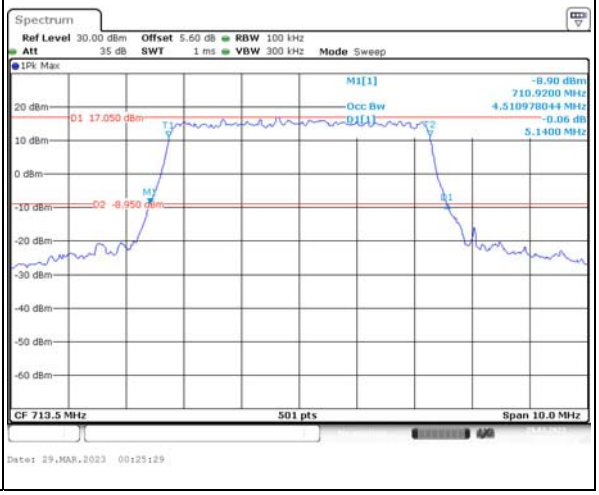
Spurious Emissions at Antenna Terminal	
Result:	**Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.**

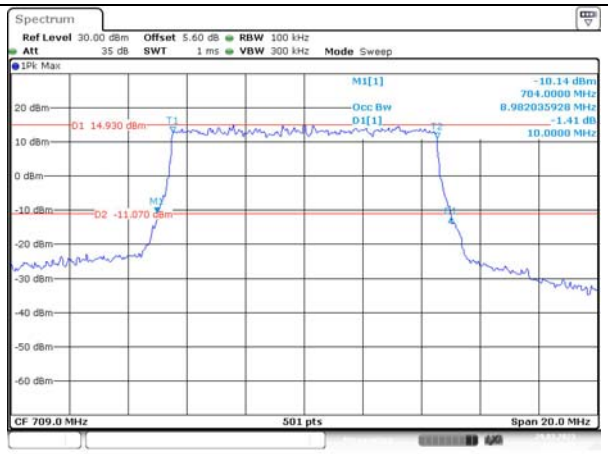
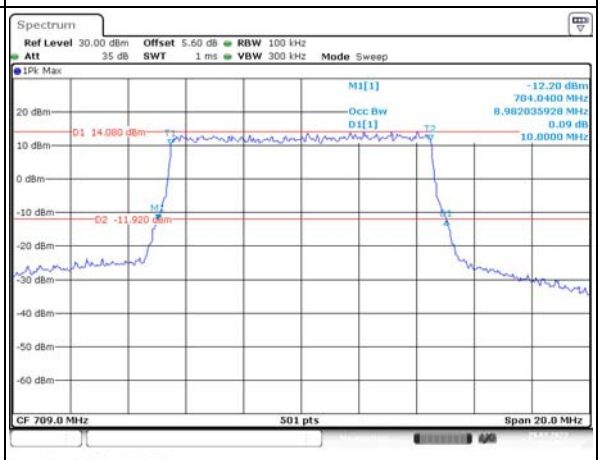
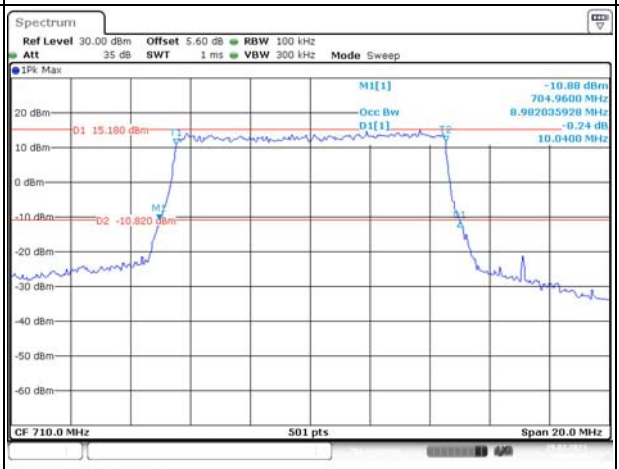
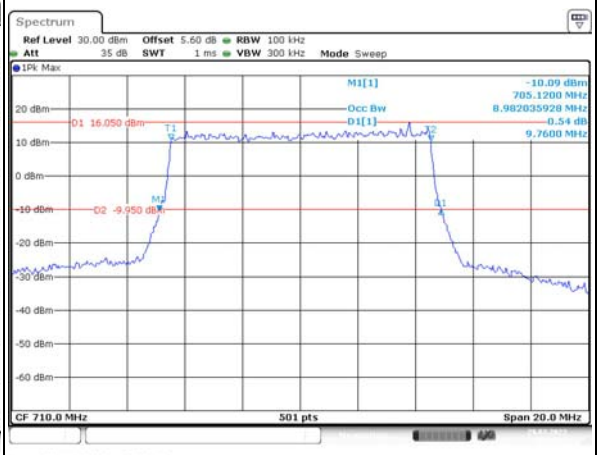
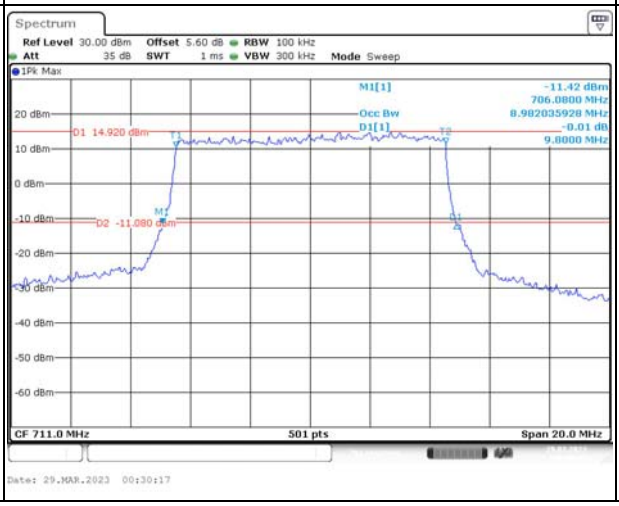
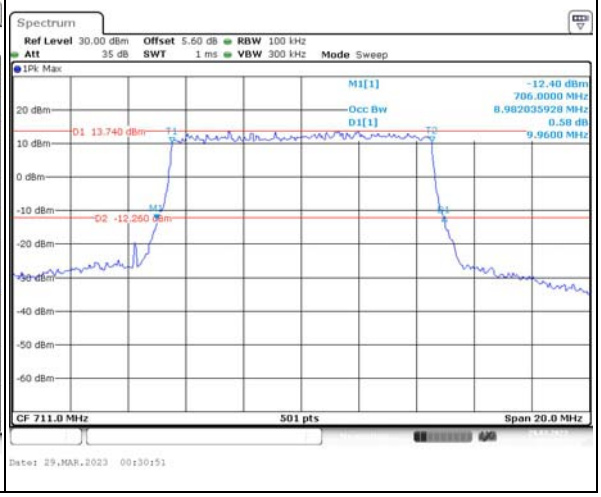
Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

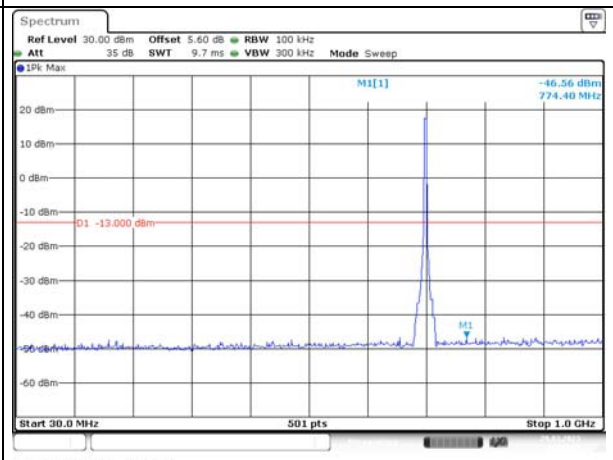
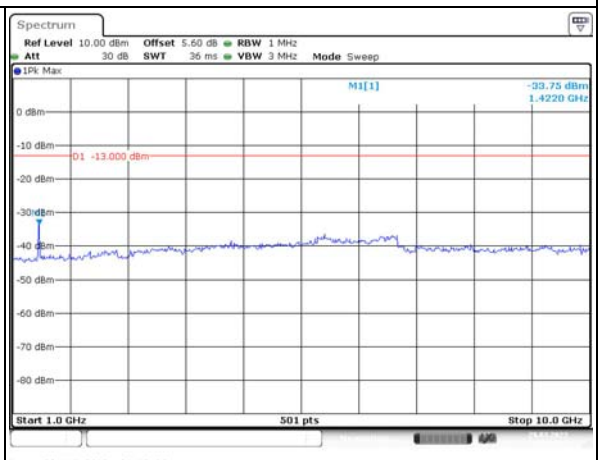
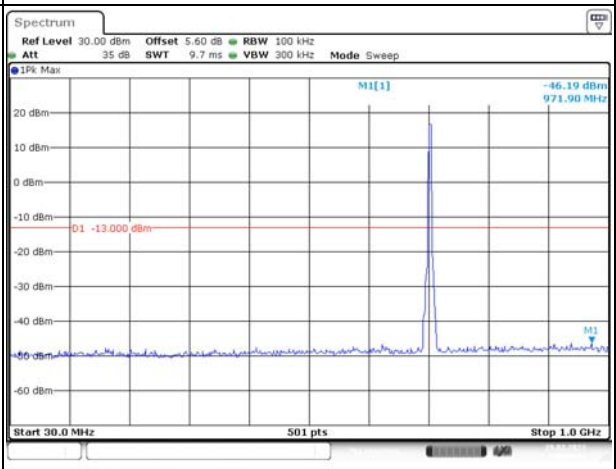
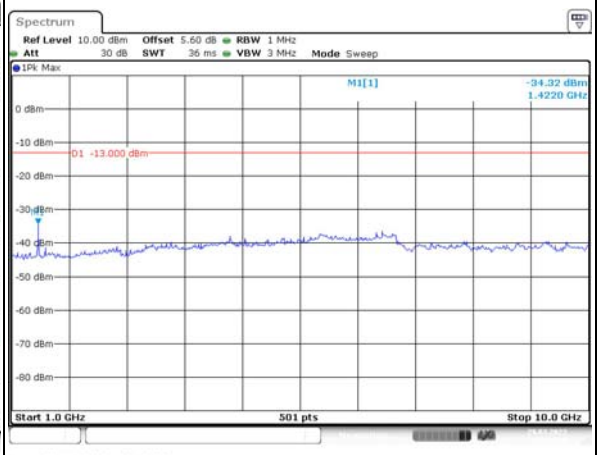
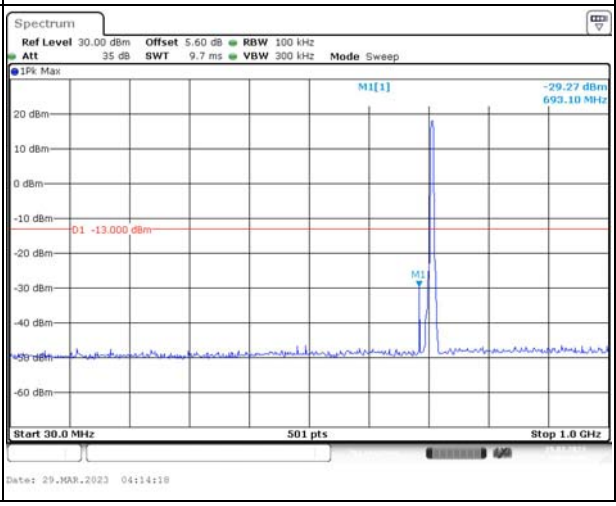
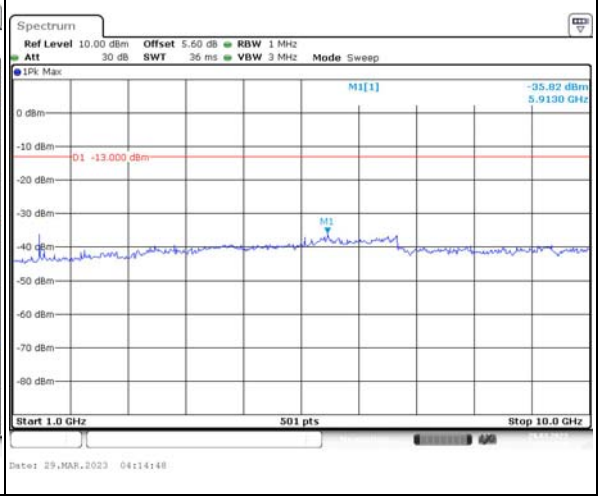
Frequency Stability						
Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	704.502	704.00	715.512	716.00
	-20	3.8	704.495	704.00	715.506	716.00
	-10	3.8	704.510	704.00	715.504	716.00
	0	3.8	704.512	704.00	715.502	716.00
	10	3.8	704.491	704.00	715.499	716.00
	20	3.8	704.514	704.00	715.486	716.00
	30	3.8	704.489	704.00	715.499	716.00
	40	3.8	704.500	704.00	715.494	716.00
	50	3.8	704.487	704.00	715.508	716.00
Frequency Stability vs. Voltage	20	3.6	704.494	704.00	715.486	716.00
	20	4.35	704.510	704.00	715.501	716.00
					Result:	**Pass**

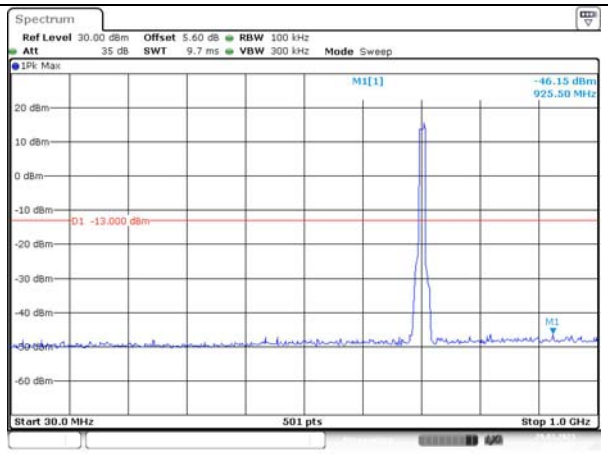
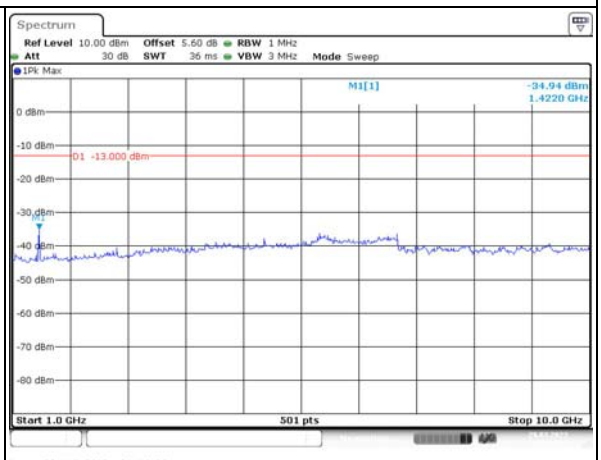
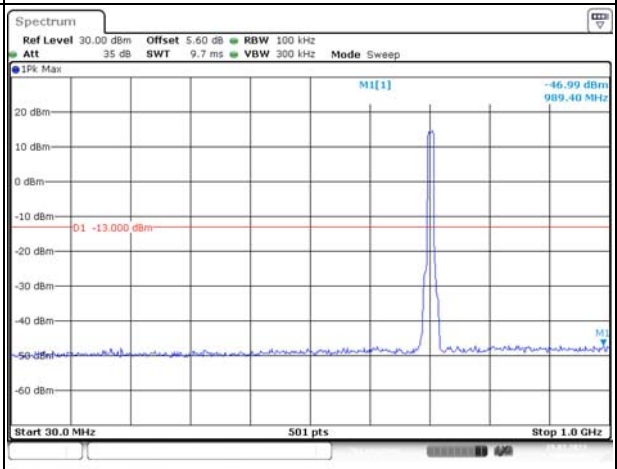
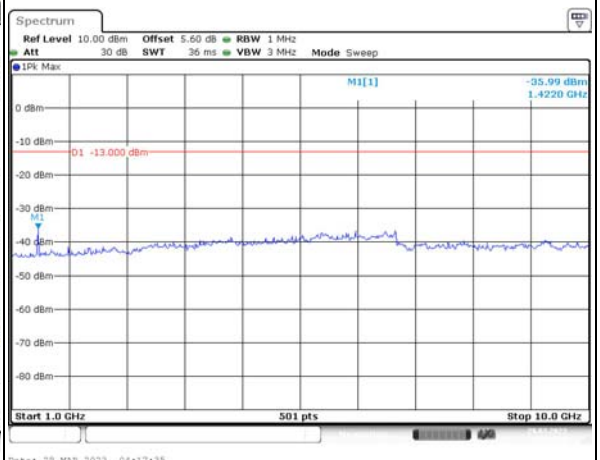
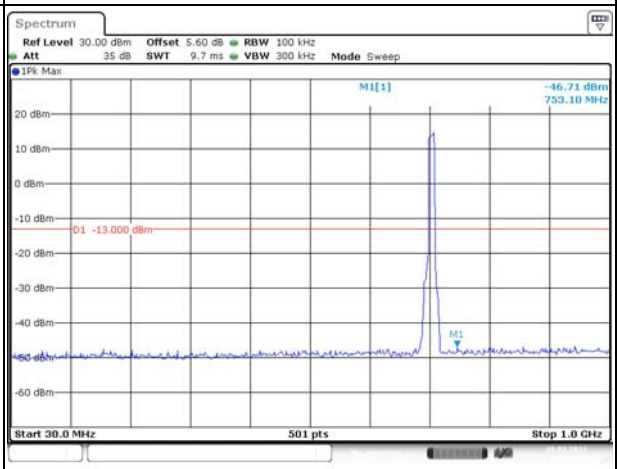
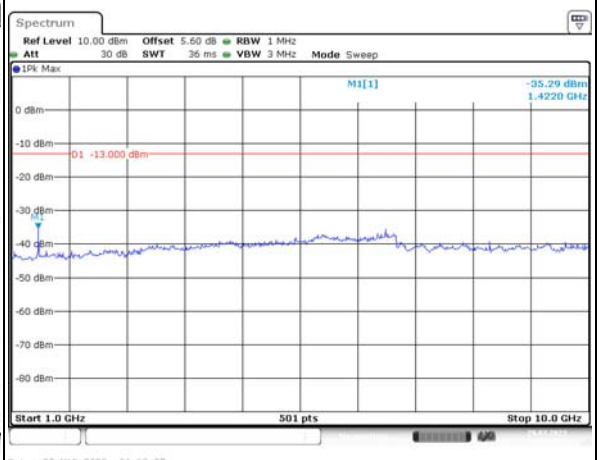
Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	704.513	704.00	715.507	716.00
	-20	3.8	704.490	704.00	715.494	716.00
	-10	3.8	704.499	704.00	715.494	716.00
	0	3.8	704.488	704.00	715.508	716.00
	10	3.8	704.497	704.00	715.500	716.00
	20	3.8	704.514	704.00	715.486	716.00
	30	3.8	704.514	704.00	715.503	716.00
	40	3.8	704.501	704.00	715.510	716.00
	50	3.8	704.489	704.00	715.486	716.00
Frequency Stability vs. Voltage	20	3.6	704.497	704.00	715.489	716.00
	20	4.35	704.511	704.00	715.509	716.00
					Result:	**Pass**

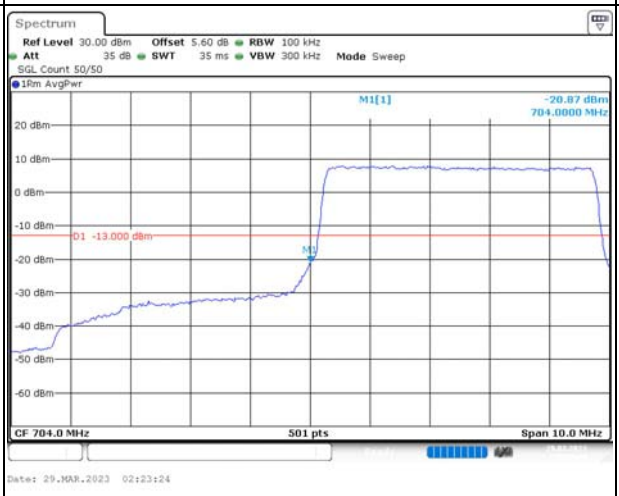
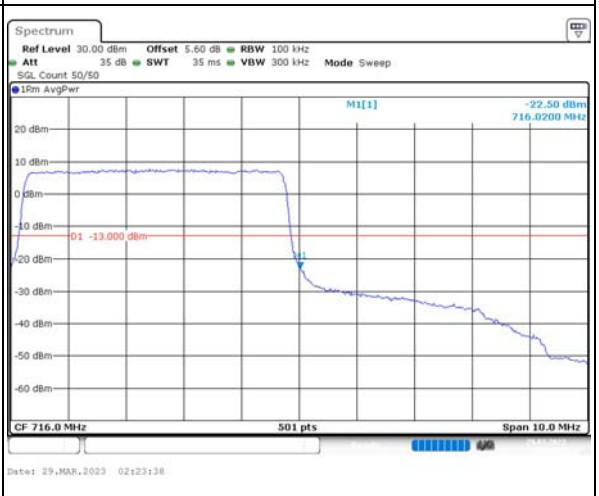
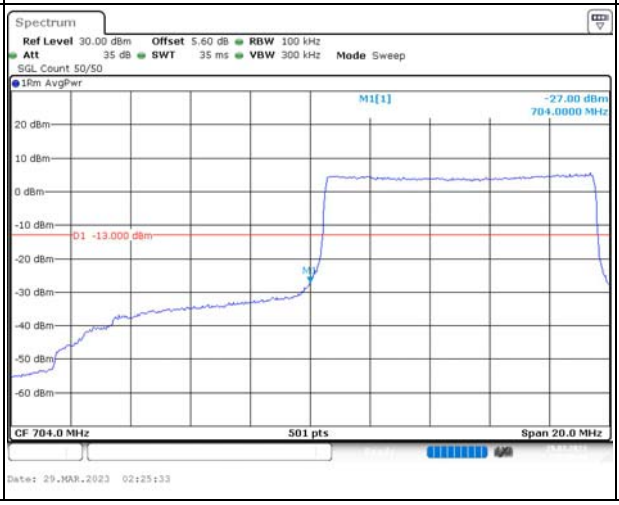
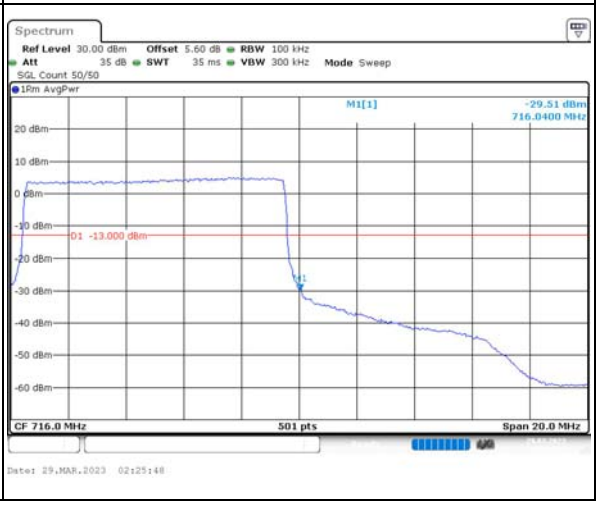
Test Plots(Note: The 5.6 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

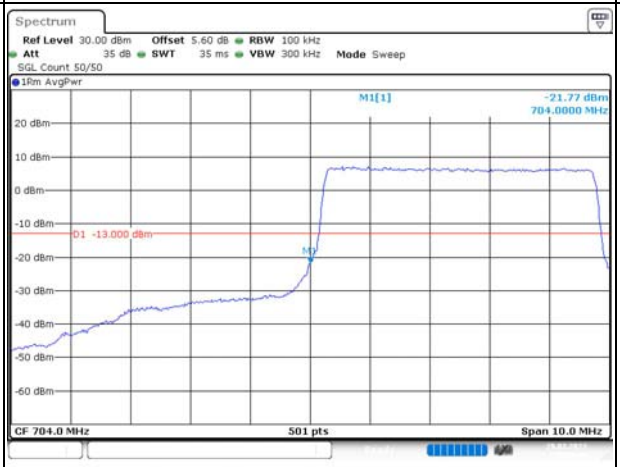
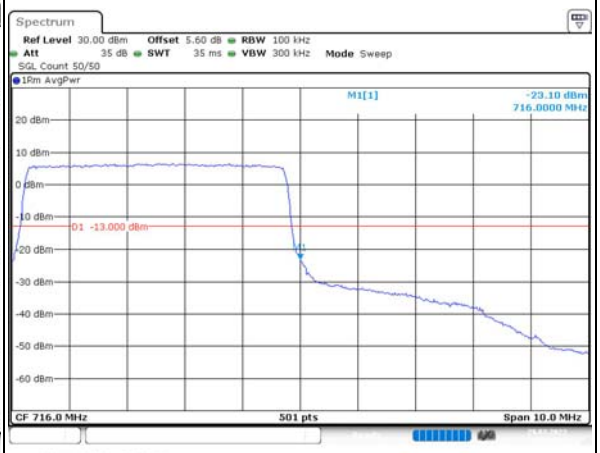
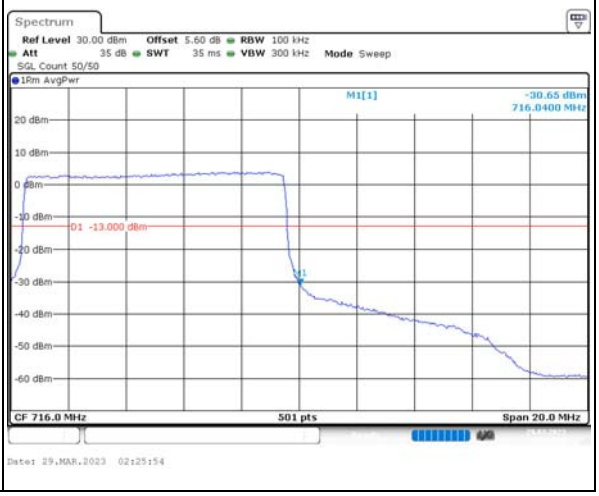
Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

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		

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

4.11 Antenna Port Test Data and Results for LTE Band 41

Serial Number:	23CF-1	Test Date:	2023/3/29~2023/4/12
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jou Zhou	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	24.3~25.6	Relative Humidity: (%)	26~45	ATM Pressure: (kPa)	100.3~101.4

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100004	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554404	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
Weinschel	Power splitter	1515	RA915	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149218	2022/7/15	2023/7/14
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022/3/31	2023/3/30
R&S	Spectrum Analyzer	FSV40	101474	2022/7/15	2023/7/14
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
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	2557.5	2605	2652.5
10MHz	2560	2605	2650
15MHz	2562.5	2605	2647.5
20MHz	2565	2605	2645

Test Data:

RF Output Power:

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	23.16	24.36	23.31	25.79	33
	RB1#13	23.5	24.48	23.56		
	RB1#24	23.46	24.22	23.42		
	RB15#0	22.29	23.51	22.26		
	RB15#10	22.41	23.32	22.27		
	RB25#0	22.41	23.32	22.22		
5MHz 16QAM	RB1#0	22.28	23.28	22.08	24.66	33
	RB1#13	22.6	23.35	22.3		
	RB1#24	22.54	23.11	22.28		
	RB15#0	21.2	22.22	21.16		
	RB15#10	21.33	22.33	21.2		
	RB25#0	21.3	22.39	21.16		
10MHz QPSK	RB1#0	23.27	24.57	23.3	26.17	33
	RB1#25	23.81	24.86	23.61		
	RB1#49	23.75	24.31	23.27		
	RB25#0	22.38	23.45	22.16		
	RB25#25	22.66	23.33	22.18		
	RB50#0	22.52	23.32	22.18		
10MHz 16QAM	RB1#0	22.09	23.47	22.15	24.93	33
	RB1#25	22.64	23.62	22.45		
	RB1#49	22.59	23.34	22.52		
	RB25#0	21.54	22.39	21.07		
	RB25#25	21.6	22.24	21.12		
	RB50#0	21.43	22.25	21.38		
15MHz QPSK	RB1#0	23.23	24.73	23.07	26.04	33
	RB1#38	24	24.51	23.41		
	RB1#74	23.95	24.18	23.19		
	RB36#0	22.52	23.54	22.52		
	RB36#39	22.96	23.44	22.33		
	RB75#0	23.04	23.47	22.23		
15MHz 16QAM	RB1#0	22.1	23.53	22.08	25.1	33
	RB1#38	22.58	23.79	22.2		
	RB1#74	22.7	23.14	22.25		
	RB36#0	21.44	22.51	21.33		
	RB36#39	21.78	22.33	21.2		
	RB75#0	21.61	22.45	21.11		
20MHz QPSK	RB1#0	23.04	24.42	22.95	26.05	33
	RB1#50	24.04	24.74	23.38		
	RB1#99	23.93	23.89	23.09		
	RB50#0	22.46	23.42	22.02		

	RB50#50	23.22	23.16	22.11		
	RB100#0	22.8	23.26	22.06		
20MHz 16QAM	RB1#0	21.94	23.47	21.88	25.11	33
	RB1#50	23.16	23.8	22.31		
	RB1#99	22.81	22.96	22		
	RB50#0	21.43	22.34	20.95		
	RB50#50	21.93	22.08	21.02		
	RB100#0	21.65	22.2	20.96		
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	8.12	7.97	8.29	13
	RB100#0	7.91	7.86	7.91	13
20MHz 16QAM	RB1#0	8.93	8.81	9.04	13
	RB100#0	9.51	9.42	9.54	13
				Result:	**Pass**

Occupied Bandwidth

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
5MHz QPSK	4.531	4.531	4.531	5.52	5.26	5.32
5MHz 16QAM	4.531	4.531	4.511	5.18	5.22	5.24
10MHz QPSK	8.982	8.982	8.982	10.12	11.44	11.76
10MHz 16QAM	8.982	8.982	8.982	10.36	10.36	12.12
15MHz QPSK	13.593	13.533	13.593	19.5	16.26	18.3
15MHz 16QAM	13.593	13.593	13.593	15.42	16.26	16.44
20MHz QPSK	17.964	17.964	18.044	23.84	24.32	21.84
20MHz 16QAM	17.964	17.964	17.964	23.2	21.76	21.52
Note: The test plots please refer to the Plots of Occupied Bandwidth						

Spurious Emissions at Antenna Terminal

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

Out of band emission, Band Edge

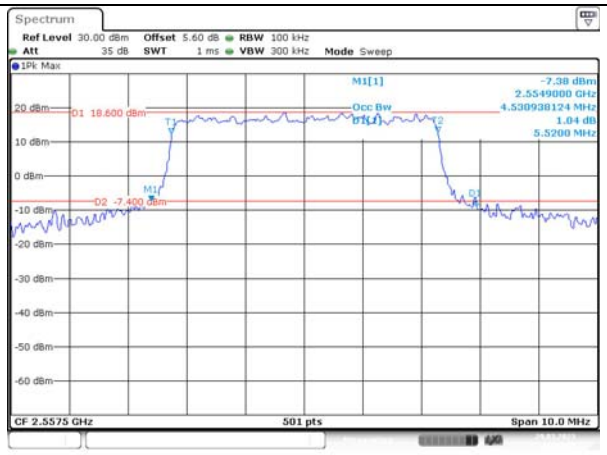
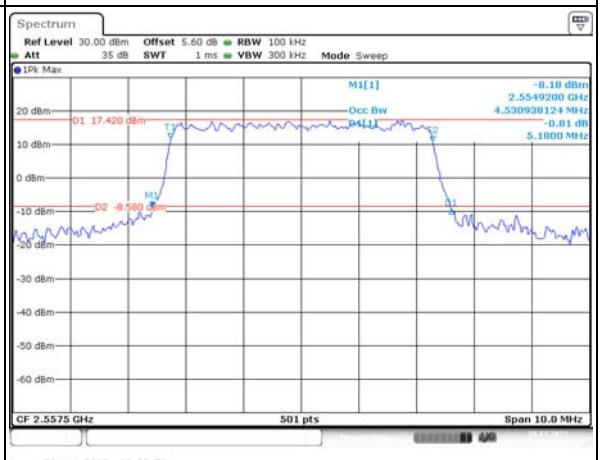
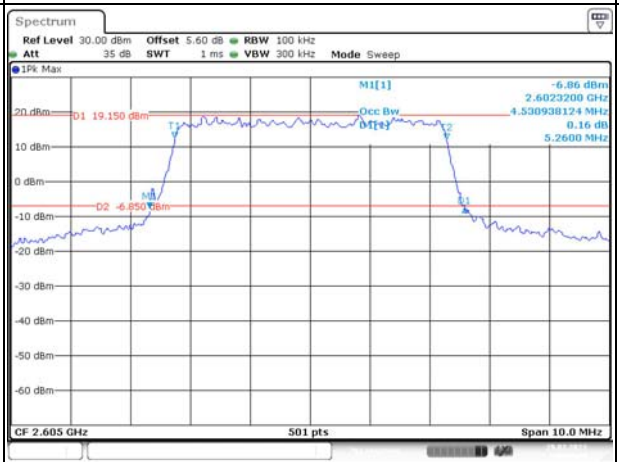
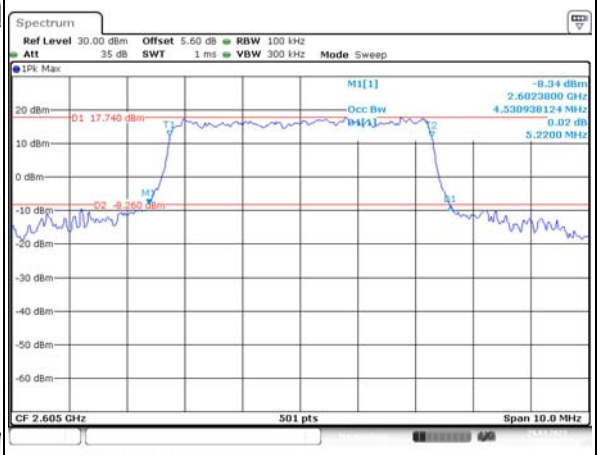
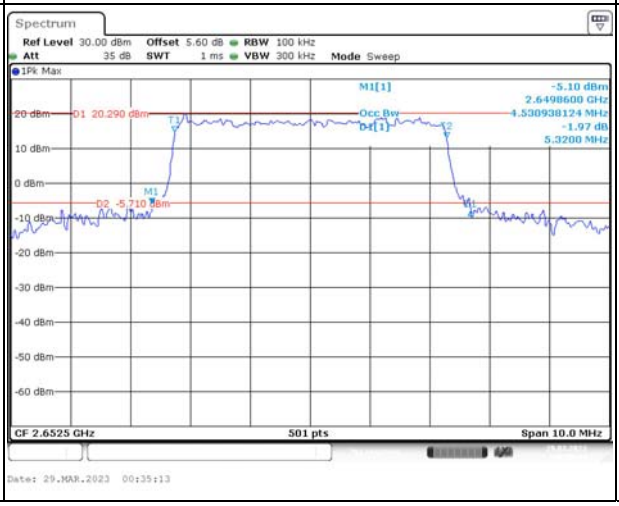
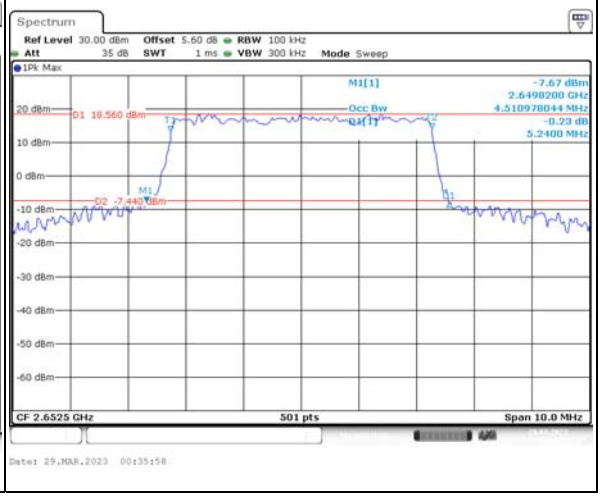
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

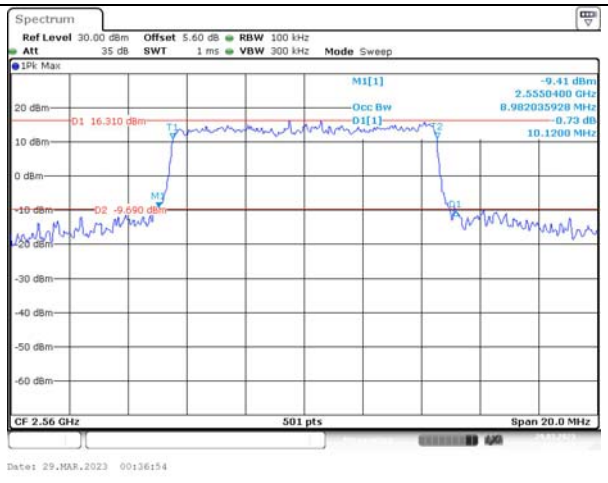
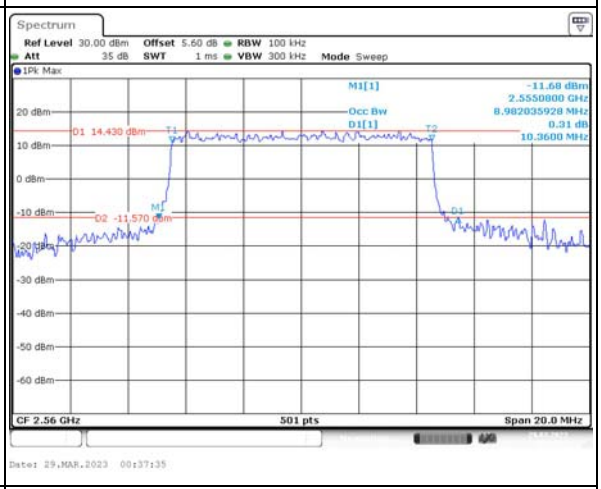
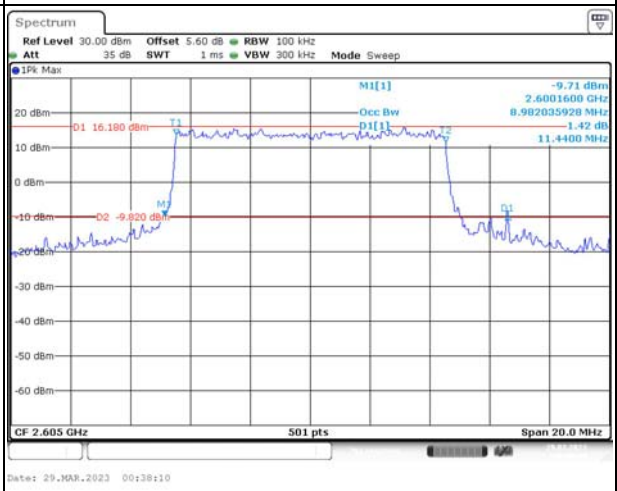
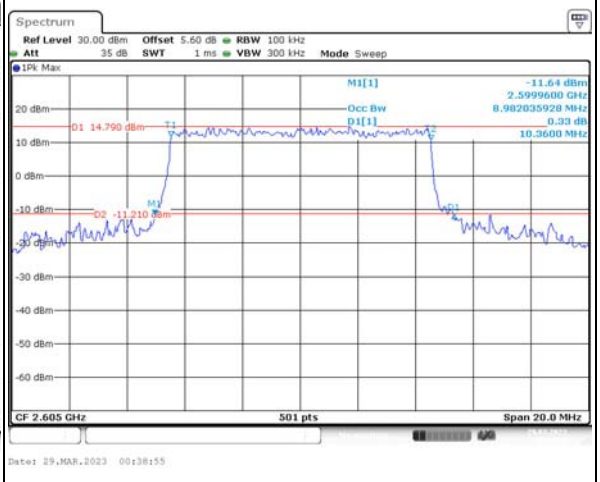
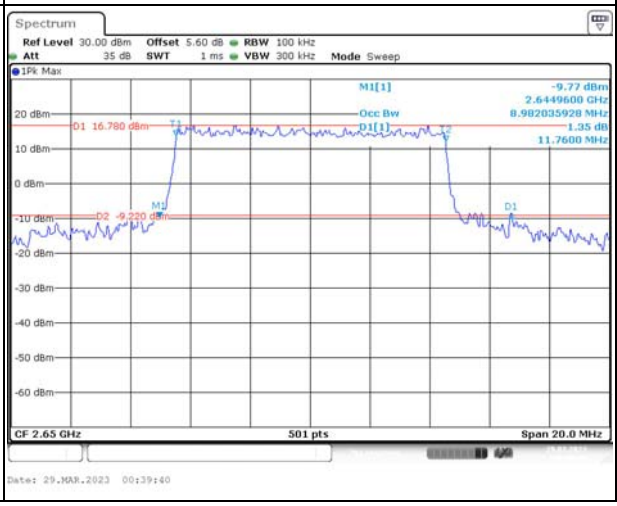
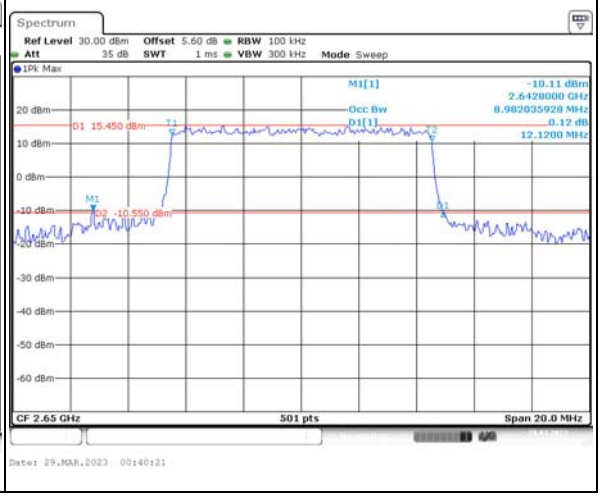
Frequency Stability

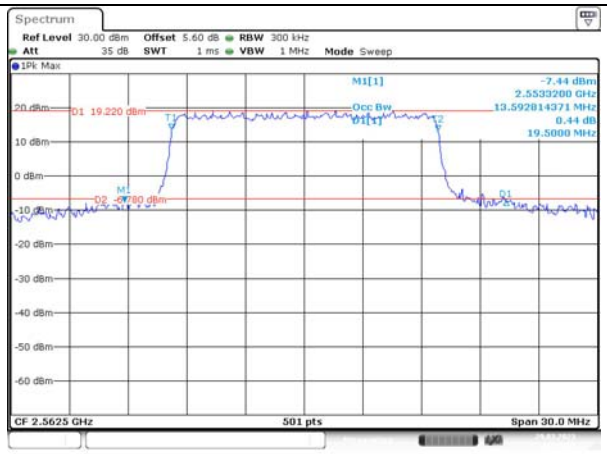
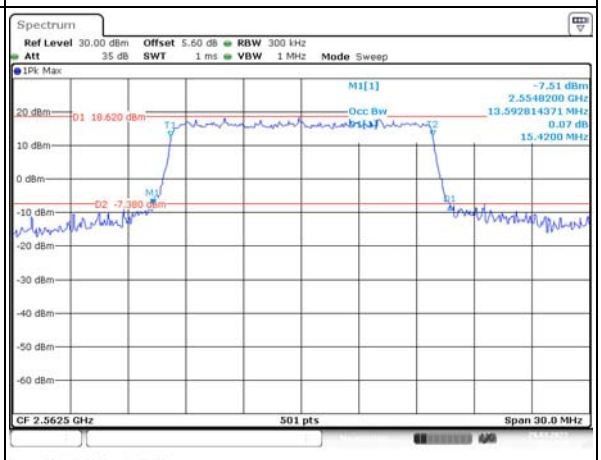
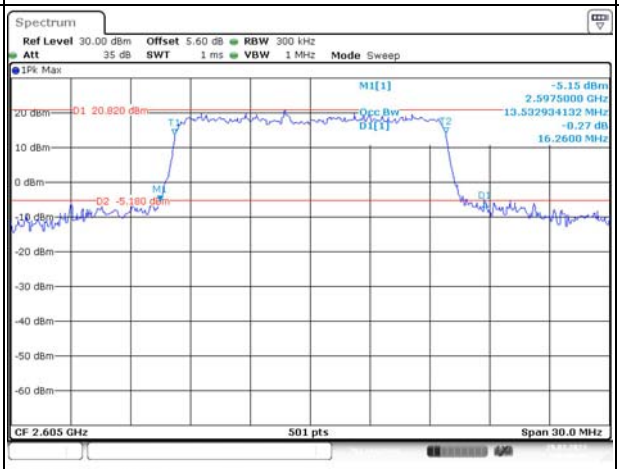
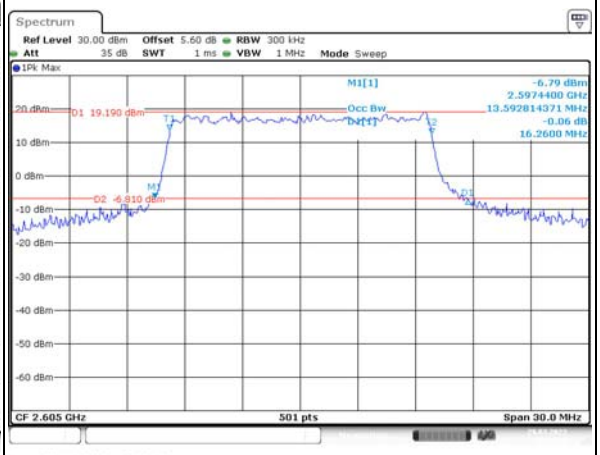
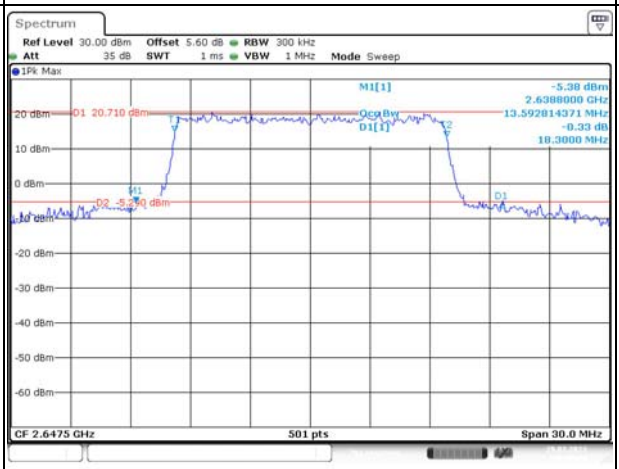
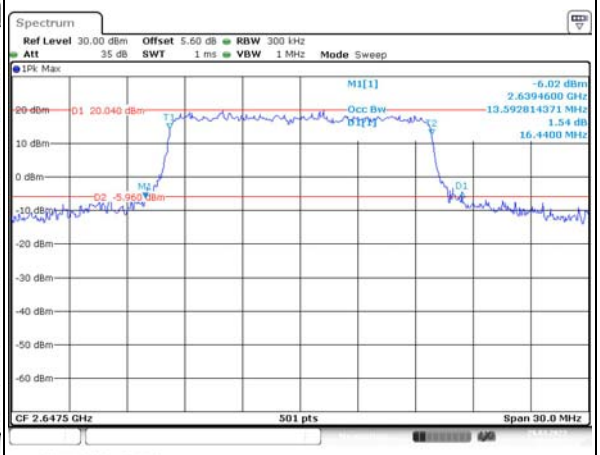
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	2556.014	2555.00	2653.974	2655
	-20	3.8	2556.017	2555.00	2653.972	2655
	-10	3.8	2556.023	2555.00	2653.977	2655
	0	3.8	2556.015	2555.00	2653.989	2655
	10	3.8	2556.007	2555.00	2653.979	2655
	20	3.8	2556.029	2555.00	2653.971	2655
	30	3.8	2556.027	2555.00	2653.973	2655
	40	3.8	2556.021	2555.00	2653.989	2655
	50	3.8	2556.020	2555.00	2653.997	2655
Frequency Stability vs. Voltage	20	3.6	2556.008	2555.00	2653.979	2655
	20	4.35	2556.023	2555.00	2653.972	2655
					Result:	**Pass**

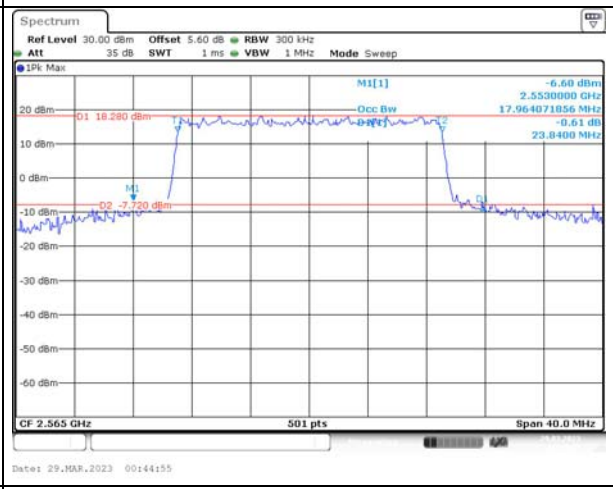
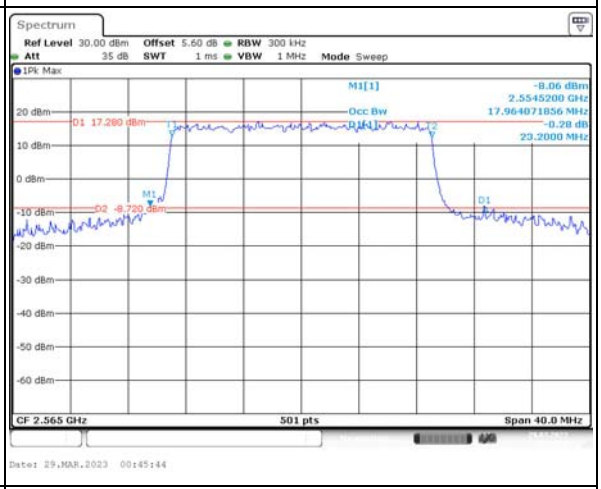
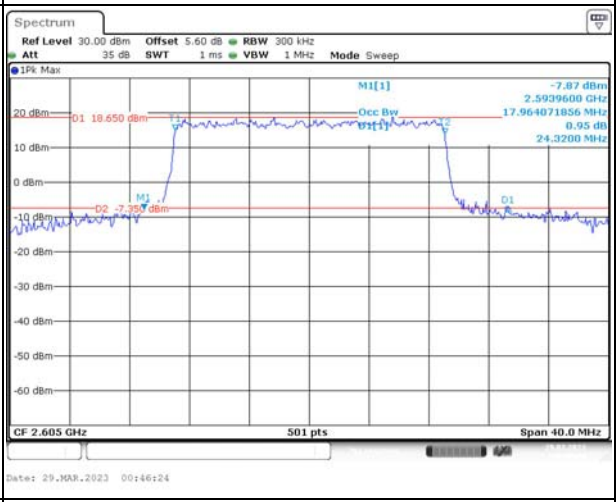
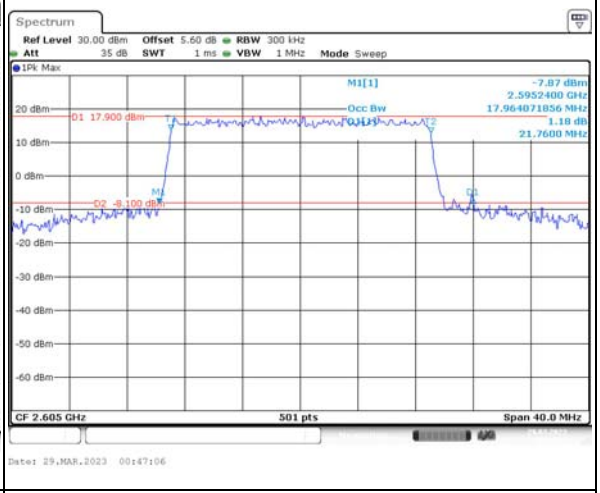
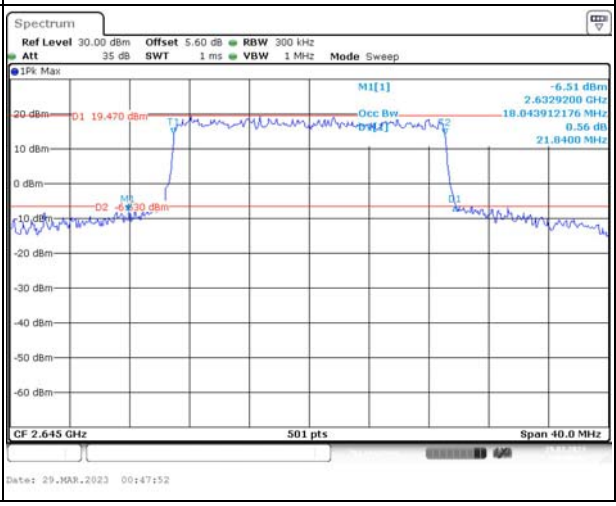
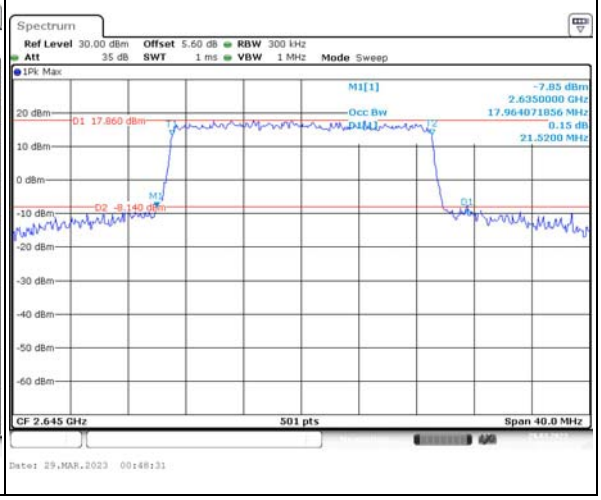
Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	2556.028	2555.00	2654.046	2655
	-20	3.8	2556.017	2555.00	2654.051	2655
	-10	3.8	2556.009	2555.00	2654.050	2655
	0	3.8	2556.006	2555.00	2654.035	2655
	10	3.8	2556.012	2555.00	2654.044	2655
	20	3.8	2556.029	2555.00	2654.029	2655
	30	3.8	2556.018	2555.00	2654.057	2655
	40	3.8	2556.001	2555.00	2654.029	2655
	50	3.8	2556.026	2555.00	2654.038	2655
Frequency Stability vs. Voltage	20	3.6	2556.003	2555.00	2654.051	2655
	20	4.35	2556.005	2555.00	2654.055	2655
					Result:	**Pass**

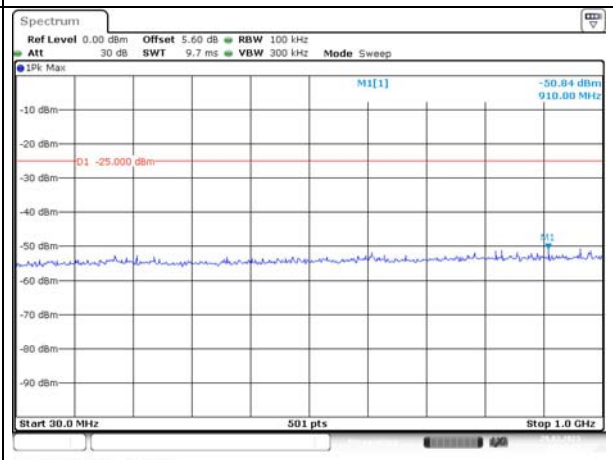
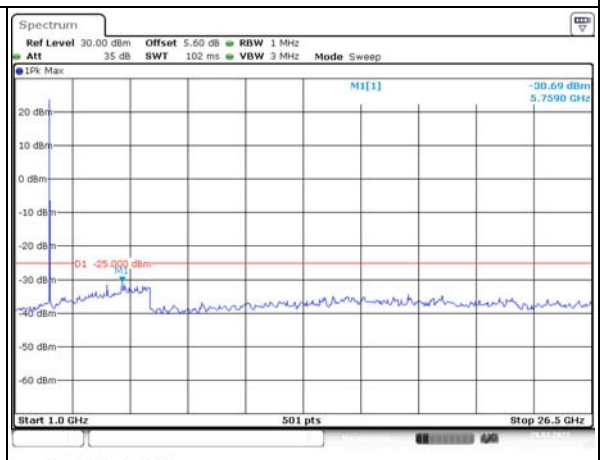
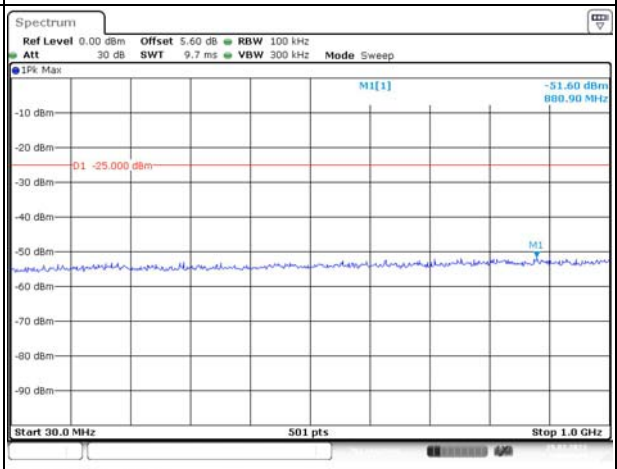
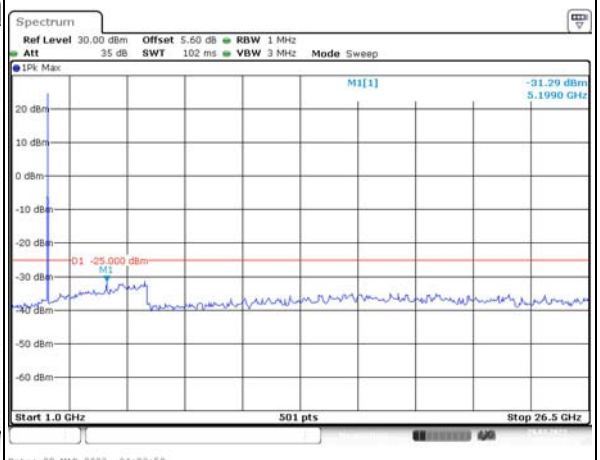
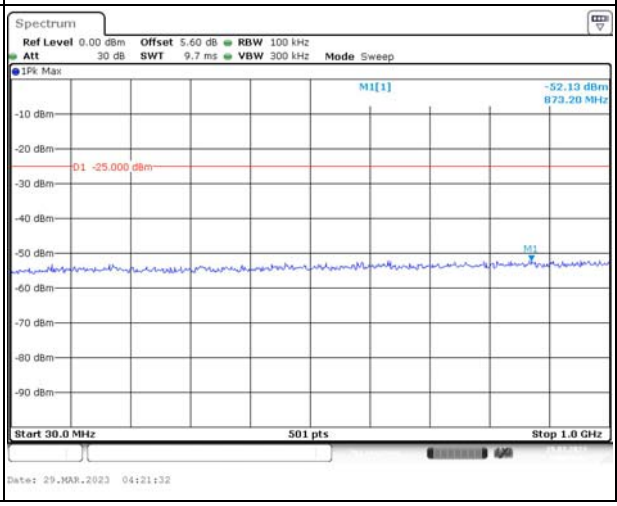
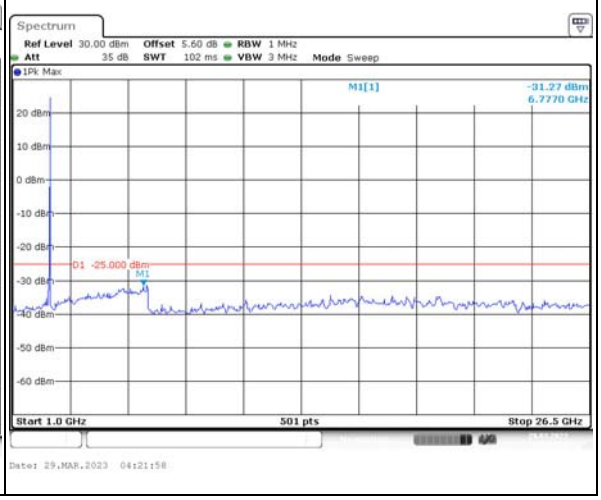
Test Plots(Note: The 5.6 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

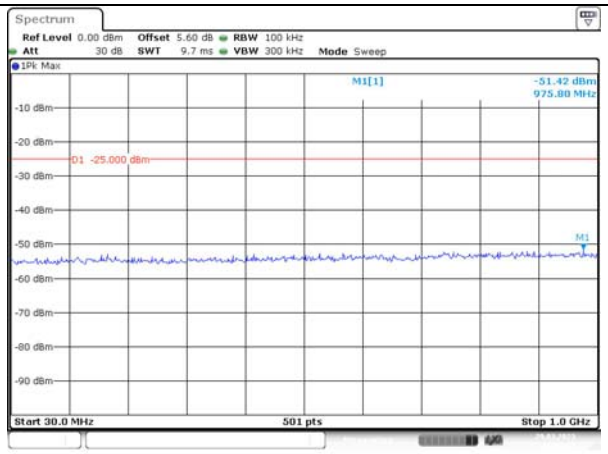
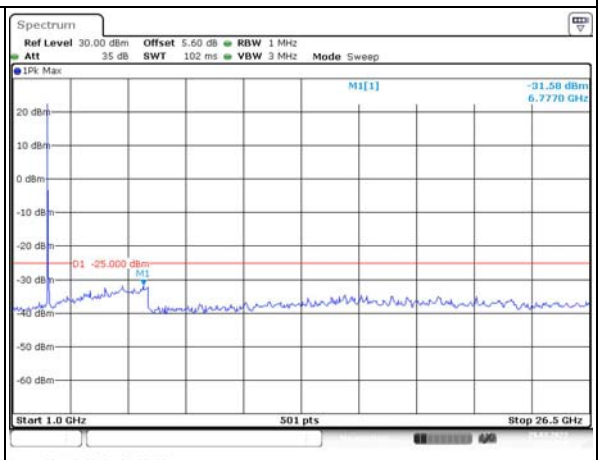
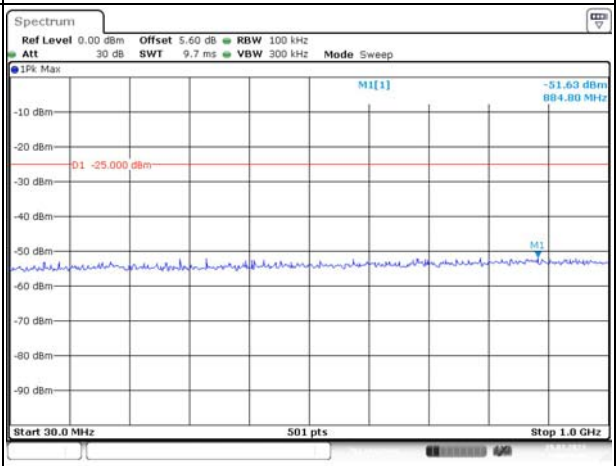
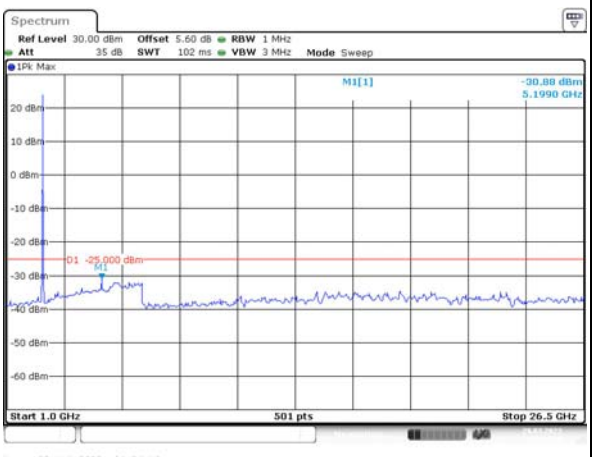
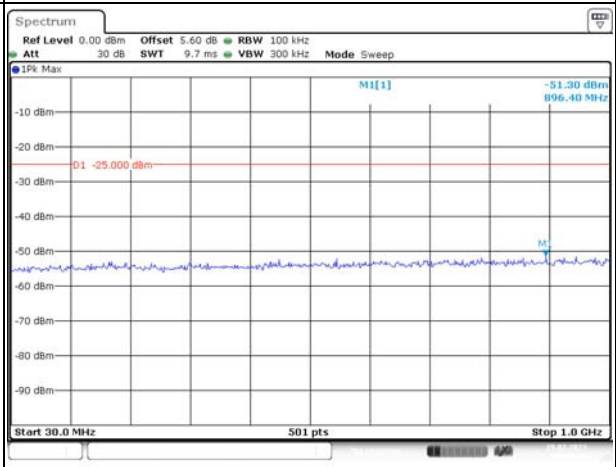
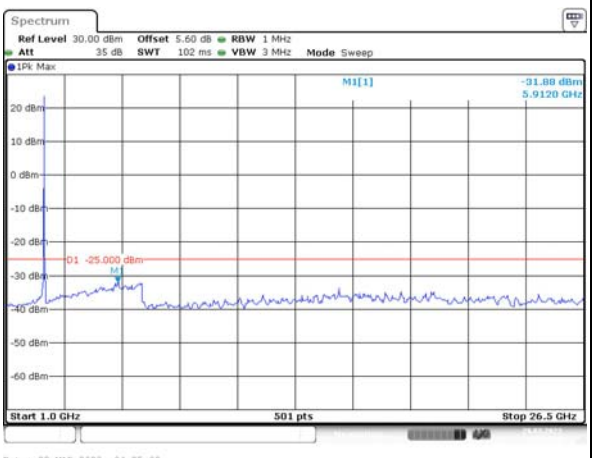
Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

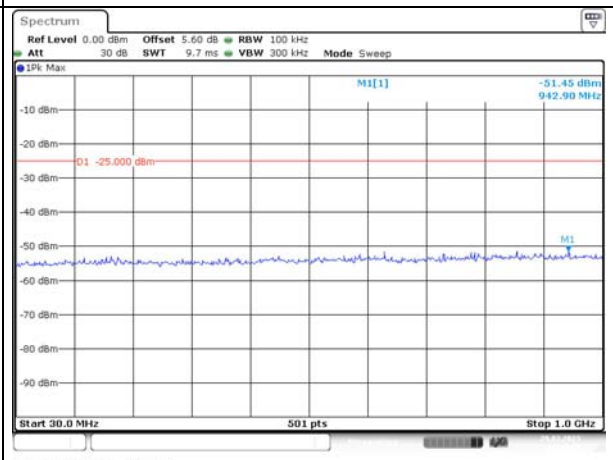
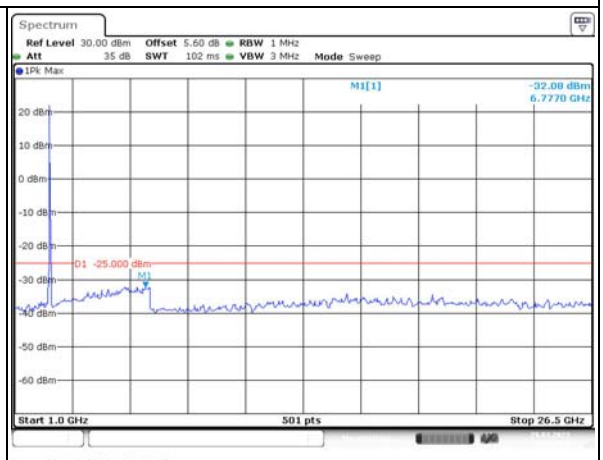
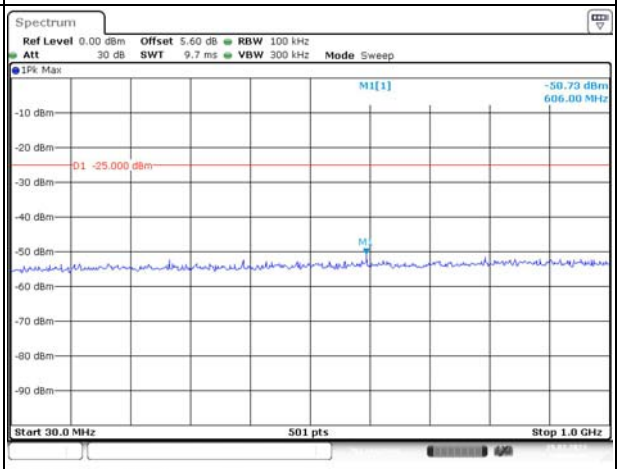
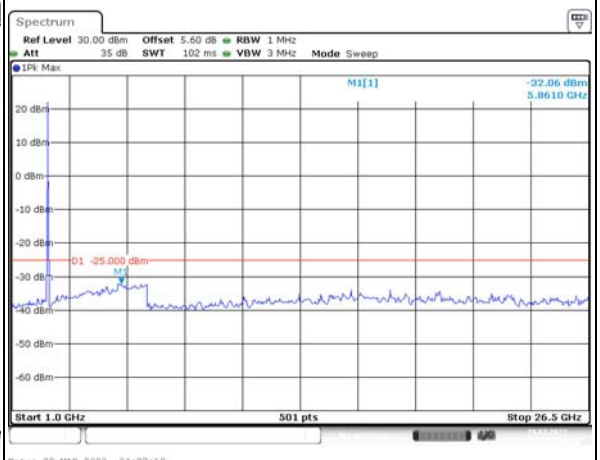
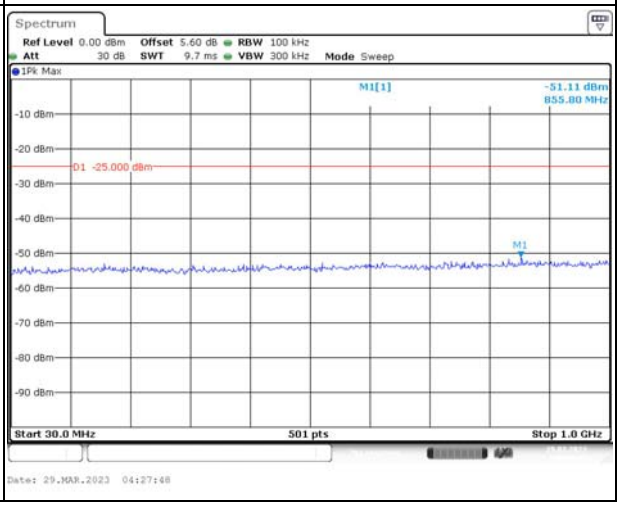
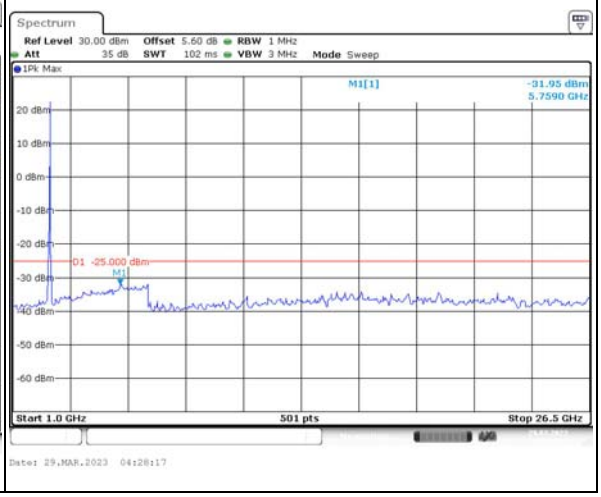
Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

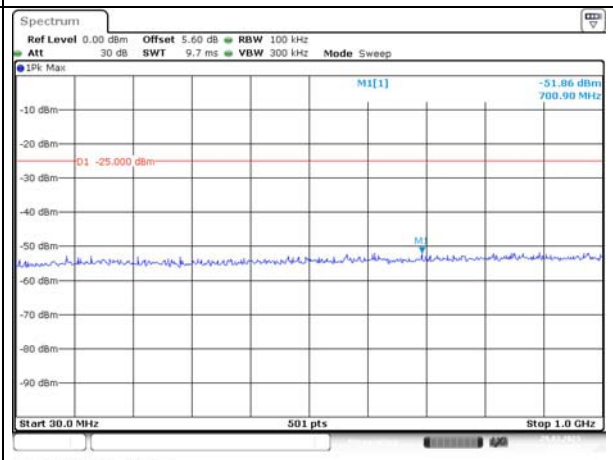
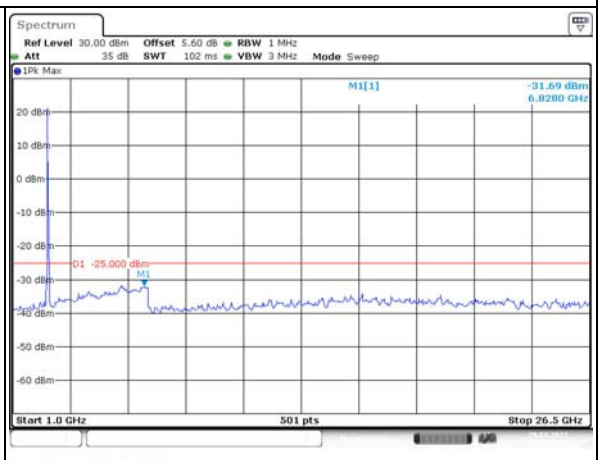
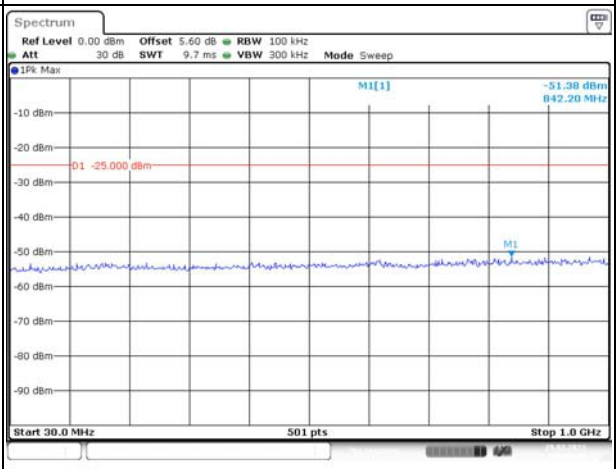
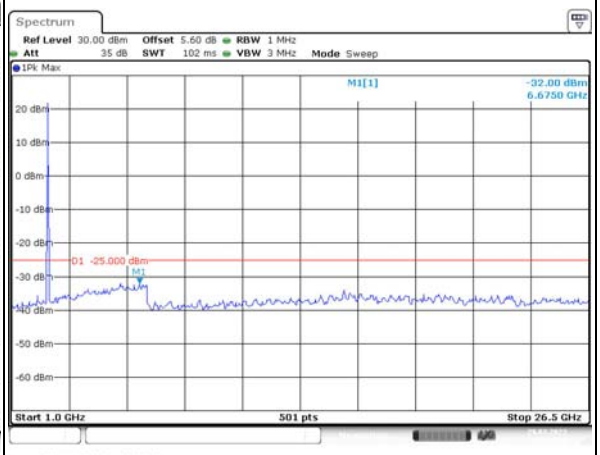
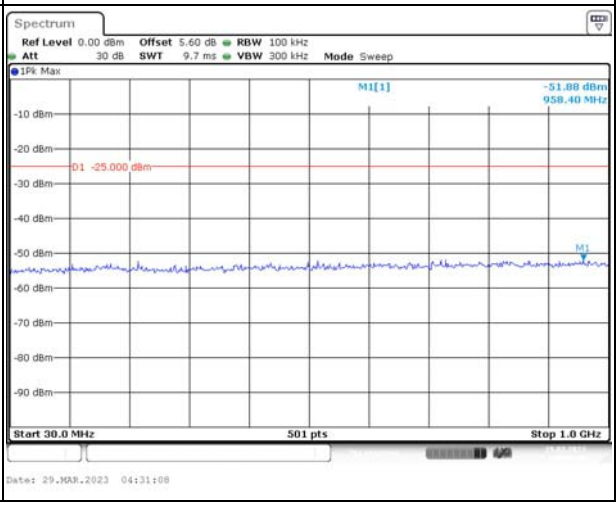
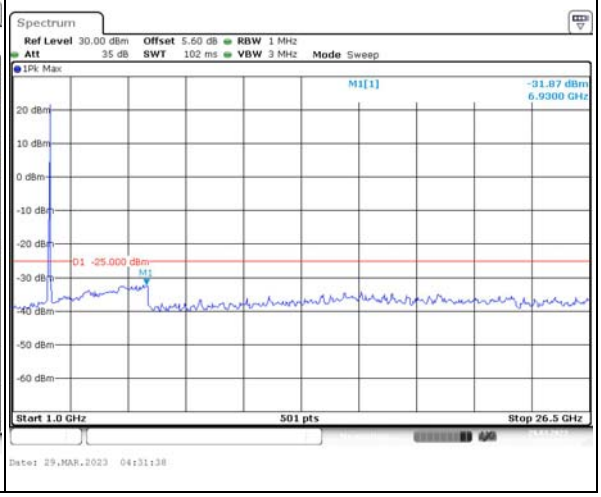
Occupied Bandwidth		
Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

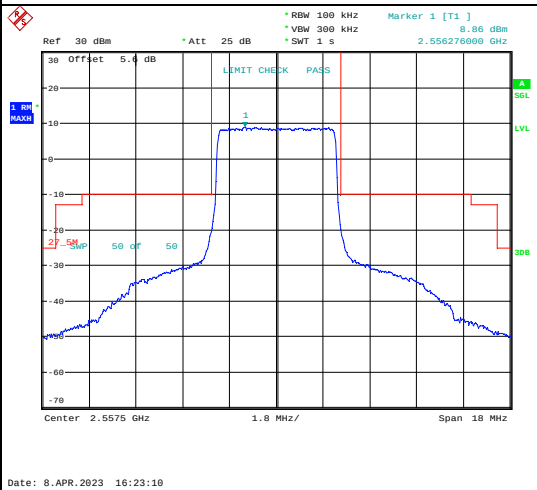
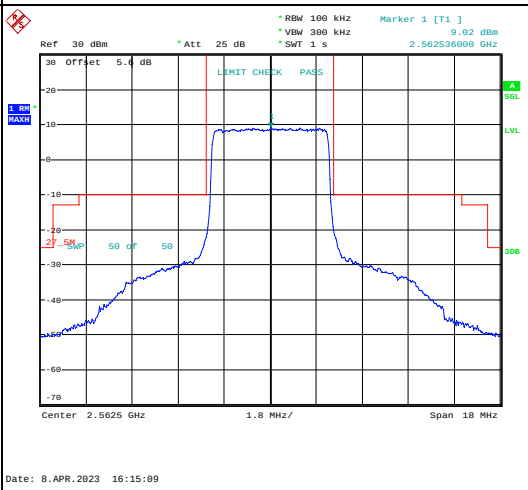
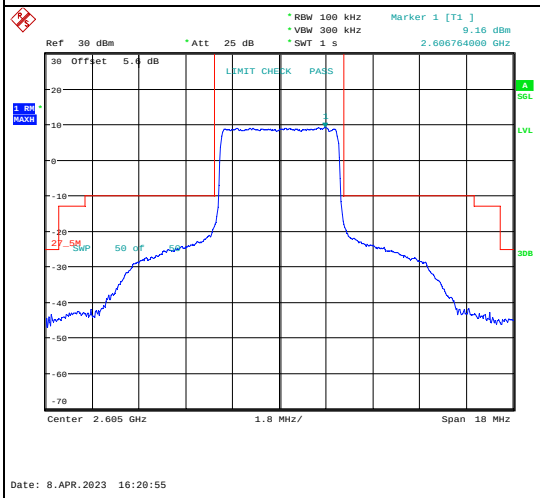
Occupied Bandwidth		
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

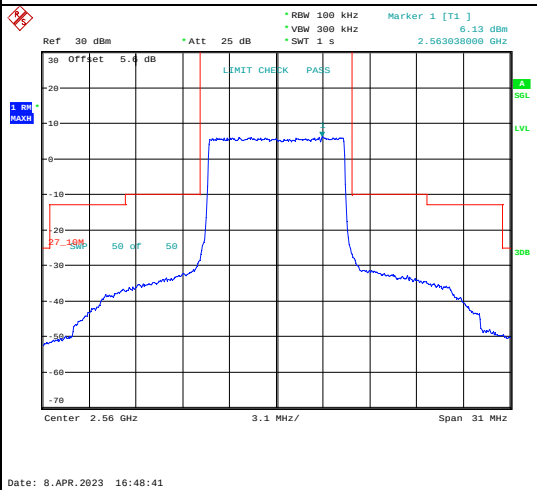
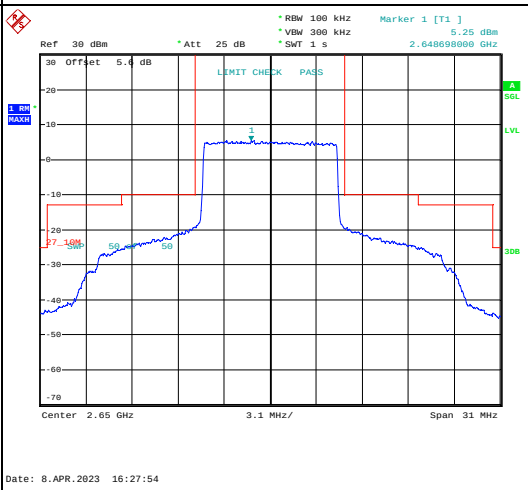
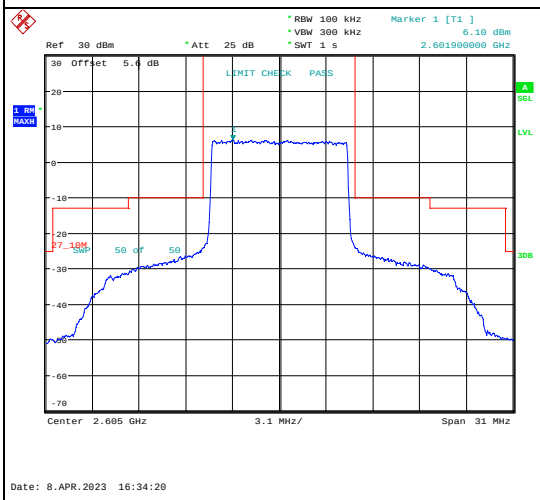
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

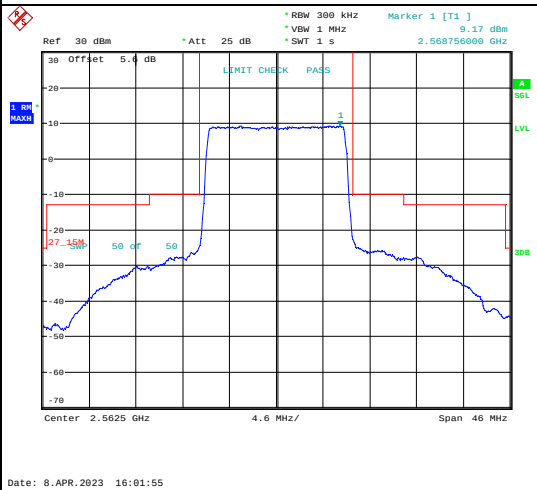
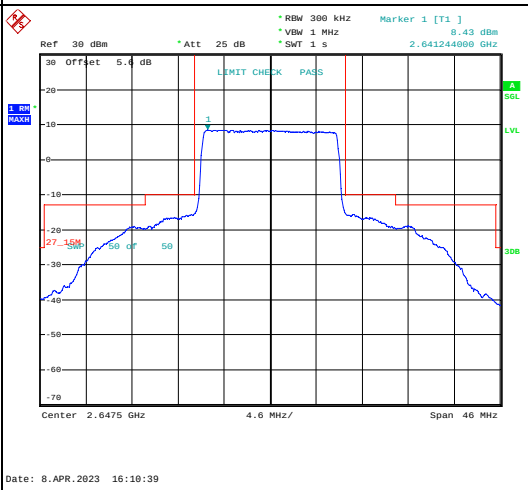
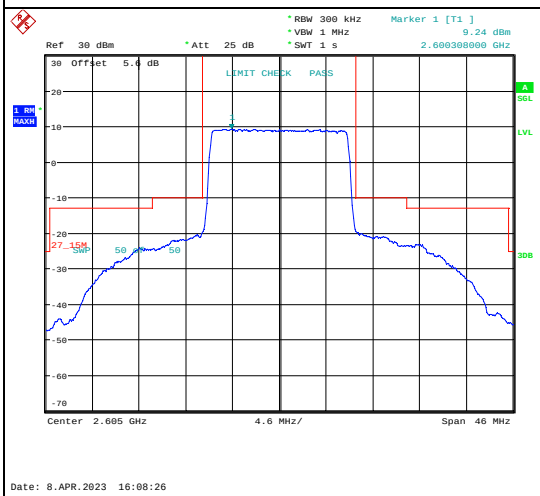
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

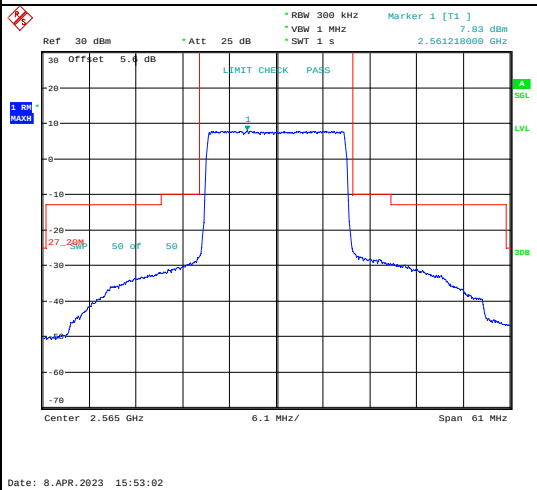
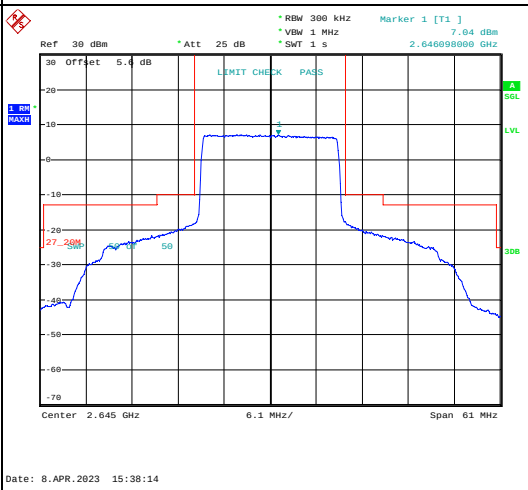
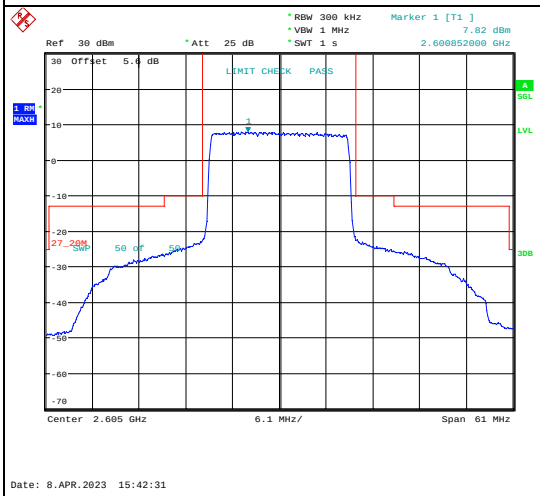
Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

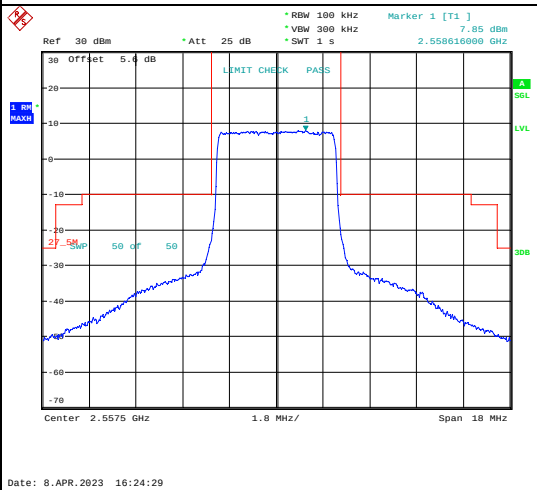
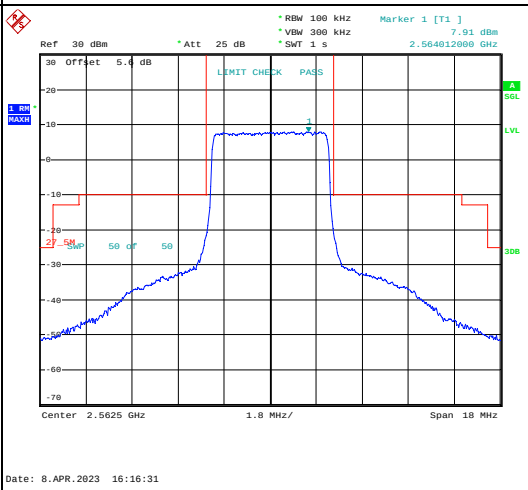
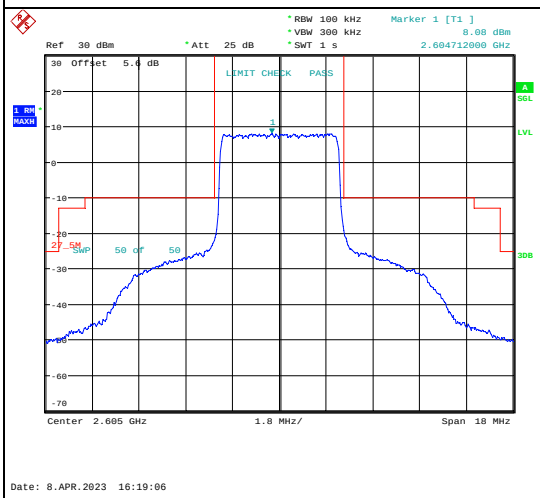
Spurious Emissions at Antenna Terminal		
Channel	**20MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

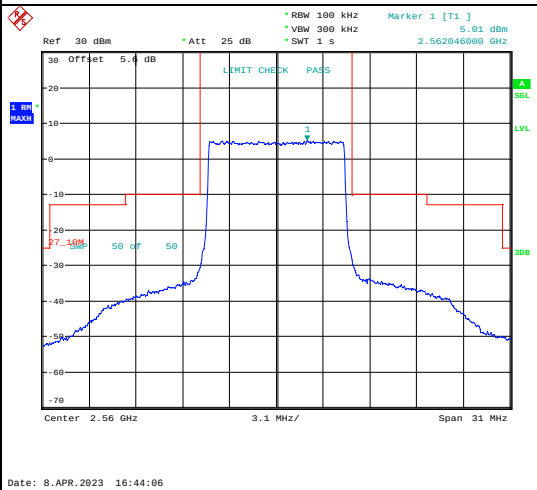
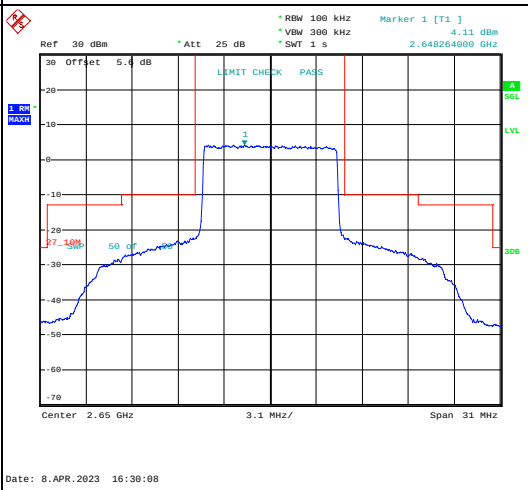
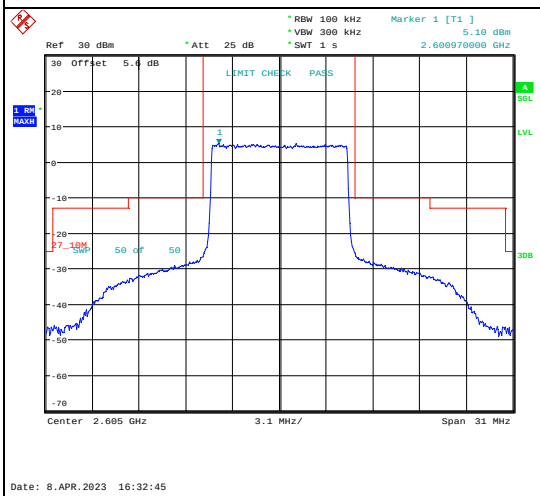
Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 5MHz		
	Middle	
		

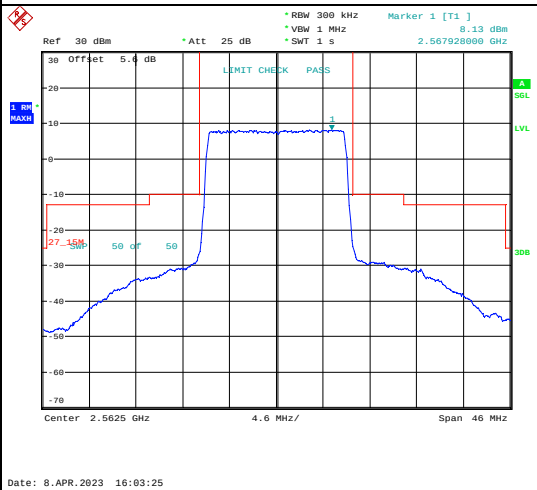
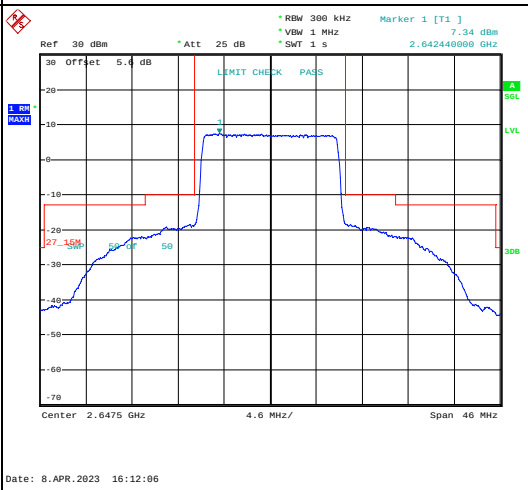
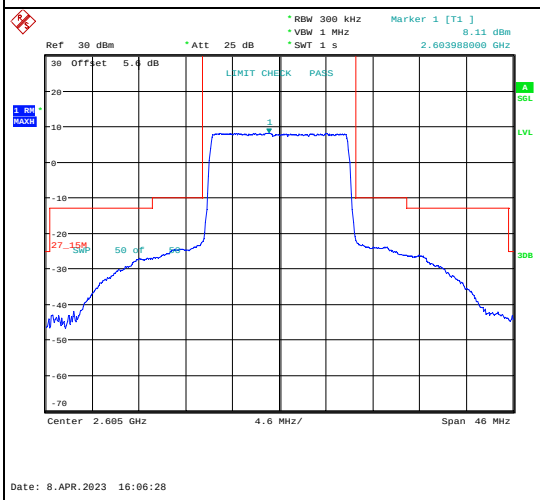
Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 10MHz		
	Middle	
		

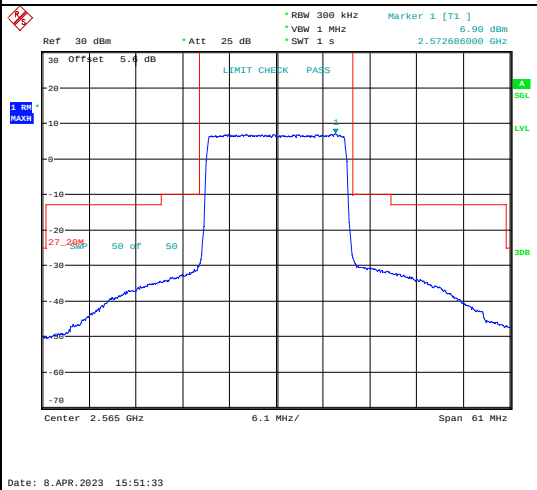
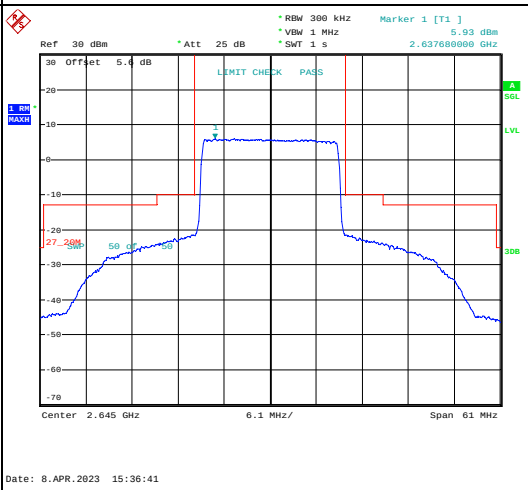
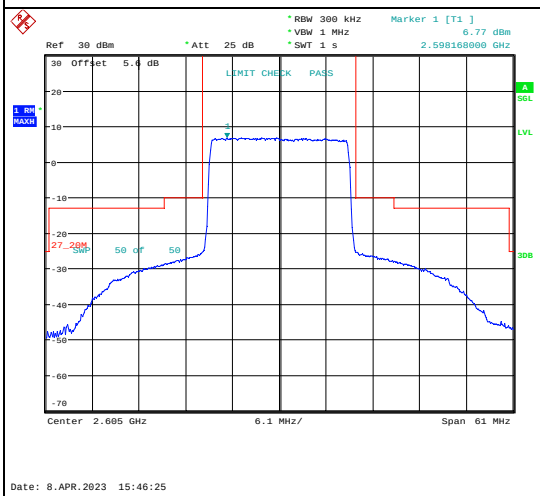
Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 15MHz		
	Middle	
		

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

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

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

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

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

4.12 Antenna Port Test Data and Results for LTE Band 66

Serial Number:	23CF-1	Test Date:	2023/3/29~2023/4/12
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jou Zhou	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	24.3~25.6	Relative Humidity: (%)	26~45	ATM Pressure: (kPa)	100.3~101.4

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100004	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554404	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
Weinschel	Power splitter	1515	RA915	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149218	2022/7/15	2023/7/14
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022/3/31	2023/3/30
R&S	Spectrum Analyzer	FSV40	101474	2022/7/15	2023/7/14
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
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	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:

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	22.34	23.47	23.15	20.21	30
	RB1#3	22.59	23.64	23.25		
	RB1#5	22.34	23.46	22.98		
	RB3#0	22.49	23.52	22.94		
	RB3#3	22.46	23.59	22.97		
	RB6#0	21.43	22.55	22.01		
1.4MHz 16QAM	RB1#0	21.32	22.59	21.88	19.35	30
	RB1#3	21.56	22.78	22.09		
	RB1#5	21.35	22.58	21.88		
	RB3#0	21.62	22.56	22.06		
	RB3#3	21.65	22.46	21.99		
	RB6#0	20.44	21.59	20.94		
3MHz QPSK	RB1#0	22.44	23.03	23.22	19.79	30
	RB1#8	22.41	23.07	23.14		
	RB1#14	22.45	23.09	23.09		
	RB6#0	21.46	21.97	22.05		
	RB6#9	21.46	22.06	22.01		
	RB15#0	21.47	22.04	22.04		
3MHz 16QAM	RB1#0	21.5	22.15	22.06	18.84	30
	RB1#8	21.49	22.18	21.97		
	RB1#14	21.51	22.27	21.94		
	RB6#0	20.02	20.98	20.97		
	RB6#9	20.01	21.11	20.89		
	RB15#0	20	21.02	21.1		
5MHz QPSK	RB1#0	22.42	22.9	23.03	19.66	30
	RB1#13	22.5	23.09	23.07		
	RB1#24	22.17	23.08	22.94		
	RB15#0	20.94	22.03	22.17		
	RB15#10	21.05	22.14	22.02		
	RB25#0	20.97	22.1	22.04		
5MHz 16QAM	RB1#0	20.8	22.2	22.02	18.95	30
	RB1#13	20.84	22.38	22.05		
	RB1#24	20.88	22.36	21.93		
	RB15#0	19.95	20.99	21.18		
	RB15#10	20.09	21.11	21.07		
	RB25#0	20.03	21.05	21.13		
10MHz QPSK	RB1#0	22.45	23.35	23.18	20.18	30
	RB1#25	22.76	23.61	23.25		
	RB1#49	22.67	23.59	23.02		
	RB25#0	21.47	22.45	22.36		

	RB25#25	21.72	22.66	22.06		
	RB50#0	21.61	22.5	22.22		
10MHz 16QAM	RB1#0	21.46	22.42	22.32	19.36	30
	RB1#25	21.7	22.79	22.4		
	RB1#49	21.64	22.76	22.09		
	RB25#0	20.55	21.12	21.39		
	RB25#25	20.78	21.37	21.12		
	RB50#0	20.62	21.27	21.23		
15MHz QPSK	RB1#0	22.34	22.73	23.17	19.81	30
	RB1#38	22.63	23.14	23.24		
	RB1#74	22.76	23.16	23.05		
	RB36#0	21.56	22.05	22.4		
	RB36#39	21.84	22.26	22.22		
	RB75#0	21.74	22.17	22.38		
15MHz 16QAM	RB1#0	21.89	21.89	22.54	19.13	30
	RB1#38	22.15	22.26	22.56		
	RB1#74	22.09	22.33	22.24		
	RB36#0	20.56	21.04	21.38		
	RB36#39	20.84	21.28	21.18		
	RB75#0	20.71	21.15	21.27		
20MHz QPSK	RB1#0	22.16	22.47	23.05	19.95	30
	RB1#50	22.85	23.28	23.38		
	RB1#99	22.75	23.08	22.79		
	RB50#0	21.54	21.98	22.38		
	RB50#50	21.86	22.29	22		
	RB100#0	21.7	22.15	22.27		
20MHz 16QAM	RB1#0	21.45	21.75	22.25	19.14	30
	RB1#50	22.19	22.57	22.53		
	RB1#99	21.82	22.38	21.96		
	RB50#0	20.37	20.98	21.39		
	RB50#50	20.75	21.25	20.99		
	RB100#0	20.56	21.16	21.26		
Note: EIRP=Conducted Power(dBm) - L_C(dB) + G_T(dBi)						
					Result:	**Pass**

Peak-to-average Ratio(PAR)

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	5.04	4.75	4.84	13
	RB100#0	4.06	4.38	4.09	13
20MHz 16QAM	RB1#0	5.65	5.91	5.94	13
	RB100#0	5.74	5.97	5.77	13
				Result:	**Pass**

Occupied Bandwidth						
Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
1.4MHz QPSK	1.096	1.102	1.102	1.302	1.32	1.296
1.4MHz 16QAM	1.102	1.096	1.102	1.326	1.29	1.296
3MHz QPSK	2.683	2.683	2.683	2.892	2.88	2.868
3MHz 16QAM	2.683	2.683	2.683	2.88	2.892	2.904
5MHz QPSK	4.531	4.511	4.531	5.2	5.2	5.22
5MHz 16QAM	4.531	4.511	4.551	5.2	5.16	5.2
10MHz QPSK	8.942	8.982	8.942	9.96	10.04	9.84
10MHz 16QAM	8.942	8.982	8.942	9.96	9.84	9.92
15MHz QPSK	13.533	13.593	13.473	15.3	15.36	15.12
15MHz 16QAM	13.533	13.593	13.533	15.18	15.18	15.18
20MHz QPSK	17.964	18.044	17.884	19.92	23.6	19.52
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						

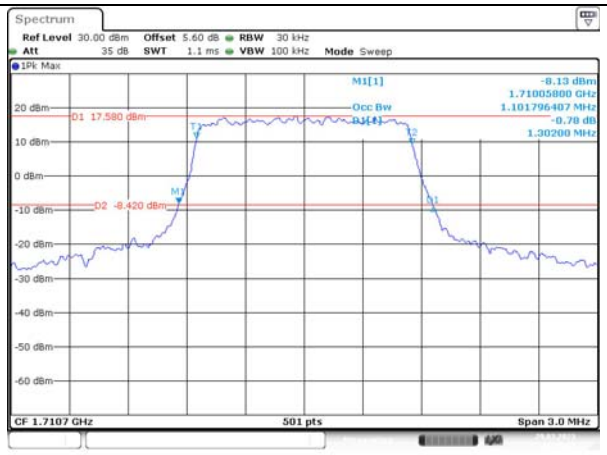
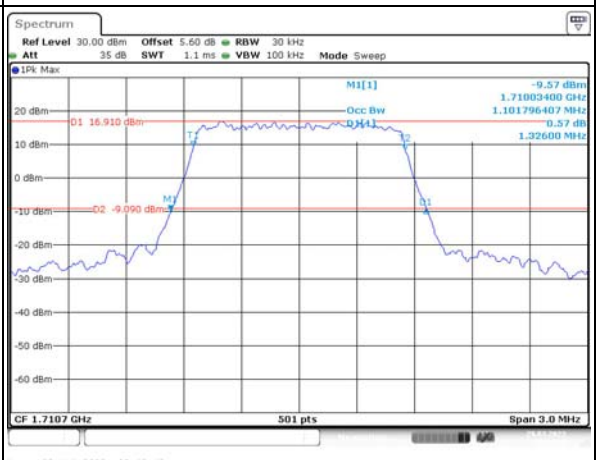
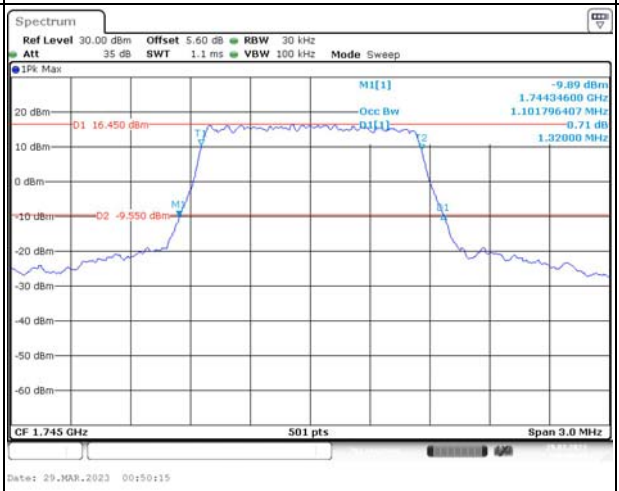
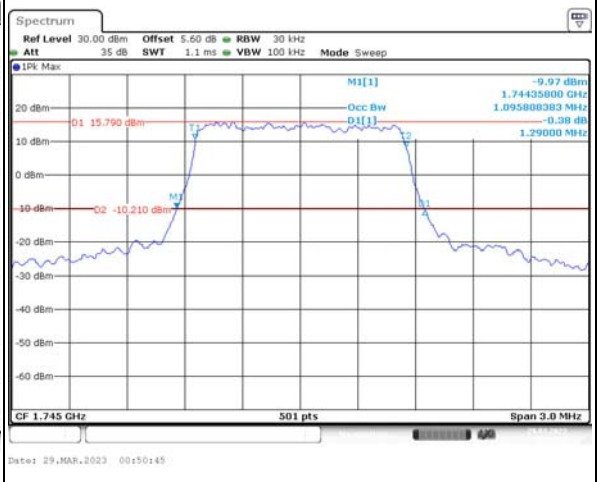
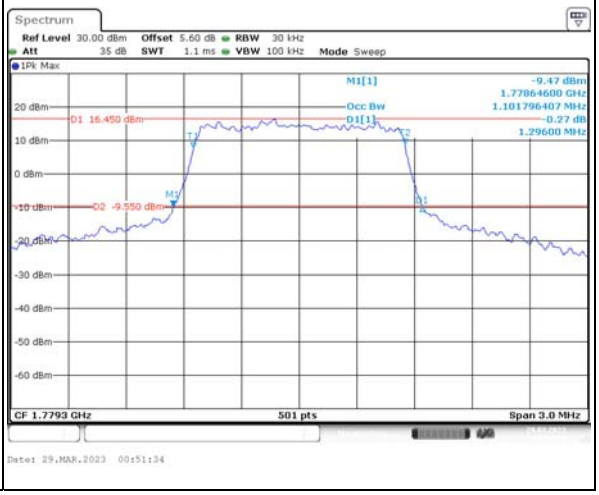
Spurious Emissions at Antenna Terminal	
Result:	**Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.**

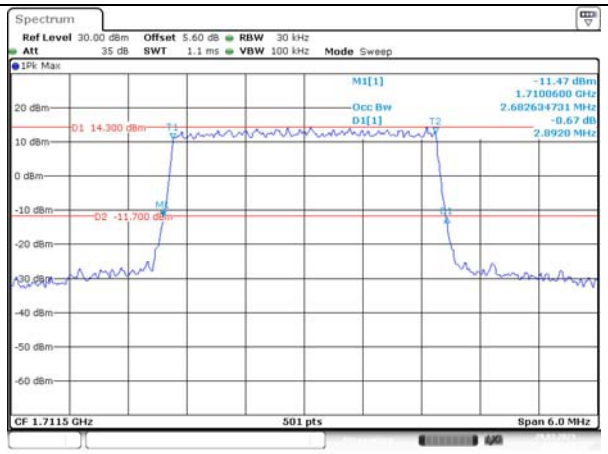
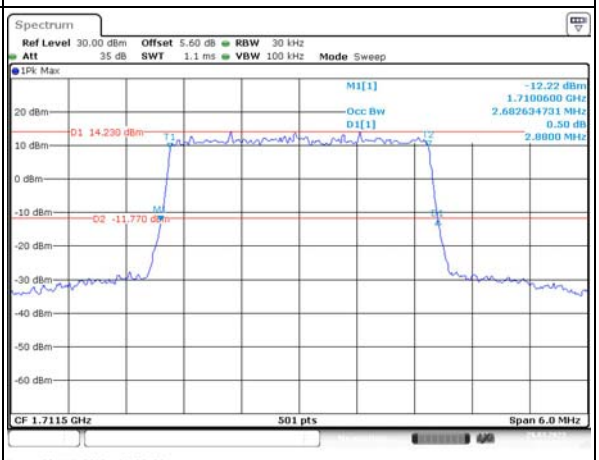
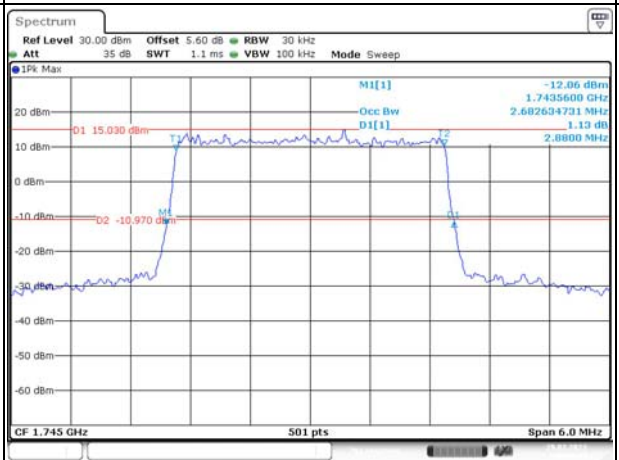
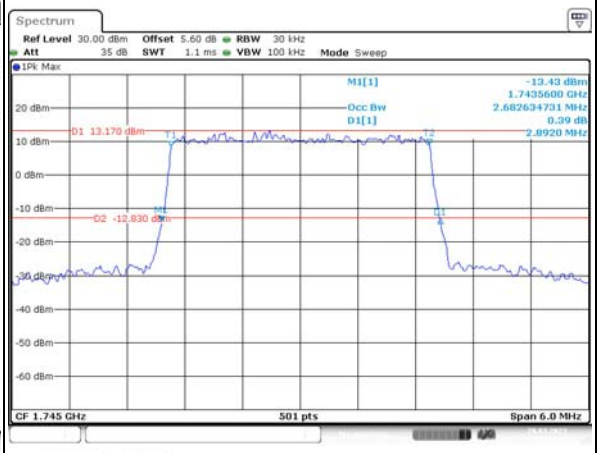
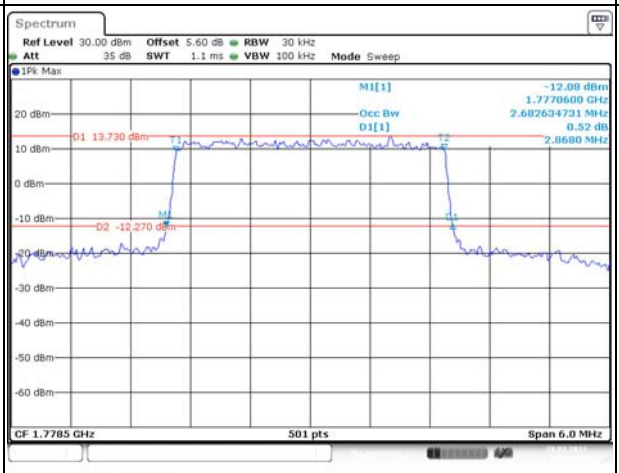
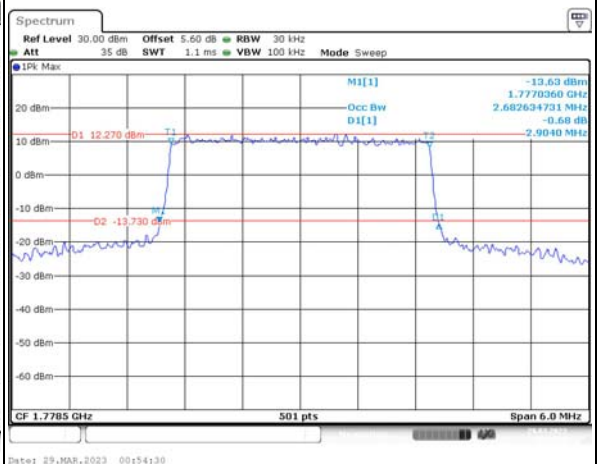
Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

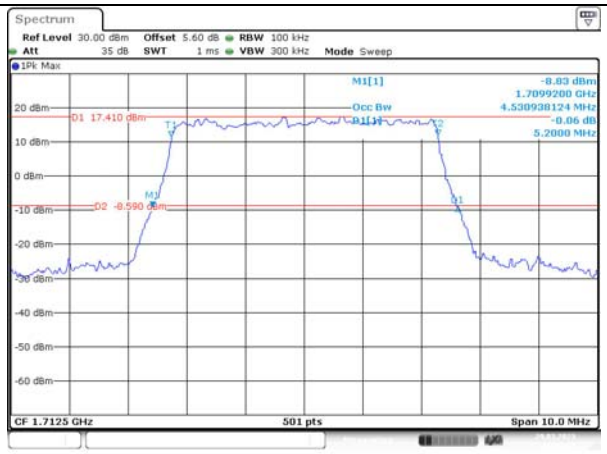
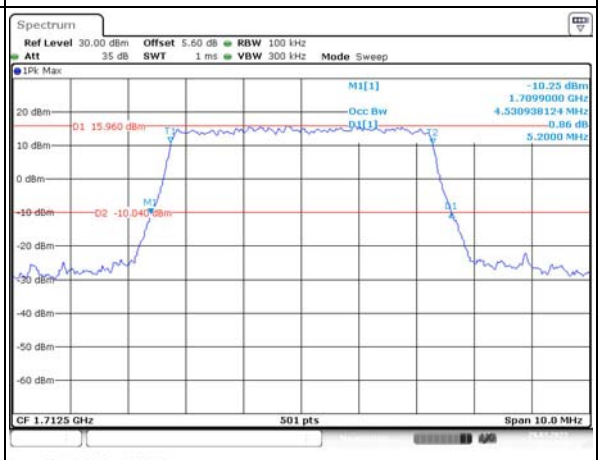
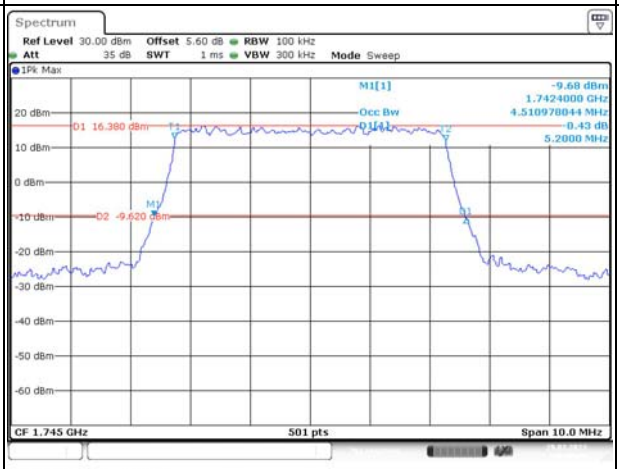
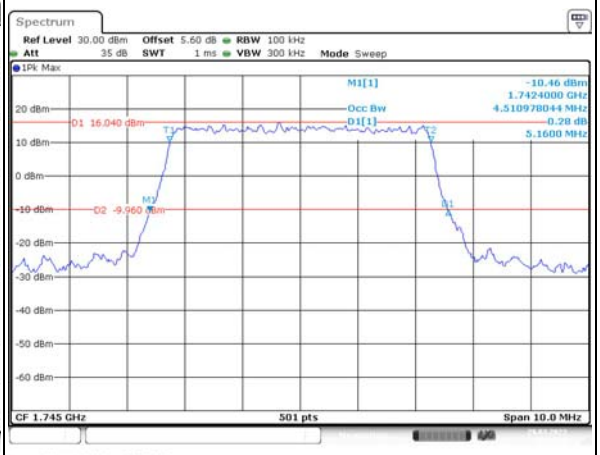
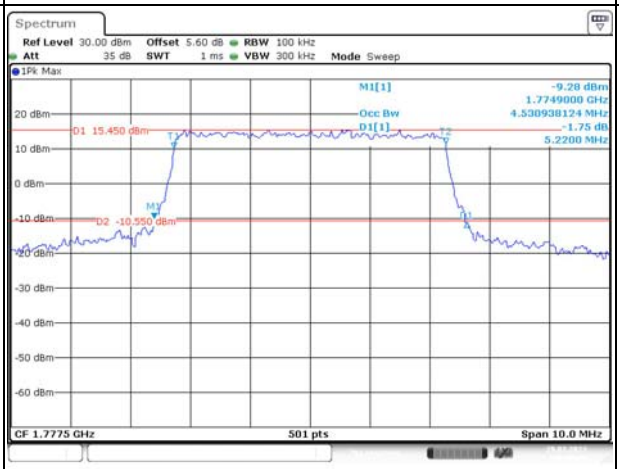
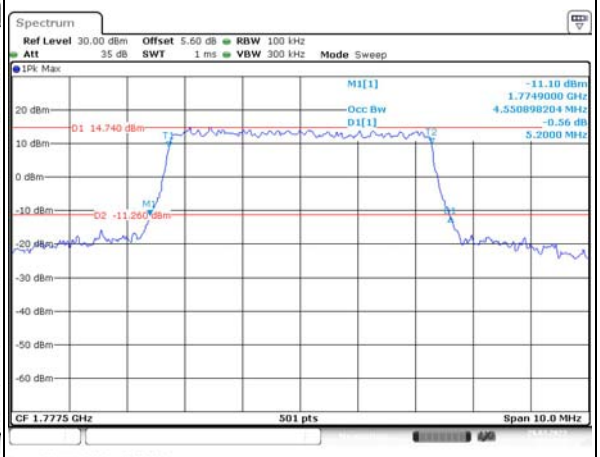
Frequency Stability						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	1711.079	1710.00	1779.050	1780
	-20	3.8	1711.060	1710.00	1779.048	1780
	-10	3.8	1711.086	1710.00	1779.047	1780
	0	3.8	1711.086	1710.00	1779.041	1780
	10	3.8	1711.077	1710.00	1779.034	1780
	20	3.8	1711.086	1710.00	1779.029	1780
	30	3.8	1711.074	1710.00	1779.044	1780
	40	3.8	1711.082	1710.00	1779.040	1780
	50	3.8	1711.066	1710.00	1779.053	1780
Frequency Stability vs. Voltage	20	3.6	1711.071	1710.00	1779.054	1780
	20	4.35	1711.065	1710.00	1779.038	1780
					Result:	**Pass**

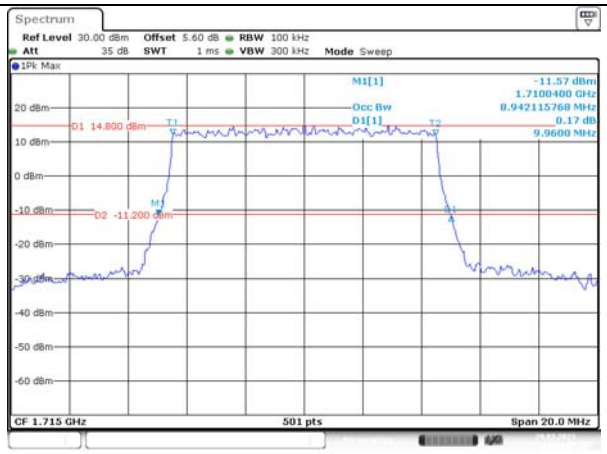
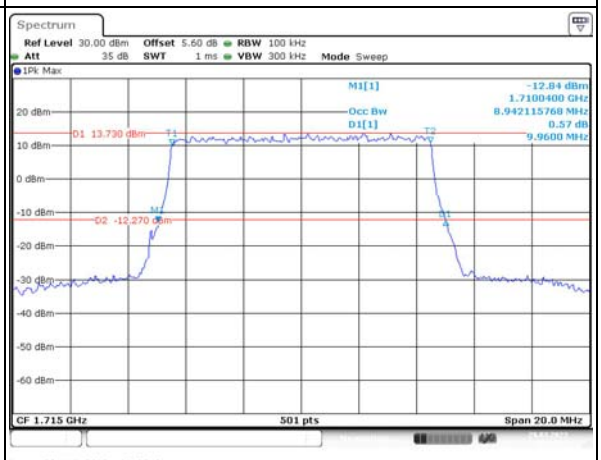
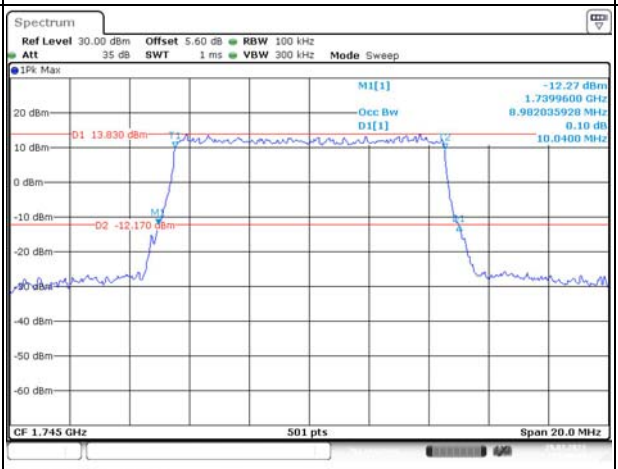
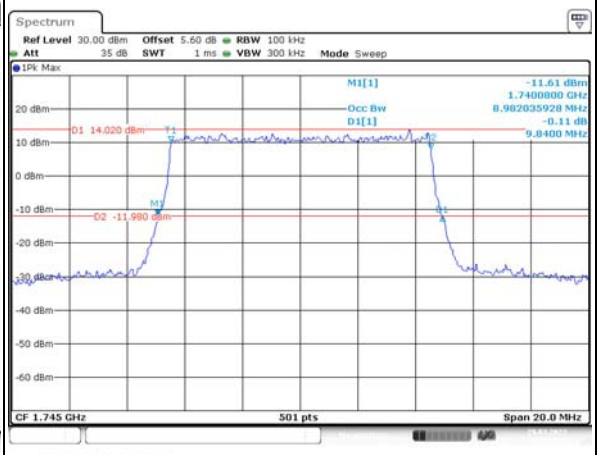
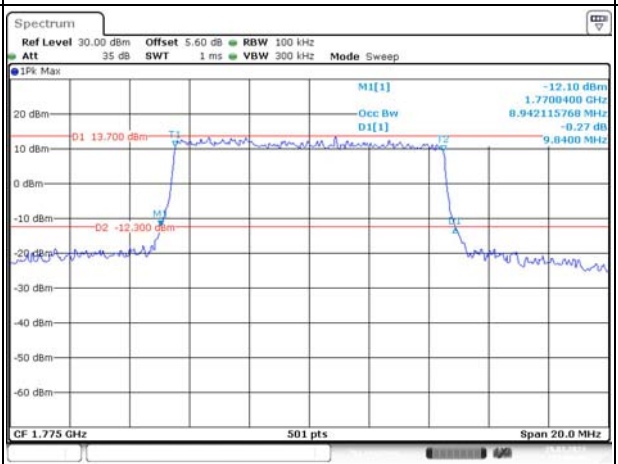
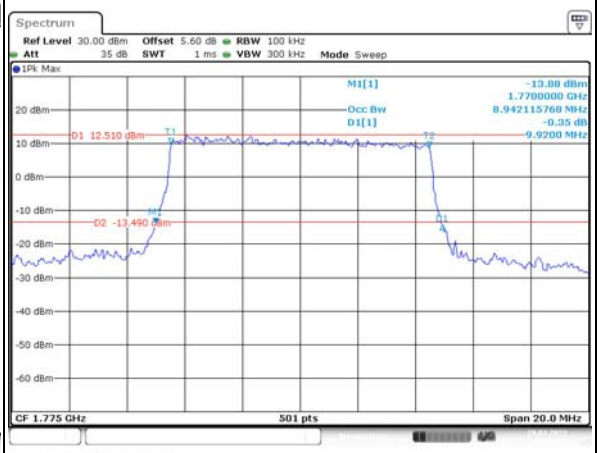
Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	1711.025	1710.00	1778.989	1780
	-20	3.8	1711.001	1710.00	1778.988	1780
	-10	3.8	1711.002	1710.00	1778.974	1780
	0	3.8	1711.010	1710.00	1778.974	1780
	10	3.8	1711.029	1710.00	1778.982	1780
	20	3.8	1711.029	1710.00	1778.971	1780
	30	3.8	1711.005	1710.00	1778.985	1780
	40	3.8	1711.011	1710.00	1778.985	1780
	50	3.8	1711.022	1710.00	1778.975	1780
Frequency Stability vs. Voltage	20	3.6	1711.009	1710.00	1778.982	1780
	20	4.35	1711.015	1710.00	1778.998	1780
					Result:	**Pass**

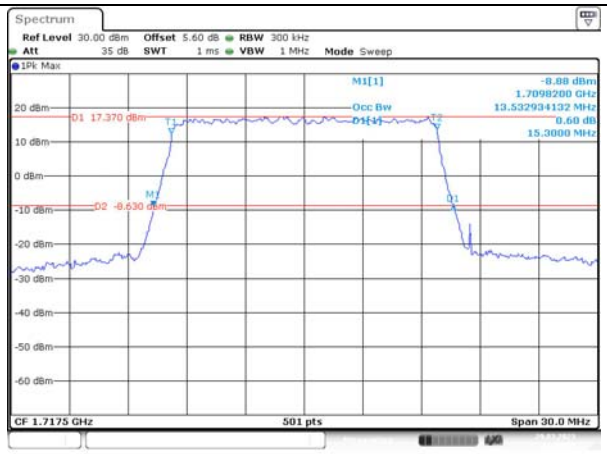
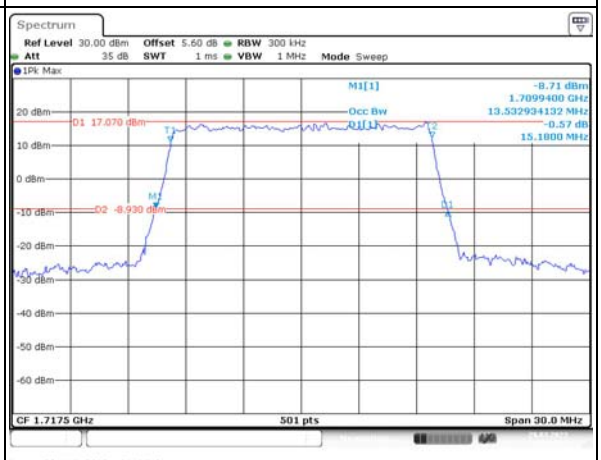
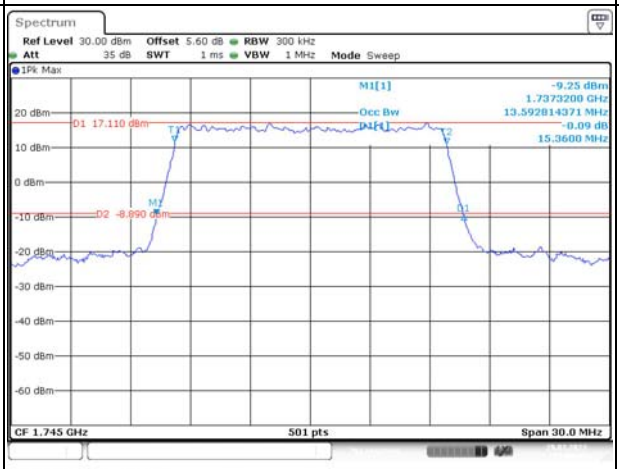
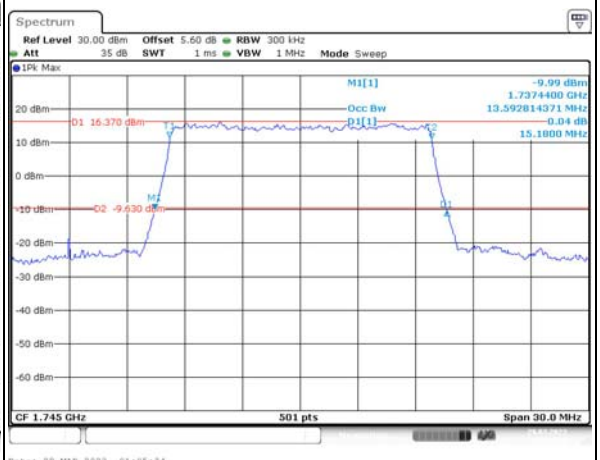
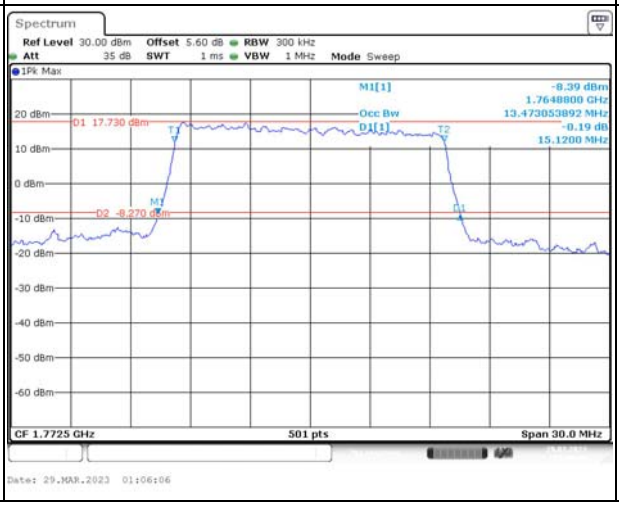
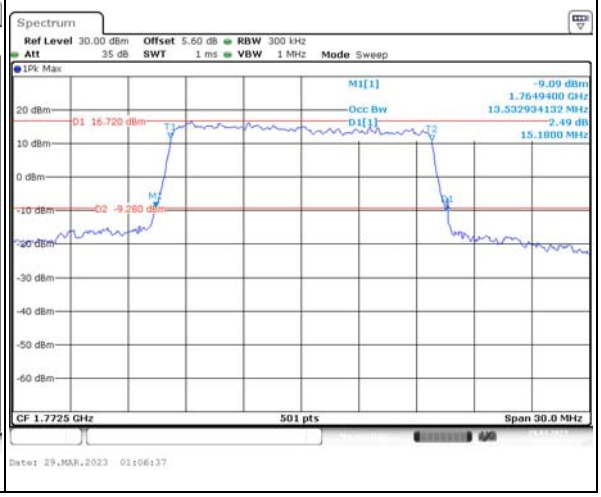
Test Plots(Note: The 5.6 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

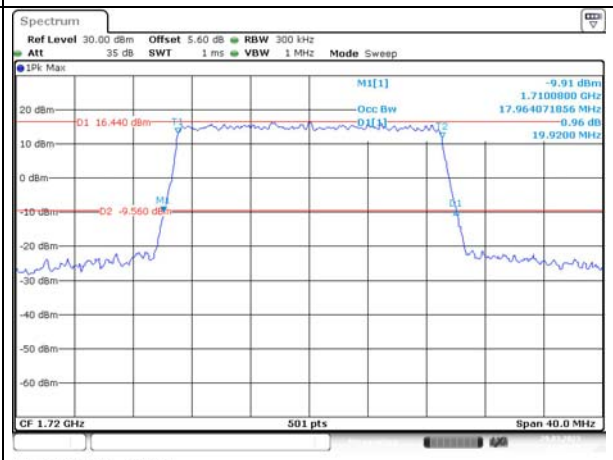
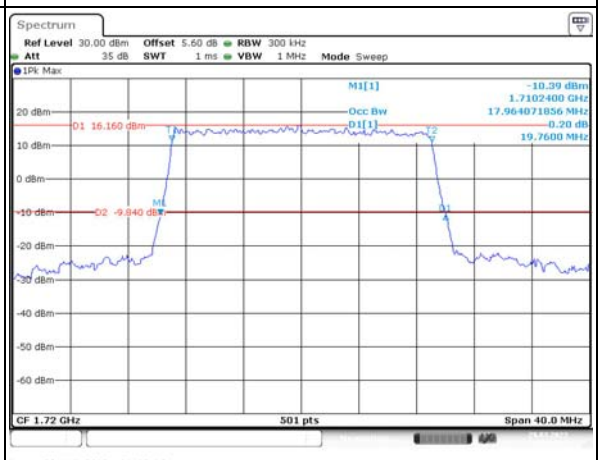
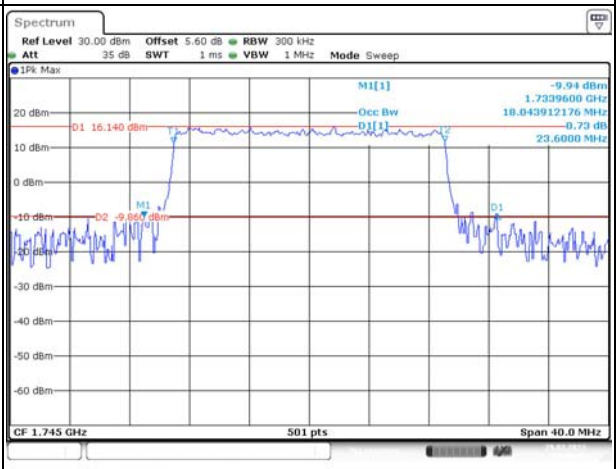
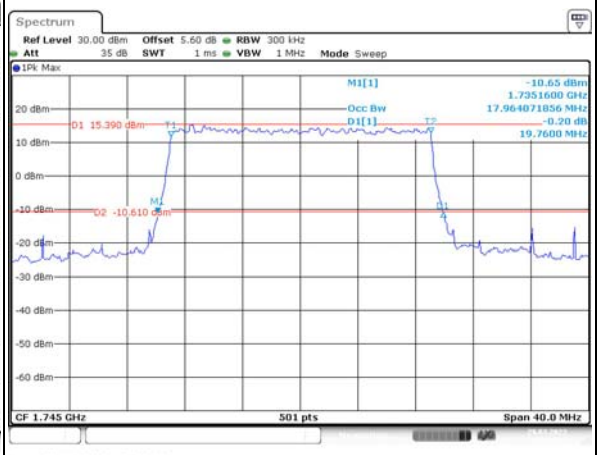
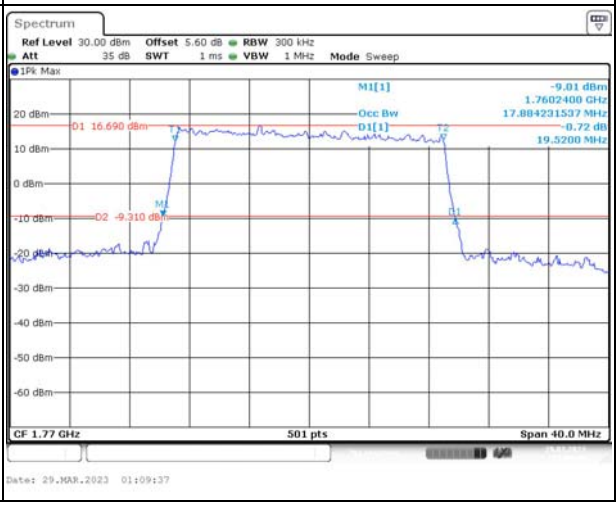
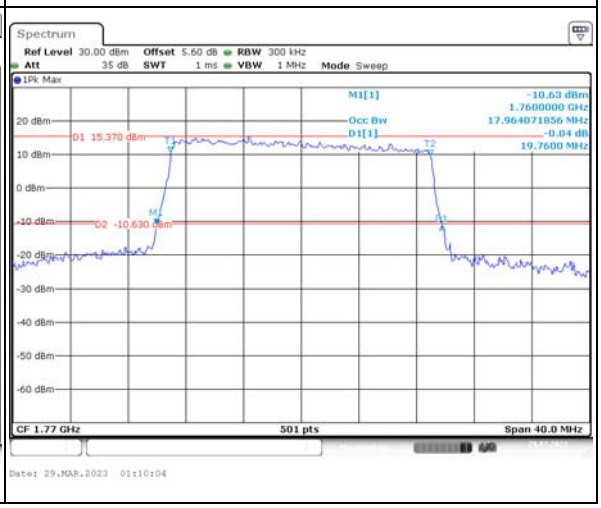
Occupied Bandwidth		
Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

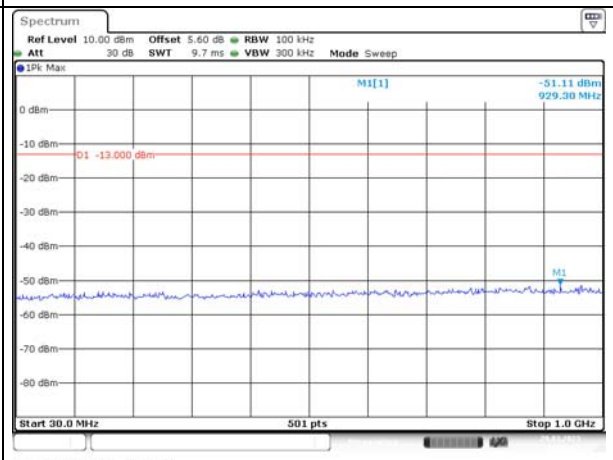
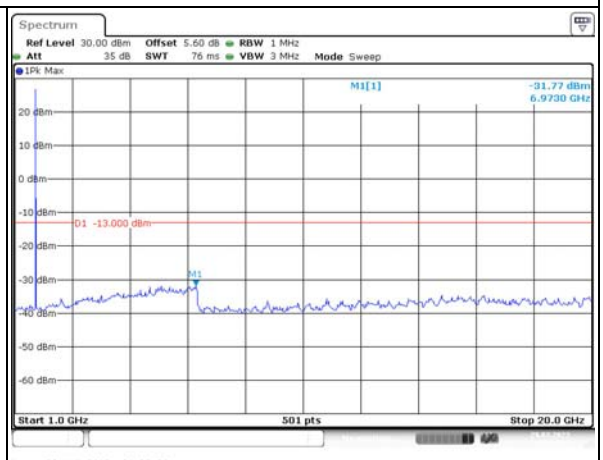
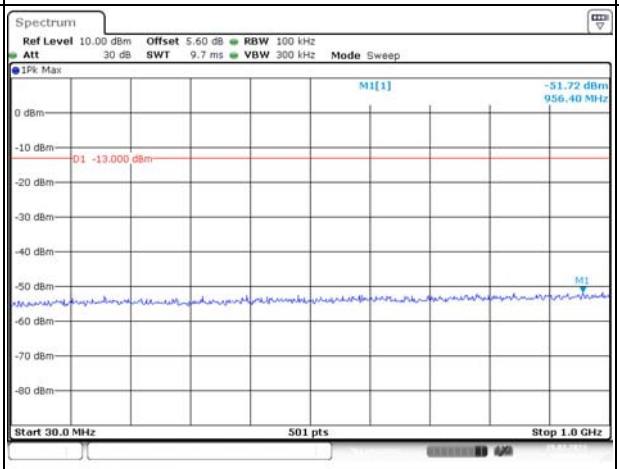
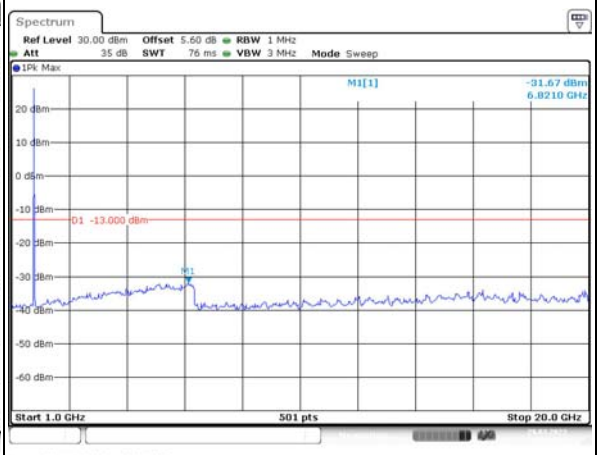
Occupied Bandwidth		
Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

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

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

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

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

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