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

4.14 Antenna Port Test Data and Results for LTE Band 26

Serial Number:	2BYR-5	Test Date:	2023/10/29-2023/11/8
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 For 90S (MHz)	Highest Frequency For 90S (MHz)	Channel Cross 90S and 22H	Lowest Frequency For 22H (MHz)	Middle Frequency For 22H (MHz)	Highest Frequency For 22H (MHz)
1.4MHz	814.7	823.3	824	824.7	836.5	848.3
3MHz	815.5	822.5	824	825.5	836.5	847.5
5MHz	816.5	821.5	824	826.5	836.5	846.5
10MHz	819	/	824	829	836.5	844
15MHz	821.5	/	824	831.5	836.5	841.5

Note: 15MHz bandwidth 821.5MHz cross Rules 90S and 22H.

4.14.1 Test Data for Part 90S:

FCC§2.1046;§ 22.913 (a),§ 90.635

RF Output Power:

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)						Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel For 90S	Highest Channel For 90S	Cross Channel	Lowest Channel For 22H	Middle Channel For 22H	Highest Channel For 22H		
1.4MHz QPSK	RB1#0	22.93	22.90	23.35	22.98	22.91	23.13	17.16	38.45
	RB1#3	22.98	22.86	23.26	22.89	23.02	23.16		
	RB1#5	23.01	22.95	23.28	22.99	22.95	23.15		
	RB3#0	23.97	24.08	24.31	22.00	21.93	22.20		
	RB3#3	24.02	24.10	24.28	21.92	22.02	22.25		
	RB6#0	21.98	21.98	22.26	21.90	22.02	22.18		
1.4MHz 16QAM	RB1#0	22.80	22.16	22.68	22.81	21.63	22.57	15.98	38.45
	RB1#3	22.71	22.11	22.74	22.71	21.64	22.56		
	RB1#5	22.74	22.01	22.88	22.82	21.72	22.47		
	RB3#0	22.75	22.83	23.13	22.01	22.22	22.25		
	RB3#3	22.85	23.11	23.11	22.00	22.25	22.23		
	RB6#0	21.91	22.22	22.37	22.06	22.03	22.29		
3MHz QPSK	RB1#0	22.91	23.05	23.25	22.98	23.03	22.96	16.11	38.45
	RB1#8	22.91	22.96	23.26	23.03	23.02	23.04		
	RB1#14	22.89	23.03	23.26	23.02	23.10	23.15		
	RB6#0	21.87	22.02	22.20	21.92	21.98	22.06		
	RB6#9	21.85	22.06	22.20	22.03	21.98	22.26		
	RB15#0	21.99	22.00	22.20	22.04	22.04	22.21		
3MHz 16QAM	RB1#0	21.66	21.75	21.28	22.64	21.57	22.27	15.58	38.45
	RB1#8	21.71	21.65	21.33	22.73	21.49	22.32		
	RB1#14	21.69	21.76	21.31	22.73	21.57	22.46		
	RB6#0	21.86	22.08	22.29	21.99	22.24	22.16		
	RB6#9	21.80	22.18	22.35	22.09	22.22	22.34		
	RB15#0	21.85	21.99	22.46	22.08	22.06	22.25		
5MHz QPSK	RB1#0	23.08	22.93	22.92	23.33	23.20	23.38	16.27	38.45
	RB1#13	23.09	22.93	23.02	23.25	23.10	23.33		
	RB1#24	23.15	22.98	23.13	23.24	23.25	23.42		
	RB15#0	21.98	22.13	22.17	22.00	22.25	22.07		
	RB15#10	21.92	22.07	22.22	22.10	22.14	21.95		
	RB25#0	22.08	22.03	22.21	22.31	22.30	22.31		
5MHz 16QAM	RB1#0	22.67	22.35	22.48	22.68	22.79	22.73	15.82	38.45
	RB1#13	22.78	22.28	22.52	22.79	22.81	22.81		
	RB1#24	22.69	22.40	22.62	22.97	22.80	22.96		
	RB15#0	22.03	22.13	22.16	22.11	22.21	22.15		
	RB15#10	22.14	22.08	22.29	22.15	22.16	22.26		
	RB25#0	22.04	22.10	22.24	22.32	22.09	22.25		
10MHz QPSK	RB1#0	23.28	/	23.29	23.29	23.30	23.19	16.16	38.45
	RB1#25	23.18	/	23.29	23.11	23.14	23.31		
	RB1#49	23.21	/	23.09	23.02	22.95	23.03		
	RB25#0	22.02	/	22.20	22.24	22.33	22.21		

	RB25#25	22.12	/	22.21	22.31	22.44	22.46		
	RB50#0	22.34	/	22.41	22.23	22.35	22.33		
10MHz 16QAM	RB1#0	22.94	/	22.64	22.53	22.64	22.46	16.05	38.45
	RB1#25	22.98	/	22.78	22.65	22.56	22.70		
	RB1#49	23.20	/	22.45	22.44	22.41	22.53		
	RB25#0	22.21	/	21.22	21.11	21.07	21.28		
	RB25#25	22.42	/	21.11	21.22	21.11	21.01		
	RB50#0	22.08	/	21.32	21.32	21.22	21.05		
15MHz QPSK	RB1#0	23.25	/	23.30	23.27	23.15	23.25	16.15	38.45
	RB1#38	23.23	/	23.03	23.01	23.23	23.00		
	RB1#74	23.06	/	23.05	23.03	23.08	22.84		
	RB36#0	22.38	/	22.32	22.25	22.16	22.35		
	RB36#39	22.30	/	21.98	22.13	22.23	22.10		
	RB75#0	22.18	/	22.36	22.47	22.38	22.33		
15MHz 16QAM	RB1#0	22.52	/	22.72	22.64	22.68	22.62	15.69	38.45
	RB1#38	22.56	/	22.78	22.84	22.82	22.68		
	RB1#74	22.61	/	22.52	22.43	22.31	22.31		
	RB36#0	21.24	/	21.28	21.33	21.27	21.34		
	RB36#39	21.18	/	21.23	21.24	21.21	21.10		
	RB75#0	21.31	/	21.14	21.09	21.13	21.10		

Note:
ERP= Conducted Power(dBm) - L_C(dB) + G_T(dBd)
G_T(dBd)=G_T(dBi)-2.15
The limit of 90S is 50dBm (100W) for conducted. Limit of 22H is 38.45dBm for ERP. The stricter limit was listed in the table.

Result:	**Pass**

Peak-to-average Ratio(PAR)

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel For 22H	Middle Channel For 22H	Highest Channel For 22H	
15MHz QPSK	RB1#0	6.13	8.46	7.81	13
	RB75#0	7.57	9.67	6.01	13
15MHz 16QAM	RB1#0	6.71	9.66	8.15	13
	RB75#0	6.83	6.43	9.29	13
				Result:	**Pass**

FCC §2.1049, §22.905, §90.209:Occupied Bandwidth

Operation Mode	99% Occupied Bandwidth (MHz)						26 dB Occupied Bandwidth (MHz)					
	Lowest For 90S	Highest For 90S	Cross	Lowest For 22H	Middle For 22H	Highest For 22H	Lowest For 90S	Highest For 90S	Cross	Lowest For 22H	Middle For 22H	Highest For 22H
1.4MHz QPSK	1.102	1.102	1.098	1.096	1.102	1.102	1.260	1.254	1.250	1.248	1.254	1.254
1.4MHz 16QAM	1.102	1.090	1.103	1.102	1.090	1.096	1.248	1.254	1.255	1.260	1.236	1.248
3MHz QPSK	2.695	2.695	2.700	2.695	2.683	2.695	3.000	2.988	2.970	3.000	3.012	2.988
3MHz 16QAM	2.683	2.695	2.692	2.695	2.695	2.683	3.000	2.976	3.004	3.000	3.012	3.000
5MHz QPSK	4.511	4.531	4.486	4.511	4.511	4.511	5.000	5.000	4.993	5.000	4.980	4.900
5MHz 16QAM	4.531	4.531	4.530	4.531	4.531	4.511	5.020	5.020	5.036	5.020	5.020	4.980
10MHz QPSK	8.942	/	8.973	8.942	8.982	8.982	9.760	/	9.667	9.800	9.760	9.800
10MHz 16QAM	8.982	/	8.973	8.942	8.942	8.942	9.800	/	9.812	9.760	9.760	9.720
15MHz QPSK	13.459	/	13.502	13.413	13.473	13.473	14.978	/	15.065	14.880	14.940	15.060
15MHz 16QAM	13.459	/	13.502	13.533	13.473	13.473	14.886	/	14.978	15.060	14.880	14.940

Note: The test plots please refer to the Plots of Occupied Bandwidth

FCC §2.1051, §22.917(a),§90.691:Spurious Emissions at Antenna Terminal	
Result:	**Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.**

FCC §2.1051, §22.917(a),§90.691:Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

FCC §2.1055, §90.213: Frequency Stability					
Test Modulation:	15 MHz QPSK		Test Channel:	821.5	MHz
Test Item	Temperature (℃)	Voltage (V_{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	108.590	0.132	2.5
	-20	3.85	115.131	0.140	2.5
	-10	3.85	107.346	0.131	2.5
	0	3.85	110.272	0.134	2.5
	10	3.85	100.444	0.122	2.5
	20	3.85	114.280	0.139	2.5
	30	3.85	109.486	0.133	2.5
	40	3.85	105.639	0.129	2.5
	50	3.85	106.236	0.129	2.5
Frequency Stability vs. Voltage	20	3.35	108.472	0.132	2.5
	20	4.4	107.929	0.131	2.5
				Result:	**Pass**

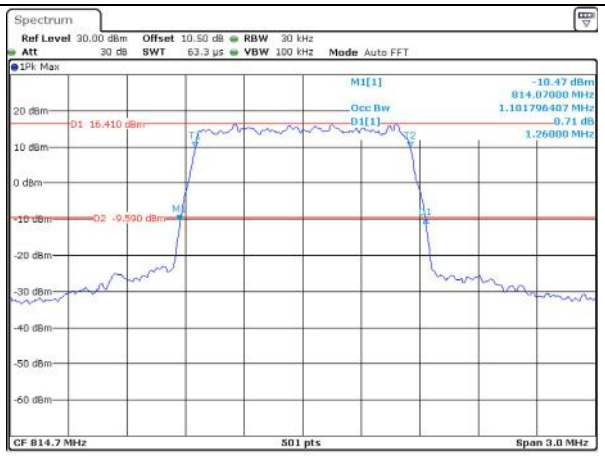
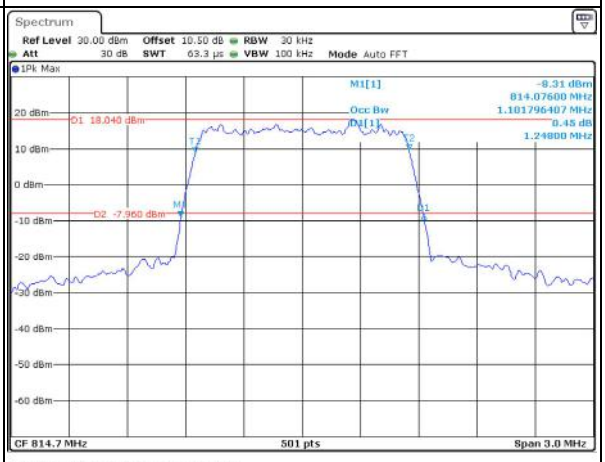
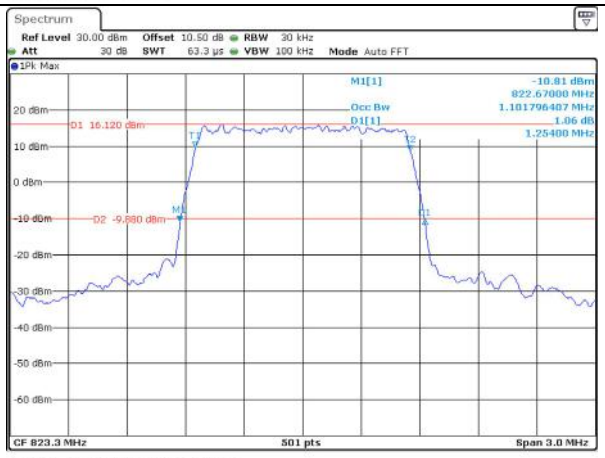
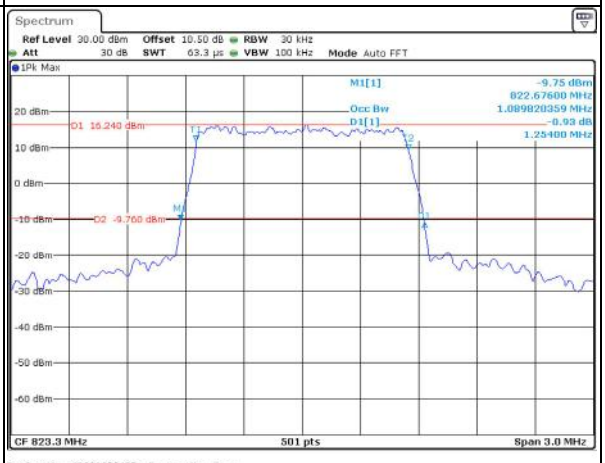
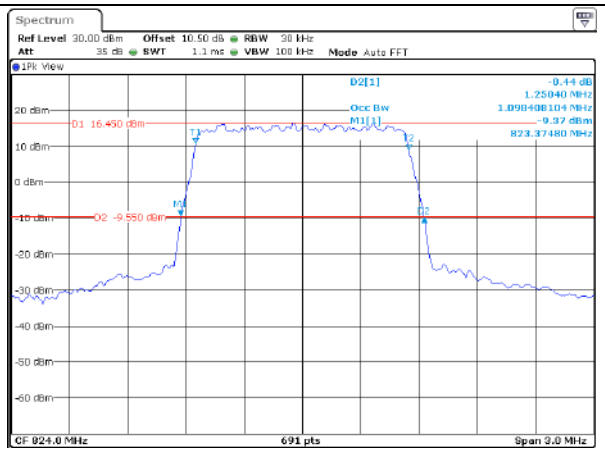
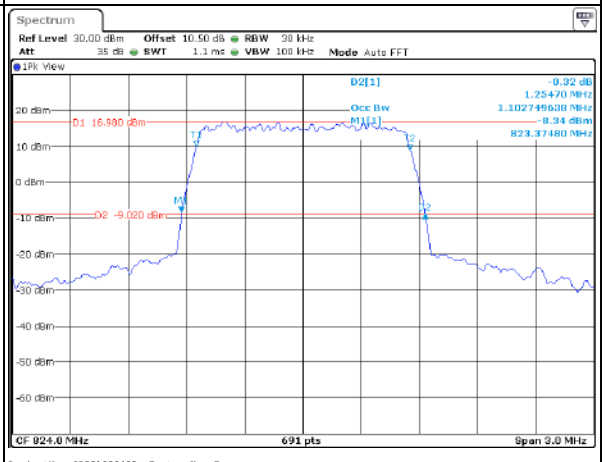
FCC §2.1055, §90.213: Frequency Stability					
Test Modulation:	15 MHz 16QAM		Test Channel:	821.5	MHz
Test Item	Temperature (℃)	Voltage (V_{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	110.426	0.134	2.5
	-20	3.85	110.383	0.134	2.5
	-10	3.85	113.252	0.138	2.5
	0	3.85	114.301	0.139	2.5
	10	3.85	116.914	0.142	2.5
	20	3.85	100.437	0.122	2.5
	30	3.85	101.791	0.124	2.5
	40	3.85	111.563	0.136	2.5
	50	3.85	105.703	0.129	2.5
Frequency Stability vs. Voltage	20	3.35	102.202	0.124	2.5
	20	4.4	118.898	0.145	2.5
				Result:	**Pass**

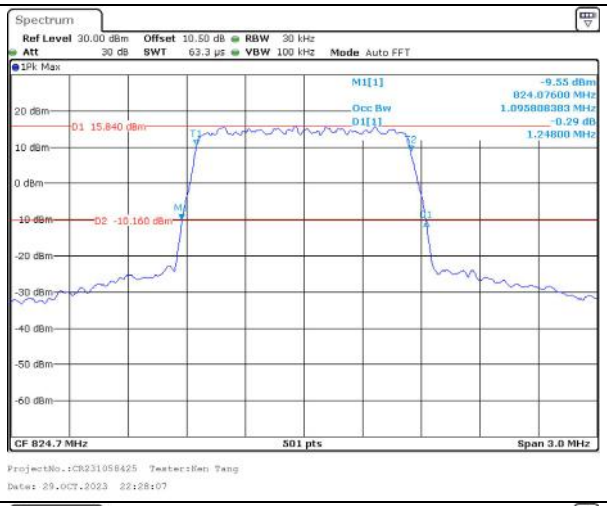
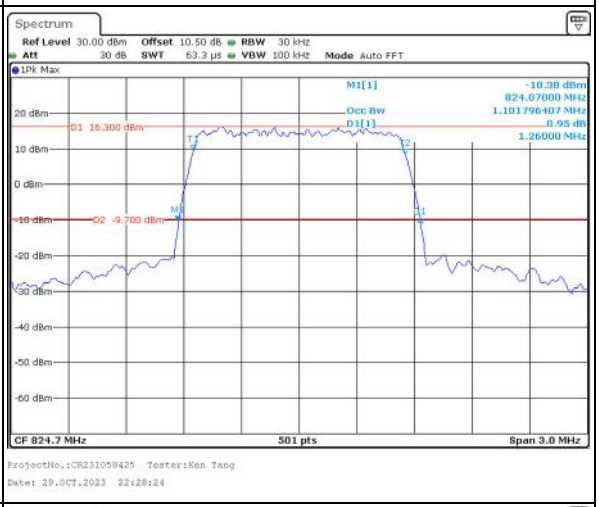
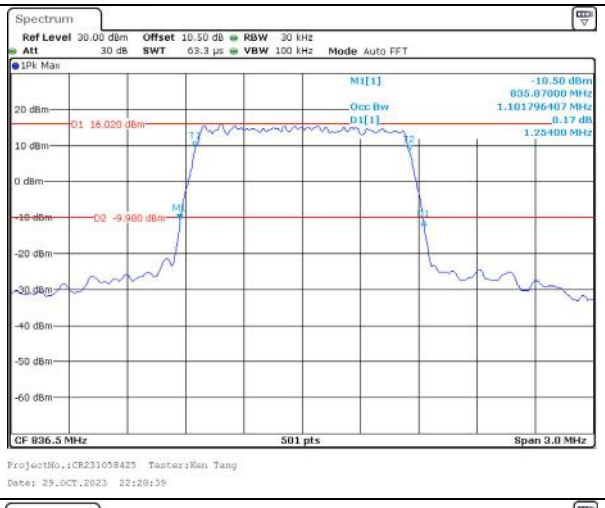
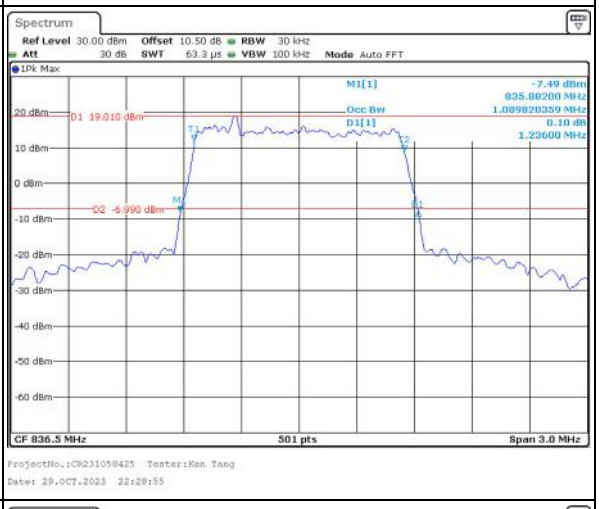
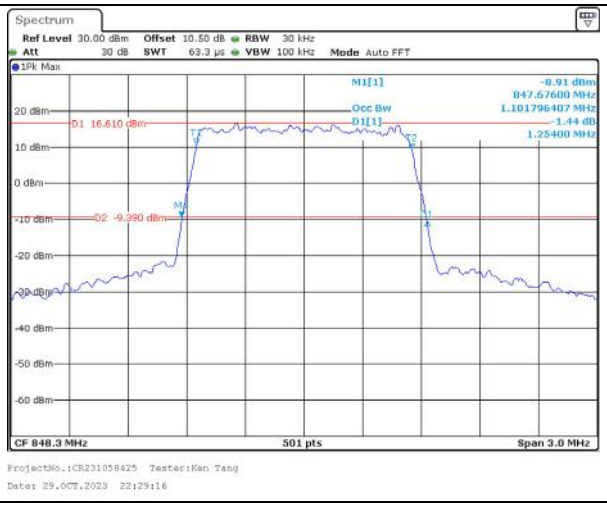
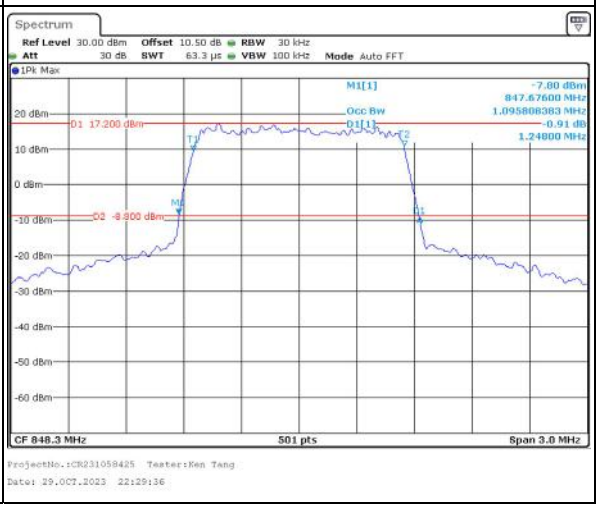
FCC §2.1055, §22.355: Frequency Stability					
Test Modulation:	15 MHz QPSK		Test Channel:	831.5	MHz
Test Item	Temperature (℃)	Voltage (V_{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	101.975	0.123	2.5
	-20	3.85	116.196	0.140	2.5
	-10	3.85	103.054	0.124	2.5
	0	3.85	103.418	0.124	2.5
	10	3.85	119.906	0.144	2.5
	20	3.85	114.724	0.138	2.5
	30	3.85	116.645	0.140	2.5
	40	3.85	100.228	0.121	2.5
	50	3.85	110.926	0.133	2.5
Frequency Stability vs. Voltage	20	3.35	117.771	0.142	2.5
	20	4.4	110.428	0.133	2.5
				Result:	**Pass**

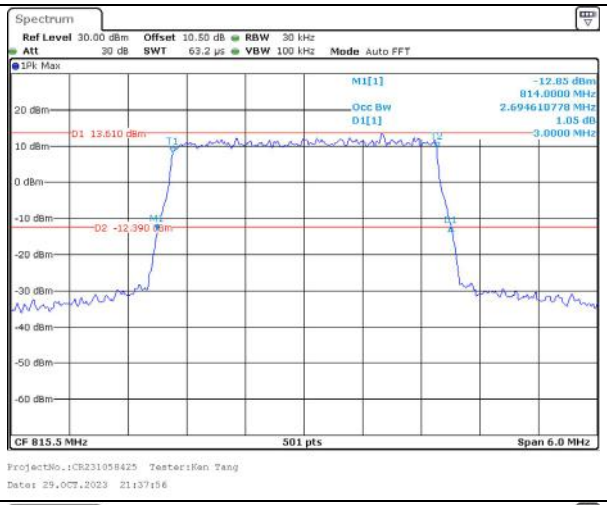
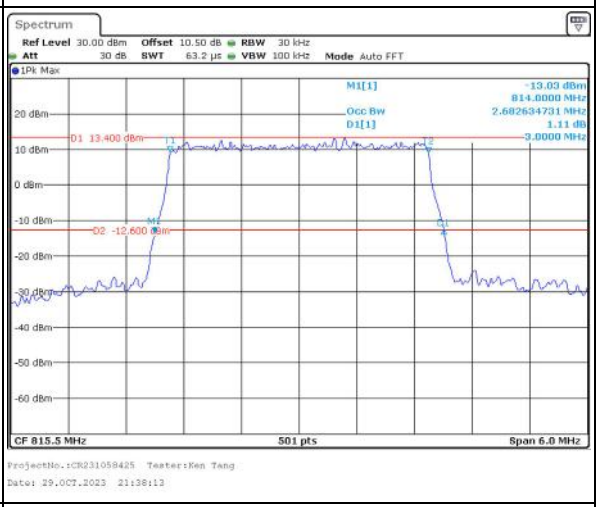
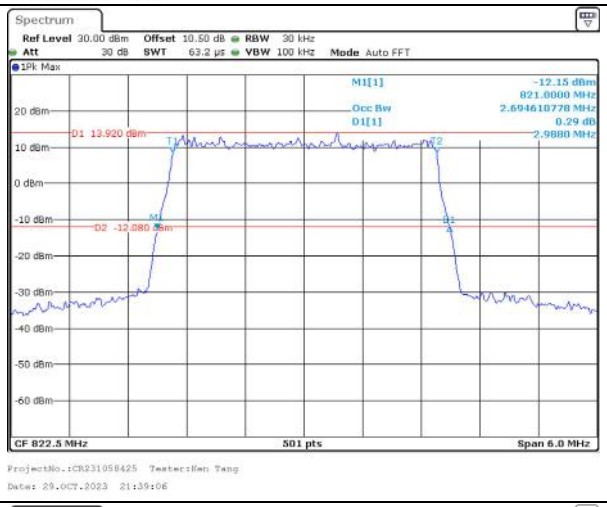
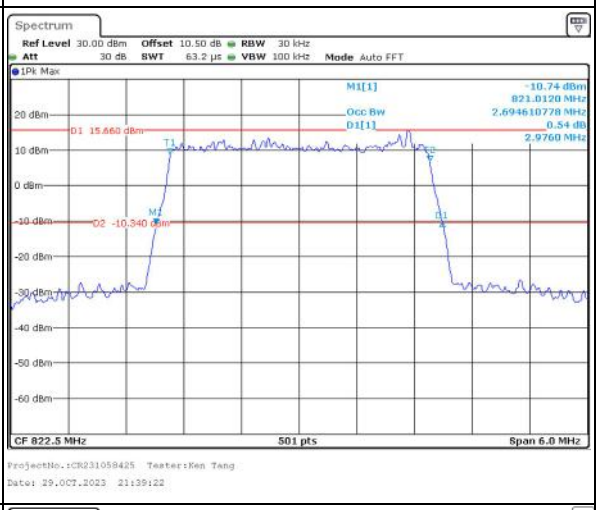
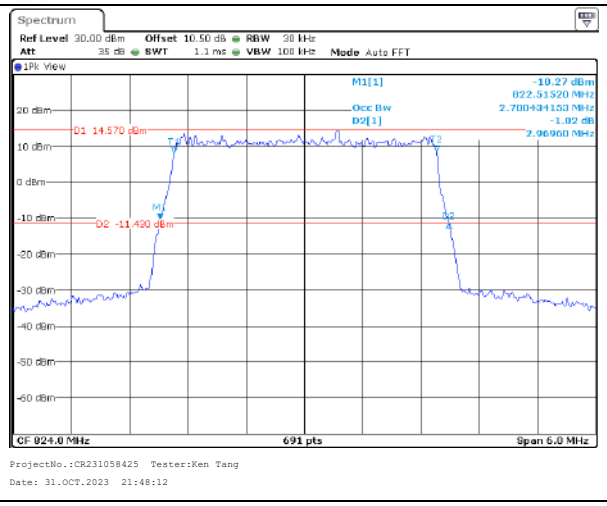
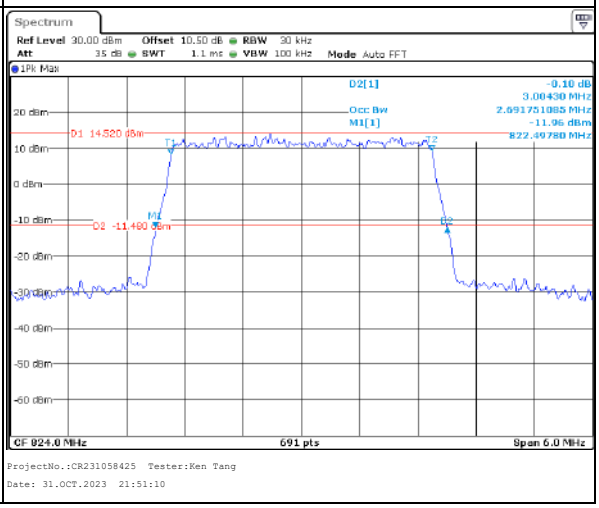
Test Modulation:	15 MHz 16QAM		Test Channel:	831.5	MHz
Test Item	Temperature (℃)	Voltage (V_{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	109.347	0.132	2.5
	-20	3.85	119.532	0.144	2.5
	-10	3.85	117.555	0.141	2.5
	0	3.85	119.699	0.144	2.5
	10	3.85	106.570	0.128	2.5
	20	3.85	109.598	0.132	2.5
	30	3.85	103.225	0.124	2.5
	40	3.85	103.099	0.124	2.5
	50	3.85	119.391	0.144	2.5
Frequency Stability vs. Voltage	20	3.35	116.318	0.140	2.5
	20	4.4	111.630	0.134	2.5
				Result:	**Pass**

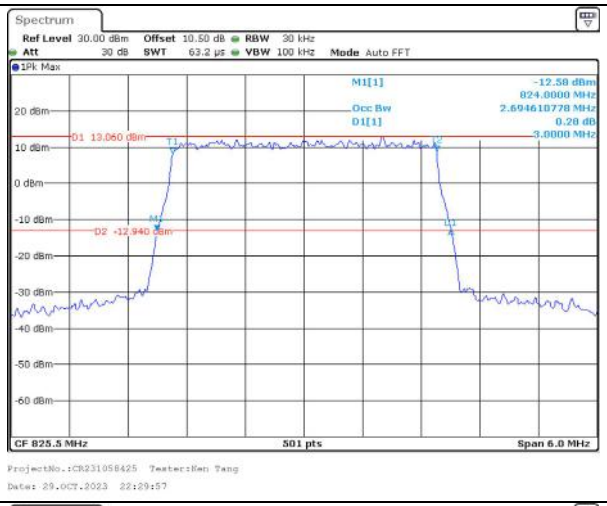
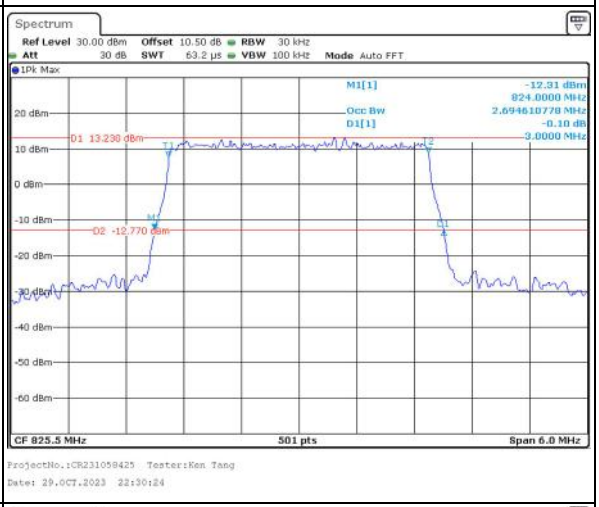
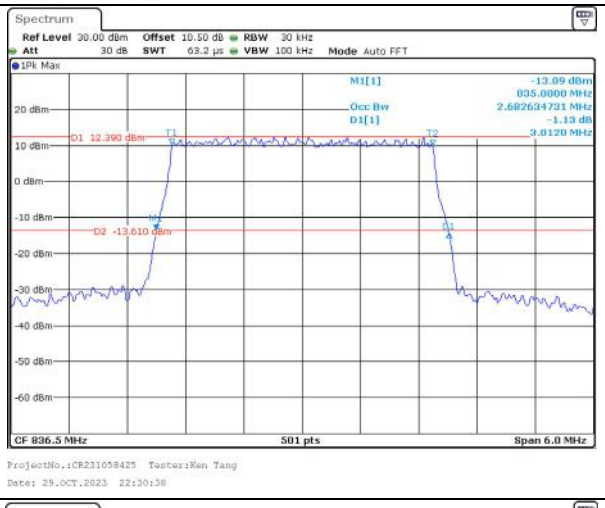
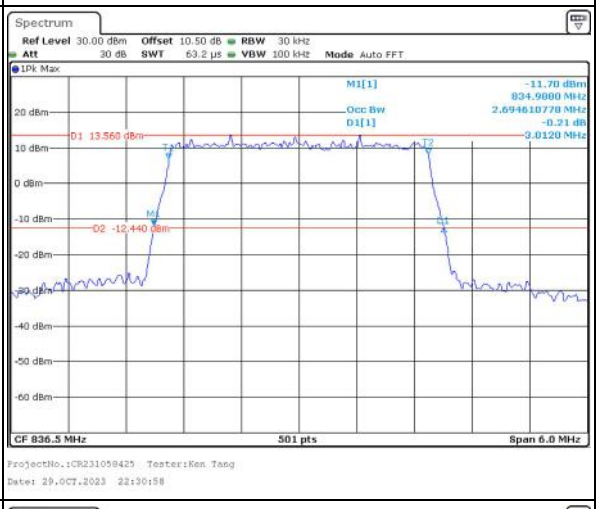
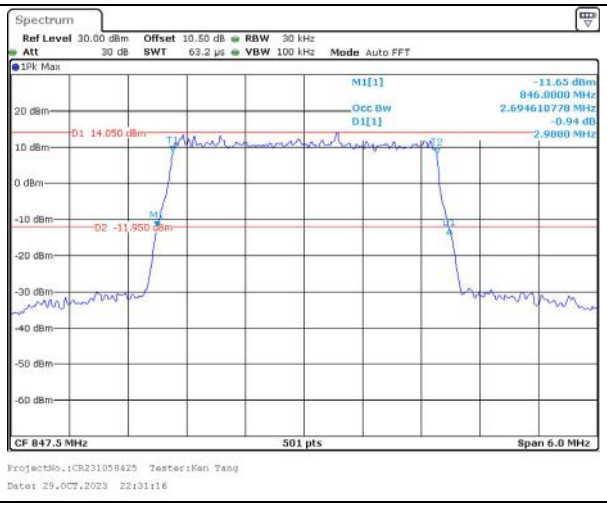
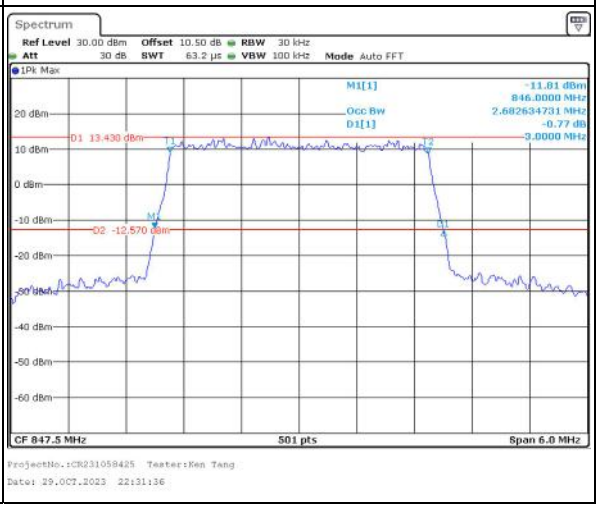
4.14.2 Test Plots:

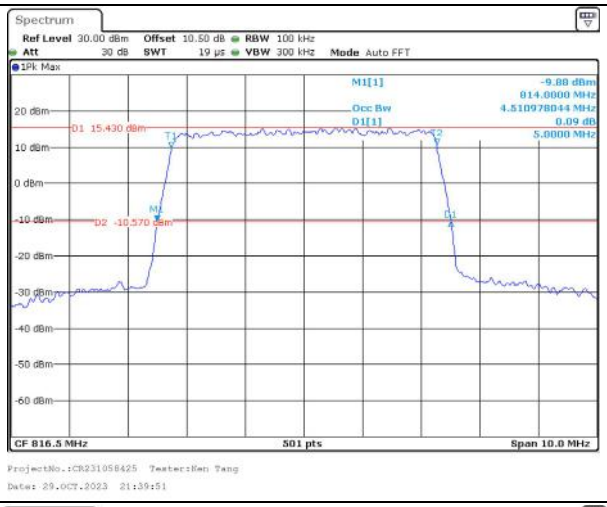
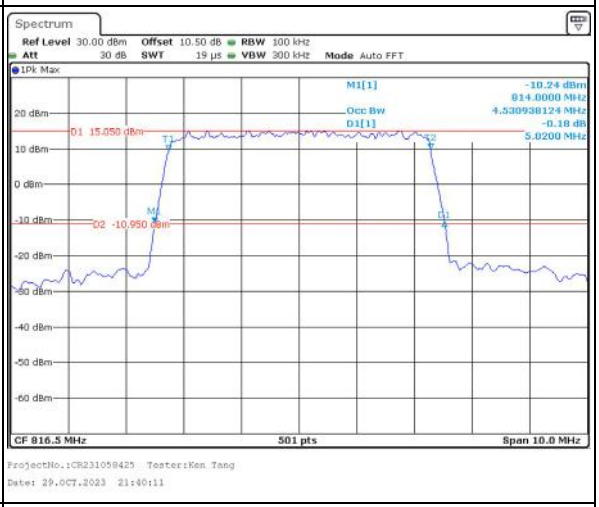
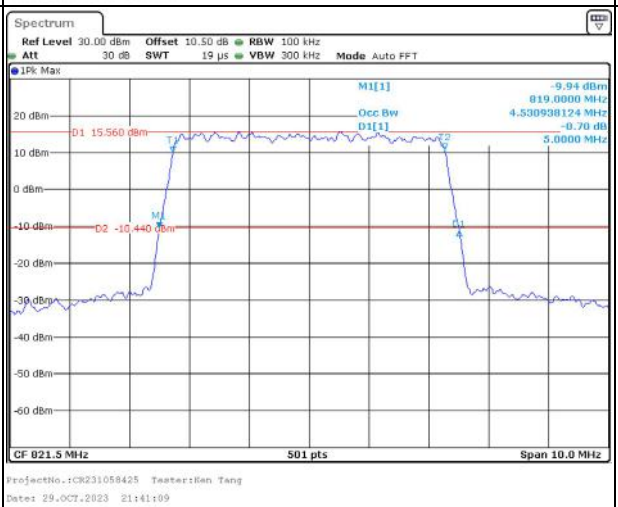
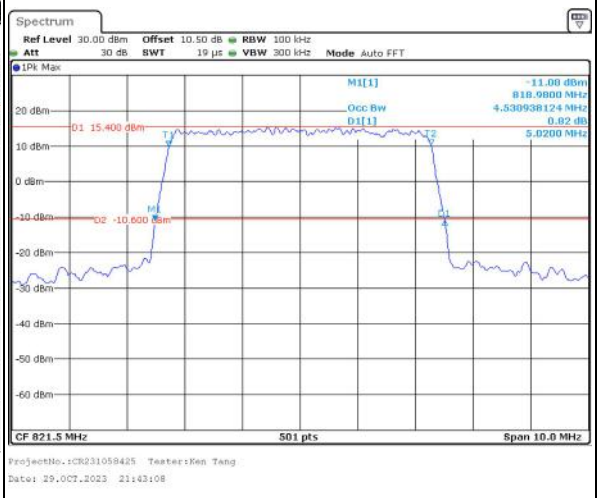
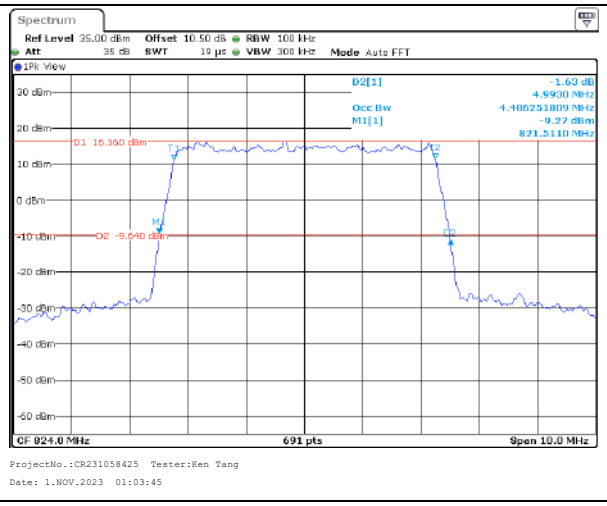
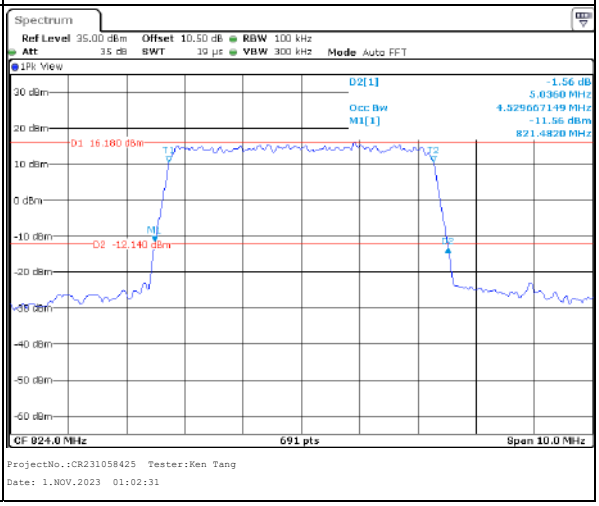
(Note: The 10.5dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer):

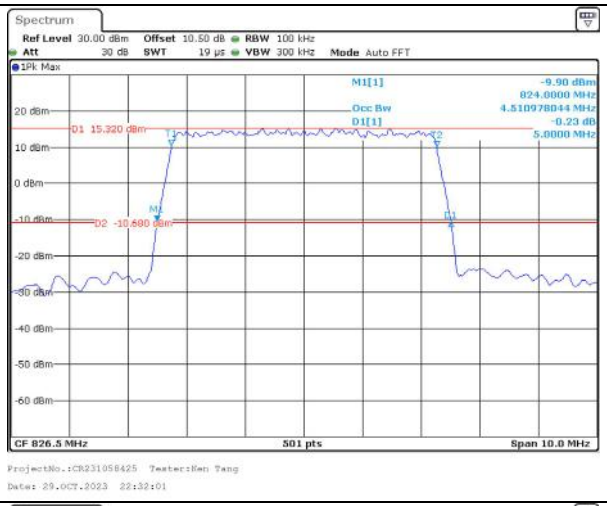
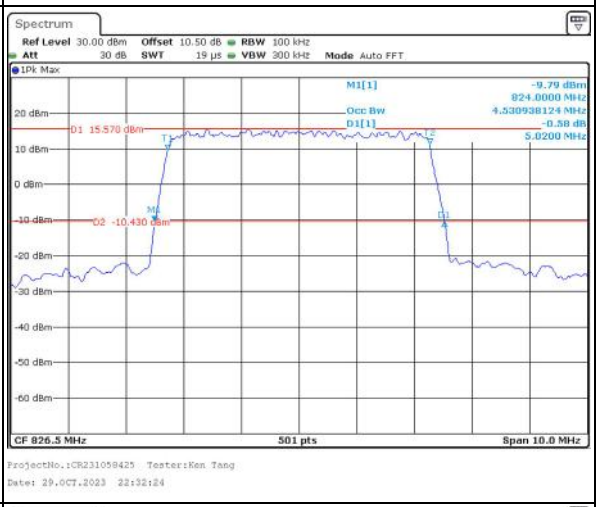
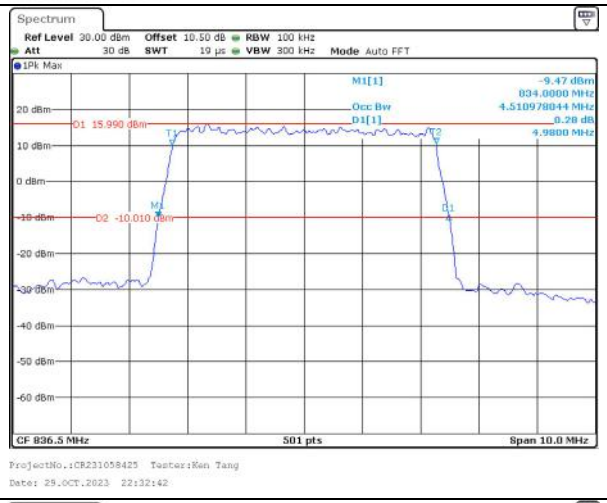
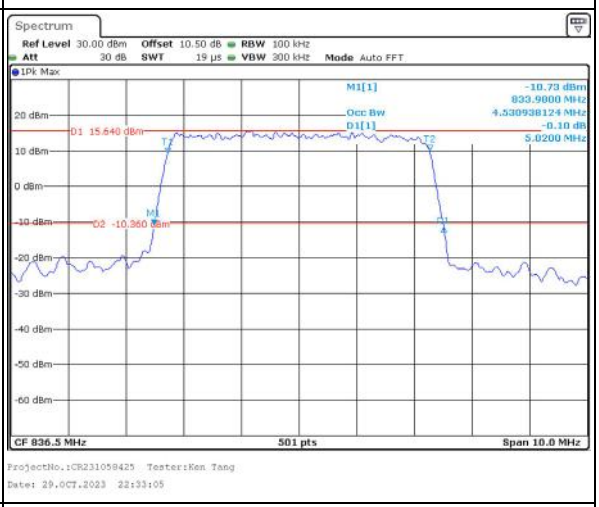
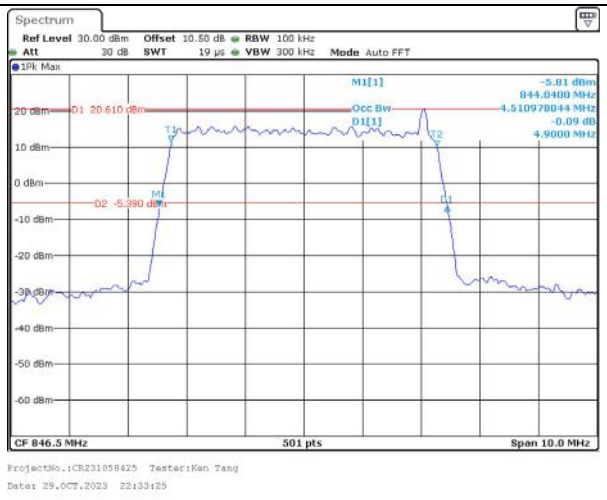
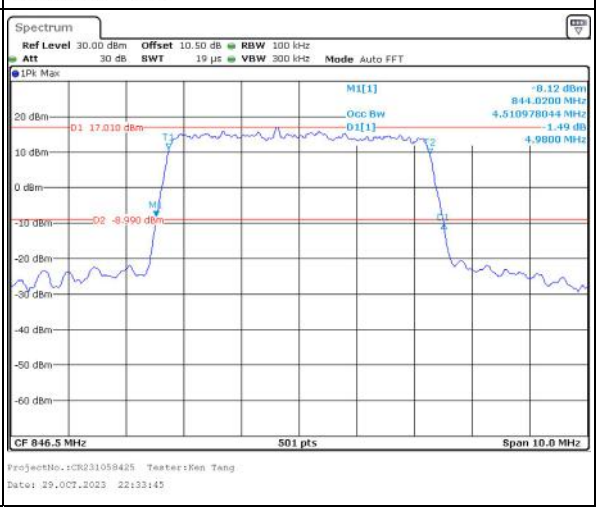
Occupied Bandwidth		
Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest For 90S		
Highest For 90S		
Cross Channel		

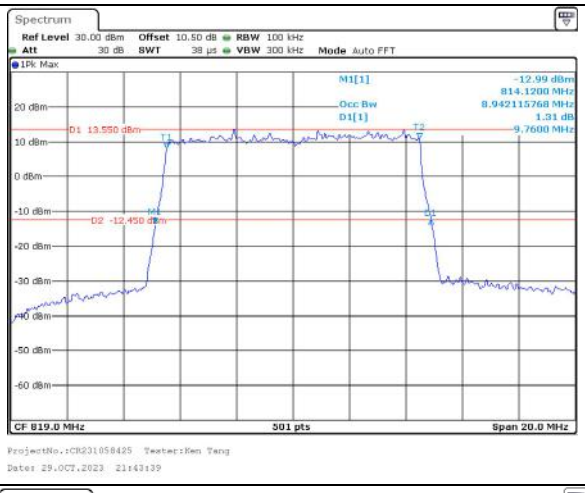
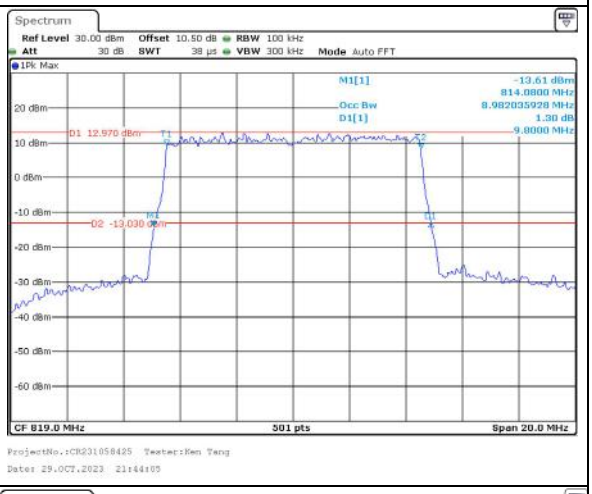
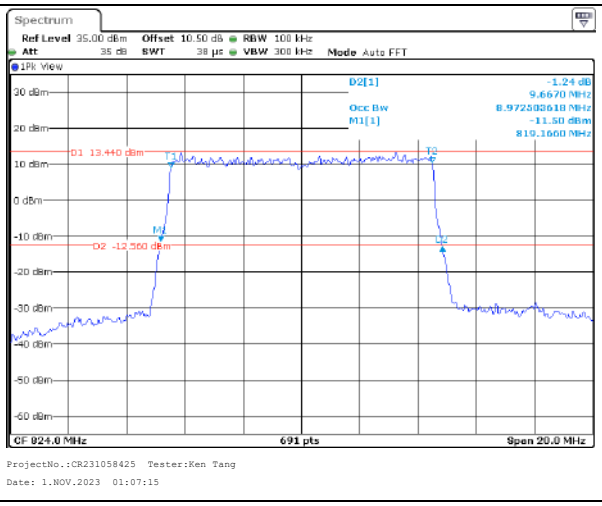
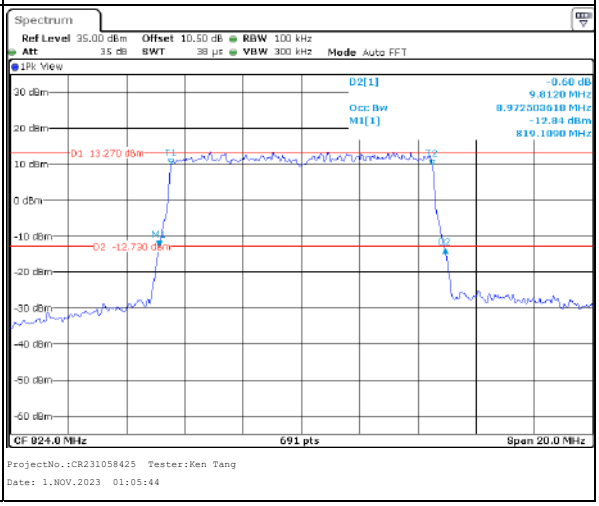
Occupied Bandwidth		
Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest For 22H		
Middle For 22H		
Highest For 22H		

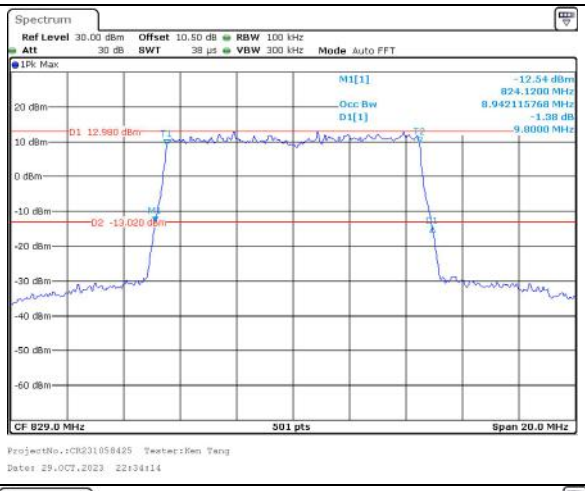
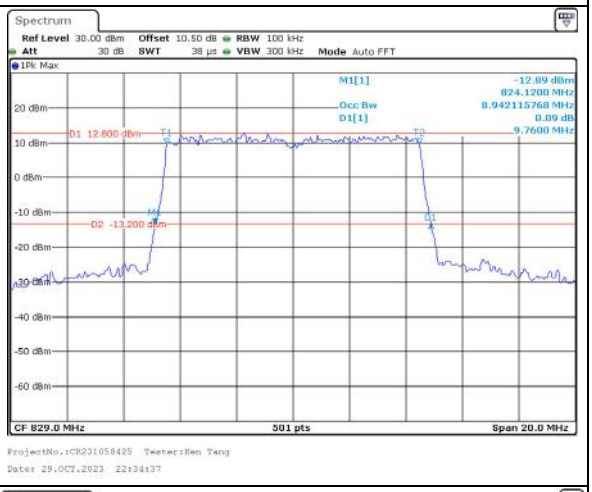
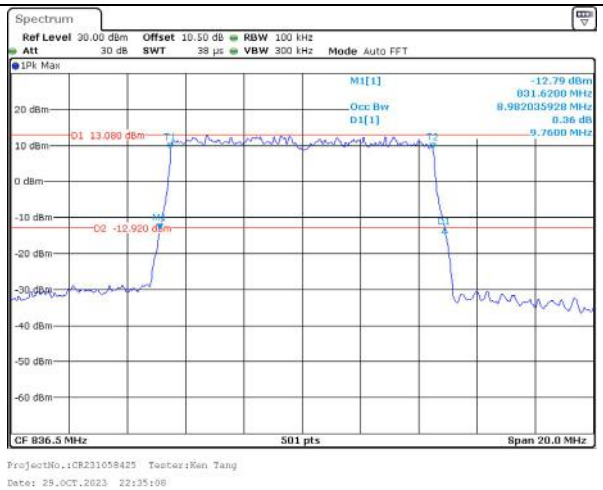
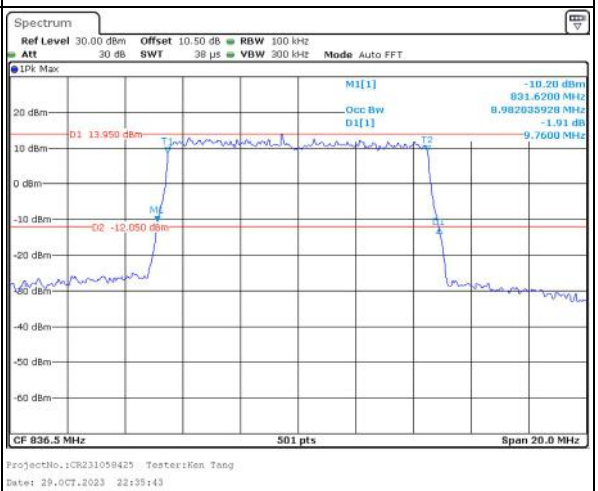
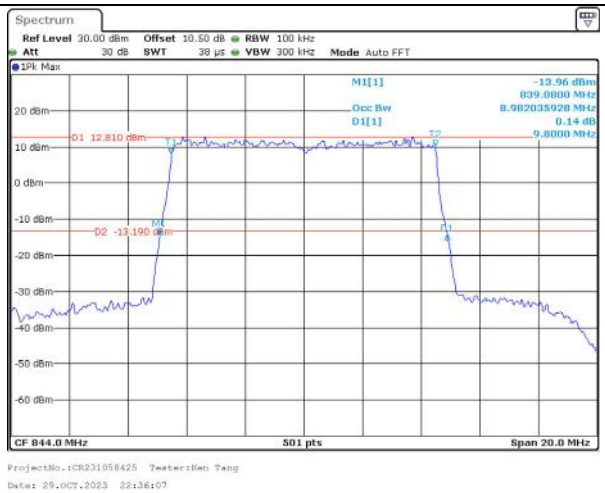
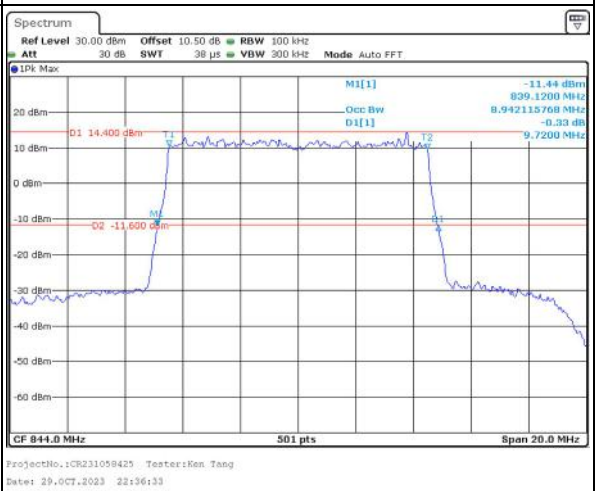
Occupied Bandwidth		
Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest For 90S		
Highest For 90S		
Cross Channel		

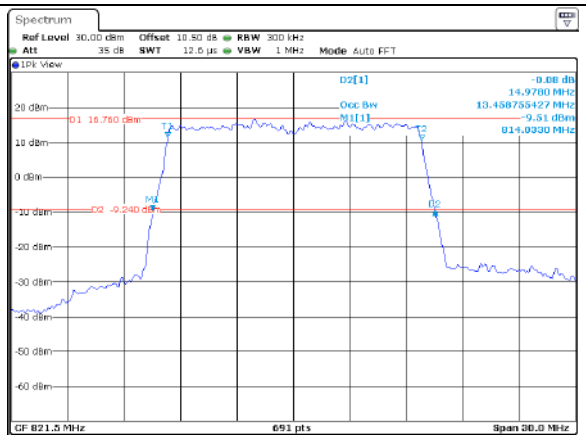
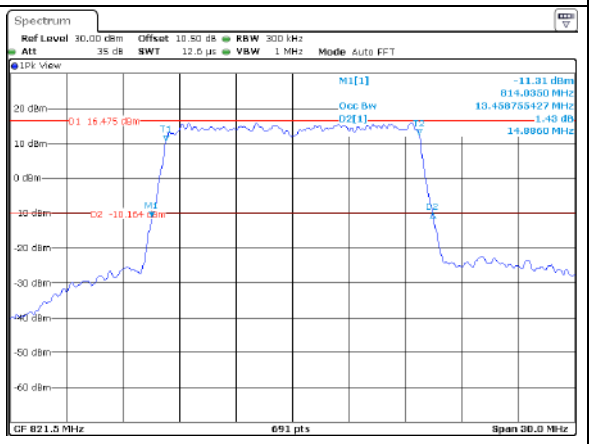
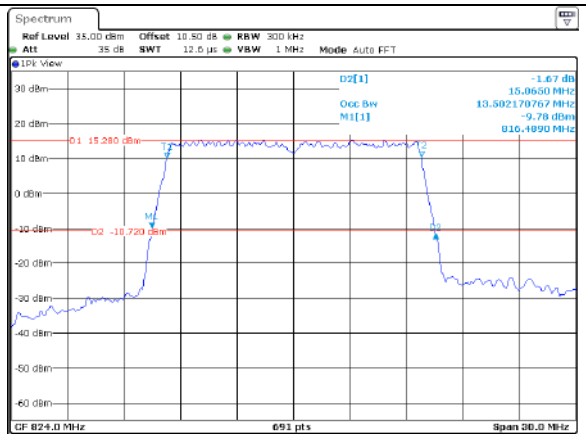
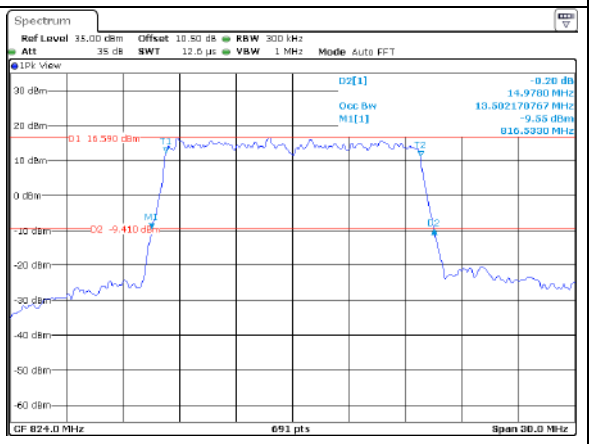
Occupied Bandwidth		
Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest For 22H		
Middle For 22H		
Highest For 22H		

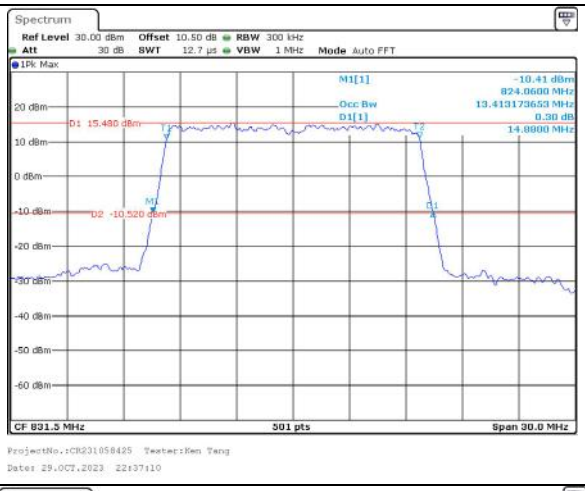
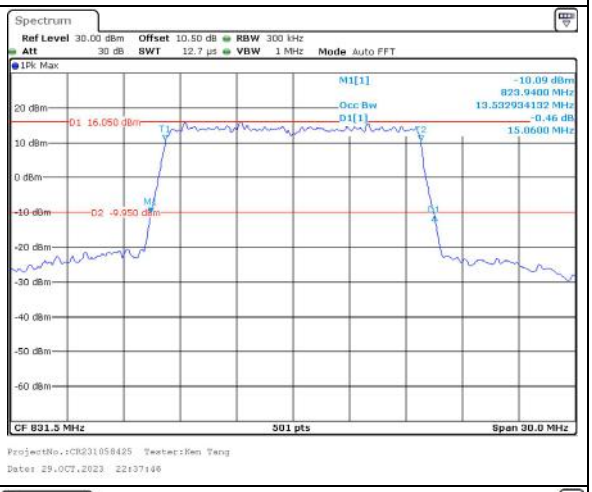
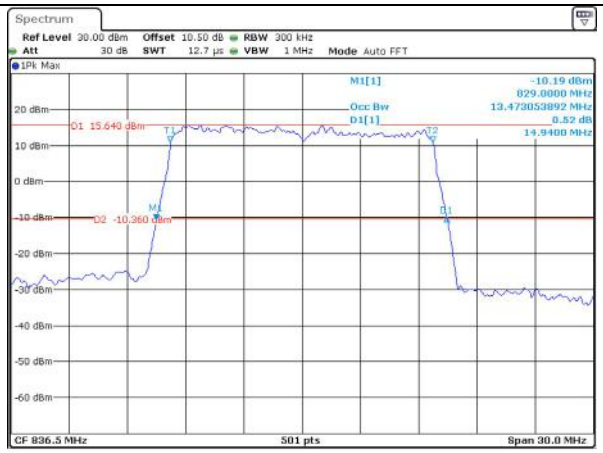
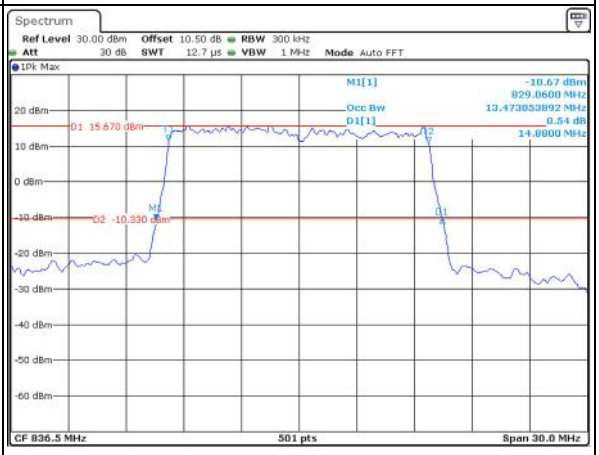
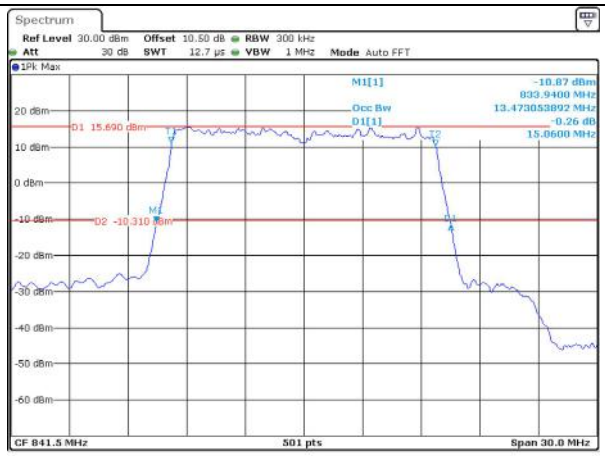
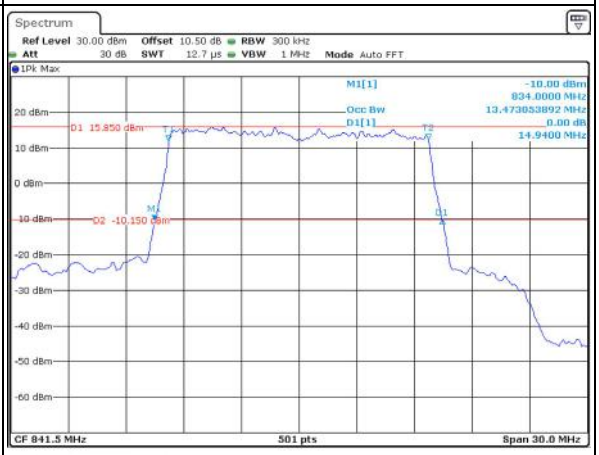
Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest For 90S		
Highest For 90S		
Cross Channel		

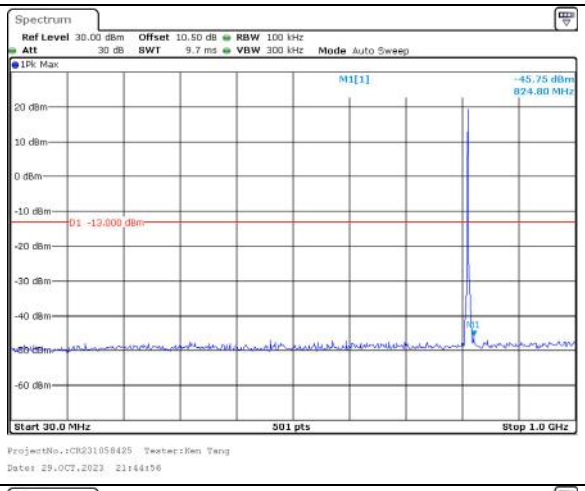
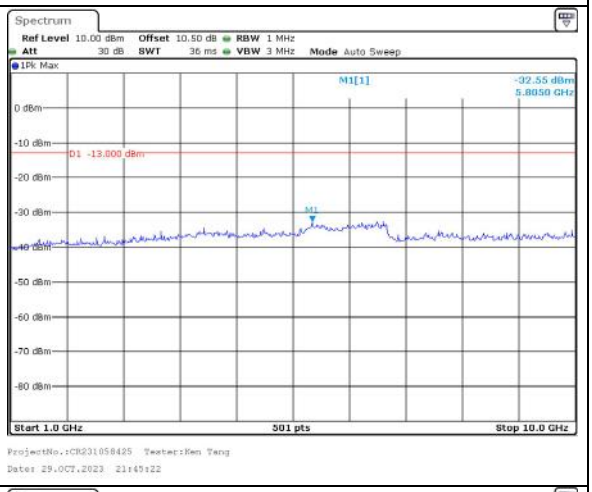
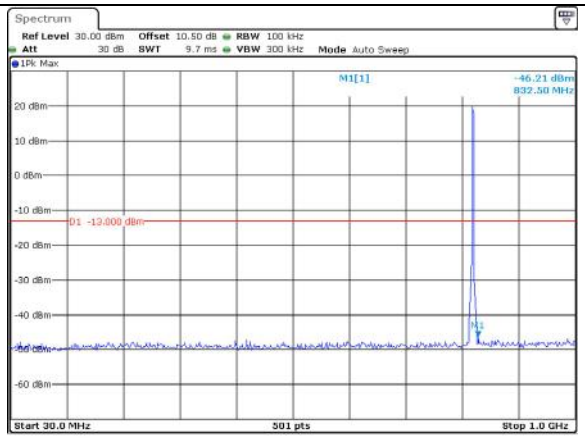
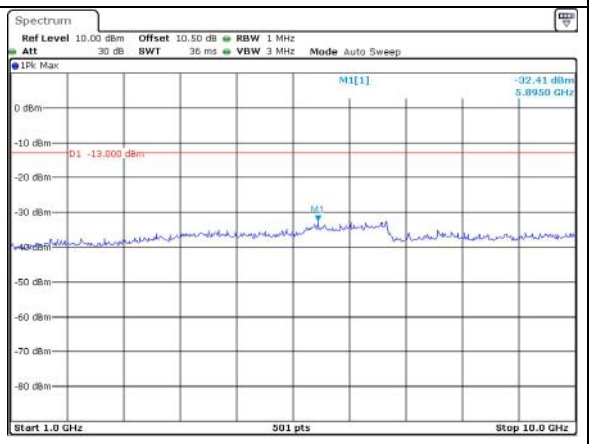
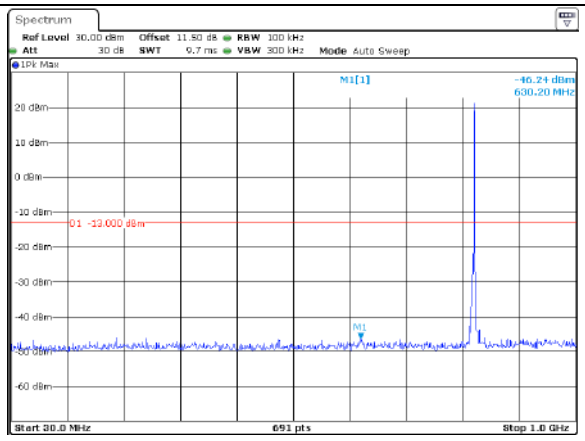
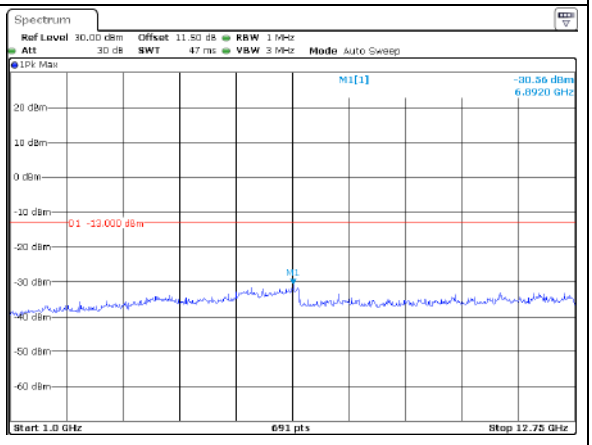
Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest For 22H		
Middle For 22H		
Highest For 22H		

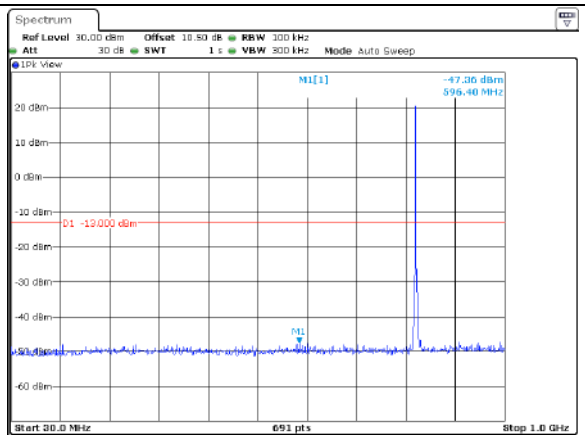
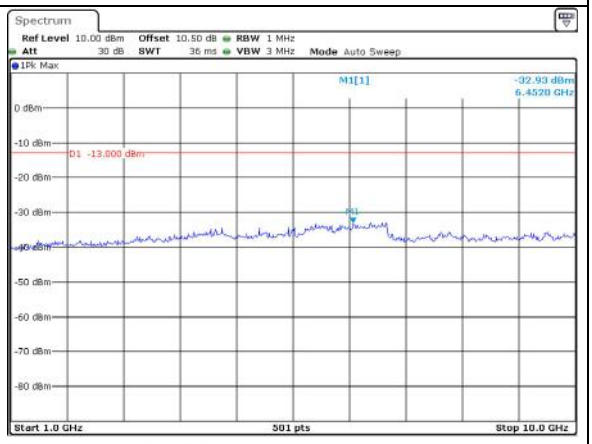
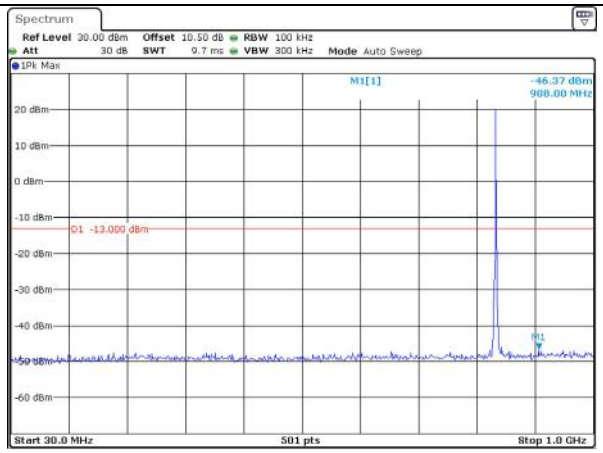
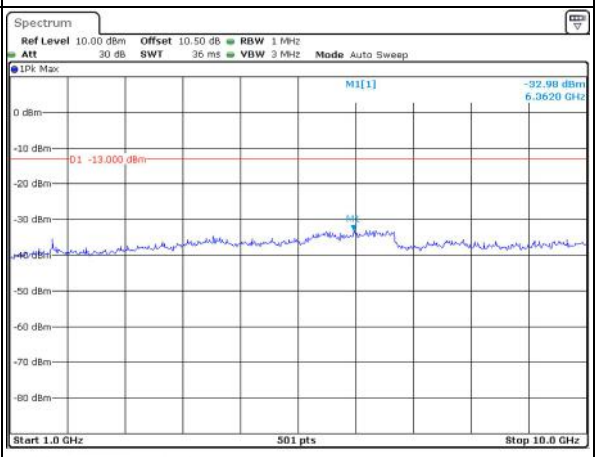
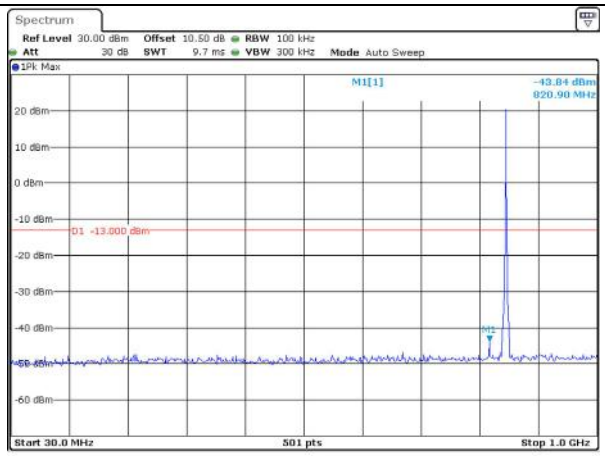
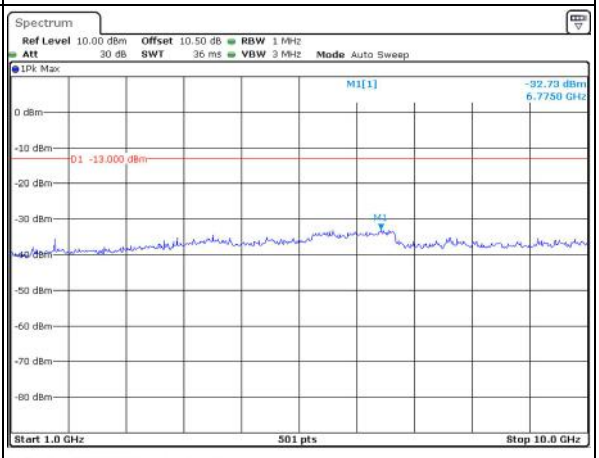
Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest For 90S		
Cross Channel		

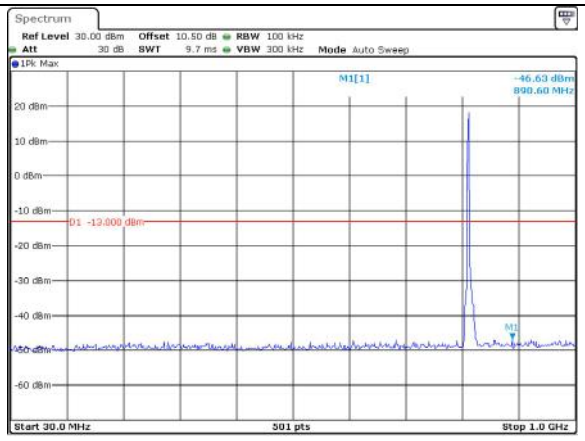
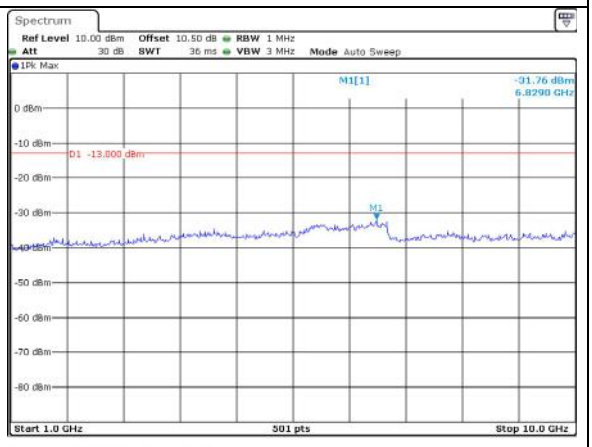
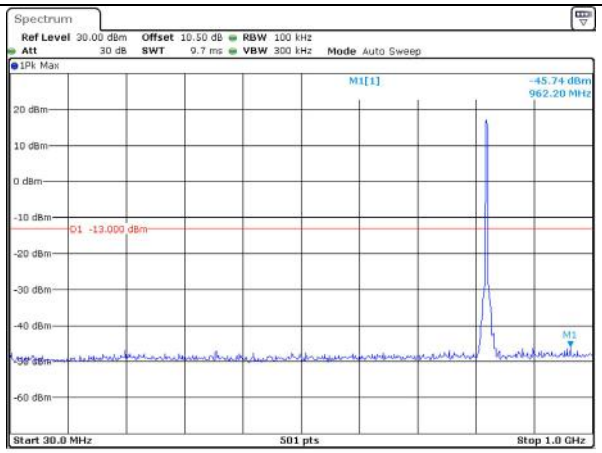
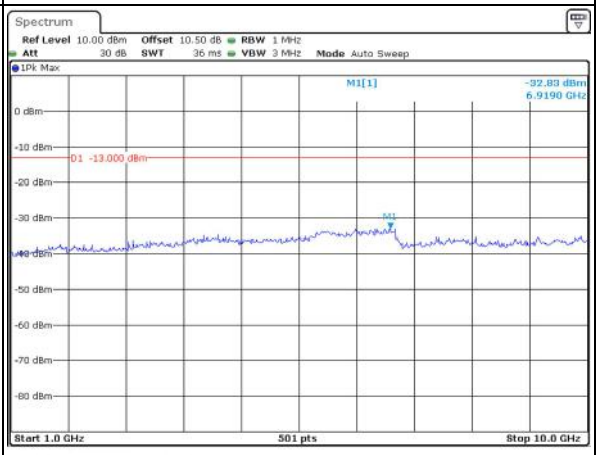
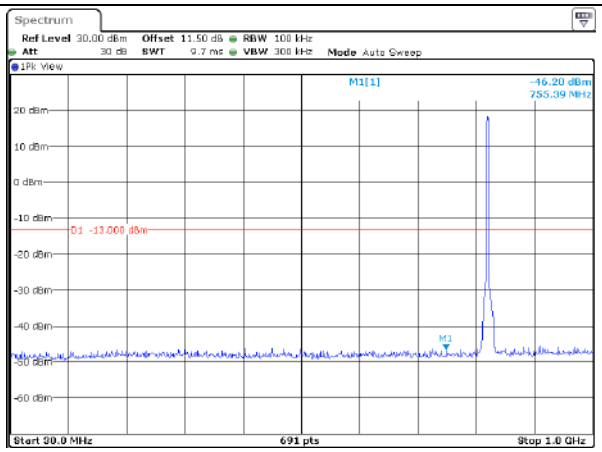
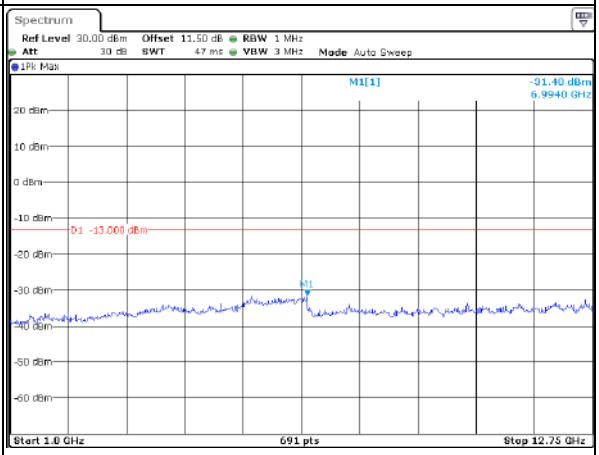
Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest For 22H		
Middle For 22H		
Highest For 22H		

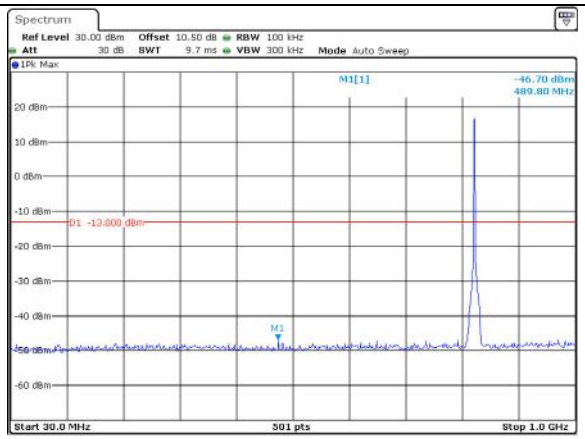
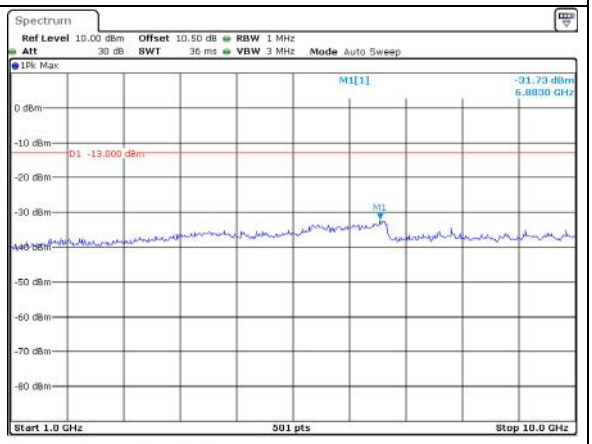
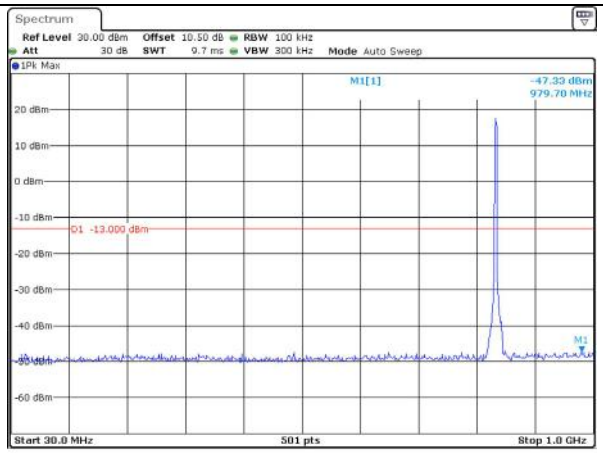
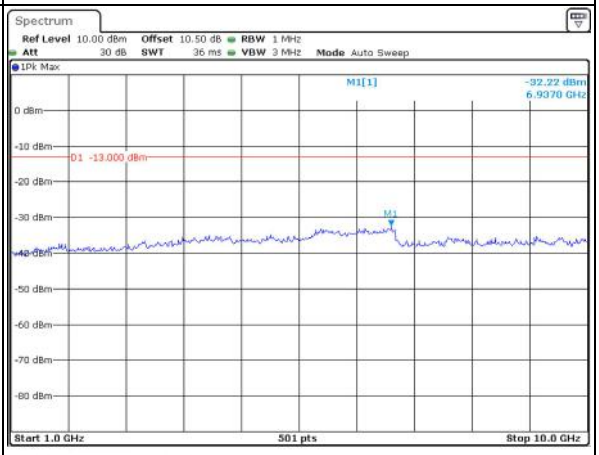
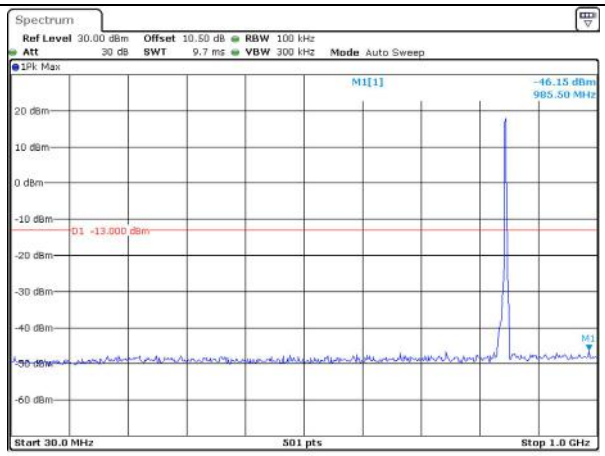
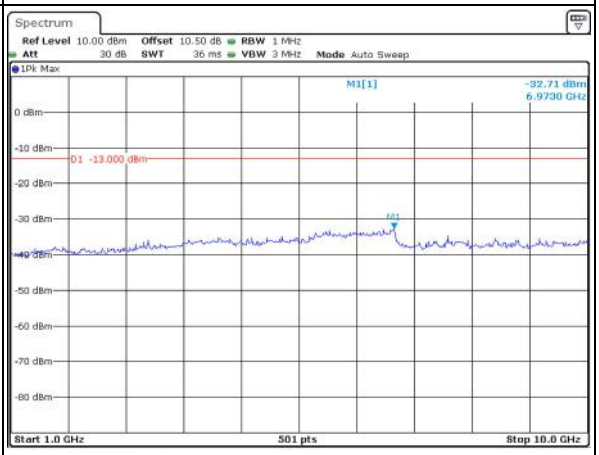
Occupied Bandwidth		
Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest For 90S		
Cross Channel		

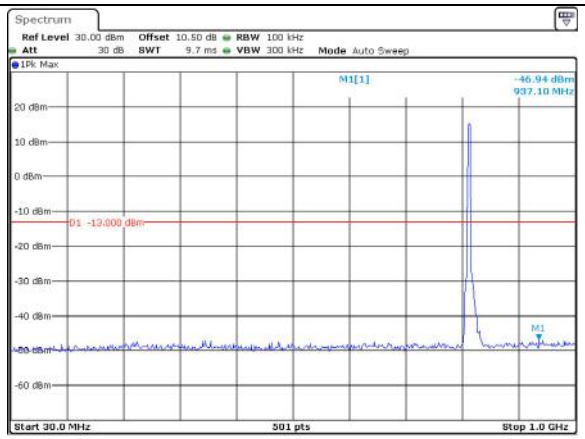
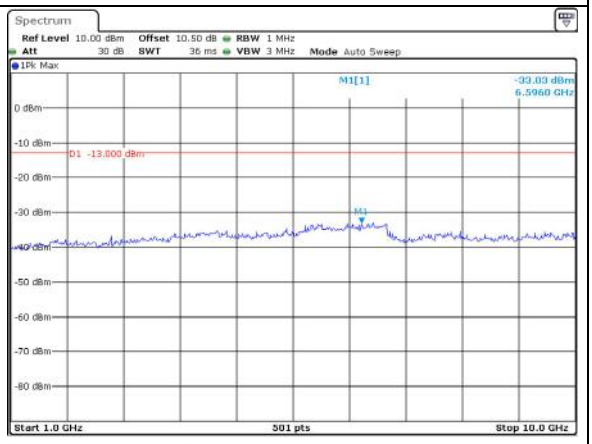
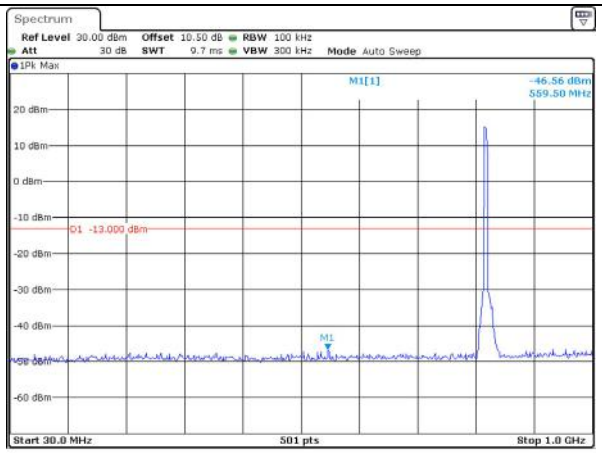
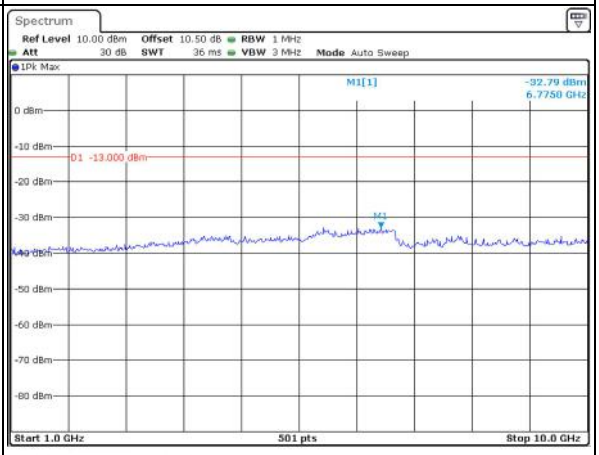
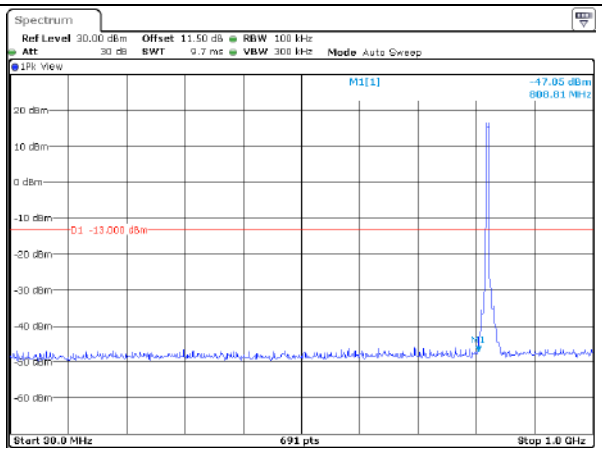
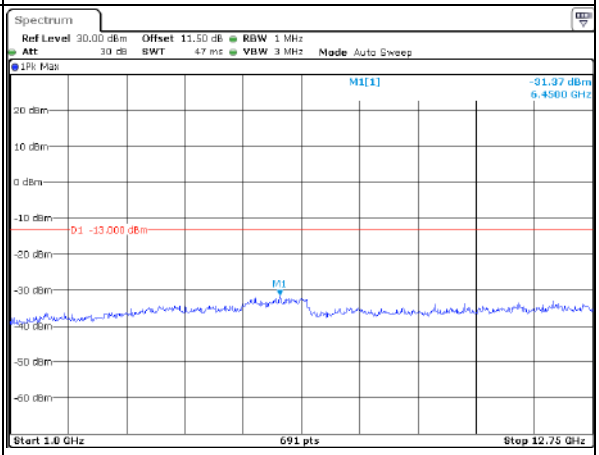
Occupied Bandwidth		
Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest For 22H		
Middle For 22H		
Highest For 22H		

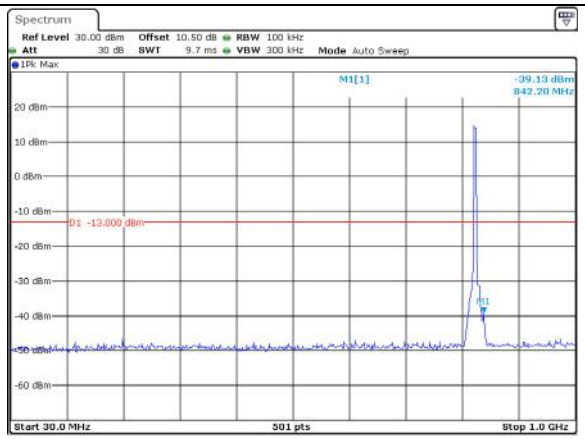
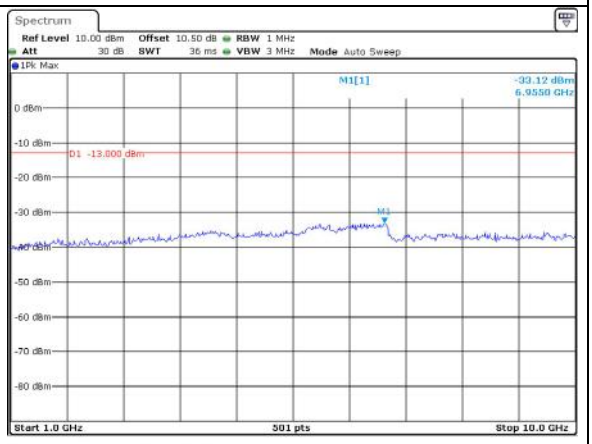
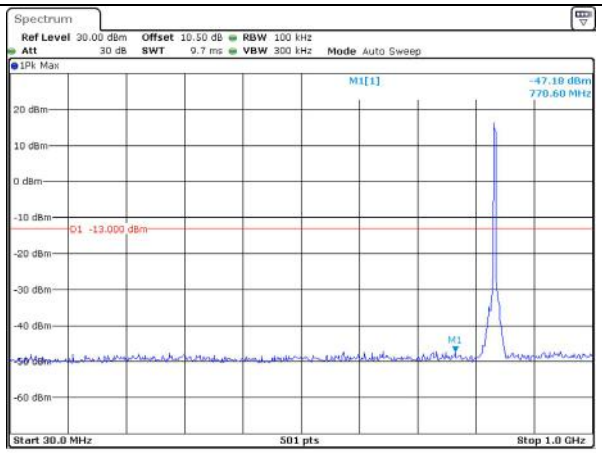
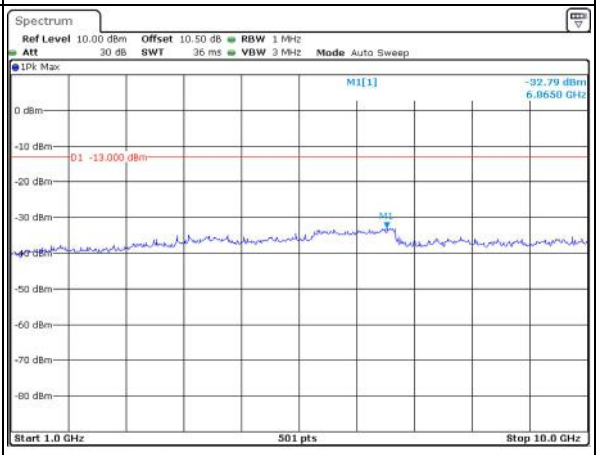
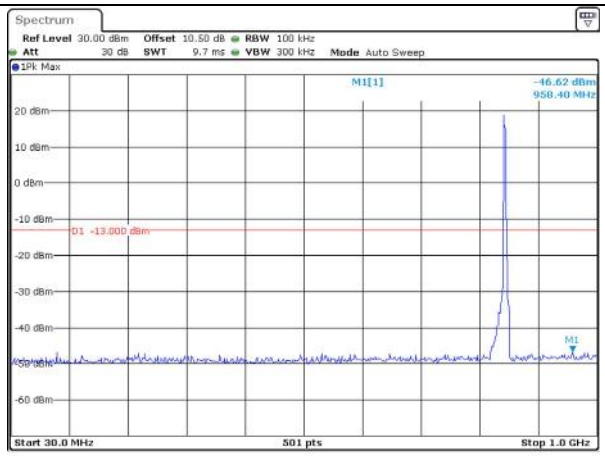
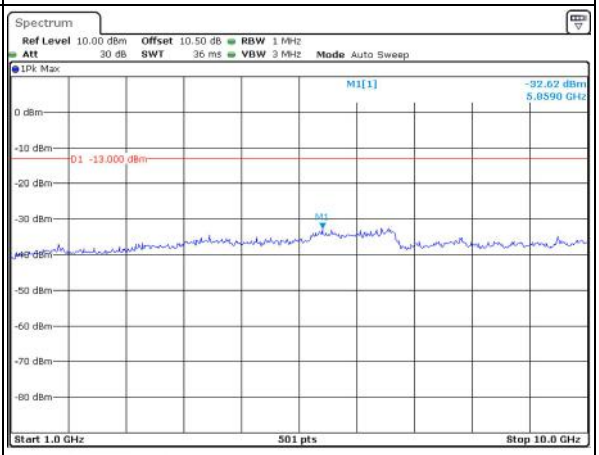
Spurious Emissions at Antenna Terminal		
Channel	**1.4MHz Bandwidth QPSK**	
Lowest For 90S		
Highest For 90S		
Cross Channel		

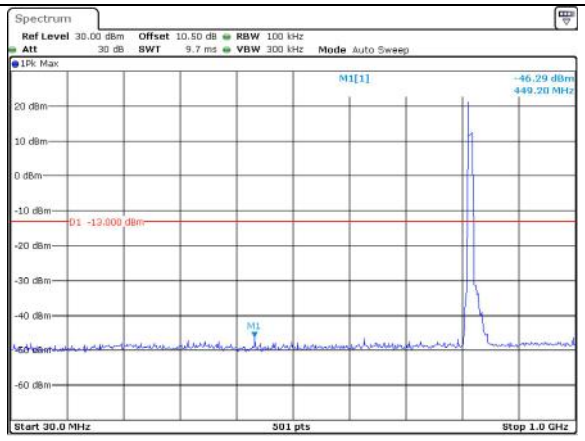
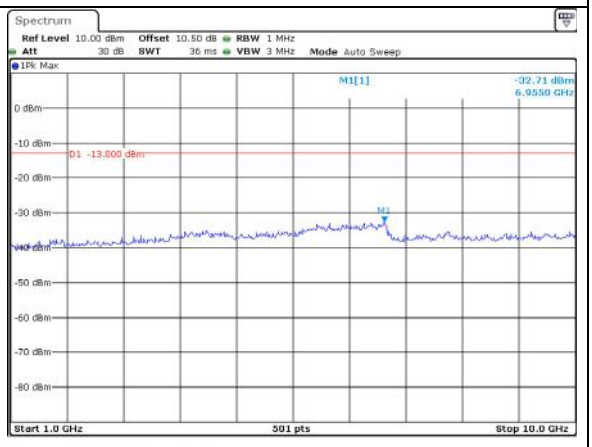
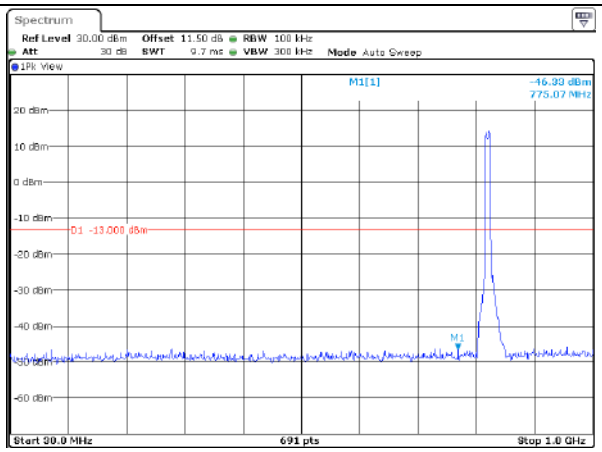
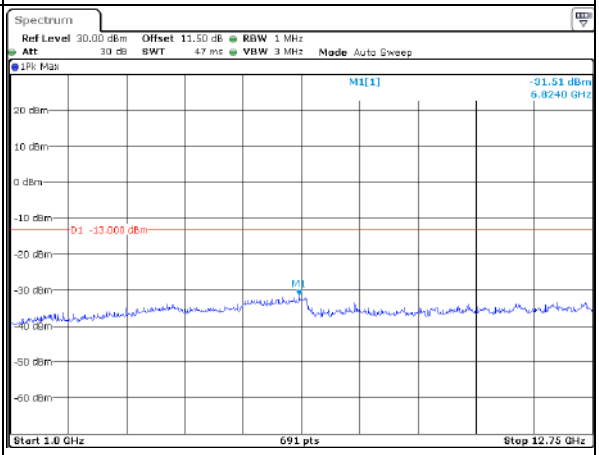
Spurious Emissions at Antenna Terminal		
Channel	**1.4MHz Bandwidth QPSK**	
Lowest For 22H		
Middle For 22H		
Highest For 22H		

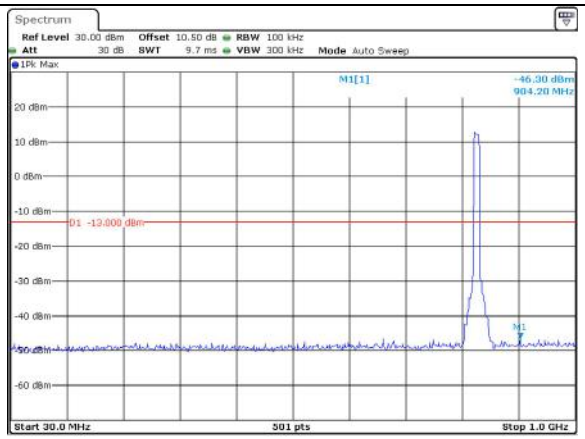
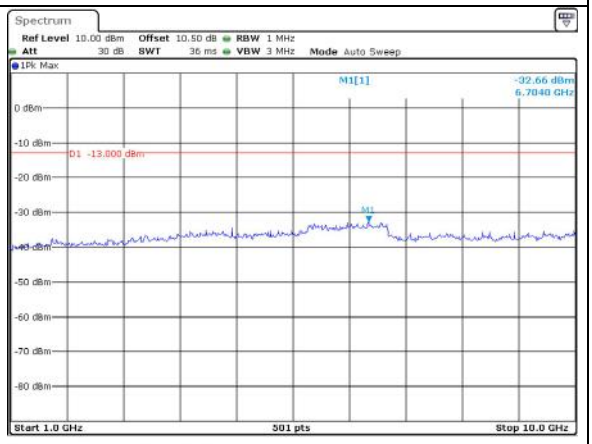
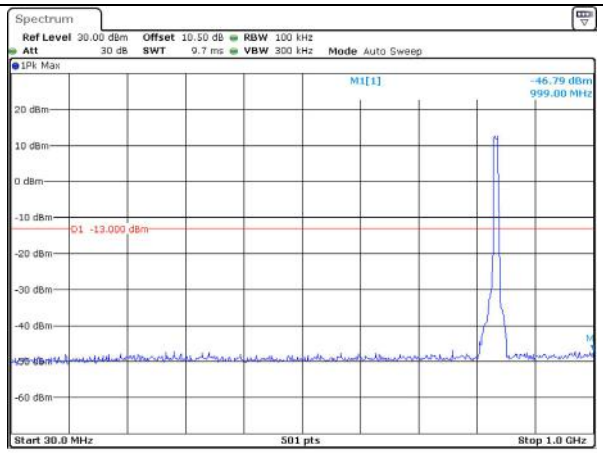
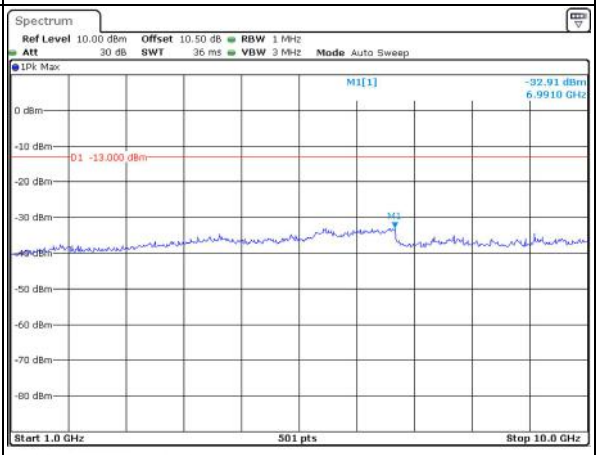
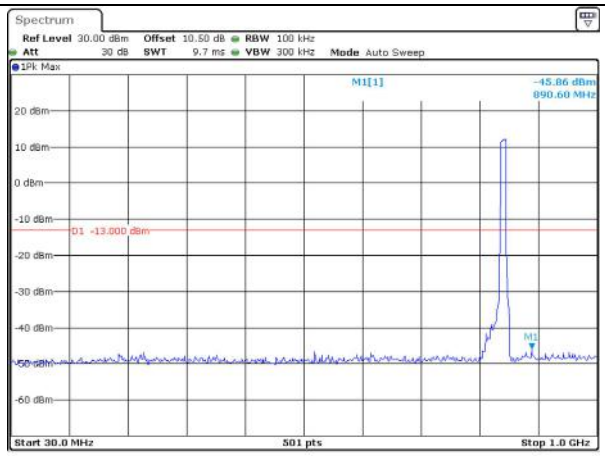
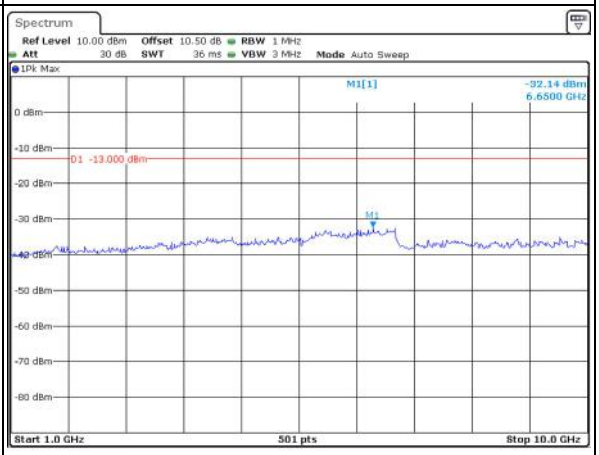
Spurious Emissions at Antenna Terminal		
Channel	**3MHz Bandwidth QPSK**	
Lowest For 90S		
Highest For 90S		
Cross Channel		

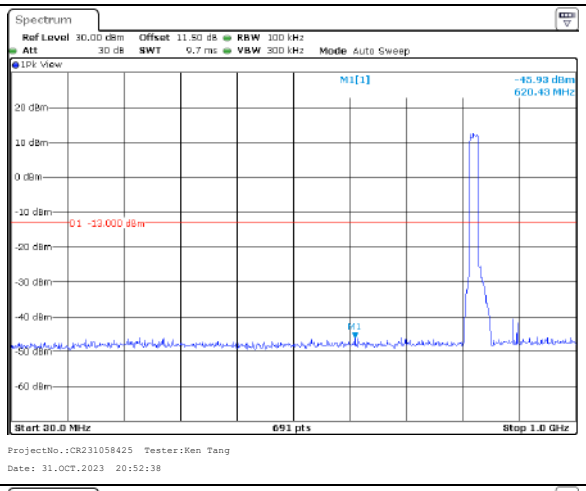
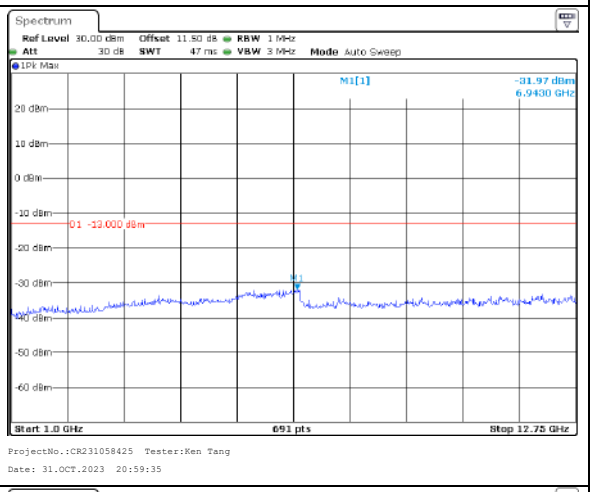
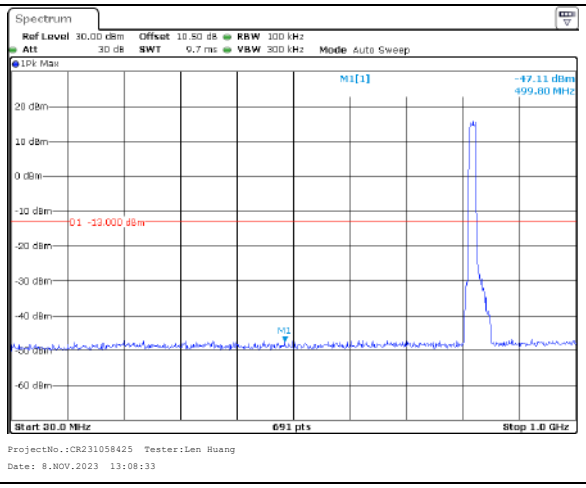
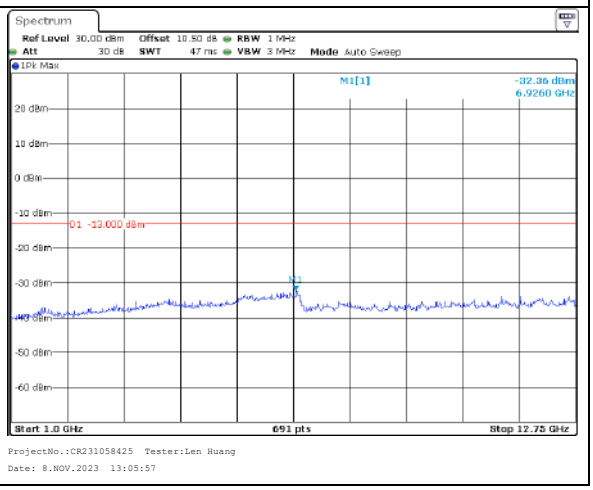
Spurious Emissions at Antenna Terminal		
Channel	**3MHz Bandwidth QPSK**	
Lowest For 22H		
Middle For 22H		
Highest For 22H		

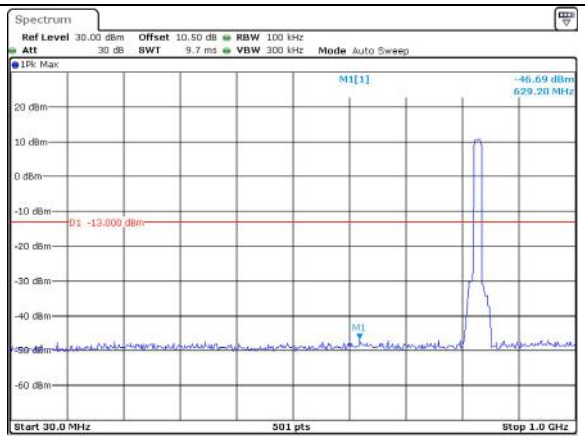
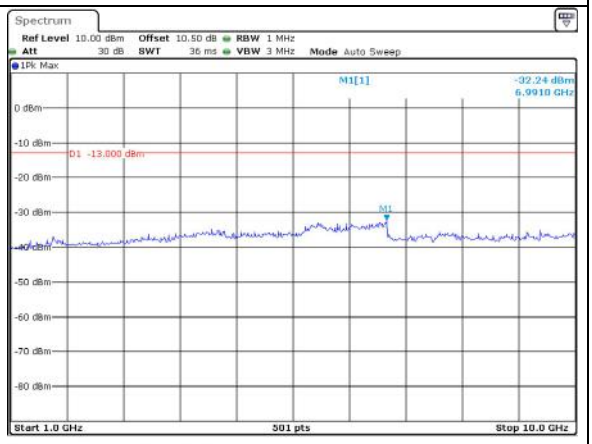
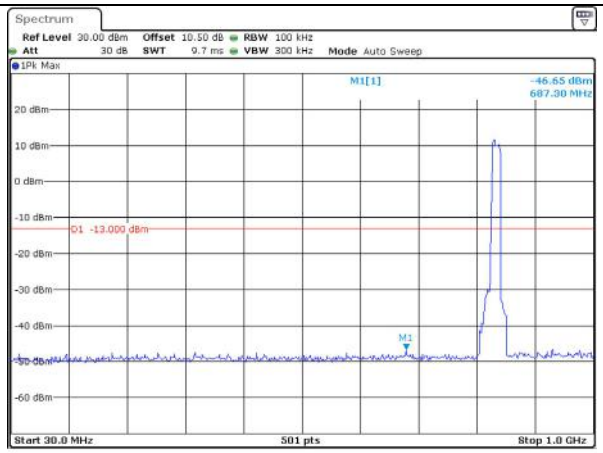
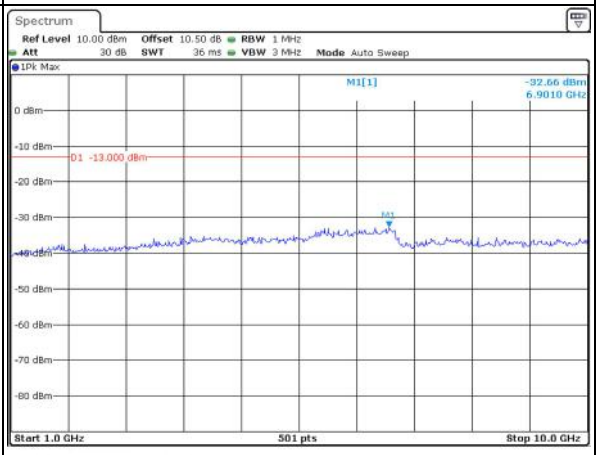
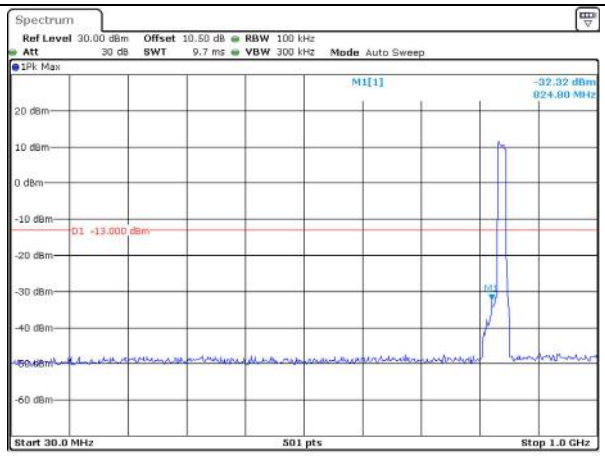
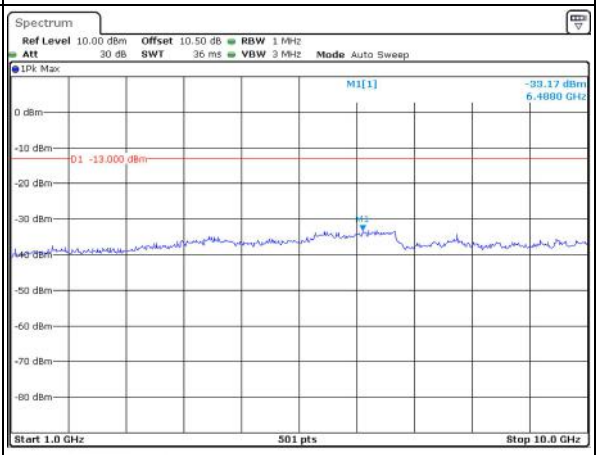
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest For 90S		
Highest For 90S		
Cross Channel		

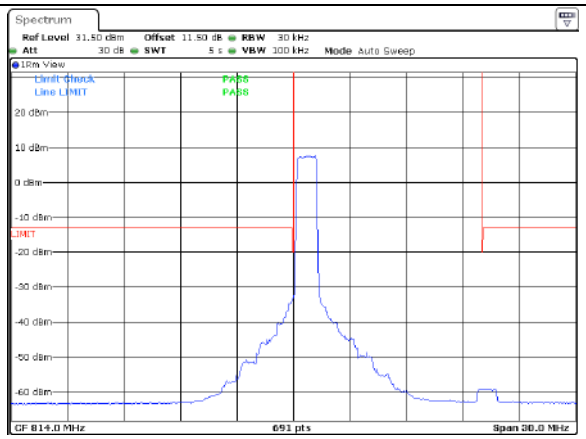
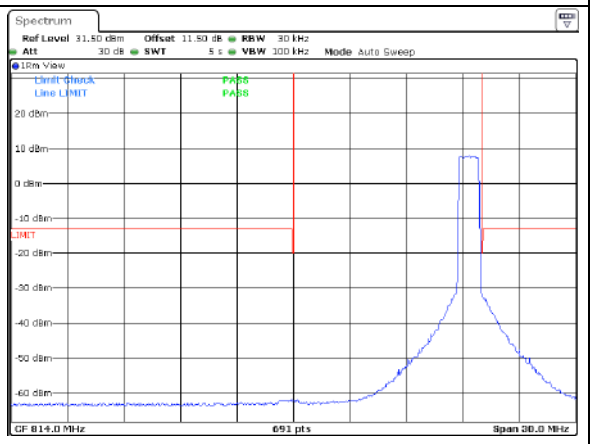
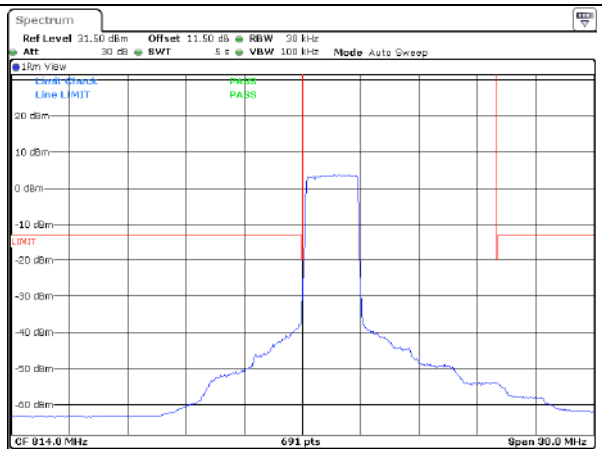
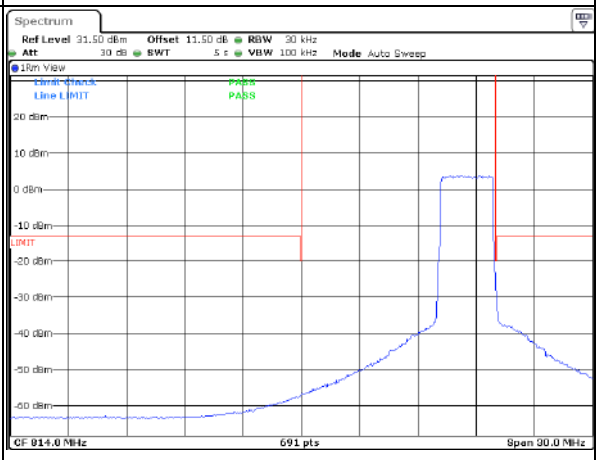
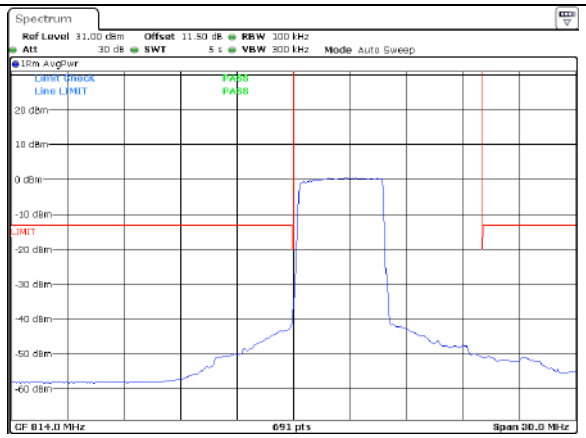
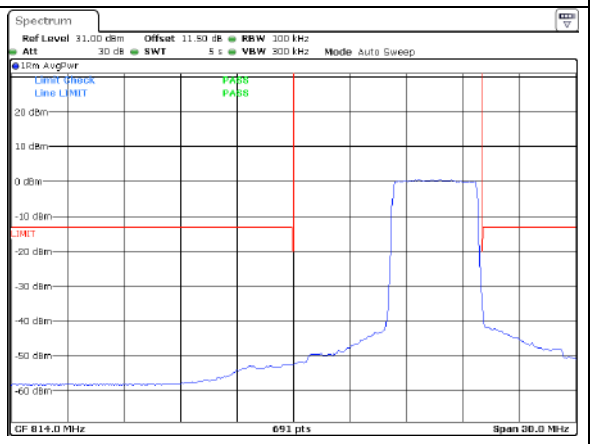
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest For 22H		
Middle For 22H		
Highest For 22H		

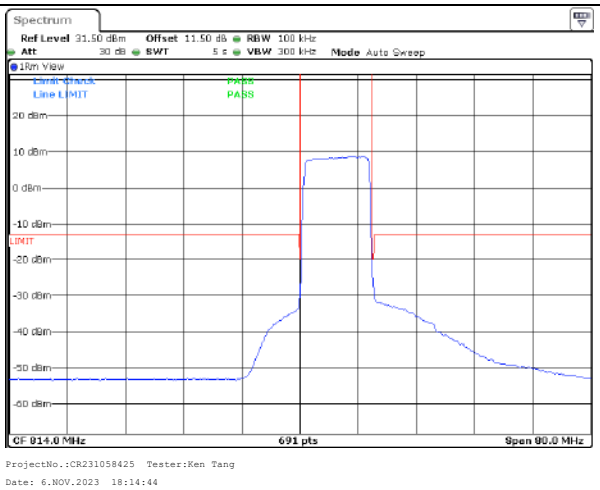
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest For 90S		
Cross Channel		

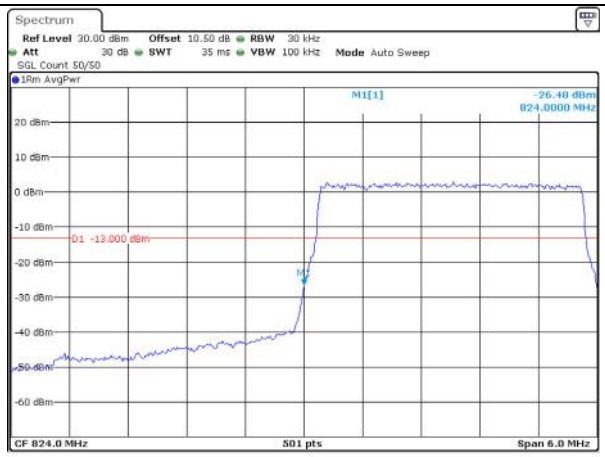
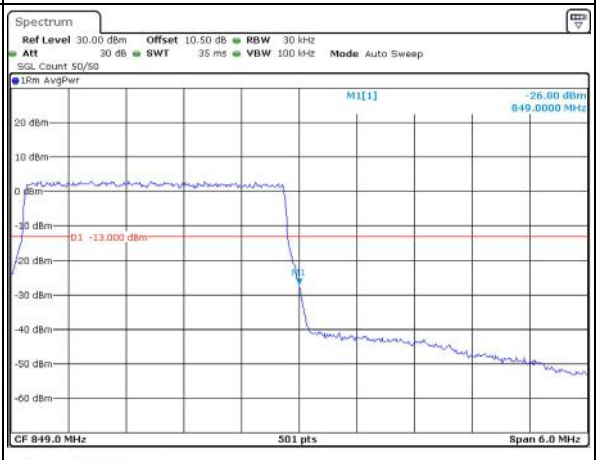
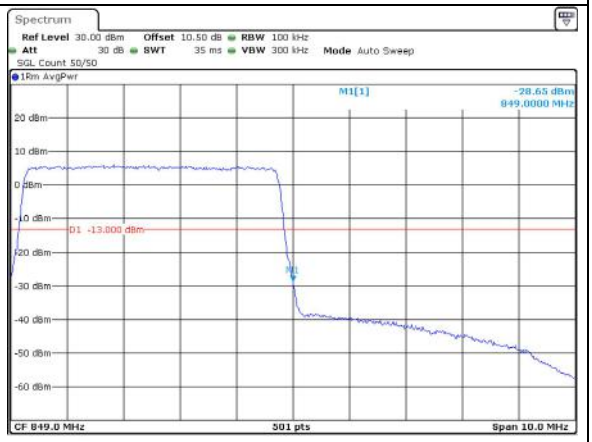
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest For 22H		
Middle For 22H		
Highest For 22H		

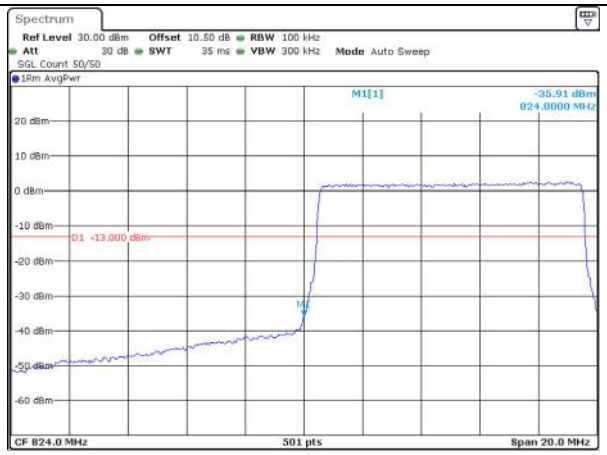
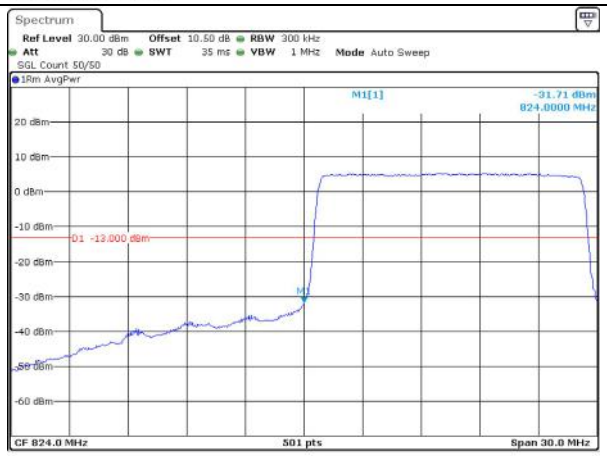
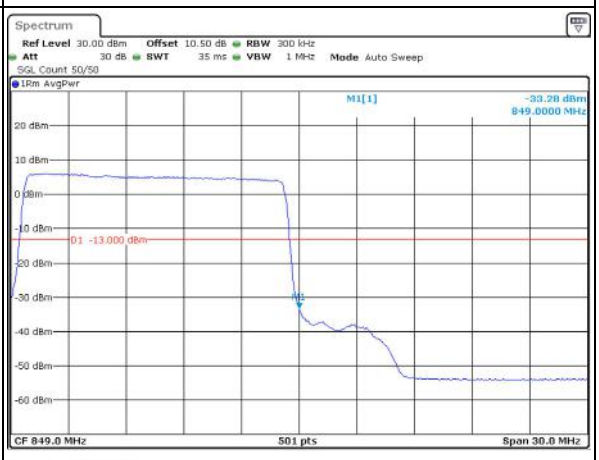
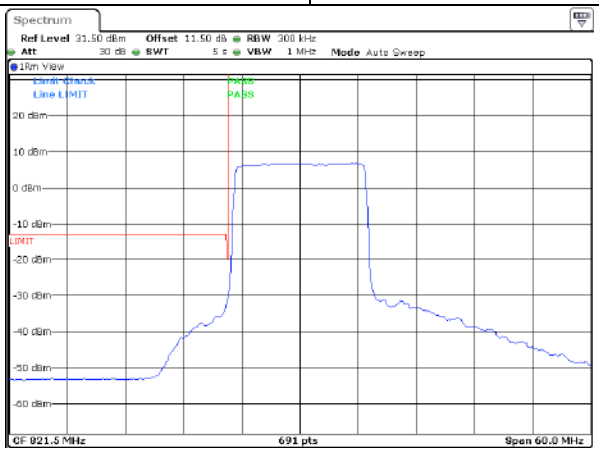
Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest For 90S		
Cross Channel		

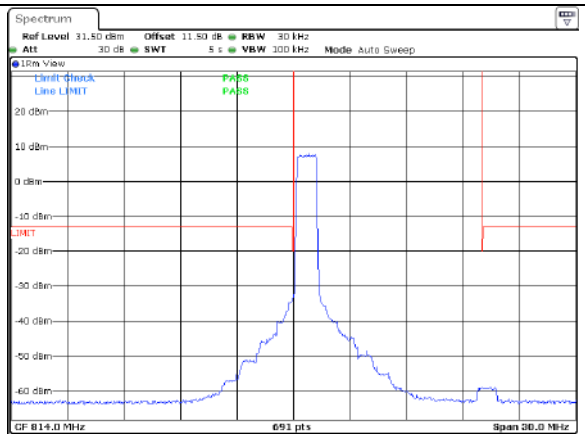
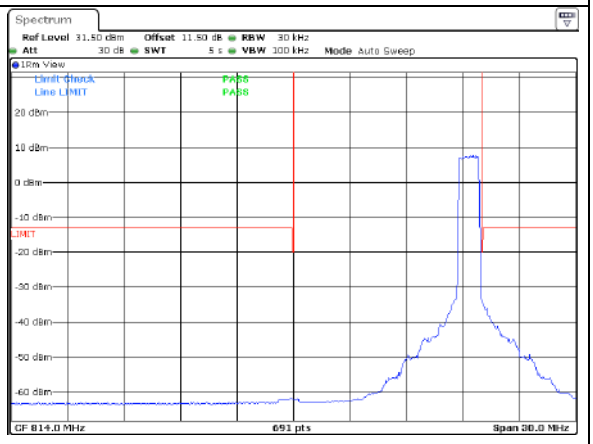
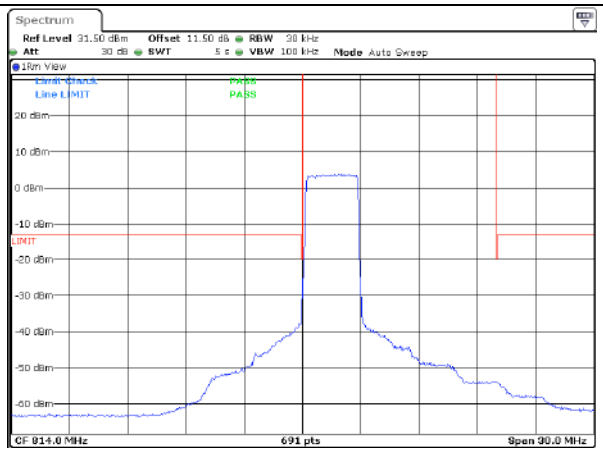
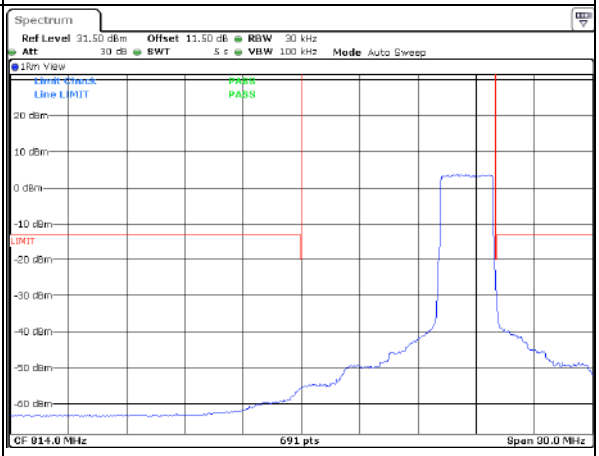
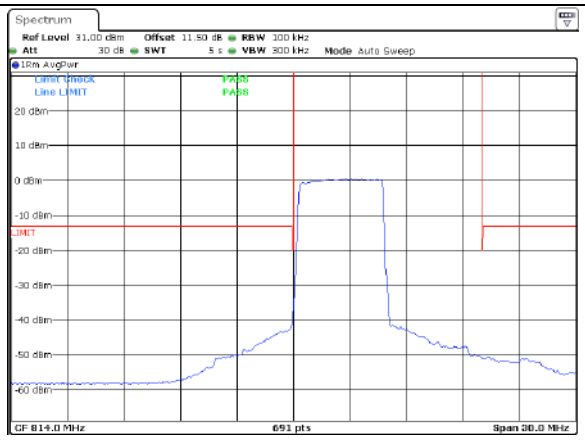
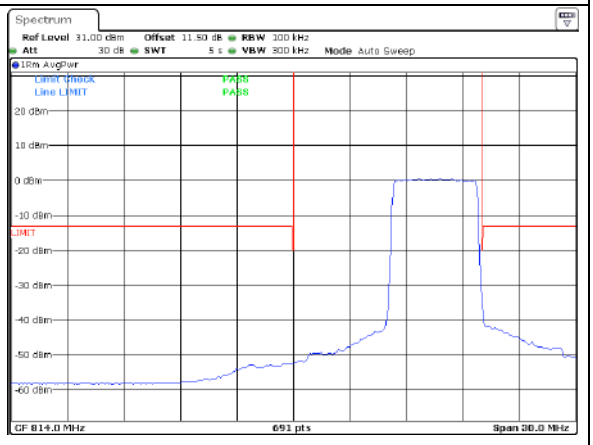
Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest For 22H		
Middle For 22H		
Highest For 22H		

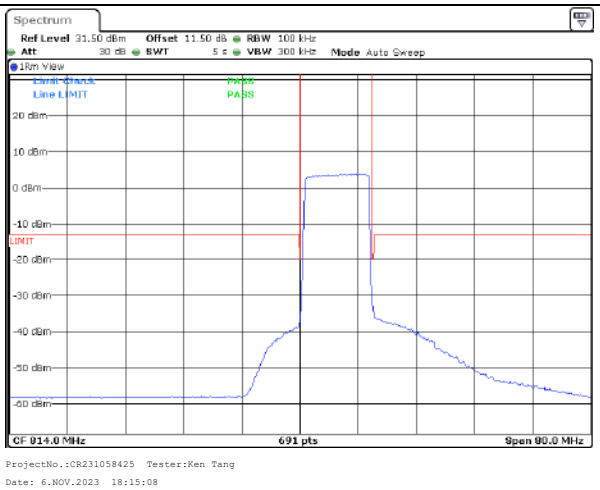
Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 1.4MHz For 90S		
QPSK 3MHz For 90S		
QPSK 5MHz For 90S		

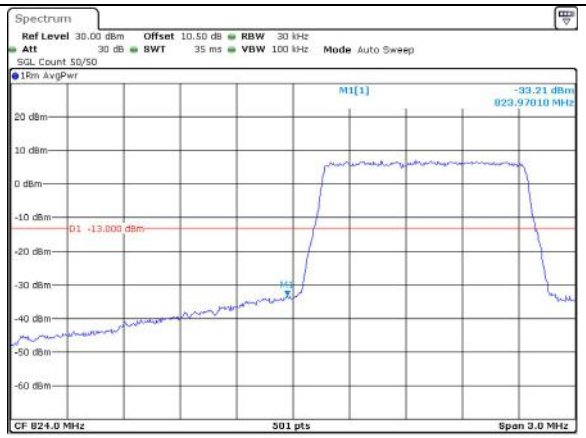
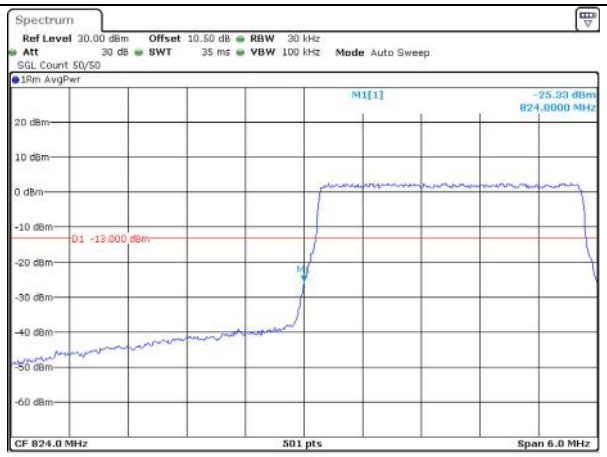
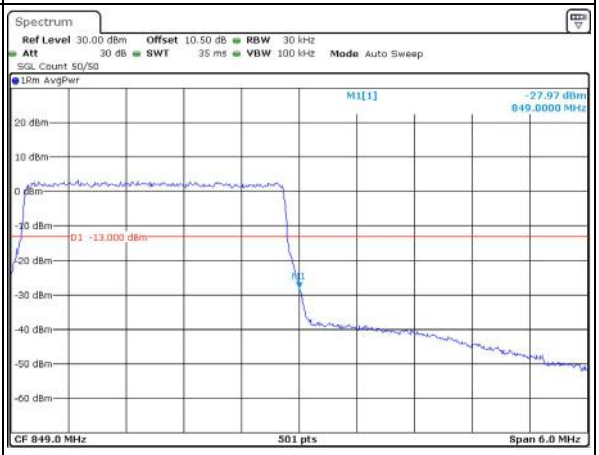
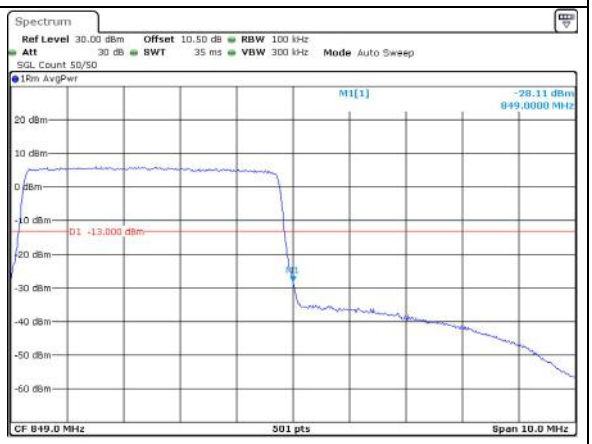
Out of band emission, Band Edge	
Mode	**Middle**
QPSK 10MHz For 90S	

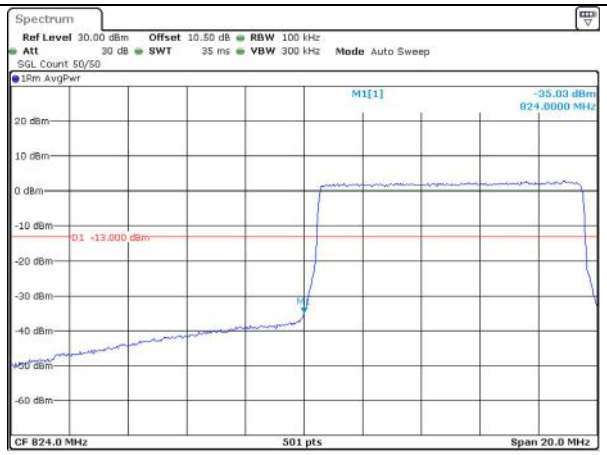
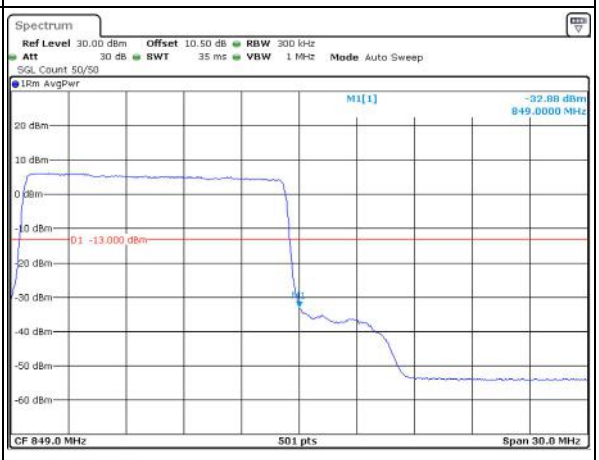
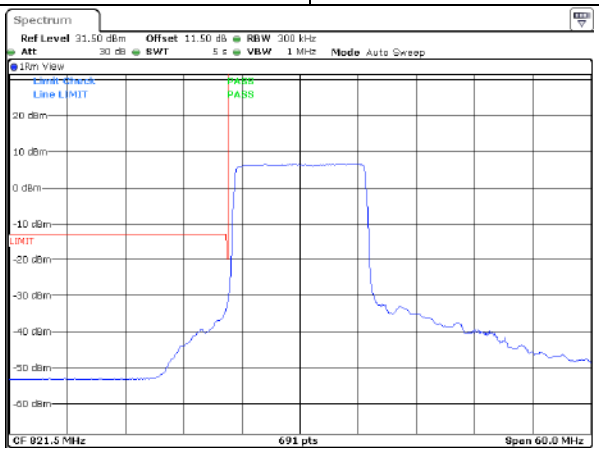
Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 1.4MHz For 22H		
QPSK 3MHz For 22H		
QPSK 5MHz For 22H		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 10MHz For 22H		
QPSK 15MHz For 22H		
QPSK 15MHz Across 90S and 22H		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 1.4MHz For 90S		
16QAM 3MHz For 90S		
16QAM 5MHz For 90S		

Out of band emission, Band Edge	
Mode	**Middle**
16QAM 10MHz For 90S	

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 1.4MHz For 22H		
16QAM 3MHz For 22H		
16QAM 5MHz For 22H		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 10MHz For 22H		
16QAM 15MHz For 22H		
16QAM 15MHz Across 90S and 22H		

4.15 Antenna Port Test Data and Results for LTE Band 38

Serial Number:	2BYR-5	Test Date:	2023/10/27-2023/11/6
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

** 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	2572.5	2595	2617.5
10MHz	2575	2595	2615
15MHz	2577.5	2595	2612.5
20MHz	2580	2595	2610

Test Data:

FCC§2.1046;§ 27.50(h)(2)

RF Output Power:

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	21.10	21.71	21.49	21.55	33
	RB1#13	21.08	21.75	21.52		
	RB1#24	21.12	21.73	21.55		
	RB15#0	19.49	19.94	19.93		
	RB15#10	19.67	19.96	19.88		
	RB25#0	19.62	19.91	19.89		
5MHz 16QAM	RB1#0	20.42	21.74	20.19	**21.58**	33
	RB1#13	20.40	21.70	20.22		
	RB1#24	20.53	21.78	20.12		
	RB15#0	18.68	18.84	18.91		
	RB15#10	18.81	18.86	18.89		
	RB25#0	18.79	19.09	19.10		
10MHz QPSK	RB1#0	21.34	21.51	21.70	21.56	33
	RB1#25	21.40	21.54	21.75		
	RB1#49	21.63	21.68	21.76		
	RB25#0	19.53	20.03	19.92		
	RB25#25	19.73	20.05	19.97		
	RB50#0	19.22	19.73	19.54		
10MHz 16QAM	RB1#0	20.51	20.58	20.72	20.96	33
	RB1#25	21.11	20.60	20.73		
	RB1#49	21.16	20.52	20.72		
	RB25#0	18.73	19.52	18.92		
	RB25#25	18.78	19.50	18.98		
	RB50#0	18.37	18.76	18.72		
15MHz QPSK	RB1#0	21.40	21.43	21.73	**21.57**	33
	RB1#38	21.52	21.50	21.77		
	RB1#74	21.68	21.55	21.73		
	RB36#0	19.65	20.00	20.03		
	RB36#39	19.80	20.08	20.01		
	RB75#0	19.38	19.65	19.66		
15MHz 16QAM	RB1#0	20.55	20.73	20.80	21.00	33
	RB1#38	21.20	20.82	20.75		
	RB1#74	20.77	20.70	20.72		
	RB36#0	18.76	19.36	19.00		
	RB36#39	18.89	19.41	18.99		
	RB75#0	18.48	18.87	18.67		

20MHz QPSK	RB1#0	21.04	21.46	21.47	21.48	33
	RB1#50	21.27	21.68	21.31		
	RB1#99	21.56	21.57	21.35		
	RB50#0	19.59	19.91	20.00		
	RB50#50	19.69	19.97	19.90		
	RB100#0	19.33	19.49	19.56		
20MHz 16QAM	RB1#0	19.72	21.25	20.01	21.52	33
	RB1#50	20.02	21.34	20.94		
	RB1#99	20.11	21.72	21.12		
	RB50#0	18.70	19.06	19.20		
	RB50#50	18.97	19.00	19.14		
	RB100#0	18.42	18.63	18.83		
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	7.89	6.40	7.10	13
	RB100#0	9.36	6.73	7.27	13
20MHz 16QAM	RB1#0	8.81	8.46	6.16	13
	RB100#0	9.82	9.34	9.19	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	4.491	4.511	4.511	4.980	5.100	5.140
5MHz 16QAM	4.551	4.491	4.511	5.080	5.080	5.120
10MHz QPSK	8.942	8.942	8.942	9.840	9.720	9.720
10MHz 16QAM	8.942	8.942	8.942	9.760	9.760	9.680
15MHz QPSK	13.533	13.533	13.593	15.300	15.720	15.840
15MHz 16QAM	13.533	13.533	13.473	15.060	15.240	14.880
20MHz QPSK	17.884	18.044	17.964	19.440	19.680	19.520
20MHz 16QAM	17.884	17.884	17.884	19.520	19.440	19.600
Note: The test plots please refer to the Plots of Occupied Bandwidth						

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

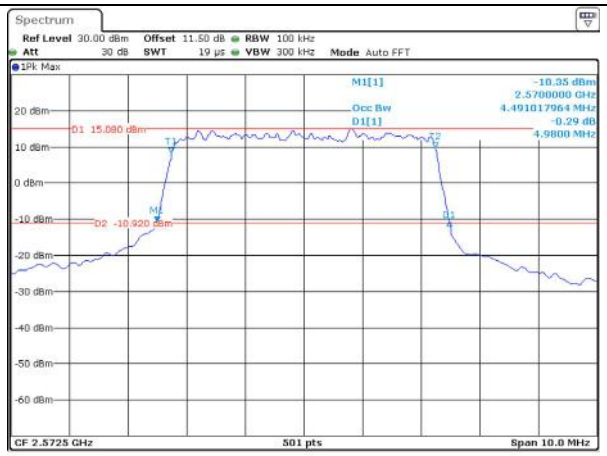
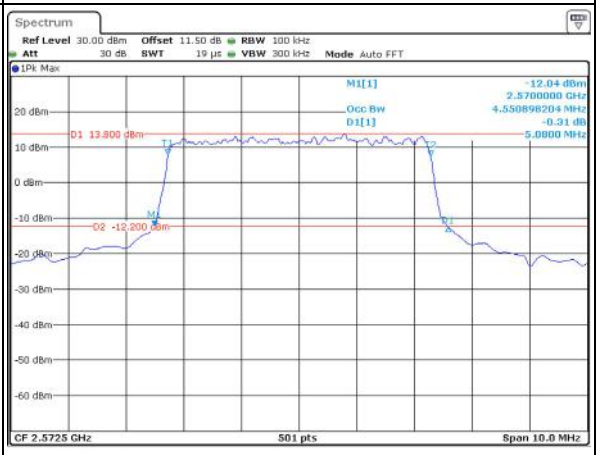
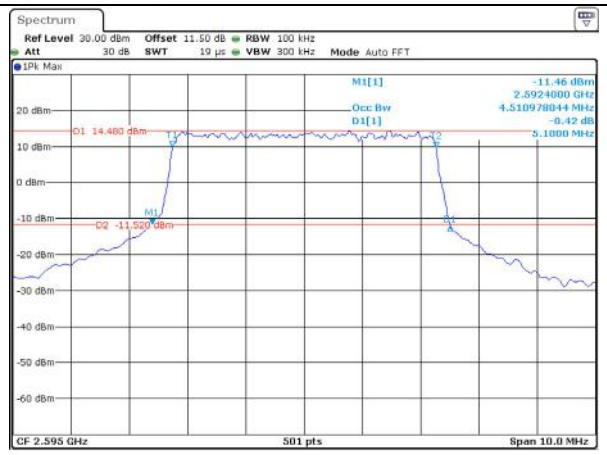
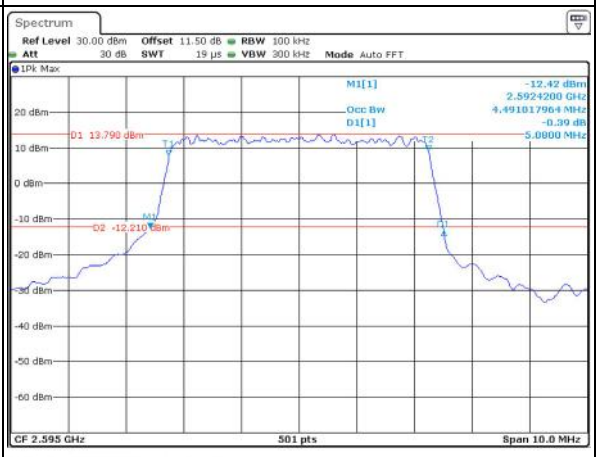
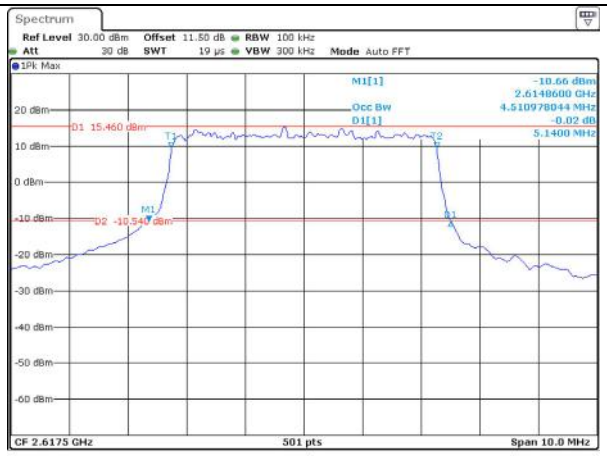
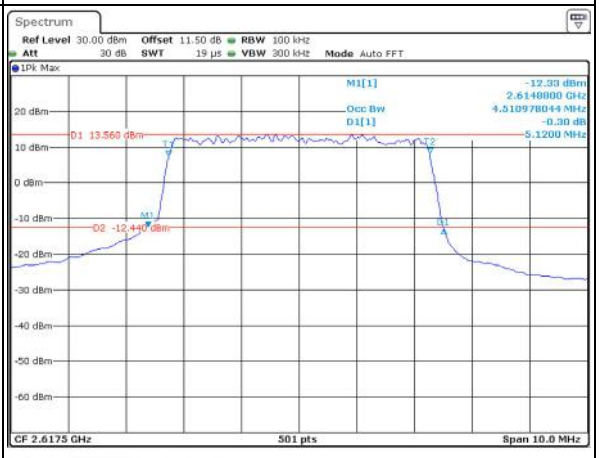
FCC §2.1051, § 27.53:Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

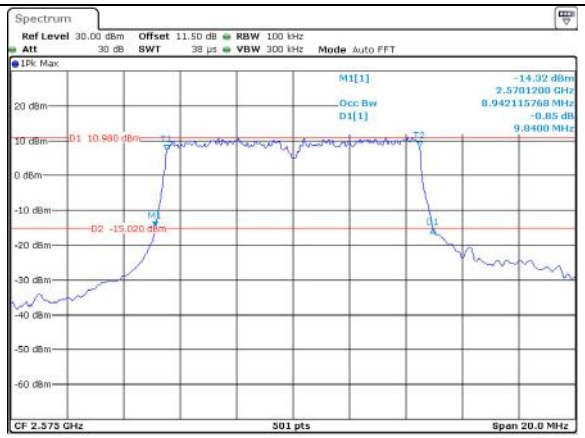
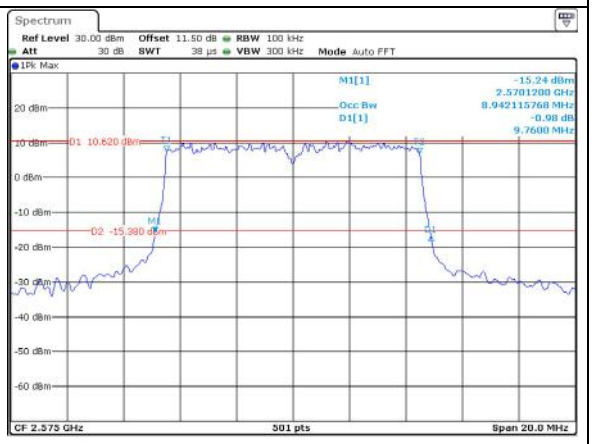
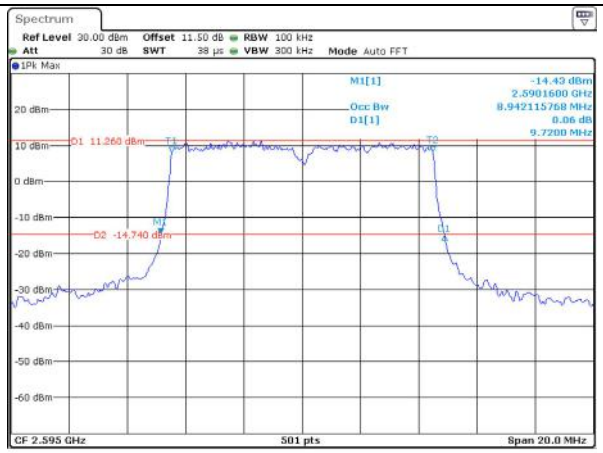
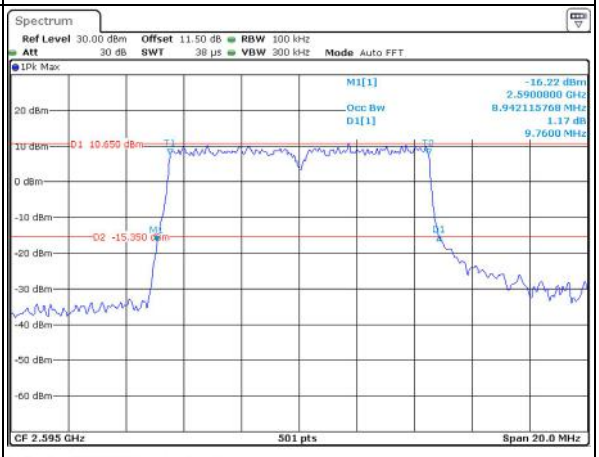
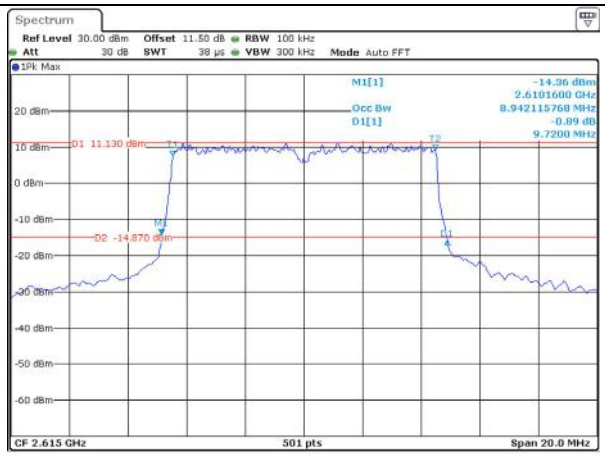
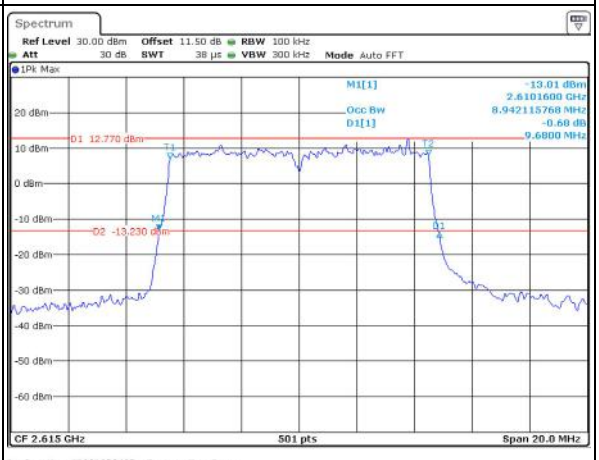
FCC §2.1055, §27.54: Frequency Stability

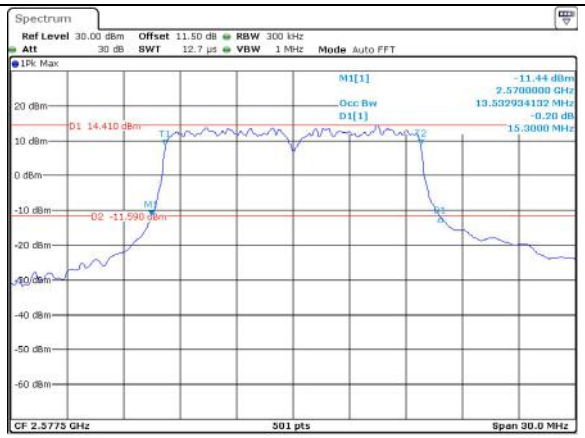
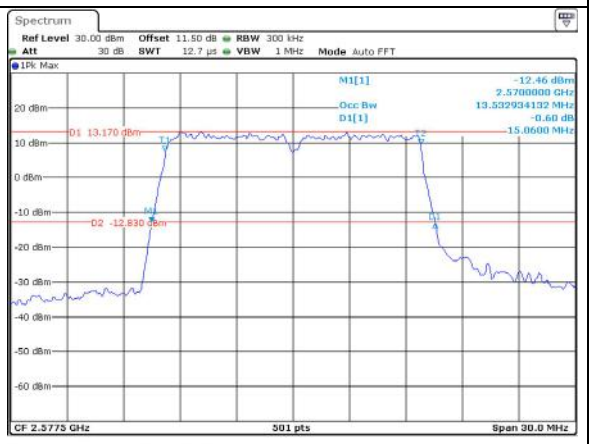
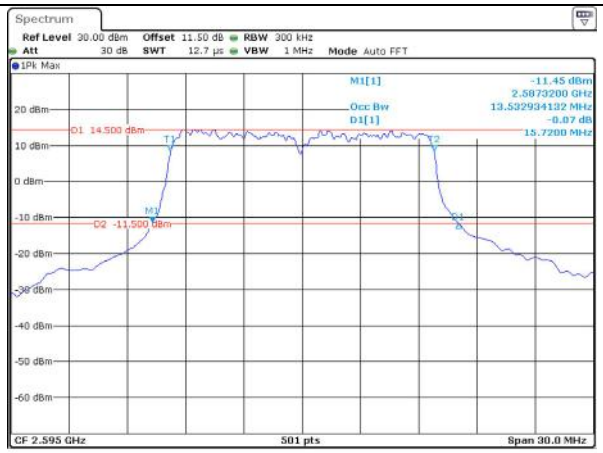
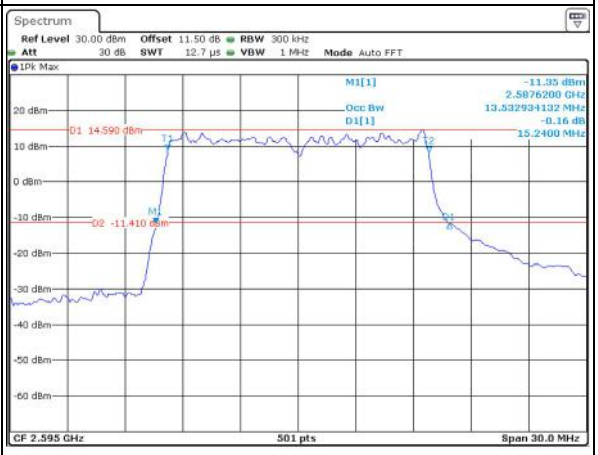
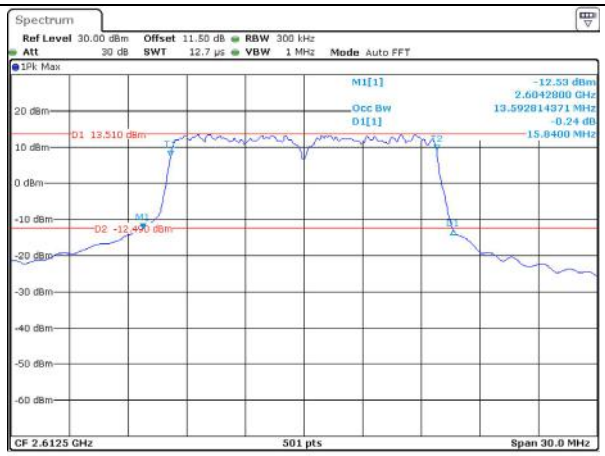
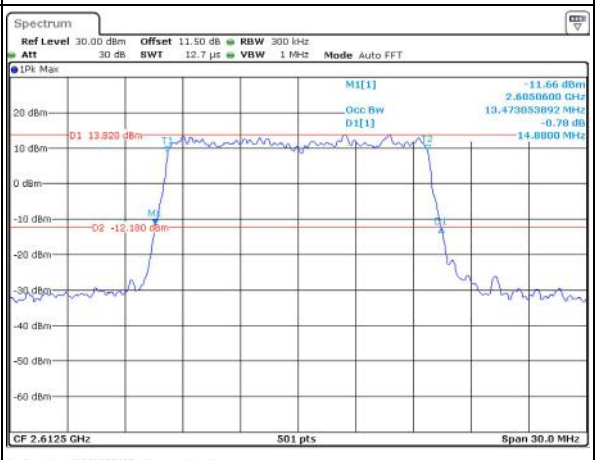
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	2570.010	2570.00	2619.994	2620
	-20	3.85	2570.021	2570.00	2619.978	2620
	-10	3.85	2570.005	2570.00	2619.987	2620
	0	3.85	2570.010	2570.00	2619.971	2620
	10	3.85	2570.001	2570.00	2619.992	2620
	20	3.85	2570.022	2570.00	2619.982	2620
	30	3.85	2570.006	2570.00	2619.995	2620
	40	3.85	2570.023	2570.00	2619.998	2620
	50	3.85	2570.020	2570.00	2619.971	2620
Frequency Stability vs. Voltage	20	3.35	2570.023	2570.00	2619.995	2620
	20	4.4	2570.006	2570.00	2619.984	2620
					Result:	**Pass**

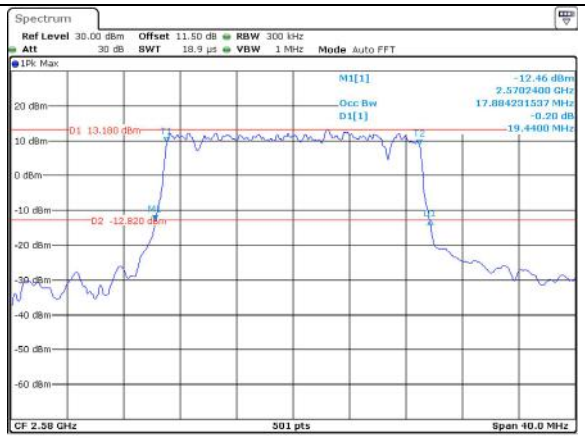
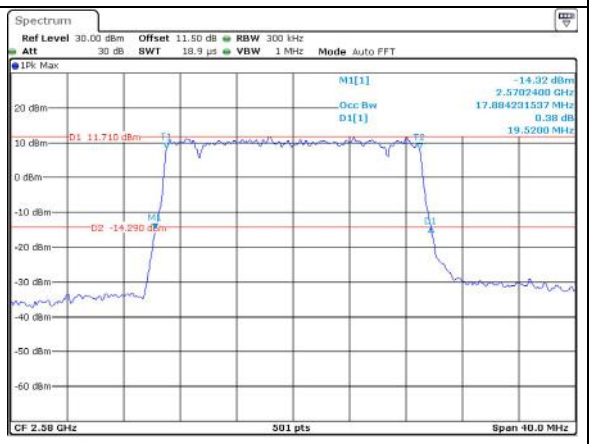
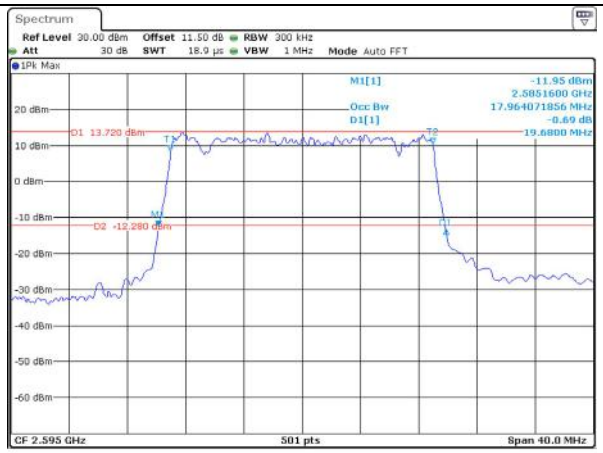
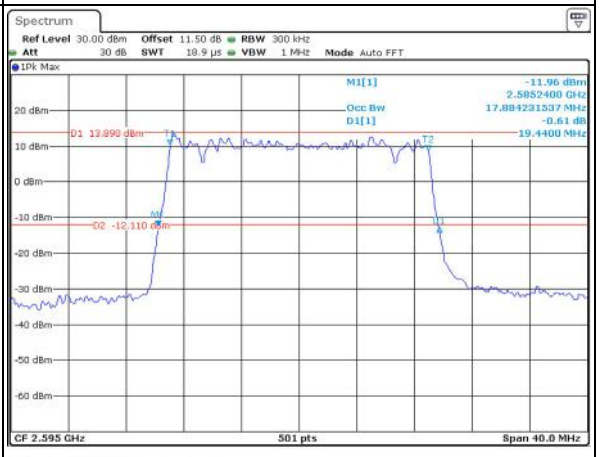
Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	2570.007	2570.00	2619.990	2620
	-20	3.85	2570.025	2570.00	2619.991	2620
	-10	3.85	2570.004	2570.00	2619.984	2620
	0	3.85	2570.028	2570.00	2619.977	2620
	10	3.85	2570.004	2570.00	2619.982	2620
	20	3.85	2570.005	2570.00	2619.998	2620
	30	3.85	2570.030	2570.00	2619.994	2620
	40	3.85	2570.014	2570.00	2619.990	2620
	50	3.85	2570.015	2570.00	2619.991	2620
Frequency Stability vs. Voltage	20	3.35	2570.004	2570.00	2619.991	2620
	20	4.4	2570.017	2570.00	2619.976	2620
					Result:	**Pass**

Test Plots(Note: The 11.5dB is the Insertion loss of the RF cable, Power Splitter and DC Block, 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