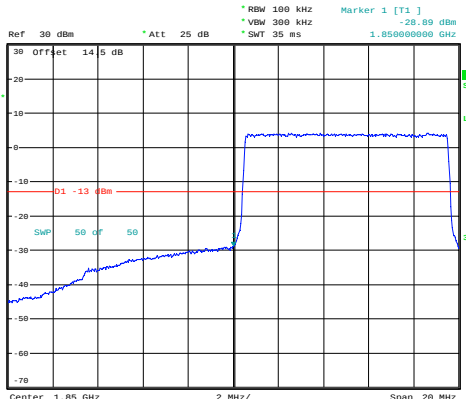
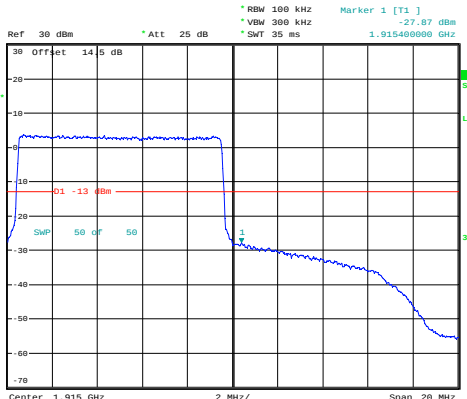
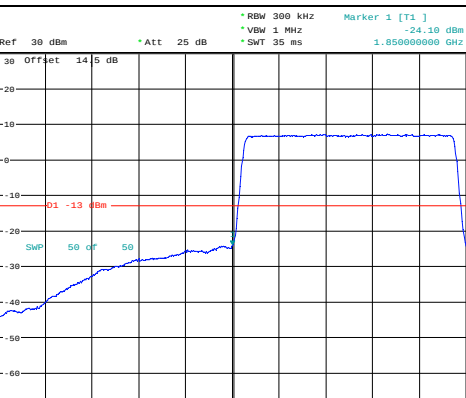
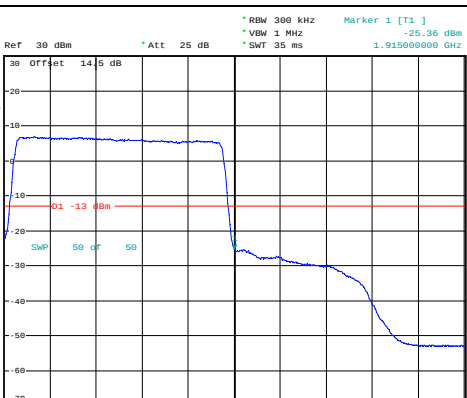
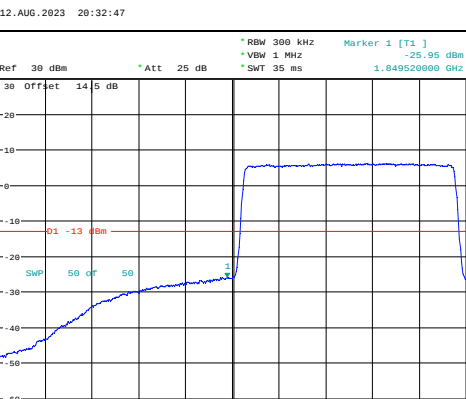
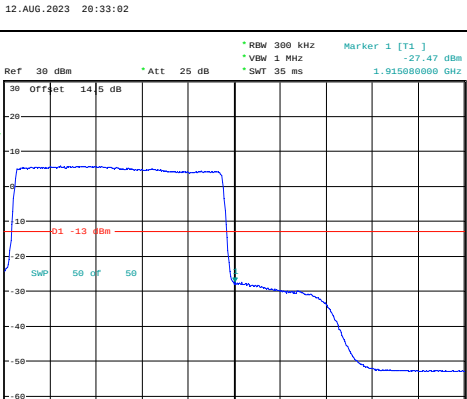
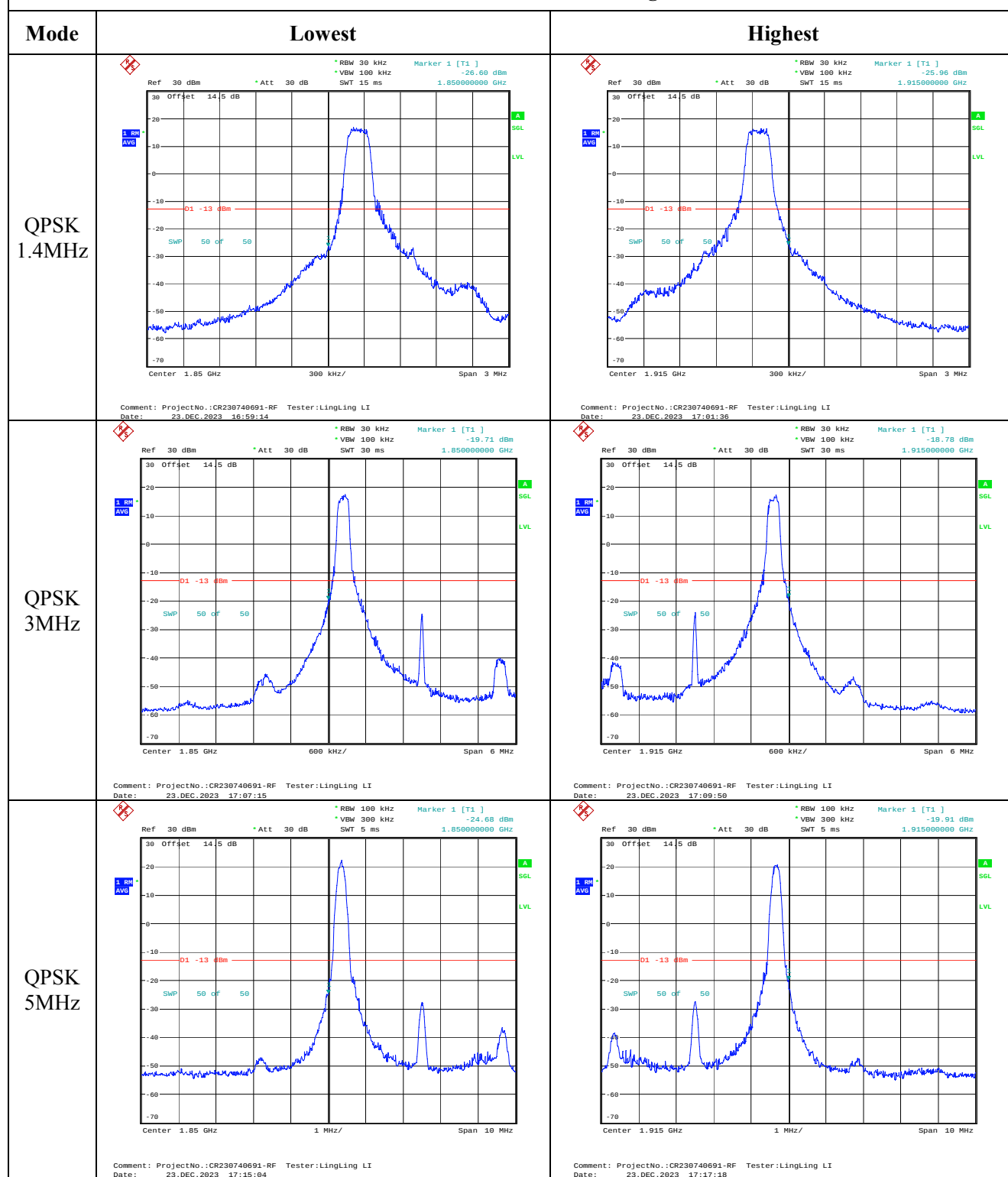


Out of band emission, Band Edge

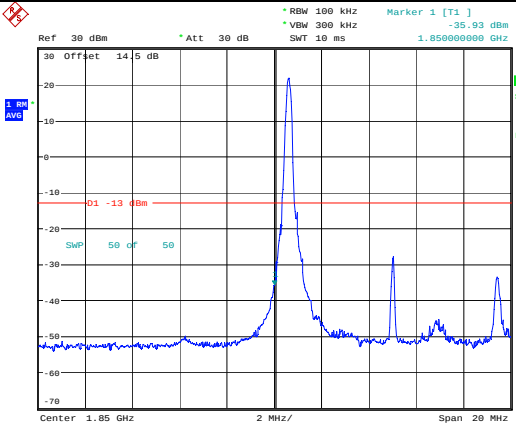
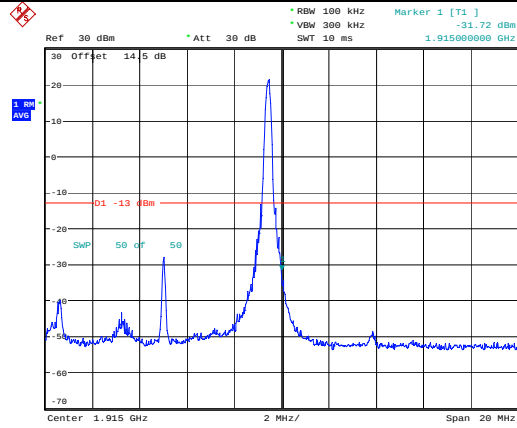
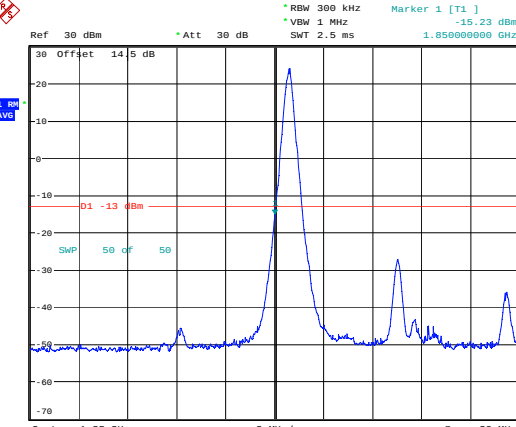
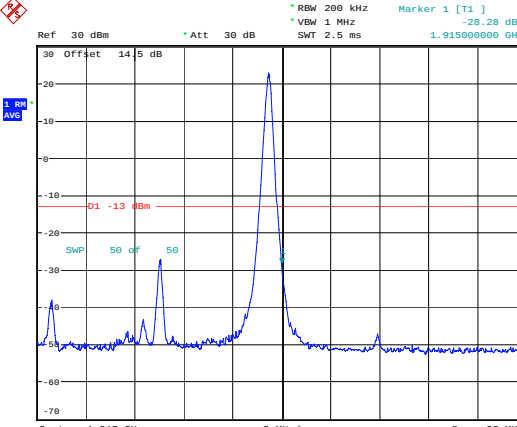
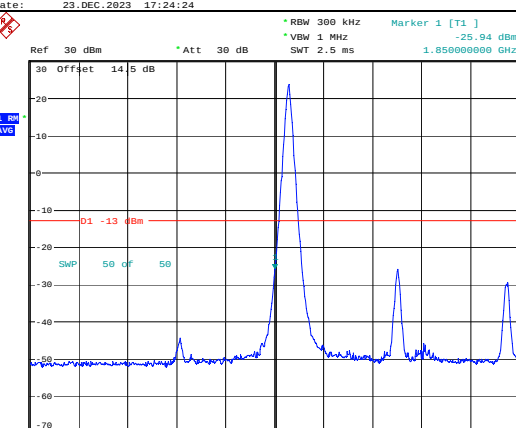
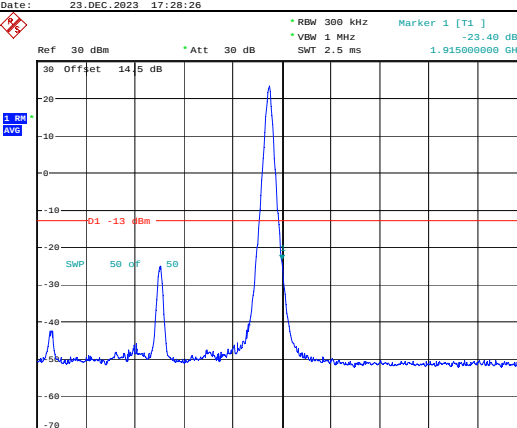
Mode	Lowest	Highest
16QAM 1.4MHz	Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 35 ms, Marker 1 [T1]: -25.59 dBm, 1.849970000 GHz Center: 1.85 GHz, Span: 3 MHz Date: 12.AUG.2023 20:11:10	Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 35 ms, Marker 1 [T1]: -22.68 dBm, 1.915024000 GHz Center: 1.915 GHz, Span: 3 MHz Date: 12.AUG.2023 20:11:27
16QAM 3MHz	Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 35 ms, Marker 1 [T1]: -25.77 dBm, 1.850000000 GHz Center: 1.85 GHz, Span: 6 MHz Date: 12.AUG.2023 20:12:14	Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 35 ms, Marker 1 [T1]: -23.82 dBm, 1.915000000 GHz Center: 1.915 GHz, Span: 6 MHz Date: 12.AUG.2023 20:12:31
16QAM 5MHz	Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -24.30 dBm, 1.850000000 GHz Center: 1.85 GHz, Span: 10 MHz Date: 12.AUG.2023 20:13:18	Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -22.22 dBm, 1.915020000 GHz Center: 1.915 GHz, Span: 10 MHz Date: 12.AUG.2023 20:13:35

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -20.89 dBm VBW 300 kHz SWT 35 ms 1.850000000 GHz 30 Offset 14.5 dB -20 -10 0 10 20 30 40 50 60 70 80 Center 1.85 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 20:30:18	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -27.87 dBm VBW 300 kHz SWT 35 ms 1.915400000 GHz 30 Offset 14.5 dB -20 -10 0 10 20 30 40 50 60 70 80 Center 1.915 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 20:30:36
16QAM 15MHz	 Ref 30 dBm Att 25 dB RBW 300 kHz Marker 1 [T1] -24.10 dBm VBW 1 MHz SWT 35 ms 1.850000000 GHz 30 Offset 14.5 dB -20 -10 0 10 20 30 40 50 60 70 80 Center 1.85 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 20:32:47	 Ref 30 dBm Att 25 dB RBW 300 kHz Marker 1 [T1] -25.36 dBm VBW 1 MHz SWT 35 ms 1.915000000 GHz 30 Offset 14.5 dB -20 -10 0 10 20 30 40 50 60 70 80 Center 1.915 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 20:33:02
16QAM 20MHz	 Ref 30 dBm Att 25 dB RBW 300 kHz Marker 1 [T1] -25.95 dBm VBW 1 MHz SWT 35 ms 1.849520000 GHz 30 Offset 14.5 dB -20 -10 0 10 20 30 40 50 60 70 80 Center 1.85 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 20:38:16	 Ref 30 dBm Att 25 dB RBW 300 kHz Marker 1 [T1] -27.47 dBm VBW 1 MHz SWT 35 ms 1.915000000 GHz 30 Offset 14.5 dB -20 -10 0 10 20 30 40 50 60 70 80 Center 1.915 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 20:38:31

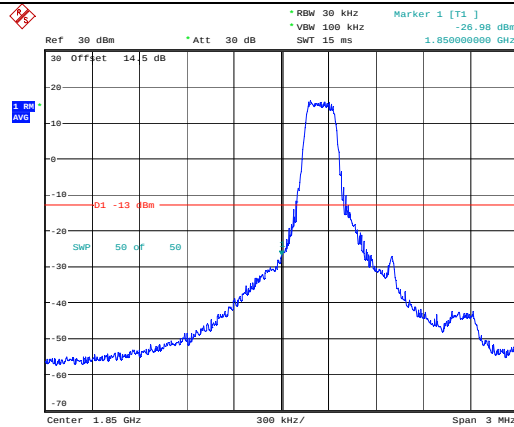
Test Plots for Out of band emission, Band Edge:
Note: The test is performed in 1RB mode.**Out of band emission, Band Edge**

Out of band emission, Band Edge

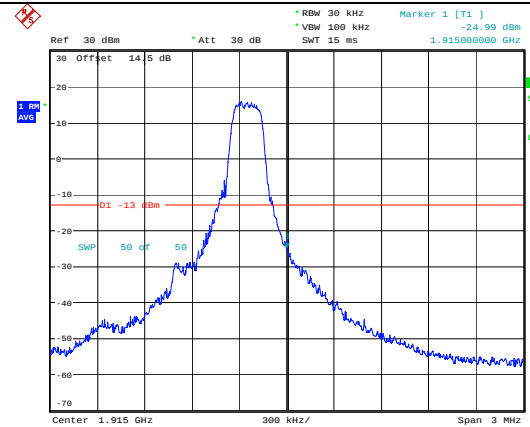
Mode	Lowest	Highest
QPSK 10MHz	 Ref 30 dBm *Att 30 dB *RBW 100 kHz *VBW 300 kHz *SWT 10 ms Marker 1 [T1] -25.93 dBm 1.850000000 GHz 30 Offset 14.5 dB D1 -13 dBm SMP 50 off 50 Center 1.85 GHz 2 MHz/ Span 20 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:20:33	 Ref 30 dBm *Att 30 dB *RBW 100 kHz *VBW 300 kHz *SWT 10 ms Marker 1 [T1] -31.72 dBm 1.915000000 GHz 30 Offset 14.5 dB D1 -13 dBm SMP 50 off 50 Center 1.915 GHz 2 MHz/ Span 20 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:22:33
QPSK 15MHz	 Ref 30 dBm *Att 30 dB *RBW 300 kHz *VBW 1 MHz *SWT 2.5 ms Marker 1 [T1] -25.94 dBm 1.850000000 GHz 30 Offset 14.5 dB D1 -13 dBm SMP 50 off 50 Center 1.85 GHz 3 MHz/ Span 30 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:24:24	 Ref 30 dBm *Att 30 dB *RBW 200 kHz *VBW 1 MHz *SWT 2.5 ms Marker 1 [T1] -28.28 dBm 1.915000000 GHz 30 Offset 14.5 dB D1 -13 dBm SMP 50 off 50 Center 1.915 GHz 3 MHz/ Span 30 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:26:26
QPSK 20MHz	 Ref 30 dBm *Att 30 dB *RBW 300 kHz *VBW 1 MHz *SWT 2.5 ms Marker 1 [T1] -25.94 dBm 1.850000000 GHz 30 Offset 14.5 dB D1 -13 dBm SMP 50 off 50 Center 1.85 GHz 4 MHz/ Span 40 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:30:30	 Ref 30 dBm *Att 30 dB *RBW 300 kHz *VBW 1 MHz *SWT 2.5 ms Marker 1 [T1] -23.40 dBm 1.915000000 GHz 30 Offset 14.5 dB D1 -13 dBm SMP 50 off 50 Center 1.915 GHz 4 MHz/ Span 40 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:34:19

Highest

16QAM
1.4MHz

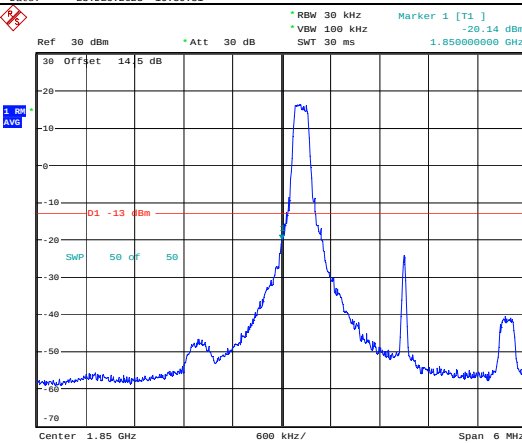


Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI
Date: 23.DEC.2023 16:59:51

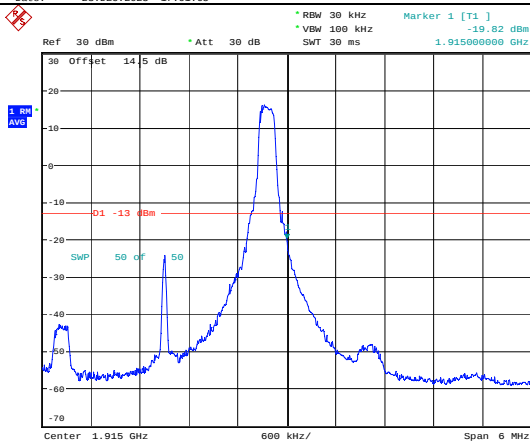


Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI
Date: 23.DEC.2023 17:01:05

16QAM
3MHz

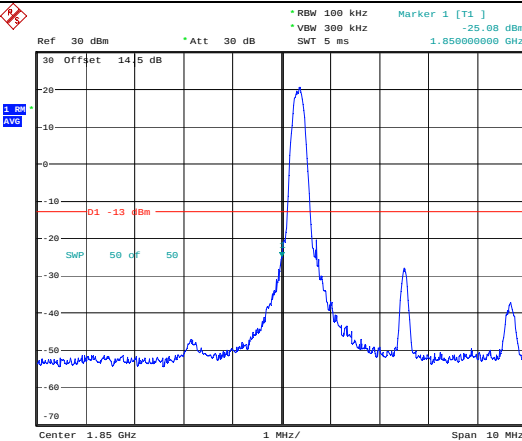


Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI
Date: 23.DEC.2023 17:07:48

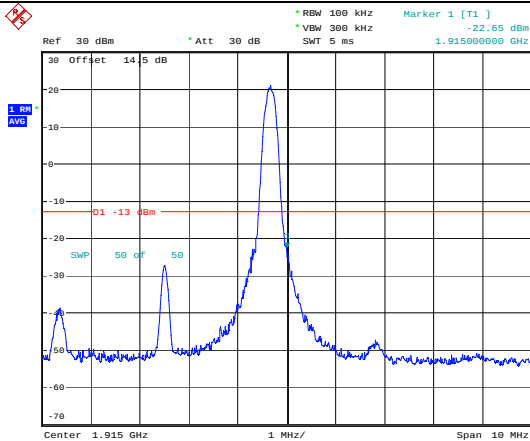


Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI
Date: 23.DEC.2023 17:09:25

16QAM
5MHz

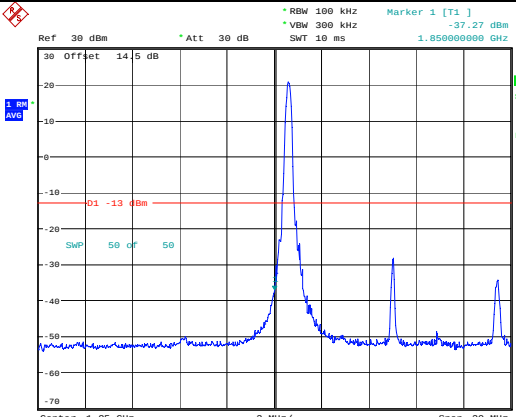
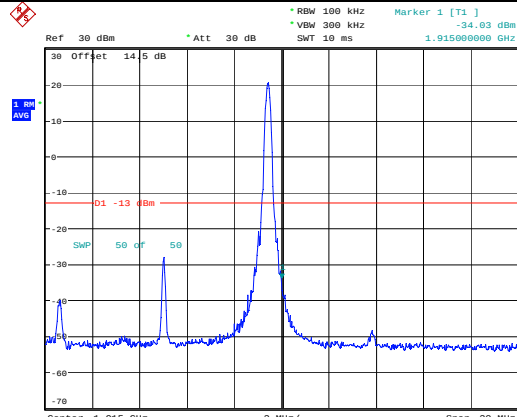
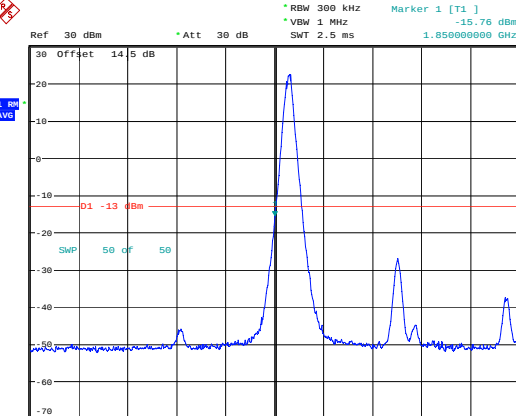
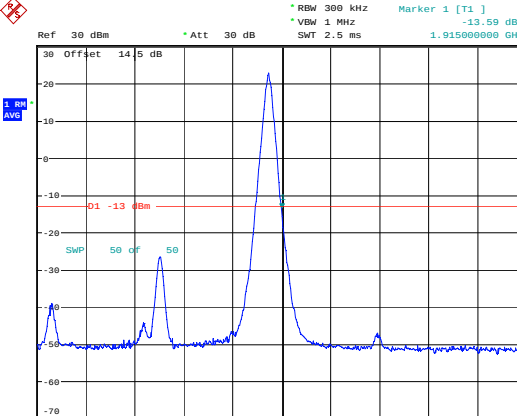
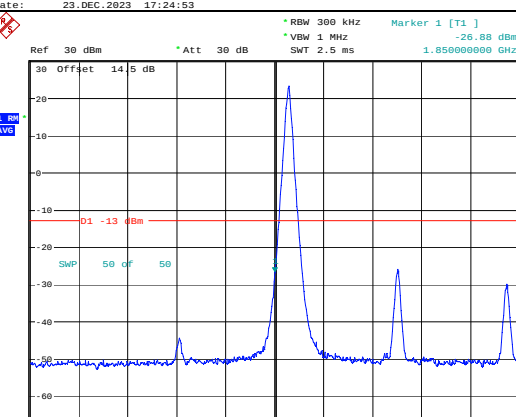
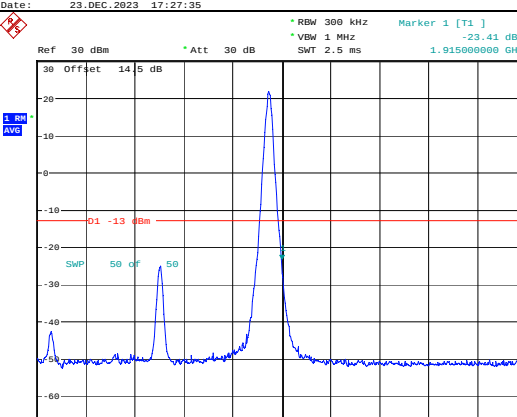


Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI
Date: 23.DEC.2023 17:15:30



Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI
Date: 23.DEC.2023 17:16:48

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:21:03	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:22:06
16QAM 15MHz	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:24:53	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:27:35
16QAM 20MHz	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:32:54	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:33:54

4.9 Antenna Port Test Data and Results for LTE Band 41

Serial Number:	288V-1	Test Date:	2023/8/4-2023/12/27
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu/Arthur Su/LingLing Li	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.3-25.1	Relative Humidity: (%)	42-60	ATM Pressure: (kPa)	99.7-101.2
-------------------	-----------	------------------------	-------	---------------------	------------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A
Unknown	Coaxial tee connector	Unknown	2204004	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	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A
R&S	Spectrum Analyzer	FSU26	100147	2023/3/31	2024/3/30

* 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	2498.5	2593	2687.5
10MHz	2501	2593	2685
15MHz	2503.5	2593	2682.5
20MHz	2506	2593	2680

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	19.59	19.7	19.06	21.22	33
	RB1#13	19.65	19.84	19.19		
	RB1#24	19.66	19.75	19.12		
	RB15#0	18.6	18.81	18.14		
	RB15#10	18.6	18.82	18.11		
	RB25#0	18.57	18.8	18.09		
5MHz 16QAM	RB1#0	18.94	18.87	18.29	20.42	33
	RB1#13	19.04	18.99	18.42		
	RB1#24	19.04	18.96	18.3		
	RB15#0	17.77	17.83	17.27		
	RB15#10	17.79	17.88	17.31		
	RB25#0	17.73	17.98	17.33		
10MHz QPSK	RB1#0	19.6	19.21	19.28	21.12	33
	RB1#25	19.69	19.38	18.72		
	RB1#49	19.74	19.37	19.34		
	RB25#0	18.73	18.29	17.94		
	RB25#25	18.72	18.41	17.99		
	RB50#0	18.71	18.38	17.93		
10MHz 16QAM	RB1#0	18.85	18.57	18.32	20.38	33
	RB1#25	18.94	18.68	17.74		
	RB1#49	19	18.7	18.4		
	RB25#0	17.82	17.46	17.04		
	RB25#25	17.89	17.54	17.14		
	RB50#0	17.89	17.5	17.06		
15MHz QPSK	RB1#0	19.61	19.82	19.32	21.37	33
	RB1#38	19.8	19.99	19.41		
	RB1#74	19.76	19.95	19.38		
	RB36#0	18.68	18.95	18.44		
	RB36#39	18.74	19.02	18.4		
	RB75#0	18.71	18.93	18.46		
15MHz 16QAM	RB1#0	18.97	19.17	18.37	20.71	33
	RB1#38	19.12	19.33	18.48		
	RB1#74	19.15	19.33	18.44		
	RB36#0	17.88	18.01	17.5		
	RB36#39	17.92	18.1	17.5		
	RB75#0	17.84	18.08	17.61		
20MHz QPSK	RB1#0	19.65	19.13	20.07	21.45	33
	RB1#50	19.86	19.48	19.06		
	RB1#99	19.83	19.55	19.14		

20MHz 16QAM	RB50#0	18.75	18.37	18.15	20.63	33
	RB50#50	18.83	18.58	18.11		
	RB100#0	18.81	18.53	18.2		
	RB1#0	19.03	18.48	19.17		
	RB1#50	19.25	18.73	18.18		
	RB1#99	19.24	18.72	18.29		
	RB50#0	17.89	17.11	17.35		
	RB50#50	17.98	17.24	17.27		
	RB100#0	17.93	17.06	17.34		

Note: EIRP=Conducted Power(dBm) - Lc(dB) + G_T(dBi)

Result:**Pass****Peak-to-average Ratio(PAR)**

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit(dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	4.93	6.97	5.45	13
	RB100#0	7.21	7.38	7.21	13
20MHz 16QAM	RB1#0	6.75	6.42	6.78	13
	RB100#0	7.98	8.05	8.34	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	4.52	4.52	4.52	5.16	4.92	4.92
5MHz 16QAM	4.52	4.52	4.52	5.00	4.98	5.10
10MHz QPSK	8.96	8.96	8.96	9.60	9.64	9.72
10MHz 16QAM	8.96	8.96	8.96	9.68	9.56	9.56
15MHz QPSK	13.44	13.5	13.5	14.76	14.8	14.8
15MHz 16QAM	13.5	13.5	13.5	14.9	14.9	14.8
20MHz QPSK	17.92	17.92	17.84	19.36	19.36	19.12
20MHz 16QAM	17.92	17.84	17.92	19.44	19.36	19.28

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
------------	----------	--

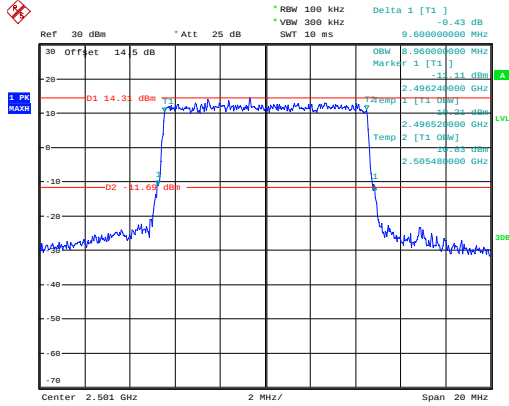
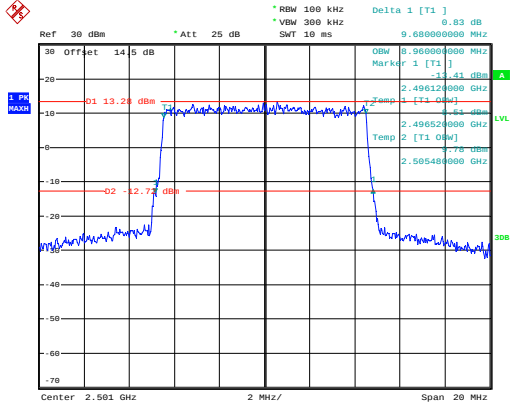
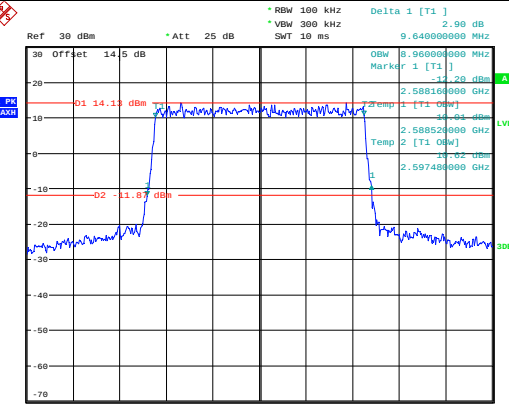
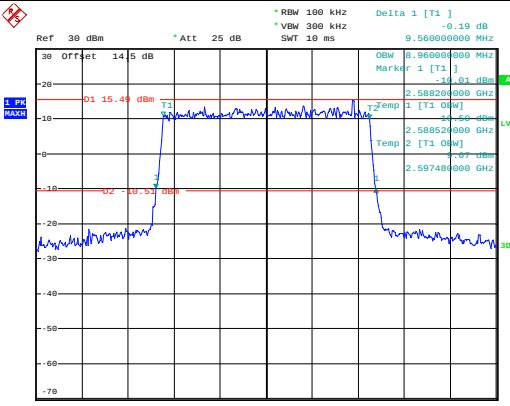
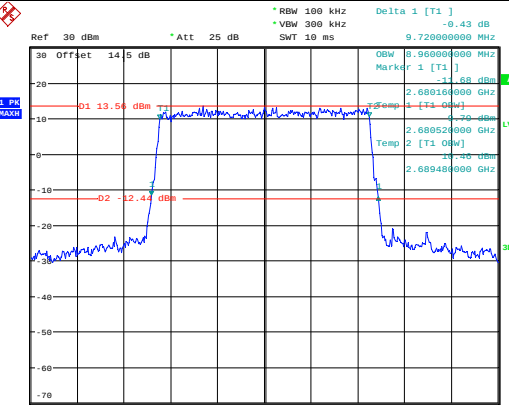
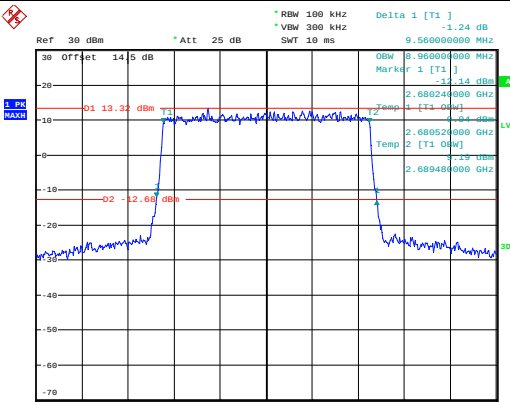
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	5	2497.016	2496.00	2688.985	2690
	-20	5	2497.022	2496.00	2688.988	2690
	-10	5	2497.021	2496.00	2688.982	2690
	0	5	2497.038	2496.00	2688.988	2690
	10	5	2497.035	2496.00	2688.983	2690
	20	5	2497.040	2496.00	2688.960	2690
	30	5	2497.031	2496.00	2688.970	2690
	40	5	2497.018	2496.00	2688.974	2690
	50	5	2497.027	2496.00	2688.972	2690
Frequency Stability vs. Voltage	20	4.4	2497.024	2496.00	2688.981	2690
	20	5.25	2497.030	2496.00	2688.975	2690
					Result:	Pass

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	5	2497.031	2496.00	2688.986	2690
	-20	5	2497.017	2496.00	2688.963	2690
	-10	5	2497.016	2496.00	2688.973	2690
	0	5	2497.039	2496.00	2688.971	2690
	10	5	2497.020	2496.00	2688.987	2690
	20	5	2497.040	2496.00	2688.960	2690
	30	5	2497.011	2496.00	2688.977	2690
	40	5	2497.033	2496.00	2688.965	2690
	50	5	2497.016	2496.00	2688.962	2690
Frequency Stability vs. Voltage	20	4.4	2497.017	2496.00	2688.967	2690
	20	5.25	2497.012	2496.00	2688.978	2690
					Result:	Pass

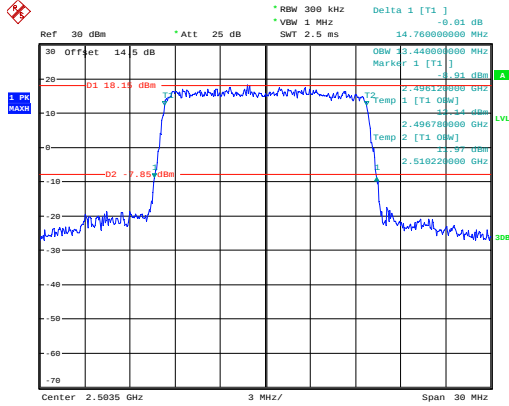
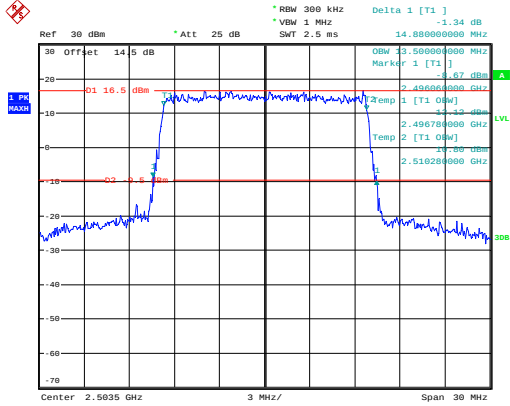
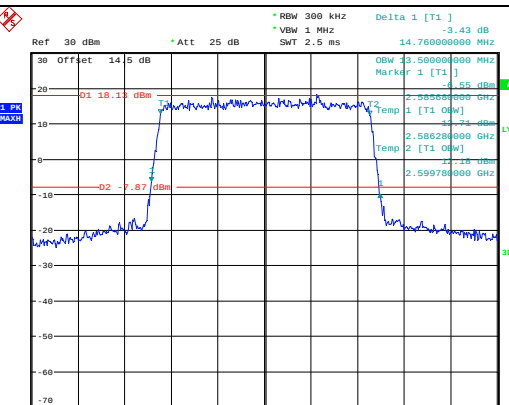
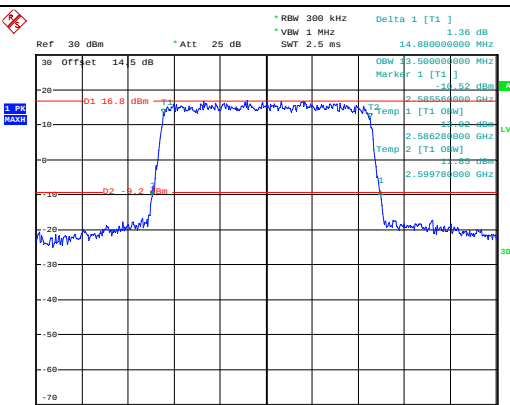
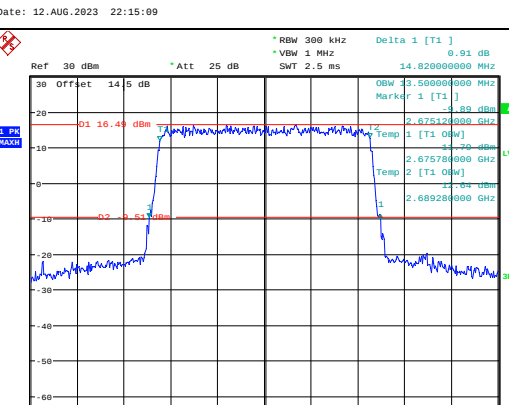
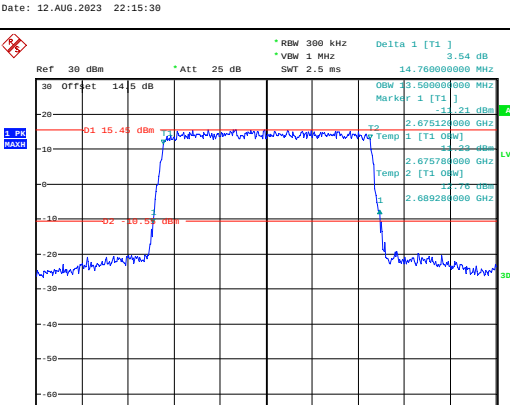
Occupied Bandwidth

Page 158 of 240

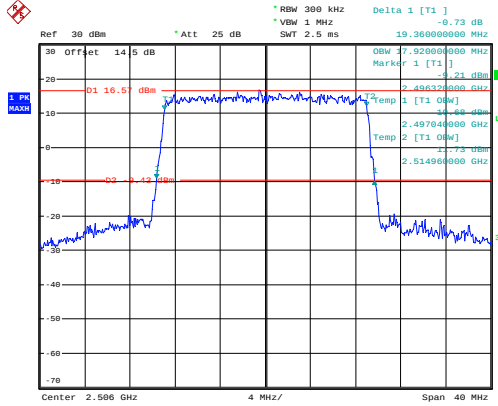
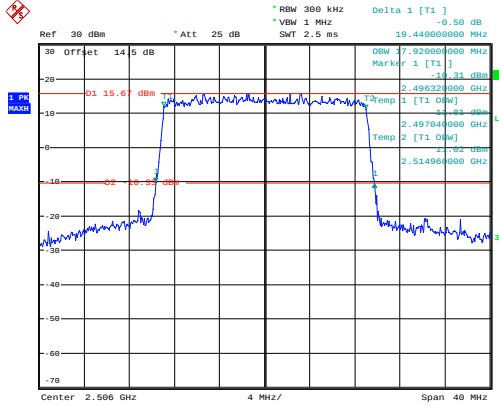
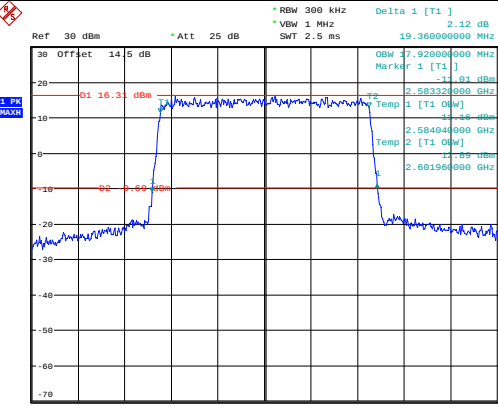
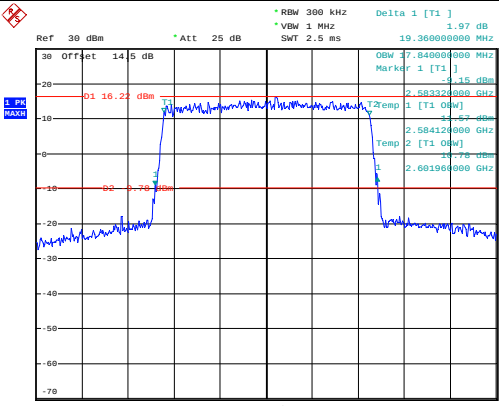
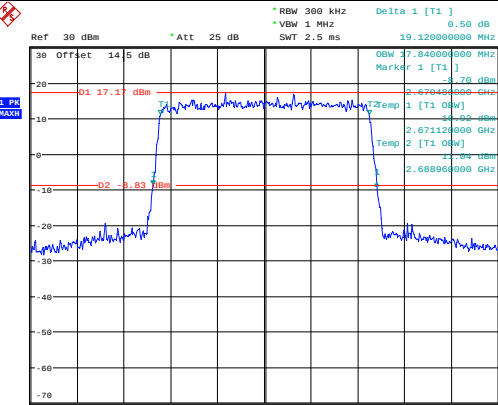
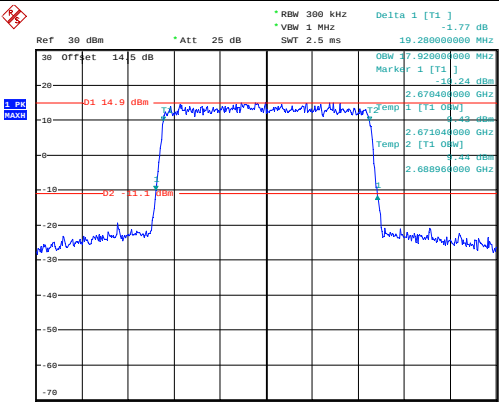
Occupied Bandwidth

Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm *Att 25 dB RBW 100 kHz Delta 1 [T1] -0.43 dB VBW 300 kHz SWT 10 ms 9.600000000 MHz Marker 1 [T1] -11.11 dBm Temp 1 [T1] 2.496240000 GHz Temp 2 [T1] 2.496520000 GHz Temp 3 [T1] 2.505480000 GHz LVL 30B Center 2.581 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 22:12:13	 Ref 30 dBm *Att 25 dB RBW 100 kHz Delta 1 [T1] -0.83 dB VBW 300 kHz SWT 10 ms 9.680000000 MHz Marker 1 [T1] -11.41 dBm Temp 1 [T1] 2.496120000 GHz Temp 2 [T1] 2.496520000 GHz Temp 3 [T1] 2.505480000 GHz LVL 30B Center 2.581 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 22:12:31
Middle	 Ref 30 dBm *Att 25 dB RBW 100 kHz Delta 1 [T1] -2.90 dB VBW 300 kHz SWT 10 ms 9.640000000 MHz Marker 1 [T1] -11.28 dBm Temp 1 [T1] 2.588160000 GHz Temp 2 [T1] 2.588520000 GHz Temp 3 [T1] 2.597480000 GHz LVL 30B Center 2.593 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 22:12:49	 Ref 30 dBm *Att 25 dB RBW 100 kHz Delta 1 [T1] -1.19 dB VBW 300 kHz SWT 10 ms 9.560000000 MHz Marker 1 [T1] -11.81 dBm Temp 1 [T1] 2.588280000 GHz Temp 2 [T1] 2.588520000 GHz Temp 3 [T1] 2.597480000 GHz LVL 30B Center 2.593 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 22:13:10
Highest	 Ref 30 dBm *Att 25 dB RBW 100 kHz Delta 1 [T1] -0.43 dB VBW 300 kHz SWT 10 ms 9.720000000 MHz Marker 1 [T1] -11.68 dBm Temp 1 [T1] 2.689160000 GHz Temp 2 [T1] 2.689520000 GHz Temp 3 [T1] 2.689480000 GHz LVL 30B Center 2.685 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 22:13:29	 Ref 30 dBm *Att 25 dB RBW 100 kHz Delta 1 [T1] -1.24 dB VBW 300 kHz SWT 10 ms 9.560000000 MHz Marker 1 [T1] -11.14 dBm Temp 1 [T1] 2.689240000 GHz Temp 2 [T1] 2.689520000 GHz Temp 3 [T1] 2.689480000 GHz LVL 30B Center 2.685 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 22:13:46

Occupied Bandwidth

Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] -0.01 dB VBW 1 MHz SWT 2.5 ms OBW 14.760000000 MHz Marker 1 [T1] -18.13 dB 1 PK MAX 30B Center 2.5835 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 22:14:33	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] -1.34 dB VBW 1 MHz SWT 2.5 ms OBW 14.880000000 MHz Marker 1 [T1] -16.5 dB 1 PK MAX 30B Center 2.5835 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 22:14:51
Middle	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] -3.43 dB VBW 1 MHz SWT 2.5 ms OBW 14.760000000 MHz Marker 1 [T1] -18.13 dB 1 PK MAX 30B Center 2.593 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 22:15:09	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] -1.35 dB VBW 1 MHz SWT 2.5 ms OBW 14.880000000 MHz Marker 1 [T1] -16.8 dB 1 PK MAX 30B Center 2.593 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 22:15:30
Highest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.91 dB VBW 1 MHz SWT 2.5 ms OBW 14.820000000 MHz Marker 1 [T1] -16.49 dB 1 PK MAX 30B Center 2.6825 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 22:15:45	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 3.54 dB VBW 1 MHz SWT 2.5 ms OBW 14.760000000 MHz Marker 1 [T1] -15.45 dB 1 PK MAX 30B Center 2.6825 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 22:16:03

Occupied Bandwidth

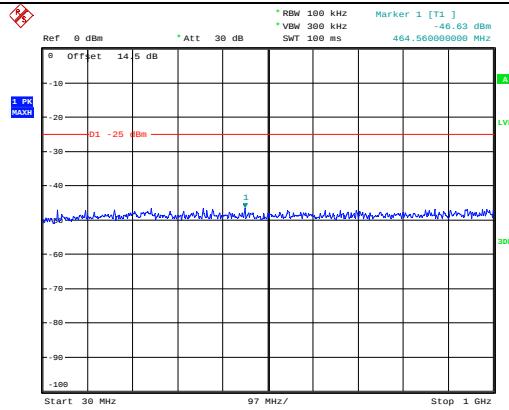
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] *VBW 1 MHz 2.12 dB SWT 2.5 ms 19.360000000 MHz Marker 1 [T1] -16.57 dBm 2.586320000 GHz 2.514960000 GHz -10.12 dBm Center 2.586 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 22:16:46	 Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] *VBW 1 MHz 2.12 dB SWT 2.5 ms 19.440000000 MHz Marker 1 [T1] -15.07 dBm 2.586320000 GHz 2.514960000 GHz -10.31 dBm Center 2.586 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 22:17:07
Middle	 Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] *VBW 1 MHz 2.12 dB SWT 2.5 ms 19.360000000 MHz Marker 1 [T1] -16.33 dBm 2.583200000 GHz 2.601960000 GHz -10.60 dBm Center 2.593 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 22:17:25	 Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] *VBW 1 MHz 2.12 dB SWT 2.5 ms 19.360000000 MHz Marker 1 [T1] -16.22 dBm 2.583200000 GHz 2.601960000 GHz -10.76 dBm Center 2.593 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 22:17:40
Highest	 Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] *VBW 1 MHz 0.50 dB SWT 2.5 ms 19.120000000 MHz Marker 1 [T1] -17.17 dBm 2.671120000 GHz 2.688960000 GHz -10.83 dBm Center 2.68 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 22:18:01	 Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] *VBW 1 MHz 0.50 dB SWT 2.5 ms 19.280000000 MHz Marker 1 [T1] -14.9 dBm 2.671120000 GHz 2.688960000 GHz -11.1 dBm Center 2.68 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 22:18:19

Spurious Emissions at Antenna Terminal

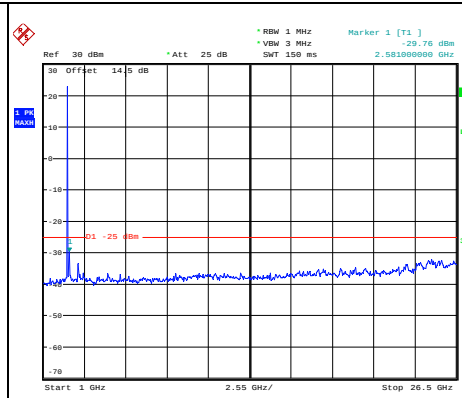
Channel

5MHz Bandwidth QPSK

Lowest

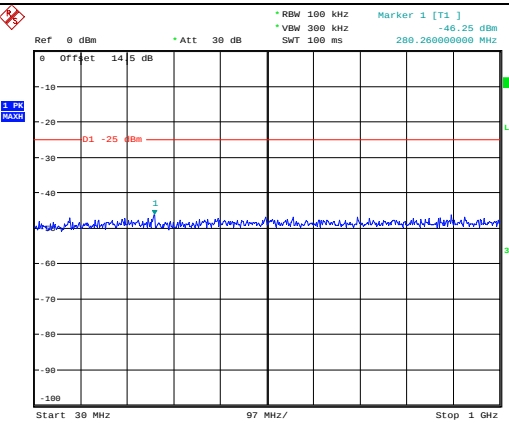


Date: 12.AUG.2023 22:39:21

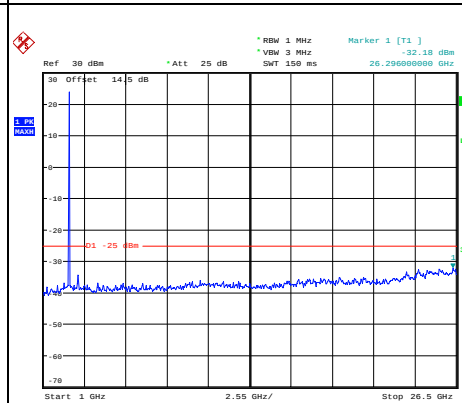


Date: 12.AUG.2023 22:39:32

Middle

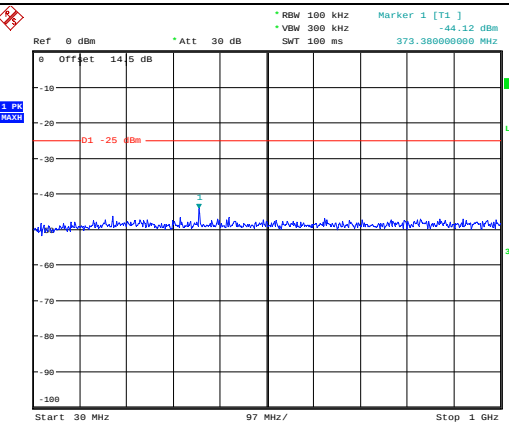


Date: 12.AUG.2023 22:39:46

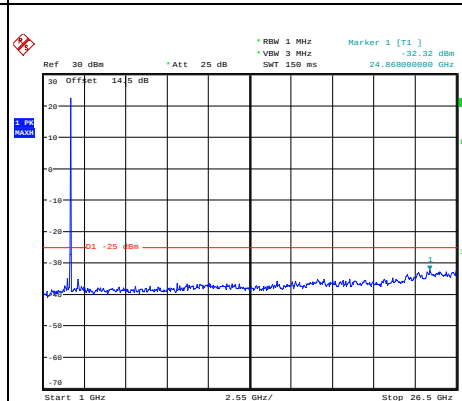


Date: 12.AUG.2023 22:39:57

Highest



Date: 12.AUG.2023 22:40:10



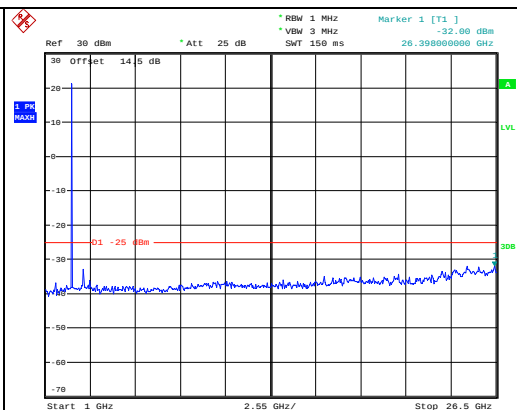
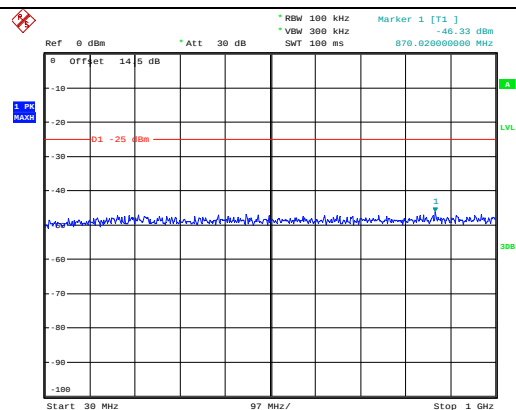
Date: 12.AUG.2023 22:40:22

Spurious Emissions at Antenna Terminal

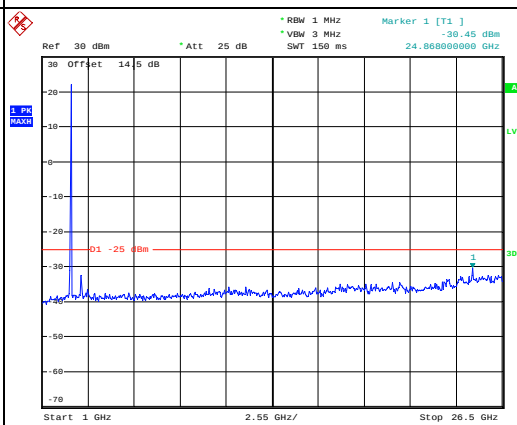
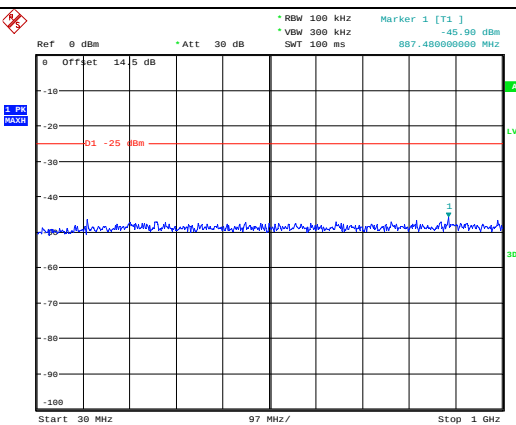
Channel

10MHz Bandwidth QPSK

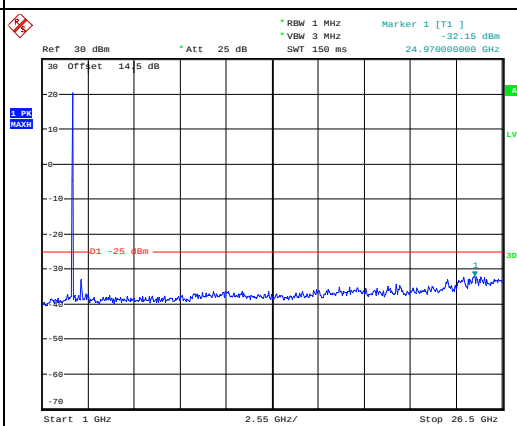
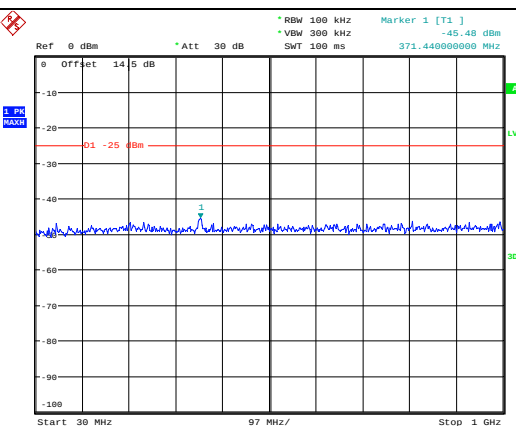
Lowest



Middle



Highest

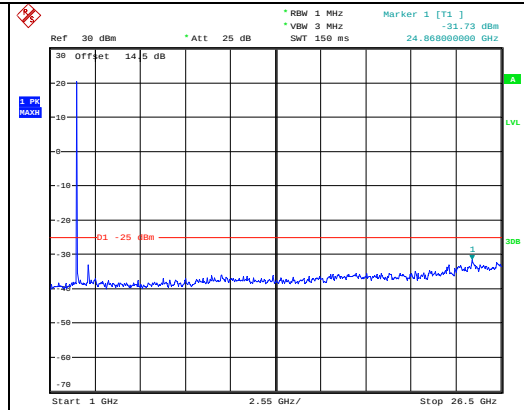
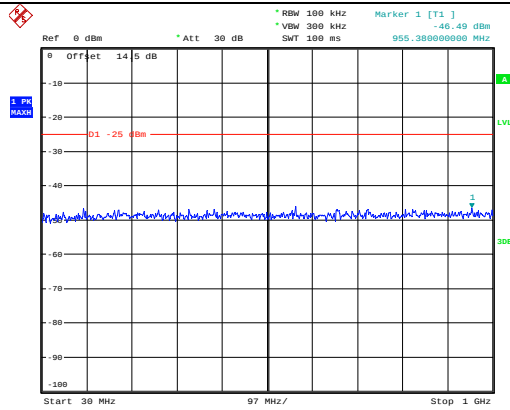


Spurious Emissions at Antenna Terminal

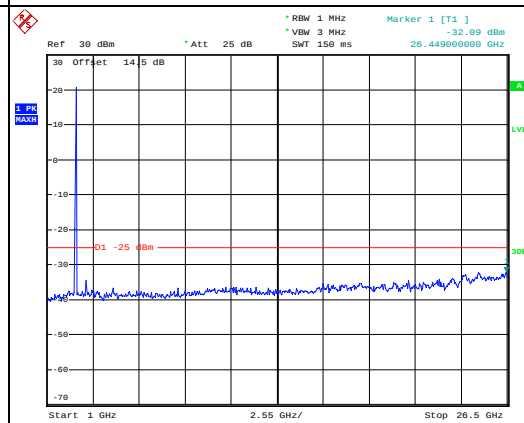
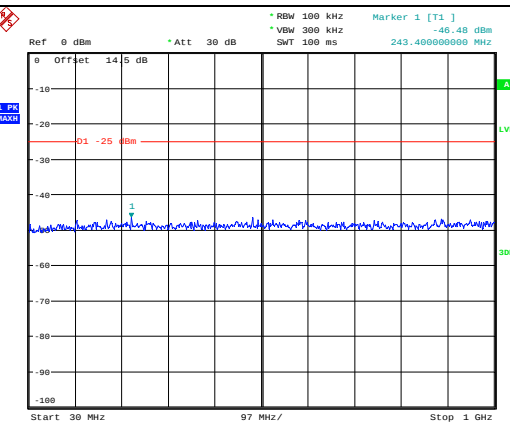
Channel

15MHz Bandwidth QPSK

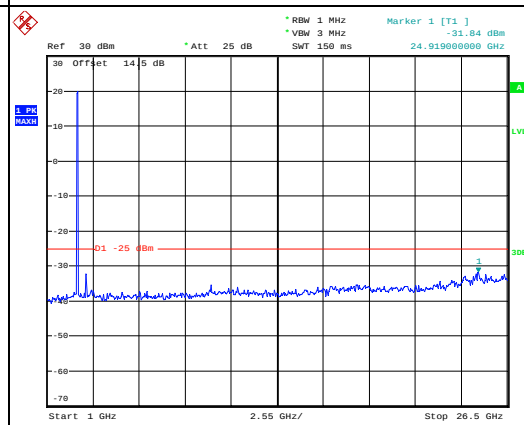
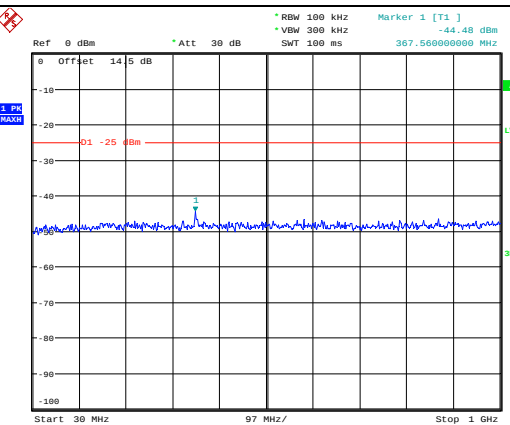
Lowest



Middle



Highest

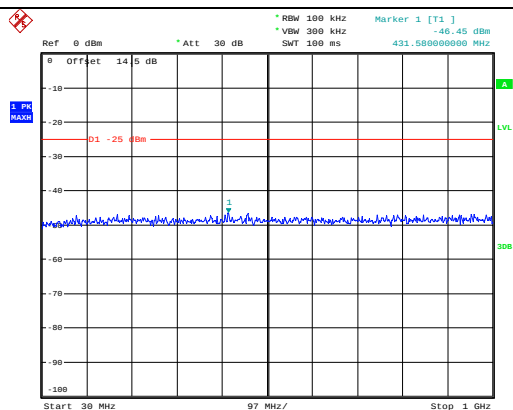


Spurious Emissions at Antenna Terminal

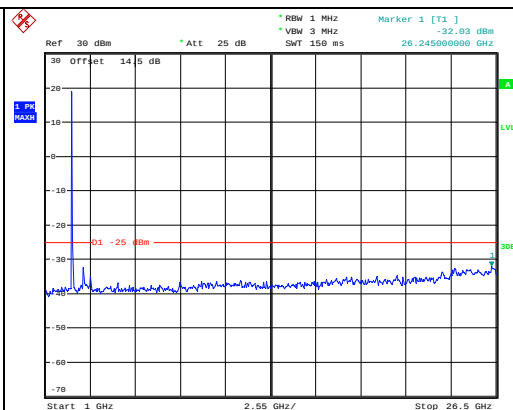
Channel

20MHz Bandwidth QPSK

Lowest

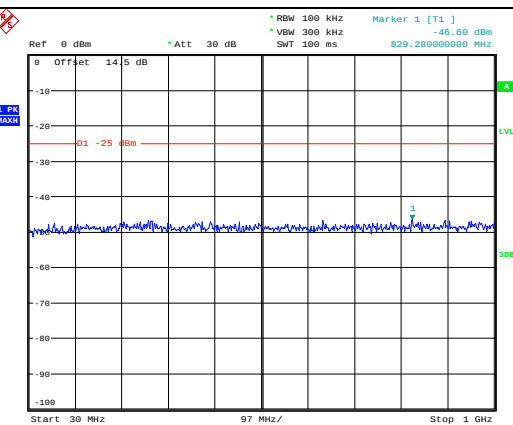


Date: 12.AUG.2023 22:44:27

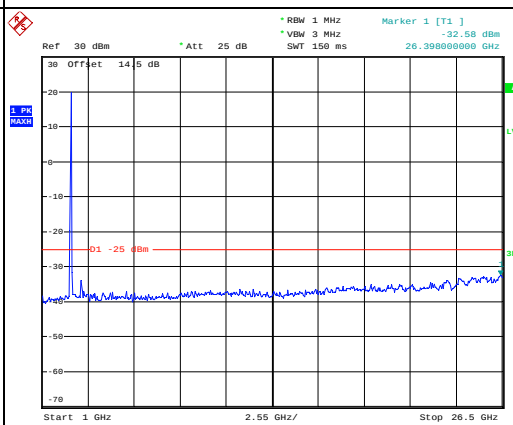


Date: 12.AUG.2023 22:44:38

Middle

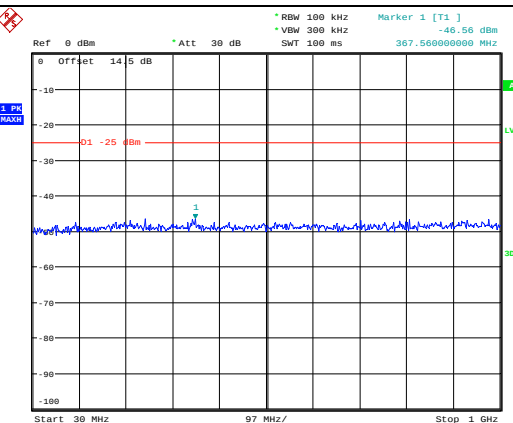


Date: 12.AUG.2023 22:44:51

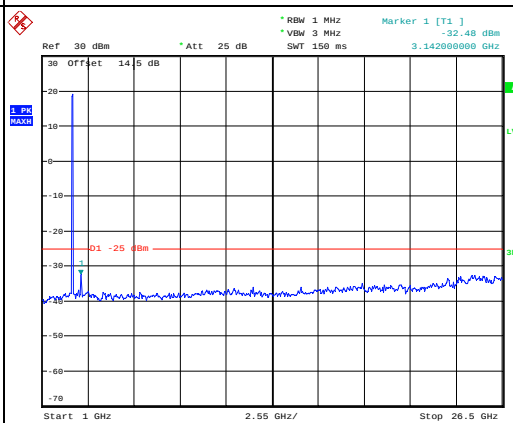


Date: 12.AUG.2023 22:45:03

Highest



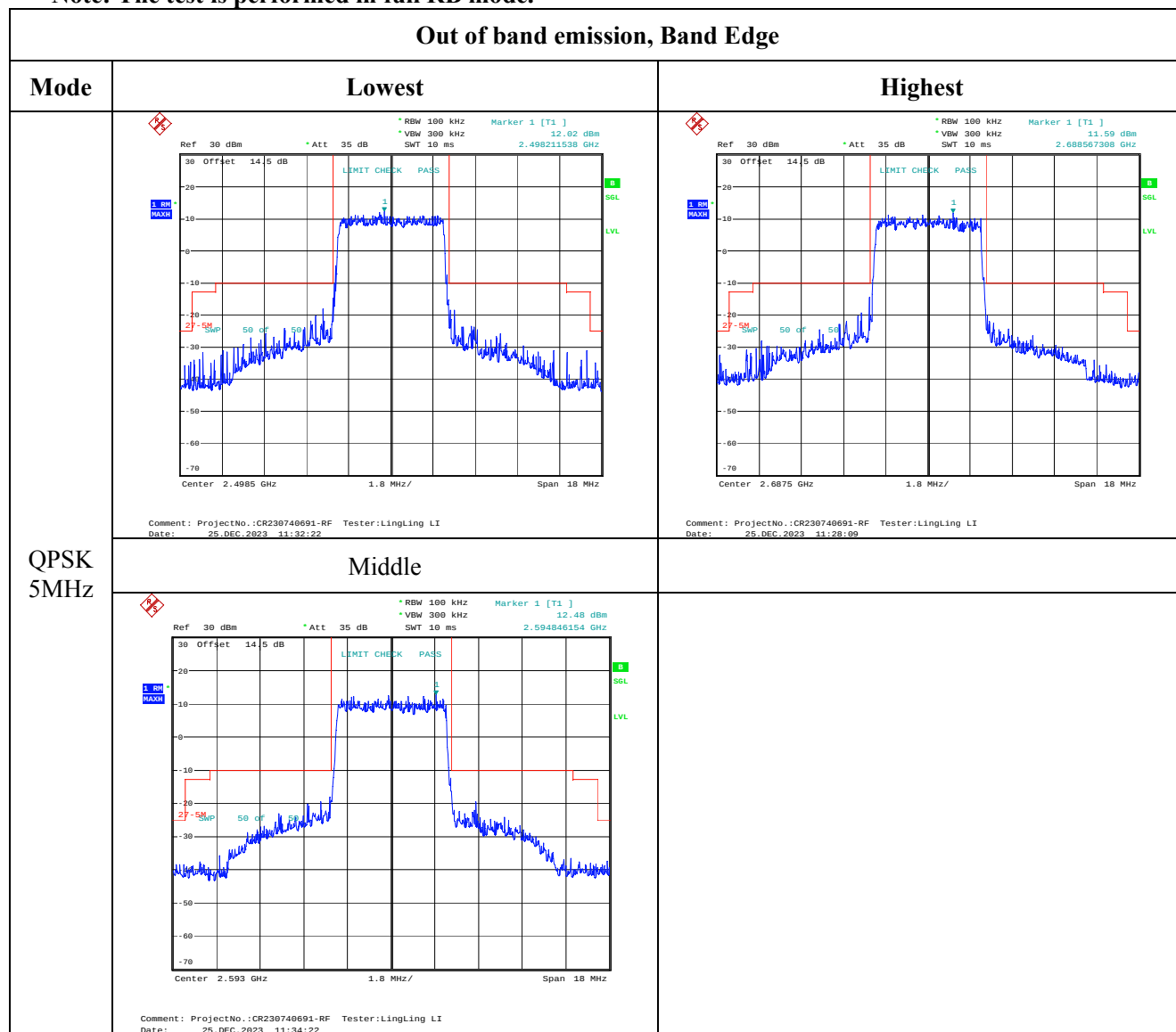
Date: 12.AUG.2023 22:45:16



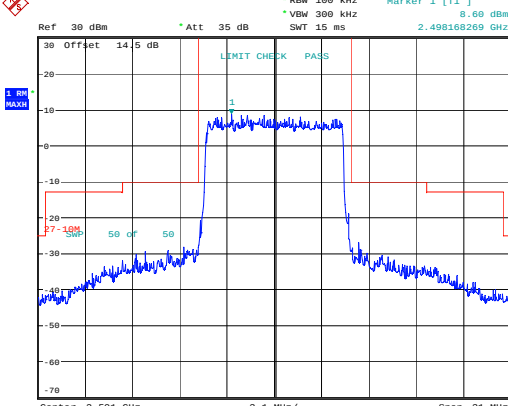
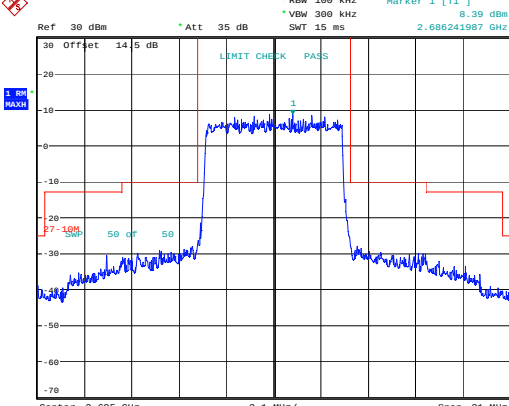
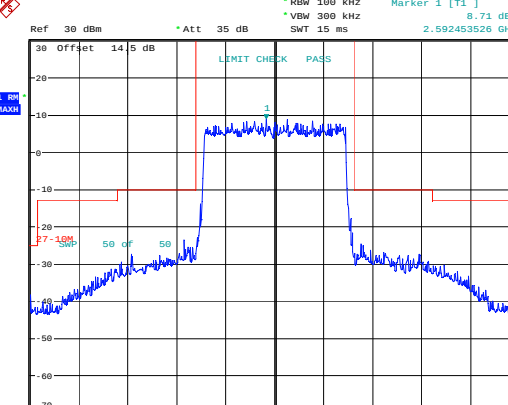
Date: 12.AUG.2023 22:45:27

Test Plots for Out of band emission, Band Edge:

Note: The test is performed in full RB mode.



Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz	Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 8.60 dBm *VBW 300 kHz SWT 15 ms 2.498168269 GHz  Center 2.501 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC.2023 13:44:25	Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 8.39 dBm *VBW 300 kHz SWT 15 ms 2.686241987 GHz  Center 2.685 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC.2023 11:40:35
	Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 8.71 dBm *VBW 300 kHz SWT 15 ms 2.592453526 GHz  Center 2.593 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC.2023 11:56:15	

Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 15MHz	Ref 30 dBm * Att 35 dB * RBW 300 kHz Marker 1 [T1] 14.26 dBm * VBW 1 MHz SWT 2.5 ms 2.497602564 GHz Center 2.5035 GHz 4.6 MHz/ Span 46 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 13:58:27	Ref 30 dBm * Att 35 dB * RBW 300 kHz Marker 1 [T1] 12.78 dBm * VBW 1 MHz SWT 2.5 ms 2.681320513 GHz Center 2.6825 GHz 4.6 MHz/ Span 46 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 13:54:00
	Ref 30 dBm * Att 35 dB * RBW 300 kHz Marker 1 [T1] 13.83 dBm * VBW 1 MHz SWT 2.5 ms 2.589387821 GHz Center 2.593 GHz 4.6 MHz/ Span 46 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 13:55:46	

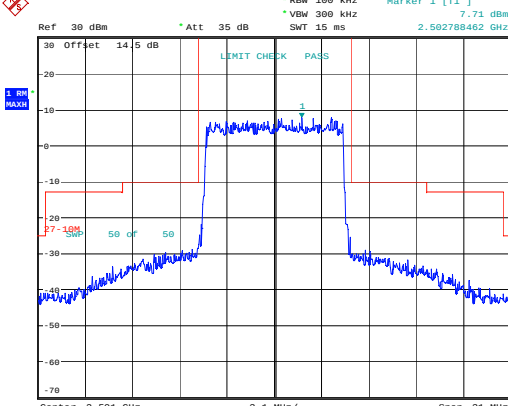
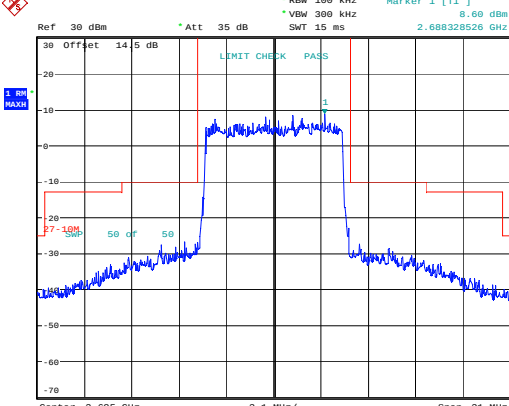
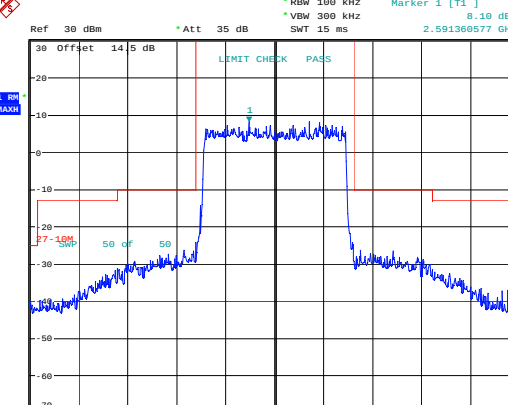
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 20MHz	Ref 30 dBm Offset 14.5 dB Att 35 dB RBW 300 kHz Marker 1 [T1] 13.38 dBm VBW 1 MHz SWT 2.5 ms 2.588737179 GHz Center 2.586 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC.2023 11:00:36	Ref 30 dBm Offset 14.5 dB Att 35 dB RBW 300 kHz Marker 1 [T1] 11.53 dBm VBW 1 MHz SWT 2.5 ms 2.683225952 GHz Center 2.68 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC.2023 10:58:09
	Ref 30 dBm Offset 14.5 dB Att 35 dB RBW 300 kHz Marker 1 [T1] 12.53 dBm VBW 1 MHz SWT 2.5 ms 2.590458333 GHz Center 2.593 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC.2023 11:03:45	

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 5MHz	Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 11.56 dBm *VBW 300 kHz SWT 10 ms 2.497403846 GHz Center 2.4985 GHz 1.8 MHz/ Span 18 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC 2023 11:31:29	Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 10.55 dBm *VBW 300 kHz SWT 10 ms 2.688278846 GHz Center 2.6875 GHz 1.8 MHz/ Span 18 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC 2023 11:29:36
	Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 12.56 dBm *VBW 300 kHz SWT 10 ms 2.593576923 GHz Center 2.593 GHz 1.8 MHz/ Span 18 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC 2023 11:34:55	

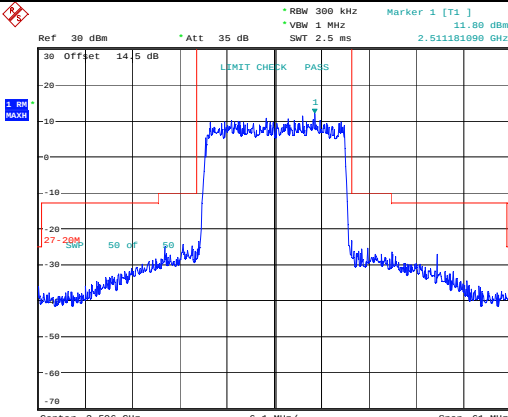
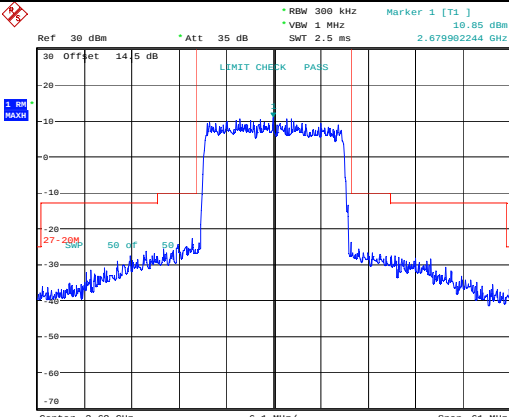
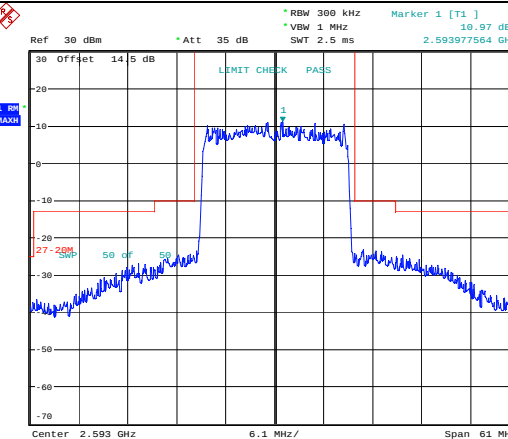
Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz	Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 7.71 dBm *VBW 300 kHz SWT 15 ms 2.502788462 GHz  Center 2.501 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 13:45:25	Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 8.60 dBm *VBW 300 kHz SWT 15 ms 2.688328526 GHz  Center 2.685 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 11:41:28
	Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 8.10 dBm *VBW 300 kHz SWT 15 ms 2.591360577 GHz  Center 2.593 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 11:51:03	

Out of band emission, Band Edge

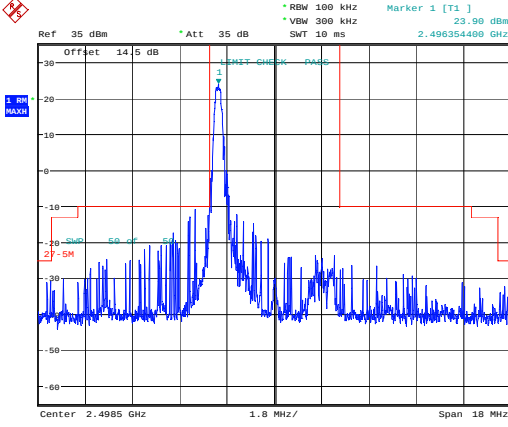
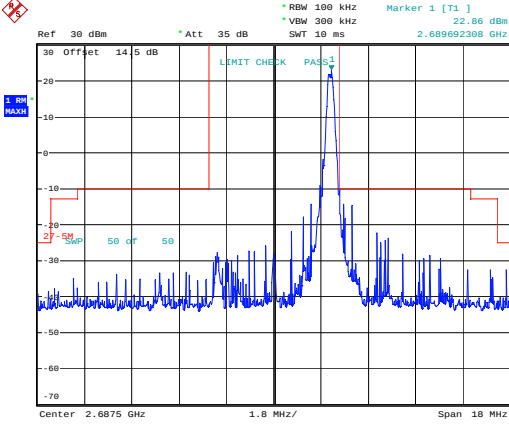
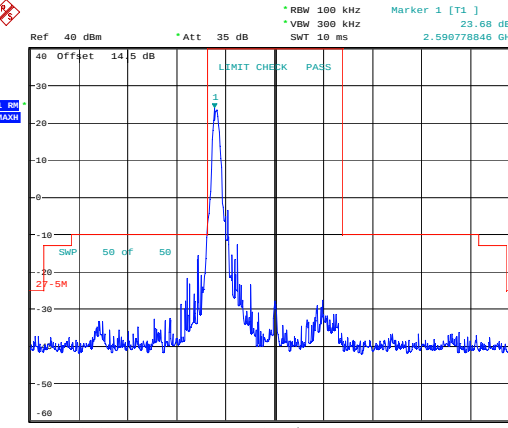
Mode	Lowest	Highest
16QAM 15MHz	Ref 30 dBm Offset 14.5 dB Att 35 dB RBW 300 kHz Marker 1 [T1] 13.25 dBm VBW 1 MHz SWT 2.5 ms 2.588660256 GHz Center 2.5835 GHz 4.6 MHz/ Span 46 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 13:57:25	Ref 30 dBm Offset 14.5 dB Att 35 dB RBW 300 kHz Marker 1 [T1] 12.12 dBm VBW 1 MHz SWT 2.5 ms 2.688878295 GHz Center 2.6825 GHz 4.6 MHz/ Span 46 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 13:53:24
	Ref 30 dBm Offset 14.5 dB Att 35 dB RBW 300 kHz Marker 1 [T1] 12.66 dBm VBW 1 MHz SWT 2.5 ms 2.588282051 GHz Center 2.593 GHz 4.6 MHz/ Span 46 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 13:56:14	

Out of band emission, Band Edge

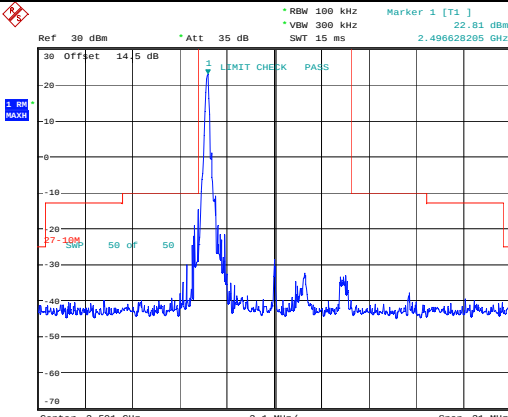
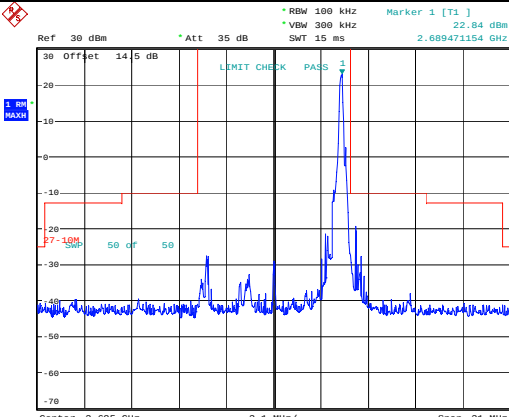
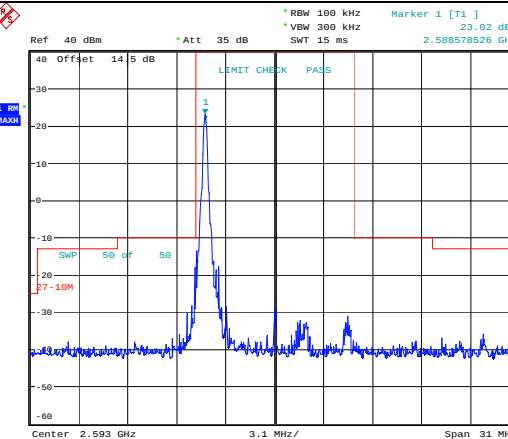
Mode	Lowest	Highest
16QAM 20MHz	 Ref 30 dBm *Att 35 dB *RBW 300 kHz Marker 1 [T1] 11.80 dBm *VBW 1 MHz SWT 2.5 ms 2.51181890 GHz Center 2.506 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 11:01:16	 Ref 30 dBm *Att 35 dB *RBW 300 kHz Marker 1 [T1] 10.85 dBm *VBW 1 MHz SWT 2.5 ms 2.679902244 GHz Center 2.68 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 10:57:30
	 Ref 30 dBm *Att 35 dB *RBW 300 kHz Marker 1 [T1] 10.97 dBm *VBW 1 MHz SWT 2.5 ms 2.593977564 GHz Center 2.593 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 11:03:18	

Test Plots for Out of band emission, Band Edge:
Note: The test is performed in 1RB mode.

Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 5MHz	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 27.DEC.2023 17:18:44	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25.DEC.2023 14:16:29
	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 27.DEC.2023 08:56:51	

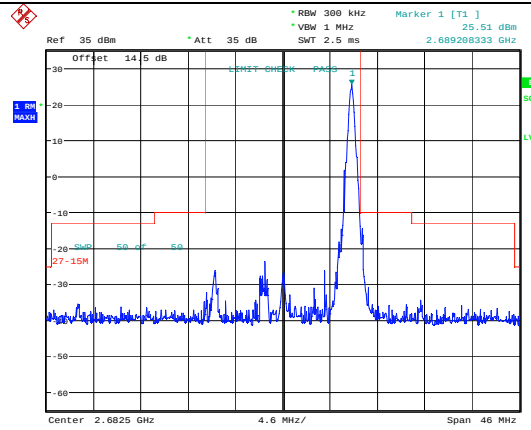
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz	 Ref 30 dBm * Att 35 dB * RBW 100 kHz Marker 1 [T1] 22.81 dBm * VBW 300 kHz SWT 15 ms 2.496628305 GHz Center 2.501 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 14:27:08	 Ref 30 dBm * Att 35 dB * RBW 100 kHz Marker 1 [T1] 22.84 dBm * VBW 300 kHz SWT 15 ms 2.689473354 GHz Center 2.685 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 14:30:44
	 Ref 40 dBm * Att 35 dB * RBW 100 kHz Marker 1 [T1] 23.02 dBm * VBW 300 kHz SWT 15 ms 2.588578526 GHz Center 2.593 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 27_DEC.2023 08:48:50	

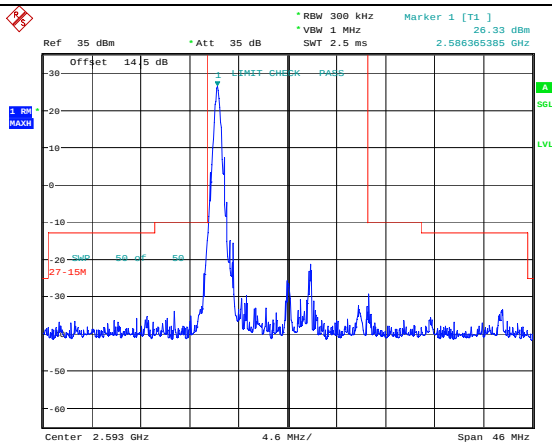
Mode

Highest

Middle

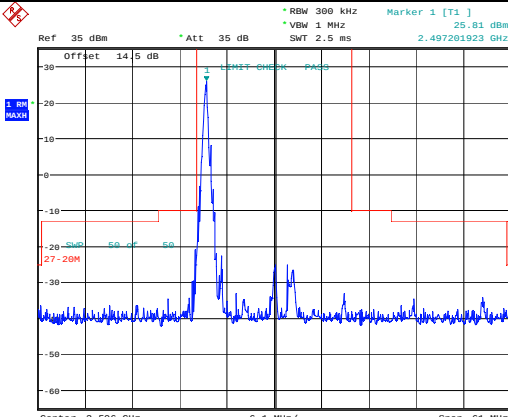
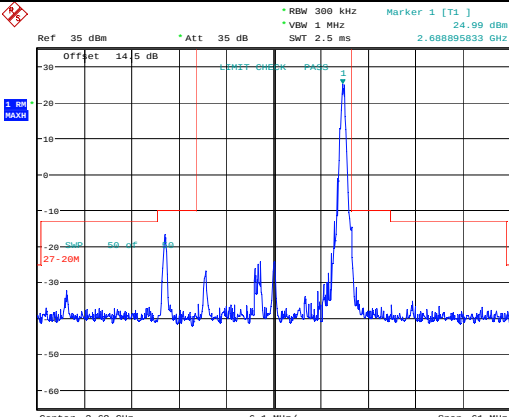
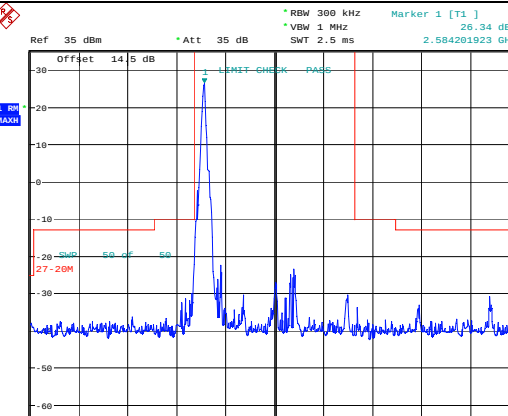


Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI
Date: 25.DEC.2023 14:40:47

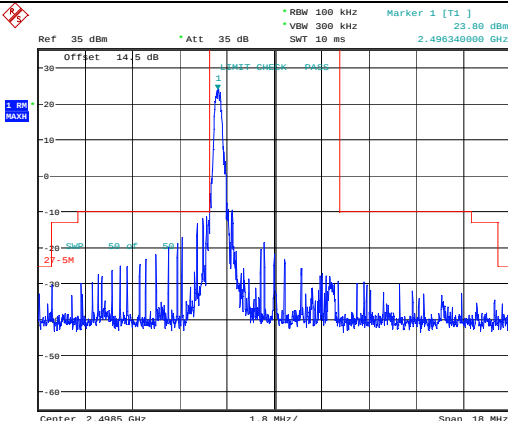
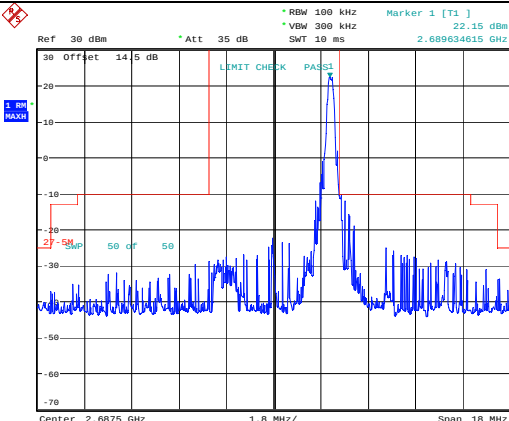
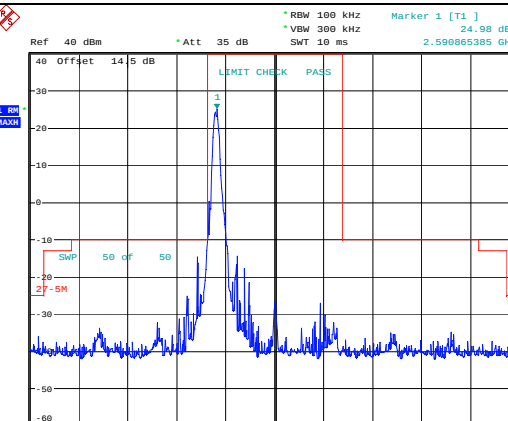


Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li
Date: 27.DEC.2023 09:03:55

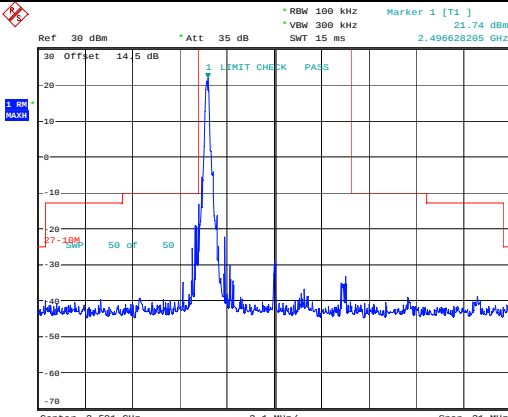
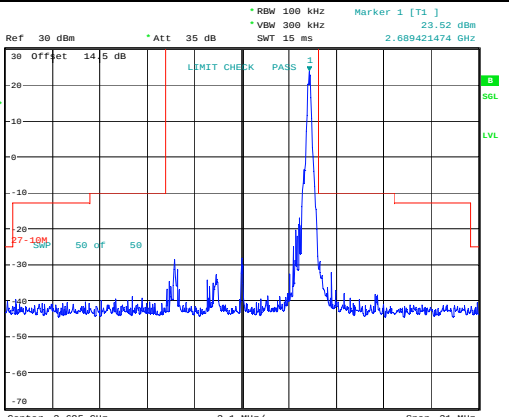
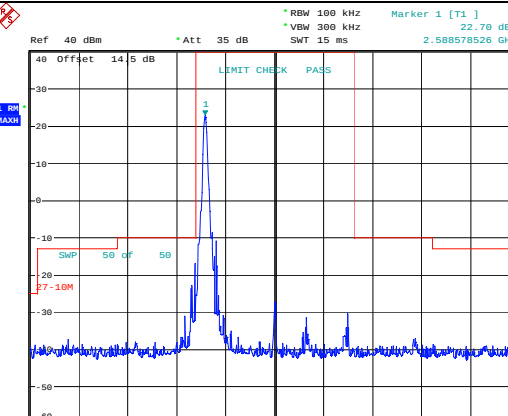
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 20MHz	 Ref 35 dBm Att 35 dB RBW 300 kHz Marker 1 [T1] 25.81 dBm VBW 1 MHz SWT 2.5 ms 2.497201923 GHz Offset 14.5 dB LIMIT CHECK PASS Center 2.596 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 15:14:30	 Ref 35 dBm Att 35 dB RBW 300 kHz Marker 1 [T1] 24.99 dBm VBW 1 MHz SWT 2.5 ms 2.688995833 GHz Offset 14.5 dB LIMIT CHECK PASS Center 2.68 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 15:18:09
	 Ref 35 dBm Att 35 dB RBW 300 kHz Marker 1 [T1] 26.34 dBm VBW 1 MHz SWT 2.5 ms 2.584201923 GHz Offset 14.5 dB LIMIT CHECK PASS Center 2.593 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 27_DEC.2023 09:09:48	

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 5MHz	 Ref 35 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 23.80 dBm *VBW 300 kHz SWT 10 ms 2.496340000 GHz Offset 14.5 dB Center 2.495 GHz 1.8 MHz/ Span 18 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li Date: 27 DEC 2023 17:22:49	 Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 22.15 dBm *VBW 300 kHz SWT 10 ms 2.699634615 GHz Offset 14.5 dB Center 2.6875 GHz 1.8 MHz/ Span 18 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li Date: 25 DEC 2023 14:17:36
	 Ref 40 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] 24.98 dBm *VBW 300 kHz SWT 10 ms 2.598865385 GHz Offset 14.5 dB Center 2.593 GHz 1.8 MHz/ Span 18 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li Date: 27 DEC 2023 08:53:58	

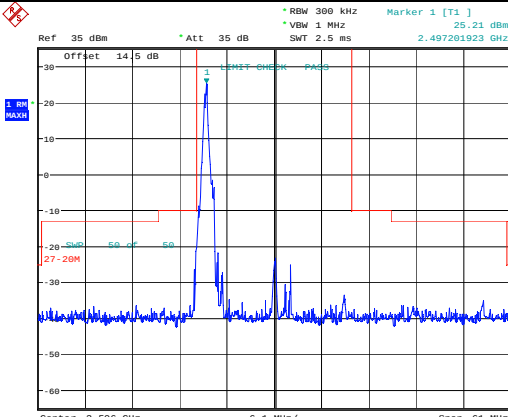
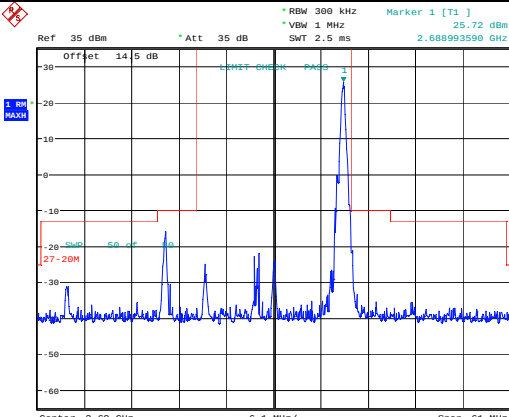
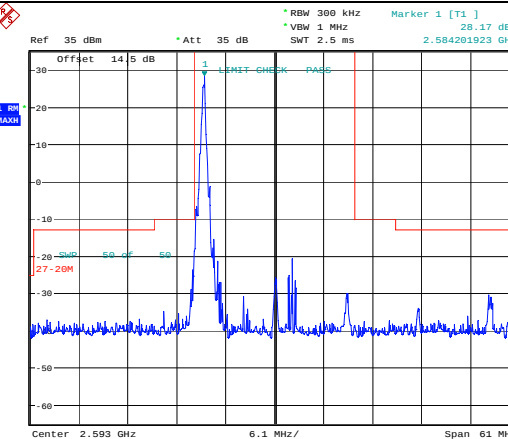
Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz	 Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] *VBW 300 kHz SWT 15 ms 2.49662885 GHz Center 2.501 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 14:28:25	 Ref 30 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] *VBW 300 kHz SWT 15 ms 2.689421474 GHz Center 2.685 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 14:30:11
	 Ref 40 dBm *Att 35 dB *RBW 100 kHz Marker 1 [T1] *VBW 300 kHz SWT 15 ms 2.588578526 GHz Center 2.593 GHz 3.1 MHz/ Span 31 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 27_DEC.2023 08:50:53	

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 15MHz	Ref 35 dBm * Att 35 dB * RBW 300 kHz Marker 1 [T1] 25.01 dBm * VBW 1 MHz SWT 2.5 ms 2.496791667 GHz Offset 14.5 dB Center 2.5935 GHz 4.6 MHz/ Span 46 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 14:37:30	Ref 35 dBm * Att 35 dB * RBW 300 kHz Marker 1 [T1] 26.92 dBm * VBW 1 MHz SWT 2.5 ms 2.689208333 GHz Offset 14.5 dB Center 2.6825 GHz 4.6 MHz/ Span 46 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 14:41:57
	Ref 35 dBm * Att 35 dB * RBW 300 kHz Marker 1 [T1] 26.96 dBm * VBW 1 MHz SWT 2.5 ms 2.586439103 GHz Offset 14.5 dB Center 2.593 GHz 4.6 MHz/ Span 46 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 27_DEC.2023 09:04:59	

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 20MHz	 Ref 35 dBm * Att 35 dB * RBW 300 kHz Marker 1 [T1] * VBW 1 MHz 25.21 dBm SWT 2.5 ms 2.497201923 GHz Offset 14.5 dB Att 35 dB RBW 300 kHz VBW 1 MHz SWT 2.5 ms Center 2.586 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 15:14:57	 Ref 35 dBm * Att 35 dB * RBW 300 kHz Marker 1 [T1] * VBW 1 MHz 25.72 dBm SWT 2.5 ms 2.688993590 GHz Offset 14.5 dB Att 35 dB RBW 300 kHz VBW 1 MHz SWT 2.5 ms Center 2.68 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25_DEC.2023 15:17:38
	 Ref 35 dBm * Att 35 dB * RBW 300 kHz Marker 1 [T1] * VBW 1 MHz 28.17 dBm SWT 2.5 ms 2.584201923 GHz Offset 14.5 dB Att 35 dB RBW 300 kHz VBW 1 MHz SWT 2.5 ms Center 2.593 GHz 6.1 MHz/ Span 61 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 27_DEC.2023 09:08:48	

4.10 Antenna Port Test Data and Results for LTE Band 66

Serial Number:	288V-1	Test Date:	2023/8/4-2023/12/25
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu/Arthur Su/LingLing Li	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.3-25.8	Relative Humidity: (%)	42-61	ATM Pressure: (kPa)	99.7-101.1
-------------------	-----------	------------------------	-------	---------------------	------------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A
Unknown	Coaxial tee connector	Unknown	2204004	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	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A
R&S	Spectrum Analyzer	FSU26	100147	2023/3/31	2024/3/30

* 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:

FCC§2.1046;§ 27.50(d)(4)						
RF Output Power:						
Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
1.4MHz QPSK	RB1#0	22.45	22.4	22.33	22.27	30
	RB1#3	22.55	22.52	22.52		
	RB1#5	22.44	22.43	22.4		
	RB3#0	22.69	22.57	22.59		
	RB3#3	22.63	22.58	22.62		
	RB6#0	22.43	22.43	22.44		
1.4MHz 16QAM	RB1#0	22.71	22.62	22.63	22.56	30
	RB1#3	22.85	22.66	22.72		
	RB1#5	22.72	22.64	22.63		
	RB3#0	22.73	22.79	22.92		
	RB3#3	22.69	22.86	22.98		
	RB6#0	22.64	22.54	22.69		
3MHz QPSK	RB1#0	22.48	22.31	22.33	22.08	30
	RB1#8	22.44	22.37	22.42		
	RB1#14	22.35	22.28	22.29		
	RB6#0	22.44	22.46	22.39		
	RB6#9	22.42	22.41	22.33		
	RB15#0	22.47	22.5	22.45		
3MHz 16QAM	RB1#0	22.53	23.08	22.63	22.78	30
	RB1#8	22.66	23.2	22.74		
	RB1#14	22.53	23.03	22.58		
	RB6#0	22.55	22.71	22.6		
	RB6#9	22.53	22.62	22.59		
	RB15#0	22.72	22.71	22.59		
5MHz QPSK	RB1#0	22.35	22.28	22.27	22.17	30
	RB1#13	22.59	22.48	22.5		
	RB1#24	22.28	22.21	22.37		
	RB15#0	22.44	22.46	22.48		
	RB15#10	22.43	22.42	22.44		
	RB25#0	22.44	22.44	22.46		
5MHz 16QAM	RB1#0	22.5	22.37	22.79	22.6	30
	RB1#13	22.74	22.56	23.02		
	RB1#24	22.52	22.29	22.79		
	RB15#0	22.66	22.66	22.63		
	RB15#10	22.64	22.64	22.62		
	RB25#0	22.61	22.62	22.68		
10MHz QPSK	RB1#0	22.43	22.16	22.29	22.04	30
	RB1#25	22.45	22.11	22.41		
	RB1#49	22.34	22.02	22.35		

	RB25#0	22.45	22.19	22.36		
	RB25#25	22.37	22.17	22.46		
	RB50#0	22.33	22.23	22.38		
10MHz 16QAM	RB1#0	22.53	22.93	22.62	22.51	30
	RB1#25	22.59	22.91	22.74		
	RB1#49	22.46	22.78	22.69		
	RB25#0	22.74	22.38	22.54		
	RB25#25	22.64	22.36	22.63		
	RB50#0	22.61	22.29	22.56		
15MHz QPSK	RB1#0	22.46	22.45	22.23	22.17	30
	RB1#38	22.59	22.51	22.39		
	RB1#74	22.35	22.36	22.29		
	RB36#0	22.39	22.4	22.14		
	RB36#39	22.32	22.36	22.26		
	RB75#0	22.31	22.38	22.14		
15MHz 16QAM	RB1#0	23.04	23.23	22.53	22.87	30
	RB1#38	23.23	23.29	22.77		
	RB1#74	23	23.1	22.65		
	RB36#0	22.52	22.52	22.32		
	RB36#39	22.48	22.39	22.47		
	RB75#0	22.44	22.39	22.31		
20MHz QPSK	RB1#0	22.32	22.52	22.35	22.1	30
	RB1#50	22.31	22.43	22.42		
	RB1#99	22.24	22.42	22.43		
	RB50#0	22.34	22.41	22.36		
	RB50#50	22.31	22.36	22.34		
	RB100#0	22.33	22.42	22.31		
20MHz 16QAM	RB1#0	23.13	23.04	22.77	22.72	30
	RB1#50	23.14	22.92	22.8		
	RB1#99	23.06	22.88	22.87		
	RB50#0	22.45	22.59	22.48		
	RB50#50	22.49	22.52	22.43		
	RB100#0	22.46	22.57	22.53		

Note: EIRP=Conducted Power(dBm) - Lc(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	3.75	3.65	3.72	13
	RB100#0	6.51	6.47	6.35	13
20MHz 16QAM	RB1#0	6.22	5.48	6.09	13
	RB100#0	7.24	7.34	7.21	13
				Result:	Pass

FCC §2.1049, §27.53:Occupied Bandwidth						
Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
1.4MHz QPSK	1.098	1.104	1.098	1.254	1.248	1.260
1.4MHz 16QAM	1.098	1.092	1.098	1.236	1.254	1.248
3MHz QPSK	2.7	2.7	2.7	3.0	3.0	3.0
3MHz 16QAM	2.687	2.687	2.687	2.952	2.964	2.964
5MHz QPSK	4.52	4.52	4.52	4.96	4.98	4.98
5MHz 16QAM	4.54	4.52	4.5	4.98	5.04	5.0
10MHz QPSK	8.96	8.96	8.96	9.72	9.72	9.60
10MHz 16QAM	8.96	8.96	8.96	9.76	9.56	9.60
15MHz QPSK	13.5	13.5	13.5	14.8	14.9	14.8
15MHz 16QAM	13.5	13.560	13.5	14.8	14.820	14.8
20MHz QPSK	18	18	17.92	20	19	19.44
20MHz 16QAM	17.92	18	17.92	19.44	19	19.36
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 (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	5	1711.038	1710.00	1778.963	1780
	-20	5	1711.034	1710.00	1778.975	1780
	-10	5	1711.031	1710.00	1778.977	1780
	0	5	1711.014	1710.00	1778.976	1780
	10	5	1711.030	1710.00	1778.968	1780
	20	5	1711.040	1710.00	1778.960	1780
	30	5	1711.028	1710.00	1778.961	1780
	40	5	1711.015	1710.00	1778.967	1780
	50	5	1711.038	1710.00	1778.961	1780
Frequency Stability vs. Voltage	20	4.4	1711.012	1710.00	1778.983	1780
	20	5.25	1711.016	1710.00	1778.983	1780
					Result:	Pass

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	5	1711.107	1710.00	1778.972	1780
	-20	5	1711.096	1710.00	1778.985	1780
	-10	5	1711.100	1710.00	1778.973	1780
	0	5	1711.118	1710.00	1778.987	1780
	10	5	1711.105	1710.00	1778.987	1780
	20	5	1711.120	1710.00	1778.960	1780
	30	5	1711.113	1710.00	1778.962	1780
	40	5	1711.102	1710.00	1778.985	1780
	50	5	1711.095	1710.00	1778.962	1780
Frequency Stability vs. Voltage	20	4.4	1711.112	1710.00	1778.971	1780
	20	5.25	1711.119	1710.00	1778.967	1780
					Result:	Pass

Test Plots(Note: The 14.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

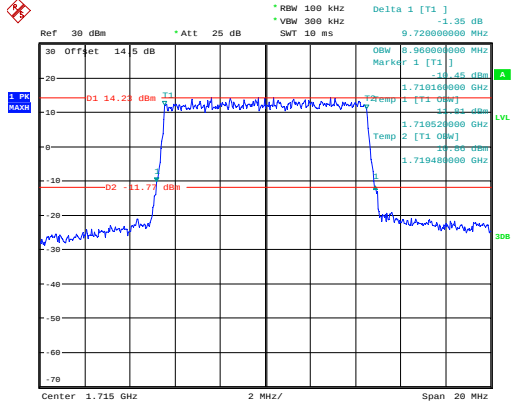
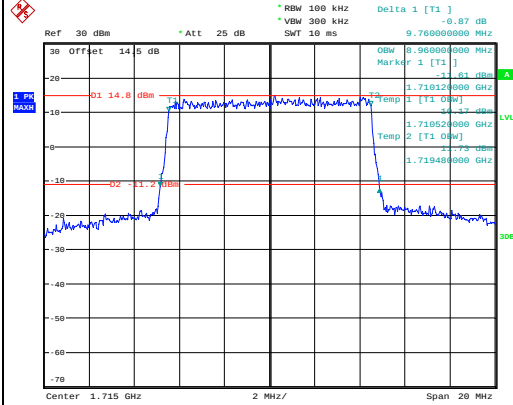
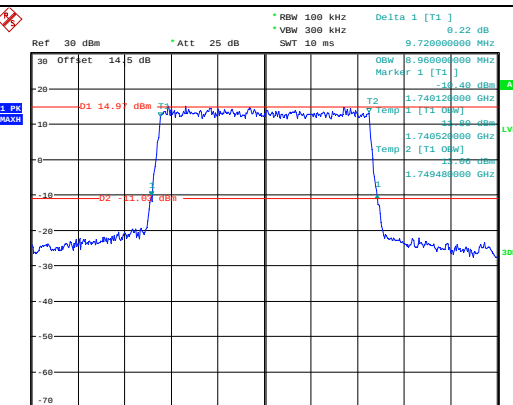
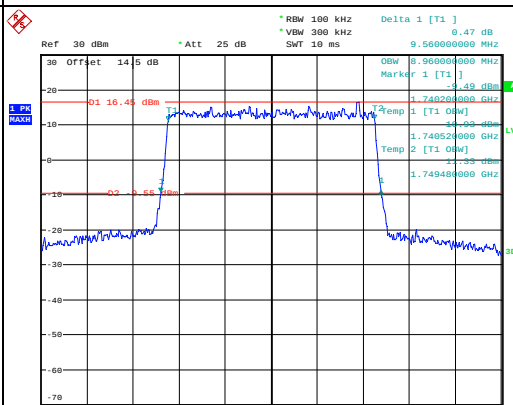
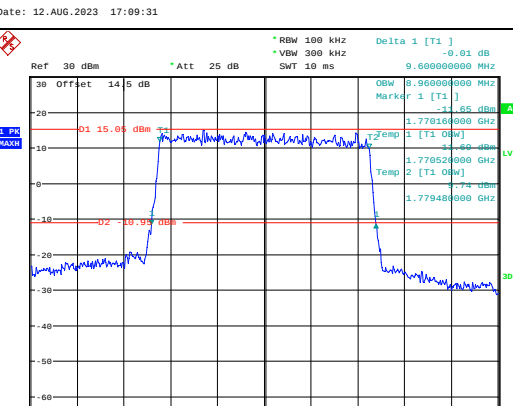
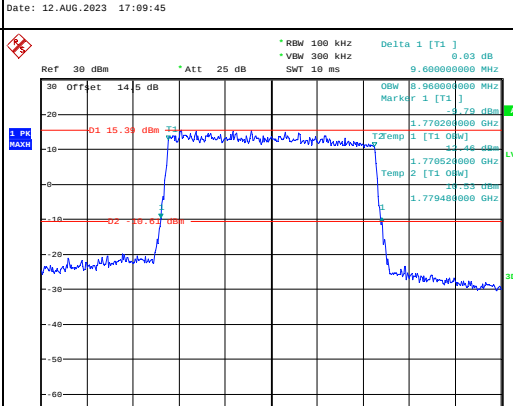
Occupied Bandwidth

Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest	Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 15 ms Delta 1 [T1] 0.71 dB Marker 1 [T1] 1.71070000 MHz OBW 1.098000000 MHz Temp 1 [T1 0dB] -17.09 dBm Temp 2 [T1 0dB] -17.09 dBm Temp 1 [T1 0dB] 1.710150000 GHz Temp 2 [T1 0dB] 1.711250000 GHz Center 1.7107 GHz 300 kHz/ Span 3 MHz Date: 12.AUG.2023 16:45:07	Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 15 ms Delta 1 [T1] 0.09 dB Marker 1 [T1] 1.71070000 MHz OBW 1.098000000 MHz Temp 1 [T1 0dB] -17.94 dBm Temp 2 [T1 0dB] -17.94 dBm Temp 1 [T1 0dB] 1.710150000 GHz Temp 2 [T1 0dB] 1.711250000 GHz Center 1.7107 GHz 300 kHz/ Span 3 MHz Date: 12.AUG.2023 16:45:25
Middle	Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 15 ms Delta 1 [T1] 0.14 dB Marker 1 [T1] 1.744370000 MHz OBW 1.098000000 MHz Temp 1 [T1 0dB] -18.74 dBm Temp 2 [T1 0dB] -18.74 dBm Temp 1 [T1 0dB] 1.744370000 GHz Temp 2 [T1 0dB] 1.745550000 GHz Center 1.745 GHz 300 kHz/ Span 3 MHz Date: 12.AUG.2023 16:45:43	Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 15 ms Delta 1 [T1] 0.15 dB Marker 1 [T1] 1.744370000 MHz OBW 1.098000000 MHz Temp 1 [T1 0dB] -18.72 dBm Temp 2 [T1 0dB] -18.72 dBm Temp 1 [T1 0dB] 1.744370000 GHz Temp 2 [T1 0dB] 1.745550000 GHz Center 1.745 GHz 300 kHz/ Span 3 MHz Date: 12.AUG.2023 16:46:01
Highest	Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 15 ms Delta 1 [T1] 1.53 dB Marker 1 [T1] 1.779300000 MHz OBW 1.098000000 MHz Temp 1 [T1 0dB] -17.54 dBm Temp 2 [T1 0dB] -17.54 dBm Temp 1 [T1 0dB] 1.778740000 GHz Temp 2 [T1 0dB] 1.779840000 GHz Center 1.7793 GHz 300 kHz/ Span 3 MHz Date: 12.AUG.2023 16:46:19	Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 15 ms Delta 1 [T1] 1.18 dB Marker 1 [T1] 1.779300000 MHz OBW 1.098000000 MHz Temp 1 [T1 0dB] -18.0 dBm Temp 2 [T1 0dB] -18.0 dBm Temp 1 [T1 0dB] 1.778740000 GHz Temp 2 [T1 0dB] 1.779840000 GHz Center 1.7793 GHz 300 kHz/ Span 3 MHz Date: 12.AUG.2023 16:46:34

Occupied Bandwidth

Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 30 kHz Delta 1 [T1] 0.21 dB VBW 100 kHz SWT 30 ms OBW 2.700000000 MHz Marker 1 [T1] -11.42 dBm A D1 14.52 dBm D2 -11.48 dBm D3 -11.48 dBm 1.7135 GHz 1.712854 GHz Center 1.7135 GHz 600 kHz/ Span 6 MHz Date: 12.AUG.2023 16:53:14	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 30 kHz Delta 1 [T1] 1.00 dB VBW 100 kHz SWT 30 ms OBW 2.952000000 MHz Marker 1 [T1] -11.20 dBm A D1 15.77 dBm D2 -10.52 dBm D3 -10.52 dBm 1.7135 GHz 1.712854 GHz Center 1.7135 GHz 600 kHz/ Span 6 MHz Date: 12.AUG.2023 16:53:28
Middle	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 30 kHz Delta 1 [T1] 1.13 dB VBW 100 kHz SWT 30 ms OBW 2.700000000 MHz Marker 1 [T1] -10.55 dBm A D1 16.32 dBm D2 -10.68 dBm D3 -10.68 dBm 1.745 GHz 1.743554 GHz Center 1.745 GHz 600 kHz/ Span 6 MHz Date: 12.AUG.2023 16:53:47	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 30 kHz Delta 1 [T1] 1.44 dB VBW 100 kHz SWT 30 ms OBW 2.680000000 MHz Marker 1 [T1] -10.96 dBm A D1 15.53 dBm D2 -10.44 dBm D3 -10.44 dBm 1.745 GHz 1.743554 GHz Center 1.745 GHz 600 kHz/ Span 6 MHz Date: 12.AUG.2023 16:54:01
Highest	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 30 kHz Delta 1 [T1] 0.81 dB VBW 100 kHz SWT 30 ms OBW 2.964000000 MHz Marker 1 [T1] -11.00 dBm A D1 14.7 dBm D2 -11.37 dBm D3 -11.37 dBm 1.7785 GHz 1.775844 GHz Center 1.7785 GHz 600 kHz/ Span 6 MHz Date: 12.AUG.2023 16:54:19	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 30 kHz Delta 1 [T1] 1.23 dB VBW 100 kHz SWT 30 ms OBW 2.680000000 MHz Marker 1 [T1] -10.46 dBm A D1 15.12 dBm D2 -10.87 dBm D3 -10.87 dBm 1.7785 GHz 1.775844 GHz Center 1.7785 GHz 600 kHz/ Span 6 MHz Date: 12.AUG.2023 16:54:34

Occupied Bandwidth

Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz Delta 1 [T1] -1.35 dB VBW 300 kHz Marker 1 [T1] 9.720000000 MHz SWT 10 ms OBW 8.950000000 MHz Marker 1 [T1] -14.23 dBm D1 14.23 dBm D2 -11.73 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Center 1.715 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 17:08:54	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz Delta 1 [T1] -0.87 dB VBW 300 kHz Marker 1 [T1] 9.760000000 MHz SWT 10 ms OBW 8.950000000 MHz Marker 1 [T1] -14.8 dBm D1 14.8 dBm D2 -11.2 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Center 1.715 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 17:09:12
Middle	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz Delta 1 [T1] 0.22 dB VBW 300 kHz Marker 1 [T1] 9.720000000 MHz SWT 10 ms OBW 8.950000000 MHz Marker 1 [T1] -14.9 dBm D1 14.9 dBm D2 -11.03 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Center 1.745 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 17:09:31	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz Delta 1 [T1] 0.47 dB VBW 300 kHz Marker 1 [T1] 9.560000000 MHz SWT 10 ms OBW 8.950000000 MHz Marker 1 [T1] -16.45 dBm D1 16.45 dBm D2 -11.55 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Center 1.745 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 17:09:45
Highest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz Delta 1 [T1] -0.01 dB VBW 300 kHz Marker 1 [T1] 9.600000000 MHz SWT 10 ms OBW 8.950000000 MHz Marker 1 [T1] -15.05 dBm D1 15.05 dBm D2 -10.93 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Center 1.775 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 17:10:00	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz Delta 1 [T1] 0.03 dB VBW 300 kHz Marker 1 [T1] 9.600000000 MHz SWT 10 ms OBW 8.950000000 MHz Marker 1 [T1] -15.39 dBm D1 15.39 dBm D2 -10.03 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Center 1.775 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 17:10:22

Page 191 of 240

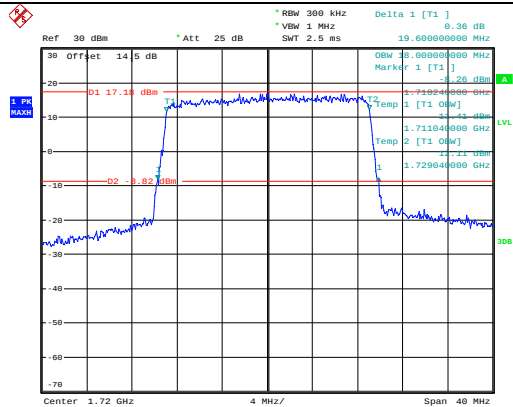
Occupied Bandwidth

Channel

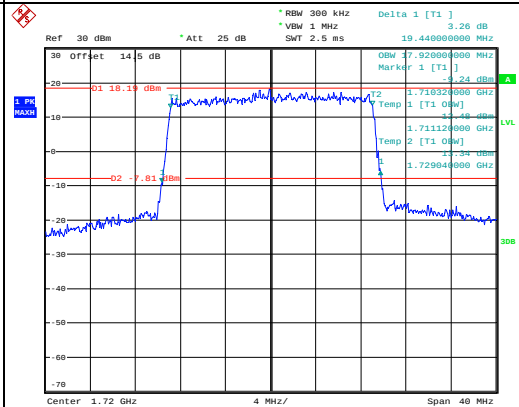
20MHz Bandwidth QPSK

20MHz Bandwidth 16QAM

Lowest

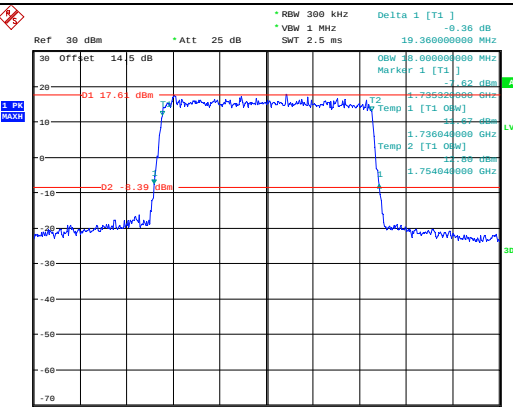


Date: 12.AUG.2023 17:23:05

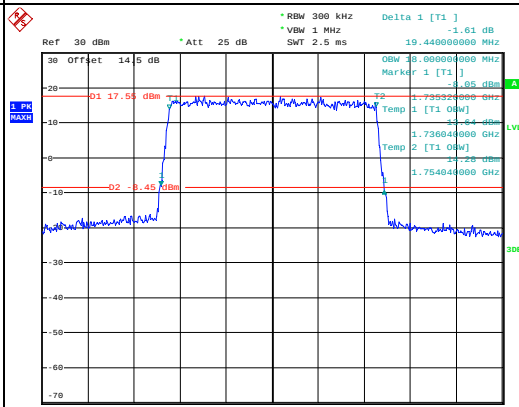


Date: 12.AUG.2023 17:23:23

Middle

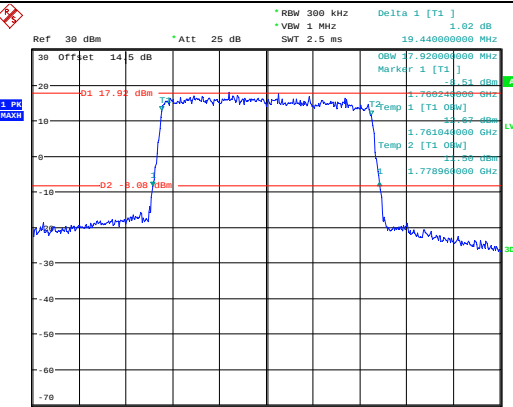


Date: 12.AUG.2023 17:23:39

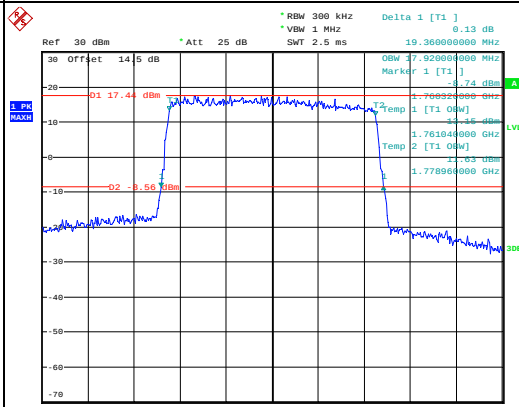


Date: 12.AUG.2023 17:23:56

Highest



Date: 12.AUG.2023 17:24:15



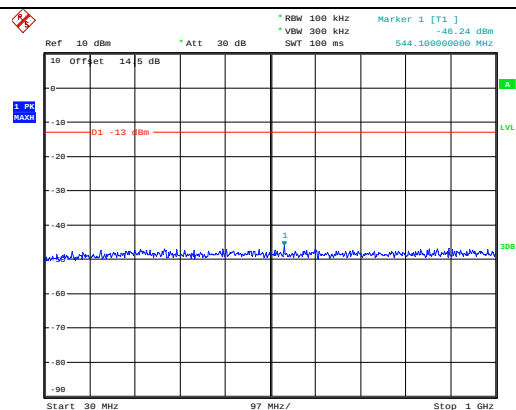
Date: 12.AUG.2023 17:24:29

Spurious Emissions at Antenna Terminal

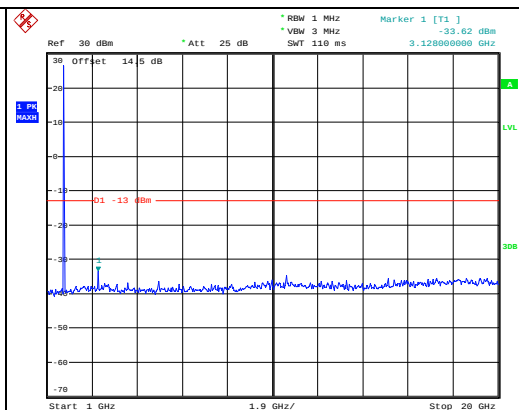
Channel

1.4MHz Bandwidth QPSK

Lowest

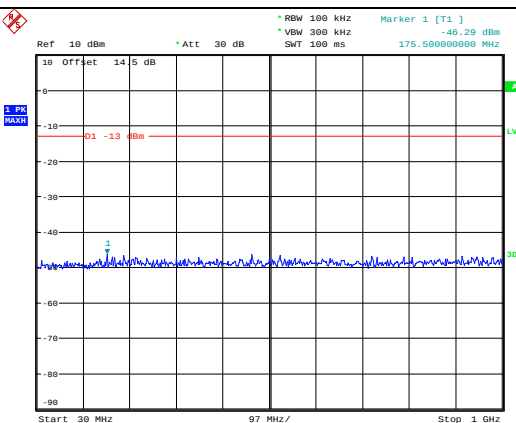


Date: 12.AUG.2023 21:35:16

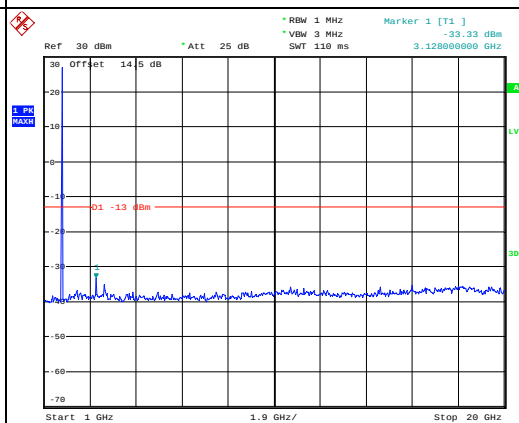


Date: 12.AUG.2023 21:35:28

Middle

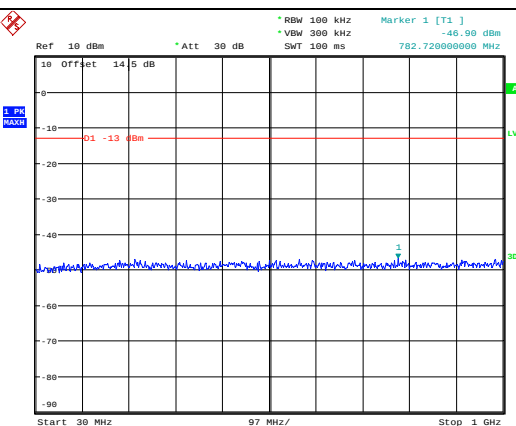


Date: 12.AUG.2023 21:35:41

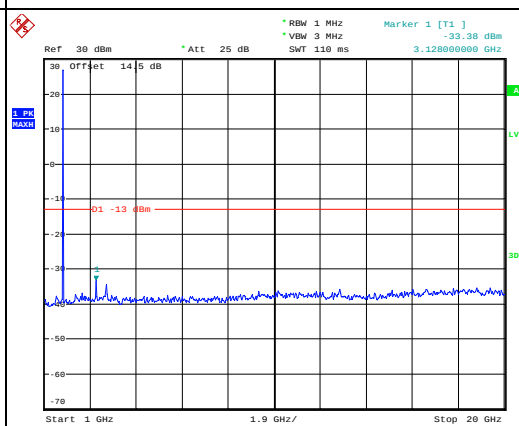


Date: 12.AUG.2023 21:35:52

Highest



Date: 12.AUG.2023 21:36:06



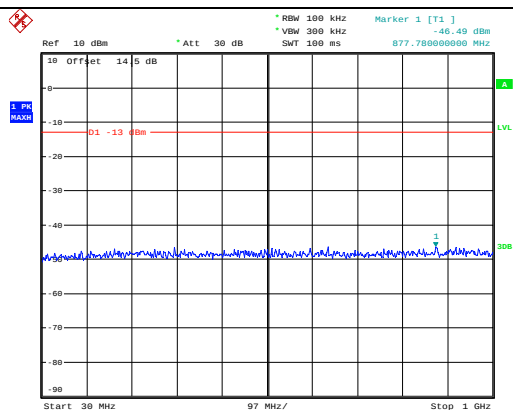
Date: 12.AUG.2023 21:36:17

Spurious Emissions at Antenna Terminal

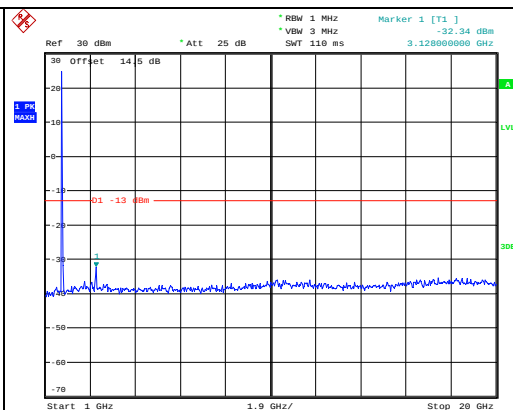
Channel

3MHz Bandwidth QPSK

Lowest

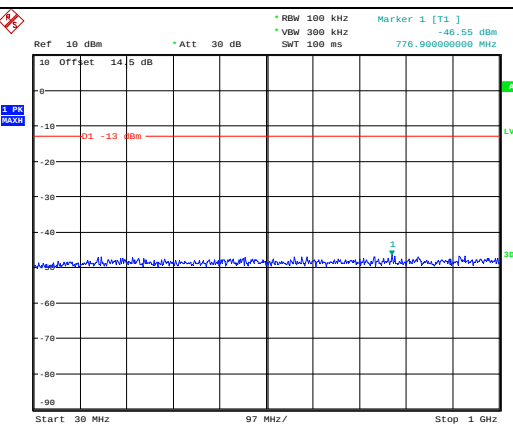


Date: 12.AUG.2023 21:36:59

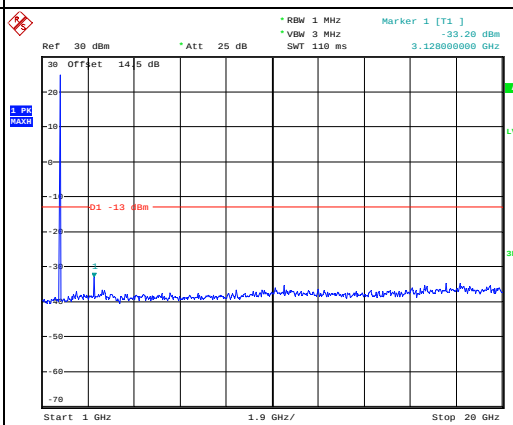


Date: 12.AUG.2023 21:37:11

Middle

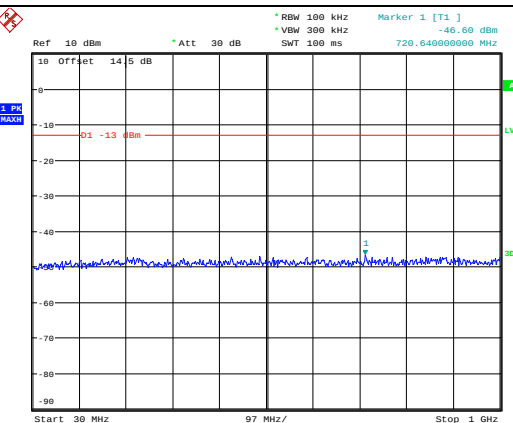


Date: 12.AUG.2023 21:37:28

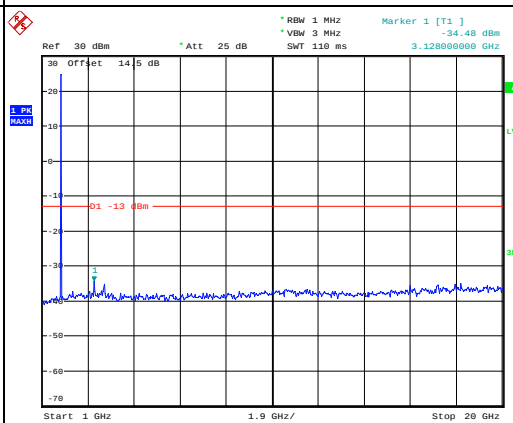


Date: 12.AUG.2023 21:37:39

Highest



Date: 12.AUG.2023 21:37:53



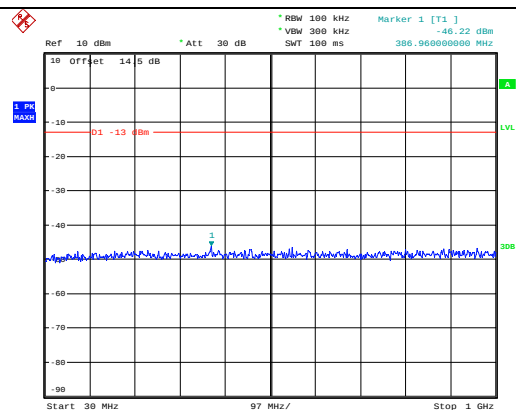
Date: 12.AUG.2023 21:38:04

Spurious Emissions at Antenna Terminal

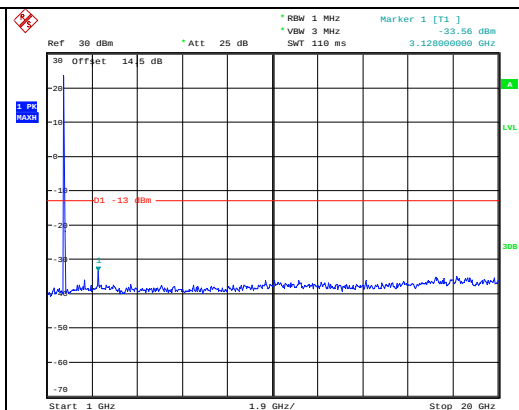
Channel

5MHz Bandwidth QPSK

Lowest

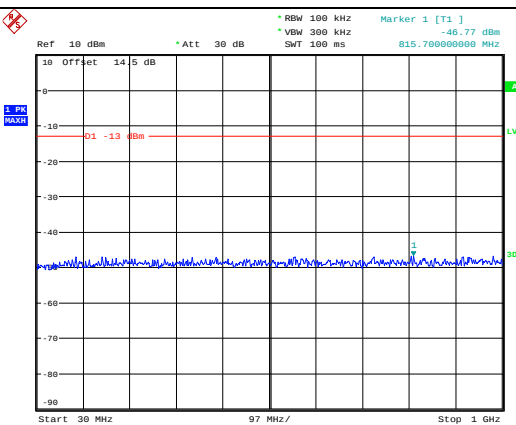


Date: 12.AUG.2023 21:38:42

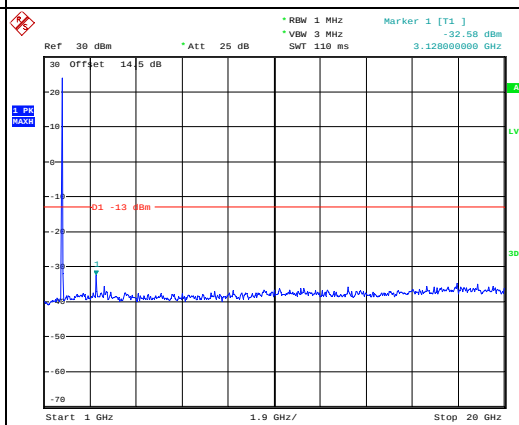


Date: 12.AUG.2023 21:38:54

Middle

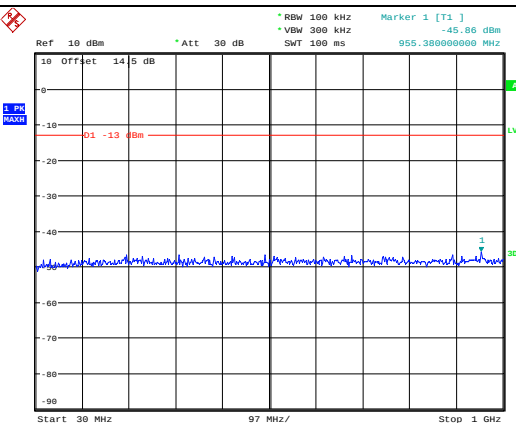


Date: 12.AUG.2023 21:39:08

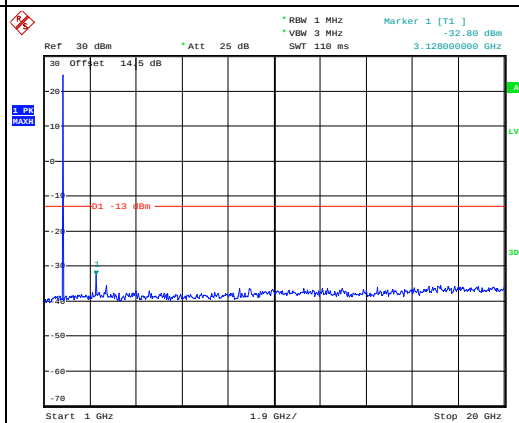


Date: 12.AUG.2023 21:39:19

Highest

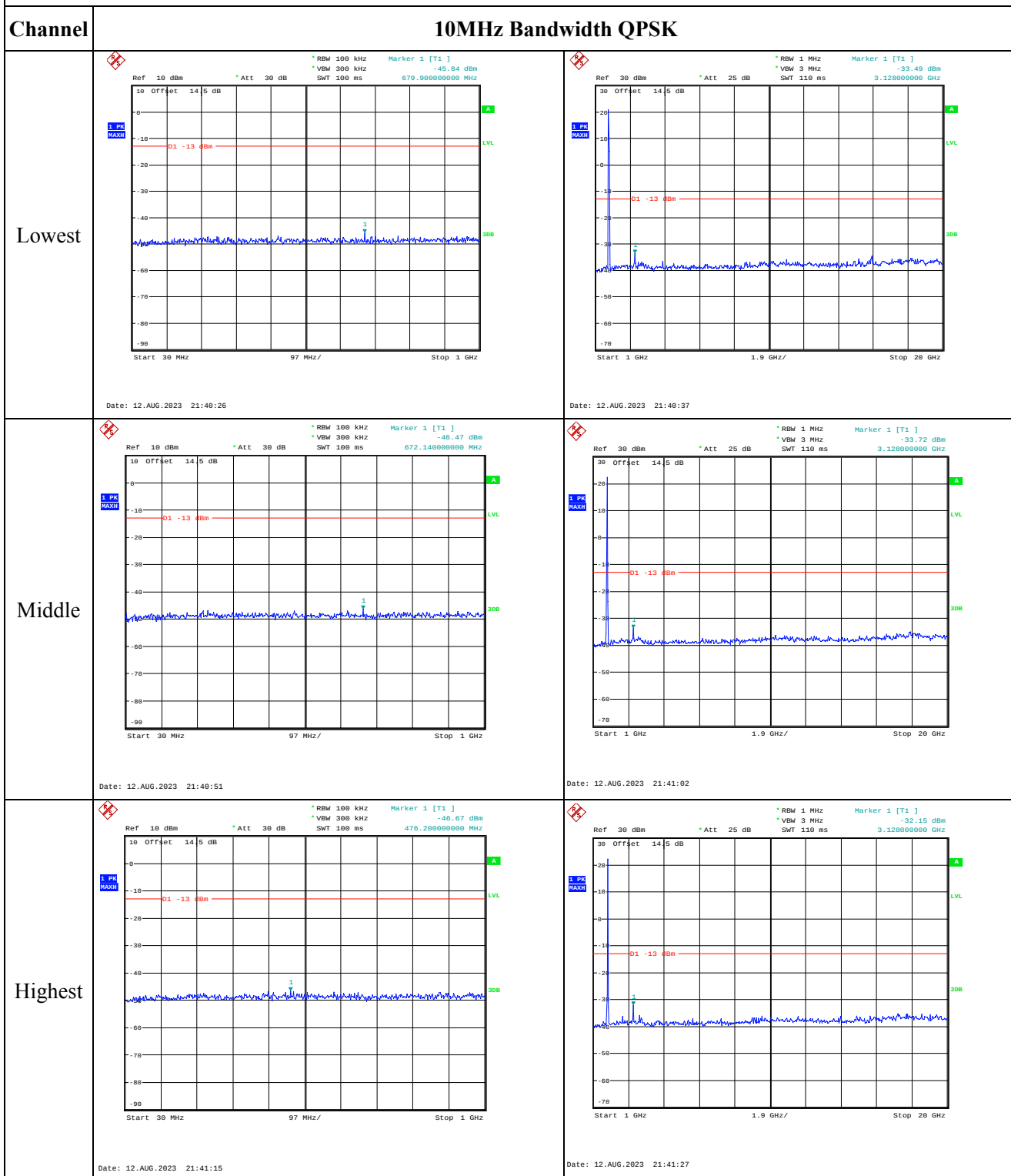


Date: 12.AUG.2023 21:39:36



Date: 12.AUG.2023 21:39:47

Spurious Emissions at Antenna Terminal

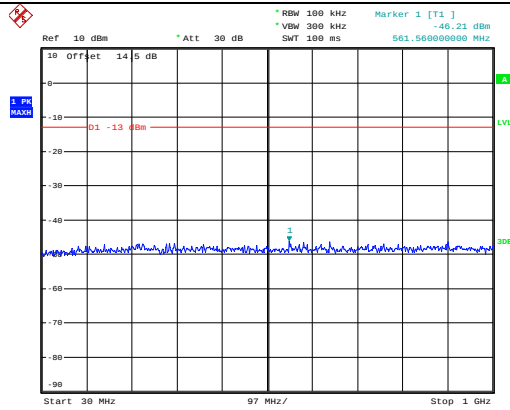


Spurious Emissions at Antenna Terminal

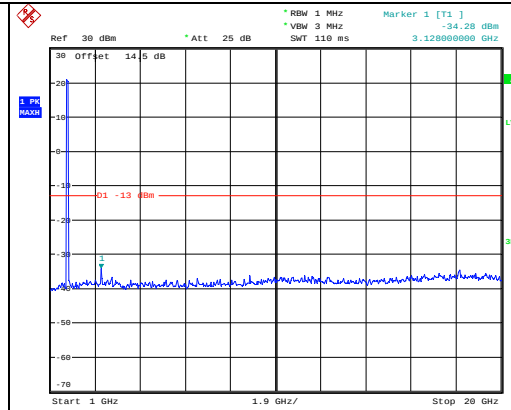
Channel

15MHz Bandwidth QPSK

Lowest

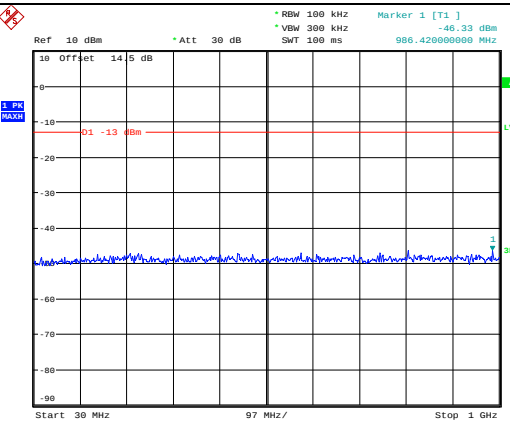


Date: 12.AUG.2023 21:42:08

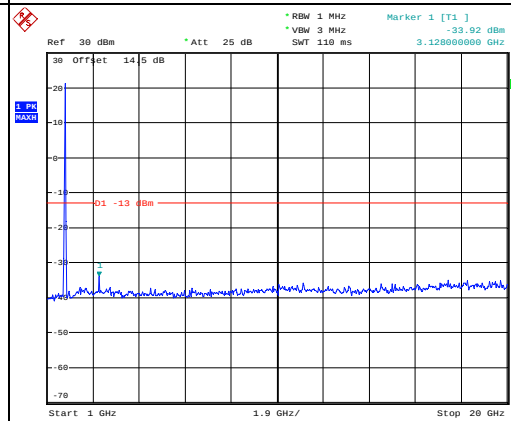


Date: 12.AUG.2023 21:42:20

Middle

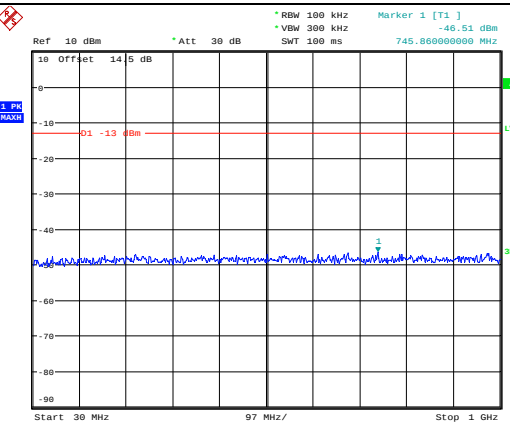


Date: 12.AUG.2023 21:42:33

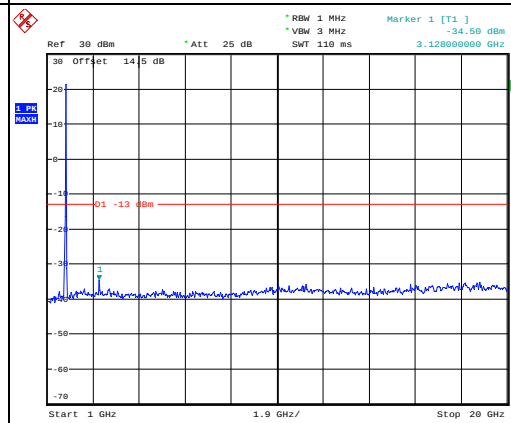


Date: 12.AUG.2023 21:42:44

Highest



Date: 12.AUG.2023 21:43:01



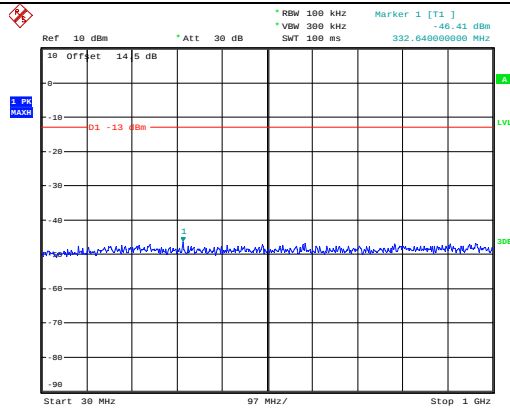
Date: 12.AUG.2023 21:43:12

Spurious Emissions at Antenna Terminal

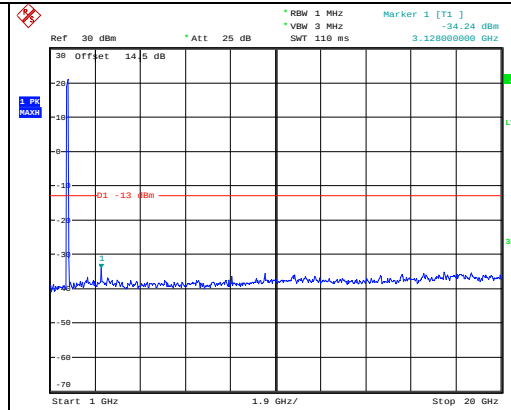
Channel

20MHz Bandwidth QPSK

Lowest

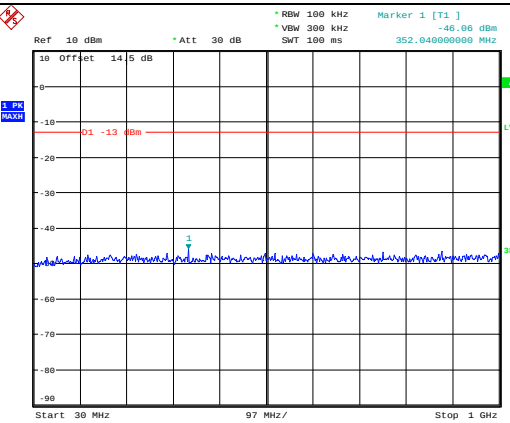


Date: 12.AUG.2023 21:43:51

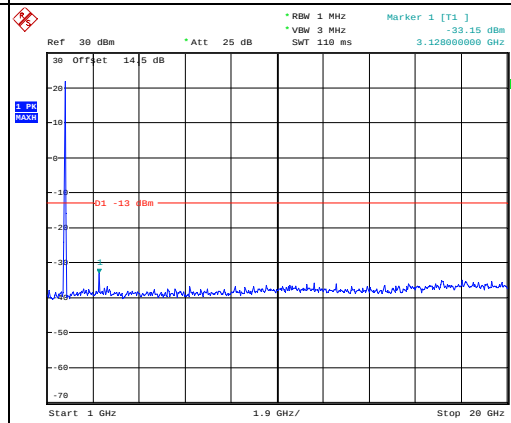


Date: 12.AUG.2023 21:44:02

Middle

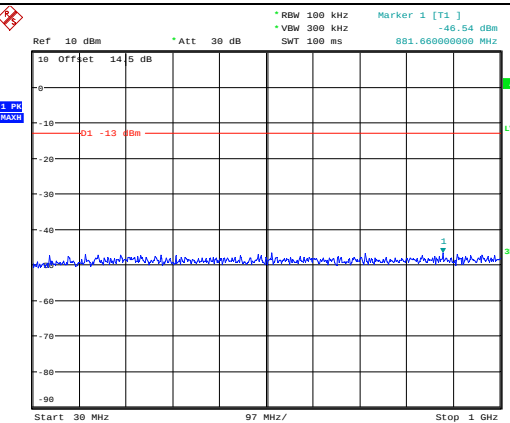


Date: 12.AUG.2023 21:44:16

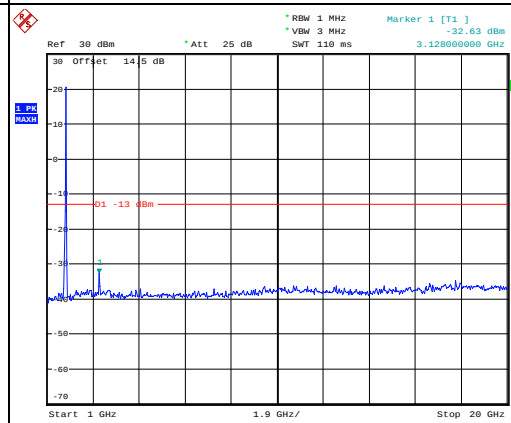


Date: 12.AUG.2023 21:44:27

Highest

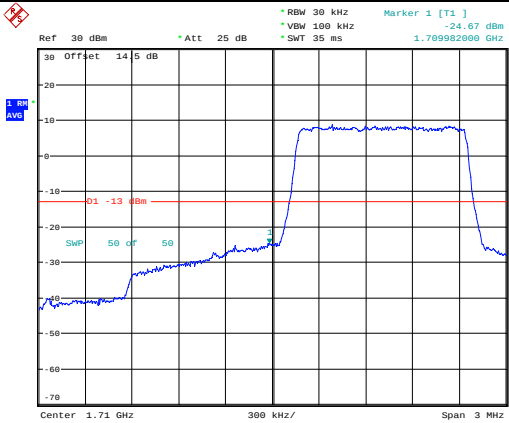
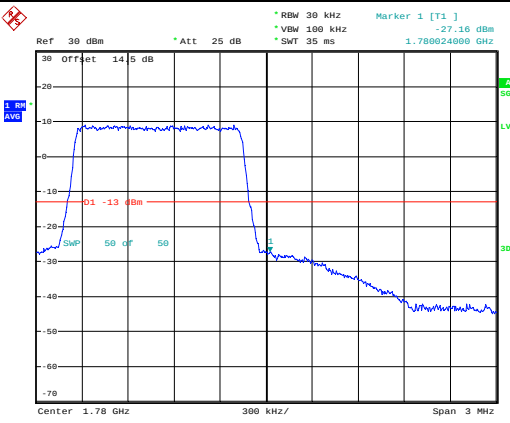
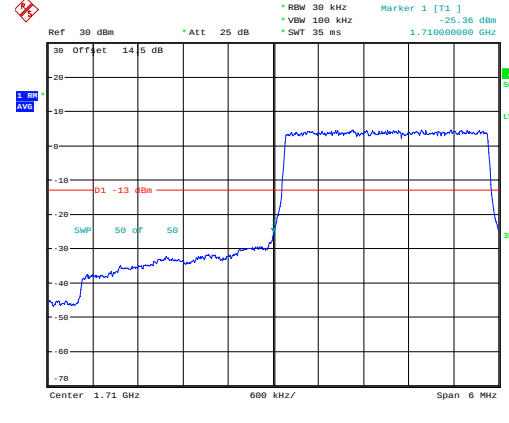
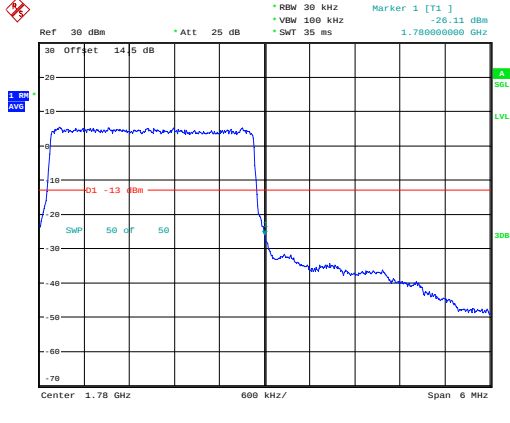
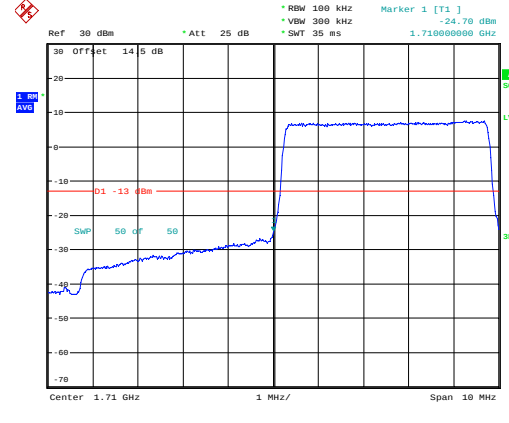
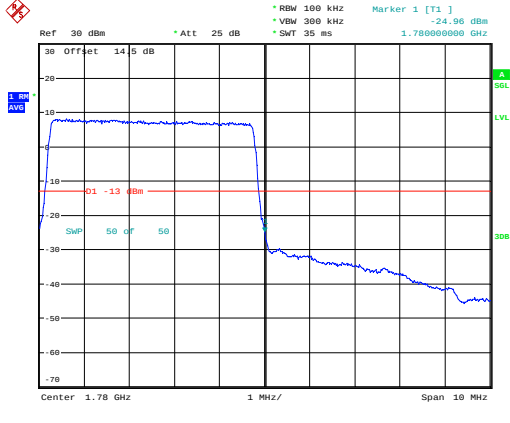


Date: 12.AUG.2023 21:44:41



Date: 12.AUG.2023 21:44:52

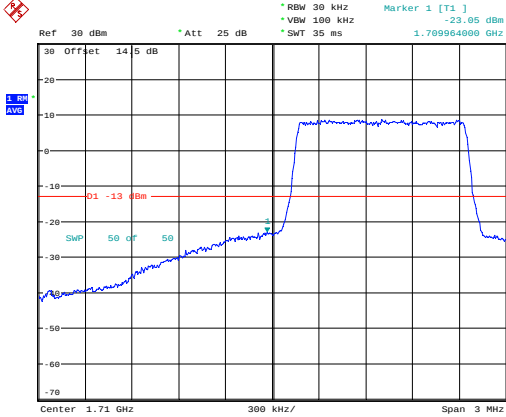
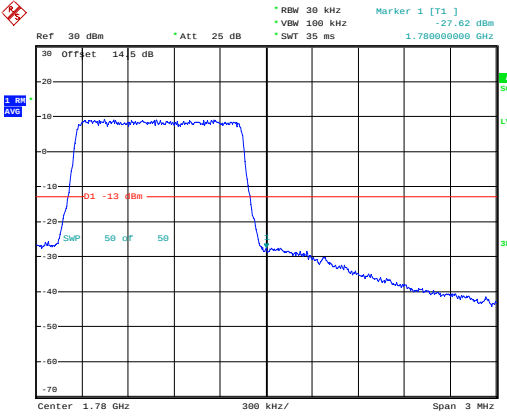
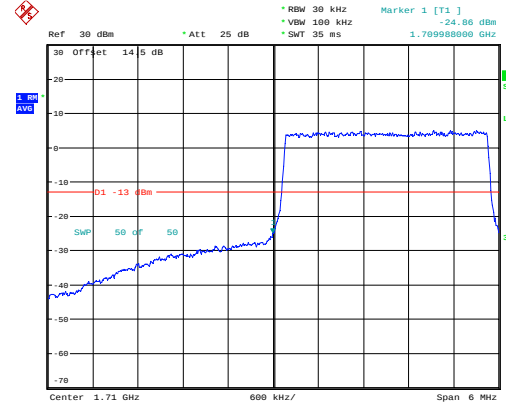
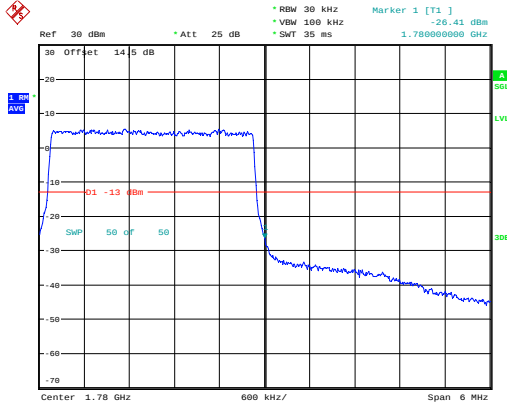
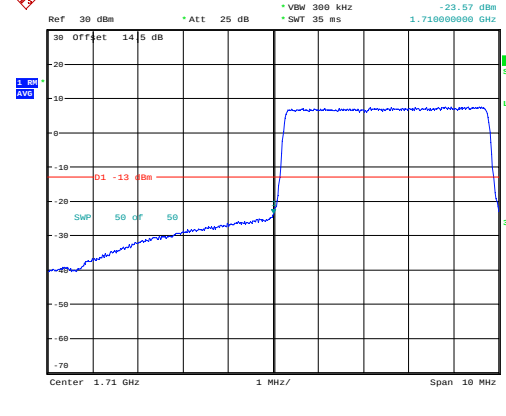
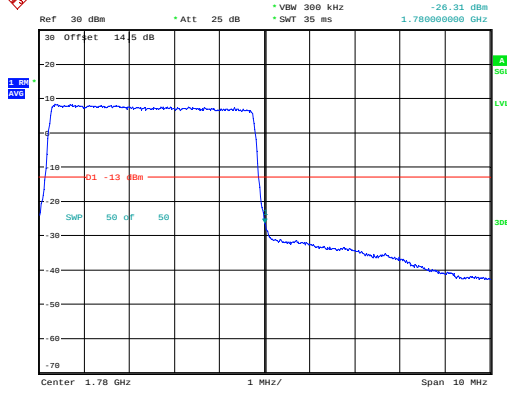
Test Plots for Out of band emission, Band Edge:
Note: The test is performed in full RB mode.**Out of band emission, Band Edge**

Mode	Lowest	Highest
QPSK 1.4MHz		
QPSK 3MHz		
QPSK 5MHz		

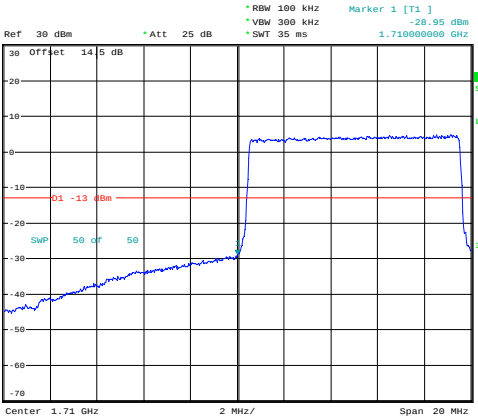
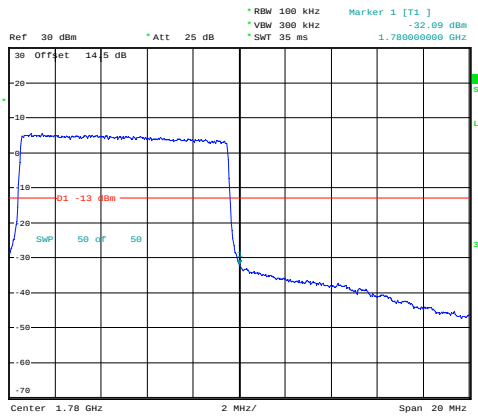
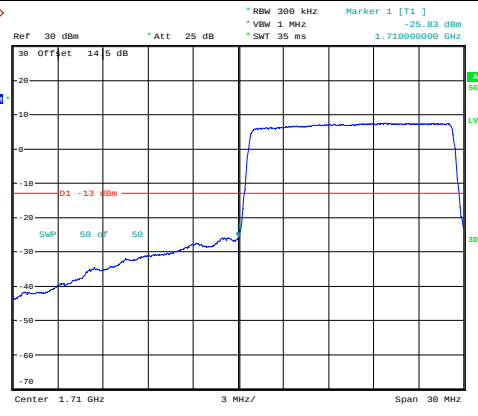
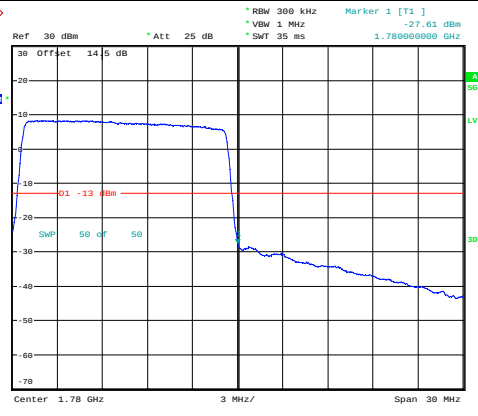
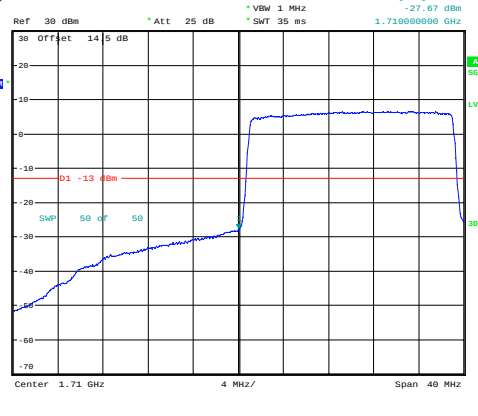
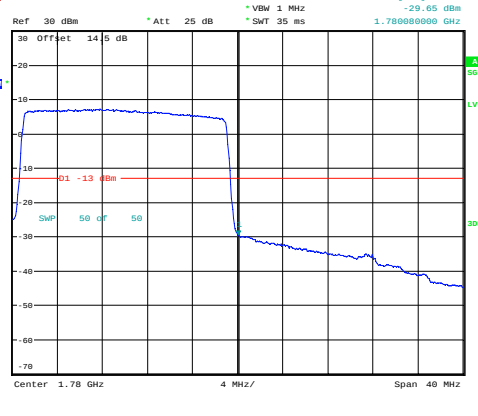
Out of band emission, Band Edge

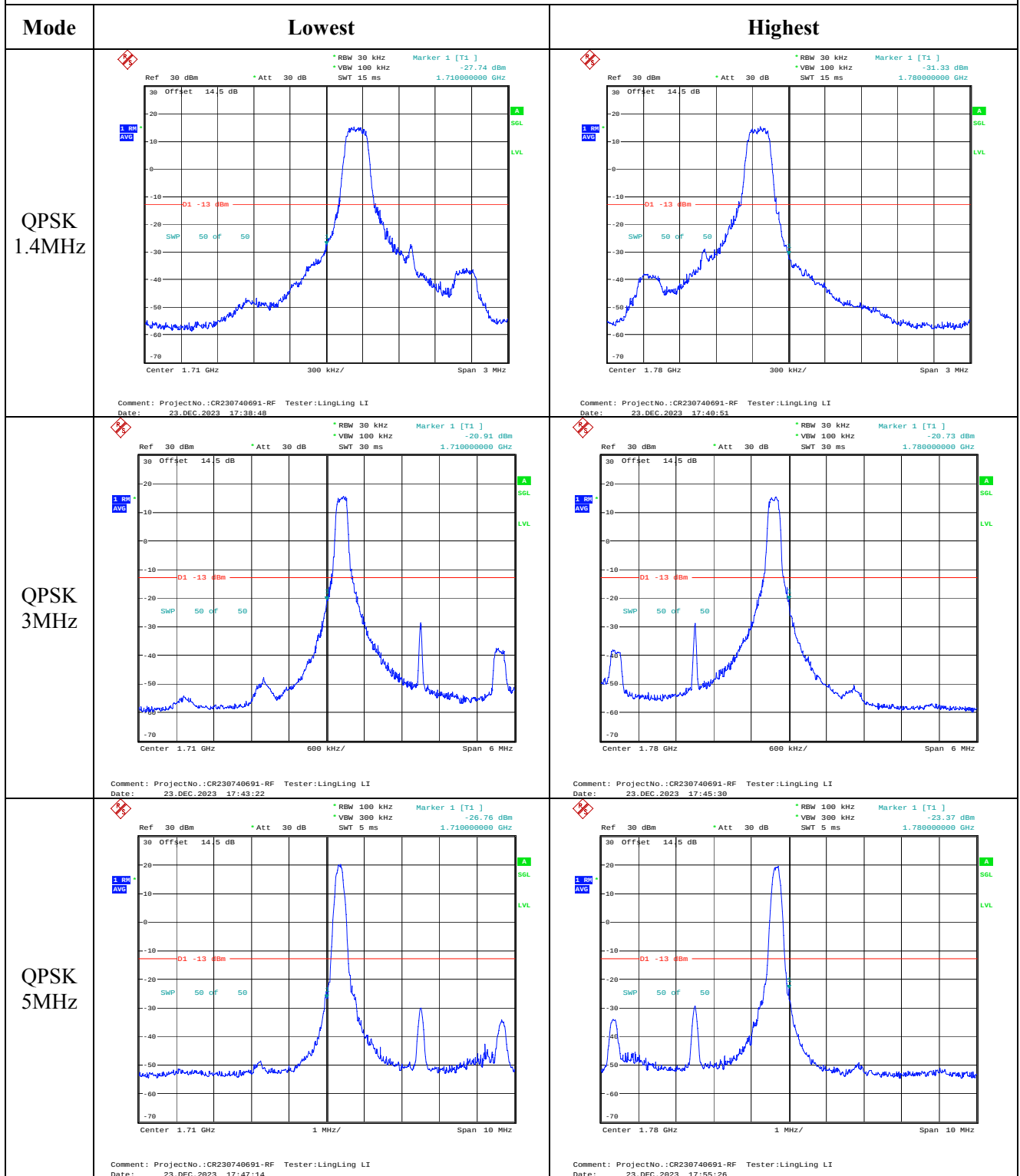
Mode	Lowest	Highest
QPSK 10MHz	Ref 30 dBm *Att 25 dB *RBW 100 kHz *VBW 300 kHz *SWT 35 ms Marker 1 [T1] -26.17 dBm 1.710000000 GHz 30 Offset 14.5 dB 1 dBm AVG 30B Center 1.71 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 20:43:27	Ref 30 dBm *Att 25 dB *RBW 100 kHz *VBW 300 kHz *SWT 35 ms Marker 1 [T1] -26.45 dBm 1.780000000 GHz 30 Offset 14.5 dB 1 dBm AVG 30B Center 1.78 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 20:43:45
QPSK 15MHz	Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 35 ms Marker 1 [T1] -26.17 dBm 1.710000000 GHz 30 Offset 14.5 dB 1 dBm AVG 30B Center 1.71 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 20:44:27	Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 35 ms Marker 1 [T1] -26.32 dBm 1.780000000 GHz 30 Offset 14.5 dB 1 dBm AVG 30B Center 1.78 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 20:44:42
QPSK 20MHz	Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 35 ms Marker 1 [T1] -26.55 dBm 1.710000000 GHz 30 Offset 14.5 dB 1 dBm AVG 30B Center 1.71 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 20:45:23	Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 35 ms Marker 1 [T1] -26.92 dBm 1.780000000 GHz 30 Offset 14.5 dB 1 dBm AVG 30B Center 1.78 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 20:45:38

Out of band emission, Band Edge

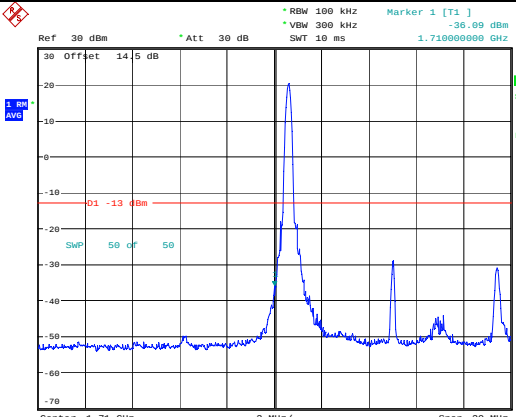
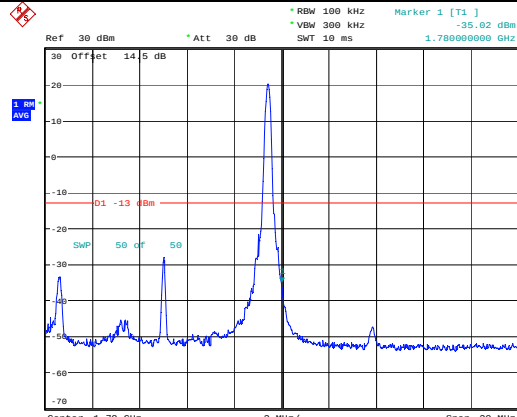
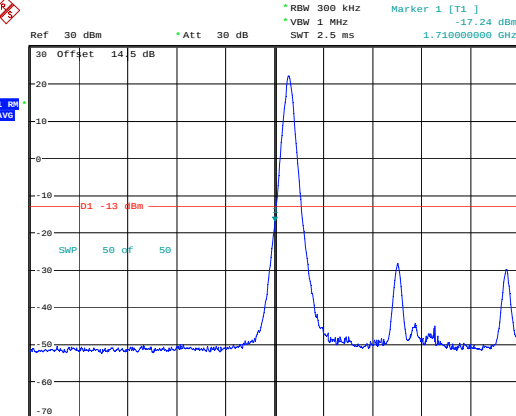
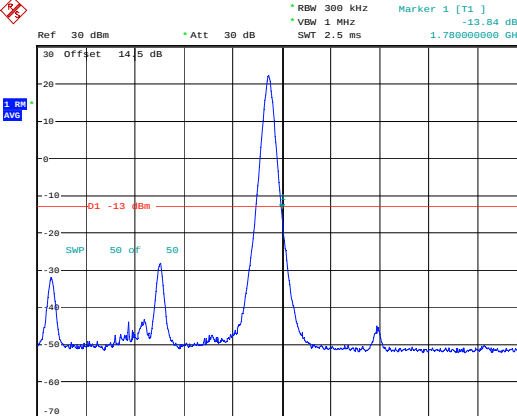
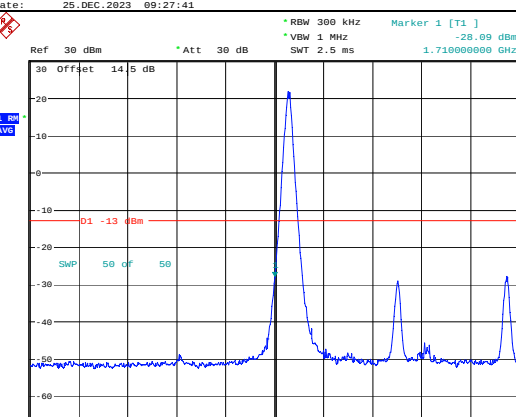
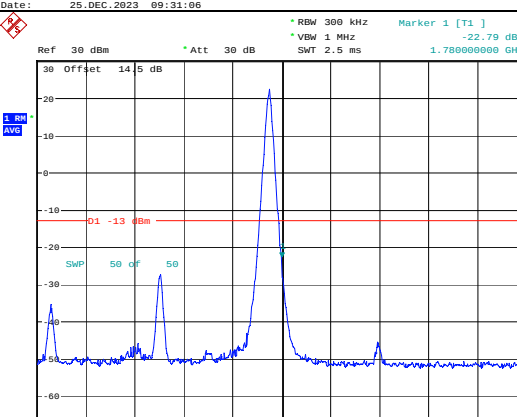
Mode	Lowest	Highest
16QAM 1.4MHz	 Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz *SWT 35 ms Marker 1 [T1] -23.05 dBm 1.709984000 GHz Center 1.71 GHz 300 kHz/ Span 3 MHz Date: 12.AUG.2023 20:38:53	 Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz *SWT 35 ms Marker 1 [T1] -27.62 dBm 1.780000000 GHz Center 1.78 GHz 300 kHz/ Span 3 MHz Date: 12.AUG.2023 20:39:09
16QAM 3MHz	 Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 300 kHz *SWT 35 ms Marker 1 [T1] -24.86 dBm 1.709980000 GHz Center 1.71 GHz 600 kHz/ Span 6 MHz Date: 12.AUG.2023 20:41:35	 Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 300 kHz *SWT 35 ms Marker 1 [T1] -26.41 dBm 1.780000000 GHz Center 1.78 GHz 600 kHz/ Span 6 MHz Date: 12.AUG.2023 20:41:52
16QAM 5MHz	 Ref 30 dBm *Att 25 dB *RBW 100 kHz *VBW 300 kHz *SWT 35 ms Marker 1 [T1] -25.57 dBm 1.710000000 GHz Center 1.71 GHz 1 MHz/ Span 10 MHz Date: 12.AUG.2023 20:42:34	 Ref 30 dBm *Att 25 dB *RBW 100 kHz *VBW 300 kHz *SWT 35 ms Marker 1 [T1] -26.31 dBm 1.780000000 GHz Center 1.78 GHz 1 MHz/ Span 10 MHz Date: 12.AUG.2023 20:42:52

Out of band emission, Band Edge

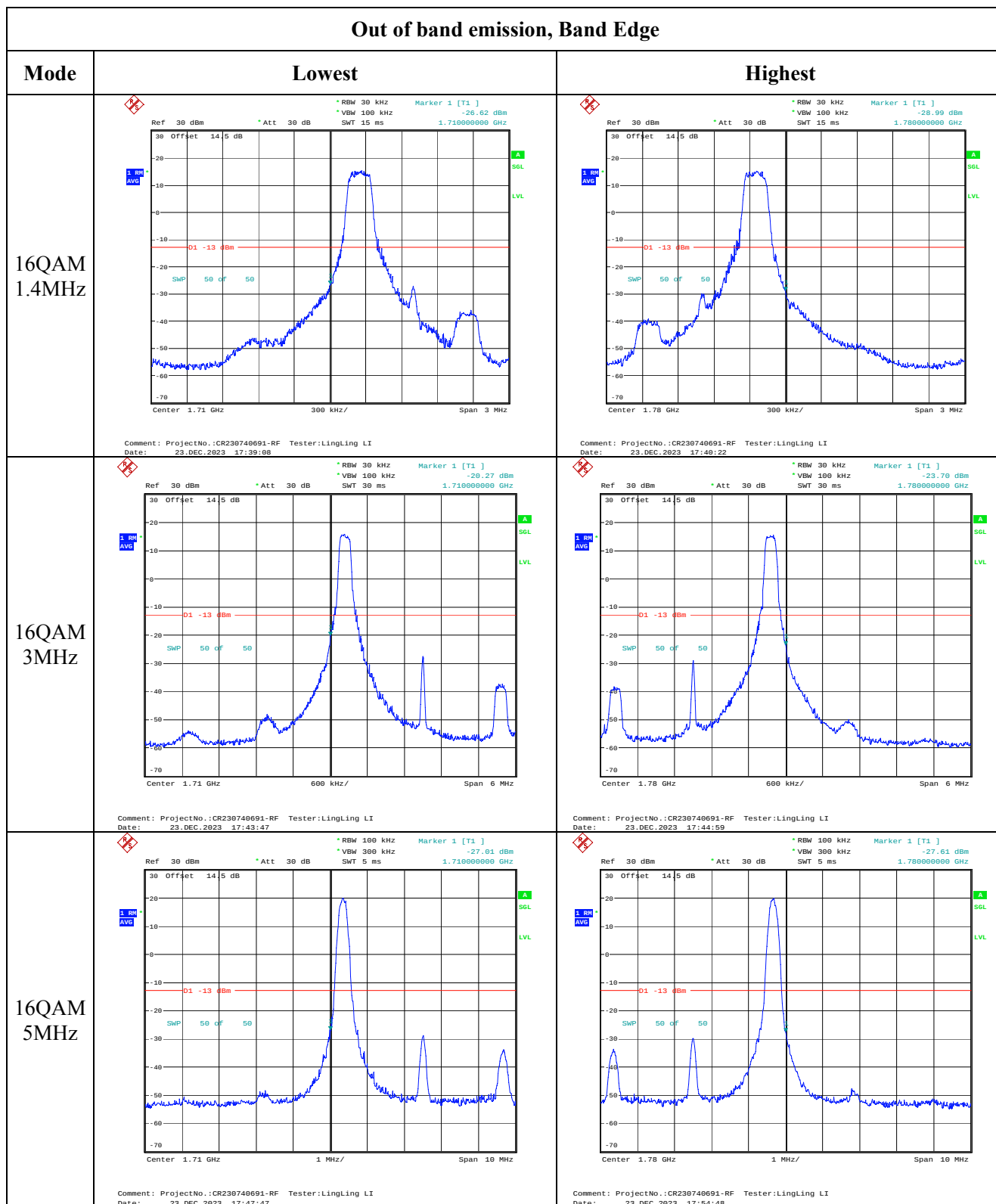
Mode	Lowest	Highest
16QAM 10MHz	 Ref 30 dBm * Att 25 dB * RBW 100 kHz * VBW 300 kHz * SWT 35 ms * Marker 1 [T1] -28.95 dBm 1.710000000 GHz Center 1.71 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 20:43:35	 Ref 30 dBm * Att 25 dB * RBW 100 kHz * VBW 300 kHz * SWT 35 ms * Marker 1 [T1] -32.69 dBm 1.780000000 GHz Center 1.78 GHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 20:43:54
16QAM 15MHz	 Ref 30 dBm * Att 25 dB * RBW 300 kHz * VBW 1 MHz * SWT 35 ms * Marker 1 [T1] -25.83 dBm 1.710000000 GHz Center 1.71 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 20:44:34	 Ref 30 dBm * Att 25 dB * RBW 300 kHz * VBW 1 MHz * SWT 35 ms * Marker 1 [T1] -27.63 dBm 1.780000000 GHz Center 1.78 GHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 20:44:50
16QAM 20MH	 Ref 30 dBm * Att 25 dB * RBW 300 kHz * VBW 1 MHz * SWT 35 ms * Marker 1 [T1] -27.67 dBm 1.710000000 GHz Center 1.71 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 20:45:30	 Ref 30 dBm * Att 25 dB * RBW 300 kHz * VBW 1 MHz * SWT 35 ms * Marker 1 [T1] -29.65 dBm 1.780000000 GHz Center 1.78 GHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 20:45:45

Test Plots for Out of band emission, Band Edge:
Note: The test is performed in 1RB mode.**Out of band emission, Band Edge**

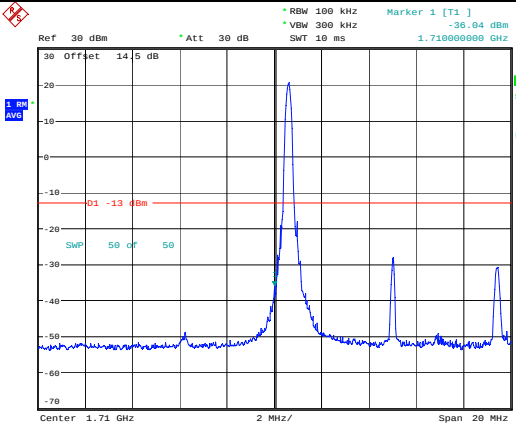
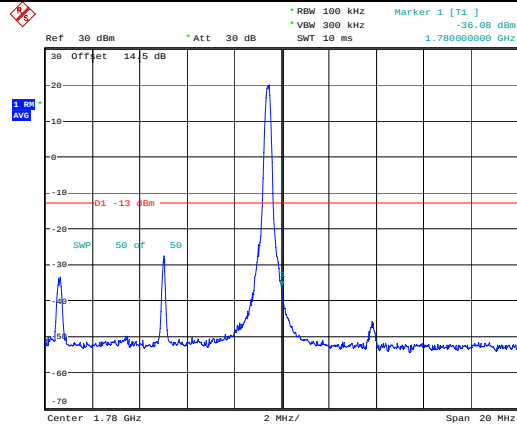
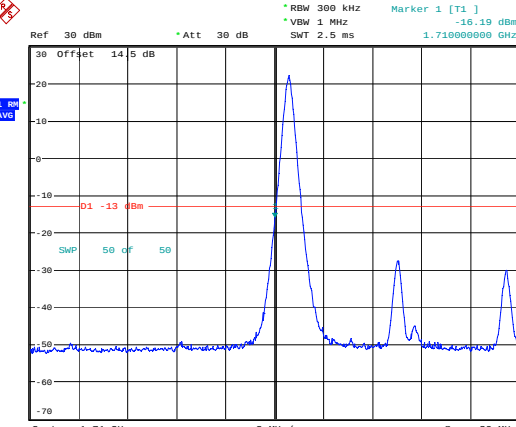
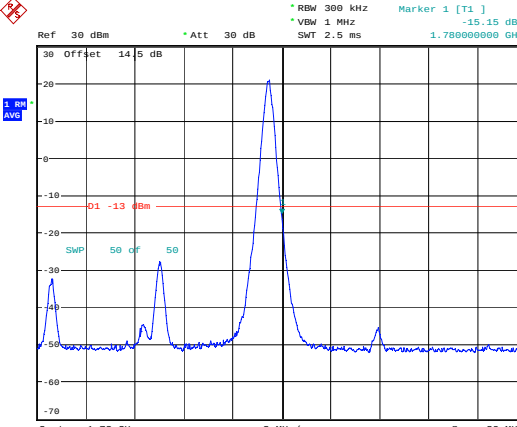
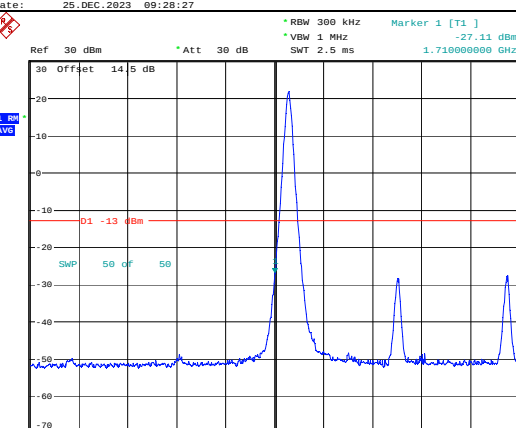
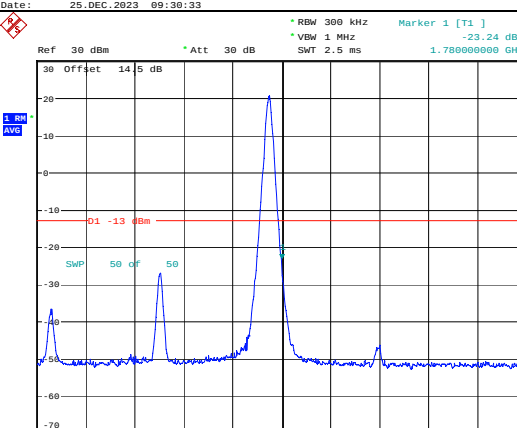
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz	 Ref 30 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1] -26.00 dBm *VBW 300 kHz SWT 10 ms 1.710000000 GHz 30 Offset 14.5 dB -20 -10 0 -10 -20 -30 -40 -50 -60 -70 Center 1.71 GHz 2 MHz/ Span 20 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 17:58:15	 Ref 30 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1] -35.02 dBm *VBW 300 kHz SWT 10 ms 1.780000000 GHz 30 Offset 14.5 dB -20 -10 0 -10 -20 -30 -40 -50 -60 -70 Center 1.78 GHz 2 MHz/ Span 20 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23.DEC.2023 18:00:25
QPSK 15MHz	 Ref 30 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -28.04 dBm *VBW 1 MHz SWT 2.5 ms 1.710000000 GHz 30 Offset 14.5 dB -20 -10 0 -10 -20 -30 -40 -50 -60 -70 Center 1.71 GHz 3 MHz/ Span 30 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25.DEC.2023 09:27:41	 Ref 30 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -27.84 dBm *VBW 1 MHz SWT 2.5 ms 1.780000000 GHz 30 Offset 14.5 dB -20 -10 0 -10 -20 -30 -40 -50 -60 -70 Center 1.78 GHz 3 MHz/ Span 30 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25.DEC.2023 09:31:06
QPSK 20MHz	 Ref 30 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -28.09 dBm *VBW 1 MHz SWT 2.5 ms 1.710000000 GHz 30 Offset 14.5 dB -20 -10 0 -10 -20 -30 -40 -50 -60 -70 Center 1.71 GHz 4 MHz/ Span 40 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25.DEC.2023 09:41:27	 Ref 30 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -22.79 dBm *VBW 1 MHz SWT 2.5 ms 1.780000000 GHz 30 Offset 14.5 dB -20 -10 0 -10 -20 -30 -40 -50 -60 -70 Center 1.78 GHz 4 MHz/ Span 40 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25.DEC.2023 09:40:21

Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23 DEC 2023 17:58:45	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 23 DEC 2023 17:59:48
16QAM 15MHz	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC 2023 09:28:27	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC 2023 09:30:33
16QAM 20MHz	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC 2023 09:41:52	 Comment: ProjectNo.:CR230740691-RF Tester:LingLing LI Date: 25 DEC 2023 09:39:54

4.11 Antenna Port Test Data and Results for LTE Band 71

Serial Number:	288V-1	Test Date:	2023/8/4-2023/12/26
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu/Arthur Su/LingLing Li	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.3-25.7	Relative Humidity: (%)	42-58	ATM Pressure: (kPa)	99.7-101.3
-------------------	-----------	------------------------	-------	---------------------	------------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A
Unknown	Coaxial tee connector	Unknown	2204004	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	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A
R&S	Spectrum Analyzer	FSU26	100147	2023/3/31	2024/3/30

* 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	665.5	680.5	695.5
10MHz	668	680.5	693
15MHz	670.5	680.5	690.5
20MHz	673	680.5	688

Test Data:**FCC§2.1046;§ 27.50(c) (10)****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	25.15	26.04	25.95	22.66	34.77
	RB1#13	26.06	26.09	26		
	RB1#24	26.19	25.99	25.93		
	RB15#0	25.2	25.14	24.9		
	RB15#10	25.27	25.1	24.96		
	RB25#0	25.29	25.07	24.89		
5MHz 16QAM	RB1#0	25.38	25.2	25.29	21.88	34.77
	RB1#13	25.36	25.25	25.41		
	RB1#24	25.38	25.13	25.25		
	RB15#0	24.3	24.25	23.96		
	RB15#10	24.39	24.14	24.01		
	RB25#0	24.4	24.21	23.98		
10MHz QPSK	RB1#0	26.12	26.02	25.99	22.61	34.77
	RB1#25	26.14	26	25.95		
	RB1#49	26.04	26.01	25.98		
	RB25#0	25.24	25.16	25.03		
	RB25#25	25.12	25.06	24.91		
	RB50#0	25.17	25.13	25		
10MHz 16QAM	RB1#0	25.22	25.25	25.07	21.72	34.77
	RB1#25	25.2	25.21	24.96		
	RB1#49	25.15	25.25	25.02		
	RB25#0	24.36	24.27	24.18		
	RB25#25	24.32	24.18	24.11		
	RB50#0	24.28	24.15	24.13		
15MHz QPSK	RB1#0	26.13	26.11	26.02	22.56	34.77
	RB1#38	26.09	26.01	25.94		
	RB1#74	26.07	26.02	25.88		
	RB36#0	25.15	25.12	24.93		
	RB36#39	25.12	25.02	24.89		
	RB75#0	25.06	25.04	24.98		
15MHz 16QAM	RB1#0	25.65	25.58	25.48	22.67	34.77
	RB1#38	25.56	25.52	25.42		
	RB1#74	25.54	25.5	25.4		
	RB36#0	24.26	24.18	24.01		
	RB36#39	24.21	24.09	24		
	RB75#0	24.16	24.12	24.06		
20MHz QPSK	RB1#0	26.2	26.09	26.14	22.58	34.77
	RB1#50	26.11	25.95	26.04		
	RB1#99	26.02	25.9	25.98		

20MHz 16QAM	RB50#0	25.2	25.12	25.06	22.22	34.77
	RB50#50	25.14	25.01	24.97		
	RB100#0	25.19	25.07	24.95		
	RB1#0	25.49	25.75	25.4		
	RB1#50	25.38	25.64	25.34		
	RB1#99	25.32	25.58	25.26		
	RB50#0	24.32	24.22	24.14		
	RB50#50	24.34	24.11	24.1		
	RB100#0	24.32	24.16	24.06		
Note: $ERP = \text{Conducted Power(dBm)} - L_c(\text{dB}) + G_T(\text{dBd})$ $G_T(\text{dBd}) = G_T(\text{dBi}) - 2.15$						
Note: $ERP = \text{Conducted Power(dBm)} - \text{Cable loss(dB)} + \text{Antenna Gain(dBd)}$						
					Result:	Pass

Peak-to-average Ratio(PAR)					
Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	3.49	3.56	3.53	13
	RB100#0	6.15	6.83	6.12	13
20MHz 16QAM	RB1#0	5.74	5.45	5.54	13
	RB100#0	7.02	7.4	6.96	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	4.54	4.5	4.52	5.02	5.0	4.98
5MHz 16QAM	4.52	4.54	4.54	4.98	5.02	5.00
10MHz QPSK	8.96	9	9	9.64	10	10
10MHz 16QAM	8.96	9	9	9.64	10	10
15MHz QPSK	13.44	13.62	13.5	14.76	14.82	14.7
15MHz 16QAM	13.44	13.560	13.5	14.70	14.820	14.7
20MHz QPSK	17.92	18	17.76	19.36	20	19.44
20MHz 16QAM	17.84	18	17.92	19.28	19	19.28
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

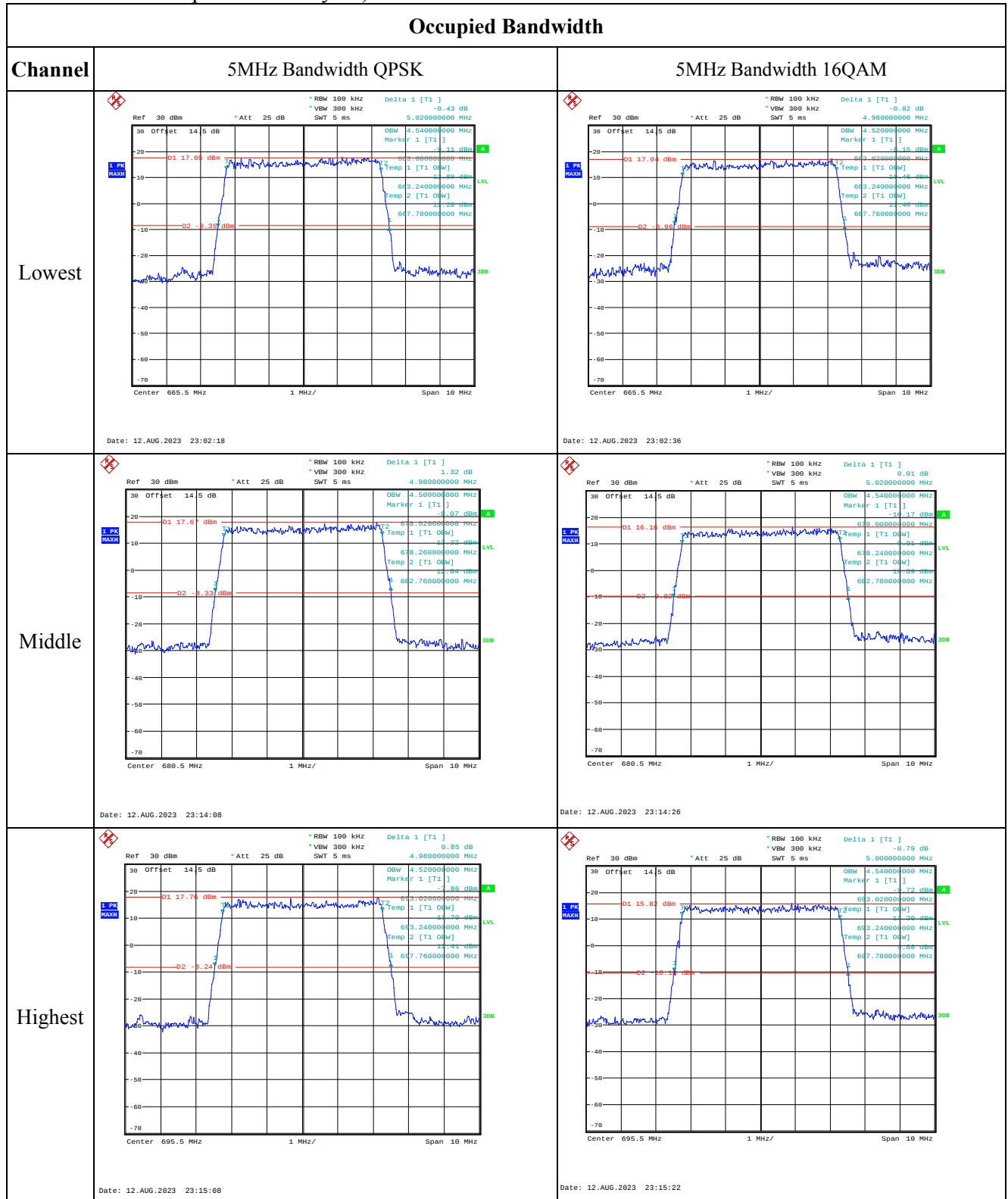
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.
----------------	---

FCC §2.1055, §27.54: Frequency Stability

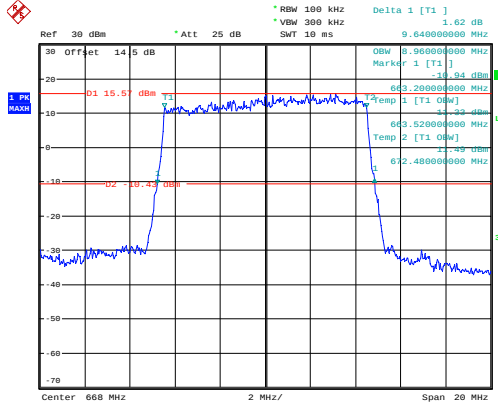
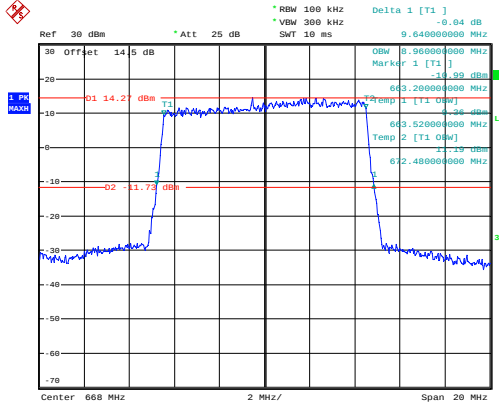
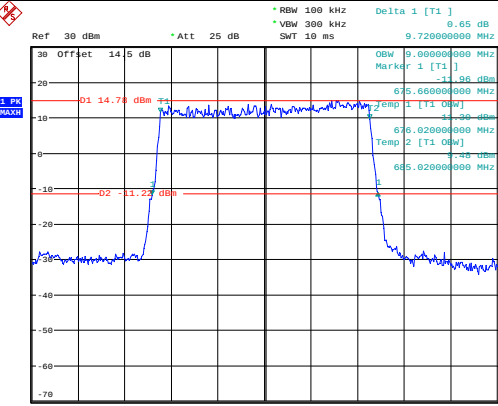
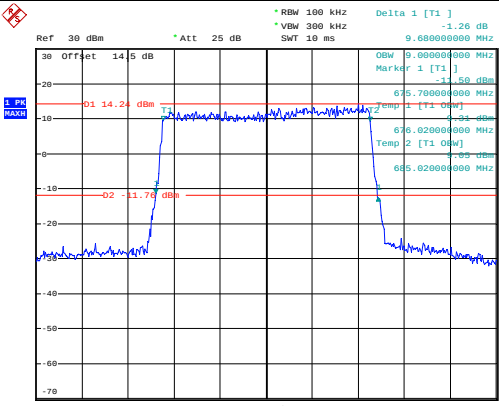
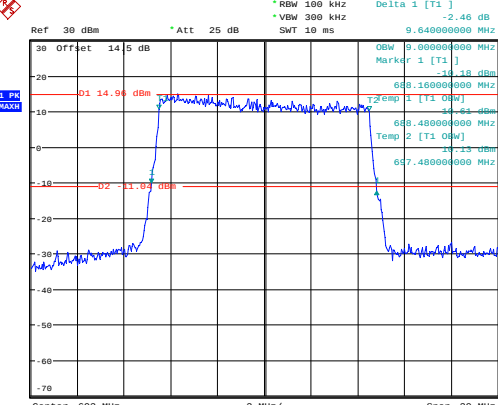
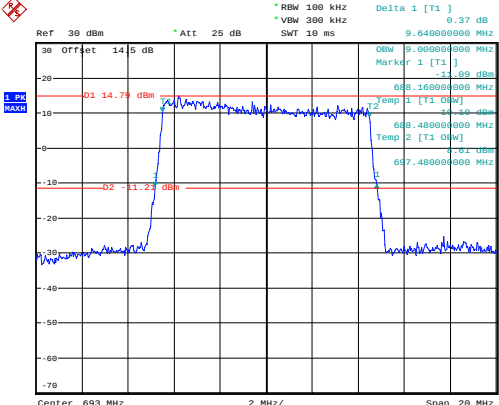
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	5	664.116	663.00	696.889	698.00
	-20	5	664.105	663.00	696.888	698.00
	-10	5	664.093	663.00	696.909	698.00
	0	5	664.097	663.00	696.892	698.00
	10	5	664.111	663.00	696.905	698.00
	20	5	664.120	663.00	696.880	698.00
	30	5	664.102	663.00	696.907	698.00
	40	5	664.098	663.00	696.899	698.00
	50	5	664.095	663.00	696.907	698.00
Frequency Stability vs. Voltage	20	4.4	664.102	663.00	696.905	698.00
	20	5.25	664.113	663.00	696.888	698.00
Result:					Pass	

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature(°C)	Voltage(V _{DC})	Lower Edge(MHz)		Upper Edge(MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	5	664.112	663.00	696.979	698.00
	-20	5	664.103	663.00	696.988	698.00
	-10	5	664.094	663.00	696.964	698.00
	0	5	664.114	663.00	696.963	698.00
	10	5	664.109	663.00	696.978	698.00
	20	5	664.120	663.00	696.960	698.00
	30	5	664.097	663.00	696.975	698.00
	40	5	664.114	663.00	696.978	698.00
	50	5	664.113	663.00	696.966	698.00
Frequency Stability vs. Voltage	20	4.4	664.116	663.00	696.987	698.00
	20	5.25	664.100	663.00	696.969	698.00
Result:					Pass	

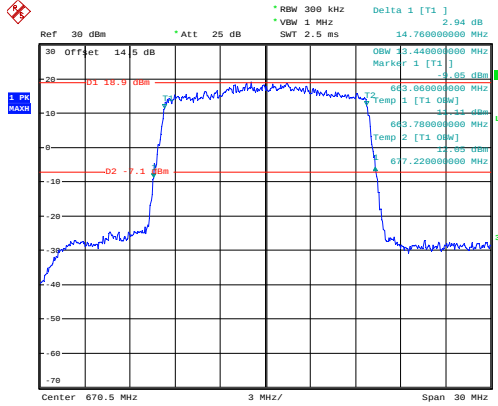
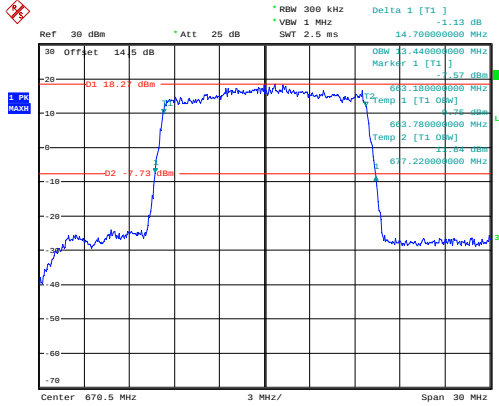
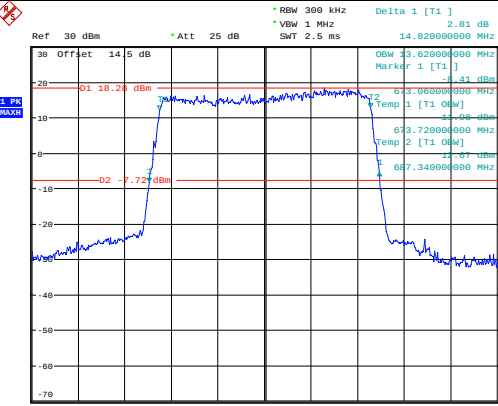
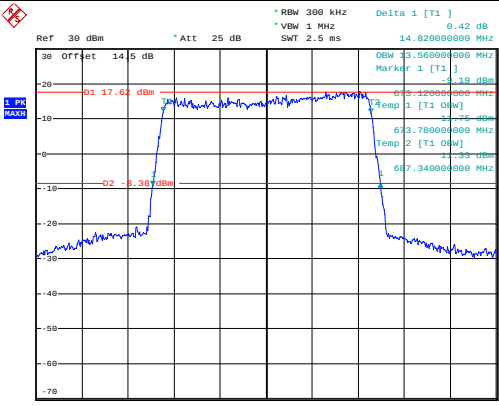
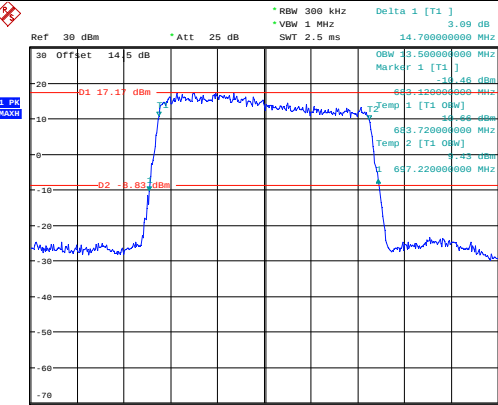
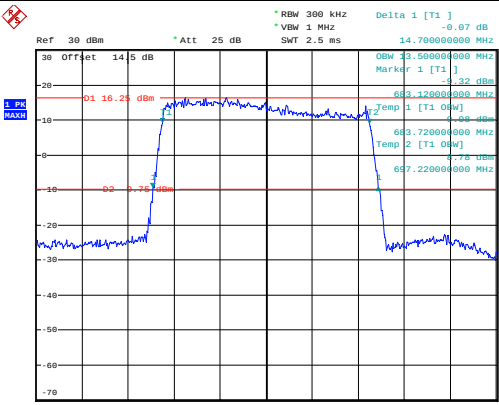
Test Plots(Note: The 14.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):



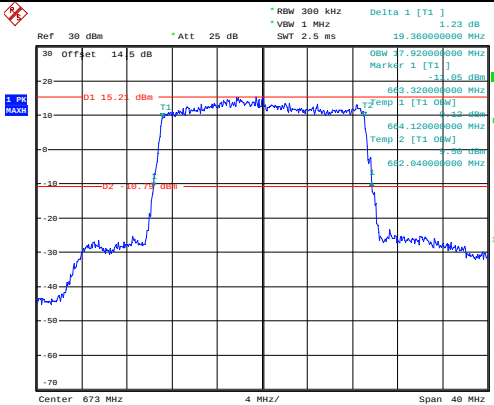
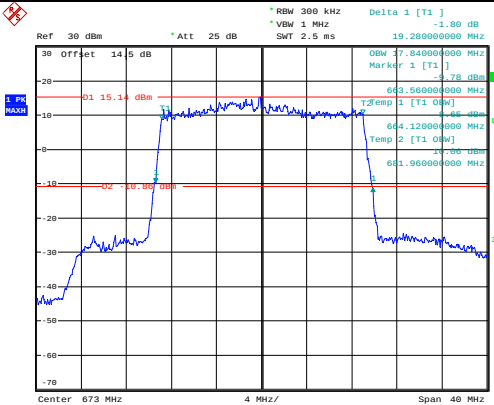
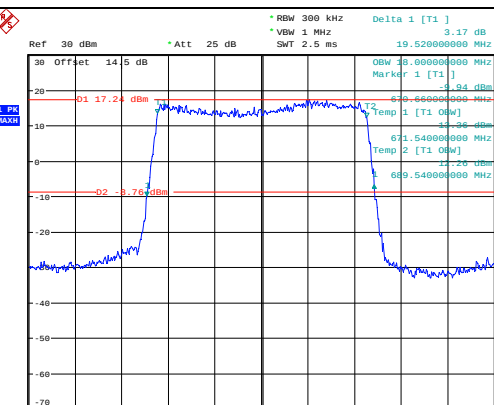
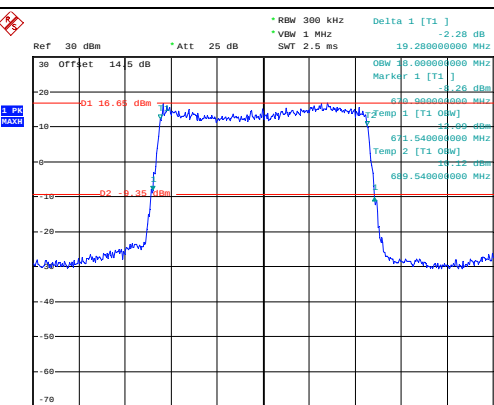
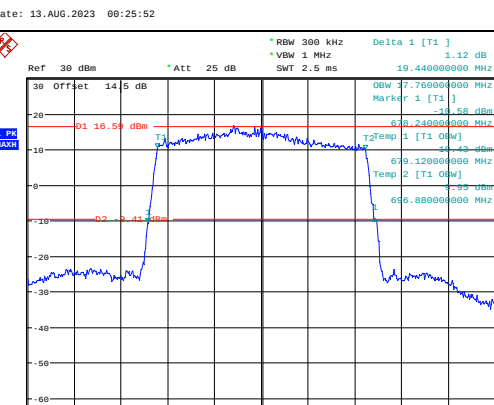
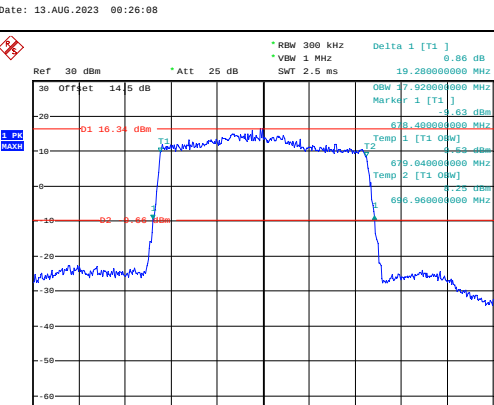
Occupied Bandwidth

Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 1 [T1] 1.62 dB Marker 1 [T1] -10.94 dBm D1 15.57 dBm D2 -10.94 dBm Center 668 MHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 23:16:06	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 1 [T1] -0.04 dB Marker 1 [T1] -10.99 dBm D1 14.27 dBm D2 -11.73 dBm Center 668 MHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 23:16:24
Middle	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 1 [T1] 0.65 dB Marker 1 [T1] -11.58 dBm D1 14.78 dBm D2 -11.58 dBm Center 680.5 MHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 23:28:39	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 1 [T1] -1.25 dB Marker 1 [T1] -11.79 dBm D1 14.24 dBm D2 -11.79 dBm Center 680.5 MHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 23:28:57
Highest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 2 [T1] -2.46 dB Marker 1 [T1] -11.03 dBm D1 14.96 dBm D2 -11.03 dBm Center 693 MHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 23:29:39	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 1 [T1] 0.37 dB Marker 1 [T1] -11.23 dBm D1 14.79 dBm D2 -11.23 dBm Center 693 MHz 2 MHz/ Span 20 MHz Date: 12.AUG.2023 23:29:56

Occupied Bandwidth

Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 2.94 dB VBW 1 MHz SWT 2.5 ms 14.700000000 MHz Marker 1 [T1] -10.85 dBm OBW 13.440000000 MHz Temp 1 [T1 0dB] -10.85 dBm 663.060000000 MHz Temp 2 [T1 0dB] -10.85 dBm 663.780000000 MHz Temp 2 [T1 0dB] -10.85 dBm 677.220000000 MHz Temp 2 [T1 0dB] -10.85 dBm Center 670.5 MHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 23:39:40	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 2.94 dB VBW 1 MHz SWT 2.5 ms 14.700000000 MHz Marker 1 [T1] -10.87 dBm OBW 13.440000000 MHz Temp 1 [T1 0dB] -10.87 dBm 663.180000000 MHz Temp 2 [T1 0dB] -10.87 dBm 663.780000000 MHz Temp 2 [T1 0dB] -10.87 dBm 677.220000000 MHz Temp 2 [T1 0dB] -10.87 dBm Center 670.5 MHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 23:39:57
Middle	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 2.81 dB VBW 1 MHz SWT 2.5 ms 14.820000000 MHz Marker 1 [T1] -10.41 dBm OBW 13.620000000 MHz Temp 1 [T1 0dB] -10.41 dBm 663.060000000 MHz Temp 2 [T1 0dB] -10.41 dBm 663.720000000 MHz Temp 2 [T1 0dB] -10.41 dBm 677.340000000 MHz Temp 2 [T1 0dB] -10.41 dBm Center 680.5 MHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 23:39:10	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 2.81 dB VBW 1 MHz SWT 2.5 ms 14.820000000 MHz Marker 1 [T1] -10.19 dBm OBW 13.500000000 MHz Temp 1 [T1 0dB] -10.19 dBm 663.120000000 MHz Temp 2 [T1 0dB] -10.19 dBm 663.720000000 MHz Temp 2 [T1 0dB] -10.19 dBm 677.340000000 MHz Temp 2 [T1 0dB] -10.19 dBm Center 680.5 MHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 23:39:29
Highest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 3.09 dB VBW 1 MHz SWT 2.5 ms 14.700000000 MHz Marker 1 [T1] -10.46 dBm OBW 13.580000000 MHz Temp 1 [T1 0dB] -10.46 dBm 663.120000000 MHz Temp 2 [T1 0dB] -10.46 dBm 663.720000000 MHz Temp 2 [T1 0dB] -10.46 dBm 677.220000000 MHz Temp 2 [T1 0dB] -10.46 dBm Center 690.5 MHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 23:39:59	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 3.07 dB VBW 1 MHz SWT 2.5 ms 14.700000000 MHz Marker 1 [T1] -10.52 dBm OBW 13.580000000 MHz Temp 1 [T1 0dB] -10.52 dBm 663.120000000 MHz Temp 2 [T1 0dB] -10.52 dBm 663.720000000 MHz Temp 2 [T1 0dB] -10.52 dBm 677.220000000 MHz Temp 2 [T1 0dB] -10.52 dBm Center 690.5 MHz 3 MHz/ Span 30 MHz Date: 12.AUG.2023 23:40:17

Occupied Bandwidth

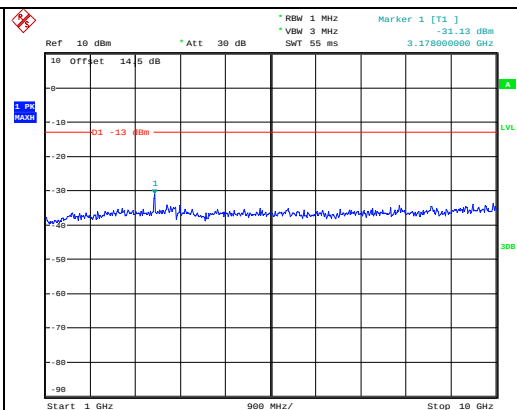
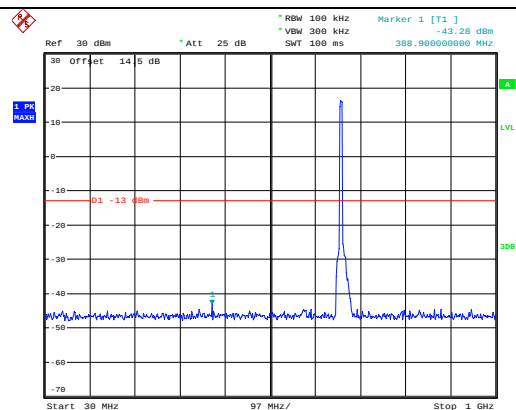
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] 3.23 dB VBW 1 MHz SWT 2.5 ms 19.360000000 MHz Marker 1 [T1] 673.320000000 MHz T2Temp 1 [T1 0dB] 673.320000000 MHz Temp 2 [T1 0dB] 672.040000000 MHz Center 673 MHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 23:40:57	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] 3.23 dB VBW 1 MHz SWT 2.5 ms 19.280000000 MHz Marker 1 [T1] 673.560000000 MHz T2Temp 1 [T1 0dB] 673.560000000 MHz Temp 2 [T1 0dB] 671.960000000 MHz Center 673 MHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 23:41:12
Middle	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] 3.17 dB VBW 1 MHz SWT 2.5 ms 19.520000000 MHz Marker 1 [T1] 680.900000000 MHz T2Temp 1 [T1 0dB] 680.900000000 MHz Temp 2 [T1 0dB] 679.540000000 MHz Center 680.5 MHz 4 MHz/ Span 40 MHz Date: 13.AUG.2023 00:25:52	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] 3.28 dB VBW 1 MHz SWT 2.5 ms 19.280000000 MHz Marker 1 [T1] 680.900000000 MHz T2Temp 1 [T1 0dB] 680.900000000 MHz Temp 2 [T1 0dB] 679.540000000 MHz Center 680.5 MHz 4 MHz/ Span 40 MHz Date: 13.AUG.2023 00:26:08
Highest	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] 1.12 dB VBW 1 MHz SWT 2.5 ms 19.440000000 MHz Marker 1 [T1] 679.760000000 MHz T2Temp 1 [T1 0dB] 679.760000000 MHz Temp 2 [T1 0dB] 679.120000000 MHz Center 688 MHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 23:55:05	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] 0.86 dB VBW 1 MHz SWT 2.5 ms 19.280000000 MHz Marker 1 [T1] 679.920000000 MHz T2Temp 1 [T1 0dB] 679.920000000 MHz Temp 2 [T1 0dB] 679.040000000 MHz Center 688 MHz 4 MHz/ Span 40 MHz Date: 12.AUG.2023 23:55:23

Spurious Emissions at Antenna Terminal

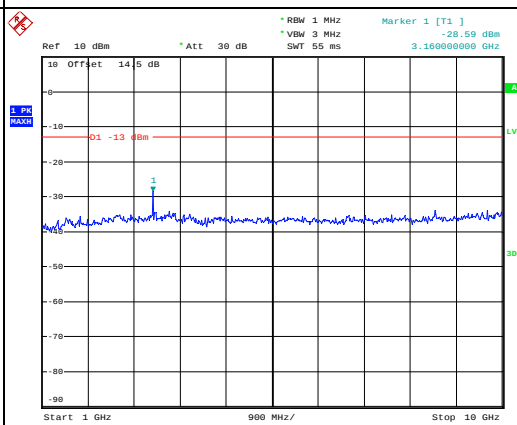
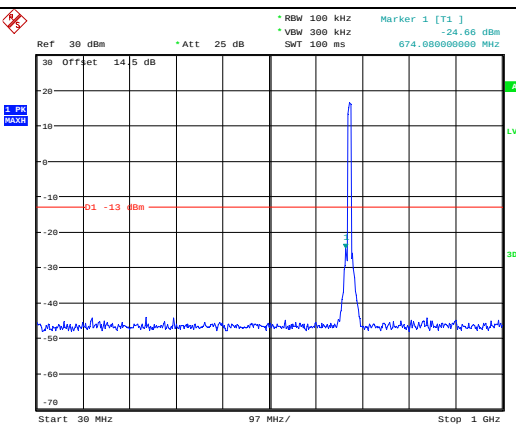
Channel

5MHz Bandwidth QPSK

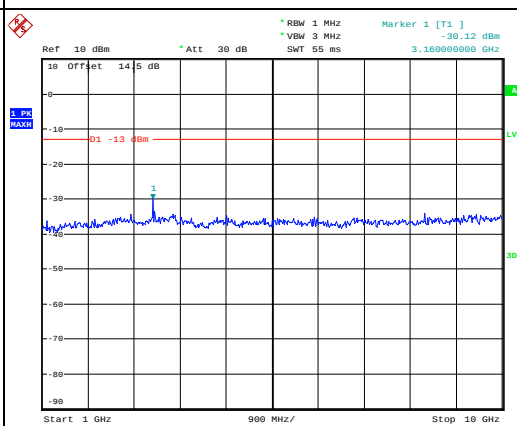
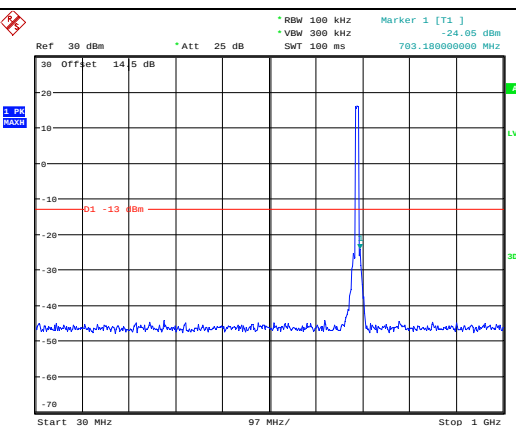
Lowest



Middle



Highest

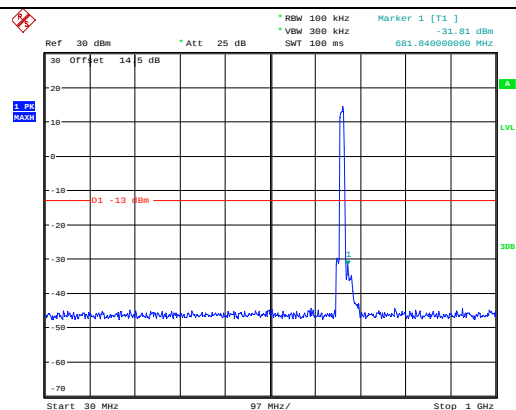


Spurious Emissions at Antenna Terminal

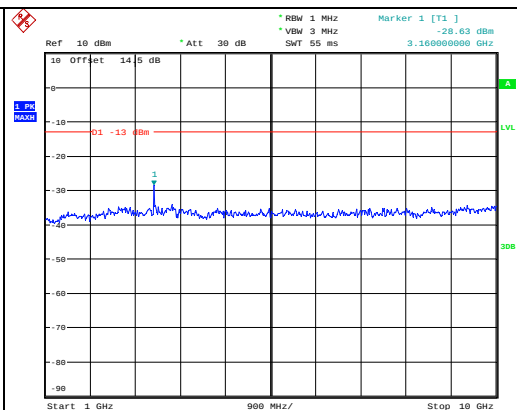
Channel

10MHz Bandwidth QPSK

Lowest

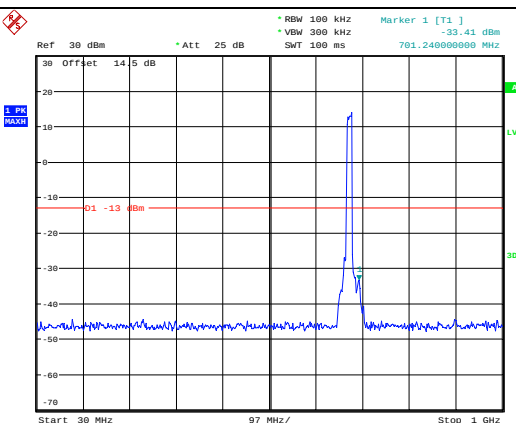


Date: 14.AUG.2023 17:55:26

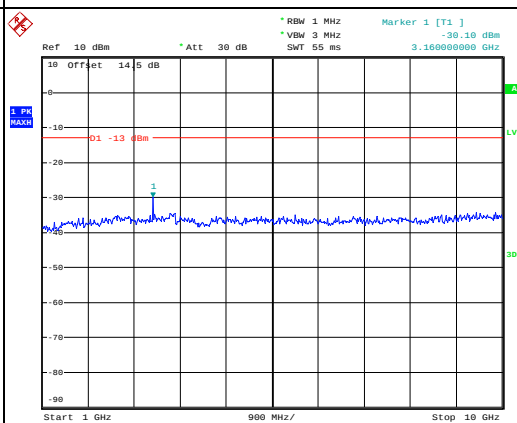


Date: 14.AUG.2023 17:55:39

Middle

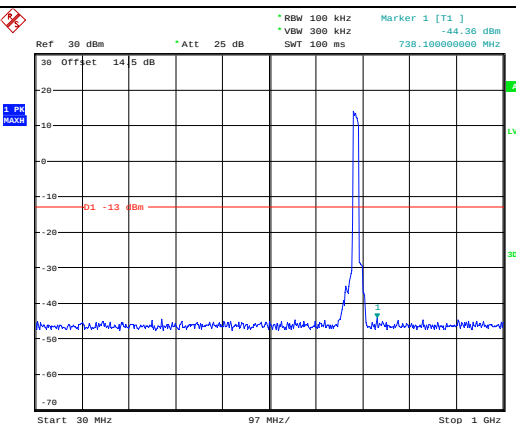


Date: 14.AUG.2023 18:02:07

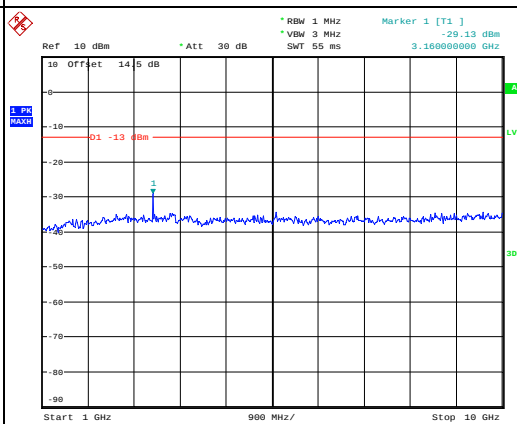


Date: 14.AUG.2023 18:02:28

Highest



Date: 14.AUG.2023 18:02:53



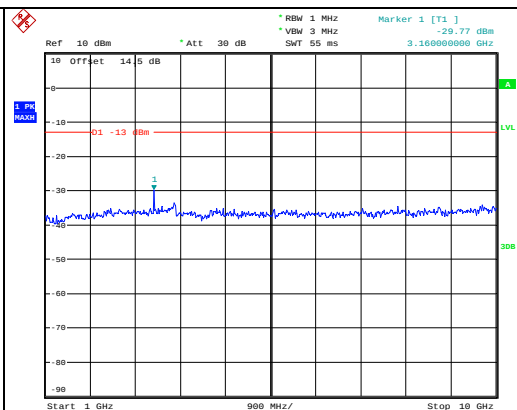
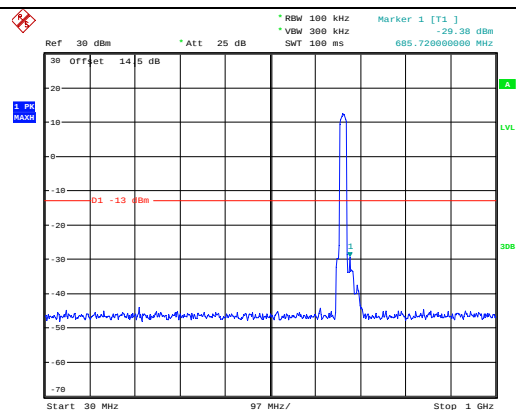
Date: 14.AUG.2023 18:03:06

Spurious Emissions at Antenna Terminal

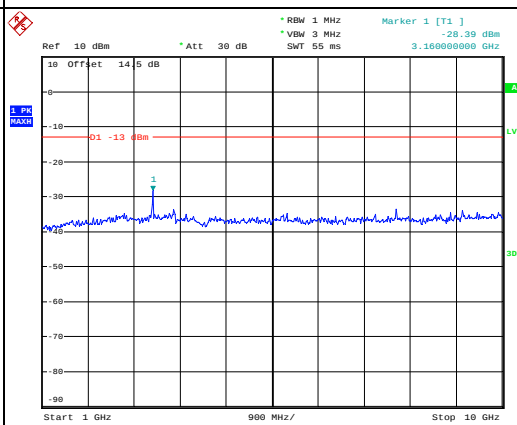
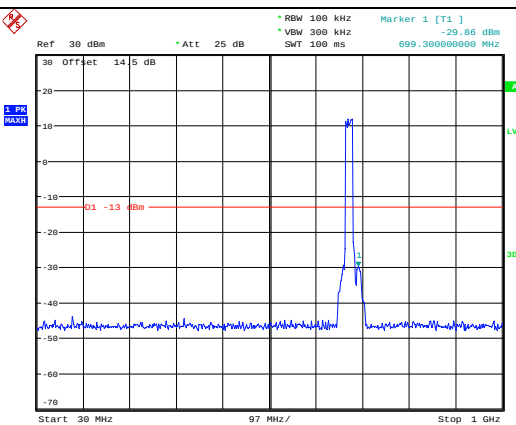
Channel

15MHz Bandwidth QPSK

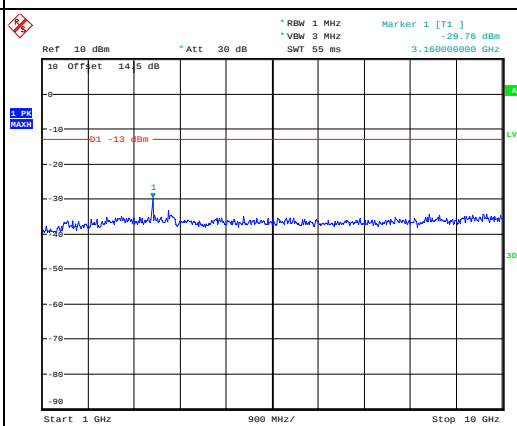
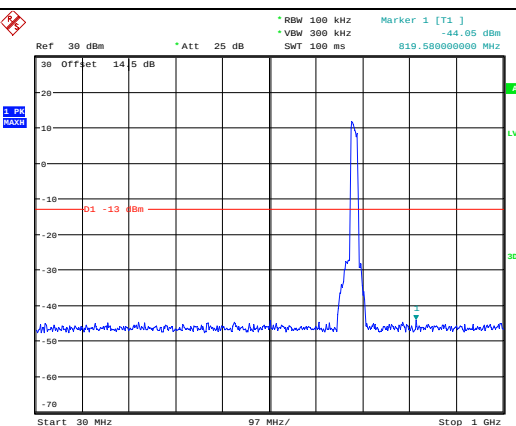
Lowest



Middle



Highest

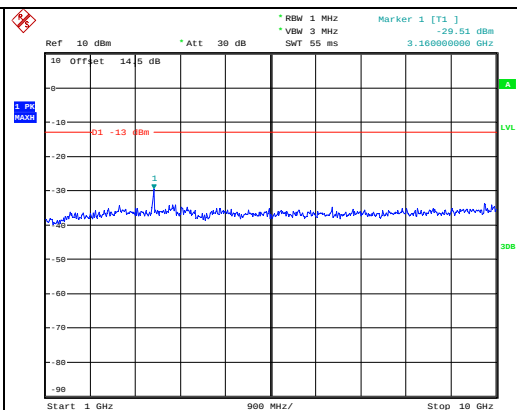
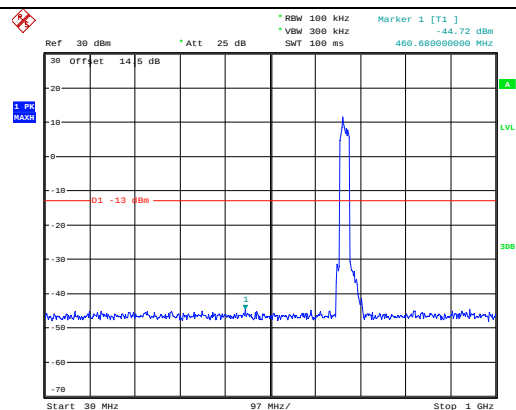


Spurious Emissions at Antenna Terminal

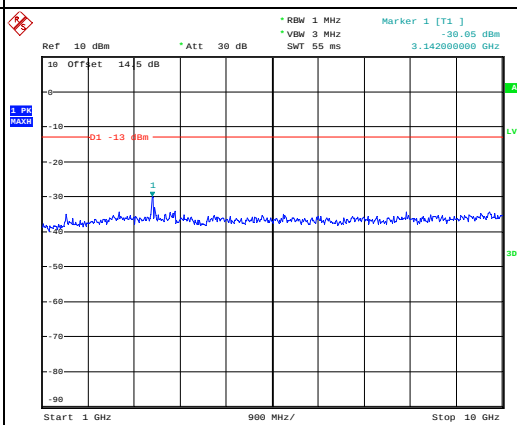
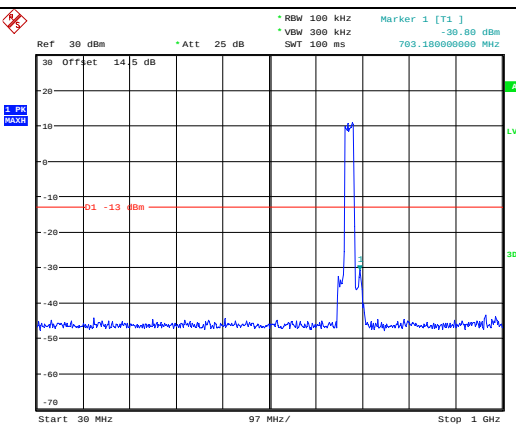
Channel

20MHz Bandwidth QPSK

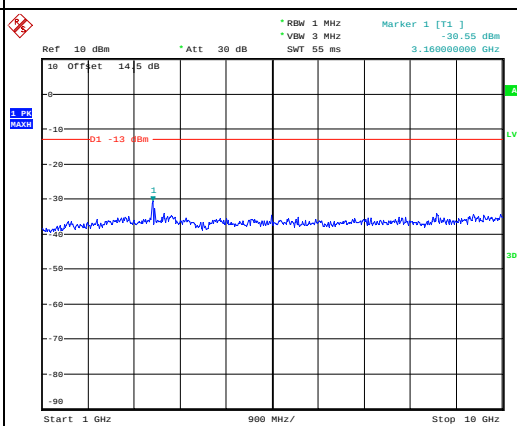
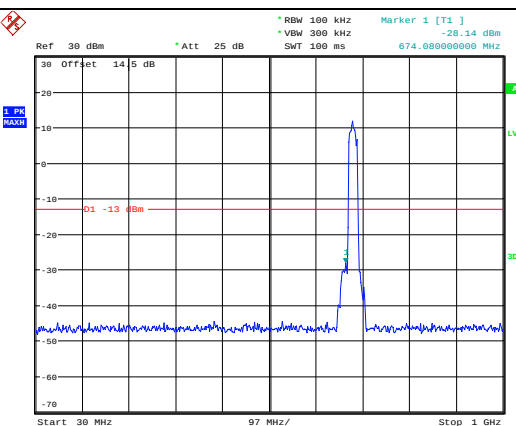
Lowest



Middle

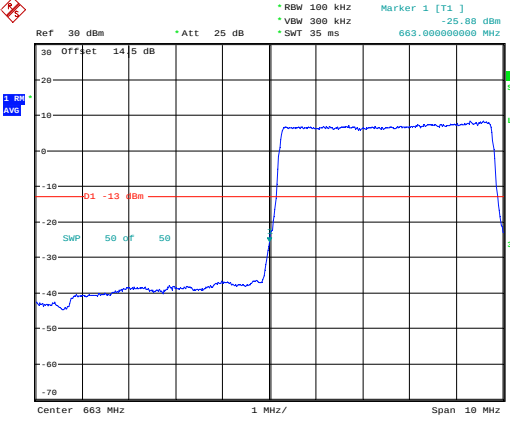
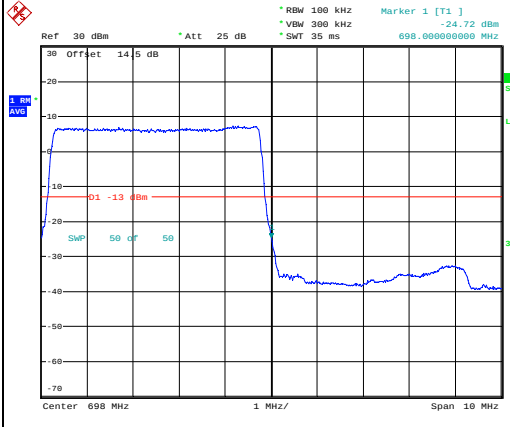
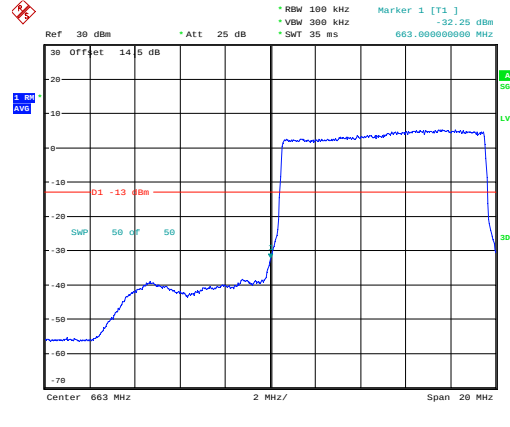
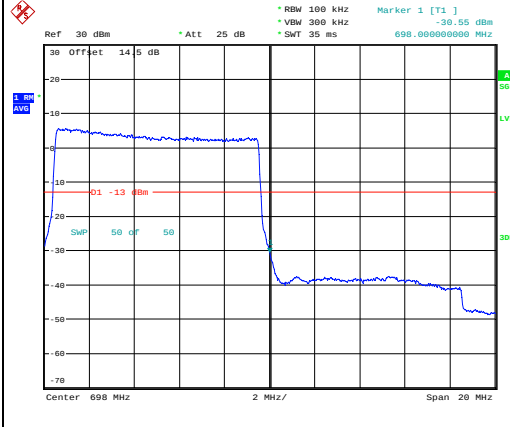
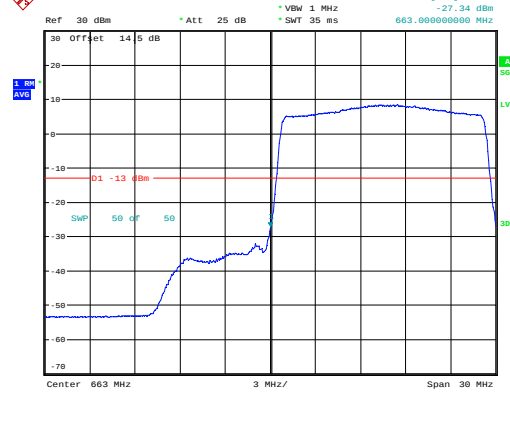
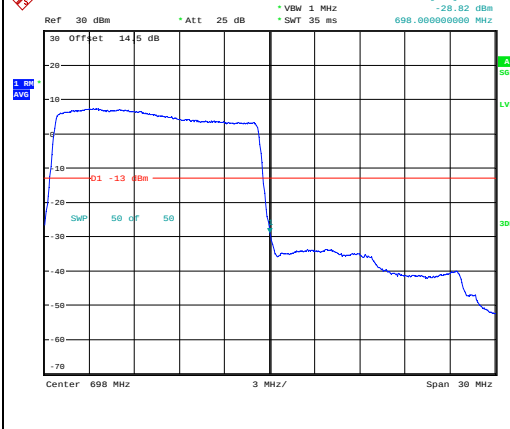


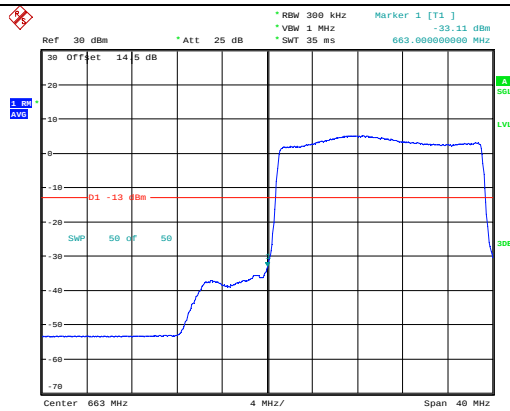
Highest



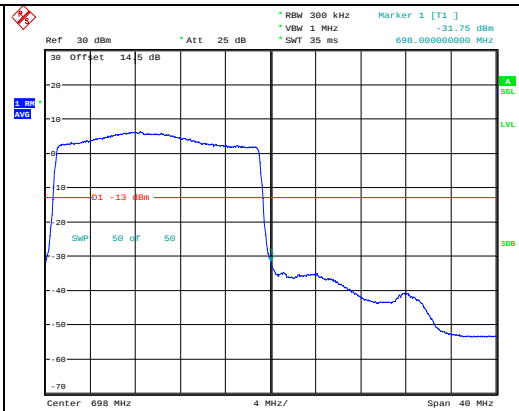
Test Plots for Out of band emission, Band Edge:
Note: The test is performed in full RB mode.

Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 5MHz	 Ref 30 dBm * Att 25 dB * RBW 100 kHz * VBW 300 kHz * SWT 35 ms * Marker 1 [T1] -25.88 dBm 663.000000000 MHz Center 663 MHz 1 MHz/ Span 10 MHz Date: 14.AUG.2023 17:42:57	 Ref 30 dBm * Att 25 dB * RBW 100 kHz * VBW 300 kHz * SWT 35 ms * Marker 1 [T1] -24.72 dBm 698.000000000 MHz Center 698 MHz 1 MHz/ Span 10 MHz Date: 14.AUG.2023 17:44:38
QPSK 10MHz	 Ref 30 dBm * Att 25 dB * RBW 100 kHz * VBW 300 kHz * SWT 35 ms * Marker 1 [T1] -32.25 dBm 663.000000000 MHz Center 663 MHz 2 MHz/ Span 20 MHz Date: 14.AUG.2023 17:45:27	 Ref 30 dBm * Att 25 dB * RBW 100 kHz * VBW 300 kHz * SWT 35 ms * Marker 1 [T1] -30.55 dBm 698.000000000 MHz Center 698 MHz 2 MHz/ Span 20 MHz Date: 14.AUG.2023 17:46:06
QPSK 15MHz	 Ref 30 dBm * Att 25 dB * RBW 300 kHz * VBW 1 MHz * SWT 35 ms * Marker 1 [T1] -27.34 dBm 663.000000000 MHz Center 663 MHz 3 MHz/ Span 30 MHz Date: 14.AUG.2023 17:46:54	 Ref 30 dBm * Att 25 dB * RBW 300 kHz * VBW 1 MHz * SWT 35 ms * Marker 1 [T1] -26.82 dBm 698.000000000 MHz Center 698 MHz 3 MHz/ Span 30 MHz Date: 14.AUG.2023 17:47:36

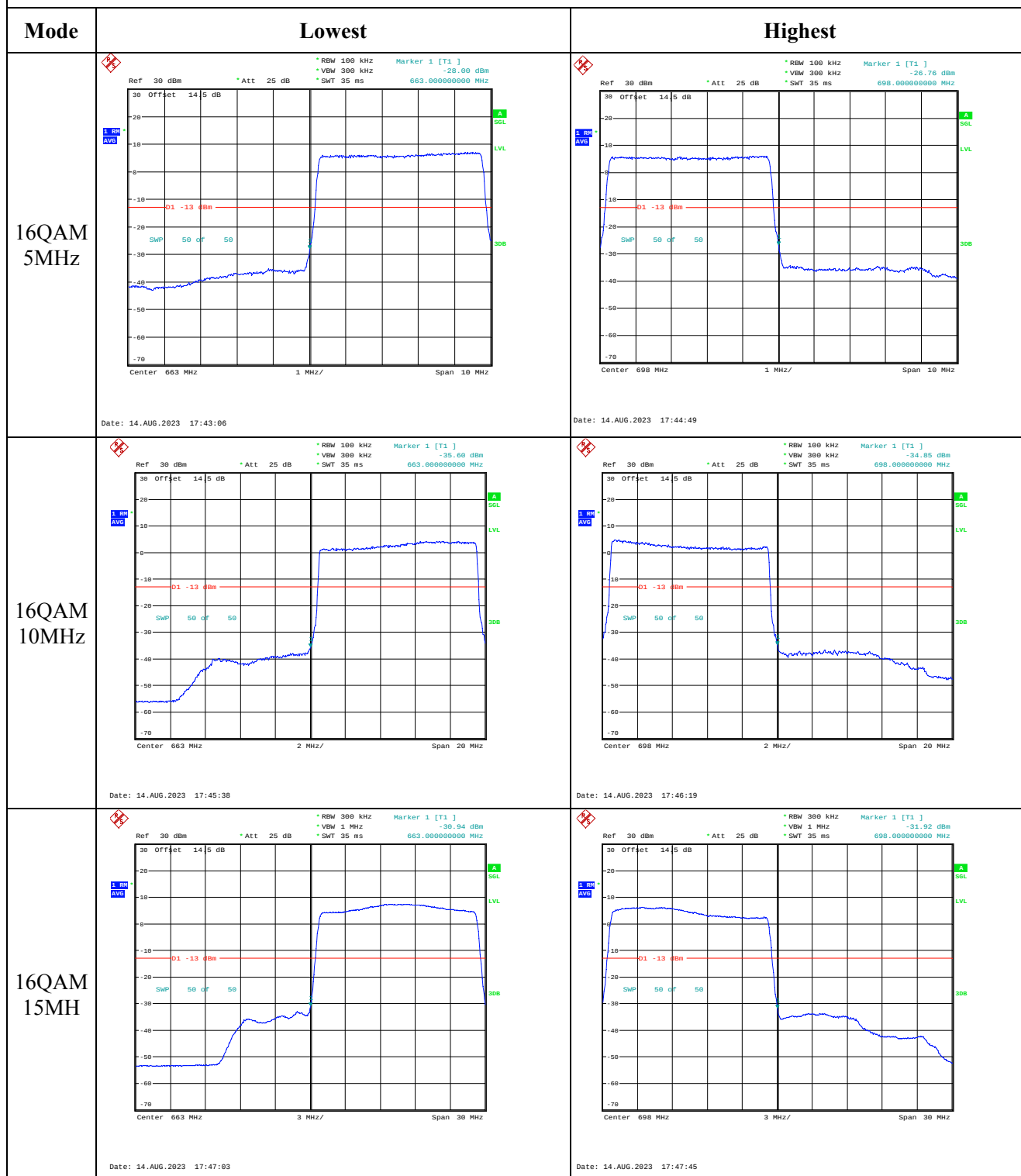
QPSK
20MHz

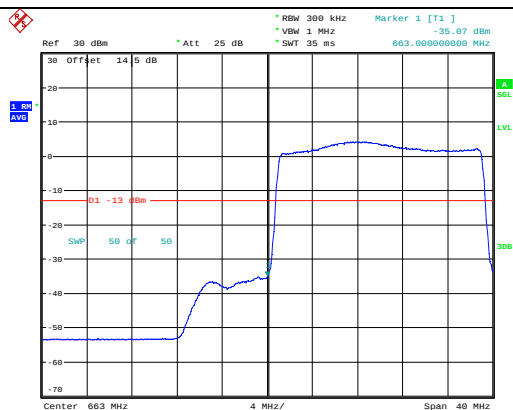
Date: 14.AUG.2023 17:48:29



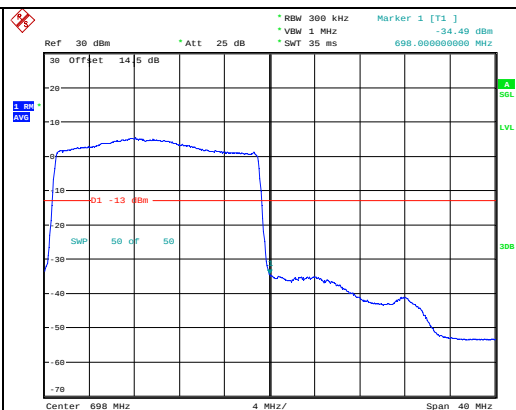
Date: 14.AUG.2023 17:49:02

Out of band emission, Band Edge

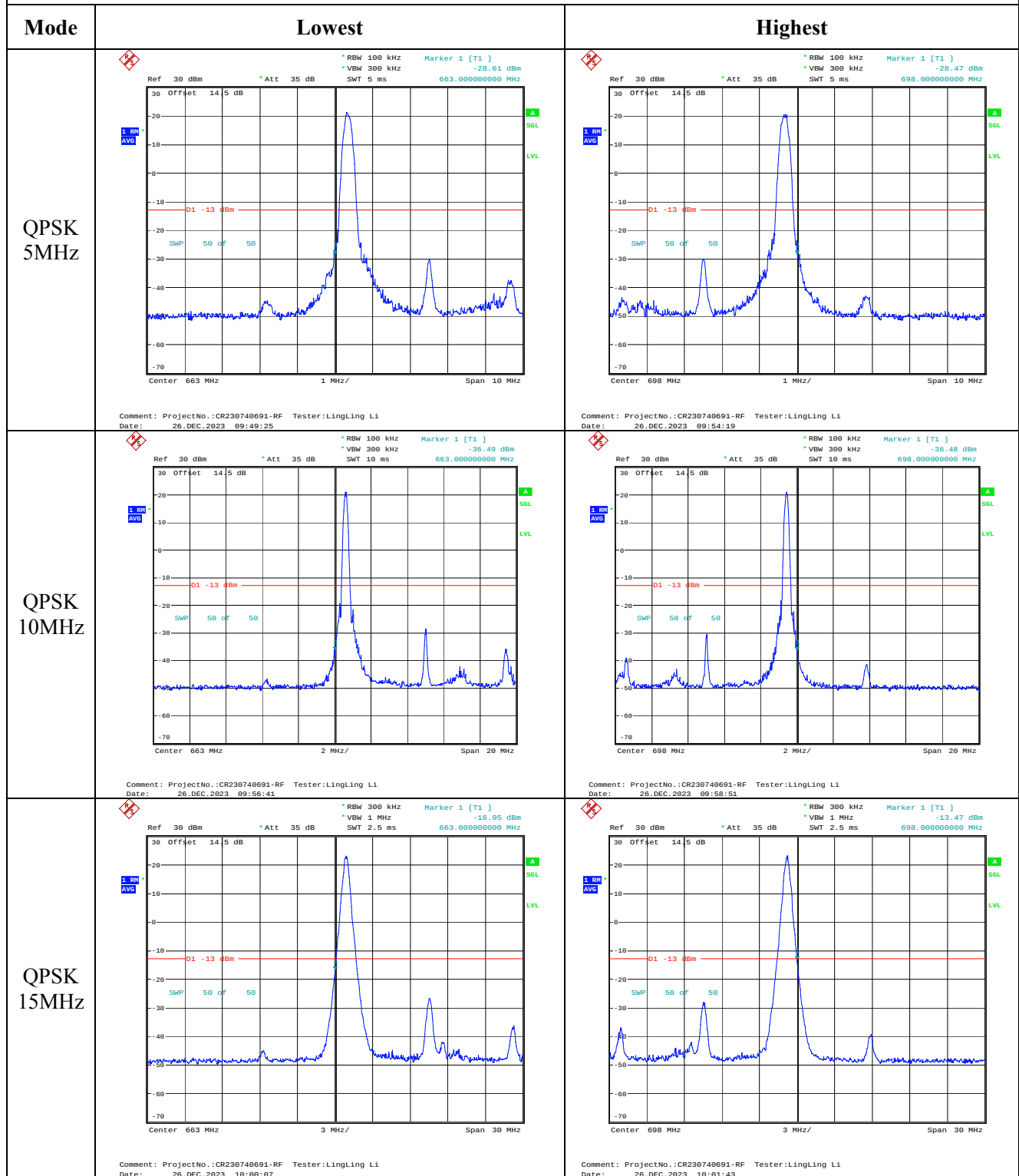


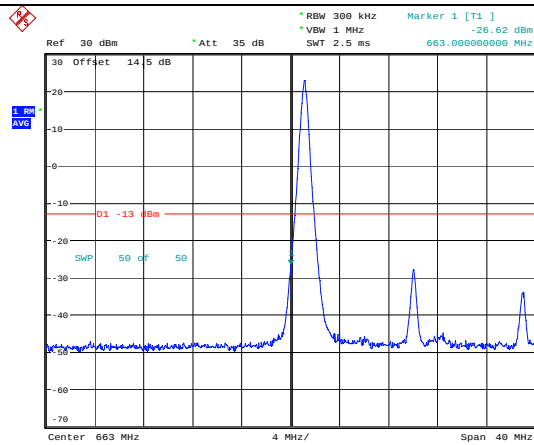
16QAM
20MH

Date: 14.AUG.2023 17:48:29

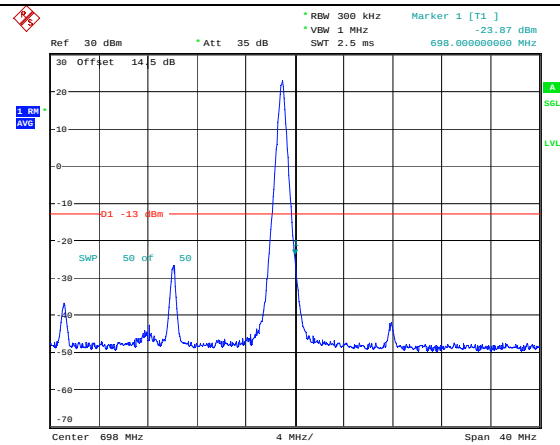


Date: 14.AUG.2023 17:49:11

Test Plots for Out of band emission, Band Edge:
Note: The test is performed in 1RB mode.**Out of band emission, Band Edge**

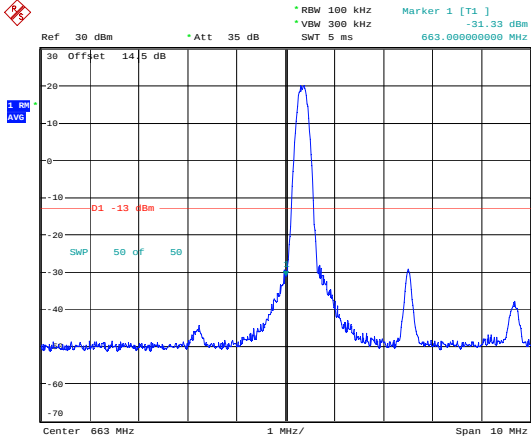
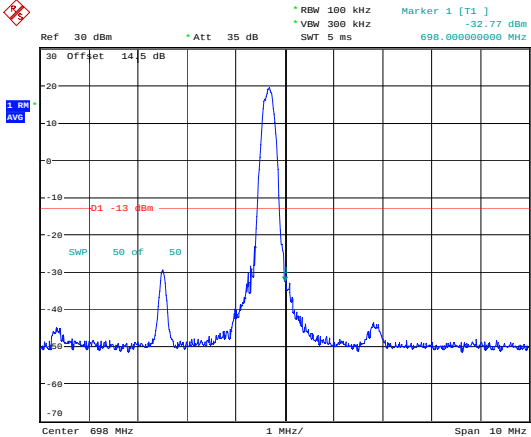
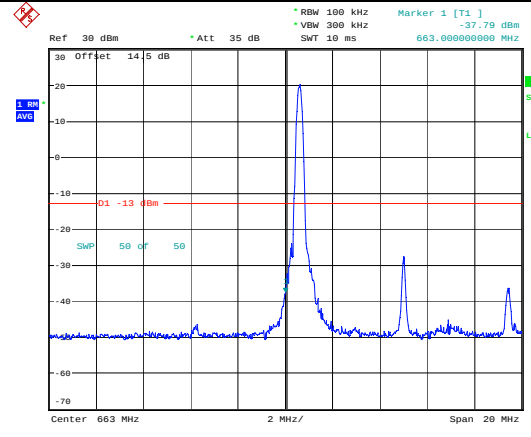
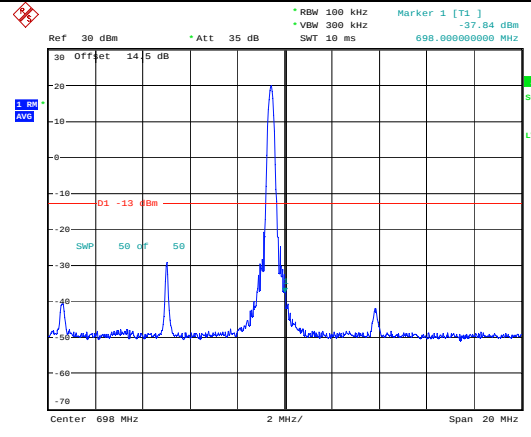
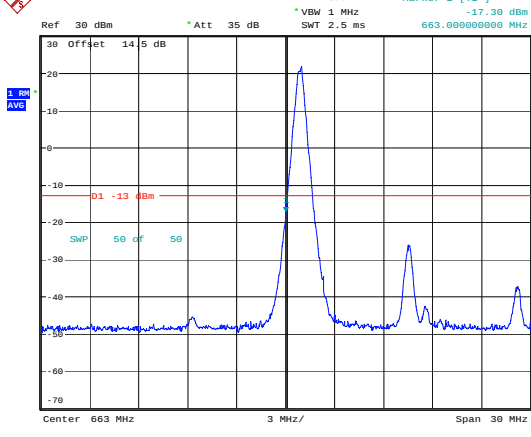
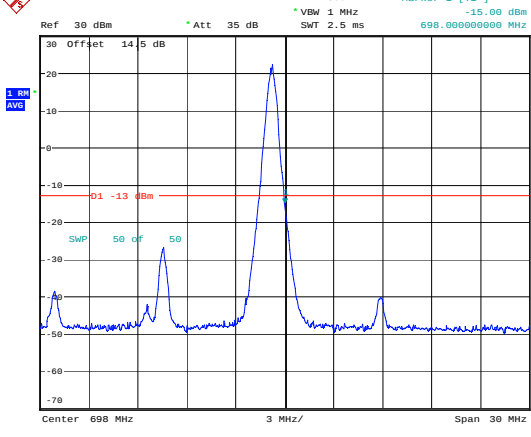
QPSK
20MHz

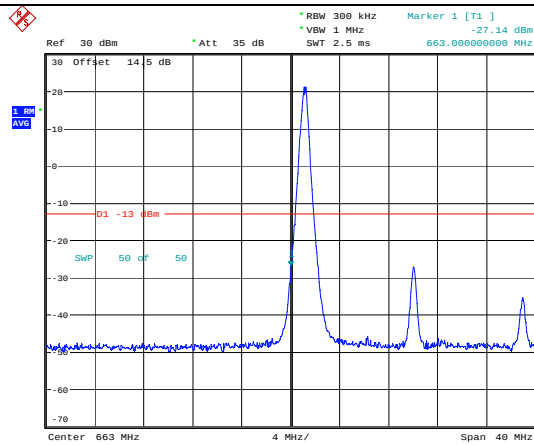
Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li
Date: 26.DEC.2023 10:06:43



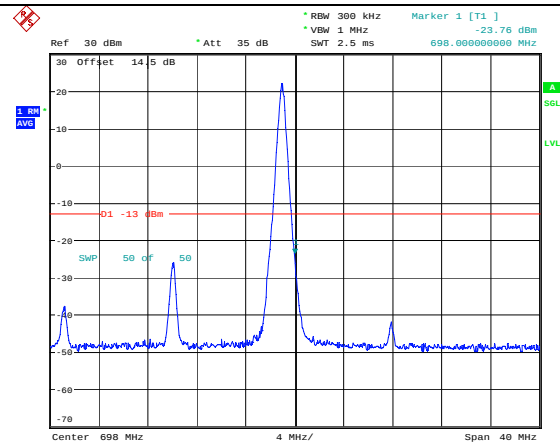
Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li
Date: 26.DEC.2023 10:06:09

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 5MHz	 Ref: 30 dBm, Att: 35 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 5 ms, Marker 1 [T1]: -31.33 dBm, 663.000000000 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li Date: 26.DEC.2023 09:49:59	 Ref: 30 dBm, Att: 35 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 5 ms, Marker 1 [T1]: -32.77 dBm, 698.000000000 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li Date: 26.DEC.2023 09:53:56
16QAM 10MHz	 Ref: 30 dBm, Att: 35 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 10 ms, Marker 1 [T1]: -37.79 dBm, 663.000000000 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li Date: 26.DEC.2023 09:57:05	 Ref: 30 dBm, Att: 35 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 10 ms, Marker 1 [T1]: -37.84 dBm, 698.000000000 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li Date: 26.DEC.2023 09:57:54
16QAM 15MHz	 Ref: 30 dBm, Att: 35 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 2.5 ms, Marker 1 [T1]: -17.30 dBm, 663.000000000 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li Date: 26.DEC.2023 10:00:29	 Ref: 30 dBm, Att: 35 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 2.5 ms, Marker 1 [T1]: -15.00 dBm, 698.000000000 MHz Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li Date: 26.DEC.2023 10:01:19

16QAM
20MHz

Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li
Date: 26.DEC.2023 10:07:06



Comment: ProjectNo.:CR230740691-RF Tester:LingLing Li
Date: 26.DEC.2023 10:05:27

4.12 Radiated Spurious Emissions

Serial Number:	288V-1	Test Date:	2023/8/9~2023/8/12
Test Site:	966-2,966-1	Test Mode:	Transmitting
Tester:	Vic Du, coco Tian	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.5~27.9	Relative Humidity: (%)	52~64	ATM Pressure: (kPa)	99.7~99.9
----------------------	-----------	---------------------------	-------	---------------------------	-----------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2020/10/19	2023/10/18
R&S	EMI Test Receiver	ESR3	102724	2023/3/31	2024/3/30
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2023/7/16	2024/7/15
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2023/7/16	2024/7/15
Sonoma	Amplifier	310N	186165	2023/7/16	2024/7/15
EMCO	Adjustable Dipole Antenna	3121C	9109-756	N/A	N/A
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022/7/16	2024/7/15
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020/10/13	2023/10/12
R&S	Spectrum Analyzer	FSV40	101591	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2023/8/6	2024/8/5
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2023/8/6	2024/8/5
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2022/11/9	2023/11/8
AH	Double Ridge Guide Horn Antenna	SAS-571	1396	2021/10/18	2024/10/17
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022/7/16	2024/7/15
Agilent	Signal Generator	E8247C	MY43321352	2022/11/18	2023/11/17
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021/2/5	2024/2/4
PASTERNAK	Horn Antenna	PE9852/2F-20	112001	2021/2/5	2024/2/4
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2022/9/16	2023/9/15
PASTERNAK	Horn Antenna	PE9850/2F-20	072001	2021/2/5	2024/2/4
PASTERNAK	Horn Antenna	PE9850/2F-20	072002	2021/2/5	2024/2/4
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2023/8/6	2024/8/5

*** 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 Data:

Please refer to the below table and plots.

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

WCDMA Band 2(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band II, Frequency:1852.4 MHz								
205.68	H	53.93	-58.85	0.00	0.26	-59.11	-13.00	46.11
64.89	V	57.15	-47.20	-7.71	0.14	-55.05	-13.00	42.05
3704.800	H	35.48	-61.78	10.60	1.25	-52.43	-13.00	39.43
3704.800	V	36.79	-60.44	10.60	1.25	-51.09	-13.00	38.09
5557.200	H	34.85	-58.43	11.43	1.49	-48.49	-13.00	35.49
5557.200	V	35.13	-58.00	11.43	1.49	-48.06	-13.00	35.06
WCDMA Band II, Frequency:1880 MHz								
240.83	H	51.05	-61.03	0.00	0.29	-61.32	-13.00	48.32
62.87	V	56.89	-48.14	-8.78	0.14	-57.06	-13.00	44.06
3760.000	H	37.54	-58.87	10.66	1.24	-49.45	-13.00	36.45
3760.000	V	36.52	-59.77	10.66	1.24	-50.35	-13.00	37.35
5640.000	H	35.45	-58.00	11.33	1.54	-48.21	-13.00	35.21
5640.000	V	36.15	-57.18	11.33	1.54	-47.39	-13.00	34.39
WCDMA Band II, Frequency:1907.6MHz								
239.15	H	51.26	-60.85	0.00	0.29	-61.14	-13.00	48.14
63.31	V	57.05	-47.83	-8.54	0.14	-56.51	-13.00	43.51
3815.200	H	34.62	-61.23	10.72	1.29	-51.80	-13.00	38.80
3815.200	V	35.15	-60.54	10.72	1.29	-51.11	-13.00	38.11
5722.800	H	36.79	-56.70	11.23	1.58	-47.05	-13.00	34.05
5722.800	V	35.28	-58.07	11.23	1.58	-48.42	-13.00	35.42

WCDMA Band 4(30MHz-20GHz)::

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Frequency:			1712.4	MHz				
210.79	H	52.76	-59.92	0.00	0.26	-60.18	-13.00	47.18
63.31	V	57.03	-47.85	-8.54	0.14	-56.53	-13.00	43.53
3424.800	H	38.79	-58.98	10.37	1.17	-49.78	-13.00	36.78
3424.800	V	37.94	-59.80	10.37	1.17	-50.60	-13.00	37.60
5137.200	H	35.46	-58.16	11.28	1.46	-48.34	-13.00	35.34
5137.200	V	35.82	-57.68	11.28	1.46	-47.86	-13.00	34.86
Frequency:			1732.6	MHz				
219.08	H	51.28	-61.23	0.00	0.27	-61.50	-13.00	48.50
63.98	V	57.48	-47.18	-8.19	0.14	-55.51	-13.00	42.51
3465.200	H	39.63	-58.18	10.39	1.15	-48.94	-13.00	35.94
3465.200	V	37.84	-59.93	10.39	1.15	-50.69	-13.00	37.69
5197.800	H	34.62	-59.51	11.32	1.44	-49.63	-13.00	36.63
5197.800	V	35.53	-58.45	11.32	1.44	-48.57	-13.00	35.57
Frequency:			1752.6	MHz				
239.99	H	52.57	-59.53	0.00	0.29	-59.82	-13.00	46.82
63.54	V	57.18	-47.63	-8.43	0.14	-56.20	-13.00	43.20
3505.200	H	40.16	-57.67	10.41	1.18	-48.44	-13.00	35.44
3505.200	V	37.94	-59.83	10.41	1.18	-50.60	-13.00	37.60
5257.800	H	35.36	-58.37	11.35	1.47	-48.49	-13.00	35.49
5257.800	V	34.71	-58.80	11.35	1.47	-48.92	-13.00	35.92

WCDMA Band 5(30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band 5 Frequency:826.4 MHz								
243.38	H	23.61	-57.24	0.00	0.30	-57.54	-13.00	44.54
65.34	V	26.38	-46.23	-7.47	0.14	-53.84	-13.00	40.84
1652.800	H	37.65	-66.68	8.68	0.81	-58.81	-13.00	45.81
1652.800	V	36.12	-68.29	8.68	0.81	-60.42	-13.00	47.42
2479.200	H	34.72	-66.04	9.39	1.01	-57.66	-13.00	44.66
2479.200	V	34.59	-66.14	9.39	1.01	-57.76	-13.00	44.76
3305.600	H	35.14	-61.59	10.32	1.15	-52.42	-13.00	39.42
3305.600	V	34.79	-61.71	10.32	1.15	-52.54	-13.00	39.54
WCDMA Band 5 Frequency:836.6MHz								
239.99	H	31.63	-49.26	0.00	0.29	-49.55	-13.00	36.55
64.21	V	26.58	-46.44	-8.07	0.14	-54.65	-13.00	41.65
1673.200	H	36.21	-68.10	8.71	0.85	-60.24	-13.00	47.24
1673.200	V	36.45	-67.96	8.71	0.85	-60.10	-13.00	47.10
2509.800	H	35.60	-65.01	9.42	1.01	-56.60	-13.00	43.60
2509.800	V	35.16	-65.46	9.42	1.01	-57.05	-13.00	44.05
3346.400	H	35.49	-61.68	10.34	1.16	-52.50	-13.00	39.50
3346.400	V	35.32	-61.71	10.34	1.16	-52.53	-13.00	39.53
WCDMA Band 5 Frequency:846.6MHz								
235.82	H	33.75	-47.19	0.00	0.29	-47.48	-13.00	34.48
63.31	V	26.54	-46.80	-8.54	0.14	-55.48	-13.00	42.48
1693.200	H	36.44	-67.86	8.73	0.89	-60.02	-13.00	47.02
1693.200	V	37.21	-67.21	8.73	0.89	-59.37	-13.00	46.37
2539.800	H	35.64	-64.74	9.46	1.01	-56.29	-13.00	43.29
2539.800	V	36.08	-64.26	9.46	1.01	-55.81	-13.00	42.81
3386.400	H	34.55	-63.04	10.35	1.18	-53.87	-13.00	40.87
3386.400	V	34.84	-62.70	10.35	1.18	-53.53	-13.00	40.53

LTE Bands:

(The Worst modulation and bandwidth were below)

LTE Band 2(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 1.4MHz, Frequency:1850.7 MHz								
236.65	H	51.37	-60.79	0.00	0.29	-61.08	-13.00	48.08
62.87	V	57.30	-47.73	-8.78	0.14	-56.65	-13.00	43.65
3701.400	H	36.54	-60.77	10.60	1.25	-51.42	-13.00	38.42
3701.400	V	37.10	-60.19	10.60	1.25	-50.84	-13.00	37.84
5552.100	H	35.49	-57.78	11.44	1.49	-47.83	-13.00	34.83
5552.100	V	38.42	-54.68	11.44	1.49	-44.73	-13.00	31.73
QPSK, 1.4MHz, Frequency:1880 MHz								
243.38	H	51.62	-60.41	0.00	0.30	-60.71	-13.00	47.71
63.98	V	57.22	-47.44	-8.19	0.14	-55.77	-13.00	42.77
3760.000	H	35.48	-60.93	10.66	1.24	-51.51	-13.00	38.51
3760.000	V	37.69	-58.60	10.66	1.24	-49.18	-13.00	36.18
5640.000	H	37.65	-55.80	11.33	1.54	-46.01	-13.00	33.01
5640.000	V	40.12	-53.21	11.33	1.54	-43.42	-13.00	30.42
QPSK, 1.4MHz, Frequency:1909.3 MHz								
204.24	H	52.05	-60.76	0.00	0.26	-61.02	-13.00	48.02
64.21	V	56.65	-47.93	-8.07	0.14	-56.14	-13.00	43.14
3818.600	H	35.96	-59.90	10.72	1.29	-50.47	-13.00	37.47
3818.600	V	37.12	-58.59	10.72	1.29	-49.16	-13.00	36.16
5727.900	H	38.41	-55.07	11.23	1.59	-45.43	-13.00	32.43
5727.900	V	36.64	-56.72	11.23	1.59	-47.08	-13.00	34.08

LTE Band 4(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.4MHz QPSK, Frequency: 1710.7 MHz								
239.15	H	52.32	-59.79	0.00	0.29	-60.08	-13.00	47.08
62.43	V	57.76	-47.42	-9.01	0.14	-56.57	-13.00	43.57
3421.400	H	47.41	-50.35	10.37	1.17	-41.15	-13.00	28.15
3421.400	V	45.38	-52.35	10.37	1.17	-43.15	-13.00	30.15
5132.100	H	35.62	-57.95	11.28	1.47	-48.14	-13.00	35.14
5132.100	V	34.71	-58.75	11.28	1.47	-48.94	-13.00	35.94
1.4MHz QPSK, Frequency: 1732.5 MHz								
209.31	H	52.37	-60.34	0.00	0.26	-60.60	-13.00	47.60
64.43	V	57.88	-46.62	-7.95	0.14	-54.71	-13.00	41.71
3465.000	H	46.87	-50.94	10.39	1.15	-41.70	-13.00	28.70
3465.000	V	42.88	-54.89	10.39	1.15	-45.65	-13.00	32.65
5197.500	H	34.67	-59.46	11.32	1.44	-49.58	-13.00	36.58
5197.500	V	35.16	-58.82	11.32	1.44	-48.94	-13.00	35.94
1.4MHz QPSK, Frequency: 1754.3 MHz								
239.15	H	55.83	-56.28	0.00	0.29	-56.57	-13.00	43.57
63.31	V	58.43	-46.45	-8.54	0.14	-55.13	-13.00	42.13
3508.600	H	44.53	-53.29	10.41	1.19	-44.07	-13.00	31.07
3508.600	V	40.75	-57.01	10.41	1.19	-47.79	-13.00	34.79
5262.900	H	36.49	-57.21	11.36	1.47	-47.32	-13.00	34.32
5262.900	V	35.42	-58.05	11.36	1.47	-48.16	-13.00	35.16

LTE Band 5(30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 1.4MHz, Frequency: 824.7 MHz								
240.83	H	25.30	-55.58	0.00	0.29	-55.87	-13.00	42.87
63.31	V	26.63	-46.71	-8.54	0.14	-55.39	-13.00	42.39
1649.400	H	38.66	-65.67	8.68	0.80	-57.79	-13.00	44.79
1649.400	V	37.51	-66.90	8.68	0.80	-59.02	-13.00	46.02
2474.100	H	34.65	-66.13	9.38	1.00	-57.75	-13.00	44.75
2474.100	V	37.28	-63.45	9.38	1.00	-55.07	-13.00	42.07
3298.800	H	34.79	-61.89	10.32	1.15	-52.72	-13.00	39.72
3298.800	V	35.07	-61.37	10.32	1.15	-52.20	-13.00	39.20
QPSK, 1.4MHz, Frequency: 836.5 MHz								
239.93	H	26.31	-54.58	0.00	0.29	-54.87	-13.00	41.87
63.54	V	26.83	-46.43	-8.43	0.14	-55.00	-13.00	42.00
1673.000	H	36.54	-67.77	8.71	0.85	-59.91	-13.00	46.91
1673.000	V	35.64	-68.77	8.71	0.85	-60.91	-13.00	47.91
2509.500	H	35.29	-65.32	9.42	1.01	-56.91	-13.00	43.91
2509.500	V	34.79	-65.83	9.42	1.01	-57.42	-13.00	44.42
3346.000	H	35.12	-62.04	10.34	1.16	-52.86	-13.00	39.86
3346.000	V	34.65	-62.37	10.34	1.16	-53.19	-13.00	40.19
QPSK, 1.4MHz, Frequency: 848.3 MHz								
240.83	H	23.66	-57.22	0.00	0.29	-57.51	-13.00	44.51
63.98	V	26.37	-46.73	-8.19	0.14	-55.06	-13.00	42.06
1696.600	H	37.64	-66.65	8.74	0.89	-58.80	-13.00	45.80
1696.600	V	35.97	-68.45	8.74	0.89	-60.60	-13.00	47.60
2544.900	H	35.26	-65.08	9.47	1.01	-56.62	-13.00	43.62
2544.900	V	34.79	-65.51	9.47	1.01	-57.05	-13.00	44.05
3393.200	H	35.11	-62.56	10.36	1.19	-53.39	-13.00	40.39
3393.200	V	34.69	-62.94	10.36	1.19	-53.77	-13.00	40.77

LTE Band 17(30MHz-10GHz):

EYE Data 1 (QPSK, 5MHz, Frequency: 706.5 MHz)								
Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 5MHz, Frequency: 706.5 MHz								
417.64	H	24.57	-52.94	0.00	0.39	-53.33	-13.00	40.33
65.34	V	25.87	-46.74	-7.47	0.14	-54.35	-13.00	41.35
1413.000	H	48.65	-55.02	8.26	0.72	-47.48	-13.00	34.48
1413.000	V	43.67	-60.05	8.26	0.72	-52.51	-13.00	39.51
2119.500	H	35.26	-66.71	9.17	0.92	-58.46	-13.00	45.46
2119.500	V	34.69	-67.26	9.17	0.92	-59.01	-13.00	46.01
2826.000	H	34.65	-65.16	9.92	1.06	-56.30	-13.00	43.30
2826.000	V	35.02	-64.72	9.92	1.06	-55.86	-13.00	42.86
QPSK, 5MHz, Frequency: 710 MHz								
236.64	H	23.99	-56.94	0.00	0.29	-57.23	-13.00	44.23
64.21	V	25.85	-47.17	-8.07	0.14	-55.38	-13.00	42.38
1420.000	H	42.67	-60.99	8.28	0.73	-53.44	-13.00	40.44
1420.000	V	40.29	-63.42	8.28	0.73	-55.87	-13.00	42.87
2130.000	H	34.67	-67.35	9.18	0.92	-59.09	-13.00	46.09
2130.000	V	35.32	-66.69	9.18	0.92	-58.43	-13.00	45.43
2840.000	H	34.73	-65.02	9.94	1.06	-56.14	-13.00	43.14
2840.000	V	34.85	-64.86	9.94	1.06	-55.98	-13.00	42.98
QPSK, 5MHz, Frequency: 713.5 MHz								
206.40	H	23.98	-57.30	0.00	0.26	-57.56	-13.00	44.56
63.09	V	26.26	-47.16	-8.66	0.14	-55.96	-13.00	42.96
1427.000	H	45.36	-58.28	8.30	0.73	-50.71	-13.00	37.71
1427.000	V	41.51	-62.18	8.30	0.73	-54.61	-13.00	41.61
2140.500	H	35.64	-66.43	9.18	0.93	-58.18	-13.00	45.18
2140.500	V	35.43	-66.65	9.18	0.93	-58.40	-13.00	45.40
2854.000	H	34.78	-64.91	9.97	1.07	-56.01	-13.00	43.01
2854.000	V	34.93	-64.75	9.97	1.07	-55.85	-13.00	42.85

LTE Band 25: (30MHz-20GHz)

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.4MHz QPSK, Frequency: 1850.7 MHz								
239.15	H	58.08	-54.03	0.00	0.29	-54.32	-13.00	41.32
63.09	V	56.88	-48.08	-8.66	0.14	-56.88	-13.00	43.88
3700.800	H	37.59	-59.73	10.60	1.25	-50.38	-13.00	37.38
3700.800	V	36.41	-60.89	10.60	1.25	-51.54	-13.00	38.54
5551.200	H	35.43	-57.83	11.44	1.49	-47.88	-13.00	34.88
5551.200	V	34.29	-58.81	11.44	1.49	-48.86	-13.00	35.86
1.4MHz QPSK, Frequency: 1882.5 MHz								
234.17	H	52.95	-59.26	0.00	0.29	-59.55	-13.00	46.55
64.21	V	57.15	-47.43	-8.07	0.14	-55.64	-13.00	42.64
3765.000	H	37.65	-58.68	10.67	1.25	-49.26	-13.00	36.26
3765.000	V	36.53	-59.68	10.67	1.25	-50.26	-13.00	37.26
5647.500	H	35.62	-57.83	11.32	1.55	-48.06	-13.00	35.06
5647.500	V	34.71	-58.62	11.32	1.55	-48.85	-13.00	35.85
1.4MHz QPSK, Frequency: 1914.3 MHz								
235.81	H	52.01	-60.17	0.00	0.29	-60.46	-13.00	47.46
63.76	V	57.09	-47.64	-8.31	0.14	-56.09	-13.00	43.09
3828.600	H	37.98	-57.92	10.73	1.28	-48.47	-13.00	35.47
3828.600	V	36.24	-59.53	10.73	1.28	-50.08	-13.00	37.08
5742.900	H	35.40	-58.08	11.21	1.60	-48.47	-13.00	35.47
5742.900	V	34.79	-58.57	11.21	1.60	-48.96	-13.00	35.96

LTE Band 41: (30MHz-27GHz)

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 2498.5 MHz								
236.64	H	51.54	-60.62	0.00	0.29	-60.91	-25.00	35.91
62.21	V	57.15	-48.11	-9.13	0.14	-57.38	-25.00	32.38
4992.000	H	49.65	-43.28	11.19	1.48	-33.57	-25.00	8.57
4992.000	V	50.16	-42.65	11.19	1.48	-32.94	-25.00	7.94
7488.000	H	34.79	-54.96	10.91	1.94	-45.99	-25.00	20.99
7488.000	V	35.26	-55.00	10.91	1.94	-46.03	-25.00	21.03
5MHz QPSK, Frequency: 2593 MHz								
239.15	H	51.01	-61.10	0.00	0.29	-61.39	-25.00	36.39
64.21	V	56.86	-47.72	-8.07	0.14	-55.93	-25.00	30.93
5186.000	H	50.13	-43.90	11.31	1.44	-34.03	-25.00	9.03
5186.000	V	53.50	-40.39	11.31	1.44	-30.52	-25.00	5.52
7779.000	H	35.26	-54.23	10.84	1.99	-45.38	-25.00	20.38
7779.000	V	34.72	-55.22	10.84	1.99	-46.37	-25.00	21.37
5MHz QPSK, Frequency: 2687.5 MHz								
240.83	H	49.99	-62.09	0.00	0.29	-62.38	-25.00	37.38
63.31	V	57.30	-47.58	-8.54	0.14	-56.26	-25.00	31.26
5380.000	H	52.37	-41.15	11.43	1.49	-31.21	-25.00	6.21
5380.000	V	53.63	-39.89	11.43	1.49	-29.95	-25.00	4.95
8070.000	H	34.59	-53.65	10.81	2.10	-44.94	-25.00	19.94
8070.000	V	34.75	-53.99	10.81	2.10	-45.28	-25.00	20.28

LTE Band 66(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.4MHz QPSK, Frequency: 1710.7 MHz								
236.64	H	52.22	-59.94	0.00	0.29	-60.23	-13.00	47.23
63.31	V	57.10	-47.78	-8.54	0.14	-56.46	-13.00	43.46
3421.400	H	43.67	-54.09	10.37	1.17	-44.89	-13.00	31.89
3421.400	V	40.18	-57.55	10.37	1.17	-48.35	-13.00	35.35
5132.100	H	39.54	-54.03	11.28	1.47	-44.22	-13.00	31.22
5132.100	V	37.89	-55.57	11.28	1.47	-45.76	-13.00	32.76
1.4MHz QPSK, Frequency: 1745 MHz								
240.83	H	52.82	-59.26	0.00	0.29	-59.55	-13.00	46.55
63.98	V	58.10	-46.56	-8.19	0.14	-54.89	-13.00	41.89
3490.000	H	42.46	-55.38	10.40	1.17	-46.15	-13.00	33.15
3490.000	V	46.35	-51.43	10.40	1.17	-42.20	-13.00	29.20
5235.000	H	40.35	-53.55	11.34	1.46	-43.67	-13.00	30.67
5235.000	V	37.42	-56.29	11.34	1.46	-46.41	-13.00	33.41
1.4MHz QPSK, Frequency: 1779.3 MHz								
216.02	H	51.65	-60.92	0.00	0.27	-61.19	-13.00	48.19
63.76	V	57.00	-47.73	-8.31	0.14	-56.18	-13.00	43.18
3558.600	H	41.79	-55.88	10.46	1.22	-46.64	-13.00	33.64
3558.600	V	39.88	-57.69	10.46	1.22	-48.45	-13.00	35.45
5337.900	H	37.64	-55.83	11.40	1.47	-45.90	-13.00	32.90
5337.900	V	36.51	-56.82	11.40	1.47	-46.89	-13.00	33.89

LTE Band 71: (30MHz-10GHz)

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 665.5 MHz								
239.26	H	24.68	-56.22	0.00	0.29	-56.51	-13.00	43.51
64.28	V	25.84	-47.15	-8.03	0.14	-55.32	-13.00	42.32
1331.000	H	45.67	-57.36	8.03	0.76	-50.09	-13.00	37.09
1331.000	V	42.08	-61.28	8.03	0.76	-54.01	-13.00	41.01
1996.500	H	34.97	-67.19	9.10	0.89	-58.98	-13.00	45.98
1996.500	V	35.09	-66.45	9.10	0.89	-58.24	-13.00	45.24
2662.000	H	34.23	-65.73	9.66	1.06	-57.13	-13.00	44.13
2662.000	V	34.06	-65.82	9.66	1.06	-57.22	-13.00	44.22
5MHz QPSK, Frequency: 680.5 MHz								
240.51	H	25.08	-55.80	0.00	0.29	-56.09	-13.00	43.09
64.37	V	25.62	-47.34	-7.98	0.14	-55.46	-13.00	42.46
1361.000	H	40.67	-62.66	8.11	0.77	-55.32	-13.00	42.32
1361.000	V	39.89	-63.64	8.11	0.77	-56.30	-13.00	43.30
2041.500	H	35.84	-66.19	9.12	0.91	-57.98	-13.00	44.98
2041.500	V	35.32	-66.32	9.12	0.91	-58.11	-13.00	45.11
2722.000	H	35.64	-64.33	9.76	1.05	-55.62	-13.00	42.62
2722.000	V	34.29	-65.62	9.76	1.05	-56.91	-13.00	43.91
5MHz QPSK, Frequency: 695.5 MHz								
240.16	H	24.93	-55.96	0.00	0.29	-56.25	-13.00	43.25
64.15	V	25.46	-47.58	-8.10	0.14	-55.82	-13.00	42.82
1391.000	H	42.65	-60.97	8.19	0.72	-53.50	-13.00	40.50
1391.000	V	41.35	-62.35	8.19	0.72	-54.88	-13.00	41.88
2086.500	H	36.42	-65.49	9.15	0.91	-57.25	-13.00	44.25
2086.500	V	35.17	-66.62	9.15	0.91	-58.38	-13.00	45.38
2782.000	H	34.65	-65.29	9.85	1.05	-56.49	-13.00	43.49
2782.000	V	34.73	-65.10	9.85	1.05	-56.30	-13.00	43.30

Note:

- 1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
- 2) Absolute Level = Substituted Level - Cable loss + Antenna Gain
- 3) Margin = Limit-Absolute Level

5. EUT PHOTOGRAPHS

Please refer to the attachment CR230740691-EXP EUT EXTERNAL PHOTOGRAPHS and CR230740691-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR230740691-00E-TSP TEST SETUP PHOTOGRAPHS.

******* END OF REPORT *******