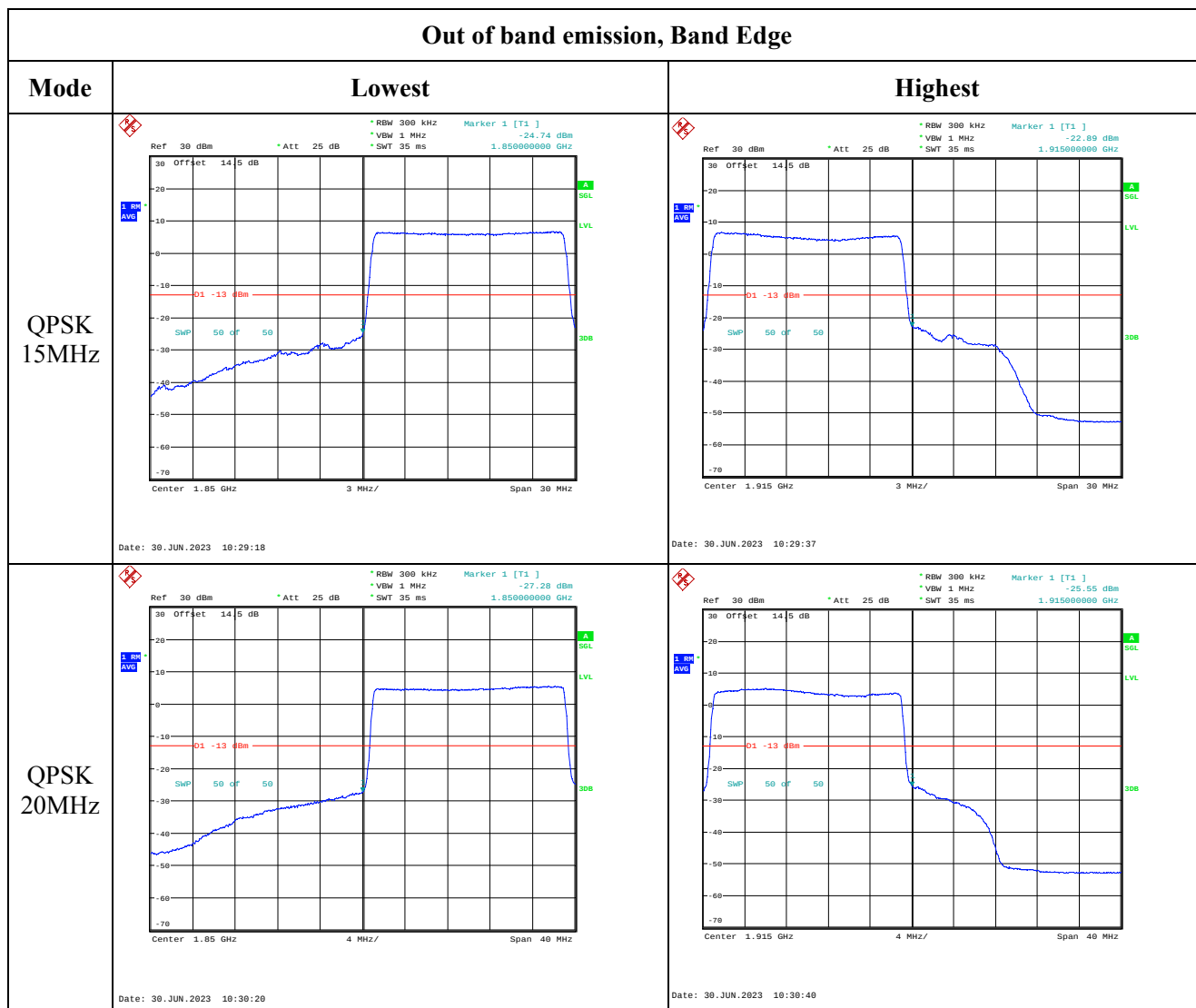


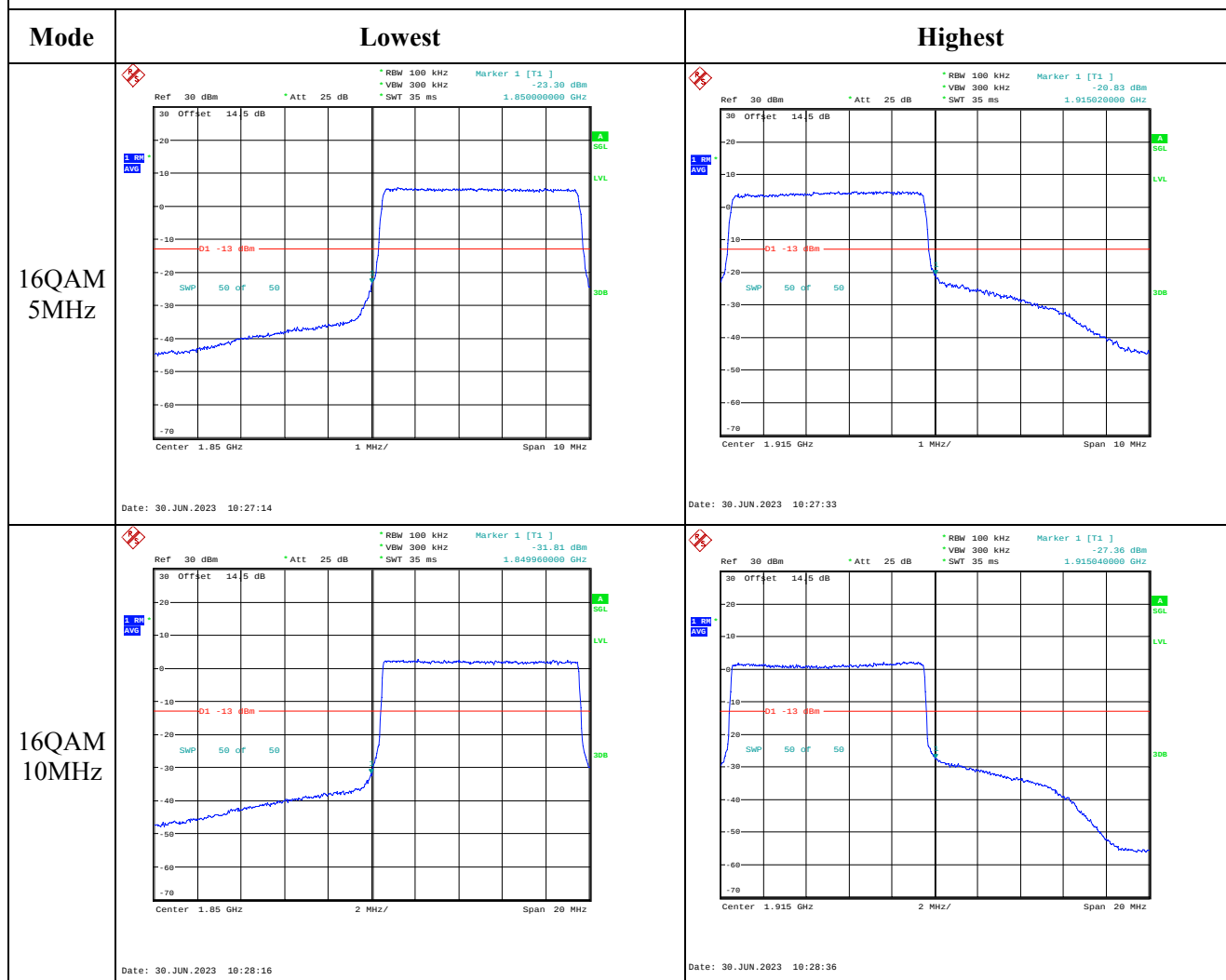
Out of band emission, Band Edge



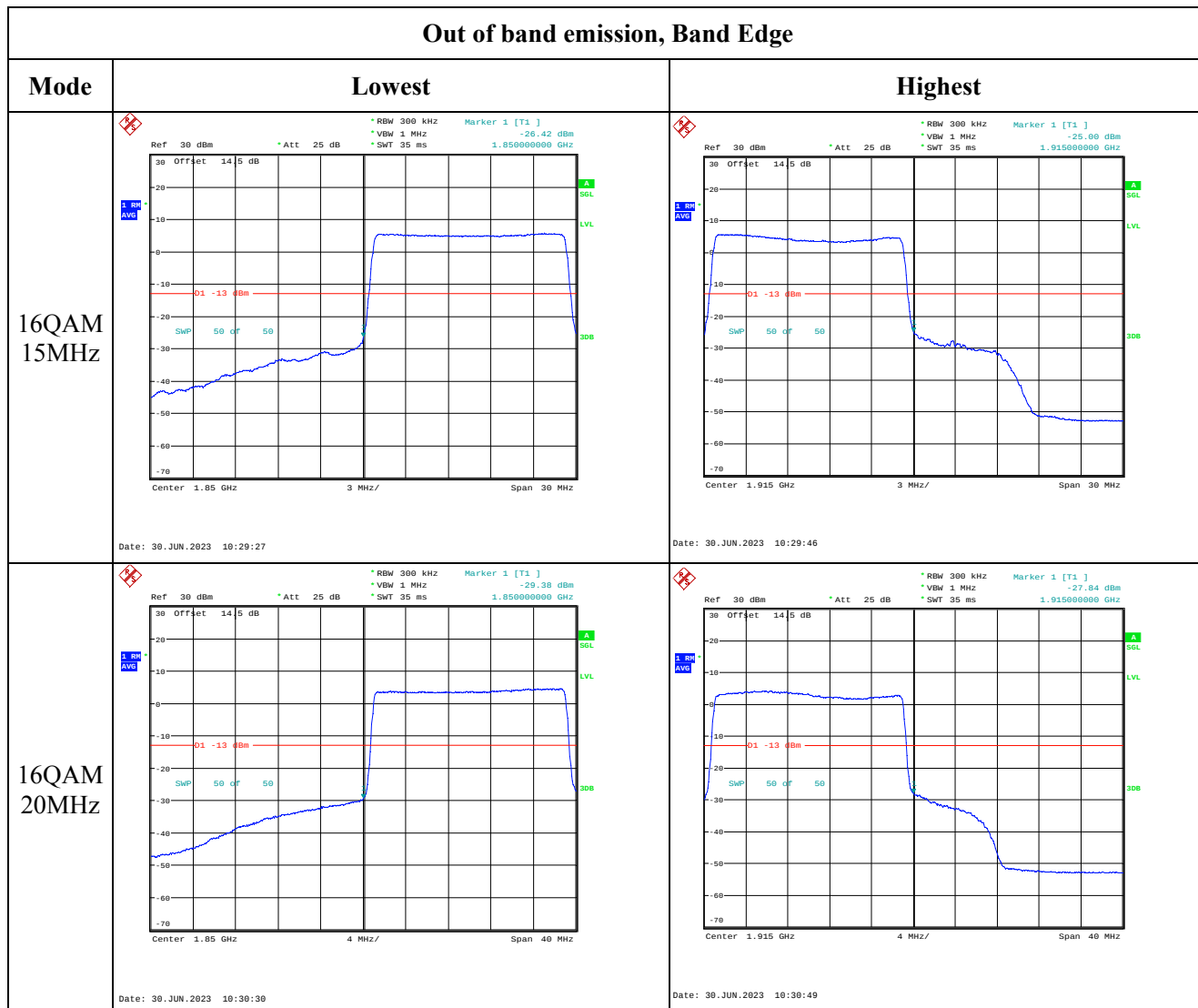
Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz		
	Date: 30 JUN. 2023 10:16:23	Date: 30 JUN. 2023 10:16:41
16QAM 3MHz		
	Date: 30 JUN. 2023 10:26:15	Date: 30 JUN. 2023 10:26:33

Out of band emission, Band Edge



Out of band emission, Band Edge



4.12 Antenna Port Test Data and Results for LTE Band 26

Serial Number:	27A0-1	Test Date:	2023/6/27~2023/7/4
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-26.3	Relative Humidity: (%)	41-59	ATM Pressure: (kPa)	99.8-100.7
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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	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149218	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022/9/29	2023/9/28
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	2022/7/15	2023/7/14

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

Test Frequency for Each Mode:

Operation Bandwidth	Lowest Frequency For 90S (MHz)	Highest Frequency For 90S (MHz)	Channel Cross 90S and 22H	Lowest Frequency For 22H (MHz)	Middle Frequency For 22H (MHz)	Highest Frequency For 22H (MHz)
1.4MHz	814.7	823.3	824	824.7	831.5	848.3
3MHz	815.5	822.5	824	825.5	831.5	847.5
5MHz	816.5	821.5	824	826.5	831.5	846.5
10MHz	819	/	824	829	831.5	844
15MHz	821.5	/	824	831.5	836.5	841.5

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

Test Data:**FCC§2.1046;§ 22.913 (a),§ 90.635****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)						Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel 1 For 90S	Highest Channel 1 For 90S	Cross Channel	Lowest Frequency For 22H	Middle Frequency For 22H	Highest Frequency For 22H		
1.4MHz QPSK	RB1#0	25.12	24.8	25.55	25.54	24.8	25.12	23.25	38.45
	RB1#3	25.25	25.0	25.74	25.73	24.99	25.32		
	RB1#5	25.02	24.9	25.56	25.55	24.81	24.78		
	RB3#0	25.2	25.0	25.73	25.72	24.98	24.68		
	RB3#3	25.17	25.1	25.77	25.76	25.02	24.7		
	RB6#0	24.13	24.0	24.67	24.66	23.92	23.66		
1.4MHz 16QAM	RB1#0	24.22	23.9	24.64	24.63	23.89	23.59	22.35	38.45
	RB1#3	24.43	24.2	24.87	24.86	24.12	23.76		
	RB1#5	24.16	24.0	24.66	24.65	23.91	23.58		
	RB3#0	24.17	24.1	24.84	24.83	24.09	23.89		
	RB3#3	24.16	24.1	24.85	24.84	24.1	23.89		
	RB6#0	23.2	23.0	23.67	23.66	22.92	22.71		
3MHz QPSK	RB1#0	25.12	24.9	25.64	25.63	24.89	25.11	23.17	38.45
	RB1#8	25.06	25.0	25.67	25.66	24.92	25.21		
	RB1#14	24.97	25.0	25.69	25.68	24.94	24.67		
	RB6#0	24.05	23.8	24.55	24.54	23.8	23.62		
	RB6#9	23.93	23.9	24.57	24.56	23.82	23.59		
	RB15#0	24.09	24.0	24.68	24.67	23.93	23.62		
3MHz 16QAM	RB1#0	24.74	24.1	24.80	24.79	24.05	23.64	22.35	38.45
	RB1#8	24.57	24.1	24.82	24.81	24.07	23.63		
	RB1#14	24.55	24.2	24.87	24.86	24.12	23.6		
	RB6#0	23.18	22.9	23.65	23.64	22.9	22.58		
	RB6#9	23.08	23.0	23.73	23.72	22.98	22.53		
	RB15#0	23.18	23.0	23.67	23.66	22.92	22.71		
5MHz QPSK	RB1#0	25.02	24.8	25.49	25.48	24.74	24.86	22.97	38.45
	RB1#13	25.06	24.8	25.48	25.47	24.73	24.76		
	RB1#24	24.64	24.7	25.38	25.37	24.63	24.57		
	RB15#0	23.75	23.8	24.49	24.48	23.74	23.73		
	RB15#10	23.53	23.8	24.49	24.48	23.74	23.35		
	RB25#0	23.67	23.8	24.50	24.49	23.75	23.51		
5MHz 16QAM	RB1#0	23.6	24.0	24.74	24.73	23.99	23.6	22.42	38.45
	RB1#13	23.51	24.2	24.94	24.93	24.19	23.6		
	RB1#24	23.36	24.0	24.74	24.73	23.99	23.57		
	RB15#0	22.94	22.8	23.48	23.47	22.73	22.78		
	RB15#10	22.69	22.9	23.59	23.58	22.84	22.4		
	RB25#0	22.93	23.0	23.69	23.68	22.94	22.58		
10MHz QPSK	RB1#0	25.12	/	25.52	25.51	24.77	25.09	23.3	38.45
	RB1#25	25.13	/	25.82	25.81	25.07	25.29		
	RB1#49	24.94	/	25.44	25.43	24.69	25.18		
	RB25#0	24.36	/	24.55	24.54	23.8	24.03		
	RB25#25	24.01	/	24.65	24.64	23.9	23.93		
	RB50#0	24.21	/	24.60	24.59	23.85	23.96		
10MHz 16QAM	RB1#0	24.61	/	24.79	24.78	24.04	24.21	22.41	38.45
	RB1#25	24.67	/	24.93	24.92	24.18	24.48		

	RB1#49	24.33	/	24.83	24.82	24.08	24.3		
	RB25#0	23.43	/	23.44	23.43	22.69	23.08		
	RB25#25	23.1	/	23.50	23.49	22.75	22.97		
	RB50#0	23.3	/	23.40	23.39	22.65	23.01		
15MHz QPSK	RB1#0	25.01	/	25.63	25.62	24.88	24.91	23.19	38.45
	RB1#38	25.03	/	25.71	25.70	24.96	24.58		
	RB1#74	24.71	/	25.71	25.70	24.96	24.49		
	RB36#0	24.34	/	24.53	24.52	23.78	23.74		
	RB36#39	24.07	/	24.64	24.63	23.89	23.61		
	RB75#0	24.21	/	24.61	24.60	23.86	23.68		
15MHz 16QAM	RB1#0	24.6	/	24.80	24.79	24.05	23.94	22.37	38.45
	RB1#38	24.66	/	24.89	24.88	24.14	23.99		
	RB1#74	24.4	/	24.86	24.85	24.11	23.86		
	RB36#0	23.35	/	23.58	23.57	22.83	22.74		
	RB36#39	23.11	/	23.72	23.71	22.97	22.59		
	RB75#0	23.3	/	23.69	23.68	22.94	22.66		

Note:

ERP= Conducted Power(dBm) - Lc(dB) + Gr(dBd)

Gr(dBd)=Gr(dBi)-2.15

The limit of 90S is 50dBm(100W) for conducted. Limit of 22H is 38.45dBm for ERP. The stricter limit was listed in the table.

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

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Frequency For 22H	Middle Frequency For 22H	Highest Frequency For 22H	
15MHz QPSK	RB1#0	8.49	8.56	8.56	13
	RB75#0	6.19	5.54	6.35	13
15MHz 16QAM	RB1#0	8.49	8.72	8.43	13
	RB75#0	6.99	6.7	7.15	13
				Result:	Pass

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

Operation Mode	99% Occupied Bandwidth (MHz)					
	Lowest For 90S	Highest For 90S	Cross	Lowest For 22H	Middle For 22H	Highest For 22H
1.4MHz QPSK	1.098	1.104	1.104	1.11	1.098	1.098
1.4MHz 16QAM	1.098	1.098	1.11	1.098	1.098	1.104
3MHz QPSK	2.687	2.683	2.688	2.683	2.687	2.687
3MHz 16QAM	2.676	2.692	2.676	2.683	2.687	2.676
5MHz QPSK	4.5	4.503	4.535	4.503	4.52	4.52
5MHz 16QAM	4.5	4.503	4.503	4.52	4.5	4.5
10MHz QPSK	9	/	8.974	8.91	8.92	8.92
10MHz 16QAM	9	/	8.942	9.506	8.96	8.92
15MHz QPSK	13.560	/	13.558	14.760	13.44	13.44
15MHz 16QAM	13.62	/	13.51	14.82	13.51	13.44
Operation Mode	26 dB Occupied Bandwidth (MHz)					
	Lowest For 90S	Highest For 90S	Cross	Lowest For 22H	Middle For 22H	Highest For 22H
1.4MHz QPSK	1.308	1.296	1.309	1.33	1.284	1.296
1.4MHz 16QAM	1.278	1.307	1.334	1.303	1.278	1.320
3MHz QPSK	2.904	2.885	2.885	2.875	2.856	2.880
3MHz 16QAM	2.880	2.91	2.897	2.875	2.880	2.880
5MHz QPSK	4.9	4.929	4.994	4.92	4.96	4.88
5MHz 16QAM	4.9	4.984	4.942	4.99	4.9	4.9
10MHz QPSK	10	/	9.615	9.558	9.48	9.44
10MHz 16QAM	10	/	9.487	8.942	9.52	9.48
15MHz QPSK	14.760	/	15.24	13.44	14.58	14.52
15MHz 16QAM	14.82	/	14.76	13.44	14.86	14.70

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

FCC §2.1051, §22.917(a),§90.691:Spurious Emissions at Antenna Terminal

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

Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.
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FCC §2.1055, §22.355, §90.213: Frequency Stability					
Test Modulation:	15 MHz QPSK		Test Channel:	821.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	0.62	0.001	2.5
	-20	3.85	-4.42	-0.005	2.5
	-10	3.85	8.82	0.011	2.5
	0	3.85	9.7	0.012	2.5
	10	3.85	9.71	0.012	2.5
	20	3.85	-6.98	-0.008	2.5
	30	3.85	-5.09	-0.006	2.5
	40	3.85	-3.16	-0.004	2.5
	50	3.85	-5.87	-0.007	2.5
Frequency Stability vs. Voltage	20	3.6	-4.05	-0.005	2.5
	20	4.35	8.5	0.010	2.5
Result:				Pass	

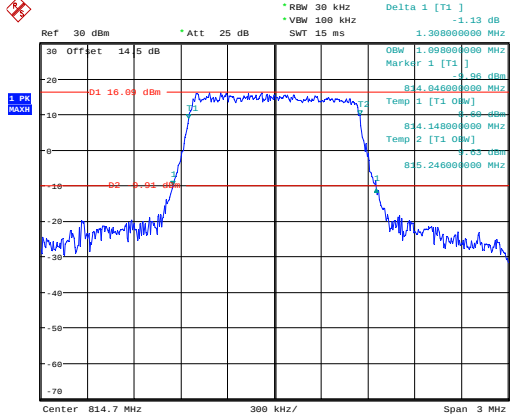
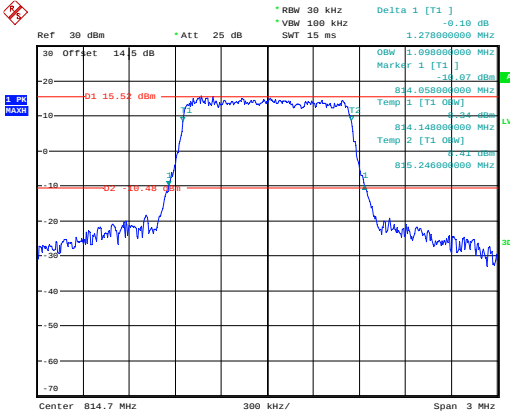
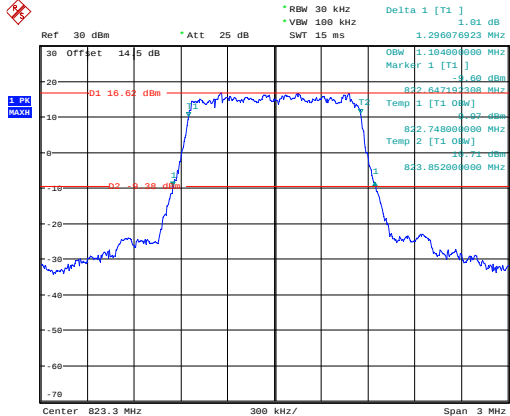
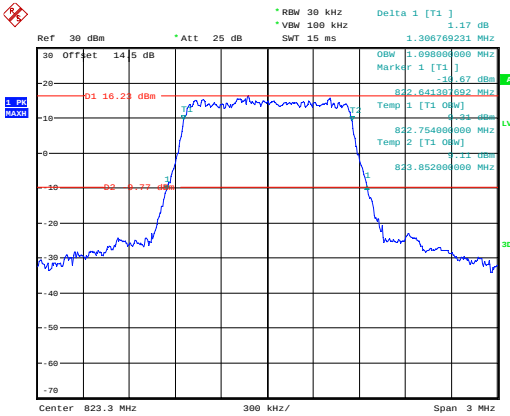
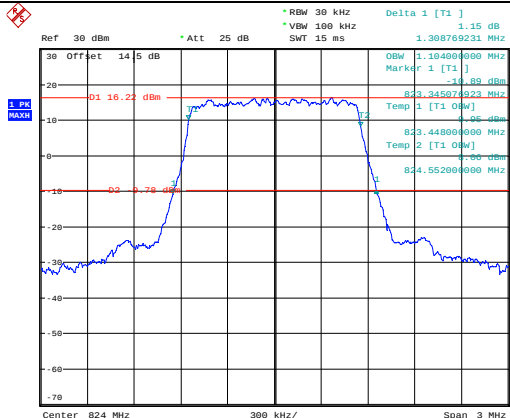
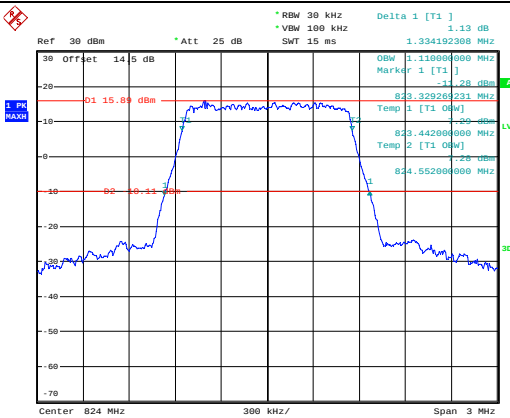
FCC §2.1055, §22.355, §90.213: Frequency Stability					
Test Modulation:	15 MHz QPSK		Test Channel:	821.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	-1.28	-0.002	2.5
	-20	3.85	8.28	0.010	2.5
	-10	3.85	7.96	0.010	2.5
	0	3.85	10.07	0.012	2.5
	10	3.85	-5.21	-0.006	2.5
	20	3.85	-5.63	-0.007	2.5
	30	3.85	9.52	0.011	2.5
	40	3.85	-6.52	-0.008	2.5
	50	3.85	-3.47	-0.004	2.5
Frequency Stability vs. Voltage	20	3.6	-5.52	-0.007	2.5
	20	4.35	8.34	0.010	2.5
Result:				Pass	

FCC §2.1055, §22.355, §90.213: Frequency Stability					
Test Modulation:	15 MHz QPSK		Test Channel:	831.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	0.63	0.001	2.5
	-20	3.85	-4.82	-0.006	2.5
	-10	3.85	9.49	0.011	2.5
	0	3.85	9.84	0.012	2.5
	10	3.85	9.63	0.012	2.5
	20	3.85	-7.16	-0.009	2.5
	30	3.85	-4.92	-0.006	2.5
	40	3.85	-3.1	-0.004	2.5
	50	3.85	-6.13	-0.007	2.5
Frequency Stability vs. Voltage	20	3.6	-4.07	-0.005	2.5
	20	4.35	8.6	0.010	2.5
Result:				Pass	

FCC §2.1055, §22.355, §90.213: Frequency Stability					
Test Modulation:	15 MHz 16QAM		Test Channel:	831.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	-0.37	0.000	2.5
	-20	3.85	8.87	0.011	2.5
	-10	3.85	8.69	0.010	2.5
	0	3.85	10.74	0.013	2.5
	10	3.85	-4.37	-0.005	2.5
	20	3.85	-4.54	-0.005	2.5
	30	3.85	9.83	0.012	2.5
	40	3.85	-5.95	-0.007	2.5
	50	3.85	-2.76	-0.003	2.5
Frequency Stability vs. Voltage	20	3.6	-5.06	-0.006	2.5
	20	4.35	8.89	0.011	2.5
Result:				Pass	

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

Occupied Bandwidth

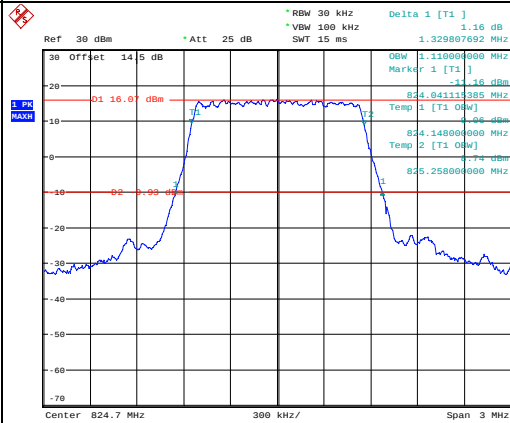
Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest For 90S	 Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 15 ms Delta 1 [T1] -1.13 dB Marker 1 [T1] 814.84000000 MHz Temp 1 [T1] 814.14000000 MHz Temp 2 [T1] 815.24000000 MHz Date: 29 JUN 2023 23:38:22	 Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 15 ms Delta 1 [T1] -0.10 dB Marker 1 [T1] 814.85000000 MHz Temp 1 [T1] 814.14000000 MHz Temp 2 [T1] 815.24000000 MHz Date: 29 JUN 2023 23:38:48
Highest For 90S	 Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 15 ms Delta 1 [T1] 1.01 dB Marker 1 [T1] 822.647191300 MHz Temp 1 [T1] 822.74000000 MHz Temp 2 [T1] 823.85200000 MHz Date: 1 JUL 2023 15:50:13	 Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 15 ms Delta 1 [T1] 1.17 dB Marker 1 [T1] 822.643301902 MHz Temp 1 [T1] 822.75400000 MHz Temp 2 [T1] 823.85200000 MHz Date: 1 JUL 2023 15:49:11
Cross Channel	 Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 15 ms Delta 1 [T1] 1.15 dB Marker 1 [T1] 823.345074823 MHz Temp 1 [T1] 823.44000000 MHz Temp 2 [T1] 824.55200000 MHz Date: 1 JUL 2023 15:51:57	 Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 15 ms Delta 1 [T1] 1.13 dB Marker 1 [T1] 823.329260723 MHz Temp 1 [T1] 823.44200000 MHz Temp 2 [T1] 824.55200000 MHz Date: 1 JUL 2023 15:53:42

Occupied Bandwidth

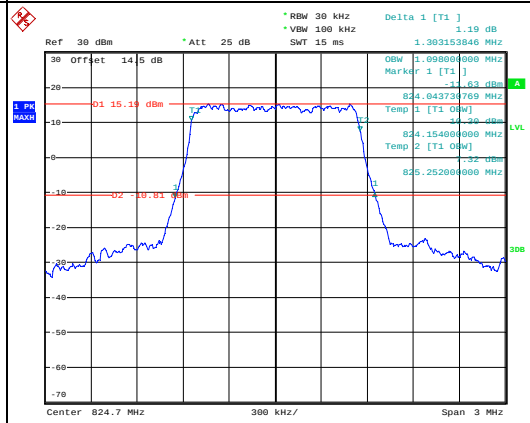
Channel

1.4MHz Bandwidth QPSK

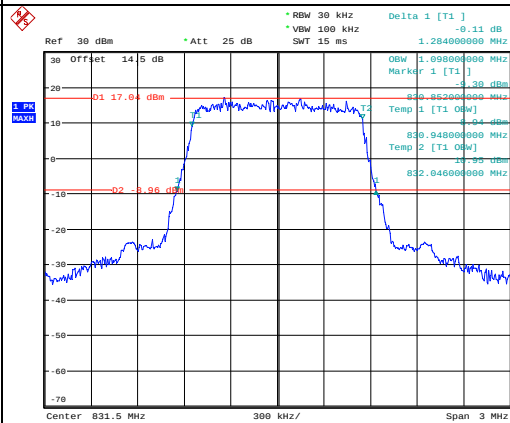
1.4MHz Bandwidth 16QAM

Lowest
For 22H

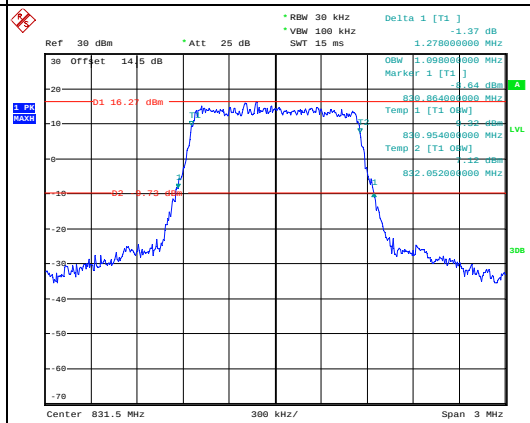
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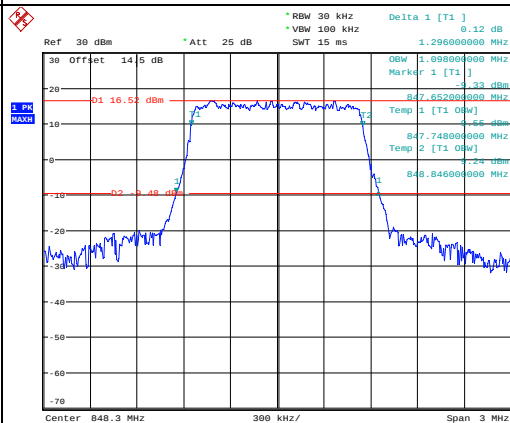
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Middle
For 22H

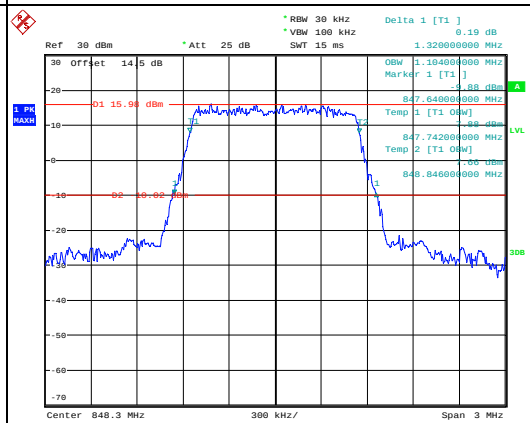
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Date: 29.JUN.2023 23:39:29

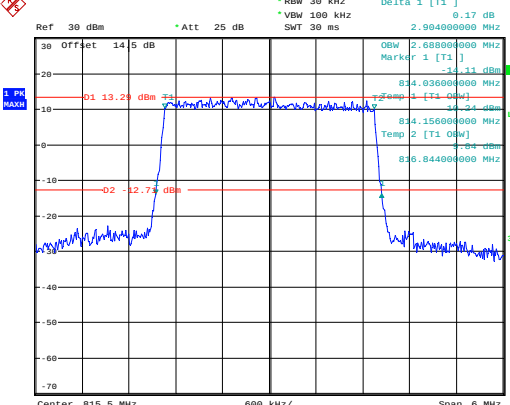
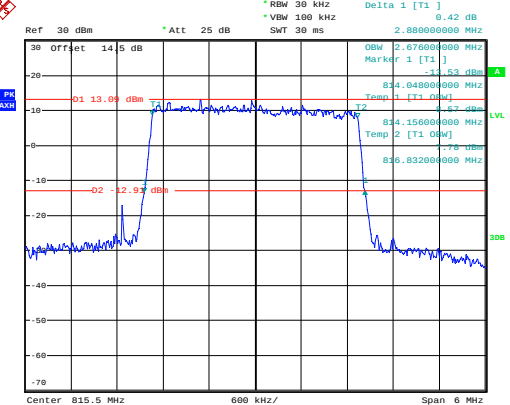
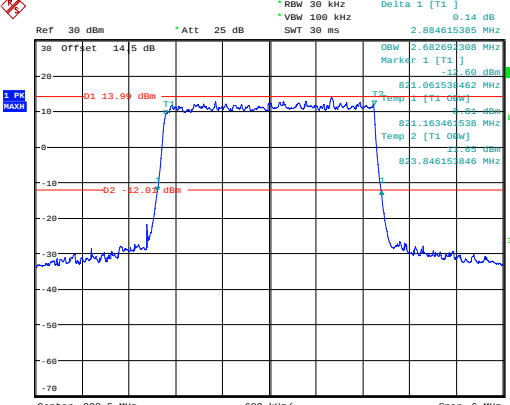
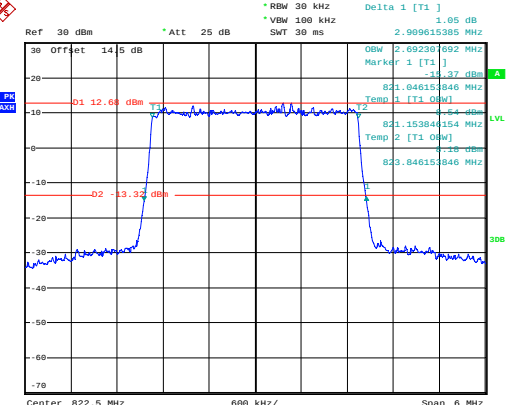
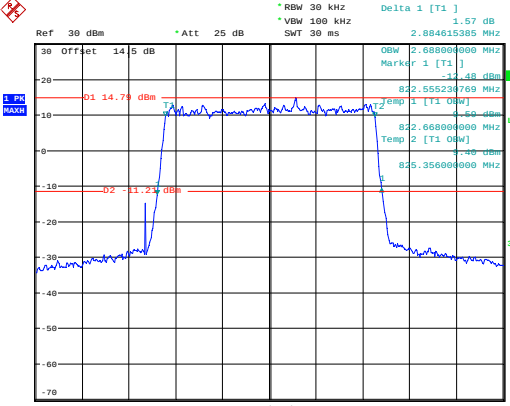
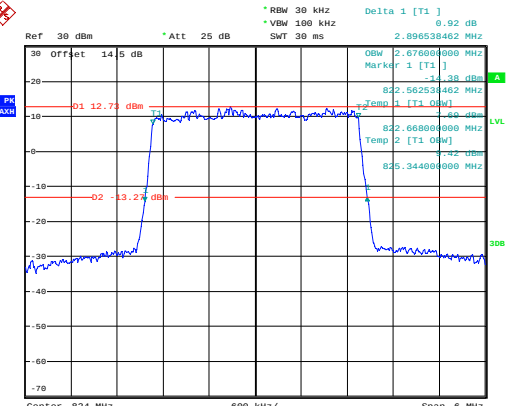
Highest
For 22H

Date: 29.JUN.2023 23:39:54



Date: 29.JUN.2023 23:40:14

Occupied Bandwidth

Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest For 90S	 Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 30 ms Delta 1 [T1] 0.17 dB OBW 2.68000000 MHz Center 815.5 MHz 600 kHz/ Span 6 MHz Date: 29.JUN.2023 23:41:05	 Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 30 ms Delta 1 [T1] 0.42 dB OBW 2.67000000 MHz Center 815.5 MHz 600 kHz/ Span 6 MHz Date: 29.JUN.2023 23:41:25
Highest For 90S	 Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 30 ms Delta 1 [T1] 0.14 dB OBW 2.684615385 MHz Center 822.5 MHz 600 kHz/ Span 6 MHz Date: 3.JUL.2023 11:31:22	 Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 30 ms Delta 1 [T1] 1.05 dB OBW 2.692304692 MHz Center 822.5 MHz 600 kHz/ Span 6 MHz Date: 3.JUL.2023 11:32:51
Cross Channel	 Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 30 ms Delta 1 [T1] 1.57 dB OBW 2.684615385 MHz Center 824 MHz 600 kHz/ Span 6 MHz Date: 1.JUL.2023 15:57:11	 Ref 30 dBm Att 25 dB RBW 30 kHz VBW 100 kHz SWT 30 ms Delta 1 [T1] 0.92 dB OBW 2.676000000 MHz Center 824 MHz 600 kHz/ Span 6 MHz Date: 1.JUL.2023 15:58:52

Occupied Bandwidth

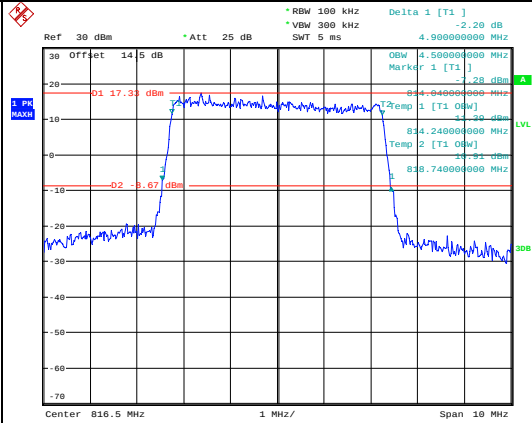
Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest For 22H	Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 30 ms Delta 1 [T1] 0.61 dB Marker 1 [T1] 2.68269308 MHz Temp 1 [T1] 824.05769308 MHz Temp 2 [T1] 824.163461538 MHz Temp 3 [T1] 826.846153846 MHz Center 825.5 MHz 600 kHz/ Span 6 MHz Date: 3.JUL.2023 11:36:50	Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 30 ms Delta 1 [T1] 1.20 dB Marker 1 [T1] 2.675000000 MHz Temp 1 [T1] 824.061538462 MHz Temp 2 [T1] 824.163461538 MHz Temp 3 [T1] 826.846153846 MHz Center 825.5 MHz 600 kHz/ Span 6 MHz Date: 3.JUL.2023 11:35:12
Middle For 22H	Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 30 ms Delta 1 [T1] -1.14 dB Marker 1 [T1] 2.680000000 MHz Temp 1 [T1] 830.072000000 MHz Temp 2 [T1] 830.150000000 MHz Temp 3 [T1] 832.844000000 MHz Center 831.5 MHz 600 kHz/ Span 6 MHz Date: 29.JUN.2023 23:41:46	Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 30 ms Delta 1 [T1] -2.05 dB Marker 1 [T1] 2.680000000 MHz Temp 1 [T1] 830.060000000 MHz Temp 2 [T1] 830.150000000 MHz Temp 3 [T1] 832.844000000 MHz Center 831.5 MHz 600 kHz/ Span 6 MHz Date: 29.JUN.2023 23:42:06
Highest For 22H	Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 30 ms Delta 1 [T1] 0.91 dB Marker 1 [T1] 2.680000000 MHz Temp 1 [T1] 846.045000000 MHz Temp 2 [T1] 846.150000000 MHz Temp 3 [T1] 848.844000000 MHz Center 847.5 MHz 600 kHz/ Span 6 MHz Date: 29.JUN.2023 23:42:26	Ref 30 dBm *Att 25 dB *RBW 30 kHz *VBW 100 kHz SWT 30 ms Delta 1 [T1] 0.81 dB Marker 1 [T1] 2.676000000 MHz Temp 1 [T1] 846.040000000 MHz Temp 2 [T1] 846.150000000 MHz Temp 3 [T1] 848.832000000 MHz Center 847.5 MHz 600 kHz/ Span 6 MHz Date: 29.JUN.2023 23:42:46

Occupied Bandwidth

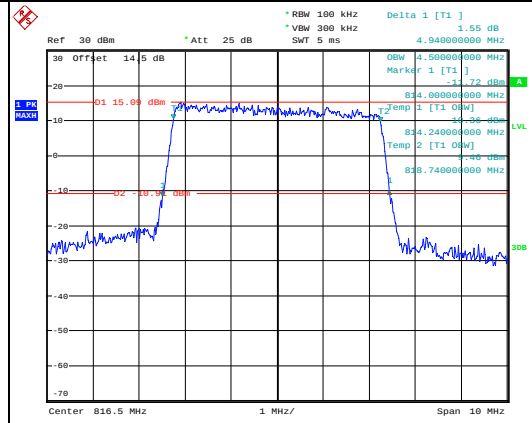
Channel

5MHz Bandwidth QPSK

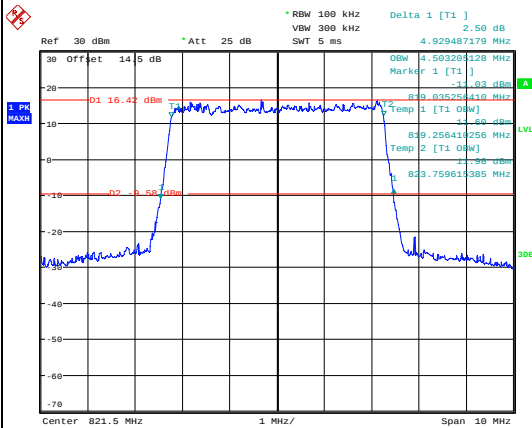
5MHz Bandwidth 16QAM

Lowest
For 90S

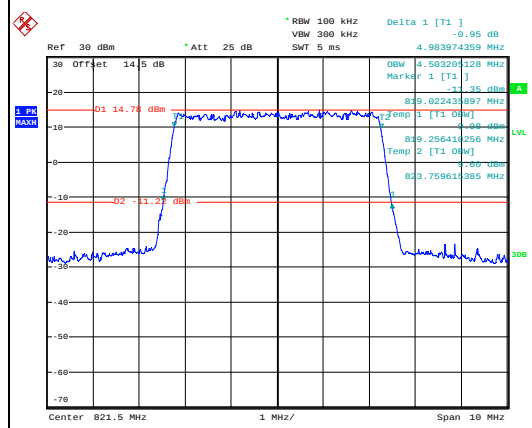
Date: 29.JUN.2023 23:43:41



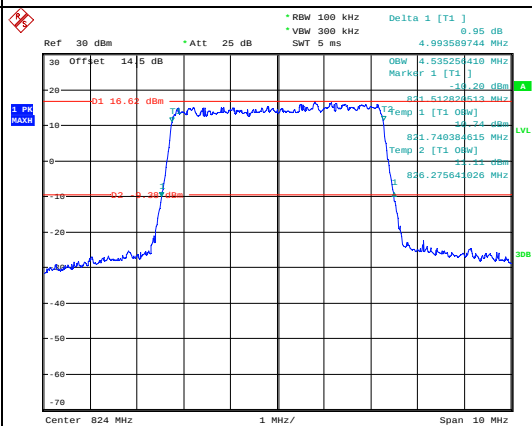
Date: 29.JUN.2023 23:44:04

Highest
For 90S

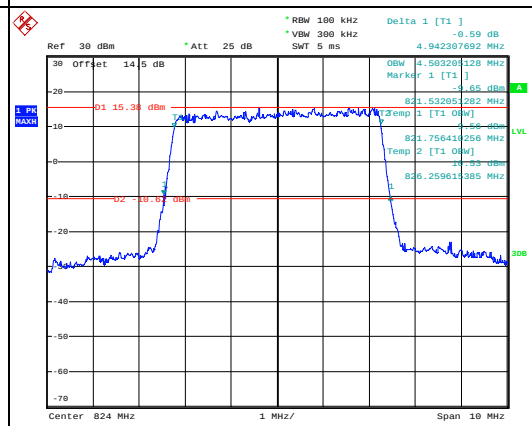
Date: 3.JUL.2023 11:26:06



Date: 3.JUL.2023 11:28:02

Cross
Channel

Date: 3.JUL.2023 09:41:43



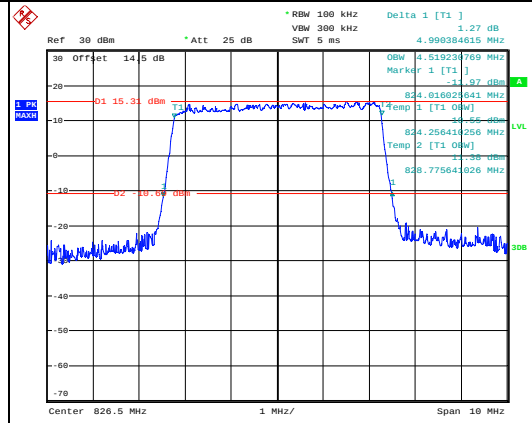
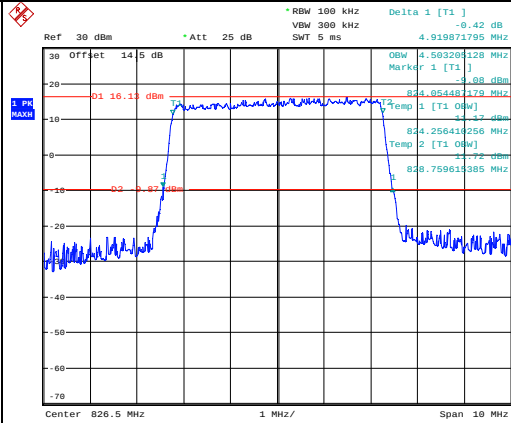
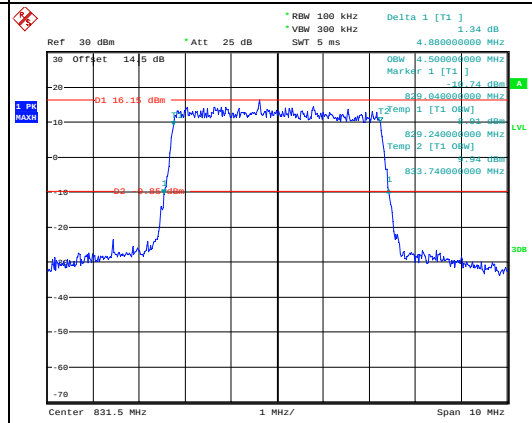
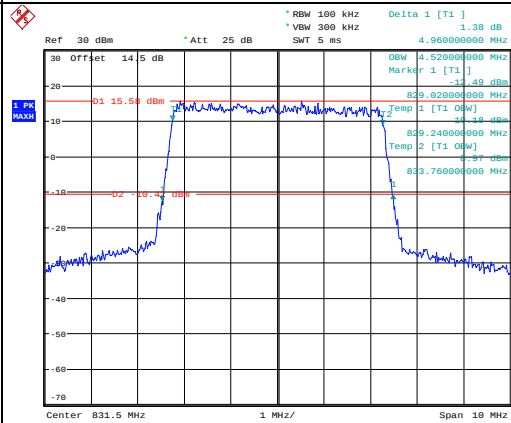
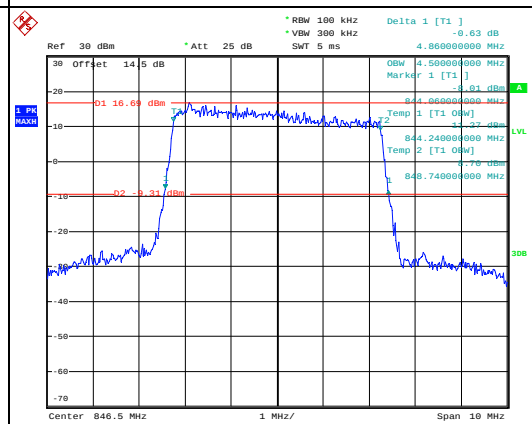
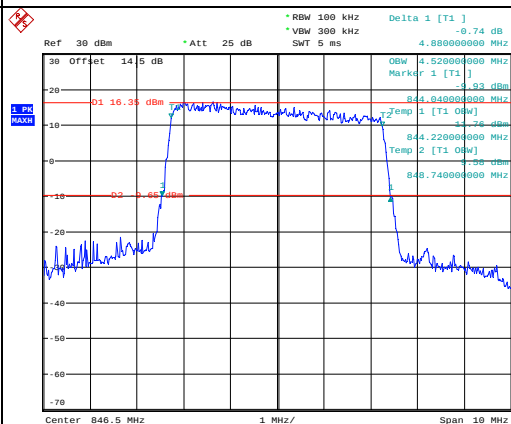
Date: 3.JUL.2023 09:43:35

Occupied Bandwidth

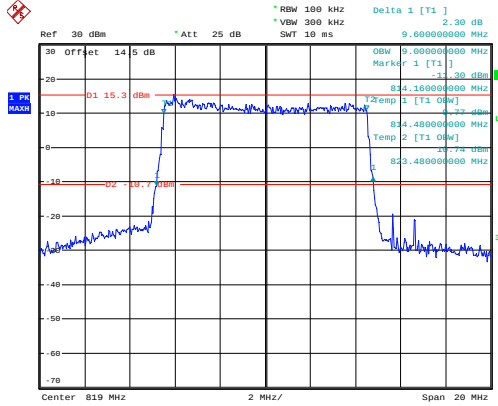
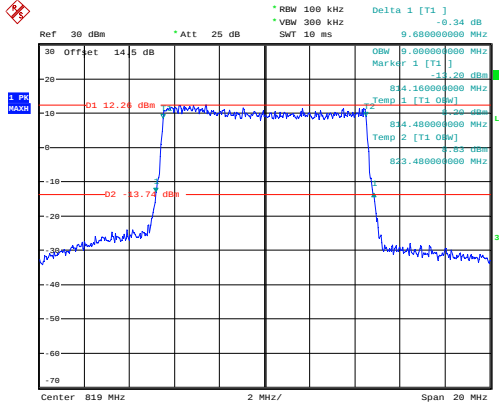
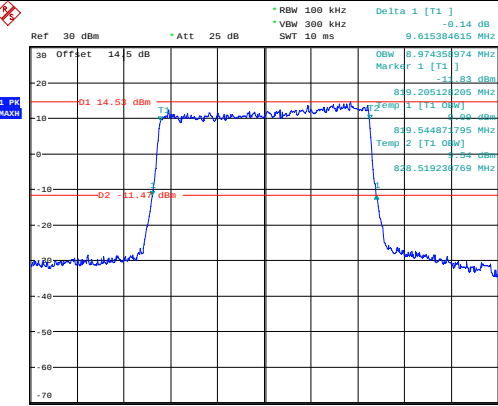
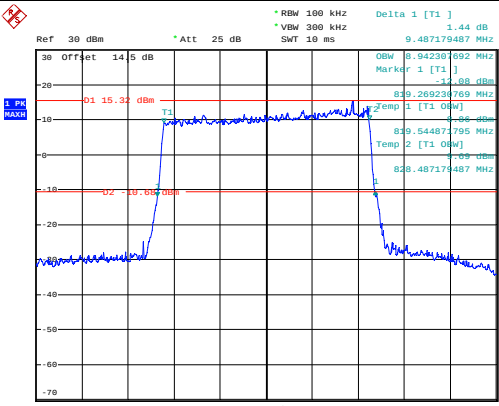
Channel

5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

Lowest
For 22HMiddle
For 22HHighest
For 22H

Occupied Bandwidth

Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest For 90S	 Ref 30 dBm Att 25 dB RBW 100 kHz Delta 1 [T1] 2.30 dB VSW 300 kHz SWT 10 ms 9.600000000 MHz OBW 9.600000000 MHz Marker 1 [T1] -15.30 dBm Temp 1 [T1 0dB] 823.480000000 MHz Temp 2 [T1 0dB] 823.480000000 MHz Center 819 MHz 2 MHz/ Span 20 MHz Date: 29 JUN.2023 23:46:25	 Ref 30 dBm Att 25 dB RBW 100 kHz Delta 1 [T1] 2.34 dB VSW 300 kHz SWT 10 ms 9.600000000 MHz OBW 9.600000000 MHz Marker 1 [T1] -12.20 dBm Temp 1 [T1 0dB] 823.480000000 MHz Temp 2 [T1 0dB] 823.480000000 MHz Center 819 MHz 2 MHz/ Span 20 MHz Date: 29 JUN.2023 23:46:44
Cross Channel	 Ref 30 dBm Att 25 dB RBW 100 kHz Delta 1 [T1] 0.14 dB VSW 300 kHz SWT 10 ms 9.615384615 MHz OBW 9.615384615 MHz Marker 1 [T1] -14.53 dBm Temp 1 [T1 0dB] 829.205123205 MHz Temp 2 [T1 0dB] 828.519234769 MHz Center 824 MHz 2 MHz/ Span 20 MHz Date: 3 JUL.2023 09:46:15	 Ref 30 dBm Att 25 dB RBW 100 kHz Delta 1 [T1] 1.44 dB VSW 300 kHz SWT 10 ms 9.487175487 MHz OBW 9.487175487 MHz Marker 1 [T1] -15.08 dBm Temp 1 [T1 0dB] 829.205123205 MHz Temp 2 [T1 0dB] 828.487175487 MHz Center 824 MHz 2 MHz/ Span 20 MHz Date: 3 JUL.2023 10:02:43

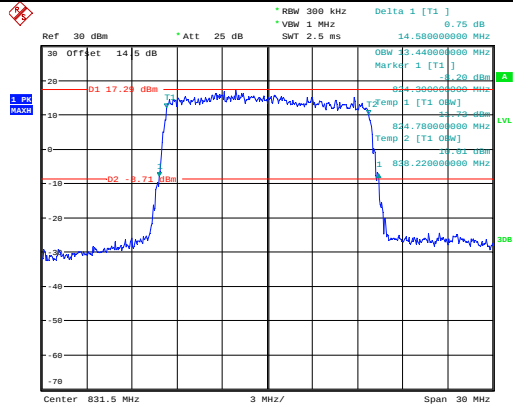
Page 179 of 266

Occupied Bandwidth

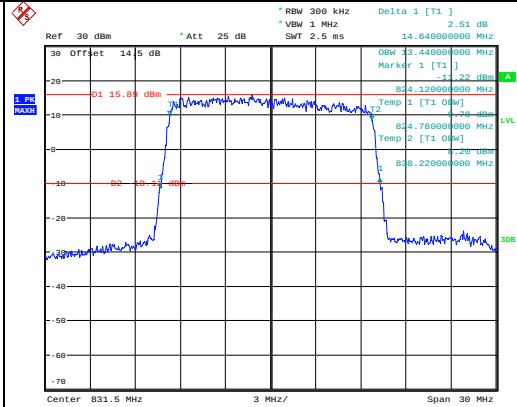
Channel

15MHz Bandwidth QPSK

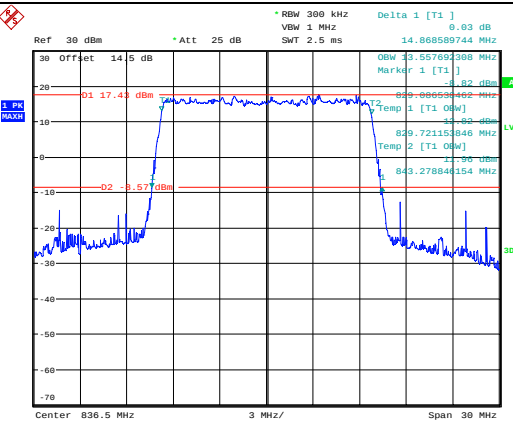
15MHz Bandwidth 16QAM

Lowest
For 22H

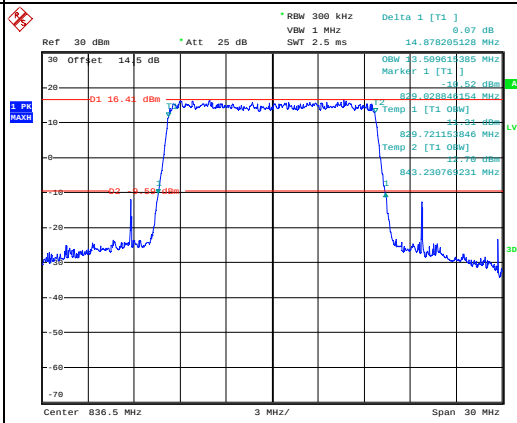
Date: 29 JUN.2023 23:49:58



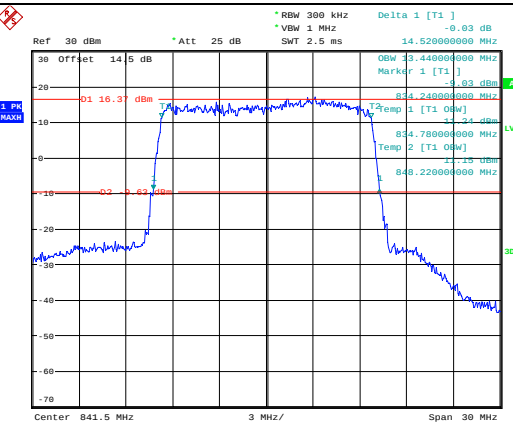
Date: 29 JUN.2023 23:50:18

Middle
For 22H

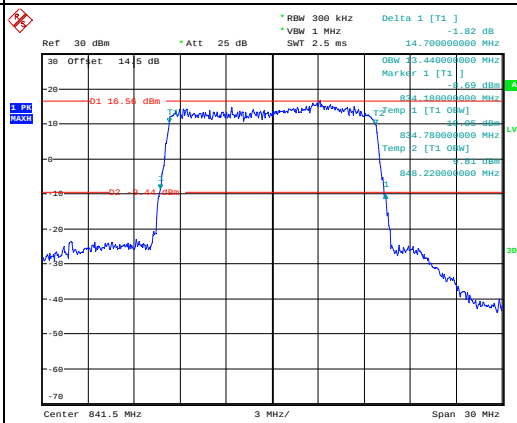
Date: 3 JUL.2023 10:44:05



Date: 3 JUL.2023 10:46:33

Highest
For 22H

Date: 29 JUN.2023 23:50:39

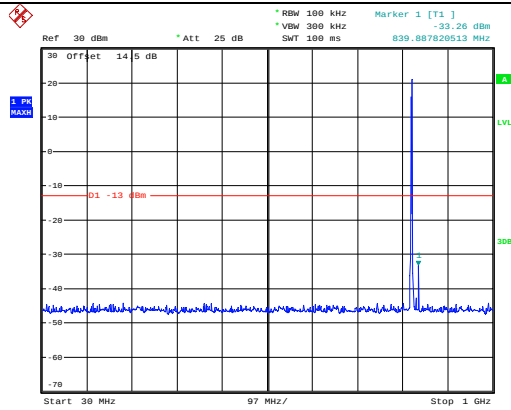


Date: 29 JUN.2023 23:50:59

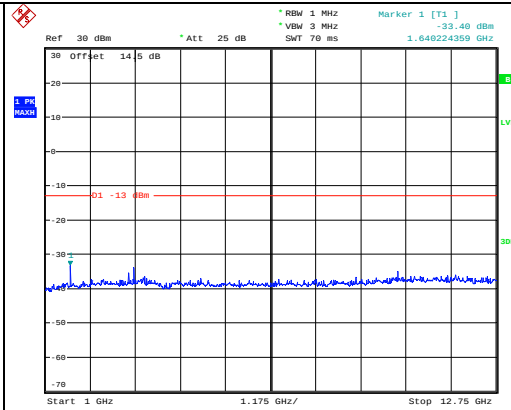
Spurious Emissions at Antenna Terminal

Channel

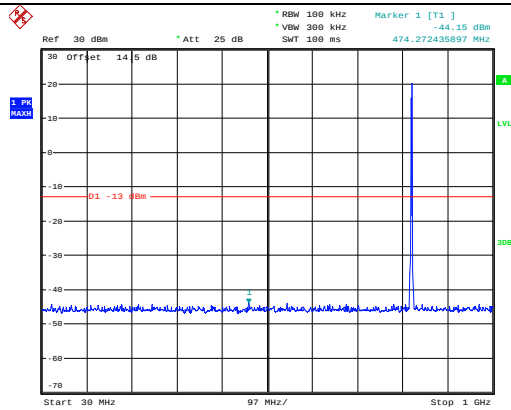
1.4MHz Bandwidth QPSK

Lowest
For 90S

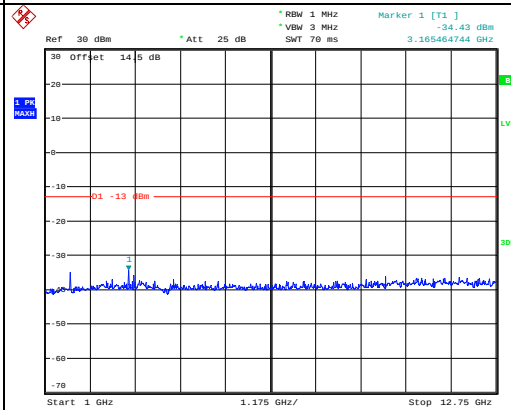
Date: 3.JUL.2023 13:28:48



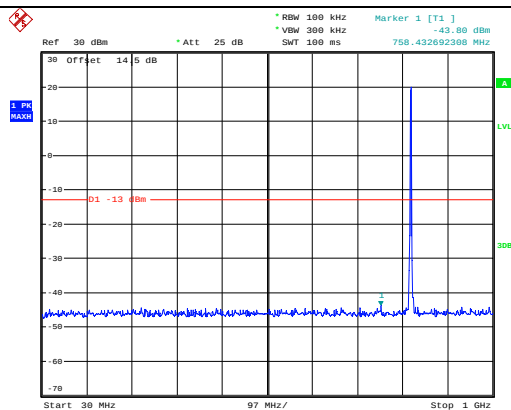
Date: 3.JUL.2023 13:31:07

Highest
For 90S

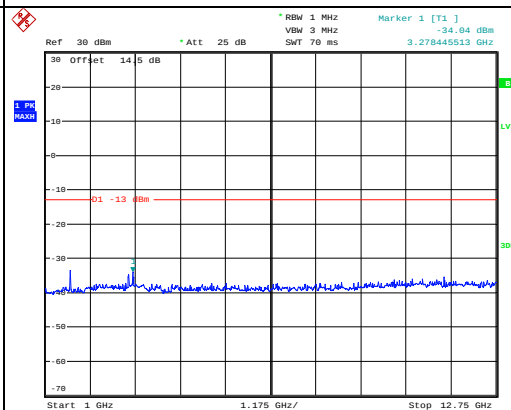
Date: 3.JUL.2023 13:33:31



Date: 3.JUL.2023 13:32:25

Cross
Channel

Date: 3.JUL.2023 13:36:00

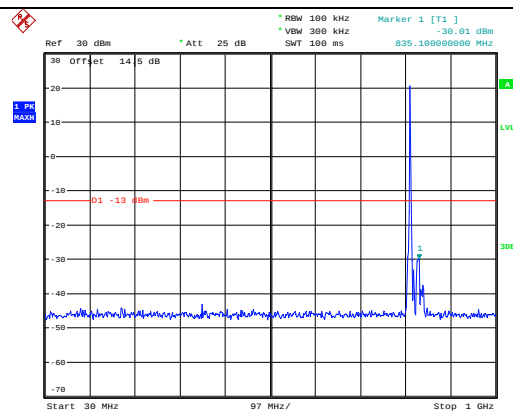


Date: 3.JUL.2023 14:04:22

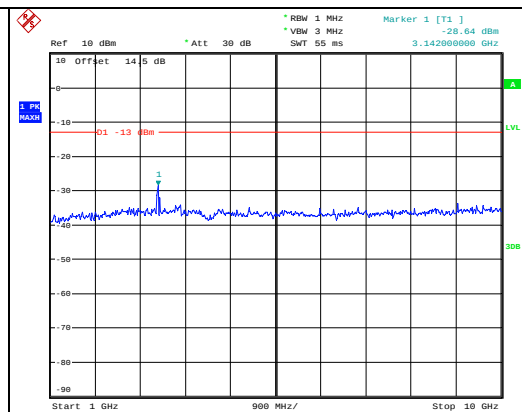
Channel

1.4MHz Bandwidth QPSK

Lowest
For 22H

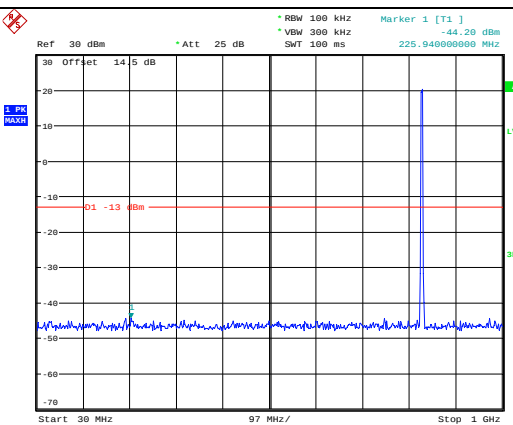


Date: 30.JUN.2023 14:33:40

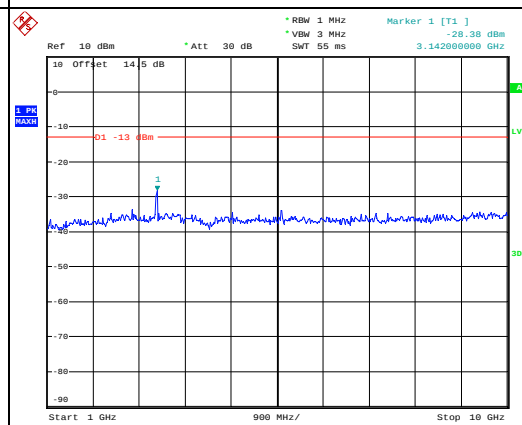


Date: 30.JUN.2023 14:33:53

Middle
For 22H

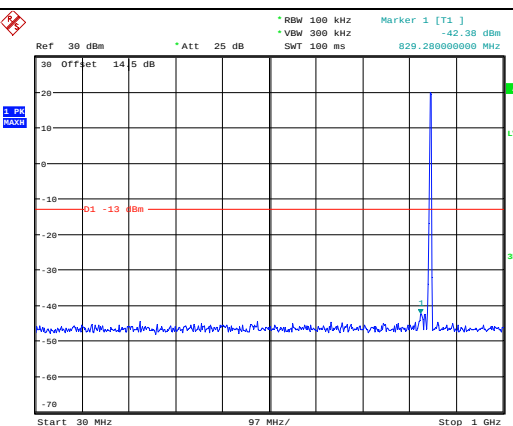


Date: 30.JUN.2023 14:34:08

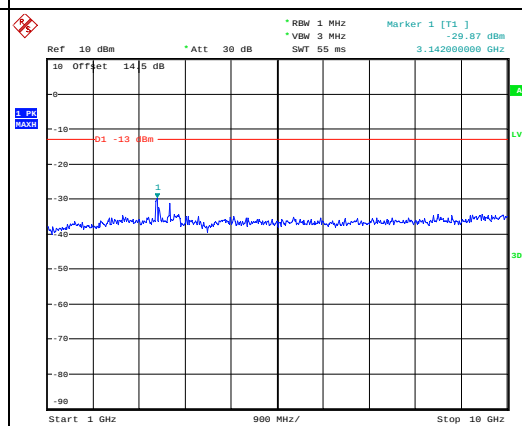


Date: 30.JUN.2023 14:34:20

Category	Lowest	Highest
For 22H	100	100



Date: 30.JUN.2023 14:34:36

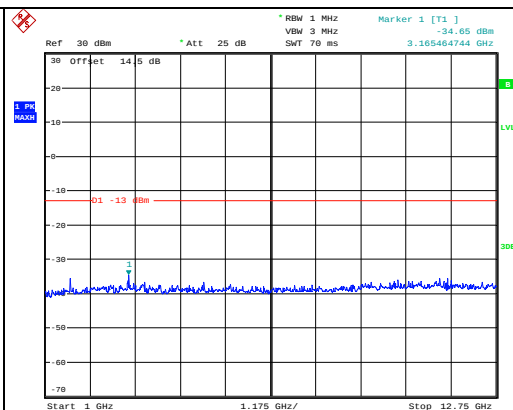
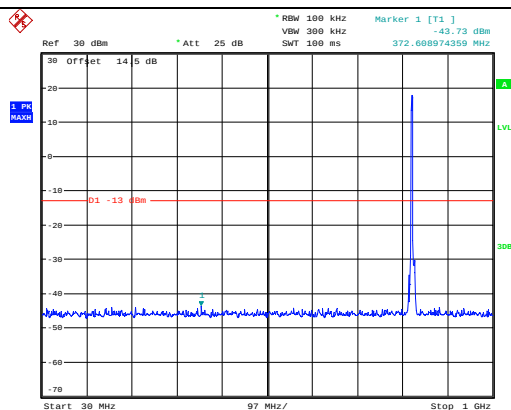
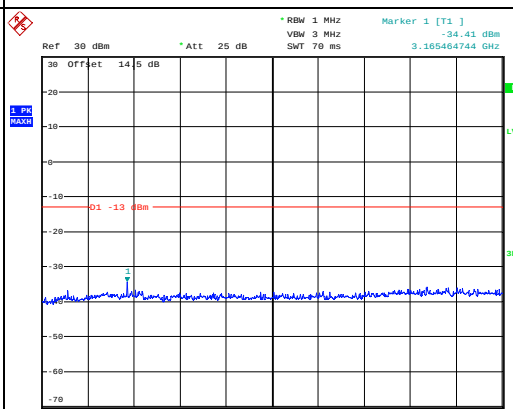
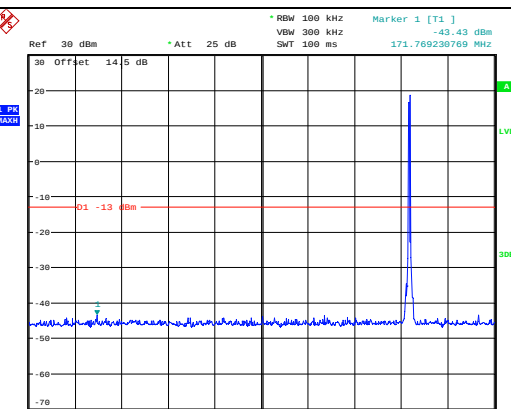
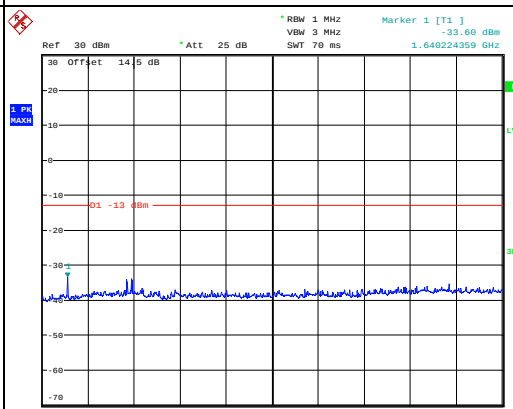
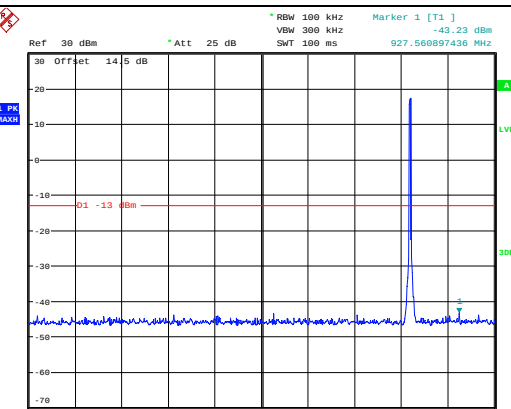


Date: 30.JUN.2023 14:34:50

Spurious Emissions at Antenna Terminal

Channel

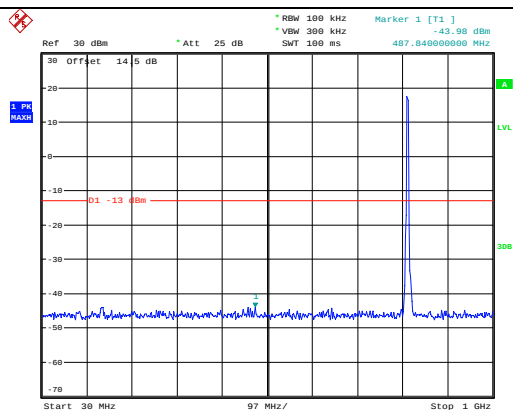
3MHz Bandwidth QPSK

Lowest
For 90SHighest
For 90SCross
Channel

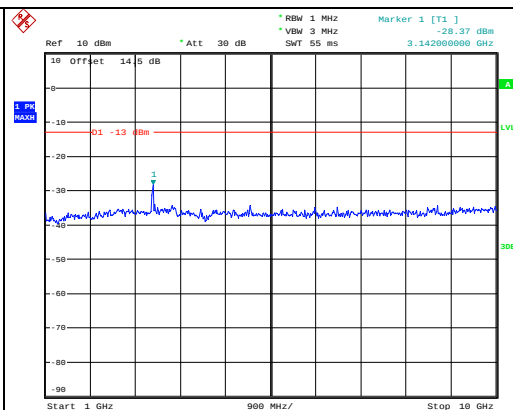
Spurious Emissions at Antenna Terminal

Channel

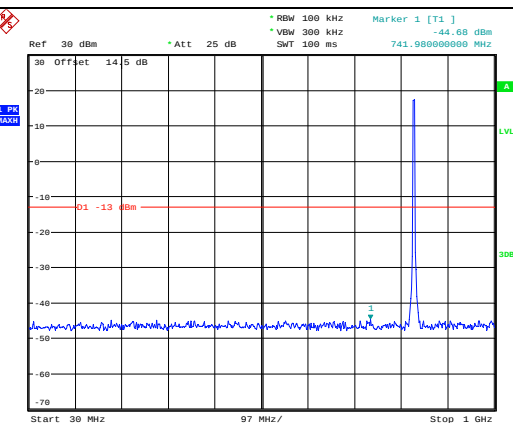
3MHz Bandwidth QPSK

Lowest
For 22H

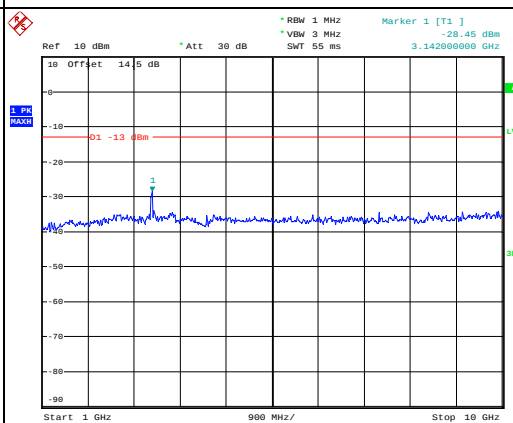
Date: 30.JUN.2023 14:35:35



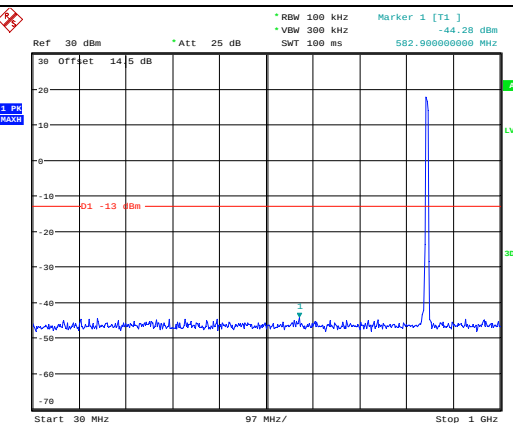
Date: 30.JUN.2023 14:35:48

Middle
For 22H

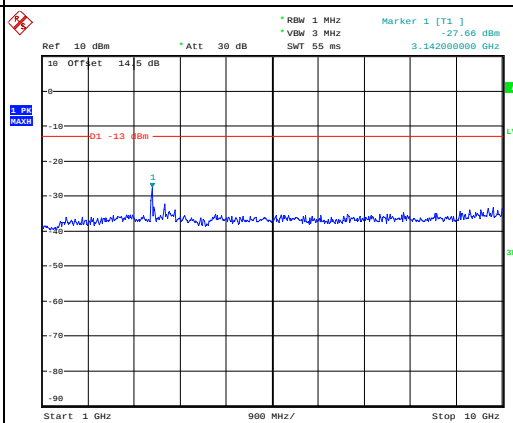
Date: 30.JUN.2023 14:36:03



Date: 30.JUN.2023 14:36:16

Highest
For 22H

Date: 30.JUN.2023 14:36:31

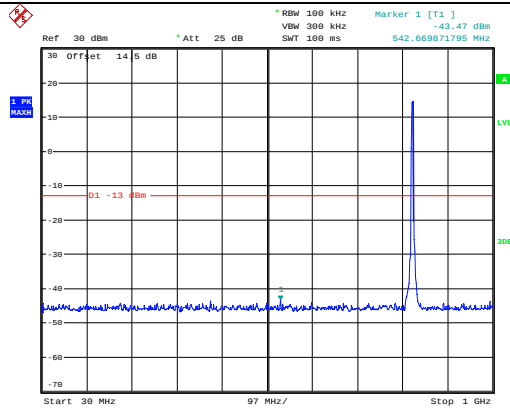


Date: 30.JUN.2023 14:36:44

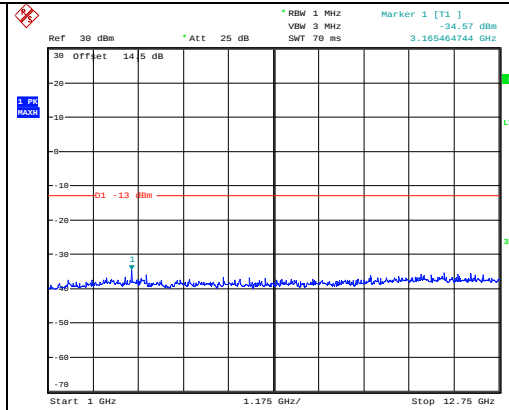
Spurious Emissions at Antenna Terminal

Channel

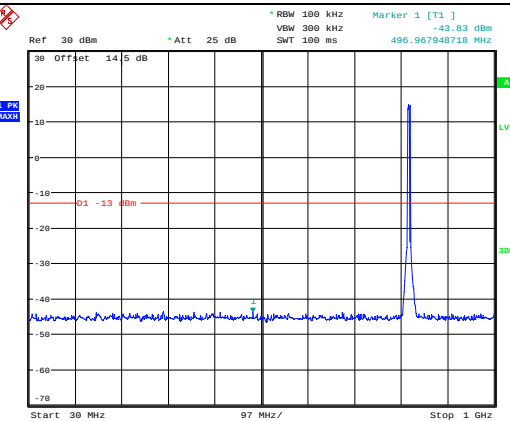
5MHz Bandwidth QPSK

Lowest
For 90S

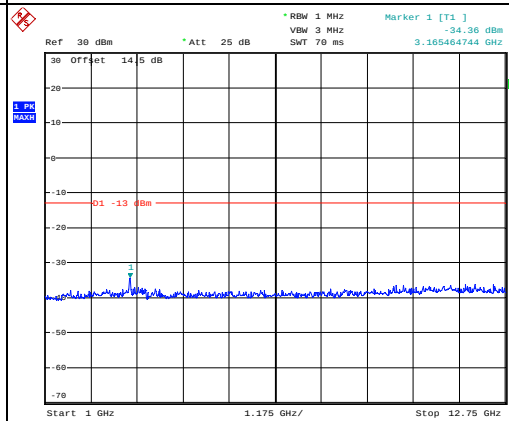
Date: 3.JUL.2023 14:21:40



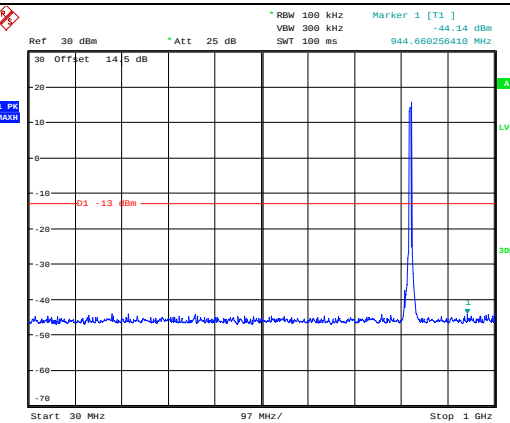
Date: 3.JUL.2023 14:18:33

Highest
For 90S

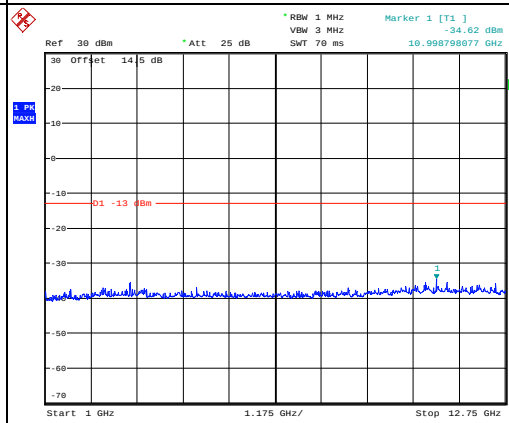
Date: 3.JUL.2023 14:24:56



Date: 3.JUL.2023 14:25:21

Cross
Channel

Date: 3.JUL.2023 14:07:07

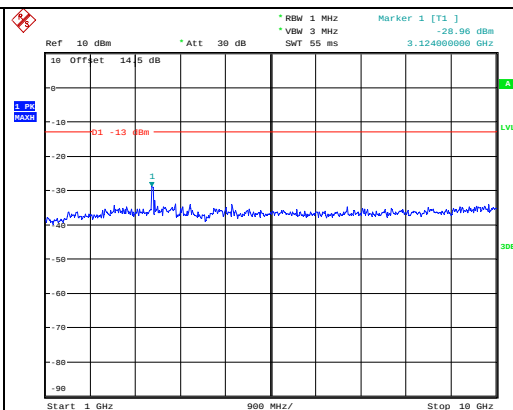
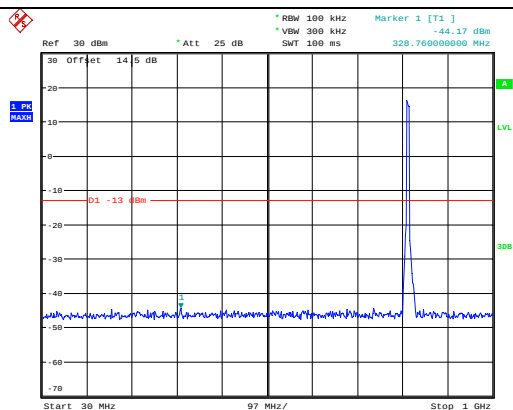
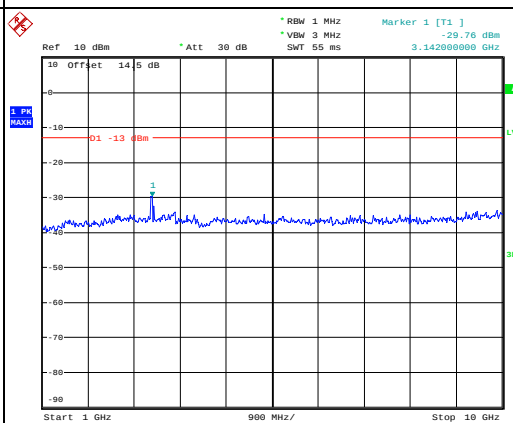
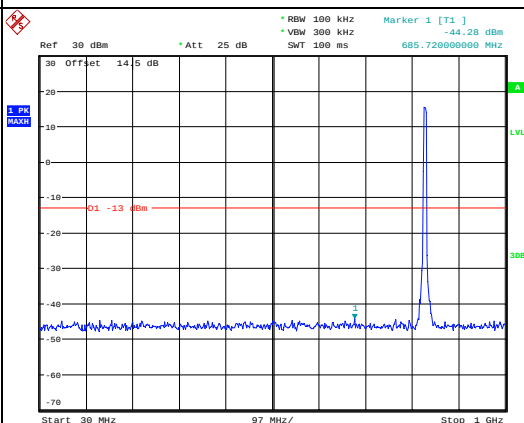
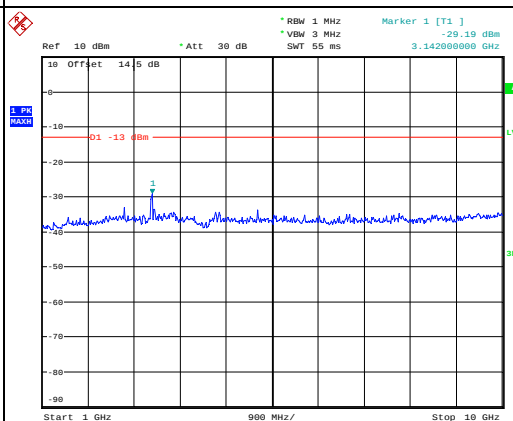
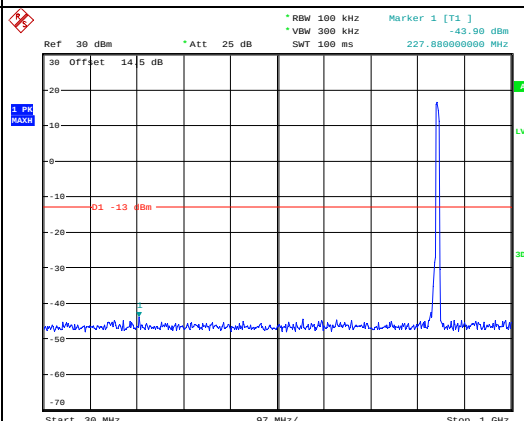


Date: 3.JUL.2023 14:07:24

Spurious Emissions at Antenna Terminal

Channel

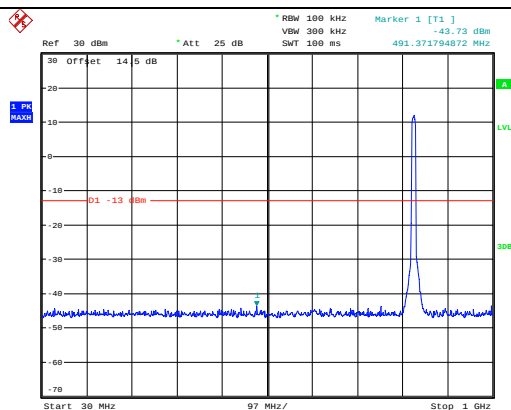
5MHz Bandwidth QPSK

Lowest
For 22HMiddle
For 22HHighest
For 22H

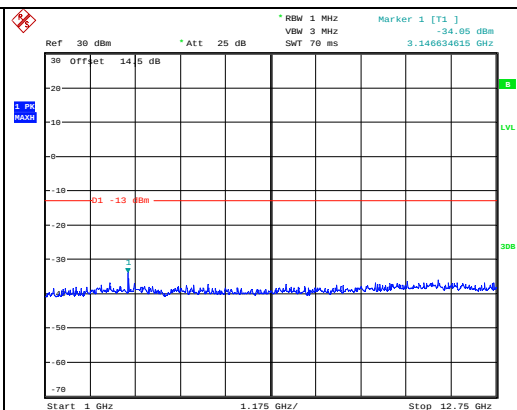
Spurious Emissions at Antenna Terminal

Channel

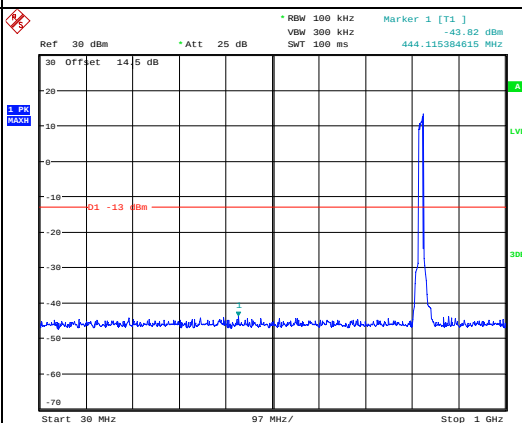
10MHz Bandwidth QPSK

Lowest
For 90S

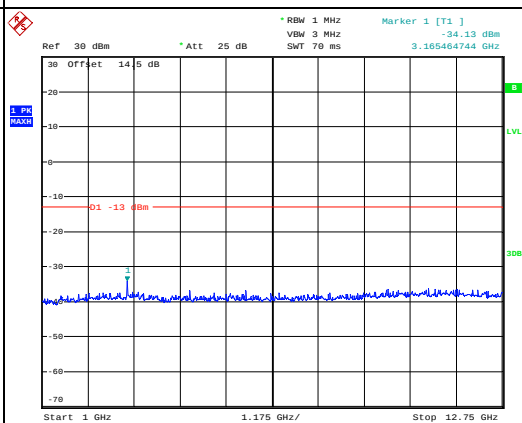
Date: 3.JUL.2023 14:17:11



Date: 3.JUL.2023 14:17:33

Cross
Channel

Date: 3.JUL.2023 14:08:47

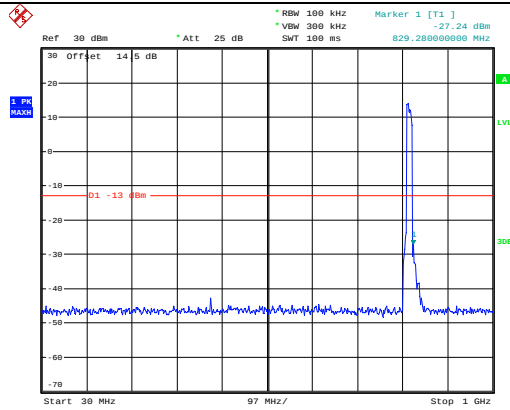


Date: 3.JUL.2023 14:08:00

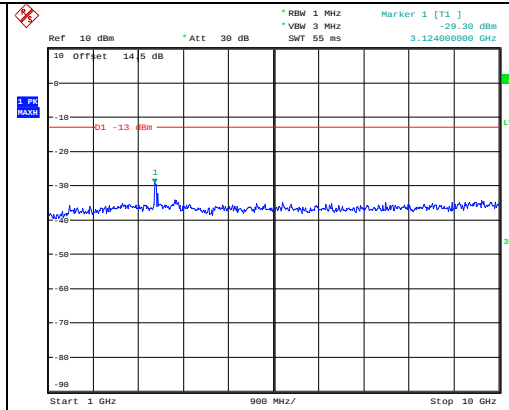
Spurious Emissions at Antenna Terminal

Channel

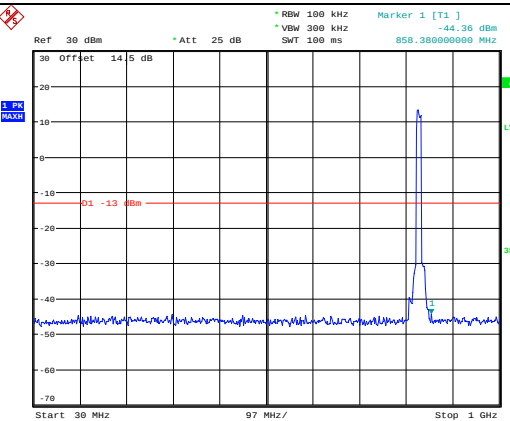
10MHz Bandwidth QPSK

Lowest
For 22H

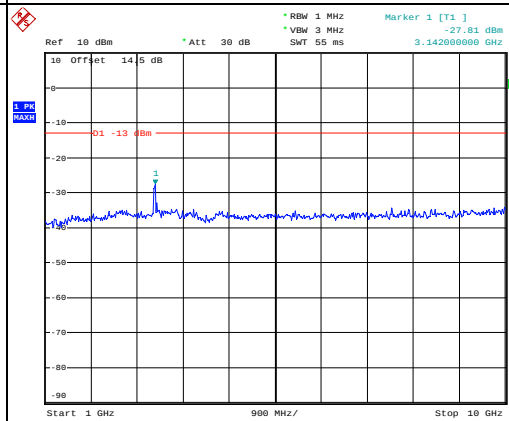
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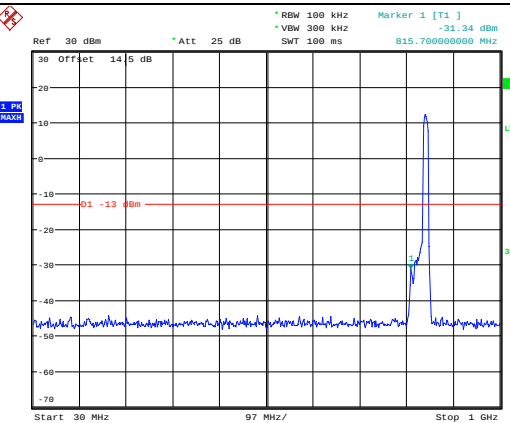
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Middle
For 22H

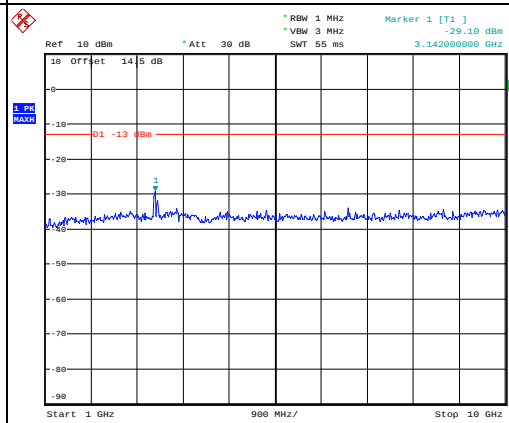
Date: 30.JUN.2023 14:57:34



Date: 30.JUN.2023 14:57:47

Highest
For 22H

Date: 30.JUN.2023 14:58:02

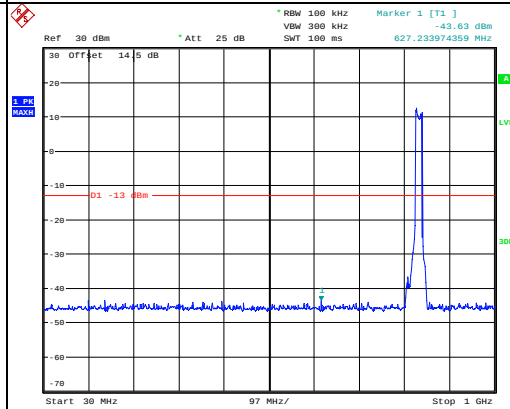


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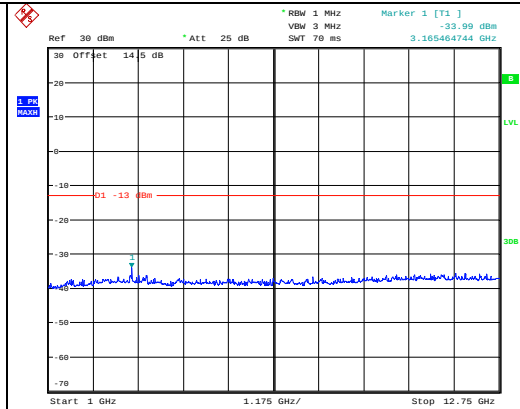
Spurious Emissions at Antenna Terminal

Channel

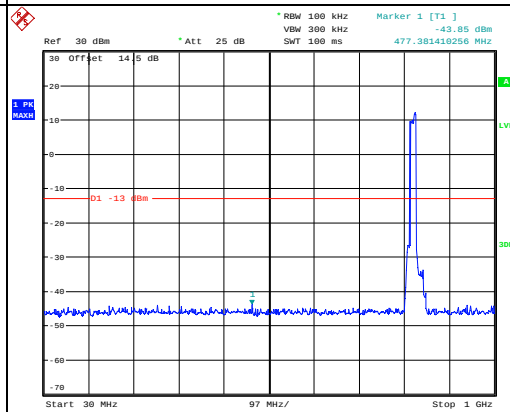
15MHz Bandwidth QPSK

Lowest
For 90S

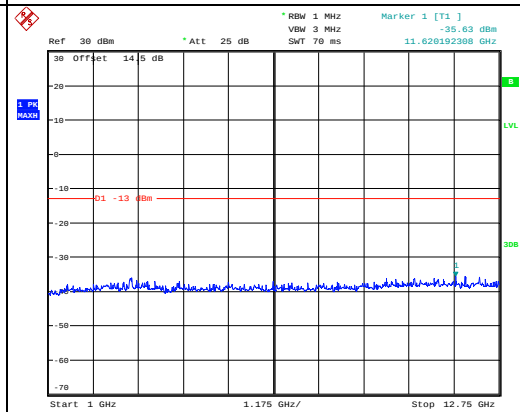
Date: 3.JUL.2023 14:13:06



Date: 3.JUL.2023 14:11:06

Cross
Channel

Date: 3.JUL.2023 14:09:43

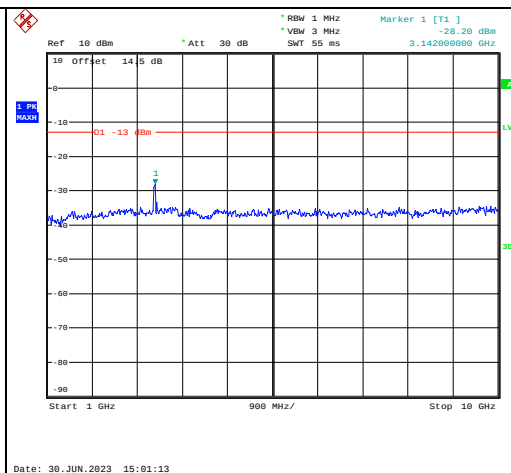
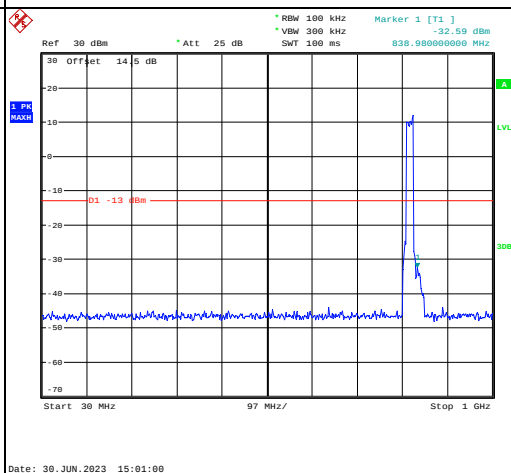
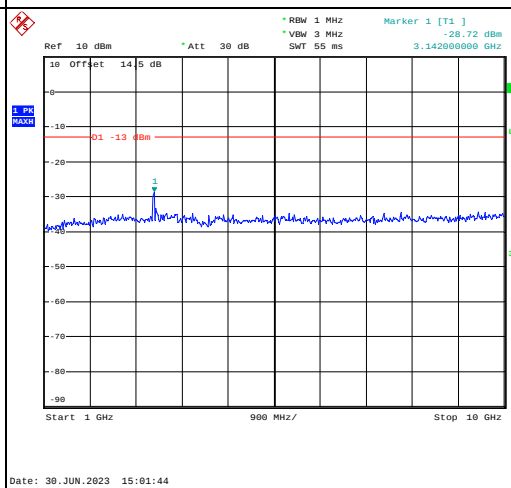
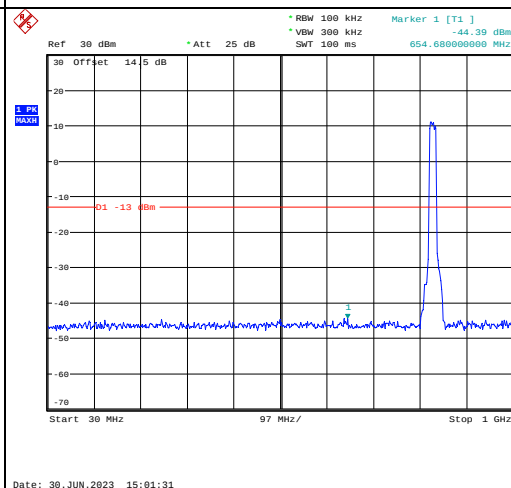
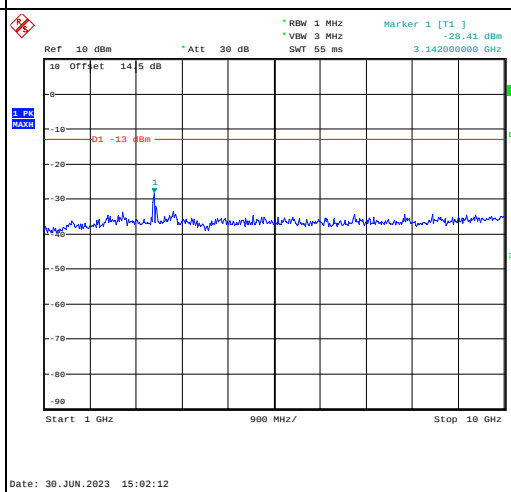
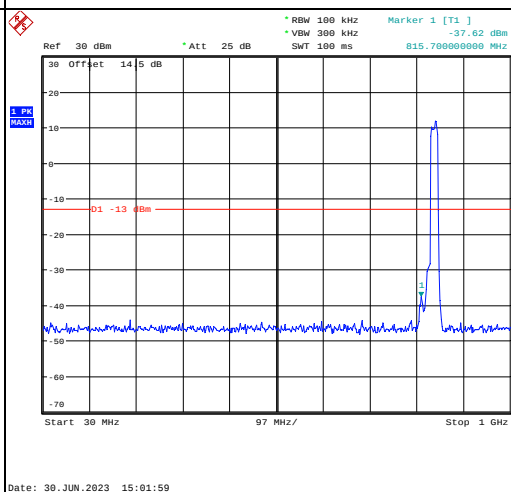


Date: 3.JUL.2023 14:09:59

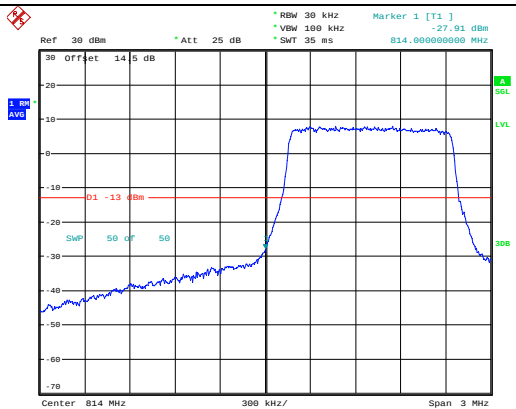
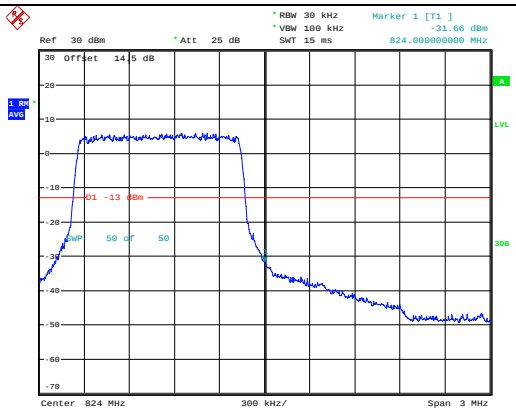
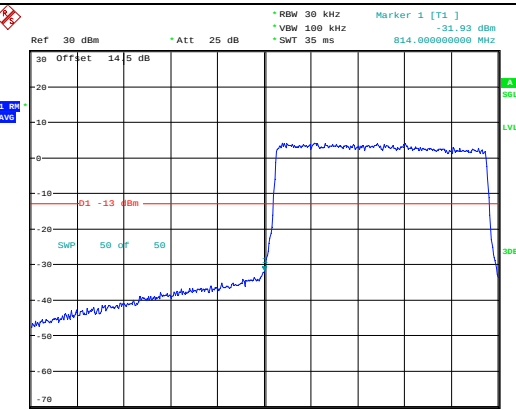
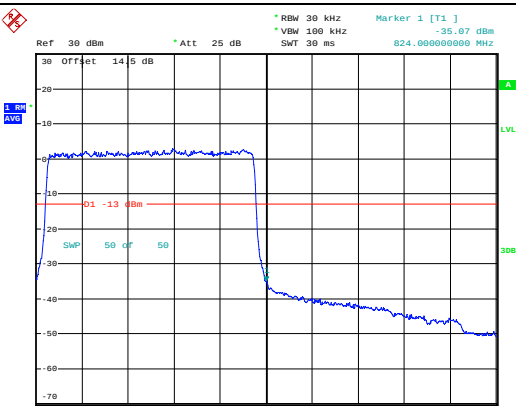
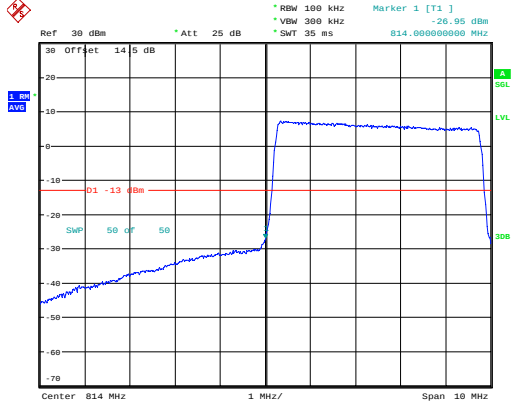
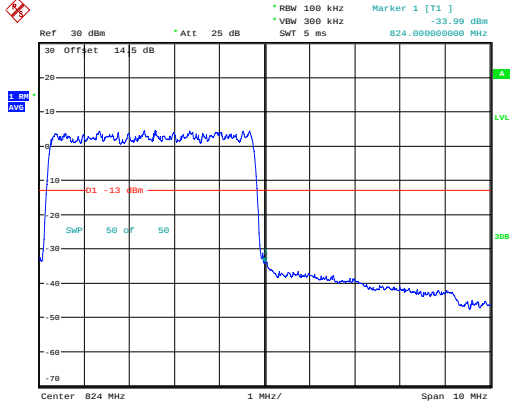
Spurious Emissions at Antenna Terminal

Channel

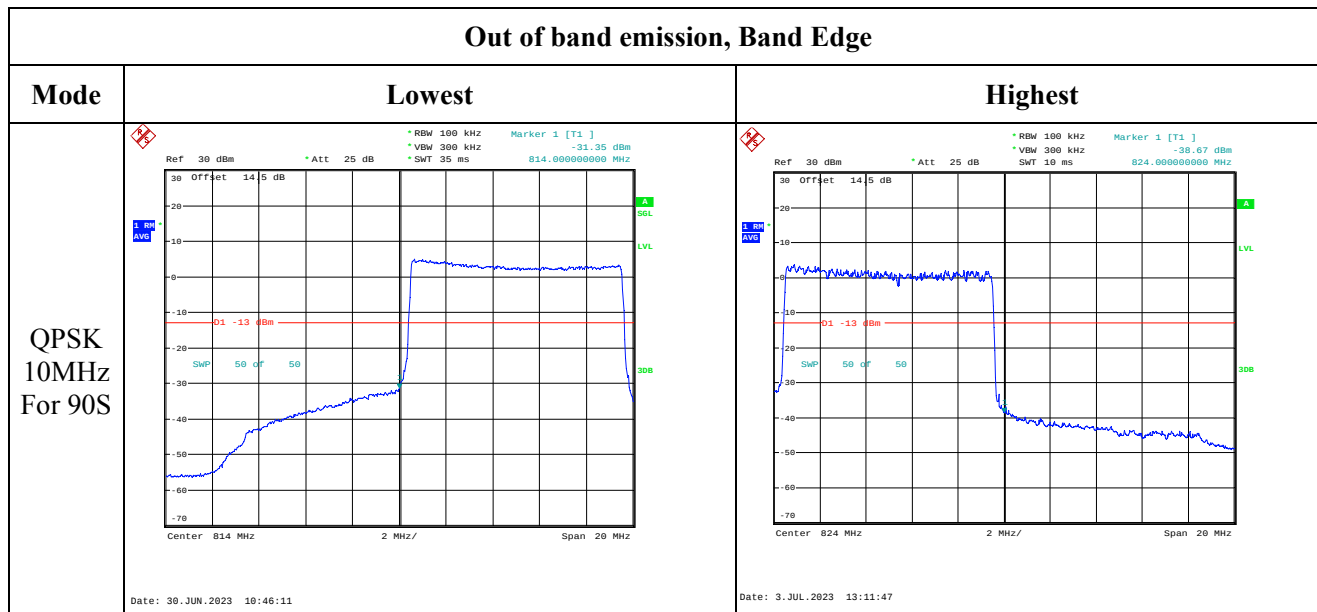
15MHz Bandwidth QPSK

Lowest
For 22HMiddle
For 22HHighest
For 22H

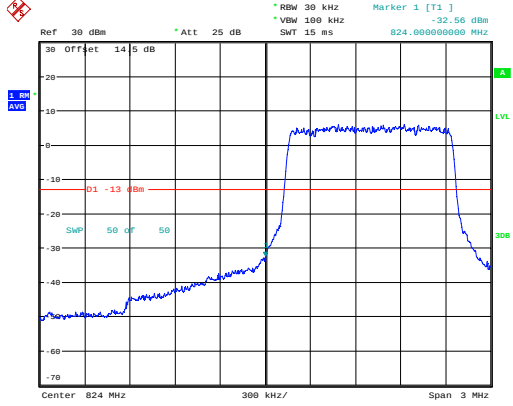
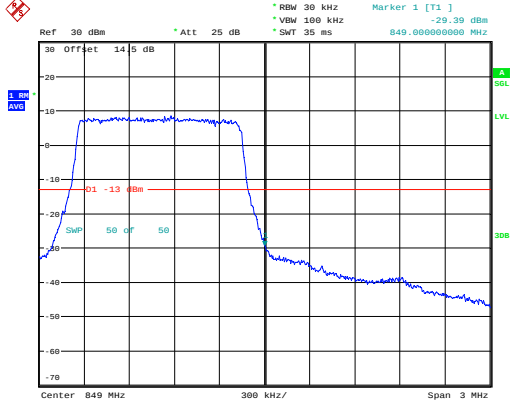
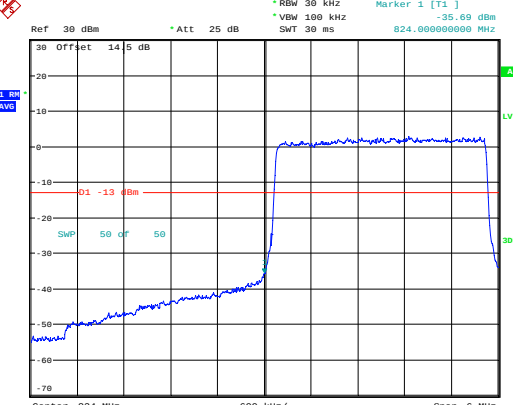
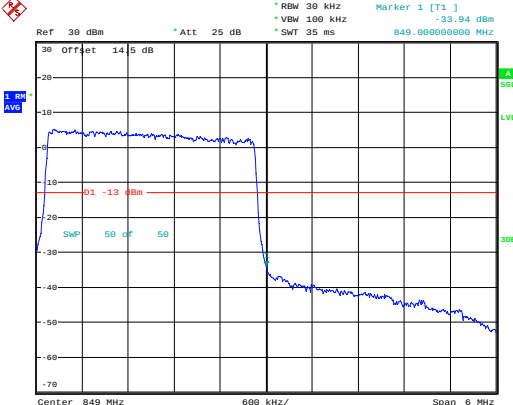
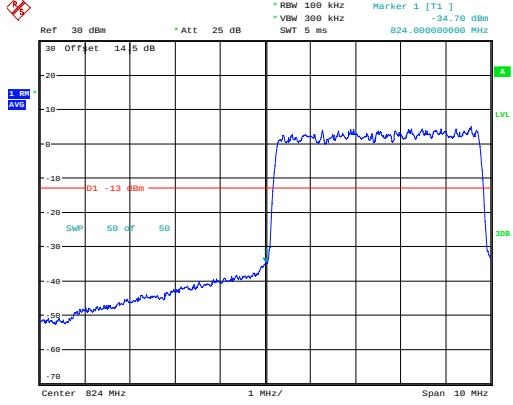
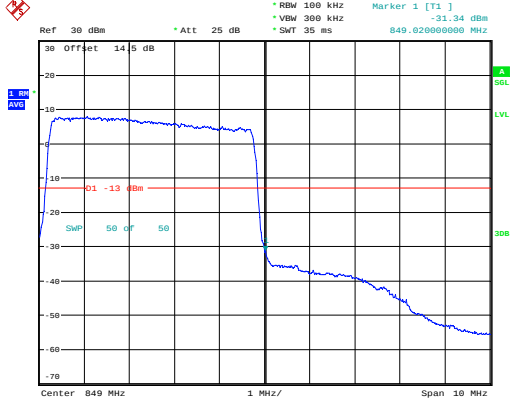
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz For 90S	 Ref 30 dBm Att 25 dB RBW 30 kHz VSW 100 kHz SWT 35 ms Marker 1 [T1] -27.91 dBm 814.000000000 MHz 30 Offset 14.5 dB SWP 50 OF 50 Center 814 MHz 300 kHz/ Span 3 MHz Date: 30 JUN 2023 10:31:02	 Ref 30 dBm Att 25 dB RBW 30 kHz VSW 100 kHz SWT 15 ms Marker 1 [T1] -31.66 dBm 824.000000000 MHz 30 Offset 14.5 dB SWP 50 OF 50 Center 824 MHz 300 kHz/ Span 3 MHz Date: 3 JUL 2023 11:41:20
QPSK 3MHz For 90S	 Ref 30 dBm Att 25 dB RBW 30 kHz VSW 100 kHz SWT 35 ms Marker 1 [T1] -31.93 dBm 814.000000000 MHz 30 Offset 14.5 dB SWP 50 OF 50 Center 814 MHz 600 kHz/ Span 6 MHz Date: 30 JUN 2023 10:32:06	 Ref 30 dBm Att 25 dB RBW 30 kHz VSW 100 kHz SWT 30 ms Marker 1 [T1] -35.67 dBm 824.000000000 MHz 30 Offset 14.5 dB SWP 50 OF 50 Center 824 MHz 600 kHz/ Span 6 MHz Date: 3 JUL 2023 11:45:50
QPSK 5MHz For 90S	 Ref 30 dBm Att 25 dB RBW 100 kHz VSW 300 kHz SWT 35 ms Marker 1 [T1] -26.95 dBm 814.000000000 MHz 30 Offset 14.5 dB SWP 50 OF 50 Center 814 MHz 1 MHz/ Span 10 MHz Date: 30 JUN 2023 10:42:32	 Ref 30 dBm Att 25 dB RBW 100 kHz VSW 300 kHz SWT 5 ms Marker 1 [T1] -33.99 dBm 824.000000000 MHz 30 Offset 14.5 dB SWP 50 OF 50 Center 824 MHz 1 MHz/ Span 10 MHz Date: 3 JUL 2023 11:50:48

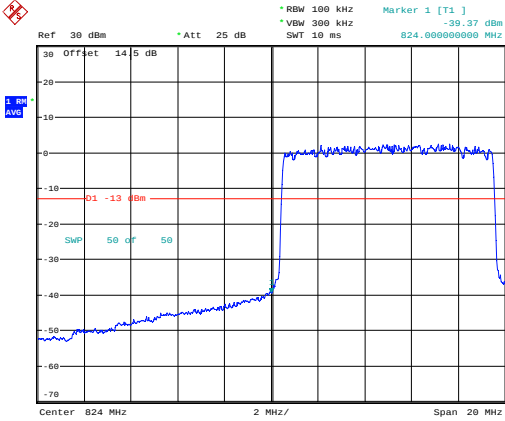
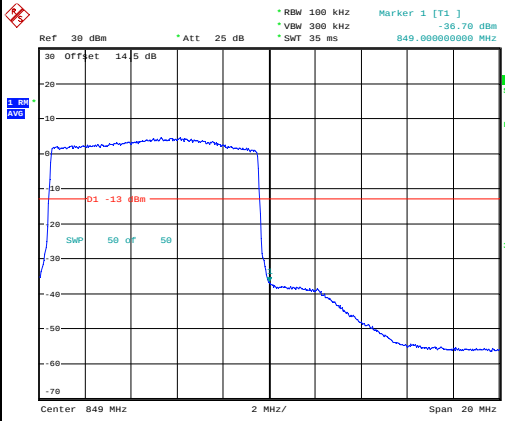
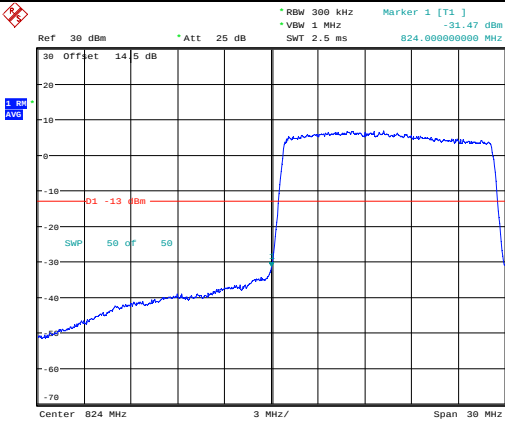
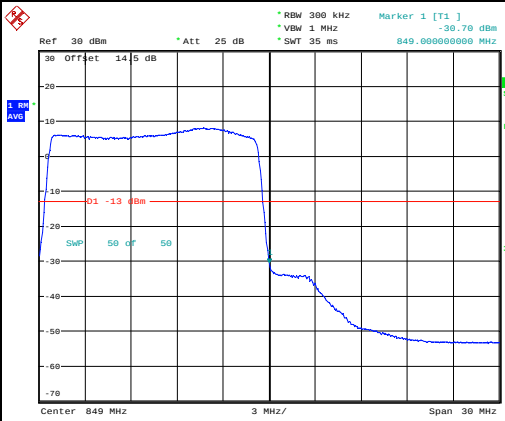
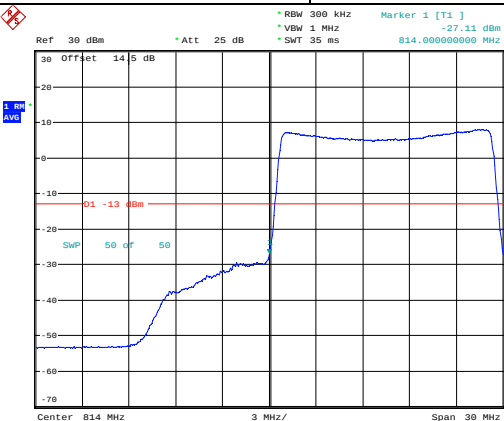
Out of band emission, Band Edge



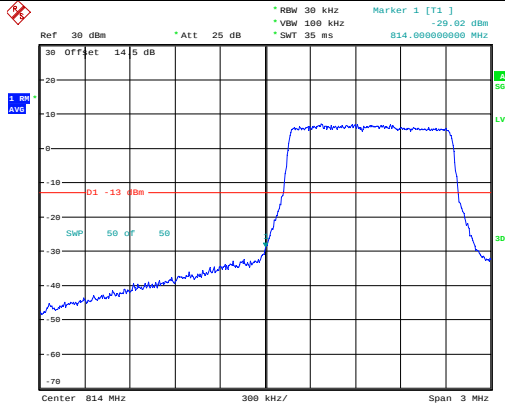
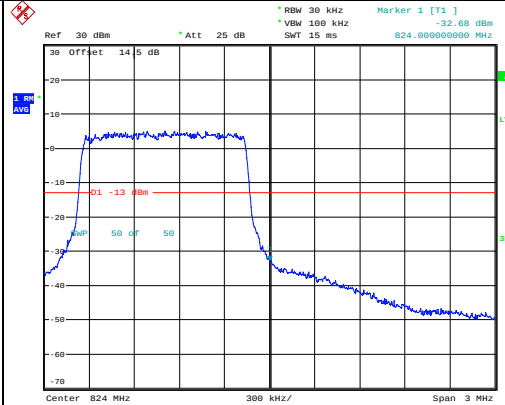
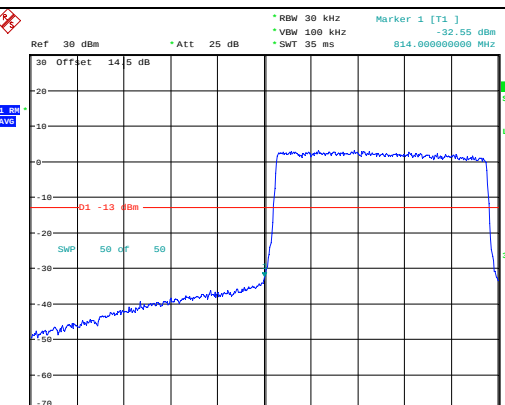
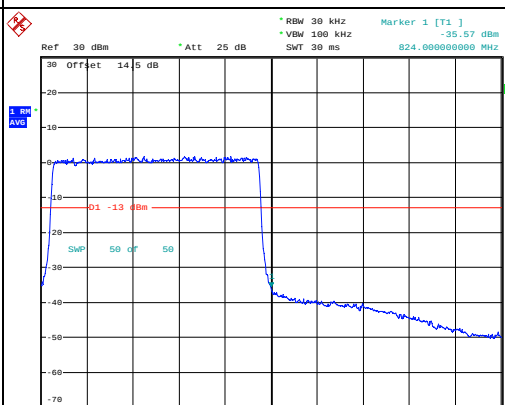
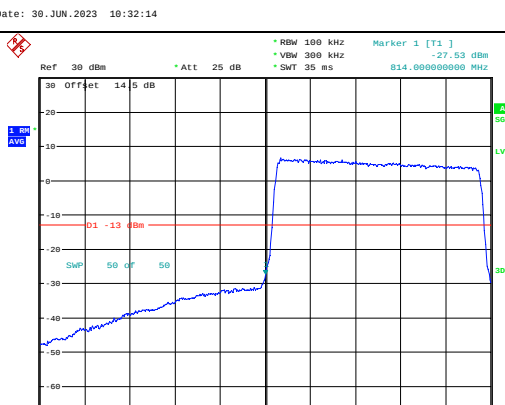
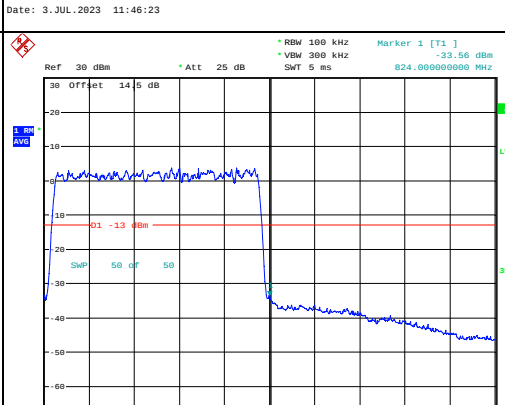
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz For 22H	 Ref 30 dBm Att 25 dB RBW 30 kHz Marker 1 [T1] -32.56 dBm VBW 100 kHz SWT 15 ms 824.000000000 MHz Center 824 MHz 300 kHz/ Span 3 MHz Date: 3.JUL.2023 11:44:01	 Ref 30 dBm Att 25 dB RBW 30 kHz Marker 1 [T1] -29.39 dBm VBW 100 kHz SWT 35 ms 849.000000000 MHz Center 849 MHz 300 kHz/ Span 3 MHz Date: 30.JUN.2023 10:31:19
QPSK 3MHz For 22H	 Ref 30 dBm Att 25 dB RBW 30 kHz Marker 1 [T1] -35.69 dBm VBW 300 kHz SWT 30 ms 824.000000000 MHz Center 824 MHz 600 kHz/ Span 6 MHz Date: 3.JUL.2023 11:47:54	 Ref 30 dBm Att 25 dB RBW 30 kHz Marker 1 [T1] -33.94 dBm VBW 300 kHz SWT 35 ms 849.000000000 MHz Center 849 MHz 600 kHz/ Span 6 MHz Date: 30.JUN.2023 10:32:23
QPSK 5MHz For 22H	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -34.70 dBm VBW 300 kHz SWT 5 ms 824.000000000 MHz Center 824 MHz 1 MHz/ Span 10 MHz Date: 3.JUL.2023 11:52:35	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -31.34 dBm VBW 300 kHz SWT 35 ms 849.000000000 MHz Center 849 MHz 1 MHz/ Span 10 MHz Date: 30.JUN.2023 10:42:49

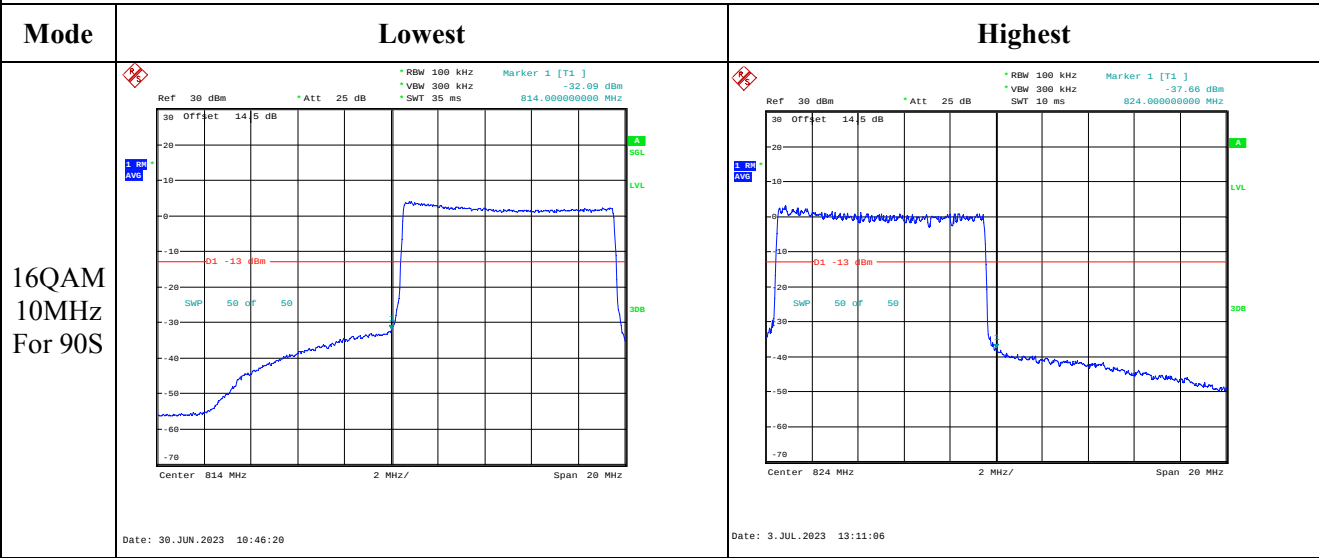
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz For 22H	 Ref 30 dBm *Att 25 dB *RBW 100 kHz *VBW 300 kHz *SWT 10 ms *Marker 1 [T1] -31.47 dBm 824.000000000 MHz 30 Offset 14 5 dB 1 SWP 50 of 50 Center 824 MHz 2 MHz/ Span 20 MHz Date: 3.JUL.2023 13:12:29	 Ref 30 dBm *Att 25 dB *RBW 100 kHz *VBW 300 kHz *SWT 35 ms *Marker 1 [T1] -30.70 dBm 849.000000000 MHz 30 Offset 14 5 dB 1 SWP 50 of 50 Center 849 MHz 2 MHz/ Span 20 MHz Date: 30.JUN.2023 10:46:31
QPSK 15MHz For 22H	 Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 2.5 ms *Marker 1 [T1] -31.47 dBm 824.000000000 MHz 30 Offset 14 5 dB 1 SWP 50 of 50 Center 824 MHz 3 MHz/ Span 30 MHz Date: 3.JUL.2023 13:21:40	 Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 35 ms *Marker 1 [T1] -30.70 dBm 849.000000000 MHz 30 Offset 14 5 dB 1 SWP 50 of 50 Center 849 MHz 3 MHz/ Span 30 MHz Date: 30.JUN.2023 10:54:35
QPSK 15MHz Across 90S and 22H	 Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 35 ms *Marker 1 [T1] -27.11 dBm 814.000000000 MHz 30 Offset 14 5 dB 1 SWP 50 of 50 Center 814 MHz 3 MHz/ Span 30 MHz Date: 30.JUN.2023 10:54:16	

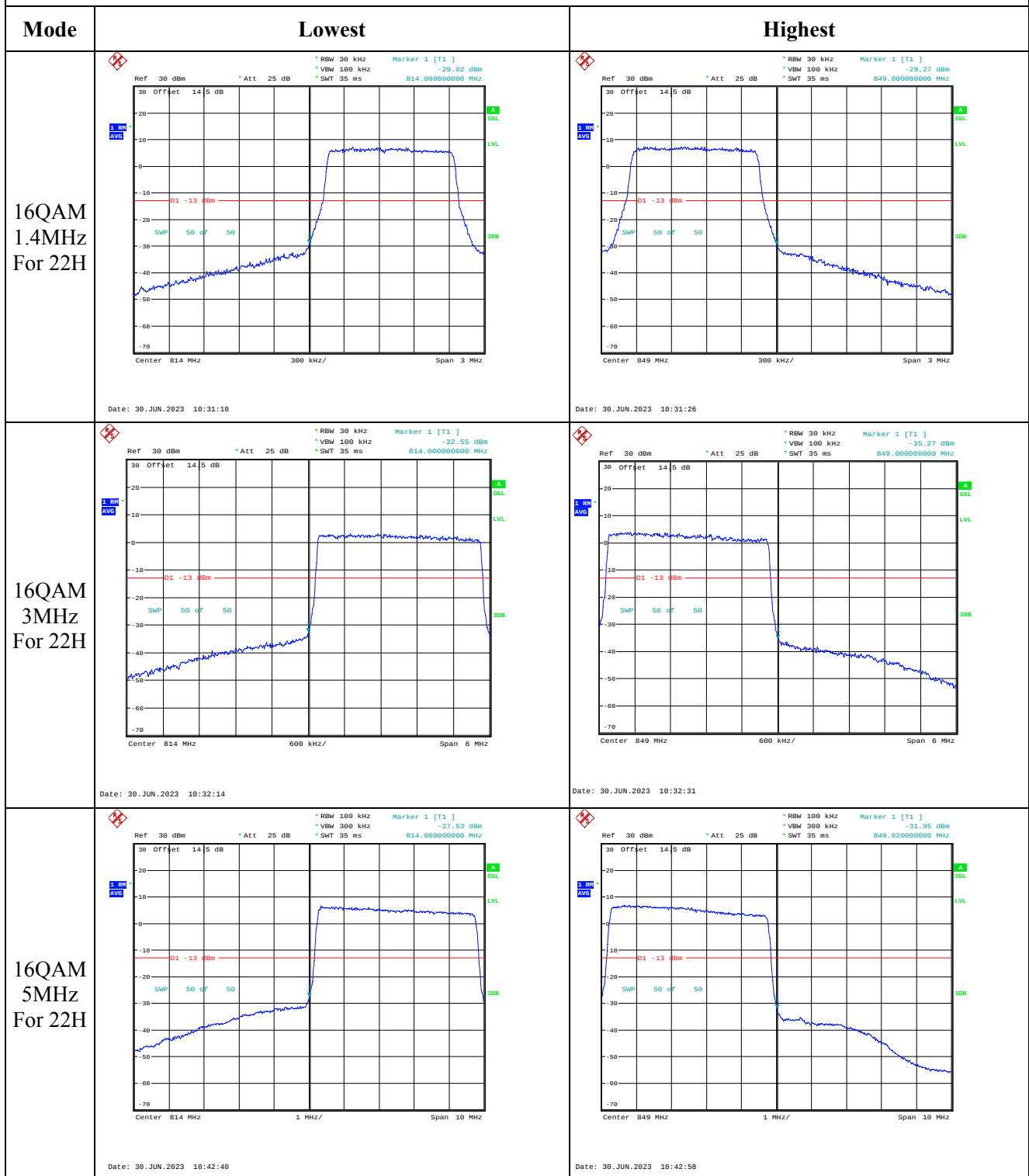
Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz For 90S	 Date: 30 JUN 2023 10:31:10	 Date: 3 JUL 2023 11:42:02
16QAM 3MHz For 90S	 Date: 30 JUN 2023 10:32:14	 Date: 3 JUL 2023 11:46:23
16QAM 5MHz For 90S	 Date: 30 JUN 2023 10:42:48	 Date: 3 JUL 2023 11:50:18

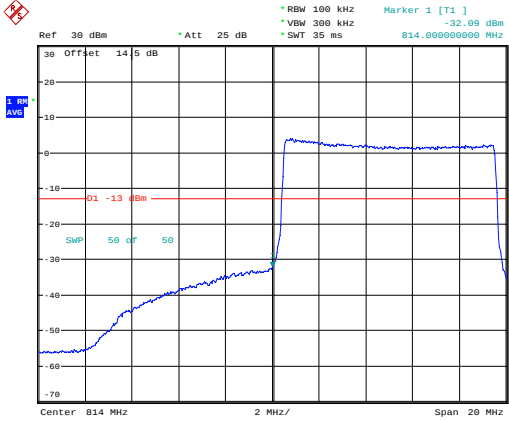
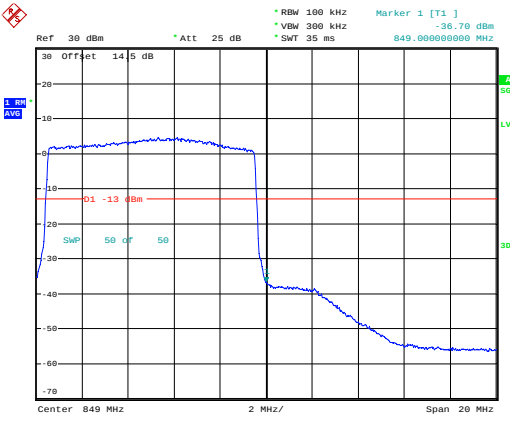
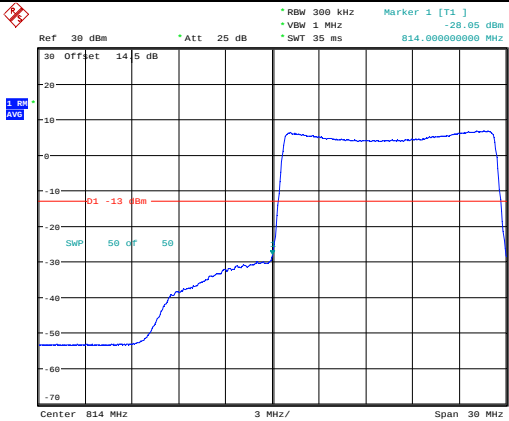
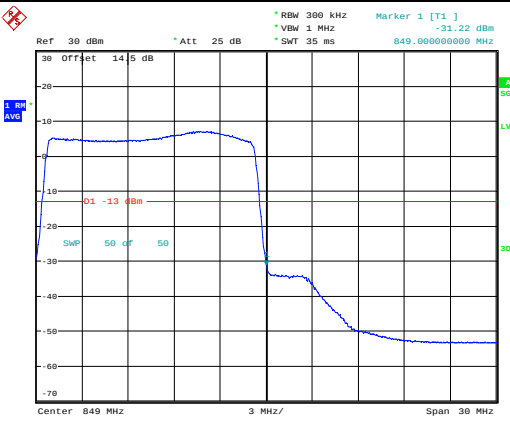
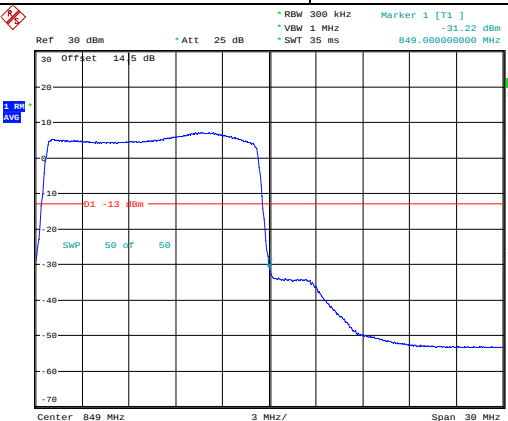
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz For 22H	 Ref 30 dBm *Att 25 dB *RBW 100 kHz *VBW 300 kHz *SWT 35 ms Marker 1 [T1] -22.69 dBm 814.000000000 MHz Center 814 MHz 2 MHz/ Span 20 MHz Date: 30.JUN.2023 10:46:20	 Ref 30 dBm *Att 25 dB *RBW 100 kHz *VBW 300 kHz *SWT 35 ms Marker 1 [T1] -36.70 dBm 849.000000000 MHz Center 849 MHz 2 MHz/ Span 20 MHz Date: 30.JUN.2023 10:46:31
16QAM 15MHz For 22H	 Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 35 ms Marker 1 [T1] -28.05 dBm 814.000000000 MHz Center 814 MHz 3 MHz/ Span 30 MHz Date: 30.JUN.2023 10:54:25	 Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 35 ms Marker 1 [T1] -31.22 dBm 849.000000000 MHz Center 849 MHz 3 MHz/ Span 30 MHz Date: 30.JUN.2023 10:54:44
16QAM 15MHz Across 90S and 22H	 Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 35 ms Marker 1 [T1] -31.22 dBm 849.000000000 MHz Center 849 MHz 3 MHz/ Span 30 MHz Date: 30.JUN.2023 10:54:44	

4.13 Antenna Port Test Data and Results for LTE Band 41

Serial Number:	27A0-1	Test Date:	2023/6/27-2023/7/3
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-26.3	Relative Humidity: (%)	41-59	ATM Pressure: (kPa)	99.8-100.7
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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	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149218	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022/9/29	2023/9/28
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	2022/7/15	2023/7/14

* 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	21.32	22.23	20.31	22.87	33
	RB1#13	21.45	22.39	20.41		
	RB1#24	21.36	22.26	20.26		
	RB15#0	21.37	22.22	20.36		
	RB15#10	21.44	22.23	20.33		
	RB25#0	21.37	22.19	20.34		
5MHz 16QAM	RB1#0	21.27	22.11	20.46	22.71	33
	RB1#13	21.41	22.23	20.56		
	RB1#24	21.32	22.09	20.4		
	RB15#0	21.24	22.08	20.31		
	RB15#10	21.27	22.08	20.31		
	RB25#0	21.34	22.1	20.29		
10MHz QPSK	RB1#0	21.38	22.66	21.08	23.45	33
	RB1#25	21.7	22.97	21.36		
	RB1#49	21.45	22.66	21.03		
	RB25#0	21.41	22.64	21.12		
	RB25#25	21.51	22.68	21.04		
	RB50#0	21.39	22.59	21.05		
10MHz 16QAM	RB1#0	21.5	22.48	21.11	23.24	33
	RB1#25	21.82	22.76	21.34		
	RB1#49	21.59	22.48	21.05		
	RB25#0	21.33	22.52	21.1		
	RB25#25	21.43	22.57	21.03		
	RB50#0	21.34	22.48	21.03		
15MHz QPSK	RB1#0	21.27	22.54	21.03	23.3	33
	RB1#38	21.45	22.69	21.06		
	RB1#74	21.35	22.52	20.86		
	RB36#0	21.48	22.71	21.12		
	RB36#39	21.59	22.82	21.01		
	RB75#0	21.55	22.77	21.09		
15MHz 16QAM	RB1#0	21.37	22.36	21.13	23.1	33
	RB1#38	21.55	22.48	21.19		
	RB1#74	21.48	22.31	20.99		
	RB36#0	21.38	22.52	21.12		
	RB36#39	21.45	22.62	21		
	RB75#0	21.44	22.6	21.03		
20MHz QPSK	RB1#0	21.21	21.8	20.42	22.84	33
	RB1#50	21.79	22.36	20.87		
	RB1#99	21.35	21.81	20.26		

20MHz 16QAM	RB50#0	21.29	21.86	20.65	22.67	33
	RB50#50	21.44	21.99	20.51		
	RB100#0	21.36	21.89	20.59		
	RB1#0	21.33	21.72	20.38		
	RB1#50	21.91	22.19	20.83		
	RB1#99	21.49	21.66	20.24		
	RB50#0	21.25	21.73	20.66		
	RB50#50	21.42	21.84	20.55		
	RB100#0	21.33	21.78	20.6		

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	8.75	9.1	8.93	13
	RB100#0	8.2	9.36	9.19	13
20MHz 16QAM	RB1#0	9.59	10	9.77	13
	RB100#0	9.83	10.14	10.03	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	4.94	4.90	4.90
5MHz 16QAM	4.52	4.52	4.52	4.90	5.00	4.86
10MHz QPSK	8.96	8.96	8.96	9.56	9.52	9.64
10MHz 16QAM	8.96	8.96	8.96	9.56	9.56	9.52
15MHz QPSK	13.5	13.560	13.5	14.8	14.700	14.5
15MHz 16QAM	13.560	13.560	13.5	14.700	14.760	14.7
20MHz QPSK	17.92	18	18	19.28	19	19
20MHz 16QAM	17.92	18	17.92	19.20	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.
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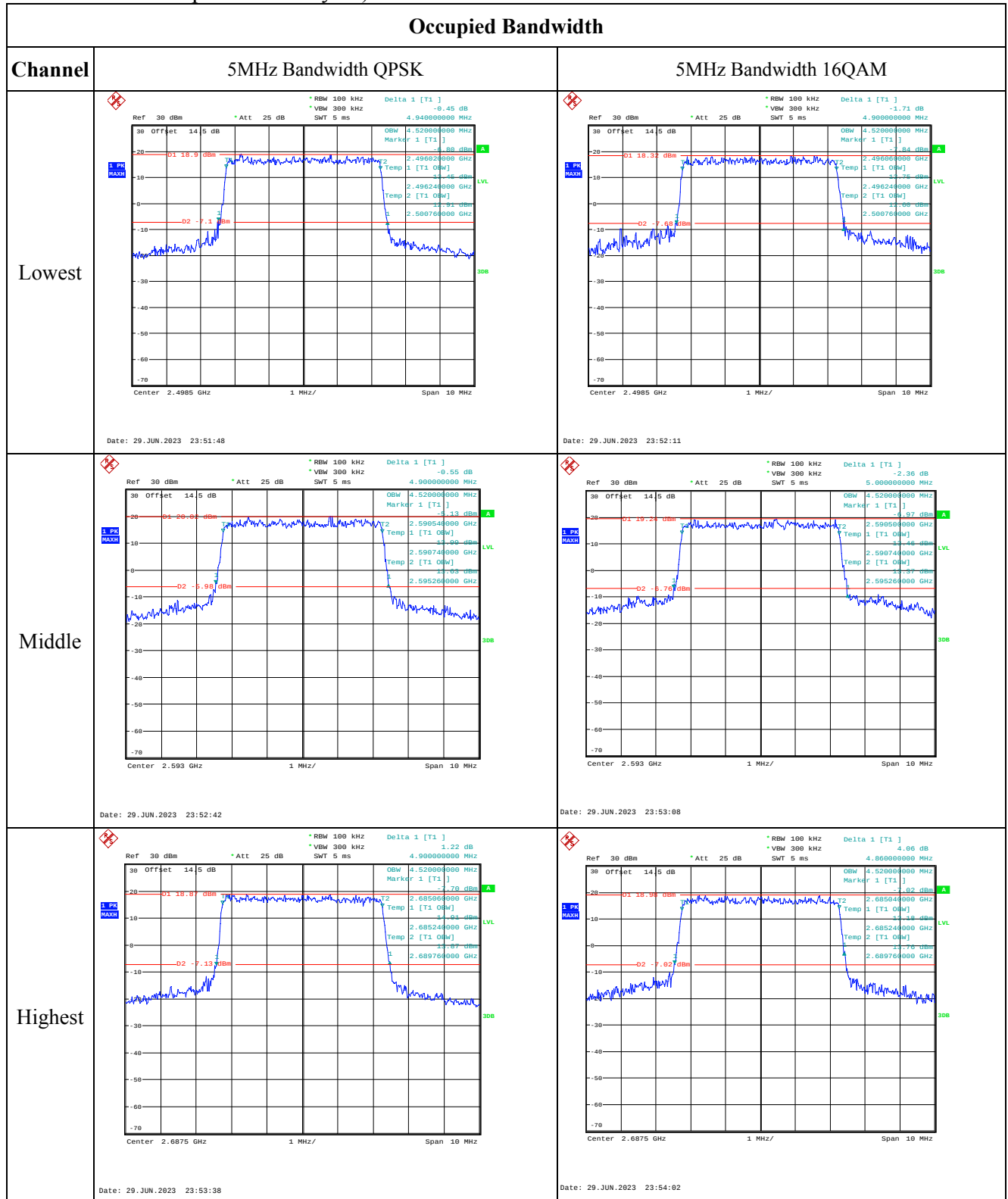
FCC §2.1051, § 27.53:Out of band emission, Band Edge

Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.
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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	3.85	2497.097	2496.00	2689.008	2690
	-20	3.85	2497.086	2496.00	2689.038	2690
	-10	3.85	2497.083	2496.00	2689.016	2690
	0	3.85	2497.006	2496.00	2689.096	2690
	10	3.85	2497.060	2496.00	2689.071	2690
	20	3.85	2497.040	2496.00	2689.040	2690
	30	3.85	2497.061	2496.00	2689.049	2690
	40	3.85	2497.059	2496.00	2689.064	2690
	50	3.85	2497.079	2496.00	2689.008	2690
Frequency Stability vs. Voltage	20	3.6	2497.064	2496.00	2689.016	2690
	20	4.35	2497.041	2496.00	2689.072	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	3.85	2497.017	2496.00	2688.953	2690
	-20	3.85	2497.000	2496.00	2688.942	2690
	-10	3.85	2497.014	2496.00	2688.974	2690
	0	3.85	2497.029	2496.00	2688.914	2690
	10	3.85	2497.077	2496.00	2688.902	2690
	20	3.85	2497.040	2496.00	2688.960	2690
	30	3.85	2497.023	2496.00	2688.979	2690
	40	3.85	2497.056	2496.00	2688.970	2690
	50	3.85	2497.099	2496.00	2688.908	2690
Frequency Stability vs. Voltage	20	3.6	2497.068	2496.00	2688.990	2690
	20	4.35	2497.025	2496.00	2688.993	2690
					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):



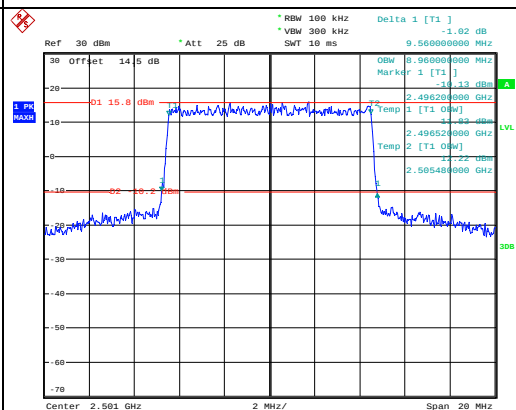
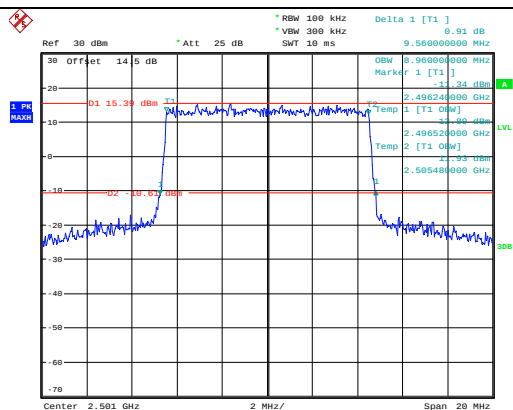
Occupied Bandwidth

Channel

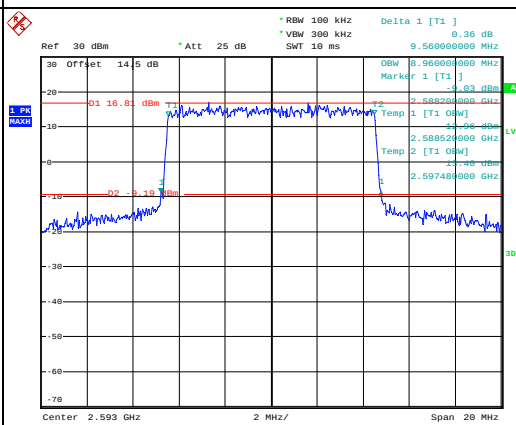
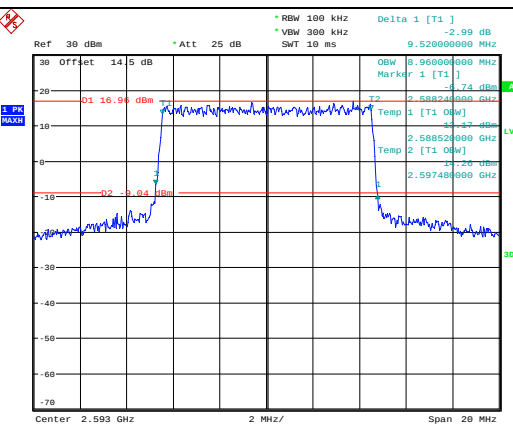
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

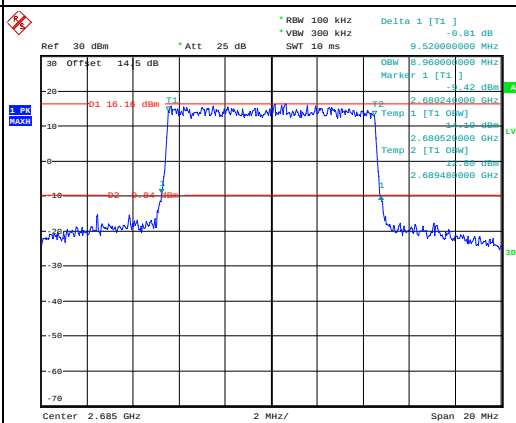
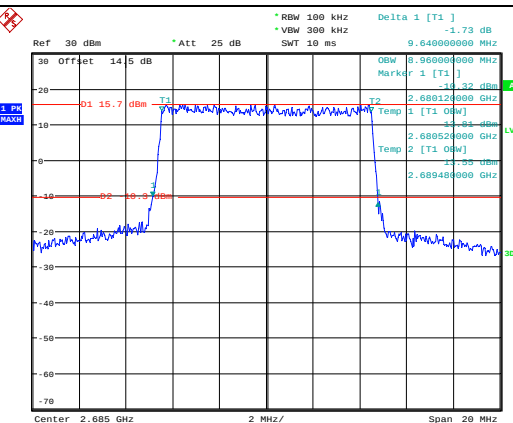
Lowest



Middle



Highest



Occupied Bandwidth

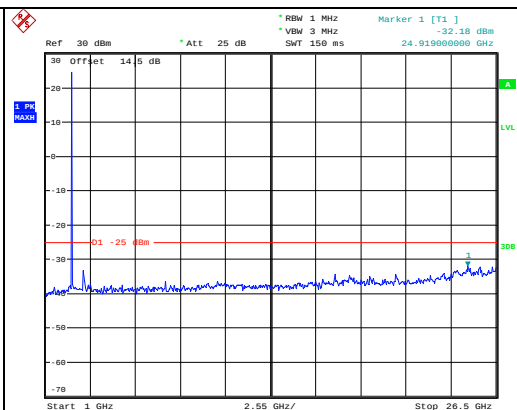
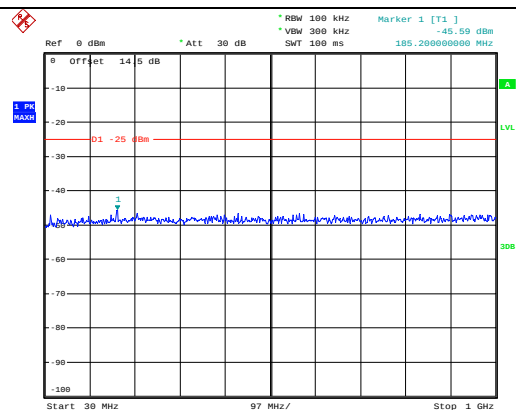
Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 2.70 dB VBW 1 MHz SWT 2.5 ms OBW 13.50000000 MHz Marker 1 [T1] 2.5835 GHz LVL 2.496120000 GHz 1 [T1 0dB] 2.496780000 GHz Temp 2 [T1 0dB] 2.510280000 GHz 1 -10 dBm 2 -20 dBm 3 -130 dBm Center 2.5835 GHz 3 MHz/ Span 30 MHz Date: 29.JUN.2023 23:57:56	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.80 dB VBW 1 MHz SWT 2.5 ms OBW 13.50000000 MHz Marker 1 [T1] 2.5835 GHz LVL 2.496240000 GHz 1 [T1 0dB] 2.496720000 GHz Temp 2 [T1 0dB] 2.510280000 GHz 1 -10 dBm 2 -20 dBm 3 -130 dBm Center 2.5835 GHz 3 MHz/ Span 30 MHz Date: 29.JUN.2023 23:58:30
Middle	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 2.16 dB VBW 1 MHz SWT 2.5 ms OBW 13.50000000 MHz Marker 1 [T1] 2.593 GHz LVL 2.585680000 GHz 1 [T1 0dB] 2.586280000 GHz Temp 2 [T1 0dB] 2.599840000 GHz 1 -10 dBm 2 -20 dBm 3 -130 dBm Center 2.593 GHz 3 MHz/ Span 30 MHz Date: 29.JUN.2023 23:58:57	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.45 dB VBW 1 MHz SWT 2.5 ms OBW 13.50000000 MHz Marker 1 [T1] 2.593 GHz LVL 2.585680000 GHz 1 [T1 0dB] 2.586220000 GHz Temp 2 [T1 0dB] 2.599780000 GHz 1 -10 dBm 2 -20 dBm 3 -130 dBm Center 2.593 GHz 3 MHz/ Span 30 MHz Date: 29.JUN.2023 23:59:27
Highest	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 1.18 dB VBW 1 MHz SWT 2.5 ms OBW 13.50000000 MHz Marker 1 [T1] 2.6825 GHz LVL 2.675380000 GHz 1 [T1 0dB] 2.675780000 GHz Temp 2 [T1 0dB] 2.689280000 GHz 1 -10 dBm 2 -20 dBm 3 -130 dBm Center 2.6825 GHz 3 MHz/ Span 30 MHz Date: 29.JUN.2023 23:59:45	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 1.44 dB VBW 1 MHz SWT 2.5 ms OBW 13.50000000 MHz Marker 1 [T1] 2.6825 GHz LVL 2.675120000 GHz 1 [T1 0dB] 2.675780000 GHz Temp 2 [T1 0dB] 2.689280000 GHz 1 -10 dBm 2 -20 dBm 3 -130 dBm Center 2.6825 GHz 3 MHz/ Span 30 MHz Date: 30.JUN.2023 00:00:15

Spurious Emissions at Antenna Terminal

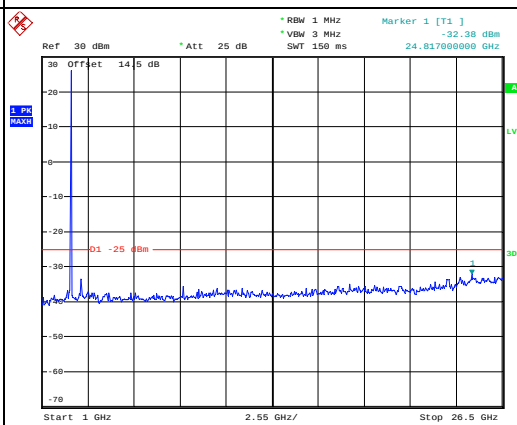
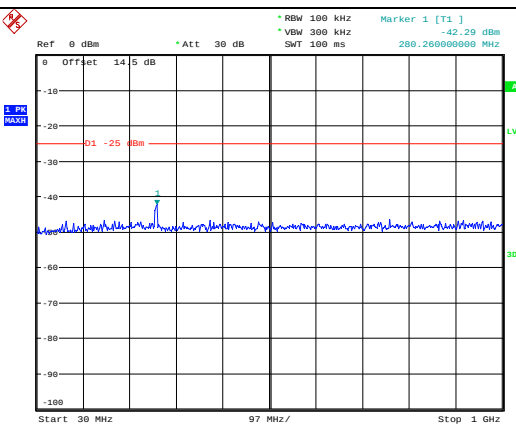
Channel

5MHz Bandwidth QPSK

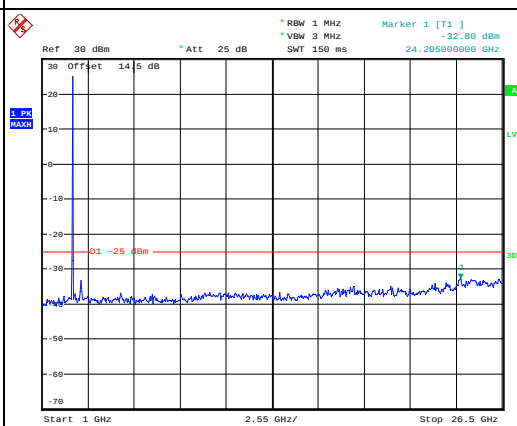
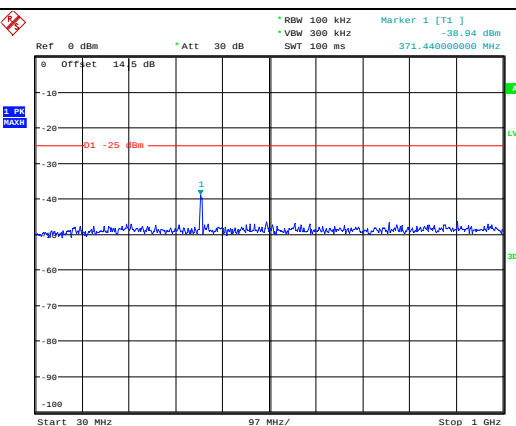
Lowest



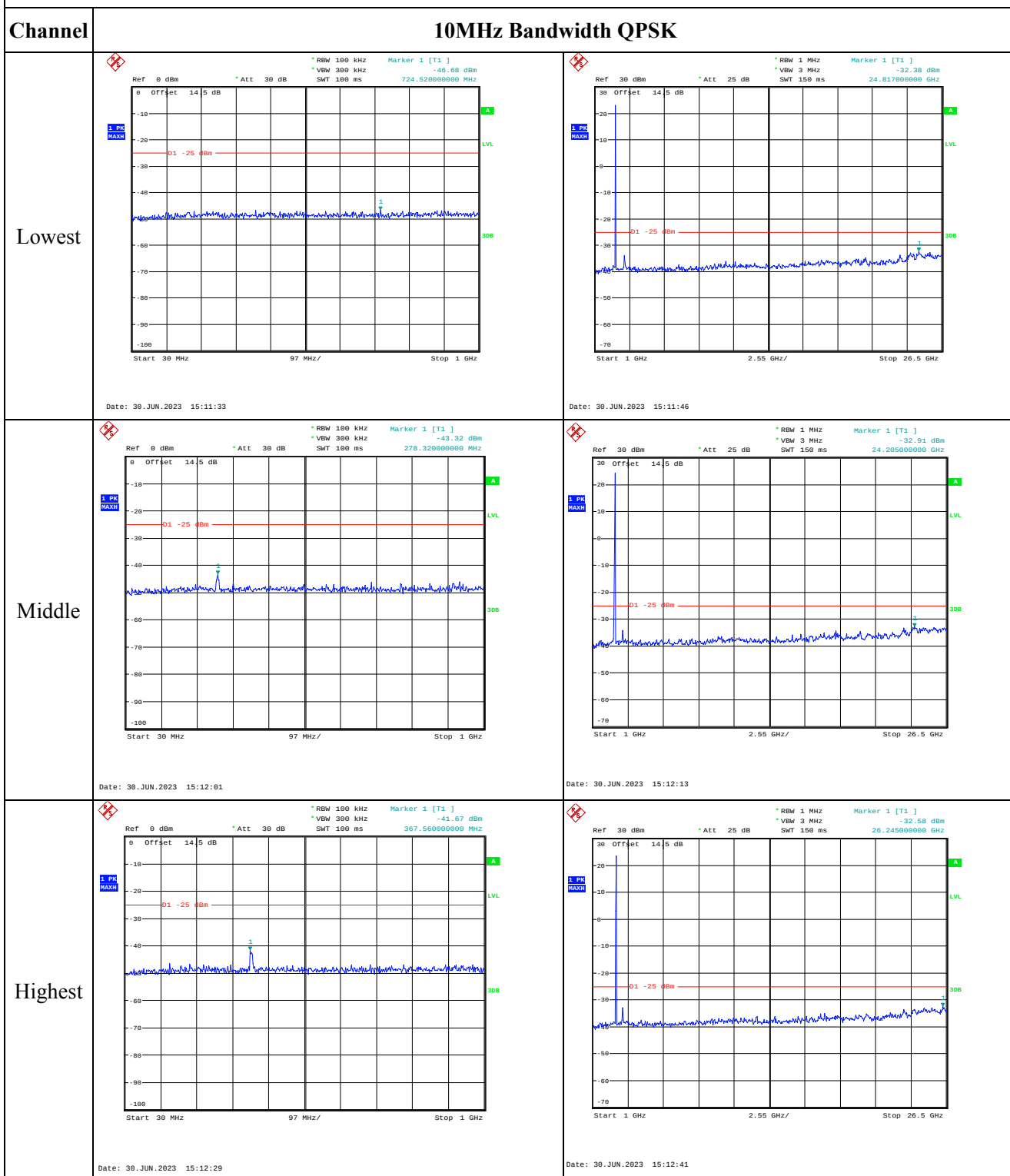
Middle



Highest



Spurious Emissions at Antenna Terminal

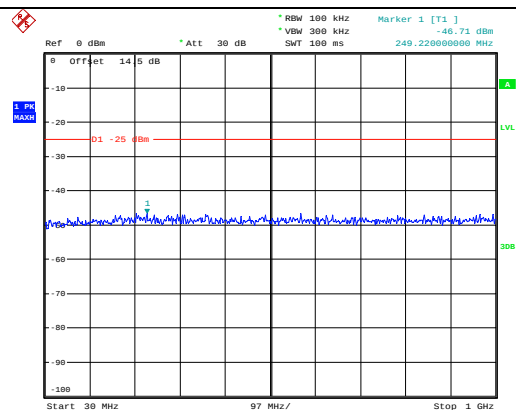


Spurious Emissions at Antenna Terminal

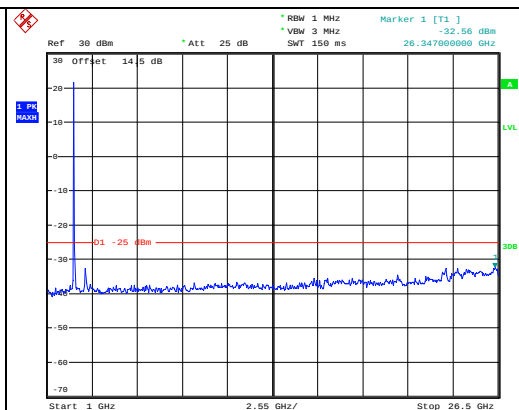
Channel

15MHz Bandwidth QPSK

Lowest

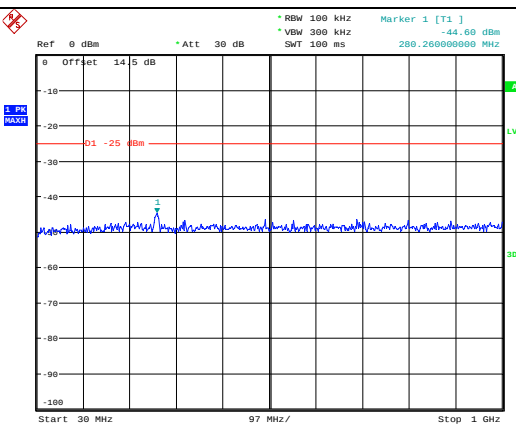


Date: 30.JUN.2023 15:13:50

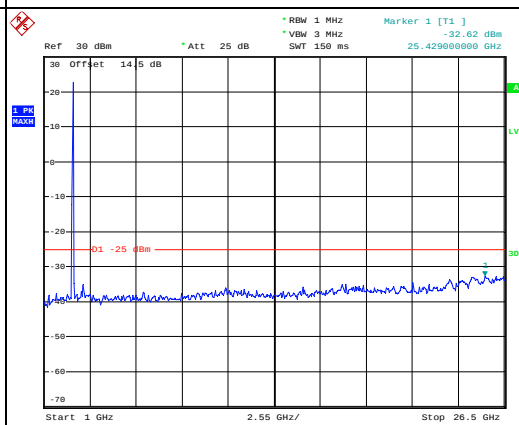


Date: 30.JUN.2023 15:14:03

Middle

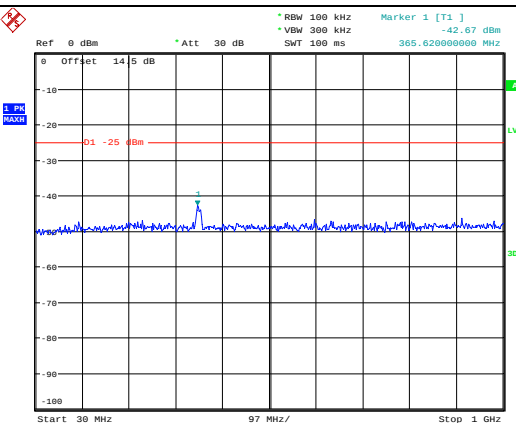


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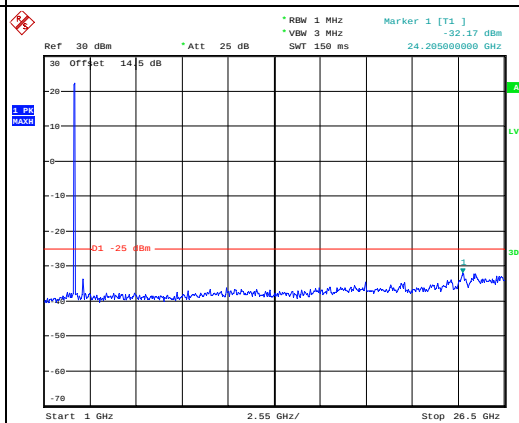


Date: 30.JUN.2023 15:14:31

Highest



Date: 30.JUN.2023 15:14:46



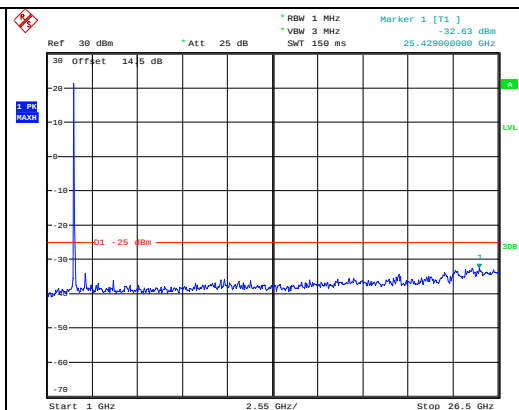
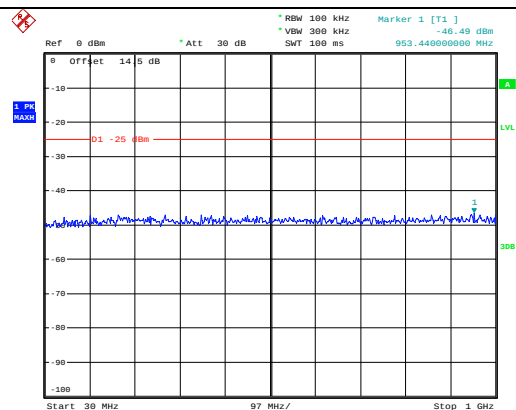
Date: 30.JUN.2023 15:14:59

Spurious Emissions at Antenna Terminal

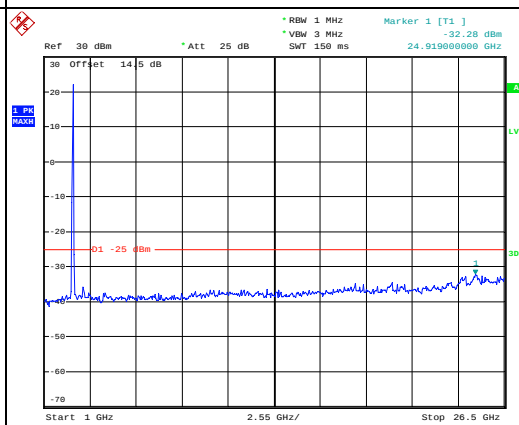
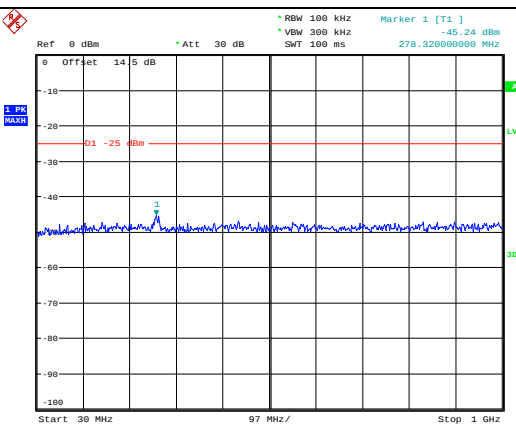
Channel

20MHz Bandwidth QPSK

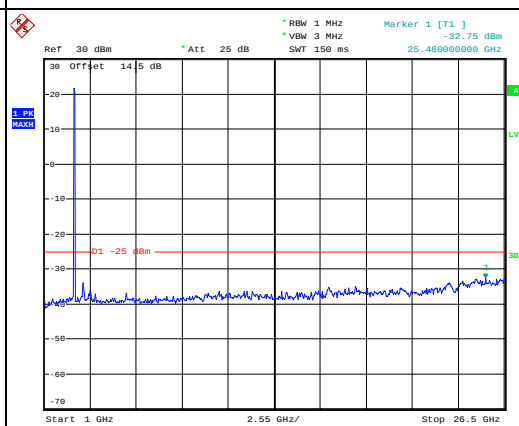
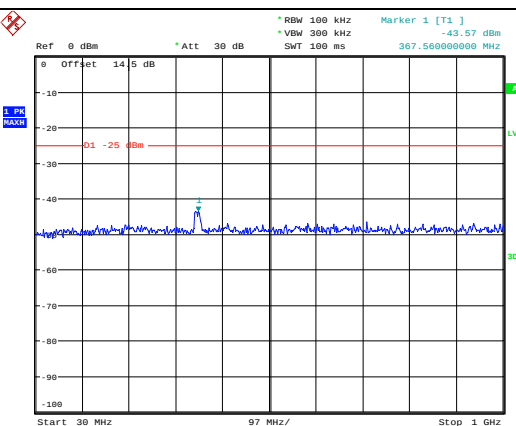
Lowest



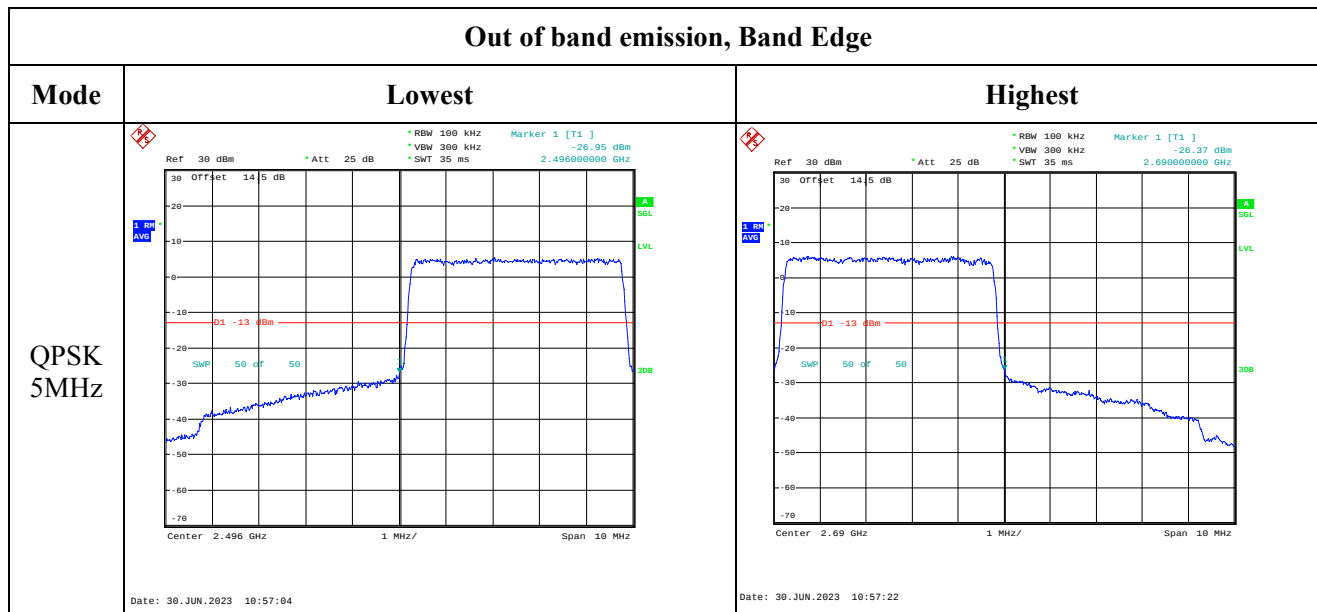
Middle



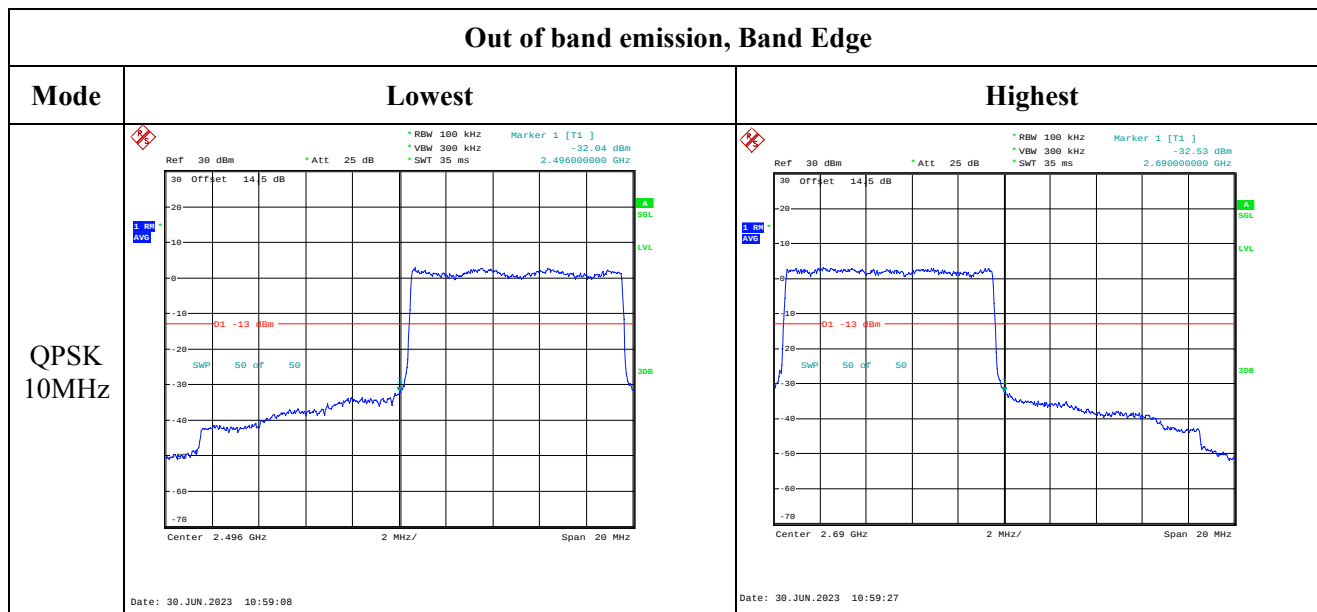
Highest



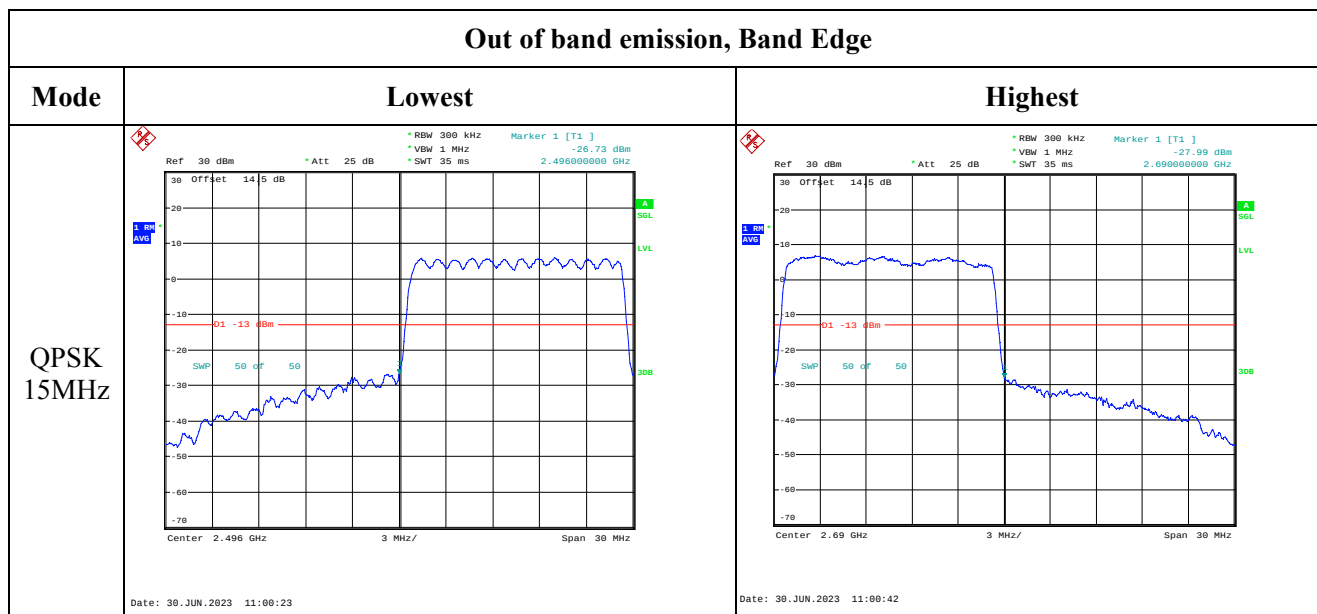
Out of band emission, Band Edge



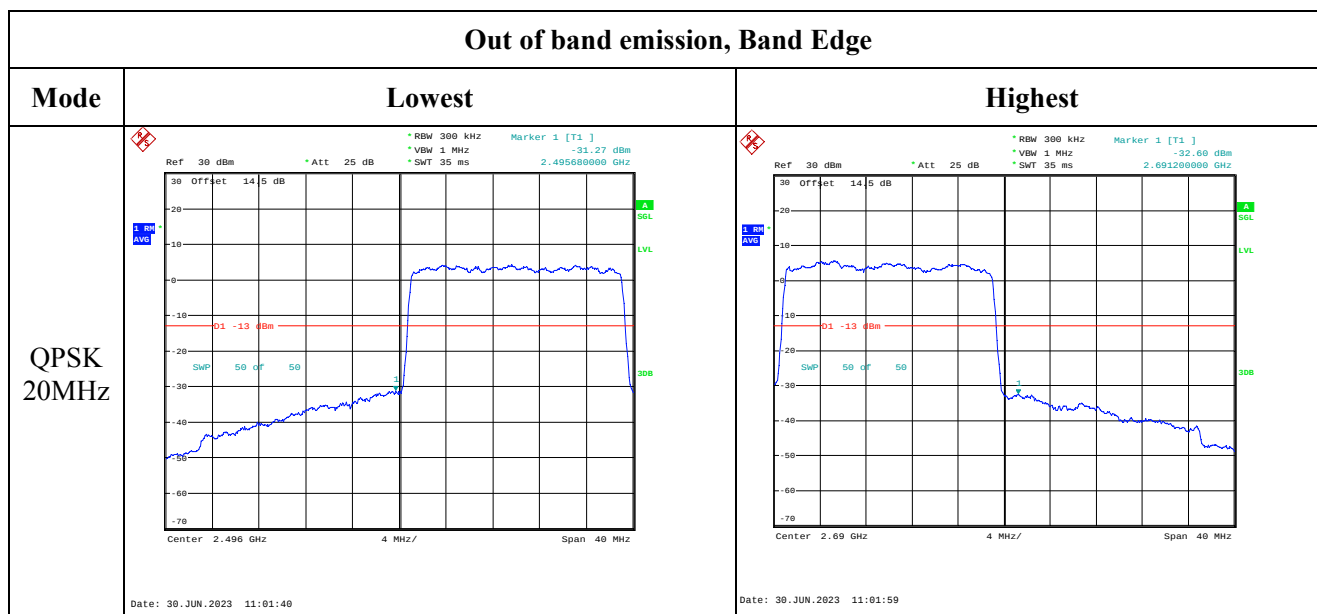
Out of band emission, Band Edge



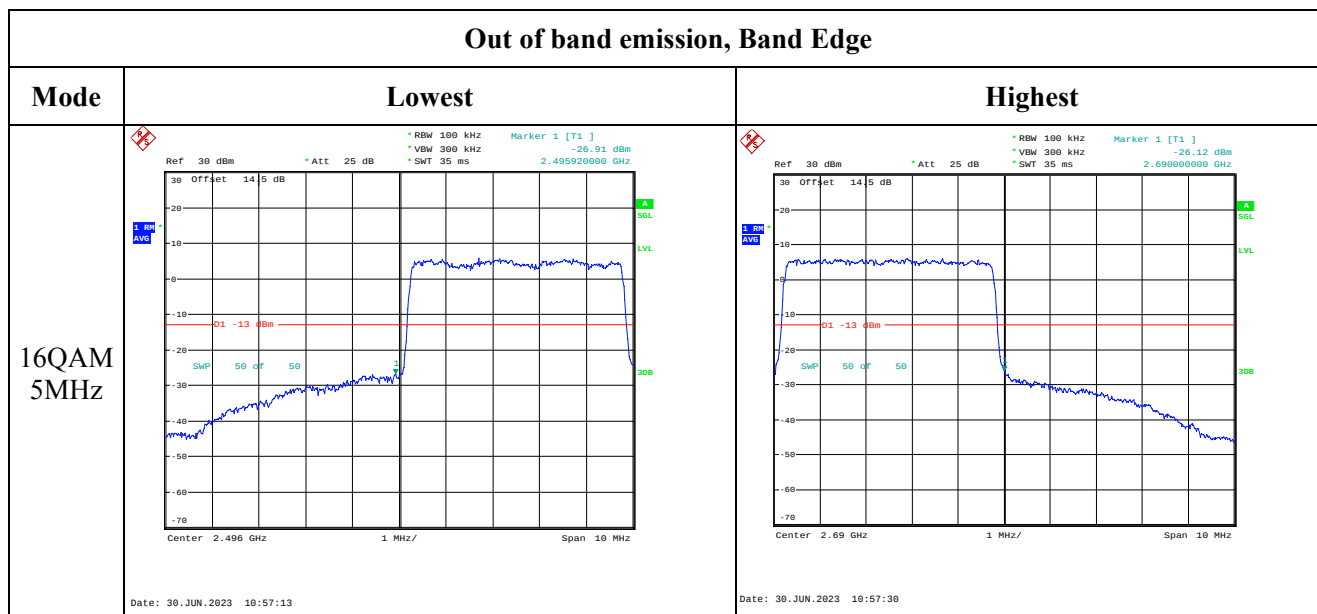
Out of band emission, Band Edge



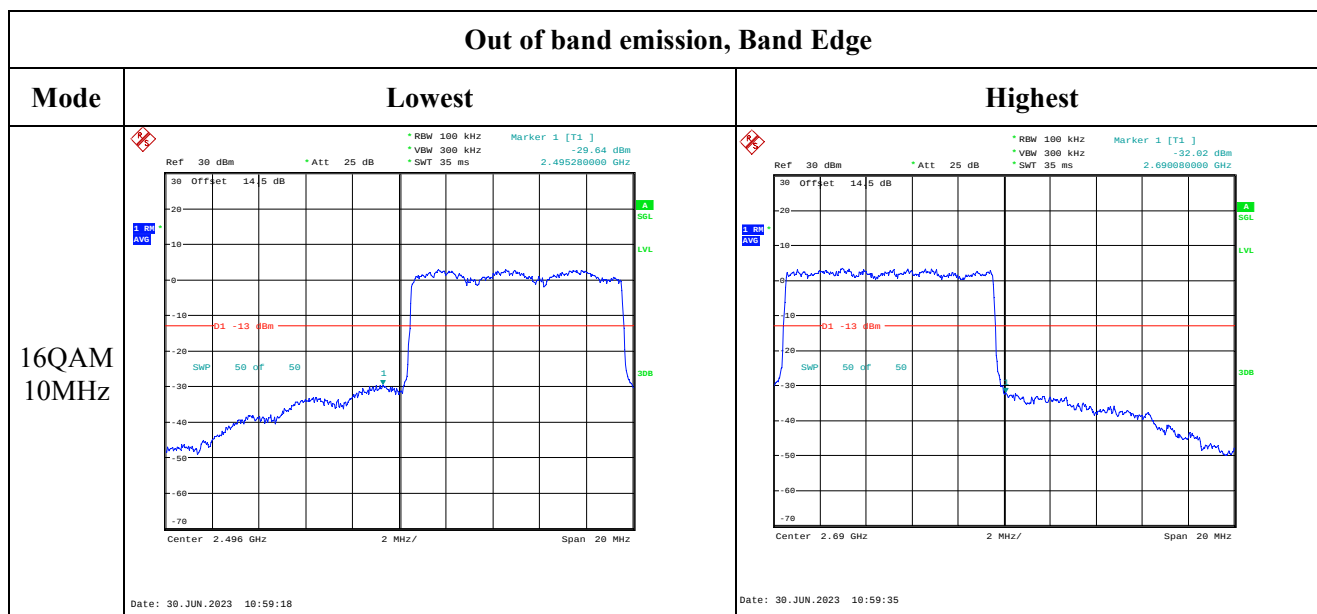
Out of band emission, Band Edge



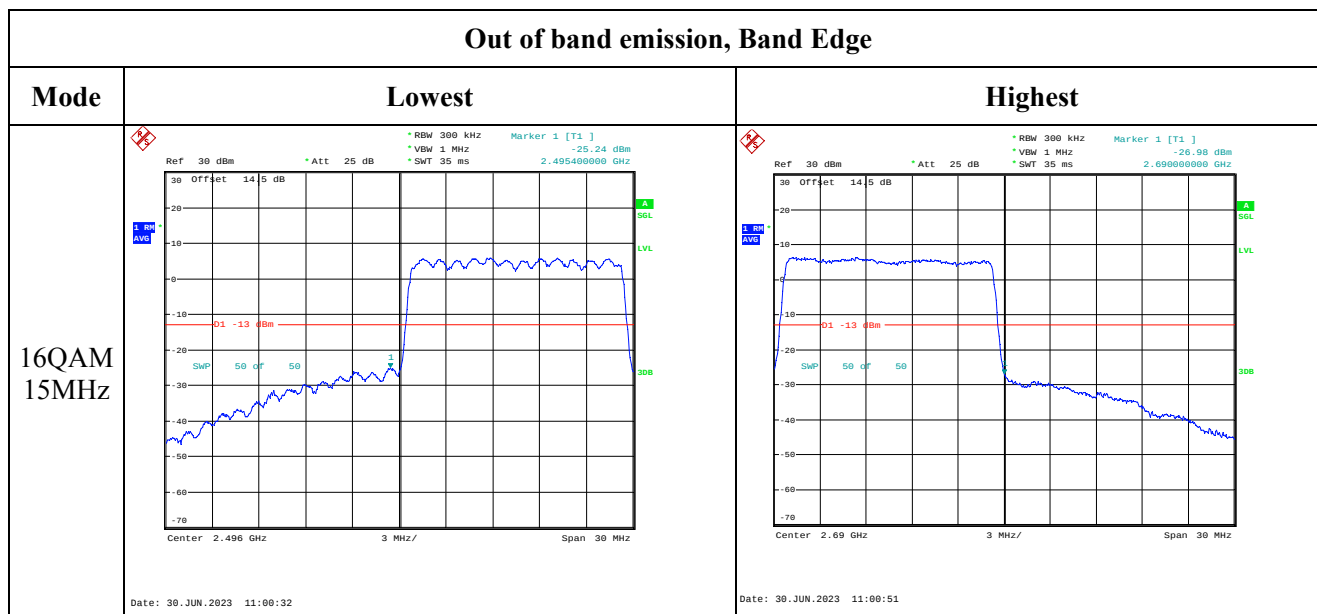
Out of band emission, Band Edge



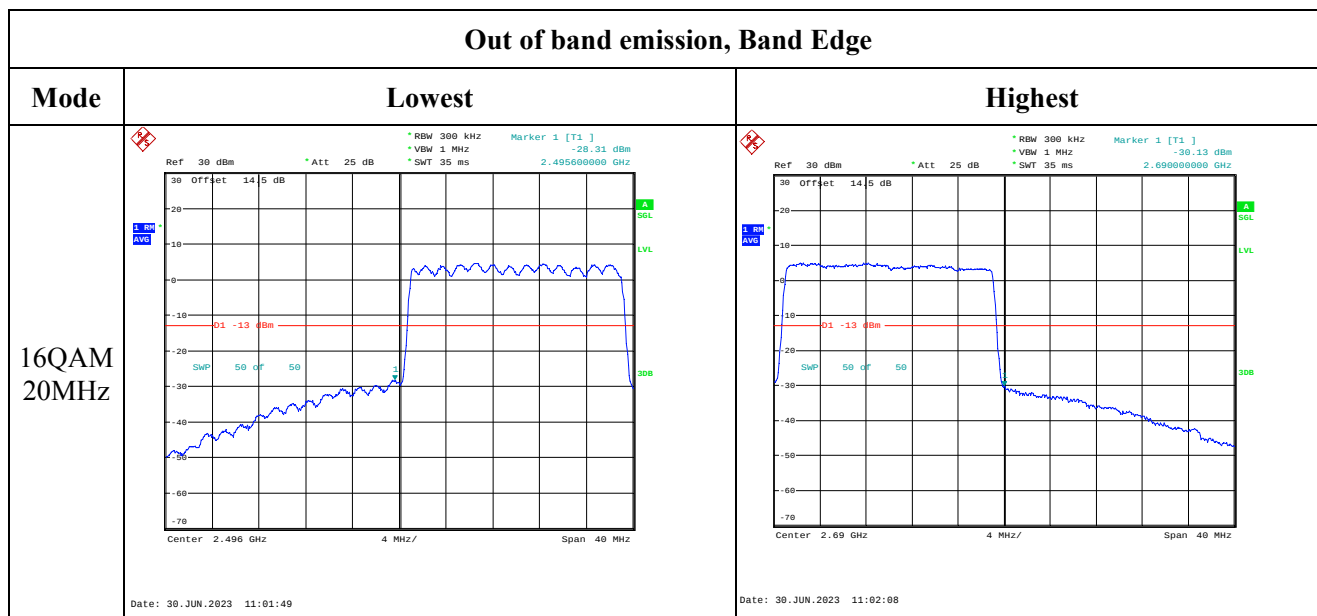
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.14 Antenna Port Test Data and Results for LTE Band 66

Serial Number:	27A0-1	Test Date:	2023/6/27-2023/7/3
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-26.3	Relative Humidity: (%)	41-59	ATM Pressure: (kPa)	99.8-100.7
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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	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149218	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022/9/29	2023/9/28
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	2022/7/15	2023/7/14

* 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	23.88	23.46	22.69	24.44	30
	RB1#3	24.05	23.48	22.79		
	RB1#5	23.88	23.26	22.67		
	RB3#0	24.06	23.35	22.58		
	RB3#3	23.68	23.35	22.56		
	RB6#0	22.5	22.36	21.78		
1.4MHz 16QAM	RB1#0	22.57	22.23	21.64	23.22	30
	RB1#3	22.84	22.42	21.8		
	RB1#5	22.52	22.24	21.62		
	RB3#0	22.61	22.48	21.42		
	RB3#3	22.72	22.49	21.44		
	RB6#0	21.47	21.41	20.7		
3MHz QPSK	RB1#0	23.98	23.89	23.43	24.36	30
	RB1#8	23.96	23.73	23.46		
	RB1#14	23.92	23.44	23.43		
	RB6#0	22.94	22.45	22.39		
	RB6#9	22.9	22.41	22.37		
	RB15#0	22.99	22.65	22.3		
3MHz 16QAM	RB1#0	23.01	22.94	22.39	23.39	30
	RB1#8	22.98	22.91	22.41		
	RB1#14	22.78	22.86	22.37		
	RB6#0	21.87	21.52	21.31		
	RB6#9	21.89	21.54	21.48		
	RB15#0	21.89	21.5	21.48		
5MHz QPSK	RB1#0	23.9	23.53	23.63	24.35	30
	RB1#13	23.97	23.65	23.43		
	RB1#24	23.91	23.5	23.31		
	RB15#0	22.98	22.54	22.32		
	RB15#10	23.01	22.36	22.49		
	RB25#0	23.01	22.36	22.72		
5MHz 16QAM	RB1#0	22.78	22.36	22.61	23.23	30
	RB1#13	22.85	22.49	22.77		
	RB1#24	22.77	22.32	22.63		
	RB15#0	22.07	21.38	21.71		
	RB15#10	22.06	21.42	21.73		
	RB25#0	22.07	21.58	21.72		
10MHz QPSK	RB1#0	23.93	23.4	23.67	24.4	30
	RB1#25	24.02	23.37	23.85		
	RB1#49	23.79	22.99	23.43		

	RB25#0	22.98	22.09	22.31		
	RB25#25	22.73	22.08	22.35		
	RB50#0	22.69	22.2	22.28		
10MHz 16QAM	RB1#0	23.19	22.23	22.31	23.65	30
	RB1#25	23.27	22.33	22.42		
	RB1#49	22.93	22.24	22.38		
	RB25#0	21.97	21.32	21.68		
	RB25#25	21.87	21.44	21.69		
	RB50#0	22.06	21.49	21.66		
15MHz QPSK	RB1#0	23.88	23.5	23.54	24.26	30
	RB1#38	23.87	23.63	23.54		
	RB1#74	23.72	23.44	23.29		
	RB36#0	23.07	22.45	22.47		
	RB36#39	22.86	22.6	22.58		
	RB75#0	22.98	22.64	22.45		
15MHz 16QAM	RB1#0	23.3	22.83	22.5	23.68	30
	RB1#38	23.29	22.84	22.51		
	RB1#74	23.16	22.84	22.21		
	RB36#0	22	21.59	21.54		
	RB36#39	21.9	21.68	21.67		
	RB75#0	21.97	21.72	21.69		
20MHz QPSK	RB1#0	23.74	23.56	22.57	24.39	30
	RB1#50	24.01	23.76	22.57		
	RB1#99	23.48	23.12	22.23		
	RB50#0	22.95	22.27	21.39		
	RB50#50	22.74	22.34	21.32		
	RB100#0	22.74	22.3	21.39		
20MHz 16QAM	RB1#0	22.68	22.26	21.77	23.48	30
	RB1#50	23.1	22.68	22.09		
	RB1#99	22.6	22.21	21.7		
	RB50#0	21.85	21.53	20.8		
	RB50#50	21.85	21.55	20.78		
	RB100#0	21.93	21.53	20.87		

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	11.35	11.03	11.41	13
	RB100#0	6.54	6.47	6.51	13
20MHz 16QAM	RB1#0	10.77	10.51	10.96	13
	RB100#0	7.24	7.24	7.15	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	1.104	1.092	1.104	1.296	1.308	1.332
1.4MHz 16QAM	1.104	1.104	1.104	1.278	1.326	1.302
3MHz QPSK	2.687	2.687	2.7	2.892	2.880	2.9
3MHz 16QAM	2.687	2.687	2.687	2.880	2.880	2.880
5MHz QPSK	4.52	4.560	4.52	5.14	5.180	5.16
5MHz 16QAM	4.54	4.52	4.560	5.18	5.14	5.160
10MHz QPSK	8.96	8.96	9	9.92	9.96	10
10MHz 16QAM	8.96	8.96	8.96	9.76	9.80	9.80
15MHz QPSK	13.560	13.560	13.560	15.300	15.240	15.480
15MHz 16QAM	13.560	13.560	13.62	15.060	15.120	15.24
20MHz QPSK	18	18.08	18	20	19.52	20
20MHz 16QAM	18	17.92	18	20	19.52	20

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.
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FCC §2.1051, § 27.53:Out of band emission, Band Edge

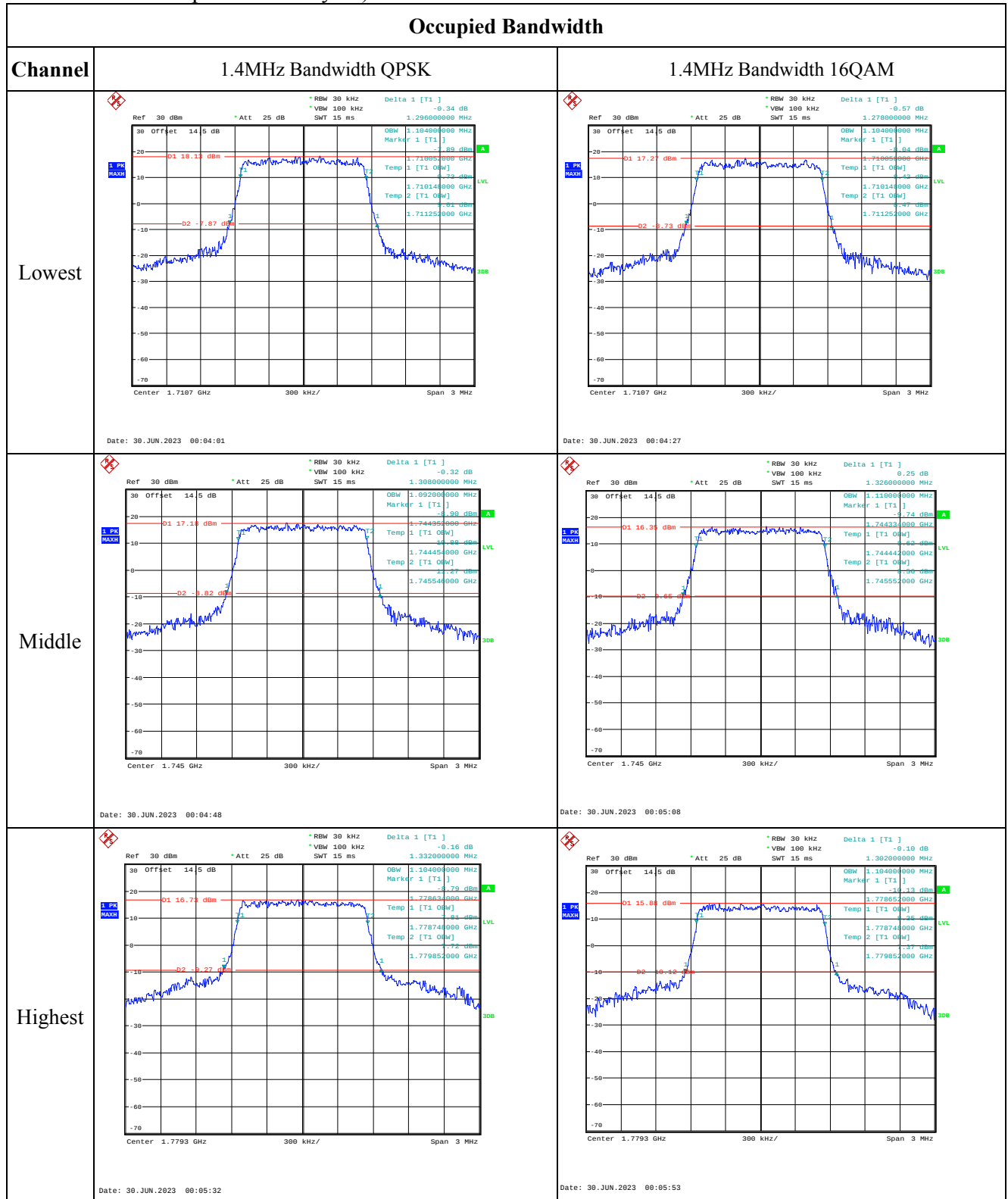
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.
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FCC §2.1055, §27.54: Frequency Stability

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	3.85	1711.069	1710.00	1779.084	1780
	-20	3.85	1711.059	1710.00	1779.087	1780
	-10	3.85	1711.044	1710.00	1779.037	1780
	0	3.85	1711.092	1710.00	1779.071	1780
	10	3.85	1711.010	1710.00	1779.078	1780
	20	3.85	1711.040	1710.00	1779.040	1780
	30	3.85	1711.076	1710.00	1779.025	1780
	40	3.85	1711.024	1710.00	1779.076	1780
	50	3.85	1711.031	1710.00	1779.083	1780
Frequency Stability vs. Voltage	20	3.6	1711.079	1710.00	1779.073	1780
	20	4.35	1711.016	1710.00	1779.064	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	3.85	1711.038	1710.00	1779.012	1780
	-20	3.85	1711.082	1710.00	1779.011	1780
	-10	3.85	1711.086	1710.00	1779.058	1780
	0	3.85	1711.010	1710.00	1779.005	1780
	10	3.85	1711.022	1710.00	1779.044	1780
	20	3.85	1711.040	1710.00	1779.040	1780
	30	3.85	1711.091	1710.00	1779.097	1780
	40	3.85	1711.022	1710.00	1779.089	1780
	50	3.85	1711.050	1710.00	1779.053	1780
Frequency Stability vs. Voltage	20	3.6	1711.028	1710.00	1779.002	1780
	20	4.35	1711.061	1710.00	1779.015	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):



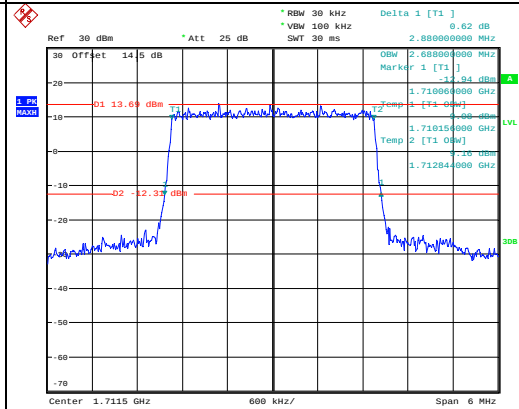
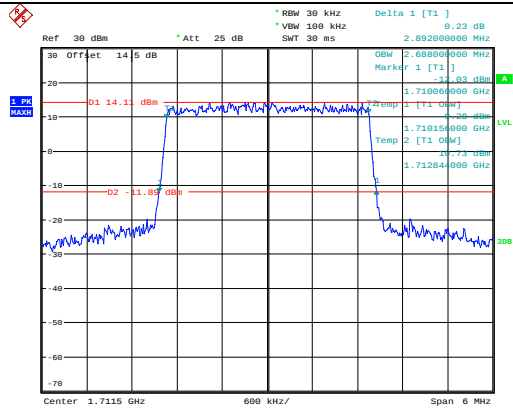
Occupied Bandwidth

Channel

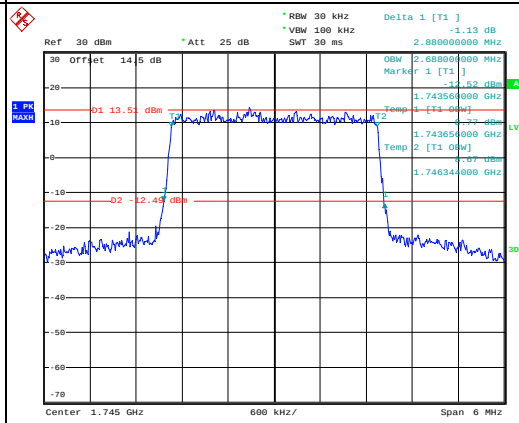
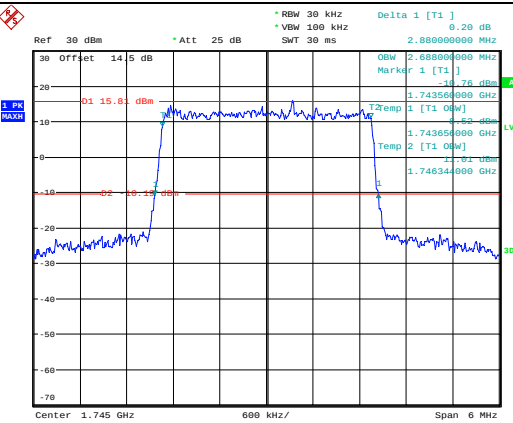
3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

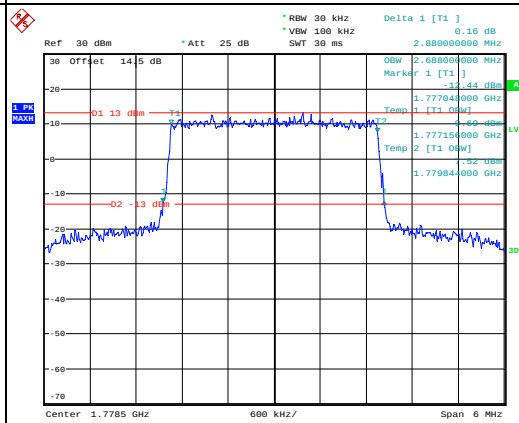
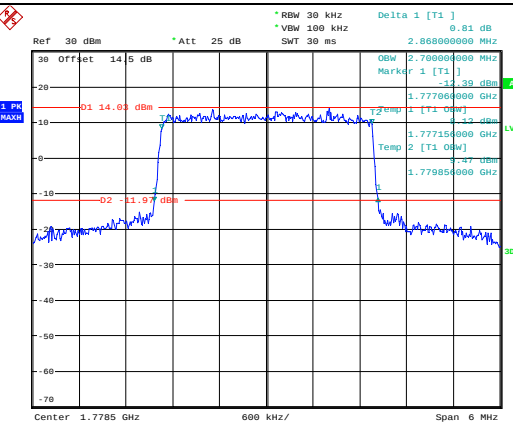
Lowest



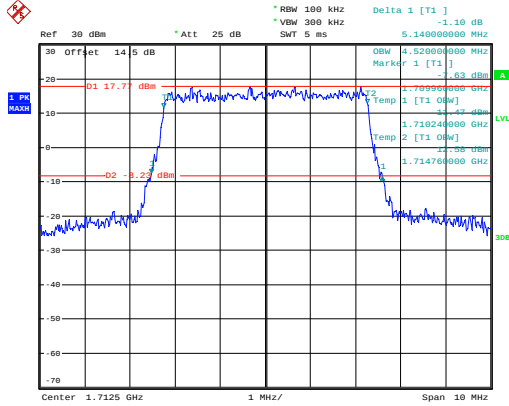
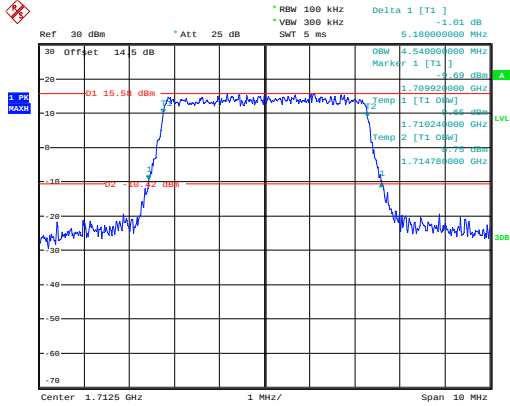
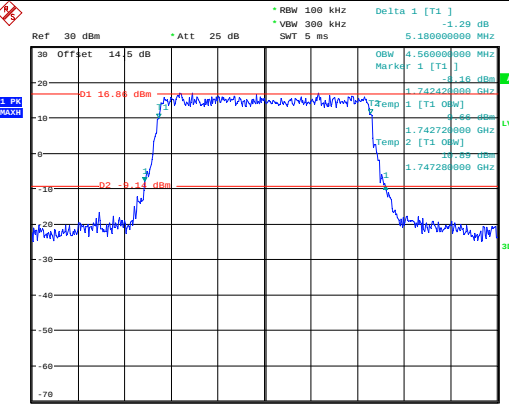
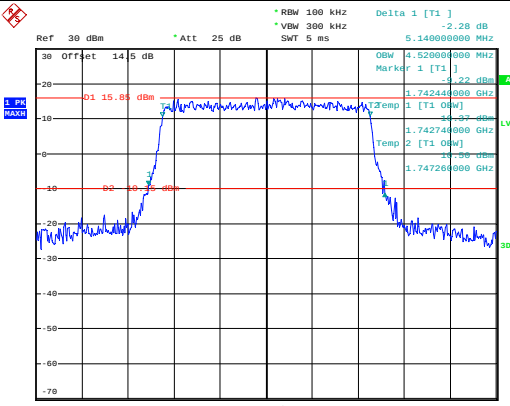
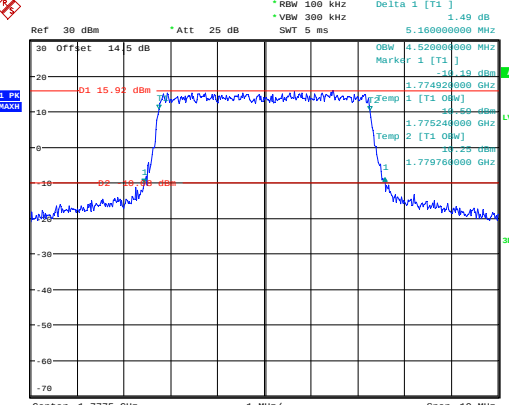
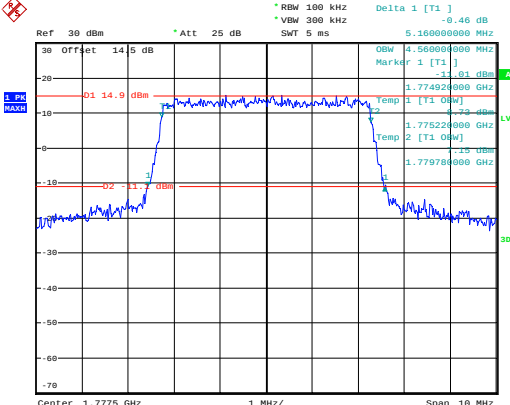
Middle



Highest



Occupied Bandwidth

Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 5 ms Delta 1 [T1] -1.10 dB Marker 1 [T1] 5.140000000 MHz OBW 4.520000000 MHz Mark 1 [T1] -1.62 dBm Temp 1 [T1] 1.709924000 GHz Temp 2 [T1] 1.710240000 GHz Temp 3 [T1] 1.714760000 GHz Center 1.7125 GHz 1 MHz/ Span 10 MHz Date: 30.JUN.2023 00:09:42	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 5 ms Delta 1 [T1] -1.01 dB Marker 1 [T1] 5.180000000 MHz OBW 4.540000000 MHz Mark 1 [T1] -1.62 dBm Temp 1 [T1] 1.709924000 GHz Temp 2 [T1] 1.710240000 GHz Temp 3 [T1] 1.714760000 GHz Center 1.7125 GHz 1 MHz/ Span 10 MHz Date: 30.JUN.2023 00:10:05
Middle	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 5 ms Delta 1 [T1] -1.29 dB Marker 1 [T1] 5.180000000 MHz OBW 4.560000000 MHz Mark 1 [T1] -1.62 dBm Temp 1 [T1] 1.742440000 GHz Temp 2 [T1] 1.742720000 GHz Temp 3 [T1] 1.747280000 GHz Center 1.745 GHz 1 MHz/ Span 10 MHz Date: 30.JUN.2023 00:10:29	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 5 ms Delta 1 [T1] -2.28 dB Marker 1 [T1] 5.140000000 MHz OBW 4.520000000 MHz Mark 1 [T1] -1.62 dBm Temp 1 [T1] 1.742440000 GHz Temp 2 [T1] 1.742720000 GHz Temp 3 [T1] 1.747280000 GHz Center 1.745 GHz 1 MHz/ Span 10 MHz Date: 30.JUN.2023 00:10:50
Highest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 5 ms Delta 1 [T1] -1.49 dB Marker 1 [T1] 5.160000000 MHz OBW 4.520000000 MHz Mark 1 [T1] -1.62 dBm Temp 1 [T1] 1.774920000 GHz Temp 2 [T1] 1.775240000 GHz Temp 3 [T1] 1.779760000 GHz Center 1.7775 GHz 1 MHz/ Span 10 MHz Date: 30.JUN.2023 00:11:17	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 5 ms Delta 1 [T1] -0.46 dB Marker 1 [T1] 5.160000000 MHz OBW 4.560000000 MHz Mark 1 [T1] -1.61 dBm Temp 1 [T1] 1.774920000 GHz Temp 2 [T1] 1.775220000 GHz Temp 3 [T1] 1.779780000 GHz Center 1.7775 GHz 1 MHz/ Span 10 MHz Date: 30.JUN.2023 00:11:41

Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	Ref 30 dBm *Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 1 [T1] -1.17 dB OBW 9.920000000 MHz Marker 1 [T1] -1.17 dB Temp 1 [T1 0dB] -1.17 dB Temp 2 [T1 0dB] -1.17 dB LVL 1.710520000 GHz LVL 1.719480000 GHz LVL 1.719480000 GHz Center 1.715 GHz 2 MHz/ Span 20 MHz Date: 30 JUN 2023 00:12:54	Ref 30 dBm *Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 1 [T1] -2.87 dB OBW 9.760000000 MHz Marker 1 [T1] -2.87 dB Temp 1 [T1 0dB] -2.87 dB Temp 2 [T1 0dB] -2.87 dB LVL 1.710520000 GHz LVL 1.719480000 GHz LVL 1.719480000 GHz Center 1.715 GHz 2 MHz/ Span 20 MHz Date: 30 JUN 2023 00:13:18
Middle	Ref 30 dBm *Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 1 [T1] 0.99 dB OBW 9.960000000 MHz Marker 1 [T1] 0.99 dB Temp 1 [T1 0dB] 0.99 dB Temp 2 [T1 0dB] 0.99 dB LVL 1.740520000 GHz LVL 1.749480000 GHz LVL 1.749480000 GHz Center 1.745 GHz 2 MHz/ Span 20 MHz Date: 30 JUN 2023 00:13:39	Ref 30 dBm *Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 1 [T1] -1.90 dB OBW 9.800000000 MHz Marker 1 [T1] -1.90 dB Temp 1 [T1 0dB] -1.90 dB Temp 2 [T1 0dB] -1.90 dB LVL 1.740520000 GHz LVL 1.749480000 GHz LVL 1.749480000 GHz Center 1.745 GHz 2 MHz/ Span 20 MHz Date: 30 JUN 2023 00:13:59
Highest	Ref 30 dBm *Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 1 [T1] 1.23 dB OBW 9.760000000 MHz Marker 1 [T1] 1.23 dB Temp 1 [T1 0dB] 1.23 dB Temp 2 [T1 0dB] 1.23 dB LVL 1.770520000 GHz LVL 1.779480000 GHz LVL 1.779480000 GHz Center 1.775 GHz 2 MHz/ Span 20 MHz Date: 30 JUN 2023 00:14:19	Ref 30 dBm *Att 25 dB RBW 100 kHz VBW 300 kHz SWT 10 ms Delta 1 [T1] -1.08 dB OBW 9.800000000 MHz Marker 1 [T1] -1.08 dB Temp 1 [T1 0dB] -1.08 dB Temp 2 [T1 0dB] -1.08 dB LVL 1.770520000 GHz LVL 1.779480000 GHz LVL 1.779480000 GHz Center 1.775 GHz 2 MHz/ Span 20 MHz Date: 30 JUN 2023 00:14:39

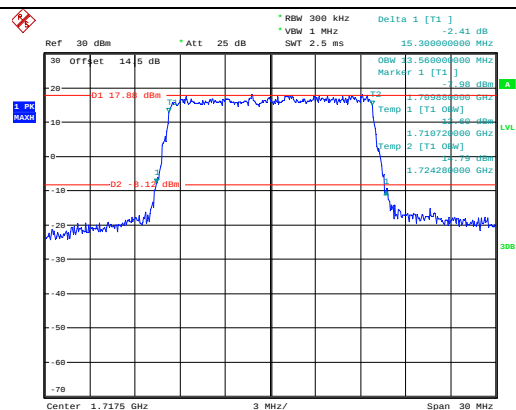
Occupied Bandwidth

Channel

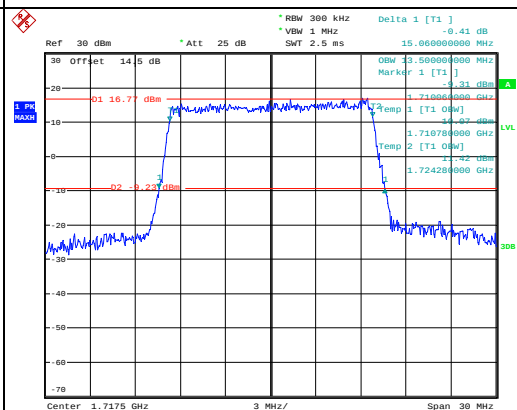
15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

Lowest

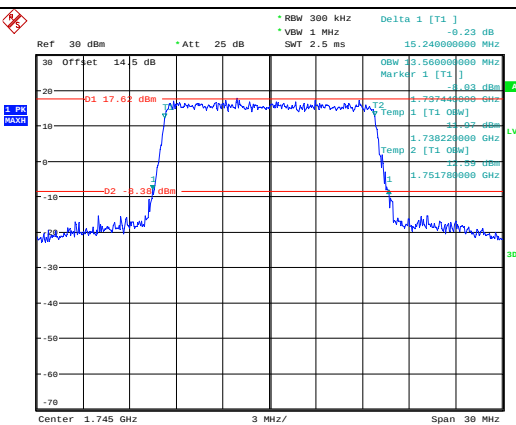


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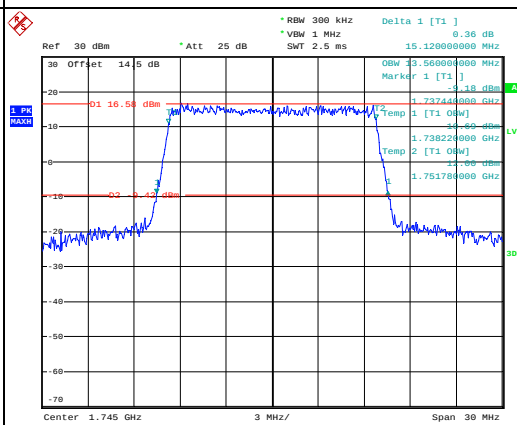


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Middle

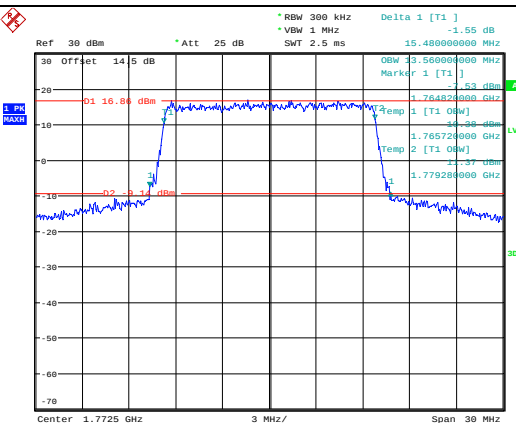


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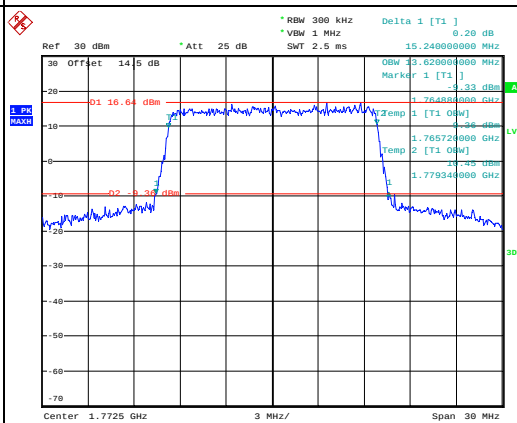


Date: 30.JUN.2023 00:17:07

Highest



Date: 30.JUN.2023 00:17:31



Date: 30.JUN.2023 00:18:01

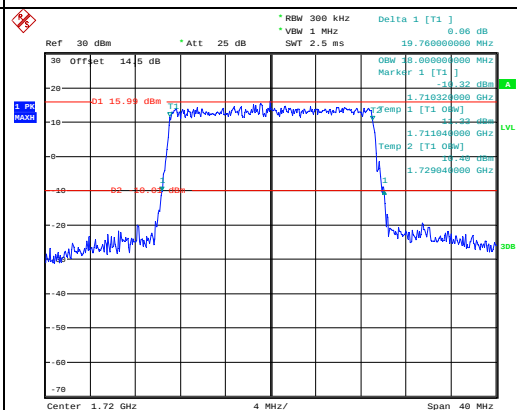
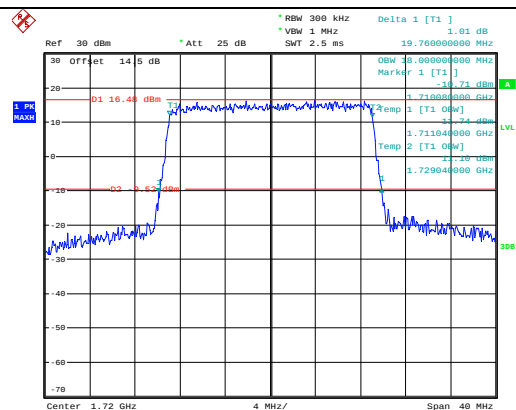
Occupied Bandwidth

Channel

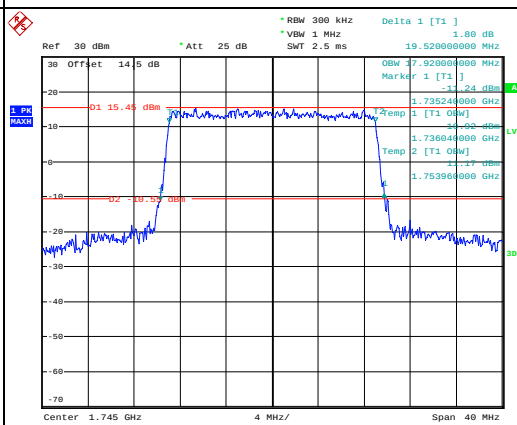
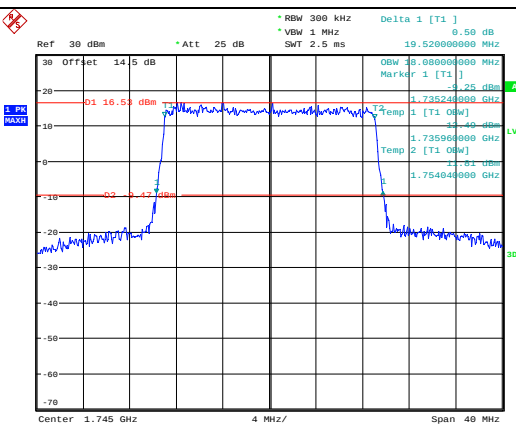
20MHz Bandwidth QPSK

20MHz Bandwidth 16QAM

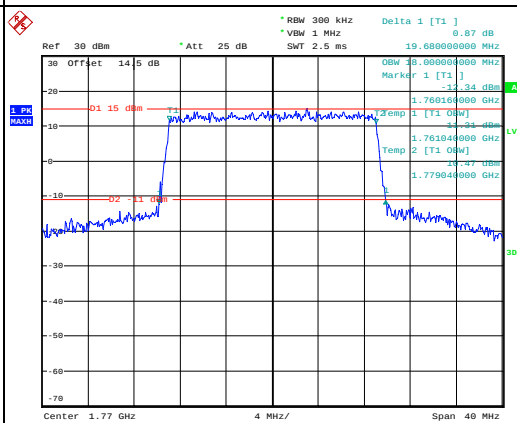
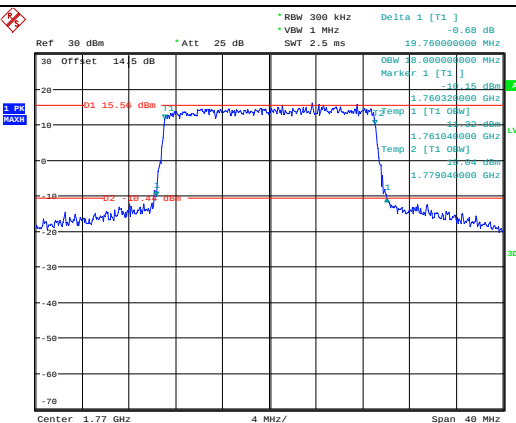
Lowest



Middle



Highest

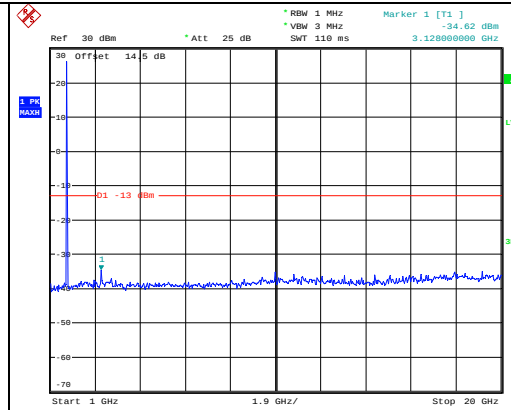
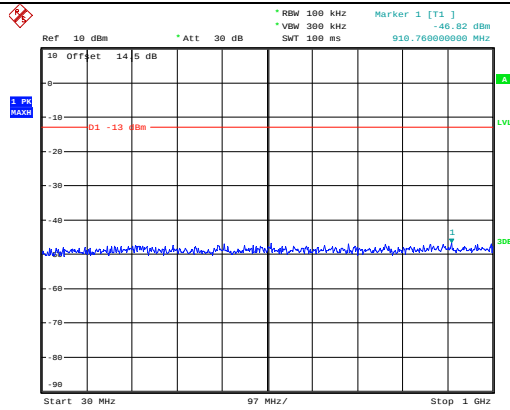


Spurious Emissions at Antenna Terminal

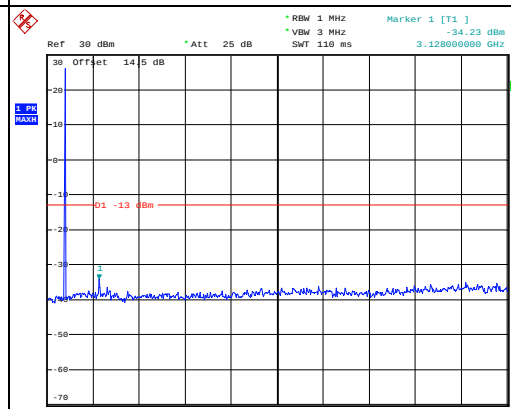
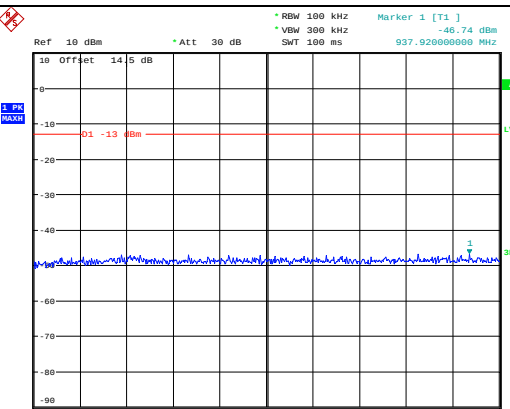
Channel

1.4MHz Bandwidth QPSK

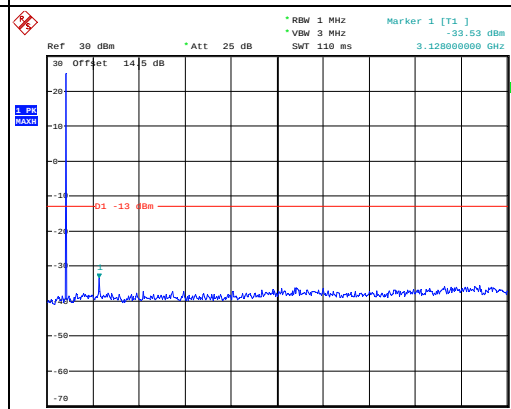
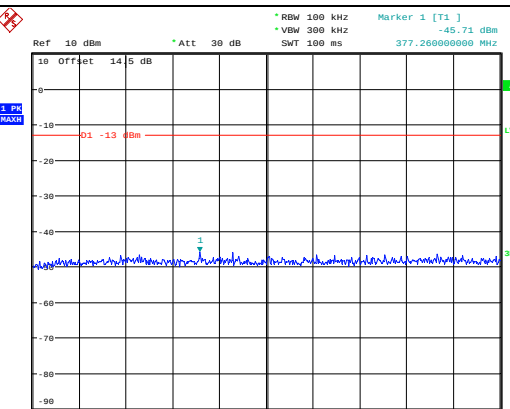
Lowest



Middle



Highest

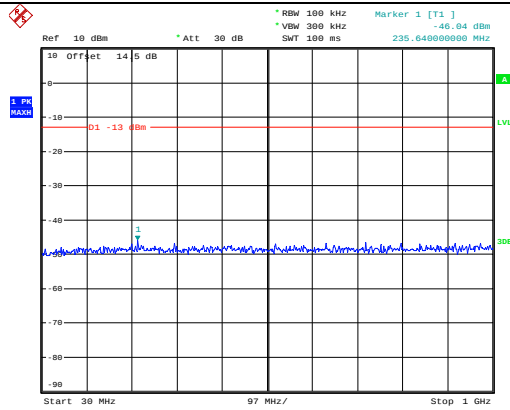


Spurious Emissions at Antenna Terminal

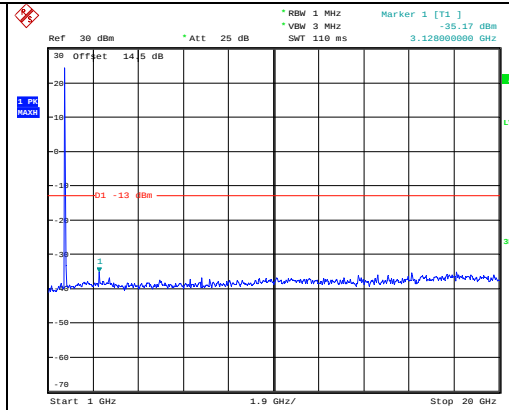
Channel

3MHz Bandwidth QPSK

Lowest

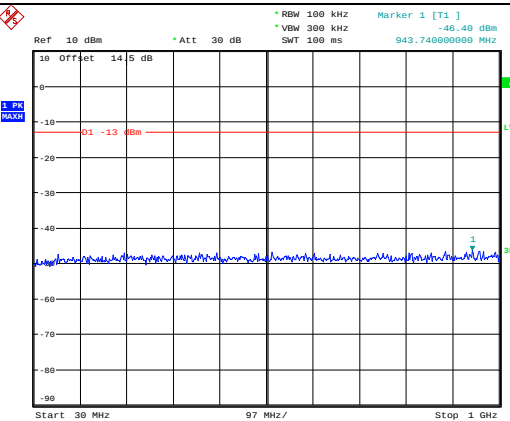


Date: 30.JUN.2023 15:43:48

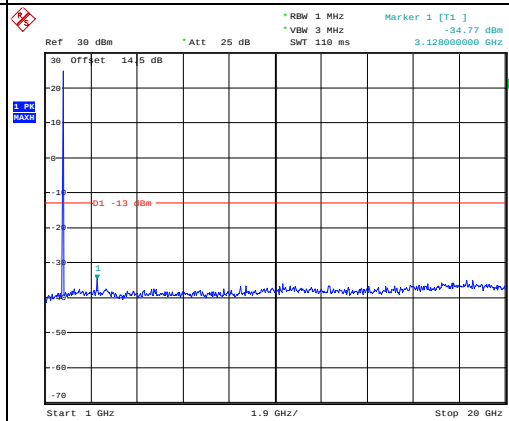


Date: 30.JUN.2023 15:44:01

Middle

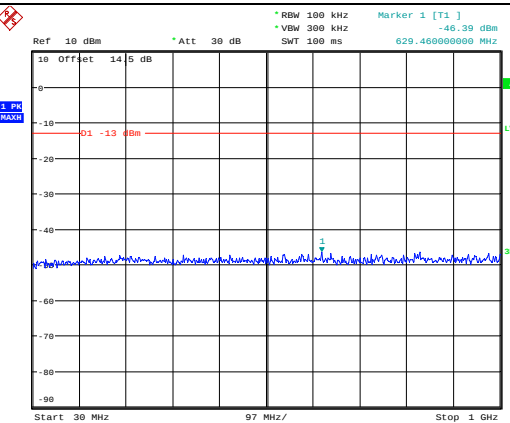


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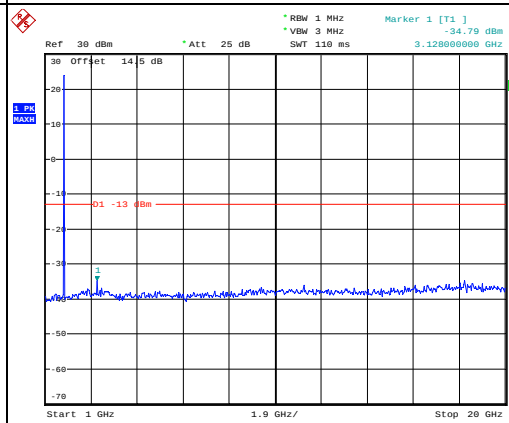


Date: 30.JUN.2023 15:44:32

Highest



Date: 30.JUN.2023 15:44:47



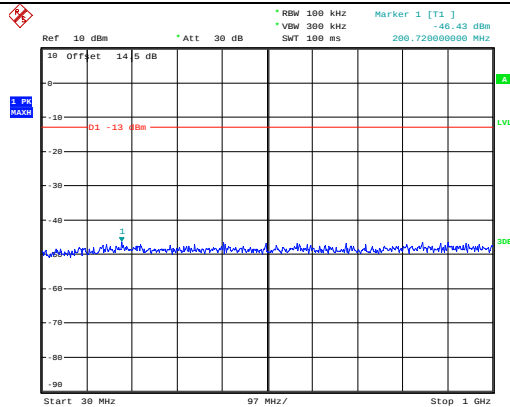
Date: 30.JUN.2023 15:45:00

Spurious Emissions at Antenna Terminal

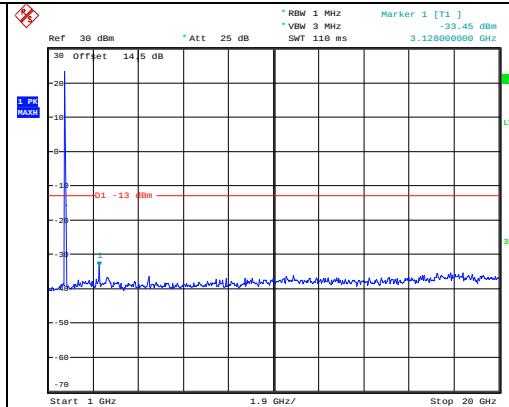
Channel

5MHz Bandwidth QPSK

Lowest

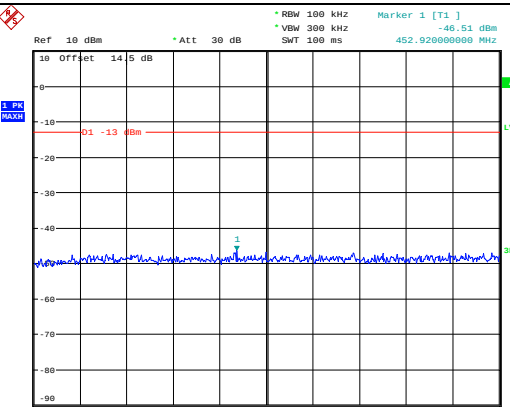


Date: 30.JUN.2023 15:46:11

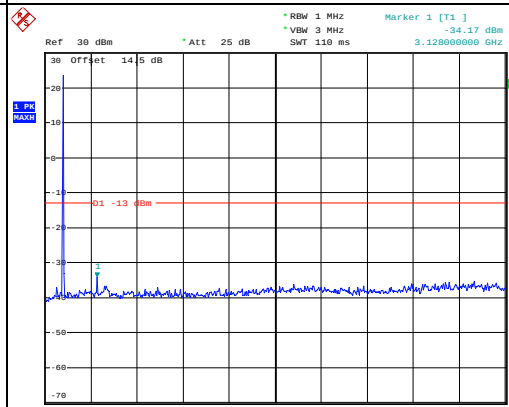


Date: 30.JUN.2023 15:46:25

Middle

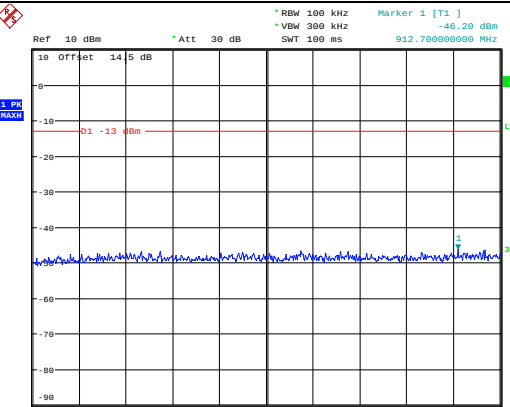


Date: 30.JUN.2023 15:46:40

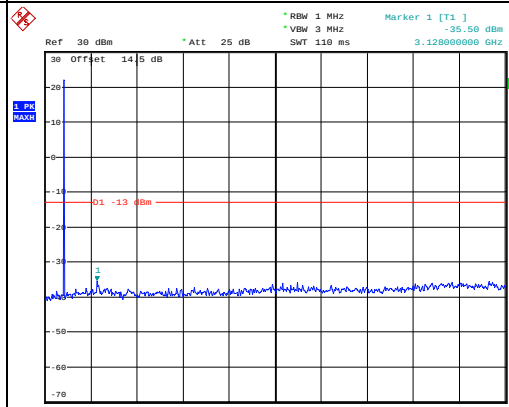


Date: 30.JUN.2023 15:46:52

Highest

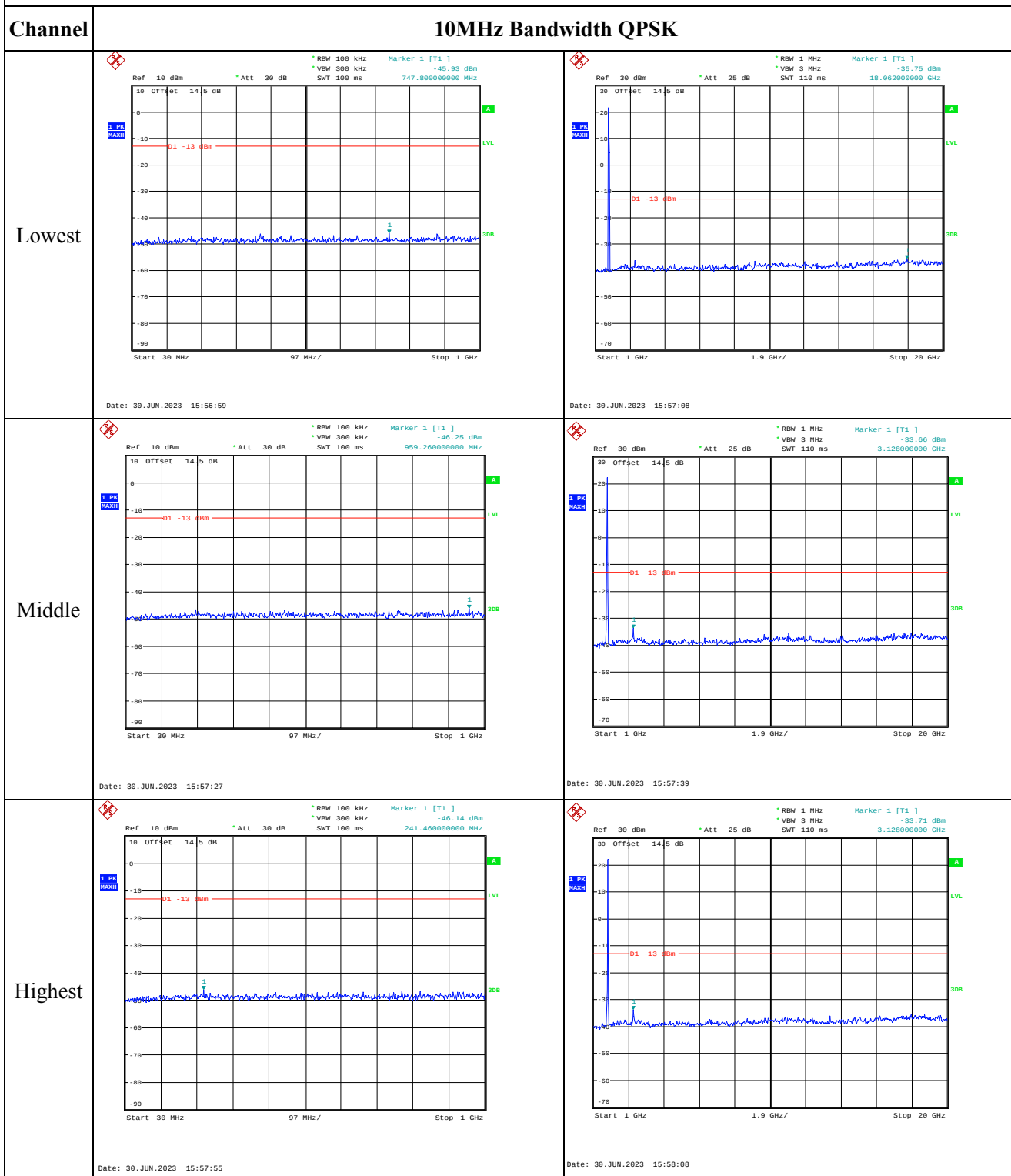


Date: 30.JUN.2023 15:47:11



Date: 30.JUN.2023 15:47:24

Spurious Emissions at Antenna Terminal

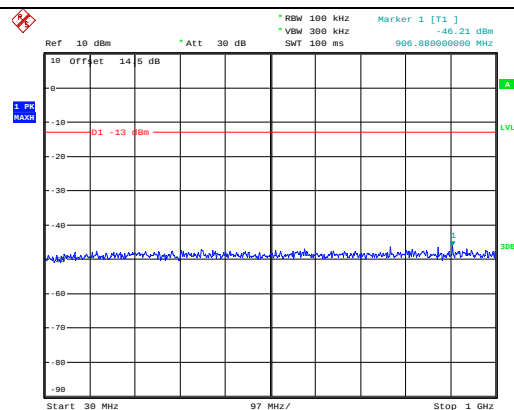


Spurious Emissions at Antenna Terminal

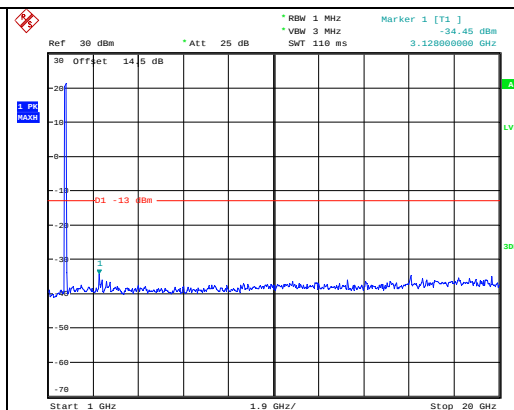
Channel

15MHz Bandwidth QPSK

Lowest

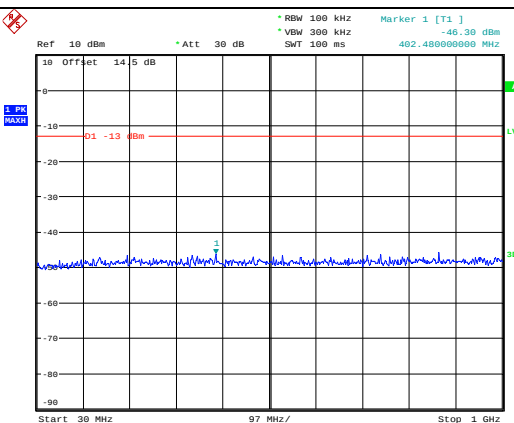


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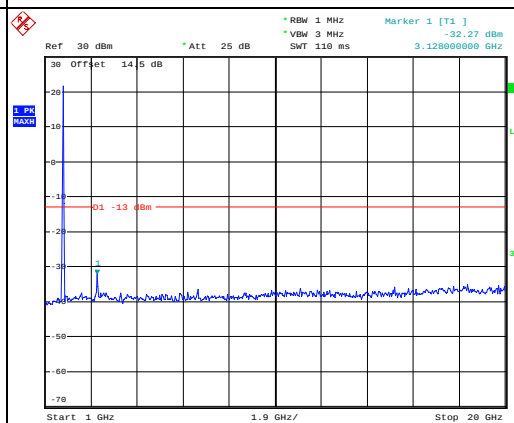


Date: 30.JUN.2023 15:59:15

Middle

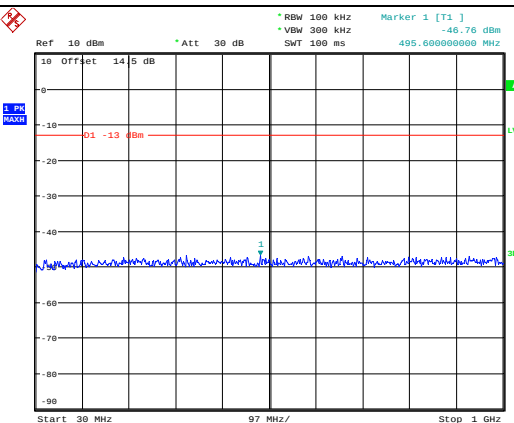


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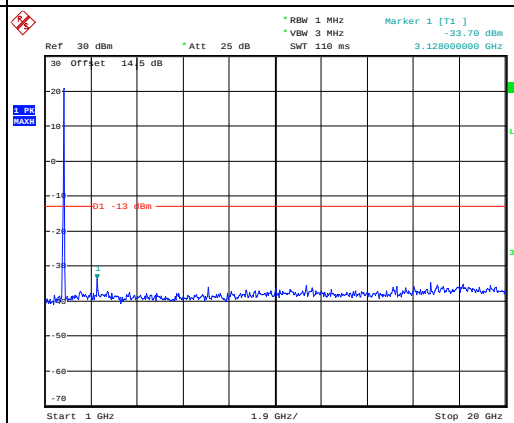


Date: 30.JUN.2023 15:59:46

Highest

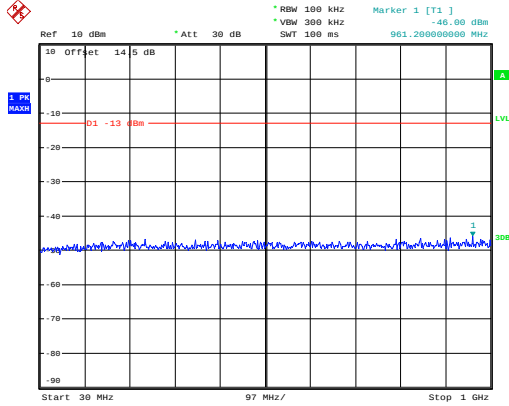
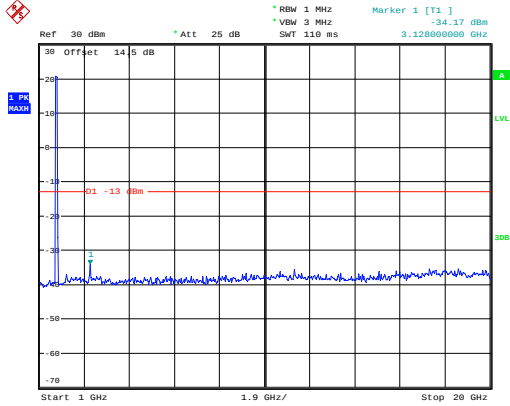
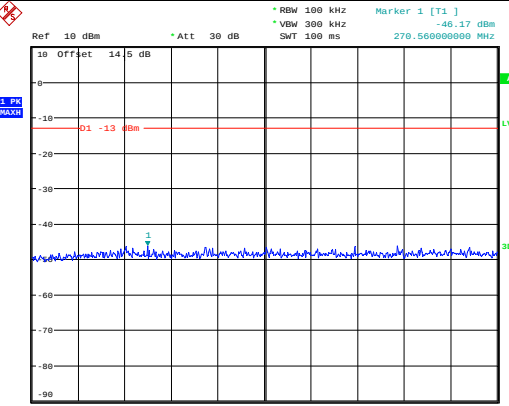
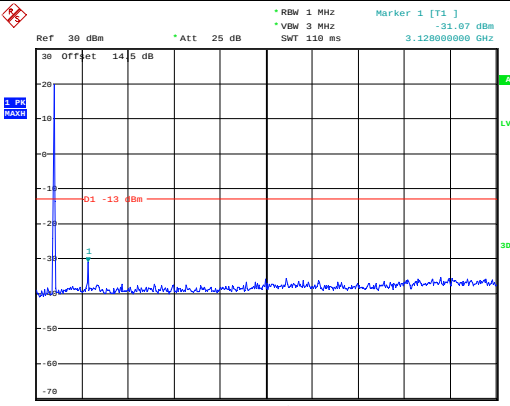
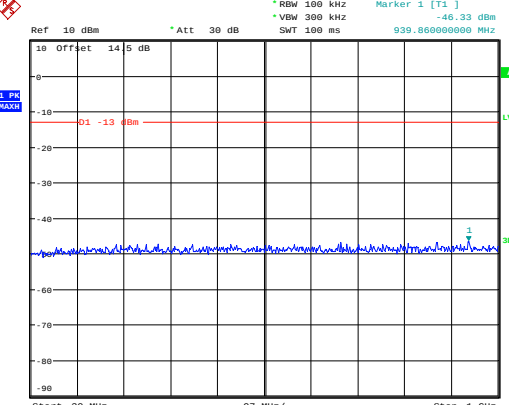
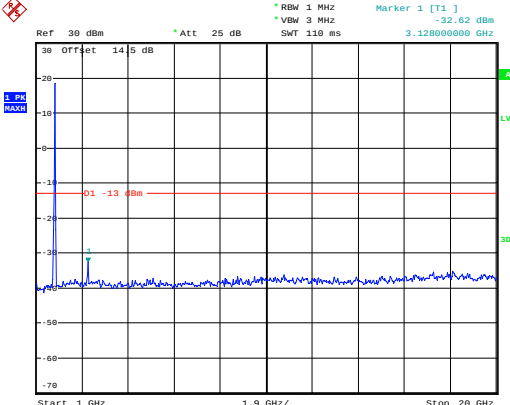


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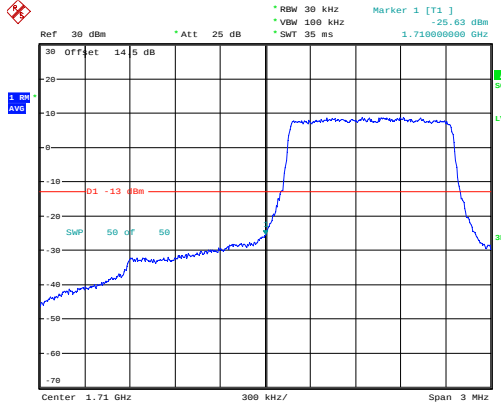
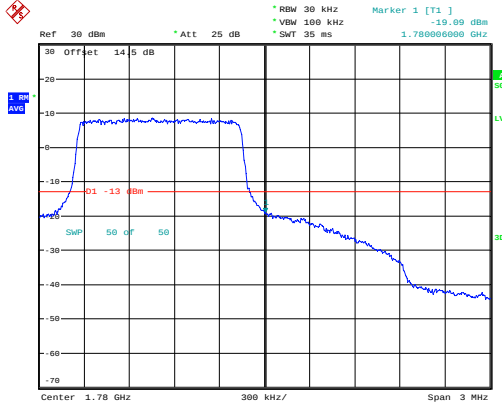
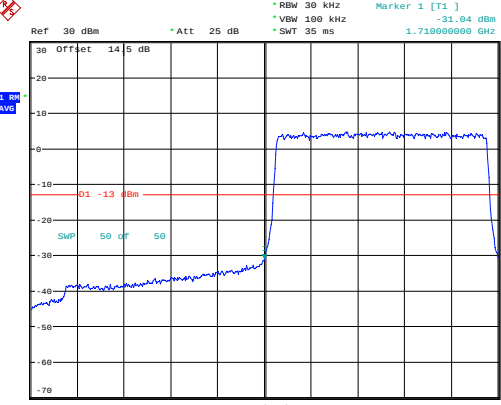
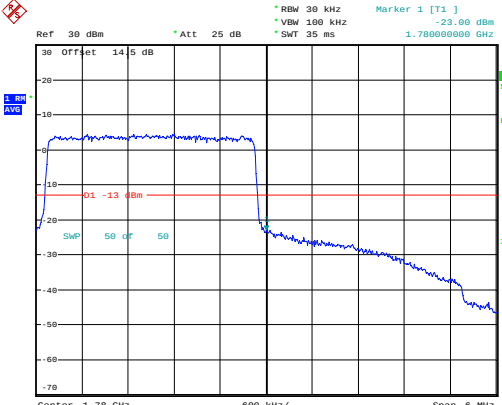
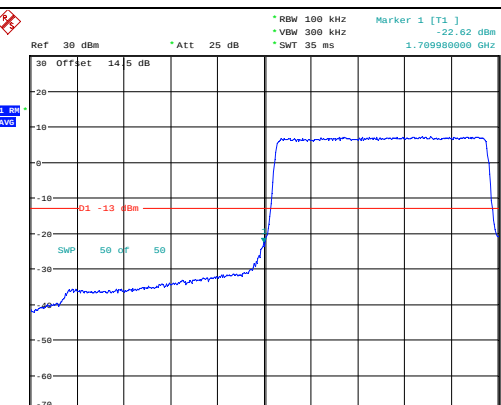
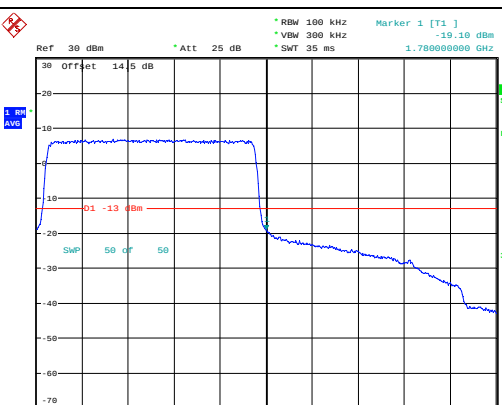


Date: 30.JUN.2023 16:00:14

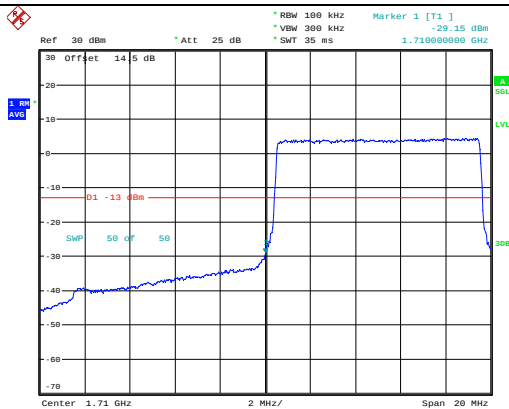
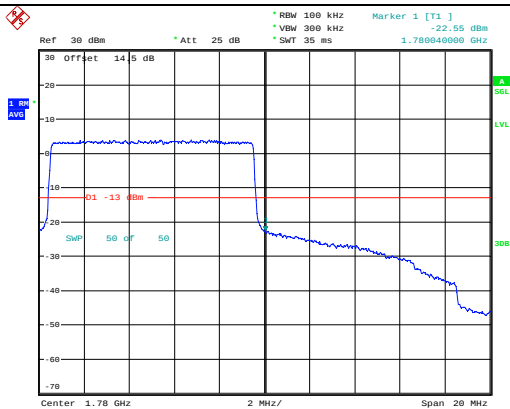
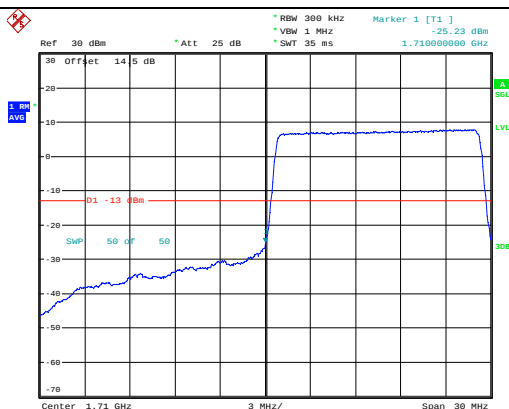
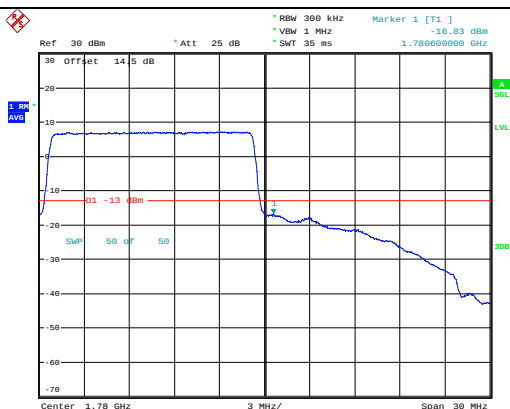
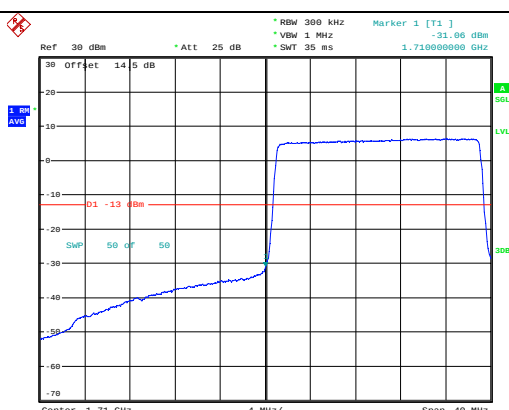
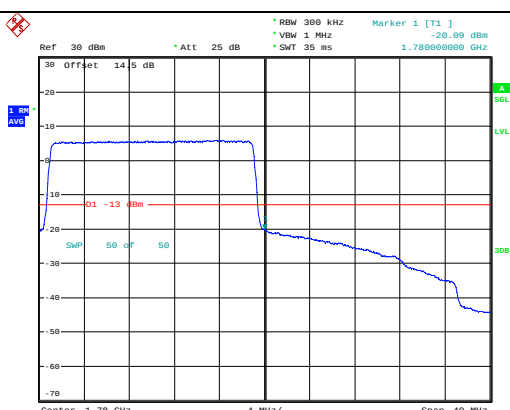
Spurious Emissions at Antenna Terminal

Channel	20MHz Bandwidth QPSK	
Lowest		
	Date: 30 JUN 2023 16:01:01	Date: 30 JUN 2023 16:01:14
Middle		
	Date: 30 JUN 2023 16:01:33	Date: 30 JUN 2023 16:01:46
Highest		
	Date: 30 JUN 2023 16:02:01	Date: 30 JUN 2023 16:02:14

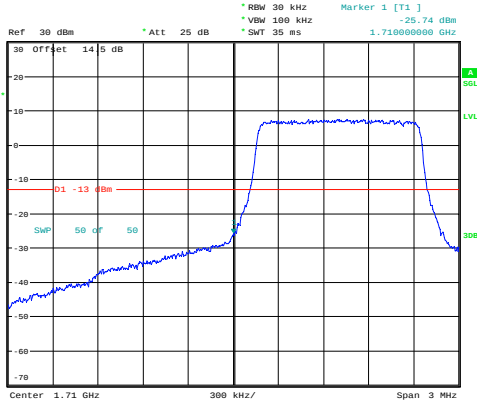
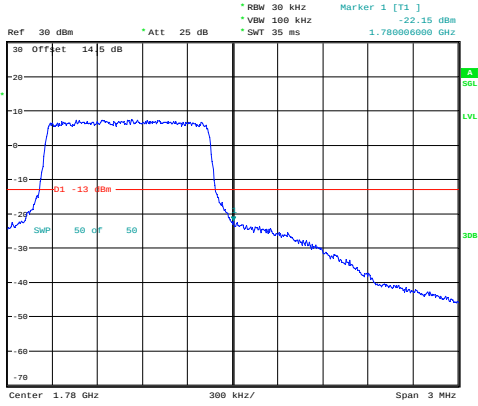
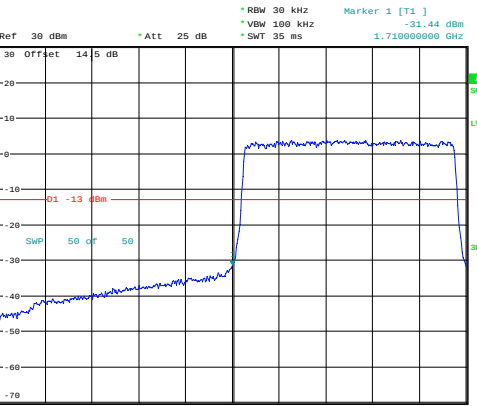
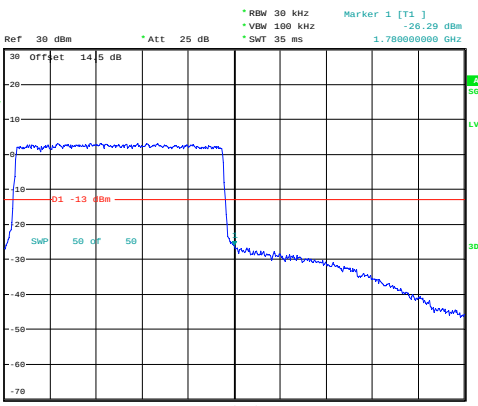
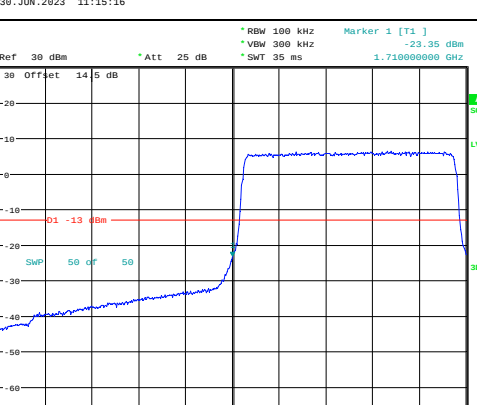
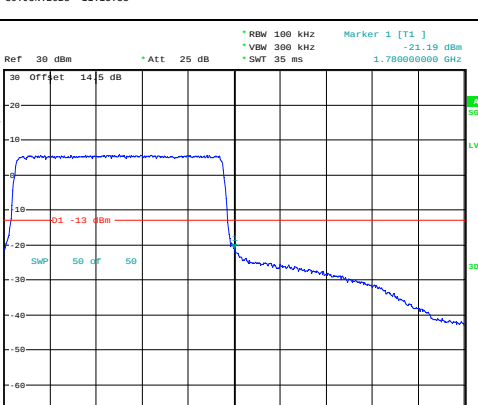
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz	 Ref 30 dBm Att 25 dB RBW 30 kHz Marker 1 [T1] -25.63 dBm VBW 100 kHz SWT 35 ms 1.710000000 GHz 30 Offset 14.5 dB -13 dBm -45 dBm -70 dBm Center 1.71 GHz 300 kHz/ Span 3 MHz Date: 30.JUN.2023 11:13:47	 Ref 30 dBm Att 25 dB RBW 30 kHz Marker 1 [T1] -19.09 dBm VBW 100 kHz SWT 35 ms 1.780000000 GHz 30 Offset 14.5 dB -13 dBm -45 dBm -70 dBm Center 1.78 GHz 300 kHz/ Span 3 MHz Date: 30.JUN.2023 11:14:04
QPSK 3MHz	 Ref 30 dBm Att 25 dB RBW 30 kHz Marker 1 [T1] -31.04 dBm VBW 100 kHz SWT 35 ms 1.710000000 GHz 30 Offset 14.5 dB -13 dBm -45 dBm -70 dBm Center 1.71 GHz 600 kHz/ Span 6 MHz Date: 30.JUN.2023 11:15:07	 Ref 30 dBm Att 25 dB RBW 30 kHz Marker 1 [T1] -23.00 dBm VBW 100 kHz SWT 35 ms 1.780000000 GHz 30 Offset 14.5 dB -13 dBm -45 dBm -70 dBm Center 1.78 GHz 600 kHz/ Span 6 MHz Date: 30.JUN.2023 11:15:25
QPSK 5MHz	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -22.62 dBm VBW 300 kHz SWT 35 ms 1.709980000 GHz 30 Offset 14.5 dB -13 dBm -45 dBm -70 dBm Center 1.71 GHz 1 MHz/ Span 10 MHz Date: 30.JUN.2023 11:16:28	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -19.10 dBm VBW 300 kHz SWT 35 ms 1.780000000 GHz 30 Offset 14.5 dB -13 dBm -45 dBm -70 dBm Center 1.78 GHz 1 MHz/ Span 10 MHz Date: 30.JUN.2023 11:16:47

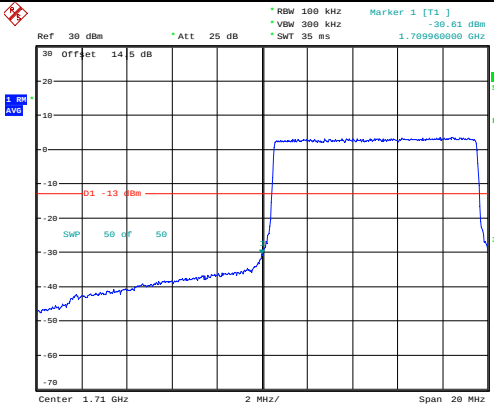
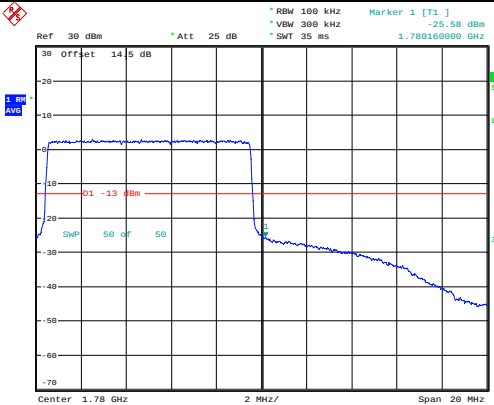
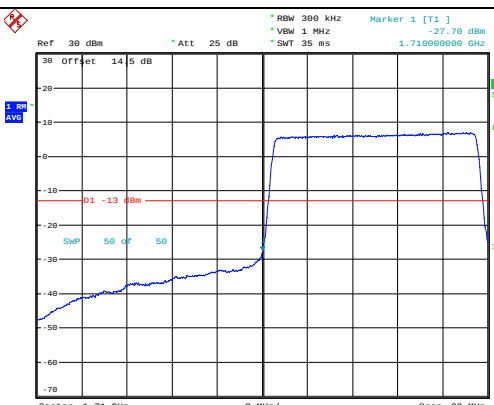
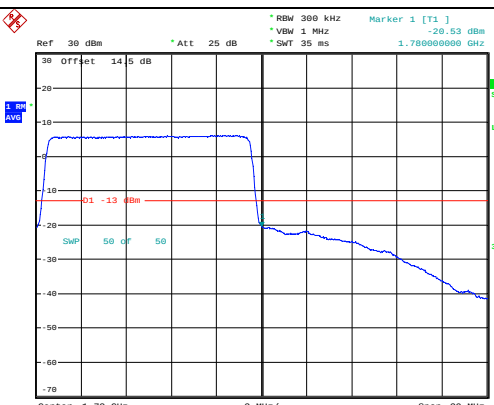
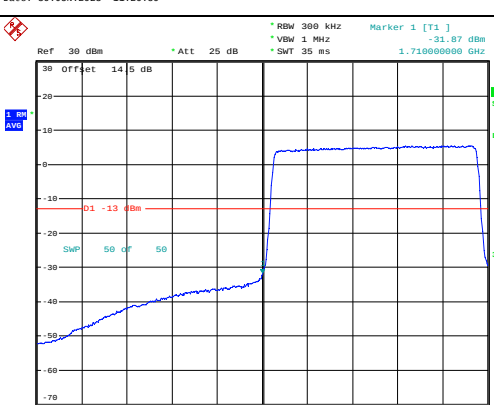
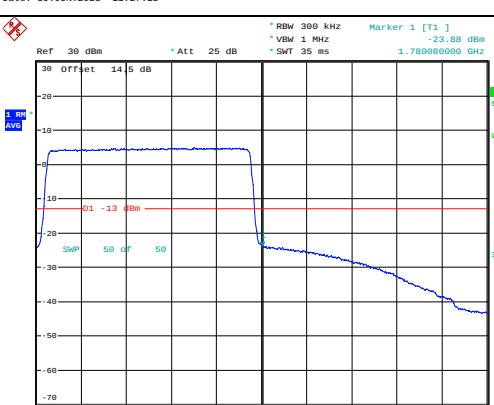
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz	 Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -29.15 dBm, 1.710000000 GHz Center: 1.71 GHz, Span: 20 MHz Date: 30 JUN 2023 11:25:24	 Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -22.55 dBm, 1.780040000 GHz Center: 1.78 GHz, Span: 20 MHz Date: 30 JUN 2023 11:25:44
QPSK 15MHz	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -31.23 dBm, 1.710000000 GHz Center: 1.71 GHz, Span: 30 MHz Date: 30 JUN 2023 11:26:50	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -16.83 dBm, 1.780040000 GHz Center: 1.78 GHz, Span: 30 MHz Date: 30 JUN 2023 11:27:09
QPSK 20MHz	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -31.00 dBm, 1.710000000 GHz Center: 1.71 GHz, Span: 40 MHz Date: 30 JUN 2023 11:28:29	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -20.09 dBm, 1.780040000 GHz Center: 1.78 GHz, Span: 40 MHz Date: 30 JUN 2023 11:28:48

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] -25.74 dBm 1.710000000 GHz Center 1.71 GHz 300 kHz/ Span 3 MHz Date: 30.JUN.2023 11:13:55	 Ref 30 dBm * Att 25 dB * RBW 30 kHz * VBW 100 kHz * SWT 35 ms * Marker 1 [T1] -22.15 dBm 1.780000000 GHz Center 1.78 GHz 300 kHz/ Span 3 MHz Date: 30.JUN.2023 11:14:12
16QAM 3MHz	 Ref 30 dBm * Att 25 dB * RBW 30 kHz * VBW 100 kHz * SWT 35 ms * Marker 1 [T1] -23.44 dBm 1.710000000 GHz Center 1.71 GHz 600 kHz/ Span 6 MHz Date: 30.JUN.2023 11:15:16	 Ref 30 dBm * Att 25 dB * RBW 30 kHz * VBW 100 kHz * SWT 35 ms * Marker 1 [T1] -26.29 dBm 1.780000000 GHz Center 1.78 GHz 600 kHz/ Span 6 MHz Date: 30.JUN.2023 11:15:33
16QAM 5MHz	 Ref 30 dBm * Att 25 dB * RBW 100 kHz * VBW 300 kHz * SWT 35 ms * Marker 1 [T1] -23.35 dBm 1.710000000 GHz Center 1.71 GHz 1 MHz/ Span 10 MHz Date: 30.JUN.2023 11:16:37	 Ref 30 dBm * Att 25 dB * RBW 100 kHz * VBW 300 kHz * SWT 35 ms * Marker 1 [T1] -21.19 dBm 1.780000000 GHz Center 1.78 GHz 1 MHz/ Span 10 MHz Date: 30.JUN.2023 11:16:56

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -30.61 dBm VBW 300 kHz SWT 35 ms 1.709960000 GHz 30 Offset 14.5 dB D1 -13 dBm SWP 50 of 50 Center 1.71 GHz 2 MHz/ Span 20 MHz Date: 30 JUN.2023 11:25:23	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -25.58 dBm VBW 300 kHz SWT 35 ms 1.780160000 GHz 30 Offset 14.5 dB D1 -13 dBm SWP 50 of 50 Center 1.78 GHz 2 MHz/ Span 20 MHz Date: 30 JUN.2023 11:25:54
16QAM 15MH	 Ref 30 dBm Att 25 dB RBW 300 kHz Marker 1 [T1] -27.70 dBm VBW 1 MHz SWT 35 ms 1.710000000 GHz 30 Offset 14.5 dB D1 -13 dBm SWP 50 of 50 Center 1.71 GHz 3 MHz/ Span 30 MHz Date: 30 JUN.2023 11:26:59	 Ref 30 dBm Att 25 dB RBW 300 kHz Marker 1 [T1] -20.53 dBm VBW 1 MHz SWT 35 ms 1.780000000 GHz 30 Offset 14.5 dB D1 -13 dBm SWP 50 of 50 Center 1.78 GHz 3 MHz/ Span 30 MHz Date: 30 JUN.2023 11:27:18
16QAM 20MH	 Ref 30 dBm Att 25 dB RBW 300 kHz Marker 1 [T1] -31.87 dBm VBW 1 MHz SWT 35 ms 1.710000000 GHz 30 Offset 14.5 dB D1 -13 dBm SWP 50 of 50 Center 1.71 GHz 4 MHz/ Span 40 MHz Date: 30 JUN.2023 11:28:38	 Ref 30 dBm Att 25 dB RBW 300 kHz Marker 1 [T1] -23.88 dBm VBW 1 MHz SWT 35 ms 1.780000000 GHz 30 Offset 14.5 dB D1 -13 dBm SWP 50 of 50 Center 1.78 GHz 4 MHz/ Span 40 MHz Date: 30 JUN.2023 11:28:57

4.15 Antenna Port Test Data and Results for LTE Band 71

Serial Number:	27A0-1	Test Date:	2023/6/27-2023/7/3
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-26.3	Relative Humidity: (%)	41-59	ATM Pressure: (kPa)	99.8-100.7
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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	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149218	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022/9/29	2023/9/28
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	2022/7/15	2023/7/14

* 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	25.1	24.86	25.2	22.33	34.77
	RB1#13	24.68	24.92	25.25		
	RB1#24	24.52	24.77	24.99		
	RB15#0	23.51	23.83	23.81		
	RB15#10	23.61	23.79	24.07		
	RB25#0	23.62	23.77	23.96		
5MHz 16QAM	RB1#0	23.9	23.71	23.94	21.12	34.77
	RB1#13	23.92	23.78	24.03		
	RB1#24	23.69	23.67	24.04		
	RB15#0	22.68	22.86	22.84		
	RB15#10	22.95	22.86	23.14		
	RB25#0	23.01	22.82	22.98		
10MHz QPSK	RB1#0	25.34	25.01	24.9	22.42	34.77
	RB1#25	25.33	25.04	25.05		
	RB1#49	25.1	24.88	25.05		
	RB25#0	24.25	23.61	23.9		
	RB25#25	23.98	23.73	24.27		
	RB50#0	24.13	23.67	24.14		
10MHz 16QAM	RB1#0	24.27	24.09	24.01	21.39	34.77
	RB1#25	24.31	24.17	24.17		
	RB1#49	24.07	24	24.17		
	RB25#0	23.32	22.68	22.96		
	RB25#25	23.06	22.73	23.28		
	RB50#0	23.17	22.7	23.17		
15MHz QPSK	RB1#0	25.19	24.4	24.82	22.27	34.77
	RB1#38	25.08	24.41	24.9		
	RB1#74	24.83	24.25	24.97		
	RB36#0	24.51	23.22	24.11		
	RB36#39	24.29	23.2	24.27		
	RB75#0	24.42	23.58	24.23		
15MHz 16QAM	RB1#0	24.42	24.03	24.37	21.56	34.77
	RB1#38	24.3	24.29	24.39		
	RB1#74	24	23.91	24.48		
	RB36#0	23.46	22.47	23.07		
	RB36#39	23.15	22.6	23.27		
	RB75#0	23.06	22.7	23.23		
20MHz QPSK	RB1#0	25.02	23.07	24.65	22.2	34.77
	RB1#50	25.12	23.09	24.93		
	RB1#99	24.19	24.7	24.83		

20MHz 16QAM	RB50#0	24.19	23.4	24.48	21.64	34.77
	RB50#50	23.99	23.36	24.33		
	RB100#0	24.05	23.42	24.48		
	RB1#0	23.81	24.11	24.23		
	RB1#50	23.97	24.35	24.56		
	RB1#99	23.48	23.98	24.38		
	RB50#0	23.14	22.35	23.49		
	RB50#50	22.96	22.43	23.37		
	RB100#0	23.13	22.46	23.42		

Note:

ERP= Conducted Power(dBm) - Lc(dB) + G_T(dBd)G_T(dBd)=G_T(dBi)-2.15

Note: ERP=Conducted Power(dBm) - Cable loss(dB) + 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	9.84	9.87	9.46	13
	RB100#0	6.79	6.15	6.47	13
20MHz 16QAM	RB1#0	9.26	9.55	9.1	13
	RB100#0	7.4	7.05	7.15	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	4.48	4.5	4.52	5.00	5.1	5.18
5MHz 16QAM	4.5	4.52	4.560	5.1	5.16	5.260
10MHz QPSK	8.92	8.88	9	9.64	9.60	10
10MHz 16QAM	8.92	8.92	9	9.60	9.68	10
15MHz QPSK	13.680	13.38	13.680	15.000	14.76	15.240
15MHz 16QAM	13.62	13.38	13.680	14.94	14.70	15.420
20MHz QPSK	18	17.76	18.08	20	19.36	19.60
20MHz 16QAM	18	17.76	18.08	20	19.20	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.
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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.
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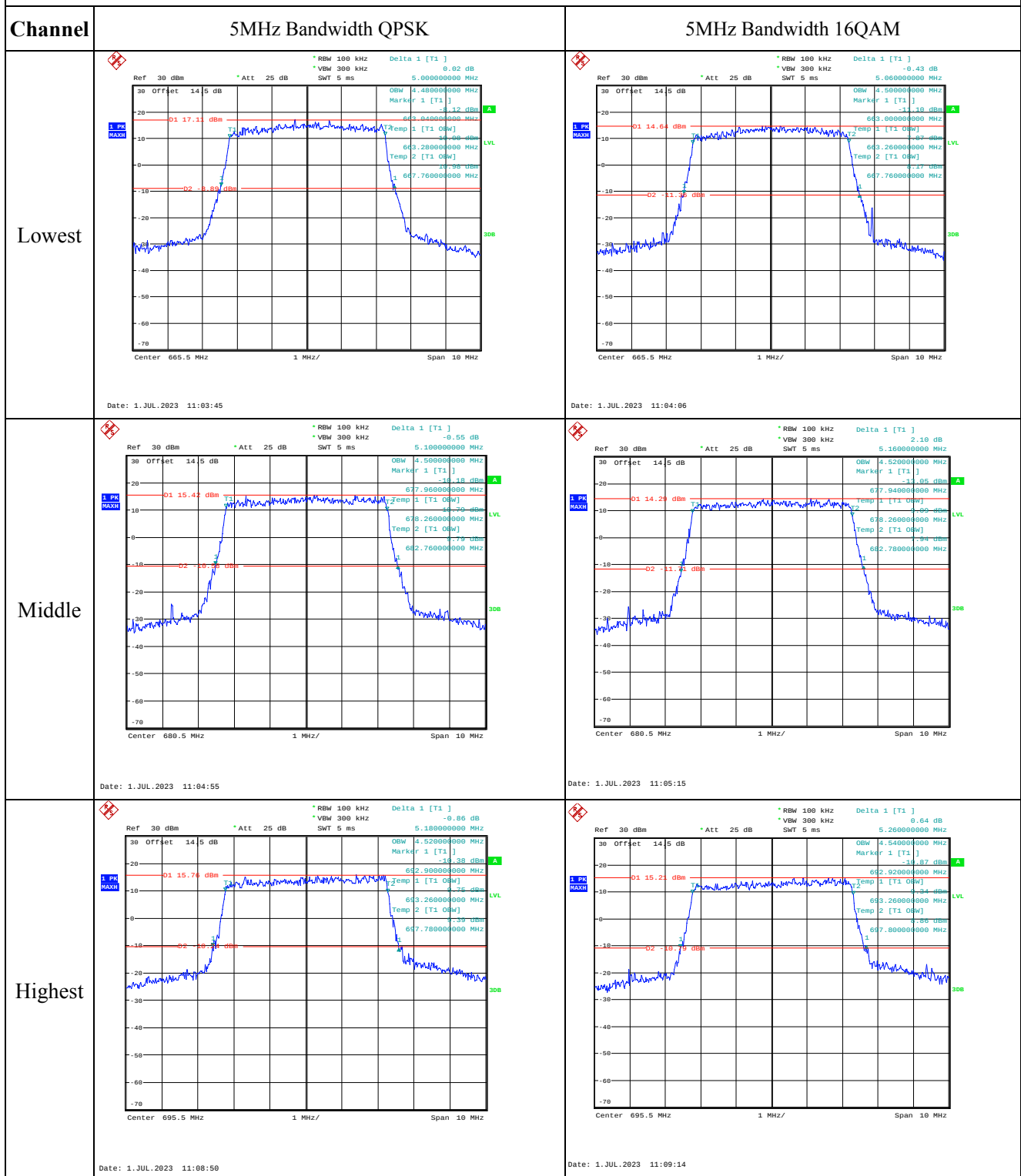
FCC §2.1055, §27.54: Frequency Stability

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	3.85	664.039	663.00	697.084	698.00
	-20	3.85	664.069	663.00	697.078	698.00
	-10	3.85	664.031	663.00	697.055	698.00
	0	3.85	664.029	663.00	697.073	698.00
	10	3.85	664.081	663.00	697.043	698.00
	20	3.85	664.040	663.00	697.040	698.00
	30	3.85	664.027	663.00	697.041	698.00
	40	3.85	664.065	663.00	697.080	698.00
	50	3.85	664.034	663.00	697.066	698.00
Frequency Stability vs. Voltage	20	3.6	664.075	663.00	697.063	698.00
	20	4.35	664.090	663.00	697.100	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	3.85	664.065	663.00	697.040	698.00
	-20	3.85	664.096	663.00	697.024	698.00
	-10	3.85	664.035	663.00	697.066	698.00
	0	3.85	664.038	663.00	697.038	698.00
	10	3.85	664.067	663.00	697.085	698.00
	20	3.85	664.040	663.00	697.040	698.00
	30	3.85	664.057	663.00	697.043	698.00
	40	3.85	664.088	663.00	697.024	698.00
	50	3.85	664.005	663.00	697.076	698.00
Frequency Stability vs. Voltage	20	3.6	664.040	663.00	697.041	698.00
	20	4.35	664.023	663.00	697.037	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):

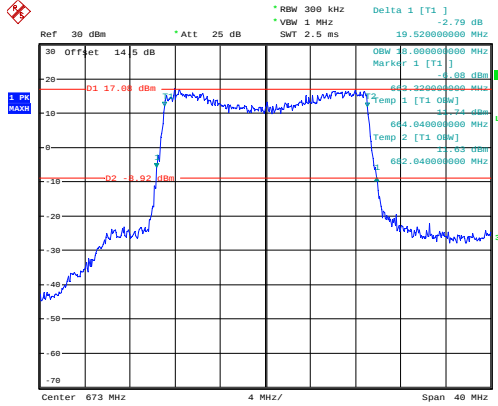
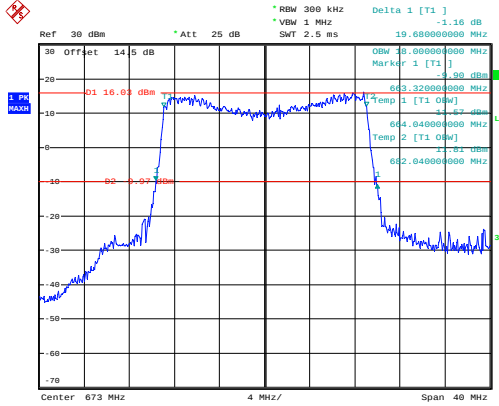
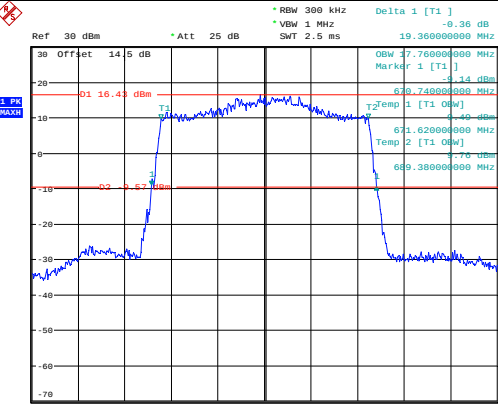
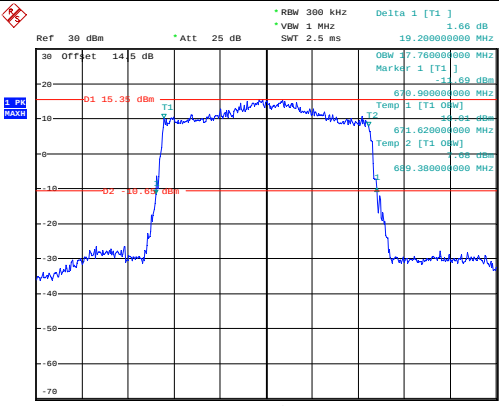
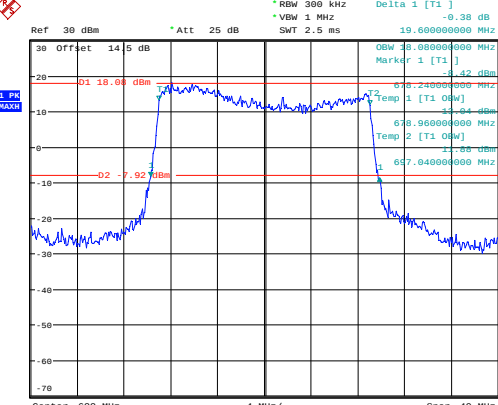
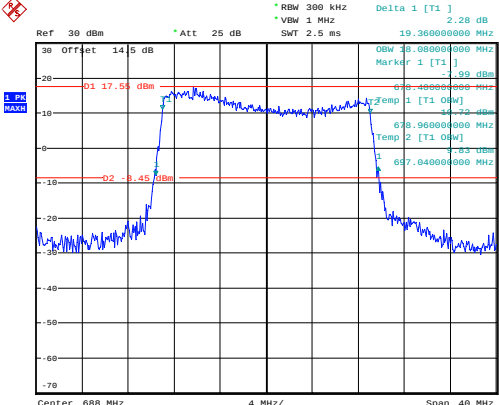
Occupied Bandwidth



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] 0.66 dB VBW 1 MHz SWT 2.5 ms 15.000000000 MHz Marker 1 [T1] -10.6 dBm LVL 603.600000000 MHz Temp 1 [T1 Off] -10.6 dBm 603.720000000 MHz Temp 2 [T1 Off] -10.6 dBm 607.400000000 MHz Center 670.5 MHz 3 MHz/ Span 30 MHz Date: 1.JUL.2023 11:13:44	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.62 dB VBW 1 MHz SWT 2.5 ms 14.940000000 MHz Marker 1 [T1] -10.6 dBm LVL 603.600000000 MHz Temp 1 [T1 Off] -10.6 dBm 603.720000000 MHz Temp 2 [T1 Off] -10.6 dBm 607.340000000 MHz Center 670.5 MHz 3 MHz/ Span 30 MHz Date: 1.JUL.2023 11:14:07
Middle	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.66 dB VBW 1 MHz SWT 2.5 ms 14.760000000 MHz Marker 1 [T1] -10.6 dBm LVL 603.600000000 MHz Temp 1 [T1 Off] -10.6 dBm 603.840000000 MHz Temp 2 [T1 Off] -10.6 dBm 607.220000000 MHz Center 680.5 MHz 3 MHz/ Span 30 MHz Date: 1.JUL.2023 11:41:25	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.62 dB VBW 1 MHz SWT 2.5 ms 14.760000000 MHz Marker 1 [T1] -10.6 dBm LVL 603.600000000 MHz Temp 1 [T1 Off] -10.6 dBm 603.840000000 MHz Temp 2 [T1 Off] -10.6 dBm 607.220000000 MHz Center 680.5 MHz 3 MHz/ Span 30 MHz Date: 1.JUL.2023 11:41:45
Highest	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.67 dB VBW 1 MHz SWT 2.5 ms 15.240000000 MHz Marker 1 [T1] -10.6 dBm LVL 603.600000000 MHz Temp 1 [T1 Off] -10.6 dBm 603.660000000 MHz Temp 2 [T1 Off] -10.6 dBm 607.340000000 MHz Center 690.5 MHz 3 MHz/ Span 30 MHz Date: 1.JUL.2023 11:42:30	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.70 dB VBW 1 MHz SWT 2.5 ms 15.420000000 MHz Marker 1 [T1] -10.6 dBm LVL 603.600000000 MHz Temp 1 [T1 Off] -10.6 dBm 603.660000000 MHz Temp 2 [T1 Off] -10.6 dBm 607.340000000 MHz Center 690.5 MHz 3 MHz/ Span 30 MHz Date: 1.JUL.2023 11:42:54

Occupied Bandwidth

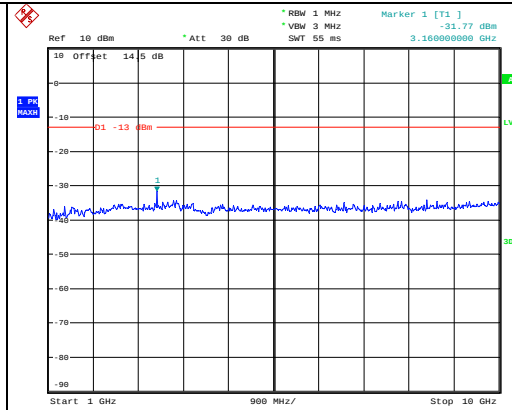
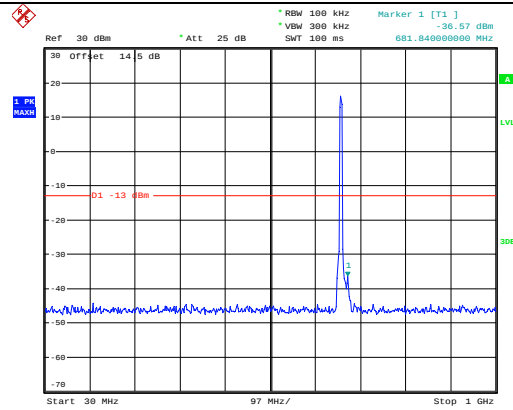
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] -0.36 dB VBW 1 MHz SWT 2.5 ms 19.520000000 MHz Marker 1 [T1] -0.36 dB Temp 1 [T1 0dB] -0.36 dB Temp 2 [T1 0dB] -0.36 dB Center 673 MHz 4 MHz/ Span 40 MHz Date: 1.JUL.2023 11:43:38	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] -1.16 dB VBW 1 MHz SWT 2.5 ms 19.680000000 MHz Marker 1 [T1] -1.16 dB Temp 1 [T1 0dB] -1.16 dB Temp 2 [T1 0dB] -1.16 dB Center 673 MHz 4 MHz/ Span 40 MHz Date: 1.JUL.2023 11:43:59
Middle	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] -0.36 dB VBW 1 MHz SWT 2.5 ms 19.360000000 MHz Marker 1 [T1] -0.36 dB Temp 1 [T1 0dB] -0.36 dB Temp 2 [T1 0dB] -0.36 dB Center 680.5 MHz 4 MHz/ Span 40 MHz Date: 1.JUL.2023 13:10:39	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] -1.65 dB VBW 1 MHz SWT 2.5 ms 19.200000000 MHz Marker 1 [T1] -1.65 dB Temp 1 [T1 0dB] -1.65 dB Temp 2 [T1 0dB] -1.65 dB Center 680.5 MHz 4 MHz/ Span 40 MHz Date: 1.JUL.2023 13:10:59
Highest	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] -0.36 dB VBW 1 MHz SWT 2.5 ms 19.600000000 MHz Marker 1 [T1] -0.36 dB Temp 1 [T1 0dB] -0.36 dB Temp 2 [T1 0dB] -0.36 dB Center 688 MHz 4 MHz/ Span 40 MHz Date: 1.JUL.2023 13:12:28	 Ref 30 dBm Att 25 dB RBW 300 kHz Delta 1 [T1] -2.28 dB VBW 1 MHz SWT 2.5 ms 19.360000000 MHz Marker 1 [T1] -2.28 dB Temp 1 [T1 0dB] -2.28 dB Temp 2 [T1 0dB] -2.28 dB Center 688 MHz 4 MHz/ Span 40 MHz Date: 1.JUL.2023 13:12:49

Spurious Emissions at Antenna Terminal

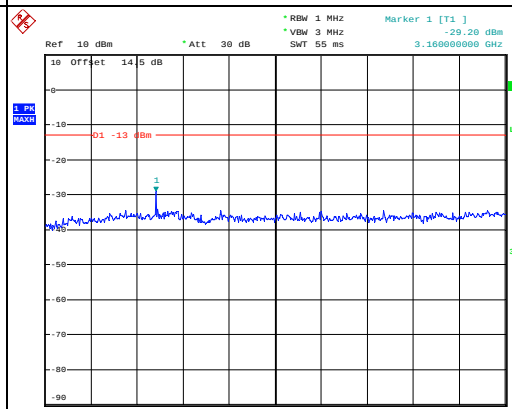
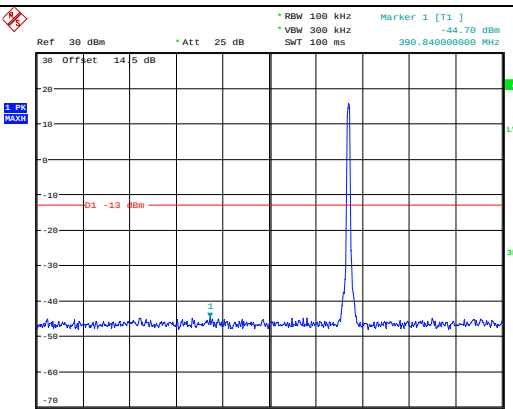
Channel

5MHz Bandwidth QPSK

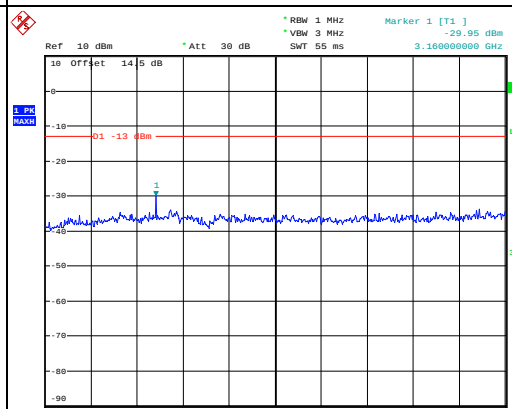
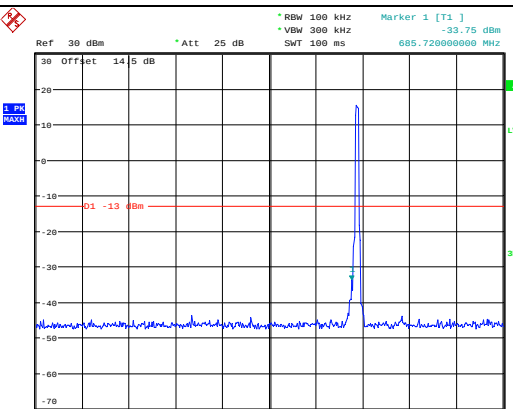
Lowest



Middle



Highest

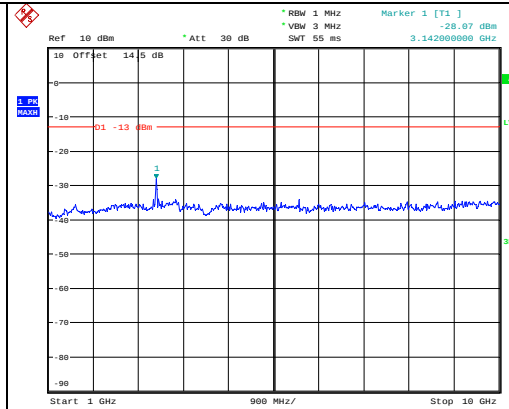
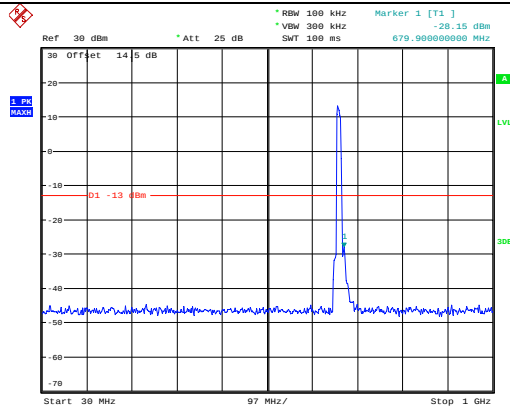


Spurious Emissions at Antenna Terminal

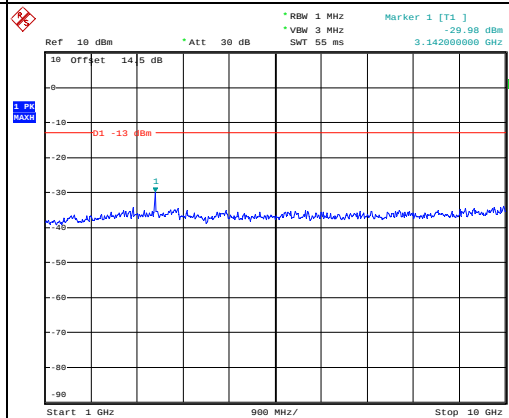
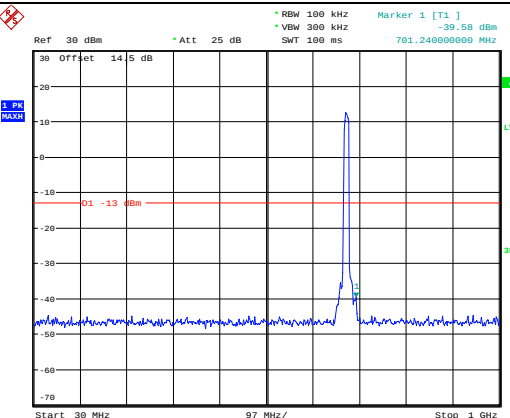
Channel

10MHz Bandwidth QPSK

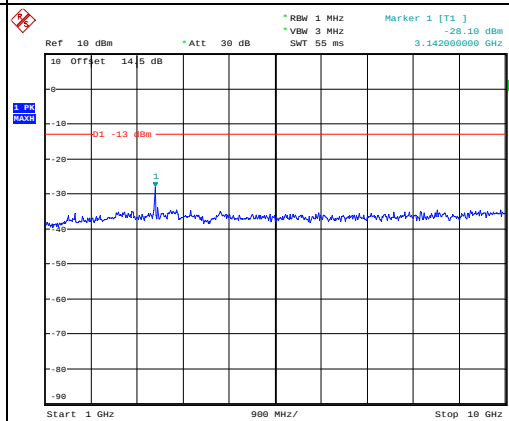
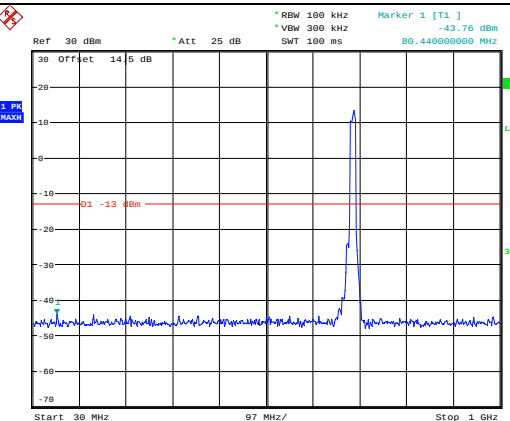
Lowest



Middle



Highest

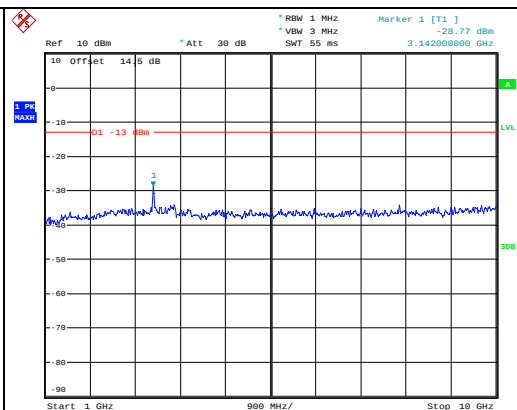
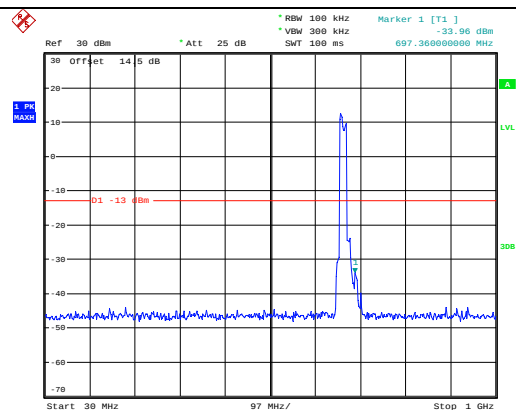


Spurious Emissions at Antenna Terminal

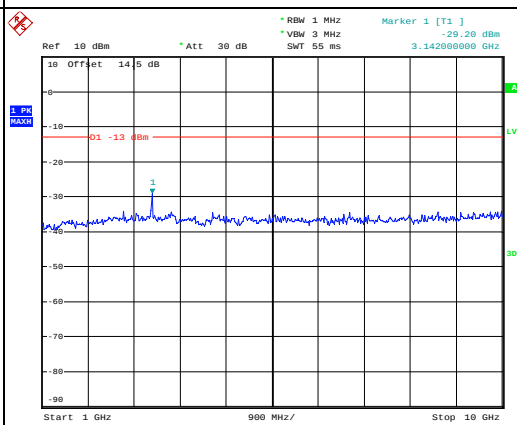
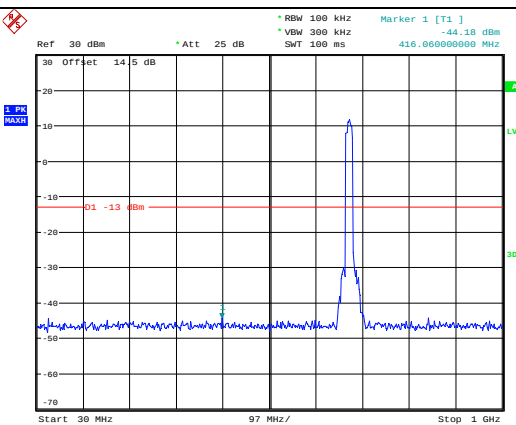
Channel

15MHz Bandwidth QPSK

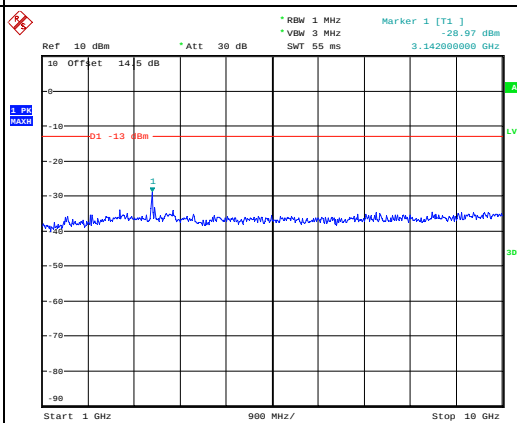
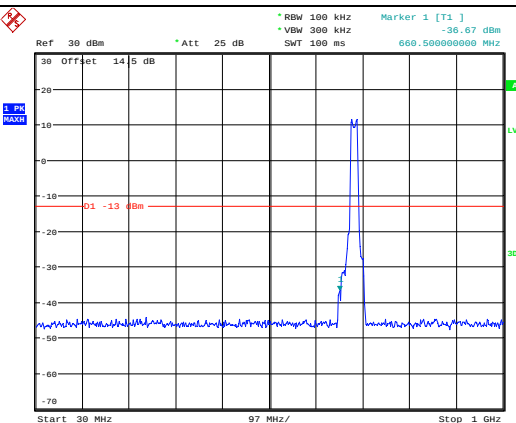
Lowest



Middle



Highest

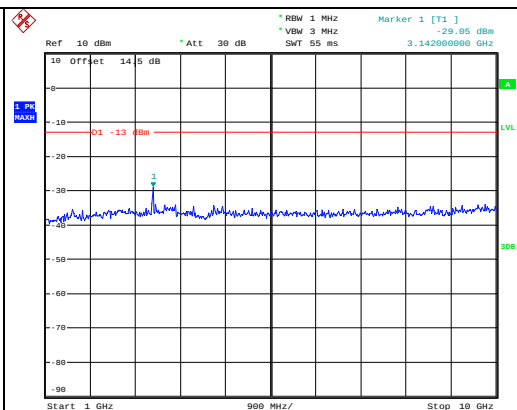
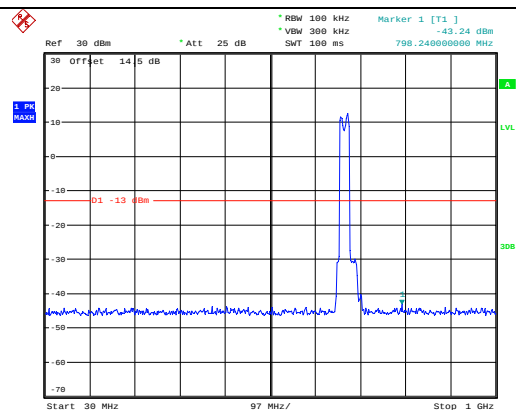


Spurious Emissions at Antenna Terminal

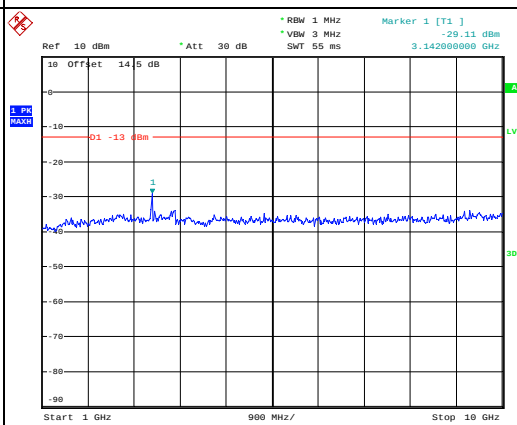
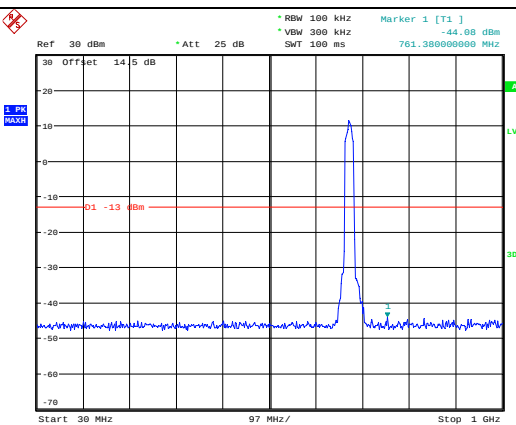
Channel

20MHz Bandwidth QPSK

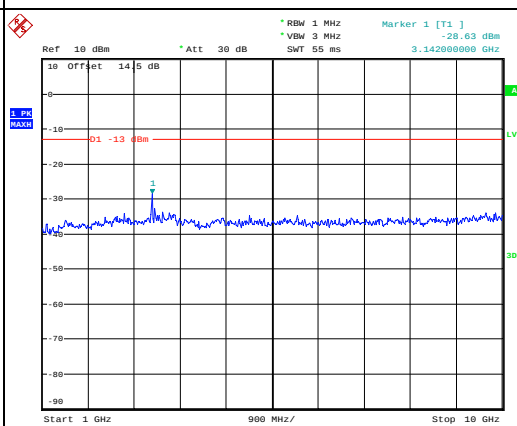
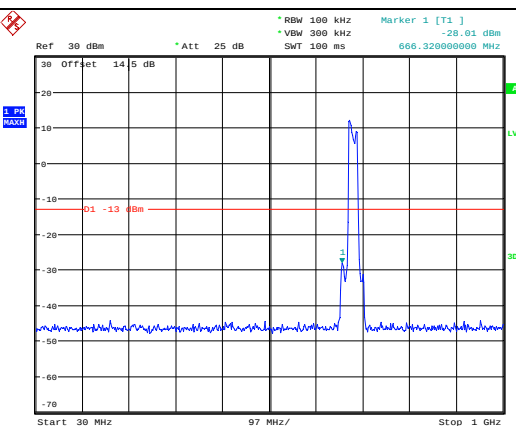
Lowest



Middle



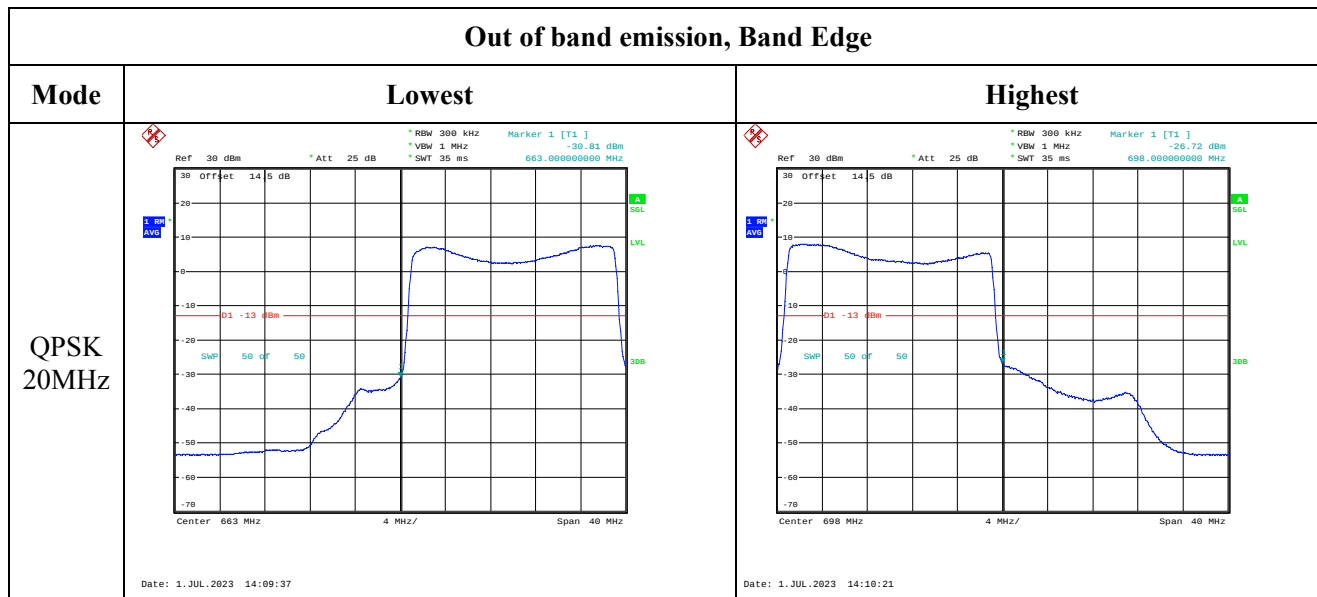
Highest



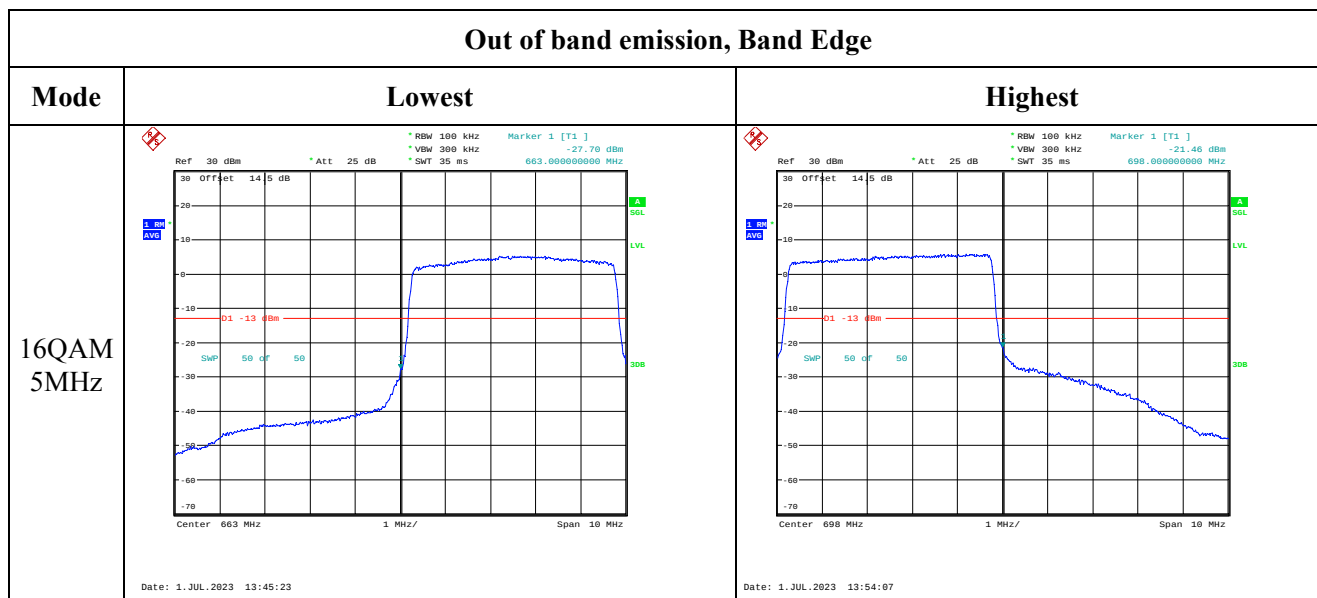
Out of band emission, Band Edge

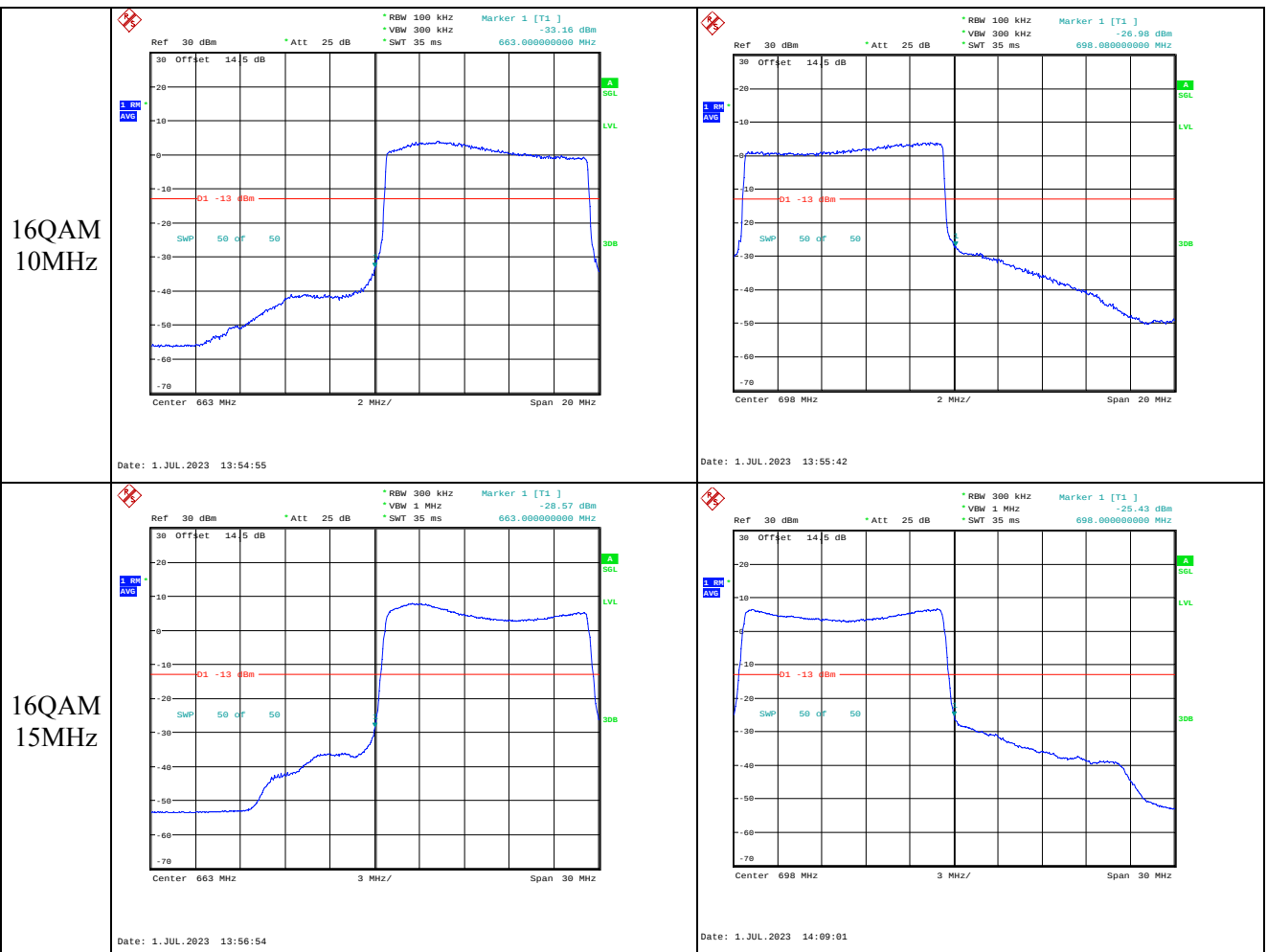
Mode	Lowest	Highest
QPSK 5MHz	Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VSW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -26.29 dBm, 663.000000000 MHz Center: 663 MHz, Span: 10 MHz Date: 1.JUL.2023 13:45:14	Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VSW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -21.17 dBm, 698.000000000 MHz Center: 698 MHz, Span: 10 MHz Date: 1.JUL.2023 13:53:54
QPSK 10MHz	Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VSW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -32.00 dBm, 662.960000000 MHz Center: 663 MHz, Span: 20 MHz Date: 1.JUL.2023 13:54:43	Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VSW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -25.44 dBm, 698.040000000 MHz Center: 698 MHz, Span: 20 MHz Date: 1.JUL.2023 13:55:30
QPSK 15MHz	Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VSW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -27.85 dBm, 663.000000000 MHz Center: 663 MHz, Span: 30 MHz Date: 1.JUL.2023 13:56:45	Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VSW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -23.59 dBm, 698.000000000 MHz Center: 698 MHz, Span: 30 MHz Date: 1.JUL.2023 14:08:52

Out of band emission, Band Edge

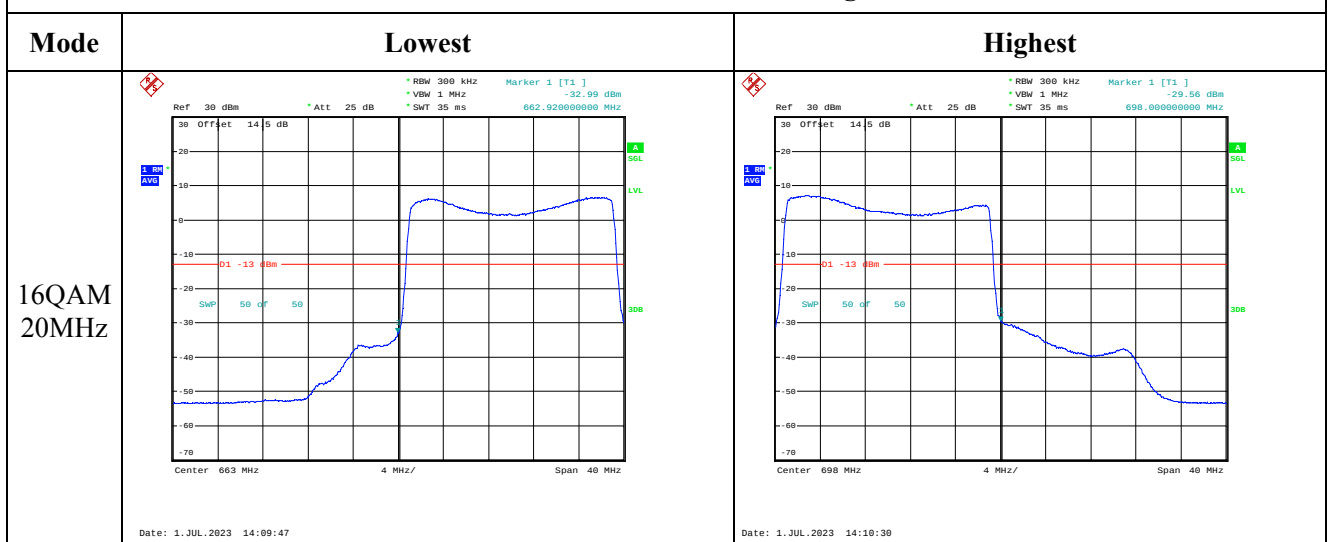


Out of band emission, Band Edge





Out of band emission, Band Edge



4.16 Radiated Spurious Emissions

Serial Number:	27A0-1	Test Date:	2023/6/27~2023/6/28
Test Site:	966-2,966-1	Test Mode:	Transmitting
Tester:	Vic Du,Mack Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5~27	Relative Humidity: (%)	59~70	ATM Pressure: (kPa)	100.2~100.4
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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	2023/03/31	2024/03/30
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2022/7/17	2023/7/16
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2022/7/17	2023/7/16
Sonoma	Amplifier	310N	186165	2022/7/17	2023/7/16
EMCO	Adjustable Dipole Antenna	3121C	9109-756	N/A	N/A
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022/7/17	2023/7/16
Agilent	Signal Generator	E8247C	MY43321352	2022/11/18	2023/11/17
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020/10/13	2023/10/12
R&S	Spectrum Analyzer	FSV40	101591	2023/03/31	2024/03/30
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2022/08/07	2023/08/06
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2022/08/07	2023/08/06
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2022/11/09	2023/11/08
AH	Double Ridge Guide Horn Antenna	SAS-571	1396	2021/10/18	2024/10/17
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022/07/17	2023/07/16
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021/02/05	2024/02/04
PASTERNAK	Horn Antenna	PE9852/2F-20	112001	2021/02/05	2024/02/04
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2022/09/16	2023/09/15
PASTERNAK	Horn Antenna	PE9850/2F-20	072001	2021/02/05	2024/02/04
PASTERNAK	Horn Antenna	PE9850/2F-20	072002	2021/02/05	2024/02/04
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2022/08/07	2023/08/06

*** 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.

Note: The device can be mounted in multiple orientations, test was performed with X, Y, Z Axis according to C63.26 figure 5, the worst orientation was photographed and it's data was recorded.

Cellular Band (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)			
GSM 850 Frequency:824.2MHz								
622.89	H	28.20	-45.54	0.00	0.48	-46.02	-13.00	33.02
622.89	V	36.49	-34.83	0.00	0.48	-35.31	-13.00	22.31
1648.400	H	41.34	-62.99	8.68	0.80	-55.11	-13.00	42.11
1648.400	V	44.45	-59.96	8.68	0.80	-52.08	-13.00	39.08
2472.600	H	60.73	-40.05	9.38	1.00	-31.67	-13.00	18.67
2472.600	V	58.08	-42.65	9.38	1.00	-34.27	-13.00	21.27
3296.800	H	42.75	-53.93	10.32	1.15	-44.76	-13.00	31.76
3296.800	V	40.57	-55.87	10.32	1.15	-46.70	-13.00	33.70
GSM 850 Frequency:836.6MHz								
755.39	H	26.95	-45.25	0.00	0.52	-45.77	-13.00	32.77
872.18	V	36.33	-30.25	0.00	0.59	-30.84	-13.00	17.84
1673.200	H	44.78	-59.53	8.71	0.85	-51.67	-13.00	38.67
1673.200	V	41.82	-62.59	8.71	0.85	-54.73	-13.00	41.73
2509.800	H	51.28	-49.33	9.42	1.01	-40.92	-13.00	27.92
2509.800	V	52.85	-47.77	9.42	1.01	-39.36	-13.00	26.36
3346.400	H	41.01	-56.16	10.34	1.16	-46.98	-13.00	33.98
3346.400	V	43.82	-53.21	10.34	1.16	-44.03	-13.00	31.03
GSM 850 Frequency:848.8MHz								
893.86	H	28.68	-40.25	0.00	0.66	-40.91	-13.00	27.91
640.61	V	42.05	-28.94	0.00	0.52	-29.46	-13.00	16.46
1697.600	H	47.89	-56.40	8.74	0.90	-48.56	-13.00	35.56
1697.600	V	41.41	-63.01	8.74	0.90	-55.17	-13.00	42.17
2546.400	H	59.59	-40.74	9.47	1.01	-32.28	-13.00	19.28
2546.400	V	51.24	-49.04	9.47	1.01	-40.58	-13.00	27.58
3395.200	H	39.11	-58.58	10.36	1.19	-49.41	-13.00	36.41
3395.200	V	43.07	-54.59	10.36	1.19	-45.42	-13.00	32.42

PCS Band (30MHz-20GHz)

1850 Band (GSM 1900)								
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)			
GSM 1900 Frequency:1850.2MHz								
144.33	H	54.54	-57.61	0.00	0.22	-57.83	-13.00	44.83
86.20	V	53.54	-55.51	0.00	0.17	-55.68	-13.00	42.68
3700.400	H	39.31	-58.01	10.60	1.25	-48.66	-13.00	35.66
3700.400	V	47.13	-50.17	10.60	1.25	-40.82	-13.00	27.82
5550.600	H	49.71	-43.55	11.44	1.49	-33.60	-13.00	20.60
5550.600	V	52.13	-40.97	11.44	1.49	-31.02	-13.00	18.02
GSM 1900 Frequency:1880MHz								
145.35	H	53.62	-58.49	0.00	0.23	-58.72	-13.00	45.72
86.50	V	53.01	-56.06	0.00	0.17	-56.23	-13.00	43.23
3760.000	H	41.57	-54.84	10.66	1.24	-45.42	-13.00	32.42
3760.000	V	44.83	-51.46	10.66	1.24	-42.04	-13.00	29.04
5640.000	H	50.33	-43.12	11.33	1.54	-33.33	-13.00	20.33
5640.000	V	43.85	-49.48	11.33	1.54	-39.69	-13.00	26.69
GSM 1900 Frequency:1909.8MHz								
142.82	H	52.27	-59.93	0.00	0.22	-60.15	-13.00	47.15
85.29	V	52.55	-56.43	0.00	0.17	-56.60	-13.00	43.60
3819.600	H	38.43	-57.43	10.72	1.29	-48.00	-13.00	35.00
3819.600	V	45.19	-50.53	10.72	1.29	-41.10	-13.00	28.10
5729.400	H	42.66	-50.82	11.22	1.59	-41.19	-13.00	28.19
5729.400	V	51.42	-41.94	11.22	1.59	-32.31	-13.00	19.31

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								
142.32	H	51.51	-60.71	0.00	0.21	-60.92	-13.00	47.92
86.20	V	53.93	-55.12	0.00	0.17	-55.29	-13.00	42.29
3704.800	H	35.46	-61.80	10.60	1.25	-52.45	-13.00	39.45
3704.800	V	36.02	-61.21	10.60	1.25	-51.86	-13.00	38.86
5557.200	H	43.44	-49.84	11.43	1.49	-39.90	-13.00	26.90
5557.200	V	41.17	-51.96	11.43	1.49	-42.02	-13.00	29.02
WCDMA Band II, Frequency:1880 MHz								
143.32	H	51.04	-61.14	0.00	0.22	-61.36	-13.00	48.36
85.90	V	50.70	-58.32	0.00	0.17	-58.49	-13.00	45.49
3760.000	H	36.44	-59.97	10.66	1.24	-50.55	-13.00	37.55
3760.000	V	35.21	-61.08	10.66	1.24	-51.66	-13.00	38.66
5640.000	H	43.57	-49.88	11.33	1.54	-40.09	-13.00	27.09
5640.000	V	42.71	-50.62	11.33	1.54	-40.83	-13.00	27.83
WCDMA Band II, Frequency:1907.6MHz								
141.33	H	51.78	-60.47	0.00	0.22	-60.69	-13.00	47.69
85.60	V	52.12	-56.88	0.00	0.17	-57.05	-13.00	44.05
3815.200	H	35.52	-60.33	10.72	1.29	-50.90	-13.00	37.90
3815.200	V	36.29	-59.40	10.72	1.29	-49.97	-13.00	36.97
5722.800	H	45.17	-48.32	11.23	1.58	-38.67	-13.00	25.67
5722.800	V	43.86	-49.49	11.23	1.58	-39.84	-13.00	26.84

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					
143.33	H	50.15	-62.03	0.00	0.22	-62.25	-13.00	49.25
86.81	V	50.00	-59.09	0.00	0.17	-59.26	-13.00	46.26
3424.800	H	35.12	-62.65	10.37	1.17	-53.45	-13.00	40.45
3424.800	V	35.56	-62.18	10.37	1.17	-52.98	-13.00	39.98
5137.200	H	36.85	-56.77	11.28	1.46	-46.95	-13.00	33.95
5137.200	V	37.02	-56.48	11.28	1.46	-46.66	-13.00	33.66
Frequency:			1732.6 MHz					
143.33	H	50.13	-62.05	0.00	0.22	-62.27	-13.00	49.27
86.20	V	47.63	-61.42	0.00	0.17	-61.59	-13.00	48.59
3465.200	H	36.33	-61.48	10.39	1.15	-52.24	-13.00	39.24
3465.200	V	36.12	-61.65	10.39	1.15	-52.41	-13.00	39.41
5197.800	H	35.78	-58.35	11.32	1.44	-48.47	-13.00	35.47
5197.800	V	36.01	-57.97	11.32	1.44	-48.09	-13.00	35.09
Frequency:			1752.6 MHz					
141.33	H	49.33	-62.92	0.00	0.22	-63.14	-13.00	50.14
85.30	V	48.62	-60.36	0.00	0.17	-60.53	-13.00	47.53
3505.200	H	35.85	-61.98	10.41	1.18	-52.75	-13.00	39.75
3505.200	V	36.47	-61.30	10.41	1.18	-52.07	-13.00	39.07
5257.800	H	36.59	-57.14	11.35	1.47	-47.26	-13.00	34.26
5257.800	V	36.11	-57.40	11.35	1.47	-47.52	-13.00	34.52

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								
875.25	H	26.83	-42.57	0.00	0.60	-43.17	-13.00	30.17
89.91	V	23.91	-53.84	0.00	0.18	-54.02	-13.00	41.02
1652.800	H	35.78	-68.55	8.68	0.81	-60.68	-13.00	47.68
1652.800	V	39.45	-64.96	8.68	0.81	-57.09	-13.00	44.09
2479.200	H	36.44	-64.32	9.39	1.01	-55.94	-13.00	42.94
2479.200	V	41.96	-58.77	9.39	1.01	-50.39	-13.00	37.39
3305.600	H	42.89	-53.84	10.32	1.15	-44.67	-13.00	31.67
3305.600	V	39.52	-56.98	10.32	1.15	-47.81	-13.00	34.81
WCDMA Band 5 Frequency:836.6MHz								
881.36	H	24.41	-44.83	0.00	0.59	-45.42	-13.00	32.42
884.45	V	35.39	-30.99	0.00	0.60	-31.59	-13.00	18.59
1673.200	H	38.27	-66.04	8.71	0.85	-58.18	-13.00	45.18
1673.200	V	41.50	-62.91	8.71	0.85	-55.05	-13.00	42.05
2509.800	H	41.11	-59.50	9.42	1.01	-51.09	-13.00	38.09
2509.800	V	38.26	-62.36	9.42	1.01	-53.95	-13.00	40.95
3346.400	H	46.70	-50.47	10.34	1.16	-41.29	-13.00	28.29
3346.400	V	40.35	-56.68	10.34	1.16	-47.50	-13.00	34.50
WCDMA Band 5 Frequency:846.6MHz								
893.81	H	25.72	-43.21	0.00	0.66	-43.87	-13.00	30.87
890.73	V	38.26	-28.02	0.00	0.64	-28.66	-13.00	15.66
1693.200	H	35.41	-68.89	8.73	0.89	-61.05	-13.00	48.05
1693.200	V	35.53	-68.89	8.73	0.89	-61.05	-13.00	48.05
2539.800	H	36.25	-64.13	9.46	1.01	-55.68	-13.00	42.68
2539.800	V	37.78	-62.56	9.46	1.01	-54.11	-13.00	41.11
3386.400	H	48.55	-49.04	10.35	1.18	-39.87	-13.00	26.87
3386.400	V	41.87	-55.67	10.35	1.18	-46.50	-13.00	33.50

LTE Bands:

(The Worst modulation and bandwidth was 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								
143.83	H	47.63	-64.54	0.00	0.22	-64.76	-13.00	51.76
86.81	V	50.56	-58.53	0.00	0.17	-58.70	-13.00	45.70
3701.400	H	35.25	-62.06	10.60	1.25	-52.71	-13.00	39.71
3701.400	V	35.41	-61.88	10.60	1.25	-52.53	-13.00	39.53
5552.100	H	45.18	-48.09	11.44	1.49	-38.14	-13.00	25.14
5552.100	V	44.86	-48.24	11.44	1.49	-38.29	-13.00	25.29
QPSK, 1.4MHz,Frequency:1880 MHz								
140.84	H	43.42	-68.85	0.00	0.22	-69.07	-13.00	56.07
87.71	V	49.87	-59.29	0.00	0.17	-59.46	-13.00	46.46
3760.000	H	36.44	-59.97	10.66	1.24	-50.55	-13.00	37.55
3760.000	V	35.12	-61.17	10.66	1.24	-51.75	-13.00	38.75
5640.000	H	47.27	-46.18	11.33	1.54	-36.39	-13.00	23.39
5640.000	V	45.73	-47.60	11.33	1.54	-37.81	-13.00	24.81
QPSK, 1.4MHz,Frequency:1909.3 MHz								
143.33	H	43.21	-68.97	0.00	0.22	-69.19	-13.00	56.19
88.96	V	50.92	-58.33	0.00	0.18	-58.51	-13.00	45.51
3818.600	H	36.78	-59.08	10.72	1.29	-49.65	-13.00	36.65
3818.600	V	35.04	-60.67	10.72	1.29	-51.24	-13.00	38.24
5727.900	H	44.46	-49.02	11.23	1.59	-39.38	-13.00	26.38
5727.900	V	42.58	-50.78	11.23	1.59	-41.14	-13.00	28.14

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								
143.33	H	43.46	-68.72	0.00	0.22	-68.94	-13.00	55.94
86.20	V	50.77	-58.28	0.00	0.17	-58.45	-13.00	45.45
3421.400	H	36.44	-61.32	10.37	1.17	-52.12	-13.00	39.12
3421.400	V	35.78	-61.95	10.37	1.17	-52.75	-13.00	39.75
5132.100	H	37.21	-56.36	11.28	1.47	-46.55	-13.00	33.55
5132.100	V	36.89	-56.57	11.28	1.47	-46.76	-13.00	33.76
1.4MHz QPSK, Frequency: 1732.5 MHz								
144.84	H	41.44	-70.69	0.00	0.23	-70.92	-13.00	57.92
88.65	V	42.13	-67.10	0.00	0.18	-67.28	-13.00	54.28
3465.000	H	36.12	-61.69	10.39	1.15	-52.45	-13.00	39.45
3465.000	V	35.78	-61.99	10.39	1.15	-52.75	-13.00	39.75
5197.500	H	38.25	-55.88	11.32	1.44	-46.00	-13.00	33.00
5197.500	V	39.67	-54.31	11.32	1.44	-44.43	-13.00	31.43
1.4MHz QPSK, Frequency: 1754.3 MHz								
142.32	H	43.00	-69.22	0.00	0.21	-69.43	-13.00	56.43
88.34	V	41.36	-67.85	0.00	0.17	-68.02	-13.00	55.02
3508.600	H	35.78	-62.04	10.41	1.19	-52.82	-13.00	39.82
3508.600	V	36.45	-61.31	10.41	1.19	-52.09	-13.00	39.09
5262.900	H	38.82	-54.88	11.36	1.47	-44.99	-13.00	31.99
5262.900	V	39.01	-54.46	11.36	1.47	-44.57	-13.00	31.57

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								
726.81	H	20.94	-51.84	0.00	0.52	-52.36	-13.00	39.36
872.18	V	27.52	-39.06	0.00	0.59	-39.65	-13.00	26.65
1649.400	H	41.76	-62.57	8.68	0.80	-54.69	-13.00	41.69
1649.400	V	42.67	-61.74	8.68	0.80	-53.86	-13.00	40.86
2474.100	H	49.18	-51.60	9.38	1.00	-43.22	-13.00	30.22
2474.100	V	50.30	-50.43	9.38	1.00	-42.05	-13.00	29.05
3298.800	H	47.29	-49.39	10.32	1.15	-40.22	-13.00	27.22
3298.800	V	43.88	-52.56	10.32	1.15	-43.39	-13.00	30.39
QPSK, 1.4MHz, Frequency: 836.5 MHz								
897.00	H	21.48	-47.37	0.00	0.65	-48.02	-13.00	35.02
884.50	V	26.60	-39.78	0.00	0.60	-40.38	-13.00	27.38
1673.000	H	43.95	-60.36	8.71	0.85	-52.50	-13.00	39.50
1673.000	V	41.51	-62.90	8.71	0.85	-55.04	-13.00	42.04
2509.500	H	45.20	-55.41	9.42	1.01	-47.00	-13.00	34.00
2509.500	V	47.01	-53.61	9.42	1.01	-45.20	-13.00	32.20
3346.000	H	48.80	-48.36	10.34	1.16	-39.18	-13.00	26.18
3346.000	V	46.24	-50.78	10.34	1.16	-41.60	-13.00	28.60
QPSK, 1.4MHz, Frequency: 848.3 MHz								
996.50	H	21.08	-45.33	0.00	0.64	-45.97	-13.00	32.97
893.86	V	28.05	-38.18	0.00	0.66	-38.84	-13.00	25.84
1696.600	H	44.38	-59.91	8.74	0.89	-52.06	-13.00	39.06
1696.600	V	42.04	-62.38	8.74	0.89	-54.53	-13.00	41.53
2544.900	H	41.01	-59.33	9.47	1.01	-50.87	-13.00	37.87
2544.900	V	45.68	-54.62	9.47	1.01	-46.16	-13.00	33.16
3393.200	H	51.62	-46.05	10.36	1.19	-36.88	-13.00	23.88
3393.200	V	47.03	-50.60	10.36	1.19	-41.43	-13.00	28.43

LTE Band 12(30MHz-10GHz):

THE DATA (Continued)								
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: 699.7 MHz								
359.43	H	19.21	-59.28	0.00	0.37	-59.65	-13.00	46.65
729.36	V	28.01	-41.27	0.00	0.53	-41.80	-13.00	28.80
1399.400	H	45.72	-57.98	8.22	0.71	-50.47	-13.00	37.47
1399.400	V	44.28	-59.47	8.22	0.71	-51.96	-13.00	38.96
2099.100	H	50.91	-50.97	9.16	0.91	-42.72	-13.00	29.72
2099.100	V	51.65	-50.18	9.16	0.91	-41.93	-13.00	28.93
2798.800	H	36.45	-63.48	9.88	1.04	-54.64	-13.00	41.64
2798.800	V	35.74	-64.06	9.88	1.04	-55.22	-13.00	42.22
QPSK, 1.4MHz, Frequency: 707.5 MHz								
726.81	H	21.10	-51.68	0.00	0.52	-52.20	-13.00	39.20
737.07	V	27.12	-41.99	0.00	0.54	-42.53	-13.00	29.53
1415.000	H	43.95	-59.72	8.26	0.72	-52.18	-13.00	39.18
1415.000	V	44.65	-59.07	8.26	0.72	-51.53	-13.00	38.53
2122.500	H	50.32	-51.67	9.17	0.92	-43.42	-13.00	30.42
2122.500	V	53.44	-48.53	9.17	0.92	-40.28	-13.00	27.28
2830.000	H	36.01	-63.79	9.93	1.06	-54.92	-13.00	41.92
2830.000	V	35.41	-64.32	9.93	1.06	-55.45	-13.00	42.45
QPSK, 1.4MHz, Frequency: 715.3 MHz								
785.09	H	21.09	-50.51	0.00	0.56	-51.07	-13.00	38.07
747.48	V	26.19	-42.69	0.00	0.55	-43.24	-13.00	30.24
1430.600	H	44.21	-59.42	8.31	0.73	-51.84	-13.00	38.84
1430.600	V	45.12	-58.57	8.31	0.73	-50.99	-13.00	37.99
2145.900	H	51.41	-50.69	9.19	0.93	-42.43	-13.00	29.43
2145.900	V	52.21	-49.90	9.19	0.93	-41.64	-13.00	28.64
2861.200	H	37.87	-61.78	9.98	1.07	-52.87	-13.00	39.87
2861.200	V	36.02	-63.65	9.98	1.07	-54.74	-13.00	41.74

LTE Band 17(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, 5MHz, Frequency: 706.5 MHz								
721.72	H	21.46	-51.42	0.00	0.50	-51.92	-13.00	38.92
524.73	V	20.85	-50.77	0.00	0.42	-51.19	-13.00	38.19
1413.000	H	36.01	-67.66	8.26	0.72	-60.12	-13.00	47.12
1413.000	V	38.11	-65.61	8.26	0.72	-58.07	-13.00	45.07
2119.500	H	38.12	-63.85	9.17	0.92	-55.60	-13.00	42.60
2119.500	V	39.24	-62.71	9.17	0.92	-54.46	-13.00	41.46
2826.000	H	35.78	-64.03	9.92	1.06	-55.17	-13.00	42.17
2826.000	V	36.27	-63.47	9.92	1.06	-54.61	-13.00	41.61
QPSK, 5MHz, Frequency:710 MHz								
790.62	H	21.32	-50.17	0.00	0.61	-50.78	-13.00	37.78
266.88	V	19.63	-59.48	0.00	0.31	-59.79	-13.00	46.79
1420.000	H	36.45	-67.21	8.28	0.73	-59.66	-13.00	46.66
1420.000	V	37.45	-66.26	8.28	0.73	-58.71	-13.00	45.71
2130.000	H	39.10	-62.92	9.18	0.92	-54.66	-13.00	41.66
2130.000	V	40.12	-61.89	9.18	0.92	-53.63	-13.00	40.63
2840.000	H	35.85	-63.90	9.94	1.06	-55.02	-13.00	42.02
2840.000	V	36.28	-63.43	9.94	1.06	-54.55	-13.00	41.55
QPSK, 5MHz, Frequency: 713.5 MHz								
636.13	H	20.79	-52.87	0.00	0.52	-53.39	-13.00	40.39
188.01	V	20.61	-57.58	0.00	0.26	-57.84	-13.00	44.84
1427.000	H	36.10	-67.54	8.30	0.73	-59.97	-13.00	46.97
1427.000	V	35.69	-68.00	8.30	0.73	-60.43	-13.00	47.43
2140.500	H	38.78	-63.29	9.18	0.93	-55.04	-13.00	42.04
2140.500	V	37.03	-65.05	9.18	0.93	-56.80	-13.00	43.80
2854.000	H	35.63	-64.06	9.97	1.07	-55.16	-13.00	42.16
2854.000	V	36.01	-63.67	9.97	1.07	-54.77	-13.00	41.77

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)			
QPSK, 1.4MHz, Frequency: 1850.7 MHz								
86.20	H	45.71	-66.09	0.00	0.17	-66.26	-13.00	53.26
88.65	V	49.72	-59.51	0.00	0.18	-59.69	-13.00	46.69
3701.400	H	36.77	-60.54	10.60	1.25	-51.19	-13.00	38.19
3701.400	V	36.25	-61.04	10.60	1.25	-51.69	-13.00	38.69
5552.100	H	45.19	-48.08	11.44	1.49	-38.13	-13.00	25.13
5552.100	V	42.98	-50.12	11.44	1.49	-40.17	-13.00	27.17
QPSK, 1.4MHz, Frequency:1882.5 MHz								
142.82	H	44.81	-67.39	0.00	0.22	-67.61	-13.00	54.61
86.81	V	49.93	-59.16	0.00	0.17	-59.33	-13.00	46.33
3765.000	H	36.34	-59.99	10.67	1.25	-50.57	-13.00	37.57
3765.000	V	35.12	-61.09	10.67	1.25	-51.67	-13.00	38.67
5647.500	H	44.78	-48.67	11.32	1.55	-38.90	-13.00	25.90
5647.500	V	43.56	-49.77	11.32	1.55	-40.00	-13.00	27.00
QPSK, 1.4MHz, Frequency: 1914.3 MHz								
144.33	H	44.37	-67.78	0.00	0.22	-68.00	-13.00	55.00
88.34	V	48.39	-60.82	0.00	0.17	-60.99	-13.00	47.99
3828.600	H	35.58	-60.32	10.73	1.28	-50.87	-13.00	37.87
3828.600	V	36.24	-59.53	10.73	1.28	-50.08	-13.00	37.08
5742.900	H	45.08	-48.40	11.21	1.60	-38.79	-13.00	25.79
5742.900	V	43.41	-49.95	11.21	1.60	-40.34	-13.00	27.34

LTE Band 26 (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: 814.7MHz								
625.08	H	21.76	-51.96	0.00	0.48	-52.44	-13.00	39.44
89.90	V	22.45	-55.30	0.00	0.18	-55.48	-13.00	42.48
1629.400	H	49.20	-55.15	8.66	0.81	-47.30	-13.00	34.30
1629.400	V	50.16	-54.25	8.66	0.81	-46.40	-13.00	33.40
2444.100	H	46.31	-54.58	9.37	1.00	-46.21	-13.00	33.21
2444.100	V	57.23	-43.52	9.37	1.00	-35.15	-13.00	22.15
3258.800	H	41.60	-55.26	10.30	1.17	-46.13	-13.00	33.13
3258.800	V	41.07	-55.54	10.30	1.17	-46.41	-13.00	33.41
QPSK, 1.4MHz, Frequency:831.5 MHz								
719.31	H	21.37	-51.56	0.00	0.49	-52.05	-13.00	39.05
90.43	V	21.06	-56.61	0.00	0.18	-56.79	-13.00	43.79
1663.000	H	50.97	-53.35	8.70	0.83	-45.48	-13.00	32.48
1663.000	V	44.68	-59.73	8.70	0.83	-51.86	-13.00	38.86
2494.500	H	52.26	-48.44	9.40	1.01	-40.05	-13.00	27.05
2494.500	V	55.69	-45.02	9.40	1.01	-36.63	-13.00	23.63
3326.000	H	45.75	-51.20	10.33	1.16	-42.03	-13.00	29.03
3326.000	V	42.01	-54.76	10.33	1.16	-45.59	-13.00	32.59
QPSK, 1.4MHz, Frequency: 848.3 MHz								
726.81	H	22.38	-50.40	0.00	0.52	-50.92	-13.00	37.92
163.46	V	19.61	-57.39	0.00	0.24	-57.63	-13.00	44.63
1696.600	H	43.90	-60.39	8.74	0.89	-52.54	-13.00	39.54
1696.600	V	43.84	-60.58	8.74	0.89	-52.73	-13.00	39.73
2544.900	H	50.58	-49.76	9.47	1.01	-41.30	-13.00	28.30
2544.900	V	50.78	-49.52	9.47	1.01	-41.06	-13.00	28.06
3393.200	H	52.48	-45.19	10.36	1.19	-36.02	-13.00	23.02
3393.200	V	49.53	-48.10	10.36	1.19	-38.93	-13.00	25.93

LTE Band 41(30MHz-26.5GHz):

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: 2498.5 MHz								
207.85	H	36.16	-76.57	0.00	0.26	-76.83	-25.00	51.83
85.30	V	43.42	-65.56	0.00	0.17	-65.73	-25.00	40.73
4997.000	H	36.63	-56.31	11.20	1.48	-46.59	-25.00	21.59
4997.000	V	37.11	-55.69	11.20	1.48	-45.97	-25.00	20.97
7495.500	H	35.56	-54.23	10.90	1.94	-45.27	-25.00	20.27
7495.500	V	36.34	-53.95	10.90	1.94	-44.99	-25.00	19.99
QPSK, 5MHz, Frequency: 2593 MHz								
212.27	H	35.41	-77.24	0.00	0.26	-77.50	-25.00	52.50
84.70	V	40.61	-68.32	0.00	0.17	-68.49	-25.00	43.49
5186.000	H	36.62	-57.41	11.31	1.44	-47.54	-25.00	22.54
5186.000	V	35.77	-58.12	11.31	1.44	-48.25	-25.00	23.25
7779.000	H	36.39	-53.10	10.84	1.99	-44.25	-25.00	19.25
7779.000	V	36.45	-53.49	10.84	1.99	-44.64	-25.00	19.64
QPSK, 5MHz, Frequency: 2687.5 MHz								
225.31	H	36.07	-76.32	0.00	0.28	-76.60	-25.00	51.60
140.84	V	40.99	-67.02	0.00	0.22	-67.24	-25.00	42.24
5375.000	H	36.10	-57.41	11.43	1.49	-47.47	-25.00	22.47
5375.000	V	36.59	-56.91	11.43	1.49	-46.97	-25.00	21.97
8062.500	H	35.43	-52.79	10.81	2.12	-44.10	-25.00	19.10
8062.500	V	35.89	-52.83	10.81	2.12	-44.14	-25.00	19.14

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								
144.33	H	48.63	-63.52	0.00	0.22	-63.74	-13.00	50.74
88.96	V	51.23	-58.02	0.00	0.18	-58.20	-13.00	45.20
3421.400	H	39.81	-57.95	10.37	1.17	-48.75	-13.00	35.75
3421.400	V	37.45	-60.28	10.37	1.17	-51.08	-13.00	38.08
5132.100	H	43.76	-49.81	11.28	1.47	-40.00	-13.00	27.00
5132.100	V	45.31	-48.15	11.28	1.47	-38.34	-13.00	25.34
1.4MHz QPSK, Frequency: 1745 MHz								
145.35	H	46.99	-65.12	0.00	0.23	-65.35	-13.00	52.35
89.28	V	53.36	-55.92	0.00	0.18	-56.10	-13.00	43.10
3490.000	H	36.47	-61.37	10.40	1.17	-52.14	-13.00	39.14
3490.000	V	35.45	-62.33	10.40	1.17	-53.10	-13.00	40.10
5235.000	H	43.82	-50.08	11.34	1.46	-40.20	-13.00	27.20
5235.000	V	42.05	-51.66	11.34	1.46	-41.78	-13.00	28.78
1.4MHz QPSK, Frequency: 1779.3 MHz								
142.82	H	47.93	-64.27	0.00	0.22	-64.49	-13.00	51.49
89.59	V	50.99	-58.31	0.00	0.18	-58.49	-13.00	45.49
3558.600	H	37.44	-60.23	10.46	1.22	-50.99	-13.00	37.99
3558.600	V	36.56	-61.01	10.46	1.22	-51.77	-13.00	38.77
5337.900	H	42.78	-50.69	11.40	1.47	-40.76	-13.00	27.76
5337.900	V	41.16	-52.17	11.40	1.47	-42.24	-13.00	29.24

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								
958.97	H	20.59	-46.74	0.00	0.62	-47.36	-13.00	34.36
89.28	V	22.44	-55.28	0.00	0.18	-55.46	-13.00	42.46
1331.000	H	36.45	-66.58	8.03	0.76	-59.31	-13.00	46.31
1331.000	V	35.78	-67.58	8.03	0.76	-60.31	-13.00	47.31
1996.500	H	38.42	-63.74	9.10	0.89	-55.53	-13.00	42.53
1996.500	V	37.46	-64.08	9.10	0.89	-55.87	-13.00	42.87
2662.000	H	36.55	-63.41	9.66	1.06	-54.81	-13.00	41.81
2662.000	V	37.10	-62.78	9.66	1.06	-54.18	-13.00	41.18
5MHz QPSK, Frequency: 680.5 MHz								
570.61	H	20.76	-53.68	0.00	0.46	-54.14	-13.00	41.14
90.54	V	22.86	-54.79	0.00	0.18	-54.97	-13.00	41.97
1361.000	H	37.47	-65.86	8.11	0.77	-58.52	-13.00	45.52
1361.000	V	36.59	-66.94	8.11	0.77	-59.60	-13.00	46.60
2041.500	H	39.02	-63.01	9.12	0.91	-54.80	-13.00	41.80
2041.500	V	37.79	-63.85	9.12	0.91	-55.64	-13.00	42.64
2722.000	H	36.56	-63.41	9.76	1.05	-54.70	-13.00	41.70
2722.000	V	38.10	-61.81	9.76	1.05	-53.10	-13.00	40.10
5MHz QPSK, Frequency: 695.5 MHz								
524.84	H	21.25	-54.09	0.00	0.42	-54.51	-13.00	41.51
88.65	V	21.68	-56.00	0.00	0.18	-56.18	-13.00	43.18
1391.000	H	36.77	-66.85	8.19	0.72	-59.38	-13.00	46.38
1391.000	V	37.12	-66.58	8.19	0.72	-59.11	-13.00	46.11
2086.500	H	38.52	-63.39	9.15	0.91	-55.15	-13.00	42.15
2086.500	V	37.44	-64.35	9.15	0.91	-56.11	-13.00	43.11
2782.000	H	36.61	-63.33	9.85	1.05	-54.53	-13.00	41.53
2782.000	V	37.03	-62.80	9.85	1.05	-54.00	-13.00	41.00

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

==== END OF REPORT =====