

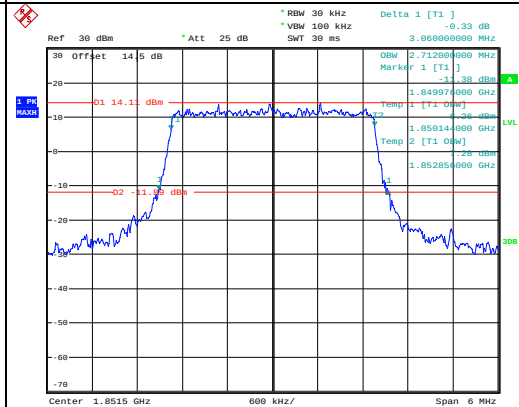
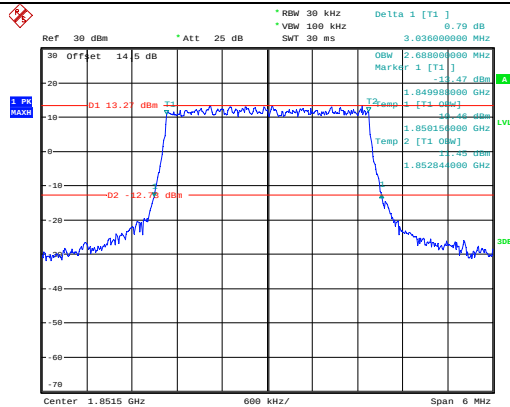
Occupied Bandwidth

Channel

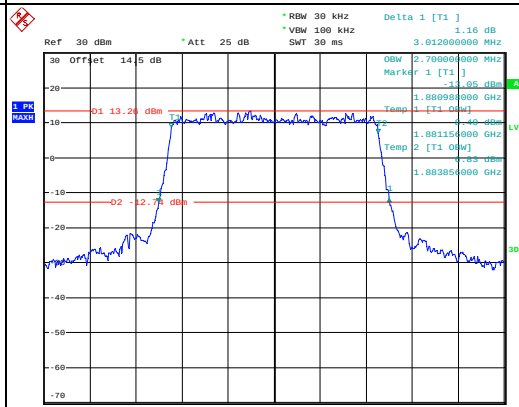
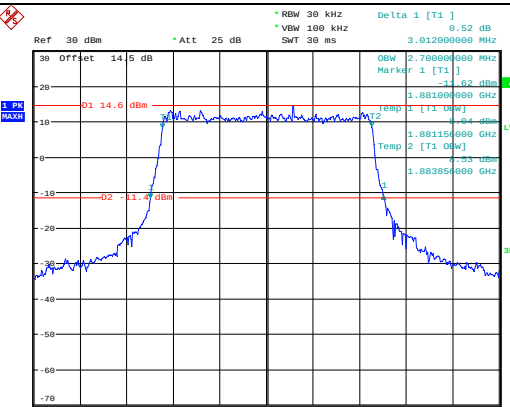
3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

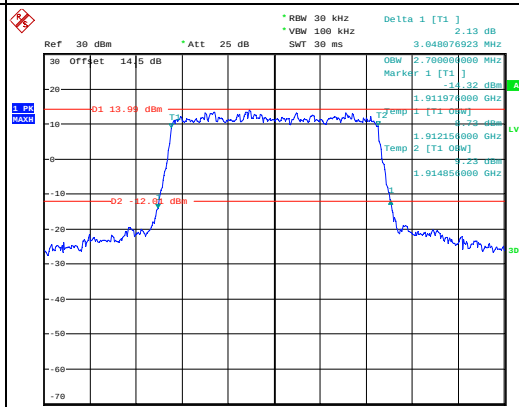
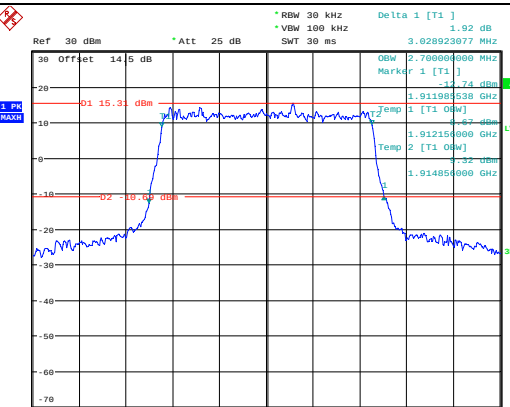
Lowest



Middle



Highest



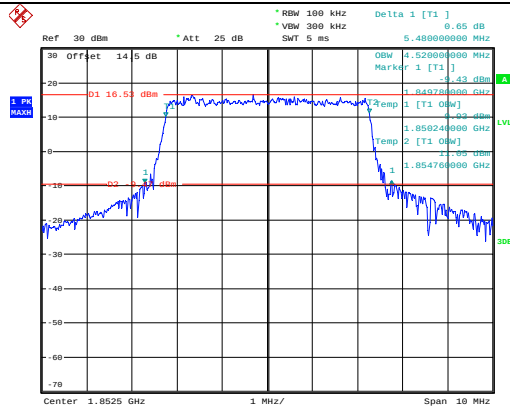
Occupied Bandwidth

Channel

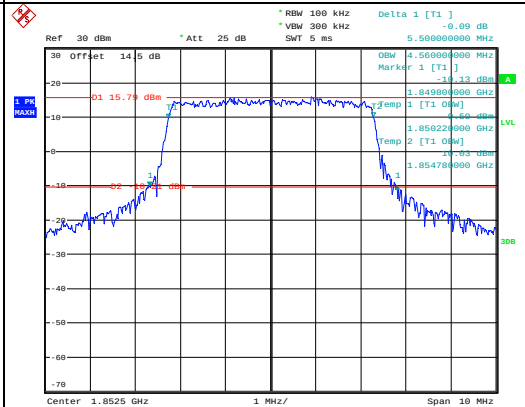
5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

Lowest

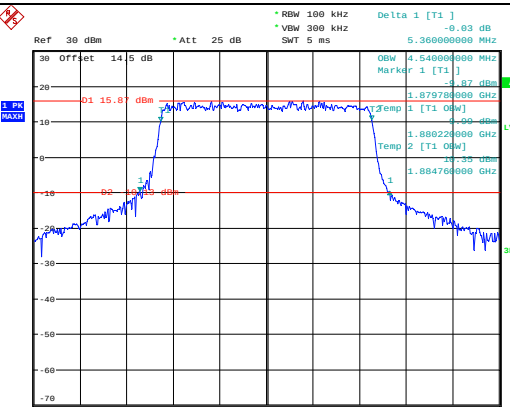


Date: 26.JUL.2023 14:29:14

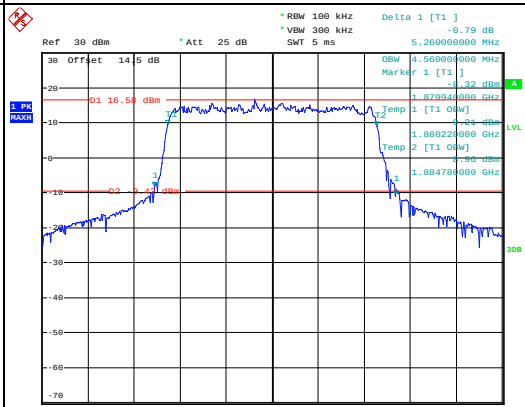


Date: 26.JUL.2023 14:29:45

Middle

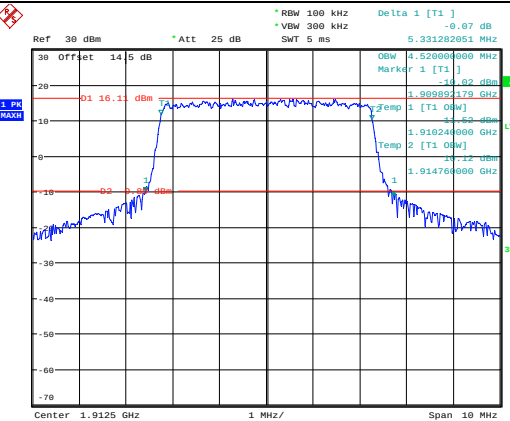


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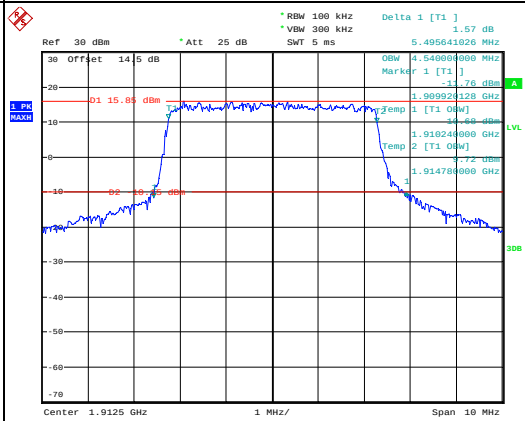


Date: 26.JUL.2023 14:30:40

Highest



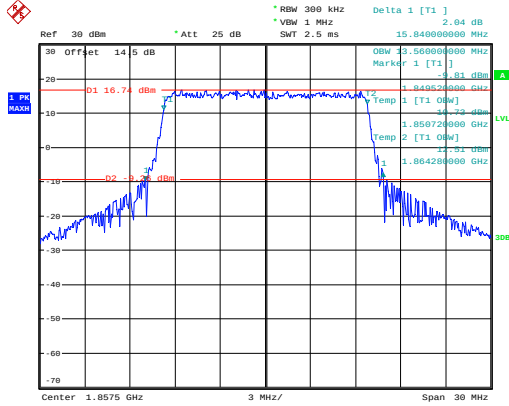
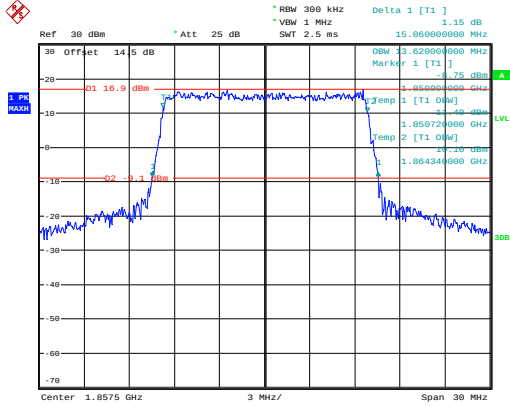
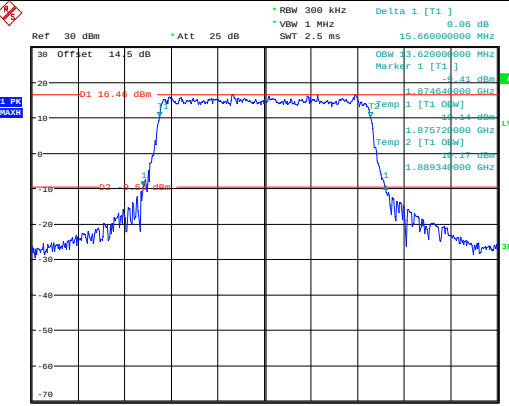
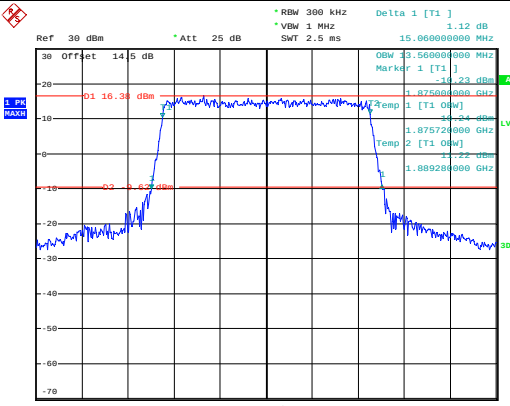
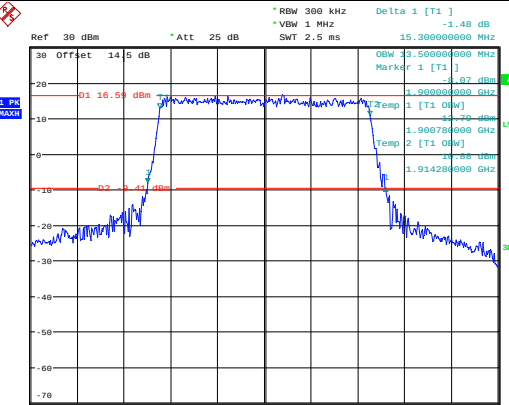
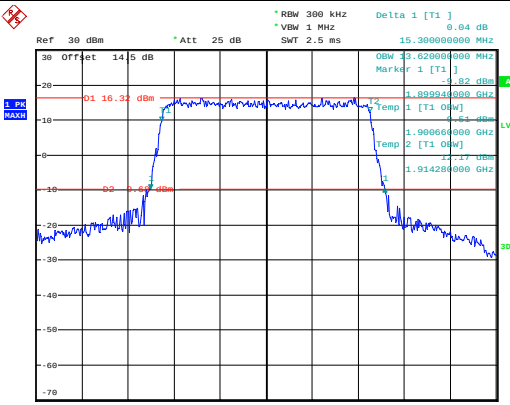
Date: 1.AUG.2023 10:38:43



Date: 1.AUG.2023 10:36:47

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] 0.04 dB VBW 1 MHz SWT 2.5 ms OBW 15.840000000 MHz Marker 1 [T1] -16.74 dBm 1.8575 GHz 1.8575 GHz 1.8575 GHz Center 1.8575 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:34:12	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.15 dB VBW 1 MHz SWT 2.5 ms OBW 15.860000000 MHz Marker 1 [T1] -16.9 dBm 1.8575 GHz 1.8575 GHz 1.8575 GHz Center 1.8575 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:34:34
Middle	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.06 dB VBW 1 MHz SWT 2.5 ms OBW 15.660000000 MHz Marker 1 [T1] -16.44 dBm 1.8825 GHz 1.8825 GHz 1.8825 GHz Center 1.8825 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:35:00	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.12 dB VBW 1 MHz SWT 2.5 ms OBW 15.660000000 MHz Marker 1 [T1] -16.38 dBm 1.8825 GHz 1.8825 GHz 1.8825 GHz Center 1.8825 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:35:22
Highest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] -1.48 dB VBW 1 MHz SWT 2.5 ms OBW 15.300000000 MHz Marker 1 [T1] -16.59 dBm 1.9075 GHz 1.9075 GHz 1.9075 GHz Center 1.9075 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:35:42	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.94 dB VBW 1 MHz SWT 2.5 ms OBW 15.300000000 MHz Marker 1 [T1] -16.32 dBm 1.9075 GHz 1.9075 GHz 1.9075 GHz Center 1.9075 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:36:04

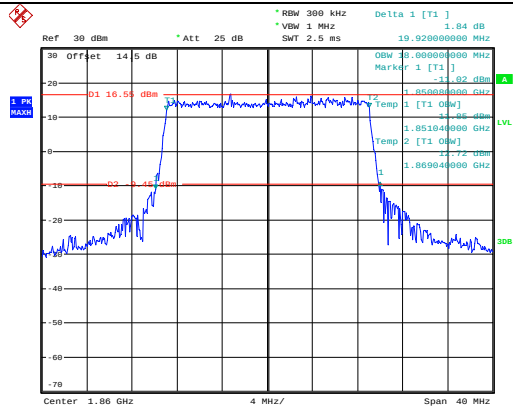
Occupied Bandwidth

Channel

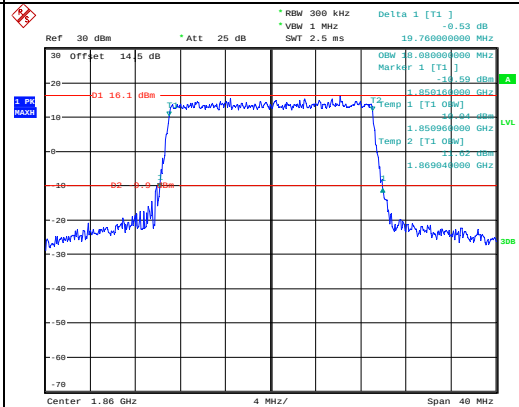
20MHz Bandwidth QPSK

20MHz Bandwidth 16QAM

Lowest

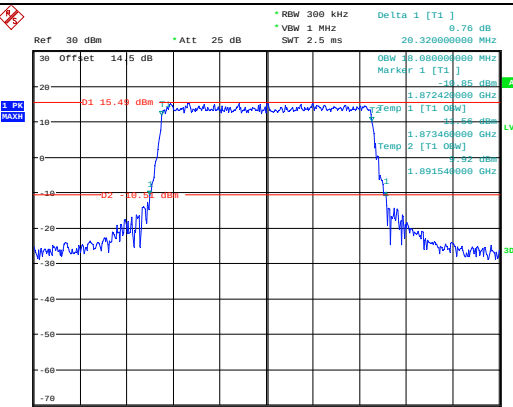


Date: 26.JUL.2023 14:36:28

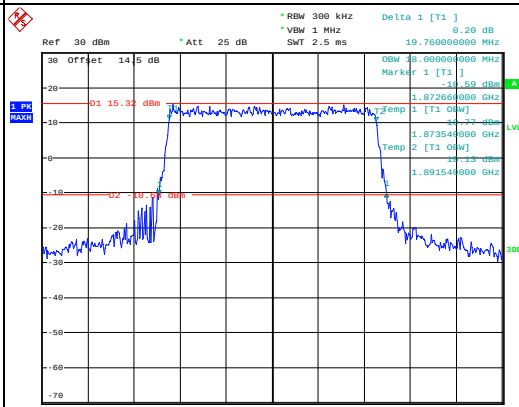


Date: 26.JUL.2023 14:36:50

Middle

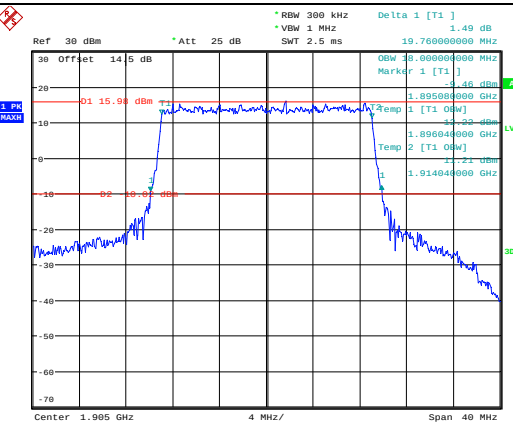


Date: 26.JUL.2023 14:37:16

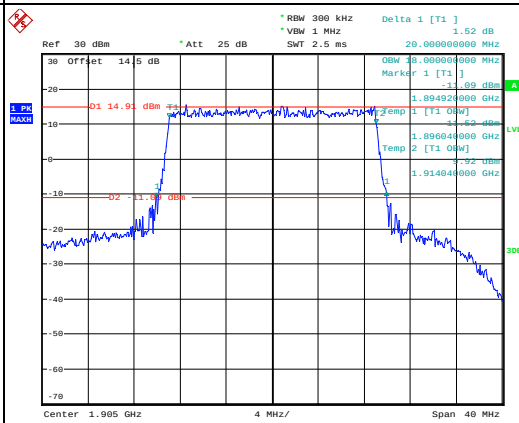


Date: 26.JUL.2023 14:37:34

Highest



Date: 26.JUL.2023 14:37:57



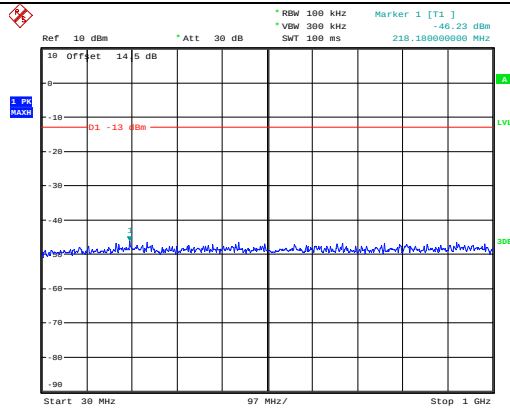
Date: 26.JUL.2023 14:38:16

Spurious Emissions at Antenna Terminal

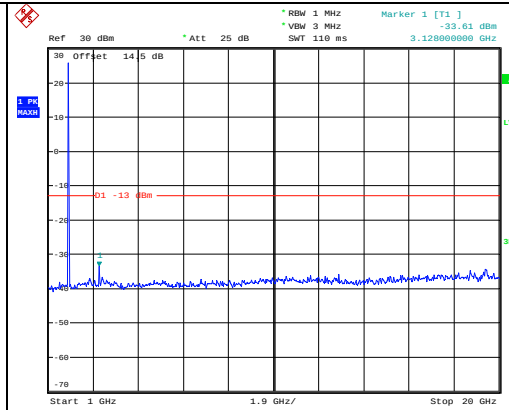
Channel

1.4MHz Bandwidth QPSK

Lowest

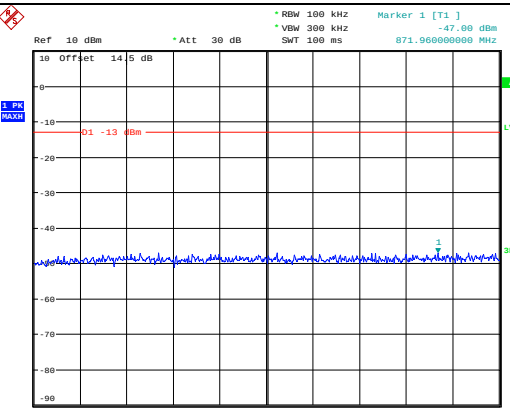


Date: 27.JUL.2023 13:43:35

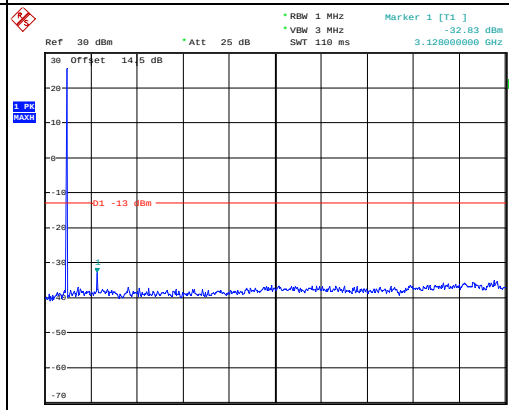


Date: 27.JUL.2023 13:43:46

Middle

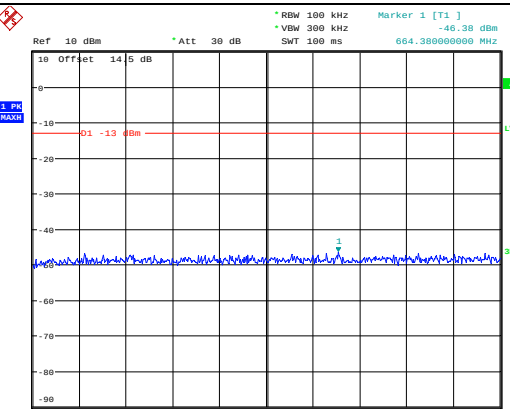


Date: 27.JUL.2023 13:44:00

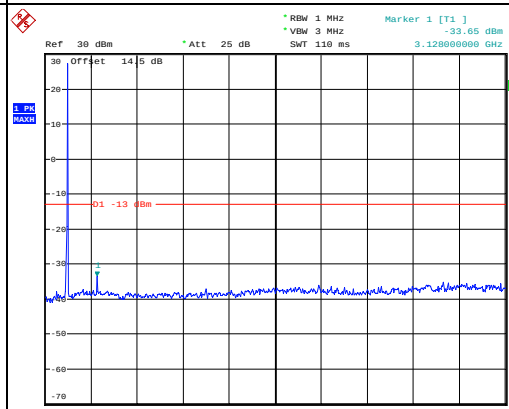


Date: 27.JUL.2023 13:44:11

Highest



Date: 27.JUL.2023 13:44:32



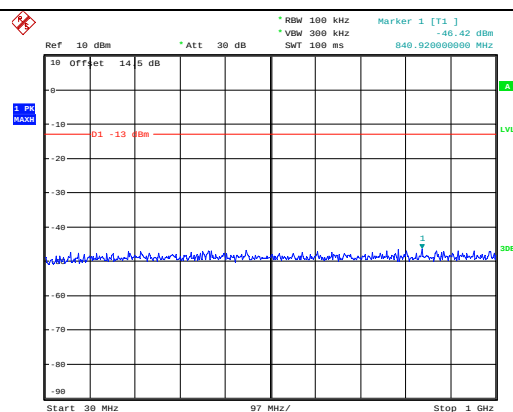
Date: 27.JUL.2023 13:44:43

Spurious Emissions at Antenna Terminal

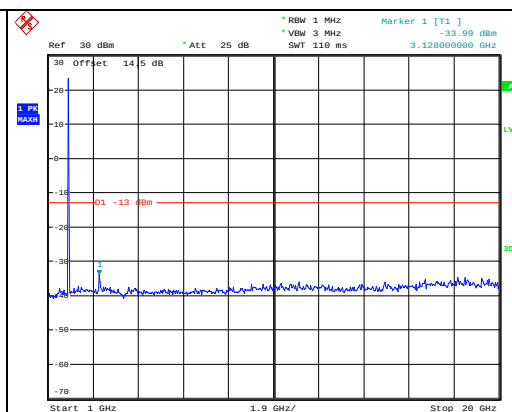
Channel

3MHz Bandwidth QPSK

Lowest

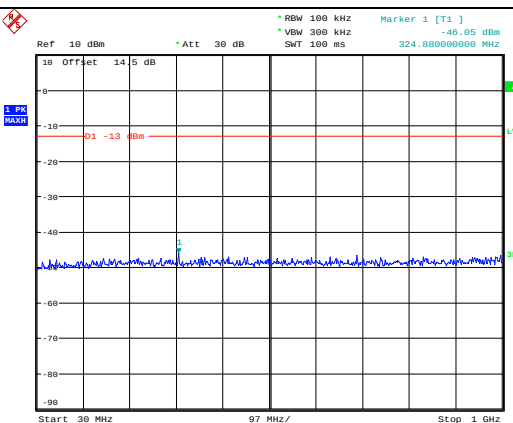


Date: 27.JUL.2023 13:45:00

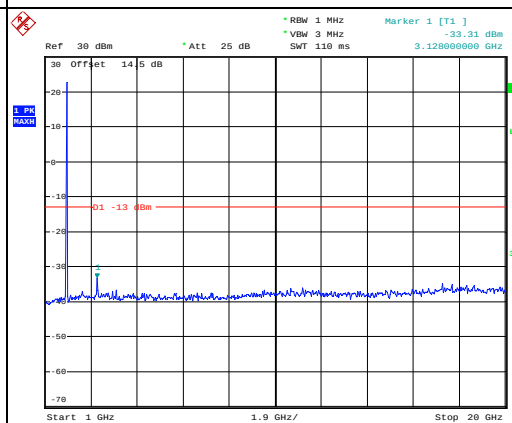


Date: 27.JUL.2023 13:45:11

Middle

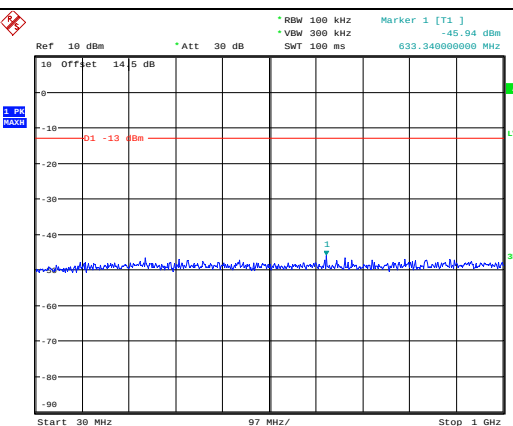


Date: 27.JUL.2023 13:45:28

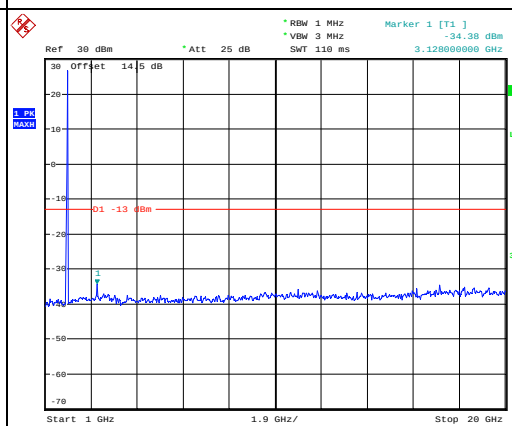


Date: 27.JUL.2023 13:45:39

Highest



Date: 27.JUL.2023 13:45:53



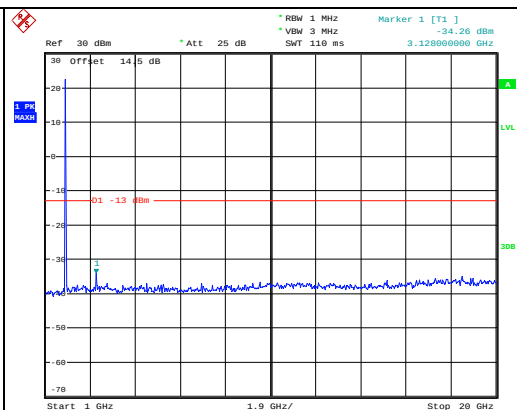
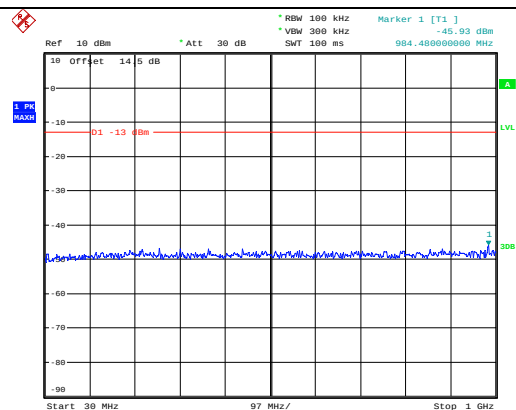
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Spurious Emissions at Antenna Terminal

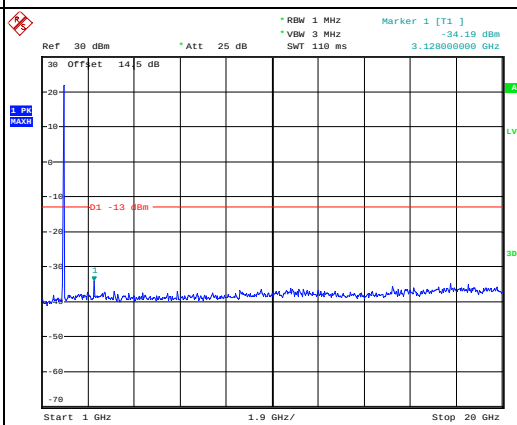
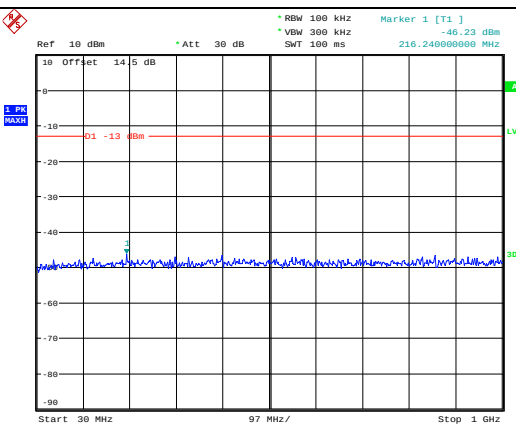
Channel

5MHz Bandwidth QPSK

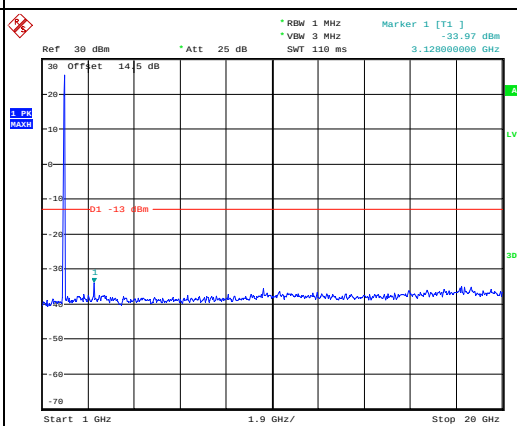
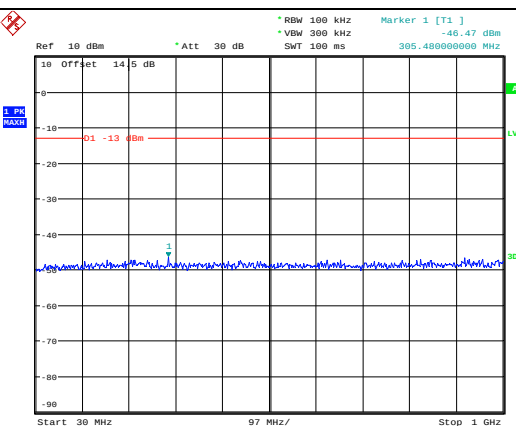
Lowest



Middle



Highest

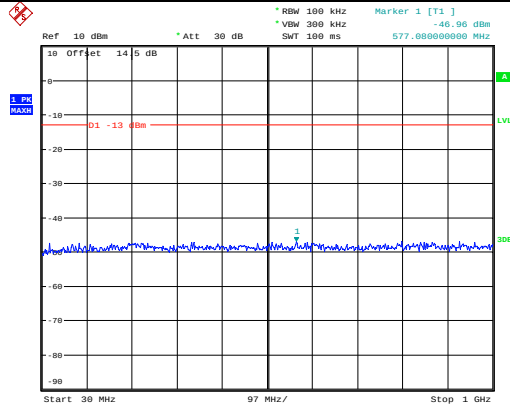


Spurious Emissions at Antenna Terminal

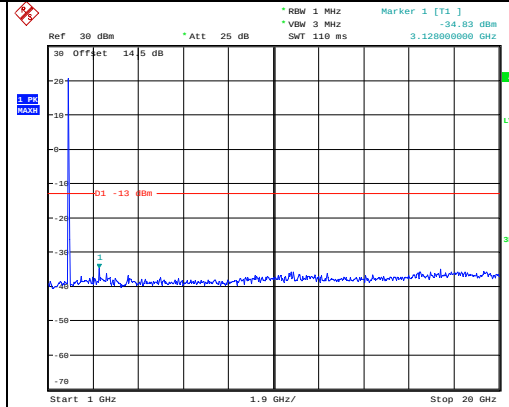
Channel

10MHz Bandwidth QPSK

Lowest

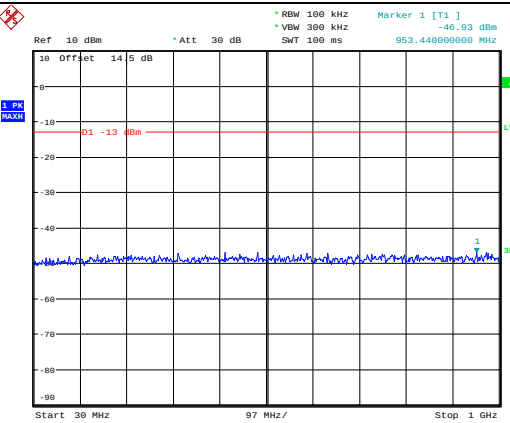


Date: 27.JUL.2023 13:47:49

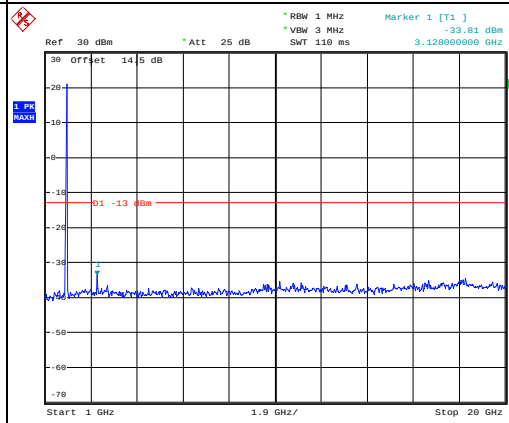


Date: 27.JUL.2023 13:48:00

Middle

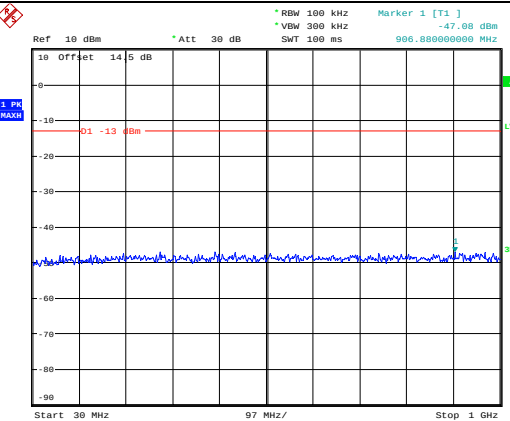


Date: 27.JUL.2023 13:48:13

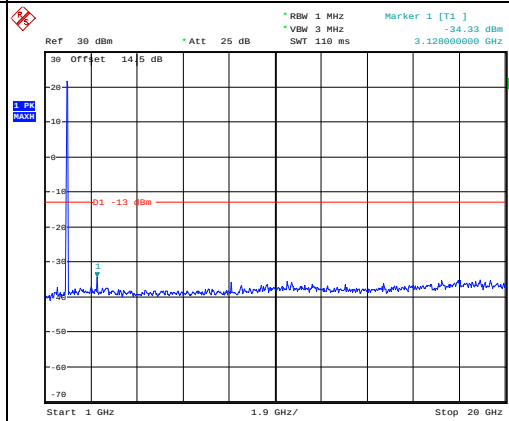


Date: 27.JUL.2023 13:48:25

Highest



Date: 27.JUL.2023 13:48:38



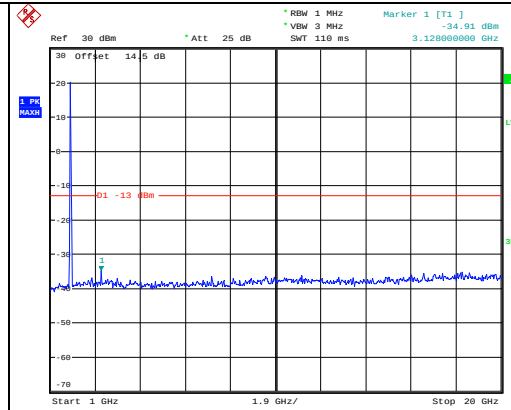
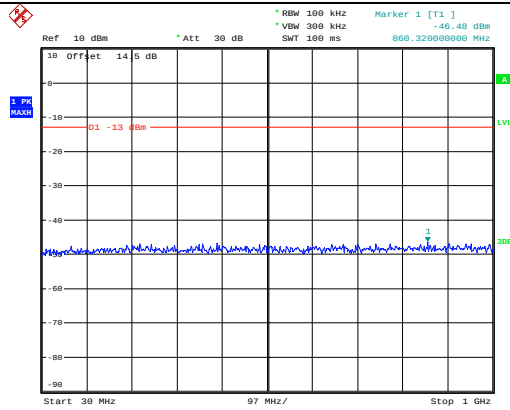
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Spurious Emissions at Antenna Terminal

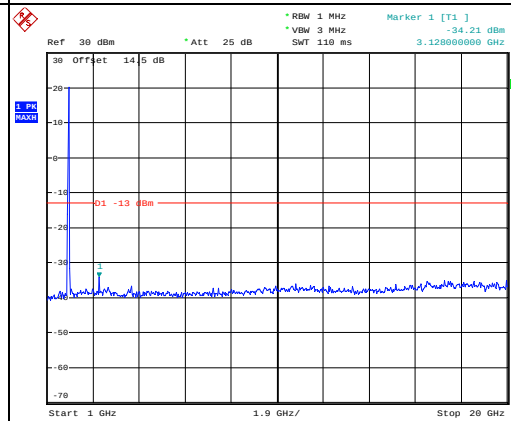
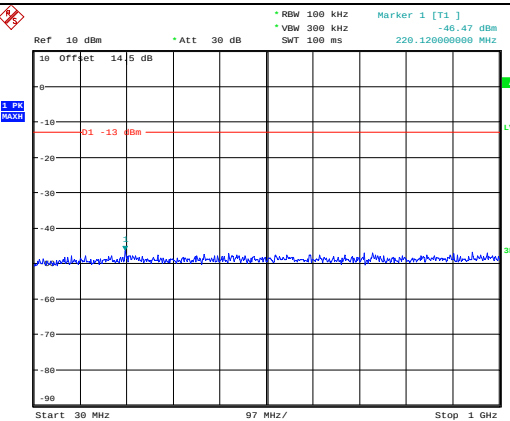
Channel

15MHz Bandwidth QPSK

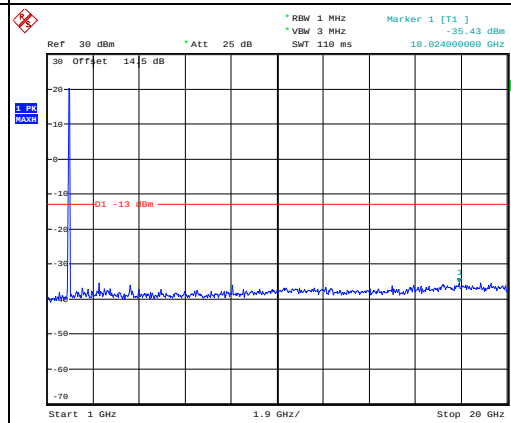
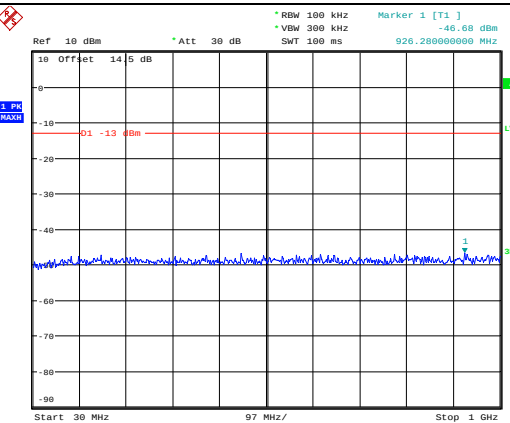
Lowest



Middle



Highest

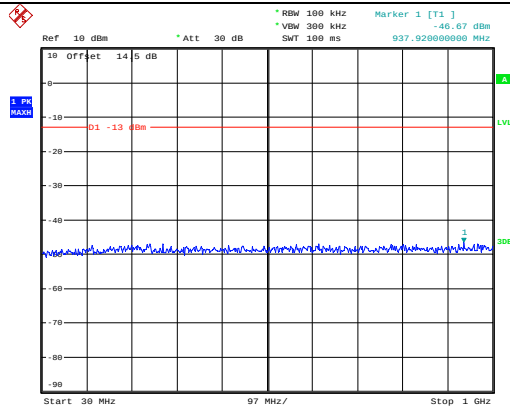


Spurious Emissions at Antenna Terminal

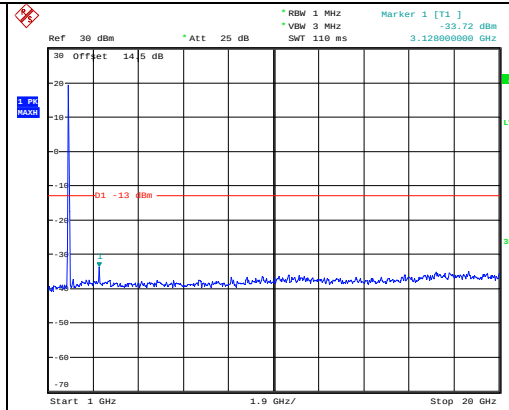
Channel

20MHz Bandwidth QPSK

Lowest

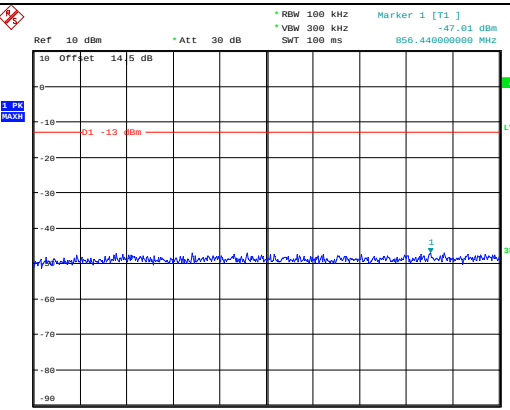


Date: 27.JUL.2023 13:50:31

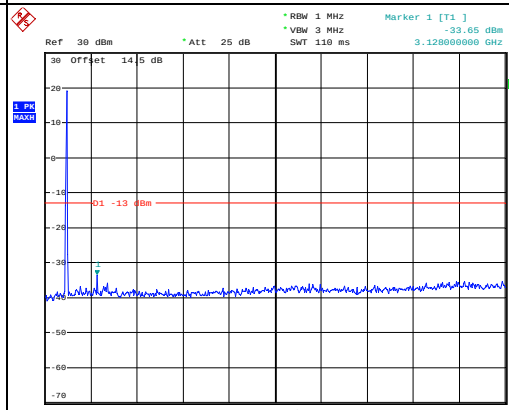


Date: 27.JUL.2023 13:50:45

Middle

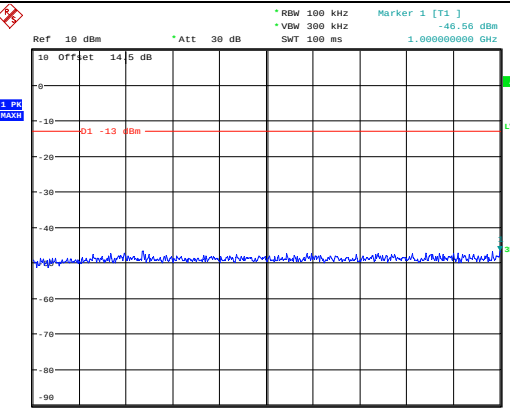


Date: 27.JUL.2023 13:50:59

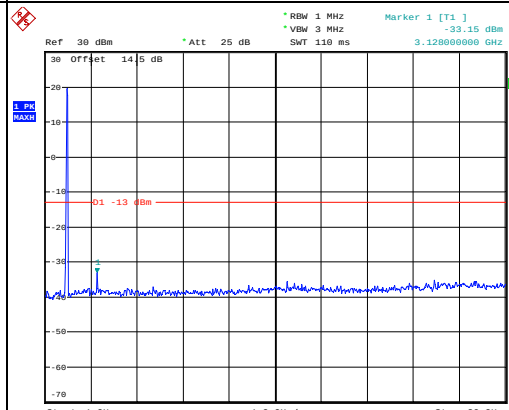


Date: 27.JUL.2023 13:51:10

Highest

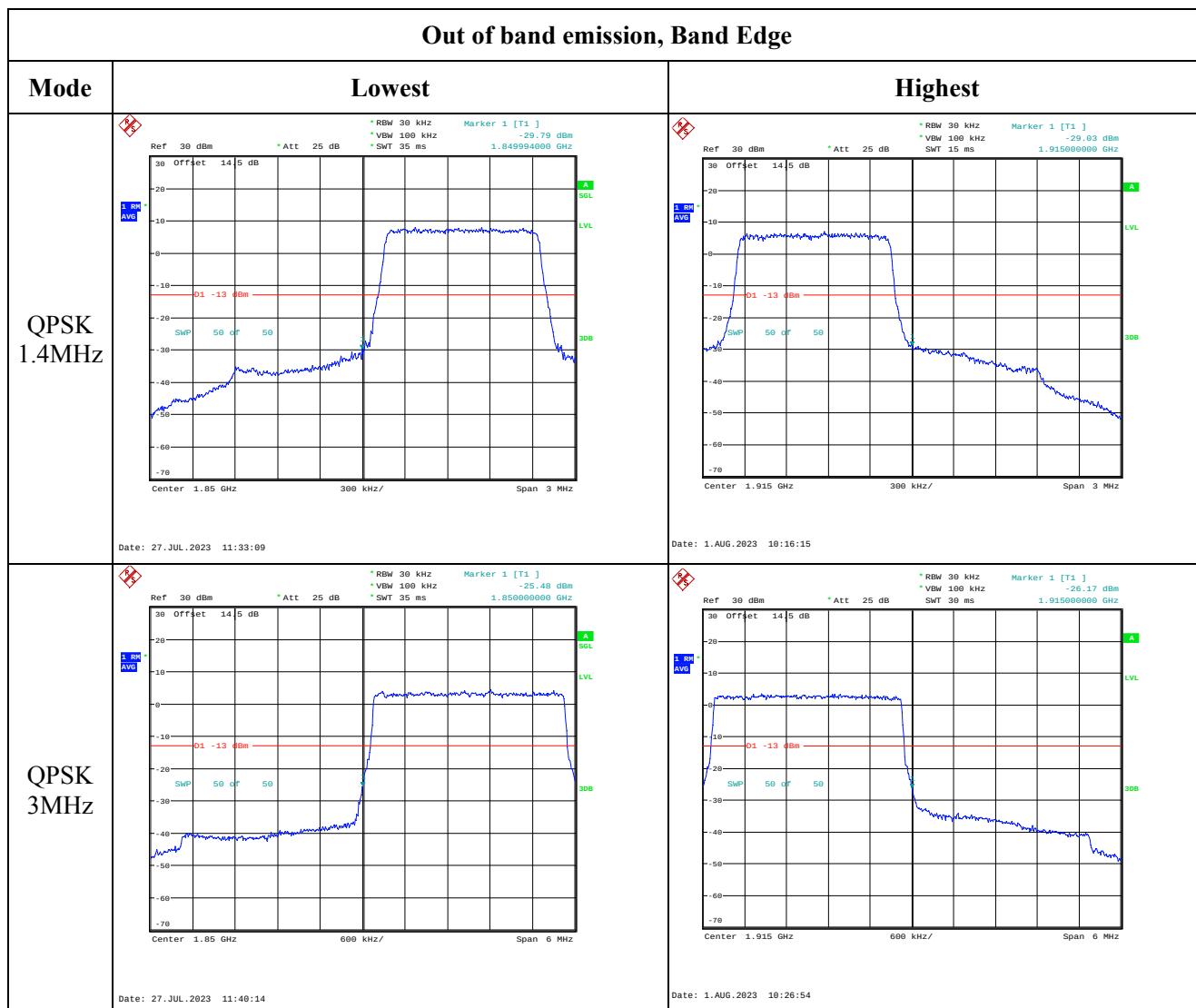


Date: 27.JUL.2023 13:51:24

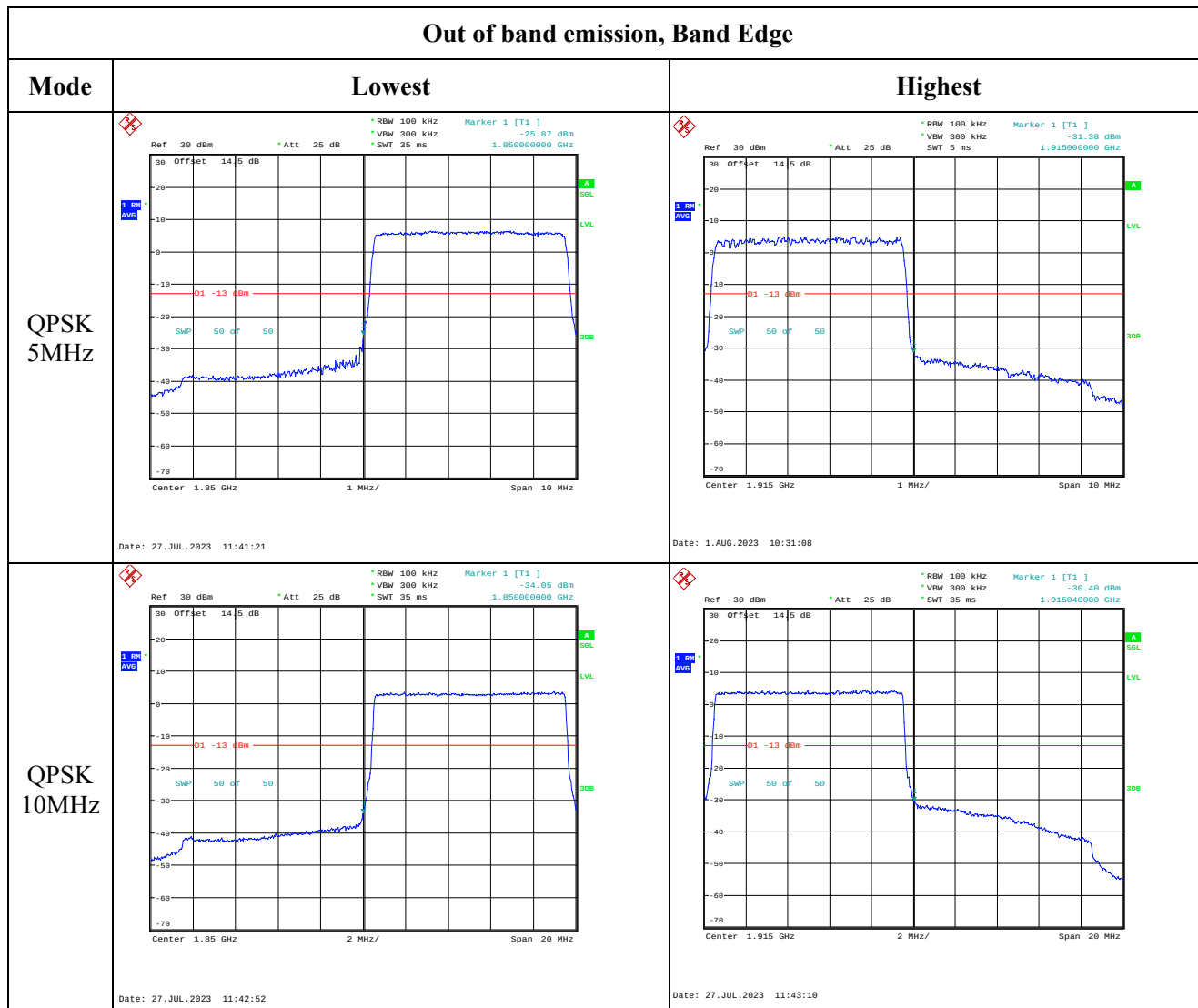


Date: 27.JUL.2023 13:51:35

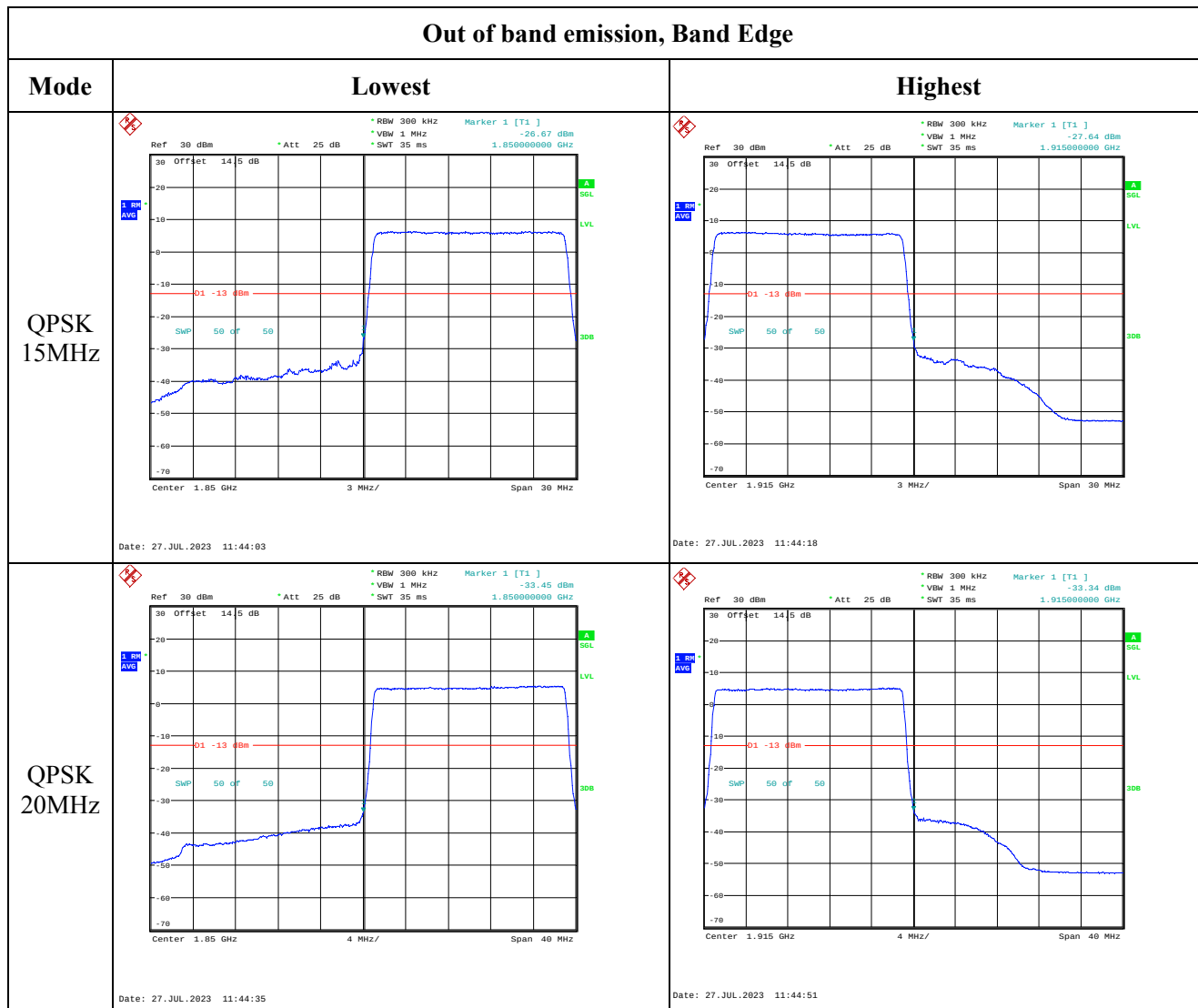
Out of band emission, Band Edge



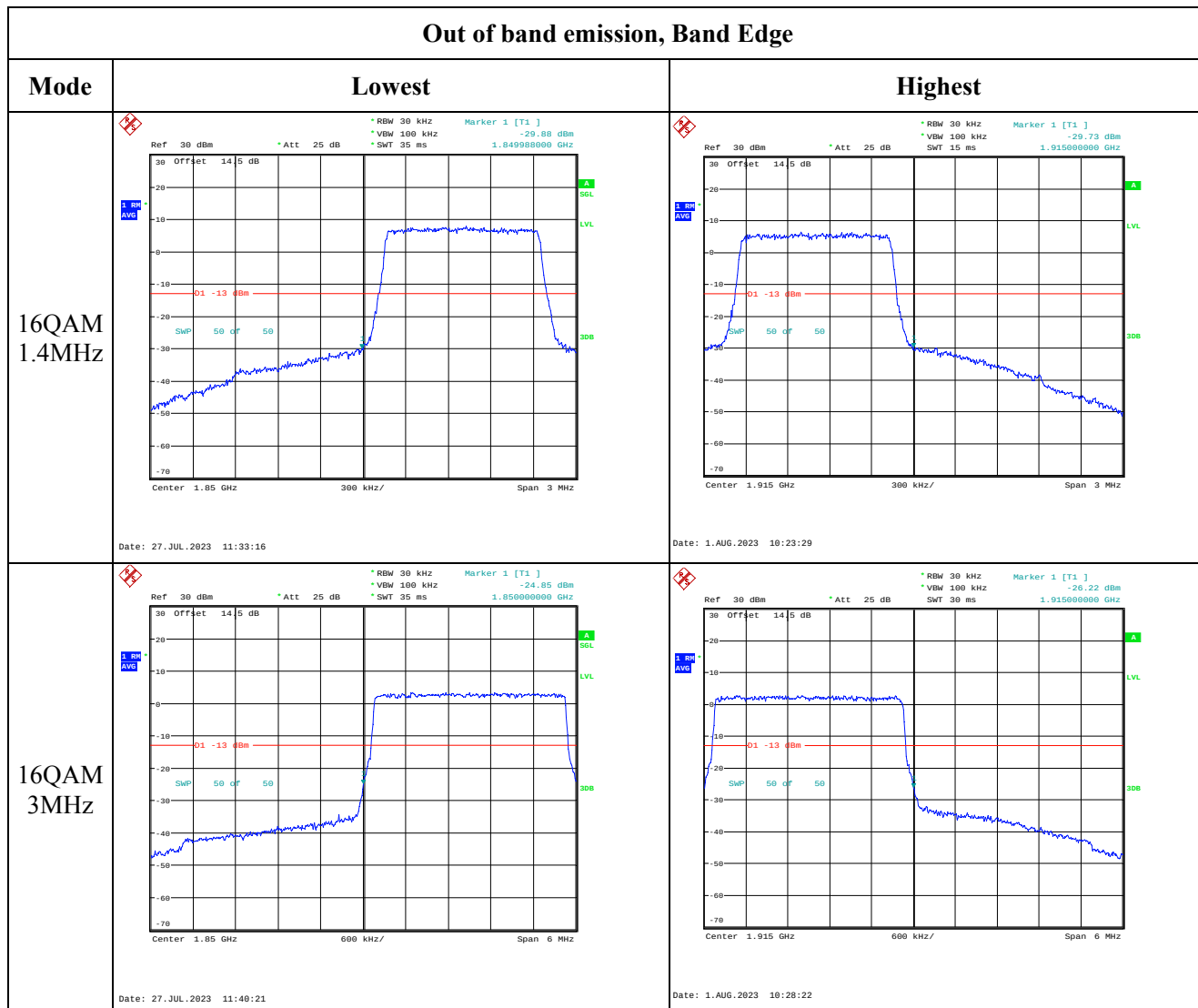
Out of band emission, Band Edge



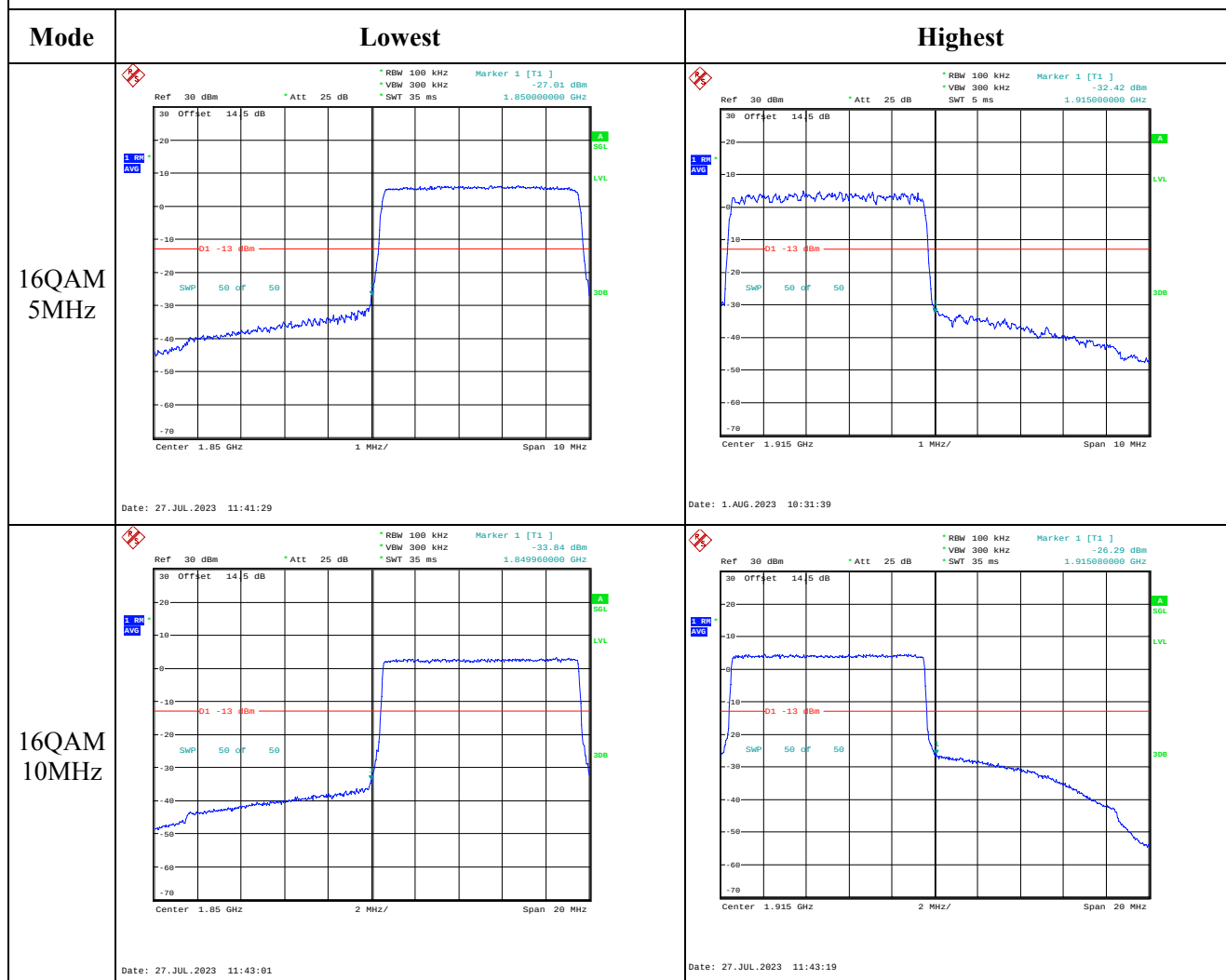
Out of band emission, Band Edge



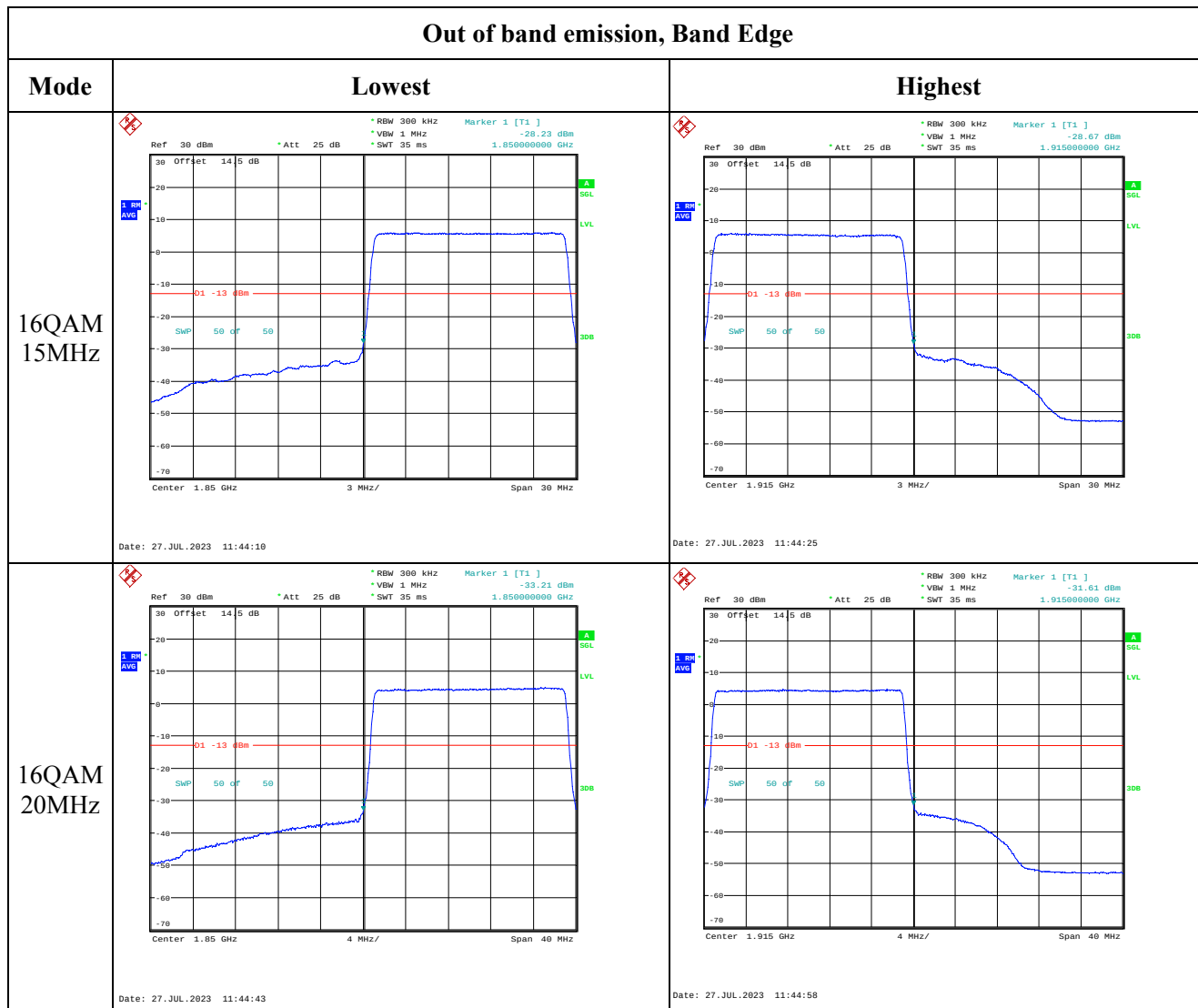
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.13 Antenna Port Test Data and Results for LTE Band 26

Serial Number:	27BI-1	Test Date:	2023/7/24-2023/7/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-26.3	Relative Humidity: (%)	46-62	ATM Pressure: (kPa)	99.7-100.6
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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
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	/
Weinschel	Power splitter	1515	RA915	Each time	/
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	/
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30

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

Test Frequency for Each Mode:

Operation Bandwidth	Lowest Frequency 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 For 90S	Highest Channel For 90S	Cross Channe	Lowest Frequency For 22H	Middle Frequency For 22H	Highest Frequency For 22H		
1.4MHz QPSK	RB1#0	23.5	23.51	23.18	23.11	23.75	23.51	22.41	38.45
	RB1#3	23.47	23.98	23.80	23.68	23.62	23.57		
	RB1#5	23.38	23.89	23.83	23.65	23.65	23.54		
	RB3#0	23.57	24.08	24.07	23.76	23.89	23.65		
	RB3#3	23.45	23.96	24.08	23.72	23.9	23.61		
	RB6#0	22.42	22.93	23.00	22.72	22.82	22.61		
1.4MHz 16QAM	RB1#0	23.25	23.76	22.59	23.56	22.41	23.45	22.12	38.45
	RB1#3	23.22	23.73	22.58	23.62	22.4	23.51		
	RB1#5	23.28	23.79	22.59	23.50	22.41	23.39		
	RB3#0	22.42	22.93	23.08	22.52	22.9	22.41		
	RB3#3	22.37	22.88	23.02	22.46	22.84	22.35		
	RB6#0	21.6	22.11	22.12	21.80	21.94	21.69		
3MHz QPSK	RB1#0	23.75	24.26	23.91	24.58	23.73	24.4	22.91	38.45
	RB1#8	23.68	24.19	24.01	24.43	23.83	24.25		
	RB1#14	23.85	24.36	24.05	24.38	23.87	24.2		
	RB6#0	22.8	24.26	23.91	24.51	22.91	23.42		
	RB6#9	22.83	24.19	24.01	24.36	23.01	23.19		
	RB15#0	22.81	24.36	24.05	24.31	22.94	23.27		
3MHz 16QAM	RB1#0	23.69	23.31	23.09	23.53	22.53	23.7	22.53	38.45
	RB1#8	23.54	23.34	23.19	23.30	22.45	23.61		
	RB1#14	23.62	23.32	23.12	23.38	22.6	23.44		
	RB6#0	21.86	24.20	22.71	23.81	22.11	22.37		
	RB6#9	21.9	24.05	22.63	23.72	22.14	22.37		
	RB15#0	21.88	24.13	22.78	23.55	21.96	22.42		
5MHz QPSK	RB1#0	23.45	22.37	22.29	22.48	23.59	24.35	22.68	38.45
	RB1#13	23.56	22.41	22.32	22.48	23.65	24.24		
	RB1#24	23.5	22.39	22.14	22.53	23.71	24.21		
	RB15#0	22.52	23.03	22.82	23.51	22.64	23.33		
	RB15#10	22.57	23.08	23.02	23.58	22.84	23.4		
	RB25#0	22.58	23.09	22.79	23.62	22.61	23.44		
5MHz 16QAM	RB1#0	22.56	23.96	23.77	24.46	22.4	22.49	22.79	38.45
	RB1#13	22.51	24.07	23.83	24.35	22.33	22.43		
	RB1#24	22.59	24.01	23.89	24.32	22.43	22.34		
	RB15#0	21.54	23.03	22.82	23.44	21.85	22.36		
	RB15#10	21.57	23.08	23.02	23.51	21.82	22.45		
	RB25#0	21.71	23.09	22.79	23.55	21.68	22.54		
10MHz QPSK	RB1#0	24.06	/	22.58	22.60	23.86	24.26	22.59	38.45
	RB1#25	23.92	/	22.51	22.54	23.77	24.18		
	RB1#49	23.99	/	22.61	22.45	23.9	24.21		
	RB25#0	22.92	/	22.03	22.47	22.81	23.44		
	RB25#25	22.94	/	22.00	22.56	22.99	23.48		
	RB50#0	23	/	21.86	22.65	22.8	23.33		
10MHz 16QAM	RB1#0	23.05	/	22.54	23.69	22.36	23.51	22.7	38.45

	RB1#25	23.07	/	22.46	23.72	22.28	23.54		
	RB1#49	23	/	22.68	23.66	22.5	23.48		
	RB25#0	22.2	/	24.04	24.37	21.97	22.44		
	RB25#25	22.16	/	23.95	24.29	22.09	22.49		
	RB50#0	22.14	/	24.08	24.32	21.92	22.57		
15MHz QPSK	RB1#0	24.1	/	22.99	23.55	24.28	23.96	22.61	38.45
	RB1#38	24.12	/	23.17	23.59	24.22	24.04		
	RB1#74	24.09	/	22.98	23.44	24.24	23.99		
	RB36#0	23.15	/	22.54	23.62	23.32	23.17		
	RB36#39	23	/	22.46	23.65	23.49	23.16		
	RB75#0	23.01	/	22.68	23.59	23.37	23.17		
15MHz 16QAM	RB1#0	23.11	/	22.15	22.55	23.76	23.32	22.09	38.45
	RB1#38	23.08	/	22.27	22.60	23.59	23.28		
	RB1#74	23.03	/	22.10	22.68	23.61	23.17		
	RB36#0	22.2	/	22.63	22.34	22.45	22.16		
	RB36#39	22.19	/	22.63	22.36	22.45	22.18		
	RB75#0	22.04	/	22.66	22.35	22.48	22.17		

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	5.38	5.42	5.99	13
	RB75#0	5.61	6.12	6.06	13
15MHz 16QAM	RB1#0	5.87	6.15	7.15	13
	RB75#0	6.63	7.02	6.99	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	1.104	1.110	1.110	1.104	1.110	1.110
1.4MHz 16QAM	1.098	1.110	1.110	1.116	1.110	1.110
3MHz QPSK	2.700	2.712	2.712	2.700	2.700	2.700
3MHz 16QAM	2.700	2.700	2.712	2.700	2.700	2.687
5MHz QPSK	4.540	4.540	4.540	4.560	4.540	4.540
5MHz 16QAM	4.560	4.580	4.540	4.580	4.560	4.520
10MHz QPSK	8.960	/	9.000	9.000	8.960	8.960
10MHz 16QAM	8.960	/	9.000	9.000	9.000	8.960
15MHz QPSK	13.500	/	13.680	13.500	13.500	13.560
15MHz 16QAM	13.560	/	13.620	13.560	13.560	13.560

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	1.290	1.319	1.296	1.326	1.284	1.302
1.4MHz 16QAM	1.308	1.351	1.271	1.274	1.272	1.302
3MHz QPSK	3.012	3.036	3.019	3.019	3.024	3.012
3MHz 16QAM	3.048	3.110	3.038	3.099	3.084	3.000
5MHz QPSK	5.160	5.420	5.469	5.344	5.560	5.300
5MHz 16QAM	5.320	5.467	5.338	5.455	5.360	5.200
10MHz QPSK	9.840	/	9.992	9.907	9.760	9.800
10MHz 16QAM	9.680	/	9.962	10.083	9.920	9.840
15MHz QPSK	15.180	/	15.604	15.660	15.424	15.180
15MHz 16QAM	15.240	/	15.324	15.120	15.207	14.940

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

FCC §2.1051, §22.917(a),§90.543:Spurious Emissions at Antenna Terminal

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

FCC §2.1051, §22.917(a),§90.543:Out of band emission, Band Edge

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

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	3.8	-0.37	0.000	2.5
	-20	3.8	8.87	0.011	2.5
	-10	3.8	8.69	0.010	2.5
	0	3.8	10.74	0.013	2.5
	10	3.8	-4.37	-0.005	2.5
	20	3.8	-4.54	-0.005	2.5
	30	3.8	9.83	0.012	2.5
	40	3.8	-5.95	-0.007	2.5
	50	3.8	-2.76	-0.003	2.5
Frequency Stability vs. Voltage	20	3.5	-5.06	-0.006	2.5
	20	4.35	8.89	0.011	2.5
Result:				Pass	

FCC §2.1055, §22.355, §90.213: Frequency Stability					
Test Modulation:	15 MHz 16QAM		Test Channel:	821.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.8	0.62	0.001	2.5
	-20	3.8	-4.42	-0.005	2.5
	-10	3.8	8.82	0.011	2.5
	0	3.8	9.70	0.012	2.5
	10	3.8	9.71	0.012	2.5
	20	3.8	-6.98	-0.008	2.5
	30	3.8	-5.09	-0.006	2.5
	40	3.8	-3.16	-0.004	2.5
	50	3.8	-5.87	-0.007	2.5
Frequency Stability vs. Voltage	20	3.5	-4.05	-0.005	2.5
	20	4.35	8.50	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	3.8	-1.28	-0.002	2.5
	-20	3.8	8.28	0.010	2.5
	-10	3.8	7.96	0.010	2.5
	0	3.8	10.07	0.012	2.5
	10	3.8	-5.21	-0.006	2.5
	20	3.8	-5.63	-0.007	2.5
	30	3.8	9.52	0.011	2.5
	40	3.8	-6.52	-0.008	2.5
	50	3.8	-3.47	-0.004	2.5
Frequency Stability vs. Voltage	20	3.5	-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 16QAM		Test Channel:	831.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.8	0.63	0.001	2.5
	-20	3.8	-4.82	-0.006	2.5
	-10	3.8	9.49	0.011	2.5
	0	3.8	9.84	0.012	2.5
	10	3.8	9.63	0.012	2.5
	20	3.8	-7.16	-0.009	2.5
	30	3.8	-4.92	-0.006	2.5
	40	3.8	-3.10	-0.004	2.5
	50	3.8	-6.13	-0.007	2.5
Frequency Stability vs. Voltage	20	3.5	-4.07	-0.005	2.5
	20	4.35	8.60	0.010	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

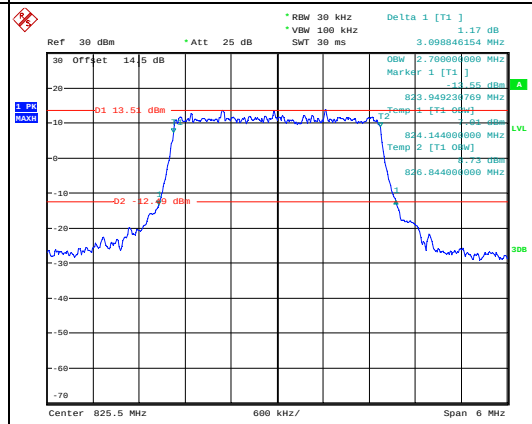
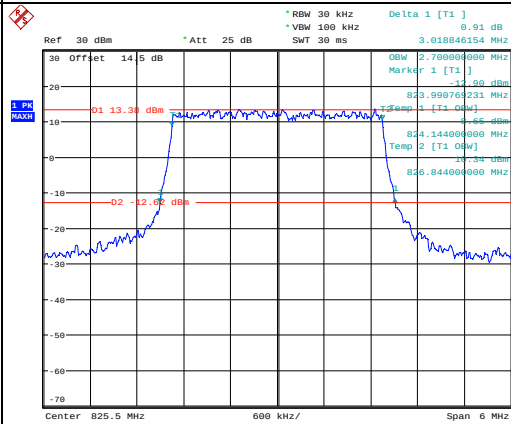
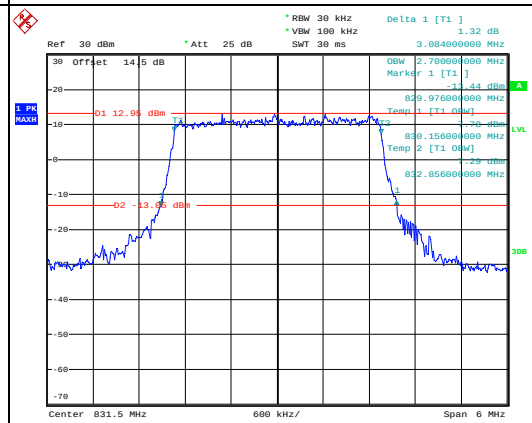
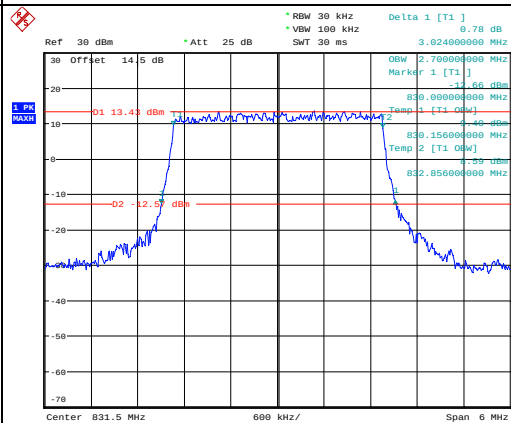
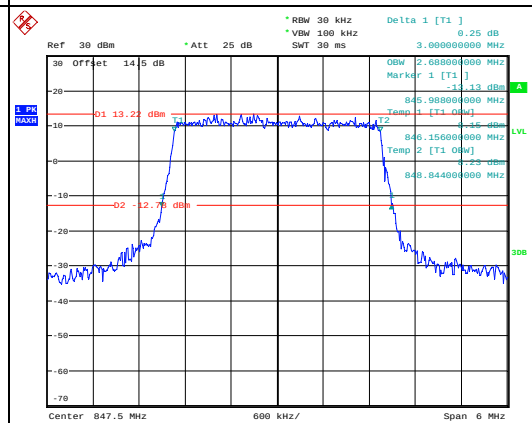
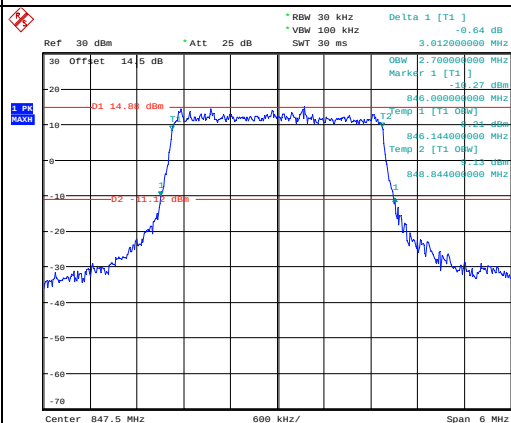
Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest For 90S	Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 15 ms, Delta 1 [T1]: 0.22 dB, Marker 1 [T1]: 1.29000000 MHz, OBW: 1.10000000 MHz, SNR: -9.98 dBm, LVL: -9.98 dBm, Temp 1 [T1]: 814.07000000 MHz, Temp 2 [T1]: 814.14000000 MHz, Temp 3 [T1]: 814.25000000 MHz, Center: 814.7 MHz, Span: 3 MHz, Date: 26 JUL 2023 14:38:36	Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 15 ms, Delta 1 [T1]: 0.78 dB, Marker 1 [T1]: 1.30000000 MHz, OBW: 1.09000000 MHz, SNR: -9.83 dBm, LVL: -9.83 dBm, Temp 1 [T1]: 814.05200000 MHz, Temp 2 [T1]: 814.14000000 MHz, Temp 3 [T1]: 814.24000000 MHz, Center: 814.7 MHz, Span: 3 MHz, Date: 26 JUL 2023 14:38:52
Highest For 90S	Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 15 ms, Delta 1 [T1]: 0.45 dB, Marker 1 [T1]: 1.31000000 MHz, OBW: 1.11000000 MHz, SNR: -9.55 dBm, LVL: -9.55 dBm, Temp 1 [T1]: 822.62000000 MHz, Temp 2 [T1]: 822.74200000 MHz, Temp 3 [T1]: 823.85200000 MHz, Center: 823.3 MHz, Span: 3 MHz, Date: 27 JUL 2023 15:50:11	Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 15 ms, Delta 1 [T1]: 1.53 dB, Marker 1 [T1]: 1.35129070 MHz, OBW: 1.11000000 MHz, SNR: -9.84 dBm, LVL: -9.84 dBm, Temp 1 [T1]: 822.61000000 MHz, Temp 2 [T1]: 822.74200000 MHz, Temp 3 [T1]: 823.85200000 MHz, Center: 823.3 MHz, Span: 3 MHz, Date: 27 JUL 2023 15:47:03
Cross Channel	Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 15 ms, Delta 1 [T1]: 0.00 dB, Marker 1 [T1]: 1.29000000 MHz, OBW: 1.11000000 MHz, SNR: -9.29 dBm, LVL: -9.29 dBm, Temp 1 [T1]: 823.32400000 MHz, Temp 2 [T1]: 823.44200000 MHz, Temp 3 [T1]: 824.55200000 MHz, Center: 824 MHz, Span: 3 MHz, Date: 27 JUL 2023 15:52:37	Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 15 ms, Delta 1 [T1]: 0.00 dB, Marker 1 [T1]: 1.27076023 MHz, OBW: 1.11000000 MHz, SNR: -9.84 dBm, LVL: -9.84 dBm, Temp 1 [T1]: 823.32400000 MHz, Temp 2 [T1]: 823.44200000 MHz, Temp 3 [T1]: 824.55200000 MHz, Center: 824 MHz, Span: 3 MHz, Date: 27 JUL 2023 15:53:49

Occupied Bandwidth

Channel

3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

Lowest
For 22HMiddle
For 22HHighest
For 22H

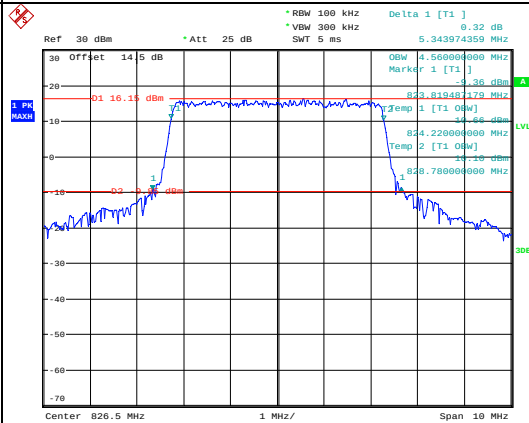
[illegible]

Occupied Bandwidth

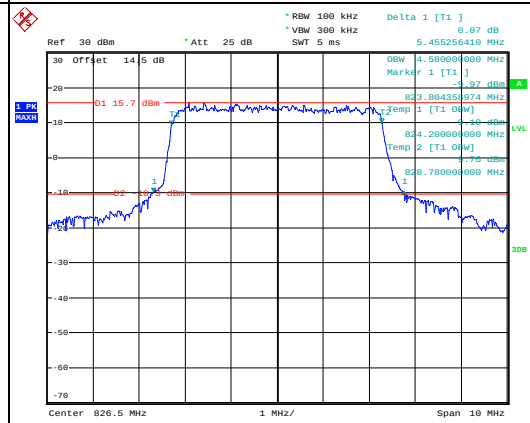
Channel

5MHz Bandwidth QPSK

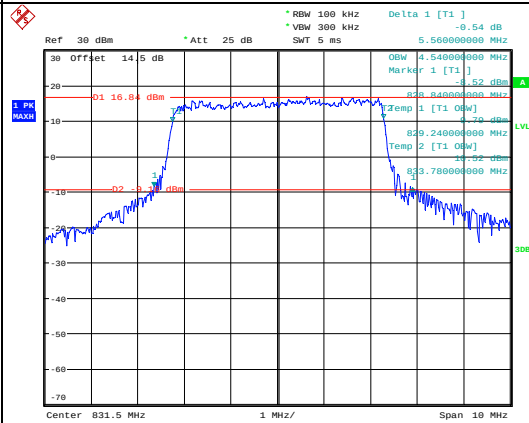
5MHz Bandwidth 16QAM

Lowest
For 22H

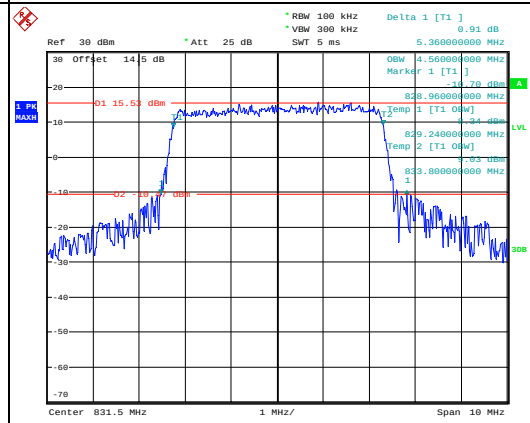
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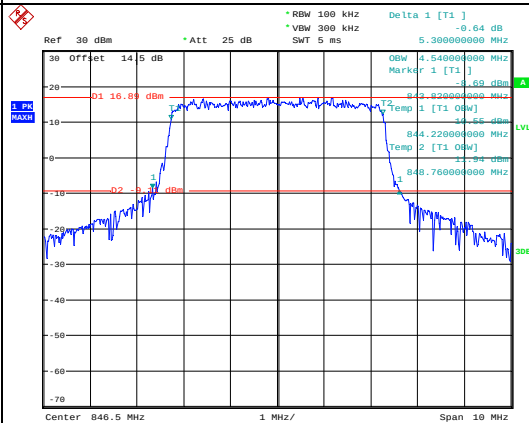
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Middle
For 22H

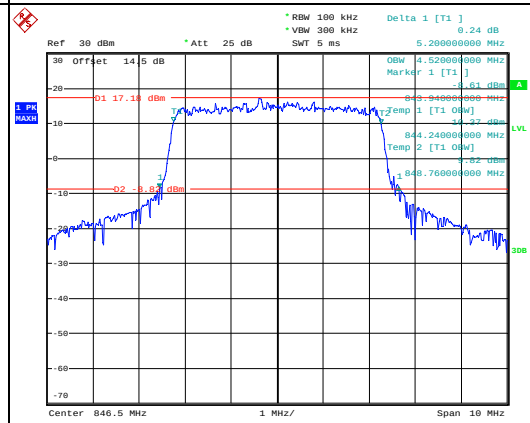
Date: 26.JUL.2023 14:43:47



Date: 26.JUL.2023 14:44:06

Highest
For 22H

Date: 26.JUL.2023 14:44:32



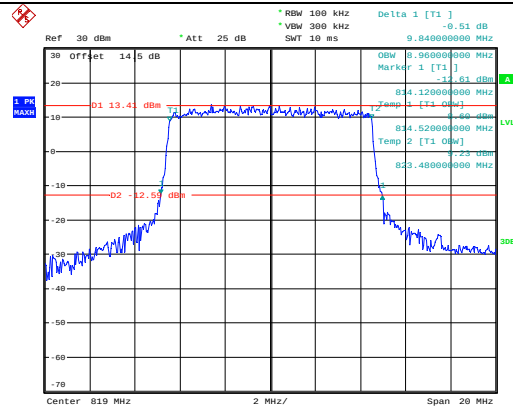
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Occupied Bandwidth

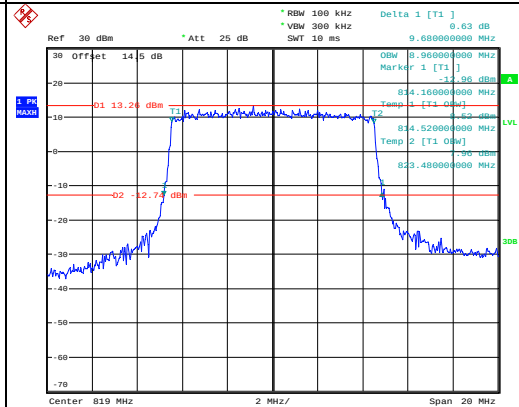
Channel

10MHz Bandwidth QPSK

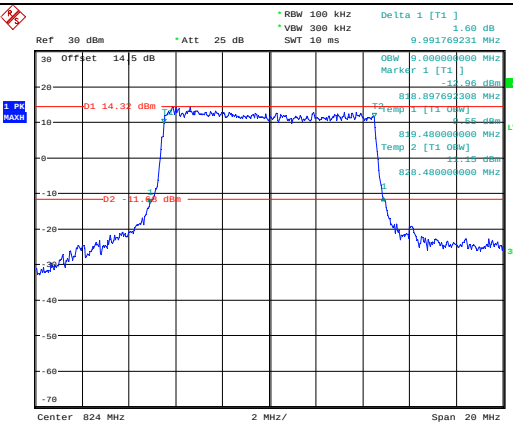
10MHz Bandwidth 16QAM

Lowest
For 90S

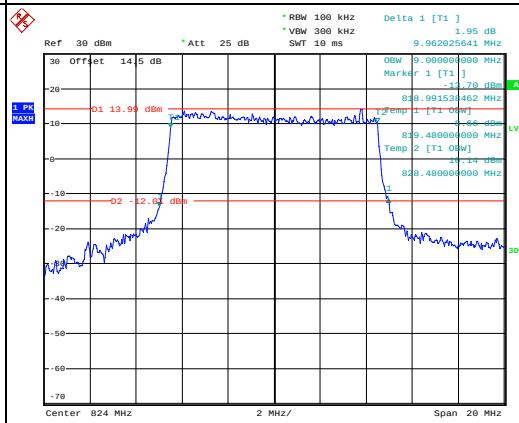
Date: 26.JUL.2023 14:45:23



Date: 26.JUL.2023 14:45:42

Cross
Channel

Date: 27.JUL.2023 16:03:15



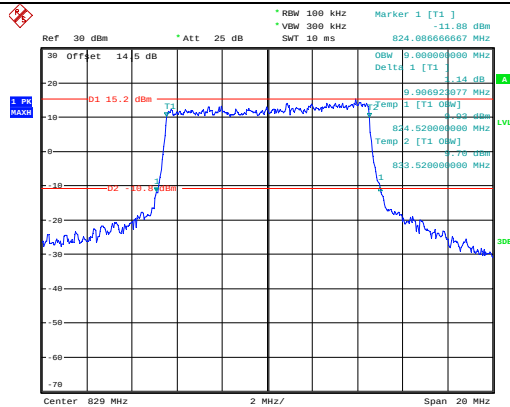
Date: 27.JUL.2023 16:05:20

Occupied Bandwidth

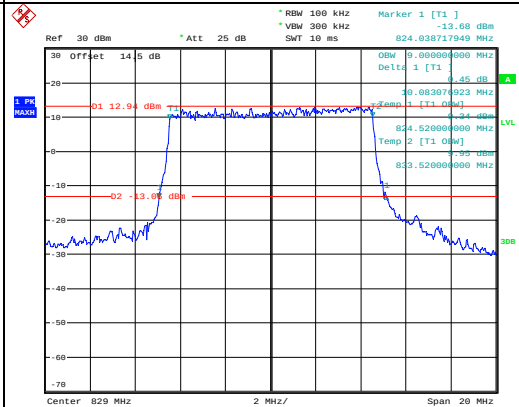
Channel

10MHz Bandwidth QPSK

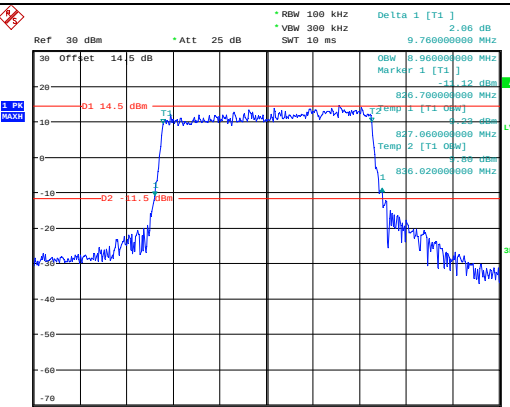
10MHz Bandwidth 16QAM

Lowest
For 22H

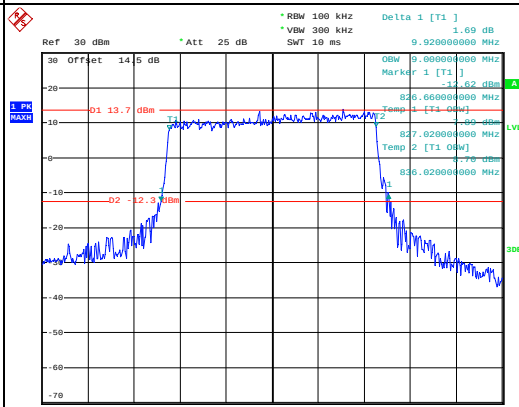
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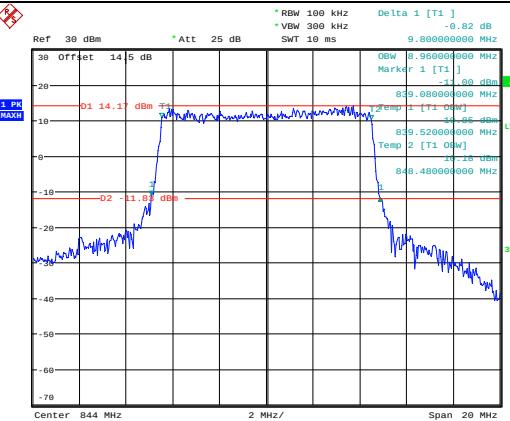
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Middle
For 22H

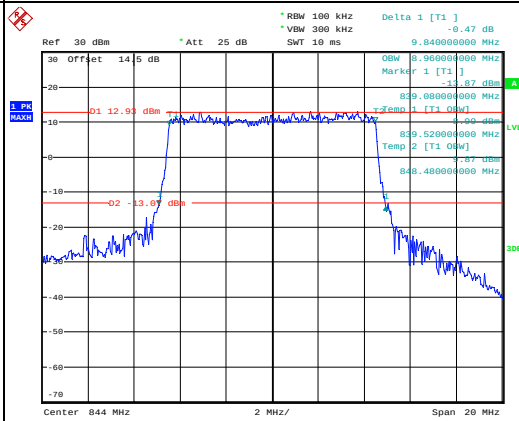
Date: 26.JUL.2023 14:46:04



Date: 26.JUL.2023 14:46:29

Highest
For 22H

Date: 26.JUL.2023 14:46:54



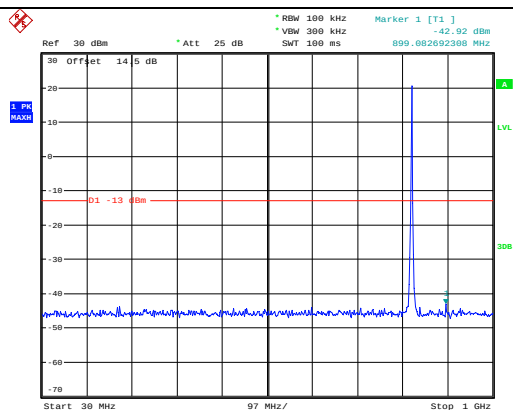
Date: 26.JUL.2023 14:47:16

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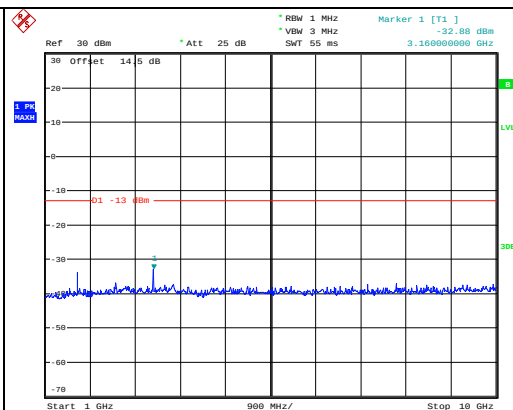
Spurious Emissions at Antenna Terminal

Channel

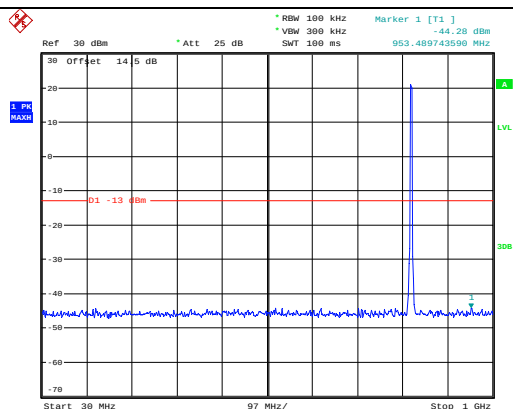
1.4MHz Bandwidth QPSK

Lowest
For 90S

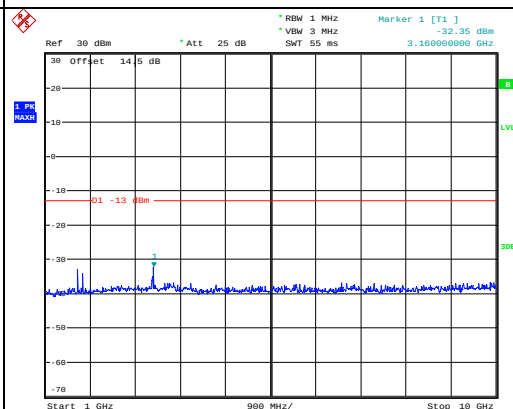
Date: 28.JUL.2023 08:54:55



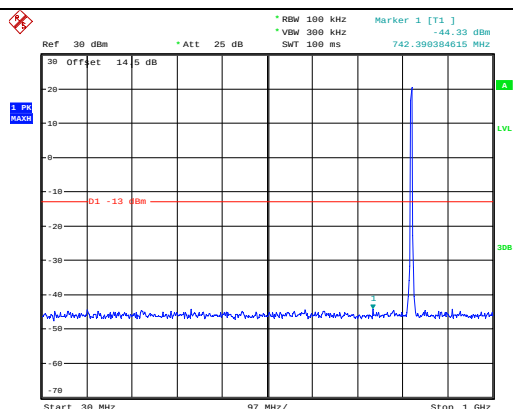
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Highest
For 90S

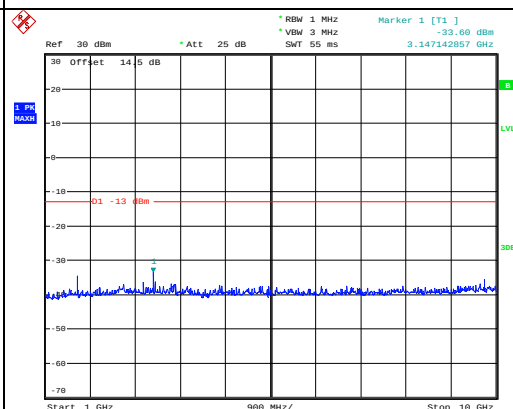
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Date: 28.JUL.2023 08:59:20

Cross
Channel

Date: 28.JUL.2023 10:13:25

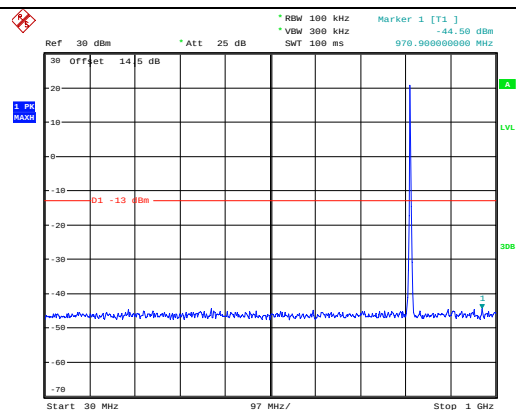


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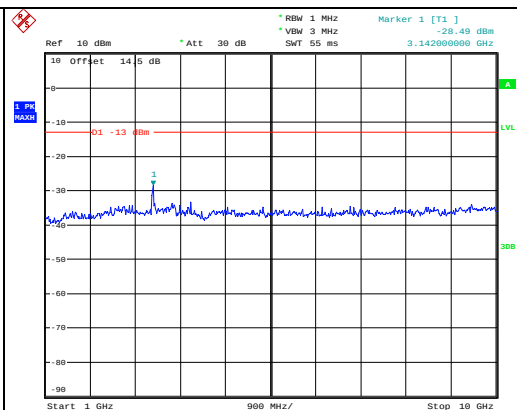
Spurious Emissions at Antenna Terminal

Channel

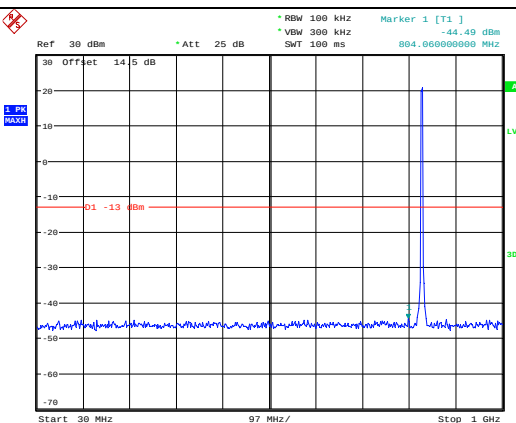
1.4MHz Bandwidth QPSK

Lowest
For 22H

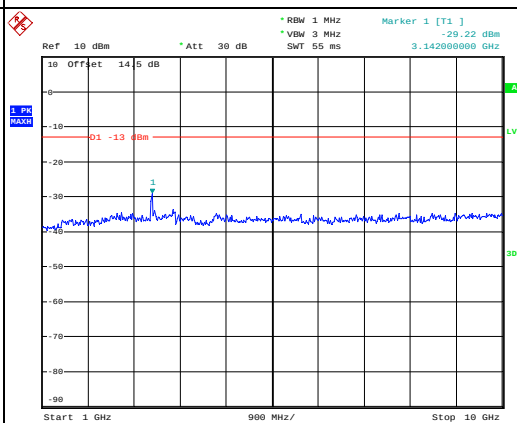
Date: 27.JUL.2023 13:52:00



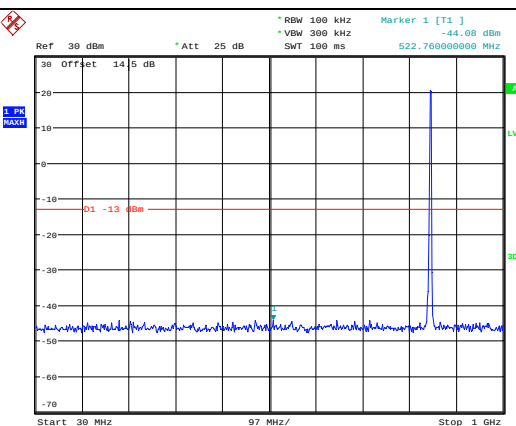
Date: 27.JUL.2023 13:52:11

Middle
For 22H

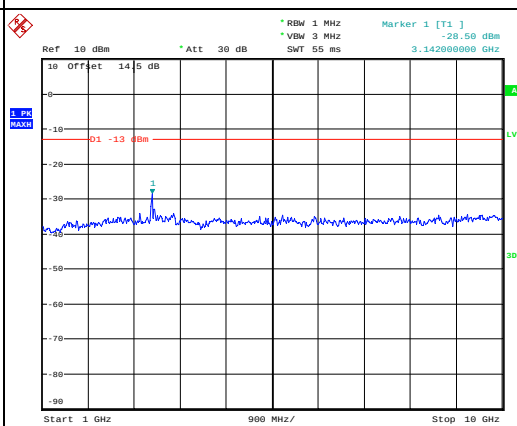
Date: 27.JUL.2023 13:52:28



Date: 27.JUL.2023 13:52:39

Highest
For 22H

Date: 27.JUL.2023 13:52:56

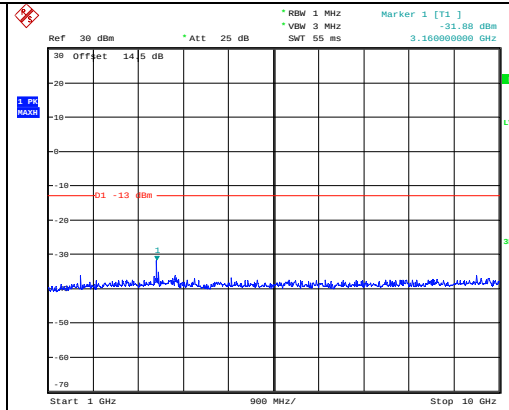
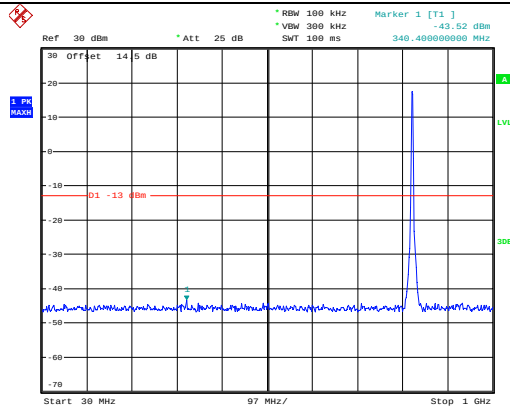
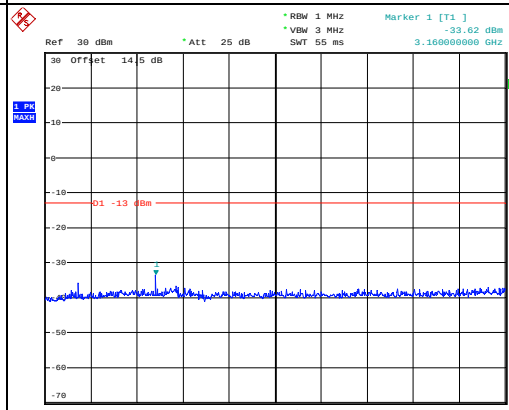
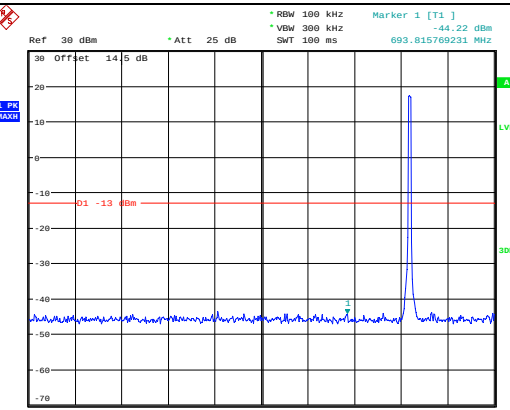
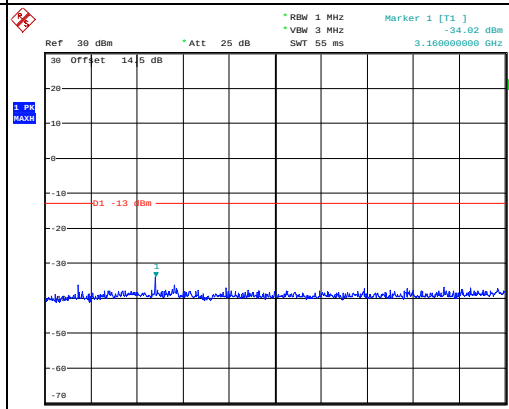
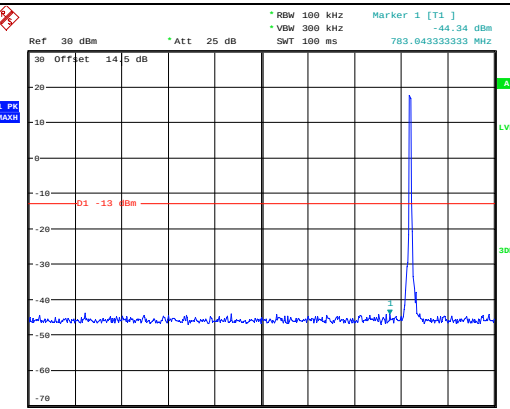


Date: 27.JUL.2023 13:53:07

Spurious Emissions at Antenna Terminal

Channel

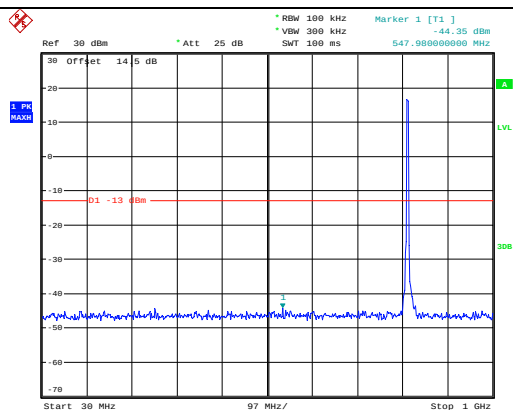
3MHz Bandwidth QPSK

Lowest
For 90SHighest
For 90SCross
Channel

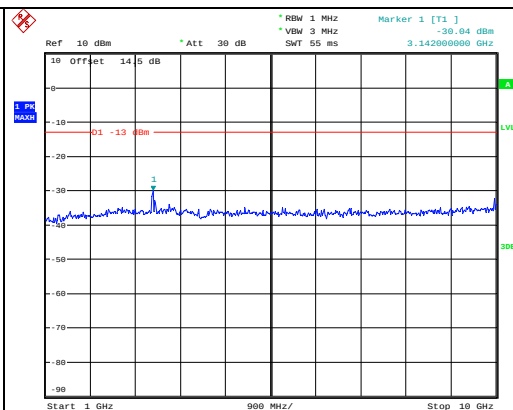
Spurious Emissions at Antenna Terminal

Channel

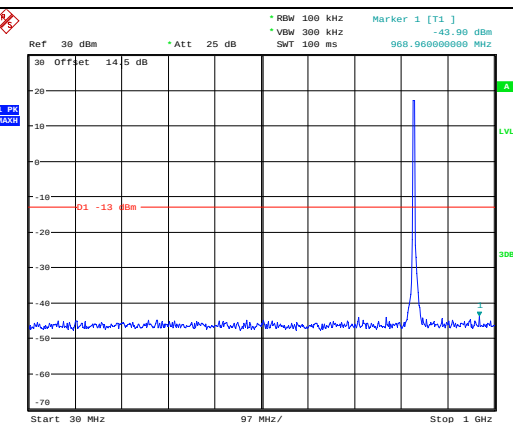
3MHz Bandwidth QPSK

Lowest
For 22H

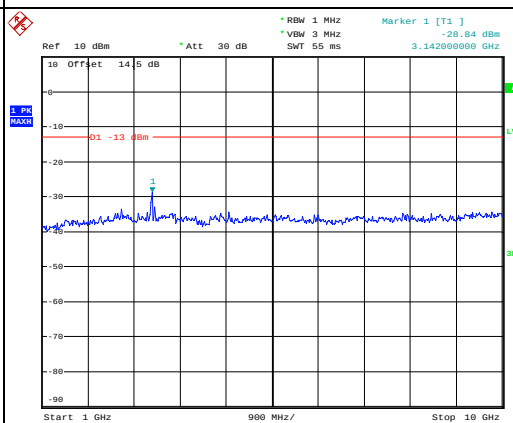
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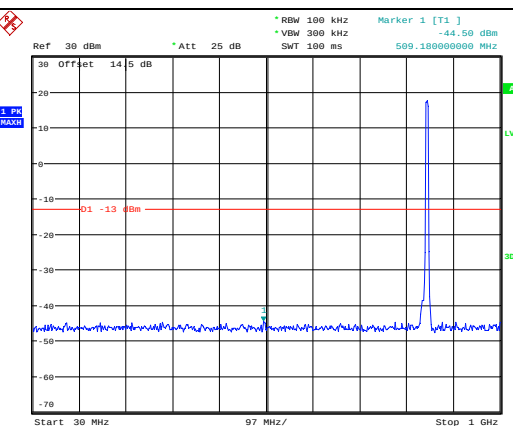
Date: 27.JUL.2023 13:53:35

Middle
For 22H

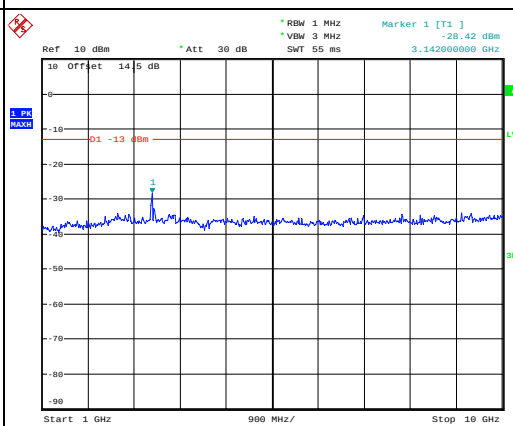
Date: 27.JUL.2023 13:53:51



Date: 27.JUL.2023 13:54:03

Highest
For 22H

Date: 27.JUL.2023 13:54:19

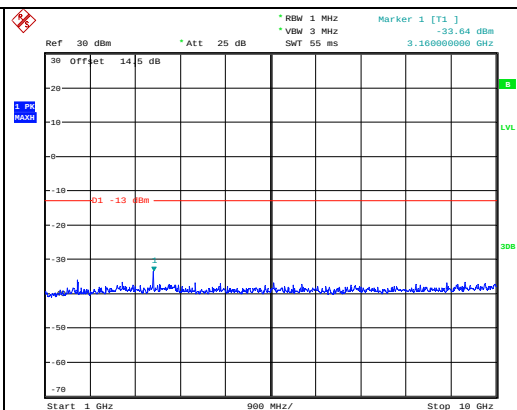
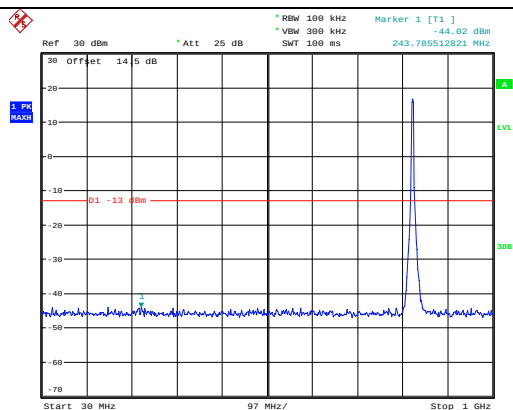
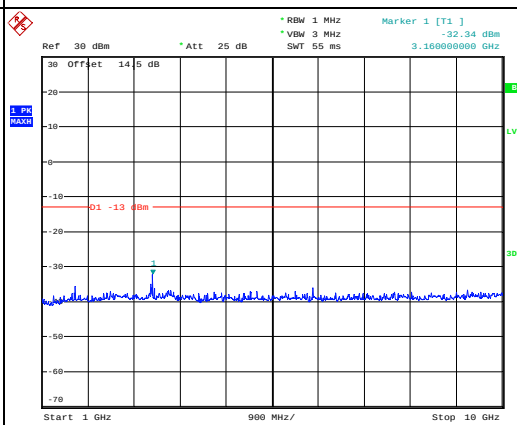
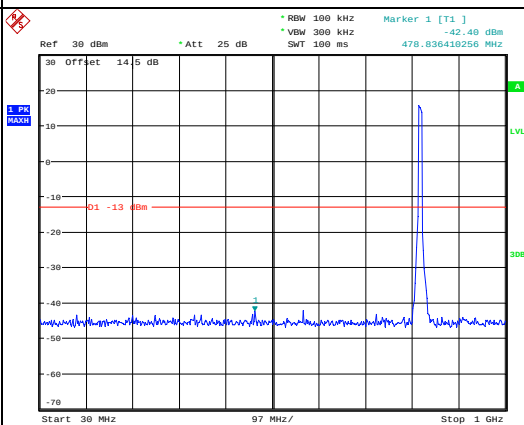
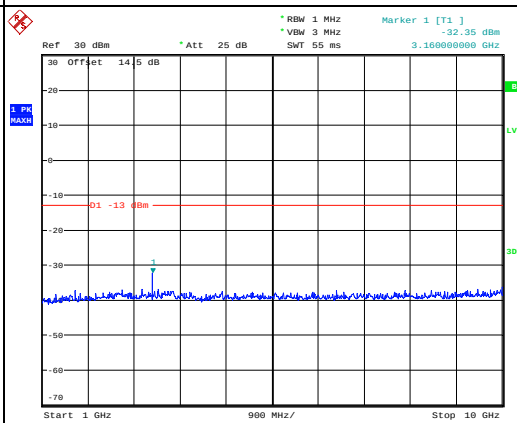
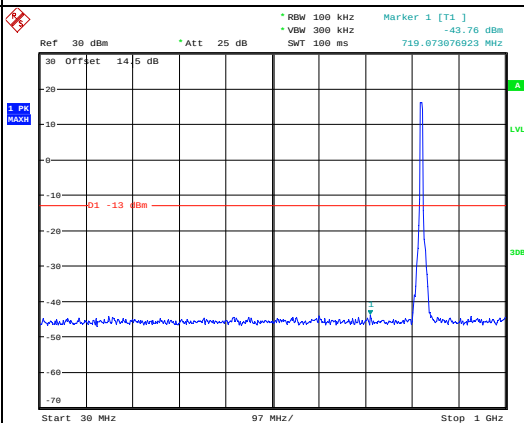


Date: 27.JUL.2023 13:54:31

Spurious Emissions at Antenna Terminal

Channel

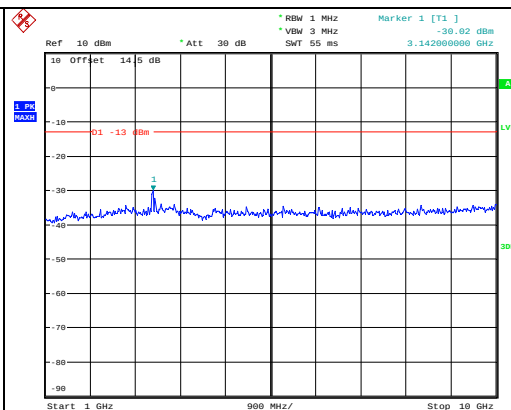
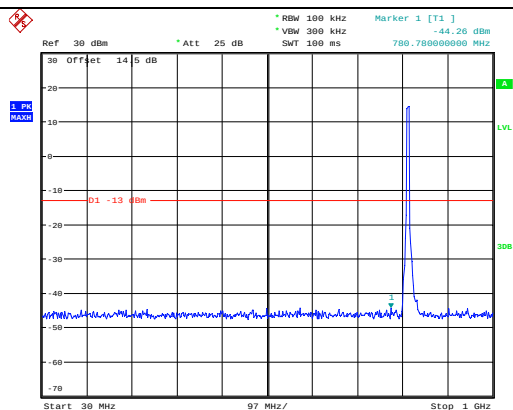
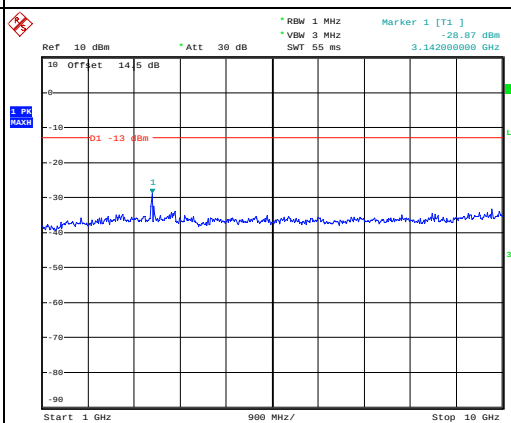
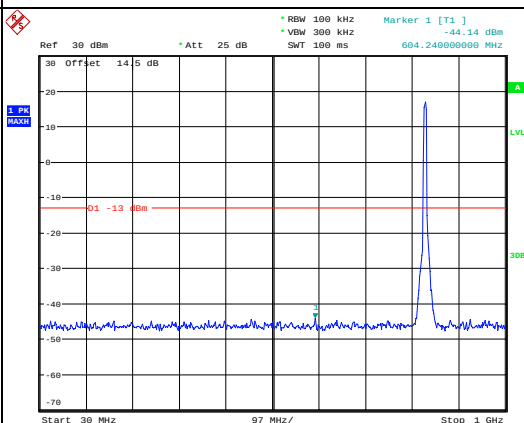
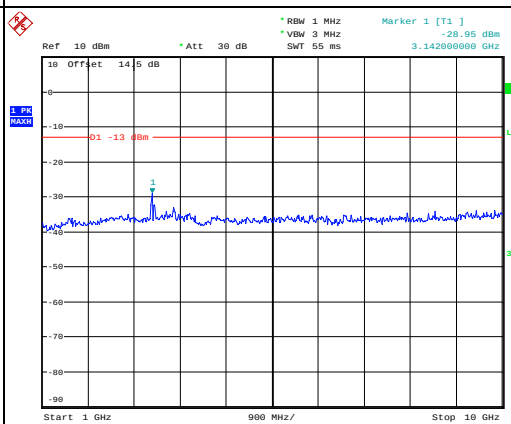
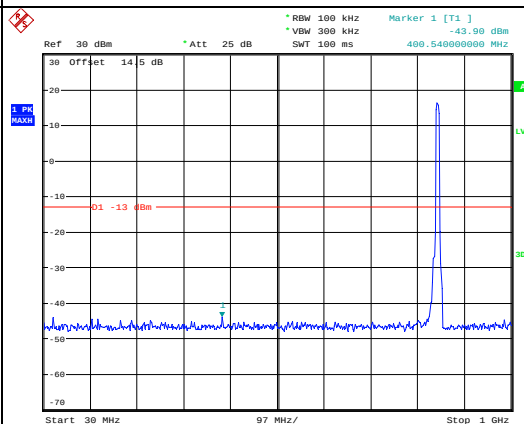
5MHz Bandwidth QPSK

Lowest
For 90SHighest
For 90SCross
Channel

Spurious Emissions at Antenna Terminal

Channel

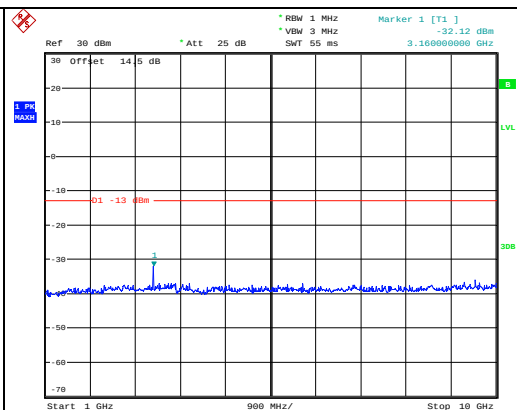
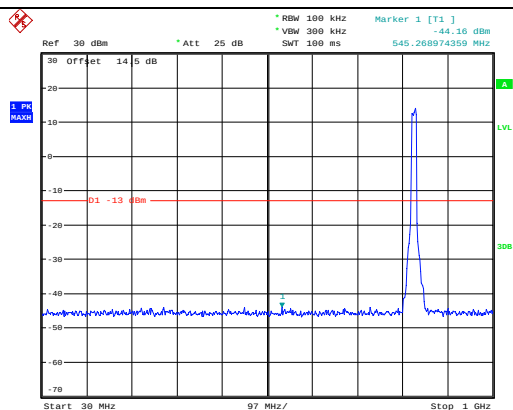
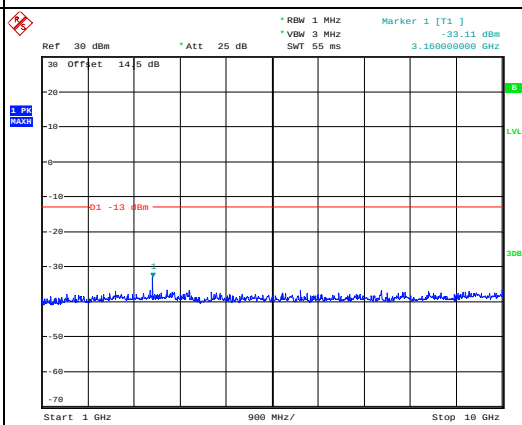
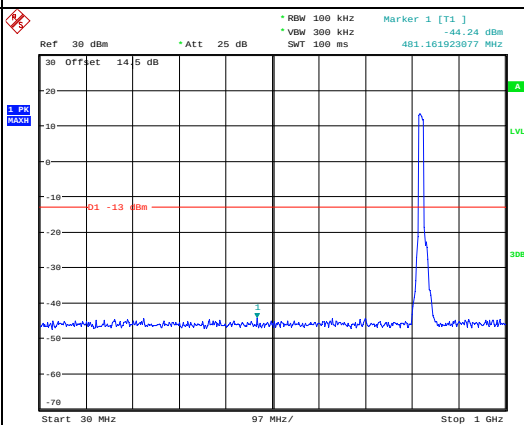
5MHz Bandwidth QPSK

Lowest
For 22HMiddle
For 22HHighest
For 22H

Spurious Emissions at Antenna Terminal

Channel

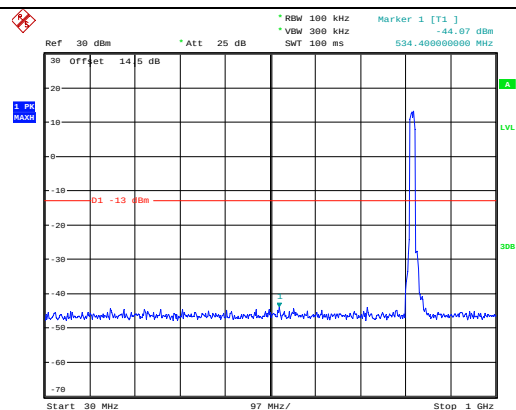
10MHz Bandwidth QPSK

Lowest
For 90SCross
Channel

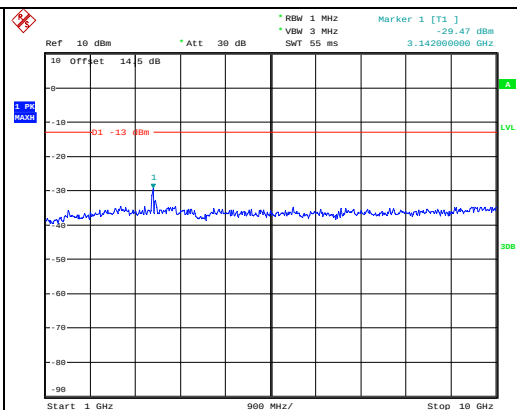
Spurious Emissions at Antenna Terminal

Channel

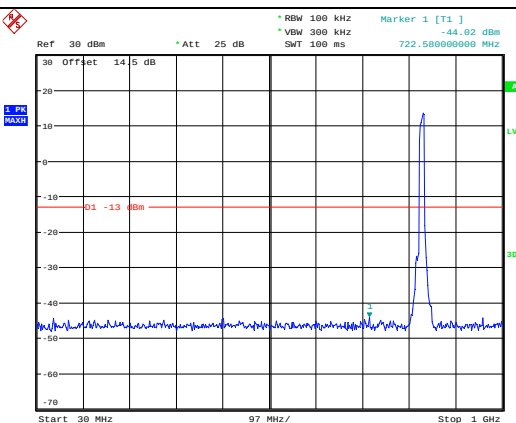
10MHz Bandwidth QPSK

Lowest
For 22H

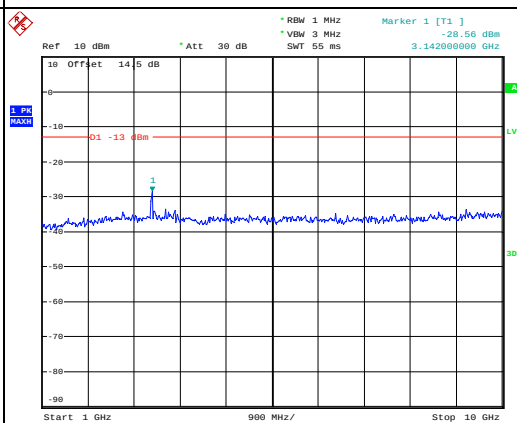
Date: 27.JUL.2023 13:56:11



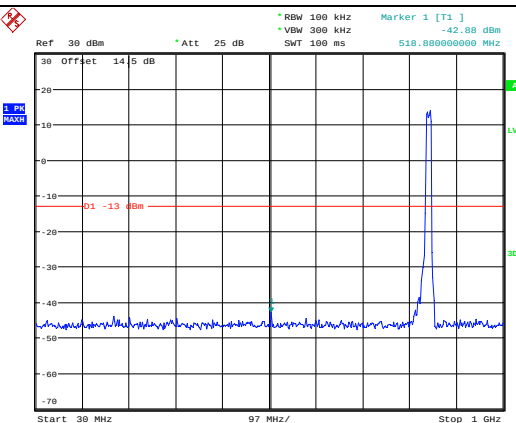
Date: 27.JUL.2023 13:56:22

Middle
For 22H

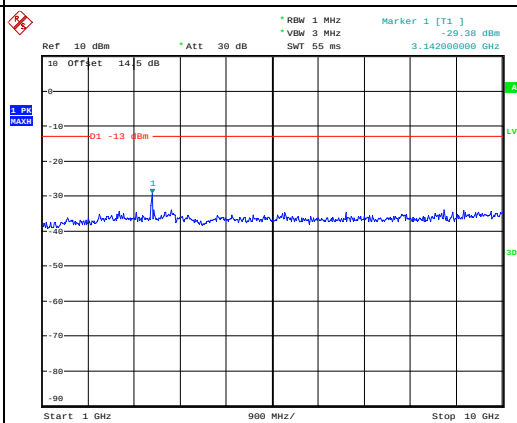
Date: 27.JUL.2023 13:56:36



Date: 27.JUL.2023 13:56:47

Highest
For 22H

Date: 27.JUL.2023 13:57:04

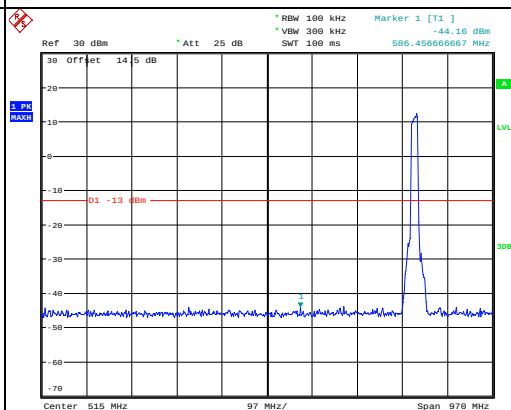


Date: 27.JUL.2023 13:57:15

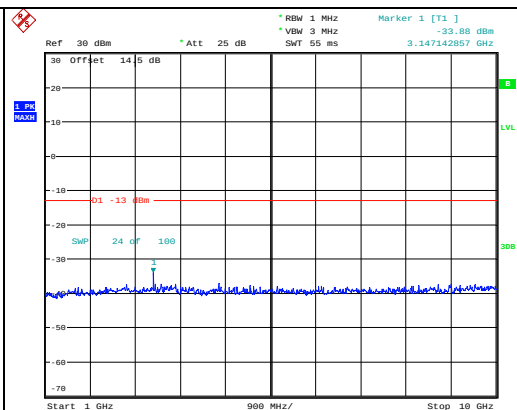
Spurious Emissions at Antenna Terminal

Channel

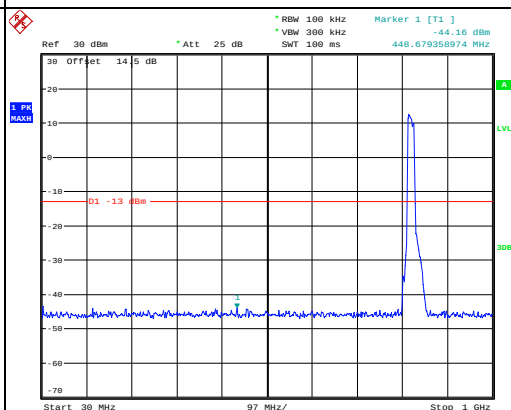
15MHz Bandwidth QPSK

Lowest
For 90S

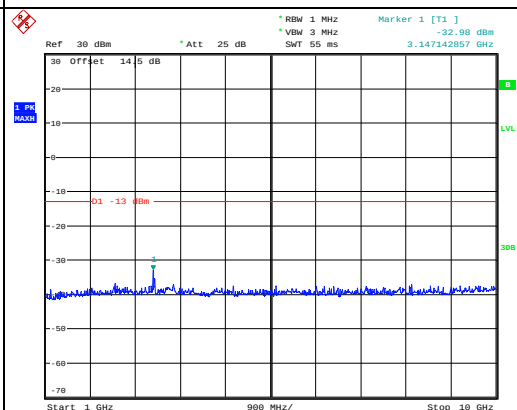
Date: 28.JUL.2023 09:51:41



Date: 28.JUL.2023 09:56:56

Cross
Channel

Date: 28.JUL.2023 10:15:26

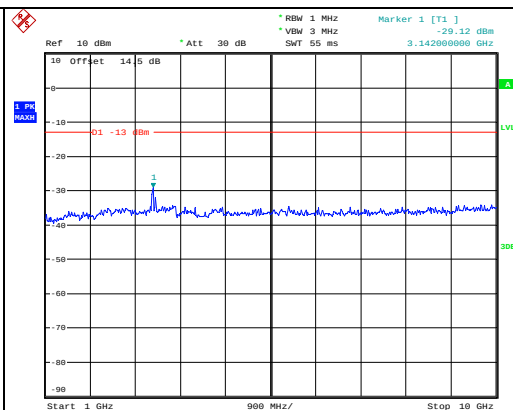
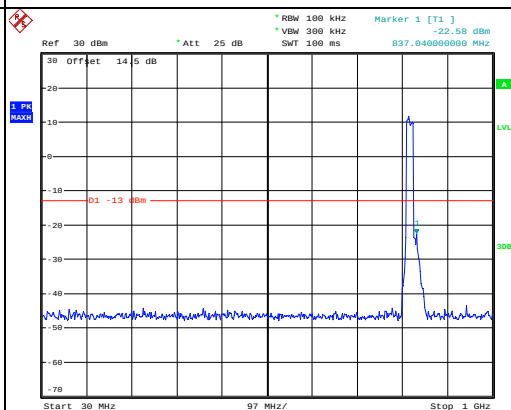
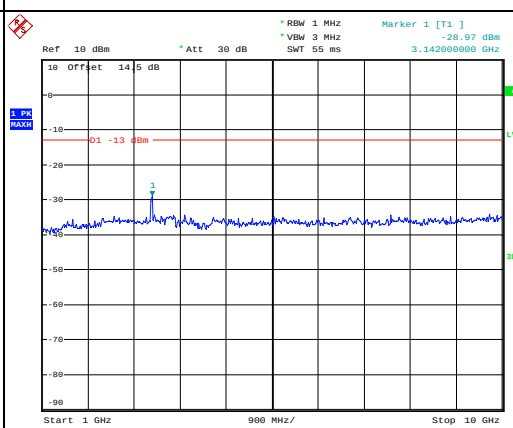
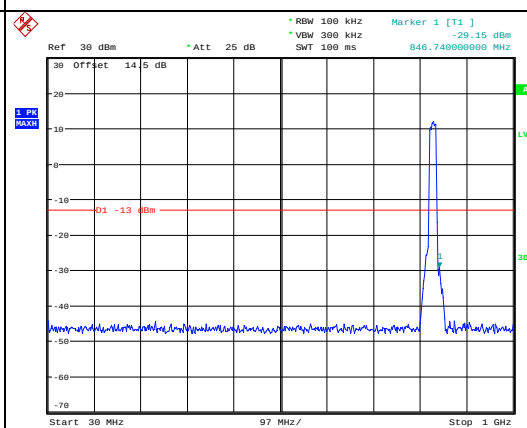
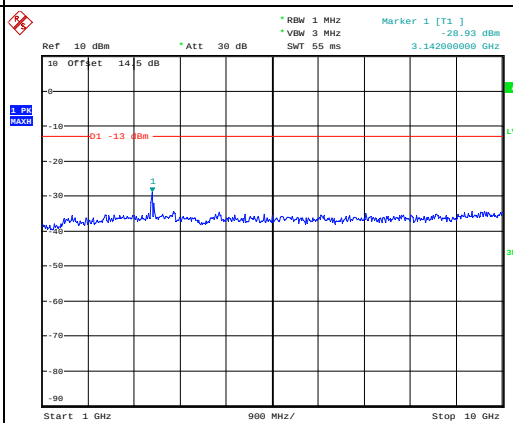
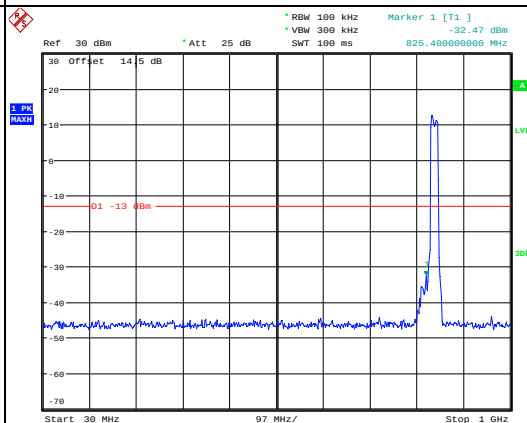


Date: 28.JUL.2023 10:15:45

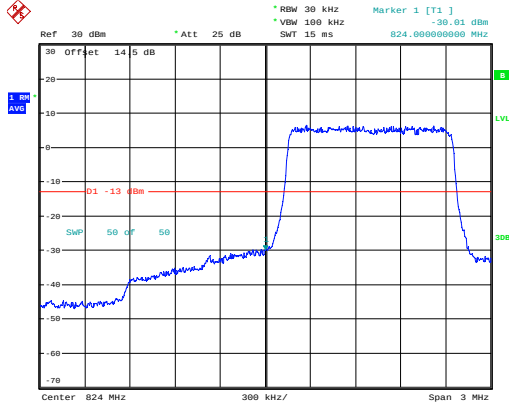
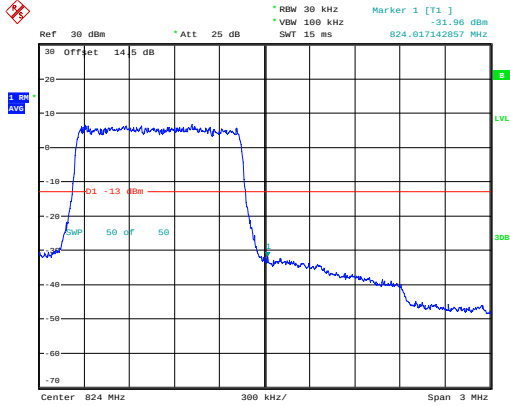
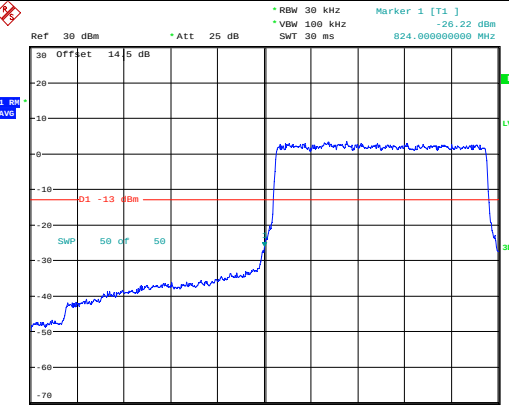
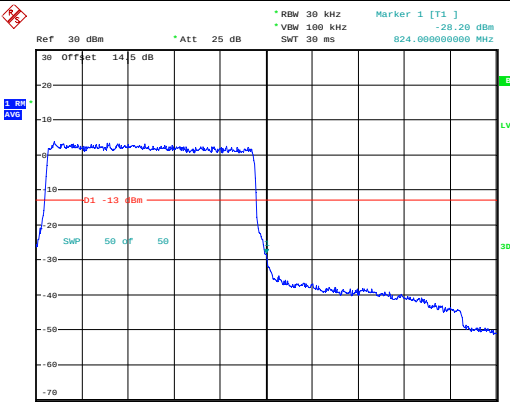
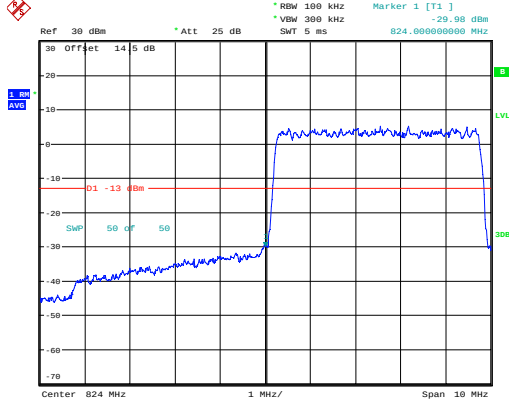
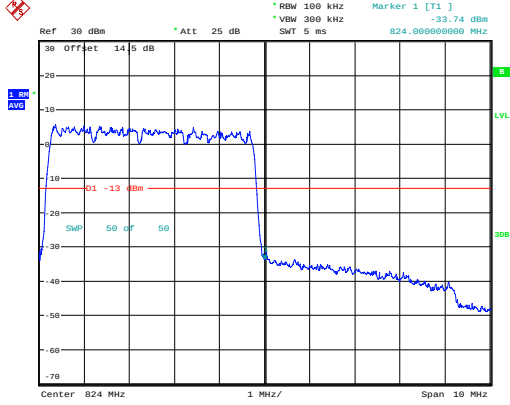
Spurious Emissions at Antenna Terminal

Channel

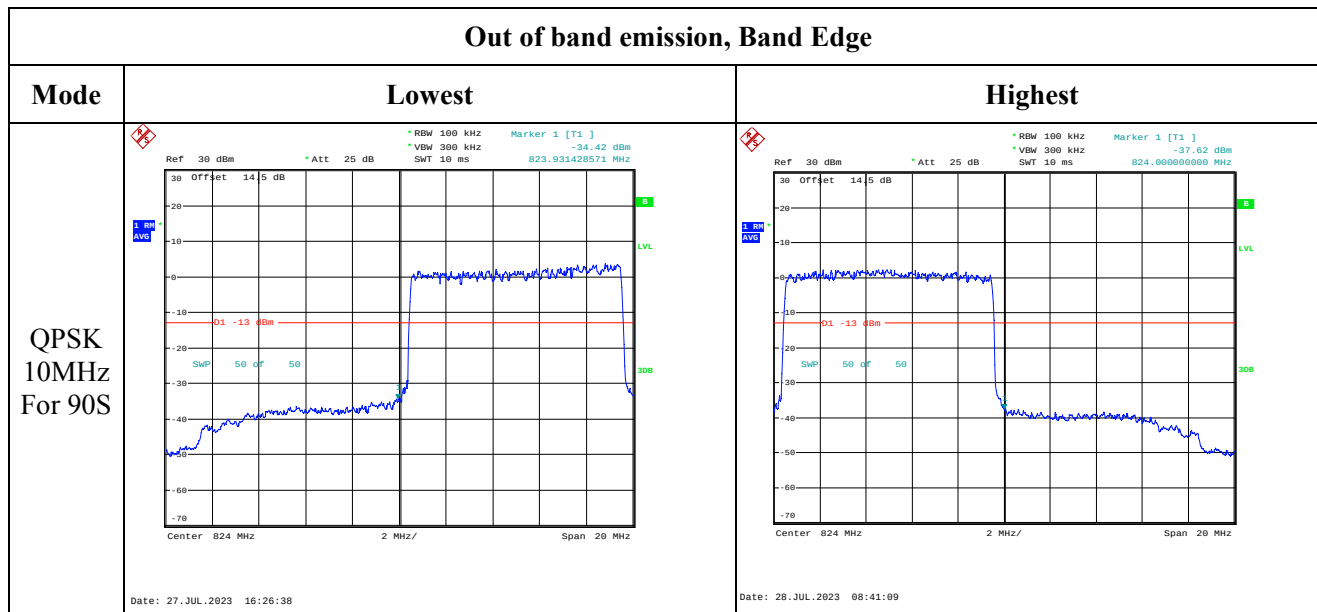
15MHz Bandwidth QPSK

Lowest
For 22HMiddle
For 22HHighest
For 22H

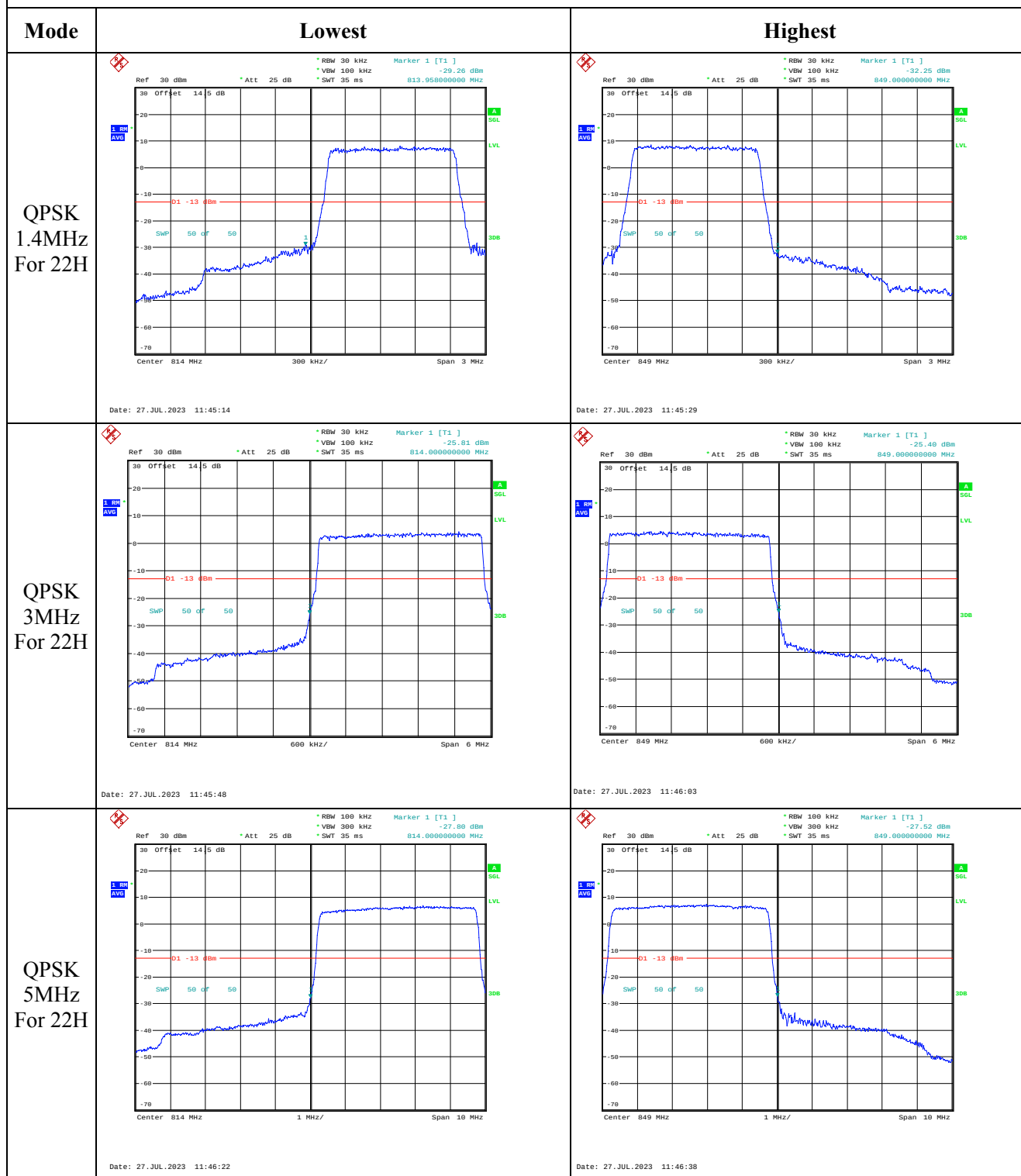
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz For 90S	 Ref 30 dBm Att 25 dB RBW 30 kHz VSW 100 kHz SWT 15 ms Marker 1 [T1] -30.01 dBm 824.000000000 MHz Center 824 MHz 300 kHz/ Span 3 MHz Date: 27.JUL.2023 15:41:27	 Ref 30 dBm Att 25 dB RBW 30 kHz VSW 100 kHz SWT 15 ms Marker 1 [T1] -31.96 dBm 824.617142857 MHz Center 824 MHz 300 kHz/ Span 3 MHz Date: 27.JUL.2023 15:48:52
QPSK 3MHz For 90S	 Ref 30 dBm Att 25 dB RBW 30 kHz VSW 100 kHz SWT 30 ms Marker 1 [T1] -26.22 dBm 824.000000000 MHz Center 824 MHz 600 kHz/ Span 6 MHz Date: 27.JUL.2023 16:56:44	 Ref 30 dBm Att 25 dB RBW 30 kHz VSW 100 kHz SWT 30 ms Marker 1 [T1] -28.20 dBm 824.000000000 MHz Center 824 MHz 600 kHz/ Span 6 MHz Date: 27.JUL.2023 16:56:02
QPSK 5MHz For 90S	 Ref 30 dBm Att 25 dB RBW 100 kHz VSW 300 kHz SWT 5 ms Marker 1 [T1] -29.90 dBm 824.000000000 MHz Center 824 MHz 1 MHz/ Span 10 MHz Date: 27.JUL.2023 16:38:56	 Ref 30 dBm Att 25 dB RBW 100 kHz VSW 300 kHz SWT 5 ms Marker 1 [T1] -33.74 dBm 824.000000000 MHz Center 824 MHz 1 MHz/ Span 10 MHz Date: 27.JUL.2023 16:43:05

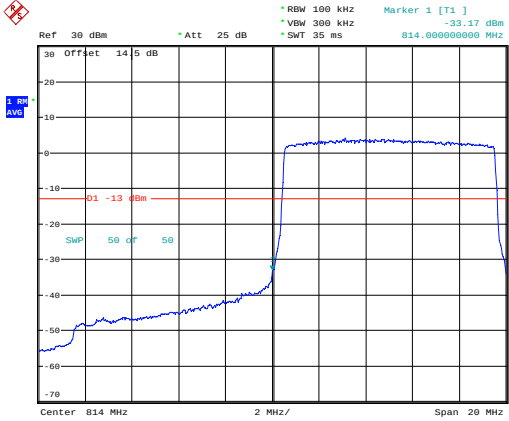
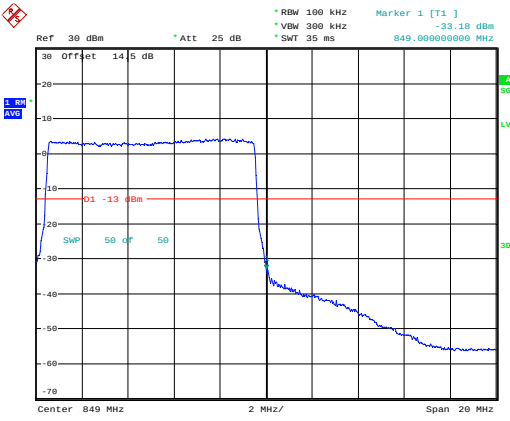
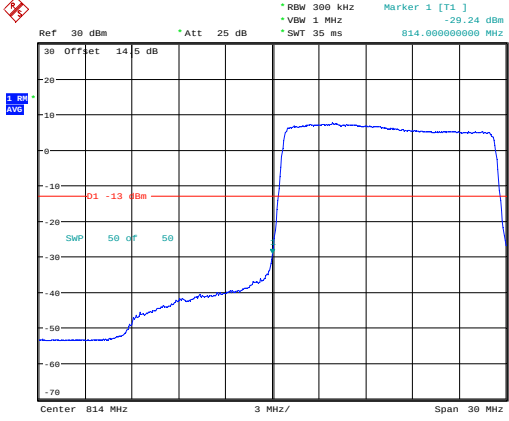
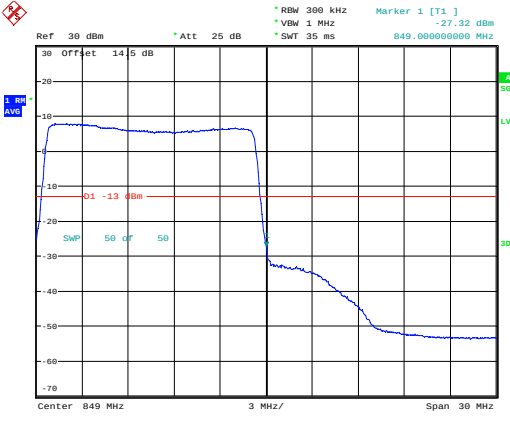
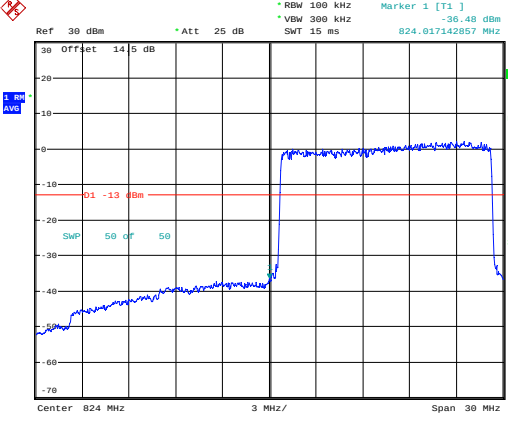
Out of band emission, Band Edge



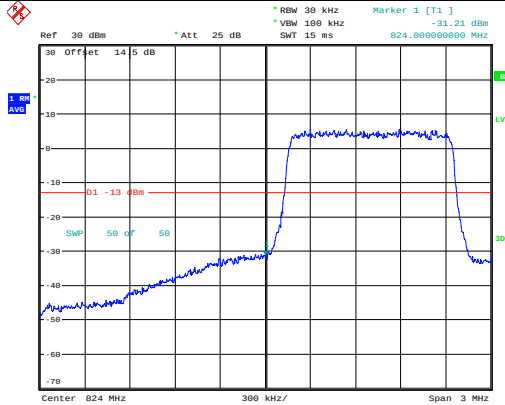
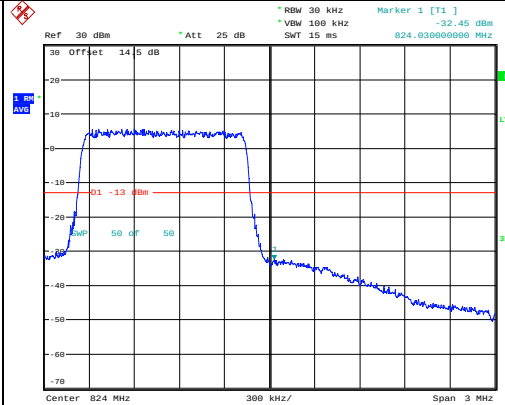
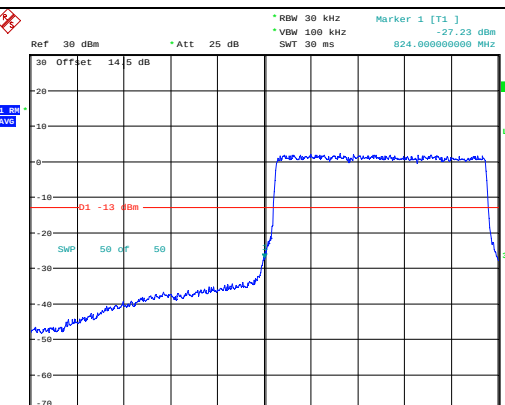
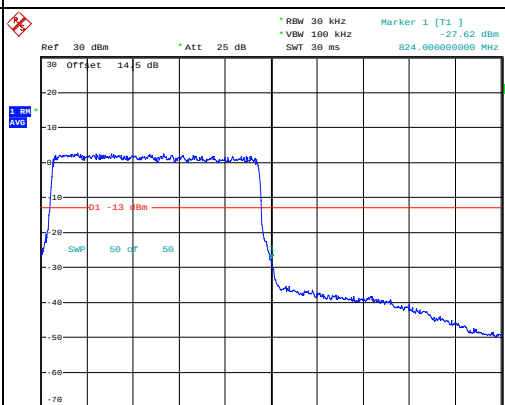
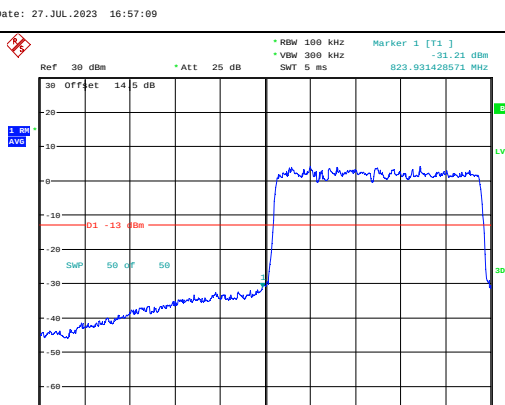
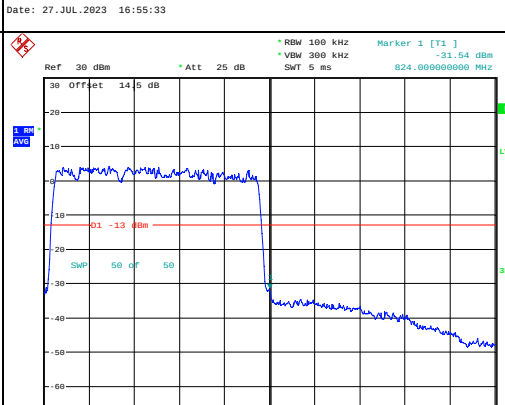
Out of band emission, Band Edge



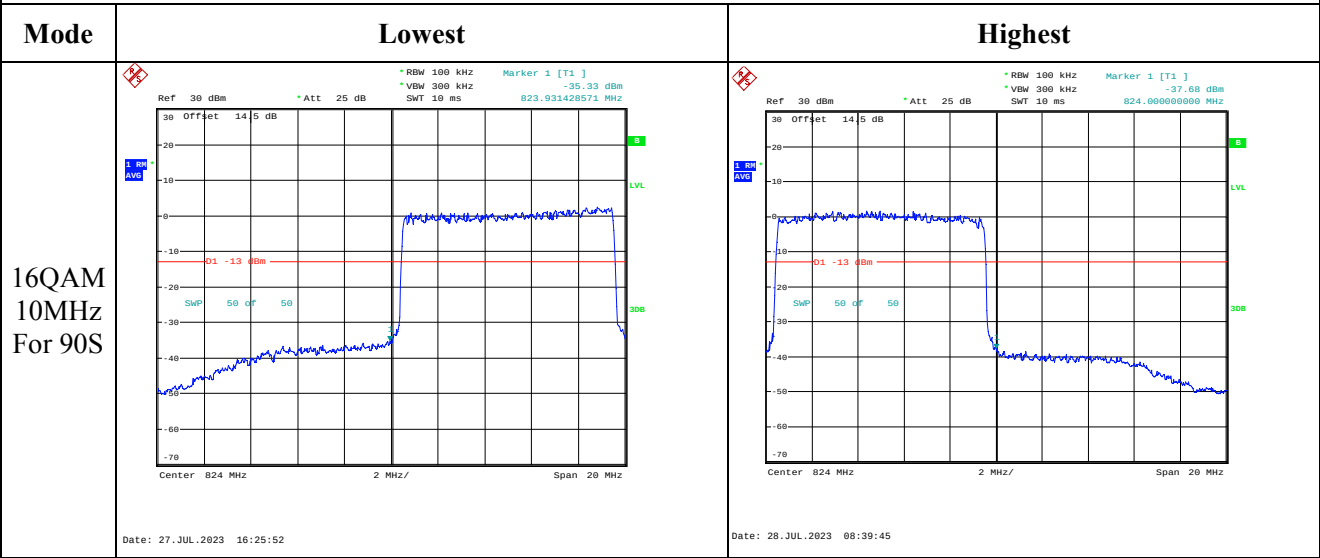
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz For 22H	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Marker 1 [T1] *VBW 1 MHz *SWT 35 ms -33.17 dBm 814.000000000 MHz Center 814 MHz 2 MHz/ Span 20 MHz Date: 27.JUL.2023 11:46:58	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Marker 1 [T1] *VBW 1 MHz *SWT 35 ms -33.18 dBm 849.000000000 MHz Center 849 MHz 2 MHz/ Span 20 MHz Date: 27.JUL.2023 11:47:16
QPSK 15MHz For 22H	 Ref 30 dBm *Att 25 dB *RBW 300 kHz Marker 1 [T1] *VBW 1 MHz *SWT 35 ms -29.24 dBm 814.000000000 MHz Center 814 MHz 3 MHz/ Span 30 MHz Date: 27.JUL.2023 11:47:36	 Ref 30 dBm *Att 25 dB *RBW 300 kHz Marker 1 [T1] *VBW 1 MHz *SWT 35 ms -27.32 dBm 849.000000000 MHz Center 849 MHz 3 MHz/ Span 30 MHz Date: 27.JUL.2023 11:47:51
QPSK 15MHz Across 90S and 22H	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Marker 1 [T1] *VBW 1 MHz *SWT 15 ms -36.48 dBm 824.017142857 MHz Center 824 MHz 3 MHz/ Span 30 MHz Date: 27.JUL.2023 16:21:50	

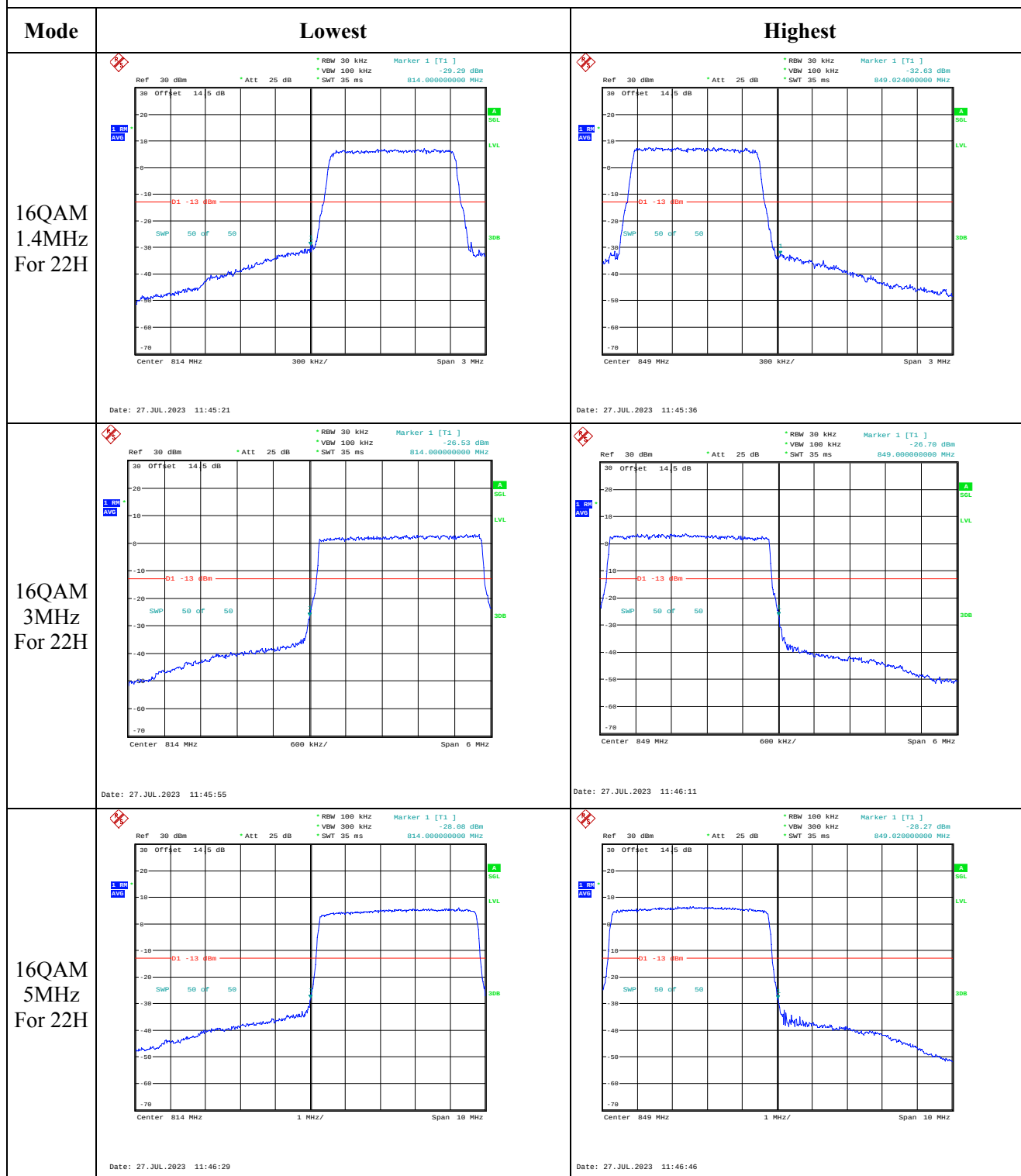
Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz For 90S	 Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 15 ms, Marker 1 [T1]: -31.21 dBm, 824.000000000 MHz 30 Offset 14.5 dB, 1.5 dB, 15 ms, 300 kHz/, Span 3 MHz Date: 27.JUL.2023 15:42:29	 Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 15 ms, Marker 1 [T1]: -32.45 dBm, 824.030000000 MHz 30 Offset 14.5 dB, 1.5 dB, 15 ms, 300 kHz/, Span 3 MHz Date: 27.JUL.2023 15:48:02
16QAM 3MHz For 90S	 Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 30 ms, Marker 1 [T1]: -27.23 dBm, 824.000000000 MHz 30 Offset 14.5 dB, 1.5 dB, 30 ms, 600 kHz/, Span 6 MHz Date: 27.JUL.2023 16:57:09	 Ref: 30 dBm, Att: 25 dB, RBW: 30 kHz, VBW: 100 kHz, SWT: 30 ms, Marker 1 [T1]: -27.62 dBm, 824.000000000 MHz 30 Offset 14.5 dB, 1.5 dB, 30 ms, 600 kHz/, Span 6 MHz Date: 27.JUL.2023 16:55:33
16QAM 5MHz For 90S	 Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 5 ms, Marker 1 [T1]: -31.21 dBm, 823.931428571 MHz 30 Offset 14.5 dB, 1.5 dB, 5 ms, 1 MHz/, Span 10 MHz Date: 27.JUL.2023 16:38:15	 Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 5 ms, Marker 1 [T1]: -31.54 dBm, 824.000000000 MHz 30 Offset 14.5 dB, 1.5 dB, 5 ms, 1 MHz/, Span 10 MHz Date: 27.JUL.2023 16:43:48

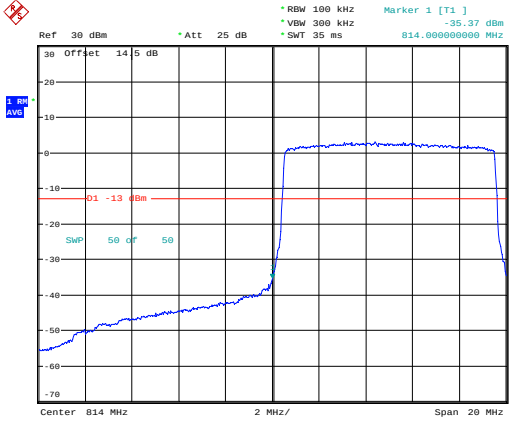
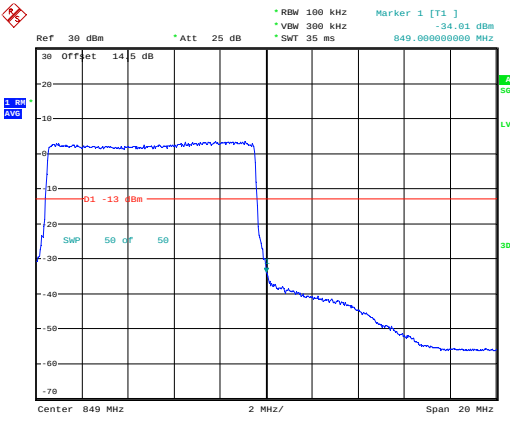
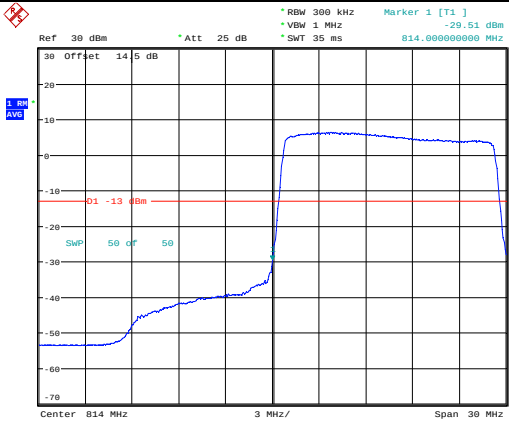
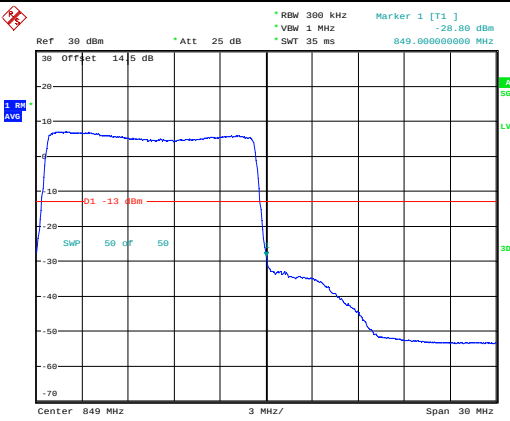
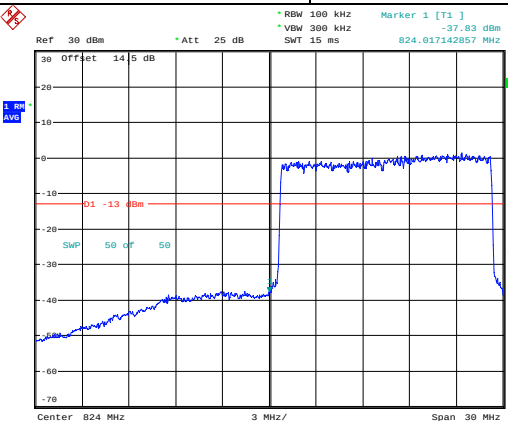
Out of band emission, Band Edge



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 1 MHz *SWT 35 ms Marker 1 [T1] -25.37 dBm 814.000000000 MHz Center 814 MHz 2 MHz/ Span 20 MHz Date: 27.JUL.2023 11:47:06	 Ref 30 dBm *Att 25 dB *RBW 100 kHz *VBW 1 MHz *SWT 35 ms Marker 1 [T1] -24.61 dBm 849.000000000 MHz Center 849 MHz 2 MHz/ Span 20 MHz Date: 27.JUL.2023 11:47:25
16QAM 15MHz For 22H	 Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 35 ms Marker 1 [T1] -29.51 dBm 814.000000000 MHz Center 814 MHz 3 MHz/ Span 30 MHz Date: 27.JUL.2023 11:47:44	 Ref 30 dBm *Att 25 dB *RBW 300 kHz *VBW 1 MHz *SWT 35 ms Marker 1 [T1] -28.60 dBm 849.000000000 MHz Center 849 MHz 3 MHz/ Span 30 MHz Date: 27.JUL.2023 11:47:58
16QAM 15MHz Across 90S and 22H	 Ref 30 dBm *Att 25 dB *RBW 100 kHz *VBW 1 MHz *SWT 15 ms Marker 1 [T1] -37.83 dBm 824.017142857 MHz Center 824 MHz 3 MHz/ Span 30 MHz Date: 27.JUL.2023 16:20:58	

4.14 Antenna Port Test Data and Results for LTE Band 38

Serial Number:	27BI-1	Test Date:	2023/7/24-2023/7/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-26.3	Relative Humidity: (%)	46-62	ATM Pressure: (kPa)	99.7-100.6
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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
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Weinschel	Power splitter	1515	RA915	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30

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

Test Frequency for Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
5MHz	2572.5	2595	2617.5
10MHz	2575	2595	2615
15MHz	2577.5	2595	2612.5
20MHz	2580	2595	2610

Test Data:**FCC§2.1046;§ 27.50(h)(2)****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	18.98	18.89	18.87	22.71	33
	RB1#13	18.97	18.82	18.98		
	RB1#24	19.12	18.88	18.94		
	RB15#0	17.99	17.79	18.09		
	RB15#10	18.01	17.78	18.02		
	RB25#0	17.96	17.73	18.04		
5MHz 16QAM	RB1#0	18.29	18.16	18.03	21.88	33
	RB1#13	17.86	18.05	18.01		
	RB1#24	17.92	18.21	17.94		
	RB15#0	17.1	16.96	17.25		
	RB15#10	17.04	17.07	17.26		
	RB25#0	17.09	16.94	16.92		
10MHz QPSK	RB1#0	18.7	18.31	18.69	22.37	33
	RB1#25	18.56	18.29	18.72		
	RB1#49	18.7	18.34	18.78		
	RB25#0	17.26	17.26	17.69		
	RB25#25	17.41	17.44	17.8		
	RB50#0	17.28	17.35	17.75		
10MHz 16QAM	RB1#0	18.21	17.54	17.69	21.80	33
	RB1#25	18.01	17.69	17.64		
	RB1#49	17.72	17.83	17.7		
	RB25#0	16.51	16.55	16.7		
	RB25#25	16.48	16.63	16.81		
	RB50#0	16.46	16.38	16.88		
15MHz QPSK	RB1#0	18.82	18.78	19.15	22.74	33
	RB1#38	18.76	18.78	19.13		
	RB1#74	18.79	18.72	19.1		
	RB36#0	17.6	18.02	18.17		
	RB36#39	17.59	17.9	17.97		
	RB75#0	17.59	17.96	18.08		
15MHz 16QAM	RB1#0	18.44	18.18	17.97	22.03	33
	RB1#38	18.38	18.07	18.04		
	RB1#74	18.26	18.1	17.99		
	RB36#0	16.78	17.05	17.13		
	RB36#39	16.77	17.01	17.11		
	RB75#0	16.65	16.97	17.24		
20MHz QPSK	RB1#0	18.48	19.21	19.19	22.84	33
	RB1#50	18.49	19.19	19.07		
	RB1#99	18.54	19.25	19.19		

20MHz 16QAM	RB50#0	17.5	18.01	18.02	22.36	33
	RB50#50	17.44	18.14	18.1		
	RB100#0	17.43	17.93	18.06		
	RB1#0	17.12	18.77	18.45		
	RB1#50	17.12	18.77	18.51		
	RB1#99	17.03	18.72	18.34		
	RB50#0	16.67	17.27	17.34		
	RB50#50	16.68	17.27	17.26		
	RB100#0	16.47	17.15	17.21		

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

Result:

Pass

Peak-to-average Ratio(PAR)

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	4.87	5.12	4.97	13
	RB100#0	5.74	5.61	5.32	13
20MHz 16QAM	RB1#0	5.48	6.03	5.99	13
	RB100#0	6.47	6.44	6.31	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	4.520	4.540	4.520	4.920	5.440	5.080
5MHz 16QAM	4.520	4.520	4.520	5.160	5.420	5.380
10MHz QPSK	8.960	8.960	8.960	9.840	9.840	9.760
10MHz 16QAM	8.960	8.960	8.960	9.680	10.080	9.760
15MHz QPSK	13.500	13.560	13.620	15.000	15.900	16.560
15MHz 16QAM	13.560	13.560	13.560	15.300	15.120	15.120
20MHz QPSK	18.000	18.000	18.080	19.440	19.840	19.600
20MHz 16QAM	18.000	18.000	17.920	19.680	19.920	19.600

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

FCC §2.1051, § 27.53: Spurious Emissions at Antenna Terminal

Result:	Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.
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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	3.8	2571.054	2570.00	2619.028	2620
	-20	3.8	2571.051	2570.00	2619.019	2620
	-10	3.8	2571.055	2570.00	2619.039	2620
	0	3.8	2571.064	2570.00	2619.023	2620
	10	3.8	2571.057	2570.00	2619.022	2620
	20	3.8	2571.040	2570.00	2619.040	2620
	30	3.8	2571.051	2570.00	2619.028	2620
	40	3.8	2571.053	2570.00	2619.027	2620
	50	3.8	2571.057	2570.00	2619.023	2620
Frequency Stability vs. Voltage	20	3.5	2571.074	2570.00	2619.026	2620
	20	4.35	2571.084	2570.00	2619.028	2620
					Result:	Pass

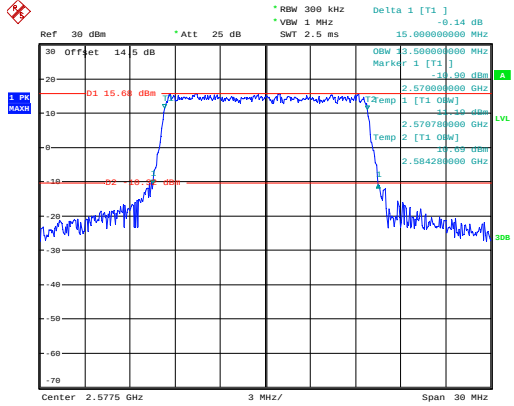
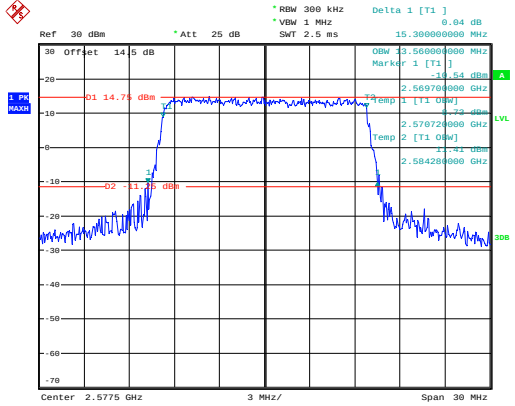
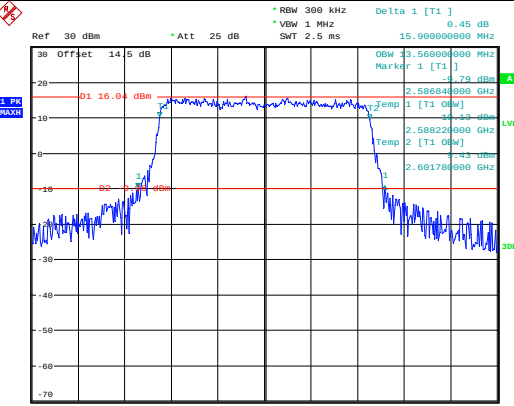
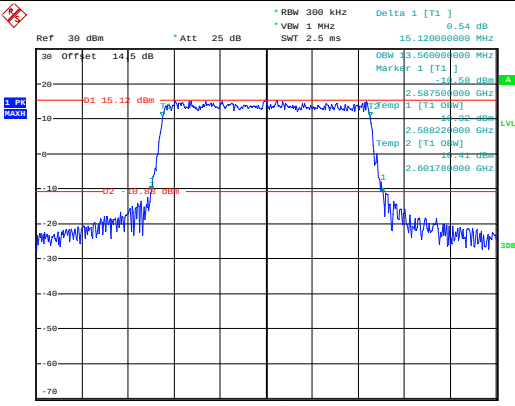
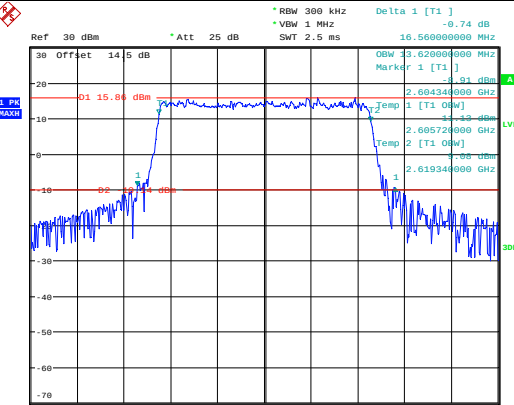
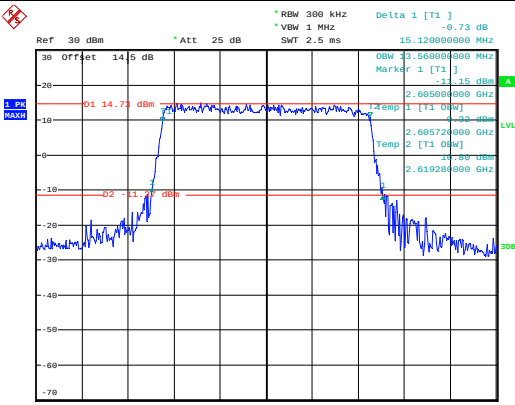
Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	2571.053	2570.00	2618.928	2620
	-20	3.8	2571.052	2570.00	2618.919	2620
	-10	3.8	2571.059	2570.00	2618.939	2620
	0	3.8	2571.071	2570.00	2618.923	2620
	10	3.8	2571.061	2570.00	2618.922	2620
	20	3.8	2571.040	2570.00	2618.960	2620
	30	3.8	2571.056	2570.00	2618.928	2620
	40	3.8	2571.057	2570.00	2618.927	2620
	50	3.8	2571.100	2570.00	2618.923	2620
Frequency Stability vs. Voltage	20	3.5	2571.047	2570.00	2618.926	2620
	20	4.35	2571.044	2570.00	2618.928	2620
					Result:	Pass

Occupied Bandwidth

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Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	Ref 30 dBm *Att 25 dB Delta 1 [T1] 1.12 dB RBW 100 kHz VSW 300 kHz SWT 10 ms 9.680000000 MHz OBW 8.960000000 MHz Marker 1 [T1] 1.12 dB Temp 1 [T1 0dB] 1.12 dB Temp 2 [T1 0dB] 1.12 dB Temp 3 [T1 0dB] 1.12 dB D1 12.34 dBm D2 -33.67 dBm Center 2.575 GHz 2 MHz/ Span 20 MHz Date: 26.JUL.2023 14:53:14	Ref 30 dBm *Att 25 dB Delta 1 [T1] 1.62 dB RBW 100 kHz VSW 300 kHz SWT 10 ms 9.680000000 MHz OBW 8.960000000 MHz Marker 1 [T1] 1.62 dB Temp 1 [T1 0dB] 1.62 dB Temp 2 [T1 0dB] 1.62 dB Temp 3 [T1 0dB] 1.62 dB D1 12.5 dBm D2 -33.47 dBm Center 2.575 GHz 2 MHz/ Span 20 MHz Date: 26.JUL.2023 14:53:35
Middle	Ref 30 dBm *Att 25 dB Delta 1 [T1] -1.69 dB RBW 100 kHz VSW 300 kHz SWT 10 ms 9.840000000 MHz OBW 8.960000000 MHz Marker 1 [T1] -1.69 dB Temp 1 [T1 0dB] -1.69 dB Temp 2 [T1 0dB] -1.69 dB Temp 3 [T1 0dB] -1.69 dB D1 12.54 dBm D2 -33.4 dBm Center 2.595 GHz 2 MHz/ Span 20 MHz Date: 26.JUL.2023 14:53:58	Ref 30 dBm *Att 25 dB Delta 1 [T1] -0.29 dB RBW 100 kHz VSW 300 kHz SWT 10 ms 10.080000000 MHz OBW 8.960000000 MHz Marker 1 [T1] -0.29 dB Temp 1 [T1 0dB] -0.29 dB Temp 2 [T1 0dB] -0.29 dB Temp 3 [T1 0dB] -0.29 dB D1 12.9 dBm D2 -35.0 dBm Center 2.595 GHz 2 MHz/ Span 20 MHz Date: 26.JUL.2023 14:54:16
Highest	Ref 30 dBm *Att 25 dB Delta 1 [T1] 0.91 dB RBW 100 kHz VSW 300 kHz SWT 10 ms 9.760000000 MHz OBW 8.960000000 MHz Marker 1 [T1] 0.91 dB Temp 1 [T1 0dB] 0.91 dB Temp 2 [T1 0dB] 0.91 dB Temp 3 [T1 0dB] 0.91 dB D1 12.39 dBm D2 -33.6 dBm Center 2.615 GHz 2 MHz/ Span 20 MHz Date: 26.JUL.2023 14:54:42	Ref 30 dBm *Att 25 dB Delta 1 [T1] 0.33 dB RBW 100 kHz VSW 300 kHz SWT 10 ms 9.760000000 MHz OBW 8.960000000 MHz Marker 1 [T1] 0.33 dB Temp 1 [T1 0dB] 0.33 dB Temp 2 [T1 0dB] 0.33 dB Temp 3 [T1 0dB] 0.33 dB D1 12.8 dBm D2 -33.1 dBm Center 2.615 GHz 2 MHz/ Span 20 MHz Date: 26.JUL.2023 14:55:06

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] 0.14 dB VBW 1 MHz SWT 2.5 ms OBW 15.900000000 MHz Marker 1 [T1] -10.90 dBm 1 PK MAX D1 15.08 dBm D2 -11.78 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Temp 3 [T1] 0.000 GHz Temp 4 [T1] 0.000 GHz Temp 5 [T1] 0.000 GHz Temp 6 [T1] 0.000 GHz Temp 7 [T1] 0.000 GHz Temp 8 [T1] 0.000 GHz Temp 9 [T1] 0.000 GHz Temp 10 [T1] 0.000 GHz Center 2.5775 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:55:35	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.04 dB VBW 1 MHz SWT 2.5 ms OBW 15.300000000 MHz Marker 1 [T1] -10.54 dBm 1 PK MAX D1 14.78 dBm D2 -11.78 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Temp 3 [T1] 0.000 GHz Temp 4 [T1] 0.000 GHz Temp 5 [T1] 0.000 GHz Temp 6 [T1] 0.000 GHz Temp 7 [T1] 0.000 GHz Temp 8 [T1] 0.000 GHz Temp 9 [T1] 0.000 GHz Temp 10 [T1] 0.000 GHz Center 2.5775 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:55:57
Middle	 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 15.900000000 MHz Marker 1 [T1] -10.79 dBm 1 PK MAX D1 16.04 dBm D2 -11.78 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Temp 3 [T1] 0.000 GHz Temp 4 [T1] 0.000 GHz Temp 5 [T1] 0.000 GHz Temp 6 [T1] 0.000 GHz Temp 7 [T1] 0.000 GHz Temp 8 [T1] 0.000 GHz Temp 9 [T1] 0.000 GHz Temp 10 [T1] 0.000 GHz Center 2.595 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:56:25	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.54 dB VBW 1 MHz SWT 2.5 ms OBW 15.120000000 MHz Marker 1 [T1] -10.58 dBm 1 PK MAX D1 15.12 dBm D2 -11.78 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Temp 3 [T1] 0.000 GHz Temp 4 [T1] 0.000 GHz Temp 5 [T1] 0.000 GHz Temp 6 [T1] 0.000 GHz Temp 7 [T1] 0.000 GHz Temp 8 [T1] 0.000 GHz Temp 9 [T1] 0.000 GHz Temp 10 [T1] 0.000 GHz Center 2.595 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:56:53
Highest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.74 dB VBW 1 MHz SWT 2.5 ms OBW 16.500000000 MHz Marker 1 [T1] -10.81 dBm 1 PK MAX D1 15.80 dBm D2 -11.78 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Temp 3 [T1] 0.000 GHz Temp 4 [T1] 0.000 GHz Temp 5 [T1] 0.000 GHz Temp 6 [T1] 0.000 GHz Temp 7 [T1] 0.000 GHz Temp 8 [T1] 0.000 GHz Temp 9 [T1] 0.000 GHz Temp 10 [T1] 0.000 GHz Center 2.6125 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:57:32	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.73 dB VBW 1 MHz SWT 2.5 ms OBW 15.120000000 MHz Marker 1 [T1] -10.15 dBm 1 PK MAX D1 14.73 dBm D2 -11.78 dBm Temp 1 [T1] 0.000 GHz Temp 2 [T1] 0.000 GHz Temp 3 [T1] 0.000 GHz Temp 4 [T1] 0.000 GHz Temp 5 [T1] 0.000 GHz Temp 6 [T1] 0.000 GHz Temp 7 [T1] 0.000 GHz Temp 8 [T1] 0.000 GHz Temp 9 [T1] 0.000 GHz Temp 10 [T1] 0.000 GHz Center 2.6125 GHz 3 MHz/ Span 30 MHz Date: 26.JUL.2023 14:57:54

Occupied Bandwidth

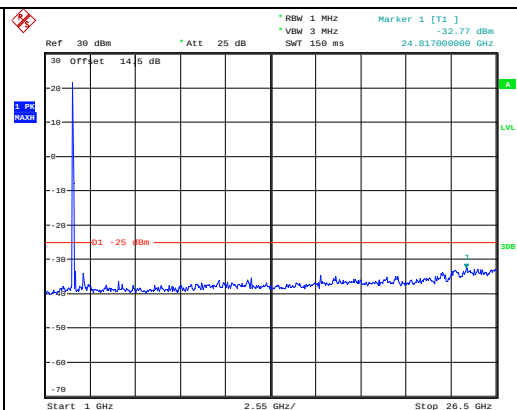
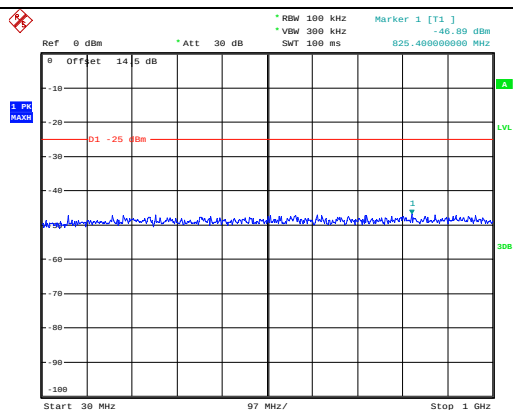
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] 1.71 dB *VBW 1 MHz SWT 2.5 ms 19.440000000 MHz OBW 30.000000000 MHz Marker 1 [T1] -10.62 dBm Temp 1 [T1 0dB] 2.570320000 GHz Temp 2 [T1 0dB] 2.571040000 GHz Temp 3 [T1 0dB] 2.589040000 GHz Center 2.58 GHz 4 MHz/ Span 40 MHz Date: 26.JUL.2023 14:58:22	Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] 0.37 dB *VBW 1 MHz SWT 2.5 ms 19.680000000 MHz OBW 30.000000000 MHz Marker 1 [T1] -11.19 dBm Temp 1 [T1 0dB] 2.570160000 GHz Temp 2 [T1 0dB] 2.571040000 GHz Temp 3 [T1 0dB] 2.589040000 GHz Center 2.58 GHz 4 MHz/ Span 40 MHz Date: 26.JUL.2023 14:58:37
Middle	Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] -1.81 dB *VBW 1 MHz SWT 2.5 ms 19.840000000 MHz OBW 30.000000000 MHz Marker 1 [T1] -11.20 dBm Temp 1 [T1 0dB] 2.585080000 GHz Temp 2 [T1 0dB] 2.586040000 GHz Temp 3 [T1 0dB] 2.604040000 GHz Center 2.595 GHz 4 MHz/ Span 40 MHz Date: 26.JUL.2023 14:59:03	Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] -1.34 dB *VBW 1 MHz SWT 2.5 ms 19.920000000 MHz OBW 30.000000000 MHz Marker 1 [T1] -11.65 dBm Temp 1 [T1 0dB] 2.584840000 GHz Temp 2 [T1 0dB] 2.586040000 GHz Temp 3 [T1 0dB] 2.604040000 GHz Center 2.595 GHz 4 MHz/ Span 40 MHz Date: 26.JUL.2023 14:59:28
Highest	Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] -1.03 dB *VBW 1 MHz SWT 2.5 ms 19.600000000 MHz OBW 30.000000000 MHz Marker 1 [T1] -10.02 dBm Temp 1 [T1 0dB] 2.600160000 GHz Temp 2 [T1 0dB] 2.600960000 GHz Temp 3 [T1 0dB] 2.619040000 GHz Center 2.61 GHz 4 MHz/ Span 40 MHz Date: 26.JUL.2023 14:59:50	Ref 30 dBm *Att 25 dB *RBW 300 kHz Delta 1 [T1] 0.54 dB *VBW 1 MHz SWT 2.5 ms 19.600000000 MHz OBW 30.000000000 MHz Marker 1 [T1] -11.13 dBm Temp 1 [T1 0dB] 2.600160000 GHz Temp 2 [T1 0dB] 2.600960000 GHz Temp 3 [T1 0dB] 2.619040000 GHz Center 2.61 GHz 4 MHz/ Span 40 MHz Date: 26.JUL.2023 15:00:11

Spurious Emissions at Antenna Terminal

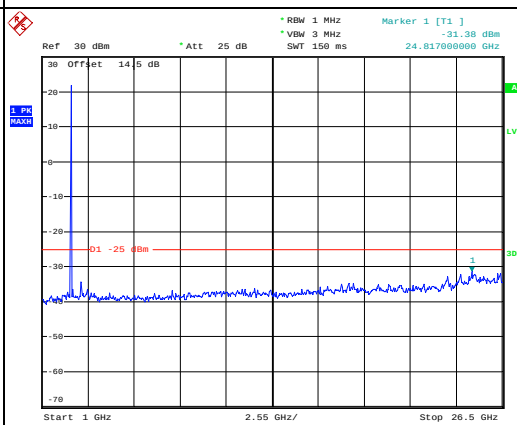
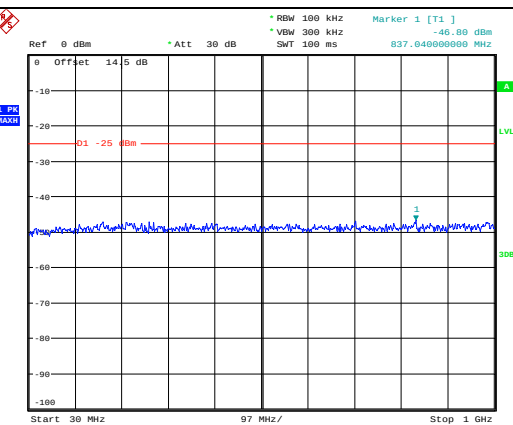
Channel

5MHz Bandwidth QPSK

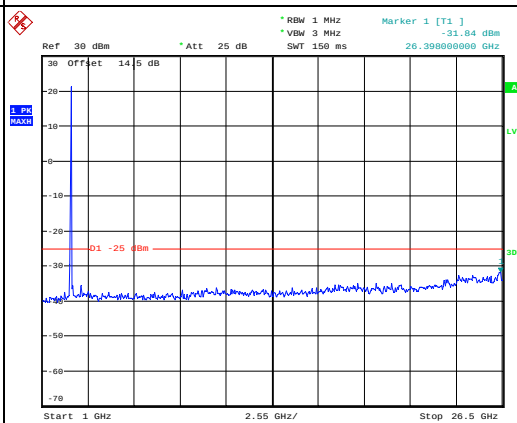
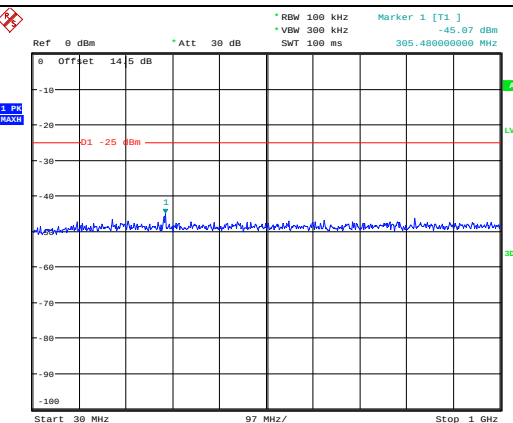
Lowest



Middle



Highest

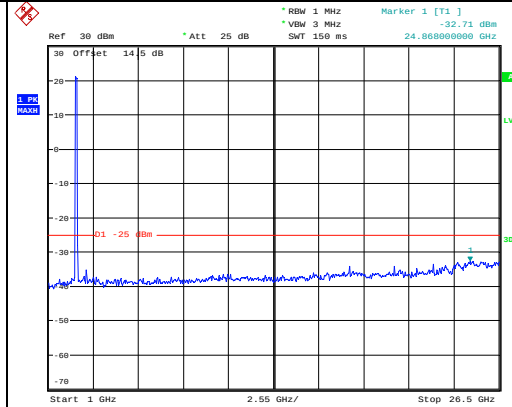
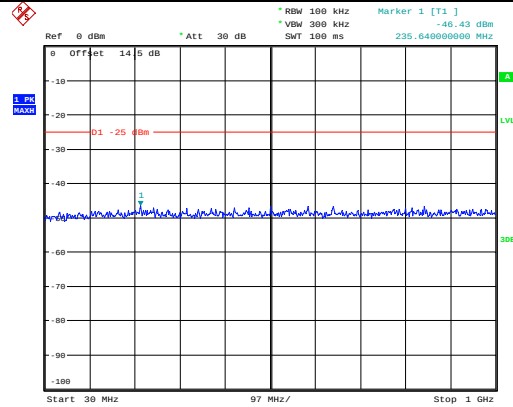


Spurious Emissions at Antenna Terminal

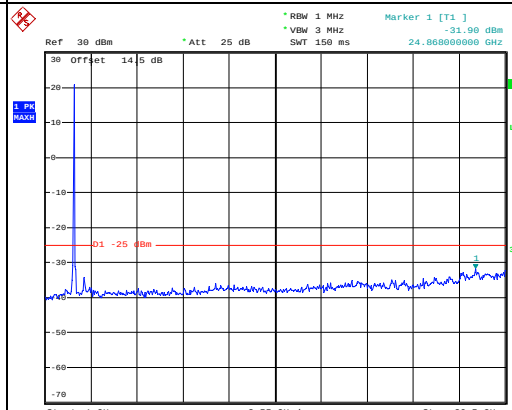
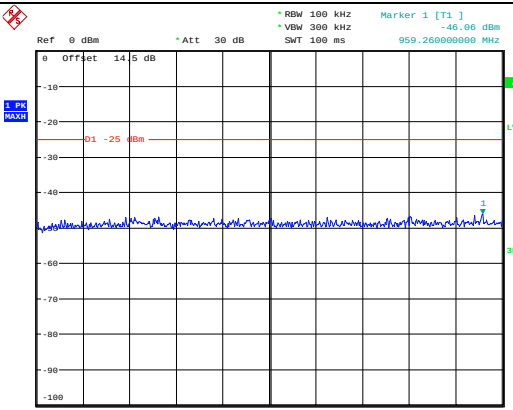
Channel

10MHz Bandwidth QPSK

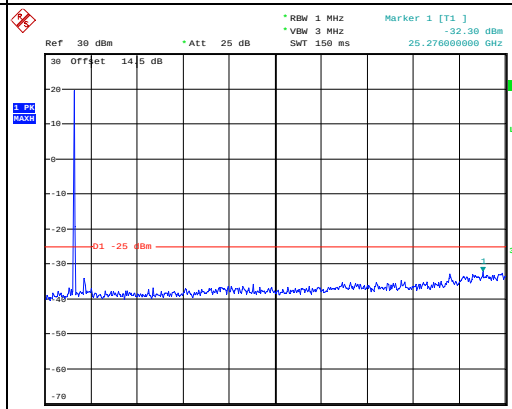
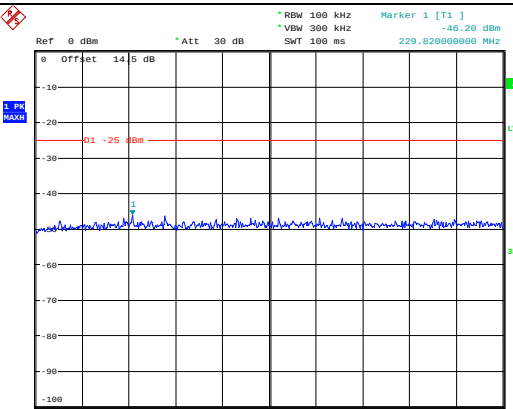
Lowest



Middle



Highest

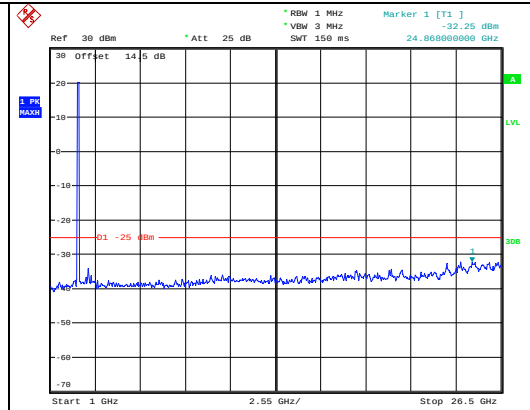
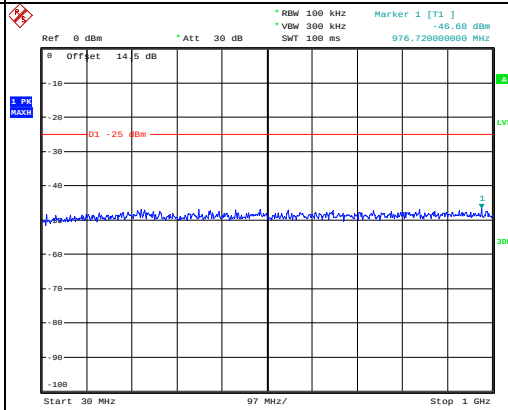


Spurious Emissions at Antenna Terminal

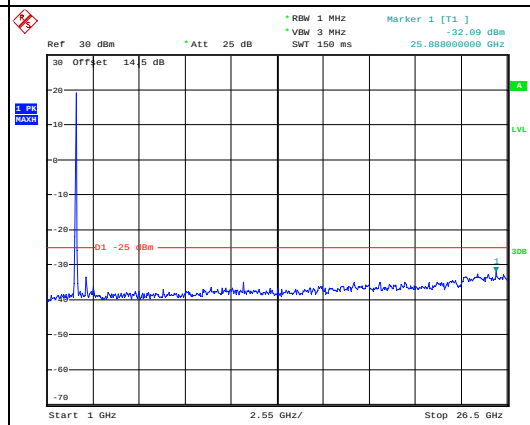
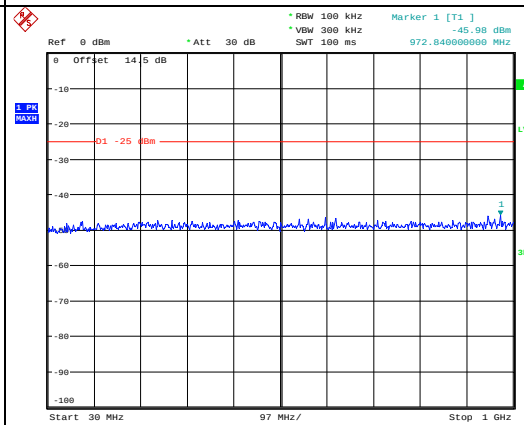
Channel

15MHz Bandwidth QPSK

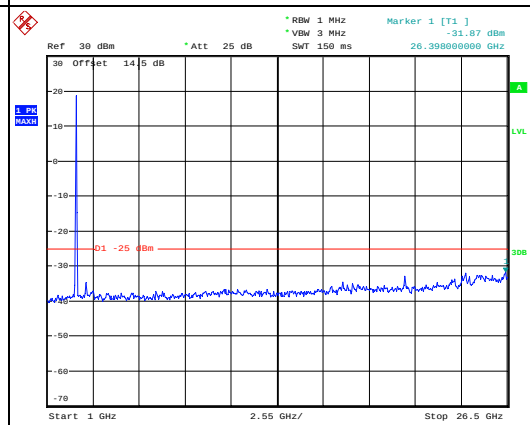
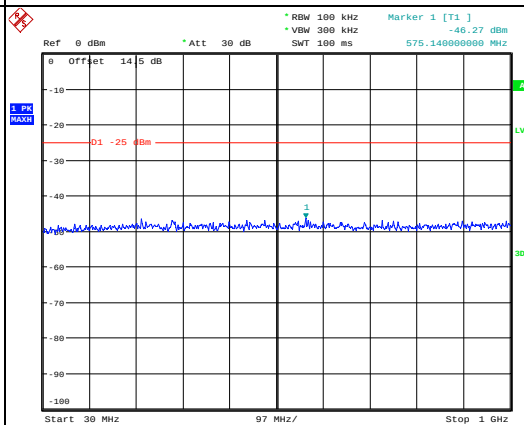
Lowest



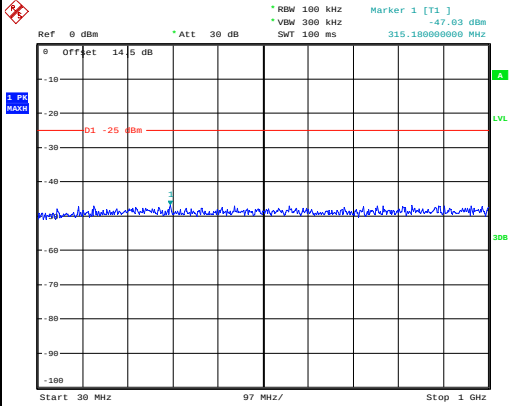
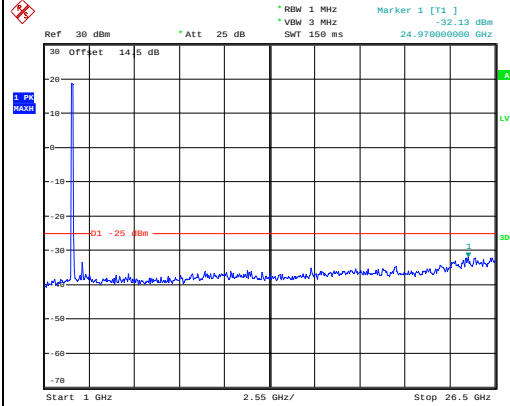
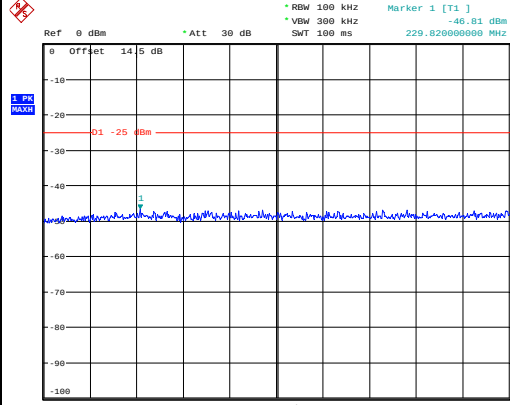
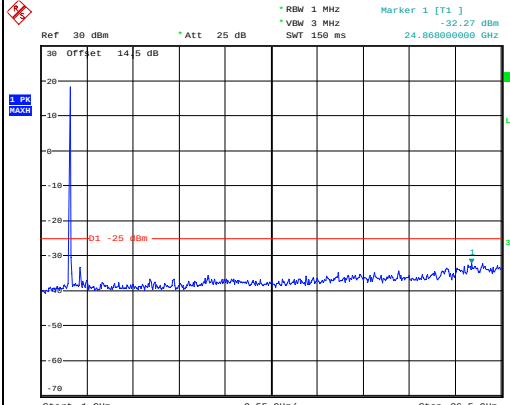
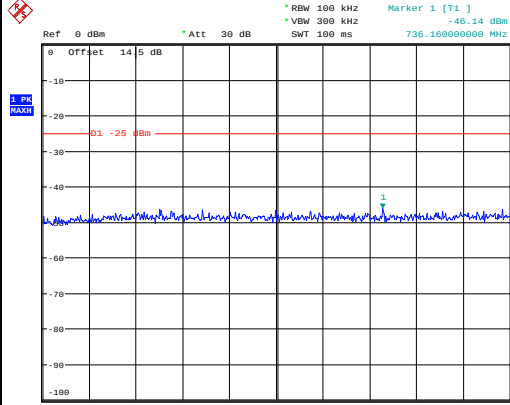
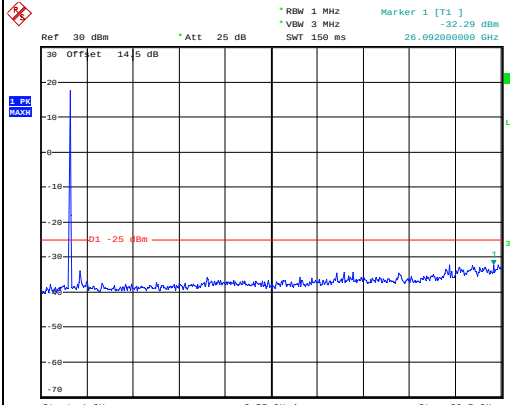
Middle



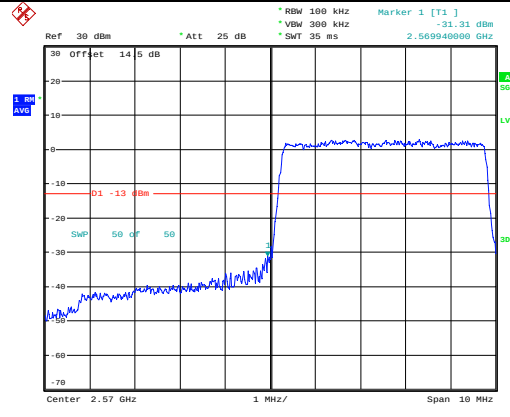
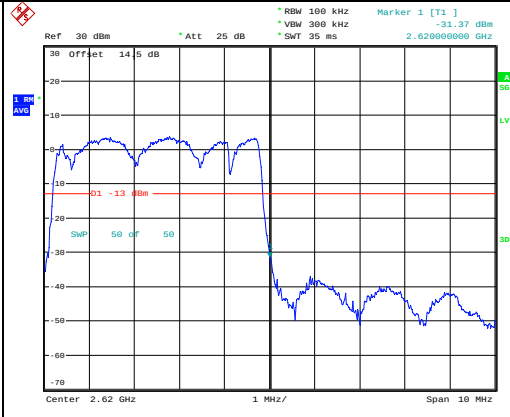
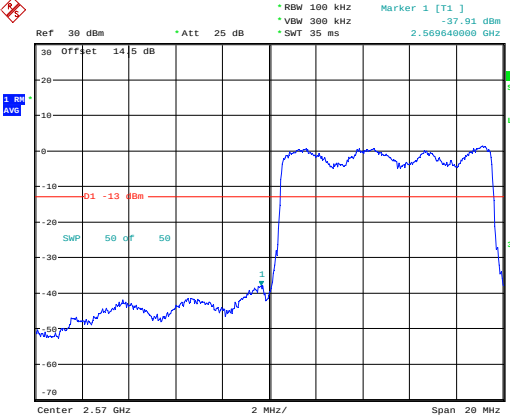
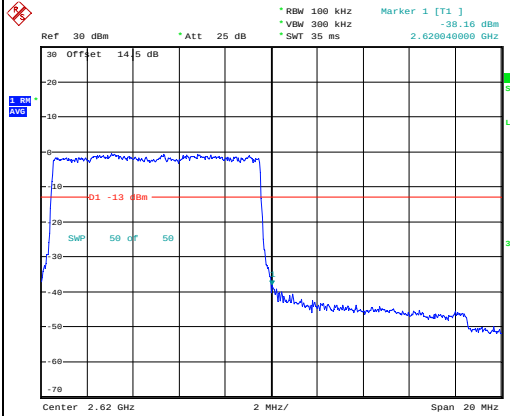
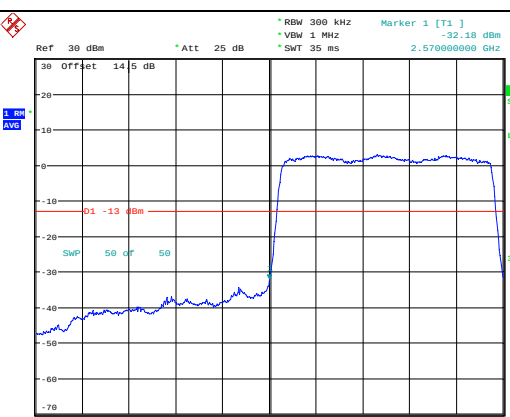
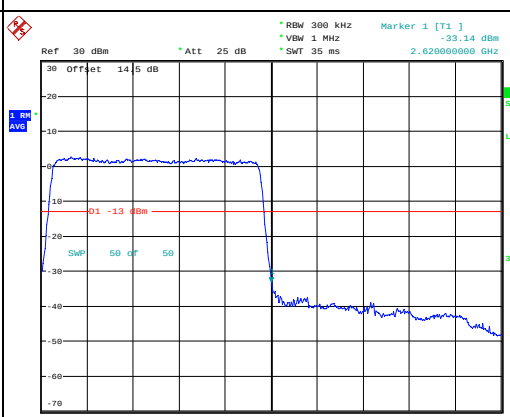
Highest



Spurious Emissions at Antenna Terminal

Channel	20MHz Bandwidth QPSK	
Lowest	 Ref 0 dBm Att 30 dB RBW 100 kHz VBW 300 kHz SWT 100 ms Marker 1 [T1] -47.03 dBm 315.180000000 MHz Start 30 MHz 97 MHz/ Stop 1 GHz Date: 27.JUL.2023 14:03:15	 Ref 30 dBm Att 25 dB RBW 1 MHz VBW 3 MHz SWT 150 ms Marker 1 [T1] -32.13 dBm 24.970000000 GHz Start 1 GHz 2.55 GHz/ Stop 26.5 GHz Date: 27.JUL.2023 14:03:27
Middle	 Ref 0 dBm Att 30 dB RBW 100 kHz VBW 300 kHz SWT 100 ms Marker 1 [T1] -46.81 dBm 229.820000000 MHz Start 30 MHz 97 MHz/ Stop 1 GHz Date: 27.JUL.2023 14:03:44	 Ref 30 dBm Att 25 dB RBW 1 MHz VBW 3 MHz SWT 150 ms Marker 1 [T1] -32.27 dBm 24.860000000 GHz Start 1 GHz 2.55 GHz/ Stop 26.5 GHz Date: 27.JUL.2023 14:03:55
Highest	 Ref 0 dBm Att 30 dB RBW 100 kHz VBW 300 kHz SWT 100 ms Marker 1 [T1] -46.14 dBm 736.160000000 MHz Start 30 MHz 97 MHz/ Stop 1 GHz Date: 27.JUL.2023 14:04:12	 Ref 30 dBm Att 25 dB RBW 1 MHz VBW 3 MHz SWT 150 ms Marker 1 [T1] -32.29 dBm 26.092000000 GHz Start 1 GHz 2.55 GHz/ Stop 26.5 GHz Date: 27.JUL.2023 14:04:23

Out of band emission, Band Edge

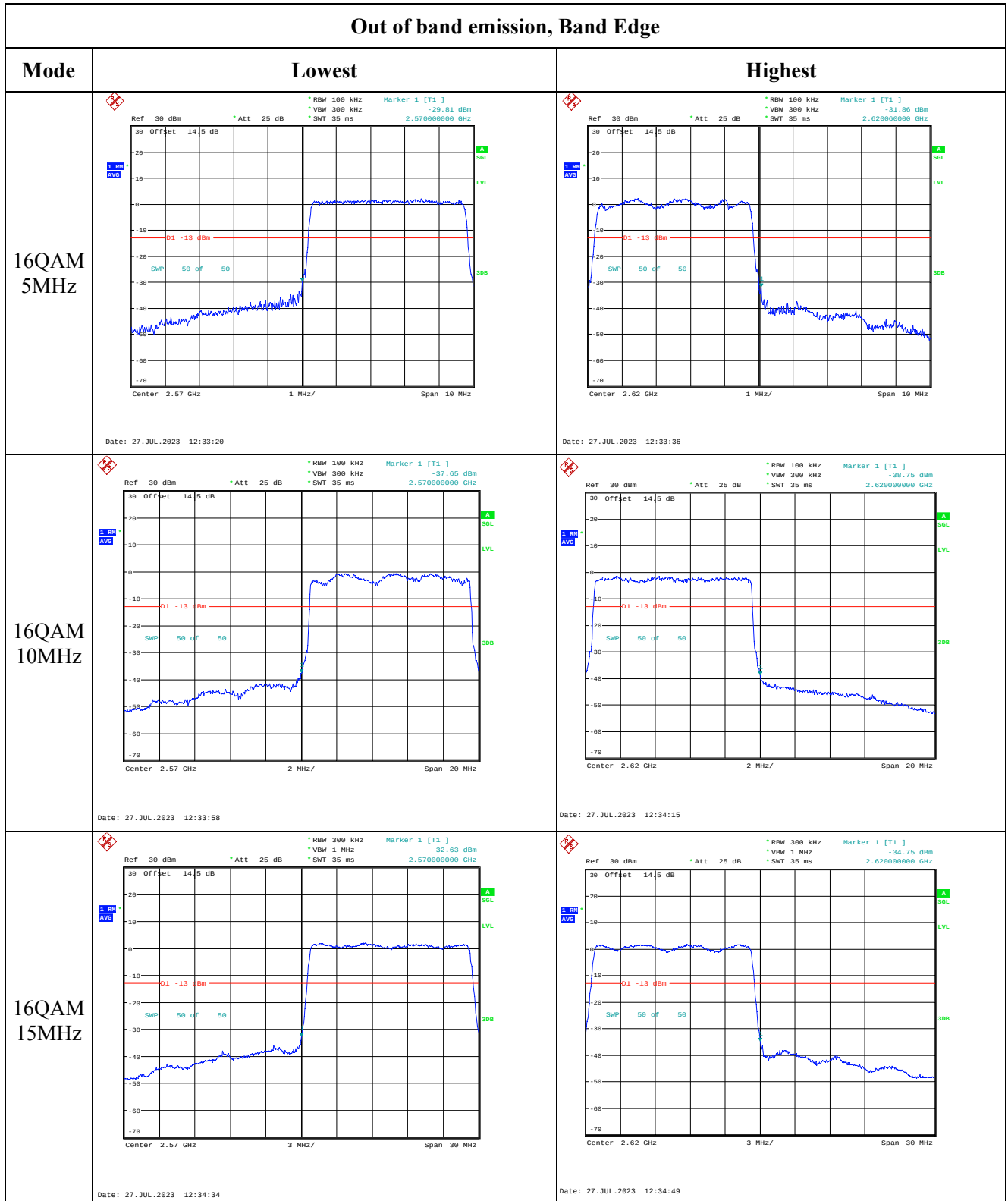
Mode	Lowest	Highest
QPSK 5MHz	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -31.31 dBm VBW 300 kHz SWT 35 ms 2.569940000 GHz 30 Offset 14.5 dB -13 dBm SWP 50 OF 50 Center 2.57 GHz 1 MHz/ Span 10 MHz Date: 27.JUL.2023 12:33:12	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -31.37 dBm VBW 300 kHz SWT 35 ms 2.620000000 GHz 30 Offset 14.5 dB -13 dBm SWP 50 OF 50 Center 2.62 GHz 1 MHz/ Span 10 MHz Date: 27.JUL.2023 12:33:29
QPSK 10MHz	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -37.91 dBm VBW 300 kHz SWT 35 ms 2.569640000 GHz 30 Offset 14.5 dB -13 dBm SWP 50 OF 50 Center 2.57 GHz 2 MHz/ Span 20 MHz Date: 27.JUL.2023 12:33:49	 Ref 30 dBm Att 25 dB RBW 100 kHz Marker 1 [T1] -38.16 dBm VBW 300 kHz SWT 35 ms 2.620000000 GHz 30 Offset 14.5 dB -13 dBm SWP 50 OF 50 Center 2.62 GHz 2 MHz/ Span 20 MHz Date: 27.JUL.2023 12:34:07
QPSK 15MHz	 Ref 30 dBm Att 25 dB RBW 300 kHz Marker 1 [T1] -32.18 dBm VBW 1 MHz SWT 35 ms 2.570000000 GHz 30 Offset 14.5 dB -13 dBm SWP 50 OF 50 Center 2.57 GHz 3 MHz/ Span 30 MHz Date: 27.JUL.2023 12:34:27	 Ref 30 dBm Att 25 dB RBW 300 kHz Marker 1 [T1] -33.14 dBm VBW 1 MHz SWT 35 ms 2.620000000 GHz 30 Offset 14.5 dB -13 dBm SWP 50 OF 50 Center 2.62 GHz 3 MHz/ Span 30 MHz Date: 27.JUL.2023 12:34:42

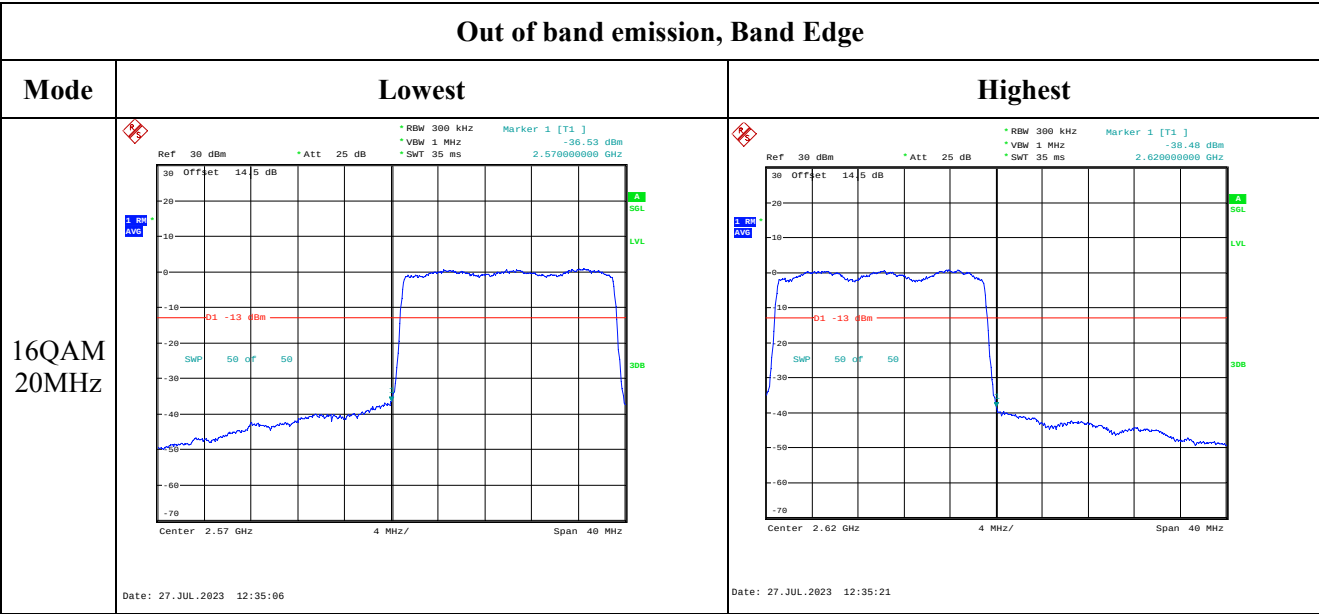
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 20MHz	Ref 30 dBm Att 25 dB RBW 300 KHz Marker 1 [T1] -35.96 dBm VBW 1 MHz 2.570000000 GHz SWT 35 ms Center 2.57 GHz 4 MHz/ Span 40 MHz	Ref 30 dBm Att 25 dB RBW 300 KHz Marker 1 [T1] -36.14 dBm VBW 1 MHz 2.620000000 GHz SWT 35 ms Center 2.62 GHz 4 MHz/ Span 40 MHz

Date: 27.JUL.2023 12:34:59
Date: 27.JUL.2023 12:35:14

Out of band emission, Band Edge





4.15 Antenna Port Test Data and Results for LTE Band 40

Serial Number:	27BI-1	Test Date:	2023/8/1-2023/8/3
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	23.6-24.7	Relative Humidity: (%)	49-54	ATM Pressure: (kPa)	99.7-99.8
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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
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Weinschel	Power splitter	1515	RA915	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30

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

Test Frequency for Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
5MHz	2307.5	/	2312.5
10MHz	/	2310	/
5MHz	2352.5	/	2357.5
10MHz	/	2355	/

Test Data:

(Note: Uplink Downlink configuration 3 was tested)

FCC§2.1046; § 27.50(a)(3)						
LTE Band 40 Lower:						
RF Output Power:						
Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	18.5	/	18.4	20.76	24
	RB1#13	18.37	/	18.43		
	RB1#24	18.32	/	18.42		
	RB15#0	18.00	/	17.79		
	RB15#10	18.02	/	17.99		
	RB25#0	17.98	/	17.91		
5MHz 16QAM	RB1#0	18.45	/	18.77	21.03	24
	RB1#13	18.46	/	18.65		
	RB1#24	18.41	/	18.75		
	RB15#0	17.89	/	17.68		
	RB15#10	17.77	/	17.73		
	RB25#0	17.44	/	17.76		
10MHz QPSK	RB1#0	/	18.28	/	20.54	24
	RB1#25	/	18.20	/		
	RB1#49	/	18.14	/		
	RB25#0	/	17.58	/		
	RB25#25	/	17.48	/		
	RB50#0	/	17.54	/		
10MHz 16QAM	RB1#0	/	18.20	/	21.1	24
	RB1#25	/	18.84	/		
	RB1#49	/	18.74	/		
	RB25#0	/	17.25	/		
	RB25#25	/	17.16	/		
	RB50#0	/	17.2	/		
EIRP PSD in 5MHz:						
Test Bandwidth & Modulation	Resource Block & RB offset	Conducted PSD (dBm/5MHz)			Maximum EIRP PSD (dBm/5MHz)	Limit (dBm/5MHz)
		Lowest Channel	Middle Channel	Highest Channel		
10MHz QPSK	RB1#0	/	18.28	/	20.54	24
	RB1#25	/	18.20	/		
	RB1#49	/	17.26	/		
	RB25#0	/	17.58	/		
	RB25#25	/	17.48	/		
	RB50#0	/	15.49	/		
10MHz 16QAM	RB1#0	/	18.20	/	21.1	24
	RB1#25	/	18.84	/		

	RB1#49	/	17.61	/		
	RB25#0	/	17.25	/		
	RB25#25	/	17.16	/		
	RB50#0	/	15.33	/		

Note:

For 5MHz mode, the channel power is equal to the test result in dBm/5MHz.

EIRP=Conducted Power(dBm) - Lc(dB) + Gt(dBi)

EIRP PSD=Conducted PSD(dBm/5MHz) - Lc(dB) + Gt(dBi)

LTE Band 40 Upper:

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	18.42	/	17.54	20.68	24
	RB1#13	18.41	/	17.54		
	RB1#24	18.39	/	17.43		
	RB15#0	17.78	/	17.09		
	RB15#10	17.7	/	17.05		
	RB25#0	17.71	/	17.04		
5MHz 16QAM	RB1#0	18.49	/	17.63	20.75	24
	RB1#13	18.27	/	17.41		
	RB1#24	18.26	/	17.71		
	RB15#0	17.46	/	16.9		
	RB15#10	17.52	/	16.91		
	RB25#0	17.5	/	16.49		
10MHz QPSK	RB1#0	/	18.56	/	20.82	24
	RB1#25	/	18.51	/		
	RB1#49	/	18.56	/		
	RB25#0	/	17.87	/		
	RB25#25	/	17.91	/		
	RB50#0	/	17.9	/		
10MHz 16QAM	RB1#0	/	18.63	/	21.33	24
	RB1#25	/	18.67	/		
	RB1#49	/	19.07	/		
	RB25#0	/	17.74	/		
	RB25#25	/	17.61	/		
	RB50#0	/	17.54	/		

EIRP PSD in 5MHz:

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted PSD(dBm/5MHz)			Maximum EIRP PSD (dBm/5MHz)	Limit (dBm/5MHz)
		Lowest Channel	Middle Channel	Highest Channel		
10MHz QPSK	RB1#0	/	18.56	/	20.82	24
	RB1#25	/	18.51	/		
	RB1#49	/	17.31	/		

10MHz 16QAM	RB25#0	/	17.87	/	20.93	24
	RB25#25	/	17.91	/		
	RB50#0	/	15.69	/		
	RB1#0	/	18.63	/		
	RB1#25	/	18.67	/		
	RB1#49	/	17.46	/		
	RB25#0	/	17.74	/		
	RB25#25	/	17.61	/		
	RB50#0	/	15.39	/		

Note:

For 5MHz mode, the channel power is equal to the test result in dBm/5MHz.

EIRP=Conducted Power(dBm) - Lc(dB) + Gt(dBi)

EIRP PSD=Conducted PSD(dBm/5MHz) - Lc(dB) + Gt(dBi)

Result:**Pass****Duty Cycle**

Duty Cycle						
Operation Band	Modulation	Bandwidth	Ton (ms)	Ton+off (ms)	Duty Cycle (%)	Limit (%)
LTE Band 40 Lower	QPSK	5M	3.186	10.032	31.76	38
		10M	3.25	10.16	31.99	38
	16QAM	5M	3.186	10.096	31.56	38
		10M	3.122	10.032	31.12	38
LTE Band 40 Upper	QPSK	5M	3.122	10.032	31.12	38
		10M	3.122	9.968	31.32	38
	16QAM	5M	3.186	10.096	31.56	38
		10M	3.122	9.968	31.32	38
					Result:	Pass

FCC §2.1049, §27.53: Occupied Bandwidth**LTE Band 40 Lower:**

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	4.50	/	4.50	5.00	/	5.08
5MHz 16QAM	4.50	/	4.50	5.22	/	5.24
10MHz QPSK	/	8.96	/	/	9.80	/
10MHz 16QAM	/	8.96	/	/	9.76	/

LTE Band 40 Upper:

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle channel	High Channel
5MHz QPSK	4.54	/	4.5	5.56	/	5.0

5MHz 16QAM	4.52	/	4.52	5.34	/	5.04
10MHz QPSK	/	8.96	/	/	9.84	/
10MHz 16QAM	/	8.96	/	/	9.76	/

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

LTE Band 40 Lower:

Test Mode:	10M 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	3.8	2305.040	2305.000	2314.240	2315.000
	-20	3.8	2305.030	2305.000	2314.190	2315.000
	-10	3.8	2305.530	2305.000	2314.480	2315.000
	0	3.8	2305.150	2305.000	2314.230	2315.000
	10	3.8	2305.930	2305.000	2314.190	2315.000
	20	3.8	2305.560	2305.000	2314.520	2315.000
	30	3.8	2305.650	2305.000	2314.160	2315.000
	40	3.8	2305.130	2305.000	2314.680	2315.000
	50	3.8	2305.340	2305.000	2314.450	2315.000
Frequency Stability vs. Voltage	20	3.5	2305.070	2305.000	2314.490	2315.000
	20	4.35	2305.960	2305.000	2314.670	2315.000
Result:					Pass	

Test Mode:	10M 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	3.8	2305.430	2305.000	2314.470	2315.000
	-20	3.8	2305.670	2305.000	2314.220	2315.000
	-10	3.8	2305.280	2305.000	2314.310	2315.000
	0	3.8	2305.990	2305.000	2314.400	2315.000
	10	3.8	2305.190	2305.000	2314.720	2315.000
	20	3.8	2305.560	2305.000	2314.520	2315.000
	30	3.8	2305.940	2305.000	2314.430	2315.000
	40	3.8	2305.300	2305.000	2314.740	2315.000
	50	3.8	2305.080	2305.000	2314.570	2315.000
Frequency	20	3.5	2305.180	2305.000	2314.300	2315.000

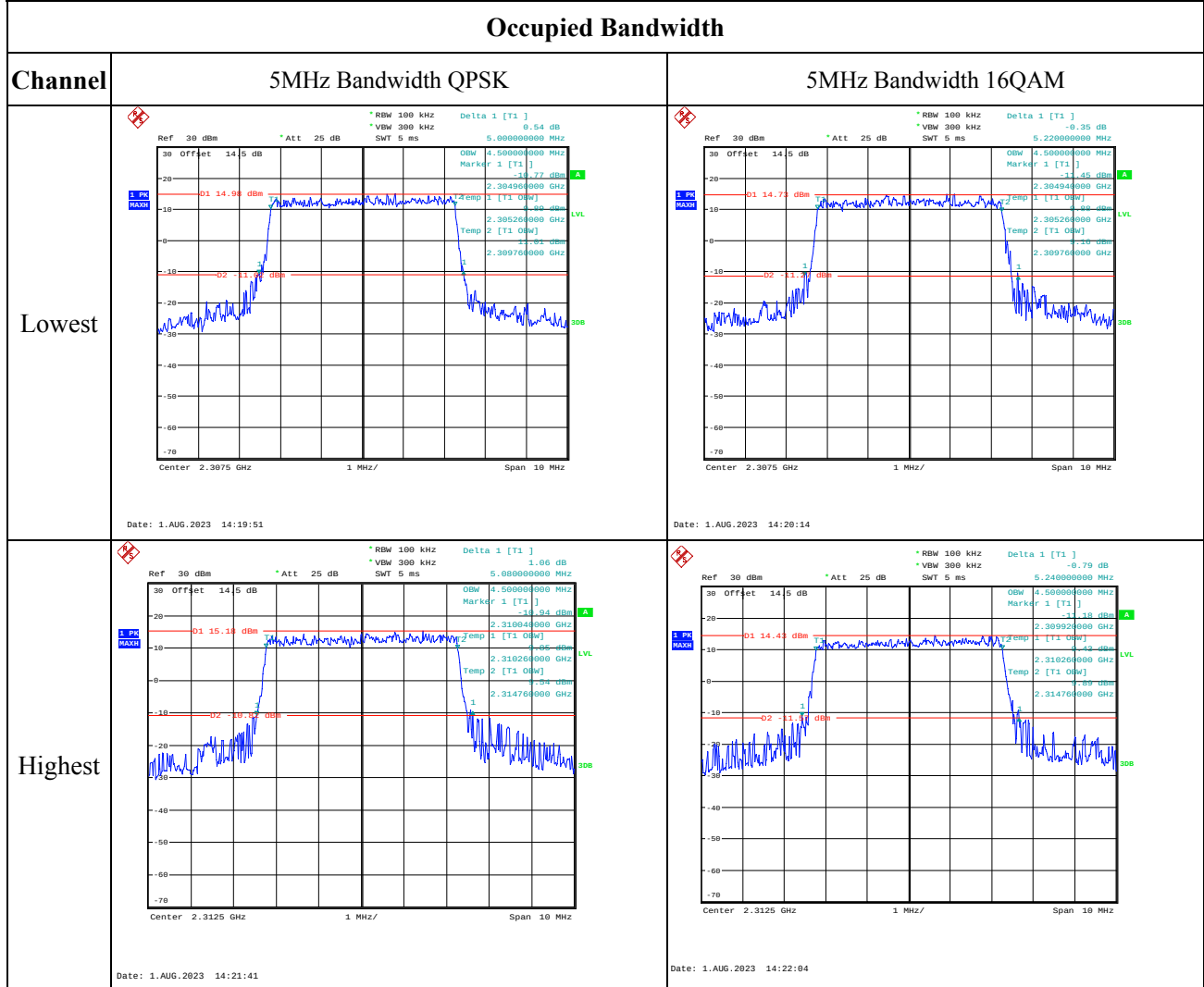
Stability vs. Voltage	20	4.35	2305.370	2305.000	2314.050	2315.000
					Result:	Pass

LTE Band 40 Upper:

Test Mode:	10M 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	3.8	2350.930	2350.000	2359.160	2360.000
	-20	3.8	2350.630	2350.000	2359.260	2360.000
	-10	3.8	2350.330	2350.000	2359.370	2360.000
	0	3.8	2350.020	2350.000	2359.020	2360.000
	10	3.8	2350.100	2350.000	2359.140	2360.000
	20	3.8	2350.520	2350.000	2359.480	2360.000
	30	3.8	2350.500	2350.000	2359.330	2360.000
	40	3.8	2350.250	2350.000	2359.260	2360.000
Frequency Stability vs. Voltage	50	3.8	2350.380	2350.000	2359.390	2360.000
	20	3.5	2350.960	2350.000	2359.250	2360.000
	20	4.35	2350.690	2350.000	2359.990	2360.000
					Result:	Pass

Test Mode:	10M 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	3.8	2350.830	2350.000	2359.750	2360.000
	-20	3.8	2350.650	2350.000	2359.170	2360.000
	-10	3.8	2350.160	2350.000	2359.930	2360.000
	0	3.8	2350.710	2350.000	2359.890	2360.000
	10	3.8	2350.580	2350.000	2359.510	2360.000
	20	3.8	2350.520	2350.000	2359.480	2360.000
	30	3.8	2350.050	2350.000	2359.920	2360.000
	40	3.8	2350.070	2350.000	2359.630	2360.000
	50	3.8	2350.590	2350.000	2359.310	2360.000
Frequency Stability vs. Voltage	20	3.5	2350.040	2350.000	2359.700	2360.000
	20	4.35	2350.370	2350.000	2359.680	2360.000
					Result:	Pass

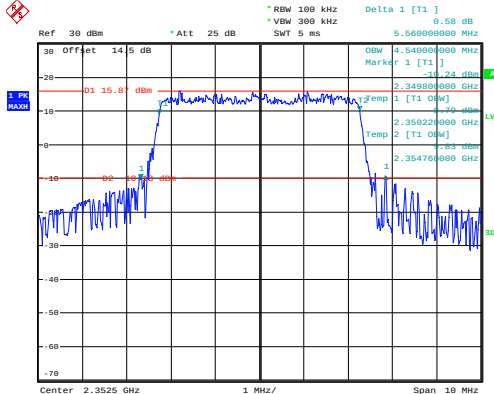
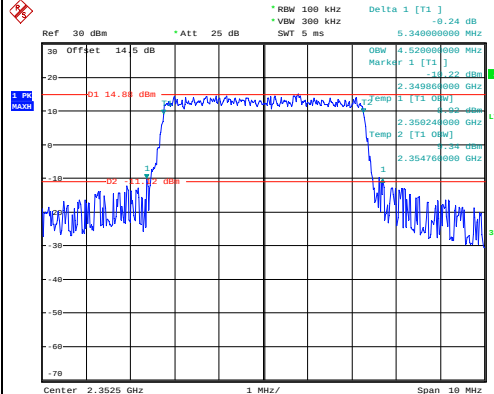
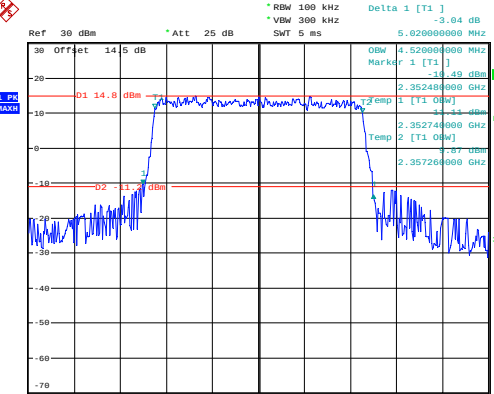
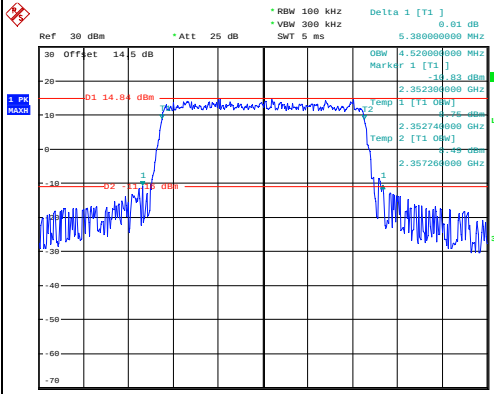
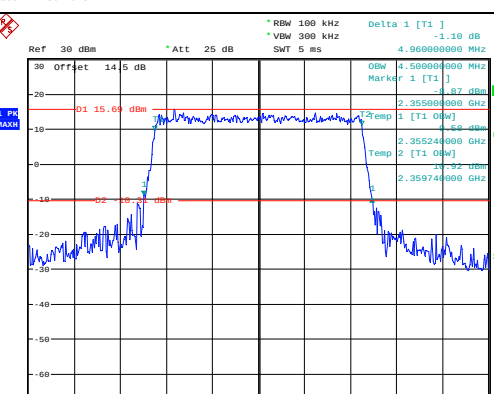
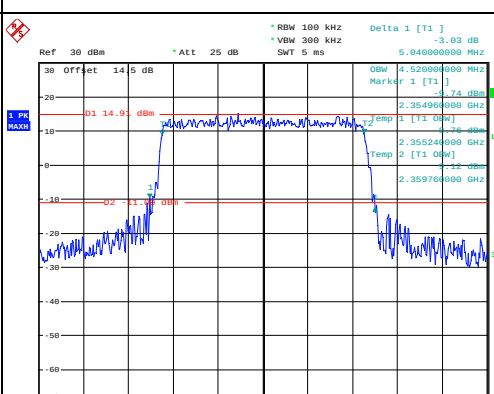
Test Plots (Note: The 14.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):
2305-2315 MHz:



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2350-2360 MHz:

Occupied Bandwidth

Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] 0.58 dB *VBW 300 kHz SWT 5 ms 5.560000000 MHz OBW 4.540000000 MHz Marker 1 [T1] -14.24 dBm 1 [T1 0dB] 2 [T1 0dB] Temp 2 [T1 0dB] 2.350224000 GHz 2.354760000 GHz Center 2.3525 GHz 1 MHz/ Span 10 MHz Date: 1.AUG.2023 14:10:49	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] -0.24 dB *VBW 300 kHz SWT 5 ms 5.340000000 MHz OBW 4.520000000 MHz Marker 1 [T1] -14.22 dBm 1 [T1 0dB] 2 [T1 0dB] Temp 2 [T1 0dB] 2.350240000 GHz 2.354760000 GHz Center 2.3525 GHz 1 MHz/ Span 10 MHz Date: 1.AUG.2023 14:11:16
Middle	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] -3.04 dB *VBW 300 kHz SWT 5 ms 5.020000000 MHz OBW 4.520000000 MHz Marker 1 [T1] -14.49 dBm 1 [T1 0dB] 2 [T1 0dB] Temp 2 [T1 0dB] 2.352480000 GHz 2.357260000 GHz Center 2.355 GHz 1 MHz/ Span 10 MHz Date: 1.AUG.2023 14:11:47	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] 0.01 dB *VBW 300 kHz SWT 5 ms 5.380000000 MHz OBW 4.520000000 MHz Marker 1 [T1] -14.83 dBm 1 [T1 0dB] 2 [T1 0dB] Temp 2 [T1 0dB] 2.352380000 GHz 2.357260000 GHz Center 2.355 GHz 1 MHz/ Span 10 MHz Date: 1.AUG.2023 14:12:14
Highest	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] -1.10 dB *VBW 300 kHz SWT 5 ms 4.960000000 MHz OBW 4.500000000 MHz Marker 1 [T1] -14.87 dBm 1 [T1 0dB] 2 [T1 0dB] Temp 2 [T1 0dB] 2.355080000 GHz 2.359740000 GHz Center 2.3575 GHz 1 MHz/ Span 10 MHz Date: 1.AUG.2023 14:12:44	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] -3.03 dB *VBW 300 kHz SWT 5 ms 5.040000000 MHz OBW 4.520000000 MHz Marker 1 [T1] -14.74 dBm 1 [T1 0dB] 2 [T1 0dB] Temp 2 [T1 0dB] 2.354900000 GHz 2.359760000 GHz Center 2.3575 GHz 1 MHz/ Span 10 MHz Date: 1.AUG.2023 14:13:08

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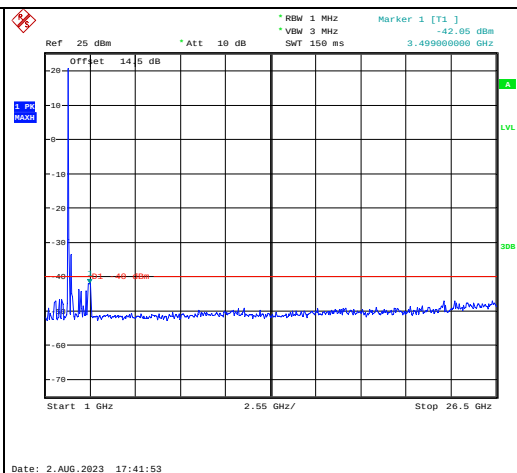
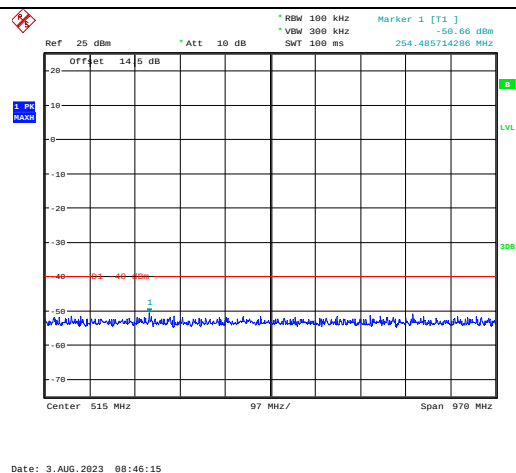
2305-2315 MHz:

Spurious Emissions at Antenna Terminal

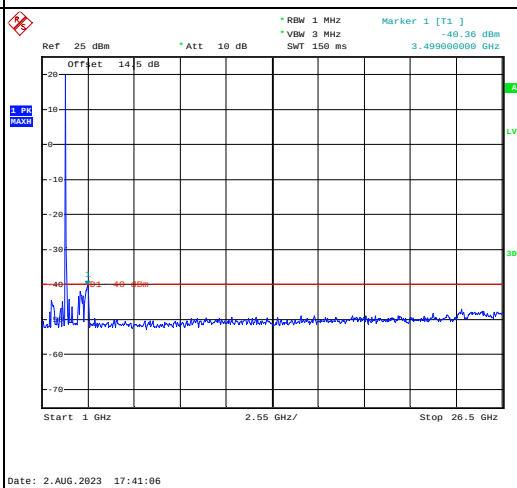
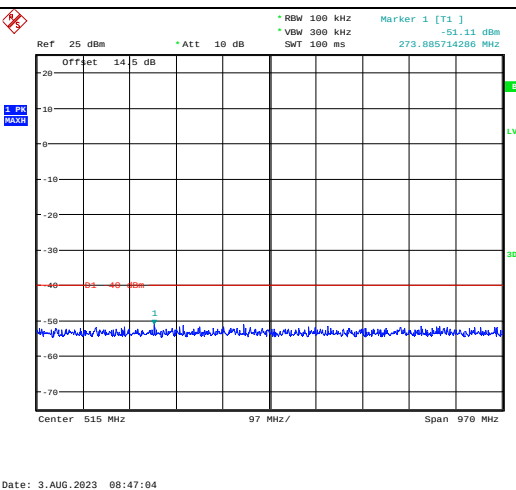
Channel

5MHz Bandwidth QPSK

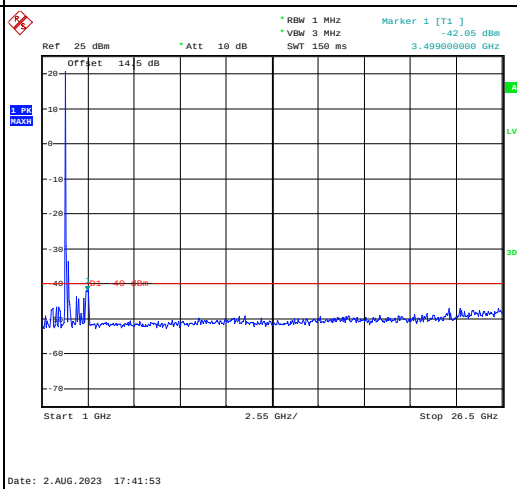
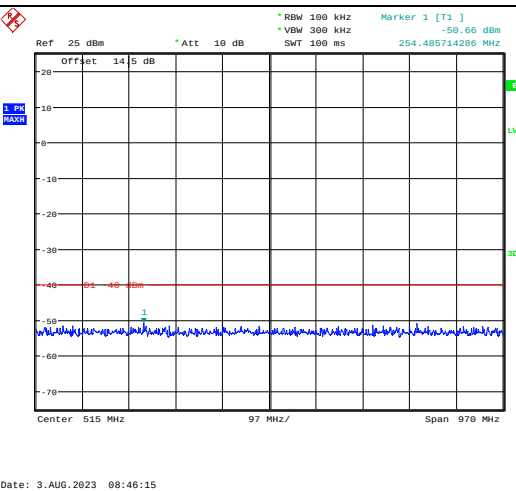
Lowest



Middle



Highest

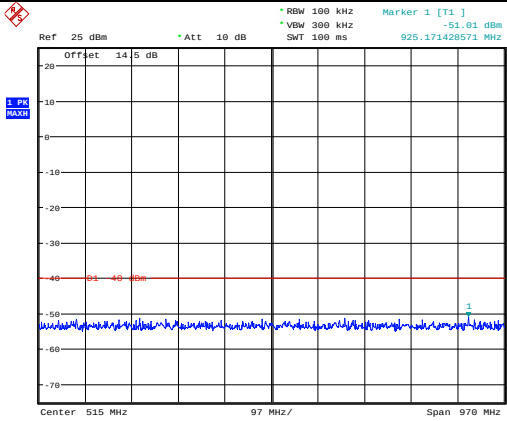


Spurious Emissions at Antenna Terminal

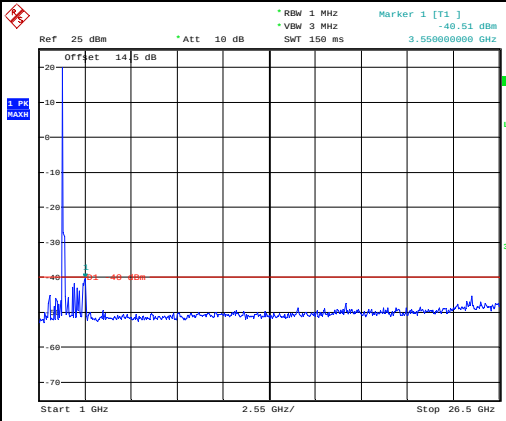
Channel

10MHz Bandwidth QPSK

Middle



Date: 3.AUG.2023 08:47:48



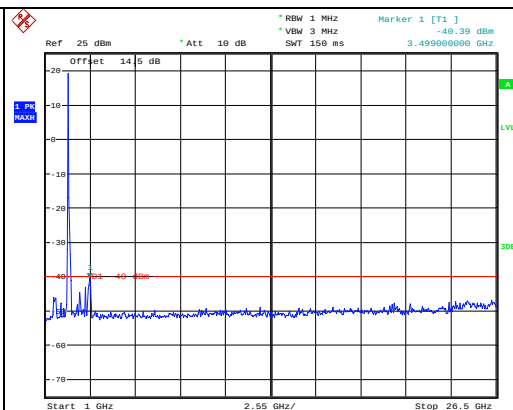
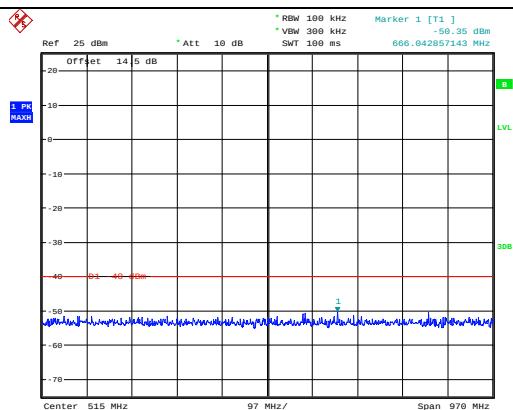
Date: 2.AUG.2023 17:40:23

Spurious Emissions at Antenna Terminal

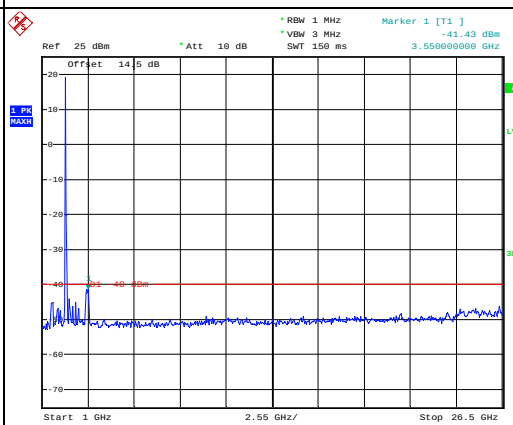
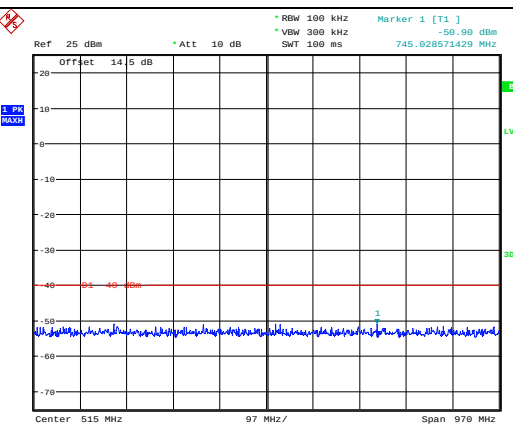
Channel

5MHz Bandwidth 16QAM

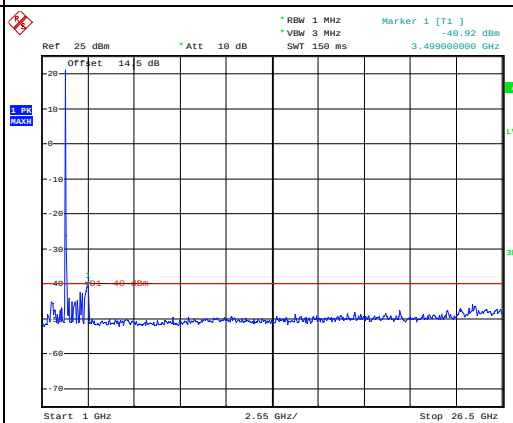
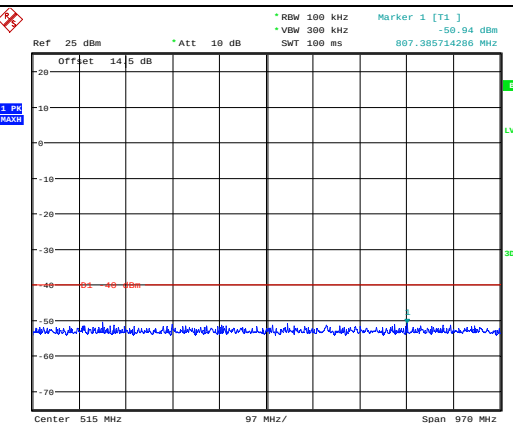
Lowest



Middle



Highest



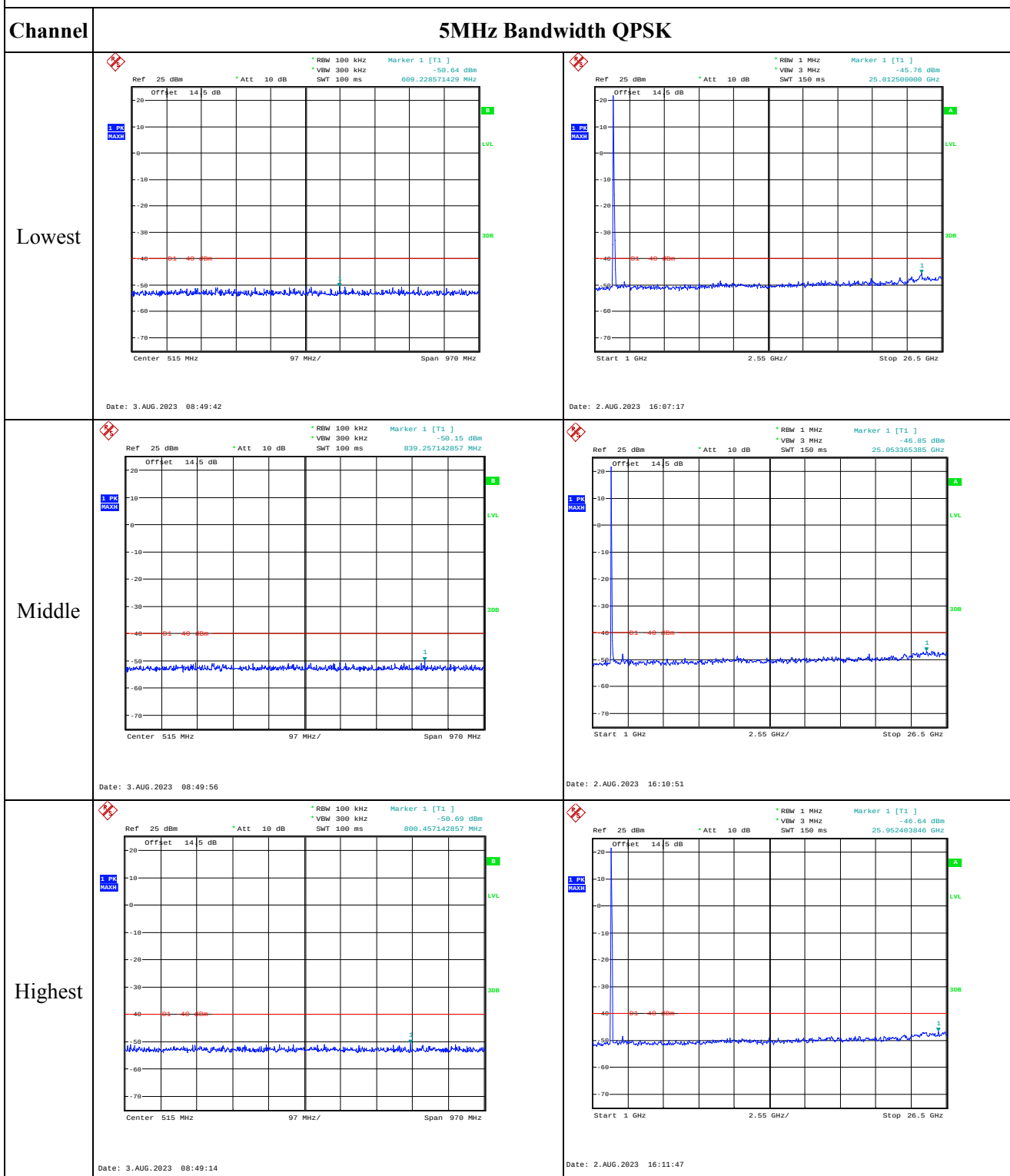
Channel

Middle

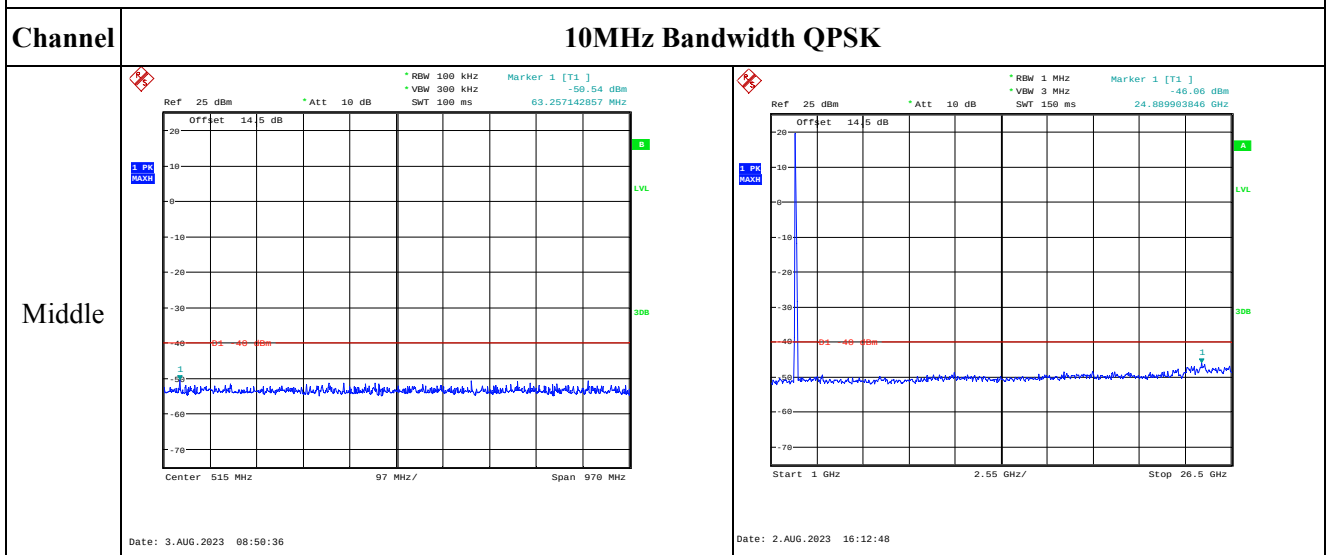


2350-2360 MHz:

Spurious Emissions at Antenna Terminal



Spurious Emissions at Antenna Terminal

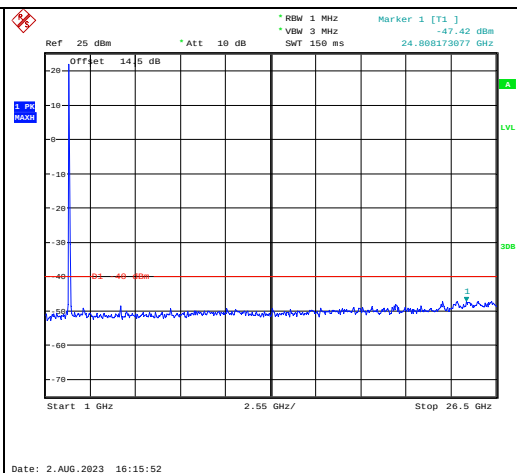
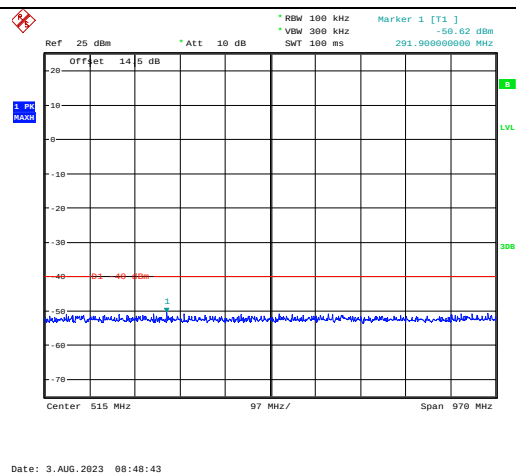


Spurious Emissions at Antenna Terminal

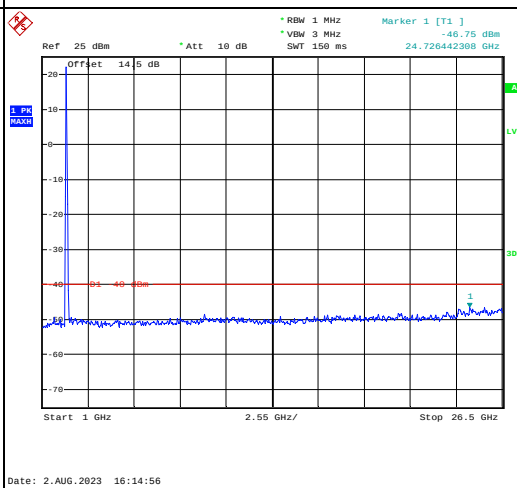
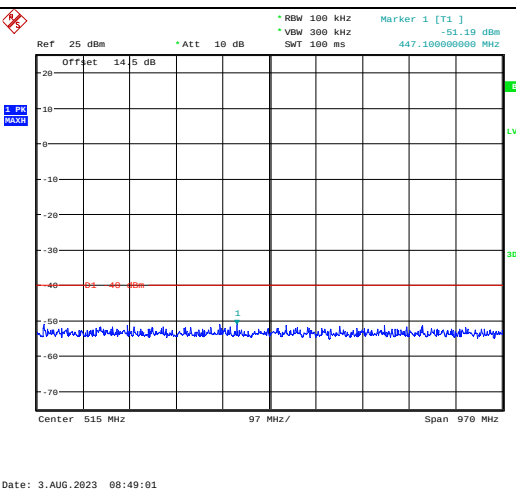
Channel

5MHz Bandwidth 16QAM

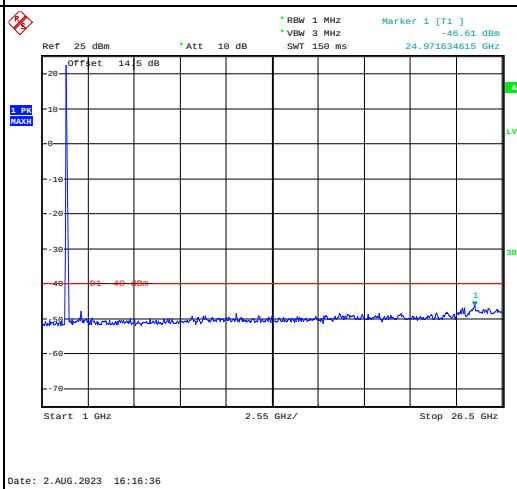
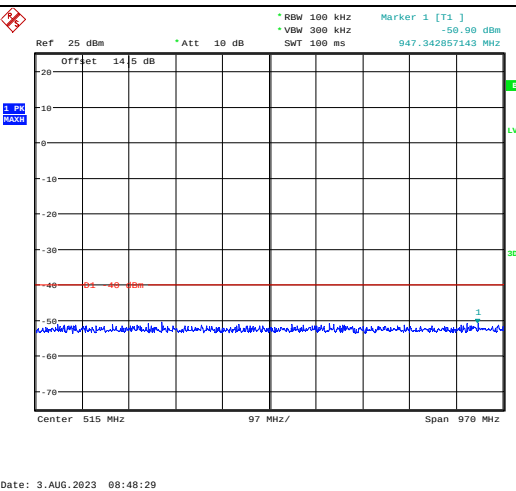
Lowest



Middle



Highest

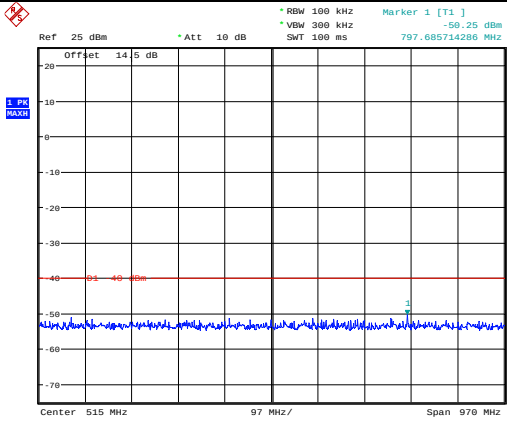


Spurious Emissions at Antenna Terminal

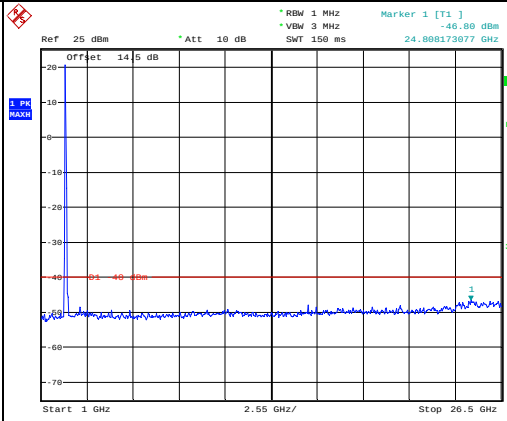
Channel

10MHz Bandwidth 16QAM

Middle



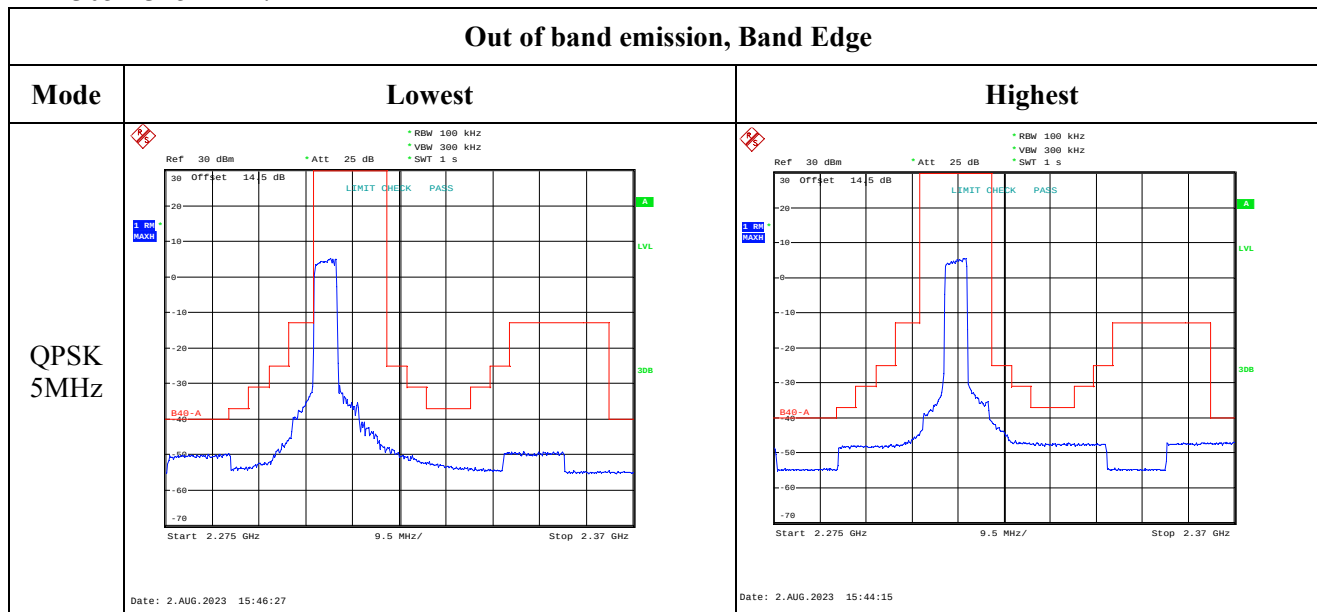
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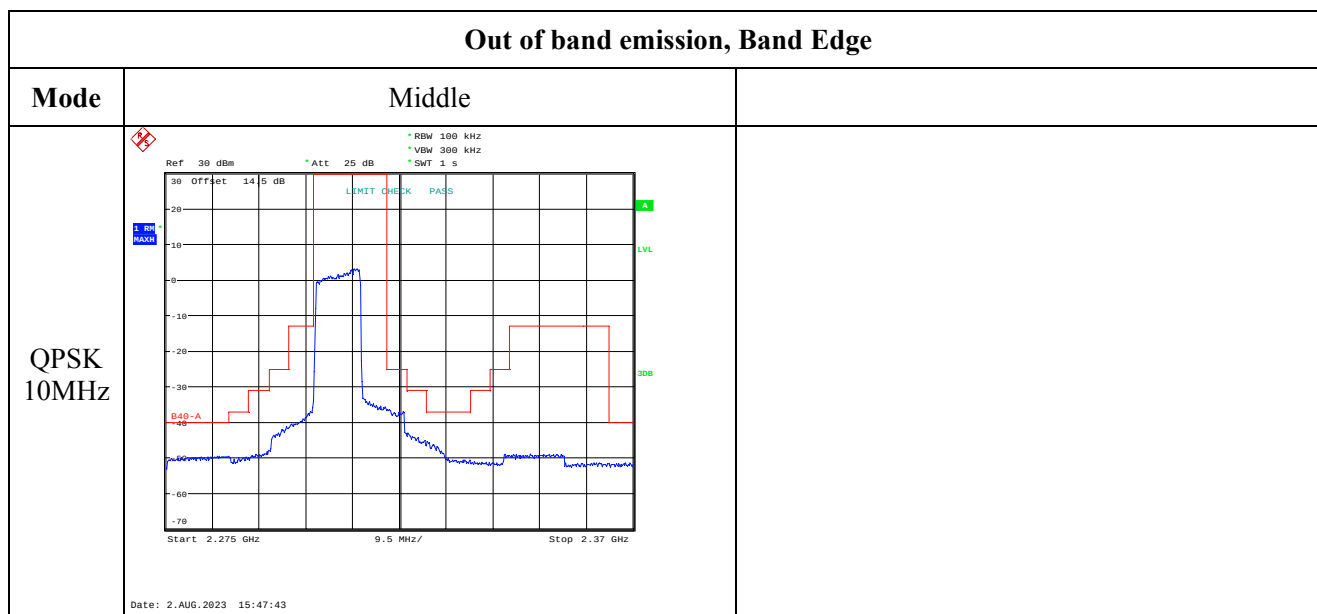
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2305-2315 MHz:

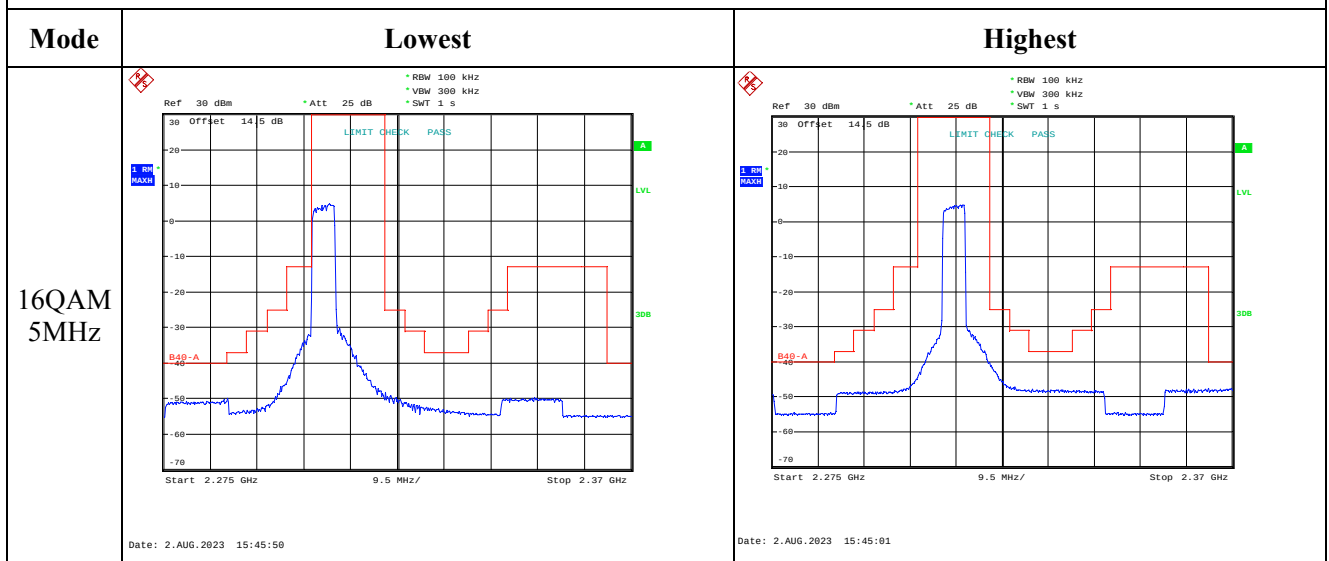
Out of band emission, Band Edge



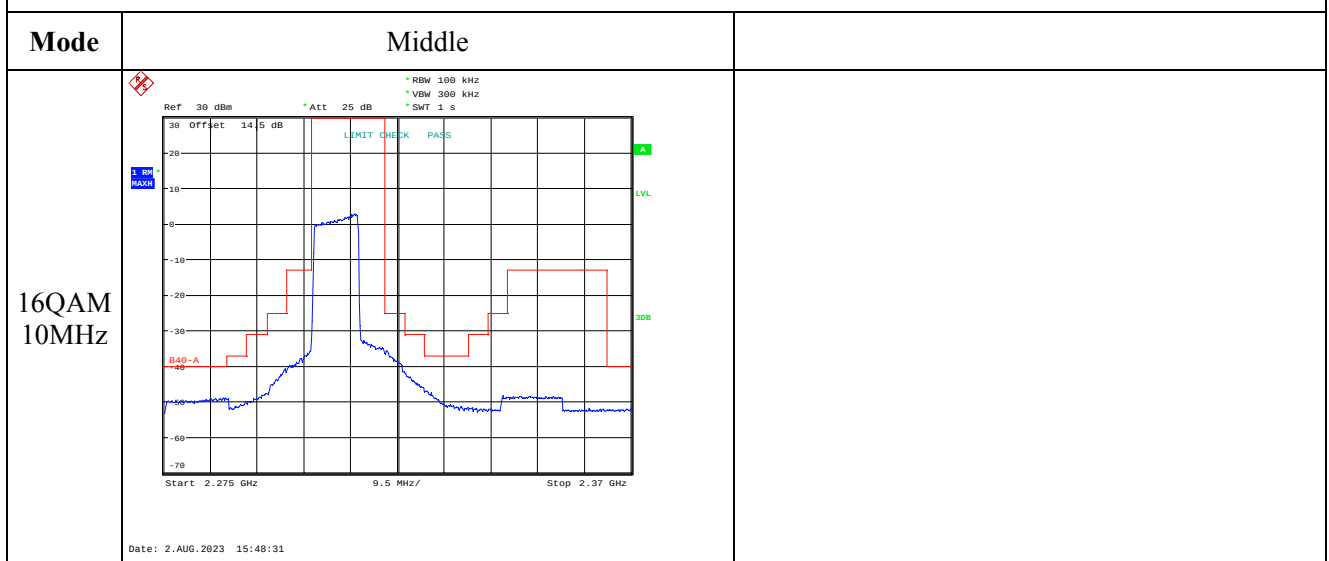
Out of band emission, Band Edge



Out of band emission, Band Edge

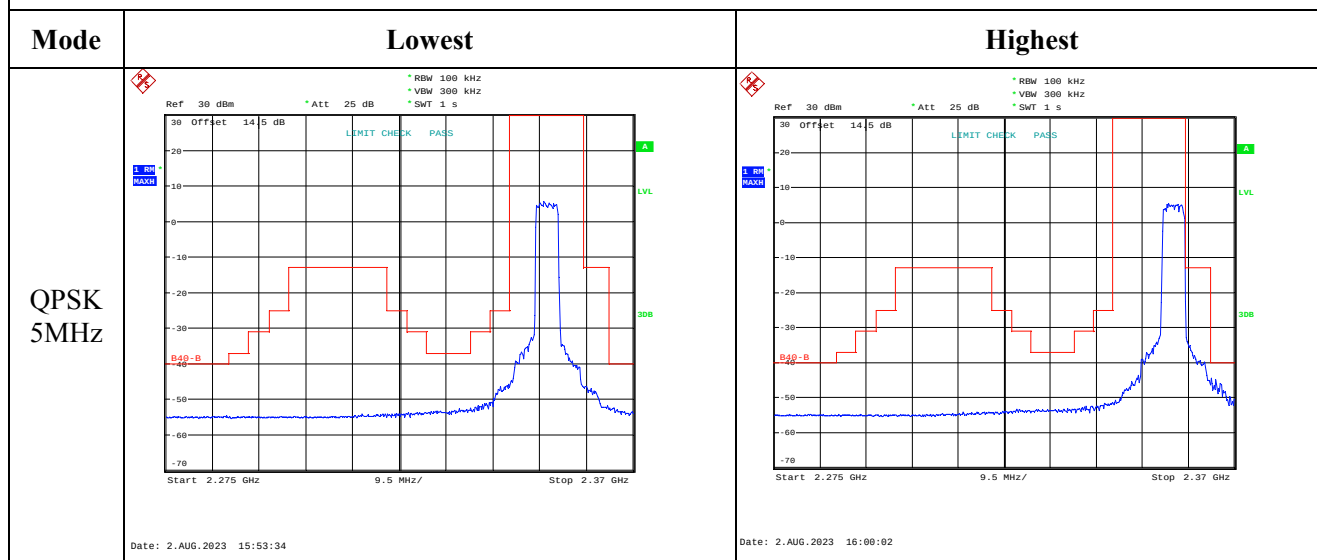


Out of band emission, Band Edge

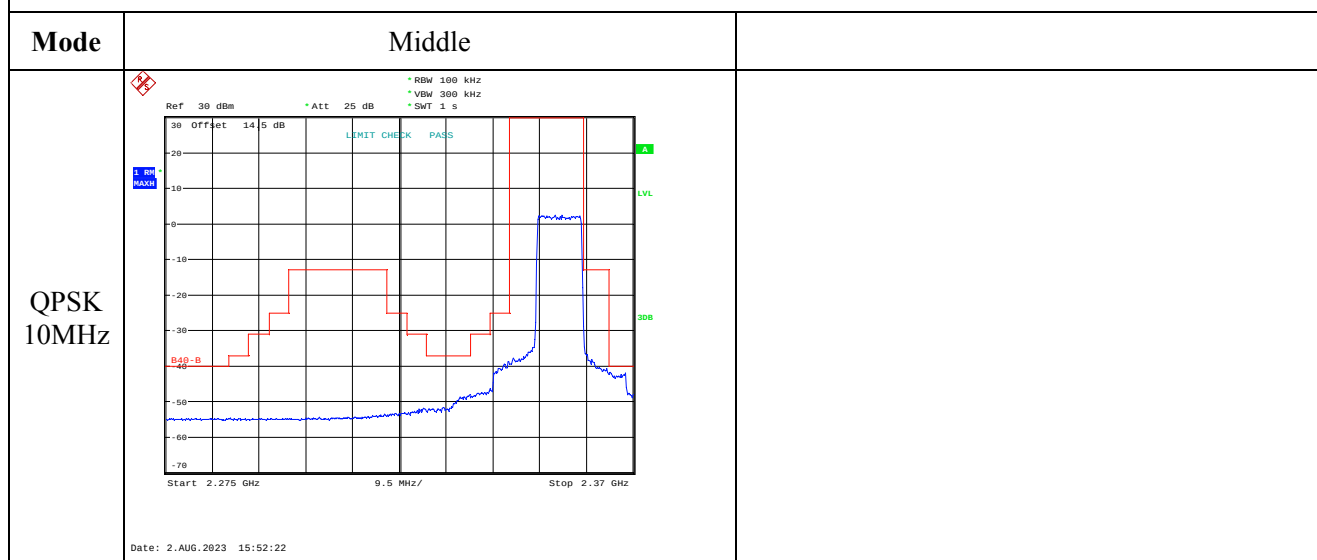


2350-2360 MHz:

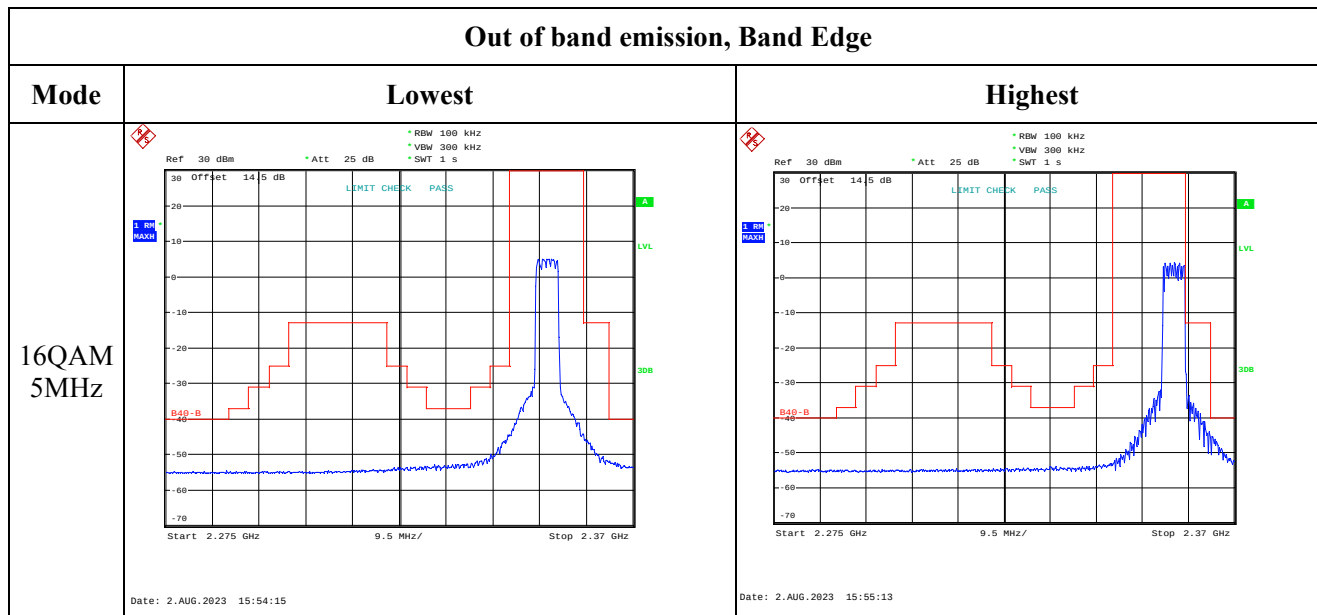
Out of band emission, Band Edge



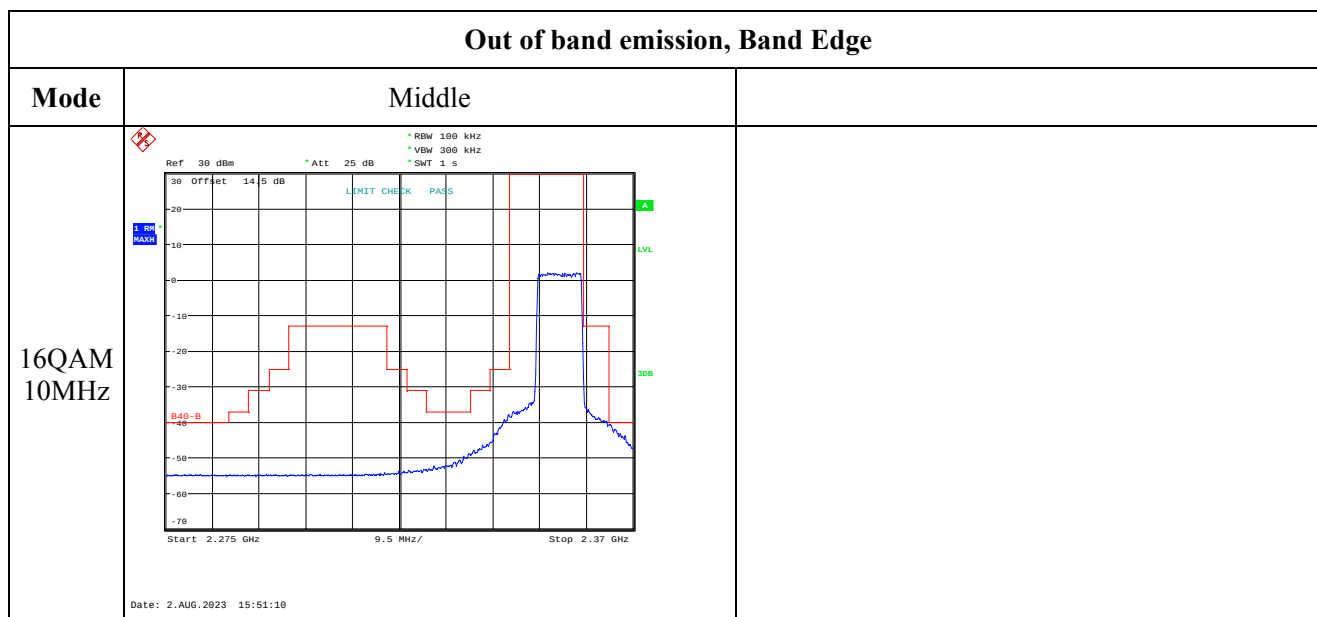
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.16 Antenna Port Test Data and Results for LTE Band 41

Serial Number:	27BI-1	Test Date:	2023/7/24-2023/7/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-26.3	Relative Humidity: (%)	46-62	ATM Pressure: (kPa)	99.7-100.6
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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
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Weinschel	Power splitter	1515	RA915	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30

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

Test Frequency for Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
5MHz	2537.5	2595	2652.5
10MHz	2540	2595	2650
15MHz	2542.5	2595	2647.5
20MHz	2545	2595	2645

Test Data:**FCC§2.1046;§ 27.50(h)(2)****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	19.13	18.68	18.98	23.35	33
	RB1#13	19.03	18.66	19.05		
	RB1#24	19.08	18.6	19.06		
	RB15#0	17.99	17.8	17.88		
	RB15#10	18.04	17.76	17.83		
	RB25#0	17.98	17.75	17.96		
5MHz 16QAM	RB1#0	18.35	17.7	18.18	22.66	33
	RB1#13	18.44	17.66	17.86		
	RB1#24	18.43	17.73	17.97		
	RB15#0	17.2	17.01	17.16		
	RB15#10	17.23	16.97	17.09		
	RB25#0	17.2	16.6	17.18		
10MHz QPSK	RB1#0	18.93	18.63	18.78	23.15	33
	RB1#25	18.88	18.61	18.82		
	RB1#49	18.92	18.72	18.84		
	RB25#0	17.6	17.64	17.77		
	RB25#25	17.71	17.69	17.89		
	RB50#0	17.65	17.61	17.82		
10MHz 16QAM	RB1#0	17.96	17.85	17.75	22.28	33
	RB1#25	18.04	17.91	17.79		
	RB1#49	17.95	18.06	17.69		
	RB25#0	16.86	16.88	16.98		
	RB25#25	16.88	16.87	16.98		
	RB50#0	16.94	16.78	16.98		
15MHz QPSK	RB1#0	18.74	18.83	19.24	23.59	33
	RB1#38	18.84	18.87	19.37		
	RB1#74	18.76	18.77	19.33		
	RB36#0	17.62	18.07	18.24		
	RB36#39	17.59	17.94	18.06		
	RB75#0	17.55	18	18.19		
15MHz 16QAM	RB1#0	17.94	18.13	17.92	22.35	33
	RB1#38	18.01	18.12	18.06		
	RB1#74	17.84	18.08	17.79		
	RB36#0	16.66	17.05	17.19		
	RB36#39	16.61	17.06	17.27		
	RB75#0	16.74	17.07	17.37		
20MHz QPSK	RB1#0	18.35	18.55	19.04	23.31	33
	RB1#50	18.48	18.46	18.98		
	RB1#99	18.42	18.49	19.09		

20MHz 16QAM	RB50#0	17.43	17.36	18.03	22.85	33
	RB50#50	17.37	17.41	17.98		
	RB100#0	17.41	17.32	18		
	RB1#0	17.14	18.11	18.44		
	RB1#50	17.14	18.01	18.63		
	RB1#99	17.11	18.05	18.45		
	RB50#0	16.6	16.43	17.36		
	RB50#50	16.7	16.45	17.3		
	RB100#0	16.45	16.49	17.16		

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	9.11	8.93	13
	RB100#0	8.29	9.36	9.19	13
20MHz 16QAM	RB1#0	9.59	10.04	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	4.54	5.08	4.94	5.44
5MHz 16QAM	4.52	4.50	4.52	5.16	5.14	5.44
10MHz QPSK	8.96	8.96	8.96	9.84	9.96	9.80
10MHz 16QAM	8.96	8.96	8.96	9.72	10.08	9.88
15MHz QPSK	13.50	13.56	13.56	15.06	15.78	15.30
15MHz 16QAM	13.62	13.56	13.56	15.60	15.06	15.30
20MHz QPSK	18.00	17.92	18.00	19.84	19.76	19.76
20MHz 16QAM	18.00	17.92	18.00	20.32	19.84	19.68

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	3.8	2536.097	2535.00	2654.028	2655
	-20	3.8	2536.086	2535.00	2654.019	2655
	-10	3.8	2536.083	2535.00	2654.039	2655
	0	3.8	2536.006	2535.00	2654.023	2655
	10	3.8	2536.060	2535.00	2654.022	2655
	20	3.8	2536.040	2535.00	2654.040	2655
	30	3.8	2536.061	2535.00	2654.028	2655
	40	3.8	2536.059	2535.00	2654.027	2655
	50	3.8	2536.079	2535.00	2654.023	2655
Frequency Stability vs. Voltage	20	3.5	2536.064	2535.00	2654.026	2655
	20	4.35	2536.041	2535.00	2654.028	2655
					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	3.8	2536.017	2535.00	2654.053	2655
	-20	3.8	2536.000	2535.00	2654.052	2655
	-10	3.8	2536.014	2535.00	2654.059	2655
	0	3.8	2536.029	2535.00	2654.071	2655
	10	3.8	2536.077	2535.00	2654.061	2655
	20	3.8	2536.040	2535.00	2654.040	2655
	30	3.8	2536.023	2535.00	2654.056	2655
	40	3.8	2536.056	2535.00	2654.057	2655
	50	3.8	2536.099	2535.00	2654.100	2655
Frequency Stability vs. Voltage	20	3.5	2536.068	2535.00	2654.047	2655
	20	4.35	2536.025	2535.00	2654.044	2655
					Result:	Pass

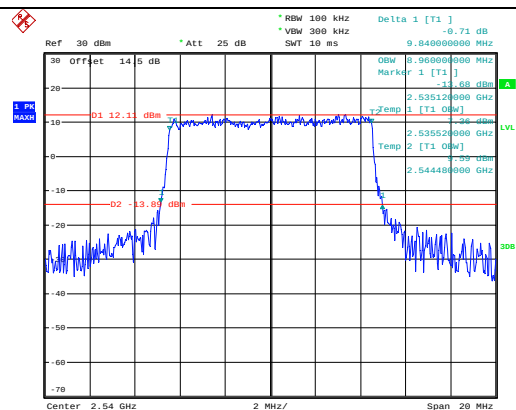
Occupied Bandwidth

Channel

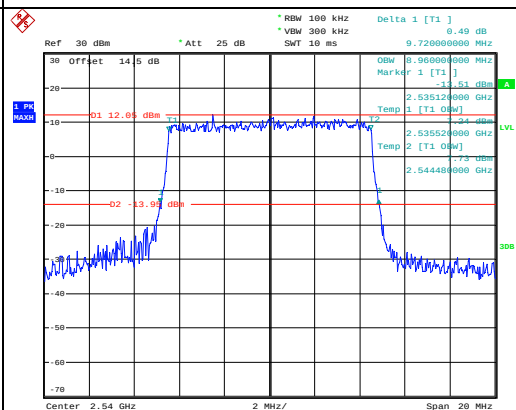
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

Lowest

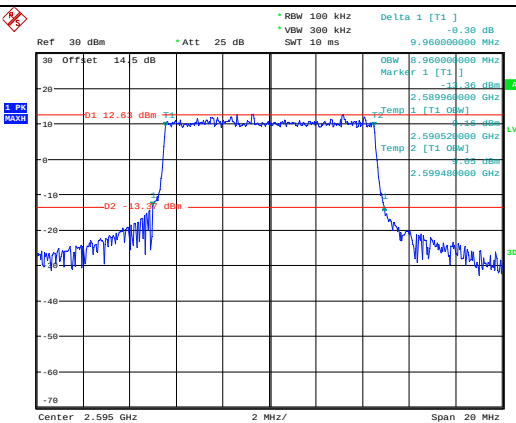


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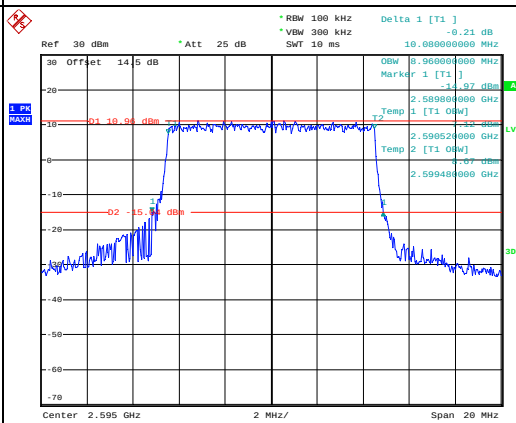


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Middle

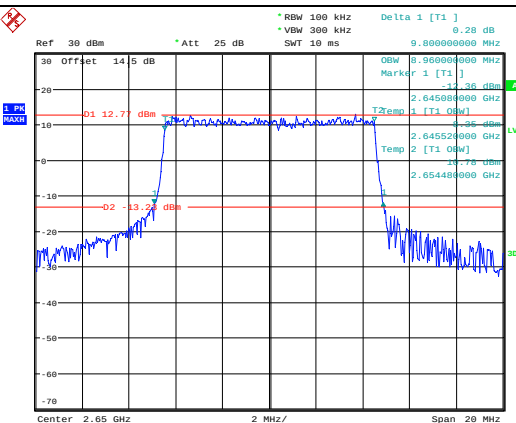


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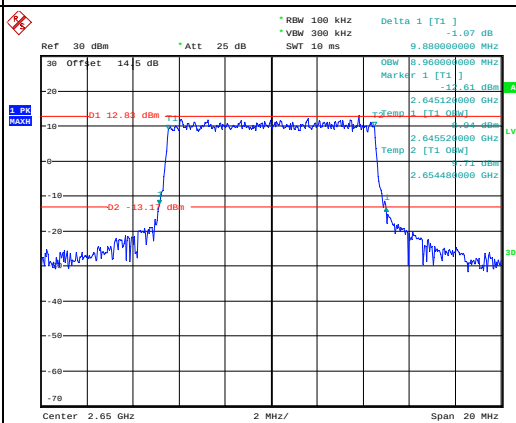


Date: 26.JUL.2023 10:07:42

Highest



Date: 26.JUL.2023 10:08:07



Date: 26.JUL.2023 10:08:27

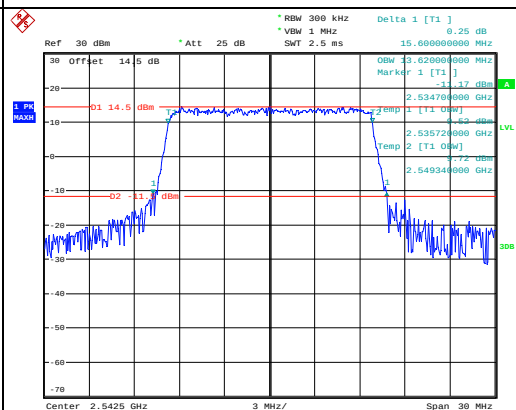
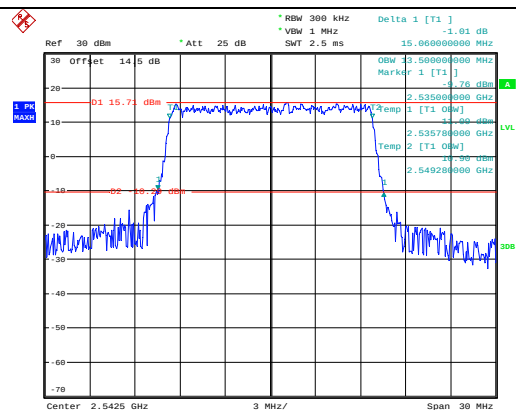
Occupied Bandwidth

Channel

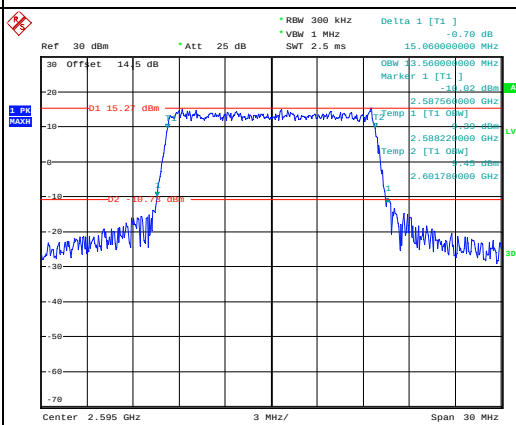
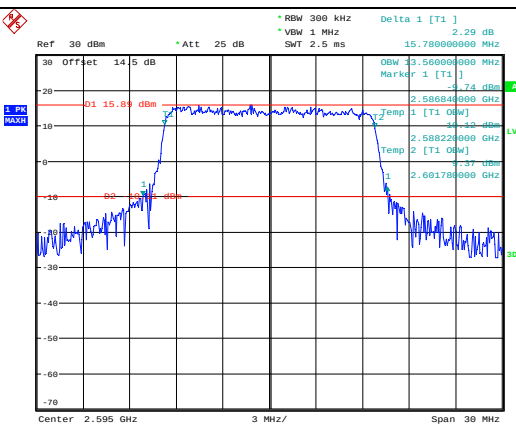
15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

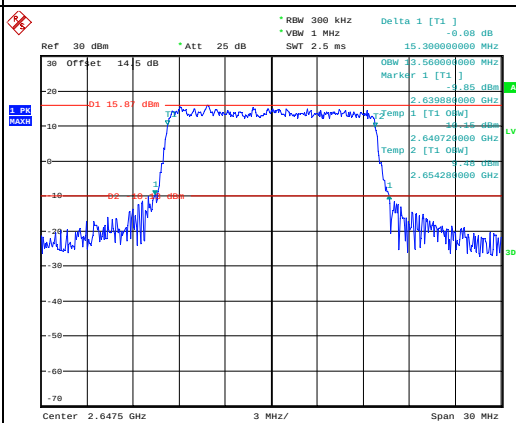
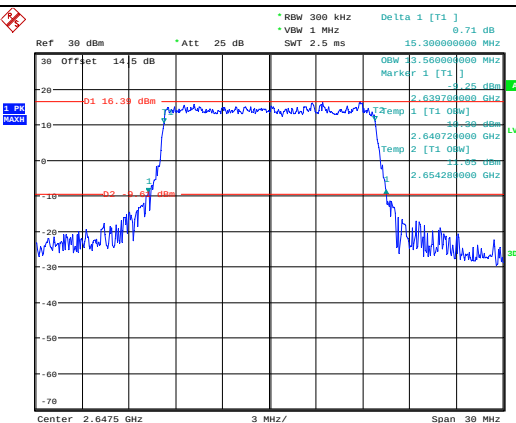
Lowest



Middle



Highest



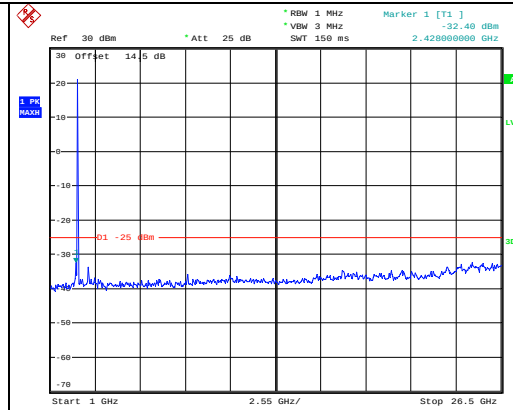
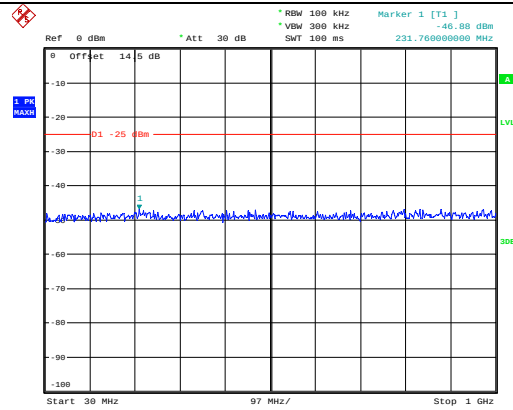
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Spurious Emissions at Antenna Terminal

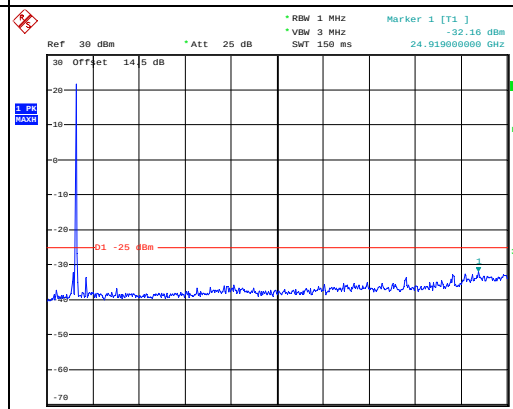
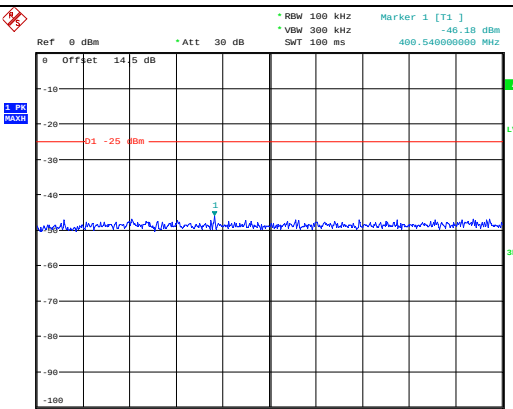
Channel

5MHz Bandwidth QPSK

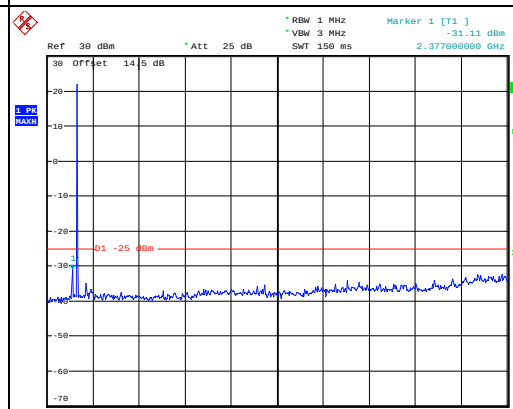
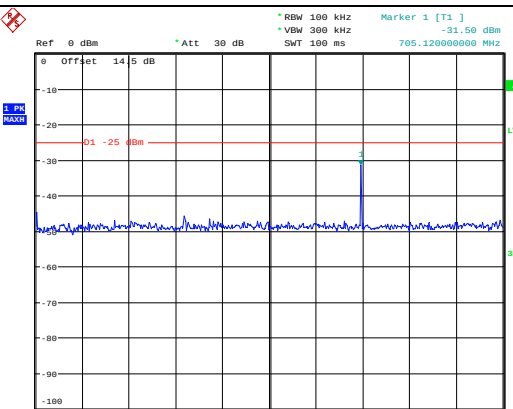
Lowest



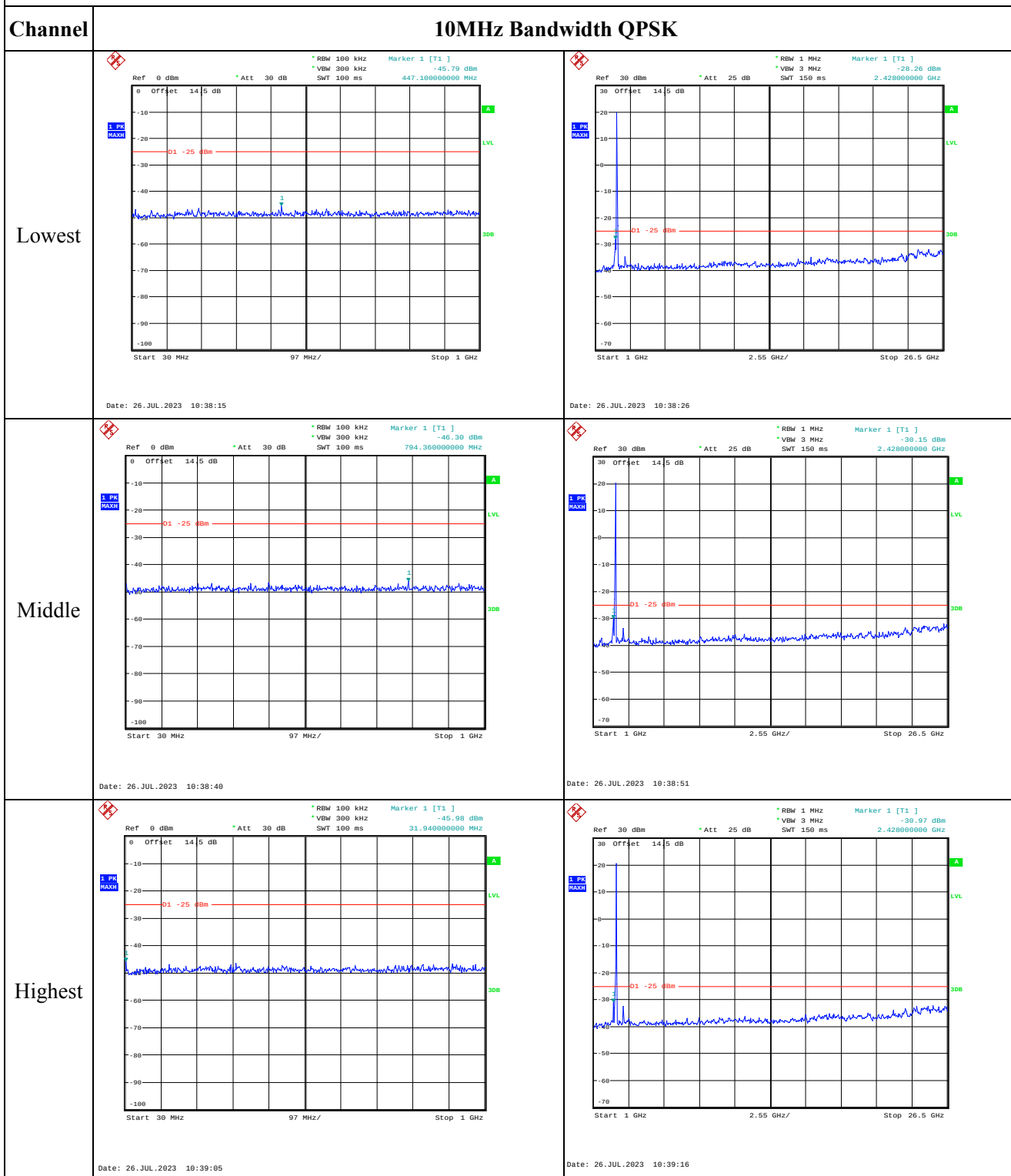
Middle



Highest



Spurious Emissions at Antenna Terminal

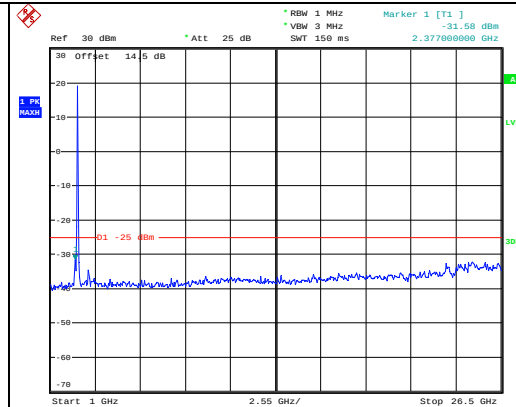
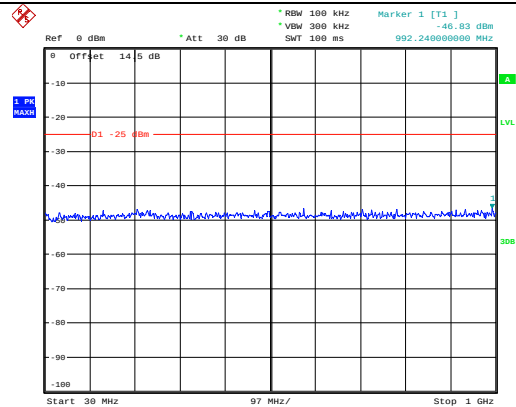


Spurious Emissions at Antenna Terminal

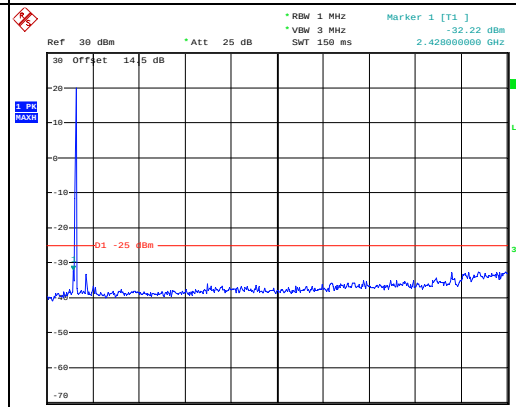
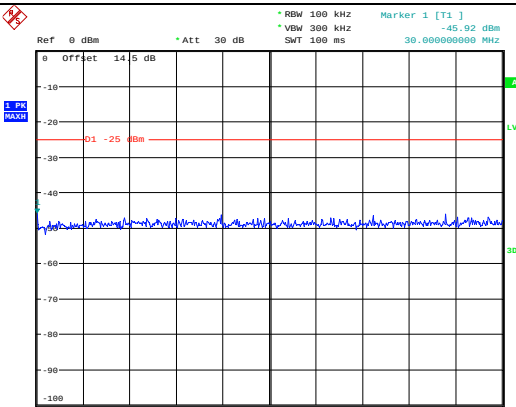
Channel

15MHz Bandwidth QPSK

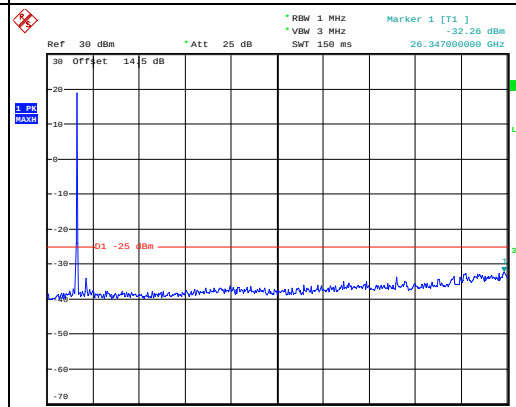
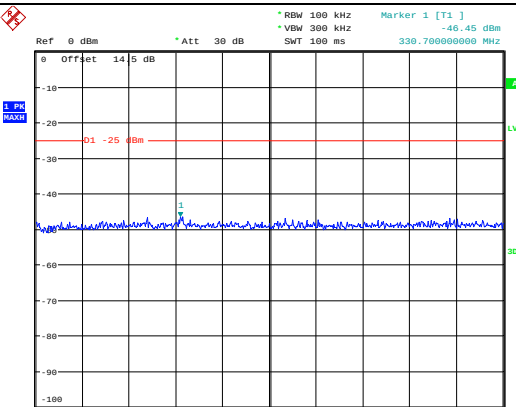
Lowest



Middle



Highest

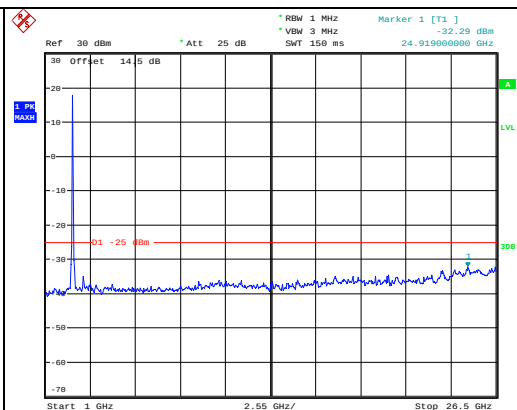
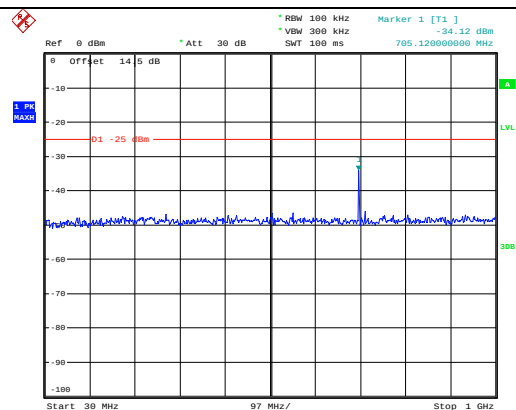


Spurious Emissions at Antenna Terminal

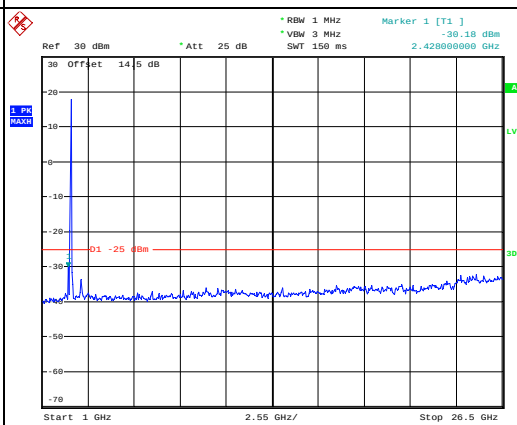
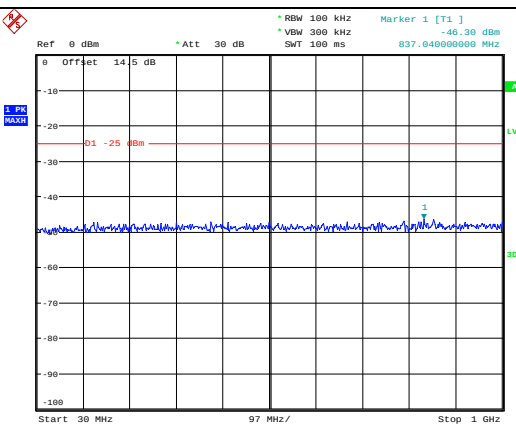
Channel

20MHz Bandwidth QPSK

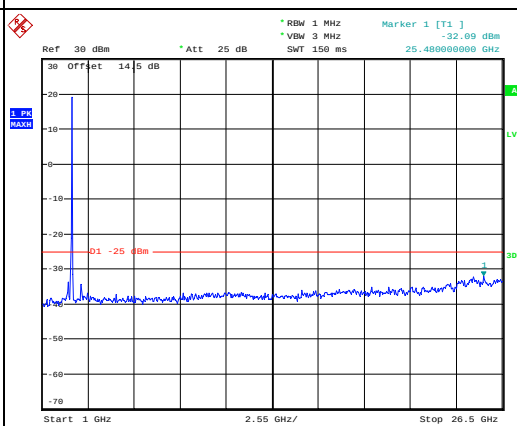
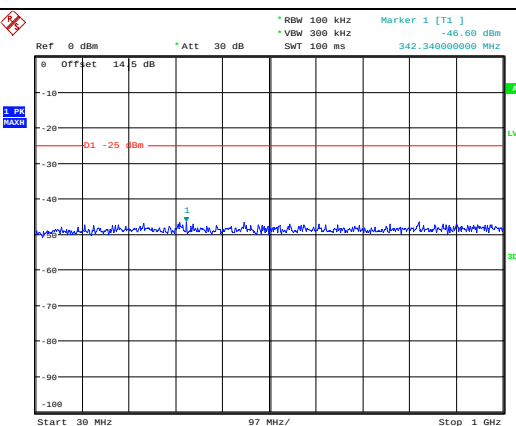
Lowest



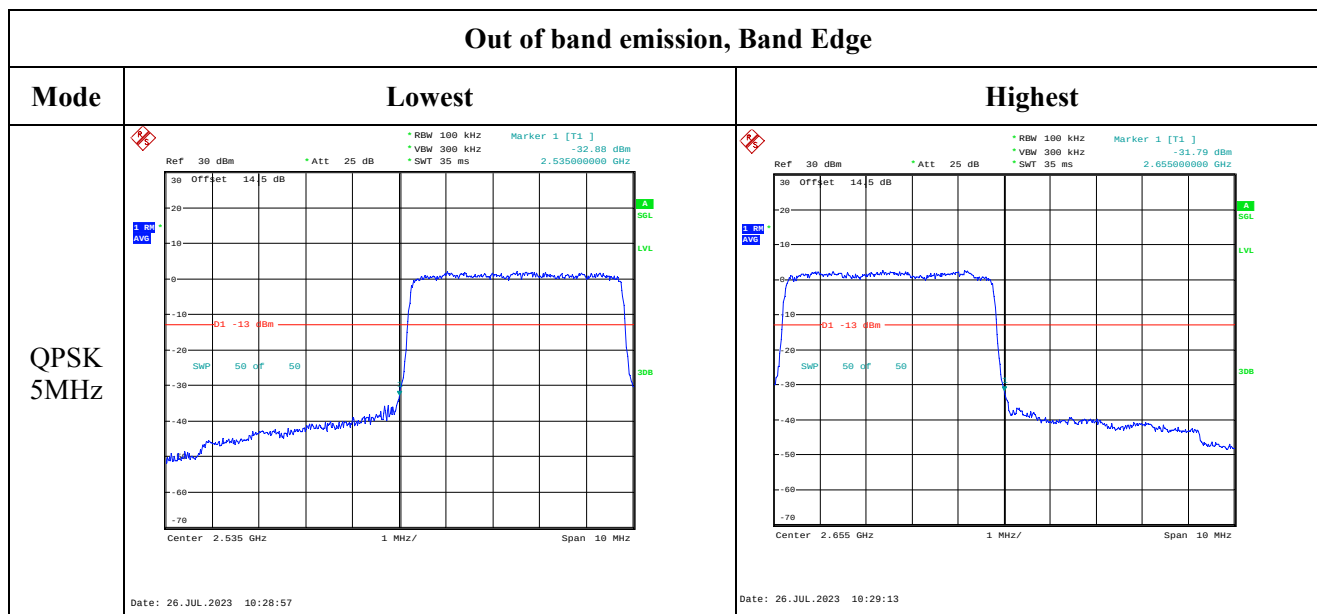
Middle



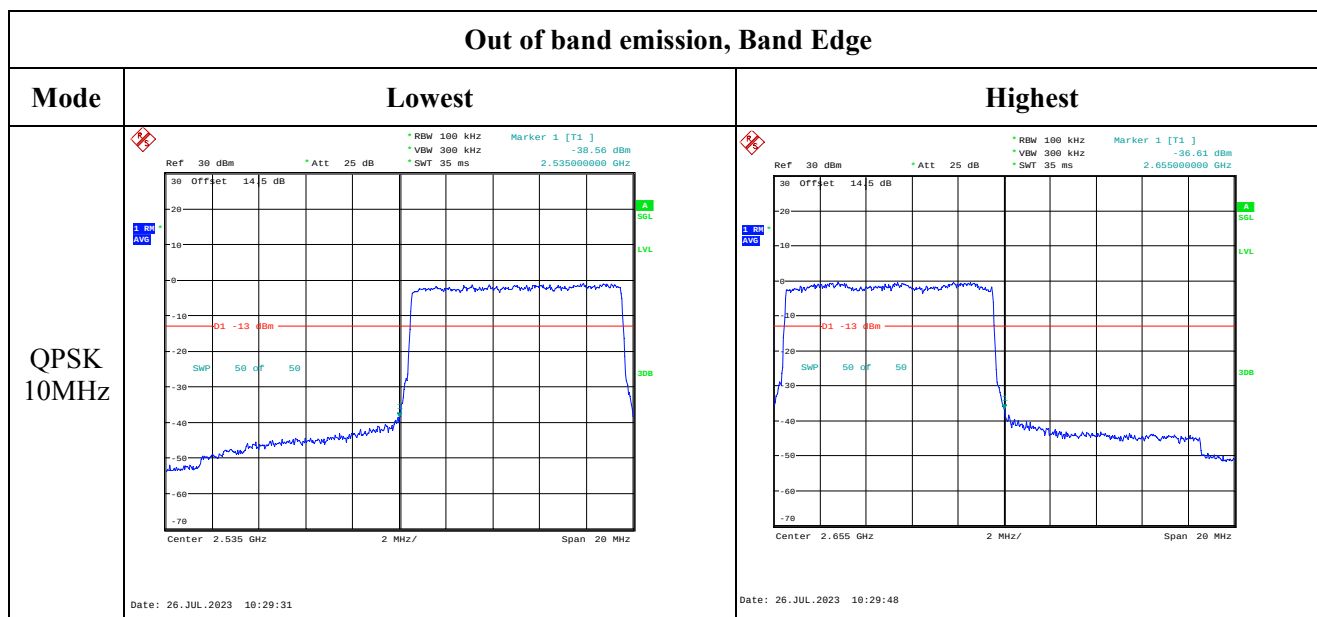
Highest



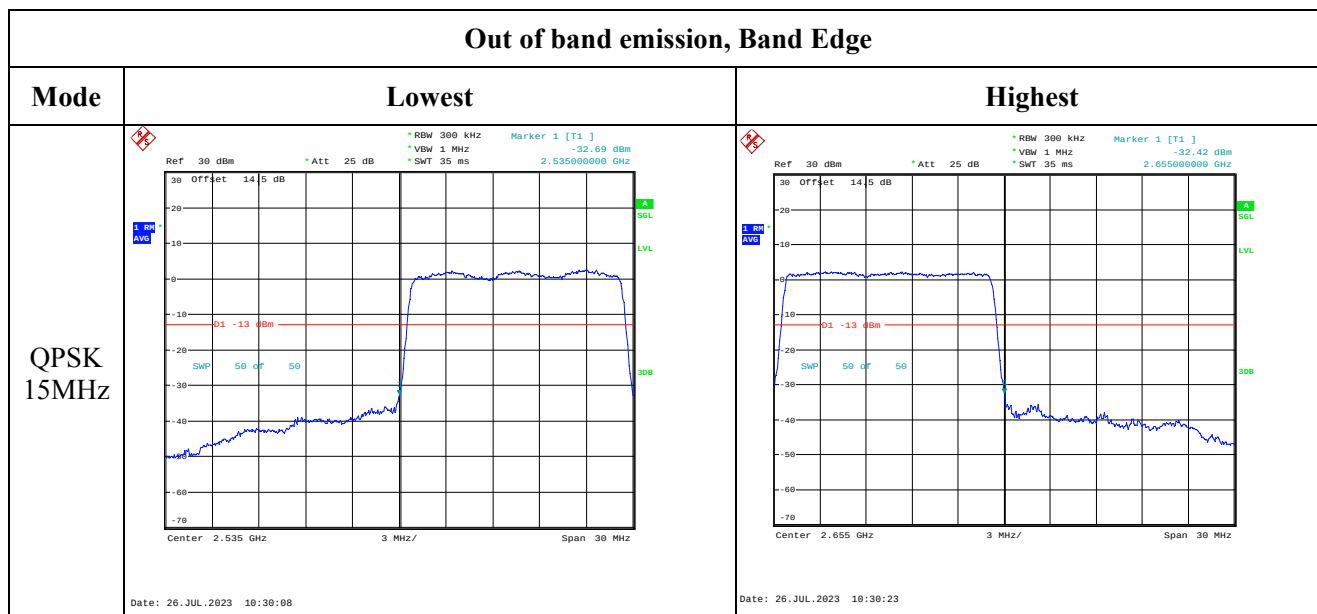
Out of band emission, Band Edge



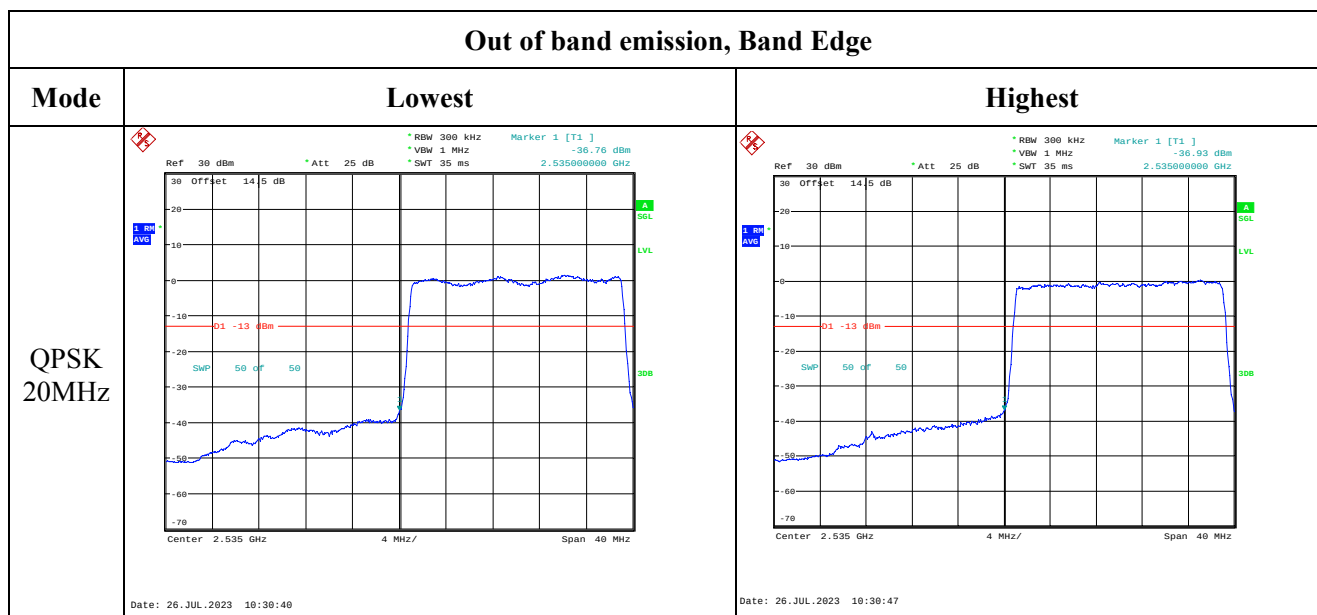
Out of band emission, Band Edge



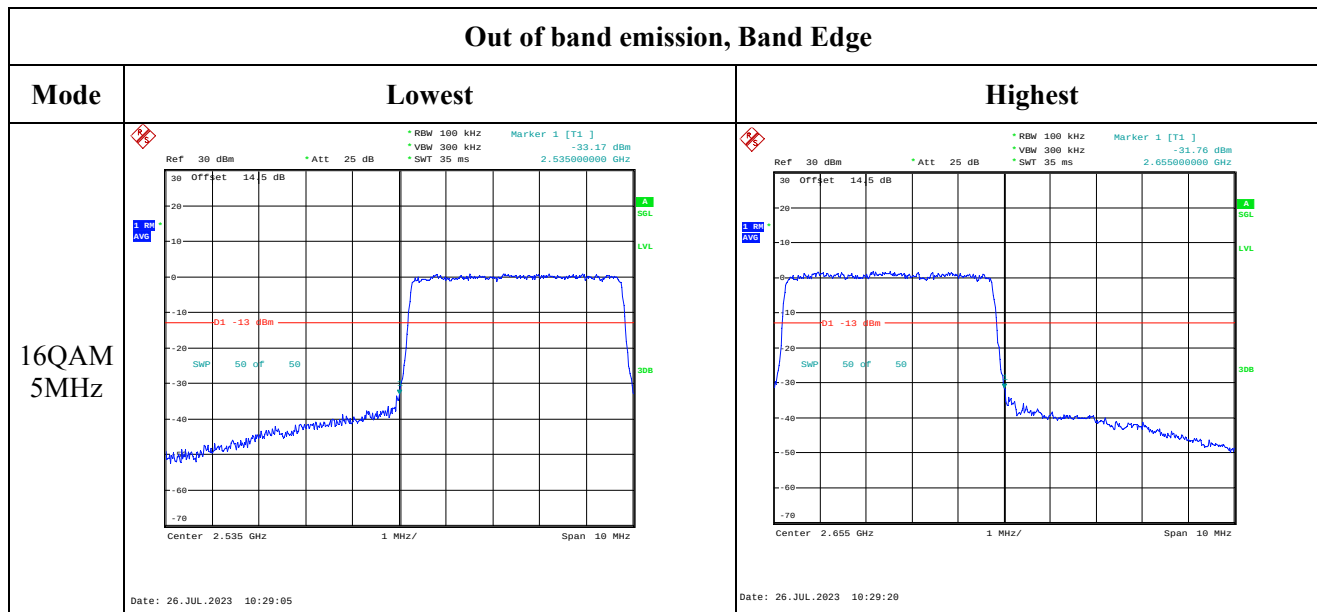
Out of band emission, Band Edge



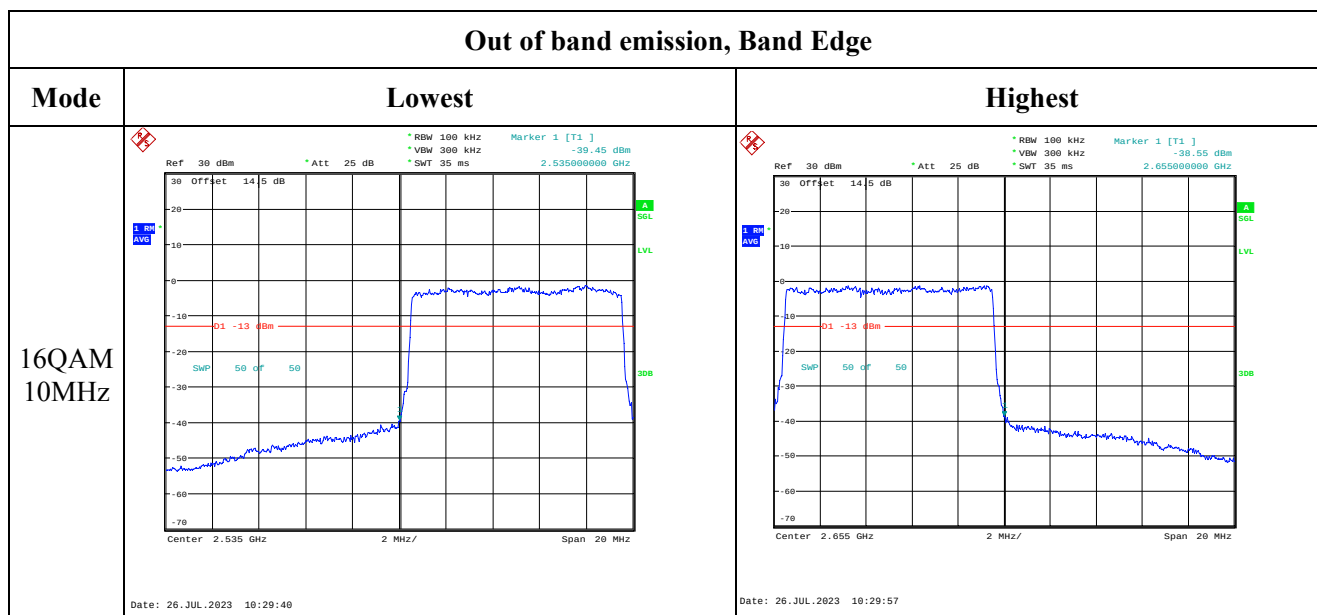
Out of band emission, Band Edge



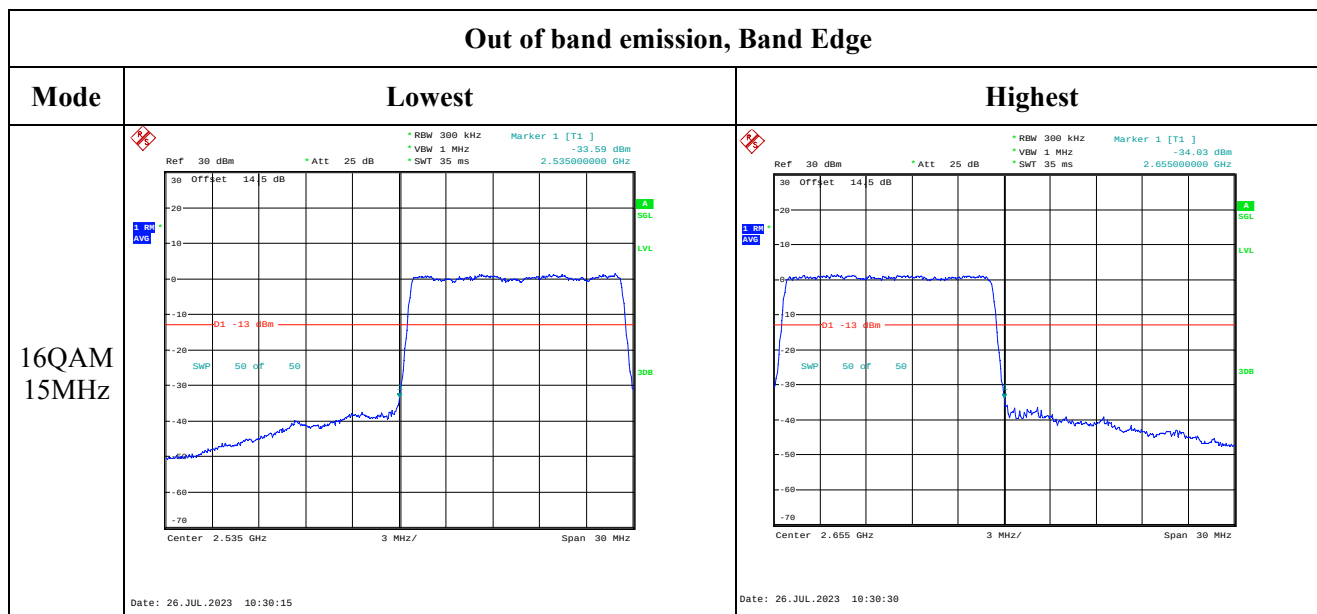
Out of band emission, Band Edge



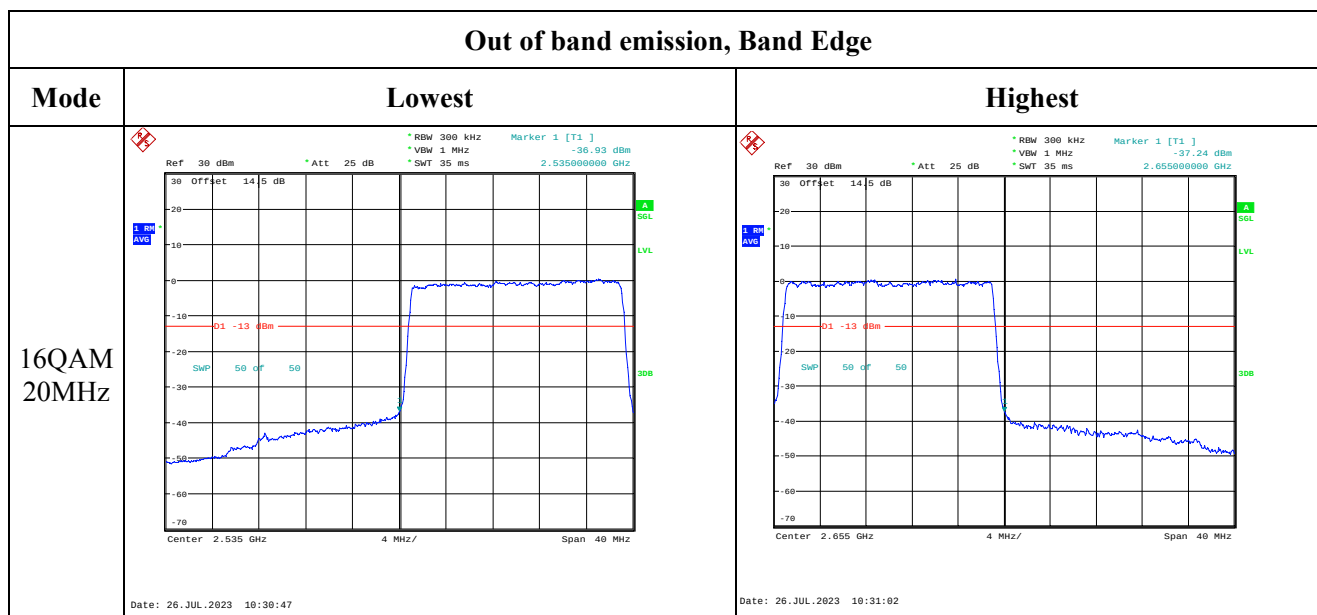
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.17 Antenna Port Test Data and Results for LTE Band 66

Serial Number:	27BI-1	Test Date:	2023/7/24-2023/7/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-26.3	Relative Humidity: (%)	46-62	ATM Pressure: (kPa)	99.7-100.6
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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
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Weinschel	Power splitter	1515	RA915	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30

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

Test Frequency for Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
1.4MHz	1710.7	1745	1779.3
3MHz	1711.5	1745	1778.5
5MHz	1712.5	1745	1777.5
10MHz	1715	1745	1775
15MHz	1717.5	1745	1772.5
20MHz	1720	1745	1770

Test Data:**FCC§2.1046;§ 27.50(d)(4)****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
1.4MHz QPSK	RB1#0	21.7	22.96	22.48	24.89	30
	RB1#3	21.76	22.88	22.53		
	RB1#5	21.71	22.88	22.43		
	RB3#0	21.74	22.82	22.68		
	RB3#3	21.78	22.81	22.7		
	RB6#0	21.32	21.81	21.7		
1.4MHz 16QAM	RB1#0	22.48	22.81	21.36	24.83	30
	RB1#3	22.59	22.9	21.46		
	RB1#5	22.47	22.83	21.43		
	RB3#0	21.66	22	21.8		
	RB3#3	21.71	22.13	21.79		
	RB6#0	20.96	21.02	20.93		
3MHz QPSK	RB1#0	21.82	22.61	22.18	24.54	30
	RB1#8	21.78	22.47	22.1		
	RB1#14	21.84	22.5	22.15		
	RB6#0	21.31	21.41	21.2		
	RB6#9	21.28	21.39	21.19		
	RB15#0	21.28	21.42	21.28		
3MHz 16QAM	RB1#0	22.53	21.47	21.68	24.54	30
	RB1#8	22.59	21.4	21.64		
	RB1#14	22.61	21.42	21.68		
	RB6#0	20.92	20.8	20.21		
	RB6#9	21	20.75	20.2		
	RB15#0	20.91	20.51	20.44		
5MHz QPSK	RB1#0	21.85	22.8	22.67	24.77	30
	RB1#13	21.8	22.82	22.71		
	RB1#24	21.91	22.84	22.68		
	RB15#0	21.31	21.81	21.71		
	RB15#10	21.27	21.78	21.75		
	RB25#0	21.31	21.88	21.69		
5MHz 16QAM	RB1#0	22.02	21.53	20.89	24.00	30
	RB1#13	22.06	21.5	20.84		
	RB1#24	22.07	21.59	20.9		
	RB15#0	20.83	21	20.9		
	RB15#10	20.8	20.96	20.89		
	RB25#0	20.92	20.82	20.93		
10MHz QPSK	RB1#0	21.12	22.85	22.4	24.81	30
	RB1#25	21.1	22.86	22.29		
	RB1#49	21.16	22.88	22.34		

	RB25#0	20.49	21.79	21.53		
	RB25#25	20.52	21.71	21.43		
	RB50#0	20.61	21.76	21.42		
10MHz 16QAM	RB1#0	21.22	21.38	21.76	23.69	30
	RB1#25	21.21	21.34	21.68		
	RB1#49	21.22	21.37	21.7		
	RB25#0	20.24	21	20.56		
	RB25#25	20.23	20.96	20.55		
	RB50#0	20.22	20.89	20.62		
15MHz QPSK	RB1#0	21.88	22.63	22.53	24.59	30
	RB1#38	21.85	22.66	22.48		
	RB1#74	21.86	22.63	22.44		
	RB36#0	21.3	21.65	21.63		
	RB36#39	21.19	21.53	21.54		
	RB75#0	21.32	21.58	21.65		
15MHz 16QAM	RB1#0	21.92	22	21.89	23.98	30
	RB1#38	21.88	22.03	21.86		
	RB1#74	21.89	22.05	21.77		
	RB36#0	20.96	20.76	20.85		
	RB36#39	20.92	20.7	20.76		
	RB75#0	20.92	20.68	20.75		
20MHz QPSK	RB1#0	20.86	22.08	22.46	24.39	30
	RB1#50	20.86	22.08	22.39		
	RB1#99	18.92	22.06	22.39		
	RB50#0	20.18	21.02	21.39		
	RB50#50	20.2	21.01	21.3		
	RB100#0	20.06	21.13	21.33		
20MHz 16QAM	RB1#0	21.05	21.69	21.66	23.63	30
	RB1#50	21.07	21.7	21.52		
	RB1#99	21.05	21.67	21.52		
	RB50#0	19.89	20.12	20.53		
	RB50#50	19.89	20.13	20.52		
	RB100#0	19.8	20.22	20.45		

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	5.61	4.13	4.42	13
	RB100#0	6.54	6.54	6.38	13
20MHz 16QAM	RB1#0	6.25	5.29	5.54	13
	RB100#0	7.28	7.24	7.18	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	1.110	1.104	1.326	1.290	1.320
1.4MHz 16QAM	1.110	1.116	1.104	1.326	1.266	1.278
3MHz QPSK	2.700	2.687	2.700	3.012	3.036	3.000
3MHz 16QAM	2.687	2.700	2.700	3.072	3.048	3.024
5MHz QPSK	4.520	4.520	4.560	5.240	5.400	5.360
5MHz 16QAM	4.540	4.560	4.540	5.560	5.380	5.420
10MHz QPSK	8.960	8.960	8.960	9.800	9.960	9.800
10MHz 16QAM	8.960	8.960	8.960	9.880	10.080	9.640
15MHz QPSK	13.560	13.620	13.620	15.420	16.260	15.420
15MHz 16QAM	13.560	13.560	13.560	15.180	15.060	15.240
20MHz QPSK	17.920	18.080	18.080	19.680	19.920	19.760
20MHz 16QAM	17.920	18.160	18.080	19.680	20.320	20.080
Note: The test plots please refer to the Plots of Occupied Bandwidth						

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

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

FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	1711.133	1710.00	1779.028	1780
	-20	3.8	1711.132	1710.00	1779.019	1780
	-10	3.8	1711.139	1710.00	1779.039	1780
	0	3.8	1711.151	1710.00	1779.023	1780
	10	3.8	1711.141	1710.00	1779.022	1780
	20	3.8	1711.120	1710.00	1779.040	1780
	30	3.8	1711.136	1710.00	1779.028	1780
	40	3.8	1711.137	1710.00	1779.027	1780
	50	3.8	1711.180	1710.00	1779.023	1780
Frequency Stability vs. Voltage	20	3.5	1711.127	1710.00	1779.026	1780
	20	4.35	1711.124	1710.00	1779.028	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	3.8	1711.108	1710.00	1779.053	1780
	-20	3.8	1711.099	1710.00	1779.052	1780
	-10	3.8	1711.119	1710.00	1779.059	1780
	0	3.8	1711.103	1710.00	1779.071	1780
	10	3.8	1711.102	1710.00	1779.061	1780
	20	3.8	1711.120	1710.00	1779.040	1780
	30	3.8	1711.108	1710.00	1779.056	1780
	40	3.8	1711.107	1710.00	1779.057	1780
	50	3.8	1711.103	1710.00	1779.100	1780
Frequency Stability vs. Voltage	20	3.5	1711.106	1710.00	1779.047	1780
	20	4.35	1711.108	1710.00	1779.044	1780
					Result:	Pass

Occupied Bandwidth



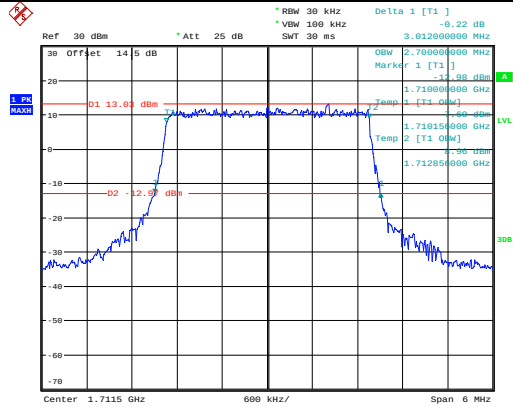
Occupied Bandwidth

Channel

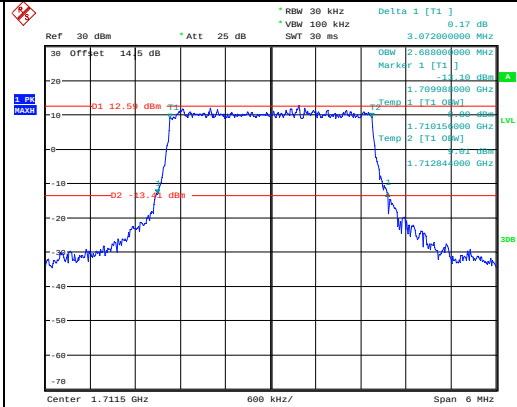
3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

Lowest

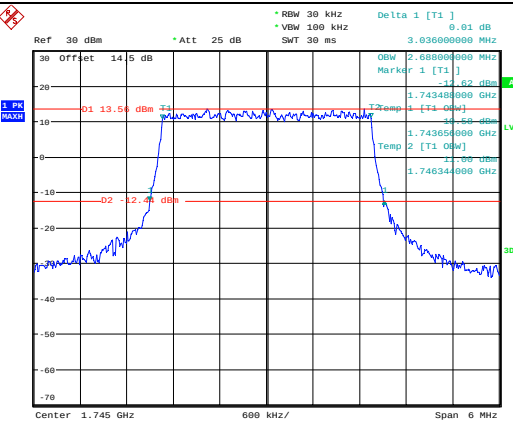


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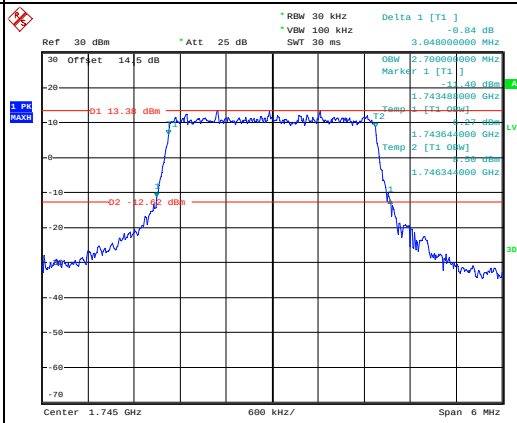


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Middle

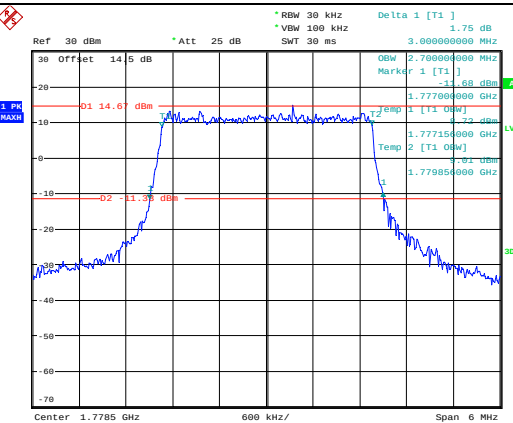


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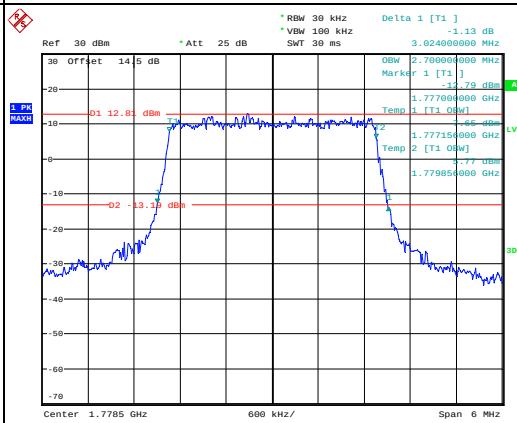


Date: 26.JUL.2023 15:31:35

Highest



Date: 26.JUL.2023 15:31:56



Date: 26.JUL.2023 15:32:14

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] -0.05 dB Marker 1 [T1] -15.37 dBm Temp 1 [T1] 1.709900000 GHz Temp 2 [T1] 1.710240000 GHz Temp 3 [T1] 1.714760000 GHz Center 1.7125 GHz 1 MHz/ Span 10 MHz Date: 26.JUL.2023 15:32:45	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 5 ms Delta 1 [T1] -0.27 dB Marker 1 [T1] -14.41 dBm Temp 1 [T1] 1.709900000 GHz Temp 2 [T1] 1.710240000 GHz Temp 3 [T1] 1.714760000 GHz Center 1.7125 GHz 1 MHz/ Span 10 MHz Date: 26.JUL.2023 15:33:06
Middle	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 5 ms Delta 1 [T1] -0.93 dB Marker 1 [T1] -17.08 dBm Temp 1 [T1] 1.742340000 GHz Temp 2 [T1] 1.742740000 GHz Temp 3 [T1] 1.747260000 GHz Center 1.745 GHz 1 MHz/ Span 10 MHz Date: 26.JUL.2023 15:33:37	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 5 ms Delta 1 [T1] -0.44 dB Marker 1 [T1] -15.63 dBm Temp 1 [T1] 1.742480000 GHz Temp 2 [T1] 1.742720000 GHz Temp 3 [T1] 1.747280000 GHz Center 1.745 GHz 1 MHz/ Span 10 MHz Date: 26.JUL.2023 15:34:01
Highest	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 5 ms Delta 1 [T1] -0.36 dB Marker 1 [T1] -16.37 dBm Temp 1 [T1] 1.774780000 GHz Temp 2 [T1] 1.775220000 GHz Temp 3 [T1] 1.779780000 GHz Center 1.7775 GHz 1 MHz/ Span 10 MHz Date: 26.JUL.2023 15:34:39	Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 100 kHz VBW 300 kHz SWT 5 ms Delta 1 [T1] -0.98 dB Marker 1 [T1] -15.11 dBm Temp 1 [T1] 1.774880000 GHz Temp 2 [T1] 1.775240000 GHz Temp 3 [T1] 1.779780000 GHz Center 1.7775 GHz 1 MHz/ Span 10 MHz Date: 26.JUL.2023 15:35:06

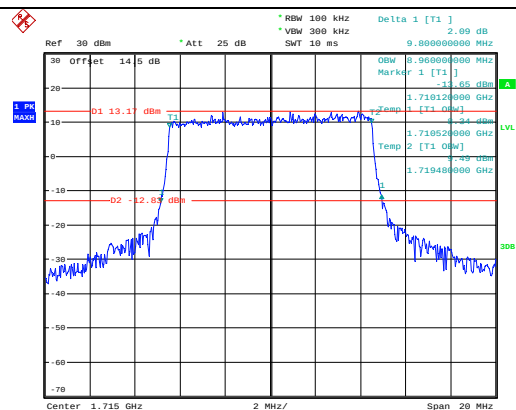
Occupied Bandwidth

Channel

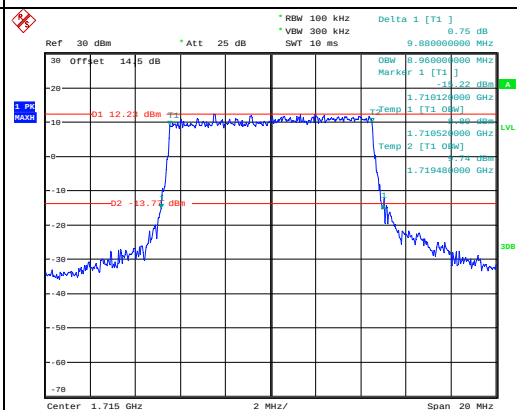
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

Lowest

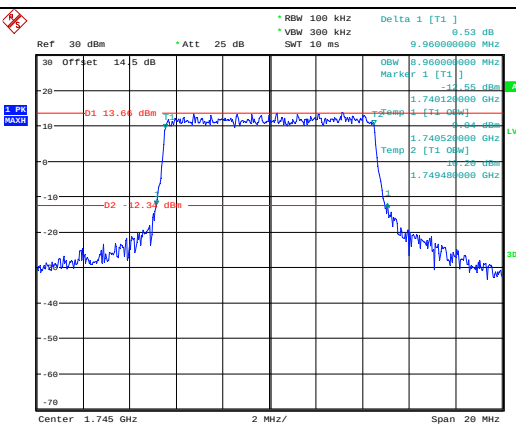


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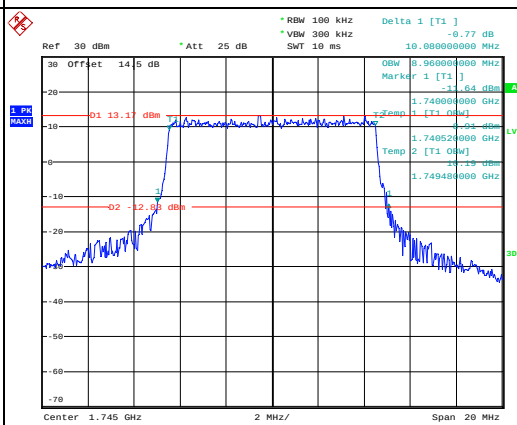


Date: 26.JUL.2023 15:35:51

Middle

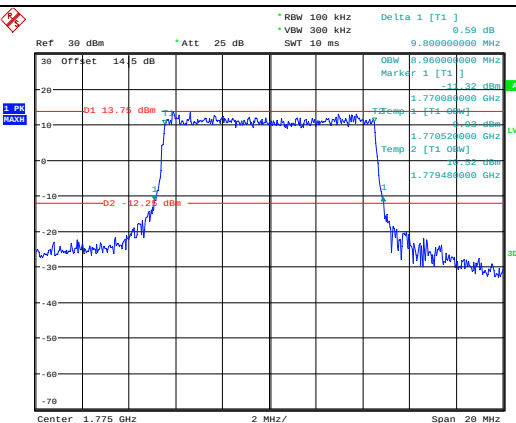


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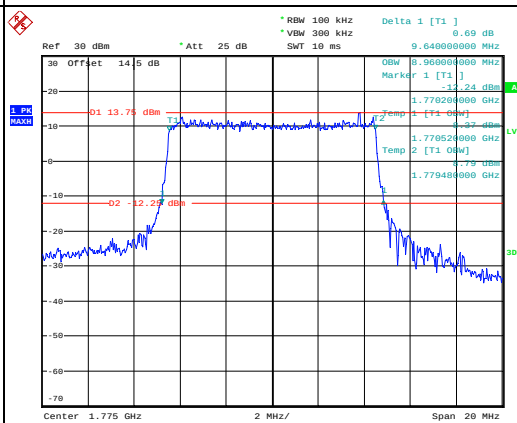


Date: 26.JUL.2023 15:36:30

Highest



Date: 26.JUL.2023 15:36:52



Date: 26.JUL.2023 15:37:13

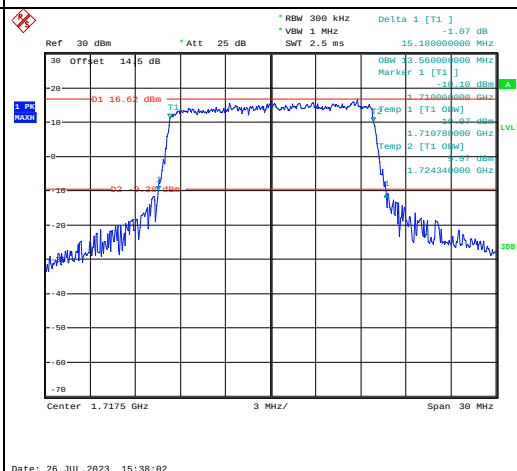
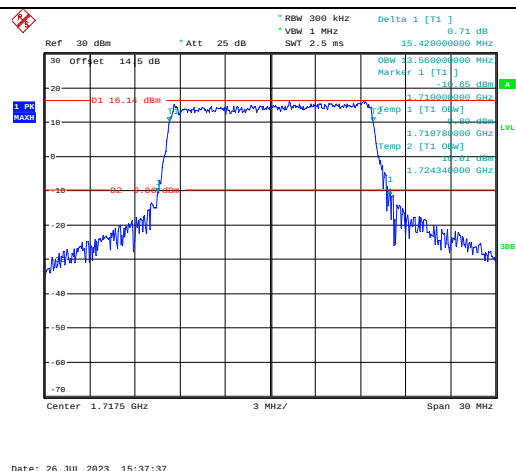
Occupied Bandwidth

Channel

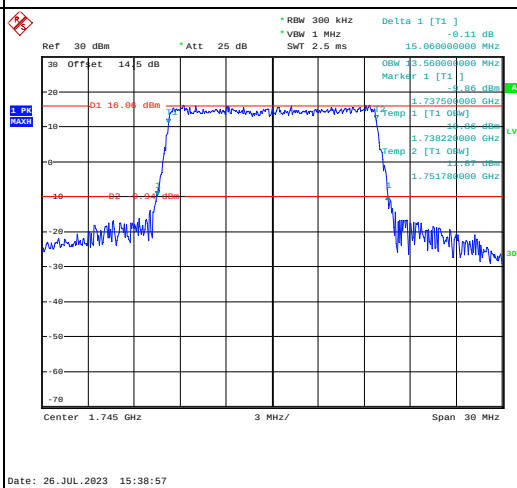
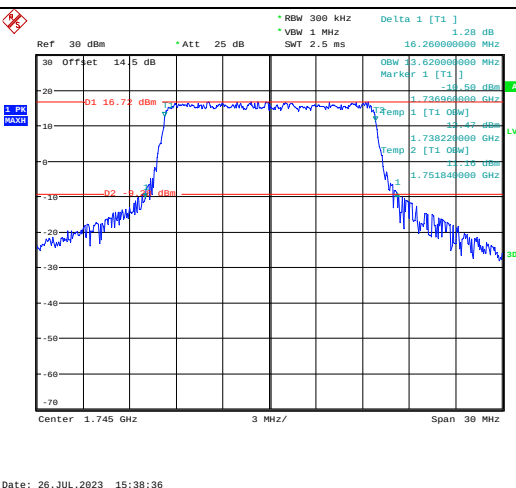
15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

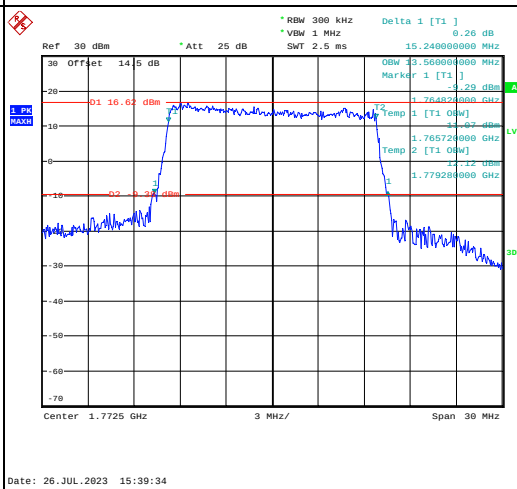
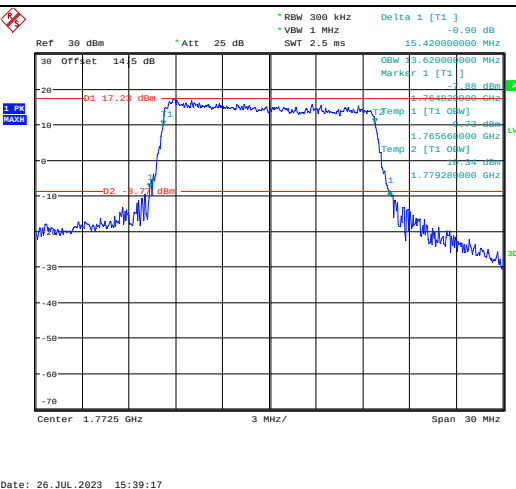
Lowest



Middle



Highest



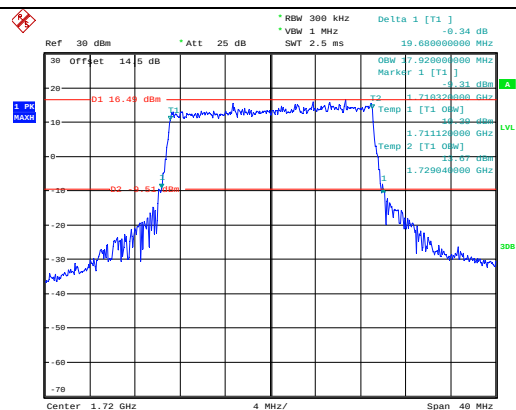
Occupied Bandwidth

Channel

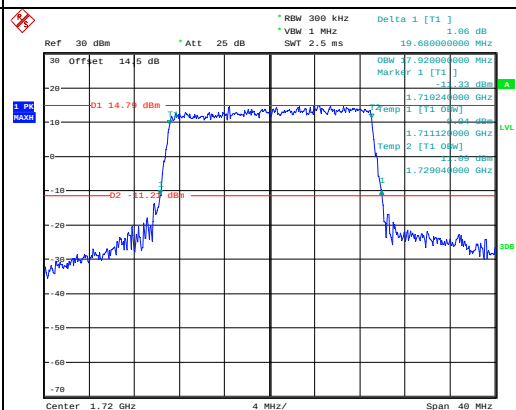
20MHz Bandwidth QPSK

20MHz Bandwidth 16QAM

Lowest

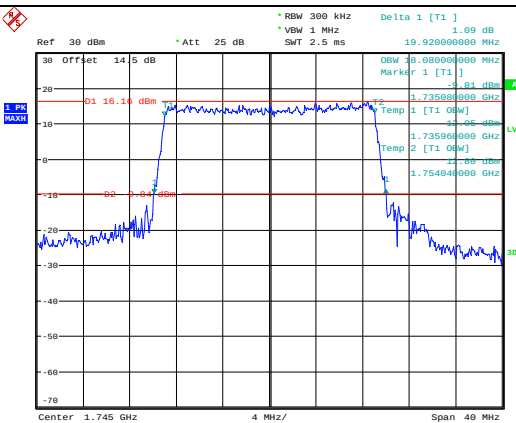


Date: 26.JUL.2023 15:39:59

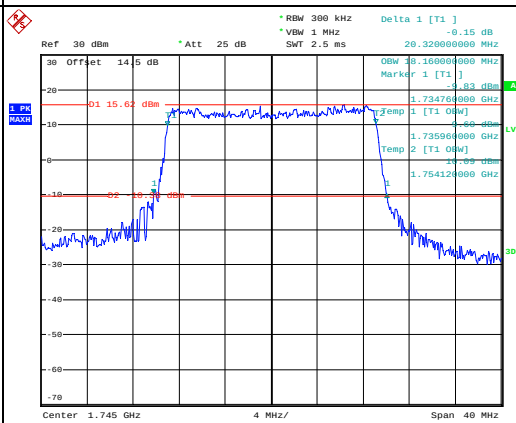


Date: 26.JUL.2023 15:40:17

Middle

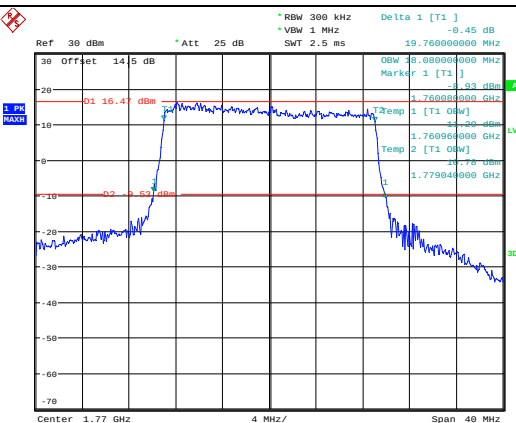


Date: 26.JUL.2023 15:40:59

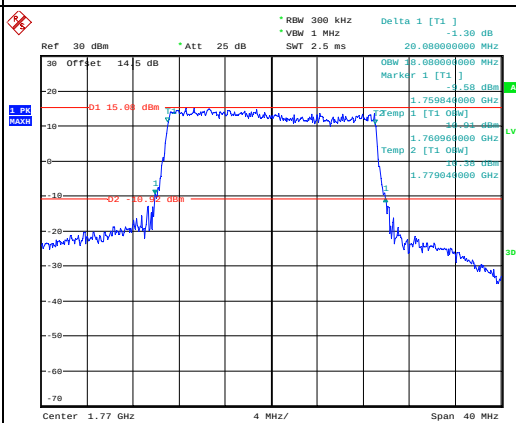


Date: 26.JUL.2023 15:41:00

Highest



Date: 26.JUL.2023 15:41:21



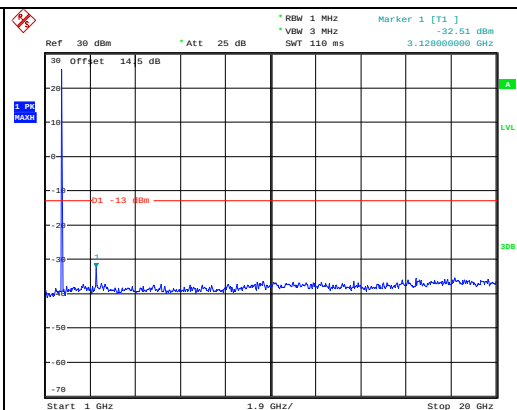
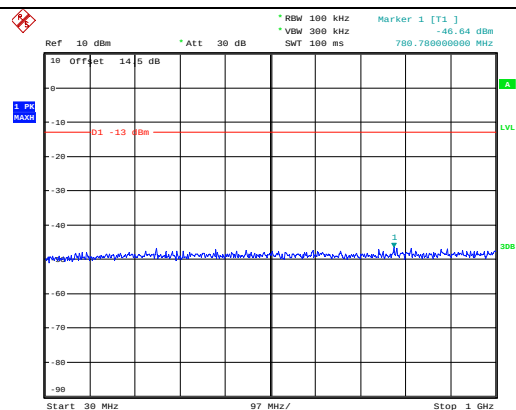
Date: 26.JUL.2023 15:41:42

Spurious Emissions at Antenna Terminal

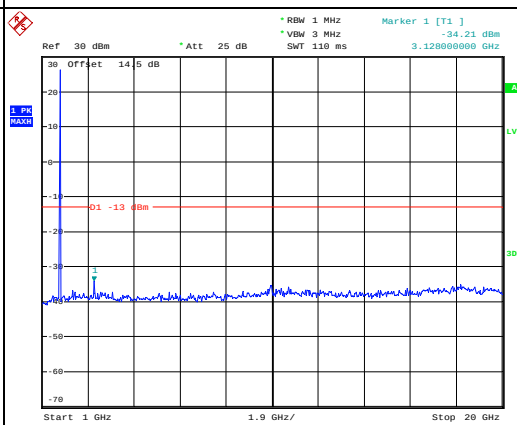
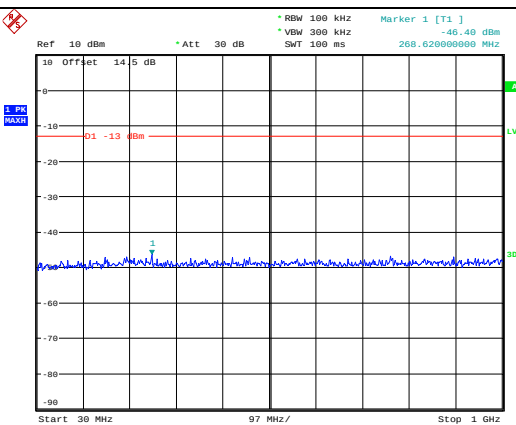
Channel

1.4MHz Bandwidth QPSK

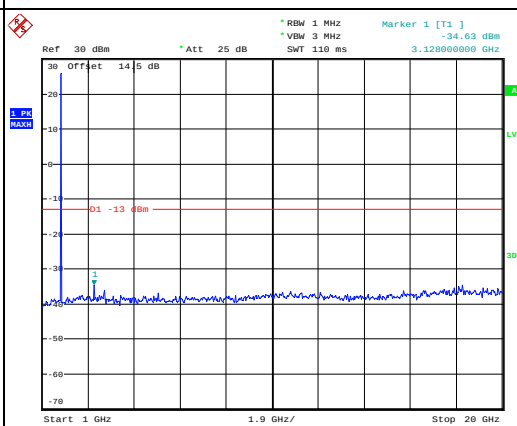
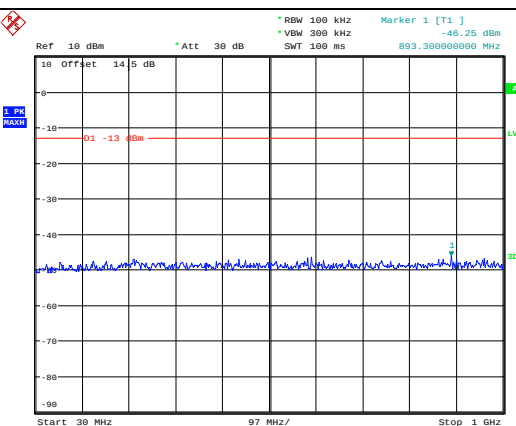
Lowest



Middle



Highest

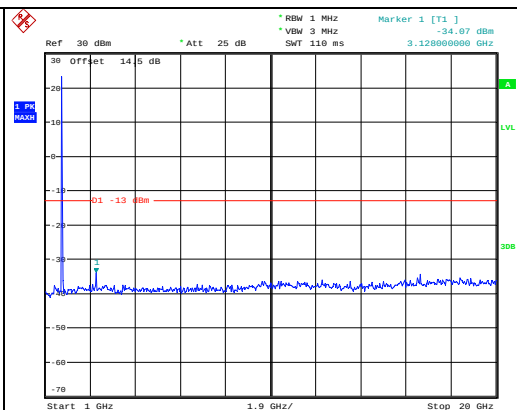
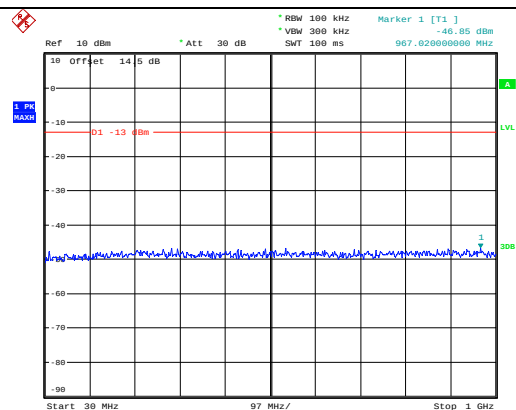


Spurious Emissions at Antenna Terminal

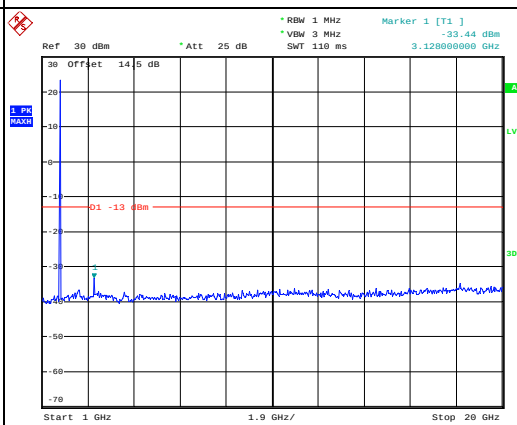
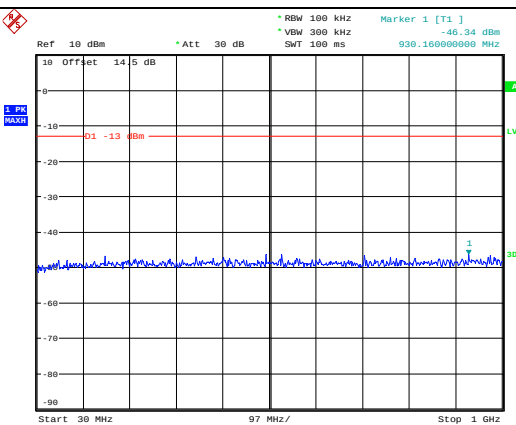
Channel

3MHz Bandwidth QPSK

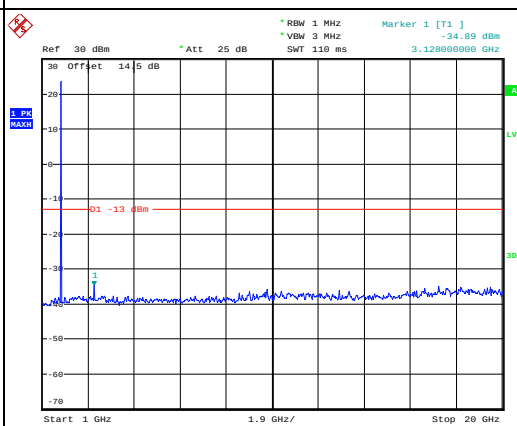
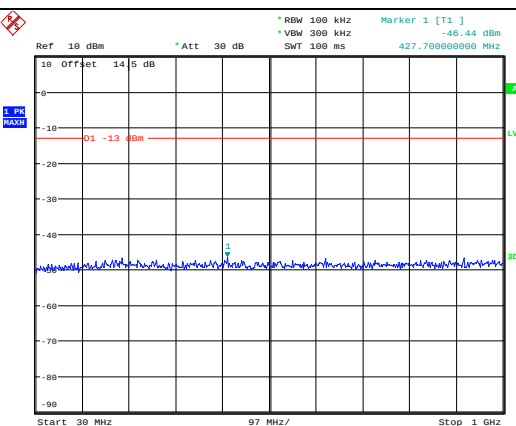
Lowest



Middle



Highest

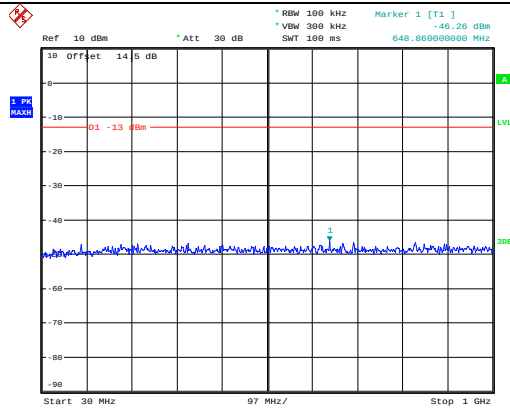


Spurious Emissions at Antenna Terminal

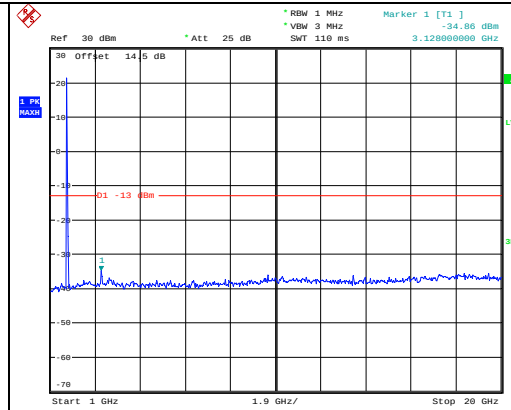
Channel

5MHz Bandwidth QPSK

Lowest

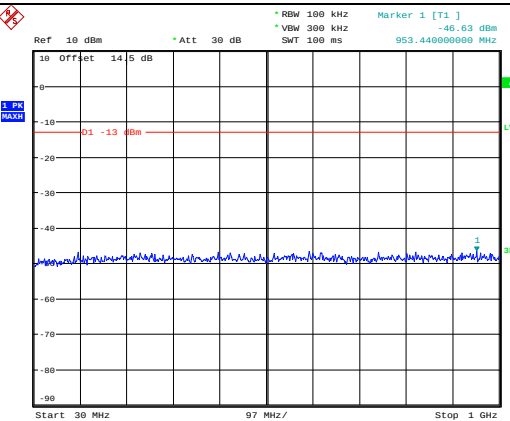


Date: 27.JUL.2023 14:17:10

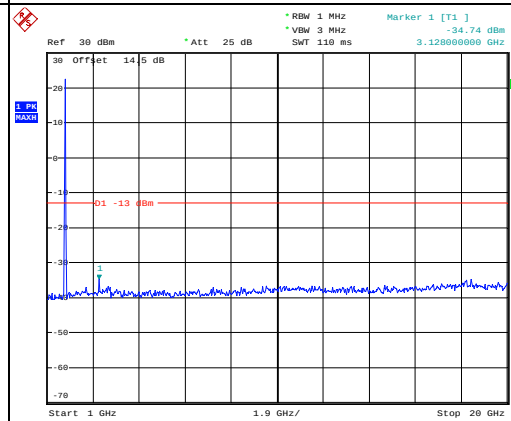


Date: 27.JUL.2023 14:17:22

Middle

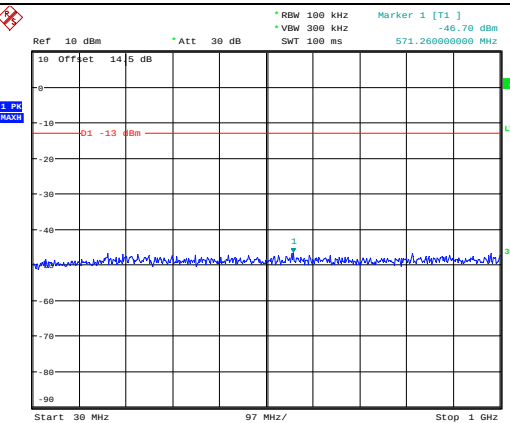


Date: 27.JUL.2023 14:17:38

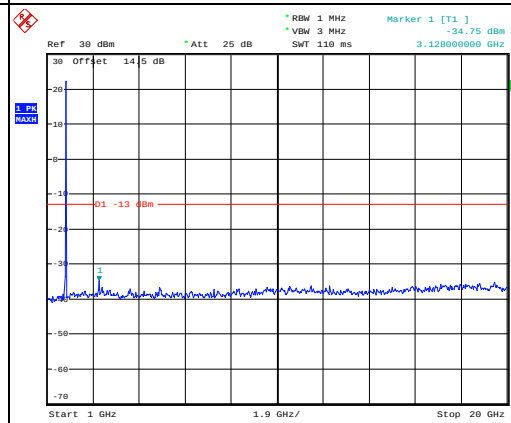


Date: 27.JUL.2023 14:17:50

Highest



Date: 27.JUL.2023 14:18:03



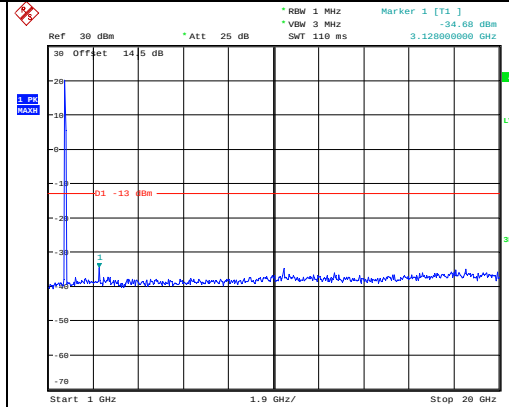
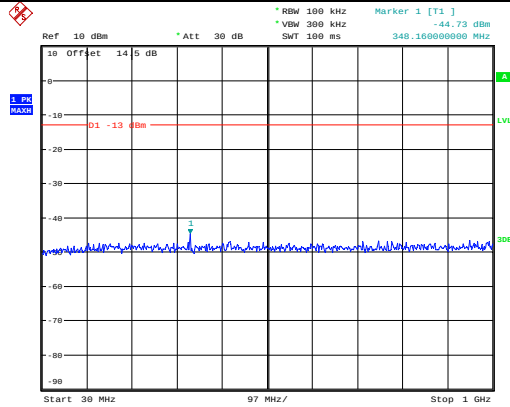
Date: 27.JUL.2023 14:18:14

Spurious Emissions at Antenna Terminal

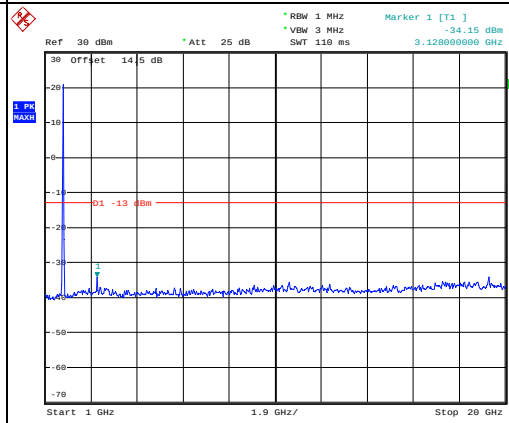
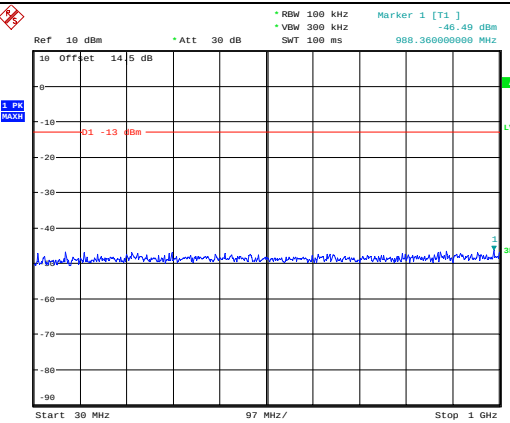
Channel

10MHz Bandwidth QPSK

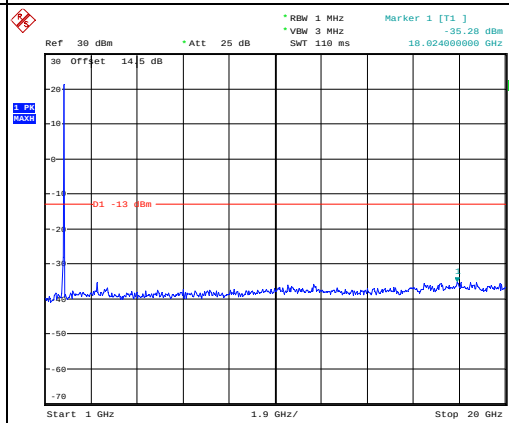
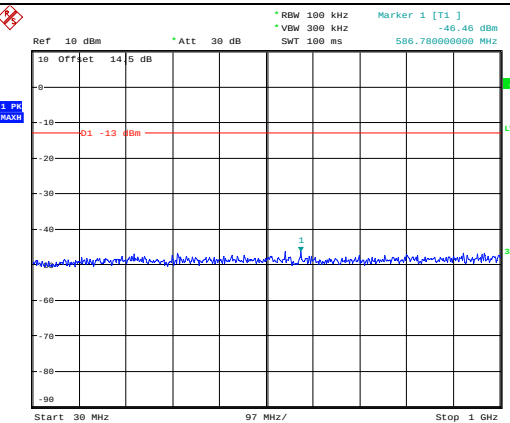
Lowest



Middle



Highest

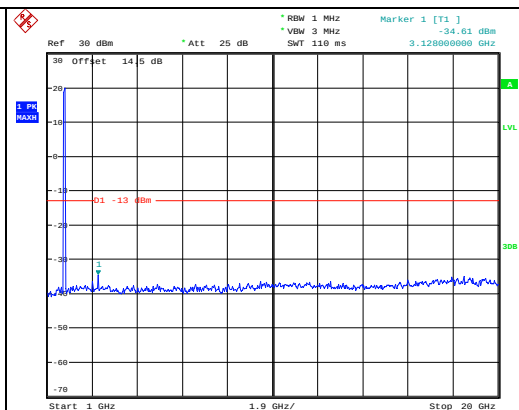
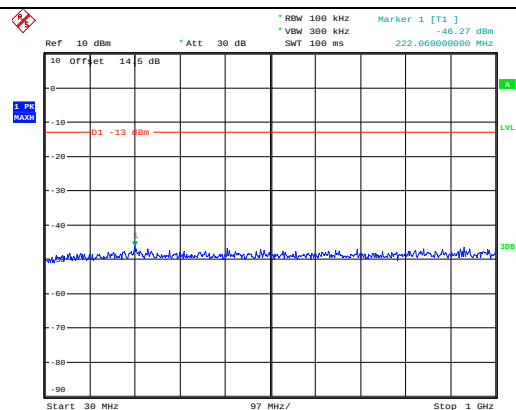


Spurious Emissions at Antenna Terminal

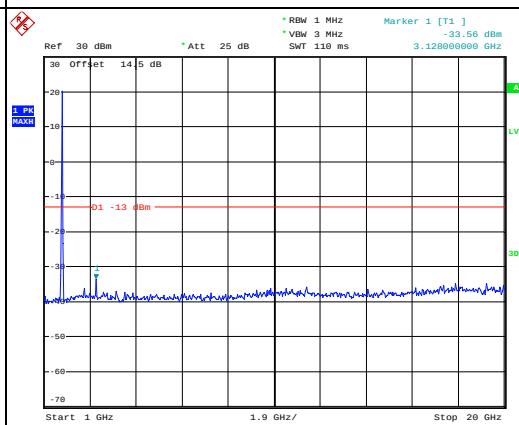
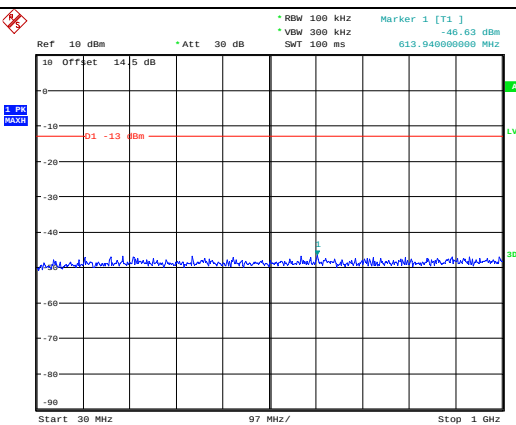
Channel

15MHz Bandwidth QPSK

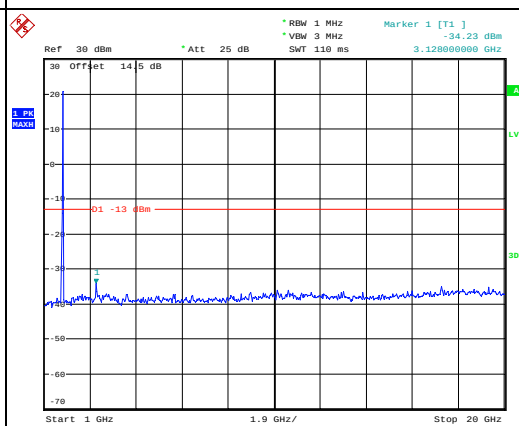
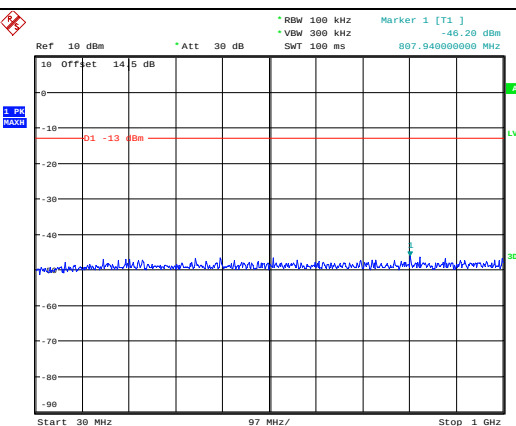
Lowest



Middle



Highest

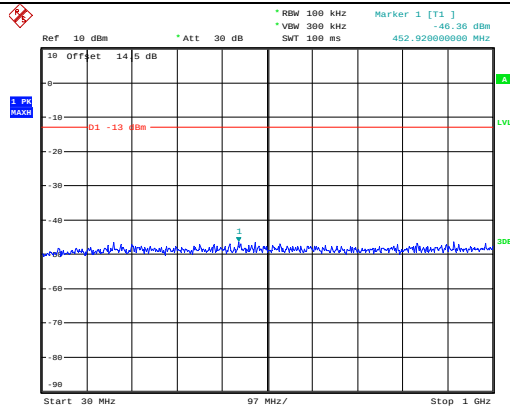


Spurious Emissions at Antenna Terminal

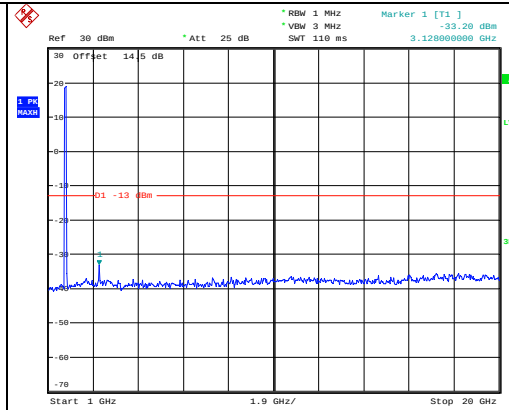
Channel

20MHz Bandwidth QPSK

Lowest

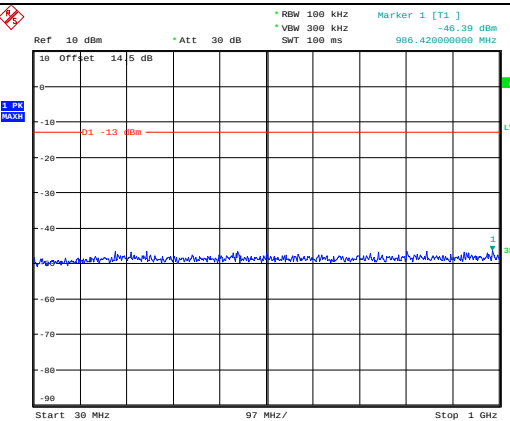


Date: 27.JUL.2023 14:21:16

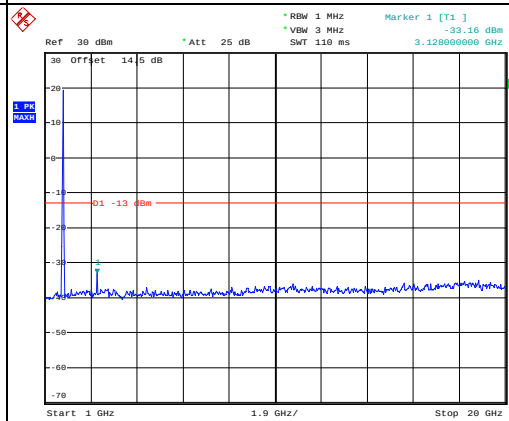


Date: 27.JUL.2023 14:21:27

Middle

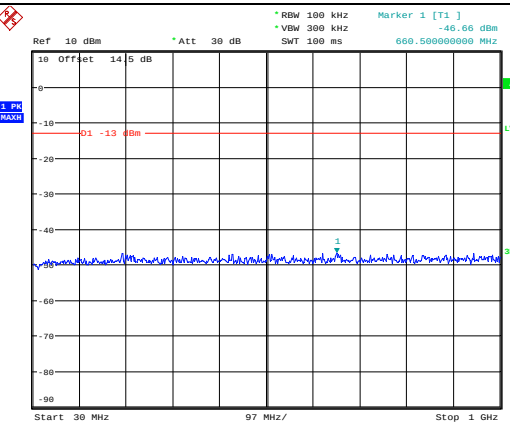


Date: 27.JUL.2023 14:21:44

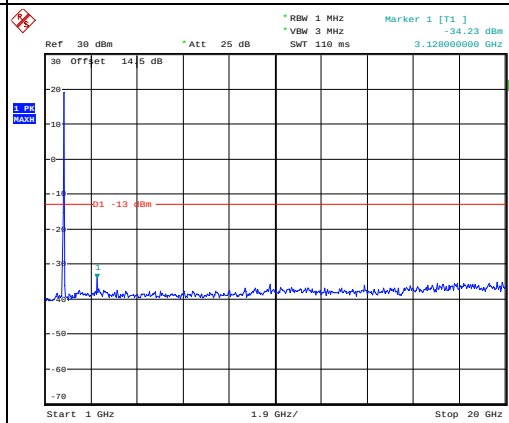


Date: 27.JUL.2023 14:21:55

Highest



Date: 27.JUL.2023 14:22:12



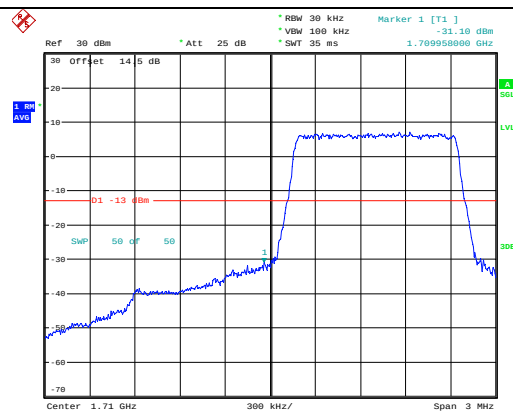
Date: 27.JUL.2023 14:22:23

Mode

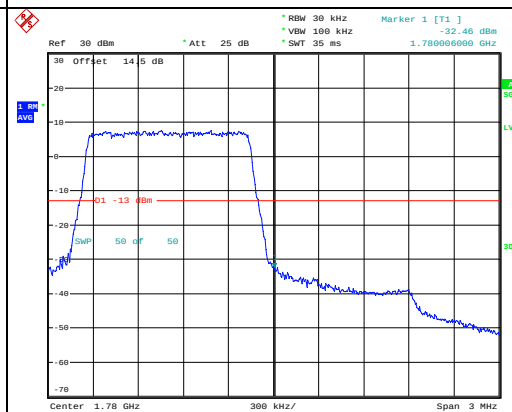
Lowest

Highest

QPSK
1.4MHz

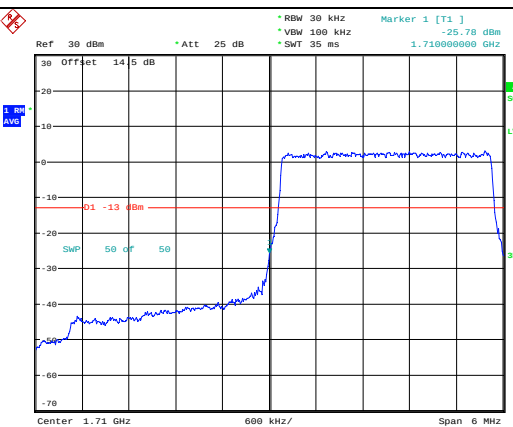


Date: 27.JUL.2023 12:37:58

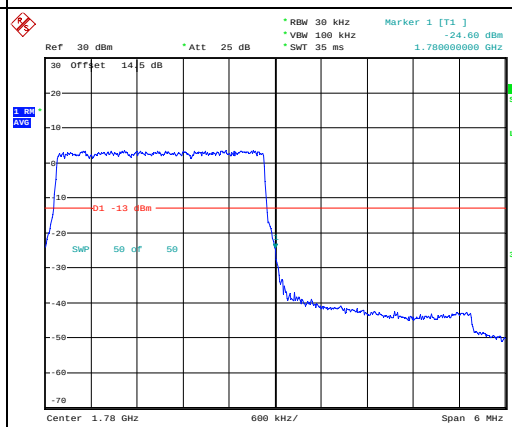


Date: 27.JUL.2023 12:38:18

QPSK
3MHz

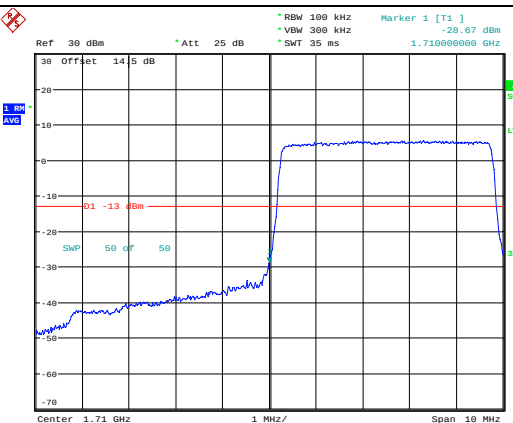


Date: 27.JUL.2023 12:38:38

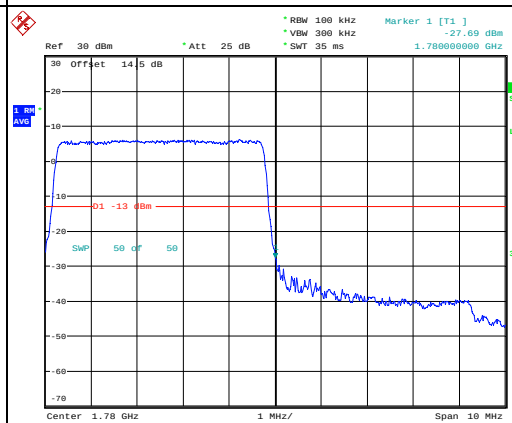


Date: 27.JUL.2023 12:38:55

QPSK
5MHz

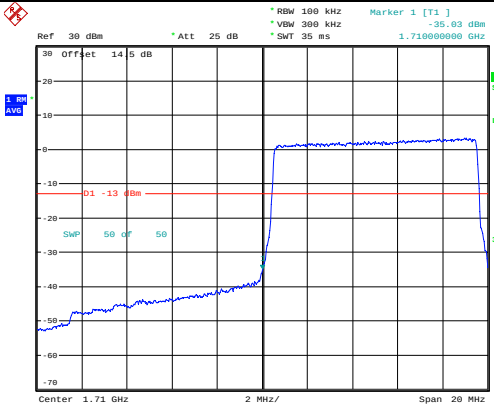
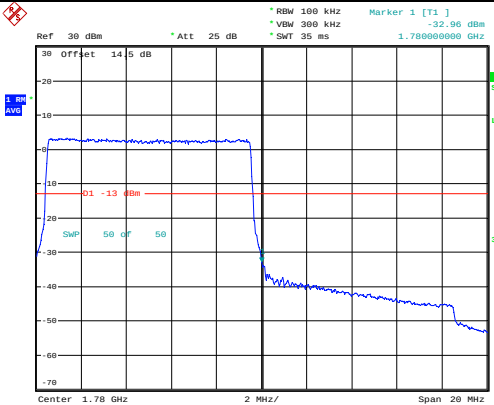
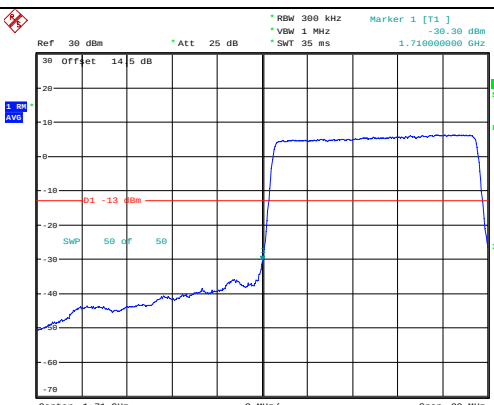
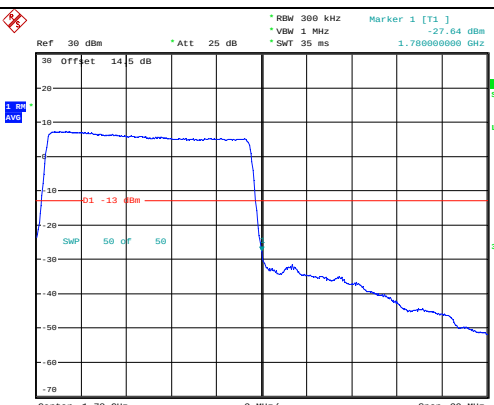
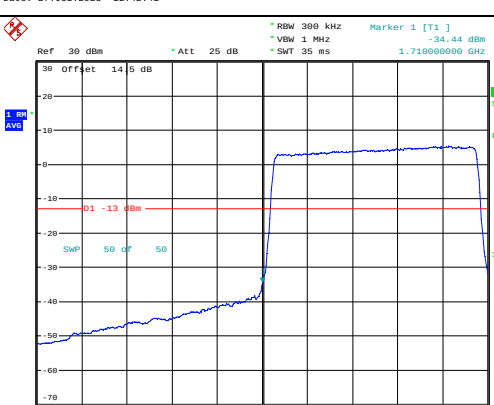
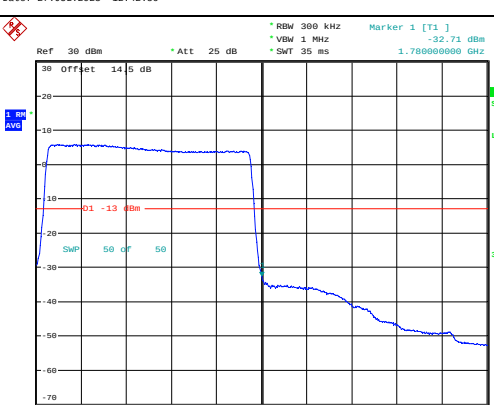


Date: 27.JUL.2023 12:41:25

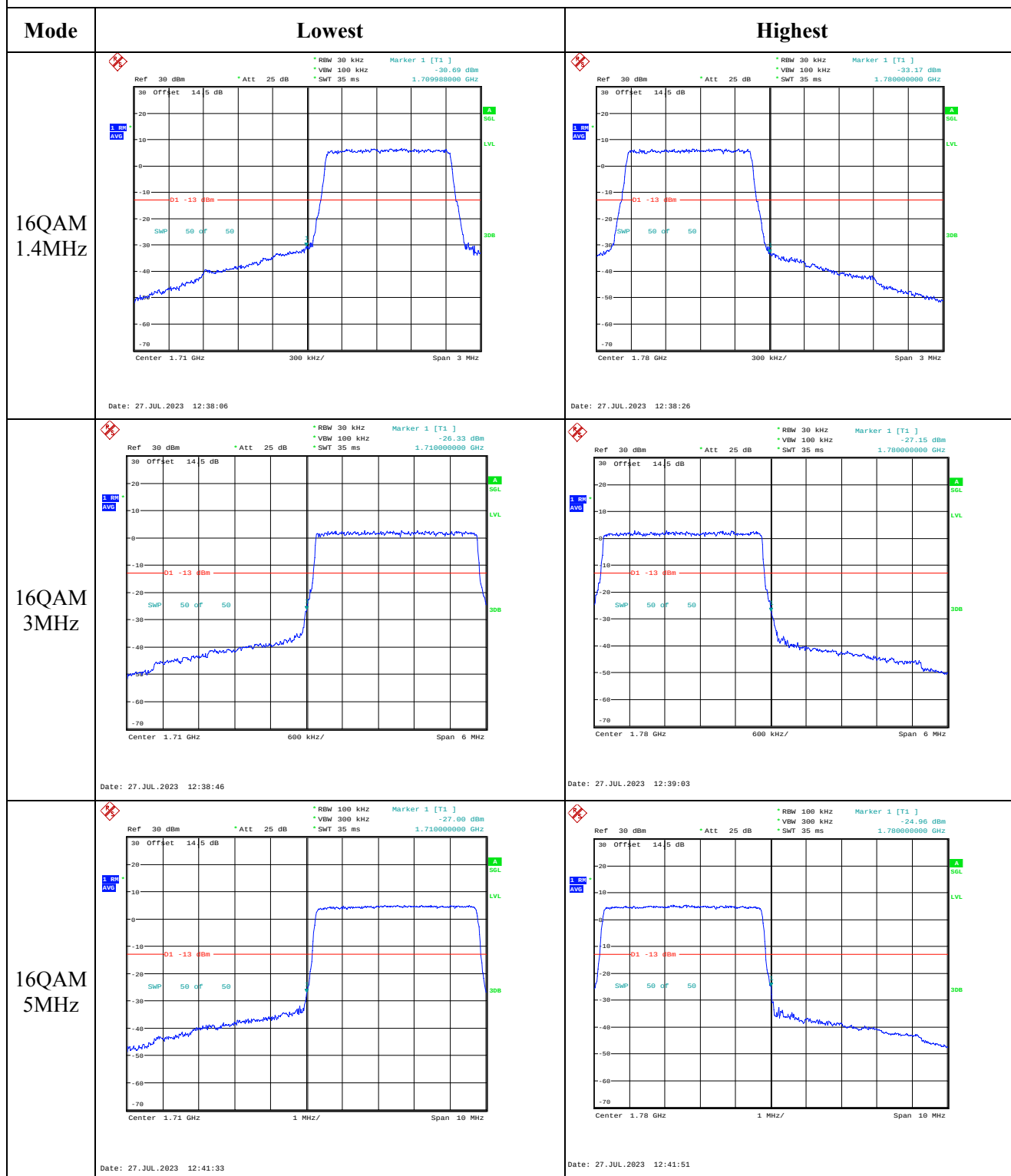


Date: 27.JUL.2023 12:41:43

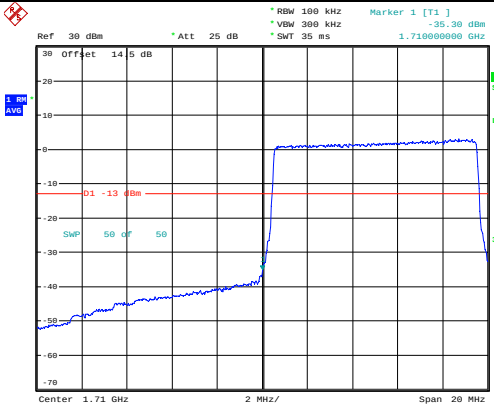
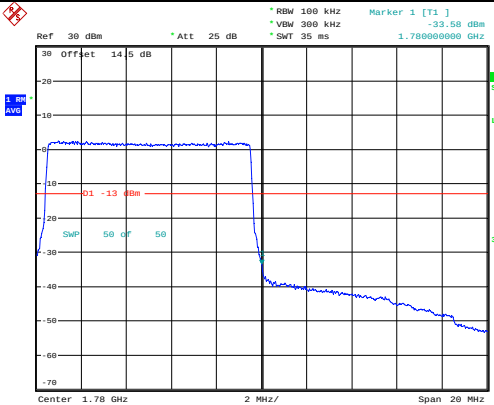
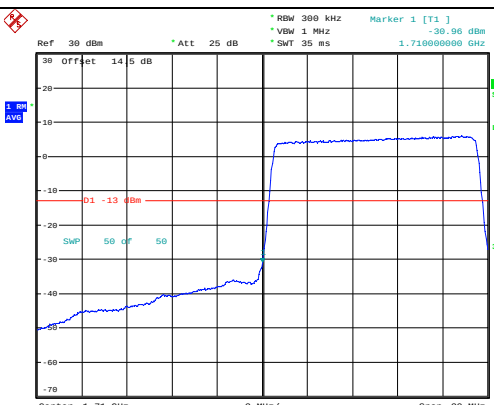
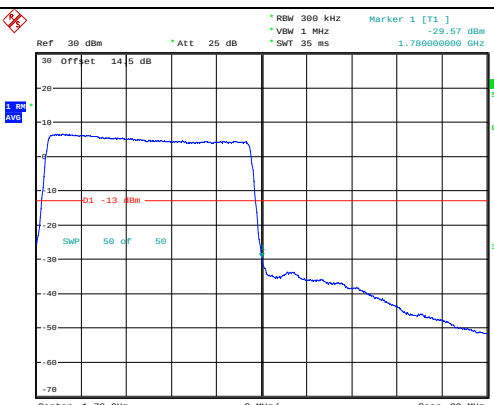
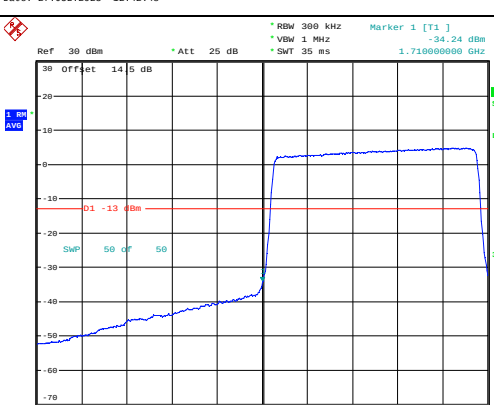
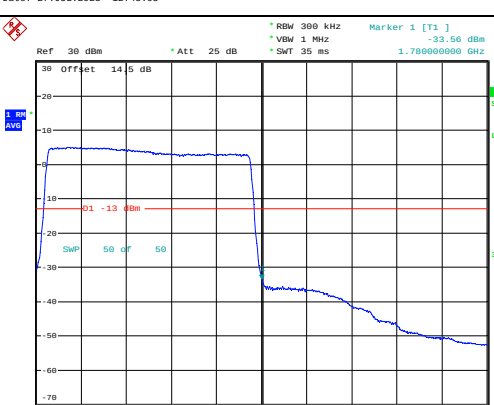
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz	 Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -35.03 dBm, 1.710000000 GHz 30 Offset 14.5 dB 1.71 GHz 2 MHz Span 20 MHz Date: 27. JUL. 2023 12:42:03	 Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -32.96 dBm, 1.780000000 GHz 30 Offset 14.5 dB 1.78 GHz 2 MHz Span 20 MHz Date: 27. JUL. 2023 12:42:22
QPSK 15MHz	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -30.30 dBm, 1.710000000 GHz 30 Offset 14.5 dB 1.71 GHz 3 MHz Span 30 MHz Date: 27. JUL. 2023 12:42:41	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -27.64 dBm, 1.780000000 GHz 30 Offset 14.5 dB 1.78 GHz 3 MHz Span 30 MHz Date: 27. JUL. 2023 12:42:56
QPSK 20MHz	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -34.44 dBm, 1.710000000 GHz 30 Offset 14.5 dB 1.71 GHz 4 MHz Span 40 MHz Date: 27. JUL. 2023 12:43:14	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -32.71 dBm, 1.780000000 GHz 30 Offset 14.5 dB 1.78 GHz 4 MHz Span 40 MHz Date: 27. JUL. 2023 12:43:29

Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz	 Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -35.30 dBm, 1.710000000 GHz 30 Offset 14.5 dB, 1.71 GHz, 2 MHz/ Span 20 MHz Date: 27. JUL. 2023 12:42:12	 Ref: 30 dBm, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -33.58 dBm, 1.780000000 GHz 30 Offset 14.5 dB, 1.78 GHz, 2 MHz/ Span 20 MHz Date: 27. JUL. 2023 12:42:31
16QAM 15MH	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -30.90 dBm, 1.710000000 GHz 30 Offset 14.5 dB, 1.71 GHz, 3 MHz/ Span 30 MHz Date: 27. JUL. 2023 12:42:48	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -29.57 dBm, 1.780000000 GHz 30 Offset 14.5 dB, 1.78 GHz, 3 MHz/ Span 30 MHz Date: 27. JUL. 2023 12:43:03
16QAM 20MH	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -34.24 dBm, 1.710000000 GHz 30 Offset 14.5 dB, 1.71 GHz, 4 MHz/ Span 40 MHz Date: 27. JUL. 2023 12:43:21	 Ref: 30 dBm, Att: 25 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -33.56 dBm, 1.780000000 GHz 30 Offset 14.5 dB, 1.78 GHz, 4 MHz/ Span 40 MHz Date: 27. JUL. 2023 12:43:36

4.17 Radiated Spurious Emissions

Serial Number:	27BI-2	Test Date:	2023/7/7(below 1GHz) 2023/8/1(above 1GHz)
Test Site:	966-2,966-1	Test Mode:	Transmitting
Tester:	Carl Xue, Tao Zhu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.7-27.2	Relative Humidity: (%)	59-69	ATM Pressure: (kPa)	99.9-100.2
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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	2022/7/15	2023/7/14
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	2022/7/15	2023/8/14
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2022/8/7	2023/8/6
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2022/8/7	2023/8/6
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2022/11/9	2023/11/8
AH	Double Ridge Guide Horn Antenna	SAS-571	1396	2021/10/18	2024/10/17
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022/7/17	2023/8/16
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021/2/5	2024/2/4
PASTERNAK	Horn Antenna	PE9852/2F-20	112001	2021/2/5	2024/2/4
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2022/9/16	2023/9/15
PASTERNAK	Horn Antenna	PE9850/2F-20	072001	2021/2/5	2024/2/4
PASTERNAK	Horn Antenna	PE9850/2F-20	072002	2021/2/5	2024/2/4
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2022/8/7	2023/8/6

*** 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								
719.29	H	20.78	-52.15	0.00	0.49	-52.64	-13.00	39.64
687.27	V	20.73	-49.42	0.00	0.53	-49.95	-13.00	36.95
1648.400	H	47.36	-56.97	8.68	0.80	-49.09	-13.00	36.09
1648.400	V	47.63	-56.78	8.68	0.80	-48.90	-13.00	35.90
2472.600	H	42.25	-58.53	9.38	1.00	-50.15	-13.00	37.15
2472.600	V	41.39	-59.34	9.38	1.00	-50.96	-13.00	37.96
3296.800	H	38.21	-58.47	10.32	1.15	-49.30	-13.00	36.30
3296.800	V	37.28	-59.16	10.32	1.15	-49.99	-13.00	36.99
GSM 850 Frequency:836.6MHz								
709.28	H	21.05	-52.08	0.00	0.52	-52.60	-13.00	39.60
729.44	V	20.52	-48.76	0.00	0.53	-49.29	-13.00	36.29
1673.200	H	48.69	-55.62	8.71	0.85	-47.76	-13.00	34.76
1673.200	V	49.32	-55.09	8.71	0.85	-47.23	-13.00	34.23
2509.800	H	43.69	-56.92	9.42	1.01	-48.51	-13.00	35.51
2509.800	V	42.50	-58.12	9.42	1.01	-49.71	-13.00	36.71
3346.400	H	36.52	-60.65	10.34	1.16	-51.47	-13.00	38.47
3346.400	V	35.74	-61.29	10.34	1.16	-52.11	-13.00	39.11
GSM 850 Frequency:848.8MHz								
701.87	H	20.62	-52.66	0.00	0.55	-53.21	-13.00	40.21
726.98	V	20.59	-48.74	0.00	0.52	-49.26	-13.00	36.26
1697.600	H	45.62	-58.67	8.74	0.90	-50.83	-13.00	37.83
1697.600	V	43.25	-61.17	8.74	0.90	-53.33	-13.00	40.33
2546.400	H	40.58	-59.75	9.47	1.01	-51.29	-13.00	38.29
2546.400	V	41.39	-58.89	9.47	1.01	-50.43	-13.00	37.43
3395.200	H	37.20	-60.49	10.36	1.19	-51.32	-13.00	38.32
3395.200	V	38.17	-59.49	10.36	1.19	-50.32	-13.00	37.32

PCS Band (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)			
GSM 1900 Frequency:1850.2MHz								
340.78	H	40.71	-69.39	0.00	0.36	-69.75	-13.00	56.75
80.36	V	39.06	-69.55	0.00	0.16	-69.71	-13.00	56.71
3700.400	H	46.82	-50.50	10.60	1.25	-41.15	-13.00	28.15
3700.400	V	43.52	-53.78	10.60	1.25	-44.43	-13.00	31.43
5550.600	H	42.12	-51.14	11.44	1.49	-41.19	-13.00	28.19
5550.600	V	39.83	-53.27	11.44	1.49	-43.32	-13.00	30.32
GSM 1900 Frequency:1880MHz								
341.97	H	40.60	-69.49	0.00	0.36	-69.85	-13.00	56.85
80.08	V	38.83	-69.76	0.00	0.16	-69.92	-13.00	56.92
3760.000	H	49.68	-46.73	10.66	1.24	-37.31	-13.00	24.31
3760.000	V	46.38	-49.91	10.66	1.24	-40.49	-13.00	27.49
5640.000	H	46.20	-47.25	11.33	1.54	-37.46	-13.00	24.46
5640.000	V	43.55	-49.78	11.33	1.54	-39.99	-13.00	26.99
GSM 1900 Frequency:1909.8MHz								
80.92	H	40.72	-69.36	0.00	0.16	-69.52	-13.00	56.52
66.26	V	39.17	-64.71	-6.98	0.15	-71.84	-13.00	58.84
3819.600	H	50.12	-45.74	10.72	1.29	-36.31	-13.00	23.31
3819.600	V	48.36	-47.36	10.72	1.29	-37.93	-13.00	24.93
5729.400	H	39.58	-53.90	11.22	1.59	-44.27	-13.00	31.27
5729.400	V	37.41	-55.95	11.22	1.59	-46.32	-13.00	33.32

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								
327.88	H	38.90	-71.40	0.00	0.34	-71.74	-13.00	58.74
80.08	V	38.76	-69.83	0.00	0.16	-69.99	-13.00	56.99
3704.800	H	49.60	-47.66	10.60	1.25	-38.31	-13.00	25.31
3704.800	V	46.40	-50.83	10.60	1.25	-41.48	-13.00	28.48
5557.200	H	42.89	-50.39	11.43	1.49	-40.45	-13.00	27.45
5557.200	V	39.92	-53.21	11.43	1.49	-43.27	-13.00	30.27
WCDMA Band II, Frequency:1880 MHz								
334.85	H	38.98	-71.21	0.00	0.35	-71.56	-13.00	58.56
80.36	V	38.74	-69.87	0.00	0.16	-70.03	-13.00	57.03
3760.000	H	50.73	-45.68	10.66	1.24	-36.26	-13.00	23.26
3760.000	V	48.57	-47.72	10.66	1.24	-38.30	-13.00	25.30
5640.000	H	45.16	-48.29	11.33	1.54	-38.50	-13.00	25.50
5640.000	V	44.29	-49.04	11.33	1.54	-39.25	-13.00	26.25
WCDMA Band II, Frequency:1907.6MHz								
330.19	H	39.15	-71.11	0.00	0.34	-71.45	-13.00	58.45
329.03	V	39.68	-68.38	0.00	0.34	-68.72	-13.00	55.72
3815.200	H	50.47	-45.38	10.72	1.29	-35.95	-13.00	22.95
3815.200	V	50.32	-45.37	10.72	1.29	-35.94	-13.00	22.94
5722.800	H	43.85	-49.64	11.23	1.58	-39.99	-13.00	26.99
5722.800	V	43.11	-50.24	11.23	1.58	-40.59	-13.00	27.59

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								
307.83	H	39.74	-70.86	0.00	0.34	-71.20	-13.00	58.20
83.52	V	37.46	-71.38	0.00	0.17	-71.55	-13.00	58.55
3424.800	H	49.08	-48.69	10.37	1.17	-39.49	-13.00	26.49
3424.800	V	45.71	-52.03	10.37	1.17	-42.83	-13.00	29.83
5137.200	H	45.84	-47.78	11.28	1.46	-37.96	-13.00	24.96
5137.200	V	42.25	-51.25	11.28	1.46	-41.43	-13.00	28.43
Frequency: 1732.6 MHz								
305.68	H	38.64	-71.99	0.00	0.34	-72.33	-13.00	59.33
84.40	V	37.74	-71.17	0.00	0.17	-71.34	-13.00	58.34
3465.200	H	52.61	-45.20	10.39	1.15	-35.96	-13.00	22.96
3465.200	V	49.88	-47.89	10.39	1.15	-38.65	-13.00	25.65
5197.800	H	47.07	-47.06	11.32	1.44	-37.18	-13.00	24.18
5197.800	V	43.48	-50.50	11.32	1.44	-40.62	-13.00	27.62
Frequency: 1752.6 MHz								
306.75	H	38.85	-71.77	0.00	0.34	-72.11	-13.00	59.11
84.51	V	37.31	-71.61	0.00	0.17	-71.78	-13.00	58.78
3505.200	H	51.11	-46.72	10.41	1.18	-37.49	-13.00	24.49
3505.200	V	47.65	-50.12	10.41	1.18	-40.89	-13.00	27.89
5257.800	H	45.67	-48.06	11.35	1.47	-38.18	-13.00	25.18
5257.800	V	42.47	-51.04	11.35	1.47	-41.16	-13.00	28.16

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								
721.82	H	20.77	-52.11	0.00	0.50	-52.61	-13.00	39.61
719.30	V	21.29	-48.21	0.00	0.49	-48.70	-13.00	35.70
1652.800	H	43.36	-60.97	8.68	0.81	-53.10	-13.00	40.10
1652.800	V	44.87	-59.54	8.68	0.81	-51.67	-13.00	38.67
2479.200	H	41.74	-59.02	9.39	1.01	-50.64	-13.00	37.64
2479.200	V	41.87	-58.86	9.39	1.01	-50.48	-13.00	37.48
3305.600	H	36.73	-60.00	10.32	1.15	-50.83	-13.00	37.83
3305.600	V	40.63	-55.87	10.32	1.15	-46.70	-13.00	33.70
WCDMA Band 5 Frequency:836.6MHz								
446.68	H	21.36	-55.56	0.00	0.43	-55.99	-13.00	42.99
470.78	V	20.60	-52.14	0.00	0.43	-52.57	-13.00	39.57
1673.200	H	43.74	-60.57	8.71	0.85	-52.71	-13.00	39.71
1673.200	V	46.55	-57.86	8.71	0.85	-50.00	-13.00	37.00
2509.800	H	44.61	-56.00	9.42	1.01	-47.59	-13.00	34.59
2509.800	V	38.29	-62.33	9.42	1.01	-53.92	-13.00	40.92
3346.400	H	42.16	-55.01	10.34	1.16	-45.83	-13.00	32.83
3346.400	V	44.88	-52.15	10.34	1.16	-42.97	-13.00	29.97
WCDMA Band 5 Frequency:846.6MHz								
724.35	H	21.47	-51.36	0.00	0.51	-51.87	-13.00	38.87
729.45	V	20.99	-48.29	0.00	0.53	-48.82	-13.00	35.82
1693.200	H	44.25	-60.05	8.73	0.89	-52.21	-13.00	39.21
1693.200	V	45.67	-58.75	8.73	0.89	-50.91	-13.00	37.91
2539.800	H	45.23	-55.15	9.46	1.01	-46.70	-13.00	33.70
2539.800	V	41.29	-59.05	9.46	1.01	-50.60	-13.00	37.60
3386.400	H	41.19	-56.40	10.35	1.18	-47.23	-13.00	34.23
3386.400	V	45.88	-51.66	10.35	1.18	-42.49	-13.00	29.49

LTE Bands:

(The Worst modulation and bandwidth were below)

LTE Band 2(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 1.4MHz, Frequency:1850.7 MHz								
321.19	H	40.89	-69.51	0.00	0.34	-69.85	-13.00	56.85
82.81	V	41.02	-67.77	0.00	0.17	-67.94	-13.00	54.94
3701.400	H	45.25	-52.06	10.60	1.25	-42.71	-13.00	29.71
3701.400	V	43.37	-53.92	10.60	1.25	-44.57	-13.00	31.57
5552.100	H	42.28	-50.99	11.44	1.49	-41.04	-13.00	28.04
5552.100	V	39.95	-53.15	11.44	1.49	-43.20	-13.00	30.20
QPSK, 1.4MHz, Frequency:1880 MHz								
321.19	H	41.16	-69.24	0.00	0.34	-69.58	-13.00	56.58
85.72	V	40.95	-68.06	0.00	0.17	-68.23	-13.00	55.23
3760.000	H	47.25	-49.16	10.66	1.24	-39.74	-13.00	26.74
3760.000	V	44.69	-51.60	10.66	1.24	-42.18	-13.00	29.18
5640.000	H	46.25	-47.20	11.33	1.54	-37.41	-13.00	24.41
5640.000	V	40.41	-52.92	11.33	1.54	-43.13	-13.00	30.13
QPSK, 1.4MHz, Frequency:1909.3 MHz								
322.16	H	41.09	-69.30	0.00	0.34	-69.64	-13.00	56.64
83.78	V	41.41	-67.45	0.00	0.17	-67.62	-13.00	54.62
3818.600	H	46.52	-49.34	10.72	1.29	-39.91	-13.00	26.91
3818.600	V	43.63	-52.08	10.72	1.29	-42.65	-13.00	29.65
5727.900	H	41.47	-52.01	11.23	1.59	-42.37	-13.00	29.37
5727.900	V	40.38	-52.98	11.23	1.59	-43.34	-13.00	30.34

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								
315.38	H	40.41	-70.08	0.00	0.34	-70.42	-13.00	57.42
85.72	V	40.54	-68.47	0.00	0.17	-68.64	-13.00	55.64
3421.400	H	45.68	-52.08	10.37	1.17	-42.88	-13.00	29.88
3421.400	V	44.13	-53.60	10.37	1.17	-44.40	-13.00	31.40
5132.100	H	43.28	-50.29	11.28	1.47	-40.48	-13.00	27.48
5132.100	V	40.68	-52.78	11.28	1.47	-42.97	-13.00	29.97
1.4MHz QPSK, Frequency: 1732.5 MHz								
316.35	H	40.61	-69.86	0.00	0.34	-70.20	-13.00	57.20
83.78	V	41.83	-67.03	0.00	0.17	-67.20	-13.00	54.20
3465.000	H	45.37	-52.44	10.39	1.15	-43.20	-13.00	30.20
3465.000	V	42.94	-54.83	10.39	1.15	-45.59	-13.00	32.59
5197.500	H	43.47	-50.66	11.32	1.44	-40.78	-13.00	27.78
5197.500	V	40.79	-53.19	11.32	1.44	-43.31	-13.00	30.31
1.4MHz QPSK, Frequency: 1754.3 MHz								
323.13	H	40.60	-69.77	0.00	0.34	-70.11	-13.00	57.11
85.72	V	41.07	-67.94	0.00	0.17	-68.11	-13.00	55.11
3508.600	H	56.82	-41.00	10.41	1.19	-31.78	-13.00	18.78
3508.600	V	43.63	-54.13	10.41	1.19	-44.91	-13.00	31.91
5262.900	H	42.11	-51.59	11.36	1.47	-41.70	-13.00	28.70
5262.900	V	37.66	-55.81	11.36	1.47	-45.92	-13.00	32.92

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								
726.92	H	20.77	-52.01	0.00	0.52	-52.53	-13.00	39.53
726.92	V	20.73	-48.60	0.00	0.52	-49.12	-13.00	36.12
1649.400	H	42.28	-62.05	8.68	0.80	-54.17	-13.00	41.17
1649.400	V	42.14	-62.27	8.68	0.80	-54.39	-13.00	41.39
2474.100	H	39.92	-60.86	9.38	1.00	-52.48	-13.00	39.48
2474.100	V	37.68	-63.05	9.38	1.00	-54.67	-13.00	41.67
3298.800	H	38.52	-58.16	10.32	1.15	-48.99	-13.00	35.99
3298.800	V	39.57	-56.87	10.32	1.15	-47.70	-13.00	34.70
QPSK, 1.4MHz, Frequency: 836.5 MHz								
564.87	H	20.59	-53.96	0.00	0.46	-54.42	-13.00	41.42
721.83	V	20.88	-48.56	0.00	0.50	-49.06	-13.00	36.06
1673.000	H	41.00	-63.31	8.71	0.85	-55.45	-13.00	42.45
1673.000	V	43.04	-61.37	8.71	0.85	-53.51	-13.00	40.51
2509.500	H	40.31	-60.30	9.42	1.01	-51.89	-13.00	38.89
2509.500	V	36.21	-64.41	9.42	1.01	-56.00	-13.00	43.00
3346.000	H	39.30	-57.86	10.34	1.16	-48.68	-13.00	35.68
3346.000	V	42.08	-54.94	10.34	1.16	-45.76	-13.00	32.76
QPSK, 1.4MHz, Frequency: 848.3 MHz								
512.09	H	20.50	-55.09	0.00	0.45	-55.54	-13.00	42.54
692.11	V	21.07	-48.99	0.00	0.54	-49.53	-13.00	36.53
1696.600	H	40.61	-63.68	8.74	0.89	-55.83	-13.00	42.83
1696.600	V	41.37	-63.05	8.74	0.89	-55.20	-13.00	42.20
2544.900	H	42.88	-57.46	9.47	1.01	-49.00	-13.00	36.00
2544.900	V	37.62	-62.68	9.47	1.01	-54.22	-13.00	41.22
3393.200	H	38.86	-58.81	10.36	1.19	-49.64	-13.00	36.64
3393.200	V	42.87	-54.76	10.36	1.19	-45.59	-13.00	32.59

LTE Band 7:

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: 2502.5 MHz								
324.10	H	40.53	-69.83	0.00	0.34	-70.17	-25.00	45.17
83.78	V	41.03	-67.83	0.00	0.17	-68.00	-25.00	43.00
5005.000	H	52.66	-40.30	11.20	1.47	-30.57	-25.00	5.57
5005.000	V	46.18	-46.64	11.20	1.47	-36.91	-25.00	11.91
7507.500	H	34.69	-55.10	10.90	1.95	-46.15	-25.00	21.15
7507.500	V	34.58	-55.71	10.90	1.95	-46.76	-25.00	21.76
QPSK, 1.4MHz, Frequency: 2535 MHz								
322.16	H	40.63	-69.76	0.00	0.34	-70.10	-25.00	45.10
83.78	V	40.94	-67.92	0.00	0.17	-68.09	-25.00	43.09
5070.000	H	52.15	-41.04	11.24	1.47	-31.27	-25.00	6.27
5070.000	V	46.40	-46.69	11.24	1.47	-36.92	-25.00	11.92
7605.000	H	34.66	-54.81	10.88	2.01	-45.94	-25.00	20.94
7605.000	V	34.27	-55.92	10.88	2.01	-47.05	-25.00	22.05
QPSK, 1.4MHz, Frequency: 2567.5 MHz								
324.10	H	39.96	-70.40	0.00	0.34	-70.74	-25.00	45.74
84.75	V	41.08	-67.86	0.00	0.17	-68.03	-25.00	43.03
5135.000	H	49.81	-43.79	11.28	1.47	-33.98	-25.00	8.98
5135.000	V	47.35	-46.14	11.28	1.47	-36.33	-25.00	11.33
7702.500	H	35.20	-54.32	10.86	1.97	-45.43	-25.00	20.43
7702.500	V	35.37	-54.81	10.86	1.97	-45.92	-25.00	20.92

LTE Band 12(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: 699.7 MHz								
556.01	H	20.83	-53.90	0.00	0.49	-54.39	-13.00	41.39
577.85	V	20.45	-51.25	0.00	0.46	-51.71	-13.00	38.71
1399.400	H	47.37	-56.33	8.22	0.71	-48.82	-13.00	35.82
1399.400	V	46.07	-57.68	8.22	0.71	-50.17	-13.00	37.17
2099.100	H	38.91	-62.97	9.16	0.91	-54.72	-13.00	41.72
2099.100	V	34.89	-66.94	9.16	0.91	-58.69	-13.00	45.69
2798.800	H	42.03	-57.90	9.88	1.04	-49.06	-13.00	36.06
2798.800	V	41.60	-58.20	9.88	1.04	-49.36	-13.00	36.36
QPSK, 1.4MHz, Frequency: 707.5 MHz								
569.81	H	20.73	-53.72	0.00	0.46	-54.18	-13.00	41.18
548.27	V	20.15	-51.50	0.00	0.47	-51.97	-13.00	38.97
1415.000	H	47.43	-56.24	8.26	0.72	-48.70	-13.00	35.70
1415.000	V	45.93	-57.79	8.26	0.72	-50.25	-13.00	37.25
2122.500	H	40.47	-61.52	9.17	0.92	-53.27	-13.00	40.27
2122.500	V	35.16	-66.81	9.17	0.92	-58.56	-13.00	45.56
2830.000	H	40.80	-59.00	9.93	1.06	-50.13	-13.00	37.13
2830.000	V	41.42	-58.31	9.93	1.06	-49.44	-13.00	36.44
QPSK, 1.4MHz, Frequency: 715.3 MHz								
536.89	H	20.52	-54.58	0.00	0.46	-55.04	-13.00	42.04
582.86	V	20.69	-51.01	0.00	0.46	-51.47	-13.00	38.47
1430.600	H	47.54	-56.09	8.31	0.73	-48.51	-13.00	35.51
1430.600	V	47.36	-56.33	8.31	0.73	-48.75	-13.00	35.75
2145.900	H	39.56	-62.54	9.19	0.93	-54.28	-13.00	41.28
2145.900	V	35.34	-66.77	9.19	0.93	-58.51	-13.00	45.51
2861.200	H	41.46	-58.19	9.98	1.07	-49.28	-13.00	36.28
2861.200	V	42.95	-56.72	9.98	1.07	-47.81	-13.00	34.81

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								
599.42	H	20.19	-53.68	0.00	0.51	-54.19	-13.00	41.19
515.60	V	20.36	-51.24	0.00	0.44	-51.68	-13.00	38.68
1413.000	H	45.89	-57.78	8.26	0.72	-50.24	-13.00	37.24
1413.000	V	45.72	-58.00	8.26	0.72	-50.46	-13.00	37.46
2119.500	H	37.66	-64.31	9.17	0.92	-56.06	-13.00	43.06
2119.500	V	35.37	-66.58	9.17	0.92	-58.33	-13.00	45.33
2826.000	H	37.70	-62.11	9.92	1.06	-53.25	-13.00	40.25
2826.000	V	38.52	-61.22	9.92	1.06	-52.36	-13.00	39.36
QPSK, 5MHz, Frequency: 710 MHz								
572.74	H	20.85	-53.55	0.00	0.46	-54.01	-13.00	41.01
582.85	V	21.17	-50.53	0.00	0.46	-50.99	-13.00	37.99
1420.000	H	46.20	-57.46	8.28	0.73	-49.91	-13.00	36.91
1420.000	V	47.59	-56.12	8.28	0.73	-48.57	-13.00	35.57
2130.000	H	35.73	-66.29	9.18	0.92	-58.03	-13.00	45.03
2130.000	V	37.02	-64.99	9.18	0.92	-56.73	-13.00	43.73
2840.000	H	39.13	-60.62	9.94	1.06	-51.74	-13.00	38.74
2840.000	V	37.81	-61.90	9.94	1.06	-53.02	-13.00	40.02
QPSK, 5MHz, Frequency: 713.5 MHz								
622.97	H	20.38	-53.36	0.00	0.48	-53.84	-13.00	40.84
625.15	V	20.76	-50.51	0.00	0.48	-50.99	-13.00	37.99
1427.000	H	46.81	-56.83	8.30	0.73	-49.26	-13.00	36.26
1427.000	V	45.30	-58.39	8.30	0.73	-50.82	-13.00	37.82
2140.500	H	39.65	-62.42	9.18	0.93	-54.17	-13.00	41.17
2140.500	V	35.66	-66.42	9.18	0.93	-58.17	-13.00	45.17
2854.000	H	40.22	-59.47	9.97	1.07	-50.57	-13.00	37.57
2854.000	V	37.50	-62.18	9.97	1.07	-53.28	-13.00	40.28

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								
325.07	H	40.63	-69.71	0.00	0.34	-70.05	-13.00	57.05
84.75	V	41.10	-67.84	0.00	0.17	-68.01	-13.00	55.01
3700.800	H	45.36	-51.96	10.60	1.25	-42.61	-13.00	29.61
3700.800	V	44.28	-53.02	10.60	1.25	-43.67	-13.00	30.67
5551.200	H	35.36	-57.90	11.44	1.49	-47.95	-13.00	34.95
5551.200	V	34.28	-58.82	11.44	1.49	-48.87	-13.00	35.87
QPSK, 1.4MHz, Frequency:1882.5 MHz								
317.32	H	40.44	-70.02	0.00	0.34	-70.36	-13.00	57.36
83.78	V	41.41	-67.45	0.00	0.17	-67.62	-13.00	54.62
3765.000	H	46.39	-49.94	10.67	1.25	-40.52	-13.00	27.52
3765.000	V	47.20	-49.01	10.67	1.25	-39.59	-13.00	26.59
5647.500	H	38.33	-55.12	11.32	1.55	-45.35	-13.00	32.35
5647.500	V	38.37	-54.96	11.32	1.55	-45.19	-13.00	32.19
QPSK, 1.4MHz, Frequency: 1914.3 MHz								
322.16	H	40.31	-70.08	0.00	0.34	-70.42	-13.00	57.42
85.72	V	40.99	-68.02	0.00	0.17	-68.19	-13.00	55.19
3828.600	H	48.20	-47.70	10.73	1.28	-38.25	-13.00	25.25
3828.600	V	46.39	-49.38	10.73	1.28	-39.93	-13.00	26.93
5742.900	H	38.66	-54.82	11.21	1.60	-45.21	-13.00	32.21
5742.900	V	37.64	-55.72	11.21	1.60	-46.11	-13.00	33.11

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								
729.45	H	20.83	-51.90	0.00	0.53	-52.43	-13.00	39.43
696.98	V	21.23	-48.74	0.00	0.55	-49.29	-13.00	36.29
1629.400	H	44.36	-59.99	8.66	0.81	-52.14	-13.00	39.14
1629.400	V	45.28	-59.13	8.66	0.81	-51.28	-13.00	38.28
2444.100	H	40.25	-60.64	9.37	1.00	-52.27	-13.00	39.27
2444.100	V	39.39	-61.36	9.37	1.00	-52.99	-13.00	39.99
3258.800	H	35.82	-61.04	10.30	1.17	-51.91	-13.00	38.91
3258.800	V	24.39	-72.22	10.30	1.17	-63.09	-13.00	50.09
QPSK, 1.4MHz, Frequency:831.5 MHz								
724.36	H	20.90	-51.93	0.00	0.51	-52.44	-13.00	39.44
726.90	V	21.56	-47.77	0.00	0.52	-48.29	-13.00	35.29
1663.000	H	47.25	-57.07	8.70	0.83	-49.20	-13.00	36.20
1663.000	V	48.36	-56.05	8.70	0.83	-48.18	-13.00	35.18
2494.500	H	38.66	-62.04	9.40	1.01	-53.65	-13.00	40.65
2494.500	V	37.48	-63.23	9.40	1.01	-54.84	-13.00	41.84
3326.000	H	36.23	-60.72	10.33	1.16	-51.55	-13.00	38.55
3326.000	V	36.44	-60.33	10.33	1.16	-51.16	-13.00	38.16
QPSK, 1.4MHz, Frequency: 848.3 MHz								
582.96	H	20.77	-53.43	0.00	0.46	-53.89	-13.00	40.89
661.30	V	20.86	-49.76	0.00	0.51	-50.27	-13.00	37.27
1696.600	H	46.30	-57.99	8.74	0.89	-50.14	-13.00	37.14
1696.600	V	45.74	-58.68	8.74	0.89	-50.83	-13.00	37.83
2544.900	H	45.20	-55.14	9.47	1.01	-46.68	-13.00	33.68
2544.900	V	44.78	-55.52	9.47	1.01	-47.06	-13.00	34.06
3393.200	H	35.20	-62.47	10.36	1.19	-53.30	-13.00	40.30
3393.200	V	34.92	-62.71	10.36	1.19	-53.54	-13.00	40.54

LTE Band 38 (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: 2572.5MHz								
327.01	H	40.30	-70.01	0.00	0.34	-70.35	-25.00	45.35
82.81	V	41.09	-67.70	0.00	0.17	-67.87	-25.00	42.87
5145.000	H	42.31	-51.37	11.29	1.44	-41.52	-25.00	16.52
5145.000	V	39.66	-53.91	11.29	1.44	-44.06	-25.00	19.06
7717.500	H	37.67	-51.84	10.86	1.99	-42.97	-25.00	17.97
7717.500	V	35.29	-54.84	10.86	1.99	-45.97	-25.00	20.97
QPSK, 1.4MHz, Frequency:2595MHz								
281.46	H	39.28	-71.88	0.00	0.32	-72.20	-25.00	47.20
83.78	V	41.73	-67.13	0.00	0.17	-67.30	-25.00	42.30
5190.000	H	39.88	-54.19	11.31	1.44	-44.32	-25.00	19.32
5190.000	V	40.28	-53.64	11.31	1.44	-43.77	-25.00	18.77
7785.000	H	37.40	-52.09	10.84	1.99	-43.24	-25.00	18.24
7785.000	V	36.32	-53.60	10.84	1.99	-44.75	-25.00	19.75
QPSK, 1.4MHz, Frequency: 2617.5MHz								
321.19	H	38.86	-71.54	0.00	0.34	-71.88	-25.00	46.88
82.81	V	41.26	-67.53	0.00	0.17	-67.70	-25.00	42.70
5235.000	H	40.45	-53.45	11.34	1.46	-43.57	-25.00	18.57
5235.000	V	41.29	-52.42	11.34	1.46	-42.54	-25.00	17.54
7852.500	H	36.65	-52.54	10.83	2.03	-43.74	-25.00	18.74
7852.500	V	35.67	-53.91	10.83	2.03	-45.11	-25.00	20.11

LTE Band 40 Lower:

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: 2307.5 MHz								
314.41	H	39.74	-70.76	0.00	0.34	-71.10	-40.00	31.10
82.81	V	41.13	-67.66	0.00	0.17	-67.83	-40.00	27.83
4615.000	H	38.62	-56.74	10.74	1.41	-47.41	-40.00	7.41
4615.000	V	38.12	-57.10	10.74	1.41	-47.77	-40.00	7.77
6922.500	H	39.64	-51.38	11.22	1.88	-42.04	-40.00	2.04
6922.500	V	38.48	-52.41	11.22	1.88	-43.07	-40.00	3.07
5MHz QPSK, Frequency: 2312.5 MHz								
318.29	H	40.13	-70.31	0.00	0.34	-70.65	-40.00	30.65
83.78	V	41.17	-67.69	0.00	0.17	-67.86	-40.00	27.86
4625.000	H	39.20	-56.09	10.75	1.41	-46.75	-40.00	6.75
4625.000	V	38.17	-57.00	10.75	1.41	-47.66	-40.00	7.66
6937.500	H	35.25	-55.73	11.21	1.90	-46.42	-40.00	6.42
6937.500	V	36.20	-54.64	11.21	1.90	-45.33	-40.00	5.33

LTE Band 40 Upper:

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: 2352.5 MHz								
291.15	H	39.57	-71.36	0.00	0.33	-71.69	-40.00	31.69
82.81	V	41.68	-67.11	0.00	0.17	-67.28	-40.00	27.28
4705.000	H	37.28	-57.50	10.85	1.41	-48.06	-40.00	8.06
4705.000	V	36.19	-58.61	10.85	1.41	-49.17	-40.00	9.17
7057.500	H	34.55	-55.46	11.17	1.92	-46.21	-40.00	6.21
7057.500	V	35.51	-54.39	11.17	1.92	-45.14	-40.00	5.14
5MHz QPSK, Frequency: 2357.5 MHz								
315.38	H	40.02	-70.47	0.00	0.34	-70.81	-40.00	30.81
83.78	V	41.34	-67.52	0.00	0.17	-67.69	-40.00	27.69
4715.000	H	40.12	-54.59	10.86	1.41	-45.14	-40.00	5.14
4715.000	V	40.33	-54.38	10.86	1.41	-44.93	-40.00	4.93
7072.500	H	35.82	-53.98	11.16	1.91	-44.73	-40.00	4.73
7072.500	V	36.43	-53.28	11.16	1.91	-44.03	-40.00	4.03

LTE Band 41(2535MHz-2655MHz):

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: 2537.5 MHz								
309.57	H	39.85	-70.73	0.00	0.34	-71.07	-25.00	46.07
82.81	V	40.89	-67.90	0.00	0.17	-68.07	-25.00	43.07
4997.000	H	42.58	-50.36	11.20	1.48	-40.64	-25.00	15.64
4997.000	V	43.66	-49.14	11.20	1.48	-39.42	-25.00	14.42
7495.500	H	38.30	-51.49	10.90	1.94	-42.53	-25.00	17.53
7495.500	V	36.77	-53.52	10.90	1.94	-44.56	-25.00	19.56
QPSK, 5MHz, Frequency: 2595 MHz								
317.32	H	40.21	-70.25	0.00	0.34	-70.59	-25.00	45.59
79.91	V	41.40	-67.13	-0.05	0.16	-67.34	-25.00	42.34
5186.000	H	38.69	-55.34	11.31	1.44	-45.47	-25.00	20.47
5186.000	V	39.78	-54.11	11.31	1.44	-44.24	-25.00	19.24
7779.000	H	35.41	-54.08	10.84	1.99	-45.23	-25.00	20.23
7779.000	V	35.43	-54.51	10.84	1.99	-45.66	-25.00	20.66
QPSK, 5MHz, Frequency: 2652.5 MHz								
308.60	H	39.88	-70.71	0.00	0.34	-71.05	-25.00	46.05
82.81	V	41.11	-67.68	0.00	0.17	-67.85	-25.00	42.85
5375.000	H	40.39	-53.12	11.43	1.49	-43.18	-25.00	18.18
5375.000	V	39.82	-53.68	11.43	1.49	-43.74	-25.00	18.74
8062.500	H	37.64	-50.58	10.81	2.12	-41.89	-25.00	16.89
8062.500	V	35.28	-53.44	10.81	2.12	-44.75	-25.00	19.75

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								
312.47	H	41.15	-69.38	0.00	0.34	-69.72	-13.00	56.72
83.78	V	42.08	-66.78	0.00	0.17	-66.95	-13.00	53.95
3421.400	H	47.36	-50.40	10.37	1.17	-41.20	-13.00	28.20
3421.400	V	45.30	-52.43	10.37	1.17	-43.23	-13.00	30.23
5132.100	H	40.10	-53.47	11.28	1.47	-43.66	-13.00	30.66
5132.100	V	41.28	-52.18	11.28	1.47	-42.37	-13.00	29.37
1.4MHz QPSK, Frequency: 1745 MHz								
316.35	H	41.28	-69.19	0.00	0.34	-69.53	-13.00	56.53
84.75	V	42.13	-66.81	0.00	0.17	-66.98	-13.00	53.98
3490.000	H	47.36	-50.48	10.40	1.17	-41.25	-13.00	28.25
3490.000	V	48.36	-49.42	10.40	1.17	-40.19	-13.00	27.19
5235.000	H	38.33	-55.57	11.34	1.46	-45.69	-13.00	32.69
5235.000	V	36.58	-57.13	11.34	1.46	-47.25	-13.00	34.25
1.4MHz QPSK, Frequency: 1779.3 MHz								
317.32	H	41.40	-69.06	0.00	0.34	-69.40	-13.00	56.40
79.91	V	41.65	-66.88	-0.05	0.16	-67.09	-13.00	54.09
3558.600	H	48.68	-48.99	10.46	1.22	-39.75	-13.00	26.75
3558.600	V	45.62	-51.95	10.46	1.22	-42.71	-13.00	29.71
5337.900	H	40.36	-53.11	11.40	1.47	-43.18	-13.00	30.18
5337.900	V	41.23	-52.10	11.40	1.47	-42.17	-13.00	29.17

Note:

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

5. EUT PHOTOGRAPHS

Please refer to the attachment CR230636432-EXP EUT EXTERNAL PHOTOGRAPHS and CR230636432-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR230636432-00H-TSP TEST SETUP PHOTOGRAPHS.

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