

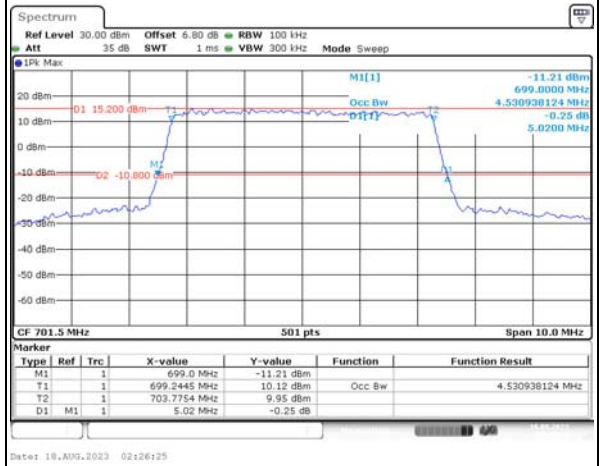
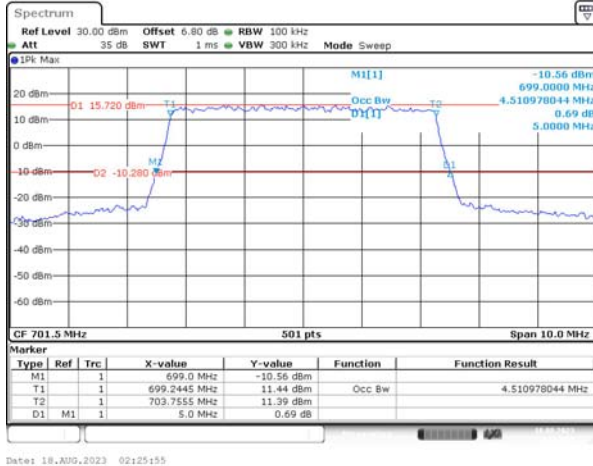
Occupied Bandwidth

Channel

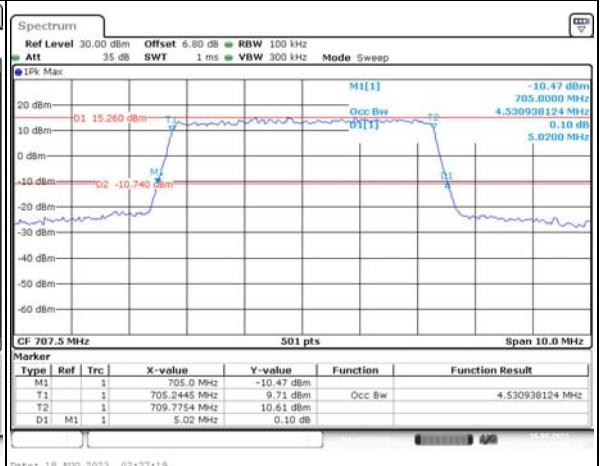
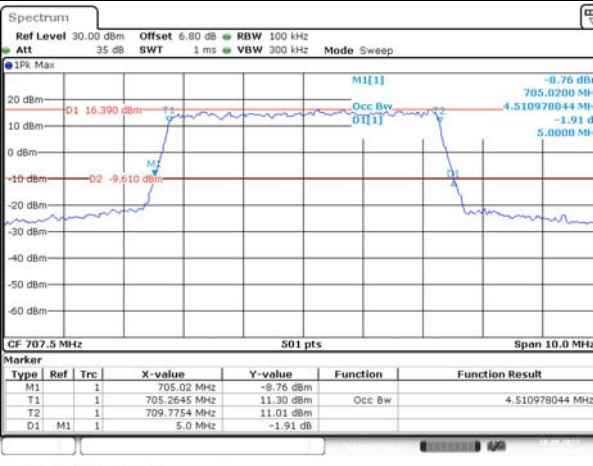
5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

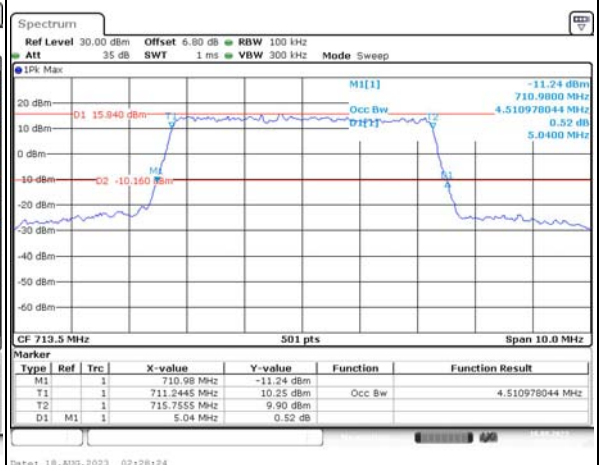
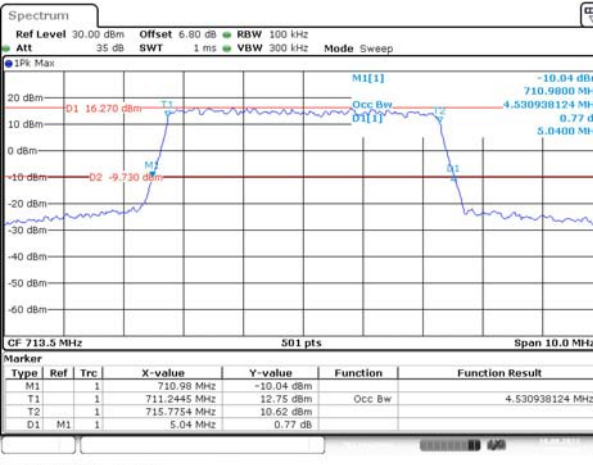
Lowest



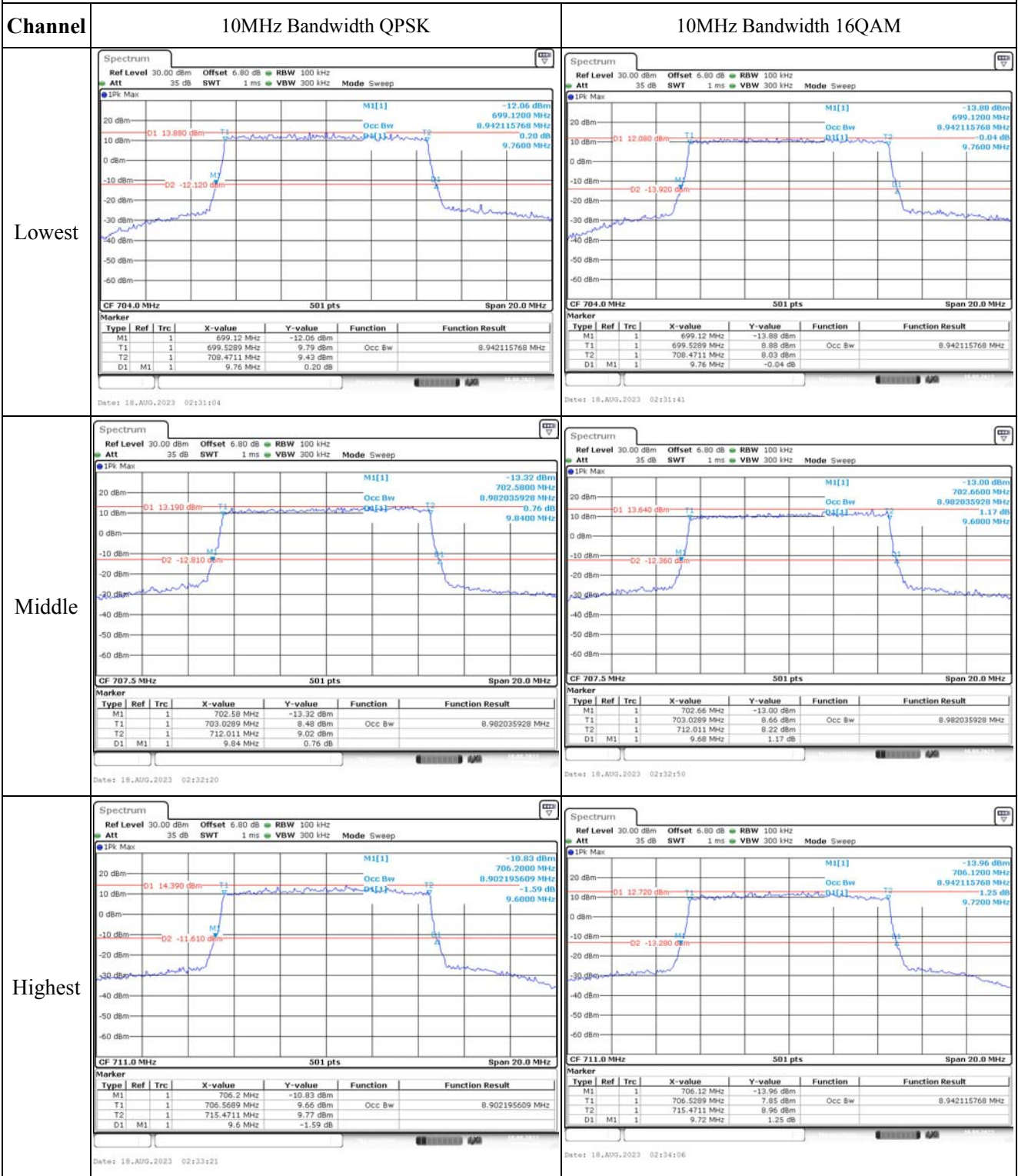
Middle



Highest



Occupied Bandwidth

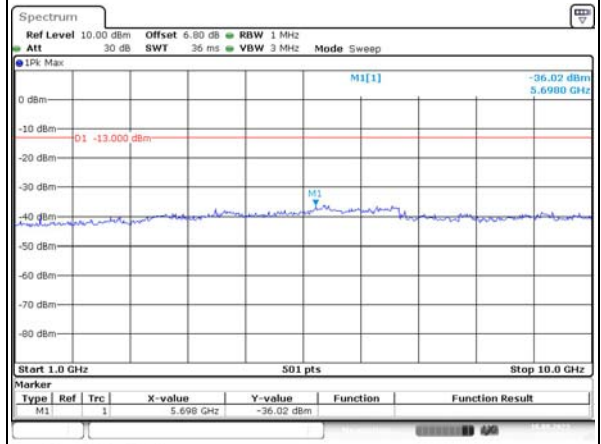
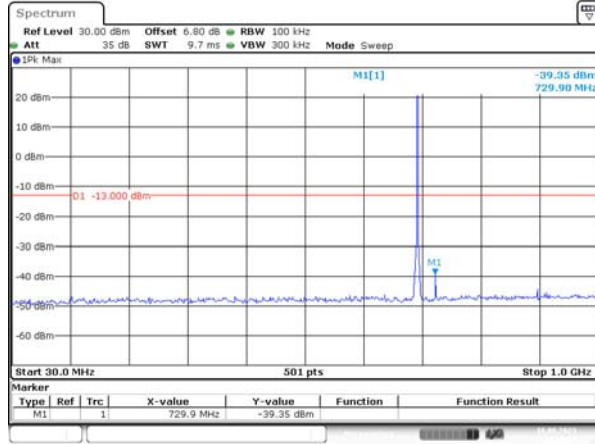


Spurious Emissions at Antenna Terminal

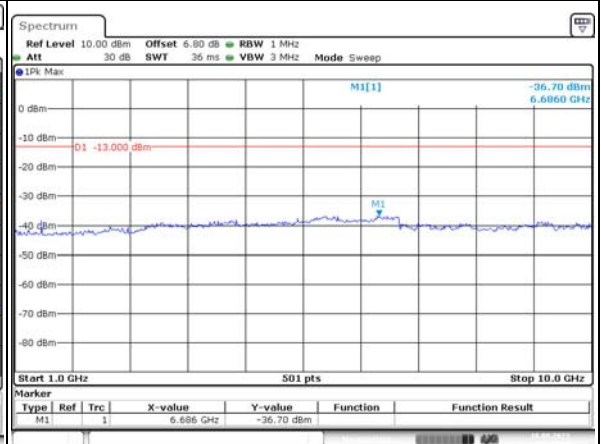
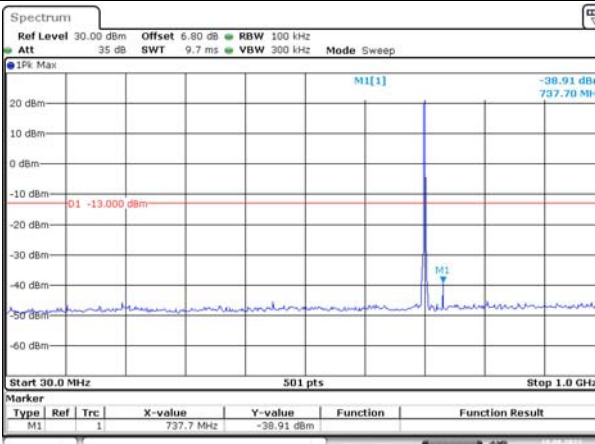
Channel

1.4MHz Bandwidth QPSK

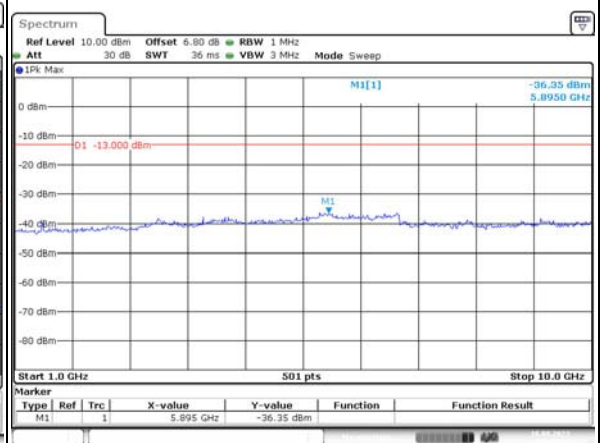
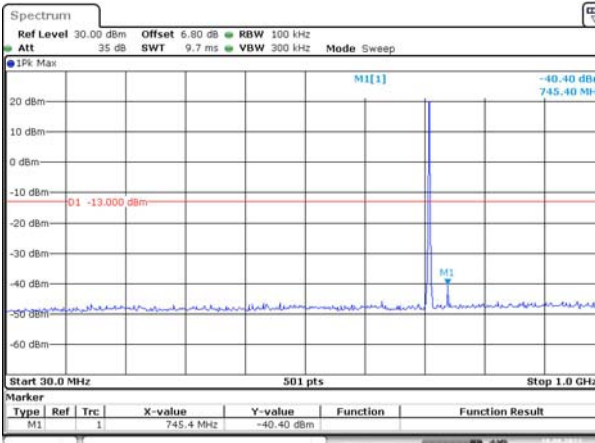
Lowest



Middle



Highest

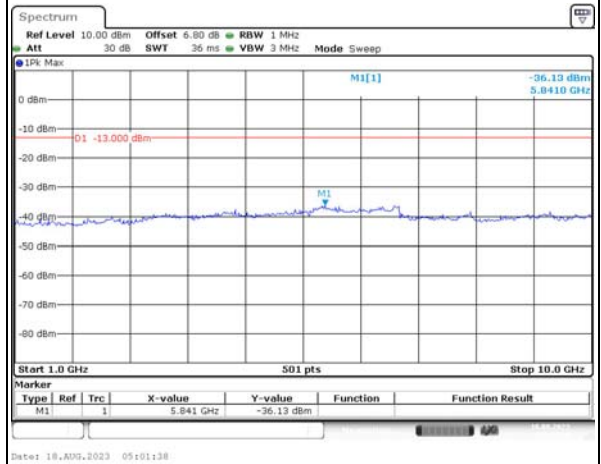
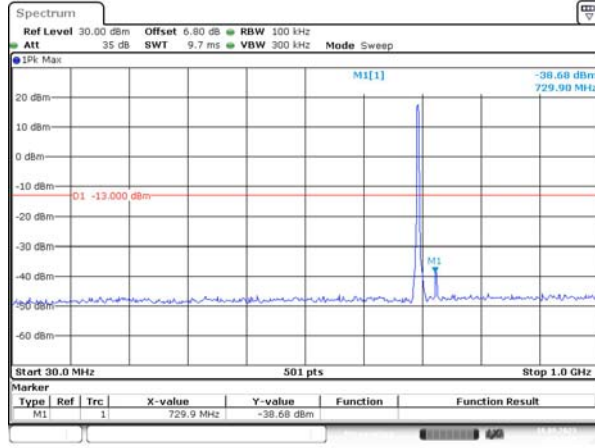


Spurious Emissions at Antenna Terminal

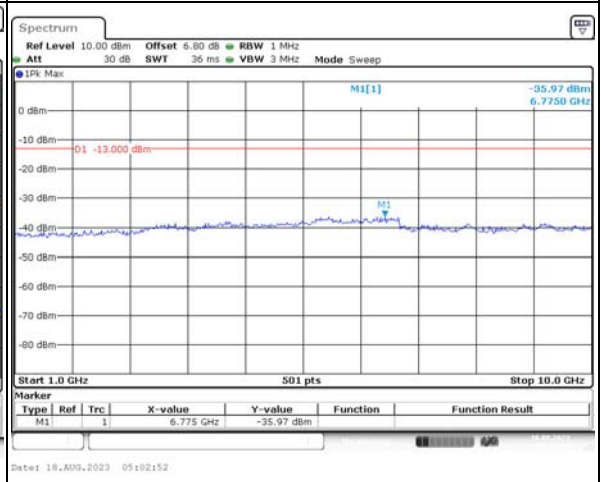
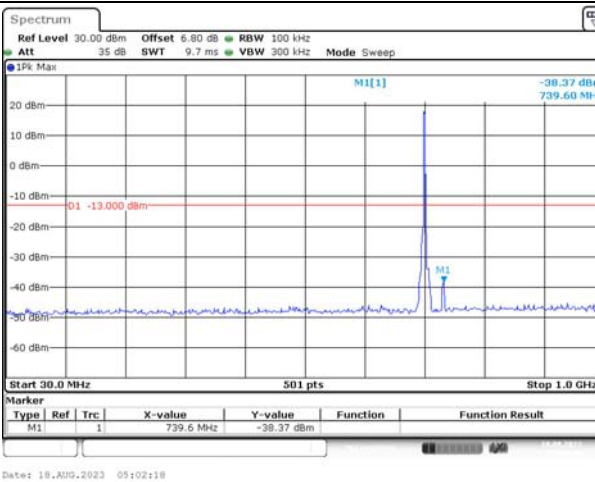
Channel

3MHz Bandwidth QPSK

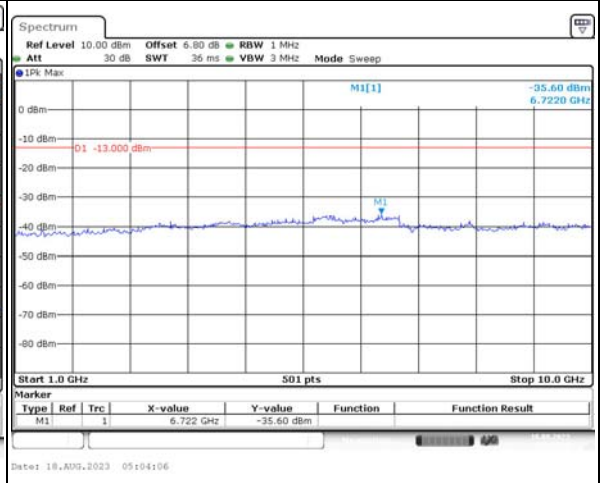
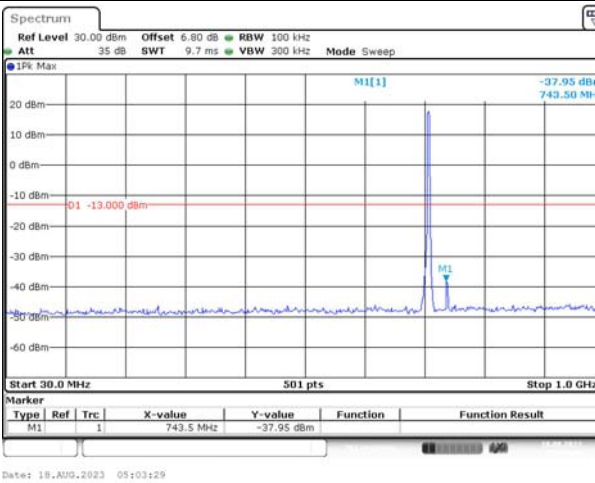
Lowest



Middle



Highest

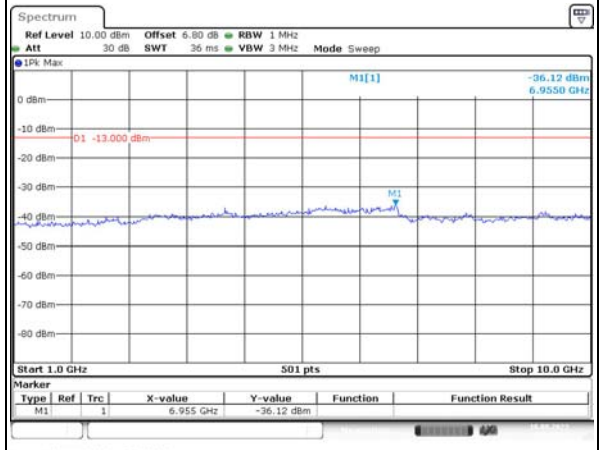
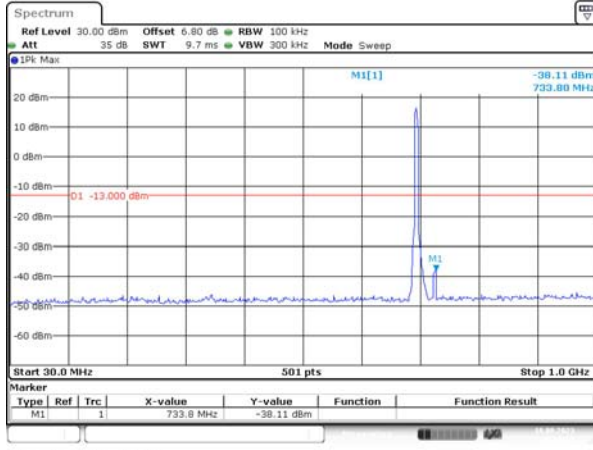


Spurious Emissions at Antenna Terminal

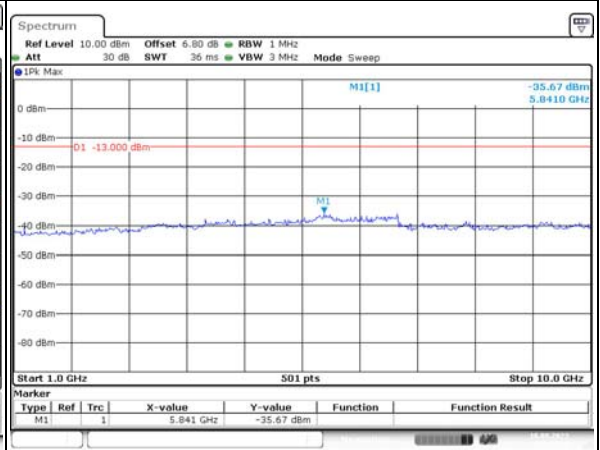
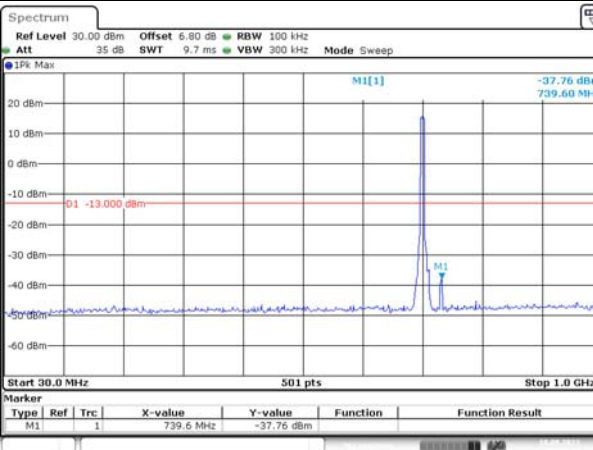
Channel

5MHz Bandwidth QPSK

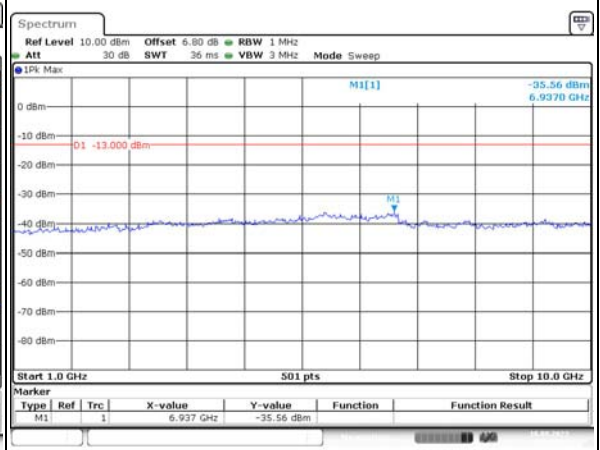
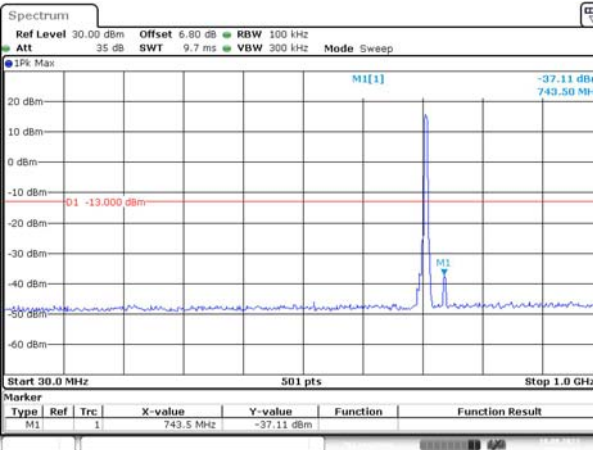
Lowest



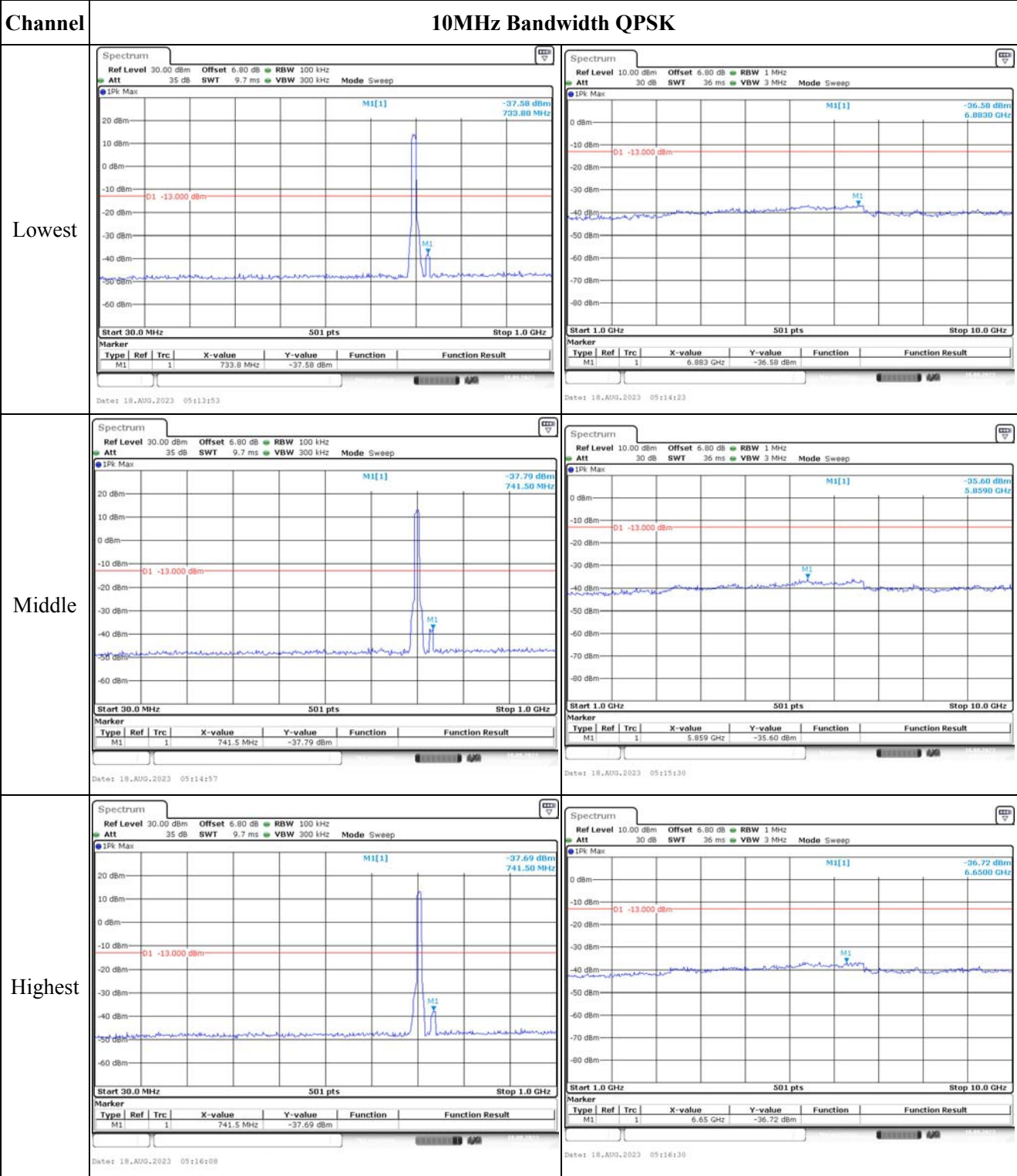
Middle



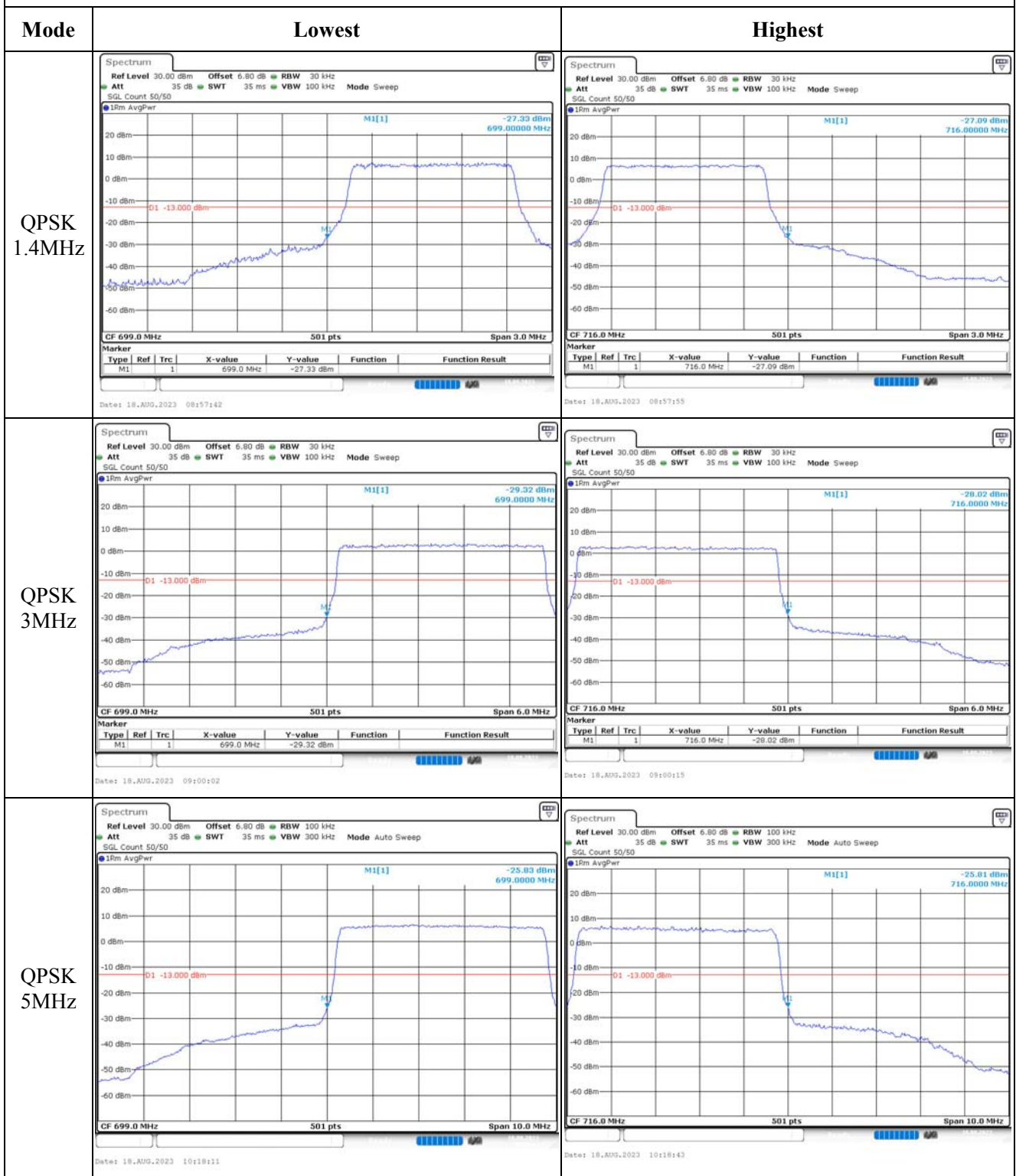
Highest



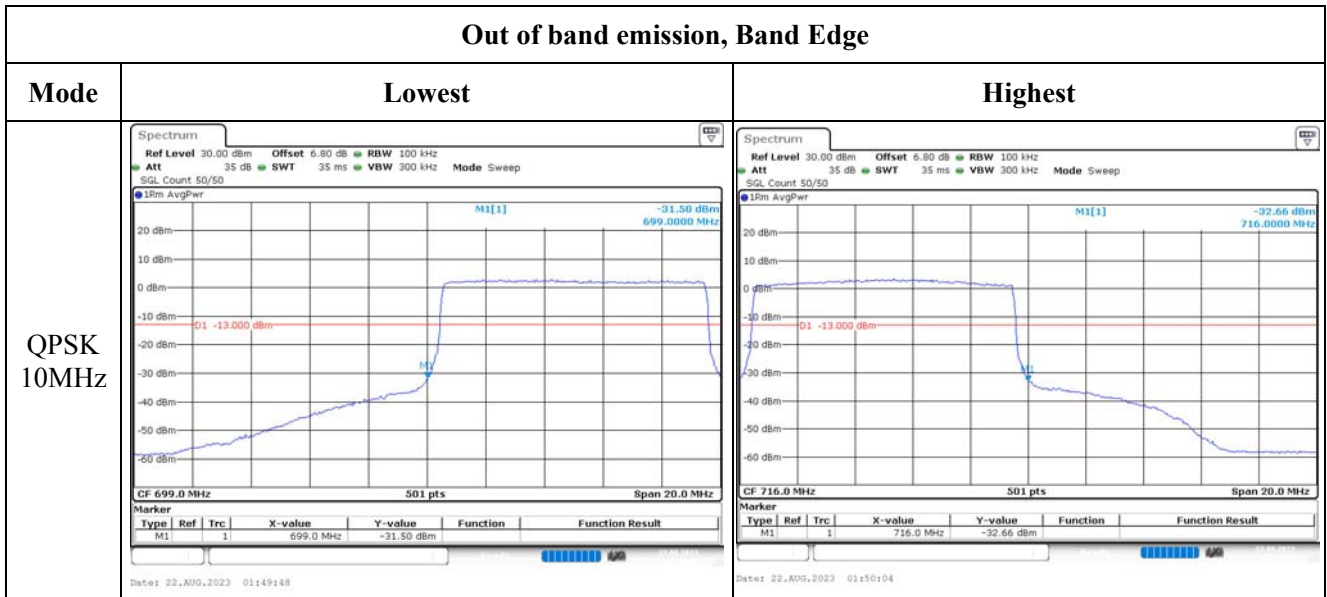
Spurious Emissions at Antenna Terminal



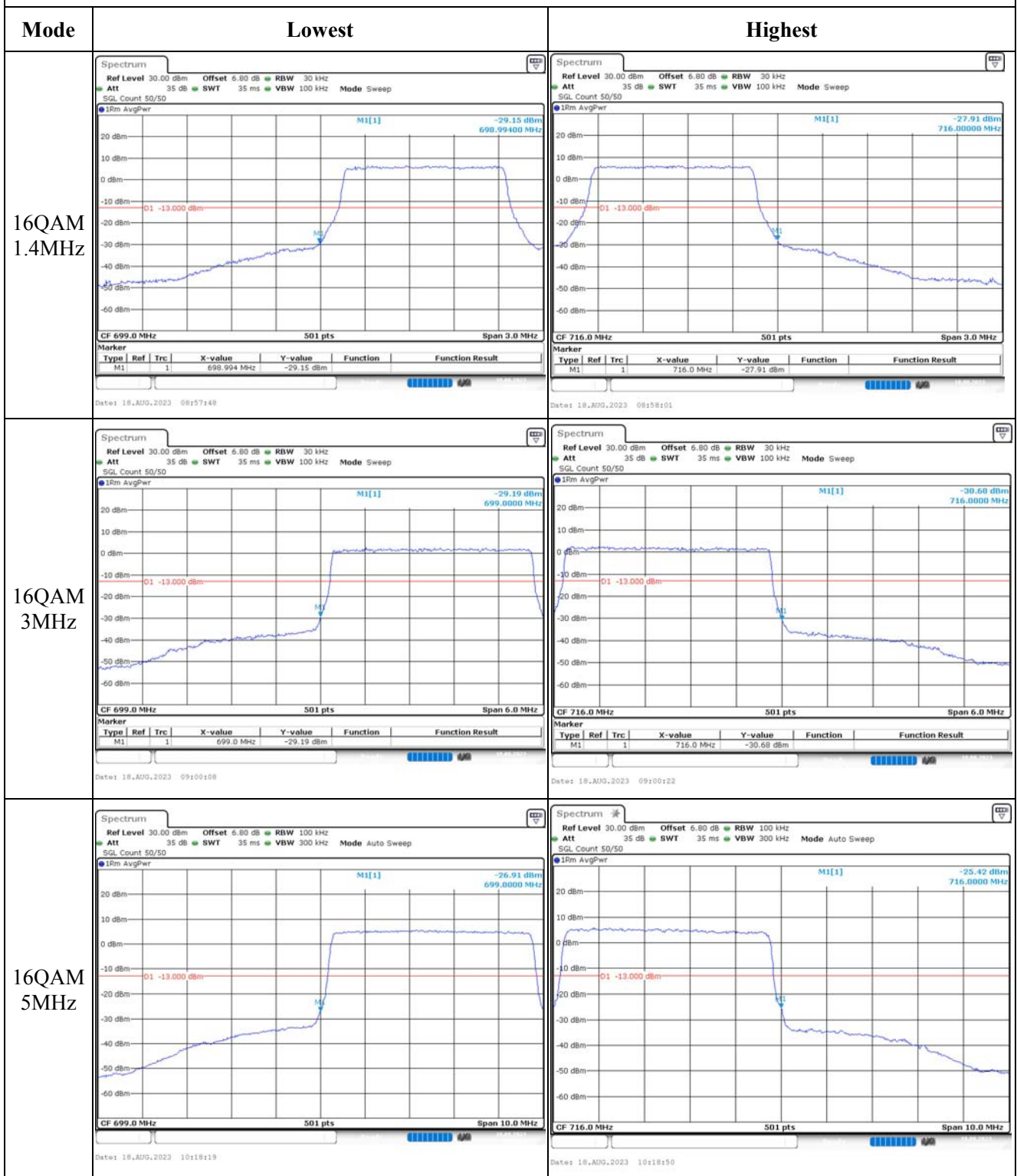
Out of band emission, Band Edge



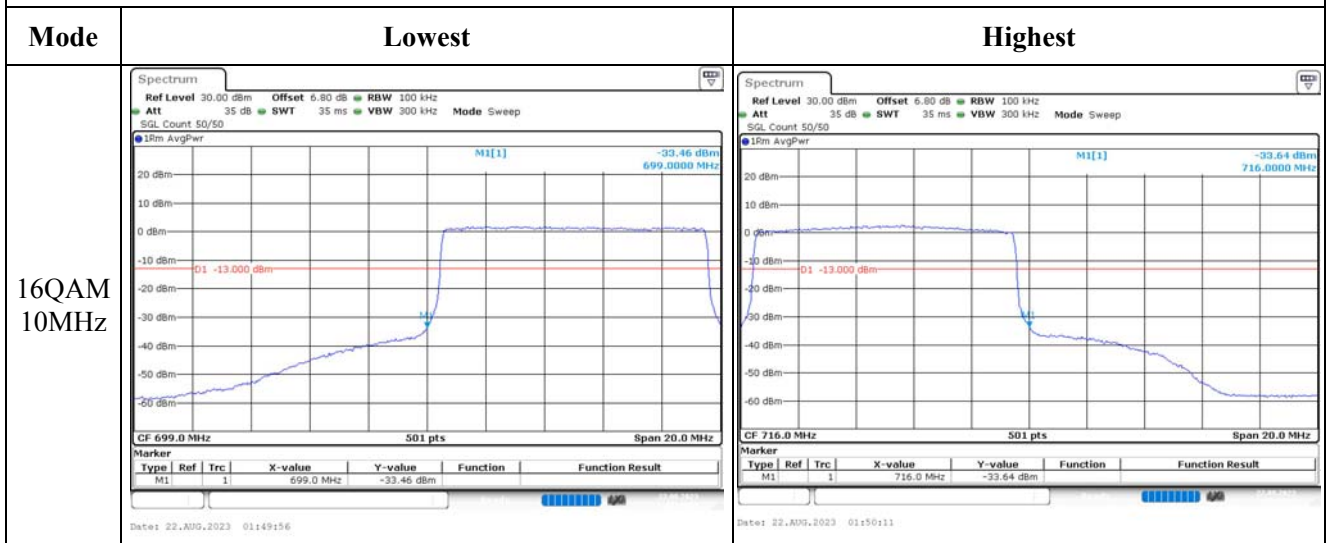
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.8 Antenna Port Test Data and Results for LTE Band 13

Serial Number:	2941-1	Test Date:	2023/8/16~2023/8/22
Test Site:	RF	Test Mode:	Transmitting
Tester:	George Chen	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.2~27.2	Relative Humidity: (%)	43~58	ATM Pressure: (kPa)	99.8~101.3
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A

* 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	779.5	/	784.5
10MHz	/	782	/

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

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	23.65	/	23.45	20.15	34.77
	RB1#13	23.38	/	23.58		
	RB1#24	23.67	/	23.64		
	RB15#0	22.51	/	22.79		
	RB15#10	22.59	/	22.75		
	RB25#0	22.64	/	22.73		
5MHz 16QAM	RB1#0	23.05	/	21.83	19.53	34.77
	RB1#13	22.72	/	22.06		
	RB1#24	23	/	22.18		
	RB15#0	21.31	/	21.71		
	RB15#10	21.33	/	21.59		
	RB25#0	21.52	/	21.81		
10MHz QPSK	RB1#0	/	23.5	/	20.03	34.77
	RB1#25	/	23.51	/		
	RB1#49	/	23.55	/		
	RB25#0	/	22.52	/		
	RB25#25	/	22.66	/		
	RB50#0	/	22.51	/		
10MHz 16QAM	RB1#0	/	22.46	/	18.94	34.77
	RB1#25	/	22.39	/		
	RB1#49	/	22.36	/		
	RB25#0	/	21.72	/		
	RB25#25	/	21.75	/		
	RB50#0	/	21.56	/		

Note:

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

Gr(dBd)=Gr(dBi)-2.15

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

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
10MHz QPSK	RB1#0	/	4.14	/	13
	RB50#0	/	4.58	/	13
10MHz 16QAM	RB1#0	/	4.93	/	13
	RB50#0	/	5.65	/	13
Result:				Pass	

FCC §2.1049, §27.53:Occupied Bandwidth

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
5MHz QPSK	4.491	4.531	4.511	5	5.04	5.04
5MHz 16QAM	4.531	4.511	4.511	5.04	5.02	5.02
10MHz QPSK	/	8.942	/	/	9.64	/
10MHz 16QAM	/	8.942	/	/	9.64	/

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

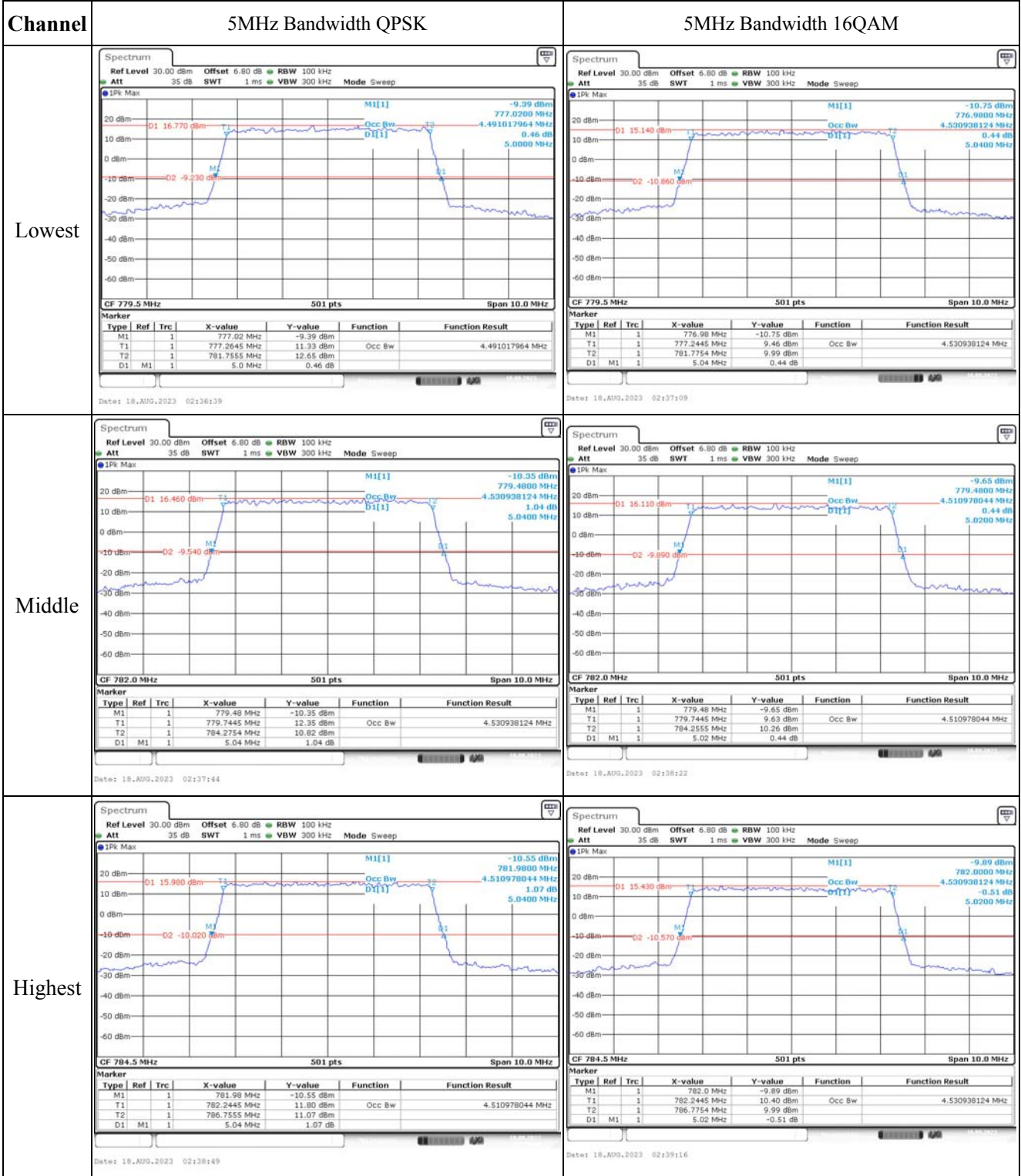
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.
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FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	24	777.520	777.00	786.449	787.00
	-20	24	777.588	777.00	786.479	787.00
	-10	24	777.548	777.00	786.480	787.00
	0	24	777.570	777.00	786.489	787.00
	10	24	777.516	777.00	786.461	787.00
	20	24	777.529	777.00	786.471	787.00
	30	24	777.535	777.00	786.476	787.00
	40	24	777.577	777.00	786.479	787.00
	50	24	777.547	777.00	786.408	787.00
Frequency Stability vs. Voltage	20	12	777.592	777.00	786.457	787.00
	20	48	777.576	777.00	786.412	787.00
					Result:	Pass

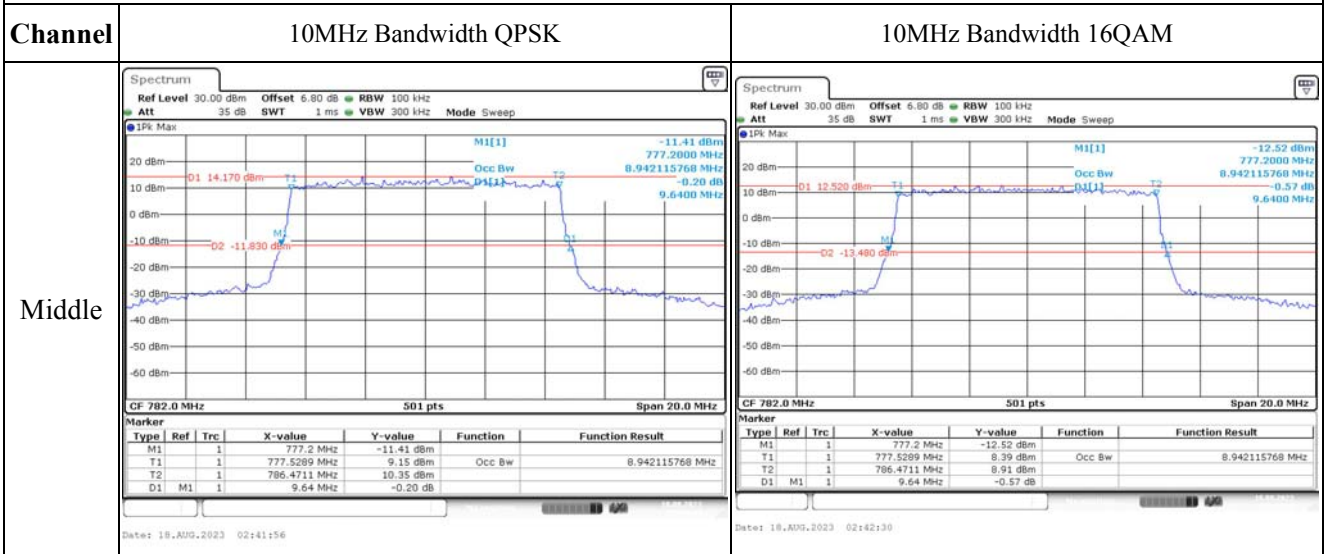
Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	12	777.558	777.00	786.481	787.00
	-20	12	777.545	777.00	786.422	787.00
	-10	12	777.590	777.00	786.479	787.00
	0	12	777.510	777.00	786.463	787.00
	10	12	777.514	777.00	786.467	787.00
	20	12	777.529	777.00	786.471	787.00
	30	12	777.567	777.00	786.448	787.00
	40	12	777.521	777.00	786.478	787.00
	50	12	777.552	777.00	786.408	787.00
Frequency Stability vs. Voltage	20	12	777.567	777.00	786.446	787.00
	20	48	777.591	777.00	786.421	787.00
					Result:	Pass

Test Plots(Note: The 6.8dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer):

Occupied Bandwidth



Occupied Bandwidth

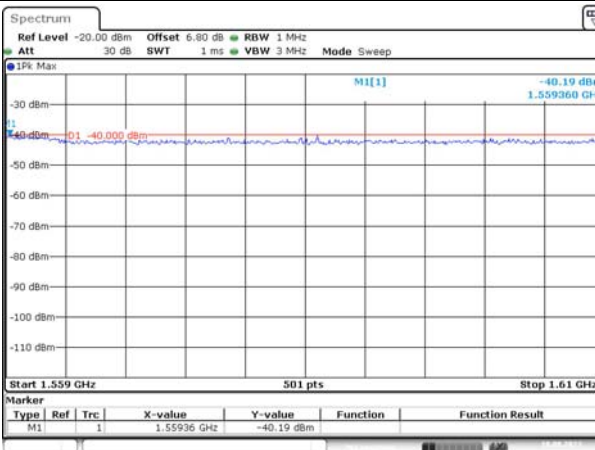
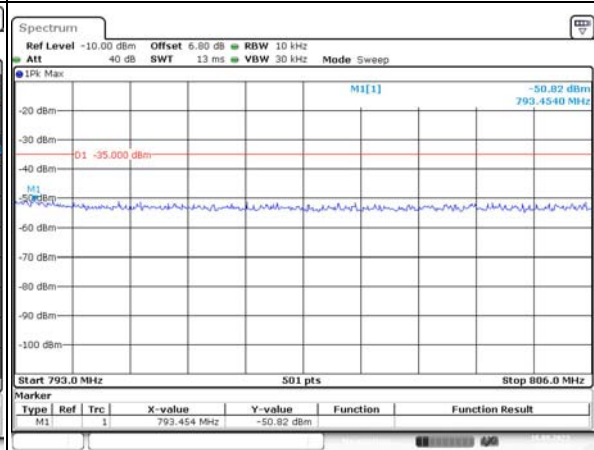
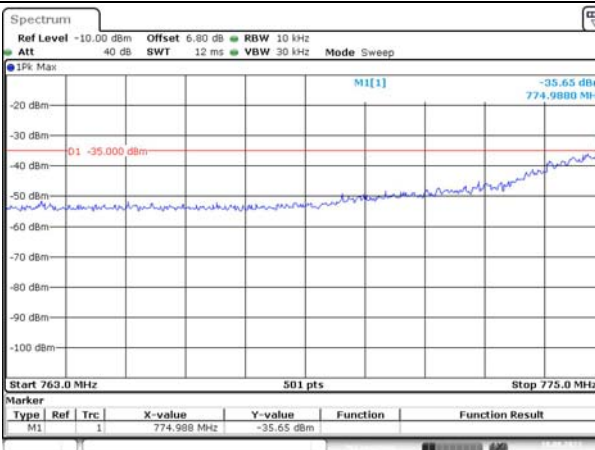
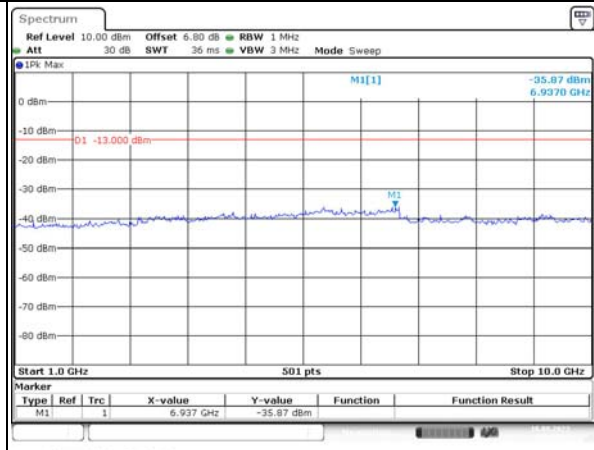
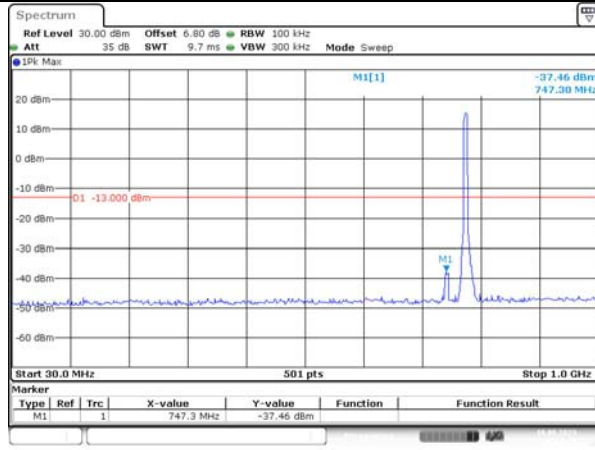


Spurious Emissions at Antenna Terminal

Channel

5MHz Bandwidth QPSK

Lowest

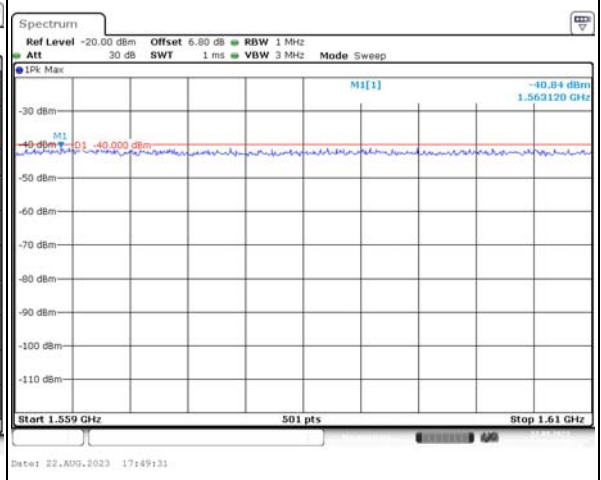
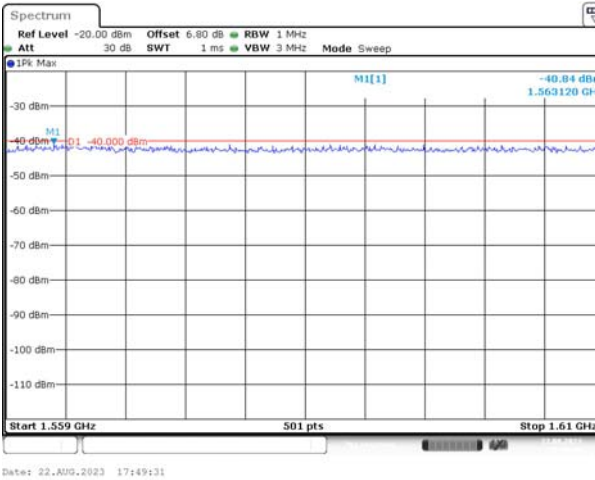
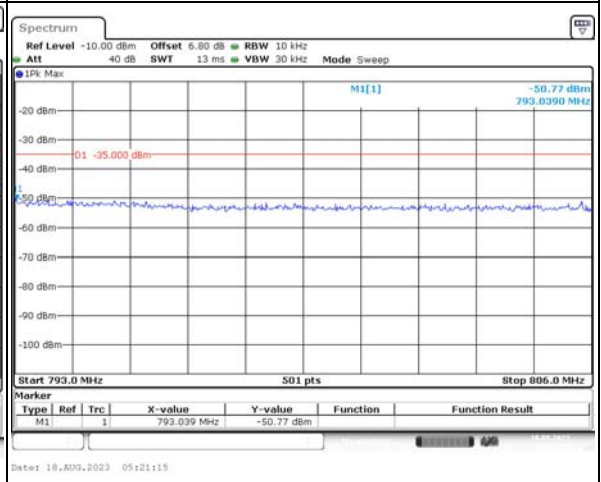
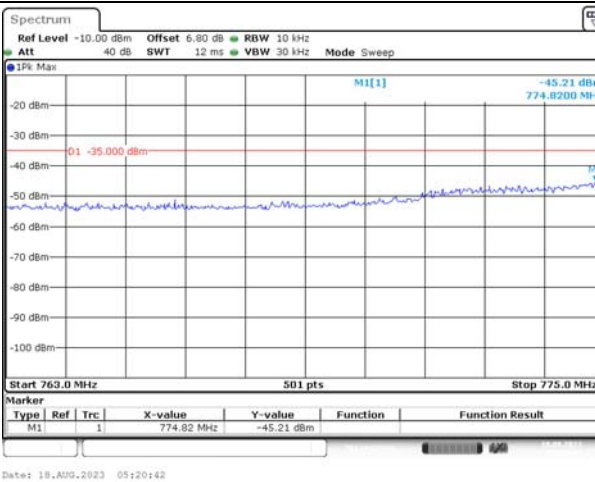
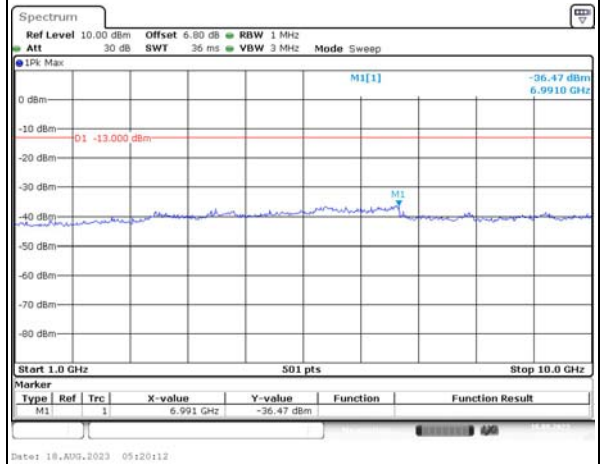
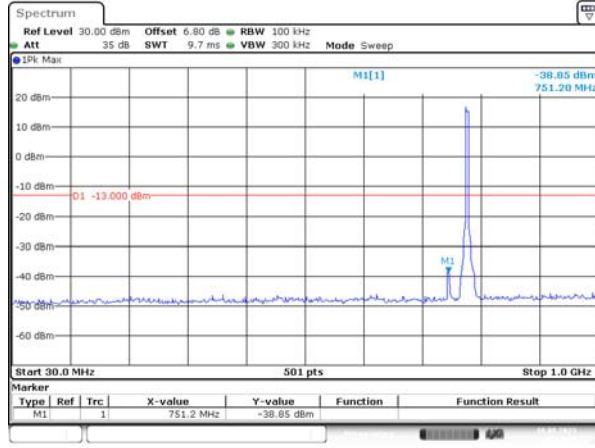


Spurious Emissions at Antenna Terminal

Channel

5MHz Bandwidth QPSK

Middle

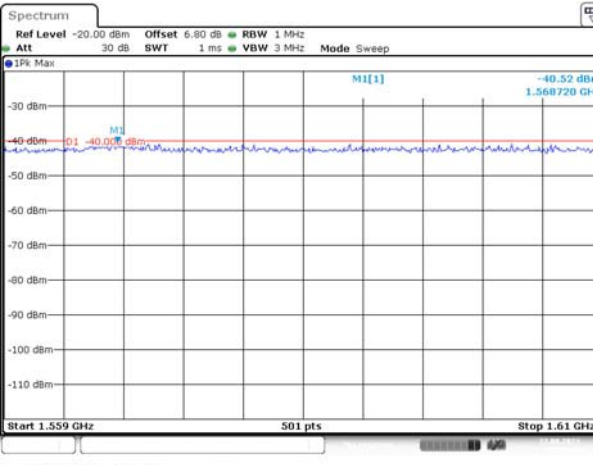
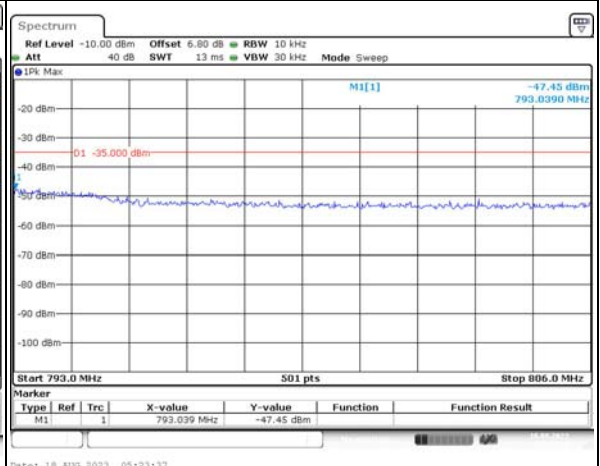
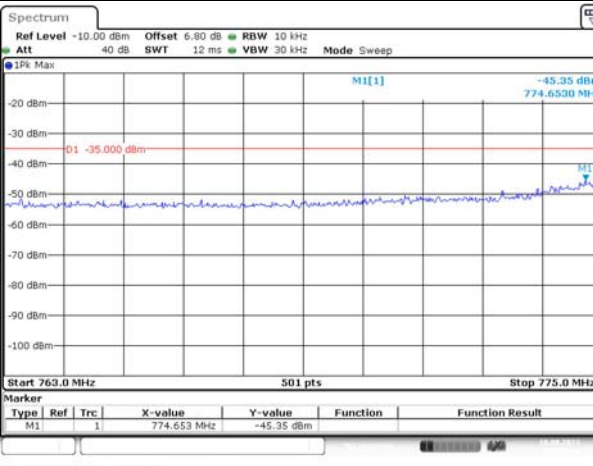
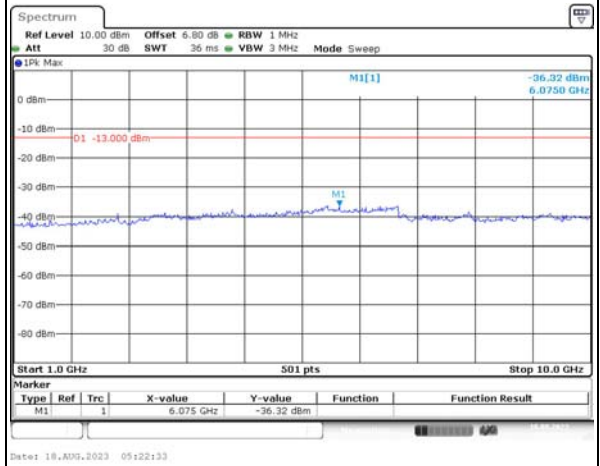
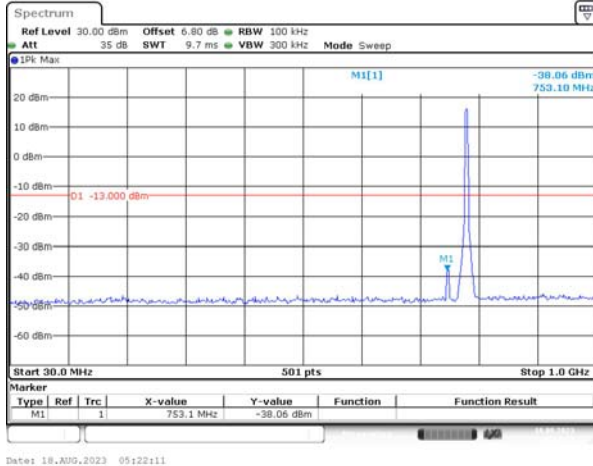


Spurious Emissions at Antenna Terminal

Channel

5MHz Bandwidth QPSK

Highest

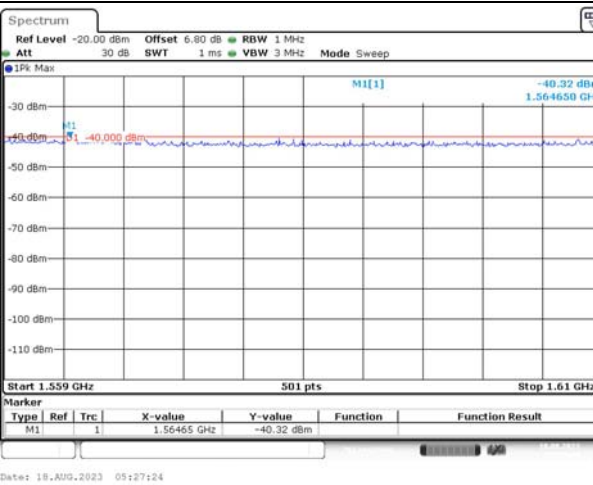
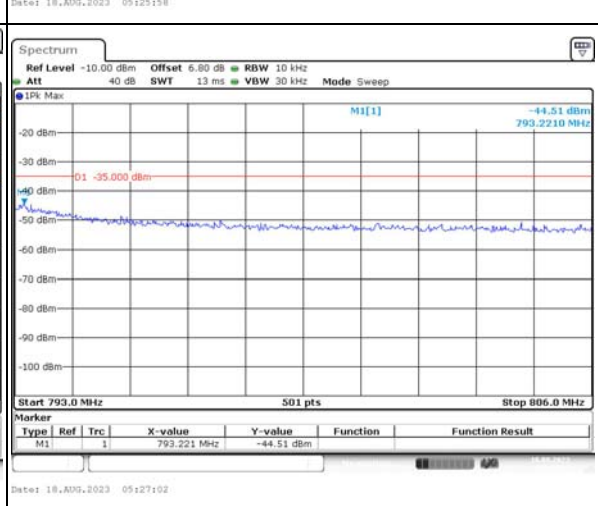
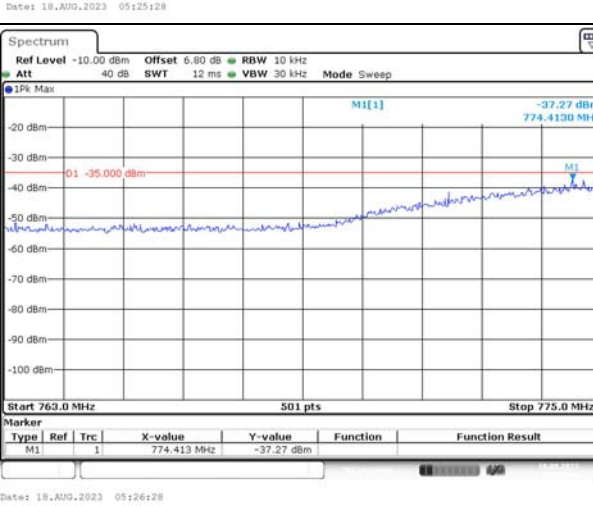
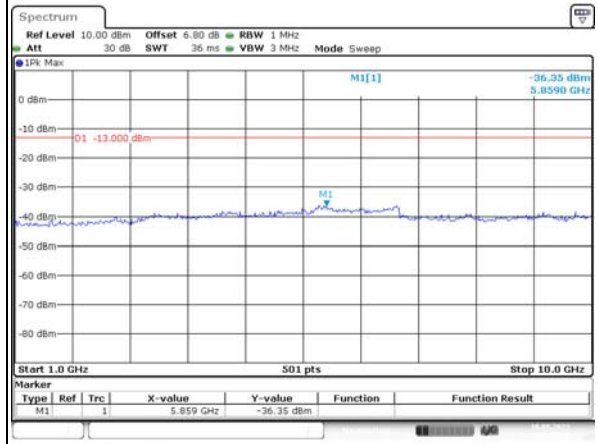
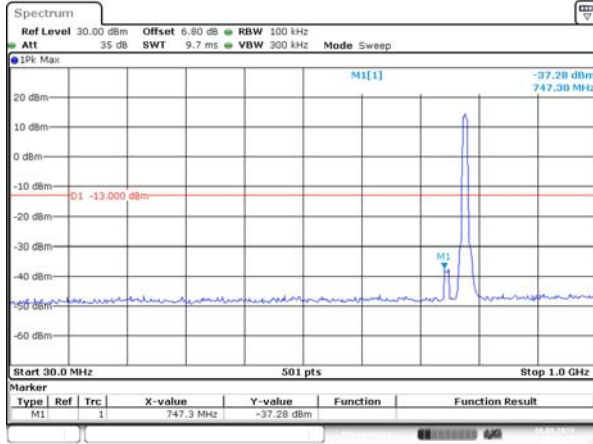


Spurious Emissions at Antenna Terminal

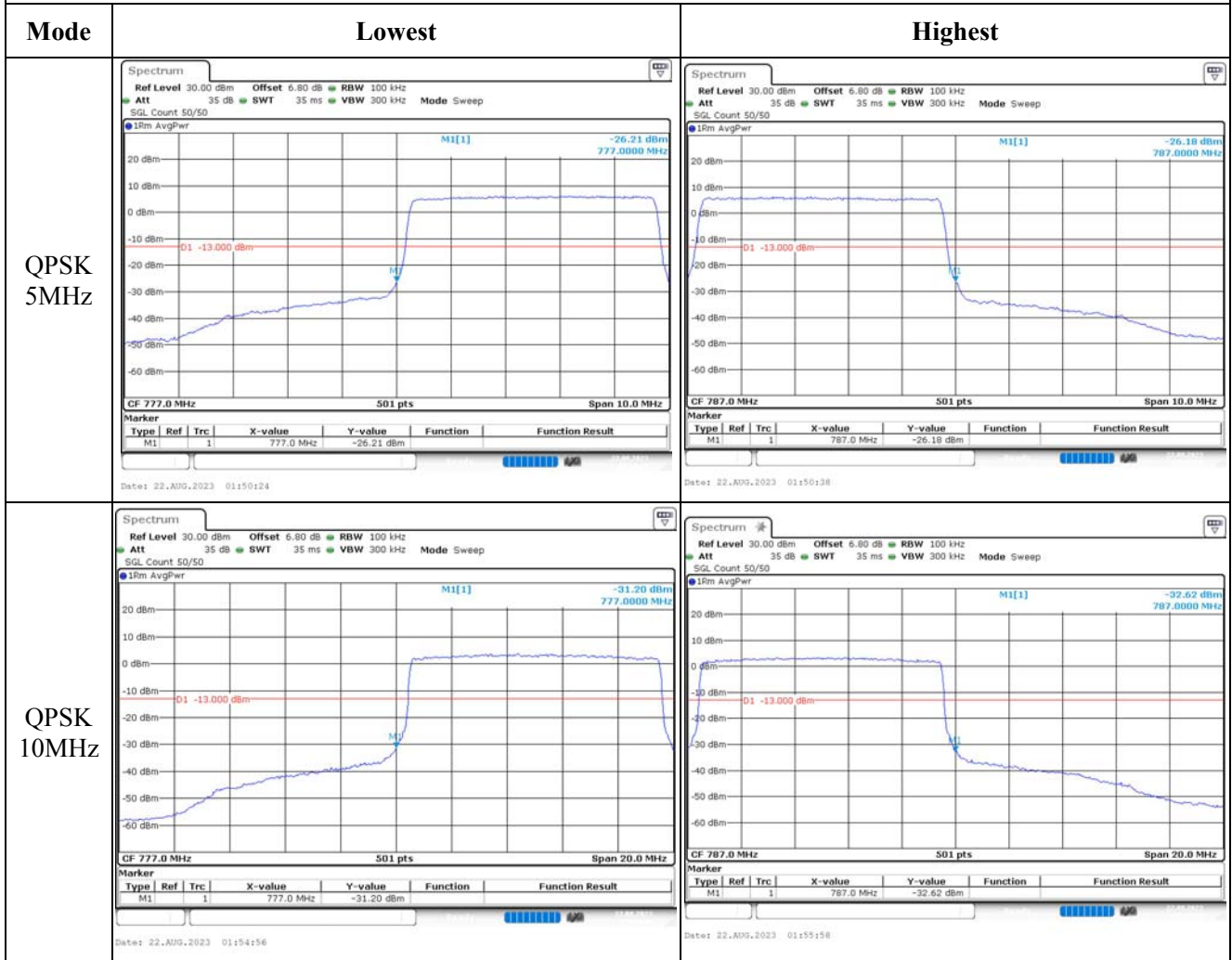
Channel

10MHz Bandwidth QPSK

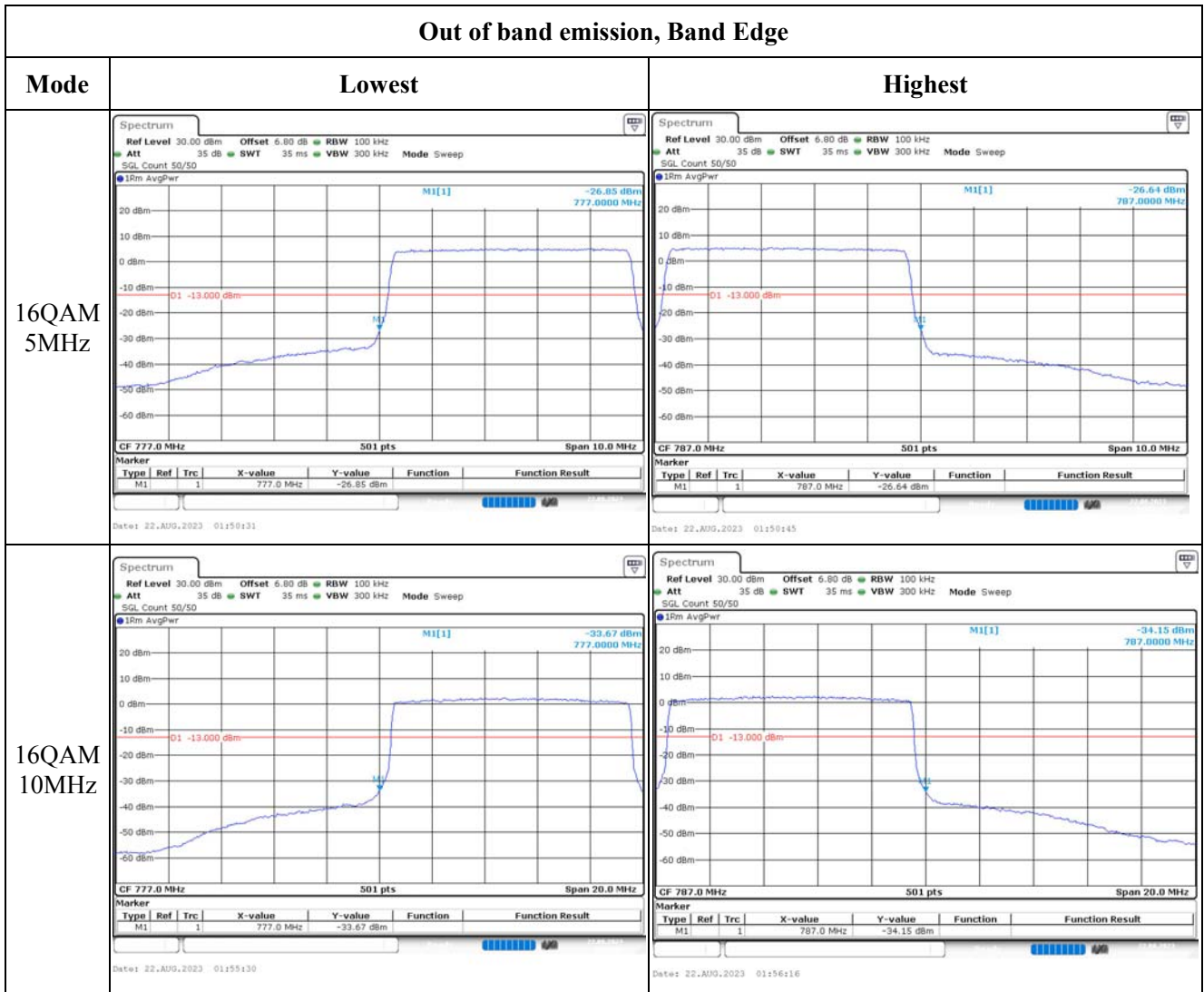
Middle



Out of band emission, Band Edge



Out of band emission, Band Edge



4.9 Antenna Port Test Data and Results for LTE Band 14

Serial Number:	2941-1	Test Date:	2023/8/16~2023/8/22
Test Site:	RF	Test Mode:	Transmitting
Tester:	George Chen	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.2~27.2	Relative Humidity: (%)	43~58	ATM Pressure: (kPa)	99.8~101.3
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A

* 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	790.5	793	795.5
10MHz	/	793	/

Test Data:**FCC§2.1046;§ 90.542****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	23.4	23.65	24.08	20.93	34.77
	RB1#13	23.57	23.72	23.78		
	RB1#24	23.67	23.95	23.75		
	RB15#0	22.85	22.86	22.86		
	RB15#10	22.77	22.8	22.77		
	RB25#0	22.93	22.87	22.84		
5MHz 16QAM	RB1#0	23.11	22.46	22.36	19.96	34.77
	RB1#13	22.91	22.7	22.51		
	RB1#24	23.03	22.57	22.41		
	RB15#0	21.76	21.9	21.72		
	RB15#10	21.69	21.83	21.79		
	RB25#0	21.83	21.98	21.84		
10MHz QPSK	RB1#0	/	23.42	/	20.75	34.77
	RB1#25	/	23.58	/		
	RB1#49	/	23.9	/		
	RB25#0	/	22.75	/		
	RB25#25	/	22.83	/		
	RB50#0	/	22.83	/		
10MHz 16QAM	RB1#0	/	22.6	/	19.77	34.77
	RB1#25	/	22.36	/		
	RB1#49	/	22.92	/		
	RB25#0	/	22.04	/		
	RB25#25	/	21.76	/		
	RB50#0	/	21.79	/		

Note:

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

Gr(dBd)=Gr(dBi)-2.15

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

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
10MHz QPSK	RB1#0	/	4.26	/	13
	RB50#0	/	4.64	/	13
10MHz 16QAM	RB1#0	/	5.1	/	13
	RB50#0	/	5.65	/	13
				Result:	Pass

FCC §2.1049, §90.209: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	4.511	4.511	4.531	5.02	5.02	5.04
5MHz 16QAM	4.531	4.531	4.511	5.04	5.06	5.02
10MHz QPSK	/	8.942	/	/	9.72	/
10MHz 16QAM	/	8.942	/	/	9.72	/

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

FCC §2.1051, §90.543: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, §90.543: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, §90.213: Frequency Stability

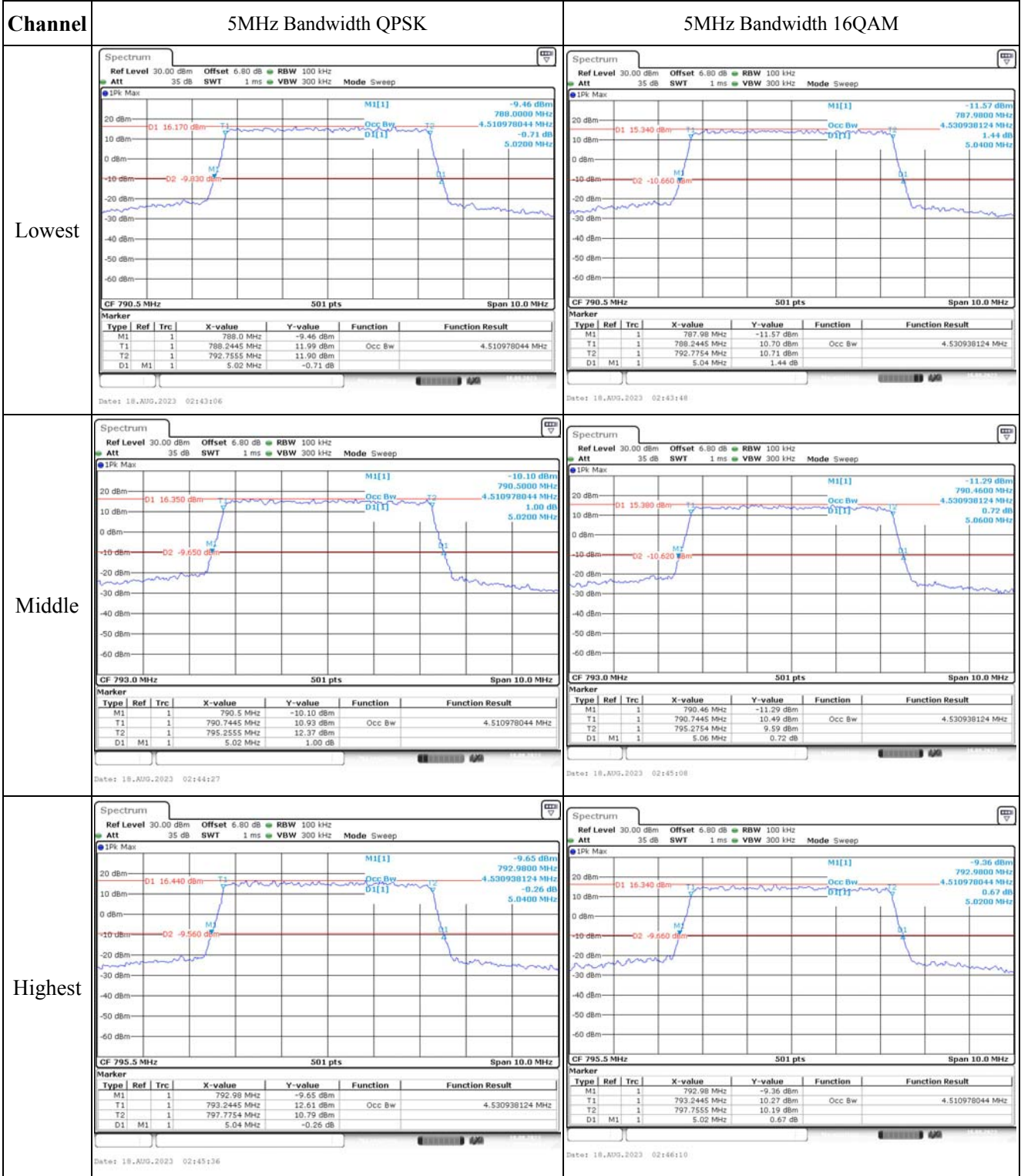
Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	24	788.501	788.00	797.469	798.00
	-20	24	788.569	788.00	797.464	798.00
	-10	24	788.515	788.00	797.412	798.00
	0	24	788.546	788.00	797.475	798.00
	10	24	788.582	788.00	797.430	798.00
	20	24	788.529	788.00	797.471	798.00
	30	24	788.569	788.00	797.410	798.00
	40	24	788.586	788.00	797.491	798.00
Frequency Stability vs. Voltage	20	12	788.597	788.00	797.437	798.00
	20	48	788.561	788.00	797.474	798.00
					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	12	788.593	788.00	797.464	798.00
	-20	12	788.539	788.00	797.407	798.00
	-10	12	788.555	788.00	797.450	798.00
	0	12	788.507	788.00	797.429	798.00

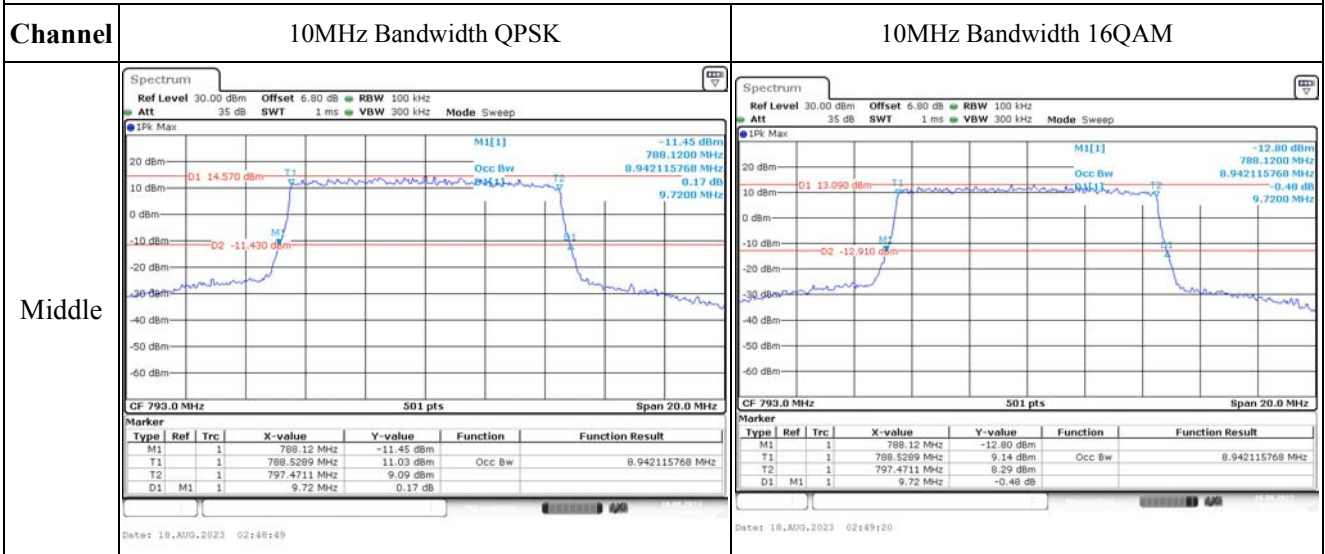
	10	12	788.534	788.00	797.440	798.00
	20	12	788.529	788.00	797.471	798.00
	30	12	788.504	788.00	797.422	798.00
	40	12	788.547	788.00	797.400	798.00
	50	12	788.520	788.00	797.467	798.00
Frequency Stability vs. Voltage	20	12	788.570	788.00	797.499	798.00
	20	48	788.526	788.00	797.486	798.00
					Result:	Pass

Test Plots(Note: The 6.8dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer):

Occupied Bandwidth



Occupied Bandwidth

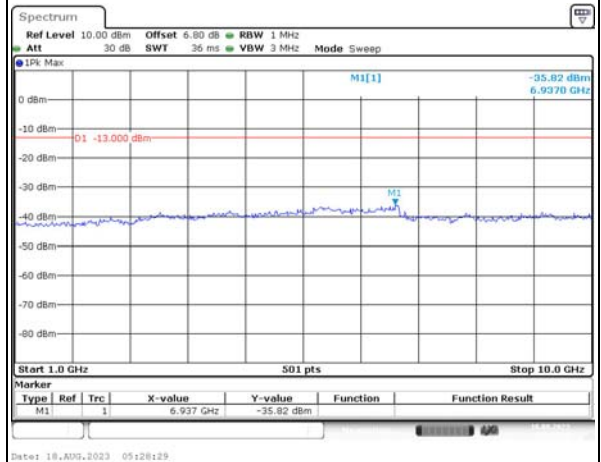
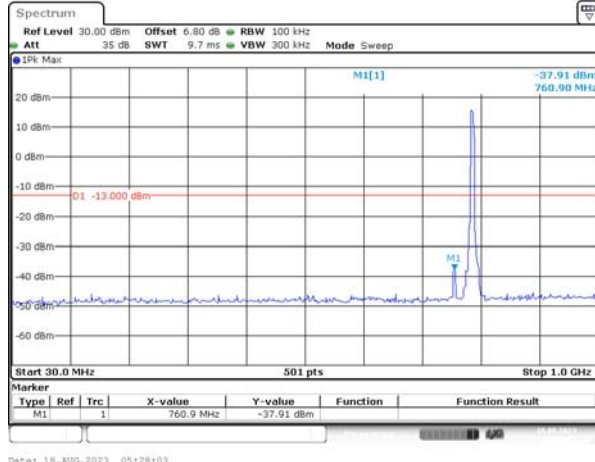


Spurious Emissions at Antenna Terminal

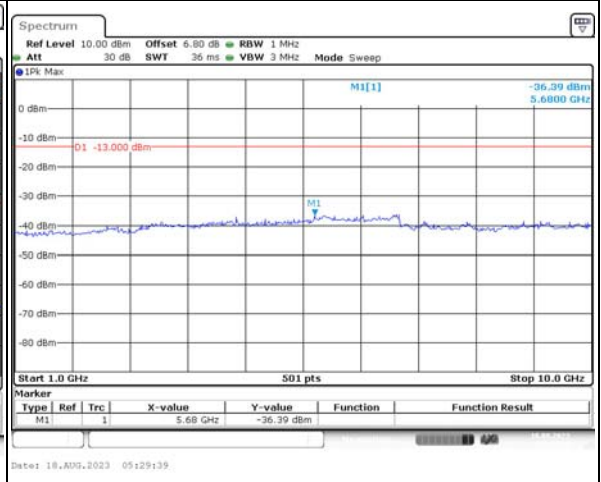
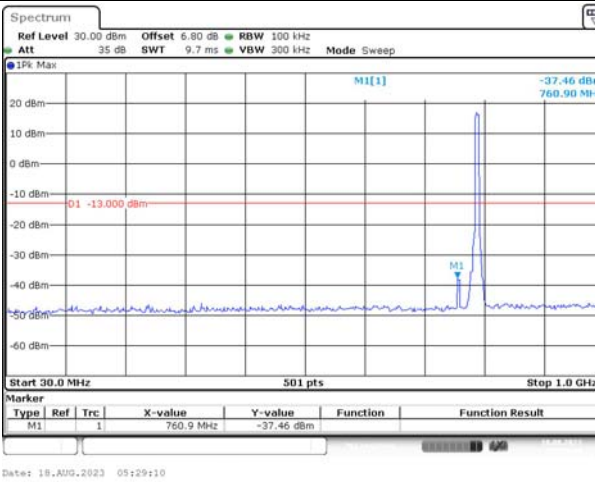
Channel

5MHz Bandwidth QPSK

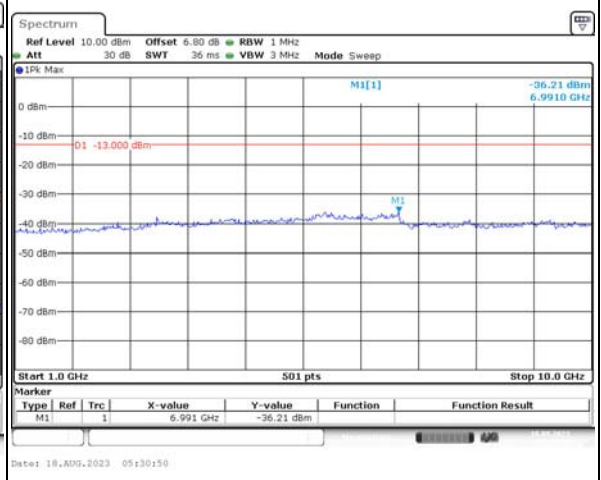
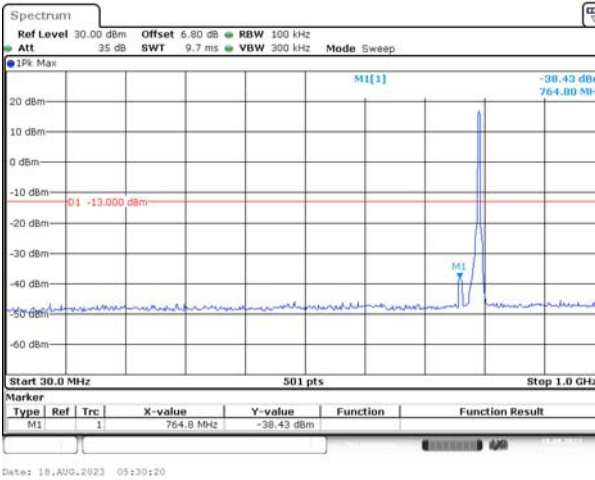
Lowest



Middle



Highest

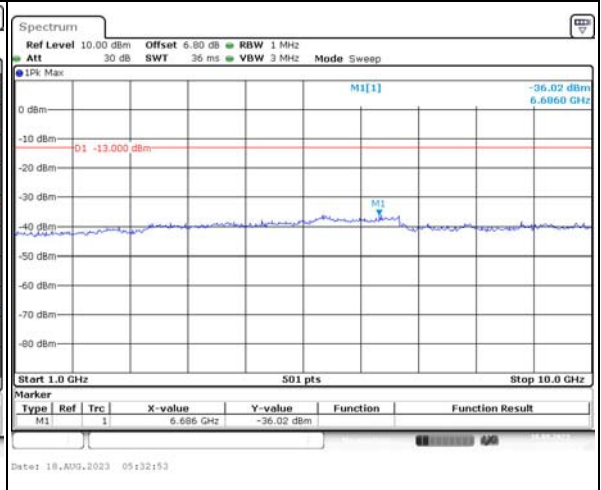
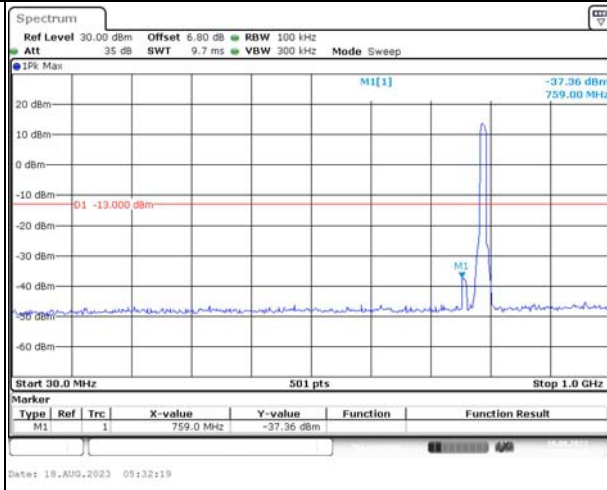


Spurious Emissions at Antenna Terminal

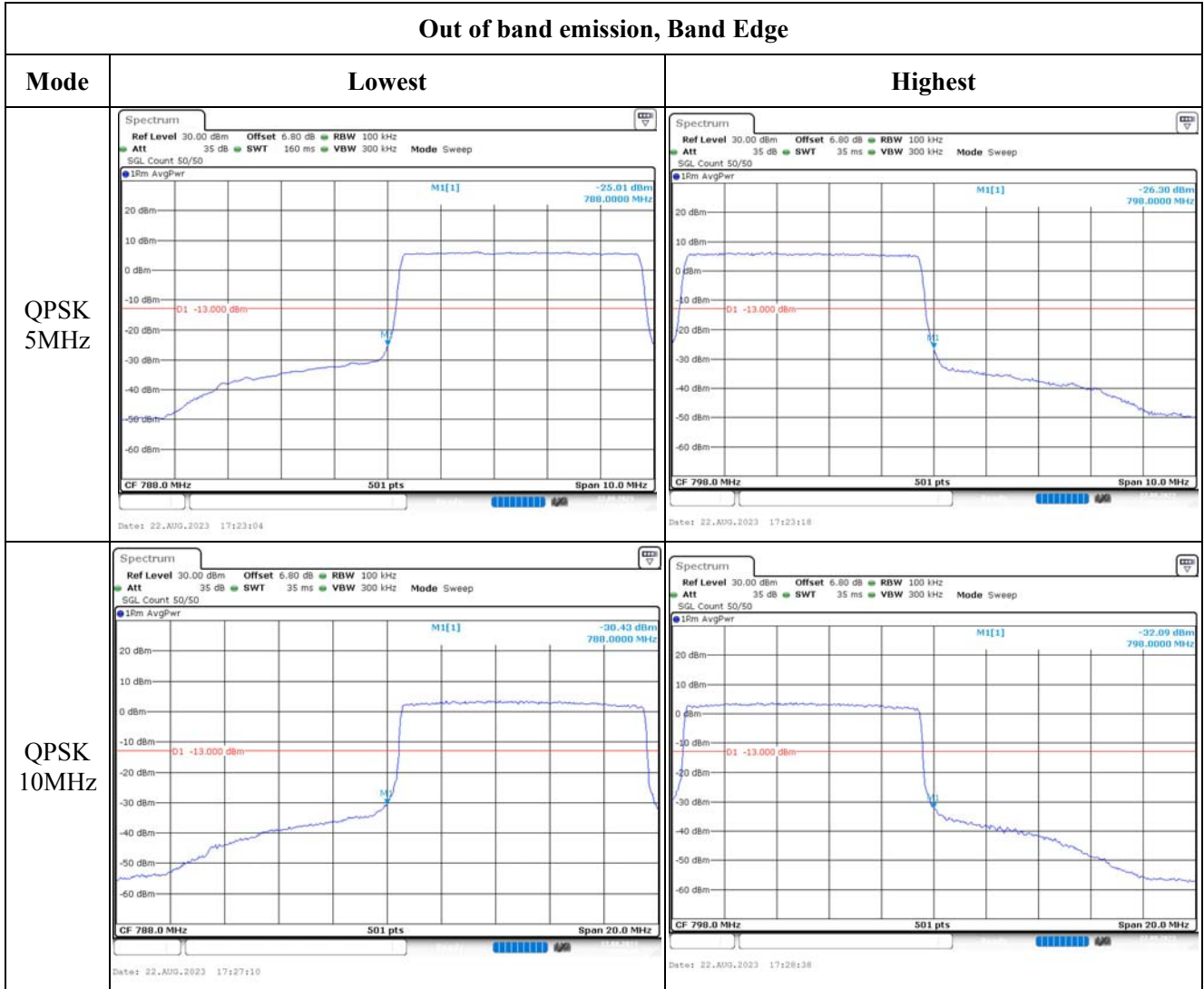
Channel

10MHz Bandwidth QPSK

Middle



Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 5MHz		
16QAM 10MHz		

4.10 Antenna Port Test Data and Results for LTE Band 66

Serial Number:	2941-1	Test Date:	2023/8/16~2023/8/22
Test Site:	RF	Test Mode:	Transmitting
Tester:	George Chen	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.2~27.2	Relative Humidity: (%)	43~58	ATM Pressure: (kPa)	99.8~101.3
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A

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

Test Frequency For Each Mode:

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

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

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
1.4MHz QPSK	RB1#0	22.92	22.92	22.71	21.77	30
	RB1#3	22.99	22.9	22.75		
	RB1#5	22.84	22.84	22.61		
	RB3#0	23	22.78	23.08		
	RB3#3	22.92	22.83	22.8		
	RB6#0	21.91	21.71	21.82		
1.4MHz 16QAM	RB1#0	21.86	21.82	22.1	20.94	30
	RB1#3	21.73	21.99	22.25		
	RB1#5	21.59	21.66	22.02		
	RB3#0	21.91	21.82	22.17		
	RB3#3	21.99	21.66	22.05		
	RB6#0	20.86	20.65	21.2		
3MHz QPSK	RB1#0	22.74	22.69	22.51	21.43	30
	RB1#8	22.72	22.57	22.55		
	RB1#14	22.59	22.46	22.65		
	RB6#0	21.74	21.76	21.79		
	RB6#9	21.67	21.48	21.72		
	RB15#0	21.82	21.69	21.79		
3MHz 16QAM	RB1#0	22.08	21.84	21.57	20.77	30
	RB1#8	21.99	21.68	21.27		
	RB1#14	21.42	21.98	21.3		
	RB6#0	20.68	21.03	20.76		
	RB6#9	20.61	20.74	20.74		
	RB15#0	20.81	20.41	20.98		
5MHz QPSK	RB1#0	22.49	22.46	22.67	21.48	30
	RB1#13	22.69	22.43	22.61		
	RB1#24	22.69	22.41	22.79		
	RB15#0	21.82	21.75	21.72		
	RB15#10	21.65	21.53	21.68		
	RB25#0	21.66	21.6	21.76		
5MHz 16QAM	RB1#0	21.33	22	21.53	20.69	30
	RB1#13	21.03	21.85	21.11		
	RB1#24	20.86	21.74	20.77		
	RB15#0	20.7	20.9	20.71		
	RB15#10	20.54	20.79	20.77		
	RB25#0	20.77	20.77	20.78		
10MHz QPSK	RB1#0	22.76	22.9	22.55	21.59	30
	RB1#25	22.71	22.76	22.6		

	RB1#49	22.68	22.66	22.66		
	RB25#0	21.81	21.91	21.87		
	RB25#25	21.71	21.64	21.66		
	RB50#0	21.72	21.8	21.85		
10MHz 16QAM	RB1#0	22.15	22.45	21.69	21.14	30
	RB1#25	22.31	22.07	21.44		
	RB1#49	21.79	22.42	21.29		
	RB25#0	20.89	21.13	21.07		
	RB25#25	20.62	20.65	20.6		
	RB50#0	20.61	20.77	20.77		
15MHz QPSK	RB1#0	22.65	22.79	22.61	21.52	30
	RB1#38	22.63	22.56	22.83		
	RB1#74	22.67	22.72	22.73		
	RB36#0	21.56	21.91	21.97		
	RB36#39	21.68	21.69	21.66		
	RB75#0	21.55	21.76	21.84		
15MHz 16QAM	RB1#0	22.15	22.27	21.74	21.48	30
	RB1#38	22.75	22.09	21.92		
	RB1#74	22.79	22.31	21		
	RB36#0	20.6	20.87	20.89		
	RB36#39	20.81	20.56	20.61		
	RB75#0	20.69	20.86	20.77		
20MHz QPSK	RB1#0	22.43	22.95	22.66	21.93	30
	RB1#50	22.88	22.89	23.24		
	RB1#99	22.46	22.91	22.7		
	RB50#0	21.57	21.89	21.9		
	RB50#50	21.72	21.68	21.74		
	RB100#0	21.62	21.82	21.83		
20MHz 16QAM	RB1#0	22.11	21.74	22.45	21.54	30
	RB1#50	22.36	21.67	22.85		
	RB1#99	22.25	21.32	22.49		
	RB50#0	20.78	20.95	20.88		
	RB50#50	20.79	20.76	20.78		
	RB100#0	20.65	20.84	20.76		

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	4.2	4.55	4.46	13
	RB100#0	3.91	3.97	3.77	13
20MHz 16QAM	RB1#0	5.19	5.33	5.1	13
	RB100#0	5.59	5.65	5.51	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	1.108	1.108	1.102	1.32	1.302	1.332
1.4MHz 16QAM	1.096	1.102	1.108	1.302	1.314	1.326
3MHz QPSK	2.695	2.683	2.695	2.952	2.964	2.952
3MHz 16QAM	2.683	2.683	2.695	2.964	2.952	2.976
5MHz QPSK	4.511	4.511	4.531	5.04	5.06	5.02
5MHz 16QAM	4.551	4.531	4.511	5.06	5.04	5.02
10MHz QPSK	8.942	8.942	8.942	9.76	9.72	9.84
10MHz 16QAM	8.942	8.942	8.942	9.8	9.76	9.72
15MHz QPSK	13.473	13.533	13.413	14.76	14.88	14.88
15MHz 16QAM	13.473	13.473	13.473	14.82	14.82	14.76
20MHz QPSK	17.884	17.884	17.884	19.36	19.6	19.28
20MHz 16QAM	17.964	17.884	17.964	19.52	19.44	19.44

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.

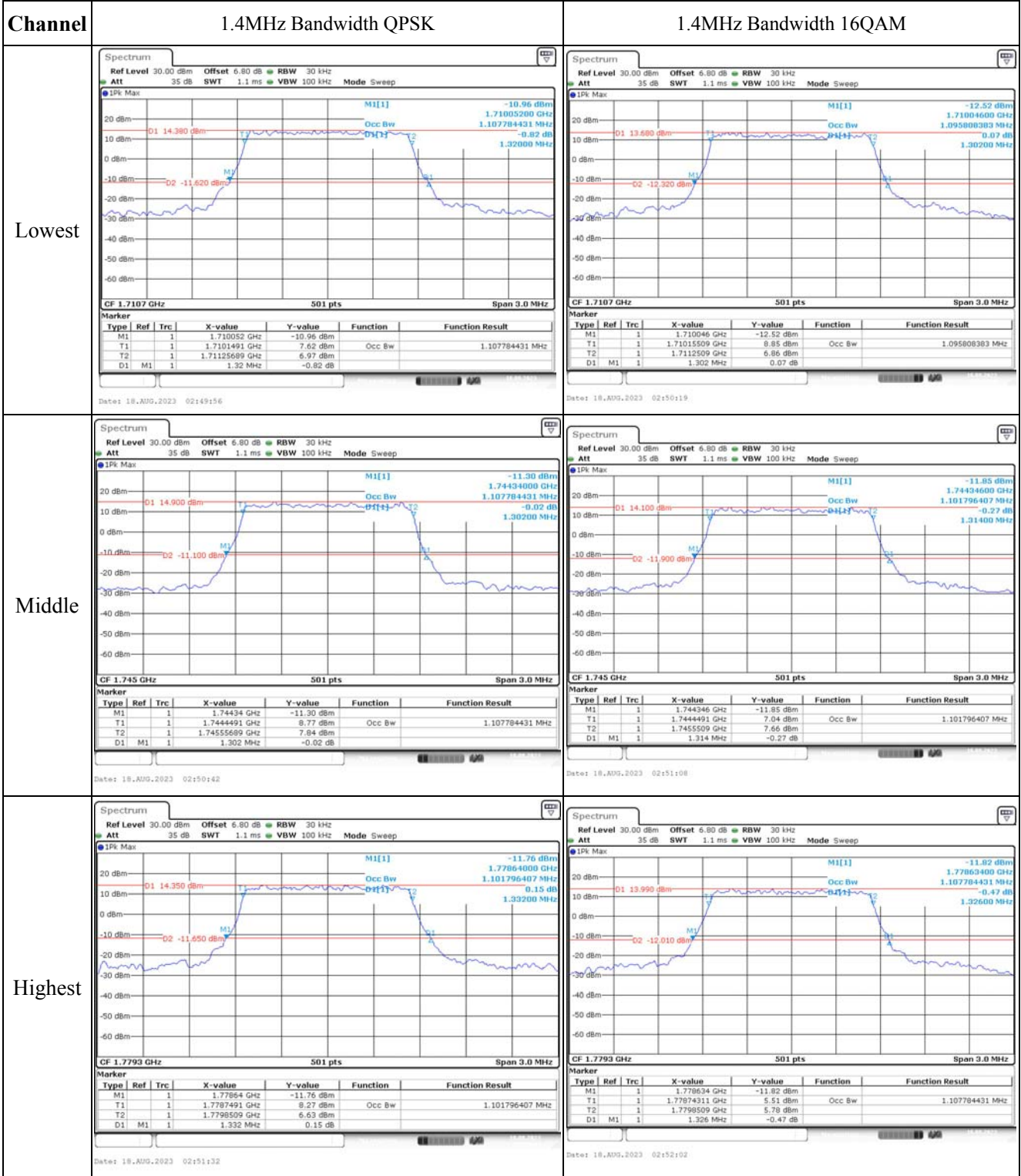
FCC §2.1051, § 27.53:Out of band emission, Band Edge	
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.

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	24	1711.146	1710.00	1778.971	1780
	-20	24	1711.197	1710.00	1778.966	1780
	-10	24	1711.111	1710.00	1778.901	1780
	0	24	1711.167	1710.00	1778.995	1780
	10	24	1711.103	1710.00	1778.995	1780
	20	24	1711.138	1710.00	1778.942	1780
	30	24	1711.129	1710.00	1778.926	1780
	40	24	1711.112	1710.00	1778.948	1780
	50	24	1711.136	1710.00	1778.949	1780
Frequency Stability vs. Voltage	20	12	1711.189	1710.00	1778.908	1780
	20	48	1711.126	1710.00	1778.912	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	12	1711.054	1710.00	1779.017	1780
	-20	12	1711.079	1710.00	1779.035	1780
	-10	12	1711.074	1710.00	1779.011	1780
	0	12	1711.018	1710.00	1779.079	1780
	10	12	1711.034	1710.00	1779.051	1780
	20	12	1711.058	1710.00	1779.022	1780
	30	12	1711.061	1710.00	1779.073	1780
	40	12	1711.058	1710.00	1779.017	1780
	50	12	1711.033	1710.00	1779.025	1780
Frequency Stability vs. Voltage	20	12	1711.060	1710.00	1779.020	1780
	20	48	1711.031	1710.00	1779.099	1780
					Result:	Pass

Test Plots(Note: The 6.8dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer):

Occupied Bandwidth



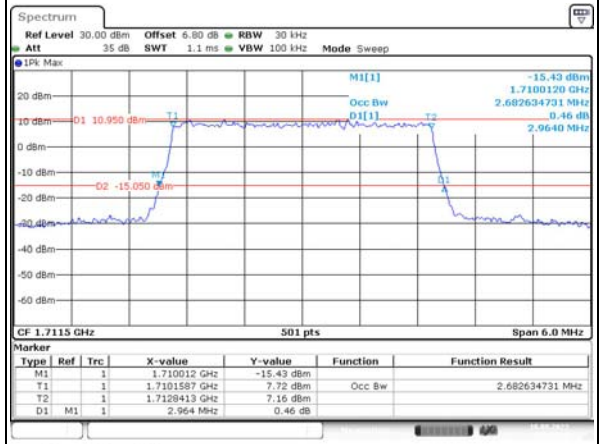
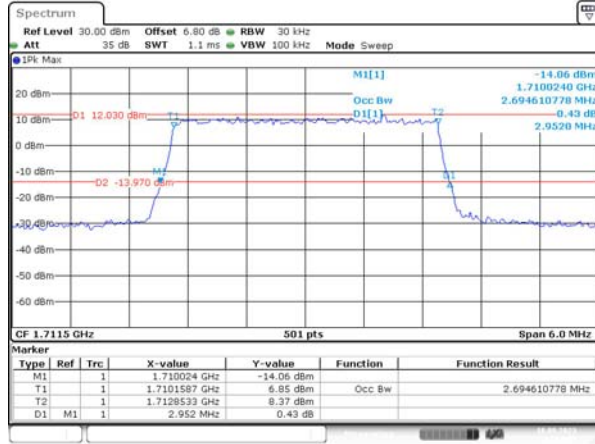
Occupied Bandwidth

Channel

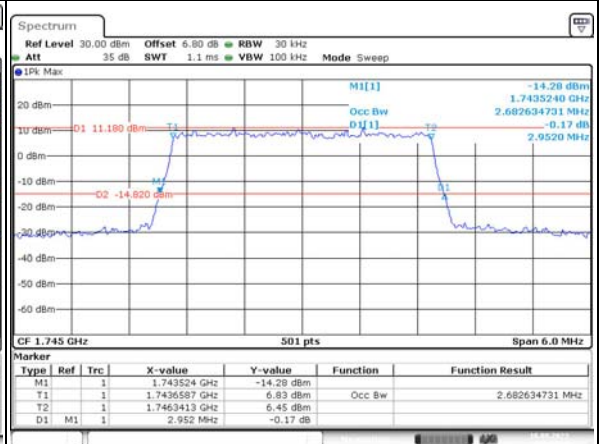
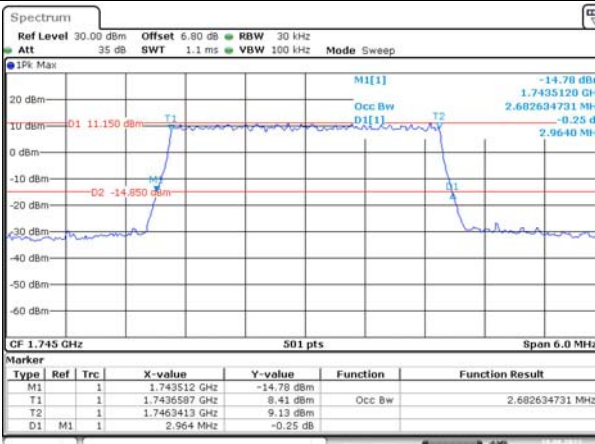
3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

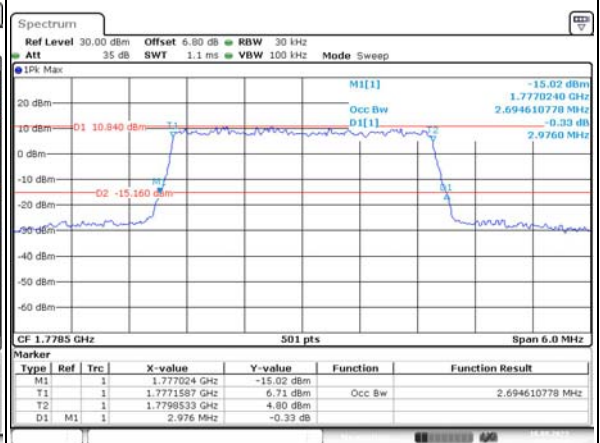
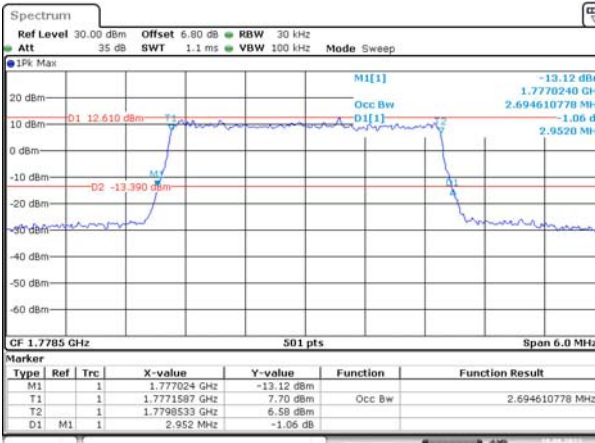
Lowest



Middle



Highest



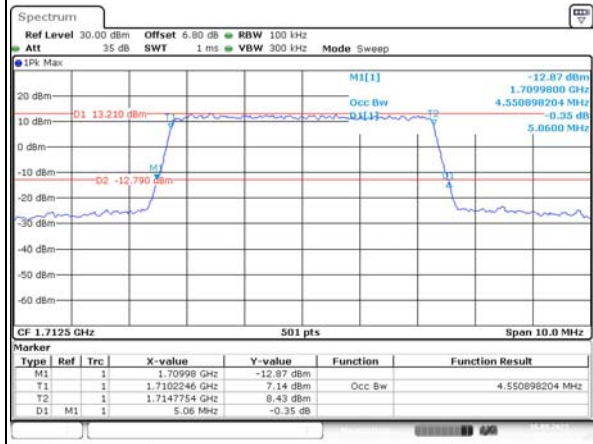
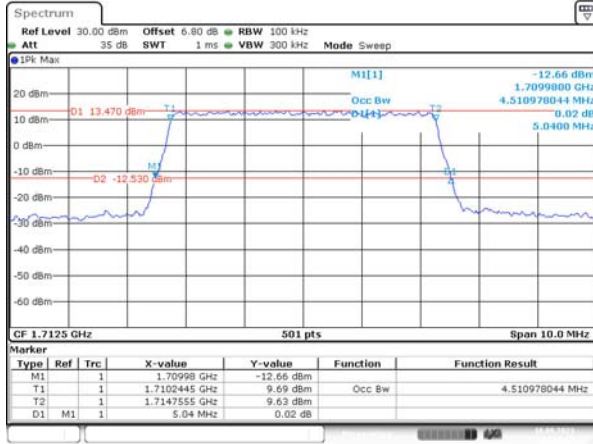
Occupied Bandwidth

Channel

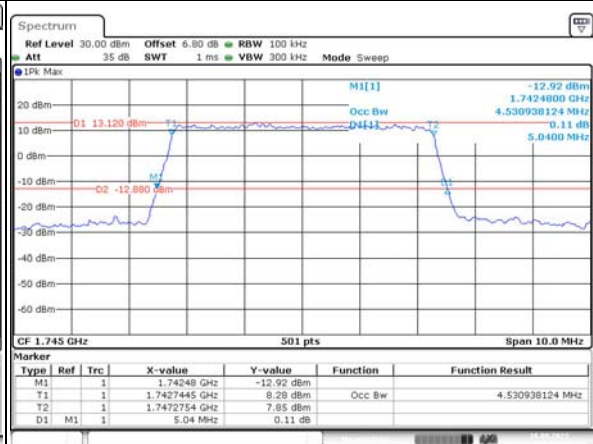
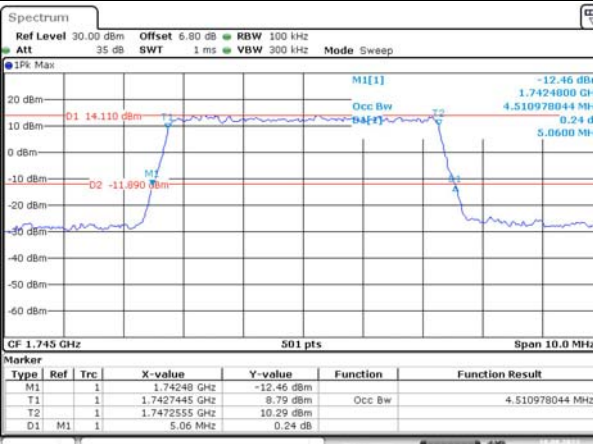
5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

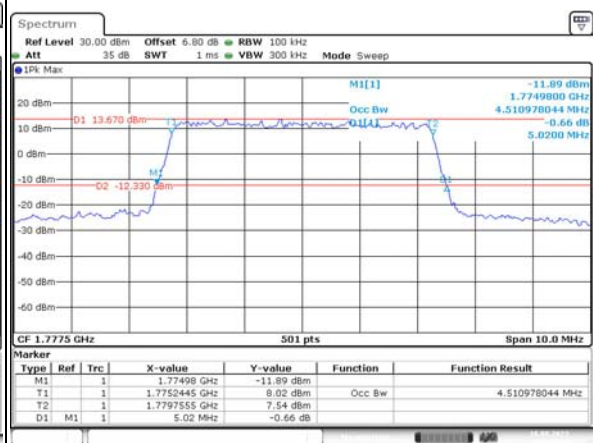
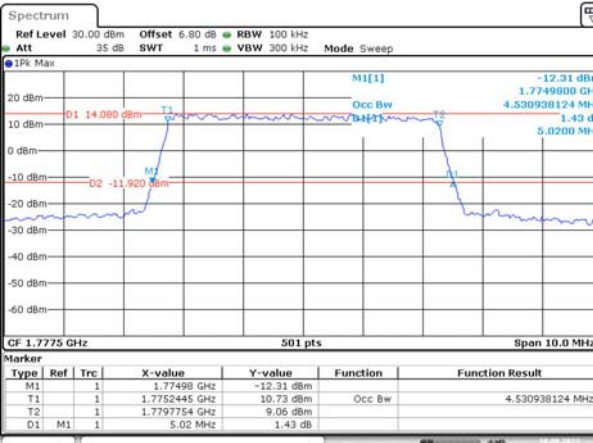
Lowest



Middle



Highest



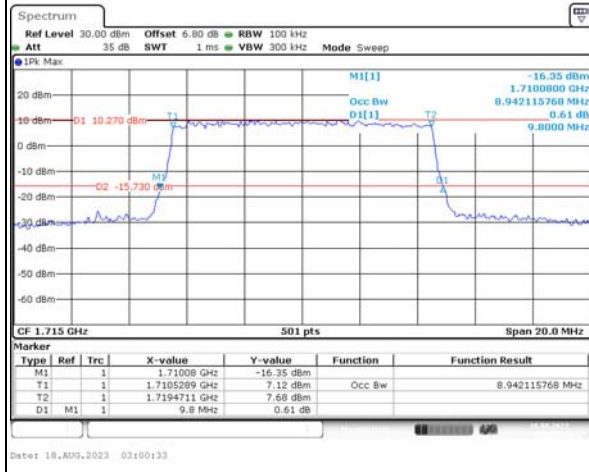
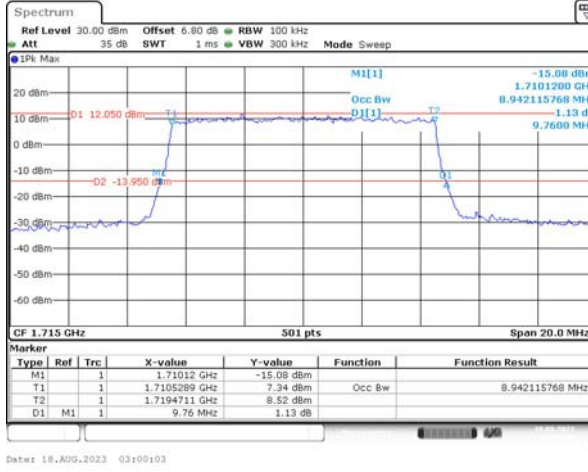
Occupied Bandwidth

Channel

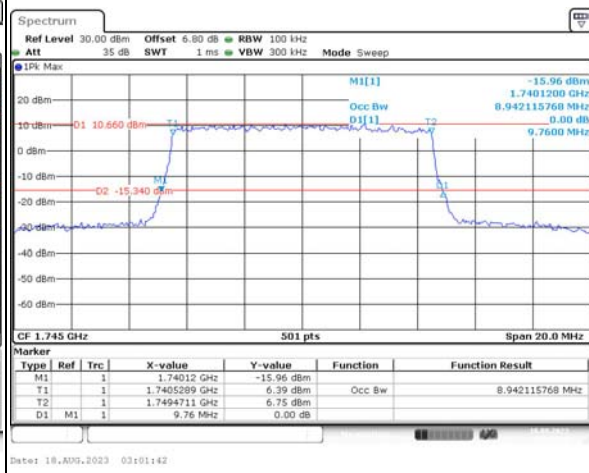
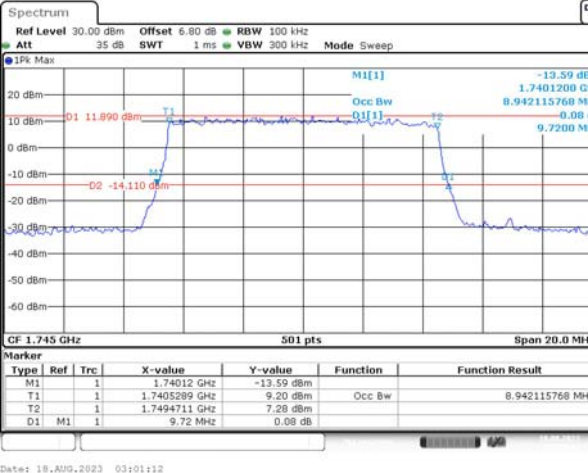
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

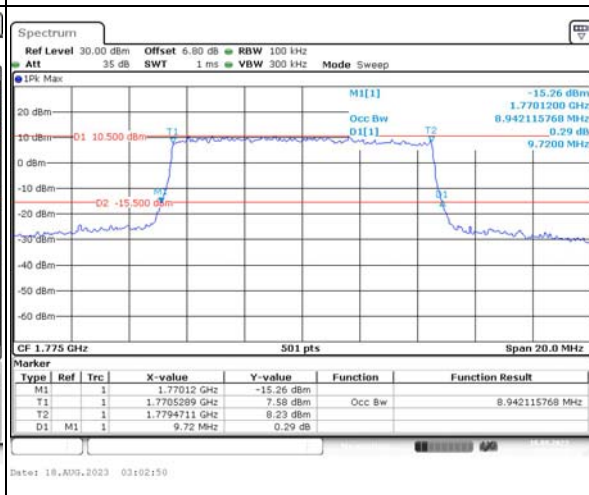
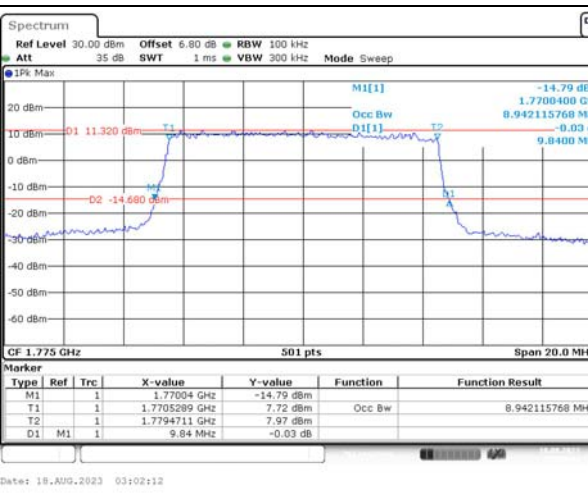
Lowest



Middle



Highest



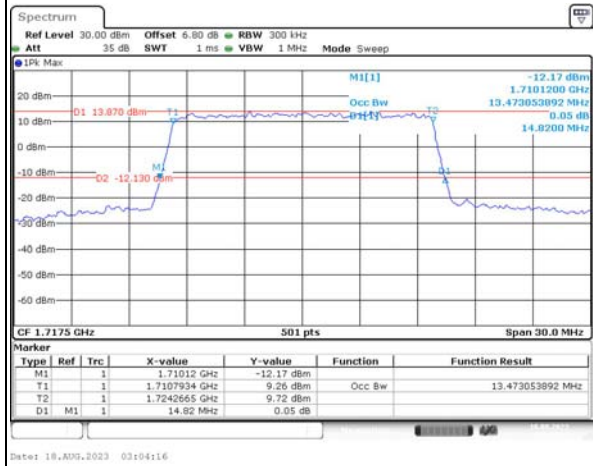
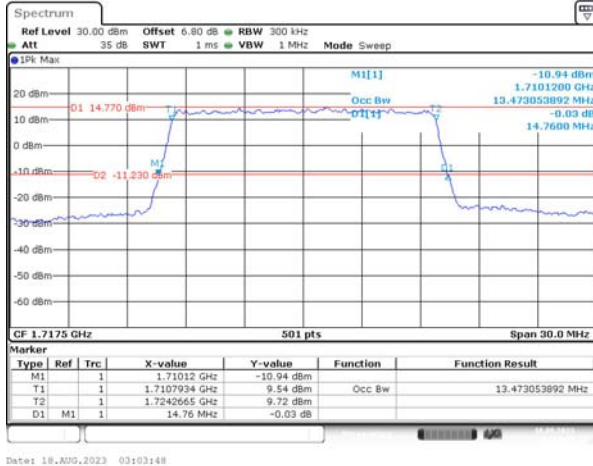
Occupied Bandwidth

Channel

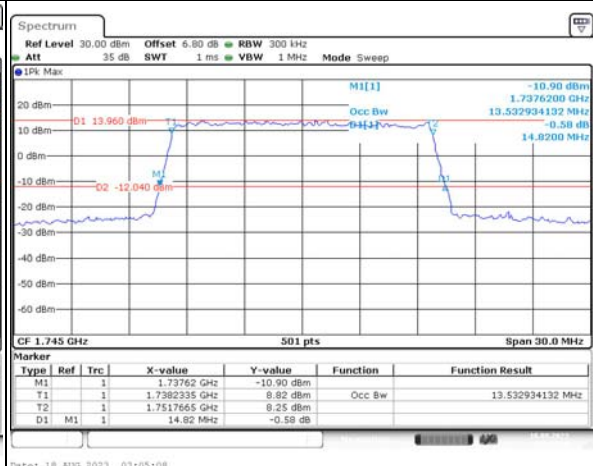
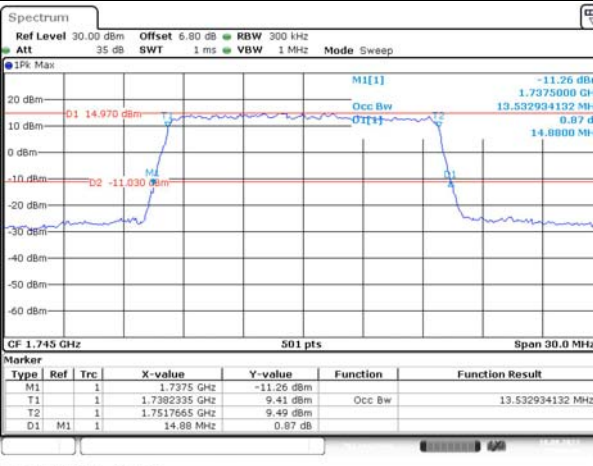
15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

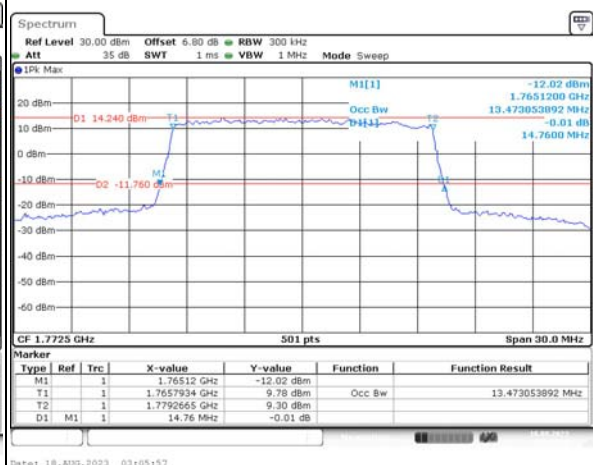
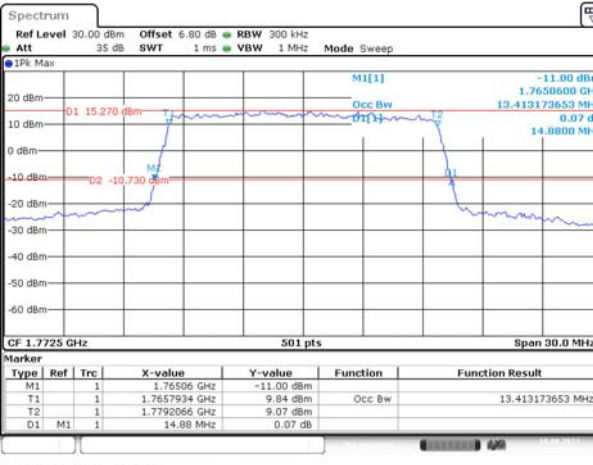
Lowest



Middle



Highest



Occupied Bandwidth

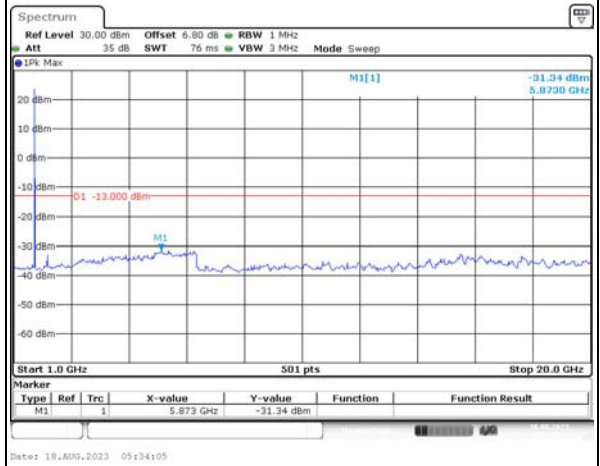
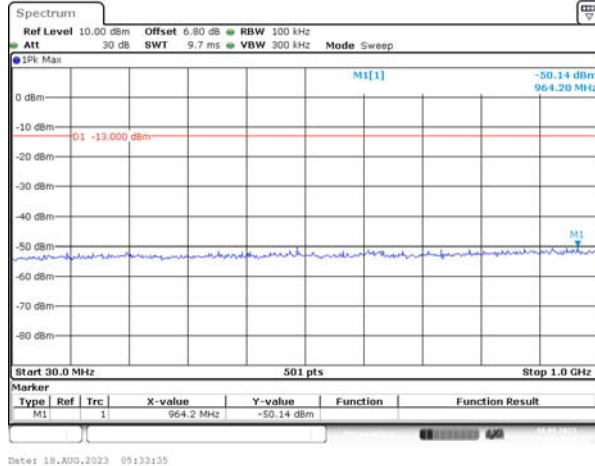
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Spurious Emissions at Antenna Terminal

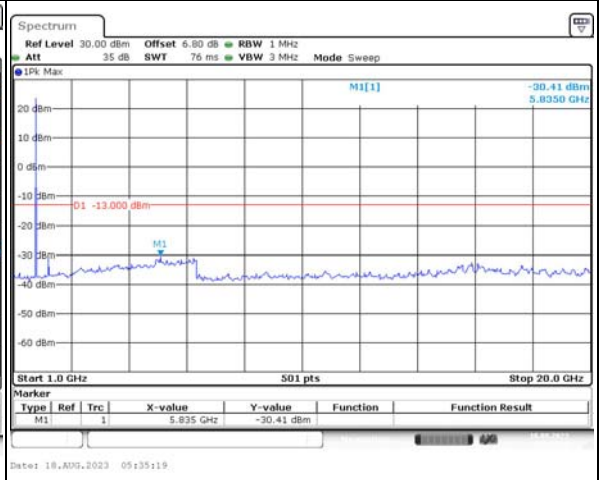
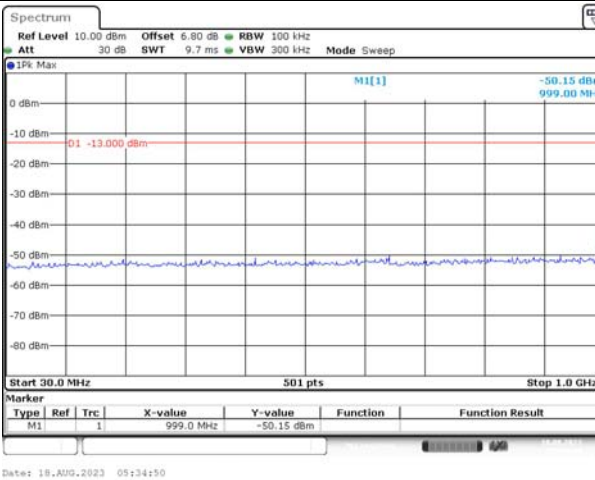
Channel

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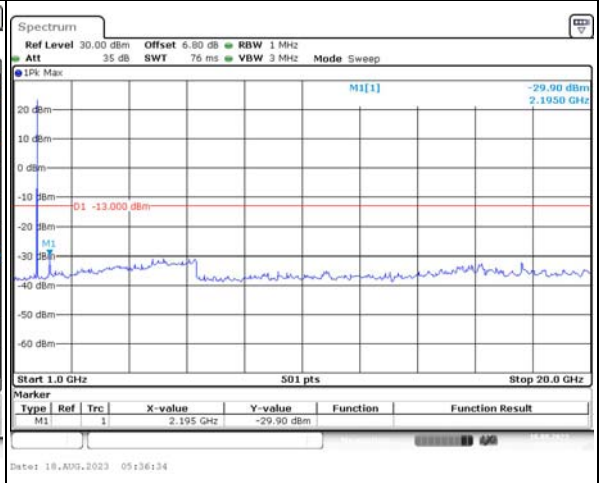
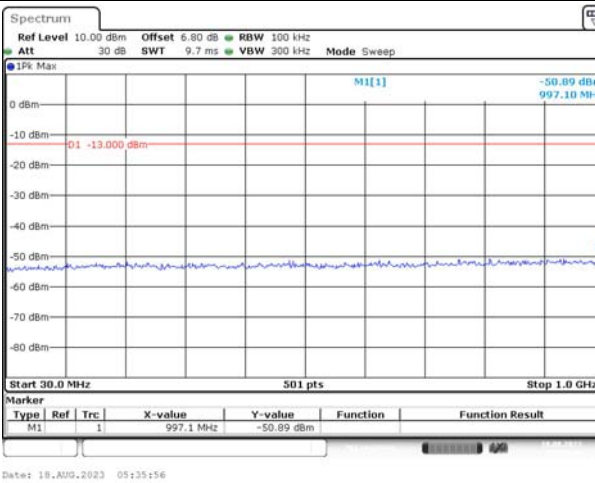
Lowest



Middle



Highest

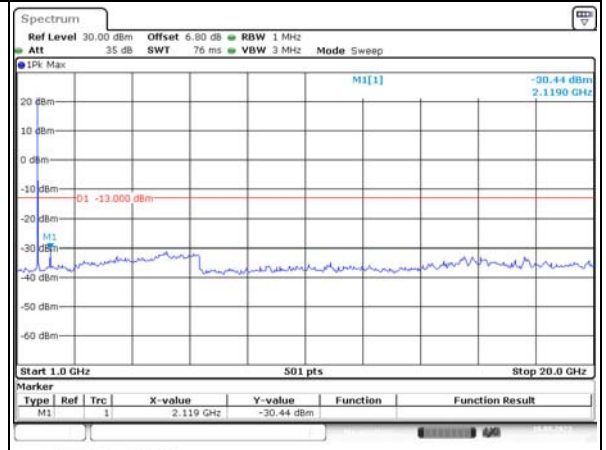
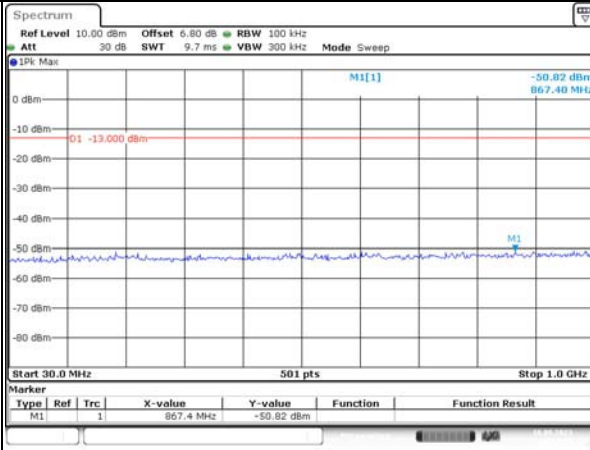


Spurious Emissions at Antenna Terminal

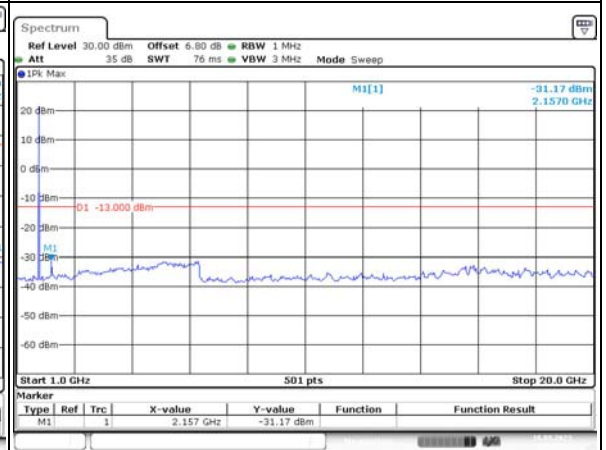
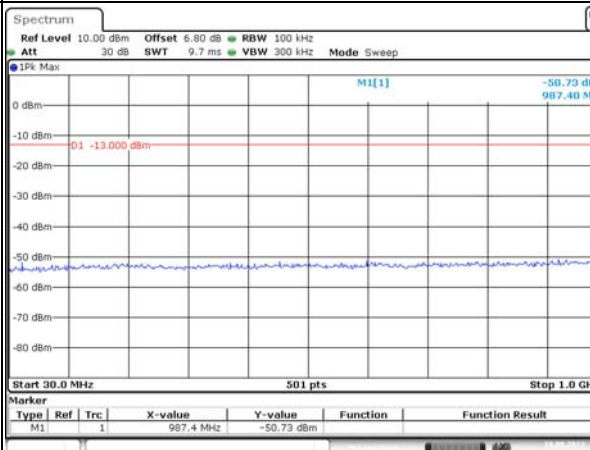
Channel

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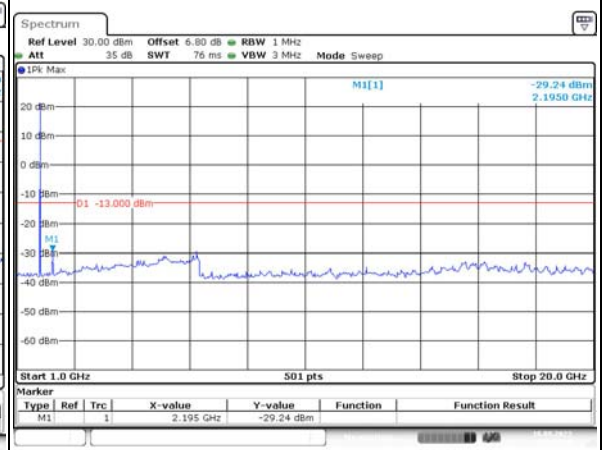
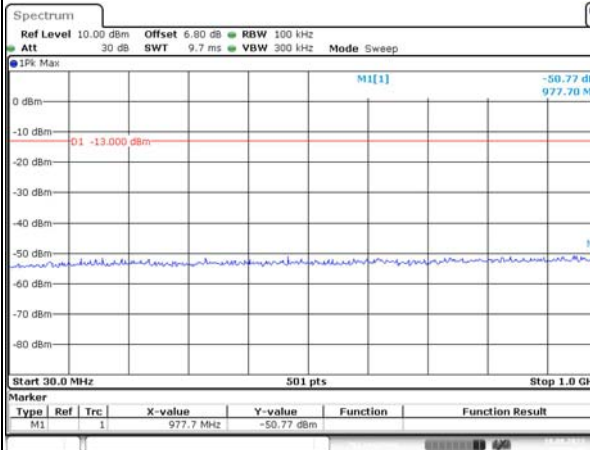
Lowest



Middle



Highest

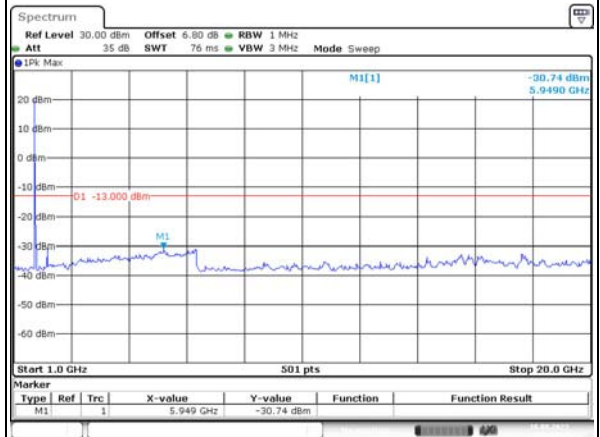
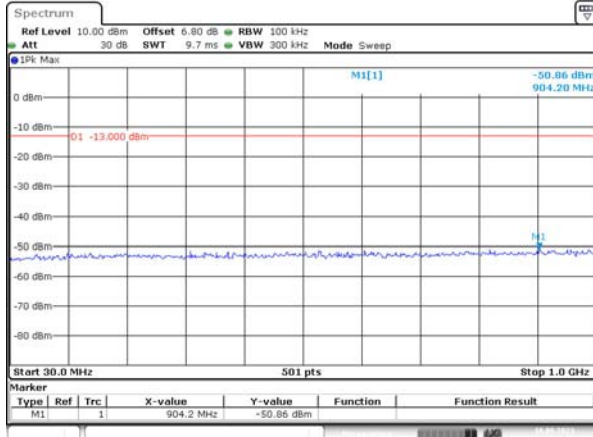


Spurious Emissions at Antenna Terminal

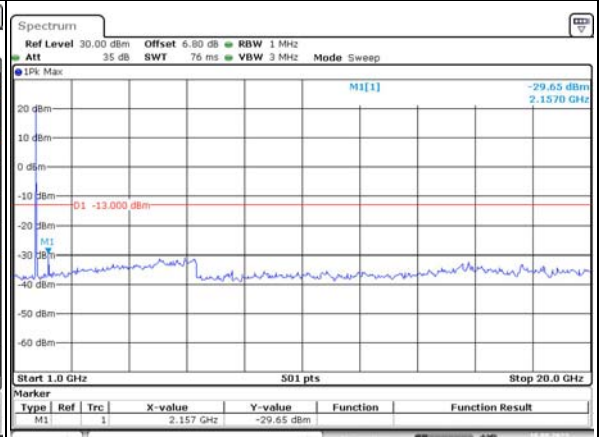
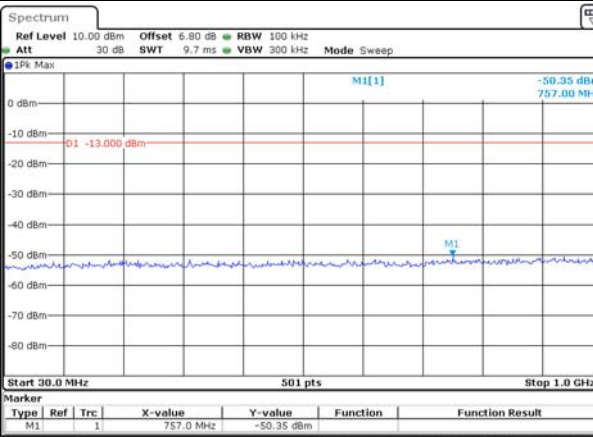
Channel

5MHz Bandwidth QPSK

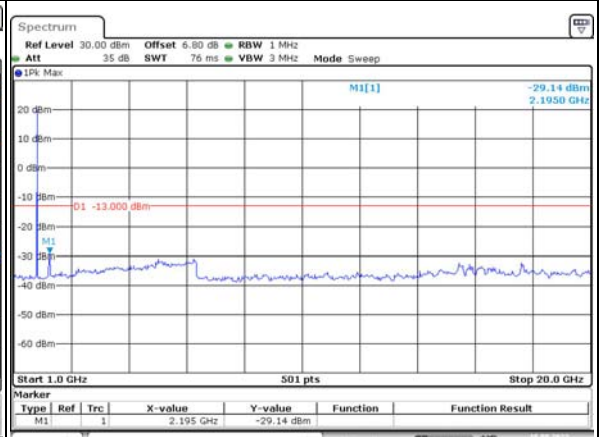
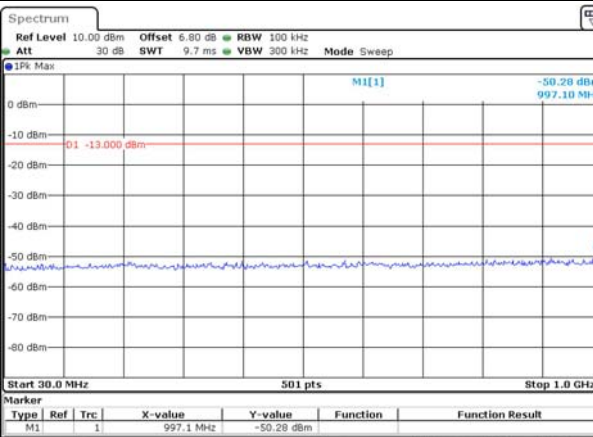
Lowest



Middle



Highest

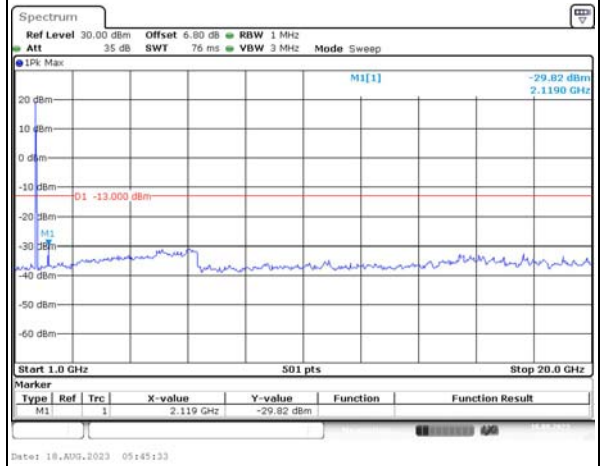
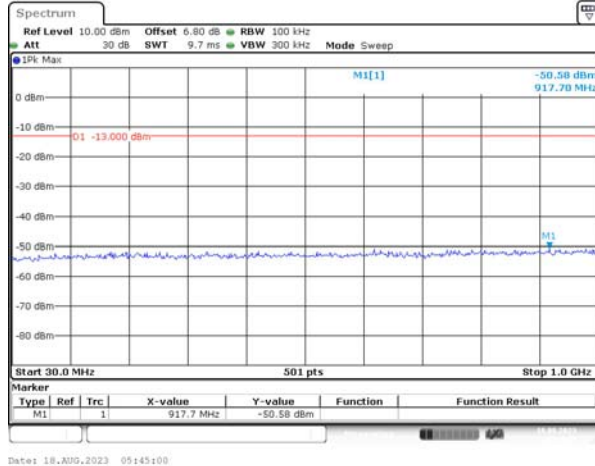


Spurious Emissions at Antenna Terminal

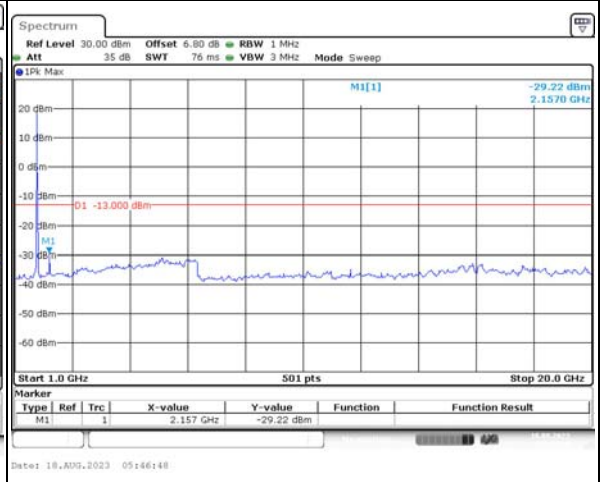
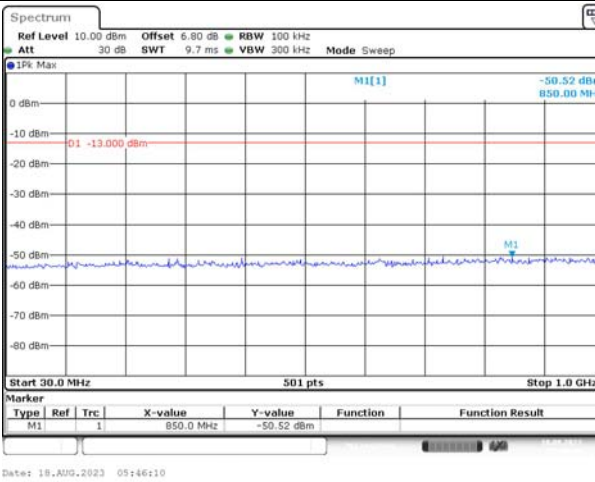
Channel

10MHz Bandwidth QPSK

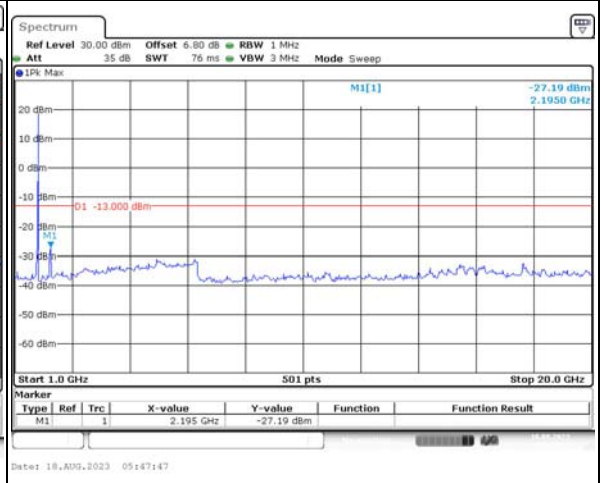
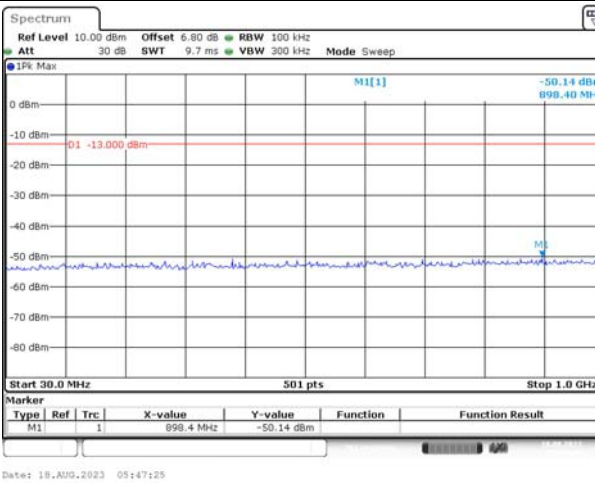
Lowest



Middle



Highest

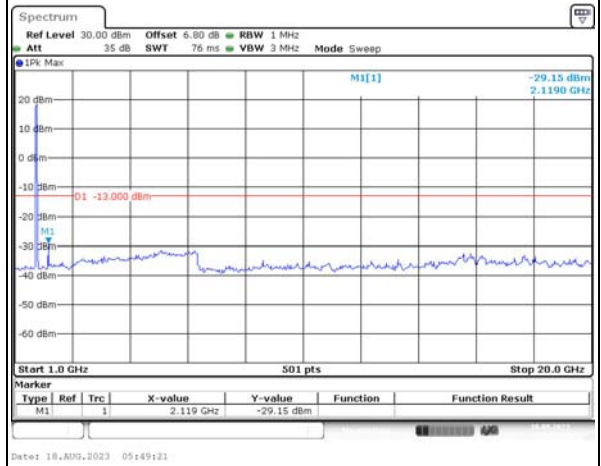
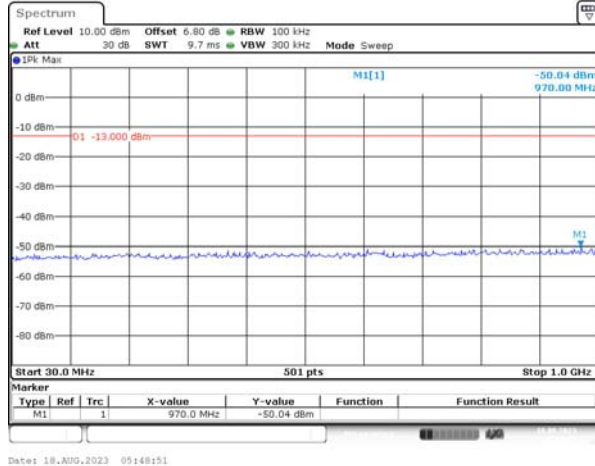


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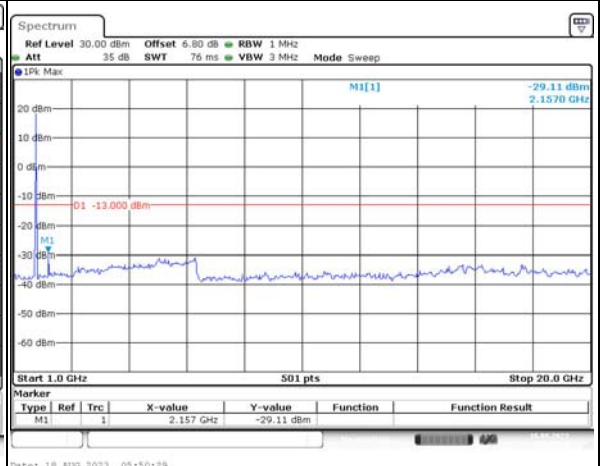
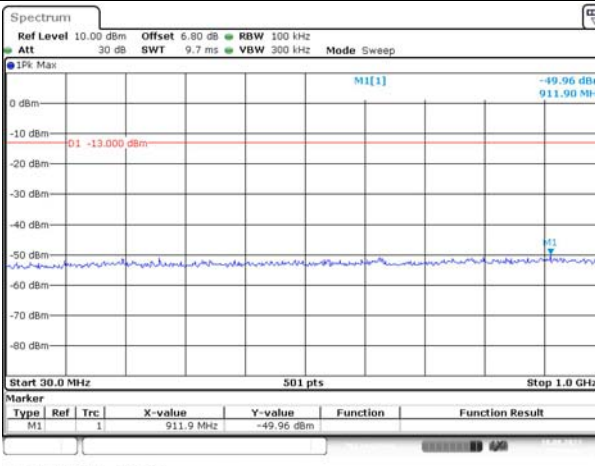
Channel

15MHz Bandwidth QPSK

Lowest



Middle



Highest

