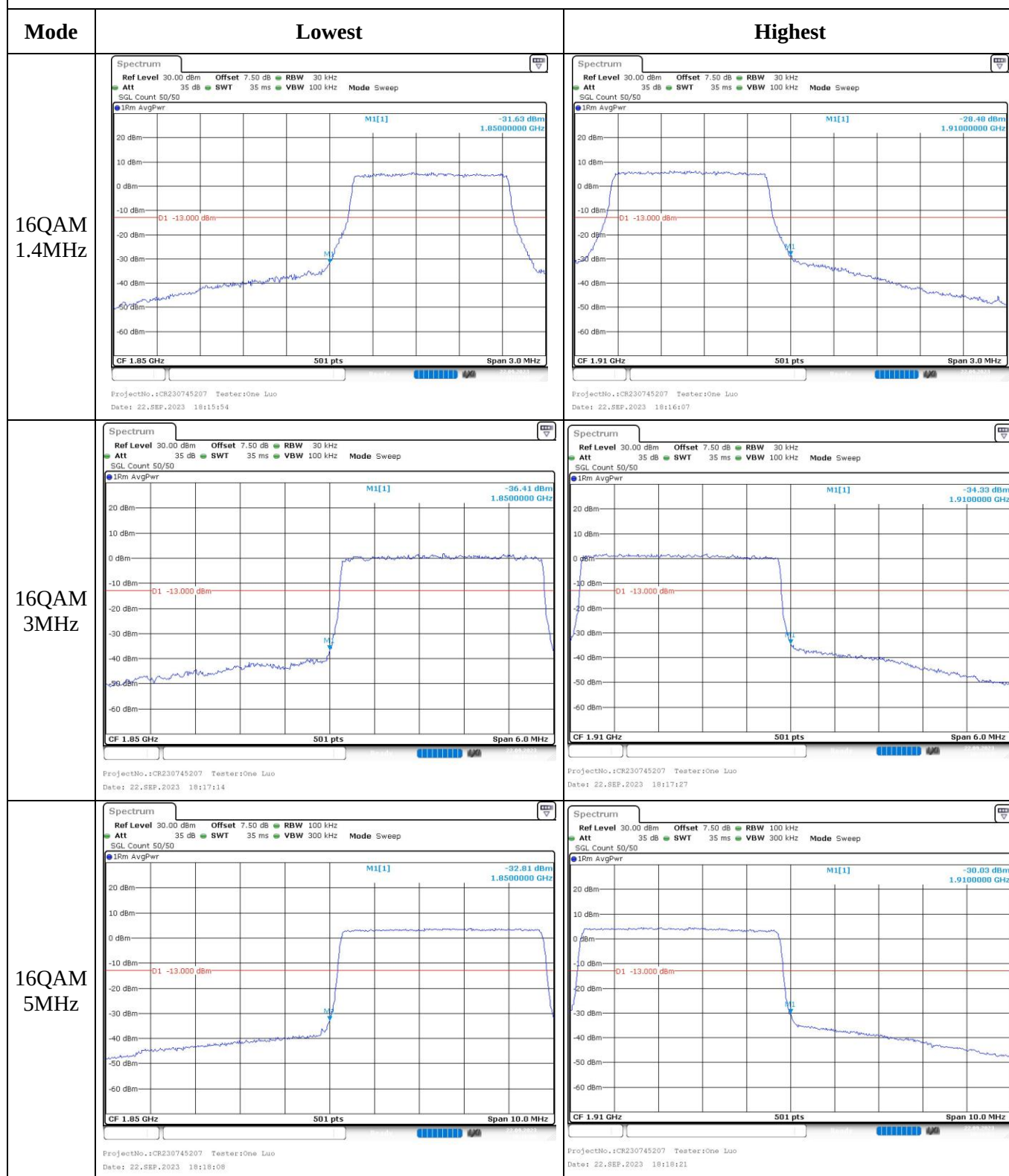


Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz	ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:19:16	ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:19:30
16QAM 15MHz	ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:20:21	ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:20:35
16QAM 20MHz	ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:21:25	ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:21:40

4.6 Antenna Port Test Data and Results for LTE Band 5

Serial Number:	29L3-1	Test Date:	2023/9/8~2023/9/22
Test Site:	RF	Test Mode:	Transmitting
Tester:	One Luo	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.3~28.2	Relative Humidity: (%)	42~52	ATM Pressure: (kPa)	99.7~100.4
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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	2023/7/15	2024/7/14
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
R&S	Wideband Radio Communication Tester	CMW500	149218	2023/7/15	2024/7/14
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
Weinschel	Power Splitter	1515	RA914	Each time	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	824.7	836.5	848.3
3MHz	825.5	836.5	847.5
5MHz	826.5	836.5	846.5
10MHz	829	836.5	844

Test Data:**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		
1.4MHz QPSK	RB1#0	23.46	23.37	23.14	16.34	34.77
	RB1#3	23.46	23.36	23.2		
	RB1#5	23.49	23.31	23.18		
	RB3#0	23.64	23.53	23.31		
	RB3#3	23.57	23.48	23.33		
	RB6#0	22.57	22.57	22.29		
1.4MHz 16QAM	RB1#0	22.74	22.67	22.27	15.47	34.77
	RB1#3	22.76	22.67	22.32		
	RB1#5	22.72	22.66	22.3		
	RB3#0	22.73	22.44	22.3		
	RB3#3	22.77	22.41	22.3		
	RB6#0	21.58	21.56	21.18		
3MHz QPSK	RB1#0	23.66	23.42	23.19	16.37	34.77
	RB1#8	23.67	23.38	23.19		
	RB1#14	23.62	23.38	23.21		
	RB6#0	22.59	22.6	22.36		
	RB6#9	22.57	22.55	22.26		
	RB15#0	22.59	22.54	22.35		
3MHz 16QAM	RB1#0	23.02	22.71	22.35	15.77	34.77
	RB1#8	23.07	22.65	22.3		
	RB1#14	23.01	22.62	22.32		
	RB6#0	21.67	21.63	21.23		
	RB6#9	21.65	21.58	21.18		
	RB15#0	21.68	21.48	21.36		
5MHz QPSK	RB1#0	23.86	23.49	23.42	16.61	34.77
	RB1#13	23.85	23.39	23.31		
	RB1#24	23.91	23.46	23.35		
	RB15#0	22.62	22.59	22.35		
	RB15#10	22.61	22.42	22.17		
	RB25#0	22.6	22.48	22.22		
5MHz 16QAM	RB1#0	22.46	22.79	22.43	15.49	34.77
	RB1#13	22.43	22.72	22.33		
	RB1#24	22.49	22.73	22.36		
	RB15#0	21.65	21.59	21.31		
	RB15#10	21.65	21.42	21.19		
	RB25#0	21.66	21.51	21.23		
10MHz QPSK	RB1#0	23.51	23.66	23.32	16.36	34.77
	RB1#25	23.53	23.6	23.26		
	RB1#49	23.48	23.59	23.24		

	RB25#0	22.49	22.57	22.31		
	RB25#25	22.65	22.42	22.17		
	RB50#0	22.55	22.51	22.34		
10MHz 16QAM	RB1#0	22.54	23.02	22.46	15.72	34.77
	RB1#25	22.56	22.95	22.45		
	RB1#49	22.52	23	22.45		
	RB25#0	21.58	21.62	21.39		
	RB25#25	21.7	21.45	21.21		
	RB50#0	21.56	21.51	21.29		

Note:

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

The limit for FCC is 38.45 dBm, RSS-132 is 34.77dBm for portable device.

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	3.54	4.52	3.57	13
	RB50#0	4.81	4.87	4.87	13
10MHz 16QAM	RB1#0	4.41	5.45	4.41	13
	RB50#0	5.77	5.86	5.83	13
Result:					Pass

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	1.102	1.102	1.096	1.308	1.29	1.302
1.4MHz 16QAM	1.09	1.102	1.096	1.296	1.302	1.314
3MHz QPSK	2.695	2.683	2.683	2.856	2.892	2.88
3MHz 16QAM	2.683	2.683	2.683	2.88	2.868	2.892
5MHz QPSK	4.491	4.511	4.511	4.94	4.96	4.96
5MHz 16QAM	4.531	4.491	4.511	4.96	4.92	4.96
10MHz QPSK	8.942	8.942	8.942	9.6	9.84	9.56
10MHz 16QAM	8.942	8.942	8.942	9.6	9.56	9.64

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

Spurious Emissions at Antenna Terminal

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

Test Modulation:	10 MHz QPSK		Test Channel:	836.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.87	1.02	0.001	2.5
	-20	3.87	-9.97	-0.012	2.5
	-10	3.87	-6.13	-0.007	2.5
	0	3.87	6.17	0.007	2.5
	10	3.87	7.92	0.009	2.5
	20	3.87	6.46	0.008	2.5
	30	3.87	-6.52	-0.008	2.5
	40	3.87	7.18	0.009	2.5
	50	3.87	-9.69	-0.012	2.5
Frequency Stability vs. Voltage	20	3.2	-8.17	-0.010	2.5
	20	4.45	-7.05	-0.008	2.5
				Result:	Pass

Test Modulation:	10 MHz 16QAM		Test Channel:	836.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.87	-0.72	-0.001	2.5
	-20	3.87	-6.68	-0.008	2.5
	-10	3.87	9.77	0.012	2.5
	0	3.87	-7.62	-0.009	2.5
	10	3.87	-9.91	-0.012	2.5
	20	3.87	-9.82	-0.012	2.5
	30	3.87	-6.68	-0.008	2.5
	40	3.87	-8.85	-0.011	2.5
	50	3.87	5.67	0.007	2.5
Frequency Stability vs. Voltage	20	3.2	6.05	0.007	2.5
	20	4.45	7.52	0.009	2.5
				Result:	Pass

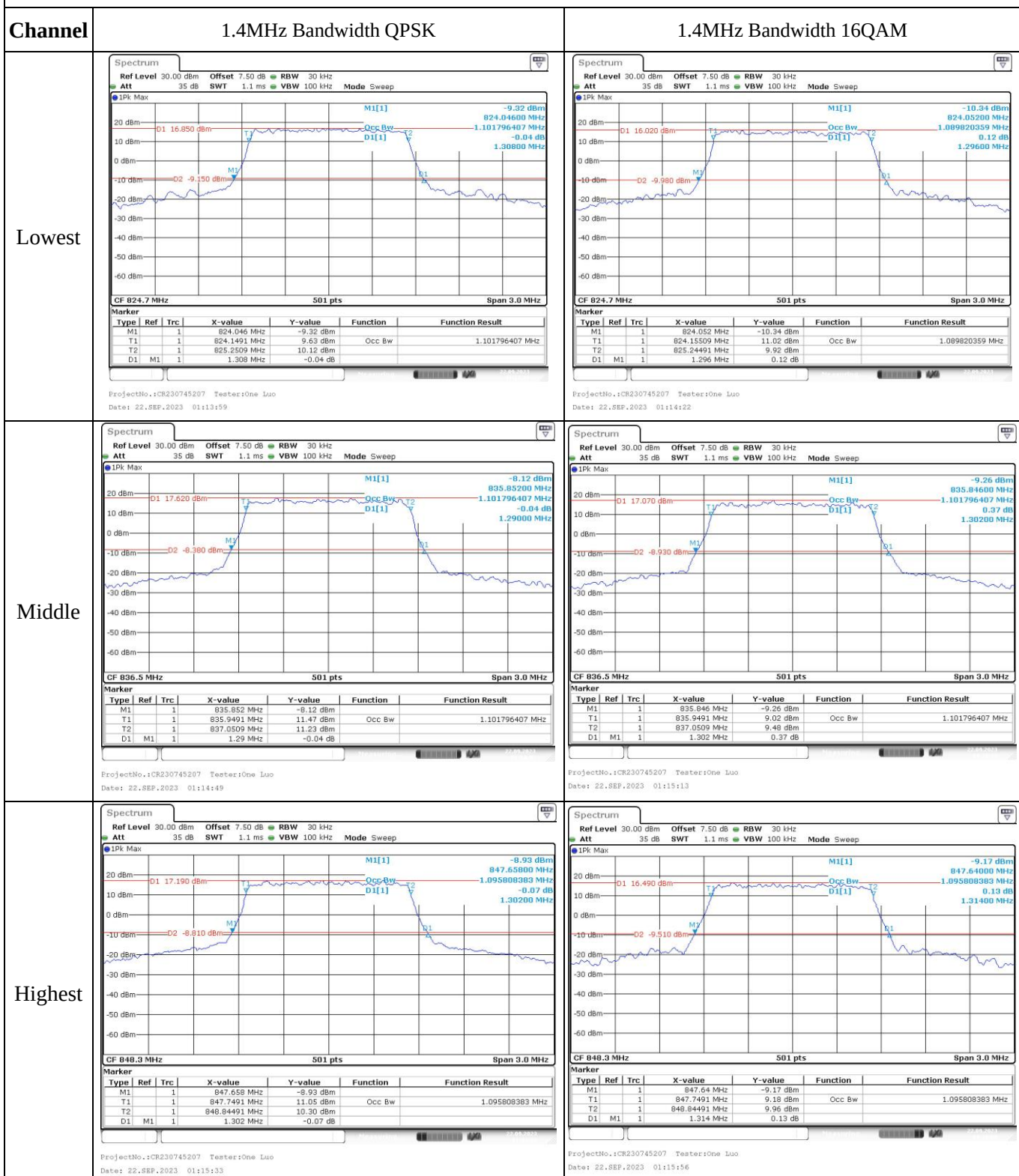
Frequency Stability For RSS-132

Test Mode:	10MHz 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	3.87	824.529	824.000	848.471	849.000
	-20	3.87	824.526	824.000	848.471	849.000
	-10	3.87	824.528	824.000	848.472	849.000
	0	3.87	824.526	824.000	848.477	849.000
	10	3.87	824.526	824.000	848.473	849.000
	20	3.87	824.521	824.000	848.476	849.000
	30	3.87	824.526	824.000	848.474	849.000
	40	3.87	824.527	824.000	848.471	849.000
	50	3.87	824.527	824.000	848.476	849.000
Frequency Stability vs. Voltage	20	3.2	824.522	824.000	848.477	849.000
	20	4.45	824.523	824.000	848.476	849.000
					Result:	Pass

Test Mode:	10MHz 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	3.87	824.529	824.000	848.471	849.000
	-20	3.87	824.527	824.000	848.472	849.000
	-10	3.87	848.522	824.000	848.473	849.000
	0	3.87	848.527	824.000	848.475	849.000
	10	3.87	848.522	824.000	848.473	849.000
	20	3.87	848.526	824.000	848.477	849.000
	30	3.87	848.528	824.000	847.476	849.000
	40	3.87	848.526	824.000	848.472	849.000
	50	3.87	848.523	824.000	848.477	849.000
Frequency Stability vs. Voltage	20	3.2	848.529	824.000	848.476	849.000
	20	4.45	848.531	824.000	848.475	849.000
					Result:	Pass

Test Plots(Note: The 7.5dB is the Insertion loss of the RF cable, Coaxial tee connector and DC Block, which was offset into the Spectrum Analyzer):

Occupied Bandwidth



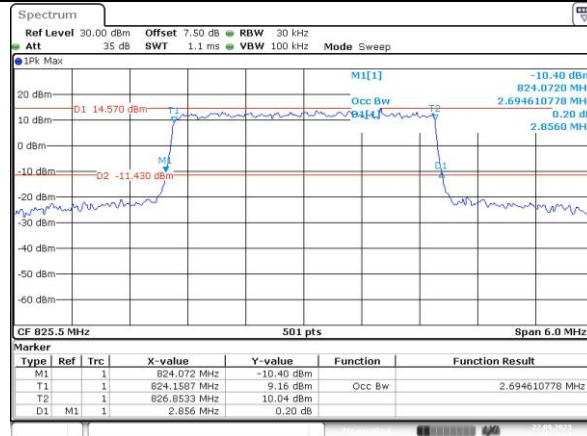
Occupied Bandwidth

Channel

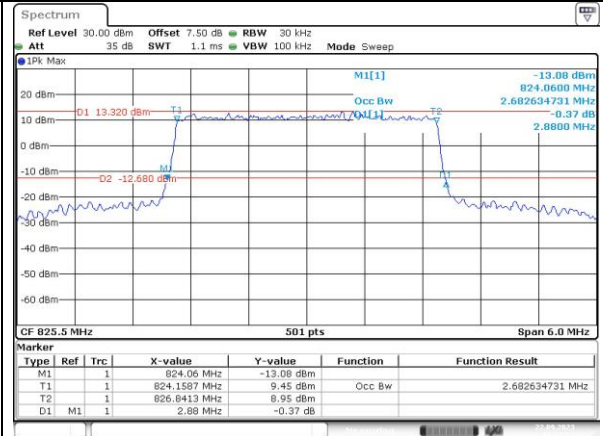
3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

Lowest

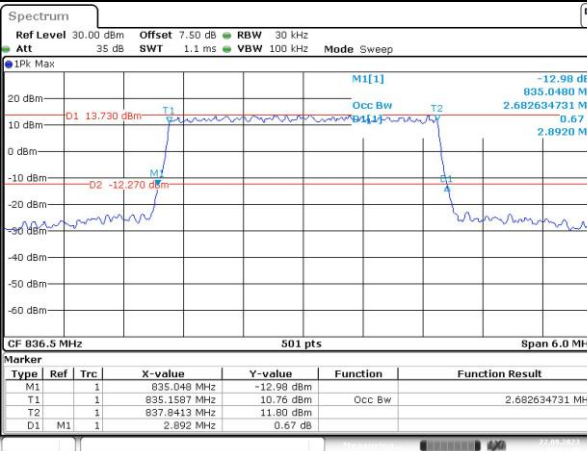


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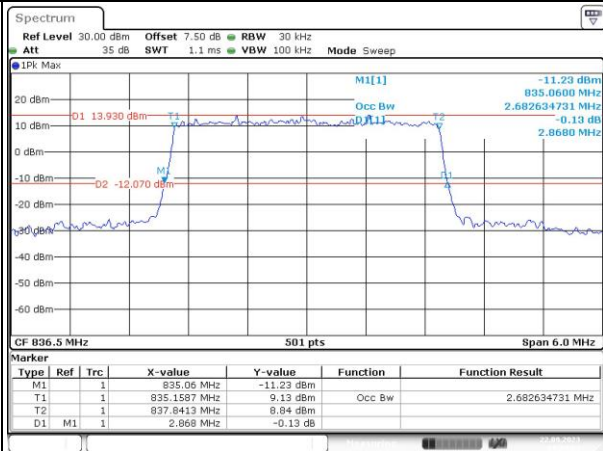


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Middle

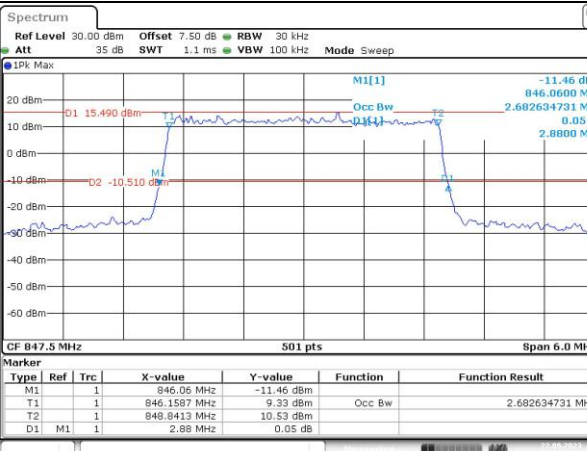


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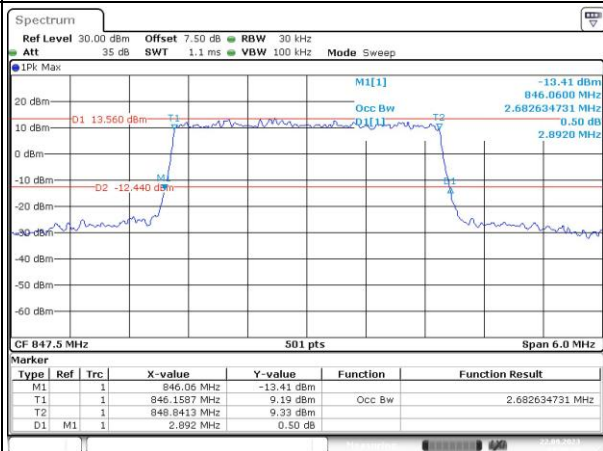


ProjectNo.:CR230745207 Tester:One Luo
Date: 22.SEP.2023 01:24:52

Highest



ProjectNo.:CR230745207 Tester:One Luo
Date: 22.SEP.2023 01:25:20



ProjectNo.:CR230745207 Tester:One Luo
Date: 22.SEP.2023 01:25:47

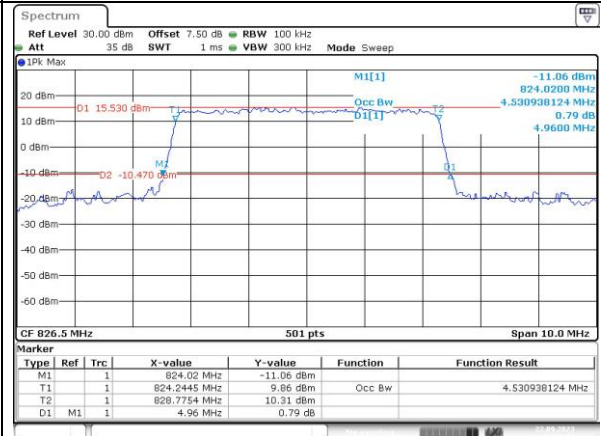
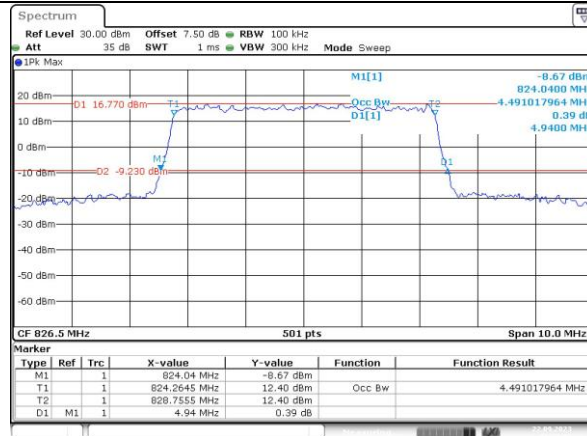
Occupied Bandwidth

Channel

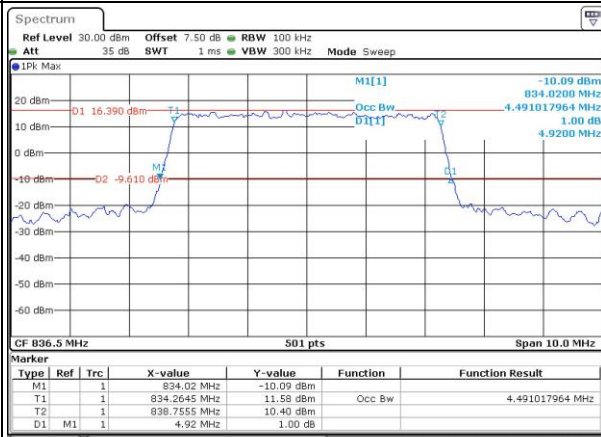
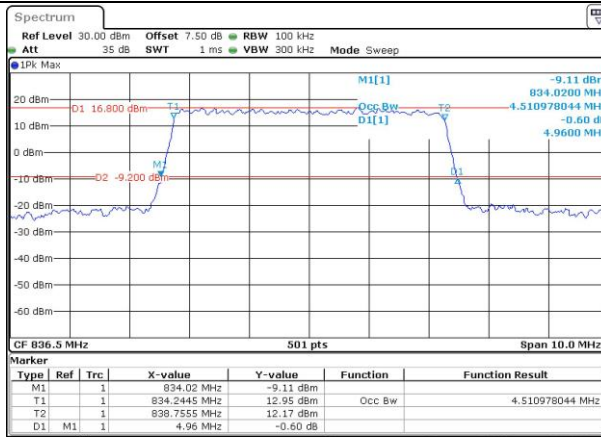
5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

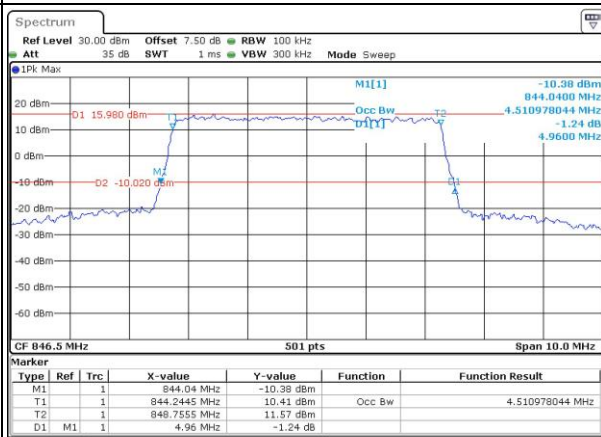
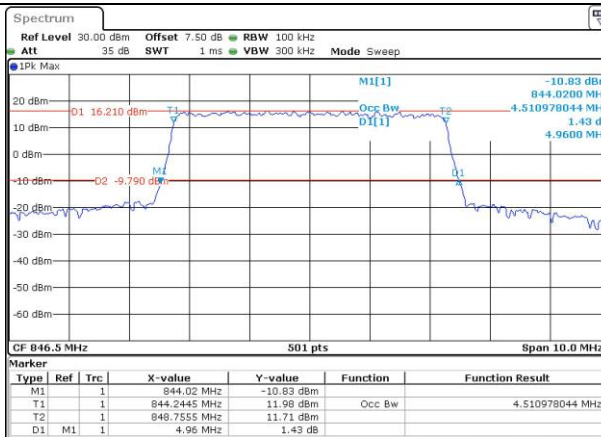
Lowest



Middle



Highest



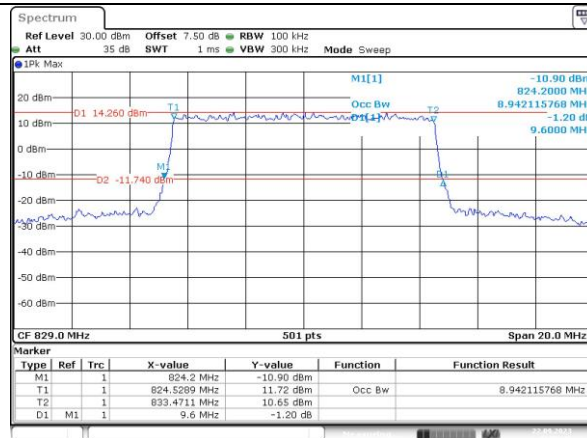
Occupied Bandwidth

Channel

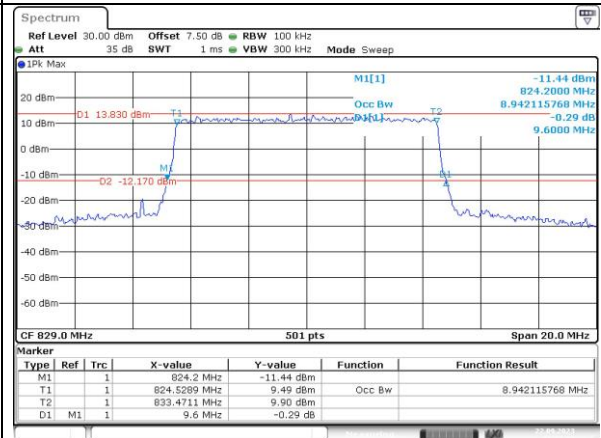
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

Lowest

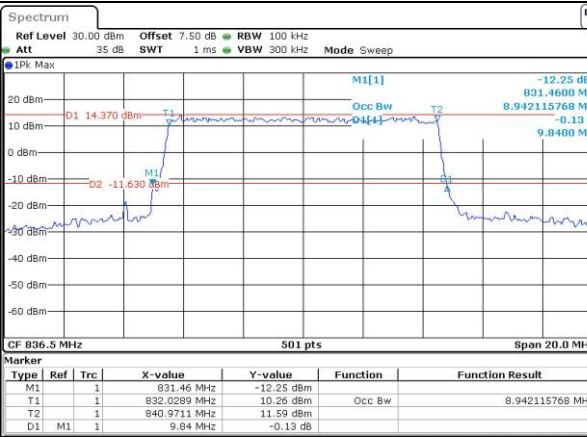


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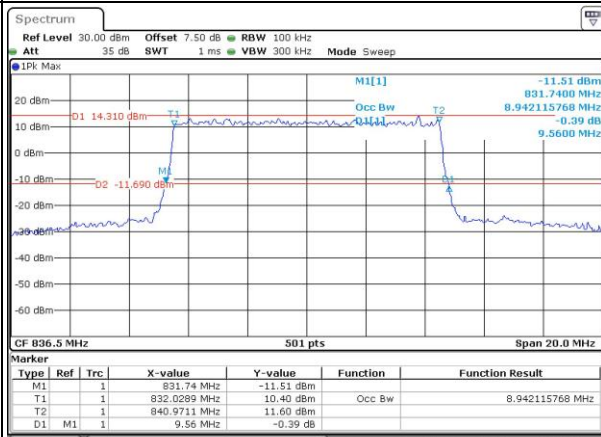


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Date: 22.SEP.2023 01:31:29

Middle

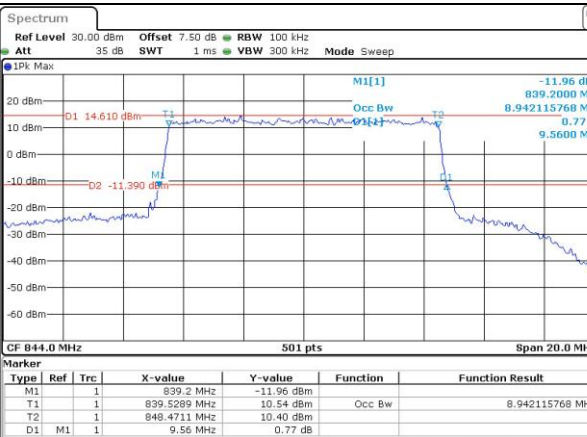


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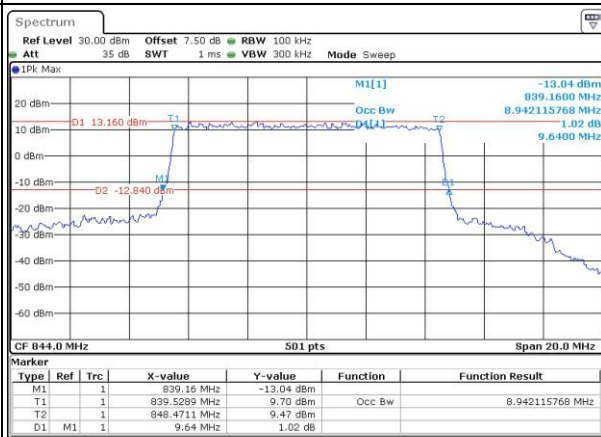


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Highest



ProjectNo.:CR230745207 Tester:One Luo
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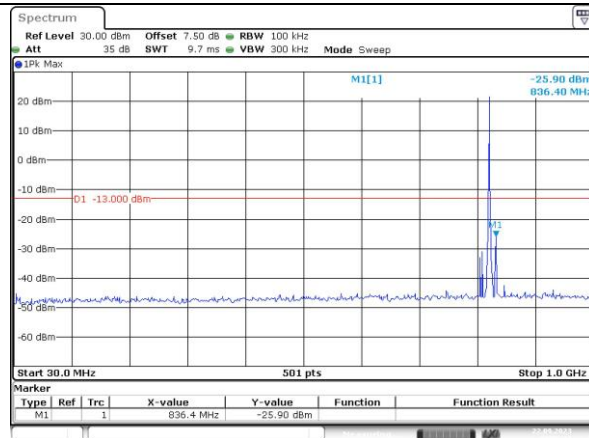
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Spurious Emissions at Antenna Terminal

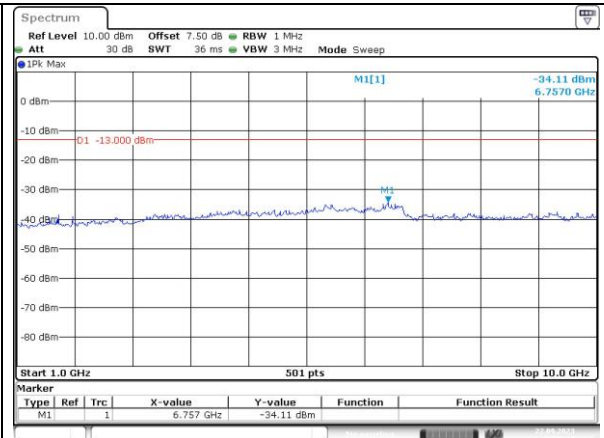
Channel

1.4MHz Bandwidth QPSK

Lowest

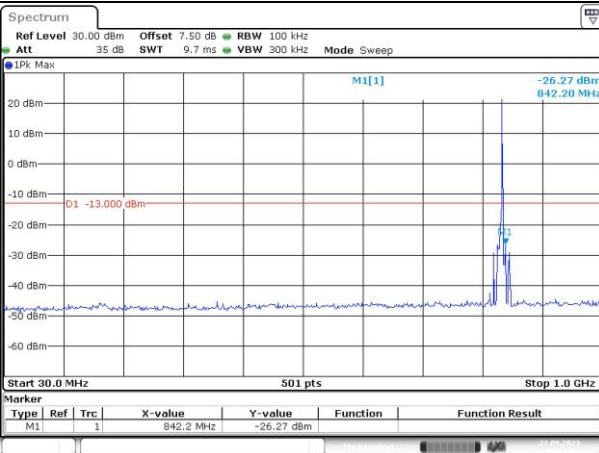


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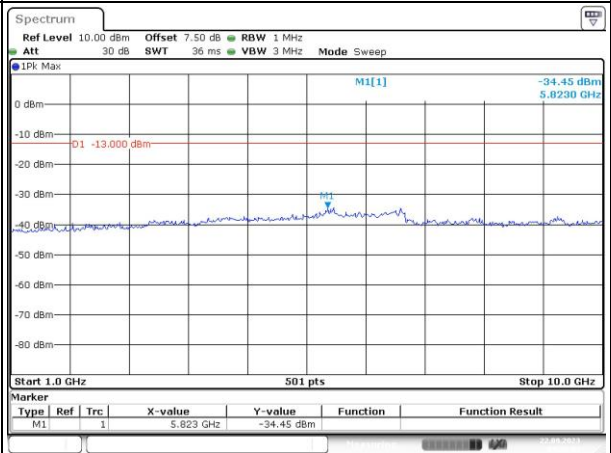


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Middle

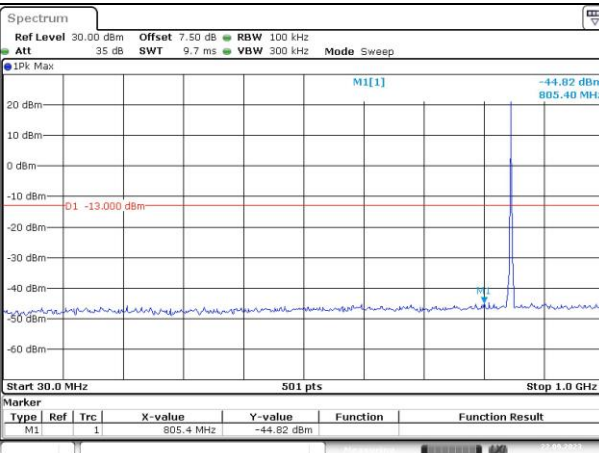


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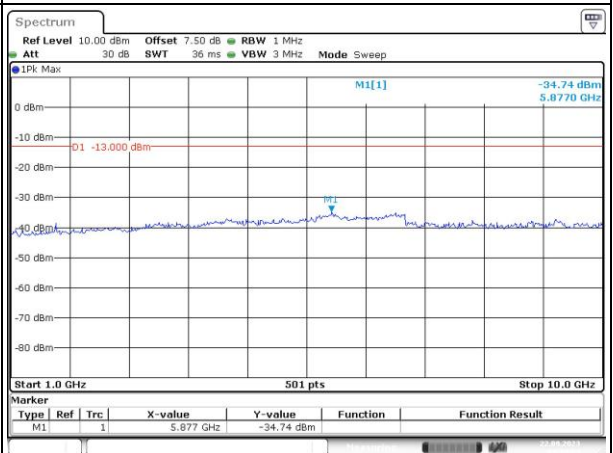


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Highest



ProjectNo.:CR230745207 Tester:One Luo
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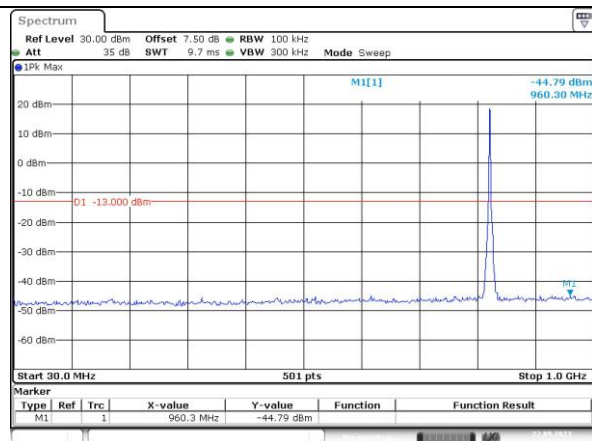
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Spurious Emissions at Antenna Terminal

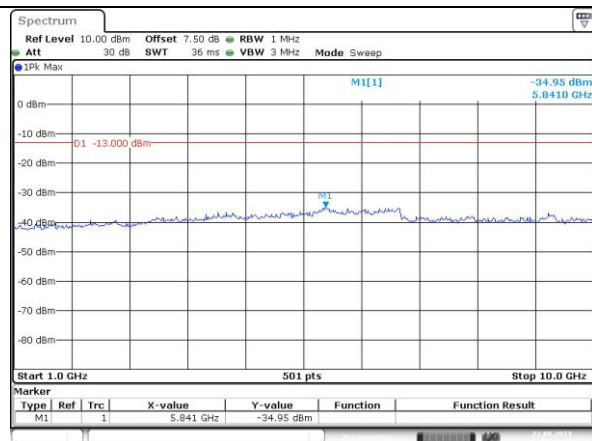
Channel

3MHz Bandwidth QPSK

Lowest

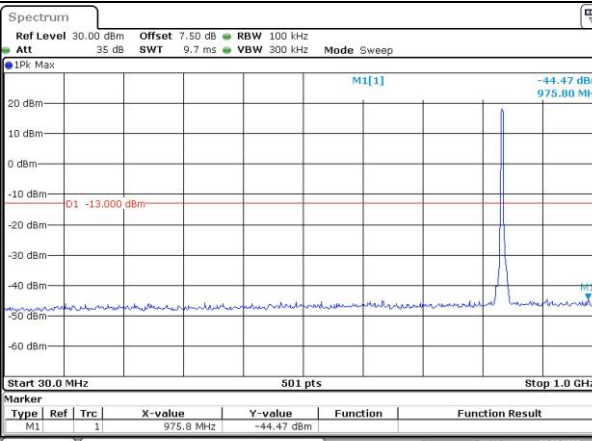


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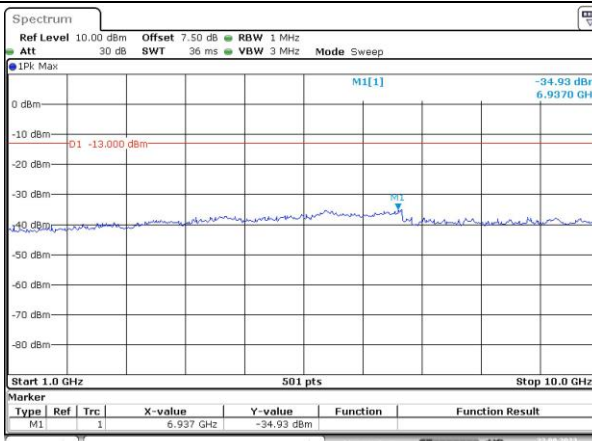


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Middle

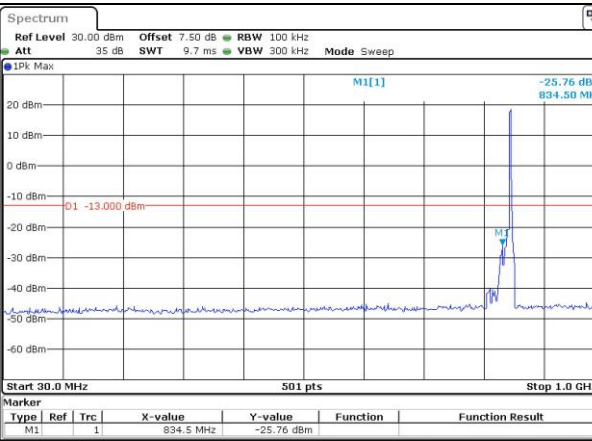


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Date: 22.SEP.2023 03:40:10

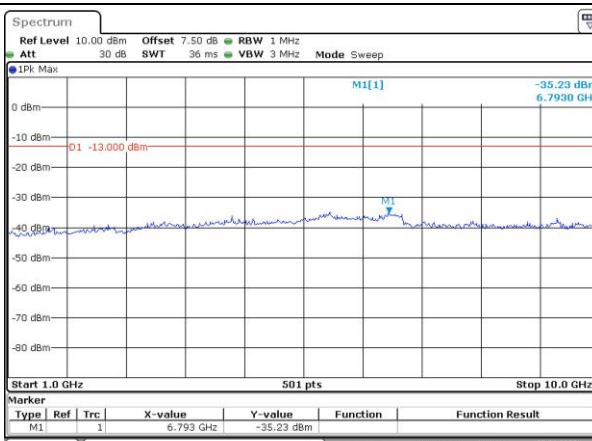


ProjectNo.:CR230745207 Tester:One Luo
Date: 22.SEP.2023 03:40:56

Highest



ProjectNo.:CR230745207 Tester:One Luo
Date: 22.SEP.2023 03:41:36



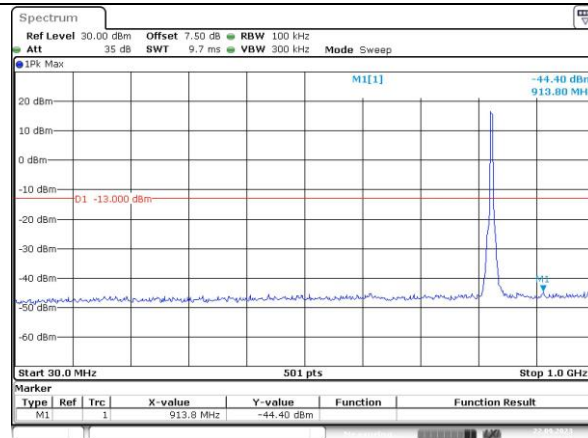
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Spurious Emissions at Antenna Terminal

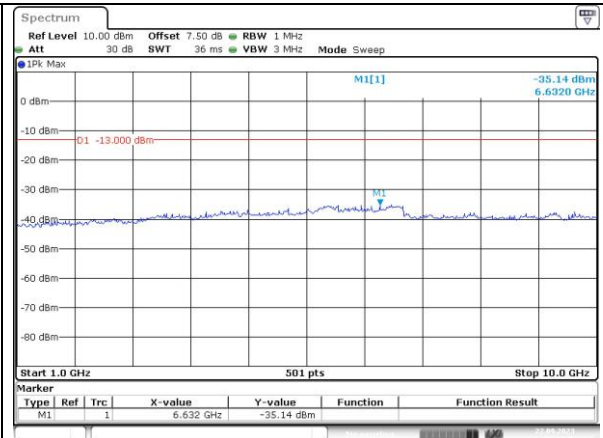
Channel

5MHz Bandwidth QPSK

Lowest

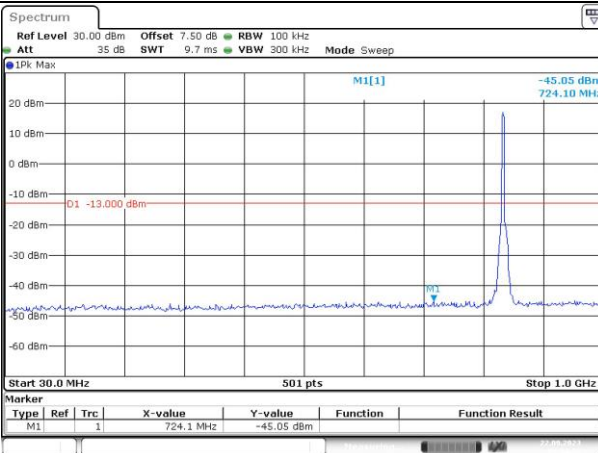


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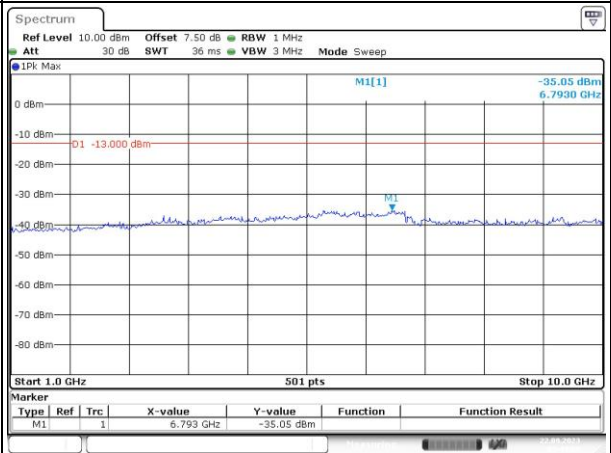


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Middle

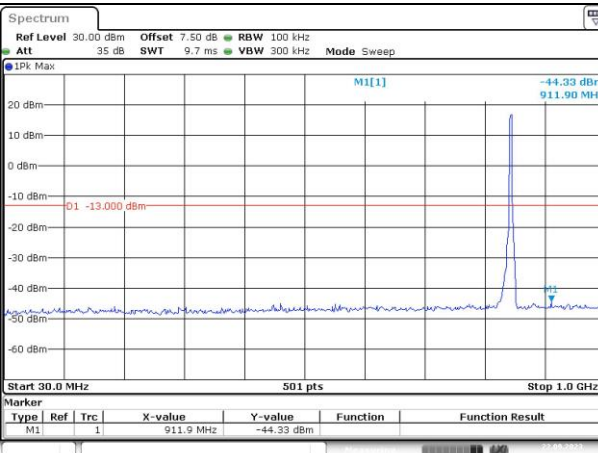


ProjectNo.:CR230745207 Tester:One Luo
Date: 22.SEP.2023 03:44:27

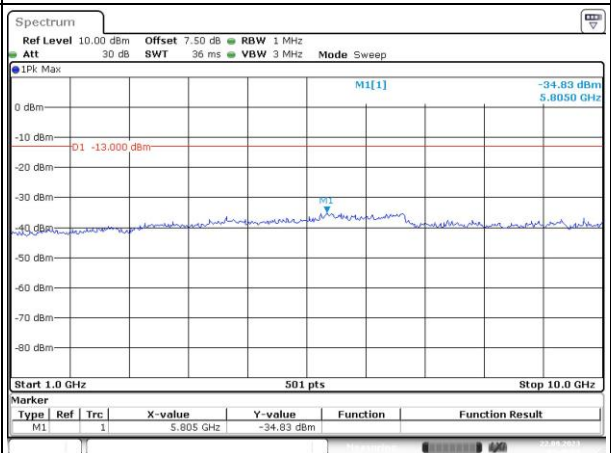


ProjectNo.:CR230745207 Tester:One Luo
Date: 22.SEP.2023 03:44:57

Highest



ProjectNo.:CR230745207 Tester:One Luo
Date: 22.SEP.2023 03:45:26



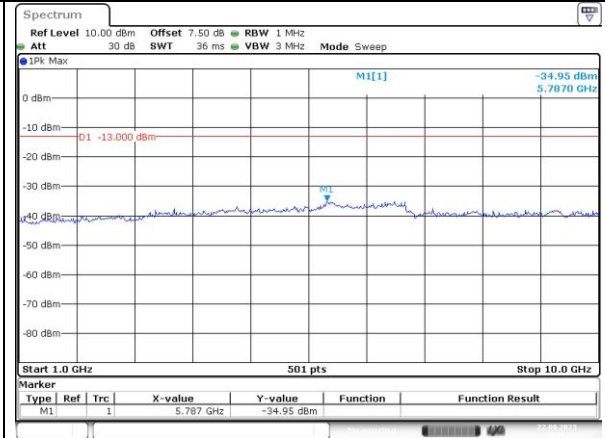
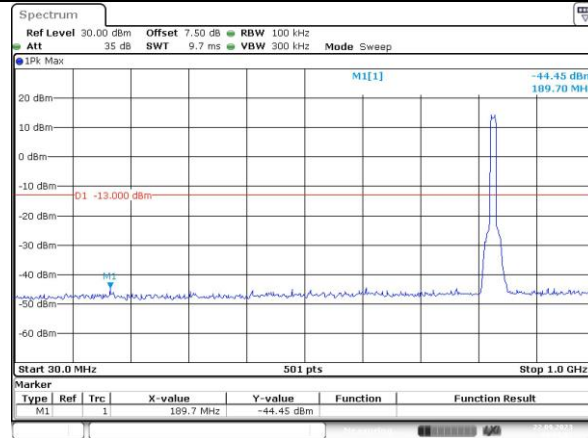
ProjectNo.:CR230745207 Tester:One Luo
Date: 22.SEP.2023 03:46:03

Spurious Emissions at Antenna Terminal

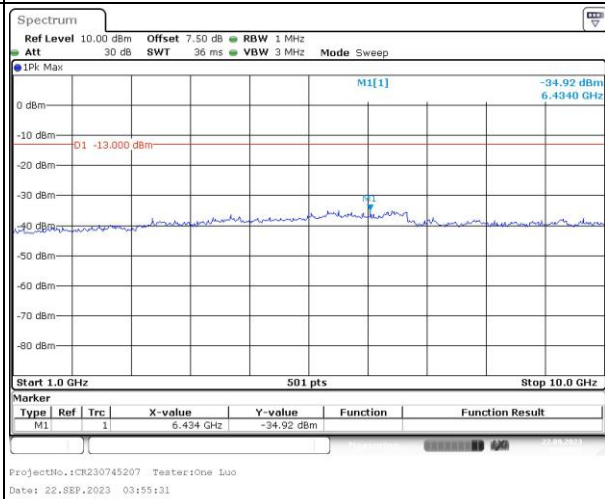
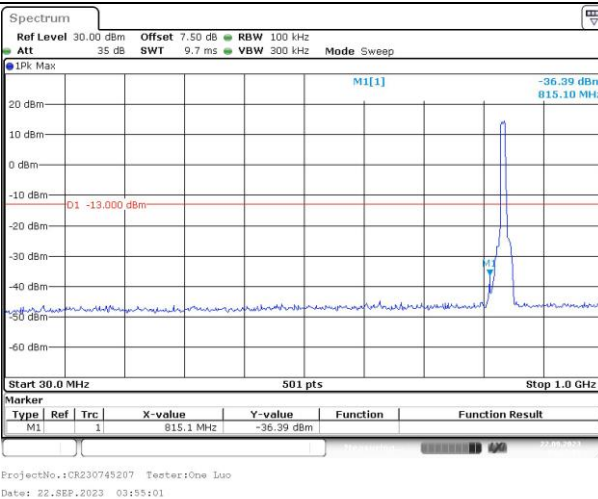
Channel

10MHz Bandwidth QPSK

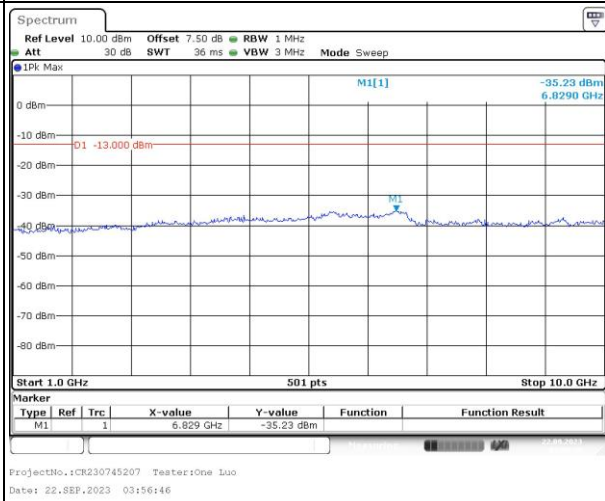
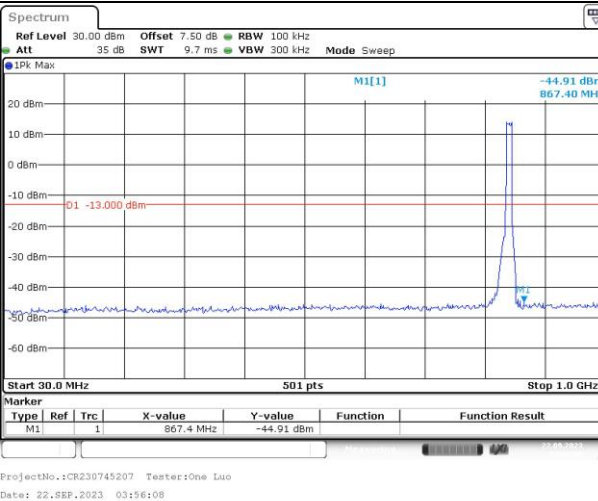
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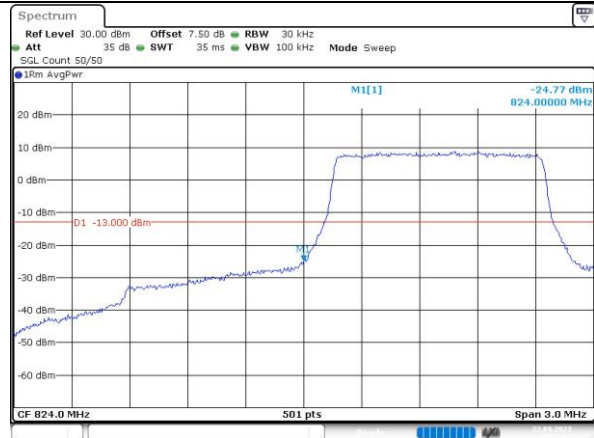
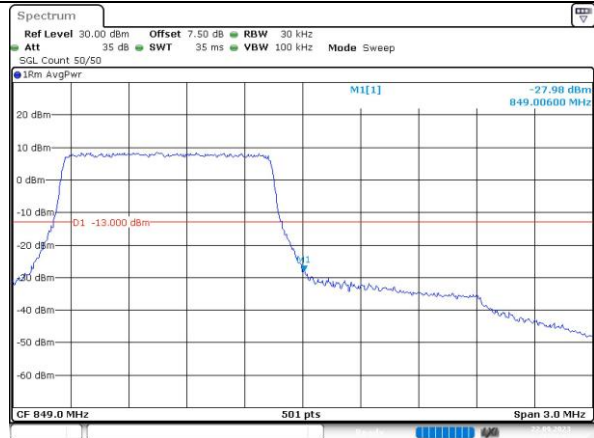
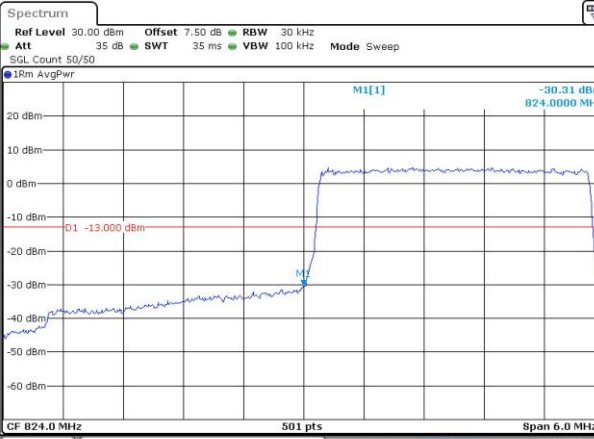
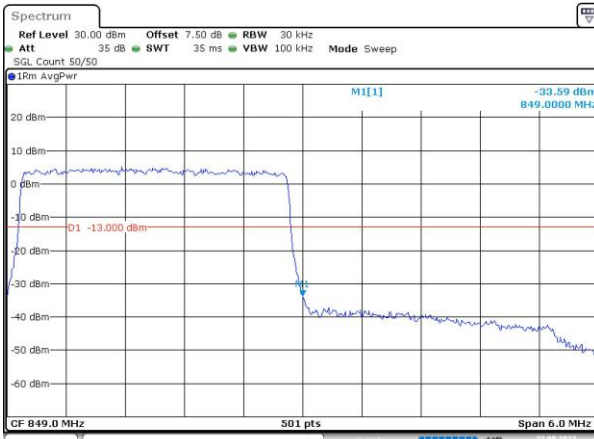
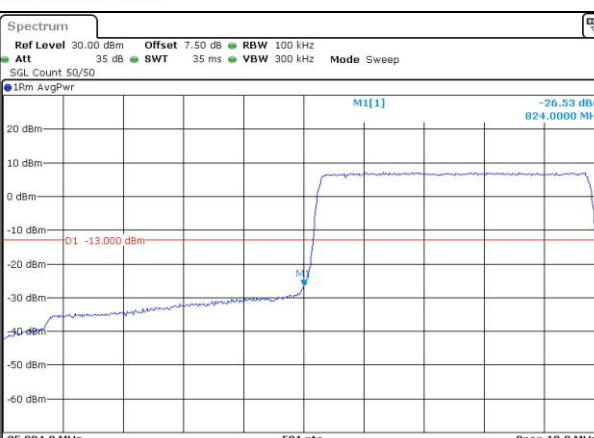
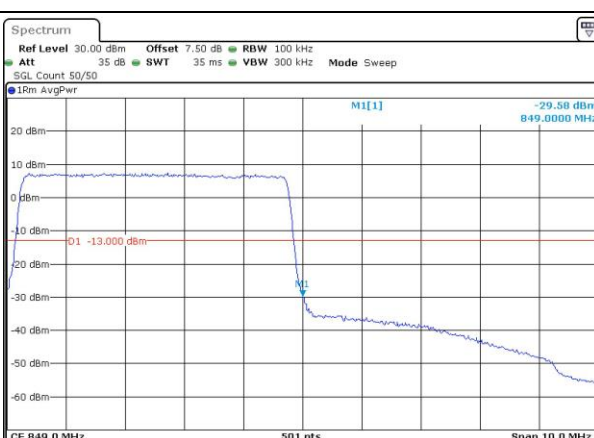
Middle



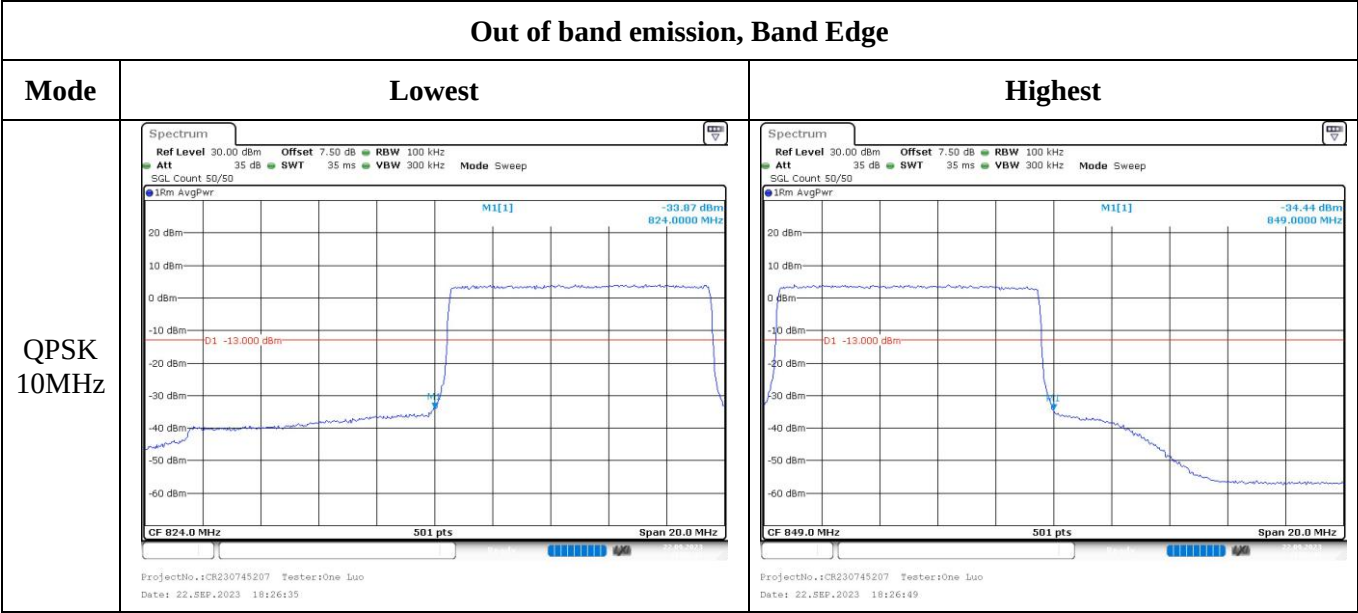
Highest



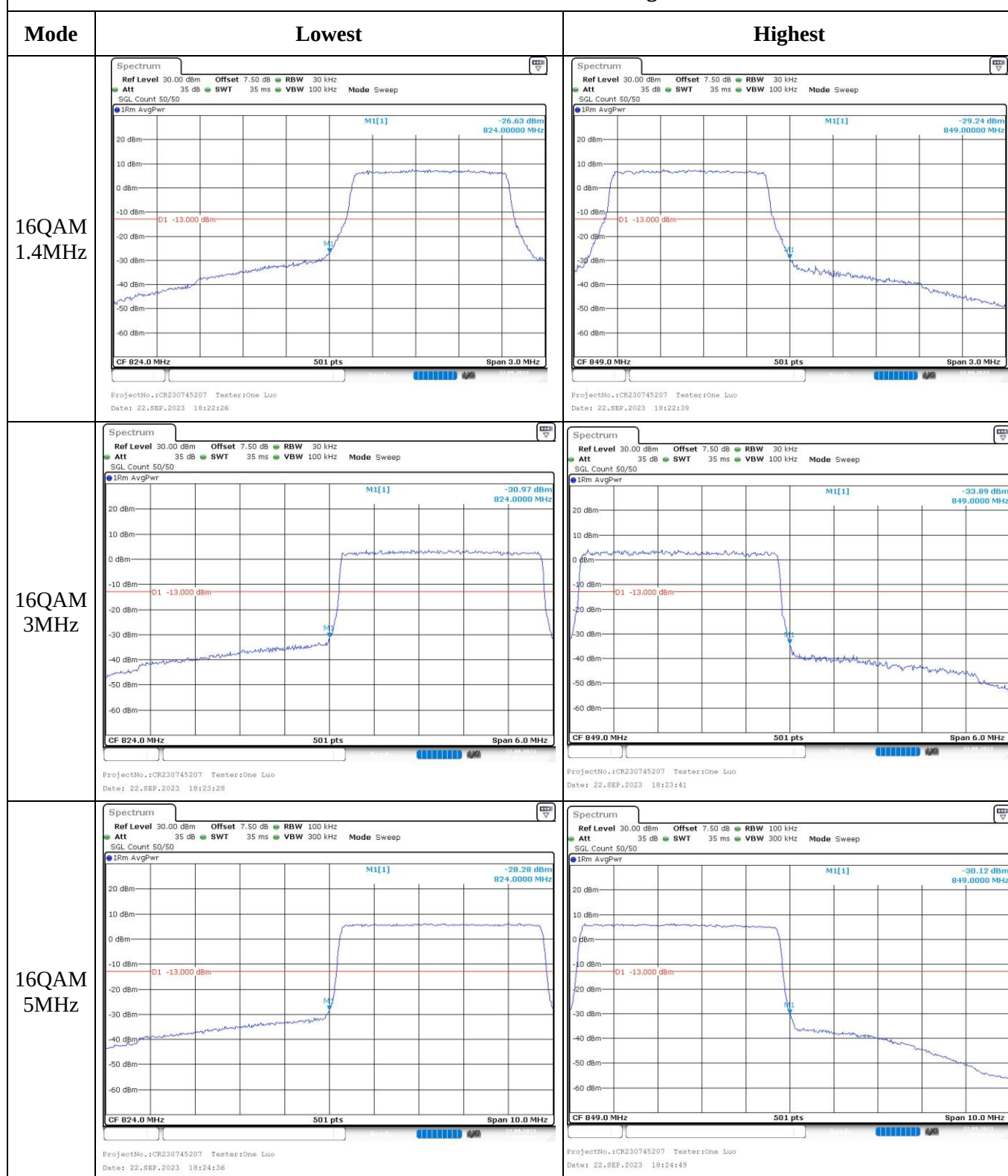
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz	 Ref Level 30.00 dBm Offset 7.50 dB RBW 30 kHz Att 35 dB SWT 35 ms VBW 100 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr MI[1] -24.77 dBm 824.00000 MHz D1 -13.000 dBm CF 824.0 MHz 501 pts Span 3.0 MHz ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:22:10	 Ref Level 30.00 dBm Offset 7.50 dB RBW 30 kHz Att 35 dB SWT 35 ms VBW 100 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr MI[1] -27.98 dBm 849.00600 MHz D1 -13.000 dBm CF 849.0 MHz 501 pts Span 3.0 MHz ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:22:33
QPSK 3MHz	 Ref Level 30.00 dBm Offset 7.50 dB RBW 30 kHz Att 35 dB SWT 35 ms VBW 100 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr MI[1] -30.31 dBm 824.00000 MHz D1 -13.000 dBm CF 824.0 MHz 501 pts Span 6.0 MHz ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:23:22	 Ref Level 30.00 dBm Offset 7.50 dB RBW 30 kHz Att 35 dB SWT 35 ms VBW 100 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr MI[1] -39.59 dBm 849.00000 MHz D1 -13.000 dBm CF 849.0 MHz 501 pts Span 6.0 MHz ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:23:35
QPSK 5MHz	 Ref Level 30.00 dBm Offset 7.50 dB RBW 100 kHz Att 35 dB SWT 35 ms VBW 300 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr MI[1] -26.53 dBm 824.00000 MHz D1 -13.000 dBm CF 824.0 MHz 501 pts Span 10.0 MHz ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:24:30	 Ref Level 30.00 dBm Offset 7.50 dB RBW 100 kHz Att 35 dB SWT 35 ms VBW 300 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr MI[1] -29.58 dBm 849.00000 MHz D1 -13.000 dBm CF 849.0 MHz 501 pts Span 10.0 MHz ProjectNo.:CR230745207 Tester:One Luo Date: 22.SEP.2023 18:24:43

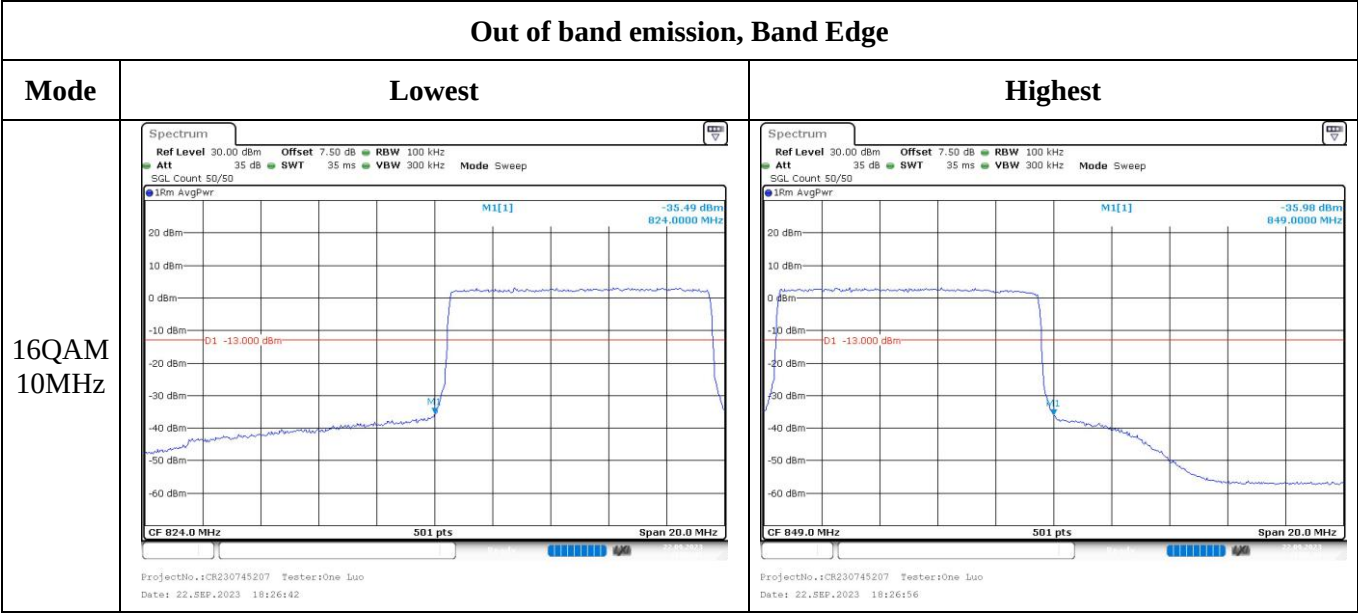
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.7 Antenna Port Test Data and Results for LTE Band 12

Serial Number:	29L3-1	Test Date:	2023/9/8~2023/9/22
Test Site:	RF	Test Mode:	Transmitting
Tester:	One Luo	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.3~28.2	Relative Humidity: (%)	42~52	ATM Pressure: (kPa)	99.7~100.4
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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	2023/7/15	2024/7/14
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
R&S	Wideband Radio Communication Tester	CMW500	149218	2023/7/15	2024/7/14
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
Weinschel	Power Splitter	1515	RA914	Each time	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	699.7	707.5	715.3
3MHz	700.5	707.5	714.5
5MHz	701.5	707.5	713.5
10MHz	704	707.5	711

Test Data:**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		
1.4MHz QPSK	RB1#0	23.22	23.14	23.09	14.1	34.77
	RB1#3	23.27	23.19	23.11		
	RB1#5	23.27	23.17	23.17		
	RB3#0	23.25	23.23	23.19		
	RB3#3	23.28	23.25	23.22		
	RB6#0	22.3	22.22	22.25		
1.4MHz 16QAM	RB1#0	22.4	22.21	22.2	13.3	34.77
	RB1#3	22.45	22.23	22.21		
	RB1#5	22.48	22.24	22.26		
	RB3#0	22.27	22.28	22.33		
	RB3#3	22.31	22.25	22.39		
	RB6#0	21.34	21.12	21.22		
3MHz QPSK	RB1#0	23.24	23.29	23.03	14.16	34.77
	RB1#8	23.28	23.18	23.14		
	RB1#14	23.23	23.34	23.14		
	RB6#0	22.31	22.24	22.25		
	RB6#9	22.28	22.21	22.26		
	RB15#0	22.33	22.21	22.2		
3MHz 16QAM	RB1#0	22.41	22.9	22.25	13.72	34.77
	RB1#8	22.34	22.78	22.33		
	RB1#14	22.32	22.73	22.36		
	RB6#0	21.25	21.35	21.29		
	RB6#9	21.24	21.26	21.32		
	RB15#0	21.33	21.28	21.12		
5MHz QPSK	RB1#0	23.53	23.34	23.2	14.35	34.77
	RB1#13	23.5	23.27	23.26		
	RB1#24	23.51	23.29	23.36		
	RB15#0	22.27	22.18	22.26		
	RB15#10	22.24	22.22	22.06		
	RB25#0	22.26	22.19	22.17		
5MHz 16QAM	RB1#0	22.21	22.61	22.21	13.43	34.77
	RB1#13	22.16	22.56	22.23		
	RB1#24	22.27	22.56	22.33		
	RB15#0	21.32	21.14	21.21		
	RB15#10	21.29	21.16	21.17		
	RB25#0	21.33	21.17	21.16		
10MHz QPSK	RB1#0	23.24	23.22	23.22	14.15	34.77
	RB1#25	23.3	23.21	23.18		
	RB1#49	23.26	23.22	23.33		

	RB25#0	22.17	22.22	22.13		
	RB25#25	22.25	22.25	22.11		
	RB50#0	22.26	22.25	22.15		
10MHz 16QAM	RB1#0	22.39	22.24	22.79	13.64	34.77
	RB1#25	22.46	22.24	22.68		
	RB1#49	22.39	22.24	22.82		
	RB25#0	21.21	21.32	21.17		
	RB25#25	21.3	21.31	21.15		
	RB50#0	21.22	21.23	21.13		

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	4.41	4.2	3.97	13
	RB50#0	4.99	4.87	4.75	13
10MHz 16QAM	RB1#0	5.28	5.19	4.78	13
	RB50#0	5.88	5.86	5.8	13
				Result:	Pass

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	1.096	1.102	1.102	1.308	1.29	1.332
1.4MHz 16QAM	1.09	1.096	1.102	1.284	1.29	1.32
3MHz QPSK	2.683	2.683	2.683	2.856	2.88	2.88
3MHz 16QAM	2.683	2.683	2.683	2.868	2.868	2.892
5MHz QPSK	4.531	4.511	4.511	5.16	5.18	5.18
5MHz 16QAM	4.511	4.531	4.551	5.14	5.18	5.2
10MHz QPSK	8.942	8.942	8.942	9.96	9.96	9.76
10MHz 16QAM	8.942	8.942	8.982	9.96	9.84	9.84

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

Spurious Emissions at Antenna Terminal

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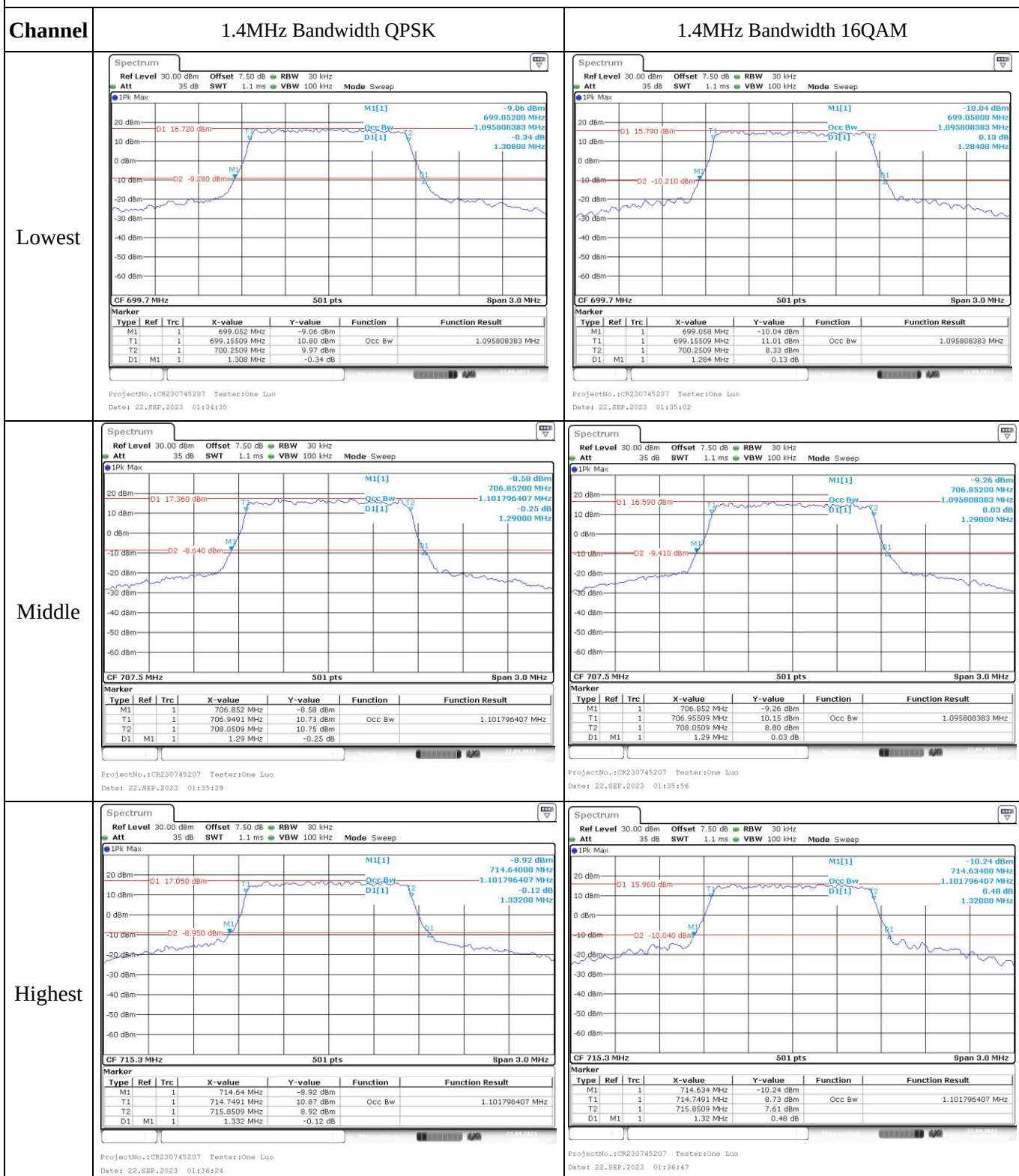
Frequency Stability

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	3.87	699.536	699.00	715.478	716.00
	-20	3.87	699.572	699.00	715.421	716.00
	-10	3.87	699.525	699.00	715.459	716.00
	0	3.87	699.500	699.00	715.482	716.00
	10	3.87	699.583	699.00	715.473	716.00
	20	3.87	699.529	699.00	715.471	716.00
	30	3.87	699.589	699.00	715.469	716.00
	40	3.87	699.539	699.00	715.455	716.00
	50	3.87	699.550	699.00	715.441	716.00
Frequency Stability vs. Voltage	20	3.2	699.539	699.00	715.464	716.00
	20	4.45	699.565	699.00	715.440	716.00
					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	3.87	699.571	699.00	715.562	716.00
	-20	3.87	699.565	699.00	715.572	716.00
	-10	3.87	699.533	699.00	715.509	716.00
	0	3.87	699.523	699.00	715.505	716.00
	10	3.87	699.535	699.00	715.586	716.00
	20	3.87	699.529	699.00	715.511	716.00
	30	3.87	699.582	699.00	715.550	716.00
	40	3.87	699.586	699.00	715.541	716.00
	50	3.87	699.539	699.00	715.536	716.00
Frequency Stability vs. Voltage	20	3.2	699.510	699.00	715.548	716.00
	20	4.45	699.588	699.00	715.568	716.00
					Result:	Pass

Test Plots(Note: The 7.5dB is the Insertion loss of the RF cable, Coaxial tee connector and DC Block, which was offset into the Spectrum Analyzer):

Occupied Bandwidth



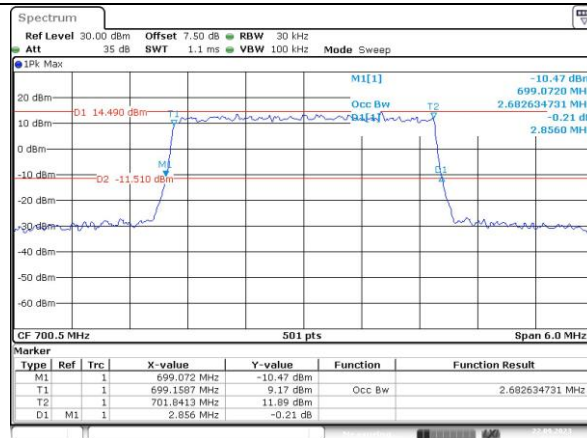
Occupied Bandwidth

Channel

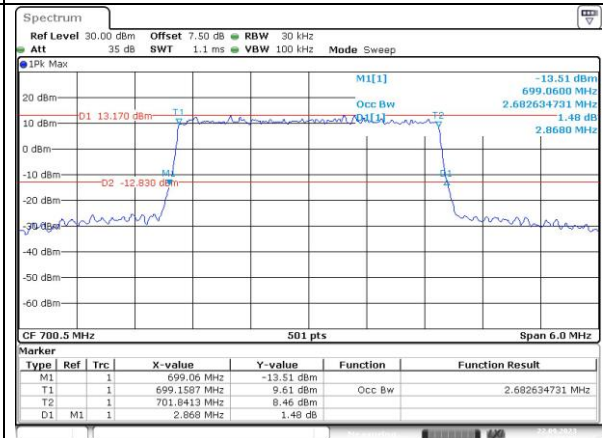
3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

Lowest

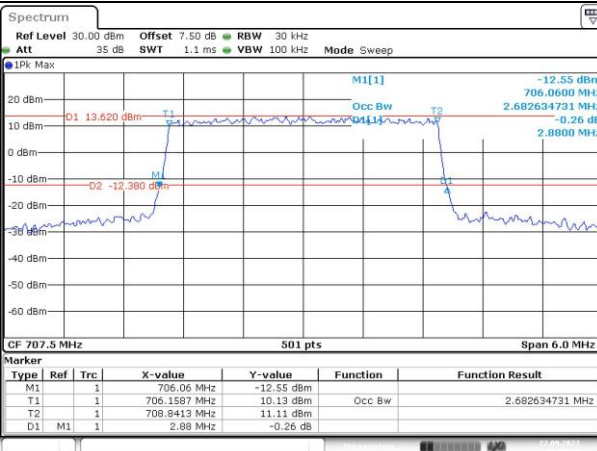


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Date: 22.SEP.2023 01:38:28

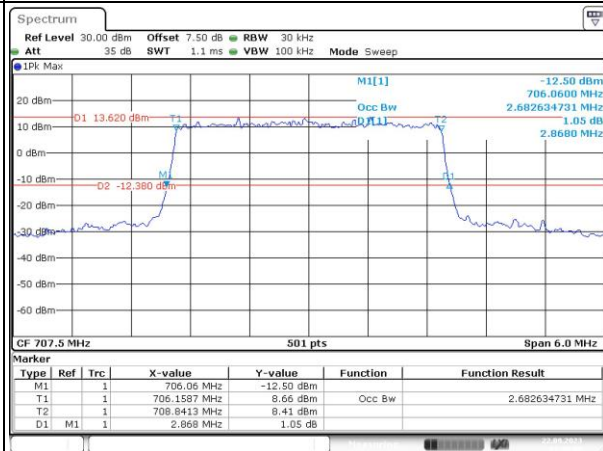


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Middle

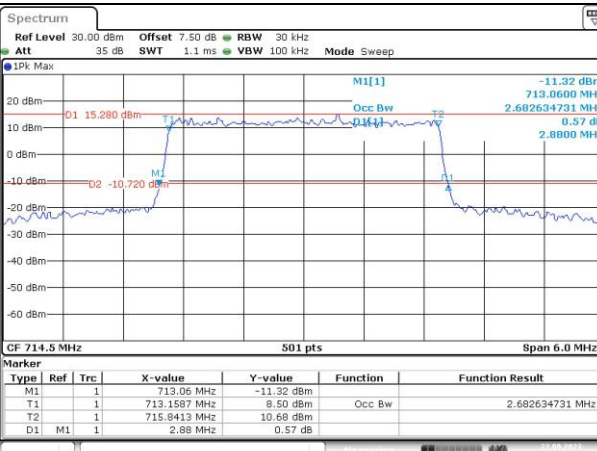


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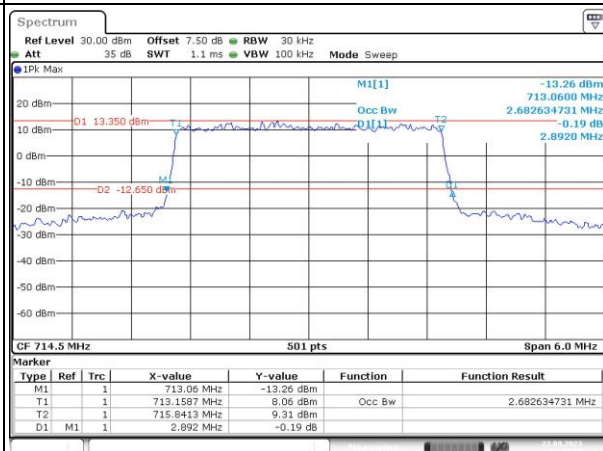


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Date: 22.SEP.2023 01:40:09

Highest



ProjectNo.:CR230745207 Tester:One Luo
Date: 22.SEP.2023 01:40:37



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Date: 22.SEP.2023 01:41:07

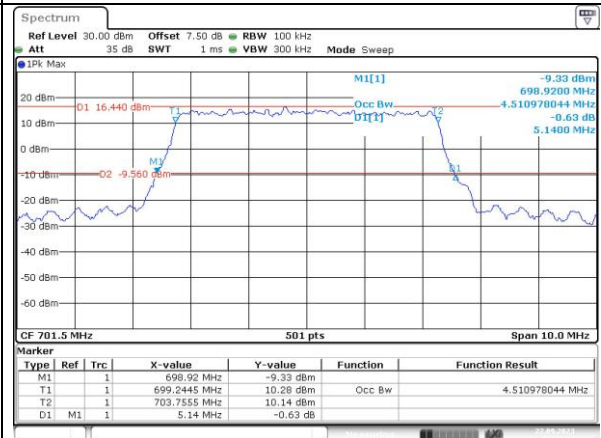
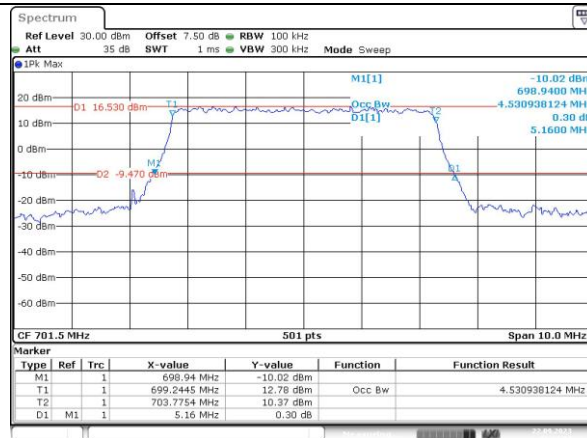
Occupied Bandwidth

Channel

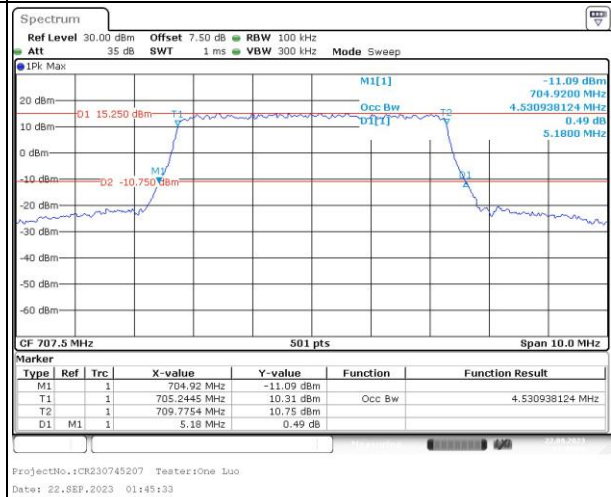
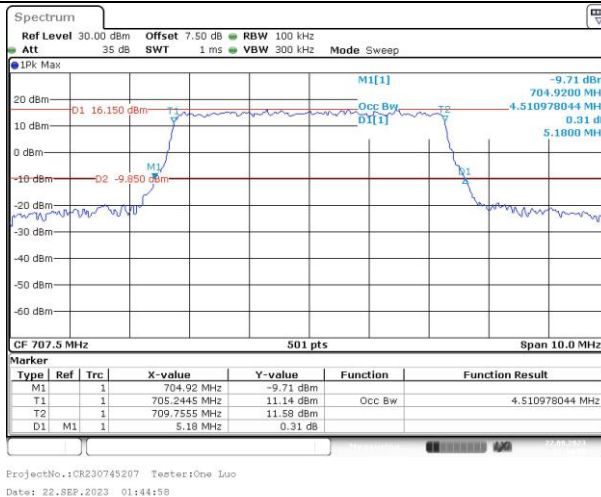
5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

Lowest



Middle



Highest

