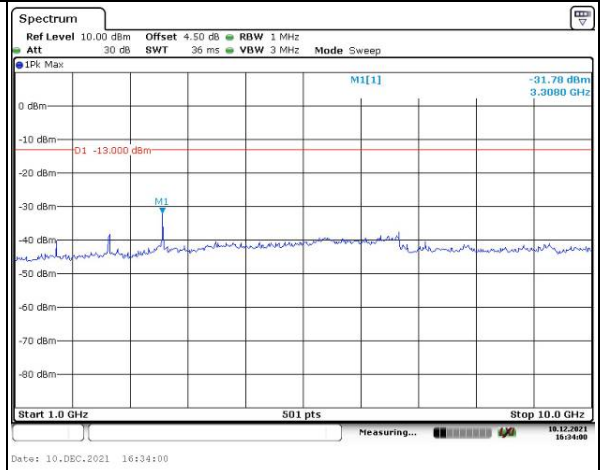
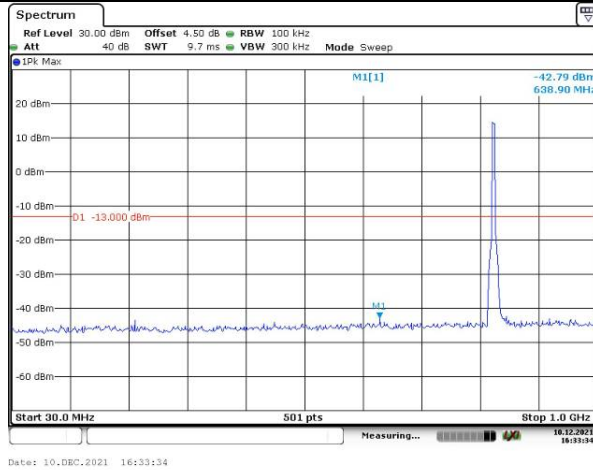


Spurious Emissions at Antenna Terminal

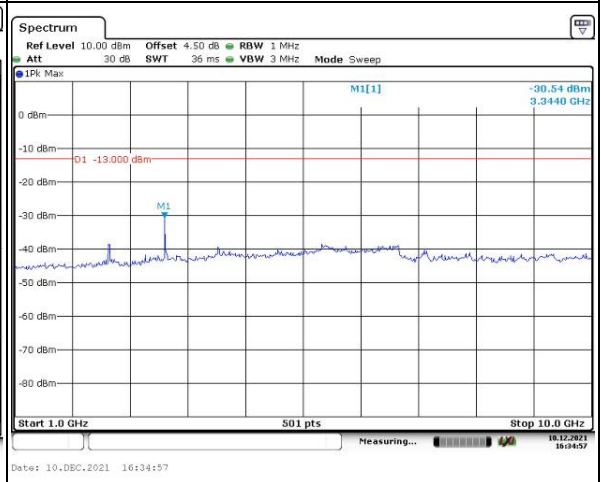
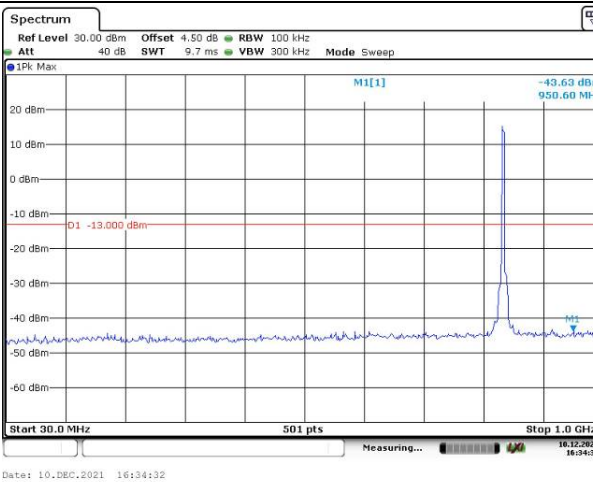
Channel

5MHz Bandwidth QPSK

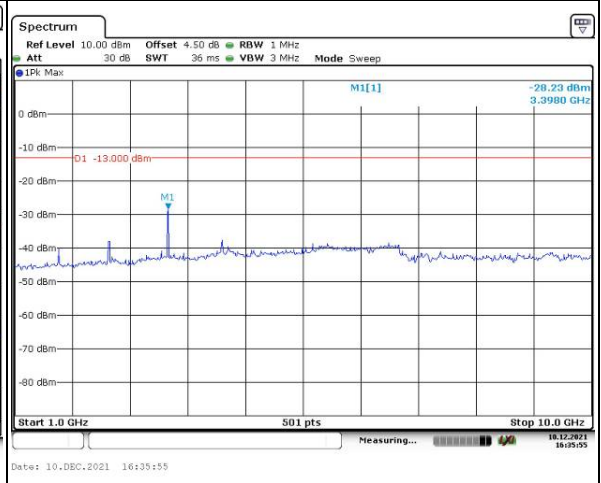
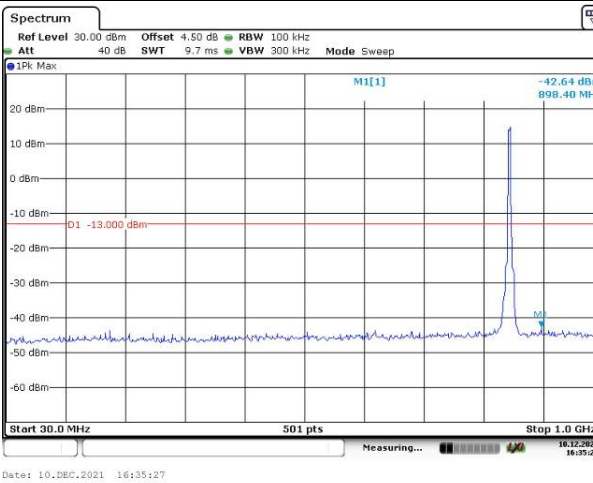
Lowest



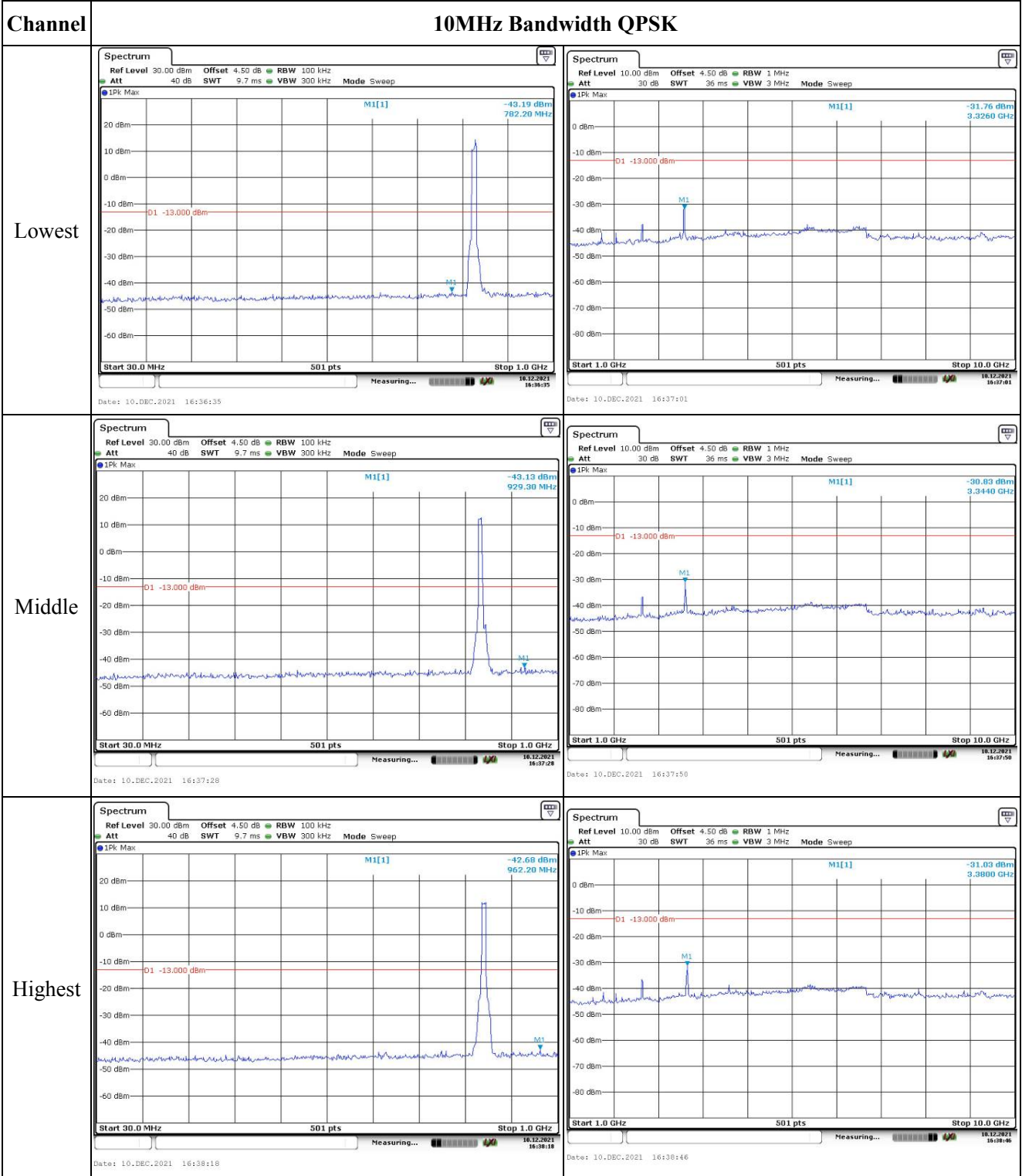
Middle



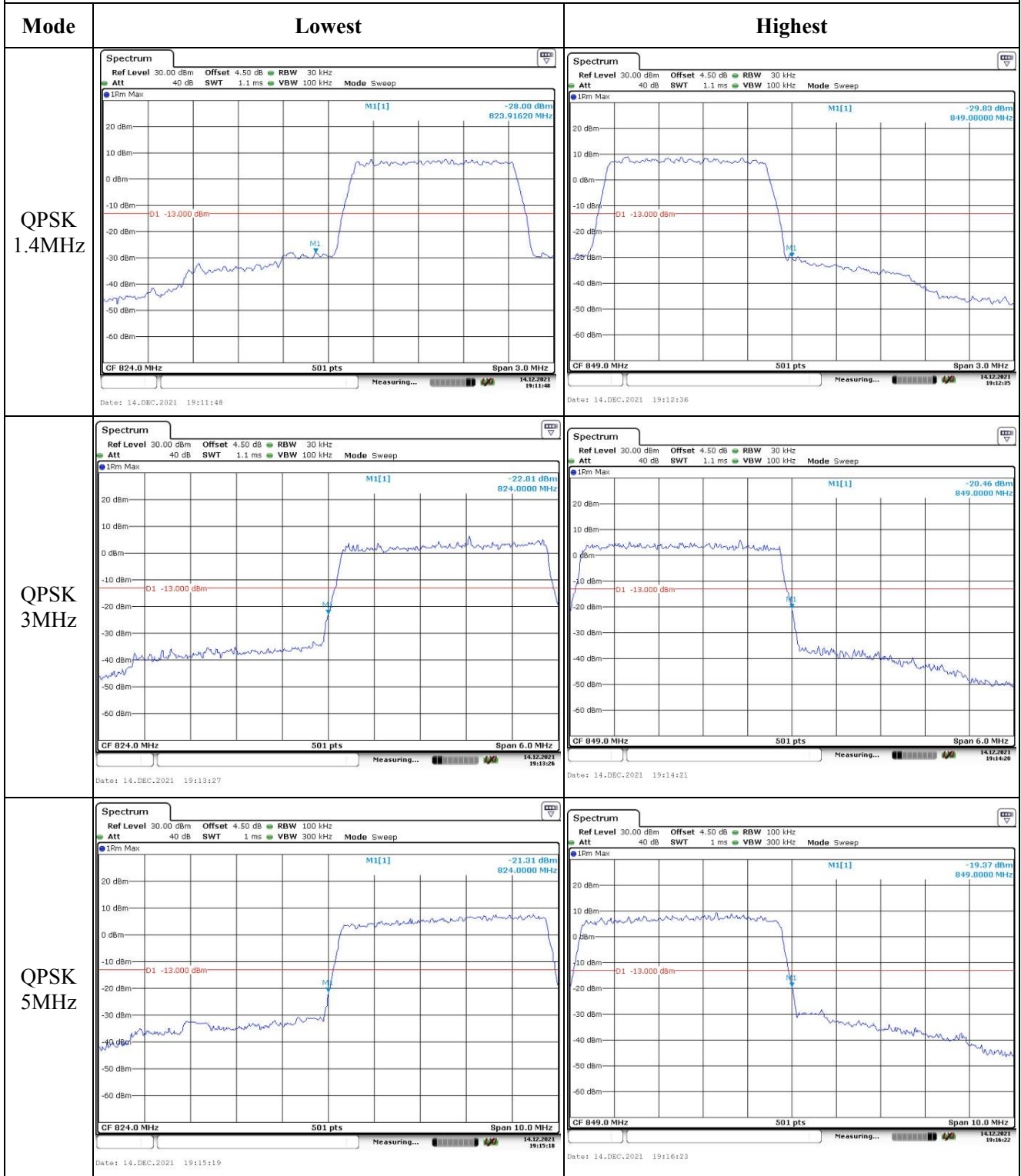
Highest



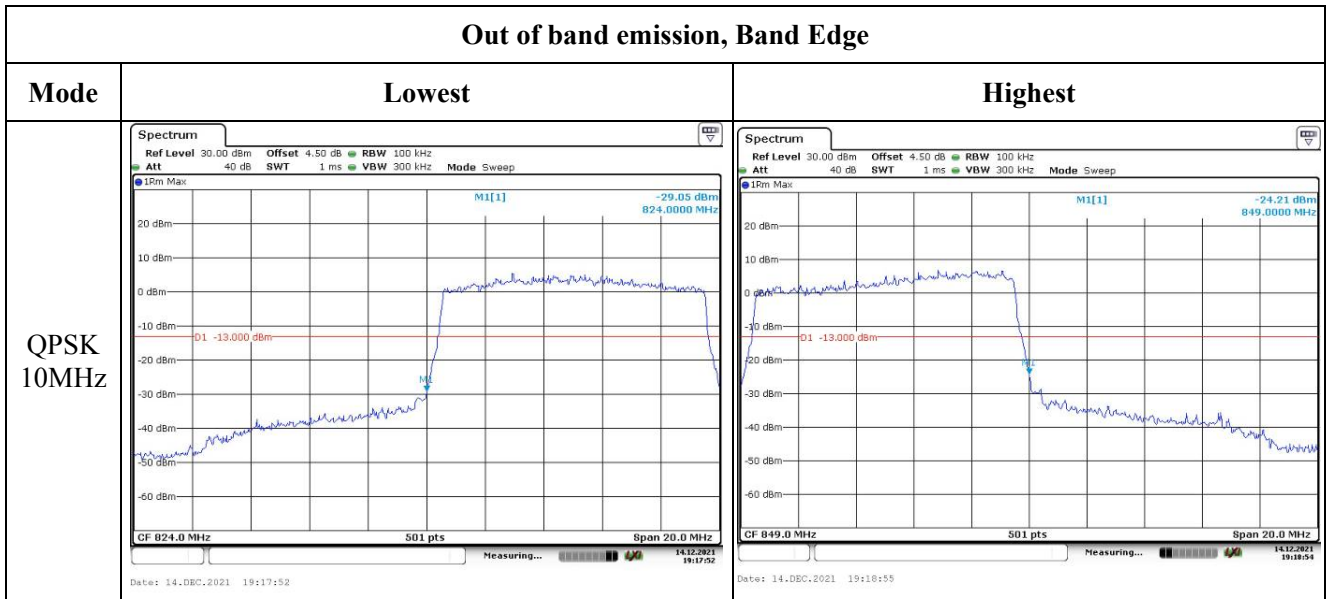
Spurious Emissions at Antenna Terminal



Out of band emission, Band Edge



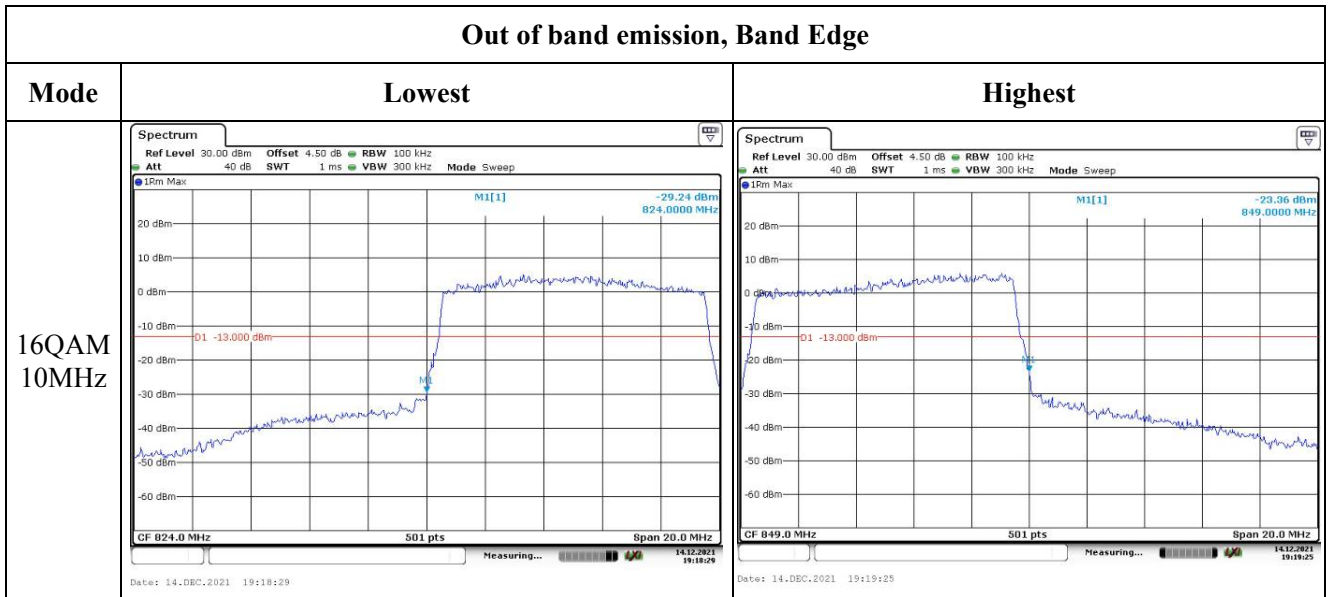
Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz		
16QAM 3MHz		
16QAM 5MHz		

Out of band emission, Band Edge



4.9 Antenna Port Test Data and Results for LTE Band 12

Serial Number:	CR21110023-RF-S1	Test Date:	2021-11-29~2022-01-06
Test Site:	RF	Test Mode:	Transmitting
Tester:	Wolf Mo	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	22.1~25.9	Relative Humidity: (%)	60~66	ATM Pressure: (kPa)	101.2~101.4
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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	2021/7/22	2022/7/21
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Weinschel	Coaxial Attenuators	53-20-34	LN751	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149218	2021/7/22	2022/7/21
BACL	TEMP&HUMI Test Chamber	BTH-150	30026	2021/7/22	2022/7/22
UNI-T	Multimeter	UT39A+	C210582554	2021/9/30	2022/9/30
E-Microwave	Two-way Splitter	ODP-1-6	OE0120176	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).

EUT Information@ LTE Band 12▲:

Antenna Gain (dBi):	0.17	Antenna Gain (dBd):	-1.98	Cable Loss (dB):	0
Operation Voltage(V _{DC}):					
Lowest:	3.5	Normal:	3.7	Highest:	4.2

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:**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		
1.4MHz QPSK	RB1#0	23.01	22.92	23.09	21.14	34.77
	RB1#3	22.94	23.08	22.94		
	RB1#5	22.93	23.00	22.90		
	RB3#0	23.00	23.04	23.09		
	RB3#3	22.94	23.12	22.96		
	RB6#0	22.07	22.47	21.90		
1.4MHz 16QAM	RB1#0	22.54	22.49	21.80	21.06	34.77
	RB1#3	22.51	23.04	21.59		
	RB1#5	22.56	23.04	21.64		
	RB3#0	22.34	22.22	22.24		
	RB3#3	22.27	22.32	22.06		
	RB6#0	21.42	21.36	21.25		
3MHz QPSK	RB1#0	22.99	22.85	23.16	21.18	34.77
	RB1#8	22.99	23.06	23.10		
	RB1#14	23.07	23.00	22.95		
	RB6#0	22.10	22.01	22.25		
	RB6#9	22.08	22.41	22.00		
	RB15#0	22.07	22.40	22.20		
3MHz 16QAM	RB1#0	22.45	22.53	21.85	21.12	34.77
	RB1#8	22.40	23.10	21.76		
	RB1#14	22.36	23.10	21.72		
	RB6#0	21.28	21.47	21.61		
	RB6#9	21.40	21.47	21.34		
	RB15#0	21.26	21.40	21.34		
5MHz QPSK	RB1#0	22.91	22.84	22.83	21.18	34.77
	RB1#13	23.08	23.01	22.97		
	RB1#24	23.16	23.09	22.74		
	RB15#0	22.06	21.99	21.88		
	RB15#10	22.09	22.39	22.24		
	RB25#0	22.09	22.46	22.21		
5MHz 16QAM	RB1#0	21.11	21.73	21.41	20.38	34.77
	RB1#13	21.17	22.36	21.83		
	RB1#24	21.25	21.98	21.63		
	RB15#0	21.27	21.29	21.10		

	RB15#10	21.49	21.24	21.51		
	RB25#0	21.50	21.34	21.38		
10MHz QPSK	RB1#0	22.85	23.00	23.06	21.25	34.77
	RB1#25	23.07	22.93	23.23		
	RB1#49	23.12	23.05	23.18		
	RB25#0	22.11	22.04	22.35		
	RB25#25	22.13	21.97	22.27		
	RB50#0	22.19	22.47	22.10		
10MHz 16QAM	RB1#0	22.14	22.29	21.33	20.6	34.77
	RB1#25	22.16	22.58	21.61		
	RB1#49	22.49	22.12	21.64		
	RB25#0	21.41	21.48	21.47		
	RB25#25	21.44	21.33	21.51		
	RB50#0	21.08	21.49	21.21		

Note: ERP=Conducted Power(dBm) - Cable loss(dB) + Antenna Gain(dBd)

Result:

Pass

Peak-to-average Ratio(PAR)

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
10MHz QPSK	RB1#0	5.77	6.00	5.54	13
	RB50#0	5.86	5.62	5.62	13
10MHz 16QAM	RB1#0	7.28	6.87	6.58	13
	RB50#0	6.75	6.61	6.58	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	1.096	1.102	1.102	1.260	1.260	1.260
1.4MHz 16QAM	1.108	1.096	1.102	1.260	1.254	1.260
3MHz QPSK	2.695	2.695	2.683	3.000	3.000	3.012
3MHz 16QAM	2.695	2.683	2.695	3.012	3.024	3.024
5MHz QPSK	4.511	4.511	4.511	5.000	5.000	5.020
5MHz 16QAM	4.511	4.551	4.511	4.980	5.040	5.020
10MHz QPSK	8.981	8.981	8.942	9.760	9.760	9.760
10MHz 16QAM	8.981	8.981	8.942	9.800	9.800	9.760

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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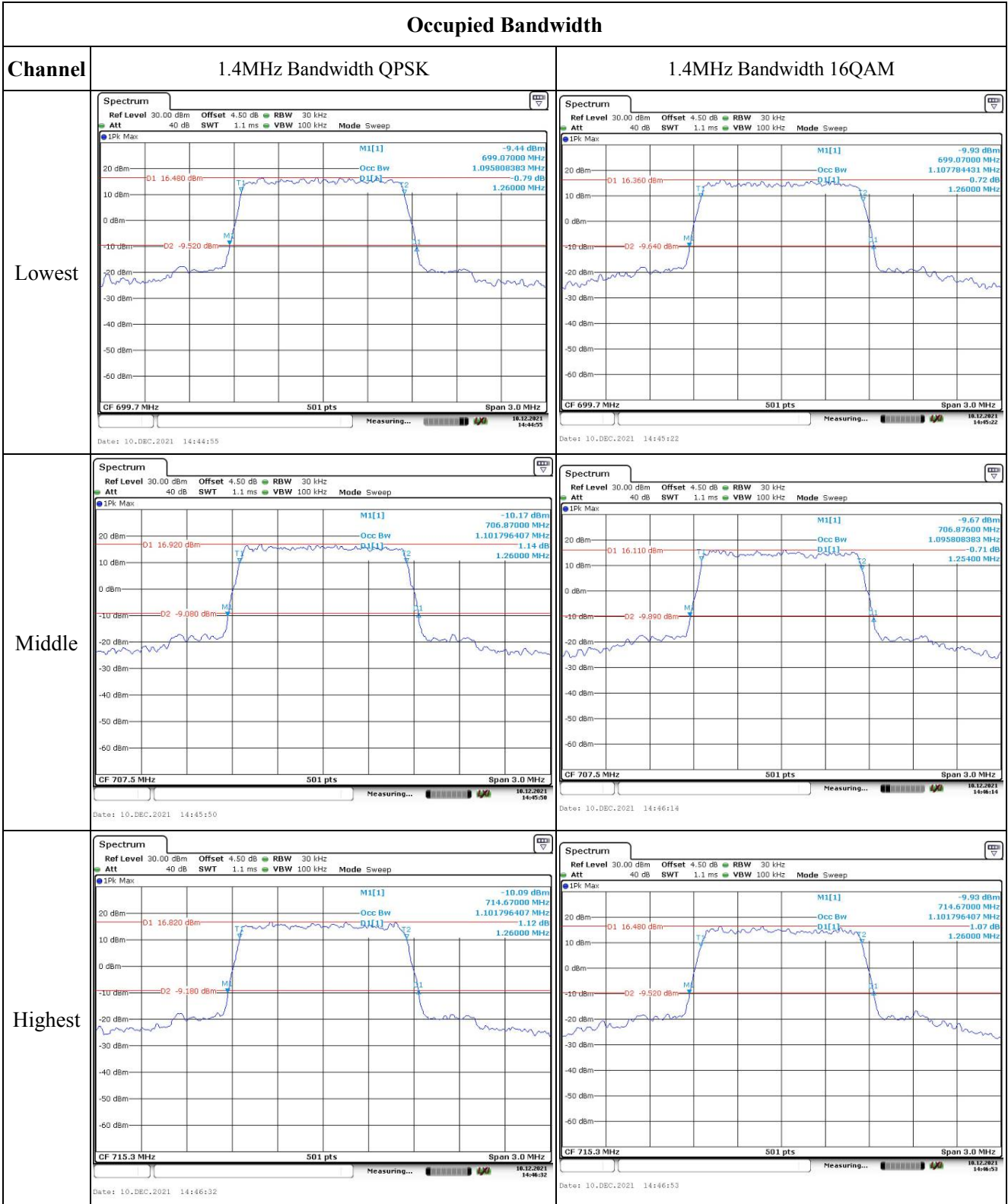
FCC §2.1055, §27.54: Frequency Stability

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	3.7	699.529	699.00	715.471	716.00
	-20	3.7	699.525	699.00	715.472	716.00
	-10	3.7	699.526	699.00	715.471	716.00
	0	3.7	699.522	699.00	715.470	716.00
	10	3.7	699.520	699.00	715.471	716.00
	20	3.7	699.529	699.00	715.471	716.00
	30	3.7	699.525	699.00	715.474	716.00
	40	3.7	699.529	699.00	715.471	716.00
	50	3.7	699.524	699.00	715.471	716.00
Frequency Stability vs. Voltage	20	3.5	699.529	699.00	715.470	716.00
	20	4.2	699.520	699.00	715.471	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	3.7	699.529	699.00	715.471	716.00
	-20	3.7	699.524	699.00	715.471	716.00
	-10	3.7	699.525	699.00	715.470	716.00
	0	3.7	699.529	699.00	715.471	716.00
	10	3.7	699.527	699.00	715.472	716.00
	20	3.7	699.529	699.00	715.471	716.00
	30	3.7	699.529	699.00	715.471	716.00
	40	3.7	699.526	699.00	715.473	716.00
	50	3.7	699.525	699.00	715.471	716.00
Frequency Stability vs. Voltage	20	3.5	699.529	699.00	715.474	716.00
	20	4.2	699.520	699.00	715.471	716.00
					Result:	Pass

Test Plots:

Occupied Bandwidth



Occupied Bandwidth

Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep</p> <p>1Pk Max -11.81 dBm M1[1] 699.0000 MHz -11.81 dBm Occ Bw 2.694610778 MHz -0.09 dB D1[1] 3.0000 MHz</p> <p>CF 700.5 MHz 501 pts Span 6.0 MHz Date: 10.DEC.2021 14:47:14</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep</p> <p>1Pk Max -12.46 dBm M1[1] 698.9880 MHz -12.46 dBm Occ Bw 2.694610778 MHz 0.28 dB D1[1] 3.0120 MHz</p> <p>CF 700.5 MHz 501 pts Span 6.0 MHz Date: 10.DEC.2021 14:47:34</p>
Middle	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep</p> <p>1Pk Max -10.83 dBm M1[1] 706.0120 MHz -10.83 dBm Occ Bw 2.694610778 MHz -0.52 dB D1[1] 3.0000 MHz</p> <p>CF 707.5 MHz 501 pts Span 6.0 MHz Date: 10.DEC.2021 14:47:59</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep</p> <p>1Pk Max -13.95 dBm M1[1] 705.9880 MHz -13.95 dBm Occ Bw 2.682634731 MHz 0.17 dB D1[1] 3.0240 MHz</p> <p>CF 707.5 MHz 501 pts Span 6.0 MHz Date: 10.DEC.2021 14:48:20</p>
Highest	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep</p> <p>1Pk Max -13.35 dBm M1[1] 712.9880 MHz -13.35 dBm Occ Bw 2.682634731 MHz 0.62 dB D1[1] 3.0120 MHz</p> <p>CF 714.5 MHz 501 pts Span 6.0 MHz Date: 10.DEC.2021 14:48:41</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep</p> <p>1Pk Max -11.08 dBm M1[1] 712.9880 MHz -11.08 dBm Occ Bw 2.694610778 MHz -0.75 dB D1[1] 3.0240 MHz</p> <p>CF 714.5 MHz 501 pts Span 6.0 MHz Date: 10.DEC.2021 14:49:02</p>

Occupied Bandwidth

Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -10.13 dBm 699.0000 MHz Occ Bw 4.510978044 MHz -0.21 dB D1[1] 16.520 dBm D2 -9.480 dBm 5.0000 MHz CF 701.5 MHz 501 pts Span 10.0 MHz Date: 10.DEC.2021 14:49:32</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -8.99 dBm 699.0200 MHz Occ Bw 4.510978044 MHz -2.09 dB D1[1] 16.350 dBm D2 -9.650 dBm 4.9800 MHz CF 701.5 MHz 501 pts Span 10.0 MHz Date: 10.DEC.2021 14:49:56</p>
Middle	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -9.11 dBm 705.0000 MHz Occ Bw 4.510978044 MHz -0.34 dB D1[1] 16.360 dBm D2 -9.640 dBm 5.0000 MHz CF 707.5 MHz 501 pts Span 10.0 MHz Date: 10.DEC.2021 14:50:24</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -10.69 dBm 705.0000 MHz Occ Bw 4.55098204 MHz -1.56 dB D1[1] 15.140 dBm D2 -10.860 dBm 5.0400 MHz CF 707.5 MHz 501 pts Span 10.0 MHz Date: 10.DEC.2021 14:50:47</p>
Highest	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -9.04 dBm 710.9800 MHz Occ Bw 4.510978044 MHz -1.03 dB D1[1] 16.830 dBm D2 -9.170 dBm 5.0200 MHz CF 713.5 MHz 501 pts Span 10.0 MHz Date: 10.DEC.2021 14:51:15</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -10.40 dBm 710.9800 MHz Occ Bw 4.510978044 MHz -0.14 dB D1[1] 15.510 dBm D2 -10.490 dBm 5.0200 MHz CF 713.5 MHz 501 pts Span 10.0 MHz Date: 10.DEC.2021 14:51:36</p>

Occupied Bandwidth

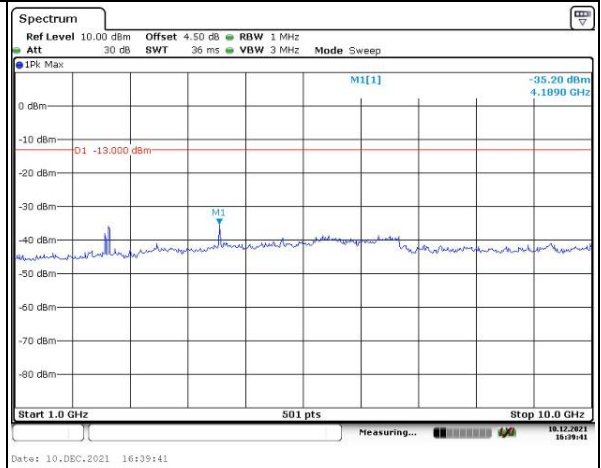
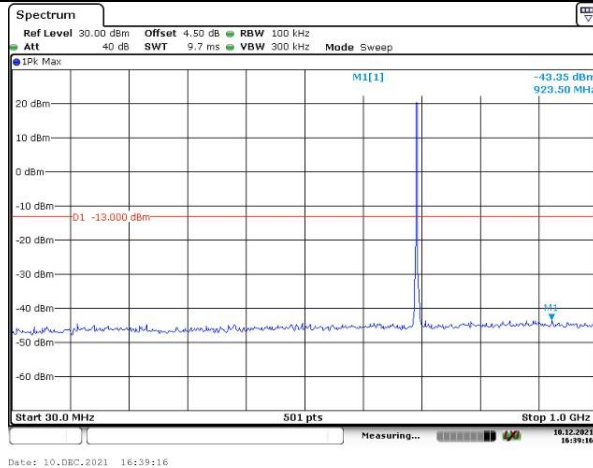
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	<p>10MHz Bandwidth QPSK</p> <p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -11.82 dBm Occ Bw 8.982035928 MHz D1[1] -0.53 dB D2 -11.510 dBm</p> <p>CF 704.0 MHz 501 pts Span 20.0 MHz</p> <p>Date: 10.DEC.2021 14:52:05</p>	<p>10MHz Bandwidth 16QAM</p> <p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -12.66 dBm Occ Bw 8.982035928 MHz D1[1] -0.76 dB D2 -12.560 dBm</p> <p>CF 704.0 MHz 501 pts Span 20.0 MHz</p> <p>Date: 10.DEC.2021 14:52:42</p>
Middle	<p>10MHz Bandwidth QPSK</p> <p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -12.51 dBm Occ Bw 8.982035928 MHz D1[1] -0.06 dB D2 -11.900 dBm</p> <p>CF 707.5 MHz 501 pts Span 20.0 MHz</p> <p>Date: 10.DEC.2021 14:53:14</p>	<p>10MHz Bandwidth 16QAM</p> <p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -13.02 dBm Occ Bw 8.982035928 MHz D1[1] 0.26 dB D2 -13.440 dBm</p> <p>CF 707.5 MHz 501 pts Span 20.0 MHz</p> <p>Date: 10.DEC.2021 14:53:42</p>
Highest	<p>10MHz Bandwidth QPSK</p> <p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -11.99 dBm Occ Bw 8.942115768 MHz D1[1] -0.87 dB D2 -12.170 dBm</p> <p>CF 711.0 MHz 501 pts Span 20.0 MHz</p> <p>Date: 10.DEC.2021 14:54:11</p>	<p>10MHz Bandwidth 16QAM</p> <p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -12.50 dBm Occ Bw 8.942115768 MHz D1[1] -0.84 dB D2 -12.650 dBm</p> <p>CF 711.0 MHz 501 pts Span 20.0 MHz</p> <p>Date: 10.DEC.2021 14:54:42</p>

Spurious Emissions at Antenna Terminal

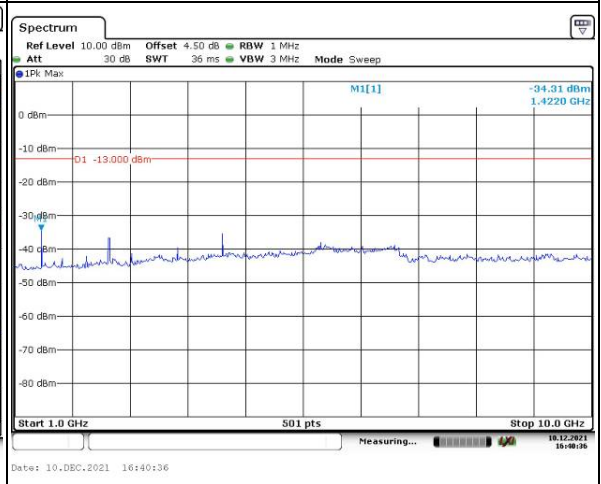
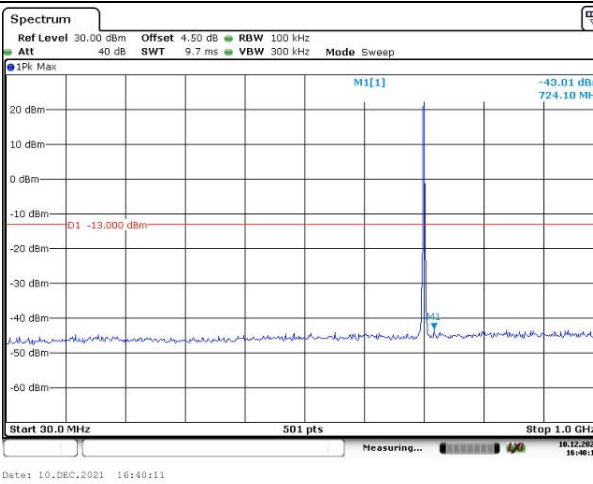
Channel

1.4MHz Bandwidth QPSK

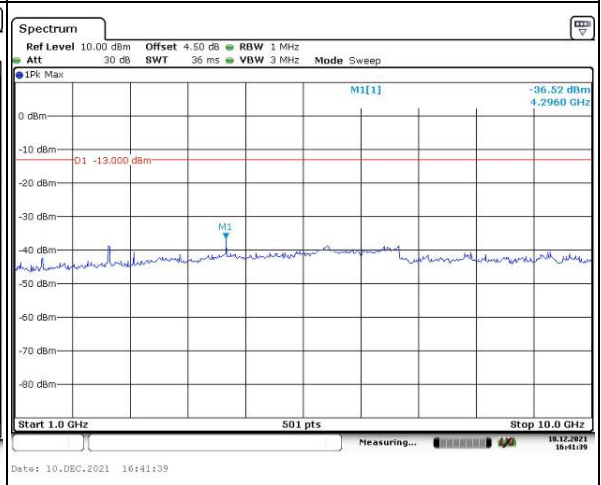
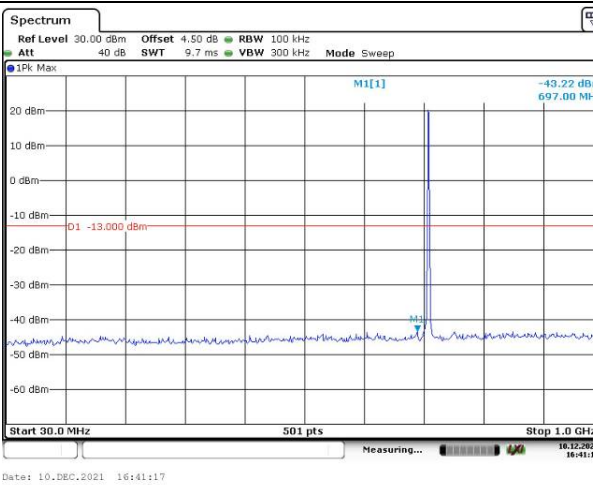
Lowest



Middle



Highest

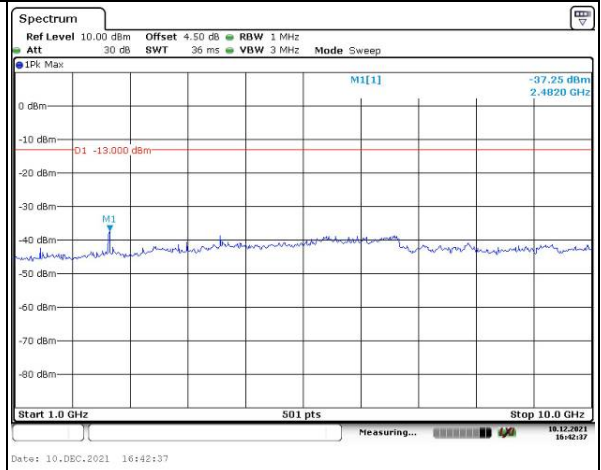
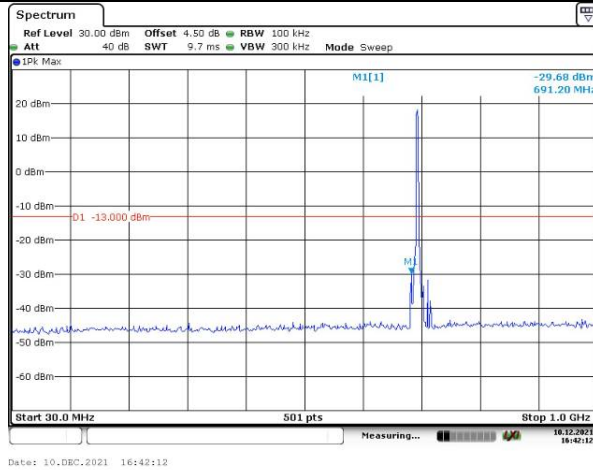


Spurious Emissions at Antenna Terminal

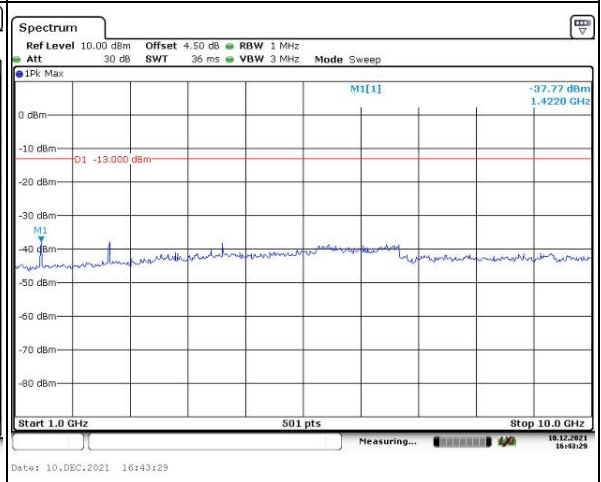
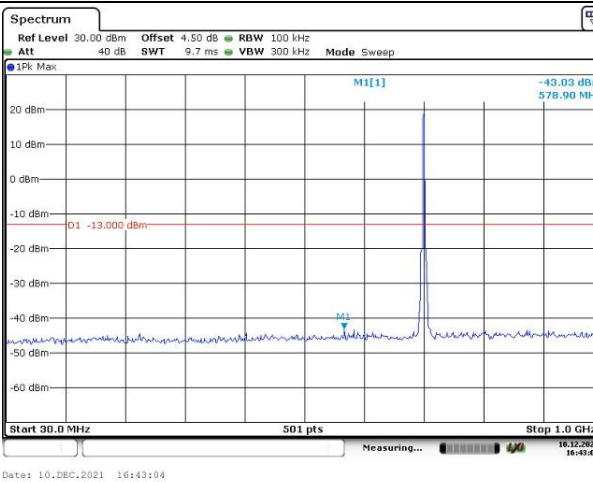
Channel

3MHz Bandwidth QPSK

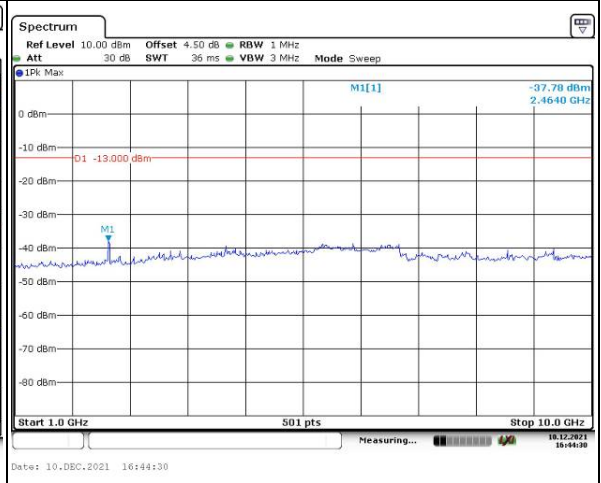
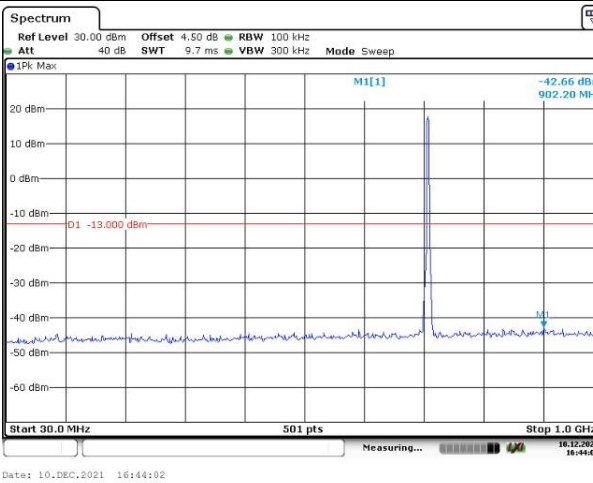
Lowest



Middle



Highest

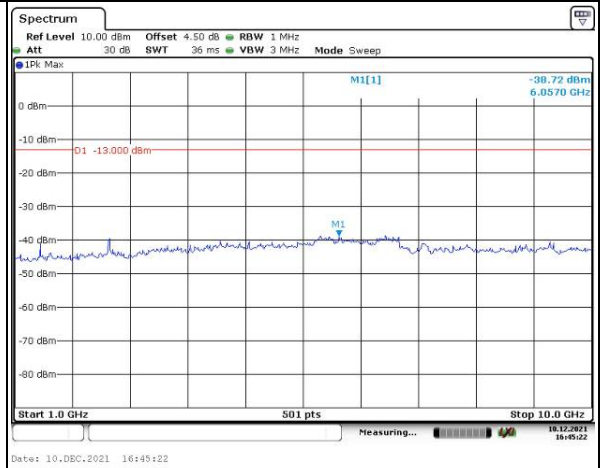
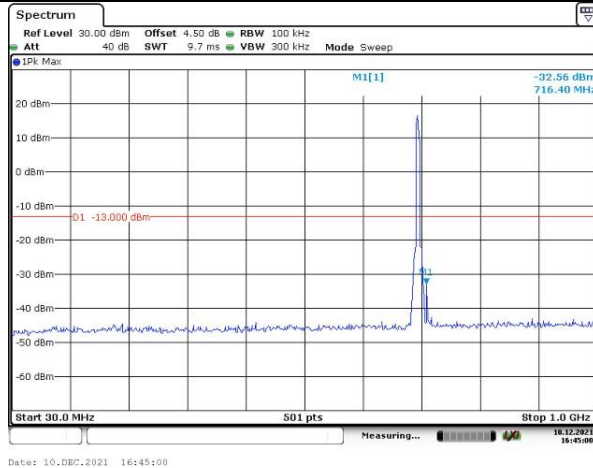


Spurious Emissions at Antenna Terminal

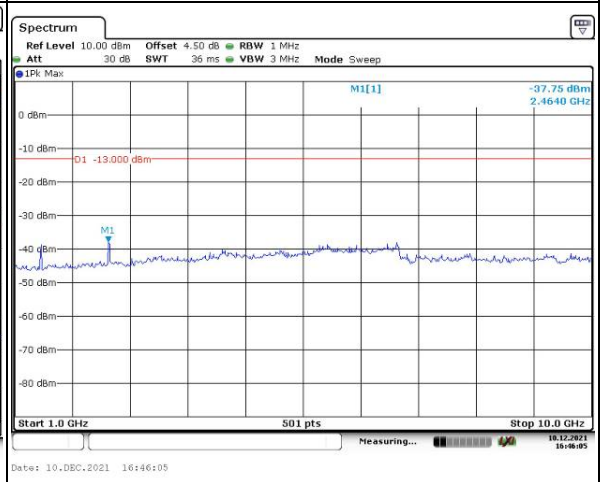
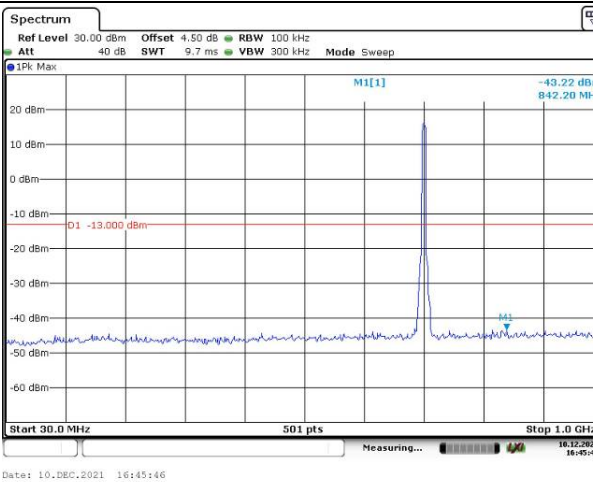
Channel

5MHz Bandwidth QPSK

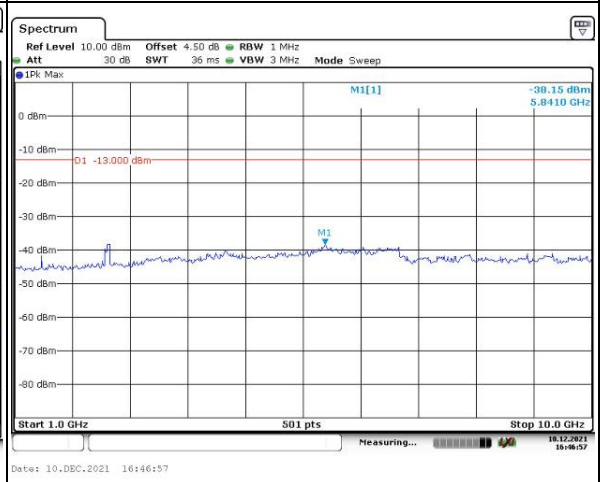
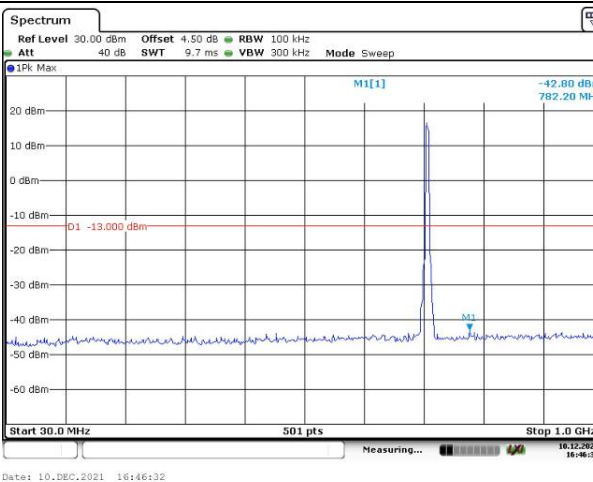
Lowest



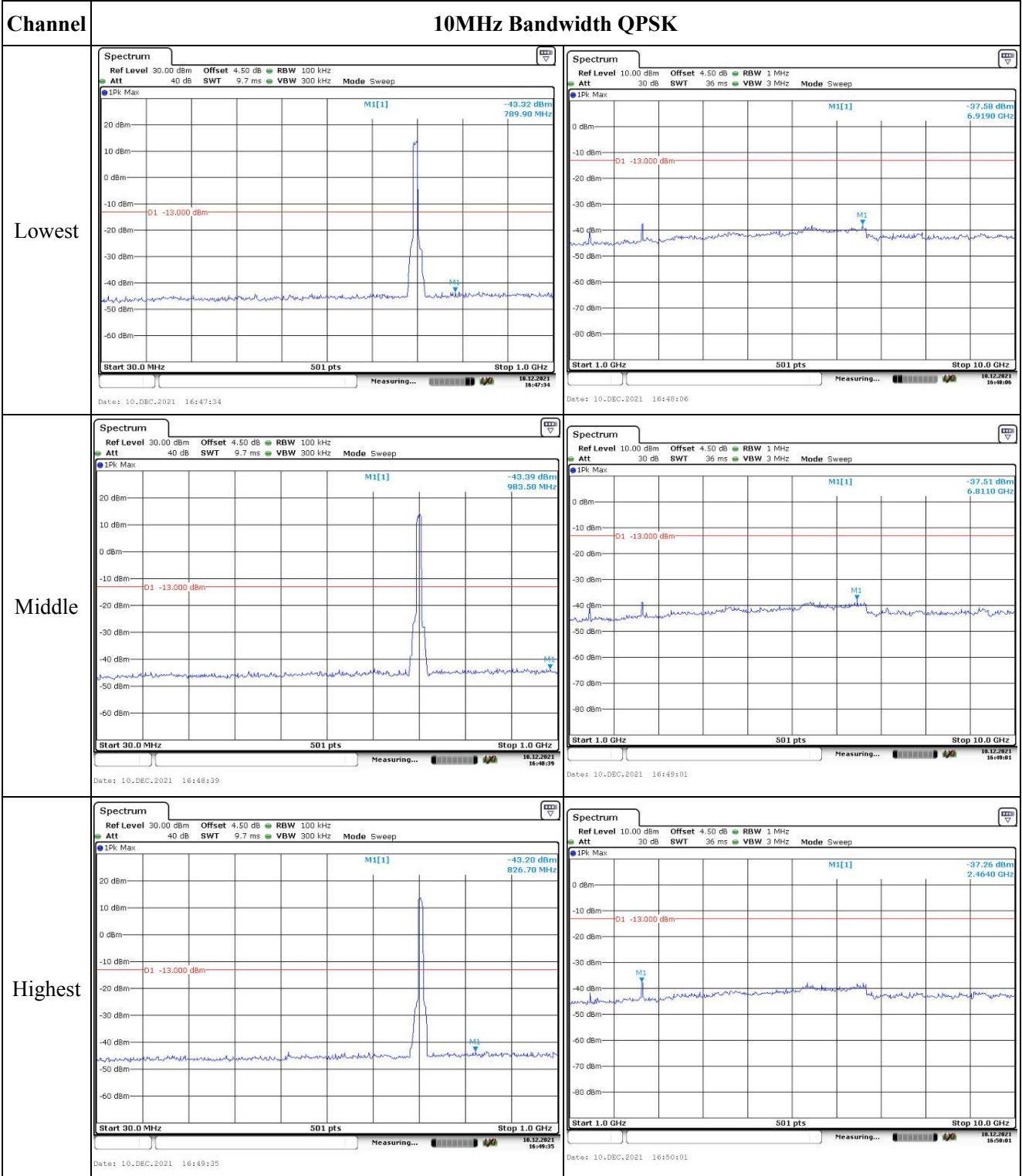
Middle



Highest



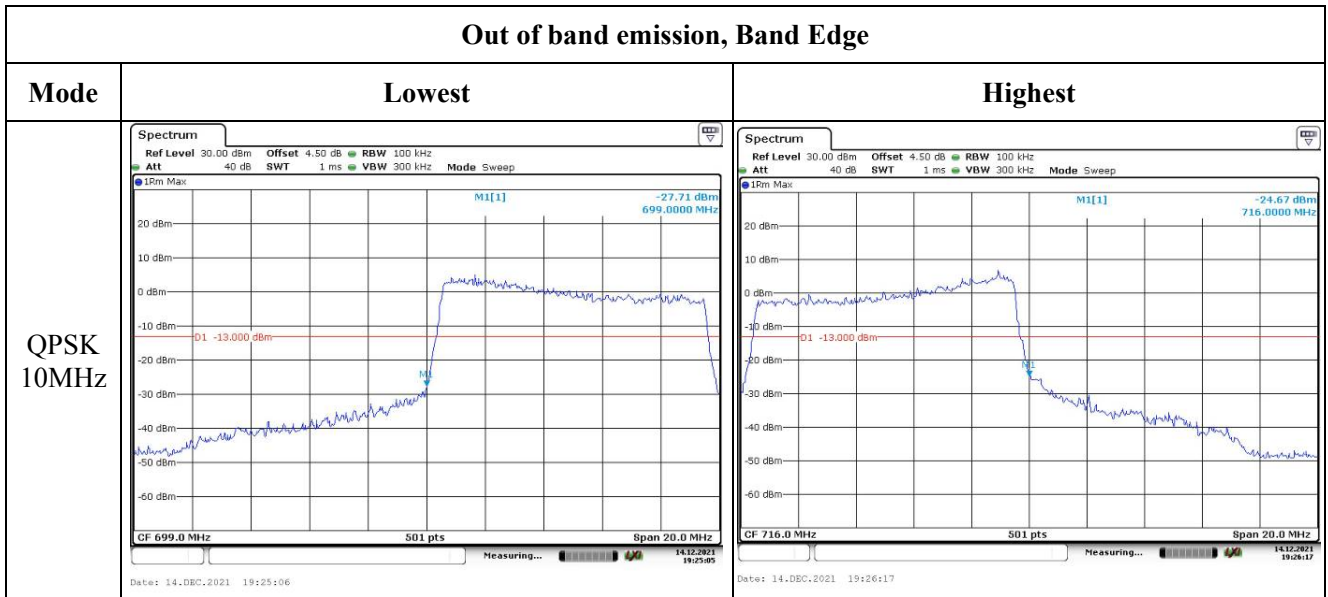
Spurious Emissions at Antenna Terminal



Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep 1Fm Max MI[1] -23.45 dBm 698.75450 MHz D1 -13.000 dBm CF 699.0 MHz 501 pts Span 3.0 MHz Date: 14.DEC.2021 19:19:50</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep 1Fm Max MI[1] -22.82 dBm 716.05390 MHz D1 -13.000 dBm CF 716.0 MHz 501 pts Span 3.0 MHz Date: 14.DEC.2021 19:20:25</p>
QPSK 3MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep 1Fm Max MI[1] -23.21 dBm 699.00000 MHz D1 -13.000 dBm CF 699.0 MHz 501 pts Span 6.0 MHz Date: 14.DEC.2021 19:21:10</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep 1Fm Max MI[1] -20.27 dBm 716.00000 MHz D1 -13.000 dBm CF 716.0 MHz 501 pts Span 6.0 MHz Date: 14.DEC.2021 19:21:52</p>
QPSK 5MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep 1Fm Max MI[1] -21.97 dBm 699.00000 MHz D1 -13.000 dBm CF 699.0 MHz 501 pts Span 10.0 MHz Date: 14.DEC.2021 19:22:55</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep 1Fm Max MI[1] -19.03 dBm 716.00000 MHz D1 -13.000 dBm CF 716.0 MHz 501 pts Span 10.0 MHz Date: 14.DEC.2021 19:23:52</p>

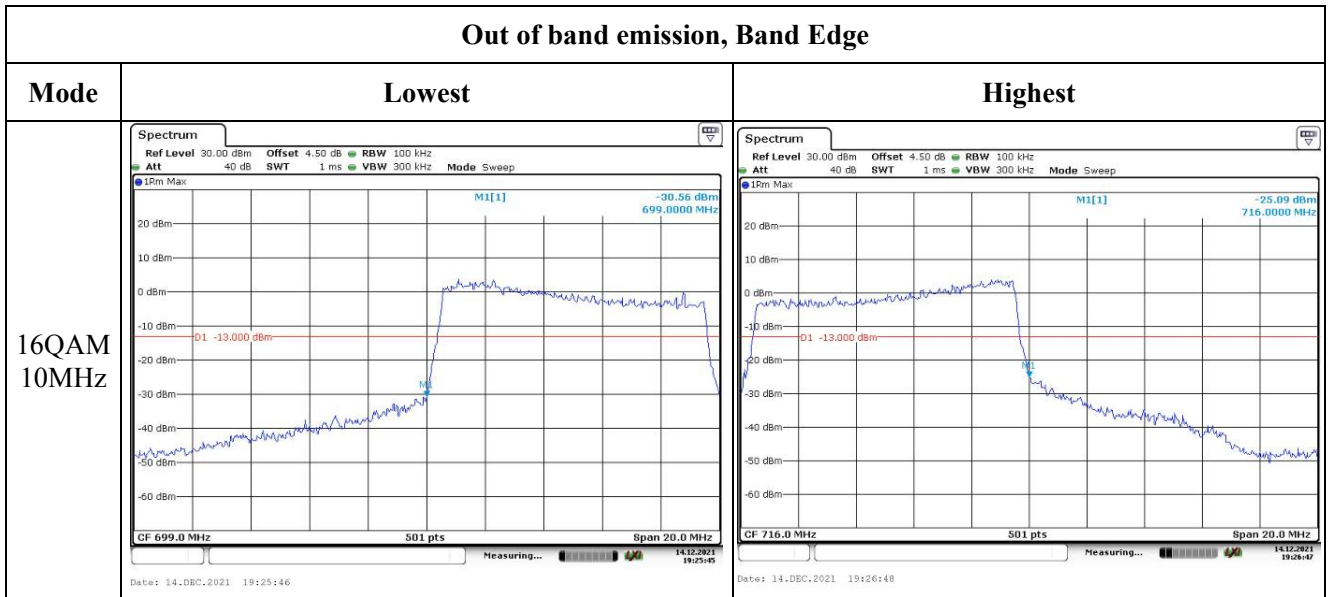
Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz		
16QAM 3MHz		
16QAM 5MHz		

Out of band emission, Band Edge



4.10 Antenna Port Test Data and Results for LTE Band 13

Serial Number:	CR21110023-RF-S1	Test Date:	2021-11-29~2022-03-02
Test Site:	RF	Test Mode:	Transmitting
Tester:	Wolf Mo	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	22.1~25.9	Relative Humidity: (%)	60~66	ATM Pressure: (kPa)	101.2~101.4
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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	2021/7/22	2022/7/21
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Weinschel	Coaxial Attenuators	53-20-34	LN751	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149218	2021/7/22	2022/7/21
BACL	TEMP&HUMI Test Chamber	BTH-150	30026	2021/7/22	2022/7/22
UNI-T	Multimeter	UT39A+	C210582554	2021/9/30	2022/9/30
E-Microwave	Two-way Splitter	ODP-1-6	OE0120176	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).

EUT Information@LTE Band 13▲:

Antenna Gain (dBi):	-0.2	Antenna Gain (dBd):	-2.35	Cable Loss (dB):	0
Operation Voltage(V _{DC}):					
Lowest:	3.5	Normal:	3.7	Highest:	4.2

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	21.09	/	21.00	18.74	34.77
	RB1#13	20.89	/	20.90		
	RB1#24	20.96	/	20.99		
	RB15#0	20.00	/	20.18		
	RB15#10	19.98	/	20.22		
	RB25#0	20.06	/	20.32		
5MHz 16QAM	RB1#0	19.34	/	19.71	17.55	34.77
	RB1#13	19.22	/	19.84		
	RB1#24	19.42	/	19.90		
	RB15#0	19.13	/	19.31		
	RB15#10	18.98	/	19.30		
	RB25#0	19.07	/	19.18		
10MHz QPSK	RB1#0	/	21.10	/	18.75	34.77
	RB1#25	/	21.06	/		
	RB1#49	/	21.05	/		
	RB25#0	/	20.01	/		
	RB25#25	/	20.28	/		
	RB50#0	/	20.08	/		
10MHz 16QAM	RB1#0	/	20.17	/	18.01	34.77
	RB1#25	/	20.16	/		
	RB1#49	/	20.36	/		
	RB25#0	/	19.06	/		
	RB25#25	/	19.34	/		
	RB50#0	/	19.16	/		

Note: ERP=Conducted Power(dBm) - Cable loss(dB) + Antenna Gain(dBd)

Result:**Pass**

Peak-to-average Ratio(PAR)					
Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
10MHz QPSK	RB1#0	/	5.07	/	13
	RB50#0	/	5.42	/	13
10MHz 16QAM	RB1#0	/	5.94	/	13
	RB50#0	/	6.29	/	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	4.511	/	4.511	4.960	/	5.000
5MHz 16QAM	4.511	/	4.551	4.960	/	5.020
10MHz QPSK	/	8.942	/	/	9.760	/
10MHz 16QAM	/	8.942	/	/	9.760	/
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.

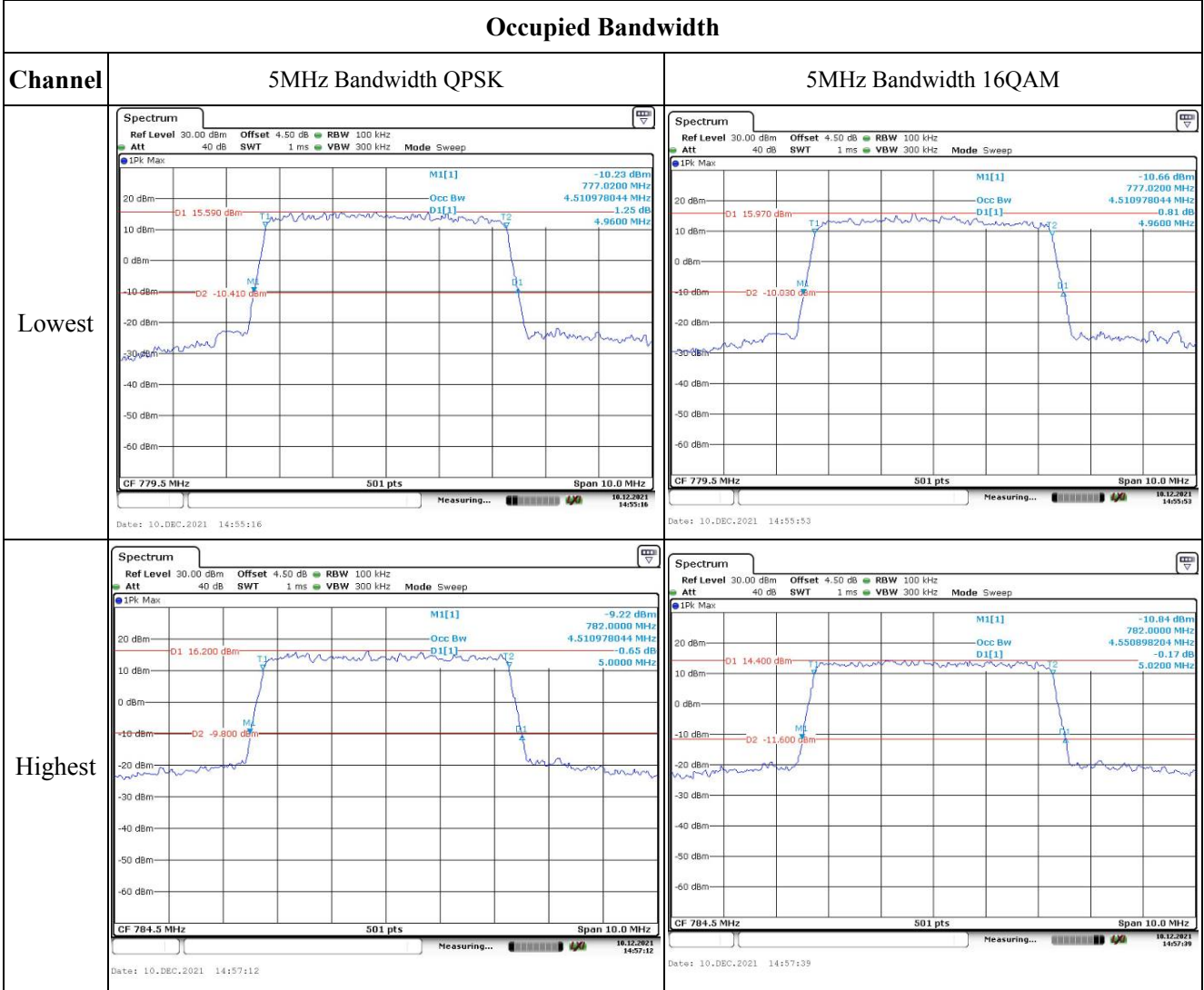
FCC §2.1051, §27.53:Out of band emission, Band Edge	
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.

FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	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	3.7	777.529	777.00	786.471	787.00
	-20	3.7	777.524	777.00	786.470	787.00
	-10	3.7	777.529	777.00	786.471	787.00
	0	3.7	777.527	777.00	786.473	787.00
	10	3.7	777.526	777.00	786.474	787.00
	20	3.7	777.529	777.00	786.471	787.00
	30	3.7	777.524	777.00	786.471	787.00
	40	3.7	777.529	777.00	786.474	787.00
	50	3.7	777.522	777.00	786.473	787.00
Frequency Stability vs. Voltage	20	3.5	777.529	777.00	786.471	787.00
	20	4.2	777.524	777.00	786.470	787.00
					Result:	Pass

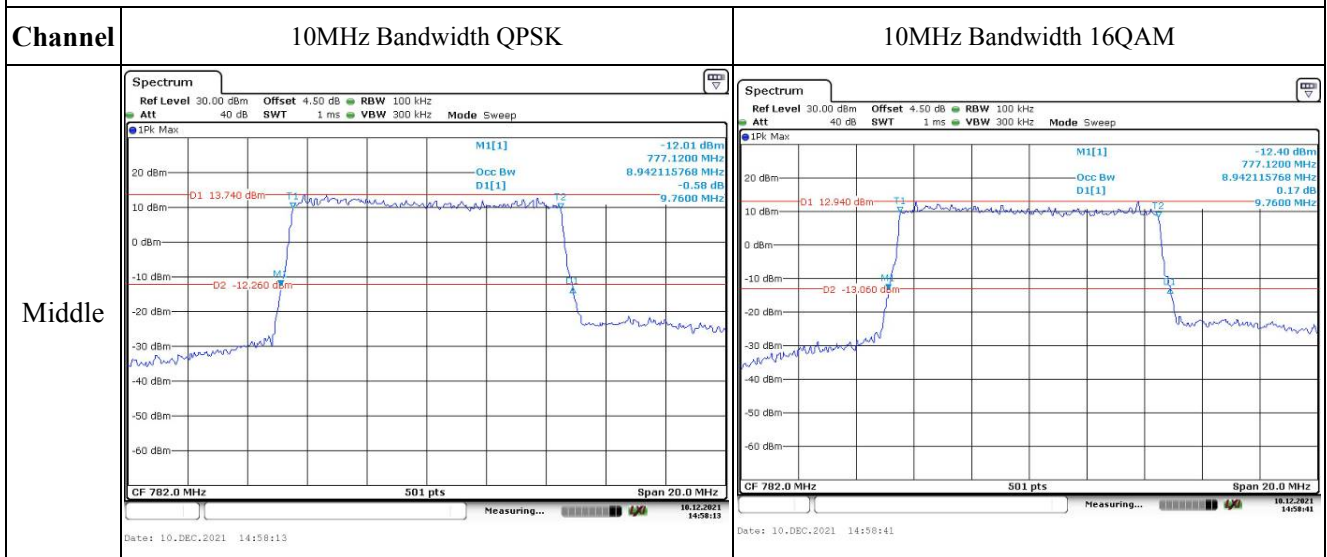
Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.7	777.529	777.00	786.471	787.00
	-20	3.7	777.524	777.00	786.470	787.00
	-10	3.7	777.529	777.00	786.471	787.00
	0	3.7	777.527	777.00	786.473	787.00
	10	3.7	777.526	777.00	786.471	787.00
	20	3.7	777.529	777.00	786.471	787.00
	30	3.7	777.524	777.00	786.471	787.00
	40	3.7	777.529	777.00	786.474	787.00
	50	3.7	777.521	777.00	786.473	787.00
Frequency Stability vs. Voltage	20	3.5	777.529	777.00	786.471	787.00
	20	4.2	777.524	777.00	786.470	787.00
					Result:	Pass

Test Plots:

Occupied Bandwidth



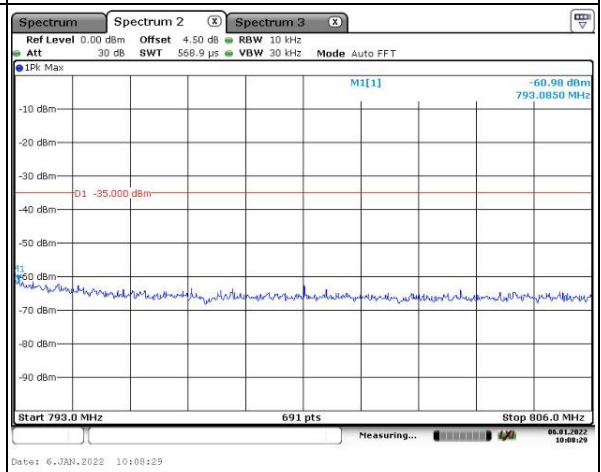
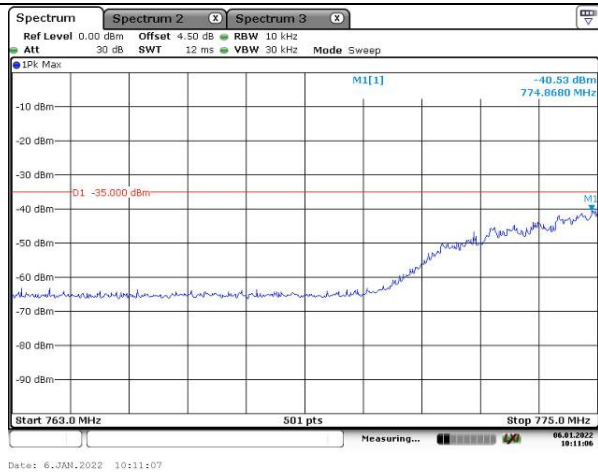
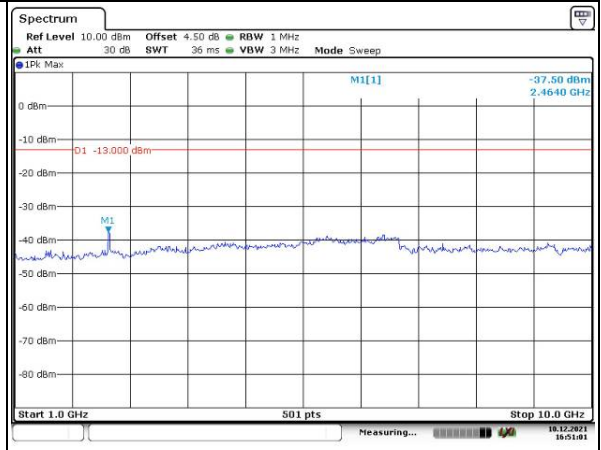
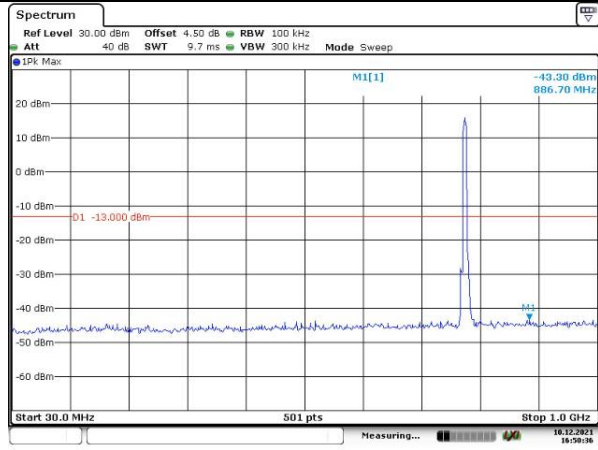
Occupied Bandwidth



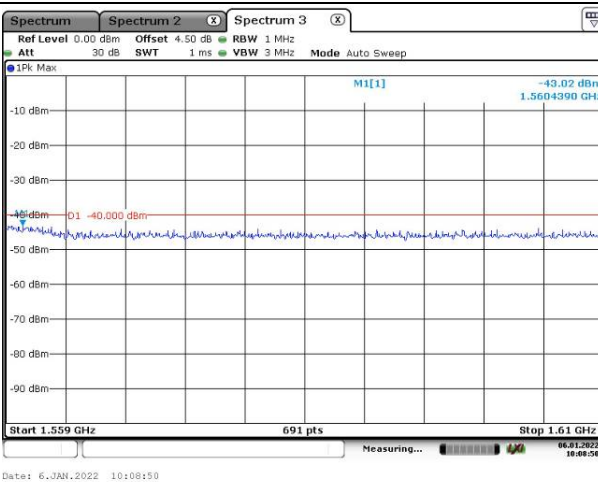
Spurious Emissions at Antenna Terminal

Channel

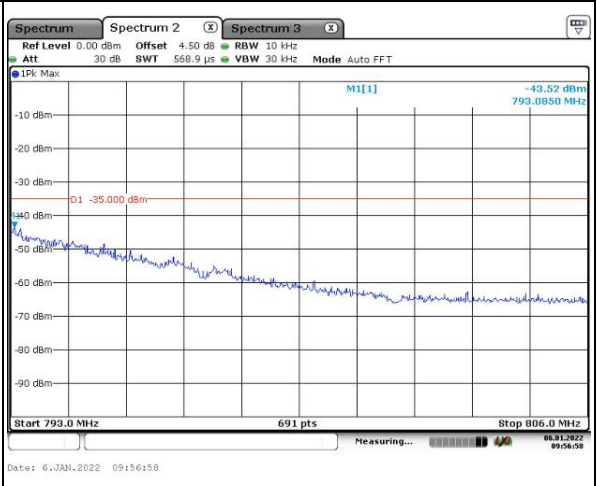
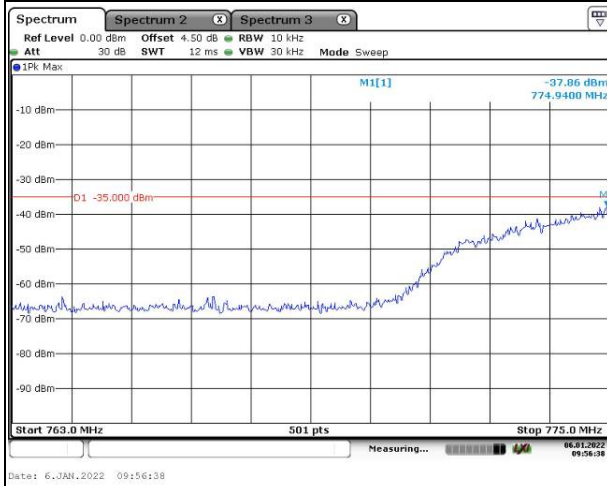
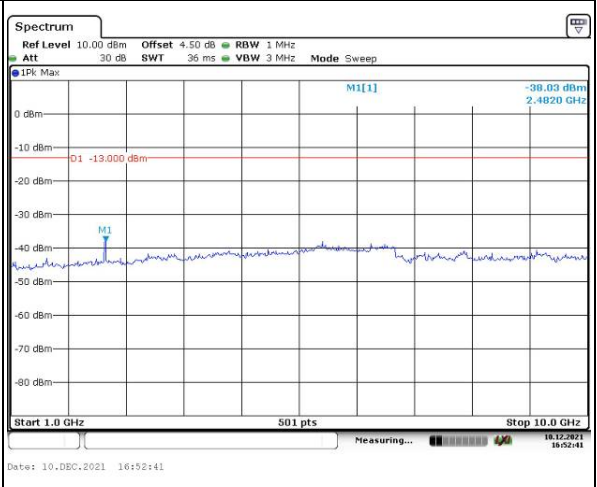
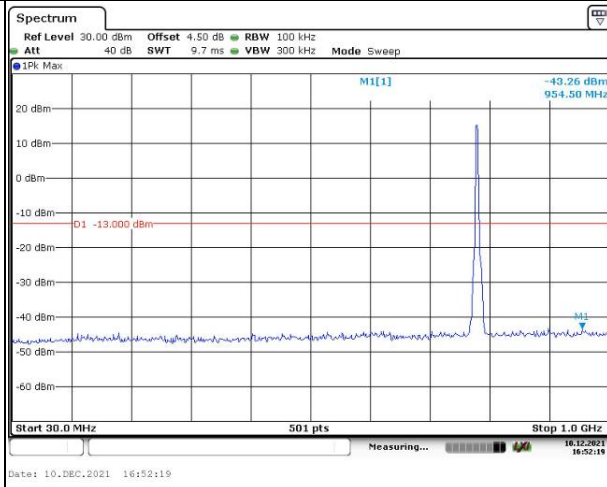
5MHz Bandwidth QPSK



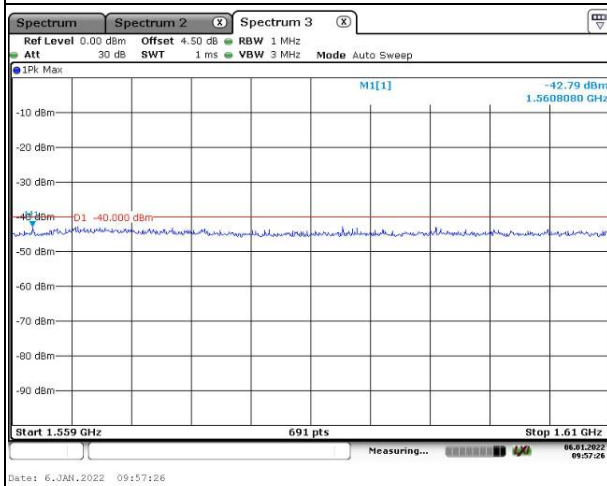
Lowest



Spurious Emissions at Antenna Terminal



Highest



Spurious Emissions at Antenna Terminal

