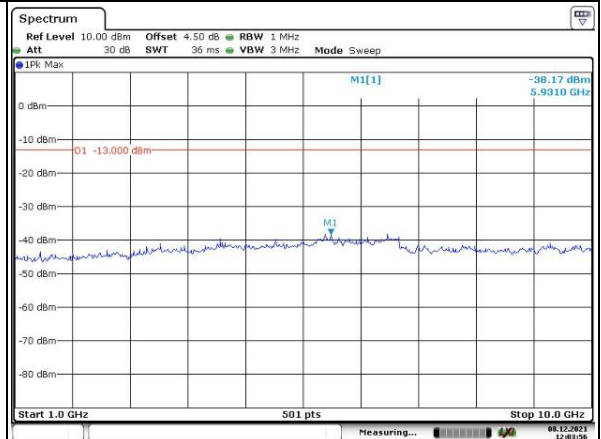
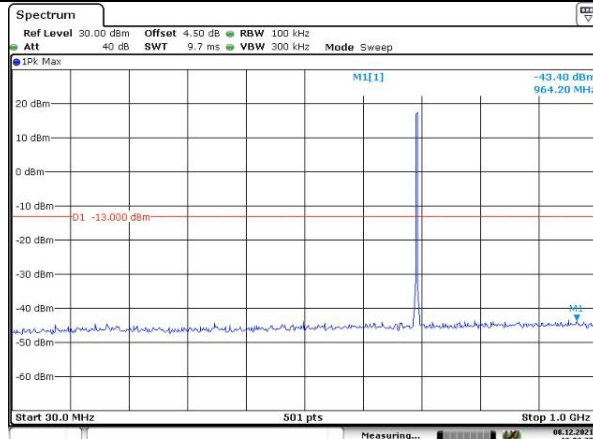


Spurious Emissions at Antenna Terminal

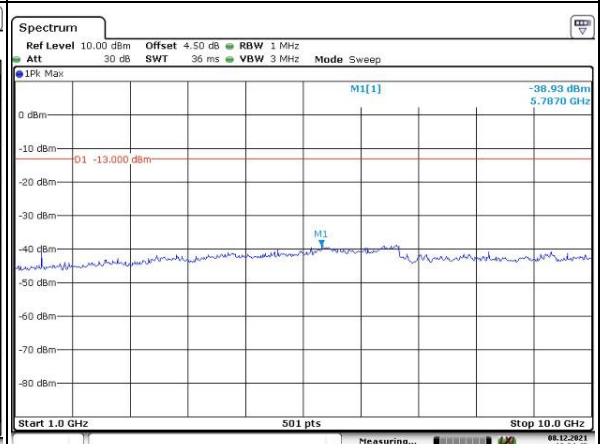
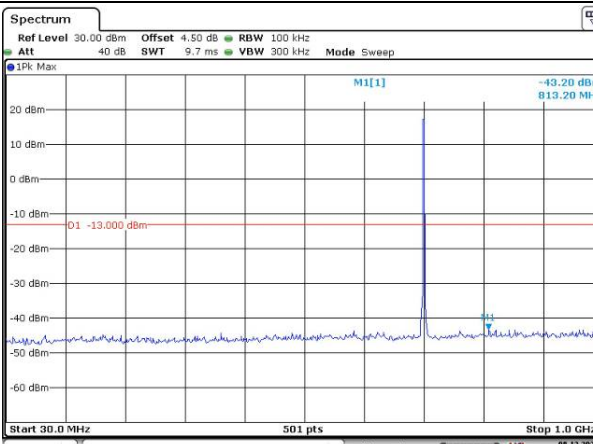
Channel

1.4MHz Bandwidth QPSK

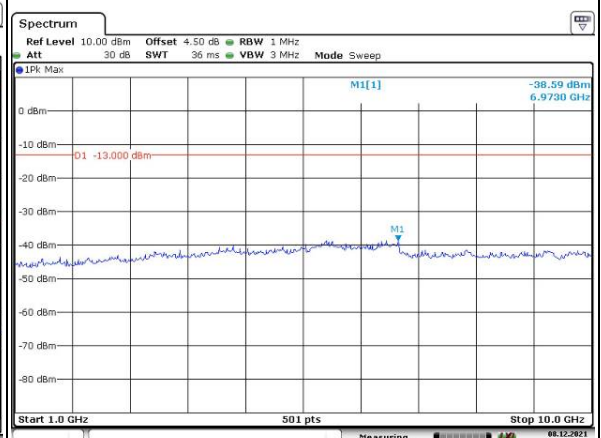
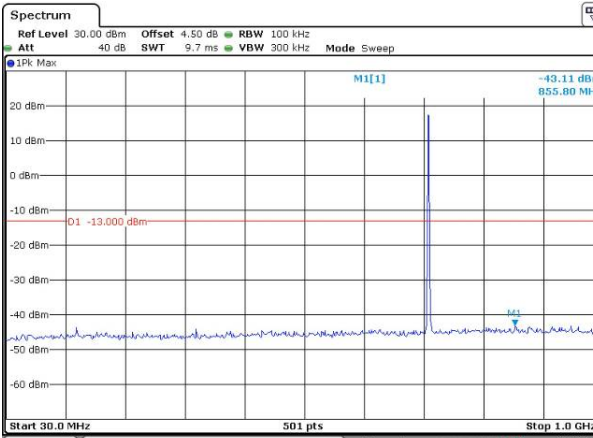
Lowest



Middle



Highest

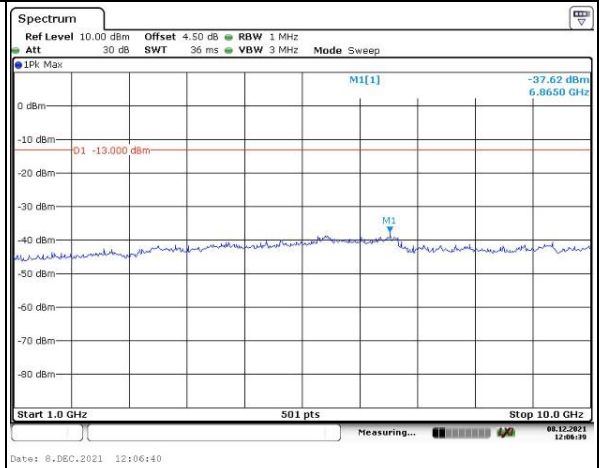
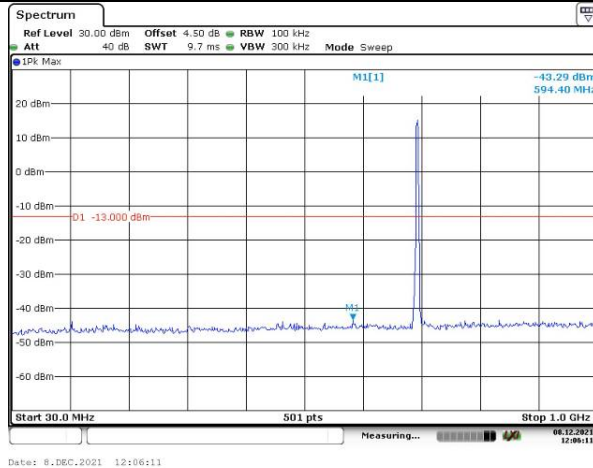


Spurious Emissions at Antenna Terminal

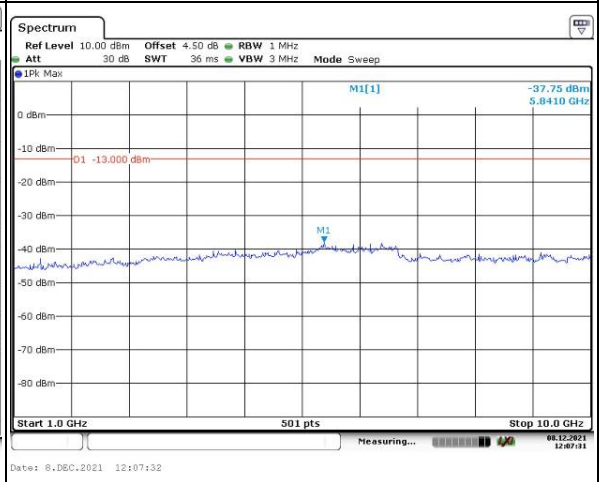
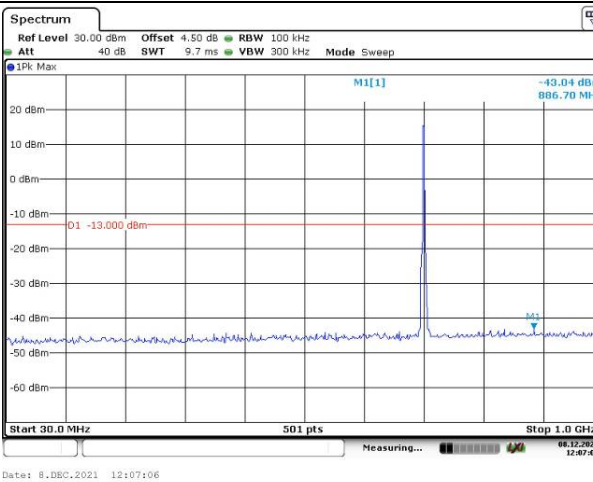
Channel

3MHz Bandwidth QPSK

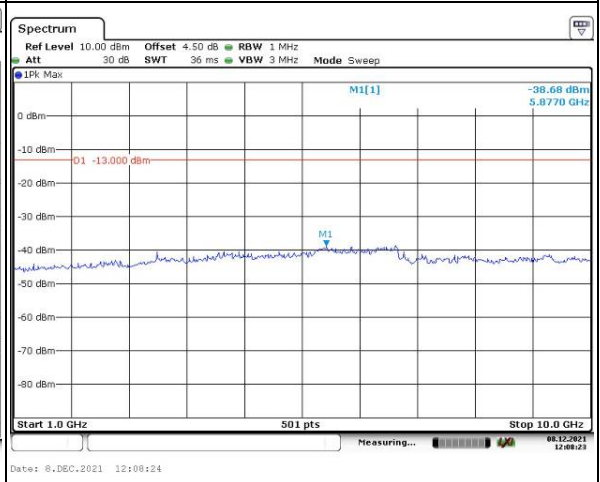
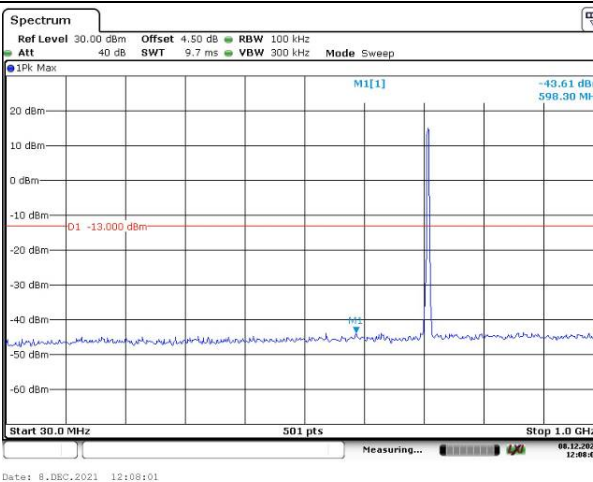
Lowest



Middle



Highest

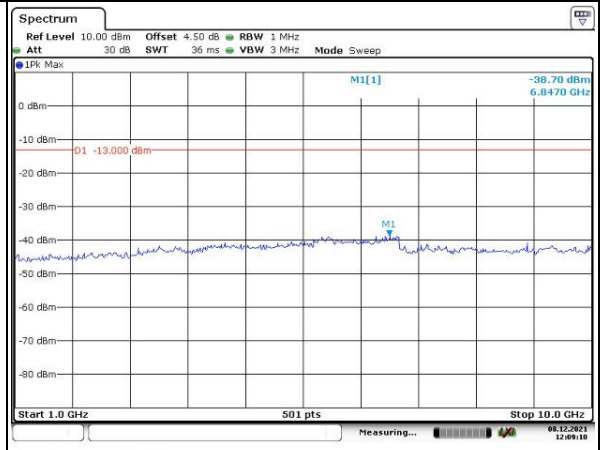
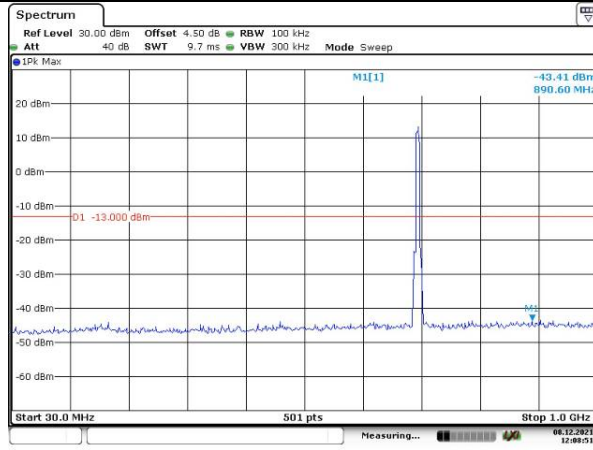


Spurious Emissions at Antenna Terminal

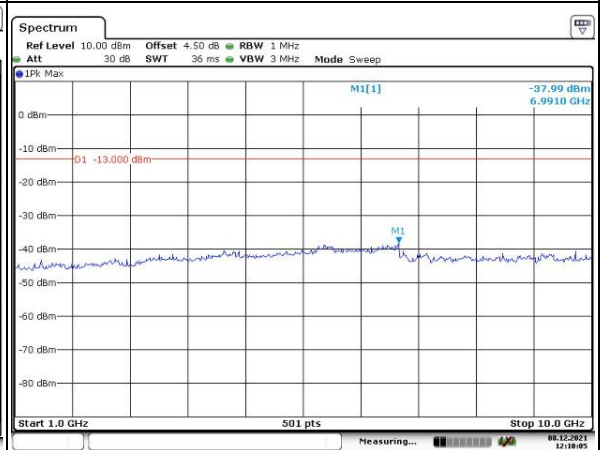
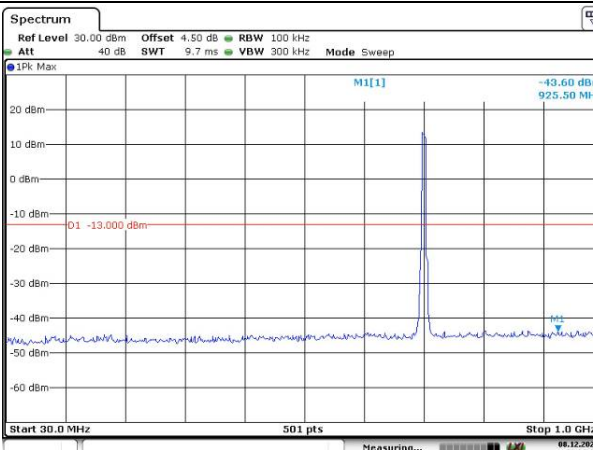
Channel

5MHz Bandwidth QPSK

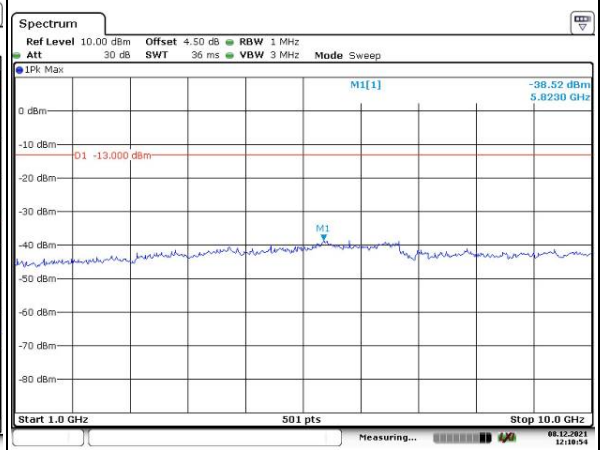
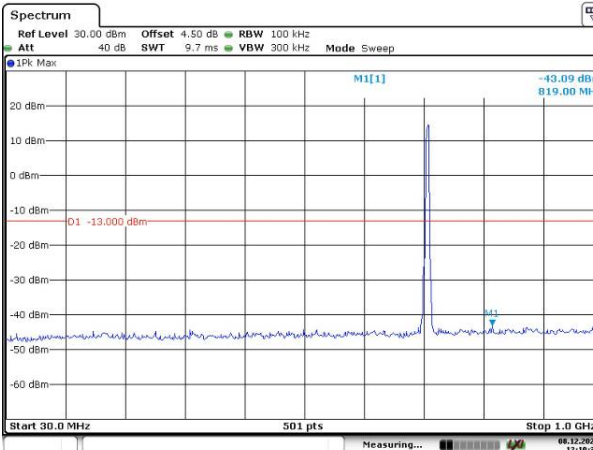
Lowest



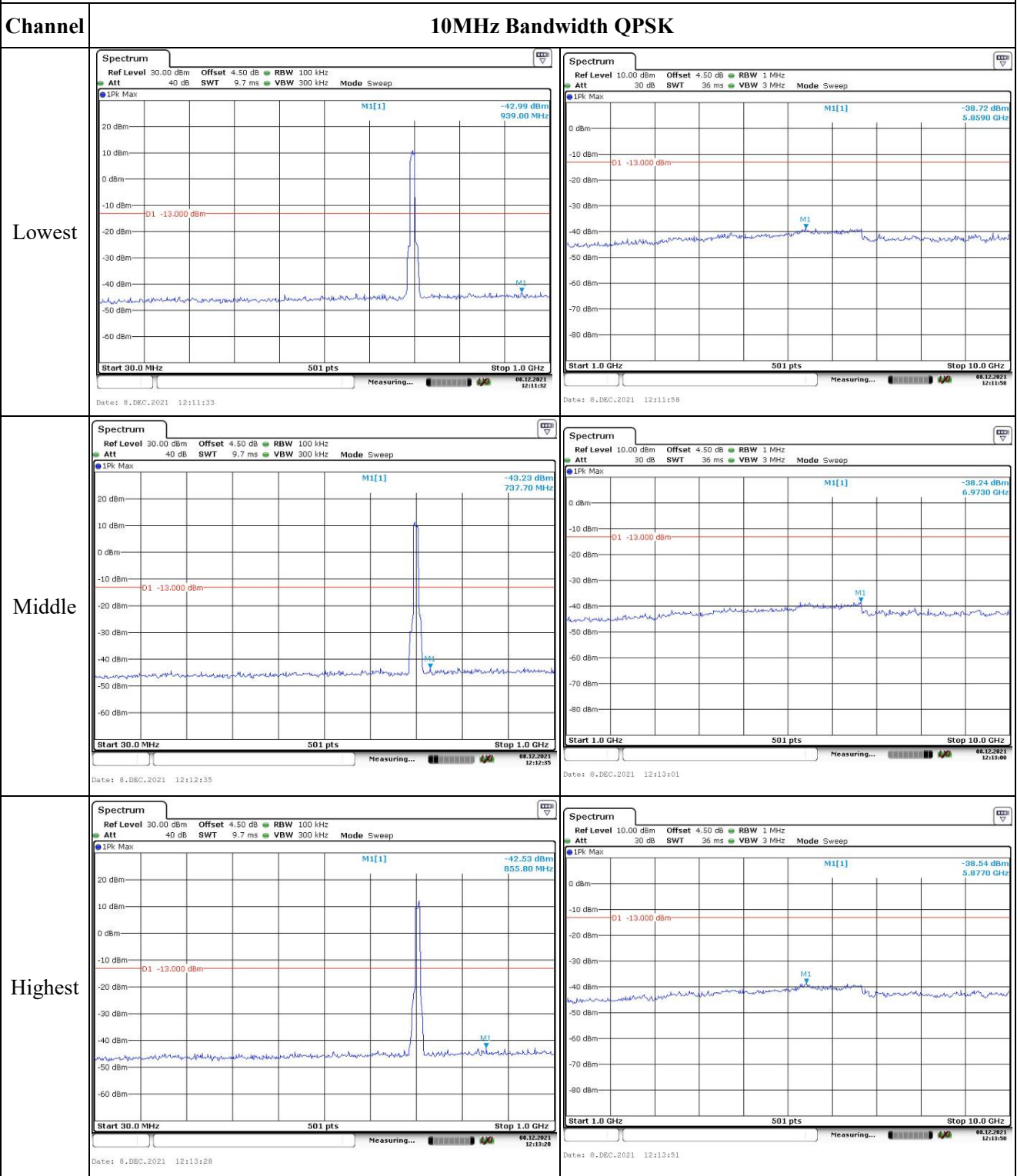
Middle



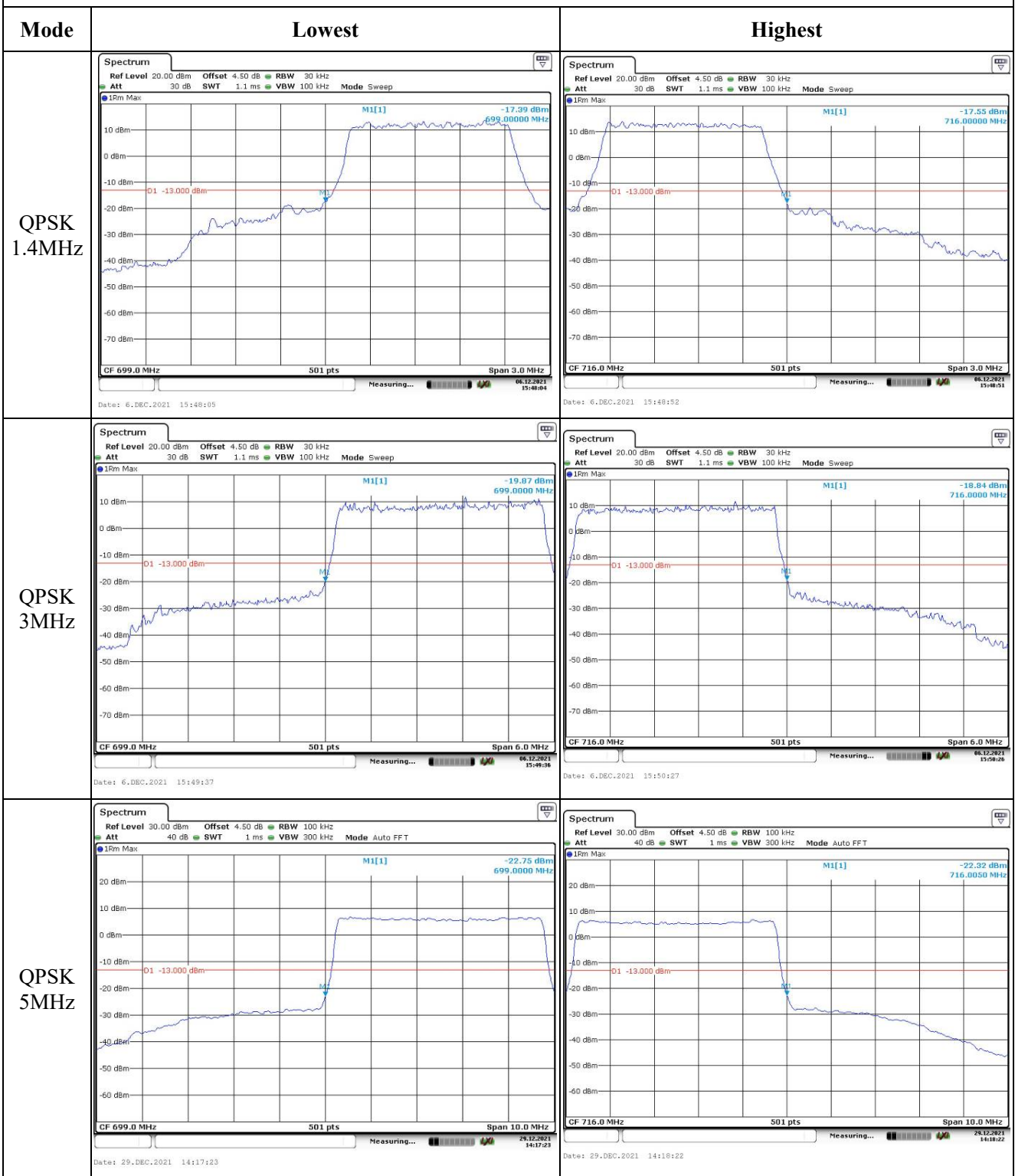
Highest



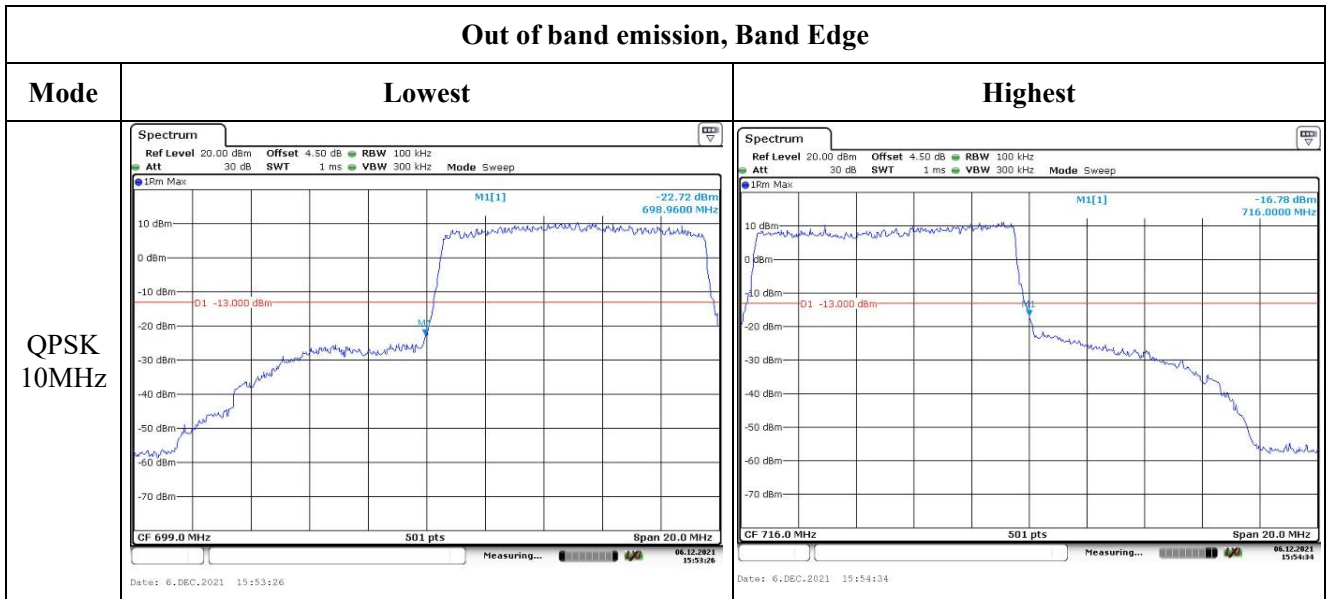
Spurious Emissions at Antenna Terminal



Out of band emission, Band Edge



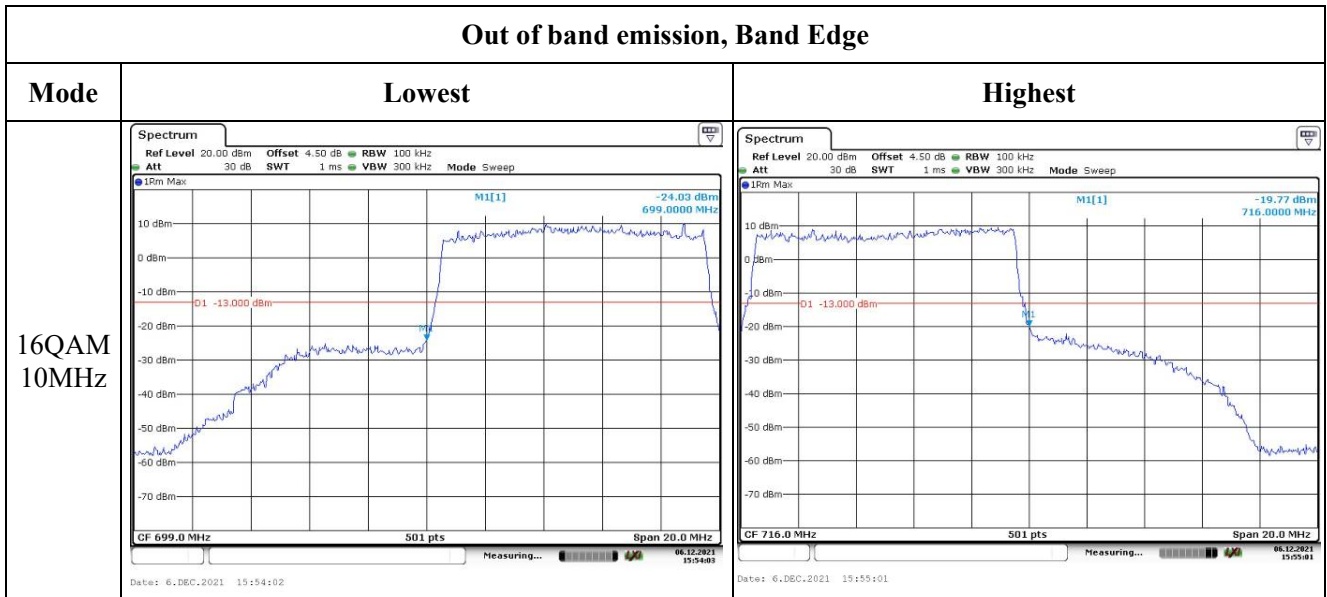
Out of band emission, Band Edge



Out of band emission, Band Edge

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

Out of band emission, Band Edge



4.11 Antenna Port Test Data and Results for LTE Band 13:

Serial Number:	CR21110036-RF-S1	Test Date:	2021/12/06~2021/12/29
Test Site:	RF	Test Mode:	Transmitting
Tester:	LE Qiao	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	18.4~21.3	Relative Humidity: (%)	32~48	ATM Pressure: (kPa)	101.6~101.8
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	Spectrum Analyzer	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):	3	Antenna Gain (dBd):	0.85	Cable Loss (dB):	0
Operation Voltage(V _{DC}):					
Lowest:	3.5	Normal:	3.85	Highest:	4.4

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	23.41	/	23.21	24.44	34.77
	RB1#13	23.05	/	23.42		
	RB1#24	23.13	/	23.59		
	RB15#0	22.51	/	22.27		
	RB15#10	22.28	/	22.53		
	RB25#0	22.50	/	22.38		
5MHz 16QAM	RB1#0	22.38	/	22.31	23.46	34.77
	RB1#13	21.46	/	21.81		
	RB1#24	21.43	/	22.44		
	RB15#0	21.69	/	21.04		
	RB15#10	21.13	/	21.42		
	RB25#0	21.72	/	21.14		
10MHz QPSK	RB1#0	/	21.25	/	24.34	34.77
	RB1#25	/	23.19	/		
	RB1#49	/	23.49	/		
	RB25#0	/	22.55	/		
	RB25#25	/	22.25	/		
	RB50#0	/	22.46	/		
10MHz 16QAM	RB1#0	/	22.74	/	23.59	34.77
	RB1#25	/	22.45	/		
	RB1#49	/	22.66	/		
	RB25#0	/	21.56	/		
	RB25#25	/	21.10	/		
	RB50#0	/	21.34	/		
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	/	3.33	/	13
	RB50#0	/	5.28	/	13
10MHz 16QAM	RB1#0	/	4.41	/	13
	RB50#0	/	6.17	/	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	/	4.55	4.94	/	5.04
5MHz 16QAM	4.511	/	4.531	5	/	5.04
10MHz QPSK	/	8.982	/	/	9.76	/
10MHz 16QAM	/	8.98	/	/	9.72	/
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.

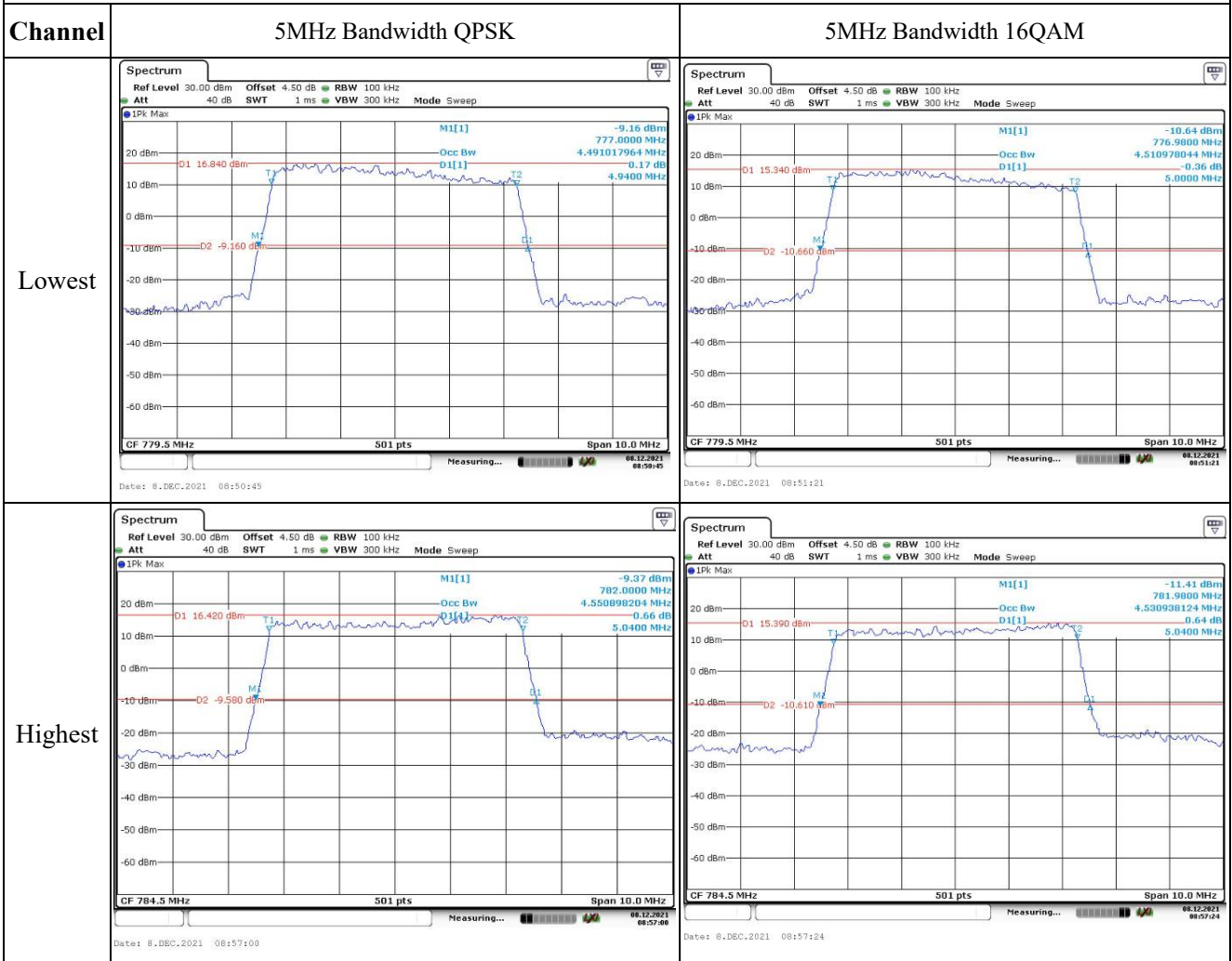
FCC §2.1051, §27.53:Out of band emission, Band Edge	
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.

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	3.85	777.482	777.00	786.471	787.00
	-20	3.85	777.483	777.00	786.472	787.00
	-10	3.85	777.484	777.00	786.473	787.00
	0	3.85	777.486	777.00	786.474	787.00
	10	3.85	777.480	777.00	786.475	787.00
	20	3.85	777.489	777.00	786.471	787.00
	30	3.85	777.484	777.00	786.477	787.00
	40	3.85	777.485	777.00	786.478	787.00
	50	3.85	777.487	777.00	786.479	787.00
Frequency Stability vs. Voltage	20	3.5	777.481	777.00	786.471	787.00
	20	4.4	777.489	777.00	786.470	787.00
					Result:	Pass

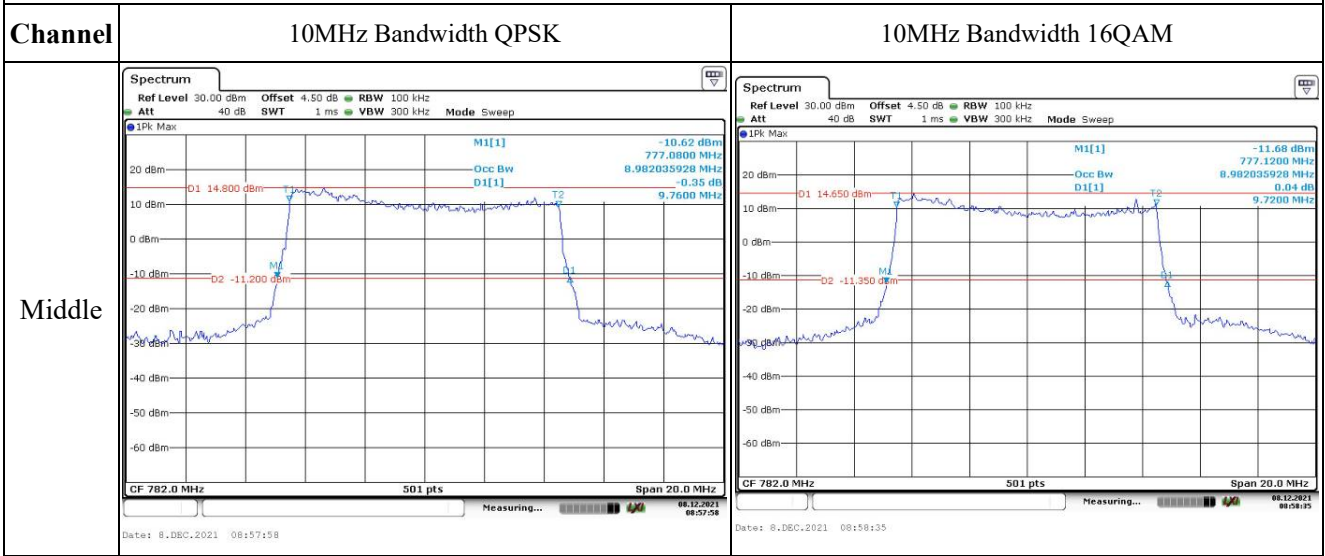
FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	777.487	777.00	786.511	787.00
	-20	3.85	777.488	777.00	786.512	787.00
	-10	3.85	777.485	777.00	786.513	787.00
	0	3.85	777.483	777.00	786.517	787.00
	10	3.85	777.487	777.00	786.513	787.00
	20	3.85	777.489	777.00	786.511	787.00
	30	3.85	777.482	777.00	786.517	787.00
	40	3.85	777.485	777.00	786.518	787.00
	50	3.85	777.486	777.00	786.513	787.00
Frequency Stability vs. Voltage	20	3.5	777.487	777.00	786.512	787.00
	20	4.4	777.489	777.00	786.511	787.00
					Result:	Pass

Test Plots:

Occupied Bandwidth



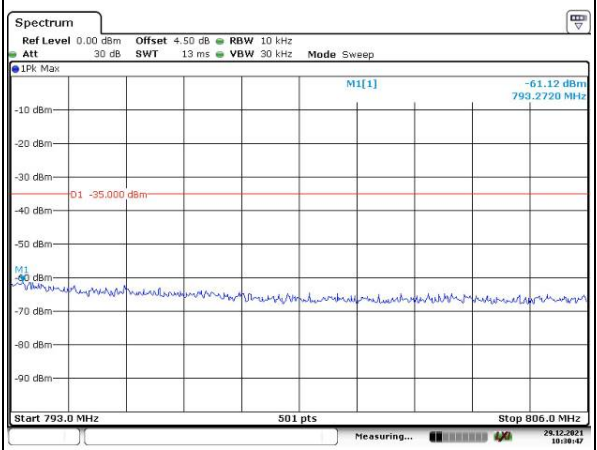
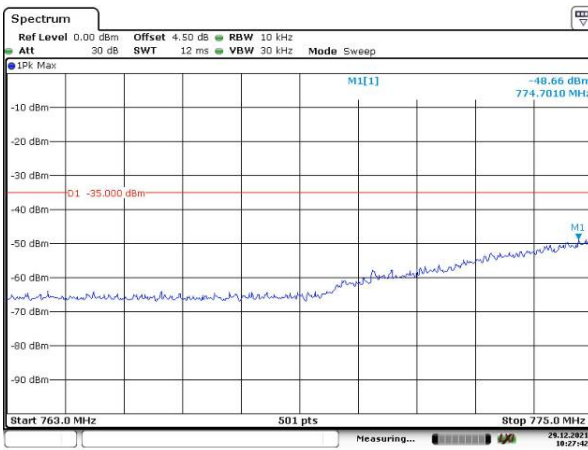
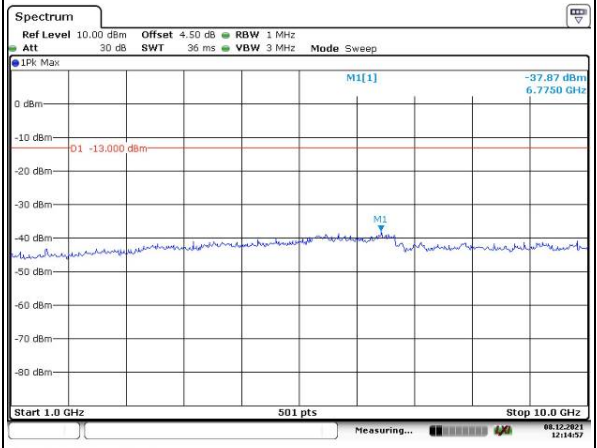
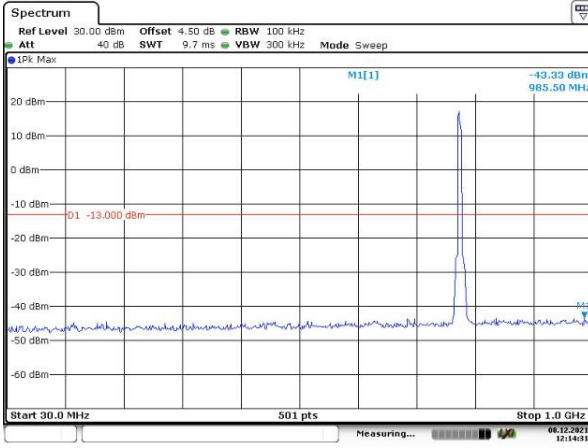
Occupied Bandwidth



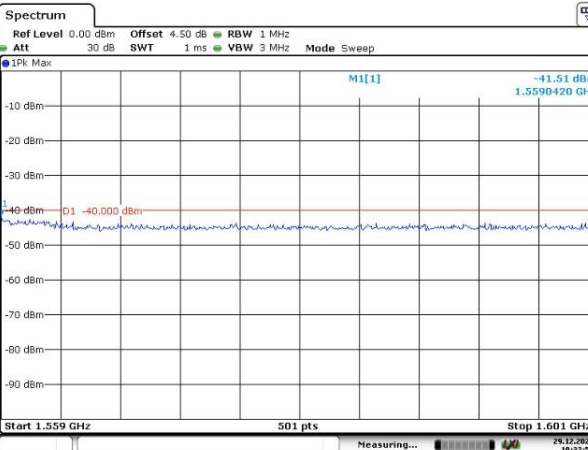
Spurious Emissions at Antenna Terminal

Channel

5MHz Bandwidth QPSK



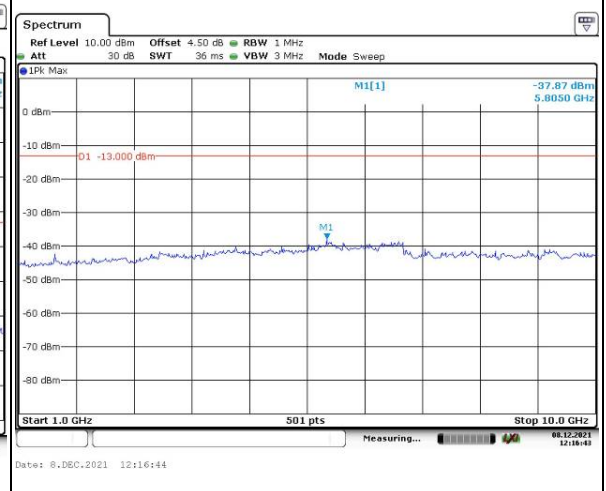
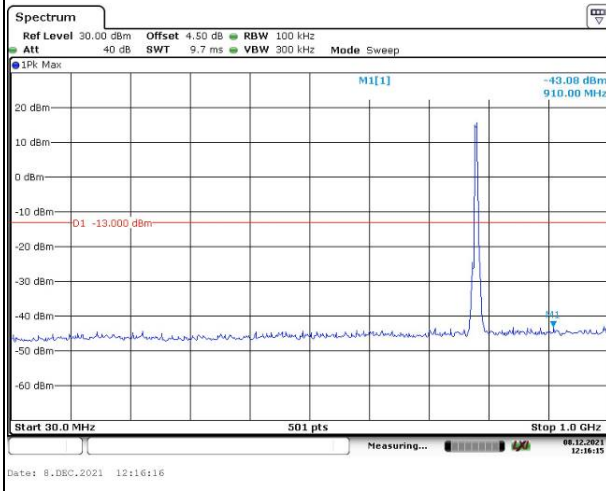
Lowest



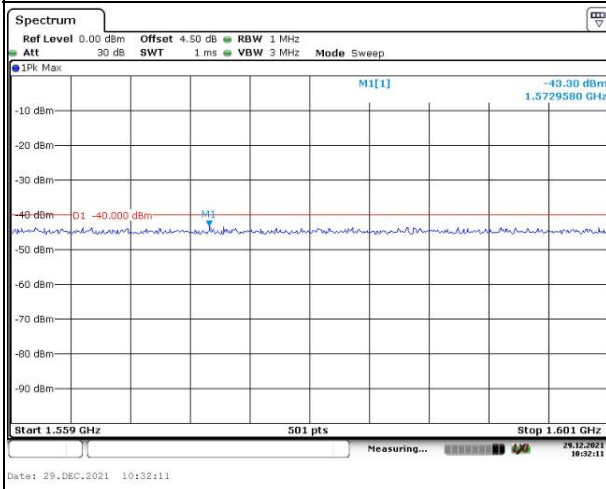
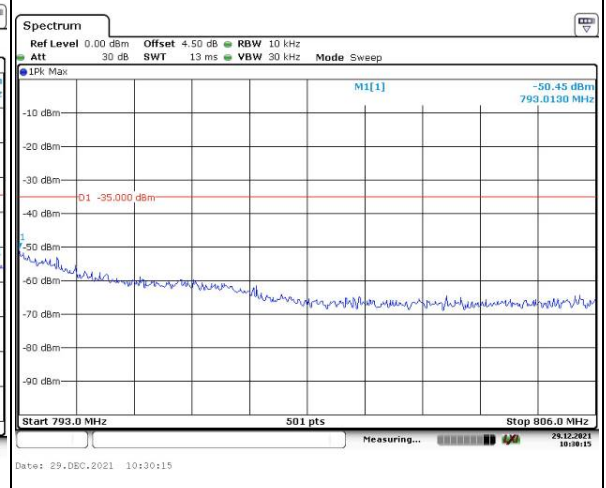
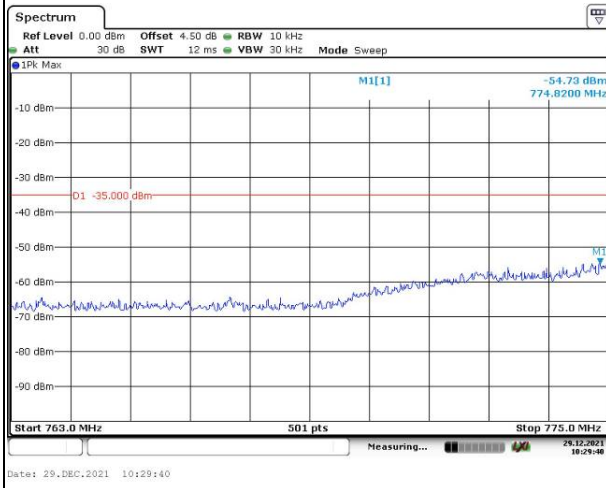
Spurious Emissions at Antenna Terminal

Channel

5MHz Bandwidth QPSK



Highest

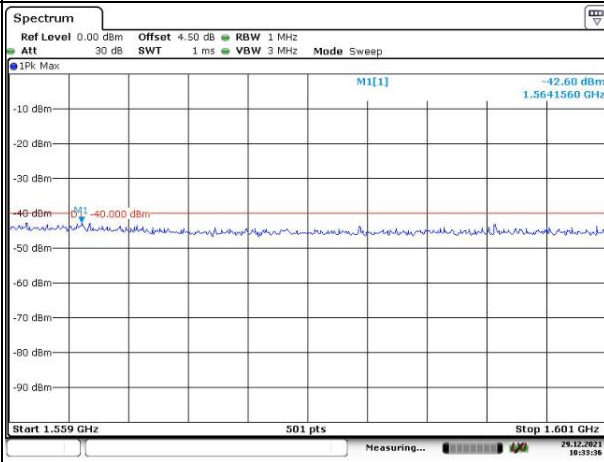
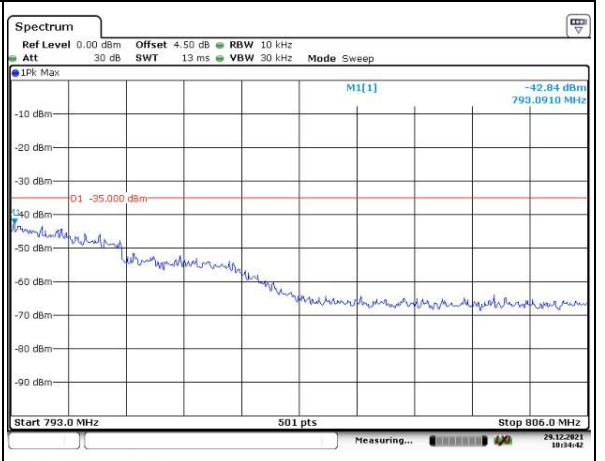
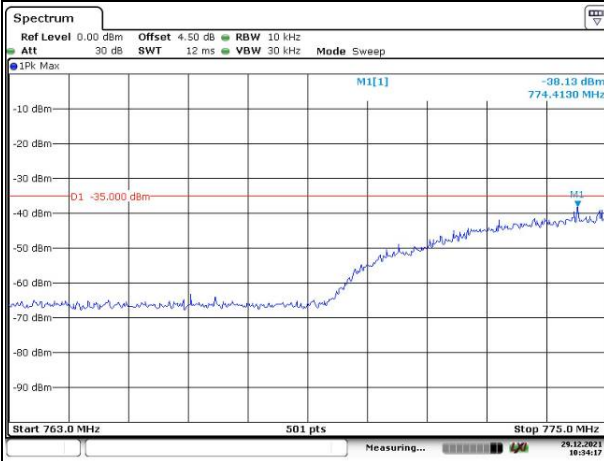
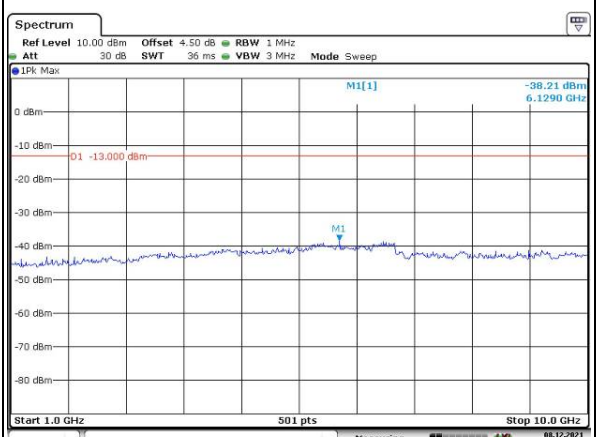
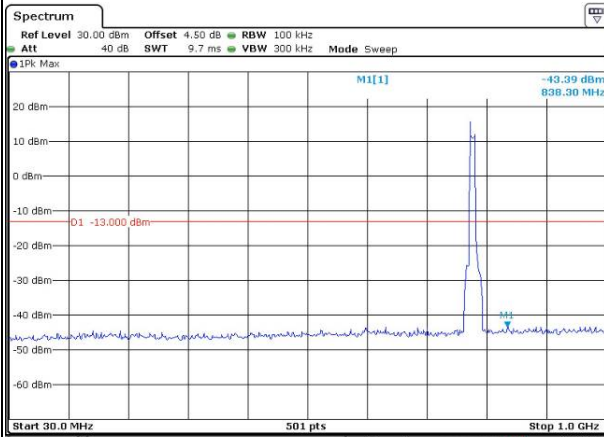


Spurious Emissions at Antenna Terminal

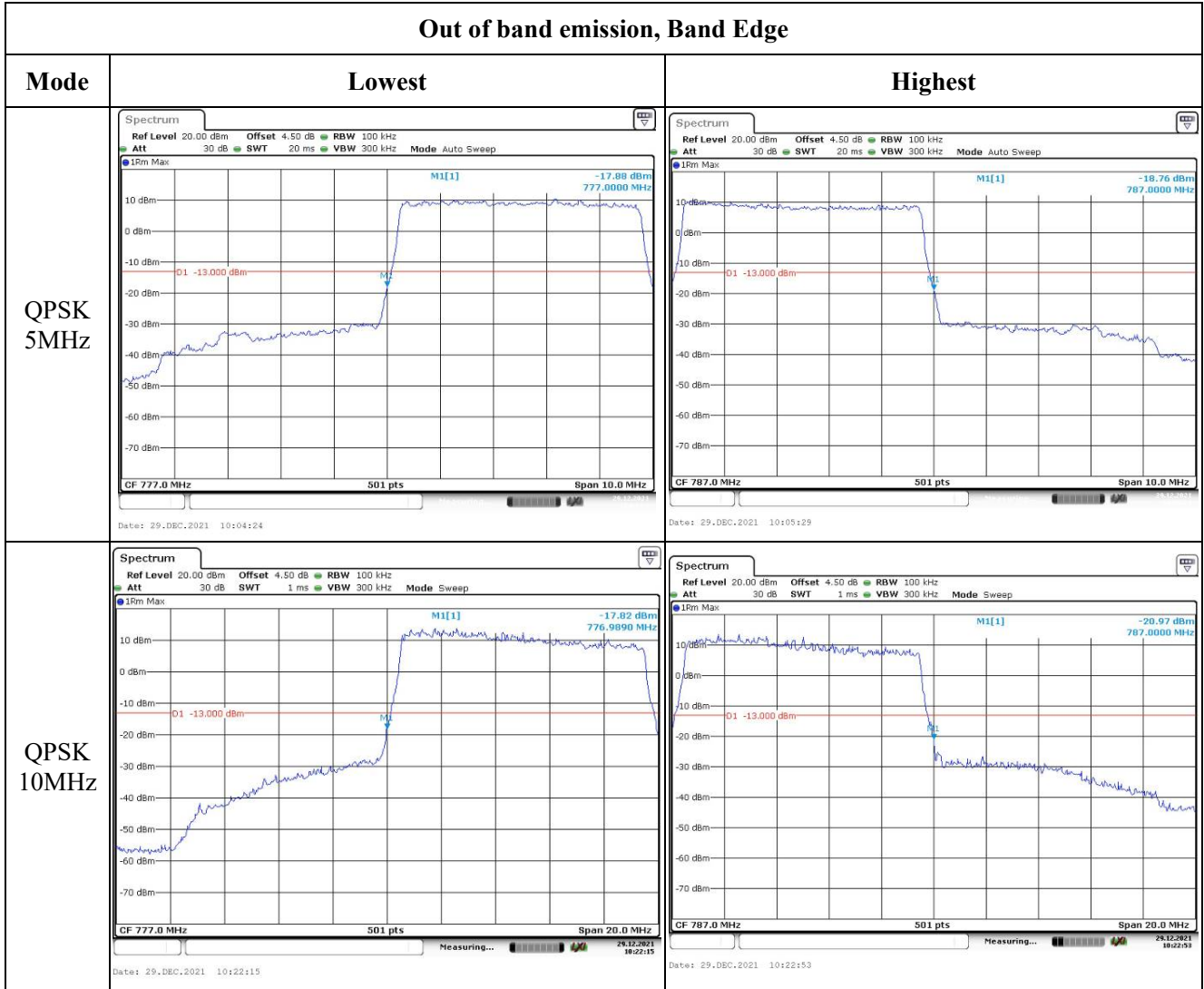
Channel

10MHz Bandwidth QPSK

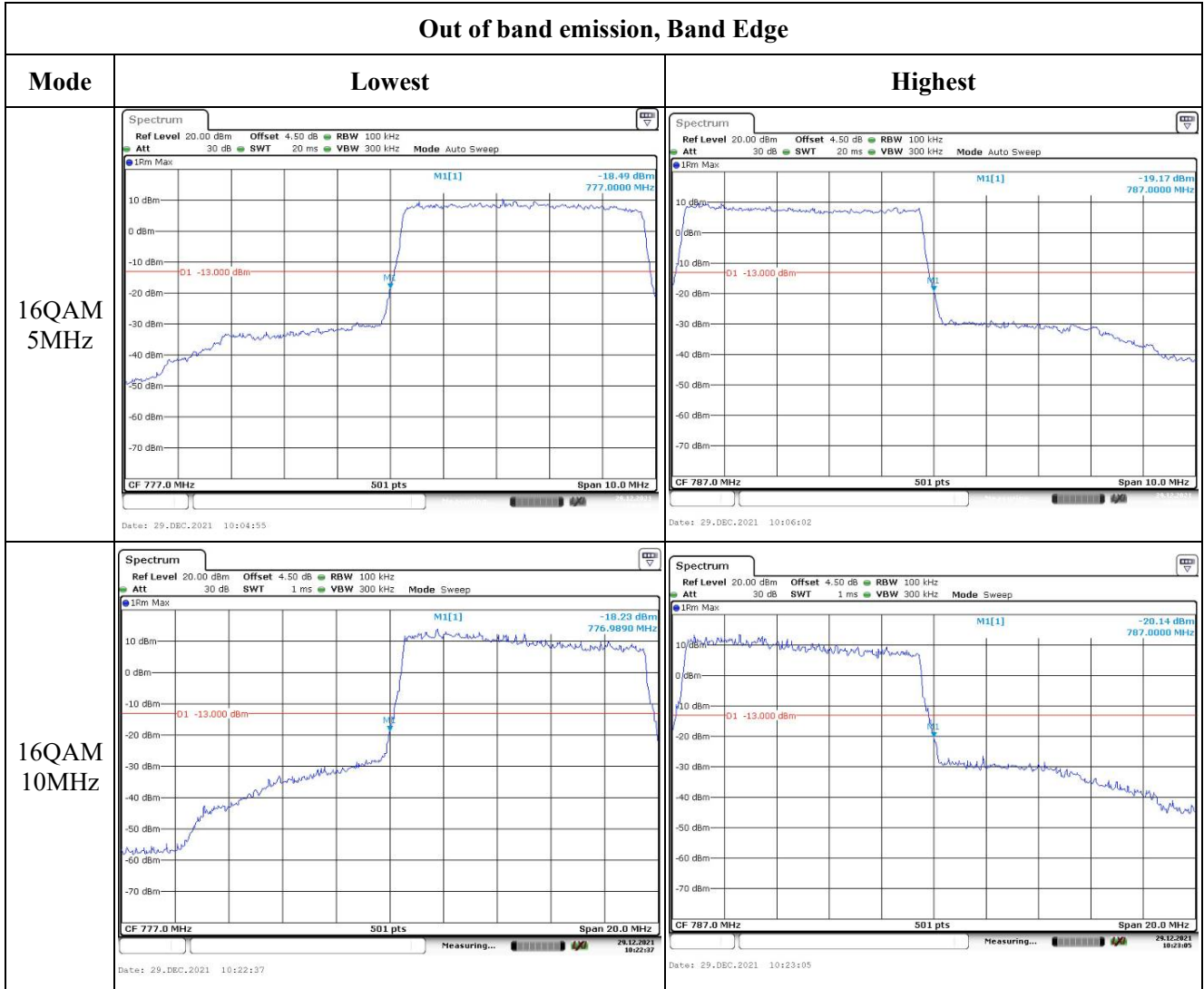
Middle



Out of band emission, Band Edge



Out of band emission, Band Edge



4.12 Antenna Port Test Data and Results for LTE Band 17:

Serial Number:	CR21110036-RF-S1	Test Date:	2021/12/06~2021/12/29
Test Site:	RF	Test Mode:	Transmitting
Tester:	LE Qiao	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	18.4~21.3	Relative Humidity: (%)	32~48	ATM Pressure: (kPa)	101.6~101.8
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	Spectrum Analyzer	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 17▲:

Antenna Gain (dBi):	3	Antenna Gain (dBd):	0.85	Cable Loss (dB):	0
Operation Voltage(V _{DC}):					
Lowest:	3.5	Normal:	3.85	Highest:	4.4

Test Frequency For Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
5MHz	706.5	710	713.5
10MHz	709	710	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		
5MHz QPSK	RB1#0	22.54	22.73	22.55	24	34.77
	RB1#13	22.58	22.67	22.75		
	RB1#24	22.60	23.15	22.94		
	RB15#0	21.87	21.85	21.90		
	RB15#10	21.75	21.99	21.97		
	RB25#0	21.82	21.91	21.92		
5MHz 16QAM	RB1#0	21.11	22.17	21.49	23.02	34.77
	RB1#13	20.65	22.04	21.80		
	RB1#24	20.58	22.13	22.06		
	RB15#0	20.95	20.50	20.81		
	RB15#10	20.65	20.77	21.00		
	RB25#0	20.85	20.91	20.92		
10MHz QPSK	RB1#0	22.74	23.08	22.72	24.03	34.77
	RB1#25	22.74	23.10	22.90		
	RB1#49	23.13	23.18	23.14		
	RB25#0	21.89	21.82	21.87		
	RB25#25	21.99	22.00	22.08		
	RB50#0	21.92	21.90	21.90		
10MHz 16QAM	RB1#0	22.17	22.20	21.57	23.77	34.77
	RB1#25	21.92	22.20	21.86		
	RB1#49	22.14	22.92	22.07		
	RB25#0	20.79	20.92	20.81		
	RB25#25	20.90	21.19	21.34		
	RB50#0	20.80	20.89	20.80		
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	4.81	4.90	4.93	13
	RB50#0	5.65	5.65	5.59	13
10MHz 16QAM	RB1#0	5.83	6.06	5.97	13
	RB50#0	6.64	6.58	6.52	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	4.531	4.531	4.511	5.020	5.040	5.000
5MHz 16QAM	4.531	4.551	4.531	5.020	5.060	5.060
10MHz QPSK	9.022	8.981	8.981	9.840	9.840	9.800
10MHz 16QAM	9.022	8.981	8.981	9.720	9.840	9.800

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.

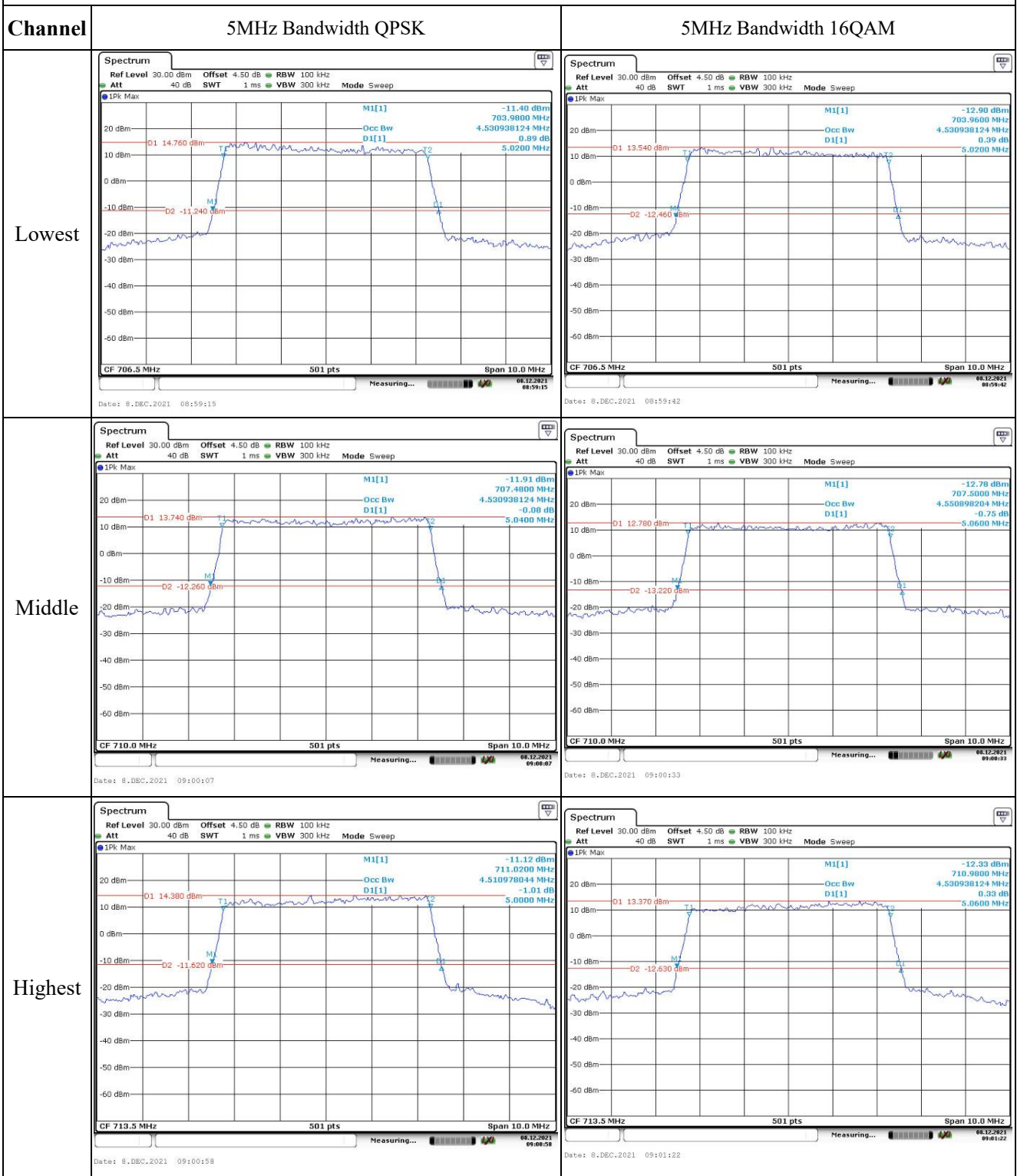
FCC §2.1051, §27.53:Out of band emission, Band Edge	
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.

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	3.85	704.529	704.00	715.511	716.00
	-20	3.85	704.522	704.00	715.512	716.00
	-10	3.85	704.523	704.00	715.513	716.00
	0	3.85	704.524	704.00	715.514	716.00
	10	3.85	704.525	704.00	715.516	716.00
	20	3.85	704.529	704.00	715.511	716.00
	30	3.85	704.526	704.00	715.517	716.00
	40	3.85	704.527	704.00	715.518	716.00
Frequency Stability vs. Voltage	20	3.5	704.529	704.00	715.511	716.00
	20	4.4	704.520	704.00	715.510	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	3.85	704.529	704.00	715.512	716.00
	-20	3.85	704.529	704.00	715.513	716.00
	-10	3.85	704.529	704.00	715.515	716.00
	0	3.85	704.529	704.00	715.516	716.00
	10	3.85	704.529	704.00	715.518	716.00
	20	3.85	704.529	704.00	715.511	716.00
	30	3.85	704.529	704.00	715.519	716.00
	40	3.85	704.529	704.00	715.510	716.00
Frequency Stability vs. Voltage	20	3.5	704.529	704.00	715.519	716.00
	20	4.4	704.529	704.00	715.511	716.00
					Result:	Pass

Test Plots:

Occupied Bandwidth



Occupied Bandwidth

Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

Spurious Emissions at Antenna Terminal

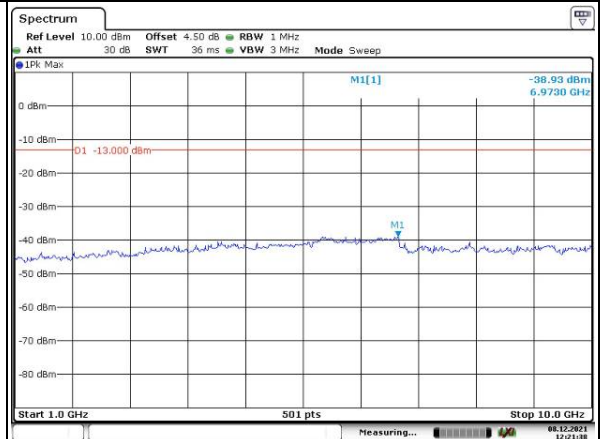
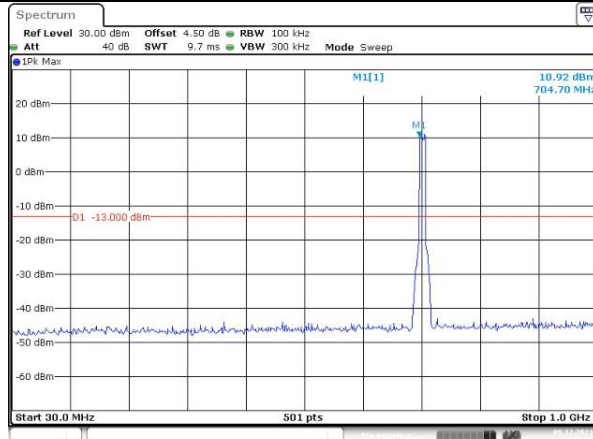
Channel	5MHz Bandwidth QPSK	
Lowest	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -43.50 dBm 578.90 MHz D1 -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 12:18:21</p>	<p>Spectrum Ref Level 10.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 36 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -38.68 dBm 5.8590 GHz D1 -13.000 dBm Start 1.0 GHz 501 pts Stop 10.0 GHz Date: 8.DEC.2021 12:18:49</p>
Middle	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -43.23 dBm 861.60 MHz D1 -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 12:19:22</p>	<p>Spectrum Ref Level 10.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 36 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -38.82 dBm 5.9130 GHz D1 -13.000 dBm Start 1.0 GHz 501 pts Stop 10.0 GHz Date: 8.DEC.2021 12:19:47</p>
Highest	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -43.03 dBm 933.20 MHz D1 -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 12:20:13</p>	<p>Spectrum Ref Level 10.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 36 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -38.07 dBm 5.8590 GHz D1 -13.000 dBm Start 1.0 GHz 501 pts Stop 10.0 GHz Date: 8.DEC.2021 12:20:38</p>

Spurious Emissions at Antenna Terminal

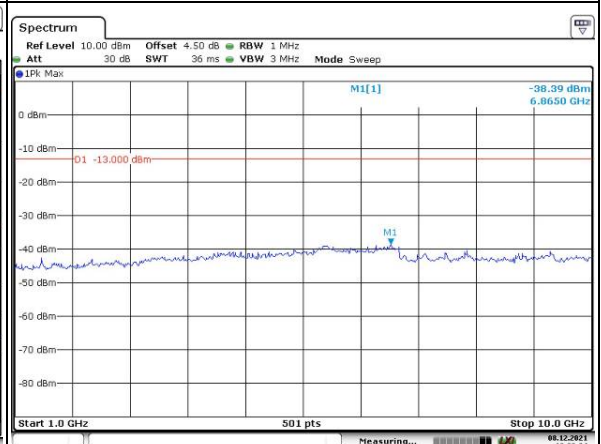
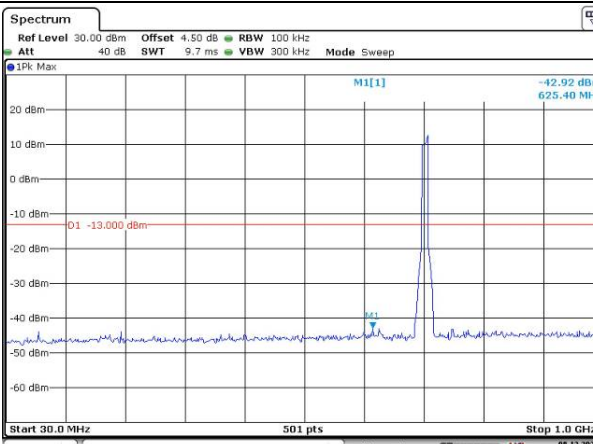
Channel

10MHz Bandwidth QPSK

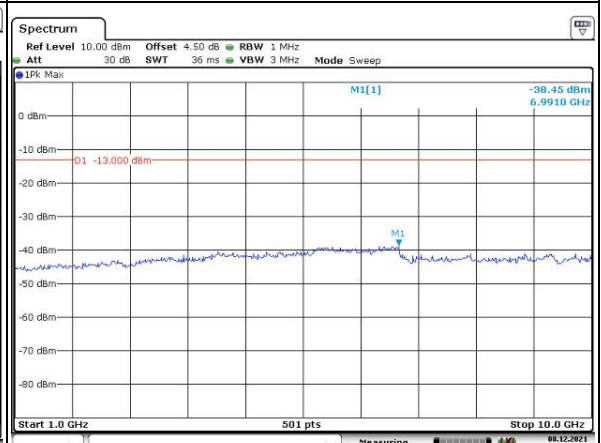
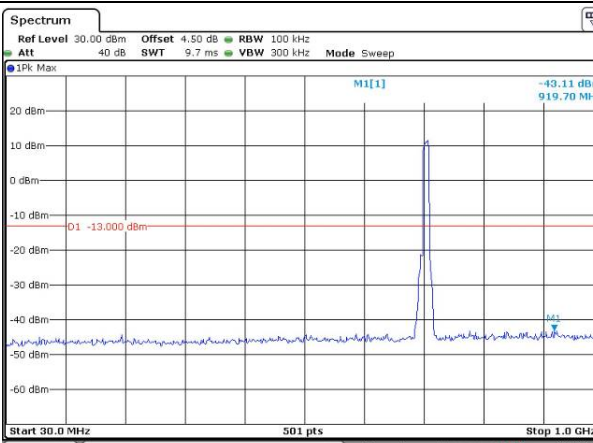
Lowest



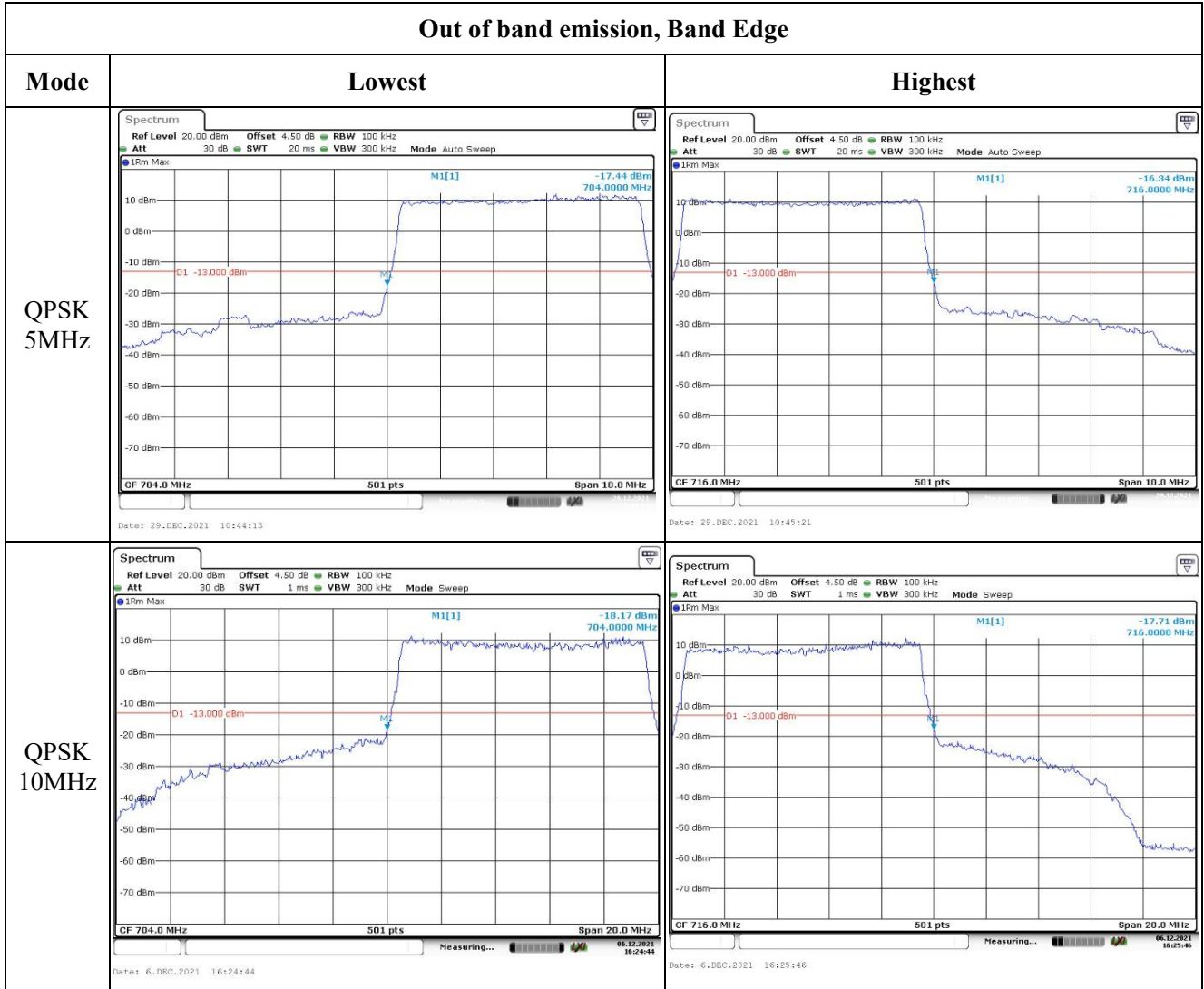
Middle



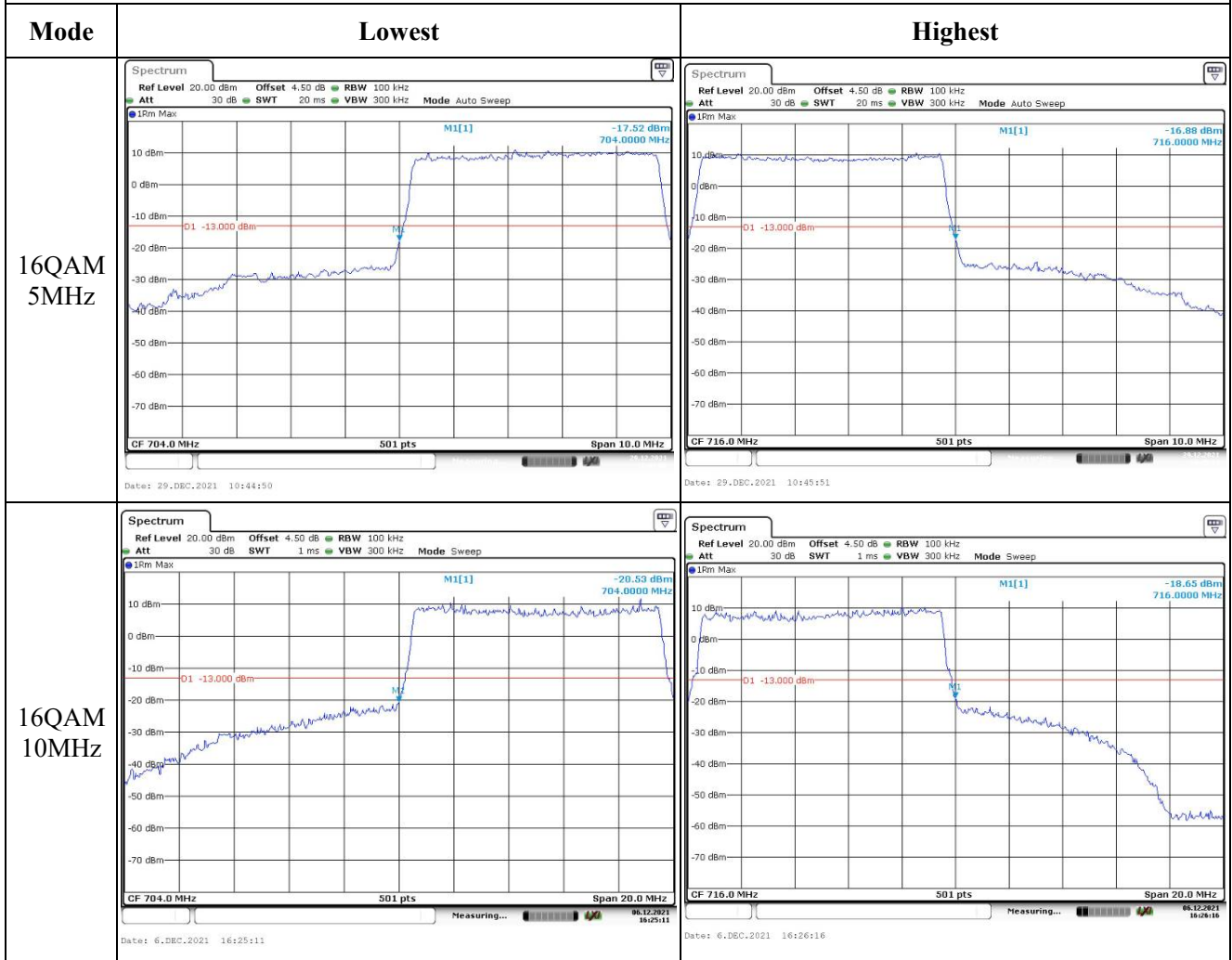
Highest



Out of band emission, Band Edge



Out of band emission, Band Edge



4.13 Antenna Port Test Data and Results for LTE Band 26:

Serial Number:	CR21110036-RF-S1	Test Date:	2021/12/06~2021/12/29
Test Site:	RF	Test Mode:	Transmitting
Tester:	LE Qiao	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	18.4~21.3	Relative Humidity: (%)	32~48	ATM Pressure: (kPa)	101.6~101.8
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	Spectrum Analyzer	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 26▲:

Antenna Gain (dBi):	3.15	Antenna Gain (dBd):	1	Cable Loss (dB):	0
Operation Voltage(V _{DC}):					
Lowest:	3.5	Normal:	3.85	Highest:	4.4

Test Frequency For Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
1.4MHz	814.7	831.5	848.3
3MHz	815.5	831.5	847.5
5MHz	816.5	831.5	846.5
10MHz	819	831.5	844
15MHz	821.5	831.5	841.5

Test Data:**FCC§2.1046;§ 22.913 (a),§ 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		
1.4MHz QPSK	RB1#0	23.76	23.53	23.45	24.95	38.45
	RB1#3	23.67	23.38	23.52		
	RB1#5	23.62	23.45	23.63		
	RB3#0	23.95	23.64	23.42		
	RB3#3	23.71	23.67	23.60		
	RB6#0	22.73	22.70	22.38		
1.4MHz 16QAM	RB1#0	22.70	22.89	22.58	23.96	38.45
	RB1#3	22.65	22.96	22.54		
	RB1#5	22.73	22.78	22.02		
	RB3#0	22.84	22.66	22.59		
	RB6#0	21.98	21.63	21.41		
3MHz QPSK	RB1#0	23.74	23.50	23.43	24.78	38.45
	RB1#8	23.65	23.47	23.38		
	RB1#14	23.78	23.55	23.61		
	RB6#0	22.66	22.60	22.55		
	RB6#9	22.57	22.47	22.44		
3MHz 16QAM	RB1#0	22.83	22.76	22.35	23.9	38.45
	RB1#8	22.43	22.86	22.03		
	RB1#14	22.41	22.90	21.88		
	RB6#0	21.80	21.81	21.56		
	RB6#9	21.73	21.67	21.47		
	RB15#0	21.85	21.63	21.57		
5MHz QPSK	RB1#0	23.55	23.43	23.18	24.84	38.45
	RB1#13	23.55	23.63	23.25		
	RB1#24	23.39	23.84	23.36		
	RB15#0	22.68	22.55	22.55		
	RB15#10	22.60	22.53	22.44		
5MHz 16QAM	RB25#0	22.65	22.57	22.58	23.69	38.45
	RB1#0	22.62	22.69	22.34		
	RB1#13	21.59	22.43	22.28		
	RB1#24	21.57	22.21	22.23		
	RB15#0	21.50	21.44	21.59		
	RB15#10	21.40	21.42	21.34		
RB25#0	21.59	21.47	21.68			

10MHz QPSK	RB1#0	23.90	23.79	23.63	24.9	38.45
	RB1#25	23.84	23.78	23.56		
	RB1#49	23.52	23.49	23.55		
	RB25#0	22.68	22.64	22.59		
	RB25#25	22.58	22.58	22.47		
	RB50#0	22.64	22.64	22.56		
10MHz 16QAM	RB1#0	22.92	22.97	22.67	24.01	38.45
	RB1#25	22.74	23.01	22.03		
	RB1#49	22.79	22.52	21.82		
	RB25#0	21.65	21.77	21.90		
	RB25#25	21.48	21.54	21.55		
	RB50#0	21.62	21.70	21.57		
15MHz QPSK	RB1#0	23.80	23.58	23.74	24.8	38.45
	RB1#38	23.50	23.48	23.35		
	RB1#74	23.80	23.57	23.73		
	RB36#0	22.65	22.65	22.61		
	RB36#39	22.62	22.58	22.47		
	RB75#0	22.61	22.63	22.57		
15MHz 16QAM	RB1#0	22.66	22.80	22.80	23.91	38.45
	RB1#38	22.52	22.71	22.66		
	RB1#74	22.90	22.91	22.74		
	RB36#0	21.72	21.63	21.62		
	RB36#39	21.69	21.48	21.35		
	RB75#0	21.68	21.65	21.52		

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	
15MHz QPSK	RB1#0	3.16	3.19	3.22	13
	RB75#0	4.61	4.12	4.29	13
15MHz 16QAM	RB1#0	4.09	3.86	4.35	13
	RB75#0	5.59	5.07	5.30	13
Result:					Pass

FCC §2.1049, §22.905, §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
1.4MHz QPSK	1.102	1.108	1.108	1.326	1.338	1.302
1.4MHz 16QAM	1.108	1.102	1.102	1.320	1.308	1.332
3MHz QPSK	2.695	2.695	2.695	2.952	2.952	2.976
3MHz 16QAM	2.695	2.683	2.683	2.952	2.976	2.976
5MHz QPSK	4.531	4.511	4.511	5.040	5.060	5.000
5MHz 16QAM	4.511	4.531	4.531	5.020	5.040	5.060
10MHz QPSK	8.942	8.942	8.901	9.760	9.760	9.720
10MHz 16QAM	8.942	8.942	8.942	9.720	9.800	9.640
15MHz QPSK	13.533	13.413	13.473	15.000	14.880	14.880
15MHz 16QAM	13.533	13.473	13.473	14.820	14.820	14.880

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

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

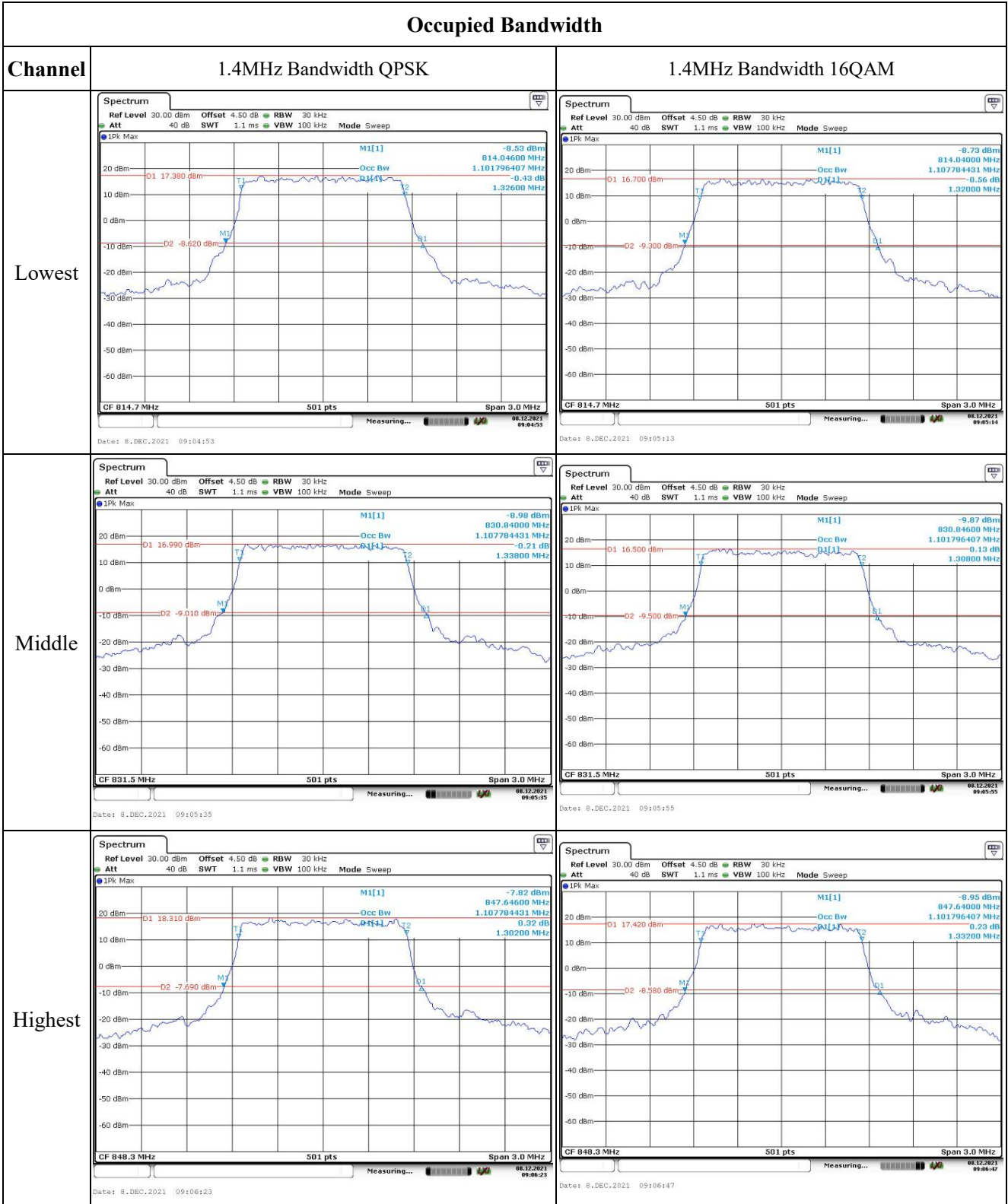
FCC §2.1051, §22.917(a), §90.691: Out of band emission, Band Edge	
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.

FCC §2.1055, §22.355, §90.213: Frequency Stability					
Test Mode:	15 MHz QPSK		Test Channel:	831.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	6.77	0.008	2.5
	-20	3.85	8.09	0.010	2.5
	-10	3.85	-7.36	-0.009	2.5
	0	3.85	-8.69	-0.010	2.5
	10	3.85	6.77	0.008	2.5
	20	3.85	8.78	0.011	2.5
	30	3.85	8.86	0.011	2.5
	40	3.85	5.96	0.007	2.5
	50	3.85	5.63	0.007	2.5
Frequency Stability vs. Voltage	20	3.5	7.83	0.009	2.5
	20	4.4	-7.75	-0.009	2.5
Result:				Pass	

Test Mode:	15 MHz 16QAM		Test Channel:	831.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	-0.87	-0.001	2.5
	-20	3.85	9.50	0.011	2.5
	-10	3.85	9.75	0.012	2.5
	0	3.85	5.77	0.007	2.5
	10	3.85	7.62	0.009	2.5
	20	3.85	-6.38	-0.008	2.5
	30	3.85	6.32	0.008	2.5
	40	3.85	9.58	0.012	2.5
Frequency Stability vs. Voltage	50	3.85	-8.44	-0.010	2.5
	20	3.5	9.81	0.012	2.5
	20	4.4	-9.86	-0.012	2.5
				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 1Pk Max M1[1] -10.02 dBm Occ Bw 2.694610778 MHz -0.72 dB D1[1] 2.9520 MHz -10.520 dBm CF 815.5 MHz 501 pts Span 6.0 MHz Date: 8.DEC.2021 09:07:19</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 1Pk Max M1[1] -12.73 dBm Occ Bw 2.694610778 MHz 1.02 dB D1[1] 2.9520 MHz -12.270 dBm CF 815.5 MHz 501 pts Span 6.0 MHz Date: 8.DEC.2021 09:07:42</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 1Pk Max M1[1] -11.26 dBm Occ Bw 2.694610778 MHz -0.45 dB D1[1] 2.9520 MHz -11.350 dBm CF 831.5 MHz 501 pts Span 6.0 MHz Date: 8.DEC.2021 09:08:01</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 1Pk Max M1[1] -12.99 dBm Occ Bw 2.682634731 MHz 0.82 dB D1[1] 2.9760 MHz -12.430 dBm CF 831.5 MHz 501 pts Span 6.0 MHz Date: 8.DEC.2021 09:08:18</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 1Pk Max M1[1] -12.54 dBm Occ Bw 2.694610778 MHz 0.29 dB D1[1] 2.9760 MHz -11.830 dBm CF 847.5 MHz 501 pts Span 6.0 MHz Date: 8.DEC.2021 09:08:39</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 1Pk Max M1[1] -11.86 dBm Occ Bw 2.682634731 MHz -0.15 dB D1[1] 2.9760 MHz -11.380 dBm CF 847.5 MHz 501 pts Span 6.0 MHz Date: 8.DEC.2021 09:08:00</p>