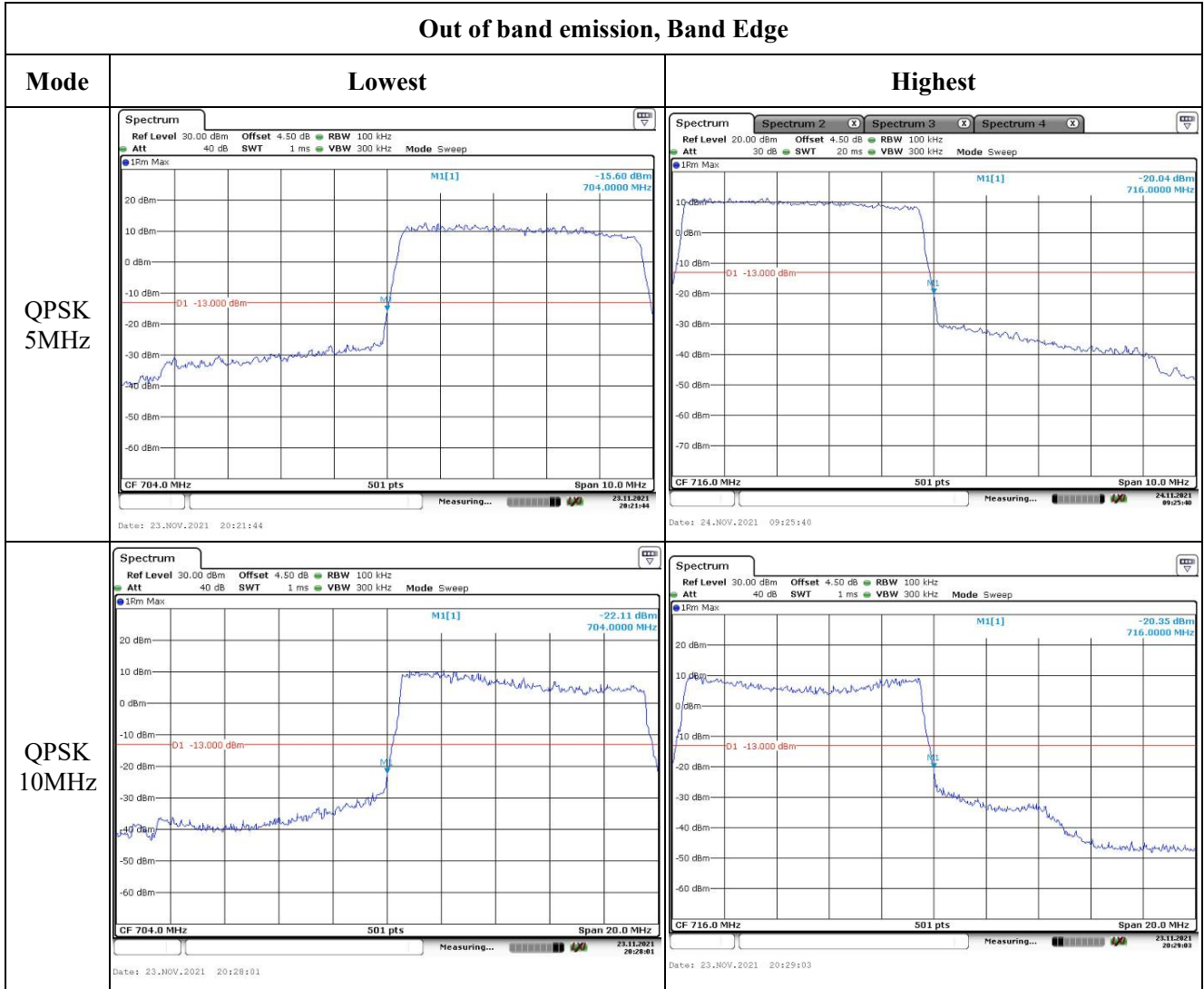
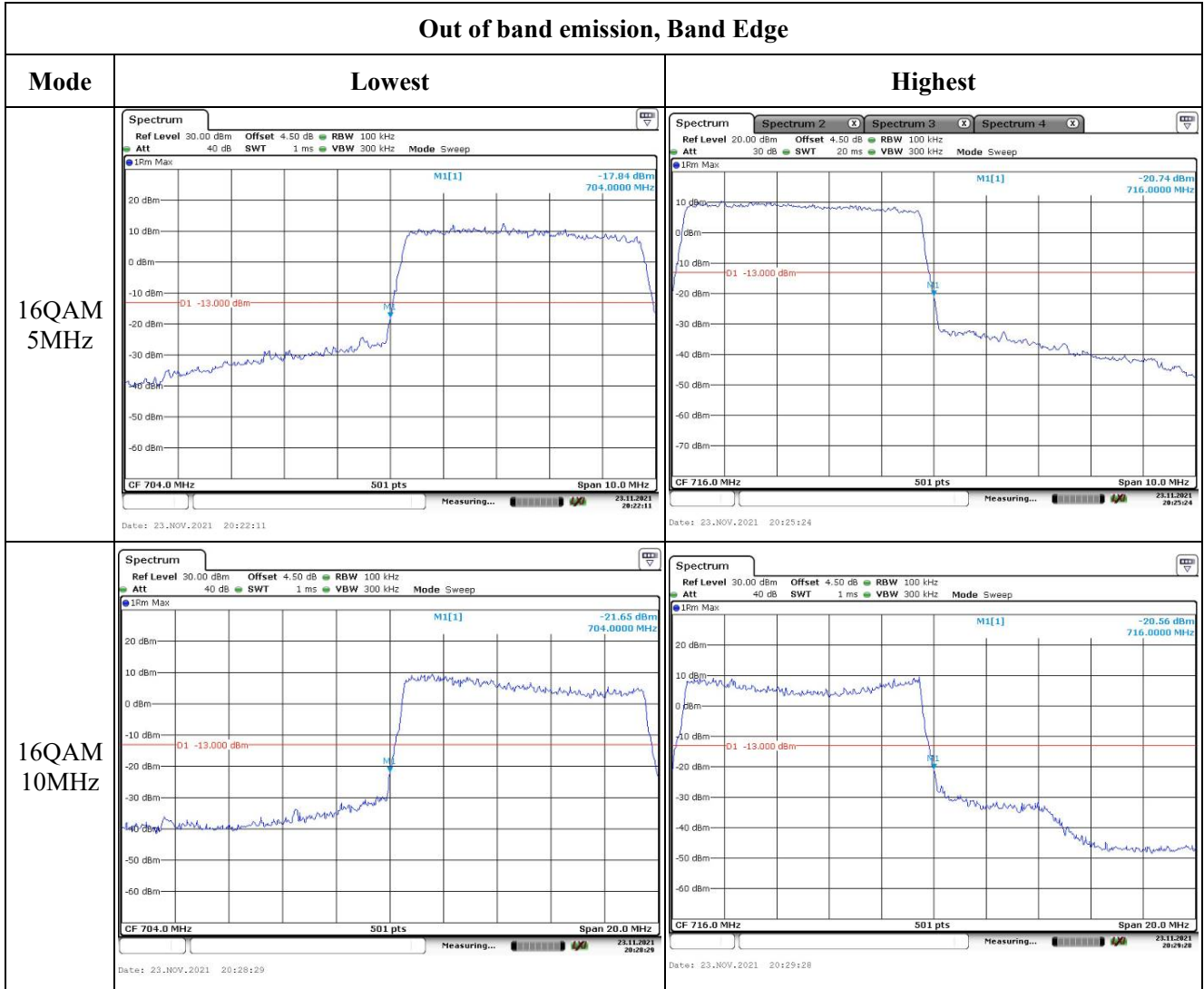


Out of band emission, Band Edge



Out of band emission, Band Edge



4.10 Antenna Port Test Data and Results for LTE Band 41:

Serial Number:	CR21090101-RF-S3/16	Test Date:	2021/09/29~2021/11/23
Test Site:	RF	Test Mode:	Transmitting
Tester:	Thor Lei	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	22.2~28.3	Relative Humidity: (%)	35~42	Temperature: (°C)	22.2~28.3
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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	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
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
R&S	Wideband Radio Communication Tester	CMW500	149218	2021/7/22	2022/7/21

* 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 41▲:

Antenna Gain (dBi):	1	Cable Loss (dB):	0.6
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	2557.5	2605	2652.5
10MHz	2560	2605	2650
15MHz	2562.5	2605	2647.5
20MHz	2565	2605	2645

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

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	22.93	21.99	22.37	23.33	33
	RB1#13	22.81	22.15	22.38		
	RB1#24	22.71	22.17	22.47		
	RB15#0	21.42	21.28	21.33		
	RB15#10	21.46	21.19	21.35		
	RB25#0	21.4	21.19	21.32		
5MHz 16QAM	RB1#0	21.52	21.26	21.67	22.25	33
	RB1#13	21.45	21.04	21.22		
	RB1#24	21.61	20.99	21.85		
	RB15#0	20.47	20.57	20.55		
	RB15#10	20.4	20.48	20.49		
	RB25#0	20.48	20.19	20.61		
10MHz QPSK	RB1#0	22.3	22.41	22.48	23	33
	RB1#25	22.25	22.45	22.6		
	RB1#49	22.37	22.44	22.51		
	RB25#0	21.17	21.47	21.54		
	RB25#25	21.17	21.49	21.5		
	RB50#0	21.16	21.47	21.54		
10MHz 16QAM	RB1#0	21.36	22.02	22.18	22.87	33
	RB1#25	21.45	22.09	21.63		
	RB1#49	21.41	22.09	22.47		
	RB25#0	20.27	20.54	20.76		
	RB25#25	20.26	20.58	20.81		
	RB50#0	20.36	20.53	20.73		
15MHz QPSK	RB1#0	22.38	22.52	22.27	22.92	33
	RB1#38	22.27	22.49	22.26		
	RB1#74	22.41	22.5	22.31		
	RB36#0	21.21	21.49	21.6		

	RB36#39	21.33	21.42	21.48		
	RB75#0	21.21	21.35	21.46		
15MHz 16QAM	RB1#0	21.44	22.05	21.84	22.61	33
	RB1#38	21.45	22.21	21.81		
	RB1#74	21.4	21.62	21.71		
	RB36#0	20.37	20.61	20.66		
	RB36#39	20.39	20.6	20.66		
	RB75#0	20.4	20.66	20.61		
20MHz QPSK	RB1#0	22.28	22.2	22.43	22.89	33
	RB1#50	22.2	22.18	22.47		
	RB1#99	22.32	22.2	22.49		
	RB50#0	21.2	21.26	21.46		
	RB50#50	21.24	21.18	21.35		
	RB100#0	21.19	21.2	21.41		
20MHz 16QAM	RB1#0	21.69	20.93	22.12	22.68	33
	RB1#50	21.53	20.98	22.21		
	RB1#99	21.47	21.1	22.28		
	RB50#0	20.39	20.52	20.62		
	RB50#50	20.54	20.46	20.56		
	RB100#0	20.35	20.43	20.58		

Note: EIRP=Conducted Power(dBm) - Cable loss(dB) + Antenna Gain(dBi)

Result:

Pass

Peak-to-average Ratio(PAR)

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	8.32	8.58	8.41	13
	RB100#0	8.55	8.55	8.64	13
20MHz 16QAM	RB1#0	8.55	8.55	8.46	13
	RB100#0	8.67	8.49	8.60	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	4.531	4.531	4.980	4.980	5.080
5MHz 16QAM	4.491	4.511	4.511	5.000	4.980	5.140
10MHz QPSK	8.982	8.982	8.942	9.720	9.840	10.000
10MHz 16QAM	8.982	8.942	8.942	9.720	9.720	9.880
15MHz QPSK	13.593	13.533	13.473	15.780	15.360	15.600
15MHz 16QAM	13.473	13.593	13.533	15.240	15.420	15.480
20MHz QPSK	17.964	17.964	17.964	19.600	19.6	19.680
20MHz 16QAM	17.964	17.964	17.884	19.600	20.640	19.680

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

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

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

Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.
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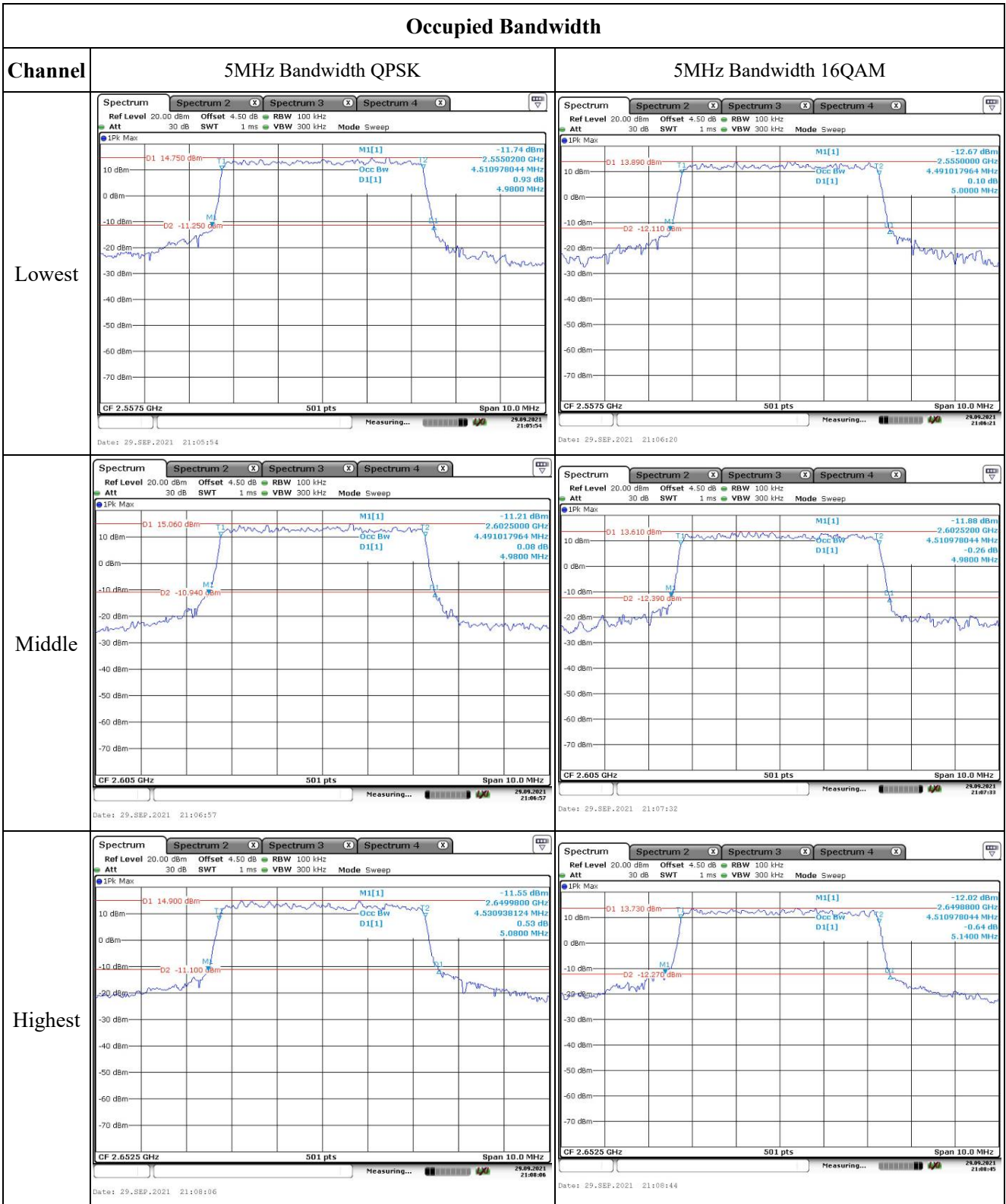
FCC §2.1055, §27.54: Frequency Stability

Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.7	2555.2244	2555.00	2654.9054	2655
	-20	3.7	2555.5289	2555.00	2654.4711	2655
	-10	3.7	2555.2618	2555.00	2654.8581	2655
	0	3.7	2555.0748	2555.00	2654.7162	2655
	10	3.7	2555.2244	2555.00	2654.9527	2655
	20	3.7	2555.1496	2555.00	2654.8581	2655
	30	3.7	2555.1496	2555.00	2654.8108	2655
	40	3.7	2555.0374	2555.00	2654.9527	2655
	50	3.7	2555.2244	2555.00	2654.7635	2655
Frequency Stability vs. Voltage	20	3.5	2555.2618	2555.00	2654.8108	2655
	20	4.2	2555.0374	2555.00	2654.8581	2655
					Result:	Pass

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.7	2555.2618	2555.00	2654.7162	2655
	-20	3.7	2555.5289	2555.00	2654.4711	2655
	-10	3.7	2555.187	2555.00	2654.8108	2655
	0	3.7	2555.1496	2555.00	2654.8581	2655
	10	3.7	2555.2244	2555.00	2654.7635	2655
	20	3.7	2555.1122	2555.00	2654.6216	2655
	30	3.7	2555.0374	2555.00	2654.9054	2655
	40	3.7	2555.0374	2555.00	2654.9527	2655
	50	3.7	2555.1496	2555.00	2654.7162	2655
Frequency Stability vs. Voltage	20	3.5	2555.1122	2555.00	2654.7635	2655
	20	4.2	2555.3366	2555.00	2654.6689	2655
					Result:	Pass

Test Plots:

Occupied Bandwidth



Occupied Bandwidth

Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	<p>CF 2.56 GHz 501 pts Span 20.0 MHz</p> <p>Date: 29_SEP.2021 21:09:26</p>	<p>CF 2.56 GHz 501 pts Span 20.0 MHz</p> <p>Date: 29_SEP.2021 21:10:01</p>
Middle	<p>CF 2.605 GHz 501 pts Span 20.0 MHz</p> <p>Date: 29_SEP.2021 21:10:40</p>	<p>CF 2.605 GHz 501 pts Span 20.0 MHz</p> <p>Date: 29_SEP.2021 21:11:14</p>
Highest	<p>CF 2.65 GHz 501 pts Span 20.0 MHz</p> <p>Date: 29_SEP.2021 21:11:50</p>	<p>CF 2.65 GHz 501 pts Span 20.0 MHz</p> <p>Date: 29_SEP.2021 21:12:34</p>

Occupied Bandwidth

Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep 1Pk Max D1 15.860 dBm M1[1] -10.28 dBm -Occ BW 2.5547600 GHz D1[1] 13.592814371 MHz -1.21 dB 15.7800 MHz CF 2.5625 GHz 501 pts Span 30.0 MHz Date: 29_SEP.2021 21:13:29</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep 1Pk Max D1 14.720 dBm M1[1] -11.17 dBm -Occ BW 2.5549400 GHz D1[1] 13.473053892 MHz 0.29 dB 15.2400 MHz CF 2.5625 GHz 501 pts Span 30.0 MHz Date: 29_SEP.2021 21:14:06</p>
Middle	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep 1Pk Max D1 14.800 dBm M1[1] -10.47 dBm -Occ BW 2.5971400 GHz D1[1] 13.532934132 MHz -1.35 dB 15.3600 MHz CF 2.605 GHz 501 pts Span 30.0 MHz Date: 29_SEP.2021 21:14:46</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep 1Pk Max D1 14.450 dBm M1[1] -12.34 dBm -Occ BW 2.5974400 GHz D1[1] 13.592814371 MHz 1.44 dB 15.4200 MHz CF 2.605 GHz 501 pts Span 30.0 MHz Date: 29_SEP.2021 21:15:16</p>
Highest	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep 1Pk Max D1 15.550 dBm M1[1] -9.65 dBm -Occ BW 2.6395800 GHz D1[1] 13.473053892 MHz -1.37 dB 15.6000 MHz CF 2.6475 GHz 501 pts Span 30.0 MHz Date: 29_SEP.2021 21:15:47</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep 1Pk Max D1 14.870 dBm M1[1] -11.21 dBm -Occ BW 2.6400000 GHz D1[1] 13.532934132 MHz 0.23 dB 15.4800 MHz CF 2.6475 GHz 501 pts Span 30.0 MHz Date: 29_SEP.2021 21:16:23</p>

Occupied Bandwidth

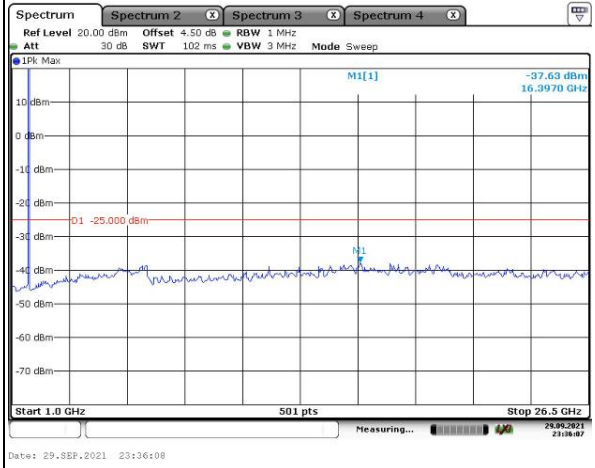
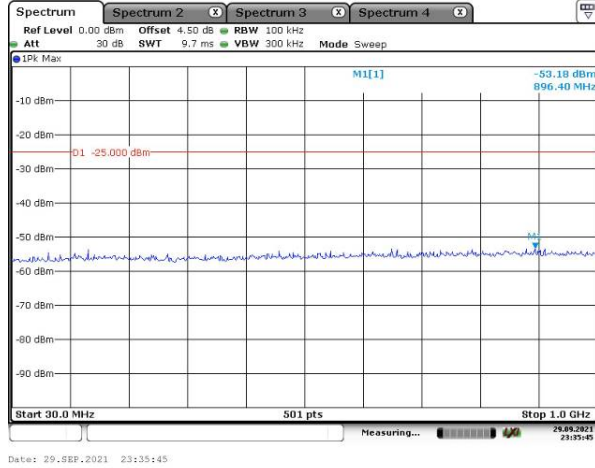
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

Spurious Emissions at Antenna Terminal

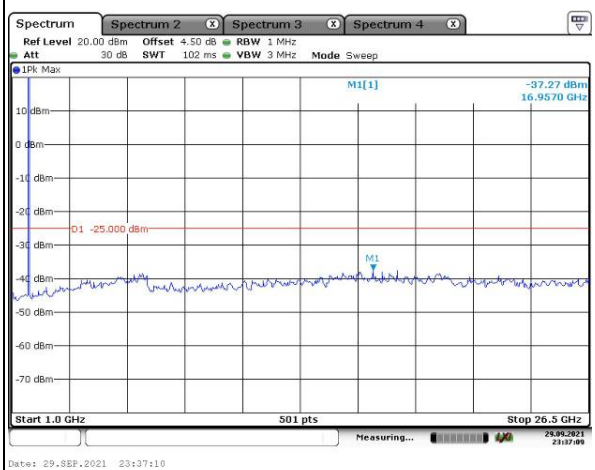
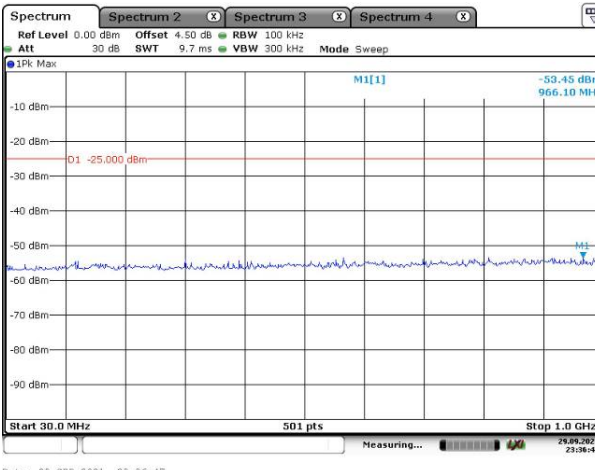
Channel

5MHz Bandwidth QPSK

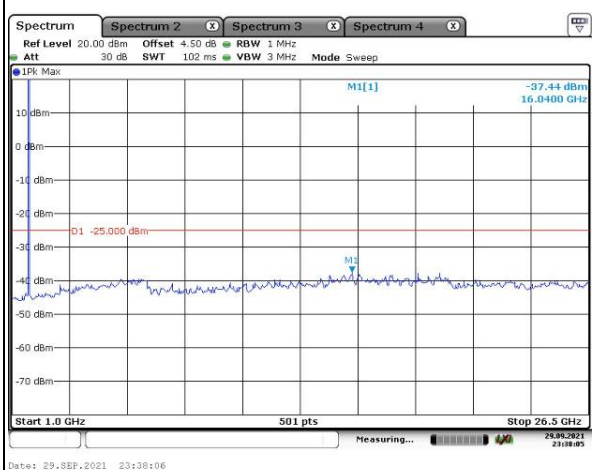
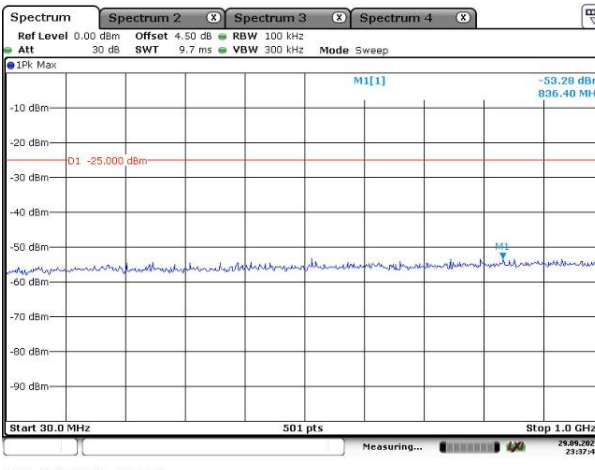
Lowest



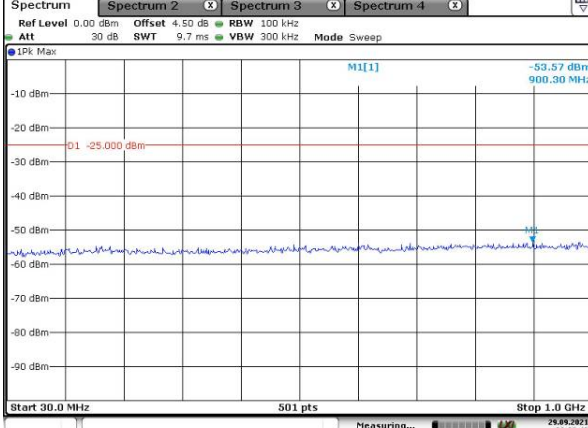
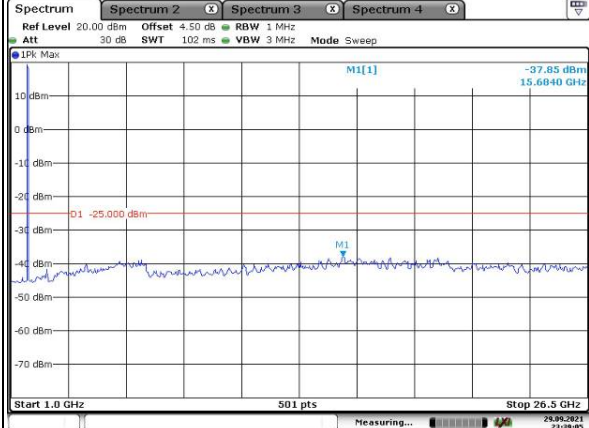
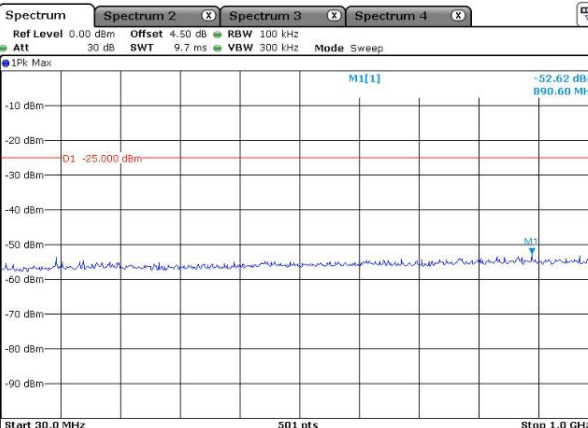
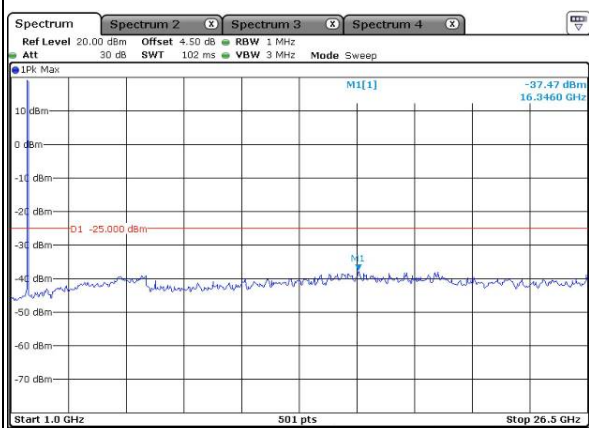
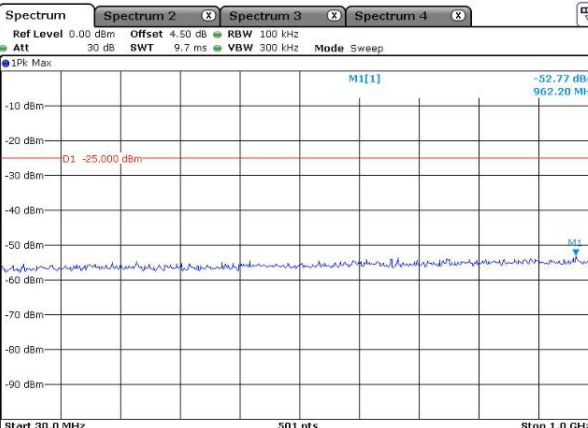
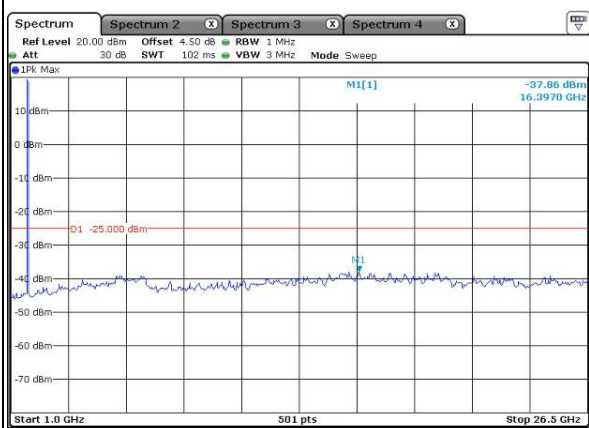
Middle



Highest



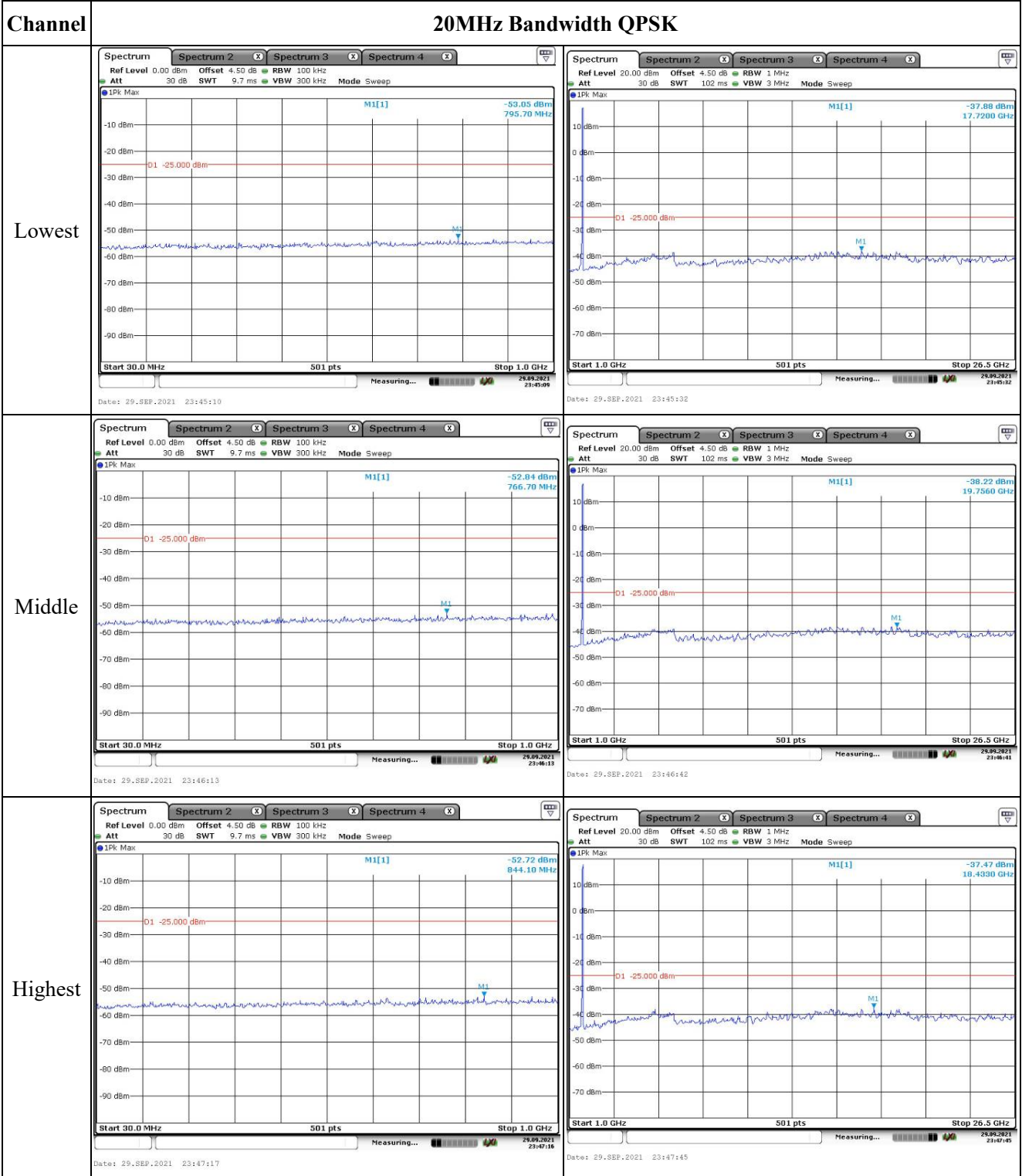
Spurious Emissions at Antenna Terminal

Channel	10MHz Bandwidth QPSK	
Lowest	 <p>1Pk Max</p> <p>Ref Level 0.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>M1[1] -59.57 dBm 900.30 MHz</p> <p>D1 -25.000 dBm</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>Date: 29_SEP.2021 23:38:44</p>	 <p>1Pk Max</p> <p>Ref Level 20.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 102 ms VBW 3 MHz Mode Sweep</p> <p>M1[1] -37.85 dBm 15.6840 GHz</p> <p>D1 -25.000 dBm</p> <p>Start 1.0 GHz 501 pts Stop 26.5 GHz</p> <p>Date: 29_SEP.2021 23:39:06</p>
Middle	 <p>1Pk Max</p> <p>Ref Level 0.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>M1[1] -52.62 dBm 890.60 MHz</p> <p>D1 -25.000 dBm</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>Date: 29_SEP.2021 23:39:41</p>	 <p>1Pk Max</p> <p>Ref Level 20.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 102 ms VBW 3 MHz Mode Sweep</p> <p>M1[1] -37.47 dBm 16.3460 GHz</p> <p>D1 -25.000 dBm</p> <p>Start 1.0 GHz 501 pts Stop 26.5 GHz</p> <p>Date: 29_SEP.2021 23:40:03</p>
Highest	 <p>1Pk Max</p> <p>Ref Level 0.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>M1[1] -52.77 dBm 962.20 MHz</p> <p>D1 -25.000 dBm</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>Date: 29_SEP.2021 23:40:38</p>	 <p>1Pk Max</p> <p>Ref Level 20.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 102 ms VBW 3 MHz Mode Sweep</p> <p>M1[1] -37.86 dBm 16.3970 GHz</p> <p>D1 -25.000 dBm</p> <p>Start 1.0 GHz 501 pts Stop 26.5 GHz</p> <p>Date: 29_SEP.2021 23:41:06</p>

Spurious Emissions at Antenna Terminal

Channel	15MHz Bandwidth QPSK	
Lowest	<p>Ref Level 0.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -59.74 dBm 855.80 MHz -25.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 29_SEP.2021 23:41:44</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 102 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -36.83 dBm 16.3460 GHz -25.000 dBm Start 1.0 GHz 501 pts Stop 26.5 GHz Date: 29_SEP.2021 23:42:13</p>
Middle	<p>Ref Level 0.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -51.86 dBm 937.10 MHz -25.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 29_SEP.2021 23:42:51</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 102 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -37.72 dBm 15.6940 GHz -25.000 dBm Start 1.0 GHz 501 pts Stop 26.5 GHz Date: 29_SEP.2021 23:43:19</p>
Highest	<p>Ref Level 0.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -53.22 dBm 873.20 MHz -25.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 29_SEP.2021 23:44:03</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 102 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -37.99 dBm 18.3920 GHz -25.000 dBm Start 1.0 GHz 501 pts Stop 26.5 GHz Date: 29_SEP.2021 23:44:26</p>

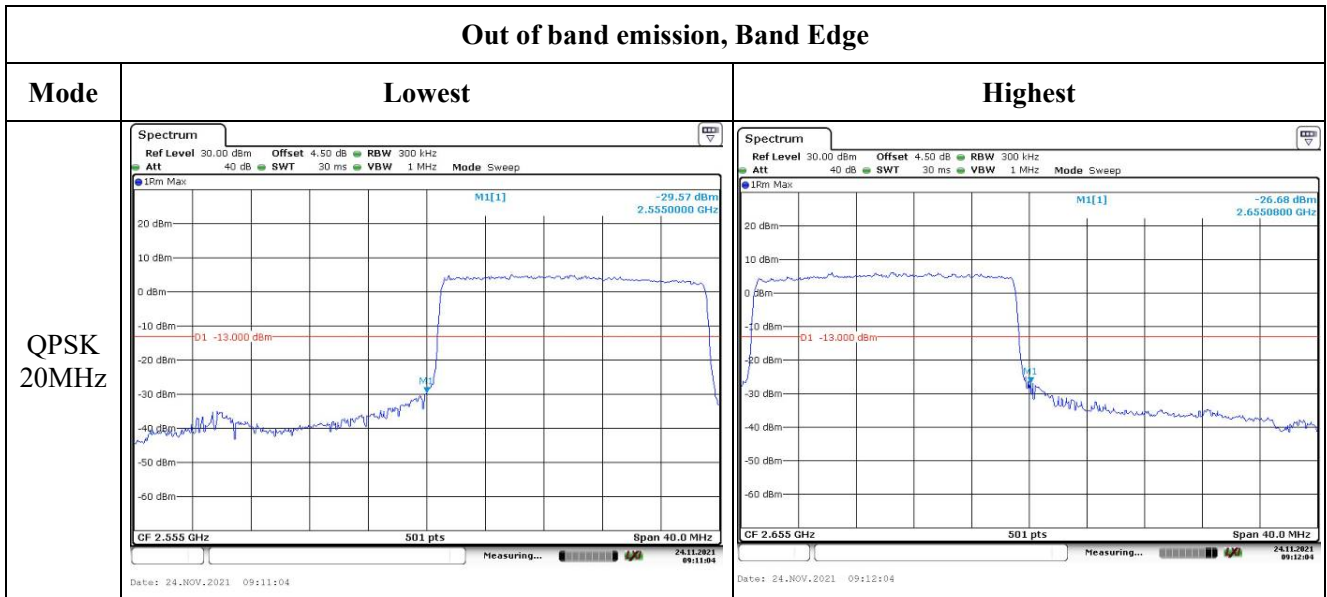
Spurious Emissions at Antenna Terminal



Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 5MHz		
QPSK 10MHz		
QPSK 15MHz		

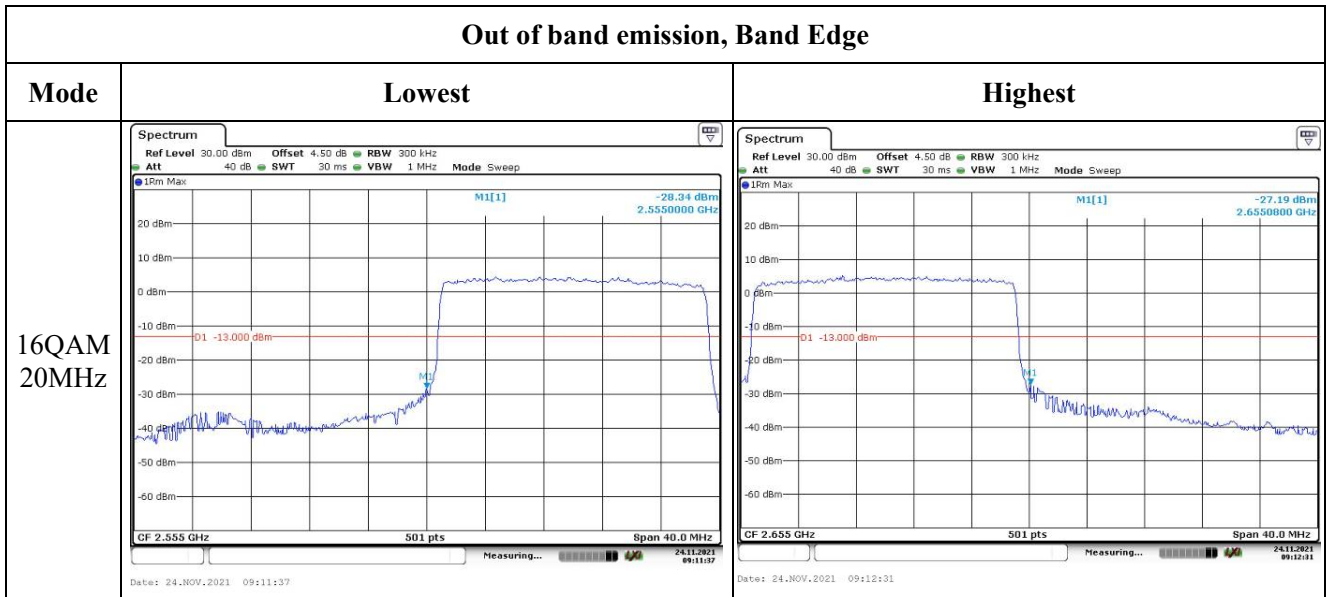
Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 5MHz		
16QAM 10MHz		
16QAM 15MHz		

Out of band emission, Band Edge



4.11 Antenna Port Test Data and Results for LTE Band 66:

Serial Number:	CR21090101-RF-S3/16	Test Date:	2021/09/29~2021/11/23
Test Site:	RF	Test Mode:	Transmitting
Tester:	Thor Lei	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	22.2~28.3	Relative Humidity: (%)	35~42	Temperature: (°C)	22.2~28.3
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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	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
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
R&S	Wideband Radio Communication Tester	CMW500	149218	2021/7/22	2022/7/21

* 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 66▲:

Antenna Gain (dBi):	1	Cable Loss (dB):	0.5
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	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	23.09	22.63	22.49	23.61	30
	RB1#3	23.1	22.62	22.46		
	RB1#5	23.11	22.63	22.54		
	RB3#0	22.97	22.89	22.6		
	RB3#3	22.98	22.83	22.62		
	RB6#0	21.92	21.88	21.55		
1.4MHz 16QAM	RB1#0	22.21	22.54	21.42	23.11	30
	RB1#3	22.25	22.59	21.44		
	RB1#5	22.23	22.61	22.32		
	RB3#0	21.98	21.92	21.53		
	RB3#3	22.01	21.96	21.59		
	RB6#0	21.1	20.85	20.77		
3MHz QPSK	RB1#0	22.91	22.6	22.49	23.41	30
	RB1#8	22.9	22.67	22.52		
	RB1#14	22.87	22.67	22.52		
	RB6#0	21.99	21.88	21.59		
	RB6#9	21.96	21.86	21.55		
	RB15#0	21.96	21.8	21.64		
3MHz 16QAM	RB1#0	22.39	22.58	21.44	23.15	30
	RB1#8	22.44	22.63	21.43		
	RB1#14	22.42	22.65	21.42		
	RB6#0	21.02	20.96	20.93		
	RB6#9	21.1	20.96	20.96		
	RB15#0	21.2	21.09	20.72		
5MHz QPSK	RB1#0	22.89	22.93	22.5	23.44	30
	RB1#13	22.84	22.92	22.48		
	RB1#24	22.88	22.94	22.45		
	RB15#0	22.09	21.79	21.55		
	RB15#10	22.02	21.86	21.65		
	RB25#0	21.99	21.76	21.66		
5MHz 16QAM	RB1#0	21.32	22.06	21.39	22.59	30
	RB1#13	21.32	22.02	21.42		
	RB1#24	21.27	22.09	21.35		
	RB15#0	21.22	20.91	20.77		
	RB15#10	21.25	20.9	20.75		
	RB25#0	21.21	21	20.71		
10MHz QPSK	RB1#0	22.91	22.7	22.66	23.42	30
	RB1#25	22.92	22.72	22.59		
	RB1#49	22.88	22.73	22.52		

	RB25#0	22	21.83	21.7		
	RB25#25	21.92	21.72	21.52		
	RB50#0	21.99	21.8	21.69		
10MHz 16QAM	RB1#0	22.22	22.48	21.2	23.04	30
	RB1#25	22.27	22.46	21.16		
	RB1#49	22.22	22.54	21.16		
	RB25#0	21.13	21.01	20.89		
	RB25#25	21.11	21.01	20.83		
	RB50#0	21.14	21.09	20.81		
15MHz QPSK	RB1#0	22.86	22.68	22.67	23.37	30
	RB1#38	22.87	22.67	22.6		
	RB1#74	22.81	22.75	22.53		
	RB36#0	22.01	21.84	21.71		
	RB36#39	21.96	21.78	21.59		
	RB75#0	22	21.85	21.65		
15MHz 16QAM	RB1#0	22.42	22.53	22.16	23.05	30
	RB1#38	22.41	22.52	22.13		
	RB1#74	22.4	22.55	22.06		
	RB36#0	21.2	20.99	20.88		
	RB36#39	21.12	21.02	20.77		
	RB75#0	21.11	20.99	20.8		
20MHz QPSK	RB1#0	23.14	22.67	22.7	23.64	30
	RB1#50	23.14	22.64	22.64		
	RB1#99	23.09	22.73	22.57		
	RB50#0	21.94	21.87	21.72		
	RB50#50	21.89	21.9	21.6		
	RB100#0	22.07	21.82	21.58		
20MHz 16QAM	RB1#0	22.06	22.5	22.45	23	30
	RB1#50	21.95	22.43	22.35		
	RB1#99	22.06	22.47	22.22		
	RB50#0	21.22	21.08	20.81		
	RB50#50	21.23	21.1	20.72		
	RB100#0	21.09	20.95	20.91		

Note: EIRP=Conducted Power(dBm) - Cable loss(dB) + Antenna Gain(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	4.64	4.38	4.43	13
	RB100#0	4.87	5.07	8.46	13
20MHz 16QAM	RB1#0	5.62	5.59	4.84	13
	RB100#0	5.83	5.88	5.42	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	1.102	1.102	1.102	1.266	1.260	1.26
1.4MHz 16QAM	1.108	1.090	1.102	1.290	1.260	1.260
3MHz QPSK	2.707	2.695	2.695	2.988	3.012	3.024
3MHz 16QAM	2.707	2.695	2.683	3.024	3.000	3.036
5MHz QPSK	4.531	4.511	4.511	5.020	5.000	5.020
5MHz 16QAM	4.531	4.531	4.531	5.040	5.020	5.000
10MHz QPSK	8.982	8.982	8.982	9.800	9.760	9.760
10MHz 16QAM	8.982	8.942	8.982	9.720	9.800	9.800
15MHz QPSK	13.533	13.473	13.593	15.060	15.000	15.180
15MHz 16QAM	13.533	13.533	13.593	15.000	15.120	15.060
20MHz QPSK	17.964	17.964	18.124	19.520	19.600	19.920
20MHz 16QAM	18.044	18.044	18.044	19.760	19.840	19.920

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

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

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

Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.
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FCC §2.1055, §27.54: Frequency Stability

Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.7	1710.1496	1710.00	1779.7162	1780
	-20	3.7	1710.5289	1710.00	1779.4711	1780
	-10	3.7	1710.2244	1710.00	1779.7635	1780
	0	3.7	1710.0374	1710.00	1779.8108	1780
	10	3.7	1710.2618	1710.00	1779.8108	1780
	20	3.7	1710.2244	1710.00	1779.9527	1780
	30	3.7	1710.0374	1710.00	1779.7635	1780
	40	3.7	1710.2992	1710.00	1779.6689	1780
	50	3.7	1710.1496	1710.00	1779.9054	1780
Frequency Stability vs. Voltage	20	3.5	1710.0374	1710.00	1779.8581	1780
	20	4.2	1710.2618	1710.00	1779.6689	1780
					Result:	Pass

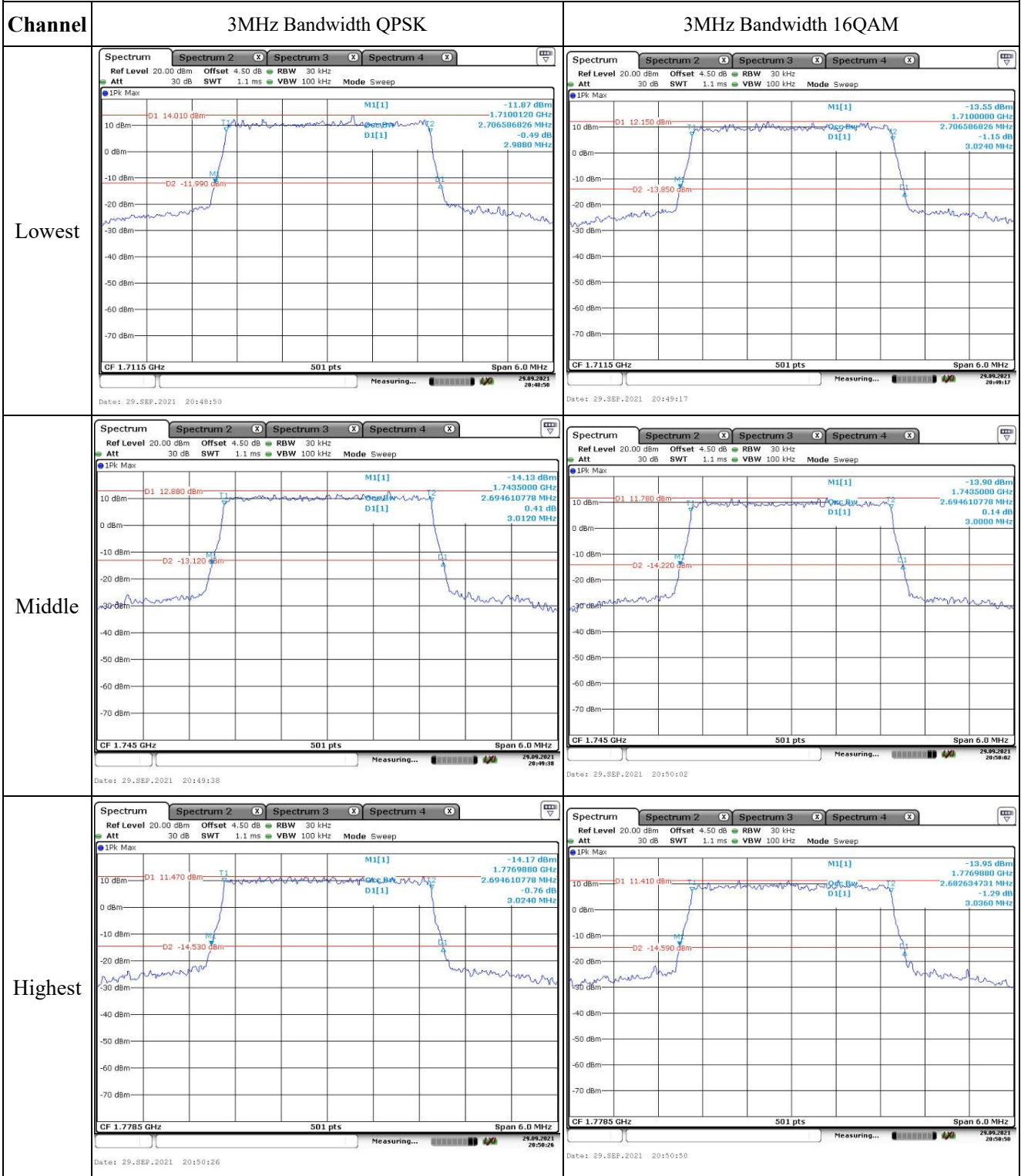
Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{Dc})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.7	1710.2244	1710.00	1779.9054	1780
	-20	3.7	1710.5289	1710.00	1779.4711	1780
	-10	3.7	1710.2618	1710.00	1779.9054	1780
	0	3.7	1710.0748	1710.00	1779.7635	1780
	10	3.7	1710.3366	1710.00	1779.9527	1780
	20	3.7	1710.2244	1710.00	1779.5743	1780
	30	3.7	1710.2992	1710.00	1779.9054	1780
	40	3.7	1710.1122	1710.00	1779.9054	1780
	50	3.7	1710.2618	1710.00	1779.6216	1780
Frequency Stability vs. Voltage	20	3.5	1710.187	1710.00	1779.8581	1780
	20	4.2	1710.3366	1710.00	1779.9054	1780
					Result:	Pass

Test Plots:

Occupied Bandwidth

Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

Occupied Bandwidth



Occupied Bandwidth

Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 15.740 dBm M1[1] -10.13 dBm 1.7100000 GHz Occ Bw 4.530938124 MHz D1[1] -0.58 dB 5.0200 MHz</p> <p>CF 1.7125 GHz 501 pts Span 10.0 MHz</p> <p>Date: 29_SEP.2021 20:51:20</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 14.740 dBm M1[1] -10.98 dBm 1.7100000 GHz Occ Bw 4.530938124 MHz D1[1] -1.09 dB 5.0400 MHz</p> <p>CF 1.7125 GHz 501 pts Span 10.0 MHz</p> <p>Date: 29_SEP.2021 20:51:53</p>
Middle	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 14.710 dBm M1[1] -10.86 dBm 1.7425000 GHz Occ Bw 4.510978044 MHz D1[1] 1.13 dB 5.0000 MHz</p> <p>CF 1.745 GHz 501 pts Span 10.0 MHz</p> <p>Date: 29_SEP.2021 20:52:23</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 13.470 dBm M1[1] -11.77 dBm 1.7425000 GHz Occ Bw 4.530938124 MHz D1[1] -0.24 dB 5.0200 MHz</p> <p>CF 1.745 GHz 501 pts Span 10.0 MHz</p> <p>Date: 29_SEP.2021 20:52:50</p>
Highest	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 14.690 dBm M1[1] -11.83 dBm 1.7749800 GHz Occ Bw 4.510978044 MHz D1[1] 0.05 dB 5.0200 MHz</p> <p>CF 1.7775 GHz 501 pts Span 10.0 MHz</p> <p>Date: 29_SEP.2021 20:53:17</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 13.900 dBm M1[1] -11.53 dBm 1.7750000 GHz Occ Bw 4.530938124 MHz D1[1] -0.46 dB 5.0000 MHz</p> <p>CF 1.7775 GHz 501 pts Span 10.0 MHz</p> <p>Date: 29_SEP.2021 20:53:50</p>

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

Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		