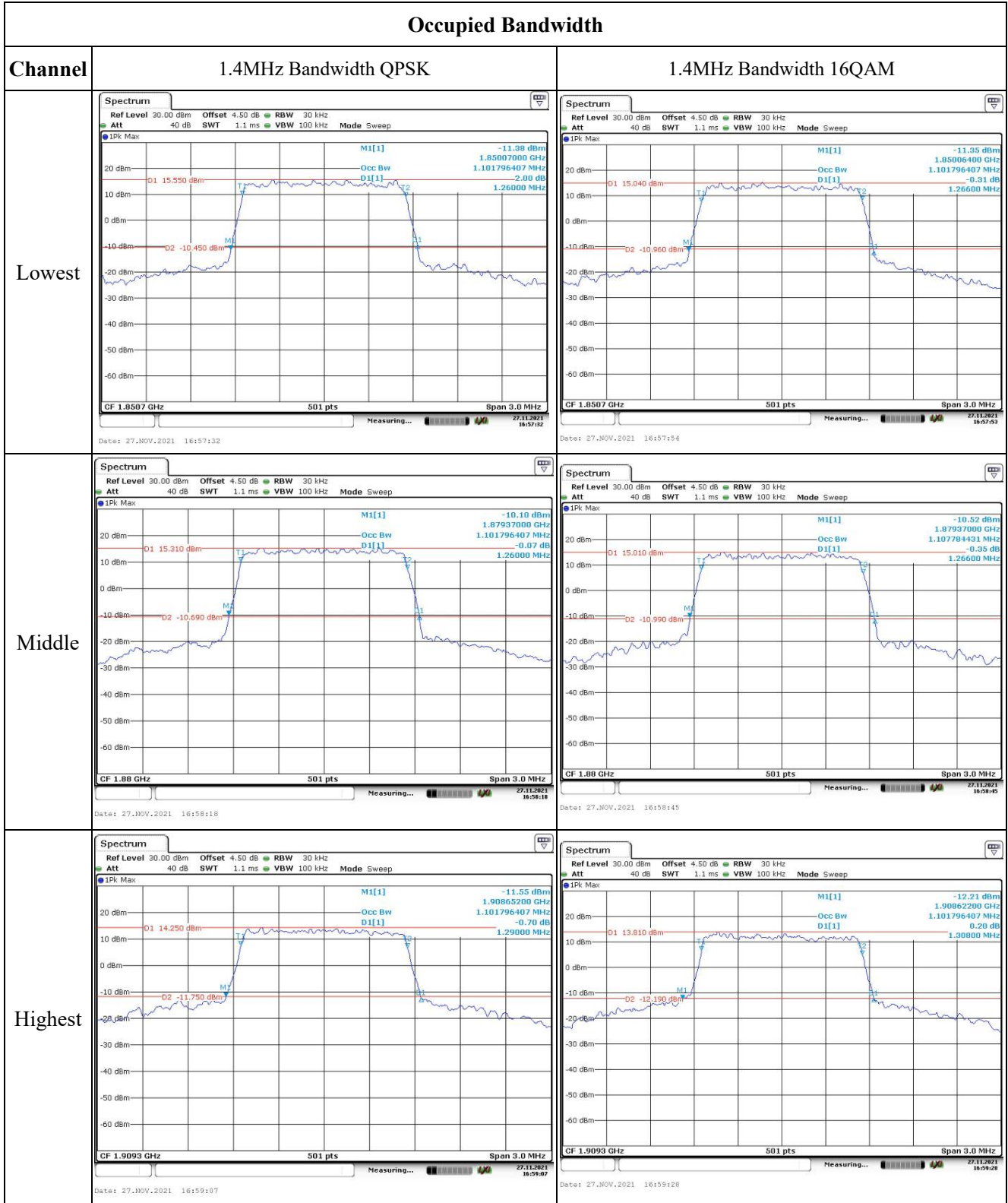


Test Plots:

Occupied Bandwidth



Occupied Bandwidth

Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

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] -11.88 dBm Occ Bw 4.530998124 MHz D1[1] 2.22 dB D2 -10.970 dBm CF 1.8525 GHz 501 pts Span 10.0 MHz Date: 27.NOV.2021 17:02:14</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] -11.42 dBm Occ Bw 4.510978044 MHz D1[1] -9.39 dB D2 -11.070 dBm CF 1.8525 GHz 501 pts Span 10.0 MHz Date: 27.NOV.2021 17:02:44</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] -10.70 dBm Occ Bw 4.510978044 MHz D1[1] 0.46 dB D2 -11.480 dBm CF 1.88 GHz 501 pts Span 10.0 MHz Date: 27.NOV.2021 17:03:08</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] -11.99 dBm Occ Bw 4.550898204 MHz D1[1] -0.52 dB D2 -12.000 dBm CF 1.88 GHz 501 pts Span 10.0 MHz Date: 27.NOV.2021 17:03:35</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] -11.23 dBm Occ Bw 4.510978044 MHz D1[1] -0.65 dB D2 -11.860 dBm CF 1.9075 GHz 501 pts Span 10.0 MHz Date: 27.NOV.2021 17:03:57</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] -13.48 dBm Occ Bw 4.530998124 MHz D1[1] 0.26 dB D2 -12.920 dBm CF 1.9075 GHz 501 pts Span 10.0 MHz Date: 27.NOV.2021 17:04:27</p>

Occupied Bandwidth

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

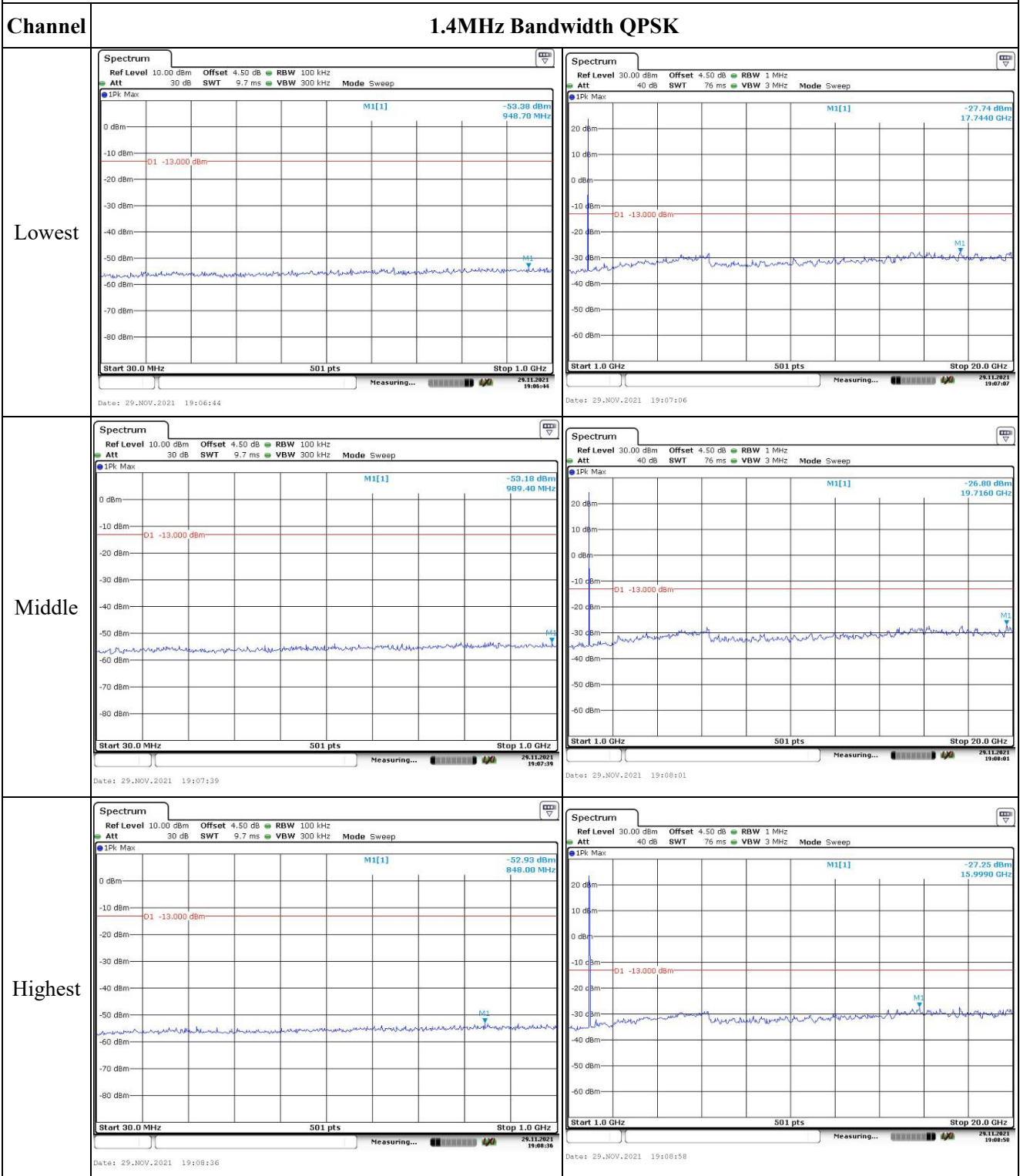
Occupied Bandwidth

Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep M1[1] -9.57 dBm Occ Bw 1.850000 GHz D1[1] -1.42 dB D1 15.910 dBm D2 -10.090 dBm CF 1.8575 GHz 501 pts Span 30.0 MHz Date: 27.NOV.2021 17:08:18</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep M1[1] -10.71 dBm Occ Bw 1.850000 GHz D1[1] -9.44 dB D1 15.090 dBm D2 -10.910 dBm CF 1.8575 GHz 501 pts Span 30.0 MHz Date: 27.NOV.2021 17:08:41</p>
Middle	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep M1[1] -10.44 dBm Occ Bw 1.8725000 GHz D1[1] -1.05 dB D1 15.650 dBm D2 -10.350 dBm CF 1.88 GHz 501 pts Span 30.0 MHz Date: 27.NOV.2021 17:09:13</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep M1[1] -11.72 dBm Occ Bw 1.8723800 GHz D1[1] 1.19 dB D1 14.780 dBm D2 -11.220 dBm CF 1.88 GHz 501 pts Span 30.0 MHz Date: 27.NOV.2021 17:09:40</p>
Highest	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep M1[1] -11.61 dBm Occ Bw 1.8949400 GHz D1[1] 0.52 dB D1 14.470 dBm D2 -11.530 dBm CF 1.9025 GHz 501 pts Span 30.0 MHz Date: 27.NOV.2021 17:10:08</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep M1[1] -12.05 dBm Occ Bw 1.8950000 GHz D1[1] 1.52 dB D1 14.080 dBm D2 -11.920 dBm CF 1.9025 GHz 501 pts Span 30.0 MHz Date: 27.NOV.2021 17:10:35</p>

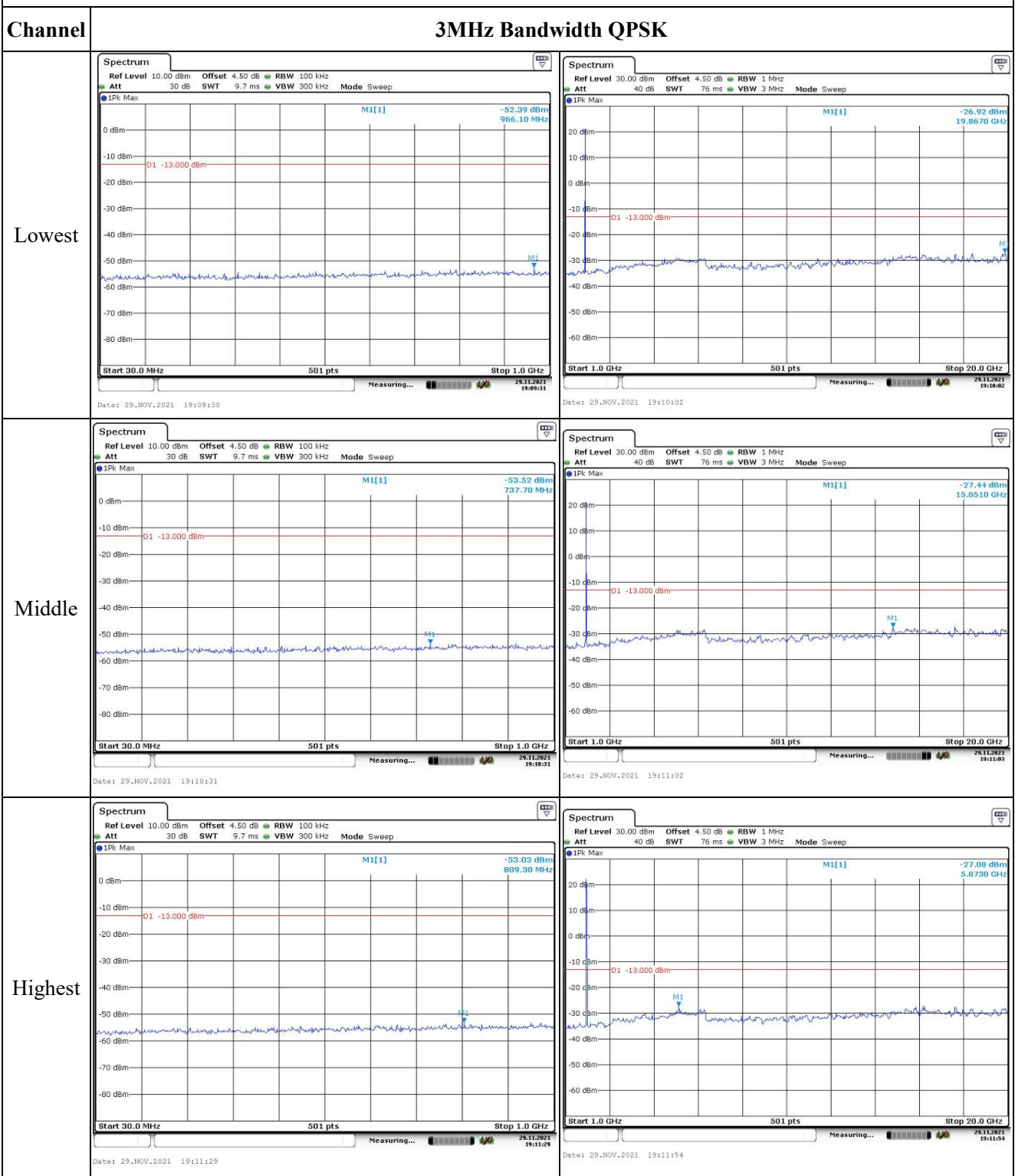
Occupied Bandwidth

Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	<p>1Pk Max</p> <p>M1[1] -11.02 dBm</p> <p>Occ Bw 17.964071856 MHz</p> <p>D1[1] -0.96 dB</p> <p>D1 14.230 dBm</p> <p>D2 -11.770 dBm</p> <p>CF 1.86 GHz</p> <p>Span 40.0 MHz</p> <p>Date: 27.NOV.2021 17:11:05</p>	<p>1Pk Max</p> <p>M1[1] -11.57 dBm</p> <p>Occ Bw 18.043912176 MHz</p> <p>D1[1] 0.29 dB</p> <p>D1 14.230 dBm</p> <p>D2 -11.770 dBm</p> <p>CF 1.86 GHz</p> <p>Span 40.0 MHz</p> <p>Date: 27.NOV.2021 17:11:33</p>
Middle	<p>1Pk Max</p> <p>M1[1] -10.63 dBm</p> <p>Occ Bw 17.964071856 MHz</p> <p>D1[1] -0.47 dB</p> <p>D1 15.010 dBm</p> <p>D2 -10.990 dBm</p> <p>CF 1.88 GHz</p> <p>Span 40.0 MHz</p> <p>Date: 27.NOV.2021 17:12:01</p>	<p>1Pk Max</p> <p>M1[1] -12.43 dBm</p> <p>Occ Bw 18.043912176 MHz</p> <p>D1[1] 0.11 dB</p> <p>D1 13.870 dBm</p> <p>D2 -12.130 dBm</p> <p>CF 1.88 GHz</p> <p>Span 40.0 MHz</p> <p>Date: 27.NOV.2021 17:12:28</p>
Highest	<p>1Pk Max</p> <p>M1[1] -12.78 dBm</p> <p>Occ Bw 17.964071856 MHz</p> <p>D1[1] -1.04 dB</p> <p>D1 12.860 dBm</p> <p>D2 -13.140 dBm</p> <p>CF 1.9 GHz</p> <p>Span 40.0 MHz</p> <p>Date: 27.NOV.2021 17:12:53</p>	<p>1Pk Max</p> <p>M1[1] -12.31 dBm</p> <p>Occ Bw 17.884231537 MHz</p> <p>D1[1] -0.42 dB</p> <p>D1 13.200 dBm</p> <p>D2 -12.800 dBm</p> <p>CF 1.9 GHz</p> <p>Span 40.0 MHz</p> <p>Date: 27.NOV.2021 17:13:23</p>

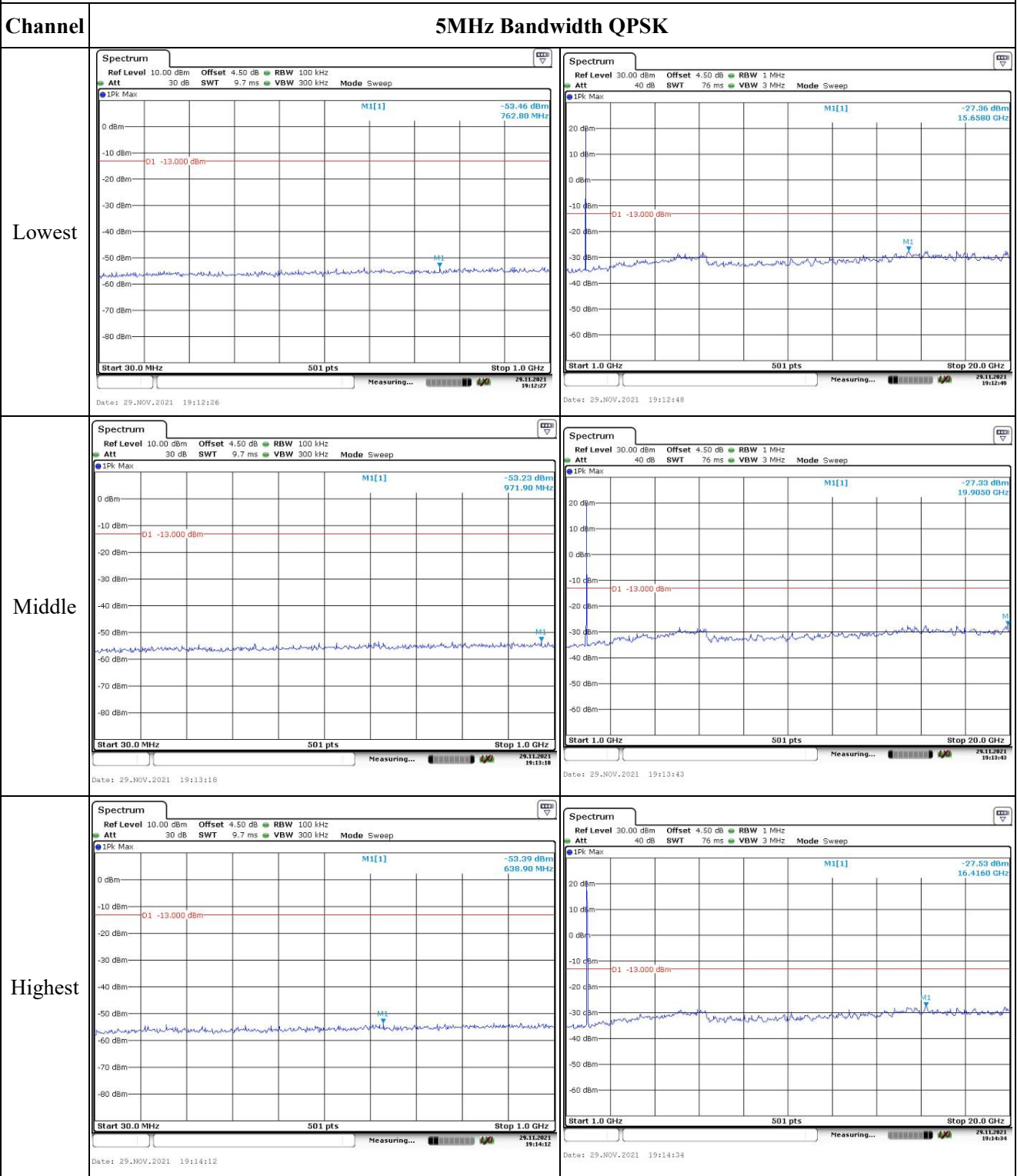
Spurious Emissions at Antenna Terminal



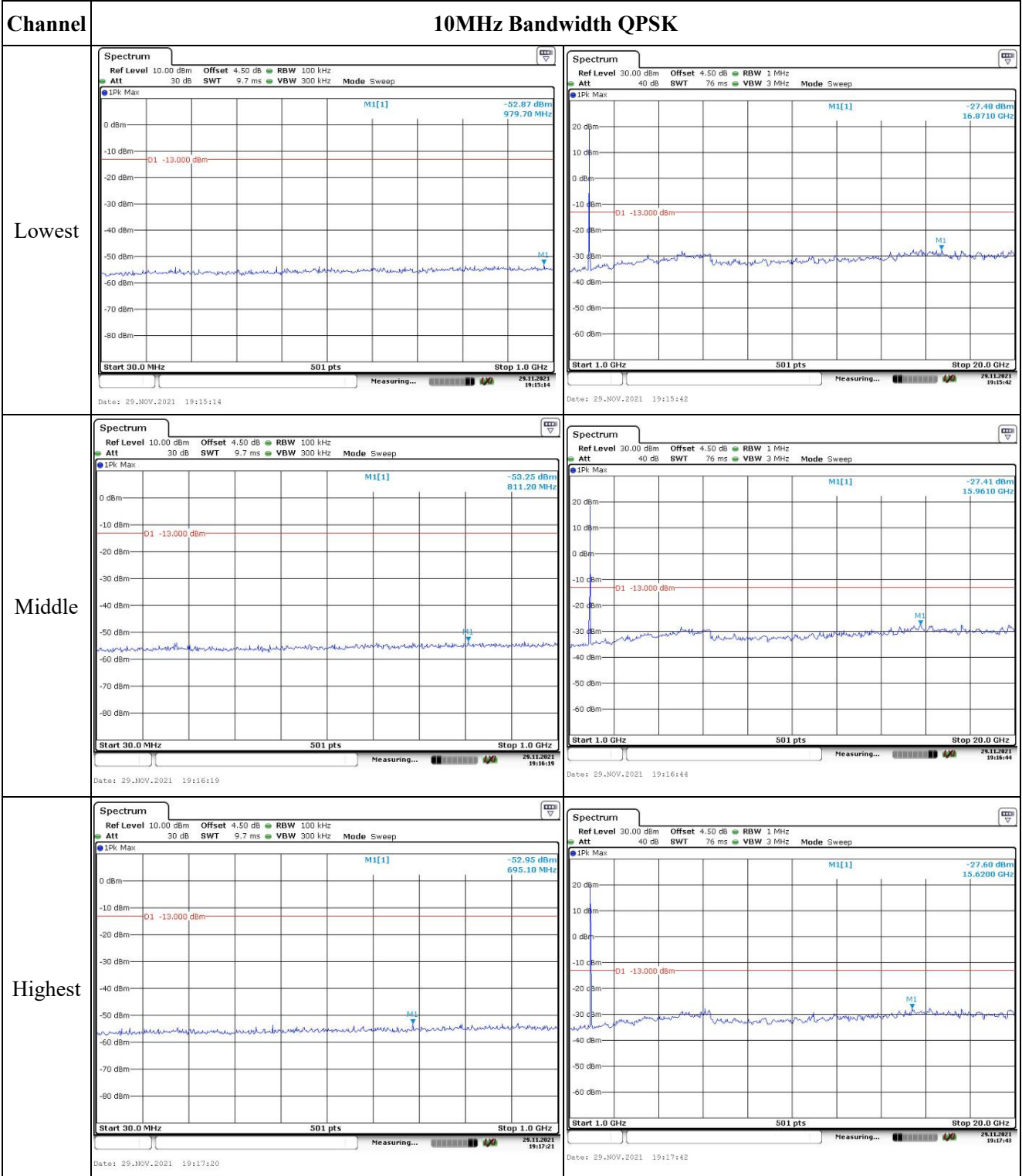
Spurious Emissions at Antenna Terminal



Spurious Emissions at Antenna Terminal



Spurious Emissions at Antenna Terminal

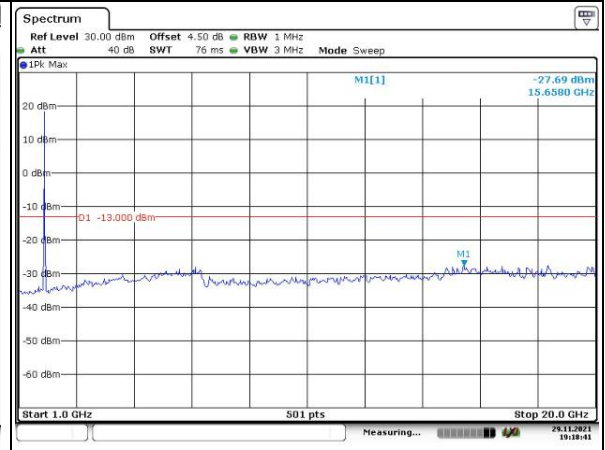
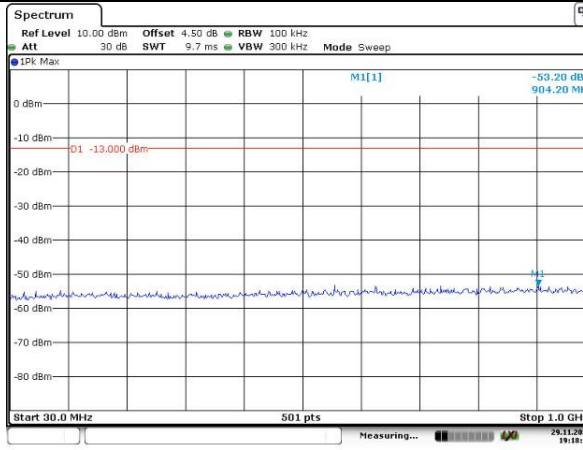


Spurious Emissions at Antenna Terminal

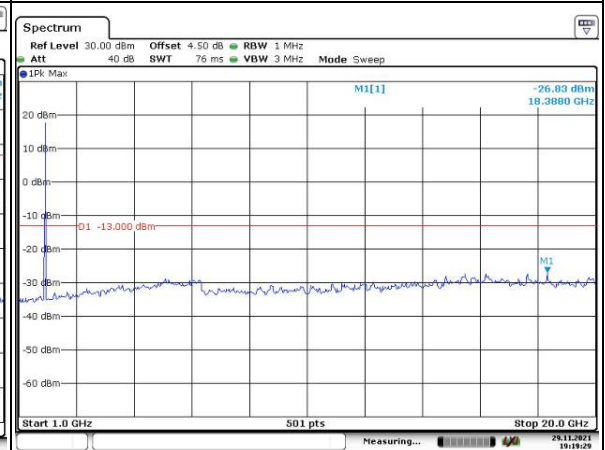
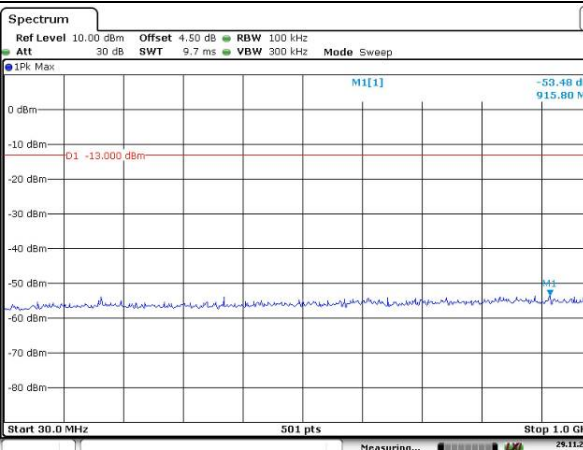
Channel

15MHz Bandwidth QPSK

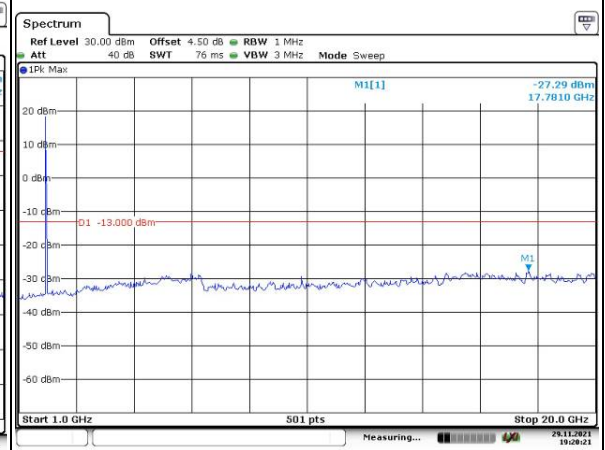
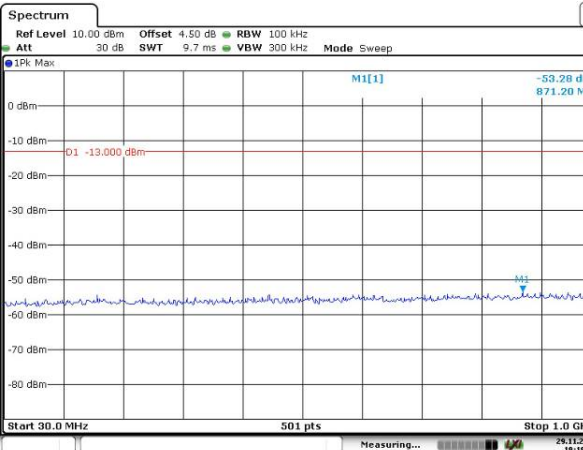
Lowest



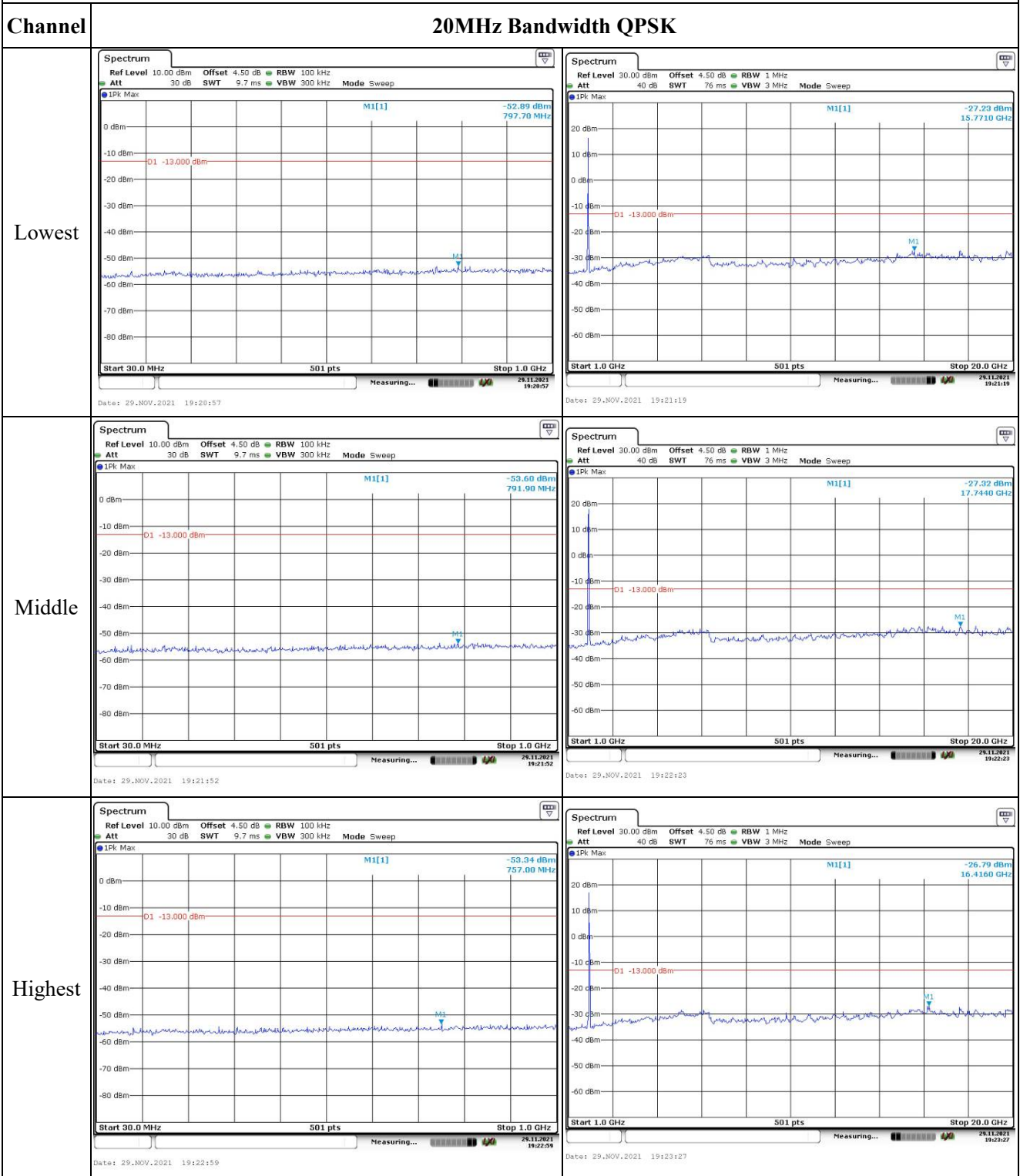
Middle



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 M1[1] -16.08 dBm 1.85000000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 3.0 MHz Date: 27.NOV.2021 15:14:28</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 M1[1] -14.38 dBm 1.91000000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 3.0 MHz Date: 27.NOV.2021 15:15:07</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 M1[1] -13.10 dBm 1.85000000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 6.0 MHz Date: 27.NOV.2021 15:15:54</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 M1[1] -16.35 dBm 1.91000000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 6.0 MHz Date: 27.NOV.2021 15:16:42</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 M1[1] -16.77 dBm 1.8499910 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 10.0 MHz Date: 30.NOV.2021 19:38:56</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 M1[1] -14.35 dBm 1.91000000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 10.0 MHz Date: 27.NOV.2021 15:18:39</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz		
QPSK 15MHz		
QPSK 20MHz		

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 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 M1[1] -15.90 dBm 1.84989220 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 3.0 MHz Date: 27.NOV.2021 15:14:46</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 M1[1] -15.56 dBm 1.91006590 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 3.0 MHz Date: 27.NOV.2021 15:15:27</p>
16QAM 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 M1[1] -15.10 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 6.0 MHz Date: 27.NOV.2021 15:16:21</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 M1[1] -16.10 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 6.0 MHz Date: 27.NOV.2021 15:17:02</p>
16QAM 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 M1[1] -13.36 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 10.0 MHz Date: 27.NOV.2021 15:18:05</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 M1[1] -14.67 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 10.0 MHz Date: 27.NOV.2021 15:19:08</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep M1[1] -19.90 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 20.0 MHz Date: 27.NOV.2021 15:20:11</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 M1[1] -21.79 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 20.0 MHz Date: 27.NOV.2021 15:21:13</p>
16QAM 15MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep M1[1] -13.82 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 30.0 MHz Date: 27.NOV.2021 15:22:14</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep M1[1] -15.37 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 30.0 MHz Date: 27.NOV.2021 15:23:17</p>
16QAM 20MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep M1[1] -15.61 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 40.0 MHz Date: 27.NOV.2021 15:24:21</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep M1[1] -19.18 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 40.0 MHz Date: 27.NOV.2021 15:25:22</p>

4.7 Antenna Port Test Data and Results for LTE Band 4

Serial Number:	CR21110024-RF-S4	Test Date:	2021-11-27~2022-01-06
Test Site:	RF	Test Mode:	Transmitting
Tester:	Le Qiao	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	22.1~22.9	Relative Humidity: (%)	40~66	ATM Pressure: (kPa)	101.4~101.7
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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 4▲:

Antenna Gain (dBi):	-1	Cable Loss (dB):	0.2
Operation Voltage(V _{DC}):			
Lowest:	3.5	Normal:	3.8
		Highest:	4.35

Test Frequency For Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
1.4MHz	1710.7	1732.5	1754.3
3MHz	1711.5	1732.5	1753.5
5MHz	1712.5	1732.5	1752.5
10MHz	1715	1732.5	1750
15MHz	1717.5	1732.5	1747.5
20MHz	1720	1732.5	1745

Test Data:

FCC§2.1046;§ 27.50(d)(4)						
RF Output Power:						
Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
1.4MHz QPSK	RB1#0	22.25	22.21	22.40	21.2	30
	RB1#3	22.28	22.24	22.36		
	RB1#5	22.24	22.26	22.34		
	RB3#0	22.29	22.38	22.19		
	RB3#3	22.36	22.40	22.24		
	RB6#0	21.16	21.32	21.16		
1.4MHz 16QAM	RB1#0	21.99	21.96	21.23	20.84	30
	RB1#3	22.00	22.02	21.17		
	RB1#5	22.04	22.03	21.22		
	RB3#0	21.34	21.22	21.34		
	RB6#0	20.66	20.38	20.55		
3MHz QPSK	RB1#0	22.26	22.22	22.34	21.14	30
	RB1#8	22.27	22.24	22.31		
	RB1#14	22.22	22.28	22.33		
	RB6#0	21.20	21.26	21.18		
	RB6#9	21.21	21.32	21.19		
3MHz 16QAM	RB1#0	21.77	21.99	21.22	20.84	30
	RB1#8	21.77	22.04	21.23		
	RB1#14	21.74	22.03	21.24		
	RB6#0	20.40	20.44	20.62		
	RB6#9	20.31	20.43	20.52		
	RB15#0	20.49	20.37	20.44		
5MHz QPSK	RB1#0	22.28	22.36	22.07	21.25	30
	RB1#13	22.24	22.45	22.00		
	RB1#24	22.29	22.44	22.06		
	RB15#0	21.35	21.18	21.19		
	RB15#10	21.28	21.28	21.11		
5MHz 16QAM	RB25#0	21.27	21.23	21.25	20.27	30
	RB1#0	20.48	21.40	20.73		
	RB1#13	20.42	21.35	20.75		
	RB1#24	20.36	21.47	20.77		
	RB15#0	20.51	20.22	20.21		
	RB15#10	20.45	20.27	20.29		
RB25#0	20.46	20.29	20.20			

10MHz QPSK	RB1#0	22.21	22.23	22.35	21.2	30
	RB1#25	22.08	22.30	22.40		
	RB1#49	22.12	22.33	22.34		
	RB25#0	21.23	21.35	21.25		
	RB25#25	21.44	21.31	21.18		
	RB50#0	21.17	21.24	21.19		
10MHz 16QAM	RB1#0	21.54	21.53	20.70	20.34	30
	RB1#25	21.51	21.43	20.76		
	RB1#49	21.52	21.44	20.75		
	RB25#0	20.41	20.69	20.40		
	RB25#25	20.35	20.52	20.42		
	RB50#0	20.34	20.32	20.30		
15MHz QPSK	RB1#0	22.20	22.25	22.29	21.13	30
	RB1#38	22.14	22.30	22.33		
	RB1#74	22.18	22.28	22.31		
	RB36#0	21.16	21.25	21.15		
	RB36#39	21.19	21.18	21.15		
	RB75#0	21.24	21.28	21.18		
15MHz 16QAM	RB1#0	21.53	21.44	21.58	20.63	30
	RB1#38	21.72	21.48	21.57		
	RB1#74	21.83	21.45	21.62		
	RB36#0	20.36	20.58	20.28		
	RB36#39	20.40	20.54	20.32		
	RB75#0	20.32	20.42	20.36		
20MHz QPSK	RB1#0	22.18	22.11	22.32	21.24	30
	RB1#50	22.34	22.19	21.95		
	RB1#99	22.44	22.20	22.10		
	RB50#0	21.21	21.26	21.16		
	RB50#50	21.39	21.27	21.30		
	RB100#0	21.13	21.21	21.17		
20MHz 16QAM	RB1#0	21.30	21.75	21.82	20.63	30
	RB1#50	21.26	21.67	21.83		
	RB1#99	21.37	21.67	21.79		
	RB50#0	20.44	20.48	20.29		
	RB50#50	20.40	20.43	20.32		
	RB100#0	20.11	20.25	20.39		

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	4.70	4.03	4.75	13
	RB100#0	4.87	4.75	5.30	13
20MHz 16QAM	RB1#0	5.48	4.75	5.83	13
	RB100#0	6.03	5.83	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
1.4MHz QPSK	1.102	1.102	1.102	1.254	1.266	1.260
1.4MHz 16QAM	1.108	1.102	1.102	1.266	1.254	1.254
3MHz QPSK	2.707	2.695	2.695	3.000	3.012	3.012
3MHz 16QAM	2.707	2.695	2.695	3.012	3.012	3.024
5MHz QPSK	4.511	4.531	4.491	4.980	5.000	5.000
5MHz 16QAM	4.511	4.551	4.531	5.000	5.000	5.000
10MHz QPSK	8.981	8.942	8.981	9.720	9.800	9.800
10MHz 16QAM	8.942	8.942	8.981	9.720	9.880	9.840
15MHz QPSK	13.533	13.473	13.533	15.000	14.940	15.120
15MHz 16QAM	13.533	13.593	13.593	15.000	15.060	15.000
20MHz QPSK	17.964	18.044	18.044	19.440	19.600	19.840
20MHz 16QAM	17.964	18.044	18.044	19.680	19.840	19.760

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.

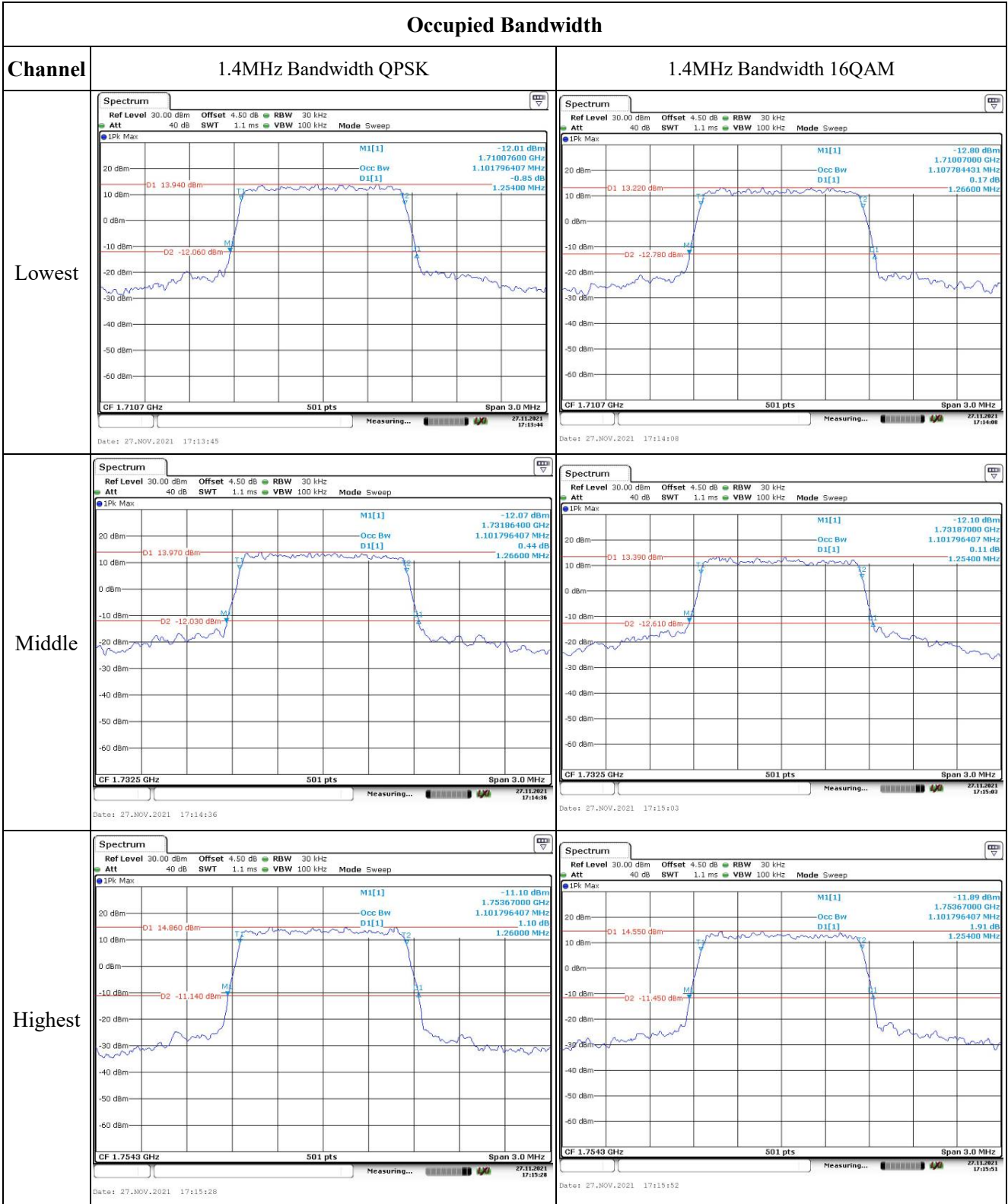
FCC §2.1051, § 27.53:Out of band emission, Band Edge	
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.

FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	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	3.8	1710.522	1710.00	1754.511	1755
	-20	3.8	1710.523	1710.00	1754.512	1755
	-10	3.8	1710.524	1710.00	1754.513	1755
	0	3.8	1710.525	1710.00	1754.514	1755
	10	3.8	1710.526	1710.00	1754.515	1755
	20	3.8	1710.528	1710.00	1754.511	1755
	30	3.8	1710.524	1710.00	1754.516	1755
	40	3.8	1710.522	1710.00	1754.517	1755
	50	3.8	1710.521	1710.00	1754.518	1755
Frequency Stability vs. Voltage	20	3.5	1710.526	1710.00	1754.516	1755
	20	4.35	1710.528	1710.00	1754.511	1755
					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	3.8	1710.523	1710.00	1754.512	1755
	-20	3.8	1710.525	1710.00	1754.513	1755
	-10	3.8	1710.524	1710.00	1754.514	1755
	0	3.8	1710.522	1710.00	1754.515	1755
	10	3.8	1710.524	1710.00	1754.516	1755
	20	3.8	1710.528	1710.00	1754.511	1755
	30	3.8	1710.527	1710.00	1754.517	1755
	40	3.8	1710.524	1710.00	1754.518	1755
	50	3.8	1710.525	1710.00	1754.519	1755
Frequency Stability vs. Voltage	20	3.5	1710.523	1710.00	1754.519	1755
	20	4.35	1710.528	1710.00	1754.511	1755
					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 -13.82 dBm M1[1] 1.710000 GHz Occ Bw 2.70658626 MHz D1[1] 0.24 dB</p> <p>CF 1.7115 GHz 501 pts Span 6.0 MHz Date: 27.NOV.2021 17:16:19</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</p> <p>1Pk Max -14.45 dBm M1[1] 1.710000 GHz Occ Bw 2.70658626 MHz D1[1] -1.09 dB</p> <p>CF 1.7115 GHz 501 pts Span 6.0 MHz Date: 27.NOV.2021 17:16:40</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 -14.70 dBm M1[1] 1.7309880 GHz Occ Bw 2.694610778 MHz D1[1] -0.23 dB</p> <p>CF 1.7325 GHz 501 pts Span 6.0 MHz Date: 27.NOV.2021 17:17:01</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</p> <p>1Pk Max -15.10 dBm M1[1] 1.7309880 GHz Occ Bw 2.694610778 MHz D1[1] -0.09 dB</p> <p>CF 1.7325 GHz 501 pts Span 6.0 MHz Date: 27.NOV.2021 17:17:25</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 -14.77 dBm M1[1] 1.7520000 GHz Occ Bw 2.694610778 MHz D1[1] -0.16 dB</p> <p>CF 1.7535 GHz 501 pts Span 6.0 MHz Date: 27.NOV.2021 17:17:58</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 -14.30 dBm M1[1] 1.7519880 GHz Occ Bw 2.694610778 MHz D1[1] -0.57 dB</p> <p>CF 1.7535 GHz 501 pts Span 6.0 MHz Date: 27.NOV.2021 17:18:17</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</p> <p>1Pk Max</p> <p>M1[1] -11.27 dBm 1.7100200 GHz Occ Bw 4.510978044 MHz D1[1] -1.37 dB 4.9800 MHz</p> <p>D1 14.090 dBm D2 -11.910 dBm</p> <p>CF 1.7125 GHz 501 pts Span 10.0 MHz</p> <p>Date: 27.NOV.2021 17:18:50</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] -12.78 dBm 1.7100200 GHz Occ Bw 4.510978044 MHz D1[1] 0.03 dB 5.0000 MHz</p> <p>D1 13.330 dBm D2 -12.670 dBm</p> <p>CF 1.7125 GHz 501 pts Span 10.0 MHz</p> <p>Date: 27.NOV.2021 17:19:14</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</p> <p>1Pk Max</p> <p>M1[1] -12.91 dBm 1.7300000 GHz Occ Bw 4.530938124 MHz D1[1] 0.30 dB 5.0000 MHz</p> <p>D1 13.300 dBm D2 -12.620 dBm</p> <p>CF 1.7325 GHz 501 pts Span 10.0 MHz</p> <p>Date: 27.NOV.2021 17:19:48</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] -13.43 dBm 1.7300000 GHz Occ Bw 4.530938124 MHz D1[1] -0.09 dB 5.0000 MHz</p> <p>D1 12.720 dBm D2 -13.380 dBm</p> <p>CF 1.7325 GHz 501 pts Span 10.0 MHz</p> <p>Date: 27.NOV.2021 17:20:18</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</p> <p>1Pk Max</p> <p>M1[1] -11.30 dBm 1.7500000 GHz Occ Bw 4.491017964 MHz D1[1] -0.60 dB 5.0000 MHz</p> <p>D1 14.730 dBm D2 -11.270 dBm</p> <p>CF 1.7525 GHz 501 pts Span 10.0 MHz</p> <p>Date: 27.NOV.2021 17:20:52</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] -11.40 dBm 1.7500000 GHz Occ Bw 4.530938124 MHz D1[1] -1.27 dB 5.0000 MHz</p> <p>D1 13.420 dBm D2 -12.580 dBm</p> <p>CF 1.7525 GHz 501 pts Span 10.0 MHz</p> <p>Date: 27.NOV.2021 17:21:25</p>