

Occupied Bandwidth

Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

Occupied Bandwidth

Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -13.89 dBm 1.8502400 GHz D1[1] 12.480 dBm 10.043912176 MHz D2 -13.520 dBm D1[1] 1.16 dB 19.5200 MHz</p> <p>CF 1.86 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:12:26</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -14.29 dBm 1.8501600 GHz D1[1] 11.150 dBm 18.043912176 MHz D2 -14.850 dBm D1[1] 0.12 dB 19.6000 MHz</p> <p>CF 1.86 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:12:53</p>
Middle	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -14.56 dBm 1.8701600 GHz D1[1] 12.010 dBm 17.964071856 MHz D2 -13.990 dBm D1[1] 1.28 dB 19.6800 MHz</p> <p>CF 1.88 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:13:27</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -15.57 dBm 1.8701600 GHz D1[1] 10.240 dBm 18.043912176 MHz D2 -15.760 dBm D1[1] -0.07 dB 19.7600 MHz</p> <p>CF 1.88 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:14:00</p>
Highest	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -14.81 dBm 1.8900800 GHz D1[1] 10.790 dBm 18.043912176 MHz D2 -15.210 dBm D1[1] 0.25 dB 19.8400 MHz</p> <p>CF 1.9 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:14:38</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -13.88 dBm 1.8901600 GHz D1[1] 11.330 dBm 18.043912176 MHz D2 -14.670 dBm D1[1] -0.33 dB 19.6000 MHz</p> <p>CF 1.9 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:15:12</p>

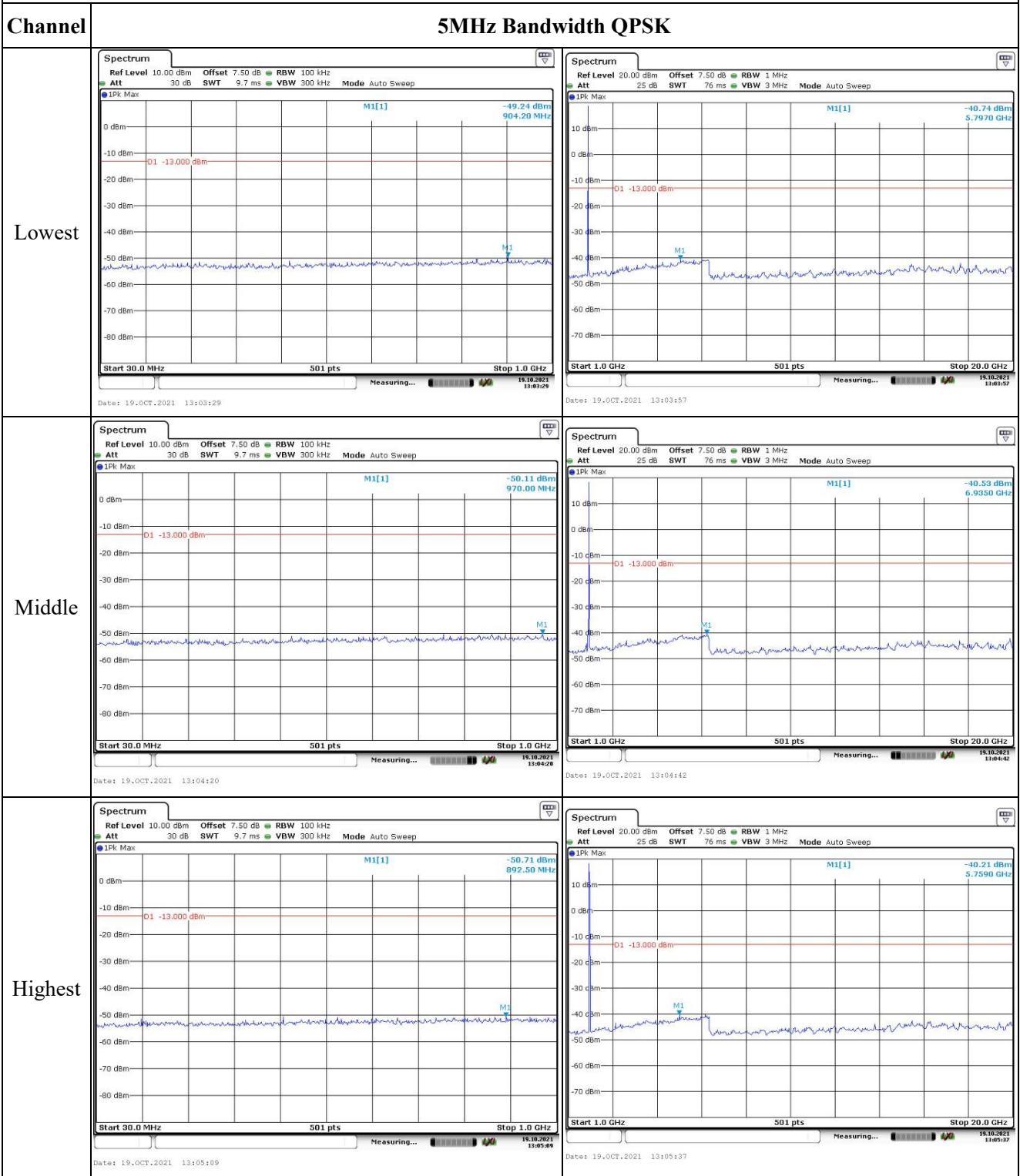
Spurious Emissions at Antenna Terminal

Channel	1.4MHz Bandwidth QPSK	
Lowest	<p>Spectrum Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep 1Pk Max M1[1] -47.56 dBm 904.20 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 19.OCT.2021 12:58:03</p>	<p>Spectrum Ref Level 20.00 dBm Offset 7.50 dB RBW 1 MHz Att 25 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep 1Pk Max M1[1] -40.74 dBm 6.7830 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 19.OCT.2021 12:58:31</p>
Middle	<p>Spectrum Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep 1Pk Max M1[1] -48.06 dBm 904.20 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 19.OCT.2021 12:59:00</p>	<p>Spectrum Ref Level 20.00 dBm Offset 7.50 dB RBW 1 MHz Att 25 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep 1Pk Max M1[1] -39.97 dBm 5.8730 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 19.OCT.2021 12:59:22</p>
Highest	<p>Spectrum Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep 1Pk Max M1[1] -48.65 dBm 904.20 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 19.OCT.2021 12:59:48</p>	<p>Spectrum Ref Level 20.00 dBm Offset 7.50 dB RBW 1 MHz Att 25 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep 1Pk Max M1[1] -40.34 dBm 6.1770 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 19.OCT.2021 13:00:14</p>

Spurious Emissions at Antenna Terminal

Channel	3MHz Bandwidth QPSK	
Lowest	<p>Spectrum Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep 1Pk Max M1[1] -47.96 dBm 904.20 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 19.OCT.2021 13:00:46</p>	<p>Spectrum Ref Level 20.00 dBm Offset 7.50 dB RBW 1 MHz Att 25 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep 1Pk Max M1[1] -40.54 dBm 6.7080 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 19.OCT.2021 13:01:08</p>
Middle	<p>Spectrum Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep 1Pk Max M1[1] -46.91 dBm 904.20 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 19.OCT.2021 13:01:34</p>	<p>Spectrum Ref Level 20.00 dBm Offset 7.50 dB RBW 1 MHz Att 25 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep 1Pk Max M1[1] -40.46 dBm 6.9350 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 19.OCT.2021 13:01:59</p>
Highest	<p>Spectrum Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep 1Pk Max M1[1] -33.40 dBm 926.70 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 19.OCT.2021 13:02:35</p>	<p>Spectrum Ref Level 20.00 dBm Offset 7.50 dB RBW 1 MHz Att 25 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep 1Pk Max M1[1] -40.12 dBm 5.9870 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 19.OCT.2021 13:02:57</p>

Spurious Emissions at Antenna Terminal

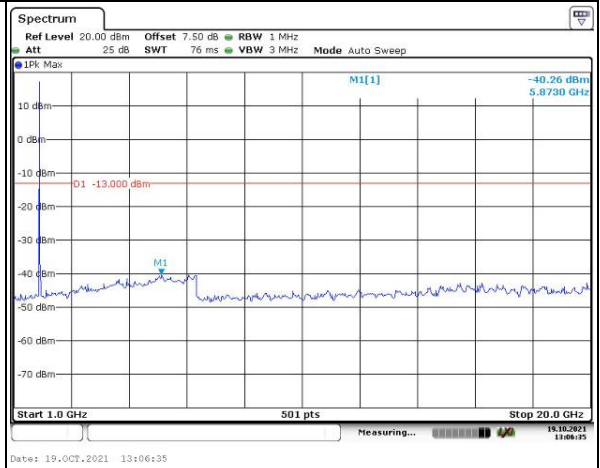
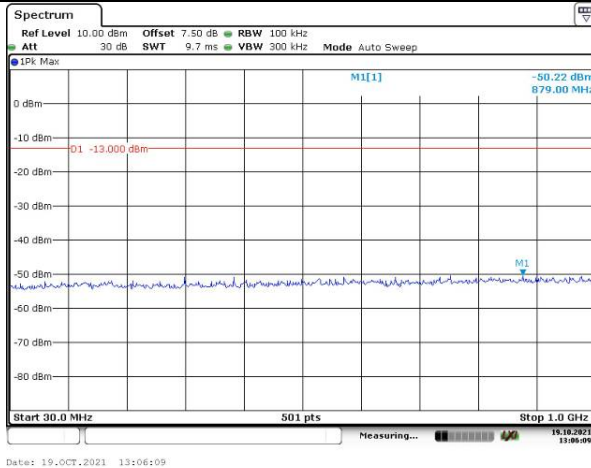


Spurious Emissions at Antenna Terminal

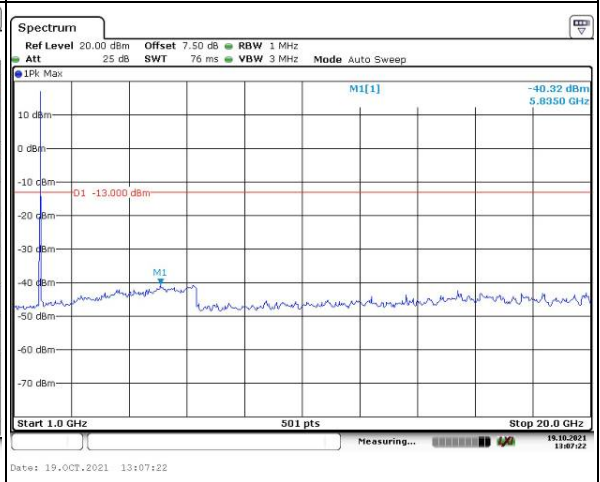
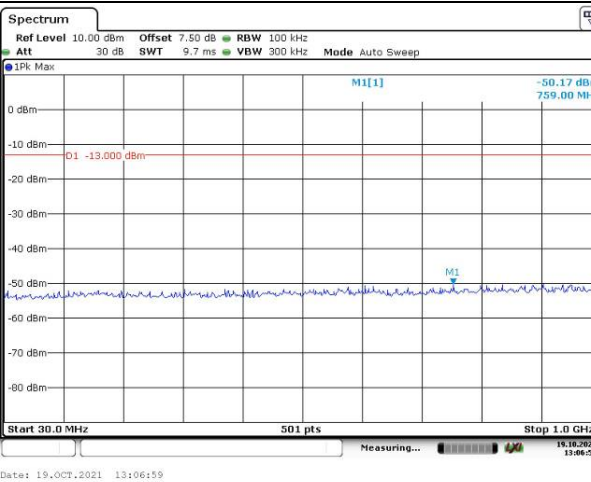
Channel

10MHz Bandwidth QPSK

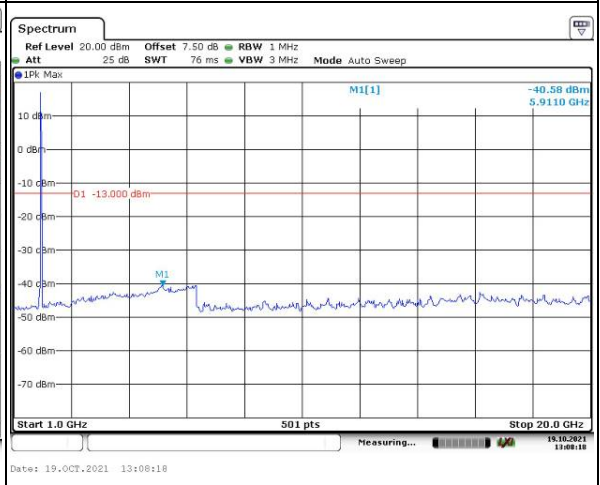
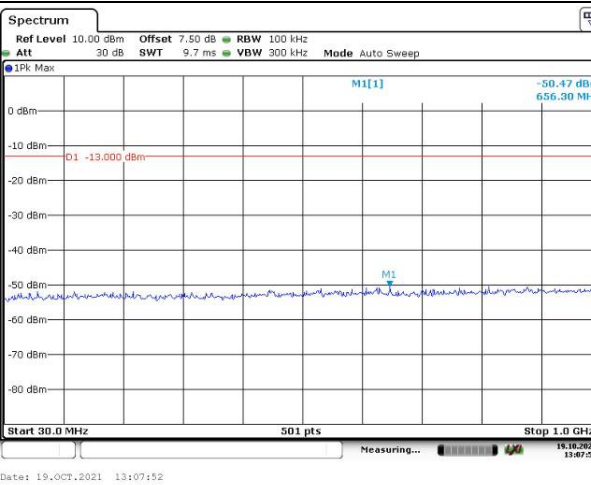
Lowest



Middle



Highest

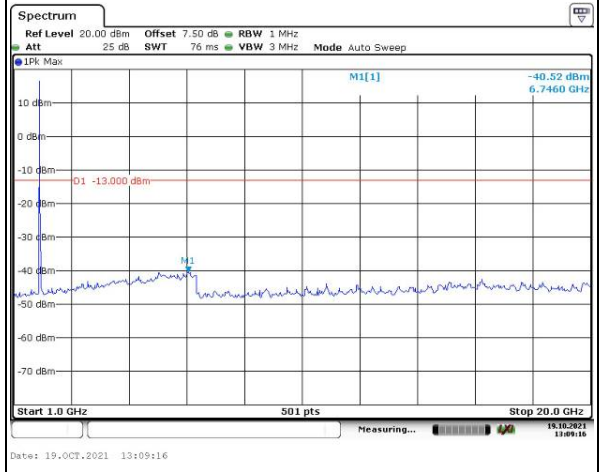
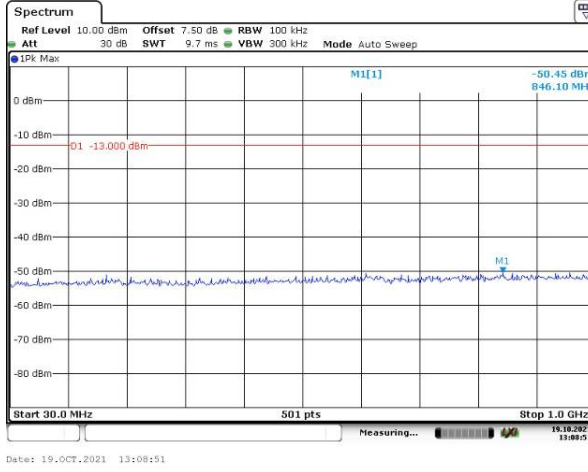


Spurious Emissions at Antenna Terminal

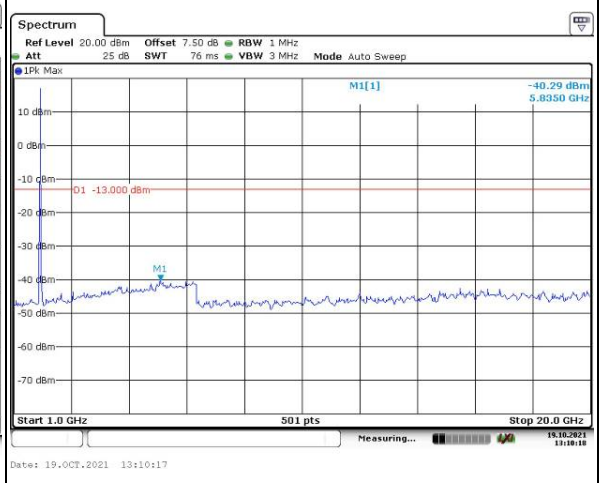
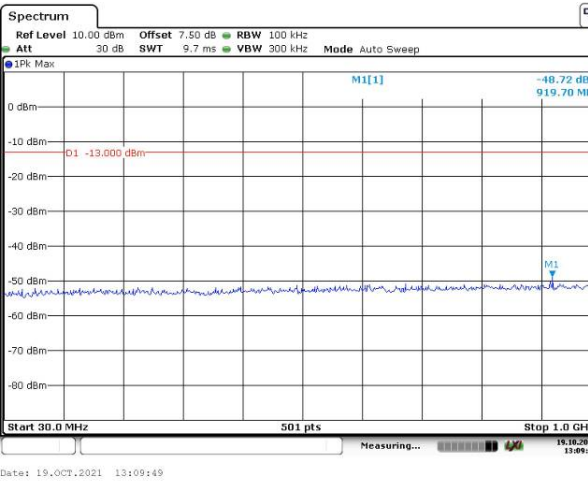
Channel

15MHz Bandwidth QPSK

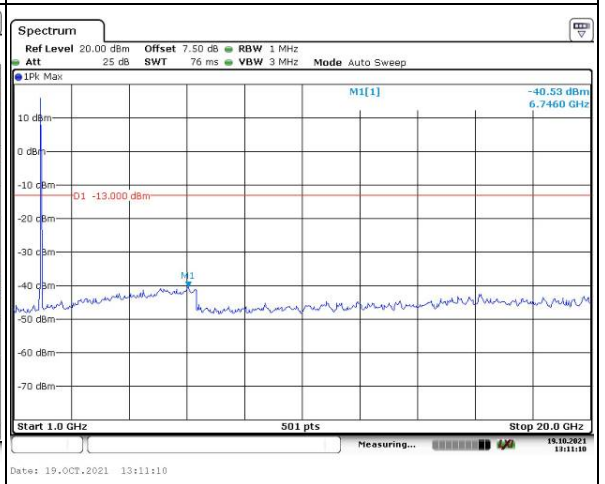
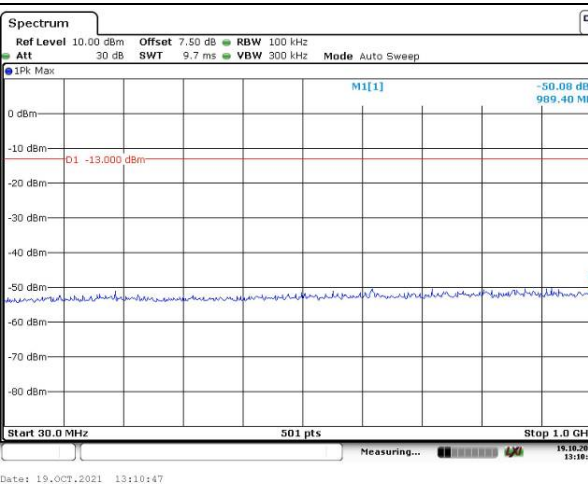
Lowest



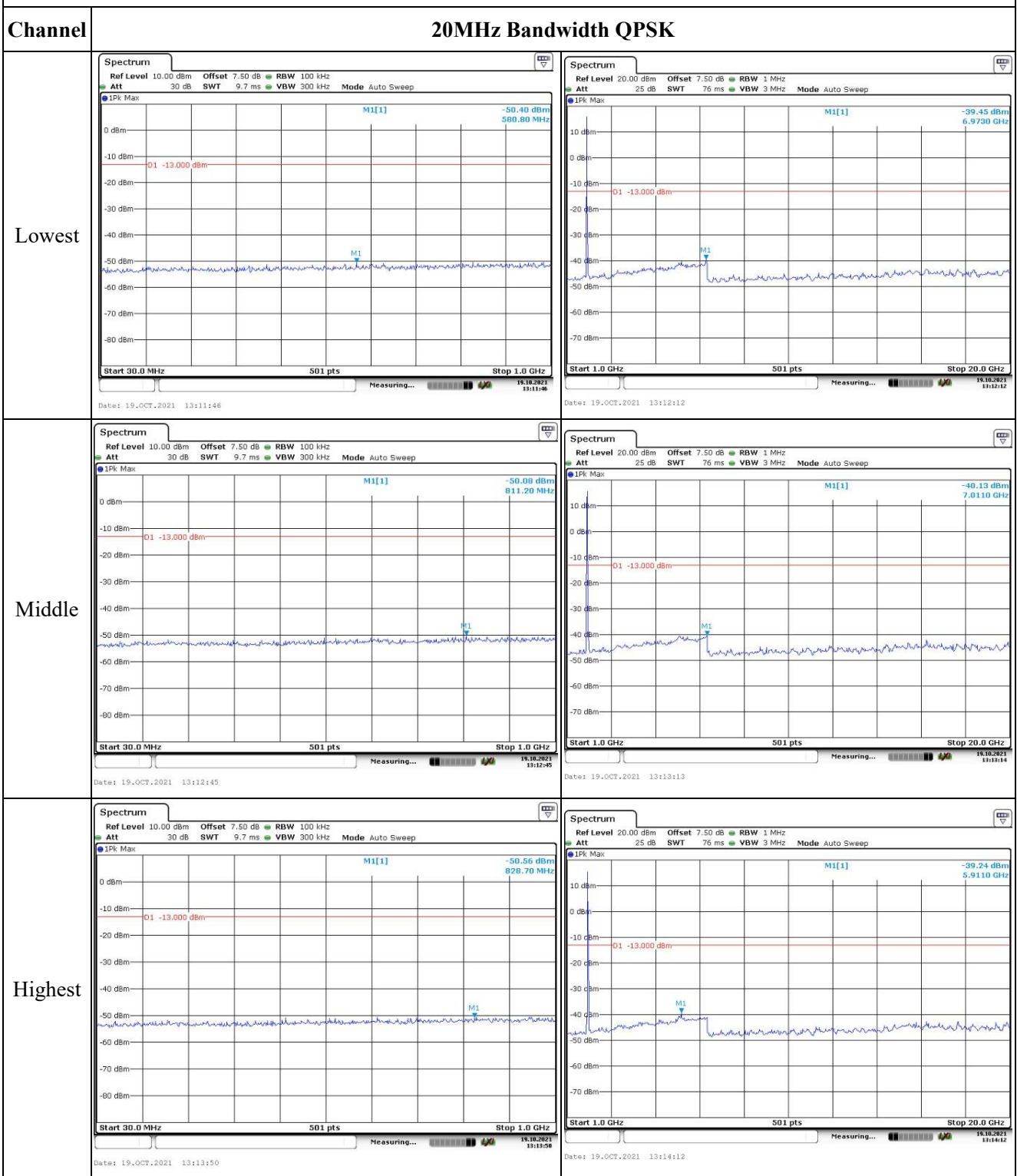
Middle



Highest



Spurious Emissions at Antenna Terminal



Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.3 μs VBW 100 kHz Mode Auto FFT M1[1] -19.60 dBm 1.84999400 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 3.0 MHz Date: 19.OCT.2021 12:27:20</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.3 μs VBW 100 kHz Mode Auto FFT M1[1] -18.38 dBm 1.91000000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 3.0 MHz Date: 19.OCT.2021 12:27:52</p>
QPSK 3MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT M1[1] -14.70 dBm 1.85000000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 6.0 MHz Date: 19.OCT.2021 12:28:20</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT M1[1] -15.91 dBm 1.91000000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 6.0 MHz Date: 19.OCT.2021 12:28:51</p>
QPSK 5MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 100 kHz Att 25 dB SWT 38 μs VBW 300 kHz Mode Auto FFT M1[1] -16.47 dBm 1.85000000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 10.0 MHz Date: 19.OCT.2021 12:29:38</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 100 kHz Att 25 dB SWT 38 μs VBW 300 kHz Mode Auto FFT M1[1] -17.04 dBm 1.91000000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 10.0 MHz Date: 19.OCT.2021 12:30:19</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 100 kHz Att 25 dB SWT 56.9 μs VBW 300 kHz Mode Auto FFT M1[1] -22.32 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 20.0 MHz Date: 19.OCT.2021 12:31:16</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 100 kHz Att 25 dB SWT 56.9 μs VBW 300 kHz Mode Auto FFT M1[1] -21.52 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 20.0 MHz Date: 19.OCT.2021 12:31:59</p>
QPSK 15MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT M1[1] -14.23 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 30.0 MHz Date: 19.OCT.2021 12:32:53</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT M1[1] -16.61 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 30.0 MHz Date: 19.OCT.2021 12:33:53</p>
QPSK 20MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT M1[1] -22.55 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 40.0 MHz Date: 19.OCT.2021 12:35:02</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT M1[1] -20.83 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 40.0 MHz Date: 19.OCT.2021 12:36:06</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.3 μs VBW 100 kHz Mode Auto FFT</p> <p>1Rm Max</p> <p>M1[1] -21.65 dBm 1.8500000 GHz</p> <p>D1 -13.000 dBm</p> <p>CF 1.85 GHz 501 pts Span 3.0 MHz</p> <p>Date: 19.OCT.2021 12:27:34</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.3 μs VBW 100 kHz Mode Auto FFT</p> <p>1Rm Max</p> <p>M1[1] -18.39 dBm 1.9100000 GHz</p> <p>D1 -13.000 dBm</p> <p>CF 1.91 GHz 501 pts Span 3.0 MHz</p> <p>Date: 19.OCT.2021 12:28:02</p>
16QAM 3MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>1Rm Max</p> <p>M1[1] -15.96 dBm 1.8500000 GHz</p> <p>D1 -13.000 dBm</p> <p>CF 1.85 GHz 501 pts Span 6.0 MHz</p> <p>Date: 19.OCT.2021 12:28:37</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>1Rm Max</p> <p>M1[1] -17.63 dBm 1.9100000 GHz</p> <p>D1 -13.000 dBm</p> <p>CF 1.91 GHz 501 pts Span 6.0 MHz</p> <p>Date: 19.OCT.2021 12:29:05</p>
16QAM 5MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 100 kHz Att 25 dB SWT 38 μs VBW 300 kHz Mode Auto FFT</p> <p>1Rm Max</p> <p>M1[1] -16.76 dBm 1.8500000 GHz</p> <p>D1 -13.000 dBm</p> <p>CF 1.85 GHz 501 pts Span 10.0 MHz</p> <p>Date: 19.OCT.2021 12:30:01</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 100 kHz Att 25 dB SWT 38 μs VBW 300 kHz Mode Auto FFT</p> <p>1Rm Max</p> <p>M1[1] -17.58 dBm 1.9100000 GHz</p> <p>D1 -13.000 dBm</p> <p>CF 1.91 GHz 501 pts Span 10.0 MHz</p> <p>Date: 19.OCT.2021 12:30:42</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 100 kHz Att 25 dB SWT 56.9 μs VBW 300 kHz Mode Auto FFT M1[1] -22.60 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 20.0 MHz Date: 19.OCT.2021 12:31:40</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 100 kHz Att 25 dB SWT 56.9 μs VBW 300 kHz Mode Auto FFT M1[1] -21.97 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 20.0 MHz Date: 19.OCT.2021 12:32:20</p>
16QAM 15MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT M1[1] -17.33 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 30.0 MHz Date: 19.OCT.2021 12:33:19</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT M1[1] -16.77 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 30.0 MHz Date: 19.OCT.2021 12:34:26</p>
16QAM 20MHz	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT M1[1] -20.53 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 40.0 MHz Date: 19.OCT.2021 12:35:38</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT M1[1] -20.10 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 40.0 MHz Date: 19.OCT.2021 12:36:38</p>

4.6 Antenna Port Test Data and Results for LTE Band 4:

Serial Number:	CR21090082-RF-S2	Test Date:	2021/10/19~2021/11/5
Test Site:	RF	Test Mode:	Transmitting
Tester:	Thor Lei	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.1~27.8	Relative Humidity: (%)	52~62	ATM Pressure: (kPa)	100.8~102.1
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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 4▲:

Antenna Gain (dBi):	-0.39	Cable Loss (dB):	0.4
Operation Voltage(V _{DC}):			
Lowest:	3.6	Normal:	3.85
		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	22.73	22.83	22.93	22.15	30
	RB1#3	22.76	22.81	22.94		
	RB1#5	22.79	22.79	22.92		
	RB3#0	22.79	22.82	22.84		
	RB3#3	22.86	22.85	22.88		
	RB6#0	21.85	21.85	21.84		
1.4MHz 16QAM	RB1#0	22.36	22.61	21.93	21.82	30
	RB1#3	22.39	22.58	21.94		
	RB1#5	22.39	22.54	22		
	RB3#0	21.88	21.72	21.76		
	RB3#3	21.88	21.77	21.85		
	RB6#0	21.05	20.94	21.22		
3MHz QPSK	RB1#0	22.71	22.87	22.94	22.18	30
	RB1#8	22.72	22.88	22.97		
	RB1#14	22.69	22.84	22.96		
	RB6#0	21.79	21.89	21.86		
	RB6#9	21.8	21.81	21.83		
	RB15#0	21.8	21.79	21.83		
3MHz 16QAM	RB1#0	22.18	22.62	21.94	21.83	30
	RB1#8	22.19	22.54	21.9		
	RB1#14	22.13	22.57	21.94		
	RB6#0	20.75	21	21.17		
	RB6#9	20.83	21	21.17		
	RB15#0	20.92	20.86	20.95		
5MHz QPSK	RB1#0	22.74	22.93	22.63	22.15	30

	RB1#13	22.71	22.94	22.64		
	RB1#24	22.75	22.92	22.71		
	RB15#0	21.81	21.86	21.78		
	RB15#10	21.88	21.8	21.87		
	RB25#0	21.78	21.81	21.91		
5MHz 16QAM	RB1#0	21.06	22.02	21.4	21.23	30
	RB1#13	21.09	21.94	21.45		
	RB1#24	21.1	21.98	21.5		
	RB15#0	20.97	20.77	20.93		
	RB15#10	20.99	20.75	20.9		
10MHz QPSK	RB1#0	22.68	22.84	22.98	22.26	30
	RB1#25	22.69	22.85	23.05		
	RB1#49	22.77	22.82	23.02		
	RB25#0	21.82	21.91	21.85		
	RB25#25	21.73	21.91	21.91		
10MHz 16QAM	RB1#0	21.99	21.97	21.32	21.2	30
	RB1#25	21.95	21.93	21.46		
	RB1#49	21.95	21.92	21.4		
	RB25#0	20.9	21.04	20.99		
	RB25#25	20.84	21.01	20.99		
15MHz QPSK	RB1#0	22.67	22.82	22.95	22.22	30
	RB1#38	22.75	22.85	22.96		
	RB1#74	22.76	22.84	23.01		
	RB36#0	21.76	21.8	21.83		
	RB36#39	21.82	21.91	21.84		
15MHz 16QAM	RB1#0	21.97	21.94	22.09	21.46	30
	RB1#38	21.96	21.94	22.13		
	RB1#74	22	21.94	22.25		
	RB36#0	20.97	21.01	20.95		
	RB36#39	20.9	20.99	20.95		
20MHz QPSK	RB1#0	22.89	22.8	22.94	22.25	30
	RB1#50	22.92	22.83	22.91		
	RB1#99	23.04	22.87	23.01		
	RB50#0	21.78	21.87	21.87		
	RB50#50	21.84	21.8	21.98		
20MHz 16QAM	RB1#0	21.76	22.26	22.37	21.68	30
	RB1#50	21.78	22.25	22.4		
	RB1#99	21.79	22.25	22.47		
	RB50#0	20.94	21.04	20.84		
	RB50#50	21.02	20.98	20.98		

	RB100#0	20.88	20.88	20.9		
					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	3.88	4.81	3.97	13
	RB100#0	4.72	5.13	4.81	13
20MHz 16QAM	RB1#0	4.96	5.83	4.67	13
	RB100#0	5.65	5.94	5.71	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	1.09	1.102	1.254	1.23	1.26
1.4MHz 16QAM	1.108	1.084	1.102	1.272	1.218	1.248
3MHz QPSK	2.695	2.695	2.695	3	3	3.012
3MHz 16QAM	2.695	2.683	2.683	3.012	3	2.952
5MHz QPSK	4.531	4.511	4.511	5	5.02	5
5MHz 16QAM	4.511	4.551	4.531	4.98	5.02	4.9
10MHz QPSK	8.942	8.942	8.942	9.84	9.8	9.359
10MHz 16QAM	8.942	8.981	8.981	9.72	9.8	9.84
15MHz QPSK	13.533	13.473	13.473	14.76	14.76	14.82
15MHz 16QAM	13.473	13.533	13.533	14.46	14.76	14.82
20MHz QPSK	17.964	17.964	17.964	19.6	19.52	19.84
20MHz 16QAM	18.044	18.044	18.044	19.68	19.84	19.6

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	3.85	1710.5291	1710.00	1754.4714	1755
	-20	3.85	1710.5284	1710.00	1754.4718	1755
	-10	3.85	1710.5285	1710.00	1754.4715	1755
	0	3.85	1710.5287	1710.00	1754.4716	1755
	10	3.85	1710.5286	1710.00	1754.4712	1755
	20	3.85	1710.5289	1710.00	1754.4711	1755
	30	3.85	1710.5287	1710.00	1754.4717	1755
	40	3.85	1710.5284	1710.00	1754.4719	1755
Frequency Stability vs. Voltage	20	3.6	1710.5286	1710.00	1754.4712	1755
	20	4.4	1710.5281	1710.00	1754.4714	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	3.85	1710.5287	1710.00	1754.5121	1755
	-20	3.85	1710.5284	1710.00	1754.5121	1755
	-10	3.85	1710.5287	1710.00	1754.5117	1755
	0	3.85	1710.5282	1710.00	1754.5115	1755
	10	3.85	1710.5289	1710.00	1754.5113	1755
	20	3.85	1710.5289	1710.00	1754.511	1755
	30	3.85	1710.5287	1710.00	1754.5118	1755
	40	3.85	1710.5282	1710.00	1754.5119	1755
Frequency Stability vs. Voltage	20	3.6	1710.5285	1710.00	1754.5114	1755
	20	4.4	1710.5289	1710.00	1754.5113	1755
Result:					Pass	

Test Plots:

Occupied Bandwidth

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

Occupied Bandwidth

Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -14.16 dBm 1.7100000 GHz 2.694610770 MHz -0.64 dB 3.0000 MHz</p> <p>D1 11.420 dBm D2 -14.580 dBm</p> <p>CF 1.7115 GHz 501 pts Span 6.0 MHz</p> <p>Date: 19.OCT.2021 11:17:15</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -15.91 dBm 1.7100000 GHz 2.694610770 MHz 0.01 dB 3.0120 MHz</p> <p>D1 9.780 dBm D2 -16.220 dBm</p> <p>CF 1.7115 GHz 501 pts Span 6.0 MHz</p> <p>Date: 19.OCT.2021 11:17:29</p>
Middle	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -14.32 dBm 1.7310120 GHz 2.694610770 MHz -1.33 dB 3.0000 MHz</p> <p>D1 10.860 dBm D2 -15.140 dBm</p> <p>CF 1.7325 GHz 501 pts Span 6.0 MHz</p> <p>Date: 19.OCT.2021 11:17:45</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -16.41 dBm 1.7310000 GHz 2.682634731 MHz 0.83 dB 3.0000 MHz</p> <p>D1 9.960 dBm D2 -16.040 dBm</p> <p>CF 1.7325 GHz 501 pts Span 6.0 MHz</p> <p>Date: 19.OCT.2021 11:17:59</p>
Highest	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -14.99 dBm 1.7520000 GHz 2.694610770 MHz -1.23 dB 3.0120 MHz</p> <p>D1 10.460 dBm D2 -15.540 dBm</p> <p>CF 1.7535 GHz 501 pts Span 6.0 MHz</p> <p>Date: 19.OCT.2021 11:18:14</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 30 kHz Att 25 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -10.88 dBm 1.7520240 GHz 2.682634731 MHz -0.85 dB 2.9520 MHz</p> <p>D1 14.740 dBm D2 -11.260 dBm</p> <p>CF 1.7535 GHz 501 pts Span 6.0 MHz</p> <p>Date: 19.OCT.2021 11:18:28</p>

Occupied Bandwidth

Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

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	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -14.67 dBm 1.7102400 GHz D1[1] -0.11 dB 17.964071856 MHz D2 -13.930 dBm 19.6000 MHz</p> <p>CF 1.72 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:26:21</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -13.68 dBm 1.7101600 GHz D1[1] -1.09 dB 18.043912176 MHz D2 -14.240 dBm 19.6800 MHz</p> <p>CF 1.72 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:26:54</p>
Middle	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -12.55 dBm 1.7228200 GHz D1[1] -1.11 dB 17.964071856 MHz D2 -13.230 dBm 19.5200 MHz</p> <p>CF 1.7325 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:27:35</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -14.70 dBm 1.7228000 GHz D1[1] -0.80 dB 18.043912176 MHz D2 -14.960 dBm 19.8400 MHz</p> <p>CF 1.7325 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:28:11</p>
Highest	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -14.51 dBm 1.7350000 GHz D1[1] 0.44 dB 17.964071856 MHz D2 -13.740 dBm 19.8400 MHz</p> <p>CF 1.745 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:28:39</p>	<p>Ref Level 20.00 dBm Offset 7.50 dB RBW 300 kHz Att 25 dB SWT 37.9 μs VBW 1 MHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -14.24 dBm 1.7352400 GHz D1[1] -0.66 dB 18.043912176 MHz D2 -13.950 dBm 19.6000 MHz</p> <p>CF 1.745 GHz 501 pts Span 40.0 MHz</p> <p>Date: 19.OCT.2021 11:29:03</p>

Spurious Emissions at Antenna Terminal

Channel	1.4MHz Bandwidth QPSK	
Lowest	<p>Spectrum Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep 1Pk Max M1[1] -50.06 dBm 979.70 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 19.OCT.2021 13:14:48</p>	<p>Spectrum Ref Level 20.00 dBm Offset 7.50 dB RBW 1 MHz Att 25 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep 1Pk Max M1[1] -40.21 dBm 6.9350 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 19.OCT.2021 13:15:20</p>
Middle	<p>Spectrum Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep 1Pk Max M1[1] -49.60 dBm 910.00 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 19.OCT.2021 13:15:50</p>	<p>Spectrum Ref Level 20.00 dBm Offset 7.50 dB RBW 1 MHz Att 25 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep 1Pk Max M1[1] -40.35 dBm 6.1010 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 19.OCT.2021 13:16:09</p>
Highest	<p>Spectrum Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep 1Pk Max M1[1] -49.67 dBm 940.30 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 19.OCT.2021 13:16:42</p>	<p>Spectrum Ref Level 20.00 dBm Offset 7.50 dB RBW 1 MHz Att 25 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep 1Pk Max M1[1] -40.13 dBm 6.7080 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 19.OCT.2021 13:17:08</p>