

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 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -12.59 dBm Occ Bw 2.694610778 MHz D1[1] -0.27 dB D2 -12.680 dBm</p> <p>CF 1.8515 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:38:44</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -14.30 dBm Occ Bw 2.694610778 MHz D1[1] -1.28 dB D2 -14.740 dBm</p> <p>CF 1.8515 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:39:02</p>
Middle	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -14.45 dBm Occ Bw 2.694610778 MHz D1[1] 1.31 dB D2 -13.870 dBm</p> <p>CF 1.88 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:39:20</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -15.07 dBm Occ Bw 2.682634731 MHz D1[1] 0.92 dB D2 -15.090 dBm</p> <p>CF 1.88 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:39:37</p>
Highest	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -14.95 dBm Occ Bw 2.682634731 MHz D1[1] -0.29 dB D2 -14.510 dBm</p> <p>CF 1.9085 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:39:56</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -14.21 dBm Occ Bw 2.682634731 MHz D1[1] -0.29 dB D2 -14.480 dBm</p> <p>CF 1.9085 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:40:13</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 38 μs VBW 300 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -11.22 dBm Occ Bw 4.530938124 MHz D1[1] 0.51 dB 5.0600 MHz</p> <p>D1 14.940 dBm D2 -11.060 dBm</p> <p>CF 1.8525 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.DEC.2021 11:40:45</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 38 μs VBW 300 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -12.51 dBm Occ Bw 4.510978044 MHz D1[1] 1.12 dB 5.0400 MHz</p> <p>D1 13.920 dBm D2 -12.080 dBm</p> <p>CF 1.8525 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.DEC.2021 11:41:15</p>
Middle	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 38 μs VBW 300 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -12.70 dBm Occ Bw 4.510978044 MHz D1[1] 1.47 dB 5.0400 MHz</p> <p>D1 14.020 dBm D2 -11.980 dBm</p> <p>CF 1.88 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.DEC.2021 11:41:39</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 38 μs VBW 300 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -12.40 dBm Occ Bw 4.550898204 MHz D1[1] 0.26 dB 5.0400 MHz</p> <p>D1 13.200 dBm D2 -12.800 dBm</p> <p>CF 1.88 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.DEC.2021 11:42:06</p>
Highest	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 38 μs VBW 300 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -11.27 dBm Occ Bw 4.491017964 MHz D1[1] -0.11 dB 5.0200 MHz</p> <p>D1 14.920 dBm D2 -11.080 dBm</p> <p>CF 1.9075 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.DEC.2021 11:42:33</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 38 μs VBW 300 kHz Mode Auto FFT</p> <p>1Pk Max</p> <p>M1[1] -12.65 dBm Occ Bw 4.530938124 MHz D1[1] -0.90 dB 5.0400 MHz</p> <p>D1 12.700 dBm D2 -13.300 dBm</p> <p>CF 1.9075 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.DEC.2021 11:42:54</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

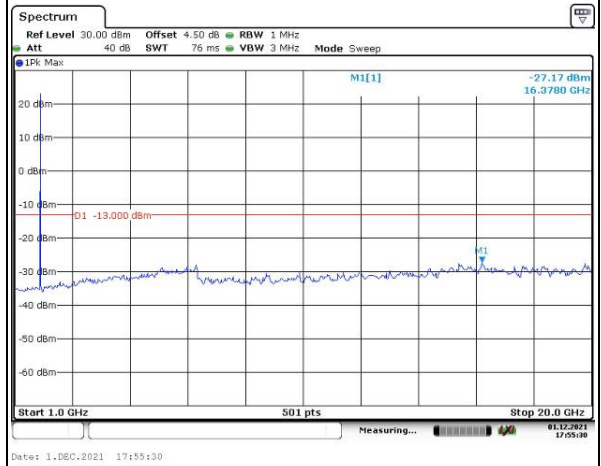
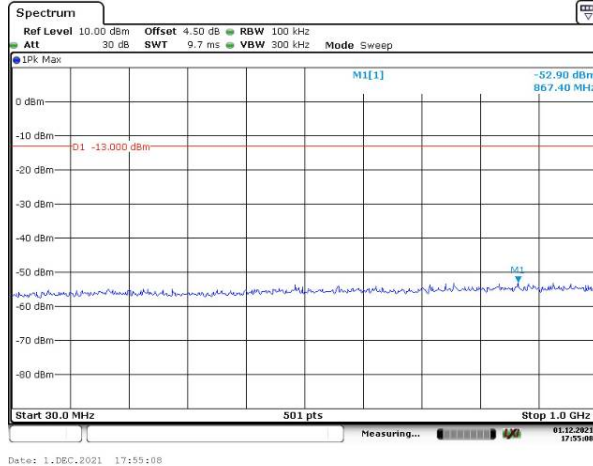
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

Spurious Emissions at Antenna Terminal

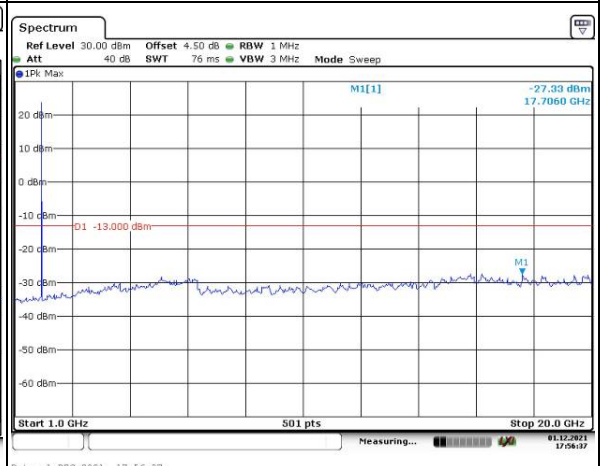
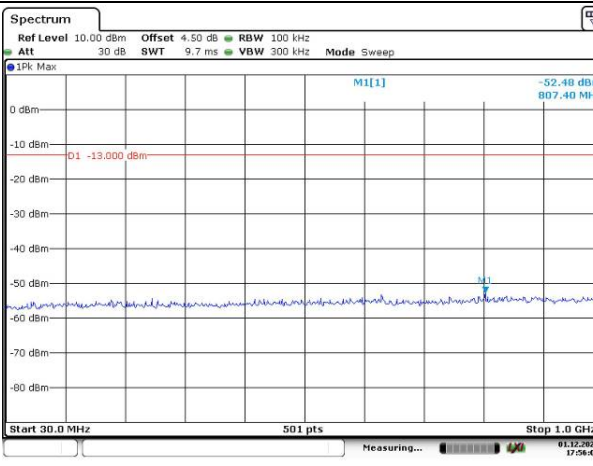
Channel

1.4MHz Bandwidth QPSK

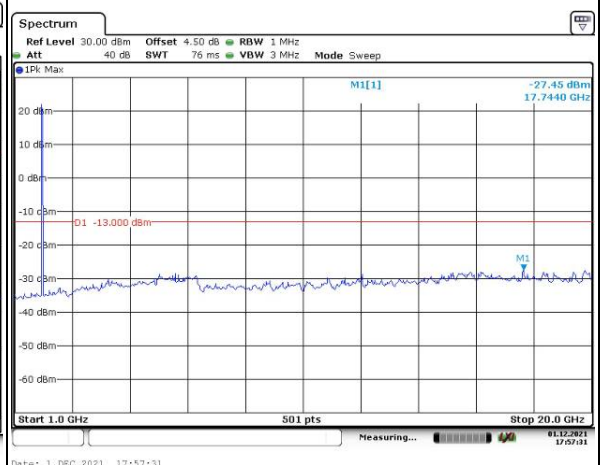
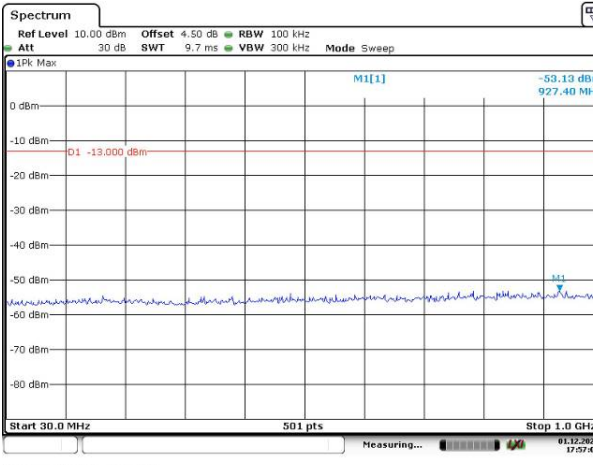
Lowest



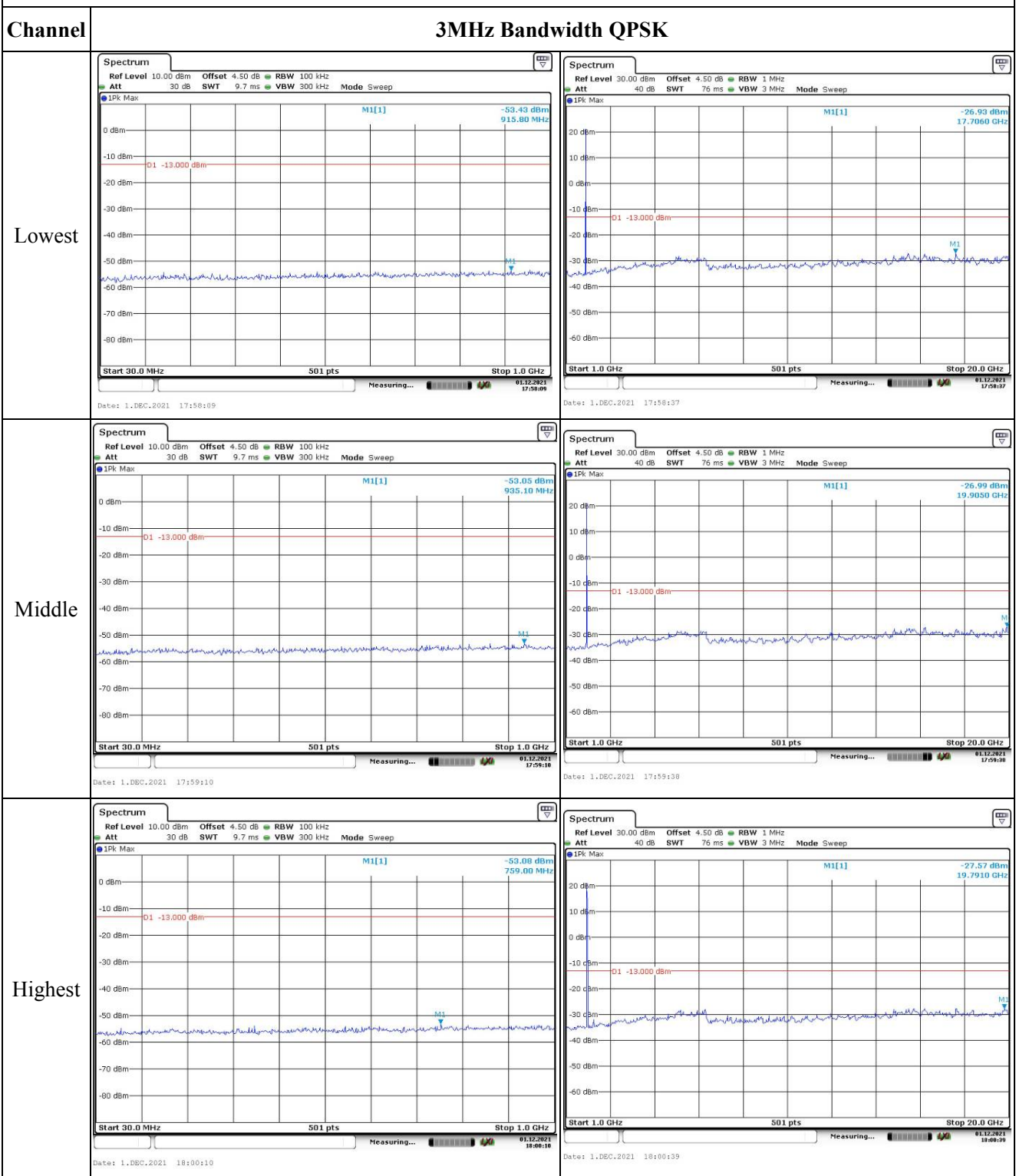
Middle



Highest



Spurious Emissions at Antenna Terminal

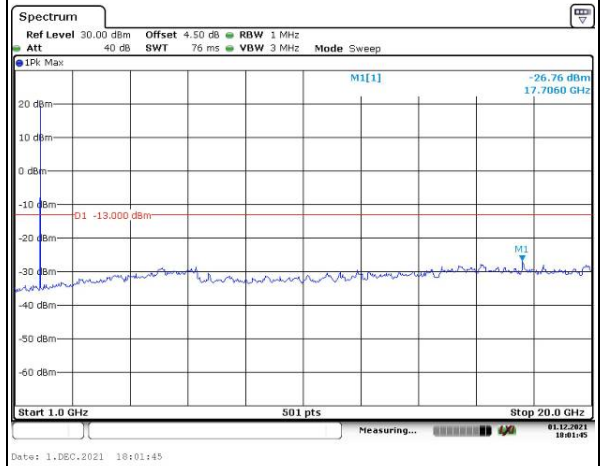
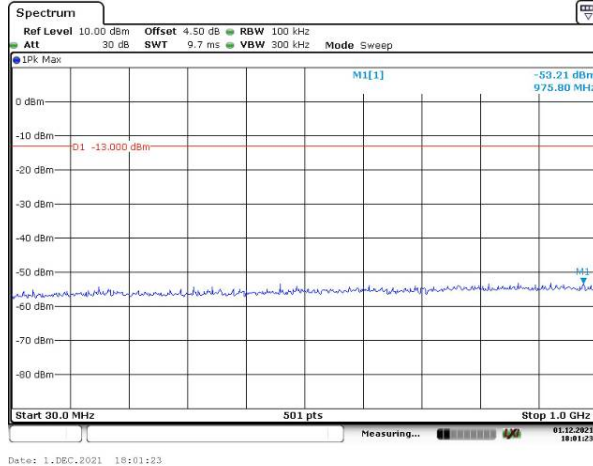


Spurious Emissions at Antenna Terminal

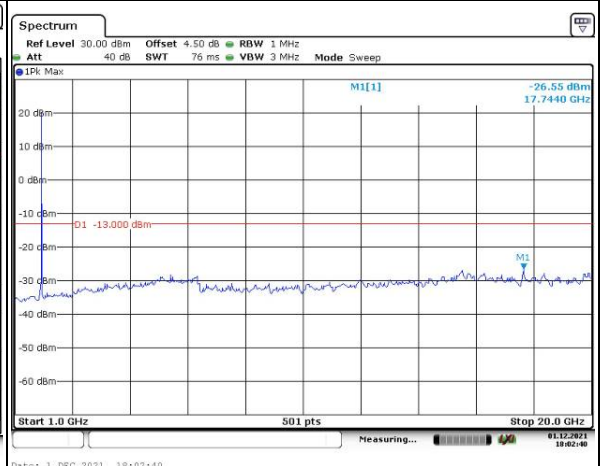
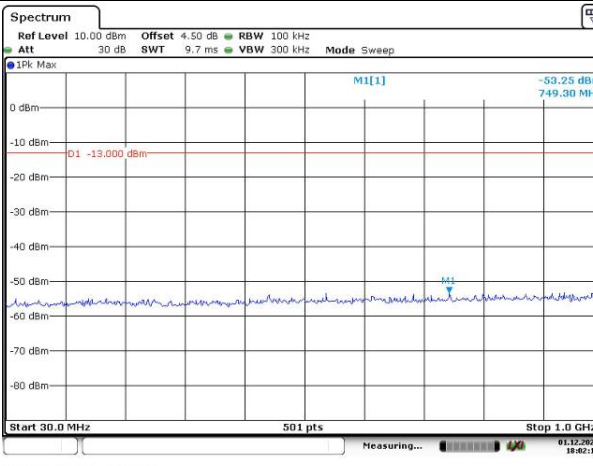
Channel

5MHz Bandwidth QPSK

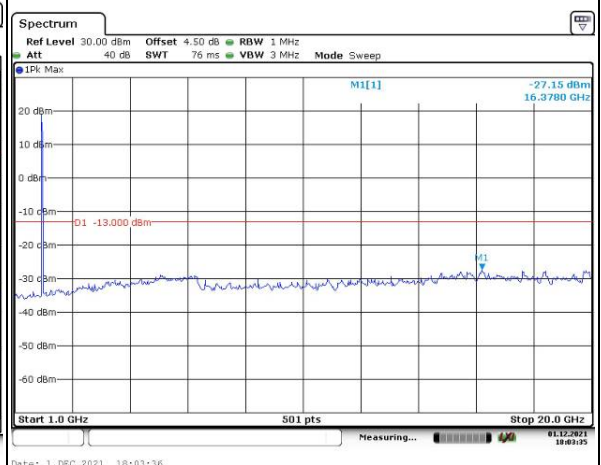
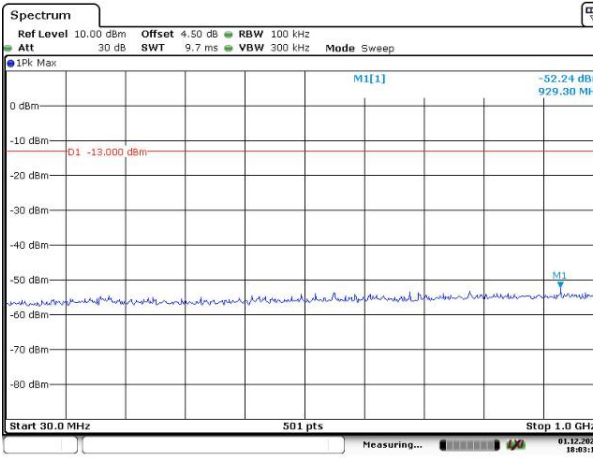
Lowest



Middle



Highest

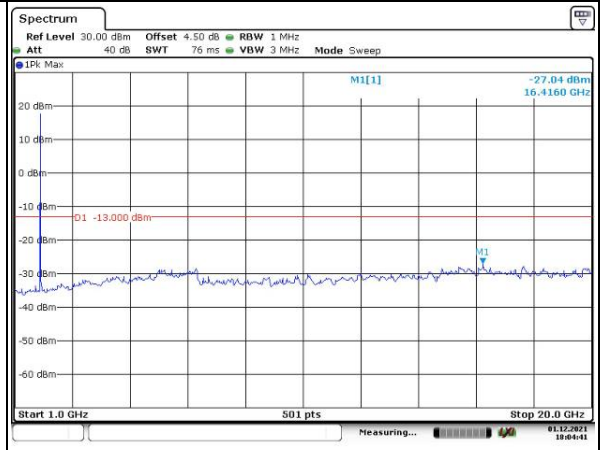
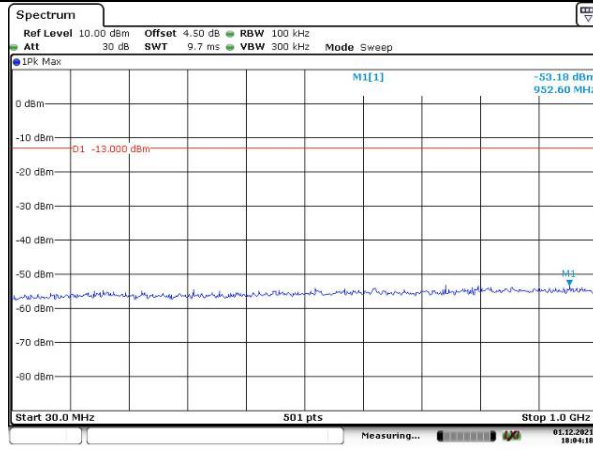


Spurious Emissions at Antenna Terminal

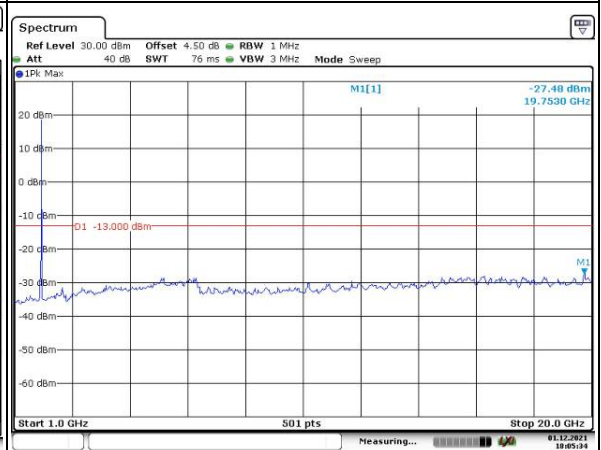
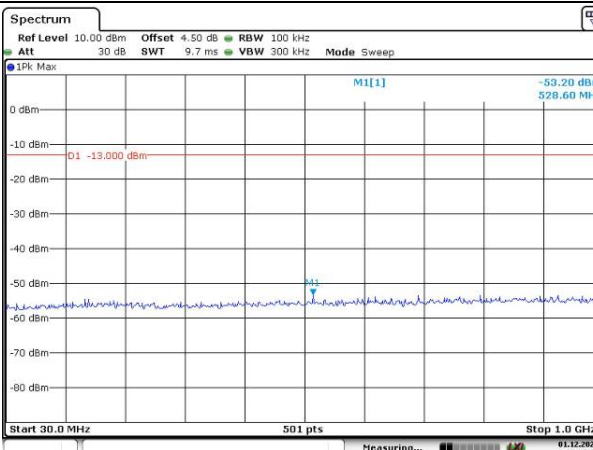
Channel

10MHz Bandwidth QPSK

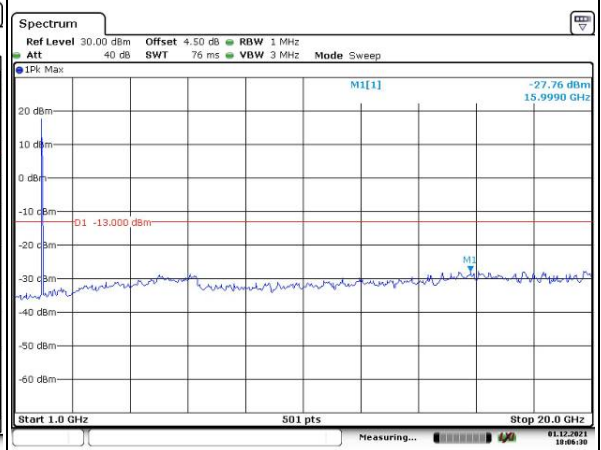
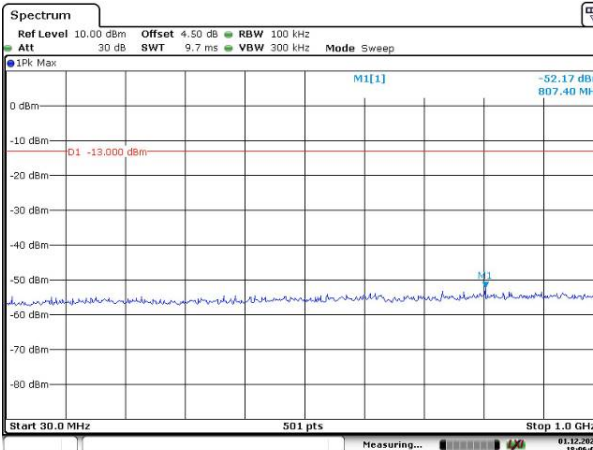
Lowest



Middle



Highest

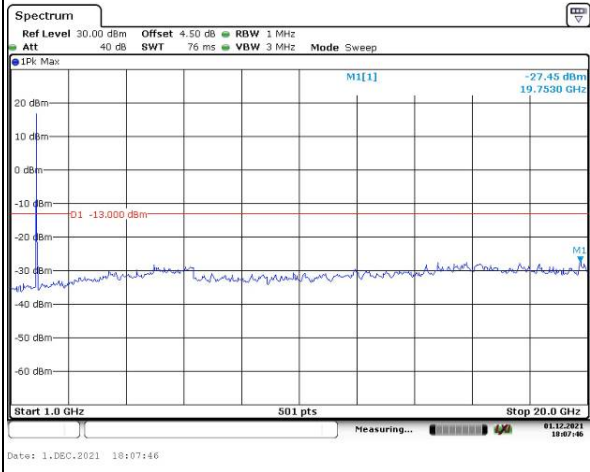
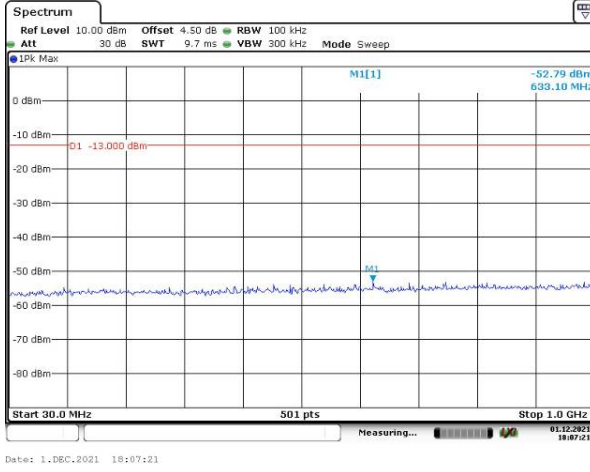


Spurious Emissions at Antenna Terminal

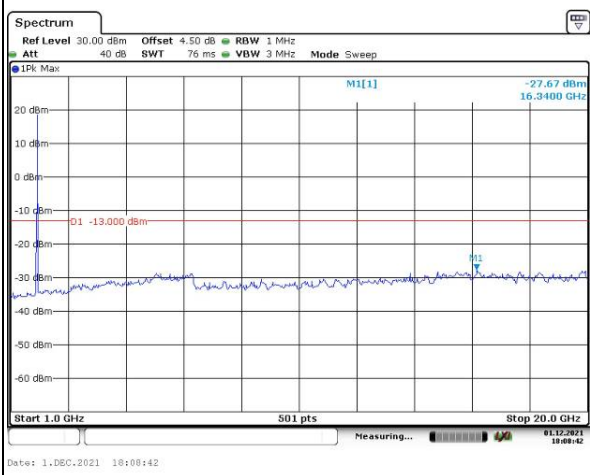
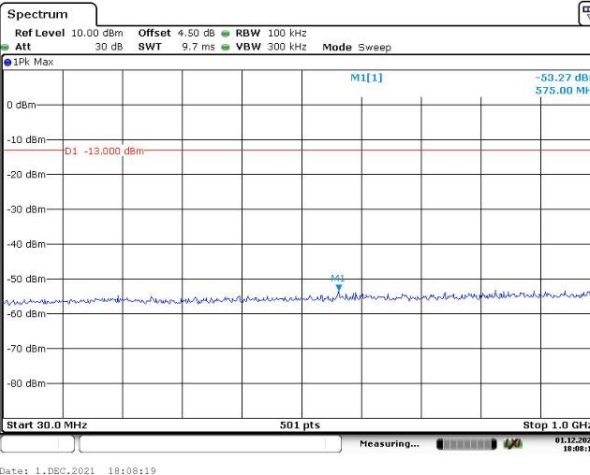
Channel

15MHz Bandwidth QPSK

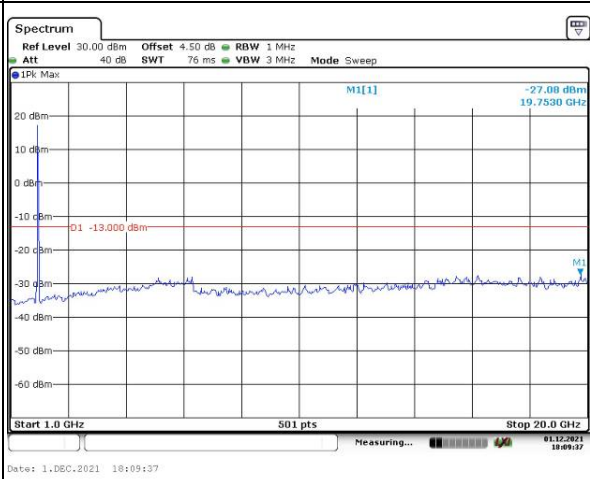
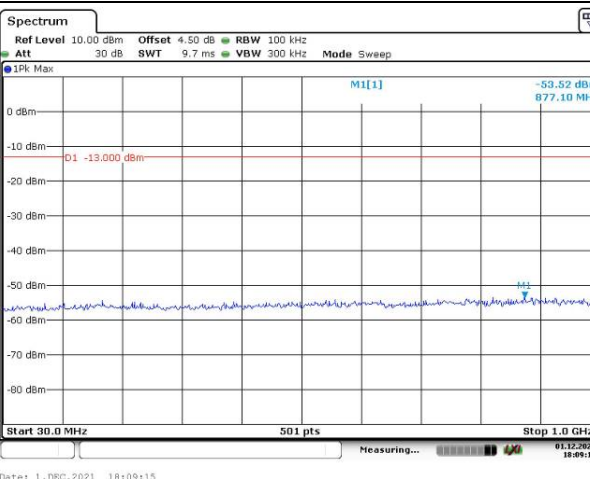
Lowest



Middle



Highest

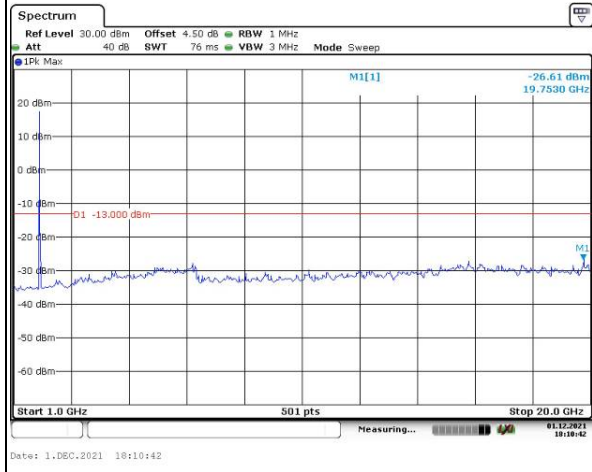
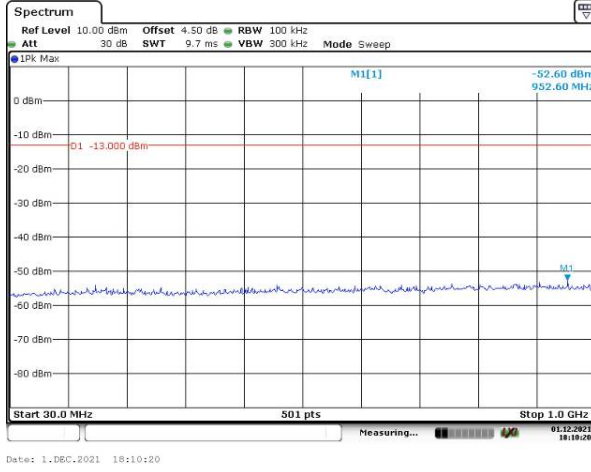


Spurious Emissions at Antenna Terminal

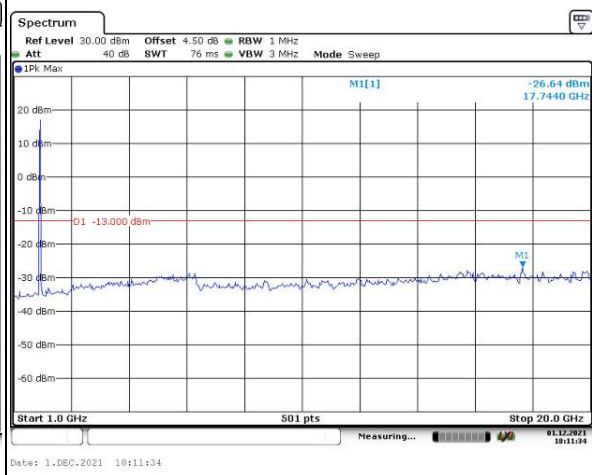
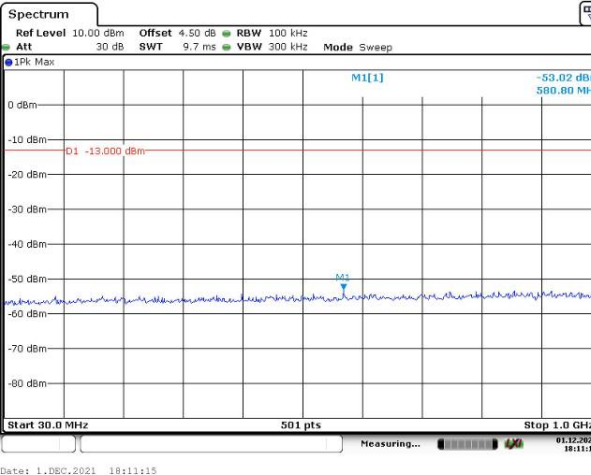
Channel

20MHz Bandwidth QPSK

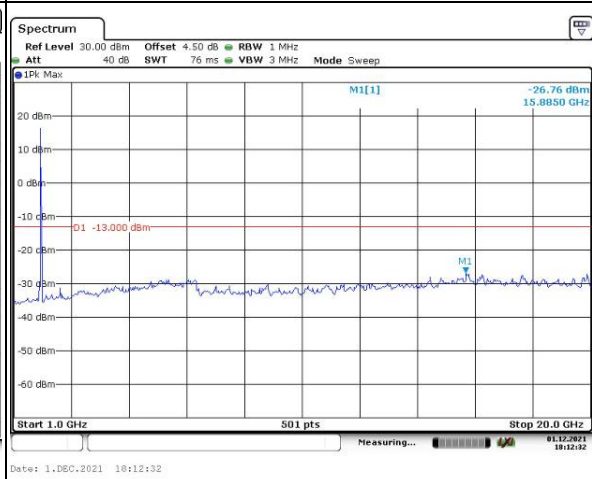
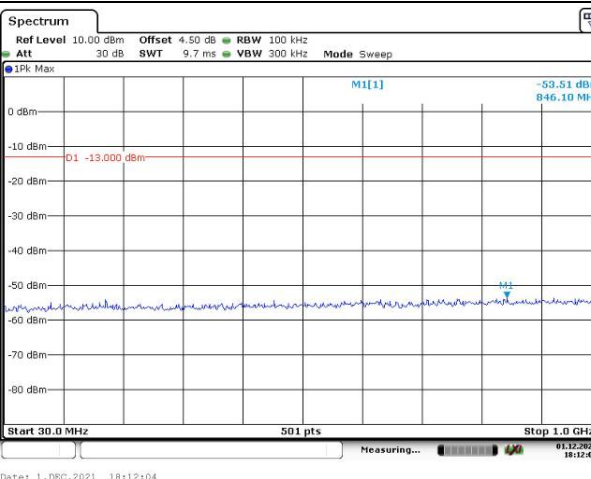
Lowest



Middle



Highest



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</p> <p>1Rm Max M1[1] -17.18 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: 1.DEC.2021 16:32:26</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>1Rm Max M1[1] -19.69 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: 1.DEC.2021 16:32:58</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</p> <p>1Rm Max M1[1] -19.32 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: 1.DEC.2021 16:33:52</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>1Rm Max M1[1] -19.26 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: 1.DEC.2021 16:34:39</p>
QPSK 5MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 20 ms VBW 300 kHz Mode Sweep</p> <p>1Rm Max M1[1] -19.31 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: 14.DEC.2021 15:42:34</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 15 ms VBW 300 kHz Mode Sweep</p> <p>1Rm Max M1[1] -18.37 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: 14.DEC.2021 15:43:56</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz	<p>Spectrum 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] -22.51 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 20.0 MHz Date: 1.DEC.2021 16:37:47</p>	<p>Spectrum 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] -21.32 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 20.0 MHz Date: 1.DEC.2021 16:38:37</p>
QPSK 15MHz	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep 1Fm Max M1[1] -16.09 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 30.0 MHz Date: 1.DEC.2021 16:39:57</p>	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep 1Fm Max M1[1] -14.51 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 30.0 MHz Date: 1.DEC.2021 16:40:57</p>
QPSK 20MHz	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep 1Fm Max M1[1] -23.36 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 40.0 MHz Date: 1.DEC.2021 16:42:10</p>	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep 1Fm Max M1[1] -21.63 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 40.0 MHz Date: 1.DEC.2021 16:43:07</p>

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] -22.29 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 3.0 MHz Date: 1.DEC.2021 16:32:43</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] -16.14 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 3.0 MHz Date: 1.DEC.2021 16:33:25</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] -21.30 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 6.0 MHz Date: 1.DEC.2021 16:34:15</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] -19.37 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 6.0 MHz Date: 1.DEC.2021 16:35:02</p>
16QAM 5MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 15 ms VBW 300 kHz Mode Sweep M1[1] -18.16 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 10.0 MHz Date: 14.DEC.2021 15:43:25</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 15 ms VBW 300 kHz Mode Sweep M1[1] -18.50 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 10.0 MHz Date: 14.DEC.2021 15:44:28</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] -24.38 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 20.0 MHz Date: 1.DEC.2021 16:38:15</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep M1[1] -22.40 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 20.0 MHz Date: 1.DEC.2021 16:39:11</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] -19.49 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 30.0 MHz Date: 1.DEC.2021 16:42:27</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] -15.75 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 30.0 MHz Date: 1.DEC.2021 16:41:27</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] -24.20 dBm 1.8500000 GHz D1 -13.000 dBm CF 1.85 GHz 501 pts Span 40.0 MHz Date: 1.DEC.2021 16:42:40</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] -22.14 dBm 1.9100000 GHz D1 -13.000 dBm CF 1.91 GHz 501 pts Span 40.0 MHz Date: 1.DEC.2021 16:43:28</p>

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

Serial Number:	CR21110087-S1	Test Date:	2021/12/16		
Test Site:	RF	Test Mode:	Transmitting		
Tester:	Wolf Mo	Test Result:	Pass		
Environmental Conditions:					
Temperature: (°C)	25.9	Relative Humidity: (%)	60	ATM Pressure: (kPa)	101.1

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
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D09	N/A	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:	3.7	Highest:	4.2

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	22.35	22.36	22.40	23.48	30
	RB1#3	22.33	22.68	22.48		
	RB1#5	22.51	22.58	22.47		
	RB3#0	22.50	22.50	22.47		
	RB3#3	22.40	22.52	22.45		
	RB6#0	21.45	21.56	21.52		
1.4MHz 16QAM	RB1#0	21.57	21.89	21.16	22.93	30
	RB1#3	21.84	22.13	21.06		
	RB1#5	21.71	21.63	20.78		
	RB3#0	21.52	21.59	21.21		
	RB3#3	21.57	21.59	21.00		
	RB6#0	20.46	20.63	20.69		
3MHz QPSK	RB1#0	22.33	22.36	22.48	23.42	30
	RB1#8	22.52	22.37	22.25		
	RB1#14	22.62	22.40	22.34		
	RB6#0	21.44	21.43	21.39		
	RB6#9	21.34	21.45	21.43		
	RB15#0	21.43	21.38	21.43		
3MHz 16QAM	RB1#0	21.78	21.96	21.53	22.76	30
	RB1#8	21.39	21.54	21.03		
	RB1#14	21.42	21.54	21.18		
	RB6#0	20.54	20.36	20.52		
	RB6#9	20.46	20.63	20.55		
	RB15#0	20.55	20.40	20.65		
5MHz QPSK	RB1#0	22.04	22.28	22.40	23.36	30

	RB1#13	22.24	22.31	22.23		
	RB1#24	22.24	22.56	22.39		
	RB15#0	21.42	21.37	21.55		
	RB15#10	21.38	21.42	21.39		
	RB25#0	21.46	21.43	21.44		
5MHz 16QAM	RB1#0	21.31	21.52	21.14	22.38	30
	RB1#13	20.69	21.05	20.87		
	RB1#24	20.60	21.58	21.48		
	RB15#0	20.50	20.20	20.56		
	RB15#10	20.37	20.28	20.47		
	RB25#0	20.50	20.21	20.63		
10MHz QPSK	RB1#0	22.58	22.50	22.49	23.38	30
	RB1#25	22.30	22.39	22.46		
	RB1#49	22.25	22.42	22.35		
	RB25#0	21.39	21.42	21.57		
	RB25#25	21.25	21.44	21.37		
	RB50#0	21.43	21.49	21.52		
10MHz 16QAM	RB1#0	22.02	22.06	21.51	22.9	30
	RB1#25	21.55	21.73	21.45		
	RB1#49	21.28	22.10	21.12		
	RB25#0	20.48	20.64	20.95		
	RB25#25	20.26	20.50	20.52		
	RB50#0	20.40	20.45	20.61		
15MHz QPSK	RB1#0	22.49	22.62	22.63	23.59	30
	RB1#38	22.13	22.51	22.45		
	RB1#74	22.54	22.79	22.53		
	RB36#0	21.45	21.43	21.64		
	RB36#39	21.36	21.49	21.47		
	RB75#0	21.42	21.48	21.46		
15MHz 16QAM	RB1#0	22.01	21.76	22.08	22.88	30
	RB1#38	21.40	21.38	21.64		
	RB1#74	21.64	22.02	21.77		
	RB36#0	20.51	20.51	20.79		
	RB36#39	20.35	20.36	20.43		
	RB75#0	20.41	20.42	20.43		
20MHz QPSK	RB1#0	22.65	22.46	22.61	23.65	30
	RB1#50	22.46	22.85	22.51		
	RB1#99	22.48	22.84	22.50		
	RB50#0	21.49	21.46	21.50		
	RB50#50	21.32	21.54	21.54		
	RB100#0	21.44	21.46	21.59		
20MHz 16QAM	RB1#0	21.74	21.99	22.01	23.34	30
	RB1#50	20.99	21.19	22.54		
	RB1#99	21.08	21.72	21.99		

	RB50#0	20.51	20.41	20.55	
	RB50#50	20.36	20.49	20.62	
	RB100#0	20.44	20.48	20.62	

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	4.46	4.61	13
	RB100#0	4.87	4.93	4.75	13
20MHz 16QAM	RB1#0	5.59	5.48	5.62	13
	RB100#0	5.83	5.88	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	1.102	1.108	1.102	1.314	1.326	1.290
1.4MHz 16QAM	1.102	1.096	1.102	1.320	1.290	1.326
3MHz QPSK	2.695	2.695	2.683	2.952	2.940	2.952
3MHz 16QAM	2.695	2.683	2.683	2.976	2.952	2.952
5MHz QPSK	4.531	4.511	4.511	5.060	5.040	5.060
5MHz 16QAM	4.511	4.531	4.531	5.020	5.040	5.060
10MHz QPSK	8.942	8.942	8.942	9.800	9.760	9.720
10MHz 16QAM	8.942	8.942	8.942	9.640	9.720	9.760
15MHz QPSK	13.473	13.413	13.473	14.700	14.640	14.700
15MHz 16QAM	13.473	13.533	13.473	14.580	14.640	14.580
20MHz QPSK	17.884	17.884	18.044	19.200	19.360	19.520
20MHz 16QAM	17.964	17.884	17.964	19.440	19.440	19.520

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	1710.528	1710.00	1754.472	1755
	-20	3.7	1710.529	1710.00	1754.472	1755
	-10	3.7	1710.528	1710.00	1754.471	1755
	0	3.7	1710.529	1710.00	1754.471	1755
	10	3.7	1710.527	1710.00	1754.470	1755
	20	3.7	1710.529	1710.00	1754.471	1755
	30	3.7	1710.529	1710.00	1754.471	1755
	40	3.7	1710.526	1710.00	1754.471	1755
Frequency Stability vs. Voltage	20	3.5	1710.529	1710.00	1754.471	1755
	20	4.2	1710.521	1710.00	1754.470	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	3.7	1710.528	1710.00	1754.472	1755
	-20	3.7	1710.529	1710.00	1754.472	1755
	-10	3.7	1710.528	1710.00	1754.471	1755
	0	3.7	1710.529	1710.00	1754.471	1755
	10	3.7	1710.527	1710.00	1754.470	1755
	20	3.7	1710.529	1710.00	1754.471	1755
	30	3.7	1710.529	1710.00	1754.471	1755
	40	3.7	1710.526	1710.00	1754.471	1755
Frequency Stability vs. Voltage	20	3.5	1710.529	1710.00	1754.471	1755
	20	4.2	1710.521	1710.00	1754.470	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 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -15.53 dBm 1.7100240 GHz Occ Bw 2.694610778 MHz D1[1] 0.49 dB 2.9520 MHz</p> <p>CF 1.7115 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:54:40</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -17.32 dBm 1.7100240 GHz Occ Bw 2.694610778 MHz D1[1] 0.57 dB 2.9760 MHz</p> <p>CF 1.7115 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:54:57</p>
Middle	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -15.37 dBm 1.7310240 GHz Occ Bw 2.694610778 MHz D1[1] 1.13 dB 2.9400 MHz</p> <p>CF 1.7325 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:55:16</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -16.07 dBm 1.7310240 GHz Occ Bw 2.682634731 MHz D1[1] -0.33 dB 2.9520 MHz</p> <p>CF 1.7325 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:55:33</p>
Highest	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -14.33 dBm 1.7520240 GHz Occ Bw 2.682634731 MHz D1[1] -0.62 dB 2.9520 MHz</p> <p>CF 1.7535 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:55:52</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 63.2 μs VBW 100 kHz Mode Auto FFT</p> <p>M1[1] -14.43 dBm 1.7520240 GHz Occ Bw 2.682634731 MHz D1[1] -0.37 dB 2.9520 MHz</p> <p>CF 1.7535 GHz 501 pts Span 6.0 MHz</p> <p>Date: 14.DEC.2021 11:56:10</p>

Occupied Bandwidth

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