

Occupied Bandwidth

Channel	10MHz Bandwidth QPSK	10MHz 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 1Pk Max M1[1] -14.70 dBm 1.7100800 GHz 8.942115768 MHz -0.54 dB 9.7600 MHz D1 10.370 dBm D2 -15.630 dBm CF 1.715 GHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:22:46</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 1Pk Max M1[1] -17.94 dBm 1.7101200 GHz 8.942115768 MHz -0.96 dB 9.7200 MHz D1 9.360 dBm D2 -16.640 dBm CF 1.715 GHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:23:14</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 1Pk Max M1[1] -10.39 dBm 1.7276600 GHz 8.982035928 MHz -0.37 dB 9.7600 MHz D1 7.560 dBm D2 -18.440 dBm CF 1.7325 GHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:23:40</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 1Pk Max M1[1] -19.91 dBm 1.7270000 GHz 8.982035928 MHz -0.66 dB 9.7200 MHz D1 6.690 dBm D2 -19.310 dBm CF 1.7325 GHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:24:08</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 1Pk Max M1[1] -15.69 dBm 1.7452000 GHz 8.982035928 MHz -0.43 dB 9.7200 MHz D1 10.000 dBm D2 -16.000 dBm CF 1.75 GHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:24:37</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 1Pk Max M1[1] -17.22 dBm 1.7451200 GHz 8.942115768 MHz -0.55 dB 9.8000 MHz D1 8.970 dBm D2 -17.030 dBm CF 1.75 GHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:24:59</p>

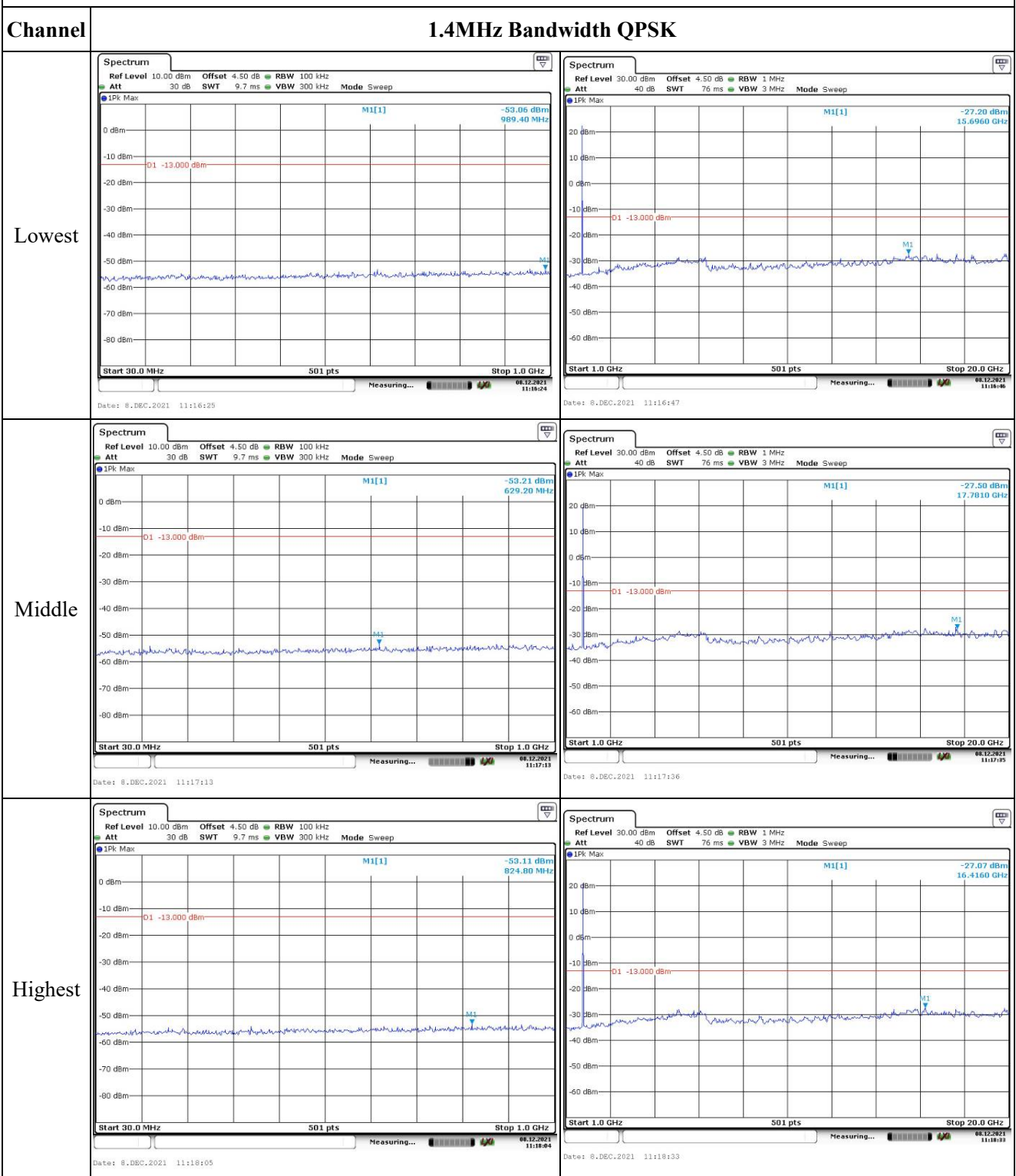
Occupied Bandwidth

Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	<p>1Pk Max Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep D1 12.880 dBm M1[1] -13.52 dBm 1.710000 GHz D1[1] 13.532934132 MHz -0.34 dB 15.0000 MHz CF 1.7175 GHz 501 pts Span 30.0 MHz Date: 6.DEC.2021 18:25:31</p>	<p>1Pk Max Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep D1 12.270 dBm M1[1] -13.65 dBm 1.710000 GHz D1[1] 13.532934132 MHz 0.36 dB 14.8200 MHz CF 1.7175 GHz 501 pts Span 30.0 MHz Date: 6.DEC.2021 18:26:01</p>
Middle	<p>1Pk Max Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep D1 11.550 dBm M1[1] -14.34 dBm 1.7251800 GHz D1[1] 13.473059892 MHz 0.25 dB 14.8200 MHz CF 1.7325 GHz 501 pts Span 30.0 MHz Date: 6.DEC.2021 18:26:23</p>	<p>1Pk Max Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep D1 10.970 dBm M1[1] -14.63 dBm 1.7251800 GHz D1[1] 13.532934132 MHz 0.23 dB 14.7600 MHz CF 1.7325 GHz 501 pts Span 30.0 MHz Date: 6.DEC.2021 18:26:53</p>
Highest	<p>1Pk Max Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep D1 12.600 dBm M1[1] -12.79 dBm 1.7400600 GHz D1[1] 13.592814371 MHz -0.97 dB 14.9400 MHz CF 1.7475 GHz 501 pts Span 30.0 MHz Date: 6.DEC.2021 18:27:18</p>	<p>1Pk Max Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep D1 12.480 dBm M1[1] -13.93 dBm 1.7400600 GHz D1[1] 13.592814371 MHz 1.21 dB 14.8800 MHz CF 1.7475 GHz 501 pts Span 30.0 MHz Date: 6.DEC.2021 18:27:42</p>

Occupied Bandwidth

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

Spurious Emissions at Antenna Terminal



Spurious Emissions at Antenna Terminal

Channel	3MHz Bandwidth QPSK	
Lowest	<p>Spectrum Ref Level 10.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -59.09 dBm 840.30 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 11:19:07</p>	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 1 MHz Att 40 dB SWT 76 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -26.98 dBm 17.7440 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 8.DEC.2021 11:19:29</p>
Middle	<p>Spectrum Ref Level 10.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -53.26 dBm 923.50 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 11:20:02</p>	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 1 MHz Att 40 dB SWT 76 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -26.95 dBm 16.3780 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 8.DEC.2021 11:20:33</p>
Highest	<p>Spectrum Ref Level 10.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -53.12 dBm 797.70 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 11:20:56</p>	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 1 MHz Att 40 dB SWT 76 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -28.03 dBm 18.7670 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 8.DEC.2021 11:21:15</p>

Spurious Emissions at Antenna Terminal

Channel	5MHz Bandwidth QPSK	
Lowest	<p>Spectrum Ref Level 10.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -52.88 dBm 799.60 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 11:21:52</p>	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 1 MHz Att 40 dB SWT 76 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -27.11 dBm 17.7440 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 8.DEC.2021 11:22:17</p>
Middle	<p>Spectrum Ref Level 10.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -52.99 dBm 853.80 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 11:22:50</p>	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 1 MHz Att 40 dB SWT 76 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -27.45 dBm 15.9990 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 8.DEC.2021 11:23:19</p>
Highest	<p>Spectrum Ref Level 10.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -52.81 dBm 882.90 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 11:23:48</p>	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 1 MHz Att 40 dB SWT 76 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -27.21 dBm 15.6960 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 8.DEC.2021 11:24:13</p>

Spurious Emissions at Antenna Terminal

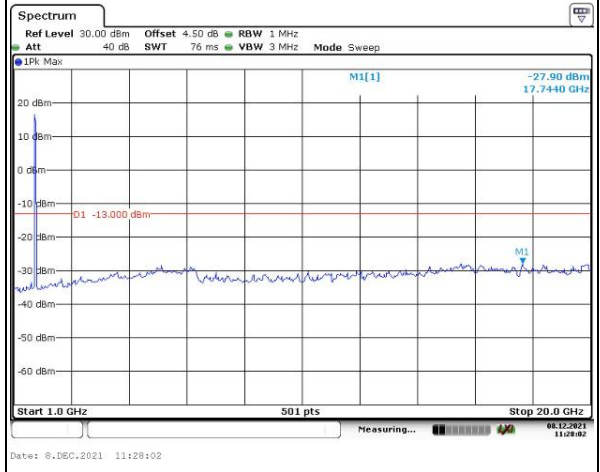
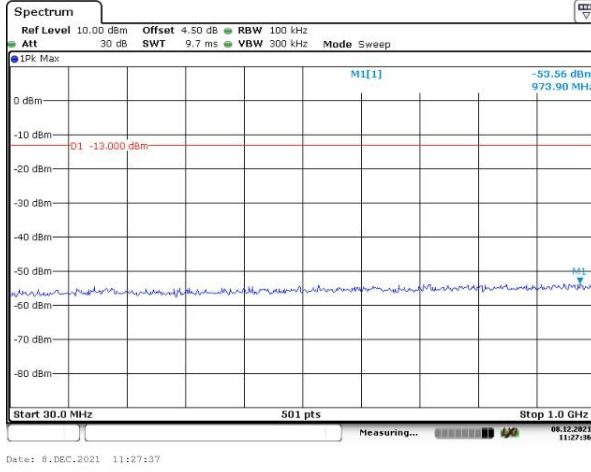
Channel	10MHz Bandwidth QPSK	
Lowest	<p>Ref Level 10.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -59.43 dBm 834.50 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 11:24:52</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 1 MHz Att 40 dB SWT 76 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -27.91 dBm 16.4160 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 8.DEC.2021 11:25:17</p>
Middle	<p>Ref Level 10.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -52.94 dBm 784.10 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 11:25:42</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 1 MHz Att 40 dB SWT 76 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -27.54 dBm 16.1130 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 8.DEC.2021 11:26:10</p>
Highest	<p>Ref Level 10.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -52.83 dBm 964.20 MHz -13.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 8.DEC.2021 11:26:38</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 1 MHz Att 40 dB SWT 76 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -27.17 dBm 19.7530 GHz -13.000 dBm Start 1.0 GHz 501 pts Stop 20.0 GHz Date: 8.DEC.2021 11:26:57</p>

Spurious Emissions at Antenna Terminal

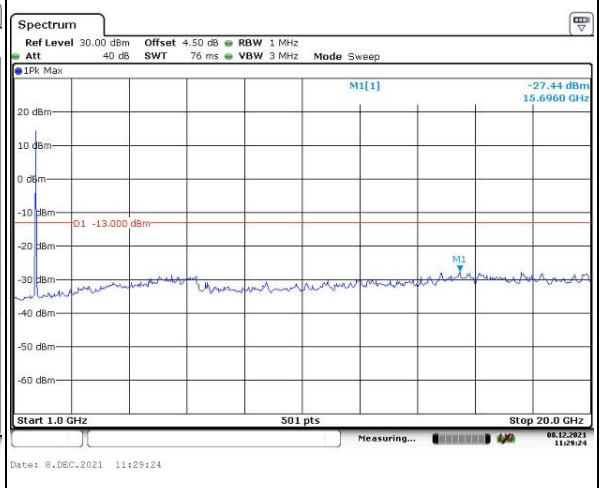
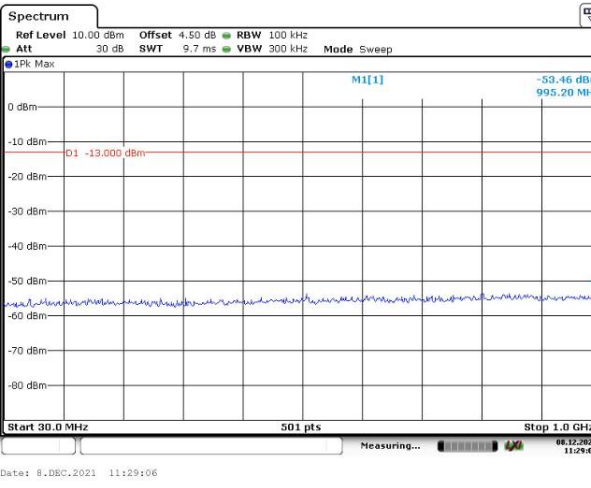
Channel

15MHz Bandwidth QPSK

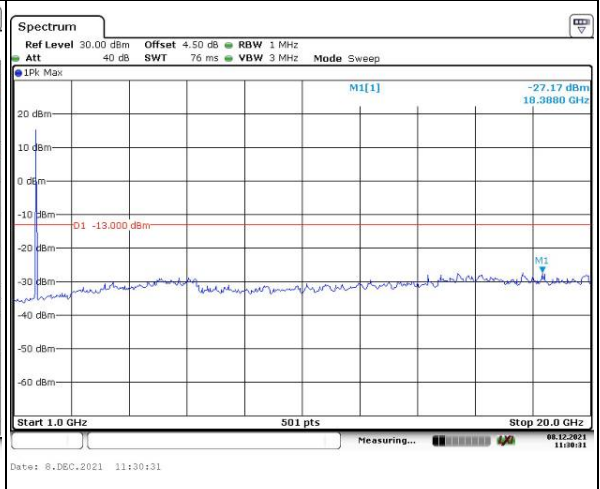
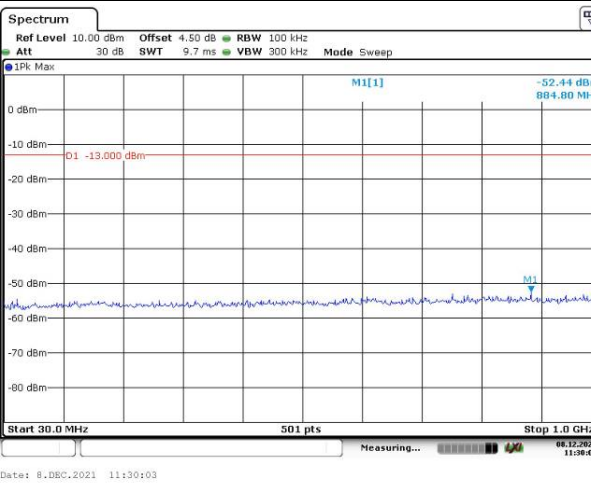
Lowest



Middle



Highest

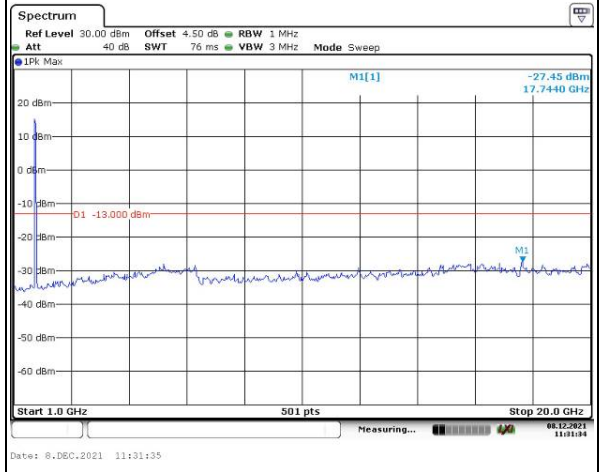
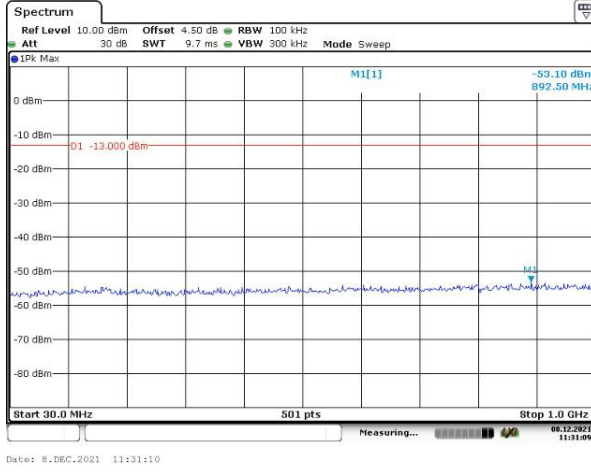


Spurious Emissions at Antenna Terminal

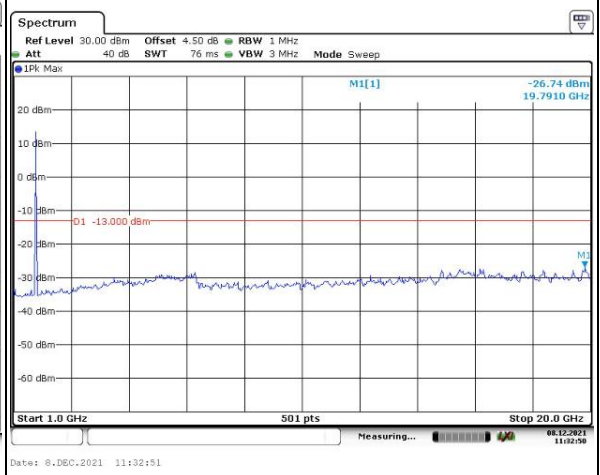
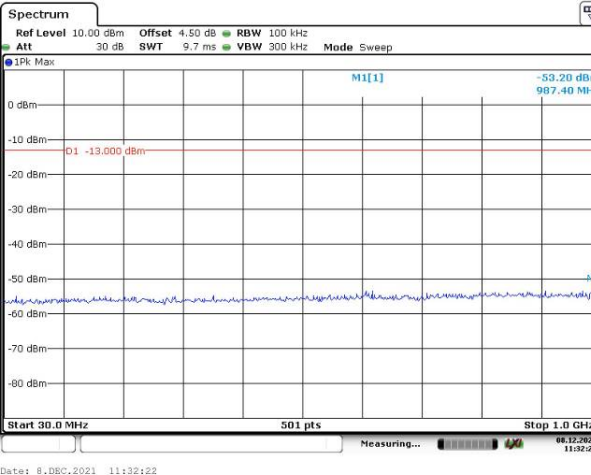
Channel

20MHz Bandwidth QPSK

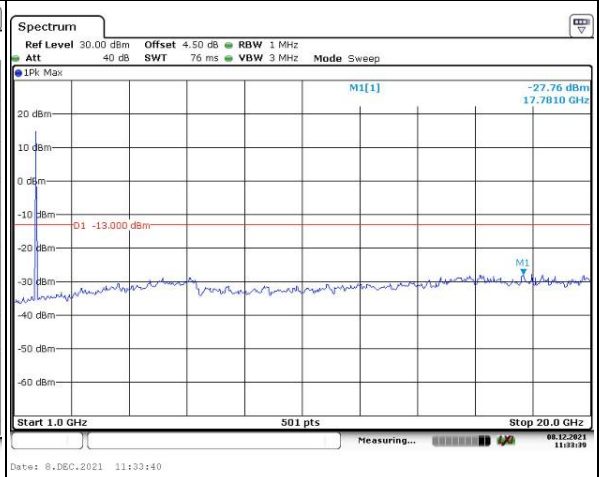
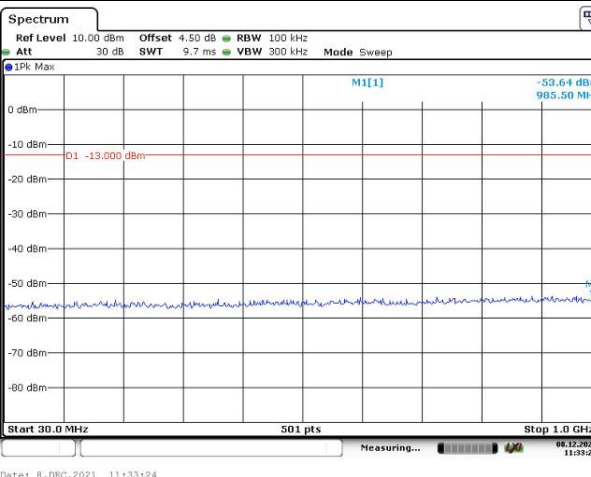
Lowest



Middle



Highest



Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz		
QPSK 3MHz		
QPSK 5MHz		

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 20.00 dBm Offset 4.50 dB RBW 30 kHz Att 30 dB SWT 1.1 ms VBW 100 kHz Mode Sweep M1[1] -20.31 dBm 1.7100000 GHz D1 -13.000 dBm CF 1.71 GHz 501 pts Span 3.0 MHz Date: 6.DEC.2021 15:11:55</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 30 kHz Att 30 dB SWT 1.1 ms VBW 100 kHz Mode Sweep M1[1] -17.46 dBm 1.75504790 GHz D1 -13.000 dBm CF 1.755 GHz 501 pts Span 3.0 MHz Date: 6.DEC.2021 15:12:36</p>
16QAM 3MHz	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 30 kHz Att 30 dB SWT 1.1 ms VBW 100 kHz Mode Sweep M1[1] -20.79 dBm 1.7100000 GHz D1 -13.000 dBm CF 1.71 GHz 501 pts Span 6.0 MHz Date: 6.DEC.2021 15:13:18</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 30 kHz Att 30 dB SWT 1.1 ms VBW 100 kHz Mode Sweep M1[1] -19.19 dBm 1.7550000 GHz D1 -13.000 dBm CF 1.755 GHz 501 pts Span 6.0 MHz Date: 6.DEC.2021 15:14:05</p>
16QAM 5MHz	<p>Ref Level 34.50 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep M1[1] -23.93 dBm 1.7100000 GHz D1 -13.000 dBm CF 1.71 GHz 691 pts Span 10.0 MHz Date: 9.DEC.2021 13:58:23</p>	<p>Ref Level 34.50 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 1 ms VBW 300 kHz Mode Sweep M1[1] -22.12 dBm 1.7550000 GHz D1 -13.000 dBm CF 1.755 GHz 691 pts Span 10.0 MHz Date: 9.DEC.2021 14:04:00</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz		
16QAM 15MHz		
16QAM 20MHz		

4.8 Antenna Port Test Data and Results for LTE Band 5:

Serial Number:	CR21110036-RF-S1	Test Date:	2021/12/06~2021/12/08
Test Site:	RF	Test Mode:	Transmitting
Tester:	LE Qiao	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	21.3~21.5	Relative Humidity: (%)	32~41	ATM Pressure: (kPa)	101.6~101.7
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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 5▲:

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

Test Frequency For Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
1.4MHz	824.7	836.5	848.3
3MHz	825.5	836.5	847.5
5MHz	826.5	836.5	846.5
10MHz	829	836.5	844

Test Data:

FCC§2.1046;§ 22.913 (a)						
RF Output Power:						
Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
1.4MHz QPSK	RB1#0	23.40	23.40	23.39	24.62	38.45
	RB1#3	23.28	23.29	23.42		
	RB1#5	23.62	23.24	23.34		
	RB3#0	23.47	23.40	23.34		
	RB3#3	23.58	23.56	23.33		
	RB6#0	22.35	22.38	22.32		
1.4MHz 16QAM	RB1#0	22.76	22.71	22.37	23.81	38.45
	RB1#3	22.69	22.81	22.43		
	RB1#5	22.61	22.76	21.98		
	RB3#0	22.18	22.50	22.29		
	RB3#3	22.33	22.34	22.36		
	RB6#0	21.51	21.67	21.38		
3MHz QPSK	RB1#0	23.56	23.42	23.38	24.56	38.45
	RB1#8	23.42	23.48	23.49		
	RB1#14	23.29	23.45	23.28		
	RB6#0	22.44	22.44	22.33		
	RB6#9	22.47	22.51	22.30		
	RB15#0	22.45	22.48	22.35		
3MHz 16QAM	RB1#0	22.15	22.87	22.96	24.03	38.45
	RB1#8	22.02	22.62	23.03		
	RB1#14	22.01	22.61	22.52		
	RB6#0	21.57	21.43	21.36		
	RB6#9	21.48	21.27	21.56		
	RB15#0	21.56	21.35	21.32		
5MHz QPSK	RB1#0	23.11	23.46	23.05	24.5	38.45
	RB1#13	23.11	23.46	23.03		
	RB1#24	23.17	23.50	23.03		
	RB15#0	22.34	22.43	22.26		
	RB15#10	22.39	22.34	22.32		
	RB25#0	22.35	22.35	22.35		
5MHz 16QAM	RB1#0	22.21	22.33	21.88	23.33	38.45
	RB1#13	21.35	22.03	21.99		
	RB1#24	21.46	22.22	22.01		
	RB15#0	21.45	21.38	21.11		
	RB15#10	21.27	21.29	21.24		
	RB25#0	21.41	21.53	21.13		
10MHz QPSK	RB1#0	23.55	23.63	23.45	24.63	38.45

	RB1#25	23.49	23.57	23.25		
	RB1#49	23.32	23.32	23.18		
	RB25#0	22.35	22.48	22.43		
	RB25#25	22.45	22.42	22.35		
	RB50#0	22.56	22.53	22.38		
10MHz 16QAM	RB1#0	22.53	22.78	22.56	23.9	38.45
	RB1#25	22.49	22.90	22.54		
	RB1#49	22.57	22.69	22.05		
	RB25#0	21.40	21.52	21.58		
	RB25#25	21.40	21.45	21.45		
	RB50#0	21.46	21.57	21.56		
Note: ERP=Conducted Power(dBm) - Cable loss(dB) + Antenna Gain(dBd)						
					Result:	Pass

Peak-to-average Ratio(PAR)

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
10MHz QPSK	RB1#0	3.33	4.61	3.28	13
	RB50#0	4.03	4.26	4.26	13
10MHz 16QAM	RB1#0	4.35	3.74	3.94	13
	RB50#0	5.04	5.30	5.30	13
Result:					Pass

FCC §2.1049, §22.905: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	1.108	1.320	1.320	1.308
1.4MHz 16QAM	1.108	1.102	1.102	1.320	1.308	1.320
3MHz QPSK	2.695	2.707	2.683	2.964	2.940	2.964
3MHz 16QAM	2.695	2.683	2.695	2.976	2.964	2.964
5MHz QPSK	4.531	4.511	4.511	5.040	5.060	5.000
5MHz 16QAM	4.531	4.551	4.551	5.040	5.040	5.080
10MHz QPSK	8.942	8.942	8.901	9.840	9.760	9.640
10MHz 16QAM	8.942	8.942	8.942	9.760	9.760	9.680
Note: The test plots please refer to the Plots of Occupied Bandwidth						

FCC §2.1051, §22.917(a):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, §22.917(a):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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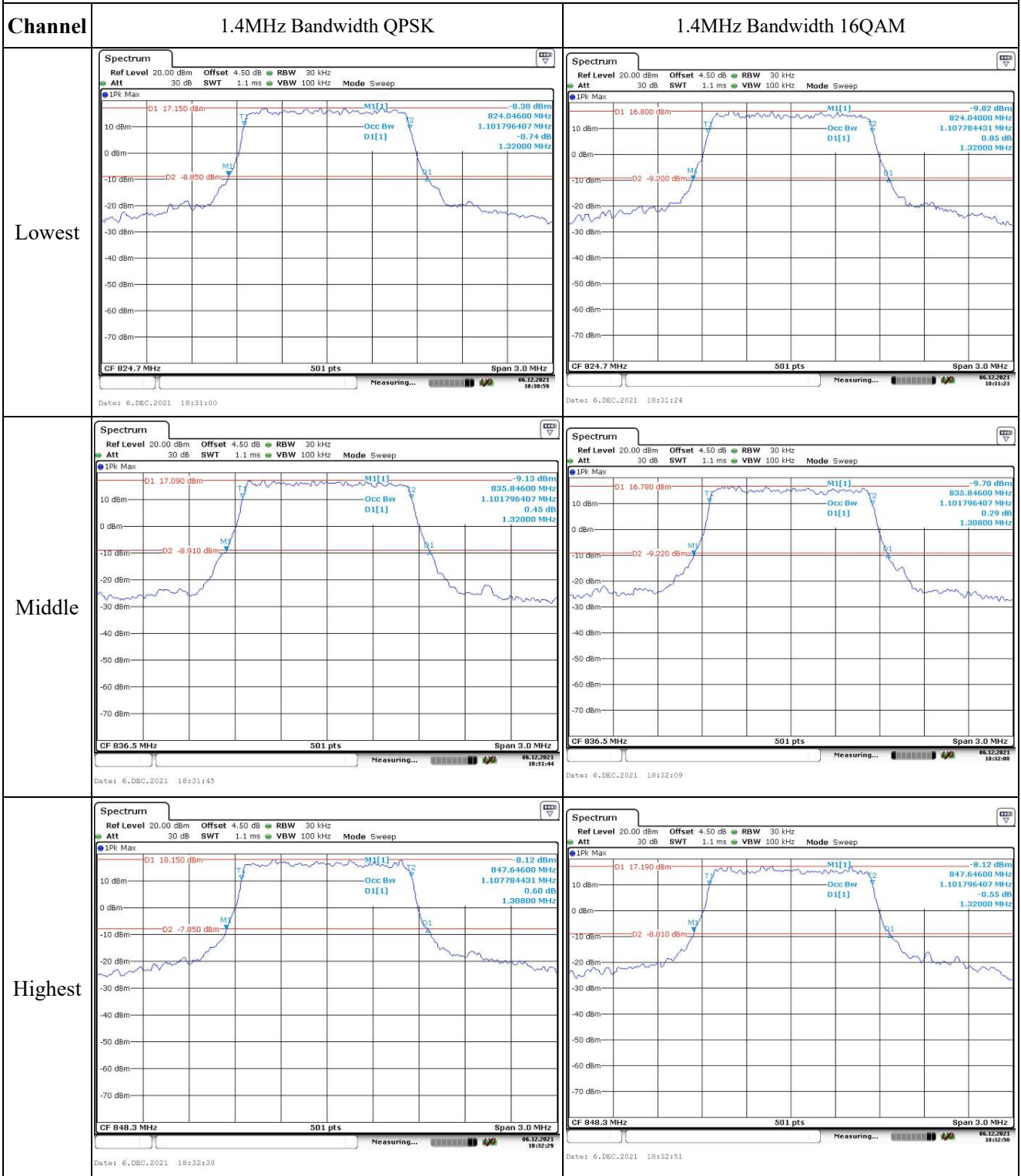
FCC §2.1055, §22.355: Frequency Stability

Test Mode:	10 MHz QPSK		Test Channel:	836.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	-1.29	-0.002	2.5
	-20	3.85	-9.86	-0.012	2.5
	-10	3.85	-7.11	-0.008	2.5
	0	3.85	-6.97	-0.008	2.5
	10	3.85	-5.74	-0.007	2.5
	20	3.85	-6.61	-0.008	2.5
	30	3.85	7.86	0.009	2.5
	40	3.85	6.36	0.008	2.5
	50	3.85	-8.31	-0.010	2.5
Frequency Stability vs. Voltage	20	3.5	7.54	0.009	2.5
	20	4.4	-9.07	-0.011	2.5
Result:				Pass	

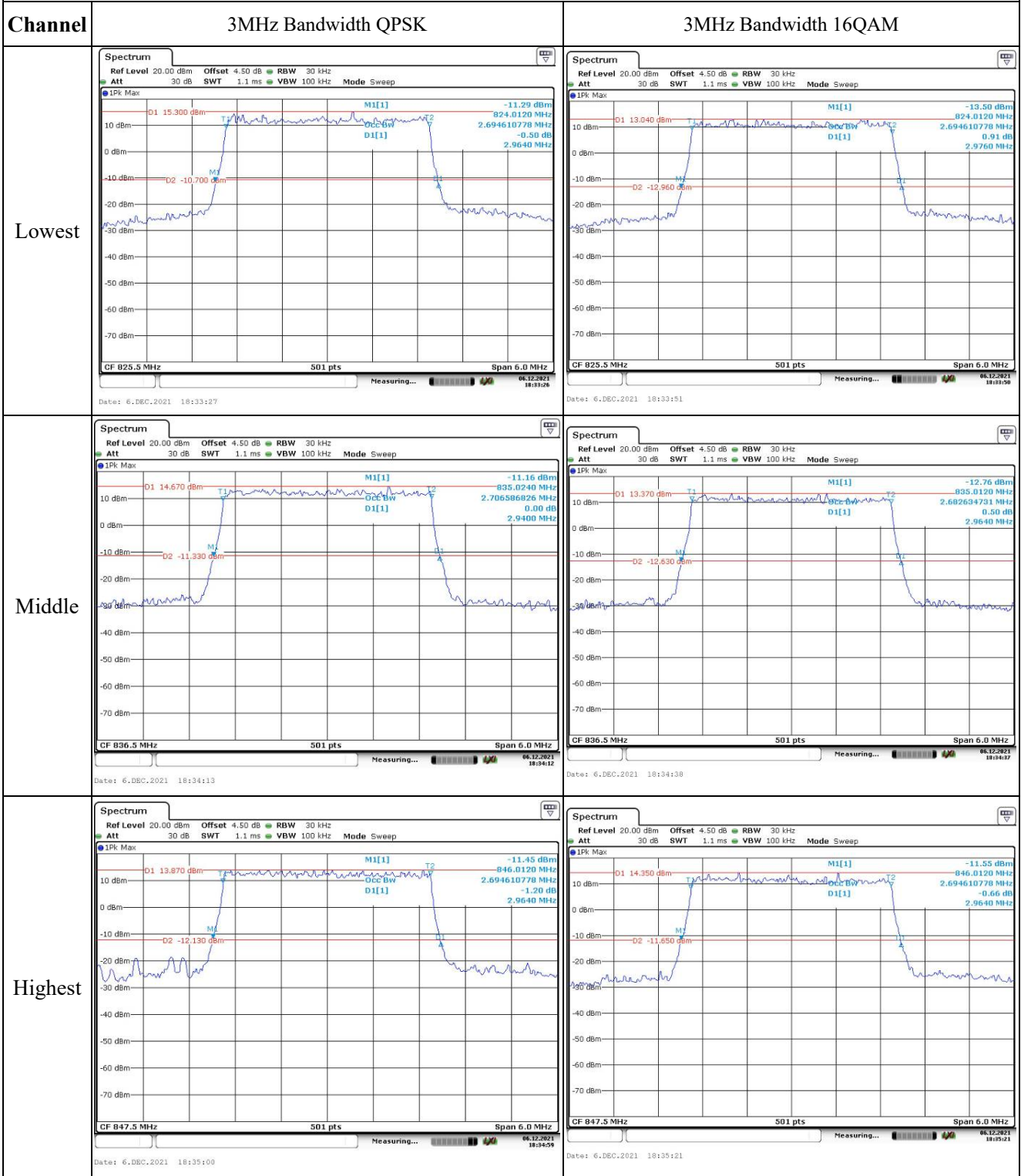
Test Mode:	10 MHz 16QAM		Test Channel:	836.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.85	-1.53	-0.002	2.5
	-20	3.85	6.56	0.008	2.5
	-10	3.85	-5.38	-0.006	2.5
	0	3.85	-9.81	-0.012	2.5
	10	3.85	6.13	0.007	2.5
	20	3.85	6.03	0.007	2.5
	30	3.85	-8.64	-0.010	2.5
	40	3.85	-8.01	-0.010	2.5
	50	3.85	7.86	0.009	2.5
Frequency Stability vs. Voltage	20	3.5	-8.25	-0.010	2.5
	20	4.4	6.34	0.008	2.5
Result:				Pass	

Test Plots:

Occupied Bandwidth



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 1Pk Max D1 16.960 dBm M1[1] -9.50 dBm 823.9800 MHz Occ Bw 4.530938124 MHz D1[1] 1.07 dB 5.0400 MHz CF 826.5 MHz 501 pts Span 10.0 MHz Date: 6.DEC.2021 18:36:05</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 1Pk Max D1 15.730 dBm M1[1] -10.19 dBm 823.9800 MHz Occ Bw 4.530938124 MHz D1[1] -0.34 dB 5.0400 MHz CF 826.5 MHz 501 pts Span 10.0 MHz Date: 6.DEC.2021 18:36:36</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 1Pk Max D1 16.360 dBm M1[1] -9.70 dBm 833.9600 MHz Occ Bw 4.510978004 MHz D1[1] 0.89 dB 5.0600 MHz CF 836.5 MHz 501 pts Span 10.0 MHz Date: 6.DEC.2021 18:37:01</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 1Pk Max D1 16.250 dBm M1[1] -9.78 dBm 833.9600 MHz Occ Bw 4.550898204 MHz D1[1] 0.43 dB 5.0400 MHz CF 836.5 MHz 501 pts Span 10.0 MHz Date: 6.DEC.2021 18:37:27</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 1Pk Max D1 17.900 dBm M1[1] -7.82 dBm 844.0000 MHz Occ Bw 4.510978004 MHz D1[1] 0.45 dB 5.0000 MHz CF 846.5 MHz 501 pts Span 10.0 MHz Date: 6.DEC.2021 18:38:05</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 1Pk Max D1 16.230 dBm M1[1] -10.52 dBm 843.9400 MHz Occ Bw 4.550898204 MHz D1[1] 0.61 dB 5.0000 MHz CF 846.5 MHz 501 pts Span 10.0 MHz Date: 6.DEC.2021 18:38:30</p>

Occupied Bandwidth

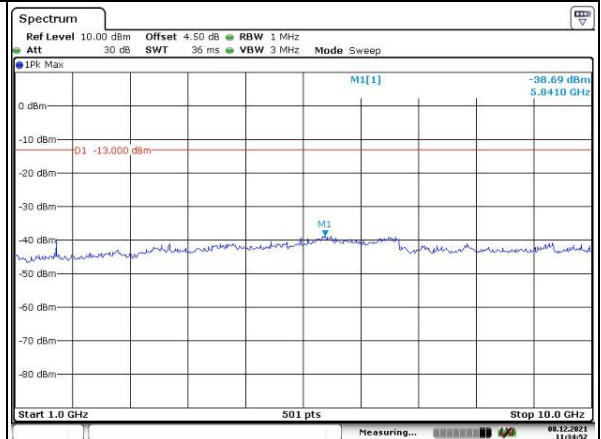
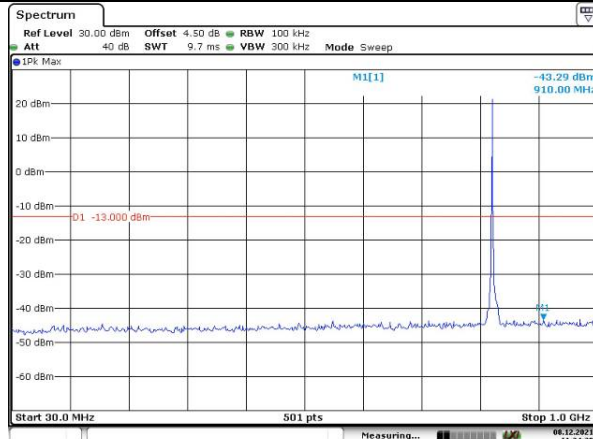
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep 1Pk Max D1 13.850 dBm M1[1] -19.50 dBm D2 -12.150 dBm Dcc Bw 1.61 dB D1[1] 8.942115768 MHz 8.942115768 MHz 9.8400 MHz CF 829.0 MHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:39:20</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 1Pk Max D1 13.270 dBm M1[1] -13.28 dBm D2 -12.730 dBm Dcc Bw 1.09 dB D1[1] 8.942115768 MHz 8.942115768 MHz 9.7600 MHz CF 829.0 MHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:39:46</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 1Pk Max D1 14.430 dBm M1[1] -11.68 dBm D2 -11.570 dBm Dcc Bw 0.89 dB D1[1] 8.942115768 MHz 8.942115768 MHz 9.7600 MHz CF 836.5 MHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:40:19</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 1Pk Max D1 14.400 dBm M1[1] -11.78 dBm D2 -11.600 dBm Dcc Bw 0.89 dB D1[1] 8.942115768 MHz 8.942115768 MHz 9.7600 MHz CF 836.5 MHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:40:51</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 1Pk Max D1 14.890 dBm M1[1] -10.64 dBm D2 -11.110 dBm Dcc Bw 0.10 dB D1[1] 8.902195609 MHz 8.902195609 MHz 9.6400 MHz CF 844.0 MHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:41:14</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 1Pk Max D1 14.760 dBm M1[1] -11.63 dBm D2 -11.240 dBm Dcc Bw 0.47 dB D1[1] 8.942115768 MHz 8.942115768 MHz 9.6800 MHz CF 844.0 MHz 501 pts Span 20.0 MHz Date: 6.DEC.2021 18:41:45</p>

Spurious Emissions at Antenna Terminal

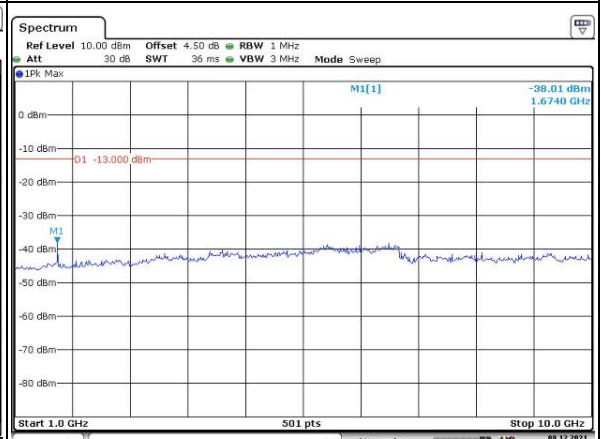
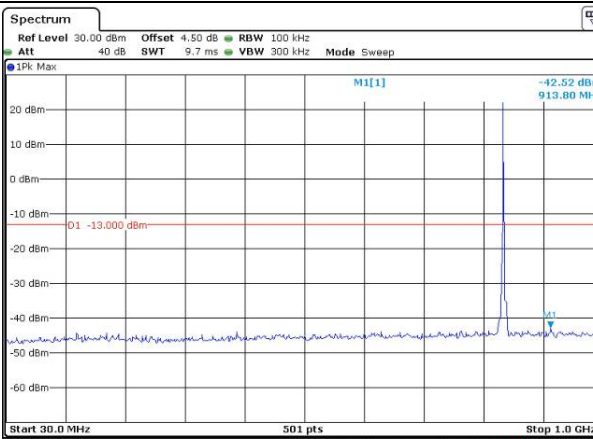
Channel

1.4MHz Bandwidth QPSK

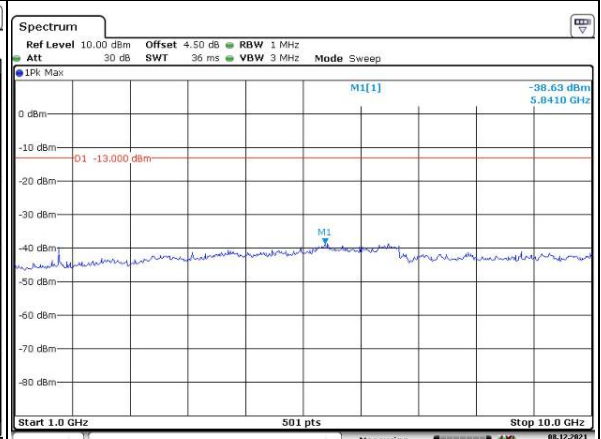
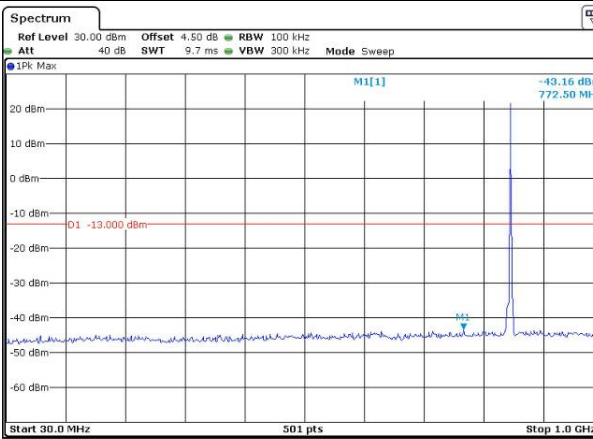
Lowest



Middle



Highest



Spurious Emissions at Antenna Terminal

