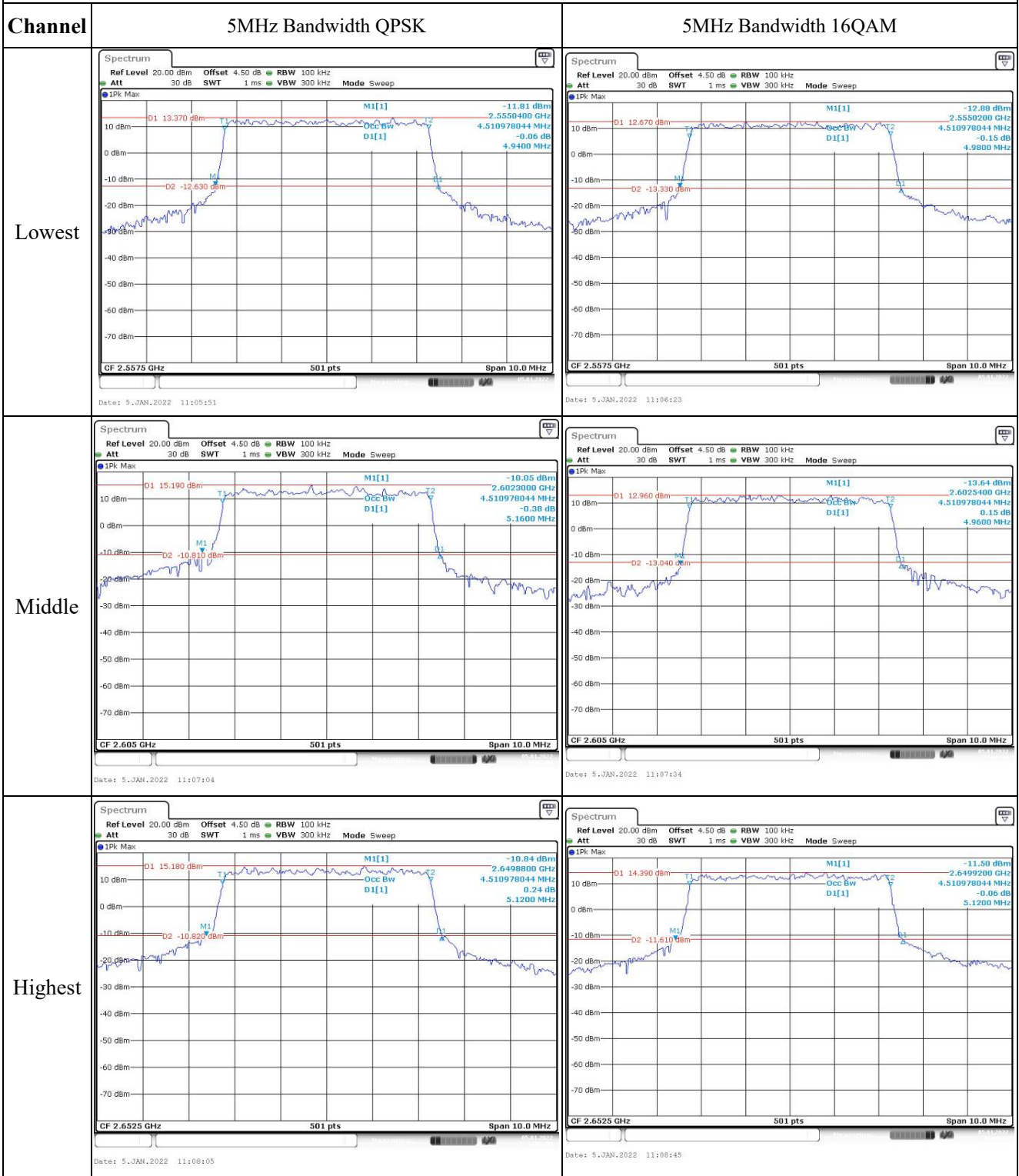


Test Plots:

Occupied Bandwidth



Occupied Bandwidth

Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	<p>10MHz Bandwidth QPSK</p> <p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -14.54 dBm 2.5550800 GHz 8.982035928 MHz 0.00 dB 9.8400 MHz</p> <p>D1 11.400 dBm D2 -14.600 dBm</p> <p>CF 2.56 GHz 501 pts Span 20.0 MHz</p> <p>Date: 5.JAN.2022 11:09:52</p>	<p>10MHz Bandwidth 16QAM</p> <p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -15.25 dBm 2.5551200 GHz 8.982035928 MHz 0.64 dB 9.8000 MHz</p> <p>D1 11.480 dBm D2 -14.520 dBm</p> <p>CF 2.56 GHz 501 pts Span 20.0 MHz</p> <p>Date: 5.JAN.2022 11:10:13</p>
Middle	<p>10MHz Bandwidth QPSK</p> <p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -14.74 dBm 2.6000000 GHz 8.942115768 MHz 0.69 dB 9.8800 MHz</p> <p>D1 11.160 dBm D2 -14.840 dBm</p> <p>CF 2.605 GHz 501 pts Span 20.0 MHz</p> <p>Date: 5.JAN.2022 11:10:54</p>	<p>10MHz Bandwidth 16QAM</p> <p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -16.19 dBm 2.6000000 GHz 8.942115768 MHz 0.98 dB 9.8000 MHz</p> <p>D1 10.740 dBm D2 -15.260 dBm</p> <p>CF 2.605 GHz 501 pts Span 20.0 MHz</p> <p>Date: 5.JAN.2022 11:11:30</p>
Highest	<p>10MHz Bandwidth QPSK</p> <p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -13.41 dBm 2.6450000 GHz 8.942115768 MHz 0.23 dB 9.9200 MHz</p> <p>D1 12.330 dBm D2 -13.670 dBm</p> <p>CF 2.65 GHz 501 pts Span 20.0 MHz</p> <p>Date: 5.JAN.2022 11:12:13</p>	<p>10MHz Bandwidth 16QAM</p> <p>Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep</p> <p>1Pk Max</p> <p>M1[1] -15.13 dBm 2.6450800 GHz 8.982035928 MHz 0.15 dB 10.0400 MHz</p> <p>D1 11.070 dBm D2 -14.930 dBm</p> <p>CF 2.65 GHz 501 pts Span 20.0 MHz</p> <p>Date: 5.JAN.2022 11:12:40</p>

Occupied Bandwidth

Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 14.510 dBm</p> <p>M1[1] -11.39 dBm</p> <p>2.5541600 GHz</p> <p>Occ Bw 13.592814371 MHz</p> <p>D1[1] -0.06 dB</p> <p>16.2500 MHz</p> <p>CF 2.5625 GHz 501 pts Span 30.0 MHz</p> <p>Date: 5.JAN.2022 11:13:24</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 13.950 dBm</p> <p>M1[1] -11.77 dBm</p> <p>2.5548900 GHz</p> <p>Occ Bw 13.532934132 MHz</p> <p>D1[1] -0.83 dB</p> <p>15.5400 MHz</p> <p>CF 2.5625 GHz 501 pts Span 30.0 MHz</p> <p>Date: 5.JAN.2022 11:13:52</p>
Middle	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 14.350 dBm</p> <p>M1[1] -11.36 dBm</p> <p>2.5974400 GHz</p> <p>Occ Bw 13.473053892 MHz</p> <p>D1[1] -0.22 dB</p> <p>15.1800 MHz</p> <p>CF 2.605 GHz 501 pts Span 30.0 MHz</p> <p>Date: 5.JAN.2022 11:14:23</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 13.310 dBm</p> <p>M1[1] -12.64 dBm</p> <p>2.5966000 GHz</p> <p>Occ Bw 13.592814371 MHz</p> <p>D1[1] 0.06 dB</p> <p>16.8600 MHz</p> <p>CF 2.605 GHz 501 pts Span 30.0 MHz</p> <p>Date: 5.JAN.2022 11:15:00</p>
Highest	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 15.120 dBm</p> <p>M1[1] -10.49 dBm</p> <p>2.6399400 GHz</p> <p>Occ Bw 13.473053892 MHz</p> <p>D1[1] -1.21 dB</p> <p>15.4200 MHz</p> <p>CF 2.6475 GHz 501 pts Span 30.0 MHz</p> <p>Date: 5.JAN.2022 11:15:31</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep</p> <p>1Pk Max</p> <p>D1 14.590 dBm</p> <p>M1[1] -11.42 dBm</p> <p>2.6400000 GHz</p> <p>Occ Bw 13.592814371 MHz</p> <p>D1[1] 0.19 dB</p> <p>16.2000 MHz</p> <p>CF 2.6475 GHz 501 pts Span 30.0 MHz</p> <p>Date: 5.JAN.2022 11:16:04</p>

Occupied Bandwidth

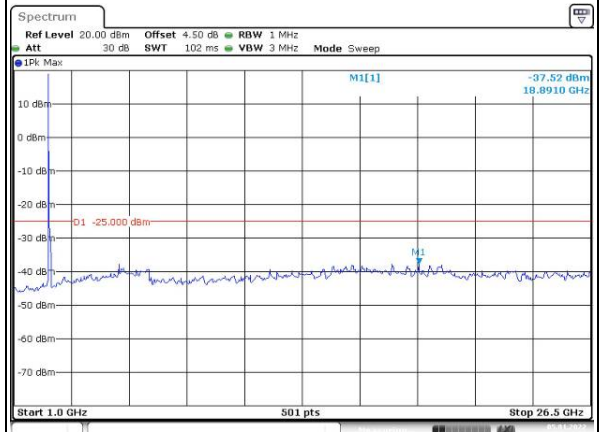
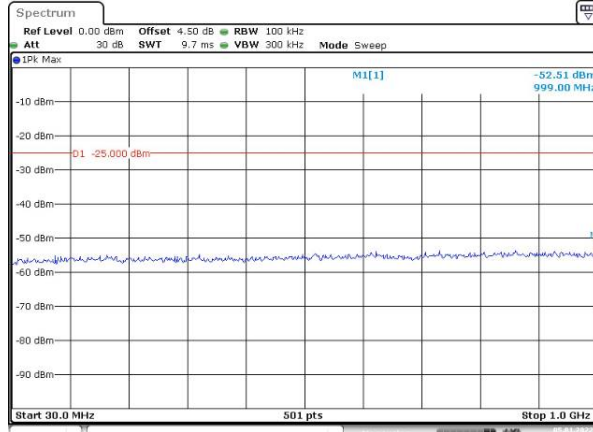
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	<p>1Pk Max</p> <p>D1 13.660 dBm</p> <p>M1[1] -11.84 dBm</p> <p>2.5552400 GHz</p> <p>17.964071856 MHz</p> <p>D1[1] -1.23 dB</p> <p>19.6800 MHz</p> <p>D2 -12.340 dBm</p> <p>CF 2.565 GHz</p> <p>501 pts</p> <p>Span 40.0 MHz</p> <p>Date: 5.JAN.2022 11:16:38</p>	<p>1Pk Max</p> <p>D1 12.290 dBm</p> <p>M1[1] -13.00 dBm</p> <p>2.5551600 GHz</p> <p>17.964071856 MHz</p> <p>D1[1] 0.79 dB</p> <p>19.6800 MHz</p> <p>D2 -13.710 dBm</p> <p>CF 2.565 GHz</p> <p>501 pts</p> <p>Span 40.0 MHz</p> <p>Date: 5.JAN.2022 11:17:08</p>
Middle	<p>1Pk Max</p> <p>D1 14.090 dBm</p> <p>M1[1] -12.51 dBm</p> <p>2.5952400 GHz</p> <p>17.964071856 MHz</p> <p>D1[1] 0.52 dB</p> <p>19.6800 MHz</p> <p>D2 -11.910 dBm</p> <p>CF 2.605 GHz</p> <p>501 pts</p> <p>Span 40.0 MHz</p> <p>Date: 5.JAN.2022 11:17:43</p>	<p>1Pk Max</p> <p>D1 12.790 dBm</p> <p>M1[1] -14.03 dBm</p> <p>2.5951600 GHz</p> <p>17.964071856 MHz</p> <p>D1[1] 1.53 dB</p> <p>19.6800 MHz</p> <p>D2 -13.210 dBm</p> <p>CF 2.605 GHz</p> <p>501 pts</p> <p>Span 40.0 MHz</p> <p>Date: 5.JAN.2022 11:18:13</p>
Highest	<p>1Pk Max</p> <p>D1 14.020 dBm</p> <p>M1[1] -11.75 dBm</p> <p>2.6351600 GHz</p> <p>17.964071856 MHz</p> <p>D1[1] -0.04 dB</p> <p>19.6800 MHz</p> <p>D2 -11.980 dBm</p> <p>CF 2.645 GHz</p> <p>501 pts</p> <p>Span 40.0 MHz</p> <p>Date: 5.JAN.2022 11:18:41</p>	<p>1Pk Max</p> <p>D1 13.690 dBm</p> <p>M1[1] -12.34 dBm</p> <p>2.6348400 GHz</p> <p>17.964071856 MHz</p> <p>D1[1] -0.30 dB</p> <p>20.0000 MHz</p> <p>D2 -12.310 dBm</p> <p>CF 2.645 GHz</p> <p>501 pts</p> <p>Span 40.0 MHz</p> <p>Date: 5.JAN.2022 11:19:09</p>

Spurious Emissions at Antenna Terminal

Channel

5MHz Bandwidth QPSK

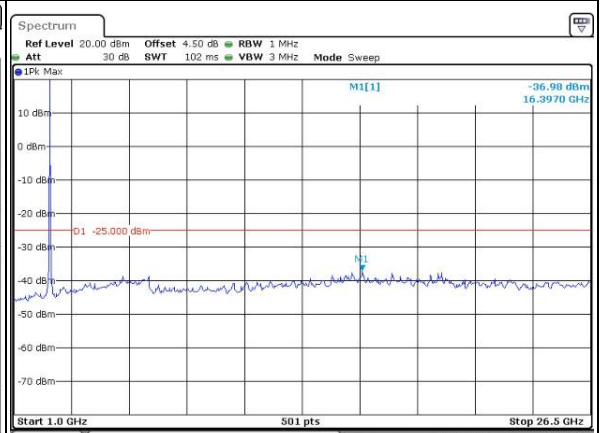
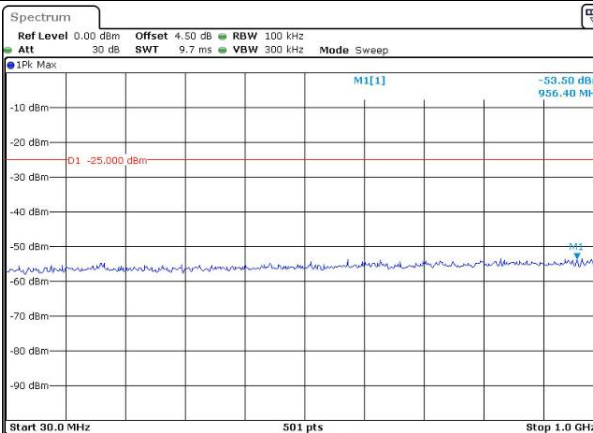
Lowest



Date: 5.JAN.2022 11:32:23

Date: 5.JAN.2022 11:32:52

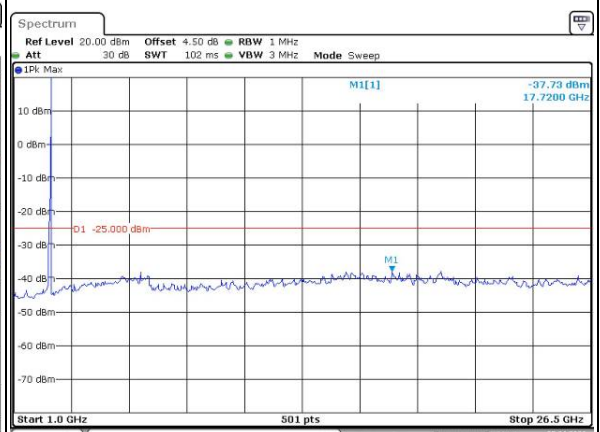
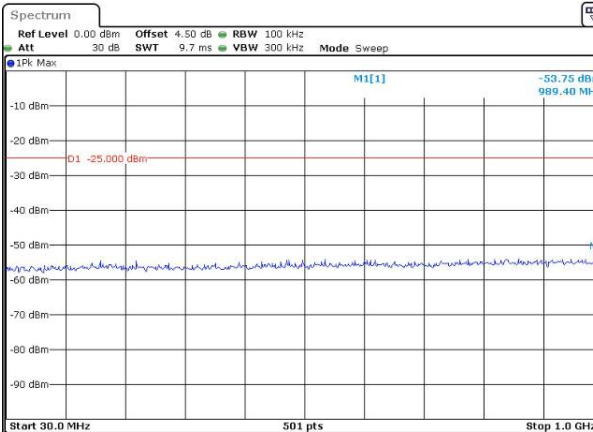
Middle



Date: 5.JAN.2022 11:33:18

Date: 5.JAN.2022 11:33:44

Highest



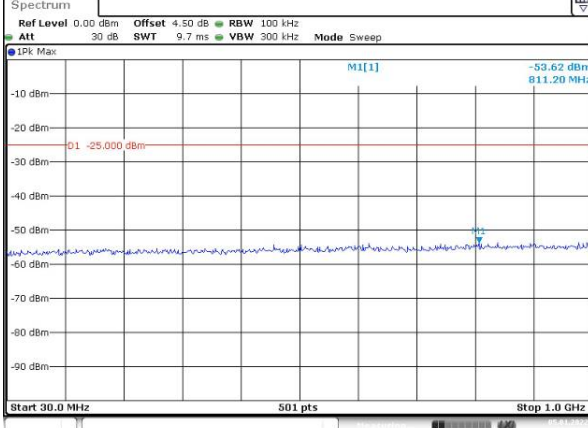
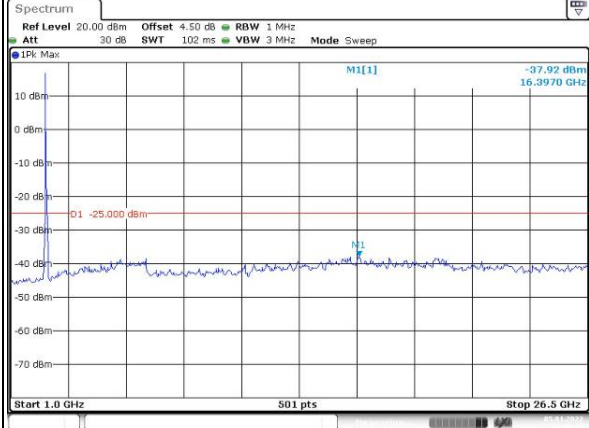
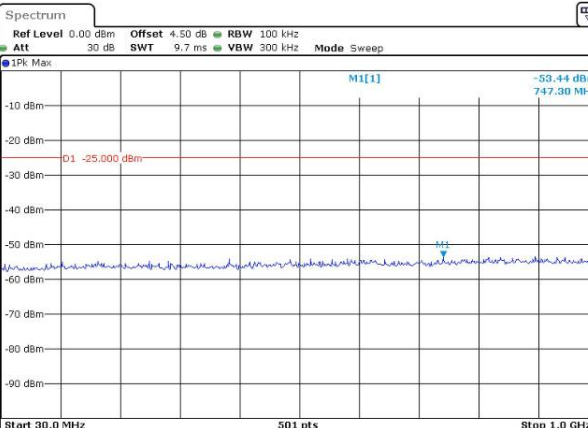
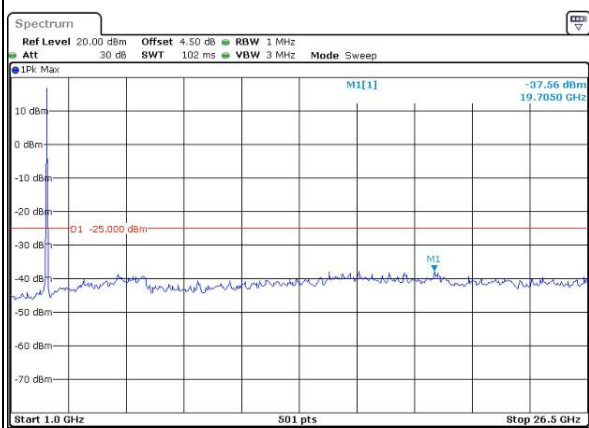
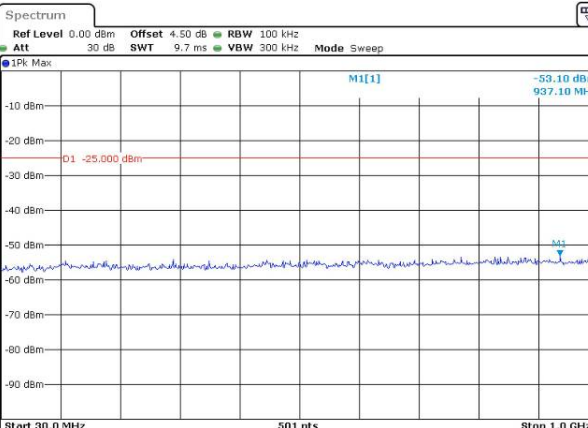
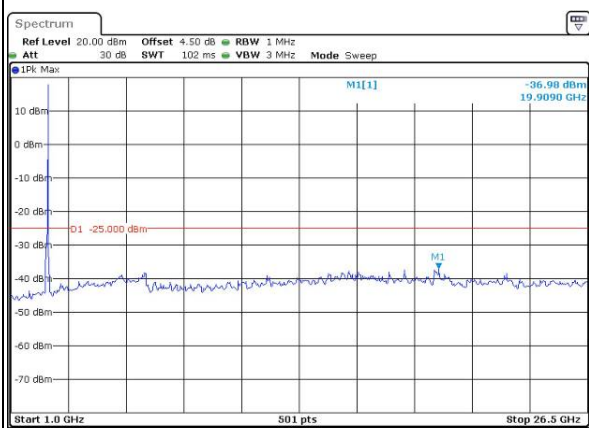
Date: 5.JAN.2022 11:34:07

Date: 5.JAN.2022 11:34:36

Spurious Emissions at Antenna Terminal

Channel	10MHz Bandwidth QPSK	
Lowest	<p>Ref Level 0.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -59.00 dBm 906.10 MHz -25.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 5.JAN.2022 11:35:06</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 102 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -38.39 dBm 19.7560 GHz -25.000 dBm Start 1.0 GHz 501 pts Stop 26.5 GHz Date: 5.JAN.2022 11:35:25</p>
Middle	<p>Ref Level 0.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -53.06 dBm 977.70 MHz -25.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 5.JAN.2022 11:35:52</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 102 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -37.67 dBm 16.3970 GHz -25.000 dBm Start 1.0 GHz 501 pts Stop 26.5 GHz Date: 5.JAN.2022 11:36:10</p>
Highest	<p>Ref Level 0.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep 1Pk Max M1[1] -53.30 dBm 788.00 MHz -25.000 dBm Start 30.0 MHz 501 pts Stop 1.0 GHz Date: 5.JAN.2022 11:36:48</p>	<p>Ref Level 20.00 dBm Offset 4.50 dB RBW 1 MHz Att 30 dB SWT 102 ms VBW 3 MHz Mode Sweep 1Pk Max M1[1] -38.15 dBm 16.6000 GHz -25.000 dBm Start 1.0 GHz 501 pts Stop 26.5 GHz Date: 5.JAN.2022 11:37:11</p>

### Spurious Emissions at Antenna Terminal

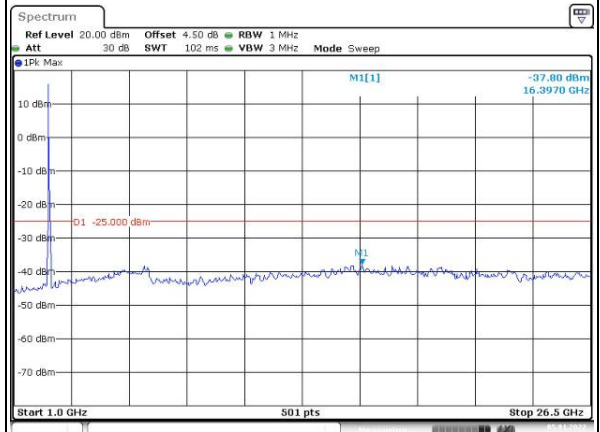
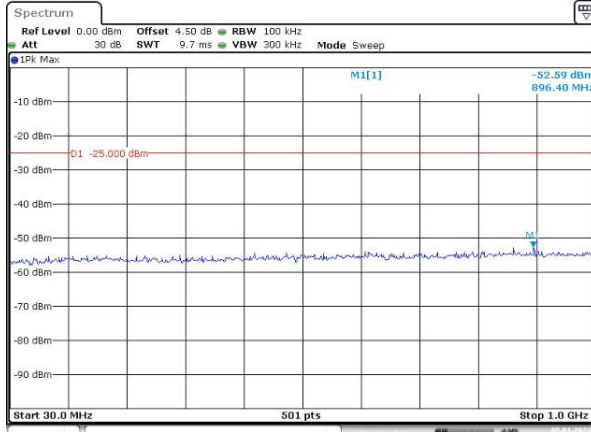
Channel	15MHz Bandwidth QPSK	
Lowest	 <p>Spectrum plot showing spurious emissions for the lowest channel. The plot covers a frequency range from 30.0 MHz to 1.0 GHz. The y-axis represents power in dBm, ranging from -90 to -10. A red horizontal line indicates a limit at -25.000 dBm. A significant peak is observed at 811.20 MHz with a power level of -59.62 dBm. The plot includes parameters: Ref Level 0.00 dBm, Offset 4.50 dB, RBW 100 kHz, Att 30 dB, SWT 9.7 ms, VBW 300 kHz, Mode Sweep. Date: 5.JAN.2022 11:37:43.</p>	 <p>Spectrum plot showing spurious emissions for the lowest channel in the 1.0 GHz to 26.5 GHz range. The y-axis represents power in dBm, ranging from -70 to 10. A red horizontal line indicates a limit at -25.000 dBm. A significant peak is observed at 16.3970 GHz with a power level of -37.92 dBm. The plot includes parameters: Ref Level 20.00 dBm, Offset 4.50 dB, RBW 1 MHz, Att 30 dB, SWT 102 ms, VBW 3 MHz, Mode Sweep. Date: 5.JAN.2022 11:38:08.</p>
Middle	 <p>Spectrum plot showing spurious emissions for the middle channel. The plot covers a frequency range from 30.0 MHz to 1.0 GHz. The y-axis represents power in dBm, ranging from -90 to -10. A red horizontal line indicates a limit at -25.000 dBm. A significant peak is observed at 747.30 MHz with a power level of -53.44 dBm. The plot includes parameters: Ref Level 0.00 dBm, Offset 4.50 dB, RBW 100 kHz, Att 30 dB, SWT 9.7 ms, VBW 300 kHz, Mode Sweep. Date: 5.JAN.2022 11:38:41.</p>	 <p>Spectrum plot showing spurious emissions for the middle channel in the 1.0 GHz to 26.5 GHz range. The y-axis represents power in dBm, ranging from -70 to 10. A red horizontal line indicates a limit at -25.000 dBm. A significant peak is observed at 19.7050 GHz with a power level of -37.56 dBm. The plot includes parameters: Ref Level 20.00 dBm, Offset 4.50 dB, RBW 1 MHz, Att 30 dB, SWT 102 ms, VBW 3 MHz, Mode Sweep. Date: 5.JAN.2022 11:39:01.</p>
Highest	 <p>Spectrum plot showing spurious emissions for the highest channel. The plot covers a frequency range from 30.0 MHz to 1.0 GHz. The y-axis represents power in dBm, ranging from -90 to -10. A red horizontal line indicates a limit at -25.000 dBm. A significant peak is observed at 937.10 MHz with a power level of -53.10 dBm. The plot includes parameters: Ref Level 0.00 dBm, Offset 4.50 dB, RBW 100 kHz, Att 30 dB, SWT 9.7 ms, VBW 300 kHz, Mode Sweep. Date: 5.JAN.2022 11:39:34.</p>	 <p>Spectrum plot showing spurious emissions for the highest channel in the 1.0 GHz to 26.5 GHz range. The y-axis represents power in dBm, ranging from -70 to 10. A red horizontal line indicates a limit at -25.000 dBm. A significant peak is observed at 19.9090 GHz with a power level of -36.98 dBm. The plot includes parameters: Ref Level 20.00 dBm, Offset 4.50 dB, RBW 1 MHz, Att 30 dB, SWT 102 ms, VBW 3 MHz, Mode Sweep. Date: 5.JAN.2022 11:39:59.</p>

Spurious Emissions at Antenna Terminal

Channel

20MHz Bandwidth QPSK

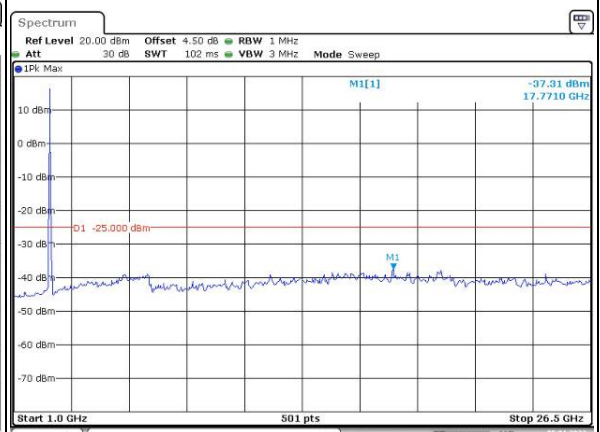
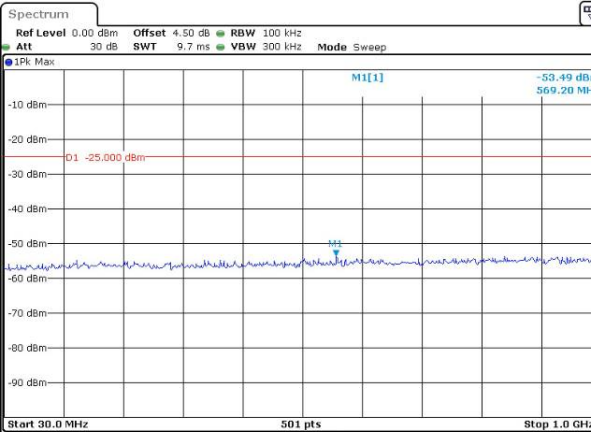
Lowest



Date: 5.JAN.2022 11:40:34

Date: 5.JAN.2022 11:41:00

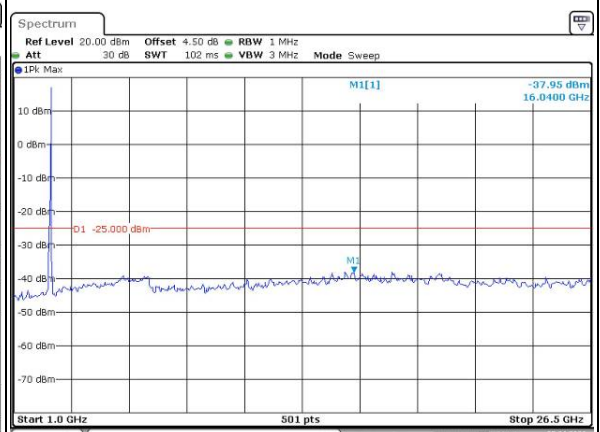
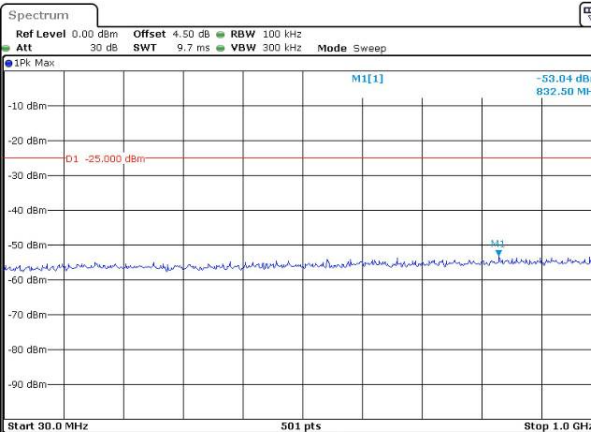
Middle



Date: 5.JAN.2022 11:41:29

Date: 5.JAN.2022 11:41:52

Highest



Date: 5.JAN.2022 11:42:25

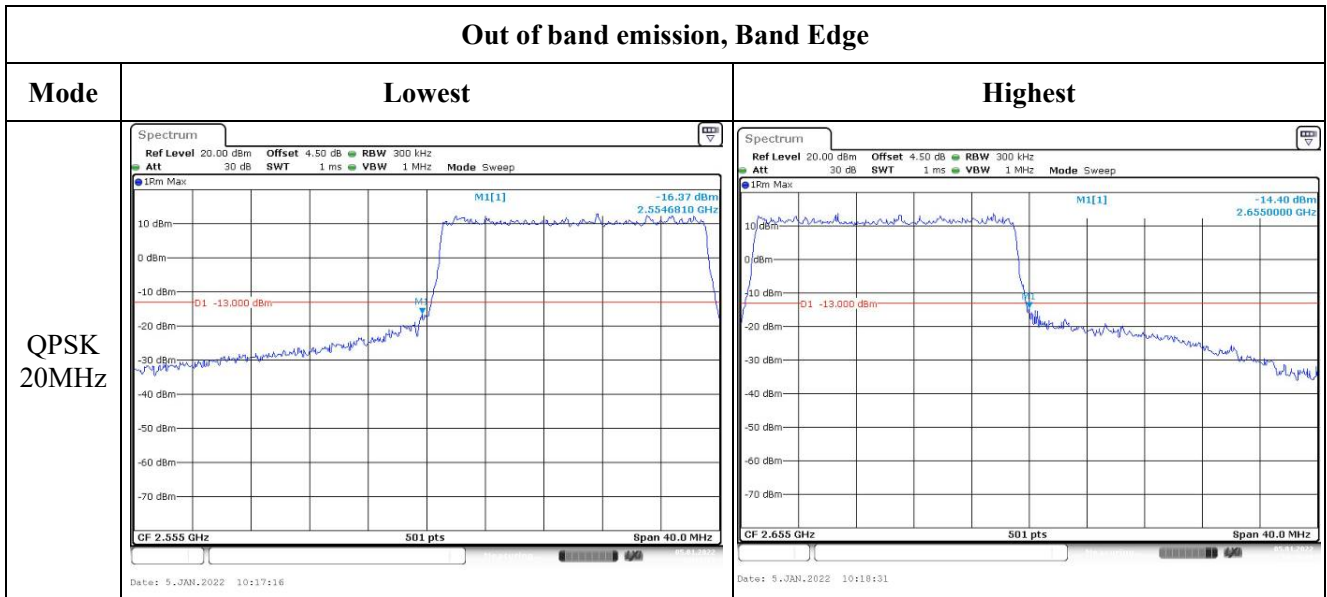
Date: 5.JAN.2022 11:42:47



Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 5MHz	<p>Spectrum Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep 15m Max M1[1] -15.90 dBm 2.5549600 GHz D1 -13.000 dBm CF 2.555 GHz 501 pts Span 10.0 MHz Date: 5.JAN.2022 10:07:58</p>	<p>Spectrum Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 20 ms VBW 300 kHz Mode Sweep 15m Max M1[1] -19.64 dBm 2.6550400 GHz D1 -13.000 dBm CF 2.655 GHz 501 pts Span 10.0 MHz Date: 5.JAN.2022 10:10:35</p>
QPSK 10MHz	<p>Spectrum Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep 15m Max M1[1] -16.96 dBm 2.5548800 GHz D1 -13.000 dBm CF 2.555 GHz 501 pts Span 20.0 MHz Date: 5.JAN.2022 10:11:57</p>	<p>Spectrum Ref Level 20.00 dBm Offset 4.50 dB RBW 100 kHz Att 30 dB SWT 1 ms VBW 300 kHz Mode Sweep 15m Max M1[1] -15.25 dBm 2.6550400 GHz D1 -13.000 dBm CF 2.655 GHz 501 pts Span 20.0 MHz Date: 5.JAN.2022 10:13:02</p>
QPSK 15MHz	<p>Spectrum Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 20 ms VBW 1 MHz Mode Sweep 15m Max M1[1] -21.06 dBm 2.5550000 GHz D1 -13.000 dBm CF 2.555 GHz 501 pts Span 30.0 MHz Date: 5.JAN.2022 10:14:31</p>	<p>Spectrum Ref Level 20.00 dBm Offset 4.50 dB RBW 300 kHz Att 30 dB SWT 20 ms VBW 1 MHz Mode Sweep 15m Max M1[1] -20.87 dBm 2.6551200 GHz D1 -13.000 dBm CF 2.655 GHz 501 pts Span 30.0 MHz Date: 5.JAN.2022 10:15:52</p>

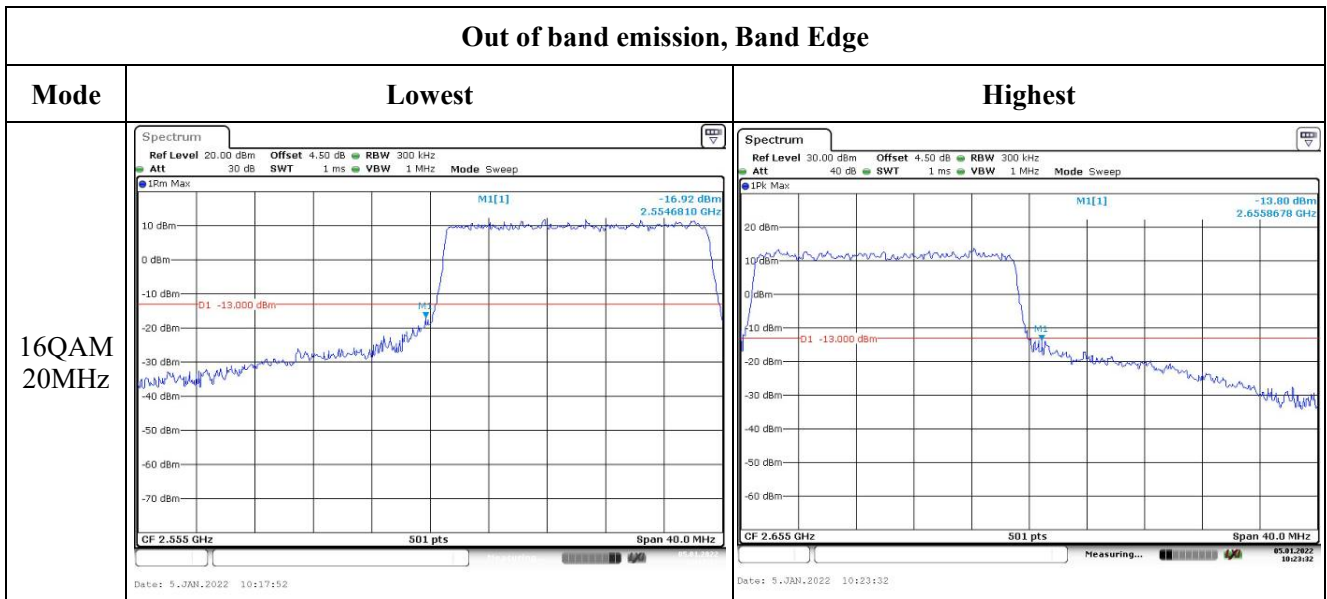
Out of band emission, Band Edge



Out of band emission, Band Edge

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

Out of band emission, Band Edge



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

Serial Number:	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 66▲:**

Antenna Gain (dBi):	-1	Cable Loss (dB):	0.2
Operation Voltage(V <sub>DC</sub> ):			
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	1745	1779.3
3MHz	1711.5	1745	1778.5
5MHz	1712.5	1745	1777.5
10MHz	1715	1745	1775
15MHz	1717.5	1745	1772.5
20MHz	1720	1745	1770

**Test Data:**

<b>FCC§2.1046;§ 27.50(d)(4)</b>						
<b>RF Output Power:</b>						
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	22.22	22.19	22.15	21.09	30
	RB1#3	22.23	22.17	22.10		
	RB1#5	22.29	22.13	22.19		
	RB3#0	21.31	21.28	21.19		
	RB3#3	21.28	21.29	21.17		
	RB6#0	21.39	21.28	21.24		
1.4MHz 16QAM	RB1#0	21.55	22.14	21.00	20.94	30
	RB1#3	21.61	22.10	21.05		
	RB1#5	21.61	22.10	21.03		
	RB3#0	20.65	20.29	20.40		
	RB3#3	20.56	20.35	20.43		
	RB6#0	20.47	20.47	20.32		
3MHz QPSK	RB1#0	22.21	22.35	22.14	21.21	30
	RB1#8	22.18	22.41	22.14		
	RB1#14	22.15	22.33	22.16		
	RB6#0	21.33	21.18	21.16		
	RB6#9	21.33	21.13	21.23		
	RB15#0	21.29	21.16	21.19		
3MHz 16QAM	RB1#0	20.73	21.45	20.84	20.27	30
	RB1#8	20.68	21.38	20.96		
	RB1#14	20.72	21.47	20.93		
	RB6#0	20.48	20.28	20.37		
	RB6#9	20.57	20.24	20.30		
	RB15#0	20.51	20.31	20.26		
5MHz QPSK	RB1#0	22.21	22.35	22.14	21.21	30
	RB1#13	22.18	22.41	22.14		
	RB1#24	22.15	22.33	22.16		
	RB15#0	21.33	21.18	21.16		
	RB15#10	21.33	21.13	21.23		
	RB25#0	21.29	21.16	21.19		
5MHz 16QAM	RB1#0	20.73	21.45	20.84	20.27	30
	RB1#13	20.68	21.38	20.96		
	RB1#24	20.72	21.47	20.93		
	RB15#0	20.48	20.28	20.37		
	RB15#10	20.57	20.24	20.30		
	RB25#0	20.51	20.31	20.26		
10MHz QPSK	RB1#0	22.19	22.23	22.17	21.1	30

	RB1#25	22.30	22.20	22.15		
	RB1#49	22.19	22.22	22.18		
	RB25#0	21.35	21.28	21.15		
	RB25#25	21.24	21.19	21.10		
	RB50#0	21.34	21.20	21.15		
10MHz 16QAM	RB1#0	21.82	21.86	20.63	20.75	30
	RB1#25	21.85	21.87	20.61		
	RB1#49	21.84	21.95	20.68		
	RB25#0	20.61	20.41	20.40		
	RB25#25	20.44	20.38	20.44		
	RB50#0	20.40	20.38	20.29		
15MHz QPSK	RB1#0	22.35	22.22	22.11	21.15	30
	RB1#38	22.25	22.25	22.14		
	RB1#74	22.22	22.25	22.15		
	RB36#0	21.39	21.24	21.15		
	RB36#39	21.35	21.25	21.21		
	RB75#0	21.29	21.18	21.19		
15MHz 16QAM	RB1#0	21.77	21.91	21.63	20.73	30
	RB1#38	21.73	21.87	21.64		
	RB1#74	21.85	21.93	21.66		
	RB36#0	20.38	20.38	20.35		
	RB36#39	20.45	20.46	20.36		
	RB75#0	20.24	20.37	20.51		
20MHz QPSK	RB1#0	21.69	22.27	21.48	21.32	30
	RB1#50	22.47	21.09	22.30		
	RB1#99	22.52	21.40	22.31		
	RB50#0	21.32	21.15	21.25		
	RB50#50	21.46	21.11	21.24		
	RB100#0	21.33	21.22	21.20		
20MHz 16QAM	RB1#0	21.38	21.93	21.88	20.73	30
	RB1#50	21.41	21.19	21.88		
	RB1#99	21.43	21.54	21.91		
	RB50#0	20.42	20.52	20.30		
	RB50#50	20.54	20.57	20.27		
	RB100#0	20.49	20.36	20.46		

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

**Result:**

**Pass**

<b>Peak-to-average Ratio(PAR)</b>					
Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	5.01	4.87	4.87	13
	RB100#0	5.30	5.39	5.22	13
20MHz 16QAM	RB1#0	5.77	5.30	5.77	13
	RB100#0	6.12	6.38	6.23	13
<b>Result:</b>					<b>Pass</b>

<b>FCC §2.1049, §27.53:Occupied Bandwidth</b>						
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	1.102	1.102	1.260	1.260	1.260
1.4MHz 16QAM	1.108	1.096	1.102	1.266	1.254	1.254
3MHz QPSK	2.707	2.695	2.695	3.000	3.000	2.988
3MHz 16QAM	2.707	2.695	2.695	3.036	3.000	3.012
5MHz QPSK	4.531	4.511	4.511	4.980	5.000	4.980
5MHz 16QAM	4.511	4.531	4.551	5.000	5.020	5.000
10MHz QPSK	8.981	8.942	8.942	9.760	9.760	9.800
10MHz 16QAM	8.942	8.981	8.942	9.680	9.800	9.800
15MHz QPSK	13.473	13.473	13.533	14.940	15.060	15.060
15MHz 16QAM	13.533	13.533	13.533	15.000	15.120	15.120
20MHz QPSK	17.964	17.964	17.964	19.440	19.760	19.840
20MHz 16QAM	17.964	18.044	17.964	19.680	19.920	19.680

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

<b>FCC §2.1051, § 27.53:Spurious Emissions at Antenna Terminal</b>	
<b>Result:</b>	<b>Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.</b>

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

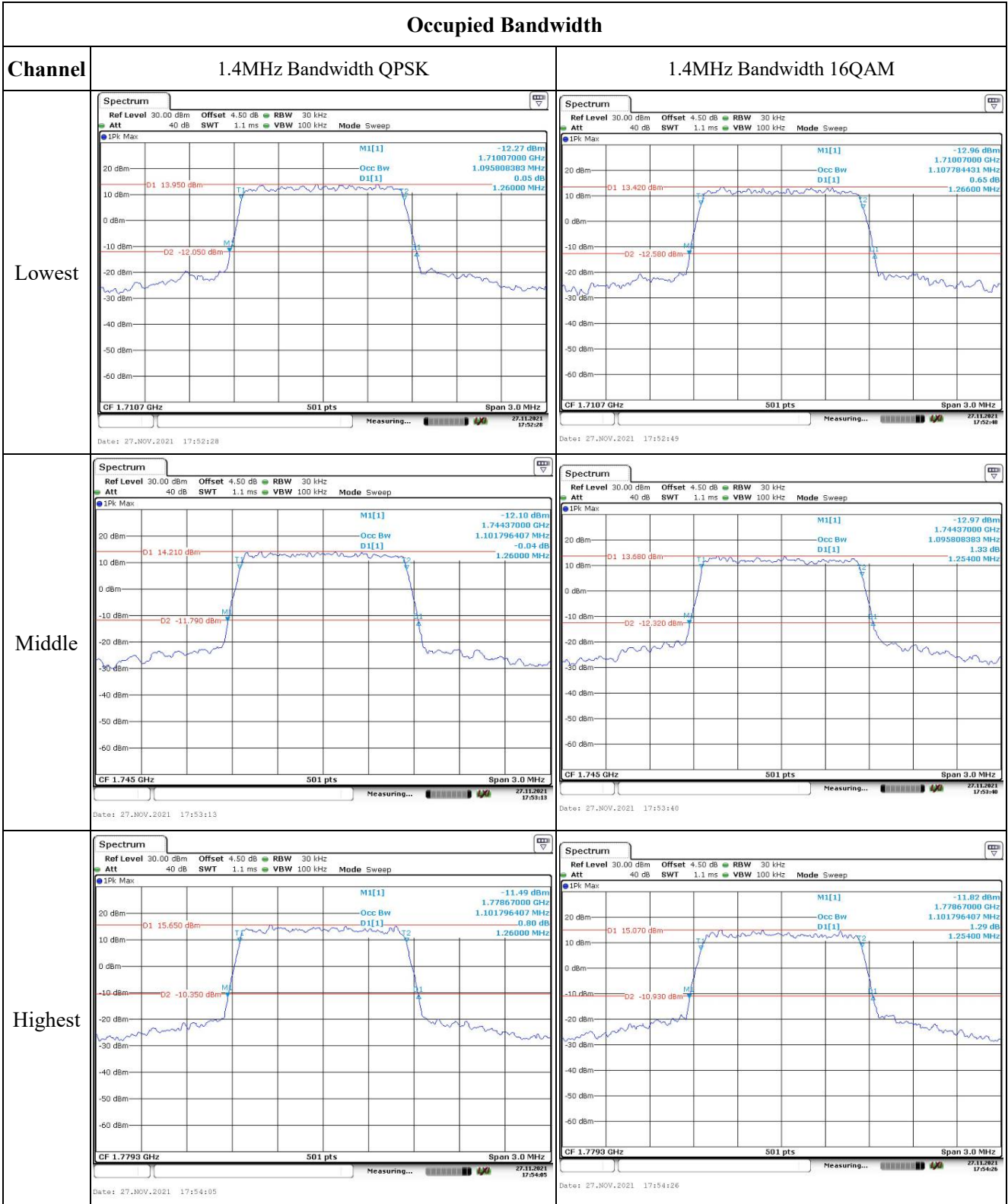


FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	1710.566	1710.00	1779.471	1780
	-20	3.8	1710.561	1710.00	1779.472	1780
	-10	3.8	1710.563	1710.00	1779.473	1780
	0	3.8	1710.567	1710.00	1779.474	1780
	10	3.8	1710.566	1710.00	1779.475	1780
	20	3.8	1710.569	1710.00	1779.471	1780
	30	3.8	1710.571	1710.00	1779.476	1780
	40	3.8	1710.553	1710.00	1779.477	1780
	50	3.8	1710.574	1710.00	1779.478	1780
Frequency Stability vs. Voltage	20	3.5	1710.537	1710.00	1779.476	1780
	20	4.35	1710.577	1710.00	1779.471	1780
					<b>Result:</b>	<b>Pass</b>

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	1710.522	1710.00	1779.515	1780
	-20	3.8	1710.523	1710.00	1779.516	1780
	-10	3.8	1710.525	1710.00	1779.513	1780
	0	3.8	1710.525	1710.00	1779.513	1780
	10	3.8	1710.523	1710.00	1779.514	1780
	20	3.8	1710.529	1710.00	1779.511	1780
	30	3.8	1710.523	1710.00	1779.515	1780
	40	3.8	1710.525	1710.00	1779.516	1780
	50	3.8	1710.526	1710.00	1779.517	1780
Frequency Stability vs. Voltage	20	3.5	1710.527	1710.00	1779.518	1780
	20	4.35	1710.529	1710.00	1779.511	1780
					<b>Result:</b>	<b>Pass</b>

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		
Middle		
Highest		

Occupied Bandwidth

Channel	10MHz Bandwidth QPSK	10MHz 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 -13.21 dBm M1[1] 1.7101600 GHz Occ Bw 8.982035928 MHz D1[1] -0.92 dB</p> <p>CF 1.715 GHz 501 pts Span 20.0 MHz Date: 29.NOV.2021 18:00:56</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</p> <p>1Pk Max -12.37 dBm M1[1] 1.7102000 GHz Occ Bw 8.942115768 MHz D1[1] 0.23 dB</p> <p>CF 1.715 GHz 501 pts Span 20.0 MHz Date: 29.NOV.2021 18:01:30</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 -13.92 dBm M1[1] 1.7401200 GHz Occ Bw 8.942115768 MHz D1[1] 0.26 dB</p> <p>CF 1.745 GHz 501 pts Span 20.0 MHz Date: 29.NOV.2021 18:02:01</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 -14.94 dBm M1[1] 1.7400800 GHz Occ Bw 8.982035928 MHz D1[1] 0.80 dB</p> <p>CF 1.745 GHz 501 pts Span 20.0 MHz Date: 29.NOV.2021 18:02:38</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 -14.92 dBm M1[1] 1.7701200 GHz Occ Bw 8.942115768 MHz D1[1] -1.01 dB</p> <p>CF 1.775 GHz 501 pts Span 20.0 MHz Date: 29.NOV.2021 18:03:13</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 -16.00 dBm M1[1] 1.7701200 GHz Occ Bw 8.942115768 MHz D1[1] 0.20 dB</p> <p>CF 1.775 GHz 501 pts Span 20.0 MHz Date: 29.NOV.2021 18:03:47</p>

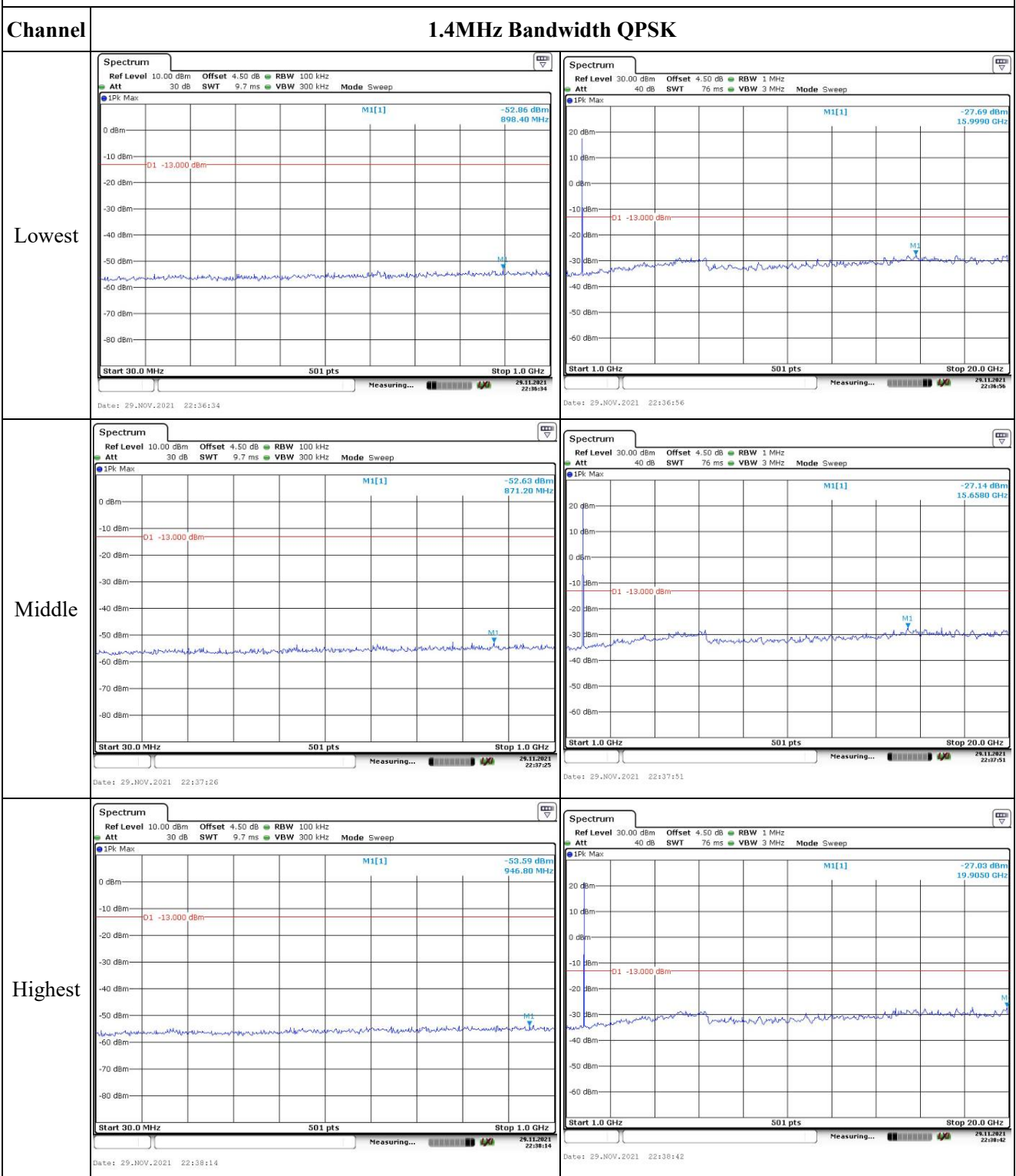
Occupied Bandwidth

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

Occupied Bandwidth

Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 1 ms VBW 1 MHz Mode Sweep M1[1] -11.91 dBm 1.7103200 GHz Occ Bw 17.964071856 MHz D1[1] -0.42 dB 19.4400 MHz D2 -11.600 dBm CF 1.72 GHz 501 pts Span 40.0 MHz Date: 29.NOV.2021 18:07:16</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] -13.73 dBm 1.7101600 GHz Occ Bw 17.964071856 MHz D1[1] 0.43 dB 19.6800 MHz D2 -13.090 dBm CF 1.72 GHz 501 pts Span 40.0 MHz Date: 29.NOV.2021 18:07:46</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] -12.87 dBm 1.7351600 GHz Occ Bw 17.964071856 MHz D1[1] -0.61 dB 19.7600 MHz D2 -12.470 dBm CF 1.745 GHz 501 pts Span 40.0 MHz Date: 29.NOV.2021 18:08:11</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] -14.34 dBm 1.7350000 GHz Occ Bw 18.043912176 MHz D1[1] 1.03 dB 19.9200 MHz D2 -13.350 dBm CF 1.745 GHz 501 pts Span 40.0 MHz Date: 29.NOV.2021 18:08:38</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] -12.27 dBm 1.7601600 GHz Occ Bw 17.964071856 MHz D1[1] -1.90 dB 19.8400 MHz D2 -12.960 dBm CF 1.77 GHz 501 pts Span 40.0 MHz Date: 29.NOV.2021 18:09:06</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] -12.58 dBm 1.7602400 GHz Occ Bw 17.964071856 MHz D1[1] -0.70 dB 19.6800 MHz D2 -13.270 dBm CF 1.77 GHz 501 pts Span 40.0 MHz Date: 29.NOV.2021 18:09:33</p>

Spurious Emissions at Antenna Terminal





### Spurious Emissions at Antenna Terminal

