

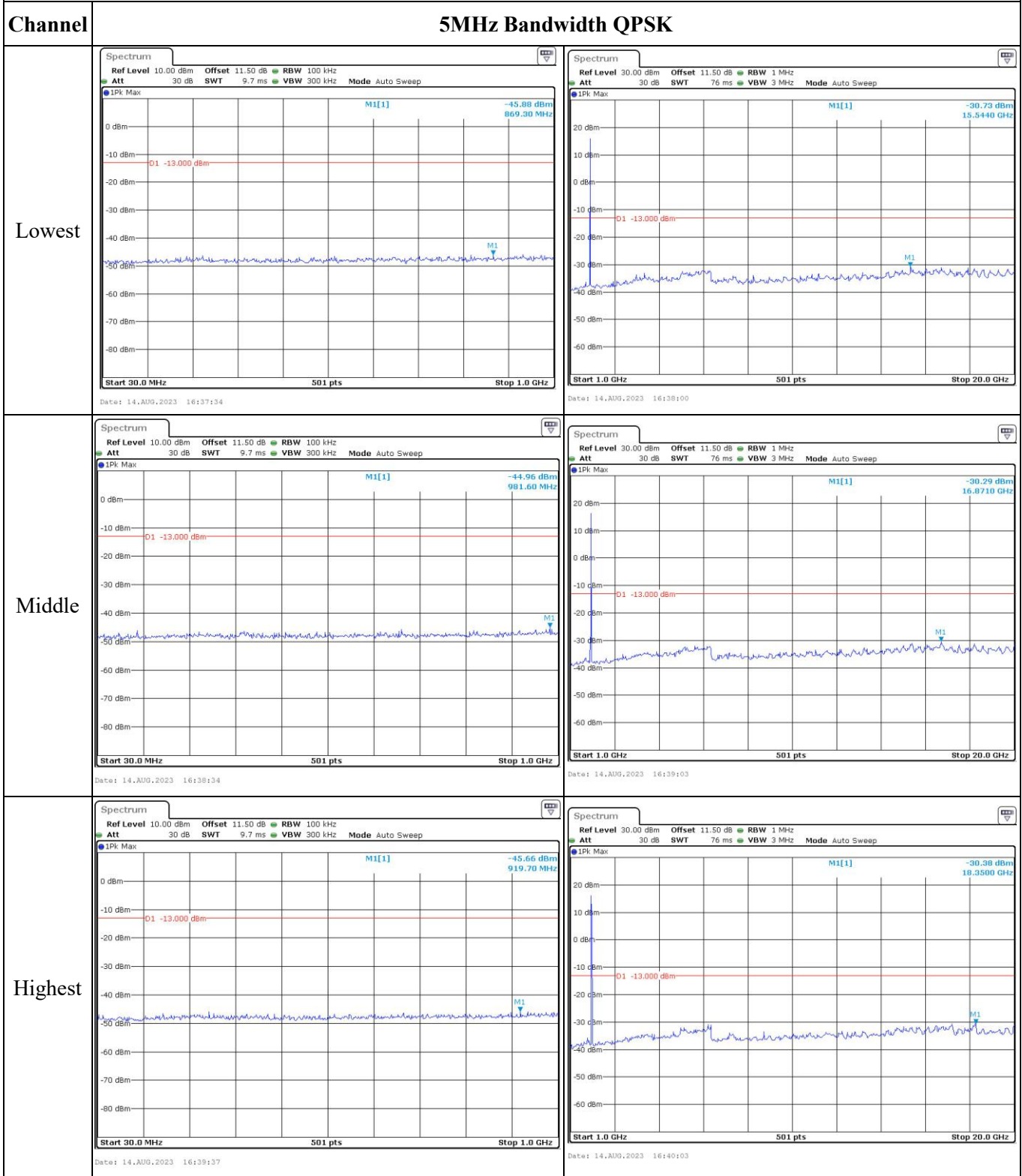
### Spurious Emissions at Antenna Terminal

Channel	1.4MHz Bandwidth QPSK	
Lowest	<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep                      IPk Max M1[1] -44.94 dBm 904.20 MHz                      -01 -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 14.AUG.2023 16:31:32</p>	<p><b>Spectrum</b>                      Ref Level 30.00 dBm Offset 11.50 dB RBW 1 MHz                      Att 30 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep                      IPk Max M1[1] -30.81 dBm 18.3120 GHz                      -01 -13.000 dBm                      Start 1.0 GHz 501 pts Stop 20.0 GHz                      Date: 14.AUG.2023 16:32:02</p>
Middle	<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep                      IPk Max M1[1] -45.12 dBm 906.10 MHz                      -01 -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 14.AUG.2023 16:32:25</p>	<p><b>Spectrum</b>                      Ref Level 30.00 dBm Offset 11.50 dB RBW 1 MHz                      Att 30 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep                      IPk Max M1[1] -29.66 dBm 5.6460 GHz                      -01 -13.000 dBm                      Start 1.0 GHz 501 pts Stop 20.0 GHz                      Date: 14.AUG.2023 16:32:51</p>
Highest	<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep                      IPk Max M1[1] -45.39 dBm 989.40 MHz                      -01 -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 14.AUG.2023 16:33:31</p>	<p><b>Spectrum</b>                      Ref Level 30.00 dBm Offset 11.50 dB RBW 1 MHz                      Att 30 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep                      IPk Max M1[1] -29.21 dBm 5.7220 GHz                      -01 -13.000 dBm                      Start 1.0 GHz 501 pts Stop 20.0 GHz                      Date: 14.AUG.2023 16:33:54</p>

### Spurious Emissions at Antenna Terminal

Channel	3MHz Bandwidth QPSK	
Lowest	<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep                      IPk Max M1[1] -44.47 dBm 979.70 MHz                      -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 14.AUG.2023 16:34:34</p>	<p><b>Spectrum</b>                      Ref Level 30.00 dBm Offset 11.50 dB RBW 1 MHz                      Att 30 dB SWT 76 ms VBW 3 MHz Mode Auto Sweep                      IPk Max M1[1] -30.37 dBm 18.2740 GHz                      -13.000 dBm                      Start 1.0 GHz 501 pts Stop 20.0 GHz                      Date: 14.AUG.2023 16:35:00</p>
	Middle	<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep                      IPk Max M1[1] -45.70 dBm 940.70 MHz                      -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 14.AUG.2023 16:35:37</p>
Highest		<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep                      IPk Max M1[1] -45.74 dBm 975.80 MHz                      -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 14.AUG.2023 16:36:42</p>

### Spurious Emissions at Antenna Terminal

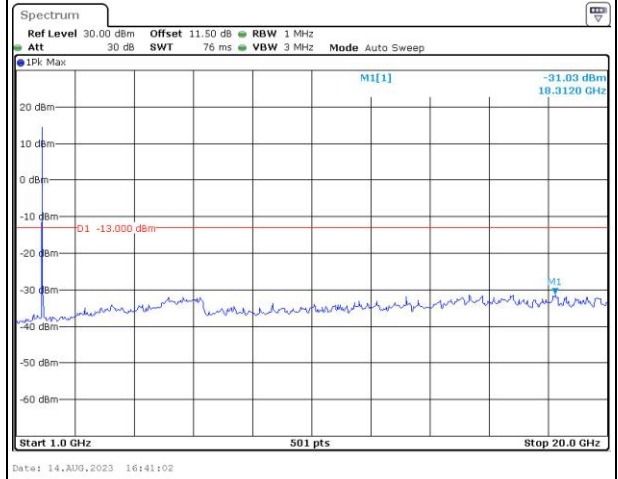
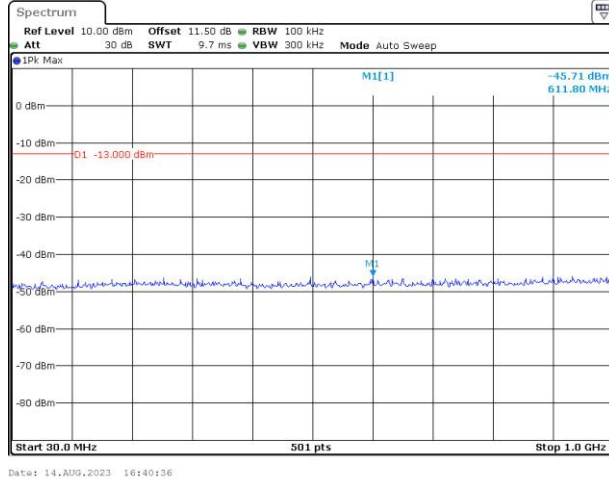


### Spurious Emissions at Antenna Terminal

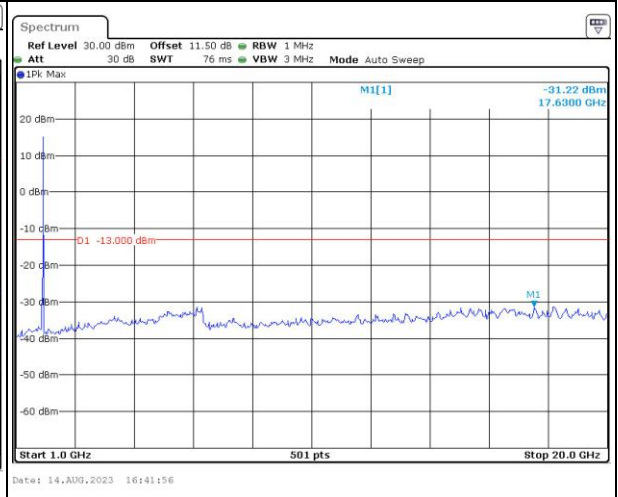
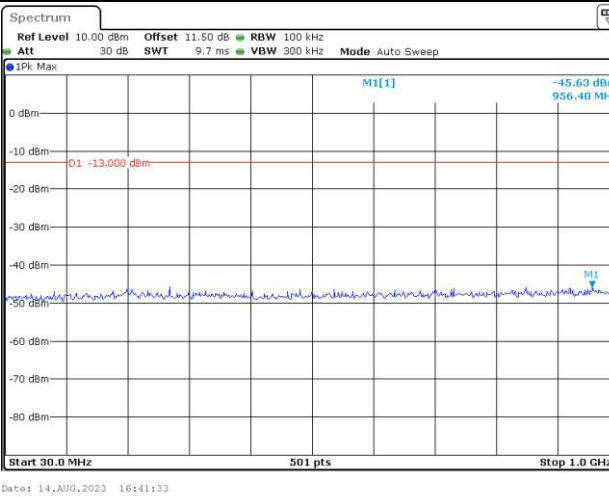
Channel

10MHz Bandwidth QPSK

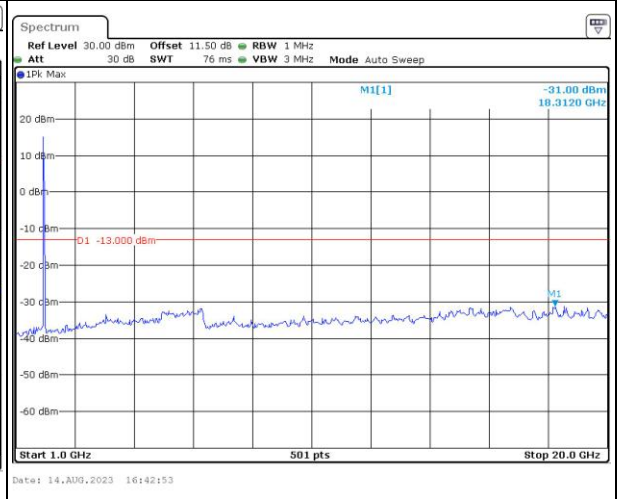
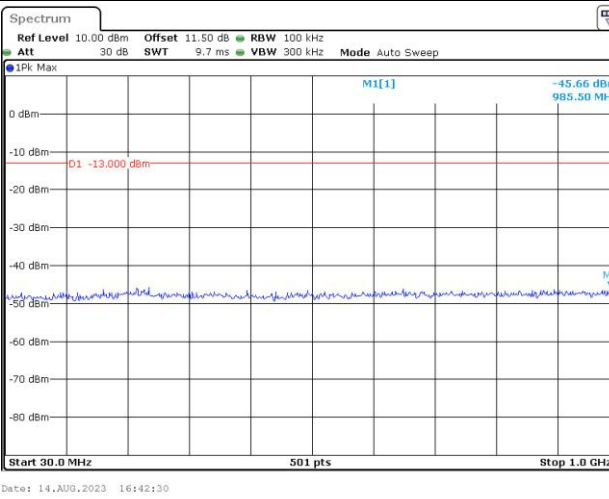
Lowest



Middle



Highest

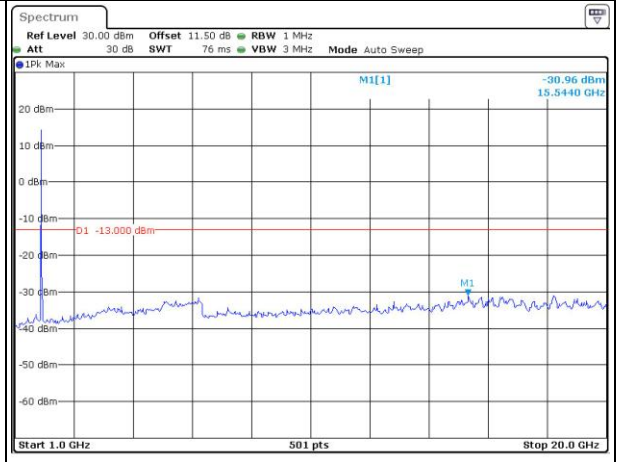
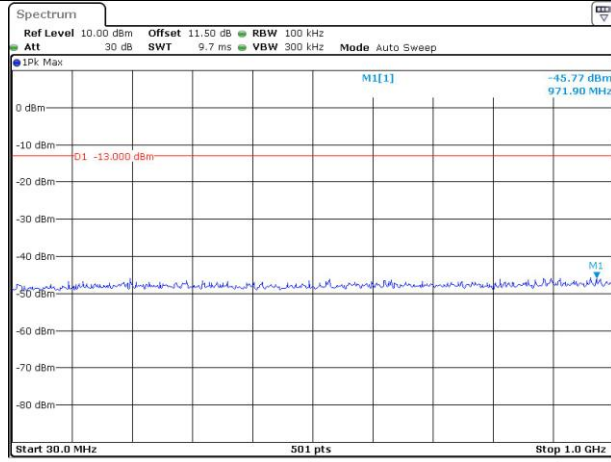


### Spurious Emissions at Antenna Terminal

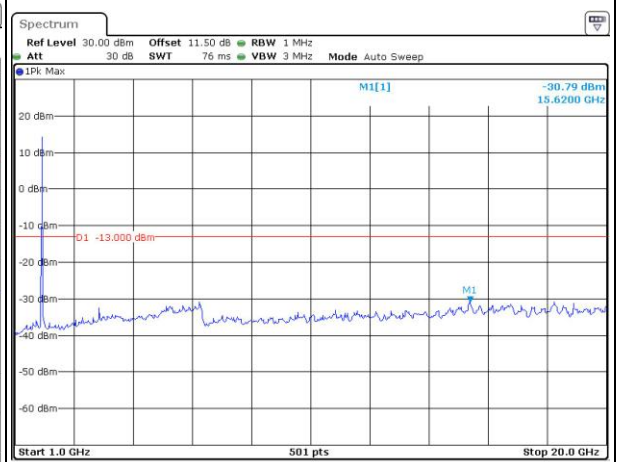
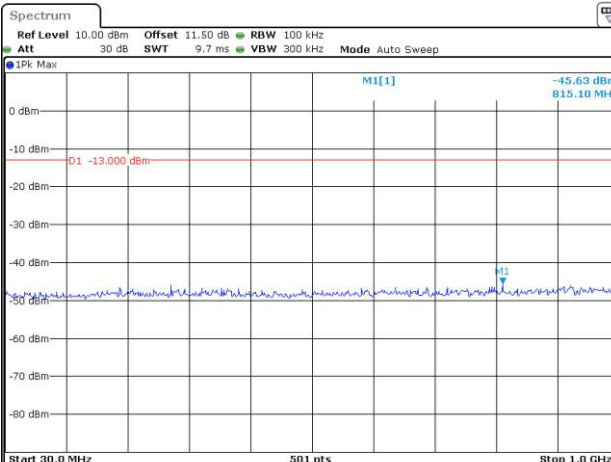
Channel

15MHz Bandwidth QPSK

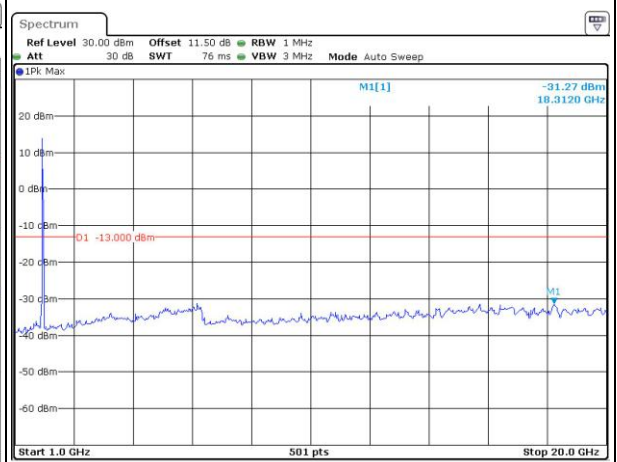
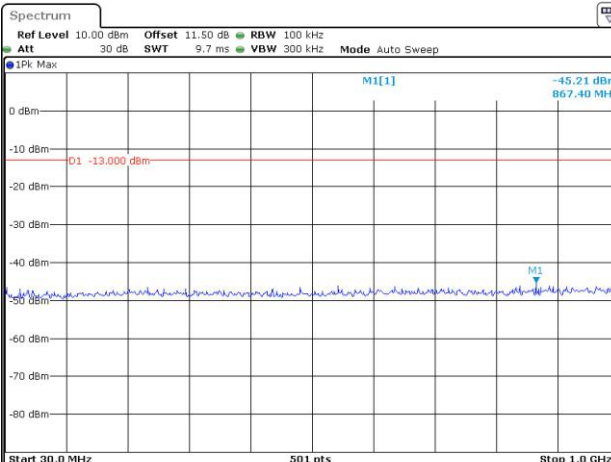
Lowest



Middle



Highest



### Spurious Emissions at Antenna Terminal

Channel	20MHz 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 -80 to 0. A red horizontal line indicates a limit at -13.000 dBm. A significant peak is observed at 915.80 MHz with a power level of -45.29 dBm. The plot includes parameters: Ref Level 10.00 dBm, Att 30 dB, Offset 11.50 dB, RBW 100 kHz, Mode Auto Sweep, and Date: 14.AUG.2023 16:46:21.</p>	<p>Spectrum plot showing spurious emissions for the lowest channel. The plot covers a frequency range from 1.0 GHz to 20.0 GHz. The y-axis represents power in dBm, ranging from -60 to 20. A red horizontal line indicates a limit at -13.000 dBm. A significant peak is observed at 18.2740 GHz with a power level of -29.64 dBm. The plot includes parameters: Ref Level 30.00 dBm, Att 30 dB, Offset 11.50 dB, RBW 1 MHz, Mode Auto Sweep, and Date: 14.AUG.2023 16:46:56.</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 -80 to 0. A red horizontal line indicates a limit at -13.000 dBm. A significant peak is observed at 981.60 MHz with a power level of -45.24 dBm. The plot includes parameters: Ref Level 10.00 dBm, Att 30 dB, Offset 11.50 dB, RBW 100 kHz, Mode Auto Sweep, and Date: 14.AUG.2023 16:47:31.</p>	<p>Spectrum plot showing spurious emissions for the middle channel. The plot covers a frequency range from 1.0 GHz to 20.0 GHz. The y-axis represents power in dBm, ranging from -60 to 20. A red horizontal line indicates a limit at -13.000 dBm. A significant peak is observed at 16.8710 GHz with a power level of -31.01 dBm. The plot includes parameters: Ref Level 30.00 dBm, Att 30 dB, Offset 11.50 dB, RBW 1 MHz, Mode Auto Sweep, and Date: 14.AUG.2023 16:47:57.</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 -80 to 0. A red horizontal line indicates a limit at -13.000 dBm. A significant peak is observed at 824.80 MHz with a power level of -45.63 dBm. The plot includes parameters: Ref Level 10.00 dBm, Att 30 dB, Offset 11.50 dB, RBW 100 kHz, Mode Auto Sweep, and Date: 14.AUG.2023 16:48:34.</p>	<p>Spectrum plot showing spurious emissions for the highest channel. The plot covers a frequency range from 1.0 GHz to 20.0 GHz. The y-axis represents power in dBm, ranging from -60 to 20. A red horizontal line indicates a limit at -13.000 dBm. A significant peak is observed at 16.3820 GHz with a power level of -30.35 dBm. The plot includes parameters: Ref Level 30.00 dBm, Att 30 dB, Offset 11.50 dB, RBW 1 MHz, Mode Auto Sweep, and Date: 14.AUG.2023 16:48:57.</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 30 kHz Att 30 dB SWT 35 ms VBW 100 kHz Mode Auto Sweep SGL Count 50/50 IRm AvgPwr MI[1] -33.21 dBm 1.84999400 GHz -13.000 dBm CF 1.85 GHz 501 pts Span 3.0 MHz Date: 29.AUG.2023 09:15:18</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 30 kHz Att 30 dB SWT 35 ms VBW 100 kHz Mode Auto Sweep SGL Count 50/50 IRm AvgPwr MI[1] -37.36 dBm 1.91000000 GHz -13.000 dBm CF 1.91 GHz 501 pts Span 3.0 MHz Date: 29.AUG.2023 09:15:19</p>
QPSK 3MHz	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 30 kHz Att 30 dB SWT 35 ms VBW 100 kHz Mode Auto Sweep SGL Count 50/50 IRm AvgPwr MI[1] -31.63 dBm 1.85000000 GHz -13.000 dBm CF 1.85 GHz 501 pts Span 6.0 MHz Date: 29.AUG.2023 09:15:16</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 30 kHz Att 30 dB SWT 35 ms VBW 100 kHz Mode Auto Sweep SGL Count 50/50 IRm AvgPwr MI[1] -31.35 dBm 1.91000000 GHz -13.000 dBm CF 1.91 GHz 501 pts Span 6.0 MHz Date: 29.AUG.2023 09:15:19</p>
QPSK 5MHz	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz Att 30 dB SWT 35 ms VBW 300 kHz Mode Auto Sweep SGL Count 50/50 IRm AvgPwr MI[1] -31.88 dBm 1.85000000 GHz -13.000 dBm CF 1.85 GHz 501 pts Span 10.0 MHz Date: 29.AUG.2023 09:15:15</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz Att 30 dB SWT 35 ms VBW 300 kHz Mode Auto Sweep SGL Count 50/50 IRm AvgPwr MI[1] -32.91 dBm 1.91000000 GHz -13.000 dBm CF 1.91 GHz 501 pts Span 10.0 MHz Date: 29.AUG.2023 09:15:19</p>

Out of band emission, Band Edge

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



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 30 kHz Att 30 dB SWT 35 ms VBW 100 kHz Mode Auto Sweep SGL Count 50/50 1Rm AvgPwr MI[1] -34.97 dBm 1.84997010 GHz -13.000 dBm CF 1.85 GHz 501 pts Span 3.0 MHz Date: 29.AUG.2023 09:53:13</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 30 kHz Att 30 dB SWT 35 ms VBW 100 kHz Mode Auto Sweep SGL Count 50/50 1Rm AvgPwr MI[1] -30.51 dBm 1.91000000 GHz -13.000 dBm CF 1.91 GHz 501 pts Span 3.0 MHz Date: 29.AUG.2023 09:53:16</p>
16QAM 3MHz	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 30 kHz Att 30 dB SWT 35 ms VBW 100 kHz Mode Auto Sweep SGL Count 50/50 1Rm AvgPwr MI[1] -31.57 dBm 1.85000000 GHz -13.000 dBm CF 1.85 GHz 501 pts Span 6.0 MHz Date: 29.AUG.2023 09:54:12</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 30 kHz Att 30 dB SWT 35 ms VBW 100 kHz Mode Auto Sweep SGL Count 50/50 1Rm AvgPwr MI[1] -32.12 dBm 1.91000000 GHz -13.000 dBm CF 1.91 GHz 501 pts Span 6.0 MHz Date: 29.AUG.2023 09:54:24</p>
16QAM 5MHz	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz Att 30 dB SWT 35 ms VBW 300 kHz Mode Auto Sweep SGL Count 50/50 1Rm AvgPwr MI[1] -34.59 dBm 1.85000000 GHz -13.000 dBm CF 1.85 GHz 501 pts Span 10.0 MHz Date: 29.AUG.2023 09:54:41</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz Att 30 dB SWT 35 ms VBW 300 kHz Mode Auto Sweep SGL Count 50/50 1Rm AvgPwr MI[1] -34.73 dBm 1.91000000 GHz -13.000 dBm CF 1.91 GHz 501 pts Span 10.0 MHz Date: 29.AUG.2023 09:54:55</p>

Out of band emission, Band Edge

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

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

Serial Number:	2A4I-1	Test Date:	2023/8/13-2023/8/14
Test Site:	RF	Test Mode:	Transmitting
Tester:	Panda Sun	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	25.3~25.6	Relative Humidity: (%)	64-68	ATM Pressure: (kPa)	101
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**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40-N	102259	2023/4/18	2024/4/17
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	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).

**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	16.74	17.11	17.07	15.91	30
	RB1#3	16.98	17.31	17.24		
	RB1#5	16.82	17.12	17.04		
	RB3#0	16.82	17.25	17.19		
	RB3#3	16.88	17.27	17.17		
	RB6#0	15.88	16.25	16.14		
1.4MHz 16QAM	RB1#0	15.84	16.14	16.05	14.99	30
	RB1#3	16.13	16.35	16.24		
	RB1#5	15.98	16.18	16.04		
	RB3#0	15.87	16.39	16.38		
	RB3#3	15.97	16.38	16.37		
	RB6#0	15.11	15.41	15.31		
3MHz QPSK	RB1#0	16.69	17.12	17.05	15.85	30
	RB1#8	17	17.25	17.16		
	RB1#14	16.98	17.1	17.01		
	RB6#0	15.85	16.23	16.17		
	RB6#9	16.07	16.25	16.15		
	RB15#0	16	16.27	16.2		
3MHz 16QAM	RB1#0	15.84	16.16	16.68	15.40	30
	RB1#8	16.19	16.3	16.8		
	RB1#14	16.17	16.17	16.64		
	RB6#0	15.08	15.39	15.38		
	RB6#9	15.31	15.41	15.36		
	RB15#0	15.15	15.53	15.41		
5MHz QPSK	RB1#0	16.4	16.8	16.83	15.94	30
	RB1#13	17.21	17.33	17.34		
	RB1#24	16.79	16.77	16.78		
	RB15#0	15.96	16.23	16.15		
	RB15#10	16.14	16.23	16.16		
	RB25#0	16.01	16.19	16.12		
5MHz 16QAM	RB1#0	15.7	15.92	15.71	15.17	30
	RB1#13	16.57	16.45	16.23		
	RB1#24	16.15	15.92	15.68		
	RB15#0	15.13	15.44	15.34		
	RB15#10	15.34	15.46	15.33		
	RB25#0	15.22	15.42	15.3		
10MHz QPSK	RB1#0	16.55	16.95	16.91	16.12	30

	RB1#25	17.18	17.26	17.14		
	RB1#49	17.48	17.52	17.44		
	RB25#0	16	16.24	16.14		
	RB25#25	16.37	16.51	16.41		
	RB50#0	16.19	16.38	16.28		
10MHz 16QAM	RB1#0	15.68	16	16.51	15.65	30
	RB1#25	16.32	16.3	16.78		
	RB1#49	16.65	16.59	17.05		
	RB25#0	15.24	15.52	15.32		
	RB25#25	15.61	15.79	15.59		
	RB50#0	15.41	15.6	15.42		
15MHz QPSK	RB1#0	16.87	17.18	17.36	16.08	30
	RB1#38	17.08	17.23	17.26		
	RB1#74	17.4	17.43	17.48		
	RB36#0	16.16	16.43	16.57		
	RB36#39	16.41	16.47	16.61		
	RB75#0	16.28	16.46	16.59		
15MHz 16QAM	RB1#0	15.97	16.72	16.85	15.50	30
	RB1#38	16.24	16.76	16.75		
	RB1#74	16.56	16.9	16.88		
	RB36#0	15.42	15.51	15.75		
	RB36#39	15.63	15.59	15.77		
	RB75#0	15.51	15.54	15.74		
20MHz QPSK	RB1#0	17.34	17.73	18.01	16.66	30
	RB1#50	17.21	17.25	17.31		
	RB1#99	17.73	17.77	18.06		
	RB50#0	16.33	16.56	16.81		
	RB50#50	16.53	16.62	16.86		
	RB100#0	16.42	16.58	16.82		
20MHz 16QAM	RB1#0	16.46	17.29	17.39	16.06	30
	RB1#50	16.41	16.87	16.74		
	RB1#99	16.9	17.35	17.46		
	RB50#0	15.5	15.76	15.81		
	RB50#50	15.7	15.81	15.85		
	RB100#0	15.59	15.78	15.85		

Note: EIRP=Conducted Power(dBm) - Lc(dB) + G<sub>T</sub>(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	6	6.12	5.83	13
	RB100#0	5.62	5.68	5.59	13

20MHz 16QAM	RB1#0	6.75	7.33	6.26	13
	RB100#0	6.43	6.46	6.38	13
				<b>Result:</b>	<b>Pass</b>

**FCC §2.1049, §27.53:Occupied Bandwidth**

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
1.4MHz QPSK	1.102	1.102	1.096	1.254	1.260	1.254
1.4MHz 16QAM	1.09	1.102	1.108	1.26	1.260	1.272
3MHz QPSK	2.695	2.695	2.695	3.012	3.012	3.000
3MHz 16QAM	2.683	2.683	2.695	3.012	3.024	3.012
5MHz QPSK	4.511	4.511	4.531	5.020	5.000	5.020
5MHz 16QAM	4.511	4.531	4.511	5.040	5.020	5.000
10MHz QPSK	8.942	8.942	8.942	9.800	9.800	9.840
10MHz 16QAM	8.982	8.942	8.942	9.720	9.840	9.760
15MHz QPSK	13.473	13.533	13.533	15.000	15.000	15.000
15MHz 16QAM	13.533	13.533	13.533	14.940	15.000	15.000
20MHz QPSK	17.964	17.964	18.044	19.600	19.840	19.520
20MHz 16QAM	18.044	17.964	18.044	19.680	19.680	19.600

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

**FCC §2.1051, § 27.53:Spurious Emissions at Antenna Terminal**

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

<b>Result:</b>	<b>Pass, Please refer to the test plots of Out of band emission, Band Edge.</b>
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**FCC §2.1055, §27.54: Frequency Stability**

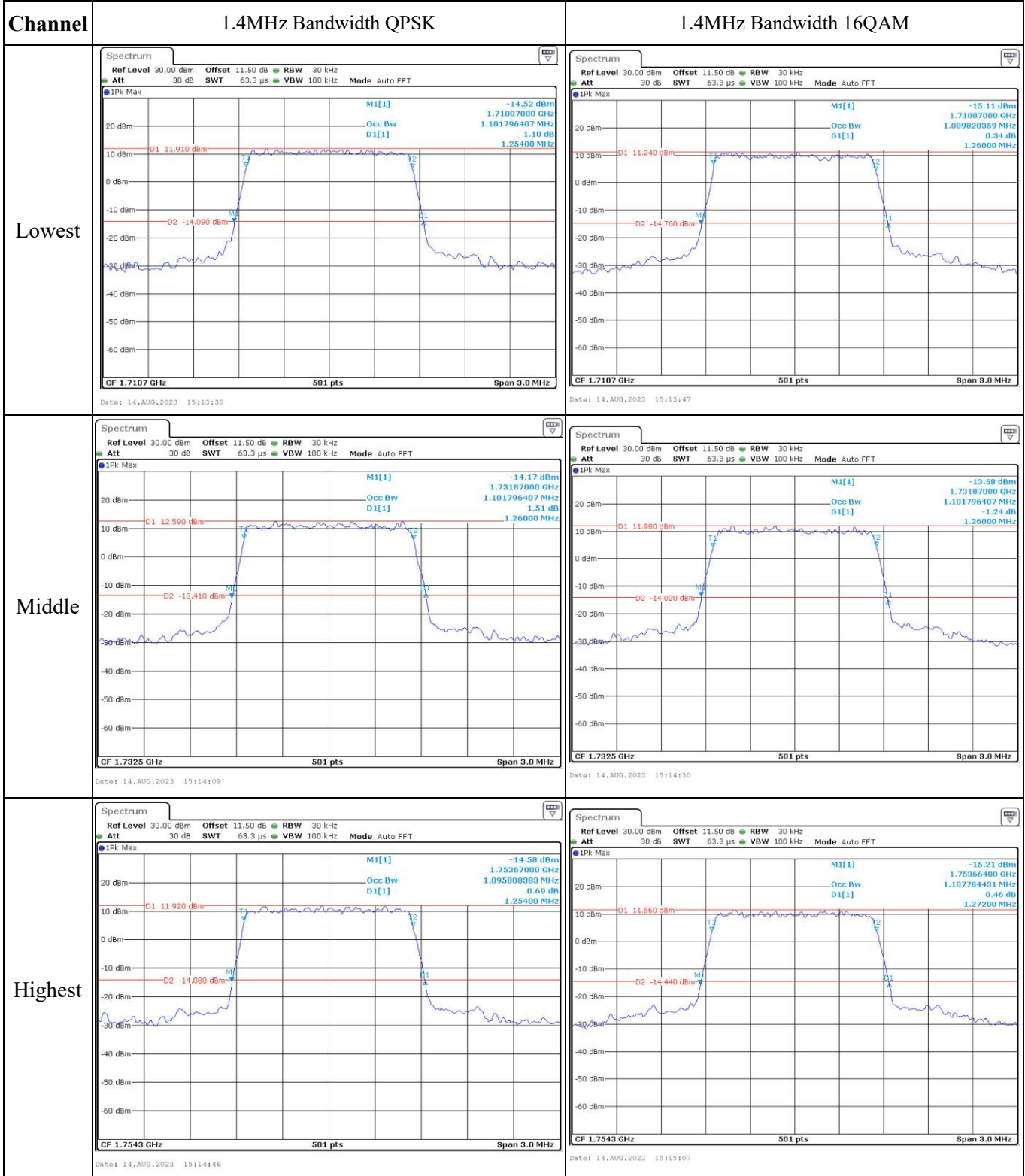
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	1710.288	1710.00	1754.774	1755
	-20	3.85	1710.292	1710.00	1754.756	1755
	-10	3.85	1710.281	1710.00	1754.777	1755
	0	3.85	1710.259	1710.00	1754.751	1755
	10	3.85	1710.273	1710.00	1754.737	1755
	20	3.85	1710.270	1710.00	1754.758	1755
	30	3.85	1710.265	1710.00	1754.766	1755
	40	3.85	1710.264	1710.00	1754.767	1755
	50	3.85	1710.260	1710.00	1754.773	1755

Frequency Stability vs. Voltage	20	3.35	1710.255	1710.00	1754.756	1755
	20	4.4	1710.269	1710.00	1754.753	1755
					<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	3.85	1710.123	1710.00	1754.867	1755
	-20	3.85	1710.124	1710.00	1754.867	1755
	-10	3.85	1710.125	1710.00	1754.873	1755
	0	3.85	1710.122	1710.00	1754.877	1755
	10	3.85	1710.123	1710.00	1754.872	1755
	20	3.85	1710.119	1710.00	1754.880	1755
	30	3.85	1710.118	1710.00	1754.884	1755
	40	3.85	1710.111	1710.00	1754.878	1755
	50	3.85	1710.118	1710.00	1754.876	1755
Frequency Stability vs. Voltage	20	3.35	1710.109	1710.00	1754.884	1755
	20	4.4	1710.093	1710.00	1754.870	1755
					<b>Result:</b>	<b>Pass</b>

**Test Plots**(Note: The 11.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

**Occupied Bandwidth**





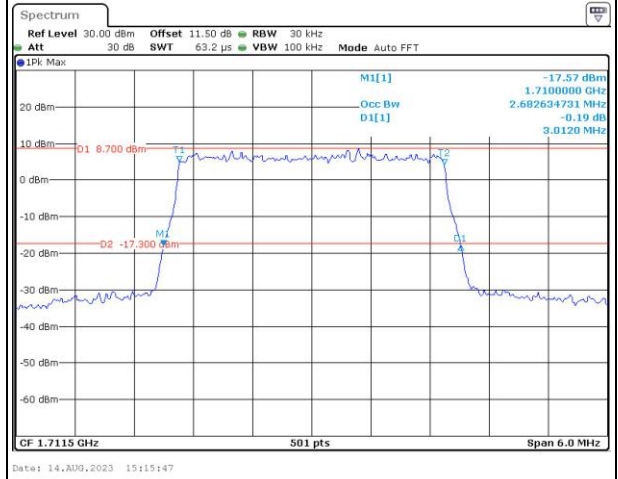
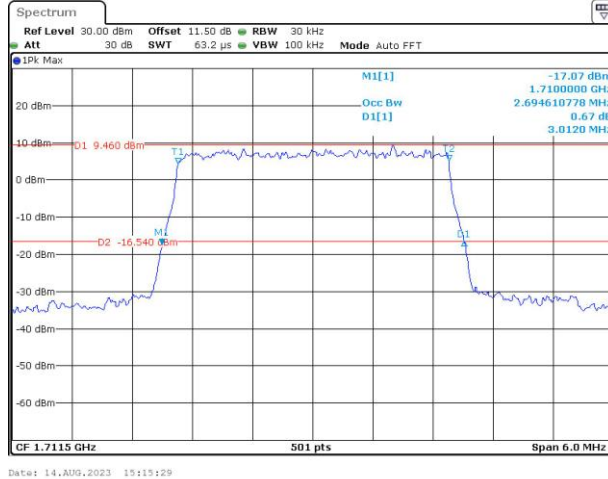
### Occupied Bandwidth

Channel

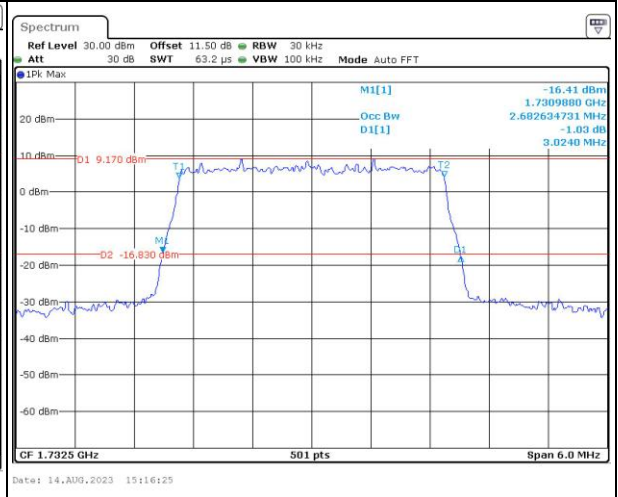
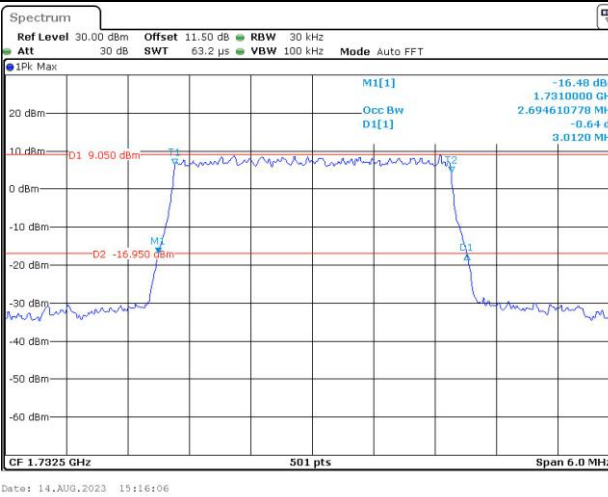
3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

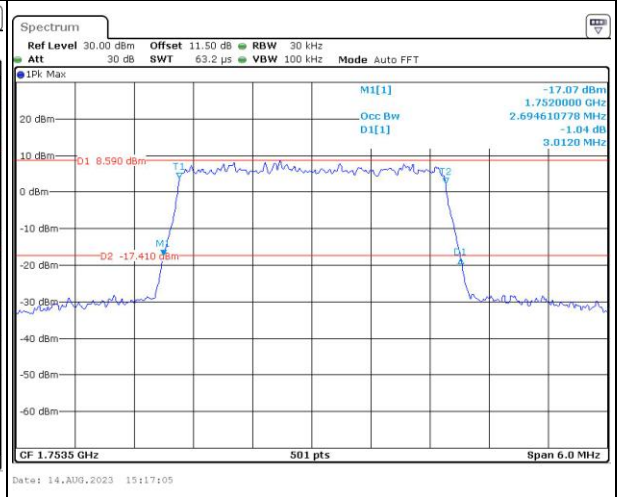
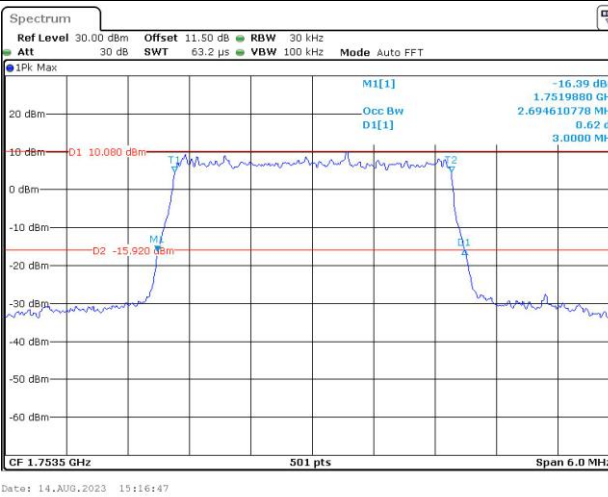
Lowest



Middle



Highest



### Occupied Bandwidth

Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz Att 30 dB SWT 19 μs VVBW 300 kHz Mode Auto FFT</p> <p>M1[1] -15.90 dBm 1.7099800 GHz Occ Bw 4.510978044 MHz D1[1] 1.59 dB 5.0200 MHz</p> <p>D1 11.180 dBm D2 -14.820 dBm</p> <p>CF 1.7125 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.AUG.2023 15:17:34</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz Att 30 dB SWT 19 μs VVBW 300 kHz Mode Auto FFT</p> <p>M1[1] -16.06 dBm 1.7099800 GHz Occ Bw 4.530978044 MHz D1[1] 0.45 dB 5.0400 MHz</p> <p>D1 10.660 dBm D2 -15.340 dBm</p> <p>CF 1.7125 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.AUG.2023 15:18:05</p>
Middle	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz Att 30 dB SWT 19 μs VVBW 300 kHz Mode Auto FFT</p> <p>M1[1] -14.28 dBm 1.7300000 GHz Occ Bw 4.510978044 MHz D1[1] 0.62 dB 5.0000 MHz</p> <p>D1 12.470 dBm D2 -13.530 dBm</p> <p>CF 1.7325 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.AUG.2023 15:18:31</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz Att 30 dB SWT 19 μs VVBW 300 kHz Mode Auto FFT</p> <p>M1[1] -14.88 dBm 1.7299800 GHz Occ Bw 4.530978124 MHz D1[1] 0.66 dB 5.0600 MHz</p> <p>D1 10.990 dBm D2 -15.010 dBm</p> <p>CF 1.7325 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.AUG.2023 15:18:53</p>
Highest	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz Att 30 dB SWT 19 μs VVBW 300 kHz Mode Auto FFT</p> <p>M1[1] -14.75 dBm 1.7499800 GHz Occ Bw 4.530978124 MHz D1[1] 0.26 dB 5.0200 MHz</p> <p>D1 11.980 dBm D2 -14.020 dBm</p> <p>CF 1.7525 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.AUG.2023 15:19:22</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz Att 30 dB SWT 19 μs VVBW 300 kHz Mode Auto FFT</p> <p>M1[1] -14.85 dBm 1.7500000 GHz Occ Bw 4.510978044 MHz D1[1] 0.66 dB 5.0000 MHz</p> <p>D1 11.780 dBm D2 -14.220 dBm</p> <p>CF 1.7525 GHz 501 pts Span 10.0 MHz</p> <p>Date: 14.AUG.2023 15:19:47</p>

### Occupied Bandwidth

Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	<p>                     Spectrum                      Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 38 μs VBW 300 kHz Mode Auto FFT                      IPk Max M1[1] -16.93 dBm                      1.7101200 GHz                      Occ Bw 8.942115768 MHz                      D1[1] -0.09 dB                      9.8000 MHz                      D1 9.510 dBm                      D2 -16.490 dBm                      CF 1.715 GHz 501 pts Span 20.0 MHz                      Date: 14.AUG.2023 15:20:23                 </p>	<p>                     Spectrum                      Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 38 μs VBW 300 kHz Mode Auto FFT                      IPk Max M1[1] -17.69 dBm                      1.7101600 GHz                      Occ Bw 8.982035928 MHz                      D1[1] -0.11 dB                      9.7200 MHz                      D1 7.870 dBm                      D2 -18.130 dBm                      CF 1.715 GHz 501 pts Span 20.0 MHz                      Date: 14.AUG.2023 15:20:49                 </p>
Middle	<p>                     Spectrum                      Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 38 μs VBW 300 kHz Mode Auto FFT                      IPk Max M1[1] -16.12 dBm                      1.7276200 GHz                      Occ Bw 8.942115768 MHz                      D1[1] -1.08 dB                      9.8000 MHz                      D1 9.230 dBm                      D2 -16.770 dBm                      CF 1.7325 GHz 501 pts Span 20.0 MHz                      Date: 14.AUG.2023 15:21:18                 </p>	<p>                     Spectrum                      Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 38 μs VBW 300 kHz Mode Auto FFT                      IPk Max M1[1] -16.27 dBm                      1.7275800 GHz                      Occ Bw 8.942115768 MHz                      D1[1] -0.97 dB                      9.8400 MHz                      D1 9.190 dBm                      D2 -16.810 dBm                      CF 1.7325 GHz 501 pts Span 20.0 MHz                      Date: 14.AUG.2023 15:21:44                 </p>
Highest	<p>                     Spectrum                      Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 38 μs VBW 300 kHz Mode Auto FFT                      IPk Max M1[1] -17.12 dBm                      1.7450800 GHz                      Occ Bw 8.942115768 MHz                      D1[1] 0.55 dB                      9.8400 MHz                      D1 9.220 dBm                      D2 -16.780 dBm                      CF 1.75 GHz 501 pts Span 20.0 MHz                      Date: 14.AUG.2023 15:22:20                 </p>	<p>                     Spectrum                      Ref Level 30.00 dBm Offset 11.50 dB RBW 100 kHz                      Att 30 dB SWT 38 μs VBW 300 kHz Mode Auto FFT                      IPk Max M1[1] -15.77 dBm                      1.7451200 GHz                      Occ Bw 8.942115768 MHz                      D1[1] 0.04 dB                      9.7600 MHz                      D1 10.060 dBm                      D2 -15.940 dBm                      CF 1.75 GHz 501 pts Span 20.0 MHz                      Date: 14.AUG.2023 15:22:48                 </p>

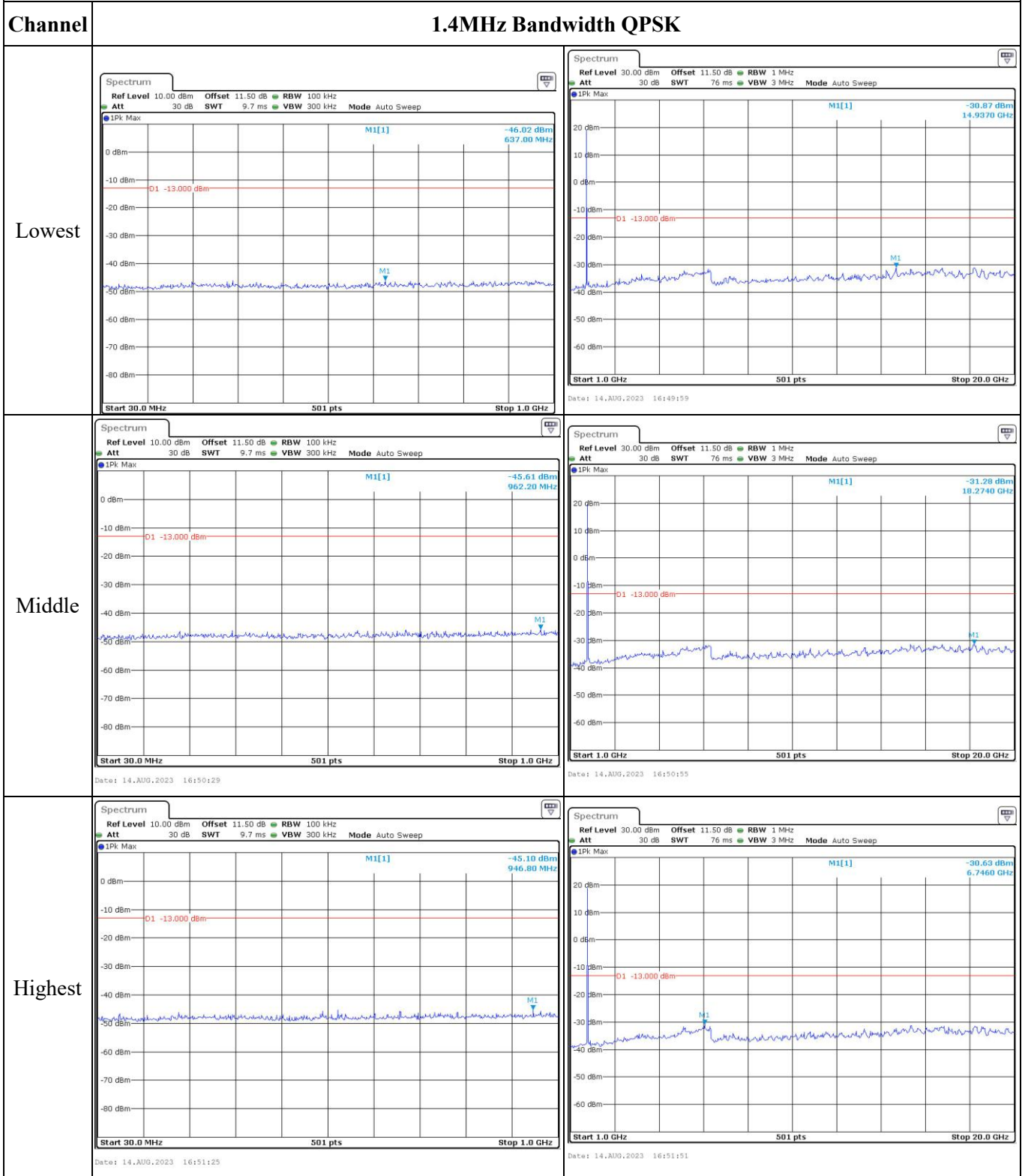
### Occupied Bandwidth

Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 300 kHz Att 30 dB SWT 12.7 μs VBW 1 MHz Mode Auto FFT</p> <p>M1[1] -14.63 dBm 1.7100000 GHz Occ Bw 13.473053892 MHz D1[1] 0.20 dB 15.0000 MHz</p> <p>D1 11.660 dBm D2 -14.340 dBm</p> <p>CF 1.7175 GHz 501 pts Span 30.0 MHz</p> <p>Date: 14.AUG.2023 15:23:27</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 300 kHz Att 30 dB SWT 12.7 μs VBW 1 MHz Mode Auto FFT</p> <p>M1[1] -14.78 dBm 1.7100000 GHz Occ Bw 13.532934132 MHz D1[1] 0.94 dB 15.0000 MHz</p> <p>D1 11.560 dBm D2 -14.440 dBm</p> <p>CF 1.7175 GHz 501 pts Span 30.0 MHz</p> <p>Date: 14.AUG.2023 15:23:55</p>
Middle	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 300 kHz Att 30 dB SWT 12.7 μs VBW 1 MHz Mode Auto FFT</p> <p>M1[1] -13.76 dBm 1.7250000 GHz Occ Bw 13.532934132 MHz D1[1] 0.09 dB 15.0000 MHz</p> <p>D1 11.680 dBm D2 -14.320 dBm</p> <p>CF 1.7325 GHz 501 pts Span 30.0 MHz</p> <p>Date: 14.AUG.2023 15:24:27</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 300 kHz Att 30 dB SWT 12.7 μs VBW 1 MHz Mode Auto FFT</p> <p>M1[1] -14.27 dBm 1.7250000 GHz Occ Bw 13.532934132 MHz D1[1] -0.06 dB 15.0000 MHz</p> <p>D1 11.250 dBm D2 -14.750 dBm</p> <p>CF 1.7325 GHz 501 pts Span 30.0 MHz</p> <p>Date: 14.AUG.2023 15:25:01</p>
Highest	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 300 kHz Att 30 dB SWT 12.7 μs VBW 1 MHz Mode Auto FFT</p> <p>M1[1] -13.44 dBm 1.7400000 GHz Occ Bw 13.532934132 MHz D1[1] 0.37 dB 15.0000 MHz</p> <p>D1 12.100 dBm D2 -13.900 dBm</p> <p>CF 1.7475 GHz 501 pts Span 30.0 MHz</p> <p>Date: 14.AUG.2023 15:25:34</p>	<p>Ref Level 30.00 dBm Offset 11.50 dB RBW 300 kHz Att 30 dB SWT 12.7 μs VBW 1 MHz Mode Auto FFT</p> <p>M1[1] -14.50 dBm 1.7400000 GHz Occ Bw 13.532934132 MHz D1[1] -0.16 dB 15.0000 MHz</p> <p>D1 11.370 dBm D2 -14.630 dBm</p> <p>CF 1.7475 GHz 501 pts Span 30.0 MHz</p> <p>Date: 14.AUG.2023 15:26:08</p>

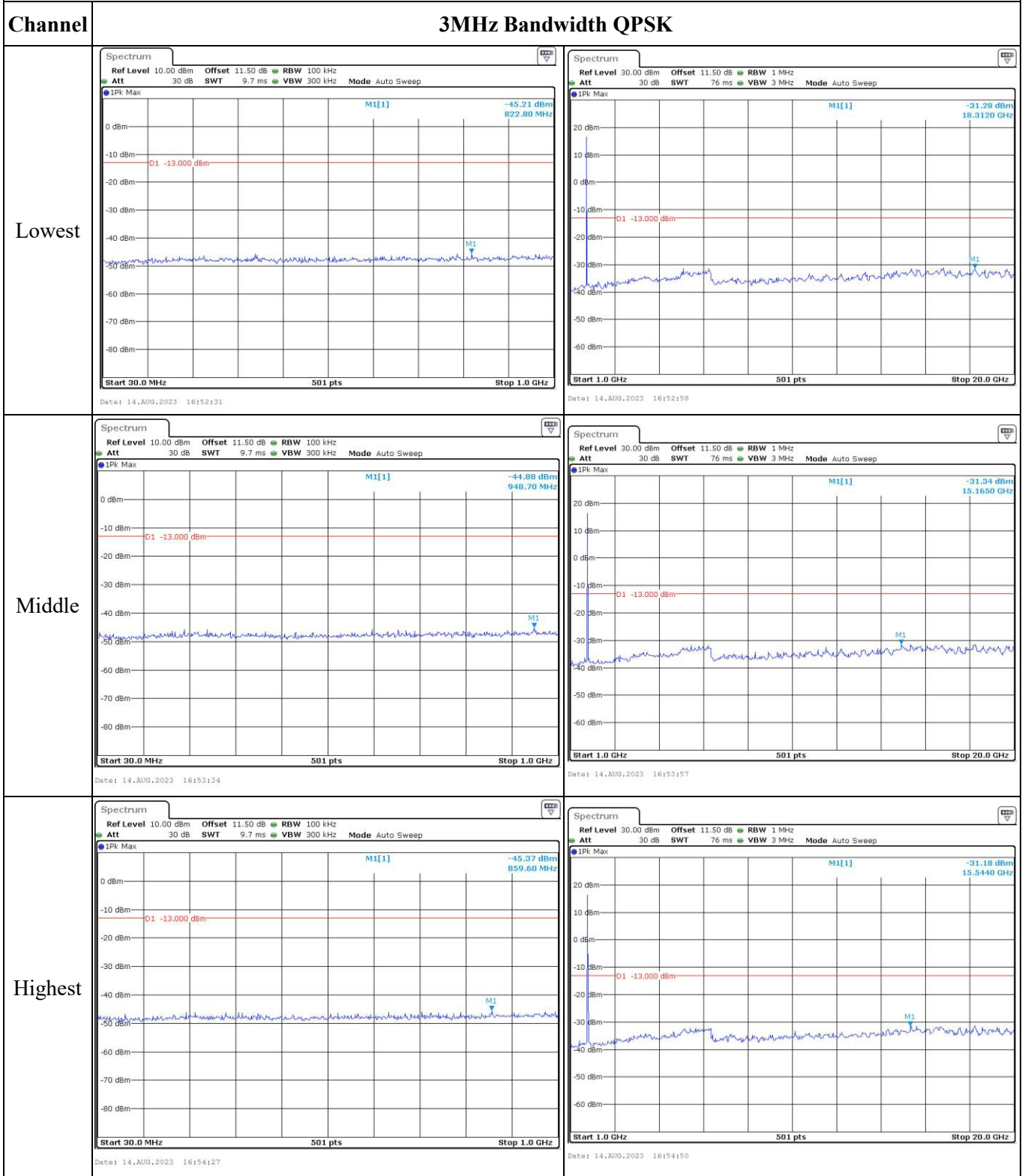
### Occupied Bandwidth

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

### Spurious Emissions at Antenna Terminal



### Spurious Emissions at Antenna Terminal

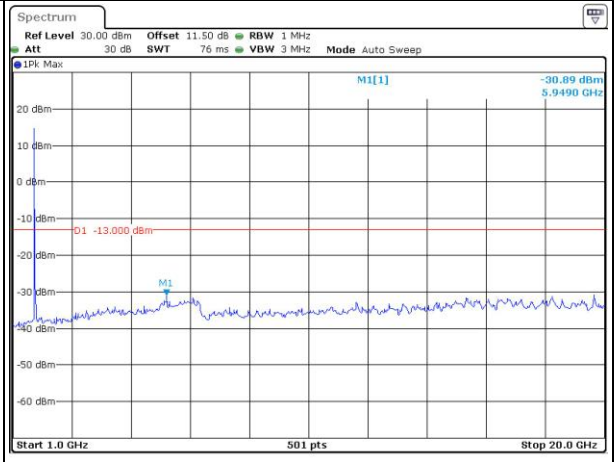
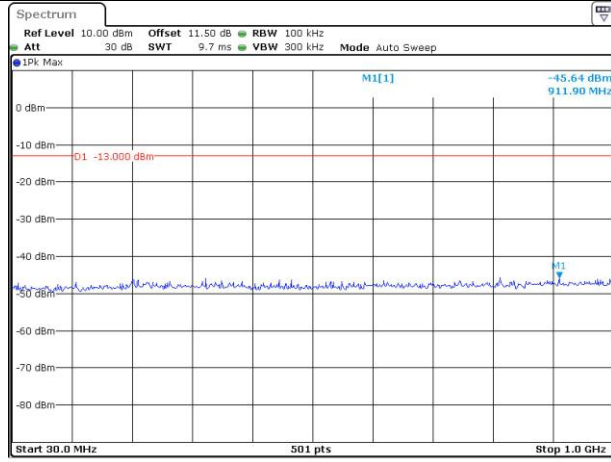


### Spurious Emissions at Antenna Terminal

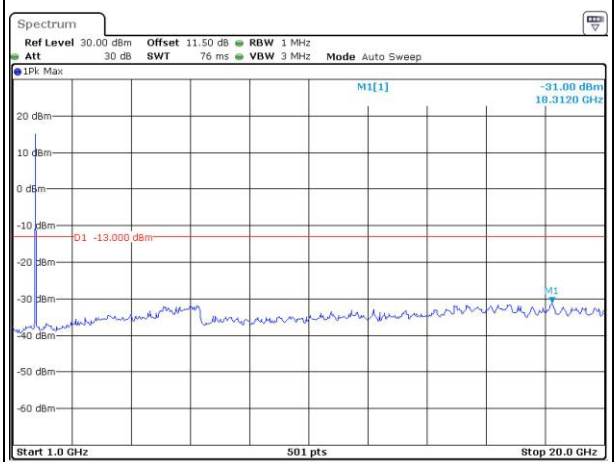
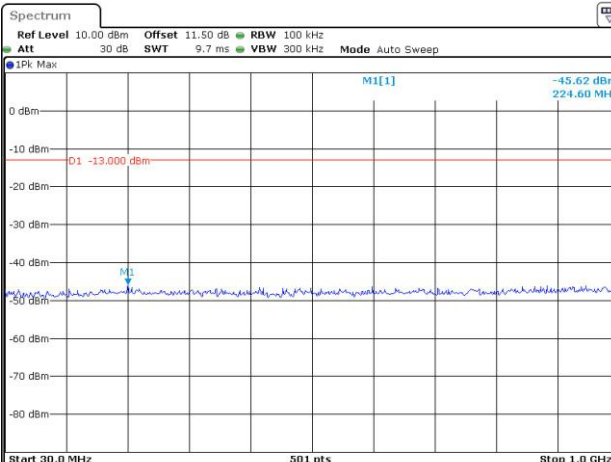
Channel

5MHz Bandwidth QPSK

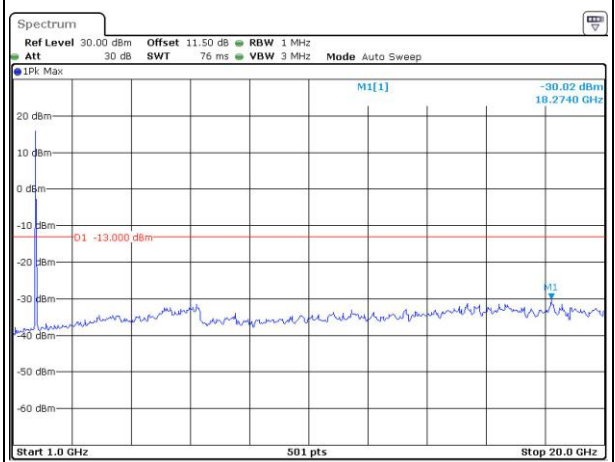
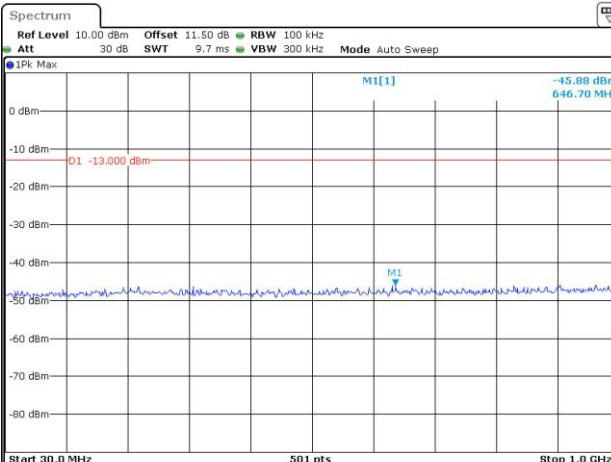
Lowest



Middle



Highest



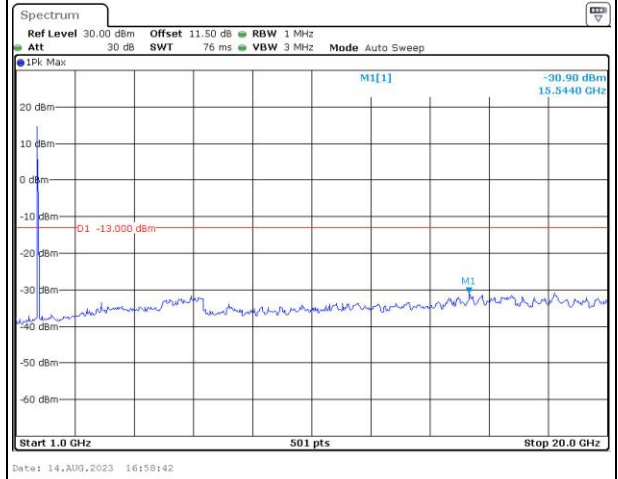
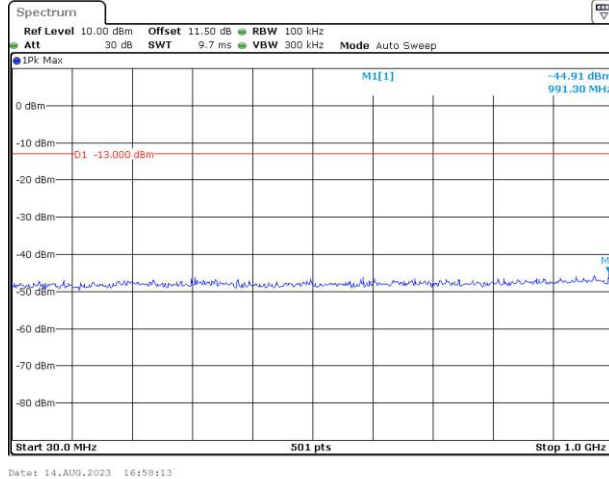


### Spurious Emissions at Antenna Terminal

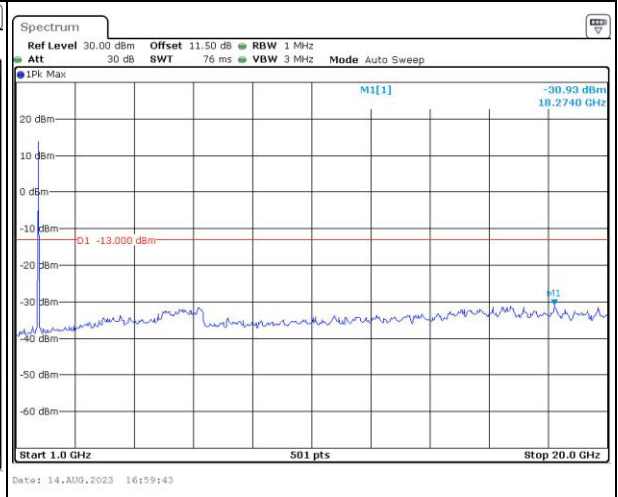
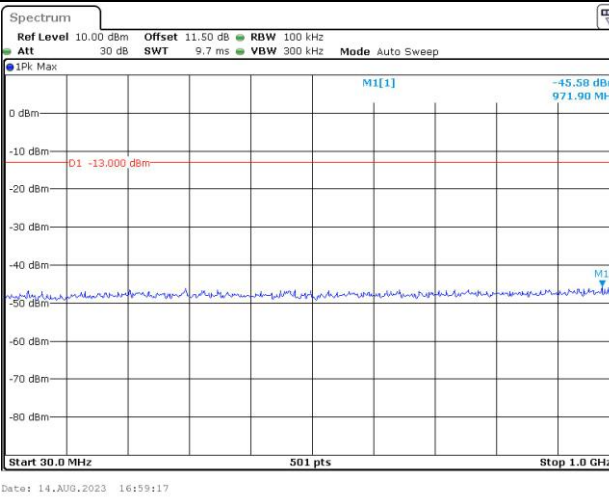
Channel

10MHz Bandwidth QPSK

Lowest



Middle



Highest

