

**4.6 Antenna Port Test Data and Results for WCDMA Band 5:**

Serial Number:	291M-2	Test Date:	2023/08/04~2023/08/05
Test Site:	RF	Test Mode:	Transmitting
Tester:	One Luo	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	24.2~26.5	Relative Humidity: (%)	42~58	ATM Pressure: (kPa)	99.7~102.2
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**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2023/07/15	2024/07/14
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Unknow	Coaxial tee connector	Unknow	2204004	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149218	2023/07/15	2024/07/14
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022/09/29	2023/09/28
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	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:**

Operation Modes	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
WCDMA	826.4	836.6	846.6

**Test Data:****FCC §2.1046; § 22.913 (a)****RF Output Power:**

Test Mode	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
	Lowest Channel	Middle Channel	Highest Channel		
WCDMA R99	22.58	22.89	23.15	14.93	38.45
HSDPA Subtest 1	22.45	22.79	22.95	14.73	38.45
HSDPA Subtest 2	22.28	22.74	22.3	14.52	38.45
HSDPA Subtest 3	22.23	22.25	22.24	14.03	38.45
HSDPA Subtest 4	22.2	22.54	22.4	14.32	38.45
HSUPA Subtest 1	22.27	22.69	22.46	14.47	38.45
HSUPA Subtest 2	22.2	22.25	22.22	14.03	38.45
HSUPA Subtest 3	22.05	22.59	22.49	14.37	38.45
HSUPA Subtest 4	21.92	22.18	22.11	13.96	38.45
HSUPA Subtest 5	21.74	22.2	22.32	14.1	38.45
DC-HSDPA Subtest 1	21.77	21.86	22.15	13.93	38.45
DC-HSDPA Subtest 2	21.76	22.17	21.83	13.95	38.45
DC-HSDPA Subtest 3	21.68	22.02	22.1	13.88	38.45
DC-HSDPA Subtest 4	21.54	22.04	21.95	13.82	38.45
HSPA+ Subtest 1	21.4	21.66	21.78	13.56	38.45

Note:

ERP= Conducted Power(dBm) - Lc(dB) + Gr(dBd)

Gr(dBd)=Gr(dBi)-2.15

**Result:****Pass****Peak-to-average Ratio(PAR)**

Test Mode	Peak-to-average Ratio(dB)			Limit (dB)
	Lowest Channel	Middle Channel	Highest Channel	
WCDMA R99	3.54	3.01	3.13	13
HSDPA	4.61	5.1	4.72	13
HSUPA	5.83	5.16	5.65	13

**Result:****Pass**

<b>FCC §2.1049, §22.917, §22.905: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
WCDMA R99	4.124	4.124	4.139	4.732	4.761	4.747
HSDPA	4.182	4.211	4.197	6.194	6.078	5.311
HSUPA	4.24	4.255	4.255	6.223	6.382	6.281

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

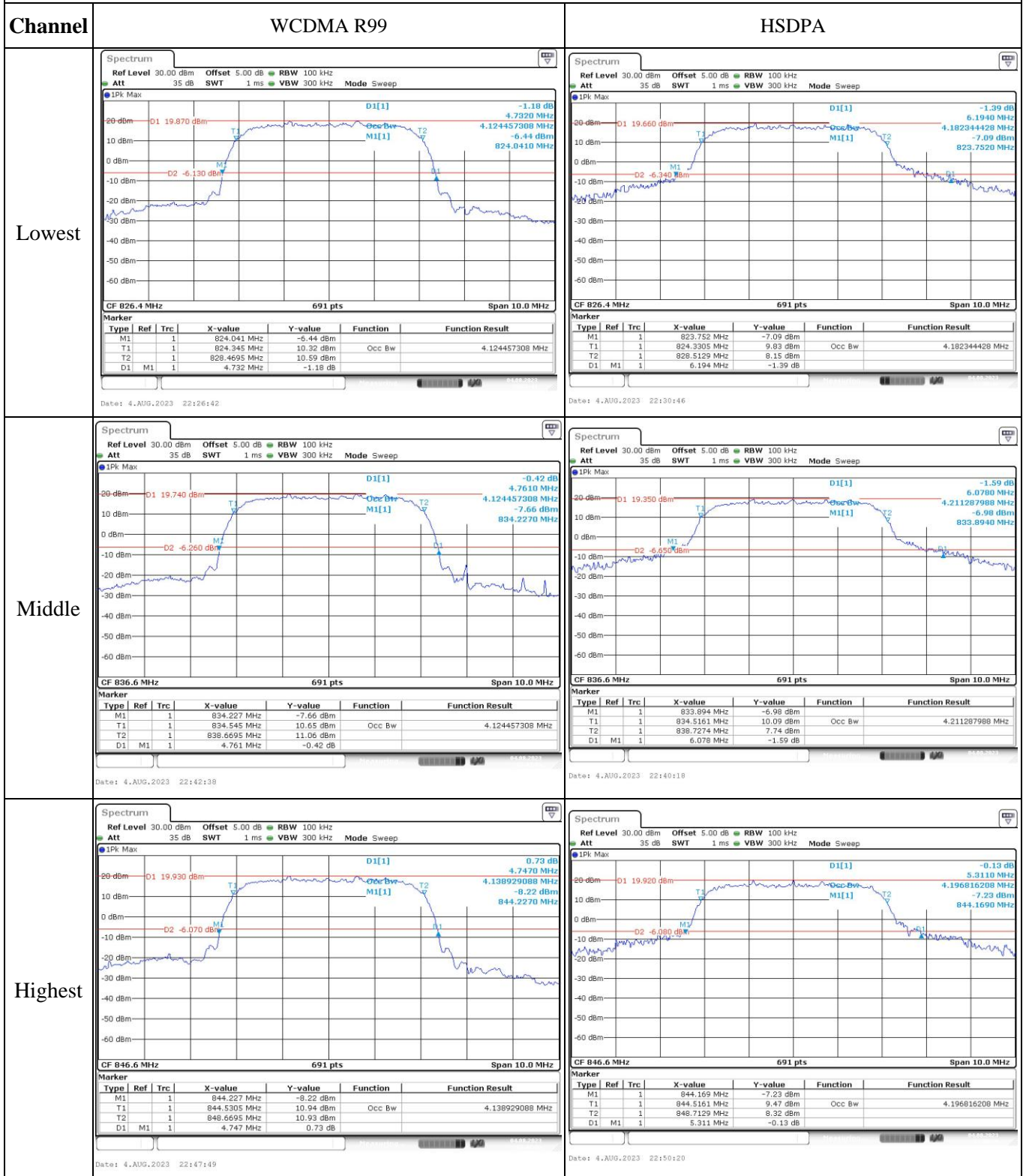
<b>FCC §2.1051, §22.917(a):Spurious Emissions at Antenna Terminal</b>	
<b>Result:</b>	<b>Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.</b>

<b>FCC §2.1051, §22.917(a):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>

<b>FCC §2.1055, §22.355: Frequency Stability</b>					
Test Modulation:	WCDMA R99		Test Channel:	836.6	MHz
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.8	-3.25	-0.004	2.5
	-20	3.8	-6.65	-0.008	2.5
	-10	3.8	9.78	0.012	2.5
	0	3.8	-7.66	-0.009	2.5
	10	3.8	-9.94	-0.012	2.5
	20	3.8	-9.82	-0.012	2.5
	30	3.8	-6.64	-0.008	2.5
	40	3.8	-8.85	-0.011	2.5
Frequency Stability vs. Voltage	50	3.8	5.64	0.007	2.5
	20	3.55	6.06	0.007	2.5
	20	4.35	7.59	0.009	2.5
				<b>Result:</b>	<b>Pass</b>

**Test Plots**(Note: The 5.0dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer):

**Occupied Bandwidth**

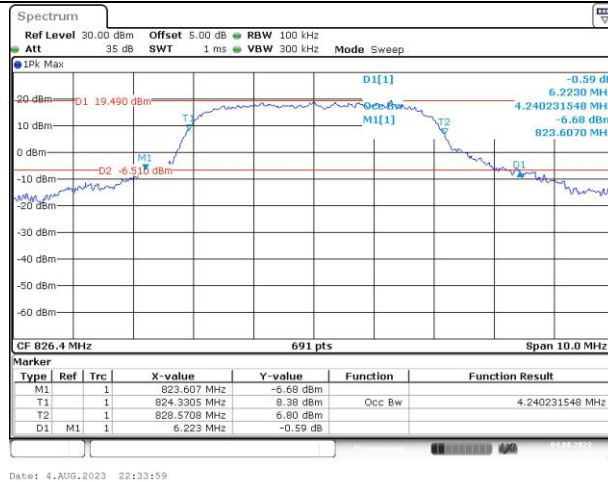


### Occupied Bandwidth

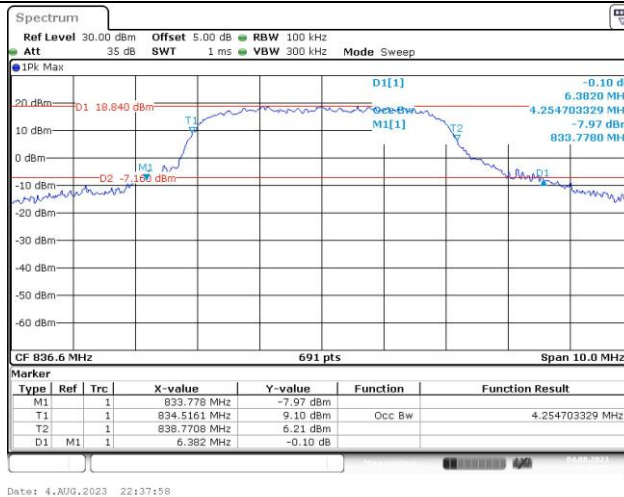
Channel

HSUPA

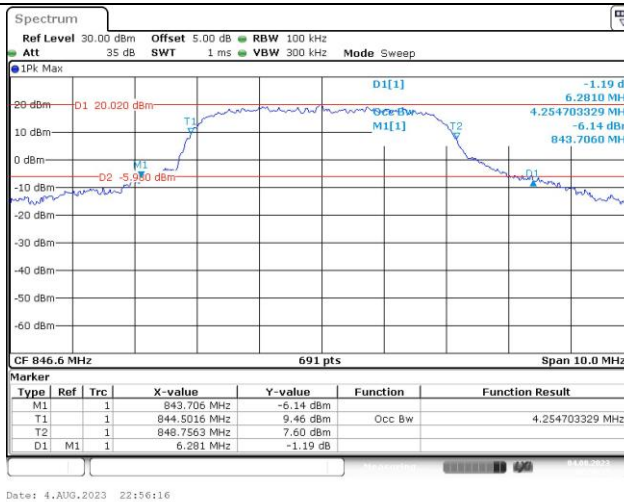
Lowest



Middle



Highest



### Spurious Emissions at Antenna Terminal

Channel	WCDMA R99	
Lowest	<p>Ref Level 30.00 dBm Offset 5.00 dB RBW 100 kHz Att 35 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>IPK Max M1[1] -46.50 dBm 632.90 MHz</p> <p>D1 -13.000 dBm</p> <p>Start 30.0 MHz 691 pts Stop 1.0 GHz</p> <p>Date: 4.AUG.2023 23:55:55</p>	<p>Ref Level 30.00 dBm Offset 5.00 dB RBW 1 MHz Att 35 dB SWT 36 ms VBW 3 MHz Mode Sweep</p> <p>IPK Max M1[1] -32.42 dBm 6.8680 GHz</p> <p>D1 -13.000 dBm</p> <p>Start 1.0 GHz 691 pts Stop 10.0 GHz</p> <p>Date: 4.AUG.2023 23:56:26</p>
	<p>Ref Level 30.00 dBm Offset 5.00 dB RBW 100 kHz Att 35 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>IPK Max M1[1] -47.80 dBm 489.70 MHz</p> <p>D1 -13.000 dBm</p> <p>Start 30.0 MHz 691 pts Stop 1.0 GHz</p> <p>Date: 4.AUG.2023 23:57:42</p>	<p>Ref Level 30.00 dBm Offset 5.00 dB RBW 1 MHz Att 35 dB SWT 36 ms VBW 3 MHz Mode Sweep</p> <p>IPK Max M1[1] -32.44 dBm 5.8520 GHz</p> <p>D1 -13.000 dBm</p> <p>Start 1.0 GHz 691 pts Stop 10.0 GHz</p> <p>Date: 4.AUG.2023 23:57:04</p>
Highest	<p>Ref Level 30.00 dBm Offset 5.00 dB RBW 100 kHz Att 35 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>IPK Max M1[1] -47.55 dBm 672.20 MHz</p> <p>D1 -13.000 dBm</p> <p>Start 30.0 MHz 691 pts Stop 1.0 GHz</p> <p>Date: 4.AUG.2023 23:58:31</p>	<p>Ref Level 30.00 dBm Offset 5.00 dB RBW 1 MHz Att 35 dB SWT 36 ms VBW 3 MHz Mode Sweep</p> <p>IPK Max M1[1] -31.95 dBm 6.8420 GHz</p> <p>D1 -13.000 dBm</p> <p>Start 1.0 GHz 691 pts Stop 10.0 GHz</p> <p>Date: 4.AUG.2023 23:58:55</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
R99		
HSUPA		
HSDPA		



**4.7 Antenna Port Test Data and Results for LTE Band 2**

Serial Number:	291M-2	Test Date:	2023/08/05~2023/08/07
Test Site:	RF	Test Mode:	Transmitting
Tester:	One Luo	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	24.2~26.5	Relative Humidity: (%)	42~58	ATM Pressure: (kPa)	99.7~102.2
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**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2023/07/15	2024/07/14
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149218	2023/07/15	2024/07/14
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022/09/29	2023/09/28
UNI-T	Multimeter	UT39A+	C210582554	2022/9/29	2023/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	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	1850.7	1880	1909.3
3MHz	1851.5	1880	1908.5
5MHz	1852.5	1880	1907.5
10MHz	1855	1880	1905
15MHz	1857.5	1880	1902.5
20MHz	1860	1880	1900



**Test Data:**

<b>FCC §2.1046; § 24.232</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	23.15	23.32	22.99	19.14	33
	RB1#3	23.2	23.36	22.77		
	RB1#5	22.98	23.08	22.64		
	RB3#0	23.11	23.14	22.79		
	RB3#3	23.02	23.06	22.68		
	RB6#0	21.95	22	21.79		
1.4MHz 16QAM	RB1#0	22.07	22.12	21.95	18.26	33
	RB1#3	22.26	22.48	21.75		
	RB1#5	22.06	22.46	21.61		
	RB3#0	22.01	22.06	22.01		
	RB3#3	22.11	21.92	21.71		
	RB6#0	20.74	21.15	20.95		
3MHz QPSK	RB1#0	23.23	23.11	22.81	19.1	33
	RB1#8	23.2	22.99	22.57		
	RB1#14	23.05	23.32	22.73		
	RB6#0	22.01	22.12	21.83		
	RB6#9	22.04	21.96	21.8		
	RB15#0	21.94	22.13	21.95		
3MHz 16QAM	RB1#0	22.88	22.39	22.14	18.66	33
	RB1#8	22.28	22.43	21.3		
	RB1#14	22.2	22.44	21.28		
	RB6#0	20.86	21.46	21.06		
	RB6#9	20.96	21.55	20.97		
	RB15#0	20.95	21.32	21		
5MHz QPSK	RB1#0	23.36	23.05	22.79	19.18	33
	RB1#13	23.4	22.95	22.7		
	RB1#24	23.14	23.15	22.81		
	RB15#0	22	22.15	21.9		
	RB15#10	22.05	22.1	21.78		
	RB25#0	22.06	22.17	21.89		
5MHz 16QAM	RB1#0	22.19	21.86	21.37	18.31	33
	RB1#13	22.48	21.63	21.08		
	RB1#24	22.53	21.61	21.02		
	RB15#0	20.7	21.19	21.13		
	RB15#10	20.87	21.14	20.64		
	RB25#0	20.9	21.11	20.99		

10MHz QPSK	RB1#0	23.12	23.17	23.16	19.16	33
	RB1#25	23.29	23.38	23.07		
	RB1#49	23.09	23.17	22.31		
	RB25#0	22.13	21.93	22.05		
	RB25#25	22.19	22.07	21.87		
	RB50#0	22.13	21.95	21.99		
10MHz 16QAM	RB1#0	22.29	21.55	22.31	18.41	33
	RB1#25	22.63	21.58	22.62		
	RB1#49	22.55	21.54	21.69		
	RB25#0	21.09	21.13	21.04		
	RB25#25	21.24	21.1	20.91		
	RB50#0	21.07	21.08	21.06		
15MHz QPSK	RB1#0	23.33	23.06	22.88	19.11	33
	RB1#38	23.15	22.97	22.93		
	RB1#74	23.32	23.19	22.33		
	RB36#0	22.19	21.94	22.02		
	RB36#39	22.18	22	21.93		
	RB75#0	22.11	22.07	21.84		
15MHz 16QAM	RB1#0	22.35	22.52	21.86	18.78	33
	RB1#38	22.23	22.69	21.9		
	RB1#74	22.46	23	21.25		
	RB36#0	20.89	20.92	20.91		
	RB36#39	20.9	20.82	20.99		
	RB75#0	20.95	20.98	20.87		
20MHz QPSK	RB1#0	22.92	23.19	22.89	19.54	33
	RB1#50	23.4	23.76	23.27		
	RB1#99	23.24	23.32	22.22		
	RB50#0	22.18	22	22.06		
	RB50#50	22.28	22.07	21.93		
	RB100#0	22.16	21.98	21.89		
20MHz 16QAM	RB1#0	22.26	22.01	22.65	18.78	33
	RB1#50	22.8	22.07	23		
	RB1#99	22.32	21.79	21.91		
	RB50#0	21.05	20.99	20.86		
	RB50#50	21.07	20.96	20.98		
	RB100#0	21	20.99	20.98		

Note: EIRP=Conducted Power(dBm) - Lc(dB) + Gr(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	4.75	4.78	4.7	13
	RB100#0	3.97	4.03	3.94	13
20MHz 16QAM	RB1#0	5.8	5.57	5.68	13
	RB100#0	5.77	5.83	5.77	13
<b>Result:</b>					<b>Pass</b>

<b>FCC §2.1049, §24.238: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	1.108	1.102	1.108	1.29	1.302	1.32
1.4MHz 16QAM	1.102	1.108	1.096	1.314	1.32	1.296
3MHz QPSK	2.695	2.683	2.695	2.94	2.964	2.94
3MHz 16QAM	2.683	2.683	2.683	2.964	2.94	2.964
5MHz QPSK	4.531	4.511	4.511	5.02	5.04	4.98
5MHz 16QAM	4.511	4.531	4.511	5.02	5.06	5.06
10MHz QPSK	8.942	8.942	8.942	9.72	9.76	9.72
10MHz 16QAM	8.942	8.942	8.902	9.68	9.76	9.64
15MHz QPSK	13.473	13.413	13.413	14.76	14.76	14.76
15MHz 16QAM	13.473	13.473	13.413	14.82	14.82	14.76
20MHz QPSK	17.884	17.884	17.884	19.36	19.6	19.2
20MHz 16QAM	17.884	17.884	17.804	19.52	19.44	19.36

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

<b>FCC §2.1051, §24.238 (a):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, §24.238 (a):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>

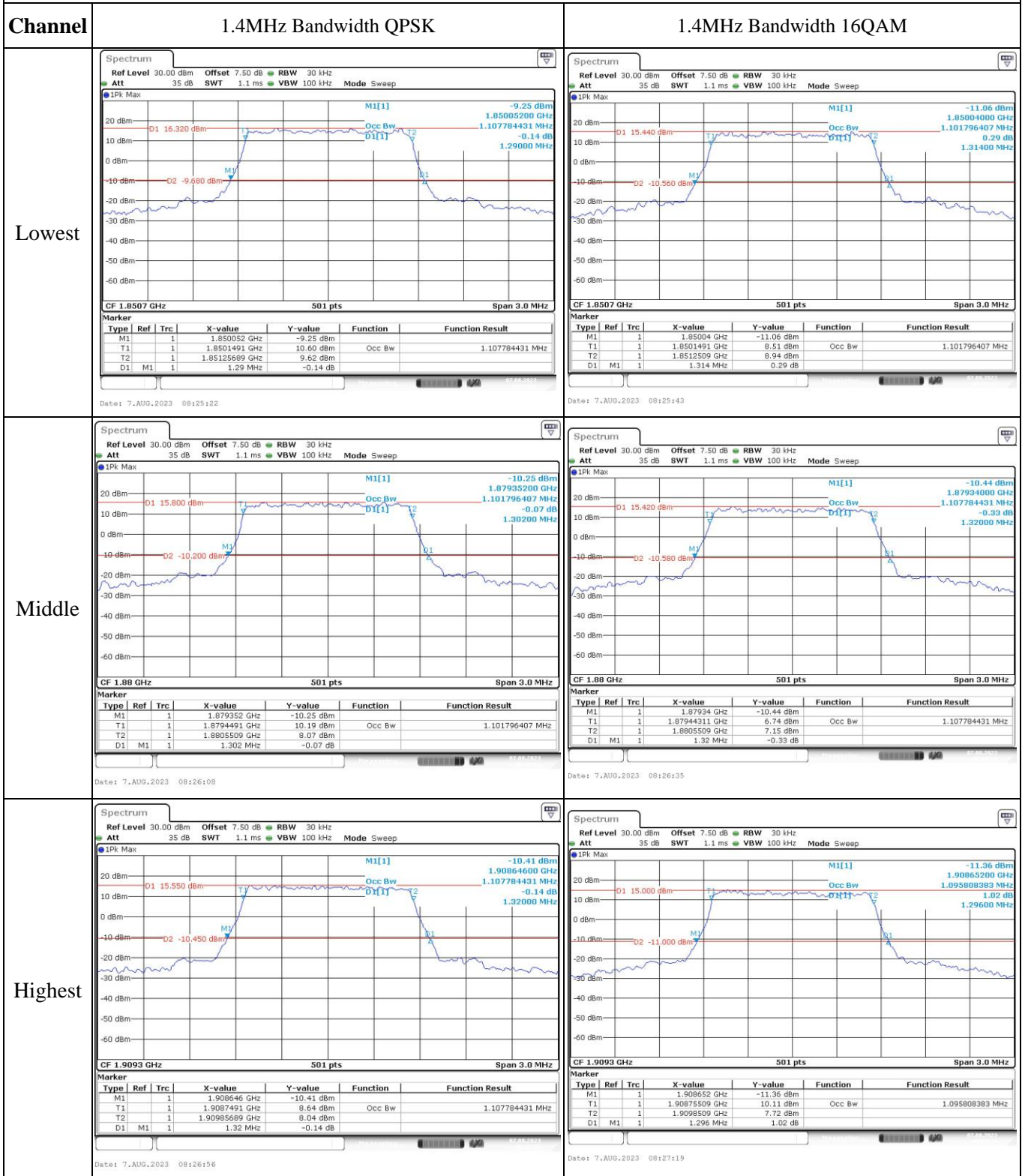
**FCC §2.1055, §24.235: Frequency Stability**

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	1851.164	1850.000	1908.978	1910.000
	-20	3.8	1851.163	1850.000	1908.927	1910.000
	-10	3.8	1851.102	1850.000	1908.917	1910.000
	0	3.8	1851.181	1850.000	1908.978	1910.000
	10	3.8	1851.147	1850.000	1908.998	1910.000
	20	3.8	1851.138	1850.000	1908.942	1910.000
	30	3.8	1851.179	1850.000	1908.930	1910.000
	40	3.8	1851.154	1850.000	1908.975	1910.000
Frequency Stability vs. Voltage	20	3.55	1851.101	1850.000	1908.967	1910.000
	20	4.35	1851.199	1850.000	1908.969	1910.000
					<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	1851.070	1850.000	1908.973	1910.000
	-20	3.8	1851.027	1850.000	1908.941	1910.000
	-10	3.8	1851.082	1850.000	1908.918	1910.000
	0	3.8	1851.011	1850.000	1908.988	1910.000
	10	3.8	1851.079	1850.000	1908.920	1910.000
	20	3.8	1851.058	1850.000	1908.942	1910.000
	30	3.8	1851.043	1850.000	1908.927	1910.000
	40	3.8	1851.074	1850.000	1908.918	1910.000
Frequency Stability vs. Voltage	20	3.55	1851.014	1850.000	1908.910	1910.000
	20	4.35	1851.034	1850.000	1908.998	1910.000
					<b>Result:</b>	<b>Pass</b>

**Test Plots**(Note: The 7.5dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer):

**Occupied Bandwidth**



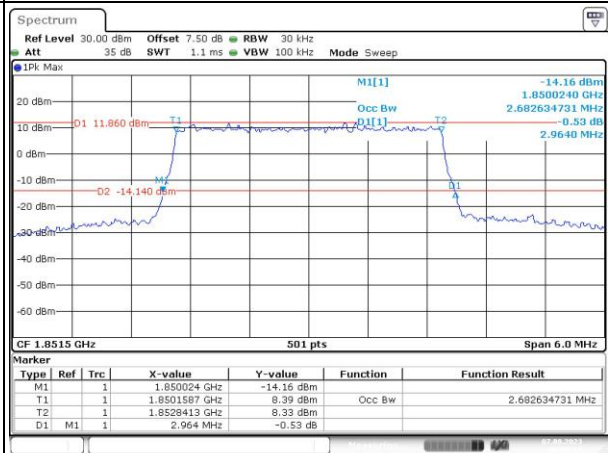
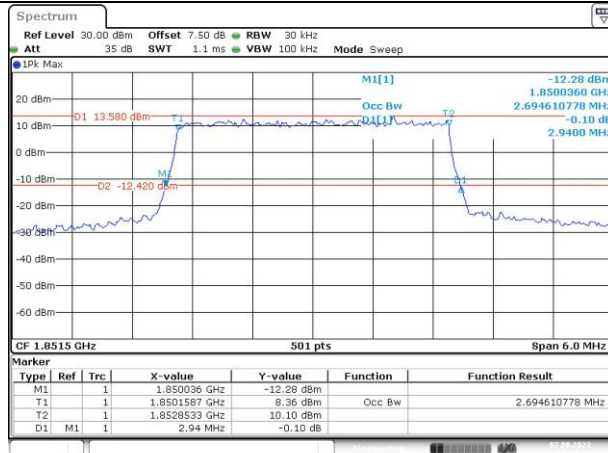
### Occupied Bandwidth

Channel

3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

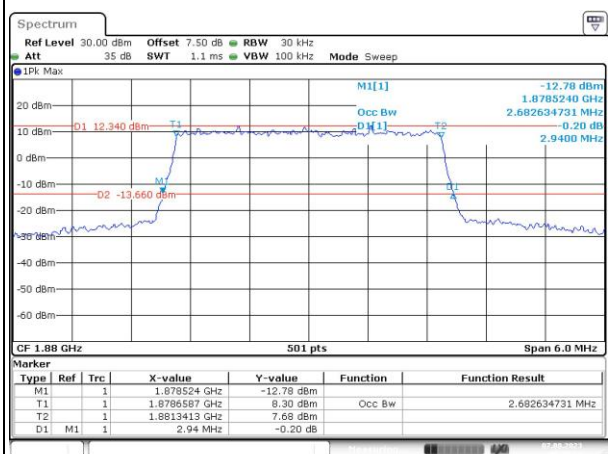
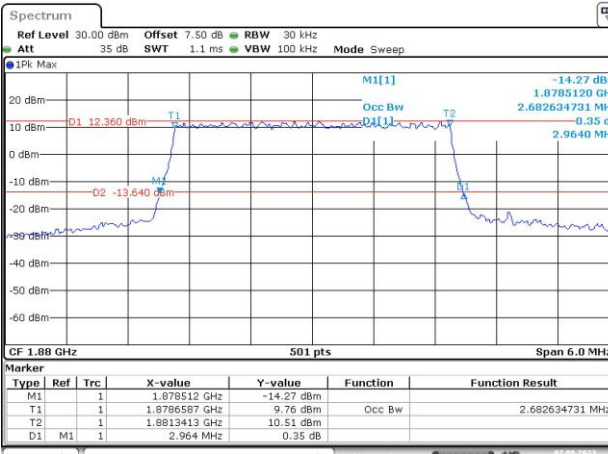
Lowest



Date: 7.AUG.2023 08:29:16

Date: 7.AUG.2023 08:29:39

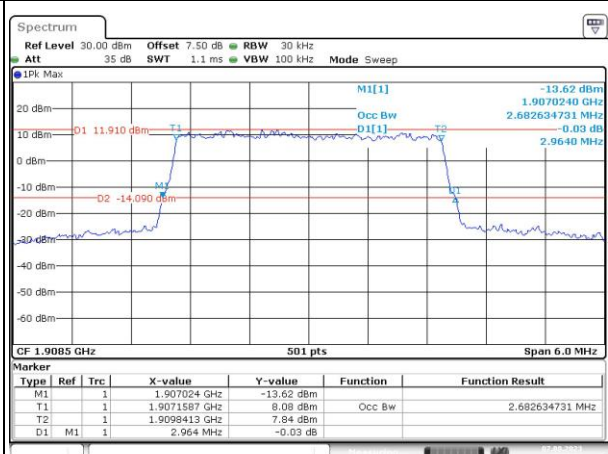
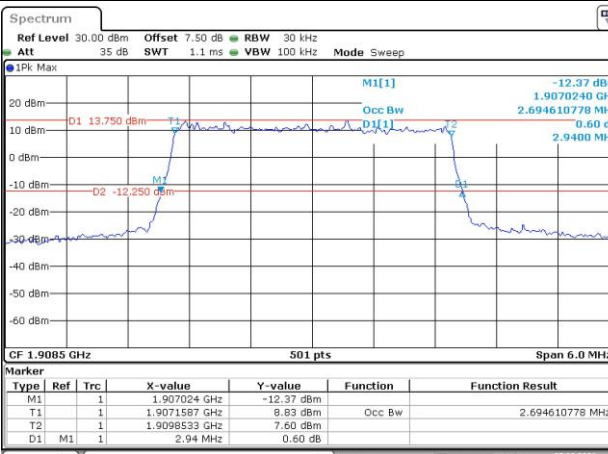
Middle



Date: 7.AUG.2023 08:30:03

Date: 7.AUG.2023 08:30:26

Highest



Date: 7.AUG.2023 08:30:51

Date: 7.AUG.2023 08:31:14



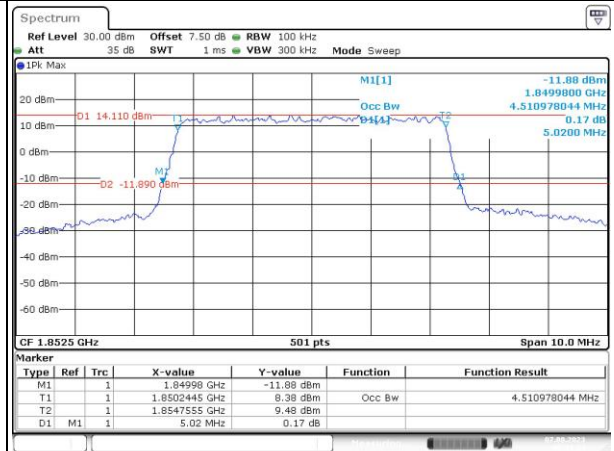
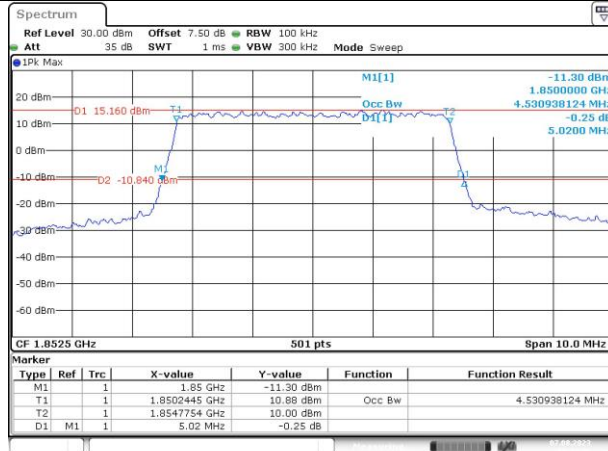
### Occupied Bandwidth

Channel

5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

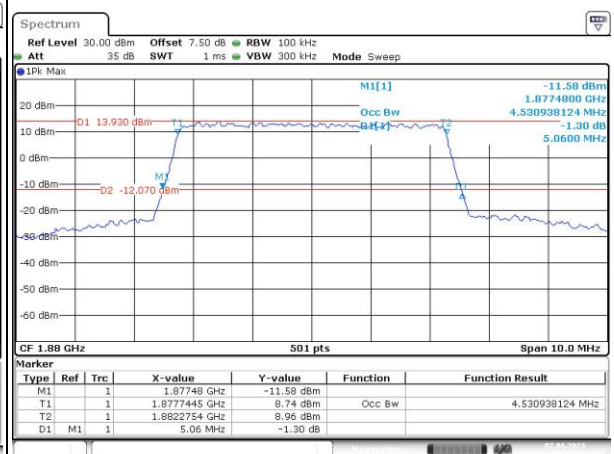
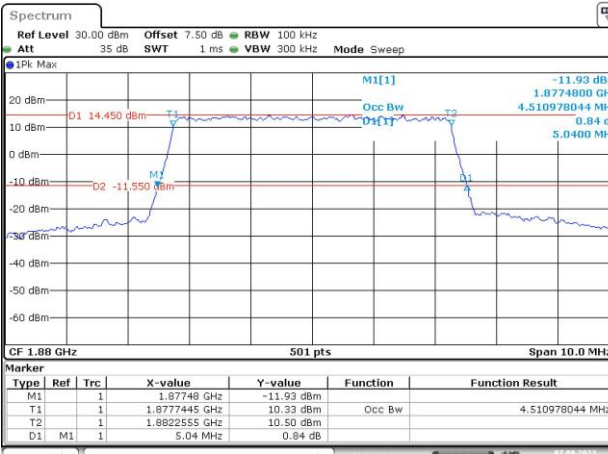
Lowest



Date: 7.AUG.2023 08:34:06

Date: 7.AUG.2023 08:34:34

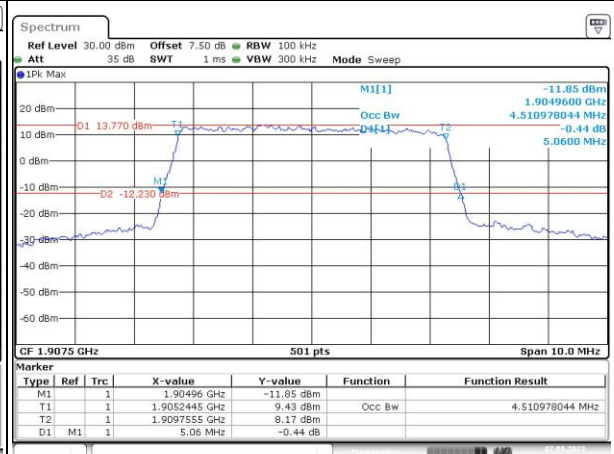
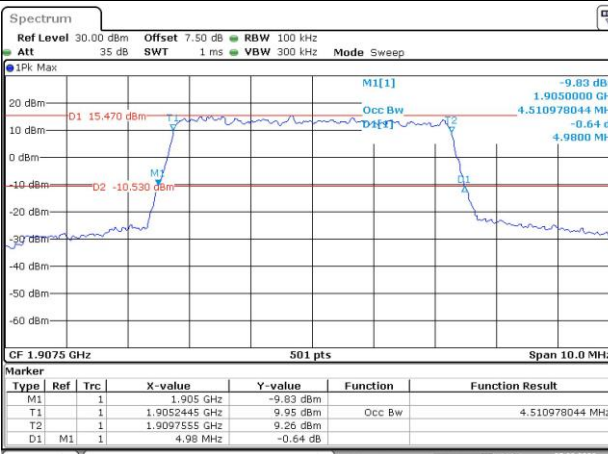
Middle



Date: 7.AUG.2023 08:34:59

Date: 7.AUG.2023 08:35:27

Highest

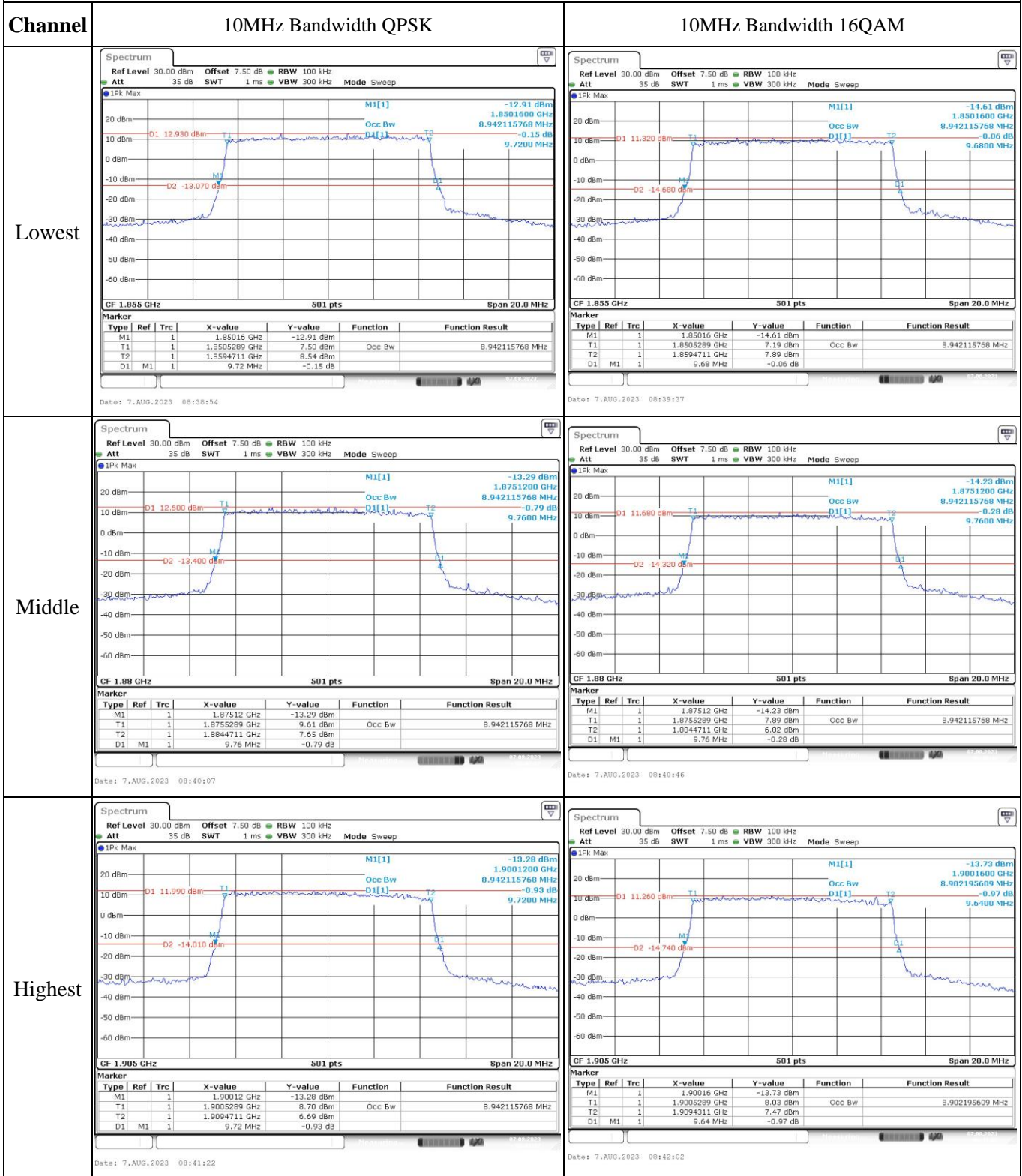


Date: 7.AUG.2023 08:35:56

Date: 7.AUG.2023 08:36:27



### Occupied Bandwidth



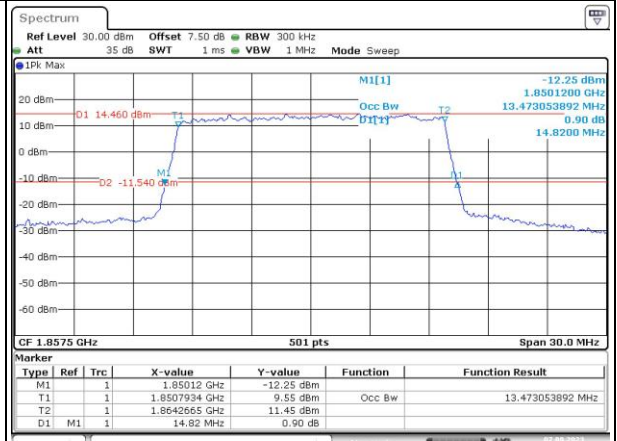
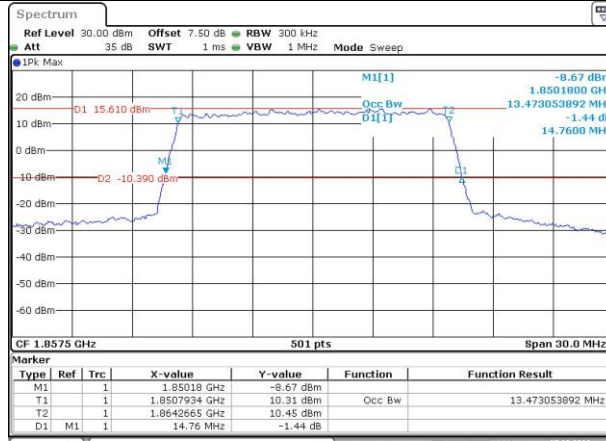
### Occupied Bandwidth

Channel

15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

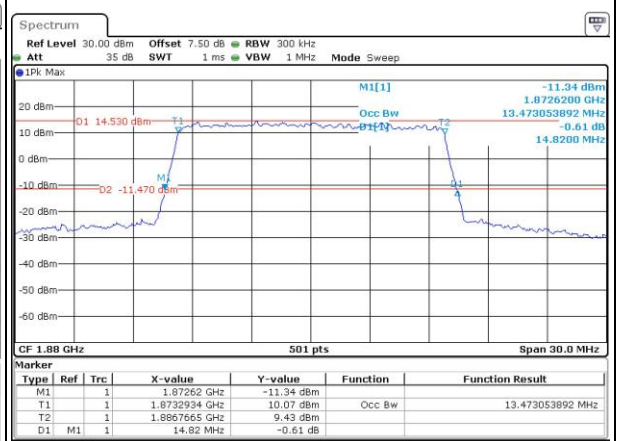
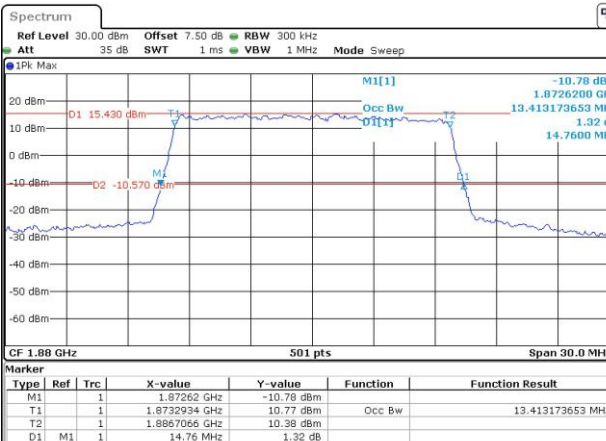
Lowest



Date: 7.AUG.2023 08:44:00

Date: 7.AUG.2023 08:44:27

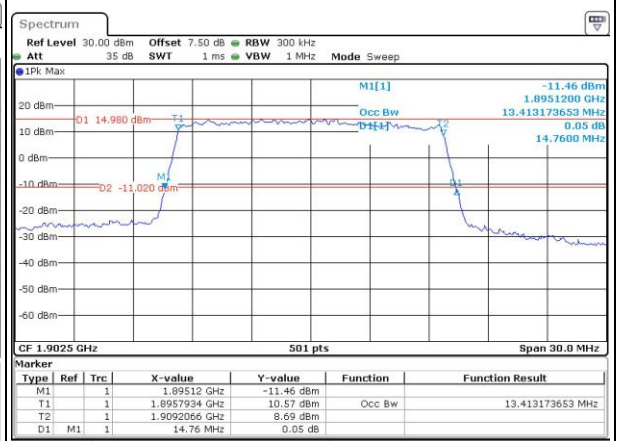
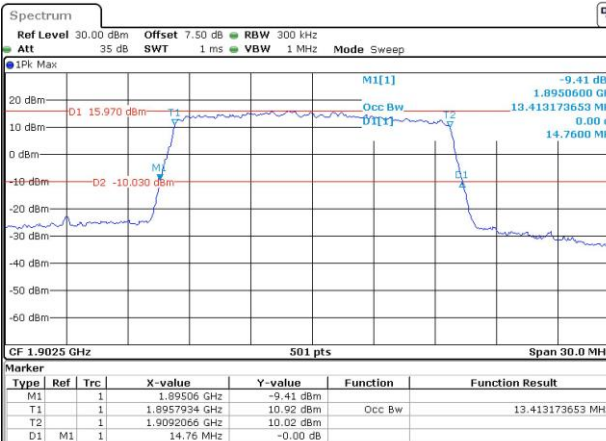
Middle



Date: 7.AUG.2023 08:44:55

Date: 7.AUG.2023 08:45:23

Highest



Date: 7.AUG.2023 08:45:14

Date: 7.AUG.2023 08:46:26

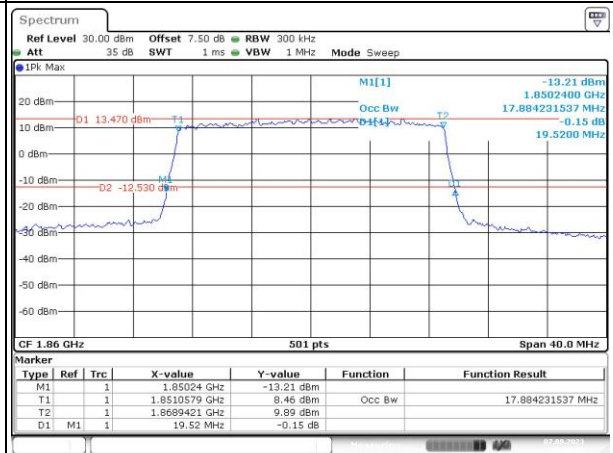
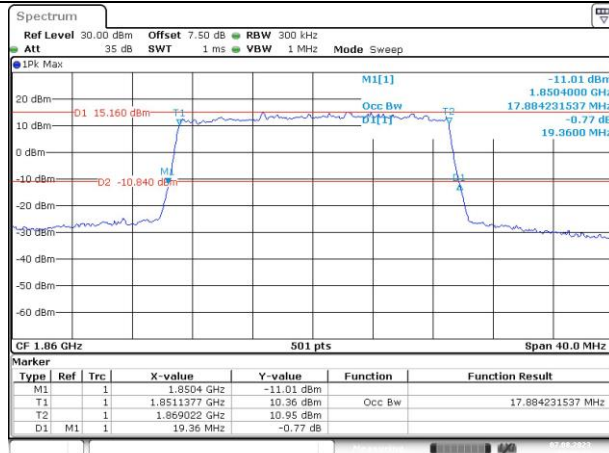
### Occupied Bandwidth

Channel

20MHz Bandwidth QPSK

20MHz Bandwidth 16QAM

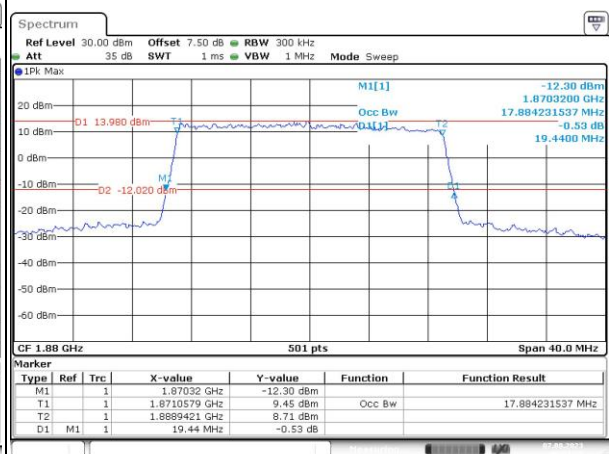
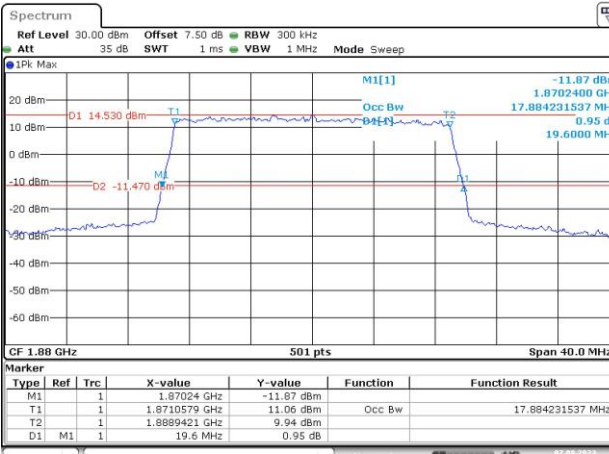
Lowest



Date: 7.AUG.2023 08:49:35

Date: 7.AUG.2023 08:50:06

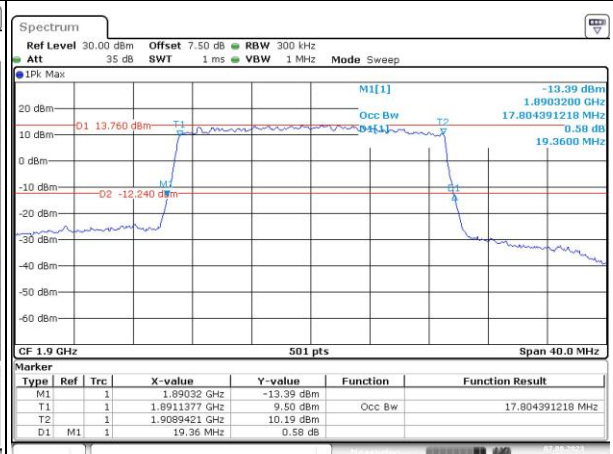
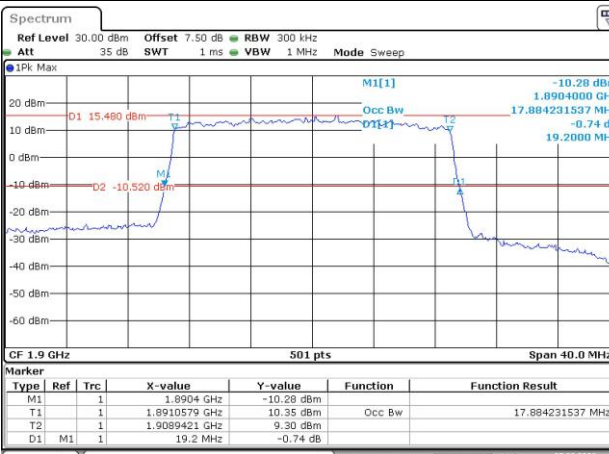
Middle



Date: 7.AUG.2023 08:50:39

Date: 7.AUG.2023 08:51:15

Highest



Date: 7.AUG.2023 08:51:51

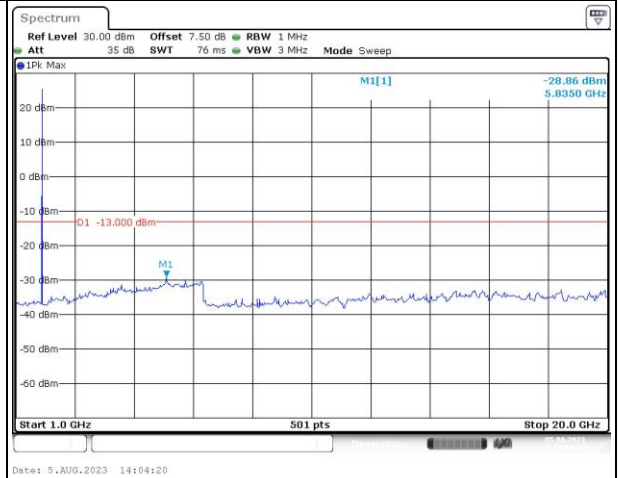
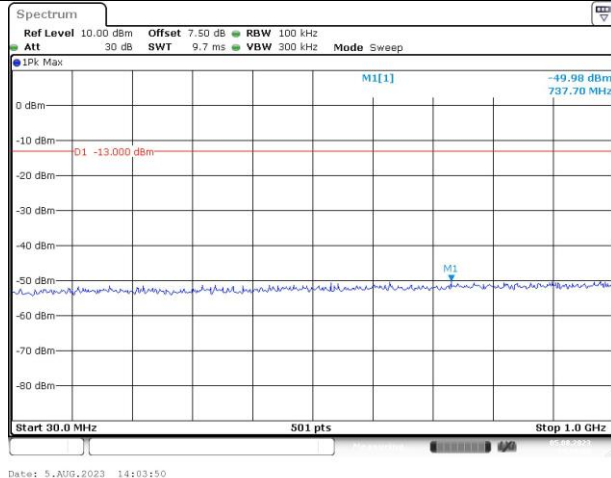
Date: 7.AUG.2023 08:52:31

### Spurious Emissions at Antenna Terminal

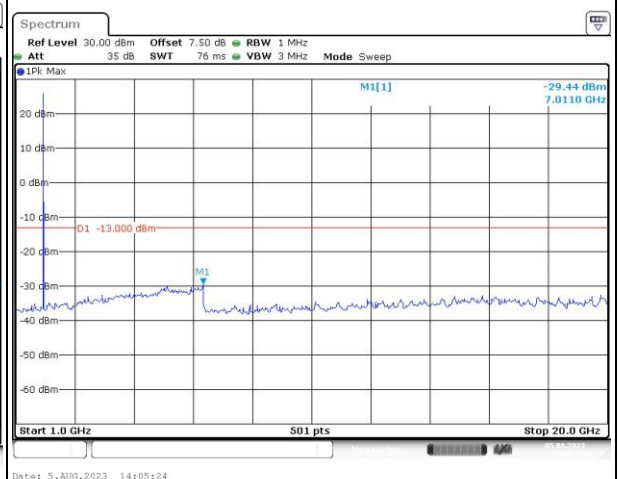
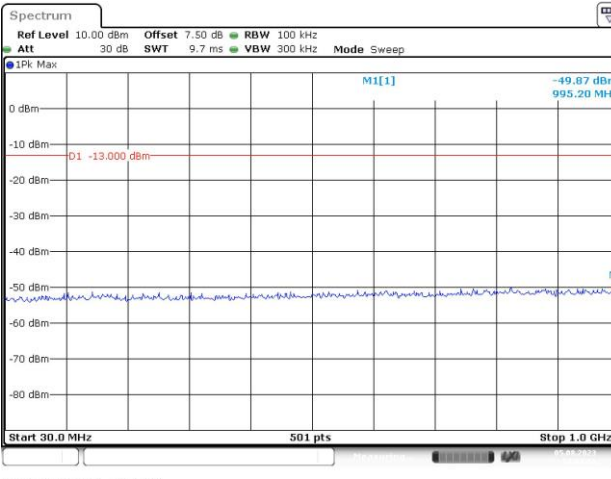
Channel

1.4MHz Bandwidth QPSK

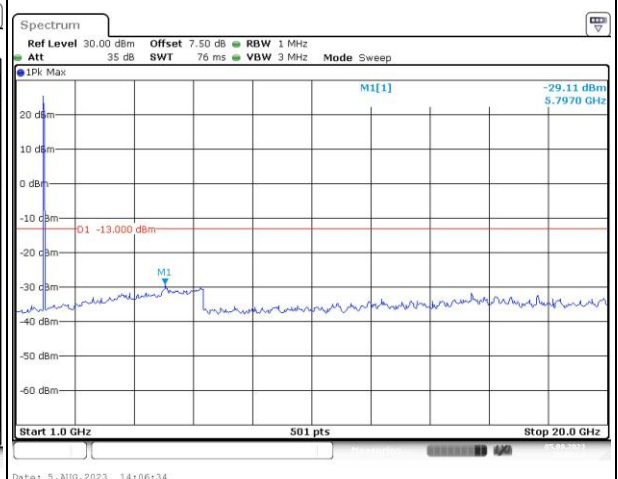
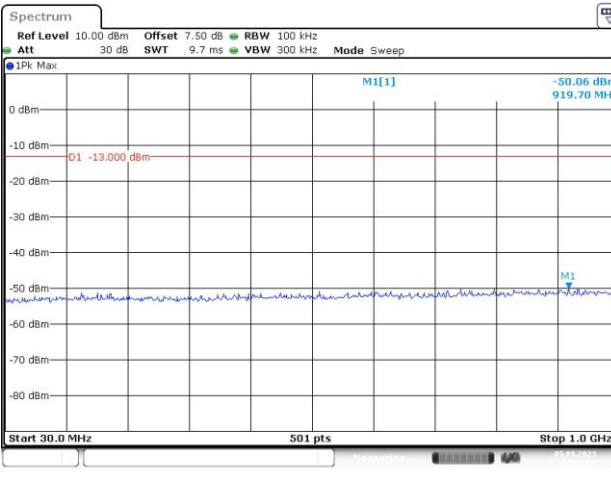
Lowest



Middle



Highest





### Spurious Emissions at Antenna Terminal

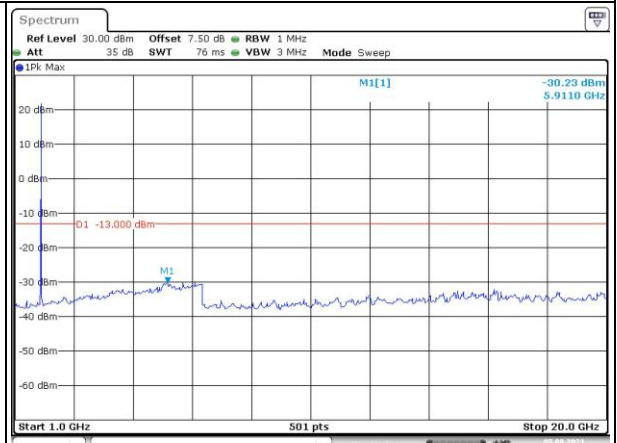
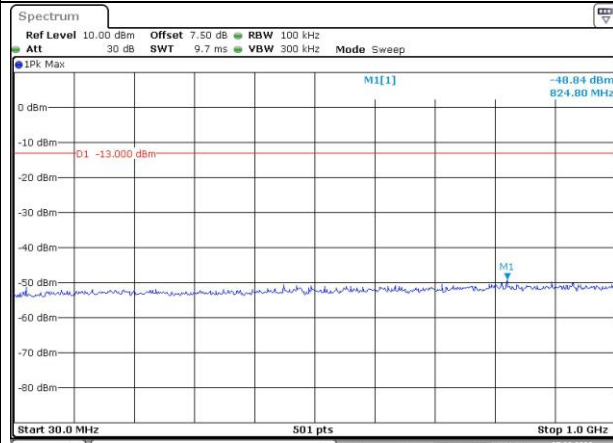
Channel	3MHz Bandwidth QPSK	
Lowest	<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz                      Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep                      IPk Max M1[1] -49.18 dBm 975.80 MHz                      -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 5.AUG.2023 14:24:54</p>	<p><b>Spectrum</b>                      Ref Level 30.00 dBm Offset 7.50 dB RBW 1 MHz                      Att 35 dB SWT 76 ms VBW 3 MHz Mode Sweep                      IPk Max M1[1] -29.58 dBm 7.0110 GHz                      -13.000 dBm                      Start 1.0 GHz 501 pts Stop 20.0 GHz                      Date: 5.AUG.2023 14:25:28</p>
	<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz                      Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep                      IPk Max M1[1] -49.77 dBm 950.60 MHz                      -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 5.AUG.2023 14:26:02</p>	<p><b>Spectrum</b>                      Ref Level 30.00 dBm Offset 7.50 dB RBW 1 MHz                      Att 35 dB SWT 76 ms VBW 3 MHz Mode Sweep                      IPk Max M1[1] -29.58 dBm 7.0110 GHz                      -13.000 dBm                      Start 1.0 GHz 501 pts Stop 20.0 GHz                      Date: 5.AUG.2023 14:26:32</p>
Highest	<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz                      Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep                      IPk Max M1[1] -49.87 dBm 747.30 MHz                      -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 5.AUG.2023 14:27:12</p>	<p><b>Spectrum</b>                      Ref Level 30.00 dBm Offset 7.50 dB RBW 1 MHz                      Att 35 dB SWT 76 ms VBW 3 MHz Mode Sweep                      IPk Max M1[1] -30.18 dBm 6.3280 GHz                      -13.000 dBm                      Start 1.0 GHz 501 pts Stop 20.0 GHz                      Date: 5.AUG.2023 14:27:50</p>

### Spurious Emissions at Antenna Terminal

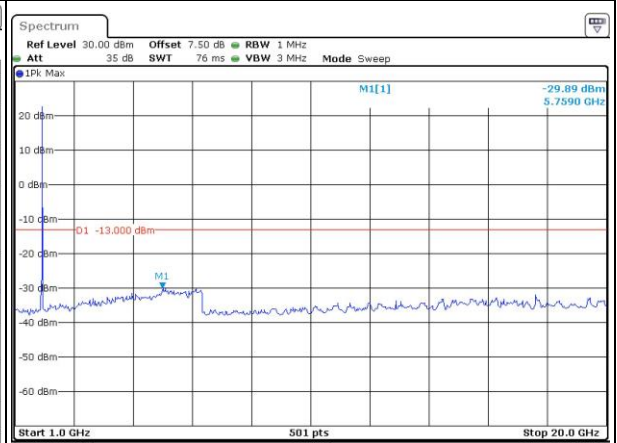
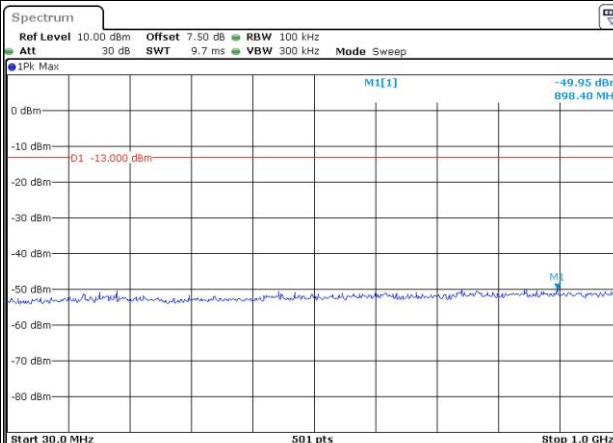
Channel

5MHz Bandwidth QPSK

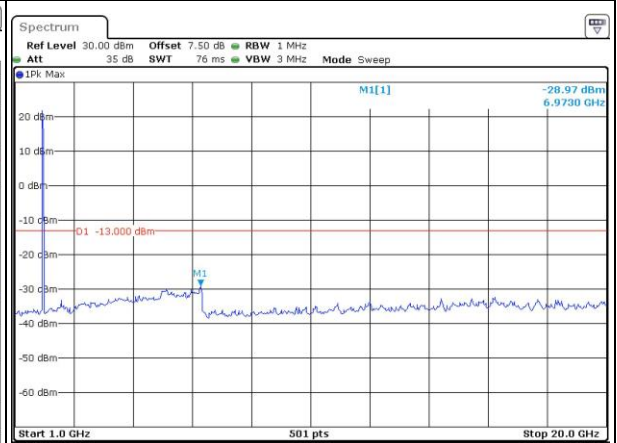
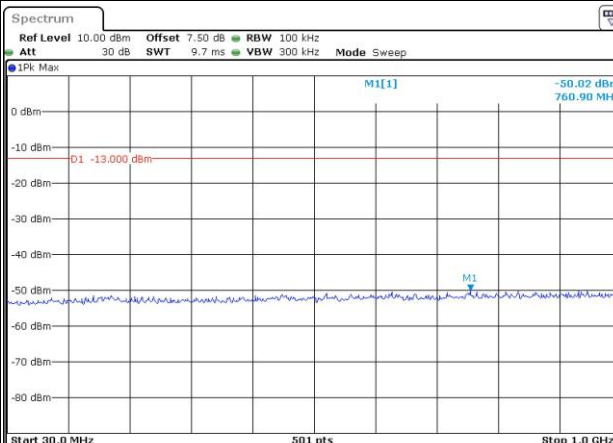
Lowest



Middle



Highest

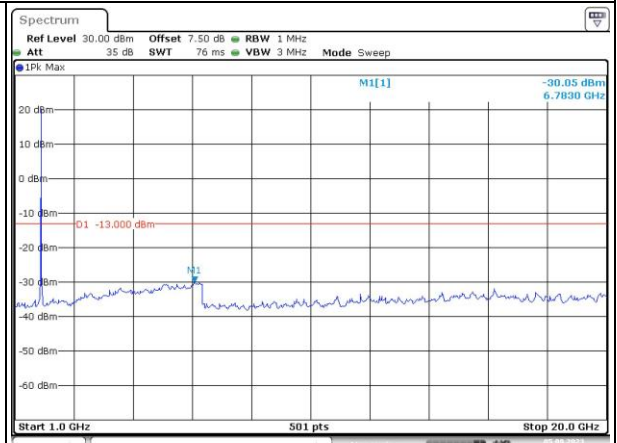
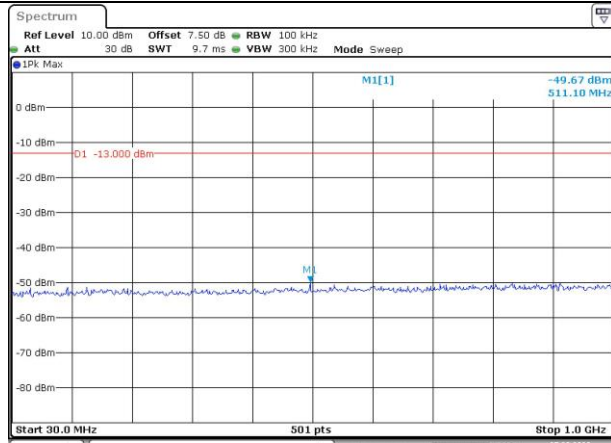


### Spurious Emissions at Antenna Terminal

Channel

10MHz Bandwidth QPSK

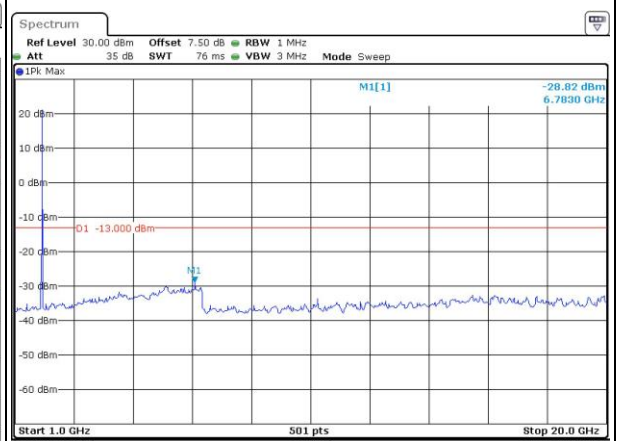
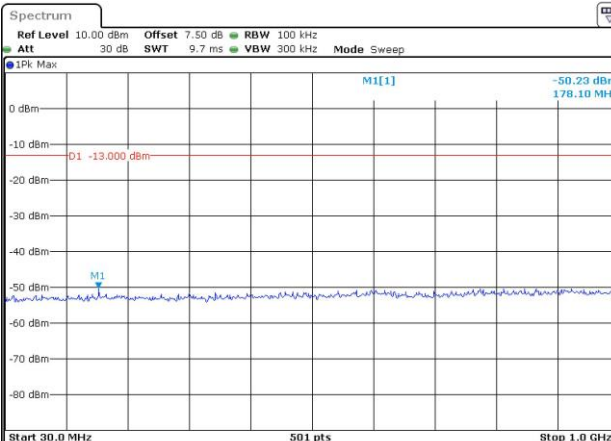
Lowest



Date: 5.AUG.2023 14:36:25

Date: 5.AUG.2023 14:36:59

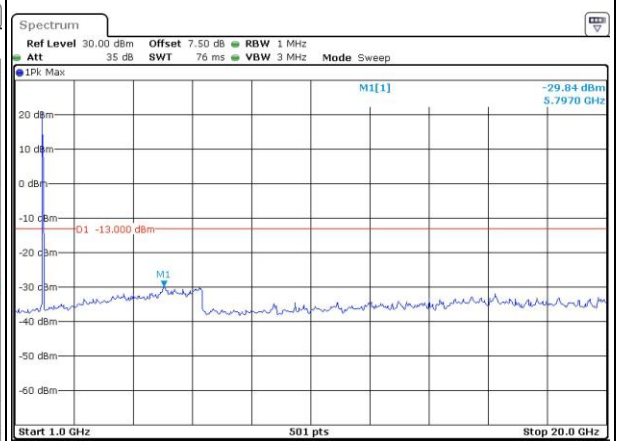
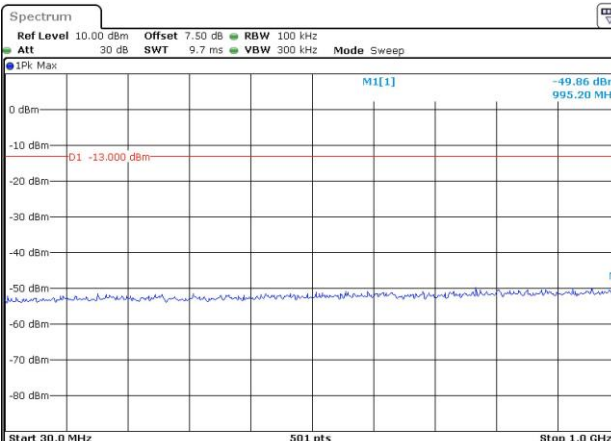
Middle



Date: 5.AUG.2023 14:37:29

Date: 5.AUG.2023 14:37:59

Highest



Date: 5.AUG.2023 14:38:36

Date: 5.AUG.2023 14:39:03



### Spurious Emissions at Antenna Terminal

Channel	15MHz Bandwidth QPSK	
Lowest	<p>Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>IPk Max M1[1] -49.51 dBm 993.50 MHz</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>Date: 5.AUG.2023 14:47:53</p>	<p>Ref Level 30.00 dBm Offset 7.50 dB RBW 1 MHz Att 35 dB SWT 76 ms VBW 3 MHz Mode Sweep</p> <p>IPk Max M1[1] -29.74 dBm 6.3280 GHz</p> <p>Start 1.0 GHz 501 pts Stop 20.0 GHz</p> <p>Date: 5.AUG.2023 14:48:23</p>
	<p>Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>IPk Max M1[1] -50.01 dBm 993.20 MHz</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>Date: 5.AUG.2023 14:49:01</p>	<p>Ref Level 30.00 dBm Offset 7.50 dB RBW 1 MHz Att 35 dB SWT 76 ms VBW 3 MHz Mode Sweep</p> <p>IPk Max M1[1] -29.52 dBm 5.8730 GHz</p> <p>Start 1.0 GHz 501 pts Stop 20.0 GHz</p> <p>Date: 5.AUG.2023 14:49:24</p>
Highest	<p>Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>IPk Max M1[1] -50.32 dBm 923.50 MHz</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>Date: 5.AUG.2023 14:49:54</p>	<p>Ref Level 30.00 dBm Offset 7.50 dB RBW 1 MHz Att 35 dB SWT 76 ms VBW 3 MHz Mode Sweep</p> <p>IPk Max M1[1] -30.10 dBm 6.7460 GHz</p> <p>Start 1.0 GHz 501 pts Stop 20.0 GHz</p> <p>Date: 5.AUG.2023 14:50:24</p>

### Spurious Emissions at Antenna Terminal

Channel	20MHz Bandwidth QPSK	
Lowest	<p>Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>IPk Max M1[1] -49.98 dBm 977.70 MHz</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>Date: 5.AUG.2023 14:56:00</p>	<p>Ref Level 30.00 dBm Offset 7.50 dB RBW 1 MHz Att 35 dB SWT 76 ms VBW 3 MHz Mode Sweep</p> <p>IPk Max M1[1] -29.96 dBm 6.9730 GHz</p> <p>Start 1.0 GHz 501 pts Stop 20.0 GHz</p> <p>Date: 5.AUG.2023 14:56:34</p>
	<p>Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>IPk Max M1[1] -49.34 dBm 019.00 MHz</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>Date: 5.AUG.2023 14:57:01</p>	<p>Ref Level 30.00 dBm Offset 7.50 dB RBW 1 MHz Att 35 dB SWT 76 ms VBW 3 MHz Mode Sweep</p> <p>IPk Max M1[1] -29.62 dBm 5.7970 GHz</p> <p>Start 1.0 GHz 501 pts Stop 20.0 GHz</p> <p>Date: 5.AUG.2023 14:57:20</p>
Highest	<p>Ref Level 10.00 dBm Offset 7.50 dB RBW 100 kHz Att 30 dB SWT 9.7 ms VBW 300 kHz Mode Sweep</p> <p>IPk Max M1[1] -50.29 dBm 621.50 MHz</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>Date: 5.AUG.2023 14:58:02</p>	<p>Ref Level 30.00 dBm Offset 7.50 dB RBW 1 MHz Att 35 dB SWT 76 ms VBW 3 MHz Mode Sweep</p> <p>IPk Max M1[1] -30.39 dBm 5.7970 GHz</p> <p>Start 1.0 GHz 501 pts Stop 20.0 GHz</p> <p>Date: 5.AUG.2023 14:58:36</p>

Out of band emission, Band Edge

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