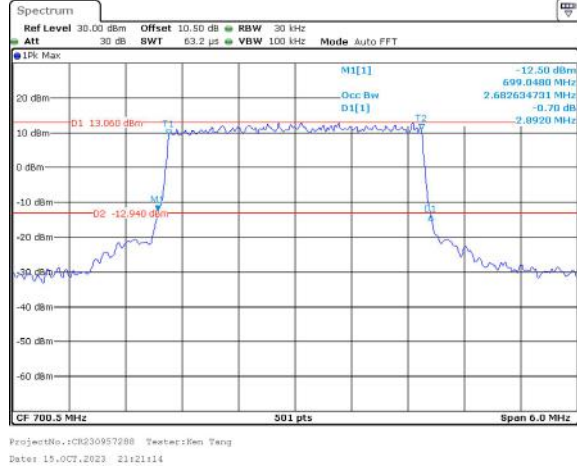
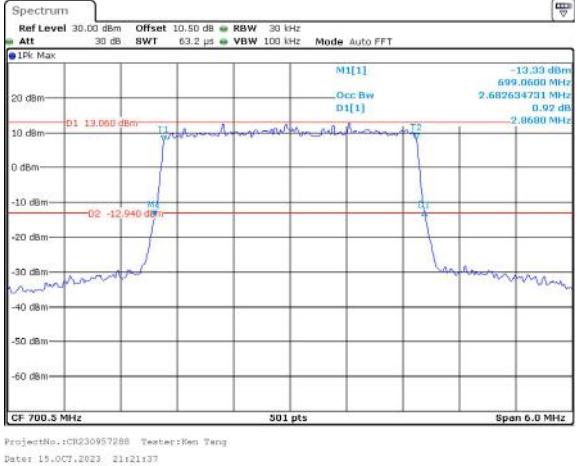
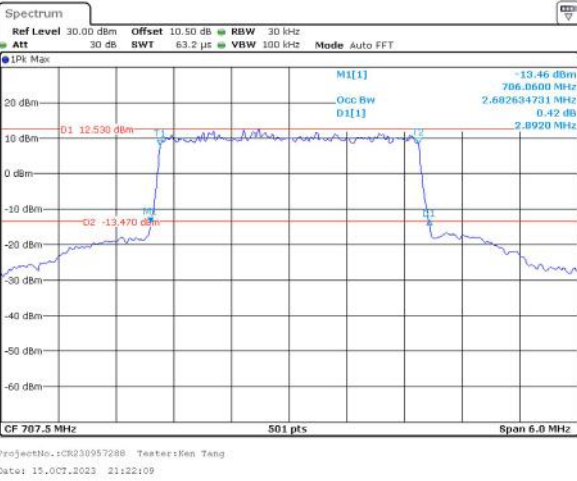
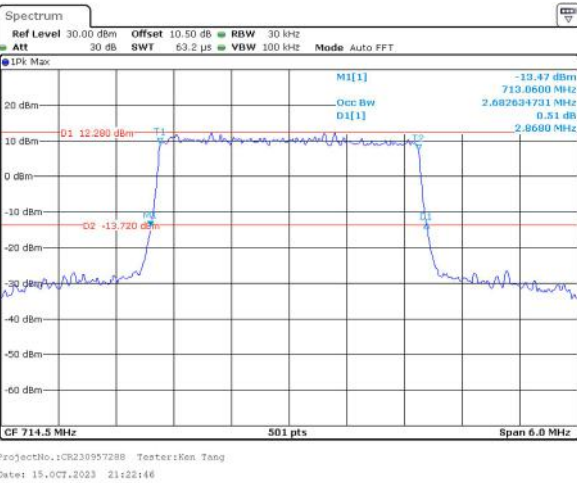


Occupied Bandwidth

Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

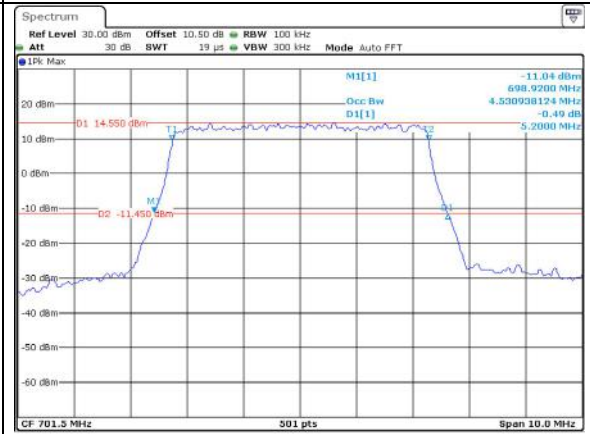
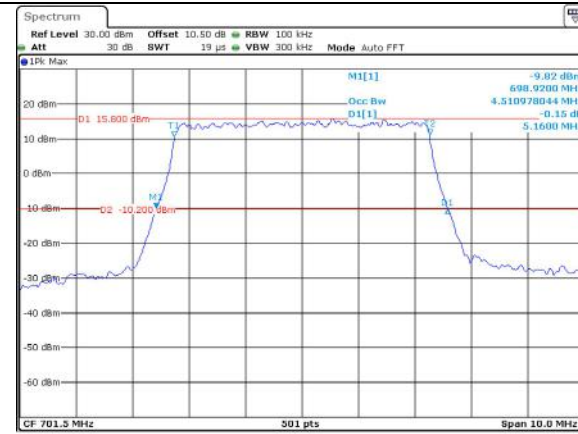
Occupied Bandwidth

Channel

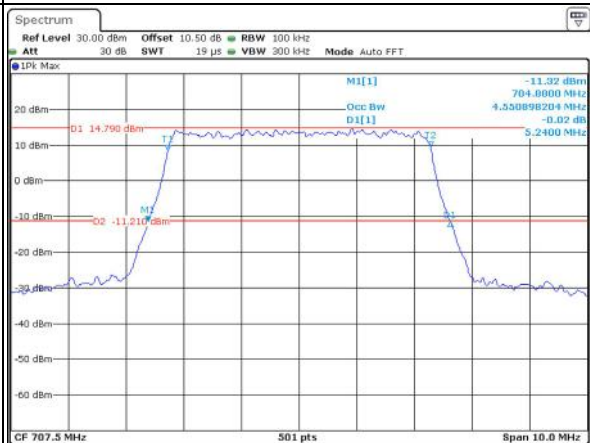
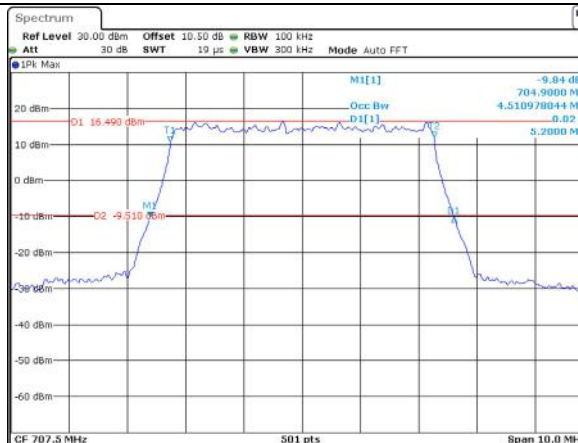
5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

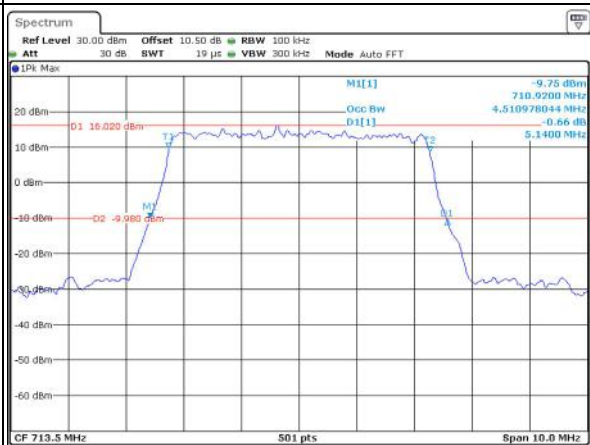
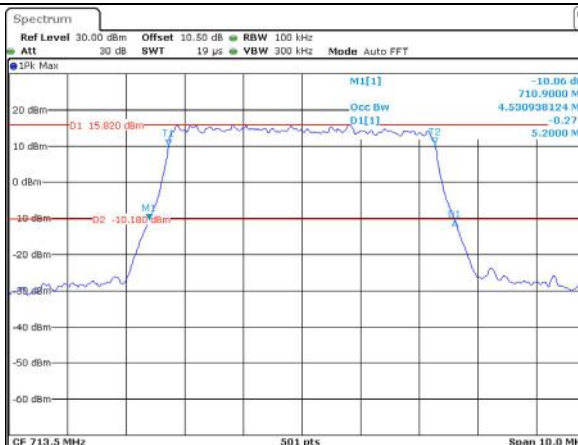
Lowest



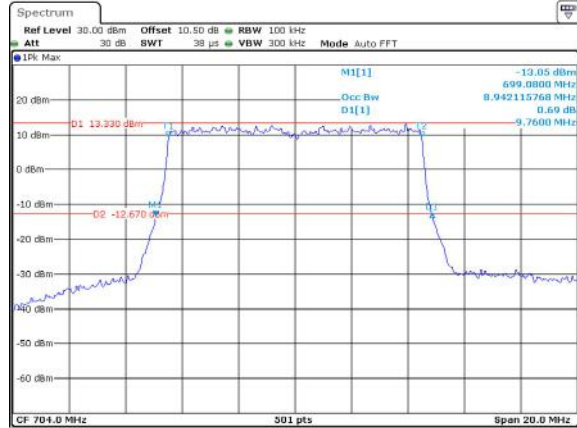
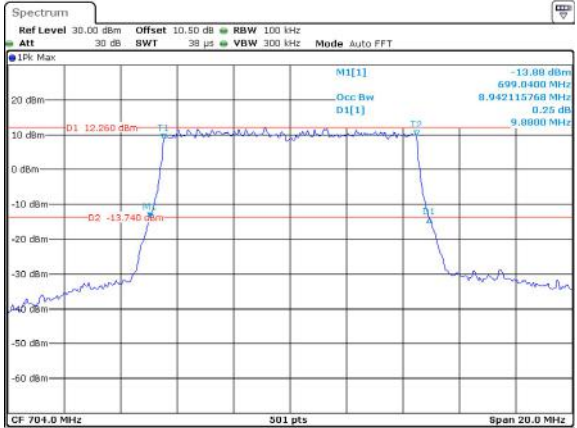
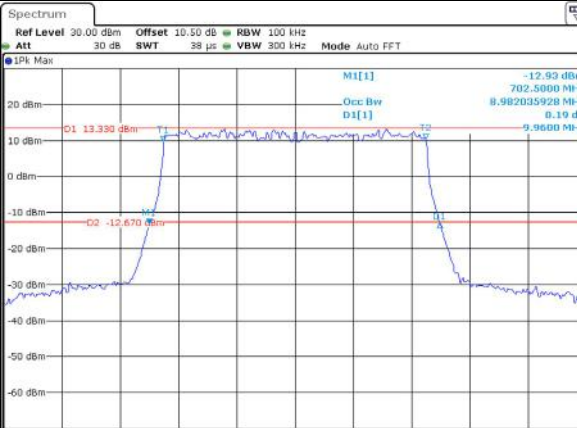
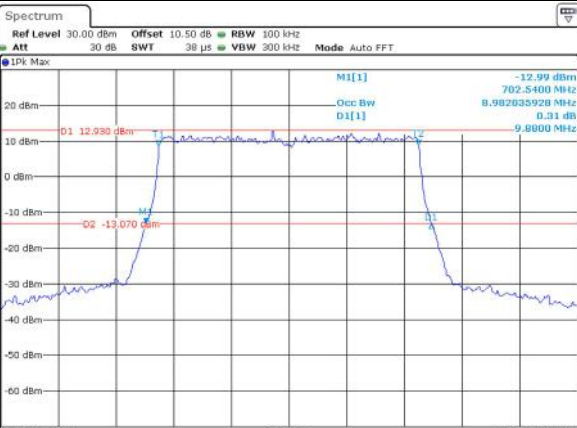
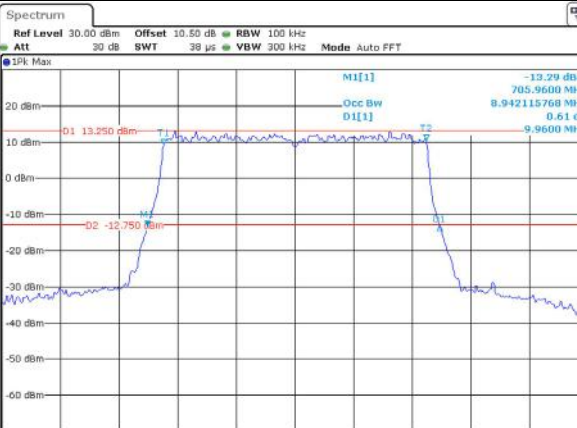
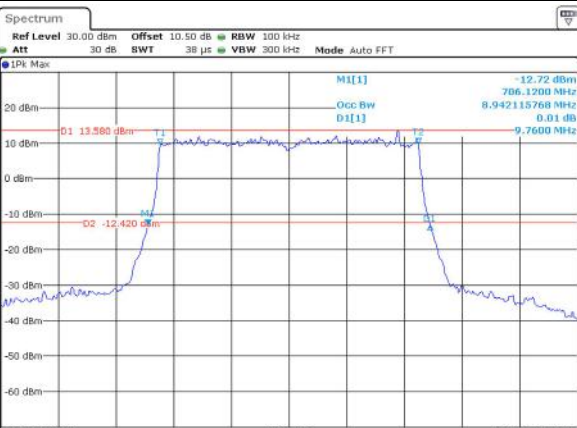
Middle



Highest



Occupied Bandwidth

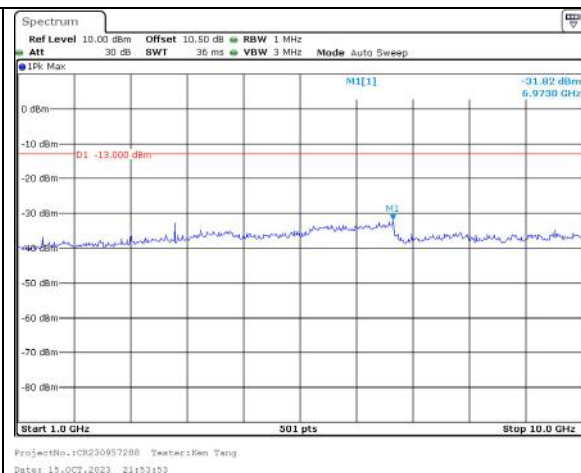
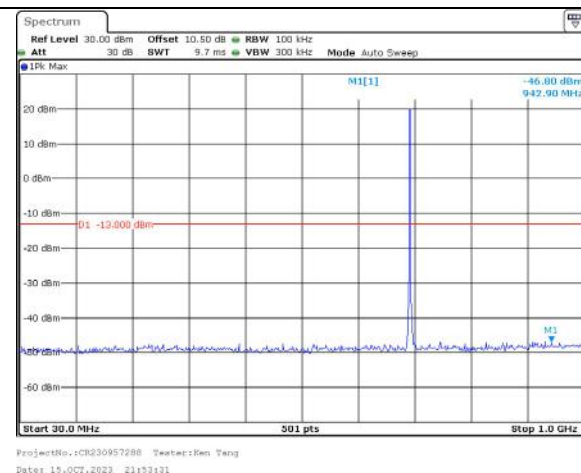
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 21:26:14	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 21:26:40
Middle	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 21:27:07	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 21:27:43
Highest	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 21:28:06	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 21:28:33

Spurious Emissions at Antenna Terminal

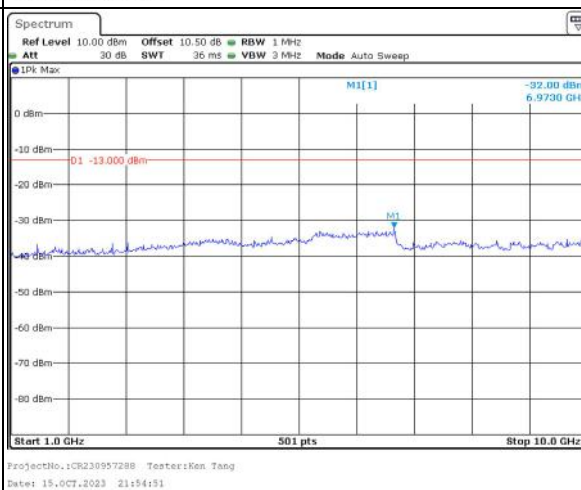
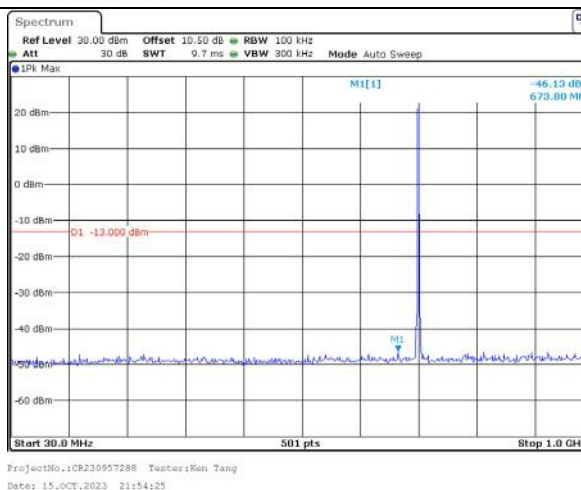
Channel

1.4MHz Bandwidth QPSK

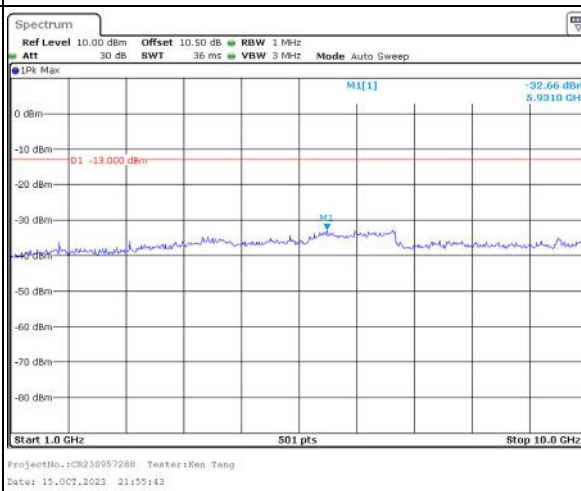
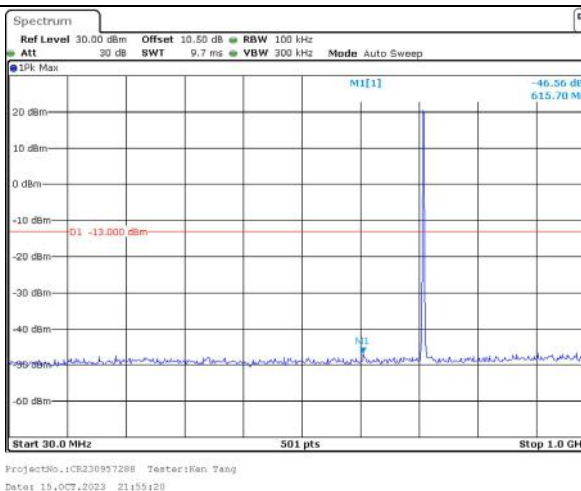
Lowest



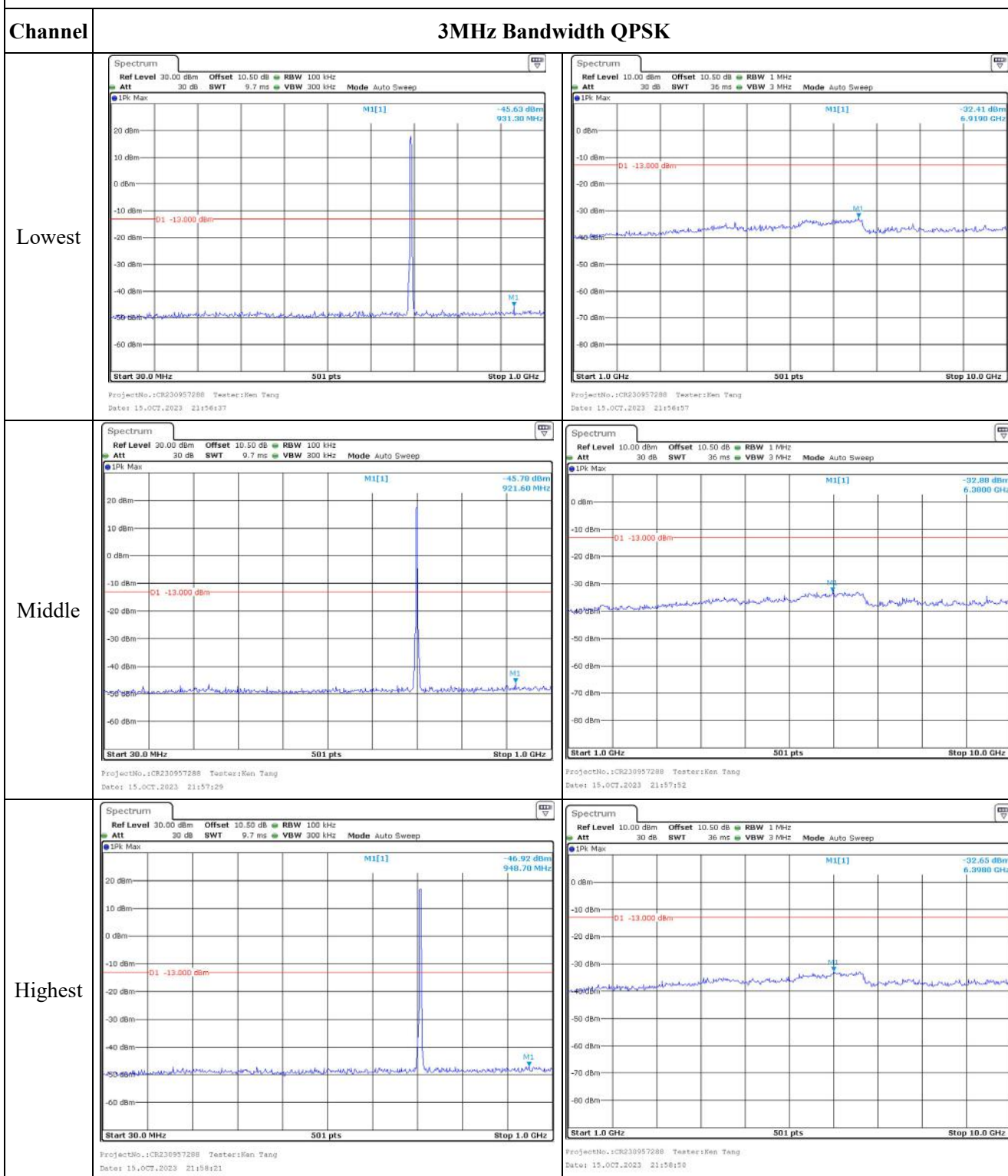
Middle



Highest



Spurious Emissions at Antenna Terminal

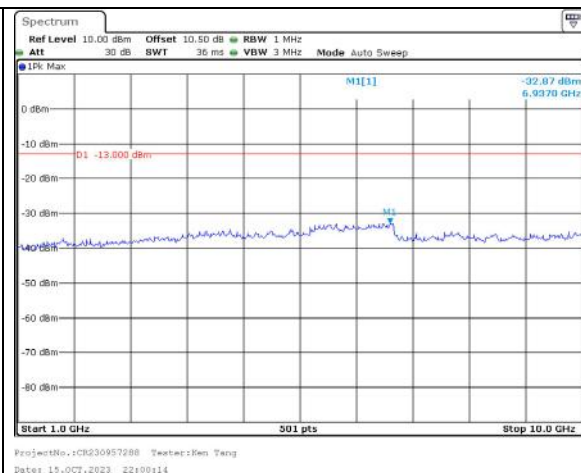
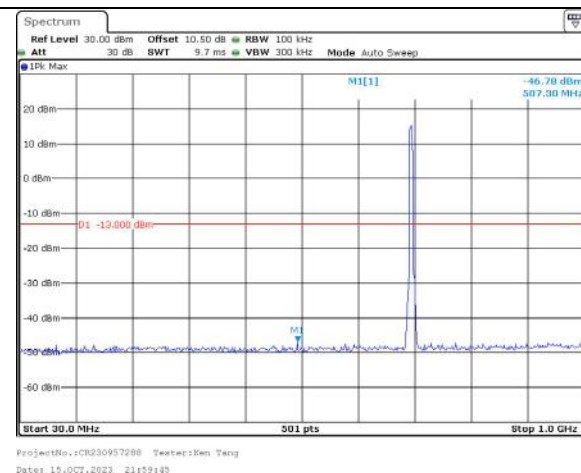


Spurious Emissions at Antenna Terminal

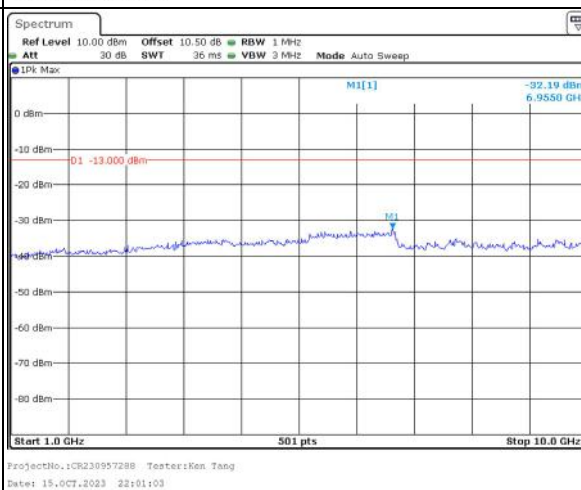
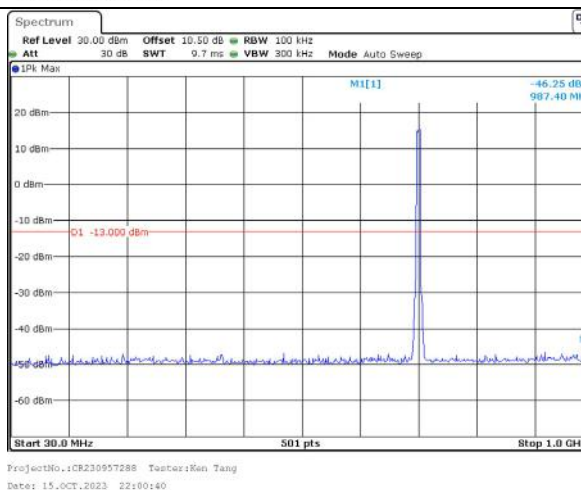
Channel

5MHz Bandwidth QPSK

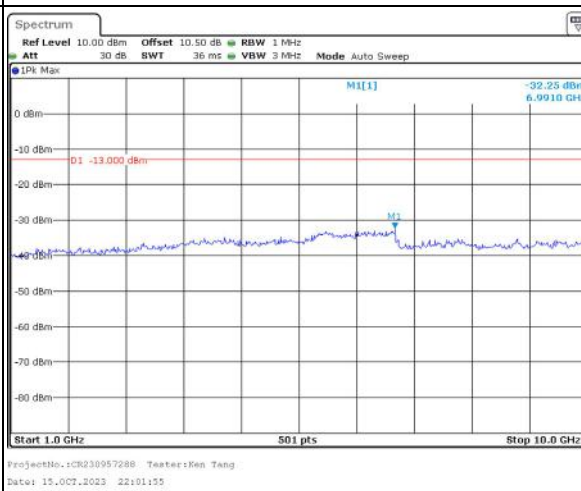
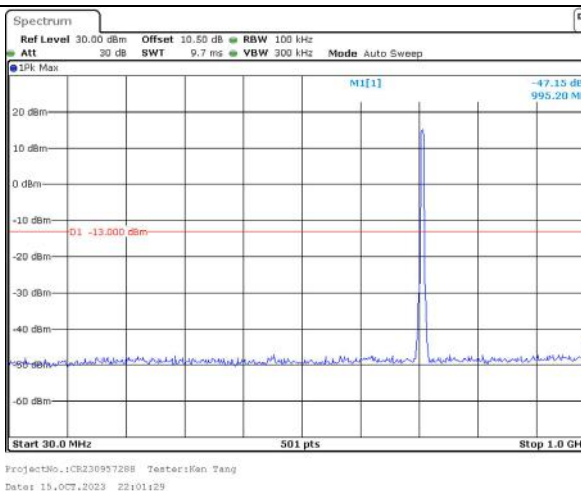
Lowest



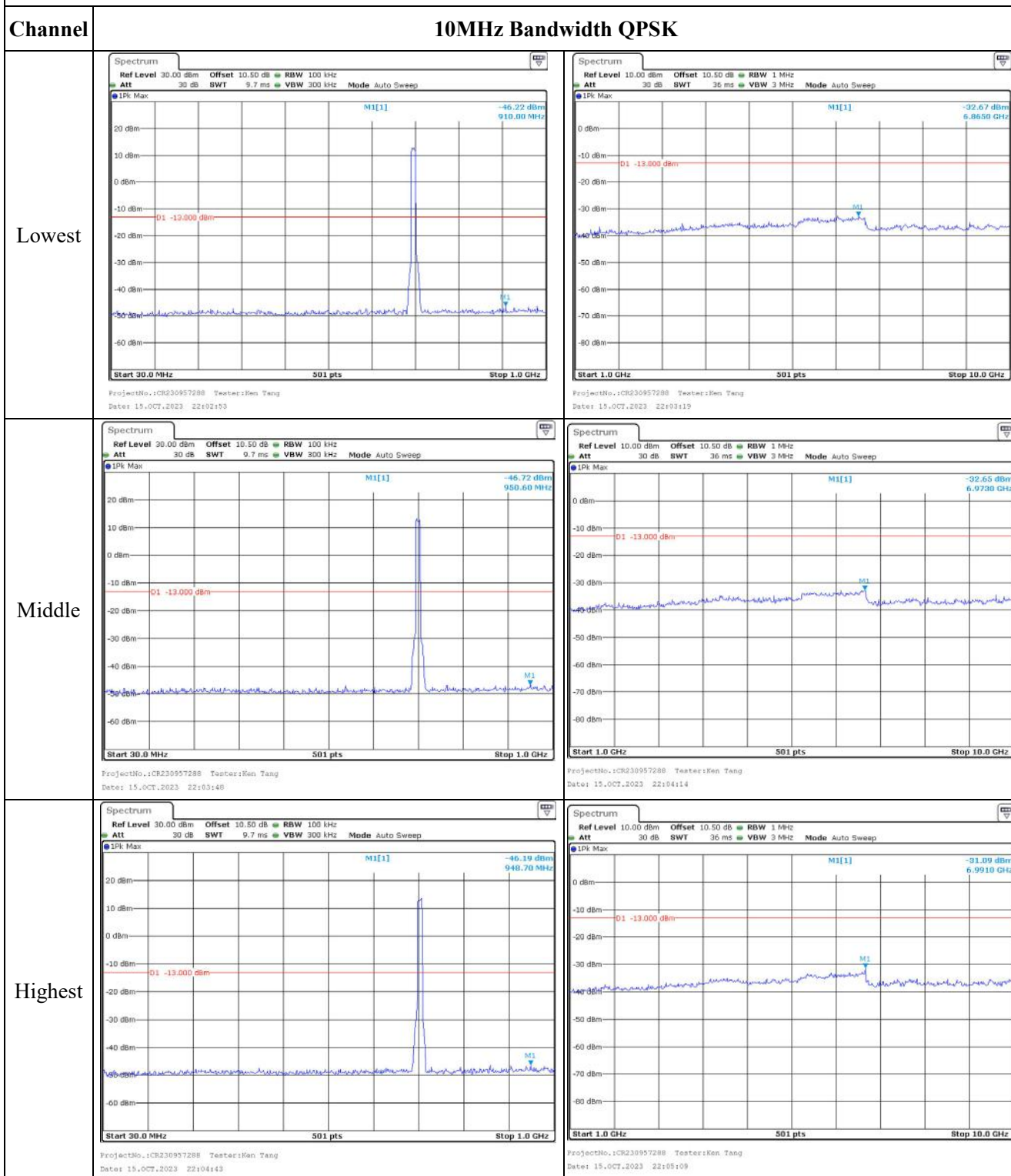
Middle



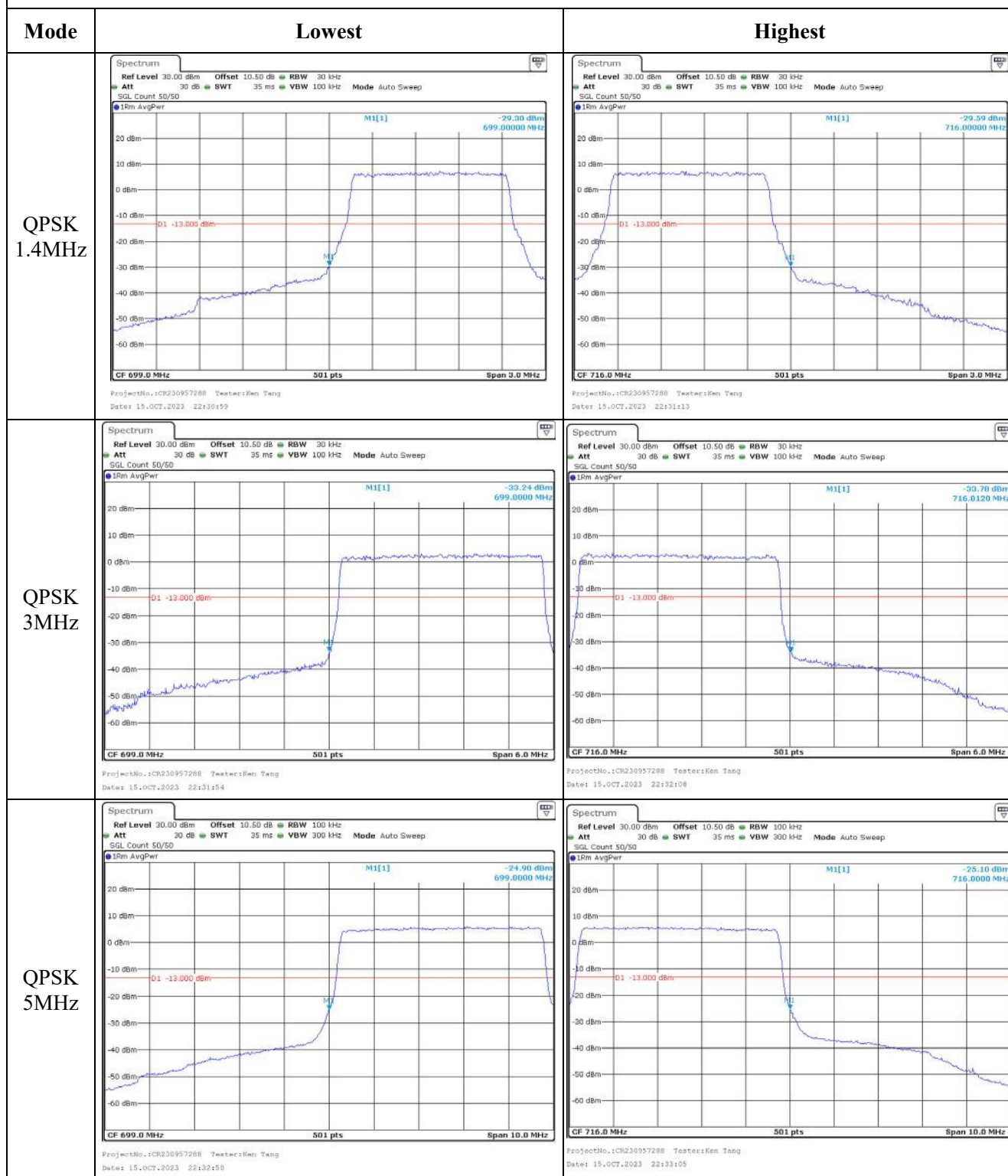
Highest

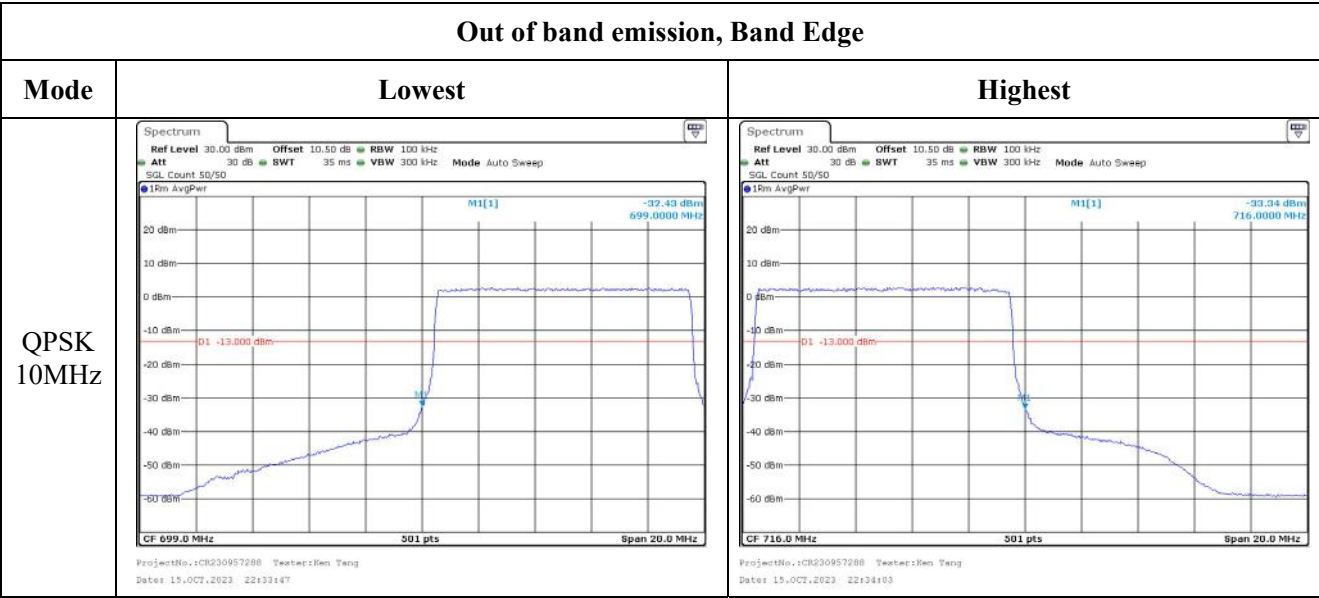


Spurious Emissions at Antenna Terminal

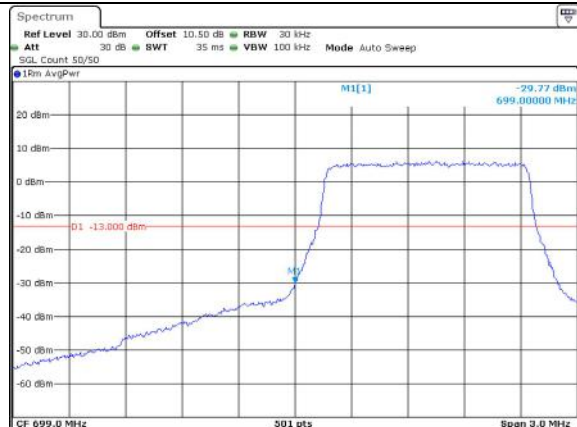
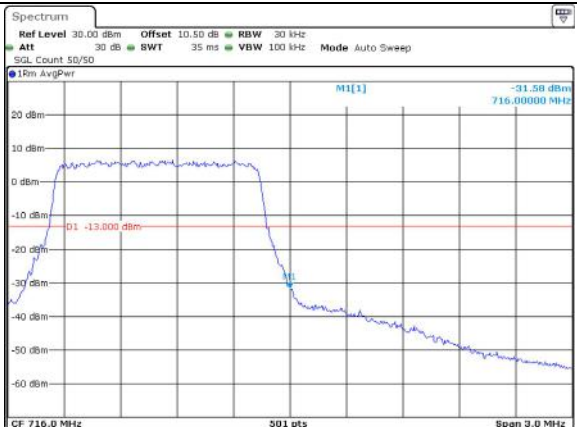
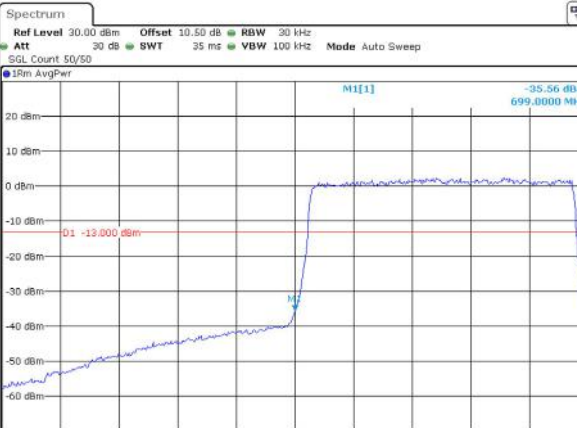
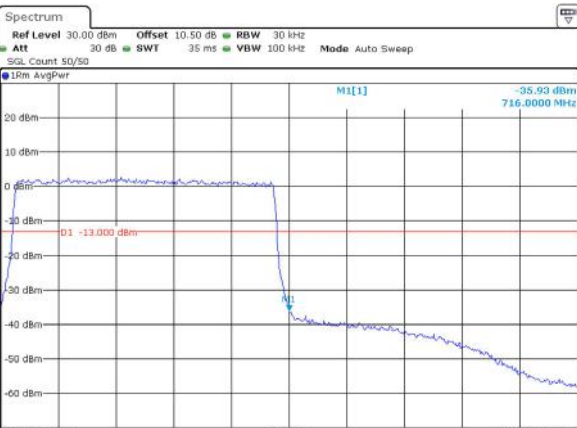


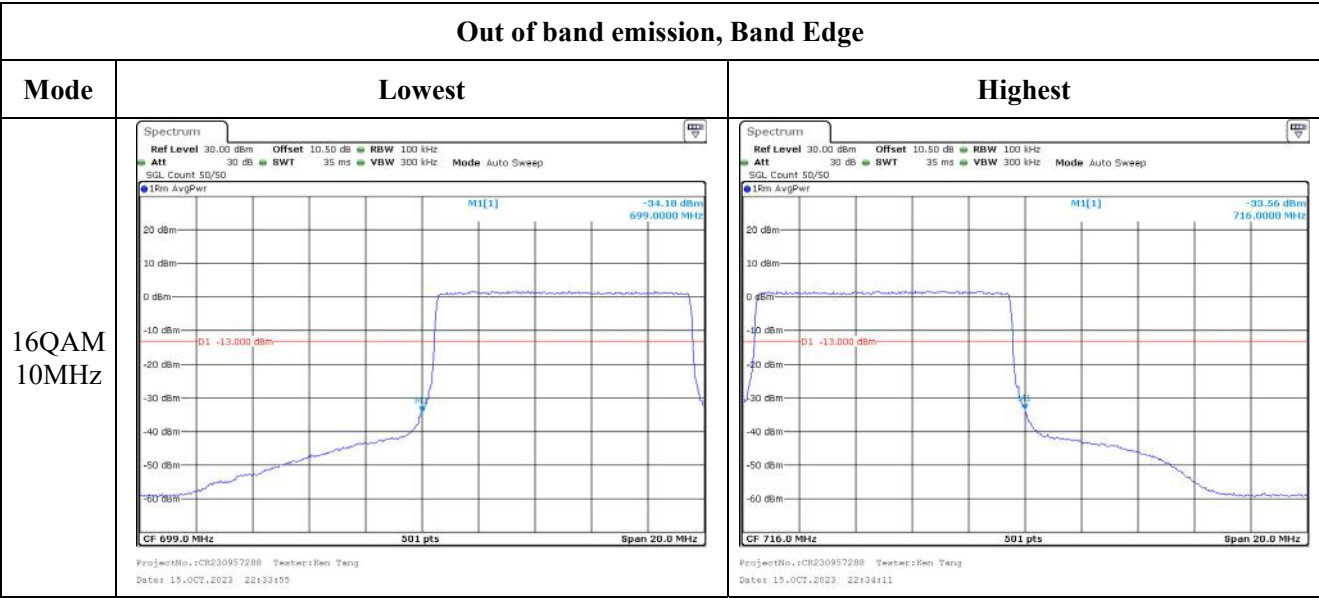
Out of band emission, Band Edge





Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 22:31:06	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 22:31:20
16QAM 3MHz	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 22:32:01	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 22:32:15
16QAM 5MHz	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 22:32:57	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 15.OCT.2023 22:33:12



4.11 Antenna Port Test Data and Results for LTE Band 13

Serial Number:	2BUF-5	Test Date:	2023/10/15~2023/10/18
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ken Tang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26	Relative Humidity: (%)	49	ATM Pressure: (kPa)	101.5
----------------------	----	---------------------------	----	------------------------	-------

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
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
Minl-Circuits	Power Splitter	ZFRSC-183-S+	S F448201619	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/28	2024/9/27
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)
5MHz	779.5	/	784.5
10MHz	/	782	/

Test Data:**FCC§2.1046;§ 27.50(c) (10)****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	22.78	/	22.81	15.87	34.77
	RB1#13	22.92	/	22.84		
	RB1#24	22.79	/	22.69		
	RB15#0	21.88	/	21.79		
	RB15#10	21.91	/	21.92		
	RB25#0	21.87	/	21.87		
5MHz 16QAM	RB1#0	21.89	/	22.14	15.12	34.77
	RB1#13	22.04	/	22.17		
	RB1#24	21.85	/	21.98		
	RB15#0	20.98	/	20.83		
	RB15#10	20.98	/	20.94		
	RB25#0	20.97	/	20.92		
10MHz QPSK	RB1#0	/	22.83	/	15.87	34.77
	RB1#25	/	22.92	/		
	RB1#49	/	22.76	/		
	RB25#0	/	21.84	/		
	RB25#25	/	21.9	/		
	RB50#0	/	21.86	/		
10MHz 16QAM	RB1#0	/	21.69	/	14.77	34.77
	RB1#25	/	21.82	/		
	RB1#49	/	21.69	/		
	RB25#0	/	20.94	/		
	RB25#25	/	21.04	/		
	RB50#0	/	20.98	/		

Note:

ERP= Conducted Power(dBm) - Lc(dB) + G_T(dBd)G_T(dBd)=G_T(dBi)-2.15**Result:****Pass**

Peak-to-average Ratio(PAR)					
Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
10MHz QPSK	RB1#0	/	9.31	/	13
	RB50#0	/	7.09	/	13
10MHz 16QAM	RB1#0	/	8.33	/	13
	RB50#0	/	6.06	/	13
Result:					Pass

FCC §2.1049, §27.53:Occupied Bandwidth						
Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
5MHz QPSK	4.511	/	4.511	5.200	/	5.180
5MHz 16QAM	4.551	/	4.531	5.240	/	5.220
10MHz QPSK	/	8.942	/	/	9.920	/
10MHz 16QAM	/	8.942	/	/	9.920	/
Note: The test plots please refer to the Plots of Occupied Bandwidth						

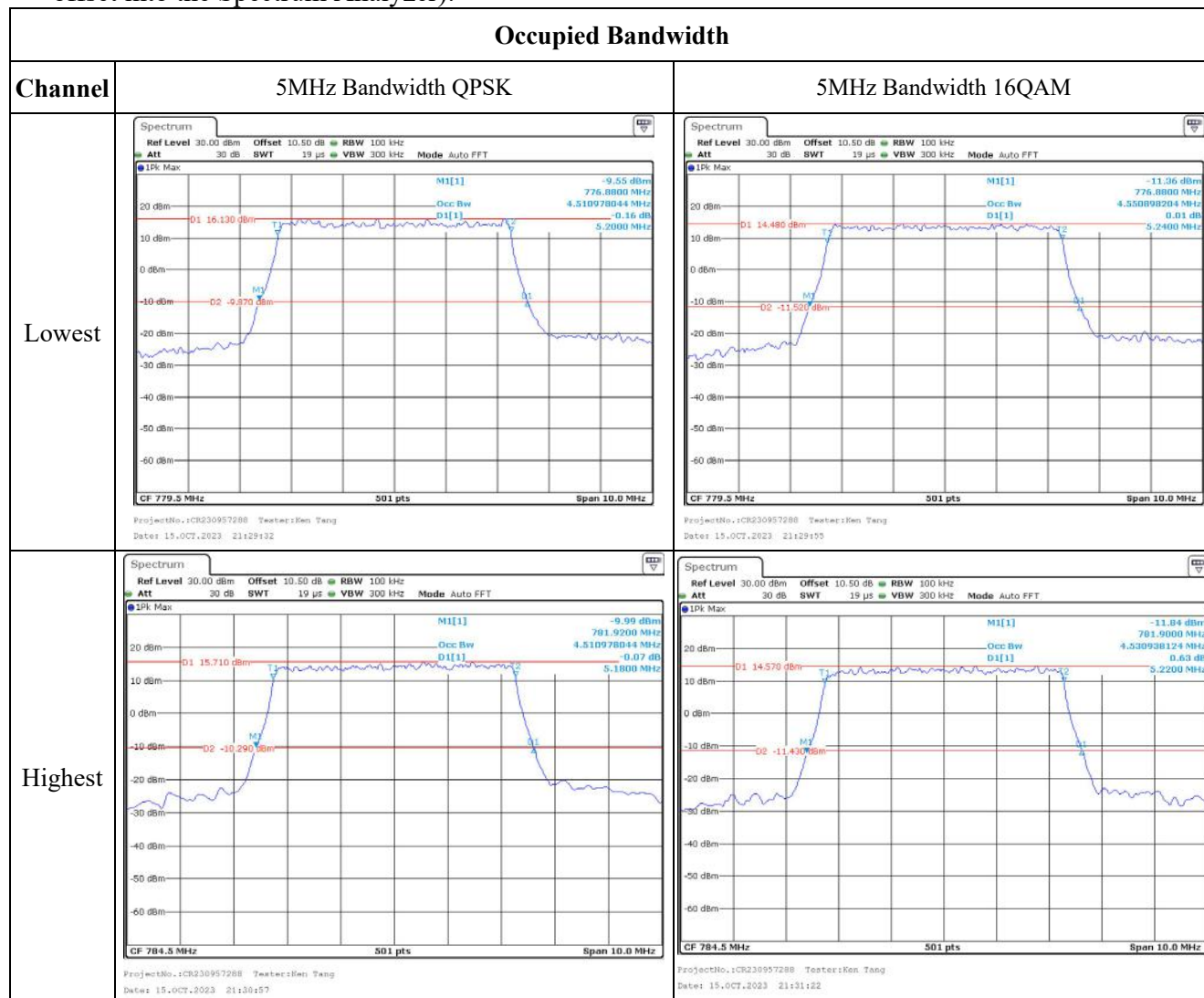
FCC §2.1051, §27.53:Spurious Emissions at Antenna Terminal	
Result:	Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.

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

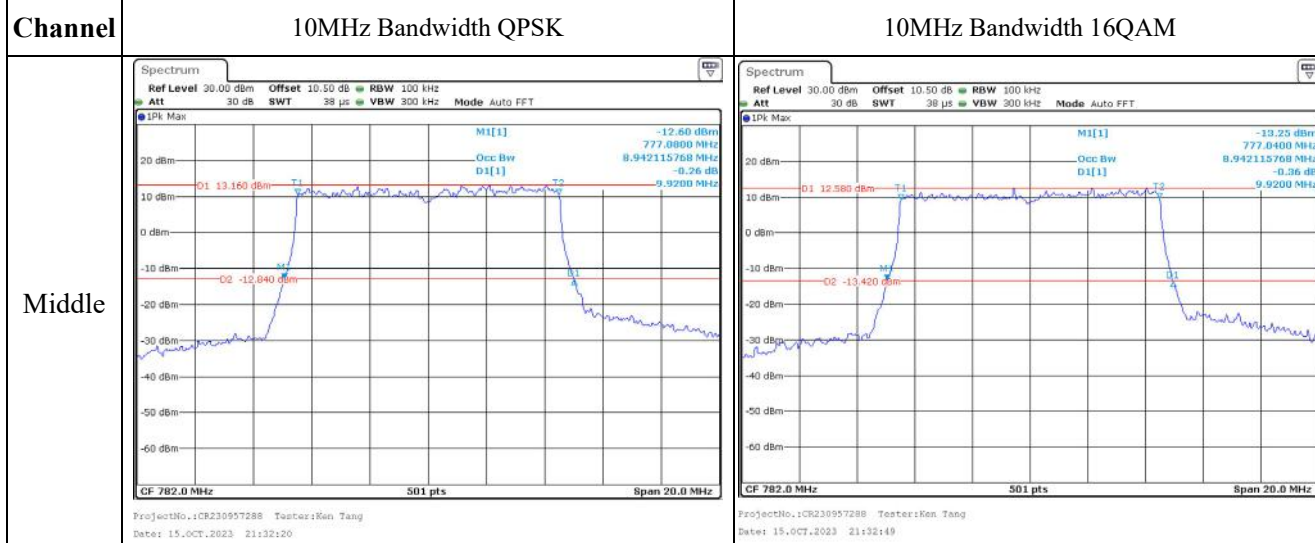
FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	777.018	777.00	786.989	787.00
	-20	3.87	777.021	777.00	786.971	787.00
	-10	3.87	777.024	777.00	786.992	787.00
	0	3.87	777.023	777.00	786.980	787.00
	10	3.87	777.004	777.00	786.997	787.00
	20	3.87	777.009	777.00	786.974	787.00
	30	3.87	777.020	777.00	786.985	787.00
	40	3.87	777.023	777.00	786.988	787.00
	50	3.87	777.029	777.00	786.978	787.00
Frequency Stability vs. Voltage	20	3.29	777.019	777.00	786.986	787.00
	20	4.45	777.023	777.00	786.983	787.00
					Result:	Pass

Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	777.001	777.00	786.981	787.00
	-20	3.87	777.006	777.00	786.996	787.00
	-10	3.87	777.003	777.00	786.998	787.00
	0	3.87	777.027	777.00	786.994	787.00
	10	3.87	777.013	777.00	786.999	787.00
	20	3.87	777.026	777.00	786.981	787.00
	30	3.87	777.011	777.00	786.974	787.00
	40	3.87	777.029	777.00	786.992	787.00
	50	3.87	777.011	777.00	786.975	787.00
Frequency Stability vs. Voltage	20	3.29	777.012	777.00	786.986	787.00
	20	4.45	777.020	777.00	786.993	787.00
					Result:	Pass

Test Plots(Note: The 10.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):



Occupied Bandwidth

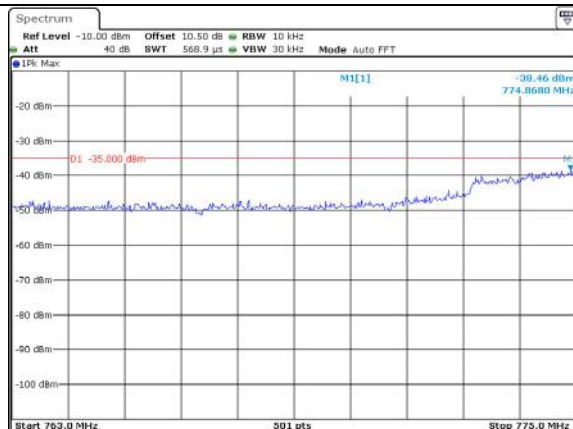


Spurious Emissions at Antenna Terminal

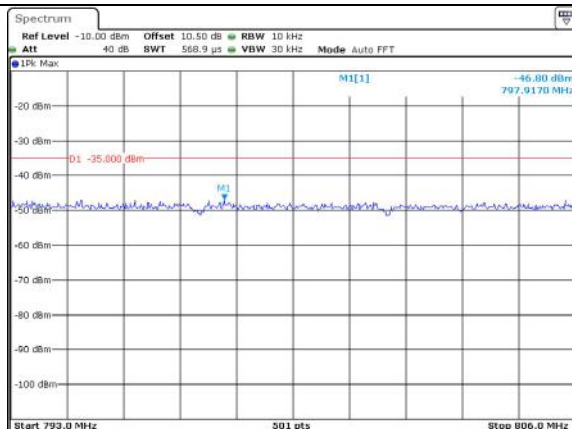
Channel

5MHz Bandwidth QPSK

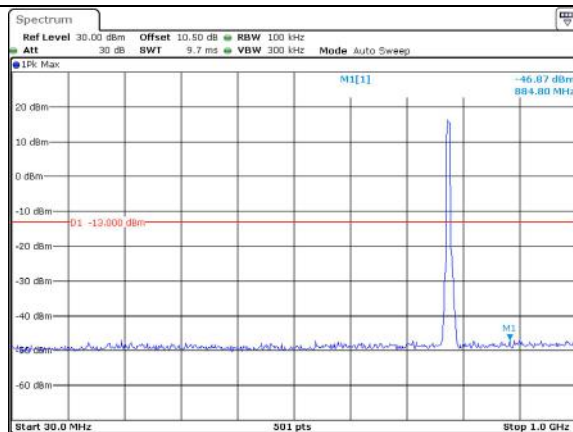
Lowest



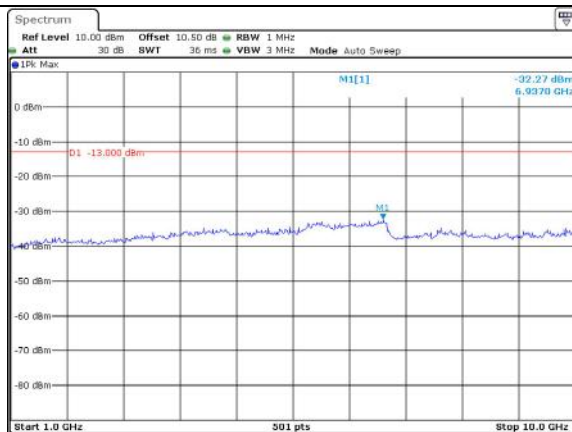
ProjectNo.:CR230957288 Testee:Ken Tang
Date: 15.OCT.2023 22:07:09



ProjectNo.:CR230957288 Testee:Ken Tang
Date: 15.OCT.2023 22:07:10



ProjectNo.:CR230957288 Testee:Ken Tang
Date: 15.OCT.2023 22:06:13



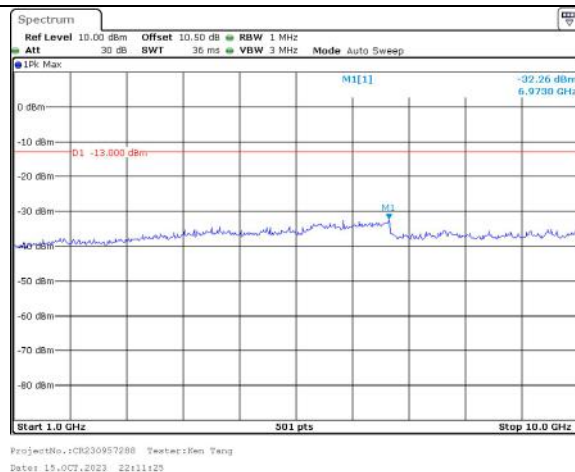
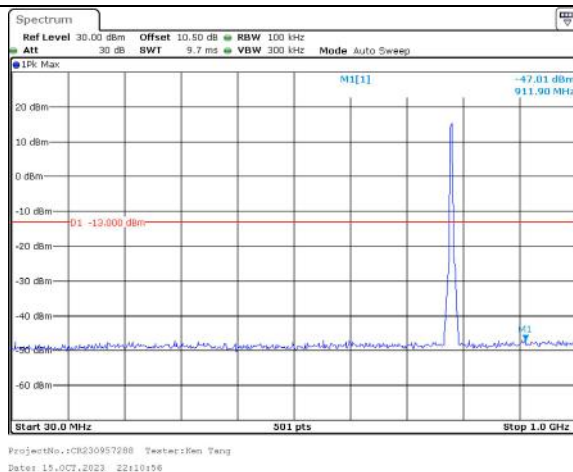
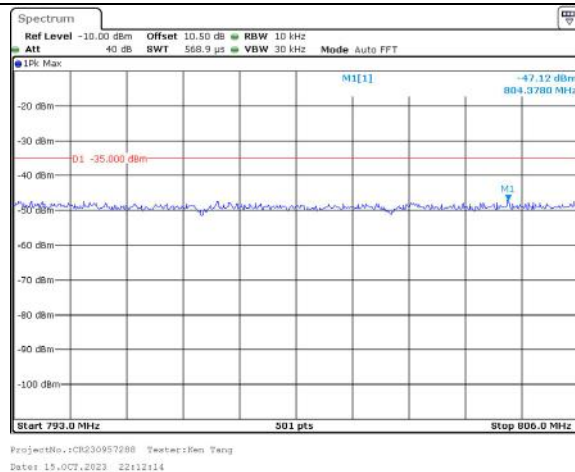
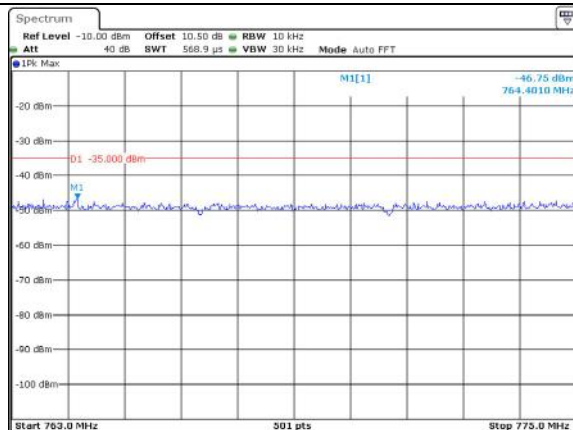
ProjectNo.:CR230957288 Testee:Ken Tang
Date: 15.OCT.2023 22:06:48

Spurious Emissions at Antenna Terminal

Channel

5MHz Bandwidth QPSK

Highest

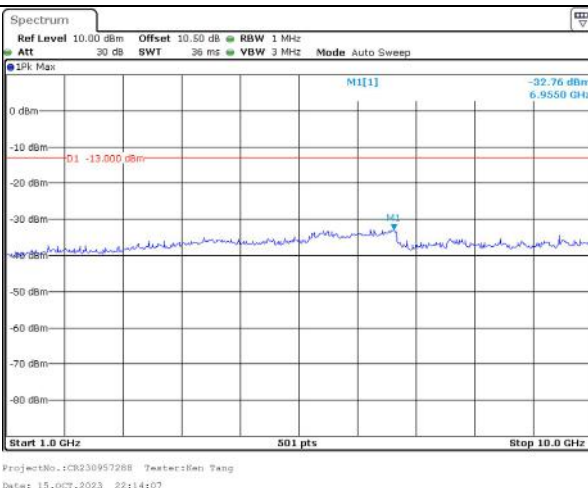
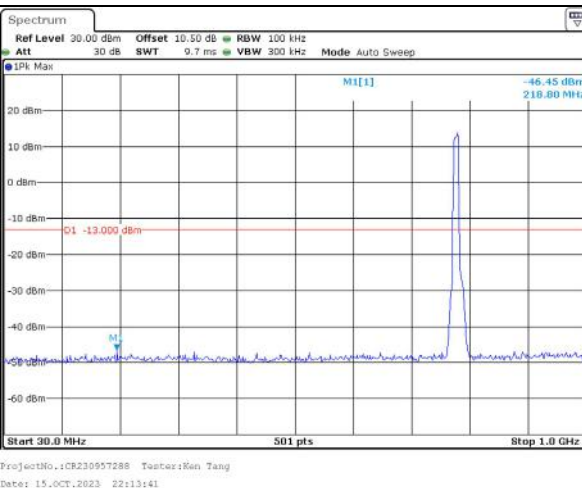
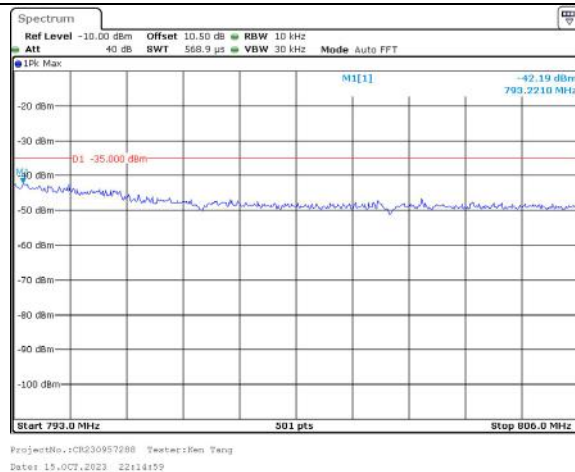
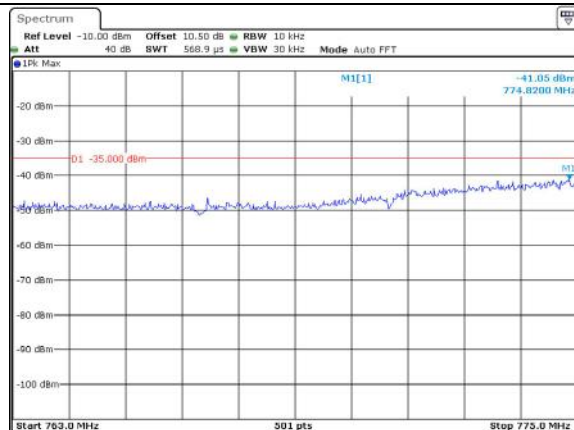


Spurious Emissions at Antenna Terminal

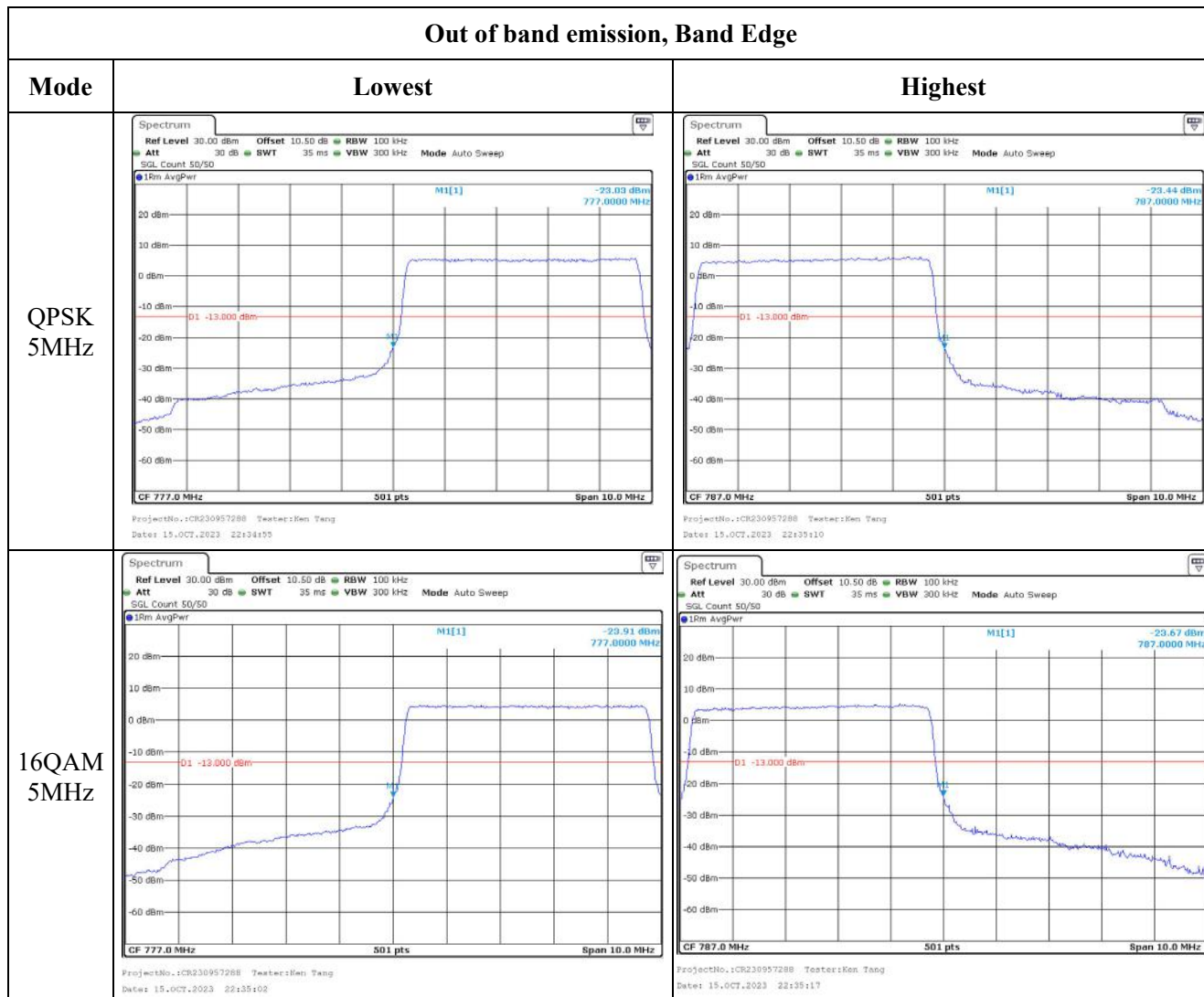
Channel

10MHz Bandwidth QPSK

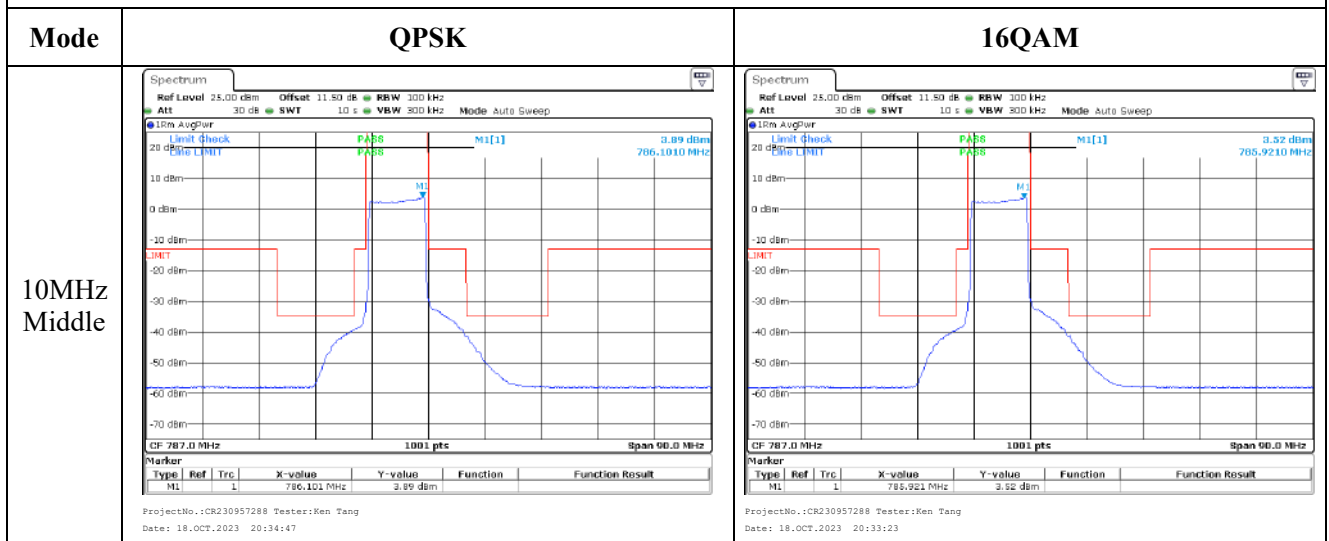
Middle



Out of band emission, Band Edge



Out of band emission, Band Edge



4.12 Antenna Port Test Data and Results for LTE Band 17

Serial Number:	2BUF-5	Test Date:	2023/10/15
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ken Tang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26	Relative Humidity: (%)	49	ATM Pressure: (kPa)	101.5
----------------------	----	---------------------------	----	------------------------	-------

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
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
Minl-Circuits	Power Splitter	ZFRSC-183-S+	S F448201619	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/28	2024/9/27
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)
5MHz	706.5	710	713.5
10MHz	709	710	711

Test Data:**FCC§2.1046;§ 27.50(c) (10)****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	22.82	22.8	22.75	15.88	34.77
	RB1#13	22.93	22.89	22.9		
	RB1#24	22.8	22.76	22.83		
	RB15#0	21.94	21.87	21.89		
	RB15#10	21.9	21.92	21.79		
	RB25#0	21.87	21.91	21.86		
5MHz 16QAM	RB1#0	21.85	21.69	22.09	15.17	34.77
	RB1#13	21.95	21.78	22.22		
	RB1#24	21.88	21.7	22.15		
	RB15#0	20.94	20.94	20.91		
	RB15#10	20.89	20.94	20.77		
	RB25#0	20.91	20.95	20.85		
10MHz QPSK	RB1#0	22.85	22.82	22.78	15.97	34.77
	RB1#25	23.02	22.92	22.94		
	RB1#49	22.8	22.81	22.85		
	RB25#0	21.88	21.87	21.86		
	RB25#25	21.96	21.96	21.89		
	RB50#0	21.94	21.9	21.86		
10MHz 16QAM	RB1#0	21.97	21.81	22.37	15.52	34.77
	RB1#25	22.16	22.01	22.57		
	RB1#49	21.97	21.85	22.44		
	RB25#0	20.9	20.94	20.91		
	RB25#25	20.99	21.01	20.92		
	RB50#0	20.95	20.95	20.87		

Note: ERP= Conducted Power(dBm) - Lc(dB) + G_T(dBd)G_T(dBd)=G_T(dBi)-2.15**Result:****Pass****Peak-to-average Ratio(PAR)**

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
10MHz QPSK	RB1#0	6.06	8.87	9.65	13
	RB50#0	7.94	6.85	6.26	13
10MHz 16QAM	RB1#0	6.52	8.91	6.42	13
	RB50#0	6.14	7.60	7.15	13
				Result:	Pass

FCC §2.1049, §27.53:Occupied Bandwidth

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
5MHz QPSK	4.511	4.551	4.531	5.180	5.240	5.220
5MHz 16QAM	4.551	4.511	4.531	5.220	5.180	5.160
10MHz QPSK	8.942	8.982	8.942	9.840	9.920	9.960
10MHz 16QAM	8.942	8.942	8.942	10.000	9.880	9.760

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

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

Result:	Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.
----------------	--

FCC §2.1051, §27.53:Out of band emission, Band Edge

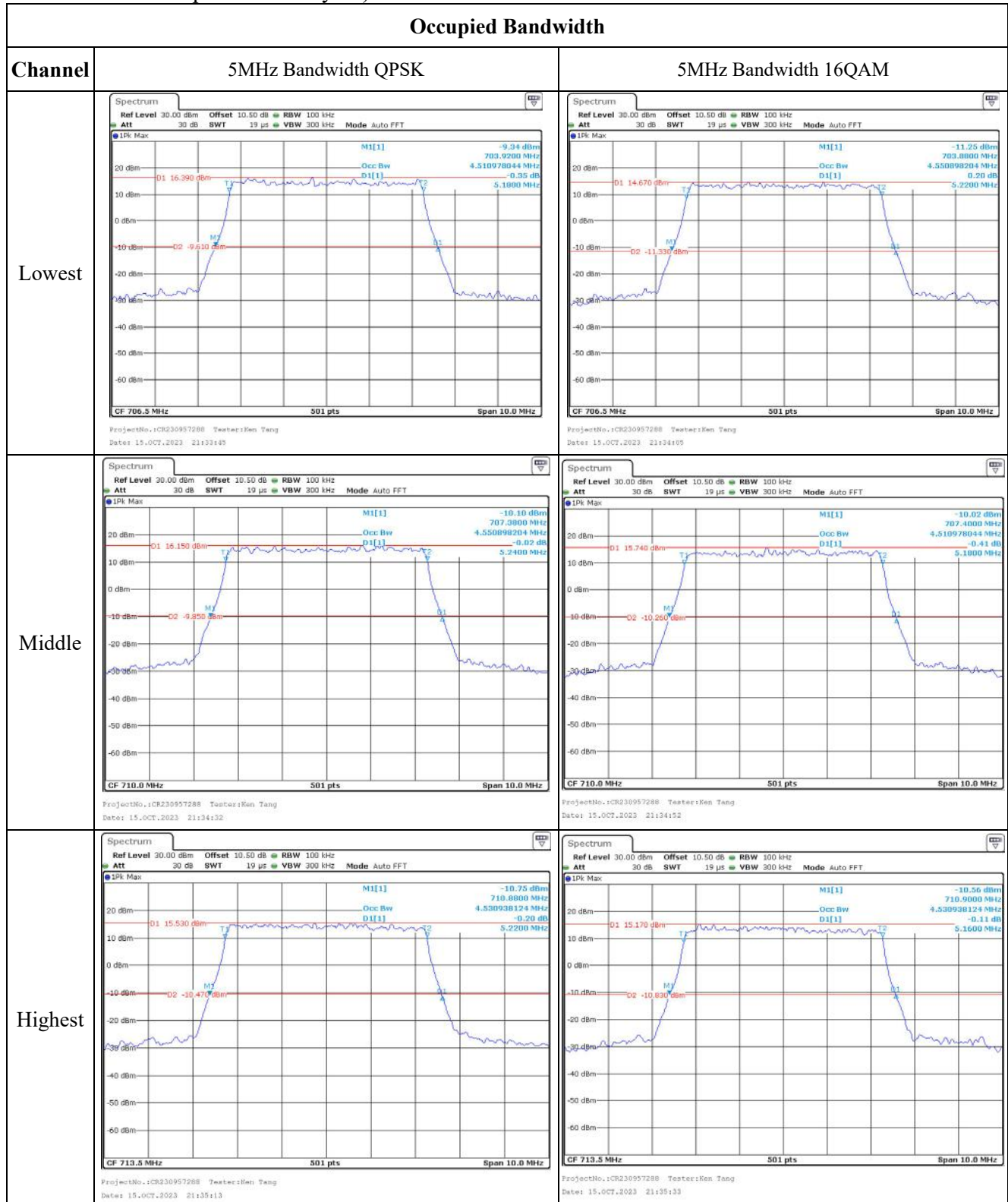
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.
----------------	---

FCC §2.1055, §27.54: Frequency Stability

Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	704.022	704.00	715.974	716.00
	-20	3.87	704.028	704.00	715.984	716.00
	-10	3.87	704.005	704.00	715.993	716.00
	0	3.87	704.003	704.00	715.989	716.00
	10	3.87	704.012	704.00	715.996	716.00
	20	3.87	704.016	704.00	715.993	716.00
	30	3.87	704.022	704.00	715.984	716.00
	40	3.87	704.006	704.00	715.985	716.00
Frequency Stability vs. Voltage	20	3.29	704.008	704.00	715.971	716.00
	20	4.45	704.011	704.00	715.993	716.00
Result:					Pass	

Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	704.007	704.00	715.985	716.00
	-20	3.87	704.015	704.00	715.979	716.00
	-10	3.87	704.023	704.00	715.980	716.00
	0	3.87	704.017	704.00	715.990	716.00
	10	3.87	704.001	704.00	715.990	716.00
	20	3.87	704.002	704.00	715.985	716.00
	30	3.87	704.002	704.00	715.977	716.00
	40	3.87	704.026	704.00	715.978	716.00
	50	3.87	704.015	704.00	715.981	716.00
Frequency Stability vs. Voltage	20	3.29	704.007	704.00	715.972	716.00
	20	4.45	704.030	704.00	715.994	716.00
					Result:	Pass

Test Plots (Note: The 10.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):



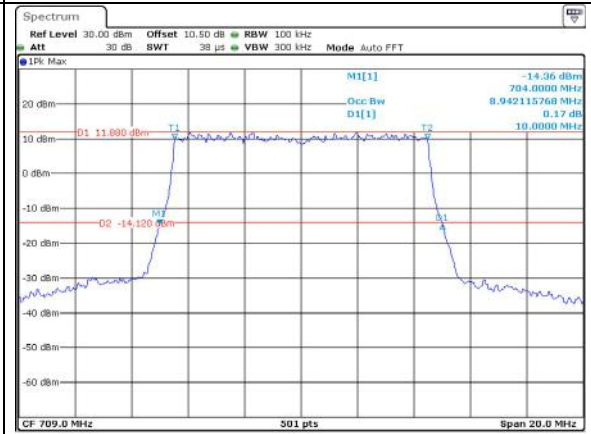
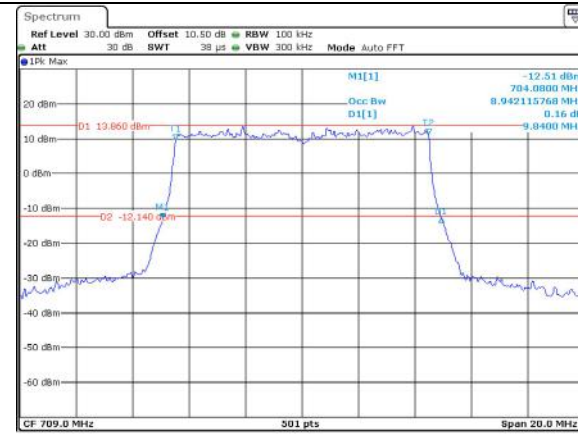
Occupied Bandwidth

Channel

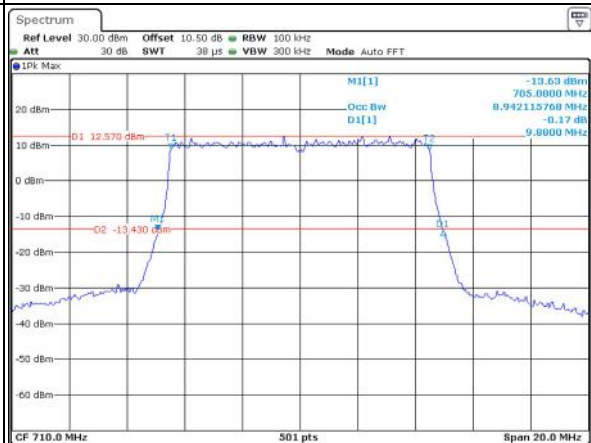
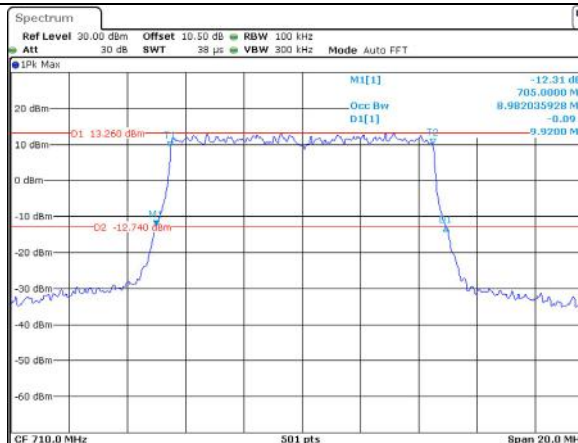
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

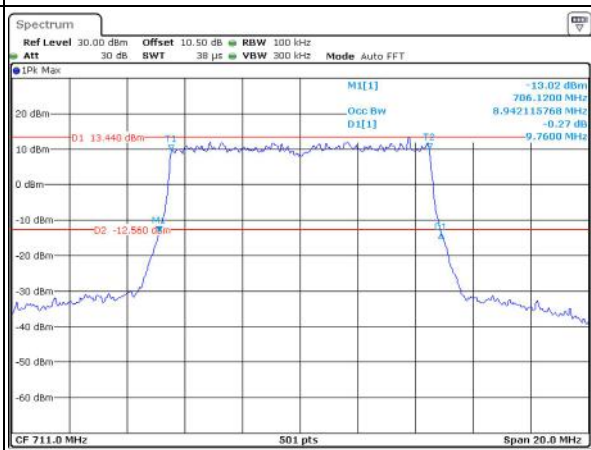
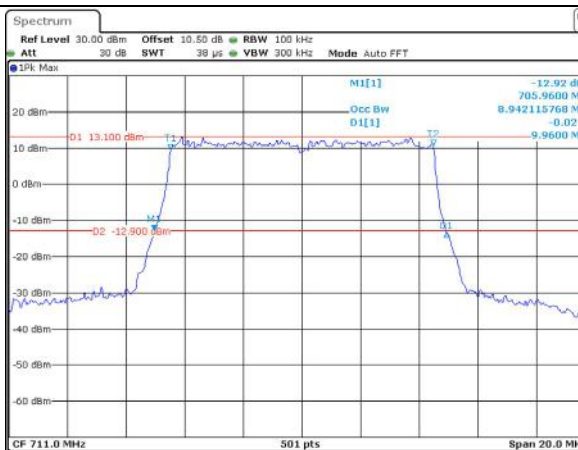
Lowest



Middle



Highest

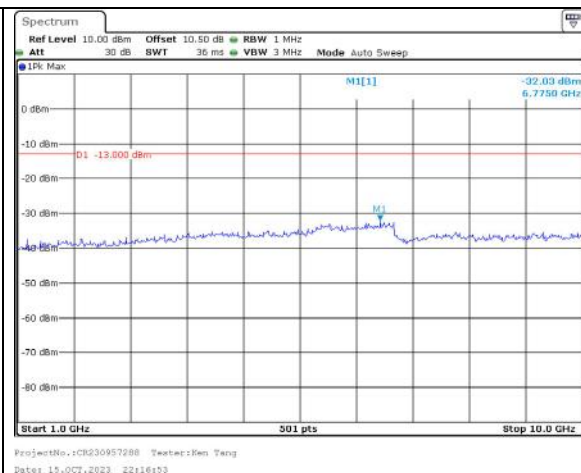
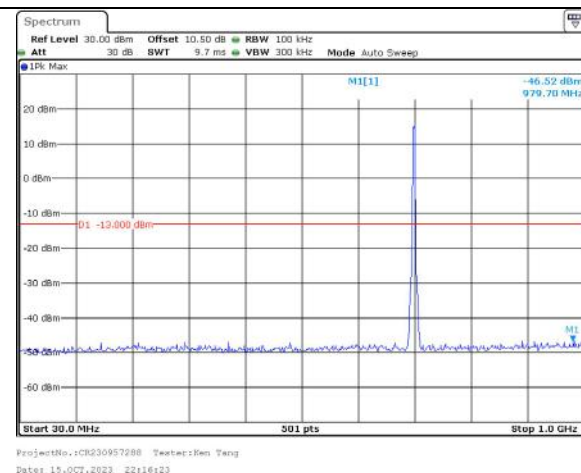


Spurious Emissions at Antenna Terminal

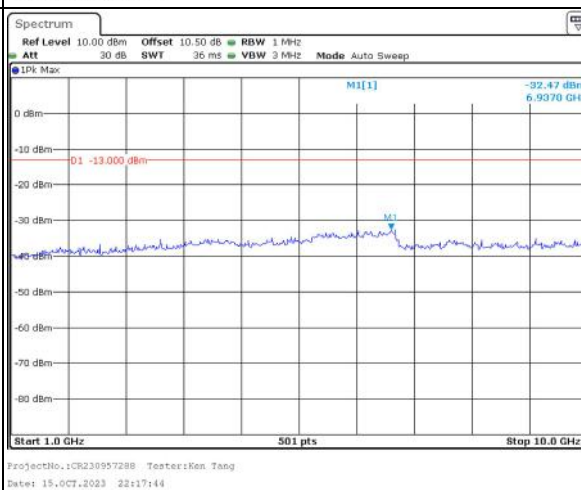
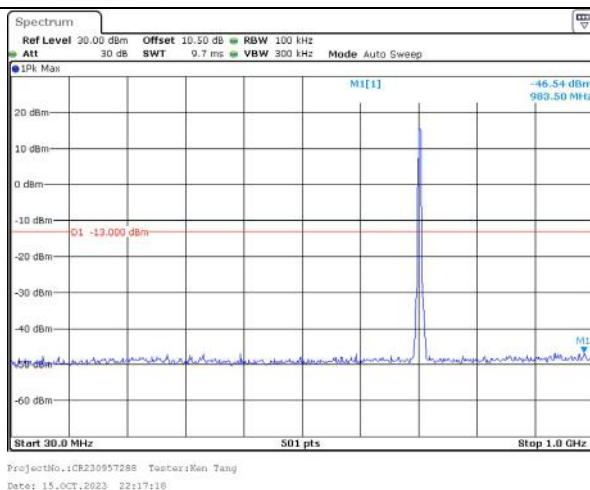
Channel

5MHz Bandwidth QPSK

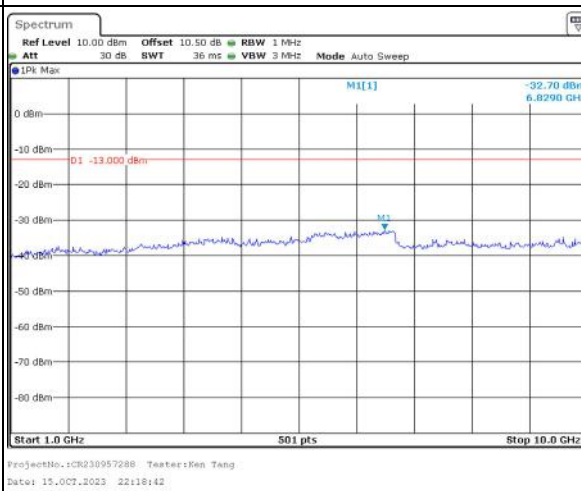
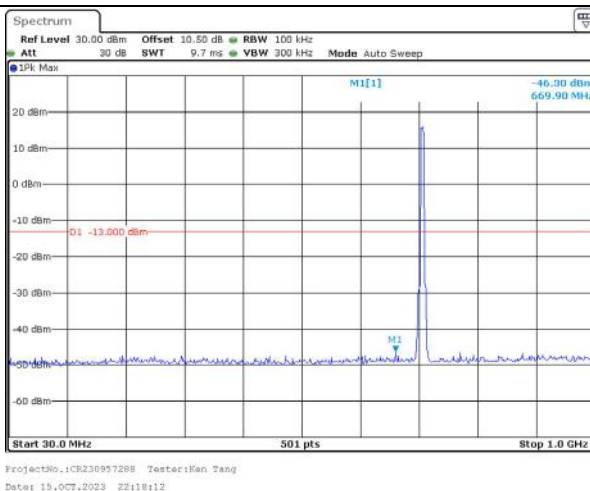
Lowest



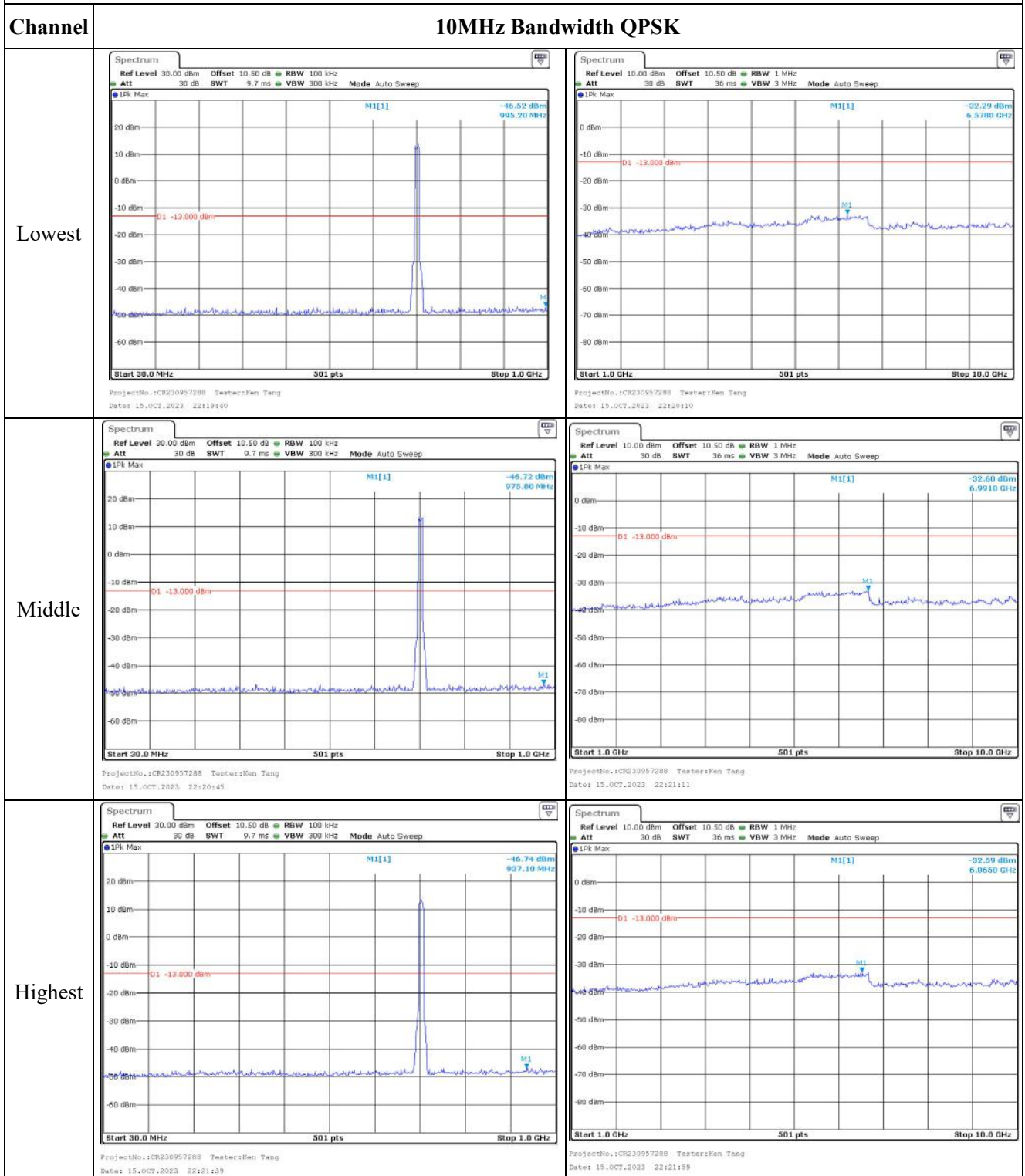
Middle



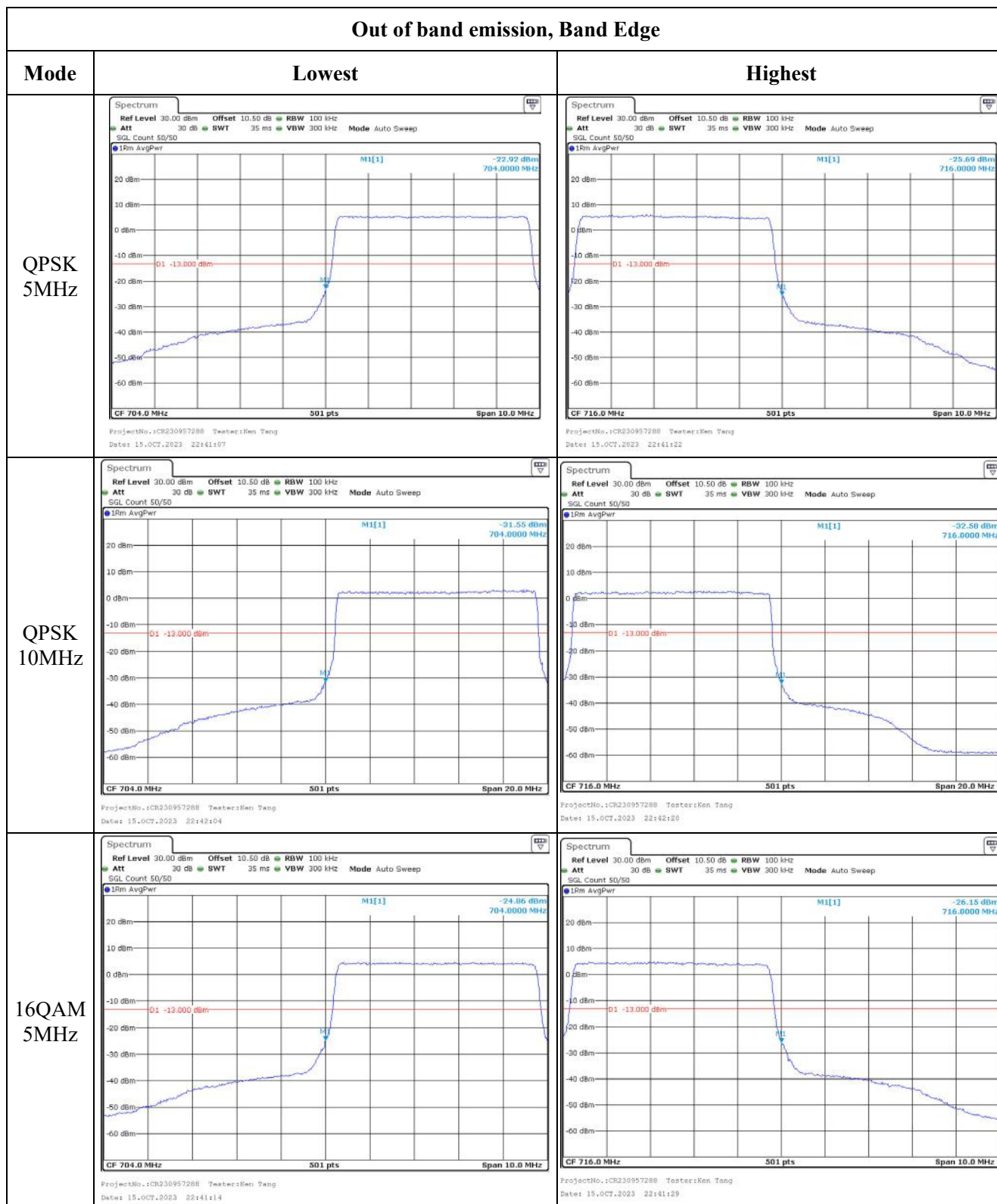
Highest

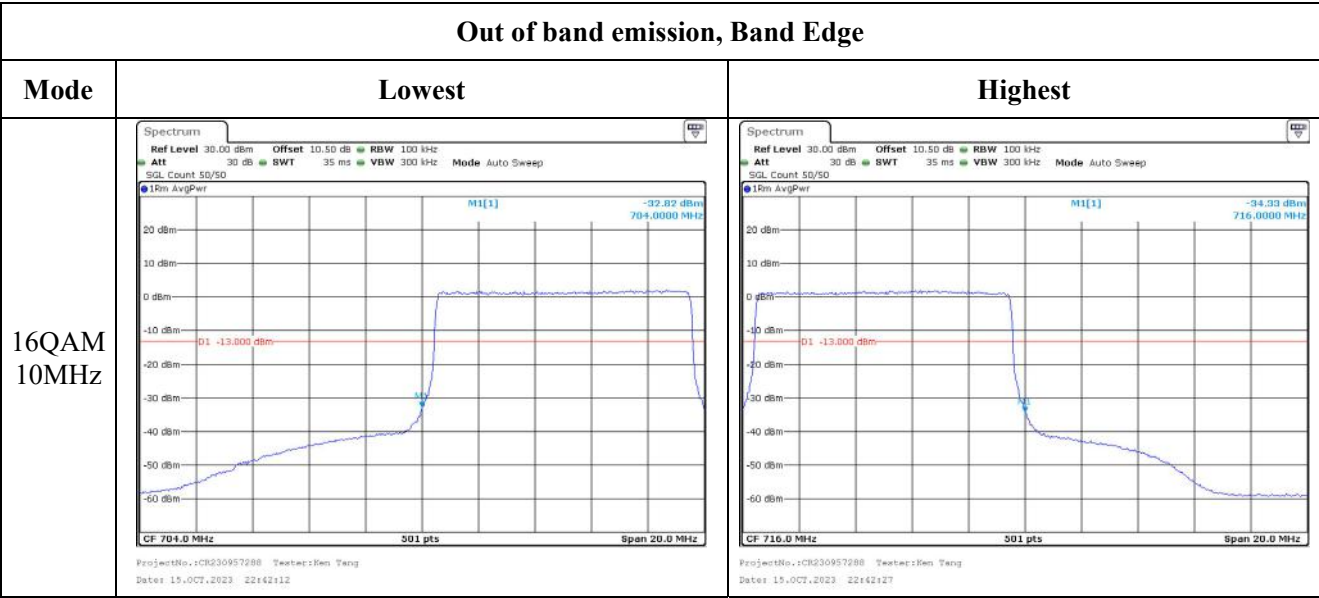


Spurious Emissions at Antenna Terminal



Out of band emission, Band Edge





4.13 Antenna Port Test Data and Results for LTE Band 25

Serial Number:	2BUF-5	Test Date:	2023/10/17
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ken Tang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.6	Relative Humidity: (%)	48	ATM Pressure: (kPa)	101.2
----------------------	------	---------------------------	----	------------------------	-------

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
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
Minl-Circuits	Power Splitter	ZFRSC-183-S+	S F448201619	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/28	2024/9/27
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	1882.5	1914.3
3MHz	1851.5	1882.5	1913.5
5MHz	1852.5	1882.5	1912.5
10MHz	1855	1882.5	1910
15MHz	1857.5	1882.5	1907.5
20MHz	1860	1882.5	1905

Test Data:

FCC§2.1046; § 24.232						
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	14.96	15.06	15.45	15.45	33
	RB1#3	15.14	15.27	15.65		
	RB1#5	14.9	15.06	15.49		
	RB3#0	15	15.21	15.52		
	RB3#3	15.04	15.18	15.53		
	RB6#0	14.05	14.18	14.54		
1.4MHz 16QAM	RB1#0	13.97	14.14	14.61	14.65	33
	RB1#3	14.2	14.39	14.85		
	RB1#5	13.96	14.12	14.51		
	RB3#0	14.19	14.42	14.69		
	RB3#3	14.19	14.45	14.64		
	RB6#0	13.01	13.23	13.51		
3MHz QPSK	RB1#0	14.93	15.07	15.42	15.25	33
	RB1#8	14.95	15	15.45		
	RB1#14	14.9	15.04	15.37		
	RB6#0	13.94	14.06	14.44		
	RB6#9	13.91	14.09	14.41		
	RB15#0	13.96	14.16	14.5		
3MHz 16QAM	RB1#0	14.04	14.77	14.64	14.57	33
	RB1#8	14.04	14.75	14.68		
	RB1#14	14.04	14.7	14.65		
	RB6#0	12.92	13.18	13.5		
	RB6#9	12.9	13.17	13.5		
	RB15#0	13.04	13.2	13.47		
5MHz QPSK	RB1#0	14.88	15.02	15.31	15.19	33
	RB1#13	14.97	15.15	15.39		
	RB1#24	14.86	15.05	15.32		
	RB15#0	14.03	14.17	14.58		
	RB15#10	14	14.13	14.42		
	RB25#0	13.98	14.13	14.45		
5MHz 16QAM	RB1#0	14.03	14.36	14.45	15.19	33
	RB1#13	14.09	14.53	14.58		
	RB1#24	13.99	14.33	14.5		
	RB15#0	13.05	13.14	13.6		
	RB15#10	13.04	13.12	13.43		
	RB25#0	12.99	13.15	13.51		
10MHz QPSK	RB1#0	14.96	15.06	15.39	15.33	33
	RB1#25	15.09	15.15	15.53		
	RB1#49	14.94	15.08	15.41		
	RB25#0	13.99	14.18	14.51		

	RB25#25	13.99	14.23	14.39		
	RB50#0	14.05	14.23	14.44		
10MHz 16QAM	RB1#0	14	14.77	14.59	14.66	33
	RB1#25	14.16	14.86	14.78		
	RB1#49	14.01	14.82	14.6		
	RB25#0	13.16	13.29	13.6		
	RB25#25	13.1	13.28	13.43		
	RB50#0	13.11	13.22	13.5		
15MHz QPSK	RB1#0	15.15	15.2	15	15.21	33
	RB1#38	15.27	15.41	15.26		
	RB1#74	14.95	15.1	14.97		
	RB36#0	15.08	15.07	15.13		
	RB36#39	15.08	15.12	15.07		
	RB75#0	14.11	14.27	14.12		
15MHz 16QAM	RB1#0	13.99	14.18	14.14	14.29	33
	RB1#38	14.34	14.49	14.37		
	RB1#74	14.09	14.04	14.15		
	RB36#0	14.23	14.29	14.22		
	RB36#39	14.25	14.3	14.3		
	RB75#0	13.16	13.14	13.21		
20MHz QPSK	RB1#0	15.07	14.95	15.11	14.99	33
	RB1#50	15.11	15.03	15.1		
	RB1#99	15.03	15.19	14.93		
	RB50#0	13.94	14.07	14.1		
	RB50#50	14.2	14.18	14.06		
	RB100#0	14.1	14.25	13.99		
20MHz 16QAM	RB1#0	14.08	14.25	14.27	14.08	33
	RB1#50	14.09	14.17	14.09		
	RB1#99	14.27	14.23	14.28		
	RB50#0	13.04	12.93	13.13		
	RB50#50	14.05	14.2	14.04		
	RB100#0	13.1	13.07	13.01		

Note: EIRP=Conducted Power(dBm) - Lc(dB) + G_T(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	6.67	6.32	6.58	13
	RB100#0	4.64	4.46	4.46	13
20MHz 16QAM	RB1#0	7.97	6.23	7.65	13
	RB100#0	6.09	6	6.06	13
				Result:	Pass

FCC §2.1049, §24.238: 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	1.096	1.102	1.096	1.320	1.296	1.290
1.4MHz 16QAM	1.09	1.096	1.096	1.29	1.290	1.314
3MHz QPSK	2.683	2.683	2.683	2.880	2.892	2.880
3MHz 16QAM	2.683	2.683	2.683	2.880	2.868	2.892
5MHz QPSK	4.511	4.511	4.531	5.220	5.180	5.200
5MHz 16QAM	4.551	4.531	4.511	5.220	5.220	5.140
10MHz QPSK	8.942	8.982	8.982	9.880	9.880	9.920
10MHz 16QAM	8.942	8.982	8.942	9.840	9.880	9.880
15MHz QPSK	13.593	13.533	13.473	15.360	15.240	15.060
15MHz 16QAM	13.533	13.473	13.533	15.000	15.060	15.060
20MHz QPSK	17.964	17.964	17.884	19.920	19.520	19.600
20MHz 16QAM	17.964	18.044	17.964	19.600	19.680	19.440

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

FCC §2.1051, § 24.238 (a): Spurious Emissions at Antenna Terminal

Result:	Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.
----------------	--

FCC §2.1051, § 24.238 (a): Out of band emission, Band Edge

Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.
----------------	---

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 _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	1850.020	1850.000	1914.988	1915.000
	-20	3.87	1850.004	1850.000	1914.991	1915.000
	-10	3.87	1850.003	1850.000	1914.974	1915.000
	0	3.87	1850.003	1850.000	1914.986	1915.000
	10	3.87	1850.022	1850.000	1914.994	1915.000
	20	3.87	1850.005	1850.000	1914.977	1915.000
	30	3.87	1850.004	1850.000	1914.997	1915.000
	40	3.87	1850.018	1850.000	1914.973	1915.000
	50	3.87	1850.026	1850.000	1914.987	1915.000
Frequency Stability vs. Voltage	20	3.29	1850.015	1850.000	1914.989	1915.000
	20	4.45	1850.008	1850.000	1914.983	1915.000
					Result:	Pass

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	1850.012	1850.000	1914.974	1915.000
	-20	3.87	1850.029	1850.000	1914.984	1915.000
	-10	3.87	1850.004	1850.000	1914.991	1915.000
	0	3.87	1850.021	1850.000	1914.999	1915.000
	10	3.87	1850.003	1850.000	1914.974	1915.000
	20	3.87	1850.030	1850.000	1914.997	1915.000
	30	3.87	1850.001	1850.000	1914.997	1915.000
	40	3.87	1850.018	1850.000	1914.977	1915.000
	50	3.87	1850.009	1850.000	1914.992	1915.000
Frequency Stability vs. Voltage	20	3.29	1850.010	1850.000	1914.983	1915.000
	20	4.45	1850.006	1850.000	1914.995	1915.000
					Result:	Pass

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):

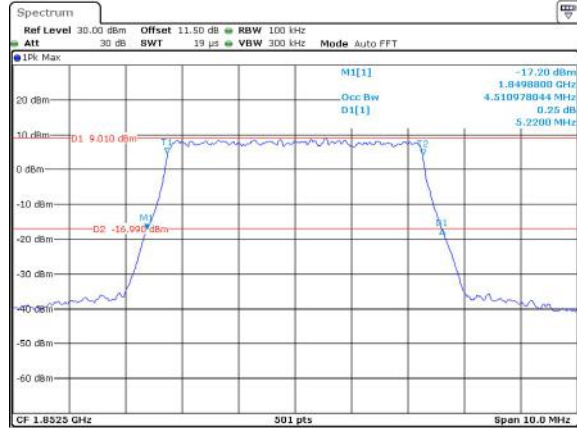
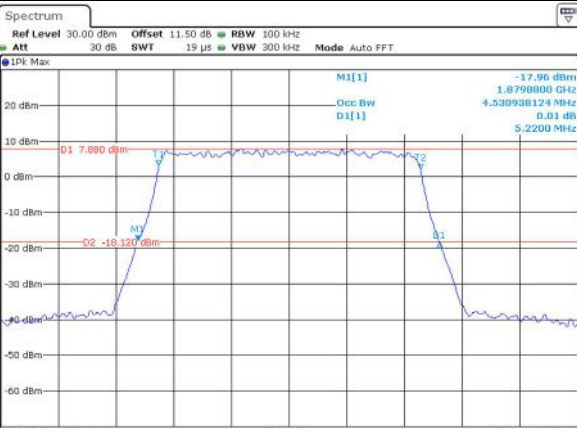
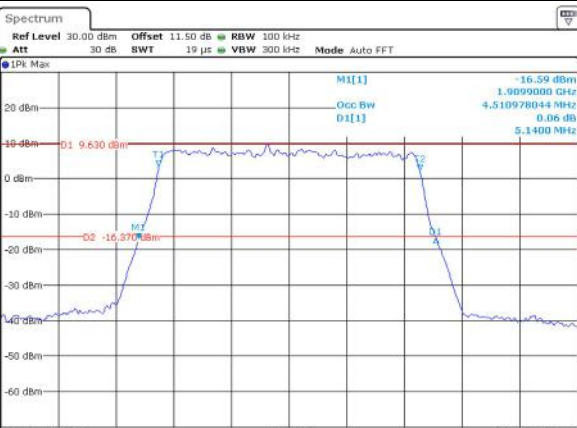
Occupied Bandwidth

Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

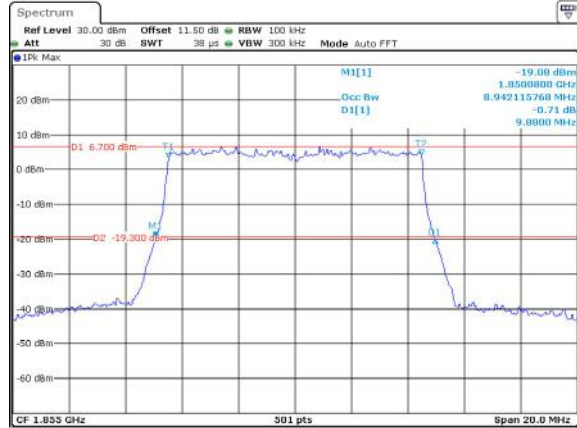
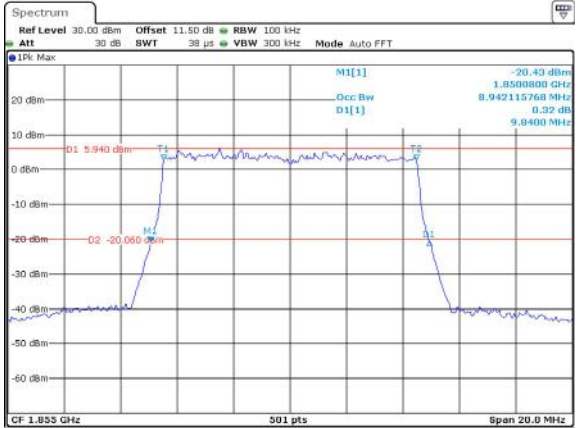
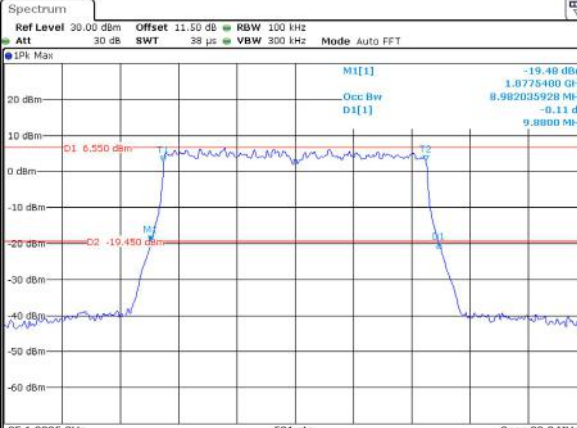
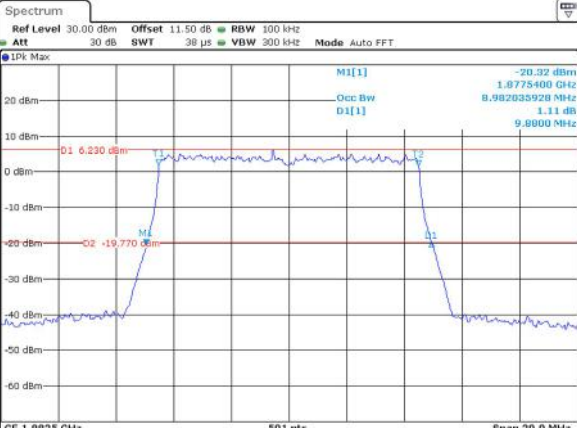
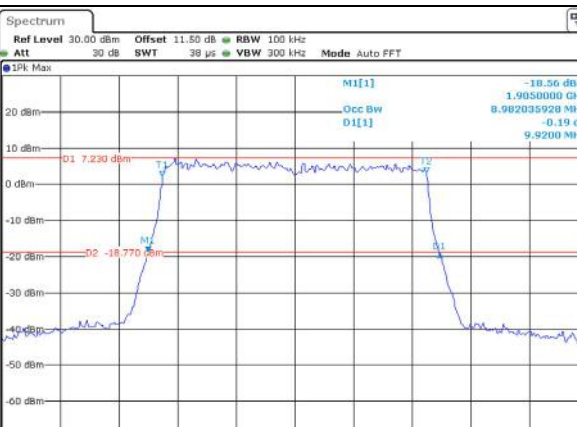
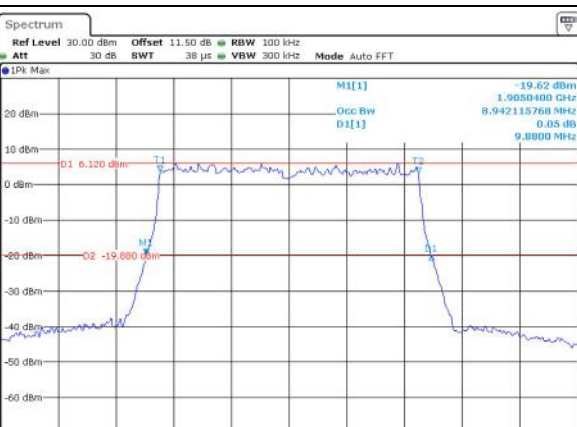
Occupied Bandwidth

Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest	ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:52:24	ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:52:47
Middle	ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:53:20	ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:53:40
Highest	ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:54:07	ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:54:33

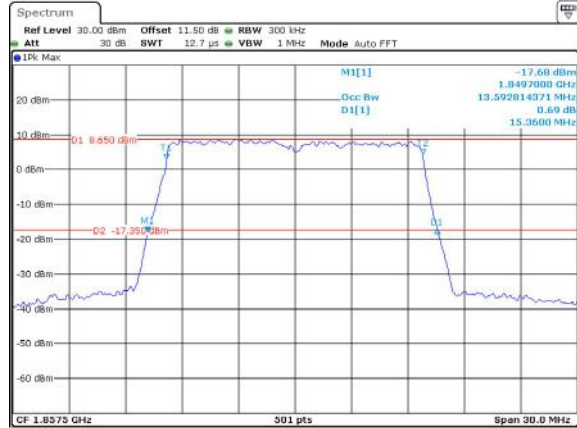
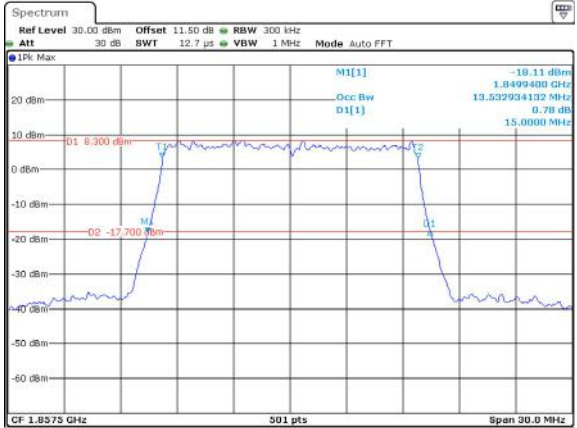
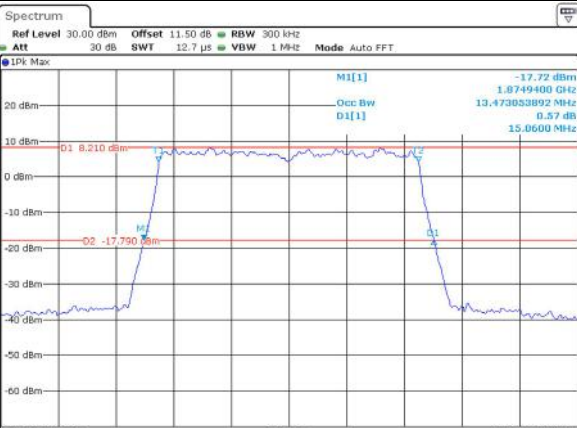
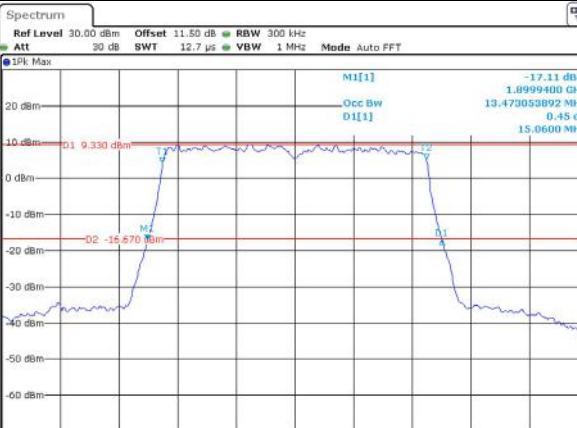
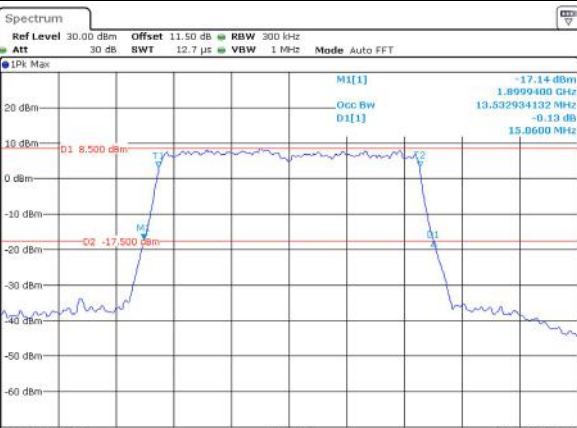
Occupied Bandwidth

Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:55:40	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:56:10
Middle	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:56:36	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:57:09
Highest	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:57:34	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:58:03

Occupied Bandwidth

Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:59:14	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 20:59:43
Middle	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 21:00:16	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 21:00:55
Highest	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 21:01:28	 ProjectNo.:CR230957288 Tester:Ken Tang Date: 17.OCT.2023 21:02:03

Occupied Bandwidth

Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:03:13	 ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:03:39
Middle	 ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:04:18	 ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:04:57
Highest	 ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:04:42	 ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:04:15

Occupied Bandwidth

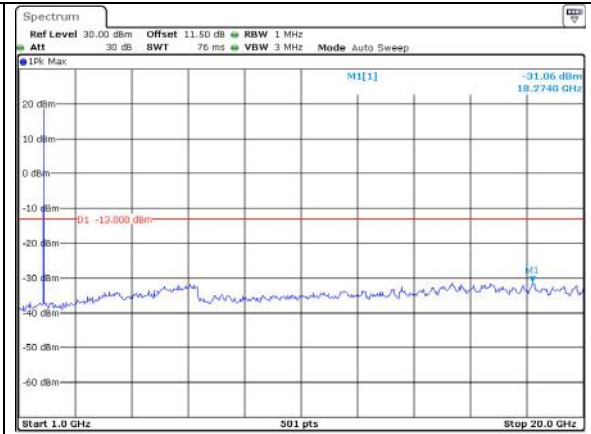
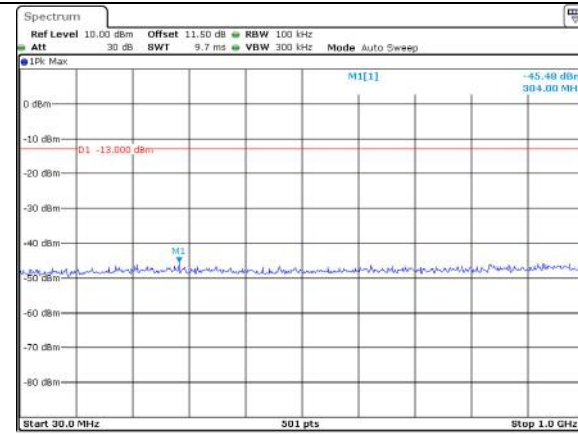
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:07:12	ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:07:14
Middle	ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:08:49	ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:09:10
Highest	ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:10:13	ProjectNo.:CR230957288 Testter:Ken Tang Date: 17.OCT.2023 21:10:14

Spurious Emissions at Antenna Terminal

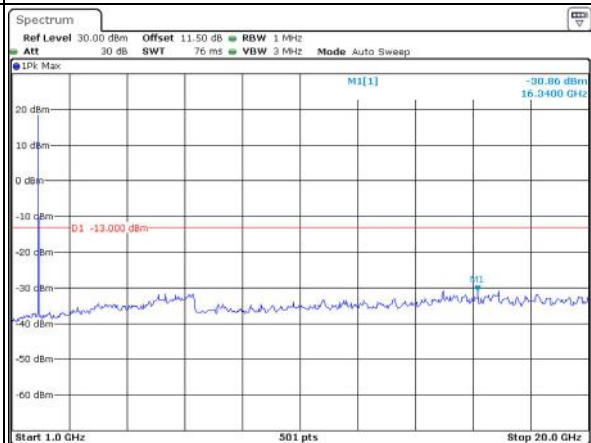
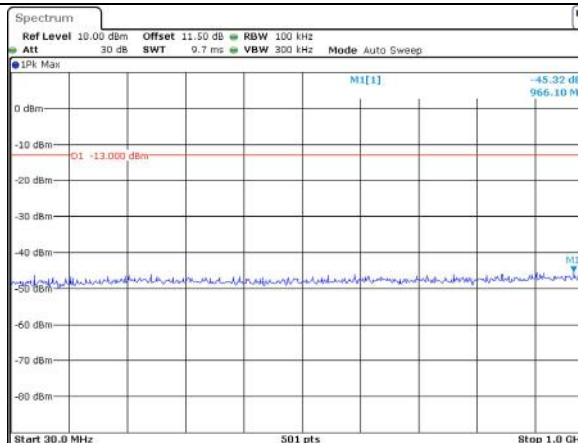
Channel

1.4MHz Bandwidth QPSK

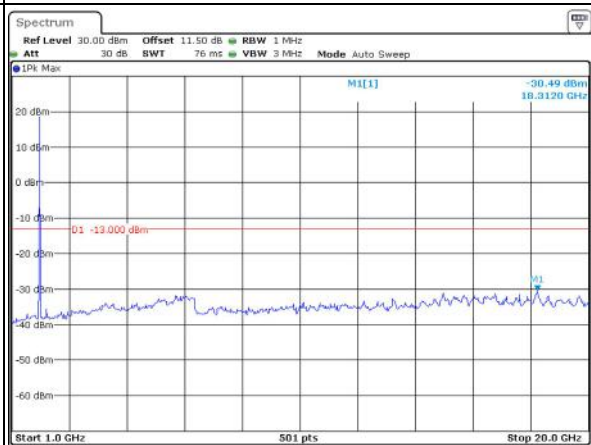
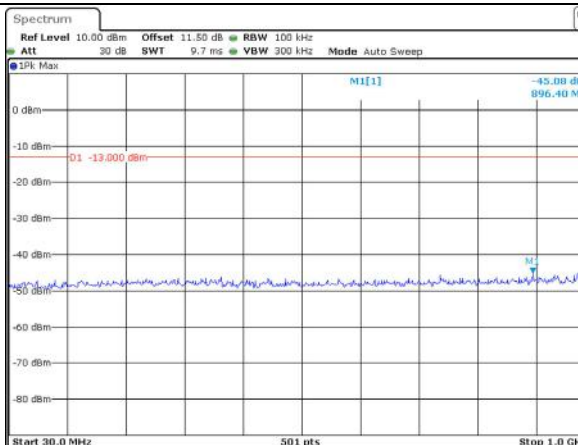
Lowest



Middle



Highest

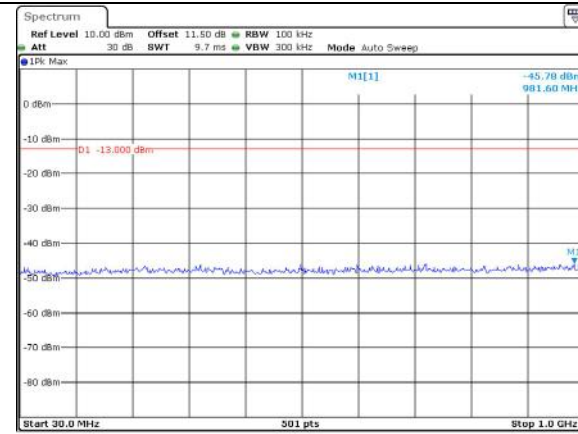


Spurious Emissions at Antenna Terminal

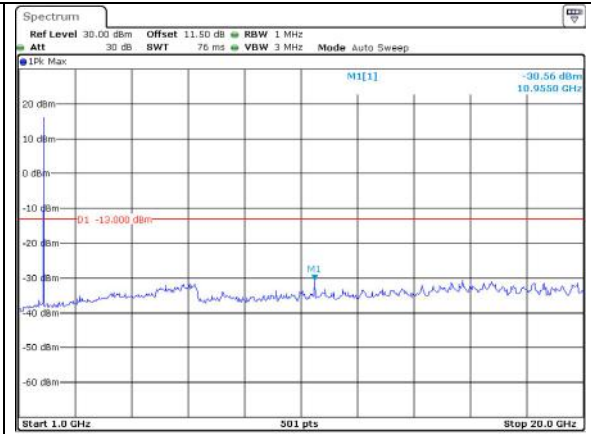
Channel

3MHz Bandwidth QPSK

Lowest

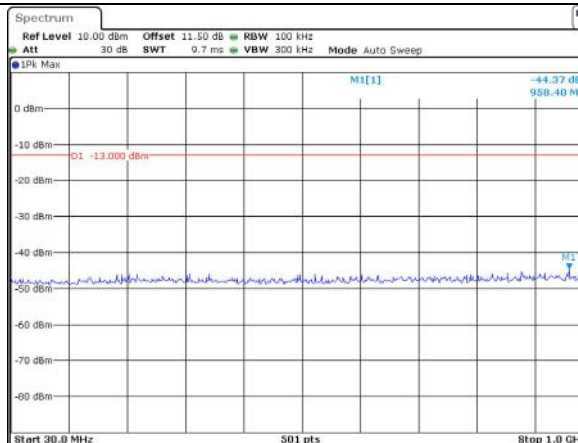


ProjectNo.:CR230957288 Testers:Ken Tang
Date: 17.OCT.2023 23:13:49

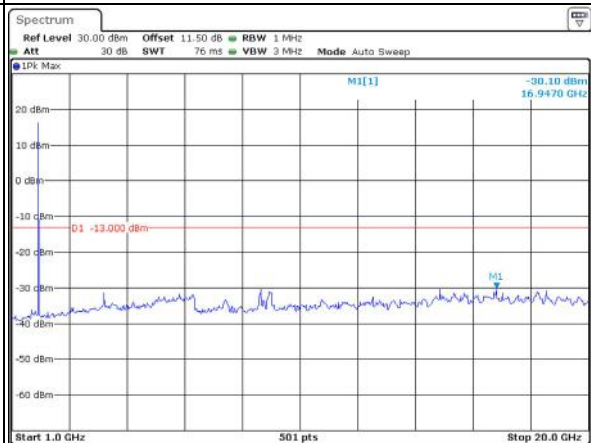


ProjectNo.:CR230957288 Testers:Ken Tang
Date: 17.OCT.2023 23:14:16

Middle

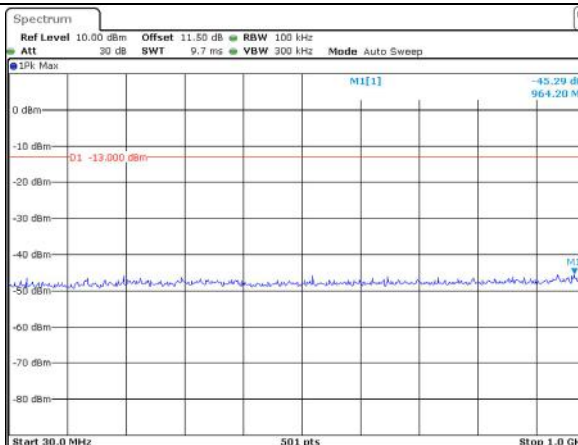


ProjectNo.:CR230957288 Testers:Ken Tang
Date: 17.OCT.2023 23:14:51

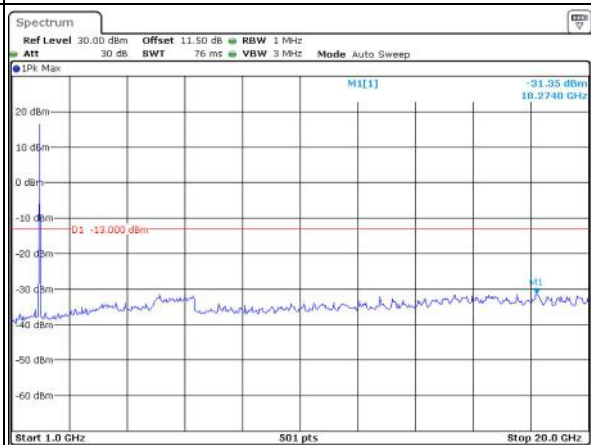


ProjectNo.:CR230957288 Testers:Ken Tang
Date: 17.OCT.2023 23:15:17

Highest



ProjectNo.:CR230957288 Testers:Ken Tang
Date: 17.OCT.2023 23:15:42



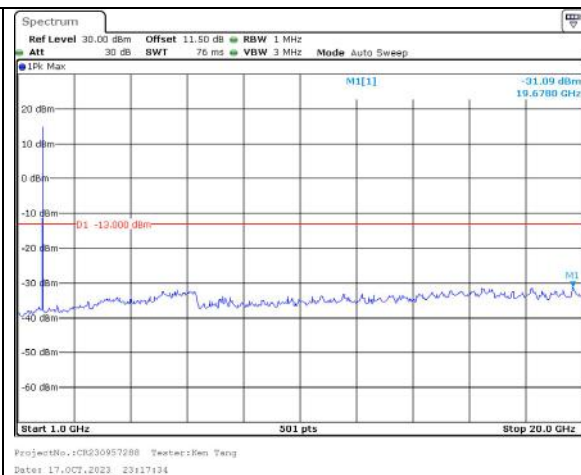
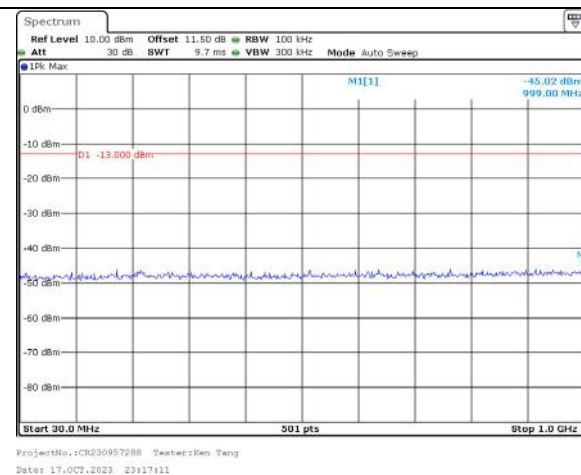
ProjectNo.:CR230957288 Testers:Ken Tang
Date: 17.OCT.2023 23:16:12

Spurious Emissions at Antenna Terminal

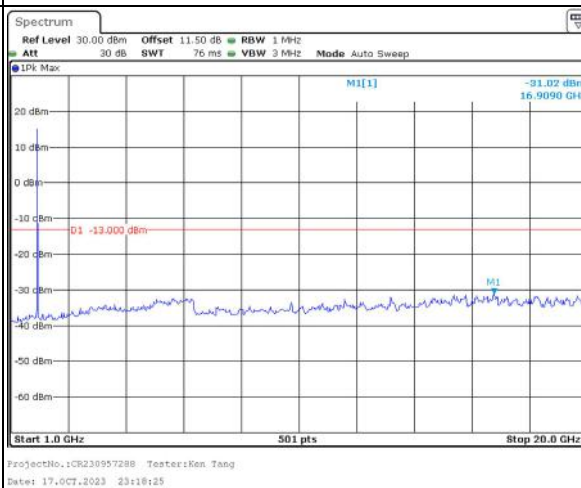
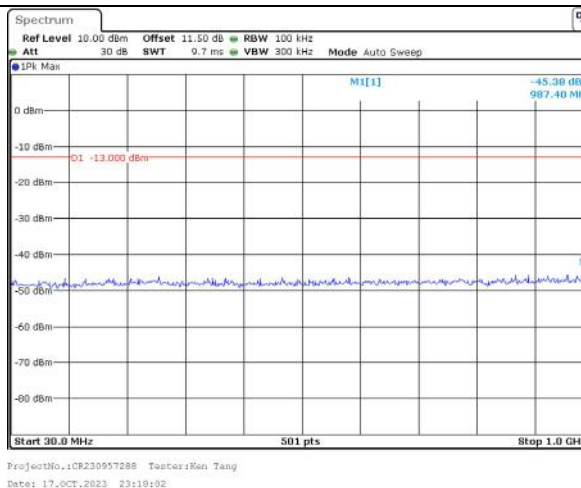
Channel

5MHz Bandwidth QPSK

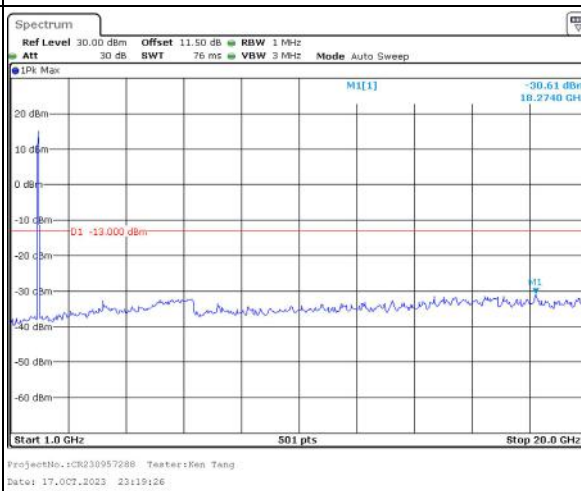
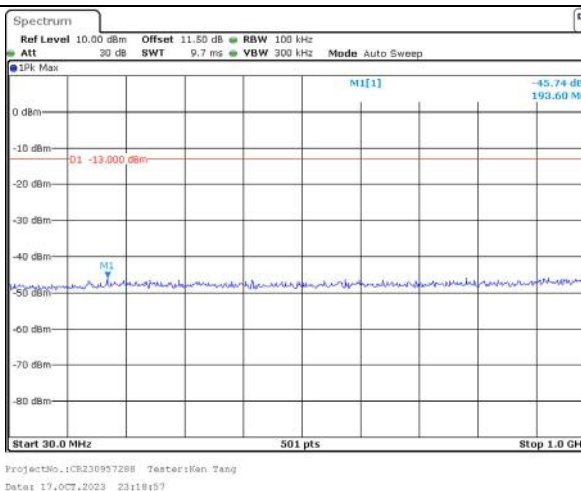
Lowest



Middle



Highest



Spurious Emissions at Antenna Terminal

