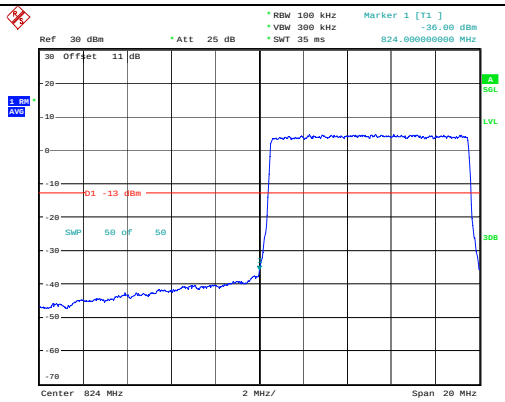
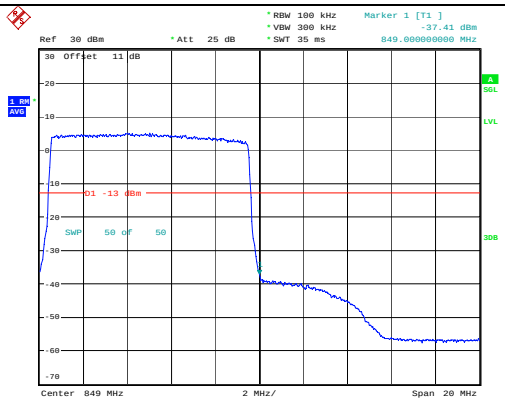
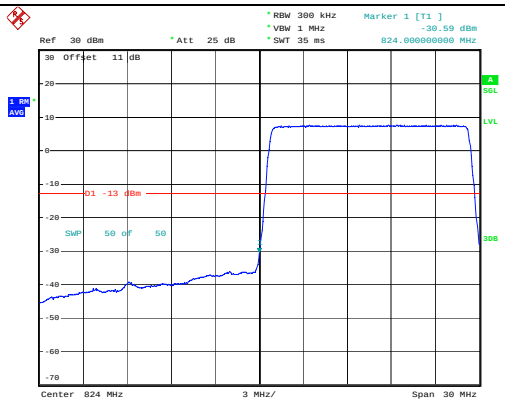
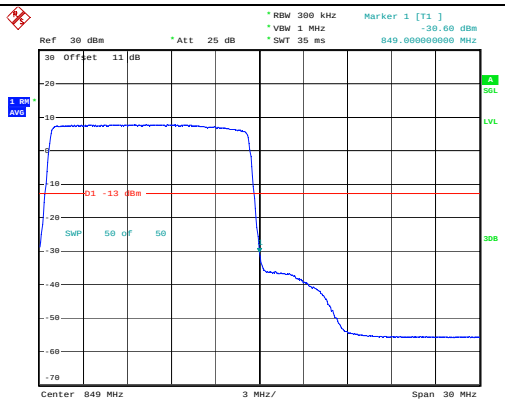
Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 10MHz For 22H		
16QAM 15MHz For 22H		

4.14 Antenna Port Test Data and Results for LTE Band 38

Serial Number:	2CGM-1	Test Date:	2023/11/22-2023/12/4
Test Site:	RF	Test Mode:	Transmitting
Tester:	Hale Li, Rod Luo	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	25.7-26.5	Relative Humidity: (%)	55-57	ATM Pressure: (kPa)	101

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200120	2023/4/18	2024/4/17
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
Minl-Clrcuits	Power Splitter	ZFRSC-183-S+	S F448201619	Each time	N/A
UNI-T	Multimeter	UT39A+	C210582554	2023/9/29	2024/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	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
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30

** 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	2572.5	2595	2617.5
10MHz	2575	2595	2615
15MHz	2577.5	2595	2612.5
20MHz	2580	2595	2610

Test Data:

FCC§2.1046;§ 27.50(h)(2)

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		
5MHz QPSK	RB1#0	21.77	21.91	22.10	21.34	33
	RB1#13	21.94	22.00	22.22		
	RB1#24	21.79	21.91	22.11		
	RB15#0	20.79	20.93	21.17		
	RB15#10	20.82	20.95	21.16		
	RB25#0	20.80	20.97	21.12		
5MHz 16QAM	RB1#0	21.02	21.24	21.28	20.52	33
	RB1#13	21.14	21.39	21.40		
	RB1#24	21.02	21.24	21.31		
	RB15#0	19.85	19.87	20.15		
	RB15#10	19.89	19.89	20.14		
	RB25#0	19.77	20.00	20.13		
10MHz QPSK	RB1#0	21.84	21.97	22.24	21.45	33
	RB1#25	21.88	21.96	22.33		
	RB1#49	21.87	21.94	22.27		
	RB25#0	20.76	20.94	21.14		
	RB25#25	20.82	20.92	21.17		
	RB50#0	20.84	20.96	21.15		
10MHz 16QAM	RB1#0	20.71	20.96	21.28	20.52	33
	RB1#25	20.81	21.01	21.40		
	RB1#49	20.77	20.96	21.32		
	RB25#0	19.81	20.00	20.19		
	RB25#25	19.85	20.06	20.21		
	RB50#0	19.85	20.04	20.18		
15MHz QPSK	RB1#0	21.83	21.94	22.06	21.38	33
	RB1#38	21.94	22.08	22.26		
	RB1#74	21.88	22.02	22.18		
	RB36#0	20.82	20.93	21.09		
	RB36#39	20.90	20.97	21.12		
	RB75#0	20.86	20.98	21.15		
15MHz 16QAM	RB1#0	21.03	20.89	21.26	20.56	33
	RB1#38	21.14	21.00	21.44		
	RB1#74	21.08	20.91	21.40		
	RB36#0	19.79	19.91	20.13		
	RB36#39	19.88	19.91	20.20		
	RB75#0	19.80	19.95	20.12		
20MHz QPSK	RB1#0	21.82	21.84	21.91	21.32	33

	RB1#50	22.07	22.07	22.20		
	RB1#99	21.96	21.91	22.03		
	RB50#0	20.78	20.93	21.05		
	RB50#50	20.90	20.97	21.08		
	RB100#0	20.83	20.93	21.06		
20MHz 16QAM	RB1#0	21.04	20.90	20.87	20.46	33
	RB1#50	21.34	21.15	21.18		
	RB1#99	21.17	20.99	20.99		
	RB50#0	19.76	19.90	20.09		
	RB50#50	19.93	19.95	20.09		
	RB100#0	19.85	19.94	20.07		
Note: EIRP=Conducted Power(dBm) - L_C(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	10.8	10.21	11.79	13
	RB100#0	10.71	11.12	10.88	13
20MHz 16QAM	RB1#0	10.33	10.13	10.26	13
	RB100#0	10.38	10.23	9.01	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	4.520	4.500	4.500	4.960	4.980	4.920
5MHz 16QAM	4.500	4.500	4.500	4.920	4.920	4.920
10MHz QPSK	8.960	9.000	8.960	9.600	9.640	9.640
10MHz 16QAM	8.960	9.000	8.960	9.840	9.480	9.520
15MHz QPSK	13.500	13.560	13.500	15.060	14.640	14.700
15MHz 16QAM	13.500	13.500	13.560	14.820	14.820	14.820
20MHz QPSK	17.920	18.000	17.840	19.440	19.280	19.440
20MHz 16QAM	17.920	17.920	18.000	19.280	19.440	19.440
Note: The test plots please refer to the Plots of Occupied Bandwidth						

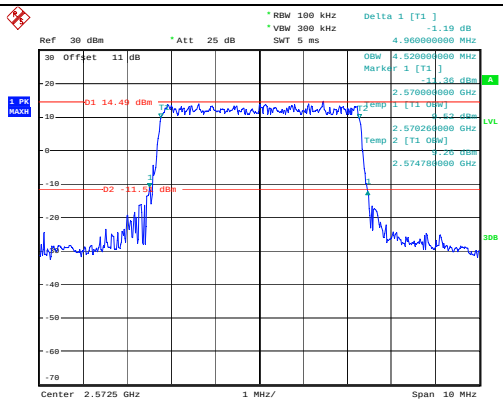
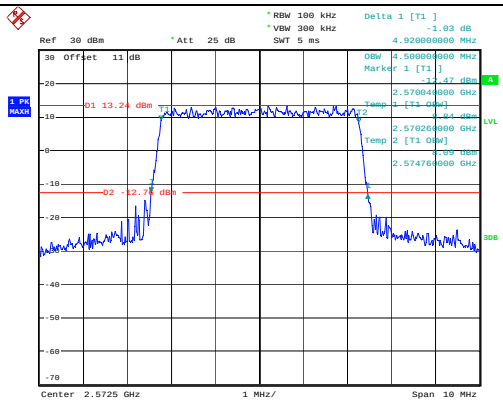
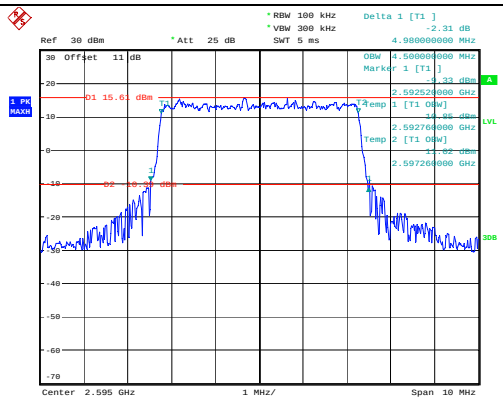
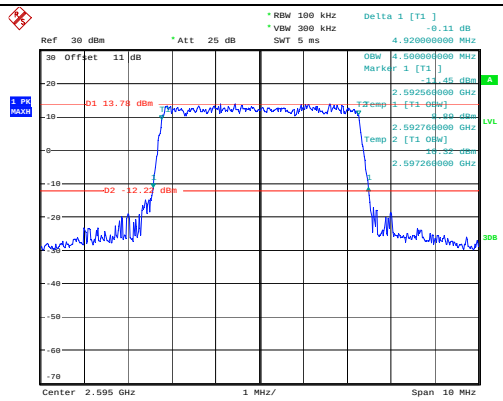
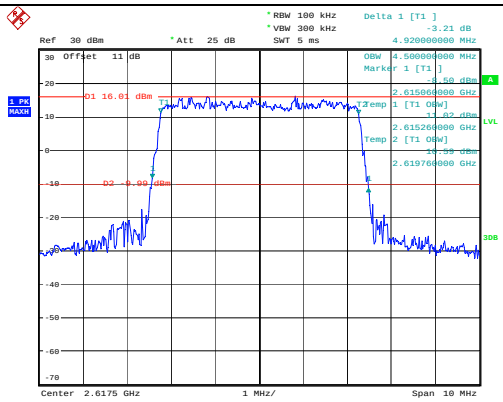
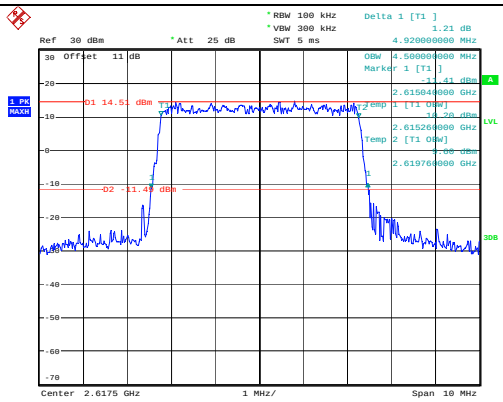
FCC §2.1051, § 27.53:Spurious Emissions at Antenna Terminal	
Result:	**Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.**

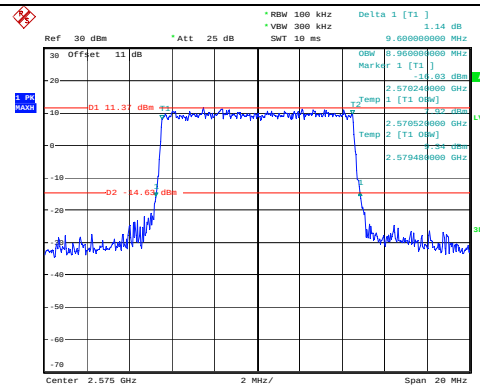
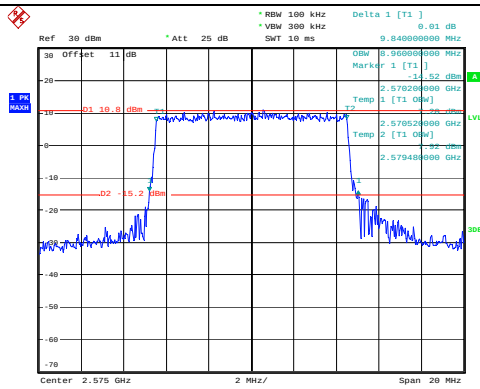
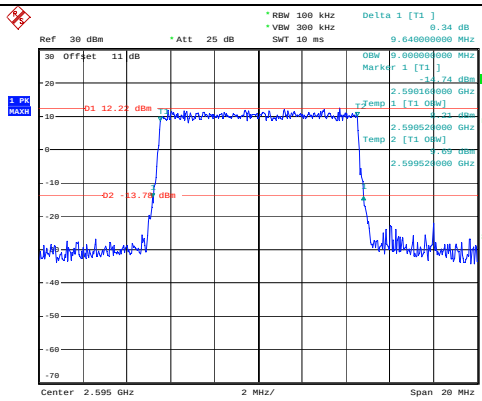
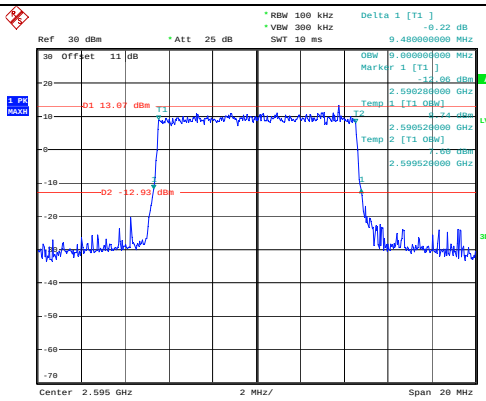
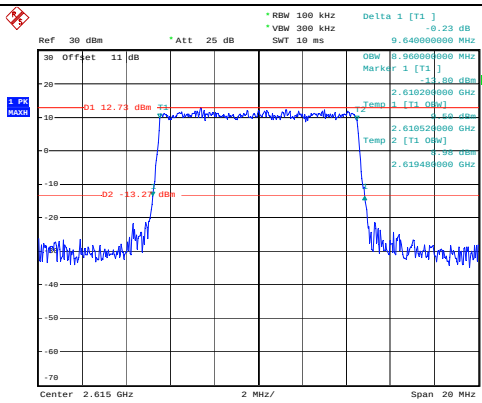
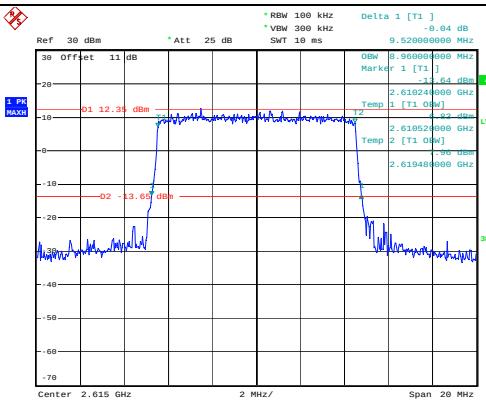
FCC §2.1051, § 27.53:Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

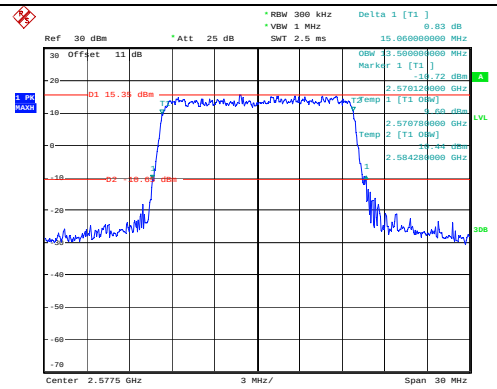
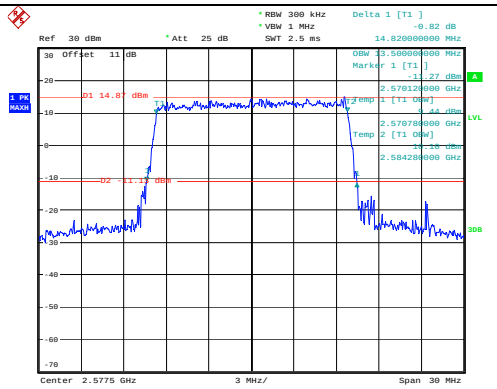
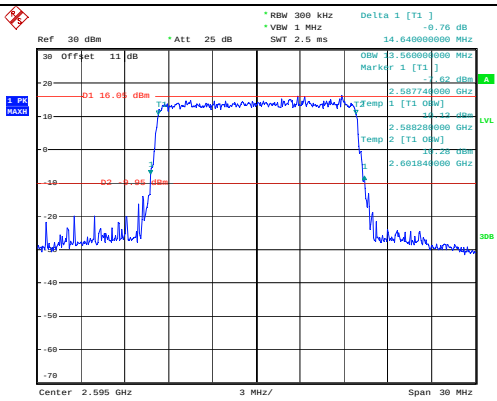
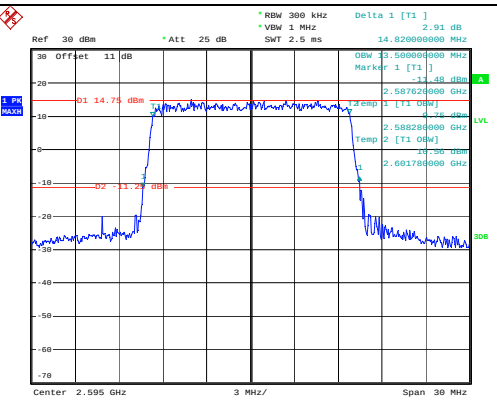
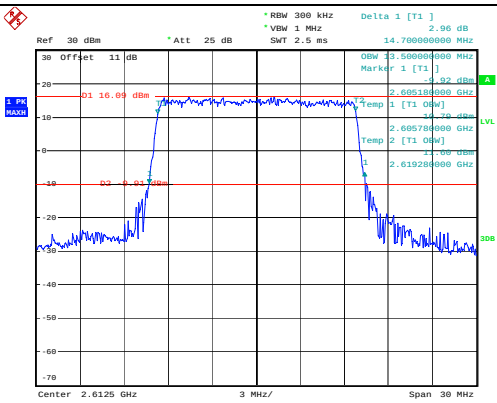
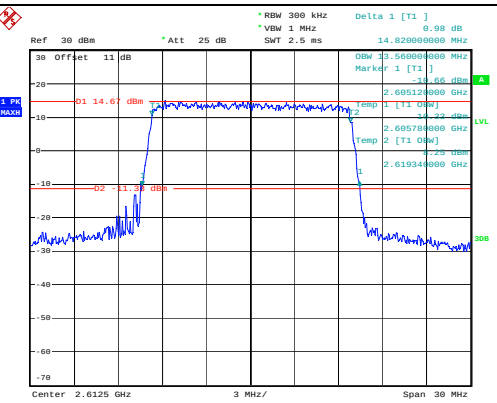
FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.91	2570.036	2570.00	2619.974	2620
	-20	3.91	2570.036	2570.00	2619.968	2620
	-10	3.91	2570.035	2570.00	2619.972	2620
	0	3.91	2570.033	2570.00	2619.971	2620
	10	3.91	2570.032	2570.00	2619.971	2620
	20	3.91	2570.033	2570.00	2619.971	2620
	30	3.91	2570.035	2570.00	2619.975	2620
	40	3.91	2570.035	2570.00	2619.975	2620
	50	3.91	2570.036	2570.00	2619.972	2620
Frequency Stability vs. Voltage	20	3.45	2570.032	2570.00	2619.970	2620
	20	4.5	2570.036	2570.00	2619.976	2620
					Result:	**Pass**

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.91	2570.036	2570.00	2619.969	2620
	-20	3.91	2570.033	2570.00	2619.972	2620
	-10	3.91	2570.032	2570.00	2619.974	2620
	0	3.91	2570.029	2570.00	2619.975	2620
	10	3.91	2570.039	2570.00	2619.976	2620
	20	3.91	2570.035	2570.00	2619.975	2620
	30	3.91	2570.035	2570.00	2619.975	2620
	40	3.91	2570.030	2570.00	2619.973	2620
	50	3.91	2570.031	2570.00	2619.970	2620
Frequency Stability vs. Voltage	20	3.45	2570.034	2570.00	2619.971	2620
	20	4.5	2570.037	2570.00	2619.975	2620
					Result:	**Pass**

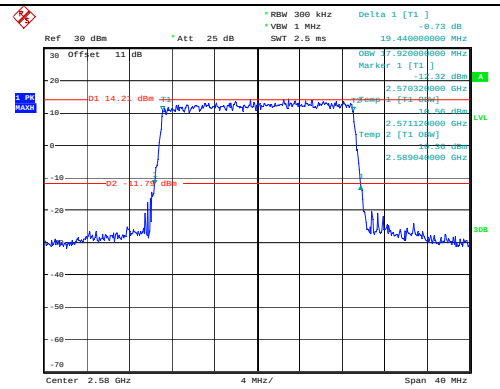
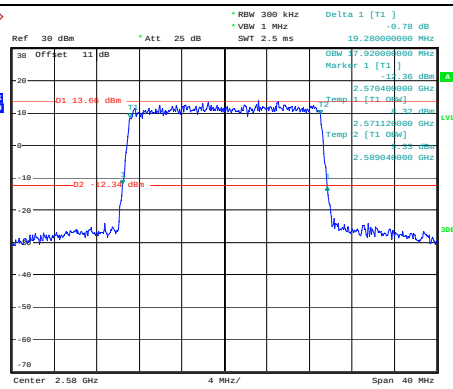
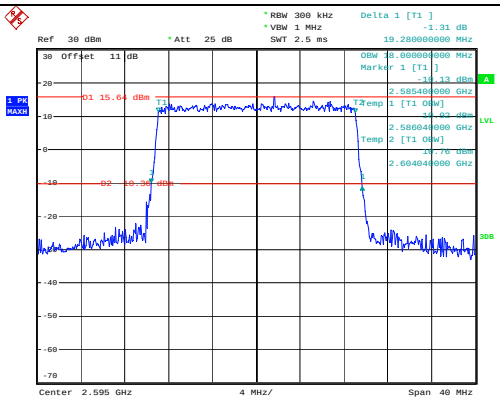
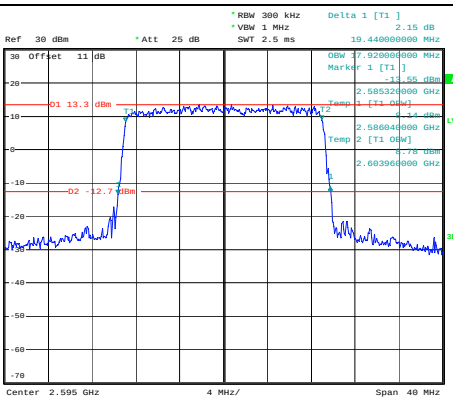
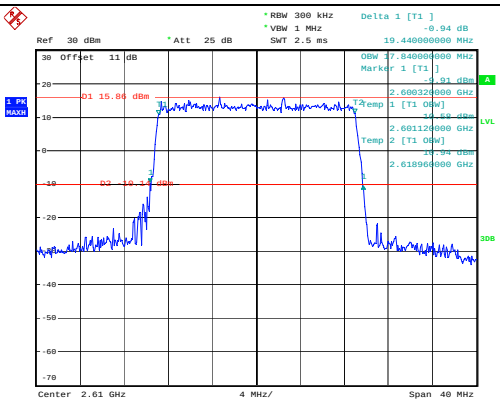
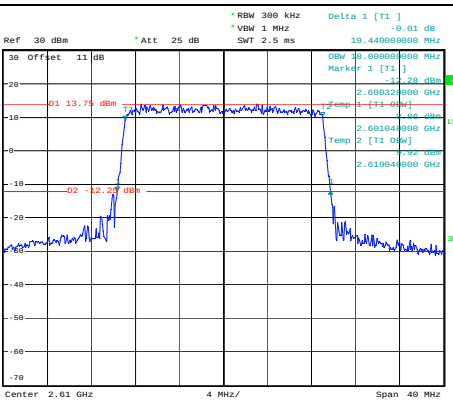
Test Plots(Note: The 11.0dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer)**:**

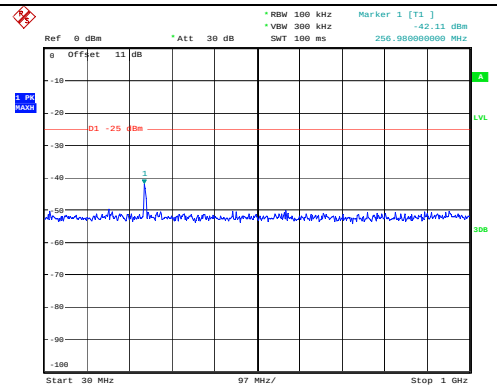
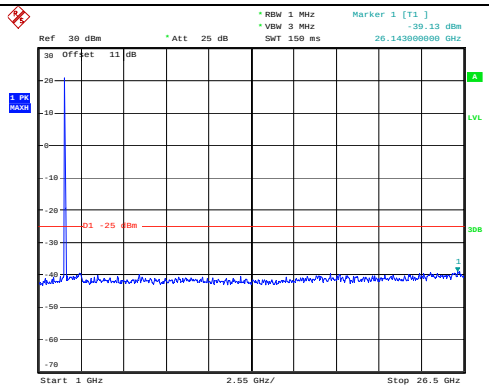
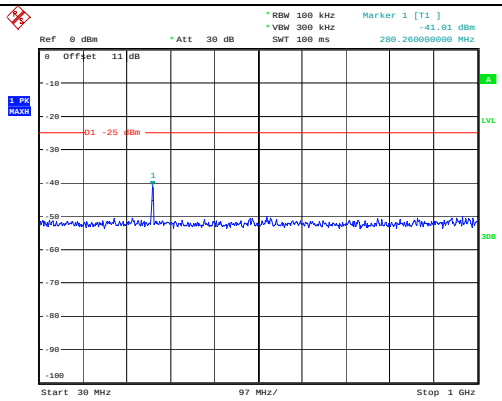
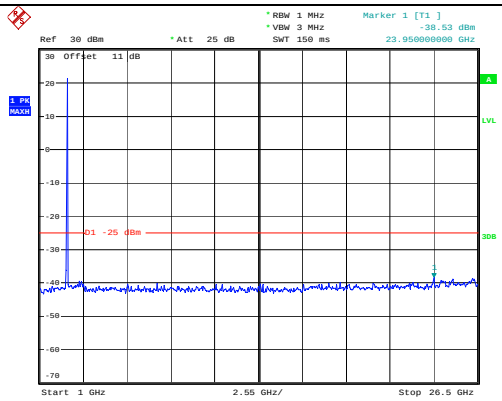
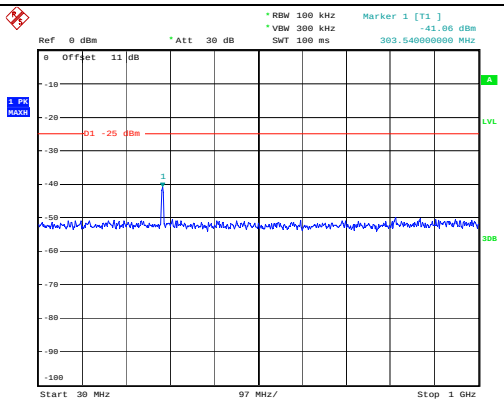
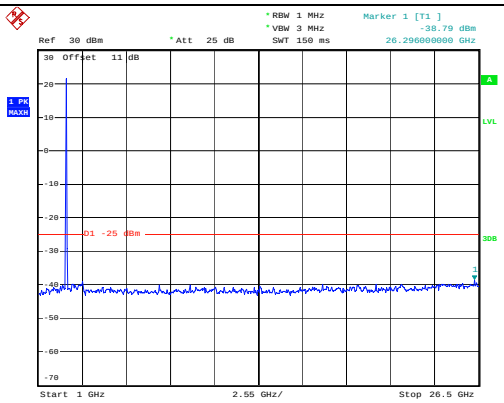
Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:33:22	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:33:42
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:34:05	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:34:25
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:34:42	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:34:55

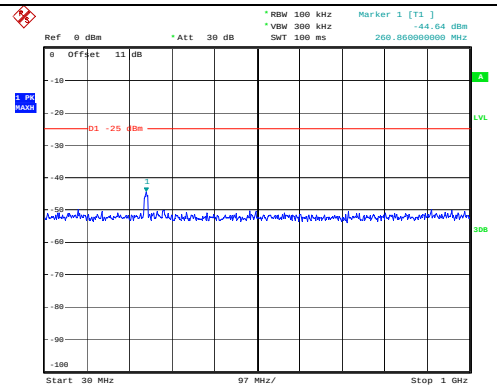
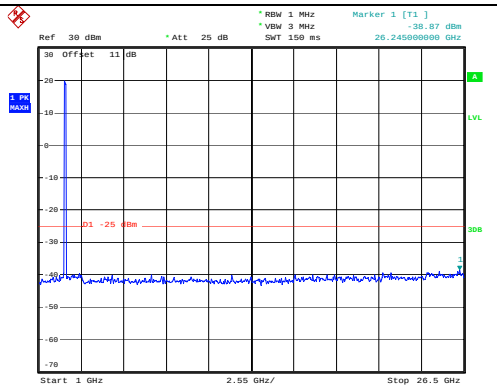
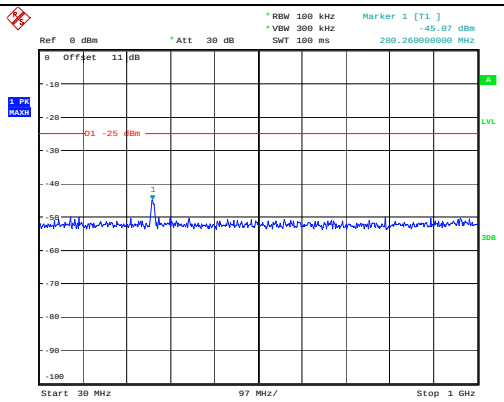
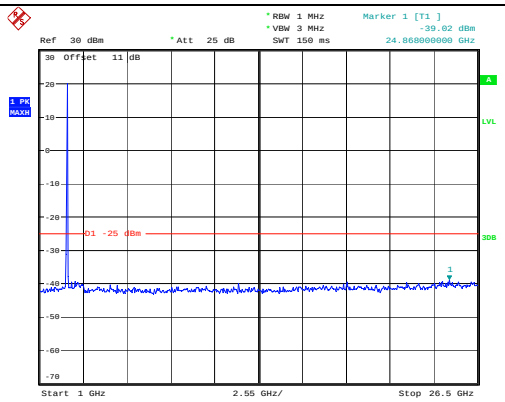
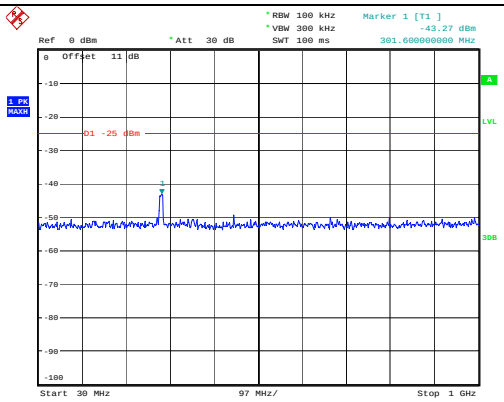
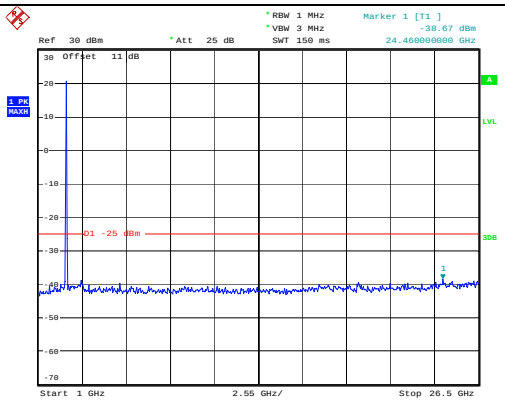
Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:35:38	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:35:58
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:36:18	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:36:34
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:36:55	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:37:11

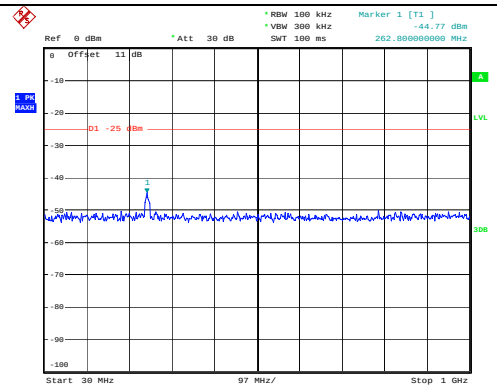
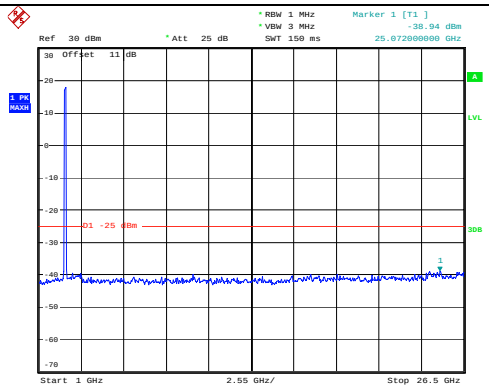
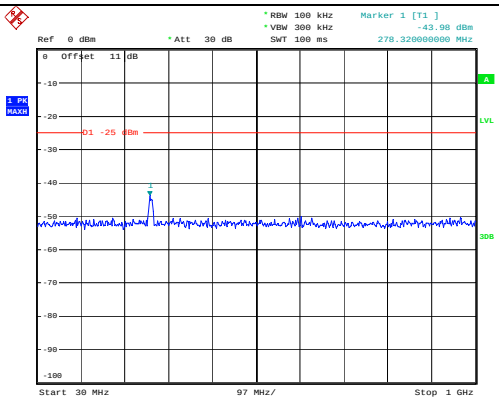
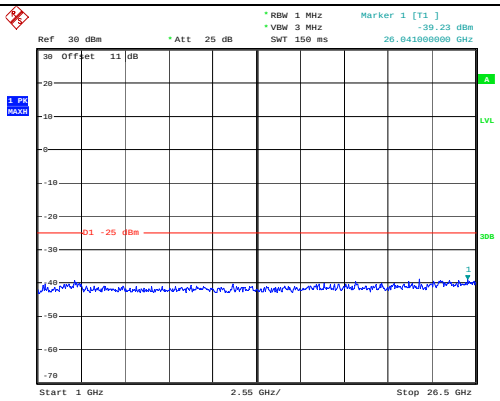
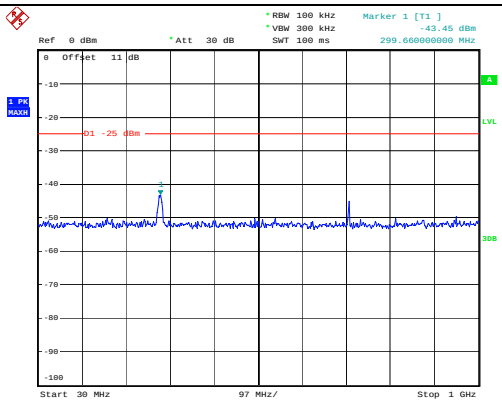
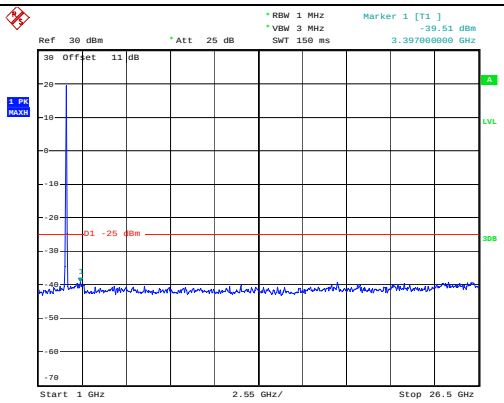
Occupied Bandwidth		
Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:37:54	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:38:11
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:38:25	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:38:38
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:39:02	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:39:18

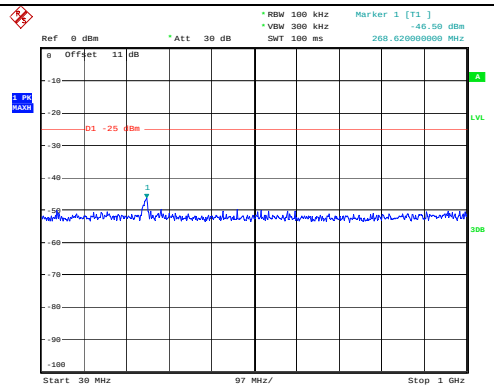
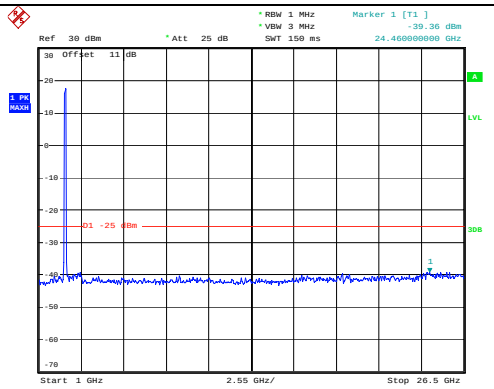
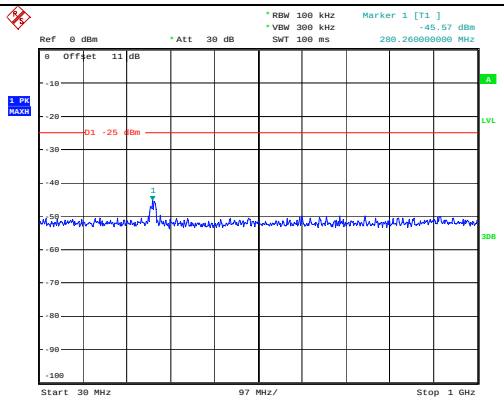
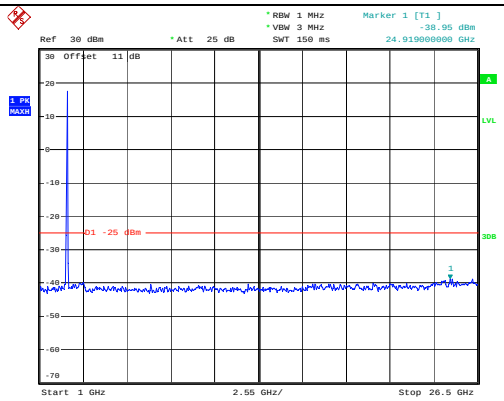
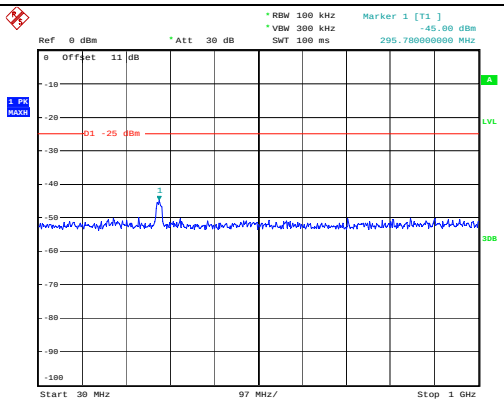
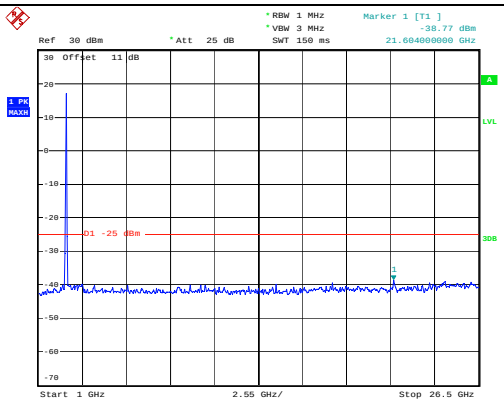
Occupied Bandwidth

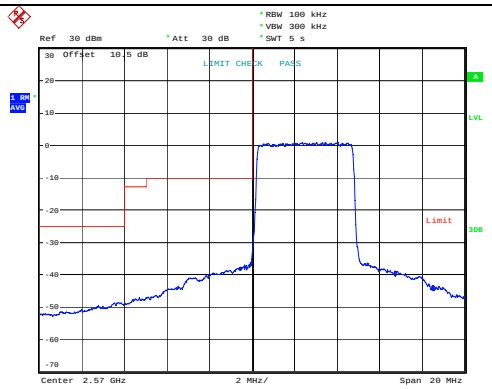
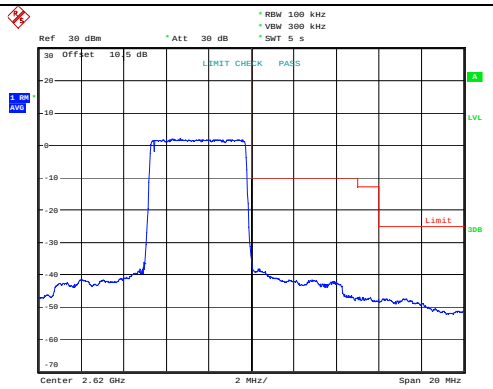
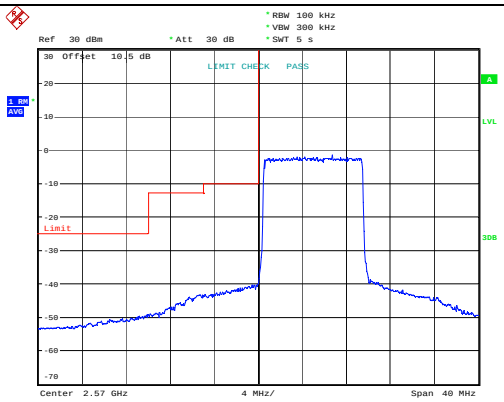
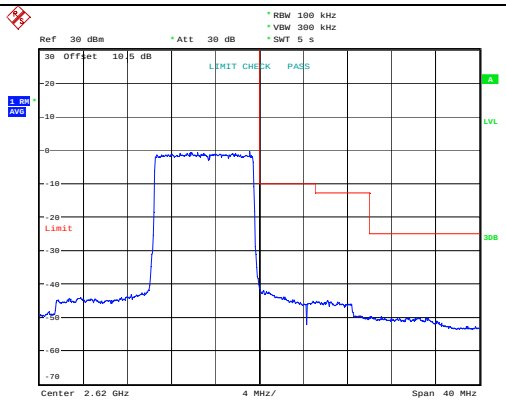
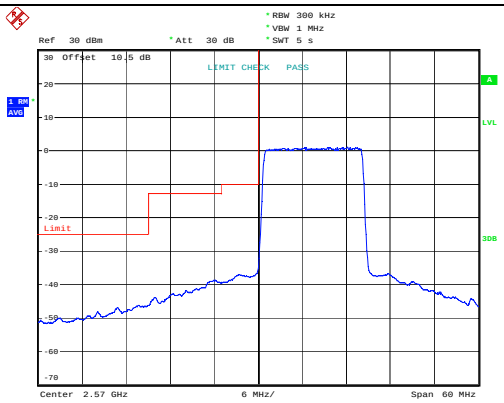
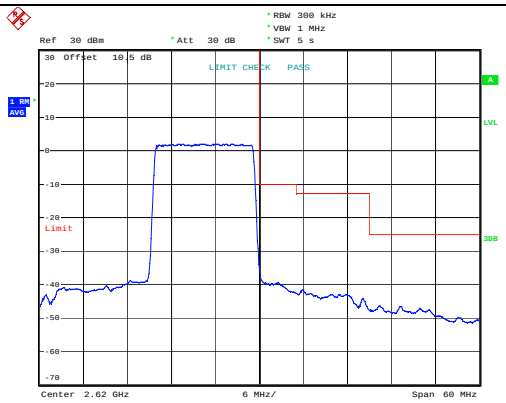
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:40:10	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:40:23
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:40:40	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:40:56
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:41:14	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:41:30

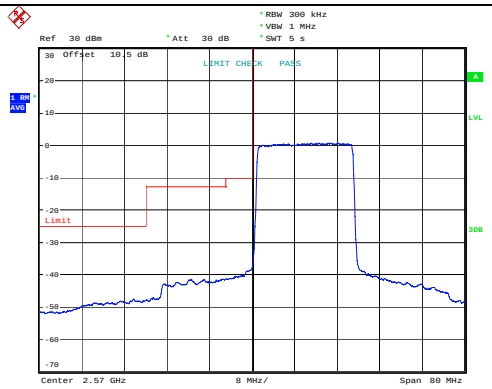
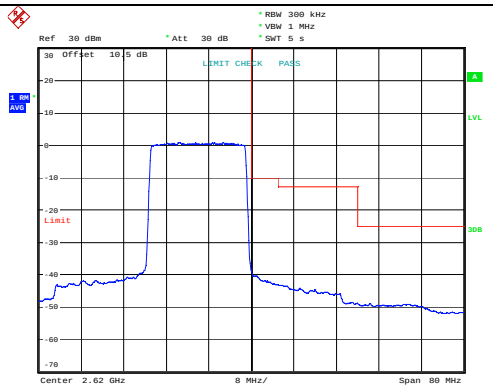
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:31:39	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:31:49
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:32:02	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:32:12
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:32:25	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:32:35

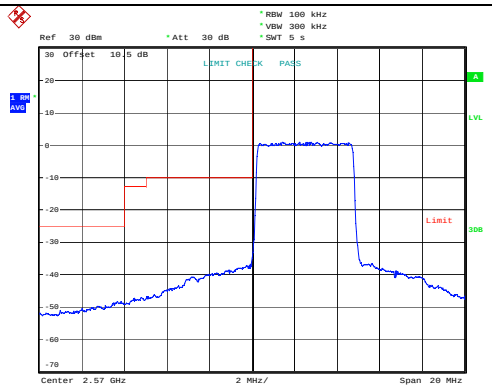
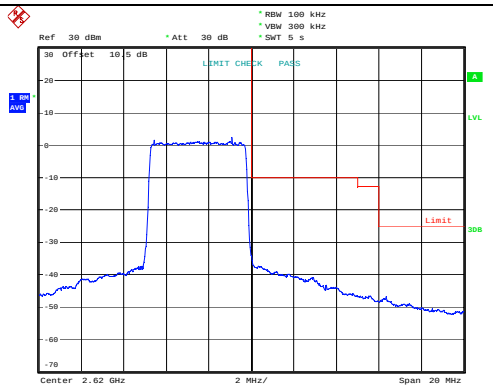
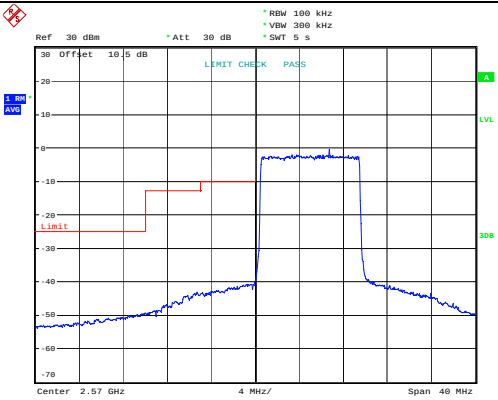
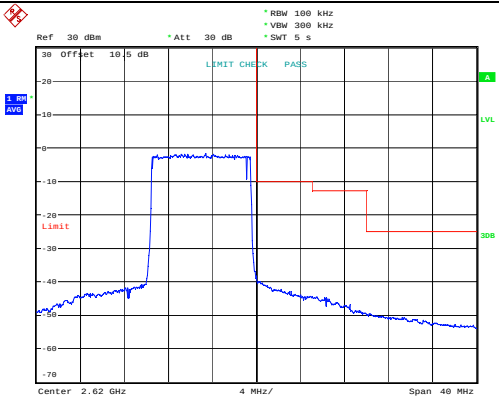
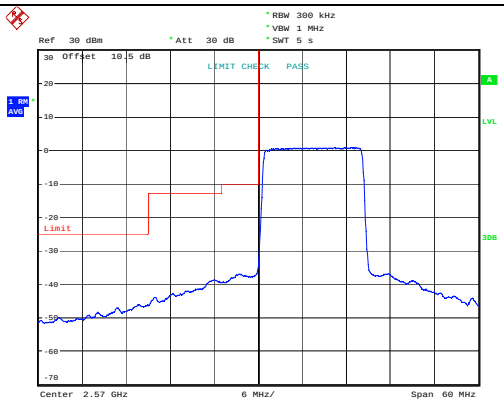
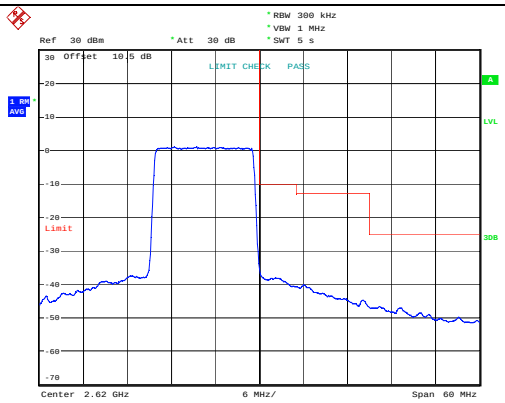
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:33:13	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:33:23
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:33:36	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:33:46
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:33:59	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:34:09

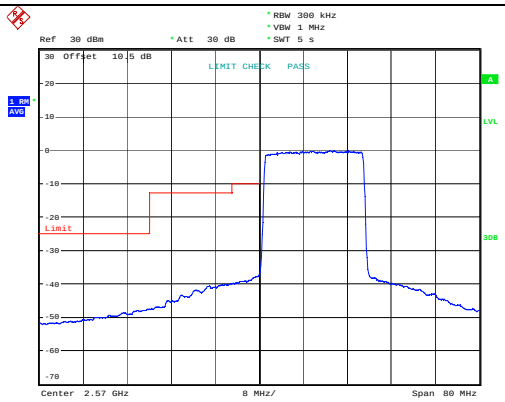
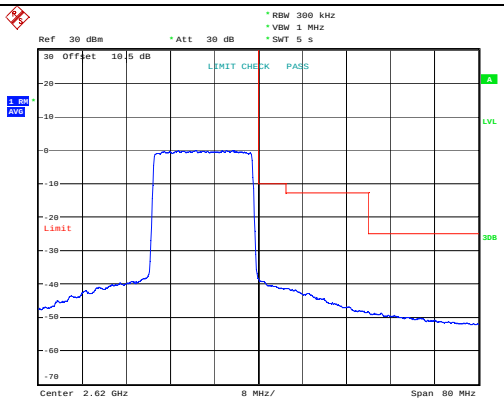
Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:34:56	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:35:06
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:35:18	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:35:29
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:36:46	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:36:56

Spurious Emissions at Antenna Terminal	
Channel	**20MHz Bandwidth QPSK**
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:37:43	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:37:54
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:38:09	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:38:19
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:38:32	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:38:42

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 5MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:13:14	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:13:51
QPSK 10MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:16:25	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:17:01
QPSK 15MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:19:41	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:20:17

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 20MHz		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 5MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:14:27	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:15:05
16QAM 10MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:17:37	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:18:23
16QAM 15MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:20:54	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:24:45

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 20MHz		

4.15 Antenna Port Test Data and Results for LTE Band 40

Serial Number:	2CGM-1	Test Date:	2023/11/21-2024/1/2
Test Site:	RF	Test Mode:	Transmitting
Tester:	Hale Li, Rod Luo	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	25.6-27.3	Relative Humidity: (%)	48-56	ATM Pressure: (kPa)	101

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200120	2023/4/18	2024/4/17
zhuoxiang	Coaxial Cable	211001	Each time	N/A	N/A
Minl-Clrcuits	Power Splitter	S F448201619	Each time	N/A	N/A
eastsheep	Coaxial Attenuator	21060301	Each time	N/A	N/A
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/29	2024/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30

** 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	2307.5	/	2312.5
10MHz	/	2310	/
5MHz	2352.5	/	2357.5
10MHz	/	2355	/

Test Data:
(Note:Uplink Downlink configuration 3 was tested)

FCC§2.1046;§ 27.50(a)(3)

LTE Band 40 Lower:

RF Output Power:

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	16.14	/	16.15	14.95	24
	RB1#13	16.27	/	16.29		
	RB1#24	16.13	/	16.16		
	RB15#0	15.20	/	15.20		
	RB15#10	15.20	/	15.20		
	RB25#0	15.18	/	15.19		
5MHz 16QAM	RB1#0	15.25	/	15.16	14.04	24
	RB1#13	15.38	/	15.32		
	RB1#24	15.22	/	15.17		
	RB15#0	14.20	/	14.11		
	RB15#10	14.24	/	14.15		
	RB25#0	14.24	/	14.19		
10MHz QPSK	RB1#0	/	16.16	/	14.93	24
	RB1#25	/	16.27	/		
	RB1#49	/	16.18	/		
	RB25#0	/	15.12	/		
	RB25#25	/	15.14	/		
	RB50#0	/	15.16	/		
10MHz 16QAM	RB1#0	/	15.39	/	14.12	24
	RB1#25	/	15.46	/		
	RB1#49	/	15.42	/		
	RB25#0	/	14.14	/		
	RB25#25	/	14.17	/		
	RB50#0	/	14.14	/		

Note:
For 5MHz mode, the channel power is equal to the test result in dBm/5MHz.
For 10MHz mode, the channel power is sum of 10MHz bandwidth, the result is less than 24dBm, so in any 5MHz bandwidth, it's will not exceed limit
EIRP=Conducted Power(dBm) - L_C(dB) + G_T(dBi)

LTE Band 40 Upper:

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		
5MHz QPSK	RB1#0	16.27	/	16.24	15.09	24
	RB1#13	16.43	/	16.37		
	RB1#24	16.21	/	16.23		
	RB15#0	15.28	/	15.28		
	RB15#10	15.29	/	15.29		
	RB25#0	15.24	/	15.26		
5MHz 16QAM	RB1#0	15.53	/	15.34	14.33	24
	RB1#13	15.67	/	15.48		
	RB1#24	15.50	/	15.31		
	RB15#0	14.30	/	14.29		
	RB15#10	14.31	/	14.33		
	RB25#0	14.26	/	14.32		
10MHz QPSK	RB1#0	/	16.36	/	15.05	24
	RB1#25	/	16.39	/		
	RB1#49	/	16.25	/		
	RB25#0	/	15.20	/		
	RB25#25	/	15.24	/		
	RB50#0	/	15.22	/		
10MHz 16QAM	RB1#0	/	15.48	/	14.15	24
	RB1#25	/	15.49	/		
	RB1#49	/	15.41	/		
	RB25#0	/	14.27	/		
	RB25#25	/	14.28	/		
	RB50#0	/	14.27	/		

Note:
For 5MHz mode, the channel power is equal to the test result in dBm/5MHz.
For 10MHz mode, the channel power is sum of 10MHz bandwidth, the result is less than 24dBm, so in any 5MHz bandwidth, it's will not exceed limit
EIRP=Conducted Power(dBm) - L_C(dB) + G_T(dBi)

Result:	**Pass**

Duty Cycle

Operation Band	Modulation	Bandwidth	Ton (ms)	Ton+off (ms)	Duty Cycle (%)	Limit (%)
LTE Band 40 Lower	QPSK	5M	3.013	10.051	29.41	38
		10M	2.974	10.013	29.70	38
	16QAM	5M	2.949	10.026	29.41	38
		10M	2.956	10.058	29.39	38
LTE Band 40 Upper	QPSK	5M	2.910	10.013	29.06	38
		10M	2.949	10.051	29.34	38
	16QAM	5M	2.968	10.013	29.64	38
		10M	2.927	10.051	29.12	38
					Result:	**Pass**

FCC §2.1049, §27.53:Occupied Bandwidth						
LTE Band 40 Lower:						
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	4.52	/	4.54	4.94	/	4.94
5MHz 16QAM	4.50	/	4.50	4.94	/	4.96
10MHz QPSK	/	8.96	/	/	9.64	/
10MHz 16QAM	/	8.96	/	/	9.56	/
LTE Band 40 Upper:						
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	4.52	/	4.50	4.90	/	4.90
5MHz 16QAM	4.50	/	4.50	5.04	/	4.92
10MHz QPSK	/	9.00	/	/	9.68	/
10MHz 16QAM	/	8.96	/	/	9.56	/
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						
LTE Band 40 Lower:						
Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.91	2305.010	2305.000	2314.979	2315.000
	-20	3.91	2305.012	2305.000	2314.982	2315.000
	-10	3.91	2305.017	2305.000	2314.980	2315.000
	0	3.91	2305.012	2305.000	2314.987	2315.000
	10	3.91	2305.012	2305.000	2314.982	2315.000
	20	3.91	2305.016	2305.000	2314.982	2315.000
	30	3.91	2305.013	2305.000	2314.985	2315.000
	40	3.91	2305.011	2305.000	2314.985	2315.000
	50	3.91	2305.015	2305.000	2314.983	2315.000
Frequency Stability vs. Voltage	20	3.45	2305.012	2305.000	2314.982	2315.000
	20	4.5	2305.016	2305.000	2314.983	2315.000
					Result:	**Pass**

Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.91	2305.014	2305.000	2314.985	2315.000
	-20	3.91	2305.015	2305.000	2314.983	2315.000
	-10	3.91	2305.012	2305.000	2314.987	2315.000
	0	3.91	2305.011	2305.000	2314.983	2315.000
	10	3.91	2305.012	2305.000	2314.982	2315.000
	20	3.91	2305.012	2305.000	2314.981	2315.000
	30	3.91	2305.016	2305.000	2314.987	2315.000
	40	3.91	2305.011	2305.000	2314.987	2315.000
	50	3.91	2305.014	2305.000	2314.984	2315.000
Frequency Stability vs. Voltage	20	3.45	2305.017	2305.000	2314.984	2315.000
	20	4.5	2305.014	2305.000	2314.981	2315.000
					Result:	**Pass**

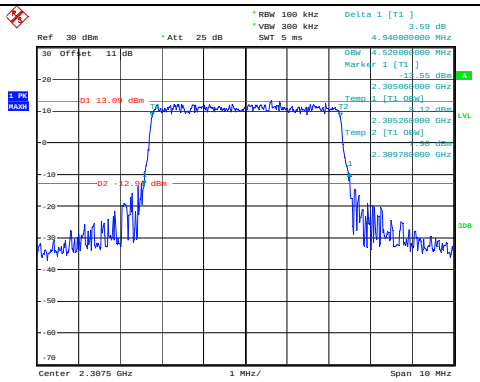
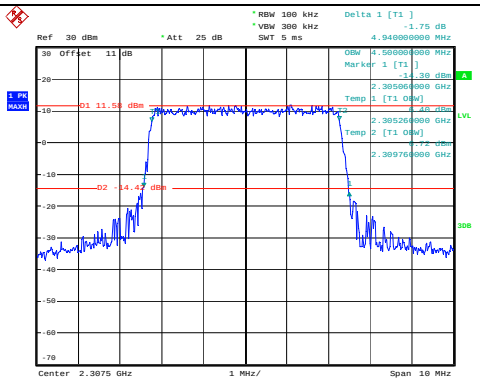
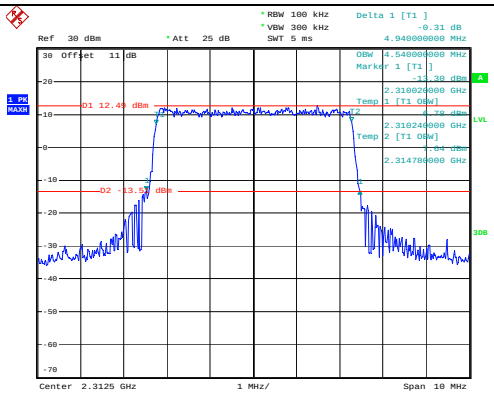
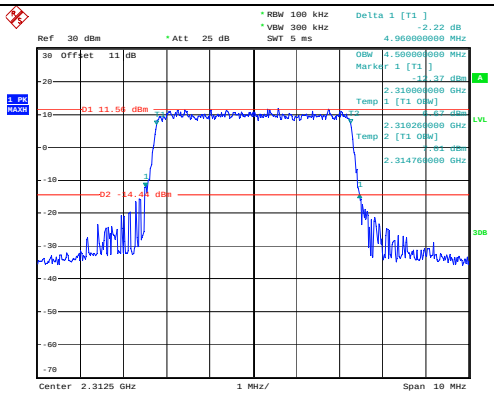
LTE Band 40 Upper:						
Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.91	2350.010	2350.000	2359.978	2360.000
	-20	3.91	2350.013	2350.000	2359.979	2360.000
	-10	3.91	2350.014	2350.000	2359.978	2360.000
	0	3.91	2350.016	2350.000	2359.979	2360.000

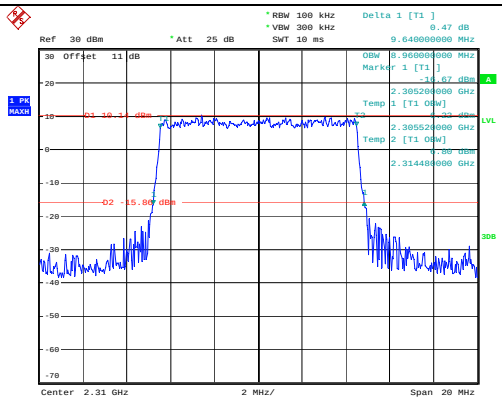
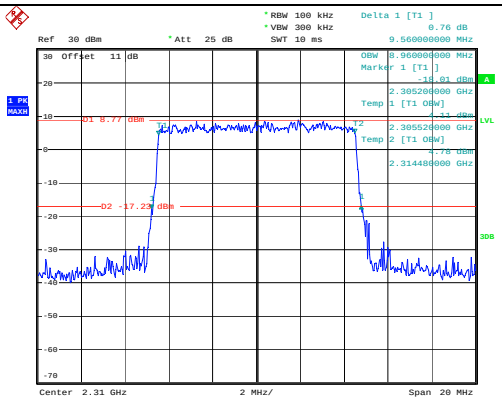
	10	3.91	2350.013	2350.000	2359.974	2360.000
	20	3.91	2350.018	2350.000	2359.975	2360.000
	30	3.91	2350.010	2350.000	2359.972	2360.000
	40	3.91	2350.015	2350.000	2359.974	2360.000
	50	3.91	2350.014	2350.000	2359.973	2360.000
Frequency Stability vs. Voltage	20	3.45	2350.016	2350.000	2359.977	2360.000
	20	4.5	2350.015	2350.000	2359.972	2360.000
					Result:	**Pass**

Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.91	2350.014	2350.000	2359.977	2360.000
	-20	3.91	2350.014	2350.000	2359.976	2360.000
	-10	3.91	2350.018	2350.000	2359.976	2360.000
	0	3.91	2350.011	2350.000	2359.976	2360.000
	10	3.91	2350.013	2350.000	2359.974	2360.000
	20	3.91	2350.012	2350.000	2359.972	2360.000
	30	3.91	2350.011	2350.000	2359.979	2360.000
	40	3.91	2350.016	2350.000	2359.976	2360.000
	50	3.91	2350.014	2350.000	2359.971	2360.000
Frequency Stability vs. Voltage	20	3.45	2350.018	2350.000	2359.974	2360.000
	20	4.5	2350.015	2350.000	2359.978	2360.000
					Result:	**Pass**

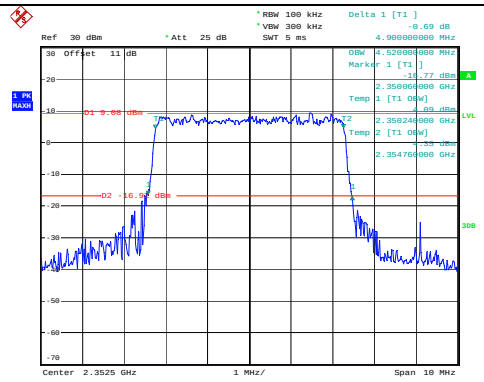
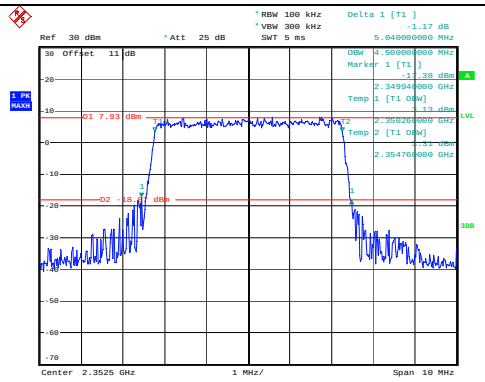
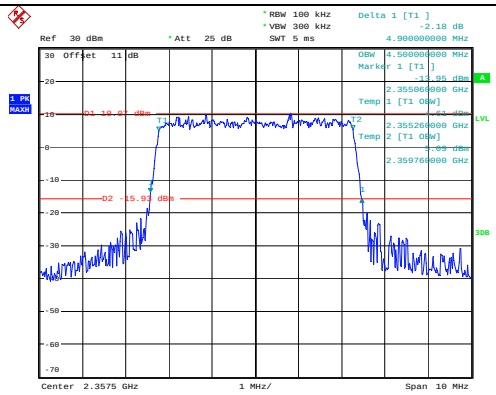
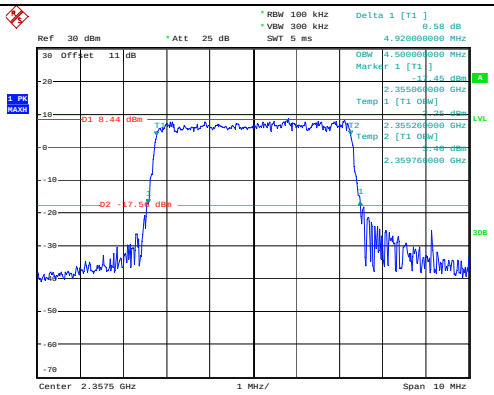
Test Plots (Note: The 11.0 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

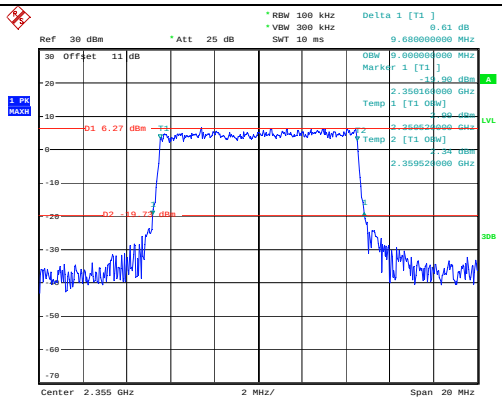
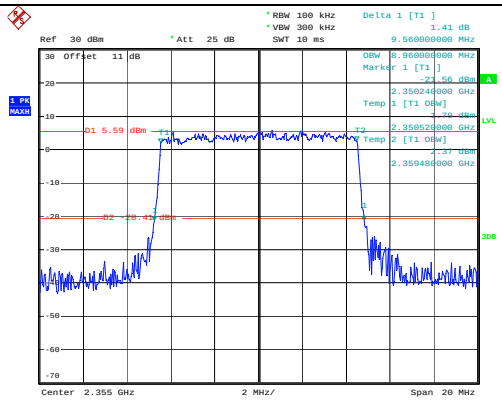
2305-2315 MHz:

Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 21.NOV.2023 19:31:52	 ProjectNo.:CR231061288 Tester:Hale Li Date: 21.NOV.2023 19:32:17
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 21.NOV.2023 19:33:22	 ProjectNo.:CR231061288 Tester:Hale Li Date: 21.NOV.2023 19:33:43

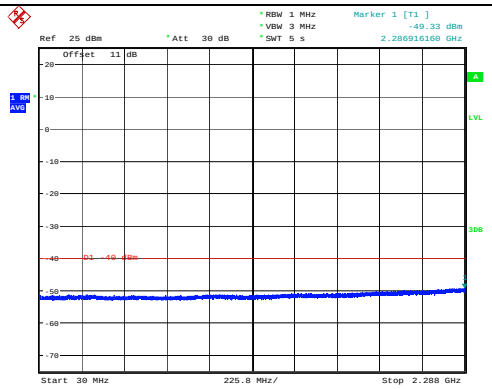
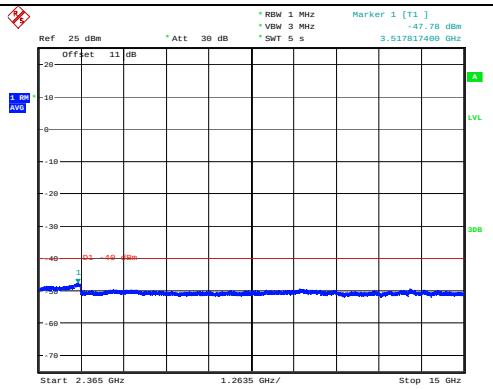
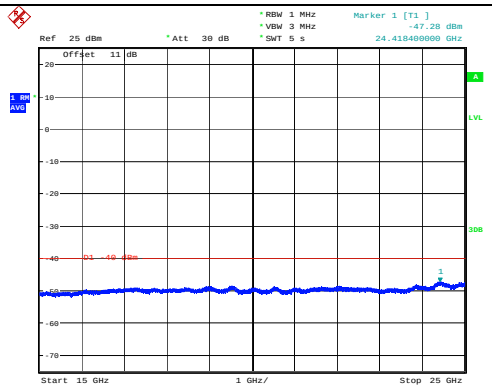
Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Middle		

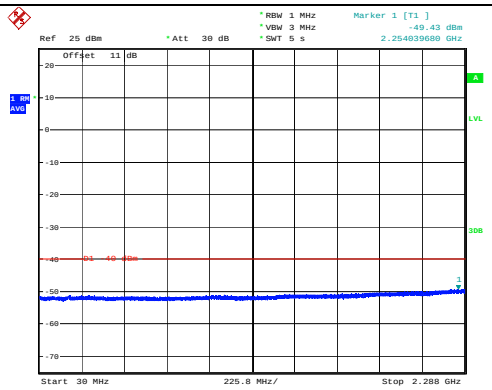
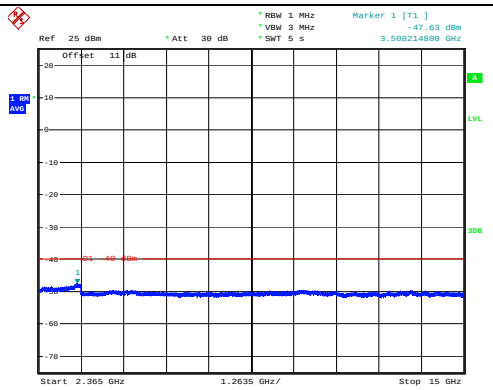
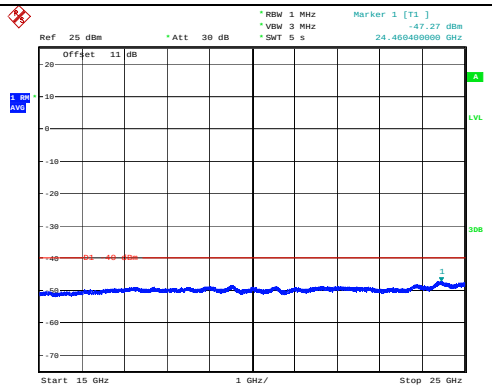
2350-2360 MHz:

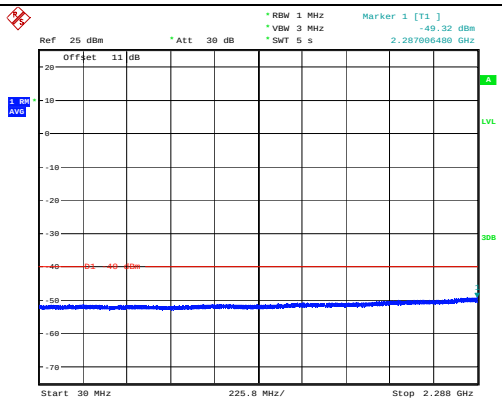
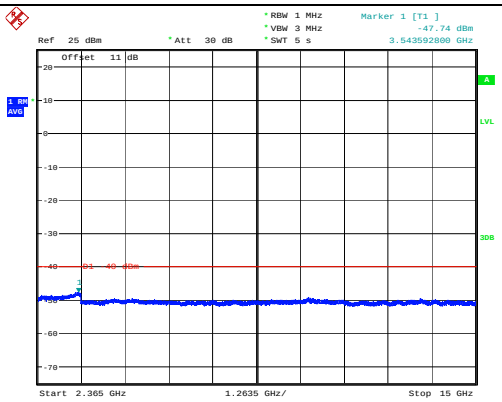
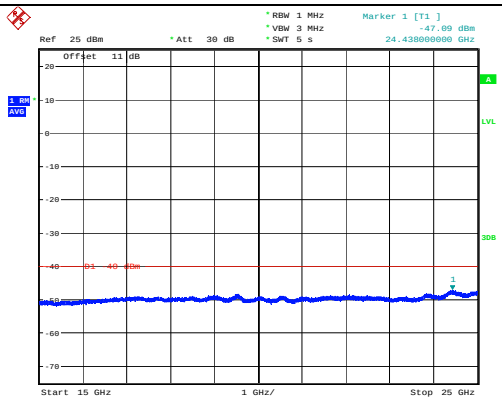
Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest		
Highest		

Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Middle		

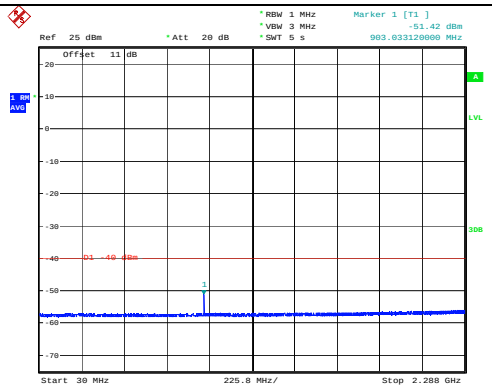
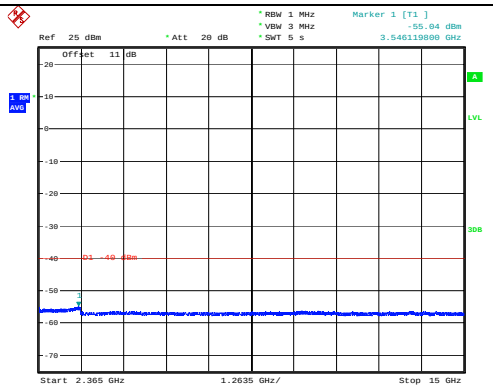
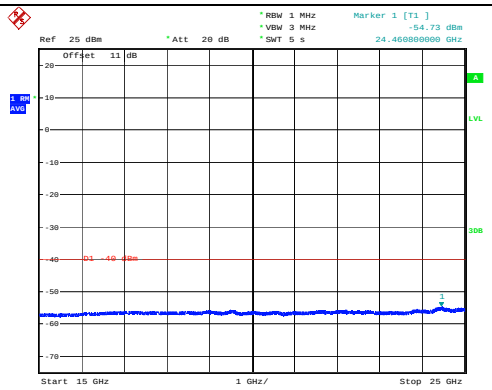
2305-2315 MHz:

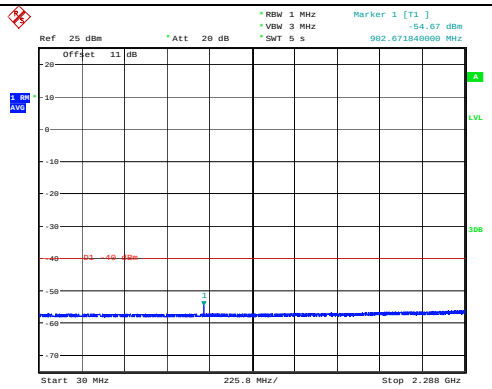
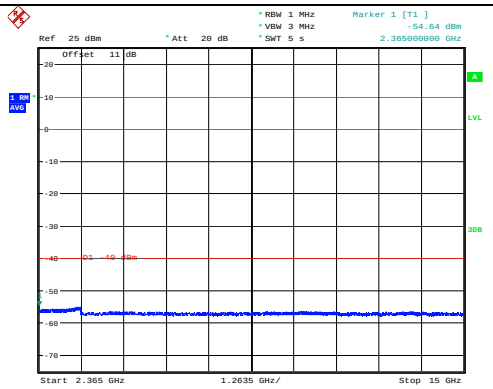
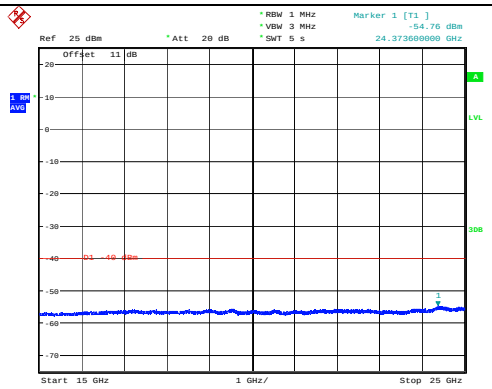
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:13:33	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:13:52
	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:14:12	

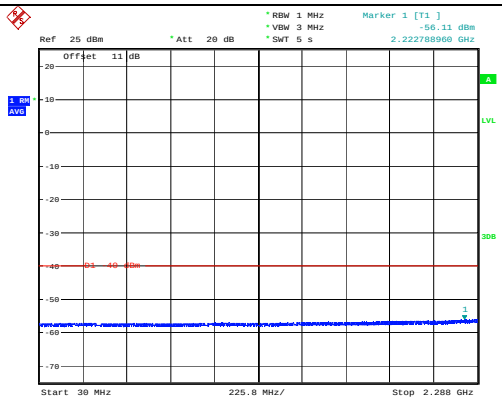
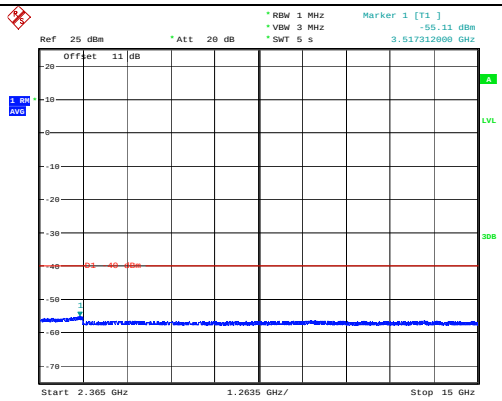
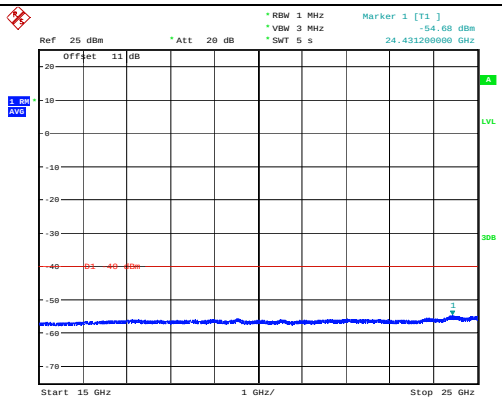
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Highest	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:16:49	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:17:08
	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:17:28	

Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Middle	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:18:36	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:18:56
	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:19:15	

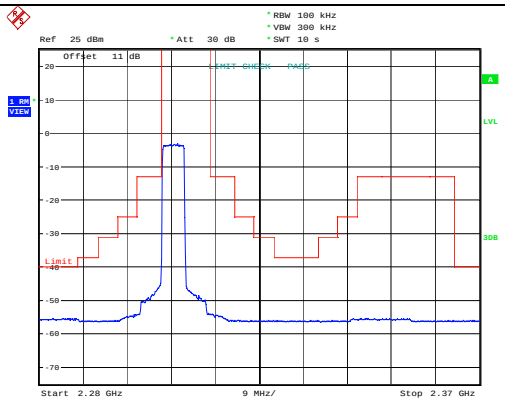
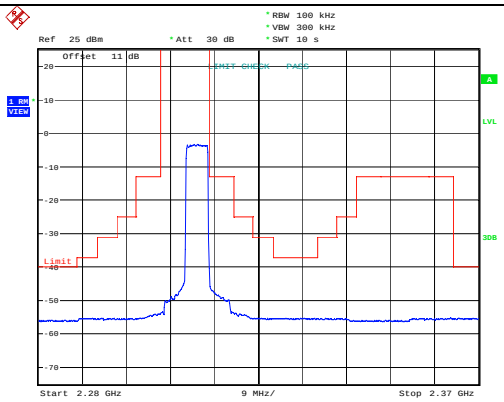
2350-2360 MHz:

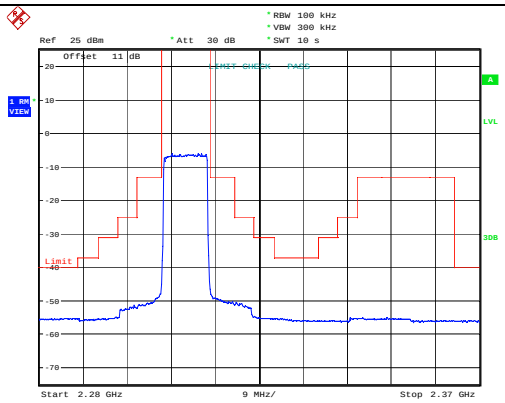
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 2.JAN.2024 17:05:49	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:20:58
	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:21:17	

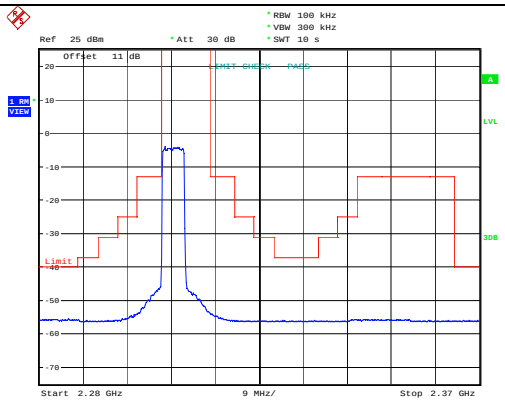
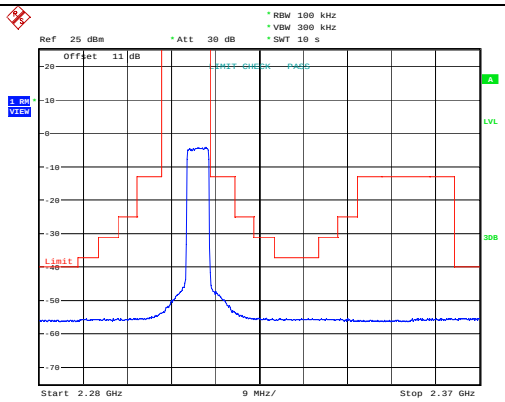
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Highest	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 2.JAN.2024 17:06:39	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:23:38
	 ProjectNo.:CR231061288 Tester:Rod Luo Date: 11.DEC.2023 11:23:56	

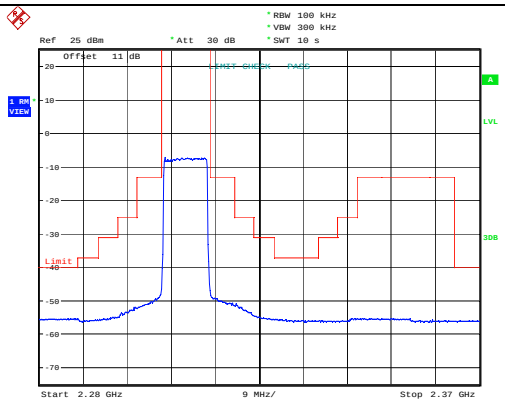
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Middle		
		

2305-2315 MHz:

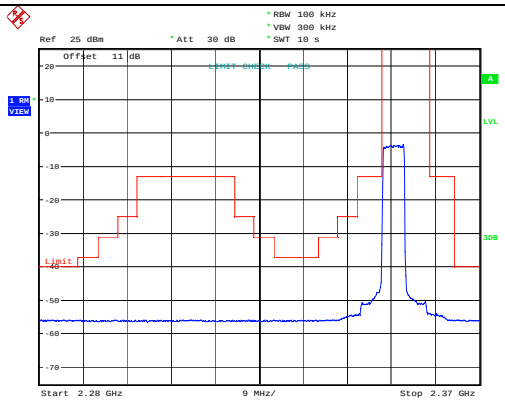
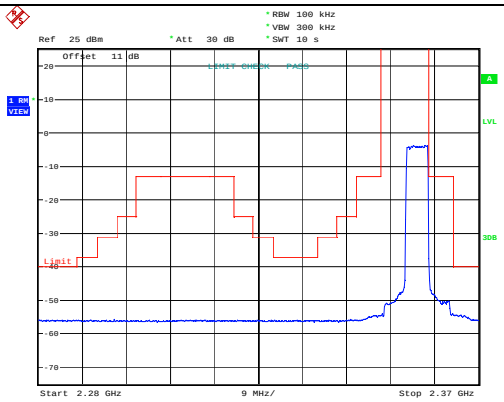
Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 5MHz		

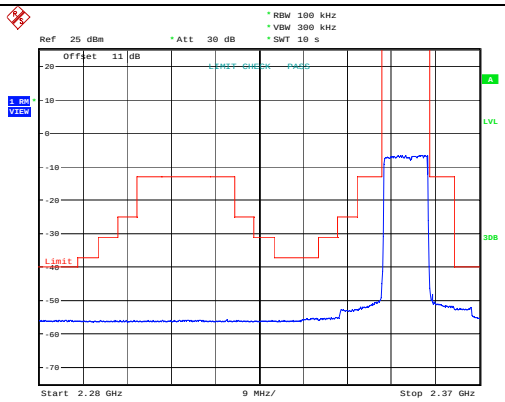
Out of band emission, Band Edge		
Mode	Middle	/
QPSK 10MHz		/

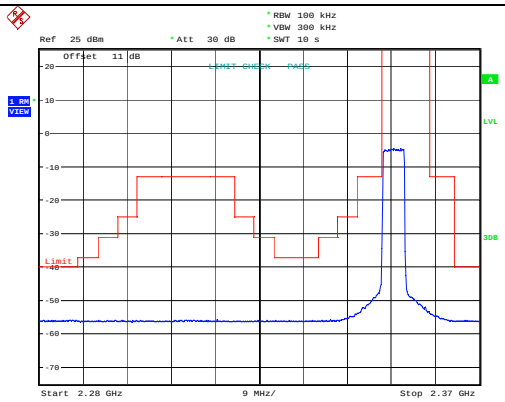
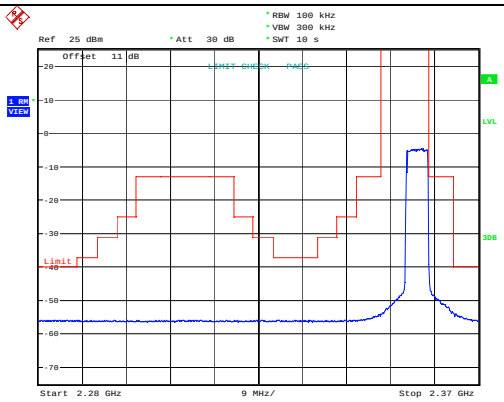
Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 5MHz		

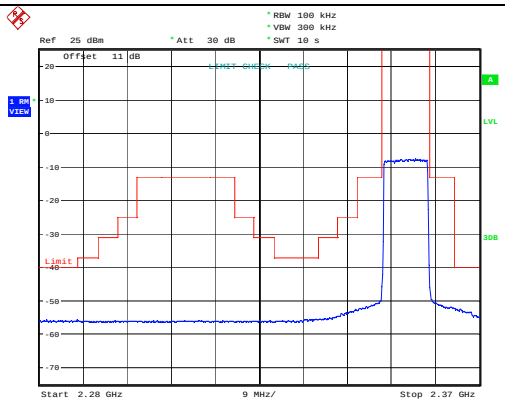
Out of band emission, Band Edge		
Mode	Middle	/
16QAM 10MHz		/

2350-2360 MHz:

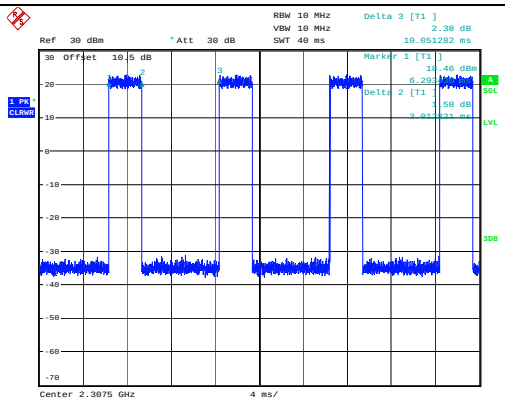
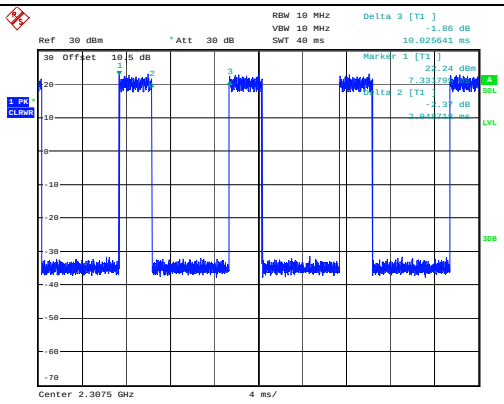
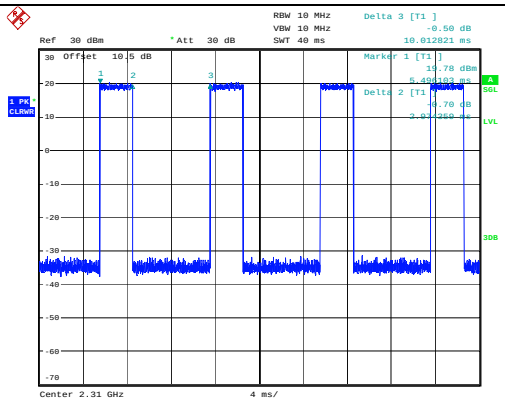
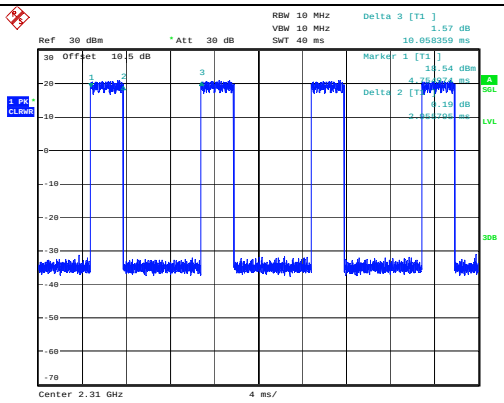
Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 5MHz	 ProjectNo.:CR231061288 Tester:Hale Li Date: 30.NOV.2023 11:59:52	 ProjectNo.:CR231061288 Tester:Hale Li Date: 30.NOV.2023 12:01:00

Out of band emission, Band Edge		
Mode	Middle	/
QPSK 10MHz	 ProjectNo.:CR231061288 Tester:Hale Li Date: 30.NOV.2023 12:02:04	/

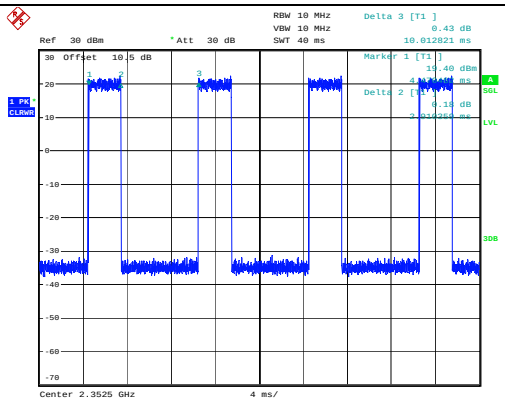
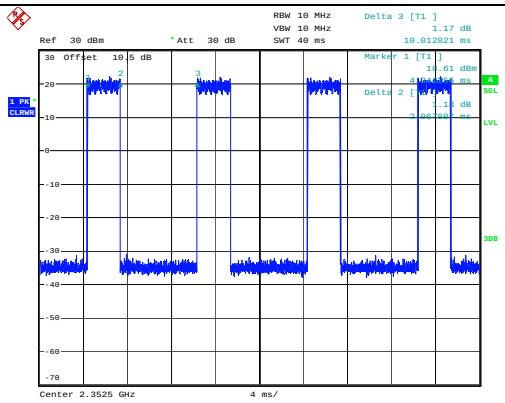
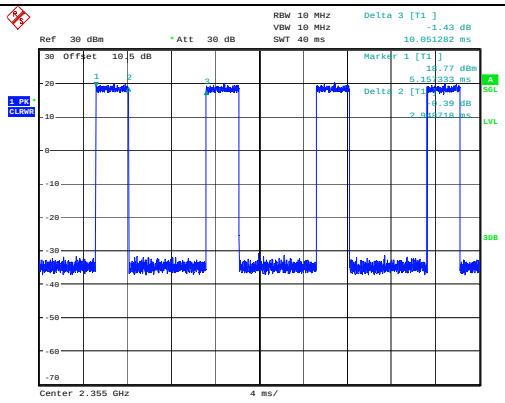
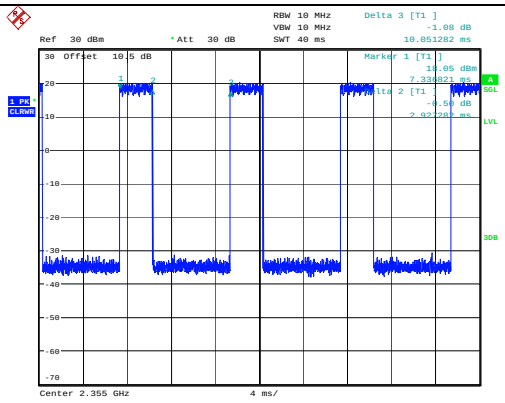
Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 5MHz		

Out of band emission, Band Edge		
Mode	Middle	/
16QAM 10MHz		/

2305-2315 MHz:

Duty cycle		
Mode	**QPSK**	**16QAM**
5MHz		
10MHz		

2350-2360 MHz:

Duty cycle		
Mode	**QPSK**	**16QAM**
5MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 14:47:14	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 14:46:18
10MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 14:51:26	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 14:52:31

4.16 Antenna Port Test Data and Results for LTE Band 41

Serial Number:	2CGM-1	Test Date:	2023/11/22-2023/12/10
Test Site:	RF	Test Mode:	Transmitting
Tester:	Hale Li, Rod Luo, Len Huang	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	25.7-27.5	Relative Humidity: (%)	51-55	ATM Pressure: (kPa)	101

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200120	2023/4/18	2024/4/17
zhuoxiang	Coaxial Cable	211001	Each time	N/A	N/A
Minl-Clrcuits	Power Splitter	S F448201619	Each time	N/A	N/A
eastsheep	Coaxial Attenuator	21060301	Each time	N/A	N/A
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
R&S	Spectrum Analyzer	FSV40-N	102259	2023/4/18	2024/4/17
UNI-T	Multimeter	UT39A+	C210582554	2023/9/29	2024/9/28
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)
5MHz	2498.5	2593	2687.5
10MHz	2501	2593	2685
15MHz	2503.5	2593	2682.5
20MHz	2506	2593	2680

Test Data:

FCC§2.1046;§ 27.50(h)(2)

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		
5MHz QPSK	RB1#0	18.75	19.01	19.35	18.61	33
	RB1#13	18.88	19.16	19.49		
	RB1#24	18.78	19.02	19.37		
	RB15#0	17.82	18.09	18.44		
	RB15#10	17.83	18.05	18.46		
	RB25#0	17.79	18.06	18.41		
5MHz 16QAM	RB1#0	17.85	18.29	18.41	17.67	33
	RB1#13	18.05	18.46	18.55		
	RB1#24	17.89	18.34	18.42		
	RB15#0	16.83	17.09	17.38		
	RB15#10	16.86	17.11	17.38		
	RB25#0	16.87	17.06	17.47		
10MHz QPSK	RB1#0	18.84	19.08	19.42	18.64	33
	RB1#25	18.96	19.15	19.52		
	RB1#49	18.90	19.15	19.46		
	RB25#0	17.75	18.10	18.39		
	RB25#25	17.87	18.09	18.43		
	RB50#0	17.84	18.12	18.45		
10MHz 16QAM	RB1#0	17.99	18.37	18.38	17.59	33
	RB1#25	18.10	18.44	18.47		
	RB1#49	18.07	18.42	18.43		
	RB25#0	16.86	17.14	17.48		
	RB25#25	16.92	17.11	17.54		
	RB50#0	16.92	17.08	17.46		
15MHz QPSK	RB1#0	18.77	19.00	19.27	18.58	33
	RB1#38	18.96	19.21	19.46		
	RB1#74	18.83	19.09	19.40		
	RB36#0	17.79	18.04	18.36		
	RB36#39	17.86	18.06	18.40		
	RB75#0	17.85	18.07	18.42		
15MHz 16QAM	RB1#0	18.04	18.00	18.57	17.87	33
	RB1#38	18.23	18.18	18.75		
	RB1#74	18.15	18.07	18.67		
	RB36#0	16.79	17.03	17.39		
	RB36#39	16.87	17.06	17.43		
	RB75#0	16.77	17.07	17.36		
20MHz QPSK	RB1#0	18.78	18.88	19.17	18.6	33

	RB1#50	19.06	19.18	19.48		
	RB1#99	18.88	19.01	19.26		
	RB50#0	17.80	18.06	18.40		
	RB50#50	17.96	18.07	18.42		
	RB100#0	17.88	18.06	18.36		
20MHz 16QAM	RB1#0	18.07	18.03	18.20	17.59	33
	RB1#50	18.32	18.32	18.47		
	RB1#99	18.17	18.14	18.31		
	RB50#0	16.83	17.06	17.46		
	RB50#50	17.01	17.04	17.47		
	RB100#0	16.90	17.07	17.42		
Note: EIRP=Conducted Power(dBm) - L_C(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	10.6	10.13	11.28	13
	RB100#0	10.62	10.58	10.65	13
20MHz 16QAM	RB1#0	10.62	10.38	10.85	13
	RB100#0	10.6	8.97	8.88	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	4.500	4.500	4.500	5.020	4.940	4.980
5MHz 16QAM	4.500	4.500	4.520	4.940	4.940	5.040
10MHz QPSK	9.000	8.960	8.960	9.640	9.640	9.560
10MHz 16QAM	9.000	8.960	8.960	9.560	9.520	9.680
15MHz QPSK	13.440	13.560	13.500	14.880	14.820	14.700
15MHz 16QAM	13.560	13.500	13.560	14.820	14.820	15.060
20MHz QPSK	17.920	18.000	17.920	19.440	19.280	19.360
20MHz 16QAM	17.920	17.920	17.840	19.200	19.360	19.360
Note: The test plots please refer to the Plots of Occupied Bandwidth						

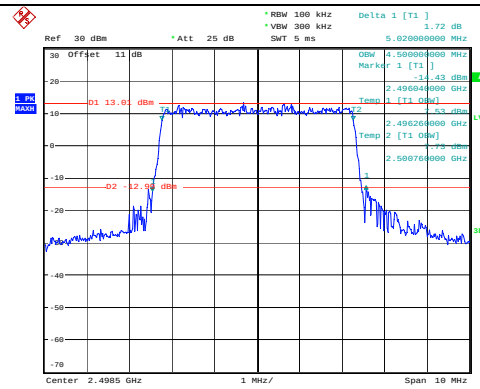
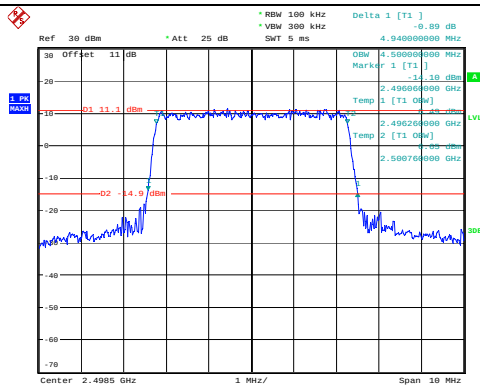
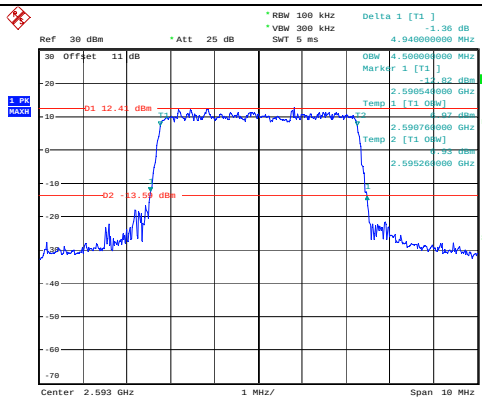
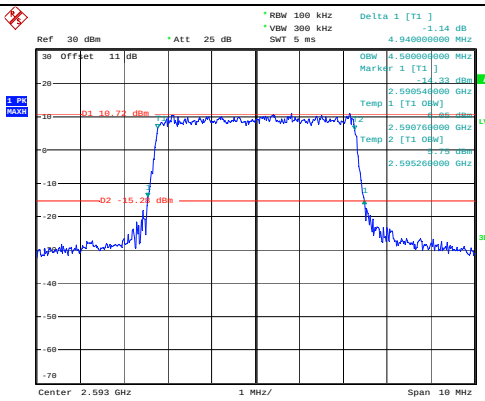
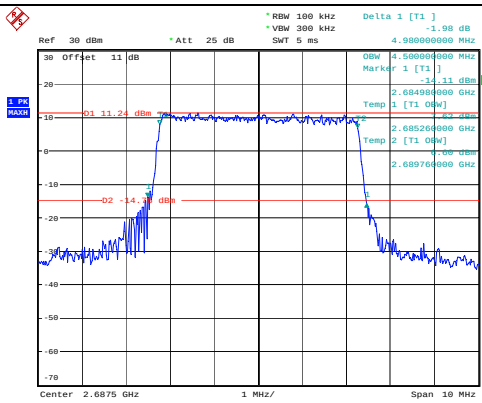
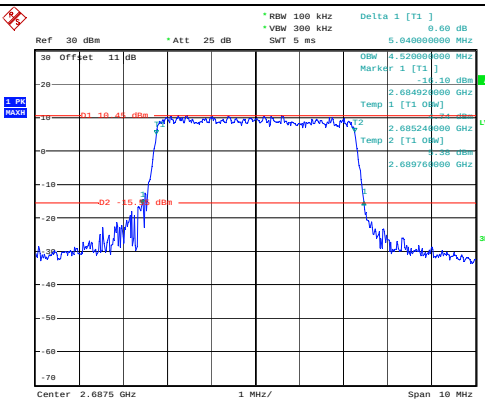
FCC §2.1051, § 27.53:Spurious Emissions at Antenna Terminal	
Result:	**Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.**

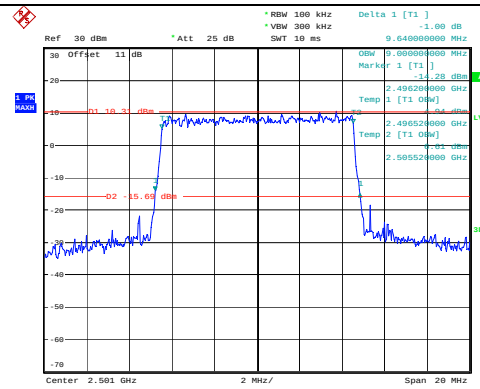
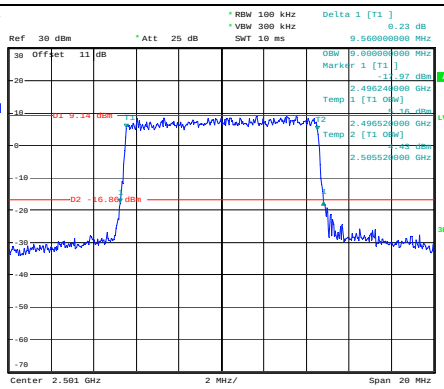
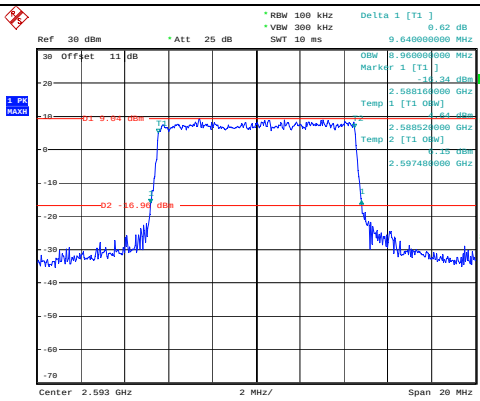
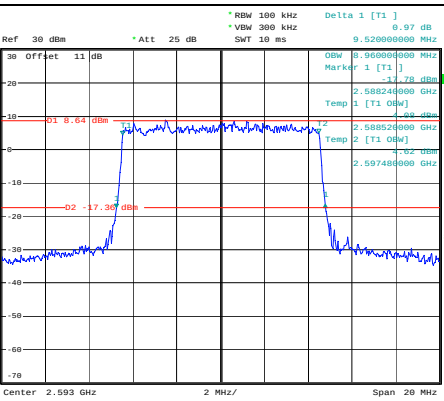
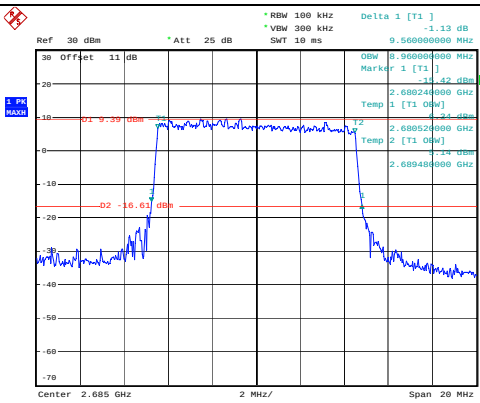
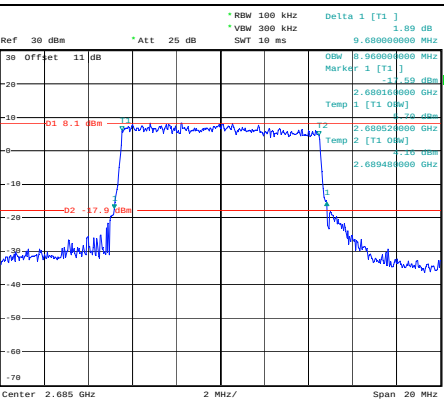
FCC §2.1051, § 27.53:Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

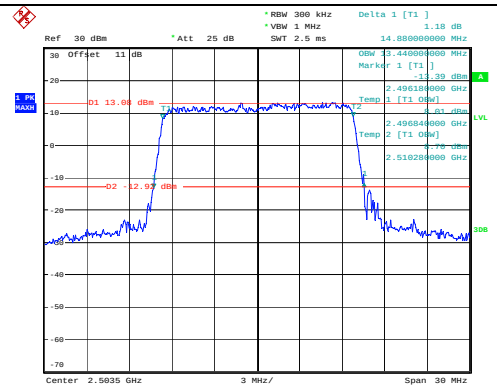
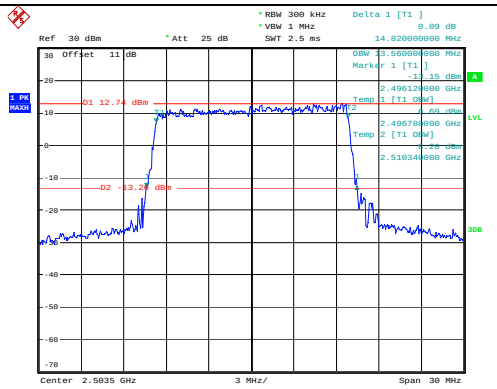
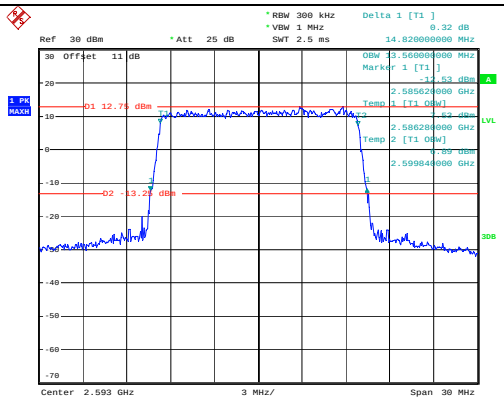
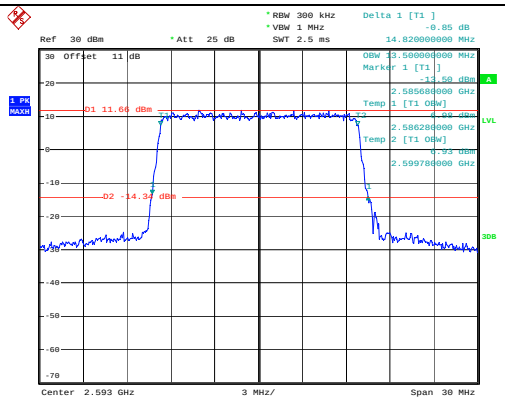
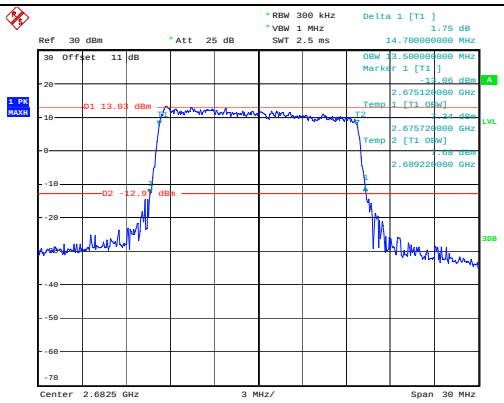
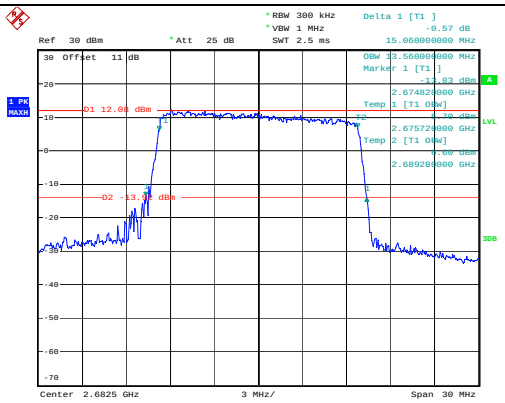
FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.91	2496.291	2496.00	2689.752	2690
	-20	3.91	2496.149	2496.00	2689.868	2690
	-10	3.91	2496.336	2496.00	2689.866	2690
	0	3.91	2496.350	2496.00	2689.623	2690
	10	3.91	2496.021	2496.00	2689.729	2690
	20	3.91	2496.417	2496.00	2689.730	2690
	30	3.91	2496.474	2496.00	2689.693	2690
	40	3.91	2496.497	2496.00	2689.861	2690
	50	3.91	2496.492	2496.00	2689.848	2690
Frequency Stability vs. Voltage	20	3.45	2496.495	2496.00	2689.747	2690
	20	4.5	2496.264	2496.00	2689.916	2690
					Result:	**Pass**

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.91	2496.372	2496.00	2689.876	2690
	-20	3.91	2496.291	2496.00	2689.992	2690
	-10	3.91	2496.273	2496.00	2689.667	2690
	0	3.91	2496.267	2496.00	2689.798	2690
	10	3.91	2496.029	2496.00	2689.557	2690
	20	3.91	2496.303	2496.00	2689.801	2690
	30	3.91	2496.105	2496.00	2689.527	2690
	40	3.91	2496.485	2496.00	2689.993	2690
	50	3.91	2496.216	2496.00	2689.972	2690
Frequency Stability vs. Voltage	20	3.45	2496.340	2496.00	2689.917	2690
	20	4.5	2496.386	2496.00	2689.847	2690
					Result:	**Pass**

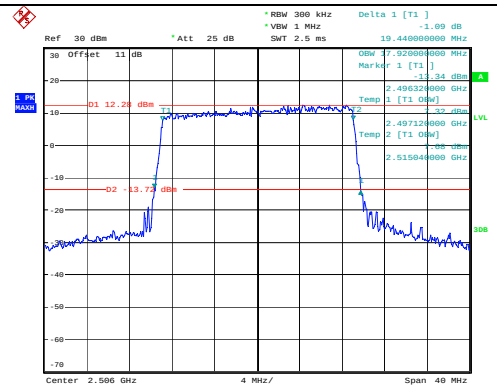
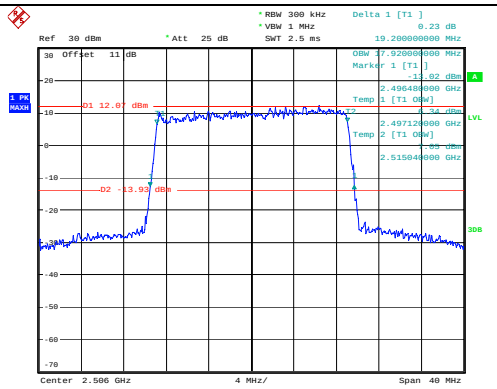
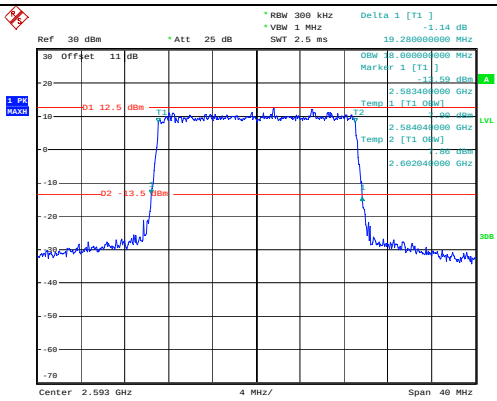
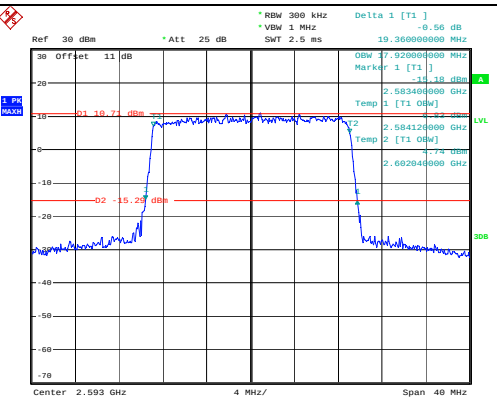
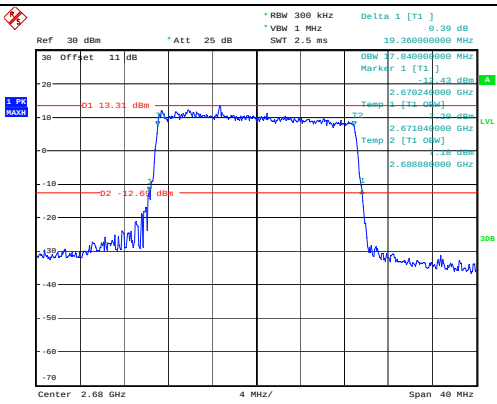
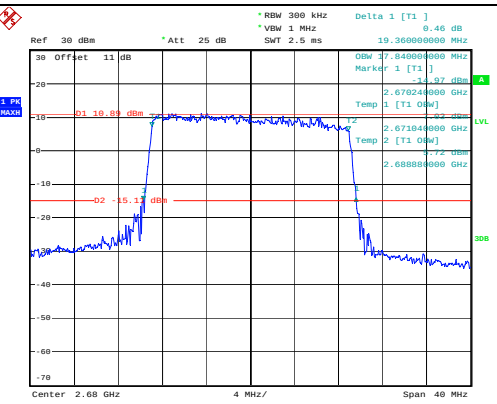
Test Plots (Note: The 11.0 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

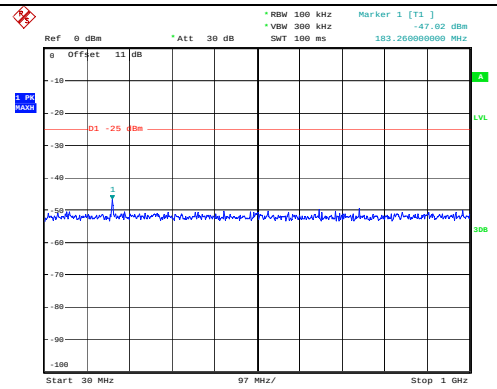
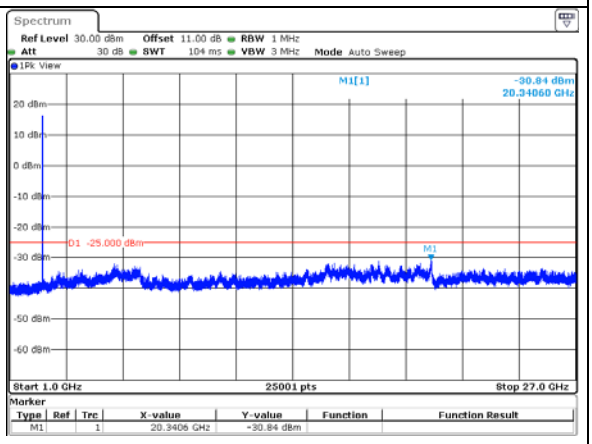
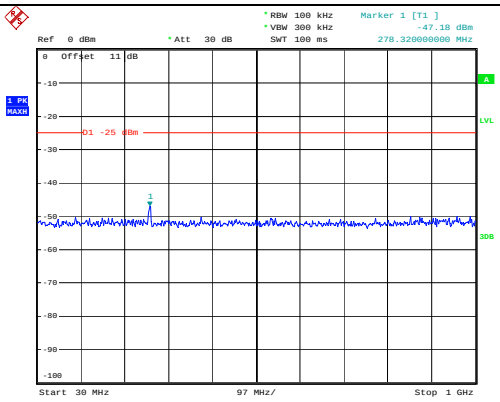
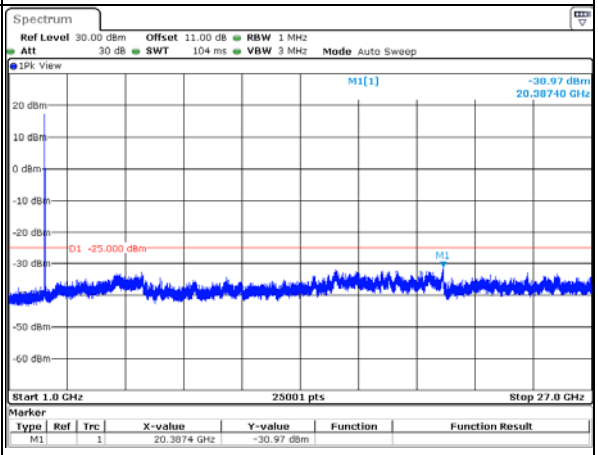
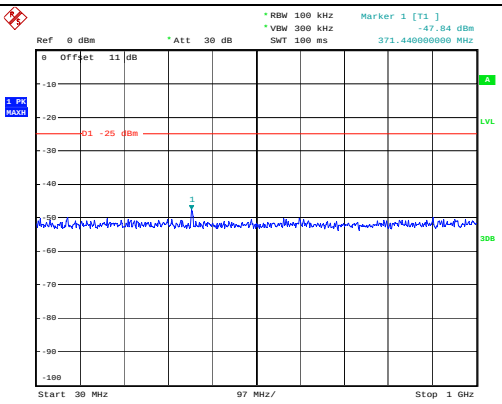
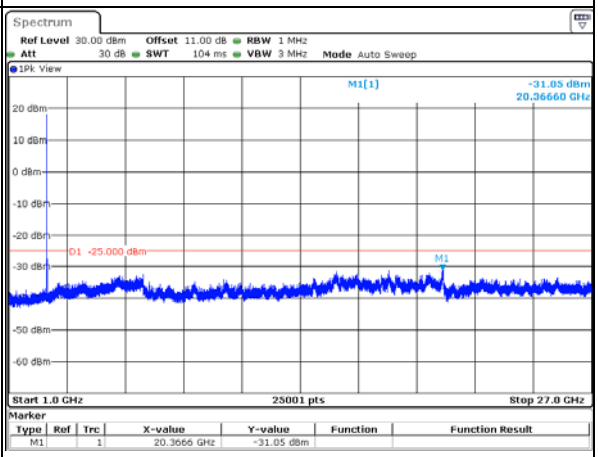
Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:11:39	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:11:53
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:12:17	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:12:34
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:12:52	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:13:16

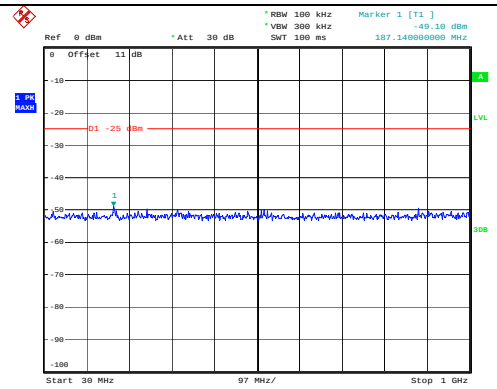
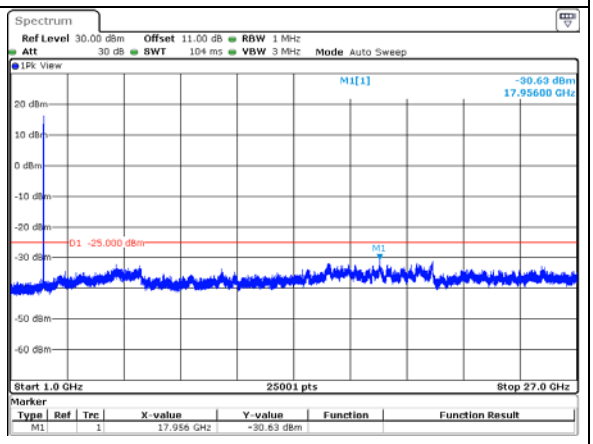
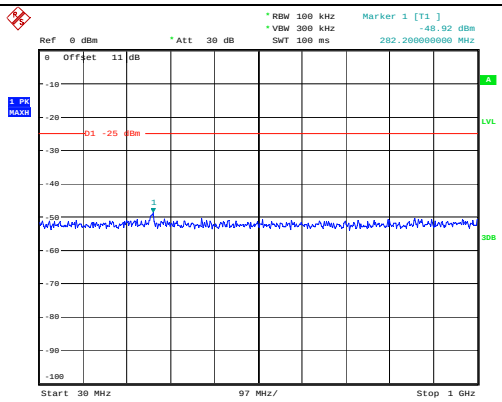
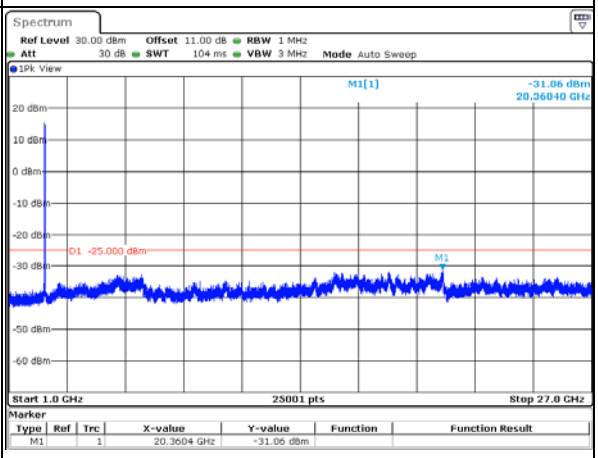
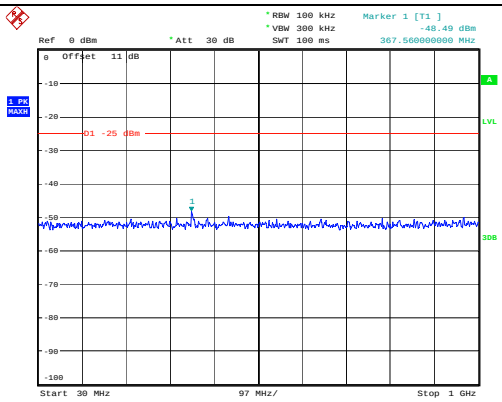
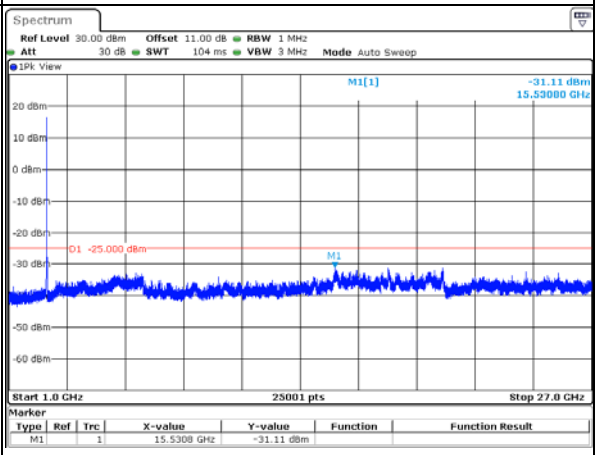
Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:15:54	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:16:18
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:16:45	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:17:09
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:17:36	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:18:06

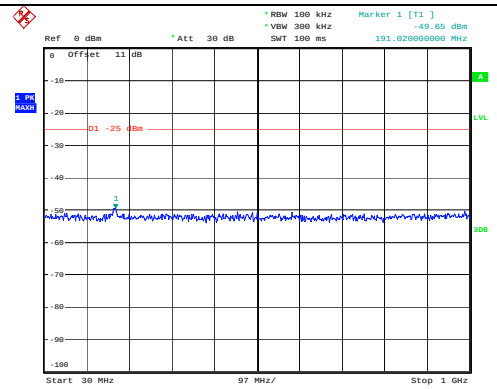
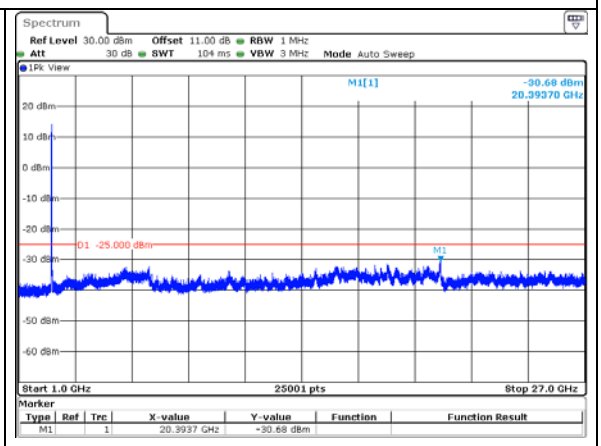
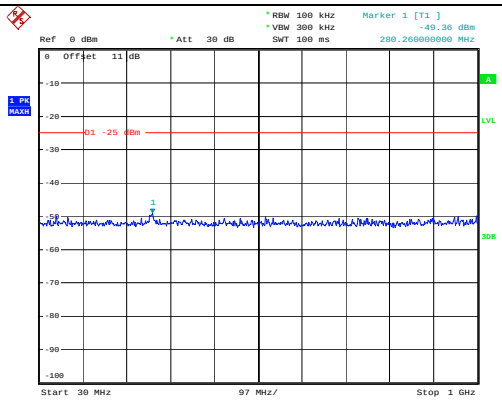
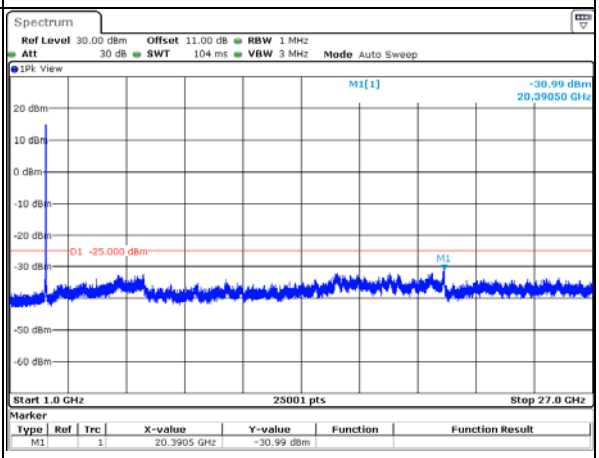
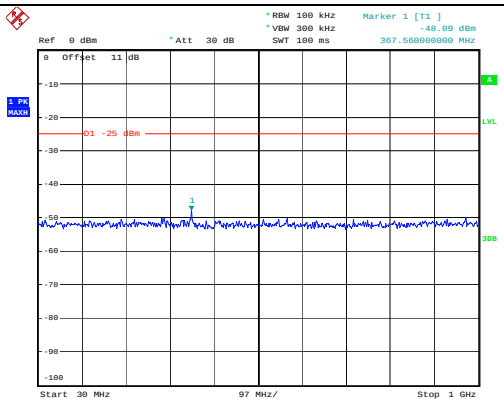
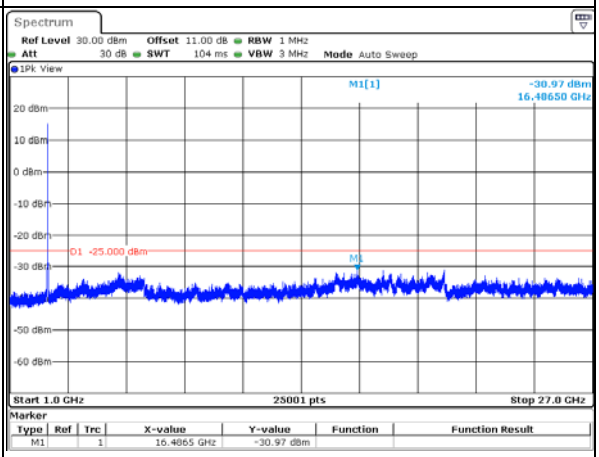
Occupied Bandwidth		
Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

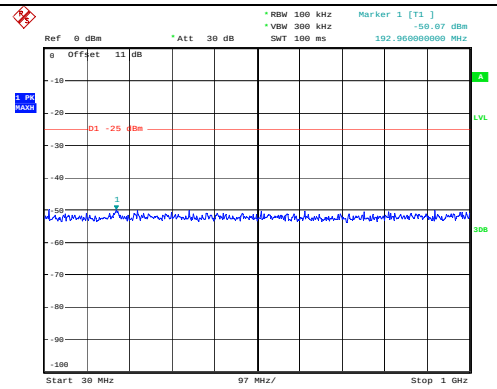
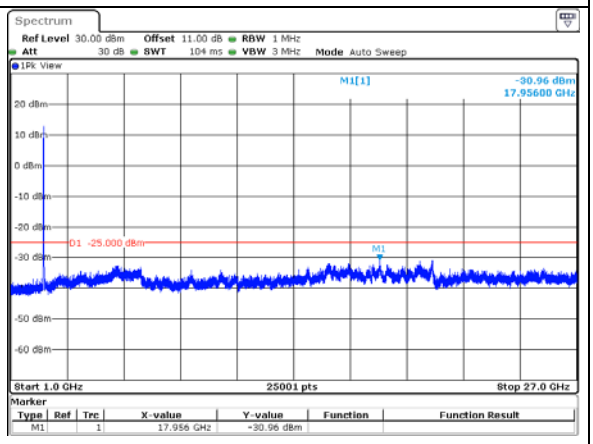
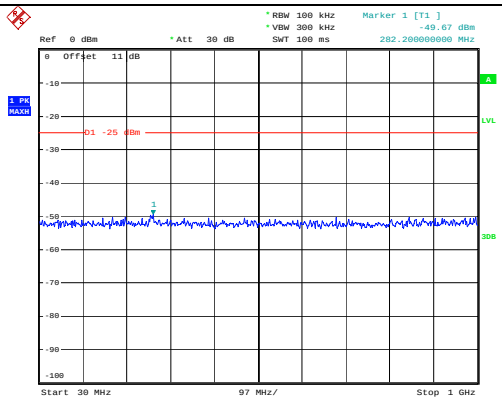
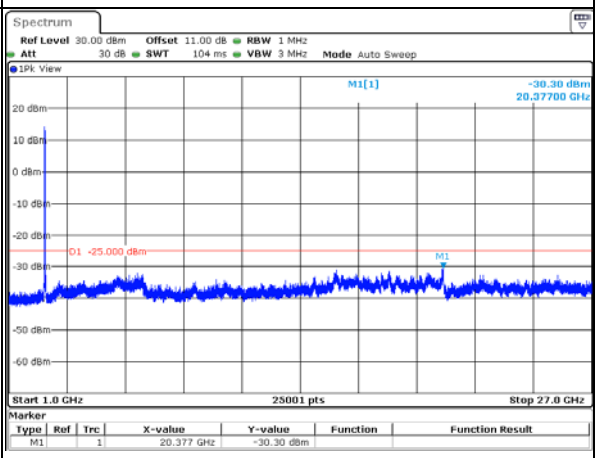
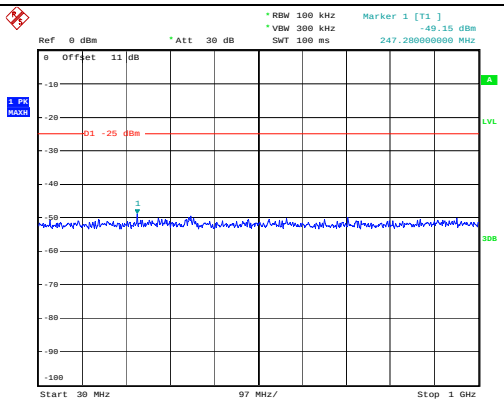
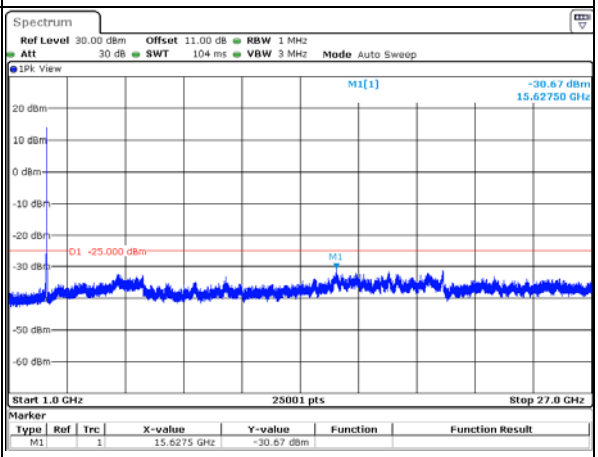
Occupied Bandwidth

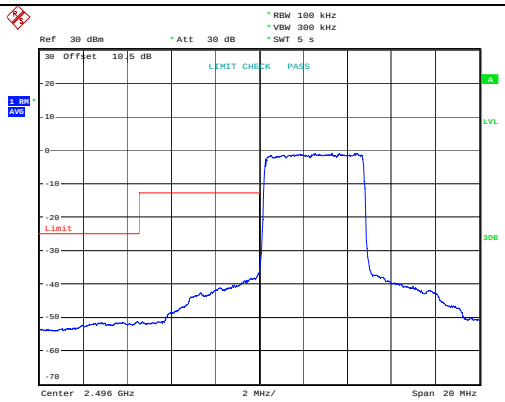
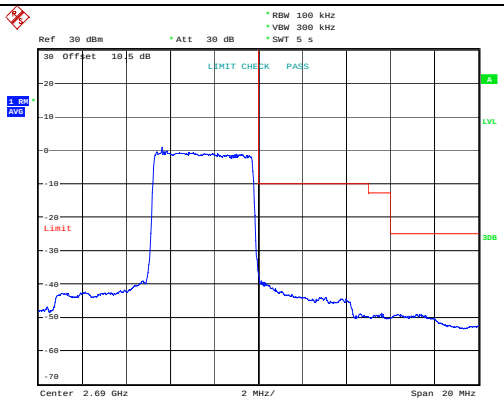
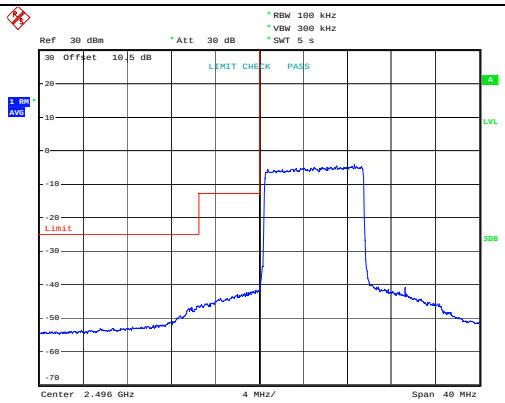
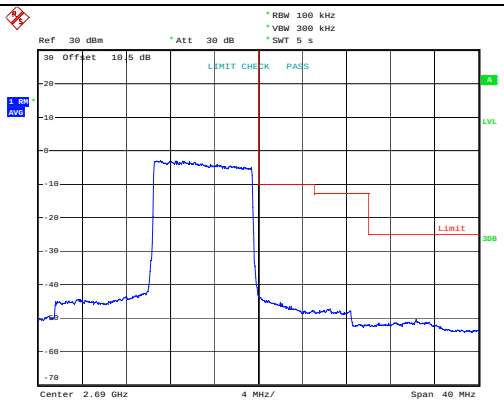
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

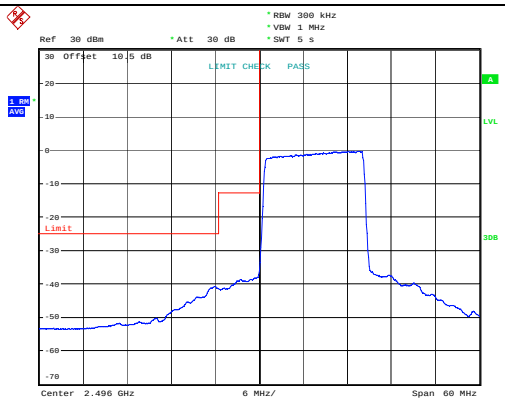
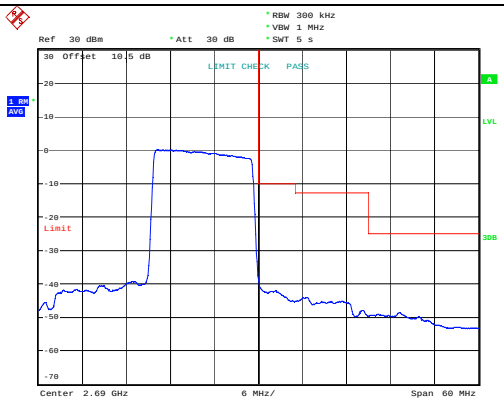
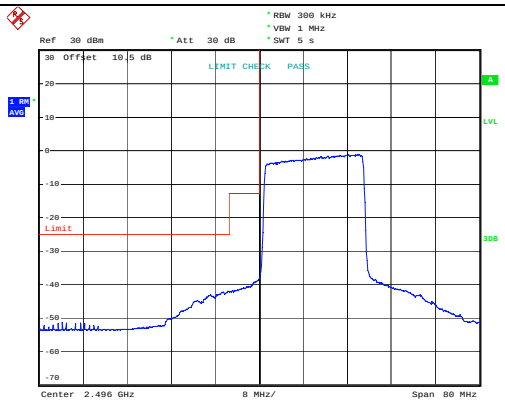
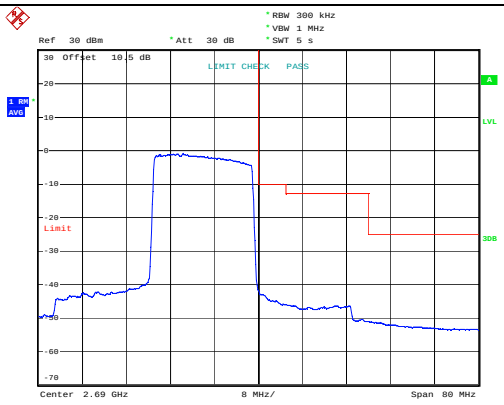
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

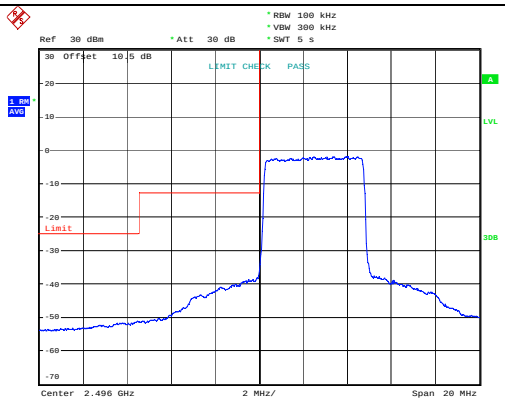
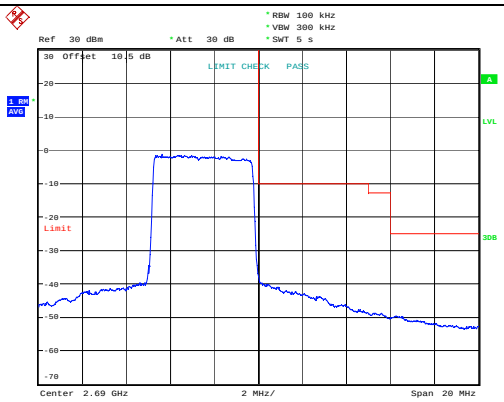
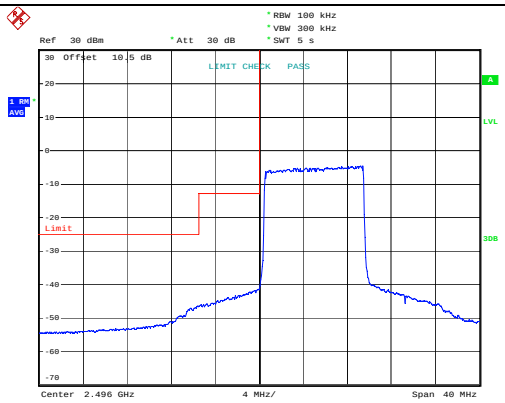
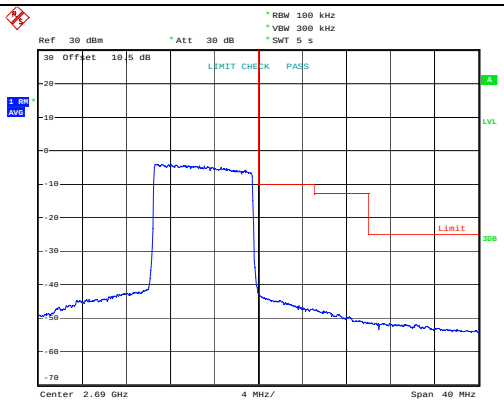
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:38:19	 ProjectNo.:CR231061288 Tester:Len Huang Date: 10.DEC.2023 13:24:56
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:39:37	 ProjectNo.:CR231061288 Tester:Len Huang Date: 10.DEC.2023 13:25:33
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 21:39:59	 ProjectNo.:CR231061288 Tester:Len Huang Date: 11.DEC.2023 13:26:19

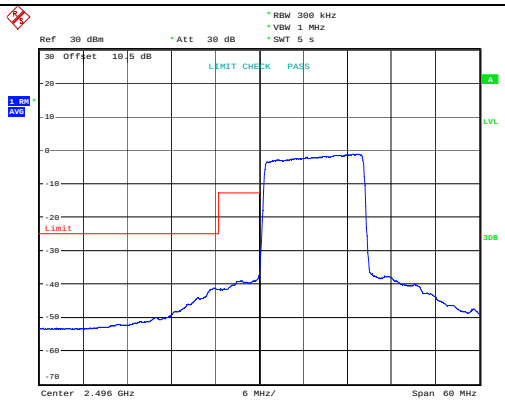
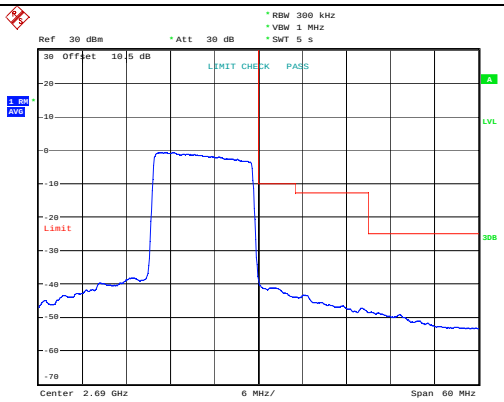
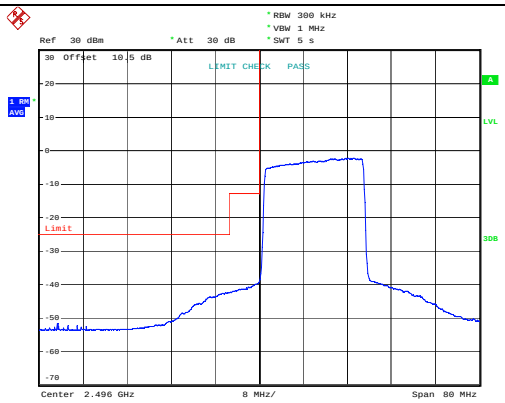
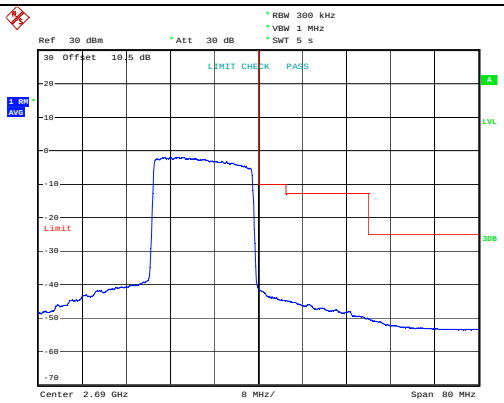
Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

Spurious Emissions at Antenna Terminal		
Channel	**20MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 5MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:37:27	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:44:38
QPSK 10MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:47:00	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:49:49

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 15MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:55:39	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:56:27
QPSK 20MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 18:11:28	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 18:12:14

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 5MHz		
16QAM 10MHz		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 15MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:57:16	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 17:58:15
16QAM 20MHz	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 18:13:03	 ProjectNo.:CR231061288-RF Tester:Rod Luo Date: 4.DEC.2023 18:13:49

4.17 Antenna Port Test Data and Results for LTE Band 66

Serial Number:	2CGM-1	Test Date:	2023/11/22
Test Site:	RF	Test Mode:	Transmitting
Tester:	Hale Li	Test Result:	**Pass**

Environmental Conditions:					
Temperature: (℃)	25.7	Relative Humidity: (%)	55	ATM Pressure: (kPa)	101

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200120	2023/4/18	2024/4/17
zhuoxiang	Coaxial Cable	211001	Each time	N/A	N/A
Minl-Clrcuits	Power Splitter	S F448201619	Each time	N/A	N/A
eastsheep	Coaxial Attenuator	21060301	Each time	N/A	N/A
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/29	2024/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30

** 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	1745	1779.3
3MHz	1711.5	1745	1778.5
5MHz	1712.5	1745	1777.5
10MHz	1715	1745	1775
15MHz	1717.5	1745	1772.5
20MHz	1720	1745	1770

Test Data:

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	19.85	19.75	20.00	17.39	30
	RB1#3	19.96	19.77	20.04		
	RB1#5	19.85	19.71	20.02		
	RB3#0	19.98	19.79	20.09		
	RB3#3	20.00	19.78	20.05		
	RB6#0	19.03	18.88	19.14		
1.4MHz 16QAM	RB1#0	18.85	18.68	19.06	16.48	30
	RB1#3	18.97	18.74	19.18		
	RB1#5	18.89	18.68	19.07		
	RB3#0	19.06	18.96	19.04		
	RB3#3	19.08	18.99	19.06		
	RB6#0	18.04	17.93	18.18		
3MHz QPSK	RB1#0	19.78	19.59	19.85	17.29	30
	RB1#8	19.84	19.65	19.99		
	RB1#14	19.71	19.58	19.87		
	RB6#0	18.94	18.80	19.02		
	RB6#9	18.90	18.82	19.00		
	RB15#0	18.96	18.80	19.09		
3MHz 16QAM	RB1#0	18.80	19.16	18.99	16.49	30
	RB1#8	18.85	19.19	19.11		
	RB1#14	18.76	19.14	18.99		
	RB6#0	17.94	17.90	18.06		
	RB6#9	17.90	17.86	18.17		
	RB15#0	18.06	17.88	18.03		
5MHz QPSK	RB1#0	20.03	19.90	20.15	17.58	30
	RB1#13	20.11	19.98	20.28		
	RB1#24	19.94	19.88	20.14		
	RB15#0	19.11	18.93	19.14		
	RB15#10	19.08	18.92	19.18		
	RB25#0	19.04	18.90	19.16		
5MHz 16QAM	RB1#0	19.14	18.75	19.39	16.86	30
	RB1#13	19.24	18.93	19.56		
	RB1#24	19.00	18.84	19.45		
	RB15#0	18.09	17.97	18.13		
	RB15#10	18.11	17.94	18.17		
	RB25#0	18.08	18.00	18.18		
10MHz QPSK	RB1#0	20.12	19.91	20.23	17.55	30

	RB1#25	20.11	19.94	20.25		
	RB1#49	20.03	19.96	20.21		
	RB25#0	19.03	18.87	19.12		
	RB25#25	19.05	18.90	19.12		
	RB50#0	19.09	18.90	19.14		
10MHz 16QAM	RB1#0	19.16	19.48	19.36	16.86	30
	RB1#25	19.11	19.56	19.35		
	RB1#49	19.04	19.53	19.30		
	RB25#0	18.12	17.94	18.13		
	RB25#25	18.13	18.00	18.16		
	RB50#0	18.10	17.91	18.13		
15MHz QPSK	RB1#0	20.06	19.87	20.16	17.57	30
	RB1#38	20.11	19.94	20.27		
	RB1#74	19.91	19.88	20.16		
	RB36#0	19.00	18.87	19.08		
	RB36#39	18.99	18.92	19.18		
	RB75#0	19.04	18.89	19.12		
15MHz 16QAM	RB1#0	19.48	19.45	19.24	16.86	30
	RB1#38	19.54	19.56	19.39		
	RB1#74	19.27	19.46	19.26		
	RB36#0	18.04	17.87	18.11		
	RB36#39	17.99	17.91	18.16		
	RB75#0	18.02	17.90	18.11		
20MHz QPSK	RB1#0	19.96	19.82	20.04	17.62	30
	RB1#50	20.07	20.02	20.32		
	RB1#99	19.77	19.89	20.05		
	RB50#0	18.98	18.91	19.14		
	RB50#50	19.05	18.91	19.16		
	RB100#0	19.03	18.89	19.10		
20MHz 16QAM	RB1#0	19.56	19.10	19.23	16.99	30
	RB1#50	19.69	19.33	19.47		
	RB1#99	19.32	19.12	19.26		
	RB50#0	17.96	17.91	18.12		
	RB50#50	18.04	17.91	18.11		
	RB100#0	18.02	17.89	18.11		
Note: EIRP=Conducted Power(dBm) - L_C(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	8.27	8.69	8.49	13
	RB100#0	6.47	6.41	6.47	13
20MHz 16QAM	RB1#0	8.65	8.56	8.59	13
	RB100#0	7.15	7.02	7.08	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
1.4MHz QPSK	1.110	1.104	1.098	1.290	1.290	1.296
1.4MHz 16QAM	1.098	1.098	1.104	1.284	1.296	1.302
3MHz QPSK	2.676	2.676	2.700	2.940	2.916	2.928
3MHz 16QAM	2.676	2.676	2.676	2.928	2.952	2.940
5MHz QPSK	4.500	4.500	4.500	4.920	4.920	4.920
5MHz 16QAM	4.540	4.500	4.520	4.920	4.920	4.940
10MHz QPSK	8.960	8.960	8.960	9.560	9.600	9.600
10MHz 16QAM	8.960	8.960	8.960	9.600	9.600	9.560
15MHz QPSK	13.500	13.500	13.500	14.820	14.820	14.760
15MHz 16QAM	13.560	13.500	13.500	14.700	14.760	14.700
20MHz QPSK	18.000	17.920	18.000	19.520	19.280	19.600
20MHz 16QAM	18.080	17.920	17.920	19.440	19.360	19.360
Note: The test plots please refer to the Plots of Occupied Bandwidth						

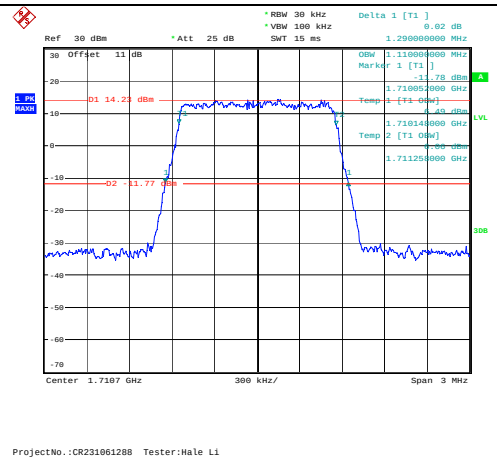
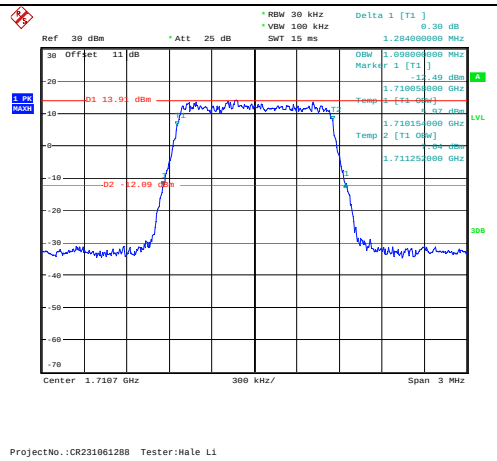
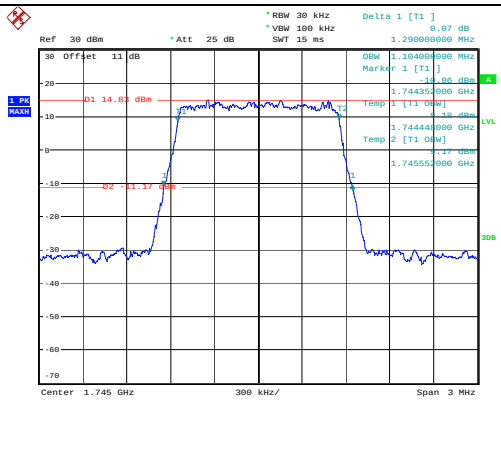
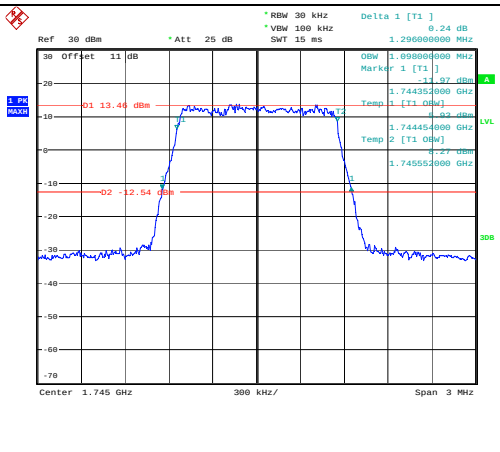
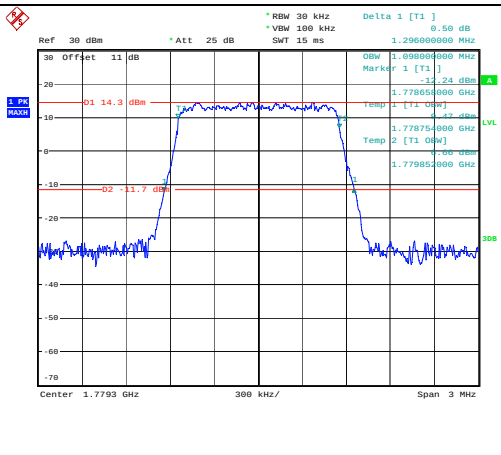
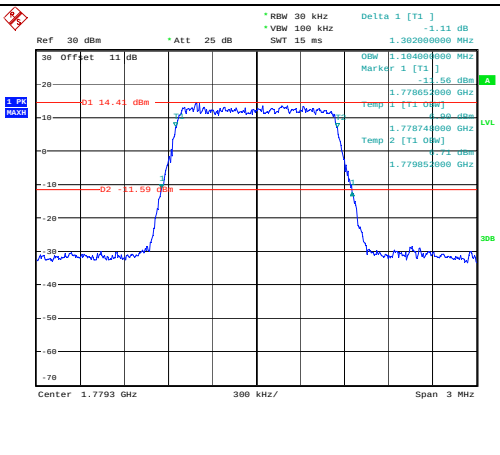
FCC §2.1051, § 27.53:Spurious Emissions at Antenna Terminal	
Result:	**Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.**

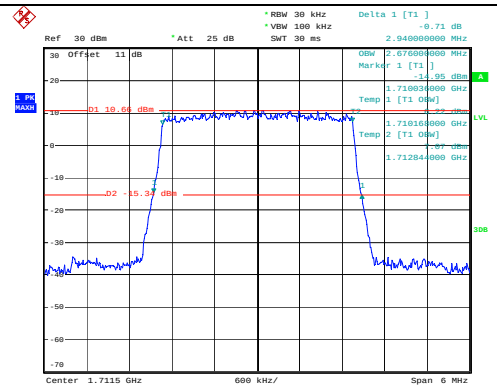
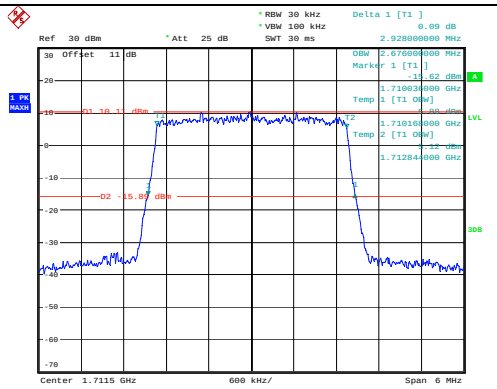
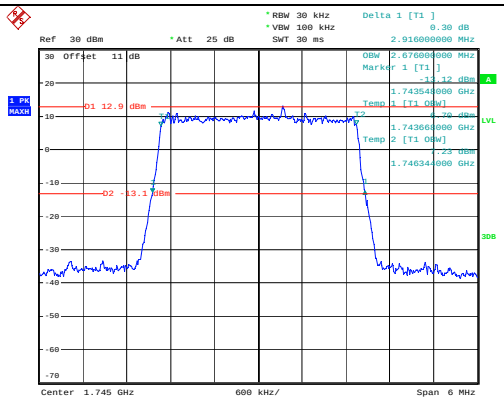
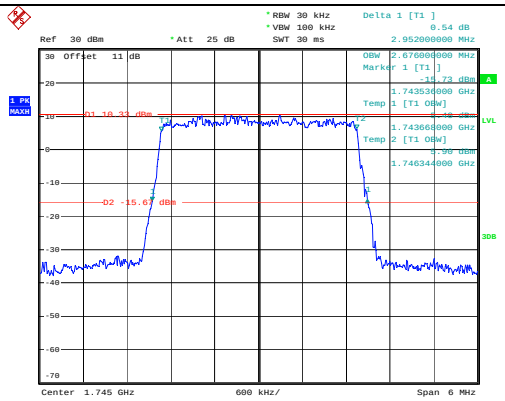
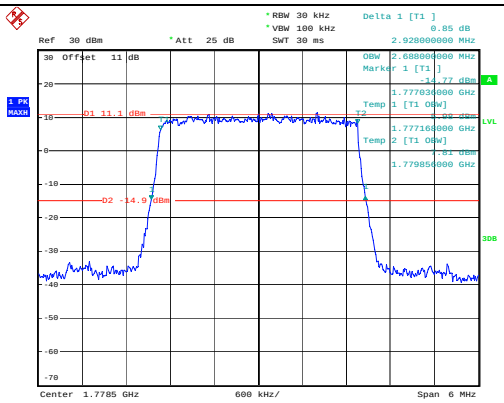
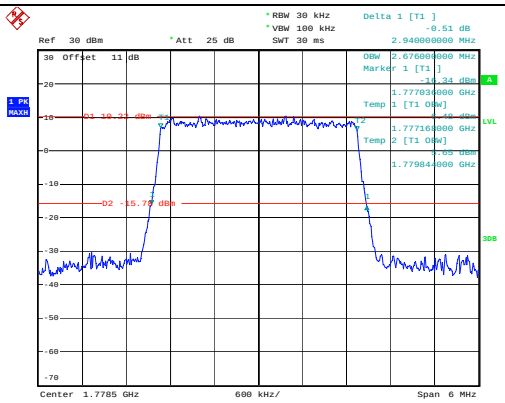
FCC §2.1051, § 27.53:Out of band emission, Band Edge	
Result:	**Pass, Please refer to the test plots of Out of band emission, Band Edge.**

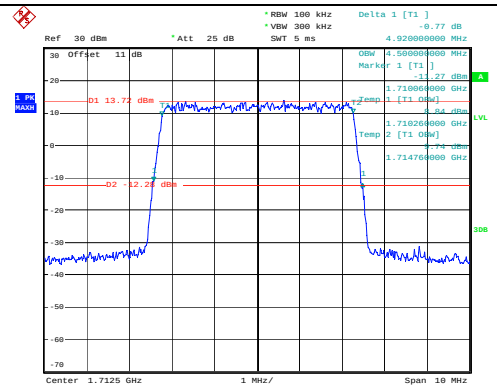
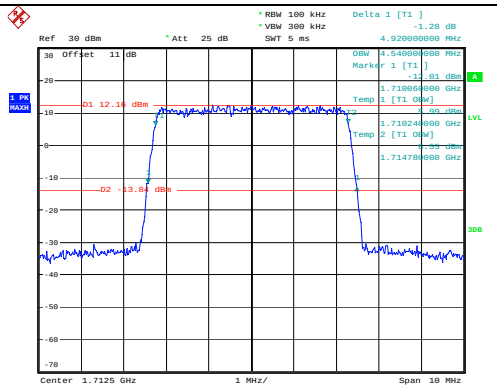
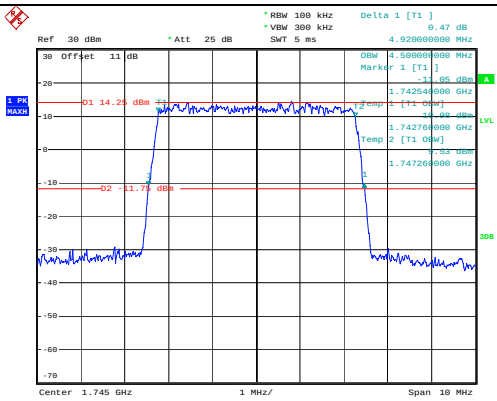
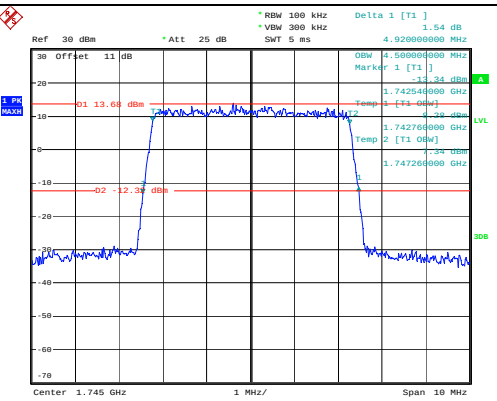
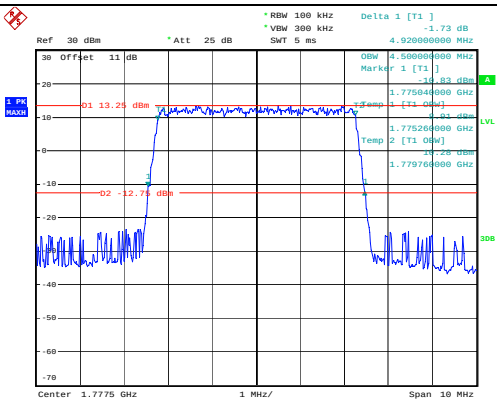
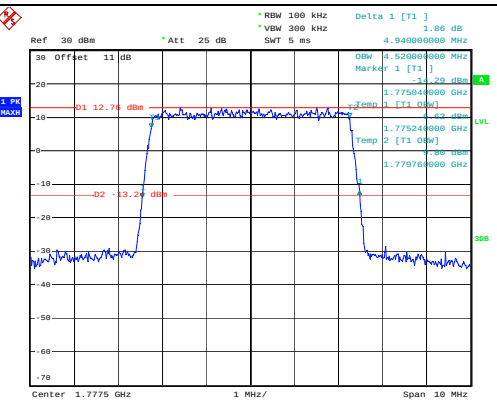
FCC §2.1055, §27.54: Frequency Stability						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.91	1710.031	1710.00	1779.959	1780
	-20	3.91	1710.030	1710.00	1779.959	1780
	-10	3.91	1710.035	1710.00	1779.960	1780
	0	3.91	1710.036	1710.00	1779.958	1780
	10	3.91	1710.032	1710.00	1779.959	1780
	20	3.91	1710.034	1710.00	1779.958	1780
	30	3.91	1710.034	1710.00	1779.958	1780
	40	3.91	1710.029	1710.00	1779.964	1780
	50	3.91	1710.035	1710.00	1779.962	1780
Frequency Stability vs. Voltage	20	3.45	1710.032	1710.00	1779.964	1780
	20	4.5	1710.033	1710.00	1779.962	1780
					Result:	**Pass**

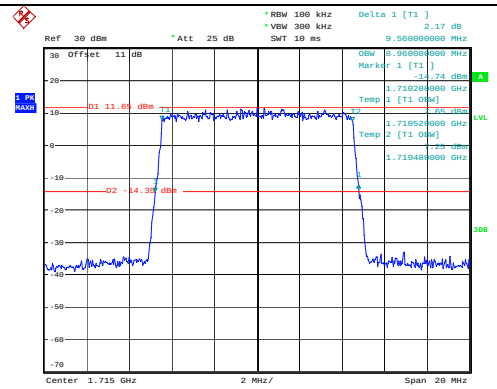
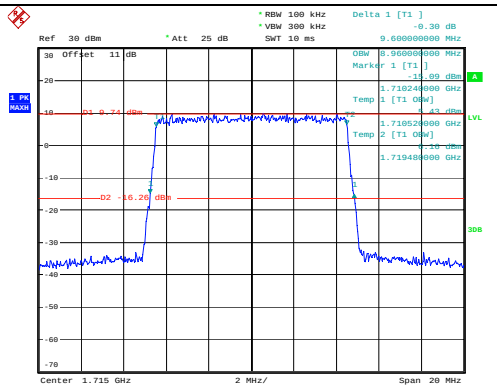
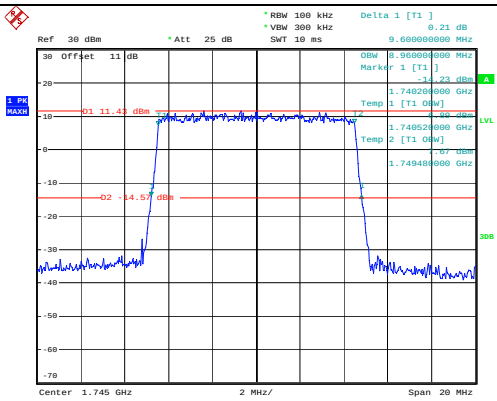
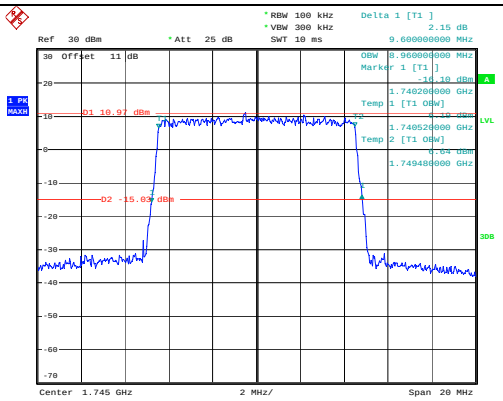
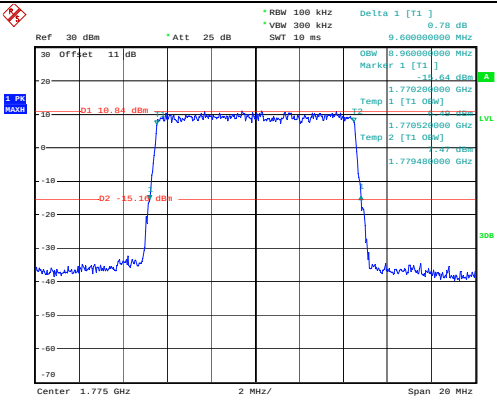
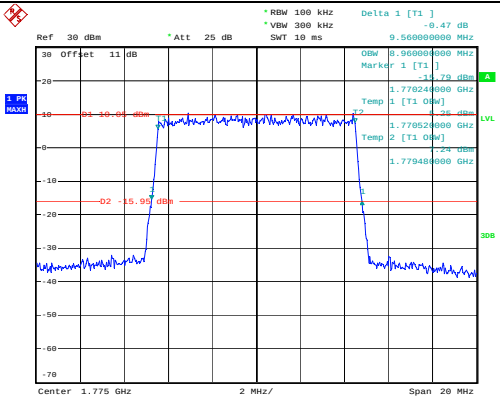
Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (℃)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.91	1710.031	1710.00	1779.961	1780
	-20	3.91	1710.035	1710.00	1779.962	1780
	-10	3.91	1710.030	1710.00	1779.961	1780
	0	3.91	1710.031	1710.00	1779.963	1780
	10	3.91	1710.034	1710.00	1779.963	1780
	20	3.91	1710.031	1710.00	1779.961	1780
	30	3.91	1710.036	1710.00	1779.961	1780
	40	3.91	1710.030	1710.00	1779.958	1780
	50	3.91	1710.034	1710.00	1779.956	1780
Frequency Stability vs. Voltage	20	3.45	1710.033	1710.00	1779.964	1780
	20	4.5	1710.030	1710.00	1779.959	1780
					Result:	**Pass**

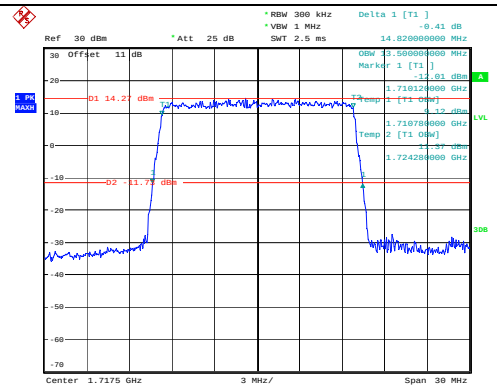
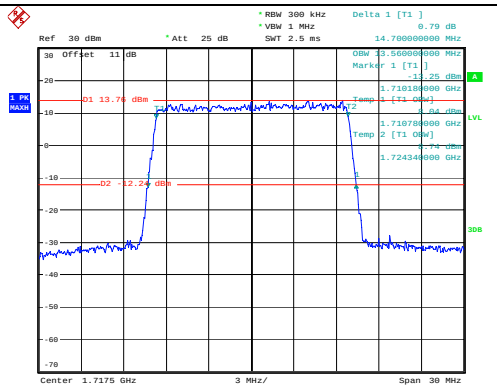
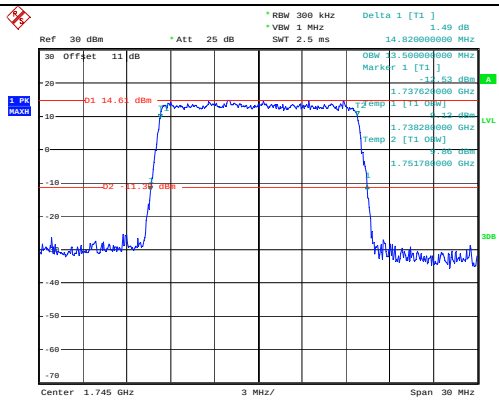
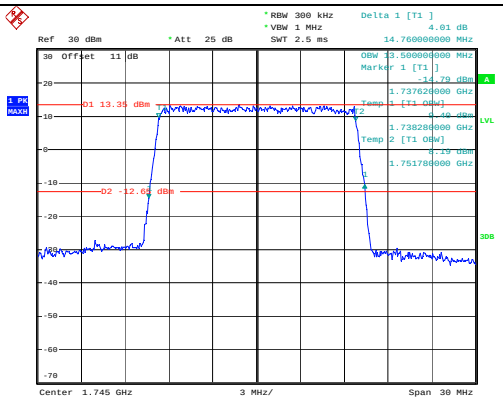
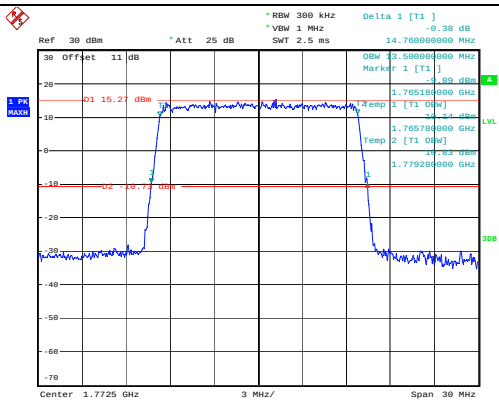
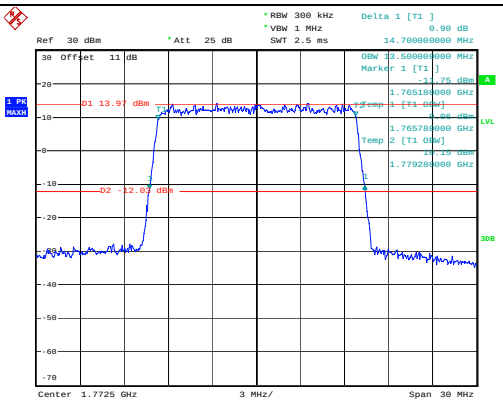
Test Plots (Note: The 11.0 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

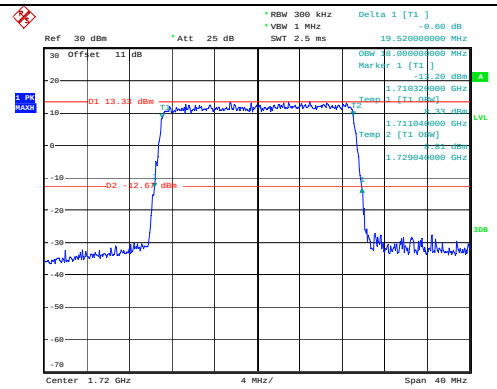
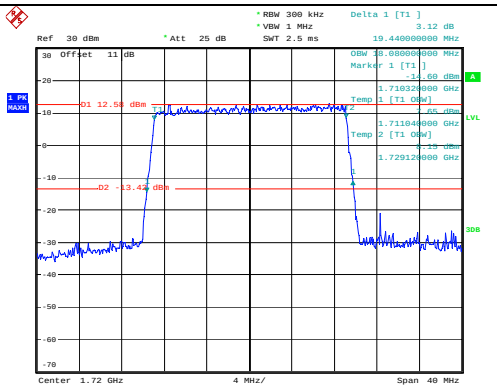
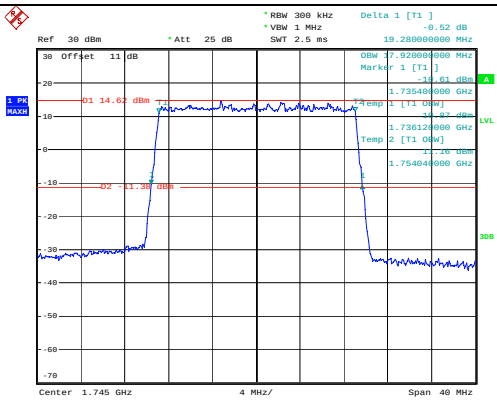
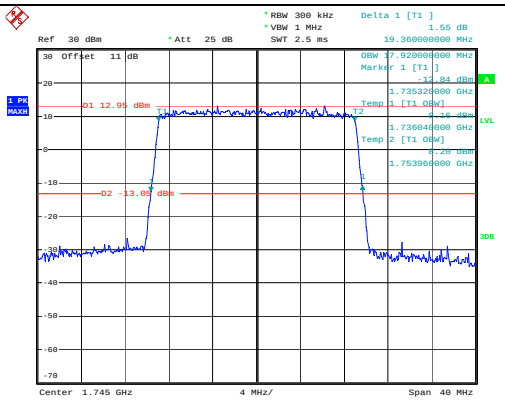
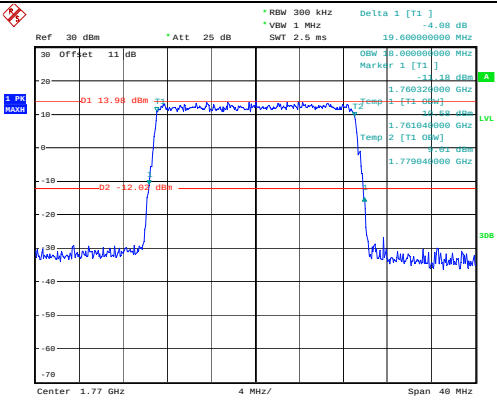
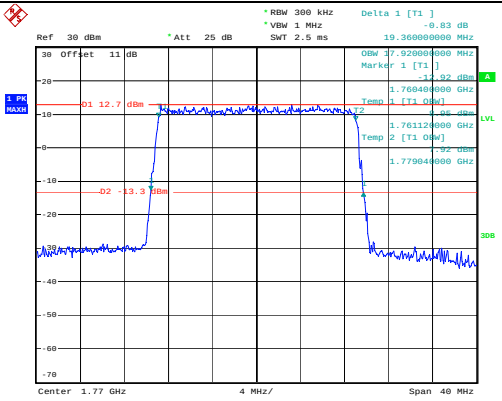
Occupied Bandwidth		
Channel	1.4MHz Bandwidth QPSK	1.4MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

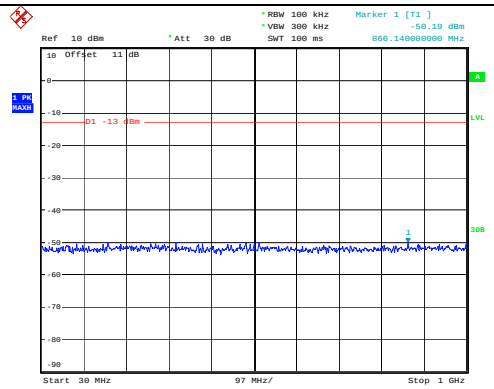
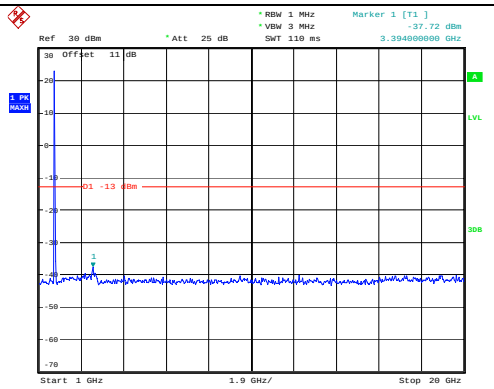
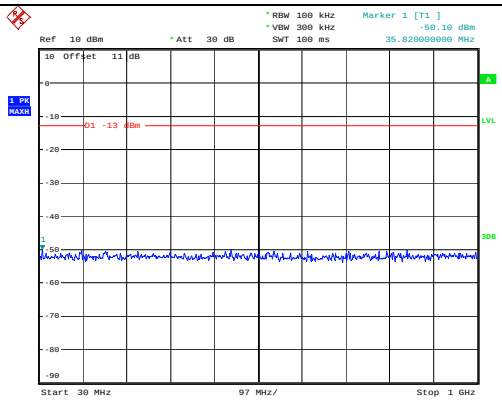
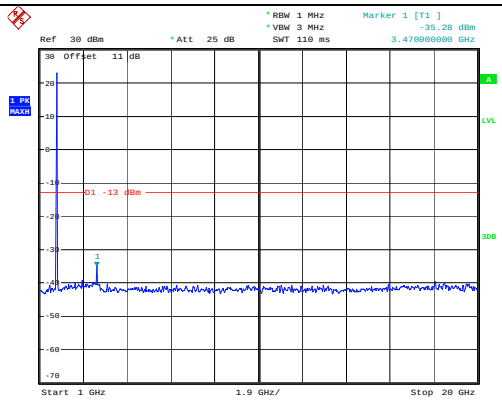
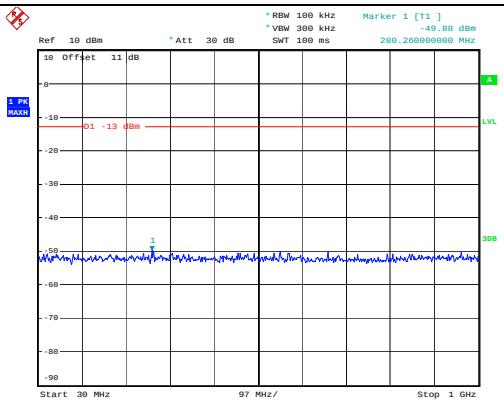
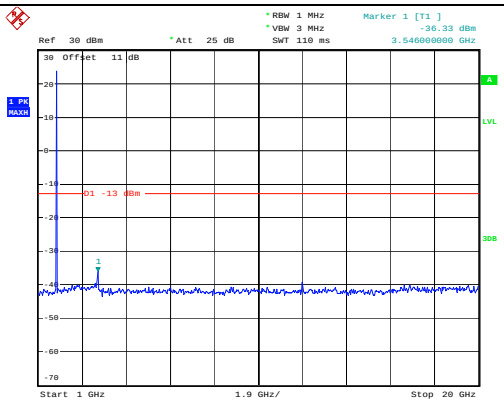
Occupied Bandwidth		
Channel	3MHz Bandwidth QPSK	3MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:46:32	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:46:45
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:47:03	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:47:17
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:47:31	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:47:48

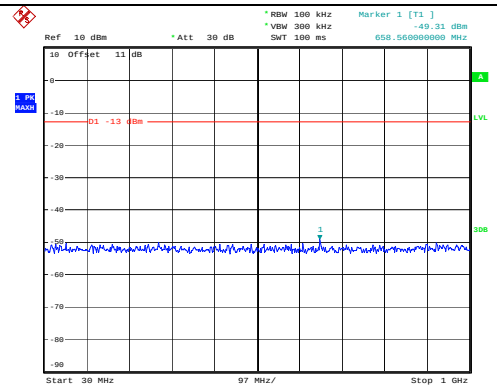
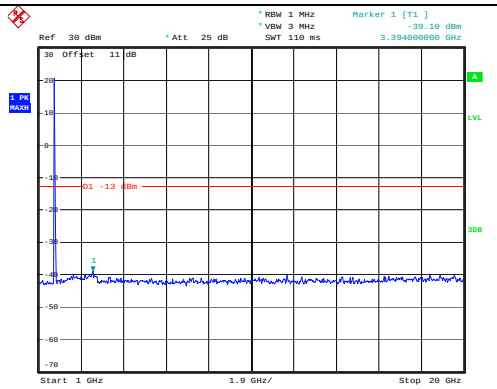
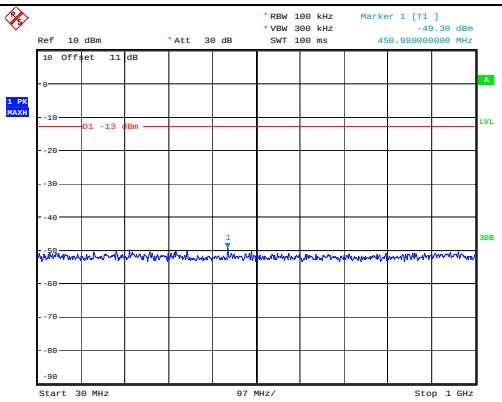
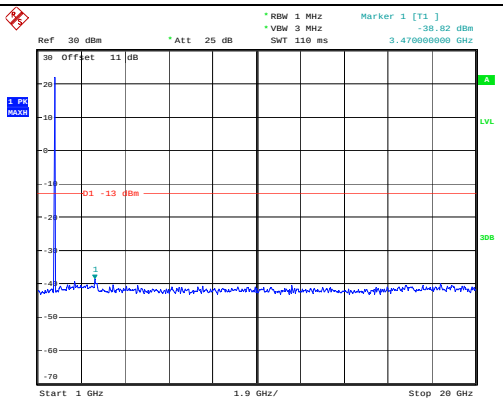
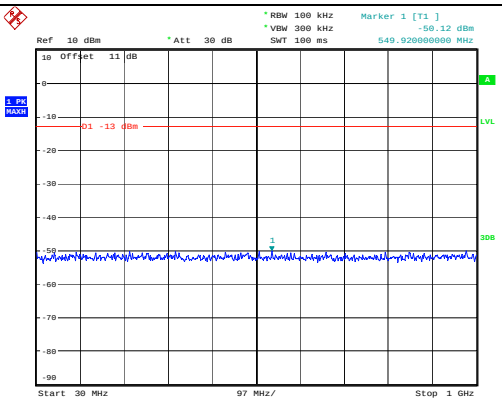
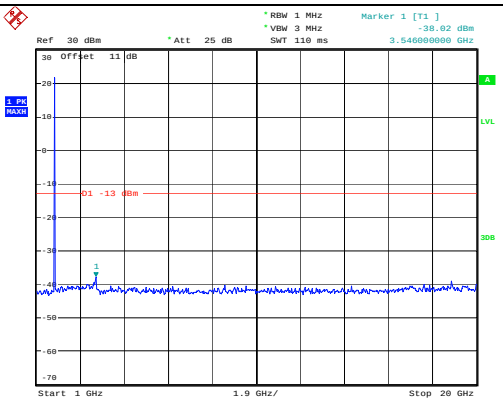
Occupied Bandwidth		
Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

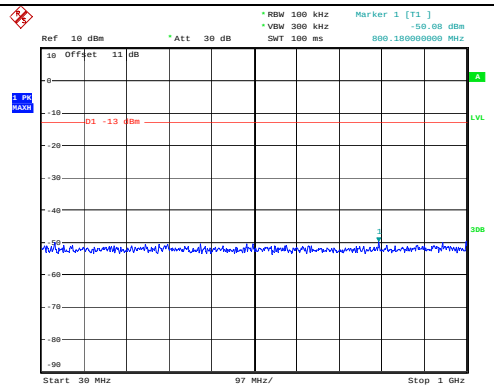
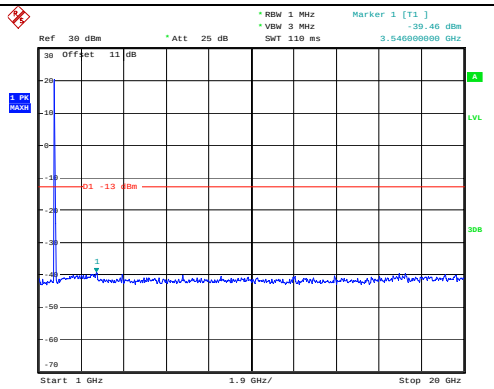
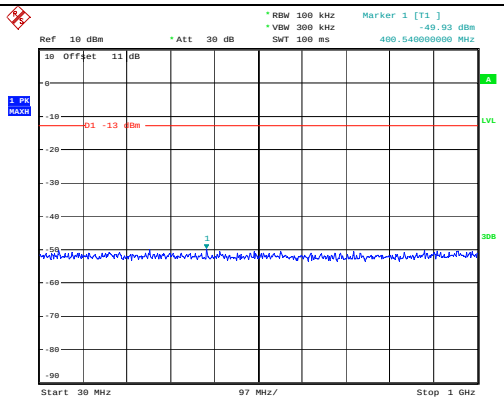
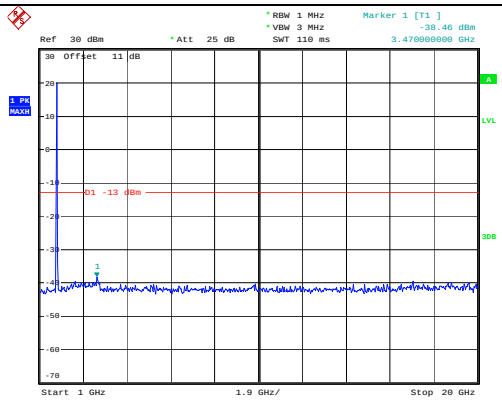
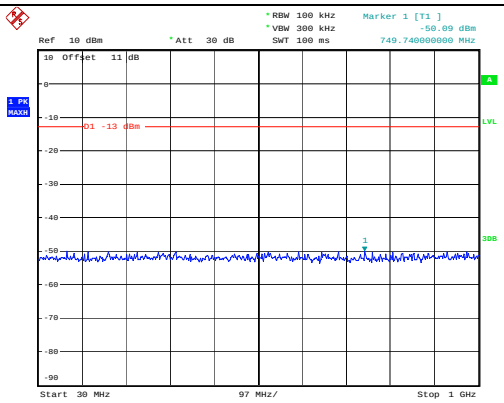
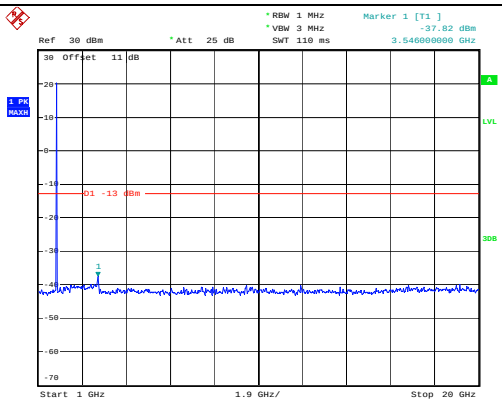
Occupied Bandwidth		
Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:50:57	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:51:15
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:52:38	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:52:56
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:53:13	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:53:28

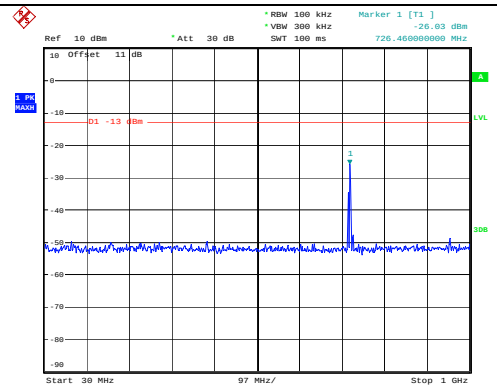
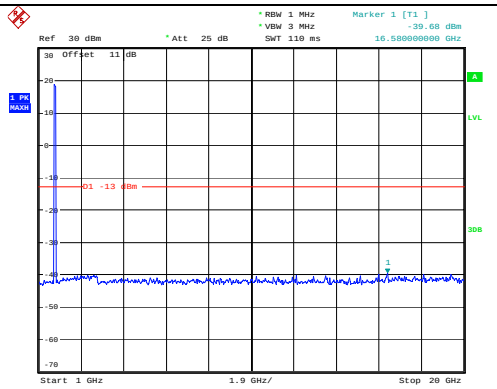
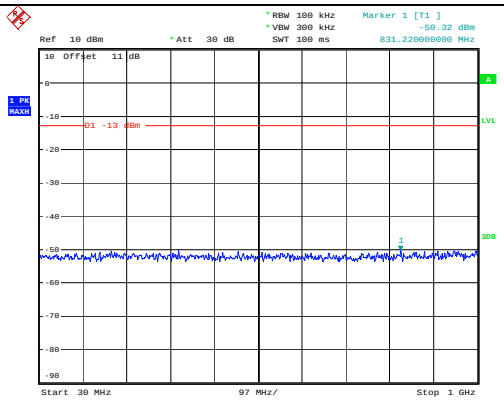
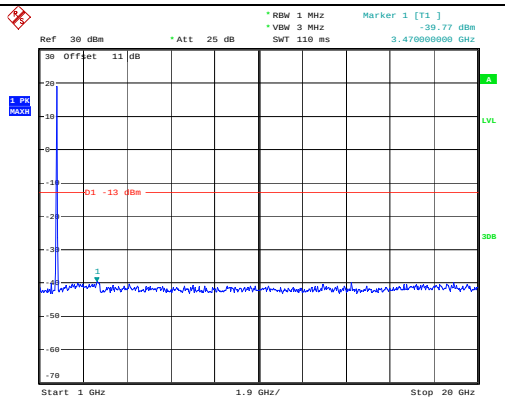
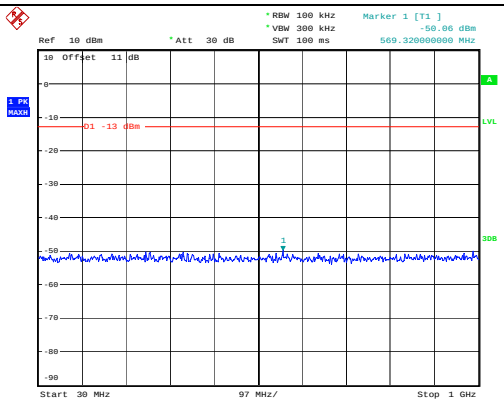
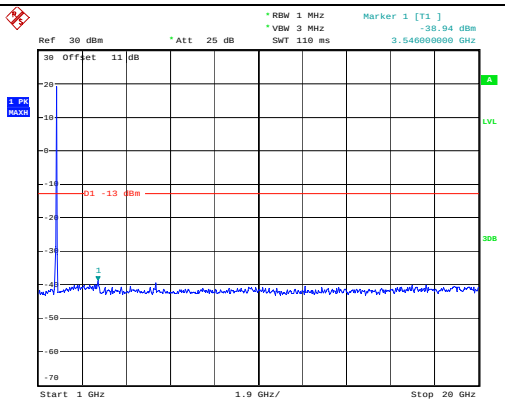
Occupied Bandwidth		
Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:54:11	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:54:27
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:54:51	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:55:07
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:55:27	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:55:44

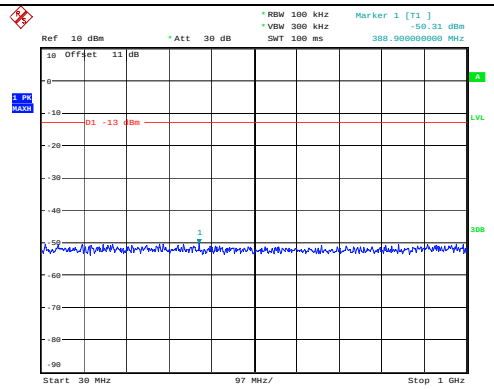
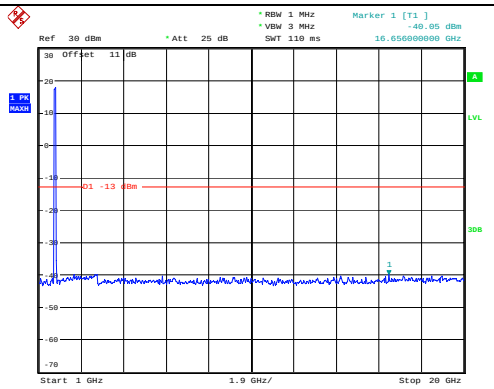
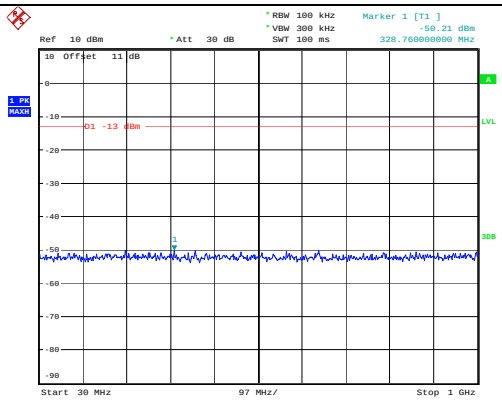
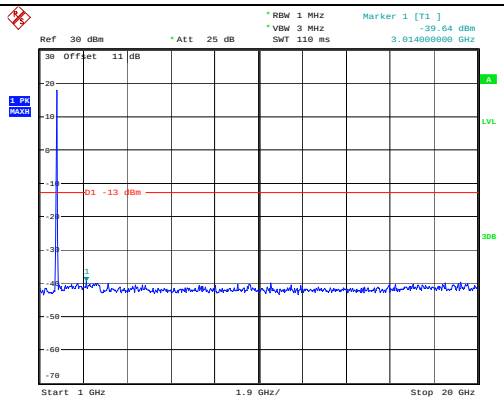
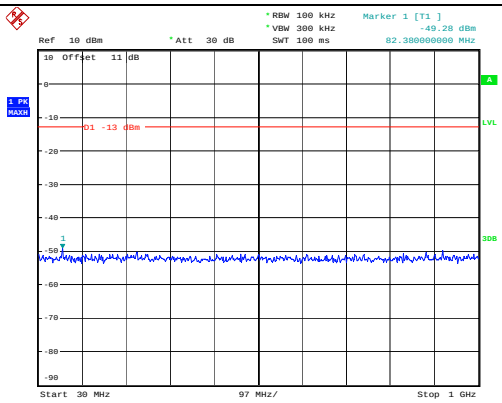
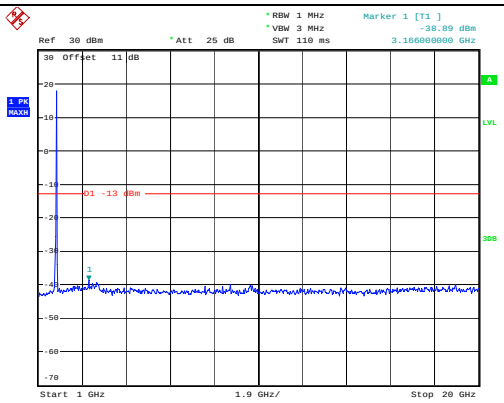
Occupied Bandwidth		
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 19:56:30	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:03:42
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:04:23	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:04:43
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:05:03	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:05:20

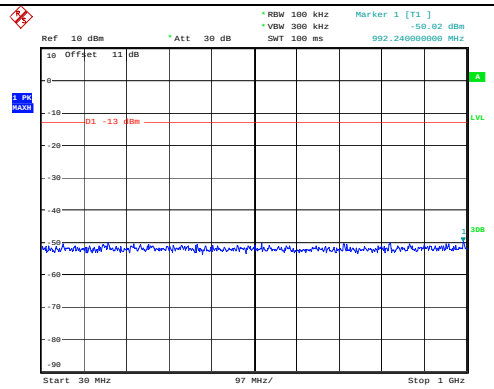
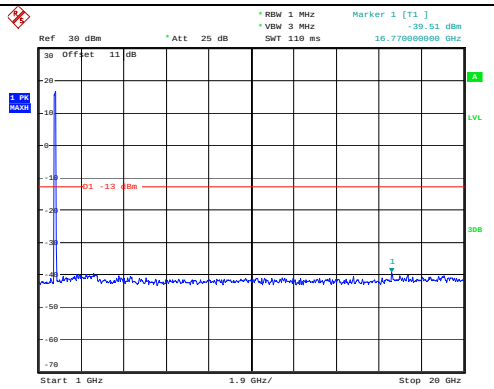
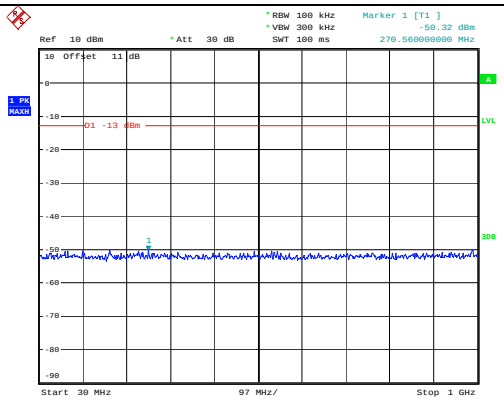
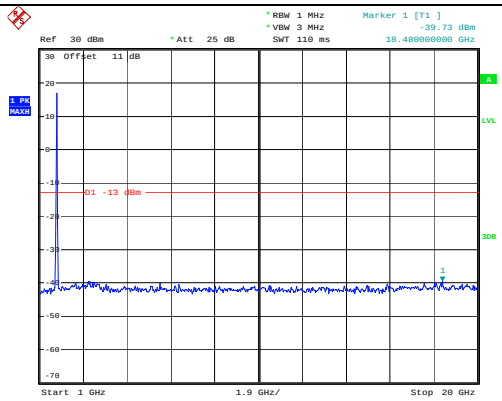
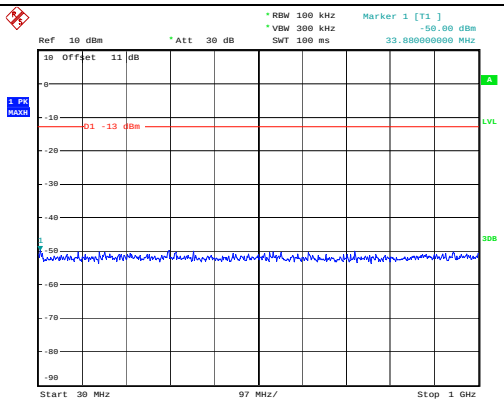
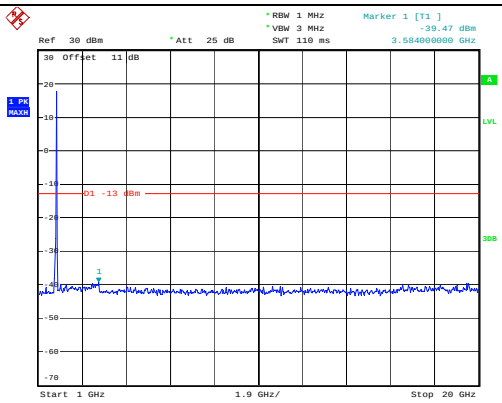
Spurious Emissions at Antenna Terminal	
Channel	**1.4MHz Bandwidth QPSK**
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:39:09  ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:39:20
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:39:32  ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:39:42
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:41:30  ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:41:40

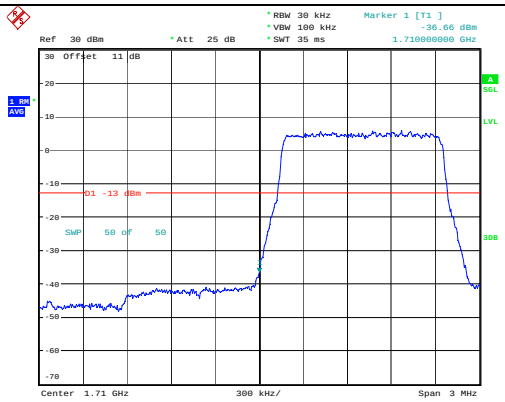
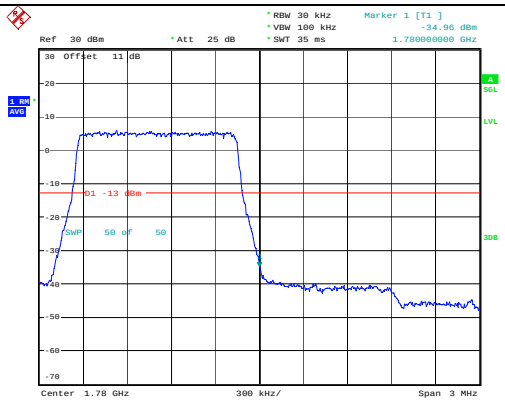
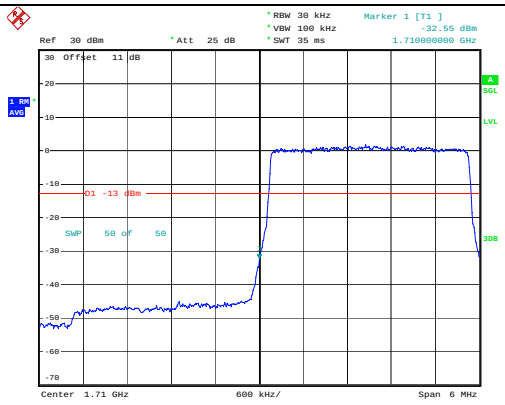
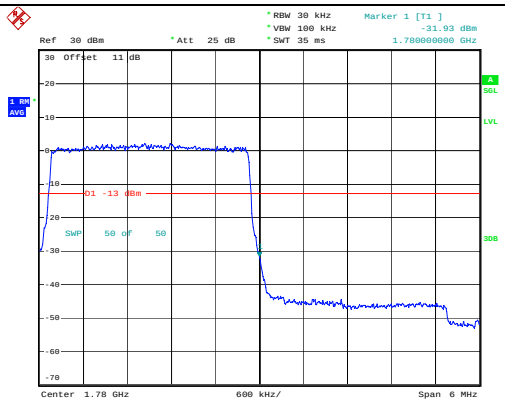
Spurious Emissions at Antenna Terminal		
Channel	**3MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

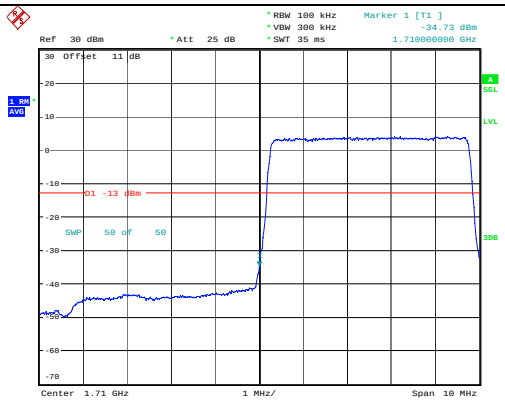
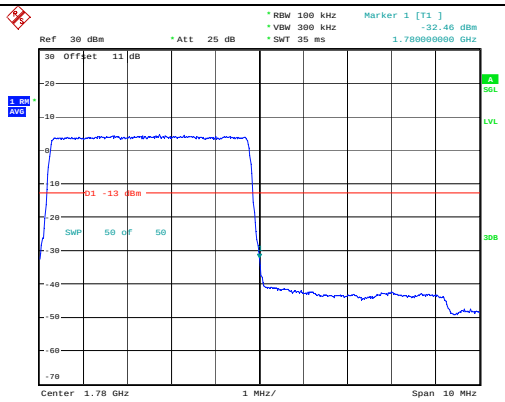
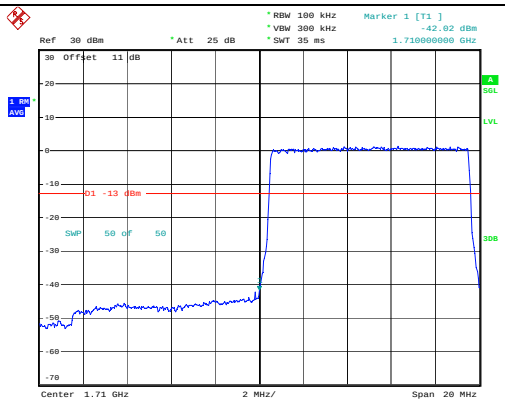
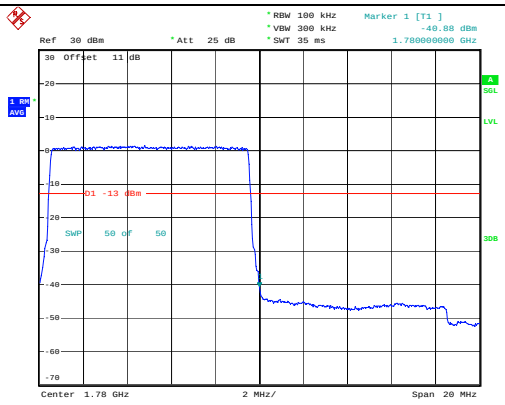
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:43:59	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:44:12
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:44:28	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:44:38
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:44:54	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:45:04

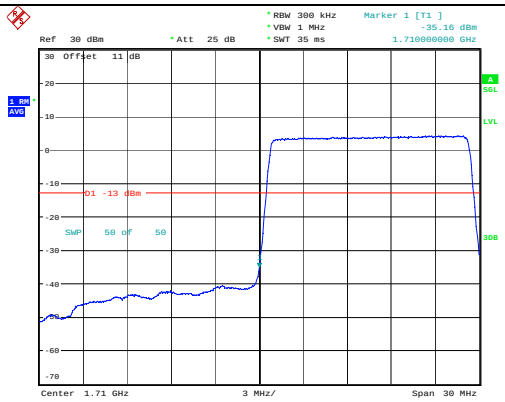
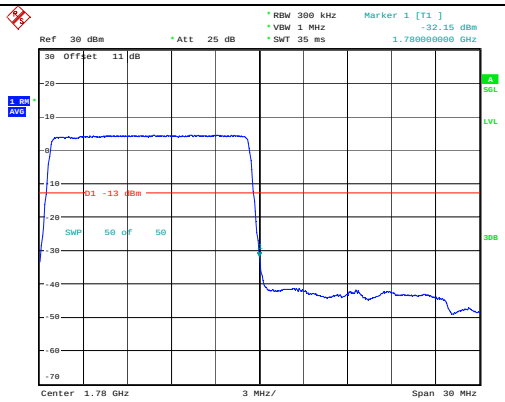
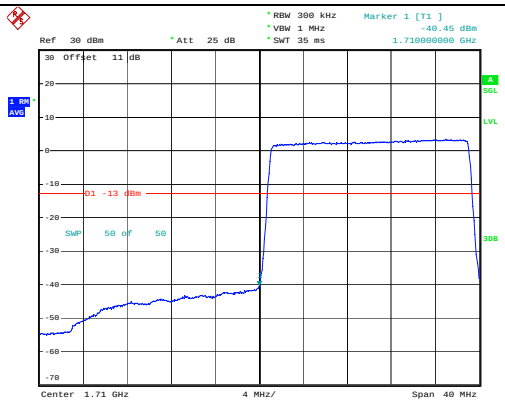
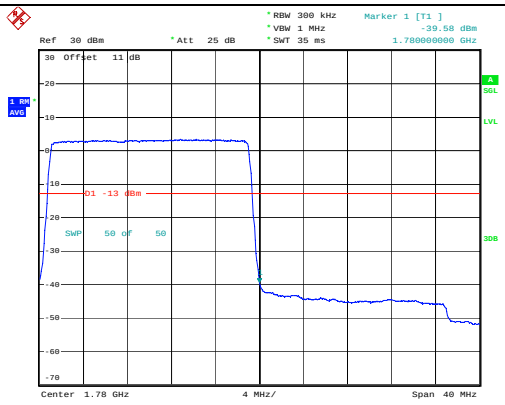
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:45:46	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:45:56
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:46:08	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:46:19
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:46:31	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:46:41

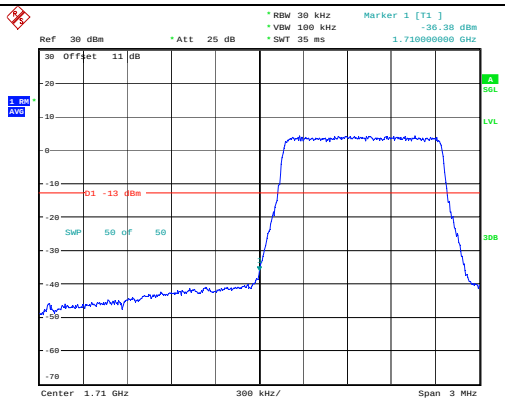
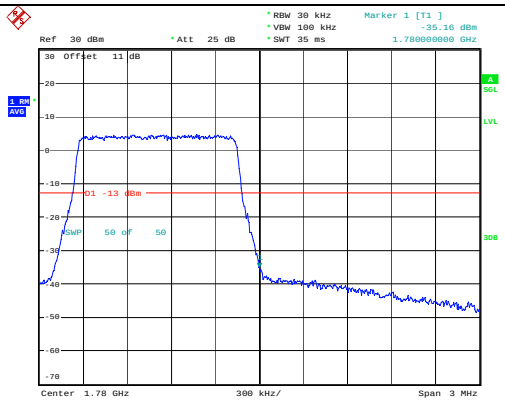
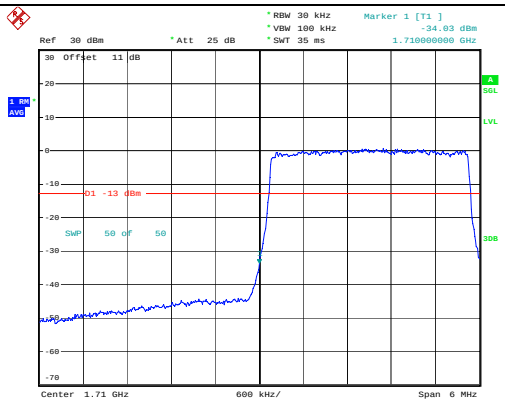
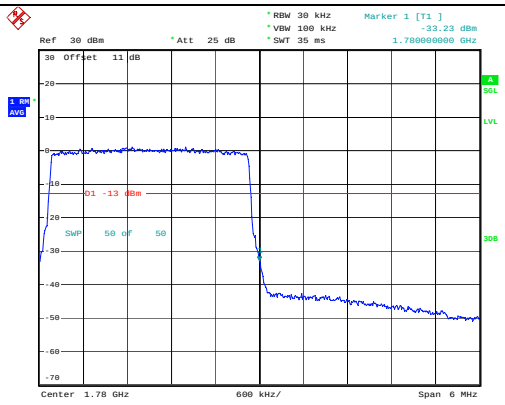
Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:47:20	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:47:30
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:47:42	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:47:53
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:48:05	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:48:15

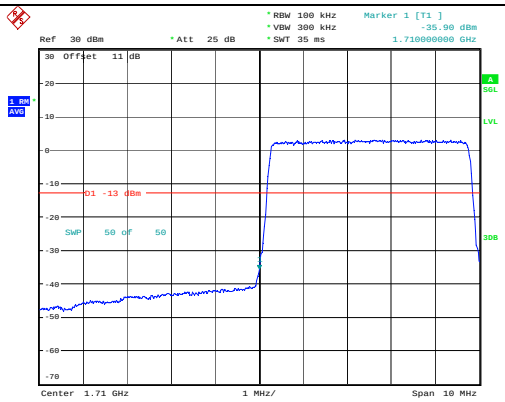
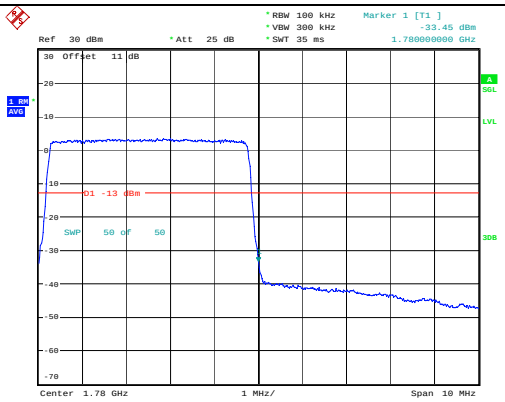
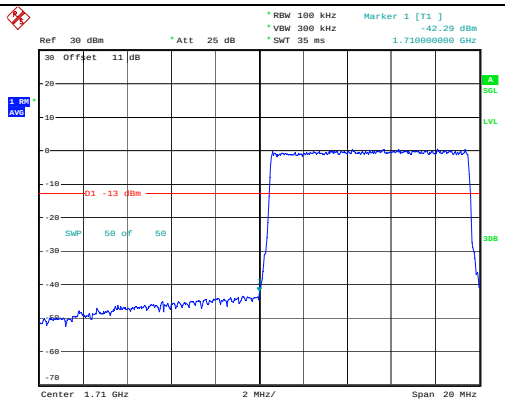
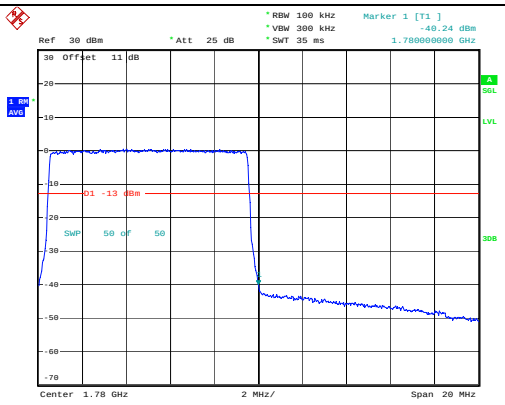
Spurious Emissions at Antenna Terminal	
Channel	**20MHz Bandwidth QPSK**
Lowest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:48:57
	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:49:07
Middle	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:49:23
	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:49:33
Highest	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:49:49
	 ProjectNo.:CR231061288 Tester:Hale Li Date: 22.NOV.2023 20:49:59

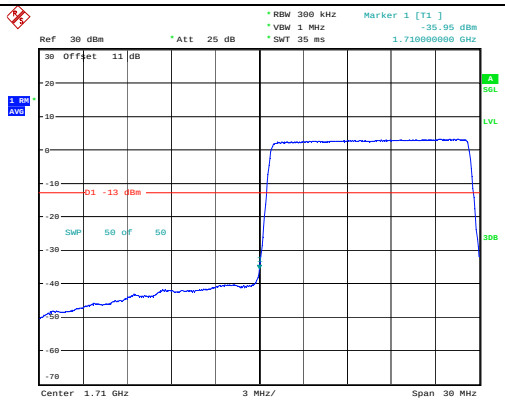
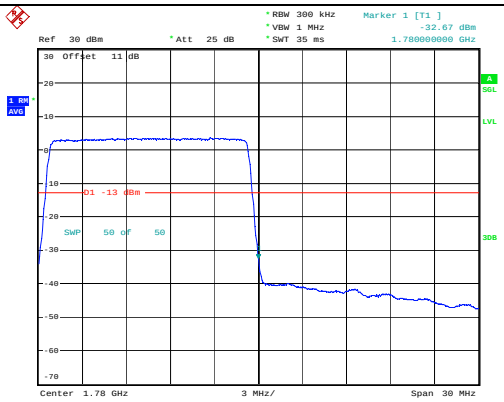
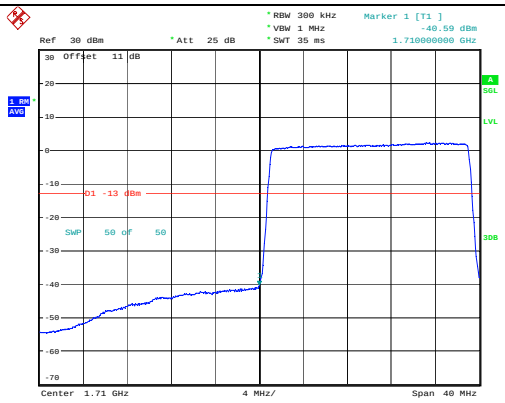
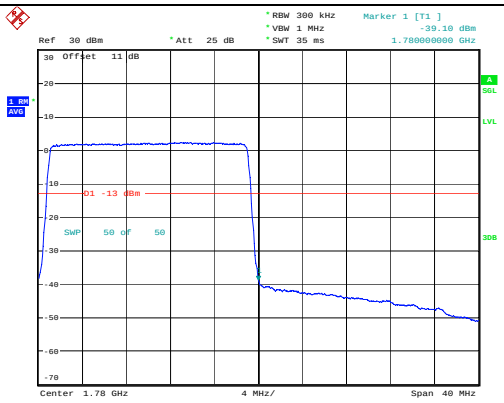
Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 1.4MHz		
QPSK 3MHz		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 5MHz		
QPSK 10MHz		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 15MHz		
QPSK 20MHz		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 1.4MHz		
16QAM 3MHz		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 5MHz		
16QAM 10MHz		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 15MHz		
16QAM 20MHz		

4.18 Radiated Spurious Emissions

Serial Number:	2CGM-2	Test Date:	Below 1GHz: 2023/11/30 Above 1GHz: 2023/10/24
Test Site:	966-1, 966-2	Test Mode:	Transmitting
Tester:	Carl Xue, Tao Zhu	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.3~26.5	Relative Humidity: (%)	45~55	ATM Pressure: (kPa)	101~101.4

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Below 1GHz					
Sunol Sciences	Antenna	JB6	A082520-6	2023/9/18	2026/9/17
R&S	EMI Test Receiver	ESR3	102724	2023/3/31	2024/3/30
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2023/7/16	2024/7/15
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2023/7/16	2024/7/15
Sonoma	Amplifier	310N	186165	2023/7/16	2024/7/15
EMCO	Adjustable Dipole Antenna	3121C	9109-756	N/A	N/A
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2023/7/16	2024/7/15
Agilent	Signal Generator	E8247C	MY43321352	2023/11/17	2024/11/16

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Above 1GHz					
AH	Double Ridge Guide Horn Antenna	SAS-571	1394	2023/3/22	2026/2/21
R&S	Spectrum Analyzer	FSV40	101591	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2023/8/6	2024/8/5
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2023/8/6	2024/8/5
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2022/11/9	2023/11/8
AH	Double Ridge Guide Horn Antenna	SAS-571	1396	2021/10/18	2024/10/17
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022/7/16	2024/7/15
Agilent	Signal Generator	E8247C	MY43321352	202211/18	2023/11/17
PASTERNACK	Horn Antenna	PE9852/2F-20	112002	2021/2/5	2024/2/4
PASTERNACK	Horn Antenna	PE9852/2F-20	112001	2021/2/5	2024/2/4
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2023/9/15	2024/9/14
PASTERNACK	Horn Antenna	PE9850/2F-20	072001	2021/2/5	2024/2/4
PASTERNACK	Horn Antenna	PE9850/2F-20	072002	2021/2/5	2024/2/4
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2023/8/6	2024/8/5
**** 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 Data:

Please refer to the below table and plots.

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

Cellular Band (30MHz-10GHz)

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM 850 Frequency:824.2MHz								
96.43	H	22.38	-58.95	0.00	0.19	-59.14	-13.00	46.14
584.90	V	20.74	-50.97	0.00	0.46	-51.43	-13.00	38.43
1648.400	H	55.85	-48.48	8.68	0.80	-40.60	-13.00	27.60
1648.400	V	56.43	-47.98	8.68	0.80	-40.10	-13.00	27.10
2472.600	H	49.60	-51.18	9.38	1.00	-42.80	-13.00	29.80
2472.600	V	50.05	-50.68	9.38	1.00	-42.30	-13.00	29.30
3296.800	H	36.61	-60.07	10.32	1.15	-50.90	-13.00	37.90
3296.800	V	36.37	-60.07	10.32	1.15	-50.90	-13.00	37.90
GSM 850 Frequency:836.6MHz								
97.79	H	21.86	-59.44	0.00	0.19	-59.63	-13.00	46.63
706.70	V	21.15	-48.62	0.00	0.54	-49.16	-13.00	36.16
1673.200	H	56.65	-47.66	8.71	0.85	-39.80	-13.00	26.80
1673.200	V	57.35	-47.06	8.71	0.85	-39.20	-13.00	26.20
2509.800	H	50.20	-50.41	9.42	1.01	-42.00	-13.00	29.00
2509.800	V	51.61	-49.01	9.42	1.01	-40.60	-13.00	27.60
3346.400	H	36.99	-60.18	10.34	1.16	-51.00	-13.00	38.00
3346.400	V	36.65	-60.38	10.34	1.16	-51.20	-13.00	38.20
GSM 850 Frequency:848.8MHz								
727.88	H	21.18	-51.58	0.00	0.52	-52.10	-13.00	39.10
719.18	V	20.97	-48.53	0.00	0.49	-49.02	-13.00	36.02
1697.600	H	57.55	-46.74	8.74	0.90	-38.90	-13.00	25.90
1697.600	V	58.18	-46.24	8.74	0.90	-38.40	-13.00	25.40
2546.400	H	50.57	-49.76	9.47	1.01	-41.30	-13.00	28.30
2546.400	V	52.02	-48.26	9.47	1.01	-39.80	-13.00	26.80
3395.200	H	38.42	-59.27	10.36	1.19	-50.10	-13.00	37.10
3395.200	V	38.19	-59.47	10.36	1.19	-50.30	-13.00	37.30

PCS Band (30MHz-20GHz)

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM 1900 Frequency:1850.2MHz								
98.49	H	50.58	-61.89	0.00	0.19	-62.08	-13.00	49.08
312.17	V	47.47	-61.02	0.00	0.34	-61.36	-13.00	48.36
3700.400	H	45.97	-51.35	10.60	1.25	-42.00	-13.00	29.00
3700.400	V	44.95	-52.35	10.60	1.25	-43.00	-13.00	30.00
5550.600	H	53.21	-40.05	11.44	1.49	-30.10	-13.00	17.10
5550.600	V	53.75	-39.35	11.44	1.49	-29.40	-13.00	16.40
GSM 1900 Frequency:1880MHz								
98.83	H	49.94	-62.51	0.00	0.19	-62.70	-13.00	49.70
304.61	V	46.65	-62.04	0.00	0.34	-62.38	-13.00	49.38
3760.000	H	45.99	-50.42	10.66	1.24	-41.00	-13.00	28.00
3760.000	V	44.77	-51.52	10.66	1.24	-42.10	-13.00	29.10
5640.000	H	54.16	-39.29	11.33	1.54	-29.50	-13.00	16.50
5640.000	V	55.24	-38.09	11.33	1.54	-28.30	-13.00	15.30
GSM 1900 Frequency:1909.8MHz								
96.10	H	50.62	-62.01	0.00	0.19	-62.20	-13.00	49.20
302.48	V	48.07	-60.68	0.00	0.34	-61.02	-13.00	48.02
3819.600	H	46.63	-49.23	10.72	1.29	-39.80	-13.00	26.80
3819.600	V	45.49	-50.23	10.72	1.29	-40.80	-13.00	27.80
5729.400	H	55.55	-37.93	11.22	1.59	-28.30	-13.00	15.30
5729.400	V	56.43	-36.93	11.22	1.59	-27.30	-13.00	14.30

WCDMA Band 2(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band II, Frequency:1852.4 MHz								
97.11	H	50.90	-61.66	0.00	0.19	-61.85	-13.00	48.85
316.57	V	46.72	-61.66	0.00	0.34	-62.00	-13.00	49.00
3704.800	H	39.91	-57.35	10.60	1.25	-48.00	-13.00	35.00
3704.800	V	39.28	-57.95	10.60	1.25	-48.60	-13.00	35.60
5557.200	H	47.44	-45.84	11.43	1.49	-35.90	-13.00	22.90
5557.200	V	47.99	-45.14	11.43	1.49	-35.20	-13.00	22.20
WCDMA Band II, Frequency:1880 MHz								
99.60	H	50.44	-61.96	0.00	0.19	-62.15	-13.00	49.15
300.36	V	47.15	-61.65	0.00	0.34	-61.99	-13.00	48.99
3760.000	H	39.69	-56.72	10.66	1.24	-47.30	-13.00	34.30
3760.000	V	38.97	-57.32	10.66	1.24	-47.90	-13.00	34.90
5640.000	H	48.66	-44.79	11.33	1.54	-35.00	-13.00	22.00
5640.000	V	49.24	-44.09	11.33	1.54	-34.30	-13.00	21.30
WCDMA Band II, Frequency:1907.6MHz								
103.87	H	51.26	-61.06	0.00	0.19	-61.25	-13.00	48.25
308.90	V	46.55	-62.03	0.00	0.34	-62.37	-13.00	49.37
3815.200	H	40.32	-55.53	10.72	1.29	-46.10	-13.00	33.10
3815.200	V	39.36	-56.33	10.72	1.29	-46.90	-13.00	33.90
5722.800	H	50.34	-43.15	11.23	1.58	-33.50	-13.00	20.50
5722.800	V	50.80	-42.55	11.23	1.58	-32.90	-13.00	19.90

WCDMA Band 4(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Frequency: 1712.4 MHz								
101.28	H	51.26	-61.09	0.00	0.19	-61.28	-13.00	48.28
315.48	V	48.48	-59.93	0.00	0.34	-60.27	-13.00	47.27
3424.800	H	40.97	-56.80	10.37	1.17	-47.60	-13.00	34.60
3424.800	V	40.54	-57.20	10.37	1.17	-48.00	-13.00	35.00
5137.200	H	49.90	-43.72	11.28	1.46	-33.90	-13.00	20.90
5137.200	V	51.18	-42.32	11.28	1.46	-32.50	-13.00	19.50
Frequency: 1732.6 MHz								
99.53	H	50.60	-61.80	0.00	0.19	-61.99	-13.00	48.99
330.18	V	46.95	-61.08	0.00	0.34	-61.42	-13.00	48.42
3465.200	H	41.77	-56.04	10.39	1.15	-46.80	-13.00	33.80
3465.200	V	41.33	-56.44	10.39	1.15	-47.20	-13.00	34.20
5197.800	H	51.25	-42.88	11.32	1.44	-33.00	-13.00	20.00
5197.800	V	52.30	-41.68	11.32	1.44	-31.80	-13.00	18.80
Frequency: 1752.6 MHz								
100.34	H	51.07	-61.30	0.00	0.19	-61.49	-13.00	48.49
305.69	V	47.22	-61.44	0.00	0.34	-61.78	-13.00	48.78
3505.200	H	42.70	-55.13	10.41	1.18	-45.90	-13.00	32.90
3505.200	V	42.24	-55.53	10.41	1.18	-46.30	-13.00	33.30
5257.800	H	52.05	-41.68	11.35	1.47	-31.80	-13.00	18.80
5257.800	V	52.93	-40.58	11.35	1.47	-30.70	-13.00	17.70

WCDMA Band 5(30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band 5 Frequency:826.4 MHz								
95.09	H	21.27	-60.09	0.00	0.19	-60.28	-13.00	47.28
694.28	V	20.82	-49.20	0.00	0.55	-49.75	-13.00	36.75
1652.800	H	45.76	-58.57	8.68	0.81	-50.70	-13.00	37.70
1652.800	V	46.04	-58.37	8.68	0.81	-50.50	-13.00	37.50
2479.200	H	41.28	-59.48	9.39	1.01	-51.10	-13.00	38.10
2479.200	V	41.25	-59.48	9.39	1.01	-51.10	-13.00	38.10
3305.600	H	35.86	-60.87	10.32	1.15	-51.70	-13.00	38.70
3305.600	V	36.53	-59.97	10.32	1.15	-50.80	-13.00	37.80
WCDMA Band 5 Frequency:836.6MHz								
96.77	H	20.93	-60.39	0.00	0.19	-60.58	-13.00	47.58
711.51	V	20.88	-48.79	0.00	0.51	-49.30	-13.00	36.30
1673.200	H	46.35	-57.96	8.71	0.85	-50.10	-13.00	37.10
1673.200	V	46.65	-57.76	8.71	0.85	-49.90	-13.00	36.90
2509.800	H	41.60	-59.01	9.42	1.01	-50.60	-13.00	37.60
2509.800	V	42.61	-58.01	9.42	1.01	-49.60	-13.00	36.60
3346.400	H	36.89	-60.28	10.34	1.16	-51.10	-13.00	38.10
3346.400	V	37.45	-59.58	10.34	1.16	-50.40	-13.00	37.40
WCDMA Band 5 Frequency:846.6MHz								
577.62	H	21.03	-53.27	0.00	0.46	-53.73	-13.00	40.73
729.18	V	20.97	-48.31	0.00	0.53	-48.84	-13.00	35.84
1693.200	H	47.06	-57.24	8.73	0.89	-49.40	-13.00	36.40
1693.200	V	47.38	-57.04	8.73	0.89	-49.20	-13.00	36.20
2539.800	H	42.03	-58.35	9.46	1.01	-49.90	-13.00	36.90
2539.800	V	43.09	-57.25	9.46	1.01	-48.80	-13.00	35.80
3386.400	H	37.72	-59.87	10.35	1.18	-50.70	-13.00	37.70
3386.400	V	38.77	-58.77	10.35	1.18	-49.60	-13.00	36.60

LTE Bands:

(The Worst modulation and bandwidth was below)

LTE Band 2(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 1.4MHz, Frequency:1850.7 MHz								
98.14	H	51.31	-61.18	0.00	0.19	-61.37	-13.00	48.37
303.54	V	46.73	-61.99	0.00	0.34	-62.33	-13.00	49.33
3701.400	H	42.96	-54.35	10.60	1.25	-45.00	-13.00	32.00
3701.400	V	42.34	-54.95	10.60	1.25	-45.60	-13.00	32.60
5552.100	H	54.32	-38.95	11.44	1.49	-29.00	-13.00	16.00
5552.100	V	54.75	-38.35	11.44	1.49	-28.40	-13.00	15.40
QPSK, 1.4MHz,Frequency:1880 MHz								
95.76	H	50.71	-61.94	0.00	0.19	-62.13	-13.00	49.13
314.36	V	46.90	-61.54	0.00	0.34	-61.88	-13.00	48.88
3760.000	H	42.99	-53.42	10.66	1.24	-44.00	-13.00	31.00
3760.000	V	42.17	-54.12	10.66	1.24	-44.70	-13.00	31.70
5640.000	H	55.26	-38.19	11.33	1.54	-28.40	-13.00	15.40
5640.000	V	55.74	-37.59	11.33	1.54	-27.80	-13.00	14.80
QPSK, 1.4MHz,Frequency:1909.3 MHz								
102.71	H	50.97	-61.36	0.00	0.19	-61.55	-13.00	48.55
322.16	V	47.08	-61.15	0.00	0.34	-61.49	-13.00	48.49
3818.600	H	43.13	-52.73	10.72	1.29	-43.30	-13.00	30.30
3818.600	V	42.18	-53.53	10.72	1.29	-44.10	-13.00	31.10
5727.900	H	56.84	-36.64	11.23	1.59	-27.00	-13.00	14.00
5727.900	V	57.42	-35.94	11.23	1.59	-26.30	-13.00	13.30

LTE Band 4(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.4MHz QPSK, Frequency: 1710.7 MHz								
95.54	H	50.70	-61.96	0.00	0.19	-62.15	-13.00	49.15
317.70	V	46.79	-61.56	0.00	0.34	-61.90	-13.00	48.90
3421.400	H	45.76	-52.00	10.37	1.17	-42.80	-13.00	29.80
3421.400	V	45.23	-52.50	10.37	1.17	-43.30	-13.00	30.30
5132.100	H	55.16	-38.41	11.28	1.47	-28.60	-13.00	15.60
5132.100	V	56.35	-37.11	11.28	1.47	-27.30	-13.00	14.30
1.4MHz QPSK, Frequency: 1732.5 MHz								
99.29	H	50.86	-61.56	0.00	0.19	-61.75	-13.00	48.75
312.18	V	46.46	-62.03	0.00	0.34	-62.37	-13.00	49.37
3465.000	H	46.37	-51.44	10.39	1.15	-42.20	-13.00	29.20
3465.000	V	45.73	-52.04	10.39	1.15	-42.80	-13.00	29.80
5197.500	H	56.45	-37.68	11.32	1.44	-27.80	-13.00	14.80
5197.500	V	57.50	-36.48	11.32	1.44	-26.60	-13.00	13.60
1.4MHz QPSK, Frequency: 1754.3 MHz								
102.83	H	51.29	-61.04	0.00	0.19	-61.23	-13.00	48.23
305.69	V	46.20	-62.46	0.00	0.34	-62.80	-13.00	49.80
3508.600	H	47.50	-50.32	10.41	1.19	-41.10	-13.00	28.10
3508.600	V	47.04	-50.72	10.41	1.19	-41.50	-13.00	28.50
5262.900	H	57.21	-36.49	11.36	1.47	-26.60	-13.00	13.60
5262.900	V	57.98	-35.49	11.36	1.47	-25.60	-13.00	12.60

LTE Band 5(30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 1.4MHz, Frequency: 824.7 MHz								
101.28	H	21.79	-59.41	0.00	0.19	-59.60	-13.00	46.60
582.74	V	21.16	-50.54	0.00	0.46	-51.00	-13.00	38.00
1649.400	H	44.05	-60.28	8.68	0.80	-52.40	-13.00	39.40
1649.400	V	44.43	-59.98	8.68	0.80	-52.10	-13.00	39.10
2474.100	H	45.60	-55.18	9.38	1.00	-46.80	-13.00	33.80
2474.100	V	44.95	-55.78	9.38	1.00	-47.40	-13.00	34.40
3298.800	H	50.91	-45.77	10.32	1.15	-36.60	-13.00	23.60
3298.800	V	51.87	-44.57	10.32	1.15	-35.40	-13.00	22.40
QPSK, 1.4MHz, Frequency: 836.5 MHz								
97.46	H	21.33	-59.98	0.00	0.19	-60.17	-13.00	47.17
726.64	V	21.01	-48.33	0.00	0.52	-48.85	-13.00	35.85
1673.000	H	44.75	-59.56	8.71	0.85	-51.70	-13.00	38.70
1673.000	V	45.05	-59.36	8.71	0.85	-51.50	-13.00	38.50
2509.500	H	45.90	-54.71	9.42	1.01	-46.30	-13.00	33.30
2509.500	V	45.41	-55.21	9.42	1.01	-46.80	-13.00	33.80
3346.000	H	51.88	-45.28	10.34	1.16	-36.10	-13.00	23.10
3346.000	V	52.94	-44.08	10.34	1.16	-34.90	-13.00	21.90
QPSK, 1.4MHz, Frequency: 848.3 MHz								
98.83	H	21.18	-60.10	0.00	0.19	-60.29	-13.00	47.29
679.85	V	20.76	-49.52	0.00	0.52	-50.04	-13.00	37.04
1696.600	H	45.74	-58.55	8.74	0.89	-50.70	-13.00	37.70
1696.600	V	45.87	-58.55	8.74	0.89	-50.70	-13.00	37.70
2544.900	H	46.38	-53.96	9.47	1.01	-45.50	-13.00	32.50
2544.900	V	45.74	-54.56	9.47	1.01	-46.10	-13.00	33.10
3393.200	H	53.40	-44.27	10.36	1.19	-35.10	-13.00	22.10
3393.200	V	54.46	-43.17	10.36	1.19	-34.00	-13.00	21.00

LTE Band 7(30MHz-26.5GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 2502.5 MHz								
101.64	H	51.79	-60.56	0.00	0.19	-60.75	-25.00	35.75
311.08	V	45.70	-62.82	0.00	0.34	-63.16	-25.00	38.16
5005.000	H	41.23	-51.73	11.20	1.47	-42.00	-25.00	17.00
5005.000	V	42.59	-50.23	11.20	1.47	-40.50	-25.00	15.50
7507.500	H	45.94	-43.85	10.90	1.95	-34.90	-25.00	9.90
7507.500	V	45.34	-44.95	10.90	1.95	-36.00	-25.00	11.00
5MHz QPSK, Frequency: 2535 MHz								
97.80	H	51.25	-61.27	0.00	0.19	-61.46	-25.00	36.46
319.92	V	46.19	-62.10	0.00	0.34	-62.44	-25.00	37.44
5070.000	H	42.02	-51.17	11.24	1.47	-41.40	-25.00	16.40
5070.000	V	43.22	-49.87	11.24	1.47	-40.10	-25.00	15.10
7605.000	H	46.50	-42.97	10.88	2.01	-34.10	-25.00	9.10
7605.000	V	46.02	-44.17	10.88	2.01	-35.30	-25.00	10.30
5MHz QPSK, Frequency: 2567.5 MHz								
95.76	H	51.40	-61.25	0.00	0.19	-61.44	-25.00	36.44
307.83	V	46.55	-62.06	0.00	0.34	-62.40	-25.00	37.40
5135.000	H	43.09	-50.51	11.28	1.47	-40.70	-25.00	15.70
5135.000	V	44.38	-49.11	11.28	1.47	-39.30	-25.00	14.30
7702.500	H	47.43	-42.09	10.86	1.97	-33.20	-25.00	8.20
7702.500	V	46.99	-43.19	10.86	1.97	-34.30	-25.00	9.30

LTE Band 12:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.4MHz QPSK, Frequency: 699.7 MHz								
98.14	H	21.91	-59.38	0.00	0.19	-59.57	-13.00	46.57
522.88	V	20.59	-51.02	0.00	0.42	-51.44	-13.00	38.44
1399.400	H	44.39	-59.31	8.22	0.71	-51.80	-13.00	38.80
1399.400	V	44.54	-59.21	8.22	0.71	-51.70	-13.00	38.70
2099.100	H	45.13	-56.75	9.16	0.91	-48.50	-13.00	35.50
2099.100	V	45.38	-56.45	9.16	0.91	-48.20	-13.00	35.20
2798.800	H	38.29	-61.64	9.88	1.04	-52.80	-13.00	39.80
2798.800	V	39.06	-60.74	9.88	1.04	-51.90	-13.00	38.90
1.4MHz QPSK, Frequency: 707.5 MHz								
100.93	H	21.42	-59.80	0.00	0.19	-59.99	-13.00	46.99
633.98	V	20.66	-50.45	0.00	0.51	-50.96	-13.00	37.96
1415.000	H	45.03	-58.64	8.26	0.72	-51.10	-13.00	38.10
1415.000	V	45.18	-58.54	8.26	0.72	-51.00	-13.00	38.00
2122.500	H	45.84	-56.15	9.17	0.92	-47.90	-13.00	34.90
2122.500	V	46.12	-55.85	9.17	0.92	-47.60	-13.00	34.60
2830.000	H	38.63	-61.17	9.93	1.06	-52.30	-13.00	39.30
2830.000	V	39.26	-60.47	9.93	1.06	-51.60	-13.00	38.60
1.4MHz QPSK, Frequency: 715.3 MHz								
96.77	H	21.30	-60.02	0.00	0.19	-60.21	-13.00	47.21
510.20	V	20.52	-51.08	0.00	0.45	-51.53	-13.00	38.53
1430.600	H	45.45	-58.18	8.31	0.73	-50.60	-13.00	37.60
1430.600	V	45.71	-57.98	8.31	0.73	-50.40	-13.00	37.40
2145.900	H	47.04	-55.06	9.19	0.93	-46.80	-13.00	33.80
2145.900	V	47.35	-54.76	9.19	0.93	-46.50	-13.00	33.50
2861.200	H	39.04	-60.61	9.98	1.07	-51.70	-13.00	38.70
2861.200	V	39.96	-59.71	9.98	1.07	-50.80	-13.00	37.80

LTE Band 13:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 779.5 MHz								
97.99	H	21.78	-59.51	0.00	0.19	-59.70	-13.00	46.70
440.41	V	20.68	-53.27	0.00	0.42	-53.69	-13.00	40.69
1559.000	H	43.42	-60.57	8.57	0.80	-52.80	-40.00	12.80
1559.000	V	43.18	-60.87	8.57	0.80	-53.10	-40.00	13.10
2338.500	H	44.56	-57.03	9.30	0.97	-48.70	-13.00	35.70
2338.500	V	45.03	-56.33	9.30	0.97	-48.00	-13.00	35.00
3118.000	H	36.47	-61.02	10.25	1.13	-51.90	-13.00	38.90
3118.000	V	35.83	-61.52	10.25	1.13	-52.40	-13.00	39.40
5MHz QPSK, Frequency: 784.5 MHz								
95.95	H	21.45	-59.89	0.00	0.19	-60.08	-13.00	47.08
584.91	V	20.74	-50.97	0.00	0.46	-51.43	-13.00	38.43
1569.000	H	44.81	-59.27	8.58	0.81	-51.50	-40.00	11.50
1569.000	V	43.46	-60.67	8.58	0.81	-52.90	-40.00	12.90
2353.500	H	46.11	-55.34	9.31	0.97	-47.00	-13.00	34.00
2353.500	V	46.78	-54.44	9.31	0.97	-46.10	-13.00	33.10
3138.000	H	37.18	-60.22	10.26	1.14	-51.10	-13.00	38.10
3138.000	V	36.71	-60.52	10.26	1.14	-51.40	-13.00	38.40

LTE Band 17:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 706.5 MHz								
95.42	H	21.70	-59.65	0.00	0.19	-59.84	-13.00	46.84
582.74	V	20.67	-51.03	0.00	0.46	-51.49	-13.00	38.49
1413.000	H	43.03	-60.64	8.26	0.72	-53.10	-13.00	40.10
1413.000	V	43.28	-60.44	8.26	0.72	-52.90	-13.00	39.90
2119.500	H	46.62	-55.35	9.17	0.92	-47.10	-13.00	34.10
2119.500	V	45.20	-56.75	9.17	0.92	-48.50	-13.00	35.50
2826.000	H	38.85	-60.96	9.92	1.06	-52.10	-13.00	39.10
2826.000	V	38.48	-61.26	9.92	1.06	-52.40	-13.00	39.40
5MHz QPSK, Frequency: 710 MHz								
96.43	H	21.84	-59.49	0.00	0.19	-59.68	-13.00	46.68
530.15	V	20.59	-51.04	0.00	0.45	-51.49	-13.00	38.49
1420.000	H	43.61	-60.05	8.28	0.73	-52.50	-13.00	39.50
1420.000	V	43.66	-60.05	8.28	0.73	-52.50	-13.00	39.50
2130.000	H	47.16	-54.86	9.18	0.92	-46.60	-13.00	33.60
2130.000	V	45.85	-56.16	9.18	0.92	-47.90	-13.00	34.90
2840.000	H	39.27	-60.48	9.94	1.06	-51.60	-13.00	38.60
2840.000	V	38.83	-60.88	9.94	1.06	-52.00	-13.00	39.00
5MHz QPSK, Frequency: 713.5 MHz								
99.17	H	21.22	-60.05	0.00	0.19	-60.24	-13.00	47.24
570.62	V	20.54	-51.15	0.00	0.46	-51.61	-13.00	38.61
1427.000	H	44.27	-59.37	8.30	0.73	-51.80	-13.00	38.80
1427.000	V	44.42	-59.27	8.30	0.73	-51.70	-13.00	38.70
2140.500	H	48.12	-53.95	9.18	0.93	-45.70	-13.00	32.70
2140.500	V	46.73	-55.35	9.18	0.93	-47.10	-13.00	34.10
2854.000	H	40.29	-59.40	9.97	1.07	-50.50	-13.00	37.50
2854.000	V	39.98	-59.70	9.97	1.07	-50.80	-13.00	37.80

LTE Band 26:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.4MHz QPSK, Frequency: 814.7 MHz								
102.71	H	21.61	-59.54	0.00	0.19	-59.73	-13.00	46.73
582.74	V	20.86	-50.84	0.00	0.46	-51.30	-13.00	38.30
1629.400	H	45.50	-58.85	8.66	0.81	-51.00	-13.00	38.00
1629.400	V	45.86	-58.55	8.66	0.81	-50.70	-13.00	37.70
2444.100	H	50.52	-50.37	9.37	1.00	-42.00	-13.00	29.00
2444.100	V	49.68	-51.07	9.37	1.00	-42.70	-13.00	29.70
3258.800	H	45.23	-51.63	10.30	1.17	-42.50	-13.00	29.50
3258.800	V	46.18	-50.43	10.30	1.17	-41.30	-13.00	28.30
1.4MHz QPSK, Frequency: 831.5 MHz								
94.10	H	21.46	-59.92	0.00	0.18	-60.10	-13.00	47.10
694.29	V	20.62	-49.40	0.00	0.55	-49.95	-13.00	36.95
1663.000	H	46.35	-57.97	8.70	0.83	-50.10	-13.00	37.10
1663.000	V	46.64	-57.77	8.70	0.83	-49.90	-13.00	36.90
2494.500	H	51.01	-49.69	9.40	1.01	-41.30	-13.00	28.30
2494.500	V	50.52	-50.19	9.40	1.01	-41.80	-13.00	28.80
3326.000	H	46.18	-50.77	10.33	1.16	-41.60	-13.00	28.60
3326.000	V	47.00	-49.77	10.33	1.16	-40.60	-13.00	27.60
1.4MHz QPSK, Frequency: 848.3 MHz								
97.80	H	21.09	-60.21	0.00	0.19	-60.40	-13.00	47.40
719.40	V	20.97	-48.53	0.00	0.49	-49.02	-13.00	36.02
1696.600	H	46.84	-57.45	8.74	0.89	-49.60	-13.00	36.60
1696.600	V	47.27	-57.15	8.74	0.89	-49.30	-13.00	36.30
2544.900	H	51.38	-48.96	9.47	1.01	-40.50	-13.00	27.50
2544.900	V	50.74	-49.56	9.47	1.01	-41.10	-13.00	28.10
3393.200	H	47.60	-50.07	10.36	1.19	-40.90	-13.00	27.90
3393.200	V	48.66	-48.97	10.36	1.19	-39.80	-13.00	26.80

LTE Band 38 (30MHz-26.5GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 2572.5 MHz								
97.45	H	52.23	-60.31	0.00	0.19	-60.50	-25.00	35.50
309.99	V	45.74	-62.81	0.00	0.34	-63.15	-25.00	38.15
5145.000	H	48.23	-45.45	11.29	1.44	-35.60	-25.00	10.60
5145.000	V	49.42	-44.15	11.29	1.44	-34.30	-25.00	9.30
7717.500	H	48.24	-41.27	10.86	1.99	-32.40	-25.00	7.40
7717.500	V	47.66	-42.47	10.86	1.99	-33.60	-25.00	8.60
5MHz QPSK, Frequency: 2595 MHz								
95.76	H	50.84	-61.81	0.00	0.19	-62.00	-25.00	37.00
316.58	V	45.96	-62.42	0.00	0.34	-62.76	-25.00	37.76
5190.000	H	49.40	-44.67	11.31	1.44	-34.80	-25.00	9.80
5190.000	V	50.45	-43.47	11.31	1.44	-33.60	-25.00	8.60
7785.000	H	48.84	-40.65	10.84	1.99	-31.80	-25.00	6.80
7785.000	V	48.07	-41.85	10.84	1.99	-33.00	-25.00	8.00
5MHz QPSK, Frequency: 2617.5 MHz								
98.83	H	51.74	-60.71	0.00	0.19	-60.90	-25.00	35.90
298.28	V	46.18	-62.70	0.00	0.34	-63.04	-25.00	38.04
5235.000	H	49.92	-43.98	11.34	1.46	-34.10	-25.00	9.10
5235.000	V	50.93	-42.78	11.34	1.46	-32.90	-25.00	7.90
7852.500	H	49.59	-39.60	10.83	2.03	-30.80	-25.00	5.80
7852.500	V	48.88	-40.70	10.83	2.03	-31.90	-25.00	6.90

LTE Band 40 Lower (30MHz-25GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 2307.5 MHz								
93.77	H	51.82	-60.96	0.00	0.18	-61.14	-40.00	21.14
327.88	V	45.63	-62.46	0.00	0.34	-62.80	-40.00	22.80
4615.000	H	37.73	-57.63	10.74	1.41	-48.30	-40.00	8.30
4615.000	V	38.49	-56.73	10.74	1.41	-47.40	-40.00	7.40
6922.500	H	37.48	-53.54	11.22	1.88	-44.20	-40.00	4.20
6922.500	V	36.95	-53.94	11.22	1.88	-44.60	-40.00	4.60
5MHz QPSK, Frequency: 2312.5 MHz								
96.76	H	50.73	-61.85	0.00	0.19	-62.04	-40.00	22.04
314.39	V	46.19	-62.25	0.00	0.34	-62.59	-40.00	22.59
4625.000	H	38.45	-56.84	10.75	1.41	-47.50	-40.00	7.50
4625.000	V	39.13	-56.04	10.75	1.41	-46.70	-40.00	6.70
6937.500	H	38.07	-52.91	11.21	1.90	-43.60	-40.00	3.60
6937.500	V	37.53	-53.31	11.21	1.90	-44.00	-40.00	4.00

LTE Band 40 Upper (30MHz-25GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 2352.5 MHz								
94.76	H	51.48	-61.24	0.00	0.19	-61.43	-40.00	21.43
306.77	V	47.20	-61.43	0.00	0.34	-61.77	-40.00	21.77
4705.000	H	37.64	-57.14	10.85	1.41	-47.70	-40.00	7.70
4705.000	V	38.56	-56.24	10.85	1.41	-46.80	-40.00	6.80
7057.500	H	37.16	-52.85	11.17	1.92	-43.60	-40.00	3.60
7057.500	V	36.55	-53.35	11.17	1.92	-44.10	-40.00	4.10
5MHz QPSK, Frequency: 2357.5 MHz								
99.52	H	51.56	-60.84	0.00	0.19	-61.03	-40.00	21.03
308.93	V	46.31	-62.27	0.00	0.34	-62.61	-40.00	22.61
4715.000	H	38.26	-56.45	10.86	1.41	-47.00	-40.00	7.00
4715.000	V	39.16	-55.55	10.86	1.41	-46.10	-40.00	6.10
7072.500	H	37.45	-52.35	11.16	1.91	-43.10	-40.00	3.10
7072.500	V	36.96	-52.75	11.16	1.91	-43.50	-40.00	3.50

LTE Band 41 (30MHz-27GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 5MHz, Frequency: 2498.5 MHz								
98.13	H	50.69	-61.80	0.00	0.19	-61.99	-25.00	36.99
307.83	V	47.11	-61.50	0.00	0.34	-61.84	-25.00	36.84
4997.000	H	48.02	-44.92	11.20	1.48	-35.20	-25.00	10.20
4997.000	V	49.38	-43.42	11.20	1.48	-33.70	-25.00	8.70
7495.500	H	48.33	-41.46	10.90	1.94	-32.50	-25.00	7.50
7495.500	V	47.63	-42.66	10.90	1.94	-33.70	-25.00	8.70
QPSK, 5MHz, Frequency:2593 MHz								
95.42	H	51.33	-61.34	0.00	0.19	-61.53	-25.00	36.53
316.58	V	46.75	-61.63	0.00	0.34	-61.97	-25.00	36.97
5186.000	H	49.76	-44.27	11.31	1.44	-34.40	-25.00	9.40
5186.000	V	50.82	-43.07	11.31	1.44	-33.20	-25.00	8.20
7779.000	H	49.14	-40.35	10.84	1.99	-31.50	-25.00	6.50
7779.000	V	48.39	-41.55	10.84	1.99	-32.70	-25.00	7.70
QPSK, 5MHz, Frequency: 2687.5 MHz								
93.44	H	50.82	-61.98	0.00	0.18	-62.16	-25.00	37.16
306.75	V	46.36	-62.27	0.00	0.34	-62.61	-25.00	37.61
5375.000	H	50.47	-43.04	11.43	1.49	-33.10	-25.00	8.10
5375.000	V	51.36	-42.14	11.43	1.49	-32.20	-25.00	7.20
8062.500	H	48.63	-39.59	10.81	2.12	-30.90	-25.00	5.90
8062.500	V	48.03	-40.69	10.81	2.12	-32.00	-25.00	7.00

LTE Band 66:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.4MHz QPSK, Frequency: 1710.7 MHz								
101.28	H	52.03	-60.32	0.00	0.19	-60.51	-13.00	47.51
309.96	V	47.04	-61.51	0.00	0.34	-61.85	-13.00	48.85
3421.400	H	44.96	-52.80	10.37	1.17	-43.60	-13.00	30.60
3421.400	V	44.43	-53.30	10.37	1.17	-44.10	-13.00	31.10
5132.100	H	57.06	-36.51	11.28	1.47	-26.70	-13.00	13.70
5132.100	V	58.25	-35.21	11.28	1.47	-25.40	-13.00	12.40
1.4MHz QPSK, Frequency: 1745 MHz								
99.18	H	51.12	-61.30	0.00	0.19	-61.49	-13.00	48.49
313.26	V	45.74	-62.73	0.00	0.34	-63.07	-13.00	50.07
3490.000	H	45.71	-52.13	10.40	1.17	-42.90	-13.00	29.90
3490.000	V	45.15	-52.63	10.40	1.17	-43.40	-13.00	30.40
5235.000	H	58.12	-35.78	11.34	1.46	-25.90	-13.00	12.90
5235.000	V	59.13	-34.58	11.34	1.46	-24.70	-13.00	11.70
1.4MHz QPSK, Frequency: 1779.3 MHz								
94.10	H	50.75	-62.01	0.00	0.18	-62.19	-13.00	49.19
323.30	V	46.59	-61.61	0.00	0.34	-61.95	-13.00	48.95
3558.600	H	46.63	-51.04	10.46	1.22	-41.80	-13.00	28.80
3558.600	V	45.93	-51.64	10.46	1.22	-42.40	-13.00	29.40
5337.900	H	58.74	-34.73	11.40	1.47	-24.80	-13.00	11.80
5337.900	V	59.70	-33.63	11.40	1.47	-23.70	-13.00	10.70

Note:
1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
2) Absolute Level = Substituted Level - Cable loss + Antenna Gain
3) Margin = Limit-Absolute Level

5. EUT PHOTOGRAPHS

Please refer to the attachment CR231061288-EXP EUT EXTERNAL PHOTOGRAPHS and CR231061288-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR231061288-00E-TSP TEST SETUP PHOTOGRAPHS.

==== END OF REPORT =====