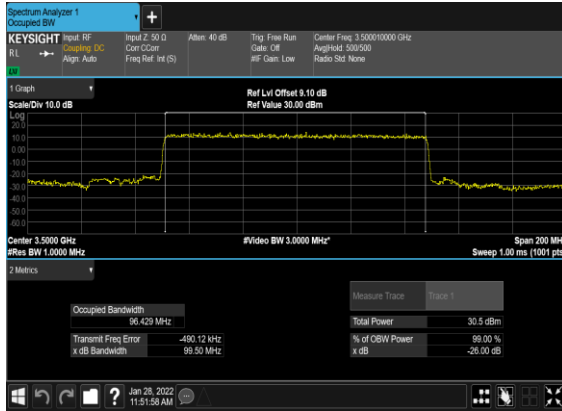
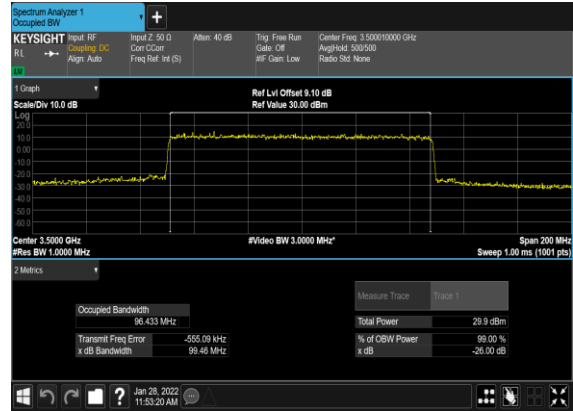


### N78(100M)\_DFT-s-OFDM\_PI\_2- BPSK\_Outer\_Full\_Mid\_CH



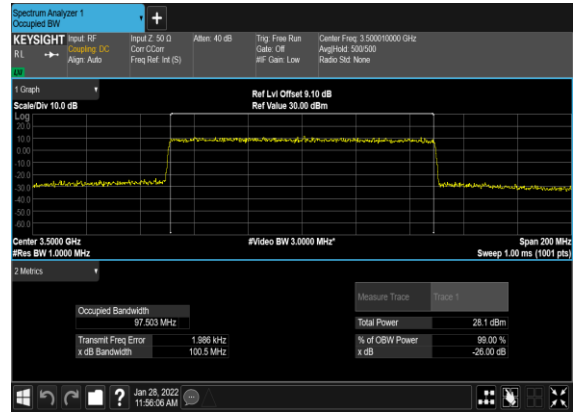
### N78(100M)\_DFT-s- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



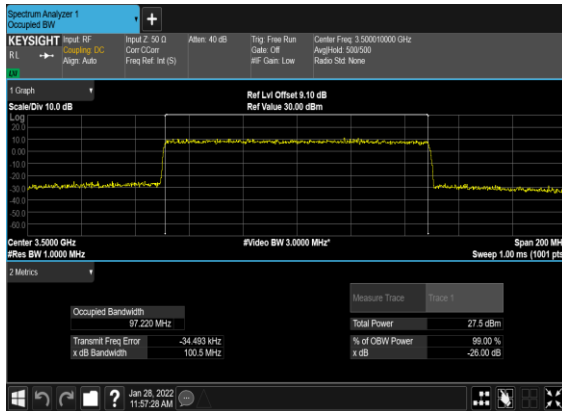
### N78(100M)\_CP- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



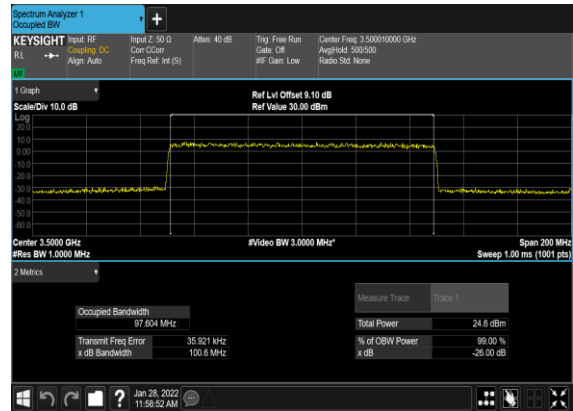
### N78(100M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



### N78(100M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH



### N78(100M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH

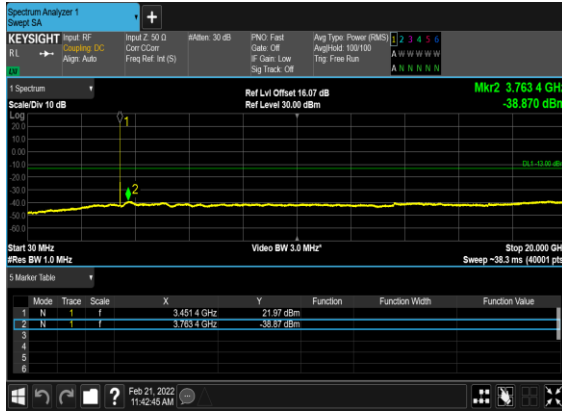


## Conducted Spurious Emissions

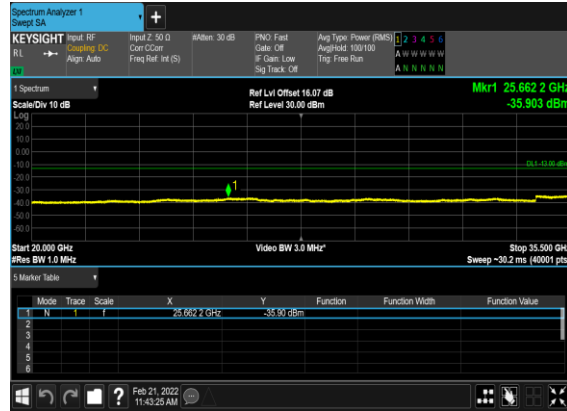
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
78	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	---

78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
78	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
78	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>

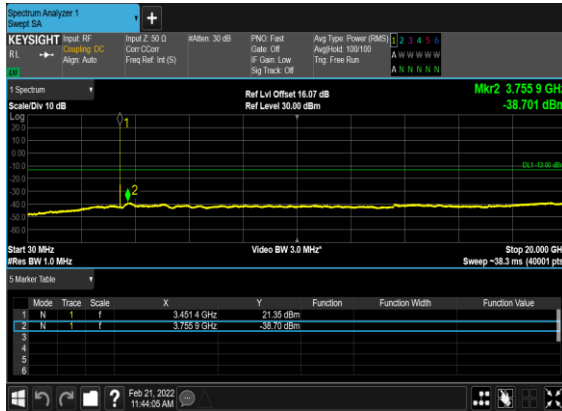
### N78(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



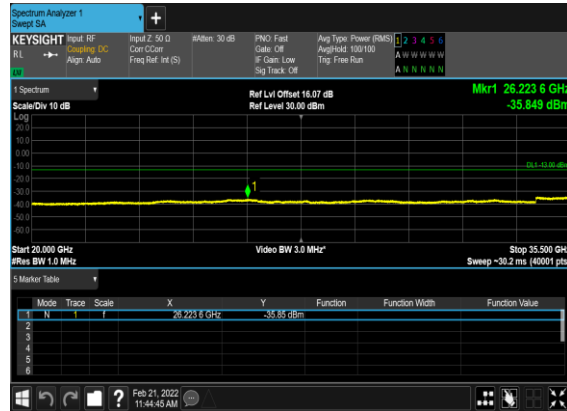
### N78(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



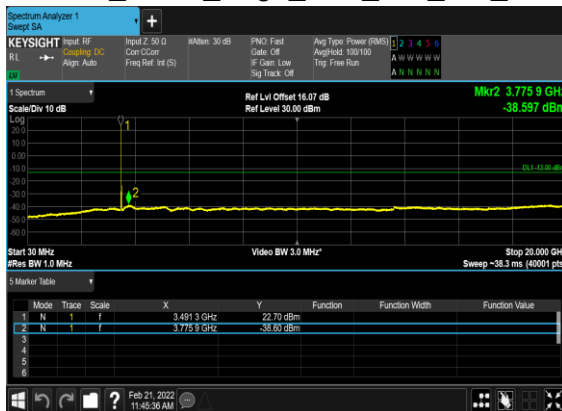
### N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



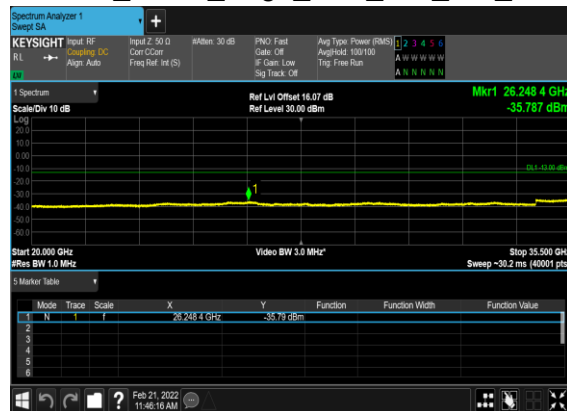
### N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



### N78(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



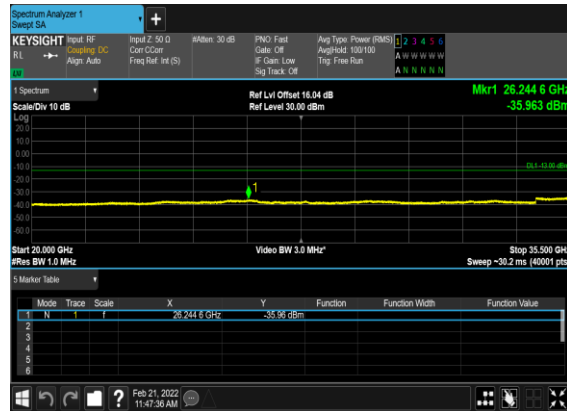
### N78(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



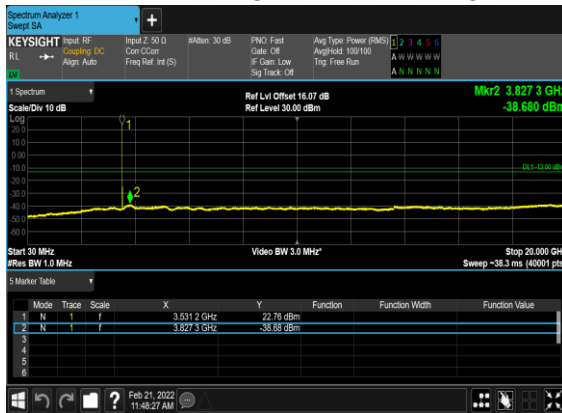
### N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



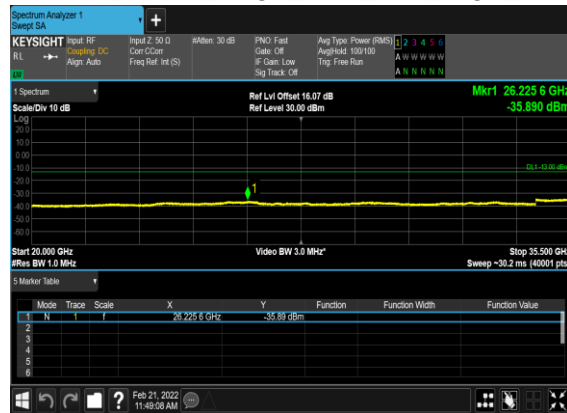
### N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



### N78(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



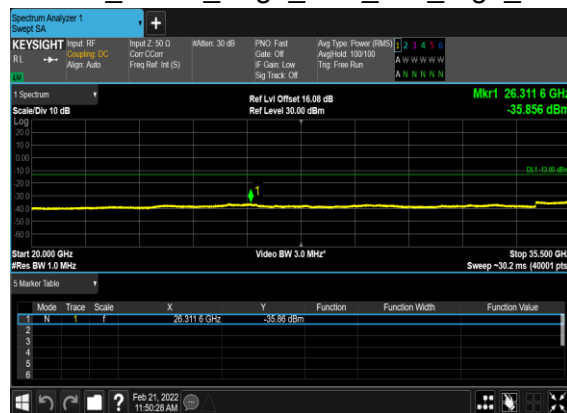
### N78(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



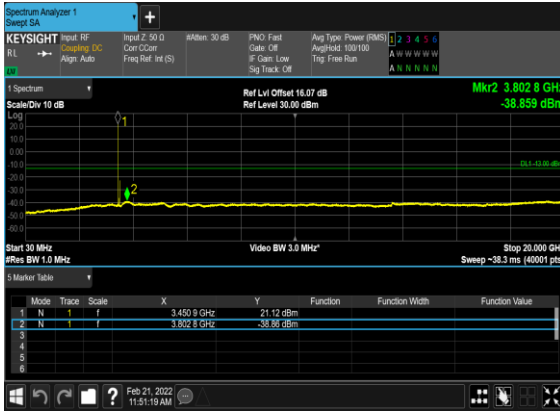
### N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



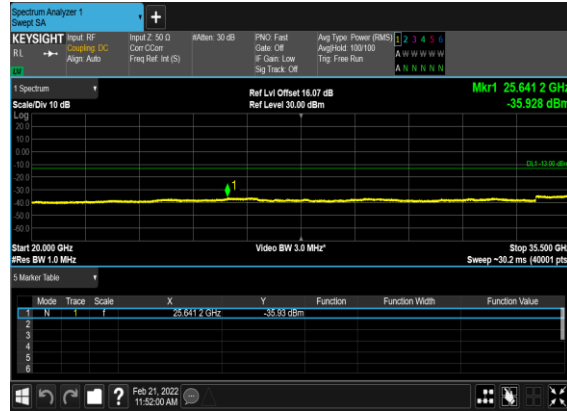
### N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



### N78(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



### N78(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



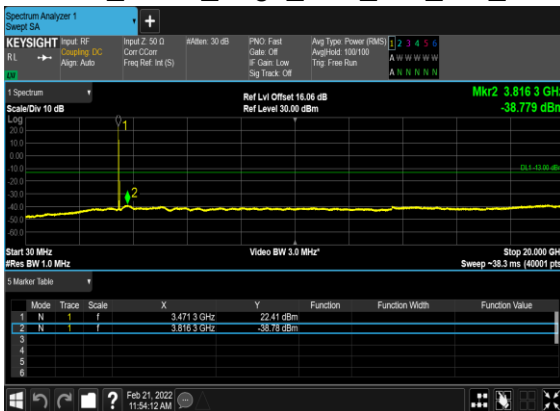
### N78(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



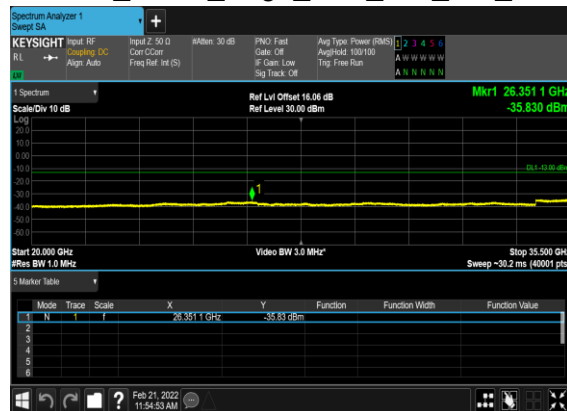
### N78(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



### N78(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



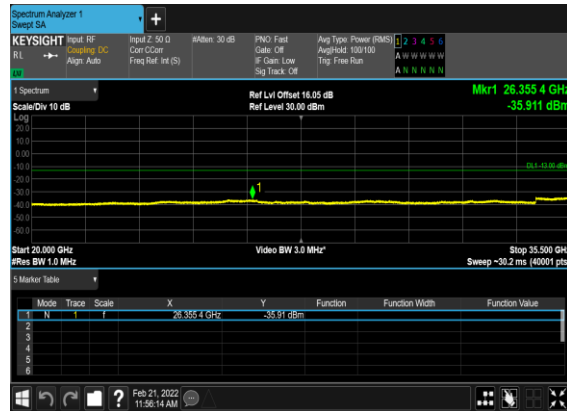
### N78(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



### N78(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



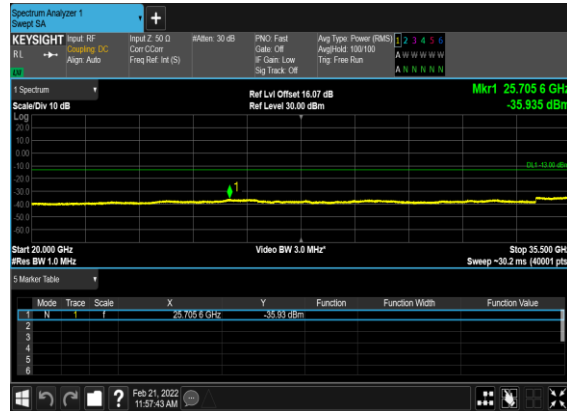
### N78(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



### N78(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



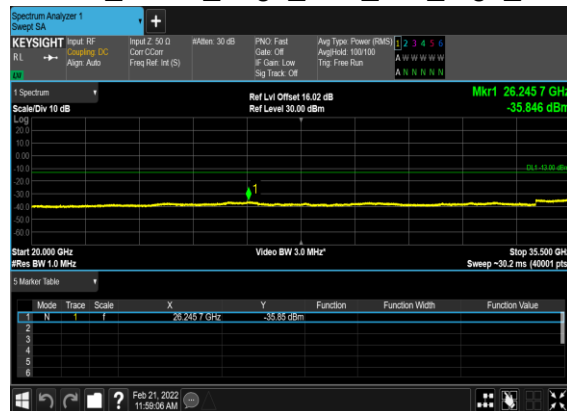
### N78(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



### N78(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



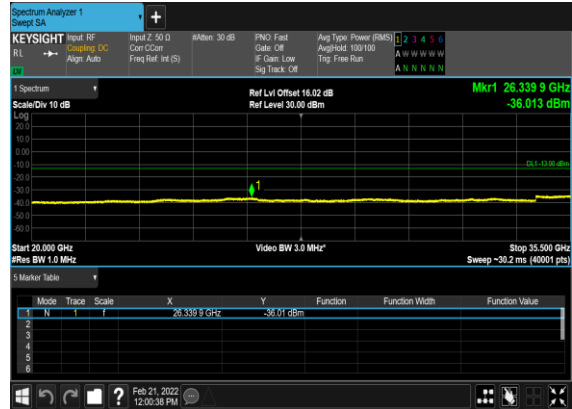
### N78(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



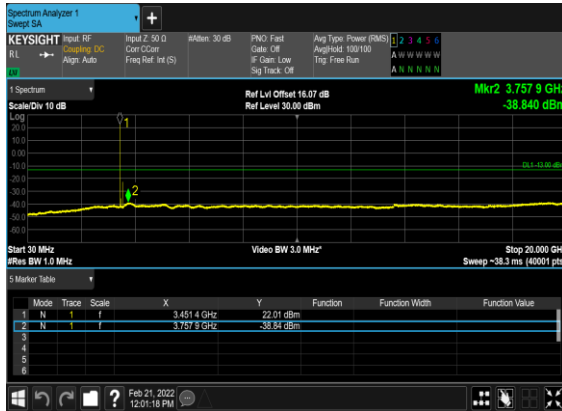
### N78(100M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



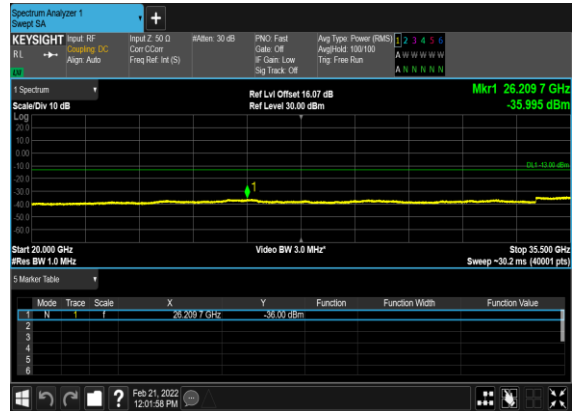
### N78(100M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



### N78(100M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



### N78(100M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH

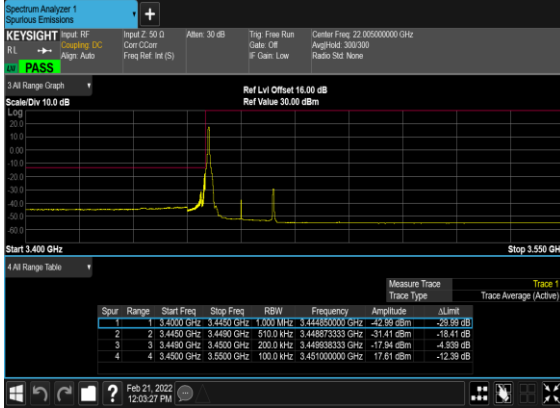




## Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
78	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM BPSK	50@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	50@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@50	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@50	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM BPSK	50@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	50@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	162@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	162@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@161	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@161	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	162@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	162@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@272	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@272	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	270@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	270@0	see graph	PASS

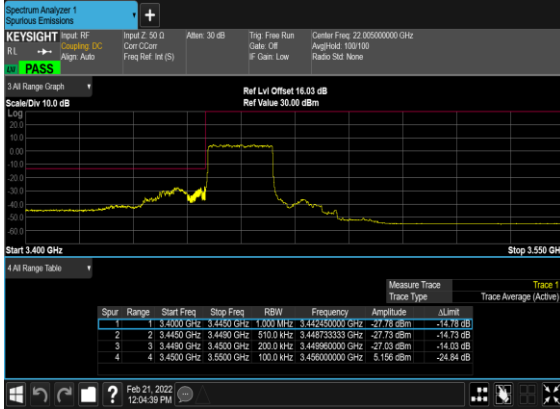
N78(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



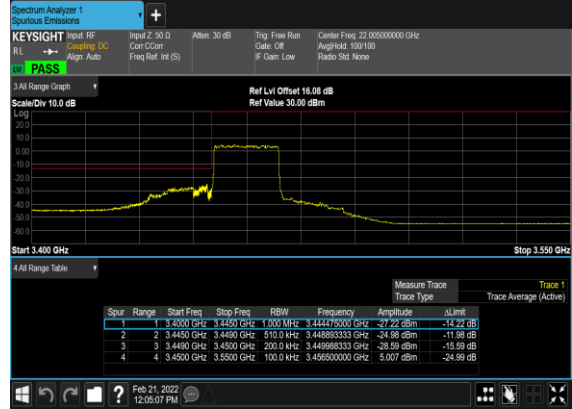
N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N78(20M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_Low\_CH



N78(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH



N78(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Right\_High\_CH



N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



N78(20M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_High\_CH



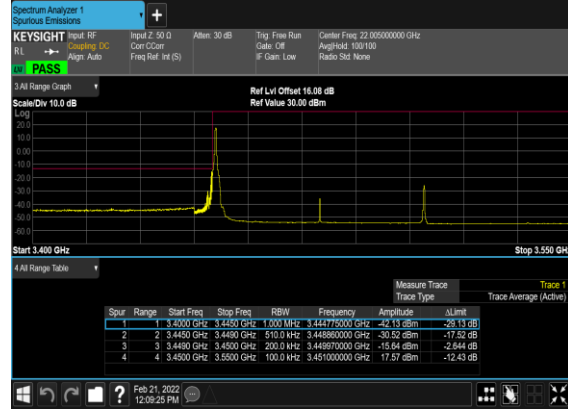
N78(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_High\_CH



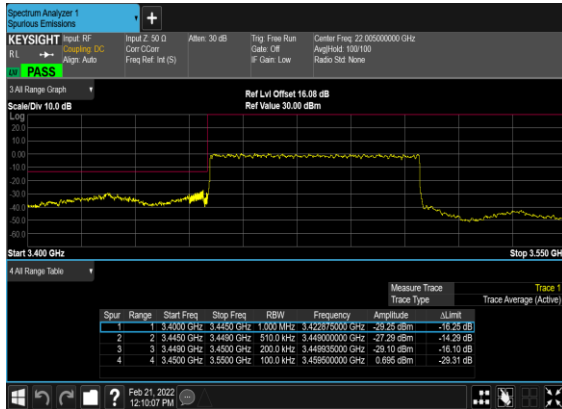
N78(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



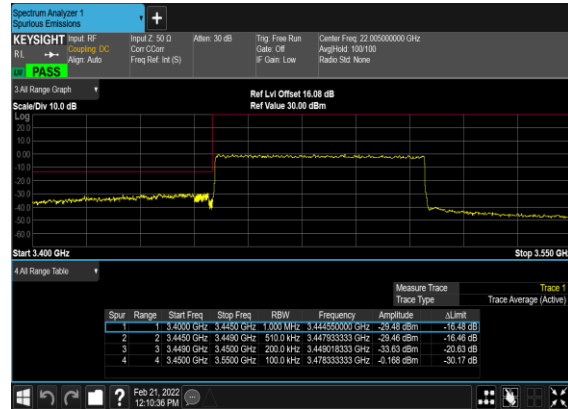
N78(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N78(60M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_Low\_CH



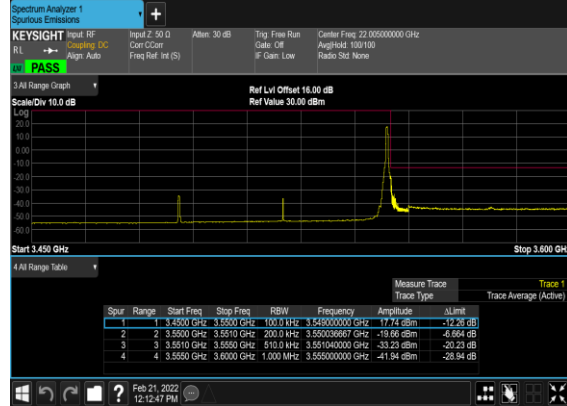
N78(60M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH



N78(60M)\_DFT-s-  
OFDM\_BPSK\_Edge\_1RB\_Right\_High\_CH



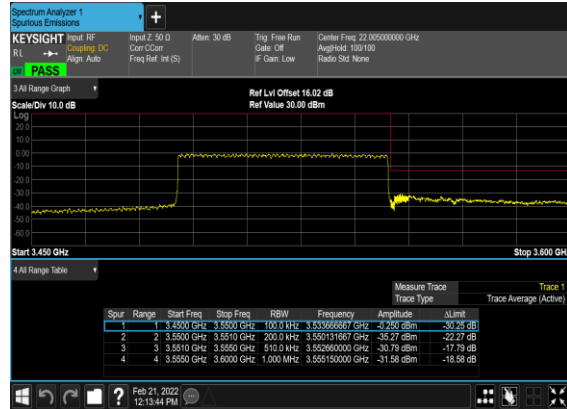
N78(60M)\_DFT-s-  
OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



N78(60M)\_DFT-s-  
OFDM\_BPSK\_Outer\_Full\_High\_CH



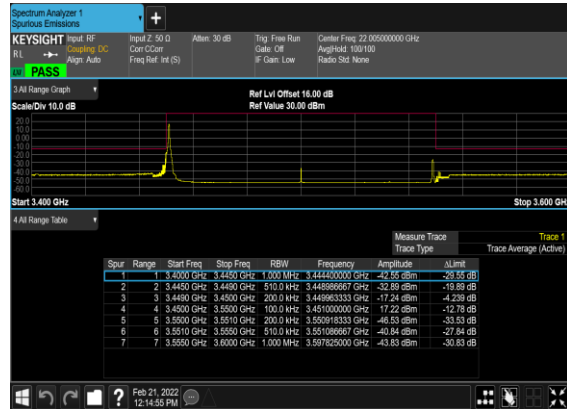
N78(60M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_High\_CH



N78(100M)\_DFT-s-  
OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



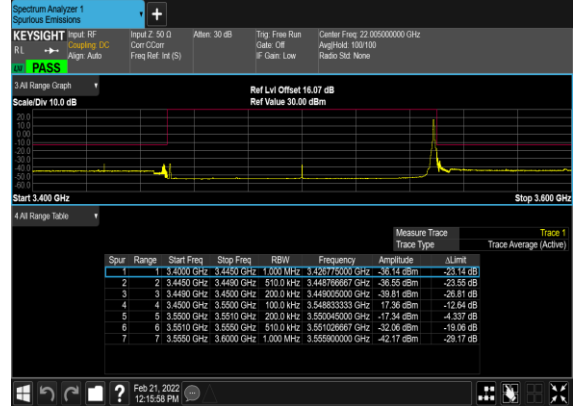
N78(100M)\_DFT-s-  
OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



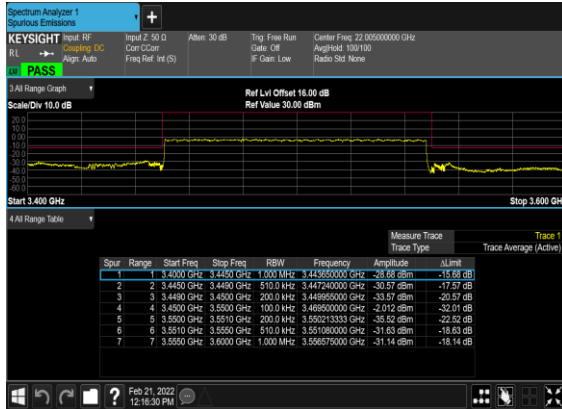
### N78(100M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Right\_Mid\_CH



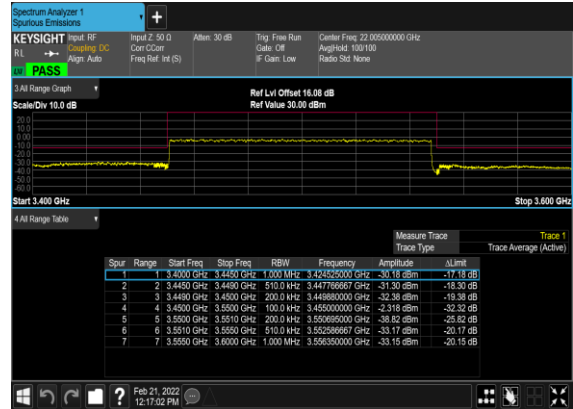
### N78(100M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_Mid\_CH



### N78(100M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_Mid\_CH



### N78(100M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH





### Appendix B. Test Results of Radiated Test

#### Radiated Spurious Emission

Test Engineer :	Chris Chen	Temperature :	22~23°C
		Relative Humidity :	41~42%

SA n78 / 100MHz / DFTs OFDM-QPSK for Ant 4								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6900	-59.24	-13	-46.24	-69.72	2.76	13.24	H
	10356	-61.35	-13	-48.35	-70.94	3.42	13.01	H
	13824	-63.83	-13	-50.83	-73.44	3.83	13.44	H
	6900	-64.56	-13	-51.56	-75.00	2.80	13.24	V
	10356	-58.76	-13	-45.76	-68.31	3.46	13.01	V
	13824	-64.40	-13	-51.40	-73.96	3.88	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_4A_n78A / LTE 10MHz + NR 100MHz / QPSK / ANT1(LTE) & ANT4(NR)								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6900	-58.28	-13	-45.28	-68.76	2.76	13.24	H
	10356	-53.51	-13	-40.51	-63.10	3.42	13.01	H
	13824	-61.90	-13	-48.90	-71.51	3.83	13.44	H
	6900	-61.33	-13	-48.33	-71.77	2.80	13.24	V
	10356	-55.13	-13	-42.13	-64.68	3.46	13.01	V
	13824	-62.04	-13	-49.04	-71.60	3.88	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

———— THE END ————