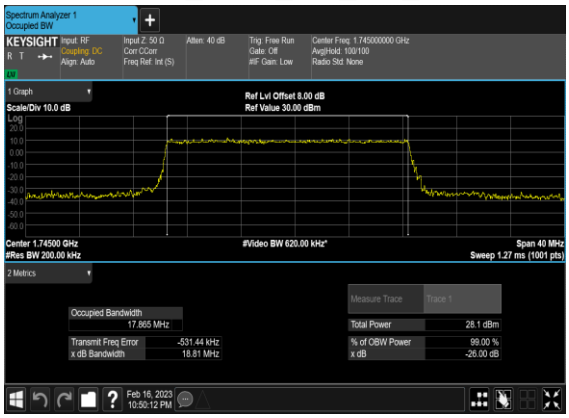
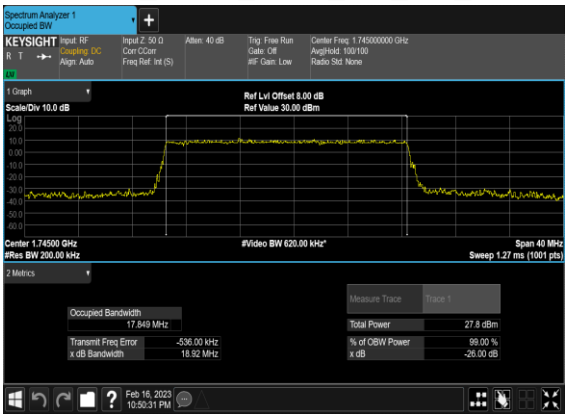
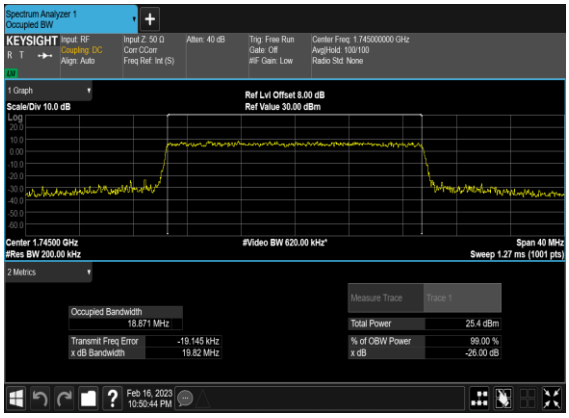
N66(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



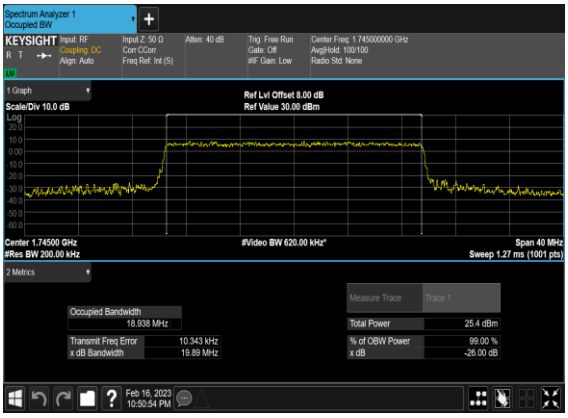
N66(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



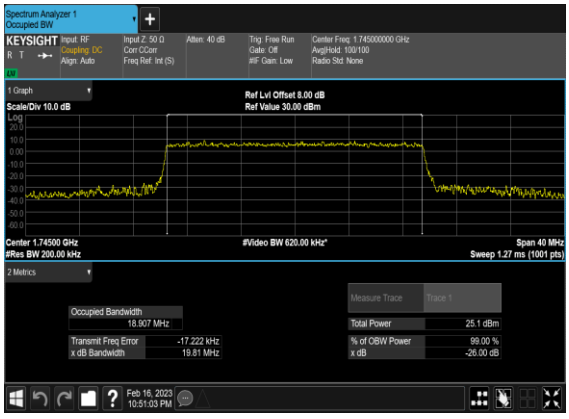
N66(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N66(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

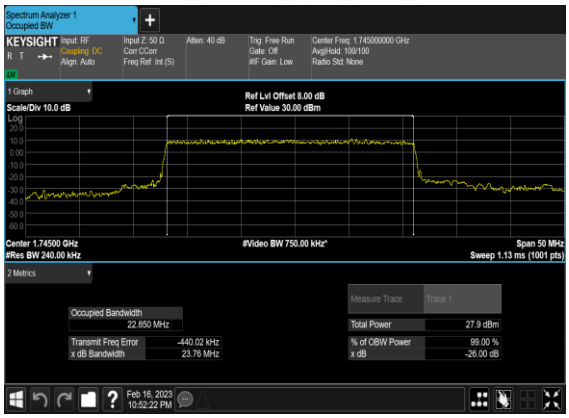


N66(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

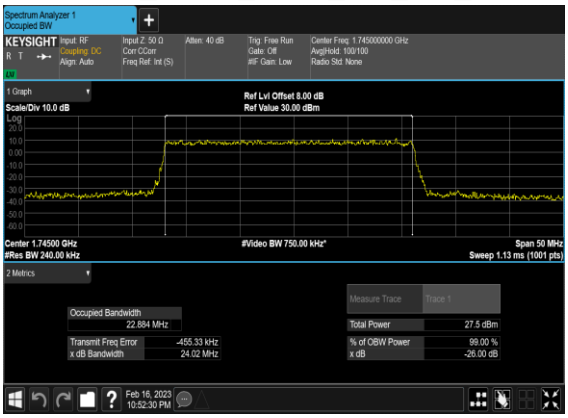


N66(20M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

N66(25M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

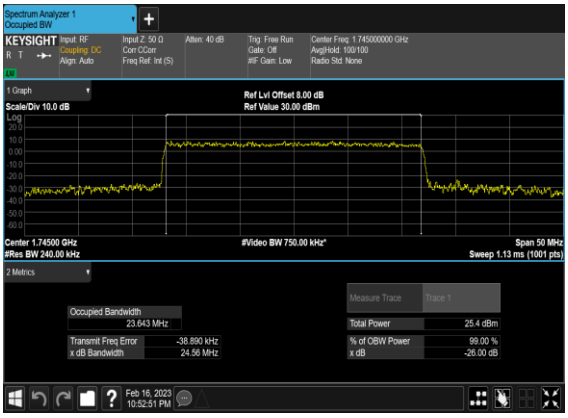


N66(25M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



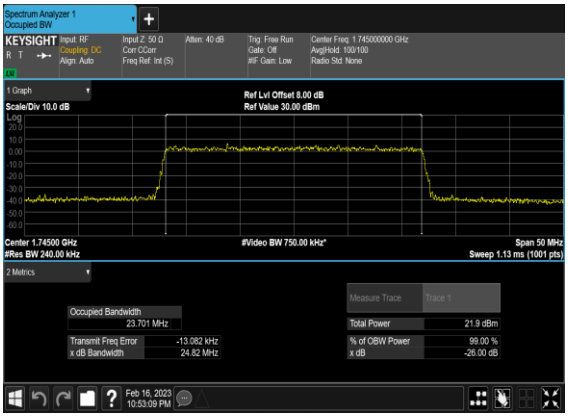
N66(25M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

N66(25M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

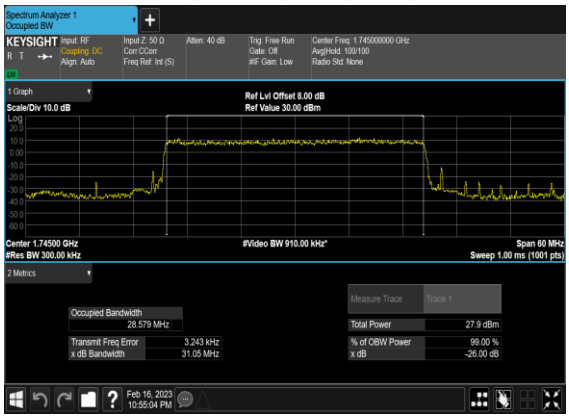


N66(25M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

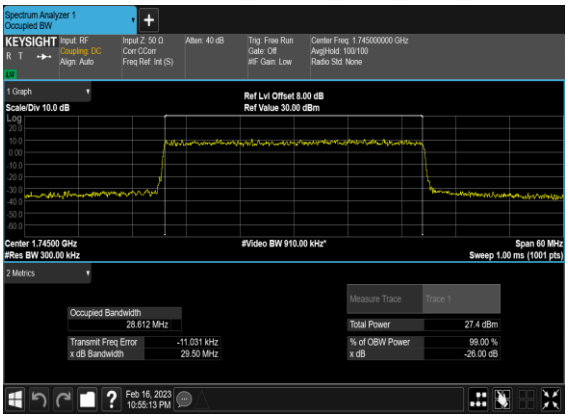
N66(25M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



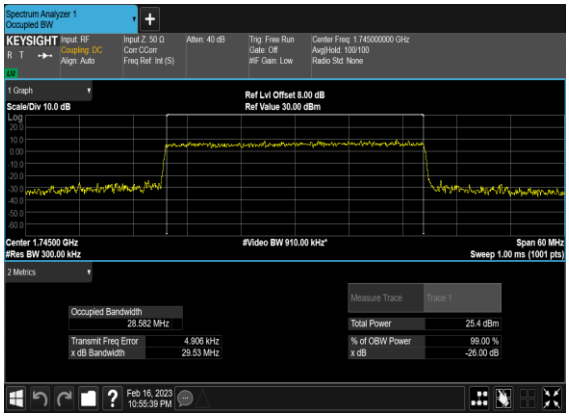
N66(30M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



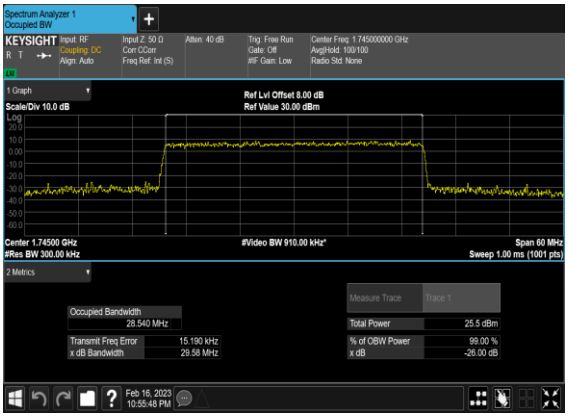
N66(30M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



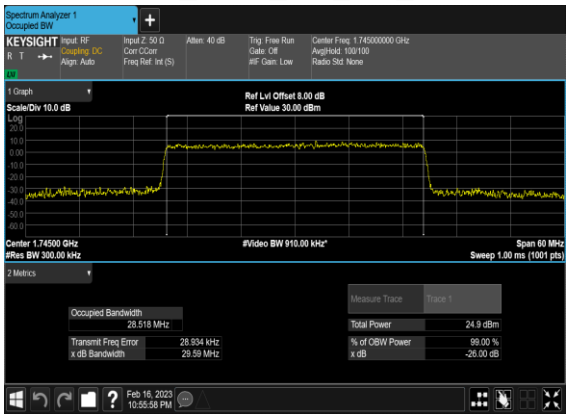
N66(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



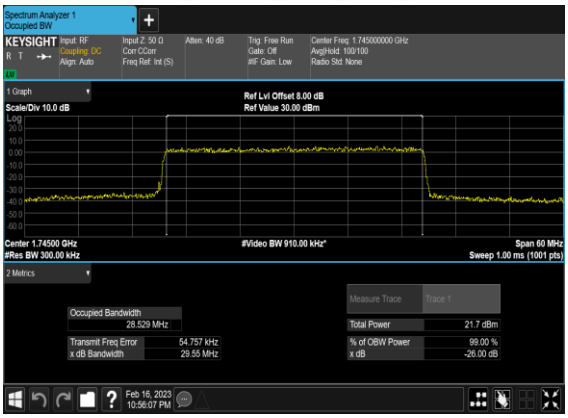
N66(30M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



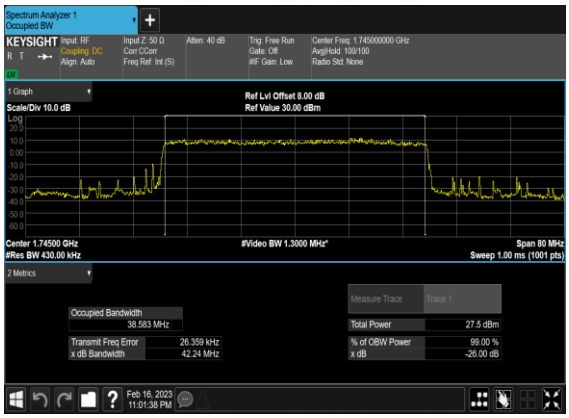
N66(30M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



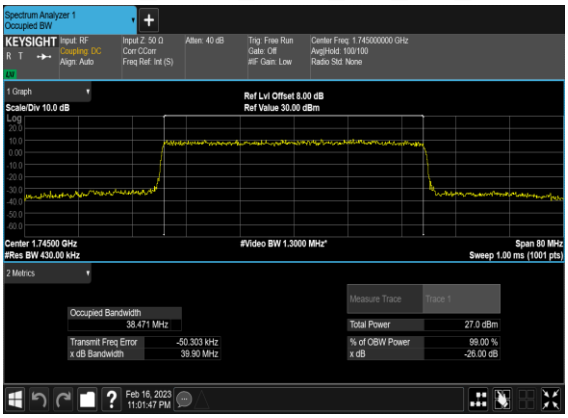
N66(30M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



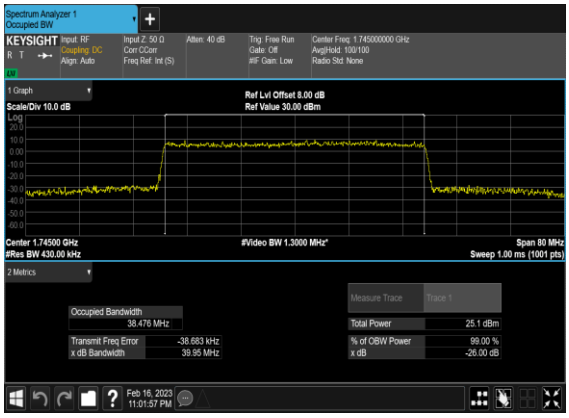
N66(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



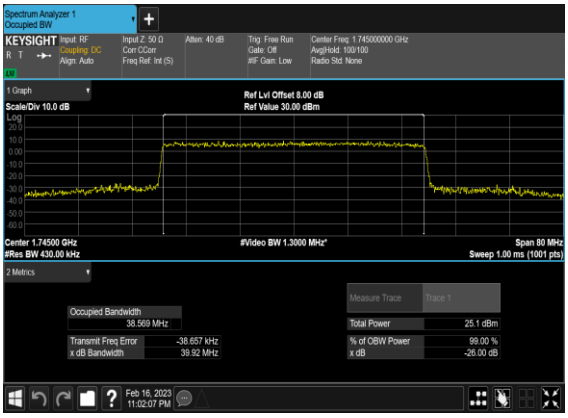
N66(40M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



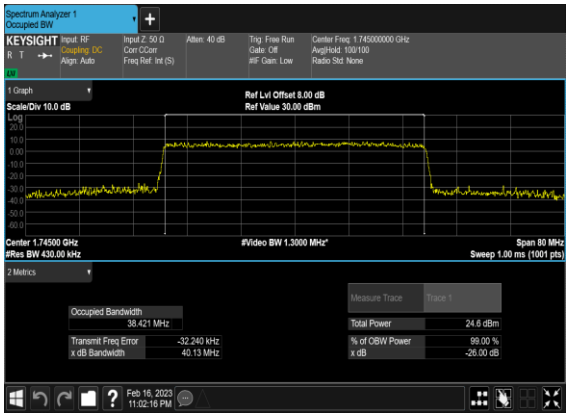
N66(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



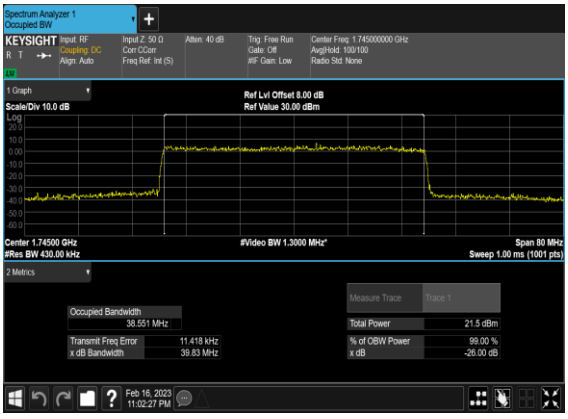
N66(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N66(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N66(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

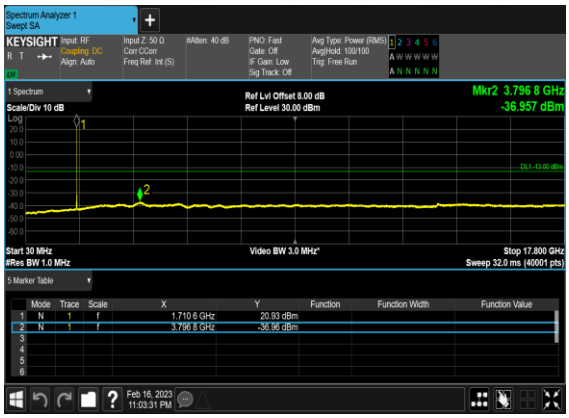


Conducted Spurious Emissions

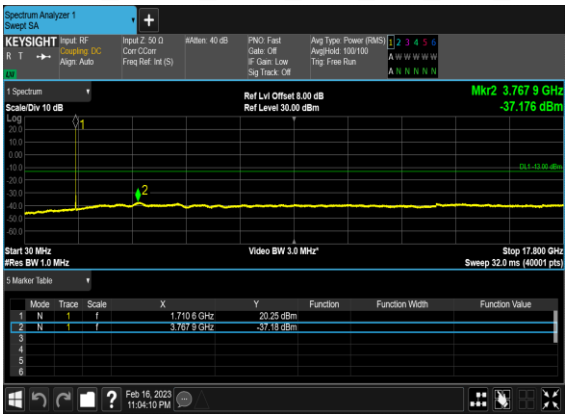
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	5	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	5	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	5	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	5	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	5	355500	1777.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	5	355500	1777.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	5	355500	1777.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	5	355500	1777.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	20	344000	1720.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	20	344000	1720.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	20	344000	1720.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	20	344000	1720.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	20	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	20	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	20	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	20	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	20	354000	1770.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	20	354000	1770.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**

66	15	20	354000	1770.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	20	354000	1770.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	40	346000	1730.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	40	346000	1730.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	40	346000	1730.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	40	346000	1730.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	40	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	40	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	40	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	40	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	40	352000	1760.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	40	352000	1760.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	40	352000	1760.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	40	352000	1760.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

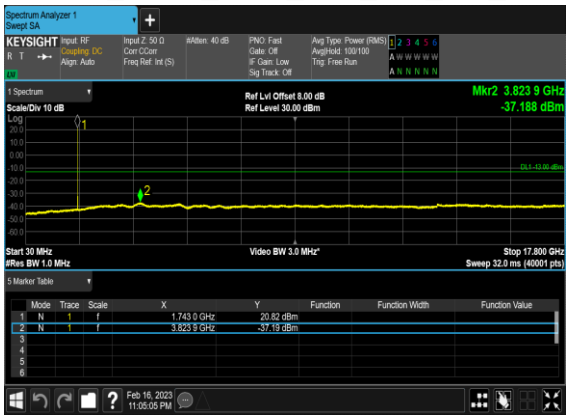
N66(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



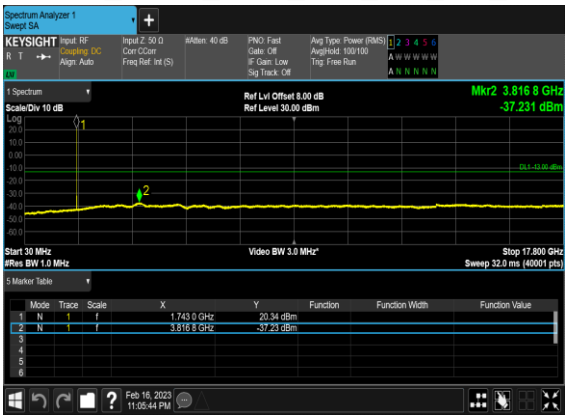
N66(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



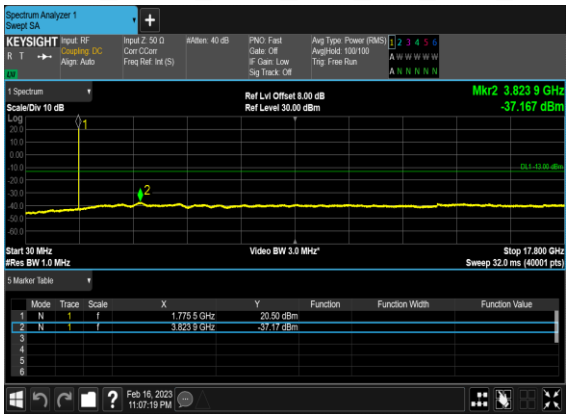
N66(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



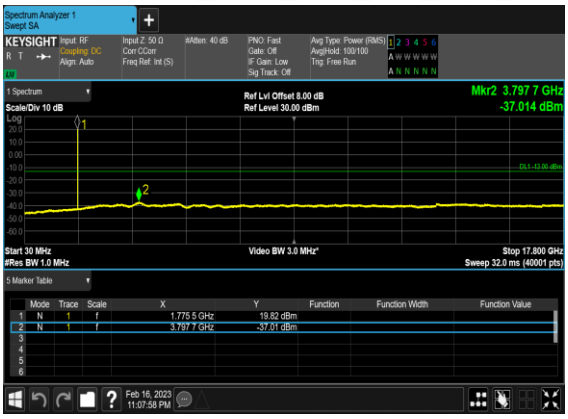
N66(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



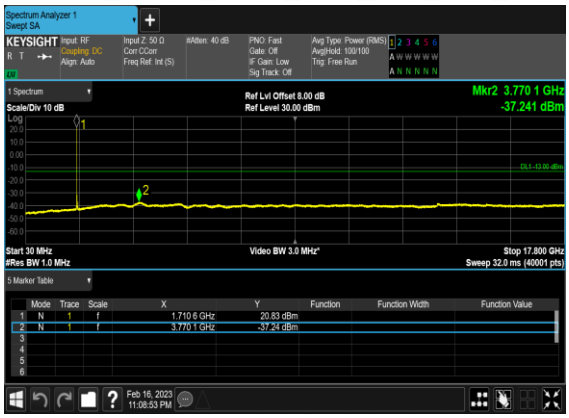
N66(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



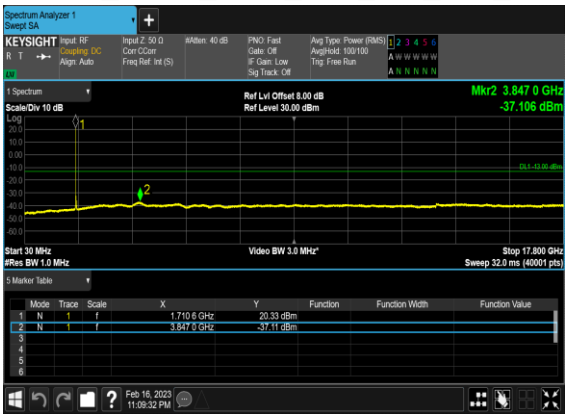
N66(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



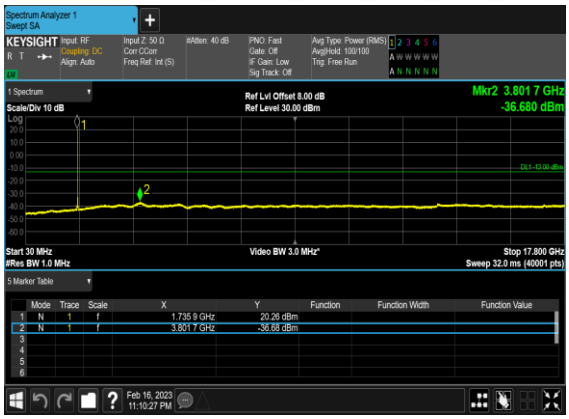
N66(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



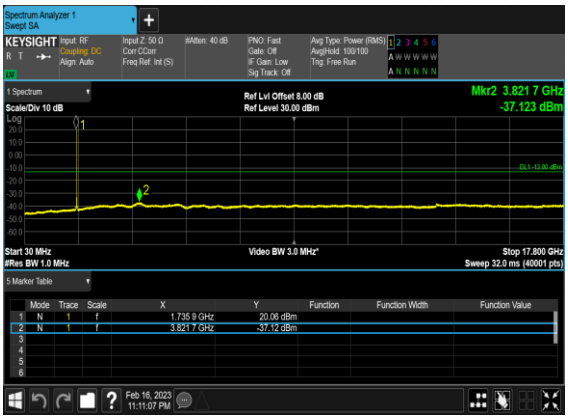
N66(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



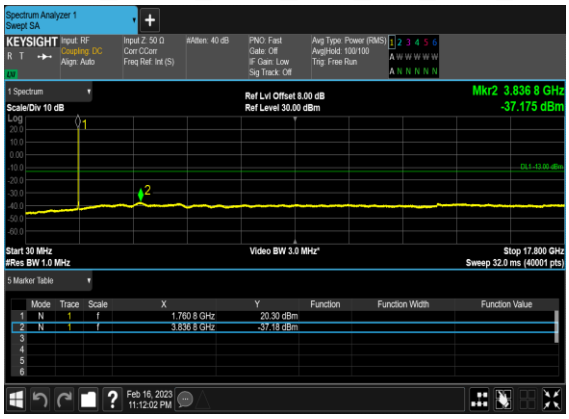
N66(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



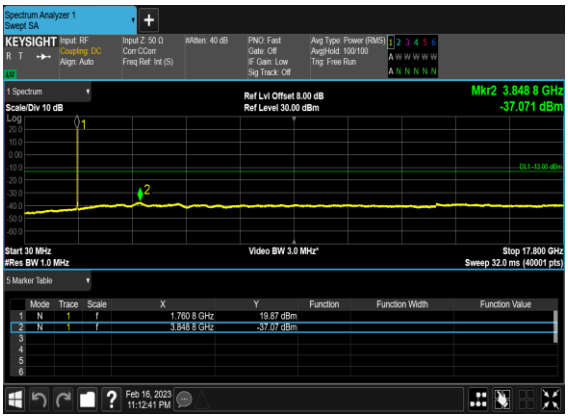
N66(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



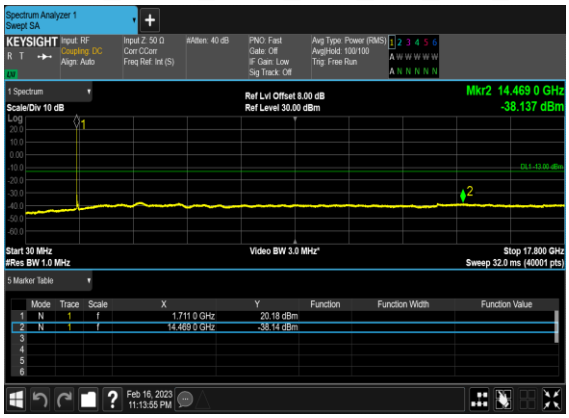
N66(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



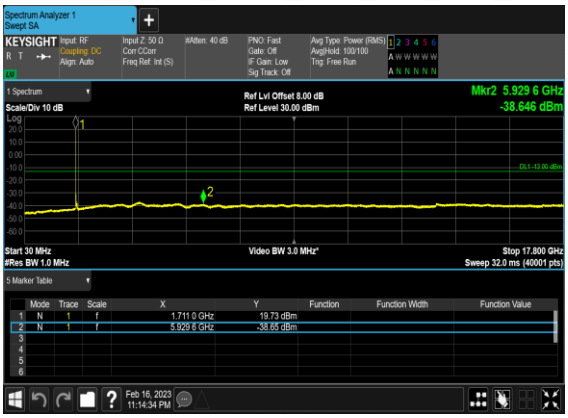
N66(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



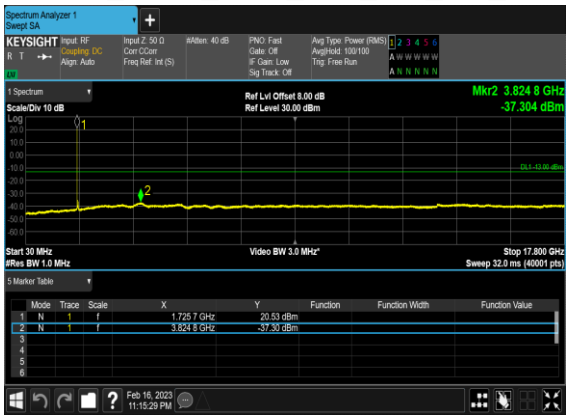
N66(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



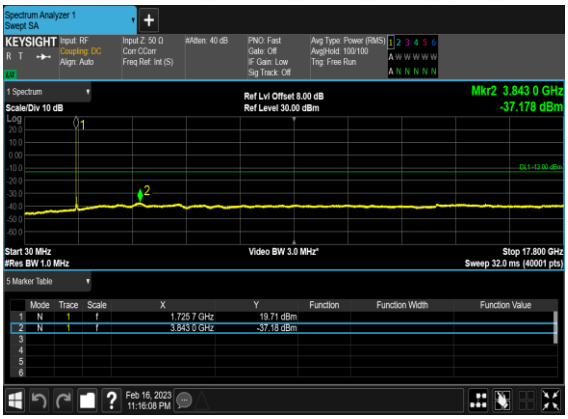
N66(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



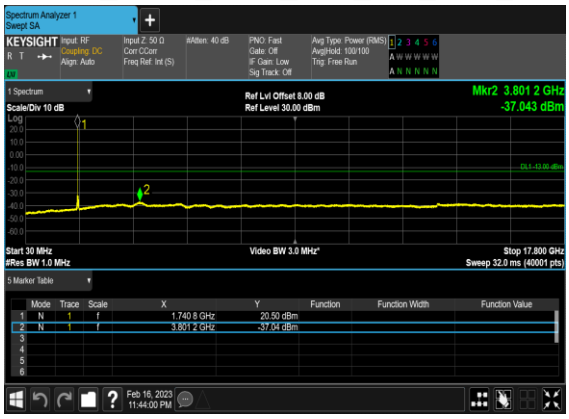
N66(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



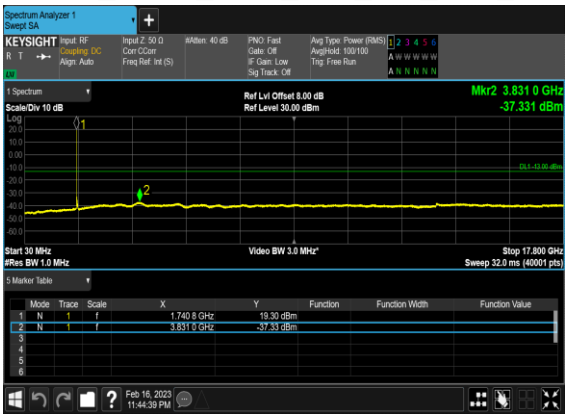
N66(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N66(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



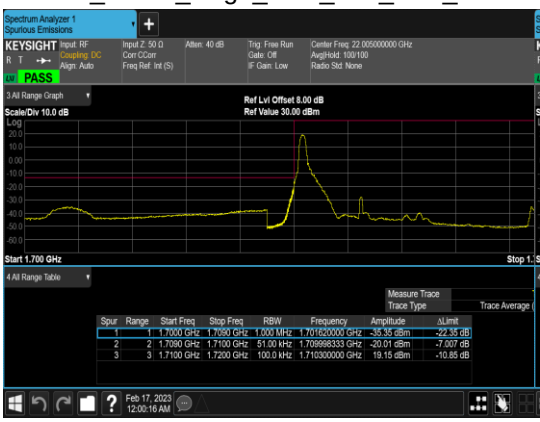
N66(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



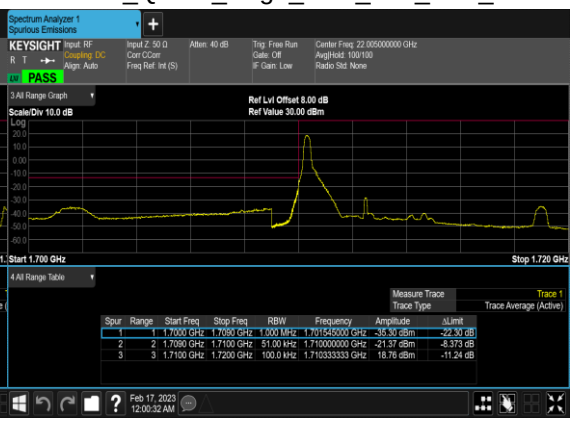
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	25@0	see graph	**PASS**
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	25@0	see graph	**PASS**
66	15	5	355500	1777.5	DFT-s-OFDM BPSK	1@24	see graph	**PASS**
66	15	5	355500	1777.5	DFT-s-OFDM QPSK	1@24	see graph	**PASS**
66	15	5	355500	1777.5	DFT-s-OFDM BPSK	25@0	see graph	**PASS**
66	15	5	355500	1777.5	DFT-s-OFDM QPSK	25@0	see graph	**PASS**
66	15	20	344000	1720.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	20	344000	1720.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	20	344000	1720.0	DFT-s-OFDM BPSK	100@0	see graph	**PASS**
66	15	20	344000	1720.0	DFT-s-OFDM QPSK	100@0	see graph	**PASS**
66	15	20	354000	1770.0	DFT-s-OFDM BPSK	1@105	see graph	**PASS**
66	15	20	354000	1770.0	DFT-s-OFDM QPSK	1@105	see graph	**PASS**
66	15	20	354000	1770.0	DFT-s-OFDM BPSK	100@0	see graph	**PASS**
66	15	20	354000	1770.0	DFT-s-OFDM QPSK	100@0	see graph	**PASS**
66	15	40	346000	1730.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	40	346000	1730.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	40	346000	1730.0	DFT-s-OFDM BPSK	216@0	see graph	**PASS**
66	15	40	346000	1730.0	DFT-s-OFDM QPSK	216@0	see graph	**PASS**
66	15	40	352000	1760.0	DFT-s-OFDM BPSK	1@215	see graph	**PASS**
66	15	40	352000	1760.0	DFT-s-OFDM QPSK	1@215	see graph	**PASS**
66	15	40	352000	1760.0	DFT-s-OFDM BPSK	216@0	see graph	**PASS**
66	15	40	352000	1760.0	DFT-s-OFDM QPSK	216@0	see graph	**PASS**

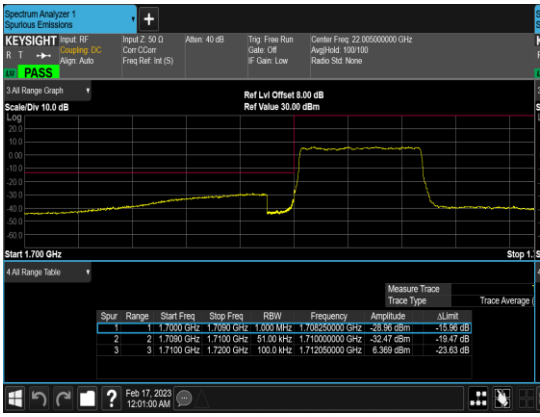
N66(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



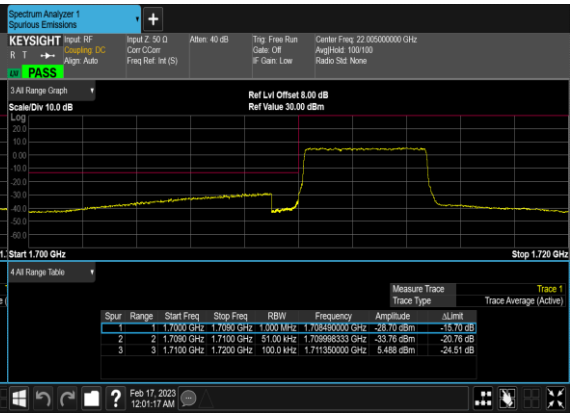
N66(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N66(5M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

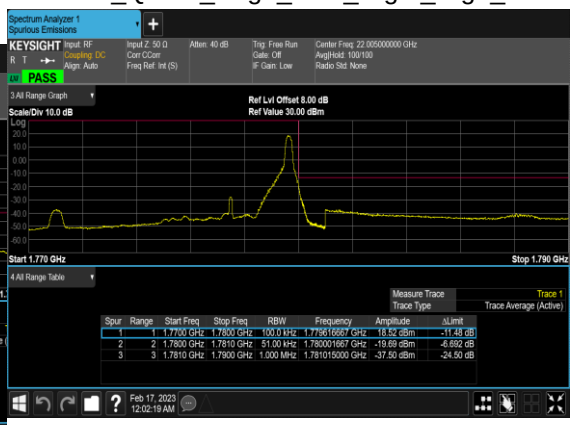


N66(5M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N66(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

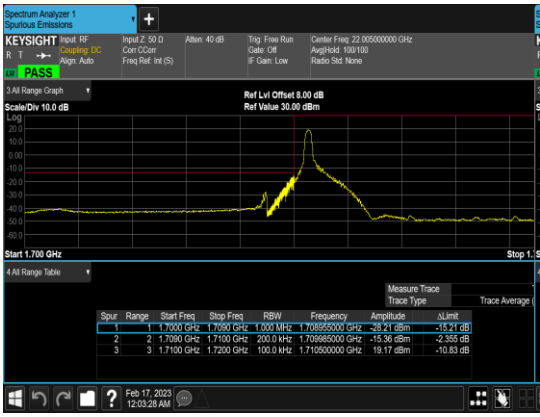
N66(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



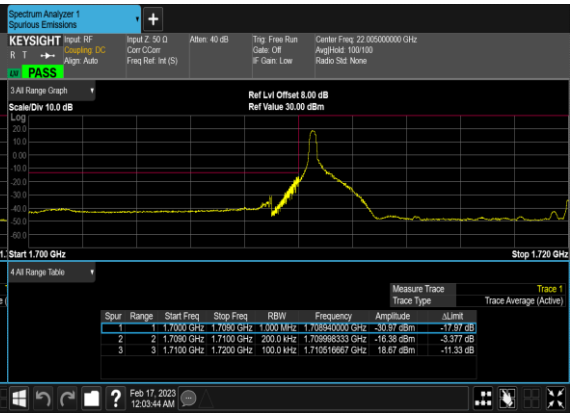
N66(5M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

N66(5M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH

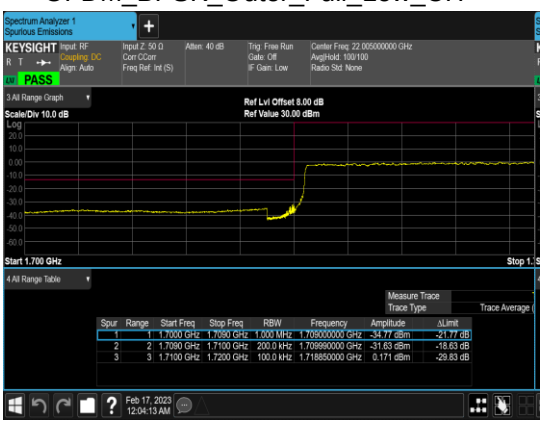
N66(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



N66(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

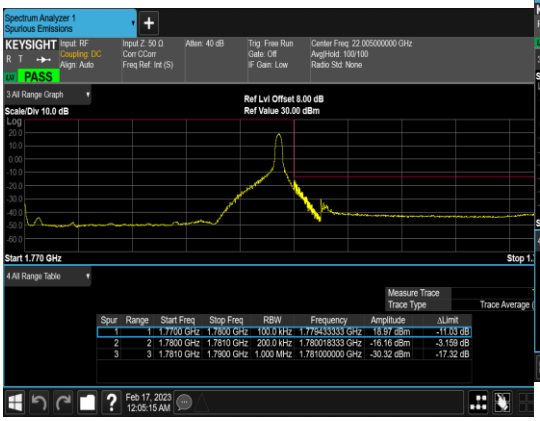


N66(20M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

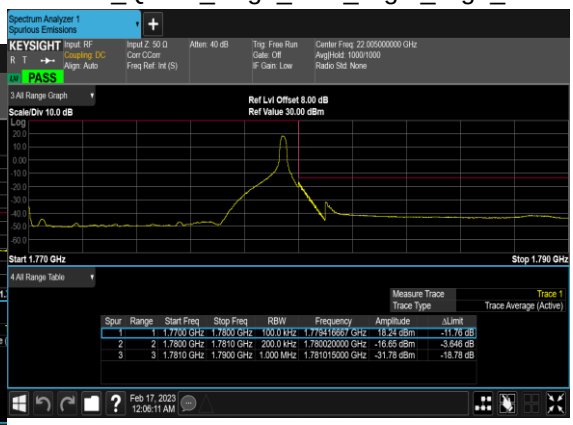


N66(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH

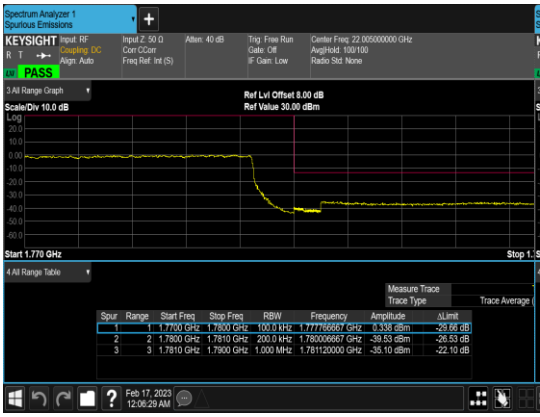
N66(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



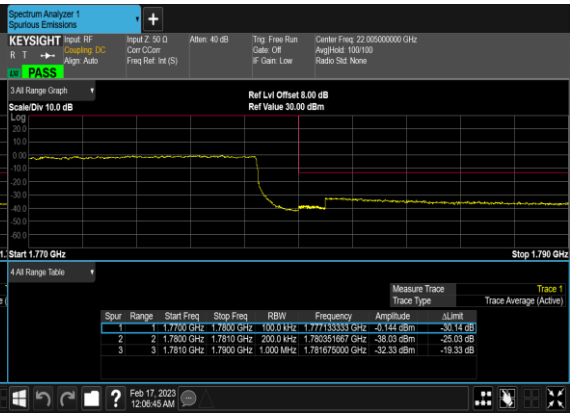
N66(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



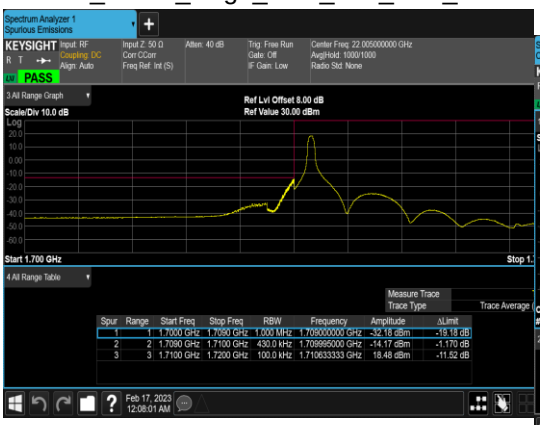
N66(20M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



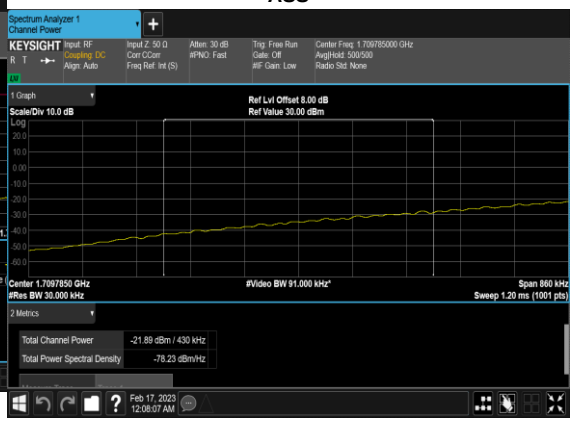
N66(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



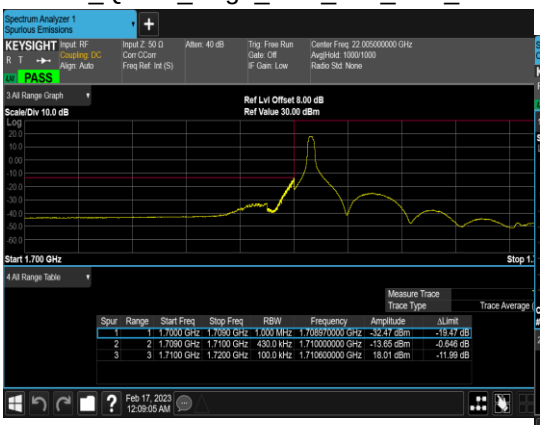
N66(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



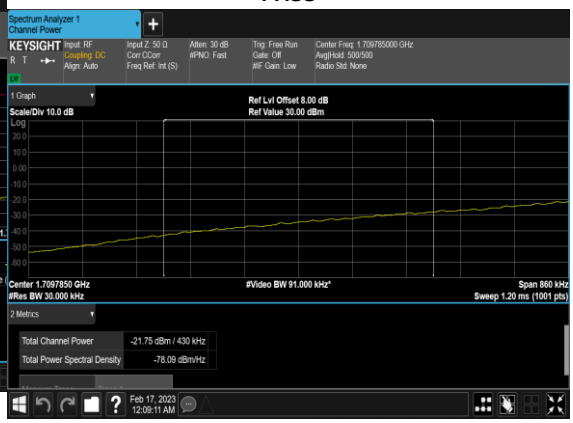
N66(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH_**CHP_PASS**



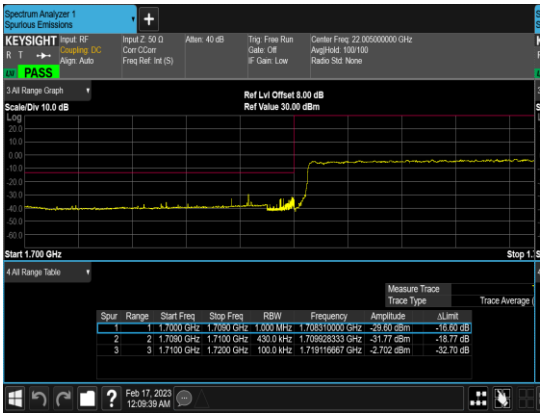
N66(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N66(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH_**CHP_PASS**



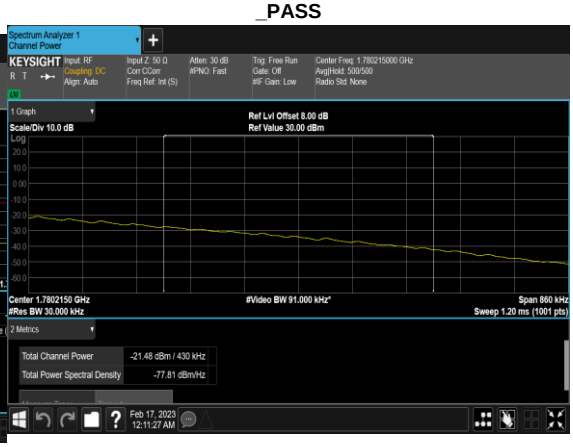
N66(40M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



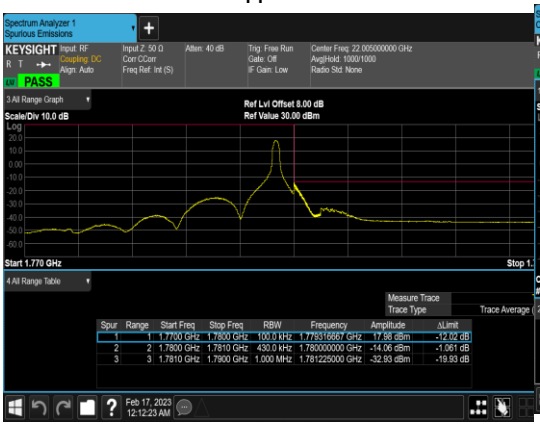
N66(40M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH

N66(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

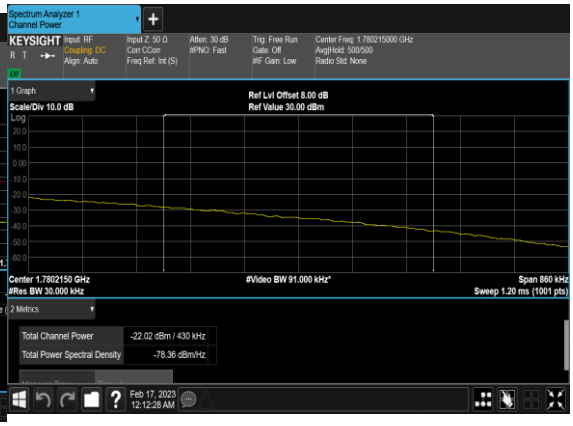
N66(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH_**CHP_PASS**



N66(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N66(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH_CHP_PASS



N66(40M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

N66(40M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Carry Xu	Temperature :	22~25℃
		Relative Humidity :	48~52%

Note: Pre-scanned harmonic for the different antenna combinations and ENDC combos, we choose the worst mode to perform final test and show in the report.

5G NR n2 SA / NR 20MHz / QPSK / ANT0								
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	3735	-56.82	-13	-43.82	-69.08	2.64	14.90	H
	5610	-43.75	-13	-30.75	-55.61	2.94	14.80	H
	7485	-53.05	-13	-40.05	-62.82	3.39	13.16	H
	3735	-55.04	-13	-42.04	-67.30	2.64	14.90	V
	5610	-48.37	-13	-35.37	-60.23	2.94	14.80	V
	7485	-53.16	-13	-40.16	-62.93	3.39	13.16	V

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

EN-DC_66A_n2A / LTE 10MHz + NR 20MHz / QPSK /ANT1(LTE)&ANT0(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	3735	-62.27	-13	-49.27	-74.53	2.64	14.90	H
	5610	-50.70	-13	-37.70	-62.56	2.94	14.80	H
	7485	-57.96	-13	-44.96	-67.73	3.39	13.16	H
	3735	-62.94	-13	-49.94	-75.20	2.64	14.90	V
	5610	-56.71	-13	-43.71	-68.57	2.94	14.80	V
	7485	-57.92	-13	-44.92	-67.69	3.39	13.16	V

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

5G NR n5 SA / NR 20MHz / QPSK / ANT0								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1656	-63.26	-13	-50.26	-70.23	1.58	10.70	H
	2480	-55.31	-13	-42.31	-63.56	2.102	12.50	H
	3312	-59.00	-13	-46.00	-67.89	2.856	13.90	H
	1656	-62.30	-13	-49.30	-69.27	1.58	10.70	V
	2480	-54.99	-13	-41.99	-63.24	2.10	12.50	V
	3312	-59.16	-13	-46.16	-68.05	2.86	13.90	V

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

EN-DC_7A_n5A / LTE 10MHz + NR 20MHz / QPSK /ANT0(LTE)&ANT1(NR)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1656	-56.89	-13	-43.89	-63.86	1.58	10.70	H
	2480	-52.52	-13	-39.52	-60.77	2.102	12.50	H
	3312	-58.89	-13	-45.89	-67.78	2.856	13.90	H
	1656	-53.45	-13	-40.45	-60.42	1.58	10.70	V
	2480	-43.99	-13	-30.99	-52.24	2.10	12.50	V
	3312	-59.11	-13	-46.11	-68.00	2.86	13.90	V

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

5G NR n7 SA / NR 50MHz / QPSK / ANT0								
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	5022	-60.01	-25	-35.01	-70.22	3.03	13.24	H
	7528	-59.40	-25	-34.40	-68.85	3.56	13.01	H
	10048	-58.29	-25	-33.29	-67.81	3.92	13.44	H
	5022	-61.46	-25	-36.46	-71.67	3.03	13.24	V
	7528	-57.73	-25	-32.73	-67.18	3.56	13.01	V
	10048	-52.33	-25	-27.33	-61.85	3.92	13.44	V

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

EN-DC_2A_n7A / LTE 10MHz + NR 50MHz / QPSK /ANT0(LTE)&ANT1(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	5022	-62.88	-25	-37.88	-73.09	3.03	13.24	H
	7542	-61.99	-25	-36.99	-71.44	3.56	13.01	H
	10048	-61.45	-25	-36.45	-70.97	3.92	13.44	H
	5022	-62.90	-25	-37.90	-73.11	3.03	13.24	V
	7542	-61.97	-25	-36.97	-71.42	3.56	13.01	V
	10048	-61.91	-25	-36.91	-71.43	3.92	13.44	V

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

5G NR n41 SA / NR 100MHz / QPSK / ANT0								
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	5092	-61.02	-25	-36.02	-71.23	3.03	13.24	H
	7626	-59.14	-25	-34.14	-68.59	3.56	13.01	H
	10174	-56.79	-25	-31.79	-66.31	3.92	13.44	H
	5092	-61.76	-25	-36.76	-71.97	3.03	13.24	V
	7626	-59.23	-25	-34.23	-68.68	3.56	13.01	V
	10174	-51.22	-25	-26.22	-60.74	3.92	13.44	V

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

5G NR n66 SA / NR 40MHz / QPSK / ANT0								
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	3450	-58.27	-13	-45.27	-69.01	2.604	13.34	H
	5175	-55.64	-13	-42.64	-66.15	3.011	13.52	H
	6915	-54.71	-13	-41.71	-64.91	3.271	13.47	H
	3450	-58.44	-13	-45.44	-69.18	2.604	13.34	V
	5175	-55.78	-13	-42.78	-66.29	3.011	13.52	V
	6915	-54.69	-13	-41.69	-64.89	3.271	13.47	V

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

EN-DC_7A_n66A / LTE 10MHz + NR 40MHz / QPSK / ANT0(LTE) + ANT1(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	3450	-62.75	-13	-49.75	-73.49	2.604	13.34	H
	5175	-55.74	-13	-42.74	-66.25	3.011	13.52	H
	6915	-58.77	-13	-45.77	-68.97	3.271	13.47	H
	3450	-62.64	-13	-49.64	-73.38	2.604	13.34	V
	5175	-59.53	-13	-46.53	-70.04	3.011	13.52	V
	6915	-59.24	-13	-46.24	-69.44	3.271	13.47	V

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