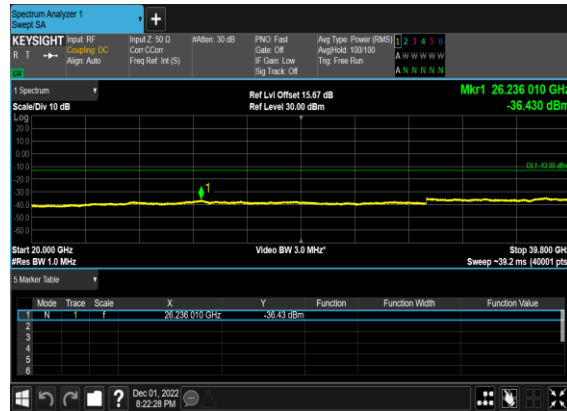


N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



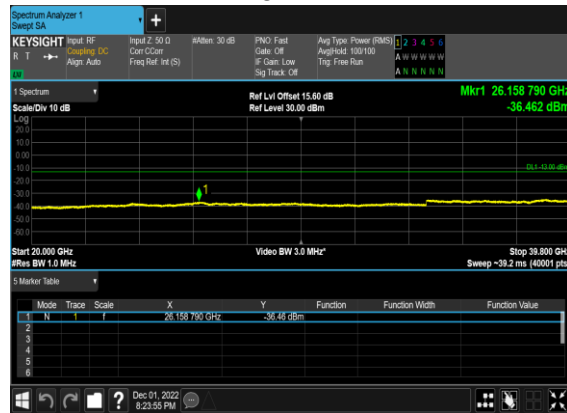
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



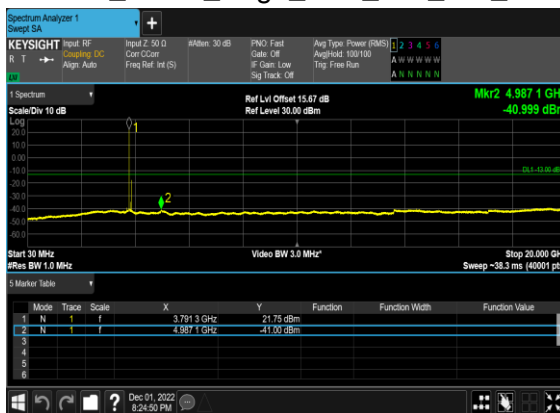
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



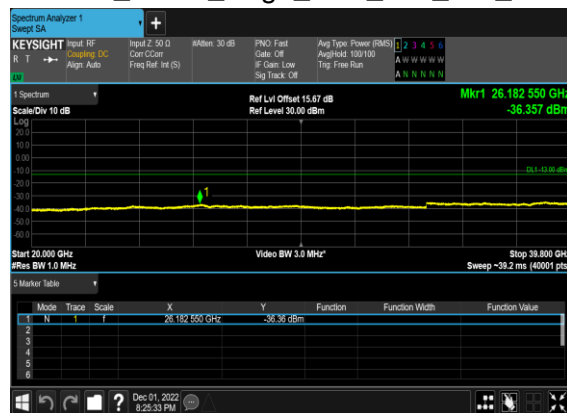
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



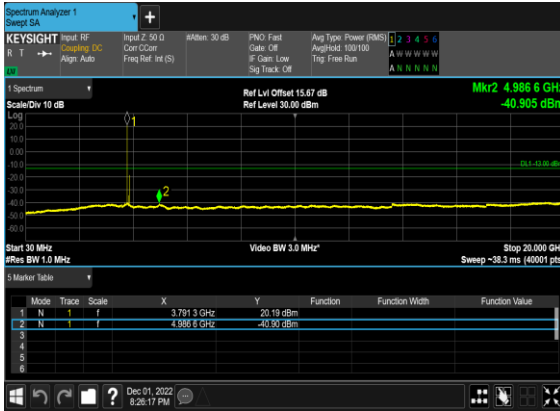
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



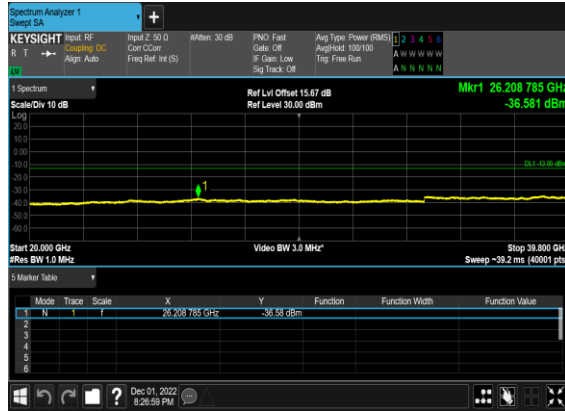
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



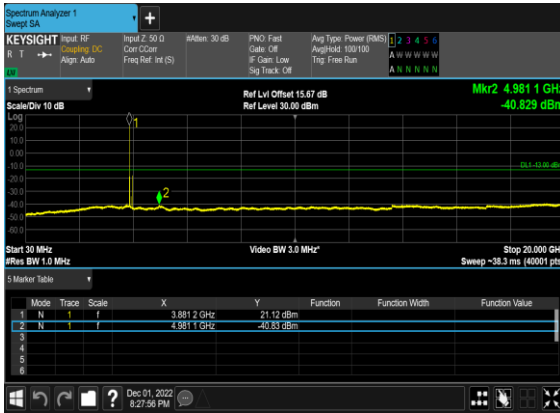
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



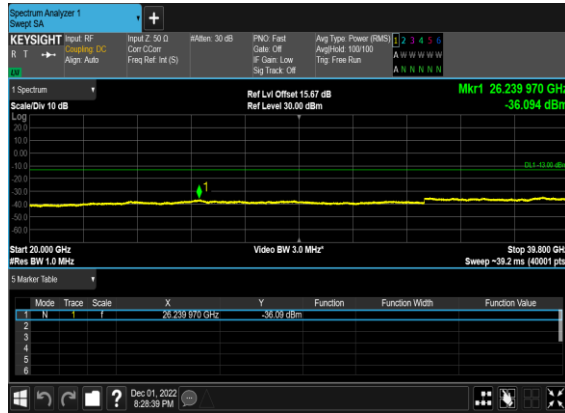
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



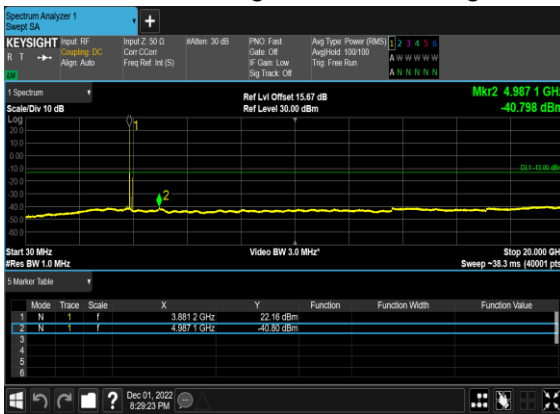
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



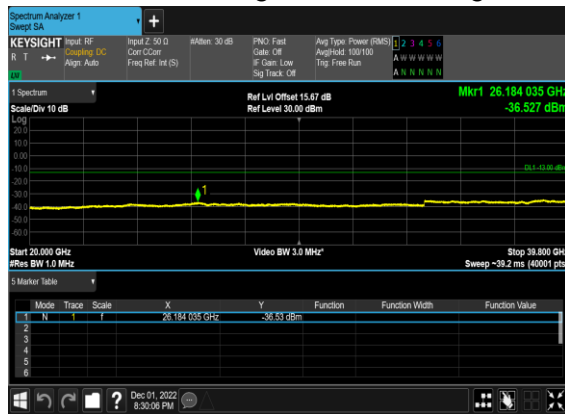
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



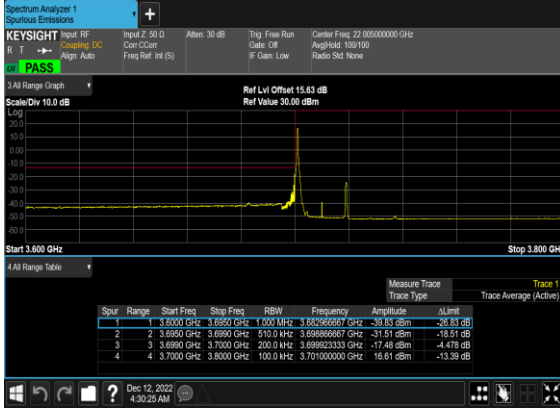
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



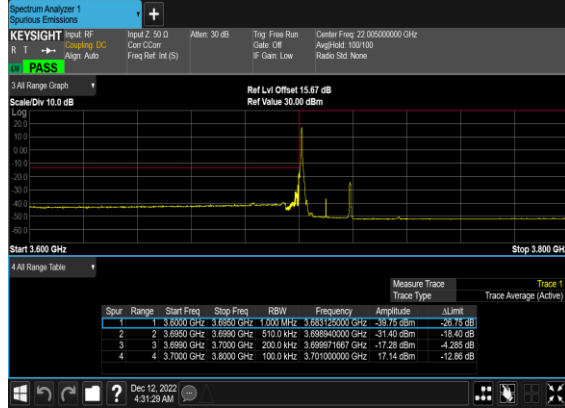
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	20	647334	3710.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	20	647334	3710.01	DFT-s-OFDM BPSK	50@0	see graph	PASS
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	50@0	see graph	PASS
77	30	20	664666	3969.99	DFT-s-OFDM BPSK	1@50	see graph	PASS
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@50	see graph	PASS
77	30	20	664666	3969.99	DFT-s-OFDM BPSK	50@0	see graph	PASS
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	50@0	see graph	PASS
77	30	60	648668	3730.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	60	648668	3730.02	DFT-s-OFDM BPSK	162@0	see graph	PASS
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	162@0	see graph	PASS
77	30	60	663332	3949.98	DFT-s-OFDM BPSK	1@161	see graph	PASS
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@161	see graph	PASS
77	30	60	663332	3949.98	DFT-s-OFDM BPSK	162@0	see graph	PASS
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	162@0	see graph	PASS
77	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	100	650000	3750.0	DFT-s-OFDM BPSK	270@0	see graph	PASS
77	30	100	650000	3750.0	DFT-s-OFDM QPSK	270@0	see graph	PASS
77	30	100	662000	3930.0	DFT-s-OFDM BPSK	1@272	see graph	PASS
77	30	100	662000	3930.0	DFT-s-OFDM QPSK	1@272	see graph	PASS
77	30	100	662000	3930.0	DFT-s-OFDM BPSK	270@0	see graph	PASS
77	30	100	662000	3930.0	DFT-s-OFDM QPSK	270@0	see graph	PASS

N77(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



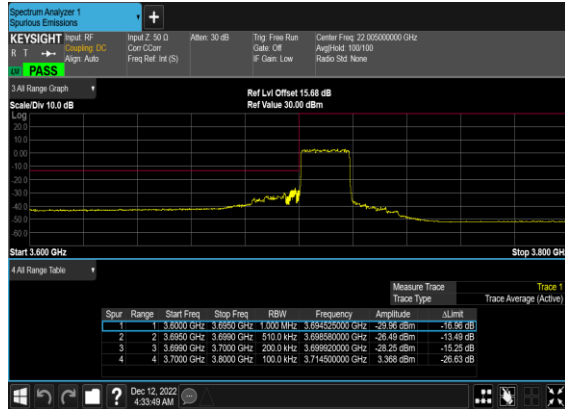
N77(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



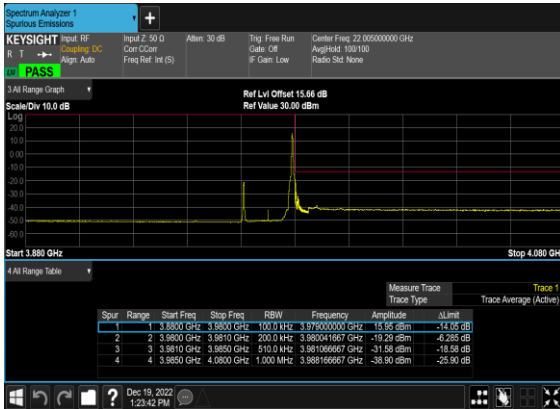
N77(20M)_DFT-s-
OFDM_BPSK_Outer_Full_Low_CH



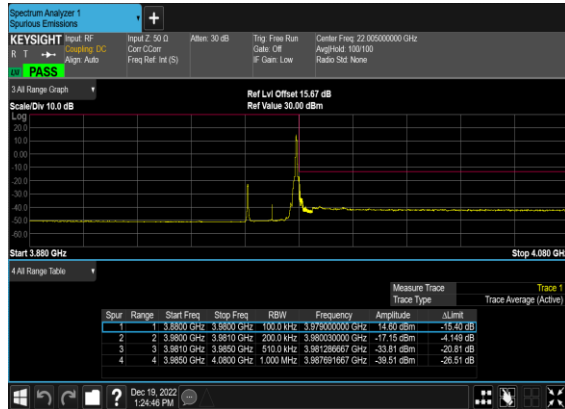
N77(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH



N77(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH



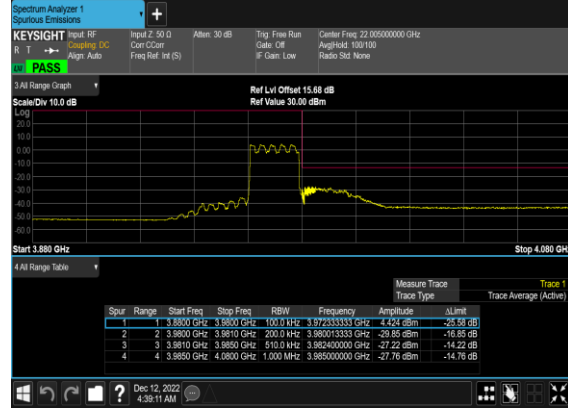
N77(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH



N77(20M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



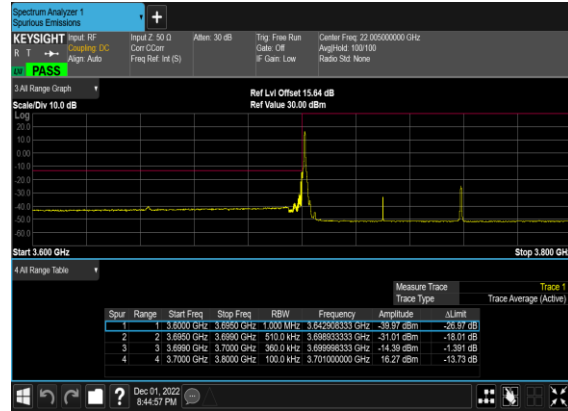
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



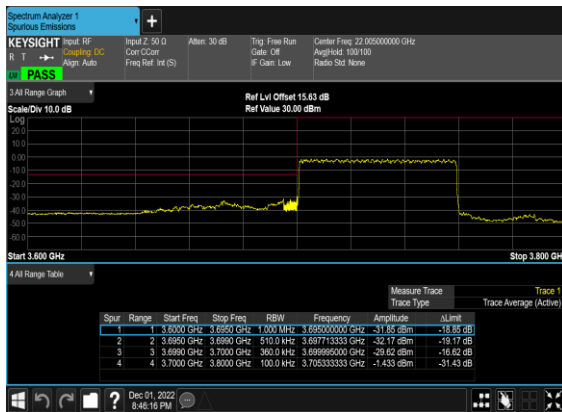
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



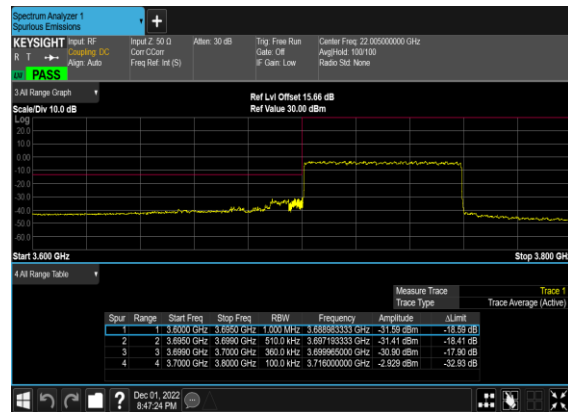
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



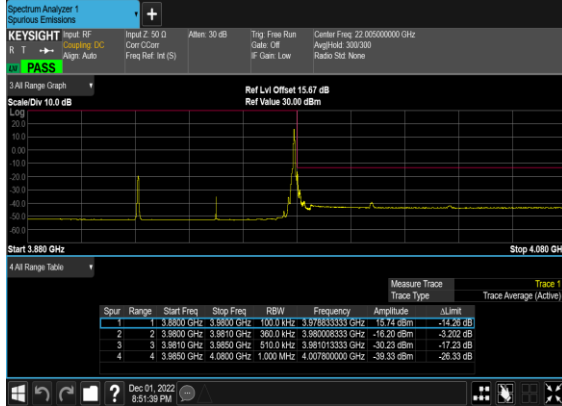
N77(60M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



N77(60M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



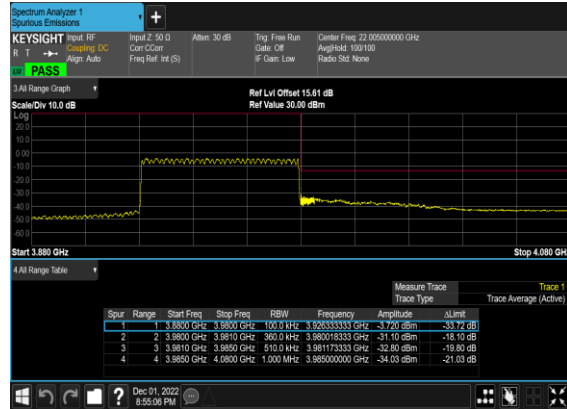
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N77(60M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



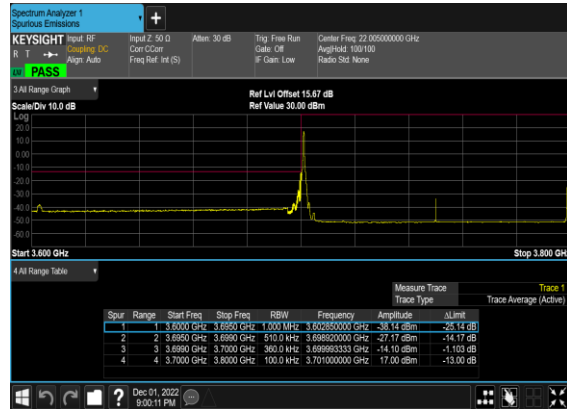
N77(60M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



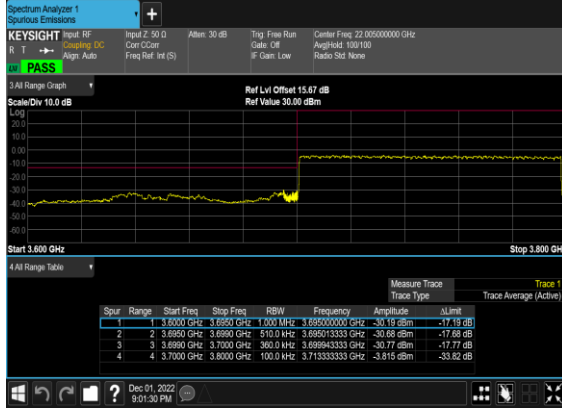
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



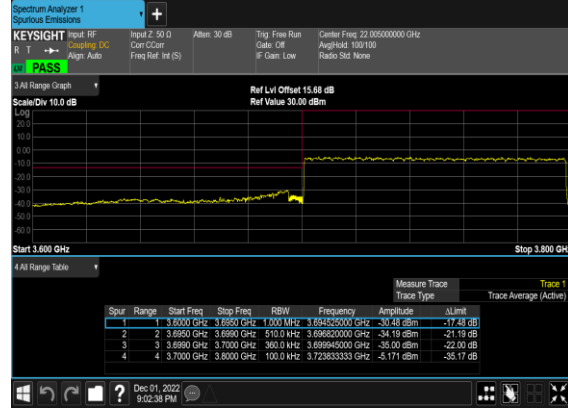
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



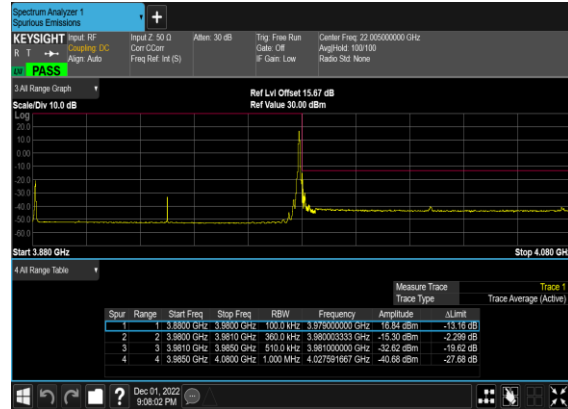
N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



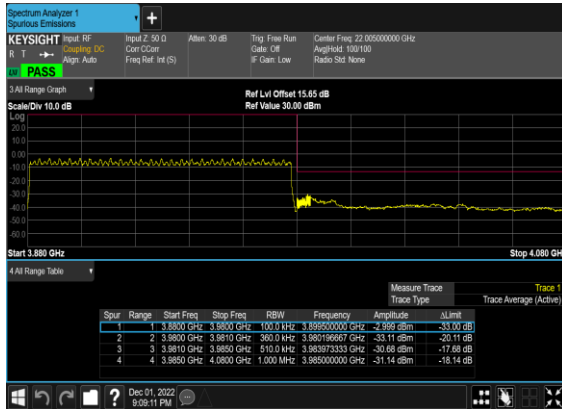
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



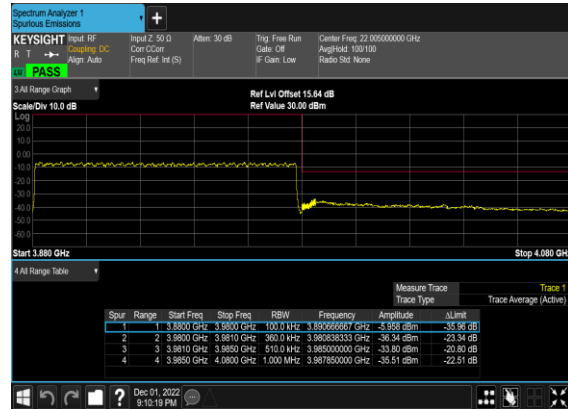
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



FR1 N78

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=-1.2dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
78	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@1	23.33	22.13	0.1633
78	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@1	23.06	21.86	0.1535
78	30	20	650000	3750	DFT-s-OFDM QPSK	1@1	23.48	22.28	0.1690
78	30	20	650000	3750	DFT-s-OFDM 16 QAM	1@1	22.98	21.78	0.1507
78	30	20	652666	3789.99	DFT-s-OFDM QPSK	1@1	23.29	22.09	0.1618
78	30	20	652666	3789.99	DFT-s-OFDM 16 QAM	1@1	22.96	21.76	0.1500
78	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@1	23.55	22.35	0.1718
78	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@1	23.32	22.12	0.1629
78	30	30	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.5	22.3	0.1698
78	30	30	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.22	22.02	0.1592
78	30	30	652332	3784.98	DFT-s-OFDM QPSK	1@1	23.51	22.31	0.1702
78	30	30	652332	3784.98	DFT-s-OFDM 16 QAM	1@1	23.32	22.12	0.1629
78	30	40	648000	3720.0	DFT-s-OFDM QPSK	1@1	23.58	22.38	0.1730
78	30	40	648000	3720.0	DFT-s-OFDM 16 QAM	1@1	23.33	22.13	0.1633
78	30	40	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.45	22.25	0.1679
78	30	40	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.2	22	0.1585
78	30	40	652000	3780.0	DFT-s-OFDM QPSK	1@1	23.61	22.41	0.1742
78	30	40	652000	3780.0	DFT-s-OFDM 16 QAM	1@1	23.42	22.22	0.1667
78	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@1	23.46	22.26	0.1683
78	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@1	23.24	22.04	0.1600
78	30	50	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.22	22.02	0.1592
78	30	50	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23	21.8	0.1514

78	30	50	651666	3774.99	DFT-s-OFDM QPSK	1@1	23.25	22.05	0.1603
78	30	50	651666	3774.99	DFT-s-OFDM 16 QAM	1@1	23.09	21.89	0.1545
78	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@1	23.31	22.11	0.1626
78	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	23.03	21.83	0.1524
78	30	60	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.49	22.29	0.1694
78	30	60	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.16	21.96	0.1570
78	30	60	651332	3769.98	DFT-s-OFDM QPSK	1@1	23.13	21.93	0.1560
78	30	60	651332	3769.98	DFT-s-OFDM 16 QAM	1@1	23	21.8	0.1514
78	30	70	649000	3735.0	DFT-s-OFDM QPSK	1@1	23.28	22.08	0.1614
78	30	70	649000	3735.0	DFT-s-OFDM 16 QAM	1@1	23.14	21.94	0.1563
78	30	70	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.12	21.92	0.1556
78	30	70	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	22.95	21.75	0.1496
78	30	70	651000	3765.0	DFT-s-OFDM QPSK	1@1	23.23	22.03	0.1596
78	30	70	651000	3765.0	DFT-s-OFDM 16 QAM	1@1	23.09	21.89	0.1545
78	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	23.22	22.02	0.1592
78	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	23.09	21.89	0.1545
78	30	80	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.31	22.11	0.1626
78	30	80	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.08	21.88	0.1542
78	30	80	650666	3759.99	DFT-s-OFDM QPSK	1@1	23.16	21.96	0.1570
78	30	80	650666	3759.99	DFT-s-OFDM 16 QAM	1@1	22.88	21.68	0.1472
78	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@1	23.21	22.01	0.1589
78	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@1	23.05	21.85	0.1531
78	30	90	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.17	21.97	0.1574
78	30	90	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.07	21.87	0.1538
78	30	90	650332	3754.98	DFT-s-OFDM QPSK	1@1	23.24	22.04	0.1600
78	30	90	650332	3754.98	DFT-s-OFDM 16 QAM	1@1	23.03	21.83	0.1524
78	30	100	650000	3750.0	DFT-s-OFDM PI/2 BPSK	135@67	23.57	22.37	0.1726

78	30	100	650000	3750.0	DFT-s-OFDM PI/2 BPSK	1@1	23.48	22.28	0.1690
78	30	100	650000	3750.0	DFT-s-OFDM PI/2 BPSK	1@271	23.6	22.4	0.1738
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	135@67	23.57	22.37	0.1726
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.45	22.25	0.1679
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@271	23.7	22.5	0.1778
78	30	100	650000	3750.0	DFT-s-OFDM 16 QAM	135@67	22.95	21.75	0.1496
78	30	100	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.02	21.82	0.1521
78	30	100	650000	3750.0	DFT-s-OFDM 16 QAM	1@271	23.16	21.96	0.1570
78	30	100	650000	3750.0	DFT-s-OFDM 64 QAM	135@67	21.67	20.47	0.1114
78	30	100	650000	3750.0	DFT-s-OFDM 64 QAM	1@1	21.38	20.18	0.1042
78	30	100	650000	3750.0	DFT-s-OFDM 64 QAM	1@271	21.51	20.31	0.1074
78	30	100	650000	3750.0	DFT-s-OFDM 256 QAM	135@67	19.69	18.49	0.0706
78	30	100	650000	3750.0	DFT-s-OFDM 256 QAM	1@1	19.52	18.32	0.0679
78	30	100	650000	3750.0	DFT-s-OFDM 256 QAM	1@271	19.67	18.47	0.0703
78	30	100	650000	3750.0	CP-OFDM QPSK	137@68	22.67	21.47	0.1403
78	30	100	650000	3750.0	CP-OFDM QPSK	1@1	22.63	21.43	0.1390
78	30	100	650000	3750.0	CP-OFDM QPSK	1@271	22.76	21.56	0.1432



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Carry Xu	Temperature :	23~25°C
		Relative Humidity :	41~42%

Pre-scanned harmonic for the different antenna combinations, we choose the worst antenna mode to perform final test and record in the report.

SA n77 / NR 100MHz / QPSK / ANT5								
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)
Lowest	7410	-62.77	-13	-49.77	-72.98	3.03	13.24	H
	11106	-53.09	-13	-40.09	-62.54	3.56	13.01	H
	14820	-59.31	-13	-46.31	-68.83	3.92	13.44	H
	7410	-63.05	-13	-50.05	-73.26	3.03	13.24	V
	11106	-45.59	-13	-32.59	-55.04	3.56	13.01	V
	14820	-59.37	-13	-46.37	-68.89	3.92	13.44	V
Middle	7590	-62.74	-13	-49.74	-72.95	3.03	13.24	H
	11376	-57.93	-13	-44.93	-67.38	3.56	13.01	H
	15180	-59.54	-13	-46.54	-69.06	3.92	13.44	H
	7590	-62.26	-13	-49.26	-72.47	3.03	13.24	V
	11376	-58.78	-13	-45.78	-68.23	3.56	13.01	V
	15180	-59.36	-13	-46.36	-68.88	3.92	13.44	V
Highest	7770	-63.09	-13	-50.09	-73.30	3.03	13.24	H
	11652	-60.72	-13	-47.72	-70.17	3.56	13.01	H
	15540	-59.52	-13	-46.52	-69.04	3.92	13.44	H
	7770	-62.98	-13	-49.98	-73.19	3.03	13.24	V
	11652	-60.76	-13	-47.76	-70.21	3.56	13.01	V
	15540	-59.27	-13	-46.27	-68.79	3.92	13.44	V

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



EN-DC_30A_n77A / LTE 10MHz + NR 100MHz / QPSK / ANT4(LTE) & ANT5(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)
Lowest	7410	-63.25	-13	-50.25	-73.46	3.03	13.24	H
	11112	-60.61	-13	-47.61	-70.06	3.56	13.01	H
	14808	-58.84	-13	-45.84	-68.36	3.92	13.44	H
	7410	-63.29	-13	-50.29	-73.50	3.03	13.24	V
	11112	-60.75	-13	-47.75	-70.20	3.56	13.01	V
	14808	-50.45	-13	-37.45	-59.97	3.92	13.44	V
Middle	7590	-63.54	-13	-50.54	-73.75	3.03	13.24	H
	11376	-58.46	-13	-45.46	-67.91	3.56	13.01	H
	15168	-59.47	-13	-46.47	-68.99	3.92	13.44	H
	7590	-63.38	-13	-50.38	-73.59	3.03	13.24	V
	11376	-58.05	-13	-45.05	-67.50	3.56	13.01	V
	15168	-53.42	-13	-40.42	-62.94	3.92	13.44	V
Highest	7770	-63.38	-13	-50.38	-73.59	3.03	13.24	H
	11652	-61.08	-13	-48.08	-70.53	3.56	13.01	H
	15528	-57.14	-13	-44.14	-66.66	3.92	13.44	H
	7770	-63.38	-13	-50.38	-73.59	3.03	13.24	V
	11652	-61.01	-13	-48.01	-70.46	3.56	13.01	V
	15528	-55.70	-13	-42.70	-65.22	3.92	13.44	V

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

SA n78 / NR 100MHz / QPSK / ANT5								
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	7410	-63.44	-13	-50.44	-73.65	3.03	13.24	H
	11106	-60.39	-13	-47.39	-69.84	3.56	13.01	H
	14820	-59.18	-13	-46.18	-68.70	3.92	13.44	H
	7410	-63.49	-13	-50.49	-73.70	3.03	13.24	V
	11106	-56.26	-13	-43.26	-65.71	3.56	13.01	V
	14820	-59.82	-13	-46.82	-69.34	3.92	13.44	V

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

EN-DC_13A_n78A / LTE 10MHz + NR 100MHz / QPSK / ANT0(LTE) & ANT5(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	7410	-63.95	-13	-50.95	-74.16	3.03	13.24	H
	11112	-61.09	-13	-48.09	-70.54	3.56	13.01	H
	14820	-60.15	-13	-47.15	-69.67	3.92	13.44	H
	7410	-64.06	-13	-51.06	-74.27	3.03	13.24	V
	11112	-61.03	-13	-48.03	-70.48	3.56	13.01	V
	14820	-59.77	-13	-46.77	-69.29	3.92	13.44	V

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