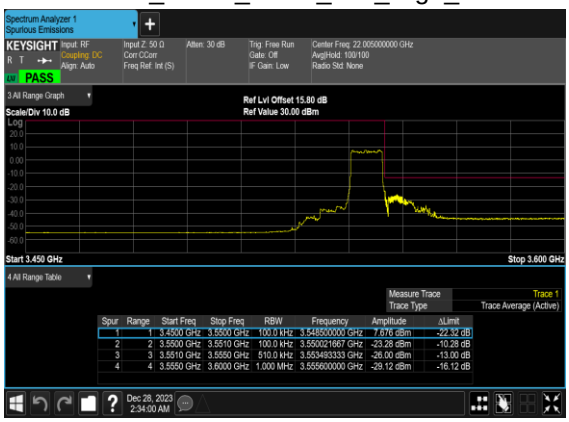
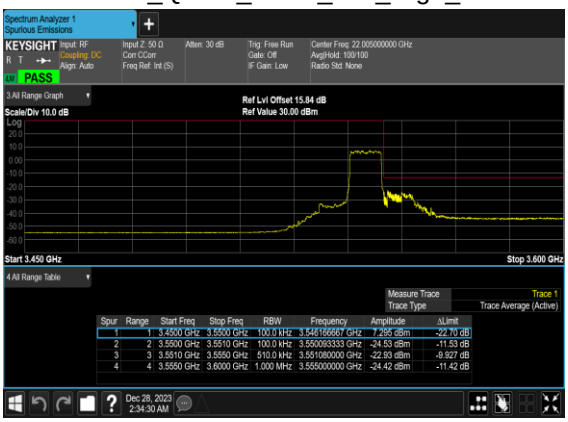
N77(10M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

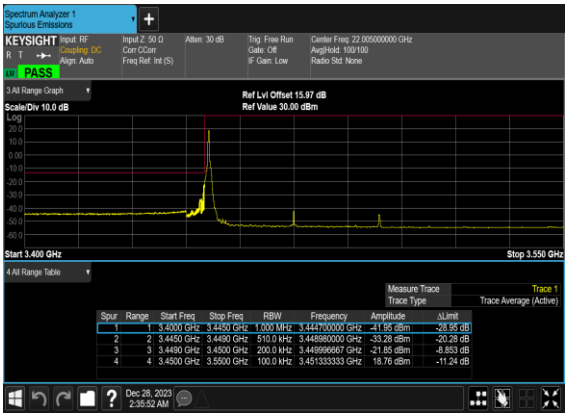


N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH

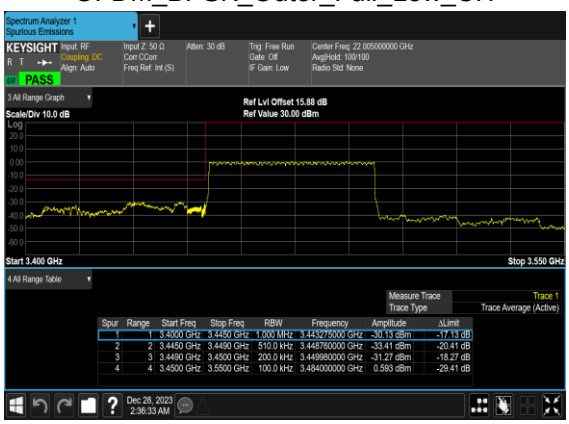


N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

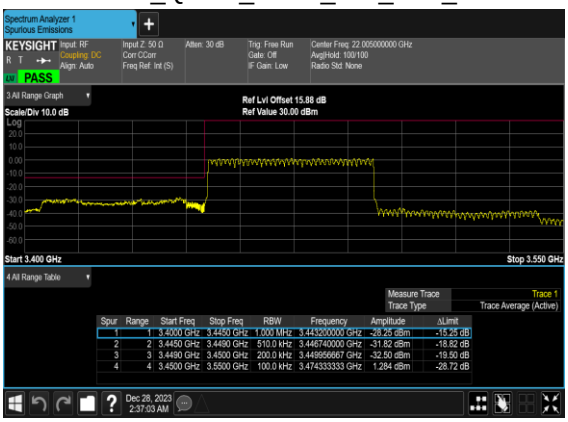
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



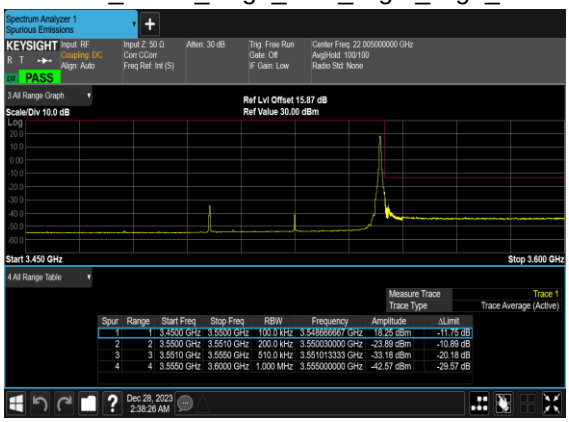
N77(50M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



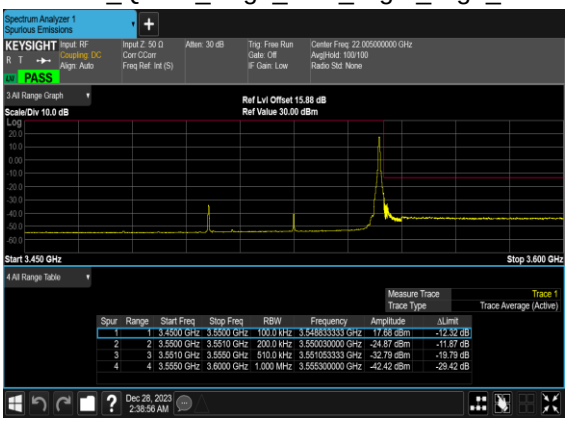
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

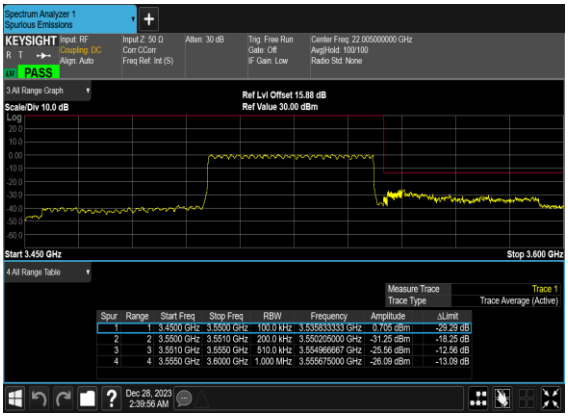


N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



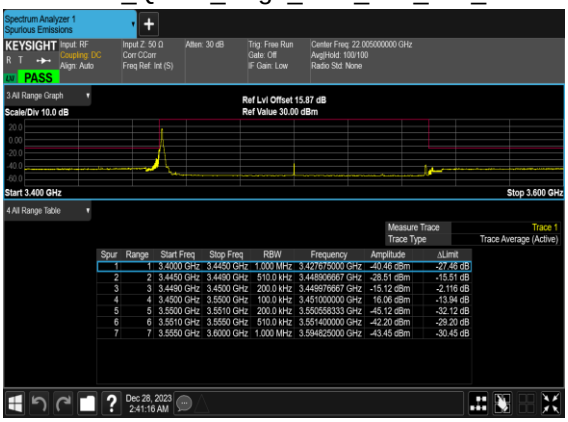
N77(50M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



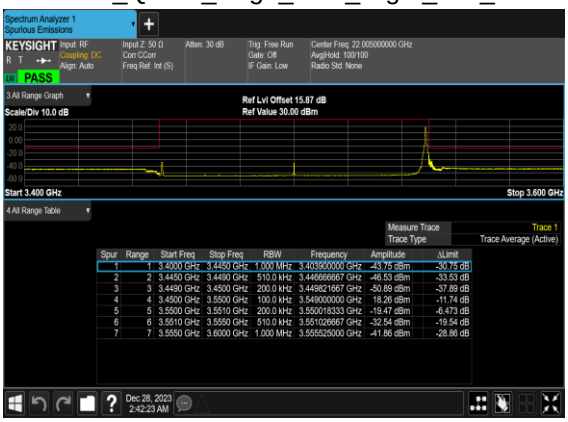
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH

N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_Mid_CH

N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_Mid_CH



N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_Mid_CH

N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

Software Version: 23.06.1602

FR1 N78 (ANT4)

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=-1.5dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
78	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@1	25.41	23.91	0.2460
78	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@1	25.34	23.84	0.2421
78	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.54	24.04	0.2535
78	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.5	24	0.2512
78	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@1	25.56	24.06	0.2547
78	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	1@1	25.67	24.17	0.2612
78	30	15	630500	3457.5	DFT-s-OFDM QPSK	1@1	25.67	24.17	0.2612
78	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@1	25.56	24.06	0.2547
78	30	15	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.52	24.02	0.2523
78	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.66	24.16	0.2606
78	30	15	636166	3542.49	DFT-s-OFDM QPSK	1@1	25.67	24.17	0.2612
78	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@1	25.63	24.13	0.2588
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	25.73	24.23	0.2649
78	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	25.64	24.14	0.2594
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.6	24.1	0.2570
78	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.63	24.13	0.2588
78	30	20	636000	3540	DFT-s-OFDM QPSK	1@1	25.69	24.19	0.2624
78	30	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	25.58	24.08	0.2559
78	30	30	631000	3465	DFT-s-OFDM QPSK	1@1	25.6	24.1	0.2570
78	30	30	631000	3465	DFT-s-OFDM 16 QAM	1@1	25.72	24.22	0.2642
78	30	30	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.81	24.31	0.2698
78	30	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.91	24.41	0.2761
78	30	30	635666	3534.99	DFT-s-OFDM QPSK	1@1	25.73	24.23	0.2649
78	30	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@1	25.94	24.44	0.2780
78	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	25.66	24.16	0.2606
78	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	25.69	24.19	0.2624
78	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.92	24.42	0.2767
78	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.93	24.43	0.2773
78	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	25.74	24.24	0.2655

78	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	25.74	24.24	0.2655
78	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@1	25.46	23.96	0.2489
78	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@1	25.46	23.96	0.2489
78	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.58	24.08	0.2559
78	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.5	24	0.2512
78	30	50	635000	3525	DFT-s-OFDM QPSK	1@1	25.43	23.93	0.2472
78	30	50	635000	3525	DFT-s-OFDM 16 QAM	1@1	25.41	23.91	0.2460
78	30	60	632000	3480	DFT-s-OFDM QPSK	1@1	25.46	23.96	0.2489
78	30	60	632000	3480	DFT-s-OFDM 16 QAM	1@1	25.4	23.9	0.2455
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.45	23.95	0.2483
78	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.6	24.1	0.2570
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	25.59	24.09	0.2564
78	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	25.61	24.11	0.2576
78	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@1	25.37	23.87	0.2438
78	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@1	25.28	23.78	0.2388
78	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.44	23.94	0.2477
78	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.29	23.79	0.2393
78	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@1	25.42	23.92	0.2466
78	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@1	25.51	24.01	0.2518
78	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	25.33	23.83	0.2415
78	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	25.34	23.84	0.2421
78	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.35	23.85	0.2427
78	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.39	23.89	0.2449
78	30	80	634000	3510	DFT-s-OFDM QPSK	1@1	25.46	23.96	0.2489
78	30	80	634000	3510	DFT-s-OFDM 16 QAM	1@1	25.41	23.91	0.2460
78	30	90	633000	3495	DFT-s-OFDM QPSK	1@1	25.3	23.8	0.2399
78	30	90	633000	3495	DFT-s-OFDM 16 QAM	1@1	25.33	23.83	0.2415
78	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.27	23.77	0.2382
78	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.35	23.85	0.2427
78	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@1	25.26	23.76	0.2377
78	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@1	25.25	23.75	0.2371
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	25.4	23.9	0.2455
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.96	24.46	0.2793
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	25.39	23.89	0.2449
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	25.39	23.89	0.2449

78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.29	23.79	0.2393
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	25.43	23.93	0.2472
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	25.23	23.73	0.2360
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.27	23.77	0.2382
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@271	25.31	23.81	0.2404
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	24.41	22.91	0.1954
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	24.33	22.83	0.1919
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@271	24.51	23.01	0.2000
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	22.44	20.94	0.1242
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	22.15	20.65	0.1161
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@271	22.38	20.88	0.1225
78	30	100	633334	3500.01	CP-OFDM QPSK	137@68	25.39	23.89	0.2449
78	30	100	633334	3500.01	CP-OFDM QPSK	1@1	25.33	23.83	0.2415
78	30	100	633334	3500.01	CP-OFDM QPSK	1@271	25.46	23.96	0.2489

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Qingsheng He	Temperature :	22~25℃
		Relative Humidity :	48~52%

RSE pre-scanned harmonic for different antennas, choose the worst antenna perform final test and record in the report.

SA n77 / NR 100MHz / QPSK / ANT4									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6902	-42.37	-13	-29.37	-37.71	-43.89	11.98	13.50	H
	10353	-46.07	-13	-33.07	-47.19	-46.07	13.60	13.60	H
	13804	-49.81	-13	-36.81	-56.28	-49.41	15.50	15.10	H
	6902	-46.14	-13	-33.14	-41.4	-47.66	11.98	13.50	V
	10353	-45.54	-13	-32.54	-46.45	-45.54	13.60	13.60	V
	13804	-50.86	-13	-37.86	-57.02	-50.46	15.50	15.10	V

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

EN-DC_30A_n77A / LTE 10MHz + NR 100MHz / QPSK / ANT9 (LTE) & ANT4(NR)									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n77 Middle	6912.5	-46.57	-13	-33.57	-41.94	-48.09	11.98	13.50	H
	10368	-51.54	-13	-38.54	-52.67	-51.54	13.60	13.60	H
	13824	-50.93	-13	-37.93	-57.38	-50.53	15.50	15.10	H
	6912.5	-52.18	-13	-39.18	-47.5	-53.70	11.98	13.50	V
	10368	-53.61	-13	-40.61	-54.55	-53.61	13.60	13.60	V
	13824	-50.38	-13	-37.38	-56.51	-49.98	15.50	15.10	V
LTE Band30 Middle	4611.50	-55.42	-40	-15.42	-71.44	-61.67	6.45	12.70	H
	6916.50	-58.57	-40	-18.57	-53.96	-61.97	8.40	11.80	H
	9222.00	-51.40	-40	-11.40	-52.48	-53.75	9.65	12.00	H
	4611.50	-55.14	-40	-15.14	-71.01	-61.39	6.45	12.70	V
	6916.50	-57.18	-40	-17.18	-52.53	-60.58	8.40	11.80	V
	9222.00	-50.88	-40	-10.88	-51.54	-53.23	9.65	12.00	V

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