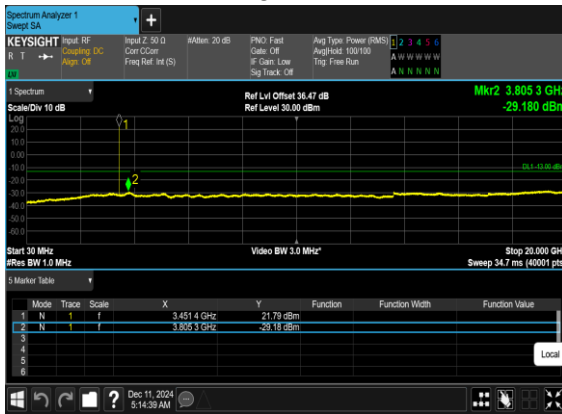
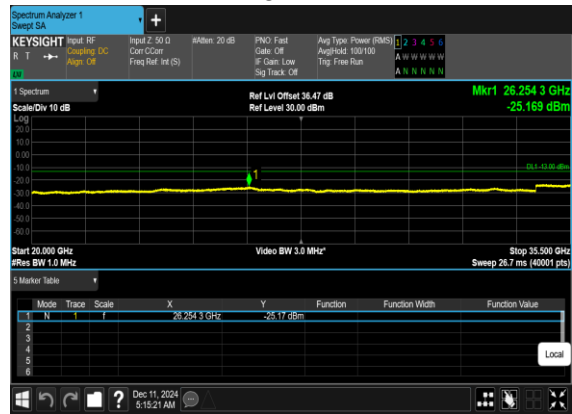




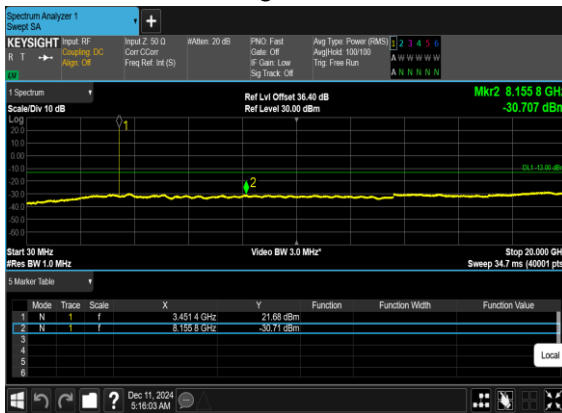
N77(100M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



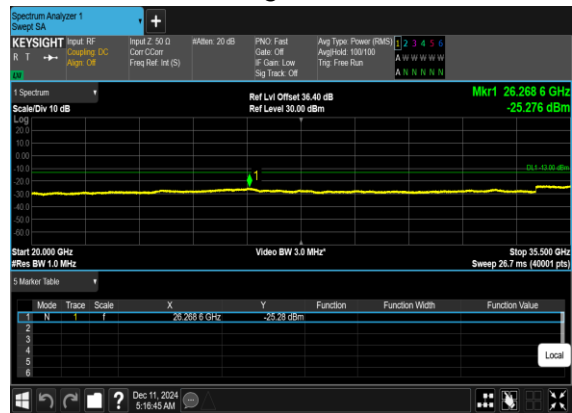
N77(100M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(100M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(100M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



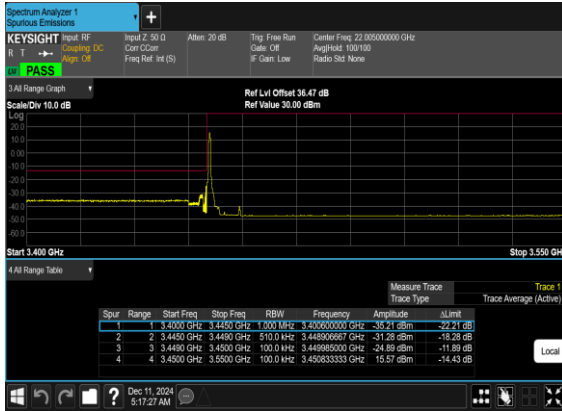


### Conducted Band Edge

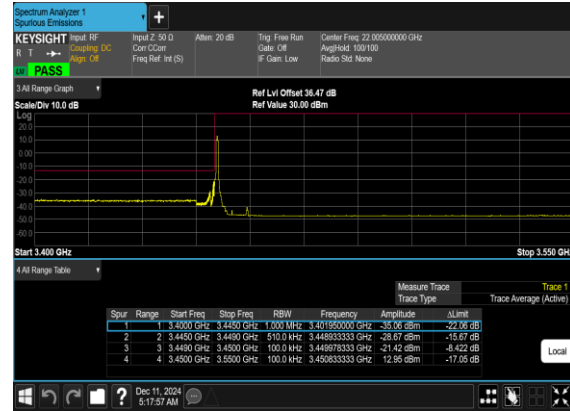
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM BPSK	24@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	24@0	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@23	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@23	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	24@0	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	24@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	128@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	128@0	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	1@132	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@132	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	128@0	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	128@0	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@272	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@272	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	270@0	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	270@0	see graph	PASS



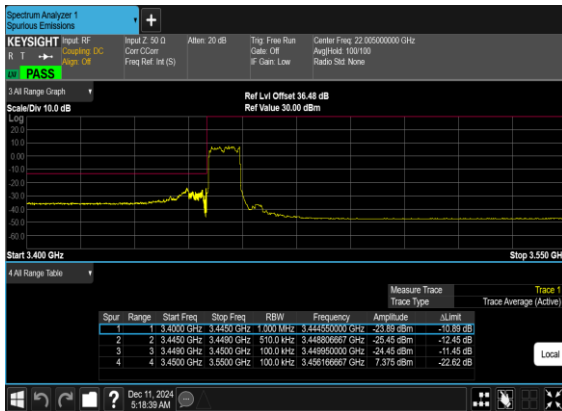
N77(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



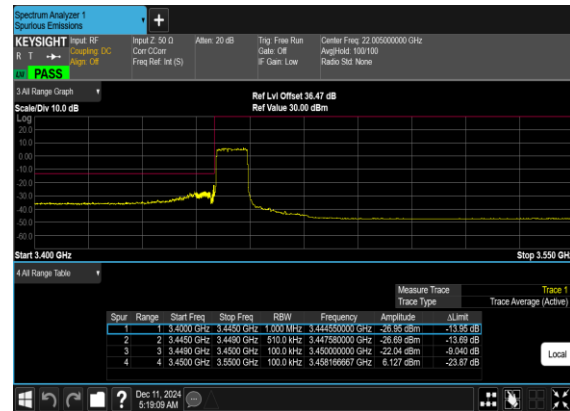
N77(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N77(10M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_Low\_CH



N77(10M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH

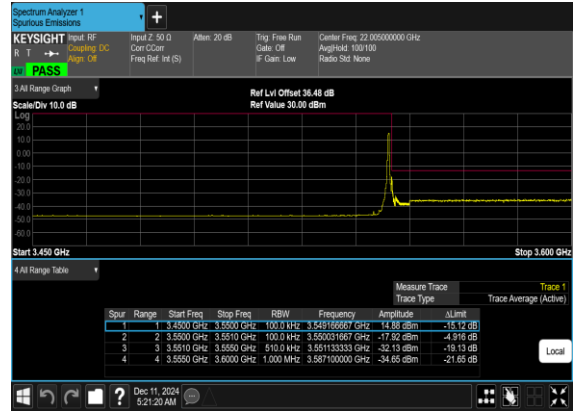




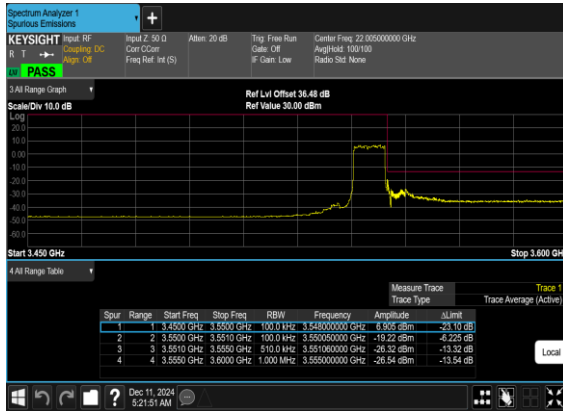
N77(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Right\_High\_CH



N77(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



N77(10M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_High\_CH

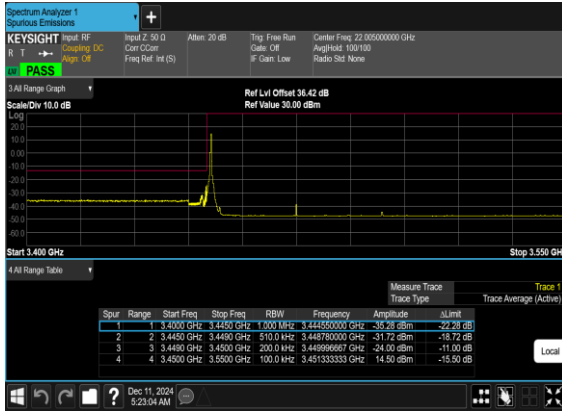


N77(10M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_High\_CH

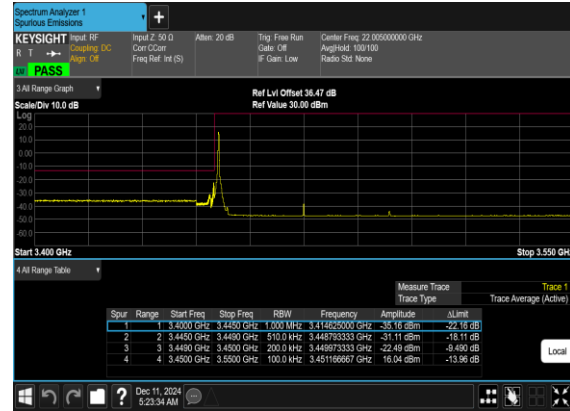




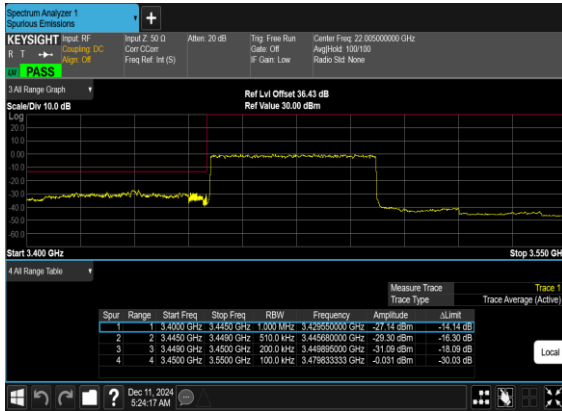
N77(50M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



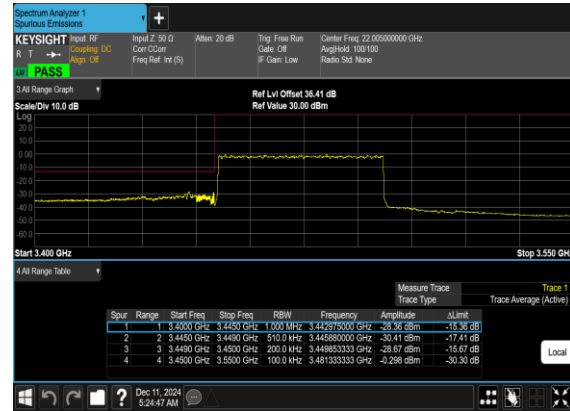
N77(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N77(50M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_Low\_CH

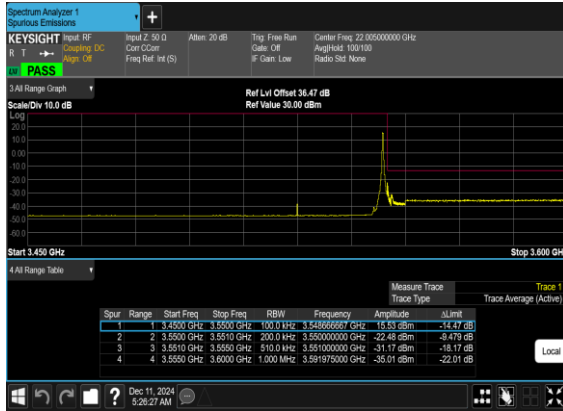


N77(50M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH

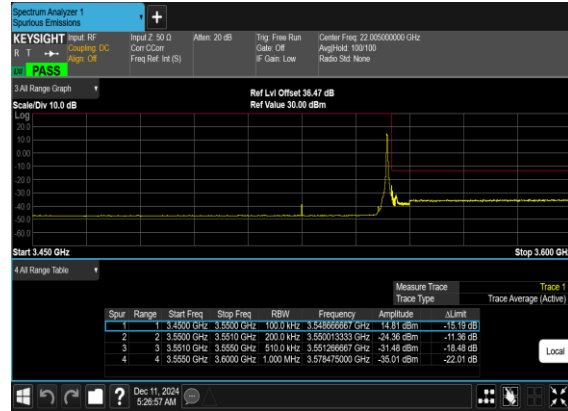




N77(50M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Right\_High\_CH



N77(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



N77(50M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_High\_CH

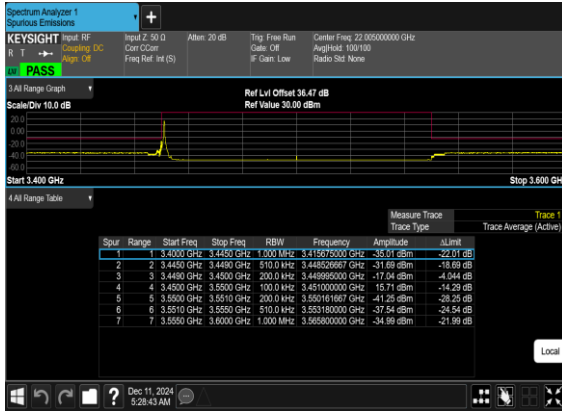


N77(50M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_High\_CH

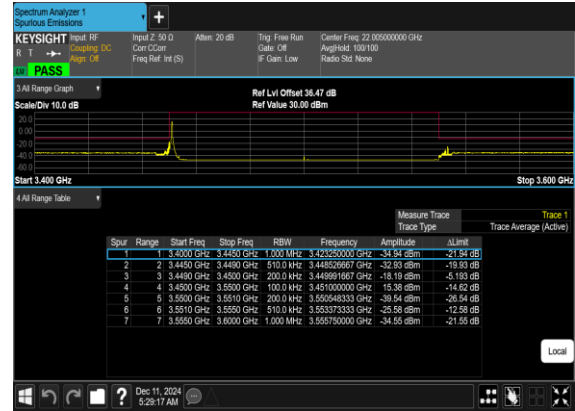




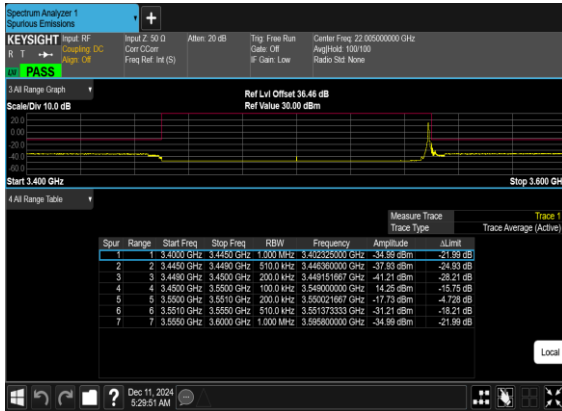
N77(100M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(100M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(100M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Right\_Mid\_CH

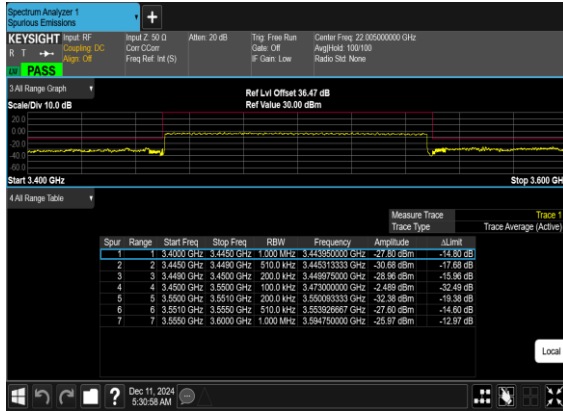


N77(100M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_Mid\_CH

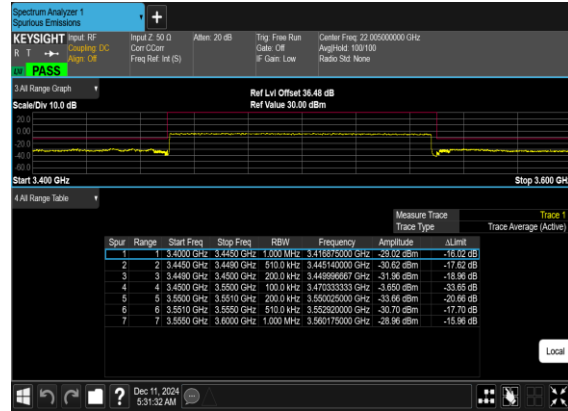




N77(100M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_Mid\_CH



N77(100M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH





Software Version: 23.06.1602

### ULMIMO N78 (Ant8+Ant4)

#### Transmitter Conducted Output Power and EIRP, (G<sub>T</sub> - L<sub>c</sub>)= -0.9dB

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	ANT8 Power(dBm)	ANT4 Power(dBm)	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
78	30	10	630334	3455.01	CP-OFDM QPSK	1@1	22.32	22.07	25.21	24.31	0.2696
78	30	10	630334	3455.01	CP-OFDM 16 QAM	1@1	21.56	21.42	24.50	23.60	0.2291
78	30	10	630334	3455.01	CP-OFDM 64 QAM	1@1	20.35	20	23.19	22.29	0.1694
78	30	10	633334	3500.01	CP-OFDM QPSK	1@1	22.53	22.17	25.36	24.46	0.2795
78	30	10	633334	3500.01	CP-OFDM 16 QAM	1@1	21.79	21.52	24.67	23.77	0.2381
78	30	10	633334	3500.01	CP-OFDM 64 QAM	1@1	20.53	20.04	23.30	22.40	0.1739
78	30	10	636332	3544.98	CP-OFDM QPSK	1@1	22.51	22.1	25.32	24.42	0.2767
78	30	10	636332	3544.98	CP-OFDM 16 QAM	1@1	21.84	21.43	24.65	23.75	0.2371
78	30	10	636332	3544.98	CP-OFDM 64 QAM	1@1	20.51	20.08	23.31	22.41	0.1742
78	30	15	630500	3457.5	CP-OFDM QPSK	1@1	22.33	22.15	25.25	24.35	0.2723
78	30	15	630500	3457.5	CP-OFDM 16 QAM	1@1	21.72	21.36	24.55	23.65	0.2320
78	30	15	630500	3457.5	CP-OFDM 64 QAM	1@1	20.42	20	23.23	22.33	0.1708
78	30	15	633334	3500.01	CP-OFDM QPSK	1@1	22.37	22.18	25.29	24.39	0.2746
78	30	15	633334	3500.01	CP-OFDM 16 QAM	1@1	21.71	21.41	24.57	23.67	0.2330
78	30	15	633334	3500.01	CP-OFDM 64 QAM	1@1	20.48	20.11	23.31	22.41	0.1742
78	30	15	636166	3542.49	CP-OFDM QPSK	1@1	22.44	22.16	25.31	24.41	0.2762
78	30	15	636166	3542.49	CP-OFDM 16 QAM	1@1	21.78	21.5	24.65	23.75	0.2373
78	30	15	636166	3542.49	CP-OFDM 64 QAM	1@1	20.49	20.14	23.33	22.43	0.1749
78	30	20	630668	3460.02	CP-OFDM QPSK	1@1	22.4	22.04	25.23	24.33	0.2713
78	30	20	630668	3460.02	CP-OFDM 16 QAM	1@1	21.61	21.26	24.45	23.55	0.2264
78	30	20	630668	3460.02	CP-OFDM 64 QAM	1@1	20.42	19.93	23.19	22.29	0.1695
78	30	20	633334	3500.01	CP-OFDM QPSK	1@1	22.32	22.16	25.25	24.35	0.2723
78	30	20	633334	3500.01	CP-OFDM 16 QAM	1@1	21.67	21.42	24.56	23.66	0.2321
78	30	20	633334	3500.01	CP-OFDM 64 QAM	1@1	20.47	20.05	23.28	22.38	0.1728
78	30	20	636000	3540	CP-OFDM QPSK	1@1	22.47	22.06	25.28	24.38	0.2742
78	30	20	636000	3540	CP-OFDM 16 QAM	1@1	21.65	21.41	24.54	23.64	0.2313
78	30	20	636000	3540	CP-OFDM 64 QAM	1@1	20.47	19.99	23.25	22.35	0.1717
78	30	25	630834	3462.51	CP-OFDM QPSK	1@1	22.51	22.21	25.37	24.47	0.2801
78	30	25	630834	3462.51	CP-OFDM 16 QAM	1@1	21.77	21.37	24.58	23.68	0.2336
78	30	25	630834	3462.51	CP-OFDM 64 QAM	1@1	20.54	20.04	23.31	22.41	0.1741
78	30	25	633334	3500.01	CP-OFDM QPSK	1@1	22.56	22.39	25.49	24.59	0.2875
78	30	25	633334	3500.01	CP-OFDM 16 QAM	1@1	21.7	21.61	24.67	23.77	0.2380
78	30	25	633334	3500.01	CP-OFDM 64 QAM	1@1	20.5	20.35	23.44	22.54	0.1793
78	30	25	635832	3537.48	CP-OFDM QPSK	1@1	22.6	22.07	25.35	24.45	0.2788
78	30	25	635832	3537.48	CP-OFDM 16 QAM	1@1	21.81	21.43	24.63	23.73	0.2363



78	30	25	635832	3537.48	CP-OFDM 64 QAM	1@1	20.58	20.03	23.32	22.42	0.1747
78	30	30	631000	3465	CP-OFDM QPSK	1@1	22.54	22.26	25.41	24.51	0.2827
78	30	30	631000	3465	CP-OFDM 16 QAM	1@1	21.77	21.5	24.65	23.75	0.2370
78	30	30	631000	3465	CP-OFDM 64 QAM	1@1	20.48	20.11	23.31	22.41	0.1742
78	30	30	633334	3500.01	CP-OFDM QPSK	1@1	22.58	22.41	25.51	24.61	0.2888
78	30	30	633334	3500.01	CP-OFDM 16 QAM	1@1	21.85	21.62	24.75	23.85	0.2425
78	30	30	633334	3500.01	CP-OFDM 64 QAM	1@1	20.58	20.29	23.45	22.55	0.1798
78	30	30	635666	3534.99	CP-OFDM QPSK	1@1	22.48	22.22	25.36	24.46	0.2794
78	30	30	635666	3534.99	CP-OFDM 16 QAM	1@1	21.84	21.43	24.65	23.75	0.2371
78	30	30	635666	3534.99	CP-OFDM 64 QAM	1@1	20.67	20.09	23.40	22.50	0.1778
78	30	40	631334	3470.01	CP-OFDM QPSK	1@1	22.35	22.12	25.25	24.35	0.2721
78	30	40	631334	3470.01	CP-OFDM 16 QAM	1@1	21.6	21.38	24.50	23.60	0.2292
78	30	40	631334	3470.01	CP-OFDM 64 QAM	1@1	20.49	20.07	23.30	22.40	0.1736
78	30	40	633334	3500.01	CP-OFDM QPSK	1@1	22.39	22.08	25.25	24.35	0.2721
78	30	40	633334	3500.01	CP-OFDM 16 QAM	1@1	21.73	21.41	24.58	23.68	0.2335
78	30	40	633334	3500.01	CP-OFDM 64 QAM	1@1	20.52	20.09	23.32	22.42	0.1746
78	30	40	635332	3529.98	CP-OFDM QPSK	1@1	22.42	21.91	25.18	24.28	0.2681
78	30	40	635332	3529.98	CP-OFDM 16 QAM	1@1	21.69	21.35	24.53	23.63	0.2309
78	30	40	635332	3529.98	CP-OFDM 64 QAM	1@1	20.51	19.98	23.26	22.36	0.1723
78	30	50	631668	3475.02	CP-OFDM QPSK	1@1	22.57	22.26	25.43	24.53	0.2837
78	30	50	631668	3475.02	CP-OFDM 16 QAM	1@1	21.81	21.55	24.69	23.79	0.2395
78	30	50	631668	3475.02	CP-OFDM 64 QAM	1@1	20.58	20.19	23.40	22.50	0.1778
78	30	50	633334	3500.01	CP-OFDM QPSK	1@1	22.54	22.25	25.41	24.51	0.2823
78	30	50	633334	3500.01	CP-OFDM 16 QAM	1@1	21.88	21.62	24.76	23.86	0.2433
78	30	50	633334	3500.01	CP-OFDM 64 QAM	1@1	20.66	20.23	23.46	22.56	0.1803
78	30	50	635000	3525	CP-OFDM QPSK	1@1	22.59	22.37	25.49	24.59	0.2879
78	30	50	635000	3525	CP-OFDM 16 QAM	1@1	21.92	21.65	24.80	23.90	0.2453
78	30	50	635000	3525	CP-OFDM 64 QAM	1@1	20.71	20.42	23.58	22.68	0.1853
78	30	60	632000	3480	CP-OFDM QPSK	1@1	22.34	22	25.18	24.28	0.2681
78	30	60	632000	3480	CP-OFDM 16 QAM	1@1	21.61	21.38	24.51	23.61	0.2294
78	30	60	632000	3480	CP-OFDM 64 QAM	1@1	20.48	20.02	23.27	22.37	0.1724
78	30	60	633334	3500.01	CP-OFDM QPSK	1@1	22.33	22.13	25.24	24.34	0.2717
78	30	60	633334	3500.01	CP-OFDM 16 QAM	1@1	21.74	21.5	24.63	23.73	0.2362
78	30	60	633334	3500.01	CP-OFDM 64 QAM	1@1	20.43	20.09	23.27	22.37	0.1727
78	30	60	634666	3519.99	CP-OFDM QPSK	1@1	22.51	22.27	25.40	24.50	0.2820
78	30	60	634666	3519.99	CP-OFDM 16 QAM	1@1	21.78	21.61	24.71	23.81	0.2402
78	30	60	634666	3519.99	CP-OFDM 64 QAM	1@1	20.61	20.27	23.45	22.55	0.1800
78	30	70	632334	3485.01	CP-OFDM QPSK	1@1	22.52	22.27	25.41	24.51	0.2823
78	30	70	632334	3485.01	CP-OFDM 16 QAM	1@1	21.85	21.61	24.74	23.84	0.2422
78	30	70	632334	3485.01	CP-OFDM 64 QAM	1@1	20.66	20.21	23.45	22.55	0.1799
78	30	70	633334	3500.01	CP-OFDM QPSK	1@1	22.46	22.27	25.38	24.48	0.2803



78	30	70	633334	3500.01	CP-OFDM 16 QAM	1@1	21.8	21.58	24.70	23.80	0.2400
78	30	70	633334	3500.01	CP-OFDM 64 QAM	1@1	20.62	20.35	23.50	22.60	0.1819
78	30	70	634332	3514.98	CP-OFDM QPSK	1@1	22.56	22.53	25.56	24.66	0.2921
78	30	70	634332	3514.98	CP-OFDM 16 QAM	1@1	21.83	21.81	24.83	23.93	0.2472
78	30	70	634332	3514.98	CP-OFDM 64 QAM	1@1	20.64	20.52	23.59	22.69	0.1858
78	30	80	632668	3490.02	CP-OFDM QPSK	1@1	22.65	22.42	25.55	24.65	0.2915
78	30	80	632668	3490.02	CP-OFDM 16 QAM	1@1	21.97	21.66	24.83	23.93	0.2471
78	30	80	632668	3490.02	CP-OFDM 64 QAM	1@1	20.74	20.27	23.52	22.62	0.1829
78	30	80	633334	3500.01	CP-OFDM QPSK	1@1	22.56	22.28	25.43	24.53	0.2840
78	30	80	633334	3500.01	CP-OFDM 16 QAM	1@1	21.88	21.64	24.77	23.87	0.2439
78	30	80	633334	3500.01	CP-OFDM 64 QAM	1@1	20.66	20.33	23.51	22.61	0.1823
78	30	80	634000	3510	CP-OFDM QPSK	1@1	22.58	22.47	25.54	24.64	0.2908
78	30	80	634000	3510	CP-OFDM 16 QAM	1@1	21.94	21.75	24.86	23.96	0.2487
78	30	80	634000	3510	CP-OFDM 64 QAM	1@1	20.58	20.48	23.54	22.64	0.1837
78	30	90	633000	3495	CP-OFDM QPSK	1@1	22.67	22.48	25.59	24.69	0.2942
78	30	90	633000	3495	CP-OFDM 16 QAM	1@1	21.94	21.74	24.85	23.95	0.2484
78	30	90	633000	3495	CP-OFDM 64 QAM	1@1	20.72	20.38	23.56	22.66	0.1847
78	30	90	633334	3500.01	CP-OFDM QPSK	1@1	22.67	22.44	25.57	24.67	0.2929
78	30	90	633334	3500.01	CP-OFDM 16 QAM	1@1	21.95	21.73	24.85	23.95	0.2484
78	30	90	633334	3500.01	CP-OFDM 64 QAM	1@1	20.72	20.29	23.52	22.62	0.1828
78	30	90	633666	3504.99	CP-OFDM QPSK	1@1	22.57	22.51	25.55	24.65	0.2918
78	30	90	633666	3504.99	CP-OFDM 16 QAM	1@1	21.98	21.71	24.86	23.96	0.2487
78	30	90	633666	3504.99	CP-OFDM 64 QAM	1@1	20.73	20.41	23.58	22.68	0.1855
78	30	100	633334	3500.01	CP-OFDM QPSK	137@68	22.41	22.12	25.28	24.38	0.2740
78	30	100	633334	3500.01	CP-OFDM QPSK	1@1	22.72	22.78	25.76	24.86	0.3062
78	30	100	633334	3500.01	CP-OFDM QPSK	1@271	22.46	21.96	25.23	24.33	0.2709
78	30	100	633334	3500.01	CP-OFDM 16 QAM	137@68	22	21.71	24.87	23.97	0.2493
78	30	100	633334	3500.01	CP-OFDM 16 QAM	1@1	22.02	21.86	24.95	24.05	0.2542
78	30	100	633334	3500.01	CP-OFDM 16 QAM	1@271	21.74	21.22	24.50	23.60	0.2290
78	30	100	633334	3500.01	CP-OFDM 64 QAM	137@68	20.51	20.19	23.36	22.46	0.1763
78	30	100	633334	3500.01	CP-OFDM 64 QAM	1@1	20.71	20.52	23.63	22.73	0.1873
78	30	100	633334	3500.01	CP-OFDM 64 QAM	1@271	20.4	19.8	23.12	22.22	0.1667
78	30	100	633334	3500.01	CP-OFDM 256 QAM	137@68	20.51	20.17	23.35	22.45	0.1759
78	30	100	633334	3500.01	CP-OFDM 256 QAM	1@1	17.85	17.46	20.67	19.77	0.0948
78	30	100	633334	3500.01	CP-OFDM 256 QAM	1@271	17.48	16.81	20.17	19.27	0.0845



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

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

Note: Pre-scanned harmonic for the different antenna combinations, we choose the worst antenna mode to perform final test.

N77 SA / NR 100MHz / QPSK / ANT3 open status								
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	6912	-56.26	-13	-43.26	-66.47	3.03	13.24	H
	10356	-36.27	-13	-23.27	-45.72	3.56	13.01	H
	13824	-42.34	-13	-29.34	-51.86	3.92	13.44	H
	6912	-56.11	-13	-43.11	-66.32	3.03	13.24	V
	10356	-37.14	-13	-24.14	-46.59	3.56	13.01	V
	13824	-42.61	-13	-29.61	-52.13	3.92	13.44	V

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

N77 UL MIMO / NR 100MHz / QPSK(Ant.3+8) open status								
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	6912	-63.44	-13	-50.44	-73.65	3.03	13.24	H
	10368	-59.66	-13	-46.66	-69.11	3.56	13.01	H
	13824	-58.90	-13	-45.90	-68.42	3.92	13.44	H
	6912	-63.38	-13	-50.38	-73.59	3.03	13.24	V
	10368	-60.06	-13	-47.06	-69.51	3.56	13.01	V
	13824	-59.26	-13	-46.26	-68.78	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 (ANT0+3) open status								
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	6912	-63.10	-13	-50.10	-73.31	3.03	13.24	H
	10356	-58.04	-13	-45.04	-67.49	3.56	13.01	H
	13824	-59.50	-13	-46.50	-69.02	3.92	13.44	H
	6912	-62.96	-13	-49.96	-73.17	3.03	13.24	V
	10356	-57.29	-13	-44.29	-66.74	3.56	13.01	V
	13824	-59.47	-13	-46.47	-68.99	3.92	13.44	V

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