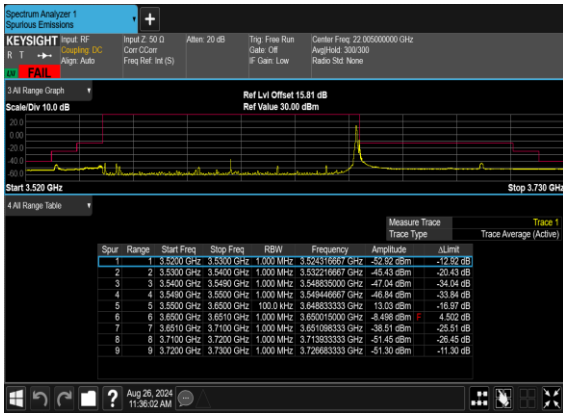
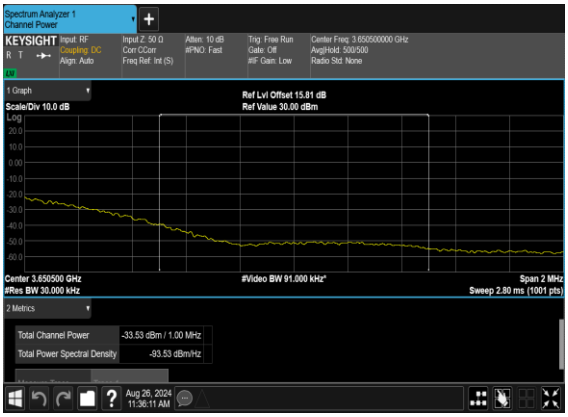
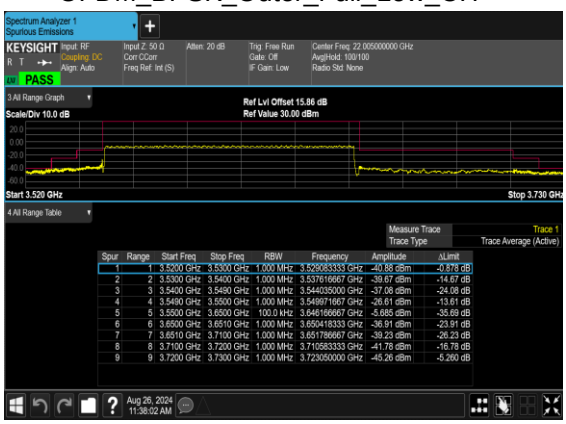
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_Low_CH



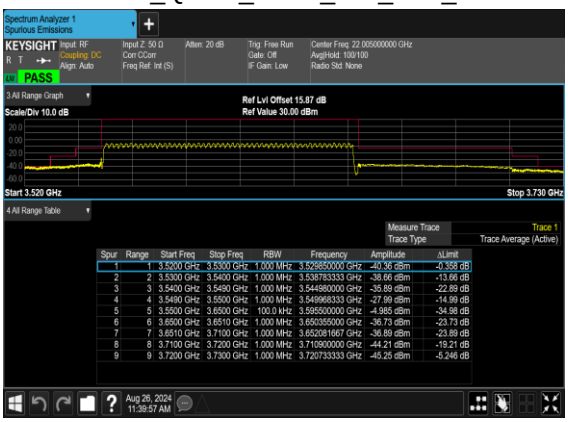
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_Low_CH_CHP_PASS



N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

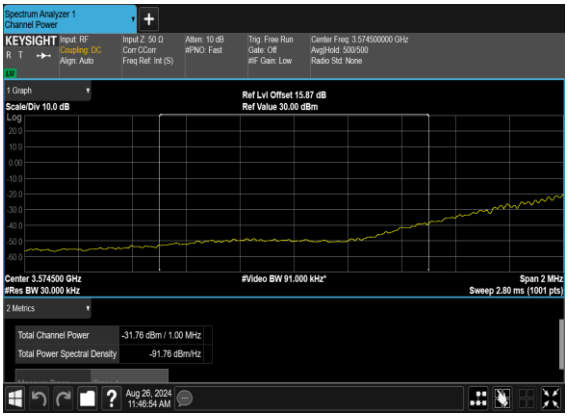


N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH

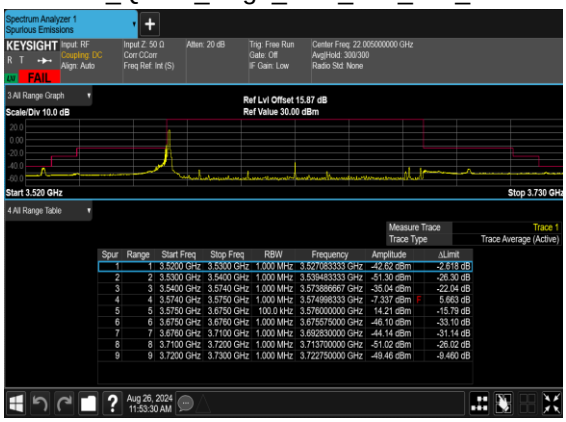


N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH

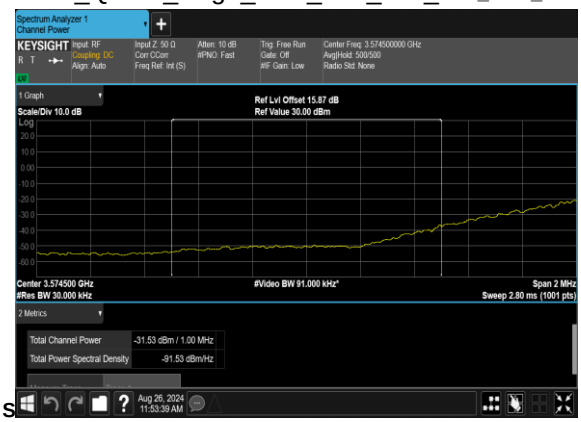
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH_CHP_PASS



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH

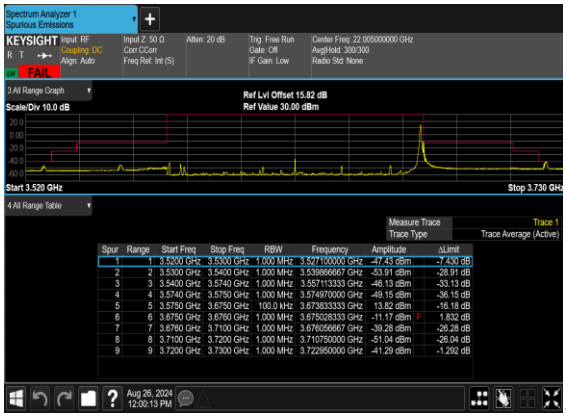


N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH_CHP_PAS

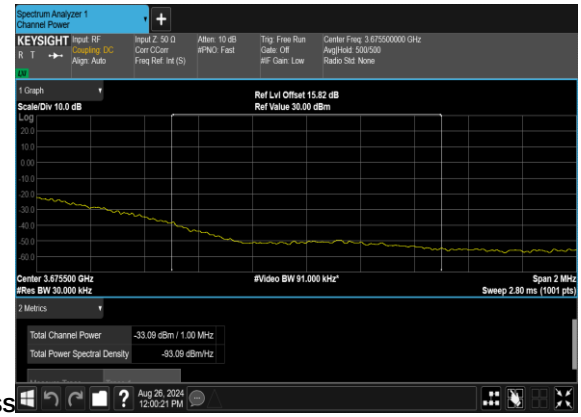


S

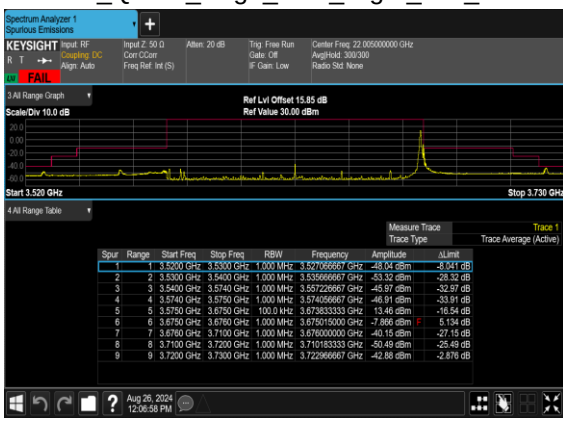
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_Mid_CH



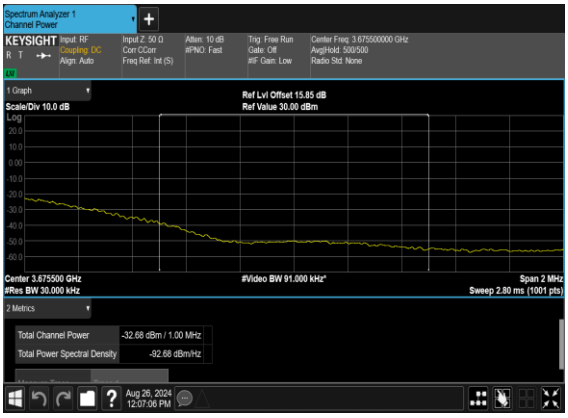
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_Mid_CH_CHP_PASS



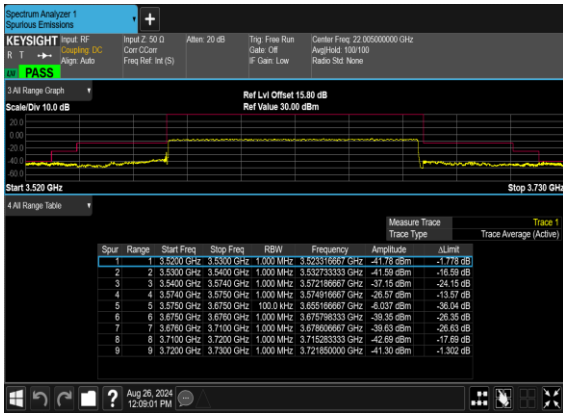
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_Mid_CH



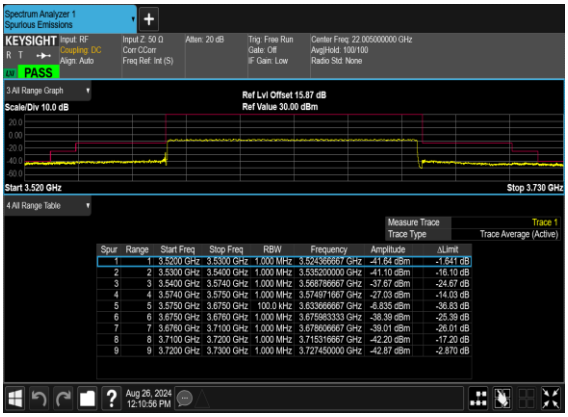
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_Mid_CH_CHP_PASS



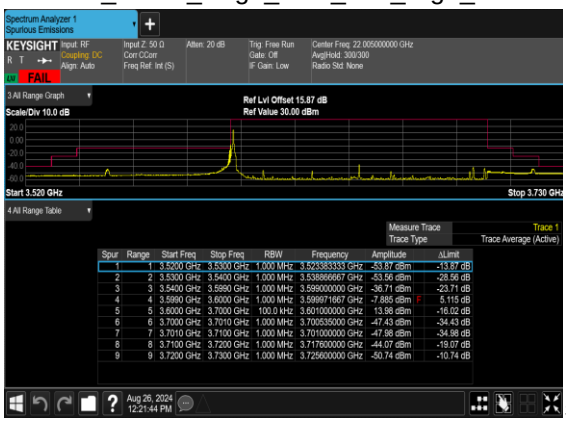
N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_Mid_CH



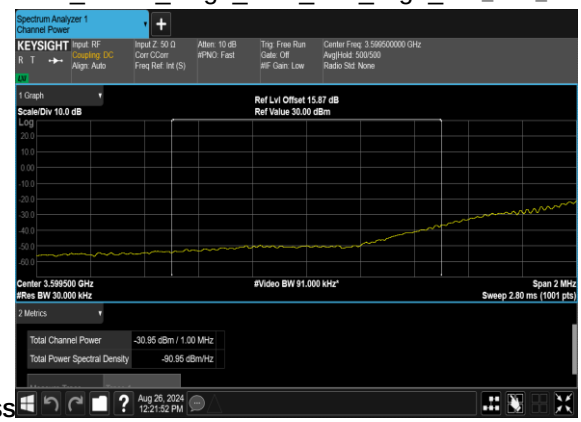
N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



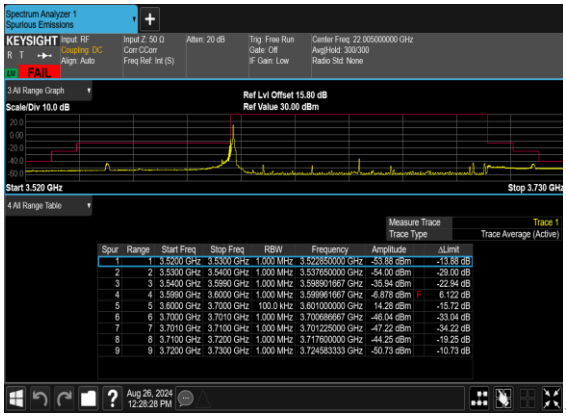
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



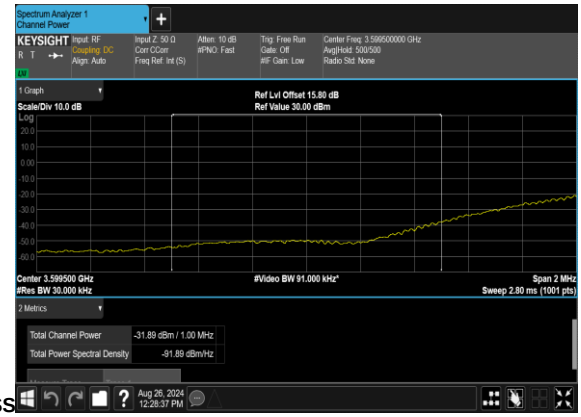
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH_CHP_PASS



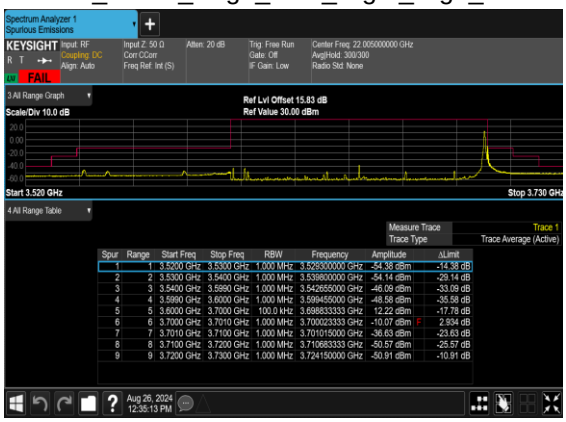
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



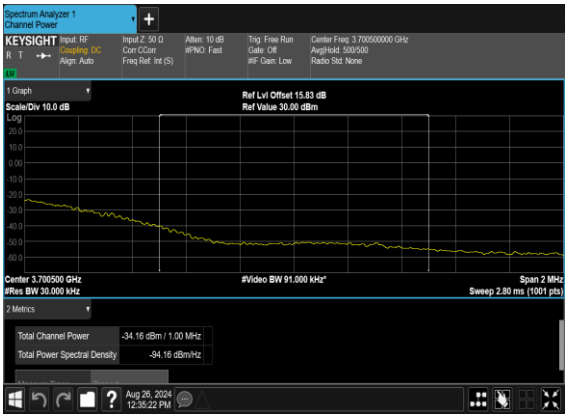
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH_CHP_PASS



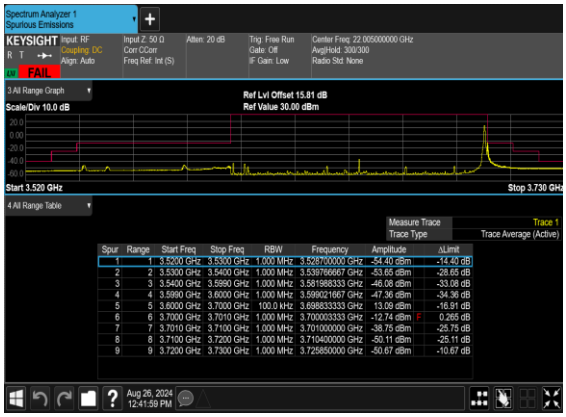
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



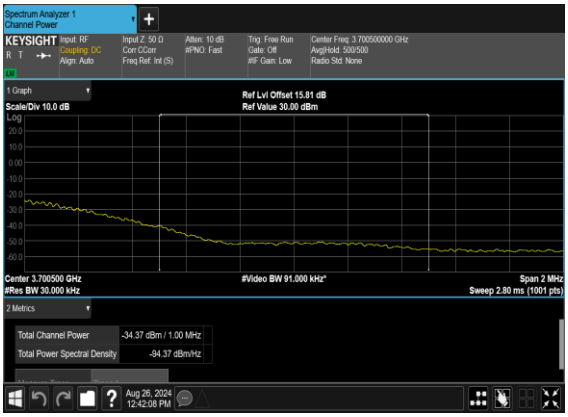
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH_CHP_PASS



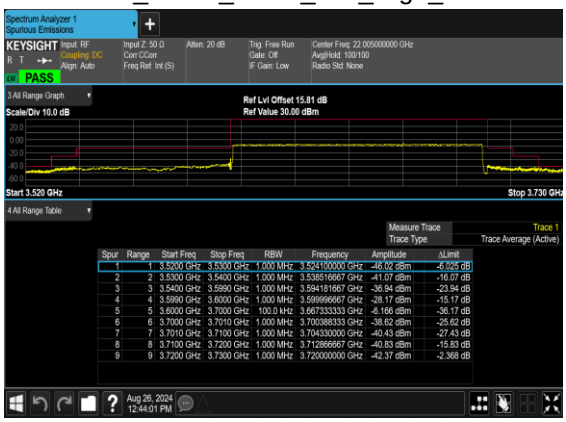
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



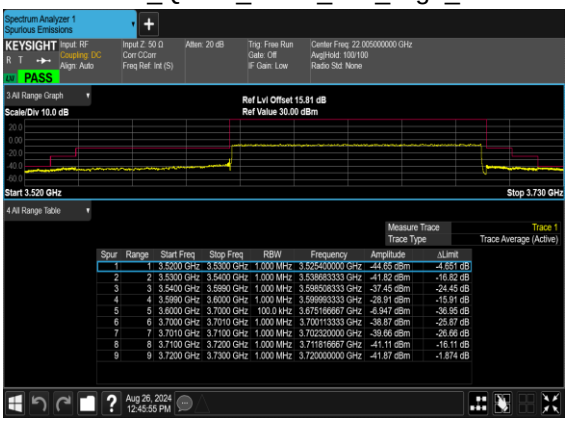
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH_CHP_PASS



N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



Software Version: 23.06.1602

FR1 N78_ANT4

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=-2.0dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
78	30	10	637000	3555	DFT-s-OFDM QPSK	1@1	23.49	21.49	0.1409
78	30	10	637000	3555	DFT-s-OFDM 16 QAM	1@1	22.56	20.56	0.1138
78	30	10	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.22	21.22	0.1324
78	30	10	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.29	20.29	0.1069
78	30	10	646332	3694.98	DFT-s-OFDM QPSK	1@1	23.02	21.02	0.1265
78	30	10	646332	3694.98	DFT-s-OFDM 16 QAM	1@1	22.18	20.18	0.1042
78	30	15	637168	3557.52	DFT-s-OFDM QPSK	1@1	23.49	21.49	0.1409
78	30	15	637168	3557.52	DFT-s-OFDM 16 QAM	1@1	22.54	20.54	0.1132
78	30	15	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.25	21.25	0.1334
78	30	15	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.26	20.26	0.1062
78	30	15	646166	3692.49	DFT-s-OFDM QPSK	1@1	23.01	21.01	0.1262
78	30	15	646166	3692.49	DFT-s-OFDM 16 QAM	1@1	22.01	20.01	0.1002
78	30	20	637334	3560.01	DFT-s-OFDM QPSK	1@1	23.51	21.51	0.1416
78	30	20	637334	3560.01	DFT-s-OFDM 16 QAM	1@1	22.52	20.52	0.1127
78	30	20	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.27	21.27	0.1340
78	30	20	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.32	20.32	0.1076
78	30	20	646000	3690	DFT-s-OFDM QPSK	1@1	22.98	20.98	0.1253
78	30	20	646000	3690	DFT-s-OFDM 16 QAM	1@1	22.03	20.03	0.1007
78	30	25	647500	3562.5	DFT-s-OFDM QPSK	1@1	23.46	21.46	0.1400
78	30	25	647500	3562.5	DFT-s-OFDM 16 QAM	1@1	22.54	20.54	0.1132
78	30	25	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.23	21.23	0.1327
78	30	25	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.29	20.29	0.1069
78	30	25	645833	3687.495	DFT-s-OFDM QPSK	1@1	22.88	20.88	0.1225
78	30	25	645833	3687.495	DFT-s-OFDM 16 QAM	1@1	22	20	0.1000
78	30	30	637668	3565.02	DFT-s-OFDM QPSK	1@1	23.51	21.51	0.1416
78	30	30	637668	3565.02	DFT-s-OFDM 16 QAM	1@1	22.54	20.54	0.1132

78	30	30	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.28	21.28	0.1343
78	30	30	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.33	20.33	0.1079
78	30	30	645666	3684.99	DFT-s-OFDM QPSK	1@1	22.89	20.89	0.1227
78	30	30	645666	3684.99	DFT-s-OFDM 16 QAM	1@1	21.96	19.96	0.0991
78	30	40	638000	3570	DFT-s-OFDM QPSK	1@1	23.53	21.53	0.1422
78	30	40	638000	3570	DFT-s-OFDM 16 QAM	1@1	22.59	20.59	0.1146
78	30	40	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.3	21.3	0.1349
78	30	40	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.33	20.33	0.1079
78	30	40	645332	3679.98	DFT-s-OFDM QPSK	1@1	22.86	20.86	0.1219
78	30	40	645332	3679.98	DFT-s-OFDM 16 QAM	1@1	22	20	0.1000
78	30	50	638334	3575.01	DFT-s-OFDM QPSK	1@1	23.5	21.5	0.1413
78	30	50	638334	3575.01	DFT-s-OFDM 16 QAM	1@1	22.6	20.6	0.1148
78	30	50	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.27	21.27	0.1340
78	30	50	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.38	20.38	0.1091
78	30	50	645000	3675	DFT-s-OFDM QPSK	1@1	22.9	20.9	0.1230
78	30	50	645000	3675	DFT-s-OFDM 16 QAM	1@1	21.97	19.97	0.0993
78	30	60	638668	3580.02	DFT-s-OFDM QPSK	1@1	23.45	21.45	0.1396
78	30	60	638668	3580.02	DFT-s-OFDM 16 QAM	1@1	22.52	20.52	0.1127
78	30	60	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.29	21.29	0.1346
78	30	60	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.35	20.35	0.1084
78	30	60	644666	3669.99	DFT-s-OFDM QPSK	1@1	23.05	21.05	0.1274
78	30	60	644666	3669.99	DFT-s-OFDM 16 QAM	1@1	22.07	20.07	0.1016
78	30	70	639000	3585	DFT-s-OFDM QPSK	1@1	23.57	21.57	0.1435
78	30	70	639000	3585	DFT-s-OFDM 16 QAM	1@1	22.61	20.61	0.1151
78	30	70	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.39	21.39	0.1377
78	30	70	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.45	20.45	0.1109
78	30	70	644332	3664.98	DFT-s-OFDM QPSK	1@1	23.24	21.24	0.1330
78	30	70	644332	3664.98	DFT-s-OFDM 16 QAM	1@1	22.3	20.3	0.1072
78	30	80	639334	3590.01	DFT-s-OFDM QPSK	1@1	23.61	21.61	0.1449
78	30	80	639334	3590.01	DFT-s-OFDM 16 QAM	1@1	22.66	20.66	0.1164
78	30	80	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.48	21.48	0.1406
78	30	80	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.56	20.56	0.1138

78	30	80	644000	3660	DFT-s-OFDM QPSK	1@1	23.35	21.35	0.1365
78	30	80	644000	3660	DFT-s-OFDM 16 QAM	1@1	22.4	20.4	0.1096
78	30	90	639668	3595.02	DFT-s-OFDM QPSK	1@1	23.6	21.6	0.1445
78	30	90	639668	3595.02	DFT-s-OFDM 16 QAM	1@1	22.67	20.67	0.1167
78	30	90	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.5	21.5	0.1413
78	30	90	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.56	20.56	0.1138
78	30	90	643666	3654.99	DFT-s-OFDM QPSK	1@1	23.42	21.42	0.1387
78	30	90	643666	3654.99	DFT-s-OFDM 16 QAM	1@1	22.48	20.48	0.1117
78	30	100	640000	3600	DFT-s-OFDM PI/2 BPSK	135@67	23.41	21.41	0.1384
78	30	100	640000	3600	DFT-s-OFDM PI/2 BPSK	1@1	23.63	21.63	0.1455
78	30	100	640000	3600	DFT-s-OFDM PI/2 BPSK	1@271	22.83	20.83	0.1211
78	30	100	640000	3600	DFT-s-OFDM QPSK	135@67	23.45	21.45	0.1396
78	30	100	640000	3600	DFT-s-OFDM QPSK	1@1	23.6	21.6	0.1445
78	30	100	640000	3600	DFT-s-OFDM QPSK	1@271	22.81	20.81	0.1205
78	30	100	640000	3600	DFT-s-OFDM 16 QAM	135@67	22.43	20.43	0.1104
78	30	100	640000	3600	DFT-s-OFDM 16 QAM	1@1	22.68	20.68	0.1169
78	30	100	640000	3600	DFT-s-OFDM 16 QAM	1@271	21.82	19.82	0.0959
78	30	100	640000	3600	DFT-s-OFDM 64 QAM	135@67	20.96	18.96	0.0787
78	30	100	640000	3600	DFT-s-OFDM 64 QAM	1@1	21.13	19.13	0.0818
78	30	100	640000	3600	DFT-s-OFDM 64 QAM	1@271	20.38	18.38	0.0689
78	30	100	640000	3600	DFT-s-OFDM 256 QAM	135@67	19	17	0.0501
78	30	100	640000	3600	DFT-s-OFDM 256 QAM	1@1	19.05	17.05	0.0507
78	30	100	640000	3600	DFT-s-OFDM 256 QAM	1@271	18.26	16.26	0.0423
78	30	100	640000	3600	CP-OFDM QPSK	137@68	21.87	19.87	0.0971
78	30	100	640000	3600	CP-OFDM QPSK	1@1	22.03	20.03	0.1007
78	30	100	640000	3600	CP-OFDM QPSK	1@271	21.26	19.26	0.0843
78	30	100	641666	3624.99	DFT-s-OFDM PI/2 BPSK	135@67	23.27	21.27	0.1340
78	30	100	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	23.55	21.55	0.1429
78	30	100	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@271	22.71	20.71	0.1178
78	30	100	641666	3624.99	DFT-s-OFDM QPSK	135@67	23.29	21.29	0.1346
78	30	100	641666	3624.99	DFT-s-OFDM QPSK	1@1	23.59	21.59	0.1442
78	30	100	641666	3624.99	DFT-s-OFDM QPSK	1@271	22.7	20.7	0.1175

78	30	100	641666	3624.99	DFT-s-OFDM 16 QAM	135@67	22.29	20.29	0.1069
78	30	100	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	22.61	20.61	0.1151
78	30	100	641666	3624.99	DFT-s-OFDM 16 QAM	1@271	21.74	19.74	0.0942
78	30	100	641666	3624.99	DFT-s-OFDM 64 QAM	135@67	20.85	18.85	0.0767
78	30	100	641666	3624.99	DFT-s-OFDM 64 QAM	1@1	21.06	19.06	0.0805
78	30	100	641666	3624.99	DFT-s-OFDM 64 QAM	1@271	20.21	18.21	0.0662
78	30	100	641666	3624.99	DFT-s-OFDM 256 QAM	135@67	18.88	16.88	0.0488
78	30	100	641666	3624.99	DFT-s-OFDM 256 QAM	1@1	19.01	17.01	0.0502
78	30	100	641666	3624.99	DFT-s-OFDM 256 QAM	1@271	18.08	16.08	0.0406
78	30	100	641666	3624.99	CP-OFDM QPSK	137@68	21.74	19.74	0.0942
78	30	100	641666	3624.99	CP-OFDM QPSK	1@1	21.98	19.98	0.0995
78	30	100	641666	3624.99	CP-OFDM QPSK	1@271	21.17	19.17	0.0826
78	30	100	643332	3649.98	DFT-s-OFDM PI/2 BPSK	135@67	23.08	21.08	0.1282
78	30	100	643332	3649.98	DFT-s-OFDM PI/2 BPSK	1@1	23.48	21.48	0.1406
78	30	100	643332	3649.98	DFT-s-OFDM PI/2 BPSK	1@271	22.89	20.89	0.1227
78	30	100	643332	3649.98	DFT-s-OFDM QPSK	135@67	23.08	21.08	0.1282
78	30	100	643332	3649.98	DFT-s-OFDM QPSK	1@1	23.47	21.47	0.1403
78	30	100	643332	3649.98	DFT-s-OFDM QPSK	1@271	22.9	20.9	0.1230
78	30	100	643332	3649.98	DFT-s-OFDM 16 QAM	135@67	22.14	20.14	0.1033
78	30	100	643332	3649.98	DFT-s-OFDM 16 QAM	1@1	22.55	20.55	0.1135
78	30	100	643332	3649.98	DFT-s-OFDM 16 QAM	1@271	21.91	19.91	0.0979
78	30	100	643332	3649.98	DFT-s-OFDM 64 QAM	135@67	20.62	18.62	0.0728
78	30	100	643332	3649.98	DFT-s-OFDM 64 QAM	1@1	21	19	0.0794
78	30	100	643332	3649.98	DFT-s-OFDM 64 QAM	1@271	20.43	18.43	0.0697
78	30	100	643332	3649.98	DFT-s-OFDM 256 QAM	135@67	18.66	16.66	0.0463
78	30	100	643332	3649.98	DFT-s-OFDM 256 QAM	1@1	18.93	16.93	0.0493
78	30	100	643332	3649.98	DFT-s-OFDM 256 QAM	1@271	18.26	16.26	0.0423
78	30	100	643332	3649.98	CP-OFDM QPSK	137@68	21.51	19.51	0.0893
78	30	100	643332	3649.98	CP-OFDM QPSK	1@1	21.87	19.87	0.0971
78	30	100	643332	3649.98	CP-OFDM QPSK	1@271	21.33	19.33	0.0857

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Zhaohui Liang	Temperature :	23~25℃
		Relative Humidity :	48~52%

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

SA n77 / 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	7152.50	-53.83	-40	-13.83	-62.23	-57.13	8.30	11.60	H
	10728.75	-54.58	-40	-14.58	-67.76	-56.10	10.48	12.00	H
	14305.00	-53.80	-40	-13.80	-69.82	-55.50	11.80	13.50	H
	7152.50	-52.96	-40	-12.96	-63	-56.26	8.30	11.60	V
	10728.75	-52.07	-40	-12.07	-67.77	-53.59	10.48	12.00	V
	14305.00	-54.44	-40	-14.44	-69.93	-56.14	11.80	13.50	V

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

EN-DC_30A_n77A / LTE 10MHz + NR 100MHz / QPSK (ANT2+4)									
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	7152.50	-52.58	-40	-12.58	-60.98	-55.88	8.30	11.60	H
	10728.75	-51.70	-40	-11.70	-64.88	-53.22	10.48	12.00	H
	14305.00	-53.63	-40	-13.63	-69.65	-55.33	11.80	13.50	H
	7152.50	-51.13	-40	-11.13	-61.17	-54.43	8.30	11.60	V
	10728.75	-51.47	-40	-11.47	-67.17	-52.99	10.48	12.00	V
	14305.00	-54.56	-40	-14.56	-70.05	-56.26	11.80	13.50	V
LTE Band30 Middle	4611.00	-61.00	-40	-21.00	-65.95	-67.25	6.45	12.70	H
	6916.50	-54.39	-40	-14.39	-61.89	-57.79	8.40	11.80	H
	9222.00	-59.02	-40	-19.02	-68.54	-61.37	9.65	12.00	H
	4611.00	-60.90	-40	-20.90	-65.98	-67.15	6.45	12.70	V
	6916.50	-54.49	-40	-14.49	-63.09	-57.89	8.40	11.80	V
	9222.00	-55.59	-40	-15.59	-67.34	-57.94	9.65	12.00	V

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