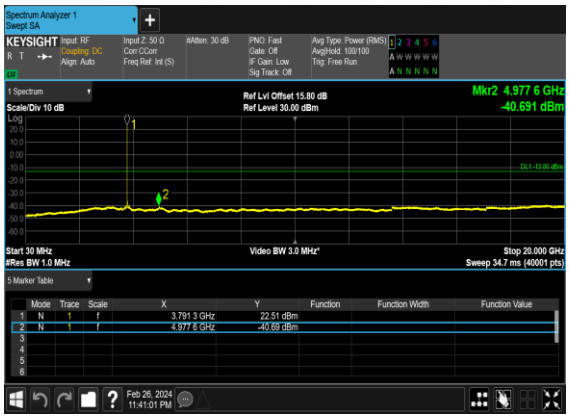
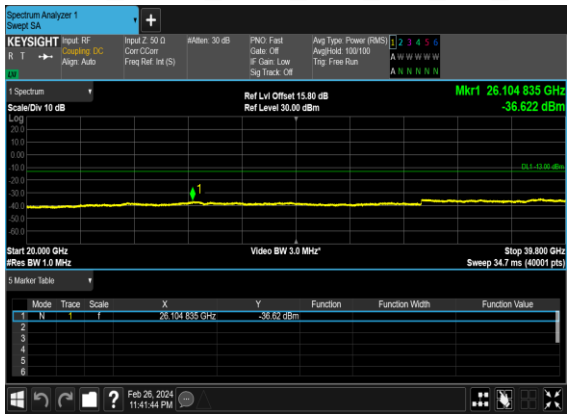
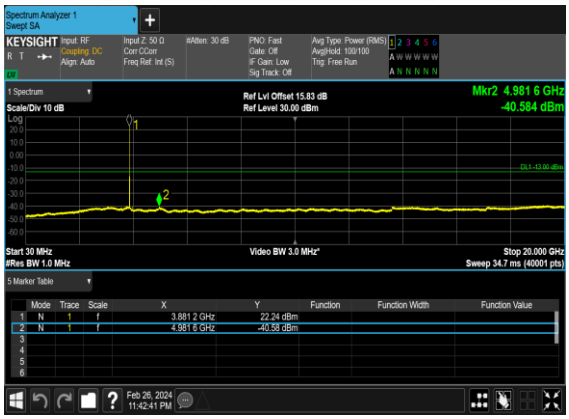
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



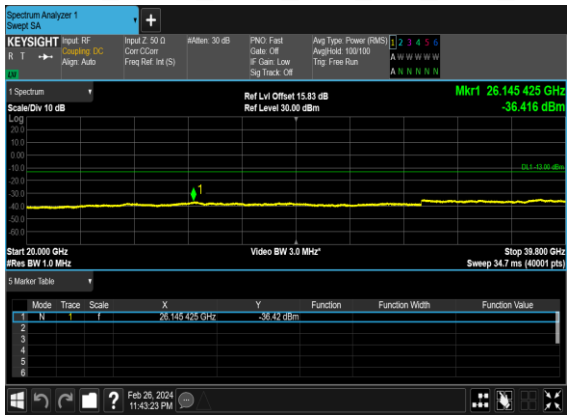
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



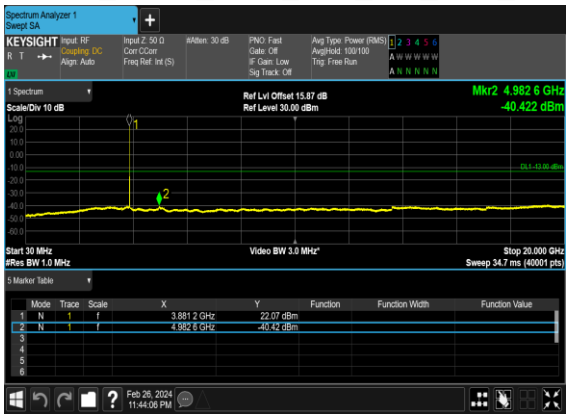
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



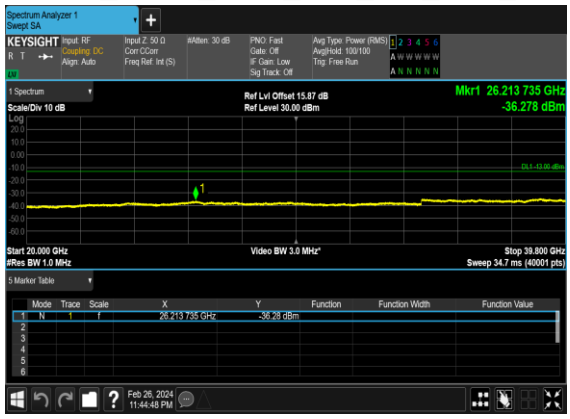
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH

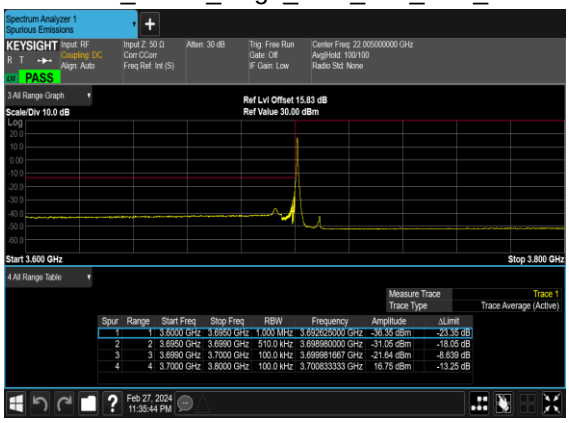


Conducted Band Edge

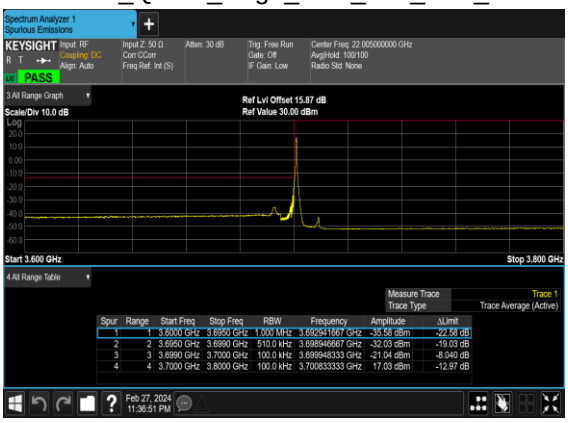
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	10	647000	3705.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	10	647000	3705.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	10	647000	3705.0	DFT-s-OFDM BPSK	24@0	see graph	**PASS**
77	30	10	647000	3705.0	DFT-s-OFDM QPSK	24@0	see graph	**PASS**
77	30	10	665000	3975.0	DFT-s-OFDM BPSK	1@23	see graph	**PASS**
77	30	10	665000	3975.0	DFT-s-OFDM QPSK	1@23	see graph	**PASS**
77	30	10	665000	3975.0	DFT-s-OFDM BPSK	24@0	see graph	**PASS**
77	30	10	665000	3975.0	DFT-s-OFDM QPSK	24@0	see graph	**PASS**
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	50	648334	3725.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	50	648334	3725.01	DFT-s-OFDM BPSK	128@0	see graph	**PASS**
77	30	50	648334	3725.01	DFT-s-OFDM QPSK	128@0	see graph	**PASS**
77	30	50	663666	3954.99	DFT-s-OFDM BPSK	1@132	see graph	**PASS**
77	30	50	663666	3954.99	DFT-s-OFDM QPSK	1@132	see graph	**PASS**

77	30	50	663666	3954.99	DFT-s-OFDM BPSK	128@0	see graph	**PASS**
77	30	50	663666	3954.99	DFT-s-OFDM QPSK	128@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**

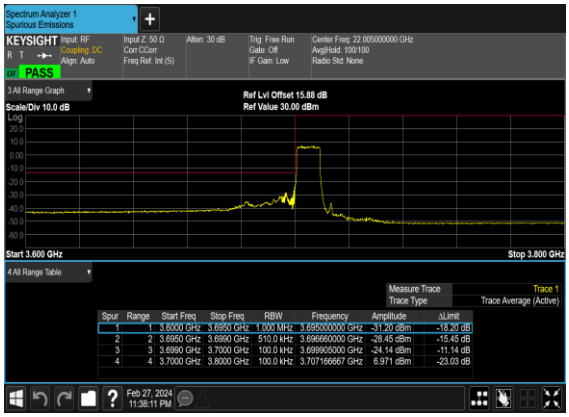
N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



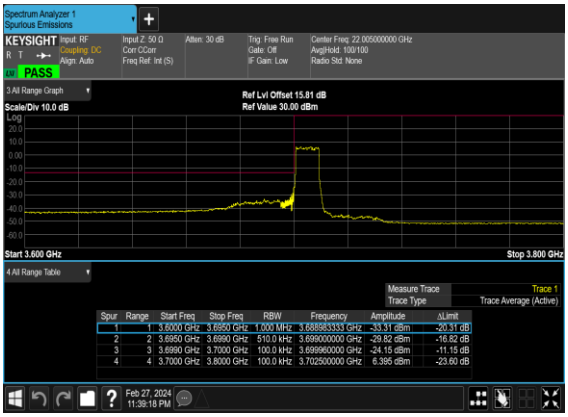
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



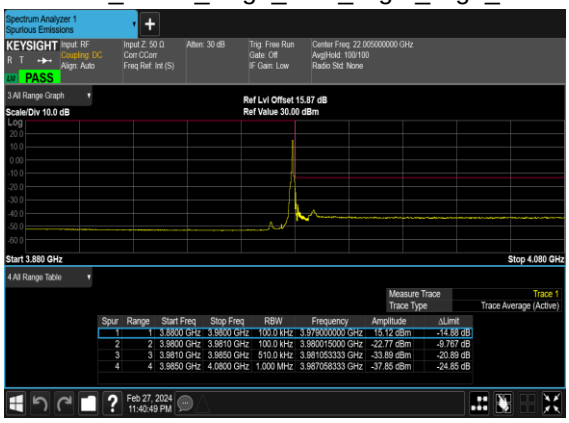
N77(10M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



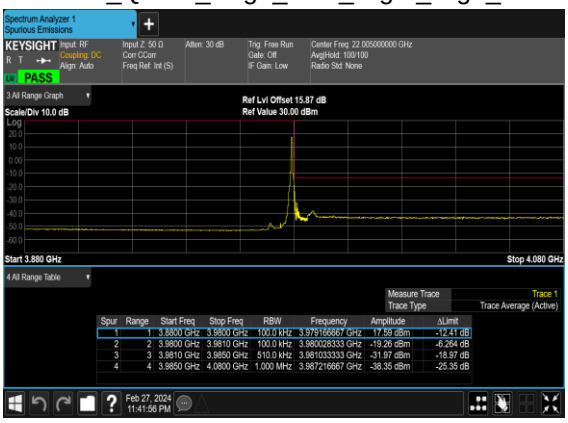
N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



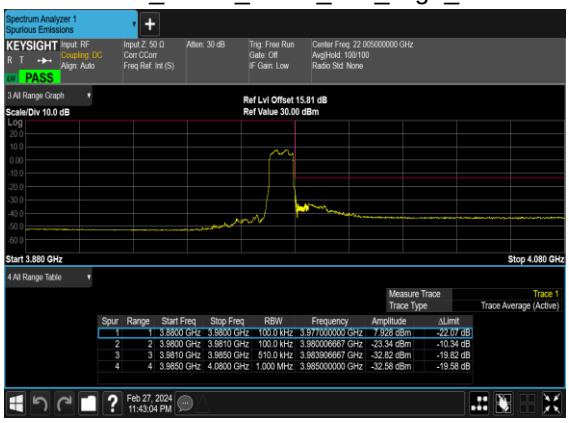
N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



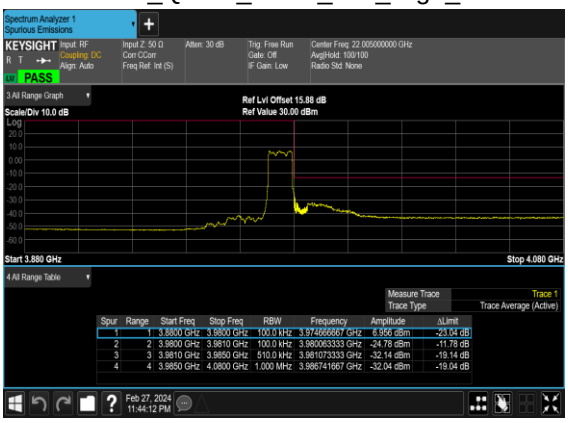
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



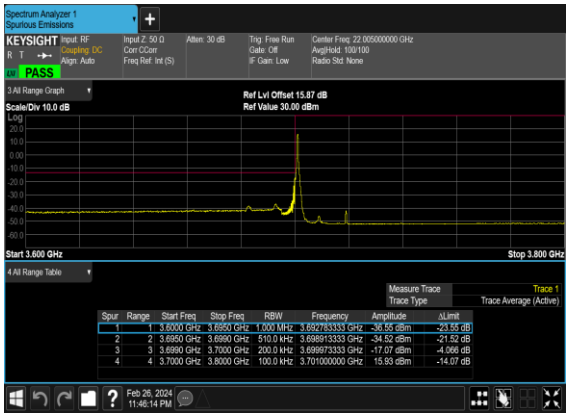
N77(10M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



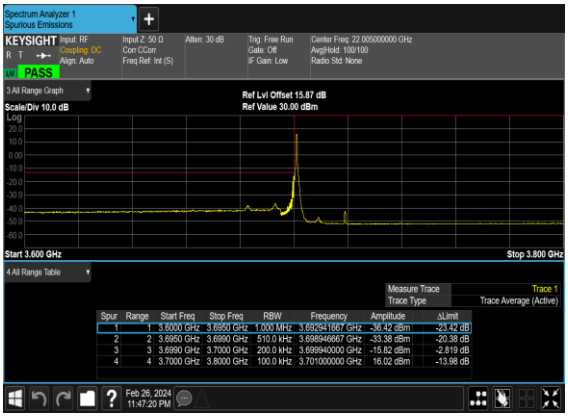
N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



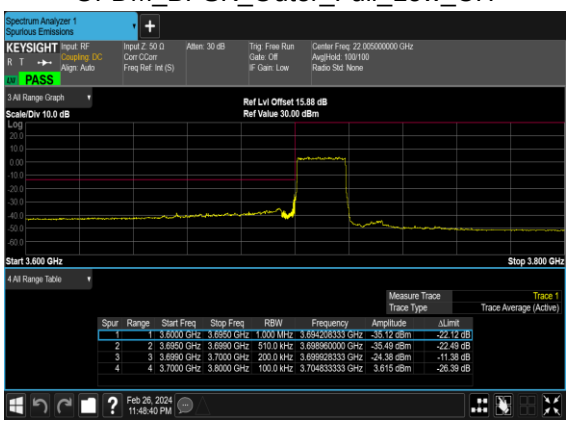
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



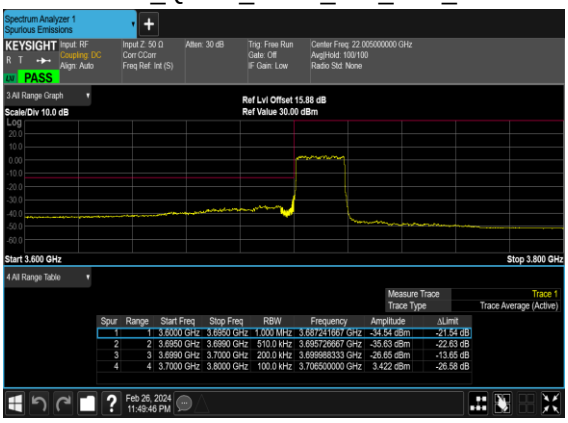
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



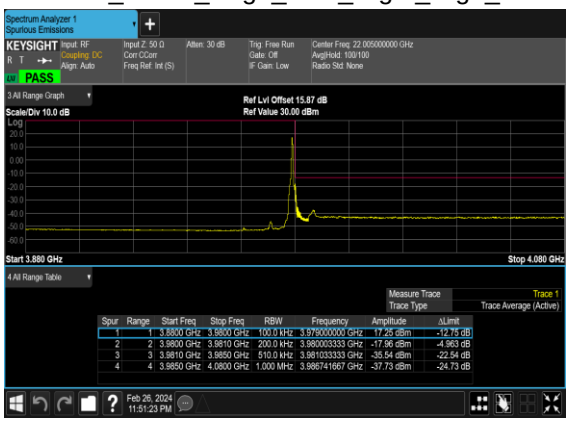
N77(20M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



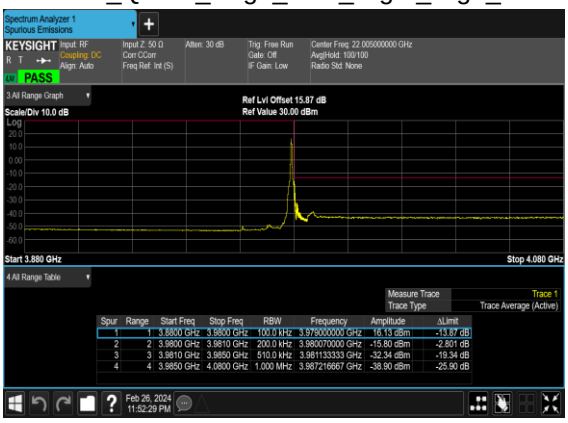
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



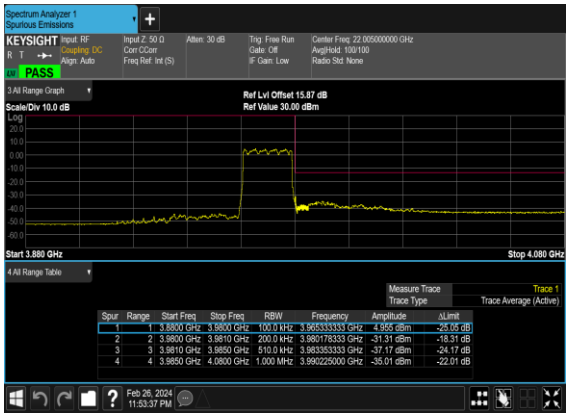
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH

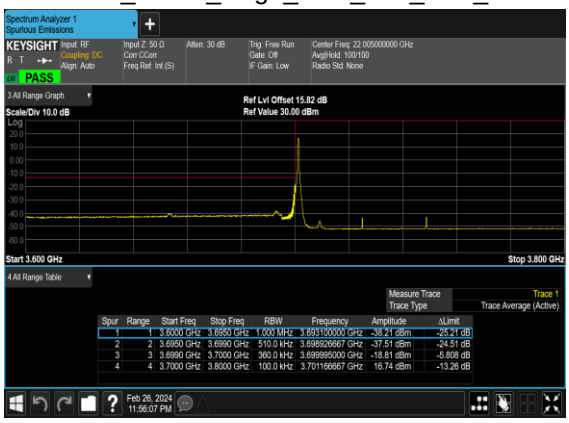


N77(20M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

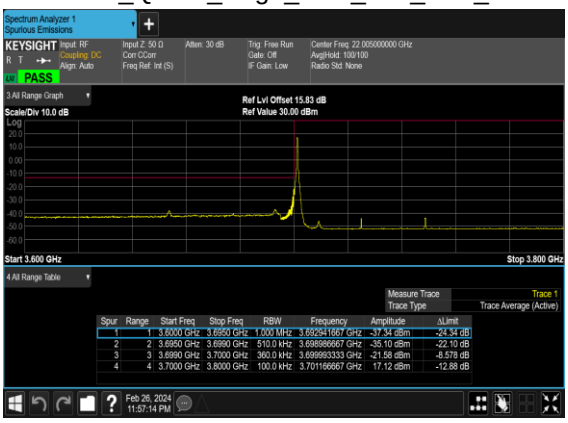


N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH

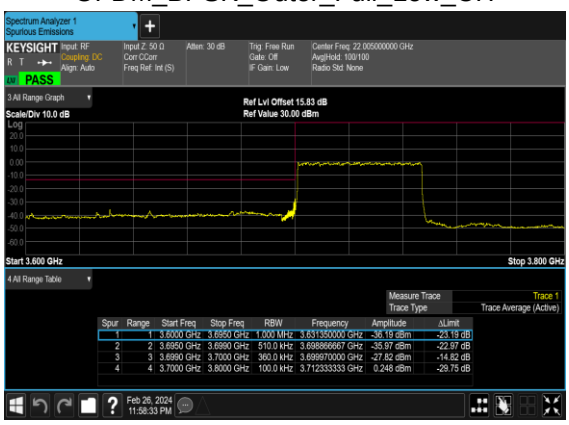
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



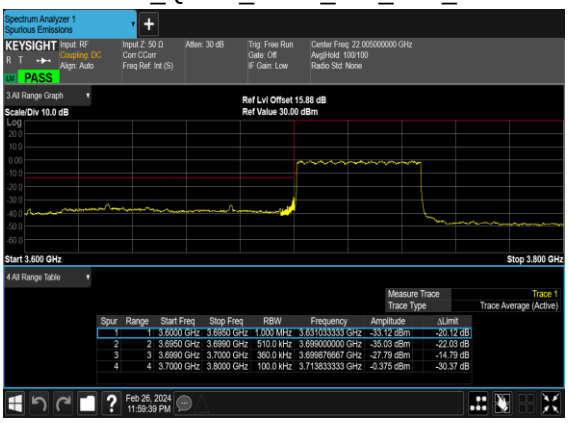
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



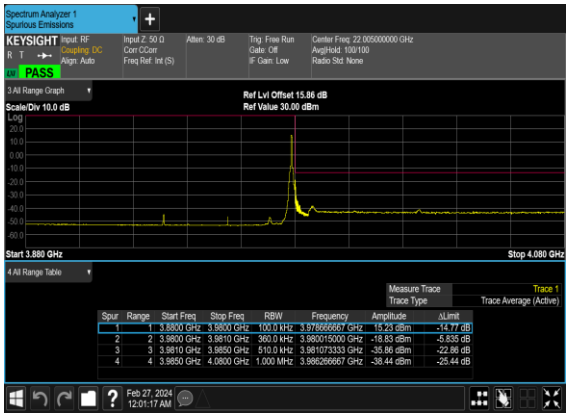
N77(50M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



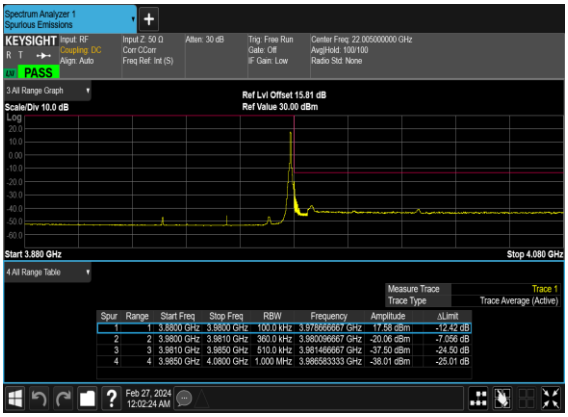
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



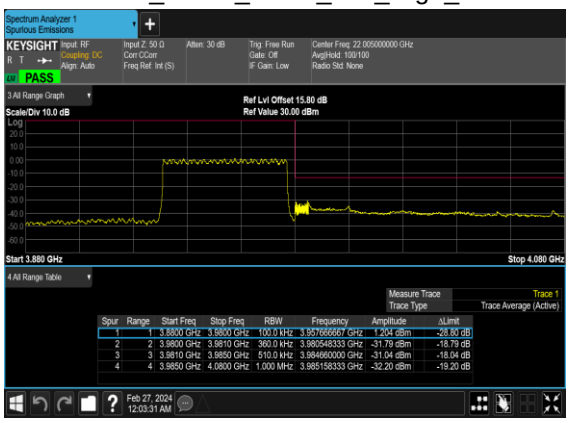
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



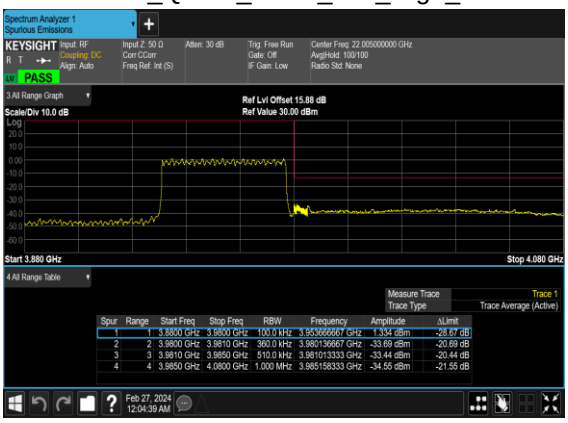
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



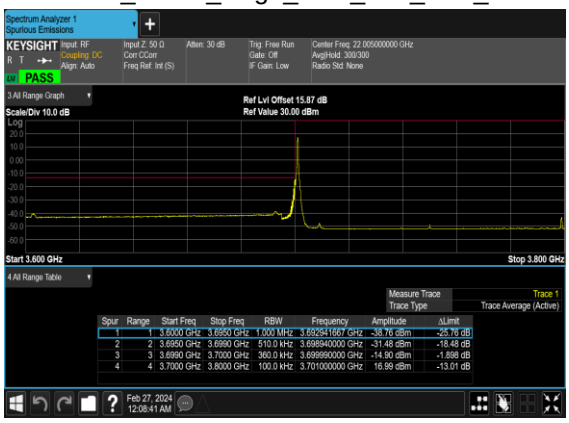
N77(50M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



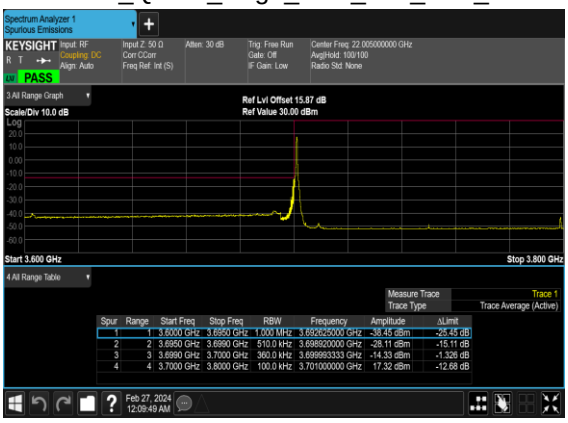
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



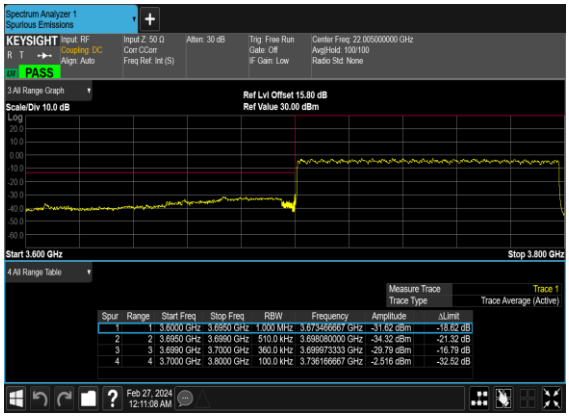
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



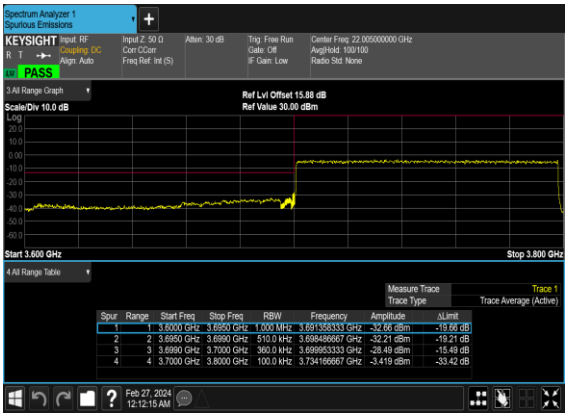
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



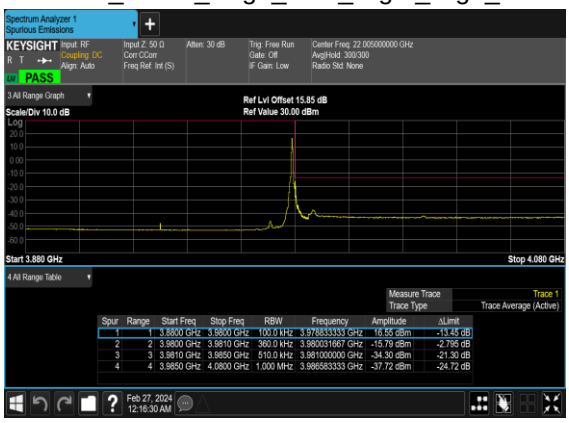
N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



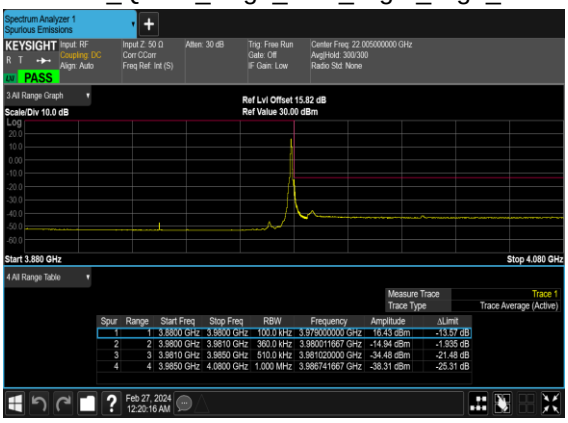
N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



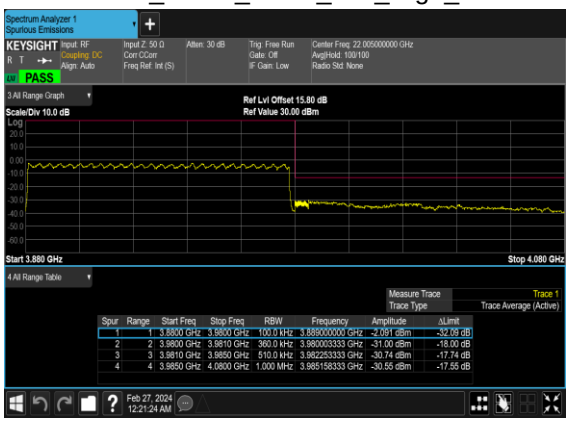
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



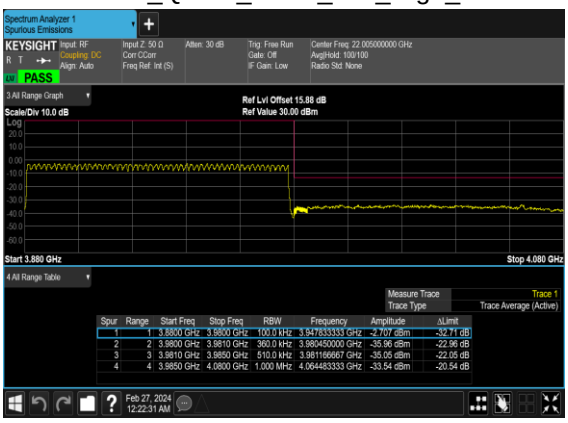
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



Software Version: 23.06.1602

FR1 N78 (Ant 6)

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=-0.3dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
78	30	10	647000	3705	DFT-s-OFDM QPSK	1@1	26.61	26.31	0.4276
78	30	10	647000	3705	DFT-s-OFDM 16 QAM	1@1	25.65	25.35	0.3428
78	30	10	650000	3750	DFT-s-OFDM QPSK	1@1	26.82	26.52	0.4487
78	30	10	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.84	25.54	0.3581
78	30	10	653000	3795	DFT-s-OFDM QPSK	1@1	27.18	26.88	0.4875
78	30	10	653000	3795	DFT-s-OFDM 16 QAM	1@1	26.19	25.89	0.3882
78	30	15	647168	3707.52	DFT-s-OFDM QPSK	1@1	26.65	26.35	0.4315
78	30	15	647168	3707.52	DFT-s-OFDM 16 QAM	1@1	25.69	25.39	0.3459
78	30	15	650000	3750	DFT-s-OFDM QPSK	1@1	26.72	26.42	0.4385
78	30	15	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.78	25.48	0.3532
78	30	15	652832	3792.48	DFT-s-OFDM QPSK	1@1	26.93	26.63	0.4603
78	30	15	652832	3792.48	DFT-s-OFDM 16 QAM	1@1	26.09	25.79	0.3793
78	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@1	26.58	26.28	0.4246
78	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@1	25.63	25.33	0.3412
78	30	20	650000	3750	DFT-s-OFDM QPSK	1@1	26.62	26.32	0.4285
78	30	20	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.67	25.37	0.3443
78	30	20	652666	3789.99	DFT-s-OFDM QPSK	1@1	27.03	26.73	0.4710
78	30	20	652666	3789.99	DFT-s-OFDM 16 QAM	1@1	25.93	25.63	0.3656
78	30	25	647500	3712.5	DFT-s-OFDM QPSK	1@1	26.62	26.32	0.4285
78	30	25	647500	3712.5	DFT-s-OFDM 16 QAM	1@1	25.62	25.32	0.3404
78	30	25	650000	3750	DFT-s-OFDM QPSK	1@1	26.77	26.47	0.4436
78	30	25	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.74	25.44	0.3499
78	30	25	652500	3787.5	DFT-s-OFDM QPSK	1@1	27.09	26.79	0.4775
78	30	25	652500	3787.5	DFT-s-OFDM 16 QAM	1@1	26.26	25.96	0.3945
78	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@1	26.67	26.37	0.4335
78	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@1	25.73	25.43	0.3491
78	30	30	650000	3750	DFT-s-OFDM QPSK	1@1	26.81	26.51	0.4477
78	30	30	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.83	25.53	0.3573
78	30	30	652332	3784.98	DFT-s-OFDM QPSK	1@1	27.01	26.71	0.4688

78	30	30	652332	3784.98	DFT-s-OFDM 16 QAM	1@1	26.12	25.82	0.3819
78	30	40	648000	3720	DFT-s-OFDM QPSK	1@1	26.67	26.37	0.4335
78	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@1	25.57	25.27	0.3365
78	30	40	650000	3750	DFT-s-OFDM QPSK	1@1	26.77	26.47	0.4436
78	30	40	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.79	25.49	0.3540
78	30	40	652000	3780	DFT-s-OFDM QPSK	1@1	27.01	26.71	0.4688
78	30	40	652000	3780	DFT-s-OFDM 16 QAM	1@1	26.06	25.76	0.3767
78	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@1	26.8	26.5	0.4467
78	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@1	25.74	25.44	0.3499
78	30	50	650000	3750	DFT-s-OFDM QPSK	1@1	26.92	26.62	0.4592
78	30	50	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.89	25.59	0.3622
78	30	50	651666	3774.99	DFT-s-OFDM QPSK	1@1	27.07	26.77	0.4753
78	30	50	651666	3774.99	DFT-s-OFDM 16 QAM	1@1	26.11	25.81	0.3811
78	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@1	26.6	26.3	0.4266
78	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	25.52	25.22	0.3327
78	30	60	650000	3750	DFT-s-OFDM QPSK	1@1	26.74	26.44	0.4406
78	30	60	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.72	25.42	0.3483
78	30	60	651332	3769.98	DFT-s-OFDM QPSK	1@1	26.95	26.65	0.4624
78	30	60	651332	3769.98	DFT-s-OFDM 16 QAM	1@1	25.92	25.62	0.3648
78	30	70	649000	3735	DFT-s-OFDM QPSK	1@1	26.67	26.37	0.4335
78	30	70	649000	3735	DFT-s-OFDM 16 QAM	1@1	25.82	25.52	0.3565
78	30	70	650000	3750	DFT-s-OFDM QPSK	1@1	26.83	26.53	0.4498
78	30	70	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.67	25.37	0.3443
78	30	70	651000	3765	DFT-s-OFDM QPSK	1@1	26.96	26.66	0.4634
78	30	70	651000	3765	DFT-s-OFDM 16 QAM	1@1	26.01	25.71	0.3724
78	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	26.76	26.46	0.4426
78	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	25.74	25.44	0.3499
78	30	80	650000	3750	DFT-s-OFDM QPSK	1@1	26.73	26.43	0.4395
78	30	80	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.74	25.44	0.3499
78	30	80	650666	3759.99	DFT-s-OFDM QPSK	1@1	26.96	26.66	0.4634
78	30	80	650666	3759.99	DFT-s-OFDM 16 QAM	1@1	25.97	25.67	0.3690
78	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@1	26.79	26.49	0.4457
78	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@1	25.8	25.5	0.3548
78	30	90	650000	3750	DFT-s-OFDM QPSK	1@1	26.82	26.52	0.4487
78	30	90	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.75	25.45	0.3508

78	30	90	650332	3754.98	DFT-s-OFDM QPSK	1@1	26.91	26.61	0.4581
78	30	90	650332	3754.98	DFT-s-OFDM 16 QAM	1@1	25.82	25.52	0.3565
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	135@67	26.77	26.47	0.4436
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.83	26.53	0.4498
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@271	27.21	26.91	0.4909
78	30	100	650000	3750	DFT-s-OFDM QPSK	135@67	26.64	26.34	0.4305
78	30	100	650000	3750	DFT-s-OFDM QPSK	1@1	26.7	26.4	0.4365
78	30	100	650000	3750	DFT-s-OFDM QPSK	1@271	27.2	26.9	0.4898
78	30	100	650000	3750	DFT-s-OFDM 16 QAM	135@67	25.63	25.33	0.3412
78	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.7	25.4	0.3467
78	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@271	26.23	25.93	0.3917
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	135@67	24.23	23.93	0.2472
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@1	23.98	23.68	0.2333
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@271	24.48	24.18	0.2618
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	135@67	22.23	21.93	0.1560
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@1	21.99	21.69	0.1476
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@271	22.45	22.15	0.1641
78	30	100	650000	3750	CP-OFDM QPSK	137@68	25.01	24.71	0.2958
78	30	100	650000	3750	CP-OFDM QPSK	1@1	25.22	24.92	0.3105
78	30	100	650000	3750	CP-OFDM QPSK	1@271	25.69	25.39	0.3459

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Carl Ni	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.

n77 SA / NR 100MHz / QPSK(ANT7)								
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	7594	-64.92	-13	-51.92	-75.13	3.03	13.24	H
	11378	-62.03	-13	-49.03	-71.48	3.56	13.01	H
	15184	-61.37	-13	-48.37	-70.89	3.92	13.44	H
	7594	-64.42	-13	-51.42	-74.63	3.03	13.24	V
	11378	-52.90	-13	-39.90	-62.35	3.56	13.01	V
	15184	-61.35	-13	-48.35	-70.87	3.92	13.44	V

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

n78 SA / NR 100MHz / QPSK(ANT7)								
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	7407	-59.52	-13	-46.52	-69.73	3.03	13.24	H
	11103	-58.54	-13	-45.54	-67.99	3.56	13.01	H
	14821	-58.61	-13	-45.61	-68.13	3.92	13.44	H
	7407	-55.41	-13	-42.41	-65.62	3.03	13.24	V
	11103	-49.28	-13	-36.28	-58.73	3.56	13.01	V
	14821	-58.15	-13	-45.15	-67.67	3.92	13.44	V

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

EN-DC_2A_n78A / LTE 10MHz + NR 100MHz / QPSK(ANT2+7)								
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	7407	-54.47	-13	-41.47	-64.68	3.03	13.24	H
	11103	-58.46	-13	-45.46	-67.91	3.56	13.01	H
	14821	-58.63	-13	-45.63	-68.15	3.92	13.44	H
	7407	-57.15	-13	-44.15	-67.36	3.03	13.24	V
	11103	-53.10	-13	-40.10	-62.55	3.56	13.01	V
	14821	-58.81	-13	-45.81	-68.33	3.92	13.44	V

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

EN-DC_5A_n78A / LTE 10MHz + NR 100MHz / QPSK(ANT0+7)								
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	7407	-55.55	-13	-42.55	-65.76	3.03	13.24	H
	11103	-57.84	-13	-44.84	-67.29	3.56	13.01	H
	14821	-58.58	-13	-45.58	-68.10	3.92	13.44	H
	7407	-58.11	-13	-45.11	-68.32	3.03	13.24	V
	11103	-53.75	-13	-40.75	-63.20	3.56	13.01	V
	14821	-58.87	-13	-45.87	-68.39	3.92	13.44	V

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

EN-DC_7A_n78A / LTE 10MHz + NR 100MHz / QPSK(ANT4+7)								
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	7407	-53.02	-13	-40.02	-63.23	3.03	13.24	H
	11103	-59.23	-13	-46.23	-68.68	3.56	13.01	H
	14821	-58.95	-13	-45.95	-68.47	3.92	13.44	H
	7407	-57.50	-13	-44.50	-67.71	3.03	13.24	V
	11103	-52.85	-13	-39.85	-62.30	3.56	13.01	V
	14821	-58.84	-13	-45.84	-68.36	3.92	13.44	V

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

EN-DC_38A_n78A / LTE 10MHz + NR 100MHz / QPSK(ANT4+7)								
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	7407	-52.92	-13	-39.92	-63.13	3.03	13.24	H
	11103	-57.80	-13	-44.80	-67.25	3.56	13.01	H
	14821	-58.23	-13	-45.23	-67.75	3.92	13.44	H
	7407	-55.73	-13	-42.73	-65.94	3.03	13.24	V
	11103	-50.39	-13	-37.39	-59.84	3.56	13.01	V
	14821	-58.57	-13	-45.57	-68.09	3.92	13.44	V

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

EN-DC_41A_n78A / LTE 10MHz + NR 100MHz / QPSK(ANT4+7)								
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	7407	-53.25	-13	-40.25	-63.46	3.03	13.24	H
	11103	-57.44	-13	-44.44	-66.89	3.56	13.01	H
	14821	-58.96	-13	-45.96	-68.48	3.92	13.44	H
	7407	-56.98	-13	-43.98	-67.19	3.03	13.24	V
	11103	-50.09	-13	-37.09	-59.54	3.56	13.01	V
	14821	-58.65	-13	-45.65	-68.17	3.92	13.44	V

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