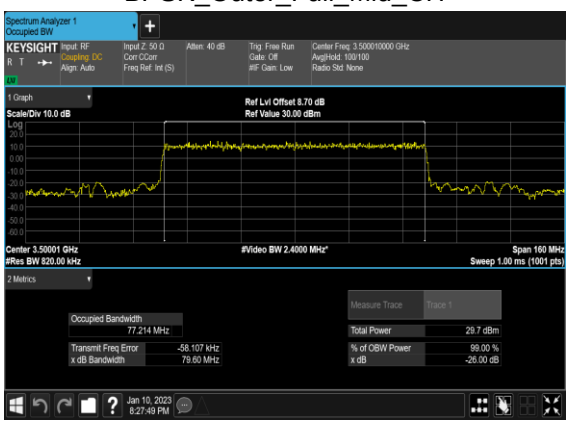
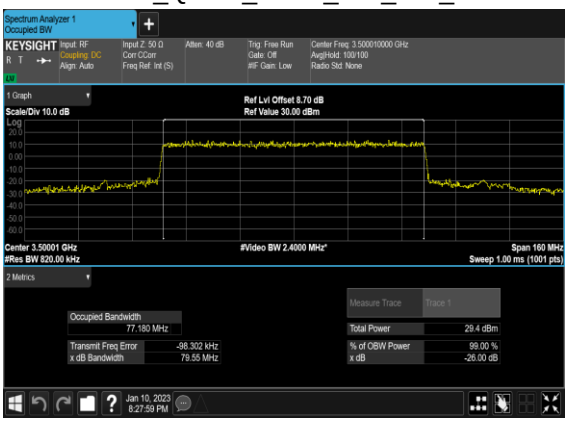
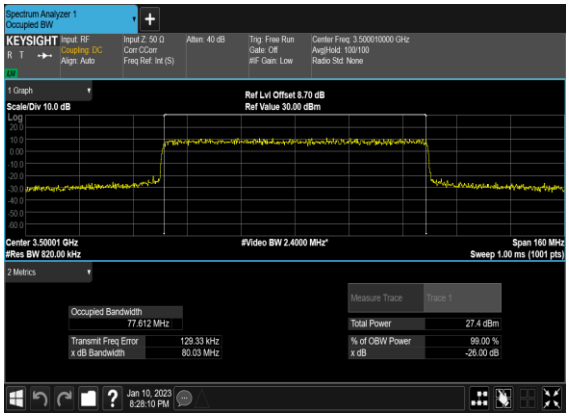
N77(80M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



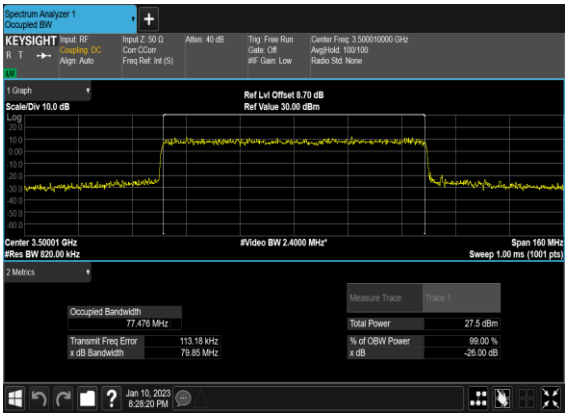
N77(80M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



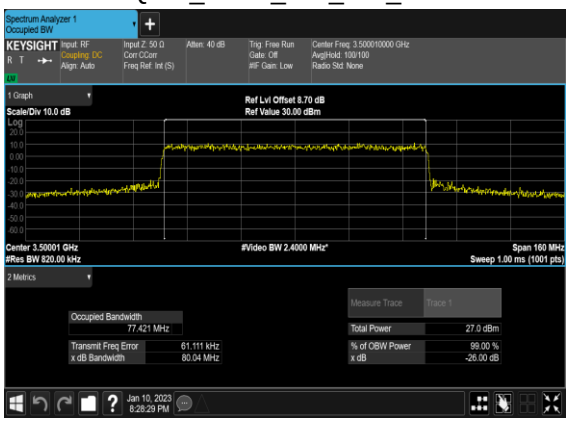
N77(80M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



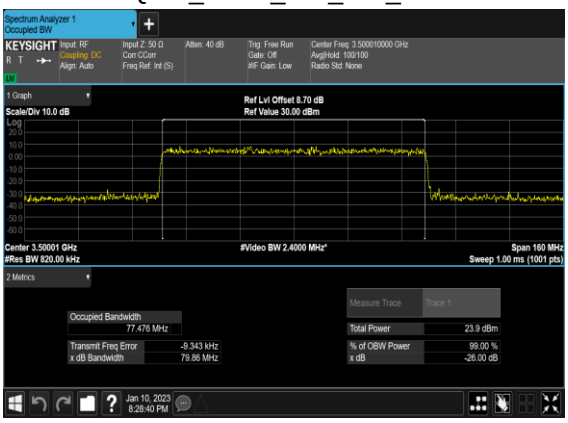
N77(80M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



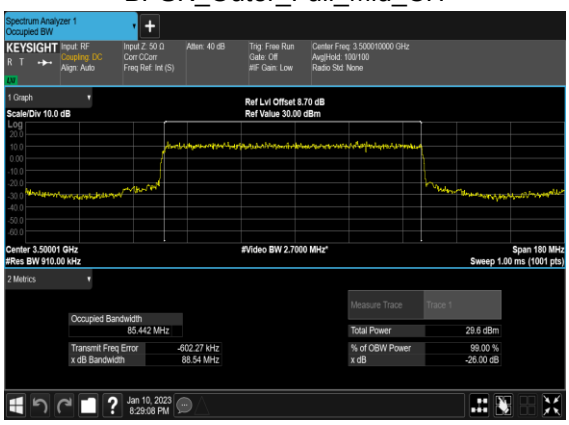
N77(80M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



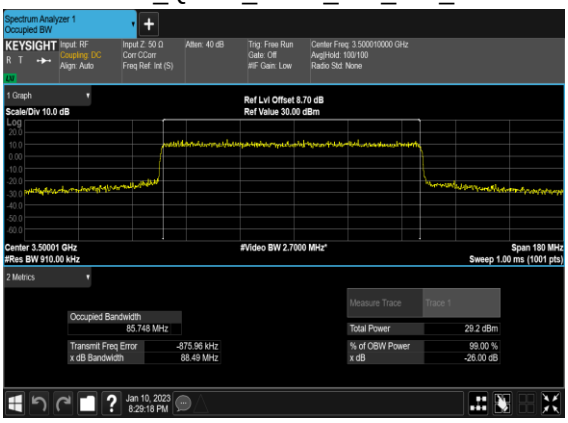
N77(80M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



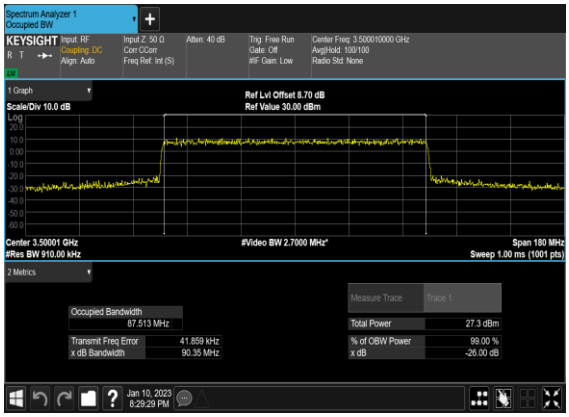
N77(90M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



N77(90M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



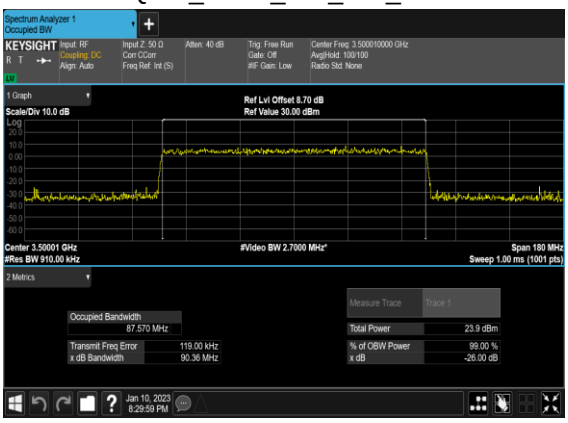
N77(90M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



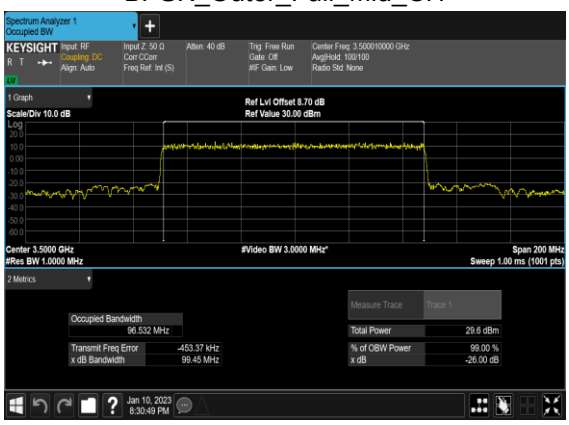
N77(90M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

N77(90M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

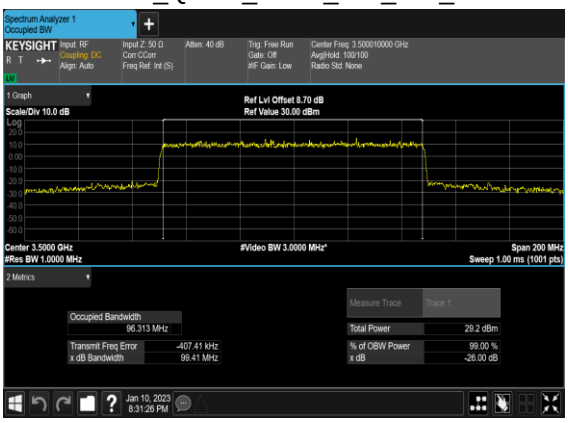
N77(90M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



N77(100M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

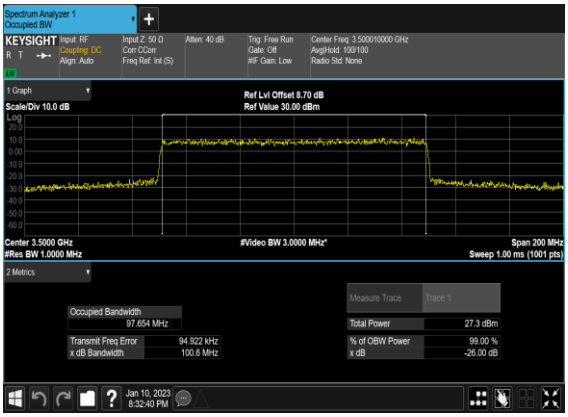


N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

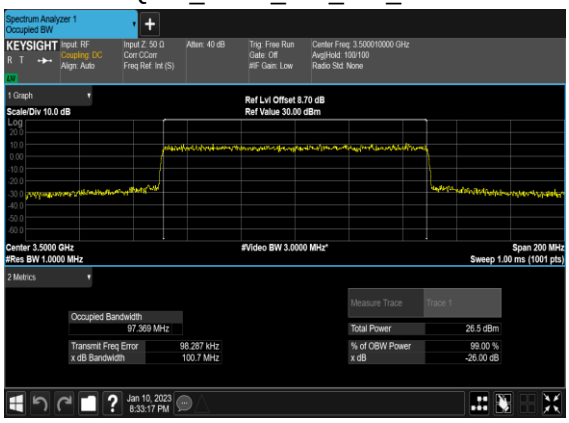


N77(100M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

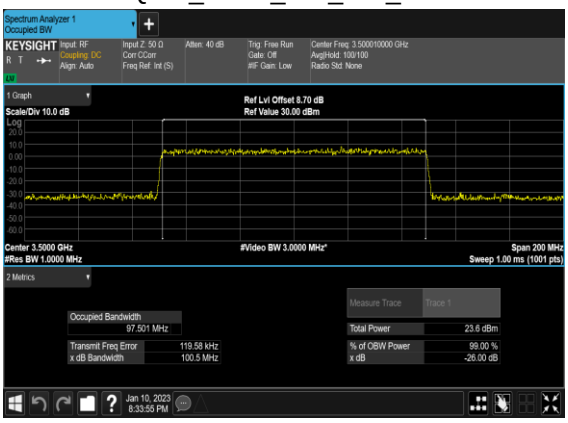
N77(100M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N77(100M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N77(100M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



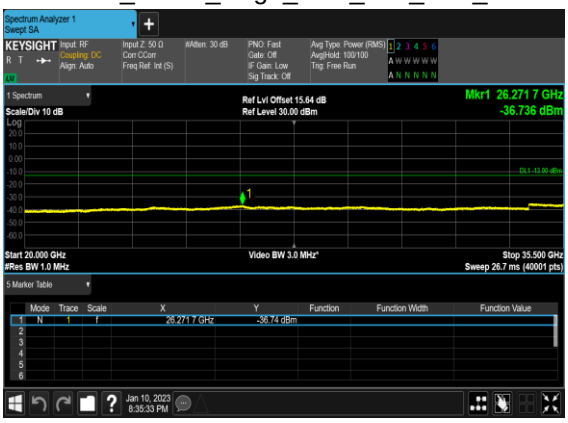
Conducted Spurious Emissions

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	**---**
77	30	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
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	**---**
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	1@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	**---**

77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@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	**---**
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

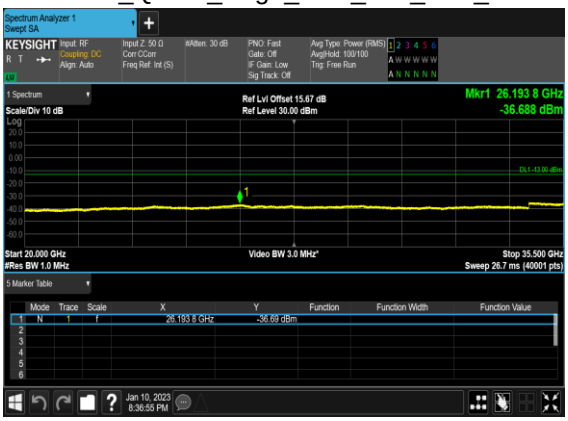
N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

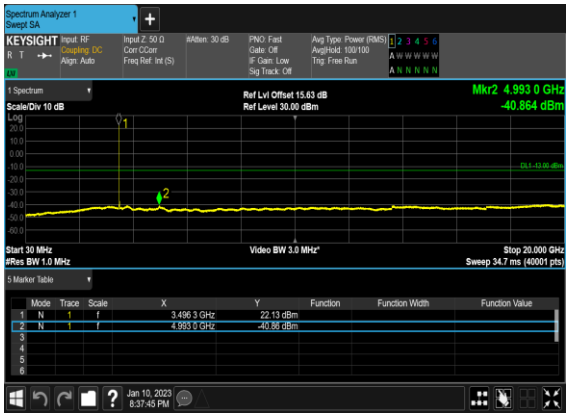


N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

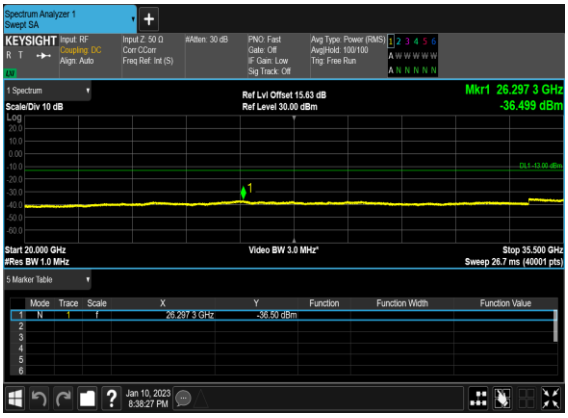
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH

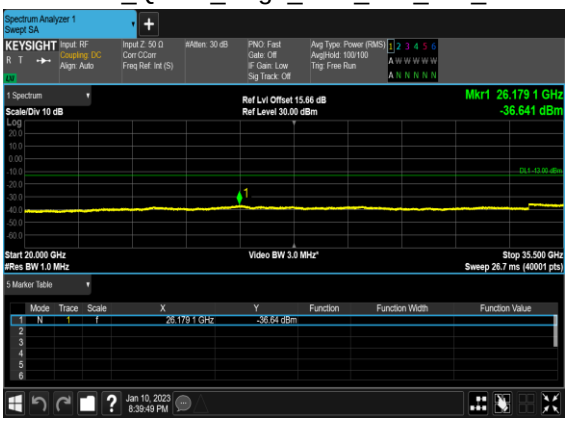


N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



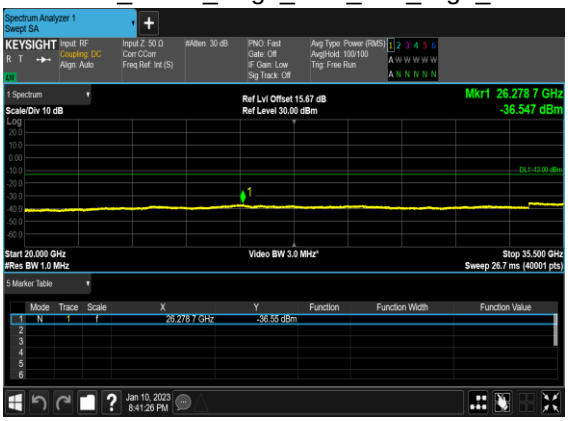
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH

N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH

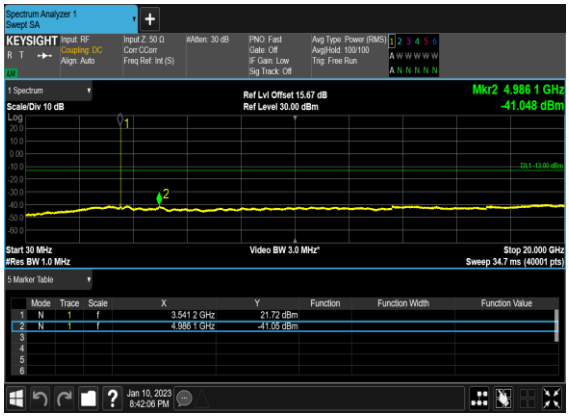


N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH

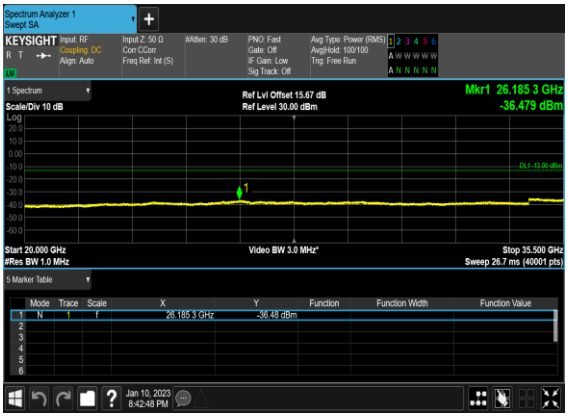
N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH

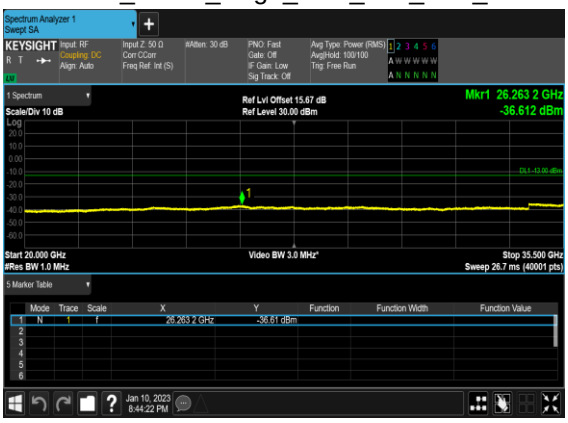


N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



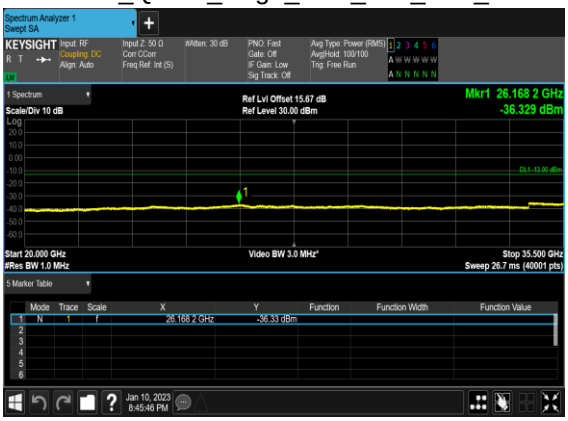
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

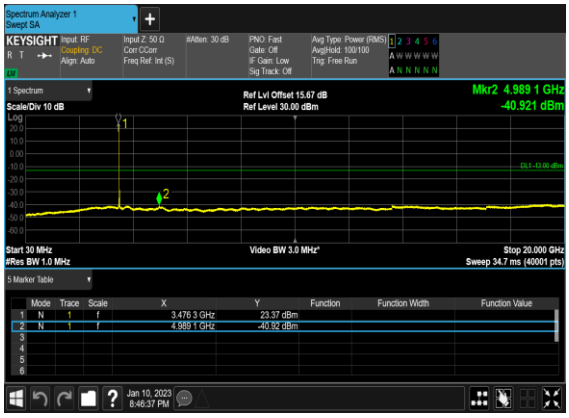


N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

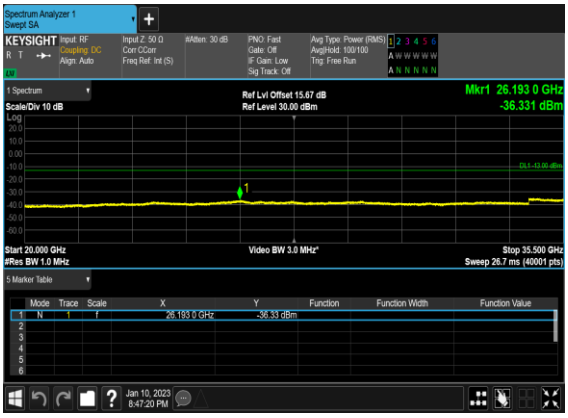
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH

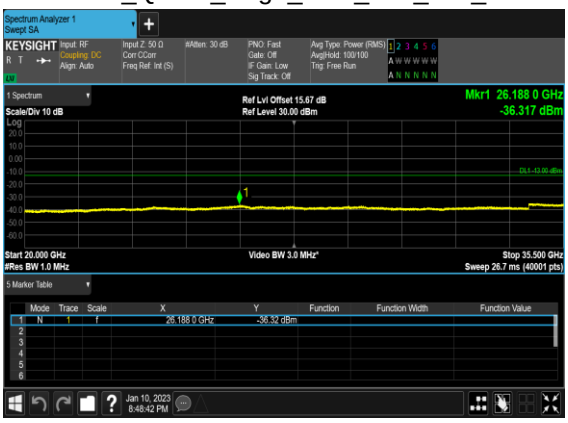


N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



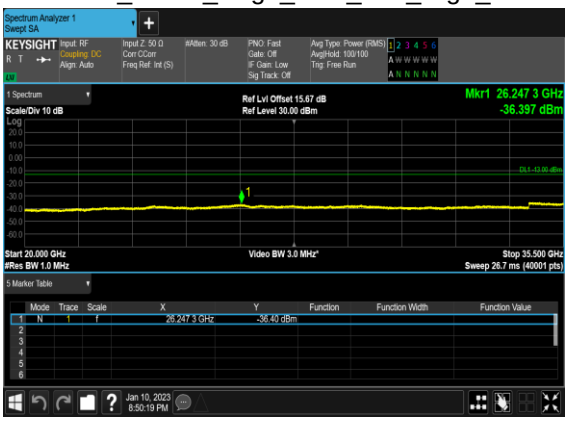
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH

N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH

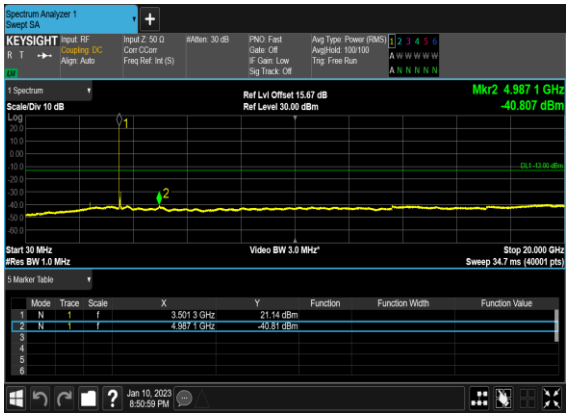


N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH

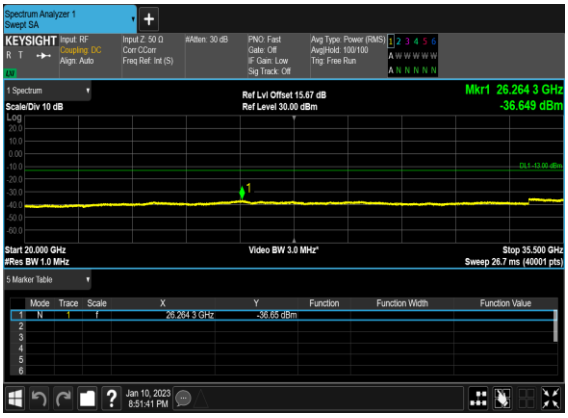
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH

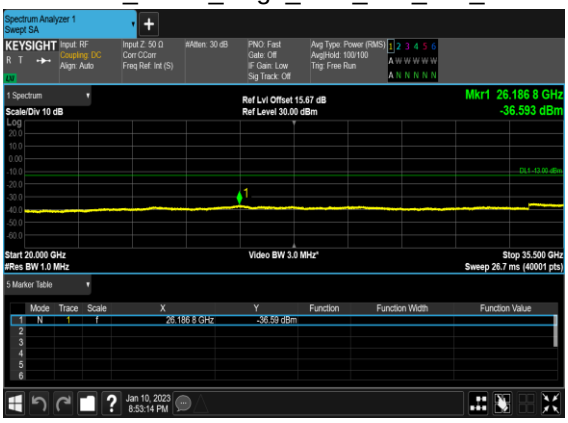


N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



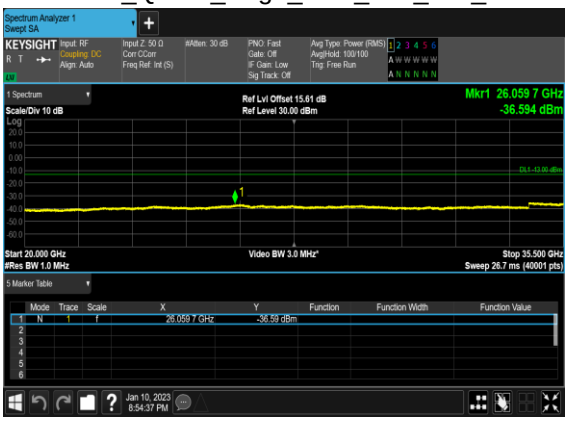
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH

N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH

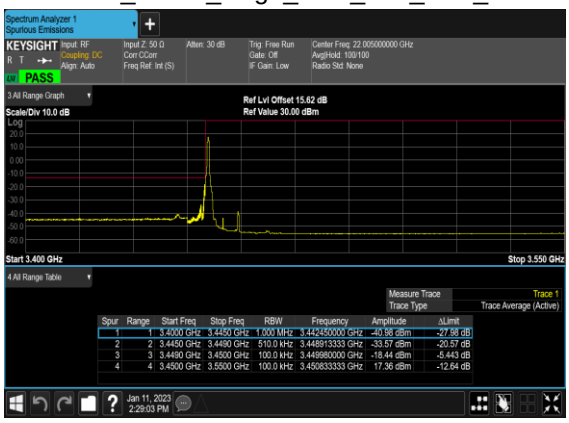
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



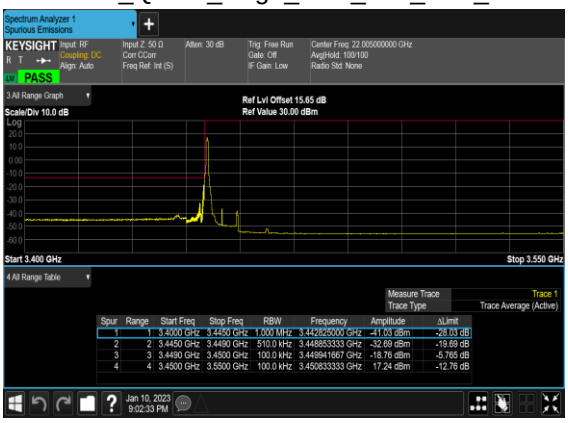
Conducted Band Edge

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**

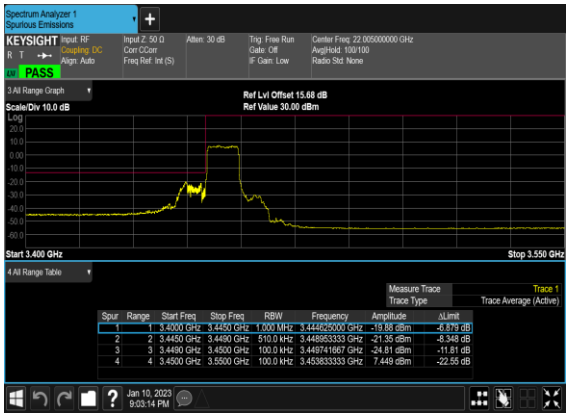
N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

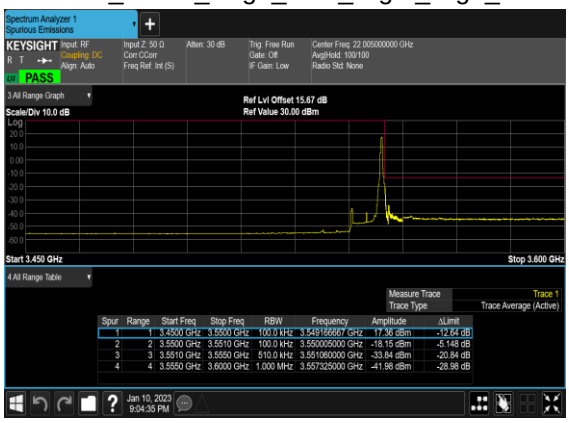


N77(10M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

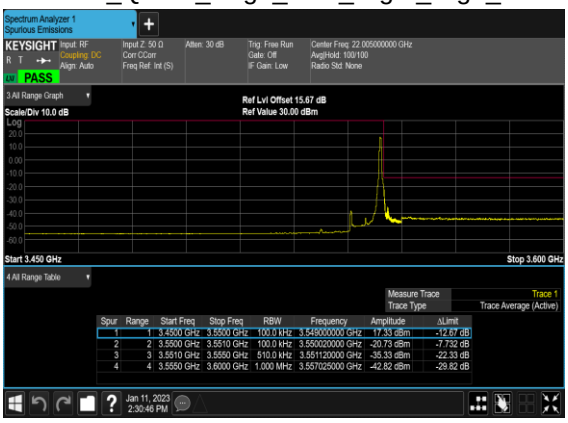


N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH

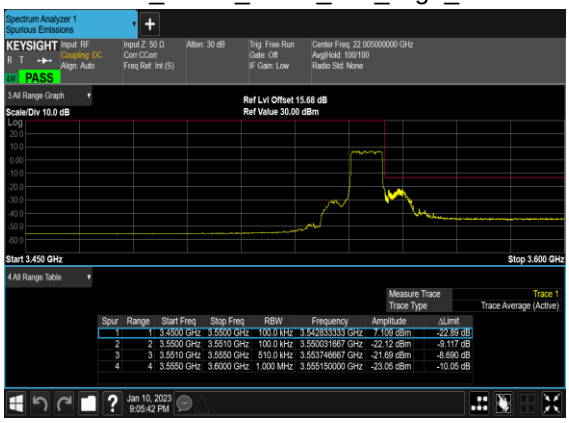
N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



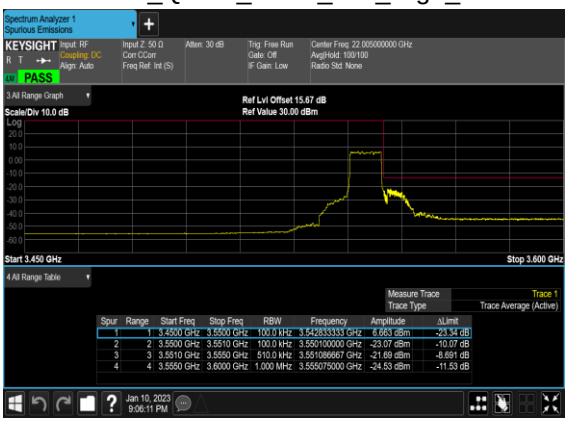
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



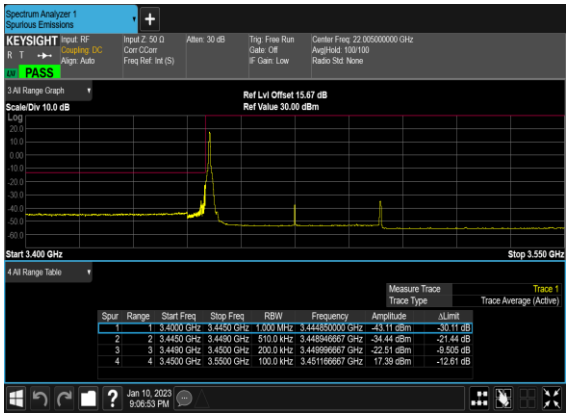
N77(10M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



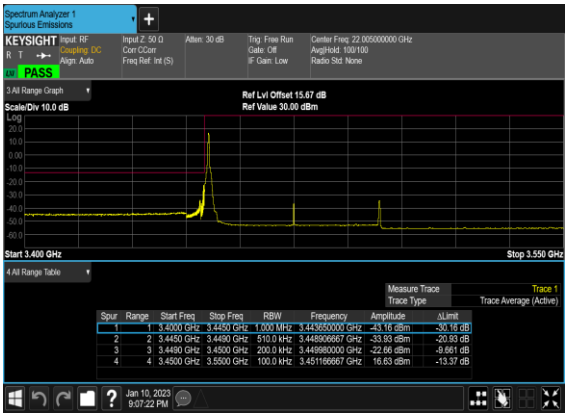
N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



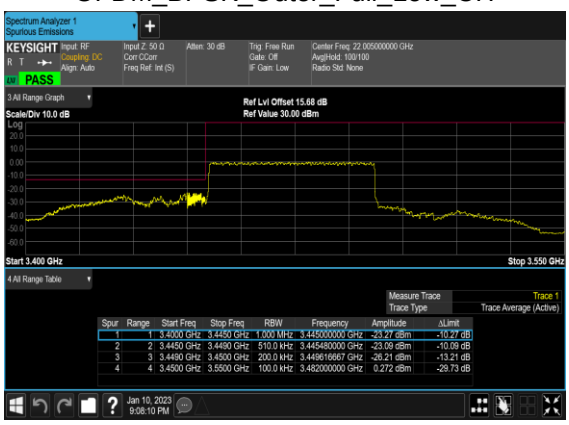
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



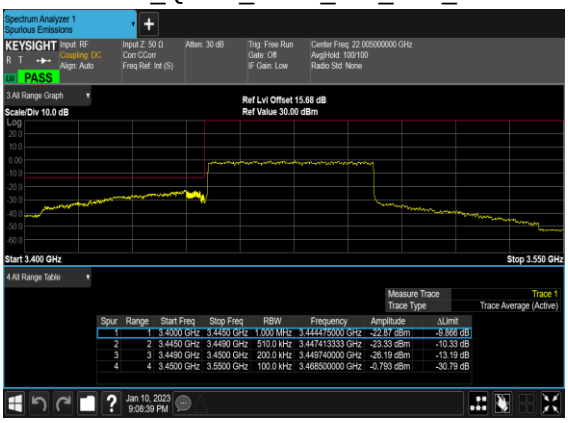
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



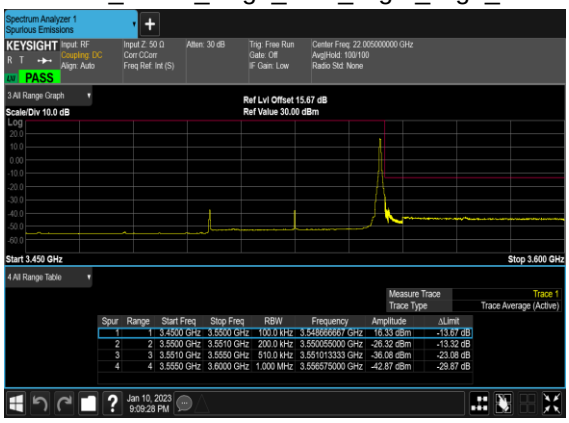
N77(50M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



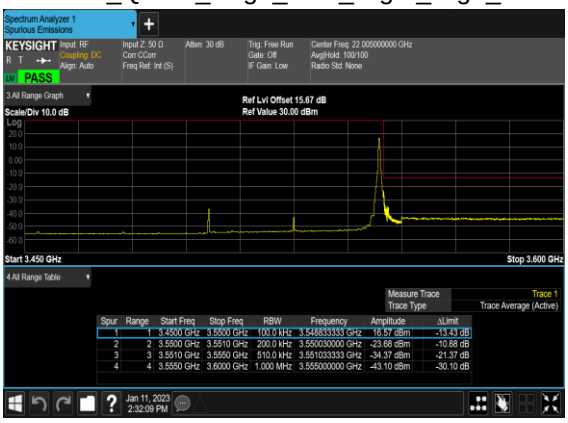
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

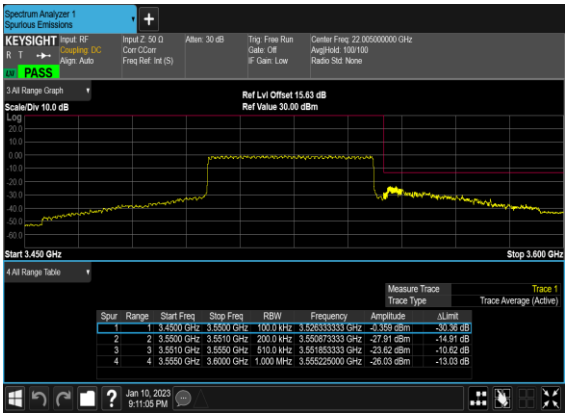


N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



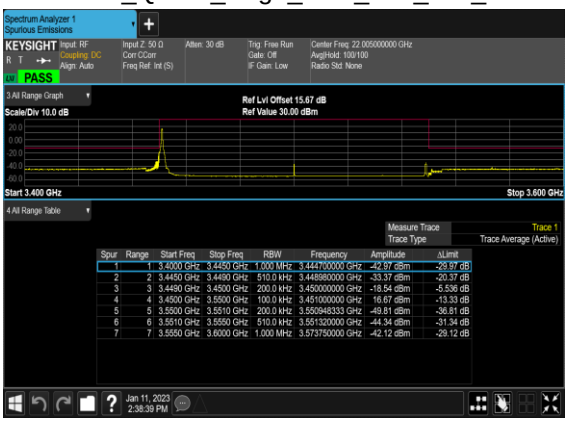
N77(50M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH

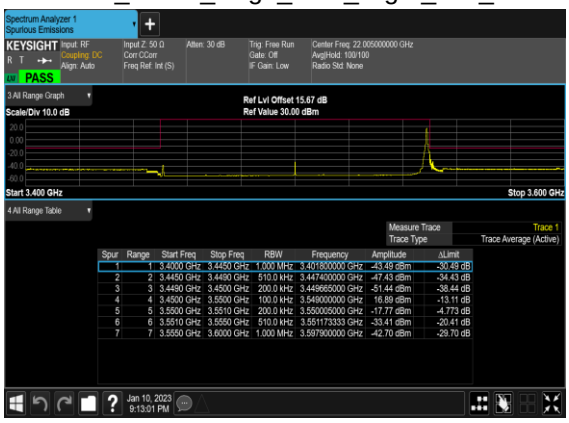


N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH

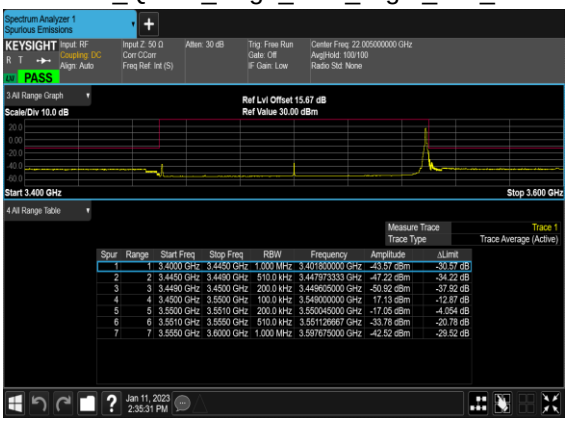
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



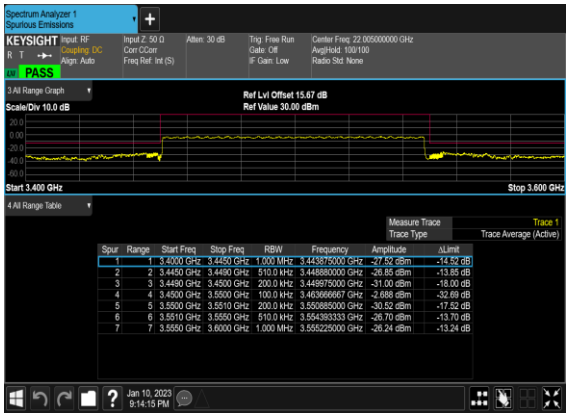
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_Mid_CH



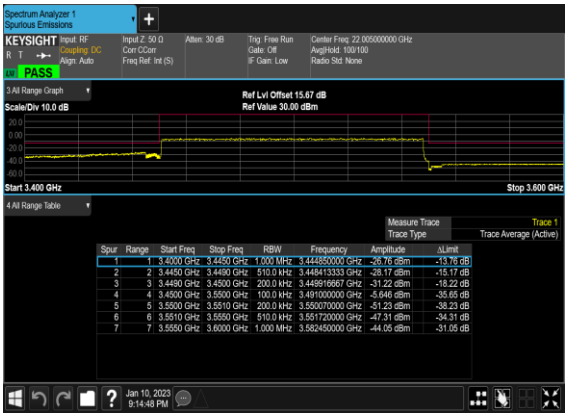
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_Mid_CH



N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_Mid_CH



N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



Software Version: 22.12.120701

FR1 N78

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	630334	3455.01	DFT-s-OFDM QPSK	1@1	26.48	28.48	0.7047
78	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@1	25.53	27.53	0.5662
78	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.54	28.54	0.7145
78	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.6	27.6	0.5754
78	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@1	26.78	28.78	0.7551
78	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	1@1	25.73	27.73	0.5929
78	30	15	630500	3457.5	DFT-s-OFDM QPSK	1@1	26.7	28.7	0.7413
78	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@1	25.71	27.71	0.5902
78	30	15	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.8	28.8	0.7586
78	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.82	27.82	0.6053
78	30	15	636166	3542.49	DFT-s-OFDM QPSK	1@1	26.79	28.79	0.7568
78	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@1	25.86	27.86	0.6109
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	26.8	28.8	0.7586
78	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	25.8	27.8	0.6026
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.82	28.82	0.7621
78	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.87	27.87	0.6124
78	30	20	636000	3540	DFT-s-OFDM QPSK	1@1	26.82	28.82	0.7621
78	30	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	25.88	27.88	0.6138
78	30	30	631000	3465	DFT-s-OFDM QPSK	1@1	26.92	28.92	0.7798
78	30	30	631000	3465	DFT-s-OFDM 16 QAM	1@1	25.93	27.93	0.6209
78	30	30	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.95	28.95	0.7852
78	30	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.96	27.96	0.6252
78	30	30	635666	3534.99	DFT-s-OFDM QPSK	1@1	26.95	28.95	0.7852
78	30	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@1	25.97	27.97	0.6266
78	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	27.03	29.03	0.7998
78	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	26.04	28.04	0.6368
78	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.99	28.99	0.7925
78	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.08	28.08	0.6427
78	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	26.98	28.98	0.7907
78	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	26.04	28.04	0.6368
78	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@1	26.58	28.58	0.7211
78	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@1	25.69	27.69	0.5875
78	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.61	28.61	0.7261
78	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.76	27.76	0.5970
78	30	50	635000	3525	DFT-s-OFDM QPSK	1@1	26.55	28.55	0.7161
78	30	50	635000	3525	DFT-s-OFDM 16 QAM	1@1	25.73	27.73	0.5929
78	30	60	632000	3480	DFT-s-OFDM QPSK	1@1	26.67	28.67	0.7362
78	30	60	632000	3480	DFT-s-OFDM 16 QAM	1@1	25.7	27.7	0.5888
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.63	28.63	0.7295
78	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.71	27.71	0.5902

78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	26.65	28.65	0.7328
78	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	25.76	27.76	0.5970
78	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@1	26.54	28.54	0.7145
78	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@1	25.7	27.7	0.5888
78	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.62	28.62	0.7278
78	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.75	27.75	0.5957
78	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@1	26.66	28.66	0.7345
78	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@1	25.71	27.71	0.5902
78	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	26.59	28.59	0.7228
78	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	25.6	27.6	0.5754
78	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.58	28.58	0.7211
78	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.65	27.65	0.5821
78	30	80	634000	3510	DFT-s-OFDM QPSK	1@1	26.57	28.57	0.7194
78	30	80	634000	3510	DFT-s-OFDM 16 QAM	1@1	25.68	27.68	0.5861
78	30	90	633000	3495	DFT-s-OFDM QPSK	1@1	26.53	28.53	0.7129
78	30	90	633000	3495	DFT-s-OFDM 16 QAM	1@1	25.66	27.66	0.5834
78	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.54	28.54	0.7145
78	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.59	27.59	0.5741
78	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@1	26.54	28.54	0.7145
78	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@1	25.71	27.71	0.5902
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	27.04	29.04	0.8017
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.01	29.01	0.7962
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	26.93	28.93	0.7816
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	27	29	0.7943
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.97	28.97	0.7889
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	26.81	28.81	0.7603
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	25.99	27.99	0.6295
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.15	28.15	0.6531
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@271	25.94	27.94	0.6223
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	24.48	26.48	0.4446
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	24.59	26.59	0.4560
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@271	24.41	26.41	0.4375
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	22.49	24.49	0.2812
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	22.46	24.46	0.2793
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@271	22.24	24.24	0.2655
78	30	100	633334	3500.01	CP-OFDM QPSK	137@68	25.45	27.45	0.5559
78	30	100	633334	3500.01	CP-OFDM QPSK	1@1	25.46	27.46	0.5572
78	30	100	633334	3500.01	CP-OFDM QPSK	1@271	25.3	27.3	0.5370

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

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

Note: 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 / ANT6								
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	-64.60	-13	-51.60	-74.81	3.03	13.24	H
	10368	-61.83	-13	-48.83	-71.28	3.56	13.01	H
	13818	-61.82	-13	-48.82	-71.34	3.92	13.44	H
	6912	-64.64	-13	-51.64	-74.85	3.03	13.24	V
	10368	-62.10	-13	-49.10	-71.55	3.56	13.01	V
	13818	-62.07	-13	-49.07	-71.59	3.92	13.44	V

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

EN-DC_7A_n78A / LTE 20MHz + NR 100MHz / QPSK / ANT2(LTE) & ANT6(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	6912	-64.84	-13	-51.84	-75.05	3.03	13.24	H
	10368	-62.00	-13	-49.00	-71.45	3.56	13.01	H
	13818	-62.04	-13	-49.04	-71.56	3.92	13.44	H
	6912	-64.45	-13	-51.45	-74.66	3.03	13.24	V
	10368	-62.30	-13	-49.30	-71.75	3.56	13.01	V
	13818	-62.13	-13	-49.13	-71.65	3.92	13.44	V

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