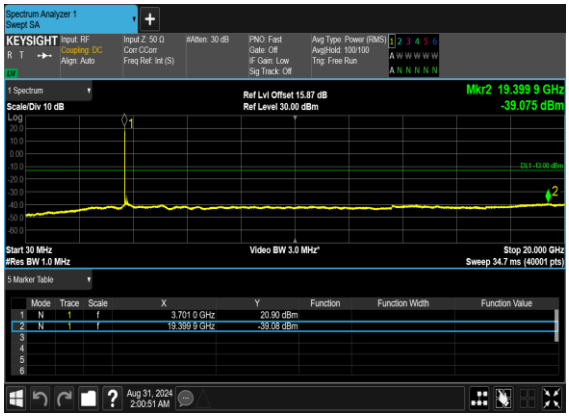
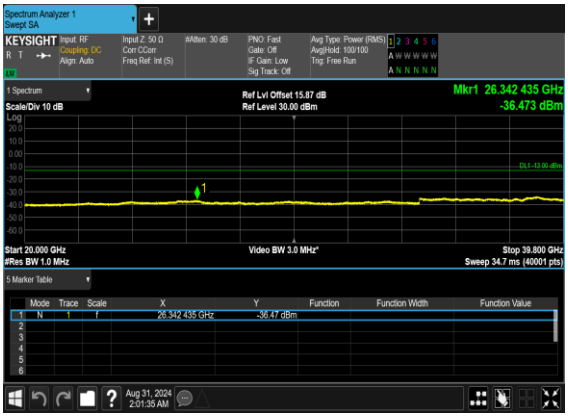
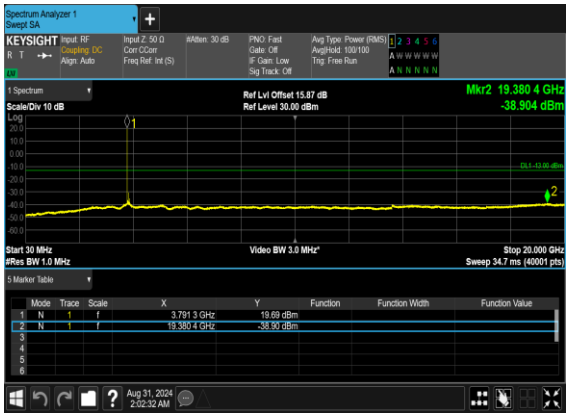
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



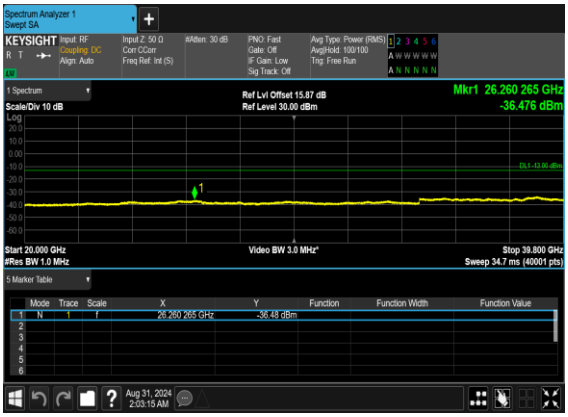
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



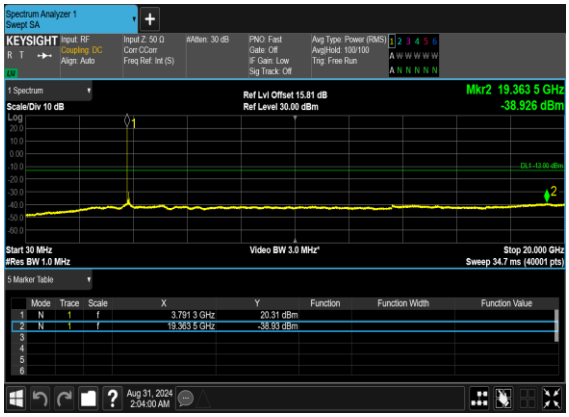
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



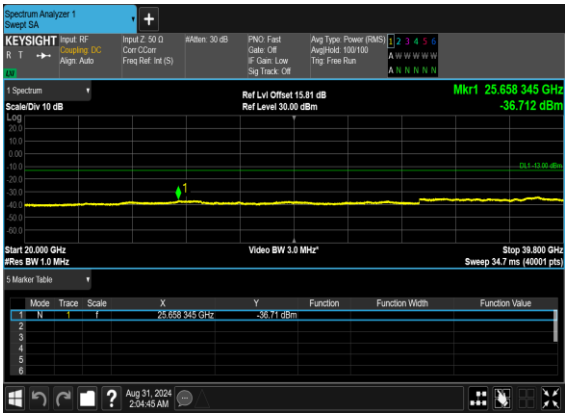
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



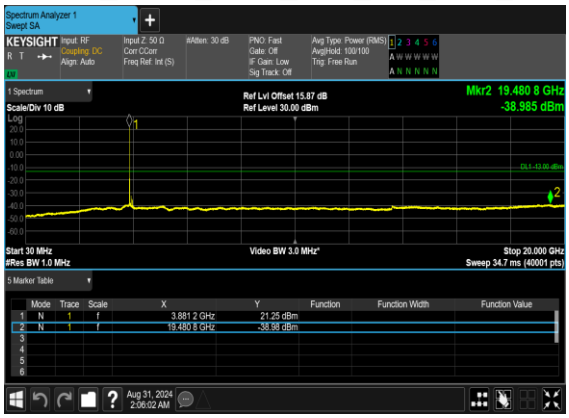
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



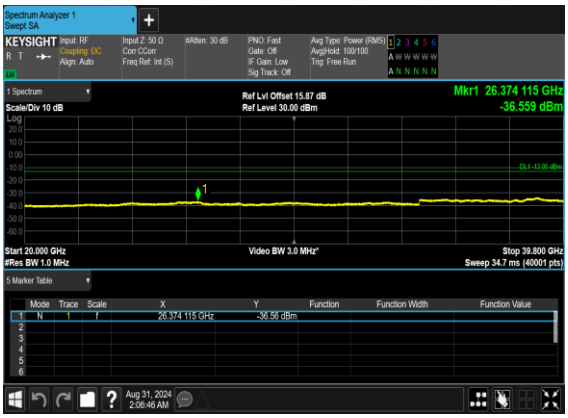
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



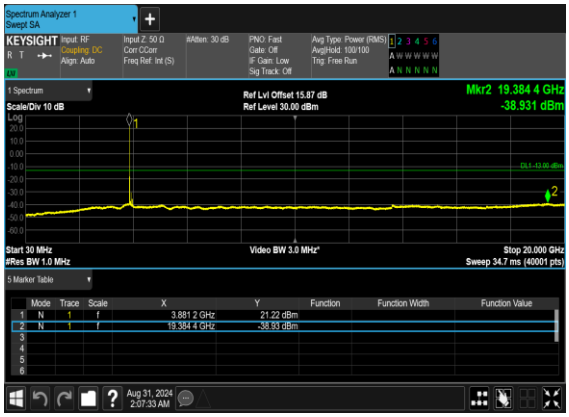
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



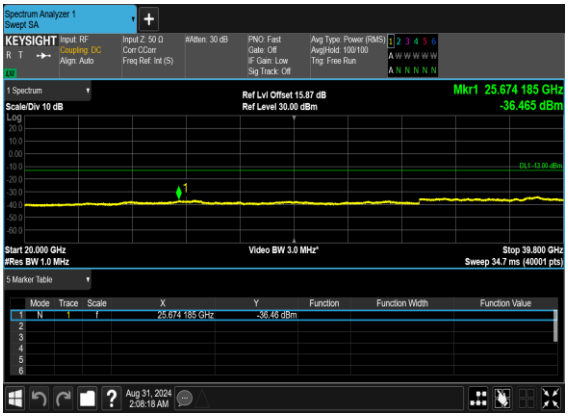
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH

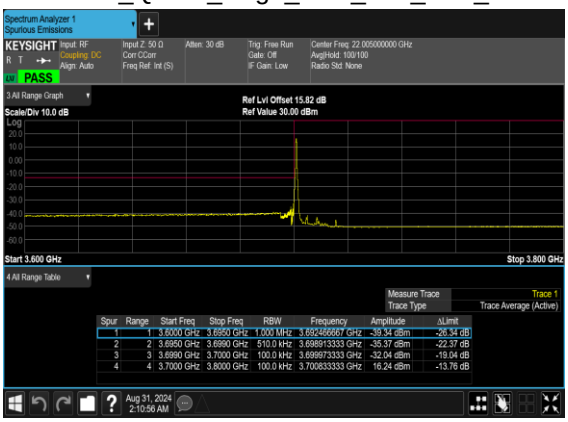


Conducted Band Edge

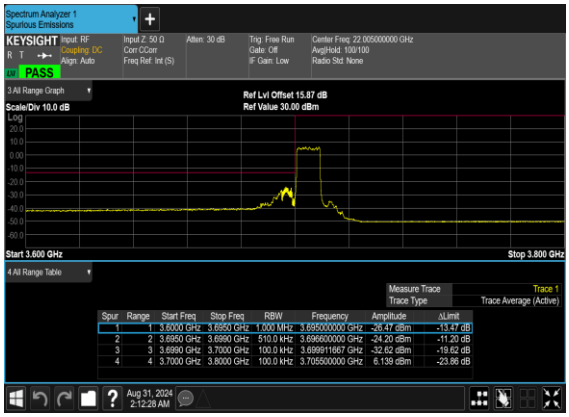
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	10	647000	3705.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	10	647000	3705.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	10	647000	3705.0	DFT-s-OFDM BPSK	24@0	see graph	**PASS**
77	30	10	647000	3705.0	DFT-s-OFDM 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	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

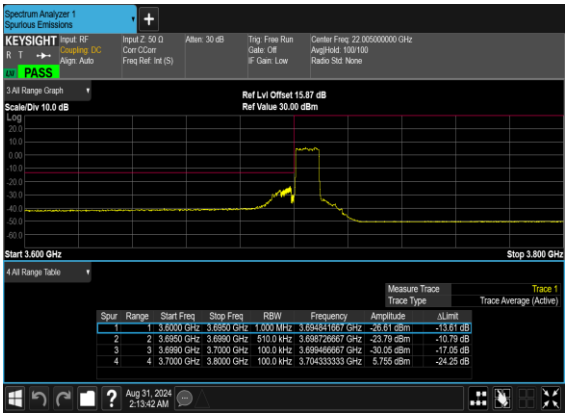
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



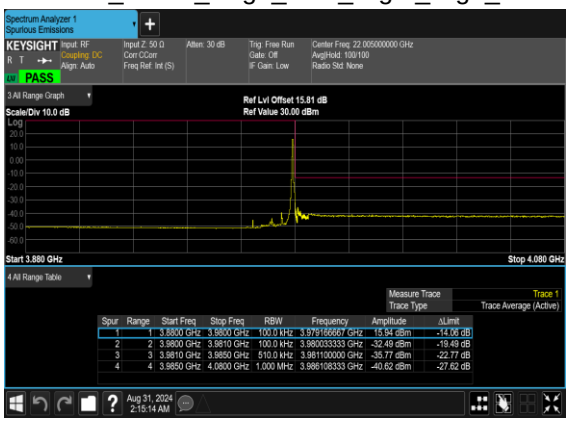
N77(10M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



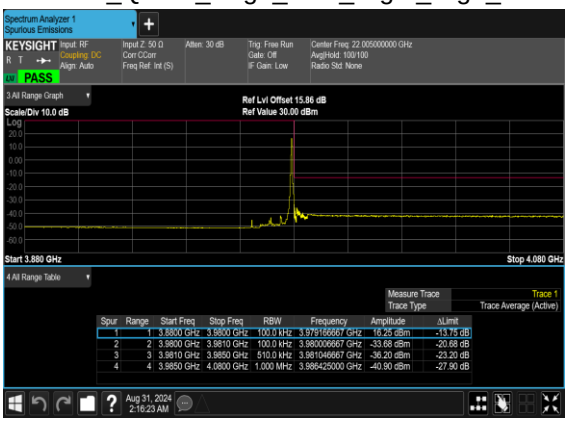
N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



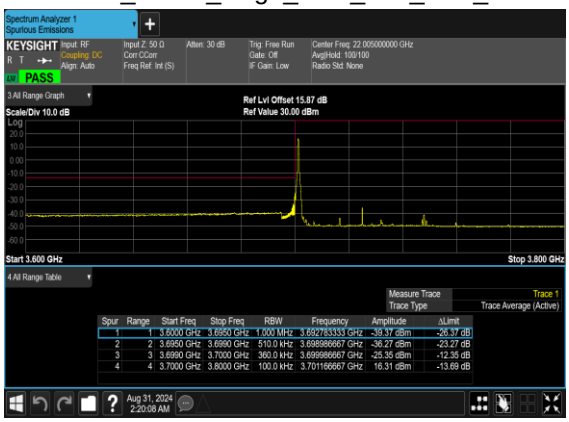
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



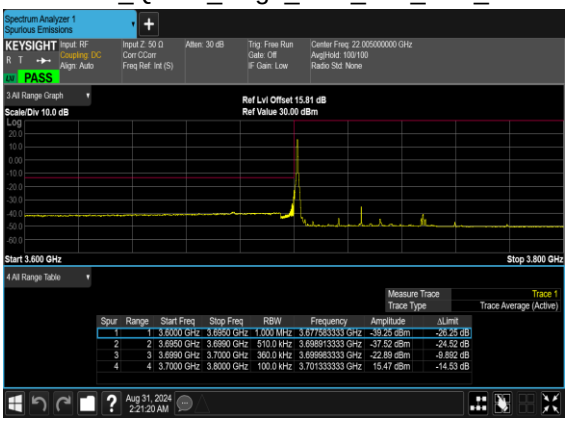
N77(10M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH

N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

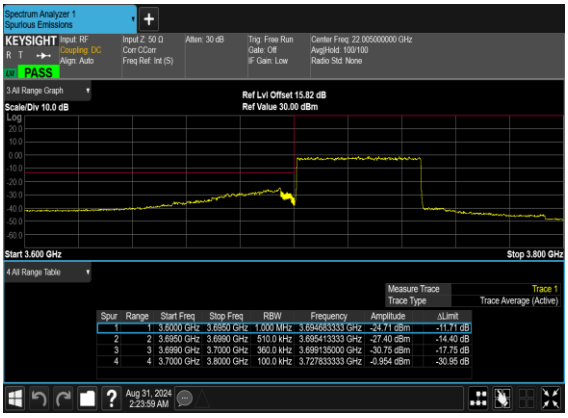


N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

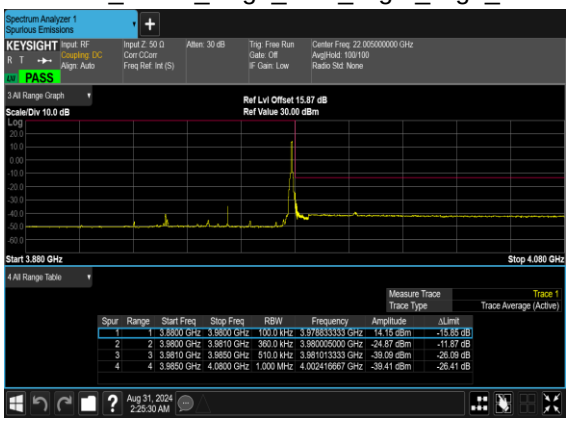


N77(50M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

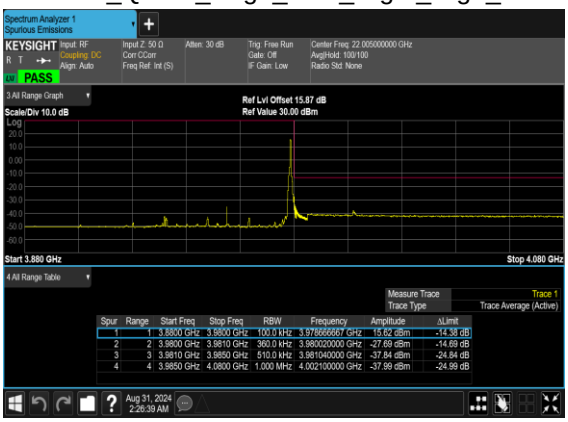
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



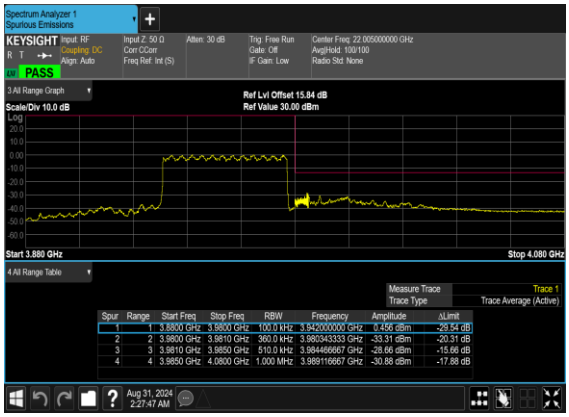
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



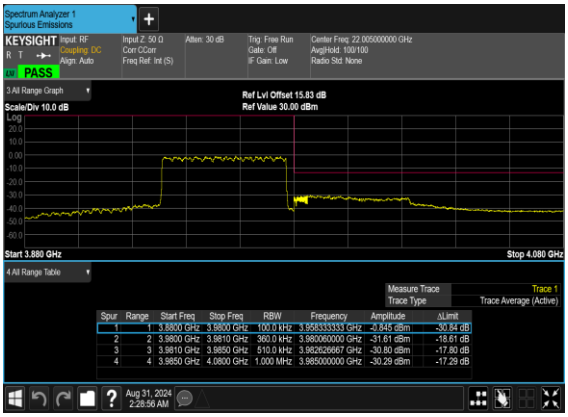
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



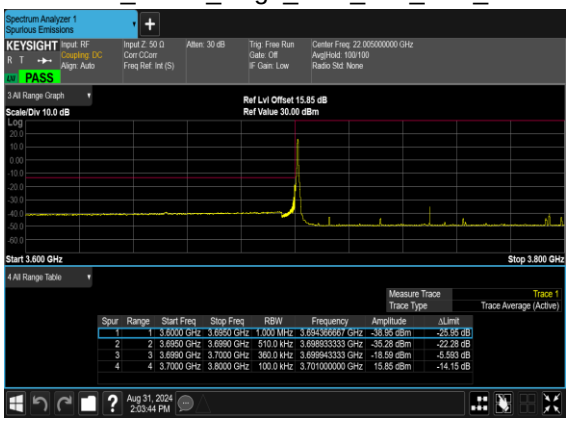
N77(50M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



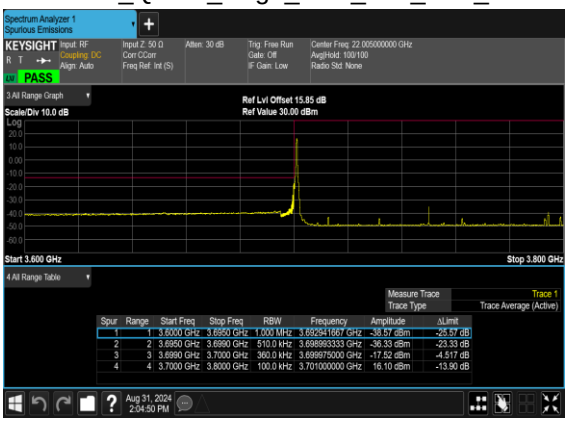
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



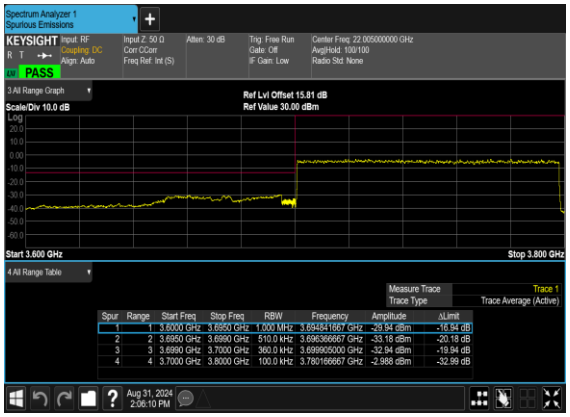
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



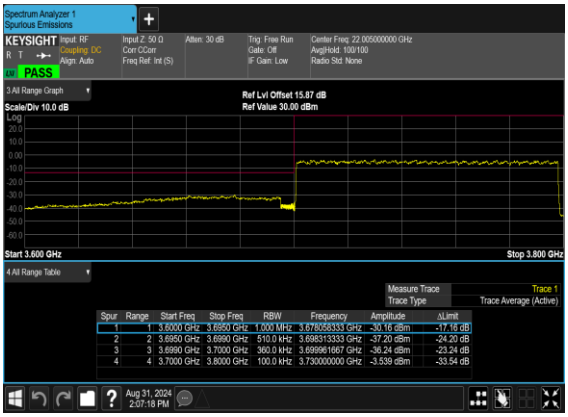
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



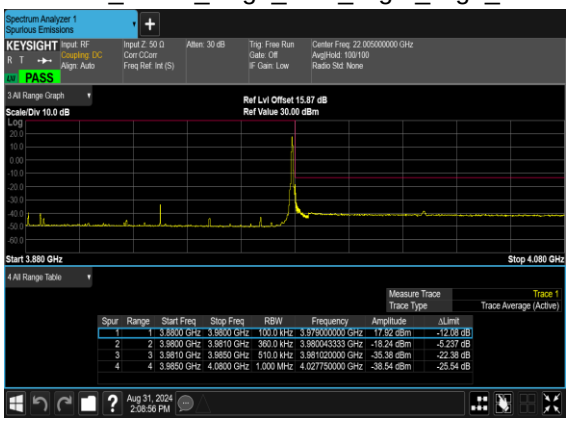
N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



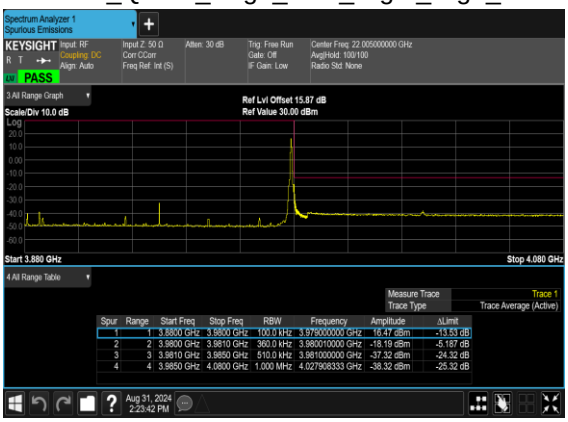
N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



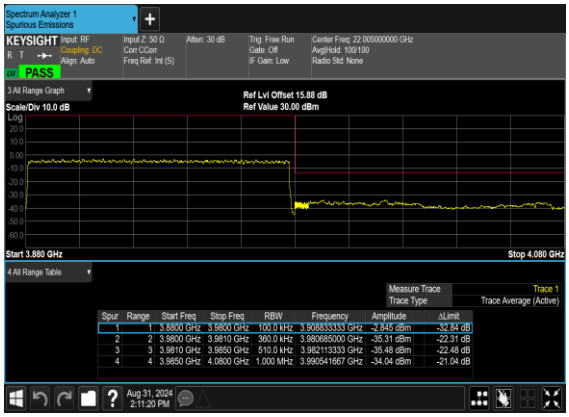
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



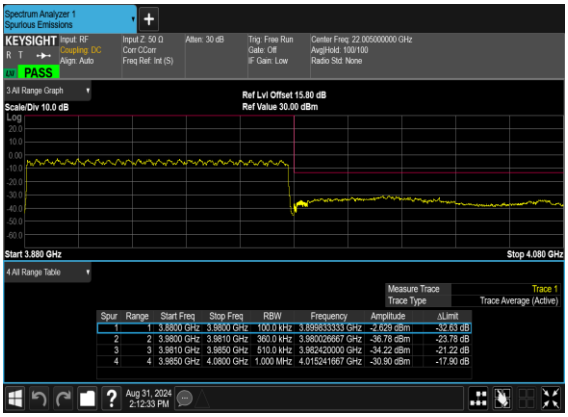
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



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(ANT5)

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=-3.3dB

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	26.35	23.05	0.2018
78	30	10	647000	3705	DFT-s-OFDM 16 QAM	1@1	25.47	22.17	0.1648
78	30	10	650000	3750	DFT-s-OFDM QPSK	1@1	25.75	22.45	0.1758
78	30	10	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.85	21.55	0.1429
78	30	10	653000	3795	DFT-s-OFDM QPSK	1@1	25.72	22.42	0.1746
78	30	10	653000	3795	DFT-s-OFDM 16 QAM	1@1	24.81	21.51	0.1416
78	30	15	647168	3707.52	DFT-s-OFDM QPSK	1@1	26.34	23.04	0.2014
78	30	15	647168	3707.52	DFT-s-OFDM 16 QAM	1@1	25.41	22.11	0.1626
78	30	15	650000	3750	DFT-s-OFDM QPSK	1@1	25.67	22.37	0.1726
78	30	15	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.7	21.4	0.1380
78	30	15	652832	3792.48	DFT-s-OFDM QPSK	1@1	25.61	22.31	0.1702
78	30	15	652832	3792.48	DFT-s-OFDM 16 QAM	1@1	24.59	21.29	0.1346
78	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@1	26.34	23.04	0.2014
78	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@1	25.4	22.1	0.1622
78	30	20	650000	3750	DFT-s-OFDM QPSK	1@1	25.61	22.31	0.1702
78	30	20	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.64	21.34	0.1361
78	30	20	652666	3789.99	DFT-s-OFDM QPSK	1@1	25.61	22.31	0.1702
78	30	20	652666	3789.99	DFT-s-OFDM 16 QAM	1@1	24.65	21.35	0.1365
78	30	25	647500	3712.5	DFT-s-OFDM QPSK	1@1	26.36	23.06	0.2023
78	30	25	647500	3712.5	DFT-s-OFDM 16 QAM	1@1	25.47	22.17	0.1648
78	30	25	650000	3750	DFT-s-OFDM QPSK	1@1	25.48	22.18	0.1652
78	30	25	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.53	21.23	0.1327
78	30	25	652500	3787.5	DFT-s-OFDM QPSK	1@1	25.65	22.35	0.1718
78	30	25	652500	3787.5	DFT-s-OFDM 16 QAM	1@1	24.71	21.41	0.1384
78	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@1	26.5	23.2	0.2089
78	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@1	25.6	22.3	0.1698
78	30	30	650000	3750	DFT-s-OFDM QPSK	1@1	25.5	22.2	0.1660
78	30	30	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.57	21.27	0.1340
78	30	30	652332	3784.98	DFT-s-OFDM QPSK	1@1	25.75	22.45	0.1758
78	30	30	652332	3784.98	DFT-s-OFDM 16 QAM	1@1	24.8	21.5	0.1413
78	30	40	648000	3720	DFT-s-OFDM QPSK	1@1	26.49	23.19	0.2084
78	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@1	25.56	22.26	0.1683
78	30	40	650000	3750	DFT-s-OFDM QPSK	1@1	25.57	22.27	0.1687
78	30	40	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.59	21.29	0.1346
78	30	40	652000	3780	DFT-s-OFDM QPSK	1@1	26.01	22.71	0.1866
78	30	40	652000	3780	DFT-s-OFDM 16 QAM	1@1	25.04	21.74	0.1493
78	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@1	26.47	23.17	0.2075
78	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@1	25.55	22.25	0.1679
78	30	50	650000	3750	DFT-s-OFDM QPSK	1@1	25.67	22.37	0.1726
78	30	50	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.73	21.43	0.1390
78	30	50	651666	3774.99	DFT-s-OFDM QPSK	1@1	25.85	22.55	0.1799

78	30	50	651666	3774.99	DFT-s-OFDM 16 QAM	1@1	24.96	21.66	0.1466
78	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@1	26.4	23.1	0.2042
78	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	25.48	22.18	0.1652
78	30	60	650000	3750	DFT-s-OFDM QPSK	1@1	25.8	22.5	0.1778
78	30	60	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.9	21.6	0.1445
78	30	60	651332	3769.98	DFT-s-OFDM QPSK	1@1	25.57	22.27	0.1687
78	30	60	651332	3769.98	DFT-s-OFDM 16 QAM	1@1	24.65	21.35	0.1365
78	30	70	649000	3735	DFT-s-OFDM QPSK	1@1	26.4	23.1	0.2042
78	30	70	649000	3735	DFT-s-OFDM 16 QAM	1@1	25.49	22.19	0.1656
78	30	70	650000	3750	DFT-s-OFDM QPSK	1@1	26.04	22.74	0.1879
78	30	70	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.07	21.77	0.1503
78	30	70	651000	3765	DFT-s-OFDM QPSK	1@1	25.51	22.21	0.1663
78	30	70	651000	3765	DFT-s-OFDM 16 QAM	1@1	24.54	21.24	0.1330
78	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	26.45	23.15	0.2065
78	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	25.56	22.26	0.1683
78	30	80	650000	3750	DFT-s-OFDM QPSK	1@1	26.29	22.99	0.1991
78	30	80	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.3	22	0.1585
78	30	80	650666	3759.99	DFT-s-OFDM QPSK	1@1	25.83	22.53	0.1791
78	30	80	650666	3759.99	DFT-s-OFDM 16 QAM	1@1	24.81	21.51	0.1416
78	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@1	26.49	23.19	0.2084
78	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@1	25.54	22.24	0.1675
78	30	90	650000	3750	DFT-s-OFDM QPSK	1@1	26.4	23.1	0.2042
78	30	90	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.46	22.16	0.1644
78	30	90	650332	3754.98	DFT-s-OFDM QPSK	1@1	26.2	22.9	0.1950
78	30	90	650332	3754.98	DFT-s-OFDM 16 QAM	1@1	25.3	22	0.1585
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	135@67	25.77	22.47	0.1766
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.52	23.22	0.2099
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@271	25.89	22.59	0.1816
78	30	100	650000	3750	DFT-s-OFDM QPSK	135@67	25.77	22.47	0.1766
78	30	100	650000	3750	DFT-s-OFDM QPSK	1@1	26.43	23.13	0.2056
78	30	100	650000	3750	DFT-s-OFDM QPSK	1@271	25.89	22.59	0.1816
78	30	100	650000	3750	DFT-s-OFDM 16 QAM	135@67	24.82	21.52	0.1419
78	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.53	22.23	0.1671
78	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@271	24.94	21.64	0.1459
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	135@67	23.31	20.01	0.1002
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@1	23.99	20.69	0.1172
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@271	23.49	20.19	0.1045
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	135@67	21.38	18.08	0.0643
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@1	21.89	18.59	0.0723
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@271	21.34	18.04	0.0637
78	30	100	650000	3750	CP-OFDM QPSK	137@68	24.25	20.95	0.1245
78	30	100	650000	3750	CP-OFDM QPSK	1@1	24.9	21.6	0.1445
78	30	100	650000	3750	CP-OFDM QPSK	1@271	24.44	21.14	0.1300

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Shiwei Wen	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 / ANT1(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 Lowest	7402.4	-55.90	-13	-42.90	-64.82	-59.23	8.25	11.58	H
	11103.6	-53.73	-13	-40.73	-68.11	-55.28	10.45	12.00	H
	14804.8	-53.27	-13	-40.27	-70.33	-54.98	11.74	13.45	H
	7402.4	-52.23	-13	-39.23	-61.12	-55.56	8.25	11.58	V
	11103.6	-52.33	-13	-39.33	-68.64	-53.88	10.45	12.00	V
	14804.8	-53.21	-13	-40.21	-70.55	-54.92	11.74	13.45	V
NR n77 Middle	7582.36	-55.23	-13	-42.23	-63.54	-58.53	8.30	11.60	H
	11373.54	-54.15	-13	-41.15	-68.49	-55.67	10.48	12.00	H
	15164.72	-51.88	-13	-38.88	-69.97	-53.58	11.80	13.50	H
	7582.36	-52.47	-13	-39.47	-60.78	-55.77	8.30	11.60	V
	11373.54	-50.50	-13	-37.50	-68.92	-52.02	10.48	12.00	V
	15164.72	-52.15	-13	-39.15	-70.23	-53.85	11.80	13.50	V
NR n77 Highest	7762.4	-56.41	-13	-43.41	-64.25	-59.71	8.32	11.62	H
	11643.6	-53.20	-13	-40.20	-68.17	-54.88	10.52	12.20	H
	15524.8	-49.98	-13	-36.98	-69.30	-51.68	11.85	13.55	H
	7762.4	-52.61	-13	-39.61	-63.88	-55.91	8.32	11.62	V
	11643.6	-50.81	-13	-37.81	-68.63	-52.49	10.52	12.20	V
	15524.8	-51.50	-13	-38.50	-69.18	-53.20	11.85	13.55	V

EN DC_7A_n77A / LTE 20MHz + NR 100MHz / QPSK(ANT1+5)									
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)
5G n77 Lowest	7591.5	-54.02	-13	-41.02	-59.92	-57.35	8.25	11.58	H
	11103.54	-47.57	-13	-34.57	-61.78	-49.12	10.45	12.00	H
	14804.72	-49.90	-13	-36.90	-67.32	-51.61	11.74	13.45	H
	7591.5	-56.84	-13	-43.84	-62.69	-60.17	8.25	11.58	V
	11103.54	-47.67	-13	-34.67	-61.59	-49.22	10.45	12.00	V
	14804.72	-50.95	-13	-37.95	-67.82	-52.66	11.74	13.45	V
LTE Band 7 Lowest	5061.00	-59.99	-25	-34.99	-81.97	-65.55	7.14	12.70	H
	7402.36	-58.18	-25	-33.18	-64.44	-61.48	8.30	11.60	H
	10122.00	-55.75	-25	-30.75	-66.92	-57.27	10.48	12.00	H
	5061.00	-59.83	-25	-34.83	-81.95	-65.39	7.14	12.70	V
	7402.36	-57.98	-25	-32.98	-64.26	-61.28	8.30	11.60	V
	10122.00	-56.97	-25	-31.97	-66.77	-58.49	10.48	12.00	V
5G n77 Middle	7591.5	-58.04	-13	-45.04	-63.94	-61.34	8.30	11.60	H
	11373.54	-50.82	-13	-37.82	-65.59	-52.34	10.48	12.00	H
	15164.72	-51.61	-13	-38.61	-68.63	-53.31	11.80	13.50	H
	7591.5	-58.63	-13	-45.63	-64.48	-61.93	8.30	11.60	V
	11373.54	-48.24	-13	-35.24	-62.74	-49.76	10.48	12.00	V
	15164.72	-52.33	-13	-39.33	-68.7	-54.03	11.80	13.50	V
LTE Band 7 Middle	5061.00	-60.25	-25	-35.25	-82.23	-65.81	7.14	12.70	H
	7582.36	-58.04	-25	-33.04	-63.97	-61.34	8.30	11.60	H
	10122.00	-55.51	-25	-30.51	-66.68	-57.03	10.48	12.00	H
	5061.00	-60.35	-25	-35.35	-82.47	-65.91	7.14	12.70	V
	7582.36	-58.63	-25	-33.63	-64.52	-61.93	8.30	11.60	V
	10122.00	-56.71	-25	-31.71	-66.51	-58.23	10.48	12.00	V
5G n77 Highest	7762.36	-56.97	-13	-43.97	-63.25	-60.27	8.32	11.62	H
	11643.54	-53.12	-13	-40.12	-67.65	-54.80	10.52	12.20	H
	15524.72	-51.16	-13	-38.16	-67.69	-52.86	11.85	13.55	H
	7762.36	-56.93	-13	-43.93	-63.05	-60.23	8.32	11.62	V
	11643.54	-53.29	-13	-40.29	-67.47	-54.97	10.52	12.20	V
	15524.72	-51.82	-13	-38.82	-67.42	-53.52	11.85	13.55	V
LTE Band 7 Highest	5061.00	-60.36	-25	-35.36	-82.34	-65.92	7.14	12.70	H
	7591.50	-54.89	-25	-29.89	-60.79	-58.19	8.30	11.60	H
	10122.00	-55.81	-25	-30.81	-66.98	-57.33	10.48	12.00	H
	5061.00	-59.84	-25	-34.84	-81.96	-65.40	7.14	12.70	V
	7591.50	-57.62	-25	-32.62	-63.47	-60.92	8.30	11.60	V
	10122.00	-57.21	-25	-32.21	-67.01	-58.73	10.48	12.00	V

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