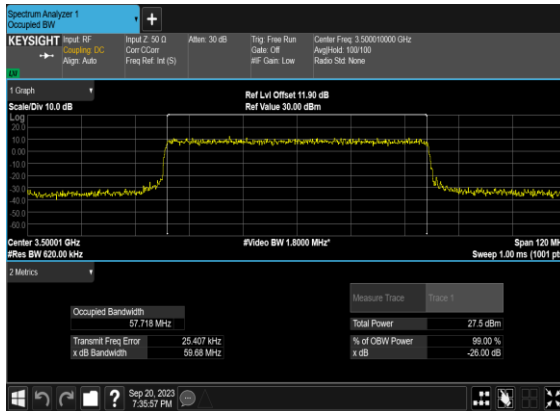
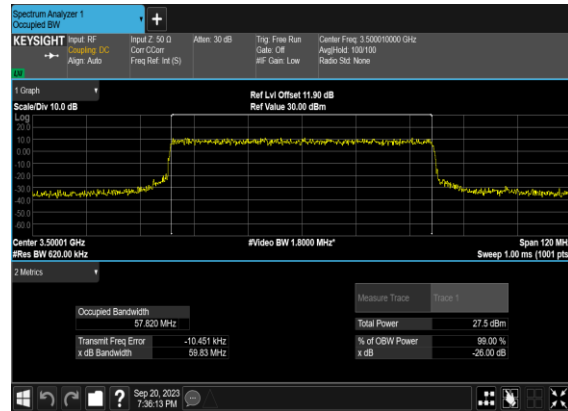


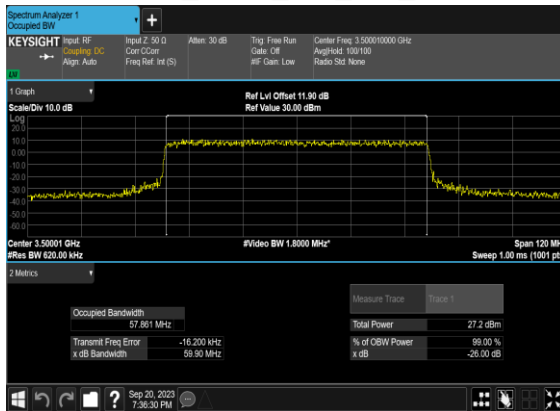
N77(60M)_CP- OFDM_QPSK_Outer_Full_Mid_CH



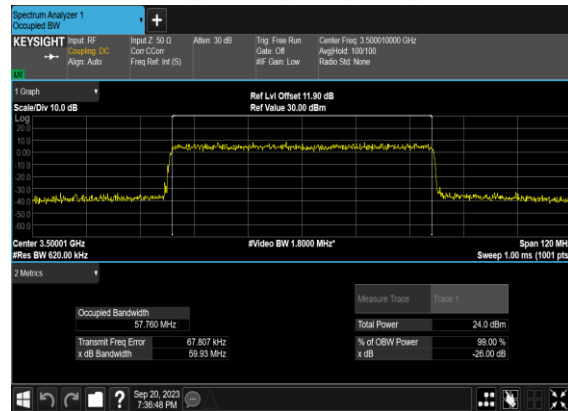
N77(60M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



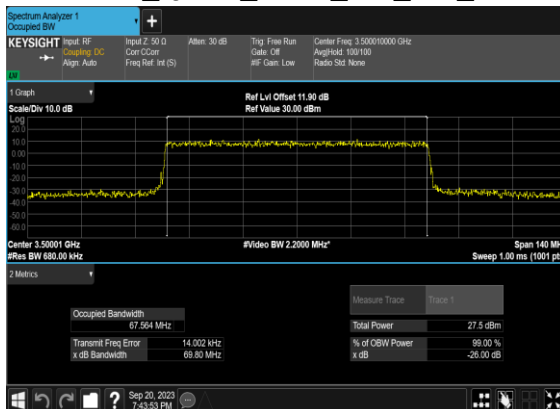
N77(60M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



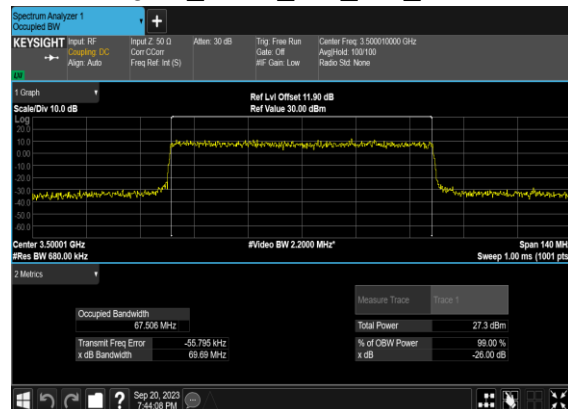
N77(60M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



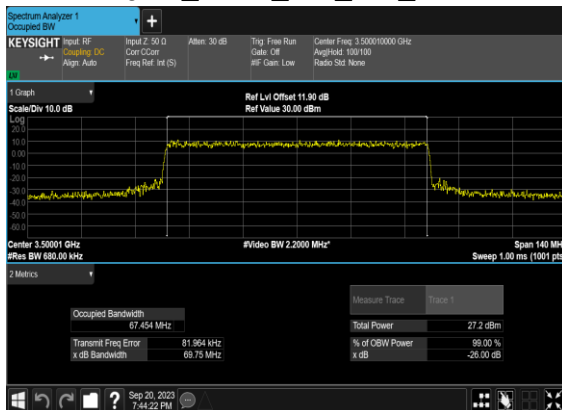
N77(70M)_CP- OFDM_QPSK_Outer_Full_Mid_CH



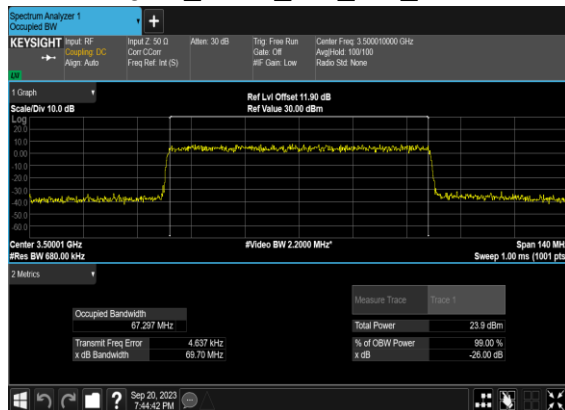
N77(70M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



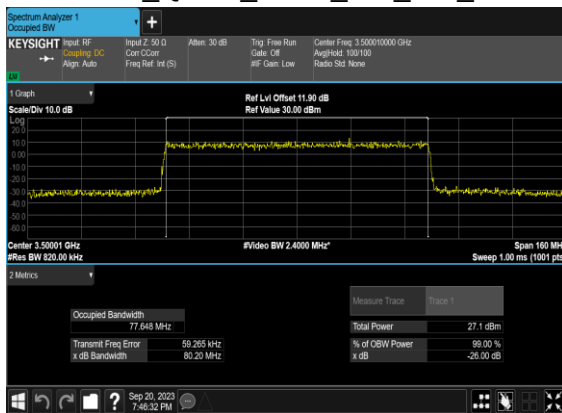
N77(70M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



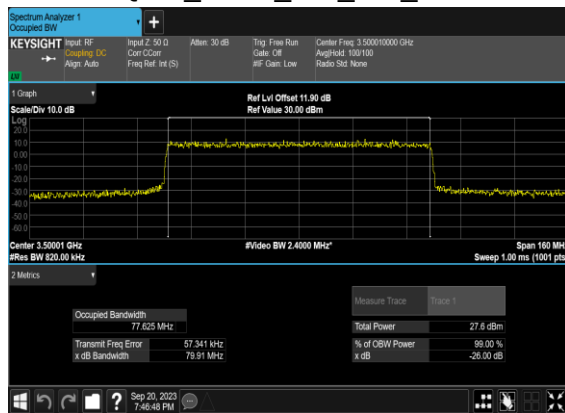
N77(70M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



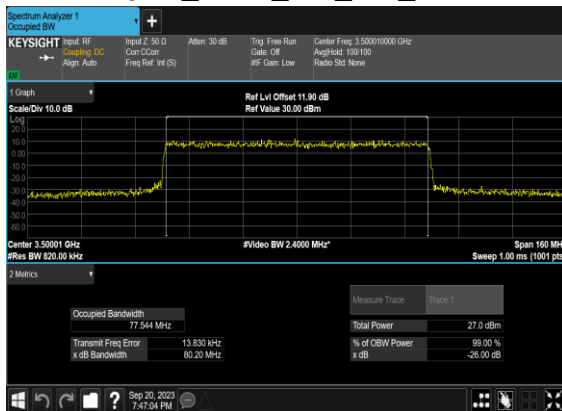
N77(80M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



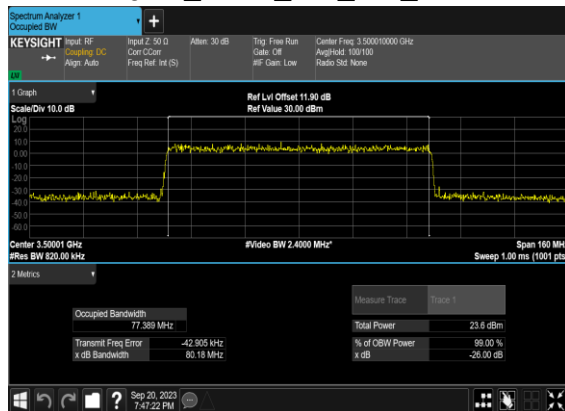
N77(80M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



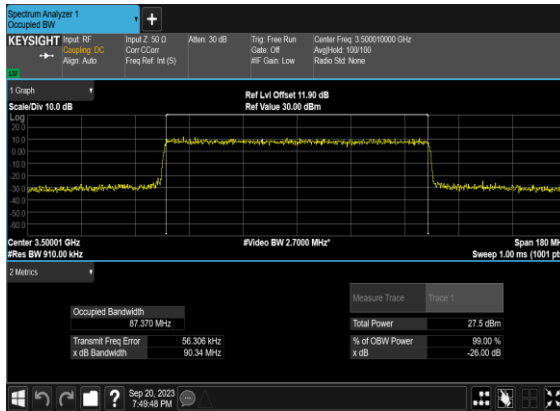
N77(80M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



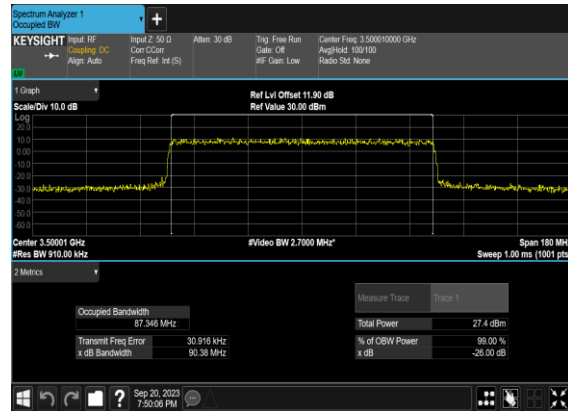
N77(80M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



N77(90M)_CP- OFDM_QPSK_Outer_Full_Mid_CH



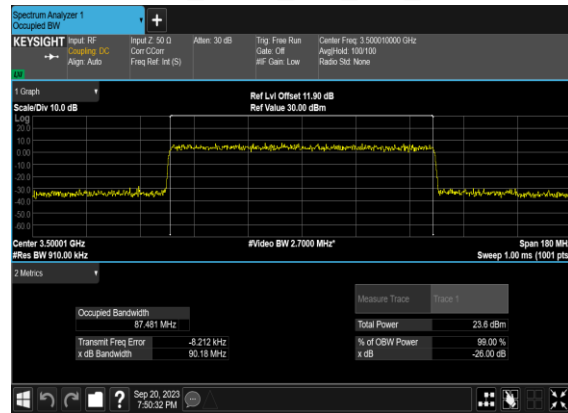
N77(90M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



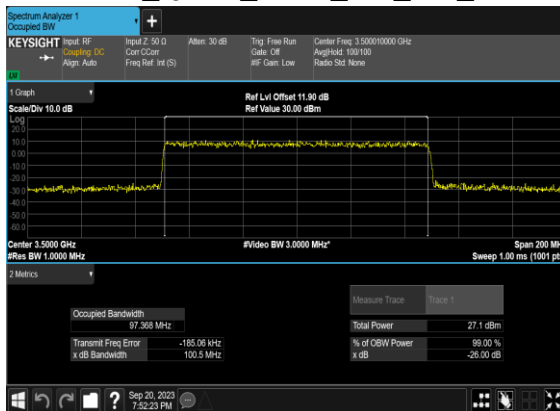
N77(90M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



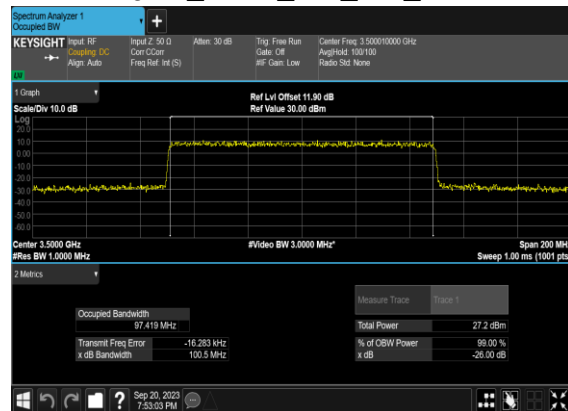
N77(90M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



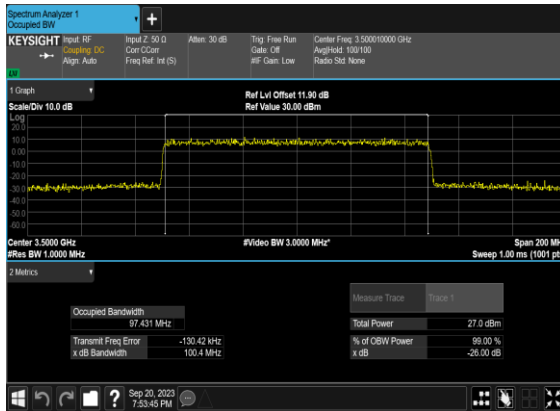
N77(100M)_CP- OFDM_QPSK_Outer_Full_Mid_CH



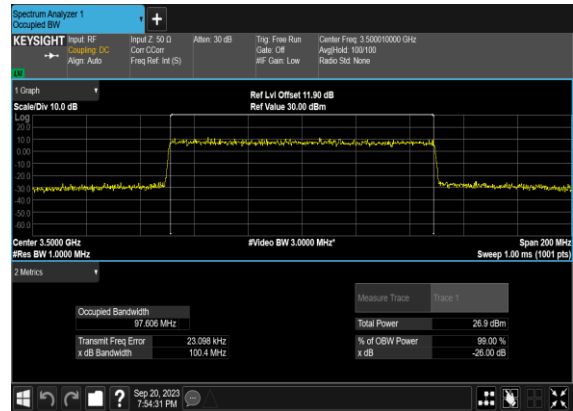
N77(100M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N77(100M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



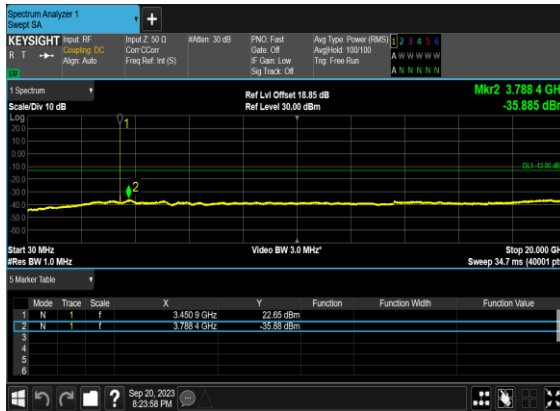
N77(100M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



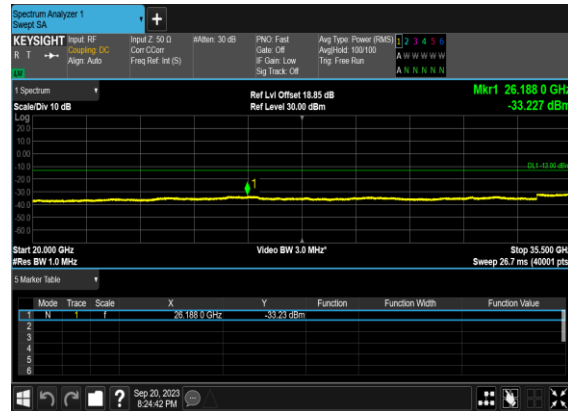
Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	10	630334	3455.01	CP-OFDM QPSK	1@0	see graph	---
77	30	10	630334	3455.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	633334	3500.01	CP-OFDM QPSK	1@0	see graph	---
77	30	10	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	636332	3544.98	CP-OFDM QPSK	1@0	see graph	---
77	30	10	636332	3544.98	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	636332	3544.98	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	CP-OFDM QPSK	1@0	see graph	---
77	30	50	631668	3475.02	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	633334	3500.01	CP-OFDM QPSK	1@0	see graph	---
77	30	50	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	635000	3525.0	CP-OFDM QPSK	1@0	see graph	---
77	30	50	635000	3525.0	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	635000	3525.0	CP-OFDM QPSK	1@0	see graph	PASS
77	30	100	633334	3500.01	CP-OFDM QPSK	1@0	see graph	---
77	30	100	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	100	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS

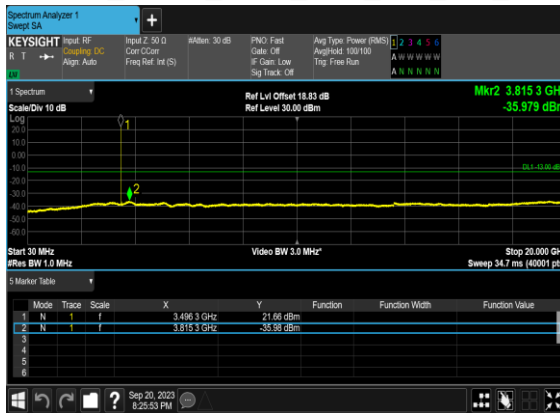
N77(10M)_CP- OFDM_QPSK_Edge_1RB_Left_Low_CH



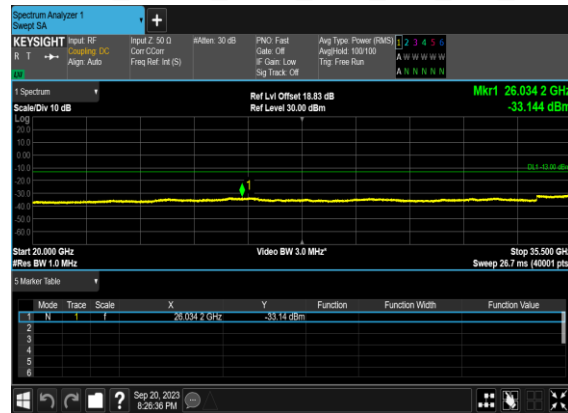
N77(10M)_CP- OFDM_QPSK_Edge_1RB_Left_Low_CH



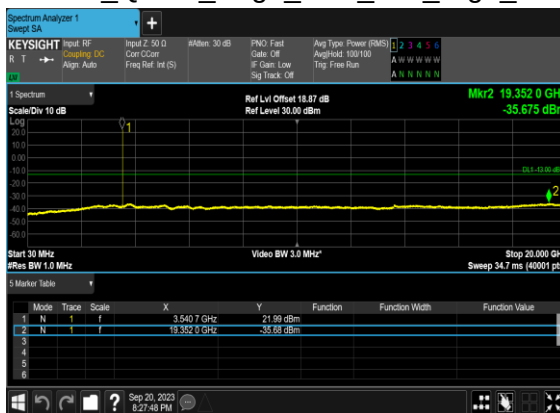
N77(10M)_CP- OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(10M)_CP- OFDM_QPSK_Edge_1RB_Left_Mid_CH



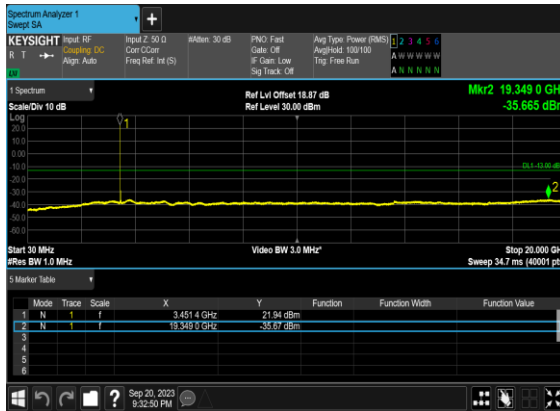
N77(10M)_CP- OFDM_QPSK_Edge_1RB_Left_High_CH



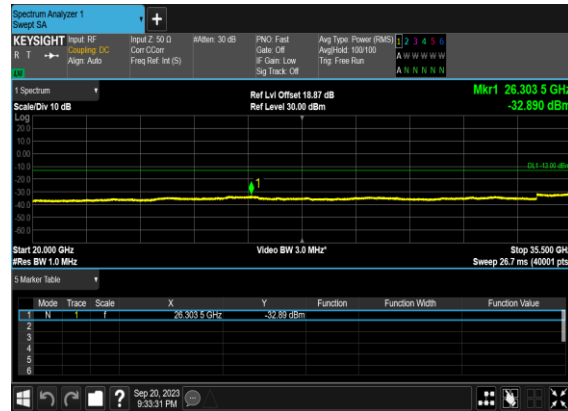
N77(10M)_CP- OFDM_QPSK_Edge_1RB_Left_High_CH



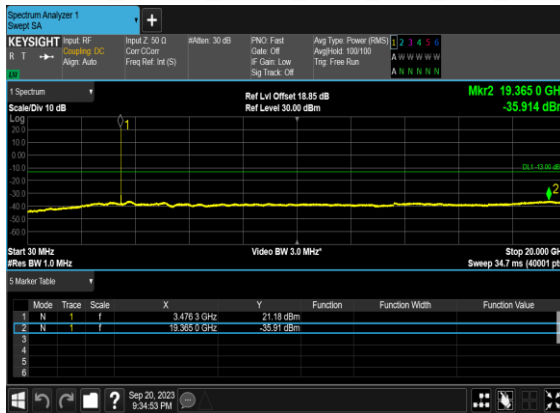
N77(50M)_CP- OFDM_QPSK_Edge_1RB_Left_Low_CH



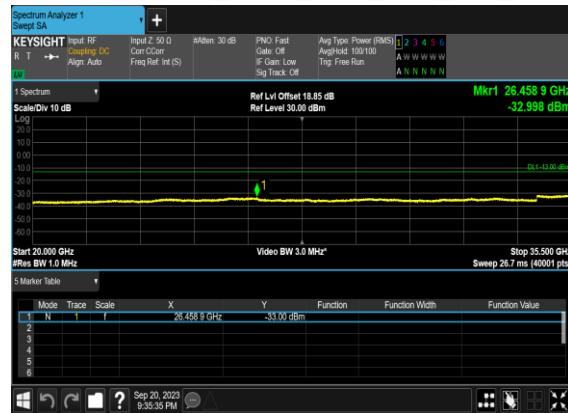
N77(50M)_CP- OFDM_QPSK_Edge_1RB_Left_Low_CH



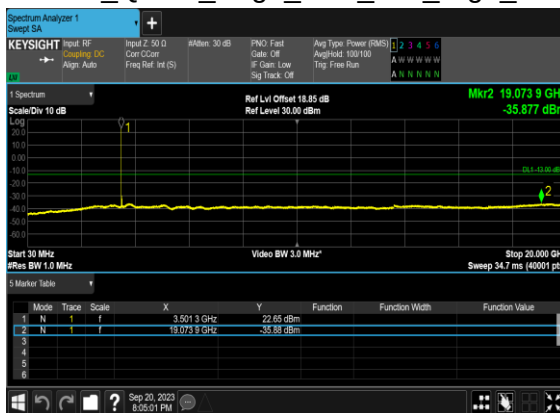
N77(50M)_CP- OFDM_QPSK_Edge_1RB_Left_Mid_CH



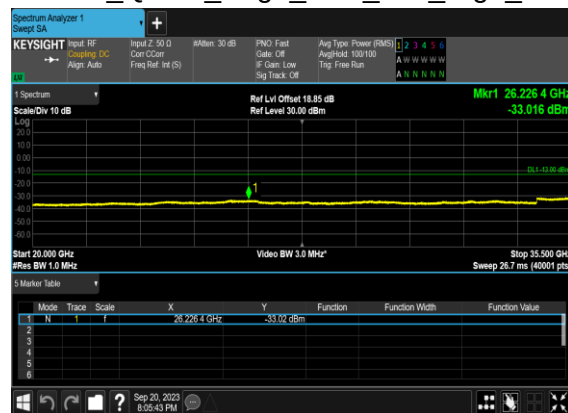
N77(50M)_CP- OFDM_QPSK_Edge_1RB_Left_Mid_CH



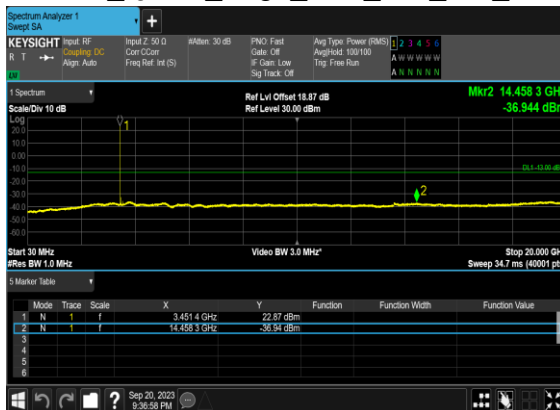
N77(50M)_CP- OFDM_QPSK_Edge_1RB_Left_High_CH



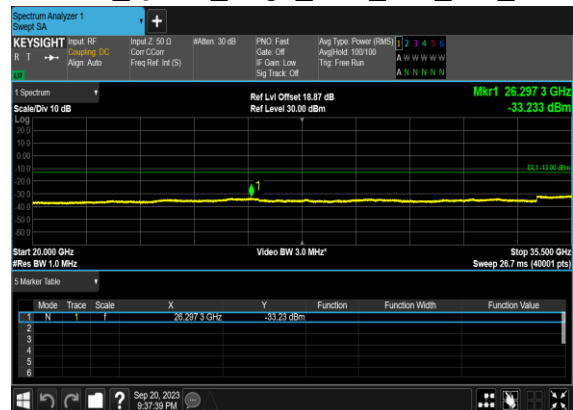
N77(50M)_CP- OFDM_QPSK_Edge_1RB_Left_High_CH



N77(100M)_CP- OFDM_QPSK_Edge_1RB_Left_Mid_CH



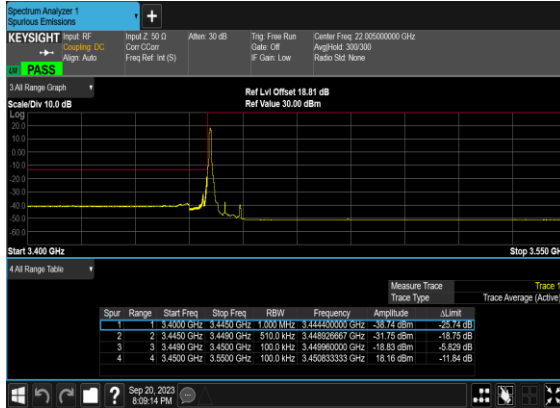
N77(100M)_CP- OFDM_QPSK_Edge_1RB_Left_Mid_CH



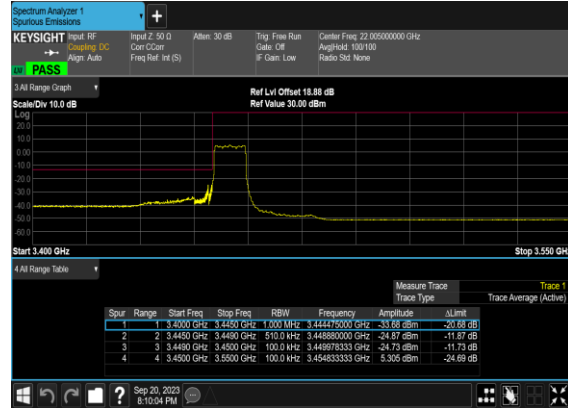
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	10	630334	3455.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	CP-OFDM QPSK	24@0	see graph	PASS
77	30	10	636332	3544.98	CP-OFDM QPSK	1@23	see graph	PASS
77	30	10	636332	3544.98	CP-OFDM QPSK	24@0	see graph	PASS
77	30	50	631668	3475.02	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	CP-OFDM QPSK	133@0	see graph	PASS
77	30	50	635000	3525.0	CP-OFDM QPSK	1@132	see graph	PASS
77	30	50	635000	3525.0	CP-OFDM QPSK	133@0	see graph	PASS
77	30	100	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	100	633334	3500.01	CP-OFDM QPSK	1@272	see graph	PASS
77	30	100	633334	3500.01	CP-OFDM QPSK	273@0	see graph	PASS

N77(10M)_CP-
OFDM_QPSK_Edge_1RB_Left_Low_CH



N77(10M)_CP-
OFDM_QPSK_Outer_Full_Low_CH



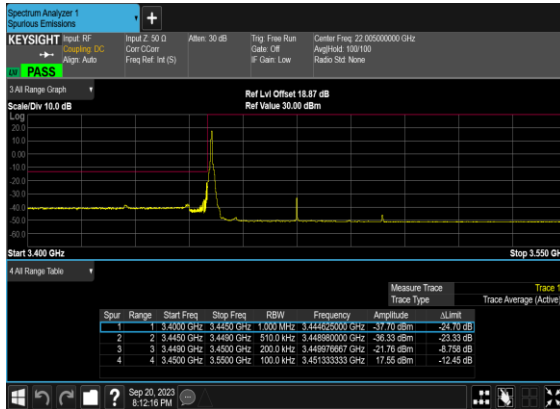
N77(10M)_CP-
OFDM_QPSK_Edge_1RB_Right_High_CH



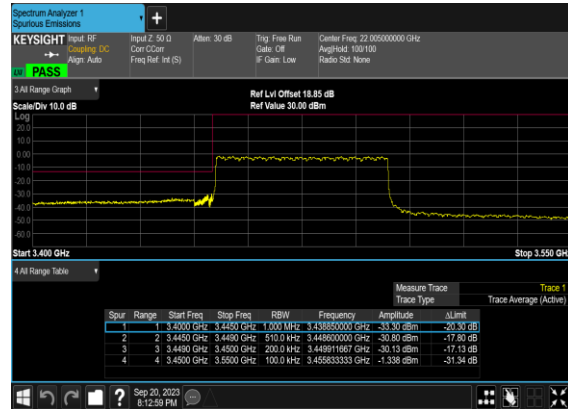
N77(10M)_CP-
OFDM_QPSK_Outer_Full_High_CH



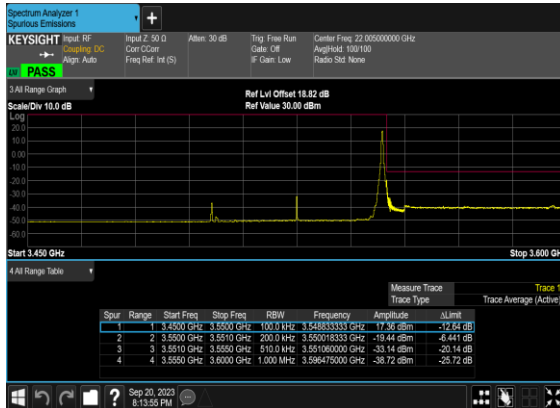
N77(50M)_CP-
OFDM_QPSK_Edge_1RB_Left_Low_CH



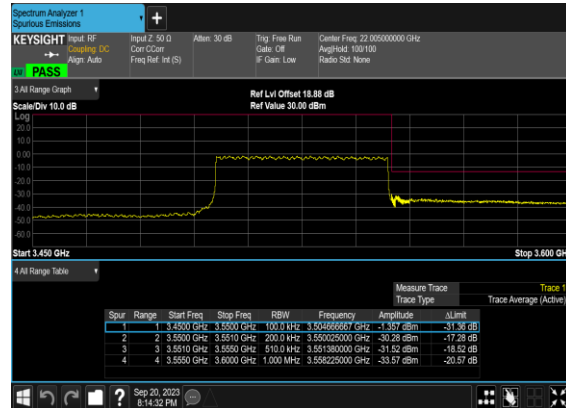
N77(50M)_CP-
OFDM_QPSK_Outer_Full_Low_CH



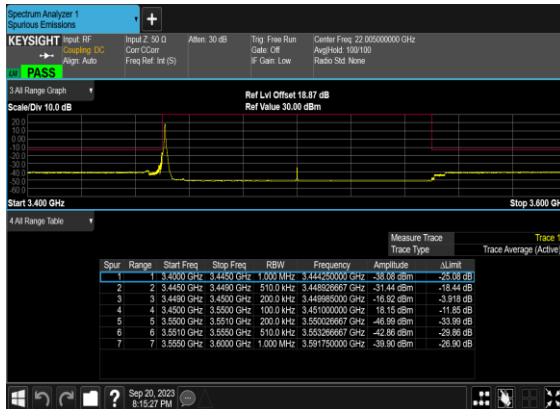
N77(50M)_CP- OFDM_QPSK_Edge_1RB_Right_High_CH



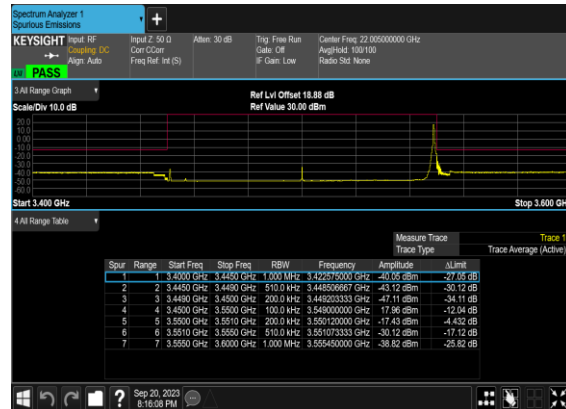
N77(50M)_CP- OFDM_QPSK_Outer_Full_High_CH



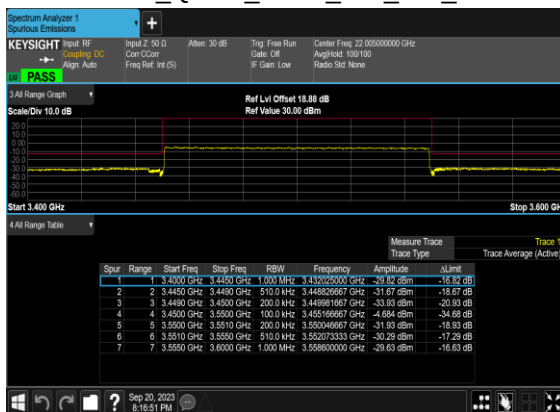
N77(100M)_CP- OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(100M)_CP- OFDM_QPSK_Edge_1RB_Right_Mid_CH



N77(100M)_CP- OFDM_QPSK_Outer_Full_Mid_CH



FR1 N78 MIMO-ANT6+ANT12

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

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	ANT6 Power(dBm)	ANT12 Power(dBm)	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
78	30	10	630334	3455.01	CP-OFDM QPSK	1@1	20.67	21.36	24.04	22.04	0.1600
78	30	10	630334	3455.01	CP-OFDM 16 QAM	1@1	20.05	20.6	23.34	21.34	0.1361
78	30	10	633334	3500.01	CP-OFDM QPSK	1@1	20.79	21.2	24.01	22.01	0.1589
78	30	10	633334	3500.01	CP-OFDM 16 QAM	1@1	20.14	20.48	23.32	21.32	0.1355
78	30	10	636332	3544.98	CP-OFDM QPSK	1@1	20.71	21.15	23.95	21.95	0.1567
78	30	10	636332	3544.98	CP-OFDM 16 QAM	1@1	20	20.6	23.32	21.32	0.1355
78	30	20	630668	3460.02	CP-OFDM QPSK	1@1	20.73	21.24	24.00	22	0.1585
78	30	20	630668	3460.02	CP-OFDM 16 QAM	1@1	20.01	20.79	23.43	21.43	0.1390
78	30	20	633334	3500.01	CP-OFDM QPSK	1@1	20.8	21.31	24.07	22.07	0.1611
78	30	20	633334	3500.01	CP-OFDM 16 QAM	1@1	20.06	20.62	23.36	21.36	0.1368
78	30	20	636000	3540.0	CP-OFDM QPSK	1@1	20.72	21.21	23.98	21.98	0.1578
78	30	20	636000	3540.0	CP-OFDM 16 QAM	1@1	20.11	20.5	23.32	21.32	0.1355
78	30	30	631000	3465.0	CP-OFDM QPSK	1@1	20.79	21.49	24.16	22.16	0.1644
78	30	30	631000	3465.0	CP-OFDM 16 QAM	1@1	20.14	20.73	23.46	21.46	0.1400
78	30	30	633334	3500.01	CP-OFDM QPSK	1@1	20.88	21.48	24.20	22.2	0.1660
78	30	30	633334	3500.01	CP-OFDM 16 QAM	1@1	20.27	20.68	23.49	21.49	0.1409
78	30	30	635666	3534.99	CP-OFDM QPSK	1@1	20.96	21.48	24.24	22.24	0.1675
78	30	30	635666	3534.99	CP-OFDM 16 QAM	1@1	20.34	20.72	23.54	21.54	0.1426
78	30	40	631334	3470.01	CP-OFDM QPSK	1@1	20.69	21.37	24.05	22.05	0.1603
78	30	40	631334	3470.01	CP-OFDM 16 QAM	1@1	20.09	20.63	23.38	21.38	0.1374
78	30	40	633334	3500.01	CP-OFDM QPSK	1@1	20.71	21.27	24.01	22.01	0.1589
78	30	40	633334	3500.01	CP-OFDM 16 QAM	1@1	20.07	20.61	23.36	21.36	0.1368

78	30	40	635332	3529.98	CP-OFDM QPSK	1@1	20.86	21.33	24.11	22.11	0.1626
78	30	40	635332	3529.98	CP-OFDM 16 QAM	1@1	20.25	20.66	23.47	21.47	0.1403
78	30	50	631668	3475.02	CP-OFDM QPSK	1@1	20.92	21.57	24.27	22.27	0.1687
78	30	50	631668	3475.02	CP-OFDM 16 QAM	1@1	20.27	20.82	23.56	21.56	0.1432
78	30	50	633334	3500.01	CP-OFDM QPSK	1@1	20.92	21.54	24.25	22.25	0.1679
78	30	50	633334	3500.01	CP-OFDM 16 QAM	1@1	20.34	20.79	23.58	21.58	0.1439
78	30	50	635000	3525.0	CP-OFDM QPSK	1@1	21.07	21.58	24.34	22.34	0.1714
78	30	50	635000	3525.0	CP-OFDM 16 QAM	1@1	20.47	20.85	23.67	21.67	0.1469
78	30	60	632000	3480.0	CP-OFDM QPSK	1@1	20.75	21.43	24.11	22.11	0.1626
78	30	60	632000	3480.0	CP-OFDM 16 QAM	1@1	20.19	20.77	23.50	21.5	0.1413
78	30	60	633334	3500.01	CP-OFDM QPSK	1@1	20.73	21.39	24.08	22.08	0.1614
78	30	60	633334	3500.01	CP-OFDM 16 QAM	1@1	20.2	20.78	23.51	21.51	0.1416
78	30	60	634666	3519.99	CP-OFDM QPSK	1@1	20.78	21.41	24.12	22.12	0.1629
78	30	60	634666	3519.99	CP-OFDM 16 QAM	1@1	20.23	20.79	23.53	21.53	0.1422
78	30	70	632334	3485.01	CP-OFDM QPSK	1@1	20.79	21.58	24.21	22.21	0.1663
78	30	70	632334	3485.01	CP-OFDM 16 QAM	1@1	20.16	20.75	23.48	21.48	0.1406
78	30	70	633334	3500.01	CP-OFDM QPSK	1@1	20.84	21.64	24.27	22.27	0.1687
78	30	70	633334	3500.01	CP-OFDM 16 QAM	1@1	20.15	20.77	23.48	21.48	0.1406
78	30	70	634332	3514.98	CP-OFDM QPSK	1@1	20.93	21.55	24.26	22.26	0.1683
78	30	70	634332	3514.98	CP-OFDM 16 QAM	1@1	20.34	20.79	23.58	21.58	0.1439
78	30	80	632668	3490.02	CP-OFDM QPSK	1@1	20.81	21.57	24.22	22.22	0.1667
78	30	80	632668	3490.02	CP-OFDM 16 QAM	1@1	20.18	20.82	23.52	21.52	0.1419
78	30	80	633334	3500.01	CP-OFDM QPSK	1@1	20.83	21.6	24.24	22.24	0.1675
78	30	80	633334	3500.01	CP-OFDM 16 QAM	1@1	20.17	20.83	23.52	21.52	0.1419
78	30	80	634000	3510.0	CP-OFDM QPSK	1@1	20.95	21.68	24.34	22.34	0.1714
78	30	80	634000	3510.0	CP-OFDM 16 QAM	1@1	20.25	20.8	23.54	21.54	0.1426
78	30	90	633000	3495.0	CP-OFDM QPSK	1@1	20.96	21.8	24.41	22.41	0.1742

78	30	90	633000	3495.0	CP-OFDM 16 QAM	1@1	20.81	21.67	24.27	22.27	0.1687
78	30	90	633334	3500.01	CP-OFDM QPSK	1@1	20.94	21.84	24.42	22.42	0.1746
78	30	90	633334	3500.01	CP-OFDM 16 QAM	1@1	20.34	21.01	23.70	21.7	0.1479
78	30	90	633666	3504.99	CP-OFDM QPSK	1@1	21	21.72	24.39	22.39	0.1734
78	30	90	633666	3504.99	CP-OFDM 16 QAM	1@1	20.41	21.01	23.73	21.73	0.1489
78	30	100	633334	3500.01	CP-OFDM QPSK	137@68	20.53	21.07	23.82	21.82	0.1521
78	30	100	633334	3500.01	CP-OFDM QPSK	1@1	20.95	21.84	24.43	22.43	0.1750
78	30	100	633334	3500.01	CP-OFDM QPSK	1@271	20.62	21.14	23.90	21.9	0.1549
78	30	100	633334	3500.01	CP-OFDM 16 QAM	137@68	20.26	20.64	23.46	21.46	0.1400
78	30	100	633334	3500.01	CP-OFDM 16 QAM	1@1	20.38	21.12	23.78	21.78	0.1507
78	30	100	633334	3500.01	CP-OFDM 16 QAM	1@271	19.96	20.33	23.16	21.16	0.1306
78	30	100	633334	3500.01	CP-OFDM 64 QAM	137@68	18.72	19.08	21.91	19.91	0.0979
78	30	100	633334	3500.01	CP-OFDM 64 QAM	1@1	18.92	19.44	22.20	20.2	0.1047
78	30	100	633334	3500.01	CP-OFDM 64 QAM	1@271	18.49	18.69	21.60	19.6	0.0912
78	30	100	633334	3500.01	CP-OFDM 256 QAM	137@68	18.6	19.01	21.82	19.82	0.0959
78	30	100	633334	3500.01	CP-OFDM 256 QAM	1@1	15.87	16.53	19.22	17.22	0.0527
78	30	100	633334	3500.01	CP-OFDM 256 QAM	1@271	15.52	15.77	18.66	16.66	0.0463

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Qingsheng He	Temperature :	22~25°C
		Relative Humidity :	48~52%

RSE pre-scanned harmonic for different antennas, choose the worst antenna perform final test and record in the report.

SA n77 / NR 100MHz / QPSK / ANT14 / Main PA									
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	6902.40	-57.13	-13	-44.13	-64.59	-60.43	8.30	11.60	H
	10353.60	-38.23	-13	-25.23	-50.25	-39.75	10.48	12.00	H
	13804.80	-52.17	-13	-39.17	-68.02	-53.87	11.80	13.50	H
	6902.40	-48.89	-13	-35.89	-57.63	-52.19	8.30	11.60	V
	10353.60	-33.26	-13	-20.26	-47.08	-34.78	10.48	12.00	V
	13804.80	-51.79	-13	-38.79	-66.45	-53.49	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 / ANT5 (LTE) & ANT14(NR) / Main PA									
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	6902.40	-58.87	-13	-45.87	-66.33	-62.17	8.30	11.60	H
	10353.60	-49.32	-13	-36.32	-61.34	-50.84	10.48	12.00	H
	13804.80	-53.98	-13	-40.98	-69.83	-55.68	11.80	13.50	H
	6902.40	-57.35	-13	-44.35	-66.09	-60.65	8.30	11.60	V
	10353.60	-49.88	-13	-36.88	-63.7	-51.40	10.48	12.00	V
	13804.80	-55.37	-13	-42.37	-70.03	-57.07	11.80	13.50	V
LTE Band30 Middle	4611.00	-58.18	-40	-18.18	-82.74	-64.43	6.45	12.70	H
	6916.50	-54.16	-40	-14.16	-61.66	-57.56	8.40	11.80	H
	9222.00	-59.26	-40	-19.26	-68.78	-61.61	9.65	12.00	H
	4611.00	-58.03	-40	-18.03	-82.72	-64.28	6.45	12.70	V
	6917.50	-53.97	-40	-13.97	-62.57	-57.37	8.40	11.80	V
	9222.00	-56.98	-40	-16.98	-68.73	-59.33	9.65	12.00	V

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

SA n77 / NR 100MHz / QPSK / ANT7 / Other PA									
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	6902.40	-59.12	-13	-46.12	-66.58	-62.42	8.30	11.60	H
	10353.60	-43.57	-13	-30.57	-55.59	-45.09	10.48	12.00	H
	13804.80	-54.28	-13	-41.28	-70.13	-55.98	11.80	13.50	H
	6902.40	-57.45	-13	-44.45	-66.19	-60.75	8.30	11.60	V
	10353.60	-38.39	-13	-25.39	-52.21	-39.91	10.48	12.00	V
	13804.80	-55.05	-13	-42.05	-69.71	-56.75	11.80	13.50	V

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

EN-DC_13A_n77A / LTE 10MHz + NR 100MHz / QPSK / ANT0 (LTE) & ANT7(NR) / Other PA									
Channel	Frequency (MHz)	ERP/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	6902.40	-56.93	-13	-43.93	-64.39	-60.23	8.30	11.60	H
	10353.60	-48.52	-13	-35.52	-60.54	-50.04	10.48	12.00	H
	13804.80	-54.12	-13	-41.12	-69.97	-55.82	11.80	13.50	H
	6902.40	-56.48	-13	-43.48	-65.22	-59.78	8.30	11.60	V
	10353.60	-49.65	-13	-36.65	-63.47	-51.17	10.48	12.00	V
	13804.80	-55.09	-13	-42.09	-69.75	-56.79	11.80	13.50	V
LTE Band13 Middle	1555	-63.96	-42.15	-21.81	-75.74	-67.21	4.00	9.40	H
	2332.5	-59.21	-13	-46.21	-77.83	-62.78	4.88	10.60	H
	3110	-57.42	-13	-44.42	-77.70	-62.35	5.52	12.60	H
	1555	-63.23	-42.15	-21.08	-75.63	-66.48	4.00	9.40	V
	2332.5	-58.67	-13	-45.67	-77.57	-62.24	4.88	10.60	V
	3110	-55.93	-13	-42.93	-77.94	-60.86	5.52	12.60	V

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

SA n77 UL_MIMO / NR 100MHz / QPSK / ANT14+7(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)
Middle	6902.40	-55.92	-13	-42.92	-63.38	-59.22	8.30	11.60	H
	10353.60	-42.63	-13	-29.63	-54.65	-44.15	10.48	12.00	H
	13804.80	-54.46	-13	-41.46	-70.31	-56.16	11.80	13.50	H
	6902.40	-50.81	-13	-37.81	-59.55	-54.11	8.30	11.60	V
	10353.60	-31.89	-13	-18.89	-45.71	-33.41	10.48	12.00	V
	13804.80	-53.98	-13	-40.98	-68.64	-55.68	11.80	13.50	V

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