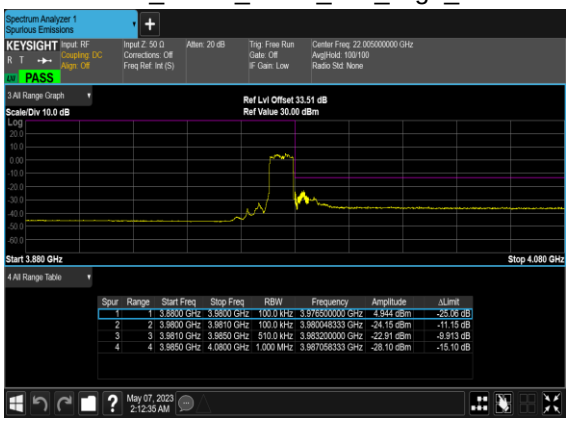
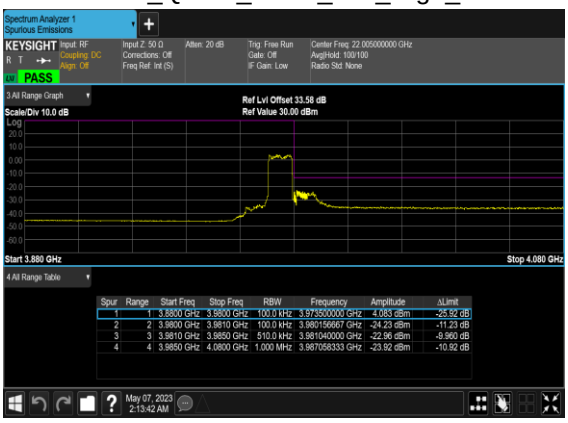
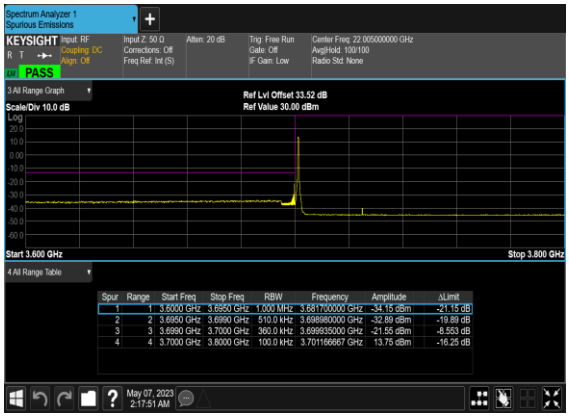
N77(10M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



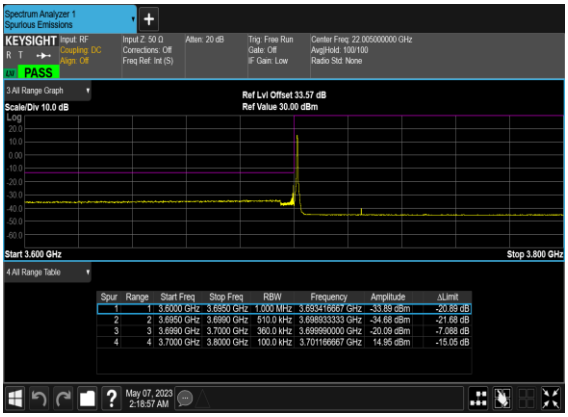
N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



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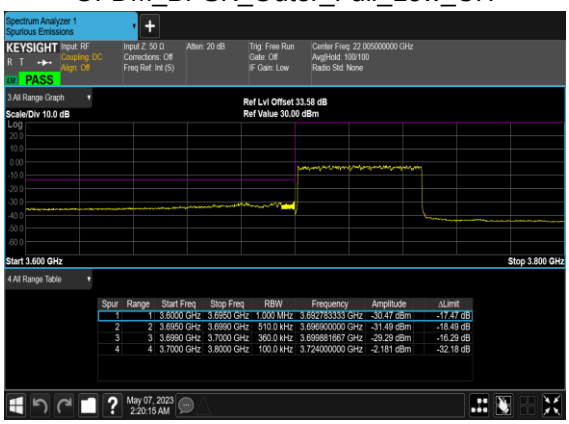
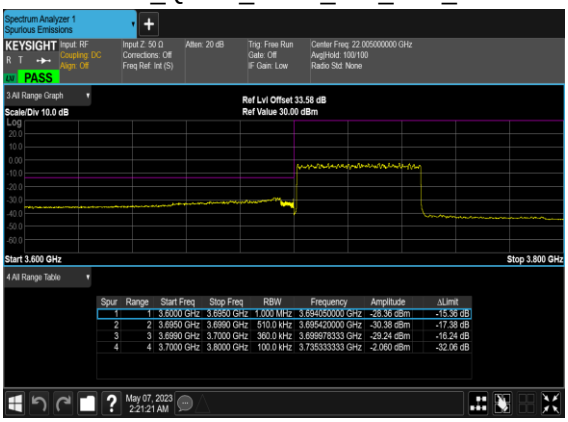
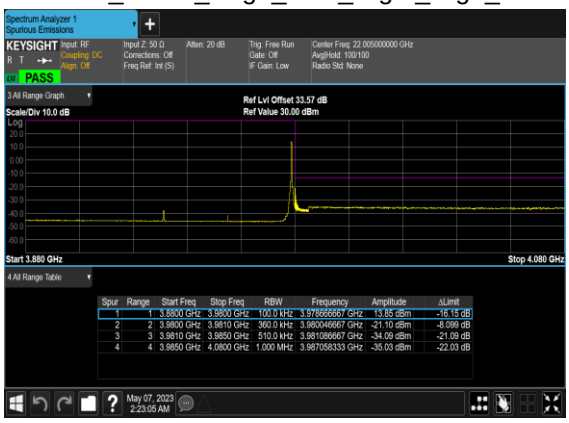


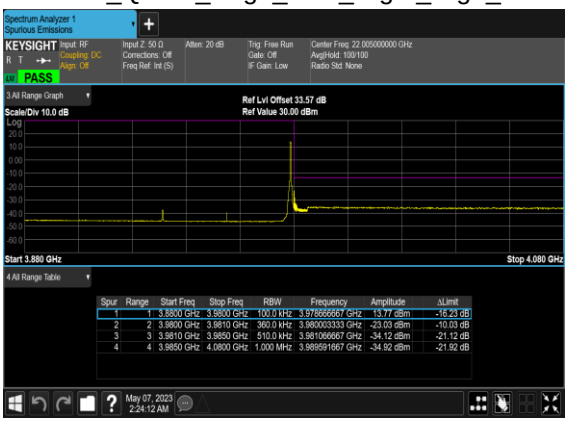
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



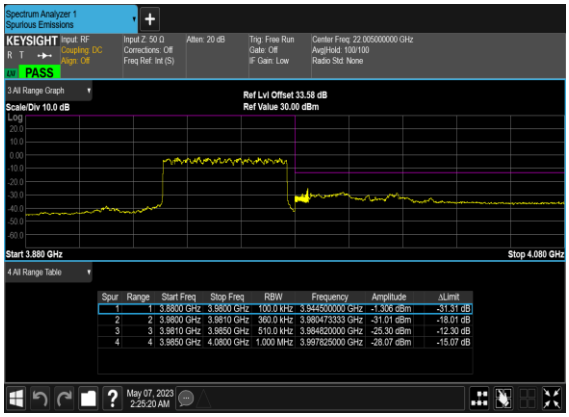
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



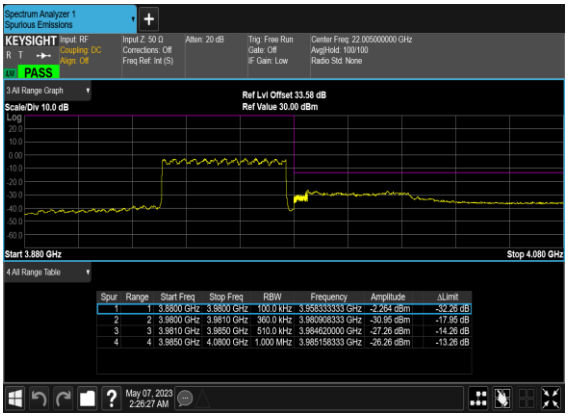
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



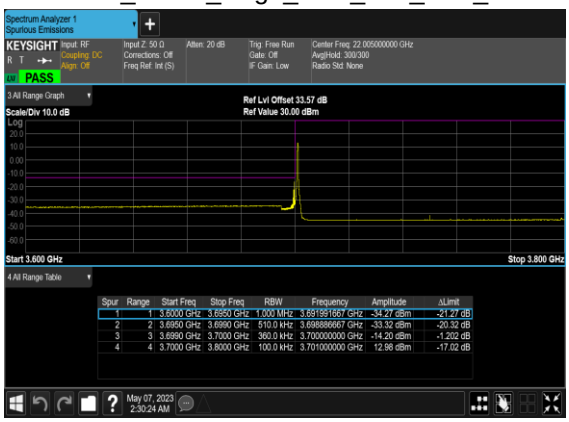
N77(50M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



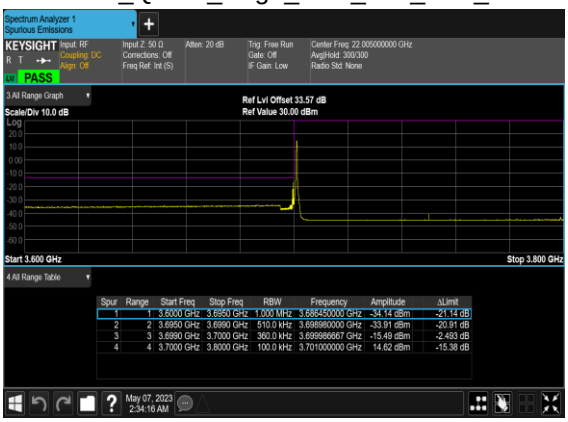
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



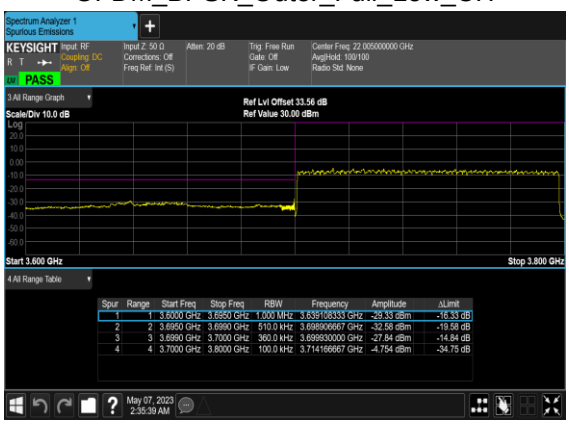
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



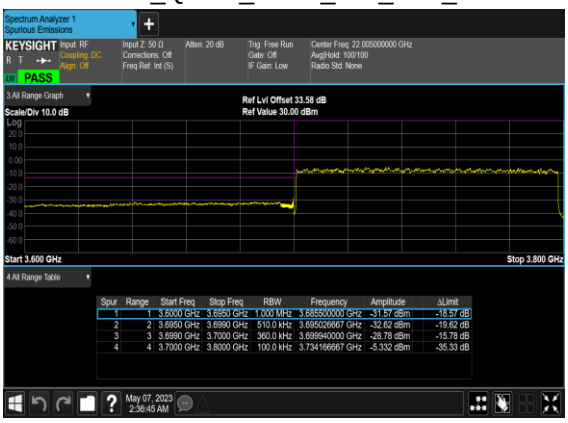
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

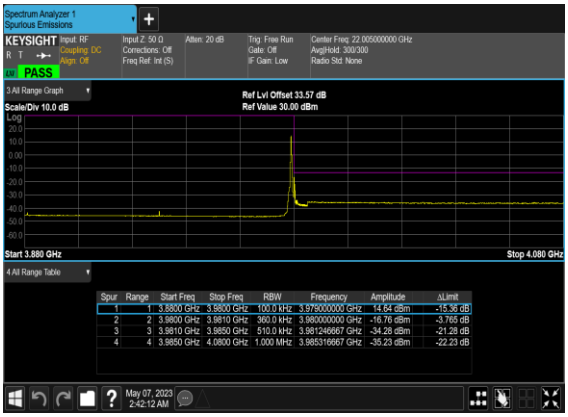


N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH

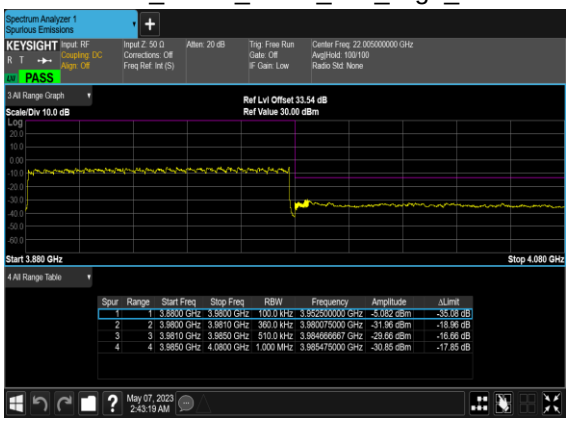


N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

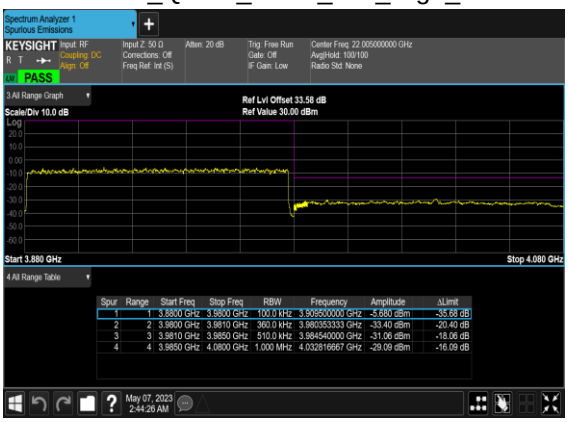
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



Software Version: 22.09.0601

FR1 N78(Ant 3)

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=-2.4dB

NR Band	SCS	Band Width	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
78	30	10	647000	3705	DFT-s-OFDM PI/2 BPSK	1@1	26.22	23.82	0.2410
78	30	10	647000	3705	DFT-s-OFDM QPSK	1@1	26.19	23.79	0.2393
78	30	10	647000	3705	DFT-s-OFDM 16 QAM	1@1	25.57	23.17	0.2075
78	30	10	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.33	23.93	0.2472
78	30	10	650000	3750	DFT-s-OFDM QPSK	1@1	26.24	23.84	0.2421
78	30	10	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.54	23.14	0.2061
78	30	10	653000	3795	DFT-s-OFDM PI/2 BPSK	1@1	26.32	23.92	0.2466
78	30	10	653000	3795	DFT-s-OFDM QPSK	1@1	26.25	23.85	0.2427
78	30	10	653000	3795	DFT-s-OFDM 16 QAM	1@1	25.58	23.18	0.2080
78	30	15	647168	3707.52	DFT-s-OFDM PI/2 BPSK	1@1	26.35	23.95	0.2483
78	30	15	647168	3707.52	DFT-s-OFDM QPSK	1@1	26.42	24.02	0.2523
78	30	15	647168	3707.52	DFT-s-OFDM 16 QAM	1@1	25.59	23.19	0.2084
78	30	15	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.5	24.1	0.2570
78	30	15	650000	3750	DFT-s-OFDM QPSK	1@1	26.42	24.02	0.2523
78	30	15	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.56	23.16	0.2070
78	30	15	652832	3792.48	DFT-s-OFDM PI/2 BPSK	1@1	26.35	23.95	0.2483
78	30	15	652832	3792.48	DFT-s-OFDM QPSK	1@1	26.32	23.92	0.2466
78	30	15	652832	3792.48	DFT-s-OFDM 16 QAM	1@1	25.57	23.17	0.2075
78	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@1	26.3	23.9	0.2455
78	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@1	26.22	23.82	0.2410
78	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@1	25.59	23.19	0.2084
78	30	20	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.45	24.05	0.2541
78	30	20	650000	3750	DFT-s-OFDM QPSK	1@1	26.43	24.03	0.2529
78	30	20	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.67	23.27	0.2123
78	30	20	652666	3789.99	DFT-s-OFDM PI/2 BPSK	1@1	26.38	23.98	0.2500
78	30	20	652666	3789.99	DFT-s-OFDM QPSK	1@1	26.36	23.96	0.2489
78	30	20	652666	3789.99	DFT-s-OFDM 16 QAM	1@1	25.69	23.29	0.2133
78	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	1@1	26.46	24.06	0.2547

78	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@1	26.43	24.03	0.2529
78	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@1	25.62	23.22	0.2099
78	30	30	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.59	24.19	0.2624
78	30	30	650000	3750	DFT-s-OFDM QPSK	1@1	26.54	24.14	0.2594
78	30	30	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.53	23.13	0.2056
78	30	30	652332	3784.98	DFT-s-OFDM PI/2 BPSK	1@1	26.51	24.11	0.2576
78	30	30	652332	3784.98	DFT-s-OFDM QPSK	1@1	26.49	24.09	0.2564
78	30	30	652332	3784.98	DFT-s-OFDM 16 QAM	1@1	25.55	23.15	0.2065
78	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@1	26.58	24.18	0.2618
78	30	40	648000	3720	DFT-s-OFDM QPSK	1@1	26.46	24.06	0.2547
78	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@1	25.56	23.16	0.2070
78	30	40	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.68	24.28	0.2679
78	30	40	650000	3750	DFT-s-OFDM QPSK	1@1	26.64	24.24	0.2655
78	30	40	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.58	23.18	0.2080
78	30	40	652000	3780	DFT-s-OFDM PI/2 BPSK	1@1	26.58	24.18	0.2618
78	30	40	652000	3780	DFT-s-OFDM QPSK	1@1	26.42	24.02	0.2523
78	30	40	652000	3780	DFT-s-OFDM 16 QAM	1@1	25.54	23.14	0.2061
78	30	50	648334	3725.01	DFT-s-OFDM PI/2 BPSK	1@1	26.15	23.75	0.2371
78	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@1	26.24	23.84	0.2421
78	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@1	25.52	23.12	0.2051
78	30	50	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.28	23.88	0.2443
78	30	50	650000	3750	DFT-s-OFDM QPSK	1@1	26.19	23.79	0.2393
78	30	50	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.54	23.14	0.2061
78	30	50	651666	3774.99	DFT-s-OFDM PI/2 BPSK	1@1	26.26	23.86	0.2432
78	30	50	651666	3774.99	DFT-s-OFDM QPSK	1@1	26.15	23.75	0.2371
78	30	50	651666	3774.99	DFT-s-OFDM 16 QAM	1@1	25.62	23.22	0.2099
78	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@1	26.03	23.63	0.2307
78	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@1	26.01	23.61	0.2296
78	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	25.63	23.23	0.2104
78	30	60	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.18	23.78	0.2388
78	30	60	650000	3750	DFT-s-OFDM QPSK	1@1	26.15	23.75	0.2371
78	30	60	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.64	23.24	0.2109
78	30	60	651332	3769.98	DFT-s-OFDM PI/2 BPSK	1@1	26.16	23.76	0.2377
78	30	60	651332	3769.98	DFT-s-OFDM QPSK	1@1	26.14	23.74	0.2366

78	30	60	651332	3769.98	DFT-s-OFDM 16 QAM	1@1	25.61	23.21	0.2094
78	30	70	649000	3735	DFT-s-OFDM PI/2 BPSK	1@1	26.15	23.75	0.2371
78	30	70	649000	3735	DFT-s-OFDM QPSK	1@1	26.14	23.74	0.2366
78	30	70	649000	3735	DFT-s-OFDM 16 QAM	1@1	25.62	23.22	0.2099
78	30	70	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.21	23.81	0.2404
78	30	70	650000	3750	DFT-s-OFDM QPSK	1@1	26.19	23.79	0.2393
78	30	70	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.64	23.24	0.2109
78	30	70	651000	3765	DFT-s-OFDM PI/2 BPSK	1@1	26.28	23.88	0.2443
78	30	70	651000	3765	DFT-s-OFDM QPSK	1@1	26.24	23.84	0.2421
78	30	70	651000	3765	DFT-s-OFDM 16 QAM	1@1	25.59	23.19	0.2084
78	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@1	26.06	23.66	0.2323
78	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	26.04	23.64	0.2312
78	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	25.68	23.28	0.2128
78	30	80	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.14	23.74	0.2366
78	30	80	650000	3750	DFT-s-OFDM QPSK	1@1	26.12	23.72	0.2355
78	30	80	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.62	23.22	0.2099
78	30	80	650666	3759.99	DFT-s-OFDM PI/2 BPSK	1@1	26.17	23.77	0.2382
78	30	80	650666	3759.99	DFT-s-OFDM QPSK	1@1	26.19	23.79	0.2393
78	30	80	650666	3759.99	DFT-s-OFDM 16 QAM	1@1	25.72	23.32	0.2148
78	30	90	649668	3745.02	DFT-s-OFDM PI/2 BPSK	1@1	26.12	23.72	0.2355
78	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@1	26.09	23.69	0.2339
78	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@1	25.72	23.32	0.2148
78	30	90	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.09	23.69	0.2339
78	30	90	650000	3750	DFT-s-OFDM QPSK	1@1	26.08	23.68	0.2333
78	30	90	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.59	23.19	0.2084
78	30	90	650332	3754.98	DFT-s-OFDM PI/2 BPSK	1@1	26.1	23.7	0.2344
78	30	90	650332	3754.98	DFT-s-OFDM QPSK	1@1	26.07	23.67	0.2328
78	30	90	650332	3754.98	DFT-s-OFDM 16 QAM	1@1	25.52	23.12	0.2051
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	135@67	26.69	24.29	0.2685
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	26.44	24.04	0.2535
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@271	26.18	23.78	0.2388
78	30	100	650000	3750	DFT-s-OFDM QPSK	135@67	26.27	23.87	0.2438
78	30	100	650000	3750	DFT-s-OFDM QPSK	1@1	26.05	23.65	0.2317
78	30	100	650000	3750	DFT-s-OFDM QPSK	1@271	26.15	23.75	0.2371

78	30	100	650000	3750	DFT-s-OFDM 16 QAM	135@67	25.88	23.48	0.2228
78	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@1	25.57	23.17	0.2075
78	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@271	25.73	23.33	0.2153
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	135@67	24.39	21.99	0.1581
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@1	24	21.6	0.1445
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@271	24.05	21.65	0.1462
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	135@67	22.38	19.98	0.0995
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@1	22.04	19.64	0.0920
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@271	22.13	19.73	0.0940
78	30	100	650000	3750	CP-OFDM QPSK	1@1	25.15	22.75	0.1884

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

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

n77 SA / NR 100MHz / QPSK(ANT2)								
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)
Lowest	7410	-52.89	-13	-39.89	-63.10	3.03	13.24	H
	11115	-57.49	-13	-44.49	-66.94	3.56	13.01	H
	14820	-58.64	-13	-45.64	-68.16	3.92	13.44	H
	7410	-52.99	-13	-39.99	-63.20	3.03	13.24	V
	11115	-55.18	-13	-42.18	-64.63	3.56	13.01	V
	14820	-58.99	-13	-45.99	-68.51	3.92	13.44	V
Middle	7590	-55.71	-13	-42.71	-65.92	3.03	13.24	H
	11385	-58.36	-13	-45.36	-67.81	3.56	13.01	H
	15180	-58.07	-13	-45.07	-67.59	3.92	13.44	H
	7590	-53.57	-13	-40.57	-63.78	3.03	13.24	V
	11385	-58.69	-13	-45.69	-68.14	3.56	13.01	V
	15180	-58.41	-13	-45.41	-67.93	3.92	13.44	V
Highest	7770	-53.32	-13	-40.32	-63.53	3.03	13.24	H
	11655	-60.02	-13	-47.02	-69.47	3.56	13.01	H
	15540	-58.54	-13	-45.54	-68.06	3.92	13.44	H
	7770	-52.94	-13	-39.94	-63.15	3.03	13.24	V
	11655	-60.13	-13	-47.13	-69.58	3.56	13.01	V
	15540	-58.43	-13	-45.43	-67.95	3.92	13.44	V

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

EN-DC_41A_n77A / LTE 20MHz + NR 100MHz / QPSK(0+2)								
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)
Lowest	7410	-59.75	-13	-46.75	-69.96	3.03	13.24	H
	11115	-60.52	-13	-47.52	-69.97	3.56	13.01	H
	14820	-59.03	-13	-46.03	-68.55	3.92	13.44	H
	7410	-61.88	-13	-48.88	-72.09	3.03	13.24	V
	11115	-60.85	-13	-47.85	-70.30	3.56	13.01	V
	14820	-59.00	-13	-46.00	-68.52	3.92	13.44	V
Middle	7590	-54.73	-13	-41.73	-64.94	3.03	13.24	H
	11385	-60.48	-13	-47.48	-69.93	3.56	13.01	H
	15180	-58.60	-13	-45.60	-68.12	3.92	13.44	H
	7590	-57.05	-13	-44.05	-67.26	3.03	13.24	V
	11385	-60.03	-13	-47.03	-69.48	3.56	13.01	V

	15180	-58.65	-13	-45.65	-68.17	3.92	13.44	V
Highest	7770	-55.29	-13	-42.29	-65.50	3.03	13.24	H
	11655	-59.62	-13	-46.62	-69.07	3.56	13.01	H
	15540	-58.38	-13	-45.38	-67.90	3.92	13.44	H
	7770	-55.92	-13	-42.92	-66.13	3.03	13.24	V
	11655	-59.88	-13	-46.88	-69.33	3.56	13.01	V
	15540	-58.26	-13	-45.26	-67.78	3.92	13.44	V

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

n78 SA / NR 100MHz / QPSK(ANT2)								
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	7410	-53.88	-13	-40.88	-64.09	3.03	13.24	H
	11115	-56.24	-13	-43.24	-65.69	3.56	13.01	H
	14820	-58.88	-13	-45.88	-68.40	3.92	13.44	H
	7410	-51.77	-13	-38.77	-61.98	3.03	13.24	V
	11115	-59.51	-13	-46.51	-68.96	3.56	13.01	V
	14820	-58.97	-13	-45.97	-68.49	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(0+2)								
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	7410	-60.50	-13	-47.50	-70.71	3.03	13.24	H
	11115	-59.96	-13	-46.96	-69.41	3.56	13.01	H
	14820	-58.67	-13	-45.67	-68.19	3.92	13.44	H
	7410	-60.63	-13	-47.63	-70.84	3.03	13.24	V
	11115	-60.62	-13	-47.62	-70.07	3.56	13.01	V
	14820	-58.92	-13	-45.92	-68.44	3.92	13.44	V

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