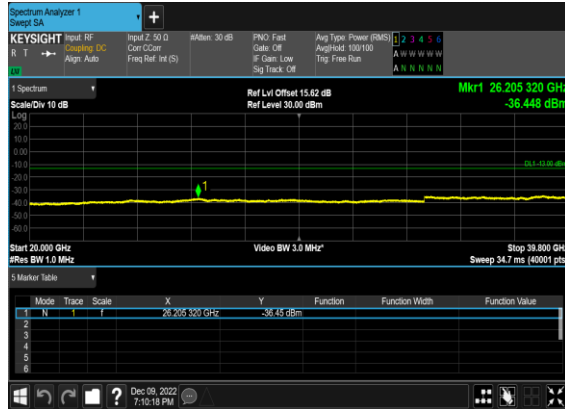


N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



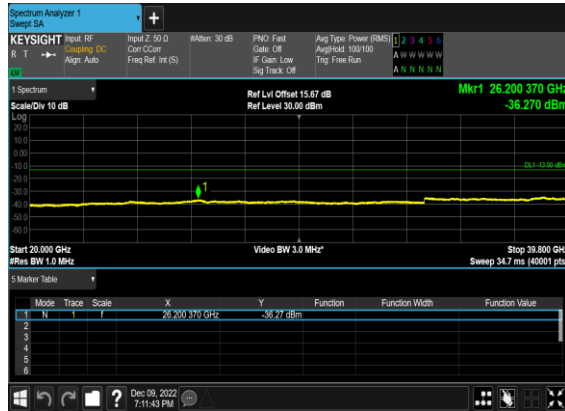
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



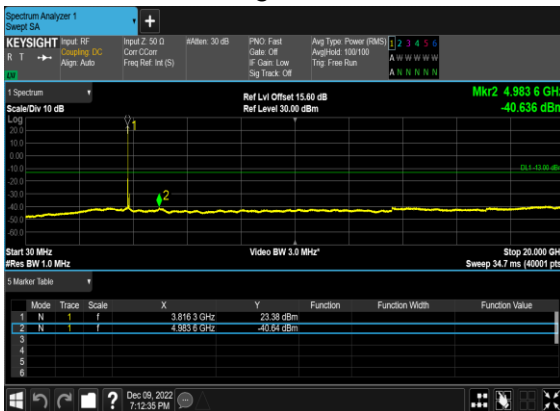
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



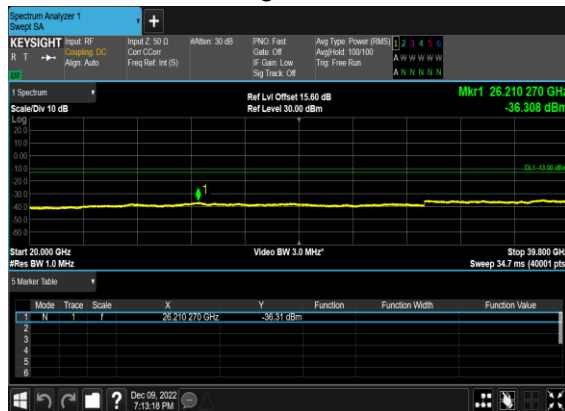
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



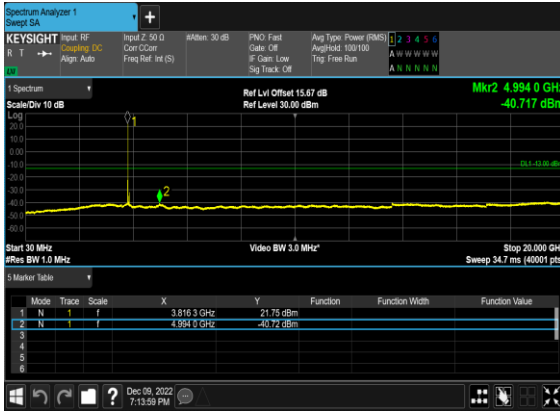
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



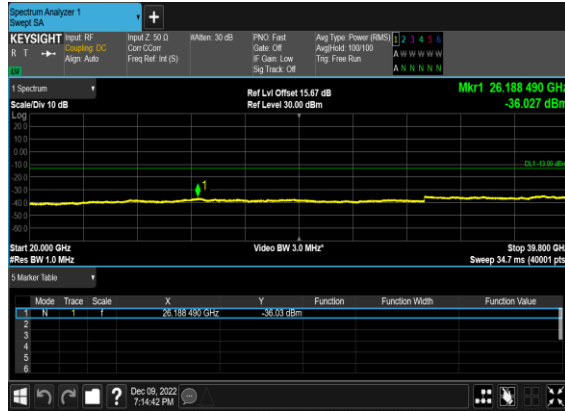
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



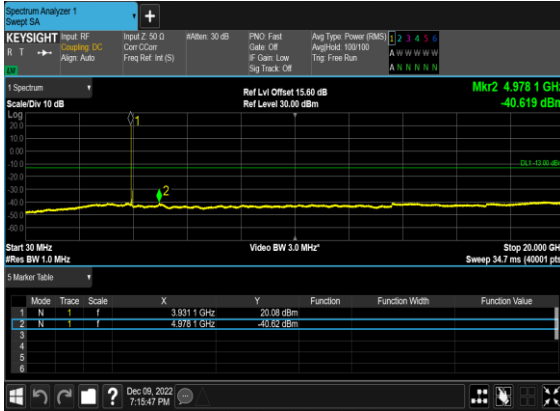
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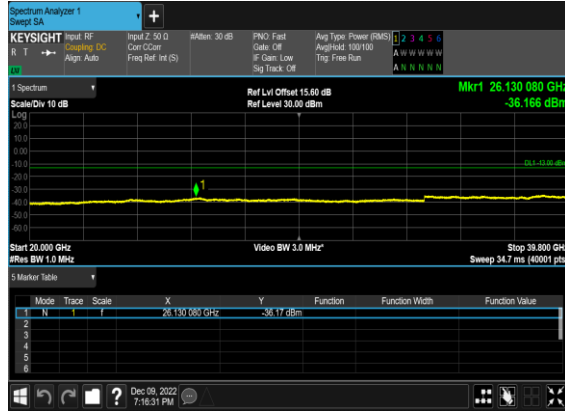
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



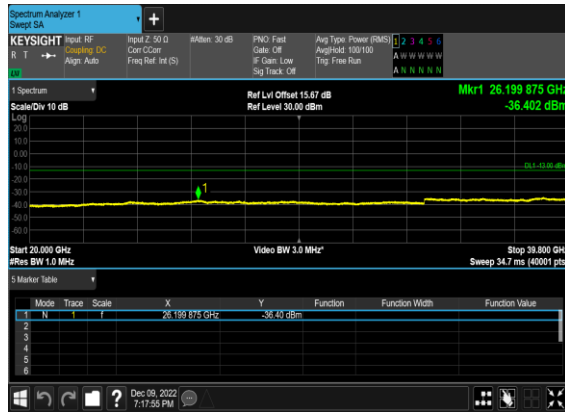
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



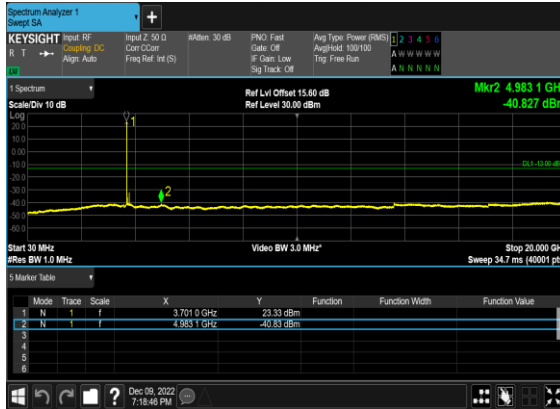
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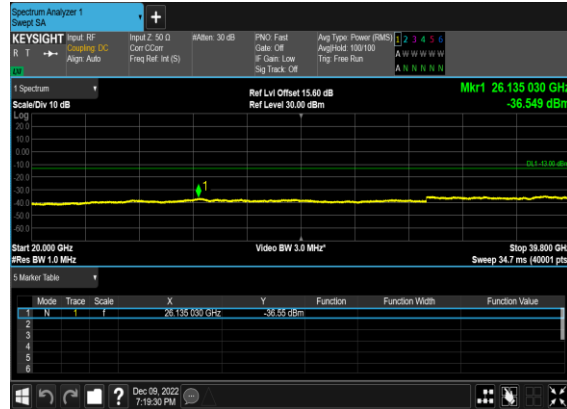
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



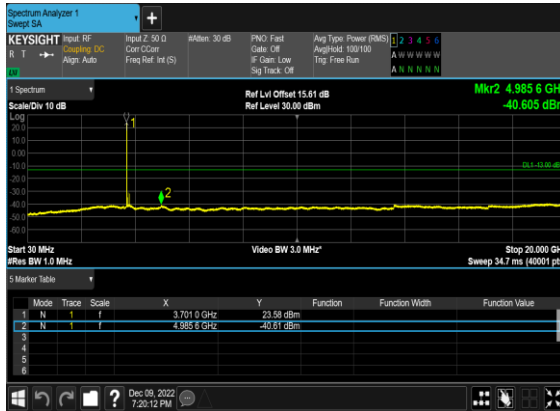
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



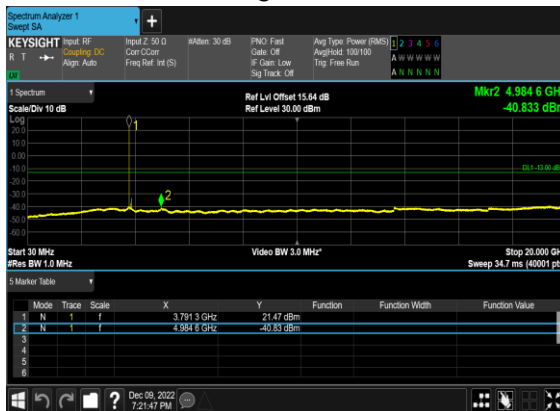
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



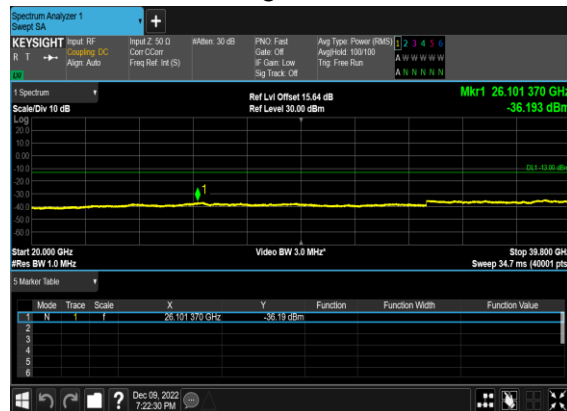
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



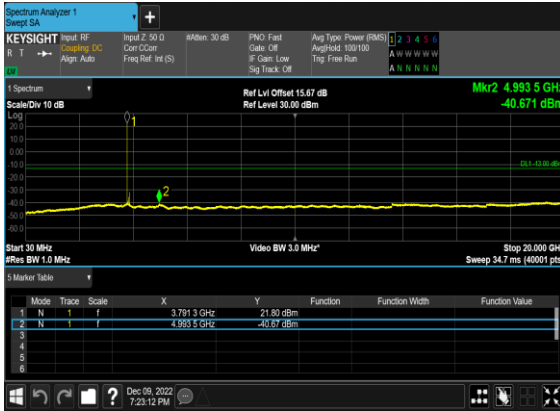
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



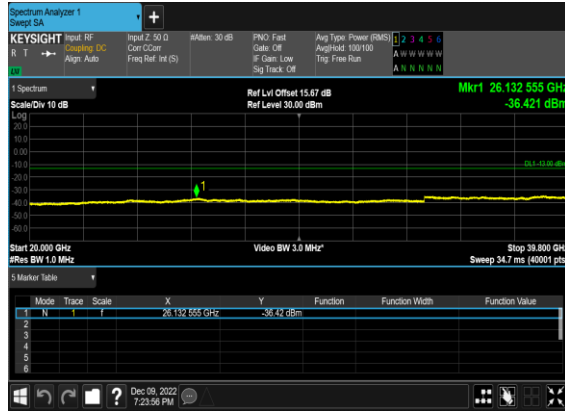
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



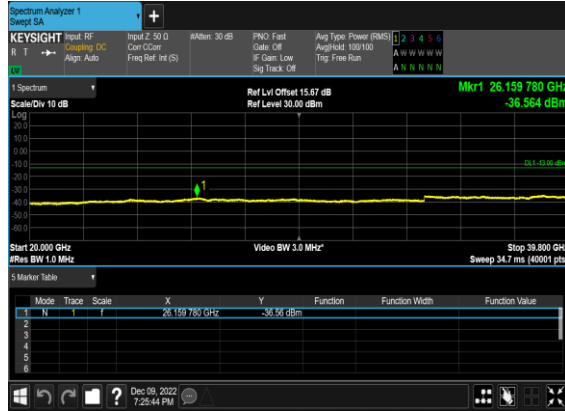
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



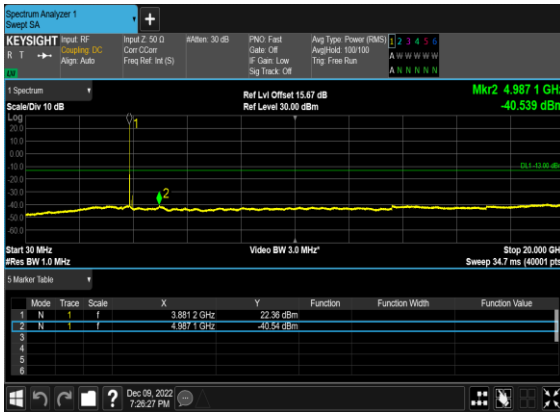
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



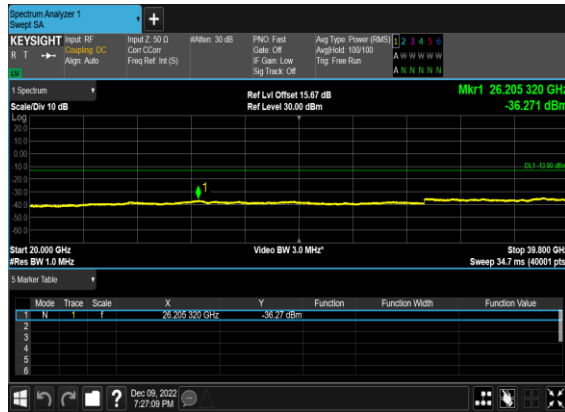
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



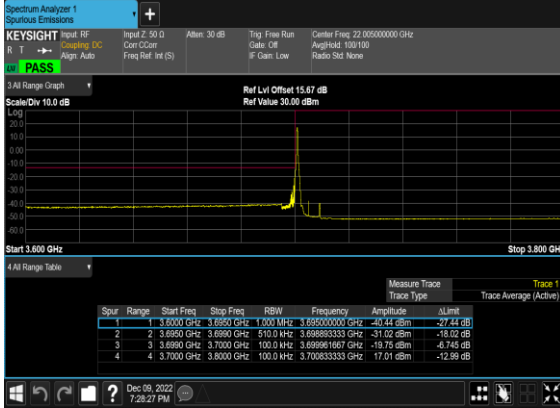
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



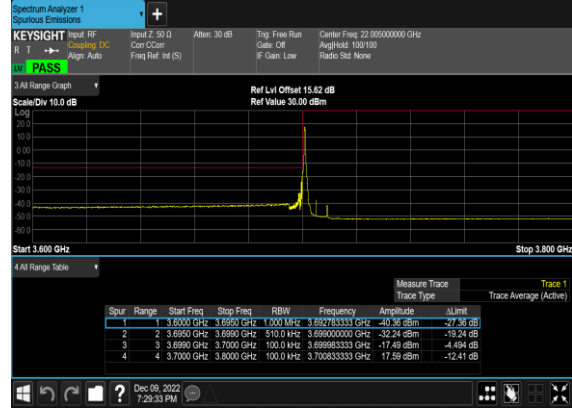
Conducted Band Edge

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

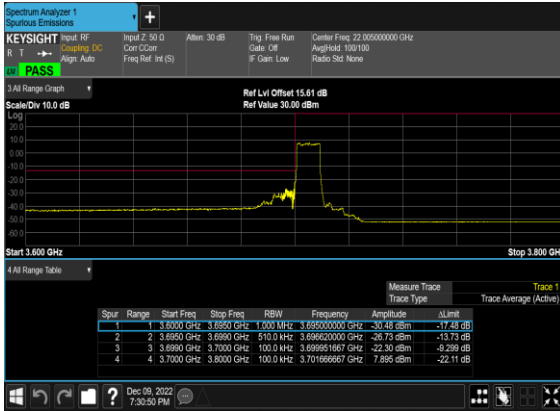
N77(10M)_DFT-s- OFDM_BPSK_Edge_1RB_Left_Low_CH



N77(10M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_Low_CH



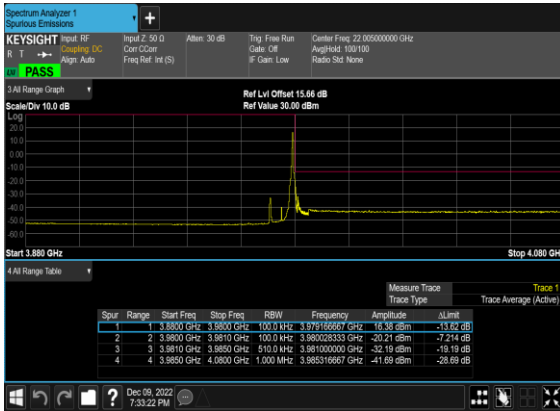
N77(10M)_DFT-s- OFDM_BPSK_Outer_Full_Low_CH



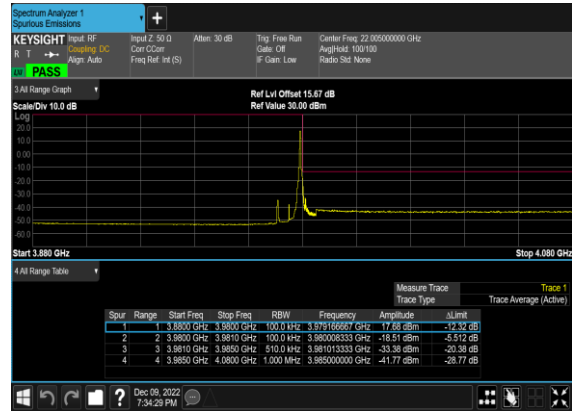
N77(10M)_DFT-s- OFDM_QPSK_Outer_Full_Low_CH



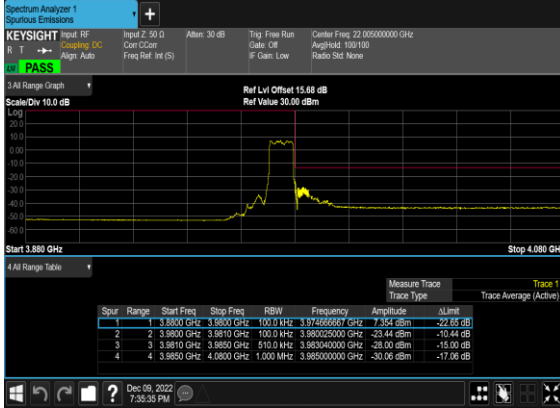
N77(10M)_DFT-s- OFDM_BPSK_Edge_1RB_Right_High_CH



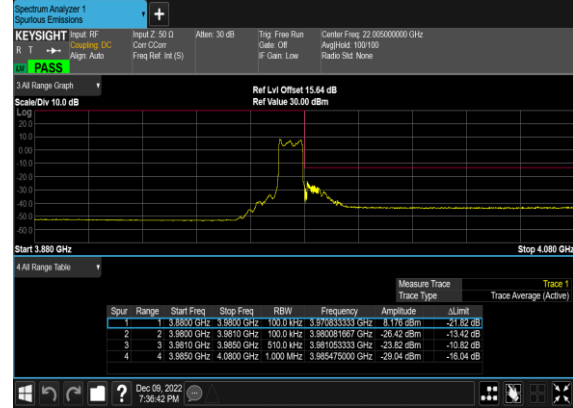
N77(10M)_DFT-s- OFDM_QPSK_Edge_1RB_Right_High_CH



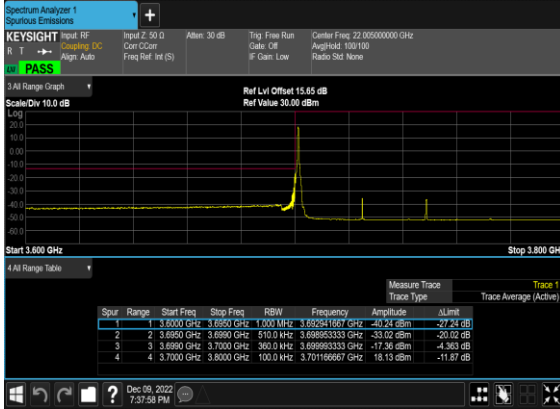
N77(10M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



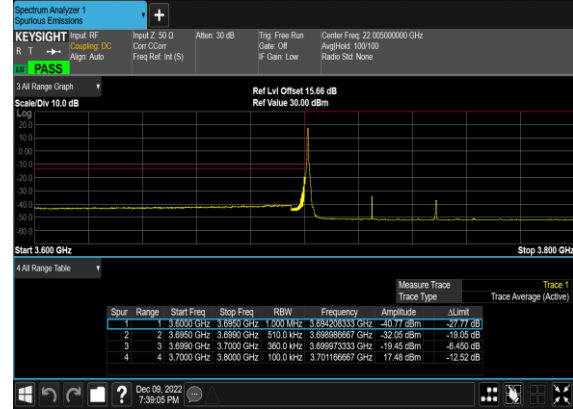
N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



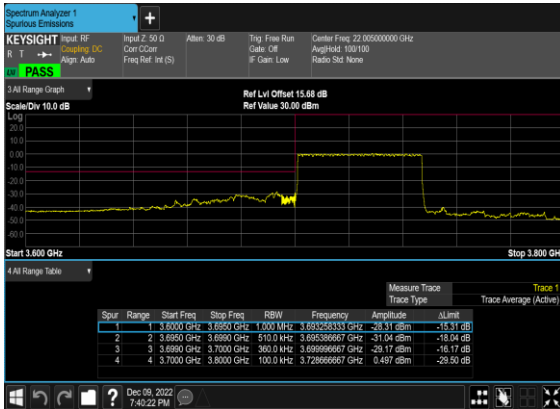
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



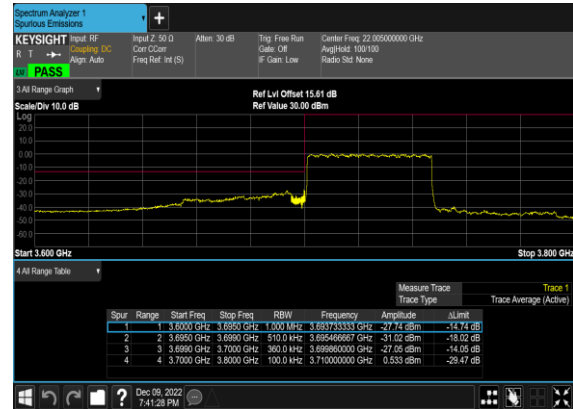
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



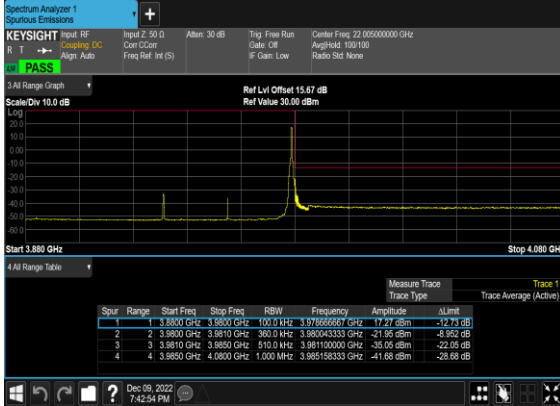
N77(50M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



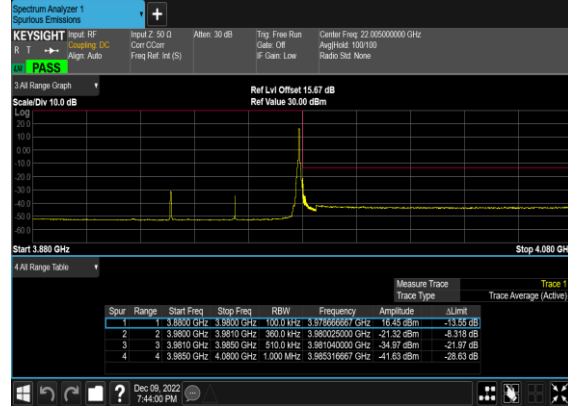
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



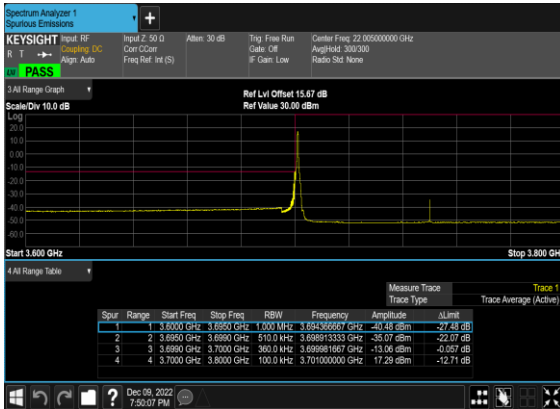
N77(50M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



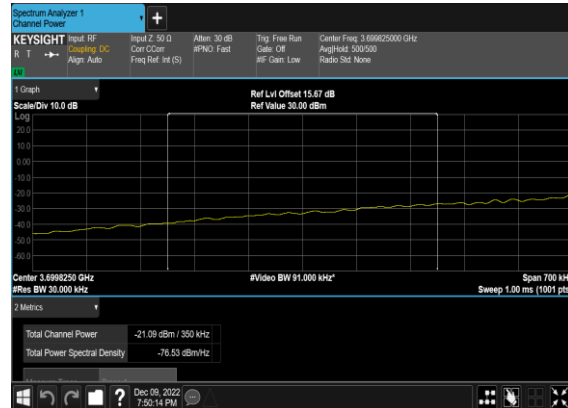
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



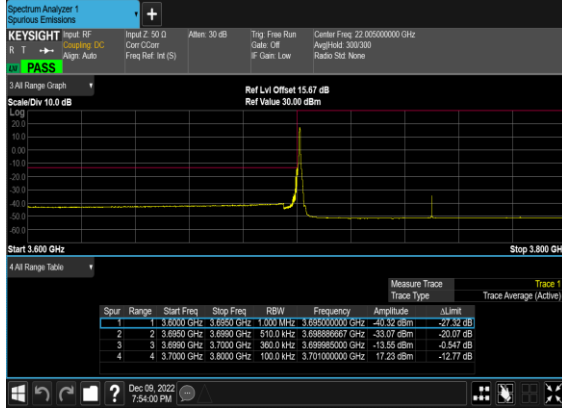
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



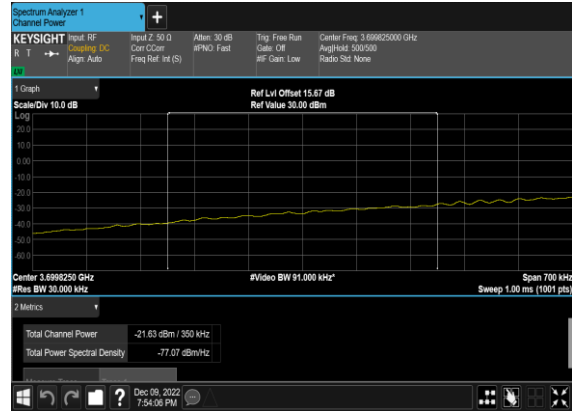
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH_CHP_PA SS



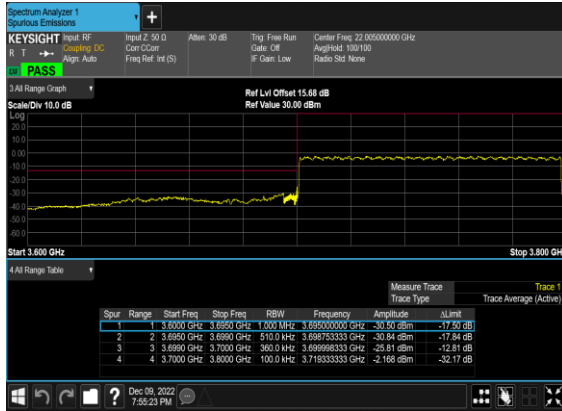
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



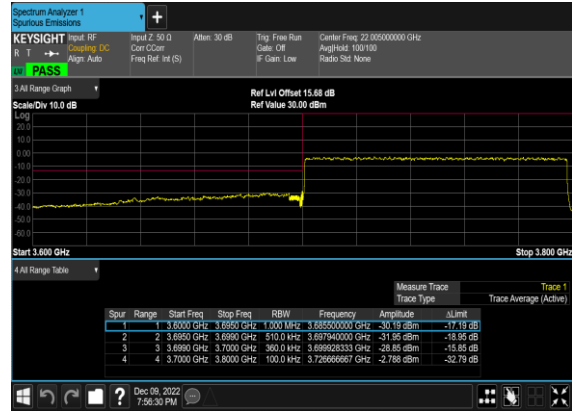
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH_CHP_PA
SS



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



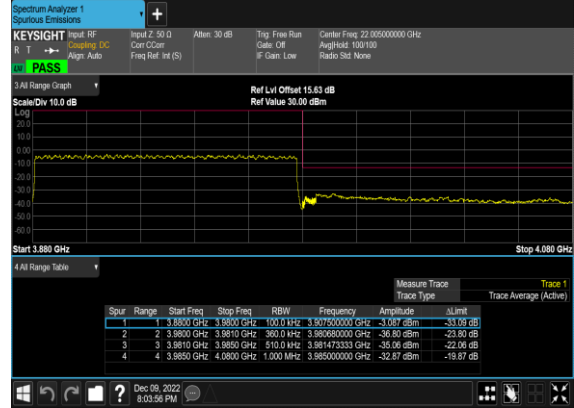
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH



N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



FR1 N78

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=-4dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
78	30	10	647000	3705.0	DFT-s-OFDM QPSK	1@1	23.25	19.25	0.0841
78	30	10	647000	3705.0	DFT-s-OFDM 16 QAM	1@1	23.31	19.31	0.0853
78	30	10	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.08	19.08	0.0809
78	30	10	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.16	19.16	0.0824
78	30	10	653000	3795.0	DFT-s-OFDM QPSK	1@1	22.89	18.89	0.0774
78	30	10	653000	3795.0	DFT-s-OFDM 16 QAM	1@1	22.98	18.98	0.0791
78	30	15	647168	3707.52	DFT-s-OFDM QPSK	1@1	23.54	19.54	0.0899
78	30	15	647168	3707.52	DFT-s-OFDM 16 QAM	1@1	23.55	19.55	0.0902
78	30	15	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.36	19.36	0.0863
78	30	15	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.44	19.44	0.0879
78	30	15	652832	3792.48	DFT-s-OFDM QPSK	1@1	23.09	19.09	0.0811
78	30	15	652832	3792.48	DFT-s-OFDM 16 QAM	1@1	23.21	19.21	0.0834
78	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@1	23.46	19.46	0.0883
78	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@1	23.51	19.51	0.0893
78	30	20	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.33	19.33	0.0857
78	30	20	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.38	19.38	0.0867
78	30	20	652666	3789.99	DFT-s-OFDM QPSK	1@1	23.09	19.09	0.0811
78	30	20	652666	3789.99	DFT-s-OFDM 16 QAM	1@1	23.12	19.12	0.0817
78	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@1	23.48	19.48	0.0887

78	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@1	23.59	19.59	0.0910
78	30	30	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.38	19.38	0.0867
78	30	30	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.5	19.5	0.0891
78	30	30	652332	3784.98	DFT-s-OFDM QPSK	1@1	23.13	19.13	0.0818
78	30	30	652332	3784.98	DFT-s-OFDM 16 QAM	1@1	23.25	19.25	0.0841
78	30	40	648000	3720.0	DFT-s-OFDM QPSK	1@1	23.6	19.6	0.0912
78	30	40	648000	3720.0	DFT-s-OFDM 16 QAM	1@1	23.72	19.72	0.0938
78	30	40	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.46	19.46	0.0883
78	30	40	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.67	19.67	0.0927
78	30	40	652000	3780.0	DFT-s-OFDM QPSK	1@1	23.37	19.37	0.0865
78	30	40	652000	3780.0	DFT-s-OFDM 16 QAM	1@1	23.5	19.5	0.0891
78	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@1	23.38	19.38	0.0867
78	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@1	23.46	19.46	0.0883
78	30	50	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.18	19.18	0.0828
78	30	50	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.27	19.27	0.0845
78	30	50	651666	3774.99	DFT-s-OFDM QPSK	1@1	23	19	0.0794
78	30	50	651666	3774.99	DFT-s-OFDM 16 QAM	1@1	23.07	19.07	0.0807
78	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@1	23.28	19.28	0.0847
78	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	23.26	19.26	0.0843
78	30	60	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.07	19.07	0.0807
78	30	60	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.27	19.27	0.0845
78	30	60	651332	3769.98	DFT-s-OFDM QPSK	1@1	23.01	19.01	0.0796
78	30	60	651332	3769.98	DFT-s-OFDM 16 QAM	1@1	23.15	19.15	0.0822
78	30	70	649000	3735.0	DFT-s-OFDM QPSK	1@1	23.11	19.11	0.0815

78	30	70	649000	3735.0	DFT-s-OFDM 16 QAM	1@1	23.32	19.32	0.0855
78	30	70	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.19	19.19	0.0830
78	30	70	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.19	19.19	0.0830
78	30	70	651000	3765.0	DFT-s-OFDM QPSK	1@1	23	19	0.0794
78	30	70	651000	3765.0	DFT-s-OFDM 16 QAM	1@1	23.12	19.12	0.0817
78	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	23.18	19.18	0.0828
78	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	23.34	19.34	0.0859
78	30	80	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.13	19.13	0.0818
78	30	80	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.16	19.16	0.0824
78	30	80	650666	3759.99	DFT-s-OFDM QPSK	1@1	22.98	18.98	0.0791
78	30	80	650666	3759.99	DFT-s-OFDM 16 QAM	1@1	23.07	19.07	0.0807
78	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@1	23.09	19.09	0.0811
78	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@1	23.25	19.25	0.0841
78	30	90	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.17	19.17	0.0826
78	30	90	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.3	19.3	0.0851
78	30	90	650332	3754.98	DFT-s-OFDM QPSK	1@1	23.01	19.01	0.0796
78	30	90	650332	3754.98	DFT-s-OFDM 16 QAM	1@1	23.14	19.14	0.0820
78	30	100	650000	3750.0	DFT-s-OFDM PI/2 BPSK	135@67	23.06	19.06	0.0805
78	30	100	650000	3750.0	DFT-s-OFDM PI/2 BPSK	1@1	23.14	19.14	0.0820
78	30	100	650000	3750.0	DFT-s-OFDM PI/2 BPSK	1@271	22.89	18.89	0.0774
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	135@67	23.02	19.02	0.0798
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@1	23.74	19.74	0.0942
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@271	22.89	18.89	0.0774
78	30	100	650000	3750.0	DFT-s-OFDM 16 QAM	135@67	23.06	19.06	0.0805

78	30	100	650000	3750.0	DFT-s-OFDM 16 QAM	1@1	23.25	19.25	0.0841
78	30	100	650000	3750.0	DFT-s-OFDM 16 QAM	1@271	23.02	19.02	0.0798
78	30	100	650000	3750.0	DFT-s-OFDM 64 QAM	135@67	22.13	18.13	0.0650
78	30	100	650000	3750.0	DFT-s-OFDM 64 QAM	1@1	22.27	18.27	0.0671
78	30	100	650000	3750.0	DFT-s-OFDM 64 QAM	1@271	22.06	18.06	0.0640
78	30	100	650000	3750.0	DFT-s-OFDM 256 QAM	135@67	20.1	16.1	0.0407
78	30	100	650000	3750.0	DFT-s-OFDM 256 QAM	1@1	20.07	16.07	0.0405
78	30	100	650000	3750.0	DFT-s-OFDM 256 QAM	1@271	19.89	15.89	0.0388
78	30	100	650000	3750.0	CP-OFDM QPSK	137@68	23.07	19.07	0.0807
78	30	100	650000	3750.0	CP-OFDM QPSK	1@1	23.15	19.15	0.0822
78	30	100	650000	3750.0	CP-OFDM QPSK	1@271	22.98	18.98	0.0791



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	HuaCong Liang	Temperature :	22~25°C
		Relative Humidity :	48~52%

Note: Pre-scanned harmonic for the different antenna, we choose the worst antenna mode to test.

n77 SA / NR 100MHz / QPSK(ANT2)									
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)
Lowest	7402.34	-51.63	-13	-38.63	-53.98	-54.93	8.30	11.60	H
	11103.51	-53.79	-13	-40.79	-62.45	-55.31	10.48	12.00	H
	14804.68	-53.24	-13	-40.24	-64.77	-54.94	11.80	13.50	H
	7402.34	-48.61	-13	-35.61	-51.01	-51.91	8.30	11.60	V
	11103.51	-54.52	-13	-41.52	-62.89	-56.04	10.48	12.00	V
	14804.68	-53.22	-13	-40.22	-64.93	-54.92	11.80	13.50	V
Middle	7582.32	-54.91	-13	-41.91	-56.86	-58.21	8.30	11.60	H
	11373.48	-55.67	-13	-42.67	-65.44	-57.19	10.48	12.00	H
	15164.64	-56.11	-13	-43.11	-65.96	-57.81	11.80	13.50	H
	7582.32	-56.29	-13	-43.29	-58.04	-59.59	8.30	11.60	V
	11373.48	-55.71	-13	-42.71	-65.29	-57.23	10.48	12.00	V
	15164.64	-55.86	-13	-42.86	-66.02	-57.56	11.80	13.50	V
Highest	7762.36	-51.55	-13	-38.55	-53.95	-54.85	8.30	11.60	H
	11643.54	-53.44	-13	-40.44	-63.05	-54.96	10.48	12.00	H
	15524.72	-57.84	-13	-44.84	-65.80	-59.54	11.80	13.50	H
	7762.36	-53.68	-13	-40.68	-56.06	-56.98	8.30	11.60	V
	11643.54	-54.82	-13	-41.82	-64.46	-56.34	10.48	12.00	V
	15524.72	-57.85	-13	-44.85	-66.01	-59.55	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(0+2)									
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	7404.00	-58.61	-13	-45.61	-60.96	-61.91	8.30	11.60	H
	11112.00	-54.58	-13	-41.58	-63.28	-56.10	10.48	12.00	H
	14808.00	-53.13	-13	-40.13	-64.64	-54.83	11.80	13.50	H
	7404.00	-59.07	-13	-46.07	-61.46	-62.37	8.30	11.60	V
	11112.00	-55.10	-13	-42.10	-63.51	-56.62	10.48	12.00	V
	14808.00	-53.11	-13	-40.11	-64.81	-54.81	11.80	13.50	V
LTE Band13 Lowest	1554.5	-70.35	-13	-57.35	-57.17	-73.58	3.98	9.36	H
	2331.75	-67.65	-13	-54.65	-57.63	-71.20	4.85	10.55	H
	3109	-66.29	-13	-53.29	-58.31	-71.22	5.50	12.58	H
	1554.5	-69.89	-13	-56.89	-56.91	-73.12	3.98	9.36	V
	2331.75	-67.30	-13	-54.30	-57.67	-70.85	4.85	10.55	V
	3109	-65.88	-13	-52.88	-58.40	-70.81	5.50	12.58	V
NR n77 Middle	7584.00	-55.25	-13	-42.25	-57.20	-58.55	8.30	11.60	H
	11376.00	-54.67	-13	-41.67	-64.45	-56.19	10.48	12.00	H
	15168.00	-55.93	-13	-42.93	-65.76	-57.63	11.80	13.50	H
	7584.00	-58.53	-13	-45.53	-60.27	-61.83	8.30	11.60	V
	11376.00	-54.60	-13	-41.60	-64.19	-56.12	10.48	12.00	V
	15168.00	-55.49	-13	-42.49	-65.63	-57.19	11.80	13.50	V
LTE Band13 Middle	1559.5	-70.32	-42.15	-28.17	-57.08	-73.57	4.00	9.40	H
	2339.25	-67.81	-13	-54.81	-57.75	-71.38	4.88	10.60	H
	3119	-59.37	-13	-46.37	-51.45	-64.30	5.52	12.60	H
	1559.5	-70.09	-42.15	-27.94	-57.06	-73.34	4.00	9.40	V
	2339.25	-67.42	-13	-54.42	-57.75	-70.99	4.88	10.60	V
	3119	-58.27	-13	-45.27	-50.86	-63.20	5.52	12.60	V
NR n77 Highest	7762.50	-50.58	-13	-37.58	-52.98	-53.88	8.30	11.60	H
	11643.75	-54.52	-13	-41.52	-64.13	-56.04	10.48	12.00	H
	15525.00	-58.44	-13	-45.44	-66.40	-60.14	11.80	13.50	H
	7762.50	-55.51	-13	-42.51	-57.89	-58.81	8.30	11.60	V
	11643.75	-54.27	-13	-41.27	-63.91	-55.79	10.48	12.00	V
	15525.00	-58.37	-13	-45.37	-66.53	-60.07	11.80	13.50	V
LTE Band13 Highest	1564.5	-70.44	-42.15	-28.29	-57.14	-73.61	4.10	9.42	H
	2346.75	-67.71	-13	-54.71	-57.61	-71.29	4.90	10.63	H
	3129	-66.08	-13	-53.08	-58.19	-71.00	5.55	12.62	H
	1564.5	-70.03	-42.15	-27.88	-56.95	-73.20	4.10	9.42	V
	2346.75	-67.57	-13	-54.57	-57.86	-71.15	4.90	10.63	V
	3129	-65.75	-13	-52.75	-58.39	-70.67	5.55	12.62	V

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