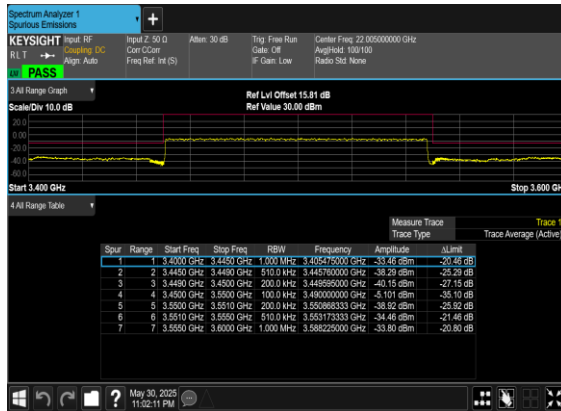
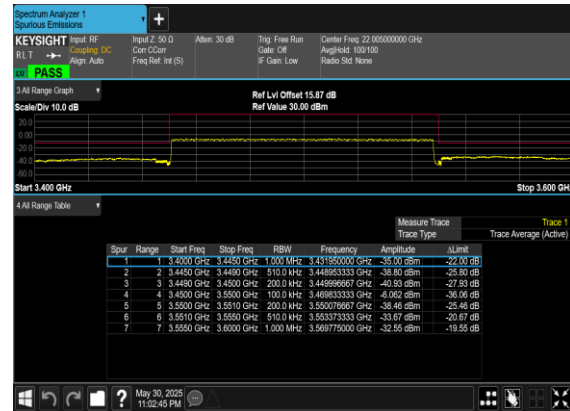




N77(100M)_DFT-s-
OFDM_BPSK_Outer_Full_Mid_CH



N77(100M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH





Software Version: 23.06.1602

FR1 N78(Ant 7)

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=-1.2dBi

NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	25@12	25.97	24.77	0.2999
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	26.02	24.82	0.3034
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@49	25.96	24.76	0.2992
78	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	25@12	25.04	23.84	0.2421
78	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	25.03	23.83	0.2415
78	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@49	25.04	23.84	0.2421
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	25@12	25.95	24.75	0.2985
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.11	24.91	0.3097
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@49	25.99	24.79	0.3013
78	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	25@12	25.09	23.89	0.2449
78	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.14	23.94	0.2477
78	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@49	25.02	23.82	0.2410
78	30	20	636000	3540	DFT-s-OFDM QPSK	25@12	26.04	24.84	0.3048
78	30	20	636000	3540	DFT-s-OFDM QPSK	1@1	26.14	24.94	0.3119
78	30	20	636000	3540	DFT-s-OFDM QPSK	1@49	26	24.8	0.3020
78	30	20	636000	3540	DFT-s-OFDM 16 QAM	25@12	25.01	23.81	0.2404
78	30	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	25.15	23.95	0.2483
78	30	20	636000	3540	DFT-s-OFDM 16 QAM	1@49	25.01	23.81	0.2404
78	30	30	631000	3465	DFT-s-OFDM QPSK	36@18	25.82	24.62	0.2897
78	30	30	631000	3465	DFT-s-OFDM QPSK	1@1	25.84	24.64	0.2911
78	30	30	631000	3465	DFT-s-OFDM QPSK	1@76	25.74	24.54	0.2844
78	30	30	631000	3465	DFT-s-OFDM 16 QAM	36@18	24.85	23.65	0.2317
78	30	30	631000	3465	DFT-s-OFDM 16 QAM	1@1	24.9	23.7	0.2344
78	30	30	631000	3465	DFT-s-OFDM 16 QAM	1@76	24.8	23.6	0.2291
78	30	30	633334	3500.01	DFT-s-OFDM QPSK	36@18	25.88	24.68	0.2938
78	30	30	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.97	24.77	0.2999
78	30	30	633334	3500.01	DFT-s-OFDM QPSK	1@76	25.78	24.58	0.2871
78	30	30	633334	3500.01	DFT-s-OFDM 16 QAM	36@18	24.87	23.67	0.2328
78	30	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.91	23.71	0.2350
78	30	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@76	24.88	23.68	0.2333
78	30	30	635666	3534.99	DFT-s-OFDM QPSK	36@18	25.89	24.69	0.2944



78	30	30	635666	3534.99	DFT-s-OFDM QPSK	1@1	26.01	24.81	0.3027
78	30	30	635666	3534.99	DFT-s-OFDM QPSK	1@76	25.97	24.77	0.2999
78	30	30	635666	3534.99	DFT-s-OFDM 16 QAM	36@18	24.95	23.75	0.2371
78	30	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@1	25.04	23.84	0.2421
78	30	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@76	24.94	23.74	0.2366
78	30	40	631334	3470.01	DFT-s-OFDM QPSK	50@25	25.82	24.62	0.2897
78	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	25.83	24.63	0.2904
78	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@104	25.84	24.64	0.2911
78	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	50@25	24.87	23.67	0.2328
78	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	24.91	23.71	0.2350
78	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@104	24.78	23.58	0.2280
78	30	40	633334	3500.01	DFT-s-OFDM QPSK	50@25	25.89	24.69	0.2944
78	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.9	24.7	0.2951
78	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@104	25.84	24.64	0.2911
78	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	50@25	24.88	23.68	0.2333
78	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.94	23.74	0.2366
78	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@104	24.92	23.72	0.2355
78	30	40	635332	3529.98	DFT-s-OFDM QPSK	50@25	25.94	24.74	0.2979
78	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	26.06	24.86	0.3062
78	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@104	25.83	24.63	0.2904
78	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	50@25	24.99	23.79	0.2393
78	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	25	23.8	0.2399
78	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@104	25.03	23.83	0.2415
78	30	50	631668	3475.02	DFT-s-OFDM QPSK	64@32	25.85	24.65	0.2917
78	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@1	25.81	24.61	0.2891
78	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@131	25.78	24.58	0.2871
78	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	64@32	24.85	23.65	0.2317
78	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@1	24.86	23.66	0.2323
78	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@131	24.86	23.66	0.2323
78	30	50	633334	3500.01	DFT-s-OFDM QPSK	64@32	25.9	24.7	0.2951
78	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.87	24.67	0.2931
78	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@131	25.87	24.67	0.2931
78	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	64@32	24.89	23.69	0.2339
78	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.06	23.86	0.2432
78	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@131	24.79	23.59	0.2286
78	30	50	635000	3525	DFT-s-OFDM QPSK	64@32	26	24.8	0.3020
78	30	50	635000	3525	DFT-s-OFDM QPSK	1@1	26.03	24.83	0.3041
78	30	50	635000	3525	DFT-s-OFDM QPSK	1@131	25.88	24.68	0.2938



78	30	50	635000	3525	DFT-s-OFDM 16 QAM	64@32	24.96	23.76	0.2377
78	30	50	635000	3525	DFT-s-OFDM 16 QAM	1@1	25.03	23.83	0.2415
78	30	50	635000	3525	DFT-s-OFDM 16 QAM	1@131	24.81	23.61	0.2296
78	30	60	632000	3480	DFT-s-OFDM QPSK	81@40	25.88	24.68	0.2938
78	30	60	632000	3480	DFT-s-OFDM QPSK	1@1	26.02	24.82	0.3034
78	30	60	632000	3480	DFT-s-OFDM QPSK	1@160	26.13	24.93	0.3112
78	30	60	632000	3480	DFT-s-OFDM 16 QAM	81@40	24.93	23.73	0.2360
78	30	60	632000	3480	DFT-s-OFDM 16 QAM	1@1	25	23.8	0.2399
78	30	60	632000	3480	DFT-s-OFDM 16 QAM	1@160	24.89	23.69	0.2339
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	81@40	25.91	24.71	0.2958
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.04	24.84	0.3048
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@160	25.98	24.78	0.3006
78	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	81@40	24.93	23.73	0.2360
78	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.06	23.86	0.2432
78	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@160	25.03	23.83	0.2415
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	81@40	25.96	24.76	0.2992
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	26.15	24.95	0.3126
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@160	26	24.8	0.3020
78	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	81@40	24.94	23.74	0.2366
78	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	25.07	23.87	0.2438
78	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@160	25.07	23.87	0.2438
78	30	70	632334	3485.01	DFT-s-OFDM QPSK	90@45	26	24.8	0.3020
78	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@1	26.08	24.88	0.3076
78	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@187	25.84	24.64	0.2911
78	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	90@45	25.03	23.83	0.2415
78	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@1	25.12	23.92	0.2466
78	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@187	24.87	23.67	0.2328
78	30	70	633334	3500.01	DFT-s-OFDM QPSK	90@45	25.96	24.76	0.2992
78	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.15	24.95	0.3126
78	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@187	25.92	24.72	0.2965
78	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	90@45	24.99	23.79	0.2393
78	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.21	24.01	0.2518
78	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@187	24.87	23.67	0.2328
78	30	70	634332	3514.98	DFT-s-OFDM QPSK	90@45	25.99	24.79	0.3013
78	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@1	26.17	24.97	0.3141
78	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@187	25.81	24.61	0.2891
78	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	90@45	25.02	23.82	0.2410
78	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@1	25.19	23.99	0.2506



78	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@187	24.86	23.66	0.2323
78	30	80	632668	3490.02	DFT-s-OFDM QPSK	108@54	26.05	24.85	0.3055
78	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	26.3	25.1	0.3236
78	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@215	25.85	24.65	0.2917
78	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	108@54	25.07	23.87	0.2438
78	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	25.05	23.85	0.2427
78	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@215	24.92	23.72	0.2355
78	30	80	633334	3500.01	DFT-s-OFDM QPSK	108@54	25.94	24.74	0.2979
78	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.16	24.96	0.3133
78	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@215	26.01	24.81	0.3027
78	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	108@54	25.01	23.81	0.2404
78	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.22	24.02	0.2523
78	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@215	24.95	23.75	0.2371
78	30	80	634000	3510	DFT-s-OFDM QPSK	108@54	26.02	24.82	0.3034
78	30	80	634000	3510	DFT-s-OFDM QPSK	1@1	26.29	25.09	0.3228
78	30	80	634000	3510	DFT-s-OFDM QPSK	1@215	25.97	24.77	0.2999
78	30	80	634000	3510	DFT-s-OFDM 16 QAM	108@54	25.07	23.87	0.2438
78	30	80	634000	3510	DFT-s-OFDM 16 QAM	1@1	25.28	24.08	0.2559
78	30	80	634000	3510	DFT-s-OFDM 16 QAM	1@215	24.99	23.79	0.2393
78	30	90	633000	3495	DFT-s-OFDM QPSK	120@60	25.99	24.79	0.3013
78	30	90	633000	3495	DFT-s-OFDM QPSK	1@1	26.23	25.03	0.3184
78	30	90	633000	3495	DFT-s-OFDM QPSK	1@243	25.81	24.61	0.2891
78	30	90	633000	3495	DFT-s-OFDM 16 QAM	120@60	25.11	23.91	0.2460
78	30	90	633000	3495	DFT-s-OFDM 16 QAM	1@1	25.22	24.02	0.2523
78	30	90	633000	3495	DFT-s-OFDM 16 QAM	1@243	24.94	23.74	0.2366
78	30	90	633334	3500.01	DFT-s-OFDM QPSK	120@60	25.97	24.77	0.2999
78	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.18	24.98	0.3148
78	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@243	25.82	24.62	0.2897
78	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	120@60	25.07	23.87	0.2438
78	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.21	24.01	0.2518
78	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@243	24.88	23.68	0.2333
78	30	90	633666	3504.99	DFT-s-OFDM QPSK	120@60	26.04	24.84	0.3048
78	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@1	26.21	25.01	0.3170
78	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@243	25.76	24.56	0.2858
78	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	120@60	25.04	23.84	0.2421
78	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@1	25.2	24	0.2512
78	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@243	24.8	23.6	0.2291
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	26.18	24.98	0.3148



78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	26.37	25.17	0.3289
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	26.11	24.91	0.3097
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	26.2	25	0.3162
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.35	25.15	0.3273
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	26.05	24.85	0.3055
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	25.21	24.01	0.2518
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.42	24.22	0.2642
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@271	25.11	23.91	0.2460
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	23.74	22.54	0.1795
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	24.15	22.95	0.1972
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@271	23.89	22.69	0.1858
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	21.71	20.51	0.1125
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	21.61	20.41	0.1099
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@271	21.42	20.22	0.1052
78	30	100	633334	3500.01	CP-OFDM QPSK	137@68	24.68	23.48	0.2228
78	30	100	633334	3500.01	CP-OFDM QPSK	1@1	24.73	23.53	0.2254
78	30	100	633334	3500.01	CP-OFDM QPSK	1@271	24.45	23.25	0.2113



Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (Hz)	Verdict	Environment
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	17.1	PASS	NV
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	18.9	PASS	LV
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	18.7	PASS	HV
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	14.7	PASS	-30℃
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	13.1	PASS	-20℃
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	19.4	PASS	-10℃
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	18.8	PASS	0℃
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	18.4	PASS	10℃
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	17.1	PASS	20℃
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	14.4	PASS	30℃
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	19.2	PASS	40℃
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	11.3	PASS	50℃

 $|\text{MAX}(\Delta f)| = 19.4 \text{ Hz}$

Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L - \text{MAX}(\Delta f) $	3450.869261	$\geq 3450 \text{ MHz}$	PASS
$f_H + \text{MAX}(\Delta f) $	3548.751335	$\leq 3550 \text{ MHz}$	

Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	4.41	13	PASS
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	5.6	13	PASS

N78(20M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



N78(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH





Occupied Bandwidth

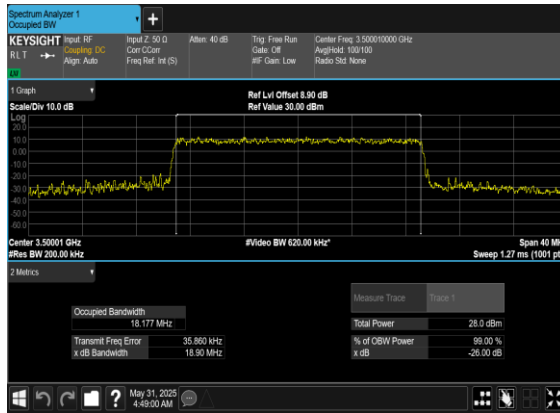
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	18.177	18.9
78	30	20	633334	3500.01	CP-OFDM 16 QAM	51@0	18.188	19.1
78	30	20	633334	3500.01	CP-OFDM 64 QAM	51@0	18.254	18.89
78	30	20	633334	3500.01	CP-OFDM 256 QAM	51@0	18.21	19.02
78	30	30	633334	3500.01	CP-OFDM QPSK	78@0	27.835	28.75
78	30	30	633334	3500.01	CP-OFDM 16 QAM	78@0	27.809	28.84
78	30	30	633334	3500.01	CP-OFDM 64 QAM	78@0	27.8	28.85
78	30	30	633334	3500.01	CP-OFDM 256 QAM	78@0	27.715	28.92
78	30	40	633334	3500.01	CP-OFDM QPSK	106@0	37.786	39.03
78	30	40	633334	3500.01	CP-OFDM 16 QAM	106@0	37.727	39.18
78	30	40	633334	3500.01	CP-OFDM 64 QAM	106@0	37.722	39.06
78	30	40	633334	3500.01	CP-OFDM 256 QAM	106@0	37.724	39.37
78	30	50	633334	3500.01	CP-OFDM QPSK	133@0	47.373	48.99
78	30	50	633334	3500.01	CP-OFDM 16 QAM	133@0	47.44	49.24
78	30	50	633334	3500.01	CP-OFDM 64 QAM	133@0	47.46	49.04
78	30	50	633334	3500.01	CP-OFDM 256 QAM	133@0	47.447	49.06
78	30	60	633334	3500.01	CP-OFDM QPSK	162@0	57.83	59.67
78	30	60	633334	3500.01	CP-OFDM 16 QAM	162@0	57.598	59.69
78	30	60	633334	3500.01	CP-OFDM 64 QAM	162@0	57.779	59.81
78	30	60	633334	3500.01	CP-OFDM 256 QAM	162@0	57.769	59.71
78	30	70	633334	3500.01	CP-OFDM QPSK	189@0	67.321	69.75
78	30	70	633334	3500.01	CP-OFDM 16 QAM	189@0	67.332	69.67



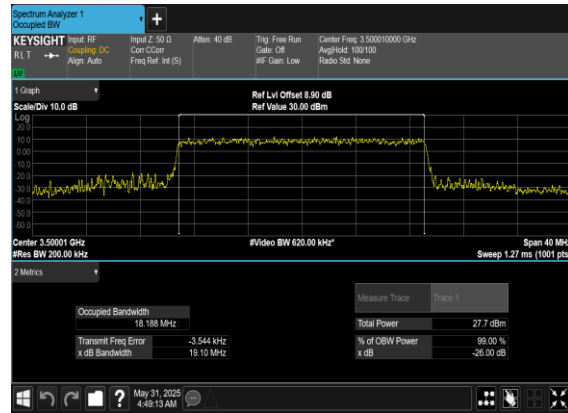
78	30	70	633334	3500.01	CP-OFDM 64 QAM	189@0	67.46	69.76
78	30	70	633334	3500.01	CP-OFDM 256 QAM	189@0	67.42	69.67
78	30	80	633334	3500.01	CP-OFDM QPSK	217@0	77.388	79.84
78	30	80	633334	3500.01	CP-OFDM 16 QAM	217@0	77.534	79.92
78	30	80	633334	3500.01	CP-OFDM 64 QAM	217@0	77.536	79.99
78	30	80	633334	3500.01	CP-OFDM 256 QAM	217@0	77.439	79.99
78	30	90	633334	3500.01	CP-OFDM QPSK	245@0	87.566	90.18
78	30	90	633334	3500.01	CP-OFDM 16 QAM	245@0	87.288	90.29
78	30	90	633334	3500.01	CP-OFDM 64 QAM	245@0	87.044	90.2
78	30	90	633334	3500.01	CP-OFDM 256 QAM	245@0	87.318	90.22
78	30	100	633334	3500.01	CP-OFDM QPSK	273@0	97.378	100.5
78	30	100	633334	3500.01	CP-OFDM 16 QAM	273@0	97.497	100.4
78	30	100	633334	3500.01	CP-OFDM 64 QAM	273@0	97.522	100.5
78	30	100	633334	3500.01	CP-OFDM 256 QAM	273@0	97.596	100.5



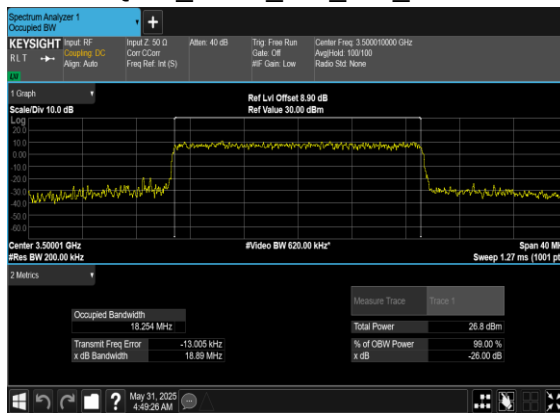
N78(20M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



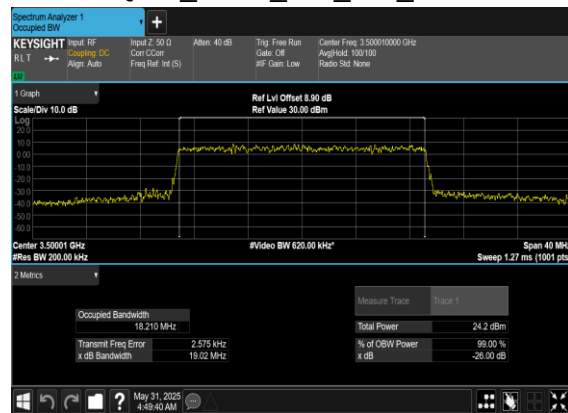
N78(20M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N78(20M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH

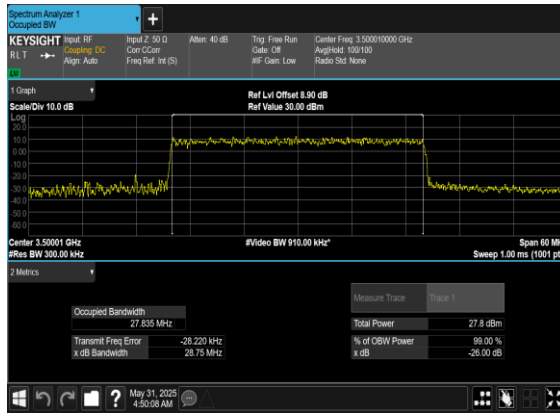


N78(20M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

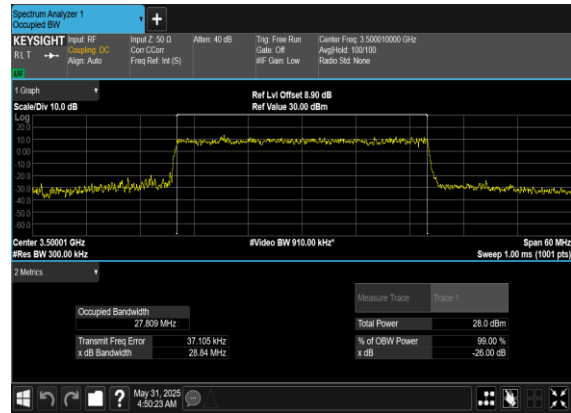




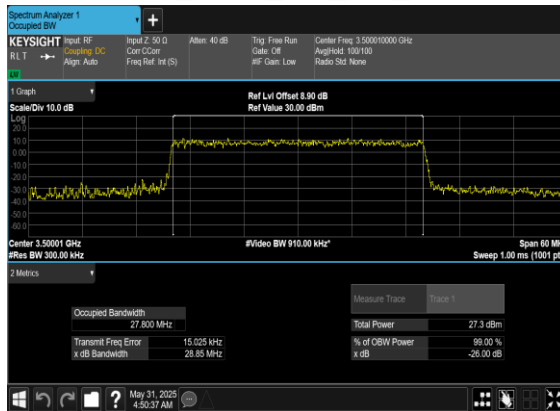
N78(30M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



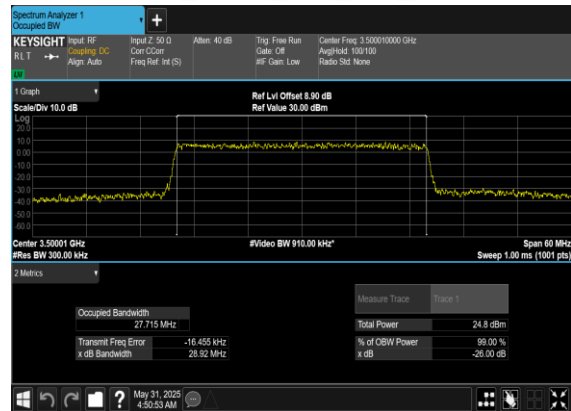
N78(30M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N78(30M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH

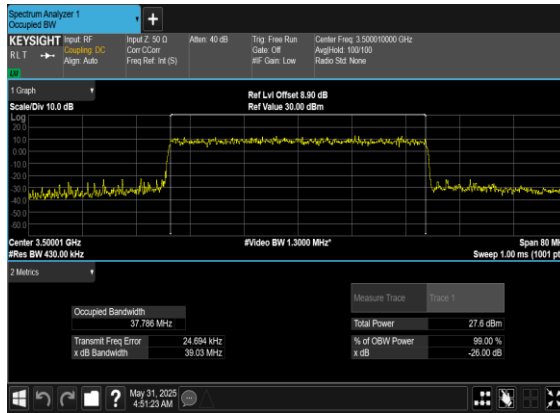


N78(30M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

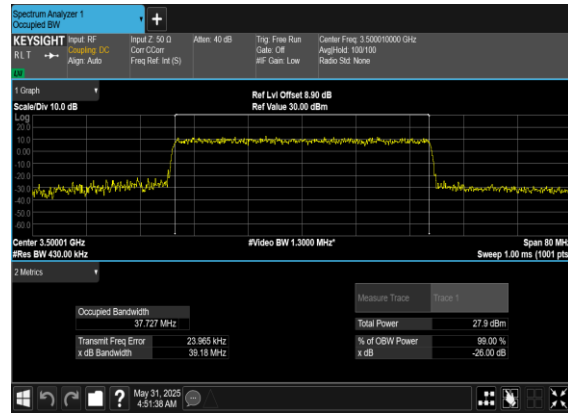




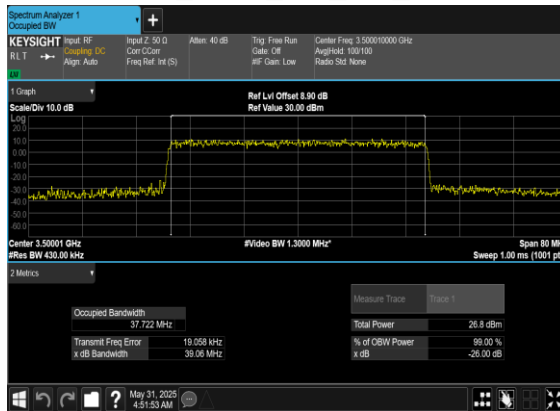
N78(40M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



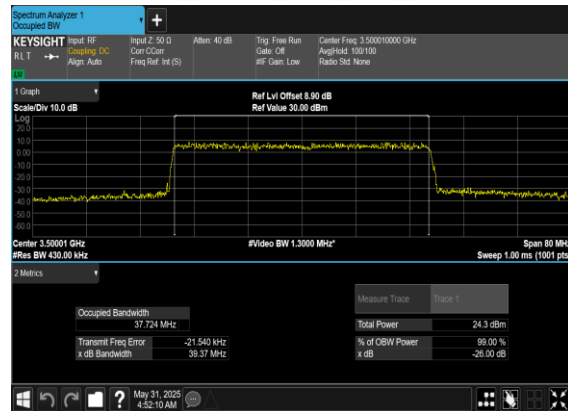
N78(40M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N78(40M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH

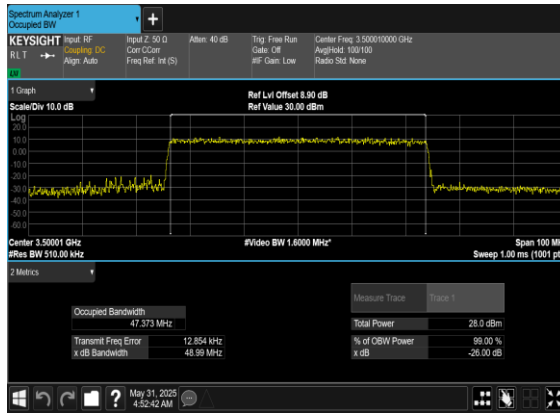


N78(40M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

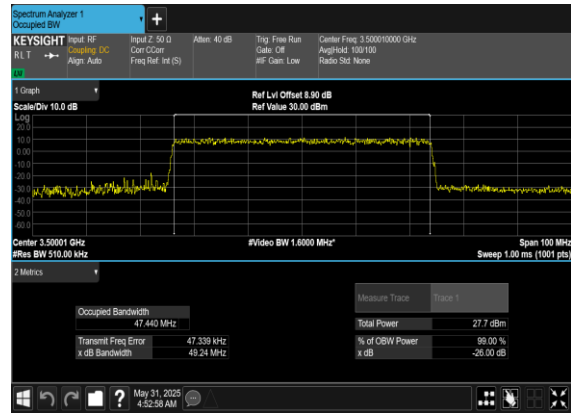




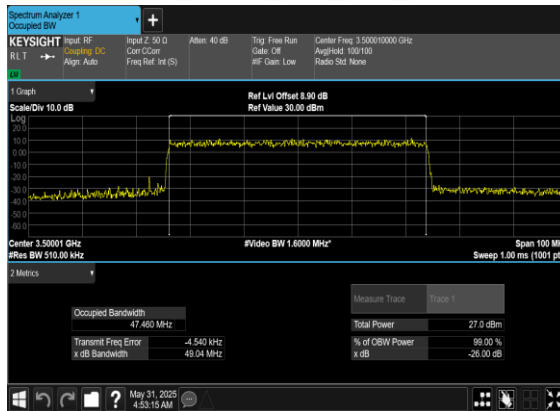
N78(50M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



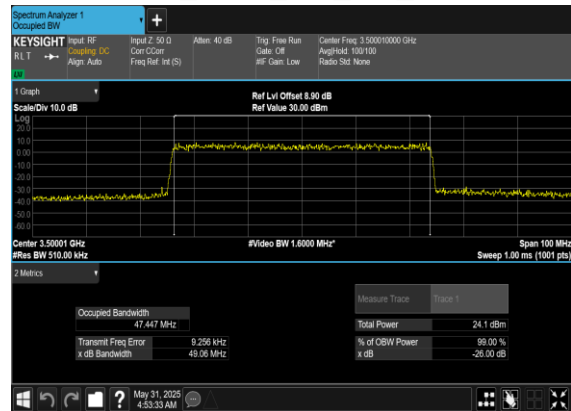
N78(50M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N78(50M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH

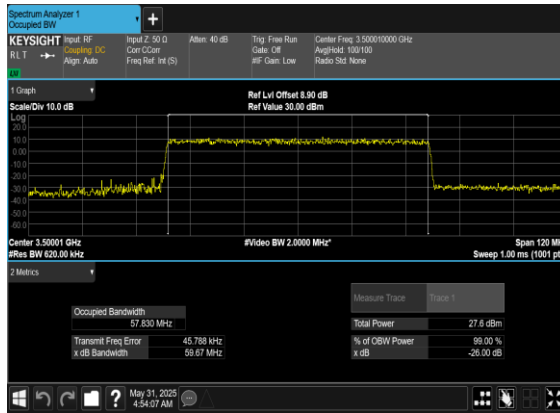


N78(50M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

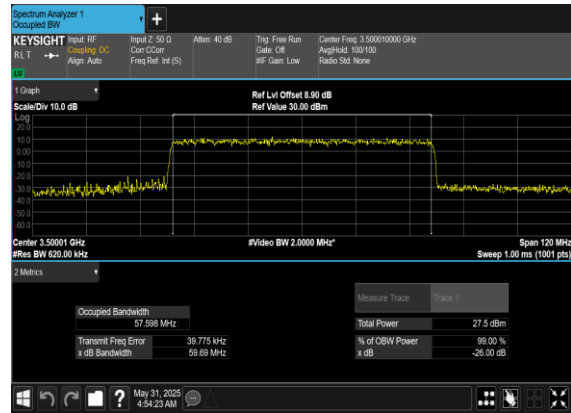




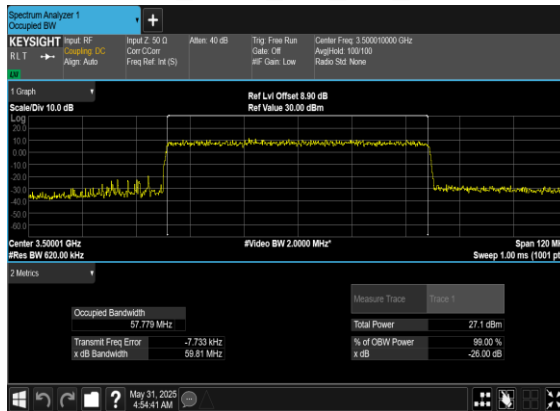
N78(60M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



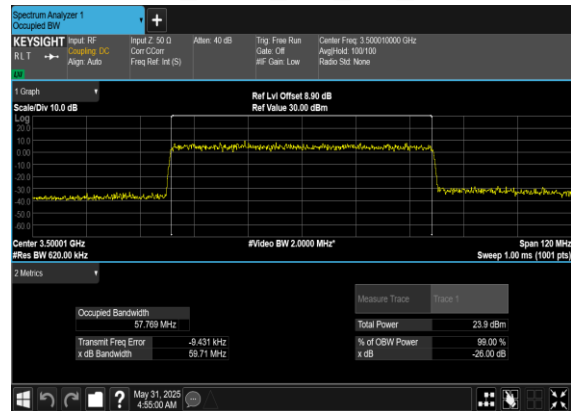
N78(60M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N78(60M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH

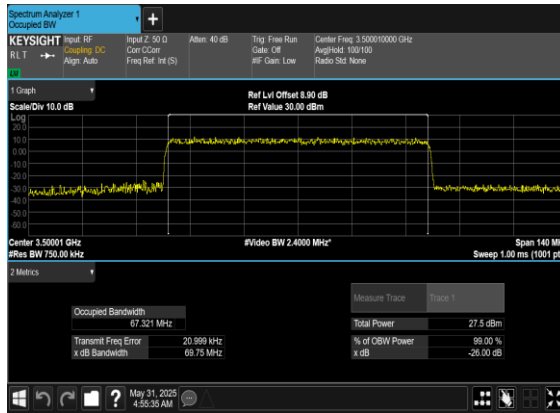


N78(60M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

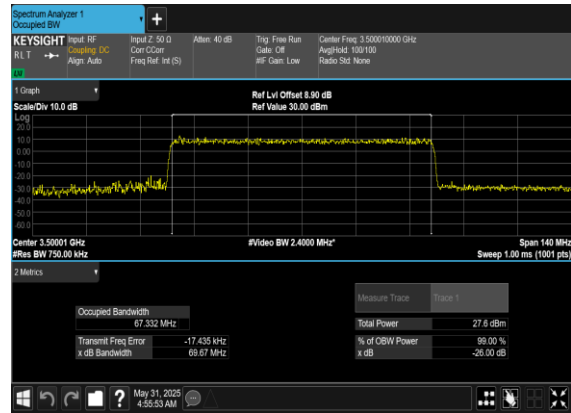




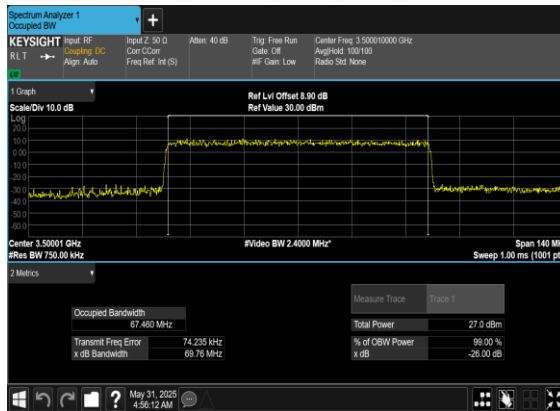
N78(70M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



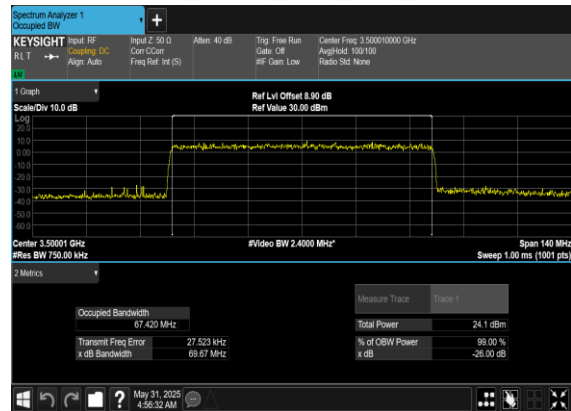
N78(70M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N78(70M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH

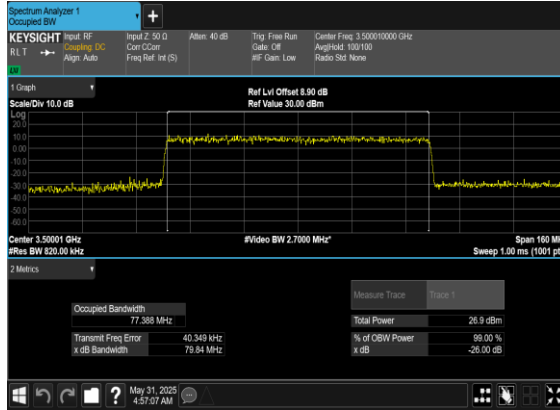


N78(70M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

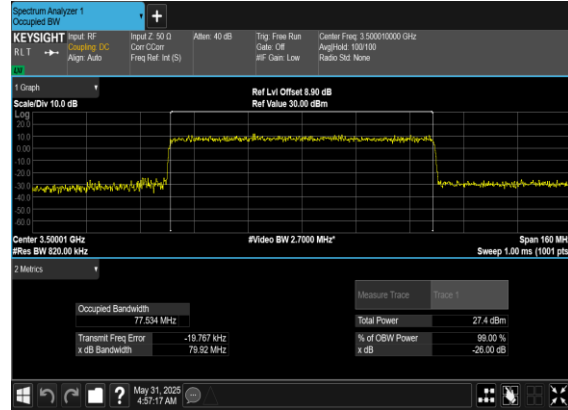




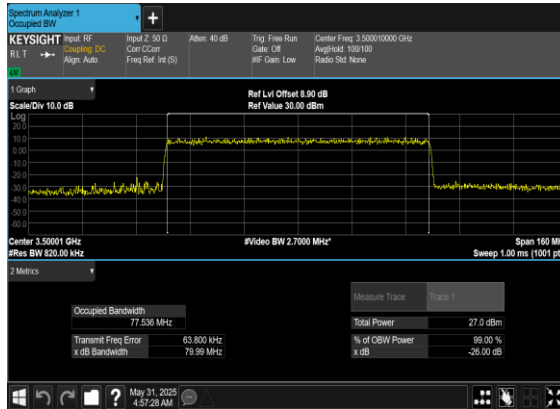
N78(80M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



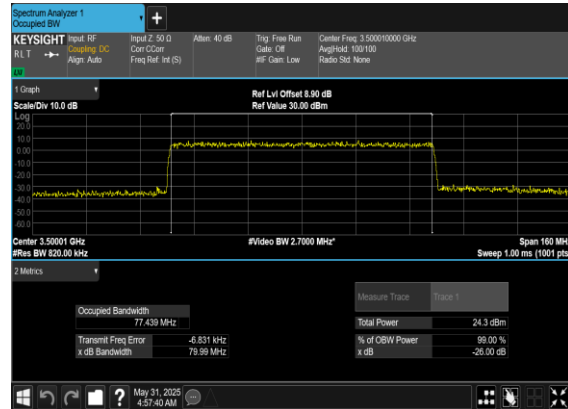
N78(80M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N78(80M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH

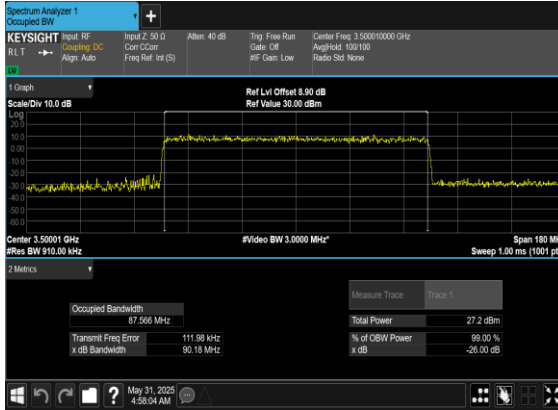


N78(80M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

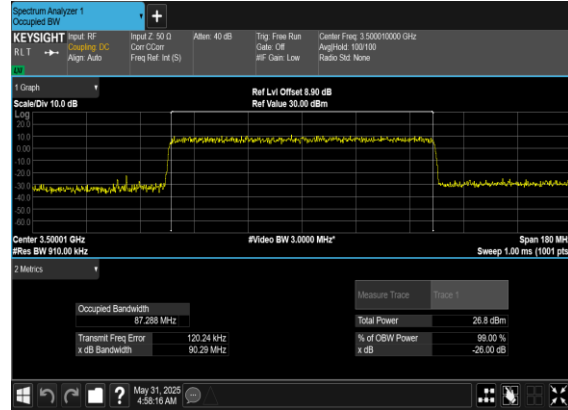




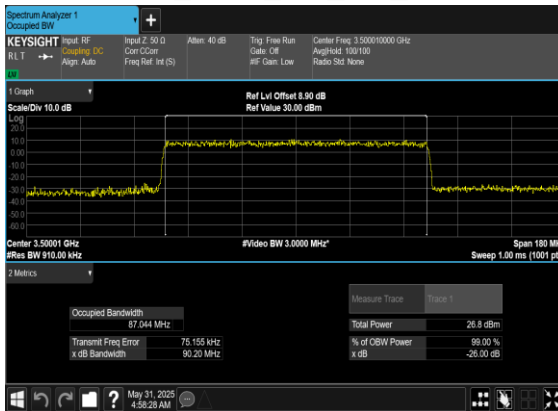
N78(90M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



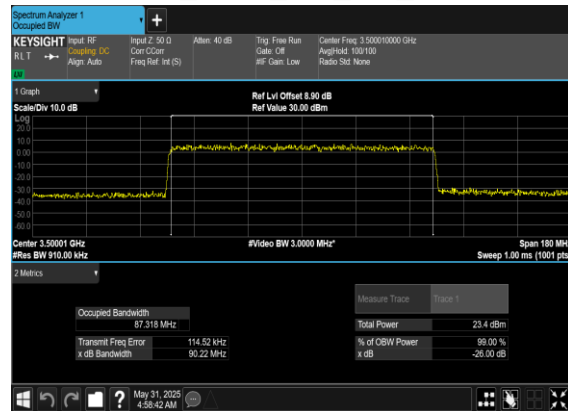
N78(90M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N78(90M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH

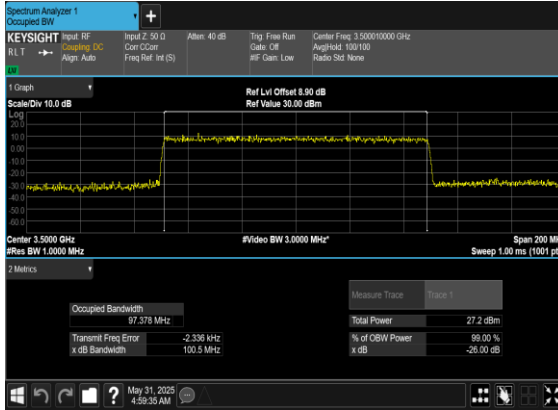


N78(90M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

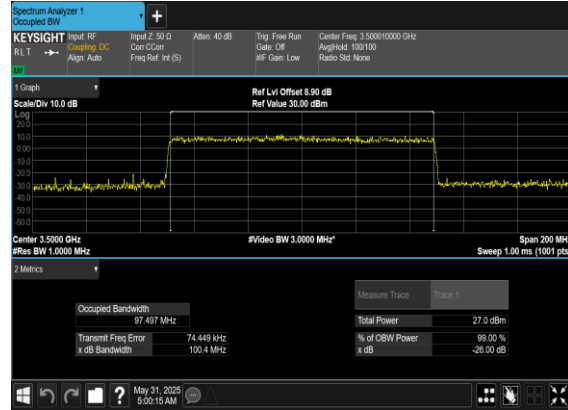




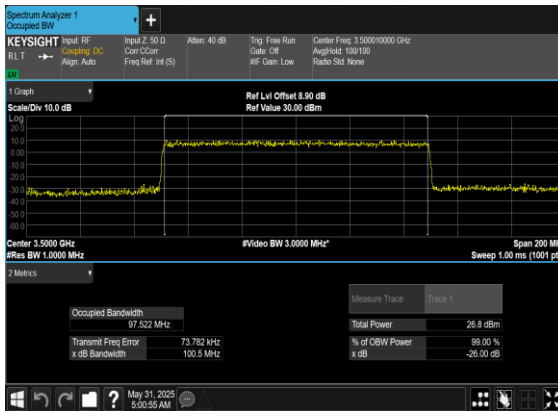
N78(100M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



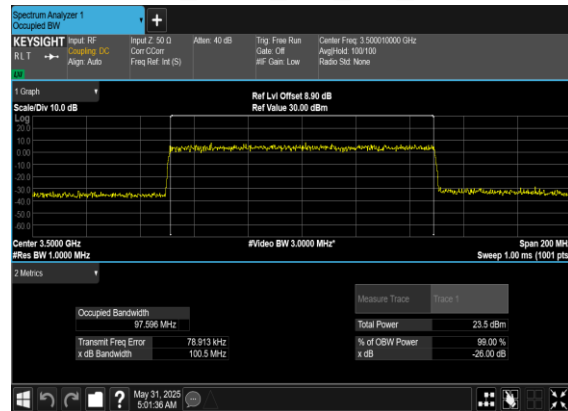
N78(100M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N78(100M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



N78(100M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH





Conducted Spurious Emissions

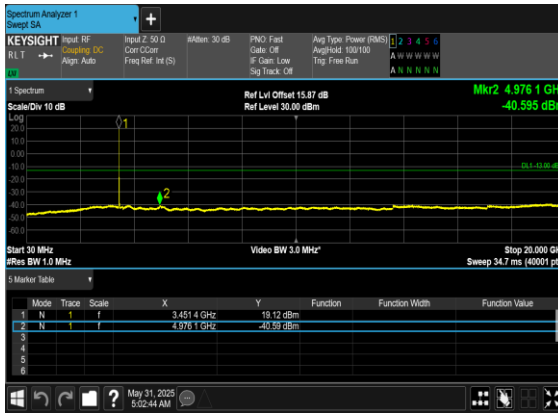
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
78	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	---



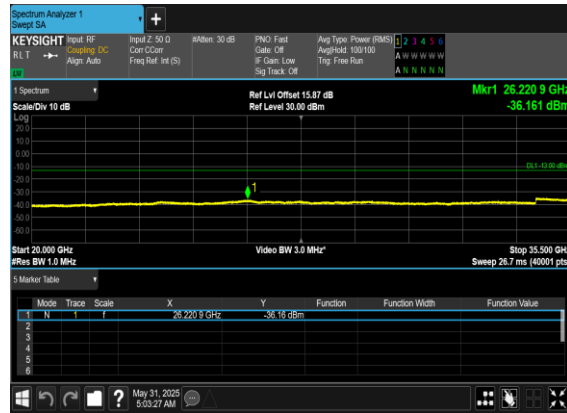
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS



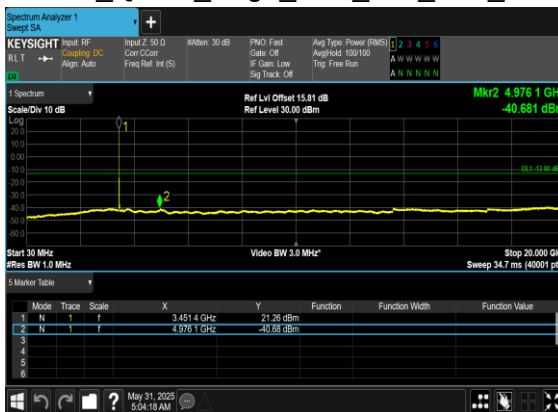
N78(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



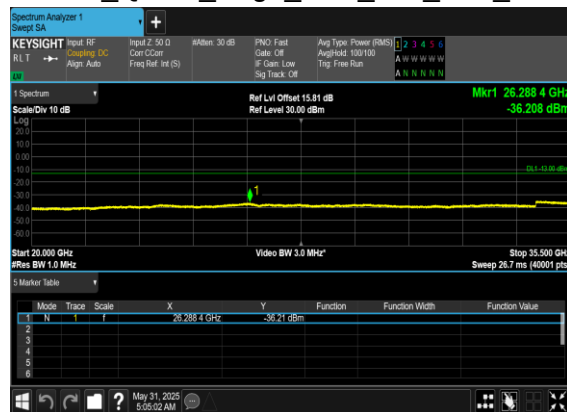
N78(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



N78(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N78(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

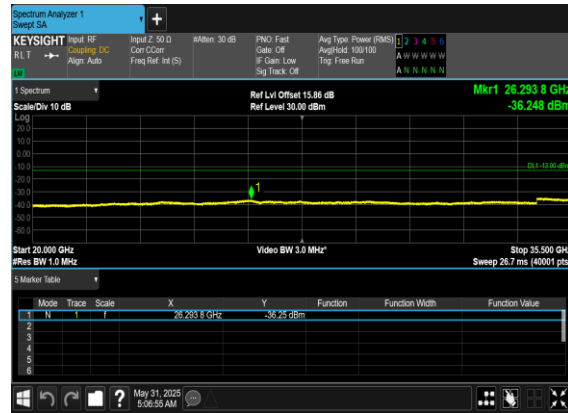




N78(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



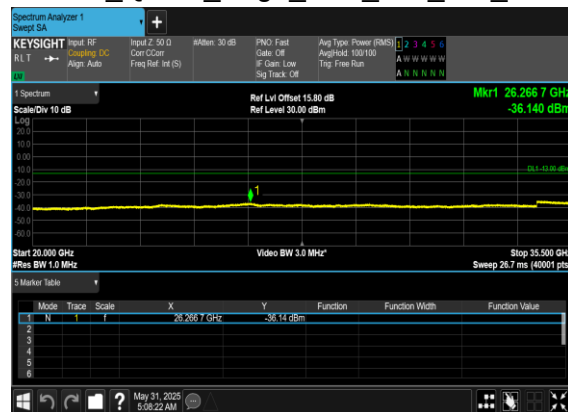
N78(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



N78(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH

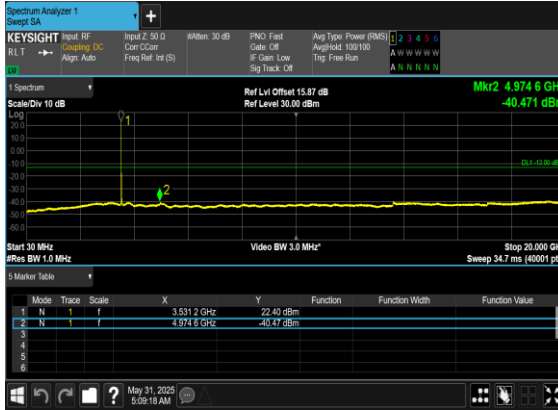


N78(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH

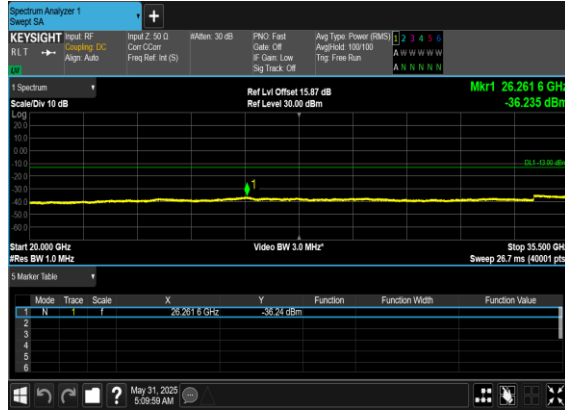




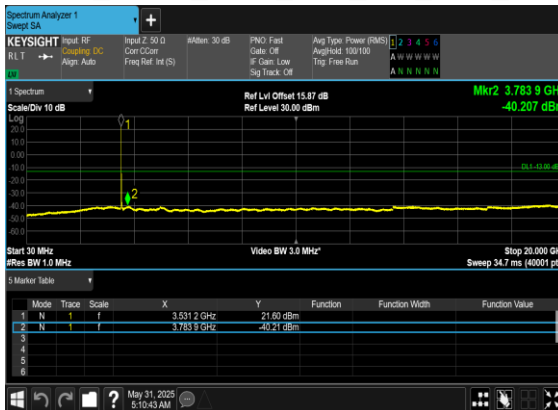
N78(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



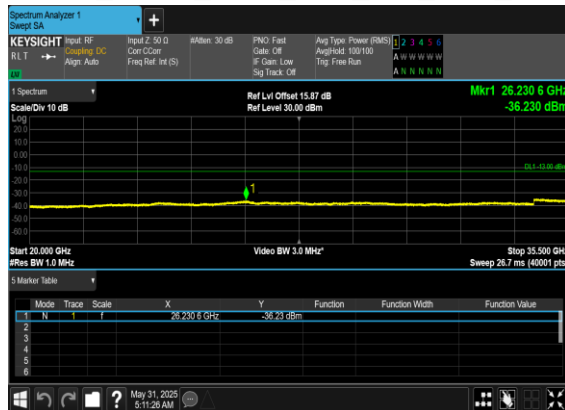
N78(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



N78(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH

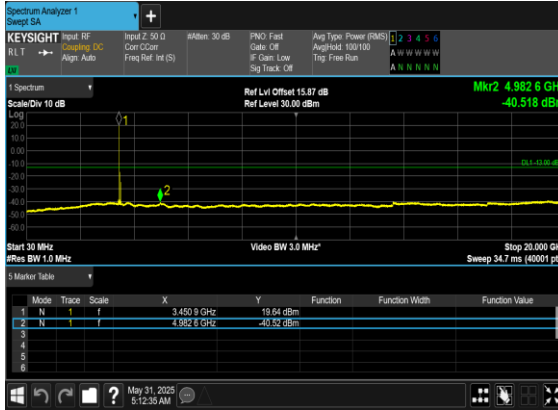


N78(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH

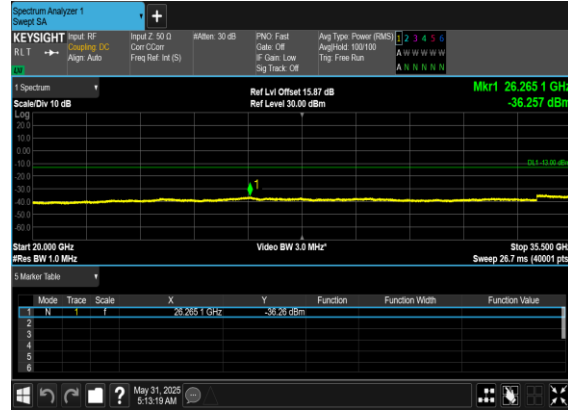




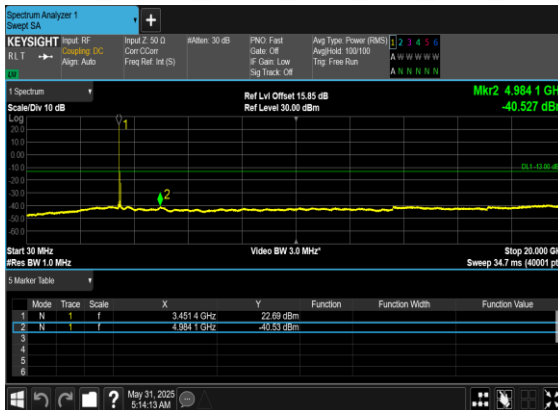
N78(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



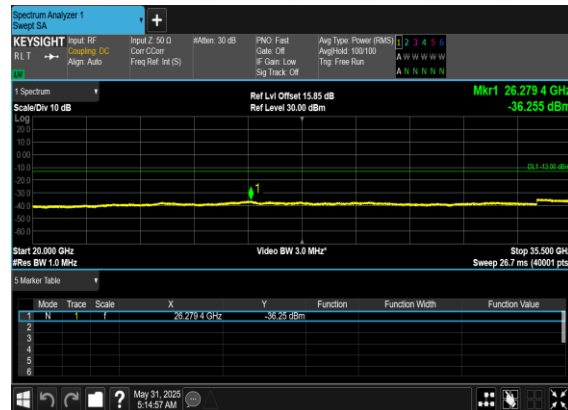
N78(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



N78(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

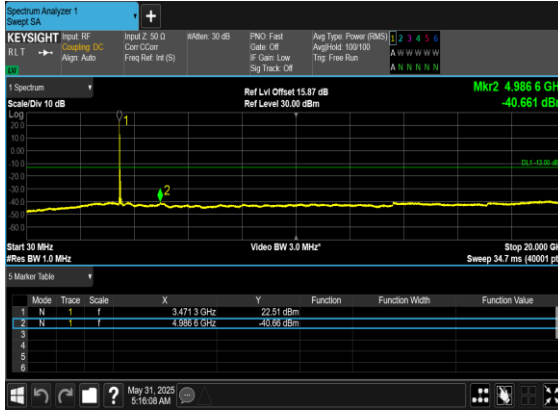


N78(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

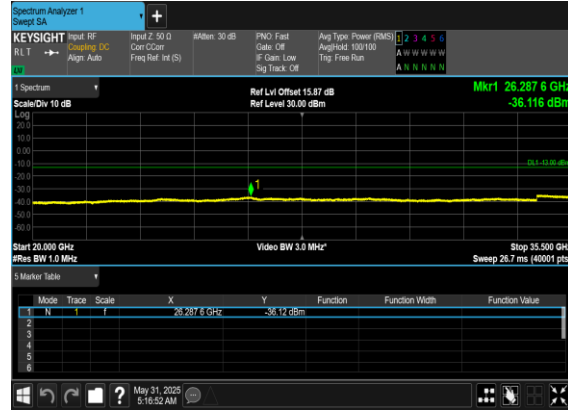




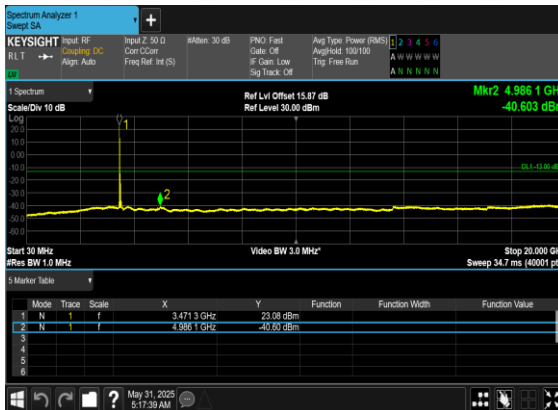
N78(60M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH



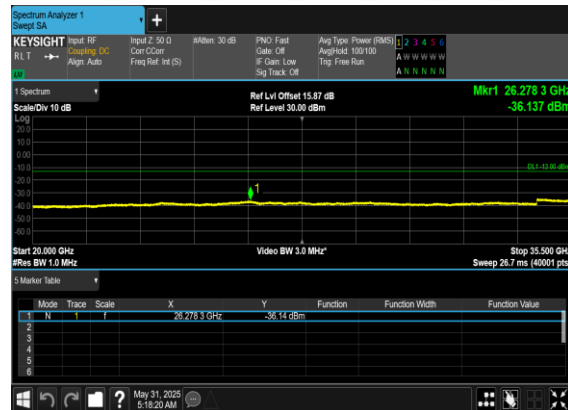
N78(60M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH



N78(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH

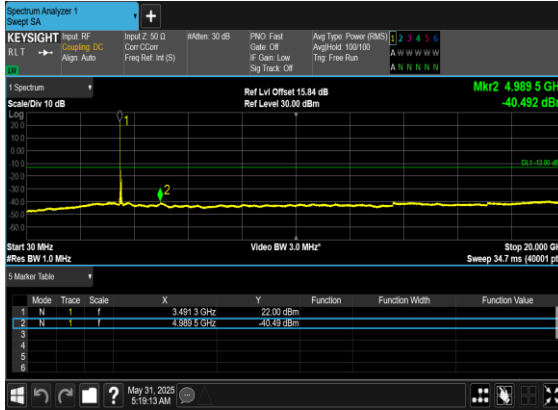


N78(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH

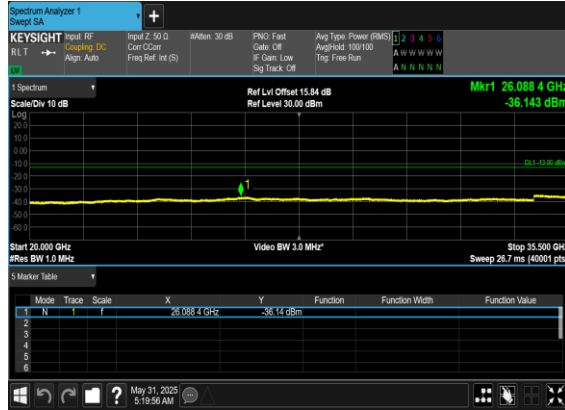




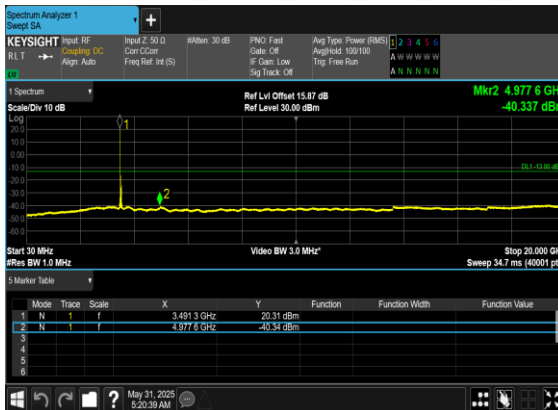
N78(60M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



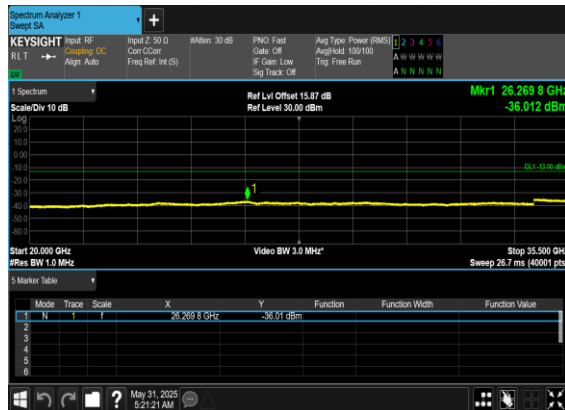
N78(60M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



N78(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH

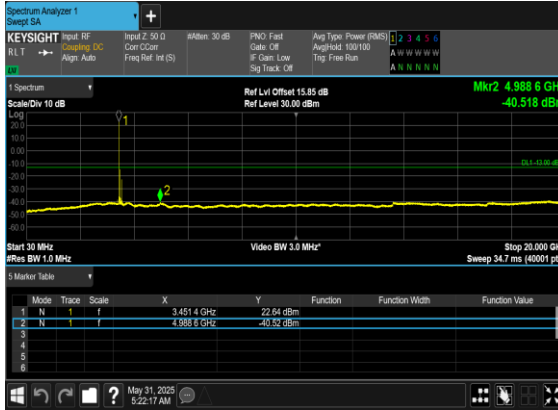


N78(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH

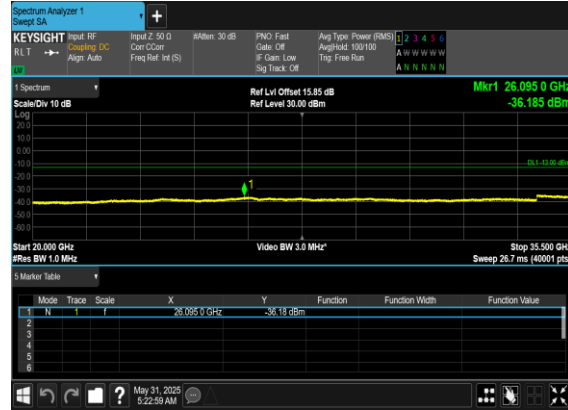




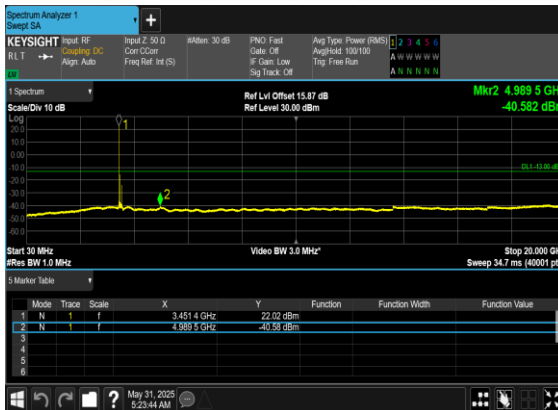
N78(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



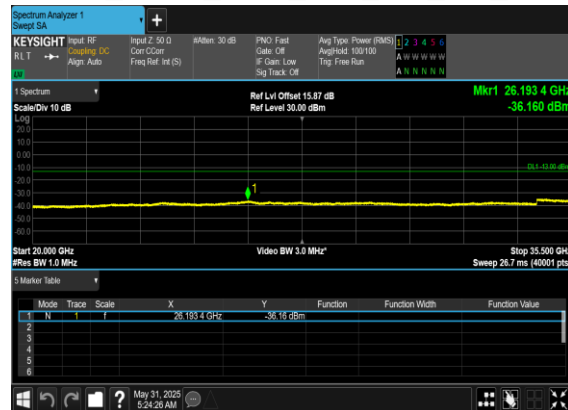
N78(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



N78(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N78(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH





Conducted Band Edge

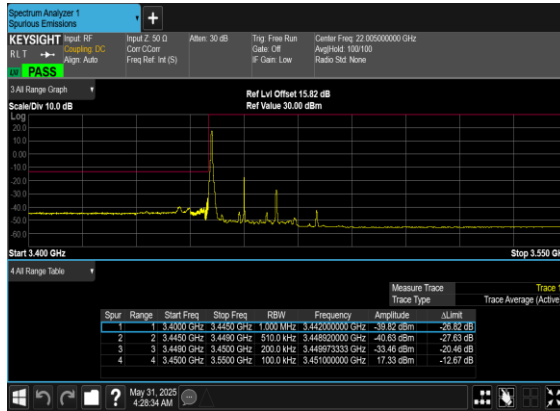
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
78	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM BPSK	50@0	see graph	PASS
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	50@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@50	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@50	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM BPSK	50@0	see graph	PASS
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	50@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	162@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	162@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@161	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@161	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	162@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	162@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@272	see graph	PASS



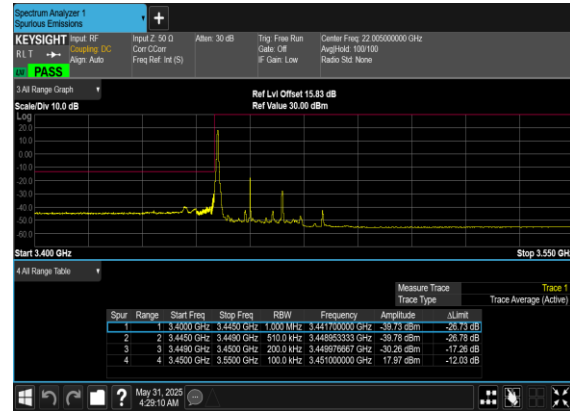
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@272	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	270@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	270@0	see graph	PASS



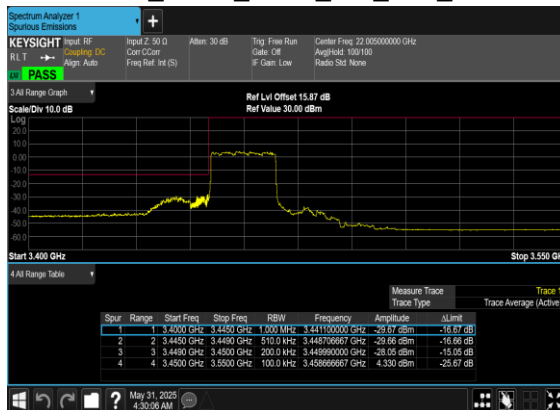
N78(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



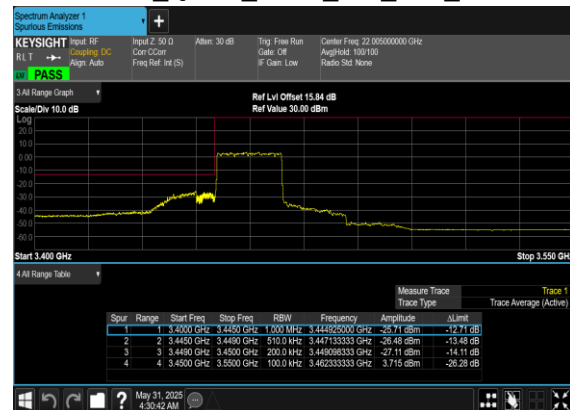
N78(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



N78(20M)_DFT-s-
OFDM_BPSK_Outer_Full_Low_CH

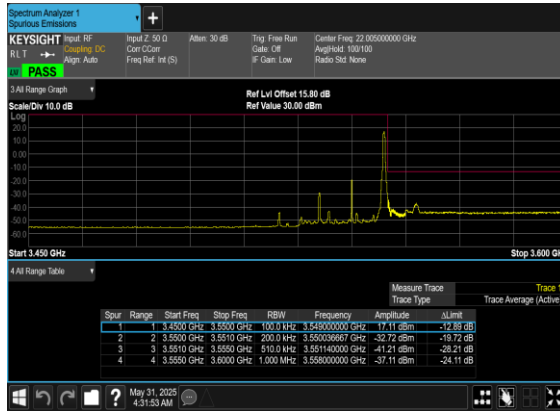


N78(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH

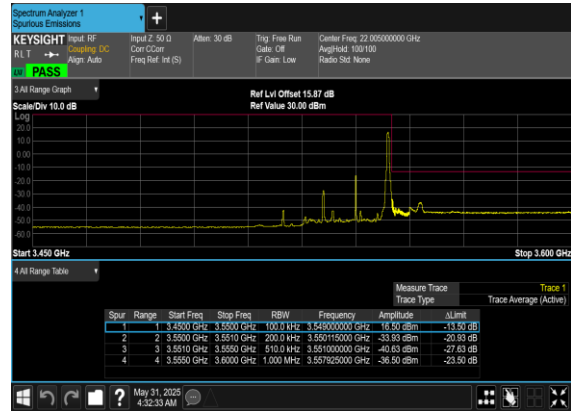




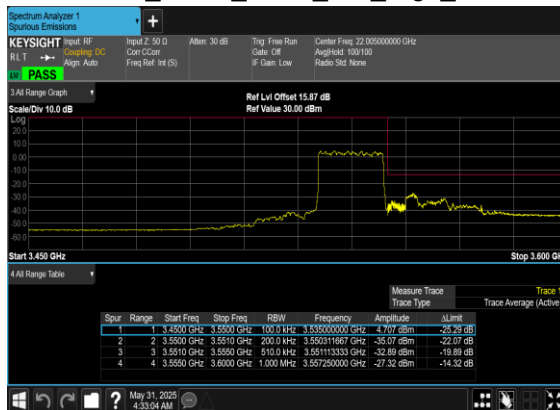
N78(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH



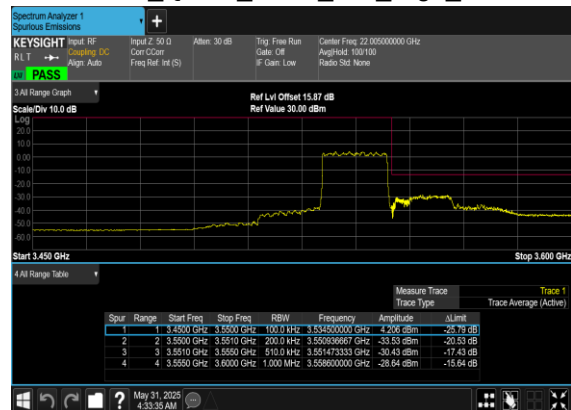
N78(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH



N78(20M)_DFT-s-
OFDM_BPSK_Outer_Full_High_CH

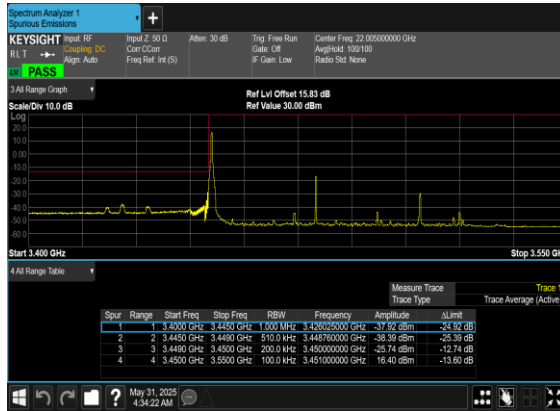


N78(20M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CH

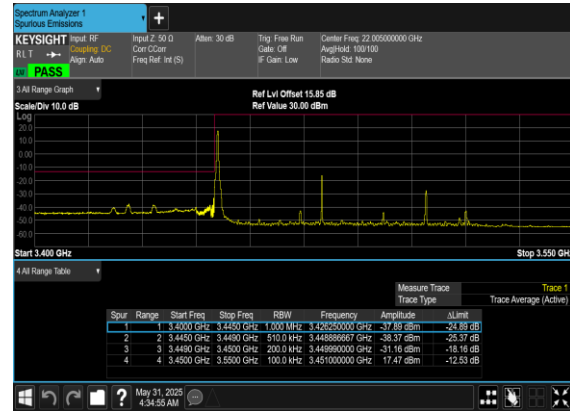




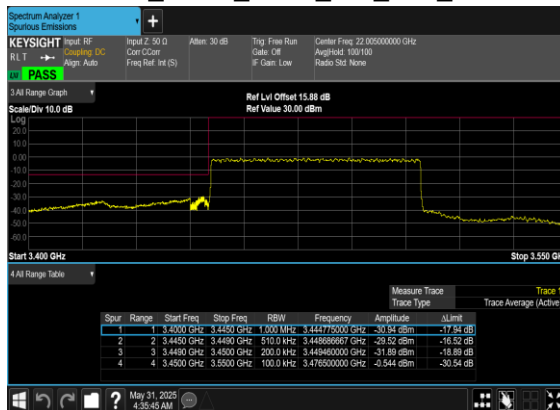
N78(60M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



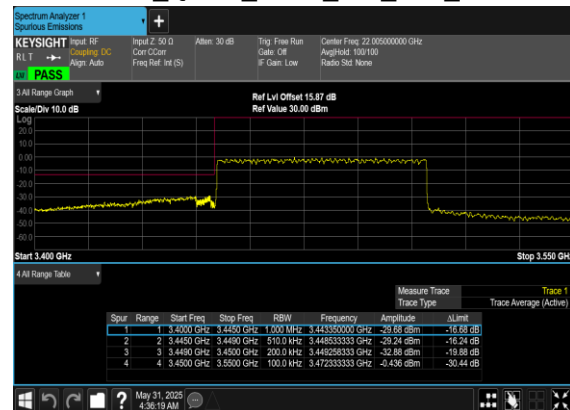
N78(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



N78(60M)_DFT-s-
OFDM_BPSK_Outer_Full_Low_CH

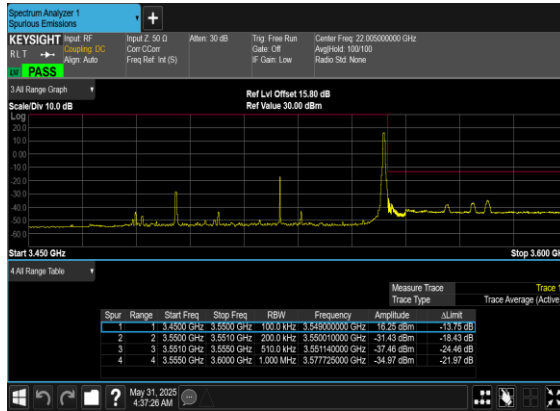


N78(60M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH

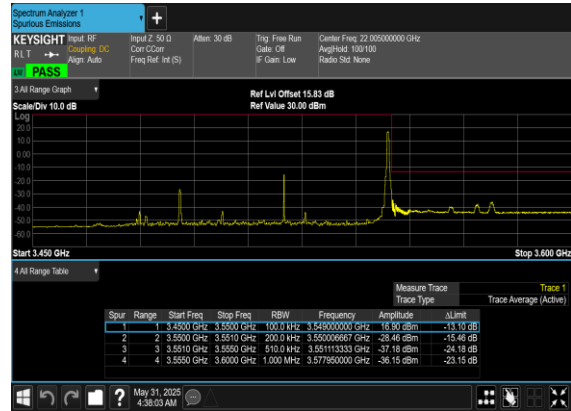




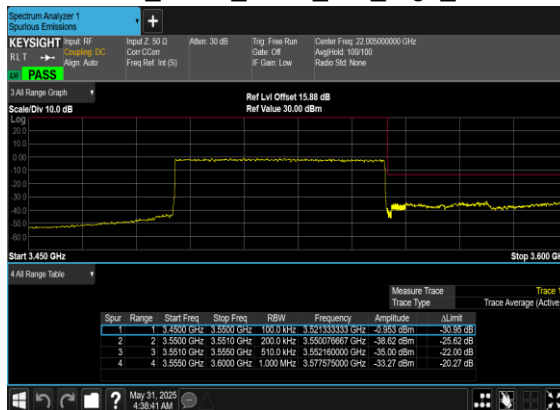
N78(60M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH



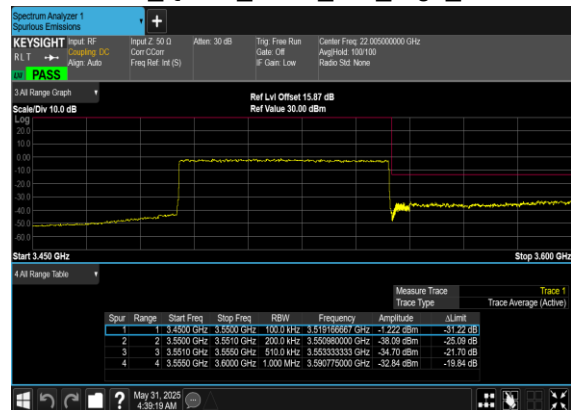
N78(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH



N78(60M)_DFT-s-
OFDM_BPSK_Outer_Full_High_CH

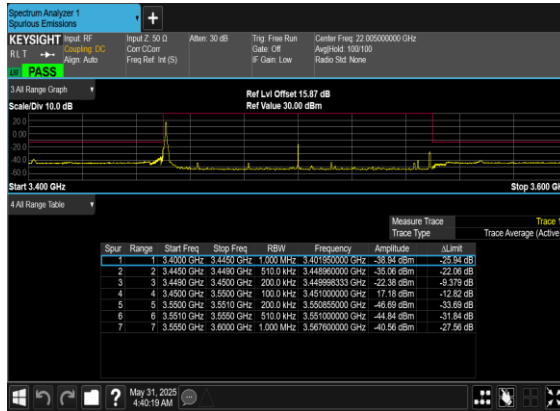


N78(60M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CH

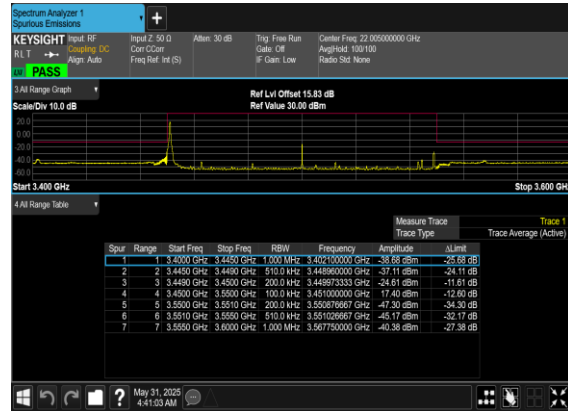




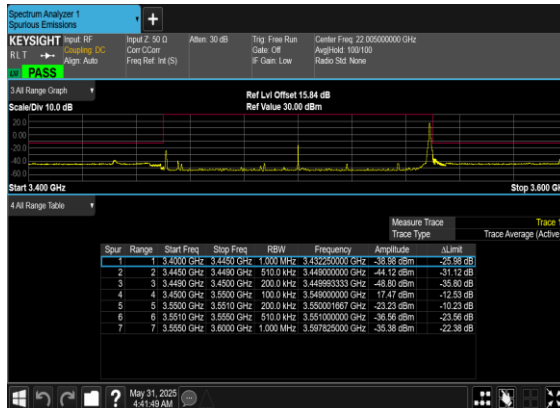
N78(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH



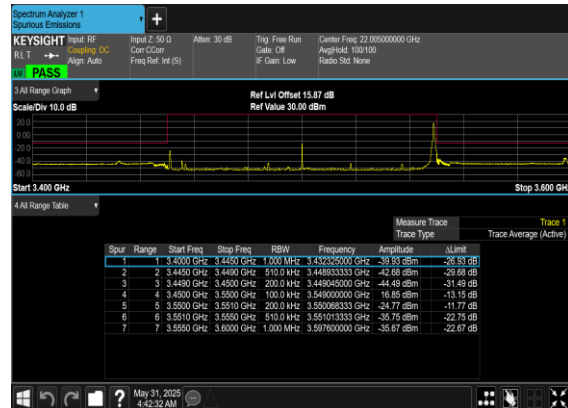
N78(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



N78(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_Mid_CH

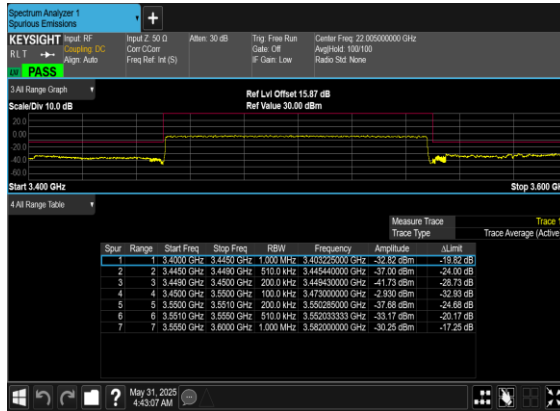


N78(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Mid_CH

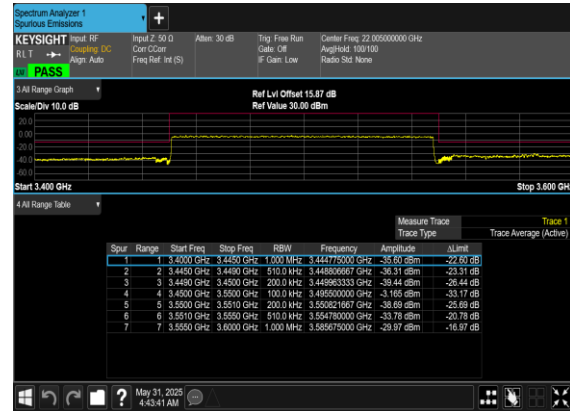




N78(100M)_DFT-s-
OFDM_BPSK_Outer_Full_Mid_CH



N78(100M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	LiangPing Zhou	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(ANT7)									
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	6904.00	-51.65	-13	-38.65	-43.64	-54.95	8.30	11.60	H
	10356.00	-52.28	-13	-39.28	-51.51	-53.80	10.48	12.00	H
	13808.00	-52.33	-13	-39.33	-55.64	-54.03	11.80	13.50	H
	6904.00	-50.49	-13	-37.49	-42.96	-53.79	8.30	11.60	V
	10356.00	-54.35	-13	-41.35	-52.71	-55.87	10.48	12.00	V
	13808.00	-53.71	-13	-40.71	-56.36	-55.41	11.80	13.50	V

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

EN-DC_41A_n77A / LTE 10MHz + NR 100MHz / QPSK(ANT4+7)									
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	6904.00	-56.34	-13	-43.34	-60.60	-59.64	8.30	11.60	H
	10356.00	-53.35	-13	-40.35	-65.11	-54.87	10.48	12.00	H
	13808.00	-49.61	-13	-36.61	-64.92	-51.31	11.80	13.50	H
	6904.00	-54.19	-13	-41.19	-58.93	-57.49	8.30	11.60	V
	10356.00	-55.55	-13	-42.55	-66.44	-57.07	10.48	12.00	V
	13808.00	-52.41	-13	-39.41	-67.06	-54.11	11.80	13.50	V
LTE Band41 Middle	5177.00	-62.46	-25	-37.46	-61.95	-68.02	7.14	12.70	H
	7765.50	-58.85	-25	-33.85	-64.83	-62.15	8.30	11.60	H
	10354.00	-53.35	-25	-28.35	-65.11	-54.87	10.48	12.00	H
	5177.00	-62.15	-25	-37.15	-61.93	-67.71	7.14	12.70	V
	7765.50	-58.92	-25	-33.92	-64.74	-62.22	8.30	11.60	V
	10354.00	-55.55	-25	-30.55	-66.44	-57.07	10.48	12.00	V

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

n78 SA / NR 100MHz / QPSK(ANT7)									
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	6904.00	-50.65	-13	-37.65	-42.64	-53.95	8.30	11.60	H
	10356.00	-48.74	-13	-35.74	-47.97	-50.26	10.48	12.00	H
	13808.00	-44.84	-13	-31.84	-48.15	-46.54	11.80	13.50	H
	6904.00	-51.24	-13	-38.24	-43.71	-54.54	8.30	11.60	V
	10356.00	-50.02	-13	-37.02	-48.38	-51.54	10.48	12.00	V
	13808.00	-47.31	-13	-34.31	-49.96	-49.01	11.80	13.50	V

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

EN-DC_41A_n78A / LTE 10MHz + NR 100MHz / QPSK(ANT4+7)									
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 n78 Middle	6904.00	-54.23	-13	-41.23	-58.49	-57.53	8.30	11.60	H
	10356.00	-50.25	-13	-37.25	-62.01	-51.77	10.48	12.00	H
	13808.00	-48.32	-13	-35.32	-63.63	-50.02	11.80	13.50	H
	6904.00	-52.88	-13	-39.88	-57.62	-56.18	8.30	11.60	V
	10356.00	-53.76	-13	-40.76	-64.65	-55.28	10.48	12.00	V
	13808.00	-49.21	-13	-36.21	-63.86	-50.91	11.80	13.50	V
LTE Band41 Middle	5177.00	-62.36	-25	-37.36	-61.85	-67.92	7.14	12.70	H
	7765.50	-57.45	-25	-32.45	-63.43	-60.75	8.30	11.60	H
	10354.00	-50.25	-25	-25.25	-62.01	-51.77	10.48	12.00	H
	5177.00	-62.01	-25	-37.01	-61.79	-67.57	7.14	12.70	V
	7765.50	-55.21	-25	-30.21	-61.03	-58.51	8.30	11.60	V
	10354.00	-53.76	-25	-28.76	-64.65	-55.28	10.48	12.00	V

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