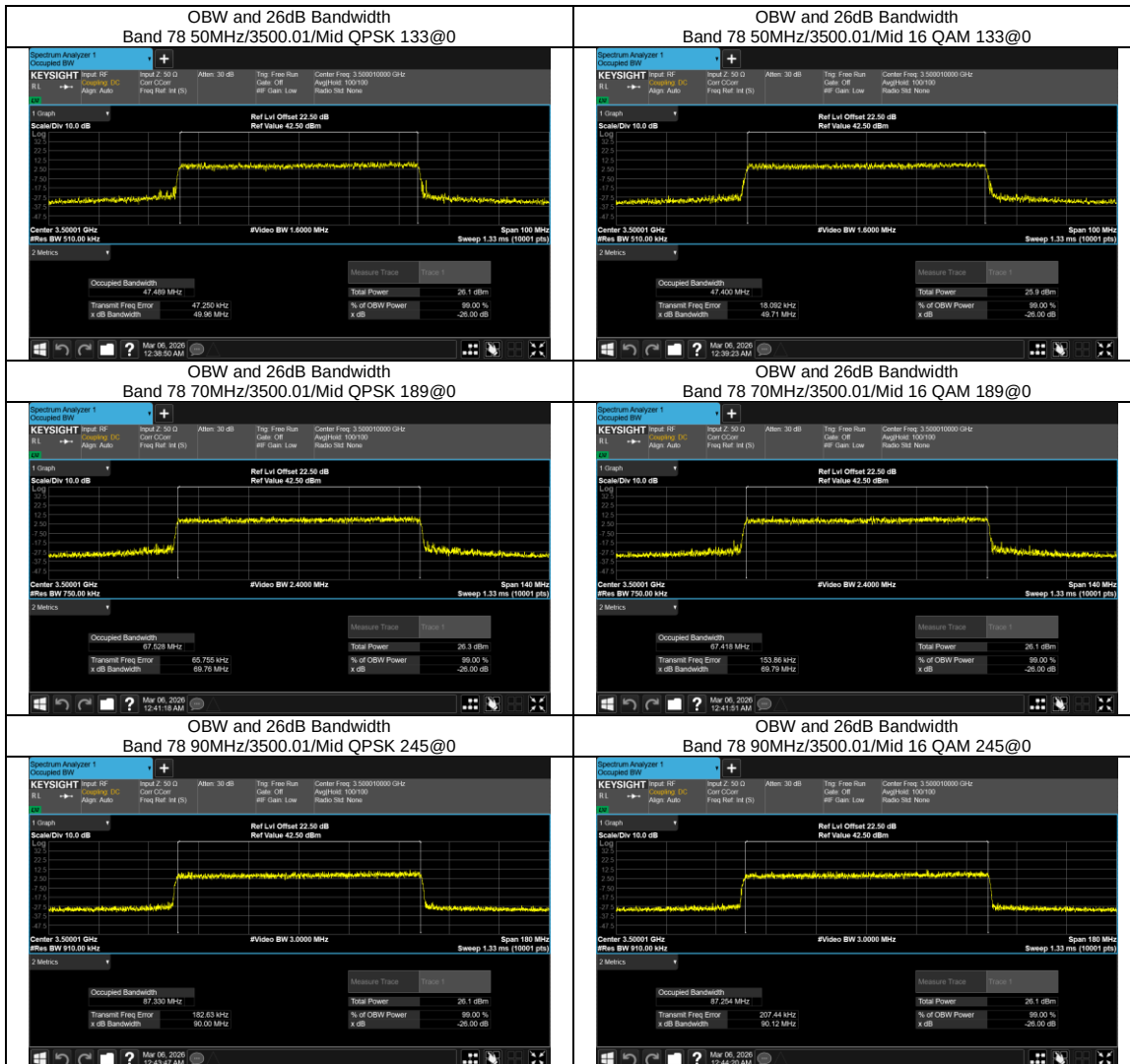




Test Graphs



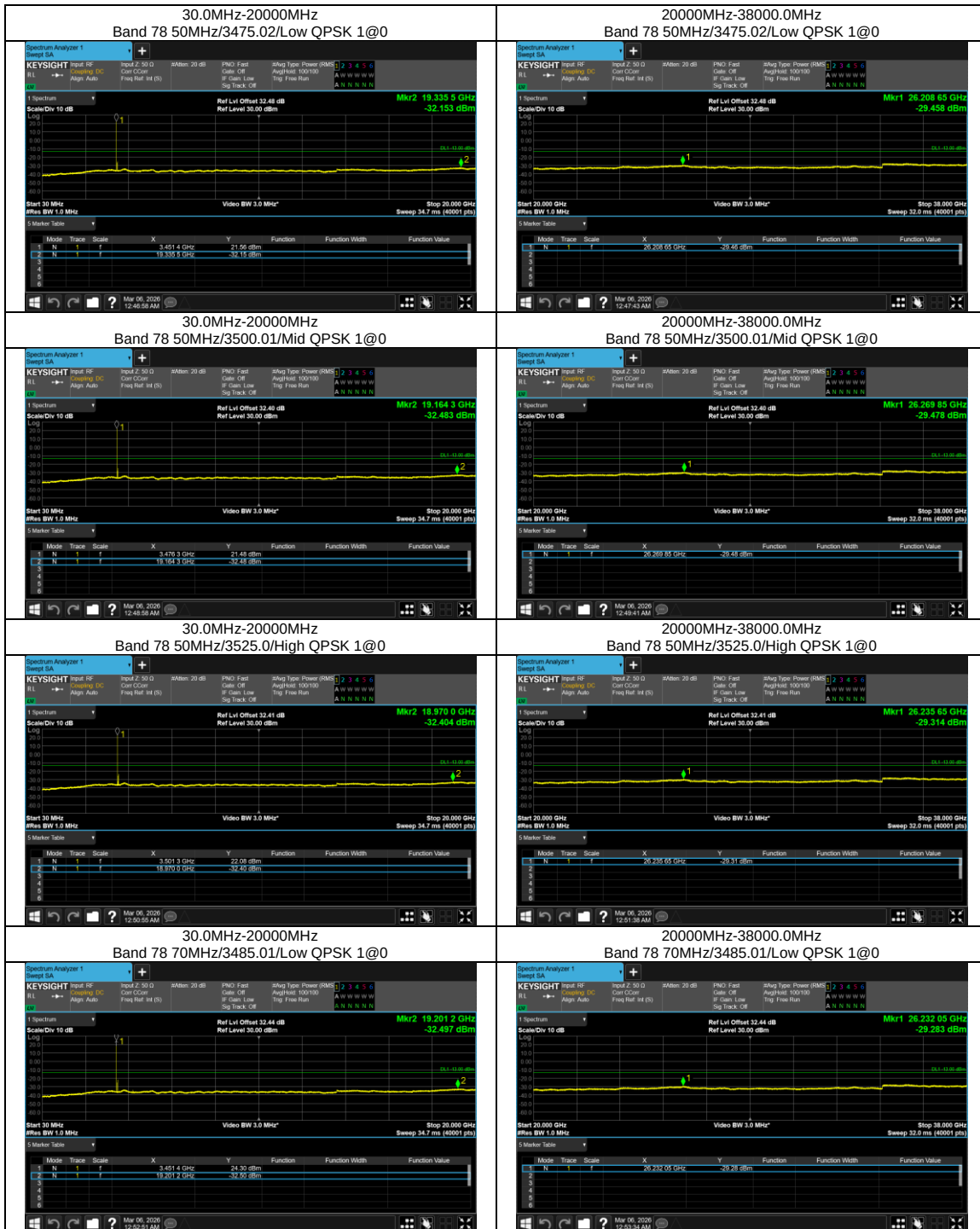
Conducted Spurious Emissions

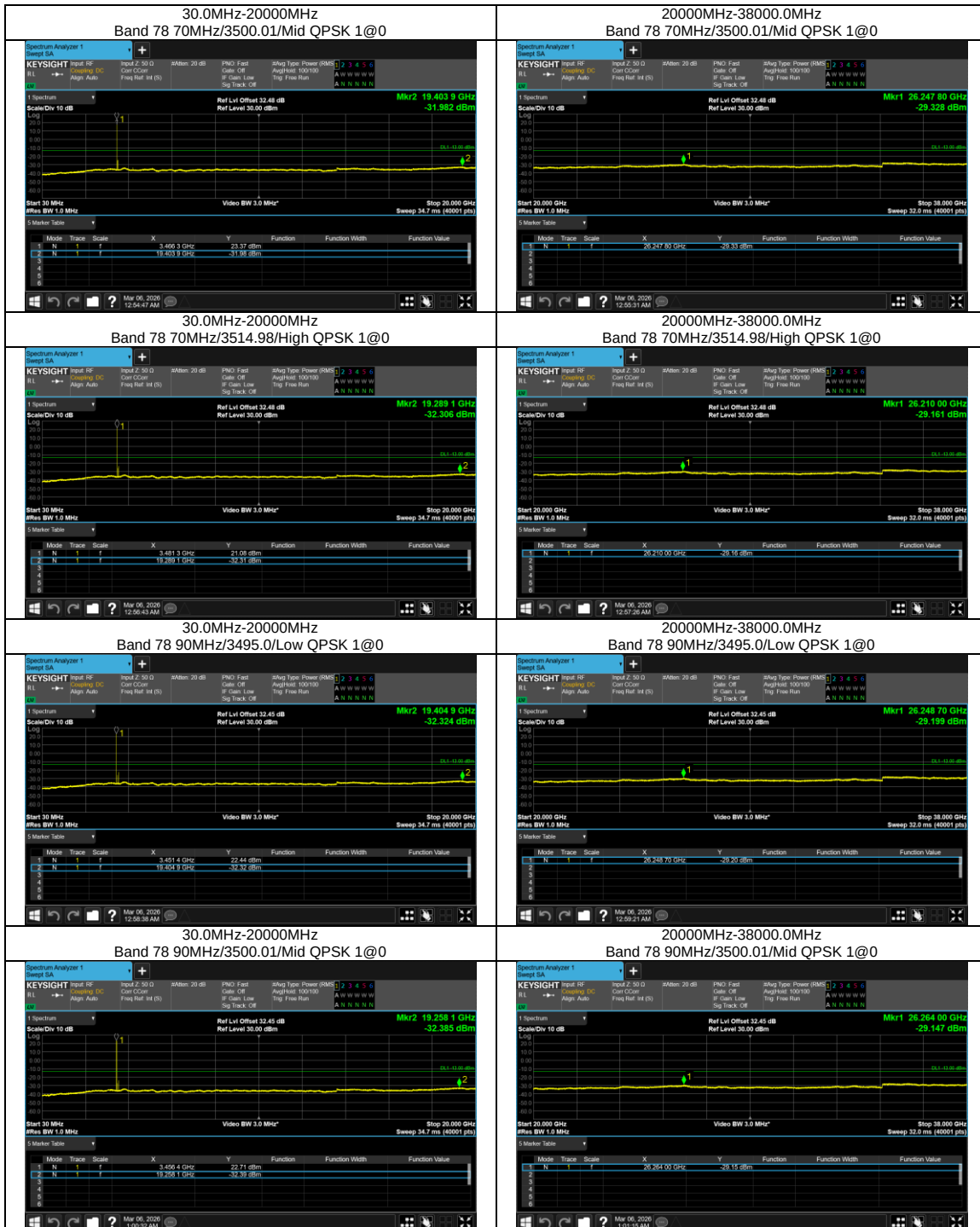
Test Result

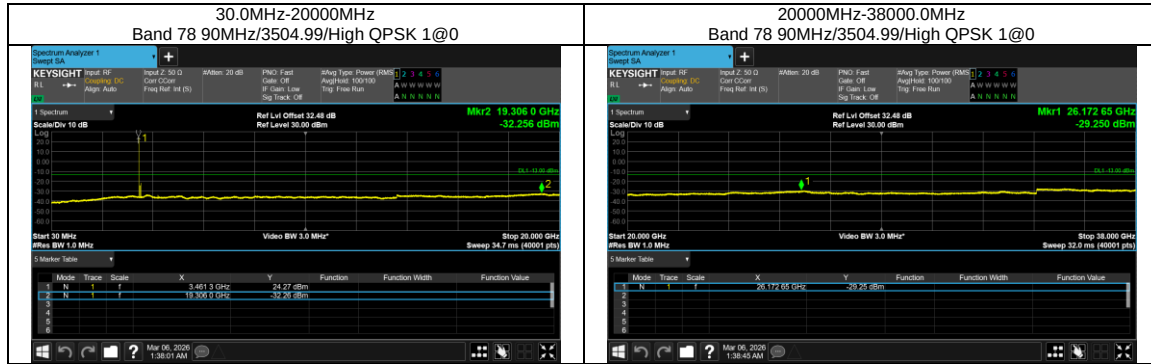
NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Result	Verdict
78	30	50	631668	3475.02	CP-OFDM QPSK	1@0	See graph	---
78	30	50	631668	3475.02	CP-OFDM QPSK	1@0	See graph	PASS
78	30	50	633334	3500.01	CP-OFDM QPSK	1@0	See graph	---
78	30	50	633334	3500.01	CP-OFDM QPSK	1@0	See graph	PASS
78	30	50	635000	3525.0	CP-OFDM QPSK	1@0	See graph	---
78	30	50	635000	3525.0	CP-OFDM QPSK	1@0	See graph	PASS
78	30	70	632334	3485.01	CP-OFDM QPSK	1@0	See graph	---
78	30	70	632334	3485.01	CP-OFDM QPSK	1@0	See graph	PASS
78	30	70	633334	3500.01	CP-OFDM QPSK	1@0	See graph	---
78	30	70	633334	3500.01	CP-OFDM QPSK	1@0	See graph	PASS
78	30	70	634332	3514.98	CP-OFDM QPSK	1@0	See graph	---
78	30	70	634332	3514.98	CP-OFDM QPSK	1@0	See graph	PASS
78	30	90	633000	3495.0	CP-OFDM QPSK	1@0	See graph	---
78	30	90	633000	3495.0	CP-OFDM QPSK	1@0	See graph	PASS
78	30	90	633334	3500.01	CP-OFDM QPSK	1@0	See graph	---
78	30	90	633334	3500.01	CP-OFDM QPSK	1@0	See graph	PASS
78	30	90	633666	3504.99	CP-OFDM QPSK	1@0	See graph	---
78	30	90	633666	3504.99	CP-OFDM QPSK	1@0	See graph	PASS



Test Graphs







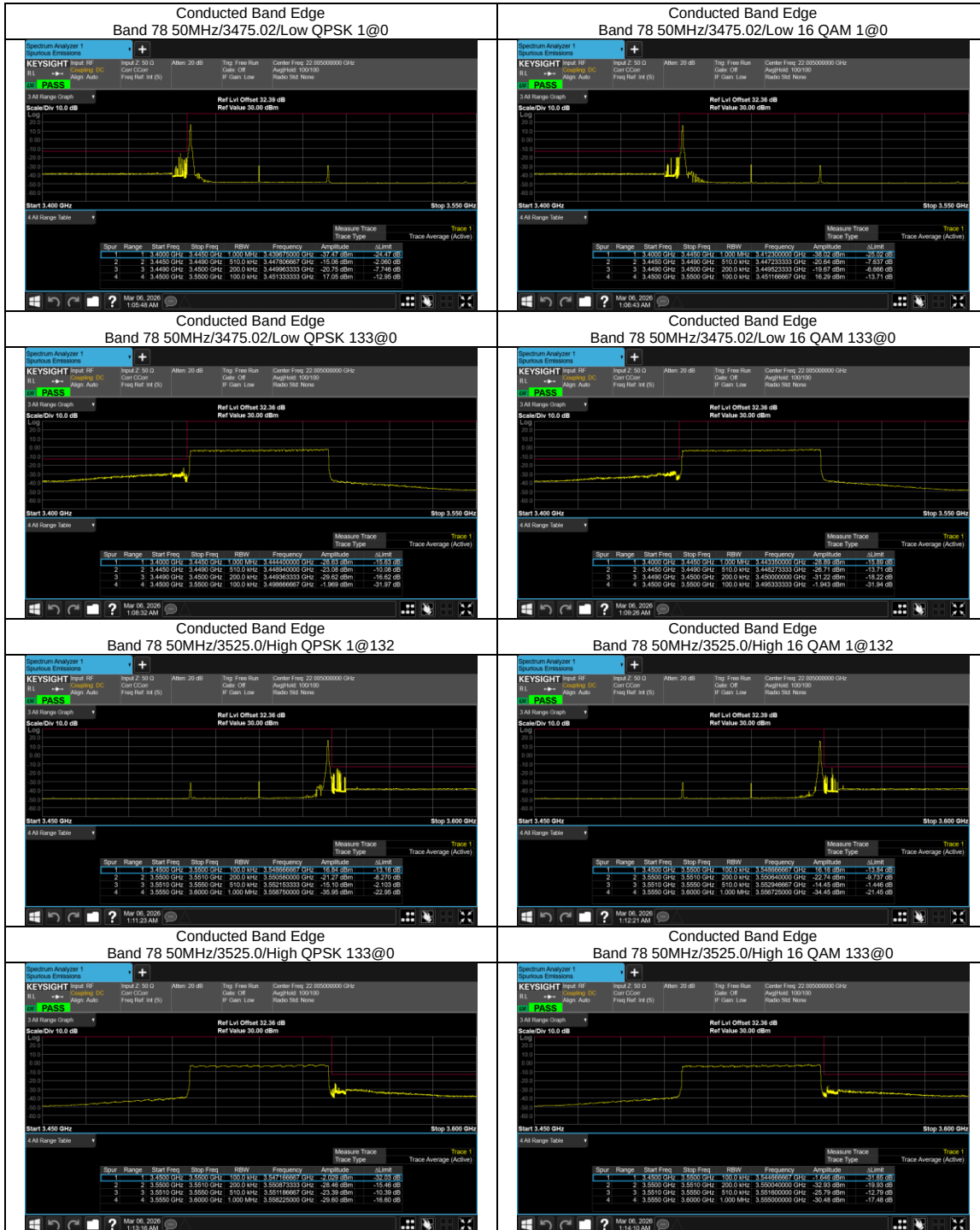
Conducted Band Edge

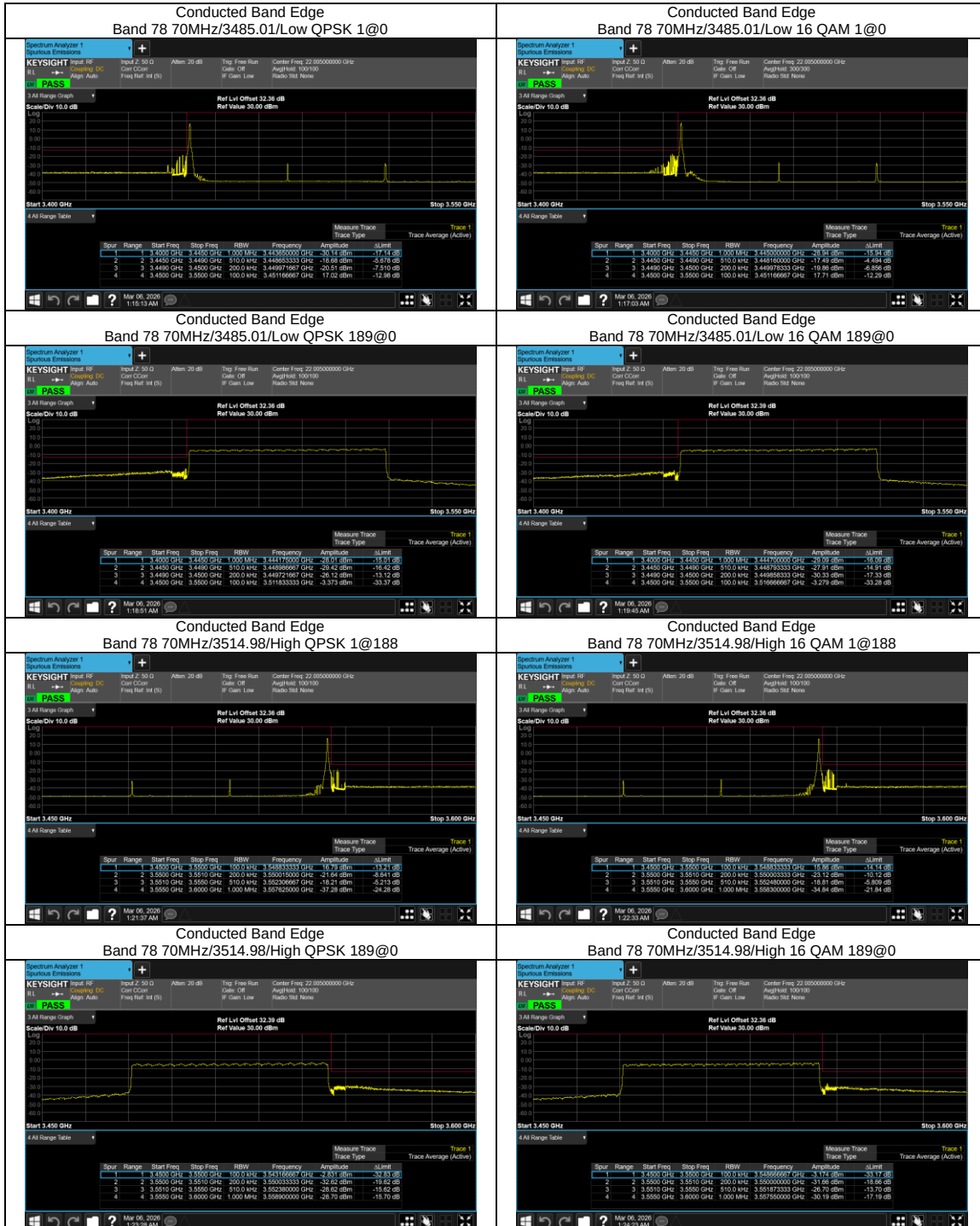
Test Result

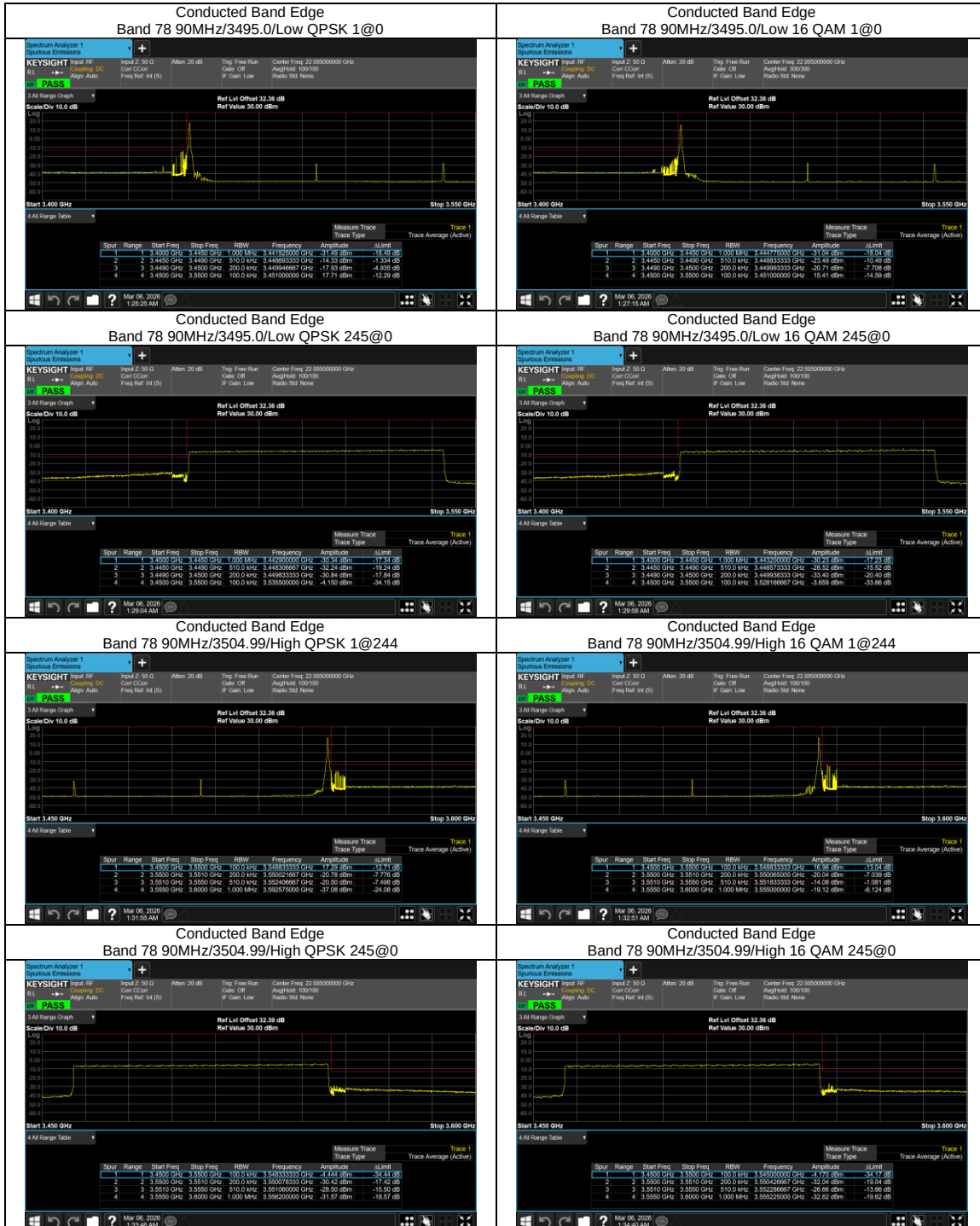
NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Result	Verdict
78	30	50	631668	3475.02	CP-OFDM QPSK	1@0	See graph	PASS
78	30	50	631668	3475.02	CP-OFDM 16 QAM	1@0	See graph	PASS
78	30	50	631668	3475.02	CP-OFDM QPSK	133@0	See graph	PASS
78	30	50	631668	3475.02	CP-OFDM 16 QAM	133@0	See graph	PASS
78	30	50	635000	3525.0	CP-OFDM QPSK	1@132	See graph	PASS
78	30	50	635000	3525.0	CP-OFDM 16 QAM	1@132	See graph	PASS
78	30	50	635000	3525.0	CP-OFDM QPSK	133@0	See graph	PASS
78	30	50	635000	3525.0	CP-OFDM 16 QAM	133@0	See graph	PASS
78	30	70	632334	3485.01	CP-OFDM QPSK	1@0	See graph	PASS
78	30	70	632334	3485.01	CP-OFDM 16 QAM	1@0	See graph	PASS
78	30	70	632334	3485.01	CP-OFDM QPSK	189@0	See graph	PASS
78	30	70	632334	3485.01	CP-OFDM 16 QAM	189@0	See graph	PASS
78	30	70	634332	3514.98	CP-OFDM QPSK	1@188	See graph	PASS
78	30	70	634332	3514.98	CP-OFDM 16 QAM	1@188	See graph	PASS
78	30	70	634332	3514.98	CP-OFDM QPSK	189@0	See graph	PASS
78	30	70	634332	3514.98	CP-OFDM 16 QAM	189@0	See graph	PASS
78	30	90	633000	3495.0	CP-OFDM QPSK	1@0	See graph	PASS
78	30	90	633000	3495.0	CP-OFDM 16 QAM	1@0	See graph	PASS
78	30	90	633000	3495.0	CP-OFDM QPSK	245@0	See graph	PASS
78	30	90	633000	3495.0	CP-OFDM 16 QAM	245@0	See graph	PASS
78	30	90	633666	3504.99	CP-OFDM QPSK	1@244	See graph	PASS
78	30	90	633666	3504.99	CP-OFDM 16 QAM	1@244	See graph	PASS
78	30	90	633666	3504.99	CP-OFDM QPSK	245@0	See graph	PASS
78	30	90	633666	3504.99	CP-OFDM 16 QAM	245@0	See graph	PASS



Test Graphs







**FR1 N78 MIMO_ANT7****Frequency Stability**

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0016	PASS	NV
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0012	PASS	LV
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0006	PASS	HV
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0000	PASS	-30°C
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0011	PASS	-20°C
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0017	PASS	-10°C
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0014	PASS	0°C
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0013	PASS	10°C
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0019	PASS	20°C
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0016	PASS	30°C
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0014	PASS	40°C
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	0.0012	PASS	50°C



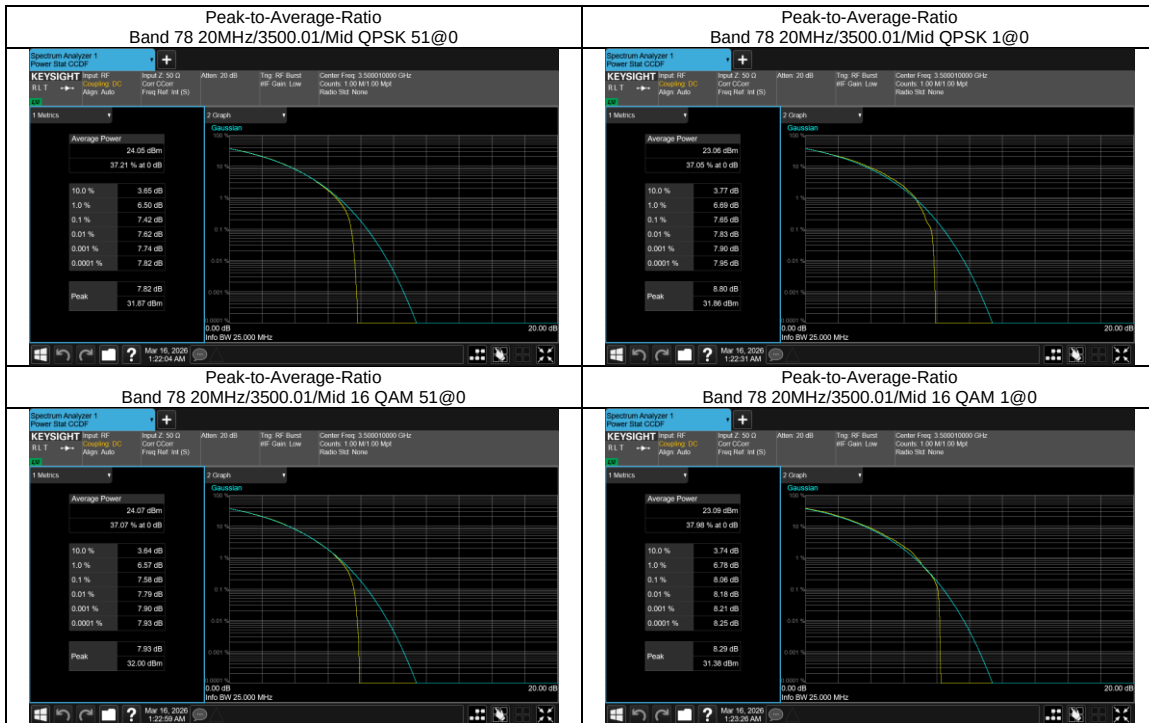
Peak to Average Ratio

Test Result

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Result	Verdict
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	7.42	13
78	30	20	633334	3500.01	CP-OFDM QPSK	1@0	7.65	13
78	30	20	633334	3500.01	CP-OFDM 16 QAM	51@0	7.58	13
78	30	20	633334	3500.01	CP-OFDM 16 QAM	1@0	8.06	13



Test Graphs





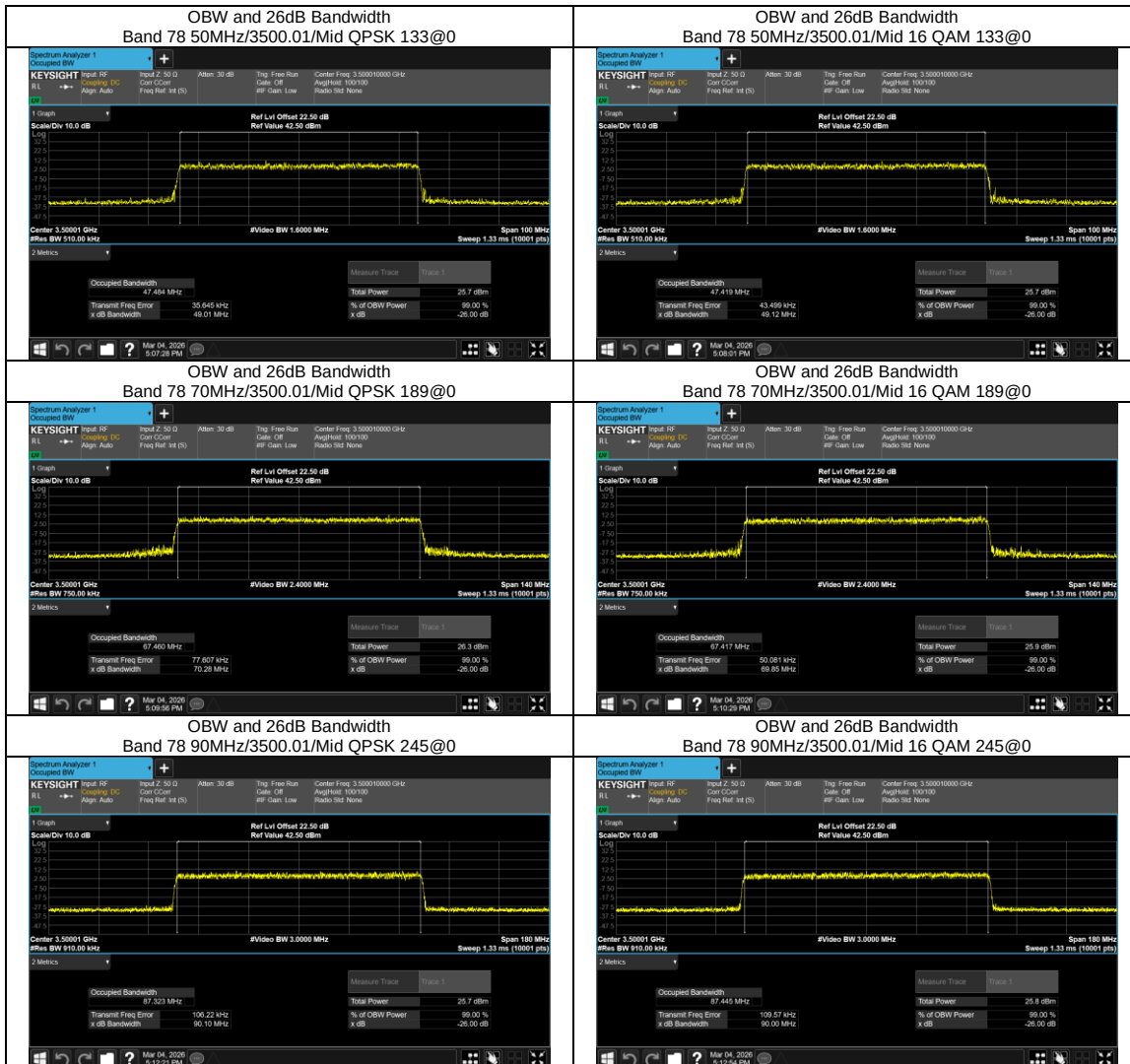
Occupied Bandwidth

Test Result

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	OBW(MHz)	26dB OBW(MHz)
78	30	50	633334	3500.01	CP-OFDM QPSK	133@0	47.48	49.01
78	30	50	633334	3500.01	CP-OFDM 16 QAM	133@0	47.42	49.12
78	30	70	633334	3500.01	CP-OFDM QPSK	189@0	67.46	70.28
78	30	70	633334	3500.01	CP-OFDM 16 QAM	189@0	67.42	69.85
78	30	90	633334	3500.01	CP-OFDM QPSK	245@0	87.32	90.1
78	30	90	633334	3500.01	CP-OFDM 16 QAM	245@0	87.45	90.0



Test Graphs



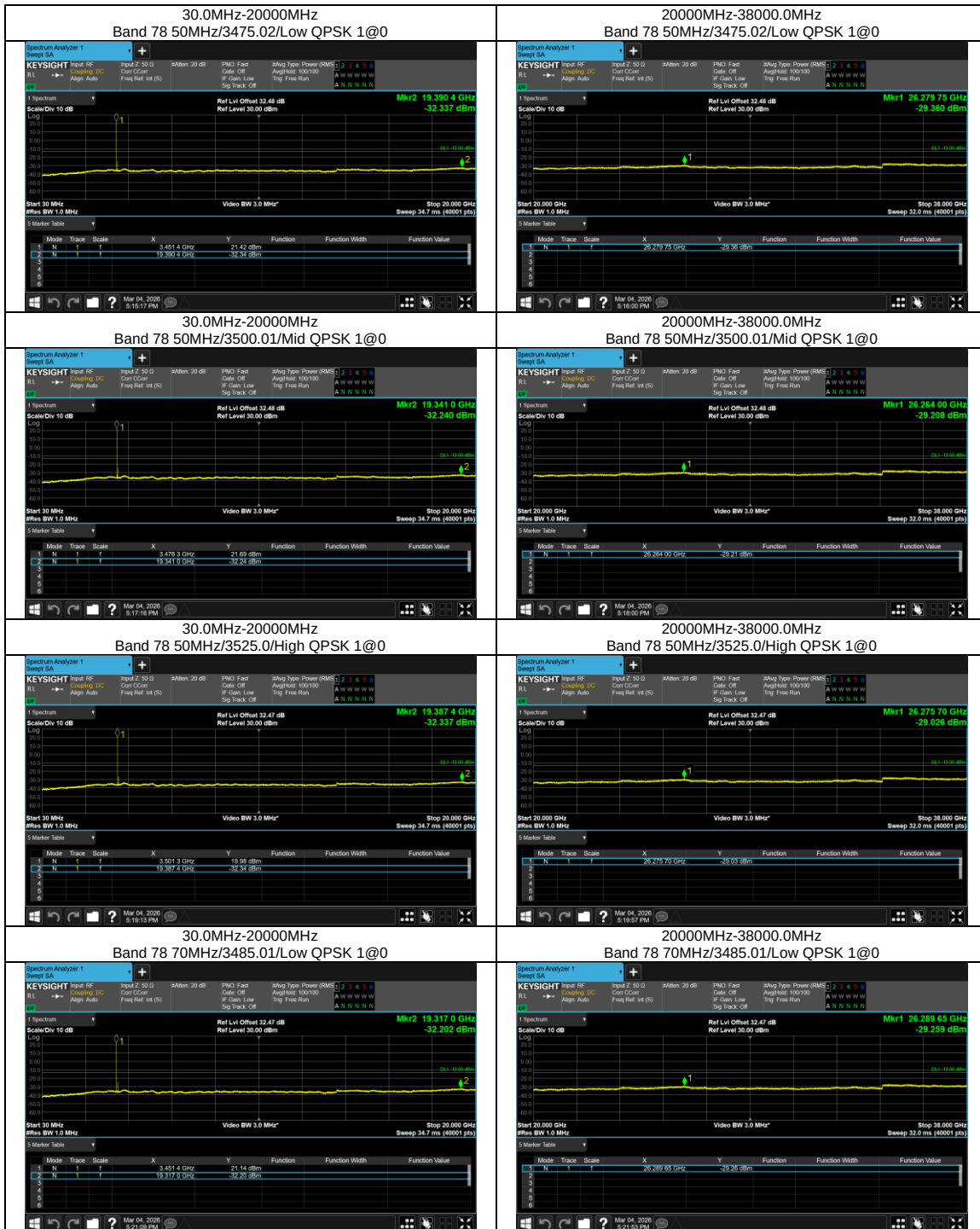
Conducted Spurious Emissions

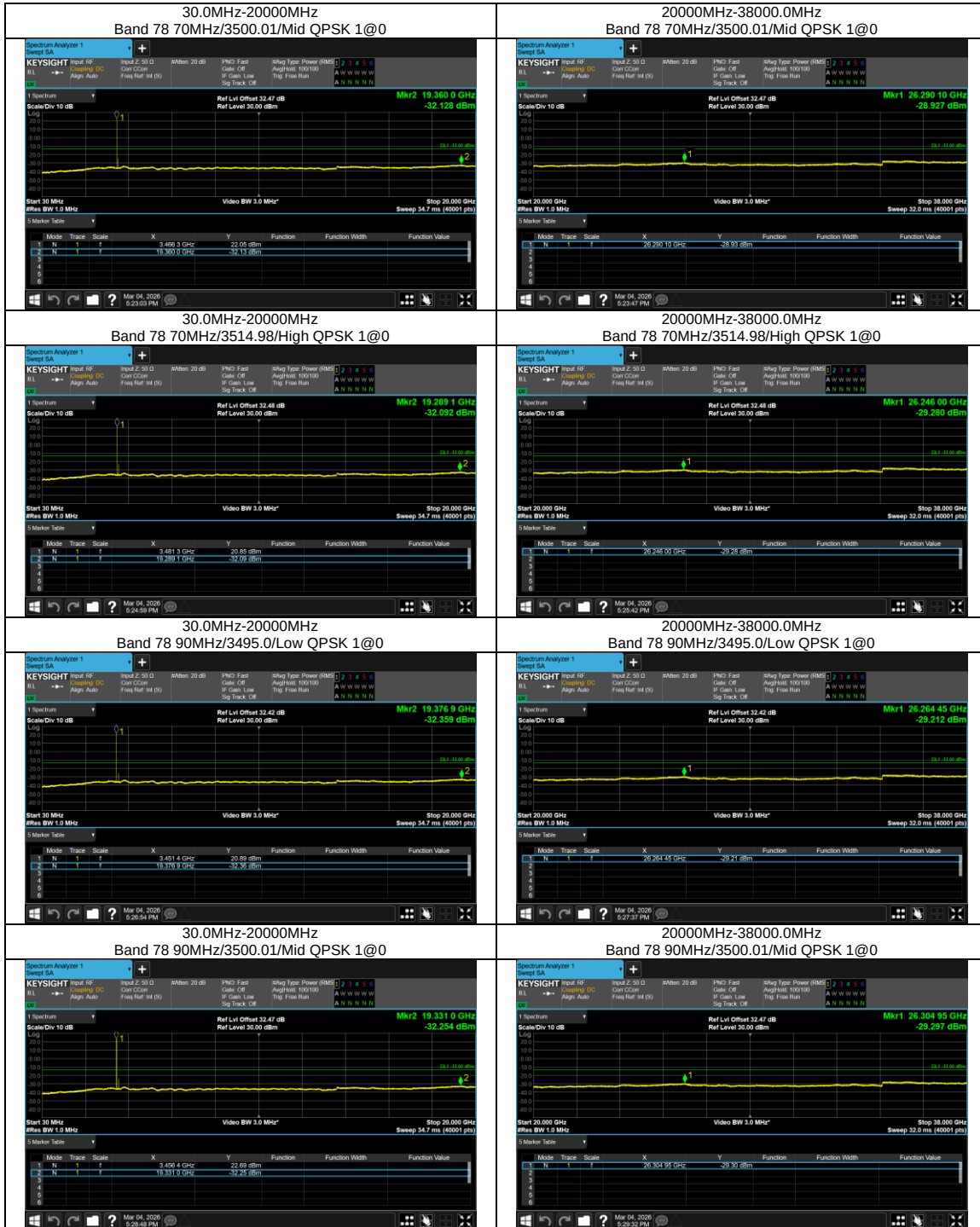
Test Result

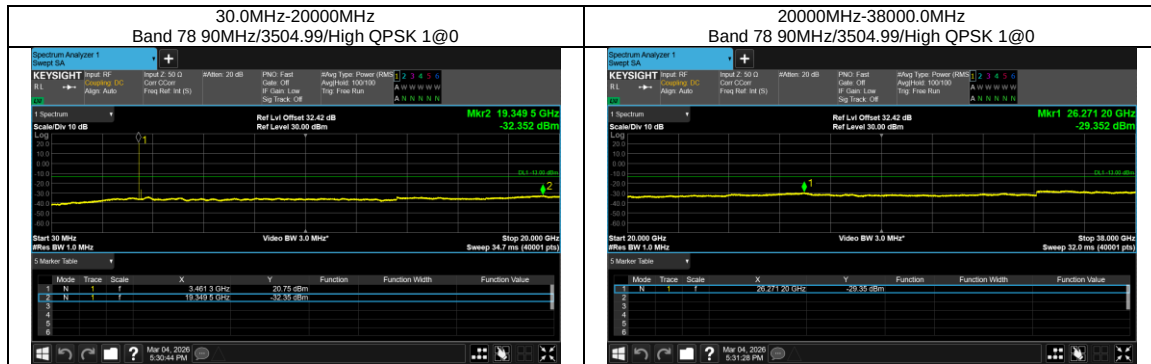
NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Result	Verdict
78	30	50	631668	3475.02	CP-OFDM QPSK	1@0	See graph	---
78	30	50	631668	3475.02	CP-OFDM QPSK	1@0	See graph	PASS
78	30	50	633334	3500.01	CP-OFDM QPSK	1@0	See graph	---
78	30	50	633334	3500.01	CP-OFDM QPSK	1@0	See graph	PASS
78	30	50	635000	3525.0	CP-OFDM QPSK	1@0	See graph	---
78	30	50	635000	3525.0	CP-OFDM QPSK	1@0	See graph	PASS
78	30	70	632334	3485.01	CP-OFDM QPSK	1@0	See graph	---
78	30	70	632334	3485.01	CP-OFDM QPSK	1@0	See graph	PASS
78	30	70	633334	3500.01	CP-OFDM QPSK	1@0	See graph	---
78	30	70	633334	3500.01	CP-OFDM QPSK	1@0	See graph	PASS
78	30	70	634332	3514.98	CP-OFDM QPSK	1@0	See graph	---
78	30	70	634332	3514.98	CP-OFDM QPSK	1@0	See graph	PASS
78	30	90	633000	3495.0	CP-OFDM QPSK	1@0	See graph	---
78	30	90	633000	3495.0	CP-OFDM QPSK	1@0	See graph	PASS
78	30	90	633334	3500.01	CP-OFDM QPSK	1@0	See graph	---
78	30	90	633334	3500.01	CP-OFDM QPSK	1@0	See graph	PASS
78	30	90	633666	3504.99	CP-OFDM QPSK	1@0	See graph	---
78	30	90	633666	3504.99	CP-OFDM QPSK	1@0	See graph	PASS



Test Graphs









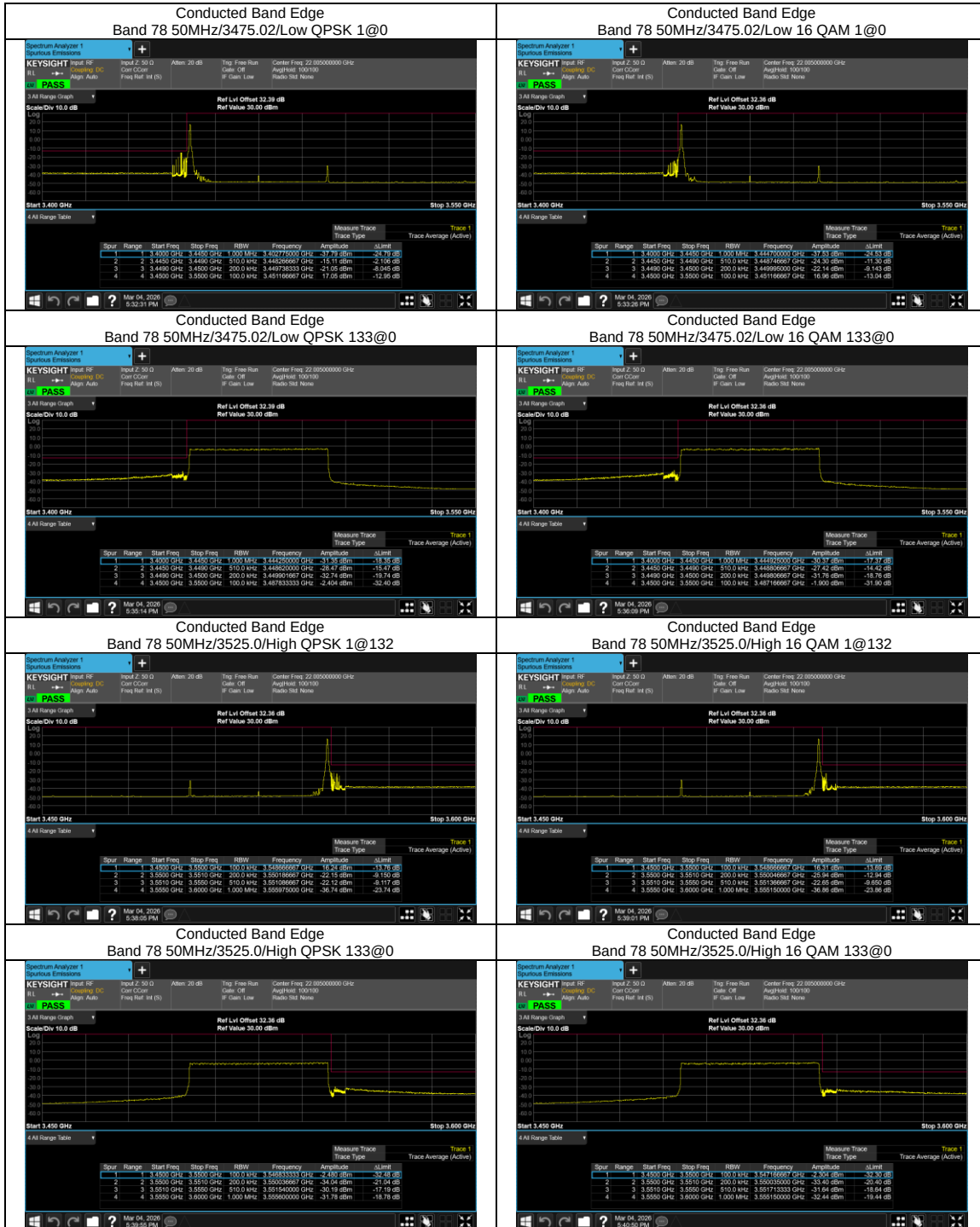
Conducted Band Edge

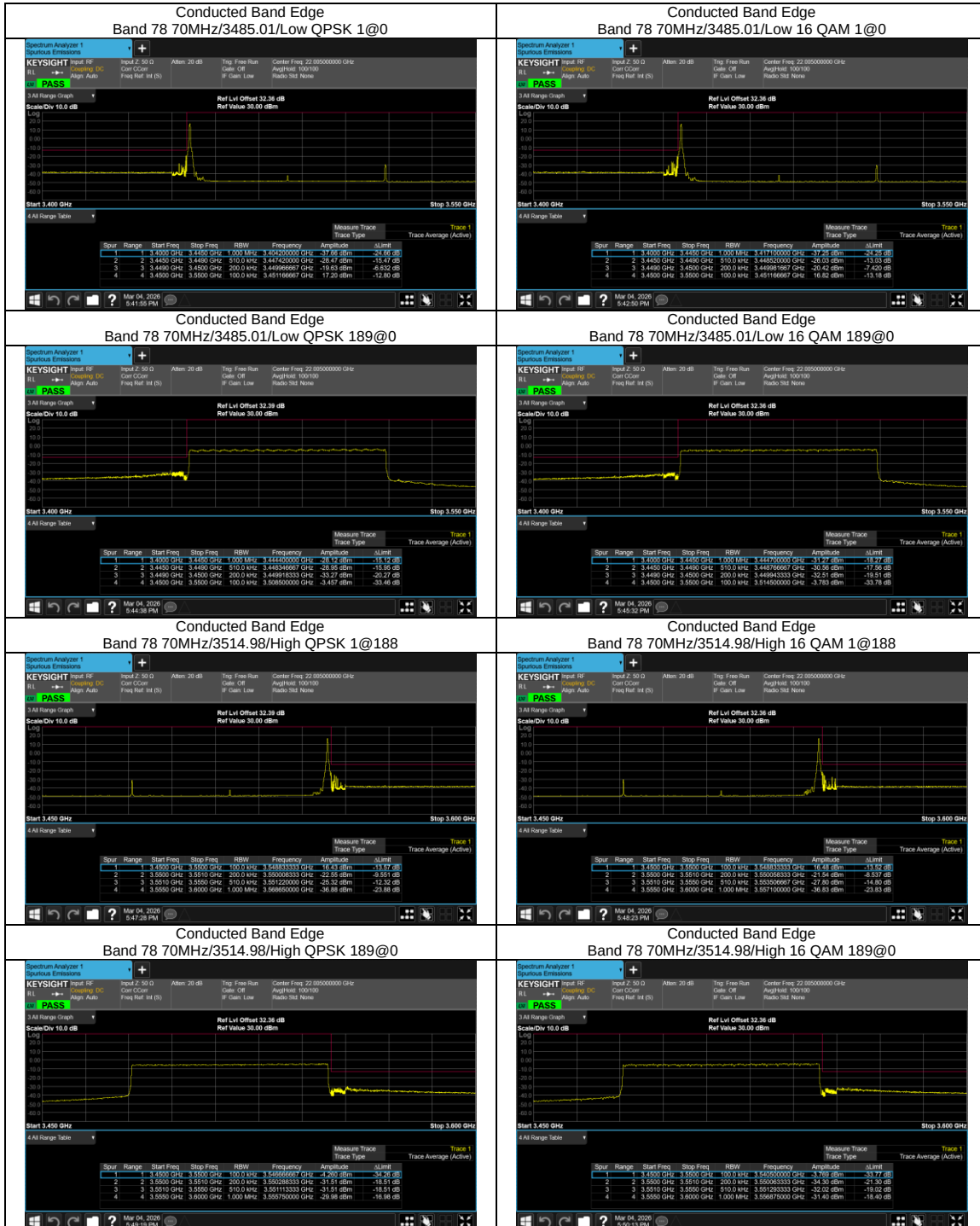
Test Result

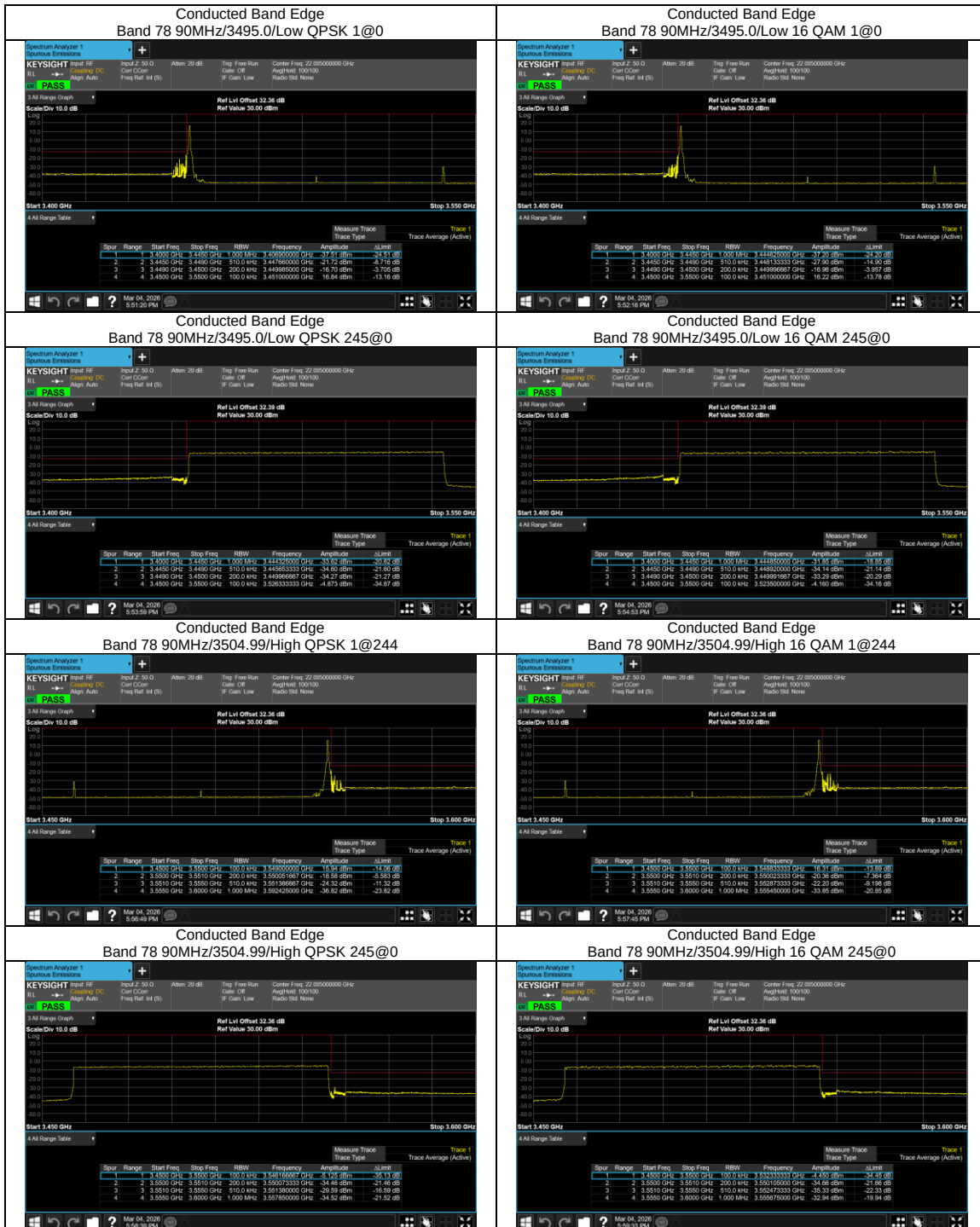
NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Result	Verdict
78	30	50	631668	3475.02	CP-OFDM QPSK	1@0	See graph	PASS
78	30	50	631668	3475.02	CP-OFDM 16 QAM	1@0	See graph	PASS
78	30	50	631668	3475.02	CP-OFDM QPSK	133@0	See graph	PASS
78	30	50	631668	3475.02	CP-OFDM 16 QAM	133@0	See graph	PASS
78	30	50	635000	3525.0	CP-OFDM QPSK	1@132	See graph	PASS
78	30	50	635000	3525.0	CP-OFDM 16 QAM	1@132	See graph	PASS
78	30	50	635000	3525.0	CP-OFDM QPSK	133@0	See graph	PASS
78	30	50	635000	3525.0	CP-OFDM 16 QAM	133@0	See graph	PASS
78	30	70	632334	3485.01	CP-OFDM QPSK	1@0	See graph	PASS
78	30	70	632334	3485.01	CP-OFDM 16 QAM	1@0	See graph	PASS
78	30	70	632334	3485.01	CP-OFDM QPSK	189@0	See graph	PASS
78	30	70	632334	3485.01	CP-OFDM 16 QAM	189@0	See graph	PASS
78	30	70	634332	3514.98	CP-OFDM QPSK	1@188	See graph	PASS
78	30	70	634332	3514.98	CP-OFDM 16 QAM	1@188	See graph	PASS
78	30	70	634332	3514.98	CP-OFDM QPSK	189@0	See graph	PASS
78	30	70	634332	3514.98	CP-OFDM 16 QAM	189@0	See graph	PASS
78	30	90	633000	3495.0	CP-OFDM QPSK	1@0	See graph	PASS
78	30	90	633000	3495.0	CP-OFDM 16 QAM	1@0	See graph	PASS
78	30	90	633000	3495.0	CP-OFDM QPSK	245@0	See graph	PASS
78	30	90	633000	3495.0	CP-OFDM 16 QAM	245@0	See graph	PASS
78	30	90	633666	3504.99	CP-OFDM QPSK	1@244	See graph	PASS
78	30	90	633666	3504.99	CP-OFDM 16 QAM	1@244	See graph	PASS
78	30	90	633666	3504.99	CP-OFDM QPSK	245@0	See graph	PASS
78	30	90	633666	3504.99	CP-OFDM 16 QAM	245@0	See graph	PASS



Test Graphs







Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Jake	Temperature :	21~25°C
		Relative Humidity :	51~53%

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

n77 SA / NR 100MHz / QPSK								
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	6900	-53.34	-13	-40.34	-63.55	3.03	13.24	H
	10356	-47.73	-13	-34.73	-57.18	3.56	13.01	H
	13824	-60.38	-13	-47.38	-69.90	3.92	13.44	H
	6900	-48.54	-13	-35.54	-58.75	3.03	13.24	V
	10356	-53.92	-13	-40.92	-63.37	3.56	13.01	V
	13824	-60.45	-13	-47.45	-69.97	3.92	13.44	V

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

EN-DC_30A_n77A / LTE 10MHz + NR 100MHz								
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	6900	-44.34	-13	-31.34	-54.55	3.03	13.24	H
	10368	-59.11	-13	-46.11	-68.56	3.56	13.01	H
	13824	-58.49	-13	-45.49	-68.01	3.92	13.44	H
	6900	-40.27	-13	-27.27	-50.48	3.03	13.24	V
	10368	-59.30	-13	-46.30	-68.75	3.56	13.01	V
	13824	-58.85	-13	-45.85	-68.37	3.92	13.44	V

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

EN-DC_13A_n77A / LTE 10MHz + NR 100MHz								
Channel	Frequency (MHz)	ERP/EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6900	-50.65	-13	-37.65	-60.86	3.03	13.24	H
	10356	-57.75	-13	-44.75	-67.20	3.56	13.01	H
	13824	-59.11	-13	-46.11	-68.63	3.92	13.44	H
	6900	-49.55	-13	-36.55	-59.76	3.03	13.24	V
	10356	-59.00	-13	-46.00	-68.45	3.56	13.01	V
	13824	-59.20	-13	-46.20	-68.72	3.92	13.44	V

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

n77 UL MIMO / NR 100+100MHz / QPSK								
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	6900	-42.85	-13	-29.85	-53.06	3.03	13.24	H
	10356	-53.42	-13	-40.42	-62.87	3.56	13.01	H
	13824	-60.54	-13	-47.54	-70.06	3.92	13.44	H
	6900	-41.22	-13	-28.22	-51.43	3.03	13.24	V
	10356	-55.02	-13	-42.02	-64.47	3.56	13.01	V
	13824	-60.75	-13	-47.75	-70.27	3.92	13.44	V

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