

APPENDIX O NR_SA RF TEST DATA

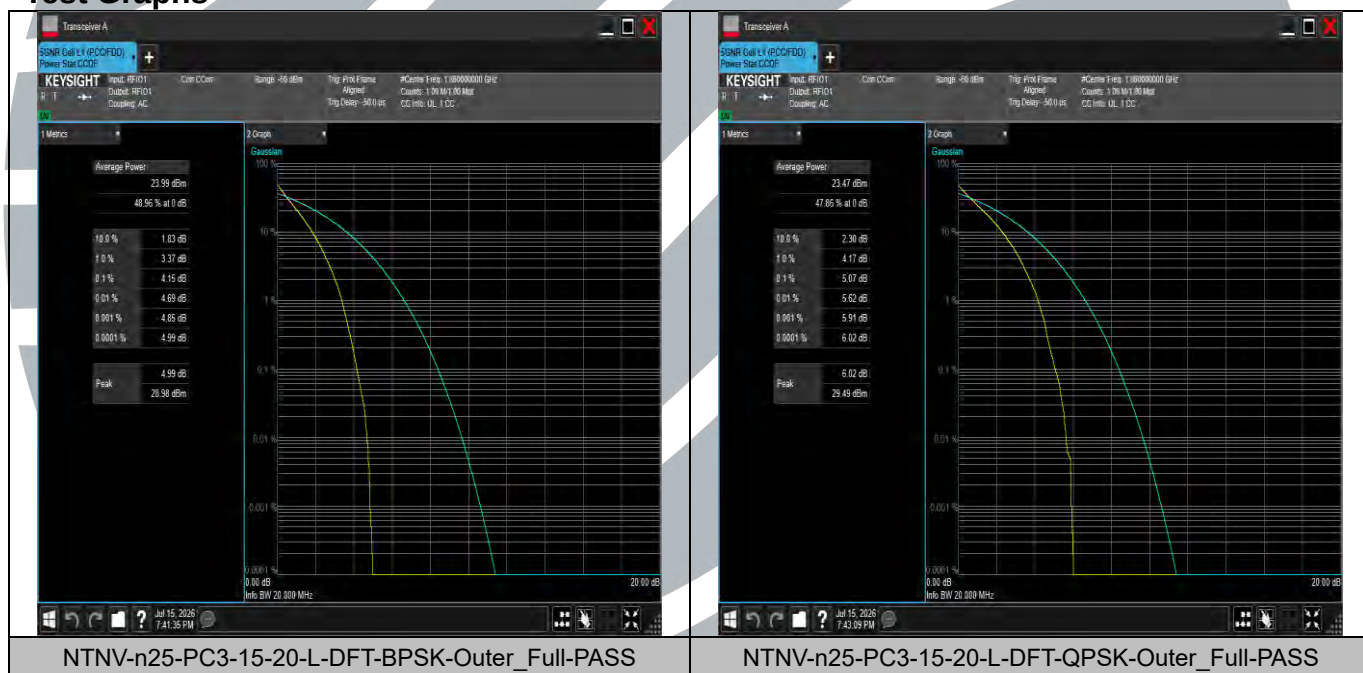
O.1 PEAK-TO-AVERAGE RATIO FOR SA

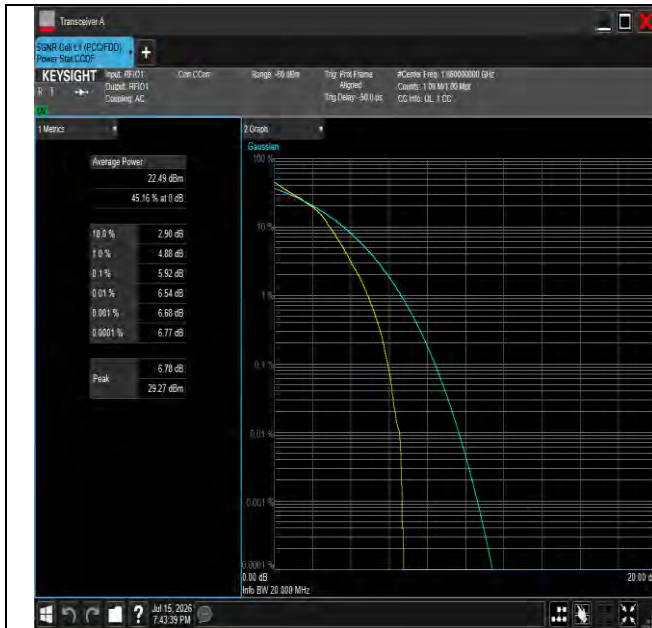
Peak-to-Average Ratio(CCDF)

Test Result

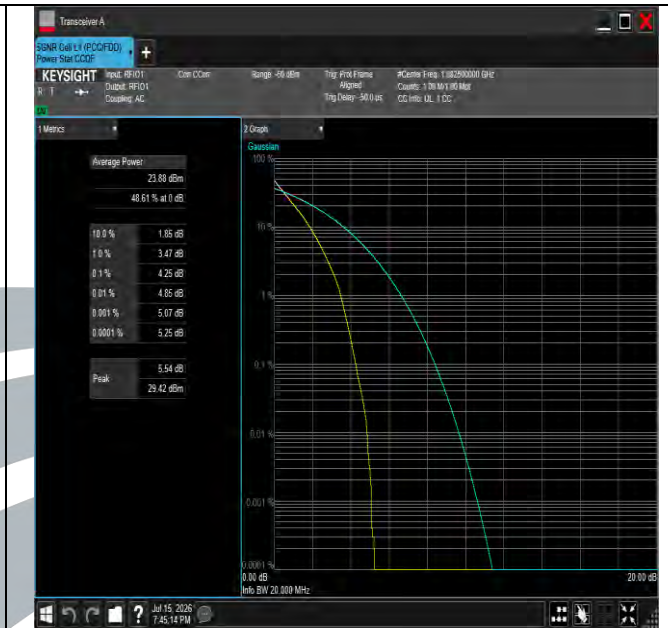
Band	SCS (kHz)	BW (MHz)	Modulation	Channel	RB Config	Result (dB)	Limit	Verdict
n25	15	20	DFT-BPSK	L	Outer_Full	4.15	≤13dB	PASS
n25	15	20	DFT-QPSK	L	Outer_Full	5.07	≤13dB	PASS
n25	15	20	DFT-16QAM	L	Outer_Full	5.92	≤13dB	PASS
n25	15	20	DFT-BPSK	M	Outer_Full	4.25	≤13dB	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	5.23	≤13dB	PASS
n25	15	20	DFT-16QAM	M	Outer_Full	6	≤13dB	PASS
n25	15	20	DFT-BPSK	H	Outer_Full	4.1	≤13dB	PASS
n25	15	20	DFT-QPSK	H	Outer_Full	5.1	≤13dB	PASS
n25	15	20	DFT-16QAM	H	Outer_Full	5.85	≤13dB	PASS

Test Graphs

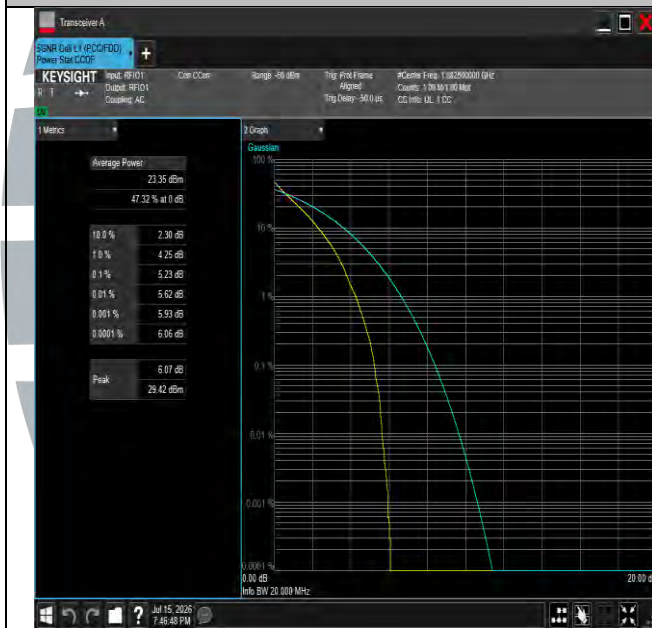




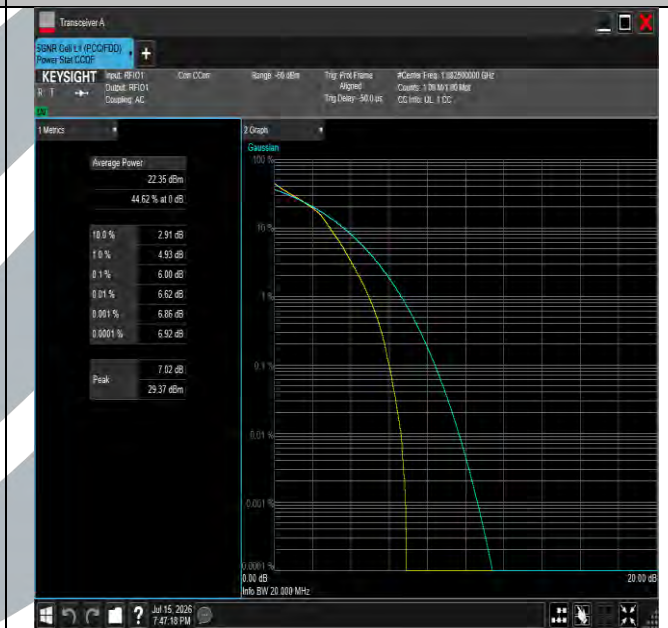
NTNV-n25-PC3-15-20-L-DFT-16QAM-Outer_Full-PASS



NTNV-n25-PC3-15-20-M-DFT-BPSK-Outer_Full-PASS



NTNV-n25-PC3-15-20-M-DFT-QPSK-Outer_Full-PASS



NTNV-n25-PC3-15-20-M-DFT-16QAM-Outer_Full-PASS

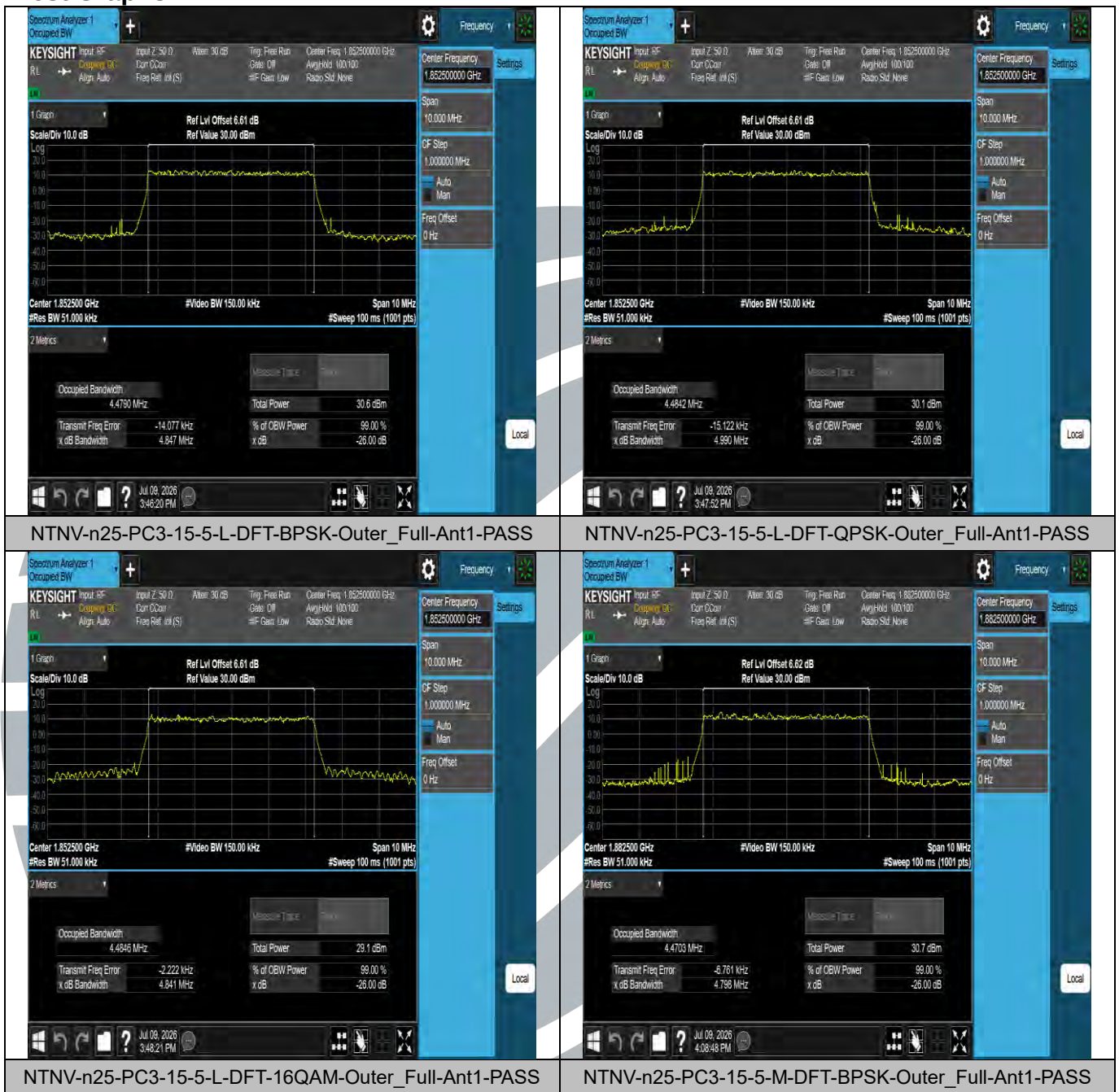


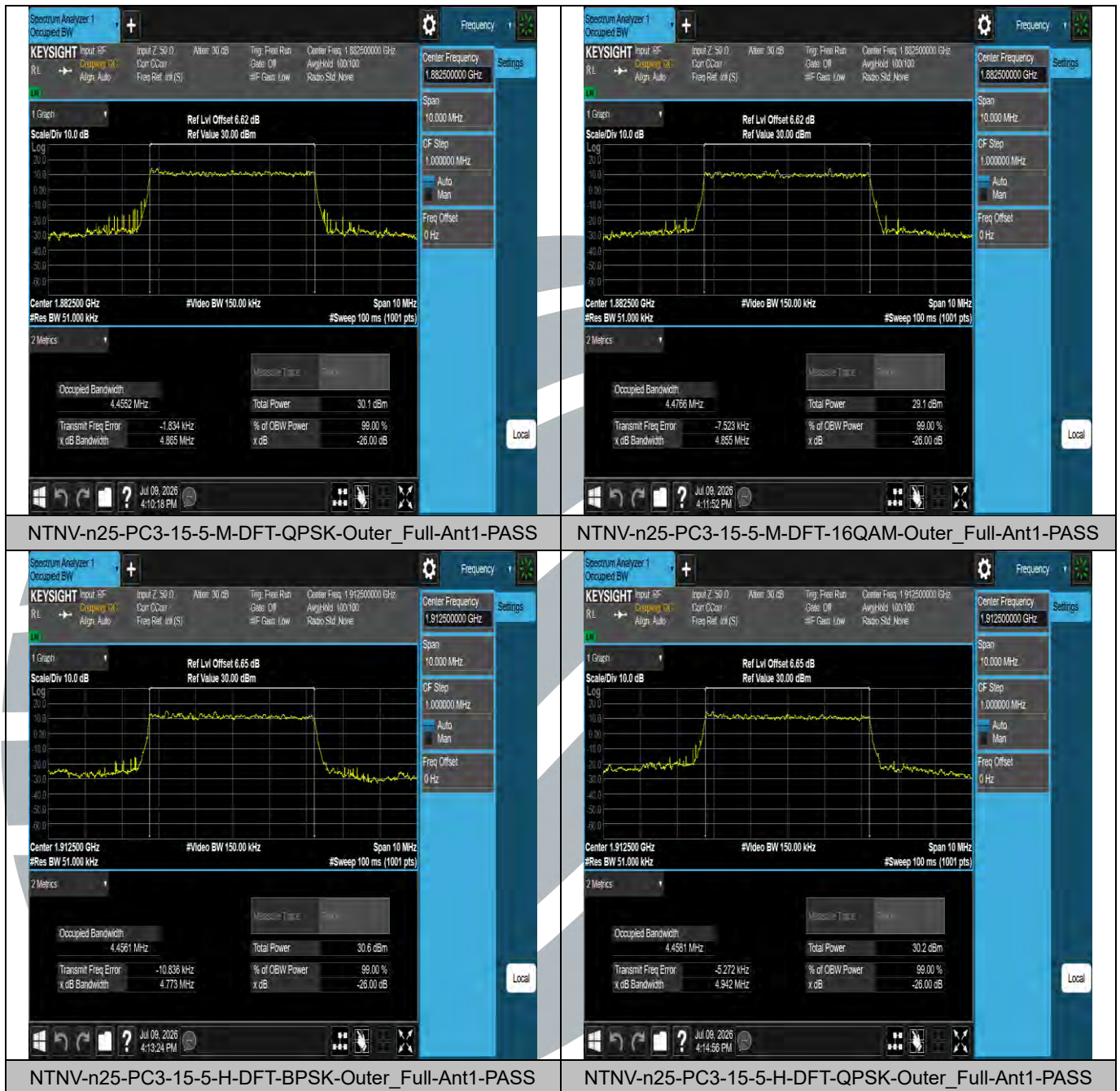
O.2 26DB BANDWIDTH AND OCCUPIED BANDWIDTH FOR SA

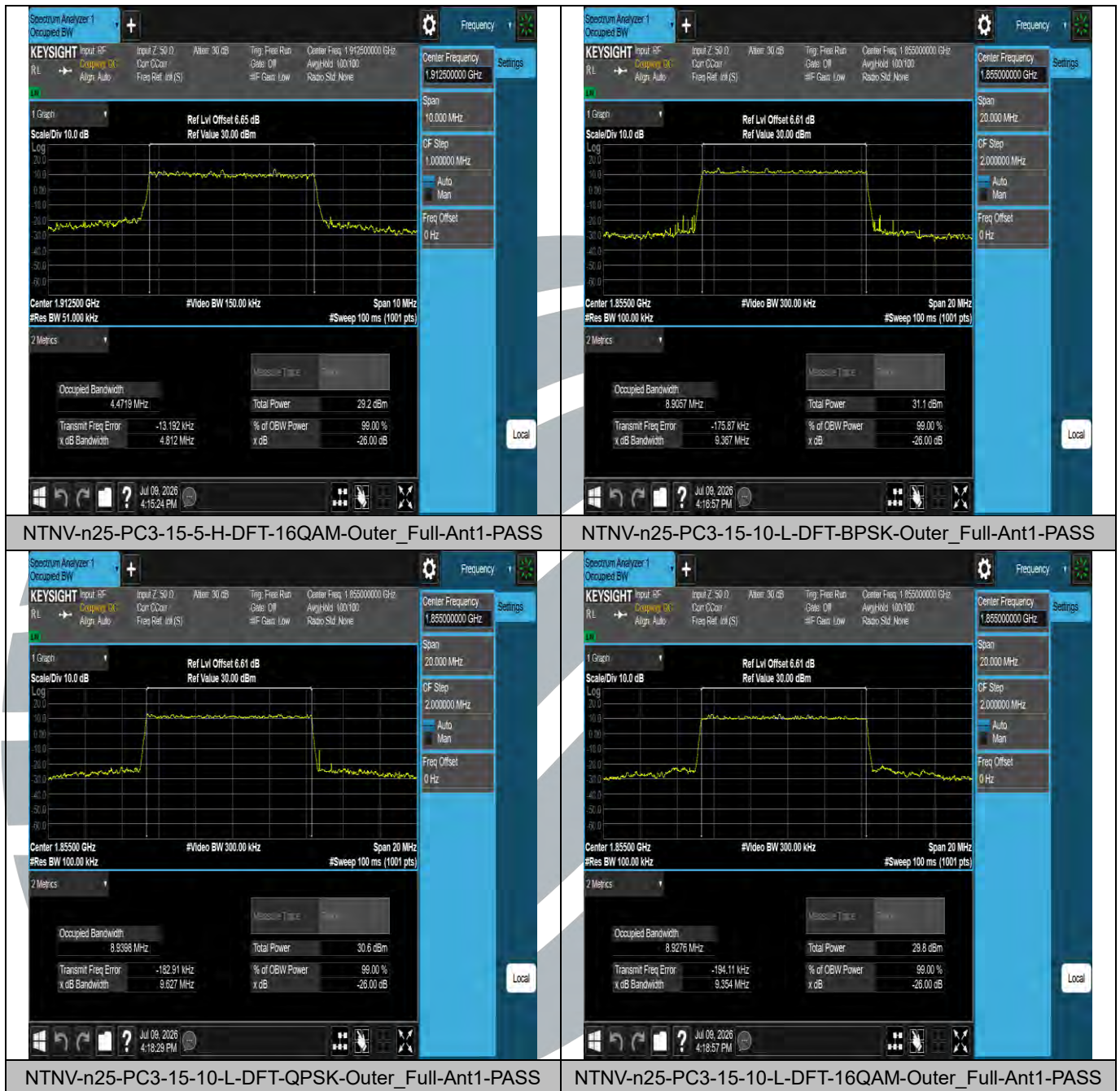
Test Result

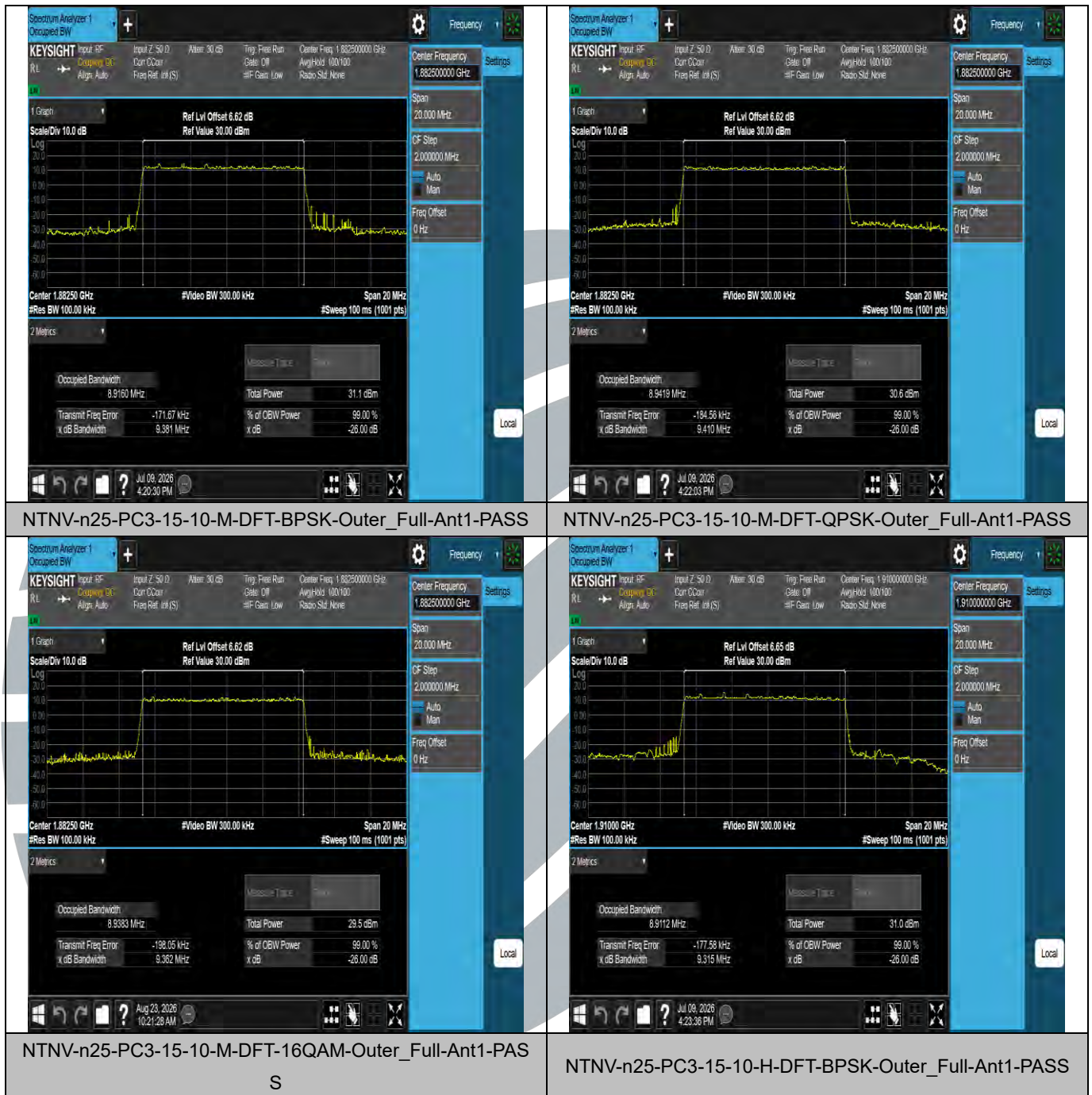
Band	SCS (kHz)	BW (MHz)	Modulation	Channel	RB Config	99% BW Result (MHz)	26dB BW Result (MHz)	Verdict
n25	15	5	DFT-BPSK	L	Outer_Full	4.4790	4.847	PASS
n25	15	5	DFT-QPSK	L	Outer_Full	4.4842	4.990	PASS
n25	15	5	DFT-16QAM	L	Outer_Full	4.4846	4.841	PASS
n25	15	5	DFT-BPSK	M	Outer_Full	4.4703	4.798	PASS
n25	15	5	DFT-QPSK	M	Outer_Full	4.4552	4.865	PASS
n25	15	5	DFT-16QAM	M	Outer_Full	4.4766	4.855	PASS
n25	15	5	DFT-BPSK	H	Outer_Full	4.4561	4.773	PASS
n25	15	5	DFT-QPSK	H	Outer_Full	4.4581	4.942	PASS
n25	15	5	DFT-16QAM	H	Outer_Full	4.4719	4.812	PASS
n25	15	10	DFT-BPSK	L	Outer_Full	8.9057	9.367	PASS
n25	15	10	DFT-QPSK	L	Outer_Full	8.9398	9.627	PASS
n25	15	10	DFT-16QAM	L	Outer_Full	8.9276	9.354	PASS
n25	15	10	DFT-BPSK	M	Outer_Full	8.9160	9.381	PASS
n25	15	10	DFT-QPSK	M	Outer_Full	8.9419	9.410	PASS
n25	15	10	DFT-16QAM	M	Outer_Full	8.9383	9.362	PASS
n25	15	10	DFT-BPSK	H	Outer_Full	8.9112	9.315	PASS
n25	15	10	DFT-QPSK	H	Outer_Full	8.9391	9.410	PASS
n25	15	10	DFT-16QAM	H	Outer_Full	8.9194	9.346	PASS
n25	15	15	DFT-BPSK	L	Outer_Full	13.436	14.24	PASS
n25	15	15	DFT-QPSK	L	Outer_Full	13.395	13.99	PASS
n25	15	15	DFT-16QAM	L	Outer_Full	13.391	14.62	PASS
n25	15	15	DFT-BPSK	M	Outer_Full	13.438	14.08	PASS
n25	15	15	DFT-QPSK	M	Outer_Full	13.409	13.96	PASS
n25	15	15	DFT-16QAM	M	Outer_Full	13.402	14.38	PASS
n25	15	15	DFT-BPSK	H	Outer_Full	13.420	14.14	PASS
n25	15	15	DFT-QPSK	H	Outer_Full	13.408	13.97	PASS
n25	15	15	DFT-16QAM	H	Outer_Full	13.379	14.35	PASS
n25	15	20	DFT-BPSK	L	Outer_Full	17.880	18.81	PASS
n25	15	20	DFT-QPSK	L	Outer_Full	17.842	18.60	PASS
n25	15	20	DFT-16QAM	L	Outer_Full	17.860	18.67	PASS
n25	15	20	DFT-BPSK	M	Outer_Full	17.905	18.69	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	17.855	18.64	PASS
n25	15	20	DFT-16QAM	M	Outer_Full	17.866	18.68	PASS
n25	15	20	DFT-BPSK	H	Outer_Full	17.851	18.56	PASS
n25	15	20	DFT-QPSK	H	Outer_Full	17.825	18.62	PASS
n25	15	20	DFT-16QAM	H	Outer_Full	17.859	18.66	PASS

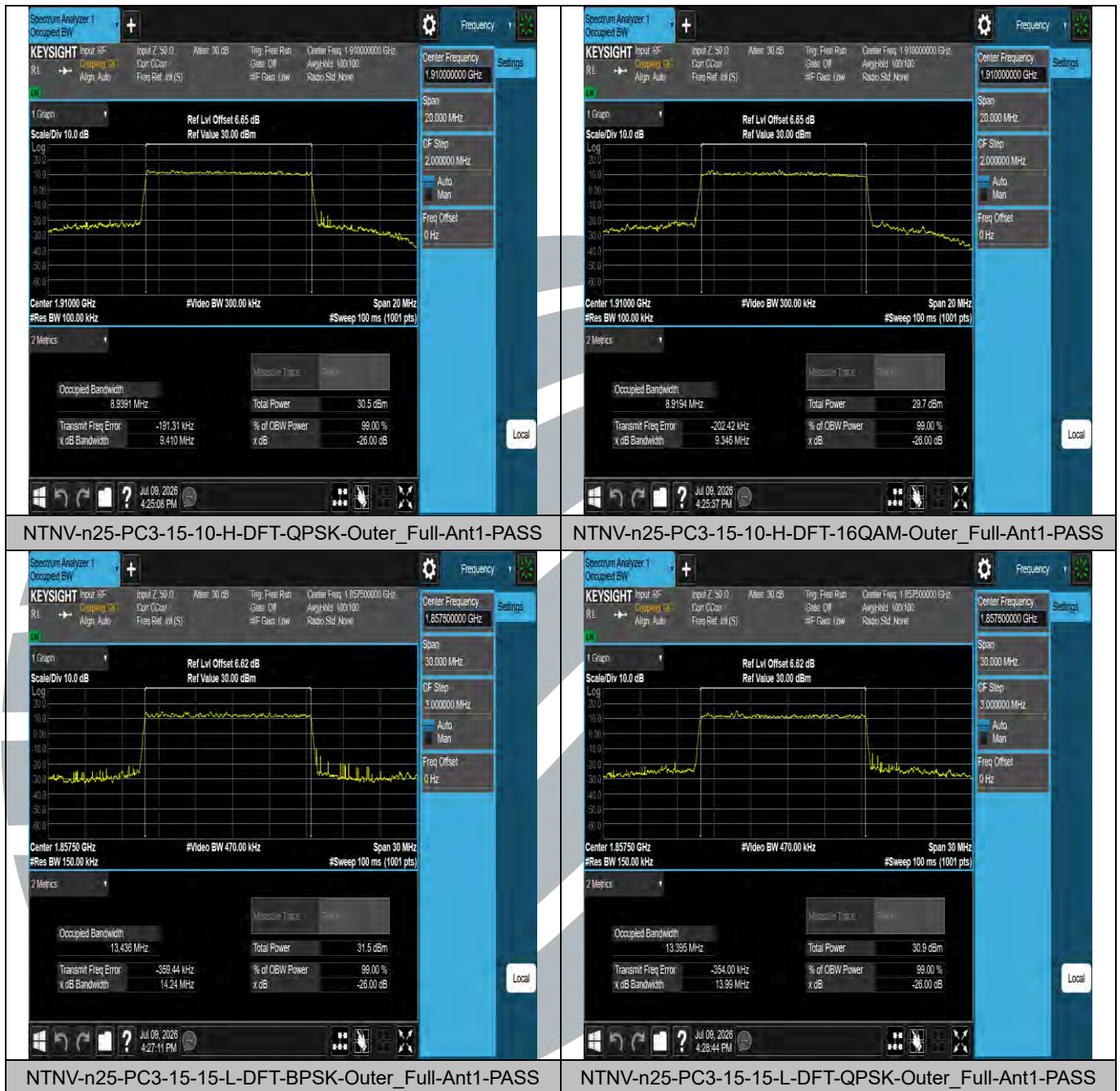
Test Graphs





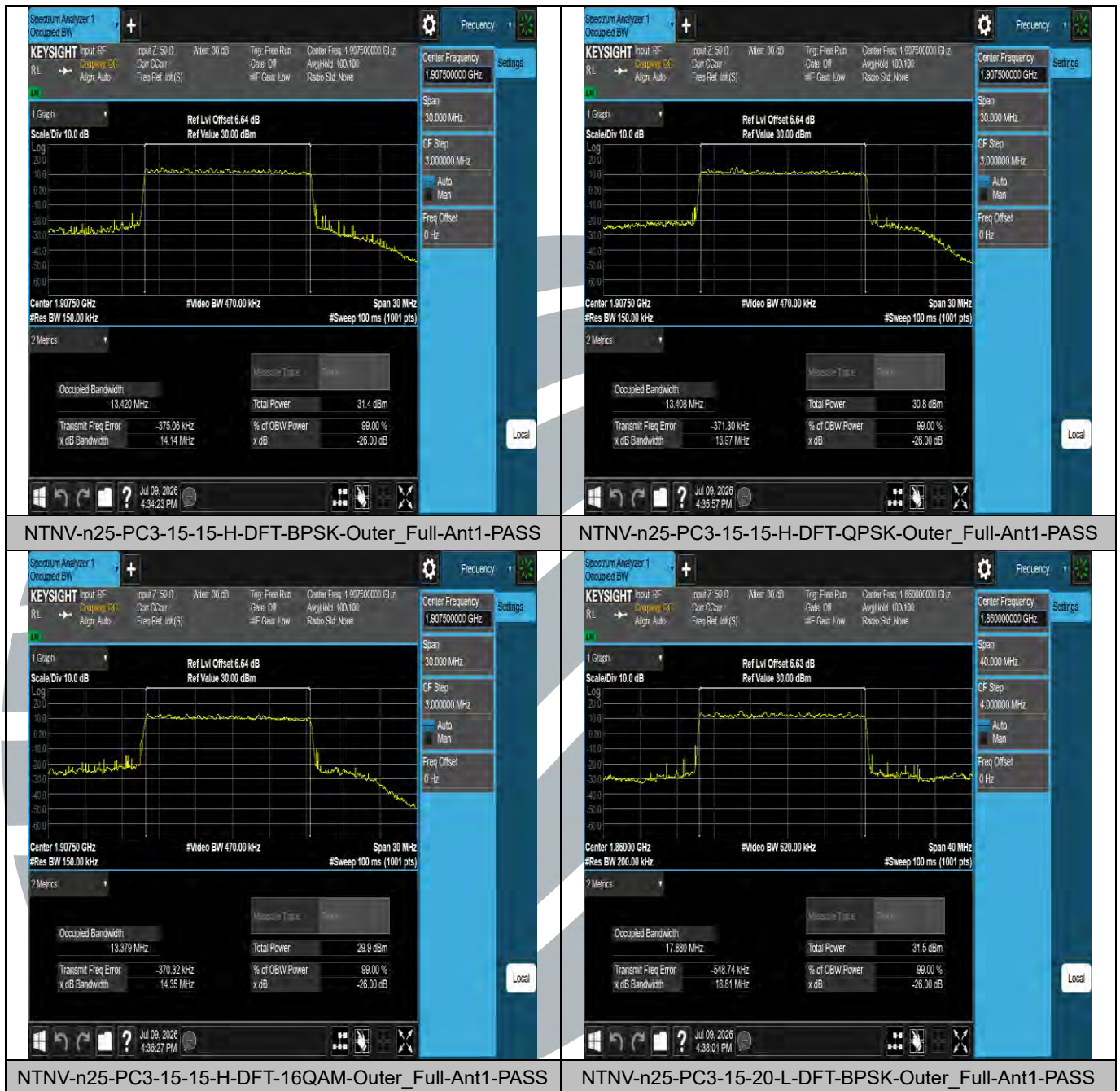


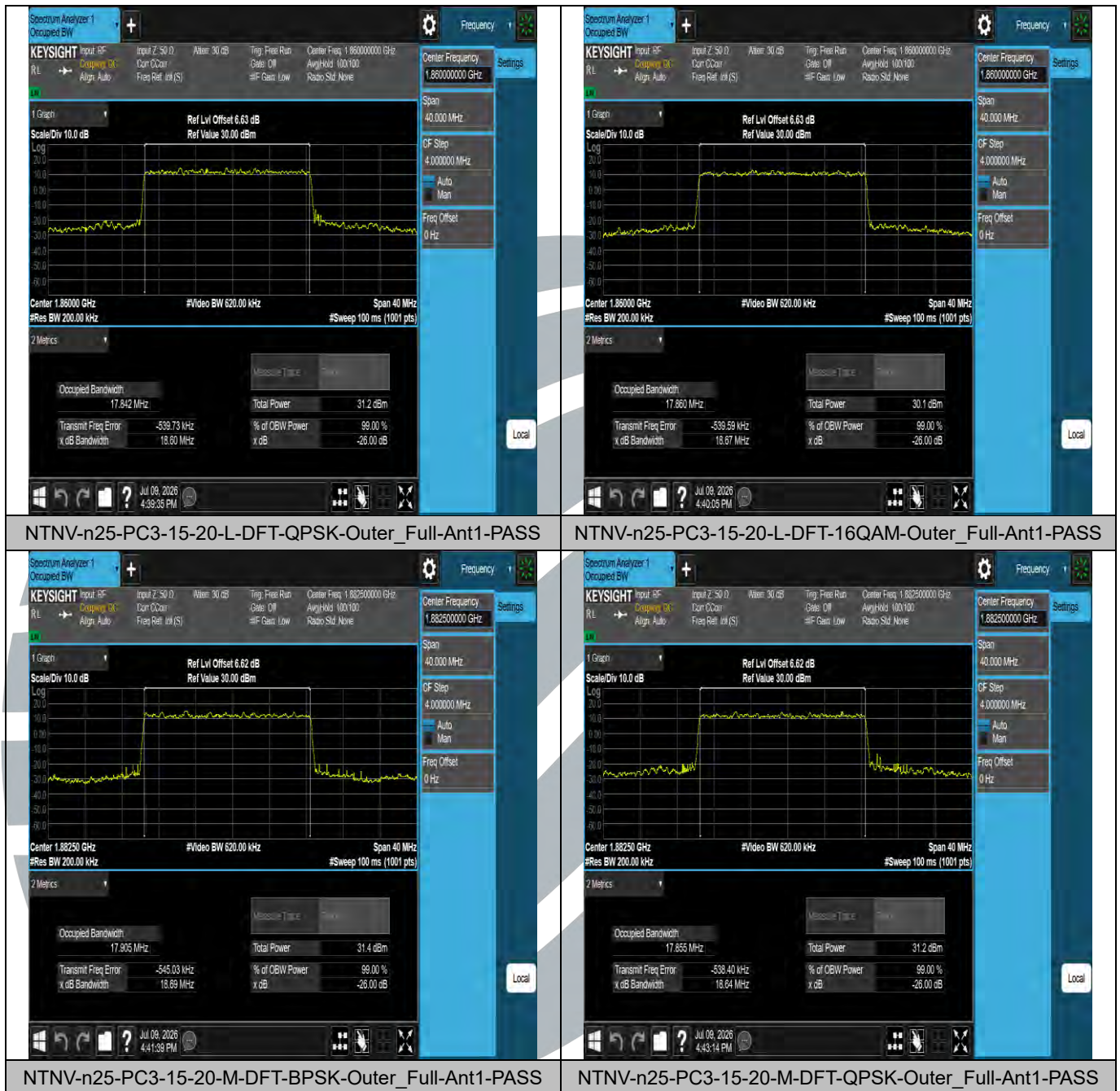


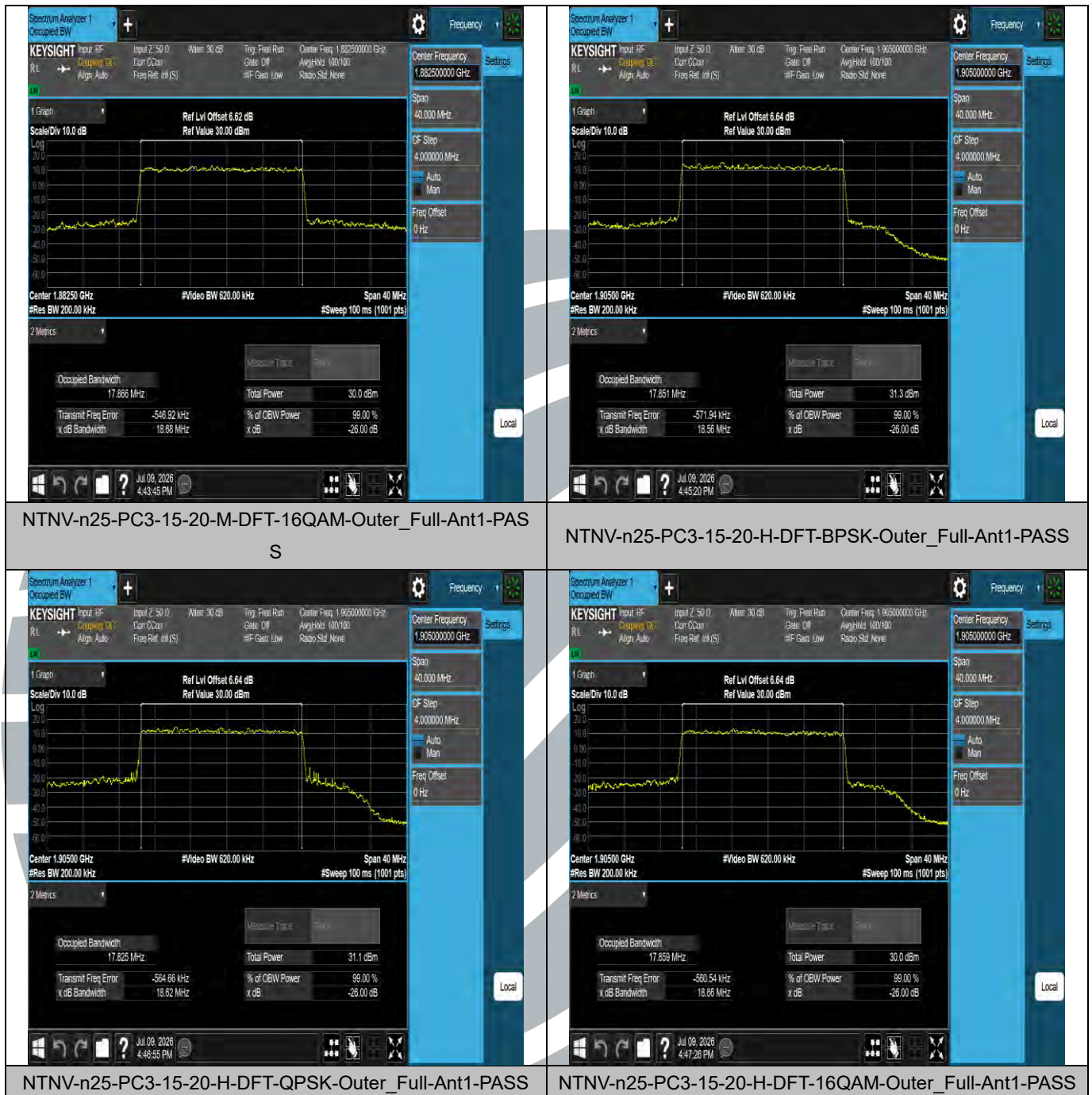




S







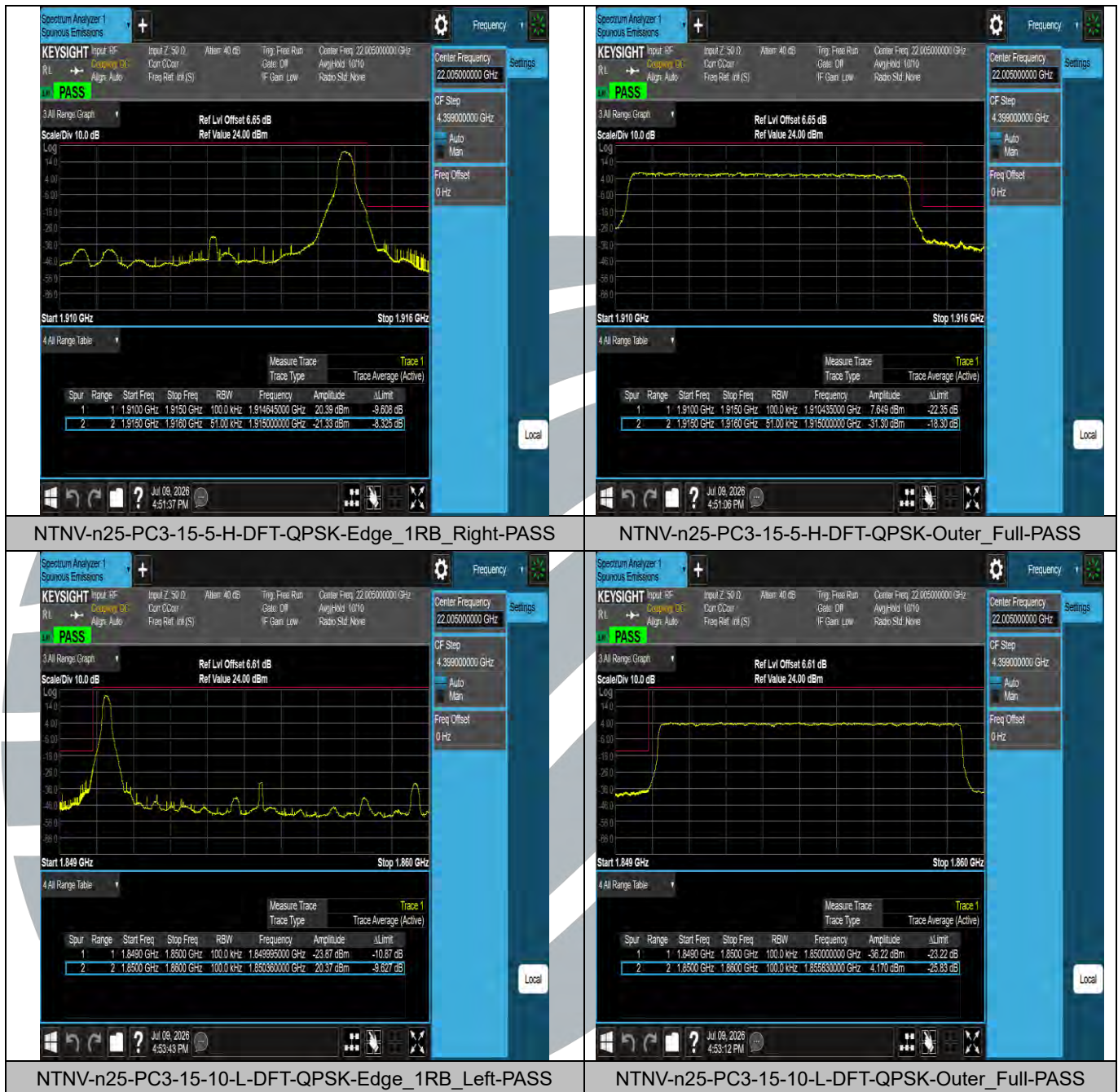
O.3 BAND EDGE FOR SA

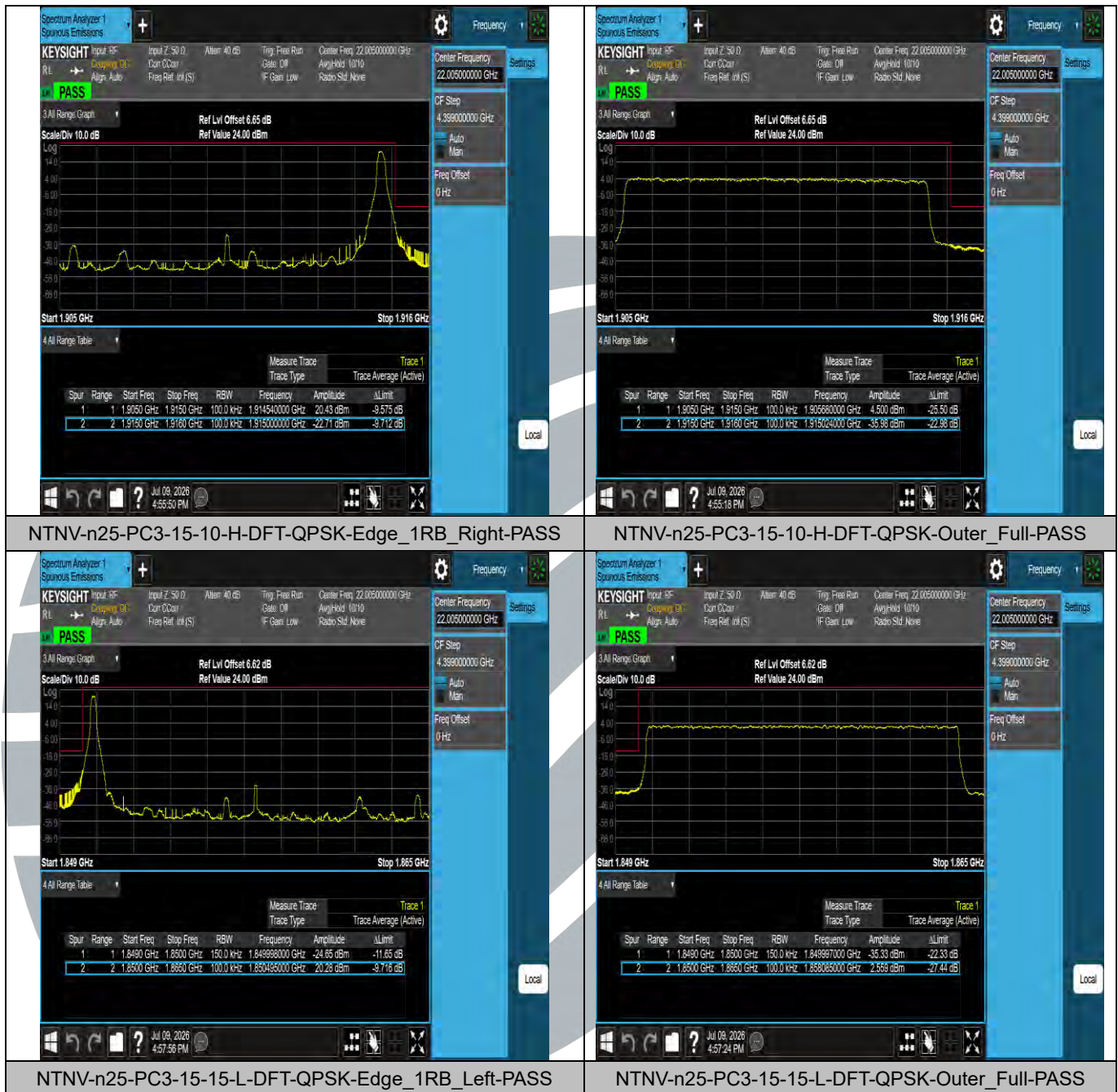
Test Result

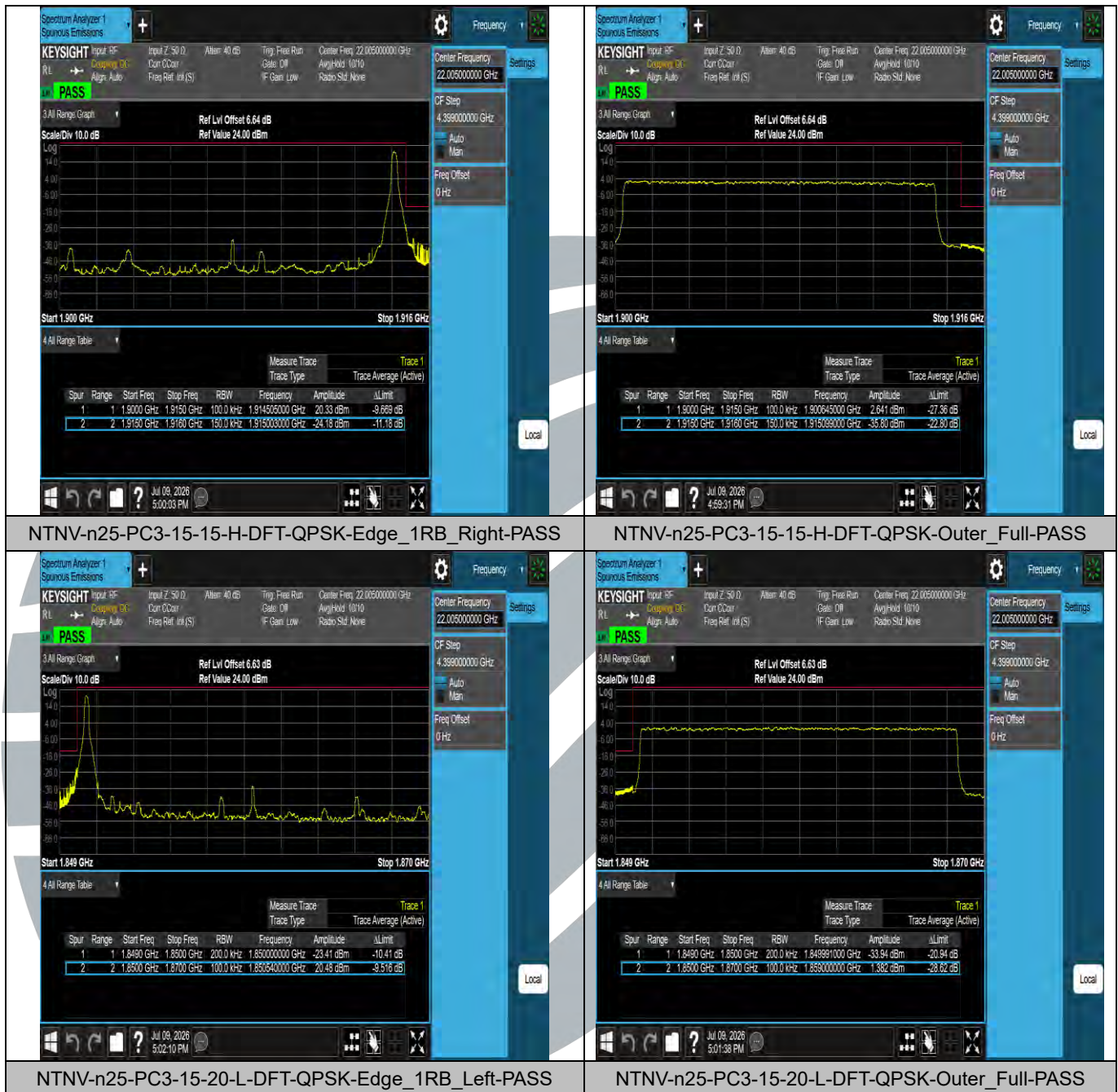
Band	SCS (kHz)	BW (MHz)	Modulation	Channel	RB Config	Result (dBm)	Verdict
n25	15	5	DFT-QPSK	L	Edge_1RB_Left	-20.75	PASS
n25	15	5	DFT-QPSK	L	Outer_Full	-32.38	PASS
n25	15	5	DFT-QPSK	H	Edge_1RB_Right	-21.33	PASS
n25	15	5	DFT-QPSK	H	Outer_Full	-31.30	PASS
n25	15	10	DFT-QPSK	L	Edge_1RB_Left	-23.87	PASS
n25	15	10	DFT-QPSK	L	Outer_Full	-36.22	PASS
n25	15	10	DFT-QPSK	H	Edge_1RB_Right	-22.71	PASS
n25	15	10	DFT-QPSK	H	Outer_Full	-35.98	PASS
n25	15	15	DFT-QPSK	L	Edge_1RB_Left	-24.65	PASS
n25	15	15	DFT-QPSK	L	Outer_Full	-35.33	PASS
n25	15	15	DFT-QPSK	H	Edge_1RB_Right	-24.18	PASS
n25	15	15	DFT-QPSK	H	Outer_Full	-35.80	PASS
n25	15	20	DFT-QPSK	L	Edge_1RB_Left	-23.41	PASS
n25	15	20	DFT-QPSK	L	Outer_Full	-33.94	PASS
n25	15	20	DFT-QPSK	H	Edge_1RB_Right	-23.62	PASS
n25	15	20	DFT-QPSK	H	Outer_Full	-36.92	PASS

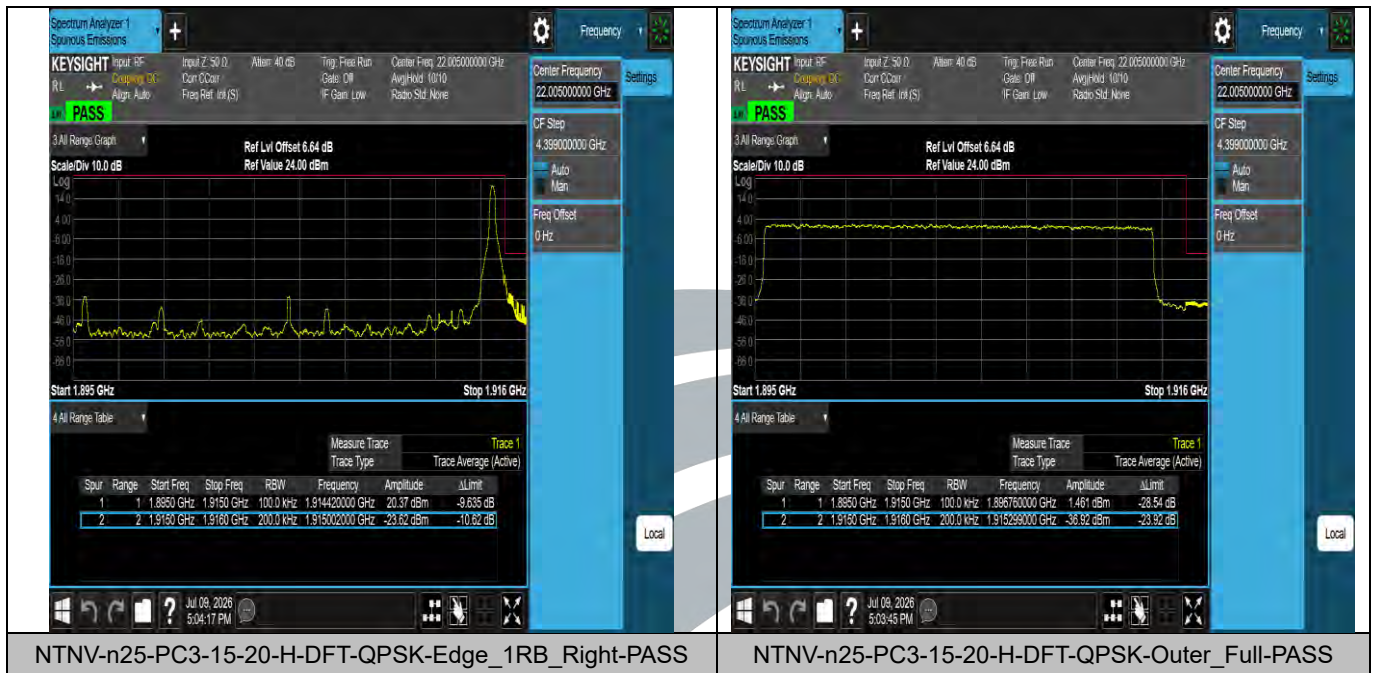
Test Graphs









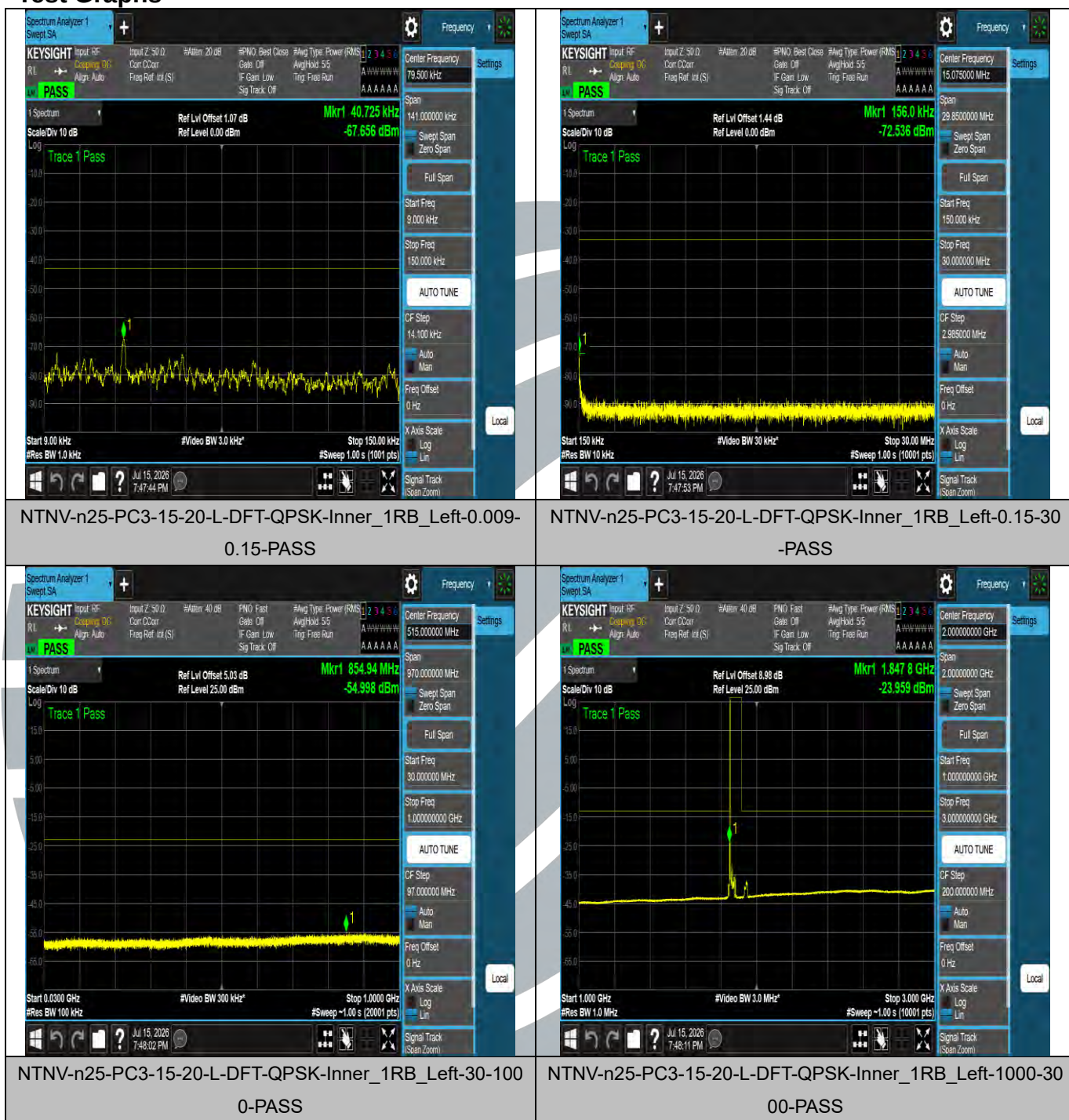


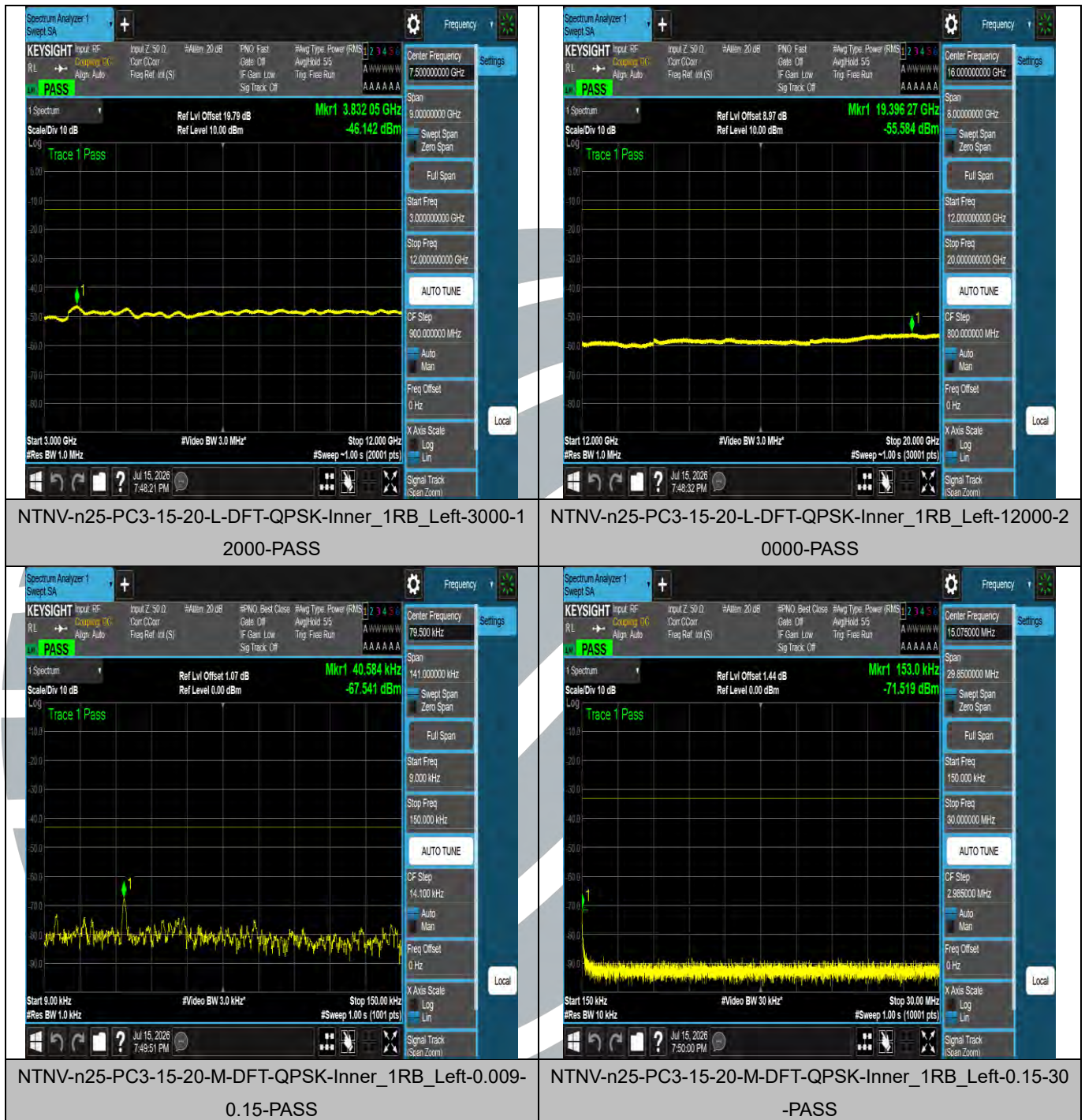
O.4 CONDUCTED SPURIOUS EMISSION FOR SA

Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Ch.	RB Config	Start Freq (MHz)	Stop Freq (MHz)	Result (dBm)	Limit (dBm)	Verdict
n25	15	20	DFT-QPSK	L	Inner_1RB_Left	0.009	0.15	-67.66	≤-43dBm	PASS
n25	15	20	DFT-QPSK	L	Inner_1RB_Left	0.15	30	-72.54	≤-33dBm	PASS
n25	15	20	DFT-QPSK	L	Inner_1RB_Left	30	1000	-55.00	≤-23dBm	PASS
n25	15	20	DFT-QPSK	L	Inner_1RB_Left	1000	3000	-23.96	≤-13dBm	PASS
n25	15	20	DFT-QPSK	L	Inner_1RB_Left	3000	12000	-46.14	≤-13dBm	PASS
n25	15	20	DFT-QPSK	L	Inner_1RB_Left	12000	20000	-55.58	≤-13dBm	PASS
n25	15	20	DFT-QPSK	M	Inner_1RB_Left	0.009	0.15	-67.54	≤-43dBm	PASS
n25	15	20	DFT-QPSK	M	Inner_1RB_Left	0.15	30	-71.52	≤-33dBm	PASS
n25	15	20	DFT-QPSK	M	Inner_1RB_Left	30	1000	-54.62	≤-23dBm	PASS
n25	15	20	DFT-QPSK	M	Inner_1RB_Left	1000	3000	-34.95	≤-13dBm	PASS
n25	15	20	DFT-QPSK	M	Inner_1RB_Left	3000	12000	-46.24	≤-13dBm	PASS
n25	15	20	DFT-QPSK	M	Inner_1RB_Left	12000	20000	-55.65	≤-13dBm	PASS
n25	15	20	DFT-QPSK	H	Inner_1RB_Left	0.009	0.15	-66.60	≤-43dBm	PASS
n25	15	20	DFT-QPSK	H	Inner_1RB_Left	0.15	30	-73.21	≤-33dBm	PASS
n25	15	20	DFT-QPSK	H	Inner_1RB_Left	30	1000	-54.69	≤-23dBm	PASS
n25	15	20	DFT-QPSK	H	Inner_1RB_Left	1000	3000	-36.65	≤-13dBm	PASS
n25	15	20	DFT-QPSK	H	Inner_1RB_Left	3000	12000	-45.69	≤-13dBm	PASS
n25	15	20	DFT-QPSK	H	Inner_1RB_Left	12000	20000	-55.81	≤-13dBm	PASS

Test Graphs







NTNV-n25-PC3-15-20-M-DFT-QPSK-Inner_1RB_Left-30-1000-PASS



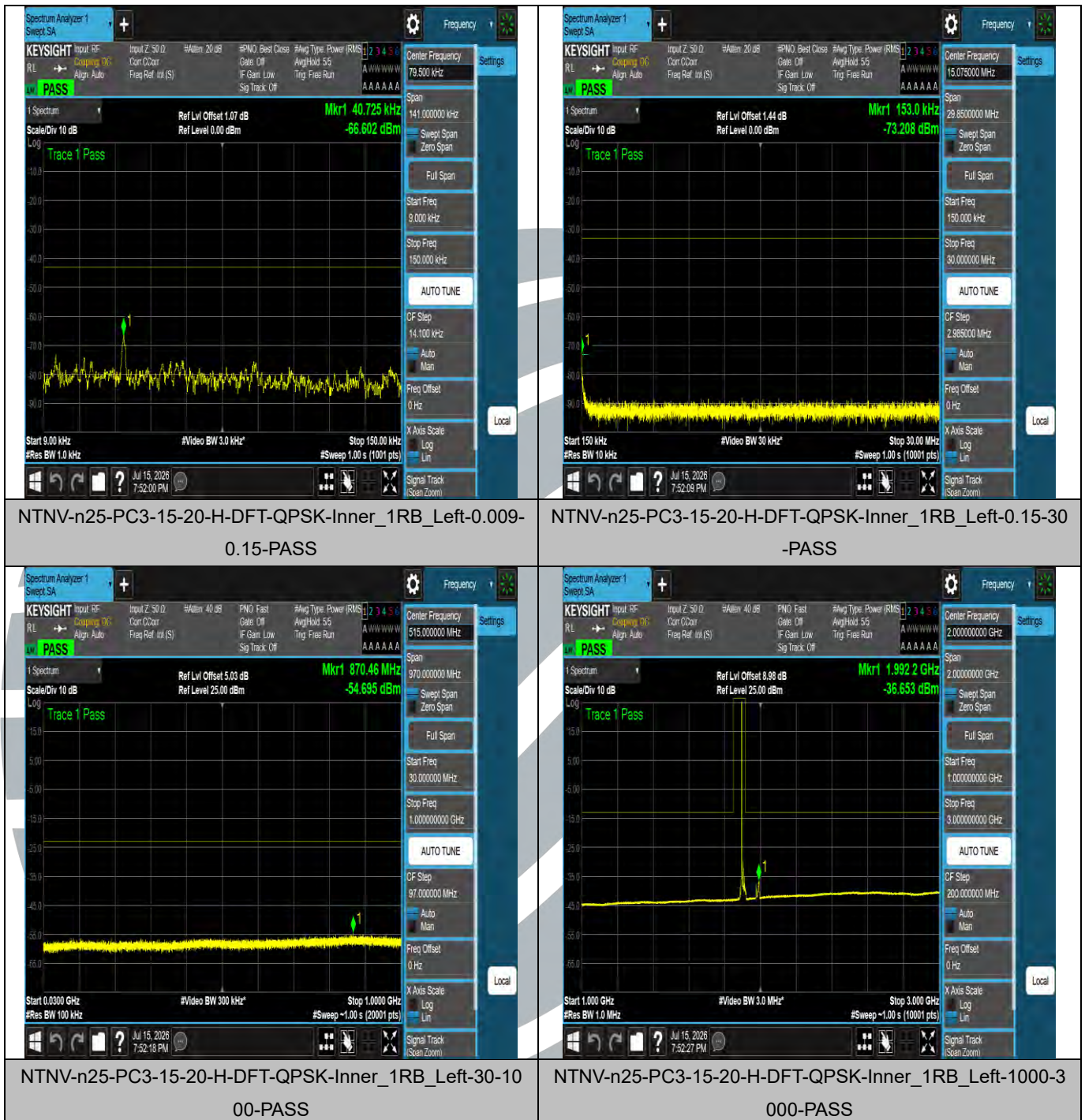
NTNV-n25-PC3-15-20-M-DFT-QPSK-Inner_1RB_Left-1000-3000-PASS

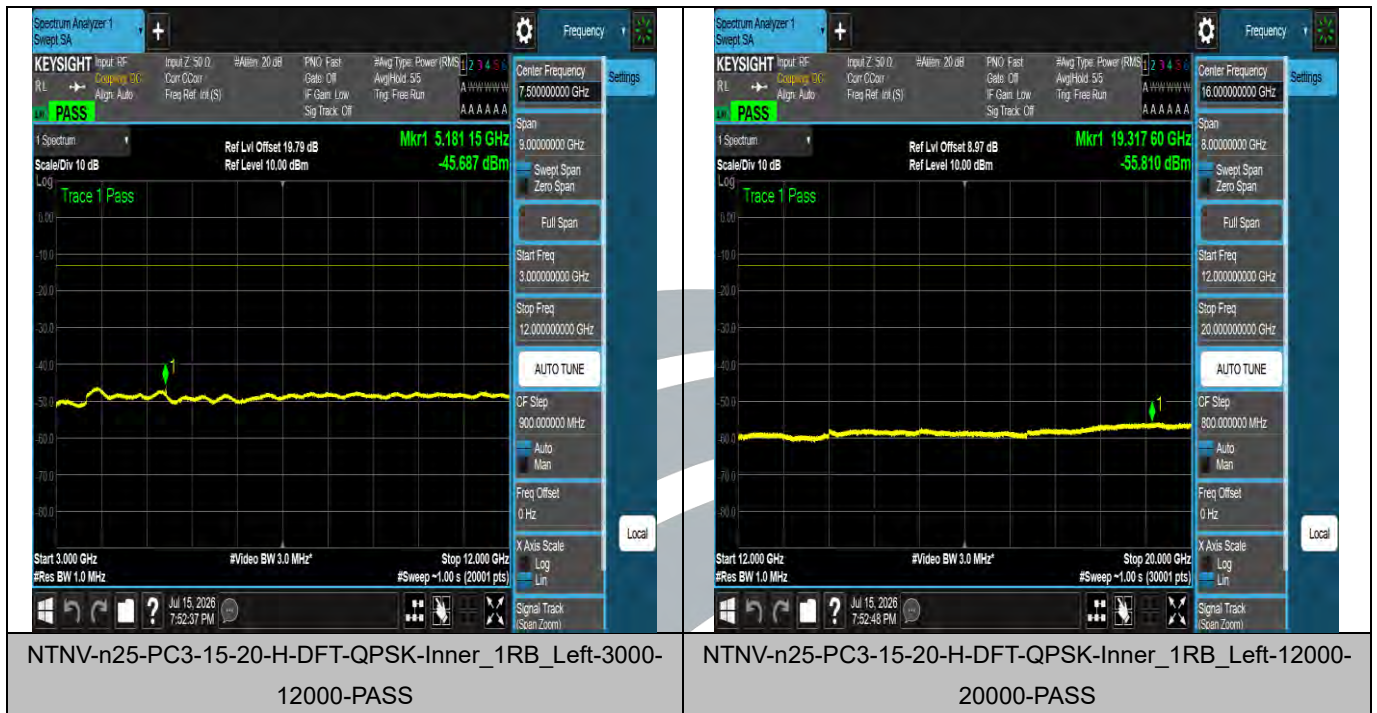


NTNV-n25-PC3-15-20-M-DFT-QPSK-Inner_1RB_Left-3000-12000-PASS



NTNV-n25-PC3-15-20-M-DFT-QPSK-Inner_1RB_Left-12000-20000-PASS





O.5 FREQUENCY STABILITY FOR SA

Test Result

Frequency Error VS. Voltage

Voltage													
Band	SCS	BW (MHz)	Modulation	Ch.	RB Config	Voltage	Temp.	Result (ppm)	Limit (ppm)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
n25	15	20	DFT-QPSK	M	Outer_Full	VL	NT	-0.003243	-2.5~2.5	1850	1915	---	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	VN	NT	-0.002084	-2.5~2.5	1850	1915	---	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	VH	NT	-0.001525	-2.5~2.5	1850	1915	---	PASS

Frequency Error VS. Temperature

Temperature													
Band	SCS	BW (MHz)	Modulation	Ch.	RB Config	Voltage	Temp.	Result (ppm)	Limit (ppm)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
n25	15	20	DFT-QPSK	M	Outer_Full	NV	-30	-0.002305	-2.5~2.5	1850	1915	---	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	NV	-20	-0.00084	-2.5~2.5	1850	1915	---	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	NV	-10	-0.001486	-2.5~2.5	1850	1915	---	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	NV	0	-0.00047	-2.5~2.5	1850	1915	---	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	NV	10	0.000791	-2.5~2.5	1850	1915	---	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	NV	20	-0.00038	-2.5~2.5	1850	1915	---	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	NV	30	0.001227	-2.5~2.5	1850	1915	---	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	NV	40	0.000292	-2.5~2.5	1850	1915	---	PASS
n25	15	20	DFT-QPSK	M	Outer_Full	NV	50	0.000576	-2.5~2.5	1850	1915	---	PASS