

APPENDIX M NR_SA RF TEST DATA

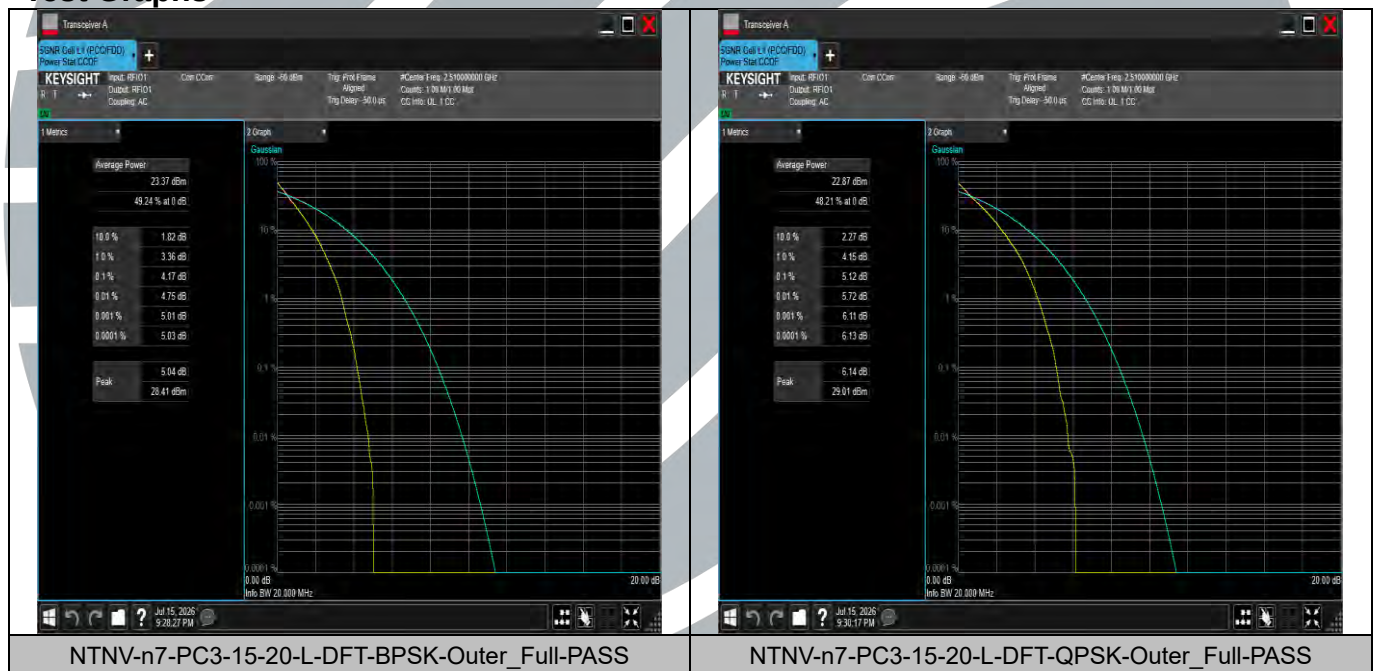
M.1 PEAK-TO-AVERAGE RATIO FOR SA

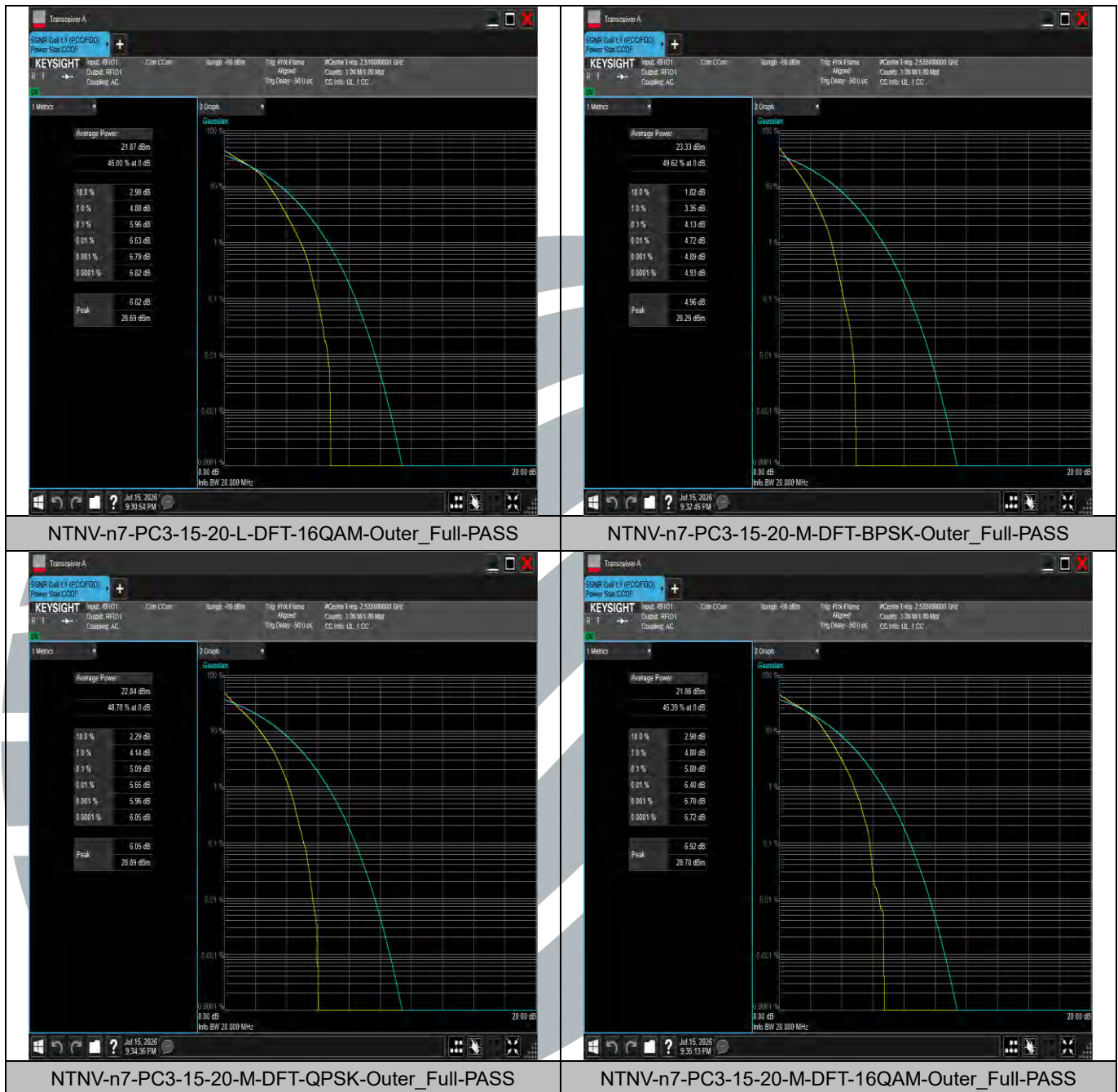
Peak-to-Average Ratio(CCDFF)

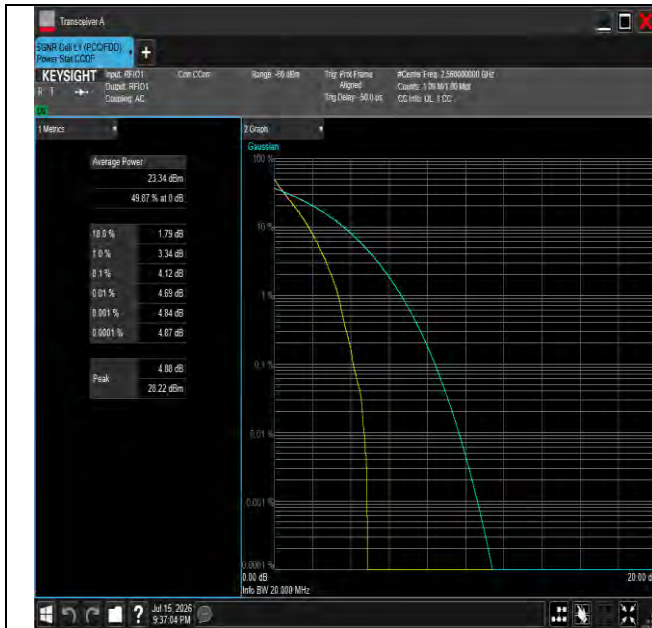
Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Channel	RB Config	Result (dB)	Limit	Verdict
n7	15	20	DFT-BPSK	L	Outer_Full	4.17	≤13dB	PASS
n7	15	20	DFT-QPSK	L	Outer_Full	5.12	≤13dB	PASS
n7	15	20	DFT-16QAM	L	Outer_Full	5.96	≤13dB	PASS
n7	15	20	DFT-BPSK	M	Outer_Full	4.13	≤13dB	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	5.09	≤13dB	PASS
n7	15	20	DFT-16QAM	M	Outer_Full	5.8	≤13dB	PASS
n7	15	20	DFT-BPSK	H	Outer_Full	4.12	≤13dB	PASS
n7	15	20	DFT-QPSK	H	Outer_Full	5	≤13dB	PASS
n7	15	20	DFT-16QAM	H	Outer_Full	5.78	≤13dB	PASS

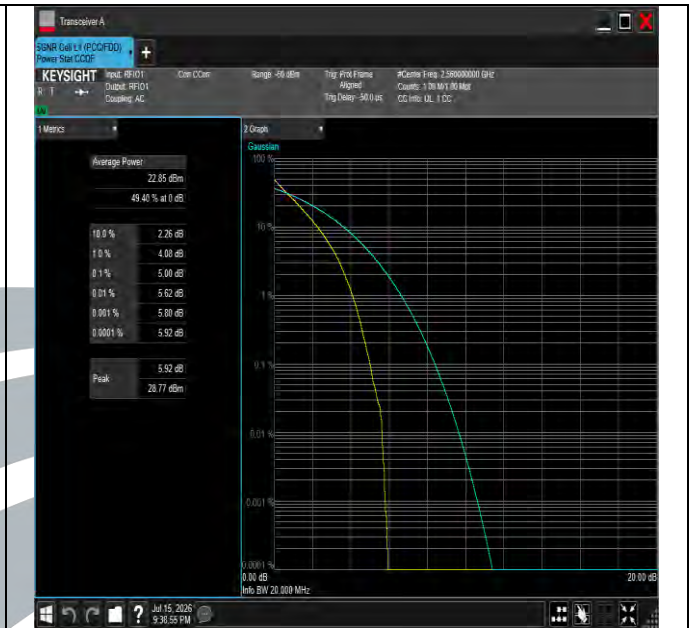
Test Graphs



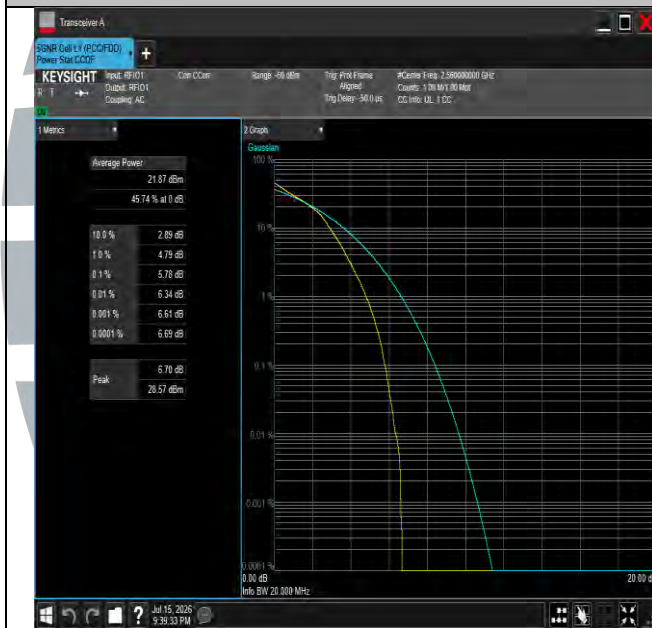




NTNV-n7-PC3-15-20-H-DFT-BPSK-Outter_Full-PASS



NTNV-n7-PC3-15-20-H-DFT-QPSK-Outter_Full-PASS



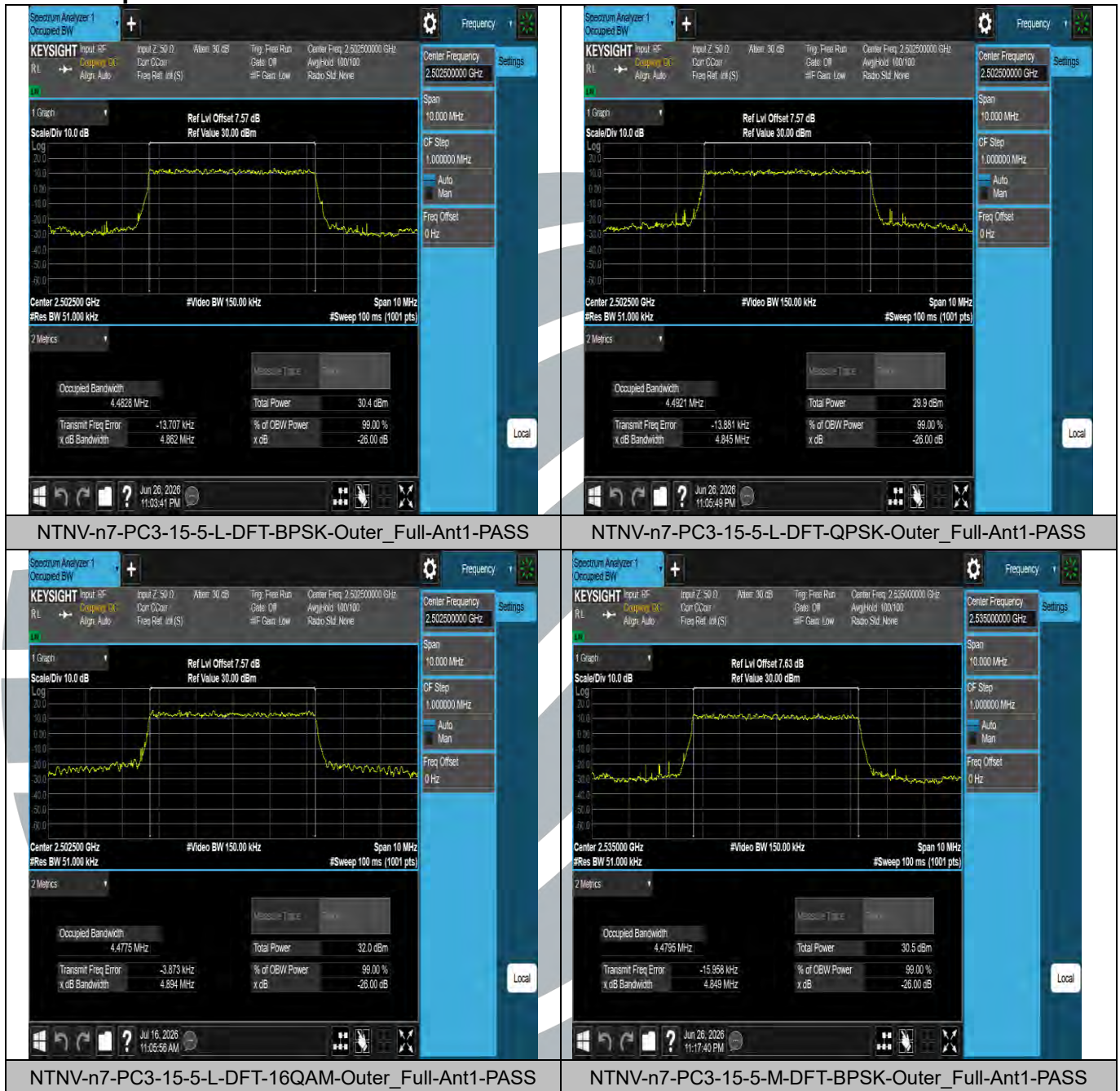
NTNV-n7-PC3-15-20-H-DFT-16QAM-Outter_Full-PASS

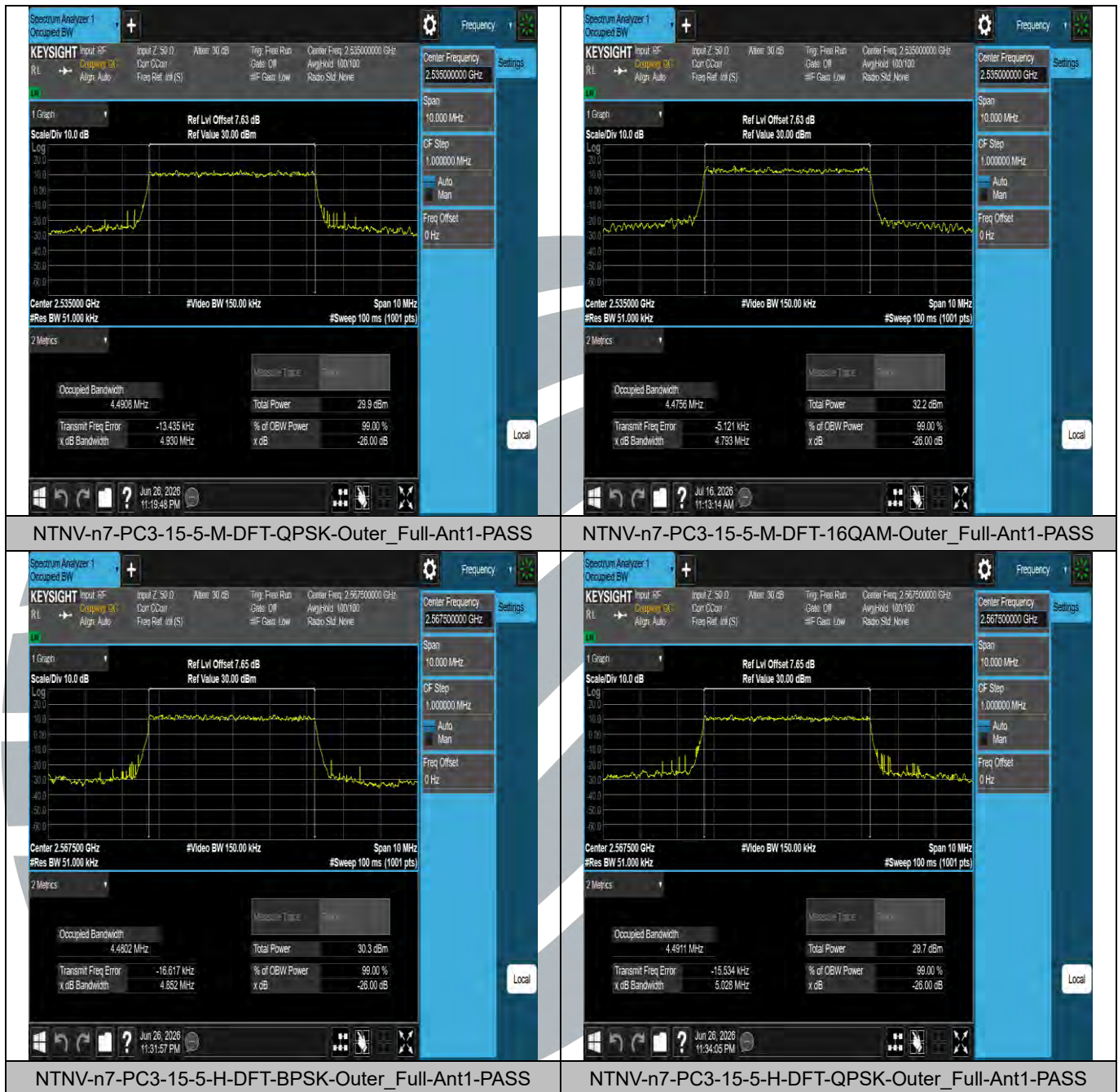
M.2 26DB BANDWIDTH AND OCCUPIED BANDWIDTH FOR SA

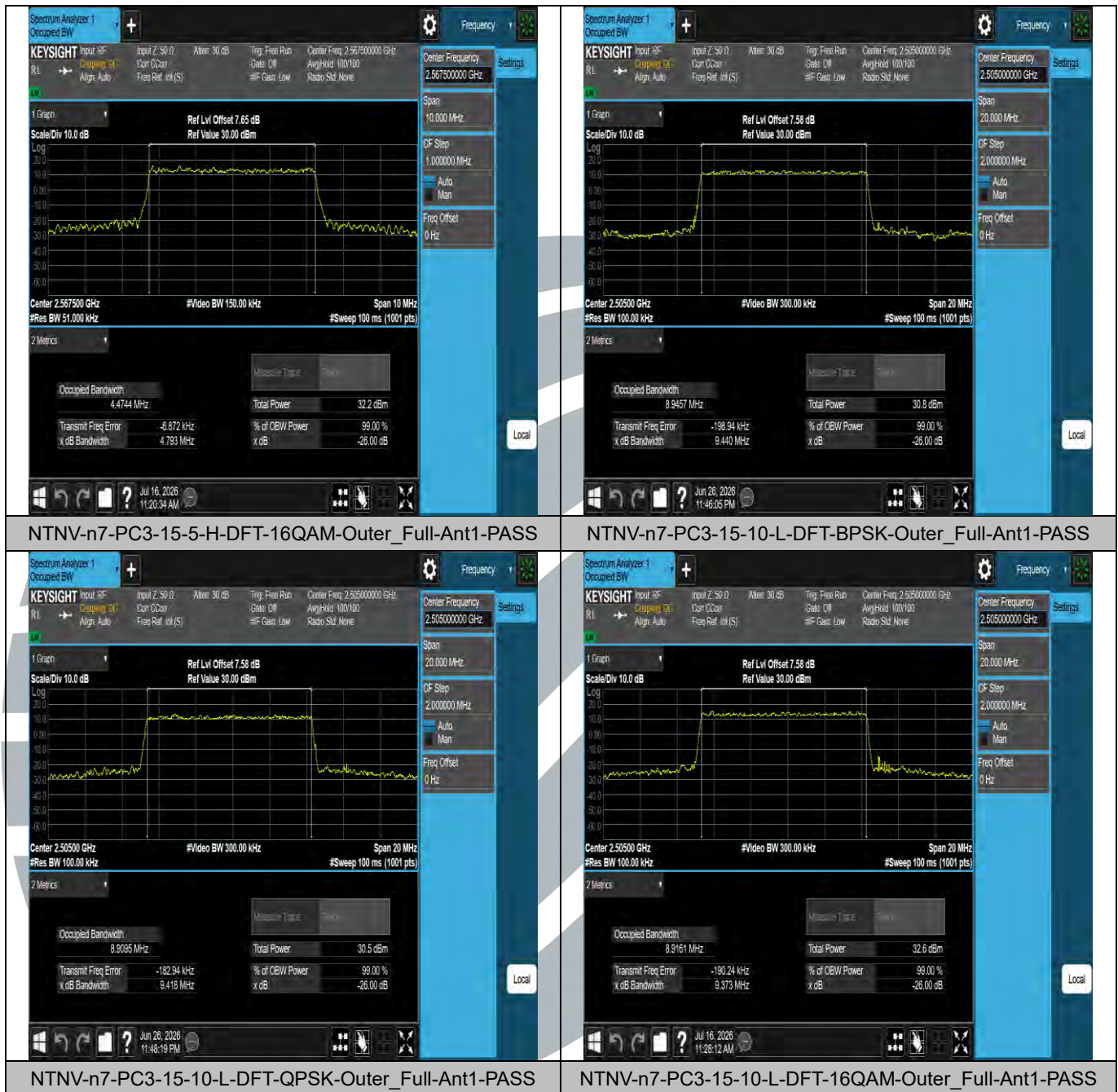
Test Result

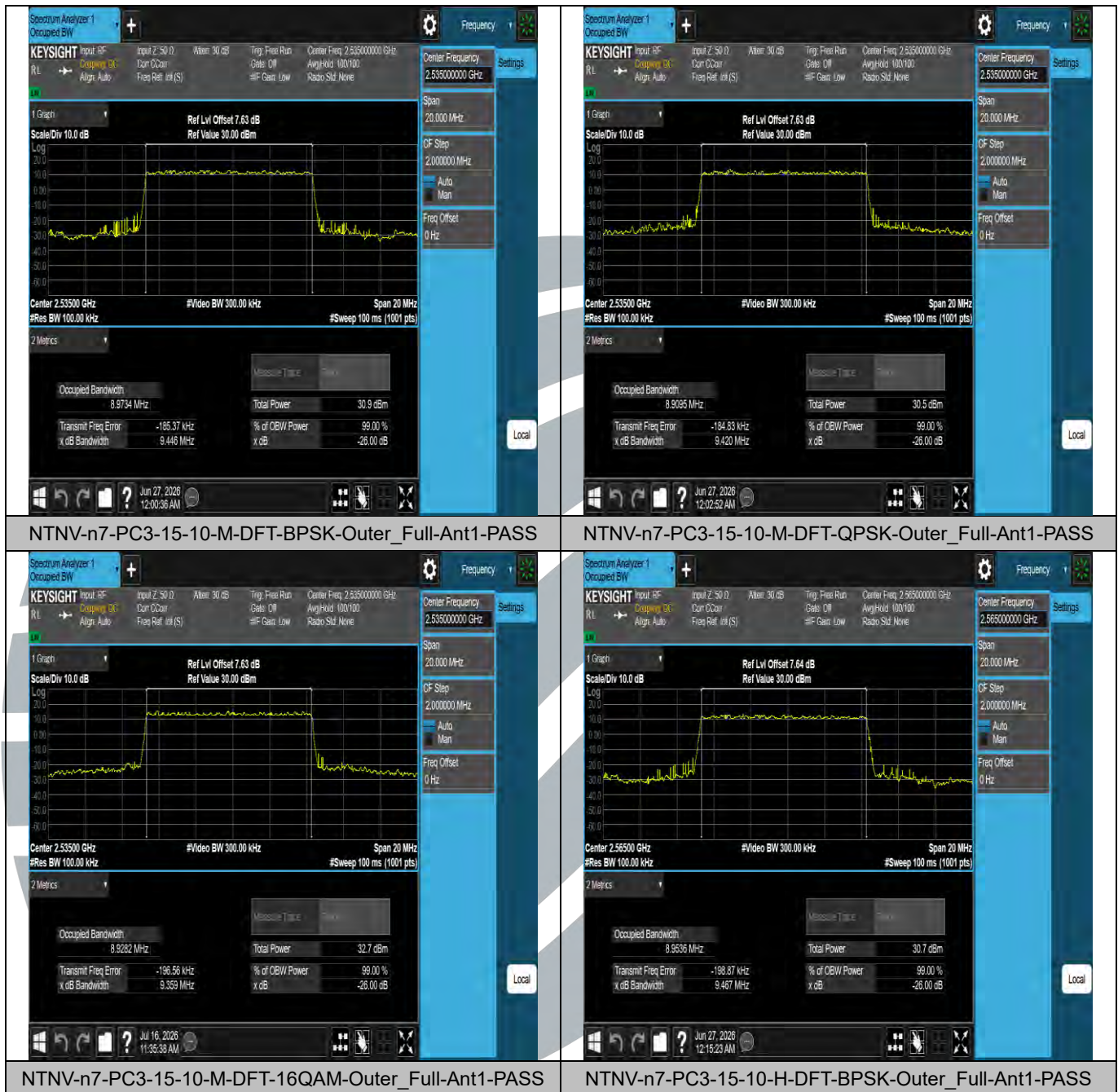
Band	SCS (kHz)	BW (MHz)	Modulation	Ch.	RB Config	99% BW Result (MHz)	26dB BW Result (MHz)	Verdict
n7	15	5	DFT-BPSK	L	Outer_Full	4.4828	4.862	PASS
n7	15	5	DFT-QPSK	L	Outer_Full	4.4921	4.845	PASS
n7	15	5	DFT-16QAM	L	Outer_Full	4.4775	4.894	PASS
n7	15	5	DFT-BPSK	M	Outer_Full	4.4795	4.849	PASS
n7	15	5	DFT-QPSK	M	Outer_Full	4.4908	4.930	PASS
n7	15	5	DFT-16QAM	M	Outer_Full	4.4756	4.793	PASS
n7	15	5	DFT-BPSK	H	Outer_Full	4.4802	4.852	PASS
n7	15	5	DFT-QPSK	H	Outer_Full	4.4911	5.028	PASS
n7	15	5	DFT-16QAM	H	Outer_Full	4.4744	4.793	PASS
n7	15	10	DFT-BPSK	L	Outer_Full	8.9457	9.440	PASS
n7	15	10	DFT-QPSK	L	Outer_Full	8.9095	9.418	PASS
n7	15	10	DFT-16QAM	L	Outer_Full	8.9161	9.373	PASS
n7	15	10	DFT-BPSK	M	Outer_Full	8.9734	9.446	PASS
n7	15	10	DFT-QPSK	M	Outer_Full	8.9095	9.420	PASS
n7	15	10	DFT-16QAM	M	Outer_Full	8.9282	9.359	PASS
n7	15	10	DFT-BPSK	H	Outer_Full	8.9536	9.467	PASS
n7	15	10	DFT-QPSK	H	Outer_Full	8.9142	9.383	PASS
n7	15	10	DFT-16QAM	H	Outer_Full	8.9332	9.393	PASS
n7	15	15	DFT-BPSK	L	Outer_Full	13.417	14.06	PASS
n7	15	15	DFT-QPSK	L	Outer_Full	13.399	14.09	PASS
n7	15	15	DFT-16QAM	L	Outer_Full	13.401	14.03	PASS
n7	15	15	DFT-BPSK	M	Outer_Full	13.413	14.30	PASS
n7	15	15	DFT QPSK	M	Outer_Full	13.399	14.33	PASS
n7	15	15	DFT-16QAM	M	Outer_Full	13.416	14.62	PASS
n7	15	15	DFT-BPSK	H	Outer_Full	13.409	14.03	PASS
n7	15	15	DFT-QPSK	H	Outer_Full	13.394	14.06	PASS
n7	15	15	DFT-16QAM	H	Outer_Full	13.399	14.03	PASS
n7	15	20	DFT-BPSK	L	Outer_Full	17.870	18.67	PASS
n7	15	20	DFT-QPSK	L	Outer_Full	17.839	18.67	PASS
n7	15	20	DFT-16QAM	L	Outer_Full	17.857	18.65	PASS
n7	15	20	DFT-BPSK	M	Outer_Full	17.872	18.74	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	17.848	18.66	PASS
n7	15	20	DFT-16QAM	M	Outer_Full	17.862	18.64	PASS
n7	15	20	DFT-BPSK	H	Outer_Full	17.860	18.71	PASS
n7	15	20	DFT-QPSK	H	Outer_Full	17.846	18.64	PASS
n7	15	20	DFT-16QAM	H	Outer_Full	17.857	18.63	PASS

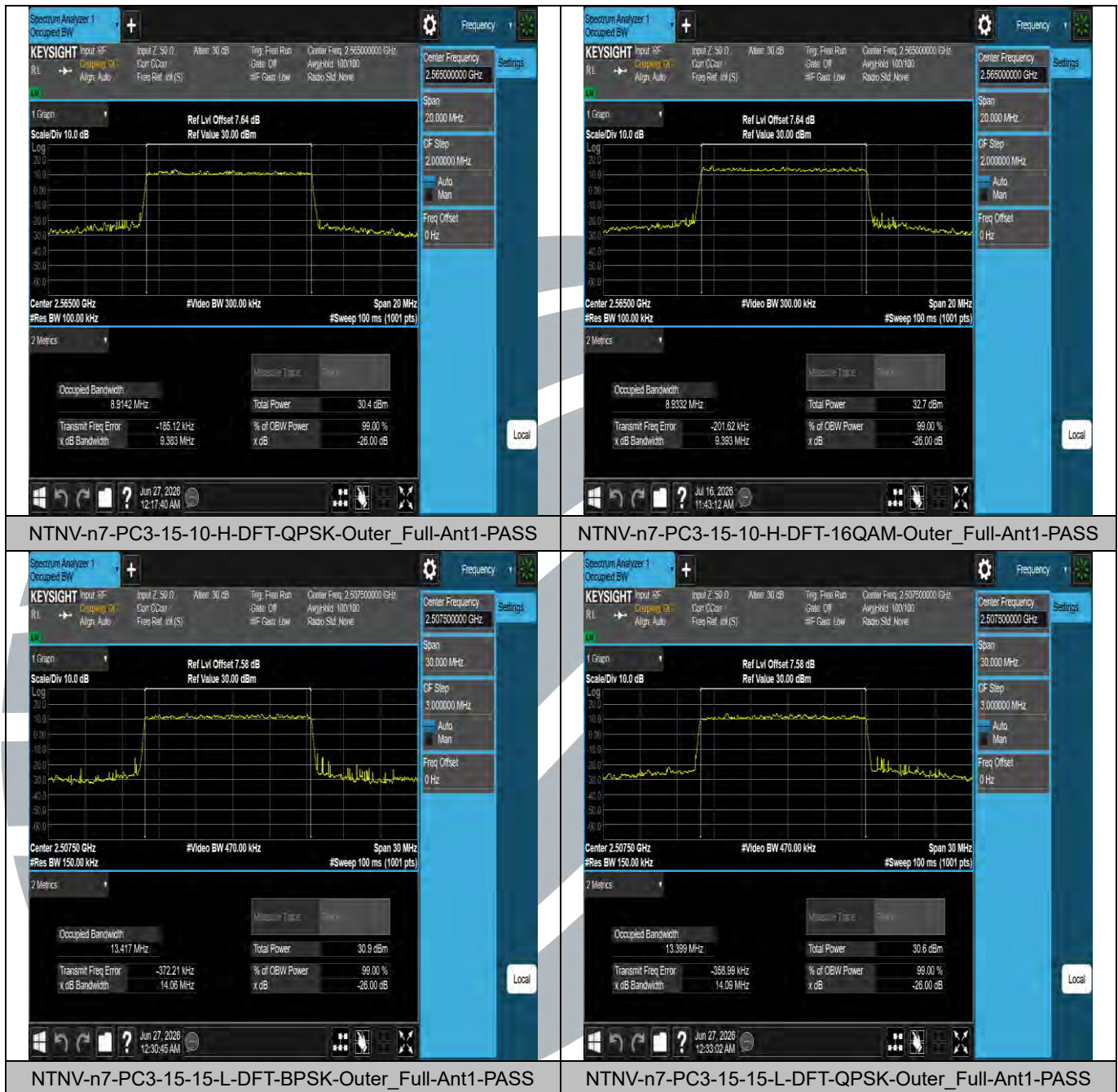
Test Graphs

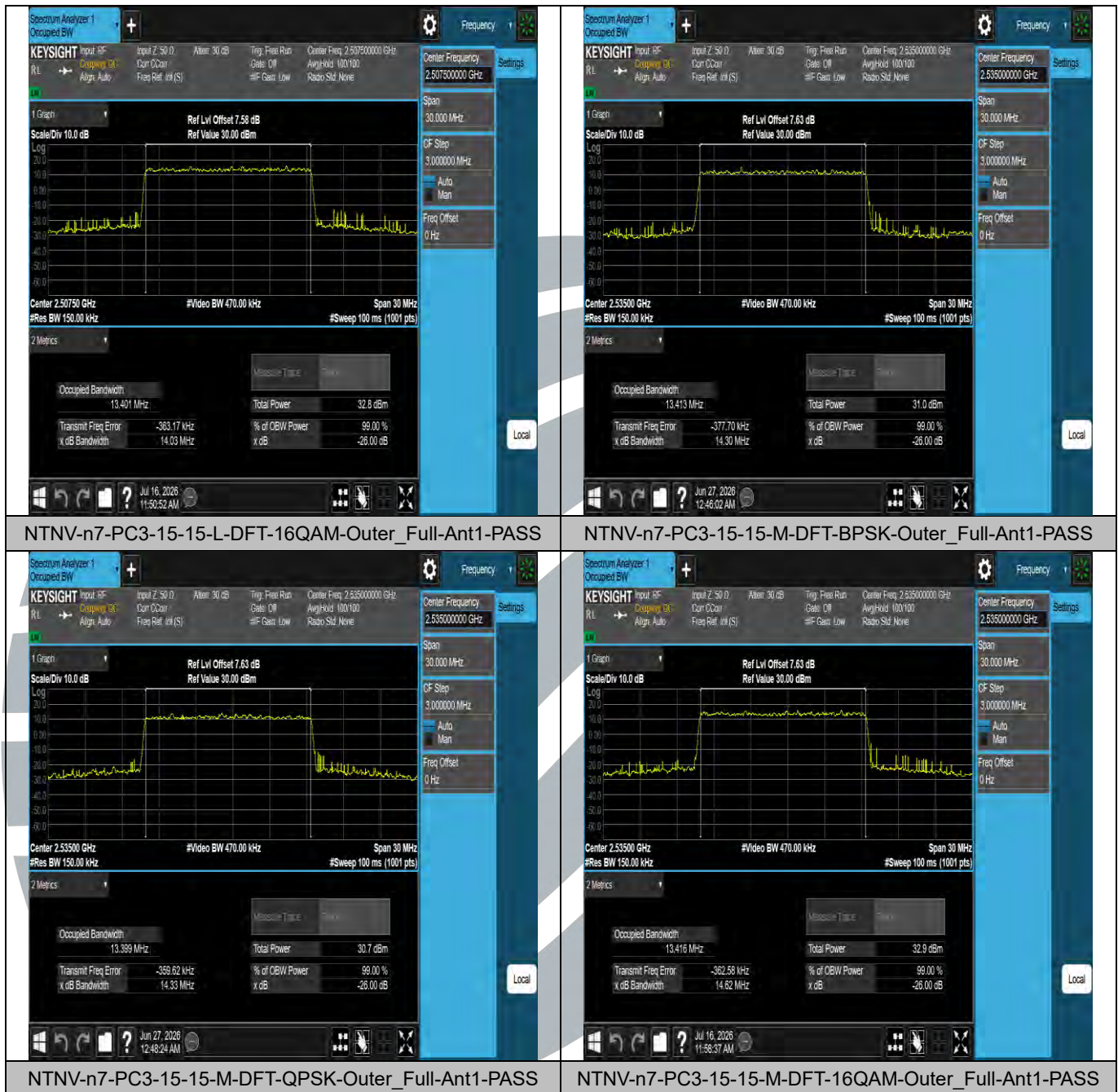


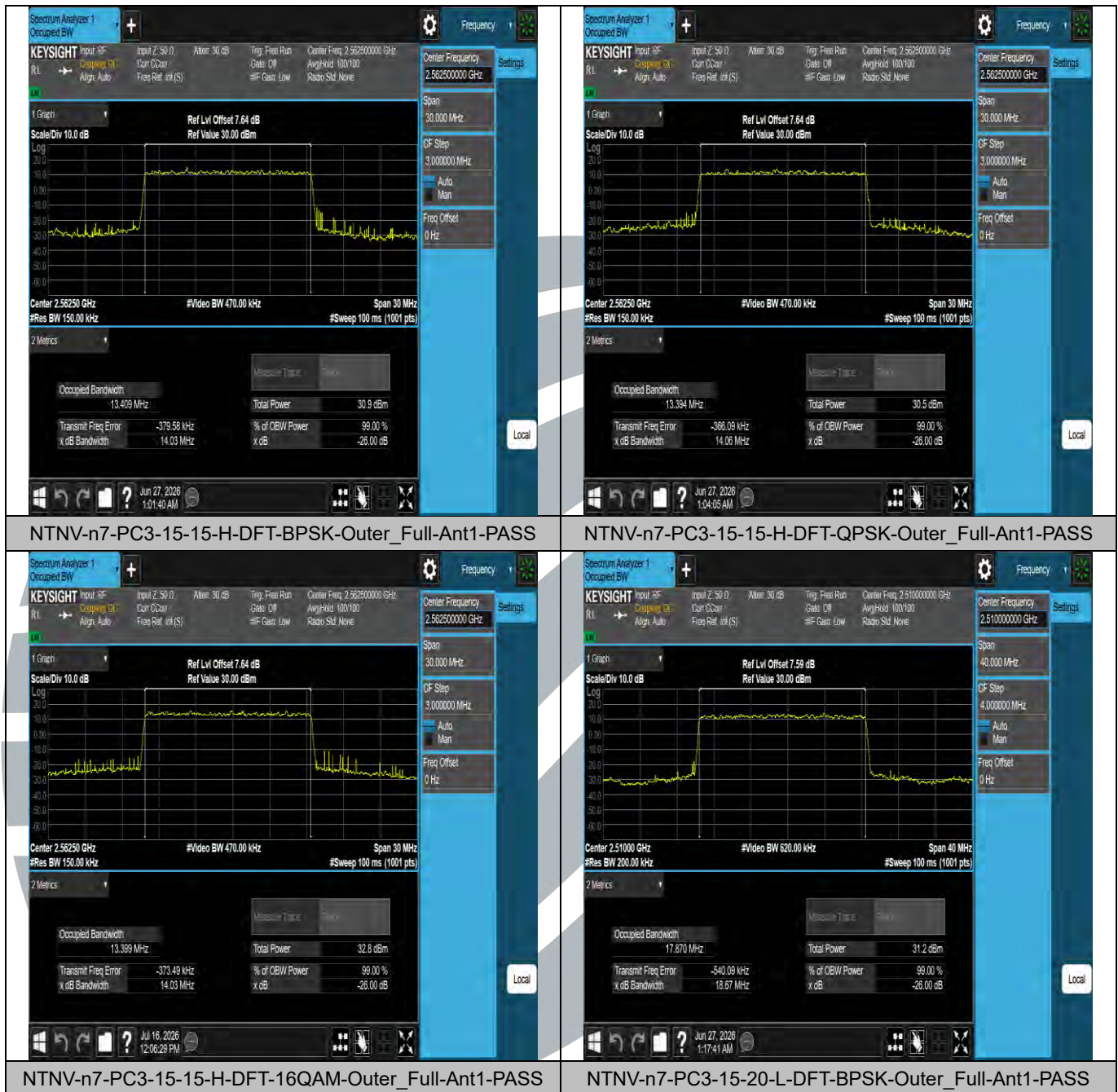


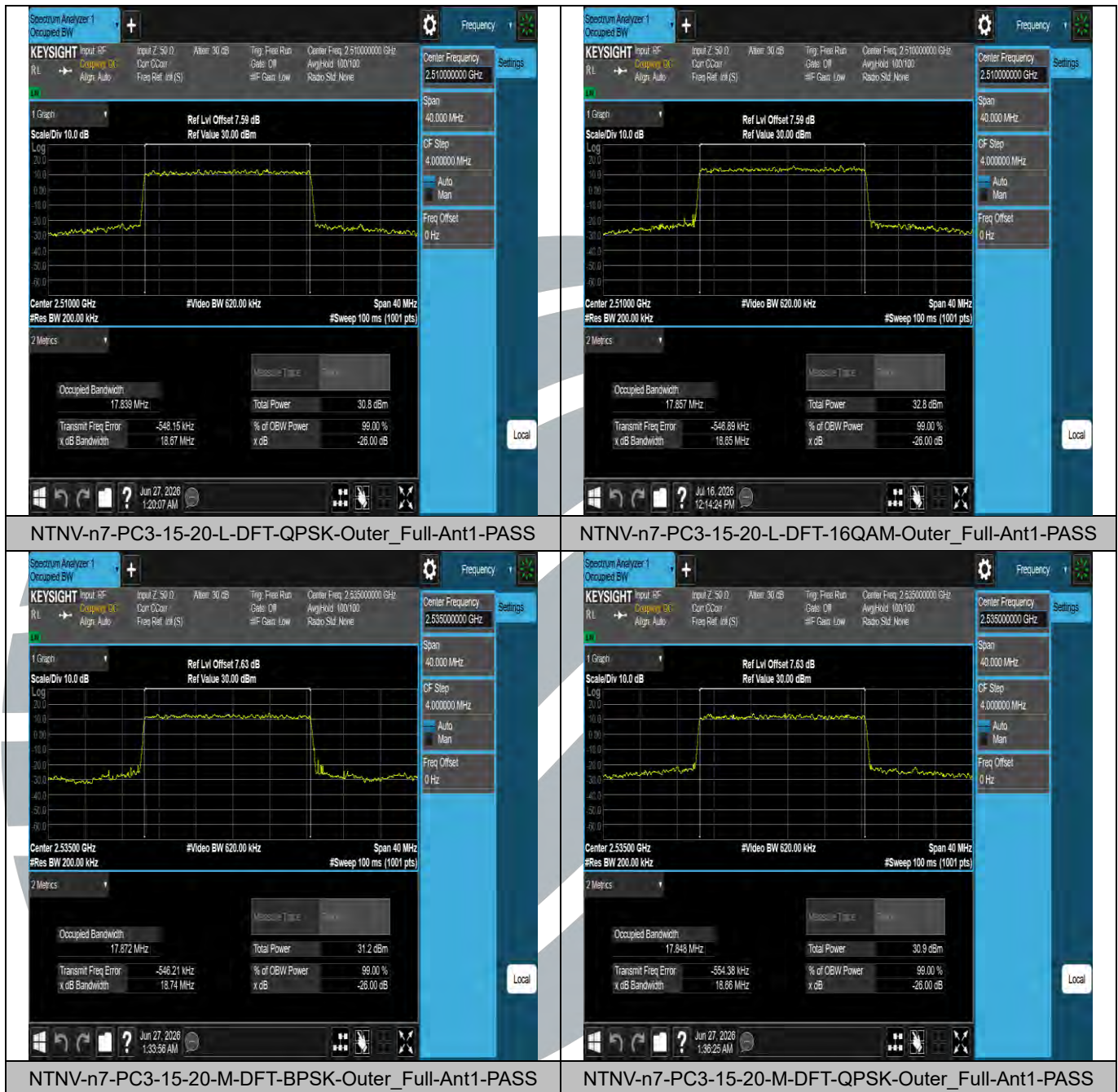


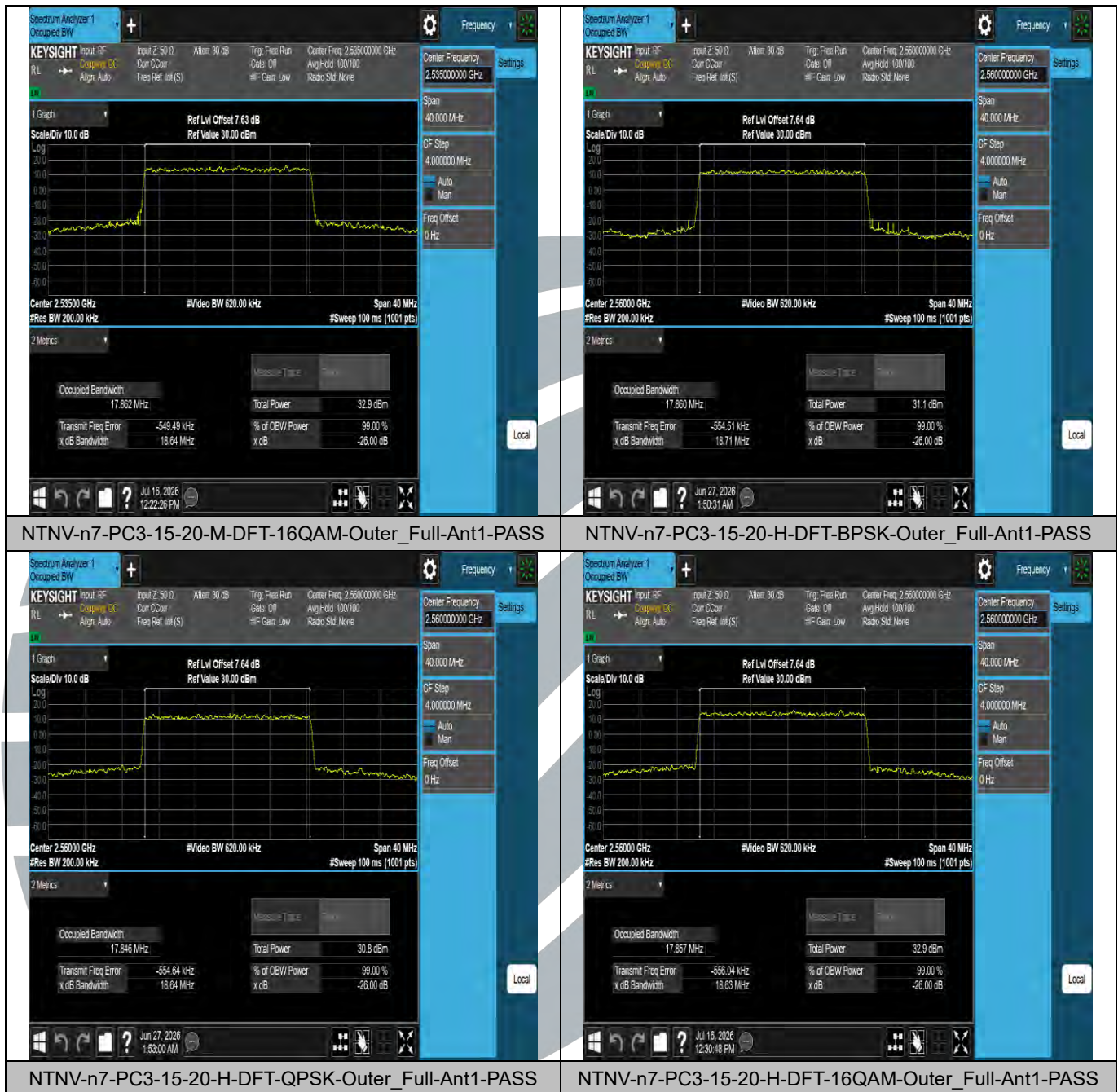










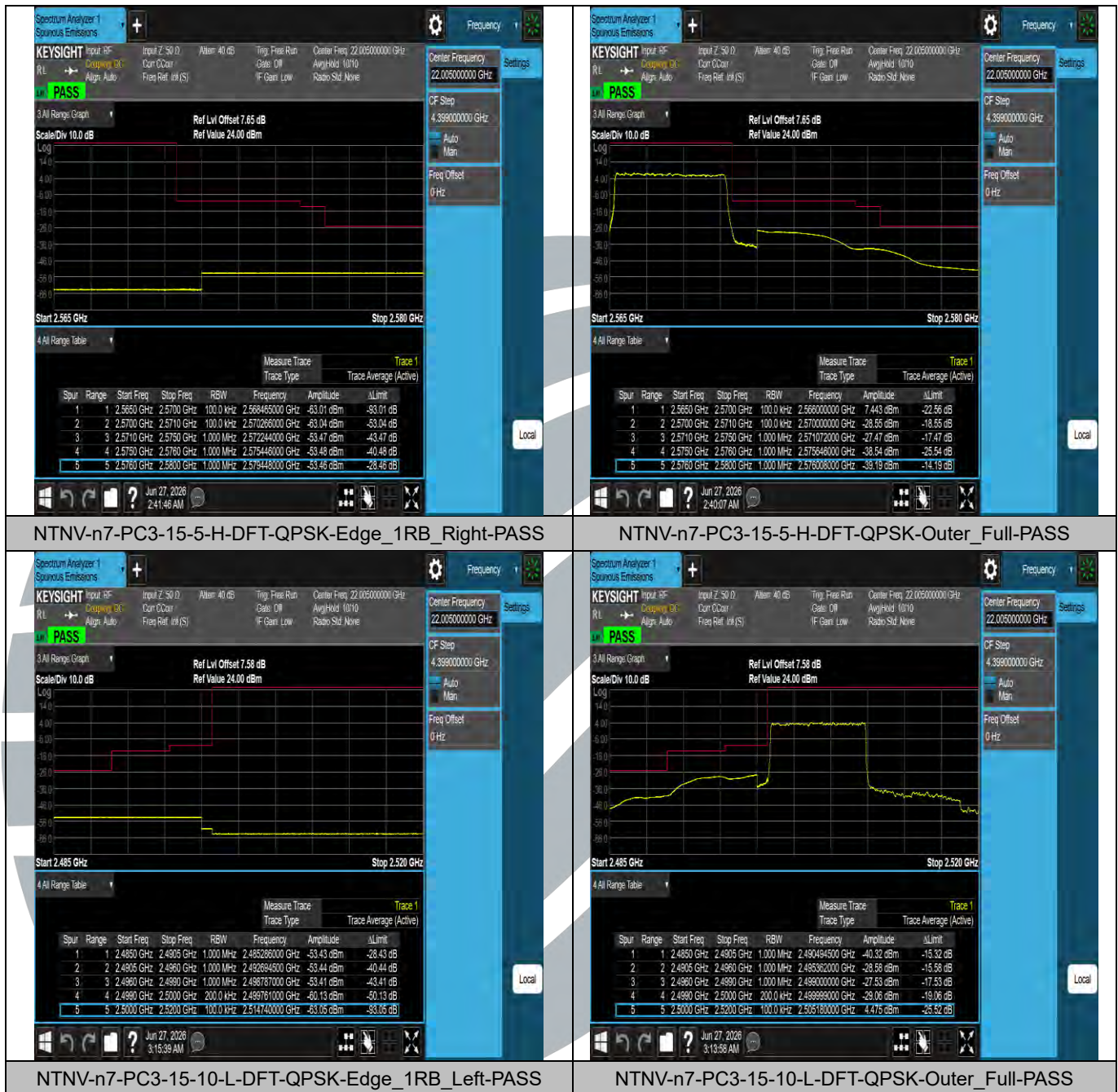


M.3 BAND EDGE FOR SA Test Result

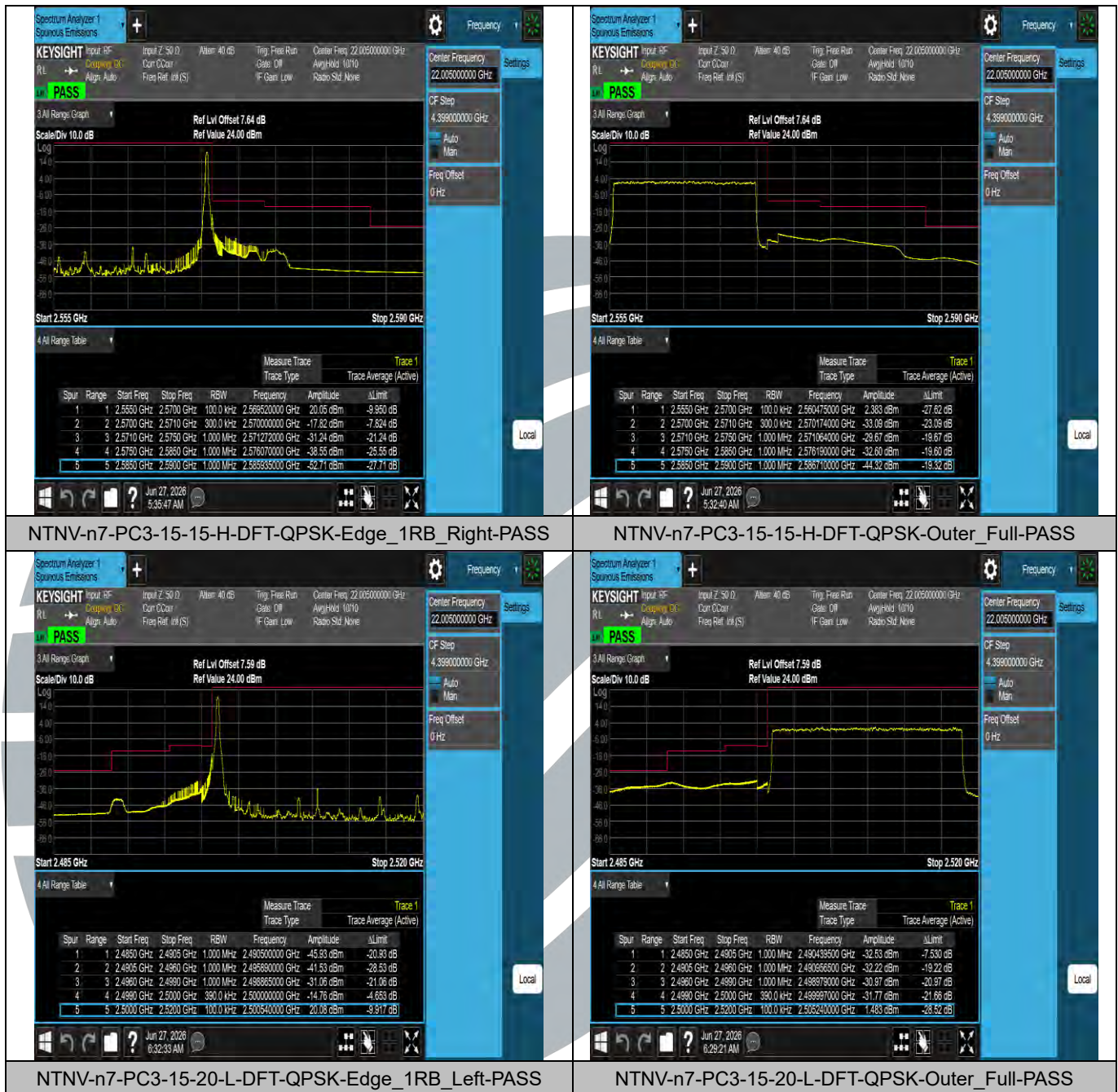
Band	SCS (kHz)	BW (MHz)	Modulation	Ch.	RB Config	Result (dBm)	Verdict
n7	15	5	DFT-QPSK	L	Edge_1RB_Left	-53.43	PASS
n7	15	5	DFT-QPSK	L	Outer_Full	-23.67	PASS
n7	15	5	DFT-QPSK	H	Edge_1RB_Right	-53.46	PASS
n7	15	5	DFT-QPSK	H	Outer_Full	-39.19	PASS
n7	15	10	DFT-QPSK	L	Edge_1RB_Left	-53.43	PASS
n7	15	10	DFT-QPSK	L	Outer_Full	-40.32	PASS
n7	15	10	DFT-QPSK	H	Edge_1RB_Right	-53.43	PASS
n7	15	10	DFT-QPSK	H	Outer_Full	-41.63	PASS
n7	15	15	DFT-QPSK	L	Edge_1RB_Left	-15.75	PASS
n7	15	15	DFT-QPSK	L	Outer_Full	-32.53	PASS
n7	15	15	DFT-QPSK	H	Edge_1RB_Right	-17.82	PASS
n7	15	15	DFT-QPSK	H	Outer_Full	-44.32	PASS
n7	15	20	DFT-QPSK	L	Edge_1RB_Left	-14.76	PASS
n7	15	20	DFT-QPSK	L	Outer_Full	-32.53	PASS
n7	15	20	DFT-QPSK	H	Edge_1RB_Right	-17.33	PASS
n7	15	20	DFT-QPSK	H	Outer_Full	-32.13	PASS

Test Graphs









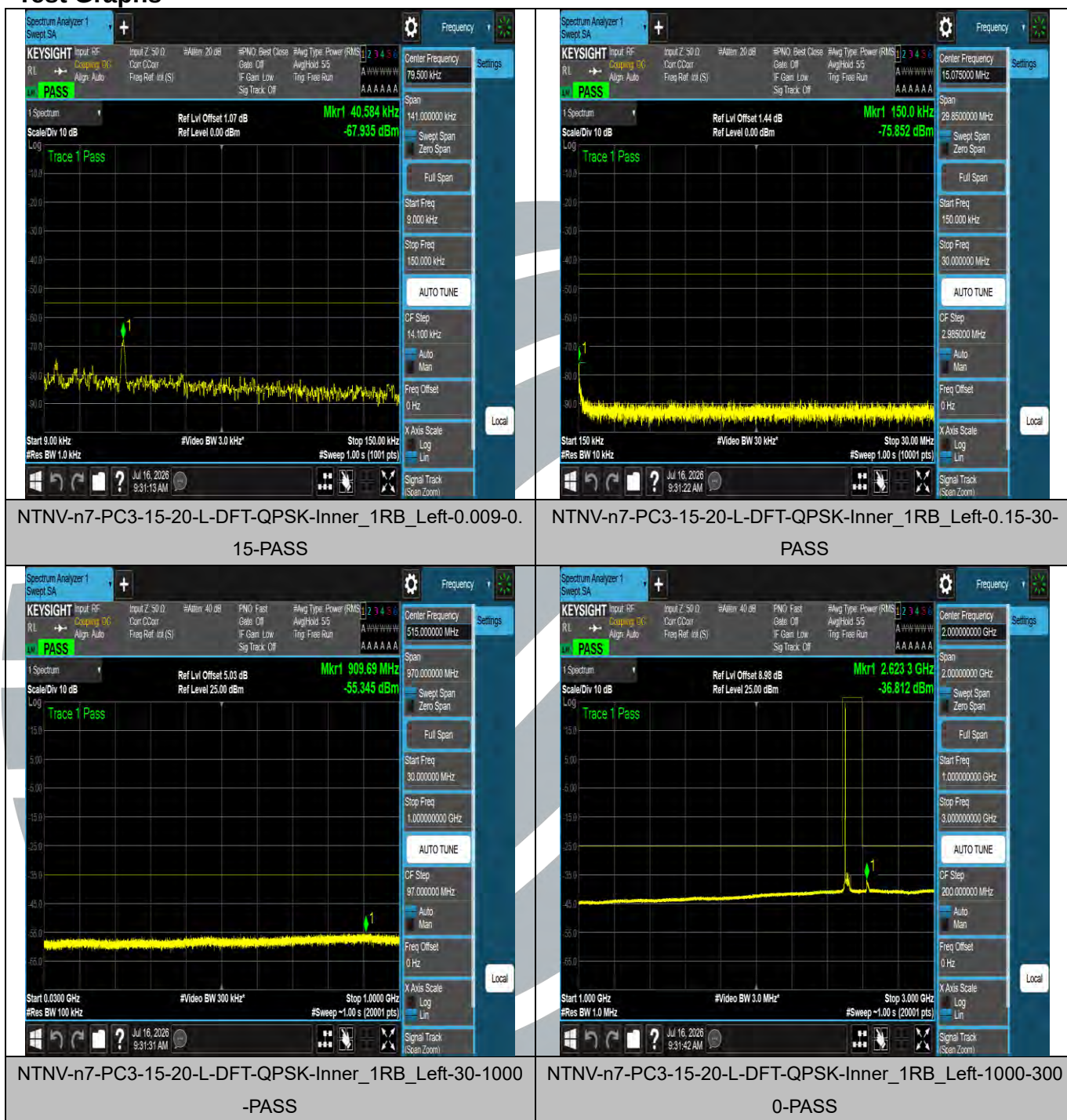


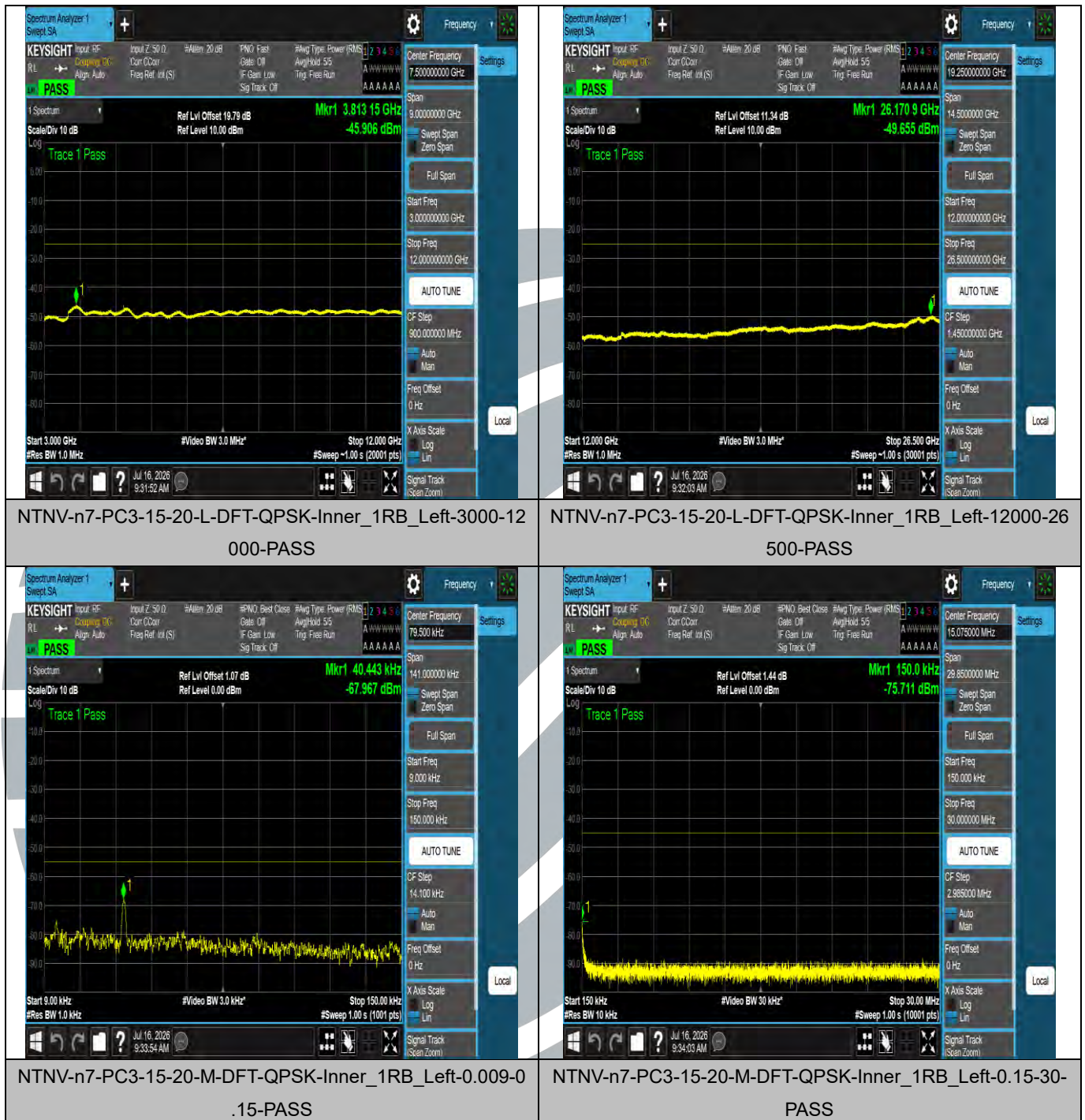
M.4 CONDUCTED SPURIOUS EMISSION FOR SA

Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Ch.	RB Config	Start Freq (MHz)	Stop Freq (MHz)	Result (dBm)	Limit (dBm)	Verdict
n7	15	20	DFT-QPSK	L	Inner_1RB_Left	0.009	0.15	-67.94	≤-55dBm	PASS
n7	15	20	DFT-QPSK	L	Inner_1RB_Left	0.15	30	-75.85	≤-45dBm	PASS
n7	15	20	DFT-QPSK	L	Inner_1RB_Left	30	1000	-55.35	≤-35dBm	PASS
n7	15	20	DFT-QPSK	L	Inner_1RB_Left	1000	3000	-36.81	≤-25dBm	PASS
n7	15	20	DFT-QPSK	L	Inner_1RB_Left	3000	12000	-45.91	≤-25dBm	PASS
n7	15	20	DFT-QPSK	L	Inner_1RB_Left	12000	26500	-49.65	≤-25dBm	PASS
n7	15	20	DFT-QPSK	M	Inner_1RB_Left	0.009	0.15	-67.97	≤-55dBm	PASS
n7	15	20	DFT-QPSK	M	Inner_1RB_Left	0.15	30	-75.71	≤-45dBm	PASS
n7	15	20	DFT-QPSK	M	Inner_1RB_Left	30	1000	-55.11	≤-35dBm	PASS
n7	15	20	DFT-QPSK	M	Inner_1RB_Left	1000	3000	-37.58	≤-25dBm	PASS
n7	15	20	DFT-QPSK	M	Inner_1RB_Left	3000	12000	-45.41	≤-25dBm	PASS
n7	15	20	DFT-QPSK	M	Inner_1RB_Left	12000	26500	-49.67	≤-25dBm	PASS
n7	15	20	DFT-QPSK	H	Inner_1RB_Left	0.009	0.15	-68.25	≤-55dBm	PASS
n7	15	20	DFT-QPSK	H	Inner_1RB_Left	0.15	30	-74.68	≤-45dBm	PASS
n7	15	20	DFT-QPSK	H	Inner_1RB_Left	30	1000	-54.91	≤-35dBm	PASS
n7	15	20	DFT-QPSK	H	Inner_1RB_Left	1000	3000	-37.58	≤-25dBm	PASS
n7	15	20	DFT-QPSK	H	Inner_1RB_Left	3000	12000	-45.88	≤-25dBm	PASS
n7	15	20	DFT-QPSK	H	Inner_1RB_Left	12000	26500	-49.70	≤-25dBm	PASS

Test Graphs







NTNV-n7-PC3-15-20-M-DFT-QPSK-Inner_1RB_Left-30-100
0-PASS



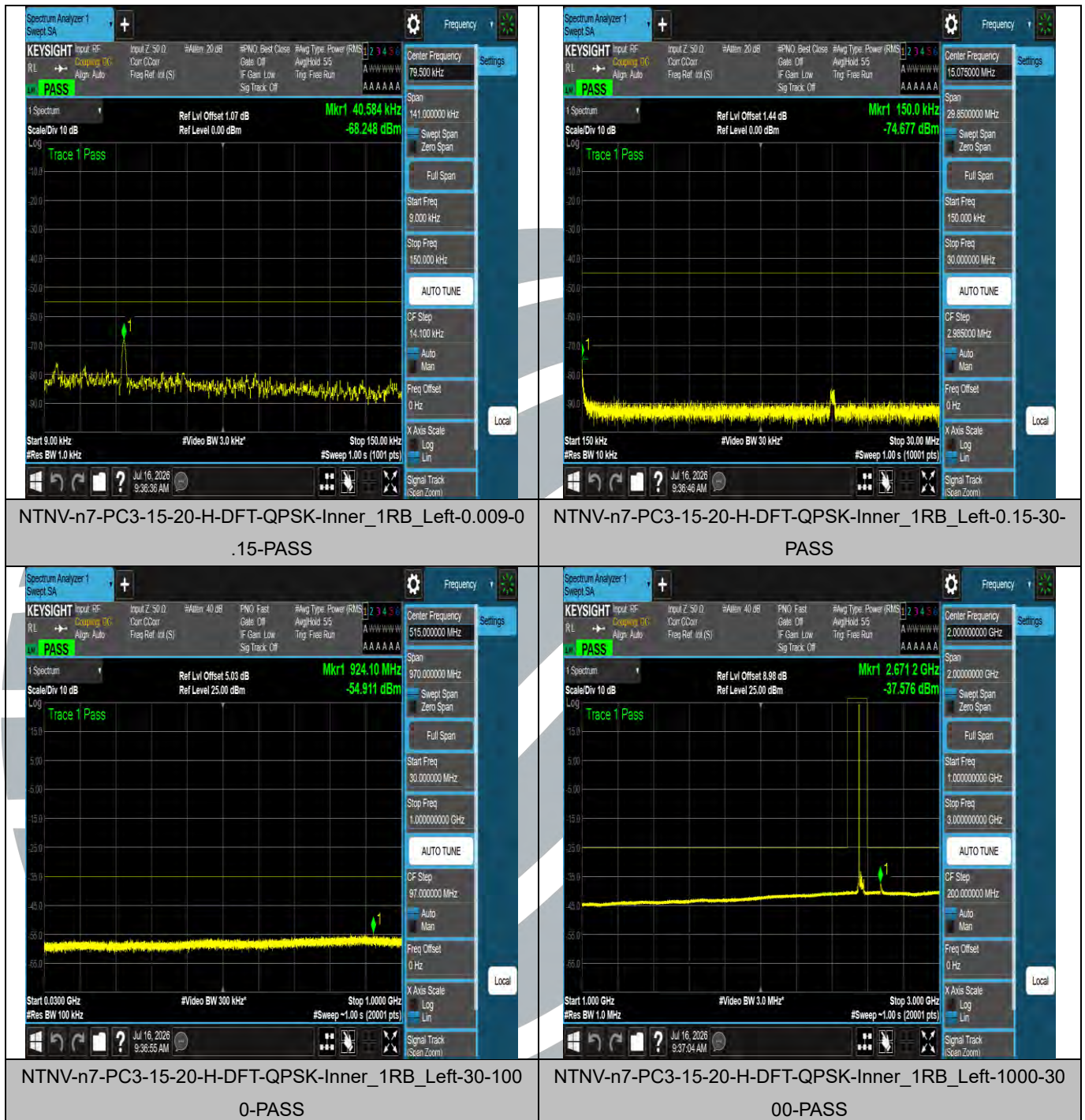
NTNV-n7-PC3-15-20-M-DFT-QPSK-Inner_1RB_Left-1000-30
00-PASS



NTNV-n7-PC3-15-20-M-DFT-QPSK-Inner_1RB_Left-3000-1
2000-PASS



NTNV-n7-PC3-15-20-M-DFT-QPSK-Inner_1RB_Left-12000-2
6500-PASS





M.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
n7	15	20	DFT-QPSK	M	Outer_Full	VL	NT	-0.001622	2500-2570	2500	2570	2500-2570	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	VN	NT	-0.002308	2500-2570	2500	2570	2500-2570	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	VH	NT	-0.001467	2500-2570	2500	2570	2500-2570	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
n7	15	20	DFT-QPSK	M	Outer_Full	NV	-30	-0.000497	2500-2570	2500	2570	2500-2570	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	NV	-20	-0.000877	2500-2570	2500	2570	2500-2570	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	NV	-10	0.000388	2500-2570	2500	2570	2500-2570	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	NV	0	-0.002012	2500-2570	2500	2570	2500-2570	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	NV	10	-0.002463	2500-2570	2500	2570	2500-2570	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	NV	20	-0.002111	2500-2570	2500	2570	2500-2570	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	NV	30	-0.000805	2500-2570	2500	2570	2500-2570	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	NV	40	-0.001507	2500-2570	2500	2570	2500-2570	PASS
n7	15	20	DFT-QPSK	M	Outer_Full	NV	50	-0.001168	2500-2570	2500	2570	2500-2570	PASS