

APPENDIX N NR_SA RF TEST DATA

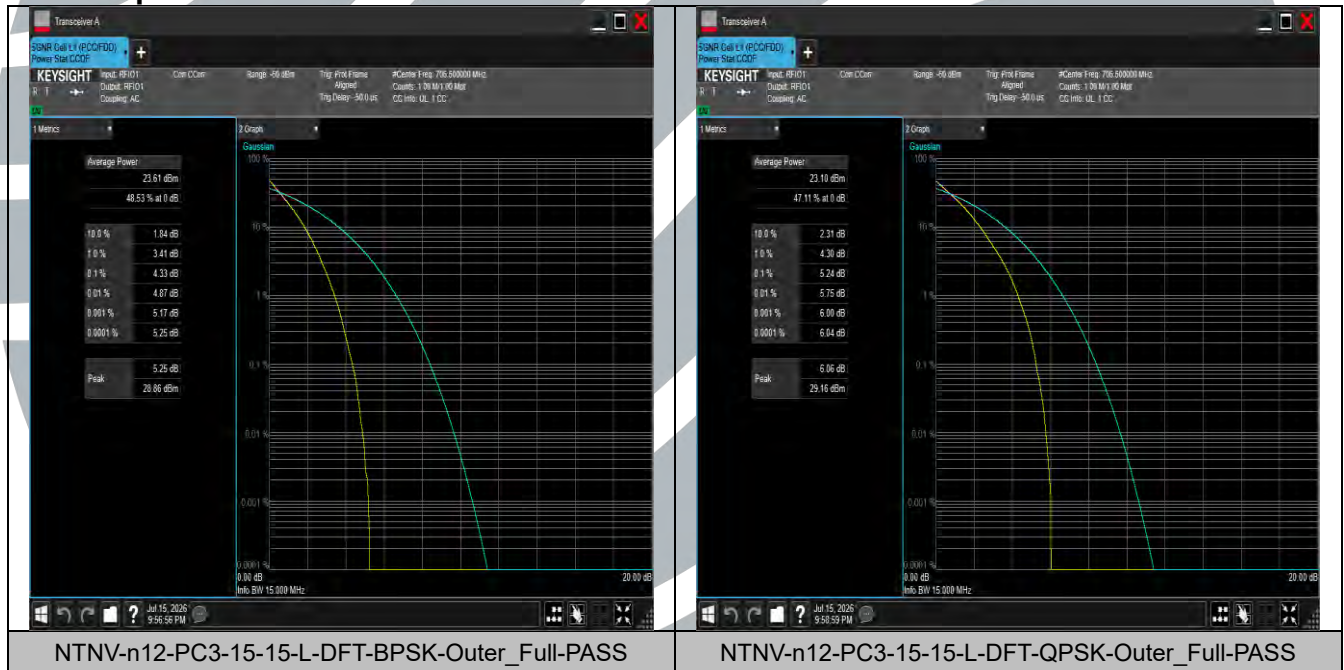
N.1 PEAK-TO-AVERAGE RATIO FOR SA

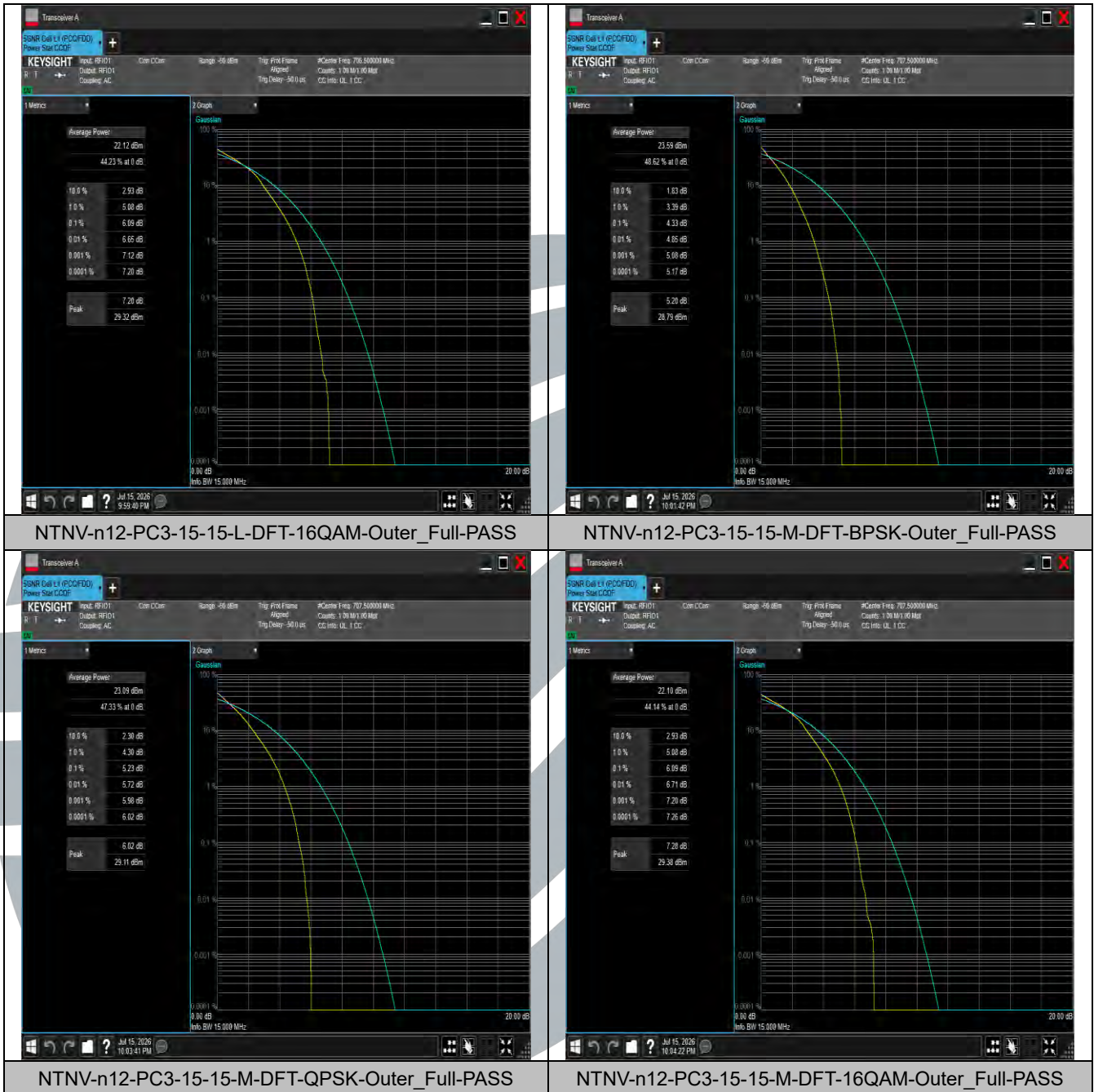
Peak-to-Average Ratio(CCDF)

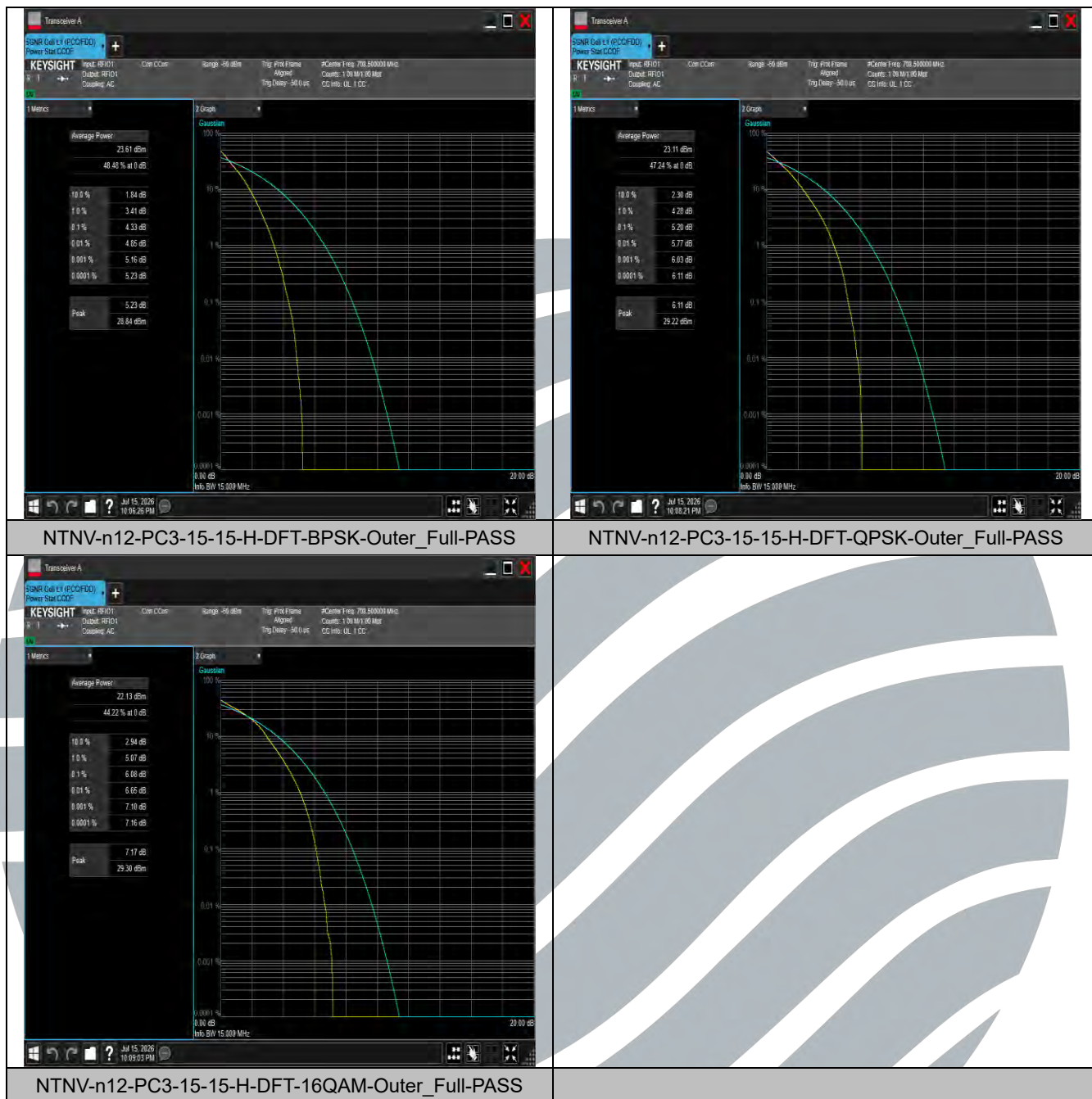
Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Channel	RB Config	Result (dB)	Limit	Verdict
n12	15	15	DFT-BPSK	L	Outer_Full	4.33	≤13dB	PASS
n12	15	15	DFT-QPSK	L	Outer_Full	5.24	≤13dB	PASS
n12	15	15	DFT-16QAM	L	Outer_Full	6.09	≤13dB	PASS
n12	15	15	DFT-BPSK	M	Outer_Full	4.33	≤13dB	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	5.23	≤13dB	PASS
n12	15	15	DFT-16QAM	M	Outer_Full	6.09	≤13dB	PASS
n12	15	15	DFT-BPSK	H	Outer_Full	4.33	≤13dB	PASS
n12	15	15	DFT-QPSK	H	Outer_Full	5.2	≤13dB	PASS
n12	15	15	DFT-16QAM	H	Outer_Full	6.08	≤13dB	PASS

Test Graphs





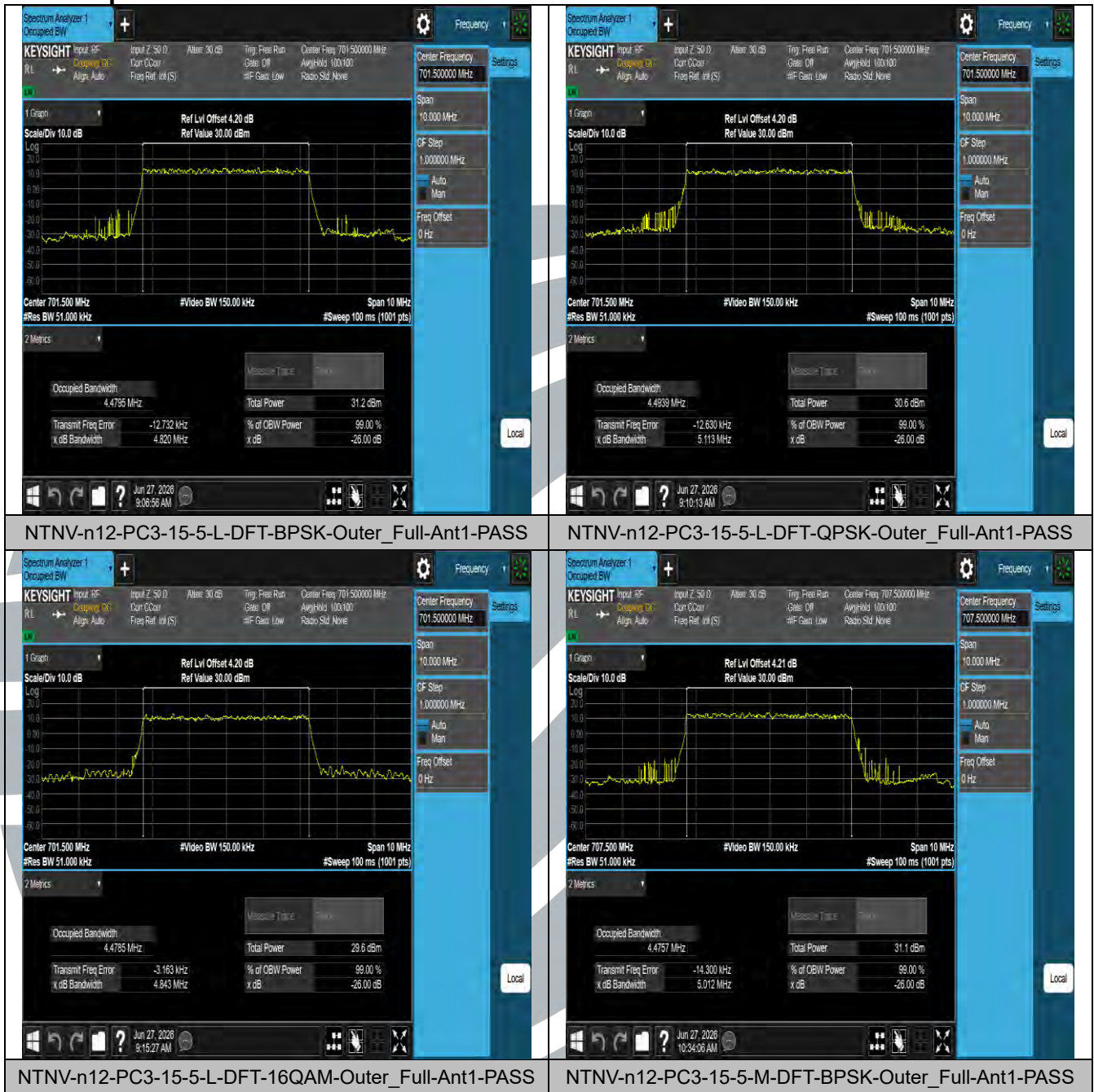


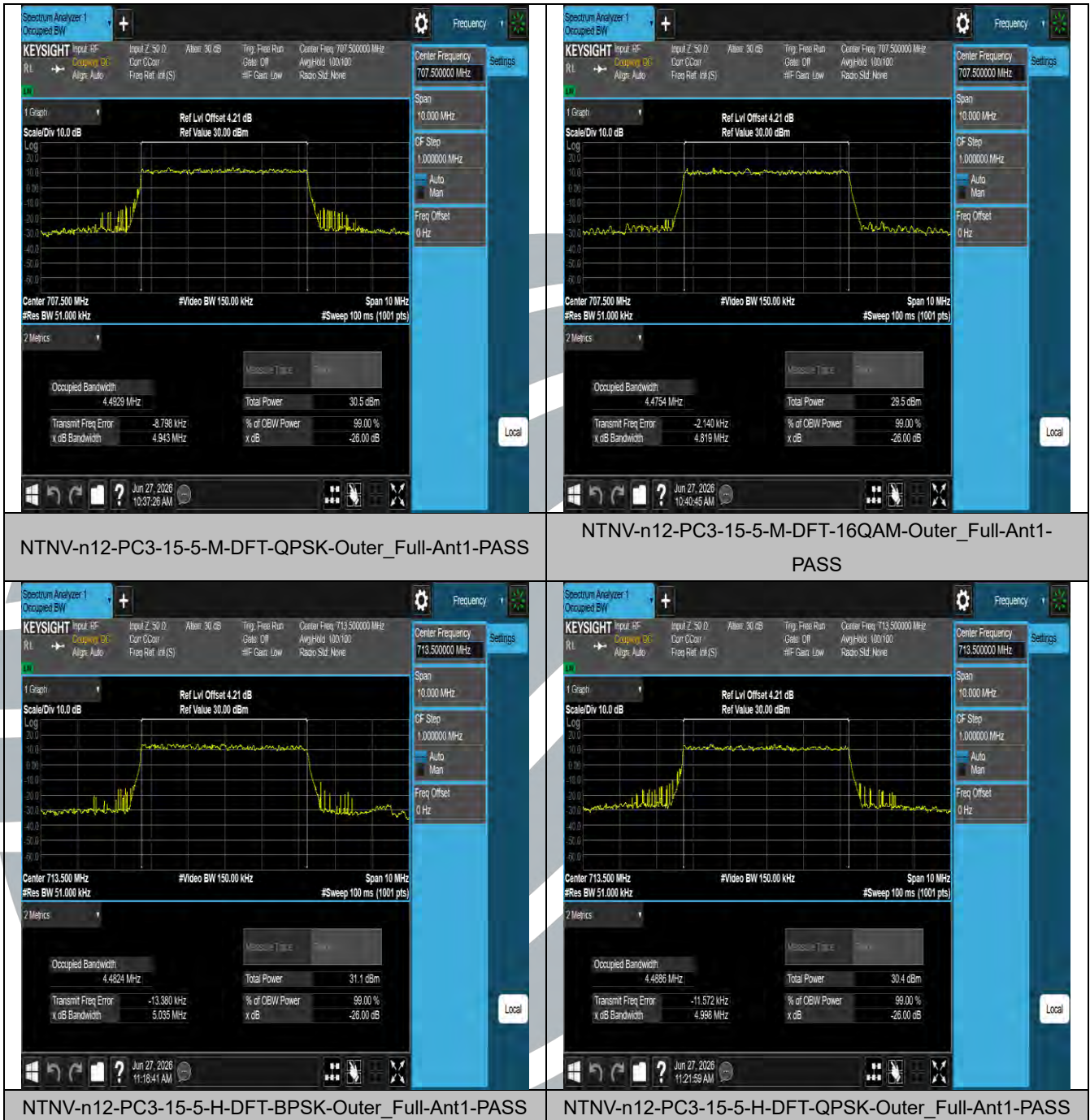
N.2 26DB BANDWIDTH AND OCCUPIED BANDWIDTH FOR SA

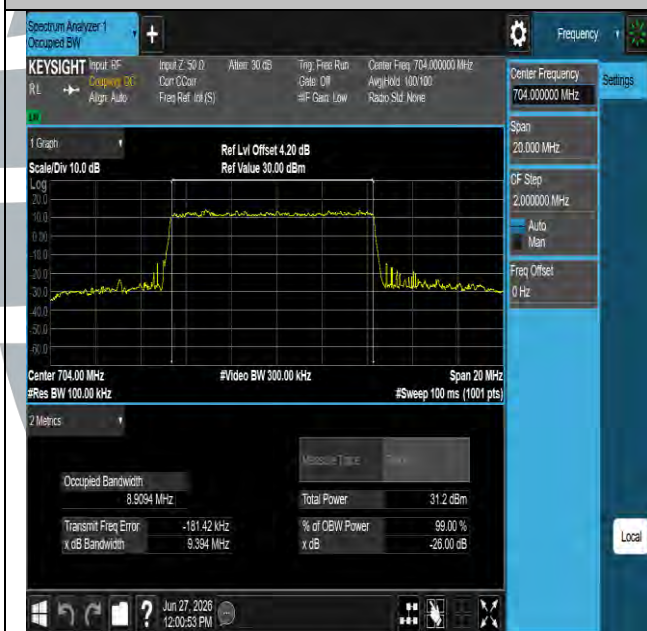
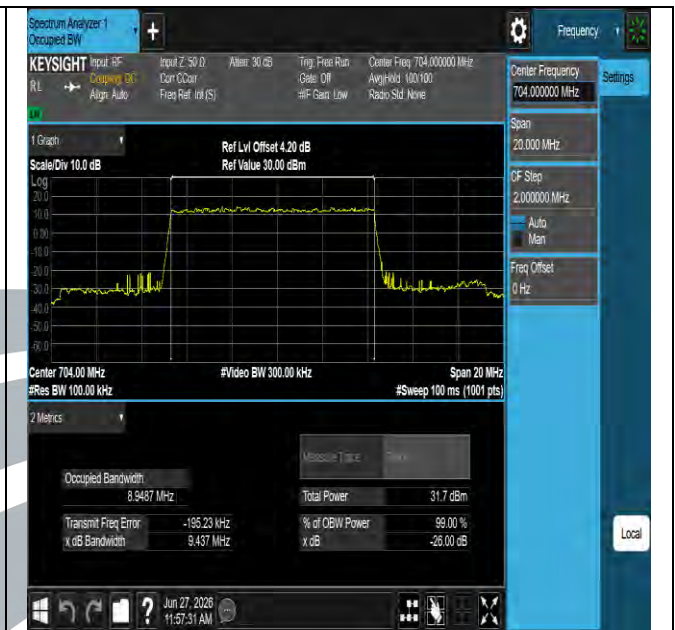
Test Result

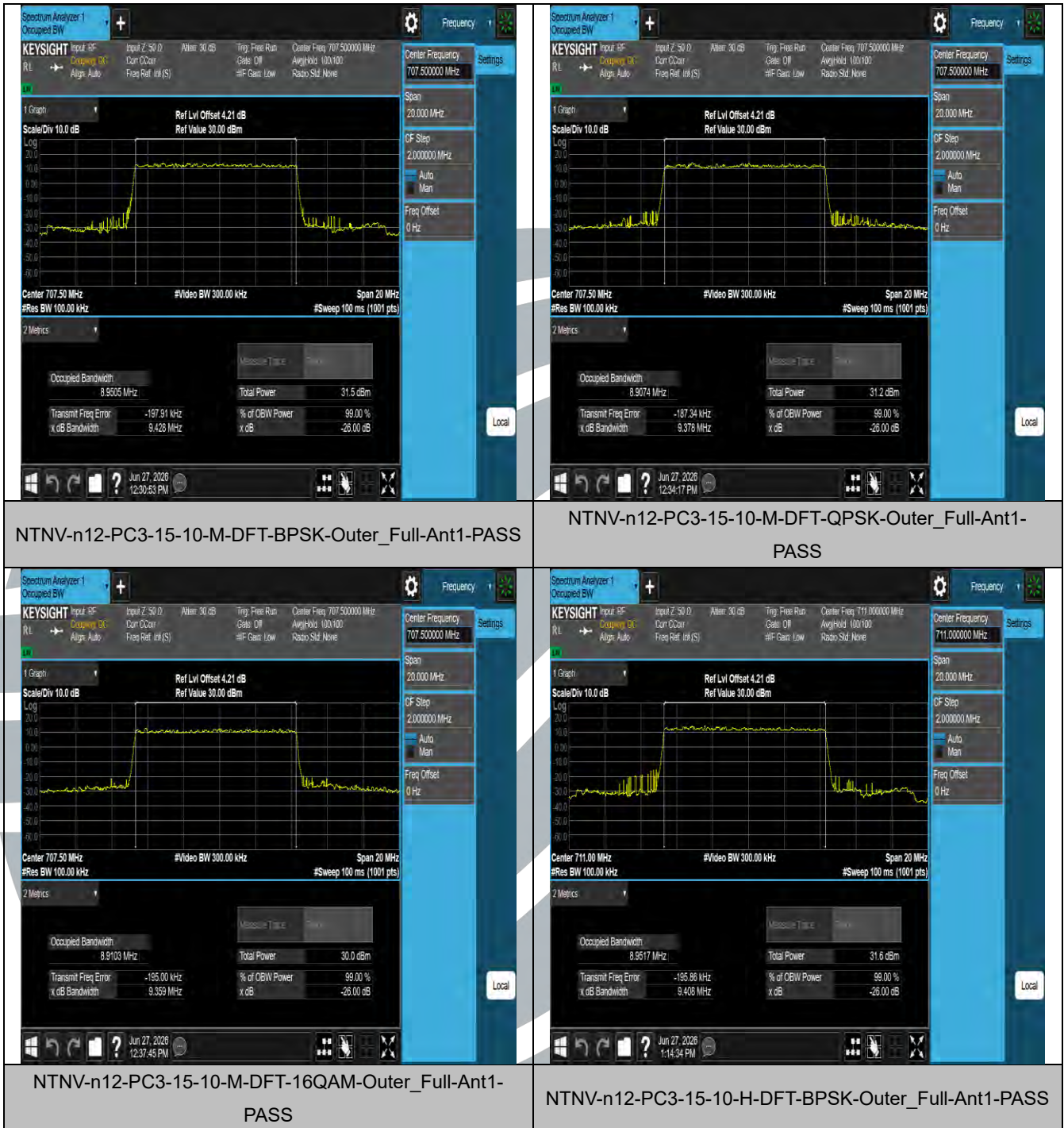
Band	SCS (kHz)	BW (MHz)	Modulation	Channel	RB Config	99% BW Result (MHz)	26dB BW Result (MHz)	Verdict
n12	15	5	DFT-BPSK	L	Outer_Full	4.4795	4.820	PASS
n12	15	5	DFT-QPSK	L	Outer_Full	4.4939	5.113	PASS
n12	15	5	DFT-16QAM	L	Outer_Full	4.4785	4.843	PASS
n12	15	5	DFT-BPSK	M	Outer_Full	4.4757	5.012	PASS
n12	15	5	DFT-QPSK	M	Outer_Full	4.4929	4.943	PASS
n12	15	5	DFT-16QAM	M	Outer_Full	4.4754	4.819	PASS
n12	15	5	DFT-BPSK	H	Outer_Full	4.4824	5.035	PASS
n12	15	5	DFT-QPSK	H	Outer_Full	4.4886	4.998	PASS
n12	15	5	DFT-16QAM	H	Outer_Full	4.4756	4.805	PASS
n12	15	10	DFT-BPSK	L	Outer_Full	8.9487	9.437	PASS
n12	15	10	DFT-QPSK	L	Outer_Full	8.9094	9.394	PASS
n12	15	10	DFT-16QAM	L	Outer_Full	8.9141	9.373	PASS
n12	15	10	DFT-BPSK	M	Outer_Full	8.9505	9.428	PASS
n12	15	10	DFT-QPSK	M	Outer_Full	8.9074	9.378	PASS
n12	15	10	DFT-16QAM	M	Outer_Full	8.9103	9.359	PASS
n12	15	10	DFT-BPSK	H	Outer_Full	8.9517	9.408	PASS
n12	15	10	DFT-QPSK	H	Outer_Full	8.9097	9.474	PASS
n12	15	10	DFT-16QAM	H	Outer_Full	8.9206	9.344	PASS
n12	15	15	DFT-BPSK	L	Outer_Full	13.411	14.41	PASS
n12	15	15	DFT-QPSK	L	Outer_Full	13.392	14.09	PASS
n12	15	15	DFT-16QAM	L	Outer_Full	13.391	14.20	PASS
n12	15	15	DFT-BPSK	M	Outer_Full	13.405	14.12	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	13.385	14.30	PASS
n12	15	15	DFT-16QAM	M	Outer_Full	13.389	14.46	PASS
n12	15	15	DFT-BPSK	H	Outer_Full	13.412	14.00	PASS
n12	15	15	DFT-QPSK	H	Outer_Full	13.398	14.28	PASS
n12	15	15	DFT-16QAM	H	Outer_Full	13.397	14.80	PASS

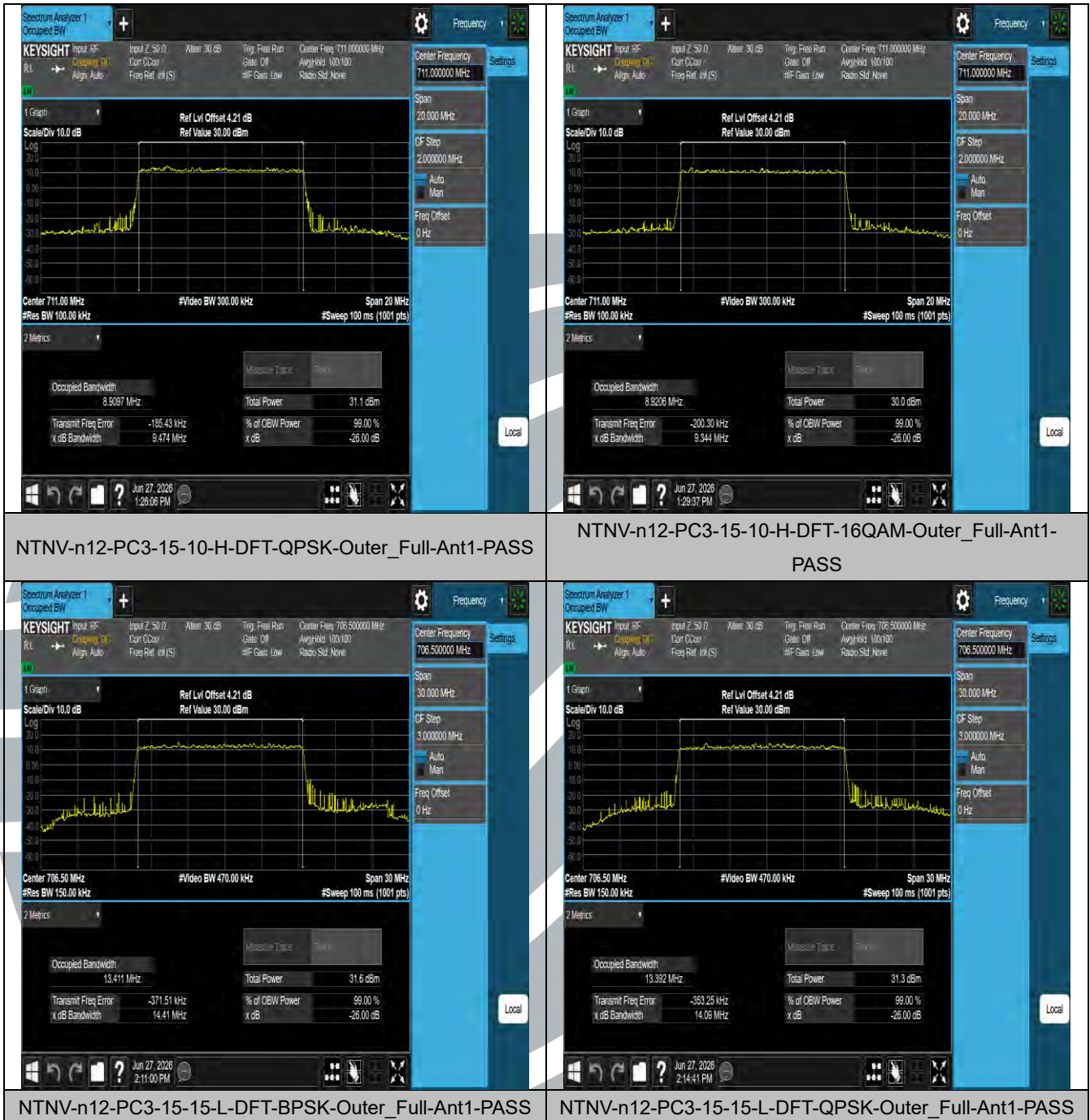
Test Graphs

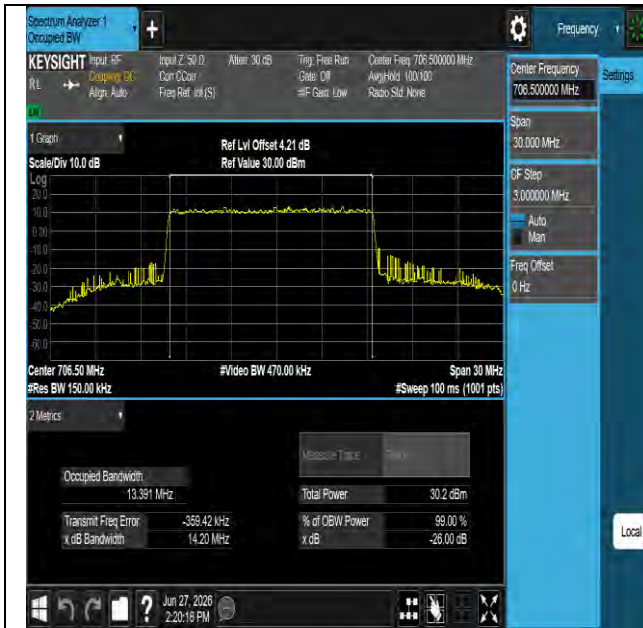








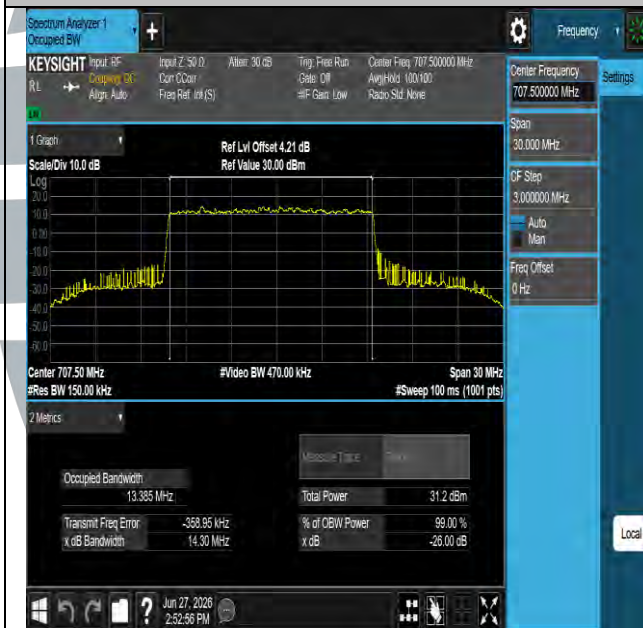




NTNV-n12-PC3-15-15-L-DFT-16QAM-Outter_Full-Ant1-PASS



NTNV-n12-PC3-15-15-M-DFT-BPSK-Outter_Full-Ant1-PASS



NTNV-n12-PC3-15-15-M-DFT-QPSK-Outter_Full-Ant1-PASS



NTNV-n12-PC3-15-15-M-DFT-16QAM-Outter_Full-Ant1-PASS



NTNV-n12-PC3-15-15-H-DFT-BPSK-Outter_Full-Ant1-PASS



NTNV-n12-PC3-15-15-H-DFT-QPSK-Outter_Full-Ant1-PASS



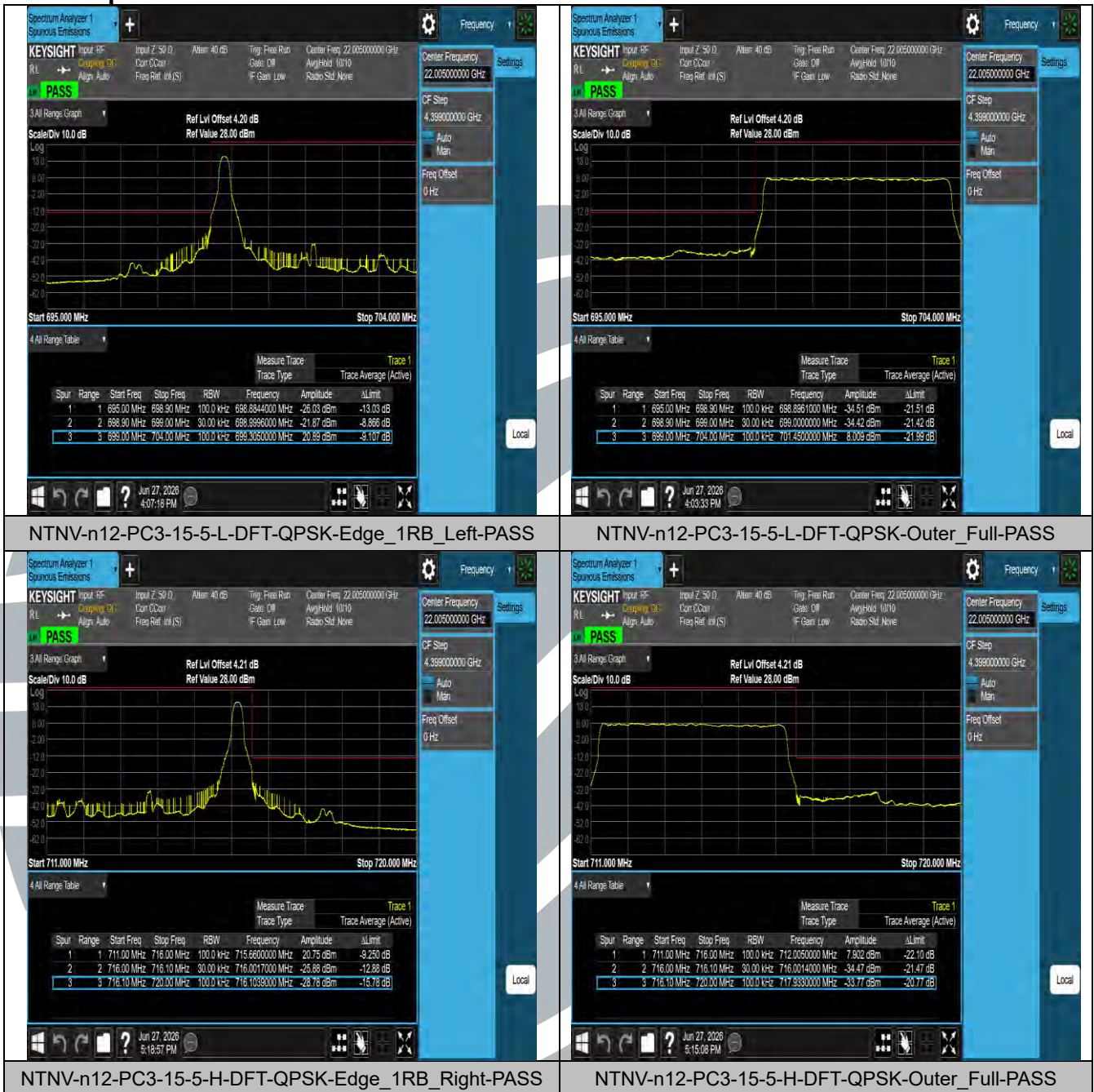
NTNV-n12-PC3-15-15-H-DFT-16QAM-Outter_Full-Ant1-PASS

N.3 BAND EDGE FOR SA

Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Channel	RB Config	Result (dBm)	Verdict
n12	15	5	DFT-QPSK	L	Edge_1RB_Left	-21.87	PASS
n12	15	5	DFT-QPSK	L	Outer_Full	-34.42	PASS
n12	15	5	DFT-QPSK	H	Edge_1RB_Right	-25.88	PASS
n12	15	5	DFT-QPSK	H	Outer_Full	-33.77	PASS
n12	15	10	DFT-QPSK	L	Edge_1RB_Left	-27.93	PASS
n12	15	10	DFT-QPSK	L	Outer_Full	-39.39	PASS
n12	15	10	DFT-QPSK	H	Edge_1RB_Right	-31.22	PASS
n12	15	10	DFT-QPSK	H	Outer_Full	-37.19	PASS
n12	15	15	DFT-QPSK	L	Edge_1RB_Left	-29.94	PASS
n12	15	15	DFT-QPSK	L	Outer_Full	-40.60	PASS
n12	15	15	DFT-QPSK	H	Edge_1RB_Right	-31.45	PASS
n12	15	15	DFT-QPSK	H	Outer_Full	-39.32	PASS

Test Graphs







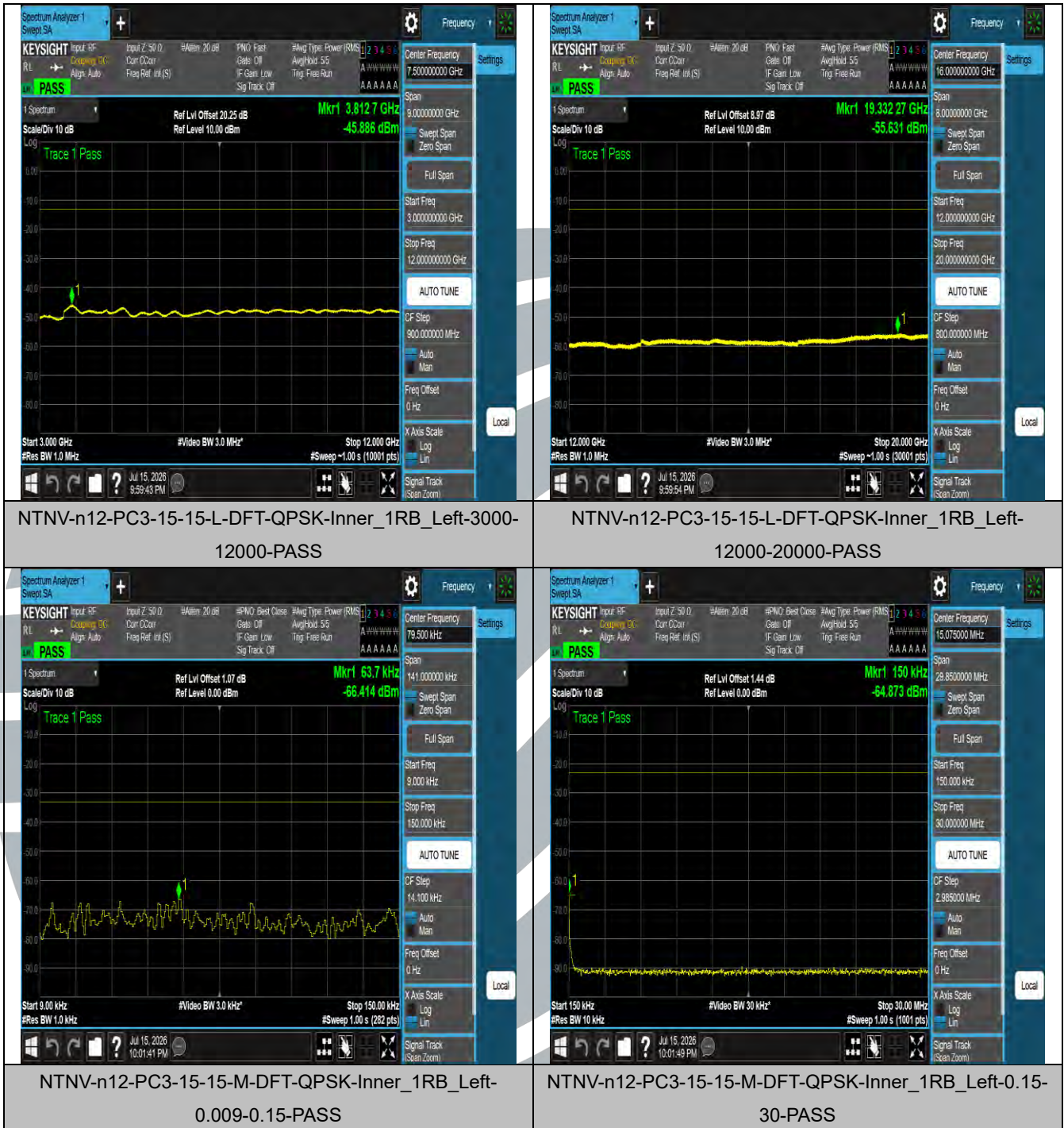
N.4 CONDUCTED SPURIOUS EMISSION FOR SA

Test Result

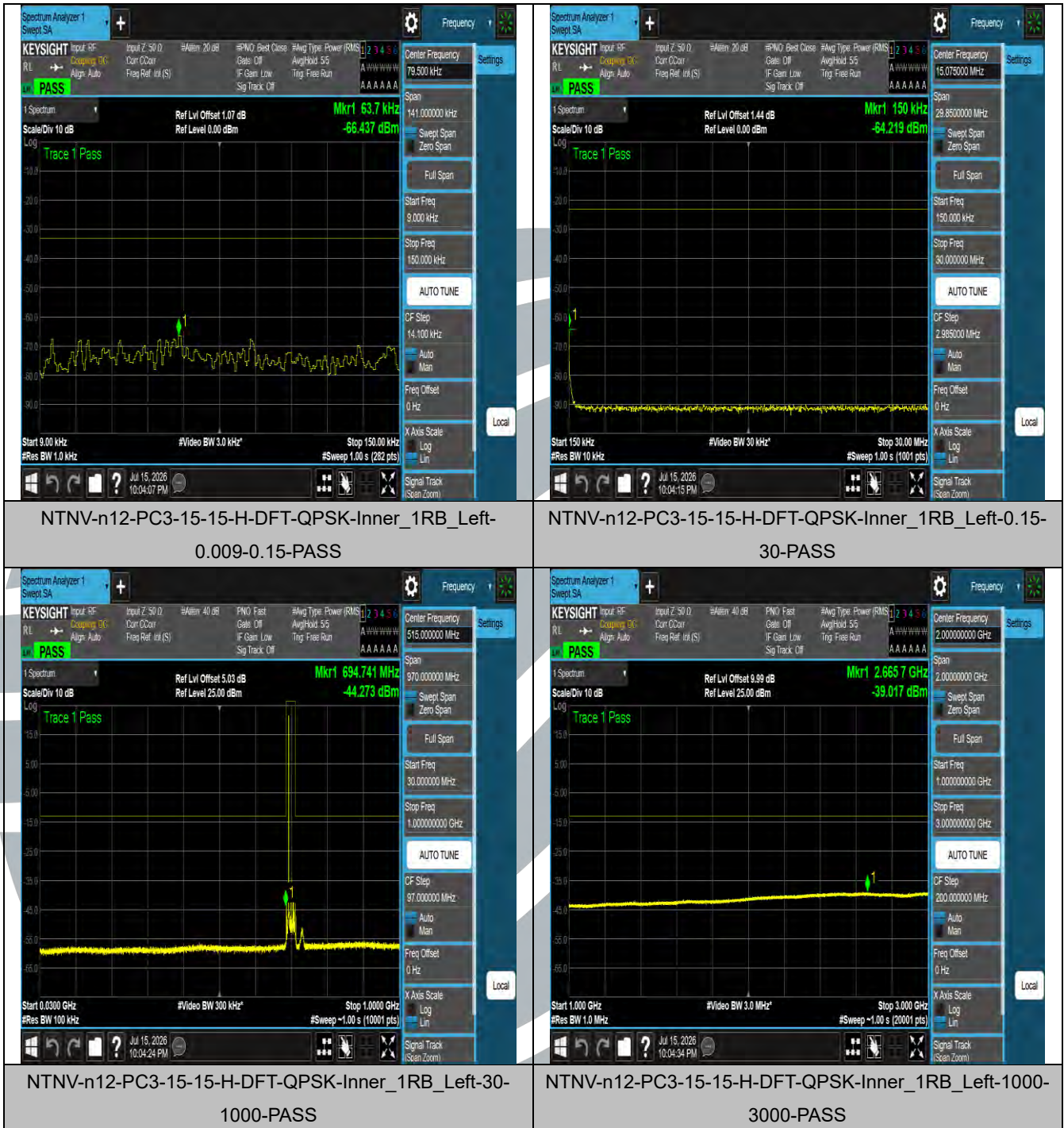
Band	SCS (kHz)	BW (MHz)	Modulation	Ch.	RB Config	Start Freq (MHz)	Stop Freq (MHz)	Result (dBm)	Limit (dBm)	Verdict
n12	15	15	DFT-QPSK	L	Inner_1RB_Left	0.009	0.15	-65.82	≤-33dBm	PASS
n12	15	15	DFT-QPSK	L	Inner_1RB_Left	0.15	30	-63.55	≤-23dBm	PASS
n12	15	15	DFT-QPSK	L	Inner_1RB_Left	30	1000	-49.06	≤-13dBm	PASS
n12	15	15	DFT-QPSK	L	Inner_1RB_Left	1000	3000	-38.97	≤-13dBm	PASS
n12	15	15	DFT-QPSK	L	Inner_1RB_Left	3000	12000	-45.89	≤-13dBm	PASS
n12	15	15	DFT-QPSK	L	Inner_1RB_Left	12000	20000	-55.63	≤-13dBm	PASS
n12	15	15	DFT-QPSK	M	Inner_1RB_Left	0.009	0.15	-66.41	≤-33dBm	PASS
n12	15	15	DFT-QPSK	M	Inner_1RB_Left	0.15	30	-64.87	≤-23dBm	PASS
n12	15	15	DFT-QPSK	M	Inner_1RB_Left	30	1000	-46.99	≤-13dBm	PASS
n12	15	15	DFT-QPSK	M	Inner_1RB_Left	1000	3000	-38.90	≤-13dBm	PASS
n12	15	15	DFT-QPSK	M	Inner_1RB_Left	3000	12000	-45.91	≤-13dBm	PASS
n12	15	15	DFT-QPSK	M	Inner_1RB_Left	12000	20000	-55.72	≤-13dBm	PASS
n12	15	15	DFT-QPSK	H	Inner_1RB_Left	0.009	0.15	-66.44	≤-33dBm	PASS
n12	15	15	DFT-QPSK	H	Inner_1RB_Left	0.15	30	-64.22	≤-23dBm	PASS
n12	15	15	DFT-QPSK	H	Inner_1RB_Left	30	1000	-44.27	≤-13dBm	PASS
n12	15	15	DFT-QPSK	H	Inner_1RB_Left	1000	3000	-39.02	≤-13dBm	PASS
n12	15	15	DFT-QPSK	H	Inner_1RB_Left	3000	12000	-45.90	≤-13dBm	PASS
n12	15	15	DFT-QPSK	H	Inner_1RB_Left	12000	20000	-55.70	≤-13dBm	PASS

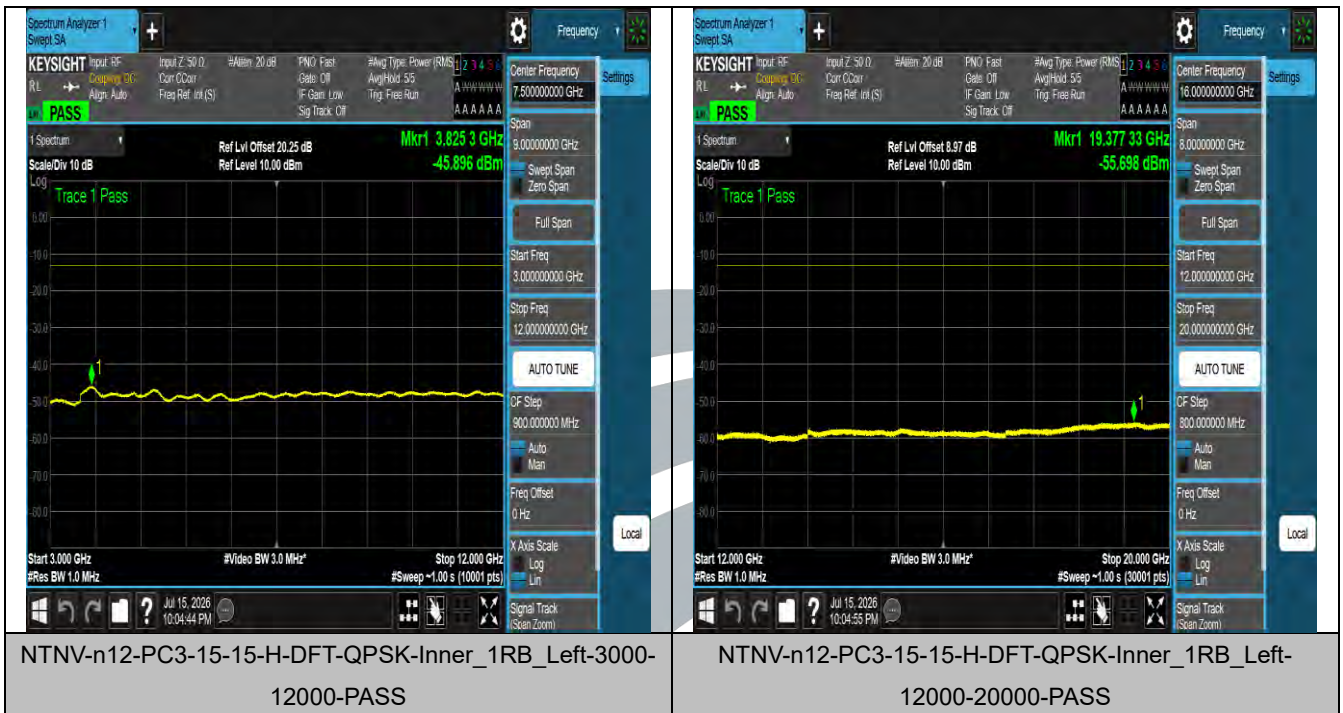
Test Graphs











N.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
n12	15	15	DFT-QPSK	M	Outer_Full	VL	NT	- 0.003355	- 2.5~2.5	699	716	---	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	VN	NT	- 0.003452	- 2.5~2.5	699	716	---	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	VH	NT	- 0.001693	- 2.5~2.5	699	716	---	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
n12	15	15	DFT-QPSK	M	Outer_Full	NV	-30	-0.00554	- 2.5~2.5	699	716	---	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	NV	-20	- 0.006619	- 2.5~2.5	699	716	---	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	NV	-10	- 0.006378	- 2.5~2.5	699	716	---	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	NV	0	- 0.003759	- 2.5~2.5	699	716	---	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	NV	10	- 0.003887	- 2.5~2.5	699	716	---	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	NV	20	- 0.003123	- 2.5~2.5	699	716	---	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	NV	30	- 0.006104	- 2.5~2.5	699	716	---	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	NV	40	- 0.001718	- 2.5~2.5	699	716	---	PASS
n12	15	15	DFT-QPSK	M	Outer_Full	NV	50	-0.00316	- 2.5~2.5	699	716	---	PASS