

APPENDIX N 5G NR N7RF TEST DATA

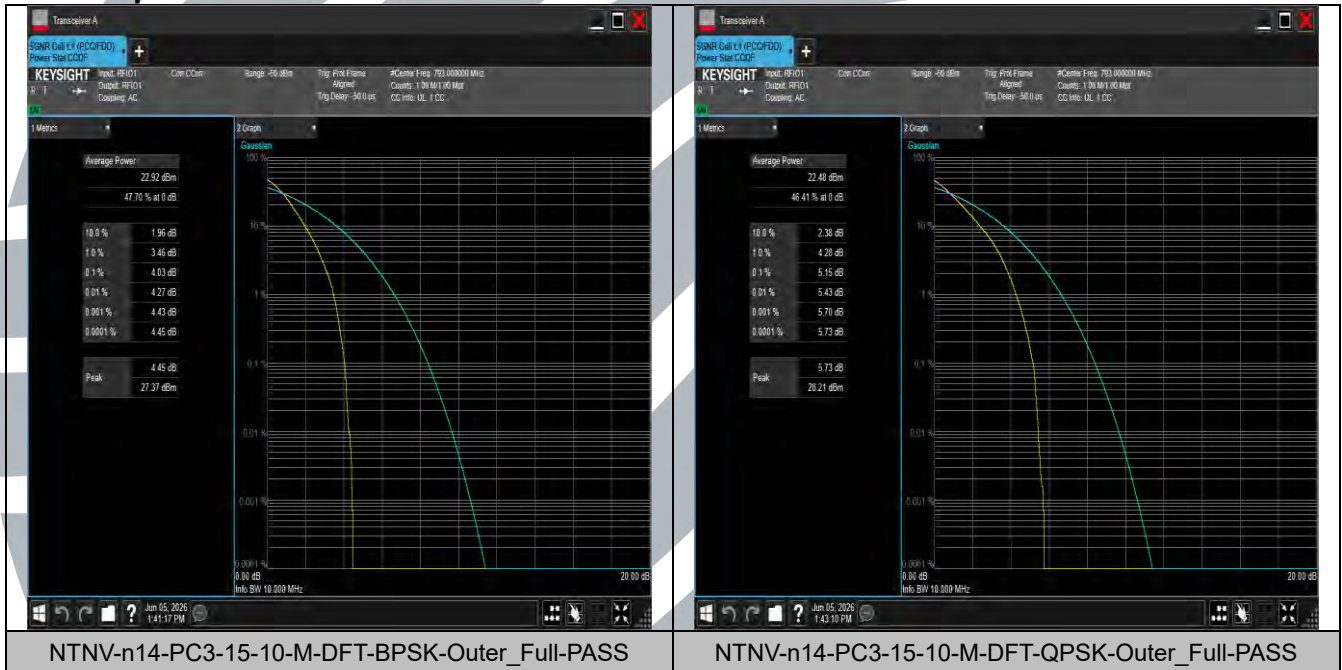
N.1 PEAK-TO-AVERAGE RATIO FOR SA

➤ Peak-to-Average Ratio(CCDF)

Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Channel	RB Config	Result	Limit	Verdict
n14	15	10	DFT-BPSK	M	Outer_Full	4.03	≤13dB	PASS
n14	15	10	DFT-QPSK	M	Outer_Full	5.15	≤13dB	PASS
n14	15	10	DFT-16QAM	M	Outer_Full	6.08	≤13dB	PASS
n14	15	10	DFT-64QAM	M	Outer_Full	6.27	≤13dB	PASS
n14	15	10	DFT-256QAM	M	Outer_Full	6.78	≤13dB	PASS

Test Graphs

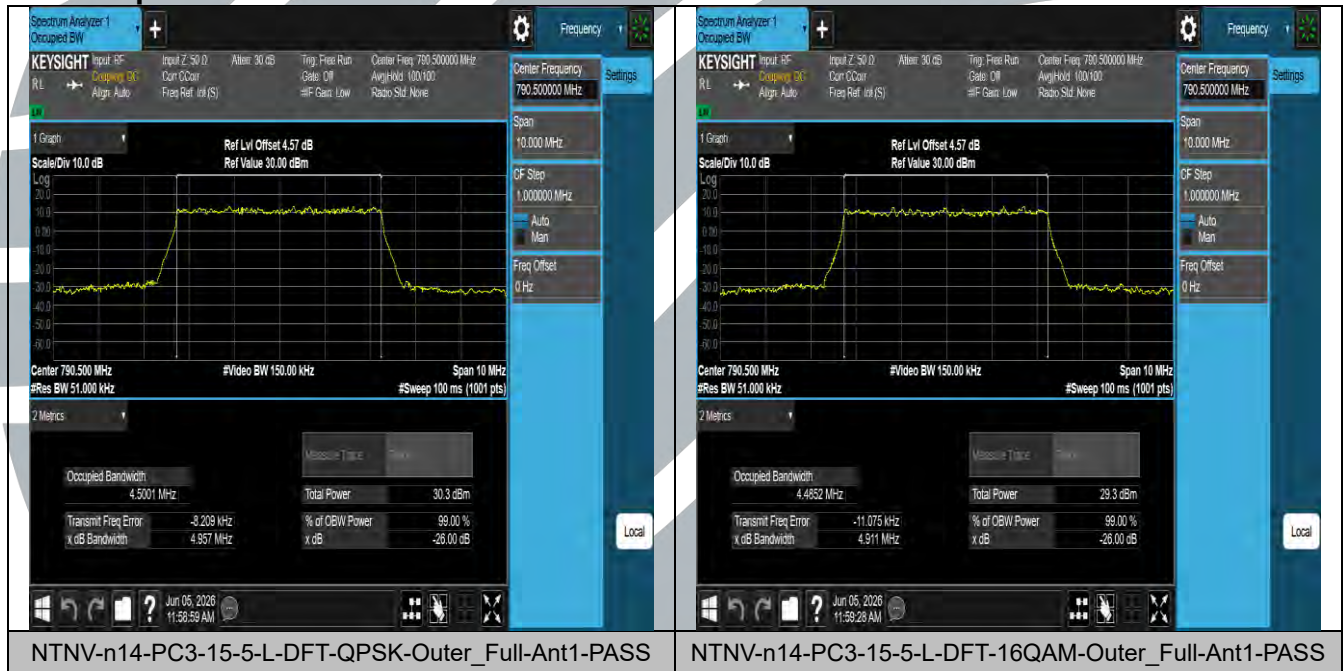


N.2 26DB BANDWIDTH AND OCCUPIED BANDWIDTH FOR SA

Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Channel	RB Config	99% BW Result (MHz)	26dB BW Result (MHz)	Verdict
n14	15	5	DFT-QPSK	L	Outer_Full	4.5001	4.957	PASS
n14	15	5	DFT-16QAM	L	Outer_Full	4.4852	4.911	PASS
n14	15	5	DFT-QPSK	M	Outer_Full	4.4746	4.818	PASS
n14	15	5	DFT-16QAM	M	Outer_Full	4.4830	4.911	PASS
n14	15	5	DFT-QPSK	H	Outer_Full	4.4821	4.885	PASS
n14	15	5	DFT-16QAM	H	Outer_Full	4.4738	4.819	PASS
n14	15	10	DFT-QPSK	M	Outer_Full	8.9113	9.511	PASS
n14	15	10	DFT-16QAM	M	Outer_Full	8.9314	9.515	PASS

Test Graphs





NTNV-n14-PC3-15-5-M-DFT-QPSK-Outer_Full-Ant1-PASS



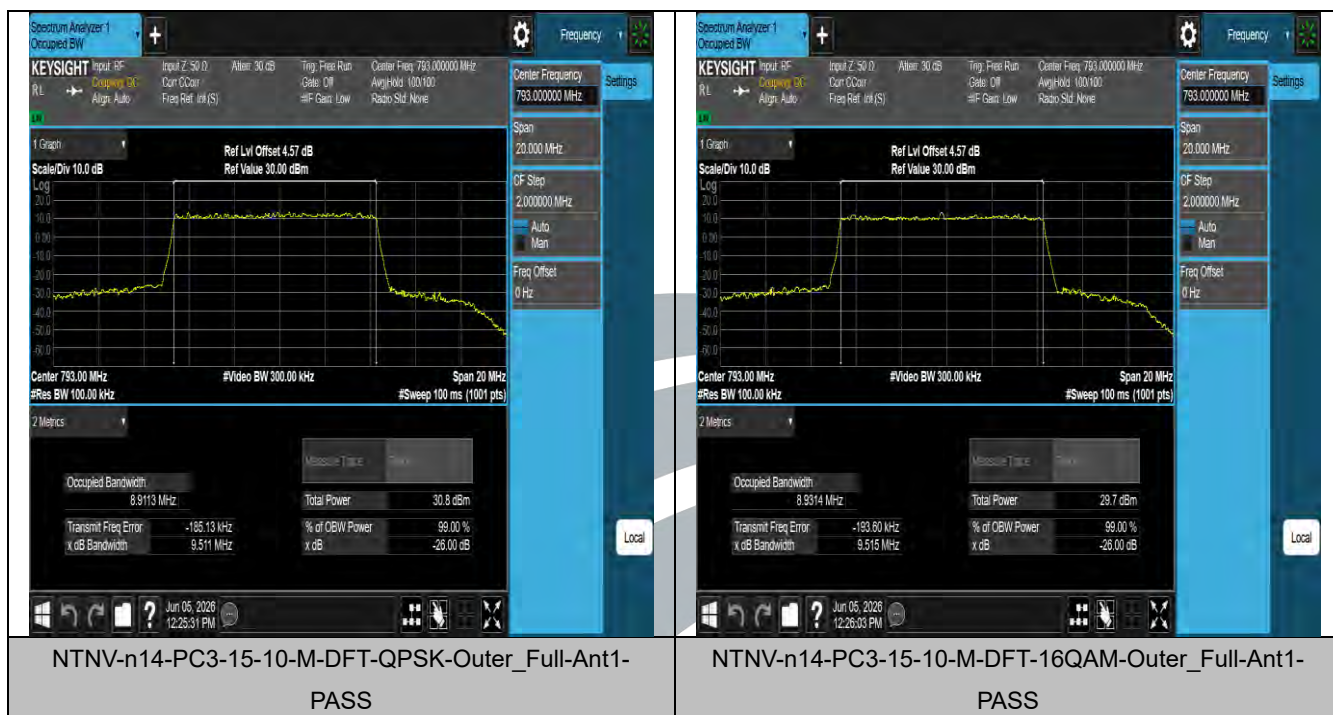
NTNV-n14-PC3-15-5-M-DFT-16QAM-Outer_Full-Ant1-PASS



NTNV-n14-PC3-15-5-H-DFT-QPSK-Outer_Full-Ant1-PASS



NTNV-n14-PC3-15-5-H-DFT-16QAM-Outer_Full-Ant1-PASS

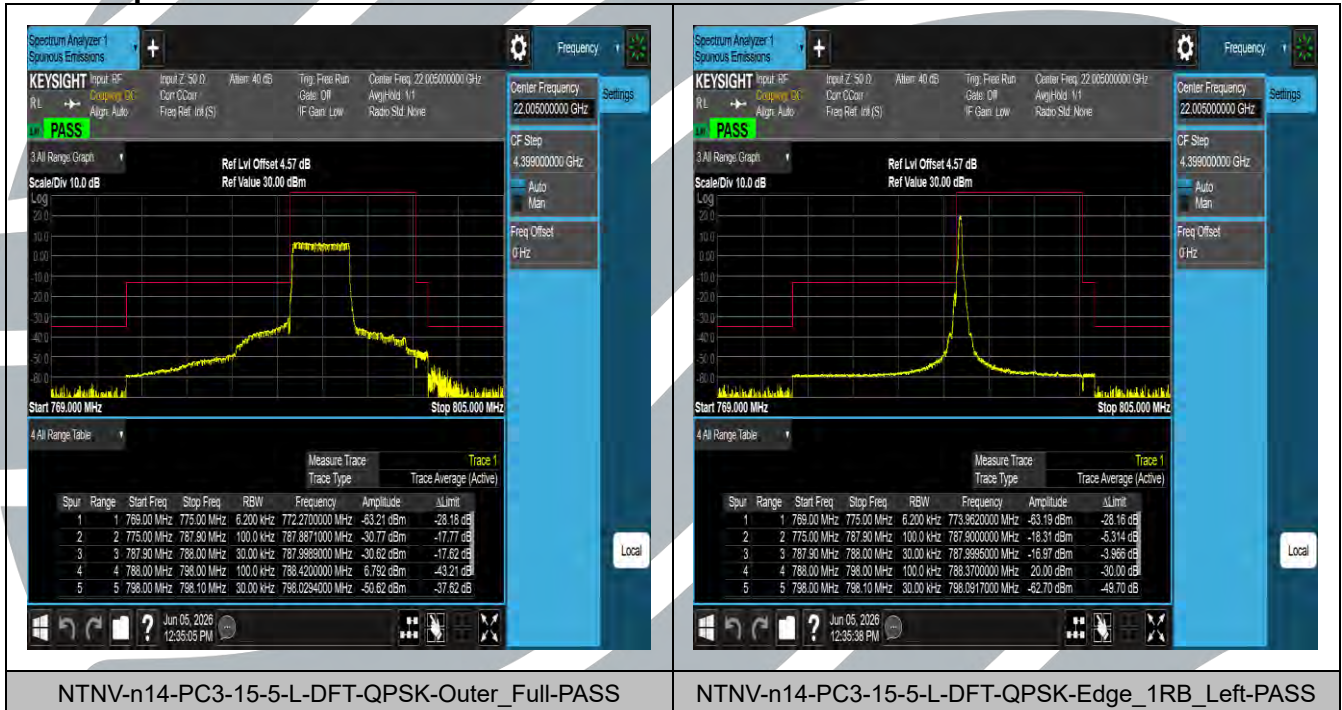


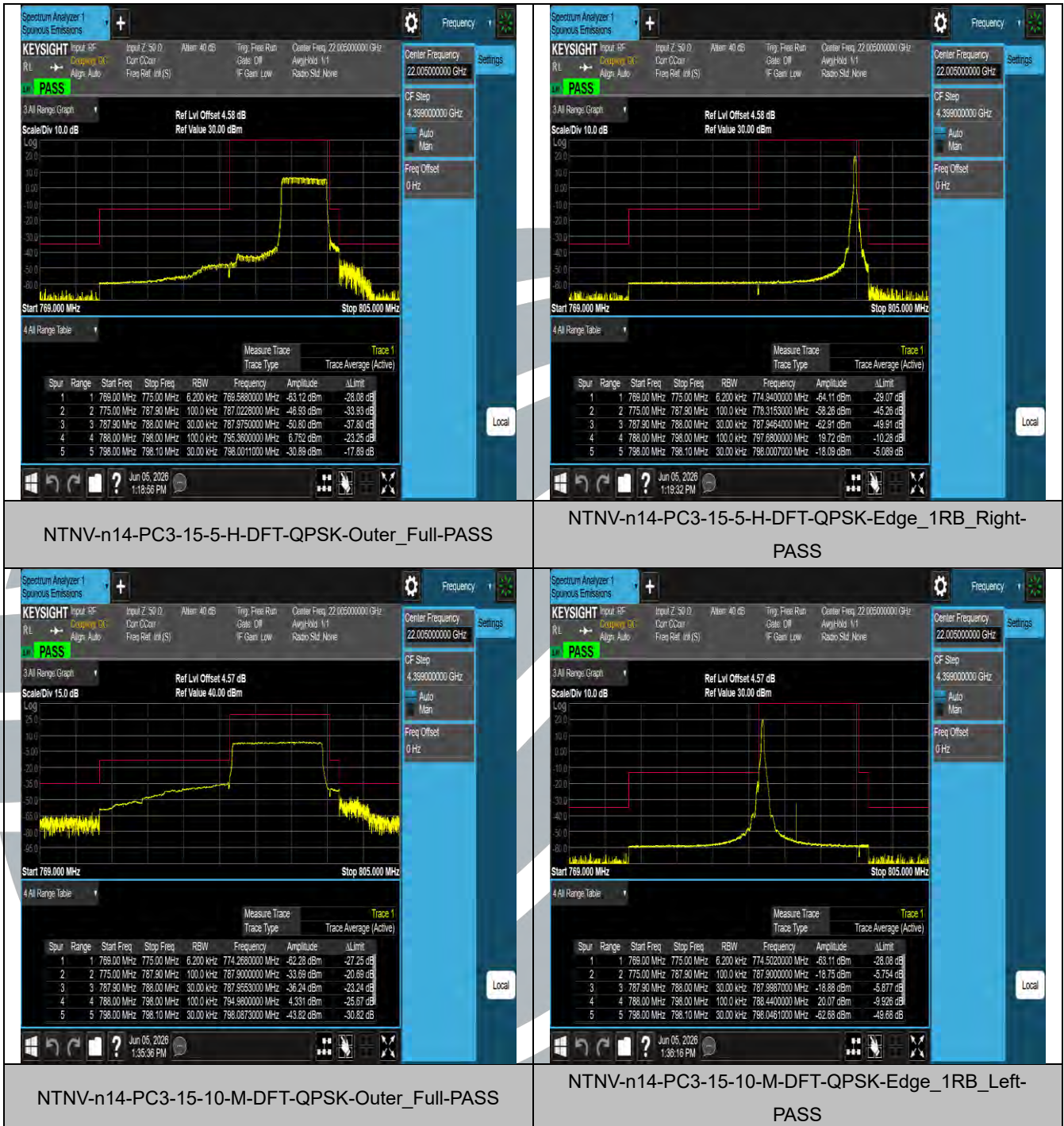
N.3 EMISSION MASK FOR SA

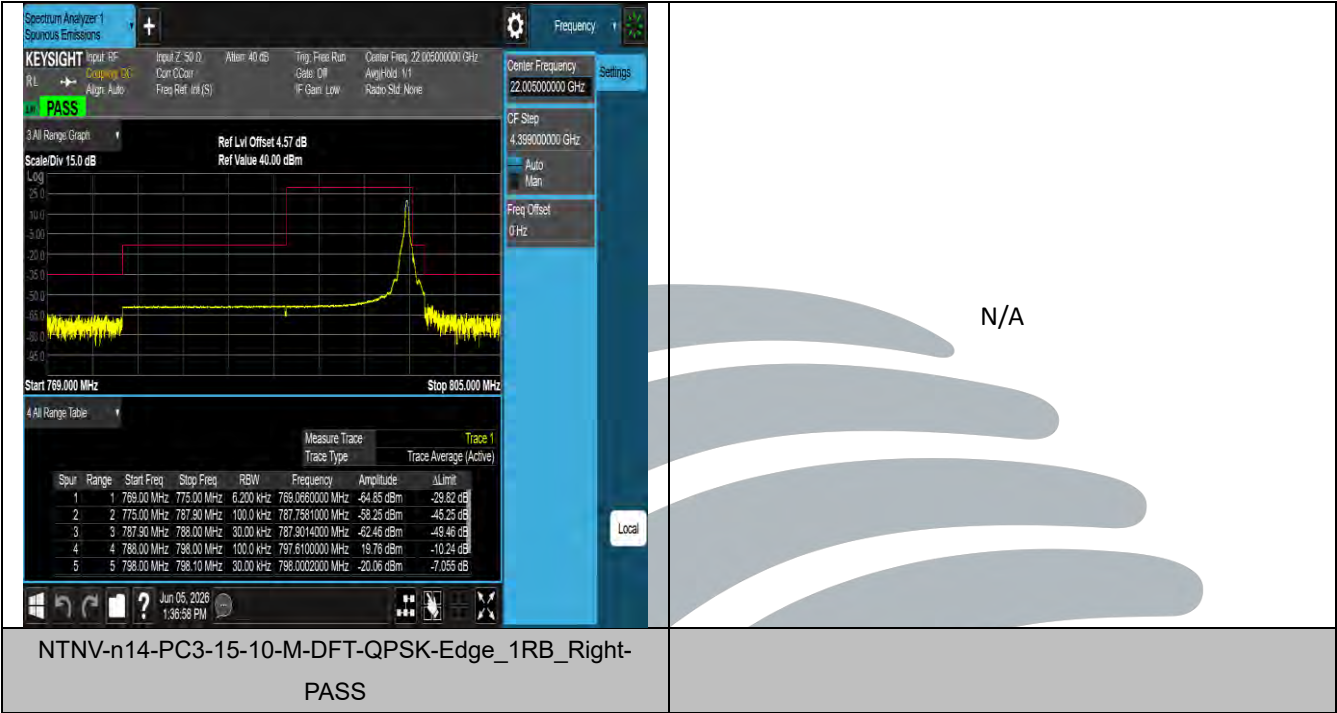
Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Channel	RB Config	Result (dBm)	Verdict
n14	15	5	DFT-QPSK	L	Outer_Full	-30.62	PASS
n14	15	5	DFT-QPSK	L	Edge_1RB_Left	-16.97	PASS
n14	15	5	DFT-QPSK	H	Outer_Full	-41.85	PASS
n14	15	5	DFT-QPSK	H	Edge_1RB_Right	-18.09	PASS
n14	15	10	DFT-QPSK	M	Outer_Full	-46.99	PASS
n14	15	10	DFT-QPSK	M	Edge_1RB_Left	-18.75	PASS
n14	15	10	DFT-QPSK	M	Edge_1RB_Right	-20.06	PASS

Test Graphs





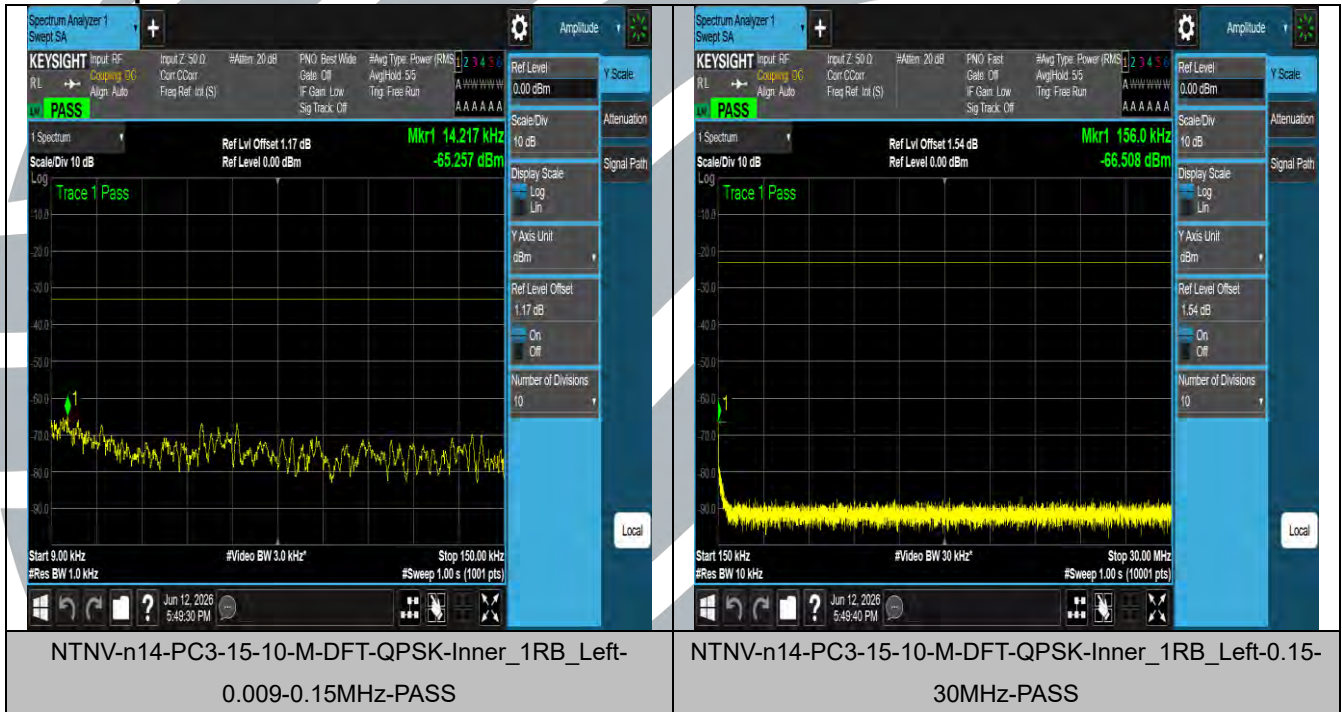


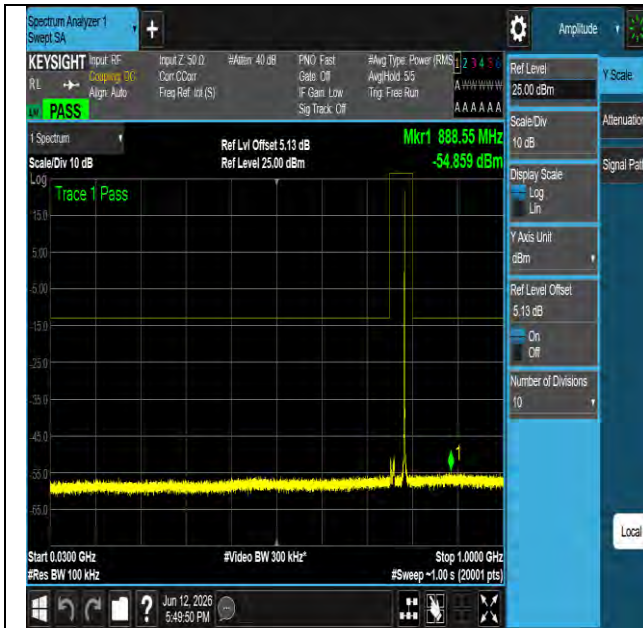
N.4 CONDUCTED SPURIOUS EMISSION FOR SA

Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Ch.	RB Config	Start Freq (MHz)	Stop Freq (MHz)	Result (dBm)	Limit	Verdict
n14	15	10	DFT-QPSK	M	Inner_1RB_Left	0.009	0.15	-65.26	≤-33dBm	PASS
n14	15	10	DFT-QPSK	M	Inner_1RB_Left	0.15	30	-66.51	≤-23dBm	PASS
n14	15	10	DFT-QPSK	M	Inner_1RB_Left	30	1000	-54.86	≤-13dBm	PASS
n14	15	10	DFT-QPSK	M	Inner_1RB_Left	1000	3000	-39.47	≤-13dBm	PASS
n14	15	10	DFT-QPSK	M	Inner_1RB_Left	3000	12000	-45.08	≤-13dBm	PASS
n14	15	10	DFT-QPSK	M	Inner_1RB_Left	12000	20000	-55.36	≤-13dBm	PASS

Test Graphs





NTNV-n14-PC3-15-10-M-DFT-QPSK-Inner_1RB_Left-30-1000MHz-PASS



NTNV-n14-PC3-15-10-M-DFT-QPSK-Inner_1RB_Left-1000-3000MHz-PASS



NTNV-n14-PC3-15-10-M-DFT-QPSK-Inner_1RB_Left-3000-12000MHz-PASS



NTNV-n14-PC3-15-10-M-DFT-QPSK-Inner_1RB_Left-12000-20000MHz-PASS

N.5 FREQUENCY STABILITY FOR SA

Test Result

Frequency Error VS. Voltage

Voltage													
Band	SCS (kHz)	BW (MHz)	Mod.	Ch.	RB Config	Voltage	Temp.	Result (ppm)	Limit (ppm)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
n14	15	10	DFT-QPSK	M	Outer_Full	VL	NT	0.0077 66	-2.5~2.5	788	798	---	PASS
n14	15	10	DFT-QPSK	M	Outer_Full	VN	NT	0.0012 99	-2.5~2.5	788	798	---	PASS
n14	15	10	DFT-QPSK	M	Outer_Full	VH	NT	0.0510 43	-2.5~2.5	788	798	---	PASS

Frequency Error VS. Temperature

Temperature													
Band	SCS (kHz)	BW (MHz)	Modulation	Ch.	RB Config	Voltage	Temp.	Result (ppm)	Limit (ppm)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
n14	15	10	DFT-QPSK	M	Outer_Full	NV	-30	-0.001006	-2.5~2.5	788	798	---	PASS
n14	15	10	DFT-QPSK	M	Outer_Full	NV	-20	-0.071632	-2.5~2.5	788	798	---	PASS
n14	15	10	DFT-QPSK	M	Outer_Full	NV	-10	-0.063304	-2.5~2.5	788	798	---	PASS
n14	15	10	DFT-QPSK	M	Outer_Full	NV	0	0.000526	-2.5~2.5	788	798	---	PASS
n14	15	10	DFT-QPSK	M	Outer_Full	NV	10	0.12283	-2.5~2.5	788	798	---	PASS
n14	15	10	DFT-QPSK	M	Outer_Full	NV	20	0.022707	-2.5~2.5	788	798	---	PASS
n14	15	10	DFT-QPSK	M	Outer_Full	NV	30	-0.000836	-2.5~2.5	788	798	---	PASS