

APPENDIX M 5G NR N7 RF TEST DATA

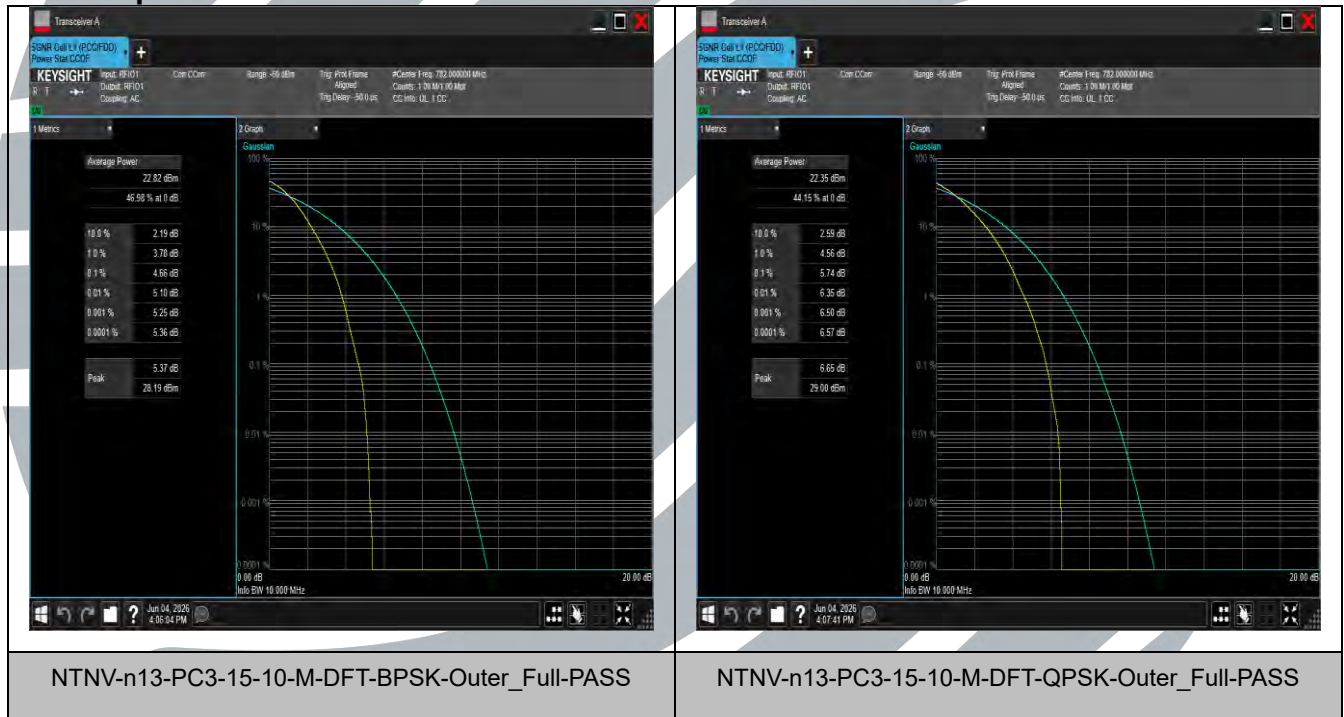
M.1 PEAK-TO-AVERAGE RATIO FOR SA

➤ Peak-to-Average Ratio(CCDF)

Test Result

Band	SCS (kHz)	Bandwidth (MHz)	Modulation	Channel	RB Config	Result (dB)	Limit	Verdict
n13	15	10	DFT-BPSK	M	Outer_Full	4.66	≤13dB	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	5.74	≤13dB	PASS
n13	15	10	DFT-16QAM	M	Outer_Full	6.44	≤13dB	PASS
n13	15	10	DFT-64QAM	M	Outer_Full	6.54	≤13dB	PASS
n13	15	10	DFT-256QAM	M	Outer_Full	6.94	≤13dB	PASS

Test Graphs



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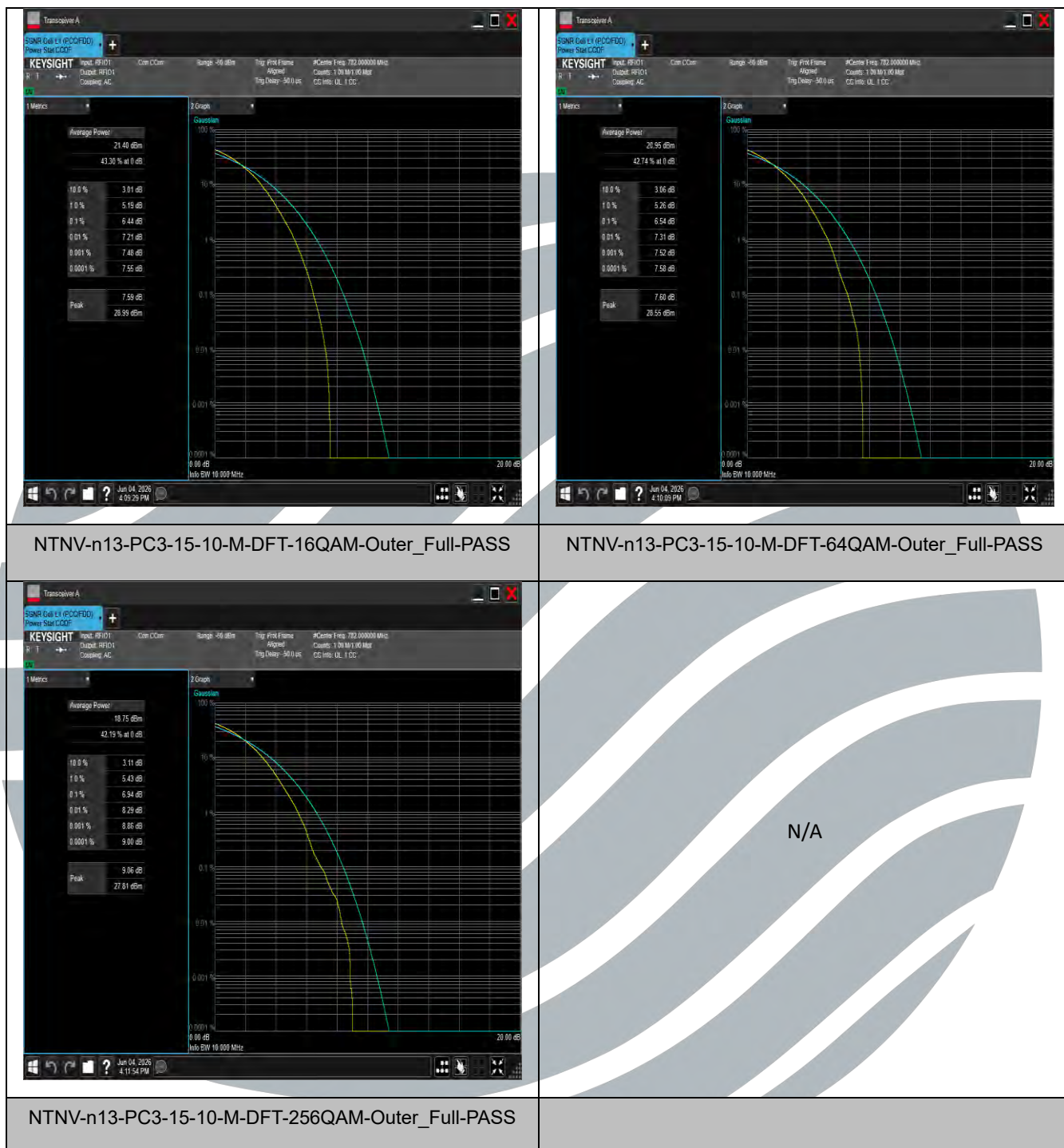
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M.2 26DB BANDWIDTH AND OCCUPIED BANDWIDTH FOR SA

Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Ch.	RB Config	99% BW Result (MHz)	26dB BW Result (MHz)	Verdict
n13	15	5	DFT-QPSK	L	Outer_Full	4.4757	4.828	PASS
n13	15	5	DFT-16QAM	L	Outer_Full	4.4718	4.861	PASS
n13	15	5	DFT-QPSK	M	Outer_Full	4.4917	4.917	PASS
n13	15	5	DFT-16QAM	M	Outer_Full	4.4946	4.944	PASS
n13	15	5	DFT-QPSK	H	Outer_Full	4.4852	4.888	PASS
n13	15	5	DFT-16QAM	H	Outer_Full	4.4717	4.809	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	8.9067	9.447	PASS
n13	15	10	DFT-16QAM	M	Outer_Full	8.9282	9.492	PASS

Test Graphs



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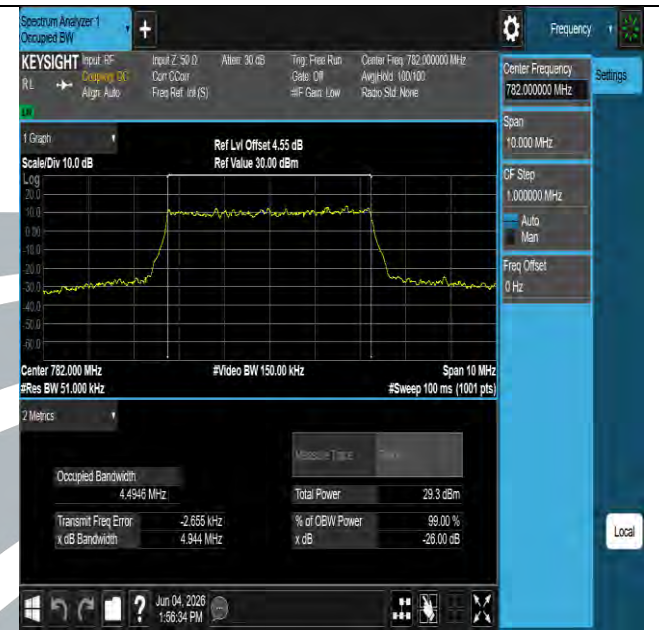
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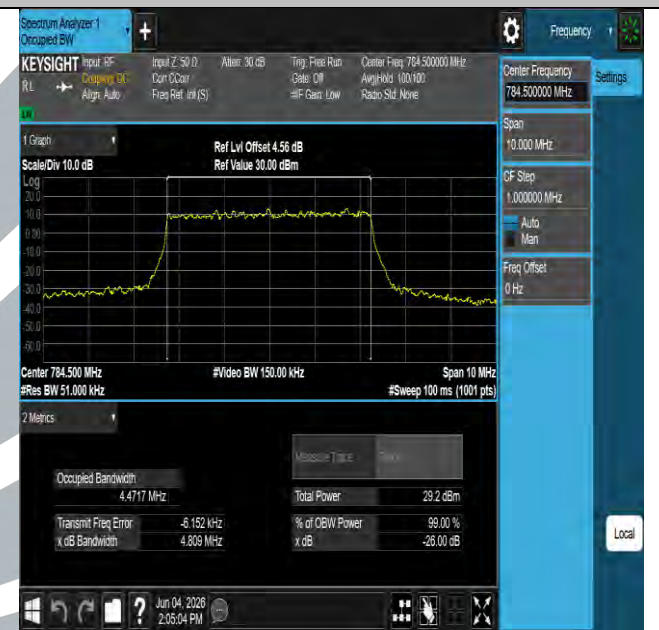
NTNV-n13-PC3-15-5-M-DFT-QPSK-Outer_Full-Ant1-PASS



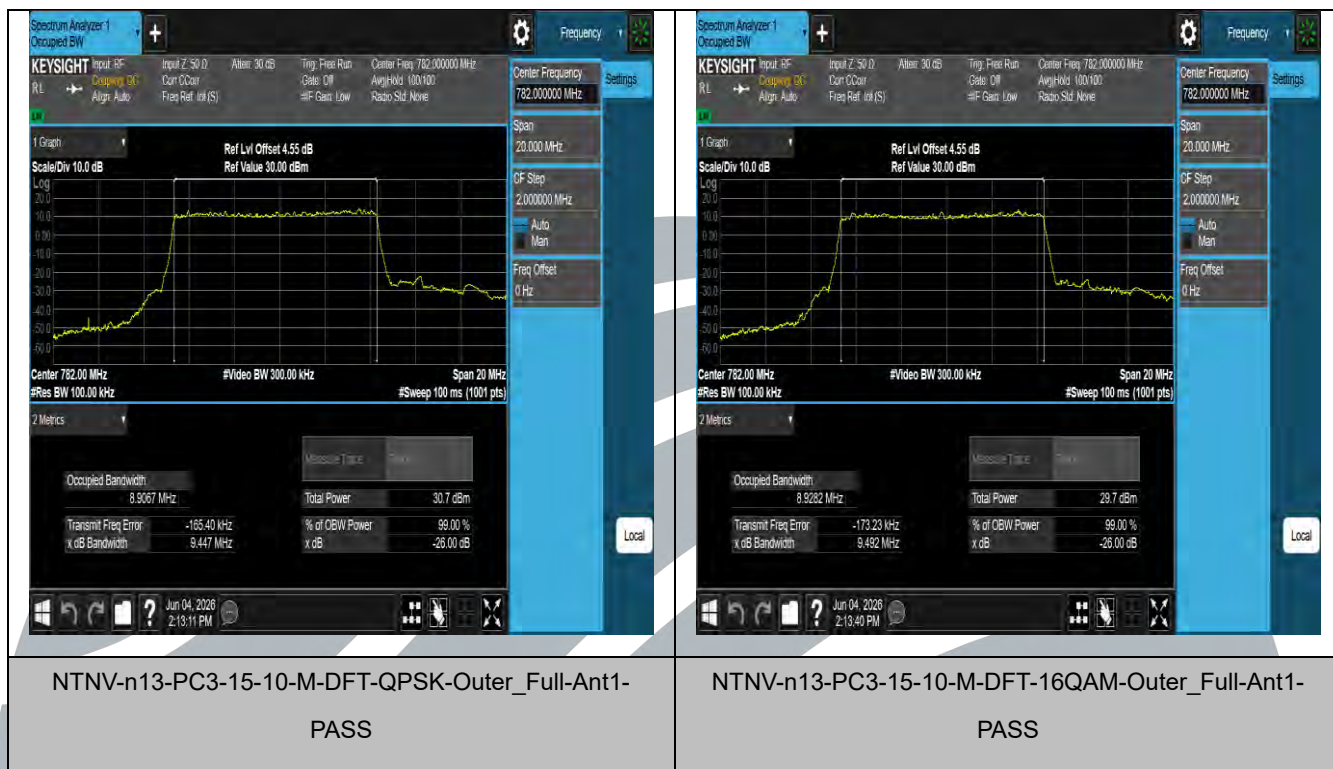
NTNV-n13-PC3-15-5-M-DFT-16QAM-Outer_Full-Ant1-PASS



NTNV-n13-PC3-15-5-H-DFT-QPSK-Outer_Full-Ant1-PASS



NTNV-n13-PC3-15-5-H-DFT-16QAM-Outer_Full-Ant1-PASS



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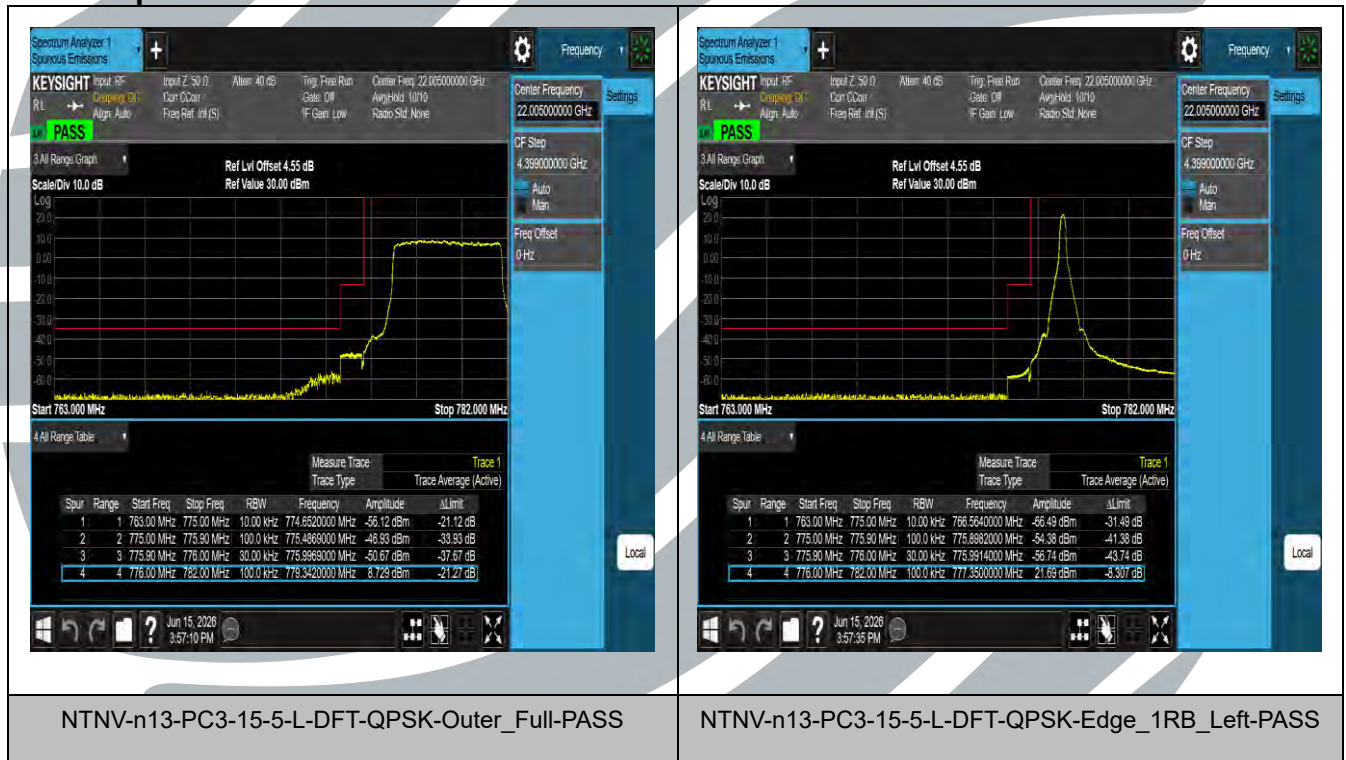
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M.3 BAND EDGE FOR SA

Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Channel	RB Config	Result	Verdict
n13	15	5	DFT-QPSK	L	Outer_Full	-56.12	PASS
n13	15	5	DFT-QPSK	L	Edge_1RB_Left	-66.49	PASS
n13	15	5	DFT-QPSK	H	Outer_Full	-55.75	PASS
n13	15	5	DFT-QPSK	H	Edge_1RB_Right	-65.82	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	-66.34	PASS
n13	15	10	DFT-QPSK	M	Edge_1RB_Left	-66.27	PASS
n13	15	10	DFT-QPSK	M	Edge_1RB_Right	-65.73	PASS

Test Graphs



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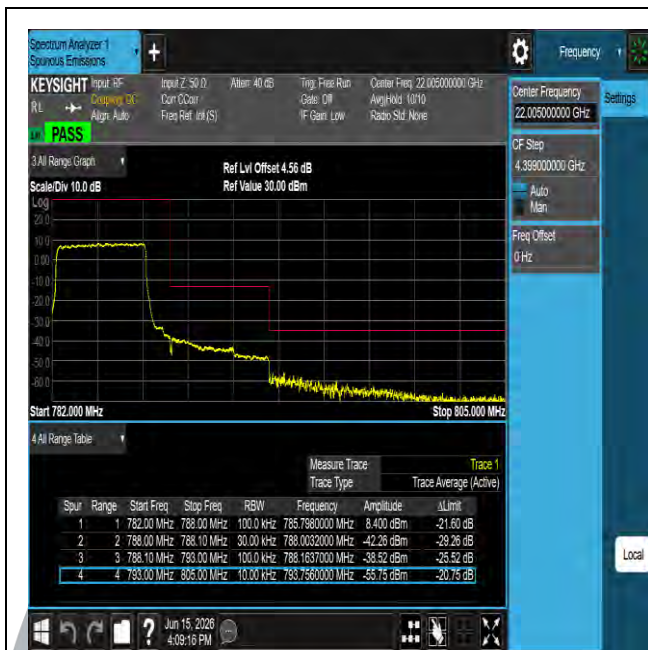
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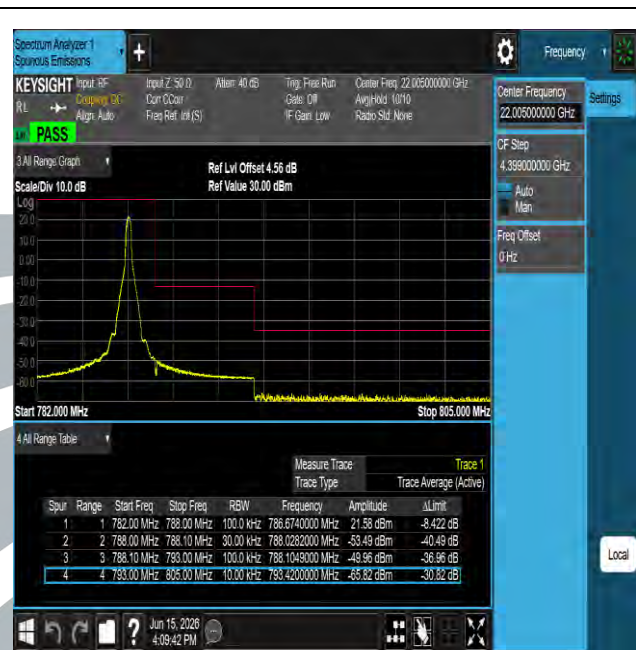
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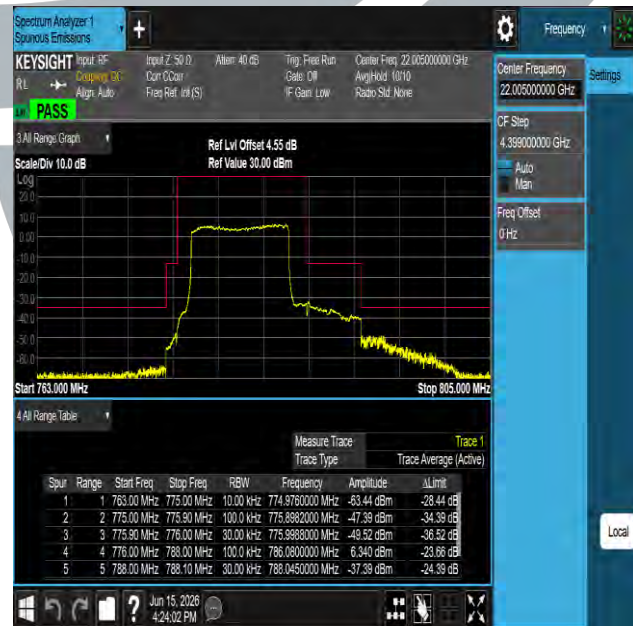
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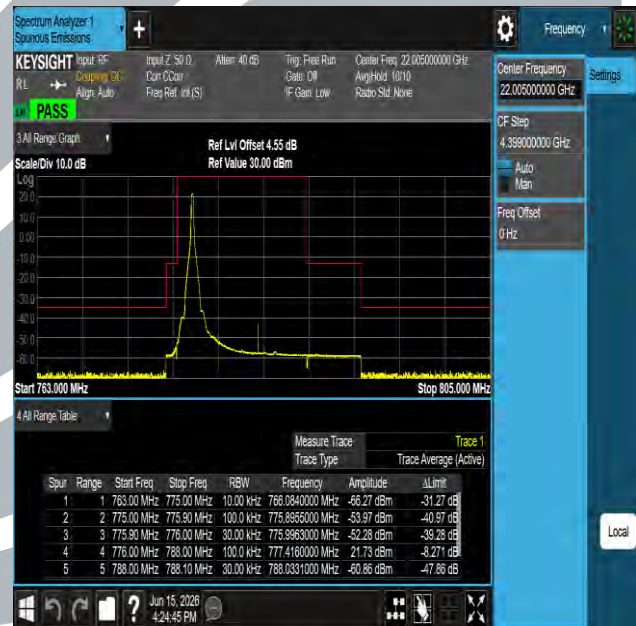
NTNV-n13-PC3-15-5-H-DFT-QPSK-Outer_Full-PASS



NTNV-n13-PC3-15-5-H-DFT-QPSK-Edge_1RB_Right-PASS



NTNV-n13-PC3-15-10-M-DFT-QPSK-Outer_Full-PASS



NTNV-n13-PC3-15-10-M-DFT-QPSK-Edge_1RB_Left-PASS

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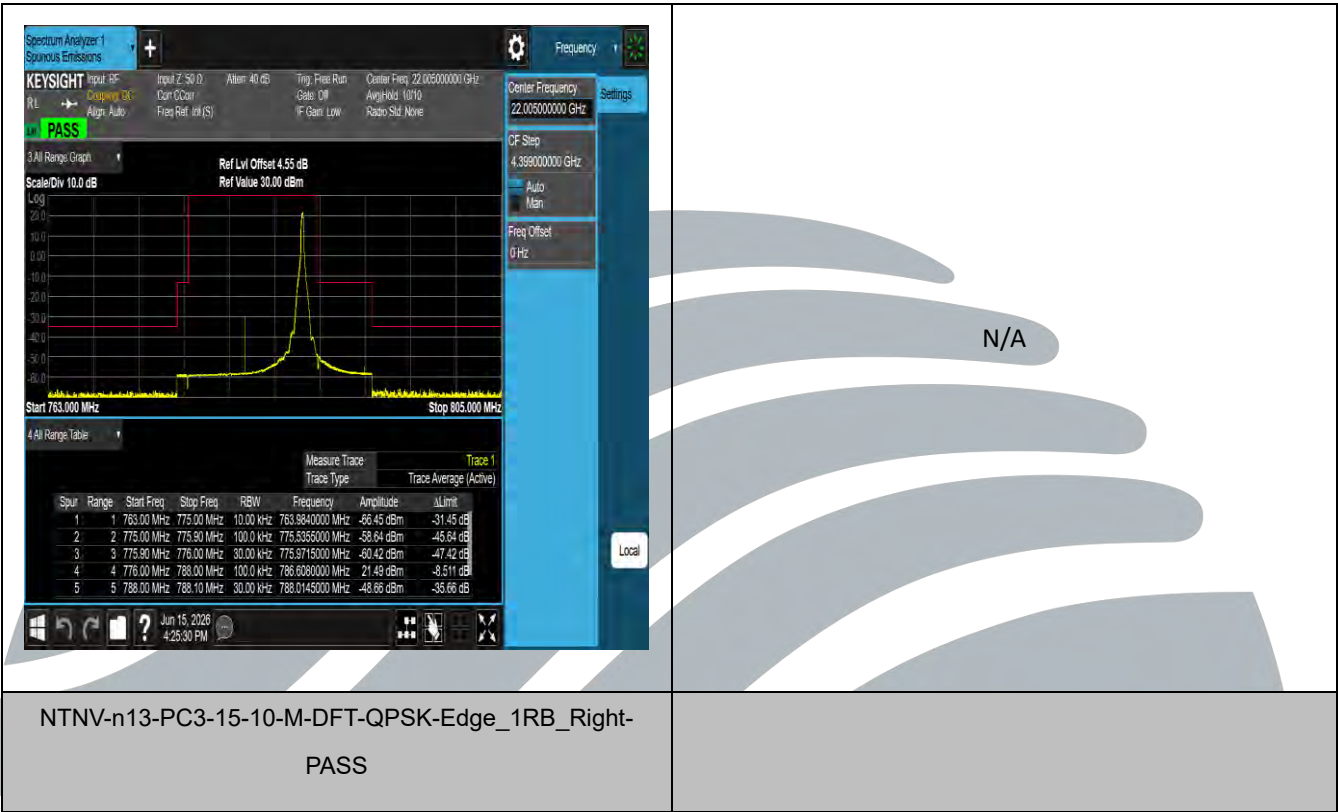
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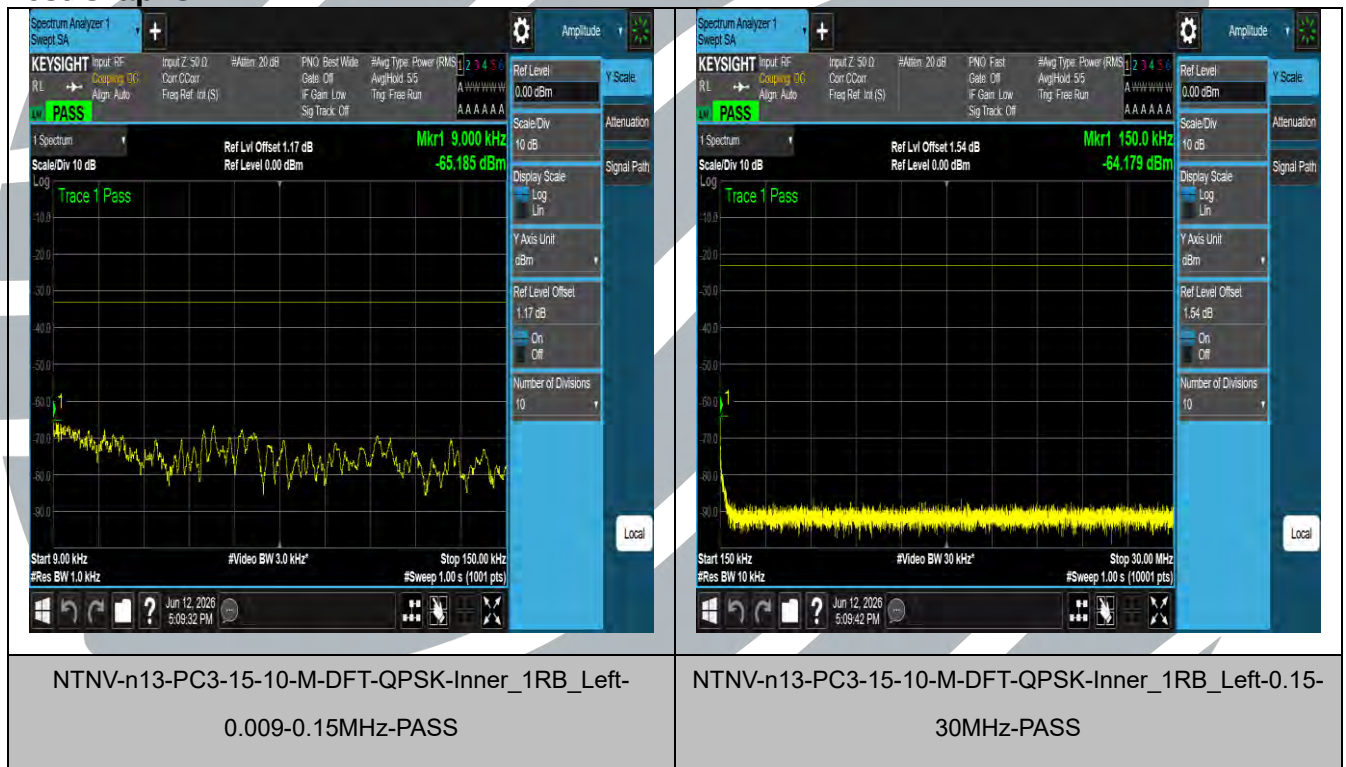


M.4 CONDUCTED SPURIOUS EMISSION FOR SA

Test Result

Band	SCS (kHz)	BW (MHz)	Modulation	Ch.	RB Config	StartFreq (MHz)	StopFreq (MHz)	Result (dBm)	Limit	Verdict
n13	15	10	DFT-QPSK	M	Inner_1RB_Left	0.009	0.15	-65.19	≤-33dBm	PASS
n13	15	10	DFT-QPSK	M	Inner_1RB_Left	0.15	30	-64.18	≤-23dBm	PASS
n13	15	10	DFT-QPSK	M	Inner_1RB_Left	30	1000	-50.72	≤-13dBm	PASS
n13	15	10	DFT-QPSK	M	Inner_1RB_Left	1000	3000	-39.39	≤-13dBm	PASS
n13	15	10	DFT-QPSK	M	Inner_1RB_Left	3000	12000	-45.19	≤-13dBm	PASS
n13	15	10	DFT-QPSK	M	Inner_1RB_Left	12000	20000	-55.37	≤-13dBm	PASS

Test Graphs



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NTNV-n13-PC3-15-10-M-DFT-QPSK-Inner_1RB_Left-30-1000MHz-PASS



NTNV-n13-PC3-15-10-M-DFT-QPSK-Inner_1RB_Left-1000-3000MHz-PASS



NTNV-n13-PC3-15-10-M-DFT-QPSK-Inner_1RB_Left-3000-12000MHz-PASS



NTNV-n13-PC3-15-10-M-DFT-QPSK-Inner_1RB_Left-12000-20000MHz-PASS

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M.5 FREQUENCY STABILITY FOR SA

Test Result

Frequency Error VS. Voltage

Voltage													
Band	SCS (kHz)	BW (MHz)	Modulation	Ch.	RB Config	Voltage	Temp.	Result (ppm)	Limit (ppm)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
n13	15	10	DFT-QPSK	M	Outer_Full	VL	NT	-0.032842	-2.5~2.5	777	787	777-787	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	VN	NT	0.151495	-2.5~2.5	777	787	777-787	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	VH	NT	-0.039057	-2.5~2.5	777	787	---	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
n13	15	10	DFT-QPSK	M	Outer_Full	NV	-30	0.001746	-2.5~2.5	777	787	---	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	NV	-20	0.003325	-2.5~2.5	777	787	---	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	NV	-10	0.002585	-2.5~2.5	777	787	---	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	NV	0	0.002478	-2.5~2.5	777	787	---	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	NV	10	0.099796	-2.5~2.5	777	787	---	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	NV	20	0.028915	-2.5~2.5	777	787	---	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	NV	30	0.048714	-2.5~2.5	777	787	---	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	NV	40	0.001902	-2.5~2.5	777	787	---	PASS
n13	15	10	DFT-QPSK	M	Outer_Full	NV	50	0.002856	-2.5~2.5	777	787	---	PASS

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