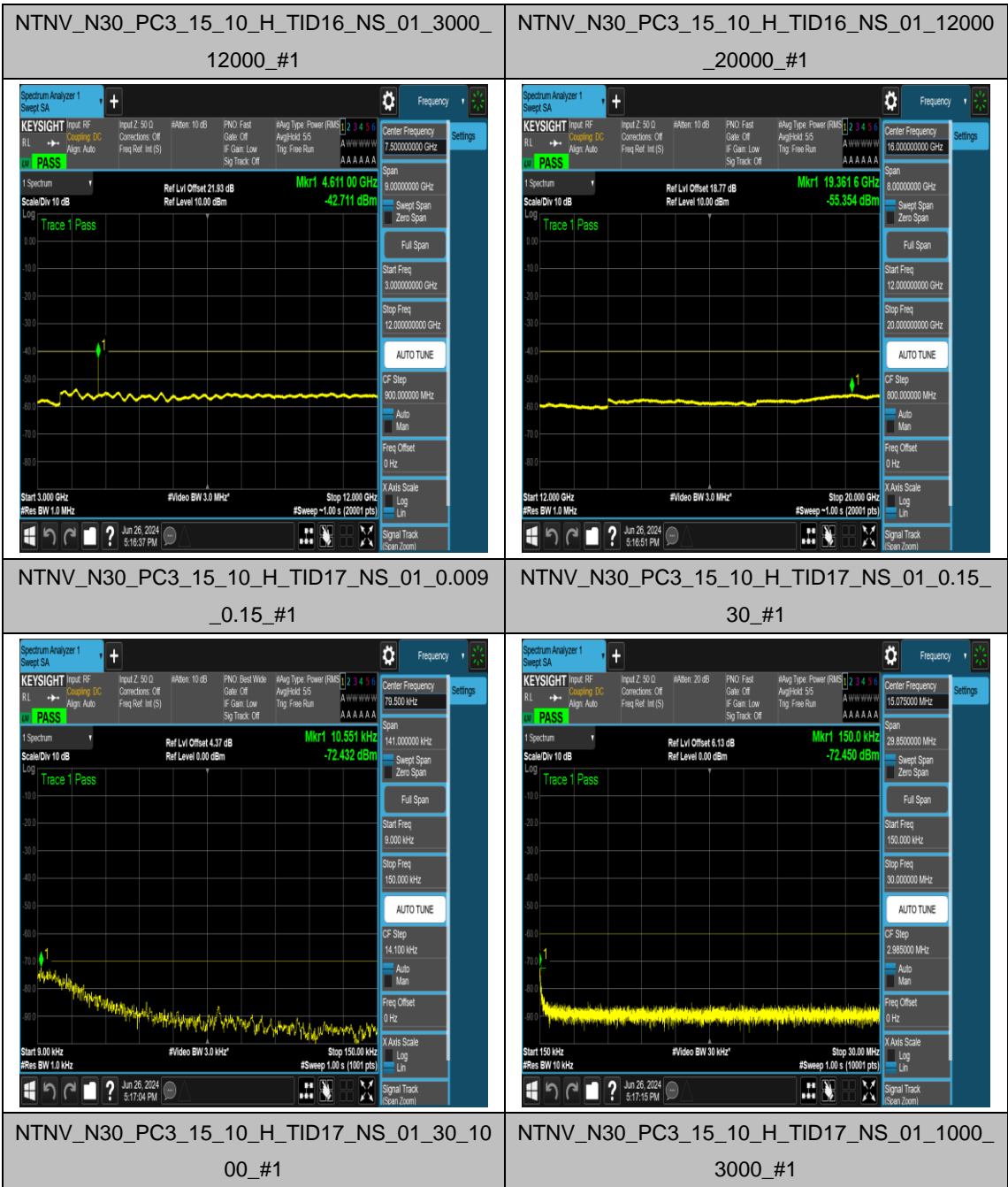


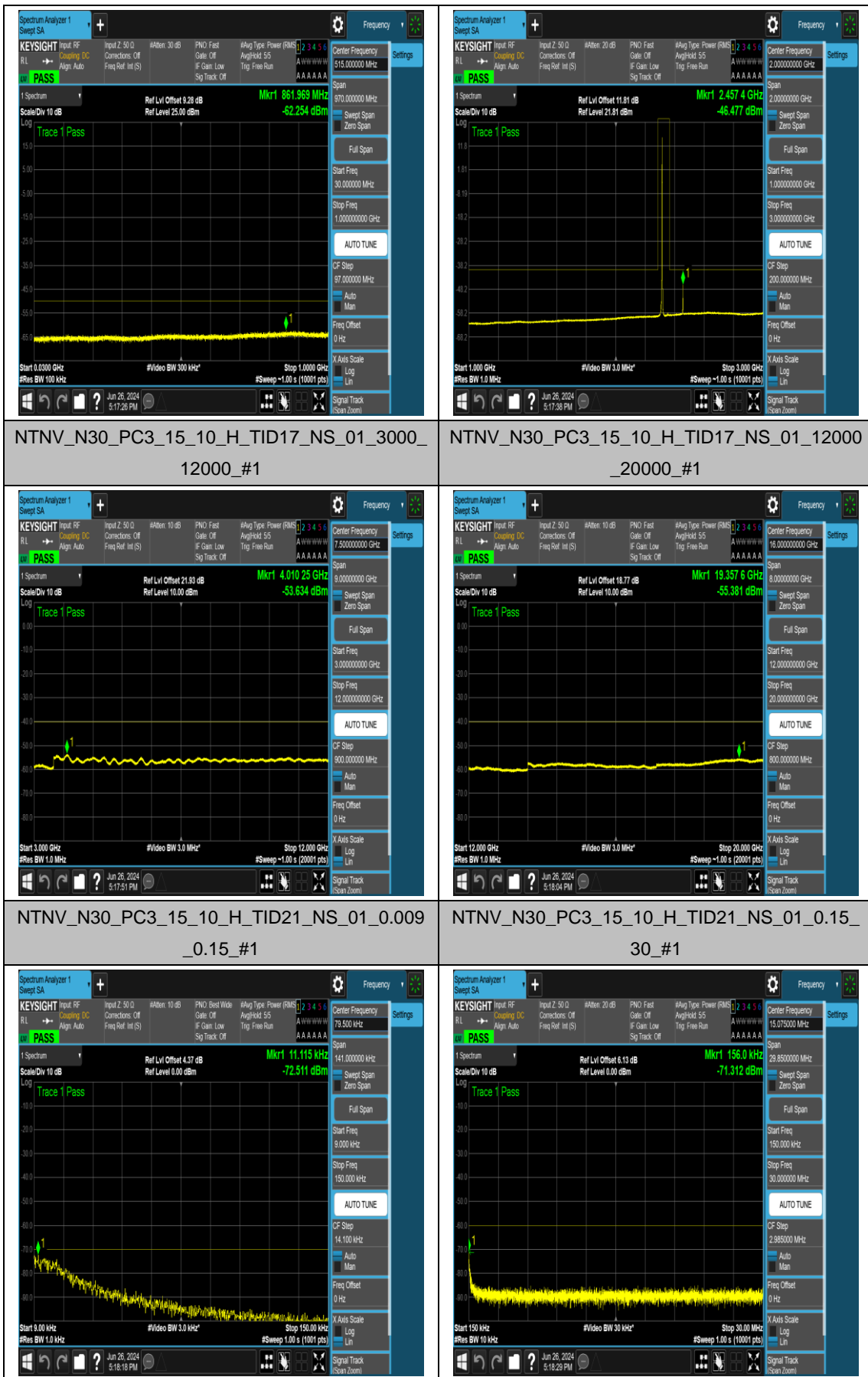
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NTNV\_N30\_PC3\_15\_10\_H\_TID16\_NS\_01\_0.15\_30\_#1

NTNV\_N30\_PC3\_15\_10\_H\_TID16\_NS\_01\_30\_1000\_00\_#1

NTNV\_N30\_PC3\_15\_10\_H\_TID16\_NS\_01\_1000\_3000\_#1



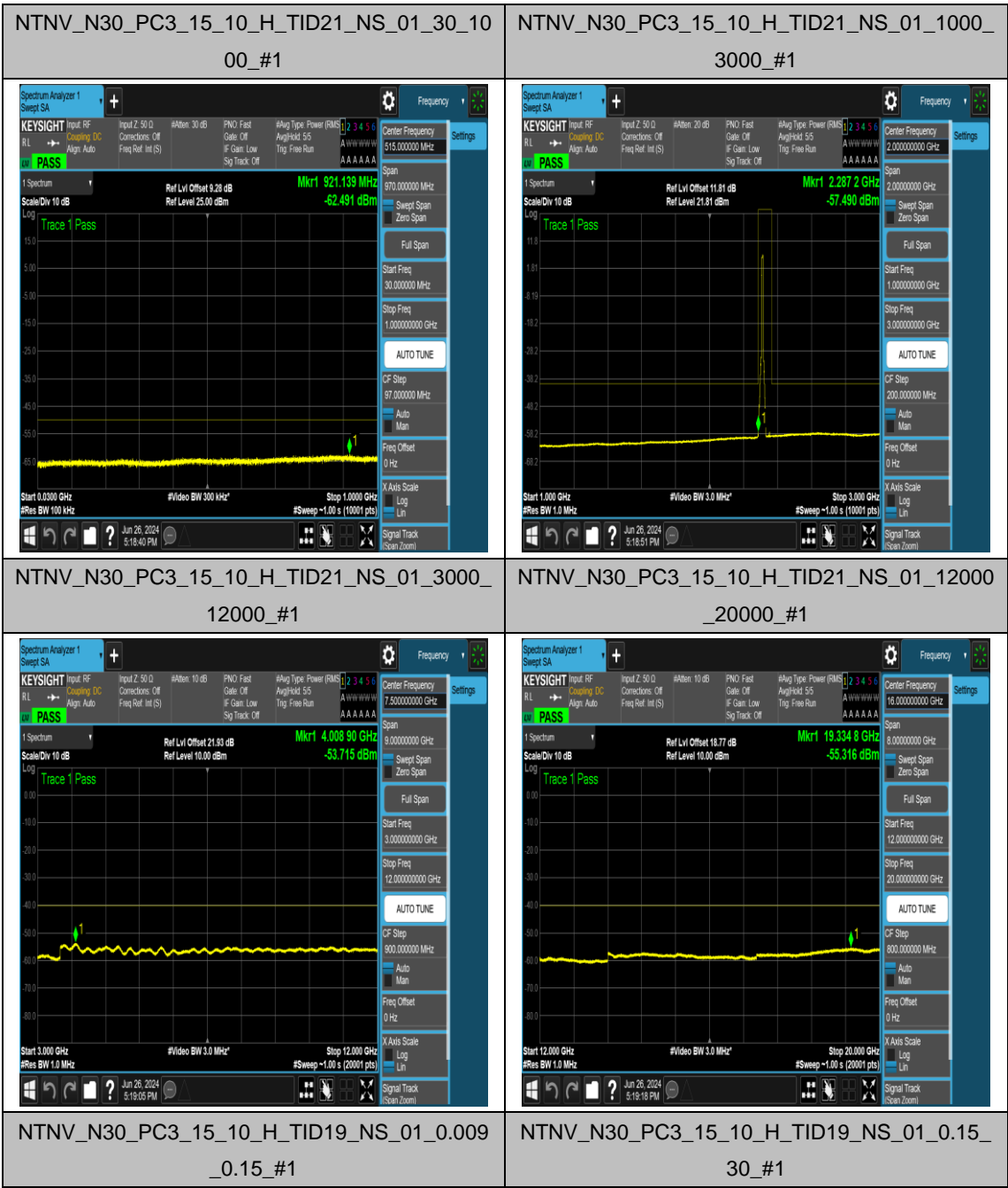


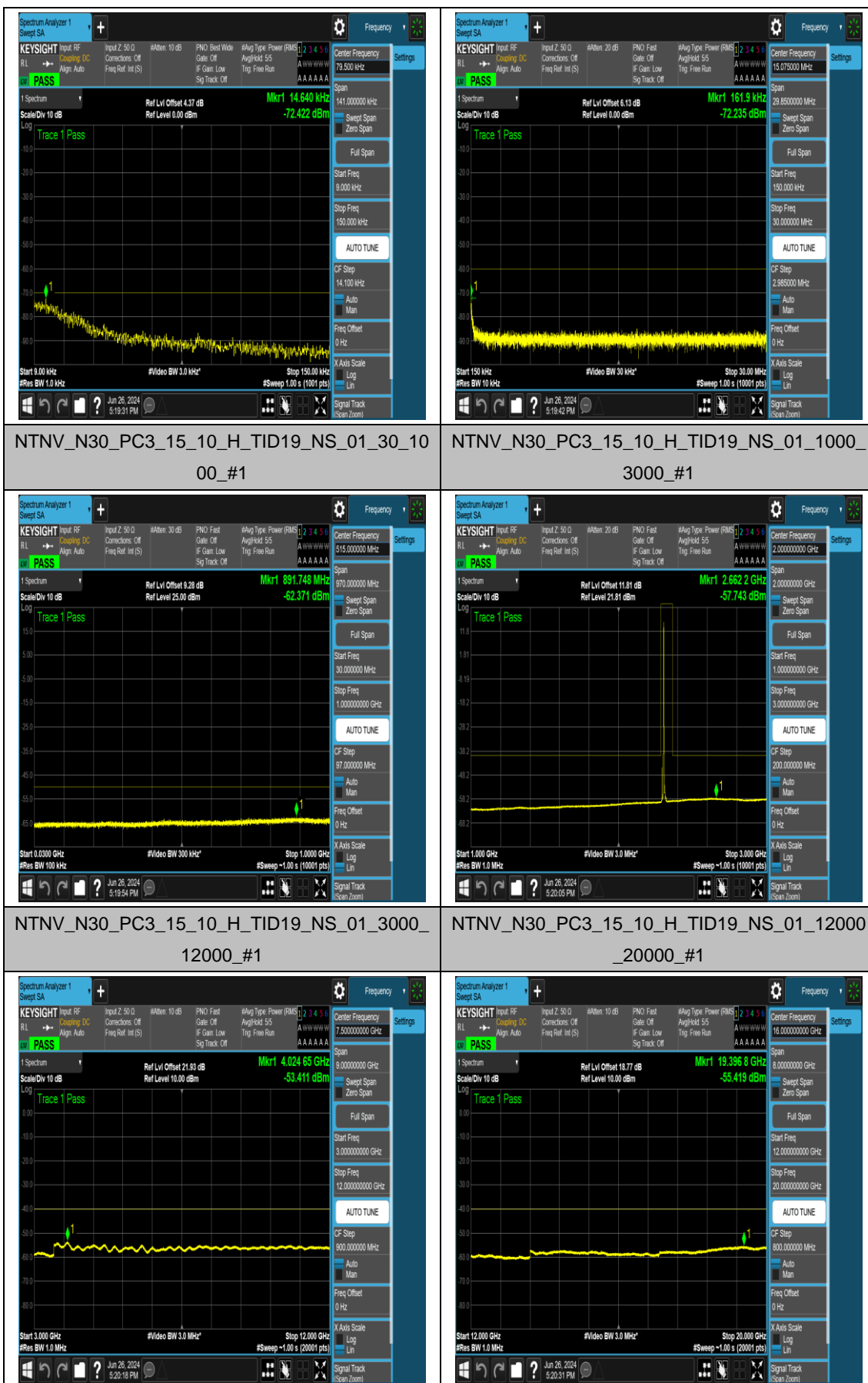
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NTNV\_N30\_PC3\_15\_10\_H\_TID17\_NS\_01\_12000\_20000\_#1

NTNV\_N30\_PC3\_15\_10\_H\_TID21\_NS\_01\_0.009\_0.15\_#1

NTNV\_N30\_PC3\_15\_10\_H\_TID21\_NS\_01\_0.15\_30\_#1



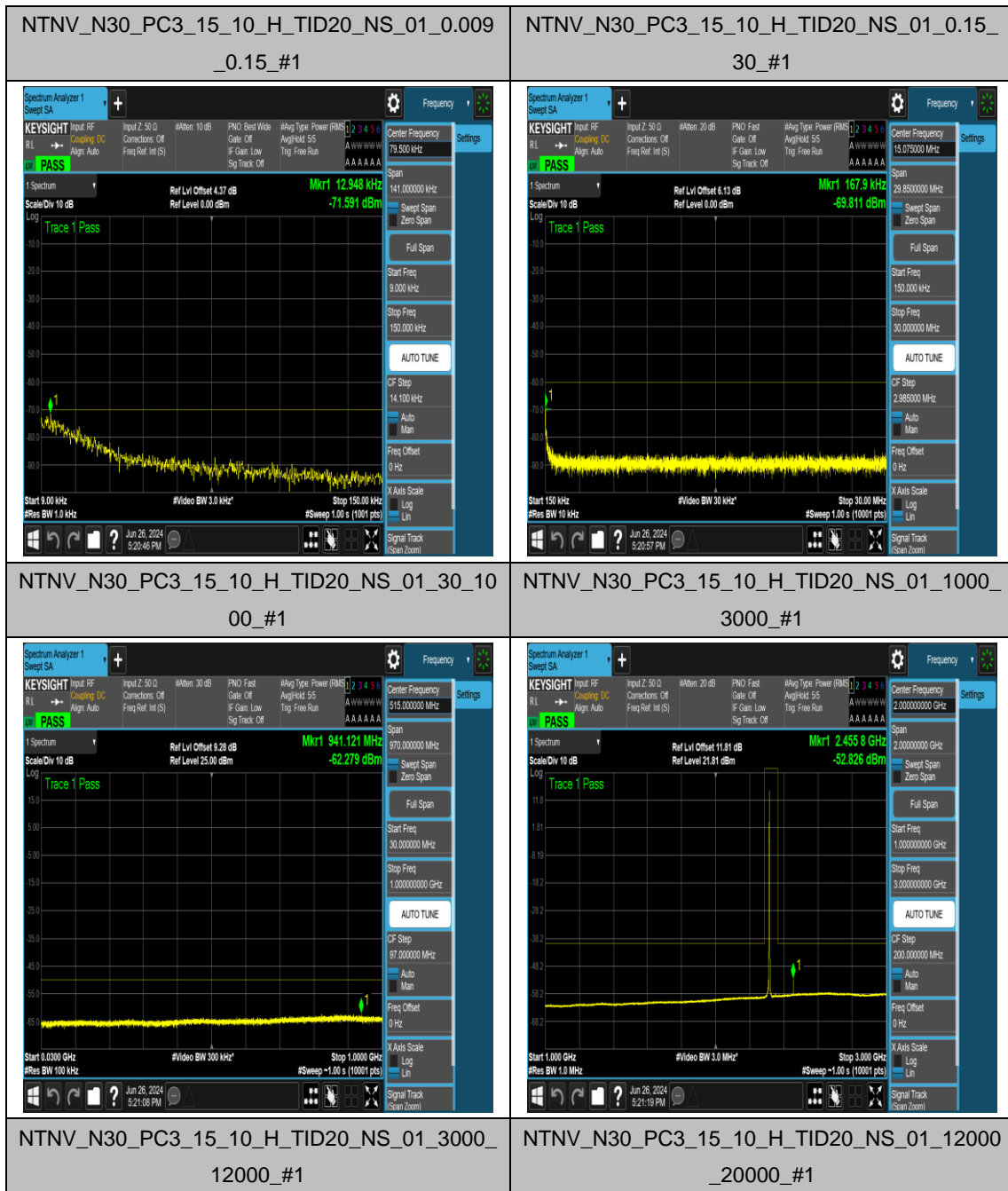


NTNV\_N30\_PC3\_15\_10\_H\_TID19\_NS\_01\_30\_10  
00\_#1

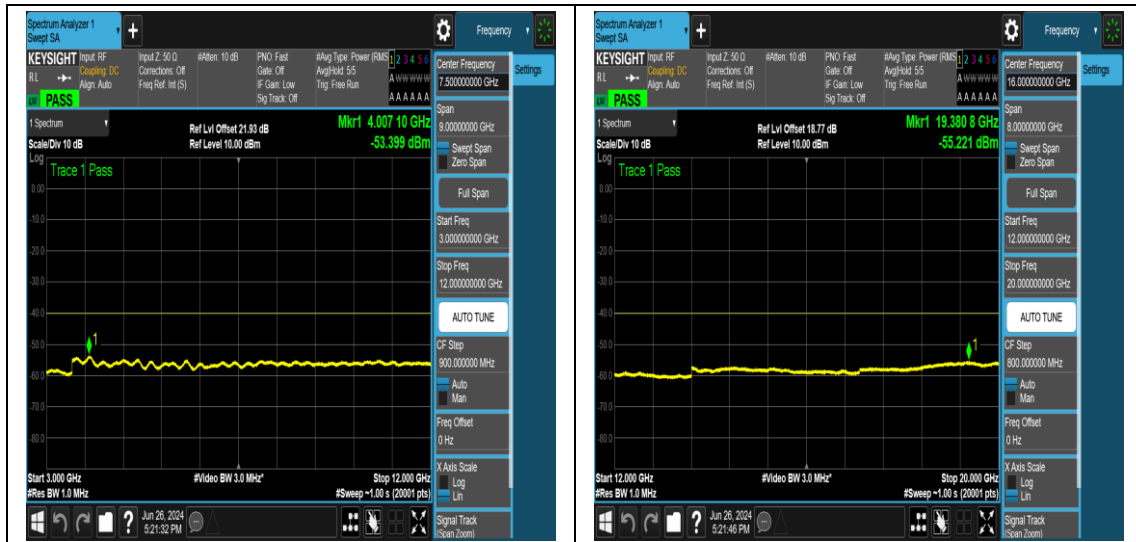
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NTNV\_N30\_PC3\_15\_10\_H\_TID19\_NS\_01\_3000\_12000\_#1

NTNV\_N30\_PC3\_15\_10\_H\_TID19\_NS\_01\_12000\_20000\_#1







## Appendix F: Frequency Stability for SA

### Test Result

#### Frequency Error VS. Voltage

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
N30	15	5	DFT-QPSK	L	Outer_Full	VL	NT	11.000000	0.004767	PASS
N30	15	5	DFT-QPSK	L	Outer_Full	VN	NT	13.000000	0.005634	PASS
N30	15	5	DFT-QPSK	L	Outer_Full	VH	NT	8.000000	0.003467	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	VL	NT	13.000000	0.005634	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	VN	NT	13.000000	0.005634	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	VH	NT	9.000000	0.003900	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	VL	NT	11.000000	0.004762	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	VN	NT	18.000000	0.007792	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	VH	NT	1.000000	0.000433	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	VL	NT	18.000000	0.007792	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	VN	NT	15.000000	0.006494	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	VH	NT	4.000000	0.001732	PASS
N30	15	5	DFT-QPSK	H	Outer_Full	VL	NT	8.000000	0.003459	PASS
N30	15	5	DFT-QPSK	H	Outer_Full	VN	NT	1.000000	0.000432	PASS
N30	15	5	DFT-QPSK	H	Outer_Full	VH	NT	7.000000	0.003027	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	VL	NT	2.000000	0.000865	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	VN	NT	12.000000	0.005189	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	VH	NT	7.000000	0.003027	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	VL	NT	3.000000	0.001299	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	VN	NT	6.000000	0.002597	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	VH	NT	17.000000	0.007359	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	VL	NT	1.000000	0.000433	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	VN	NT	11.000000	0.004762	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	VH	NT	3.000000	0.001299	PASS

#### Frequency Error VS. Temperature

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
N30	15	5	DFT-QPSK	L	Outer_Full	NV	-30	19.000000	0.008234	PASS

N30	15	5	DFT-QPSK	L	Outer_Full	NV	-20	2.000000	0.000867	PASS
N30	15	5	DFT-QPSK	L	Outer_Full	NV	-10	11.000000	0.004767	PASS
N30	15	5	DFT-QPSK	L	Outer_Full	NV	0	3.000000	0.001300	PASS
N30	15	5	DFT-QPSK	L	Outer_Full	NV	10	17.000000	0.007367	PASS
N30	15	5	DFT-QPSK	L	Outer_Full	NV	20	1.000000	0.000433	PASS
N30	15	5	DFT-QPSK	L	Outer_Full	NV	30	15.000000	0.006501	PASS
N30	15	5	DFT-QPSK	L	Outer_Full	NV	40	17.000000	0.007367	PASS
N30	15	5	DFT-QPSK	L	Outer_Full	NV	50	12.000000	0.005200	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	NV	-30	4.000000	0.001733	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	NV	-20	2.000000	0.000867	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	NV	-10	16.000000	0.006934	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	NV	0	12.000000	0.005200	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	NV	10	7.000000	0.003034	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	NV	20	2.000000	0.000867	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	NV	30	4.000000	0.001733	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	NV	40	18.000000	0.007801	PASS
N30	15	5	DFT-16QAM	L	Outer_Full	NV	50	13.000000	0.005634	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	NV	-30	15.000000	0.006494	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	NV	-20	11.000000	0.004762	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	NV	-10	9.000000	0.003896	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	NV	0	4.000000	0.001732	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	NV	10	18.000000	0.007792	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	NV	20	14.000000	0.006061	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	NV	30	9.000000	0.003896	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	NV	40	16.000000	0.006926	PASS
N30	15	5	DFT-QPSK	M	Outer_Full	NV	50	11.000000	0.004762	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	NV	-30	18.000000	0.007792	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	NV	-20	1.000000	0.000433	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	NV	-10	15.000000	0.006494	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	NV	0	10.000000	0.004329	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	NV	10	6.000000	0.002597	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	NV	20	1.000000	0.000433	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	NV	30	6.000000	0.002597	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	NV	40	13.000000	0.005628	PASS
N30	15	5	DFT-16QAM	M	Outer_Full	NV	50	9.000000	0.003896	PASS
N30	15	5	DFT-QPSK	H	Outer_Full	NV	-30	2.000000	0.000865	PASS
N30	15	5	DFT-QPSK	H	Outer_Full	NV	-20	16.000000	0.006919	PASS
N30	15	5	DFT-QPSK	H	Outer_Full	NV	-10	11.000000	0.004757	PASS
N30	15	5	DFT-QPSK	H	Outer_Full	NV	0	7.000000	0.003027	PASS
N30	15	5	DFT-QPSK	H	Outer_Full	NV	10	8.000000	0.003459	PASS

N30	15	5	DFT-QPSK	H	Outer_Full	NV	20	3.000000	0.001297	PASS
N30	15	5	DFT-QPSK	H	Outer_Full	NV	30	17.000000	0.007351	PASS
N30	15	5	DFT-QPSK	H	Outer_Full	NV	40	3.000000	0.001297	PASS
N30	15	5	DFT-QPSK	H	Outer_Full	NV	50	17.000000	0.007351	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	NV	-30	2.000000	0.000865	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	NV	-20	17.000000	0.007351	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	NV	-10	12.000000	0.005189	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	NV	0	17.000000	0.007351	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	NV	10	12.000000	0.005189	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	NV	20	8.000000	0.003459	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	NV	30	3.000000	0.001297	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	NV	40	5.000000	0.002162	PASS
N30	15	5	DFT-16QAM	H	Outer_Full	NV	50	19.000000	0.008216	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	NV	-30	7.000000	0.003030	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	NV	-20	2.000000	0.000866	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	NV	-10	17.000000	0.007359	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	NV	0	12.000000	0.005195	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	NV	10	14.000000	0.006061	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	NV	20	9.000000	0.003896	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	NV	30	1.000000	0.000433	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	NV	40	15.000000	0.006494	PASS
N30	15	10	DFT-QPSK	M	Outer_Full	NV	50	1.000000	0.000433	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	NV	-30	17.000000	0.007359	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	NV	-20	3.000000	0.001299	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	NV	-10	18.000000	0.007792	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	NV	0	10.000000	0.004329	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	NV	10	2.000000	0.000866	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	NV	20	16.000000	0.006926	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	NV	30	11.000000	0.004762	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	NV	40	6.000000	0.002597	PASS
N30	15	10	DFT-16QAM	M	Outer_Full	NV	50	2.000000	0.000866	PASS