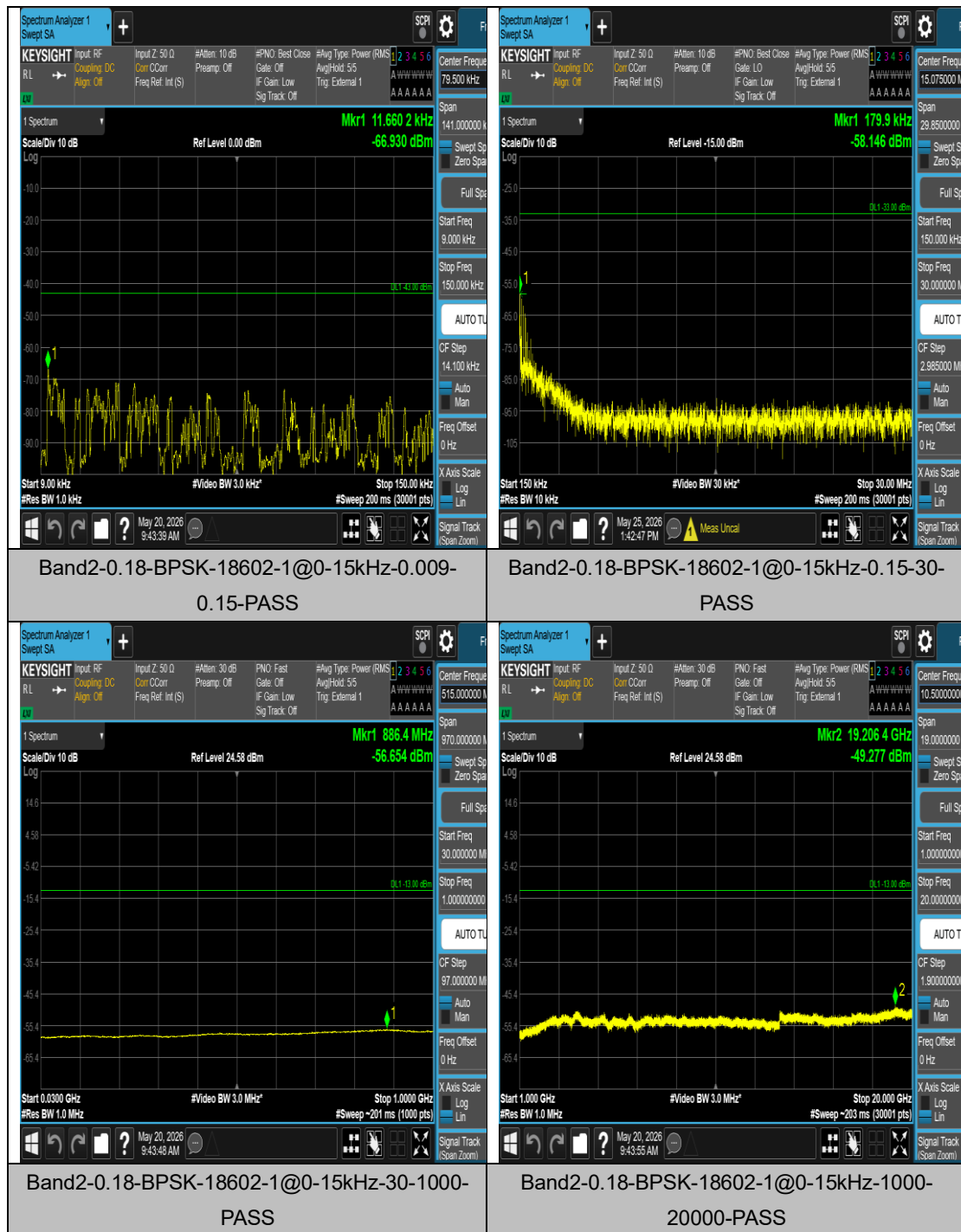
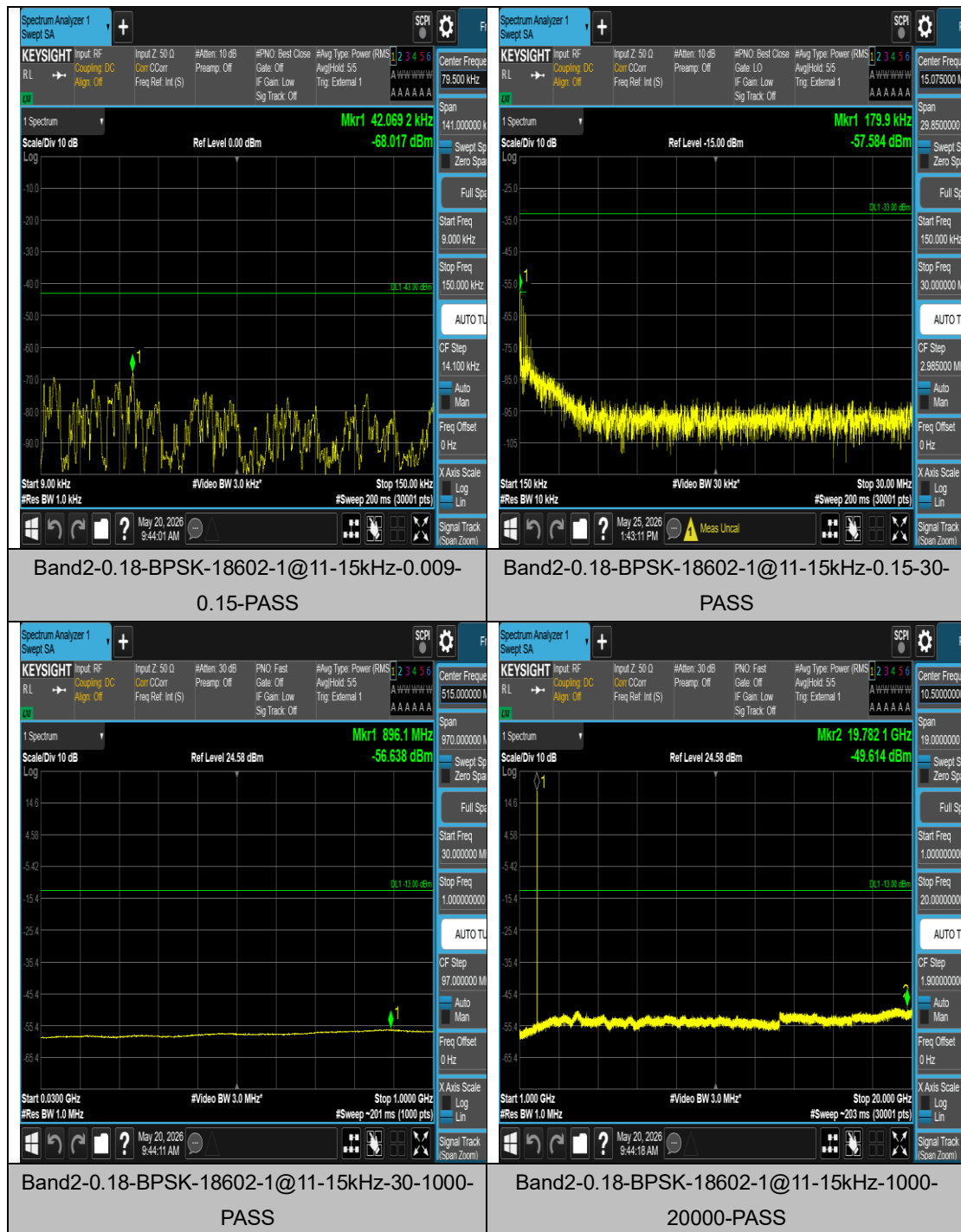
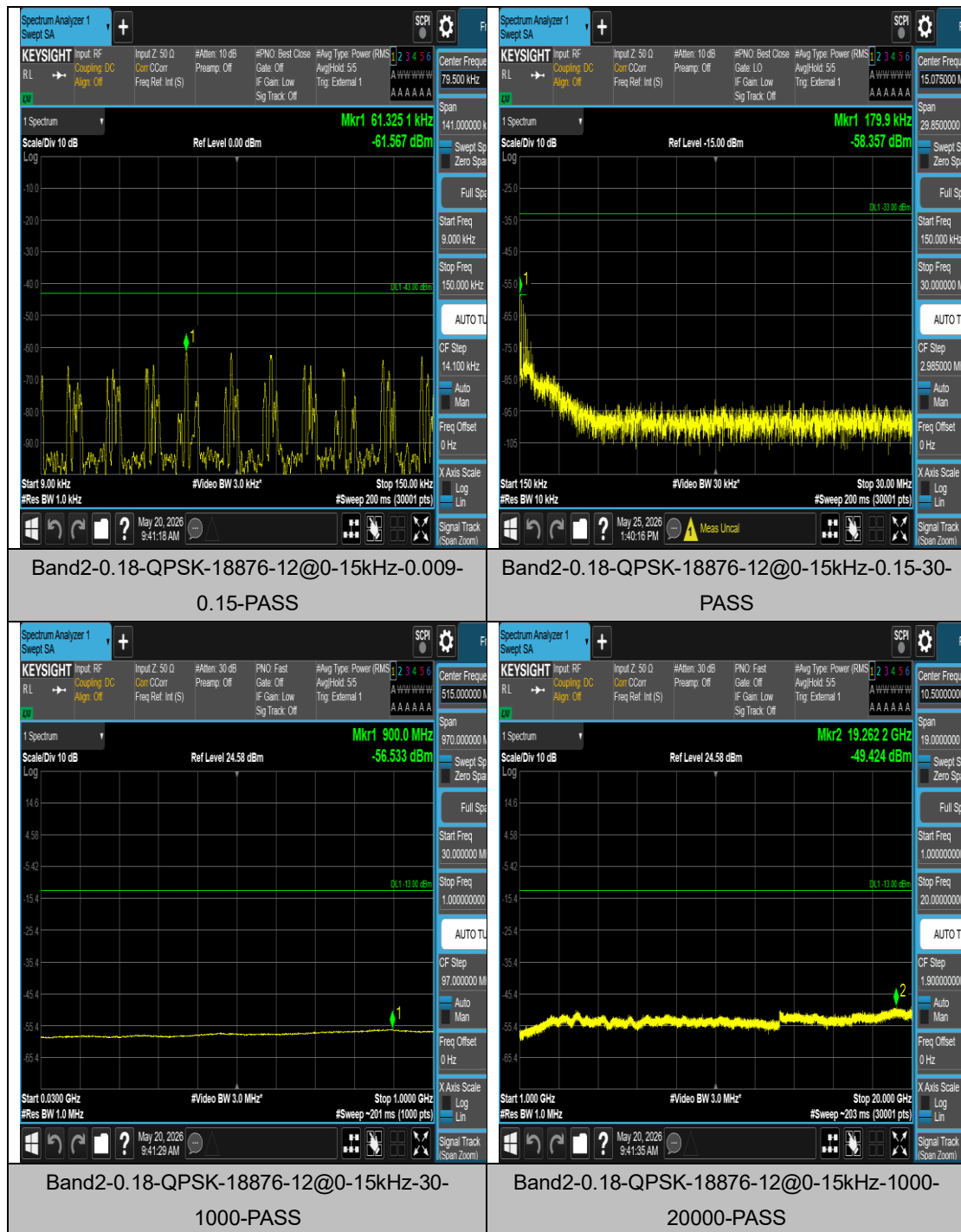
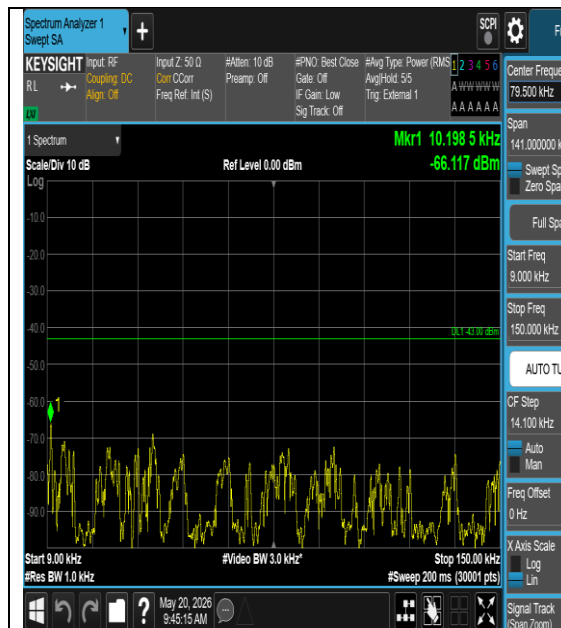


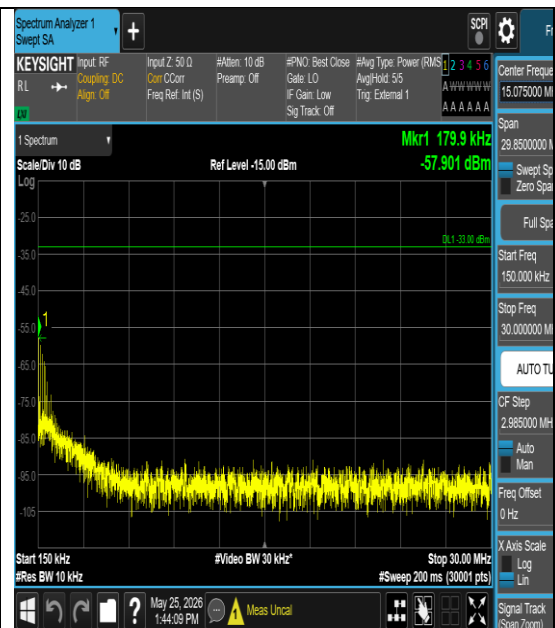








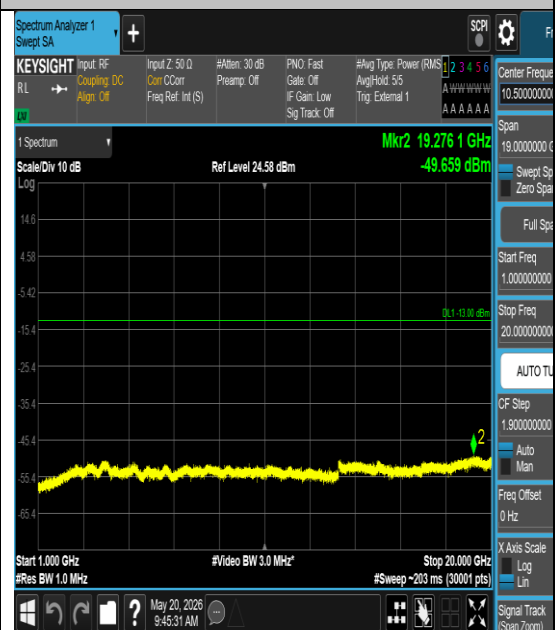
Band2-0.18-BPSK-18876-1@0-15kHz-0.009-0.15-PASS



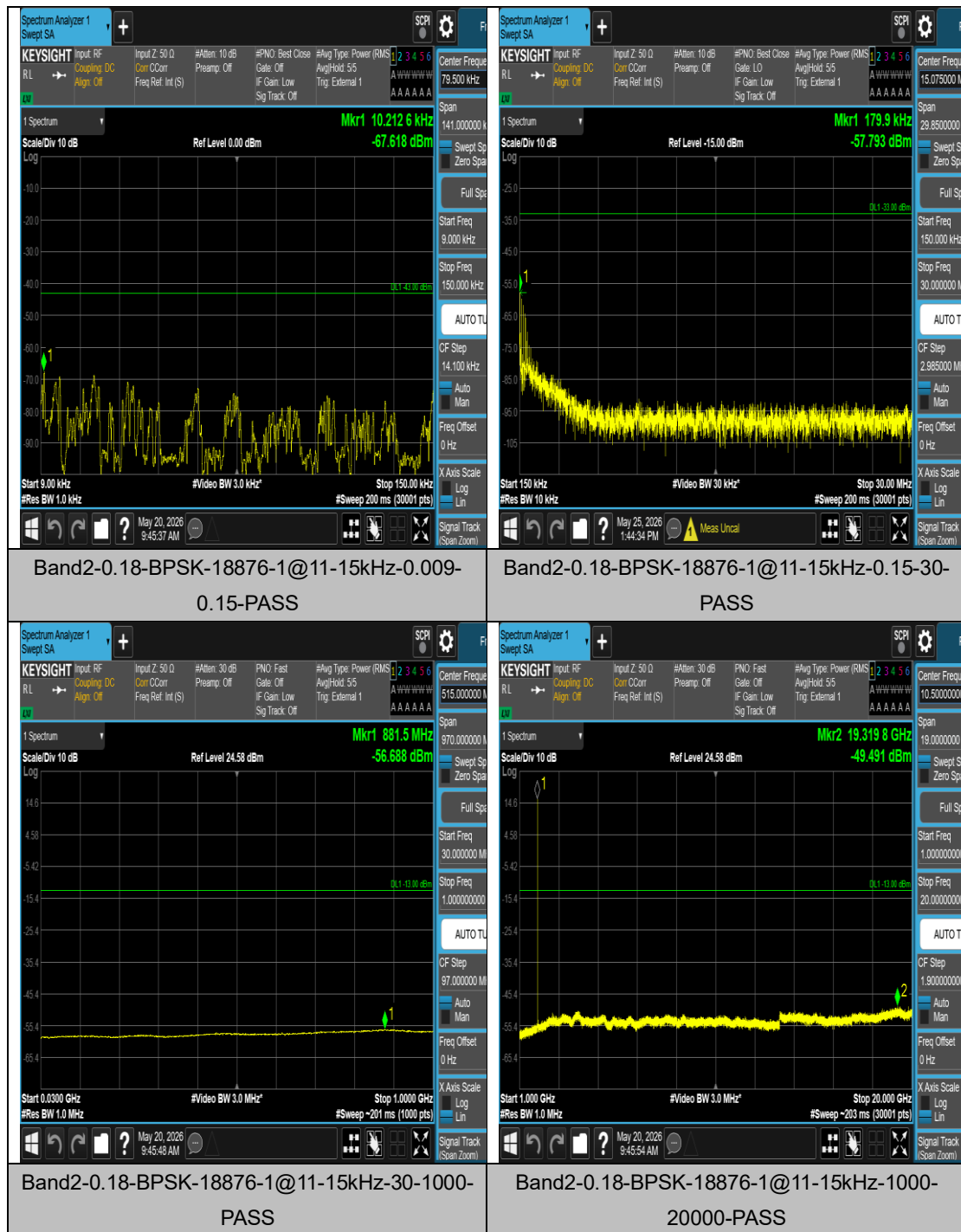
Band2-0.18-BPSK-18876-1@0-15kHz-0.15-30-PASS

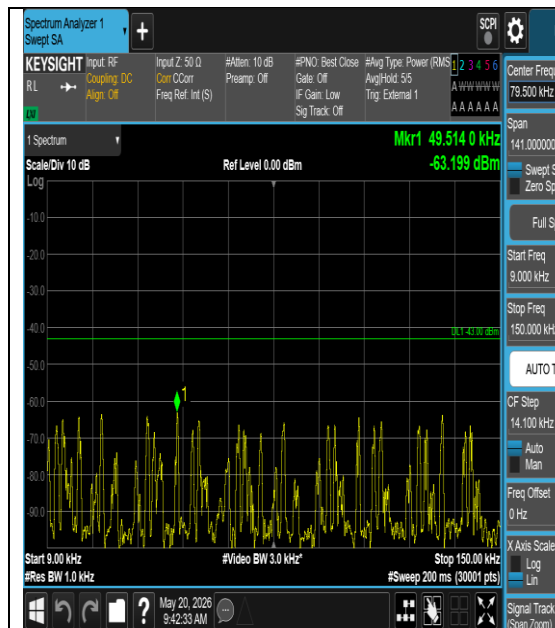


Band2-0.18-BPSK-18876-1@0-15kHz-30-1000-PASS

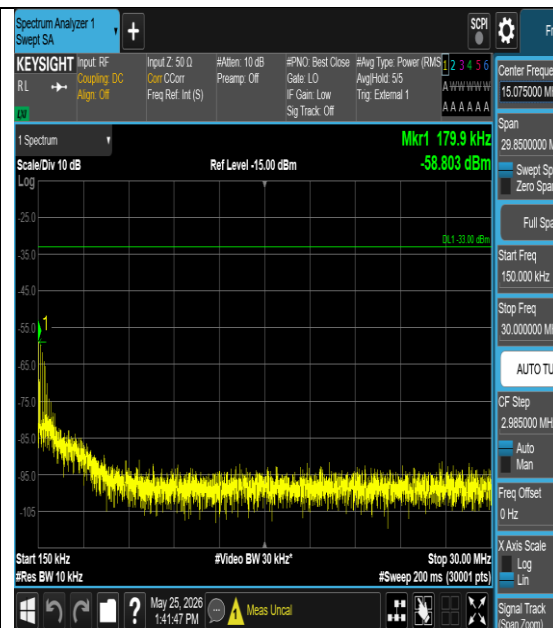


Band2-0.18-BPSK-18876-1@0-15kHz-1000-20000-PASS





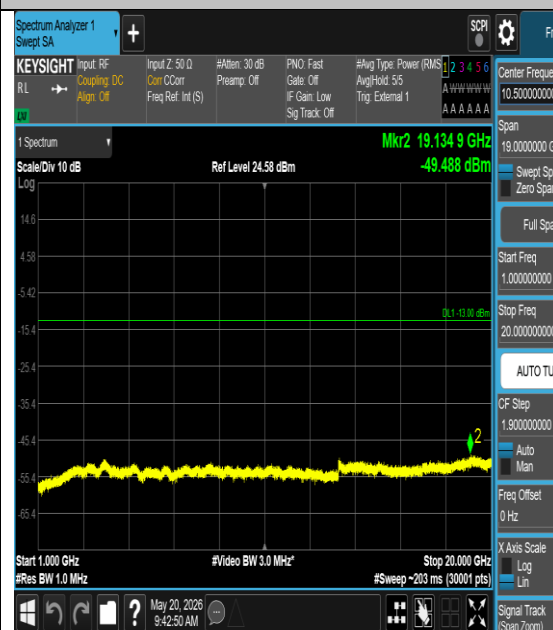
Band2-0.18-QPSK-19198-12@0-15kHz-0.009-
0.15-PASS



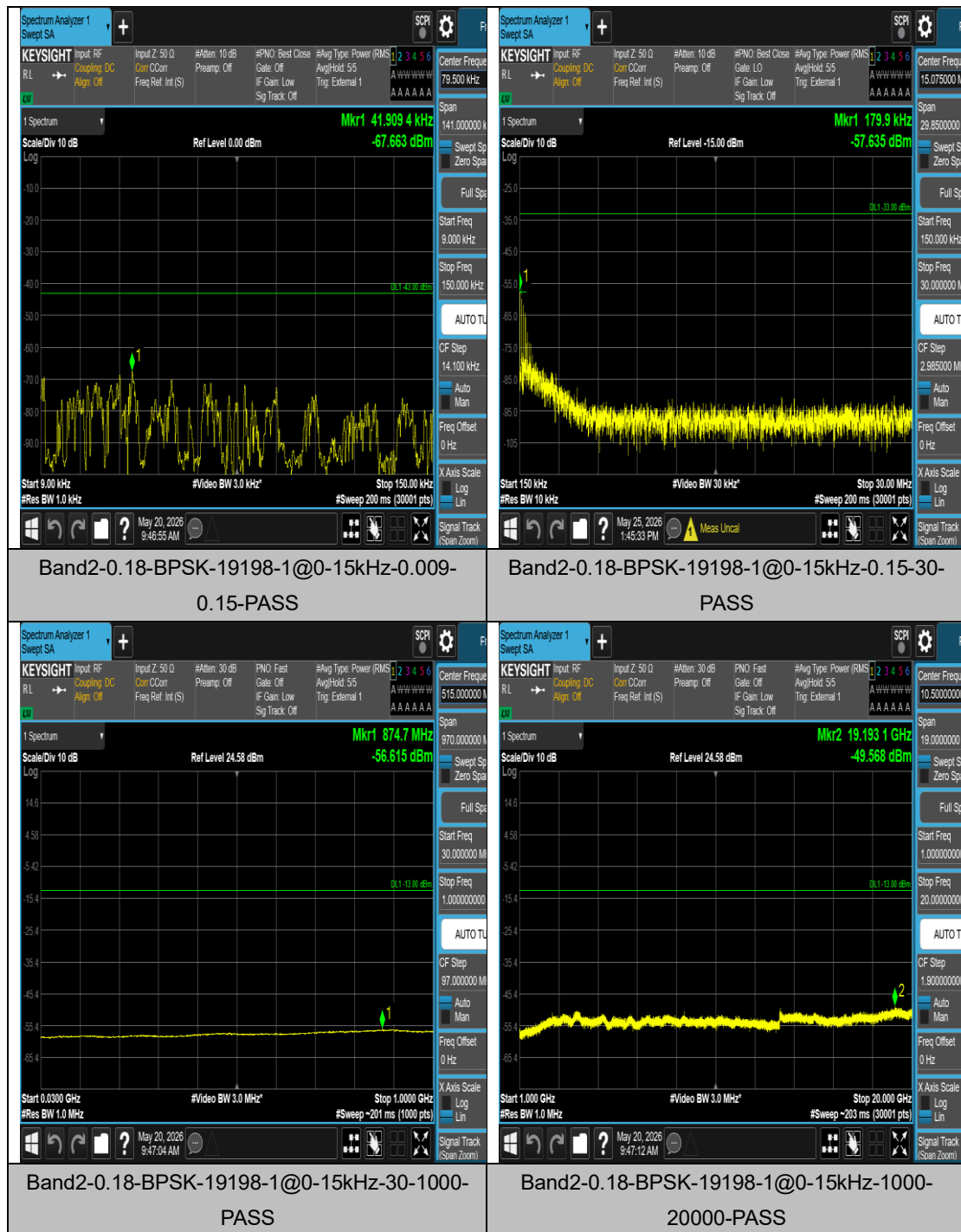
Band2-0.18-QPSK-19198-12@0-15kHz-0.15-30-
PASS

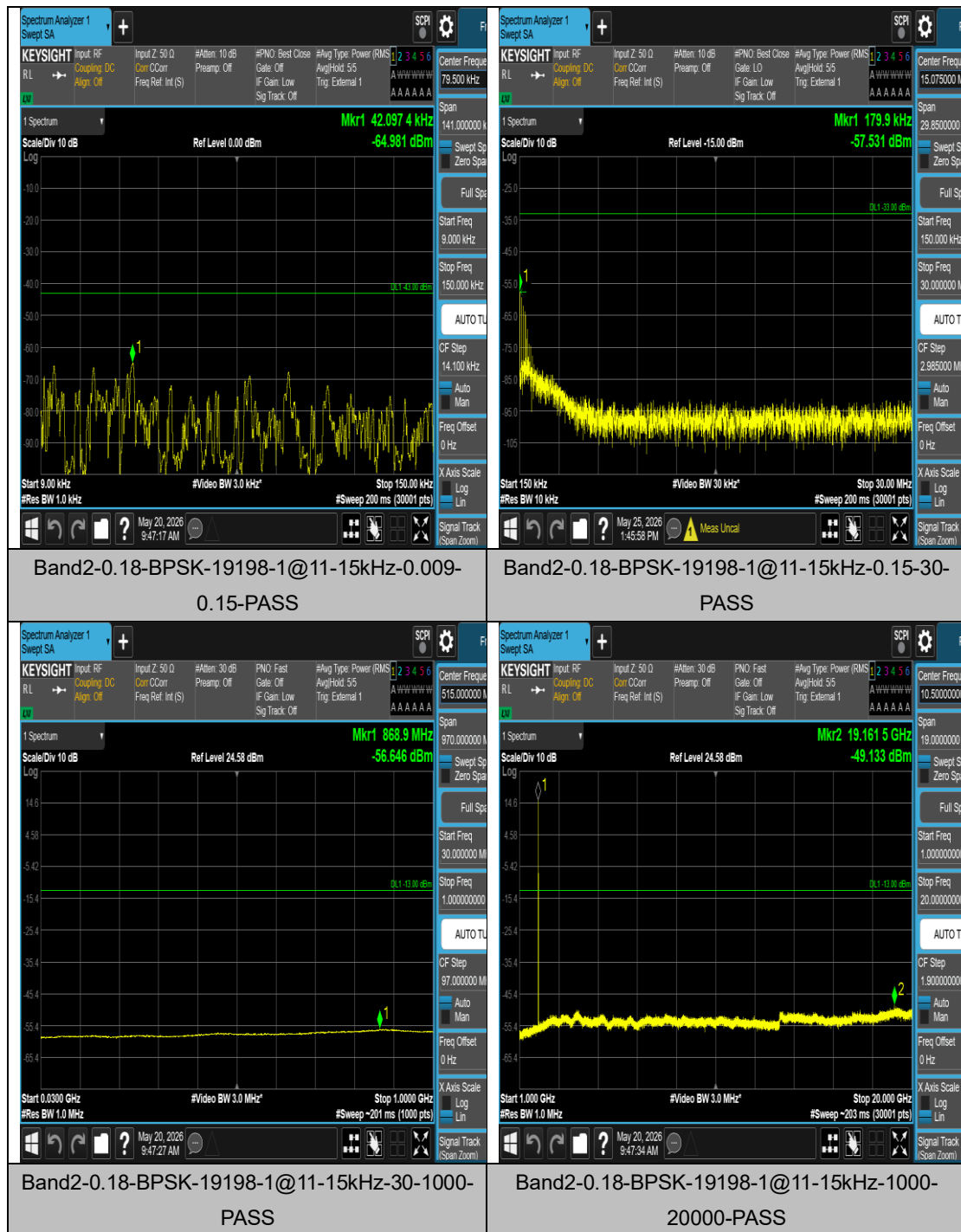


Band2-0.18-QPSK-19198-12@0-15kHz-30-
1000-PASS



Band2-0.18-QPSK-19198-12@0-15kHz-1000-
20000-PASS





Appendix F: Frequency Stability for NB1

Test Result

Voltage												
Band	OpMode	SCS	Bandwidth	Modulation	Channel	Tones	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	Stand-Alone	3.75 kHz	0.18	QPSK	18876	1@0	VN	NT	2.00	0.001065	±2.5	PASS
Band2	Stand-Alone	3.75 kHz	0.18	QPSK	18876	1@0	VL	NT	1.10	0.000586	±2.5	PASS
Band2	Stand-Alone	3.75 kHz	0.18	QPSK	18876	1@0	VH	NT	3.40	0.001811	±2.5	PASS
Band2	Stand-Alone	15k Hz	0.18	QPSK	18876	1@0	VN	NT	1.40	0.000746	±2.5	PASS
Band2	Stand-Alone	15k Hz	0.18	QPSK	18876	1@0	VL	NT	1.60	0.000852	±2.5	PASS
Band2	Stand-Alone	15k Hz	0.18	QPSK	18876	1@0	VH	NT	4.20	0.002237	±2.5	PASS
Band2	Stand-Alone	15k Hz	0.18	QPSK	18876	1@11	VL	NT	4.40	0.002343	±2.5	PASS
Band2	Stand-Alone	15k Hz	0.18	QPSK	18876	1@11	VH	NT	3.20	0.001704	±2.5	PASS
Band2	Stand-Alone	3.75 kHz	0.18	QPSK	18876	1@47	VN	NT	0.60	0.000320	±2.5	PASS

Band2	Stand-Alone	3.75 kHz	0.18	QPSK	18876	1@47	VL	NT	-0.60	-0.000320	±2.5	PASS
Band2	Stand-Alone	3.75 kHz	0.18	QPSK	18876	1@47	VH	NT	3.30	0.001758	±2.5	PASS
Band2	Stand-Alone	15k Hz	0.18	QPSK	18876	1@11	VN	NT	0.60	0.000320	±2.5	PASS

Temperature												
Band	OpMode	Bandwidth	Modulation	Channel	Tones	SCS	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	Stand-Alone	3.75k Hz	0.18	QPSK	18876	1@0	NV	-30	2.50	0.001331	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	0.18	QPSK	18876	1@0	NV	-20	0.50	0.000266	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	0.18	QPSK	18876	1@0	NV	-10	-0.70	-0.000373	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	0.18	QPSK	18876	1@0	NV	0	-1.10	-0.000586	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	0.18	QPSK	18876	1@0	NV	10	3.20	0.001704	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	0.18	QPSK	18876	1@0	NV	20	2.20	0.001172	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	0.18	QPSK	18876	1@0	NV	30	3.40	0.001811	±2.5	PASS

	Alone											
Band2	Standard-Alone	3.75k Hz	0.18	QPSK	18876	1@0	NV	40	2.00	0.001065	±2.5	PASS
Band2	Standard-Alone	3.75k Hz	0.18	QPSK	18876	1@0	NV	50	2.20	0.001172	±2.5	PASS
Band2	Standard-Alone	3.75k Hz	0.18	QPSK	18876	1@47	NV	-30	3.10	0.001651	±2.5	PASS
Band2	Standard-Alone	3.75k Hz	0.18	QPSK	18876	1@47	NV	-20	7.80	0.004154	±2.5	PASS
Band2	Standard-Alone	3.75k Hz	0.18	QPSK	18876	1@47	NV	-10	6.50	0.003462	±2.5	PASS
Band2	Standard-Alone	3.75k Hz	0.18	QPSK	18876	1@47	NV	0	5.90	0.003142	±2.5	PASS
Band2	Standard-Alone	3.75k Hz	0.18	QPSK	18876	1@47	NV	10	6.90	0.003675	±2.5	PASS
Band2	Standard-Alone	3.75k Hz	0.18	QPSK	18876	1@47	NV	20	7.60	0.004048	±2.5	PASS
Band2	Standard-Alone	3.75k Hz	0.18	QPSK	18876	1@47	NV	30	5.90	0.003142	±2.5	PASS
Band2	Standard-Alone	3.75k Hz	0.18	QPSK	18876	1@47	NV	40	6.40	0.003409	±2.5	PASS
Band	Standard	3.75k	0.18	QPSK	188	1@	NV	50	5.90	0.003	±2.	PASS

d2	d- Alone	Hz		K	76	47				142	5	S
Band2	Standard- Alone	15kHz	0.18	QPSK	18876	1@0	NV	-30	5.50	0.002929	±2.5	PASS
Band2	Standard- Alone	15kHz	0.18	QPSK	18876	1@0	NV	-20	1.60	0.000852	±2.5	PASS
Band2	Standard- Alone	15kHz	0.18	QPSK	18876	1@0	NV	-10	0.50	0.000266	±2.5	PASS
Band2	Standard- Alone	15kHz	0.18	QPSK	18876	1@0	NV	0	2.00	0.001065	±2.5	PASS
Band2	Standard- Alone	15kHz	0.18	QPSK	18876	1@0	NV	10	2.80	0.001491	±2.5	PASS
Band2	Standard- Alone	15kHz	0.18	QPSK	18876	1@0	NV	20	-1.30	-0.000692	±2.5	PASS
Band2	Standard- Alone	15kHz	0.18	QPSK	18876	1@0	NV	30	0.50	0.000266	±2.5	PASS
Band2	Standard- Alone	15kHz	0.18	QPSK	18876	1@0	NV	40	0.20	0.000107	±2.5	PASS
Band2	Standard- Alone	15kHz	0.18	QPSK	18876	1@0	NV	50	0.90	0.000479	±2.5	PASS
Band2	Standard- Alone	15kHz	0.18	QPSK	18876	1@11	NV	-30	3.20	0.001704	±2.5	PASS

Band 2	Standard Alone	15kHz	0.18	QPSK	18876	1@11	NV	-20	2.60	0.001385	±2.5	PASS
Band 2	Standard Alone	15kHz	0.18	QPSK	18876	1@11	NV	-10	4.80	0.002556	±2.5	PASS
Band 2	Standard Alone	15kHz	0.18	QPSK	18876	1@11	NV	0	4.10	0.002184	±2.5	PASS
Band 2	Standard Alone	15kHz	0.18	QPSK	18876	1@11	NV	10	4.80	0.002556	±2.5	PASS
Band 2	Standard Alone	15kHz	0.18	QPSK	18876	1@11	NV	20	5.40	0.002876	±2.5	PASS
Band 2	Standard Alone	15kHz	0.18	QPSK	18876	1@11	NV	30	5.00	0.002663	±2.5	PASS
Band 2	Standard Alone	15kHz	0.18	QPSK	18876	1@11	NV	40	5.40	0.002876	±2.5	PASS
Band 2	Standard Alone	15kHz	0.18	QPSK	18876	1@11	NV	50	5.40	0.002876	±2.5	PASS