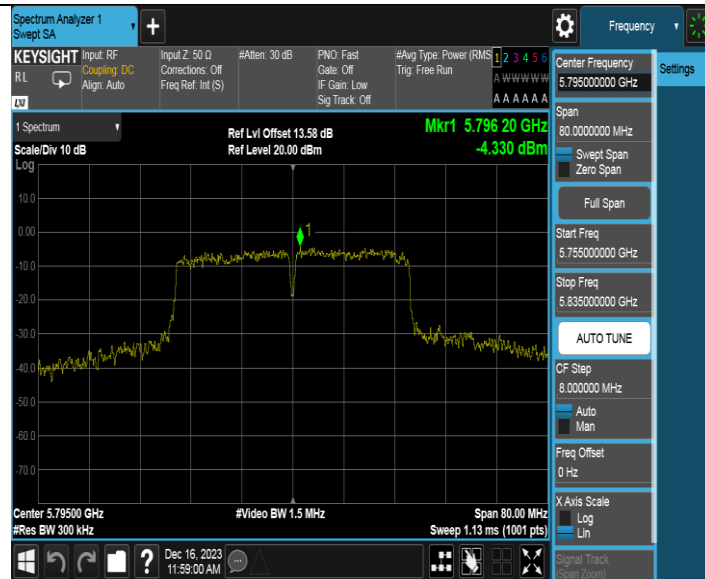
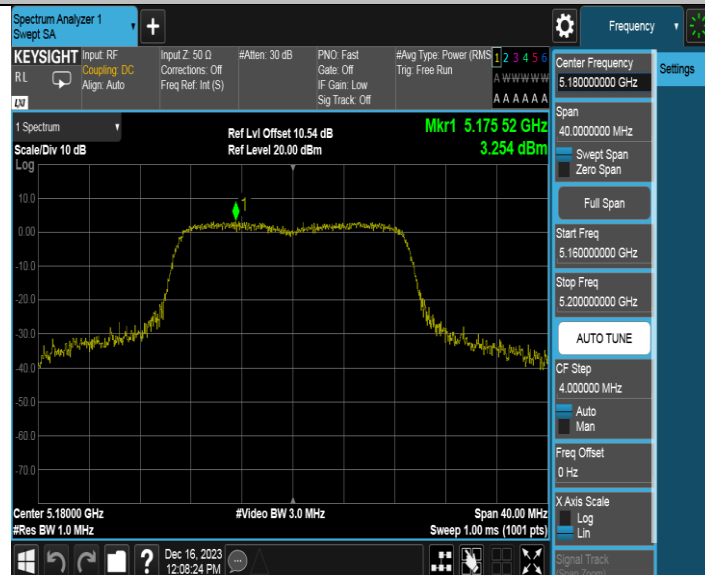
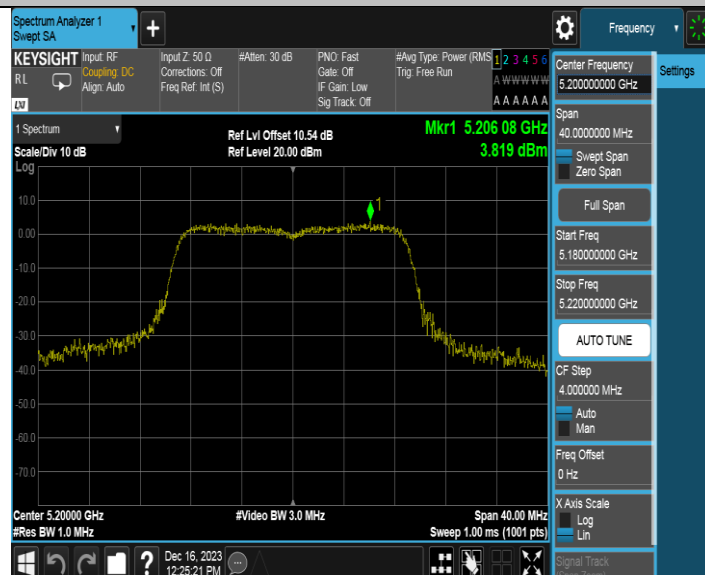




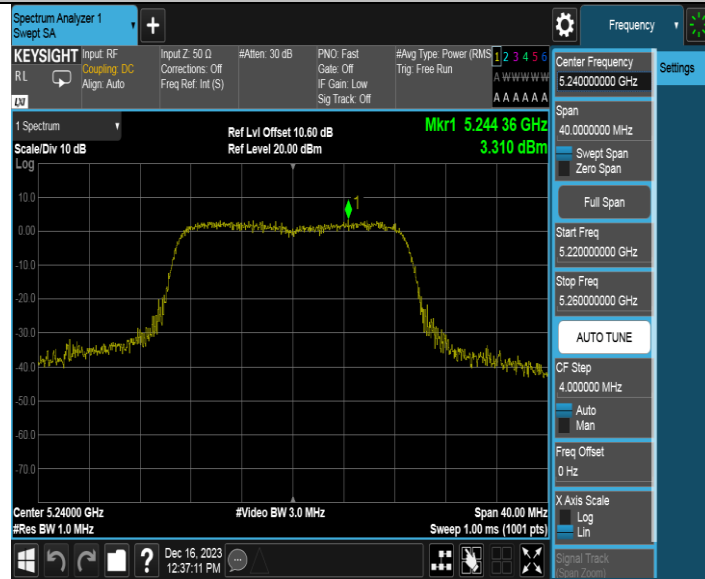
11AC20SISO_Ant1_5180



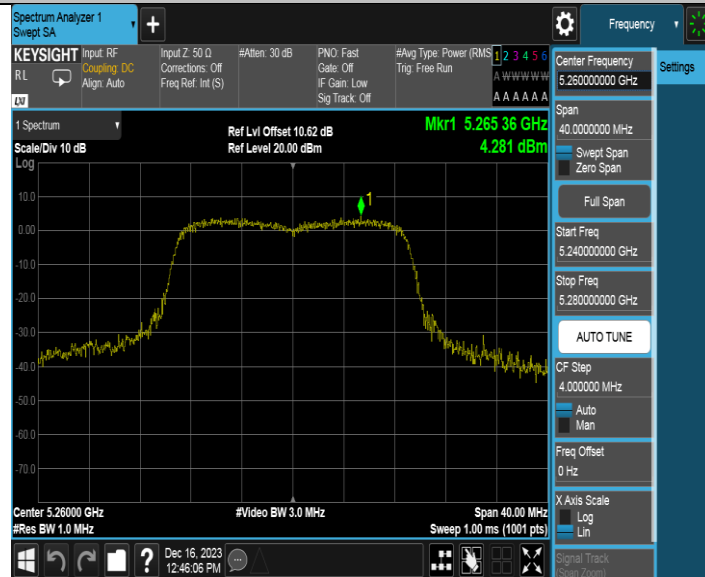
11AC20SISO_Ant1_5200



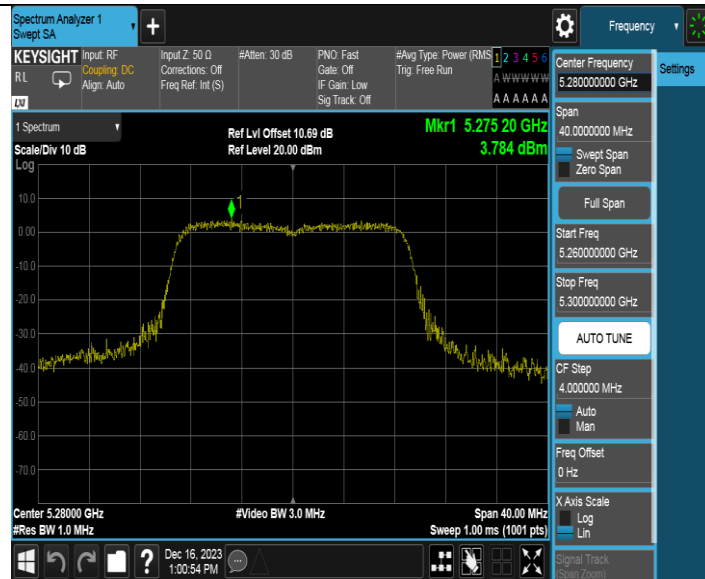
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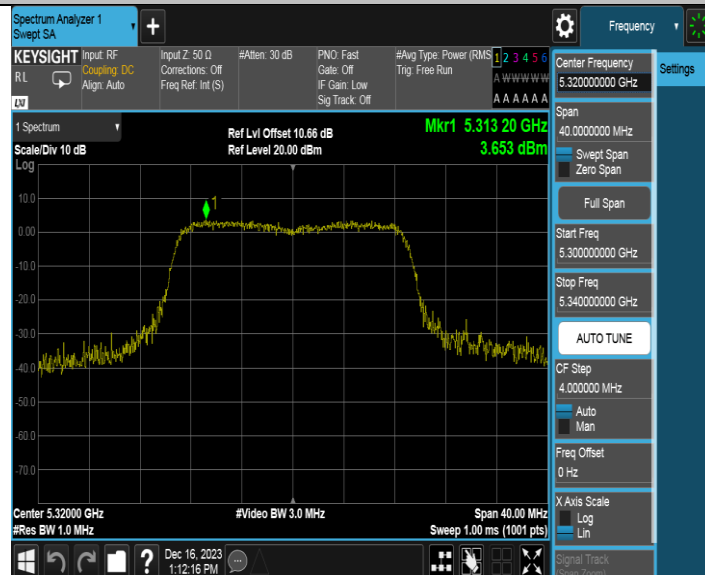
11AC20SISO_Ant1_5260



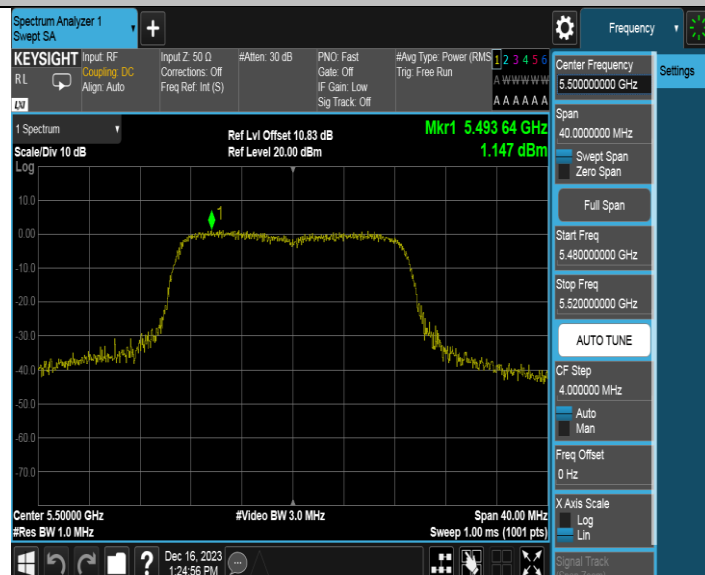
11AC20SISO_Ant1_5280



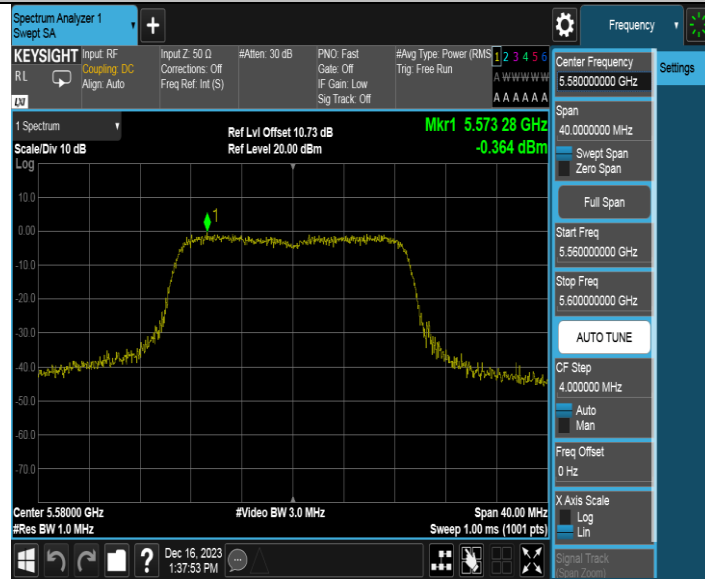
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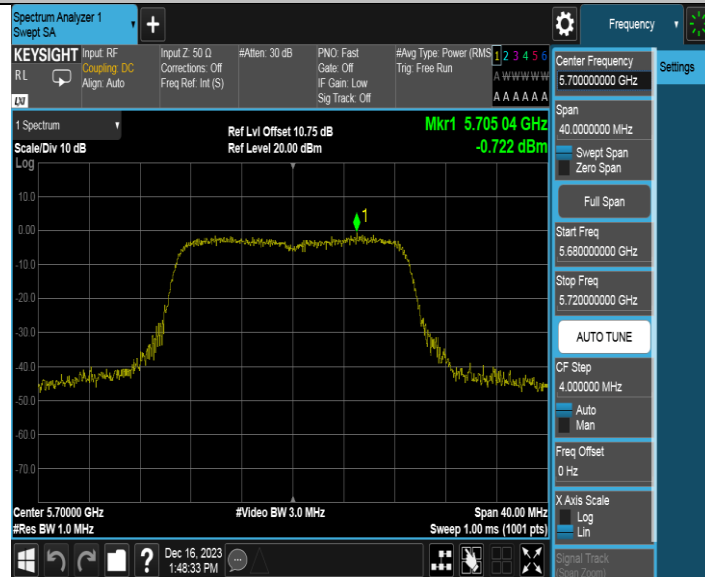
11AC20SISO_Ant1_5500



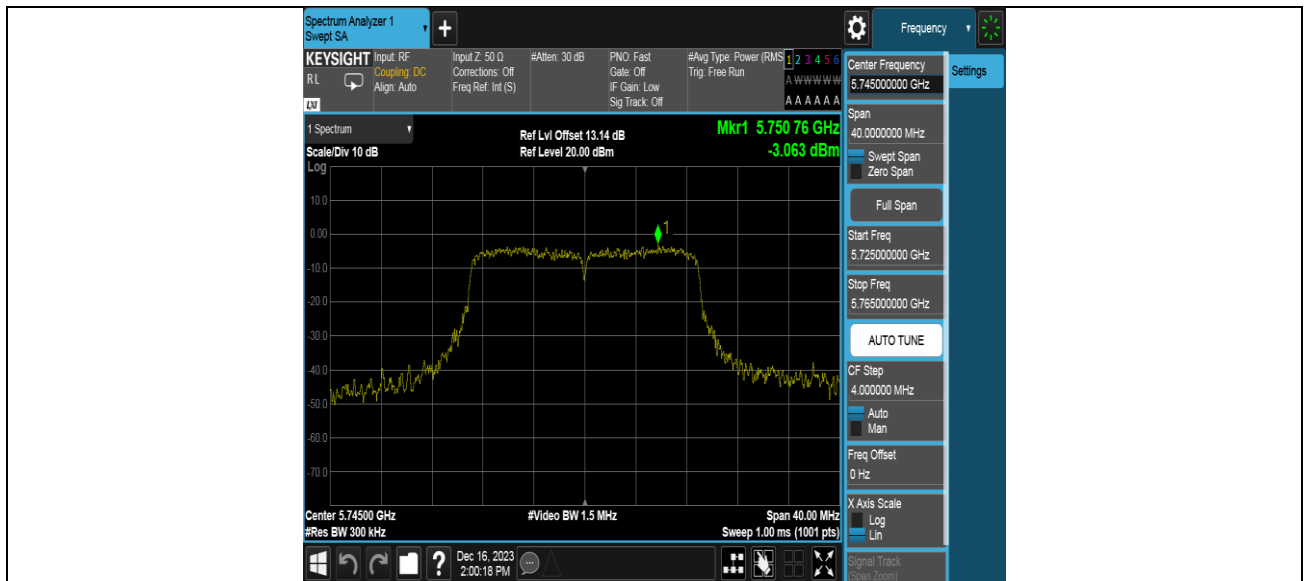
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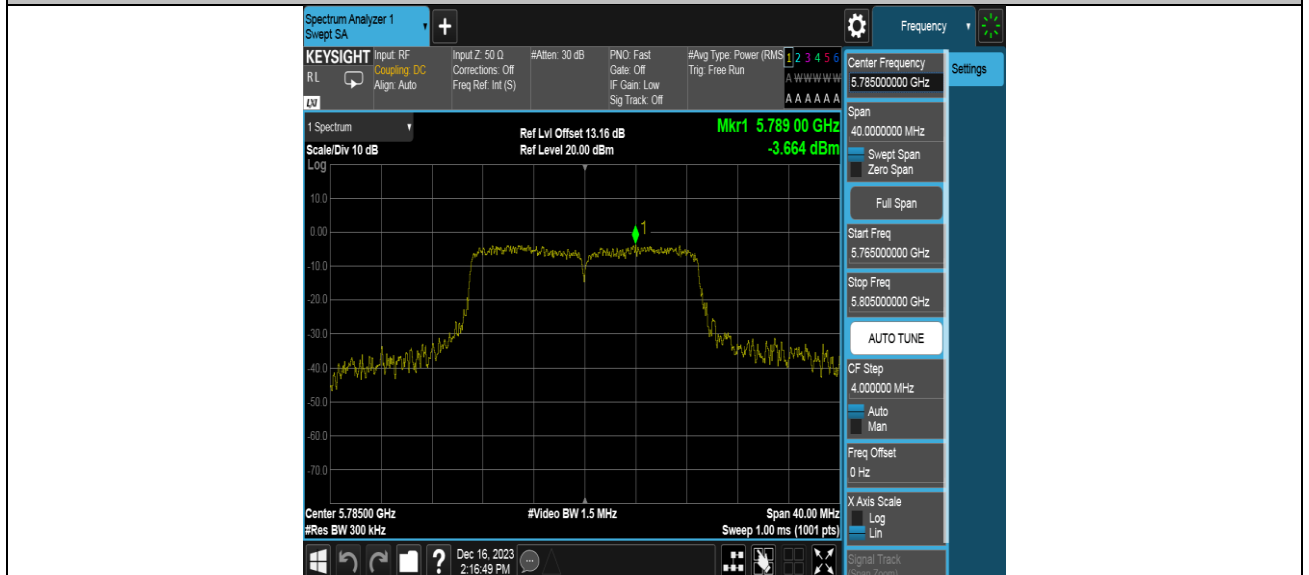
11AC20SISO_Ant1_5700



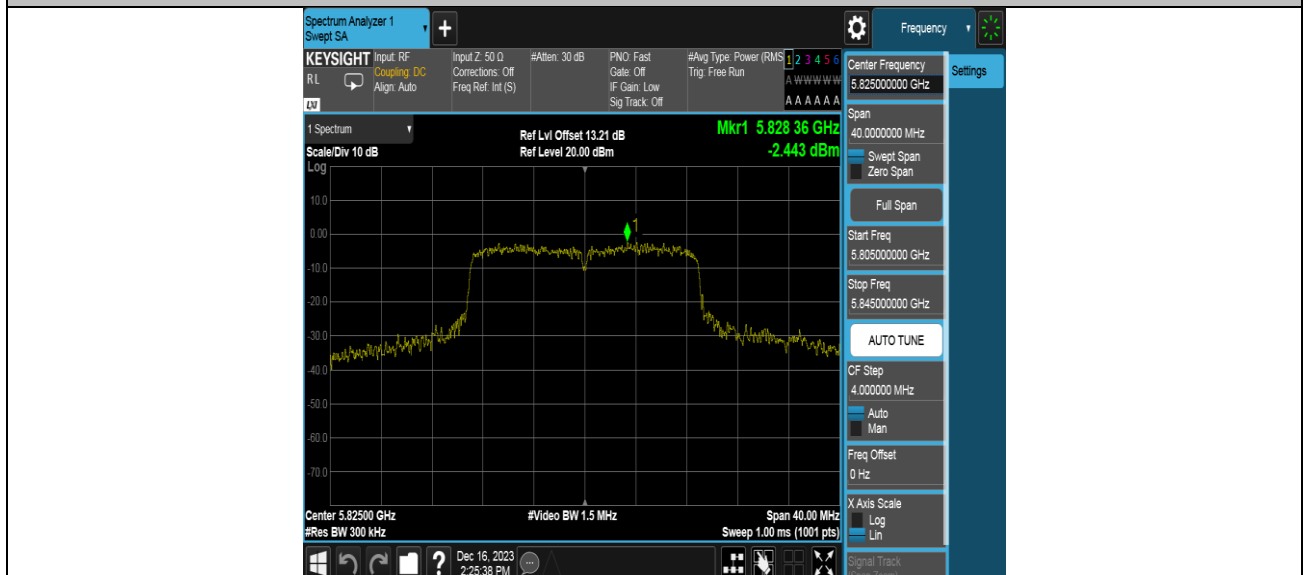
11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



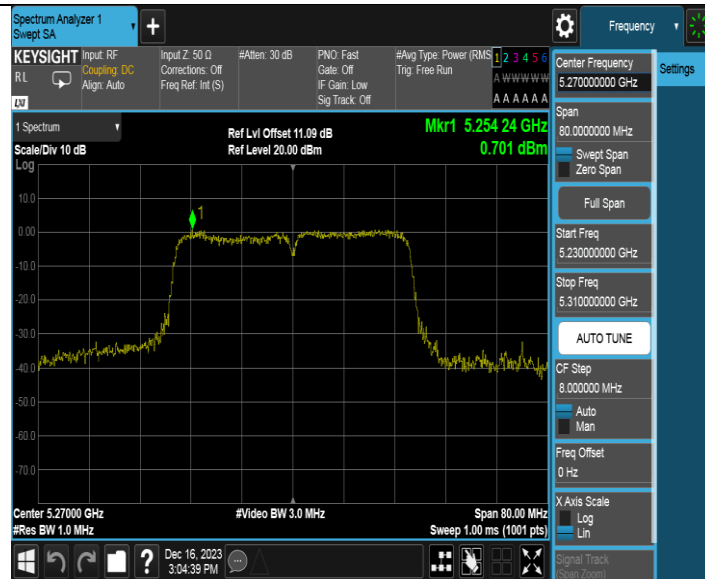
11AC40SISO_Ant1_5190



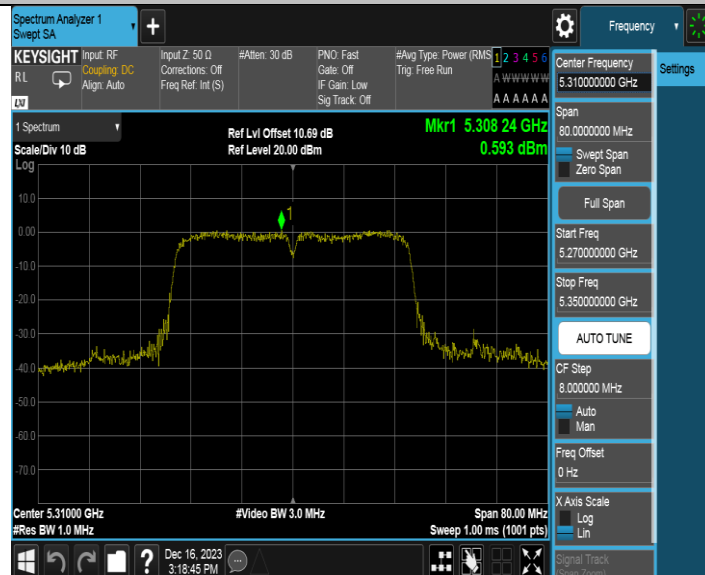
11AC40SISO_Ant1_5230



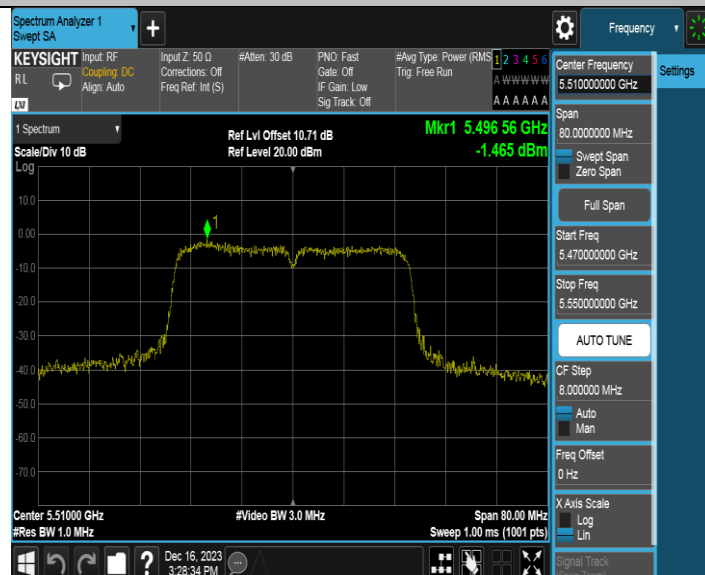
11AC40SISO_Ant1_5270



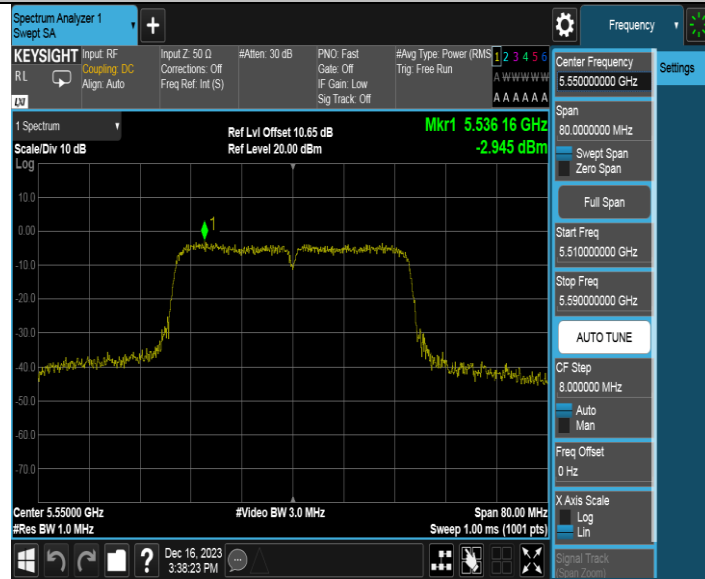
11AC40SISO_Ant1_5310



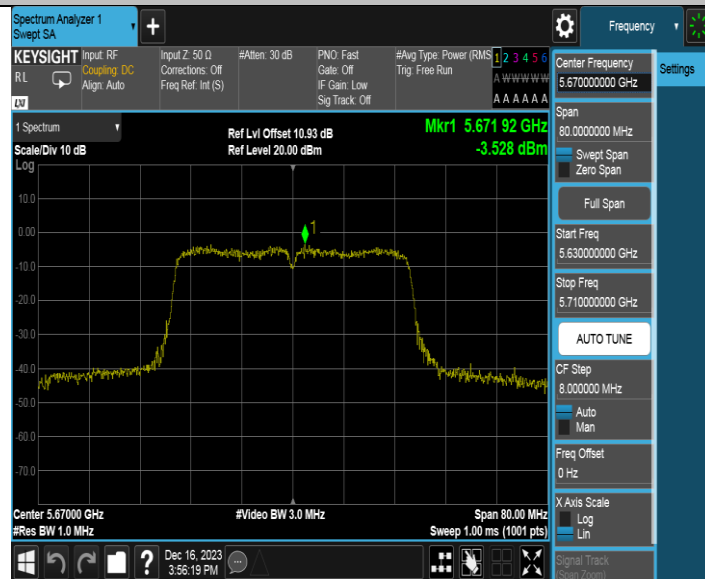
11AC40SISO_Ant1_5510



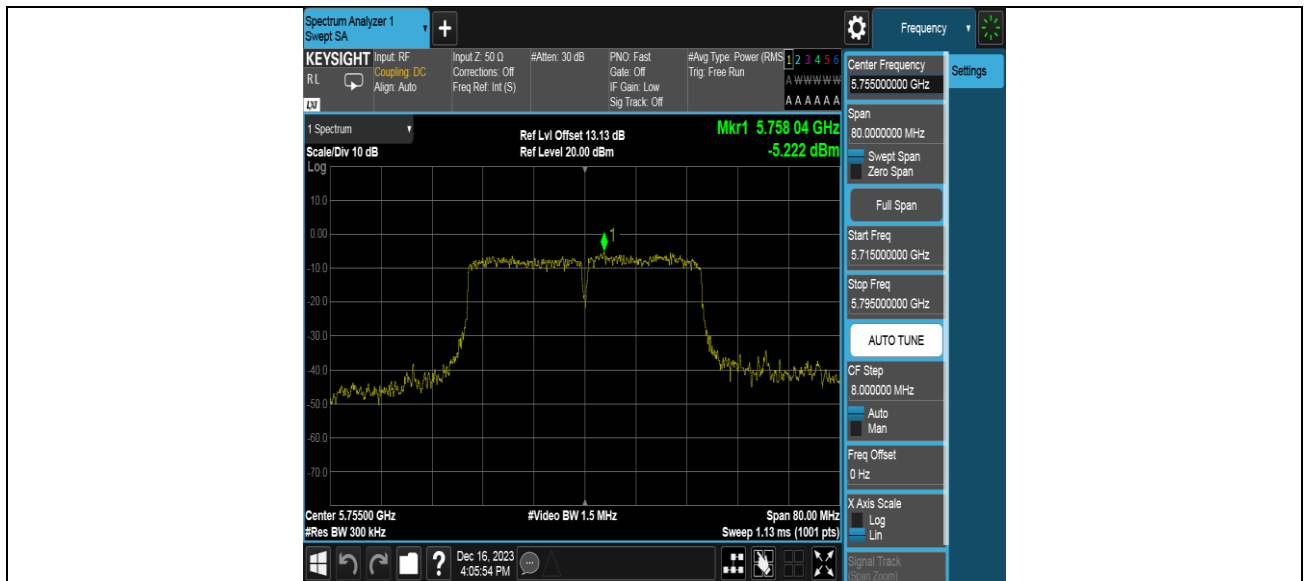
11AC40SISO_Ant1_5550



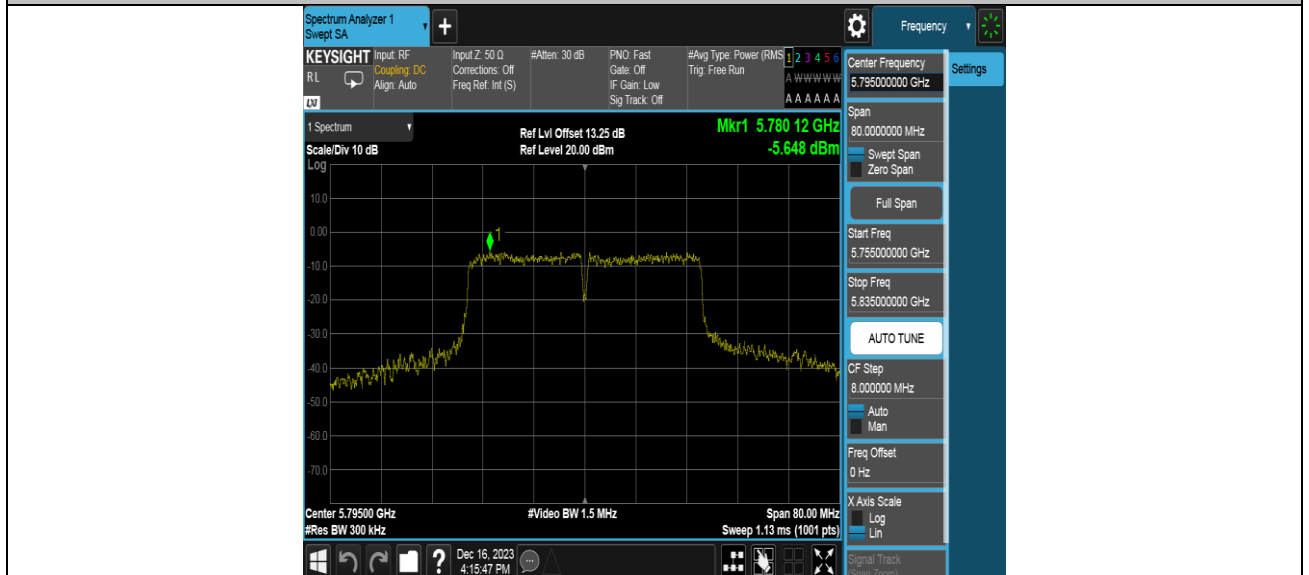
11AC40SISO_Ant1_5670



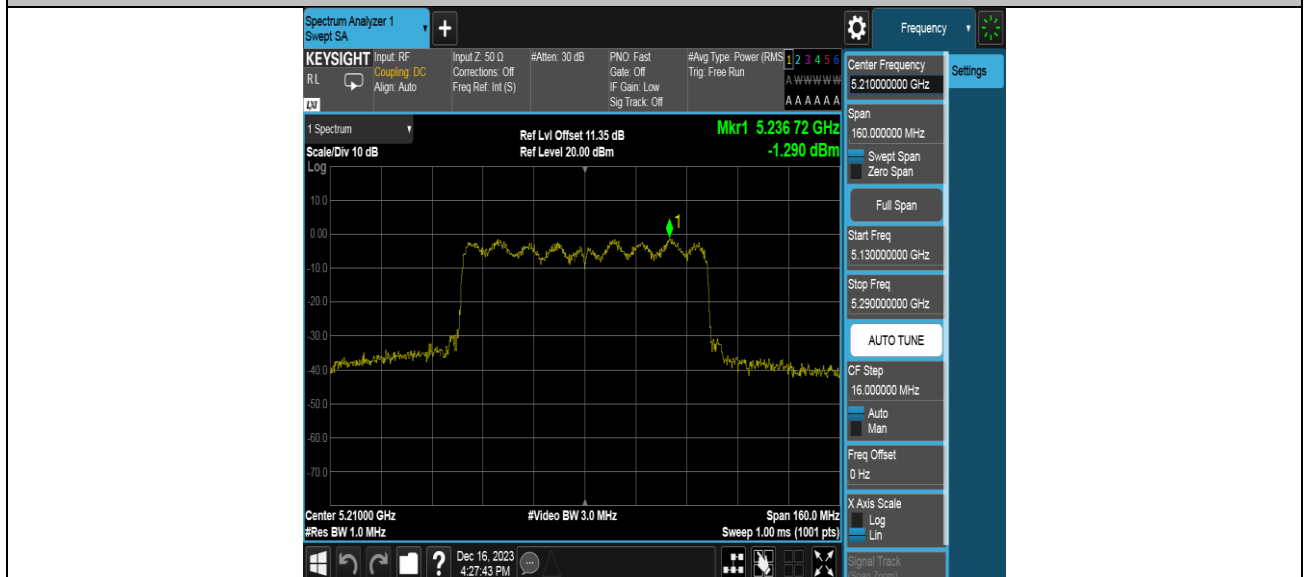
11AC40SISO_Ant1_5755



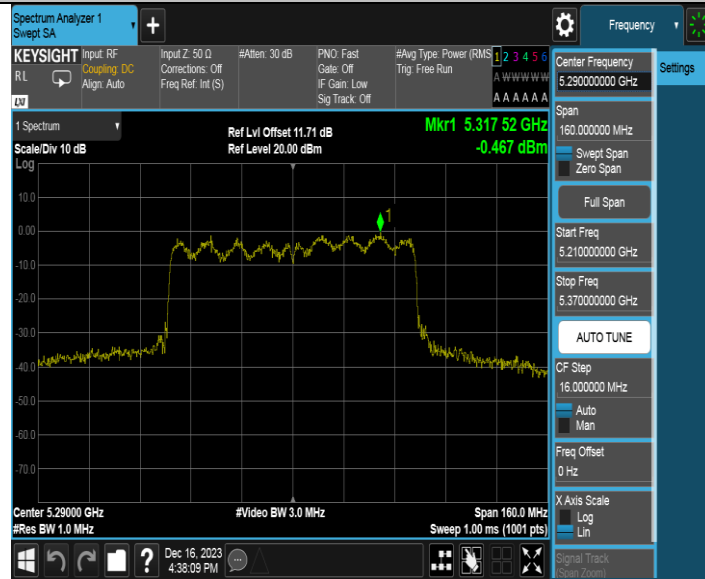
11AC40SISO_Ant1_5795



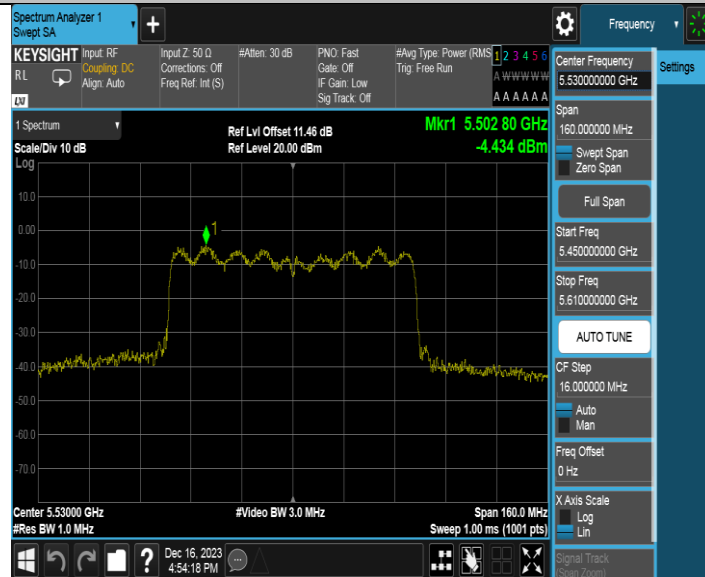
11AC80SISO_Ant1_5210



11AC80SISO_Ant1_5290



11AC80SISO_Ant1_5530



11AC80SISO_Ant1_5610



7.7. Frequency Stability Measurement

7.7.1. Test Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

7.7.2. Test Procedure Used

Frequency Stability Under Temperature Variations:

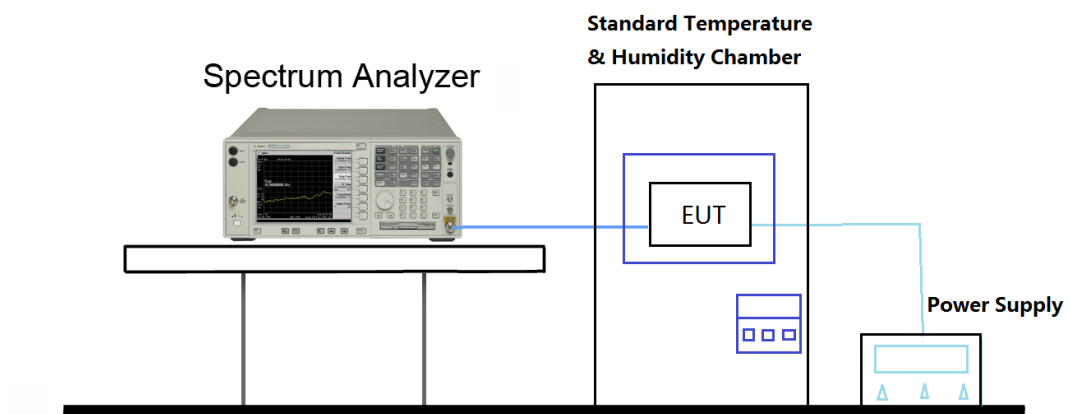
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

7.7.3. Test Setup



7.7.4. Test Result

Voltage								
Test Mode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	-20000.00	-3.861004	20	PASS
			LV	NT	-20000.00	-3.861004	20	PASS
			HV	NT	-20000.00	-3.861004	20	PASS
		5200	NV	NT	-40000.00	-7.692308	20	PASS
			LV	NT	-20000.00	-3.846154	20	PASS
			HV	NT	-20000.00	-3.846154	20	PASS
		5240	NV	NT	-40000.00	-7.633588	20	PASS
			LV	NT	-60000.00	-11.450382	20	PASS
			HV	NT	-40000.00	-7.633588	20	PASS
		5260	NV	NT	-40000.00	-7.604563	20	PASS
			LV	NT	-40000.00	-7.604563	20	PASS
			HV	NT	-40000.00	-7.604563	20	PASS
		5280	NV	NT	-40000.00	-7.575758	20	PASS
			LV	NT	-40000.00	-7.575758	20	PASS
			HV	NT	-20000.00	-3.787879	20	PASS
		5320	NV	NT	-40000.00	-7.518797	20	PASS
			LV	NT	-40000.00	-7.518797	20	PASS
			HV	NT	-40000.00	-7.518797	20	PASS
		5500	NV	NT	-60000.00	-10.909091	20	PASS
			LV	NT	-60000.00	-10.909091	20	PASS
			HV	NT	-60000.00	-10.909091	20	PASS
		5580	NV	NT	-40000.00	-7.168459	20	PASS
			LV	NT	-40000.00	-7.168459	20	PASS
			HV	NT	-40000.00	-7.168459	20	PASS
		5700	NV	NT	-60000.00	-10.526316	20	PASS
			LV	NT	-40000.00	-7.017544	20	PASS
			HV	NT	-40000.00	-7.017544	20	PASS
		5745	NV	NT	-20000.00	-3.481288	20	PASS
			LV	NT	-20000.00	-3.481288	20	PASS
			HV	NT	-40000.00	-6.962576	20	PASS
		5785	NV	NT	-60000.00	-10.371651	20	PASS
			LV	NT	-60000.00	-10.371651	20	PASS

			HV	NT	-60000.00	-10.371651	20	PASS
		5825	NV	NT	-40000.00	-6.866953	20	PASS
LV	NT		-20000.00	-3.433476	20	PASS		
HV	NT		-20000.00	-3.433476	20	PASS		
11N20SIS O	Ant1	5180	NV	NT	-40000.00	-7.722008	20	PASS
			LV	NT	-40000.00	-7.722008	20	PASS
			HV	NT	-20000.00	-3.861004	20	PASS
		5200	NV	NT	-40000.00	-7.692308	20	PASS
			LV	NT	-40000.00	-7.692308	20	PASS
			HV	NT	-40000.00	-7.692308	20	PASS
		5240	NV	NT	-20000.00	-3.816794	20	PASS
			LV	NT	-40000.00	-7.633588	20	PASS
			HV	NT	-20000.00	-3.816794	20	PASS
		5260	NV	NT	-40000.00	-7.604563	20	PASS
			LV	NT	-20000.00	-3.802281	20	PASS
			HV	NT	-40000.00	-7.604563	20	PASS
		5280	NV	NT	-40000.00	-7.575758	20	PASS
			LV	NT	-40000.00	-7.575758	20	PASS
			HV	NT	-40000.00	-7.575758	20	PASS
		5320	NV	NT	-40000.00	-7.518797	20	PASS
			LV	NT	-20000.00	-3.759398	20	PASS
			HV	NT	-20000.00	-3.759398	20	PASS
		5500	NV	NT	-40000.00	-7.272727	20	PASS
			LV	NT	-40000.00	-7.272727	20	PASS
			HV	NT	-20000.00	-3.636364	20	PASS
		5580	NV	NT	-40000.00	-7.168459	20	PASS
			LV	NT	-40000.00	-7.168459	20	PASS
			HV	NT	-40000.00	-7.168459	20	PASS
		5700	NV	NT	-40000.00	-7.017544	20	PASS
			LV	NT	-40000.00	-7.017544	20	PASS
			HV	NT	-40000.00	-7.017544	20	PASS
		5745	NV	NT	-40000.00	-6.962576	20	PASS
			LV	NT	-40000.00	-6.962576	20	PASS
			HV	NT	-40000.00	-6.962576	20	PASS
		5785	NV	NT	-40000.00	-6.914434	20	PASS
			LV	NT	-40000.00	-6.914434	20	PASS
			HV	NT	-40000.00	-6.914434	20	PASS

		5825	NV	NT	-20000.00	-3.433476	20	PASS
			LV	NT	-20000.00	-3.433476	20	PASS
			HV	NT	-20000.00	-3.433476	20	PASS
11N40SIS O	Ant1	5190	NV	NT	-80000.00	-15.414258	20	PASS
			LV	NT	-40000.00	-7.707129	20	PASS
			HV	NT	0.00	0.000000	20	PASS
		5230	NV	NT	-40000.00	-7.648184	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	-40000.00	-7.648184	20	PASS
		5270	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS
		5310	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS
		5510	NV	NT	-40000.00	-7.259528	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	-40000.00	-7.259528	20	PASS
		5550	NV	NT	-80000.00	-14.414414	20	PASS
			LV	NT	-40000.00	-7.207207	20	PASS
			HV	NT	-40000.00	-7.207207	20	PASS
		5670	NV	NT	-40000.00	-7.054674	20	PASS
			LV	NT	-80000.00	-14.109347	20	PASS
			HV	NT	-40000.00	-7.054674	20	PASS
		5755	NV	NT	0.00	0.000000	20	PASS
			LV	NT	-40000.00	-6.950478	20	PASS
			HV	NT	0.00	0.000000	20	PASS
		5795	NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-40000.00	-6.902502	20	PASS
			HV	NT	-80000.00	-13.805004	20	PASS
11AC20SI SO	Ant1	5180	NV	NT	-40000.00	-7.722008	20	PASS
			LV	NT	-40000.00	-7.722008	20	PASS
			HV	NT	-40000.00	-7.722008	20	PASS
		5200	NV	NT	-40000.00	-7.692308	20	PASS
			LV	NT	-40000.00	-7.692308	20	PASS
			HV	NT	-40000.00	-7.692308	20	PASS
		5240	NV	NT	-40000.00	-7.633588	20	PASS

			LV	NT	-40000.00	-7.633588	20	PASS
			HV	NT	-40000.00	-7.633588	20	PASS
		5260	NV	NT	-40000.00	-7.604563	20	PASS
			LV	NT	-40000.00	-7.604563	20	PASS
			HV	NT	-20000.00	-3.802281	20	PASS
		5280	NV	NT	-40000.00	-7.575758	20	PASS
			LV	NT	-40000.00	-7.575758	20	PASS
			HV	NT	-40000.00	-7.575758	20	PASS
		5320	NV	NT	-40000.00	-7.518797	20	PASS
			LV	NT	-40000.00	-7.518797	20	PASS
			HV	NT	-40000.00	-7.518797	20	PASS
		5500	NV	NT	-40000.00	-7.272727	20	PASS
			LV	NT	-60000.00	-10.909091	20	PASS
			HV	NT	-40000.00	-7.272727	20	PASS
		5580	NV	NT	-40000.00	-7.168459	20	PASS
			LV	NT	-40000.00	-7.168459	20	PASS
			HV	NT	-40000.00	-7.168459	20	PASS
		5700	NV	NT	-40000.00	-7.017544	20	PASS
			LV	NT	-20000.00	-3.508772	20	PASS
			HV	NT	-60000.00	-10.526316	20	PASS
		5745	NV	NT	-40000.00	-6.962576	20	PASS
			LV	NT	-40000.00	-6.962576	20	PASS
			HV	NT	-40000.00	-6.962576	20	PASS
		5785	NV	NT	-40000.00	-6.914434	20	PASS
			LV	NT	-40000.00	-6.914434	20	PASS
			HV	NT	-40000.00	-6.914434	20	PASS
		5825	NV	NT	-40000.00	-6.866953	20	PASS
			LV	NT	-40000.00	-6.866953	20	PASS
			HV	NT	-40000.00	-6.866953	20	PASS
11AC40SI SO	Ant1	5190	NV	NT	-40000.00	-7.707129	20	PASS
			LV	NT	-40000.00	-7.707129	20	PASS
			HV	NT	-80000.00	-15.414258	20	PASS
		5230	NV	NT	-40000.00	-7.648184	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	-40000.00	-7.648184	20	PASS
		5270	NV	NT	-40000.00	-7.590133	20	PASS
			LV	NT	-40000.00	-7.590133	20	PASS

		5310	HV	NT	-40000.00	-7.590133	20	PASS
			NV	NT	-40000.00	-7.532957	20	PASS
			LV	NT	-40000.00	-7.532957	20	PASS
			HV	NT	-40000.00	-7.532957	20	PASS
		5510	NV	NT	-40000.00	-7.259528	20	PASS
			LV	NT	-80000.00	-14.519056	20	PASS
			HV	NT	-40000.00	-7.259528	20	PASS
		5550	NV	NT	-40000.00	-7.207207	20	PASS
			LV	NT	-40000.00	-7.207207	20	PASS
			HV	NT	-80000.00	-14.414414	20	PASS
		5670	NV	NT	-40000.00	-7.054674	20	PASS
			LV	NT	-40000.00	-7.054674	20	PASS
			HV	NT	-80000.00	-14.109347	20	PASS
		5755	NV	NT	0.00	0.000000	20	PASS
			LV	NT	-40000.00	-6.950478	20	PASS
			HV	NT	0.00	0.000000	20	PASS
		5795	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS
11AC80SI SO	Ant1	5210	NV	NT	0.00	0.000000	20	PASS
			LV	NT	-80000.00	-15.355086	20	PASS
			HV	NT	-80000.00	-15.355086	20	PASS
		5290	NV	NT	-80000.00	-15.122873	20	PASS
			LV	NT	-80000.00	-15.122873	20	PASS
			HV	NT	-80000.00	-15.122873	20	PASS
		5530	NV	NT	-80000.00	-14.466546	20	PASS
			LV	NT	-80000.00	-14.466546	20	PASS
			HV	NT	-80000.00	-14.466546	20	PASS
		5610	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS
		5775	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS

Temperature								
Test Mode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	-20000.00	-3.861004	20	PASS
			NV	-20	-40000.00	-7.722008	20	PASS
			NV	-10	-20000.00	-3.861004	20	PASS
			NV	0	-20000.00	-3.861004	20	PASS
			NV	10	-20000.00	-3.861004	20	PASS
			NV	20	-20000.00	-3.861004	20	PASS
			NV	30	-20000.00	-3.861004	20	PASS
			NV	40	-20000.00	-3.861004	20	PASS
			NV	50	-20000.00	-3.861004	20	PASS
		5200	NV	-30	-20000.00	-3.846154	20	PASS
			NV	-20	-20000.00	-3.846154	20	PASS
			NV	-10	-20000.00	-3.846154	20	PASS
			NV	0	-20000.00	-3.846154	20	PASS
			NV	10	-20000.00	-3.846154	20	PASS
			NV	20	-20000.00	-3.846154	20	PASS
			NV	30	-20000.00	-3.846154	20	PASS
			NV	40	-20000.00	-3.846154	20	PASS
			NV	50	-20000.00	-3.846154	20	PASS
		5240	NV	-30	-40000.00	-7.633588	20	PASS
			NV	-20	-40000.00	-7.633588	20	PASS
			NV	-10	-40000.00	-7.633588	20	PASS
			NV	0	-40000.00	-7.633588	20	PASS
			NV	10	-40000.00	-7.633588	20	PASS
			NV	20	-60000.00	-11.450382	20	PASS
			NV	30	-40000.00	-7.633588	20	PASS
			NV	40	-40000.00	-7.633588	20	PASS
			NV	50	-40000.00	-7.633588	20	PASS
		5260	NV	-30	-40000.00	-7.604563	20	PASS
			NV	-20	-40000.00	-7.604563	20	PASS
			NV	-10	-40000.00	-7.604563	20	PASS
			NV	0	-40000.00	-7.604563	20	PASS
			NV	10	-40000.00	-7.604563	20	PASS
			NV	20	-40000.00	-7.604563	20	PASS