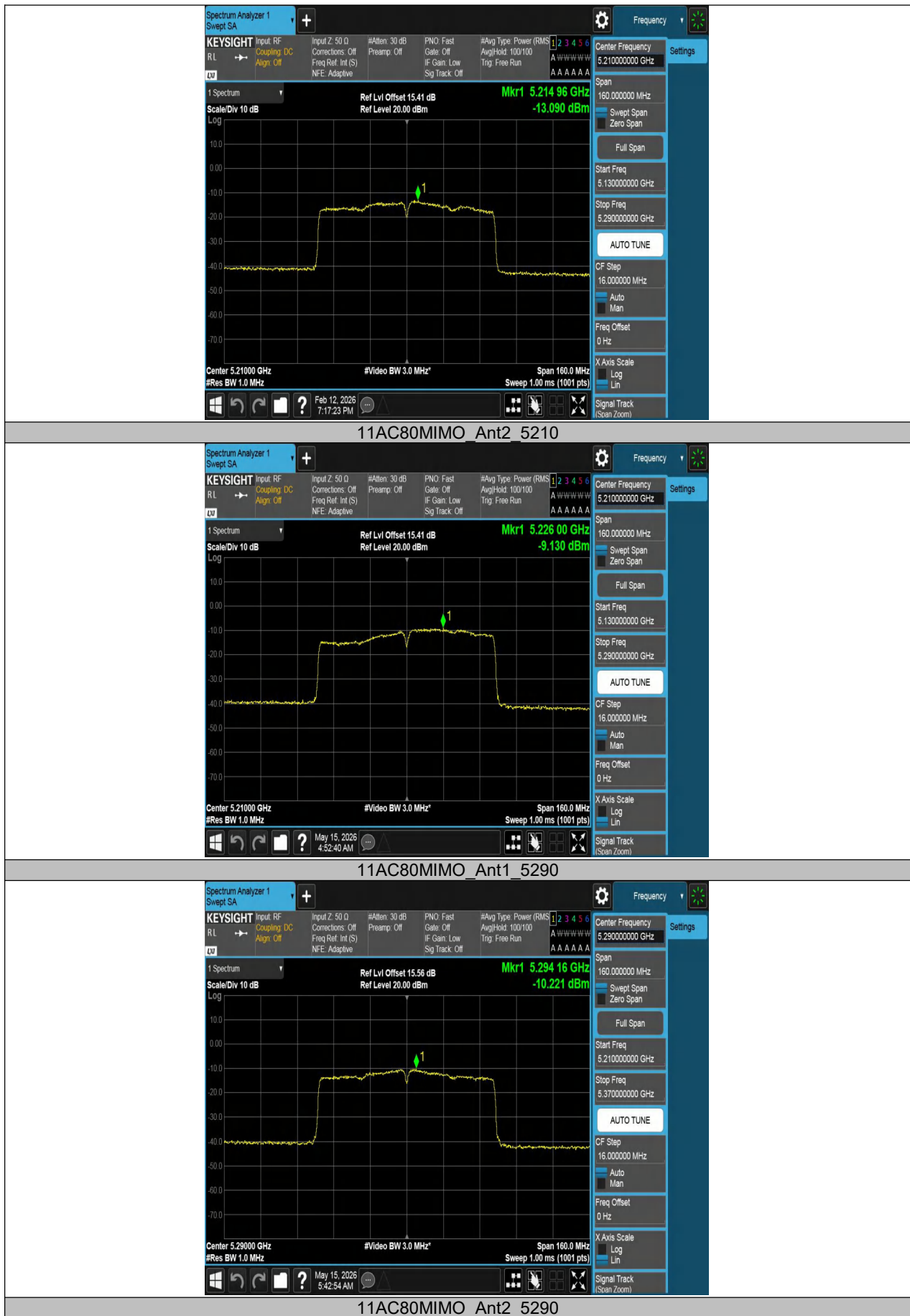
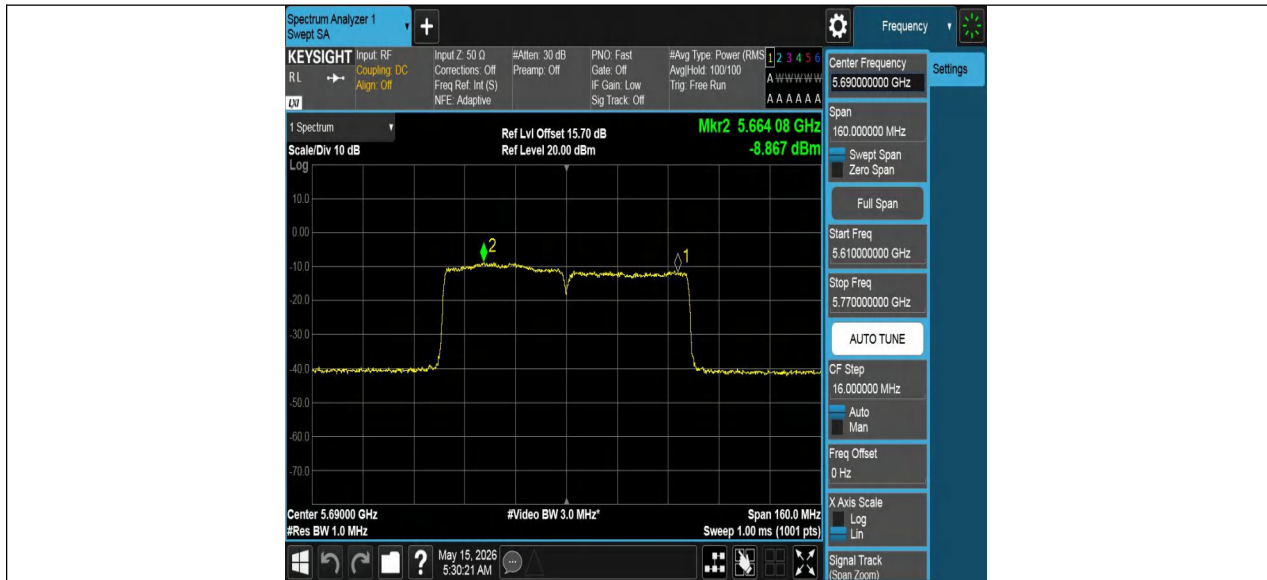






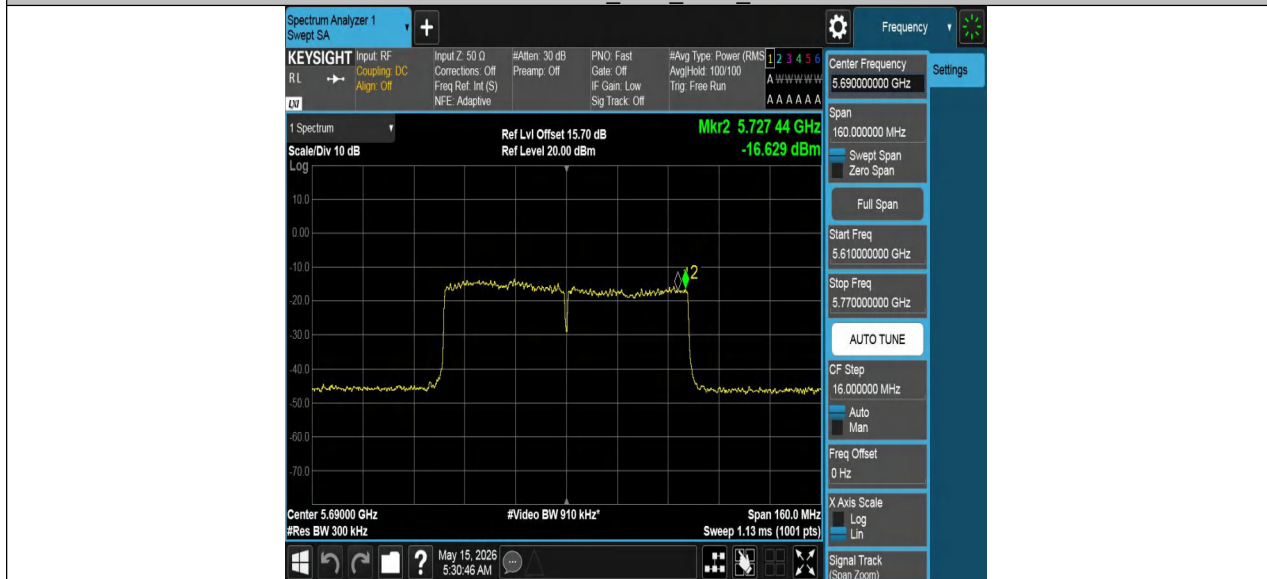




11AC80MIMO_Ant1_5690_UNII-3



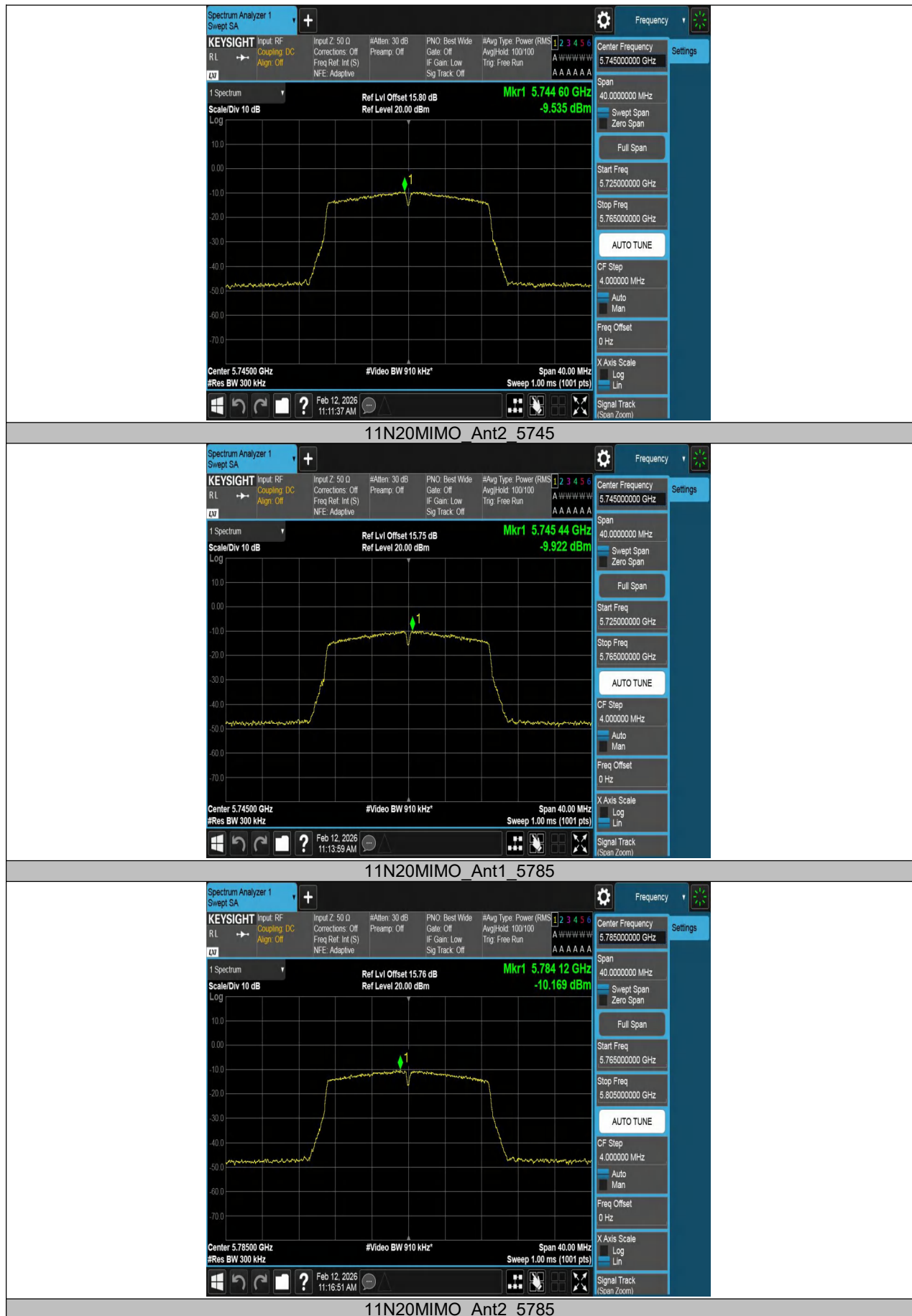
11AC80MIMO_Ant2_5690_UNII-3



11A_Ant1_5745





















12. Frequency Stability Measurement

12.1. Block Diagram of Test Setup

Same as section 8.1

12.2. Limit of Frequency Stability

Manufacturers 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.

12.3. Test Procedures

(1) To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.

(2) The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10 dB lower than the measured peak value.

(3) The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

12.4. Test Result

Voltage								
Test Mode	Ant.	Freq. (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20 MIMO	Ant1	5180	NV	NT	-34000.00	-6.563707	20	PASS
			LV	NT	-34000.00	-6.563707	20	PASS
			HV	NT	-34000.00	-6.563707	20	PASS
		5200	NV	NT	-35000.00	-6.730769	20	PASS
			LV	NT	-34000.00	-6.538462	20	PASS
			HV	NT	-33000.00	-6.346154	20	PASS
		5240	NV	NT	-32000.00	-6.106870	20	PASS
			LV	NT	-31000.00	-5.916031	20	PASS
			HV	NT	-30000.00	-5.725191	20	PASS
		5260	NV	NT	-33000.00	-6.273764	20	PASS
			LV	NT	-32000.00	-6.083650	20	PASS
			HV	NT	-32000.00	-6.083650	20	PASS
		5280	NV	NT	-32000.00	-6.060606	20	PASS
			LV	NT	-31000.00	-5.871212	20	PASS
			HV	NT	-31000.00	-5.871212	20	PASS
		5320	NV	NT	-31000.00	-5.827068	20	PASS
			LV	NT	-30000.00	-5.639098	20	PASS
			HV	NT	-29000.00	-5.451128	20	PASS
		5500	NV	NT	-35000.00	-6.363636	20	PASS
			LV	NT	-33000.00	-6.000000	20	PASS
			HV	NT	-32000.00	-5.818182	20	PASS
		5580	NV	NT	-31000.00	-5.555556	20	PASS
			LV	NT	-29000.00	-5.197133	20	PASS
			HV	NT	-27000.00	-4.838710	20	PASS
		5700	NV	NT	-27000.00	-4.736842	20	PASS
			LV	NT	-26000.00	-4.561404	20	PASS
			HV	NT	-26000.00	-4.561404	20	PASS
		5720	NV	NT	-32000.00	-5.594406	20	PASS
			LV	NT	-30000.00	-5.244755	20	PASS
			HV	NT	-29000.00	-5.069930	20	PASS
		5745	NV	NT	-29000.00	-5.047868	20	PASS
			LV	NT	-29000.00	-5.047868	20	PASS

		5785	HV	NT	-28000.00	-4.873803	20	PASS
			NV	NT	-33000.00	-5.704408	20	PASS
			LV	NT	-31000.00	-5.358686	20	PASS
		5825	HV	NT	-30000.00	-5.185825	20	PASS
			NV	NT	-31000.00	-5.321888	20	PASS
			LV	NT	-30000.00	-5.150215	20	PASS
			HV	NT	-29000.00	-4.978541	20	PASS
11AC40 MIMO	Ant1	5190	NV	NT	-35000.00	-6.743738	20	PASS
			LV	NT	-35000.00	-6.743738	20	PASS
			HV	NT	-34000.00	-6.551060	20	PASS
		5230	NV	NT	-30000.00	-5.736138	20	PASS
			LV	NT	-28000.00	-5.353728	20	PASS
			HV	NT	-28000.00	-5.353728	20	PASS
		5270	NV	NT	-29000.00	-5.502846	20	PASS
			LV	NT	-27000.00	-5.123340	20	PASS
			HV	NT	-26000.00	-4.933586	20	PASS
		5310	NV	NT	-28000.00	-5.273070	20	PASS
			LV	NT	-27000.00	-5.084746	20	PASS
			HV	NT	-26000.00	-4.896422	20	PASS
		5510	NV	NT	-31000.00	-5.626134	20	PASS
			LV	NT	-30000.00	-5.444646	20	PASS
			HV	NT	-29000.00	-5.263158	20	PASS
		5550	NV	NT	-31000.00	-5.585586	20	PASS
			LV	NT	-30000.00	-5.405405	20	PASS
			HV	NT	-29000.00	-5.225225	20	PASS
		5670	NV	NT	-32000.00	-5.643739	20	PASS
			LV	NT	-30000.00	-5.291005	20	PASS
			HV	NT	-29000.00	-5.114638	20	PASS
		5710	NV	NT	-32000.00	-5.604203	20	PASS
			LV	NT	-30000.00	-5.253940	20	PASS
			HV	NT	-30000.00	-5.253940	20	PASS
		5755	NV	NT	-38000.00	-6.602954	20	PASS
			LV	NT	-41000.00	-7.124240	20	PASS
			HV	NT	-42000.00	-7.298002	20	PASS
		5795	NV	NT	-37000.00	-6.384814	20	PASS
			LV	NT	-36000.00	-6.212252	20	PASS
			HV	NT	-36000.00	-6.212252	20	PASS
11AC80 MIMO	Ant1	5210	NV	NT	-36000.00	-6.909789	20	PASS
			LV	NT	-35000.00	-6.717850	20	PASS
			HV	NT	-35000.00	-6.717850	20	PASS
		5290	NV	NT	-35000.00	-6.616257	20	PASS
			LV	NT	-35000.00	-6.616257	20	PASS
			HV	NT	-34000.00	-6.427221	20	PASS
		5530	NV	NT	-37000.00	-6.690778	20	PASS
			LV	NT	-37000.00	-6.690778	20	PASS
			HV	NT	-36000.00	-6.509946	20	PASS
		5610	NV	NT	-37000.00	-6.595365	20	PASS
			LV	NT	-36000.00	-6.417112	20	PASS
			HV	NT	-35000.00	-6.238859	20	PASS
		5690	NV	NT	-37000.00	-6.502636	20	PASS
			LV	NT	-37000.00	-6.502636	20	PASS
			HV	NT	-36000.00	-6.326889	20	PASS
		5775	NV	NT	-38000.00	-6.580087	20	PASS
			LV	NT	-37000.00	-6.406926	20	PASS
			HV	NT	-37000.00	-6.406926	20	PASS

Temperature								
Test Mode	Ant.	Freq. (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict

11AC20 MIMO	Ant1	5180	NV	-30	-34000.00	-6.563707	20	PASS
			NV	-20	-34000.00	-6.563707	20	PASS
			NV	-10	-34000.00	-6.563707	20	PASS
			NV	0	-34000.00	-6.563707	20	PASS
			NV	10	-33000.00	-6.370656	20	PASS
			NV	20	-34000.00	-6.563707	20	PASS
			NV	30	-33000.00	-6.370656	20	PASS
			NV	40	-33000.00	-6.370656	20	PASS
		5200	NV	50	-33000.00	-6.370656	20	PASS
			NV	-30	-33000.00	-6.346154	20	PASS
			NV	-20	-32000.00	-6.153846	20	PASS
			NV	-10	-32000.00	-6.153846	20	PASS
			NV	0	-31000.00	-5.961538	20	PASS
			NV	10	-31000.00	-5.961538	20	PASS
			NV	20	-31000.00	-5.961538	20	PASS
			NV	30	-31000.00	-5.961538	20	PASS
		5240	NV	40	-30000.00	-5.769231	20	PASS
			NV	50	-30000.00	-5.769231	20	PASS
			NV	-30	-30000.00	-5.725191	20	PASS
			NV	-20	-29000.00	-5.534351	20	PASS
			NV	-10	-29000.00	-5.534351	20	PASS
			NV	0	-29000.00	-5.534351	20	PASS
			NV	10	-29000.00	-5.534351	20	PASS
			NV	20	-29000.00	-5.534351	20	PASS
		5260	NV	30	-28000.00	-5.343511	20	PASS
			NV	40	-28000.00	-5.343511	20	PASS
			NV	50	-28000.00	-5.343511	20	PASS
			NV	-30	-32000.00	-6.083650	20	PASS
			NV	-20	-31000.00	-5.893536	20	PASS
			NV	-10	-31000.00	-5.893536	20	PASS
			NV	0	-31000.00	-5.893536	20	PASS
			NV	10	-31000.00	-5.893536	20	PASS
		5280	NV	20	-30000.00	-5.703422	20	PASS
			NV	30	-30000.00	-5.703422	20	PASS
			NV	40	-30000.00	-5.703422	20	PASS
			NV	50	-30000.00	-5.703422	20	PASS
			NV	-30	-30000.00	-5.681818	20	PASS
			NV	-20	-30000.00	-5.681818	20	PASS
			NV	-10	-29000.00	-5.492424	20	PASS
			NV	0	-29000.00	-5.492424	20	PASS
		5320	NV	10	-29000.00	-5.492424	20	PASS
			NV	20	-29000.00	-5.492424	20	PASS
			NV	30	-29000.00	-5.492424	20	PASS
			NV	40	-29000.00	-5.492424	20	PASS
			NV	50	-28000.00	-5.303030	20	PASS
			NV	-30	-28000.00	-5.263158	20	PASS
			NV	-20	-28000.00	-5.263158	20	PASS
			NV	-10	-28000.00	-5.263158	20	PASS
		5500	NV	0	-28000.00	-5.263158	20	PASS
			NV	10	-28000.00	-5.263158	20	PASS
			NV	20	-28000.00	-5.263158	20	PASS
			NV	30	-28000.00	-5.263158	20	PASS
			NV	40	-27000.00	-5.075188	20	PASS
			NV	50	-27000.00	-5.075188	20	PASS
		5500	NV	-30	-31000.00	-5.636364	20	PASS
			NV	-20	-31000.00	-5.636364	20	PASS
			NV	-10	-30000.00	-5.454545	20	PASS
			NV	0	-30000.00	-5.454545	20	PASS
			NV	10	-30000.00	-5.454545	20	PASS
			NV	20	-30000.00	-5.454545	20	PASS

11AC40 MIMO	Ant1		NV	30	-29000.00	-5.272727	20	PASS
			NV	40	-29000.00	-5.272727	20	PASS
			NV	50	-29000.00	-5.272727	20	PASS
		5580	NV	-30	-25000.00	-4.480287	20	PASS
			NV	-20	-23000.00	-4.121864	20	PASS
			NV	-10	-22000.00	-3.942652	20	PASS
			NV	0	-21000.00	-3.763441	20	PASS
			NV	10	-21000.00	-3.763441	20	PASS
			NV	20	-20000.00	-3.584229	20	PASS
			NV	30	-20000.00	-3.584229	20	PASS
			NV	40	-19000.00	-3.405018	20	PASS
			NV	50	-18000.00	-3.225806	20	PASS
		5700	NV	-30	-26000.00	-4.561404	20	PASS
			NV	-20	-25000.00	-4.385965	20	PASS
			NV	-10	-25000.00	-4.385965	20	PASS
			NV	0	-26000.00	-4.561404	20	PASS
			NV	10	-25000.00	-4.385965	20	PASS
			NV	20	-26000.00	-4.561404	20	PASS
			NV	30	-26000.00	-4.561404	20	PASS
			NV	40	-26000.00	-4.561404	20	PASS
			NV	50	-26000.00	-4.561404	20	PASS
		5720	NV	-30	-28000.00	-4.895105	20	PASS
			NV	-20	-27000.00	-4.720280	20	PASS
			NV	-10	-27000.00	-4.720280	20	PASS
			NV	0	-27000.00	-4.720280	20	PASS
			NV	10	-27000.00	-4.720280	20	PASS
			NV	20	-26000.00	-4.545455	20	PASS
			NV	30	-26000.00	-4.545455	20	PASS
			NV	40	-26000.00	-4.545455	20	PASS
			NV	50	-26000.00	-4.545455	20	PASS
		5745	NV	-30	-28000.00	-4.873803	20	PASS
			NV	-20	-27000.00	-4.699739	20	PASS
			NV	-10	-28000.00	-4.873803	20	PASS
			NV	0	-27000.00	-4.699739	20	PASS
			NV	10	-27000.00	-4.699739	20	PASS
			NV	20	-27000.00	-4.699739	20	PASS
			NV	30	-27000.00	-4.699739	20	PASS
			NV	40	-27000.00	-4.699739	20	PASS
		5785	NV	50	-27000.00	-4.699739	20	PASS
			NV	-30	-29000.00	-5.012965	20	PASS
			NV	-20	-28000.00	-4.840104	20	PASS
			NV	-10	-28000.00	-4.840104	20	PASS
			NV	0	-27000.00	-4.667243	20	PASS
			NV	10	-27000.00	-4.667243	20	PASS
			NV	20	-27000.00	-4.667243	20	PASS
			NV	30	-26000.00	-4.494382	20	PASS
		5825	NV	40	-26000.00	-4.494382	20	PASS
			NV	50	-26000.00	-4.494382	20	PASS
			NV	-30	-28000.00	-4.806867	20	PASS
			NV	-20	-28000.00	-4.806867	20	PASS
			NV	-10	-28000.00	-4.806867	20	PASS
			NV	0	-27000.00	-4.635193	20	PASS
			NV	10	-27000.00	-4.635193	20	PASS
			NV	20	-27000.00	-4.635193	20	PASS
			NV	30	-27000.00	-4.635193	20	PASS
		5190	NV	40	-27000.00	-4.635193	20	PASS
			NV	50	-26000.00	-4.463519	20	PASS
			NV	-30	-33000.00	-6.358382	20	PASS
11AC40 MIMO	Ant1	5190	NV	-20	-33000.00	-6.358382	20	PASS
			NV	-10	-32000.00	-6.165703	20	PASS

			NV	0	-31000.00	-5.973025	20	PASS
			NV	10	-31000.00	-5.973025	20	PASS
			NV	20	-31000.00	-5.973025	20	PASS
			NV	30	-30000.00	-5.780347	20	PASS
			NV	40	-30000.00	-5.780347	20	PASS
			NV	50	-29000.00	-5.587669	20	PASS
			NV	-30	-27000.00	-5.162524	20	PASS
			NV	-20	-27000.00	-5.162524	20	PASS
			NV	-10	-26000.00	-4.971319	20	PASS
			NV	0	-26000.00	-4.971319	20	PASS
			NV	10	-26000.00	-4.971319	20	PASS
			NV	20	-26000.00	-4.971319	20	PASS
			NV	30	-25000.00	-4.780115	20	PASS
			NV	40	-25000.00	-4.780115	20	PASS
			NV	50	-25000.00	-4.780115	20	PASS
			NV	-30	-26000.00	-4.933586	20	PASS
			NV	-20	-25000.00	-4.743833	20	PASS
			NV	-10	-24000.00	-4.554080	20	PASS
			NV	0	-24000.00	-4.554080	20	PASS
			NV	10	-24000.00	-4.554080	20	PASS
			NV	20	-23000.00	-4.364326	20	PASS
			NV	30	-23000.00	-4.364326	20	PASS
			NV	40	-23000.00	-4.364326	20	PASS
			NV	50	-23000.00	-4.364326	20	PASS
			NV	-30	-26000.00	-4.896422	20	PASS
			NV	-20	-26000.00	-4.896422	20	PASS
			NV	-10	-25000.00	-4.708098	20	PASS
			NV	0	-25000.00	-4.708098	20	PASS
			NV	10	-25000.00	-4.708098	20	PASS
			NV	20	-25000.00	-4.708098	20	PASS
			NV	30	-25000.00	-4.708098	20	PASS
			NV	40	-25000.00	-4.708098	20	PASS
			NV	50	-25000.00	-4.708098	20	PASS
			NV	-30	-28000.00	-5.081670	20	PASS
			NV	-20	-28000.00	-5.081670	20	PASS
			NV	-10	-27000.00	-4.900181	20	PASS
			NV	0	-27000.00	-4.900181	20	PASS
			NV	10	-27000.00	-4.900181	20	PASS
			NV	20	-26000.00	-4.718693	20	PASS
			NV	30	-26000.00	-4.718693	20	PASS
			NV	40	-26000.00	-4.718693	20	PASS
			NV	50	-26000.00	-4.718693	20	PASS
			NV	-30	-28000.00	-5.045045	20	PASS
			NV	-20	-27000.00	-4.864865	20	PASS
			NV	-10	-27000.00	-4.864865	20	PASS
			NV	0	-27000.00	-4.864865	20	PASS
			NV	10	-27000.00	-4.864865	20	PASS
			NV	20	-26000.00	-4.684685	20	PASS
			NV	30	-26000.00	-4.684685	20	PASS
			NV	40	-26000.00	-4.684685	20	PASS
			NV	50	-26000.00	-4.684685	20	PASS
			NV	-30	-27000.00	-4.761905	20	PASS
			NV	-20	-27000.00	-4.761905	20	PASS
			NV	-10	-26000.00	-4.585538	20	PASS
			NV	0	-25000.00	-4.409171	20	PASS
			NV	10	-25000.00	-4.409171	20	PASS
			NV	20	-25000.00	-4.409171	20	PASS
			NV	30	-24000.00	-4.232804	20	PASS
			NV	40	-24000.00	-4.232804	20	PASS
			NV	50	-24000.00	-4.232804	20	PASS

11AC80 MIMO	Ant1	5710	NV	-30	-28000.00	-4.903678	20	PASS
			NV	-20	-28000.00	-4.903678	20	PASS
			NV	-10	-27000.00	-4.728546	20	PASS
			NV	0	-27000.00	-4.728546	20	PASS
			NV	10	-27000.00	-4.728546	20	PASS
			NV	20	-27000.00	-4.728546	20	PASS
			NV	30	-27000.00	-4.728546	20	PASS
			NV	40	-26000.00	-4.553415	20	PASS
		5755	NV	50	-26000.00	-4.553415	20	PASS
			NV	-30	-43000.00	-7.471764	20	PASS
			NV	-20	-43000.00	-7.471764	20	PASS
			NV	-10	-43000.00	-7.471764	20	PASS
			NV	0	-43000.00	-7.471764	20	PASS
			NV	10	-42000.00	-7.298002	20	PASS
			NV	20	-42000.00	-7.298002	20	PASS
			NV	30	-42000.00	-7.298002	20	PASS
		5795	NV	40	-42000.00	-7.298002	20	PASS
			NV	50	-41000.00	-7.124240	20	PASS
			NV	-30	-36000.00	-6.212252	20	PASS
			NV	-20	-36000.00	-6.212252	20	PASS
			NV	-10	-35000.00	-6.039689	20	PASS
			NV	0	-35000.00	-6.039689	20	PASS
			NV	10	-35000.00	-6.039689	20	PASS
			NV	20	-35000.00	-6.039689	20	PASS
		5210	NV	30	-35000.00	-6.039689	20	PASS
			NV	40	-35000.00	-6.039689	20	PASS
			NV	50	-35000.00	-6.039689	20	PASS
			NV	-30	-34000.00	-6.525912	20	PASS
			NV	-20	-34000.00	-6.525912	20	PASS
			NV	-10	-34000.00	-6.525912	20	PASS
			NV	0	-33000.00	-6.333973	20	PASS
			NV	10	-33000.00	-6.333973	20	PASS
		5290	NV	20	-33000.00	-6.333973	20	PASS
			NV	30	-32000.00	-6.142035	20	PASS
			NV	40	-32000.00	-6.142035	20	PASS
			NV	50	-32000.00	-6.142035	20	PASS
			NV	-30	-34000.00	-6.427221	20	PASS
			NV	-20	-33000.00	-6.238185	20	PASS
			NV	-10	-33000.00	-6.238185	20	PASS
			NV	0	-33000.00	-6.238185	20	PASS
		5530	NV	10	-33000.00	-6.238185	20	PASS
			NV	20	-33000.00	-6.238185	20	PASS
			NV	30	-33000.00	-6.238185	20	PASS
			NV	40	-33000.00	-6.238185	20	PASS
			NV	50	-33000.00	-6.238185	20	PASS
			NV	-30	-36000.00	-6.509946	20	PASS
			NV	-20	-35000.00	-6.329114	20	PASS
			NV	-10	-35000.00	-6.329114	20	PASS
		5610	NV	0	-34000.00	-6.148282	20	PASS
			NV	10	-34000.00	-6.148282	20	PASS
			NV	20	-34000.00	-6.148282	20	PASS
			NV	30	-34000.00	-6.148282	20	PASS
			NV	40	-33000.00	-5.967450	20	PASS
			NV	50	-34000.00	-6.148282	20	PASS
		5610	NV	-30	-34000.00	-6.060606	20	PASS
			NV	-20	-33000.00	-5.882353	20	PASS
			NV	-10	-33000.00	-5.882353	20	PASS
			NV	0	-32000.00	-5.704100	20	PASS
			NV	10	-32000.00	-5.704100	20	PASS
			NV	20	-31000.00	-5.525847	20	PASS