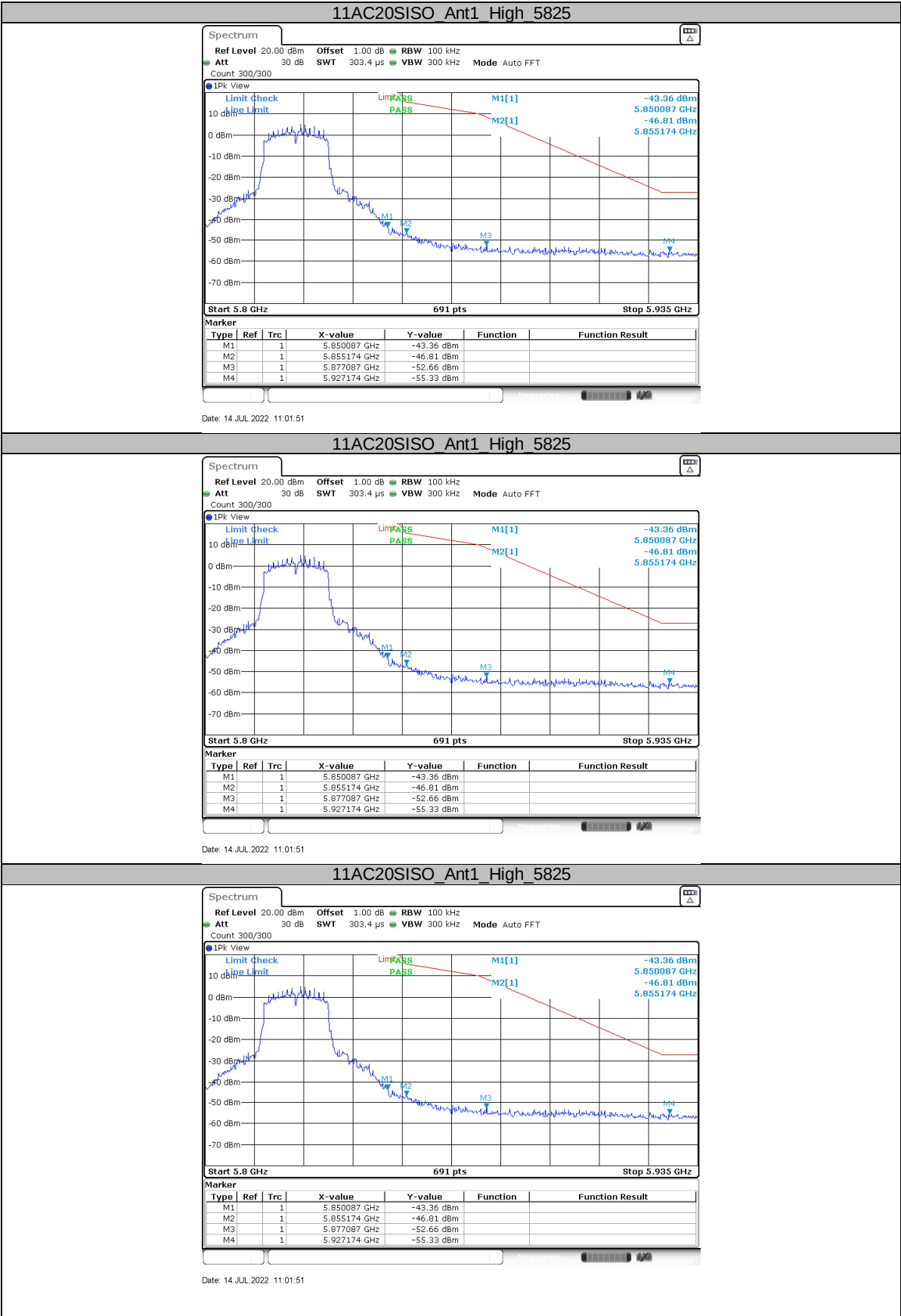
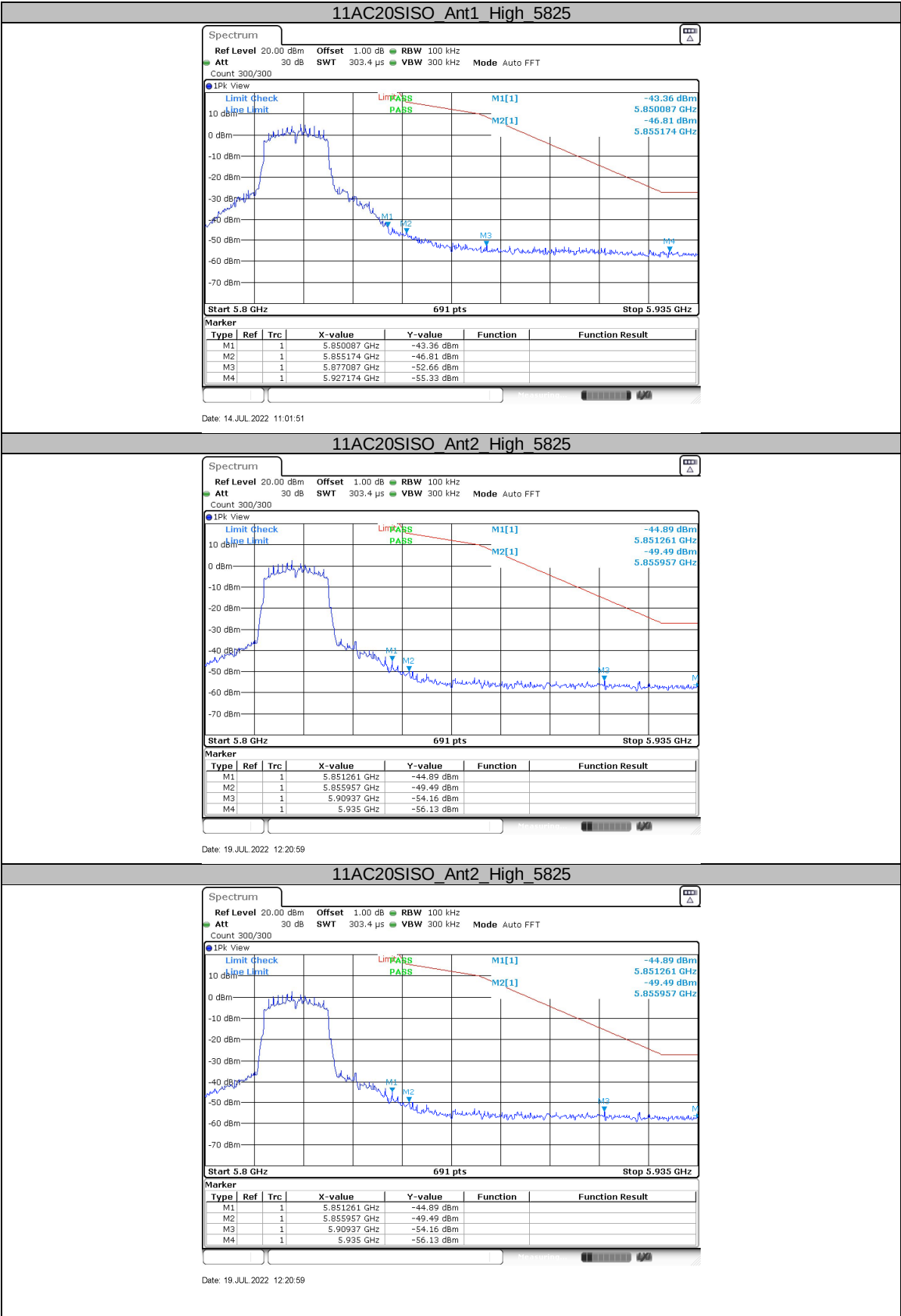
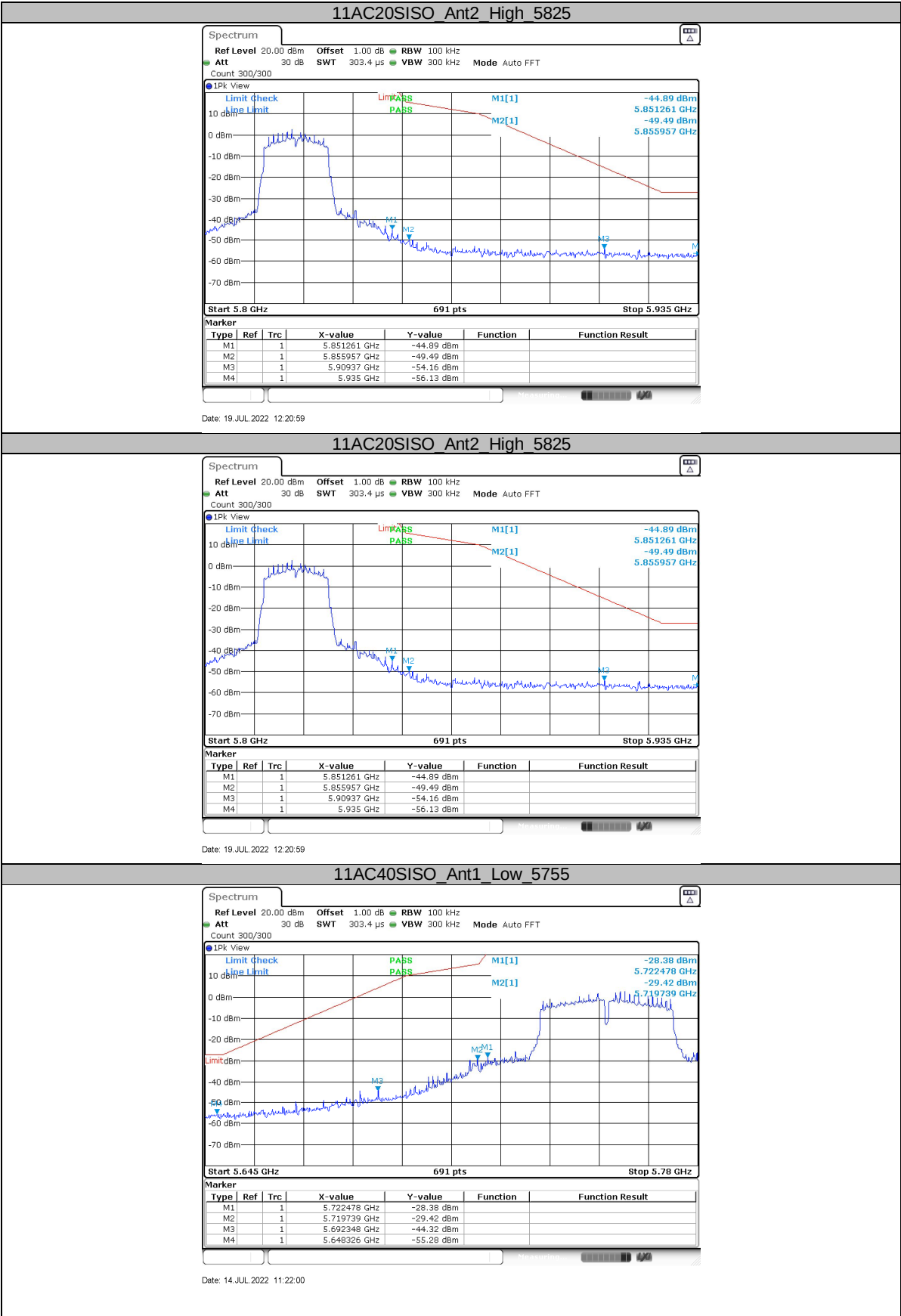
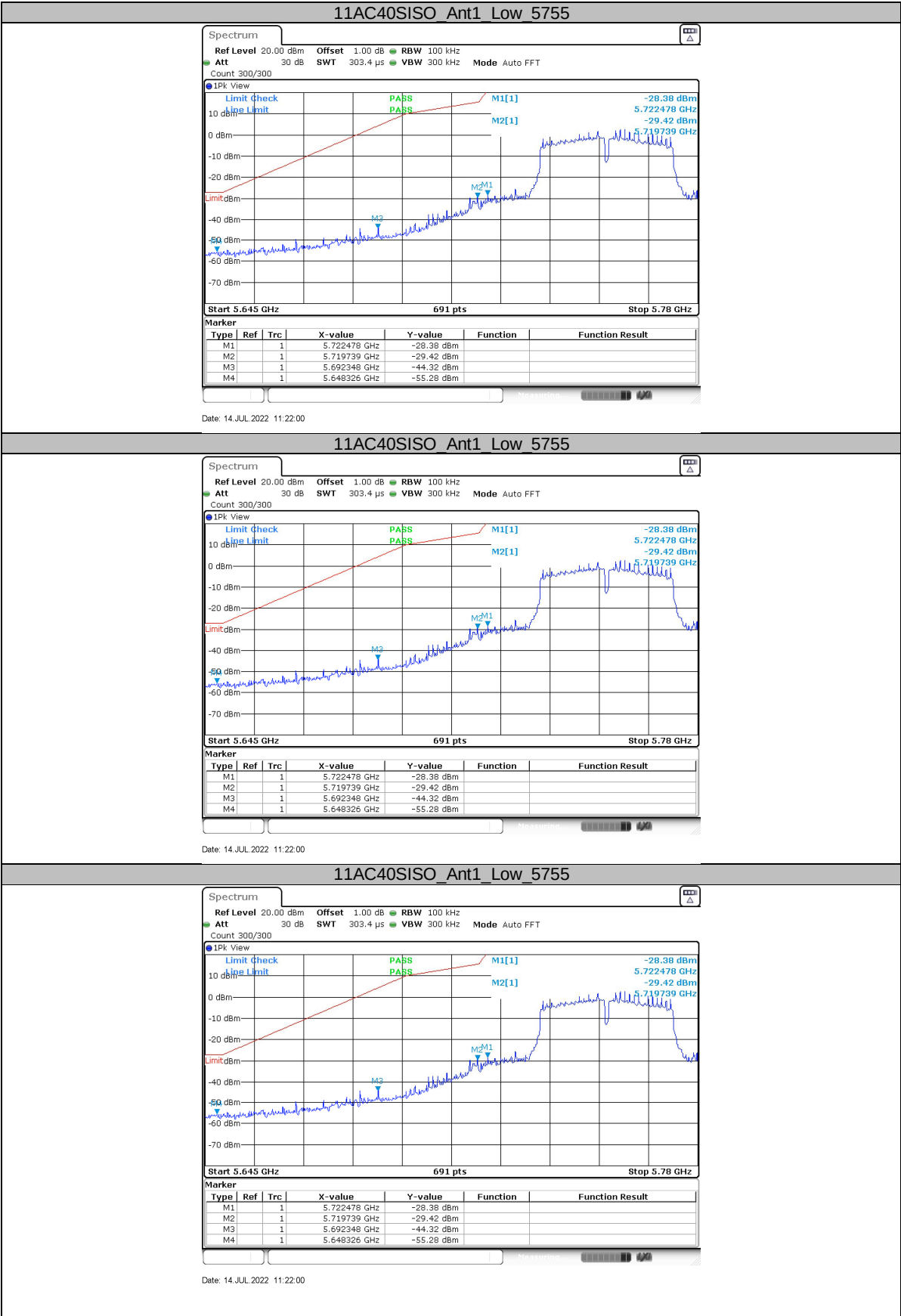
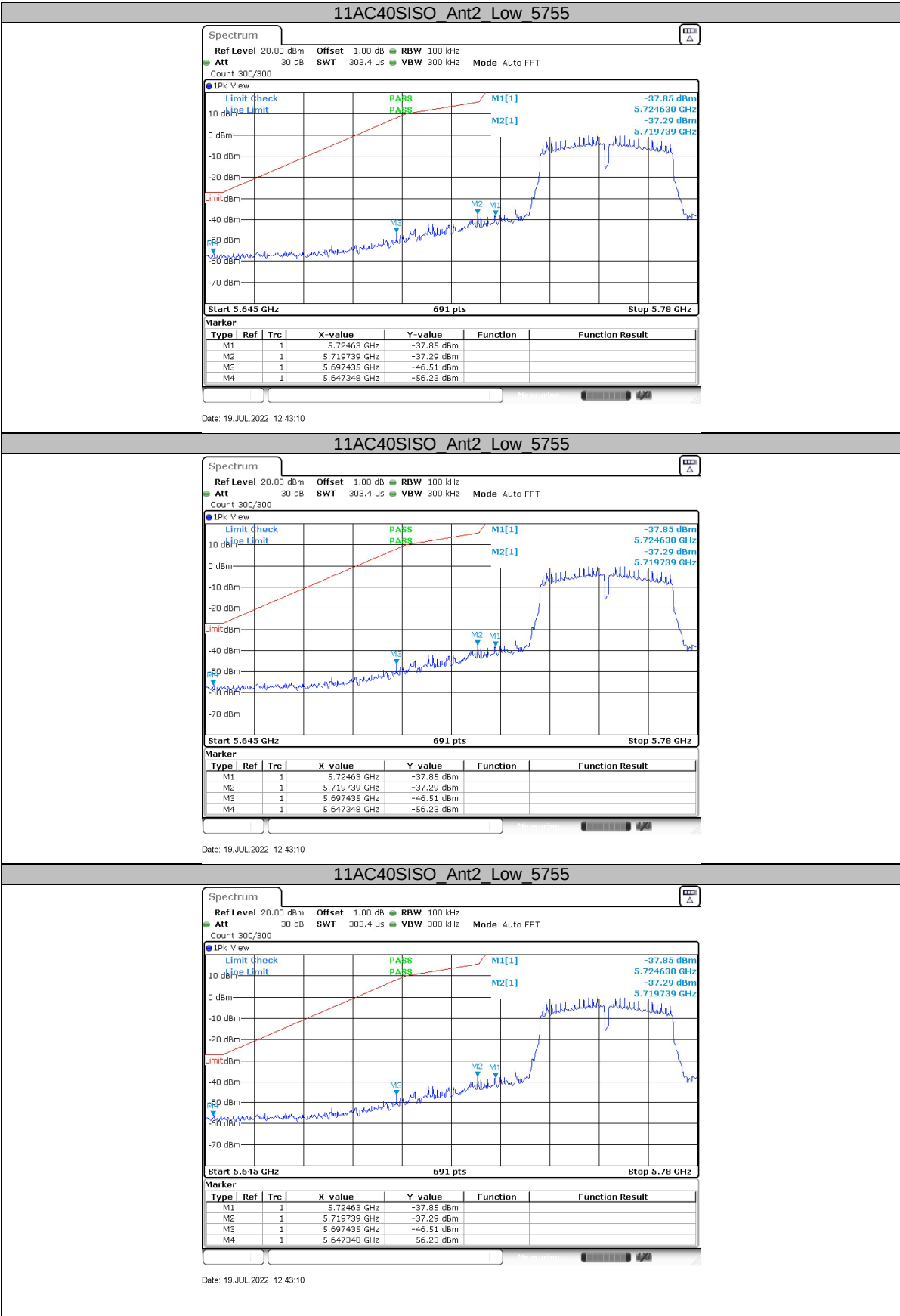


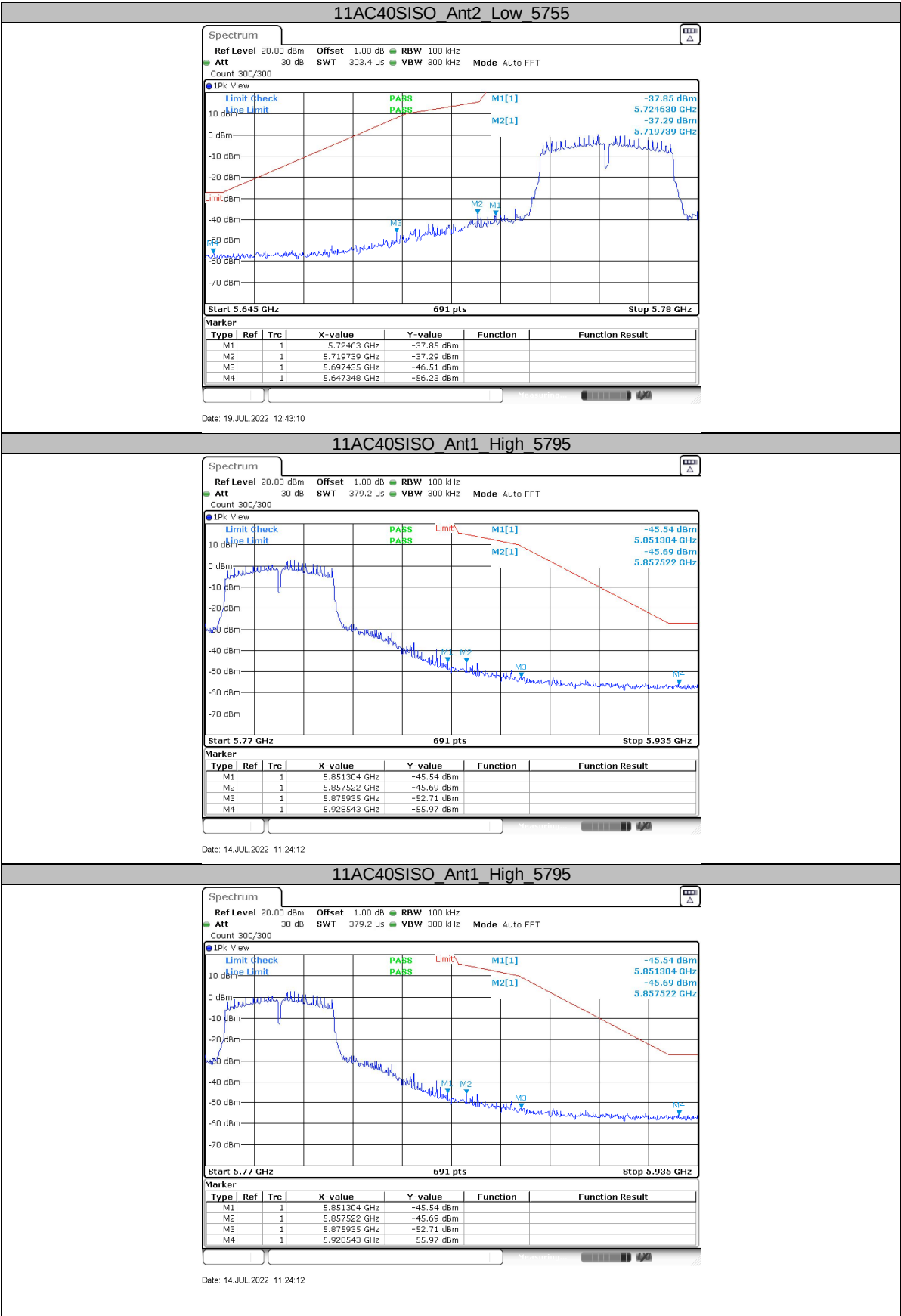


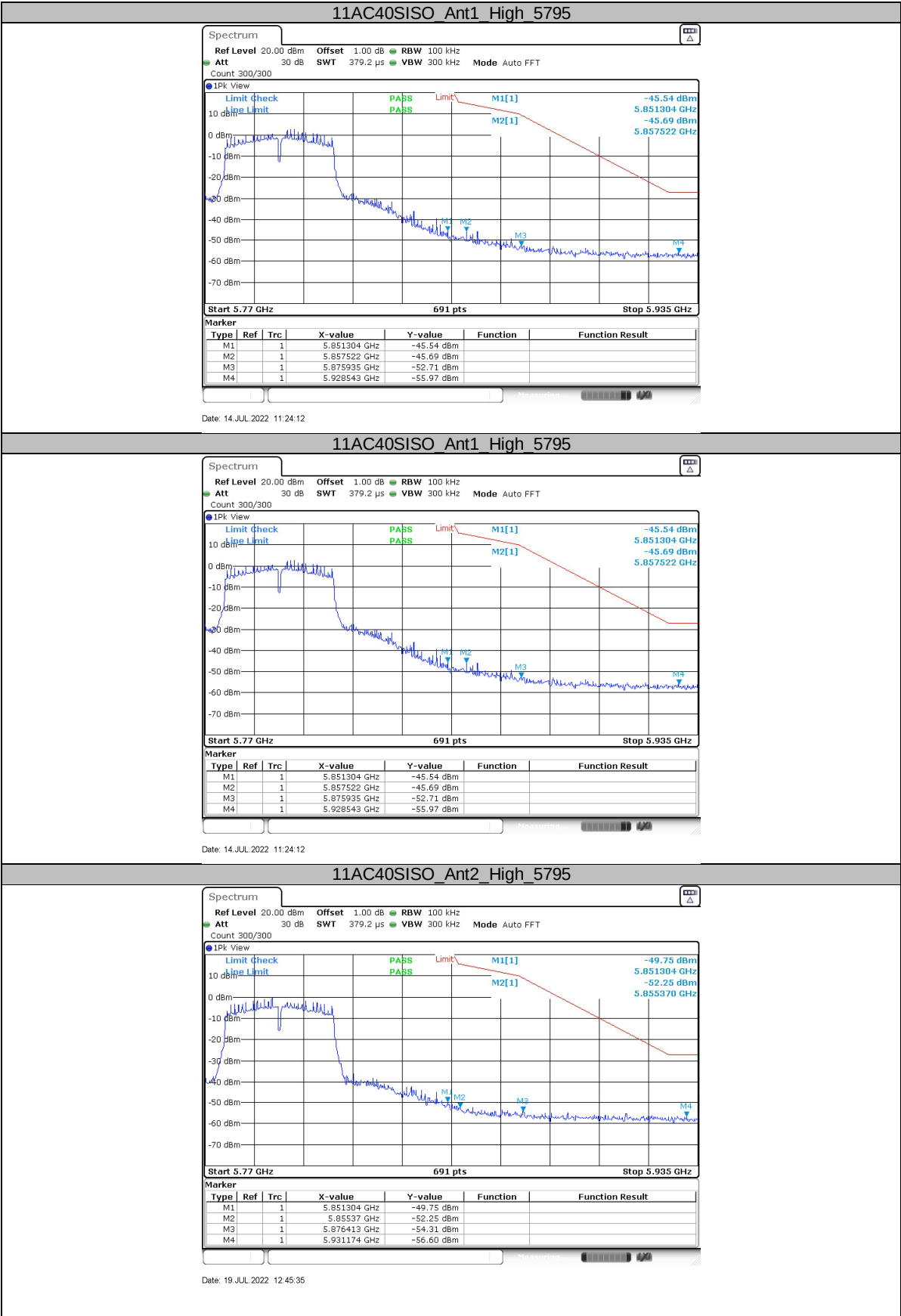


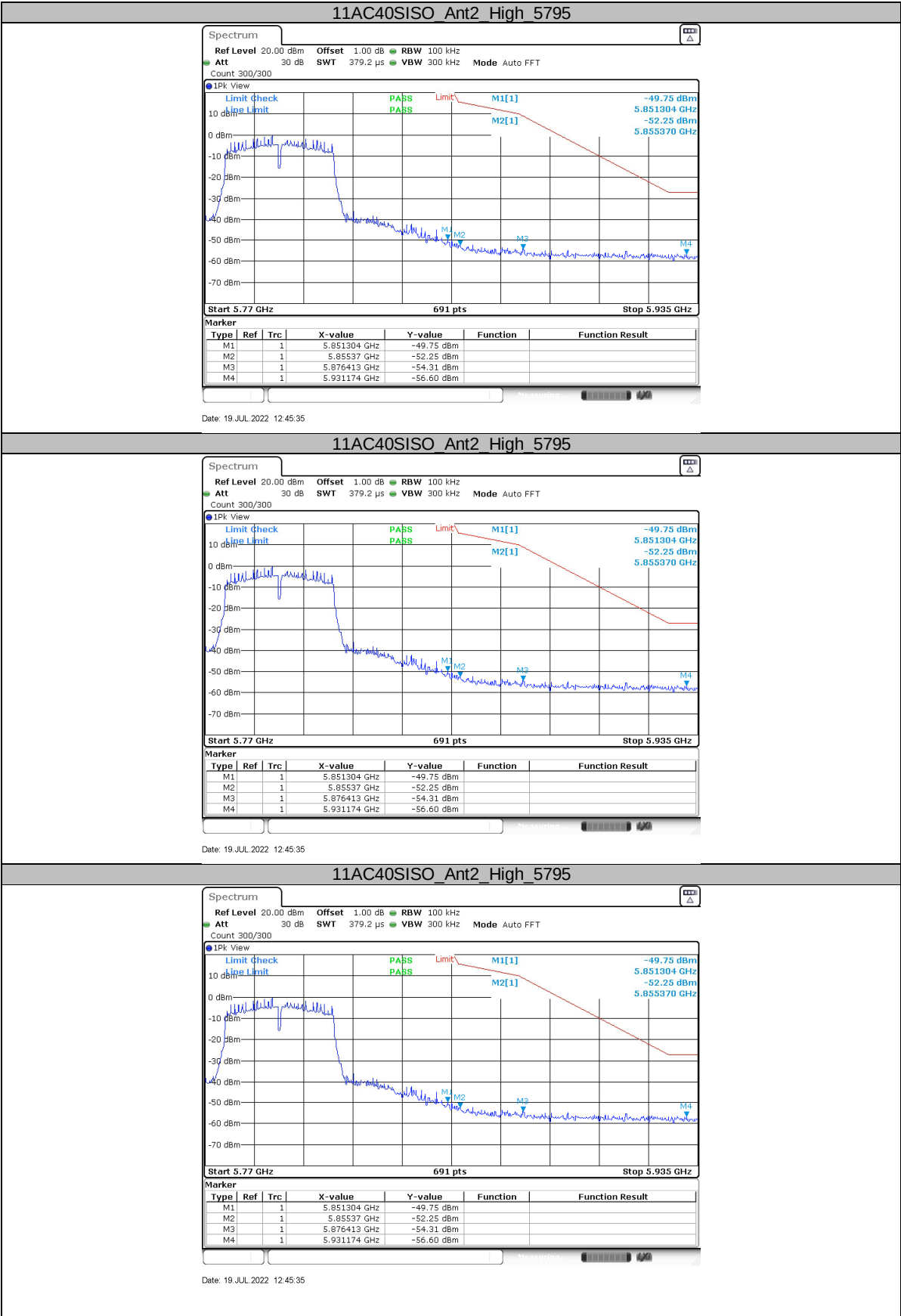


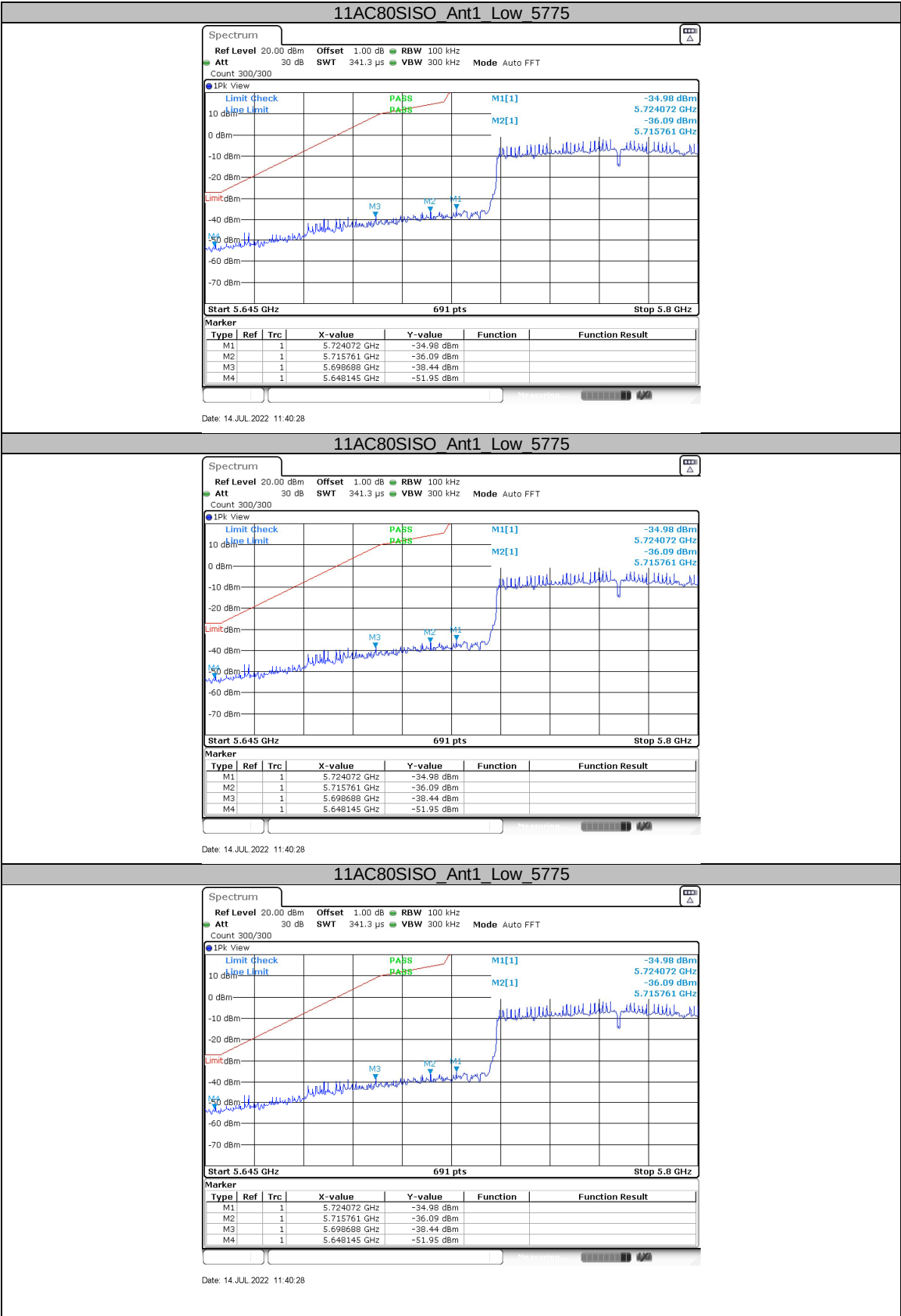


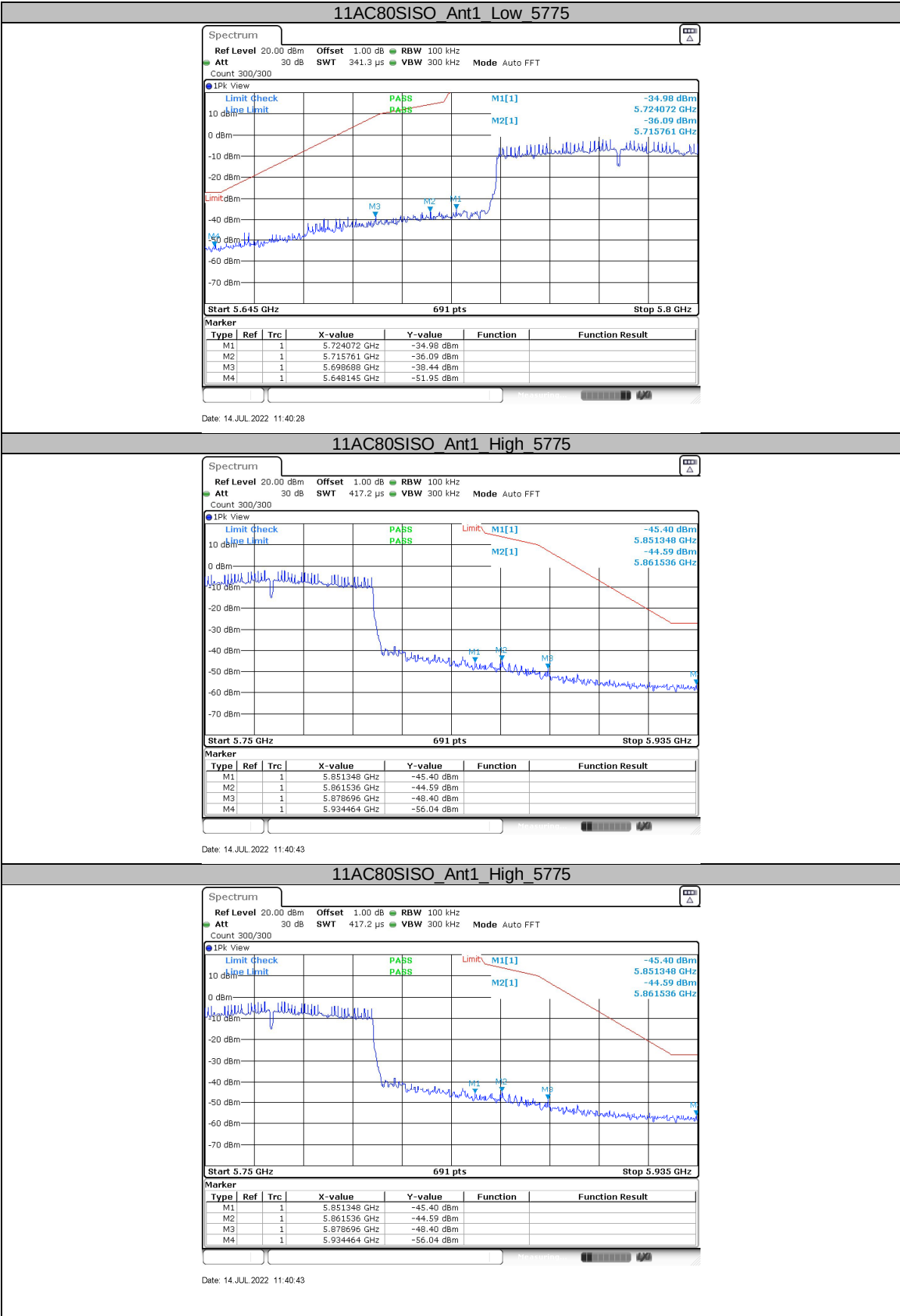


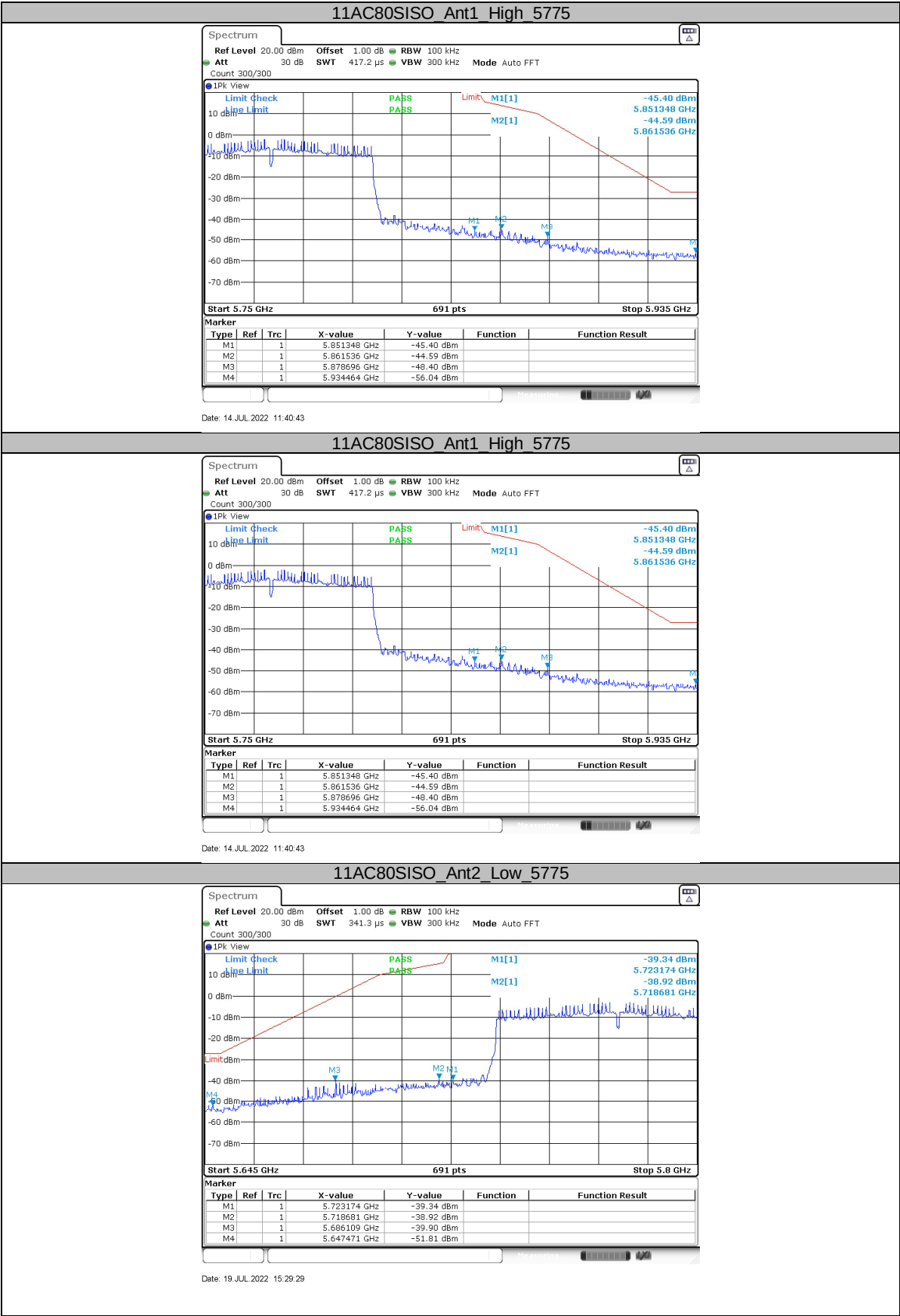


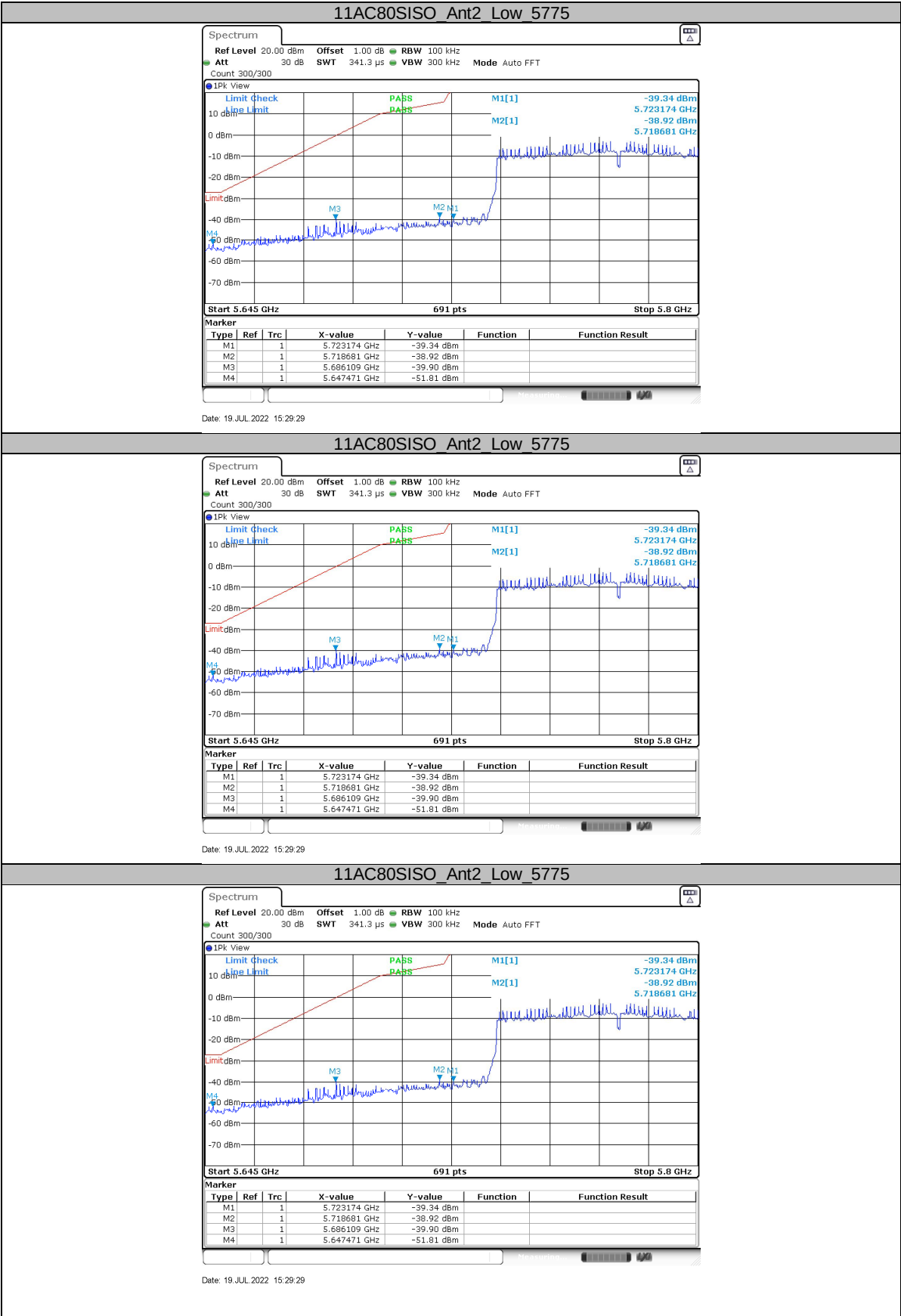


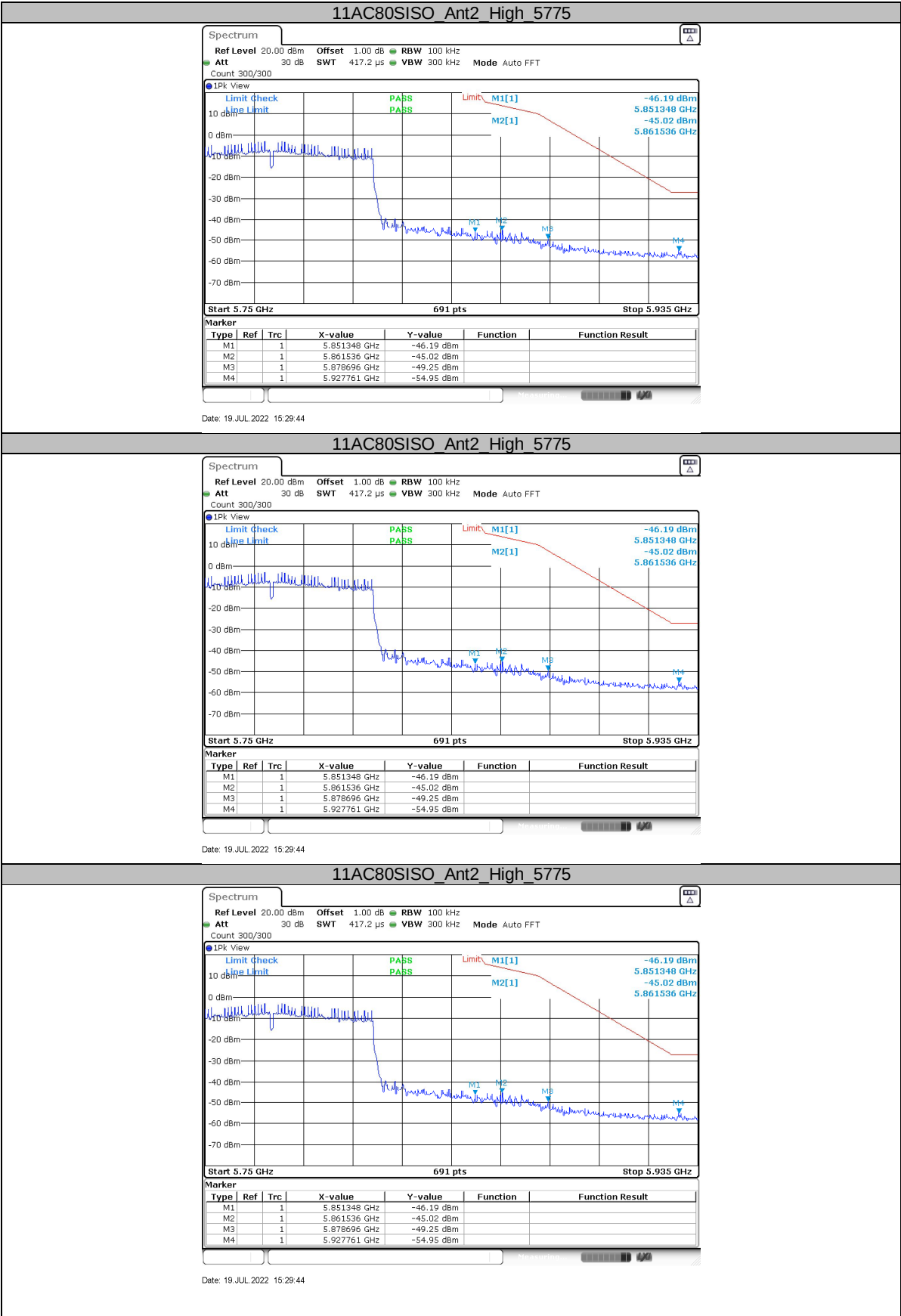


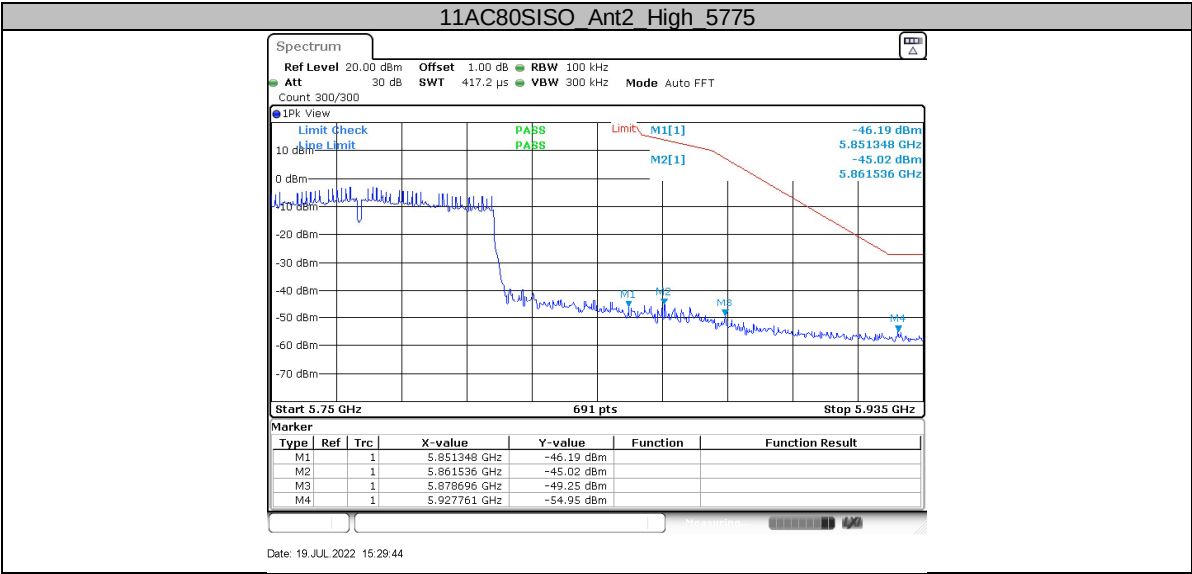












9.7 Frequencies Stability

Test Method

1. The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.
2. Set Centre Frequency of the channel under test.
3. Set Detector PEAK
4. Set RBW: 10KHz, VBW: 3RBW
5. Set Span: Encompass the entire emissions bandwidth (EBW) of the signal.
6. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

Technical description temperature is 0°C to 40°C

Limit: 20ppm

Test Results (All conditions and all modes were performed, only list Worst-Case in the report)

Remark: NV is normal Voltage: 120VAC, HV is High Voltage: 138Vdc, LV is Low Voltage: 102Vdc, NT is normal Temperature: +25°C.

Test result:

Test Mode	Antenna	Channel	Voltage					Verdict
			Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	
11AC20SISO	Ant1	5180	NV	NT	-21000	-4.054054	20	PASS
			LV	NT	-21000	-4.054054	20	PASS
			HV	NT	-21000	-4.054054	20	PASS
		5200	NV	NT	-21000	-4.038462	20	PASS
			LV	NT	-21000	-4.038462	20	PASS
			HV	NT	-21000	-4.038462	20	PASS
		5240	NV	NT	-21000	-4.007634	20	PASS
			LV	NT	-21000	-4.007634	20	PASS
			HV	NT	-21000	-4.007634	20	PASS
		5260	NV	NT	-22000	-4.18251	20	PASS
			LV	NT	-21000	-3.992395	20	PASS
			HV	NT	-21000	-3.992395	20	PASS
		5280	NV	NT	-21000	-3.977273	20	PASS
			LV	NT	-21000	-3.977273	20	PASS
			HV	NT	-20000	-3.787879	20	PASS
		5320	NV	NT	-22000	-4.135338	20	PASS
			LV	NT	-21000	-3.947368	20	PASS
			HV	NT	-21000	-3.947368	20	PASS
		5500	NV	NT	-22000	-4	20	PASS
			LV	NT	-21000	-3.818182	20	PASS
			HV	NT	-21000	-3.818182	20	PASS
		5580	NV	NT	-22000	-3.942652	20	PASS
			LV	NT	-22000	-3.942652	20	PASS
			HV	NT	-21000	-3.763441	20	PASS
		5700	NV	NT	-22000	-3.859649	20	PASS
			LV	NT	-22000	-3.859649	20	PASS
			HV	NT	-21000	-3.684211	20	PASS
		5720	NV	NT	-22000	-3.846154	20	PASS
			LV	NT	-21000	-3.671329	20	PASS
			HV	NT	-21000	-3.671329	20	PASS
		5745	NV	NT	-22000	-3.829417	20	PASS
			LV	NT	-21000	-3.655352	20	PASS
			HV	NT	-21000	-3.655352	20	PASS
		5785	NV	NT	-22000	-3.802939	20	PASS
			LV	NT	-21000	-3.630078	20	PASS
			HV	NT	-21000	-3.630078	20	PASS
		5825	NV	NT	-22000	-3.776824	20	PASS
			LV	NT	-21000	-3.60515	20	PASS
			HV	NT	-21000	-3.60515	20	PASS
11AC40SISO	Ant1	5190	NV	NT	-18000	-3.468208	20	PASS
			LV	NT	-18000	-3.468208	20	PASS
			HV	NT	-18000	-3.468208	20	PASS
		5230	NV	NT	-18000	-3.441683	20	PASS
			LV	NT	-18000	-3.441683	20	PASS
			HV	NT	-18000	-3.441683	20	PASS
		5270	NV	NT	-18000	-3.41556	20	PASS
			LV	NT	-18000	-3.41556	20	PASS
			HV	NT	-18000	-3.41556	20	PASS
		5310	NV	NT	-19000	-3.578154	20	PASS
			LV	NT	-18000	-3.389831	20	PASS
			HV	NT	-18000	-3.389831	20	PASS
		5510	NV	NT	-19000	-3.448276	20	PASS
			LV	NT	-19000	-3.448276	20	PASS
			HV	NT	-19000	-3.448276	20	PASS
		5550	NV	NT	-19000	-3.423423	20	PASS
			LV	NT	-19000	-3.423423	20	PASS
			HV	NT	-19000	-3.423423	20	PASS
		5670	NV	NT	-19000	-3.35097	20	PASS
			LV	NT	-19000	-3.35097	20	PASS

		5710	HV	NT	-19000	-3.35097	20	PASS
			NV	NT	-19000	-3.327496	20	PASS
			LV	NT	-19000	-3.327496	20	PASS
			HV	NT	-19000	-3.327496	20	PASS
		5755	NV	NT	-19000	-3.301477	20	PASS
			LV	NT	-19000	-3.301477	20	PASS
			HV	NT	-19000	-3.301477	20	PASS
		5795	NV	NT	-18000	-3.106126	20	PASS
			LV	NT	-19000	-3.278689	20	PASS
			HV	NT	-19000	-3.278689	20	PASS
11AC80SISO	Ant1	5210	NV	NT	-17000	-3.262956	20	PASS
			LV	NT	-18000	-3.454894	20	PASS
			HV	NT	-18000	-3.454894	20	PASS
		5290	NV	NT	-17000	-3.213611	20	PASS
			LV	NT	-17000	-3.213611	20	PASS
			HV	NT	-17000	-3.213611	20	PASS
		5530	NV	NT	-18000	-3.254973	20	PASS
			LV	NT	-18000	-3.254973	20	PASS
			HV	NT	-17000	-3.074141	20	PASS
		5690	NV	NT	-19000	-3.339192	20	PASS
			LV	NT	-19000	-3.339192	20	PASS
			HV	NT	-19000	-3.339192	20	PASS
		5775	NV	NT	-19000	-3.290043	20	PASS
			LV	NT	-19000	-3.290043	20	PASS
			HV	NT	-19000	-3.290043	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20SISO	Ant1	5180	NV	-30	-21000	-4.054054	20	PASS
			NV	-20	-21000	-4.054054	20	PASS
			NV	-10	-21000	-4.054054	20	PASS
			NV	0	-21000	-4.054054	20	PASS
			NV	10	-21000	-4.054054	20	PASS
			NV	20	-21000	-4.054054	20	PASS
			NV	30	-21000	-4.054054	20	PASS
			NV	40	-21000	-4.054054	20	PASS
		5200	NV	50	-21000	-4.054054	20	PASS
			NV	-30	-21000	-4.038462	20	PASS
			NV	-20	-21000	-4.038462	20	PASS
			NV	-10	-21000	-4.038462	20	PASS
			NV	0	-21000	-4.038462	20	PASS
			NV	10	-21000	-4.038462	20	PASS
			NV	20	-21000	-4.038462	20	PASS
			NV	30	-21000	-4.038462	20	PASS
		5240	NV	40	-21000	-4.038462	20	PASS
			NV	50	-21000	-4.038462	20	PASS
			NV	-30	-21000	-4.007634	20	PASS
			NV	-20	-21000	-4.007634	20	PASS
			NV	-10	-21000	-4.007634	20	PASS
			NV	0	-21000	-4.007634	20	PASS
			NV	10	-21000	-4.007634	20	PASS
			NV	20	-20000	-3.816794	20	PASS
		5260	NV	30	-21000	-4.007634	20	PASS
			NV	40	-20000	-3.816794	20	PASS
			NV	50	-21000	-4.007634	20	PASS
			NV	-30	-21000	-3.992395	20	PASS
			NV	-20	-21000	-3.992395	20	PASS
			NV	-10	-20000	-3.802281	20	PASS
			NV	0	-20000	-3.802281	20	PASS
			NV	10	-20000	-3.802281	20	PASS
			NV	20	-21000	-3.992395	20	PASS
			NV	30	-20000	-3.802281	20	PASS

			NV	40	-20000	-3.802281	20	PASS
			NV	50	-20000	-3.802281	20	PASS
		5280	NV	-30	-20000	-3.787879	20	PASS
			NV	-20	-20000	-3.787879	20	PASS
			NV	-10	-20000	-3.787879	20	PASS
			NV	0	-20000	-3.787879	20	PASS
			NV	10	-20000	-3.787879	20	PASS
			NV	20	-20000	-3.787879	20	PASS
			NV	30	-20000	-3.787879	20	PASS
			NV	40	-20000	-3.787879	20	PASS
			NV	50	-20000	-3.787879	20	PASS
		5320	NV	-30	-20000	-3.759398	20	PASS
			NV	-20	-20000	-3.759398	20	PASS
			NV	-10	-20000	-3.759398	20	PASS
			NV	0	-20000	-3.759398	20	PASS
			NV	10	-20000	-3.759398	20	PASS
			NV	20	-20000	-3.759398	20	PASS
			NV	30	-20000	-3.759398	20	PASS
			NV	40	-20000	-3.759398	20	PASS
		5500	NV	-30	-21000	-3.818182	20	PASS
			NV	-20	-21000	-3.818182	20	PASS
			NV	-10	-21000	-3.818182	20	PASS
			NV	0	-21000	-3.818182	20	PASS
			NV	10	-21000	-3.818182	20	PASS
			NV	20	-21000	-3.818182	20	PASS
			NV	30	-21000	-3.818182	20	PASS
			NV	40	-21000	-3.818182	20	PASS
		5580	NV	-30	-21000	-3.763441	20	PASS
			NV	-20	-21000	-3.763441	20	PASS
			NV	-10	-21000	-3.763441	20	PASS
			NV	0	-21000	-3.763441	20	PASS
			NV	10	-21000	-3.763441	20	PASS
			NV	20	-21000	-3.763441	20	PASS
			NV	30	-21000	-3.763441	20	PASS
			NV	40	-21000	-3.763441	20	PASS
		5700	NV	-30	-21000	-3.684211	20	PASS
			NV	-20	-21000	-3.684211	20	PASS
			NV	-10	-21000	-3.684211	20	PASS
			NV	0	-21000	-3.684211	20	PASS
			NV	10	-21000	-3.684211	20	PASS
			NV	20	-21000	-3.684211	20	PASS
			NV	30	-21000	-3.684211	20	PASS
			NV	40	-21000	-3.684211	20	PASS
		5720	NV	-30	-21000	-3.671329	20	PASS
			NV	-20	-21000	-3.671329	20	PASS
			NV	-10	-21000	-3.671329	20	PASS
			NV	0	-21000	-3.671329	20	PASS
			NV	10	-21000	-3.671329	20	PASS
			NV	20	-21000	-3.671329	20	PASS
			NV	30	-21000	-3.671329	20	PASS
			NV	40	-21000	-3.671329	20	PASS
		5745	NV	-30	-21000	-3.655352	20	PASS
			NV	-20	-21000	-3.655352	20	PASS
			NV	-10	-21000	-3.655352	20	PASS
			NV	0	-21000	-3.655352	20	PASS
			NV	10	-21000	-3.655352	20	PASS
			NV	20	-21000	-3.655352	20	PASS
			NV	30	-21000	-3.655352	20	PASS
			NV	40	-21000	-3.655352	20	PASS

		5785	NV	50	-21000	-3.655352	20	PASS
			NV	-30	-21000	-3.630078	20	PASS
			NV	-20	-21000	-3.630078	20	PASS
			NV	-10	-21000	-3.630078	20	PASS
			NV	0	-21000	-3.630078	20	PASS
			NV	10	-21000	-3.630078	20	PASS
			NV	20	-21000	-3.630078	20	PASS
			NV	30	-21000	-3.630078	20	PASS
			NV	40	-21000	-3.630078	20	PASS
			NV	50	-21000	-3.630078	20	PASS
		5825	NV	-30	-21000	-3.60515	20	PASS
			NV	-20	-21000	-3.60515	20	PASS
			NV	-10	-21000	-3.60515	20	PASS
			NV	0	-21000	-3.60515	20	PASS
			NV	10	-21000	-3.60515	20	PASS
			NV	20	-21000	-3.60515	20	PASS
			NV	30	-21000	-3.60515	20	PASS
			NV	40	-21000	-3.60515	20	PASS
			NV	50	-21000	-3.60515	20	PASS
			NV	-30	-19000	-3.660886	20	PASS
11AC40SISO	Ant1	5190	NV	-20	-19000	-3.660886	20	PASS
			NV	-10	-18000	-3.468208	20	PASS
			NV	0	-18000	-3.468208	20	PASS
			NV	10	-18000	-3.468208	20	PASS
			NV	20	-18000	-3.468208	20	PASS
			NV	30	-18000	-3.468208	20	PASS
			NV	40	-18000	-3.468208	20	PASS
			NV	50	-18000	-3.468208	20	PASS
			NV	-30	-18000	-3.441683	20	PASS
			NV	-20	-18000	-3.441683	20	PASS
		5230	NV	-10	-18000	-3.441683	20	PASS
			NV	0	-18000	-3.441683	20	PASS
			NV	10	-18000	-3.441683	20	PASS
			NV	20	-18000	-3.441683	20	PASS
			NV	30	-18000	-3.441683	20	PASS
			NV	40	-18000	-3.441683	20	PASS
			NV	50	-18000	-3.441683	20	PASS
			NV	-30	-18000	-3.41556	20	PASS
			NV	-20	-18000	-3.41556	20	PASS
			NV	-10	-18000	-3.41556	20	PASS
		5270	NV	0	-18000	-3.41556	20	PASS
			NV	10	-18000	-3.41556	20	PASS
			NV	20	-18000	-3.41556	20	PASS
			NV	30	-18000	-3.41556	20	PASS
			NV	40	-18000	-3.41556	20	PASS
			NV	50	-18000	-3.41556	20	PASS
			NV	-30	-19000	-3.578154	20	PASS
			NV	-20	-19000	-3.578154	20	PASS
			NV	-10	-19000	-3.578154	20	PASS
			NV	0	-19000	-3.578154	20	PASS
		5310	NV	10	-19000	-3.578154	20	PASS
			NV	20	-19000	-3.578154	20	PASS
			NV	30	-19000	-3.578154	20	PASS
			NV	40	-19000	-3.578154	20	PASS
			NV	50	-19000	-3.578154	20	PASS
			NV	-30	-20000	-3.629764	20	PASS
			NV	-20	-19000	-3.448276	20	PASS
			NV	-10	-19000	-3.448276	20	PASS
			NV	0	-19000	-3.448276	20	PASS
			NV	10	-19000	-3.448276	20	PASS
		5510	NV	20	-19000	-3.448276	20	PASS
			NV	30	-19000	-3.448276	20	PASS
			NV	40	-19000	-3.448276	20	PASS
			NV	50	-19000	-3.448276	20	PASS
			NV	-30	-20000	-3.629764	20	PASS
			NV	-20	-19000	-3.448276	20	PASS
			NV	-10	-19000	-3.448276	20	PASS
			NV	0	-19000	-3.448276	20	PASS

		5550	NV	-30	-19000	-3.423423	20	PASS
			NV	-20	-19000	-3.423423	20	PASS
			NV	-10	-19000	-3.423423	20	PASS
			NV	0	-19000	-3.423423	20	PASS
			NV	10	-19000	-3.423423	20	PASS
			NV	20	-19000	-3.423423	20	PASS
			NV	30	-19000	-3.423423	20	PASS
			NV	40	-18000	-3.243243	20	PASS
		5670	NV	50	-18000	-3.243243	20	PASS
			NV	-30	-19000	-3.35097	20	PASS
			NV	-20	-19000	-3.35097	20	PASS
			NV	-10	-19000	-3.35097	20	PASS
			NV	0	-19000	-3.35097	20	PASS
			NV	10	-19000	-3.35097	20	PASS
			NV	20	-19000	-3.35097	20	PASS
			NV	30	-19000	-3.35097	20	PASS
		5710	NV	40	-19000	-3.35097	20	PASS
			NV	50	-19000	-3.35097	20	PASS
			NV	-30	-19000	-3.327496	20	PASS
			NV	-20	-19000	-3.327496	20	PASS
			NV	-10	-19000	-3.327496	20	PASS
			NV	0	-19000	-3.327496	20	PASS
			NV	10	-19000	-3.327496	20	PASS
			NV	20	-19000	-3.327496	20	PASS
		5755	NV	30	-19000	-3.327496	20	PASS
			NV	40	-19000	-3.327496	20	PASS
			NV	50	-19000	-3.327496	20	PASS
			NV	-30	-19000	-3.301477	20	PASS
			NV	-20	-19000	-3.301477	20	PASS
			NV	-10	-19000	-3.301477	20	PASS
			NV	0	-19000	-3.301477	20	PASS
			NV	10	-19000	-3.301477	20	PASS
		5795	NV	20	-19000	-3.301477	20	PASS
			NV	30	-19000	-3.301477	20	PASS
			NV	40	-19000	-3.301477	20	PASS
			NV	50	-19000	-3.301477	20	PASS
			NV	-30	-19000	-3.278689	20	PASS
			NV	-20	-19000	-3.278689	20	PASS
			NV	-10	-19000	-3.278689	20	PASS
			NV	0	-19000	-3.278689	20	PASS
11AC80SISO	Ant1	5210	NV	10	-19000	-3.278689	20	PASS
			NV	20	-19000	-3.278689	20	PASS
			NV	30	-19000	-3.278689	20	PASS
			NV	40	-19000	-3.278689	20	PASS
			NV	50	-19000	-3.278689	20	PASS
			NV	-30	-19000	-3.254973	20	PASS
			NV	-20	-19000	-3.254973	20	PASS
			NV	-10	-17000	-3.213611	20	PASS
		5290	NV	0	-17000	-3.213611	20	PASS
			NV	10	-17000	-3.213611	20	PASS
			NV	20	-17000	-3.213611	20	PASS
			NV	30	-17000	-3.213611	20	PASS
			NV	40	-17000	-3.213611	20	PASS
			NV	50	-17000	-3.213611	20	PASS
			NV	-30	-18000	-3.454894	20	PASS
			NV	-20	-18000	-3.454894	20	PASS
		5530	NV	-10	-17000	-3.213611	20	PASS
			NV	0	-17000	-3.213611	20	PASS
			NV	10	-17000	-3.213611	20	PASS
			NV	20	-17000	-3.213611	20	PASS
			NV	30	-17000	-3.213611	20	PASS
			NV	40	-17000	-3.213611	20	PASS
			NV	50	-17000	-3.213611	20	PASS
			NV	-30	-18000	-3.454894	20	PASS

			NV	-20	-17000	-3.074141	20	PASS
			NV	-10	-17000	-3.074141	20	PASS
			NV	0	-17000	-3.074141	20	PASS
			NV	10	-17000	-3.074141	20	PASS
			NV	20	-17000	-3.074141	20	PASS
			NV	30	-17000	-3.074141	20	PASS
			NV	40	-17000	-3.074141	20	PASS
			NV	50	-17000	-3.074141	20	PASS
		5690	NV	-30	-19000	-3.339192	20	PASS
			NV	-20	-19000	-3.339192	20	PASS
			NV	-10	-19000	-3.339192	20	PASS
			NV	0	-19000	-3.339192	20	PASS
			NV	10	-19000	-3.339192	20	PASS
			NV	20	-19000	-3.339192	20	PASS
			NV	30	-19000	-3.339192	20	PASS
			NV	40	-19000	-3.339192	20	PASS
		5775	NV	50	-19000	-3.339192	20	PASS
			NV	-30	-19000	-3.290043	20	PASS
			NV	-20	-19000	-3.290043	20	PASS
			NV	-10	-20000	-3.463203	20	PASS
			NV	0	-20000	-3.463203	20	PASS
			NV	10	-21000	-3.636364	20	PASS
			NV	20	-21000	-3.636364	20	PASS
			NV	30	-22000	-3.809524	20	PASS
			NV	40	-22000	-3.809524	20	PASS
			NV	50	-22000	-3.809524	20	PASS

9.8 Dynamic Frequency Selection (DFS)

General Test Condition

Parameters of EUT	
Frequency	5250 – 5350 MHz & 5470 – 5725 MHz
Operational Mode	Slave
Modulation:	OFDM
Channel Bandwidth:	20 MHz , 40 MHz, 80 MHz

Note: This device was functioned as a Slave device during the DFS

Test requirement

The manufacturer shall whether the EUT is capable of operating as a master and a client. If the EUT is capable of operating in more than one operating mode then each operating mode shall be tested separately.

DFS Applicability

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
Uniform Spreading	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

DFS Applicability During Normal Operation

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Yes	Not required
Uniform Spreading	Yes	Yes	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Test Limited

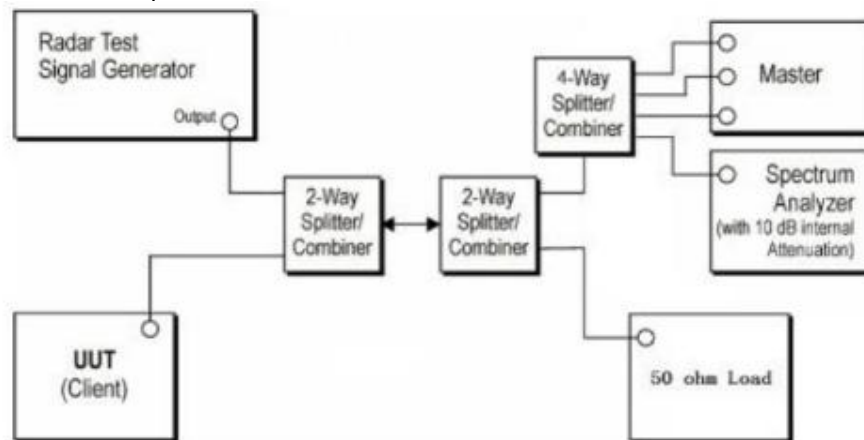
According to KDB 905462 D02 Table 4 DFS Response Requirement Values

Parameter	Value
<i>Non-occupancy period</i>	Minimum 30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.
Note 1: <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The <i>Channel Closing Transmission Time</i> is comprised of 200 milliseconds starting at the beginning of the <i>Channel Move Time</i> plus any additional intermittent control signals required to facilitate a <i>Channel</i> move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the <i>U-NII Detection Bandwidth</i> detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

Calibration of Radar Waveform

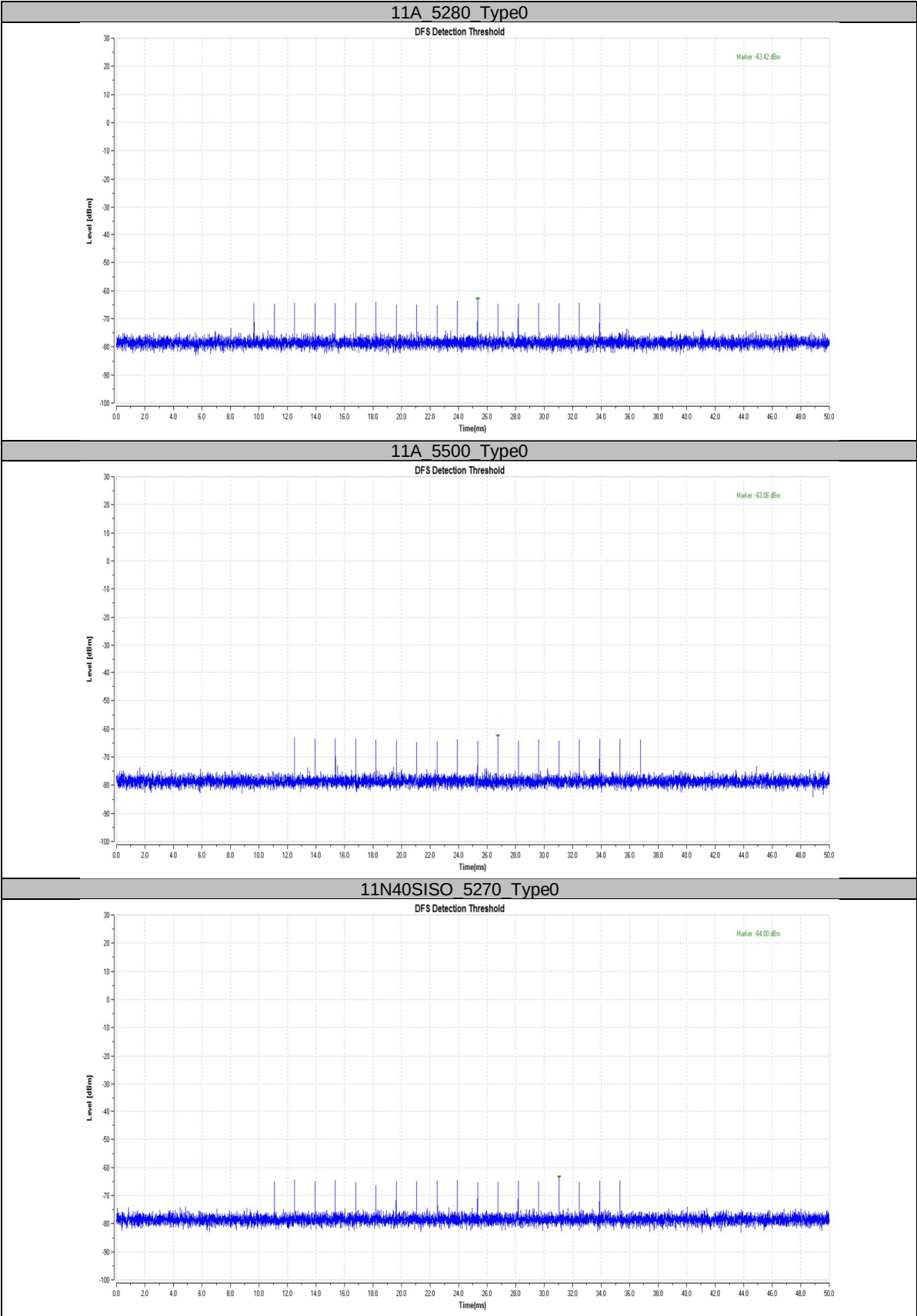
- (1) A 50ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to place of the master.
- (2) The interference Radar Detection Threshold Level is $-62\text{dBm} + 3.7\text{dB} + 1.5\text{dB} = -55.8\text{dBm}$ that had been taken into account the output power range and antenna gain.
- (3) The following equipment setup was used to calibrate the conducted radar waveform. A vector signal generator was utilized to establish the test signal level for radar type 0. During this process there were no transmissions by either the master or client device. The spectrum analyzer was switched to the zero spans (time domain) at the frequency of the radar waveform generator. Peak detection was used. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to 3MHz. The spectrum analyzer had offset -1.5dB to compensate RF cable loss 1.5dB.
- (4) The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was $-62\text{dBm} + 3.7\text{dB} + 1.5\text{dB} = -55.8\text{dBm}$. Capture the spectrum analyzer plots on short pulse radar waveform.

Conducted Calibration Setup:

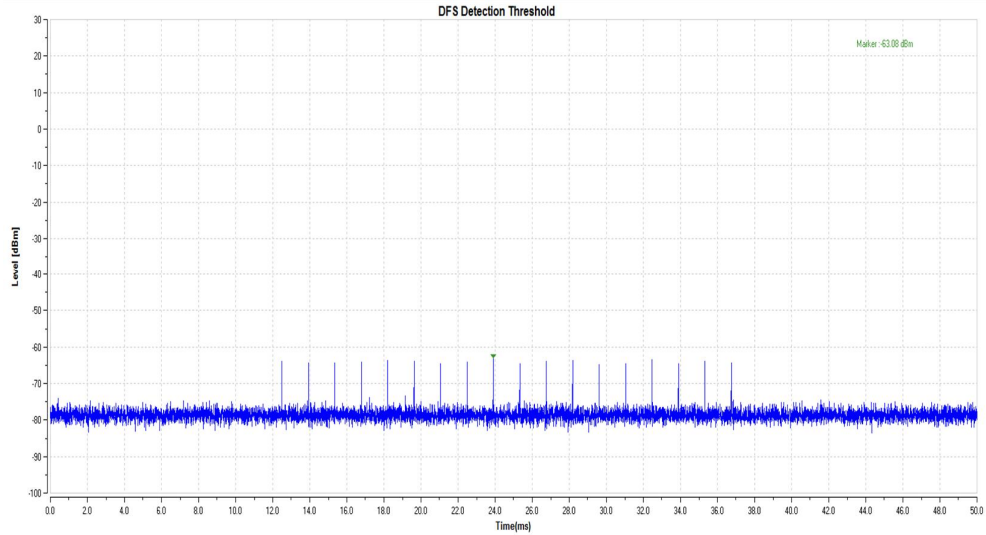




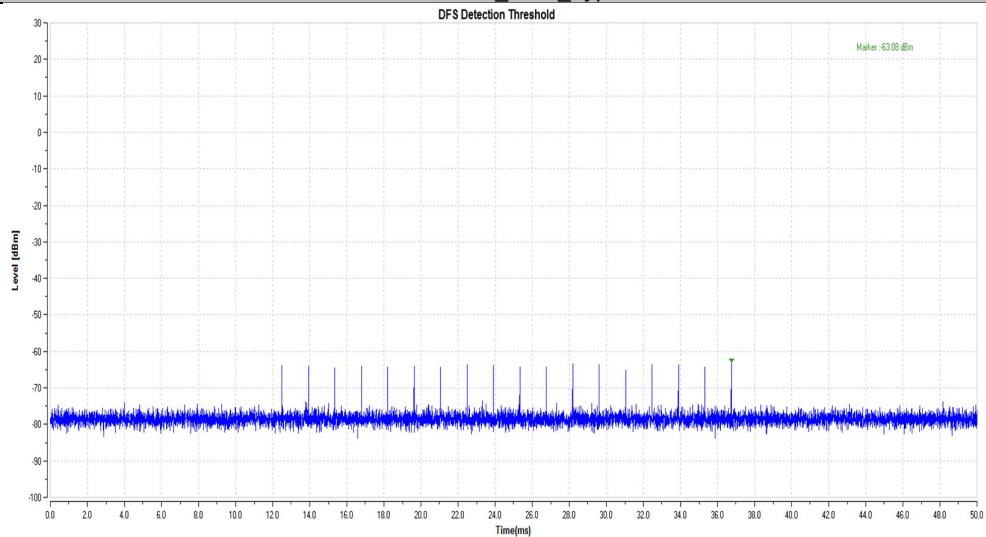
Radar Waveform Calibration result:



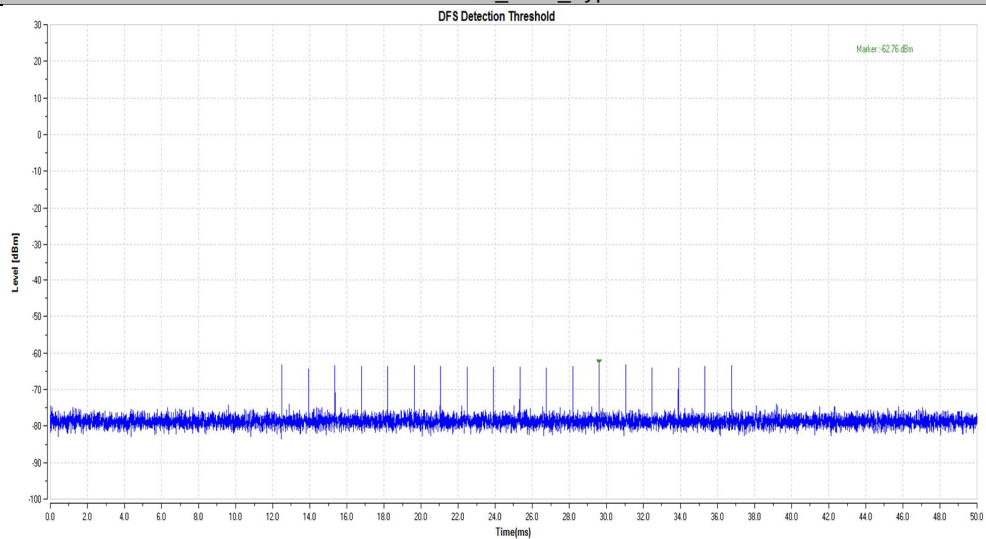
11N40SISO_5510_Type0



11AC80SISO_5290_Type0



11AC80SISO_5530_Type0



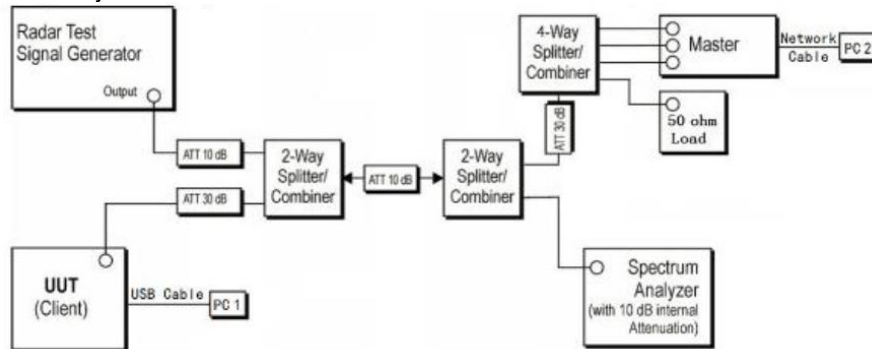
Channel Closing Transmission Time, Channel Move Time and Non-Occupancy Period.

Block Diagram of test setup test procedure.

- (1) The Radar Pulse generator is setup to provide a pulse at frequency that the master and client are operating, A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- (2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -55.8dBm at the antenna of the master device.
- (3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- (4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using test software in order to properly load the network for the entire period of the test.
- (5) When radar burst with a Level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection threshold +1dB.
- (6) Observer the transmissions of the EUT at the end of the radar Burst on the Operating channel. Measure and record the transmissions from the UUT during The observation time (channel move time). One 15 seconds plot is reported for the short pulse radar type 0. The plot for the short pulse radar burst. The channel move time will be calculated based on the zoom in 600ms plot of the short pulse radar type.
- (7) Measurement of the aggregate duration of the channel closed transmission time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell(3.0) = S(12000ms)/B(4000)$; where dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of channel closing transmission time is calculated by: $C(ms) = N \times Dwell(0.3ms)$; where C is the closing time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and dwell is the dwell time per bin.
- (8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Test Setup:

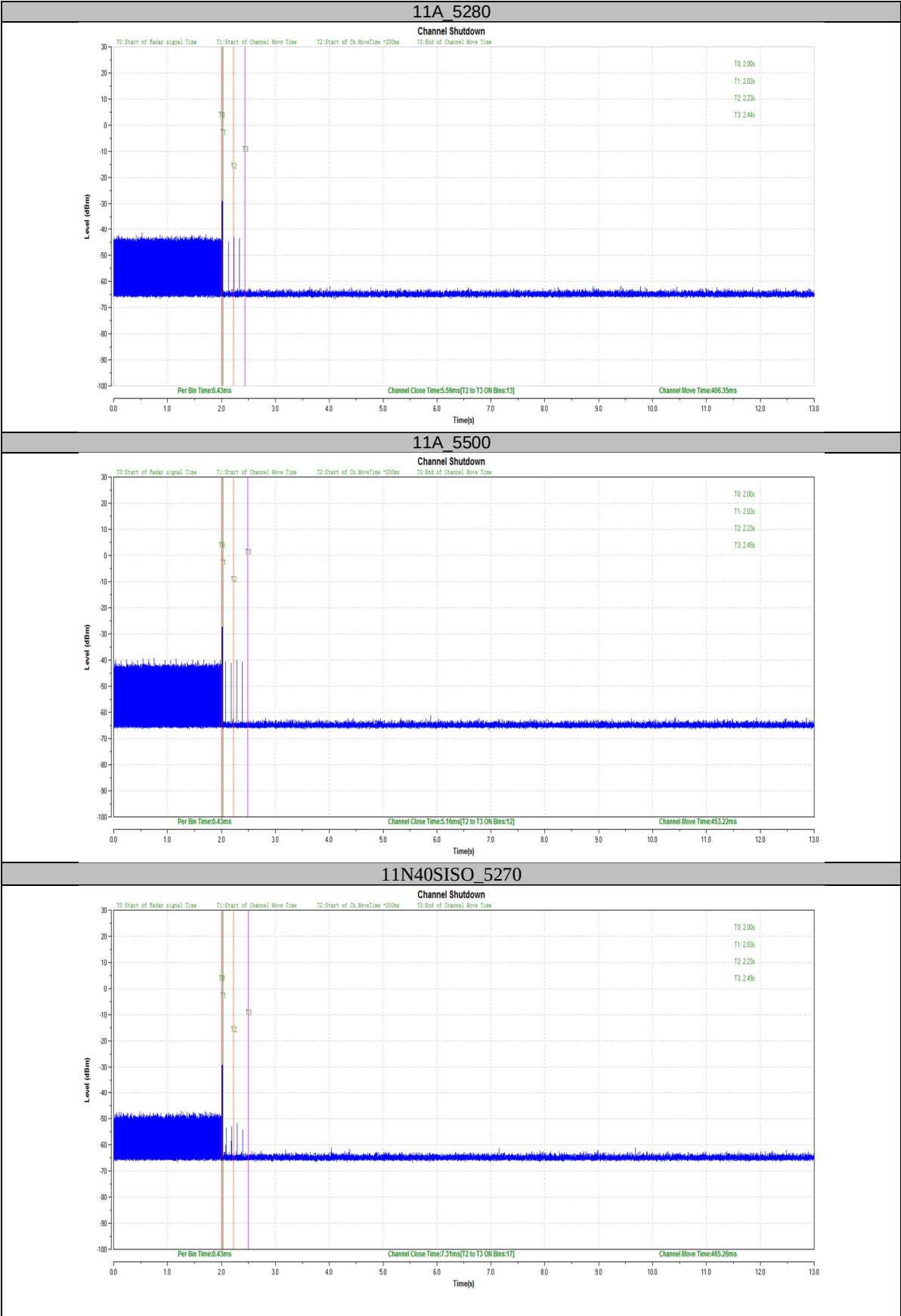
Setup for client with injection at the master.

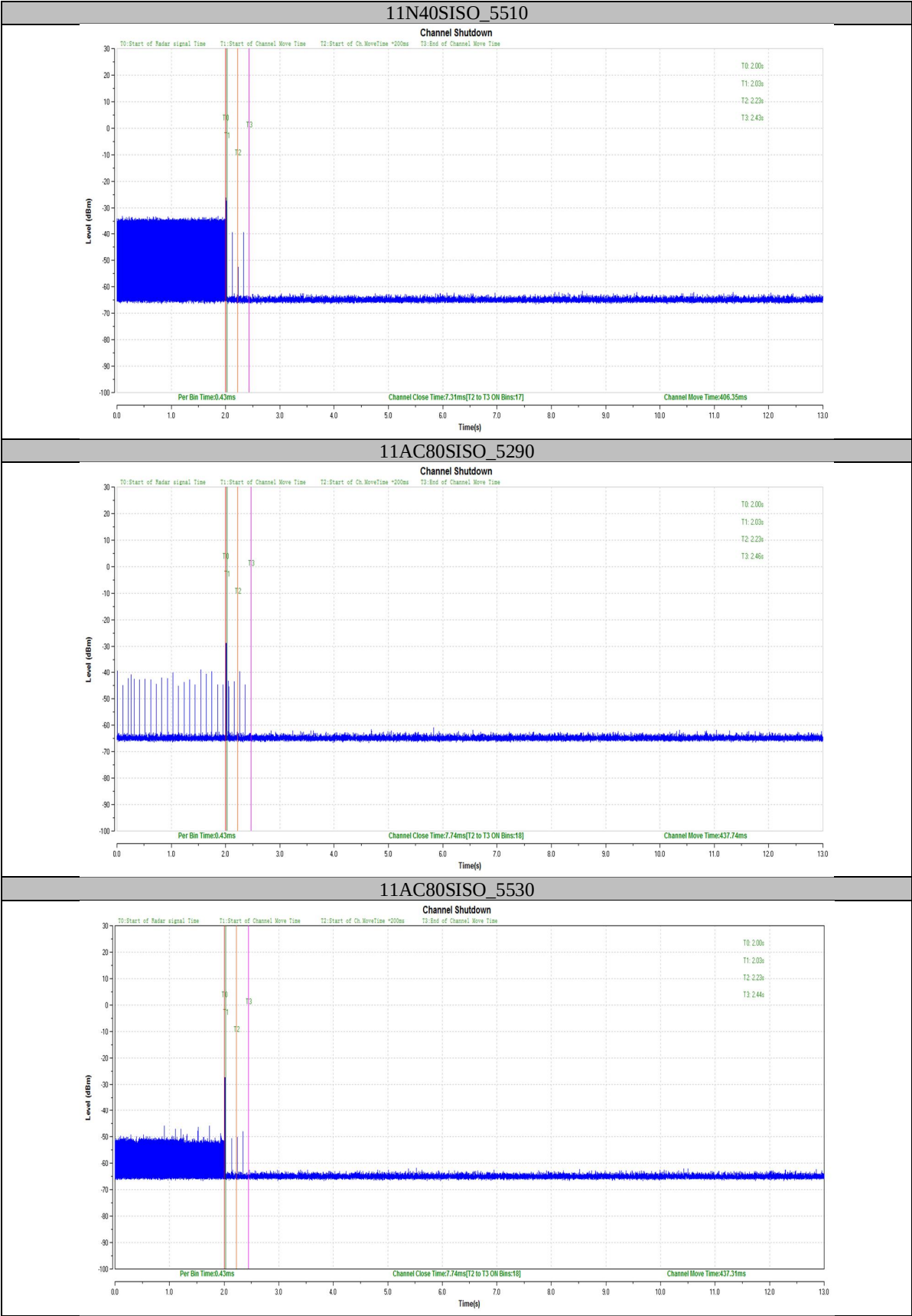


Test Result

Clause	Test Parameter	Remarks	Pass/Fail
15.407	DFS Detection Threshold	No Applicable	N/A
15.407	Channel Availability Check time	No Applicable	N/A
15.407	Channel Move time	Applicable	Pass
15.407	Channel Closing Transmission Time	Applicable	Pass
15.407	Non-Occupancy Period	Applicable	Pass
15.407	Uniform Spreading	No Applicable	N/A
15.407	U-NII Detection Bandwidth	No Applicable	N/A

TestMode	Channel	CCT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11A	5280	5.59	60	406.35	10000	PASS
	5500	5.16	60	453.22	10000	PASS
11N 40SISO	5270	7.31	60	465.26	10000	PASS
	5510	7.31	60	406.35	10000	PASS
11AC80SISO	5290	7.74	60	437.74	10000	PASS
	5530	7.74	60	437.31	10000	PASS





10 Test Equipment List

Conducted Emission Test

Description	Manufacturer	Model no.	Equipment ID	Serial no.	cal interval (year)	cal. due date
EMI Test Receiver	Rohde & Schwarz	ESR 3	68-4-74-14-001	101782	1	2023-5-27
LISN	Rohde & Schwarz	ENV4200	68-4-87-14-001	100249	1	2023-5-27
LISN	Rohde & Schwarz	ENV432	68-4-87-16-001	101318	1	2023-5-27
LISN	Rohde & Schwarz	ENV216	68-4-87-14-002	100326	1	2023-5-27
ISN	Rohde & Schwarz	ENY81	68-4-87-14-003	100177	1	2023-5-27
ISN	Rohde & Schwarz	ENY81-CA6	68-4-87-14-004	101664	1	2023-5-27
High Voltage Probe	Schwarzbeck	TK9420(VT9420)	68-4-27-14-001	9420-584	1	2023-5-27
RF Current Probe	Rohde & Schwarz	EZ-17	68-4-27-14-002	100816	1	2023-5-31
Attenuator	Shanghai Huaxiang	TS2-26-3	68-4-81-16-003	080928189	1	2023-5-27
Test software	Rohde & Schwarz	EMC32	68-4-90-14-003-A10	Version9.15.00	N/A	N/A
Shielding Room	TDK	CSR #1	68-4-90-19-004	----	3	2022-11-07

Radiated Emission Test

Description	Manufacturer	Model no.	Equipment ID	Serial no.	cal interval (year)	cal. due date
EMI Test Receiver	Rohde & Schwarz	ESR 26	68-4-74-14-002	101269	1	2023-5-28
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9162	68-4-80-19-003	284	1	2023-1-17
Wave Guide Antenna	ETS	3117	68-4-80-19-001	00218954	1	2023-5-9
Pre-amplifier	Rohde & Schwarz	SCU 18F	68-4-29-19-001	100745	1	2023-5-28
Pre-amplifier	Rohde & Schwarz	SCU 18F	68-4-29-19-002	100746	1	2023-5-28
Sideband Horn Antenna	Q-PAR	QWH-SL-18-40-K-SG	68-4-80-14-008	12827	1	2022-7-12
Pre-amplifier	Rohde & Schwarz	SCU 40A	68-4-29-14-002	100432	1	2023-7-27
Attenuator	Mini-circuits	UNAT-6+	68-4-81-21-002	15542	1	2023-5-27
3m Semi-anechoic chamber	TDK	SAC-3 #2	68-4-90-19-006	----	2	2023-5-28
Test software	Rohde & Schwarz	EMC32	68-4-90-19-006-A01	Version10.35.02	N/A	N/A

RF conducted test

Description	Manufacturer	Model no.	Equipment ID	Serial no.	cal interval (year)	cal. due date
Signal Generator	Rohde & Schwarz	SMB100A	68-4-48-14-001	108272	1	2023-5-27
RF Switch Module	Rohde & Schwarz	OSP120/OS P-B157	68-4-93-14-003	101226/100851	1	2023-5-27
Power Splitter	Weinschel	1580	68-4-85-14-001	SC319	1	2023-5-28
Test software	Rohde & Schwarz	EMC32	68-4-48-14-003-A10	Version 10.60.10	N/A	N/A
Test software	Tonscend	System for BT/WIFI	68-4-74-14-006-A13	Version 2.6.77.0518	N/A	N/A

11 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty for Conducted Emission 150kHz-30MHz (for test using AMN ENV432 or ENV4200)	3.62dB
Uncertainty for Radiated Spurious Emission 25MHz-1000MHz	Horizontal: 4.70dB; Vertical: 4.67dB;
Uncertainty for Radiated Spurious Emission 1000MHz-40000MHz	Horizontal: 4.65dB; Vertical: 4.64dB;
Uncertainty for Conducted RF test	RF Power Conducted: 1.31dB Frequency test involved: 0.6×10^{-7} or 1%

---THE END OF REPORT---