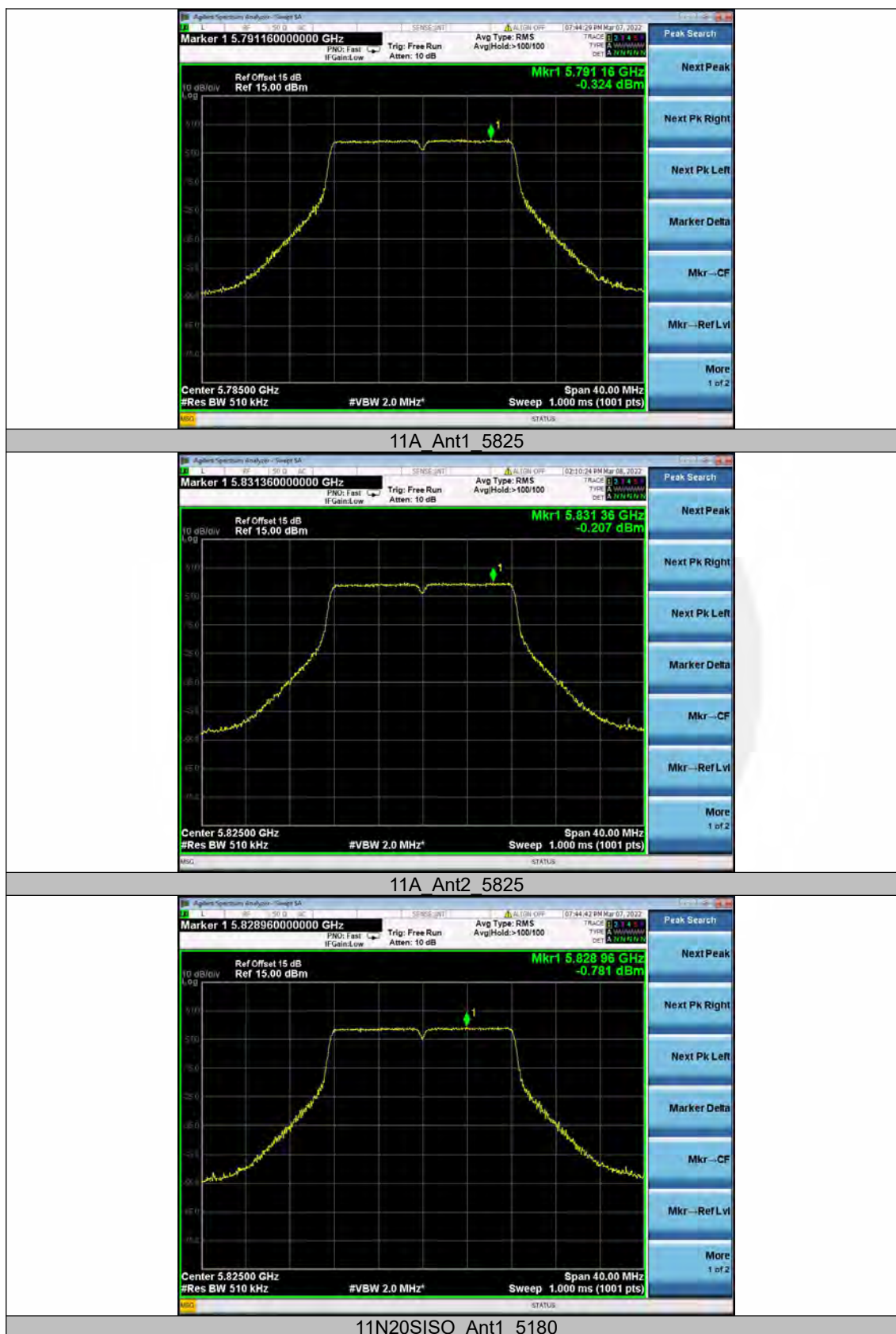
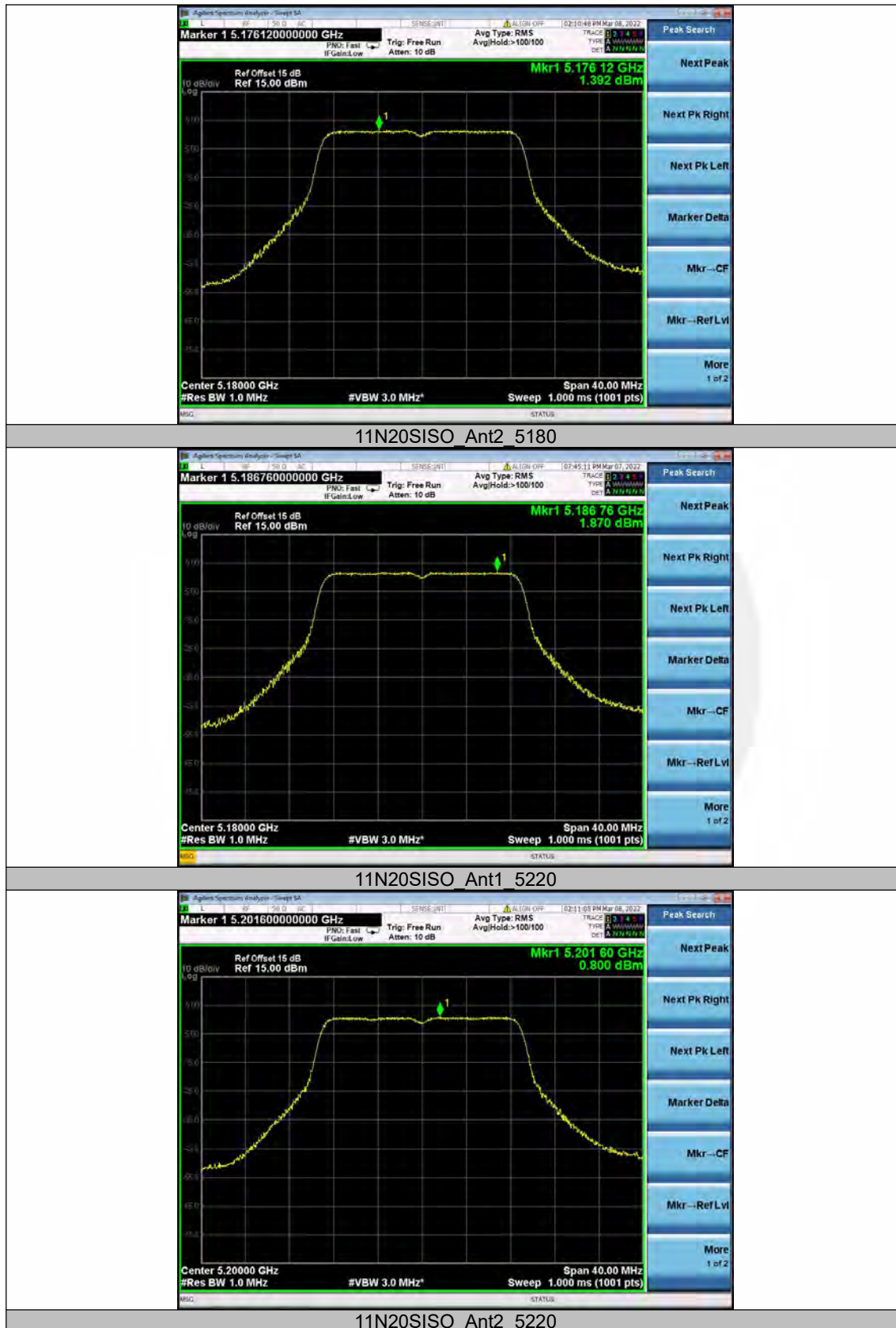
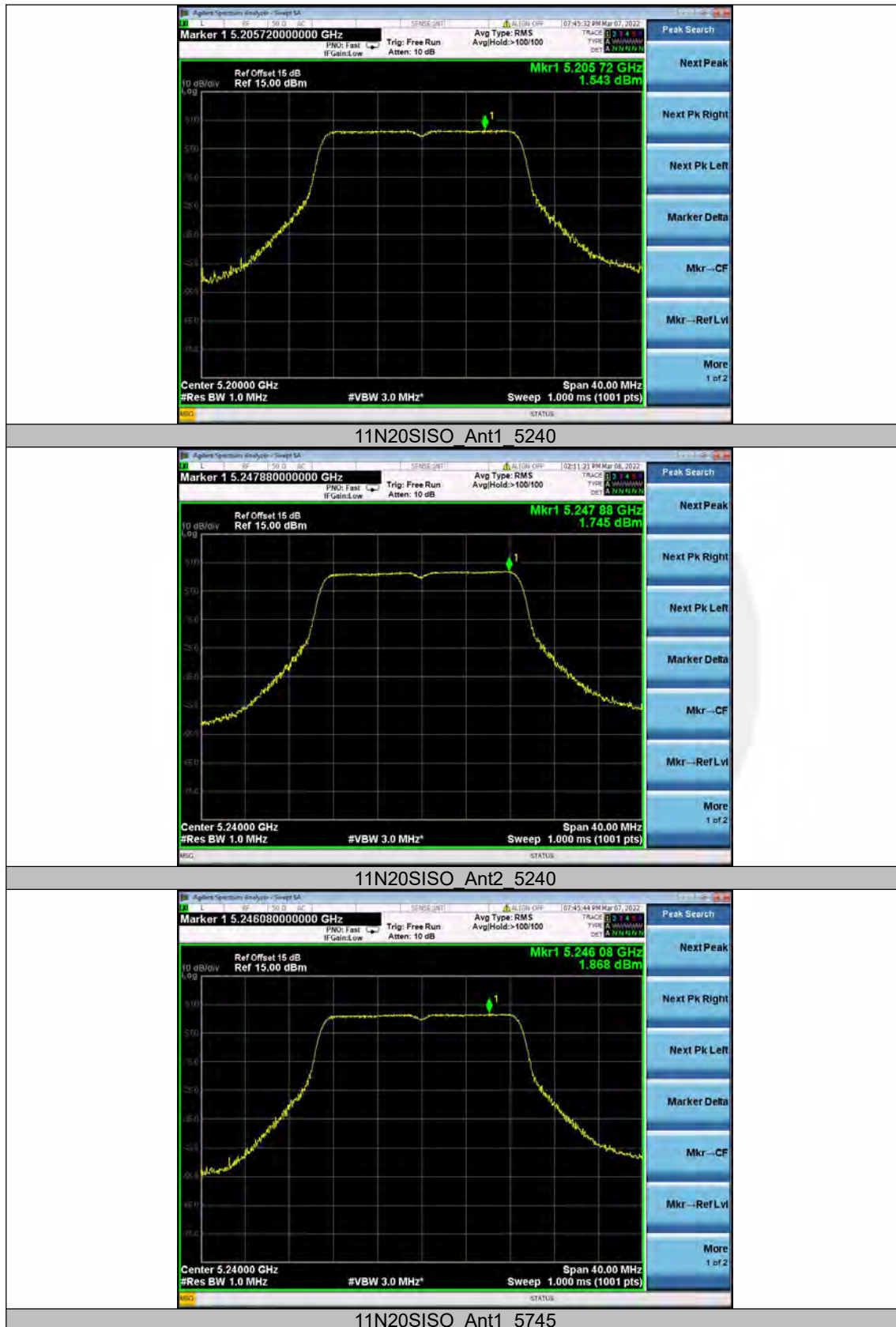
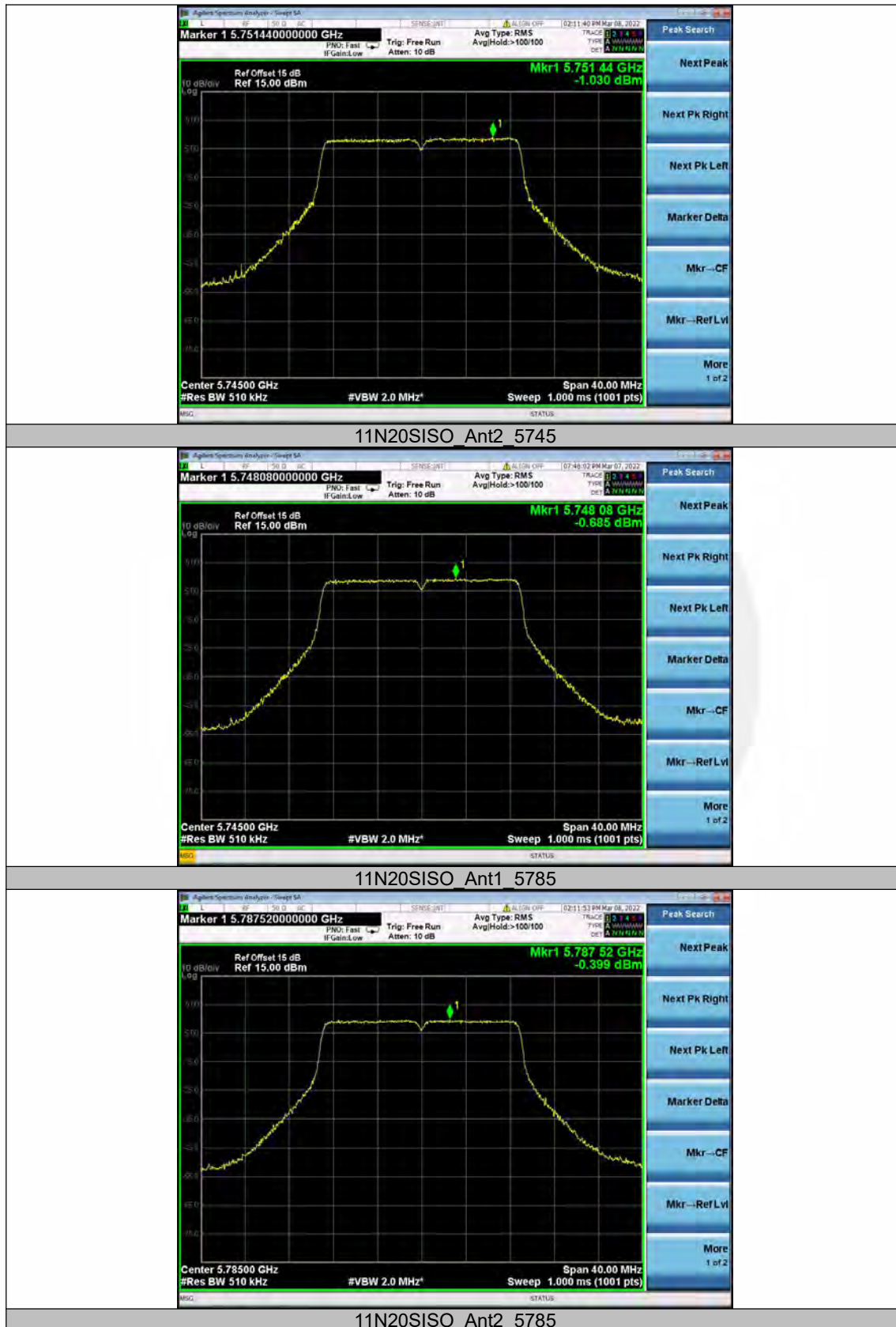
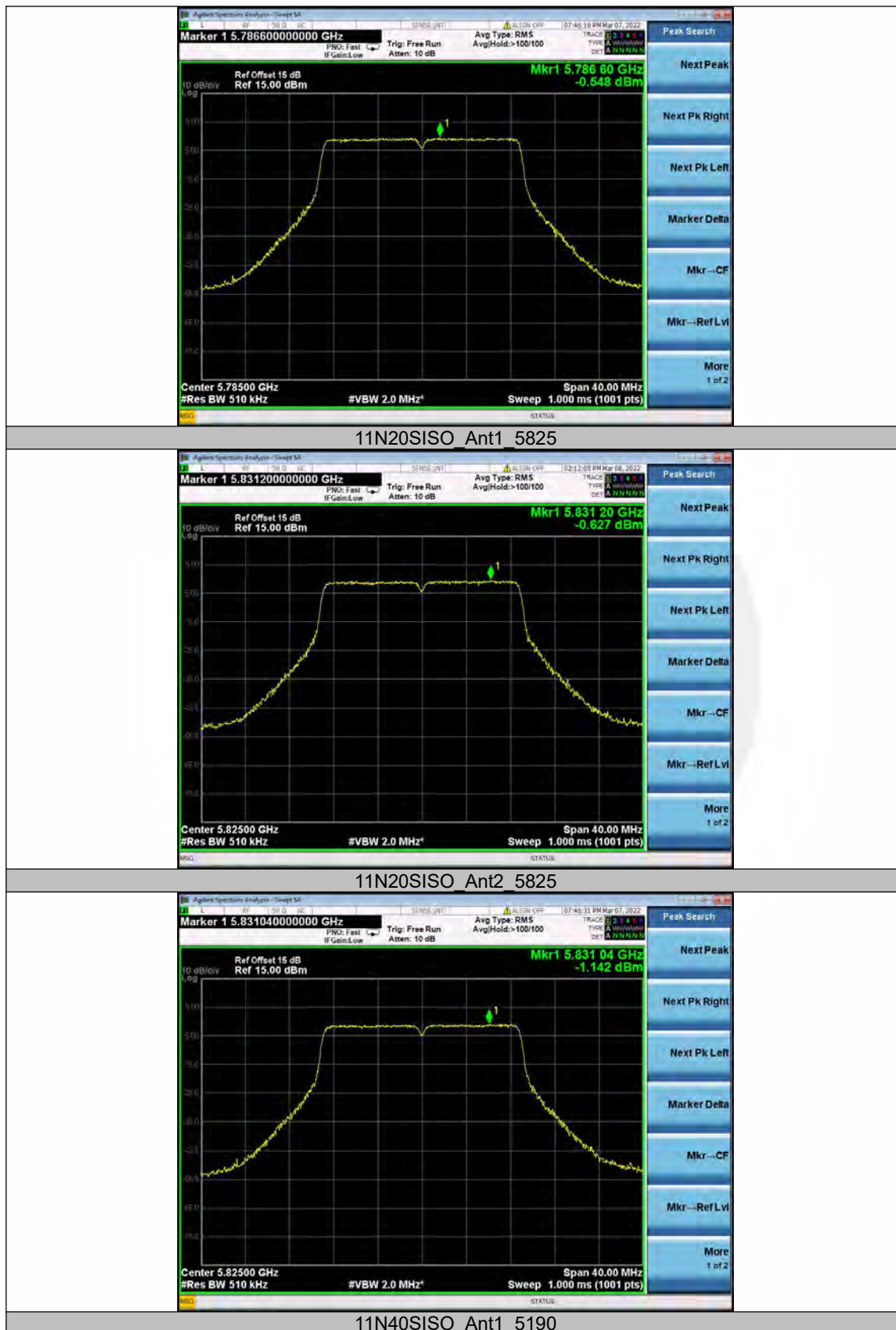


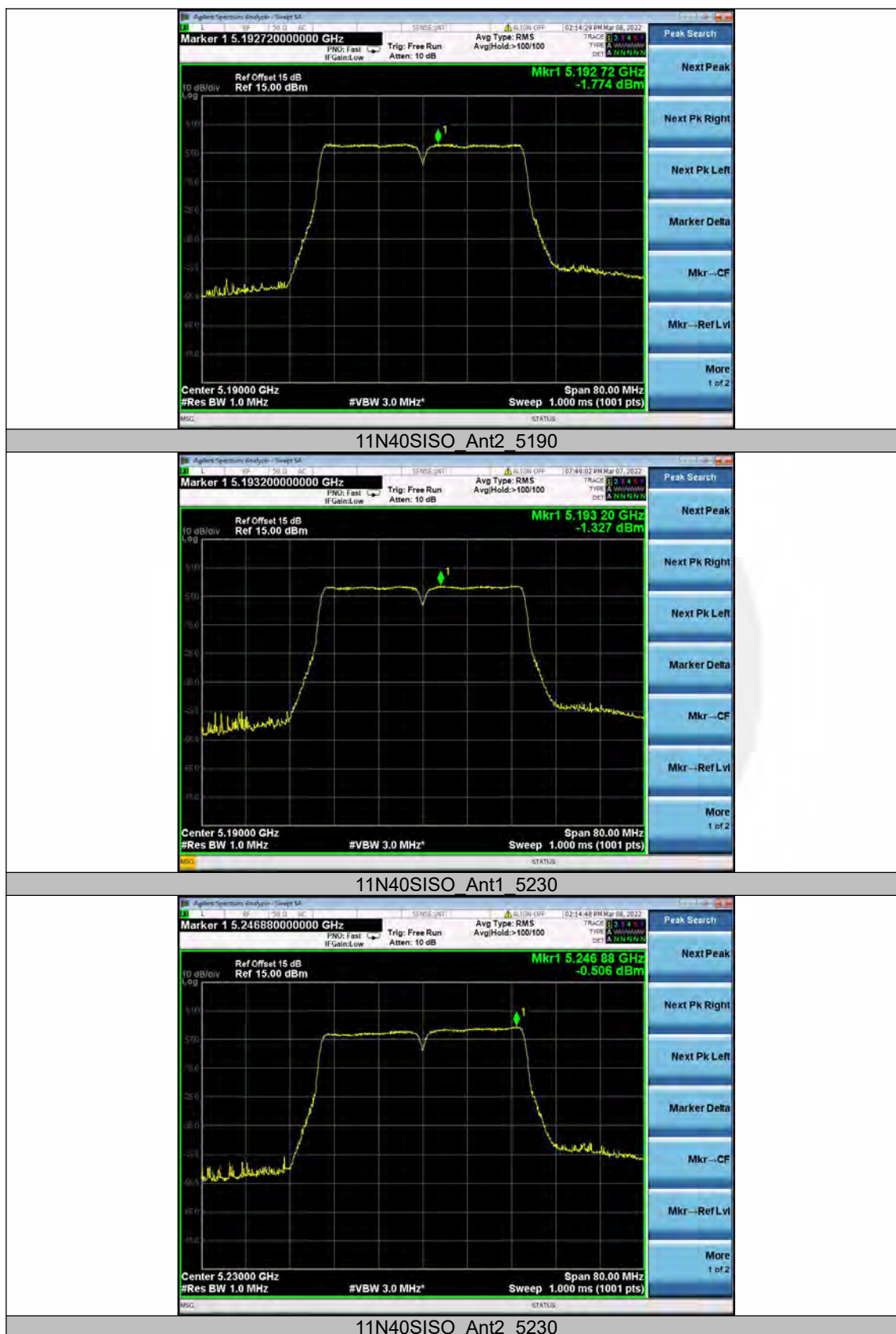


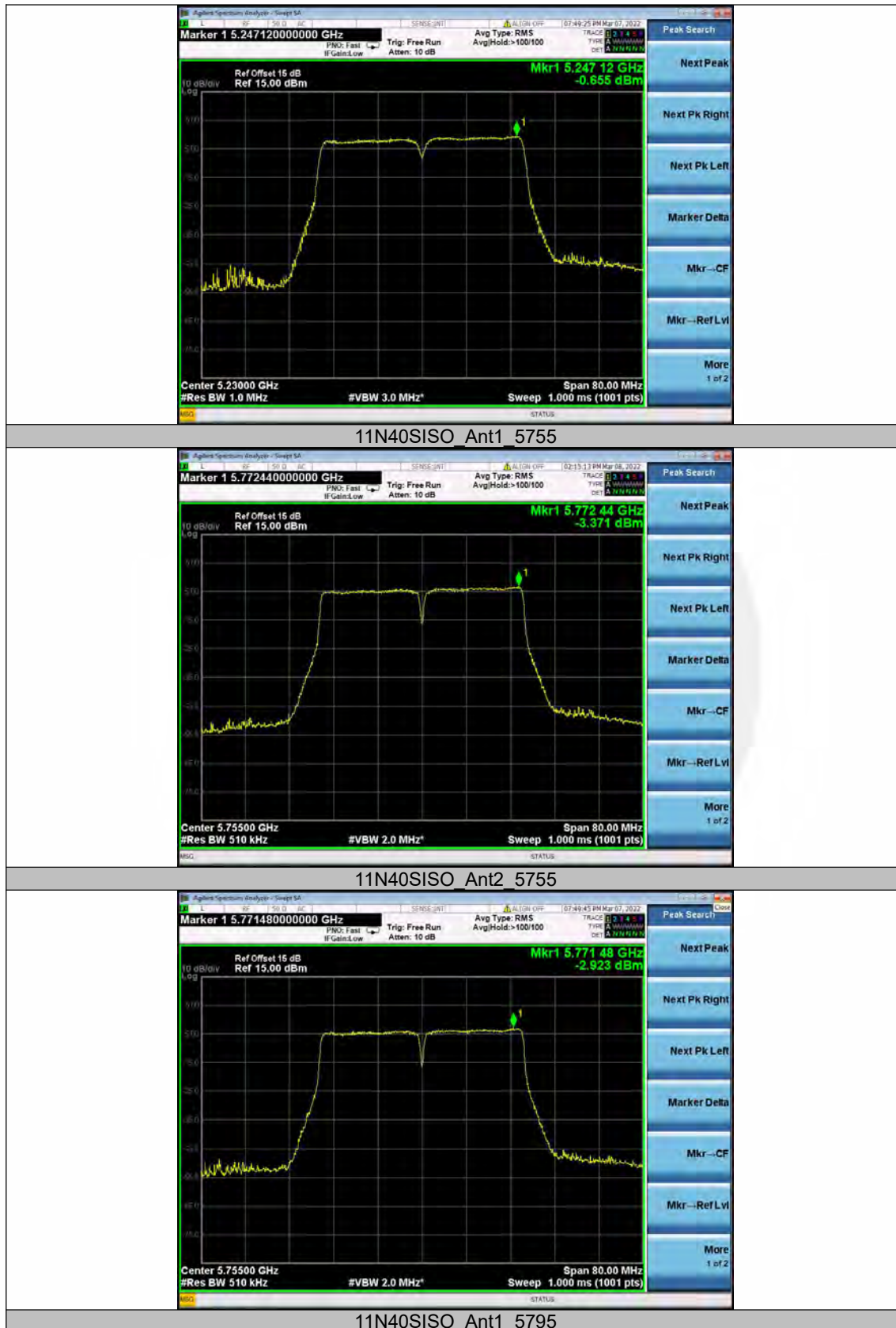


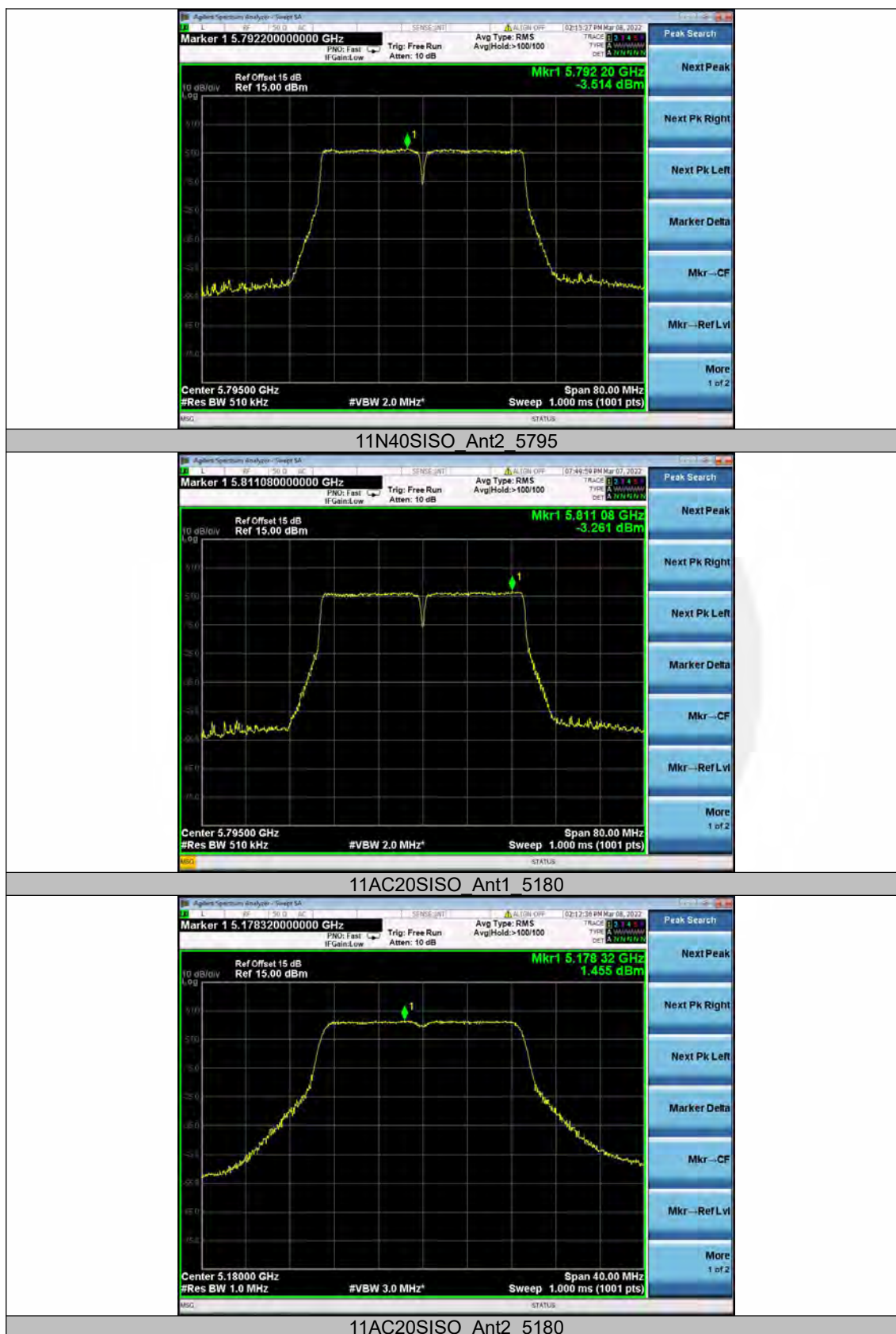


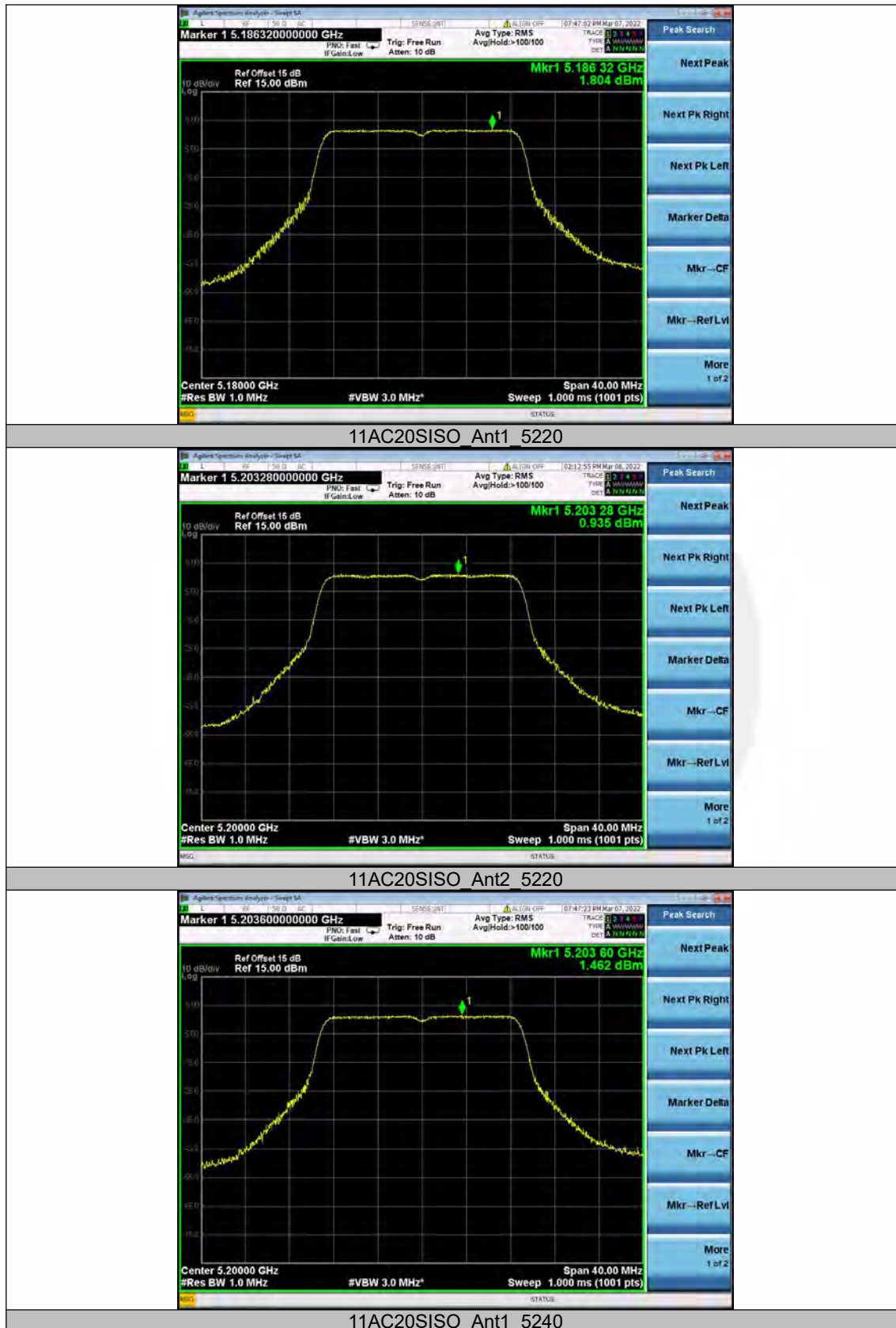


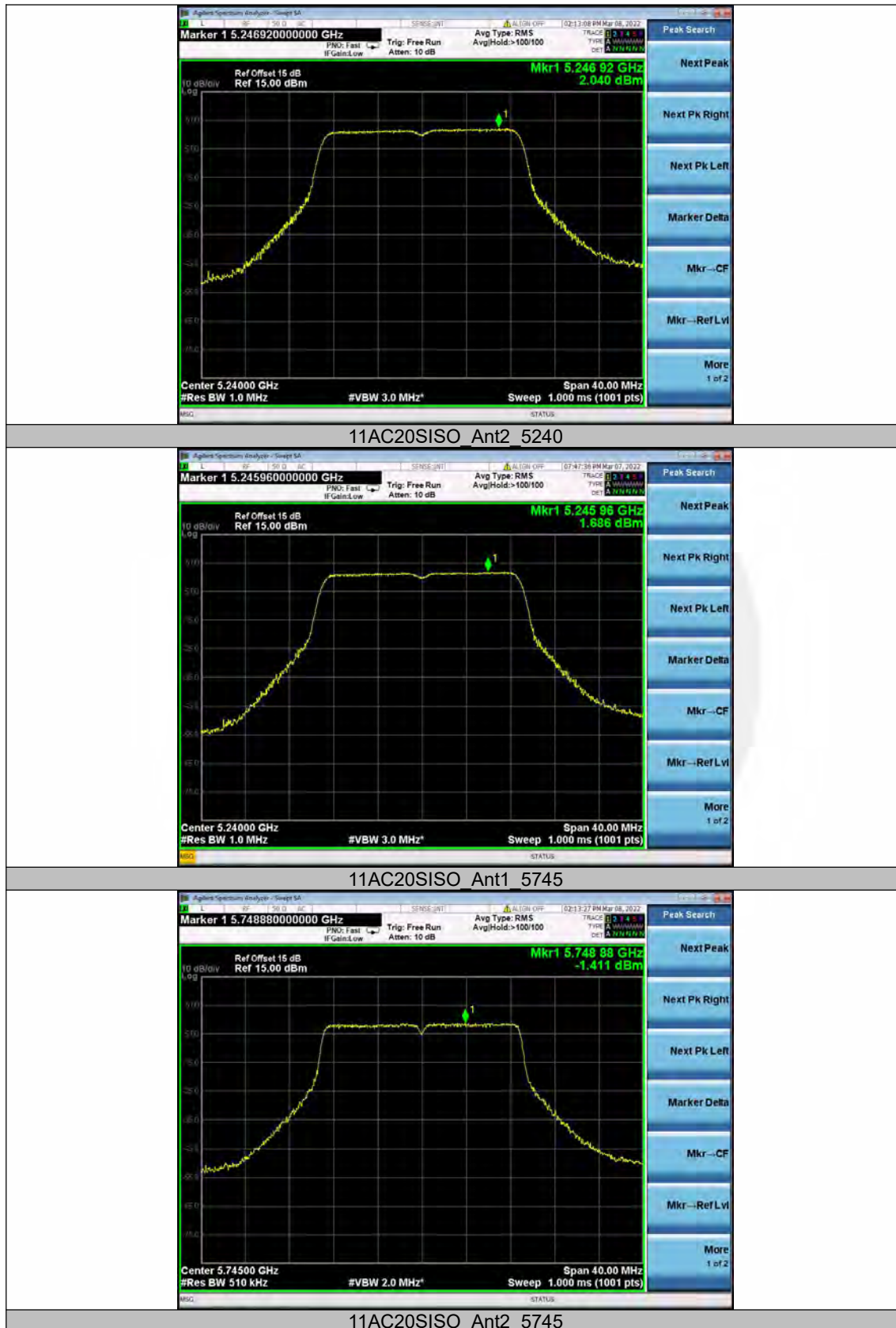


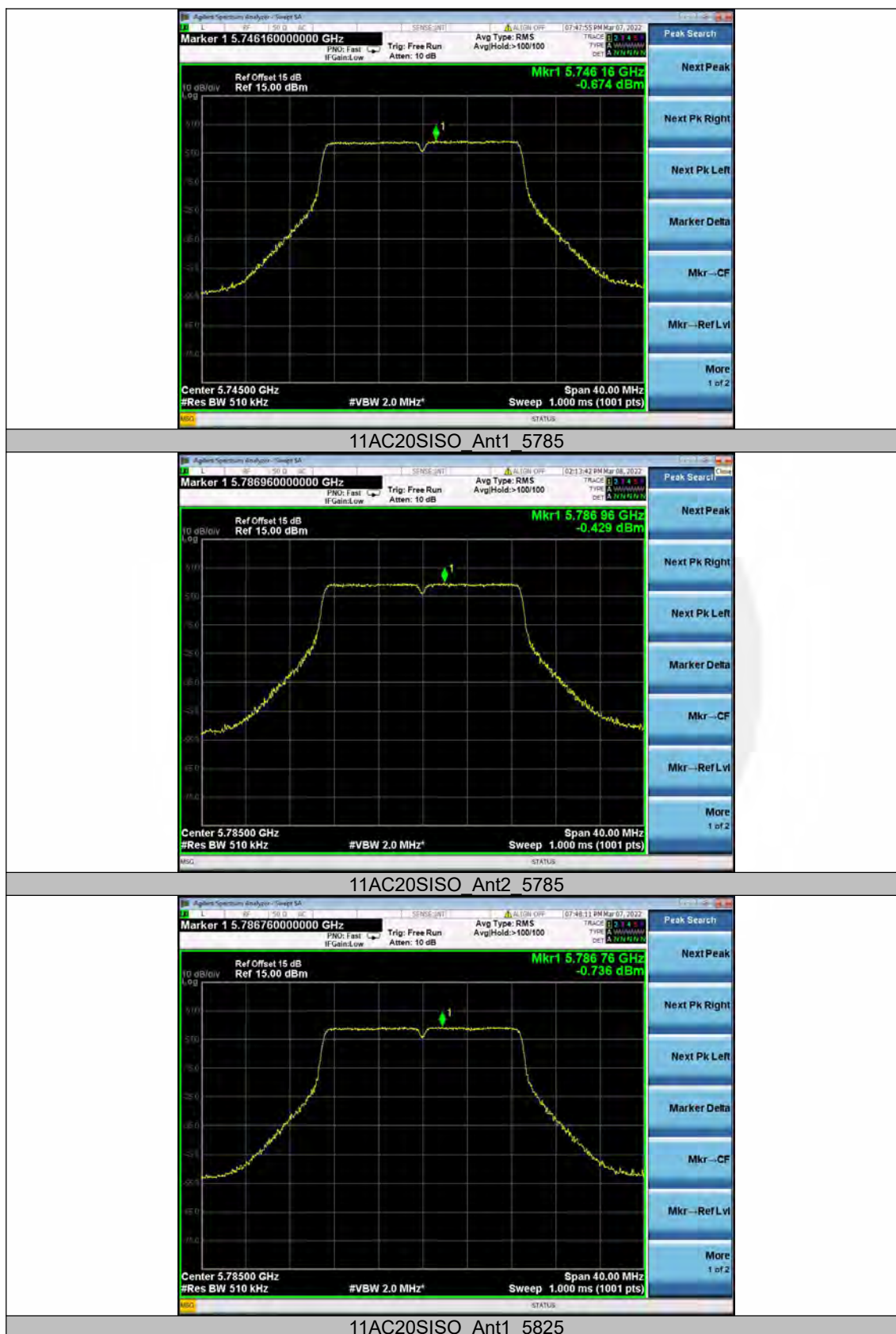


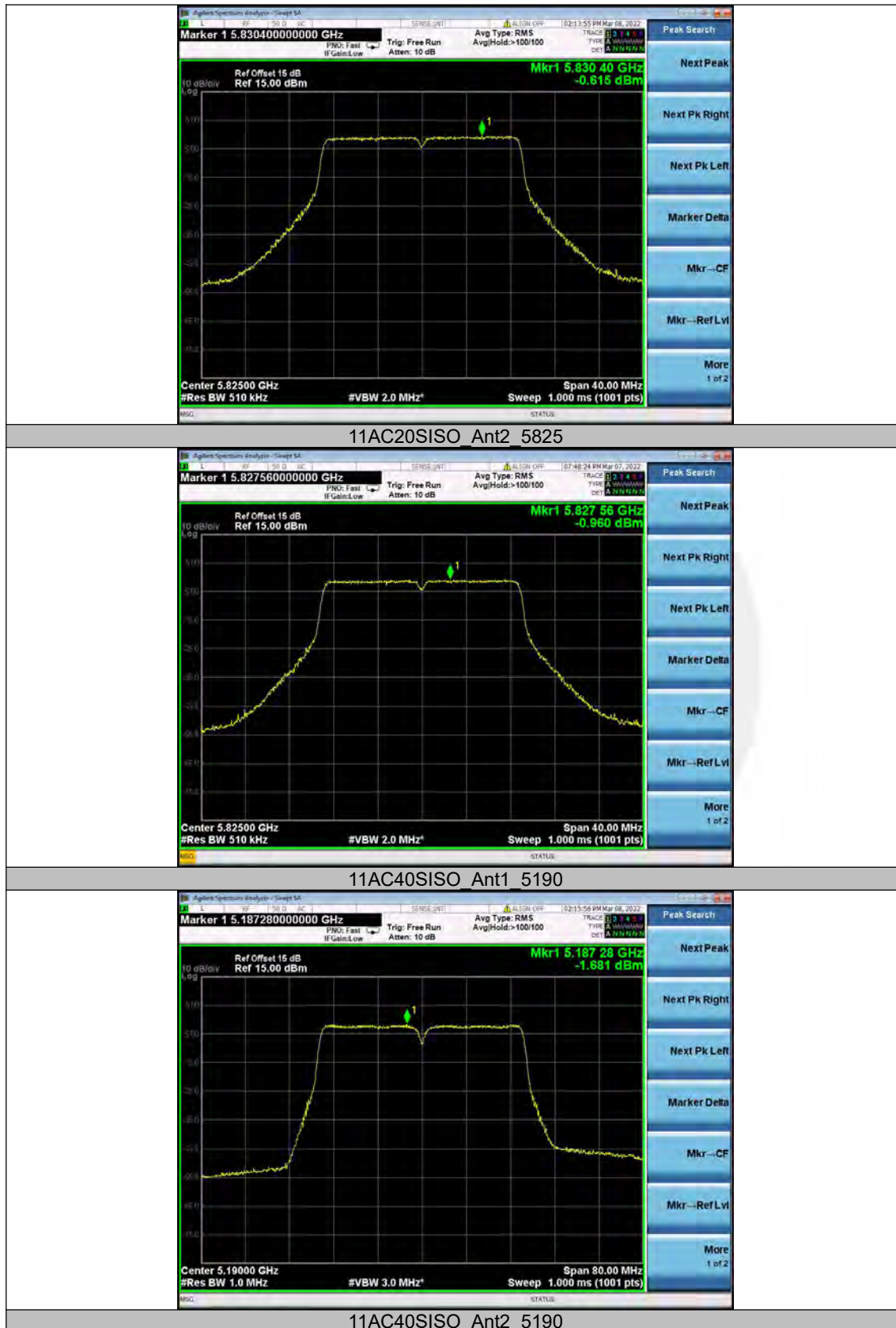


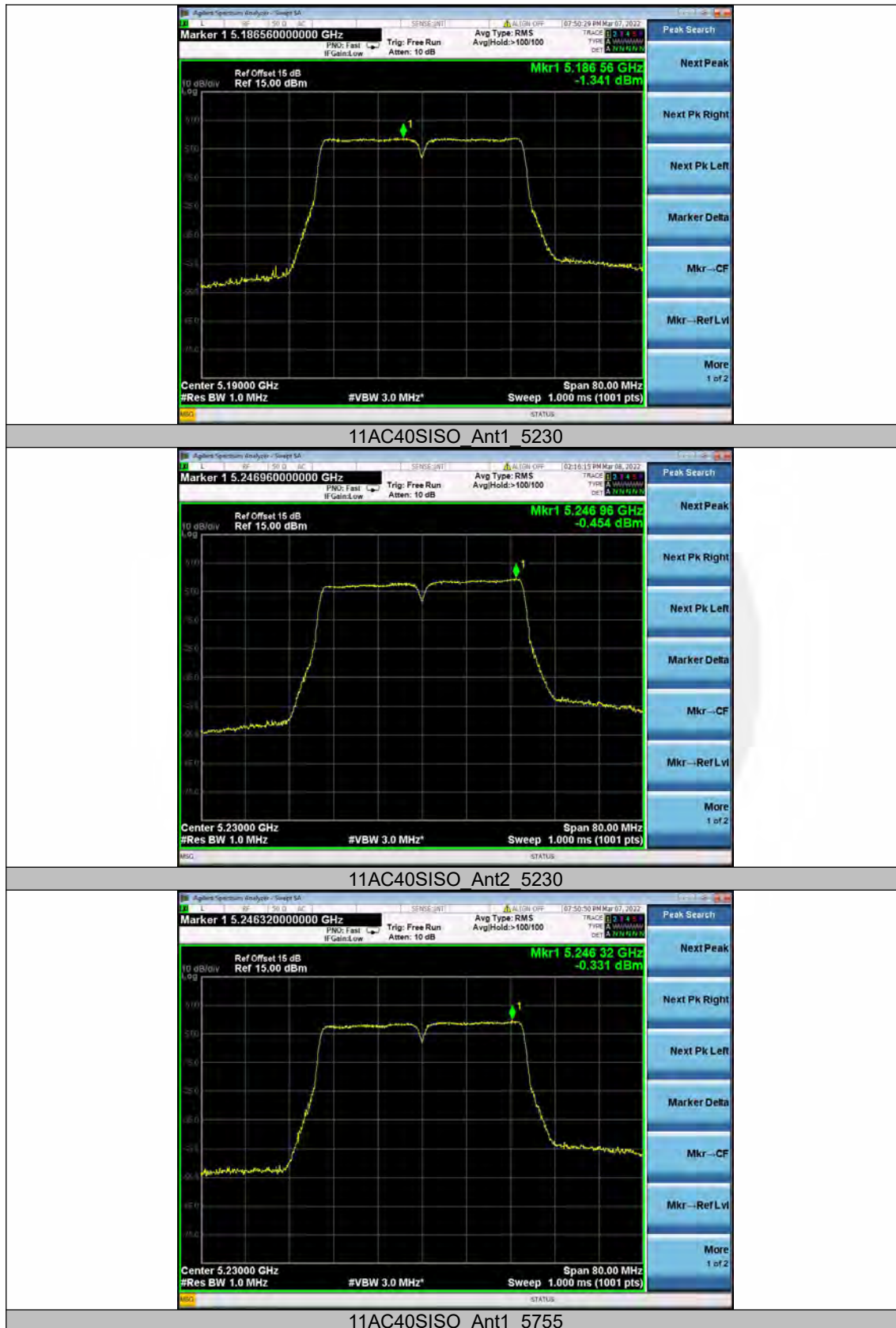


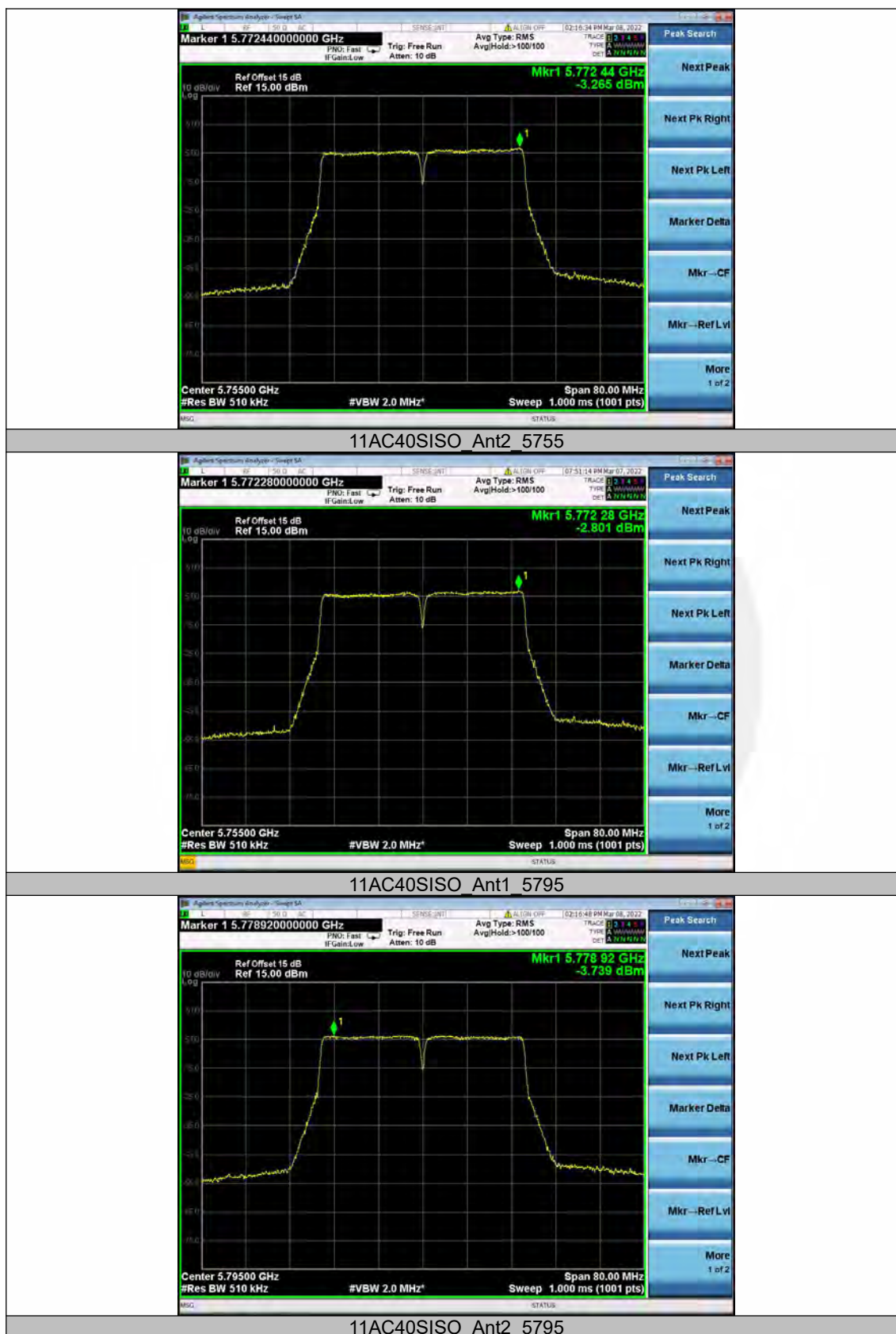


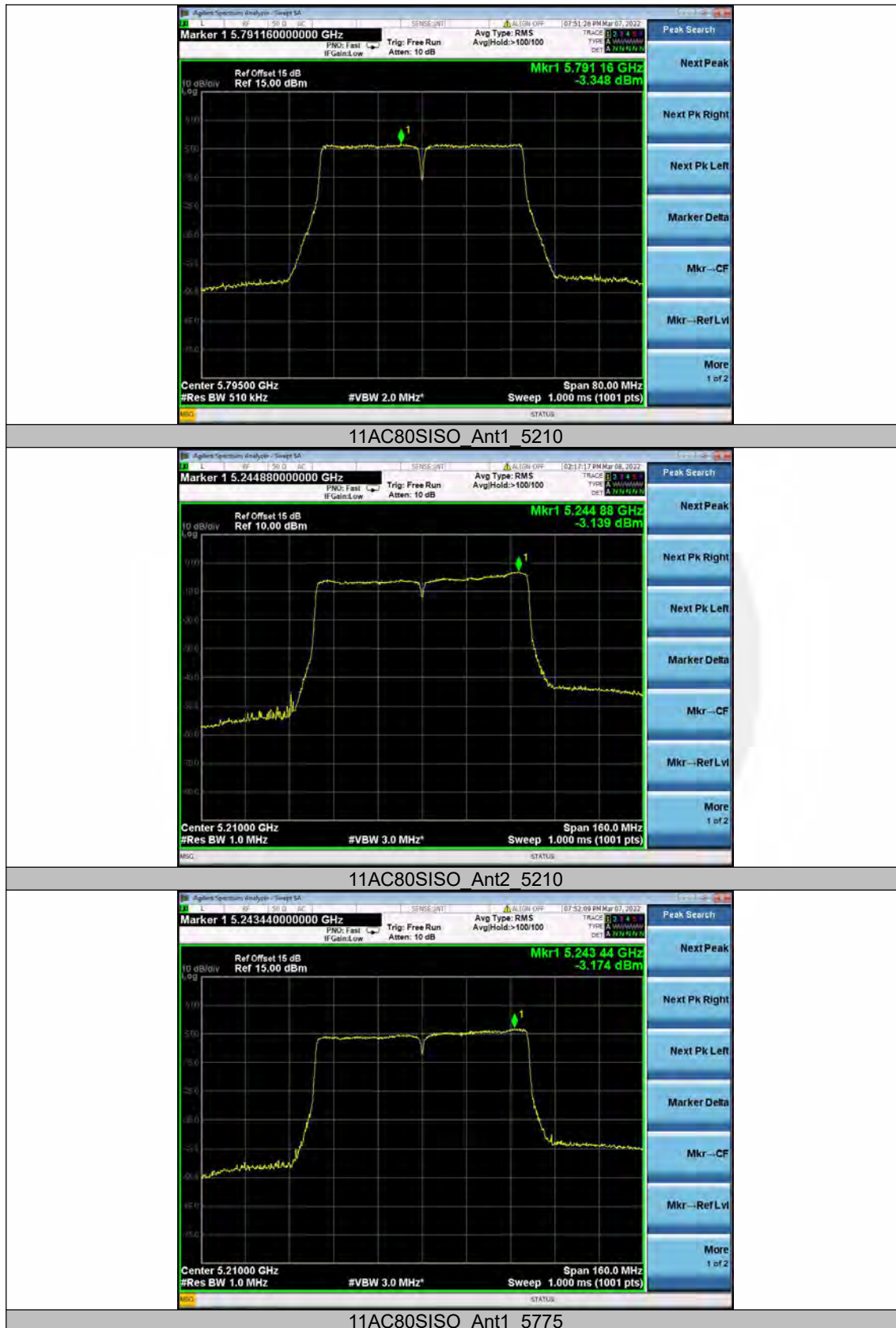














Chip 2: ANT1 and ANT2

























































8.4 FREQUENCY STABILITY

8.4.1 Applicable Standard

According to FCC Part 15.407(g)
ANSI C63.10 Section 6.8

8.4.2 Conformance Limit

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 users manual.

8.4.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

8.4.4 Test Procedure

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously

Set RBW = 10 kHz.

Set Span= Entire absence of modulation emissions band

Set the video bandwidth (VBW) =30 kHz. width

Set Detector = Peak.

Set Trace mode = max hold.

Set Sweep = auto couple.

Allow the trace to stabilize.

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

Beginning at each temperature level specified in user manual , the frequency shall be measured within one minute after application of primary power to the transmitter and at intervals of no more than one minute thereafter until ten minutes have elapsed or until sufficient measurements are obtained to indicate clearly that the frequency has stabilized within the applicable tolerance, whichever time period is greater. During each test, the ambient temperature shall not be allowed to rise more than 10° centigrade above the respective beginning ambient temperature level

Measure and record the results in the test report.

8.4.5 Test Results

All the chips and antennas were tested, only the worst chip 2 were described in the table.

Voltage								
TestMode	Antenna	Frequen cy[MHz]	Voltage [Vdc]	Temper ature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	-60000.00	-11.583012	20	PASS
			LV	NT	-80000.00	-15.444015	20	PASS
			HV	NT	-60000.00	-11.583012	20	PASS
	Ant2	5180	NV	NT	-60000.00	-11.583012	20	PASS
			LV	NT	-60000.00	-11.583012	20	PASS
			HV	NT	-80000.00	-15.444015	20	PASS
	Ant1	5220	NV	NT	-60000.00	-11.494253	20	PASS
			LV	NT	-60000.00	-11.494253	20	PASS
			HV	NT	-60000.00	-11.494253	20	PASS
	Ant2	5220	NV	NT	-80000.00	-15.325670	20	PASS
			LV	NT	-80000.00	-15.325670	20	PASS
			HV	NT	-80000.00	-15.325670	20	PASS
	Ant1	5240	NV	NT	-60000.00	-11.450382	20	PASS
			LV	NT	-80000.00	-15.267176	20	PASS
			HV	NT	-60000.00	-11.450382	20	PASS
	Ant2	5240	NV	NT	-80000.00	-15.267176	20	PASS
			LV	NT	-80000.00	-15.267176	20	PASS
			HV	NT	-80000.00	-15.267176	20	PASS
	Ant1	5745	NV	NT	-80000.00	-13.925152	20	PASS
			LV	NT	-80000.00	-13.925152	20	PASS
			HV	NT	-80000.00	-13.925152	20	PASS
	Ant2	5745	NV	NT	-60000.00	-10.443864	20	PASS
			LV	NT	-80000.00	-13.925152	20	PASS
			HV	NT	-100000.00	-17.406440	20	PASS
	Ant1	5785	NV	NT	-80000.00	-13.828868	20	PASS
			LV	NT	-80000.00	-13.828868	20	PASS
			HV	NT	-80000.00	-13.828868	20	PASS
	Ant2	5785	NV	NT	-80000.00	-13.828868	20	PASS
			LV	NT	-100000.00	-17.286085	20	PASS
			HV	NT	-80000.00	-13.828868	20	PASS
	Ant1	5825	NV	NT	-80000.00	-13.733906	20	PASS
			LV	NT	-80000.00	-13.733906	20	PASS
			HV	NT	-60000.00	-10.300429	20	PASS
	Ant2	5825	NV	NT	-80000.00	-13.733906	20	PASS
			LV	NT	-80000.00	-13.733906	20	PASS
			HV	NT	-80000.00	-13.733906	20	PASS
11N20SI SO	Ant1	5180	NV	NT	-80000.00	-15.444015	20	PASS
			LV	NT	-60000.00	-11.583012	20	PASS
			HV	NT	-80000.00	-15.444015	20	PASS
	Ant2	5180	NV	NT	-60000.00	-11.583012	20	PASS
			LV	NT	-60000.00	-11.583012	20	PASS
			HV	NT	-60000.00	-11.583012	20	PASS
	Ant1	5220	NV	NT	-60000.00	-11.494253	20	PASS
			LV	NT	-60000.00	-11.494253	20	PASS
			HV	NT	-80000.00	-15.325670	20	PASS
	Ant2	5220	NV	NT	-60000.00	-11.494253	20	PASS
			LV	NT	-60000.00	-11.494253	20	PASS
			HV	NT	-60000.00	-11.494253	20	PASS
	Ant1	5240	NV	NT	-60000.00	-11.450382	20	PASS
			LV	NT	-60000.00	-11.450382	20	PASS
			HV	NT	-80000.00	-15.267176	20	PASS
	Ant2	5240	NV	NT	-60000.00	-11.450382	20	PASS
			LV	NT	-80000.00	-15.267176	20	PASS
			HV	NT	-60000.00	-11.450382	20	PASS
	Ant1	5745	NV	NT	-60000.00	-10.443864	20	PASS
			LV	NT	-60000.00	-10.443864	20	PASS

	Ant2	5745	HV	NT	-80000.00	-13.925152	20	PASS
			NV	NT	-100000.00	-17.406440	20	PASS
			LV	NT	-80000.00	-13.925152	20	PASS
	Ant1	5785	HV	NT	-80000.00	-13.925152	20	PASS
			NV	NT	-80000.00	-13.828868	20	PASS
			LV	NT	-80000.00	-13.828868	20	PASS
	Ant2	5785	HV	NT	-80000.00	-13.828868	20	PASS
			NV	NT	-100000.00	-17.286085	20	PASS
			LV	NT	-80000.00	-13.828868	20	PASS
	Ant1	5825	HV	NT	-80000.00	-13.828868	20	PASS
			NV	NT	-60000.00	-10.300429	20	PASS
			LV	NT	-80000.00	-13.733906	20	PASS
11N40SI SO	Ant1	5190	HV	NT	-80000.00	-13.733906	20	PASS
			NV	NT	-80000.00	-13.733906	20	PASS
			LV	NT	-60000.00	-10.300429	20	PASS
	Ant2	5190	HV	NT	-60000.00	-10.300429	20	PASS
			NV	NT	-80000.00	-15.414258	20	PASS
			LV	NT	-80000.00	-15.414258	20	PASS
	Ant1	5230	HV	NT	-40000.00	-7.707129	20	PASS
			NV	NT	-80000.00	-15.414258	20	PASS
			LV	NT	-80000.00	-15.414258	20	PASS
	Ant2	5230	HV	NT	-80000.00	-15.414258	20	PASS
			NV	NT	-80000.00	-15.296367	20	PASS
			LV	NT	-80000.00	-15.296367	20	PASS
	Ant1	5755	HV	NT	-40000.00	-7.648184	20	PASS
			NV	NT	-80000.00	-15.296367	20	PASS
			LV	NT	-80000.00	-15.296367	20	PASS
	Ant2	5755	HV	NT	-80000.00	-15.296367	20	PASS
			NV	NT	-80000.00	-13.900956	20	PASS
			LV	NT	-80000.00	-13.900956	20	PASS
	Ant1	5795	HV	NT	-80000.00	-13.900956	20	PASS
			NV	NT	-80000.00	-13.900956	20	PASS
			LV	NT	-80000.00	-13.900956	20	PASS
	Ant2	5795	HV	NT	-80000.00	-13.900956	20	PASS
			NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-80000.00	-13.805004	20	PASS
11AC20S ISO	Ant1	5180	HV	NT	-80000.00	-13.805004	20	PASS
			NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-80000.00	-13.805004	20	PASS
	Ant2	5180	HV	NT	-80000.00	-13.805004	20	PASS
			NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-80000.00	-13.805004	20	PASS
	Ant1	5220	HV	NT	-80000.00	-13.805004	20	PASS
			NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-80000.00	-13.805004	20	PASS
	Ant2	5220	HV	NT	-80000.00	-13.805004	20	PASS
			NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-80000.00	-13.805004	20	PASS
	Ant1	5240	HV	NT	-80000.00	-13.805004	20	PASS
			NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-80000.00	-13.805004	20	PASS
	Ant2	5240	HV	NT	-80000.00	-13.805004	20	PASS
			NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-80000.00	-13.805004	20	PASS
	Ant1	5745	HV	NT	-80000.00	-13.805004	20	PASS
			NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-80000.00	-13.805004	20	PASS

	Ant2	5745	NV	NT	-80000.00	-13.925152	20	PASS
			LV	NT	-60000.00	-10.443864	20	PASS
			HV	NT	-80000.00	-13.925152	20	PASS
	Ant1	5785	NV	NT	-80000.00	-13.828868	20	PASS
			LV	NT	-80000.00	-13.828868	20	PASS
			HV	NT	-60000.00	-10.371651	20	PASS
	Ant2	5785	NV	NT	-60000.00	-10.371651	20	PASS
			LV	NT	-60000.00	-10.371651	20	PASS
			HV	NT	-80000.00	-13.828868	20	PASS
	Ant1	5825	NV	NT	-60000.00	-10.300429	20	PASS
			LV	NT	-80000.00	-13.733906	20	PASS
			HV	NT	-80000.00	-13.733906	20	PASS
Ant2	5825	NV	NT	-80000.00	-13.733906	20	PASS	
		LV	NT	-80000.00	-13.733906	20	PASS	
		HV	NT	-60000.00	-10.300429	20	PASS	
11AC40S ISO	Ant1	5190	NV	NT	-80000.00	-15.414258	20	PASS
			LV	NT	-80000.00	-15.414258	20	PASS
			HV	NT	-80000.00	-15.414258	20	PASS
	Ant2	5190	NV	NT	-80000.00	-15.414258	20	PASS
			LV	NT	-80000.00	-15.414258	20	PASS
			HV	NT	-80000.00	-15.414258	20	PASS
	Ant1	5230	NV	NT	-80000.00	-15.296367	20	PASS
			LV	NT	-80000.00	-15.296367	20	PASS
			HV	NT	-80000.00	-15.296367	20	PASS
	Ant2	5230	NV	NT	-80000.00	-15.296367	20	PASS
			LV	NT	-80000.00	-15.296367	20	PASS
			HV	NT	-80000.00	-15.296367	20	PASS
	Ant1	5755	NV	NT	-80000.00	-13.900956	20	PASS
			LV	NT	-80000.00	-13.900956	20	PASS
			HV	NT	-80000.00	-13.900956	20	PASS
	Ant2	5755	NV	NT	-80000.00	-13.900956	20	PASS
			LV	NT	-80000.00	-13.900956	20	PASS
			HV	NT	-80000.00	-13.900956	20	PASS
	Ant1	5795	NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-80000.00	-13.805004	20	PASS
			HV	NT	-80000.00	-13.805004	20	PASS
	Ant2	5795	NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-80000.00	-13.805004	20	PASS
			HV	NT	-80000.00	-13.805004	20	PASS
11AC80S ISO	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
	Ant2	5210	NV	NT	-80000.00	-15.355086	20	PASS
			LV	NT	-80000.00	-15.355086	20	PASS
			HV	NT	-80000.00	-15.355086	20	PASS
	Ant1	5775	NV	NT	-80000.00	-13.852814	20	PASS
			LV	NT	-80000.00	-13.852814	20	PASS
			HV	NT	-80000.00	-13.852814	20	PASS
Ant2	5775	NV	NT	-80000.00	-13.852814	20	PASS	
		LV	NT	-80000.00	-13.852814	20	PASS	
		HV	NT	-80000.00	-13.852814	20	PASS	

Temperature								
TestMode	Antenna	Frequency[MHz]	Voltage[Vdc]	Temperature(°C)	Deviation(Hz)	Deviation(ppm)	Limit(ppm)	Verdict
11A	Ant1	5180	NV	-30	-80000.00	-15.444015	20	PASS
			NV	-20	-60000.00	-11.583012	20	PASS
			NV	-10	-60000.00	-11.583012	20	PASS
			NV	0	-60000.00	-11.583012	20	PASS
			NV	10	-80000.00	-15.444015	20	PASS
			NV	20	-60000.00	-11.583012	20	PASS
			NV	30	-60000.00	-11.583012	20	PASS
			NV	40	-60000.00	-11.583012	20	PASS
			NV	50	-60000.00	-11.583012	20	PASS
	Ant2	5180	NV	-30	-60000.00	-11.583012	20	PASS
			NV	-20	-60000.00	-11.583012	20	PASS
			NV	-10	-80000.00	-15.444015	20	PASS
			NV	0	-80000.00	-15.444015	20	PASS
			NV	10	-60000.00	-11.583012	20	PASS
			NV	20	-60000.00	-11.583012	20	PASS
			NV	30	-80000.00	-15.444015	20	PASS
			NV	40	-60000.00	-11.583012	20	PASS
			NV	50	-80000.00	-15.444015	20	PASS
	Ant1	5220	NV	-30	-60000.00	-11.494253	20	PASS
			NV	-20	-60000.00	-11.494253	20	PASS
			NV	-10	-60000.00	-11.494253	20	PASS
			NV	0	-60000.00	-11.494253	20	PASS
			NV	10	-60000.00	-11.494253	20	PASS
			NV	20	-40000.00	-7.662835	20	PASS
			NV	30	-60000.00	-11.494253	20	PASS
			NV	40	-60000.00	-11.494253	20	PASS
			NV	50	-60000.00	-11.494253	20	PASS
	Ant2	5220	NV	-30	-80000.00	-15.325670	20	PASS
			NV	-20	-60000.00	-11.494253	20	PASS
			NV	-10	-60000.00	-11.494253	20	PASS
			NV	0	-60000.00	-11.494253	20	PASS
			NV	10	-80000.00	-15.325670	20	PASS
			NV	20	-80000.00	-15.325670	20	PASS
			NV	30	-60000.00	-11.494253	20	PASS
			NV	40	-80000.00	-15.325670	20	PASS
			NV	50	-80000.00	-15.325670	20	PASS
	Ant1	5240	NV	-30	-60000.00	-11.450382	20	PASS
			NV	-20	-80000.00	-15.267176	20	PASS
			NV	-10	-60000.00	-11.450382	20	PASS
			NV	0	-60000.00	-11.450382	20	PASS
			NV	10	-60000.00	-11.450382	20	PASS
			NV	20	-80000.00	-15.267176	20	PASS
			NV	30	-60000.00	-11.450382	20	PASS
			NV	40	-80000.00	-15.267176	20	PASS
			NV	50	-60000.00	-11.450382	20	PASS
	Ant2	5240	NV	-30	-80000.00	-15.267176	20	PASS
			NV	-20	-80000.00	-15.267176	20	PASS
			NV	-10	-80000.00	-15.267176	20	PASS
			NV	0	-80000.00	-15.267176	20	PASS
			NV	10	-80000.00	-15.267176	20	PASS
			NV	20	-60000.00	-11.450382	20	PASS
			NV	30	-80000.00	-15.267176	20	PASS
			NV	40	-80000.00	-15.267176	20	PASS
			NV	50	-60000.00	-11.450382	20	PASS
	Ant1	5745	NV	-30	-80000.00	-13.925152	20	PASS
			NV	-20	-60000.00	-10.443864	20	PASS

			NV	-10	-80000.00	-13.925152	20	PASS
			NV	0	-80000.00	-13.925152	20	PASS
			NV	10	-80000.00	-13.925152	20	PASS
			NV	20	-80000.00	-13.925152	20	PASS
			NV	30	-80000.00	-13.925152	20	PASS
			NV	40	-80000.00	-13.925152	20	PASS
	Ant2	5745	NV	50	-80000.00	-13.925152	20	PASS
			NV	-30	-80000.00	-13.925152	20	PASS
			NV	-20	-80000.00	-13.925152	20	PASS
			NV	-10	-80000.00	-13.925152	20	PASS
			NV	0	-60000.00	-10.443864	20	PASS
			NV	10	-80000.00	-13.925152	20	PASS
			NV	20	-80000.00	-13.925152	20	PASS
			NV	30	-80000.00	-13.925152	20	PASS
	Ant1	5785	NV	40	-80000.00	-13.925152	20	PASS
			NV	50	-80000.00	-13.925152	20	PASS
			NV	-30	-80000.00	-13.828868	20	PASS
			NV	-20	-80000.00	-13.828868	20	PASS
			NV	-10	-80000.00	-13.828868	20	PASS
			NV	0	-80000.00	-13.828868	20	PASS
			NV	10	-60000.00	-10.371651	20	PASS
			NV	20	-80000.00	-13.828868	20	PASS
	Ant2	5785	NV	30	-80000.00	-13.828868	20	PASS
			NV	40	-80000.00	-13.828868	20	PASS
			NV	50	-60000.00	-10.371651	20	PASS
			NV	-30	-80000.00	-13.828868	20	PASS
			NV	-20	-80000.00	-13.828868	20	PASS
			NV	-10	-80000.00	-13.828868	20	PASS
			NV	0	-80000.00	-13.828868	20	PASS
			NV	10	-80000.00	-13.828868	20	PASS
	Ant1	5825	NV	20	-80000.00	-13.828868	20	PASS
			NV	30	-80000.00	-13.828868	20	PASS
			NV	40	-80000.00	-13.828868	20	PASS
			NV	50	-80000.00	-13.828868	20	PASS
			NV	-30	-80000.00	-13.733906	20	PASS
			NV	-20	-60000.00	-10.300429	20	PASS
			NV	-10	-80000.00	-13.733906	20	PASS
			NV	0	-80000.00	-13.733906	20	PASS
	Ant2	5825	NV	10	-80000.00	-13.733906	20	PASS
			NV	20	-80000.00	-13.733906	20	PASS
			NV	30	-80000.00	-13.733906	20	PASS
			NV	40	-80000.00	-13.733906	20	PASS
			NV	50	-80000.00	-13.733906	20	PASS
			NV	-30	-80000.00	-13.733906	20	PASS
			NV	-20	-80000.00	-13.733906	20	PASS
			NV	-10	-80000.00	-13.733906	20	PASS
11N20SI SO	Ant1	5180	NV	0	-80000.00	-13.733906	20	PASS
			NV	10	-80000.00	-13.733906	20	PASS
			NV	20	-80000.00	-13.733906	20	PASS
			NV	30	-80000.00	-13.733906	20	PASS
			NV	40	-80000.00	-13.733906	20	PASS
			NV	50	-60000.00	-10.300429	20	PASS
			NV	-30	-60000.00	-11.583012	20	PASS
			NV	-20	-80000.00	-15.444015	20	PASS

	Ant2	5180	NV	-30	-60000.00	-11.583012	20	PASS
			NV	-20	-60000.00	-11.583012	20	PASS
			NV	-10	-80000.00	-15.444015	20	PASS
			NV	0	-60000.00	-11.583012	20	PASS
			NV	10	-60000.00	-11.583012	20	PASS
			NV	20	-60000.00	-11.583012	20	PASS
			NV	30	-60000.00	-11.583012	20	PASS
			NV	40	-80000.00	-15.444015	20	PASS
	Ant1	5220	NV	50	-60000.00	-11.583012	20	PASS
			NV	-30	-80000.00	-15.325670	20	PASS
			NV	-20	-80000.00	-15.325670	20	PASS
			NV	-10	-60000.00	-11.494253	20	PASS
			NV	0	-60000.00	-11.494253	20	PASS
			NV	10	-80000.00	-15.325670	20	PASS
			NV	20	-60000.00	-11.494253	20	PASS
			NV	30	-60000.00	-11.494253	20	PASS
	Ant2	5220	NV	40	-80000.00	-15.325670	20	PASS
			NV	50	-60000.00	-11.494253	20	PASS
			NV	-30	-80000.00	-15.325670	20	PASS
			NV	-20	-60000.00	-11.494253	20	PASS
			NV	-10	-80000.00	-15.325670	20	PASS
			NV	0	-60000.00	-11.494253	20	PASS
			NV	10	-60000.00	-11.494253	20	PASS
			NV	20	-60000.00	-11.494253	20	PASS
	Ant1	5240	NV	30	-80000.00	-15.325670	20	PASS
			NV	40	-60000.00	-11.494253	20	PASS
			NV	50	-60000.00	-11.494253	20	PASS
			NV	-30	-60000.00	-11.450382	20	PASS
			NV	-20	-60000.00	-11.450382	20	PASS
			NV	-10	-60000.00	-11.450382	20	PASS
			NV	0	-80000.00	-15.267176	20	PASS
			NV	10	-60000.00	-11.450382	20	PASS
	Ant2	5240	NV	20	-80000.00	-15.267176	20	PASS
			NV	30	-60000.00	-11.450382	20	PASS
			NV	40	-60000.00	-11.450382	20	PASS
			NV	50	-60000.00	-11.450382	20	PASS
			NV	-30	-60000.00	-11.450382	20	PASS
			NV	-20	-60000.00	-11.450382	20	PASS
			NV	-10	-80000.00	-15.267176	20	PASS
			NV	0	-80000.00	-15.267176	20	PASS
	Ant1	5745	NV	10	-80000.00	-15.267176	20	PASS
			NV	20	-80000.00	-15.267176	20	PASS
			NV	30	-60000.00	-11.450382	20	PASS
			NV	40	-80000.00	-15.267176	20	PASS
			NV	50	-80000.00	-15.267176	20	PASS
			NV	-30	-60000.00	-10.443864	20	PASS
			NV	-20	-60000.00	-10.443864	20	PASS
			NV	-10	-80000.00	-13.925152	20	PASS
	Ant2	5745	NV	0	-60000.00	-10.443864	20	PASS
			NV	10	-60000.00	-10.443864	20	PASS
			NV	20	-80000.00	-13.925152	20	PASS
			NV	30	-60000.00	-10.443864	20	PASS
			NV	40	-100000.00	-17.406440	20	PASS
			NV	50	-60000.00	-10.443864	20	PASS
			NV	-30	-80000.00	-13.925152	20	PASS
			NV	-20	-100000.00	-17.406440	20	PASS
	Ant2	5745	NV	-10	-80000.00	-13.925152	20	PASS
			NV	0	-80000.00	-13.925152	20	PASS
			NV	10	-80000.00	-13.925152	20	PASS
			NV	20	-80000.00	-13.925152	20	PASS
			NV	30	-60000.00	-10.443864	20	PASS
			NV	30	-60000.00	-10.443864	20	PASS

	Ant1	5785	NV	40	-80000.00	-13.925152	20	PASS
			NV	50	-80000.00	-13.925152	20	PASS
			NV	-30	-60000.00	-10.371651	20	PASS
			NV	-20	-80000.00	-13.828868	20	PASS
			NV	-10	-80000.00	-13.828868	20	PASS
			NV	0	-60000.00	-10.371651	20	PASS
			NV	10	-80000.00	-13.828868	20	PASS
			NV	20	-60000.00	-10.371651	20	PASS
			NV	30	-80000.00	-13.828868	20	PASS
			NV	40	-80000.00	-13.828868	20	PASS
	Ant2	5785	NV	50	-80000.00	-13.828868	20	PASS
			NV	-30	-80000.00	-13.828868	20	PASS
			NV	-20	-60000.00	-10.371651	20	PASS
			NV	-10	-80000.00	-13.828868	20	PASS
			NV	0	-80000.00	-13.828868	20	PASS
			NV	10	-80000.00	-13.828868	20	PASS
			NV	20	-100000.00	-17.286085	20	PASS
			NV	30	-100000.00	-17.286085	20	PASS
			NV	40	-80000.00	-13.828868	20	PASS
			NV	50	-60000.00	-10.371651	20	PASS
	Ant1	5825	NV	-30	-60000.00	-10.300429	20	PASS
			NV	-20	-80000.00	-13.733906	20	PASS
			NV	-10	-80000.00	-13.733906	20	PASS
			NV	0	-80000.00	-13.733906	20	PASS
			NV	10	-60000.00	-10.300429	20	PASS
			NV	20	-80000.00	-13.733906	20	PASS
			NV	30	-100000.00	-17.167382	20	PASS
			NV	40	-80000.00	-13.733906	20	PASS
			NV	50	-60000.00	-10.300429	20	PASS
	Ant2	5825	NV	-30	-100000.00	-17.167382	20	PASS
			NV	-20	-80000.00	-13.733906	20	PASS
			NV	-10	-80000.00	-13.733906	20	PASS
			NV	0	-80000.00	-13.733906	20	PASS
			NV	10	-80000.00	-13.733906	20	PASS
			NV	20	-60000.00	-10.300429	20	PASS
			NV	30	-80000.00	-13.733906	20	PASS
			NV	40	-60000.00	-10.300429	20	PASS
			NV	50	-80000.00	-13.733906	20	PASS
11N40SI SO	Ant1	5190	NV	-30	-80000.00	-15.414258	20	PASS
			NV	-20	-80000.00	-15.414258	20	PASS
			NV	-10	-80000.00	-15.414258	20	PASS
			NV	0	-80000.00	-15.414258	20	PASS
			NV	10	-80000.00	-15.414258	20	PASS
			NV	20	-80000.00	-15.414258	20	PASS
			NV	30	-80000.00	-15.414258	20	PASS
			NV	40	-80000.00	-15.414258	20	PASS
			NV	50	-80000.00	-15.414258	20	PASS
	Ant2	5190	NV	-30	-80000.00	-15.414258	20	PASS
			NV	-20	-80000.00	-15.414258	20	PASS
			NV	-10	-80000.00	-15.414258	20	PASS
			NV	0	-80000.00	-15.414258	20	PASS
			NV	10	-80000.00	-15.414258	20	PASS
			NV	20	-80000.00	-15.414258	20	PASS
			NV	30	-80000.00	-15.414258	20	PASS
			NV	40	-40000.00	-7.707129	20	PASS
			NV	50	-80000.00	-15.414258	20	PASS
	Ant1	5230	NV	-30	-80000.00	-15.296367	20	PASS
			NV	-20	-80000.00	-15.296367	20	PASS
			NV	-10	-40000.00	-7.648184	20	PASS
			NV	0	-80000.00	-15.296367	20	PASS
			NV	10	-80000.00	-15.296367	20	PASS

			NV	20	-80000.00	-15.296367	20	PASS
			NV	30	-80000.00	-15.296367	20	PASS
			NV	40	-80000.00	-15.296367	20	PASS
			NV	50	-80000.00	-15.296367	20	PASS
Ant2	5230		NV	-30	-80000.00	-15.296367	20	PASS
			NV	-20	-80000.00	-15.296367	20	PASS
			NV	-10	-80000.00	-15.296367	20	PASS
			NV	0	-80000.00	-15.296367	20	PASS
			NV	10	-80000.00	-15.296367	20	PASS
			NV	20	-80000.00	-15.296367	20	PASS
			NV	30	-40000.00	-7.648184	20	PASS
			NV	40	-80000.00	-15.296367	20	PASS
			NV	50	-80000.00	-15.296367	20	PASS
Ant1	5755		NV	-30	-80000.00	-13.900956	20	PASS
			NV	-20	-80000.00	-13.900956	20	PASS
			NV	-10	-80000.00	-13.900956	20	PASS
			NV	0	-80000.00	-13.900956	20	PASS
			NV	10	-80000.00	-13.900956	20	PASS
			NV	20	-40000.00	-6.950478	20	PASS
			NV	30	-80000.00	-13.900956	20	PASS
			NV	40	-80000.00	-13.900956	20	PASS
Ant2	5755		NV	50	-80000.00	-13.900956	20	PASS
			NV	-30	-80000.00	-13.900956	20	PASS
			NV	-20	-80000.00	-13.900956	20	PASS
			NV	-10	-80000.00	-13.900956	20	PASS
			NV	0	-80000.00	-13.900956	20	PASS
			NV	10	-80000.00	-13.900956	20	PASS
			NV	20	-80000.00	-13.900956	20	PASS
			NV	30	-80000.00	-13.900956	20	PASS
Ant1	5795		NV	40	-80000.00	-13.900956	20	PASS
			NV	50	-80000.00	-13.900956	20	PASS
			NV	-30	-40000.00	-6.902502	20	PASS
			NV	-20	-80000.00	-13.805004	20	PASS
			NV	-10	-80000.00	-13.805004	20	PASS
			NV	0	-80000.00	-13.805004	20	PASS
			NV	10	-80000.00	-13.805004	20	PASS
			NV	20	-80000.00	-13.805004	20	PASS
Ant2	5795		NV	30	-80000.00	-13.805004	20	PASS
			NV	40	-80000.00	-13.805004	20	PASS
			NV	50	-80000.00	-13.805004	20	PASS
			NV	-30	-80000.00	-13.805004	20	PASS
			NV	-20	-80000.00	-13.805004	20	PASS
			NV	-10	-80000.00	-13.805004	20	PASS
			NV	0	-80000.00	-13.805004	20	PASS
			NV	10	-80000.00	-13.805004	20	PASS
11AC20S ISO	Ant1	5180	NV	20	-80000.00	-13.805004	20	PASS
			NV	30	-80000.00	-13.805004	20	PASS
			NV	40	-80000.00	-13.805004	20	PASS
			NV	50	-80000.00	-13.805004	20	PASS
			NV	-30	-60000.00	-11.583012	20	PASS
			NV	-20	-80000.00	-15.444015	20	PASS
			NV	-10	-80000.00	-15.444015	20	PASS
			NV	0	-60000.00	-11.583012	20	PASS
	Ant2	5180	NV	10	-60000.00	-11.583012	20	PASS
			NV	20	-80000.00	-15.444015	20	PASS
			NV	30	-80000.00	-15.444015	20	PASS
			NV	40	-60000.00	-11.583012	20	PASS
			NV	50	-80000.00	-15.444015	20	PASS
			NV	-30	-80000.00	-15.444015	20	PASS
			NV	-20	-60000.00	-11.583012	20	PASS
			NV	-10	-60000.00	-11.583012	20	PASS

			NV	0	-80000.00	-15.444015	20	PASS
			NV	10	-60000.00	-11.583012	20	PASS
			NV	20	-60000.00	-11.583012	20	PASS
			NV	30	-80000.00	-15.444015	20	PASS
			NV	40	-40000.00	-7.722008	20	PASS
			NV	50	-80000.00	-15.444015	20	PASS
	Ant1	5220	NV	-30	-60000.00	-11.494253	20	PASS
			NV	-20	-80000.00	-15.325670	20	PASS
			NV	-10	-60000.00	-11.494253	20	PASS
			NV	0	-60000.00	-11.494253	20	PASS
			NV	10	-80000.00	-15.325670	20	PASS
			NV	20	-60000.00	-11.494253	20	PASS
			NV	30	-60000.00	-11.494253	20	PASS
			NV	40	-60000.00	-11.494253	20	PASS
	Ant2	5220	NV	-30	-60000.00	-11.494253	20	PASS
			NV	-20	-60000.00	-11.494253	20	PASS
			NV	-10	-60000.00	-11.494253	20	PASS
			NV	0	-60000.00	-11.494253	20	PASS
			NV	10	-80000.00	-15.325670	20	PASS
			NV	20	-60000.00	-11.494253	20	PASS
			NV	30	-60000.00	-11.494253	20	PASS
			NV	40	-80000.00	-15.325670	20	PASS
	Ant1	5240	NV	-30	-80000.00	-15.267176	20	PASS
			NV	-20	-60000.00	-11.450382	20	PASS
			NV	-10	-60000.00	-11.450382	20	PASS
			NV	0	-60000.00	-11.450382	20	PASS
			NV	10	-80000.00	-15.267176	20	PASS
			NV	20	-60000.00	-11.450382	20	PASS
			NV	30	-60000.00	-11.450382	20	PASS
			NV	40	-80000.00	-15.267176	20	PASS
	Ant2	5240	NV	-30	-60000.00	-11.450382	20	PASS
			NV	-20	-60000.00	-11.450382	20	PASS
			NV	-10	-80000.00	-15.267176	20	PASS
			NV	0	-60000.00	-11.450382	20	PASS
			NV	10	-60000.00	-11.450382	20	PASS
			NV	20	-60000.00	-11.450382	20	PASS
			NV	30	-60000.00	-11.450382	20	PASS
			NV	40	-80000.00	-15.267176	20	PASS
	Ant1	5745	NV	-30	-80000.00	-13.925152	20	PASS
			NV	-20	-80000.00	-13.925152	20	PASS
			NV	-10	-60000.00	-10.443864	20	PASS
			NV	0	-60000.00	-10.443864	20	PASS
			NV	10	-60000.00	-10.443864	20	PASS
			NV	20	-80000.00	-13.925152	20	PASS
			NV	30	-80000.00	-13.925152	20	PASS
			NV	40	-80000.00	-13.925152	20	PASS
	Ant2	5745	NV	-30	-80000.00	-13.925152	20	PASS
			NV	-20	-80000.00	-13.925152	20	PASS
			NV	-10	-60000.00	-10.443864	20	PASS
			NV	0	-100000.00	-17.406440	20	PASS
			NV	10	-80000.00	-13.925152	20	PASS
			NV	20	-80000.00	-13.925152	20	PASS
			NV	30	-60000.00	-10.443864	20	PASS
			NV	40	-80000.00	-13.925152	20	PASS
	Ant1	5785	NV	-30	-80000.00	-13.828868	20	PASS

			NV	-20	-60000.00	-10.371651	20	PASS
			NV	-10	-60000.00	-10.371651	20	PASS
			NV	0	-80000.00	-13.828868	20	PASS
			NV	10	-80000.00	-13.828868	20	PASS
			NV	20	-80000.00	-13.828868	20	PASS
			NV	30	-80000.00	-13.828868	20	PASS
			NV	40	-80000.00	-13.828868	20	PASS
			NV	50	-60000.00	-10.371651	20	PASS
	Ant2	5785	NV	-30	-80000.00	-13.828868	20	PASS
			NV	-20	-80000.00	-13.828868	20	PASS
			NV	-10	-80000.00	-13.828868	20	PASS
			NV	0	-60000.00	-10.371651	20	PASS
			NV	10	-60000.00	-10.371651	20	PASS
			NV	20	-100000.00	-17.286085	20	PASS
			NV	30	-60000.00	-10.371651	20	PASS
			NV	40	-60000.00	-10.371651	20	PASS
			NV	50	-60000.00	-10.371651	20	PASS
	Ant1	5825	NV	-30	-80000.00	-13.733906	20	PASS
			NV	-20	-60000.00	-10.300429	20	PASS
			NV	-10	-60000.00	-10.300429	20	PASS
			NV	0	-40000.00	-6.866953	20	PASS
			NV	10	-80000.00	-13.733906	20	PASS
			NV	20	-60000.00	-10.300429	20	PASS
			NV	30	-80000.00	-13.733906	20	PASS
			NV	40	-60000.00	-10.300429	20	PASS
	Ant2	5825	NV	-30	-80000.00	-13.733906	20	PASS
			NV	-20	-100000.00	-17.167382	20	PASS
			NV	-10	-80000.00	-13.733906	20	PASS
			NV	0	-80000.00	-13.733906	20	PASS
			NV	10	-80000.00	-13.733906	20	PASS
			NV	20	-80000.00	-13.733906	20	PASS
			NV	30	-80000.00	-13.733906	20	PASS
			NV	40	-80000.00	-13.733906	20	PASS
11AC40S ISO	Ant1	5190	NV	-30	-80000.00	-15.414258	20	PASS
			NV	-20	-80000.00	-15.414258	20	PASS
			NV	-10	-80000.00	-15.414258	20	PASS
			NV	0	-80000.00	-15.414258	20	PASS
			NV	10	-40000.00	-7.707129	20	PASS
			NV	20	-80000.00	-15.414258	20	PASS
			NV	30	-80000.00	-15.414258	20	PASS
			NV	40	-40000.00	-7.707129	20	PASS
	Ant2	5190	NV	50	-80000.00	-15.414258	20	PASS
			NV	-30	-40000.00	-7.707129	20	PASS
			NV	-20	-80000.00	-15.414258	20	PASS
			NV	-10	-80000.00	-15.414258	20	PASS
			NV	0	-80000.00	-15.414258	20	PASS
			NV	10	-40000.00	-7.707129	20	PASS
			NV	20	-80000.00	-15.414258	20	PASS
			NV	30	-80000.00	-15.414258	20	PASS
	Ant1	5230	NV	40	-80000.00	-15.414258	20	PASS
			NV	50	-40000.00	-7.707129	20	PASS
			NV	-30	-80000.00	-15.296367	20	PASS
			NV	-20	-80000.00	-15.296367	20	PASS
			NV	-10	-80000.00	-15.296367	20	PASS
			NV	0	-80000.00	-15.296367	20	PASS
			NV	10	-80000.00	-15.296367	20	PASS
			NV	20	-80000.00	-15.296367	20	PASS
			NV	30	-80000.00	-15.296367	20	PASS
			NV	40	-80000.00	-15.296367	20	PASS

11AC80S ISO	Ant2	5230	NV	50	-80000.00	-15.296367	20	PASS
			NV	-30	-40000.00	-7.648184	20	PASS
			NV	-20	-80000.00	-15.296367	20	PASS
			NV	-10	-80000.00	-15.296367	20	PASS
			NV	0	-80000.00	-15.296367	20	PASS
			NV	10	-80000.00	-15.296367	20	PASS
			NV	20	-80000.00	-15.296367	20	PASS
			NV	30	-80000.00	-15.296367	20	PASS
			NV	40	-80000.00	-15.296367	20	PASS
	Ant1	5755	NV	50	-80000.00	-15.296367	20	PASS
			NV	-30	-80000.00	-13.900956	20	PASS
			NV	-20	-80000.00	-13.900956	20	PASS
			NV	-10	-40000.00	-6.950478	20	PASS
			NV	0	-80000.00	-13.900956	20	PASS
			NV	10	-80000.00	-13.900956	20	PASS
			NV	20	-80000.00	-13.900956	20	PASS
			NV	30	-80000.00	-13.900956	20	PASS
			NV	40	-80000.00	-13.900956	20	PASS
	Ant2	5755	NV	50	-80000.00	-13.900956	20	PASS
			NV	-30	-80000.00	-13.900956	20	PASS
			NV	-20	-80000.00	-13.900956	20	PASS
			NV	-10	-80000.00	-13.900956	20	PASS
			NV	0	-80000.00	-13.900956	20	PASS
			NV	10	-80000.00	-13.900956	20	PASS
			NV	20	-80000.00	-13.900956	20	PASS
			NV	30	-80000.00	-13.900956	20	PASS
			NV	40	-80000.00	-13.900956	20	PASS
	Ant1	5795	NV	50	-80000.00	-13.805004	20	PASS
			NV	-30	-80000.00	-13.805004	20	PASS
			NV	-20	-80000.00	-13.805004	20	PASS
			NV	-10	-80000.00	-13.805004	20	PASS
			NV	0	-80000.00	-13.805004	20	PASS
			NV	10	-80000.00	-13.805004	20	PASS
			NV	20	-80000.00	-13.805004	20	PASS
			NV	30	-80000.00	-13.805004	20	PASS
			NV	40	-80000.00	-13.805004	20	PASS
	Ant2	5795	NV	50	-80000.00	-13.805004	20	PASS
			NV	-30	-80000.00	-13.805004	20	PASS
			NV	-20	-80000.00	-13.805004	20	PASS
			NV	-10	-80000.00	-13.805004	20	PASS
			NV	0	-80000.00	-13.805004	20	PASS
			NV	10	-80000.00	-13.805004	20	PASS
			NV	20	-80000.00	-13.805004	20	PASS
			NV	30	-80000.00	-13.805004	20	PASS
			NV	40	-80000.00	-13.805004	20	PASS
11AC80S ISO	Ant1	5210	NV	50	-80000.00	-15.355086	20	PASS
			NV	-30	-80000.00	-15.355086	20	PASS
			NV	-20	-80000.00	-15.355086	20	PASS
			NV	-10	-80000.00	-15.355086	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	-80000.00	-15.355086	20	PASS
			NV	20	-80000.00	-15.355086	20	PASS
			NV	30	-80000.00	-15.355086	20	PASS
			NV	40	-80000.00	-15.355086	20	PASS
	Ant2	5210	NV	50	-80000.00	-15.355086	20	PASS
			NV	-30	-80000.00	-15.355086	20	PASS
			NV	-20	-80000.00	-15.355086	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	-80000.00	-15.355086	20	PASS
			NV	20	-80000.00	-15.355086	20	PASS
			NV	30	-80000.00	-15.355086	20	PASS
			NV	40	-80000.00	-15.355086	20	PASS

			NV	30	0.00	0.000000	20	PASS
			NV	40	-80000.00	-15.355086	20	PASS
			NV	50	-80000.00	-15.355086	20	PASS
	Ant1	5775	NV	-30	-80000.00	-13.852814	20	PASS
			NV	-20	-80000.00	-13.852814	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	-80000.00	-13.852814	20	PASS
			NV	10	-80000.00	-13.852814	20	PASS
			NV	20	-80000.00	-13.852814	20	PASS
			NV	30	-80000.00	-13.852814	20	PASS
			NV	40	-80000.00	-13.852814	20	PASS
			NV	50	0.00	0.000000	20	PASS
	Ant2	5775	NV	-30	-80000.00	-13.852814	20	PASS
			NV	-20	-80000.00	-13.852814	20	PASS
			NV	-10	-80000.00	-13.852814	20	PASS
			NV	0	-80000.00	-13.852814	20	PASS
			NV	10	-80000.00	-13.852814	20	PASS
			NV	20	-80000.00	-13.852814	20	PASS
			NV	30	-80000.00	-13.852814	20	PASS
			NV	40	-80000.00	-13.852814	20	PASS
			NV	50	-80000.00	-13.852814	20	PASS

8.5 UNDESIRABLE RADIATED SPURIOUS EMISSION

8.5.1 Applicable Standard

According to FCC Part 15.407 (b)
According to 789033 D02 Section II(G)

8.5.2 Conformance Limit

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table 15.209(a):

Restricted Frequency(MHz)	Field Strength ($\mu\text{V/m}$)	Field Strength (dB $\mu\text{V/m}$)	Measurement Distance
0.009-0.490	2400/F(KHz)	20 log ($\mu\text{V/m}$)	300
0.490-1.705	2400/F(KHz)	20 log ($\mu\text{V/m}$)	30
1.705-30	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The provisions of §15.205 apply to intentional radiators operating under this section, 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

Remark: 1. Emission level in dBuV/m=20 log (uV/m)
2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of 15.205, and the emissions located in restricted bands also comply with 15.209 limit.

8.5.3 Test Configuration

Test according to clause 6.2 radio frequency test setup

8.5.4 Test Procedure

■ Unwanted Emissions Measurements below 1000 MHz

Compliance shall be demonstrated using CISPR quasi-peak detection; however, peak detection is permitted as an alternative to quasi-peak detection.

The EUT was placed on a turn table which is 0.8m above ground plane.

And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

Repeat above procedures until all frequency measured was complete.

We use software control the EUT, Let EUT hopping on and transmit with highest power, All the modes have been tested and the worst result was reported.

Use the following spectrum analyzer settings:

Set RBW=120kHz for $f < 1$ GHz(30MHz to 1GHz), 200Hz for $f < 150$ KHz(9KHz to 150KHz), 9KHz for < 30 MHz

(150KHz to 30KHz).

Set the VBW > RBW.

Detector = Peak.

Trace mode = max hold.

Follow the guidelines in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b). Submit this data.

Repeat above procedures until all frequency measured was complete.

■ Unwanted Maximum peak Emissions Measurements above 1000 MHz

Maximum emission levels are measured by setting the analyzer as follows:

RBW = 1 MHz.

VBW $\geq$ 3 MHz.

Detector = Peak.

Sweep time = auto.

Trace mode = max hold.

Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately 1/x, where x is the duty cycle. For example, at 50 percent duty cycle, the measurement time will increase by a factor of two relative to measurement time for continuous transmission.

■ Unwanted Average Emissions Measurements above 1000 MHz

Method VB (Averaging using reduced video bandwidth): Alternative method.

RBW = 1 MHz.

Video bandwidth. • If the EUT is configured to transmit with duty cycle $\geq$ 98 percent, set VBW $\leq$ RBW/100 (i.e., 10 kHz) but not less than 10 Hz.

• If the EUT duty cycle is < 98 percent, set VBW $\geq$ 1/T, where T is defined in section II.B.1.a).

Video bandwidth mode or display mode • The instrument shall be set to ensure that video filtering is applied in the power domain. Typically, this requires setting the detector mode to RMS and setting the Average-VBW Type to Power (RMS).

• As an alternative, the analyzer may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some analyzers require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage"

regardless of the display mode.

Detector = Peak.

Sweep time = auto.

Trace mode = max hold.

Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 percent duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of $1/x$, where x is the duty cycle. For example, use at least 200 traces if the duty cycle is 25 percent. (If a specific emission is demonstrated to be continuous—i.e., 100 percent duty cycle—rather than turning on and off with the transmit cycle, at least 50 traces shall be averaged.)

■ Band edge measurements.

Unwanted band-edge emissions may be measured using either of the special band-edge measurement techniques (the marker-delta or integration methods) described below. Note that the marker-delta method is primarily a radiated measurement technique that requires the 99% occupied bandwidth edge to be within 2 MHz of the authorized band edge, whereas the integration method can be used in either a radiated or conducted measurement without any special requirement with regards to the displacement of the unwanted emission(s) relative to the authorized bandwidth.

Marker-Delta Method.

The marker-delta method, as described in ANSI C63.10, can be used to perform measurements of the radiated unwanted emissions level of emissions provided that the 99% occupied bandwidth of the fundamental is within 2 MHz of the authorized band-edge.

8.5.5 Test Results

The voltage 120V & 240V and the modes 802.11a/n/ac has been tested and the worst result recorded as below:

- ☒ For Undesirable radiated Spurious Emission in U-NII – 1
All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

Chip 1 ANT2:

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5180
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
6645.342	V	50.35	-44.88	-27.00	-17.88
10558.73	V	53.93	-41.30	-27.00	-14.30
17831.7	V	65.37	-29.86	-27.00	-2.86
12096.85	H	55.08	-40.15	-27.00	-13.15
14300.55	H	56.46	-38.77	-27.00	-11.77
18000	H	47.9	-47.33	-27.00	-20.33

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5220
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
5454.842	V	48.69	-46.54	-27.00	-19.54
11028.17	V	55.1	-40.13	-27.00	-13.13
17803.38	V	65.72	-29.51	-27.00	-2.51
7083.678	H	51.65	-43.58	-27.00	-16.58
10974.12	H	55.24	-39.99	-27.00	-12.99
17927.31	H	48.31	-46.92	-27.00	-19.92

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5240
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
5417.134	V	48.42	-46.81	-27.00	-19.81
10684.6	V	56.21	-39.02	-27.00	-12.02
17971.4	V	65.68	-29.55	-27.00	-2.55
7035.726	H	50.74	-44.49	-27.00	-17.49
12159.95	H	56.41	-38.82	-27.00	-11.82
17950.64	H	48.19	-47.04	-27.00	-20.04

Chip 2 ANT1:

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5180
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
6643.952	V	50.22	-45.01	-27.00	-18.01
10560.01	V	53.90	-41.33	-27.00	-14.33
17834.59	V	65.11	-30.12	-27.00	-3.12
5473.632	H	48.15	-47.08	-27.00	-20.08
10775.33	H	55.58	-39.65	-27.00	-12.65
17198.24	H	65.84	-29.39	-27.00	-2.39

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5220
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
5214.354	V	49.16	-46.07	-27.00	-19.07
10687.16	V	59.15	-36.08	-27.00	-9.08
17977.18	V	65.16	-30.07	-27.00	-3.07
7059.106	H	50.58	-44.65	-27.00	-17.65
12183.33	H	56.09	-39.14	-27.00	-12.14
17745.52	H	66.45	-28.78	-27.00	-1.78

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5240
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
5653.452	V	50.56	-44.67	-27.00	-17.67
11029.45	V	55.07	-40.16	-27.00	-13.16
16806.27	V	65.46	-29.77	-27.00	-2.77
7095.368	H	51.57	-43.66	-27.00	-16.66
10985.81	H	55.08	-40.15	-27.00	-13.15
16924.75	H	65.15	-30.08	-27.00	-3.08

MIMO:

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5180
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
11980.66	V	55.12	-40.11	-27.00	-13.11
13405.54	V	56.41	-38.82	-27.00	-11.82
17919.83	V	63.56	-31.67	-27.00	-4.67
11897.13	H	54.64	-40.59	-27.00	-13.59
14457.64	H	56.59	-38.64	-27.00	-11.64
16987.03	H	64.03	-31.20	-27.00	-4.20

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5220
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
11179.67	V	54.80	-40.43	-27.00	-13.43
14449.32	V	56.80	-38.43	-27.00	-11.43
17995.08	V	63.39	-31.84	-27.00	-4.84
12180.43	H	54.56	-40.67	-27.00	-13.67
15115.18	H	55.82	-39.41	-27.00	-12.41
17976.64	H	64.21	-31.02	-27.00	-4.02

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5240
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
10887.42	V	54.42	-40.81	-27.00	-13.81
15225.3	V	55.94	-39.29	-27.00	-12.29
17989.88	V	63.28	-31.95	-27.00	-4.95
12168.13	H	55.24	-39.99	-27.00	-12.99
14376.45	H	55.73	-39.50	-27.00	-12.50
17989.63	H	63.83	-31.40	-27.00	-4.40

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.
 (3) EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77
 d is the measurement distance in 3 meters

Chip 1 ANT2:

Frequency: 5180					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6645.342	V	50.35	74.00	-23.65	peak
6645.342	V	32.48	54.00	-21.52	AVG
10558.73	V	53.93	74.00	-20.07	peak
10558.73	V	35.61	54.00	-18.39	AVG
17831.70	V	65.37	74.00	-8.63	peak
17831.7	V	48.22	54.00	-5.78	AVG
5461.942	H	48.23	74.00	-25.77	peak
5461.942	H	30.03	54.00	-23.97	AVG
10763.64	H	55.74	74.00	-18.26	peak
10763.64	H	38.65	54.00	-15.35	AVG
17800.80	H	66.02	74.00	-7.98	peak
17800.8	H	48.53	54.00	-5.47	AVG

Frequency: 5220					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5454.842	V	48.69	74.00	-25.31	peak
5454.842	V	30.24	54.00	-23.76	AVG
11028.17	V	55.10	74.00	-18.90	peak
11028.17	V	38.29	54.00	-15.71	AVG
17803.38	V	65.72	74.00	-8.28	peak
17803.38	V	48.59	54.00	-5.41	AVG
7083.678	H	51.65	74.00	-22.35	peak
7083.678	H	33.59	54.00	-20.41	AVG
10974.12	H	55.24	74.00	-18.76	peak
10974.12	H	38.76	54.00	-15.24	AVG
17927.31	H	65.33	74.00	-8.67	peak
17927.31	H	48.31	54.00	-5.69	AVG

Frequency: 5240					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5417.134	V	48.42	74.00	-25.58	peak
5417.134	V	30.45	54.00	-23.55	AVG
10684.60	V	56.21	74.00	-17.79	peak
10684.60	V	39.02	54.00	-14.98	AVG
17971.40	V	65.68	74.00	-8.32	peak
17971.4	V	47.93	54.00	-6.07	AVG
7035.726	H	50.74	74.00	-23.26	peak
7035.726	H	32.48	54.00	-21.52	AVG
12159.95	H	56.41	74.00	-17.59	peak
12159.95	H	38.24	54.00	-15.76	AVG
17950.64	H	66.81	74.00	-7.19	peak
17950.64	H	48.19	54.00	-5.81	AVG

Chip 2 ANT1:

Frequency: 5180					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6643.952	V	50.22	74.00	-23.78	peak
6643.952	V	32.32	54.00	-21.68	AVG
10560.010	V	53.90	74.00	-20.1	peak
10560.010	V	35.59	54.00	-18.41	AVG
17834.590	V	65.11	74.00	-8.89	peak
17834.590	V	48.03	54.00	-5.97	AVG
5473.632	H	48.15	74.00	-25.85	peak
5473.632	H	29.82	54.00	-24.18	AVG
10775.330	H	55.58	74.00	-18.42	peak
10775.330	H	38.51	54.00	-15.49	AVG
17198.240	H	65.84	74.00	-8.16	peak
17198.240	H	48.40	54.00	-5.6	AVG

Frequency: 5220					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5214.354	V	49.16	74.00	-24.84	peak
5214.354	V	30.13	54.00	-23.87	AVG
10687.160	V	59.15	74.00	-14.85	peak
10687.160	V	38.98	54.00	-15.02	AVG
17977.180	V	65.16	74.00	-8.84	peak
17977.180	V	50.55	54.00	-3.45	AVG
7059.106	H	50.58	74.00	-23.42	peak
7059.106	H	32.06	54.00	-21.94	AVG
12183.330	H	56.09	74.00	-17.91	peak
12183.330	H	37.96	54.00	-16.04	AVG
17745.520	H	66.45	74.00	-7.55	peak
17745.520	H	47.93	54.00	-6.07	AVG

Frequency: 5240					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5653.452	V	50.56	74.00	-23.44	peak
5653.452	V	30.08	54.00	-23.92	AVG
11029.450	V	55.07	74.00	-18.93	peak
11029.450	V	43.27	54.00	-10.73	AVG
16806.270	V	65.46	74.00	-8.54	peak
16806.270	V	48.40	54.00	-5.6	AVG
7095.368	H	51.57	74.00	-22.43	peak
7095.368	H	33.38	54.00	-20.62	AVG
10985.810	H	55.08	74.00	-18.92	peak
10985.810	H	38.62	54.00	-15.38	AVG
16924.750	H	65.15	74.00	-8.85	peak
16924.750	H	49.18	54.00	-4.82	AVG

MIMO:

Frequency: 5180					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11980.660	V	55.12	74.00	-18.88	peak
11980.660	V	38.44	54.00	-15.56	AVG
13405.540	V	56.41	74.00	-17.59	peak
13405.540	V	40.08	54.00	-13.92	AVG
17919.830	V	63.56	74.00	-10.44	peak
17919.830	V	46.11	54.00	-7.89	AVG
11897.130	H	54.64	74.00	-19.36	peak
11897.130	H	37.39	54.00	-16.61	AVG
14457.640	H	56.59	74.00	-17.41	peak
14457.640	H	40.36	54.00	-13.64	AVG
16987.030	H	64.03	74.00	-9.97	peak
16987.030	H	47.97	54.00	-6.03	AVG

Frequency: 5220					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11179.670	V	54.80	74.00	-19.2	peak
11179.670	V	37.34	54.00	-16.66	AVG
14449.320	V	56.80	74.00	-17.2	peak
14449.320	V	40.18	54.00	-13.82	AVG
17995.080	V	63.39	74.00	-10.61	peak
17995.080	V	46.01	54.00	-7.99	AVG
12180.430	H	54.56	74.00	-19.44	peak
12180.430	H	37.29	54.00	-16.71	AVG
15115.180	H	55.82	74.00	-18.18	peak
15115.180	H	39.36	54.00	-14.64	AVG
17976.640	H	64.21	74.00	-9.79	peak
17976.640	H	46.77	54.00	-7.23	AVG

Frequency: 5240					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
10887.420	V	54.42	74.00	-19.58	peak
10887.420	V	37.34	54.00	-16.66	AVG
15225.300	V	55.94	74.00	-18.06	peak
15225.300	V	39.18	54.00	-14.82	AVG
17989.880	V	63.28	74.00	-10.72	peak
17989.880	V	46.51	54.00	-7.49	AVG
12168.130	H	55.24	74.00	-18.76	peak
12168.130	H	39.19	54.00	-14.81	AVG
14376.450	H	55.73	74.00	-18.27	peak
14376.450	H	39.46	54.00	-14.54	AVG
17989.630	H	63.83	74.00	-10.17	peak
17989.630	H	47.67	54.00	-6.33	AVG

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)Data of measurement within this frequency range shown " -- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

● ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

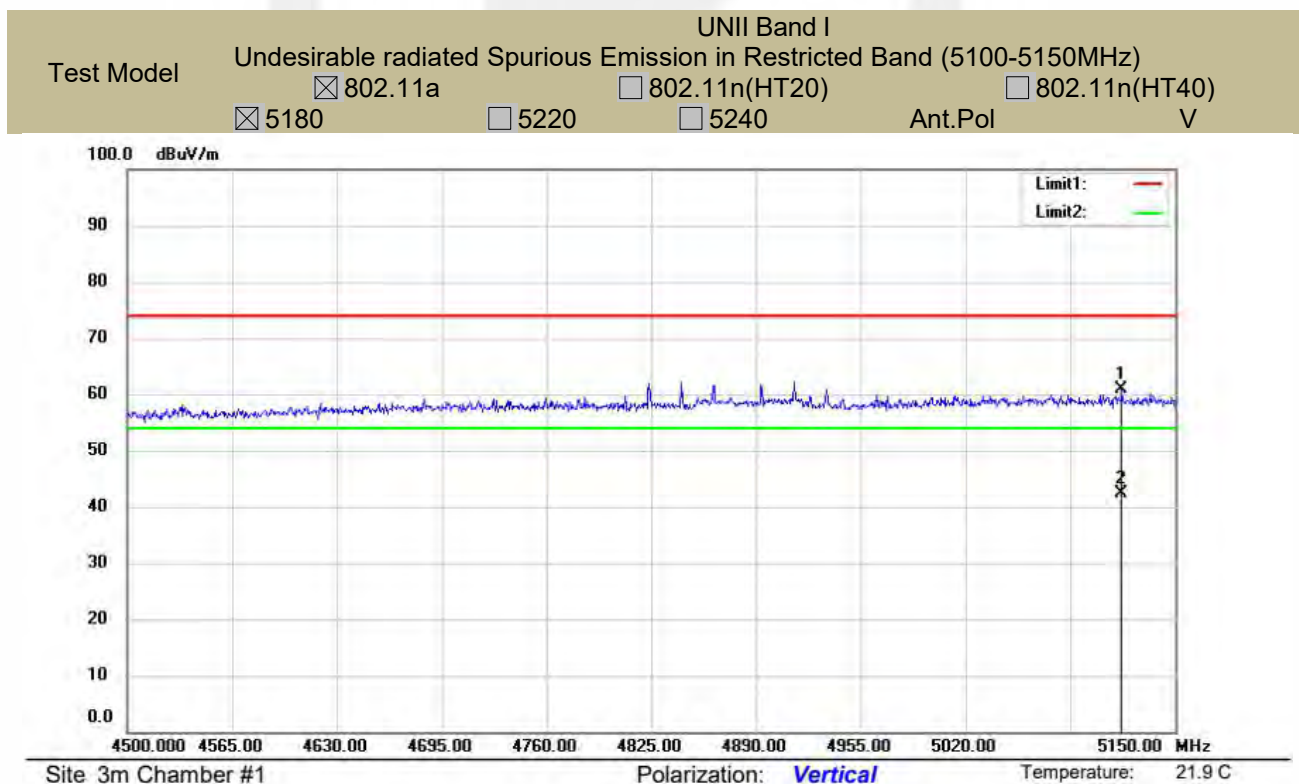
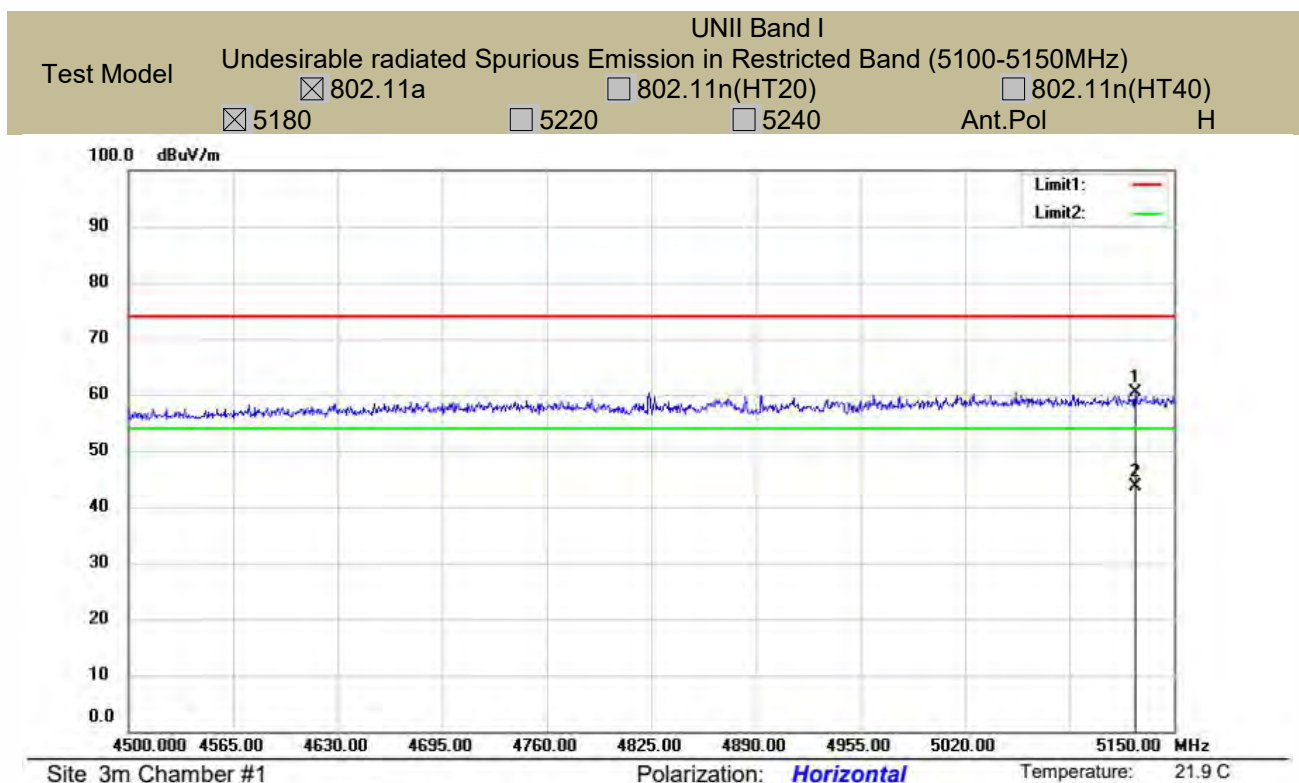
Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5180
Test mode:	802.11a		

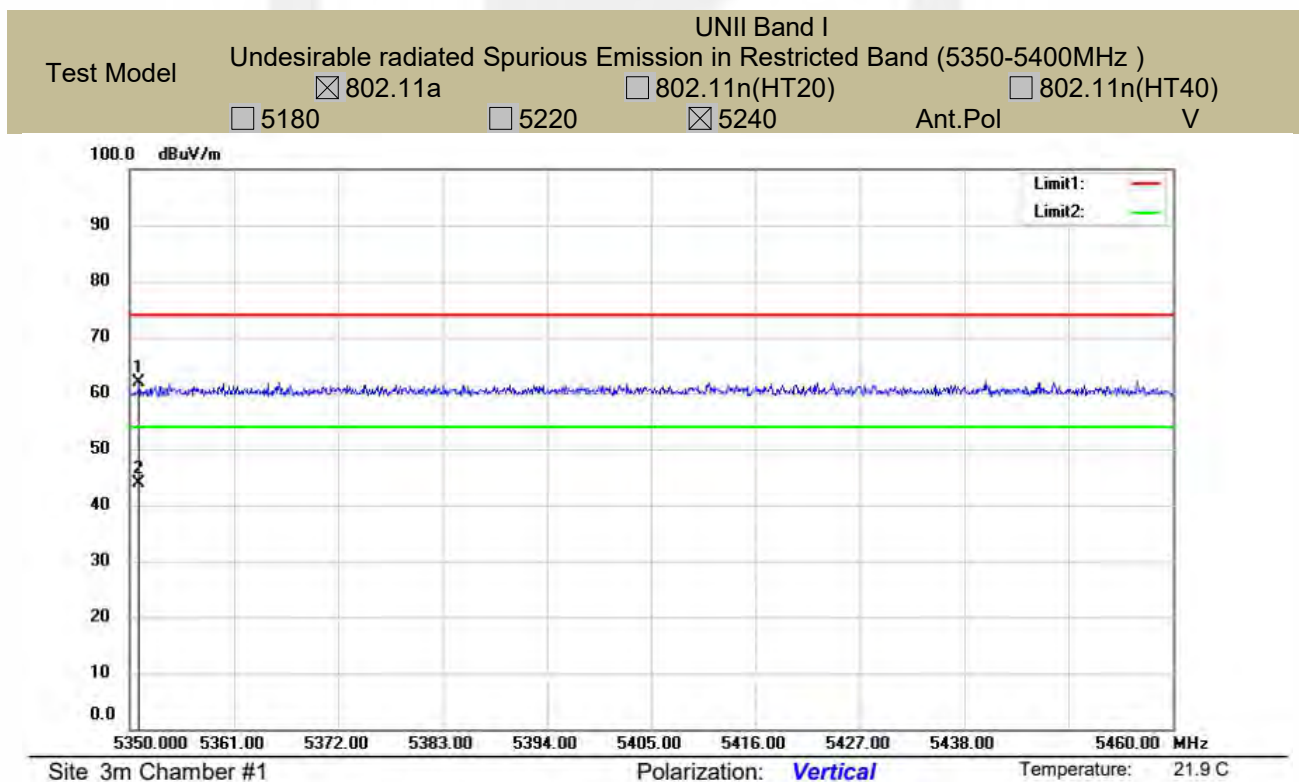
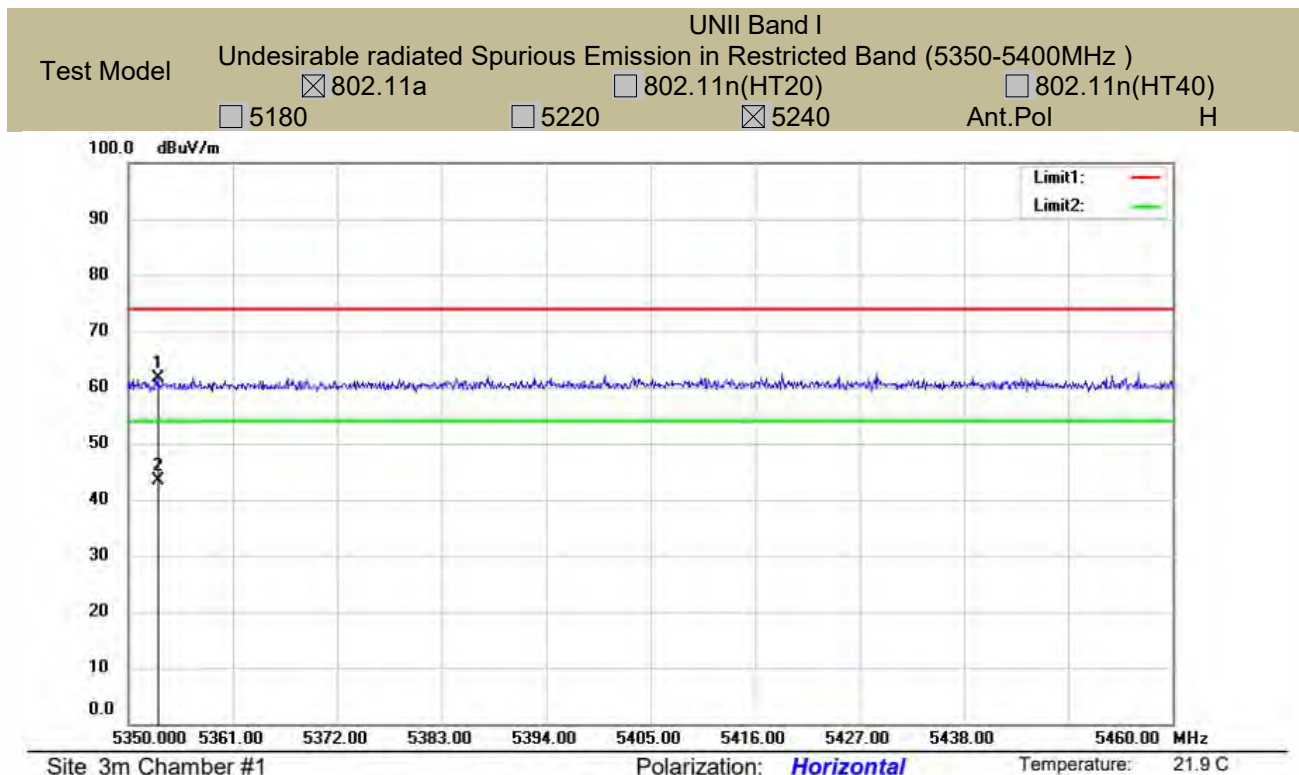
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5116.948	V	60.78	-34.45	-27.00	Pass
5126.243	H	60.32	-34.91	-27.00	Pass

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5240
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5351.073	V	61.76	-33.47	-27.00	Pass
5353.163	H	61.59	-33.64	-27.00	Pass

Note: (1) All Readings are Peak Value (VBW=300kHz)
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.
 (3) $EIRP[dBm] = E[dB\mu V/m] + 20 \log(d[meters]) - 104.77$
 d is the measurement distance in 3 meters





- ☒ For Undesirable radiated Spurious Emission in UNII Band III

All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:

- ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

Chip 1 ANT2:

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5745
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
7039.795	V	52.51	-42.72	-27.00	-15.72
11219.47	V	55.87	-39.36	-27.00	-12.36
17997.39	V	66.63	-28.60	-27.00	-1.60
5459.574	H	47.87	-47.36	-27.00	-20.36
10048.1	H	53.12	-42.11	-27.00	-15.11
17981.8	H	48.22	-47.01	-27.00	-20.01

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5785
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
5454.054	V	48.09	-47.14	-27.00	-20.14
10950.36	V	55.69	-39.54	-27.00	-12.54
17979.2	V	65.67	-29.56	-27.00	-2.56
5454.054	H	48.89	-46.34	-27.00	-19.34
10084.47	H	53.46	-41.77	-27.00	-14.77
17986.99	H	48.79	-46.44	-27.00	-19.44

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5825
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
5543.853	V	48.13	-47.10	-27.00	-20.10
10710.89	V	55.84	-39.39	-27.00	-12.39
17976.6	V	67.01	-28.22	-27.00	-1.22
5382.018	H	47.28	-47.95	-27.00	-20.95
10277.2	H	53.52	-41.71	-27.00	-14.71
17968.81	H	48.93	-46.30	-27.00	-19.30

Chip 2 ANT1:

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5180
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
5038.405	V	56.38	-38.85	-27.00	-11.85
11220.75	V	55.84	-39.39	-27.00	-12.39
18000.28	V	66.37	-28.86	-27.00	-1.86
5471.264	H	47.79	-47.44	-27.00	-20.44
10059.79	H	52.96	-42.27	-27.00	-15.27
15979.24	H	65.40	-29.83	-27.00	-2.83

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5220
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
6452.664	V	47.96	-47.27	-27.00	-20.27
10951.64	V	55.66	-39.57	-27.00	-12.57
17982.09	V	65.41	-29.82	-27.00	-2.82
5465.744	H	48.81	-46.42	-27.00	-19.42
10096.16	H	53.30	-41.93	-27.00	-14.93
16984.43	H	65.49	-29.74	-27.00	-2.74

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5240
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
5742.463	V	48.00	-47.23	-27.00	-20.23
10712.17	V	55.81	-39.42	-27.00	-12.42
17879.49	V	66.75	-28.48	-27.00	-1.48
5393.708	H	47.20	-48.03	-27.00	-21.03
10288.89	H	53.36	-41.87	-27.00	-14.87
17966.25	H	65.48	-29.75	-27.00	-2.75

MIMO:

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5180
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
6084.84	V	58.17	-37.06	-27.00	-10.06
14415.95	V	58.16	-37.07	-27.00	-10.07
17829.44	V	66.09	-29.14	-27.00	-2.14
11845.71	H	56.10	-39.13	-27.00	-12.13
15235.71	H	58.22	-37.01	-27.00	-10.01
16989.63	H	66.69	-28.54	-27.00	-1.54

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5220
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
5119.96	V	59.46	-35.77	-27.00	-8.77
12111.32	V	57.64	-37.59	-27.00	-10.59
17837.17	V	65.82	-29.41	-27.00	-2.41
12194.51	H	56.85	-38.38	-27.00	-11.38
14682.76	H	57.65	-37.58	-27.00	-10.58
16831.72	H	65.94	-29.29	-27.00	-2.29

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency(MHz):	5240
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
6093.71	V	59.43	-35.80	-27.00	-8.80
13409.7	V	57.79	-37.44	-27.00	-10.44
17868.12	V	65.18	-30.05	-27.00	-3.05
11905.72	H	56.94	-38.29	-27.00	-11.29
14217.49	H	57.77	-37.46	-27.00	-10.46
16997.44	H	65.41	-29.82	-27.00	-2.82

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.
 (3) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
 d is the measurement distance in 3 meters

Chip 1 ANT2:

Frequency: 802.11a			Frequency(MHz): 5745		
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
7039.795	V	52.51	74.00	-21.49	peak
7039.795	V	34.81	54.00	-19.19	AVG
11219.47	V	55.87	74.00	-18.13	peak
11219.47	V	38.76	54.00	-15.24	AVG
17997.39	V	66.63	74.00	-7.37	peak
17997.39	V	48.69	54.00	-5.31	AVG
5459.574	H	47.87	74.00	-26.13	peak
5459.574	H	30.88	54.00	-23.12	AVG
10048.10	H	53.12	74.00	-20.88	peak
10048.10	H	35.63	54.00	-18.37	AVG
17981.80	H	65.58	74.00	-8.42	peak
17981.8	H	48.22	54.00	-5.78	AVG

Frequency: 802.11a			Frequency(MHz): 5785		
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5454.054	V	48.09	74.00	-25.91	peak
5454.054	V	30.29	54.00	-23.71	AVG
10950.36	V	55.69	74.00	-18.31	peak
10950.36	V	38.57	54.00	-15.43	AVG
17979.20	V	65.67	74.00	-8.33	peak
17979.2	V	48.64	54.00	-5.36	AVG
5454.054	H	48.89	74.00	-25.11	peak
5454.054	H	30.91	54.00	-23.09	AVG
10084.47	H	53.46	74.00	-20.54	peak
10084.47	H	35.19	54.00	-18.81	AVG
17986.99	H	65.67	74.00	-8.33	peak
17986.99	H	48.79	54.00	-5.21	AVG

Frequency: 802.11a			Frequency(MHz): 5825		
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5543.853	V	48.13	74.00	-25.87	peak
5543.853	V	30.55	54.00	-23.45	AVG
10710.89	V	55.84	74.00	-18.16	peak
10710.89	V	38.72	54.00	-15.28	AVG
17976.60	V	67.01	74.00	-6.99	peak
17976.6	V	50.03	54.00	-3.97	AVG
5382.018	H	47.28	74.00	-26.72	peak
5382.018	H	30.28	54.00	-23.72	AVG
10277.20	H	53.52	74.00	-20.48	peak
10277.20	H	35.74	54.00	-18.26	AVG
17968.81	H	65.66	74.00	-8.34	peak
17968.81	H	48.93	54.00	-5.07	AVG

Chip 2 ANT1:

Frequency: 5180					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5038.405	V	56.38	74.00	-17.62	peak
5038.405	V	45.65	54.00	-8.35	AVG
11220.750	V	55.84	74.00	-18.16	peak
11220.750	V	43.74	54.00	-10.26	AVG
18000.280	V	66.37	74.00	-7.63	peak
18000.280	V	48.50	54.00	-5.5	AVG
5471.264	H	47.79	74.00	-26.21	peak
5471.264	H	30.67	54.00	-23.33	AVG
10059.790	H	52.96	74.00	-21.04	peak
10059.790	H	35.49	54.00	-18.51	AVG
15979.240	H	65.40	74.00	-8.6	peak
15979.240	H	48.09	54.00	-5.91	AVG

Frequency: 5220					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6452.664	V	47.96	74.00	-26.04	peak
6452.664	V	30.13	54.00	-23.87	AVG
10951.640	V	55.66	74.00	-18.34	peak
10951.640	V	38.55	54.00	-15.45	AVG
17982.090	V	65.41	74.00	-8.59	peak
17982.090	V	48.45	54.00	-5.55	AVG
5465.744	H	48.81	74.00	-25.19	peak
5465.744	H	30.70	54.00	-23.3	AVG
10096.160	H	53.30	74.00	-20.7	peak
10096.160	H	35.05	54.00	-18.95	AVG
16984.430	H	65.49	74.00	-8.51	peak
16984.430	H	48.66	54.00	-5.34	AVG

Frequency: 5240					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5742.463	V	48.00	74.00	-26	peak
5742.463	V	30.39	54.00	-23.61	AVG
10712.170	V	55.81	74.00	-18.19	peak
10712.170	V	38.70	54.00	-15.3	AVG
17879.490	V	66.75	74.00	-7.25	peak
17879.490	V	49.84	54.00	-4.16	AVG
5393.708	H	47.20	74.00	-26.8	peak
5393.708	H	30.07	54.00	-23.93	AVG
10288.890	H	53.36	74.00	-20.64	peak
10288.890	H	35.60	54.00	-18.4	AVG
17966.250	H	65.48	74.00	-8.52	peak
17966.250	H	48.80	54.00	-5.2	AVG

MIMO:

Frequency: 5180					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6084.840	V	58.17	74.00	-15.83	peak
6084.840	V	40.04	54.00	-13.96	AVG
14415.950	V	58.16	74.00	-15.84	peak
14415.950	V	41.68	54.00	-12.32	AVG
17829.440	V	66.09	74.00	-7.91	peak
17829.440	V	50.01	54.00	-3.99	AVG
11845.710	H	56.10	74.00	-17.9	peak
11845.710	H	39.99	54.00	-14.01	AVG
15235.710	H	58.22	74.00	-15.78	peak
15235.710	H	41.36	54.00	-12.64	AVG
16989.630	H	66.69	74.00	-7.31	peak
16989.630	H	49.17	54.00	-4.83	AVG

Frequency: 5220					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5119.960	V	59.46	74.00	-14.54	peak
5119.960	V	41.54	54.00	-12.46	AVG
12111.320	V	57.64	74.00	-16.36	peak
12111.320	V	41.28	54.00	-12.72	AVG
17837.170	V	65.82	74.00	-8.18	peak
17837.170	V	49.91	54.00	-4.09	AVG
12194.510	H	56.85	74.00	-17.15	peak
12194.510	H	40.49	54.00	-13.51	AVG
14682.760	H	57.65	74.00	-16.35	peak
14682.760	H	41.46	54.00	-12.54	AVG
16831.720	H	65.94	74.00	-8.06	peak
16831.720	H	51.67	54.00	-2.33	AVG

Frequency: 5240					
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6093.710	V	59.43	74.00	-14.57	peak
6093.710	V	40.14	54.00	-13.86	AVG
13409.700	V	57.79	74.00	-16.21	peak
13409.700	V	41.68	54.00	-12.32	AVG
17868.120	V	65.18	74.00	-8.82	peak
17868.120	V	49.11	54.00	-4.89	AVG
11905.720	H	56.94	74.00	-17.06	peak
11905.720	H	40.99	54.00	-13.01	AVG
14217.490	H	57.77	74.00	-16.23	peak
14217.490	H	45.66	54.00	-8.34	AVG
16997.440	H	65.41	74.00	-8.59	peak
16997.440	H	48.67	54.00	-5.33	AVG

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)Data of measurement within this frequency range shown " -- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

● ☒ Undesirable radiated Spurious Emission in band edge

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency:	5745
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5717.769	V	61.2	-34.03	-27.00	PASS
5714.456	H	61.35	-33.88	-27.00	PASS

Temperature :	28℃	Test By:	HYD
Humidity :	65 %	Frequency:	5825
Test mode:	802.11a		

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5860.244	H	60.99	-34.24	-27.00	PASS
5855.544	V	61.48	-33.75	-27.00	PASS

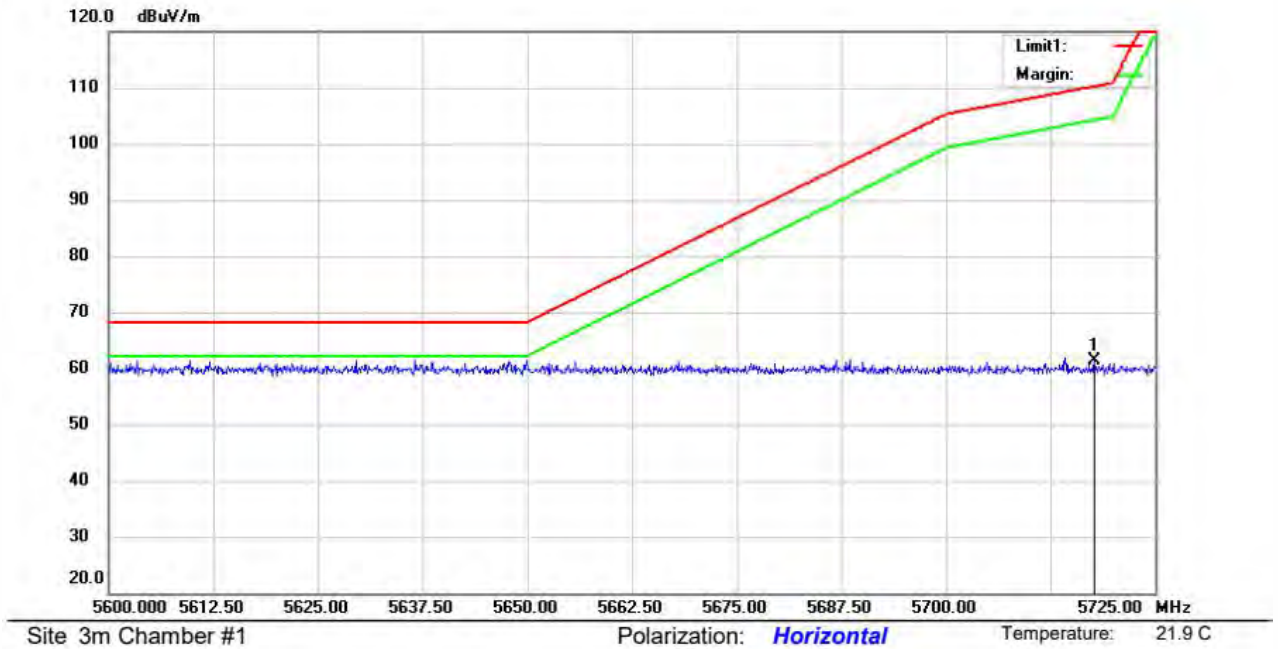
Note: (1) All Readings are Peak Value (VBW=3MHz)
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.
 (3) $EIRP[dBm] = E[dB\mu V/m] + 20 \log(d[meters]) - 104.77$
 d is the measurement distance in 3 meters

UNII Band III

Test Model Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

802.11a 802.11n(HT20) 802.11n(HT40)

5745 Ant.Pol H

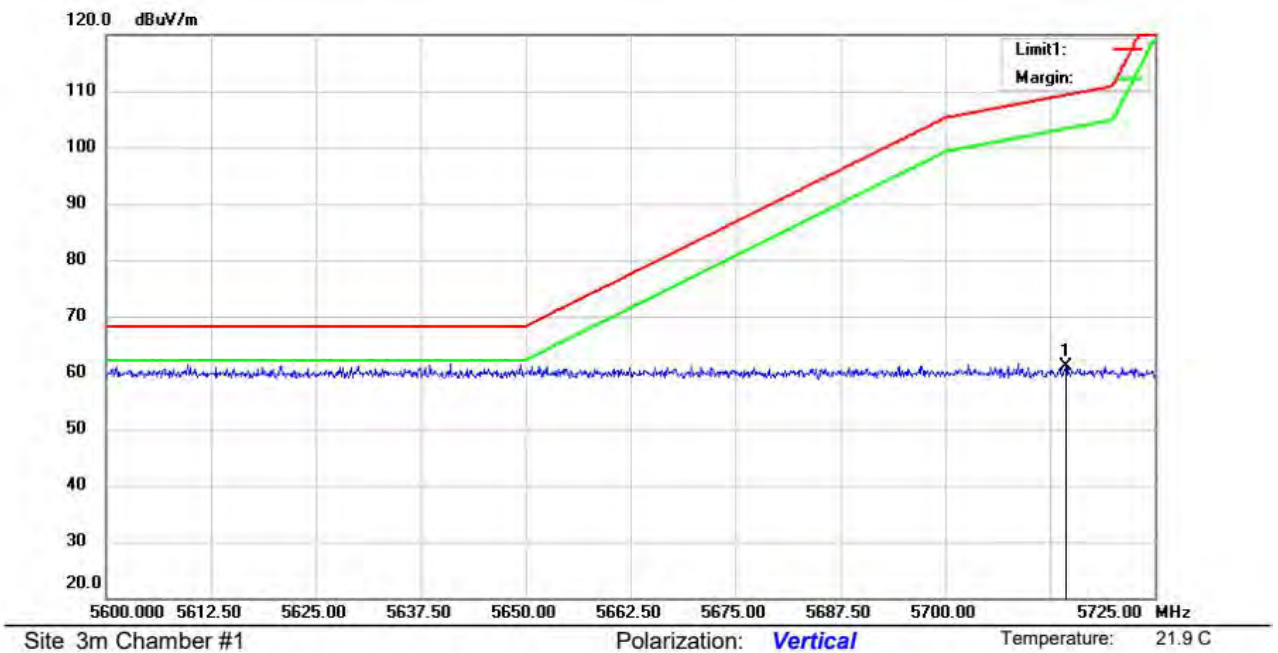


UNII Band III

Test Model Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

802.11a 802.11n(HT20) 802.11n(HT40)

5745 Ant.Pol V



UNII Band III

Test Model Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

802.11a 802.11n(HT20) 802.11n(HT40)

5825 Ant.Pol H



UNII Band III

Test Model Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

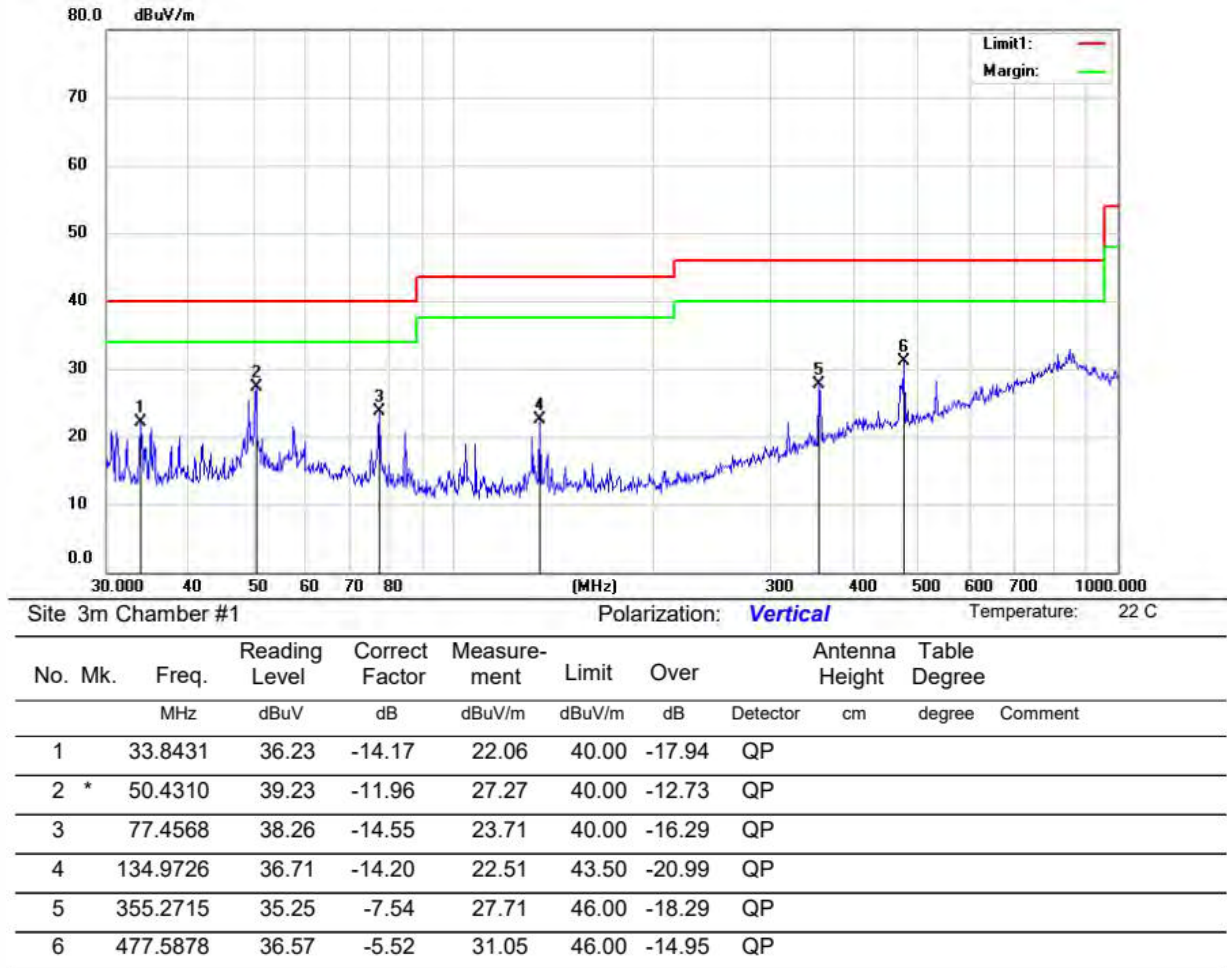
802.11a 802.11n(HT20) 802.11n(HT40)

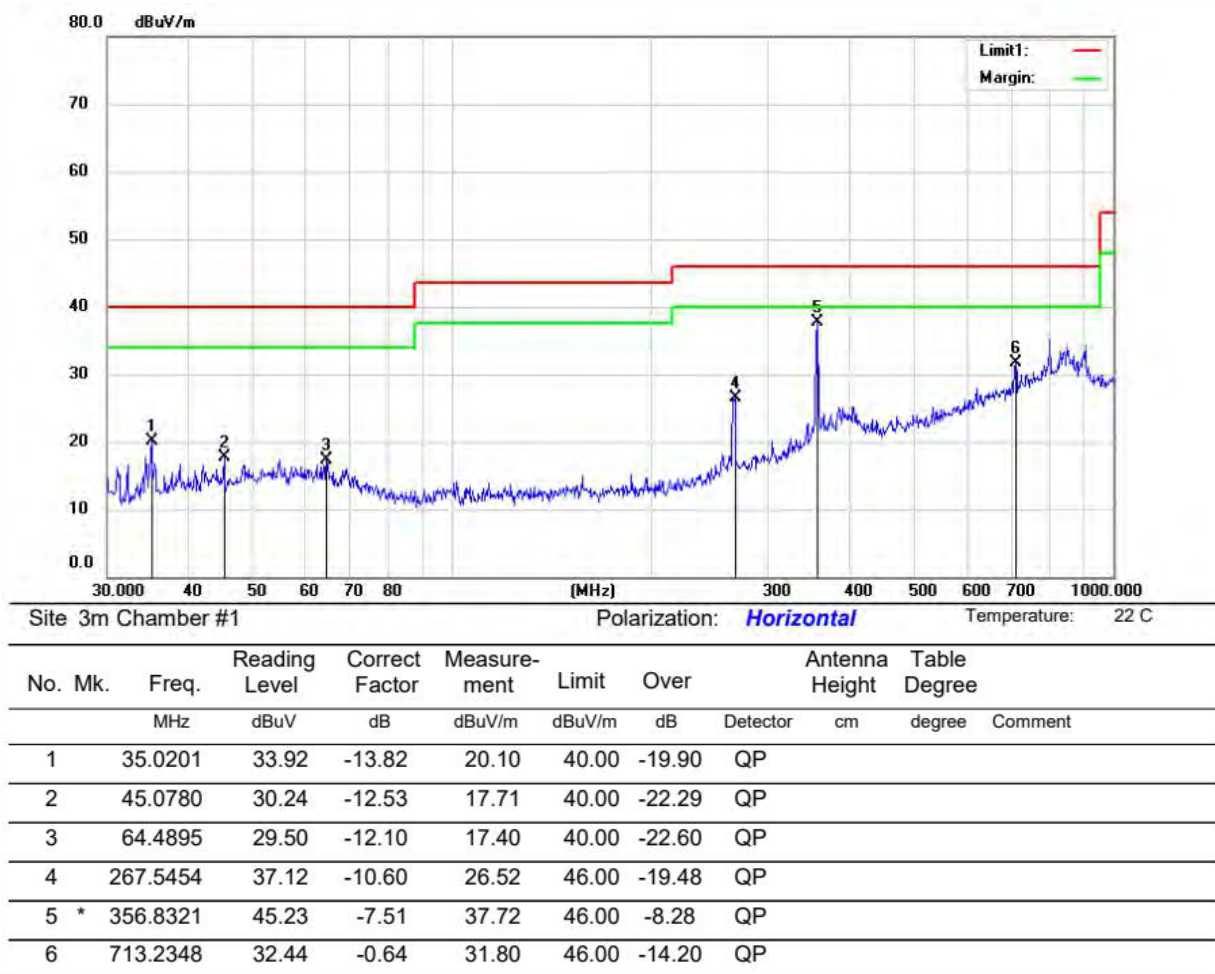
5825 Ant.Pol V



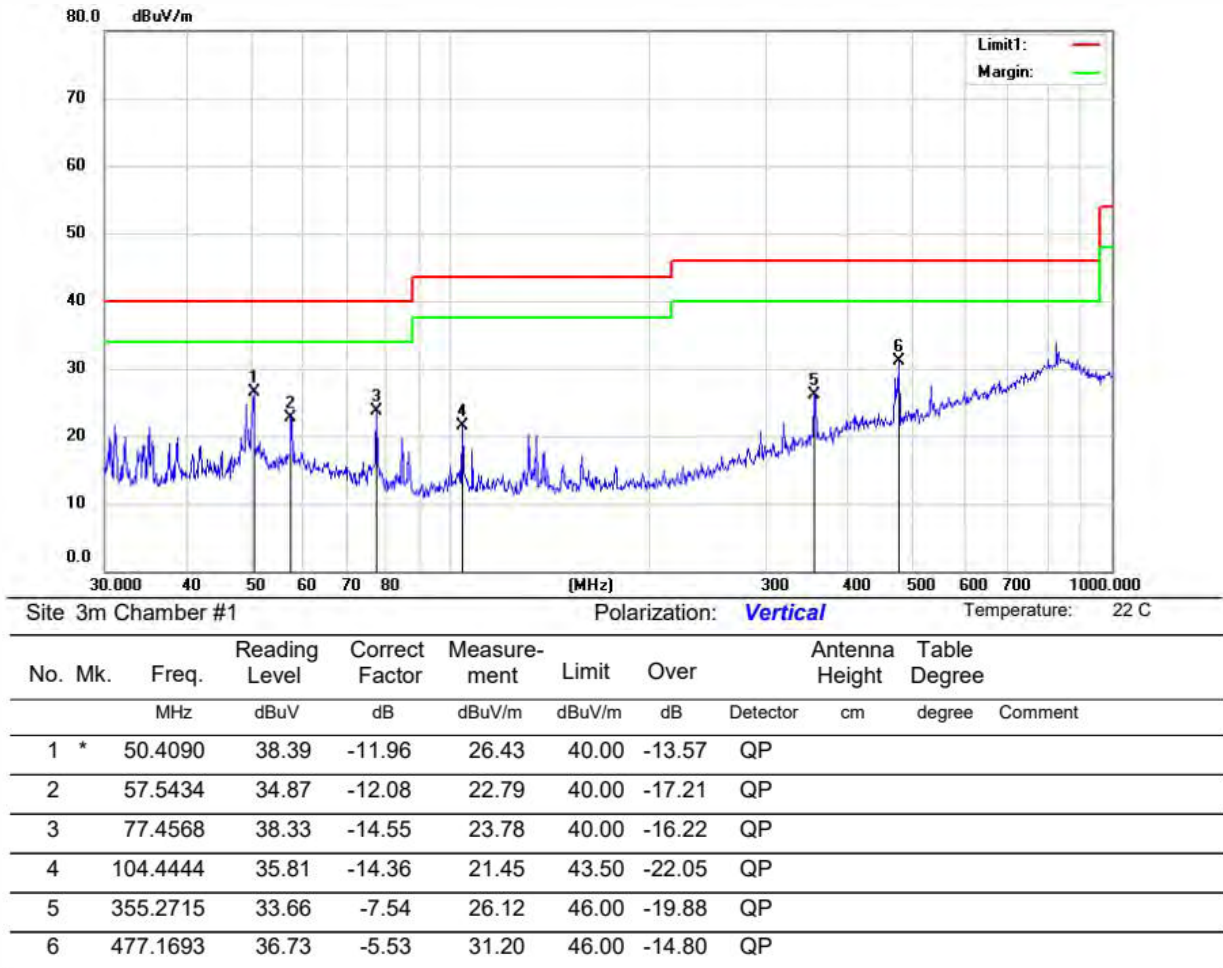
- Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)
All modes have been tested, and the worst result recorded was report as below:

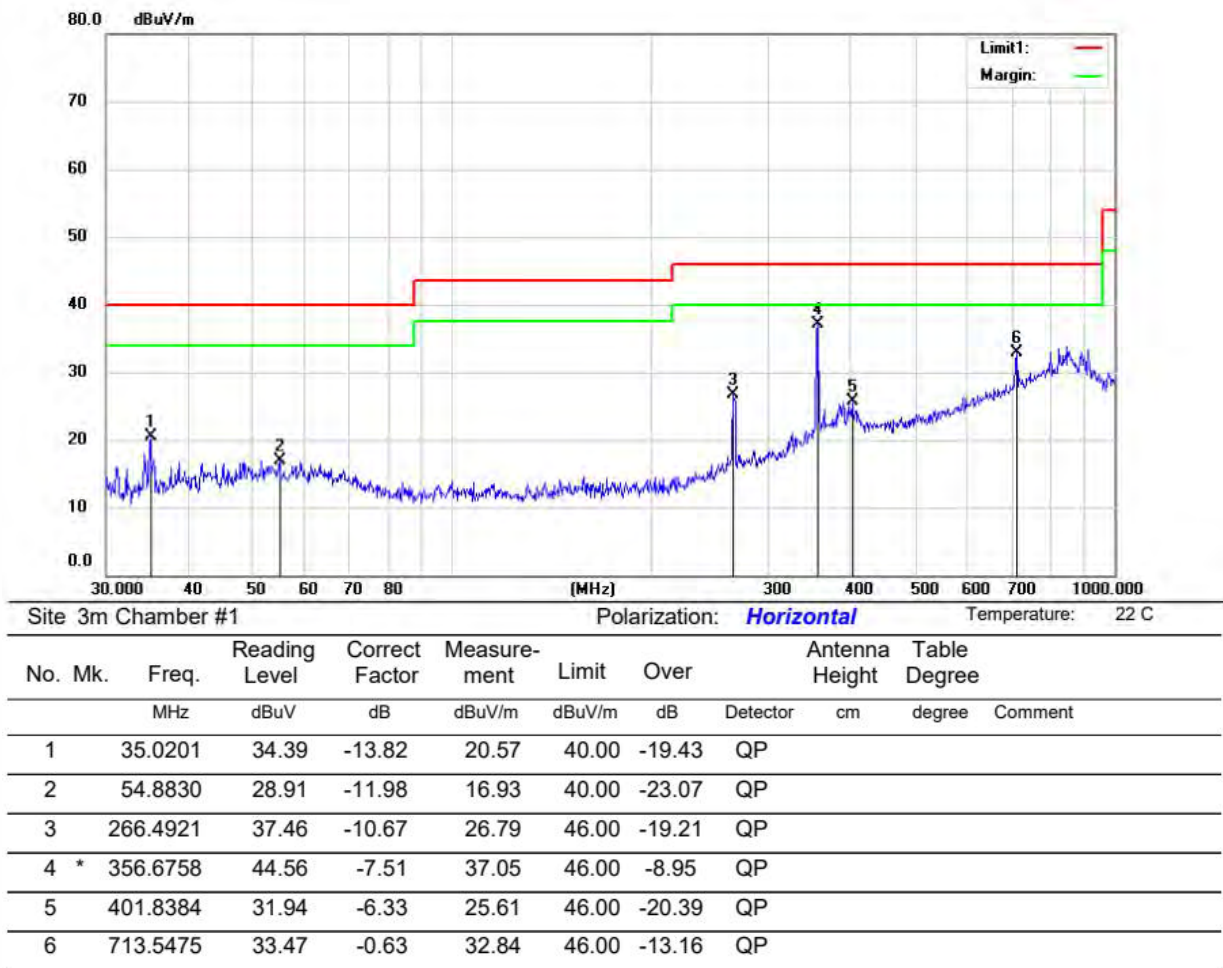
Test mode: 802.11a Frequency: 5180



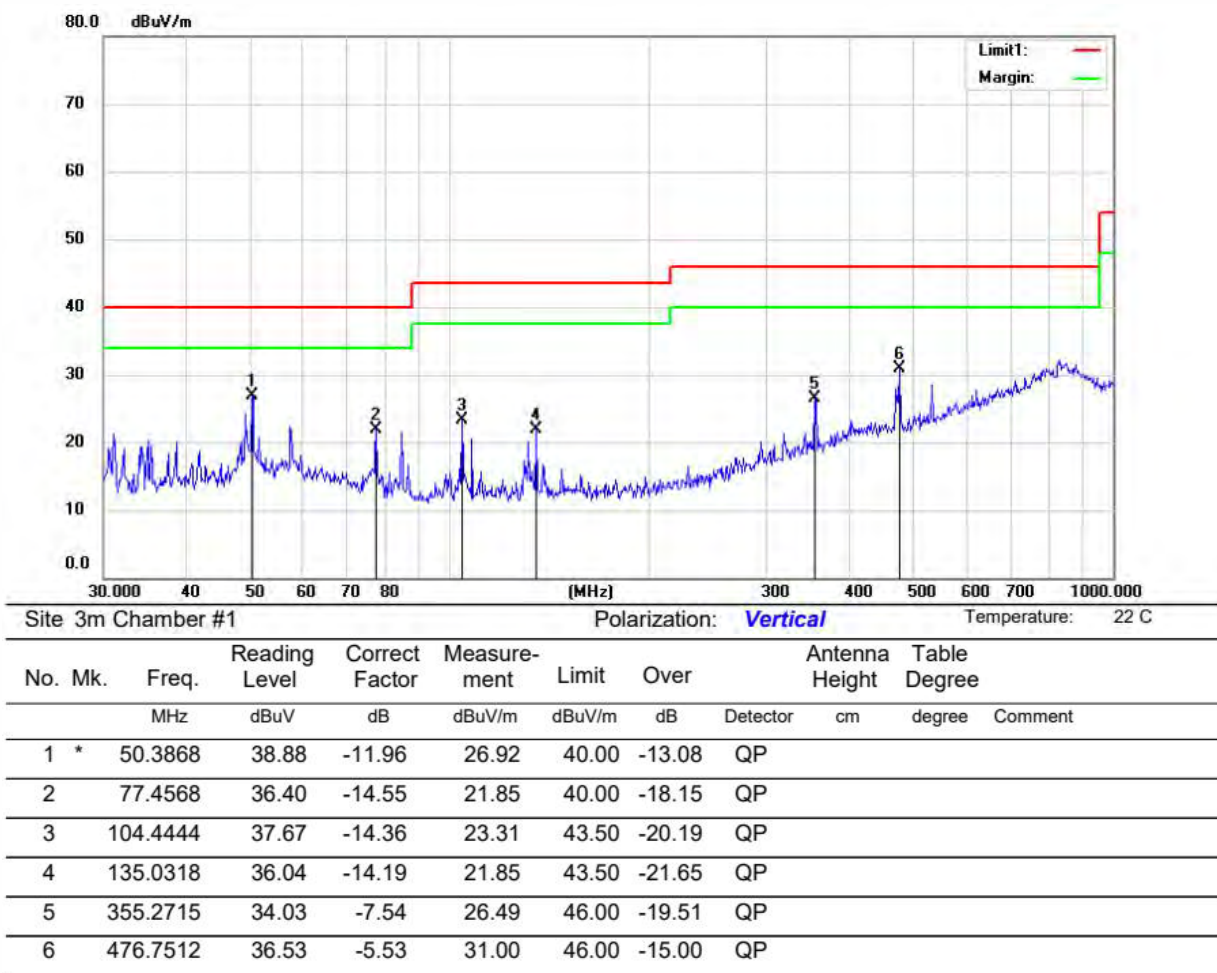


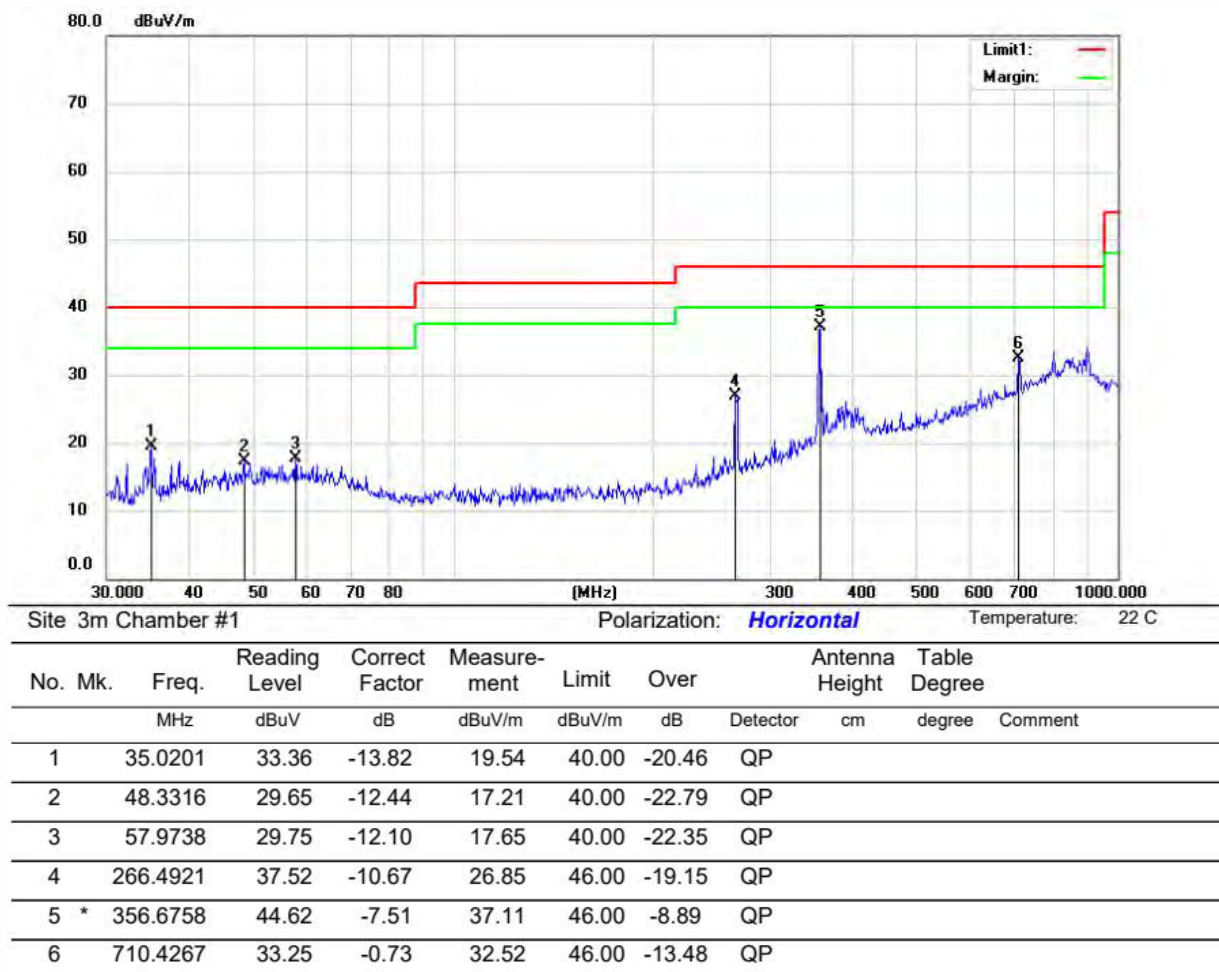
Test mode: 802.11a Frequency: 5220





Test mode: 802.11a Frequency: 5240





8.6 POWER LINE CONDUCTED EMISSIONS

8.6.1 Applicable Standard

According to FCC Part 15.207(a)

8.6.2 Conformance Limit

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

8.6.3 Test Configuration

Test according to clause 6.3 conducted emission test setup

8.6.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.

Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Repeat above procedures until all frequency measured were complete.

8.6.5 Test Results

Pass

The 120V & 240V voltage have been tested, and the worst result recorded was report as below: