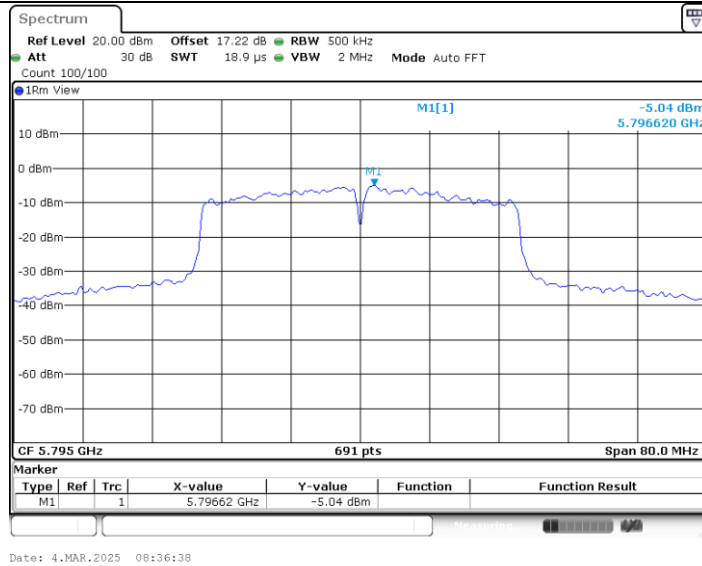
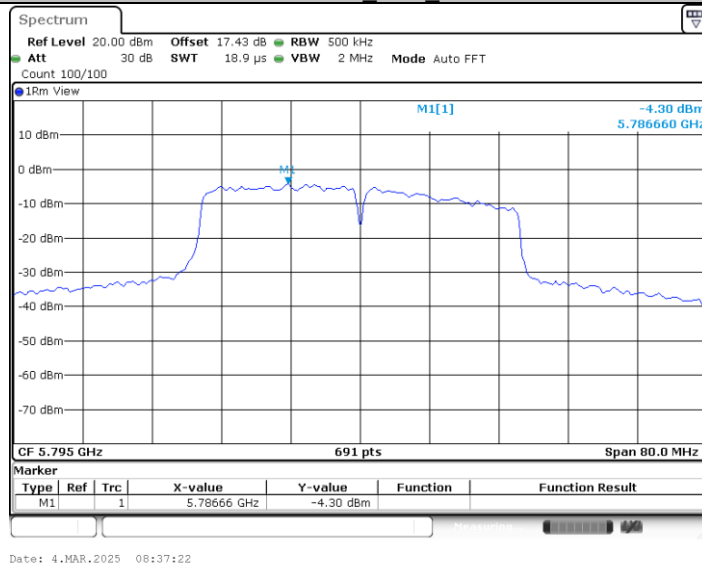
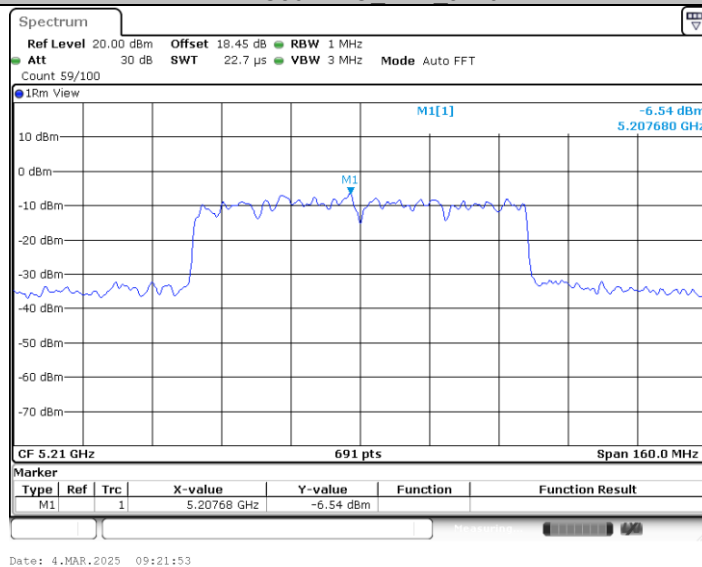




11N40MIMO Ant2 5795



11AC80MIMO Ant1 5210



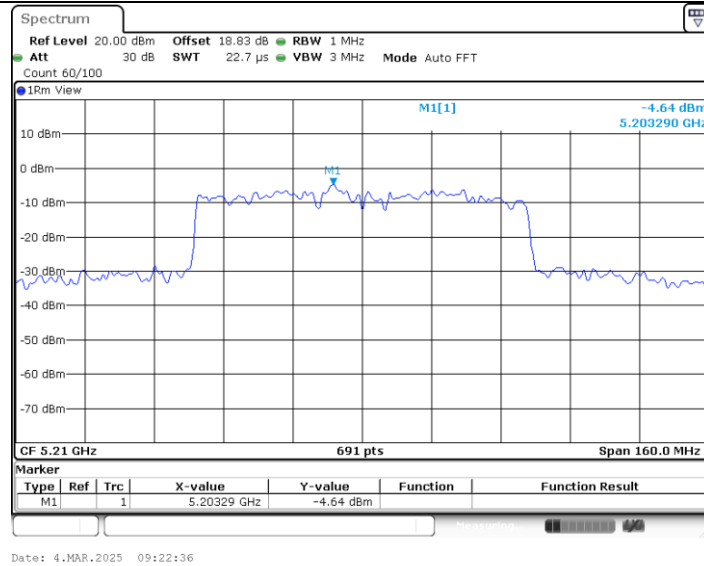
11AC80MIMO Ant2 5210

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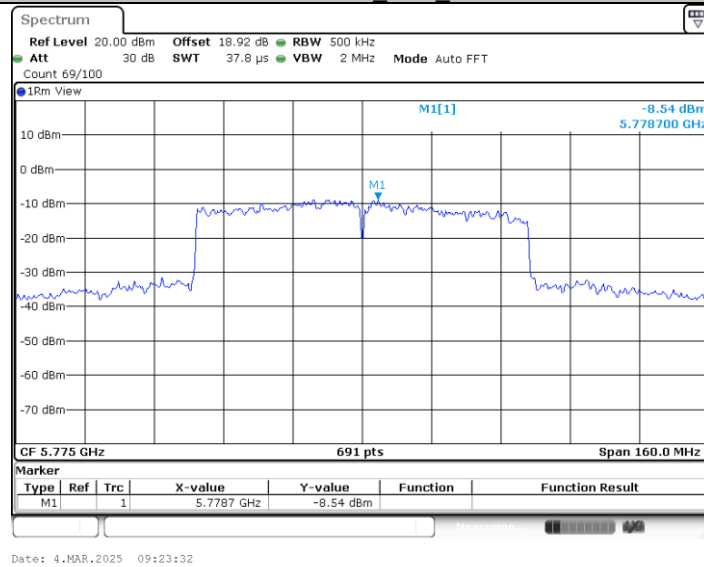
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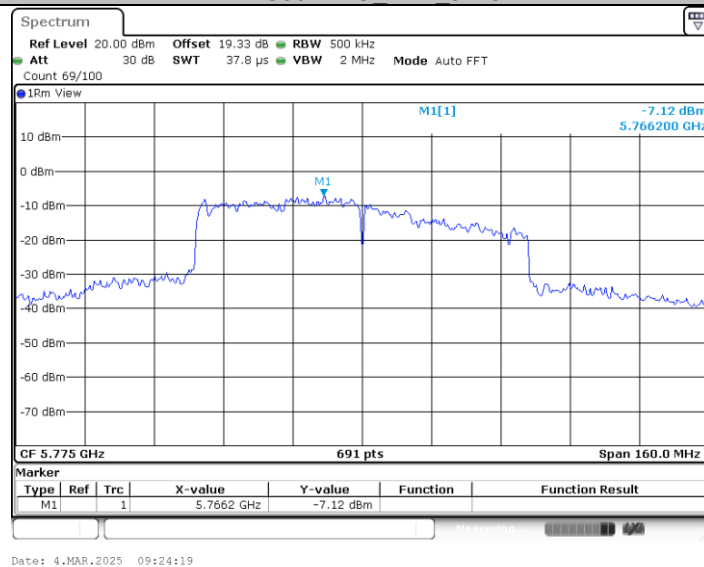
TRF No: CTC-TR-062_A2



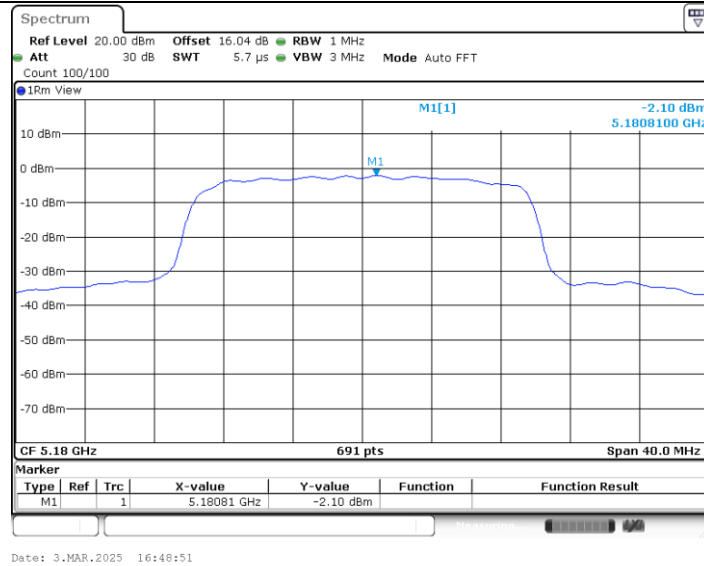
11AC80MIMO_Ant1_5775



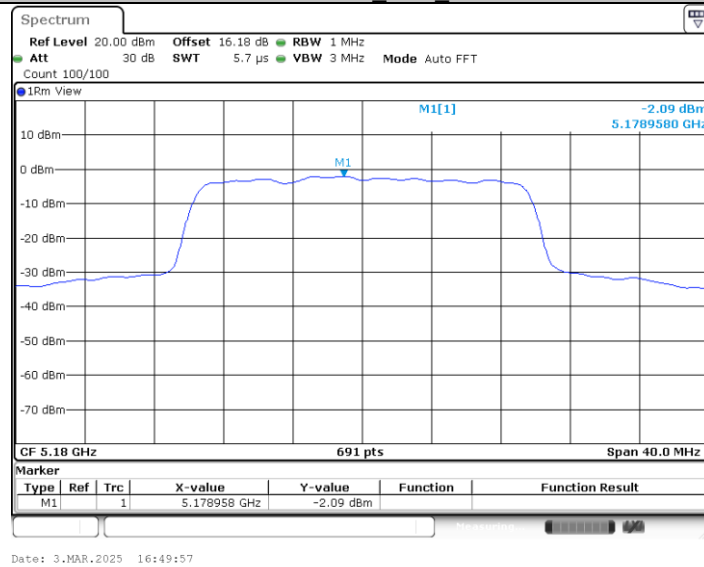
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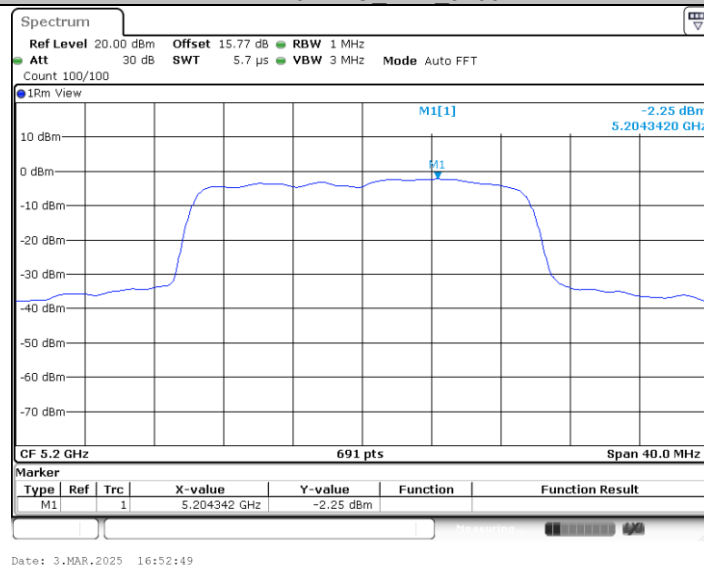
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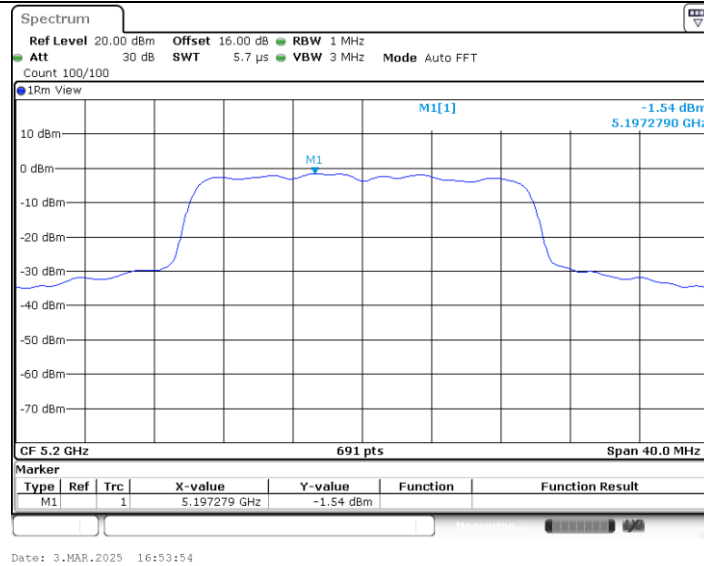
11AX20MIMO_Ant2_5180



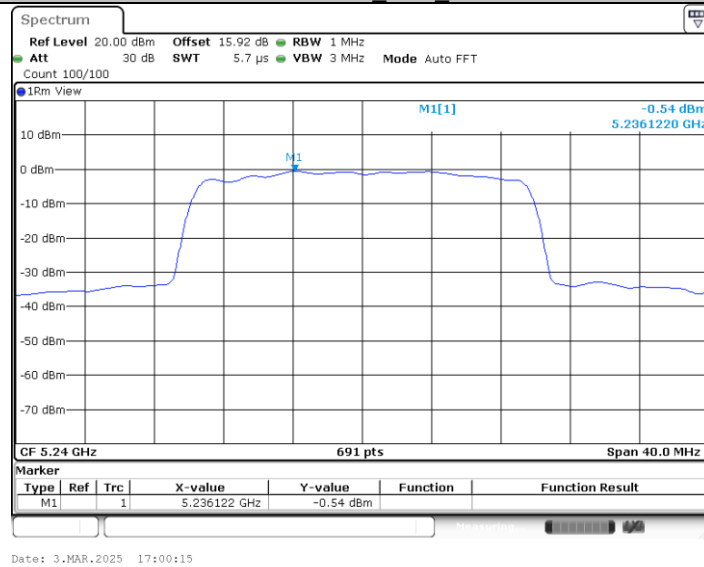
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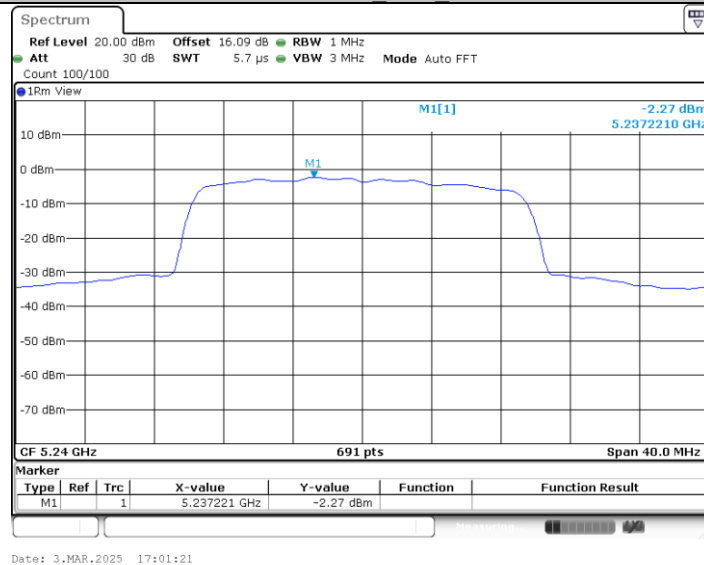
11AX20MIMO_Ant2_5200



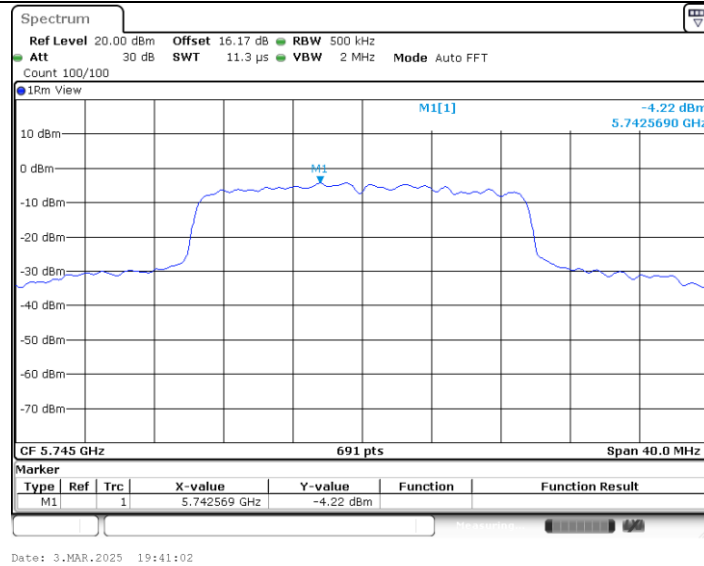
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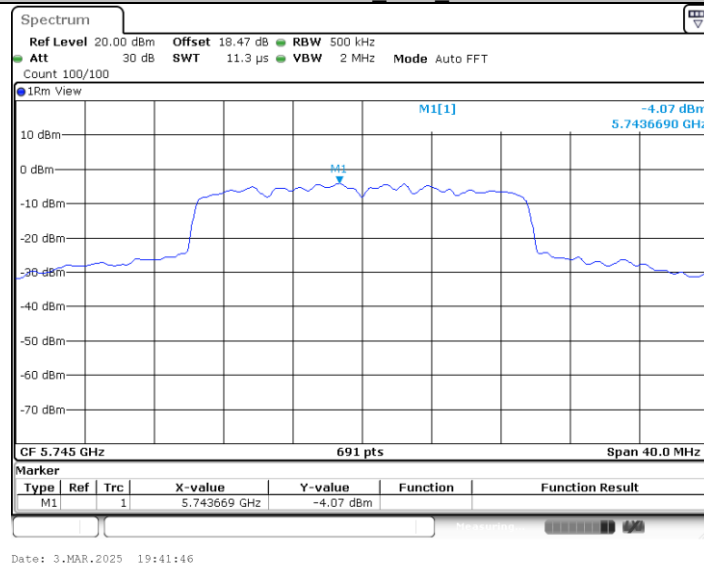
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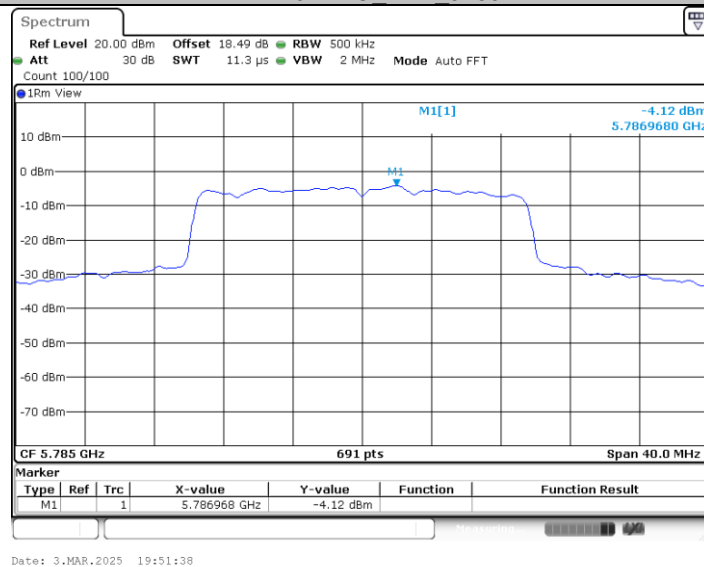
11AX20MIMO_Ant1_5745



11AX20MIMO_Ant2_5745



11AX20MIMO_Ant1_5785



11AX20MIMO_Ant2_5785

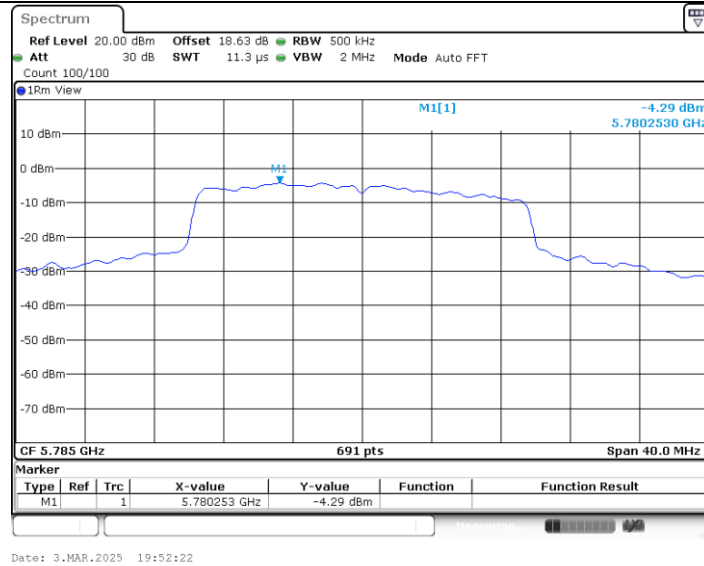
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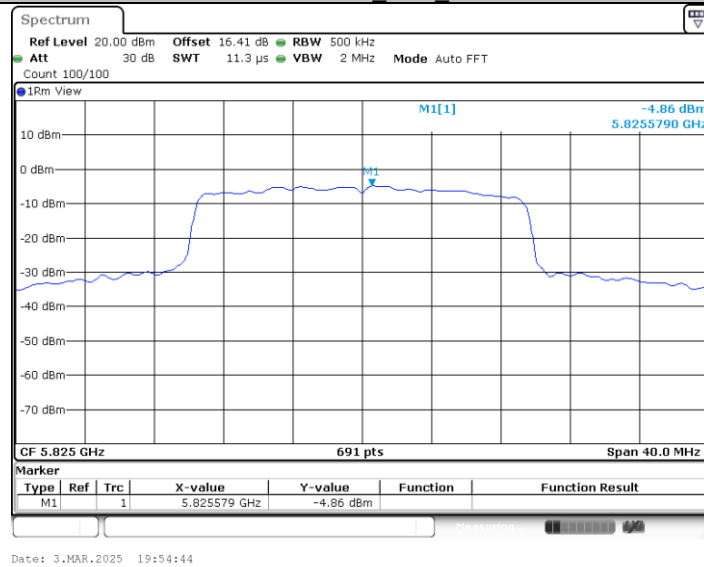
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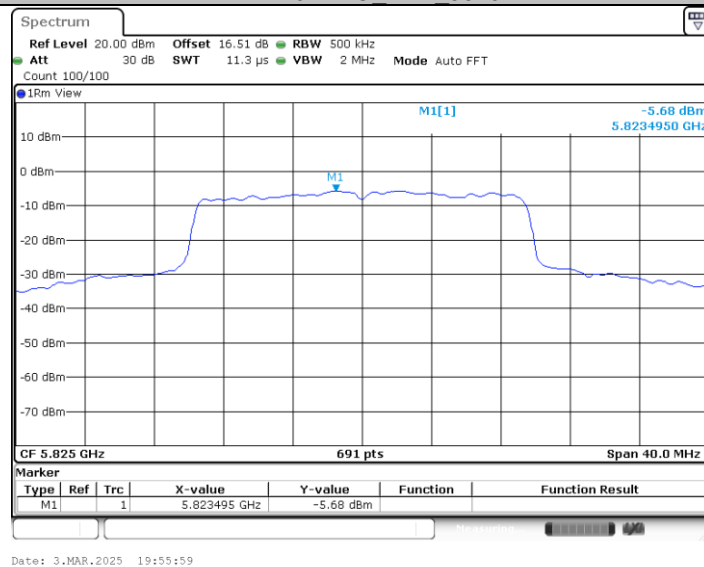
TRF No: CTC-TR-062_A2



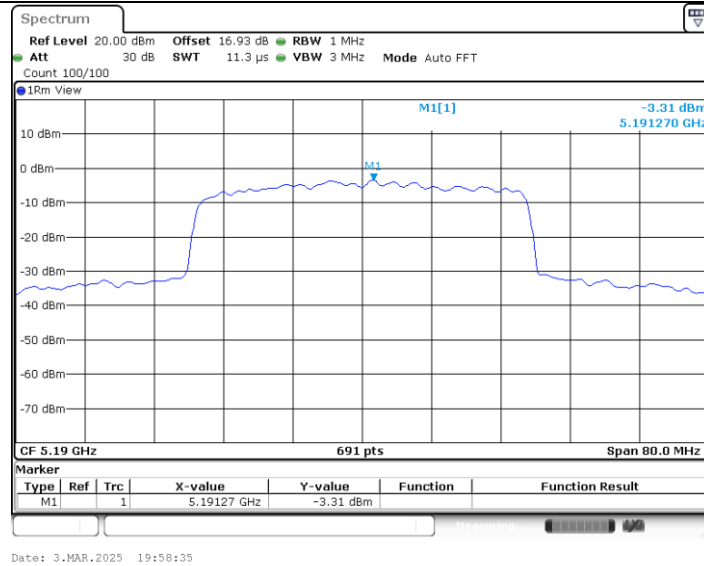
11AX20MIMO Ant1 5825



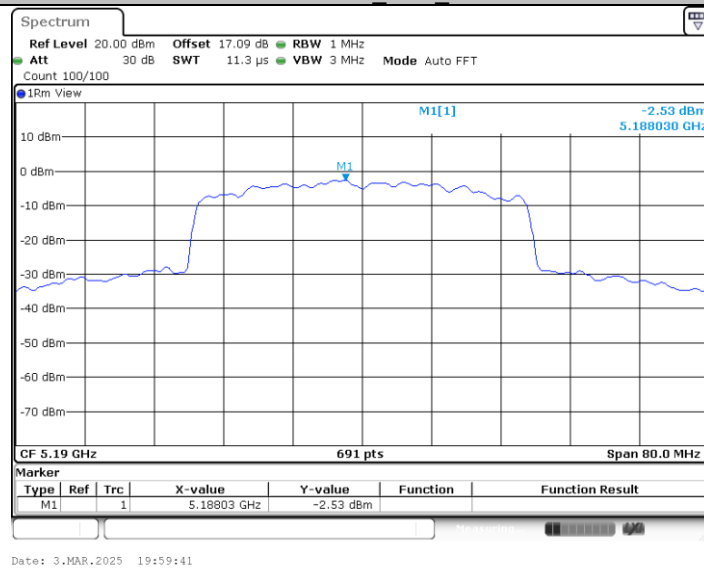
11AX20MIMO Ant2 5825



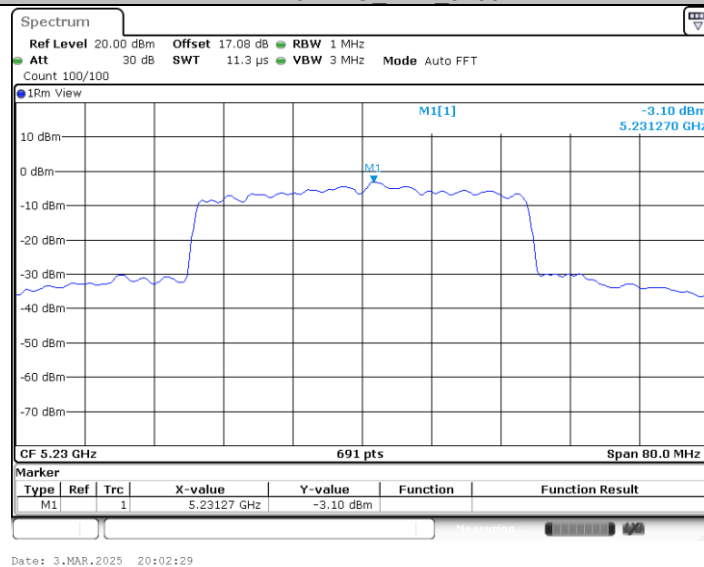
11AX40MIMO Ant1 5190



11AX40MIMO_Ant2_5190



11AX40MIMO_Ant1_5230



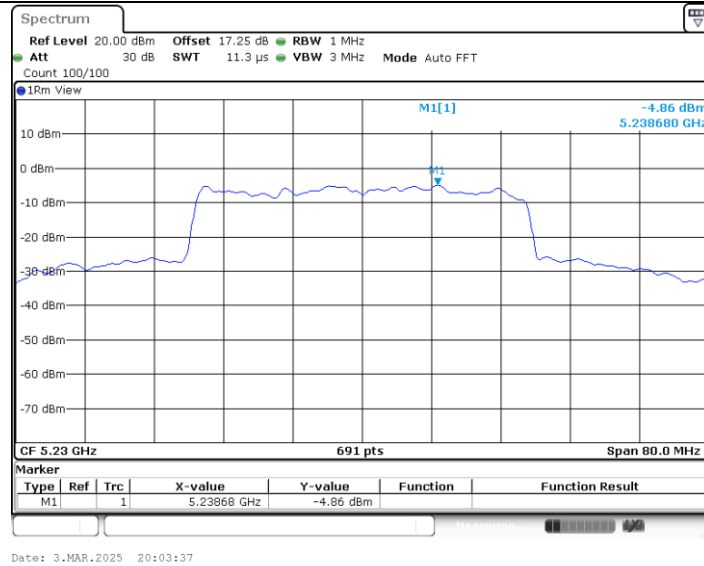
11AX40MIMO_Ant2_5230

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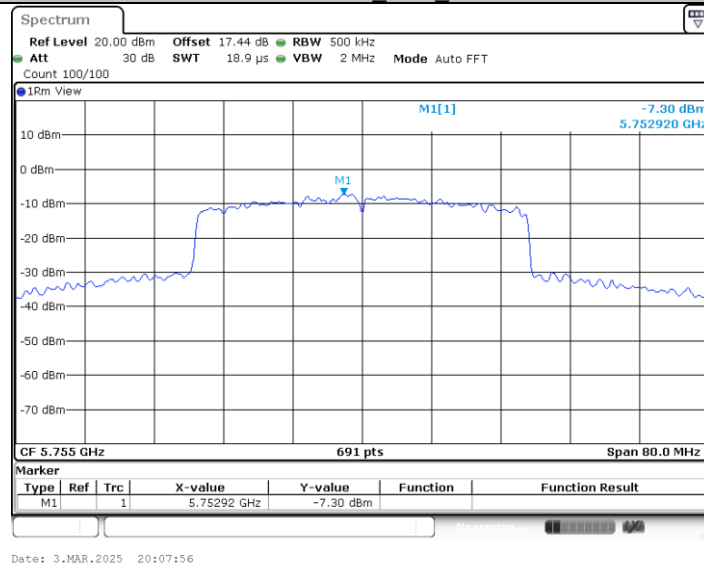
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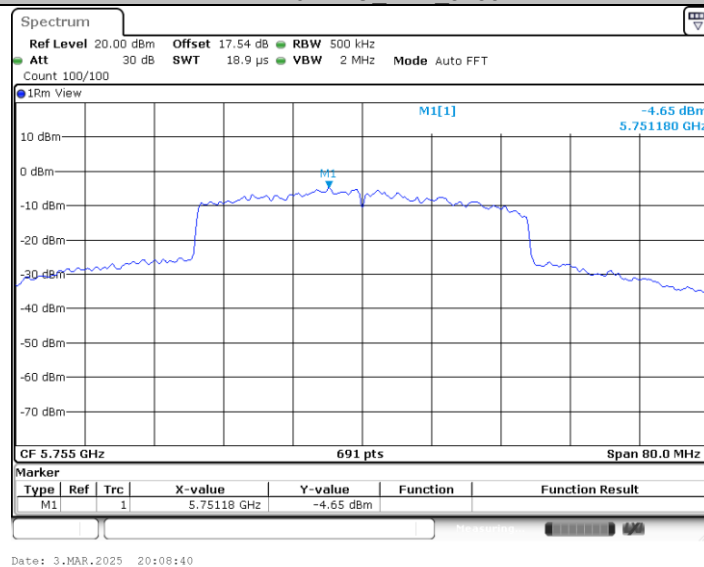
TRF No: CTC-TR-062_A2



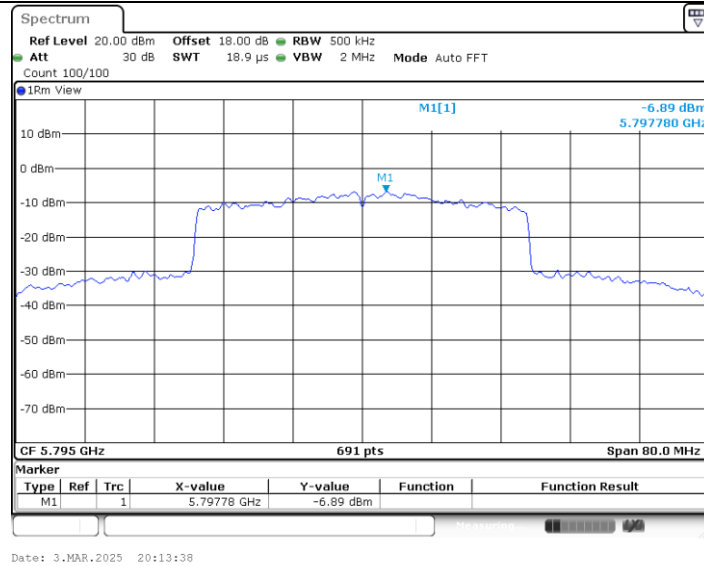
11AX40MIMO_Ant1_5755



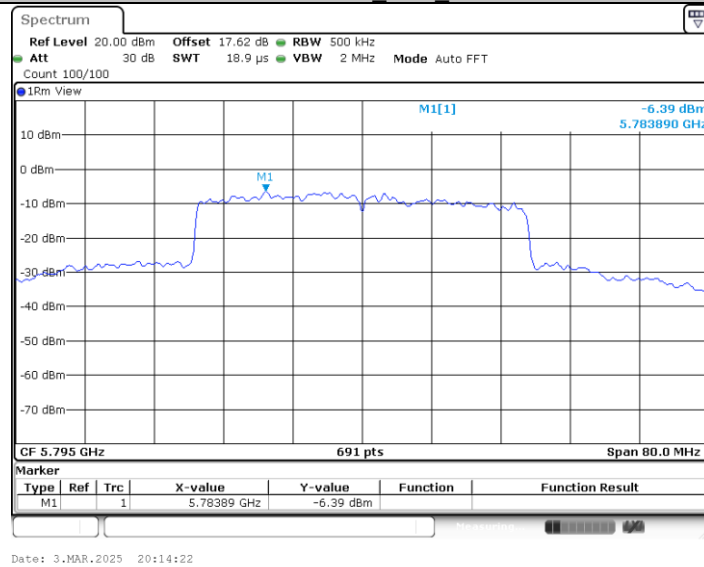
11AX40MIMO_Ant2_5755



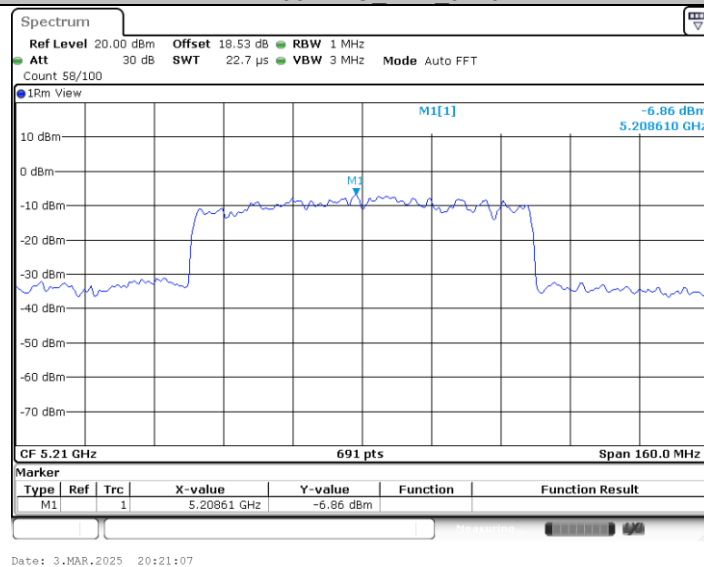
11AX40MIMO_Ant1_5795



11AX40MIMO_Ant2_5795



11AX80MIMO_Ant1_5210



11AX80MIMO_Ant2_5210

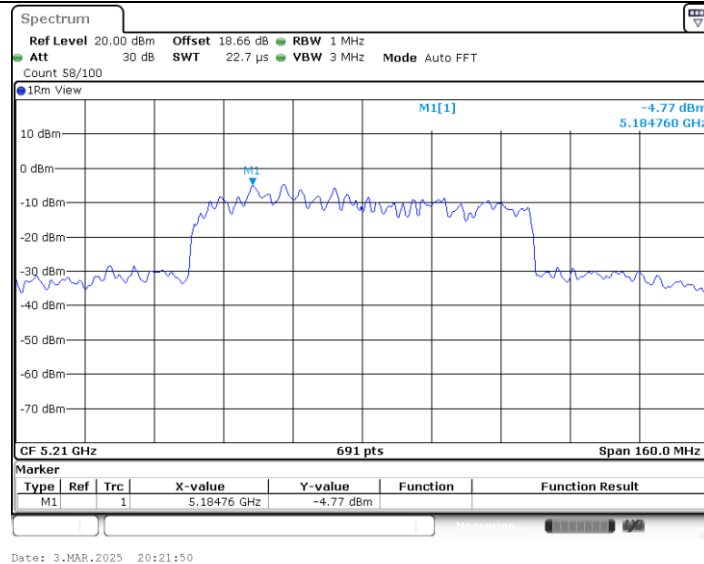
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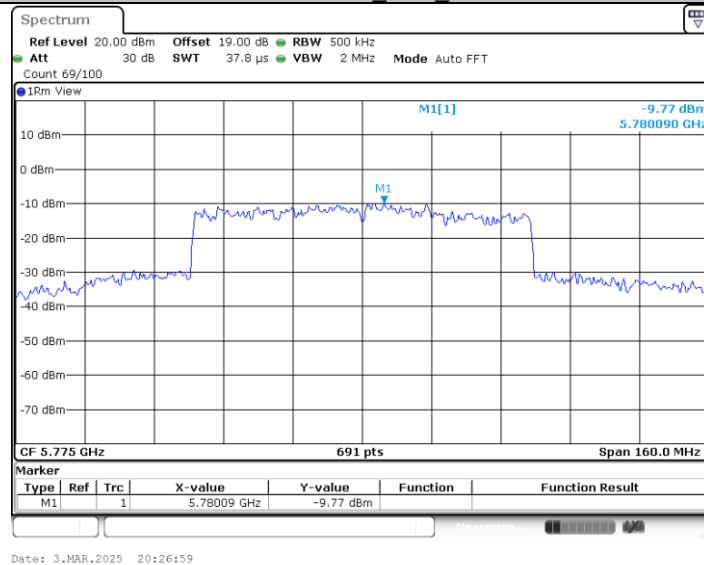
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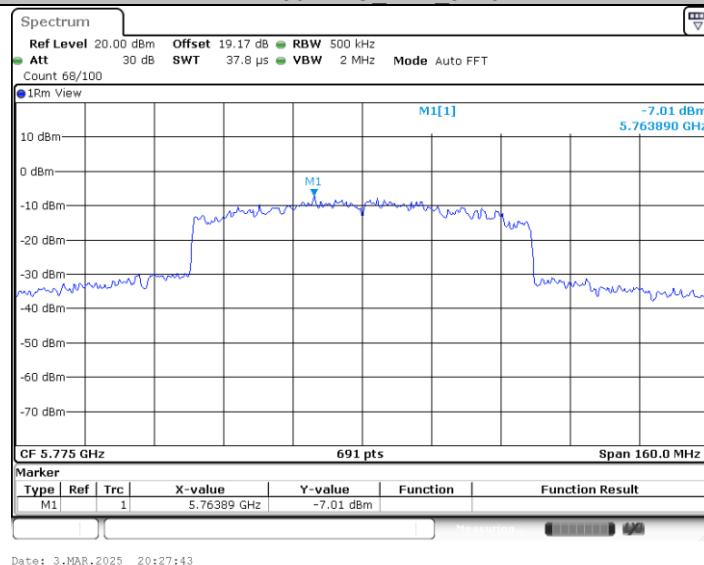
TRF No: CTC-TR-062_A2



11AX80MIMO_Ant1_5775



11AX80MIMO_Ant2_5775



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TRF No: CTC-TR-062_A2



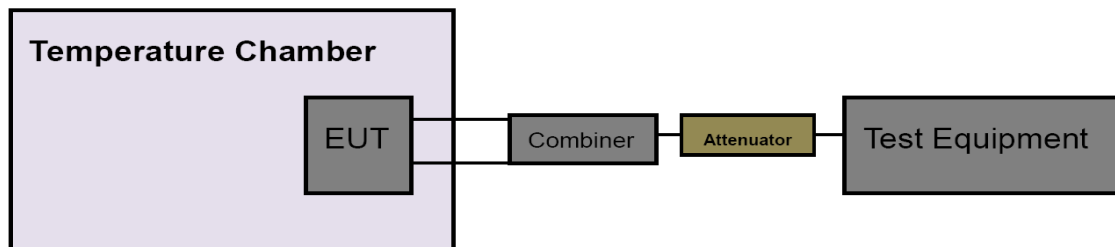
3.7. Frequency Stability

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(g)

Test Item	Limit	Frequency Range (MHz)
Frequency Stability	Specified in the user's manual, the transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band (IEEE 802.11n specification)	5150~5250
		5250~5350
		5500~5700
		5725~5850

Test Configuration



Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyzer center frequency to transmitting frequency.
- (3) Set the span to encompass the entire emissions bandwidth (EBW) of the signal.
- (4) Set the RBW to: 8MHz, VBW=8MHz with peak detector and max hold settings.
- (5) The test extreme voltage is to change the primary supply voltage from 100V to 240V percent of the nominal value.
- (6) Extreme temperature is 0°C~45°C

NOTE: The EUT was set to continuously transmitting in continuously un-modulation transmitting mode.

Test Mode

Please refer to the clause 2.4.

**Test Result**

Voltage								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20M	Ant1	5180	NV	NT	-20980.00	-4.050193	20	PASS
			LV	NT	-20980.00	-4.050193	20	PASS
			HV	NT	-20980.00	-4.050193	20	PASS
	Ant2	5180	NV	NT	-14990.00	-2.893822	20	PASS
			LV	NT	-16980.00	-3.277992	20	PASS
			HV	NT	-17480.00	-3.374517	20	PASS
	Ant1	5200	NV	NT	-21480.00	-4.130769	20	PASS
			LV	NT	-21980.00	-4.226923	20	PASS
			HV	NT	-21980.00	-4.226923	20	PASS
	Ant2	5200	NV	NT	-25470.00	-4.898077	20	PASS
			LV	NT	-26970.00	-5.186538	20	PASS
			HV	NT	-28470.00	-5.475000	20	PASS
	Ant1	5240	NV	NT	-30470.00	-5.814885	20	PASS
			LV	NT	-32470.00	-6.196565	20	PASS
			HV	NT	-32970.00	-6.291985	20	PASS
	Ant2	5240	NV	NT	-34470.00	-6.578244	20	PASS
			LV	NT	-35460.00	-6.767176	20	PASS
			HV	NT	-36460.00	-6.958015	20	PASS
	Ant1	5745	NV	NT	-36460.00	-6.346388	20	PASS
			LV	NT	-36960.00	-6.433420	20	PASS
			HV	NT	-36960.00	-6.433420	20	PASS
	Ant2	5745	NV	NT	-42460.00	-7.390775	20	PASS
			LV	NT	-41960.00	-7.303742	20	PASS
			HV	NT	-41960.00	-7.303742	20	PASS
	Ant1	5785	NV	NT	-37460.00	-6.475367	20	PASS
			LV	NT	-37960.00	-6.561798	20	PASS
			HV	NT	-37960.00	-6.561798	20	PASS
	Ant2	5785	NV	NT	-40960.00	-7.080380	20	PASS
			LV	NT	-41460.00	-7.166811	20	PASS
			HV	NT	-41960.00	-7.253241	20	PASS
	Ant1	5825	NV	NT	-36460.00	-6.259227	20	PASS
			LV	NT	-36460.00	-6.259227	20	PASS
			HV	NT	-37460.00	-6.430901	20	PASS
	Ant2	5825	NV	NT	-42960.00	-7.375107	20	PASS
			LV	NT	-42960.00	-7.375107	20	PASS
			HV	NT	-42960.00	-7.375107	20	PASS
40M	Ant1	5190	NV	NT	-28470.00	-5.485549	20	PASS
			LV	NT	-30470.00	-5.870906	20	PASS
			HV	NT	-32470.00	-6.256262	20	PASS
	Ant2	5190	NV	NT	-37960.00	-7.314066	20	PASS
			LV	NT	-38460.00	-7.410405	20	PASS
			HV	NT	-38960.00	-7.506744	20	PASS
	Ant1	5230	NV	NT	-33970.00	-6.495220	20	PASS
			LV	NT	-34470.00	-6.590822	20	PASS
			HV	NT	-34470.00	-6.590822	20	PASS
	Ant2	5230	NV	NT	-39960.00	-7.640535	20	PASS
			LV	NT	-39960.00	-7.640535	20	PASS
			HV	NT	-39960.00	-7.640535	20	PASS
	Ant1	5755	NV	NT	-36960.00	-6.422242	20	PASS
			LV	NT	-36960.00	-6.422242	20	PASS
			HV	NT	-36960.00	-6.422242	20	PASS
	Ant2	5755	NV	NT	-41460.00	-7.204170	20	PASS
			LV	NT	-40960.00	-7.117289	20	PASS
			HV	NT	-41460.00	-7.204170	20	PASS
	Ant1	5795	NV	NT	-35960.00	-6.205349	20	PASS
			LV	NT	-36460.00	-6.291631	20	PASS
			HV	NT	-36460.00	-6.291631	20	PASS
	Ant2	5795	NV	NT	-41460.00	-7.154443	20	PASS

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80M	Ant1	5210	LV	NT	-41460.00	-7.154443	20	PASS
			HV	NT	-41460.00	-7.154443	20	PASS
			NV	NT	-33970.00	-6.520154	20	PASS
			LV	NT	-33970.00	-6.520154	20	PASS
			HV	NT	-33970.00	-6.520154	20	PASS
	Ant2	5210	NV	NT	-36460.00	-6.998081	20	PASS
			LV	NT	-36960.00	-7.094050	20	PASS
			HV	NT	-37460.00	-7.190019	20	PASS
	Ant1	5775	NV	NT	-37960.00	-6.573160	20	PASS
			LV	NT	-37960.00	-6.573160	20	PASS
			HV	NT	-37460.00	-6.486580	20	PASS
	Ant2	5775	NV	NT	-40960.00	-7.092641	20	PASS
			LV	NT	-41460.00	-7.179221	20	PASS
			HV	NT	-41960.00	-7.265801	20	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20M	Ant1	5180	NV	0	-21980.00	-4.243243	20	PASS
			NV	10	-21480.00	-4.146718	20	PASS
			NV	20	-21980.00	-4.243243	20	PASS
			NV	30	-21480.00	-4.146718	20	PASS
			NV	40	-21480.00	-4.146718	20	PASS
			NV	45	-21980.00	-4.243243	20	PASS
	Ant2	5180	NV	0	-17480.00	-3.374517	20	PASS
			NV	10	-18480.00	-3.567568	20	PASS
			NV	20	-18480.00	-3.567568	20	PASS
			NV	30	-17980.00	-3.471042	20	PASS
			NV	40	-19480.00	-3.760618	20	PASS
			NV	45	-18980.00	-3.664093	20	PASS
	Ant1	5200	NV	0	-21980.00	-4.226923	20	PASS
			NV	10	-21980.00	-4.226923	20	PASS
			NV	20	-21980.00	-4.226923	20	PASS
			NV	30	-22480.00	-4.323077	20	PASS
			NV	40	-22480.00	-4.323077	20	PASS
			NV	45	-21980.00	-4.226923	20	PASS
	Ant2	5200	NV	0	-29470.00	-5.667308	20	PASS
			NV	10	-29970.00	-5.763462	20	PASS
			NV	20	-30970.00	-5.955769	20	PASS
			NV	30	-31470.00	-6.051923	20	PASS
			NV	40	-31470.00	-6.051923	20	PASS
			NV	45	-32470.00	-6.244231	20	PASS
	Ant1	5240	NV	0	-33970.00	-6.482824	20	PASS
			NV	10	-34470.00	-6.578244	20	PASS
			NV	20	-34970.00	-6.673664	20	PASS
			NV	30	-34970.00	-6.673664	20	PASS
			NV	40	-35460.00	-6.767176	20	PASS
			NV	45	-35960.00	-6.862595	20	PASS
	Ant2	5240	NV	0	-36960.00	-7.053435	20	PASS
			NV	10	-37460.00	-7.148855	20	PASS
			NV	20	-37960.00	-7.244275	20	PASS
			NV	30	-37960.00	-7.244275	20	PASS
			NV	40	-38460.00	-7.339695	20	PASS
			NV	45	-38460.00	-7.339695	20	PASS
	Ant1	5745	NV	0	-36960.00	-6.433420	20	PASS
			NV	10	-36960.00	-6.433420	20	PASS
			NV	20	-36460.00	-6.346388	20	PASS
			NV	30	-36960.00	-6.433420	20	PASS
			NV	40	-36960.00	-6.433420	20	PASS
			NV	45	-36960.00	-6.433420	20	PASS
	Ant2	5745	NV	0	-41460.00	-7.216710	20	PASS
			NV	10	-41460.00	-7.216710	20	PASS
			NV	20	-41460.00	-7.216710	20	PASS
			NV	30	-40960.00	-7.129678	20	PASS

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			NV	40	-40960.00	-7.129678	20	PASS
			NV	45	-41460.00	-7.216710	20	PASS
	Ant1	5785	NV	0	-37960.00	-6.561798	20	PASS
			NV	10	-37960.00	-6.561798	20	PASS
			NV	20	-37960.00	-6.561798	20	PASS
			NV	30	-37960.00	-6.561798	20	PASS
			NV	40	-38460.00	-6.648228	20	PASS
			NV	45	-37960.00	-6.561798	20	PASS
	Ant2	5785	NV	0	-42460.00	-7.339672	20	PASS
			NV	10	-42460.00	-7.339672	20	PASS
			NV	20	-42460.00	-7.339672	20	PASS
			NV	30	-42460.00	-7.339672	20	PASS
			NV	40	-42460.00	-7.339672	20	PASS
			NV	45	-42460.00	-7.339672	20	PASS
	Ant1	5825	NV	0	-36960.00	-6.345064	20	PASS
			NV	10	-37460.00	-6.430901	20	PASS
			NV	20	-37460.00	-6.430901	20	PASS
			NV	30	-37460.00	-6.430901	20	PASS
			NV	40	-36960.00	-6.345064	20	PASS
			NV	45	-36960.00	-6.345064	20	PASS
	Ant2	5825	NV	0	-42960.00	-7.375107	20	PASS
			NV	10	-42960.00	-7.375107	20	PASS
			NV	20	-42960.00	-7.375107	20	PASS
			NV	30	-42960.00	-7.375107	20	PASS
			NV	40	-42460.00	-7.289270	20	PASS
			NV	45	-42960.00	-7.375107	20	PASS
40M	Ant1	5190	NV	0	-32470.00	-6.256262	20	PASS
			NV	10	-32970.00	-6.352601	20	PASS
			NV	20	-33470.00	-6.448940	20	PASS
			NV	30	-33470.00	-6.448940	20	PASS
			NV	40	-33970.00	-6.545279	20	PASS
			NV	45	-33970.00	-6.545279	20	PASS
	Ant2	5190	NV	0	-38960.00	-7.506744	20	PASS
			NV	10	-39460.00	-7.603083	20	PASS
			NV	20	-38960.00	-7.506744	20	PASS
			NV	30	-39960.00	-7.699422	20	PASS
			NV	40	-39460.00	-7.603083	20	PASS
			NV	45	-39960.00	-7.699422	20	PASS
	Ant1	5230	NV	0	-34470.00	-6.590822	20	PASS
			NV	10	-33970.00	-6.495220	20	PASS
			NV	20	-34470.00	-6.590822	20	PASS
			NV	30	-34470.00	-6.590822	20	PASS
			NV	40	-34470.00	-6.590822	20	PASS
			NV	45	-34470.00	-6.590822	20	PASS
	Ant2	5230	NV	0	-39460.00	-7.544933	20	PASS
			NV	10	-39960.00	-7.640535	20	PASS
			NV	20	-39960.00	-7.640535	20	PASS
			NV	30	-39960.00	-7.640535	20	PASS
			NV	40	-39960.00	-7.640535	20	PASS
			NV	45	-39460.00	-7.544933	20	PASS
	Ant1	5755	NV	0	-36960.00	-6.422242	20	PASS
			NV	10	-36960.00	-6.422242	20	PASS
			NV	20	-36960.00	-6.422242	20	PASS
			NV	30	-36960.00	-6.422242	20	PASS
			NV	40	-36960.00	-6.422242	20	PASS
			NV	45	-36960.00	-6.422242	20	PASS
	Ant2	5755	NV	0	-40960.00	-7.117289	20	PASS
			NV	10	-41460.00	-7.204170	20	PASS
			NV	20	-41460.00	-7.204170	20	PASS
			NV	30	-41460.00	-7.204170	20	PASS
			NV	40	-41460.00	-7.204170	20	PASS
			NV	45	-41460.00	-7.204170	20	PASS
	Ant1	5795	NV	0	-36460.00	-6.291631	20	PASS
			NV	10	-36460.00	-6.291631	20	PASS
			NV	20	-36960.00	-6.377912	20	PASS

CTC Laboratories, Inc.

Room 107, 108, 207, 208, 303 of Building A, Room 101 of Building B, No.7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict,
Longhua District, Shenzhen, Guangdong, China Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

For anti-fake verification, please visit the official website of China Inspection And Testing

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			NV	30	-36960.00	-6.377912	20	PASS
			NV	40	-36960.00	-6.377912	20	PASS
			NV	45	-36960.00	-6.377912	20	PASS
	Ant2	5795	NV	0	-41460.00	-7.154443	20	PASS
			NV	10	-41460.00	-7.154443	20	PASS
			NV	20	-41460.00	-7.154443	20	PASS
			NV	30	-41460.00	-7.154443	20	PASS
			NV	40	-41460.00	-7.154443	20	PASS
80M	Ant1	5210	NV	45	-41960.00	-7.240725	20	PASS
			NV	0	-33970.00	-6.520154	20	PASS
			NV	10	-33970.00	-6.520154	20	PASS
			NV	20	-33970.00	-6.520154	20	PASS
			NV	30	-33970.00	-6.520154	20	PASS
			NV	40	-33970.00	-6.520154	20	PASS
	Ant2	5210	NV	45	-33970.00	-6.520154	20	PASS
			NV	0	-37960.00	-7.285988	20	PASS
			NV	10	-38460.00	-7.381958	20	PASS
			NV	20	-37960.00	-7.285988	20	PASS
			NV	30	-38460.00	-7.381958	20	PASS
			NV	40	-37960.00	-7.285988	20	PASS
	Ant1	5775	NV	45	-38460.00	-7.381958	20	PASS
			NV	0	-37460.00	-6.486580	20	PASS
			NV	10	-37960.00	-6.573160	20	PASS
			NV	20	-37460.00	-6.486580	20	PASS
			NV	30	-37460.00	-6.486580	20	PASS
			NV	40	-37460.00	-6.486580	20	PASS
	Ant2	5775	NV	45	-37460.00	-6.486580	20	PASS
			NV	0	-41960.00	-7.265801	20	PASS
			NV	10	-41960.00	-7.265801	20	PASS
			NV	20	-41960.00	-7.265801	20	PASS
			NV	30	-41960.00	-7.265801	20	PASS
			NV	40	-41960.00	-7.265801	20	PASS
			NV	45	-42460.00	-7.352381	20	PASS



3.8. Antenna Requirement

Requirement

FCC CFR Title 47 Part 15 Subpart C Section 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Test Result

The directional gain of the antenna is less than 6dBi, please refer to the EUT internal photographs antenna photo.