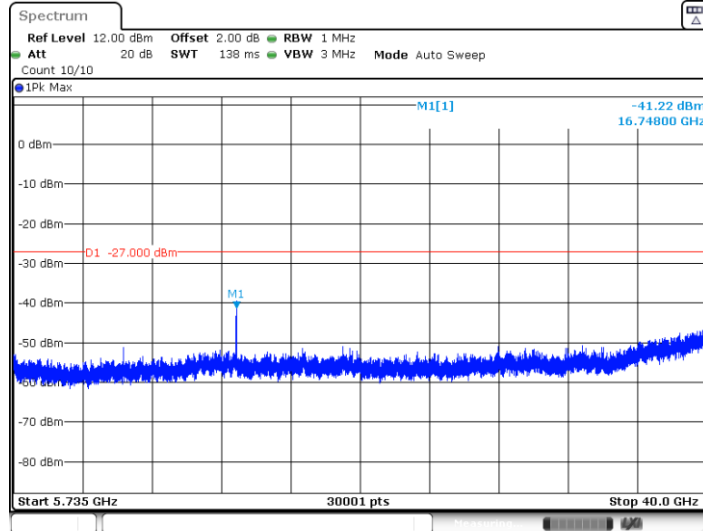
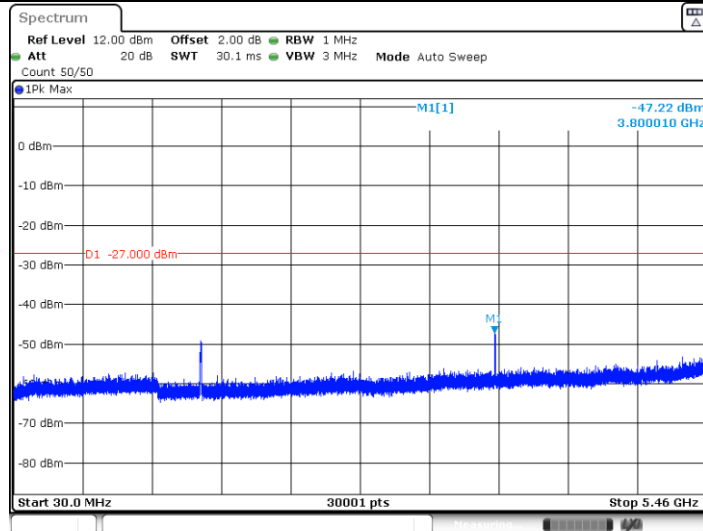


11N20SISO Ant1 5580 5735~40000



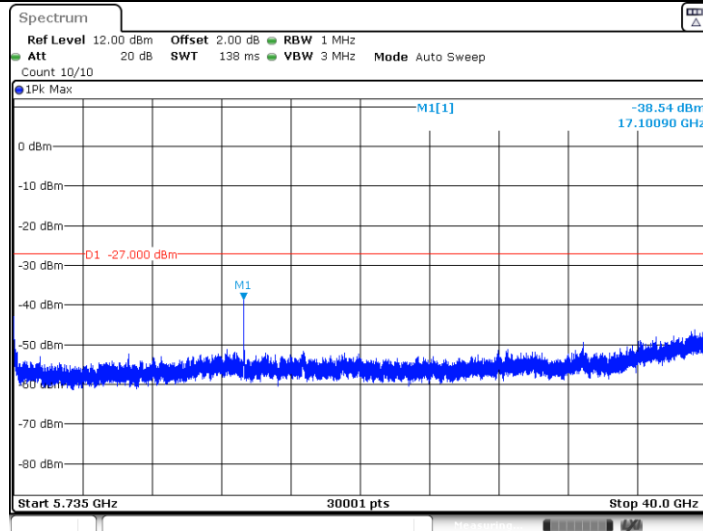
Date: 16.FEB.2022 09:38:15

11N20SISO Ant1 5700 30~5460



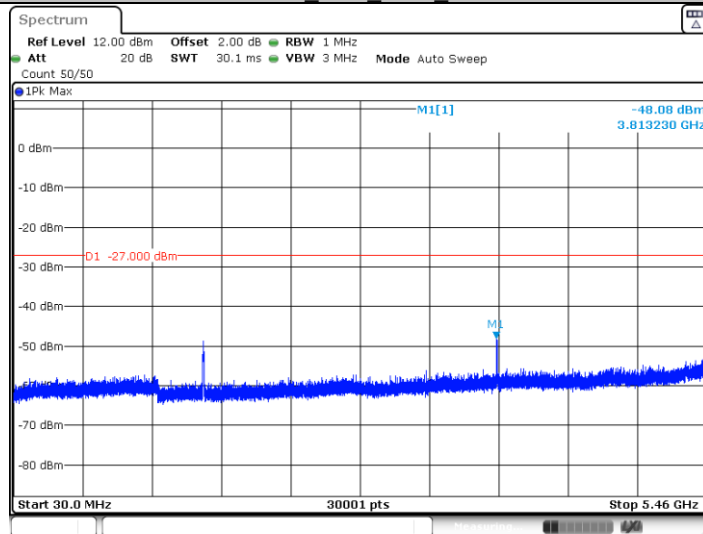
Date: 16.FEB.2022 09:39:46

11N20SISO Ant1 5700 5735~40000



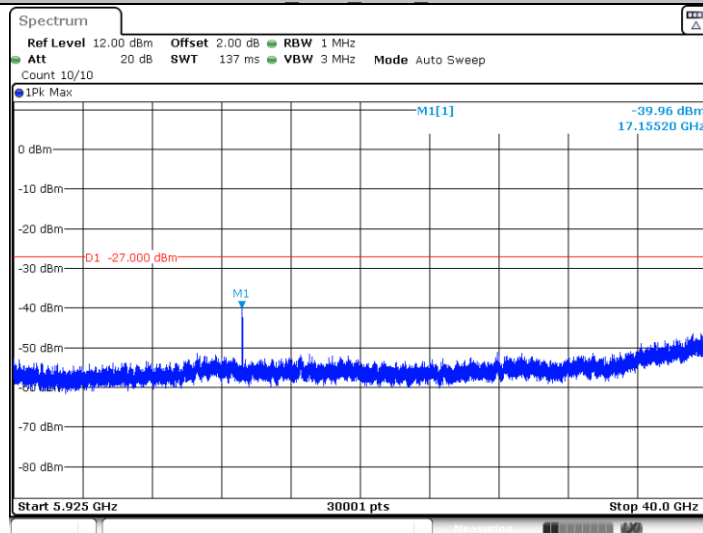
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11N20SISO_Ant1_5720_30~5460



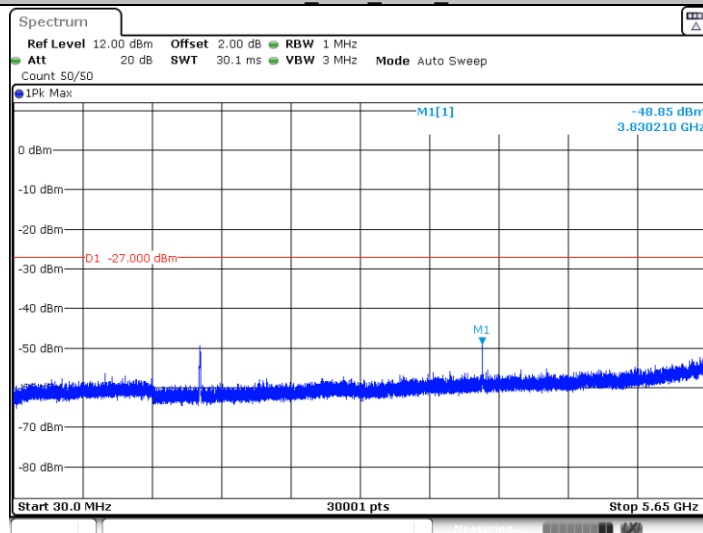
Date: 16.FEB.2022 09:41:40

11N20SISO_Ant1_5720_5925~40000



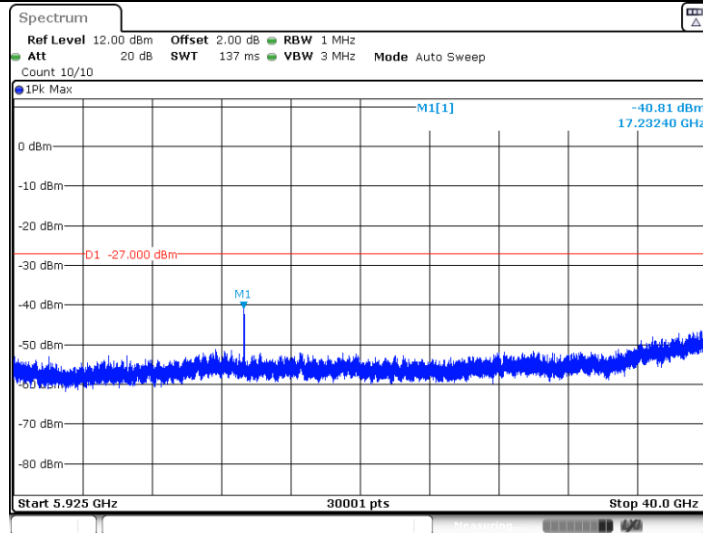
Date: 16.FEB.2022 09:41:45

11N20SISO_Ant1_5745_30~5650



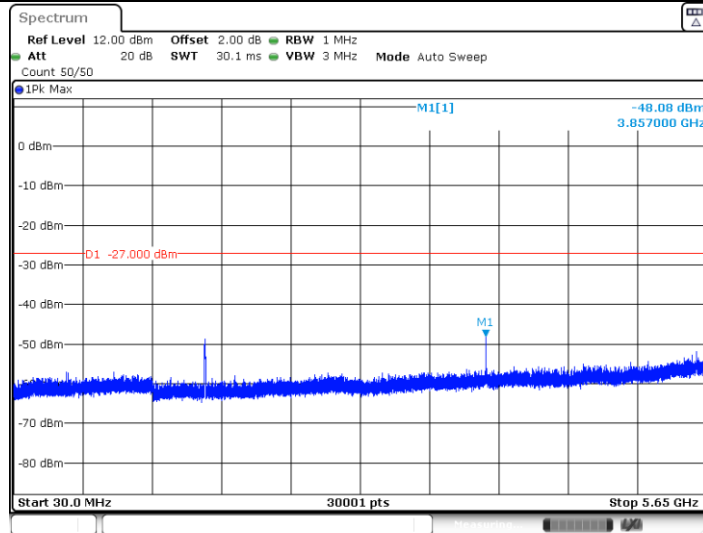
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11N20SISO Ant1 5745 5925~40000



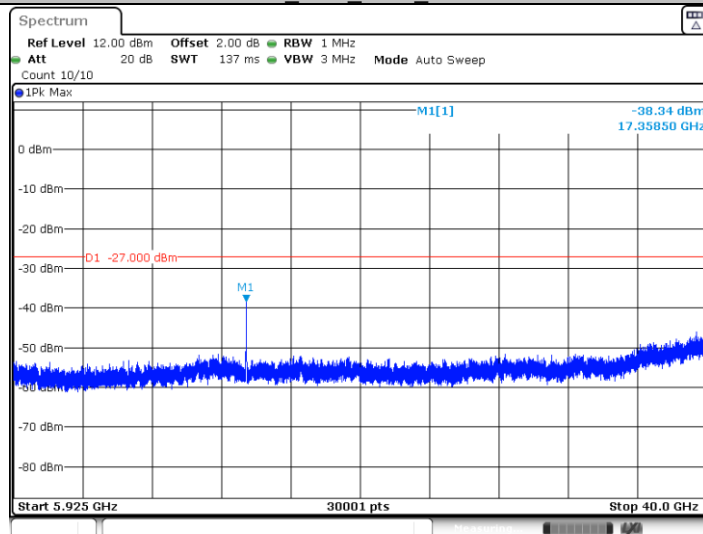
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11N20SISO Ant1 5785 30~5650



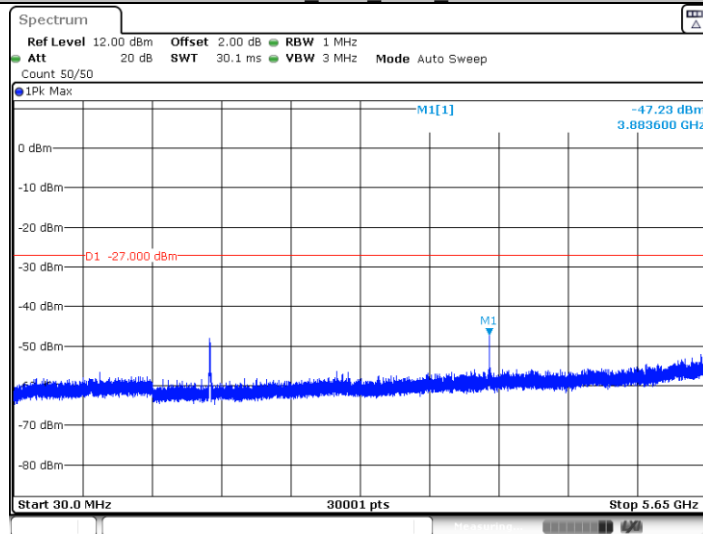
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11N20SISO Ant1 5785 5925~40000



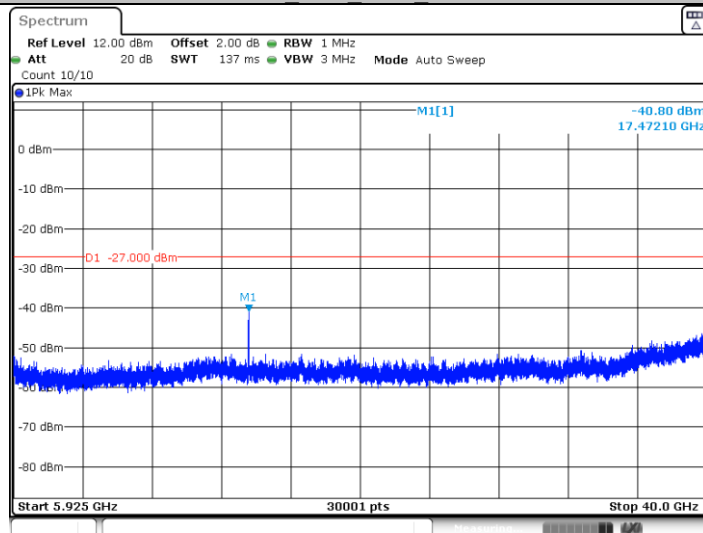
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11N20SISO_Ant1_5825_30~5650



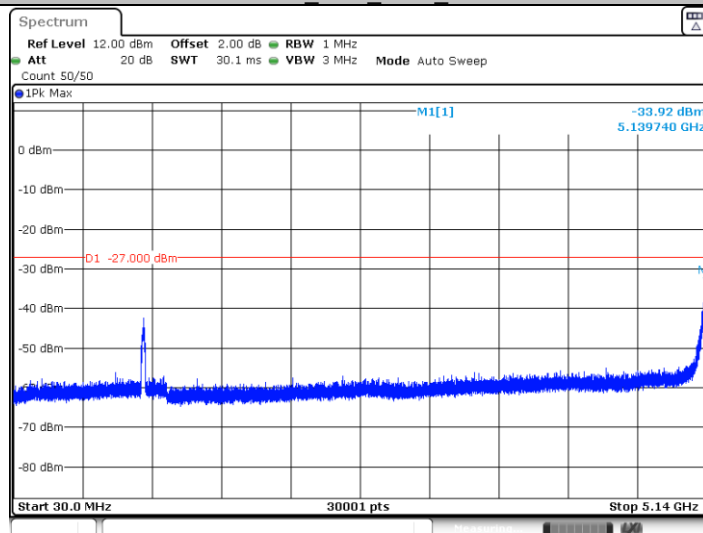
Date: 15.FEB.2022 15:20:17

11N20SISO_Ant1_5825_5925~40000



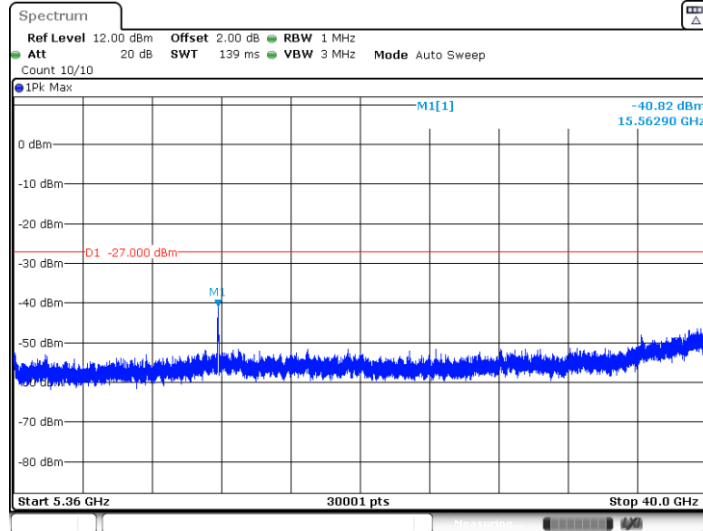
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11N40SISO_Ant1_5190_30~5140



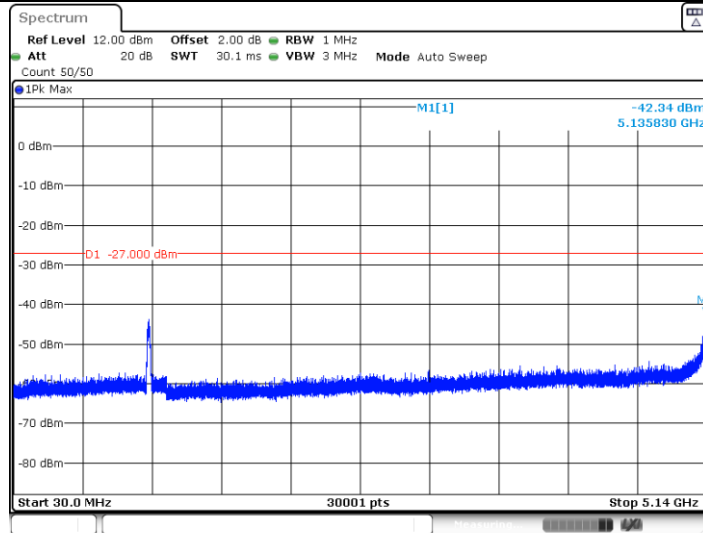
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11N40SISO_Ant1_5190_5360~40000



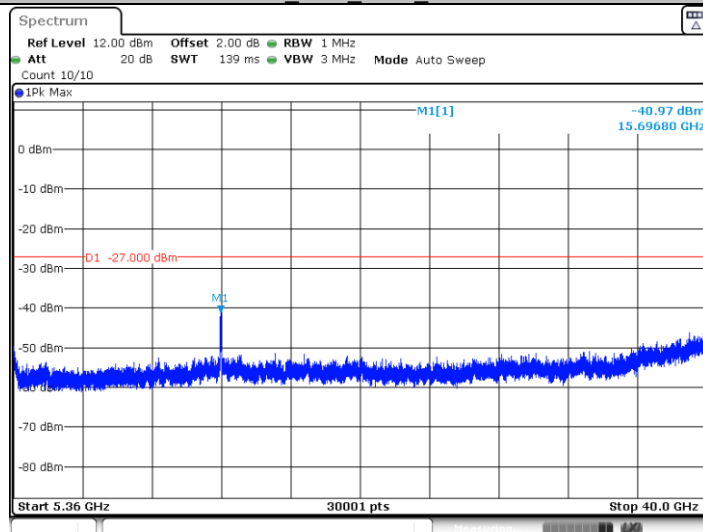
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11N40SISO_Ant1_5230_30~5140



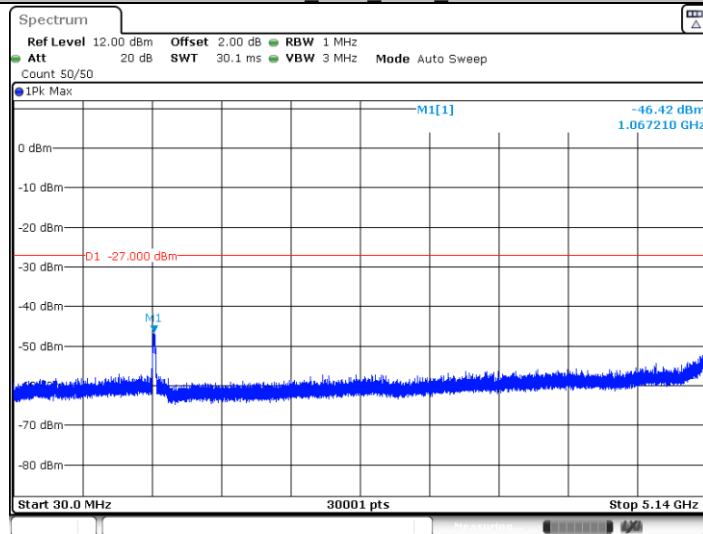
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11N40SISO_Ant1_5230_5360~40000



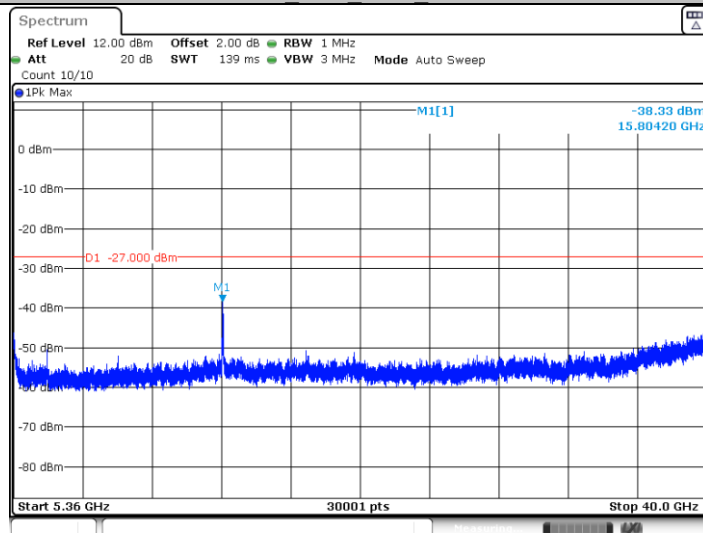
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11N40SISO_Ant1_5270_30~5140



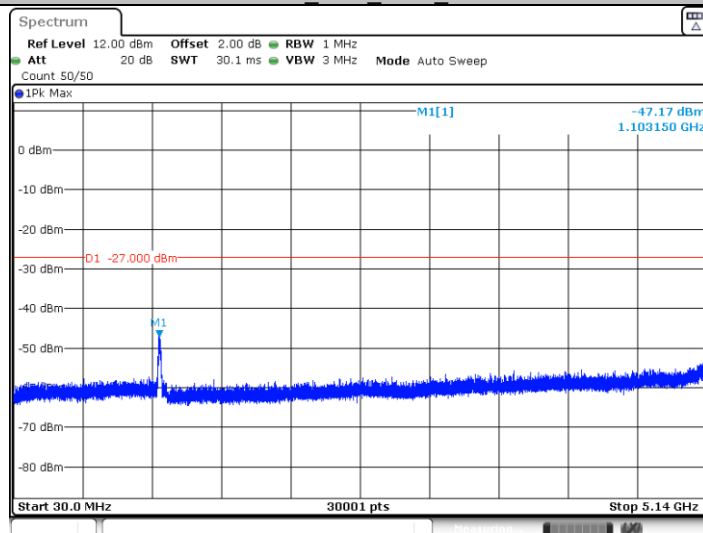
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11N40SISO_Ant1_5270_5360~40000



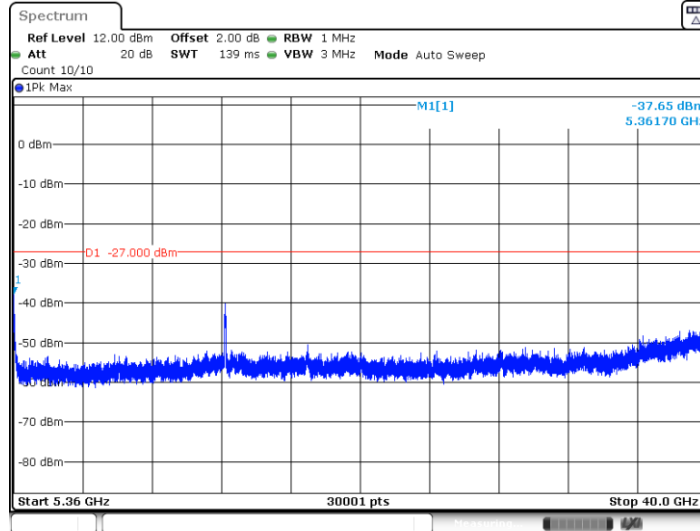
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11N40SISO_Ant1_5310_30~5140



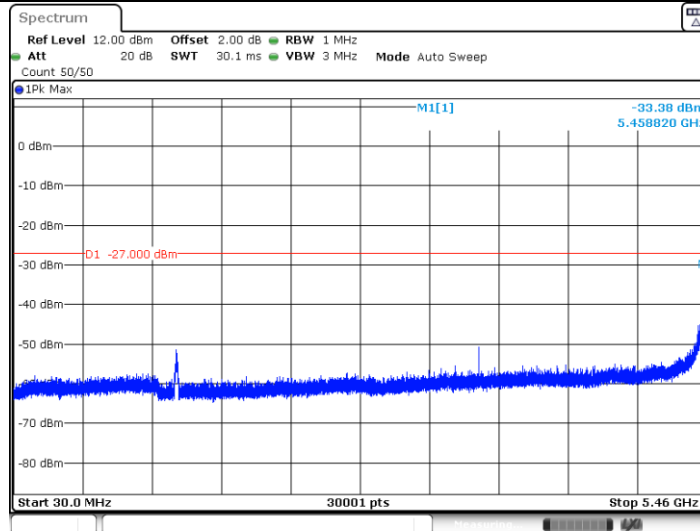
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11N40SISO_Ant1_5310_5360~40000



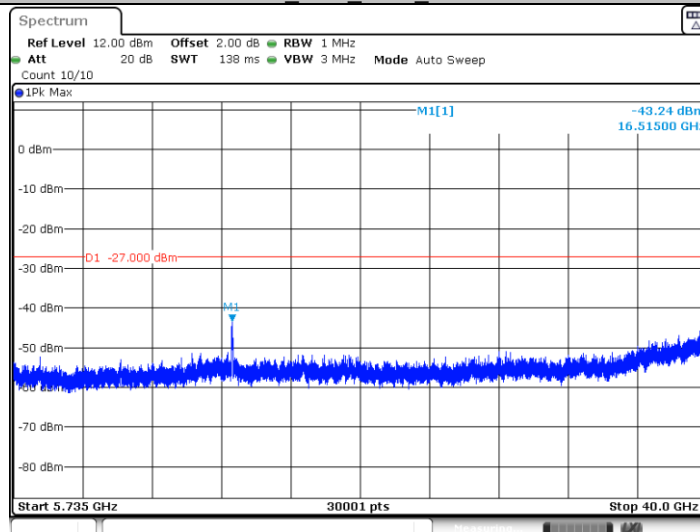
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11N40SISO_Ant1_5510_30~5460



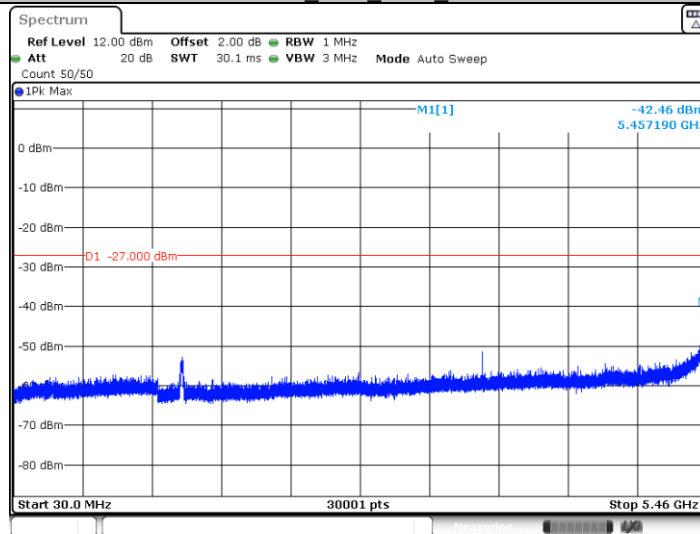
Date: 16.FEB.2022 09:47:47

11N40SISO_Ant1_5510_5735~40000



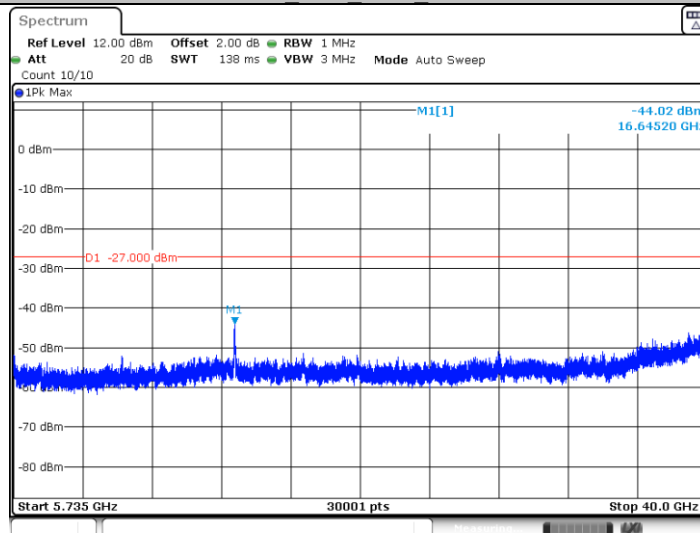
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11N40SISO_Ant1_5550_30~5460



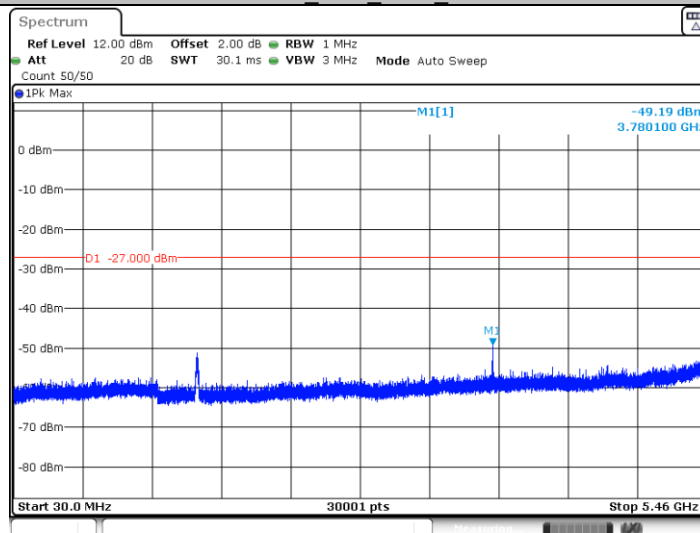
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11N40SISO_Ant1_5550_5735~40000



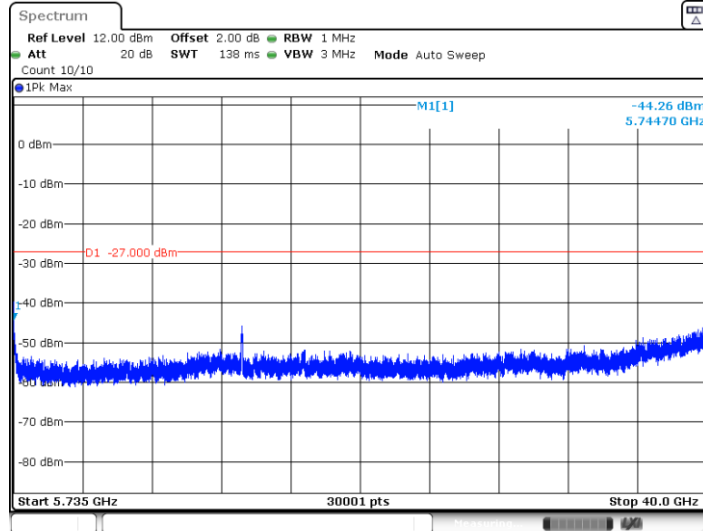
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11N40SISO_Ant1_5670_30~5460



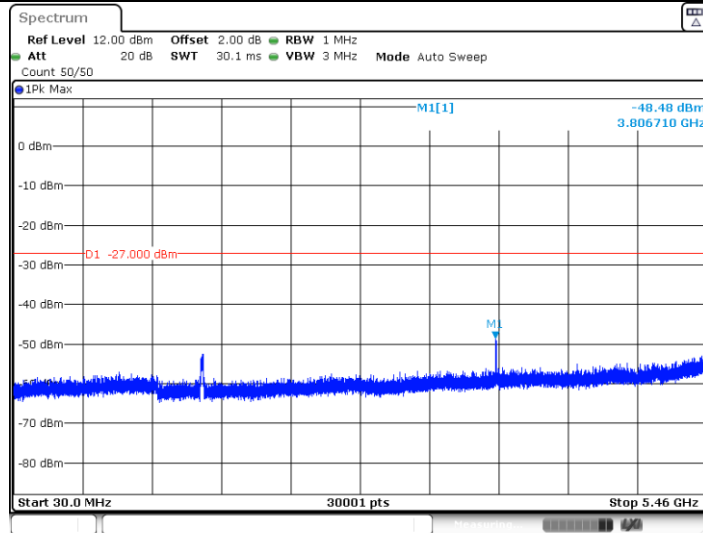
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11N40SISO Ant1 5670 5735~40000



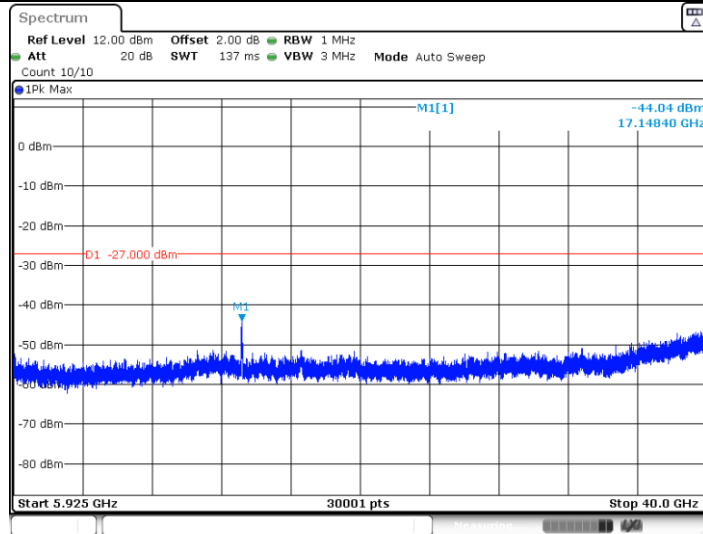
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11N40SISO Ant1 5710 30~5460



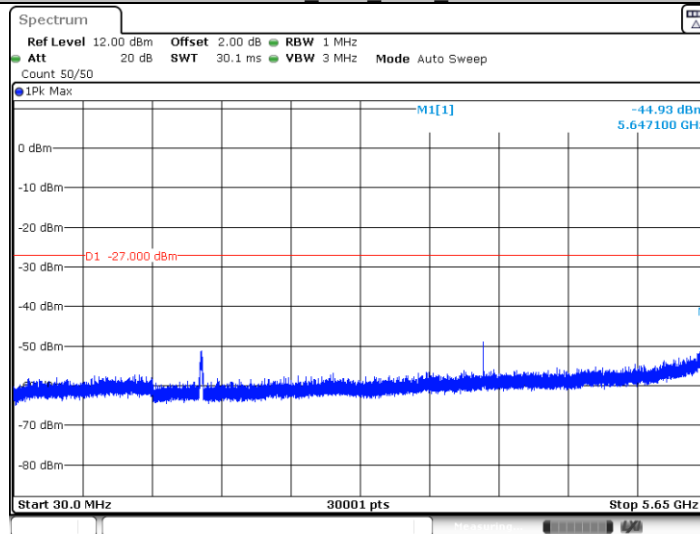
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11N40SISO Ant1 5710 5925~40000



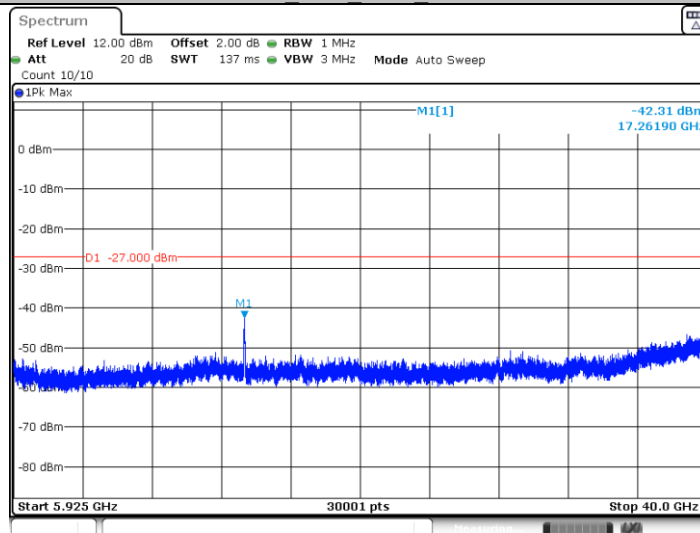
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11N40SISO_Ant1_5755_30~5650



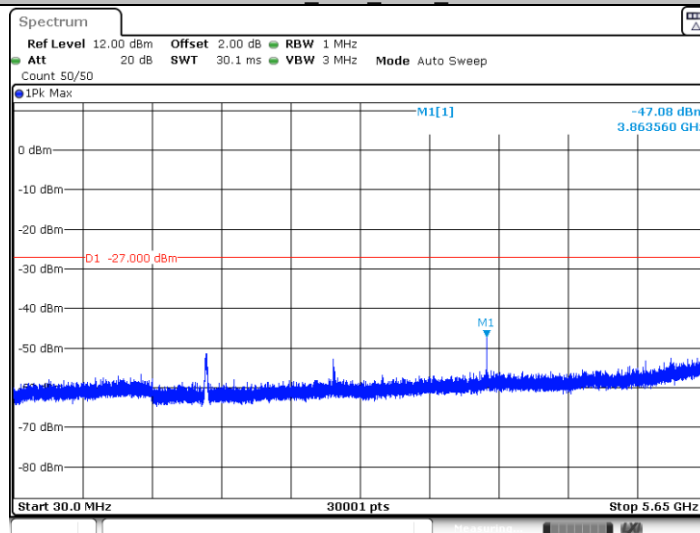
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11N40SISO_Ant1_5755_5925~40000



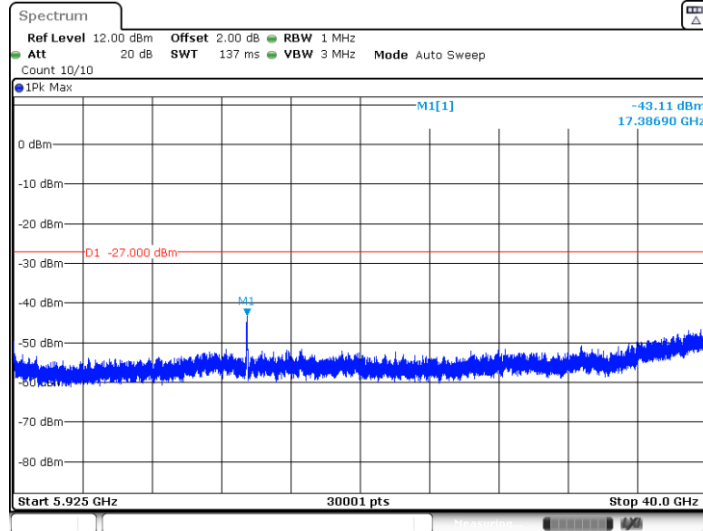
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11N40SISO_Ant1_5795_30~5650



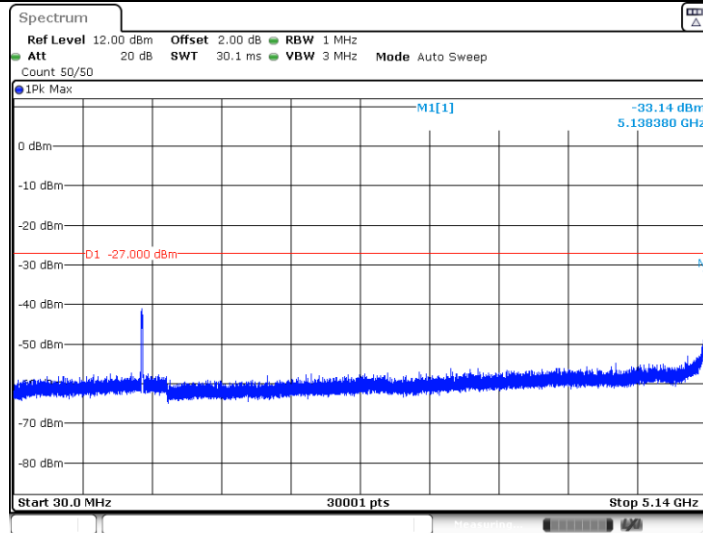
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11N40SISO_Ant1 5795 5925~40000



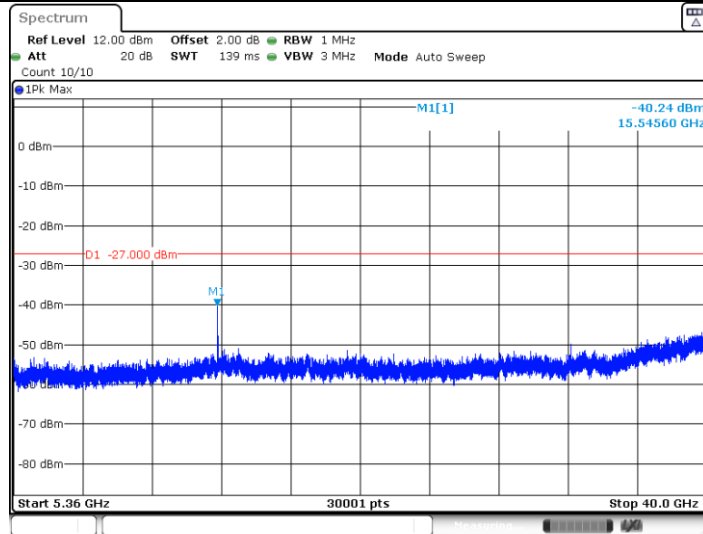
Date: 15.FEB.2022 17:21:51

11AC20SISO_Ant1 5180 30~5140



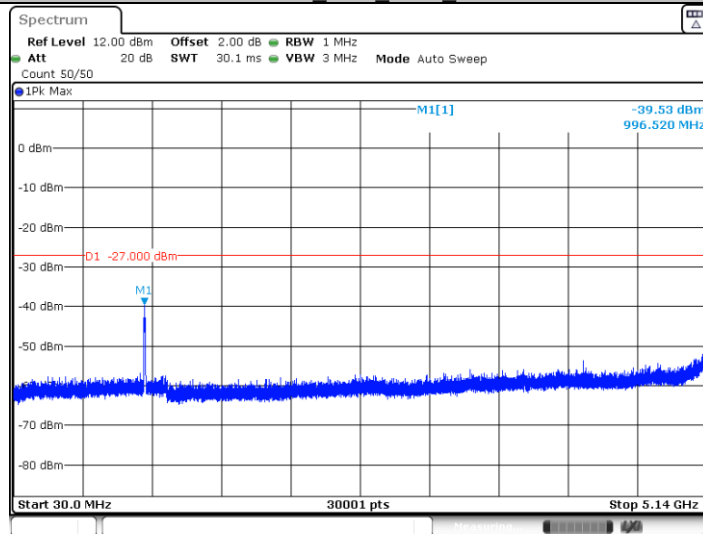
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11AC20SISO_Ant1 5180 5360~40000



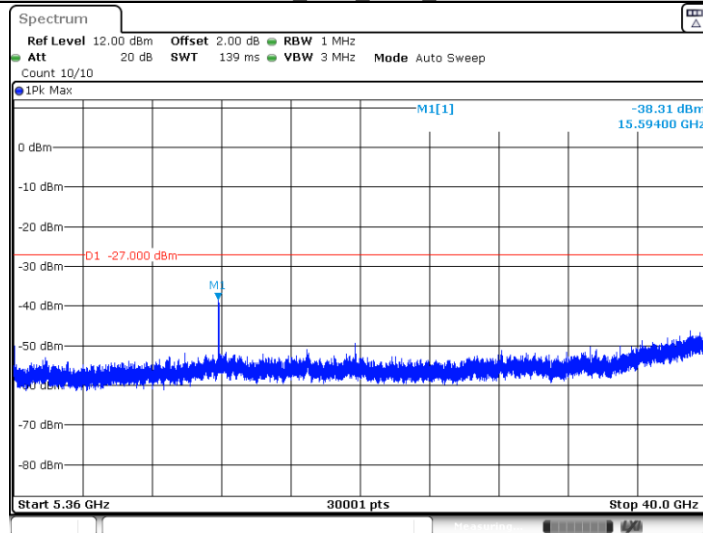
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11AC20SISO_Ant1_5200_30~5140



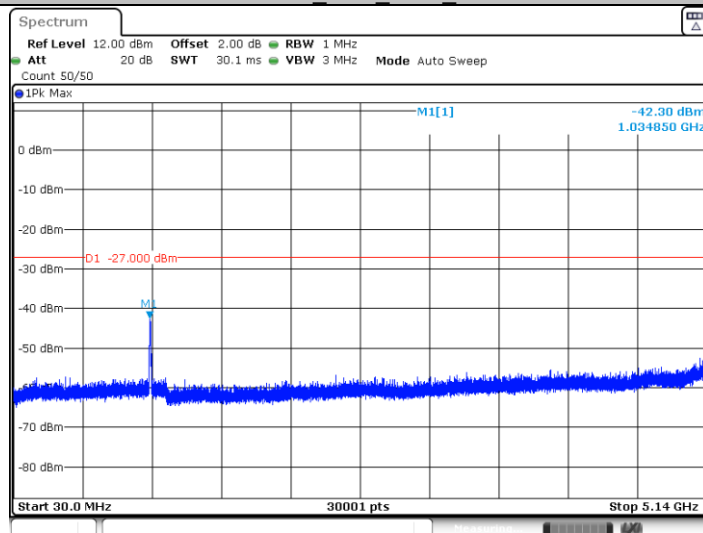
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11AC20SISO_Ant1_5200_5360~40000



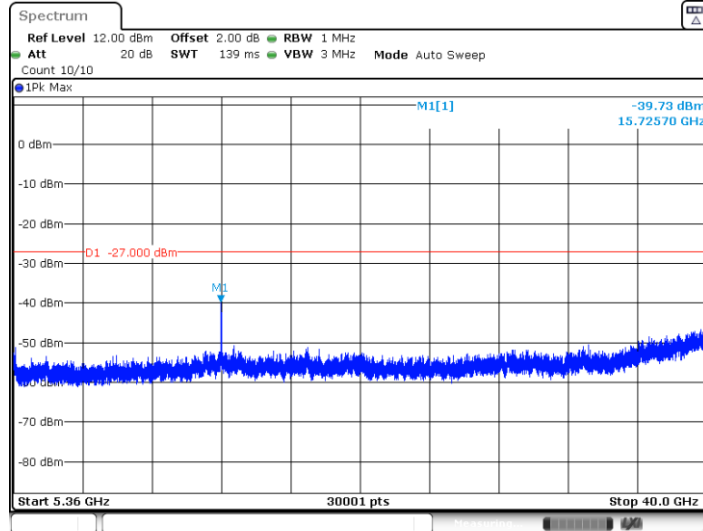
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11AC20SISO_Ant1_5240_30~5140



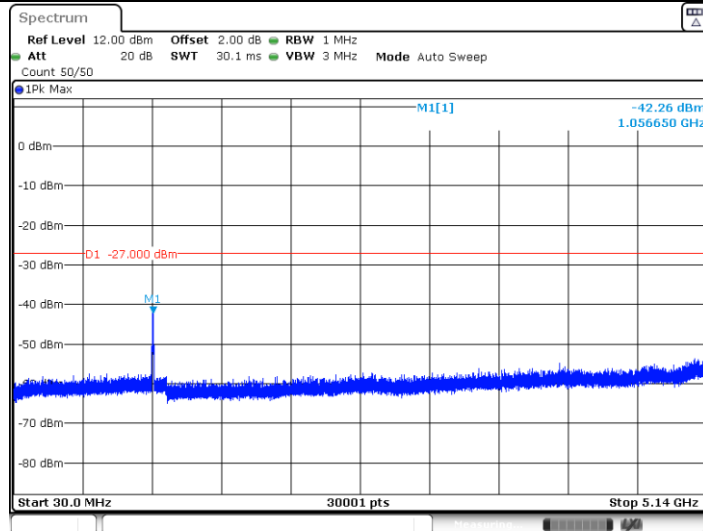
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11AC20SISO_Ant1_5240_5360~40000



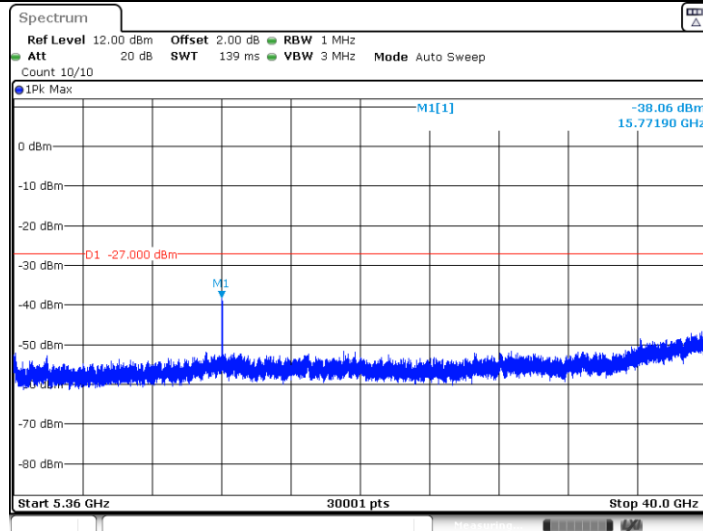
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11AC20SISO_Ant1_5260_30~5140



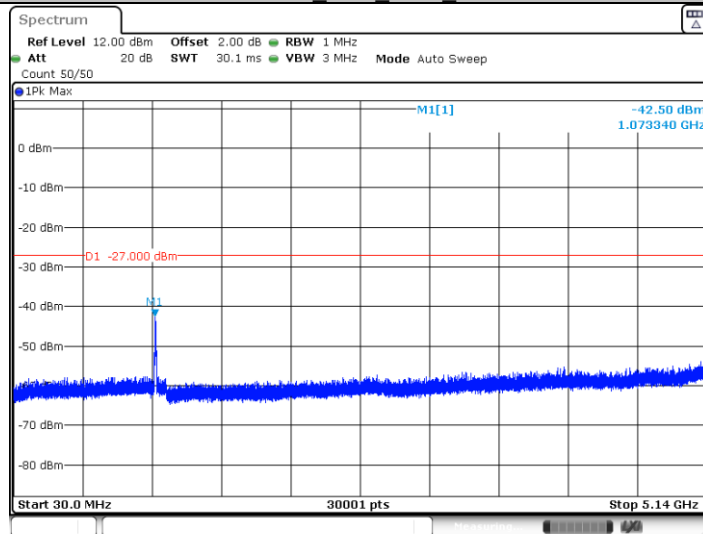
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11AC20SISO_Ant1_5260_5360~40000



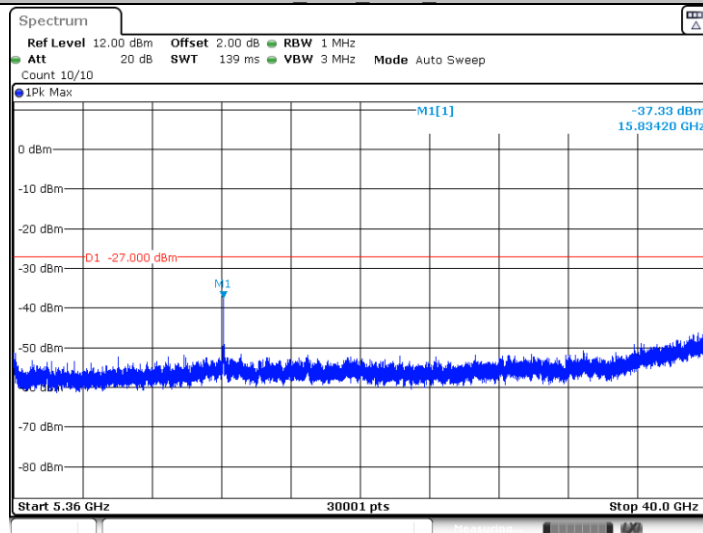
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11AC20SISO_Ant1_5280_30~5140



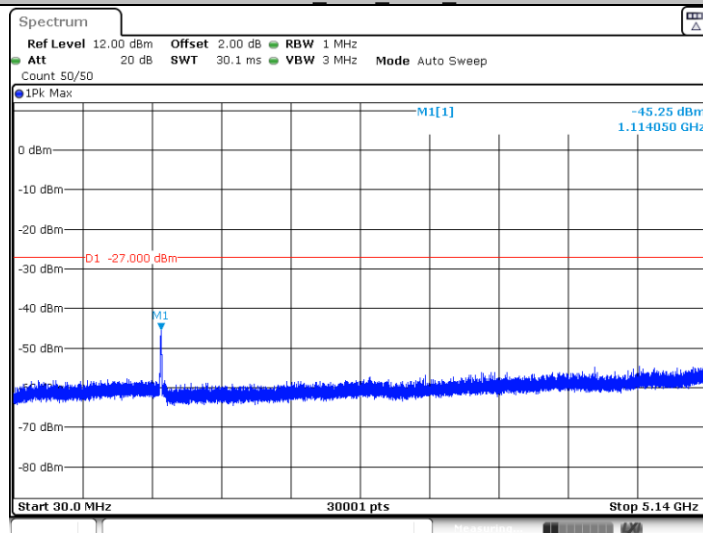
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11AC20SISO_Ant1_5280_5360~40000



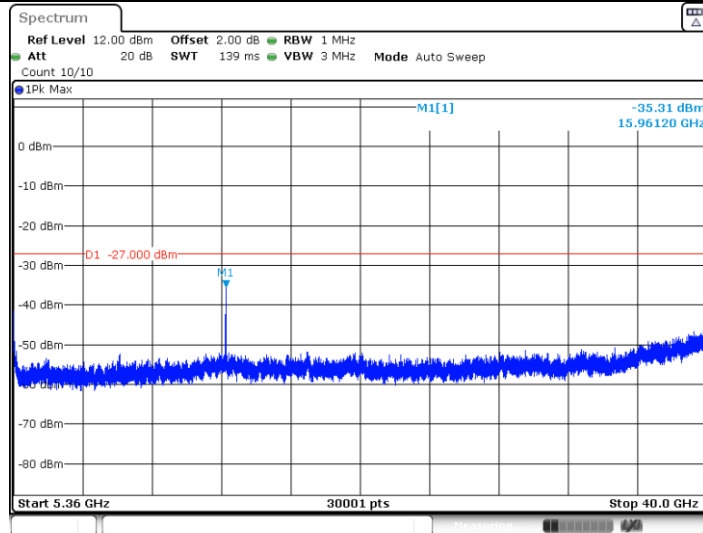
Date: 16.FEB.2022 09:56:24

11AC20SISO_Ant1_5320_30~5140



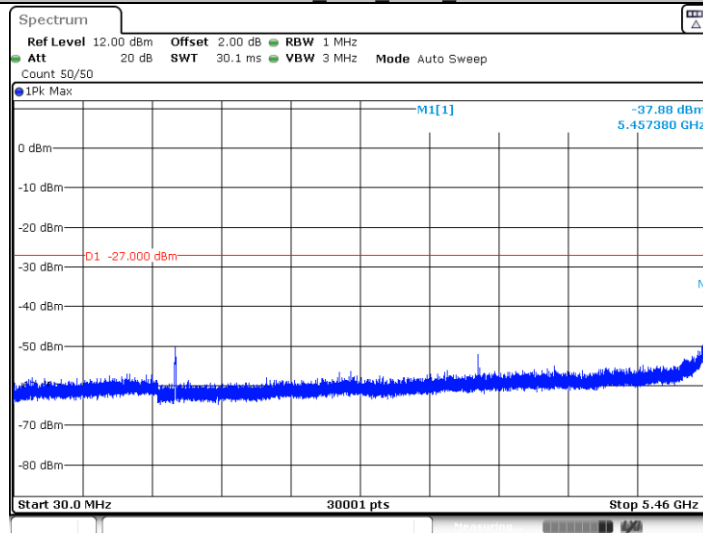
Date: 16.FEB.2022 09:57:54

11AC20SISO_Ant1 5320 5360~40000



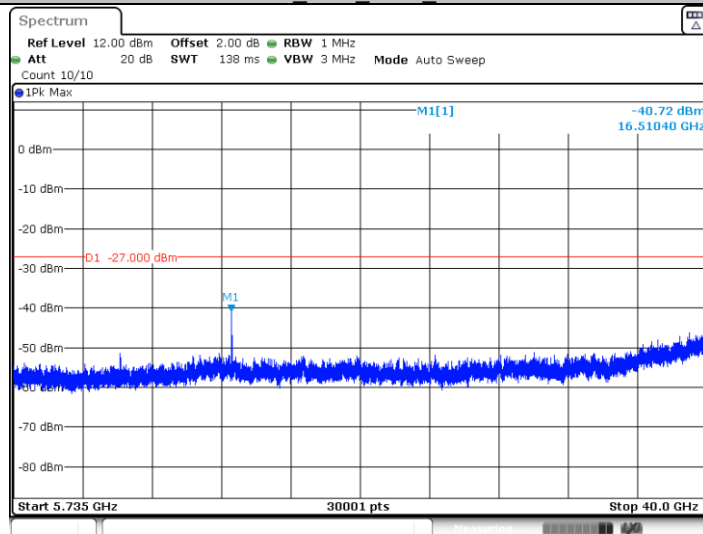
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11AC20SISO_Ant1 5500 30~5460



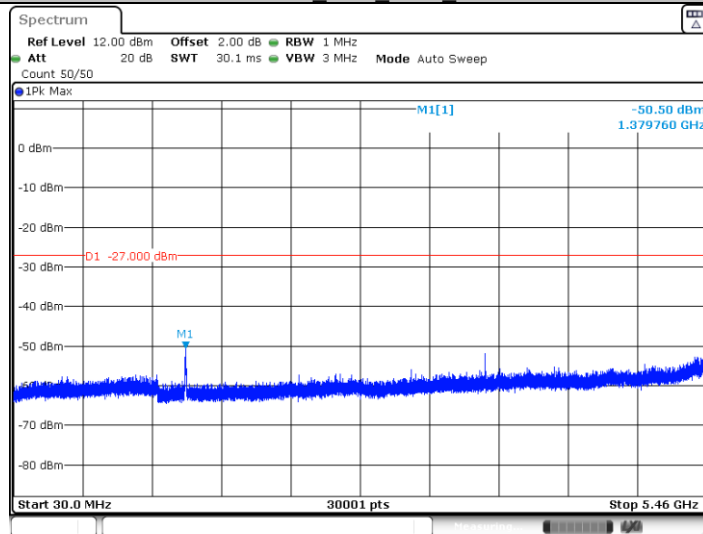
Date: 16.FEB.2022 09:59:27

11AC20SISO_Ant1 5500 5735~40000



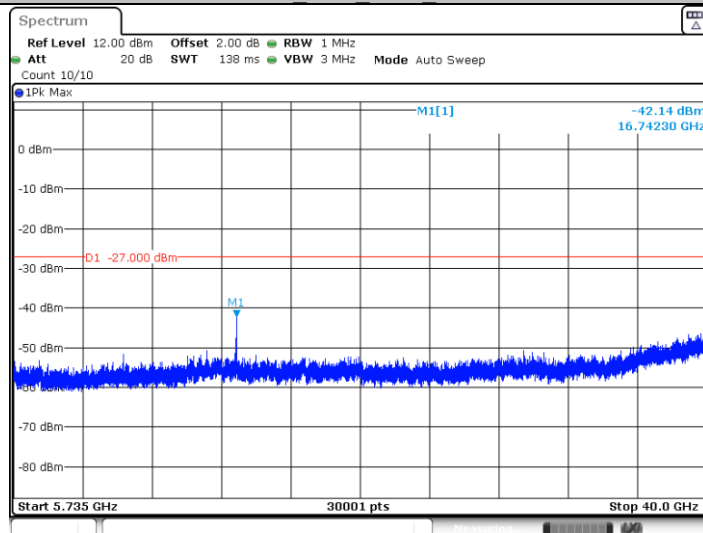
Date: 16.FEB.2022 09:59:32

11AC20SISO_Ant1_5580_30~5460



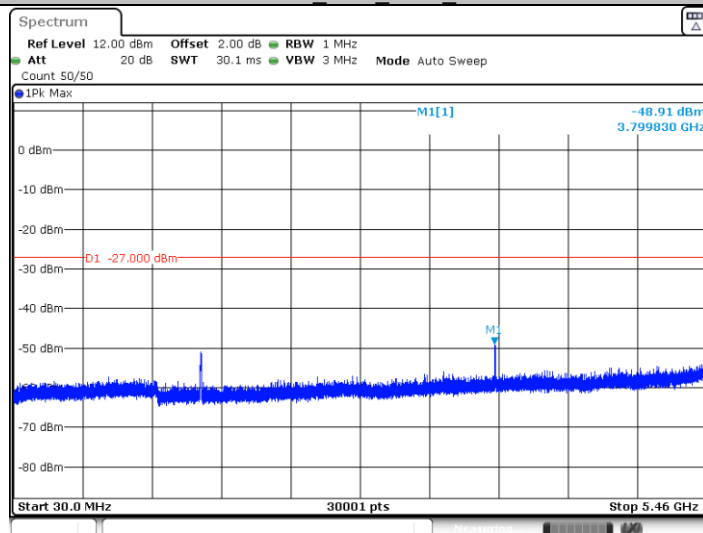
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11AC20SISO_Ant1_5580_5735~40000



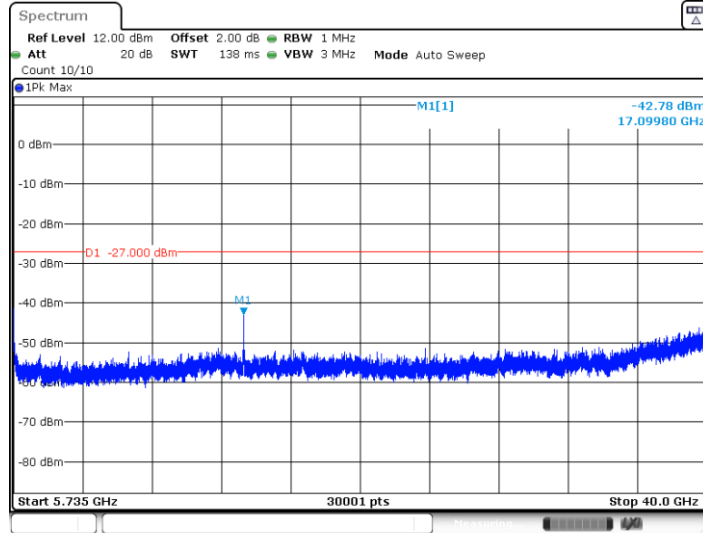
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11AC20SISO_Ant1_5700_30~5460



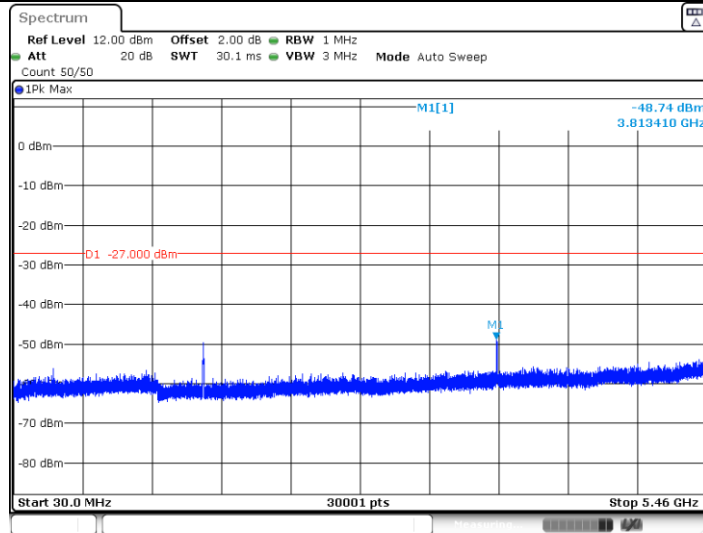
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11AC20SISO_Ant1_5700_5735~40000



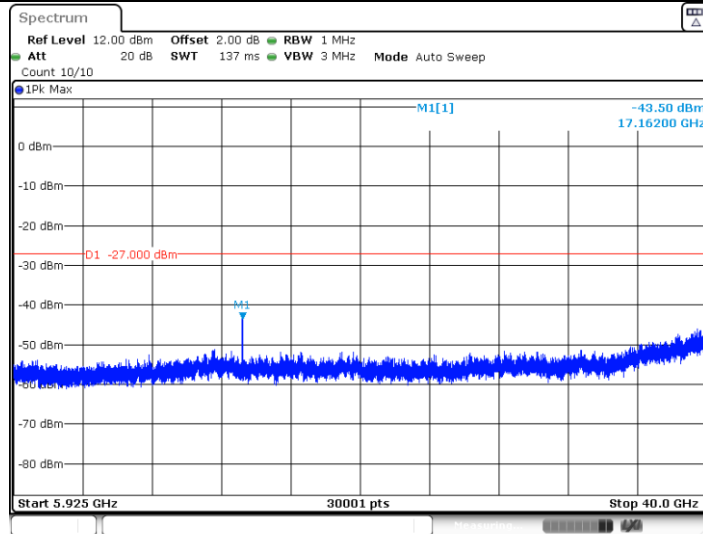
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11AC20SISO_Ant1_5720_30~5460



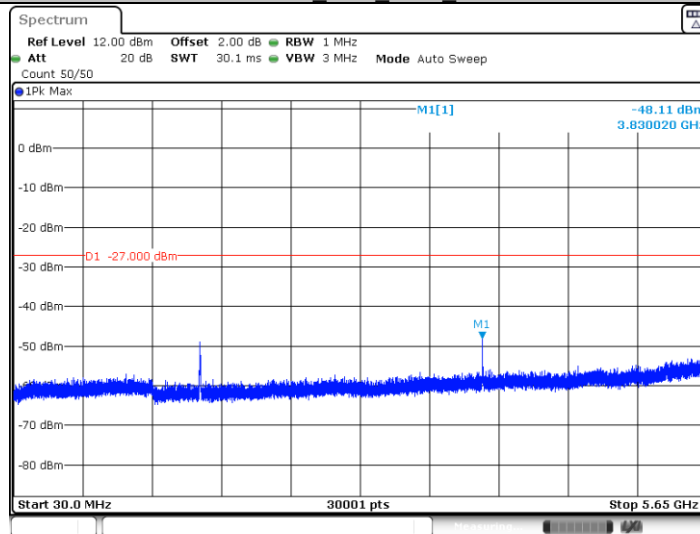
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11AC20SISO_Ant1_5720_5925~40000



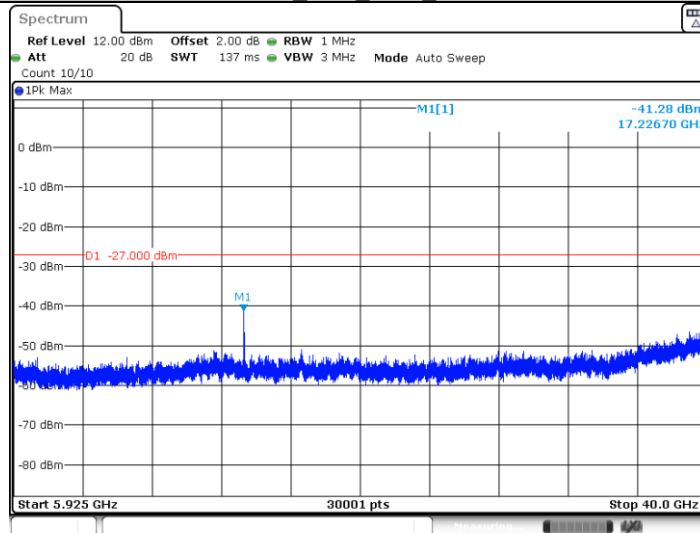
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11AC20SISO_Ant1_5745_30~5650



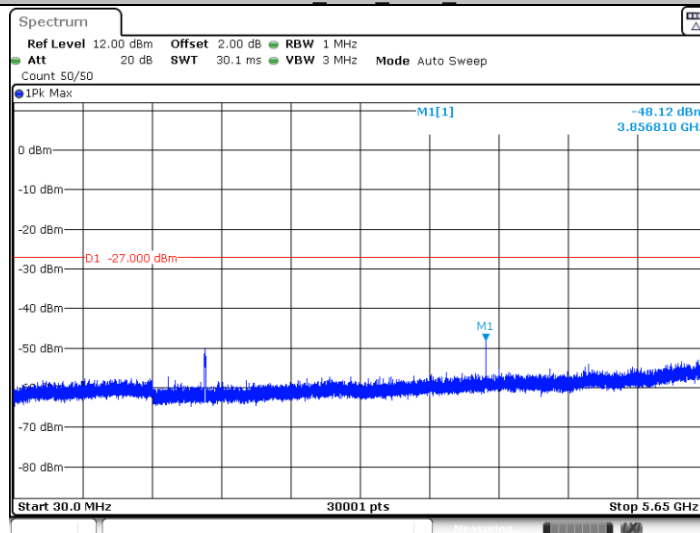
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11AC20SISO_Ant1_5745_5925~40000



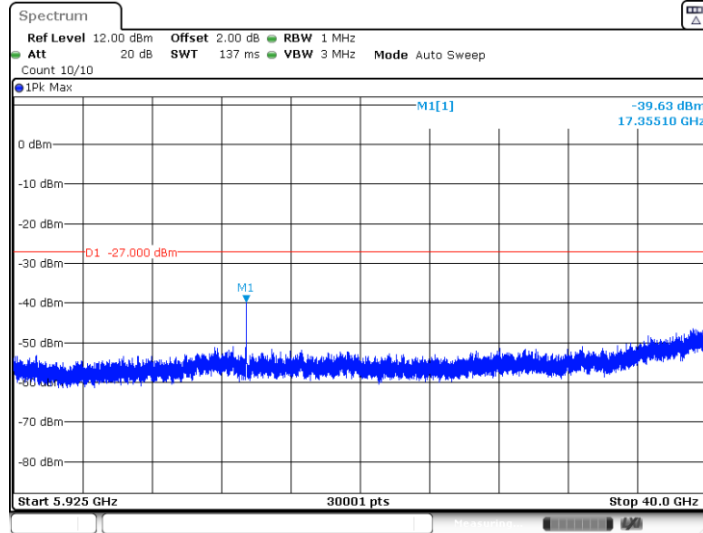
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11AC20SISO_Ant1_5785_30~5650



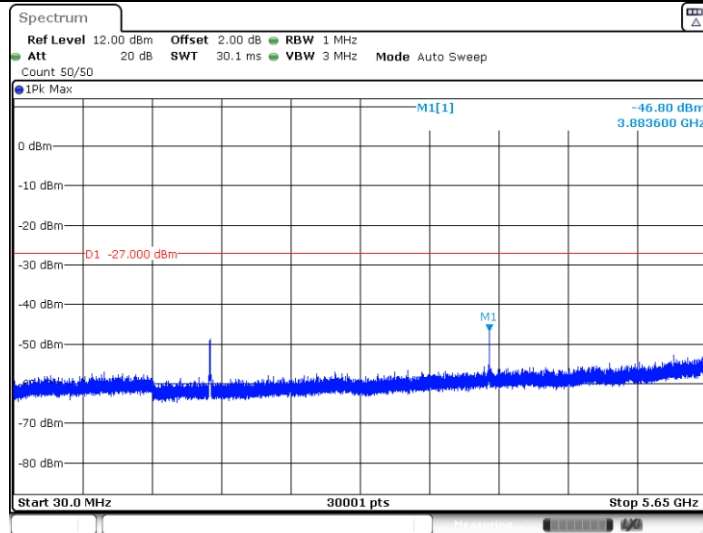
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11AC20SISO_Ant1_5785_5925~40000



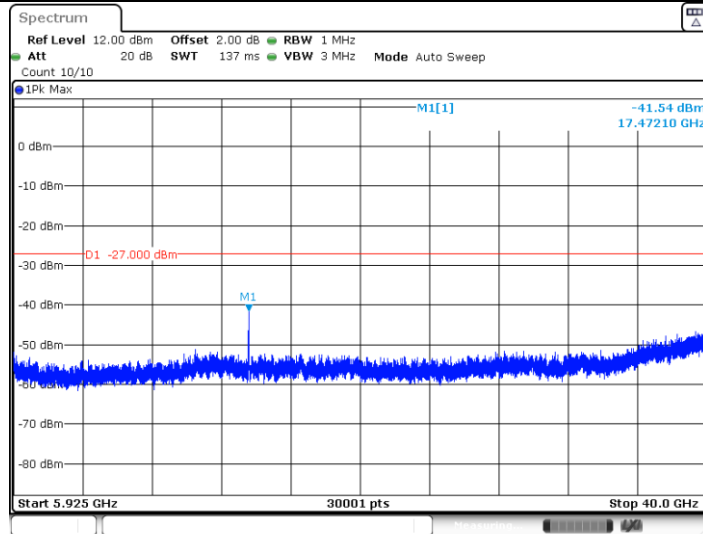
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11AC20SISO_Ant1_5825_30~5650



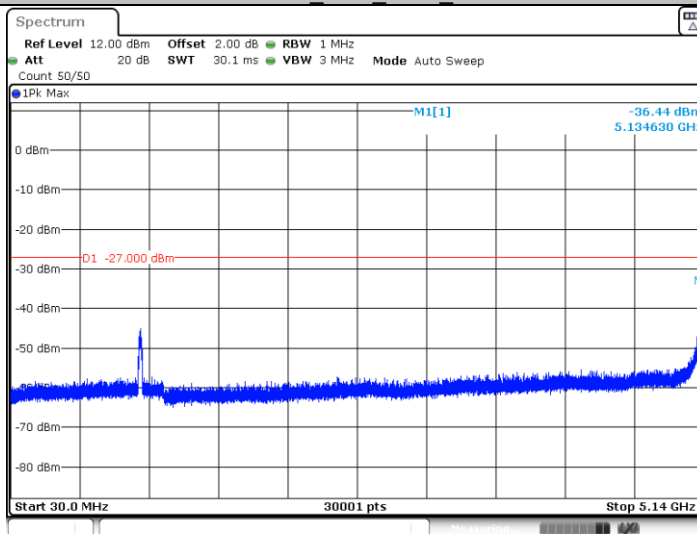
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11AC20SISO_Ant1_5825_5925~40000



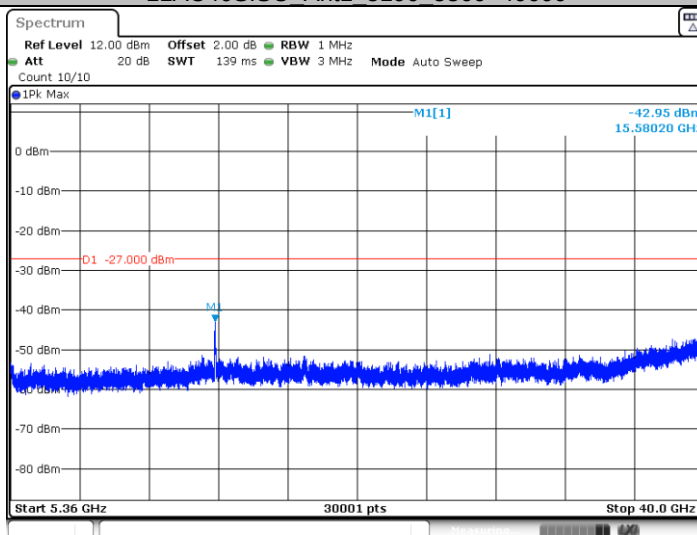
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11AC40SISO_Ant1_5190_30~5140



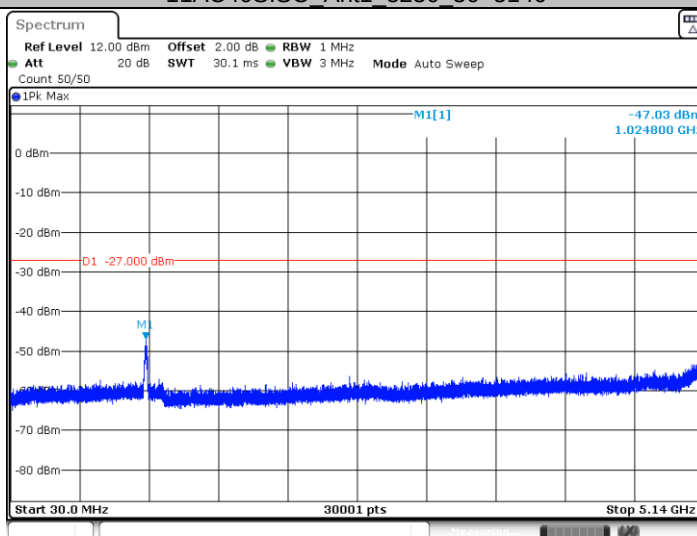
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11AC40SISO_Ant1_5190_5360~40000



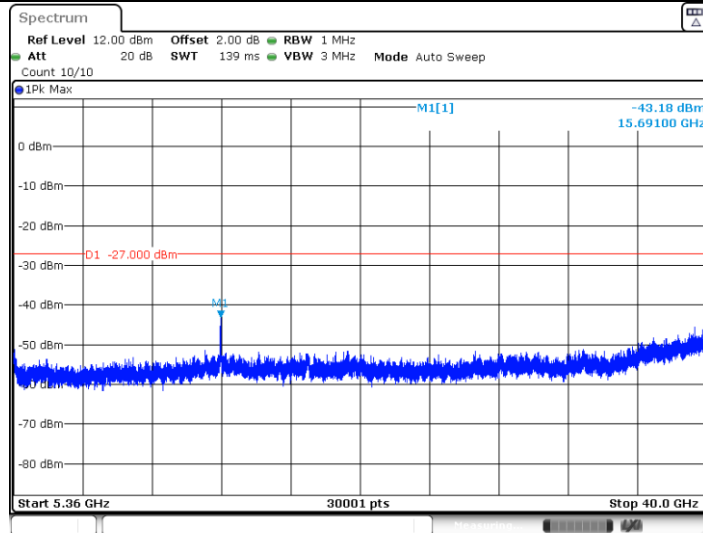
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11AC40SISO_Ant1_5230_30~5140



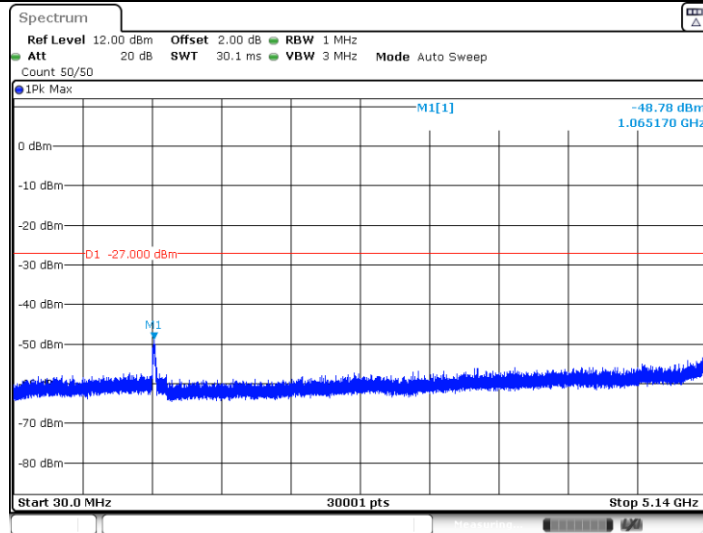
Date: 15.FEB.2022 17:26:02

11AC40SISO_Ant1_5230_5360~40000



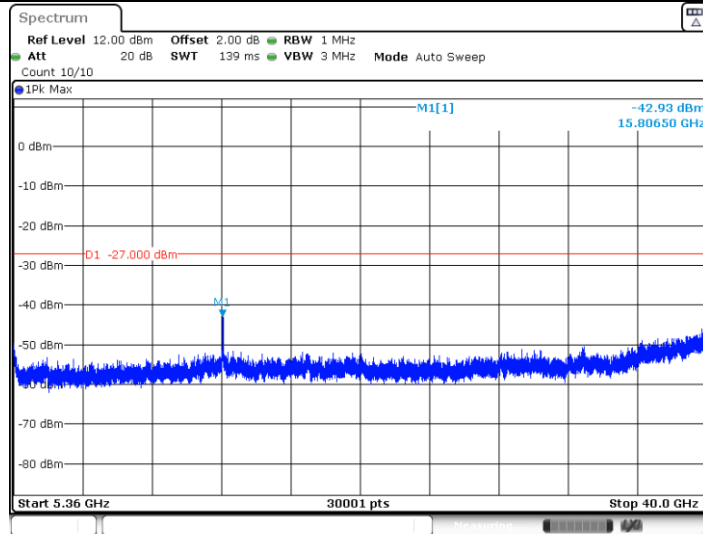
Date: 15.FEB.2022 17:26:07

11AC40SISO_Ant1_5270_30~5140



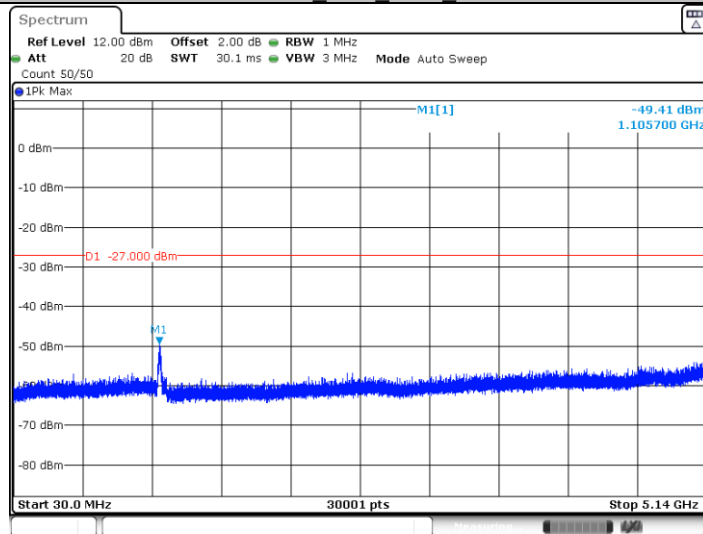
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11AC40SISO_Ant1_5270_5360~40000



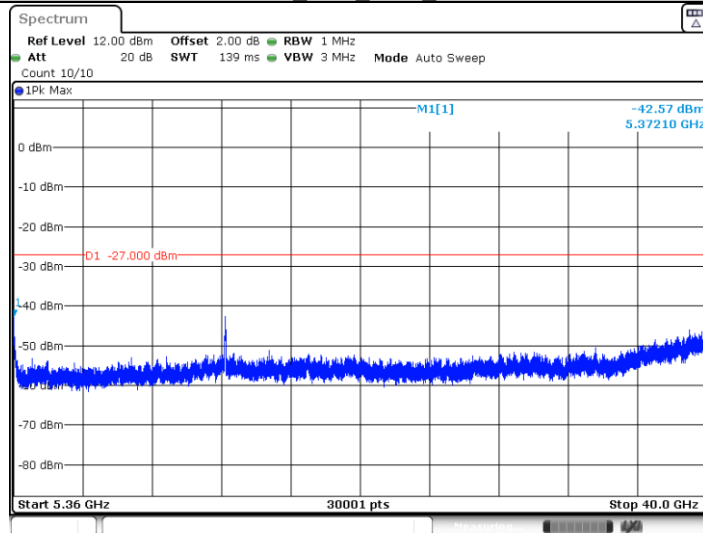
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11AC40SISO_Ant1_5310_30~5140



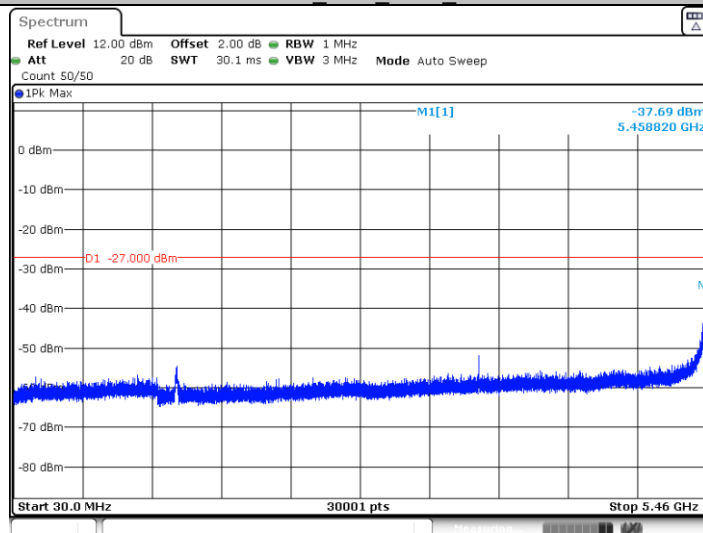
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11AC40SISO_Ant1_5310_5360~40000



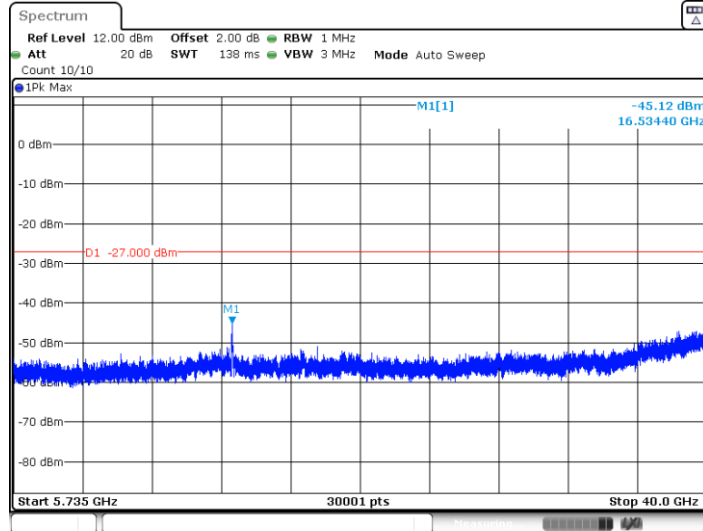
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11AC40SISO_Ant1_5510_30~5460



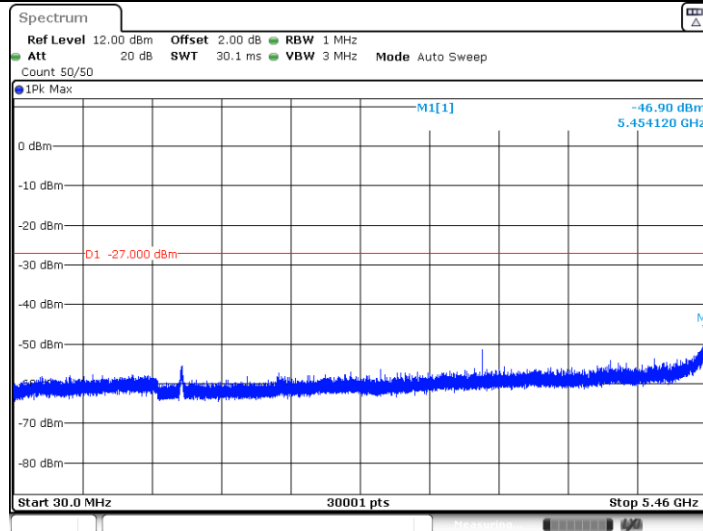
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11AC40SISO_Ant1 5510 5735~40000



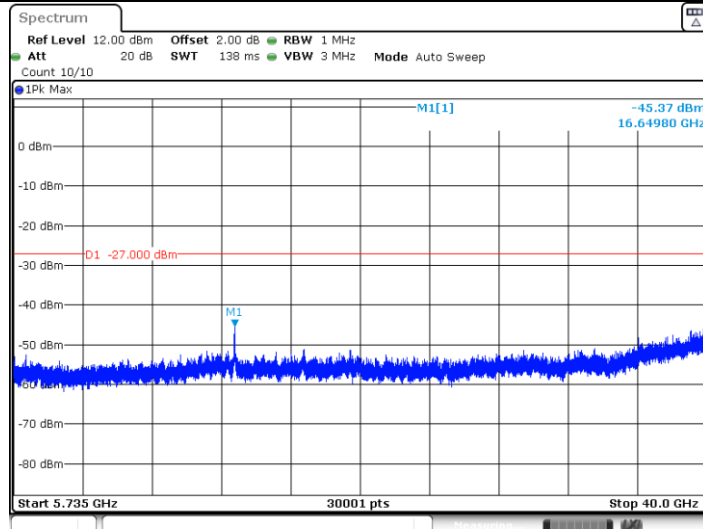
Date: 16.FEB.2022 10:09:47

11AC40SISO_Ant1 5550 30~5460



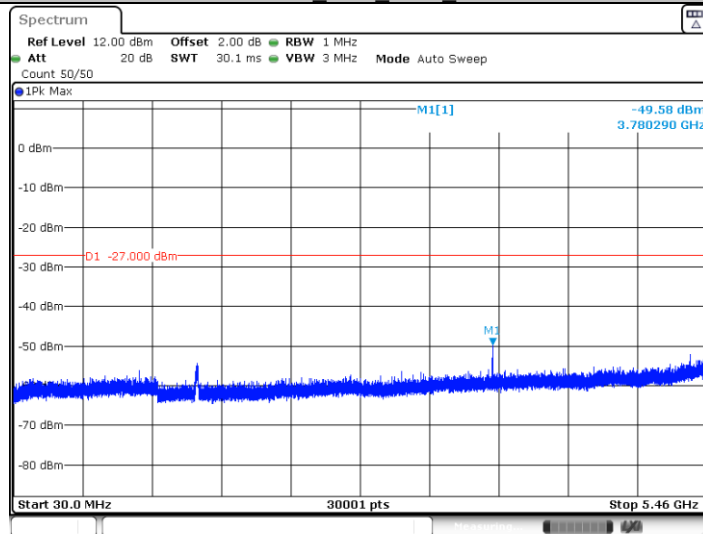
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11AC40SISO_Ant1 5550 5735~40000



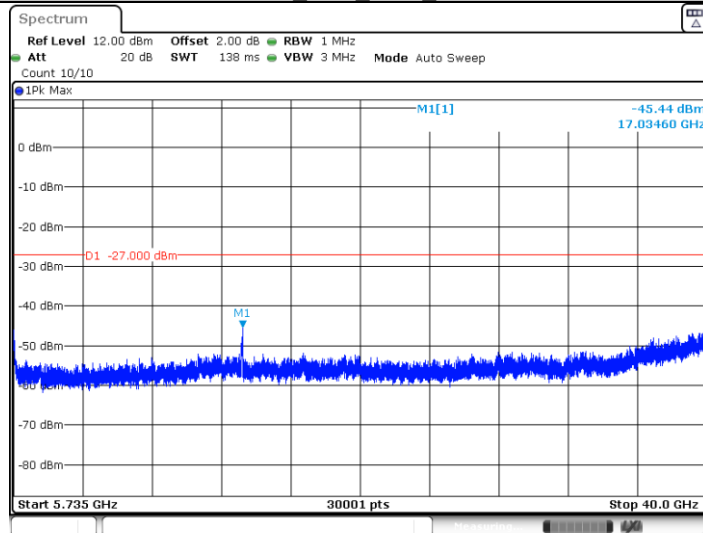
Date: 16.FEB.2022 10:11:03

11AC40SISO_Ant1_5670_30~5460



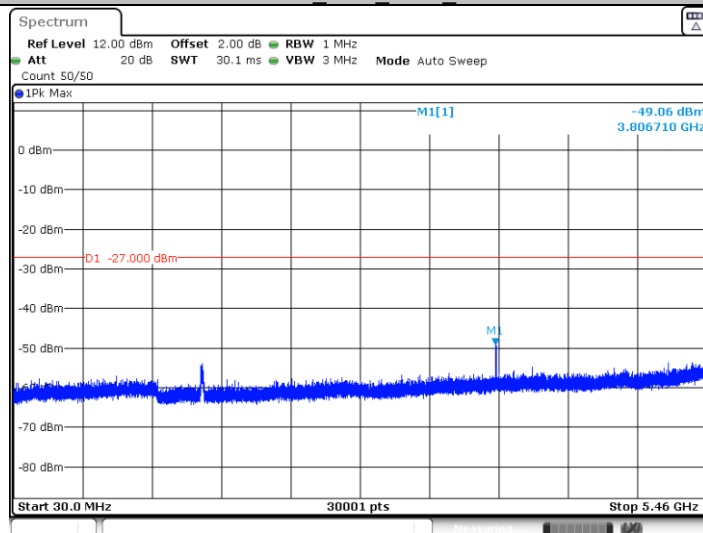
Date: 16.FEB.2022 10:12:40

11AC40SISO_Ant1_5670_5735~40000



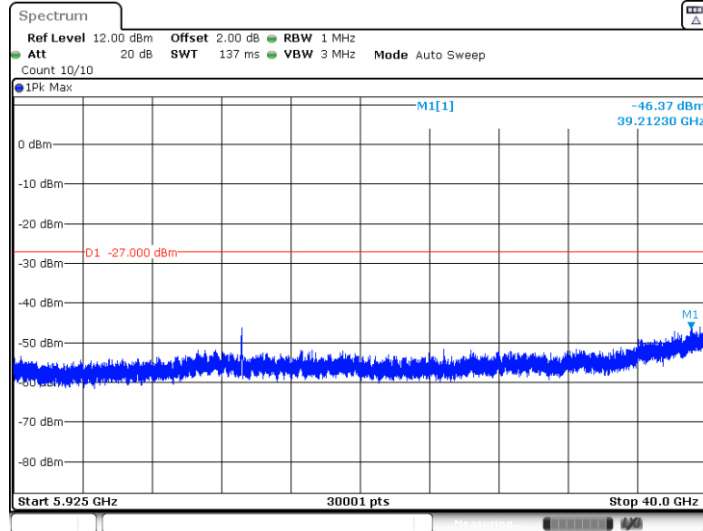
Date: 16.FEB.2022 10:12:45

11AC40SISO_Ant1_5710_30~5460



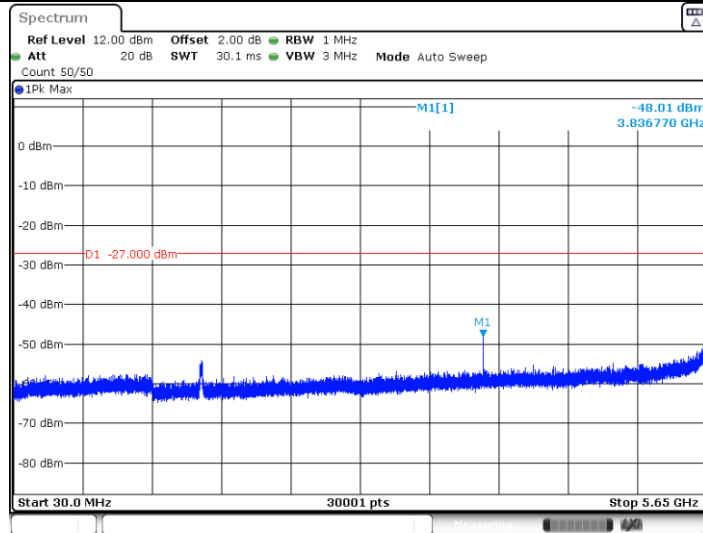
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11AC40SISO_Ant1_5710_5925~40000



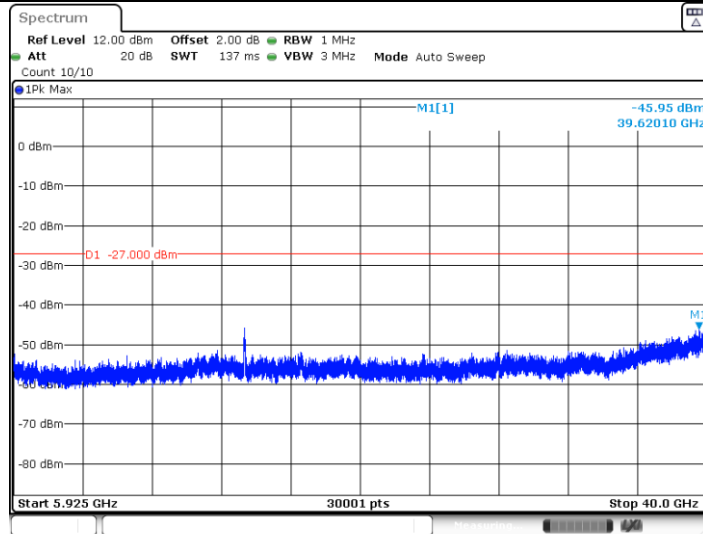
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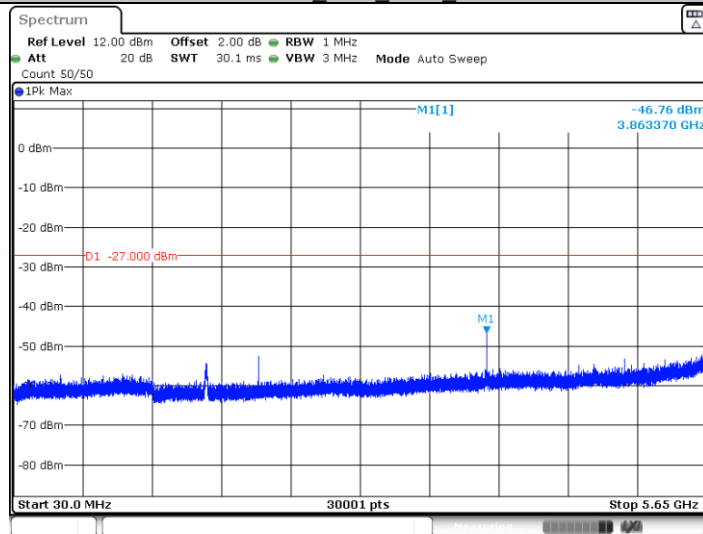
Date: 15.FEB.2022 17:28:14

11AC40SISO_Ant1_5755_5925~40000



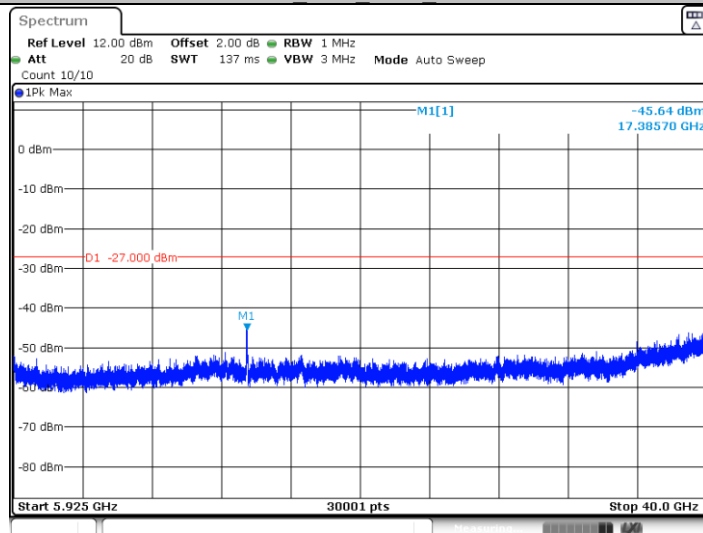
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11AC40SISO_Ant1_5795_30~5650



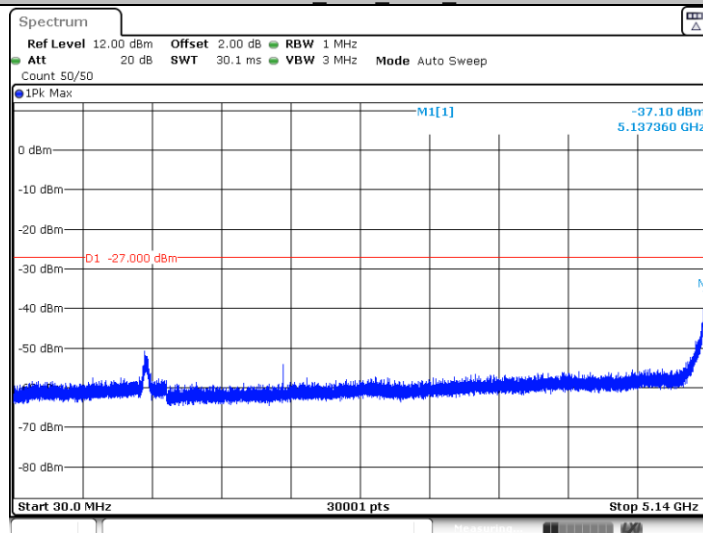
Date: 15.FEB.2022 17:30:17

11AC40SISO_Ant1_5795_5925~40000



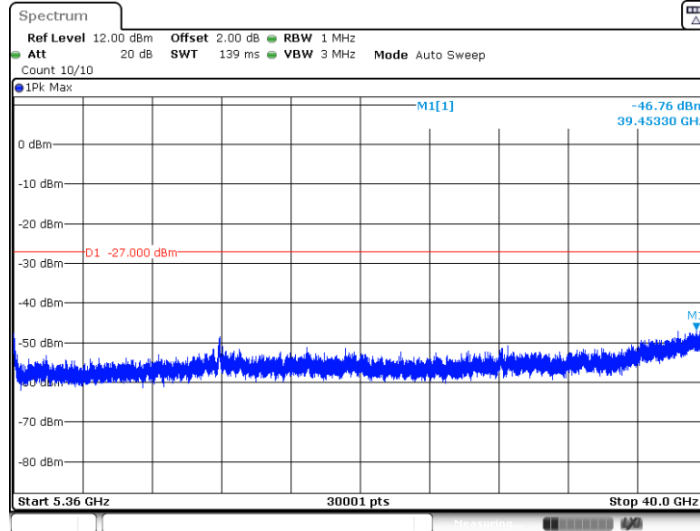
Date: 15.FEB.2022 17:30:22

11AC80SISO_Ant1_5210_30~5140



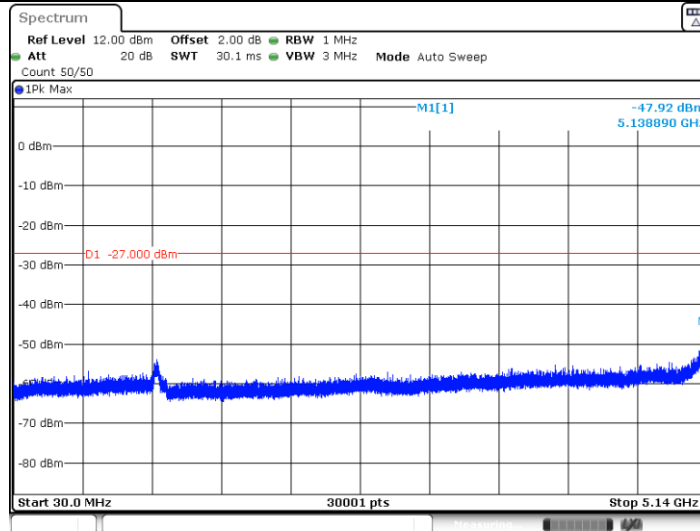
Date: 15.FEB.2022 17:32:45

11AC80SISO_Ant1_5210_5360~40000



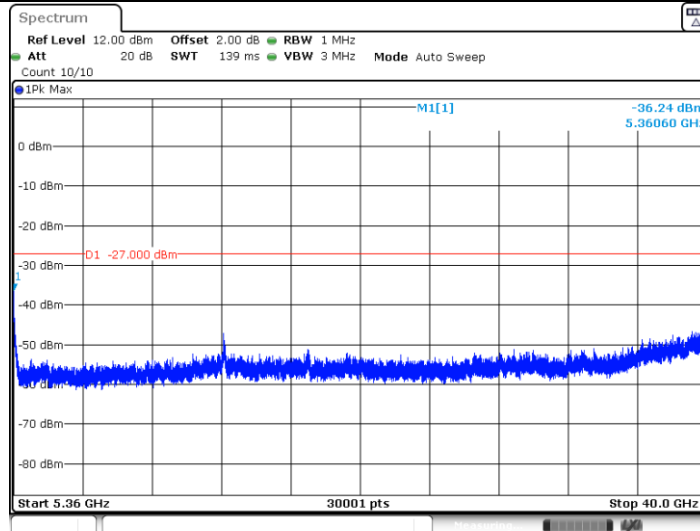
Date: 15.FEB.2022 17:32:50

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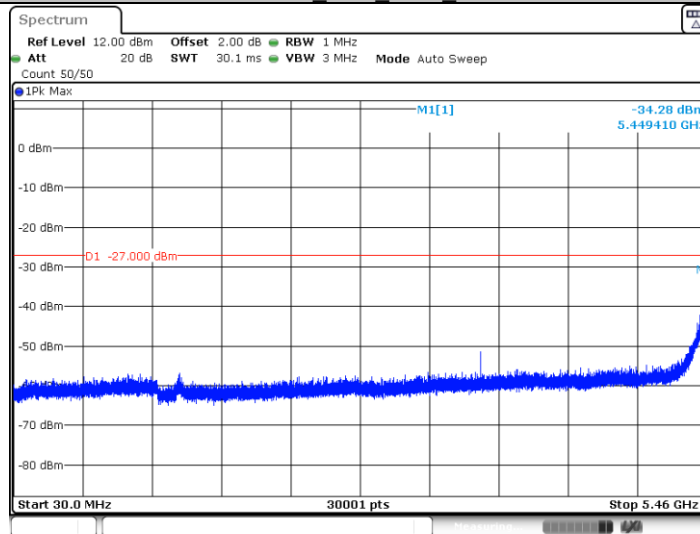
Date: 16.FEB.2022 10:16:38

11AC80SISO_Ant1_5290_5360~40000



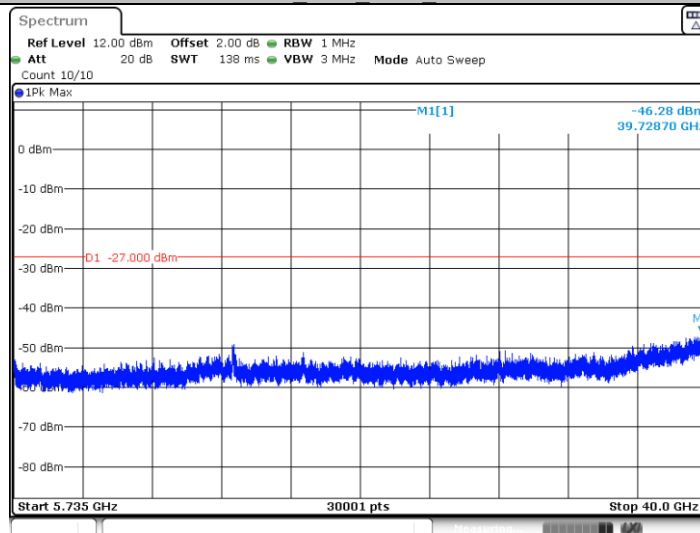
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11AC80SISO_Ant1_5530_30~5460



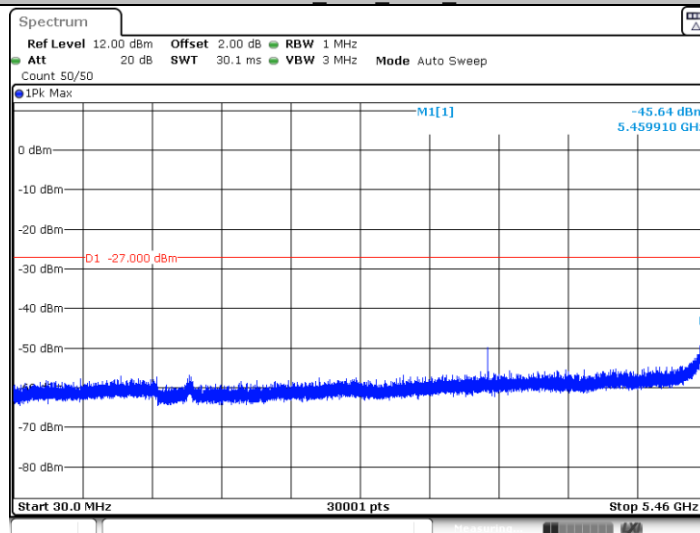
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11AC80SISO_Ant1_5530_5735~40000



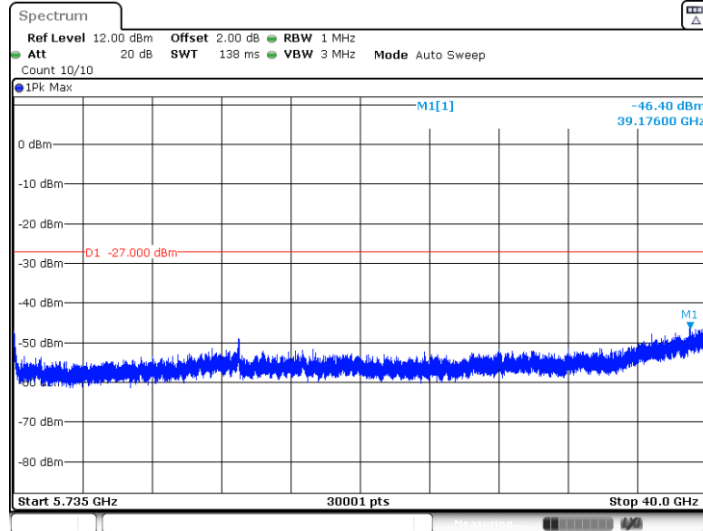
Date: 16.FEB.2022 10:18:23

11AC80SISO_Ant1_5610_30~5460



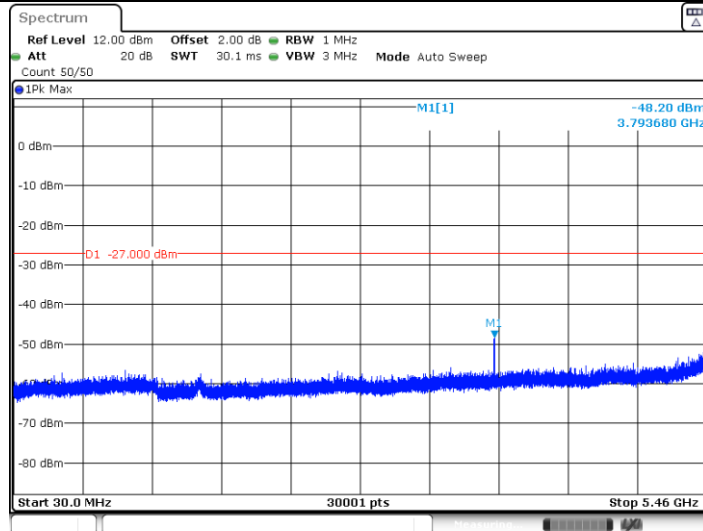
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11AC80SISO_Ant1_5610_5735~40000



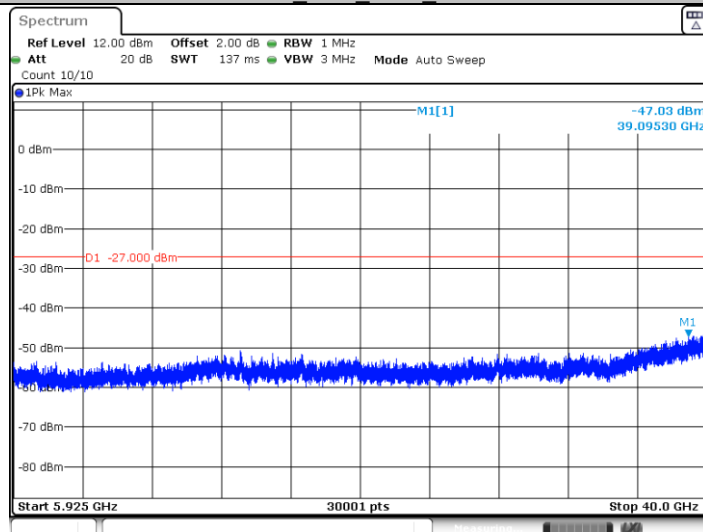
Date: 16.FEB.2022 10:20:04

11AC80SISO_Ant1_5690_30~5460



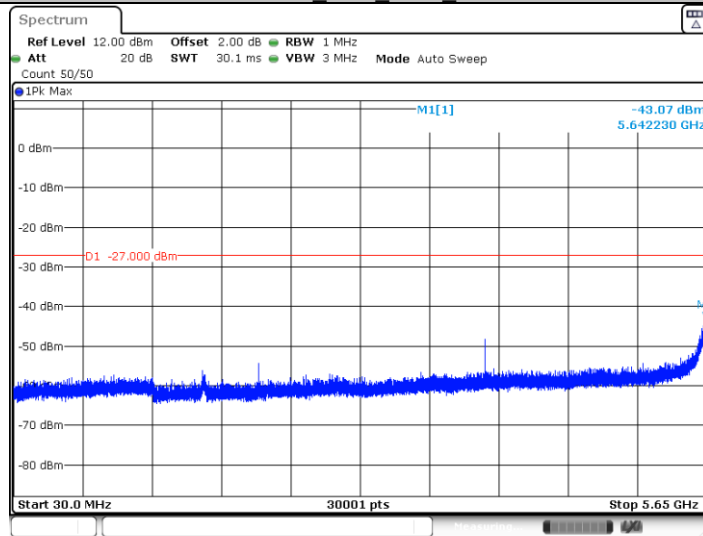
Date: 16.FEB.2022 10:22:04

11AC80SISO_Ant1_5690_5925~40000



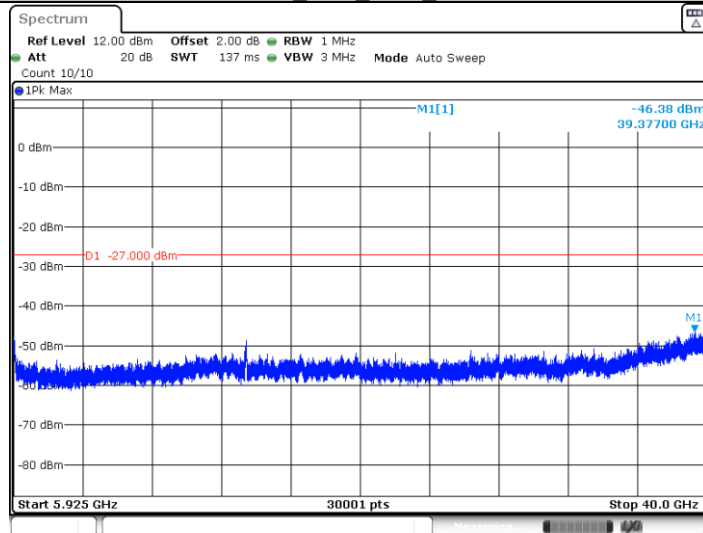
Date: 16.FEB.2022 10:22:09

11AC80SISO_Ant1_5775_30~5650



Date: 15.FEB.2022 17:35:37

11AC80SISO_Ant1_5775_5925~40000



Date: 15.FEB.2022 17:35:42

9.6 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.

User manual temperature is -20°C to +85°C, normal Temperature is +20°C.

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.

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

Remark: NV is normal Voltage: 3.6Vdc, HV is High Voltage: 4.14Vdc, LV is Low Voltage: 3.06Vdc, NT is normal Temperature: +20°C.

TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
11AC20SISO	Ant1	5180	NV	NT	-50000	-9.65251	PASS
			LV	NT	-52900	-10.212355	PASS
			HV	NT	-53900	-10.405405	PASS
		5200	NV	NT	-54900	-10.557692	PASS
			LV	NT	-55900	-10.75	PASS
			HV	NT	-55900	-10.75	PASS
		5240	NV	NT	-55900	-10.667939	PASS
			LV	NT	-56900	-10.858779	PASS
			HV	NT	-56900	-10.858779	PASS
		5260	NV	NT	-57900	-11.007605	PASS
			LV	NT	-57900	-11.007605	PASS
			HV	NT	-57900	-11.007605	PASS
		5280	NV	NT	-57900	-10.965909	PASS
			LV	NT	-58900	-11.155303	PASS
			HV	NT	-58900	-11.155303	PASS
		5320	NV	NT	-58900	-11.071429	PASS
			LV	NT	-58900	-11.071429	PASS
			HV	NT	-58900	-11.071429	PASS
		5500	NV	NT	-60900	-11.072727	PASS
			LV	NT	-60900	-11.072727	PASS
			HV	NT	-60900	-11.072727	PASS
		5580	NV	NT	-61900	-11.09319	PASS
			LV	NT	-61900	-11.09319	PASS
			HV	NT	-61900	-11.09319	PASS
		5700	NV	NT	-62900	-11.035088	PASS

			LV	NT	-63900	-11.210526	PASS
			HV	NT	-63900	-11.210526	PASS
			NV	NT	-62900	-10.996503	PASS
		5720	LV	NT	-63900	-11.171329	PASS
			HV	NT	-63900	-11.171329	PASS
			NV	NT	-64900	-11.29678	PASS
		5745	LV	NT	-63900	-11.122715	PASS
			HV	NT	-64900	-11.29678	PASS
			NV	NT	-63900	-11.045808	PASS
		5785	LV	NT	-64900	-11.218669	PASS
			HV	NT	-64900	-11.218669	PASS
			NV	NT	-64900	-11.141631	PASS
11AC40SISO	Ant1	5190	LV	NT	-57900	-11.156069	PASS
			HV	NT	-57900	-11.156069	PASS
			NV	NT	-57900	-11.070746	PASS
		5230	LV	NT	-57900	-11.070746	PASS
			HV	NT	-57900	-11.070746	PASS
			NV	NT	-58900	-11.176471	PASS
		5270	LV	NT	-58900	-11.176471	PASS
			HV	NT	-58900	-11.176471	PASS
			NV	NT	-58900	-11.092279	PASS
		5310	LV	NT	-58900	-11.092279	PASS
			HV	NT	-58900	-11.092279	PASS
			NV	NT	-60900	-11.052632	PASS
		5510	LV	NT	-61900	-11.23412	PASS
			HV	NT	-61900	-11.23412	PASS
			NV	NT	-61900	-11.153153	PASS
		5550	LV	NT	-61900	-11.153153	PASS
			HV	NT	-61900	-11.153153	PASS
			NV	NT	-62900	-11.093474	PASS
		5670	LV	NT	-62900	-11.093474	PASS
			HV	NT	-63900	-11.269841	PASS
			NV	NT	-63900	-11.190893	PASS
		5710	LV	NT	-63900	-11.190893	PASS
			HV	NT	-63900	-11.190893	PASS
			NV	NT	-63900	-11.103388	PASS
		5755	LV	NT	-63900	-11.103388	PASS
			HV	NT	-63900	-11.103388	PASS
			NV	NT	-63900	-11.026747	PASS
		5795	LV	NT	-64900	-11.19931	PASS
			HV	NT	-64900	-11.19931	PASS
			NV	NT	-57900	-11.113244	PASS
11AC80SISO	Ant1	5210	LV	NT	-57900	-11.113244	PASS
			HV	NT	-57900	-11.113244	PASS
			NV	NT	-58900	-11.134216	PASS
		5290	LV	NT	-58900	-11.134216	PASS
			HV	NT	-58900	-11.134216	PASS
			NV	NT	-60900	-11.012658	PASS
		5530	LV	NT	-61900	-11.19349	PASS
			HV	NT	-61900	-11.19349	PASS
			NV	NT	-61900	-11.033868	PASS
		5610	LV	NT	-62900	-11.212121	PASS
			HV	NT	-62900	-11.212121	PASS
			NV	NT	-62900	-11.054482	PASS
		5690	LV	NT	-62900	-11.054482	PASS
			HV	NT	-63900	-11.230228	PASS
			NV	NT	-63900	-11.064935	PASS
		5775	LV	NT	-64900	-11.238095	PASS
			HV	NT	-64900	-11.238095	PASS

TestMode	Antenna	Channel (MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
11AC20SISO	Ant1	5180	NV	-20	-54900	-10.598456	PASS
			NV	0	-54900	-10.598456	PASS
			NV	20	-54900	-10.598456	PASS
			NV	40	-54900	-10.598456	PASS
			NV	85	-55900	-10.791506	PASS
		5200	NV	-20	-56900	-10.942308	PASS
			NV	0	-55900	-10.75	PASS
			NV	20	-56900	-10.942308	PASS
			NV	40	-56900	-10.942308	PASS
			NV	85	-56900	-10.942308	PASS
		5240	NV	-20	-56900	-10.858779	PASS
			NV	0	-57900	-11.049618	PASS
			NV	20	-57900	-11.049618	PASS
			NV	40	-57900	-11.049618	PASS
			NV	85	-57900	-11.049618	PASS
		5260	NV	-20	-57900	-11.007605	PASS
			NV	0	-57900	-11.007605	PASS
			NV	20	-57900	-11.007605	PASS
			NV	40	-57900	-11.007605	PASS
			NV	85	-57900	-11.007605	PASS
		5280	NV	-20	-58900	-11.155303	PASS
			NV	0	-58900	-11.155303	PASS
			NV	20	-58900	-11.155303	PASS
			NV	40	-58900	-11.155303	PASS
			NV	85	-58900	-11.155303	PASS
		5320	NV	-20	-58900	-11.071429	PASS
			NV	0	-58900	-11.071429	PASS
			NV	20	-59900	-11.259398	PASS
			NV	40	-58900	-11.071429	PASS
			NV	85	-58900	-11.071429	PASS
		5500	NV	-20	-60900	-11.072727	PASS
			NV	0	-60900	-11.072727	PASS
			NV	20	-61900	-11.254545	PASS
			NV	40	-61900	-11.254545	PASS
			NV	85	-61900	-11.254545	PASS
		5580	NV	-20	-62900	-11.272401	PASS
			NV	0	-62900	-11.272401	PASS
			NV	20	-62900	-11.272401	PASS
			NV	40	-61900	-11.09319	PASS
			NV	85	-62900	-11.272401	PASS
		5700	NV	-20	-63900	-11.210526	PASS
			NV	0	-63900	-11.210526	PASS
			NV	20	-63900	-11.210526	PASS
			NV	40	-63900	-11.210526	PASS
			NV	85	-63900	-11.210526	PASS
		5720	NV	-20	-63900	-11.171329	PASS
			NV	0	-63900	-11.171329	PASS
			NV	20	-63900	-11.171329	PASS
			NV	40	-63900	-11.171329	PASS
			NV	85	-63900	-11.171329	PASS
		5745	NV	-20	-63900	-11.122715	PASS
			NV	0	-64900	-11.29678	PASS
			NV	20	-64900	-11.29678	PASS
			NV	40	-63900	-11.122715	PASS
			NV	85	-64900	-11.29678	PASS
		5785	NV	-20	-64900	-11.218669	PASS
			NV	0	-64900	-11.218669	PASS
			NV	20	-64900	-11.218669	PASS
			NV	40	-64900	-11.218669	PASS
			NV	85	-64900	-11.218669	PASS

		5825	NV	-20	-64900	-11.141631	PASS
			NV	0	-64900	-11.141631	PASS
			NV	20	-64900	-11.141631	PASS
			NV	40	-64900	-11.141631	PASS
			NV	85	-64900	-11.141631	PASS
11AC40SISO	Ant1	5190	NV	-20	-57900	-11.156069	PASS
			NV	0	-57900	-11.156069	PASS
			NV	20	-57900	-11.156069	PASS
			NV	40	-57900	-11.156069	PASS
			NV	85	-57900	-11.156069	PASS
		5230	NV	-20	-58900	-11.26195	PASS
			NV	0	-58900	-11.26195	PASS
			NV	20	-58900	-11.26195	PASS
			NV	40	-58900	-11.26195	PASS
			NV	85	-58900	-11.26195	PASS
		5270	NV	-20	-58900	-11.176471	PASS
			NV	0	-58900	-11.176471	PASS
			NV	20	-58900	-11.176471	PASS
			NV	40	-58900	-11.176471	PASS
			NV	85	-58900	-11.176471	PASS
		5310	NV	-20	-59900	-11.280603	PASS
			NV	0	-59900	-11.280603	PASS
			NV	20	-59900	-11.280603	PASS
			NV	40	-59900	-11.280603	PASS
			NV	85	-58900	-11.092279	PASS
		5510	NV	-20	-61900	-11.23412	PASS
			NV	0	-61900	-11.23412	PASS
			NV	20	-61900	-11.23412	PASS
			NV	40	-61900	-11.23412	PASS
			NV	85	-61900	-11.23412	PASS
		5550	NV	-20	-61900	-11.153153	PASS
			NV	0	-61900	-11.153153	PASS
			NV	20	-61900	-11.153153	PASS
			NV	40	-61900	-11.153153	PASS
			NV	85	-61900	-11.153153	PASS
		5670	NV	-20	-63900	-11.269841	PASS
			NV	0	-63900	-11.269841	PASS
			NV	20	-63900	-11.269841	PASS
			NV	40	-63900	-11.269841	PASS
			NV	85	-63900	-11.269841	PASS
		5710	NV	-20	-63900	-11.190893	PASS
			NV	0	-63900	-11.190893	PASS
			NV	20	-63900	-11.190893	PASS
			NV	40	-63900	-11.190893	PASS
			NV	85	-63900	-11.190893	PASS
		5755	NV	-20	-64900	-11.27715	PASS
			NV	0	-63900	-11.103388	PASS
			NV	20	-64900	-11.27715	PASS
			NV	40	-64900	-11.27715	PASS
			NV	85	-63900	-11.103388	PASS
		5795	NV	-20	-64900	-11.19931	PASS
			NV	0	-64900	-11.19931	PASS
			NV	20	-64900	-11.19931	PASS
			NV	40	-64900	-11.19931	PASS
			NV	85	-64900	-11.19931	PASS
11AC80SISO	Ant1	5210	NV	-20	-57900	-11.113244	PASS
			NV	0	-57900	-11.113244	PASS
			NV	20	-57900	-11.113244	PASS
			NV	40	-57900	-11.113244	PASS
			NV	85	-57900	-11.113244	PASS
		5290	NV	-20	-58900	-11.134216	PASS
			NV	0	-58900	-11.134216	PASS
			NV	20	-58900	-11.134216	PASS
			NV	40	-58900	-11.134216	PASS

		5530	NV	85	-58900	-11.134216	PASS
			NV	-20	-61900	-11.19349	PASS
			NV	0	-61900	-11.19349	PASS
			NV	20	-61900	-11.19349	PASS
			NV	40	-61900	-11.19349	PASS
			NV	85	-61900	-11.19349	PASS
		5610	NV	-20	-62900	-11.212121	PASS
			NV	0	-62900	-11.212121	PASS
			NV	20	-62900	-11.212121	PASS
			NV	40	-62900	-11.212121	PASS
			NV	85	-62900	-11.212121	PASS
		5690	NV	-20	-63900	-11.230228	PASS
			NV	0	-63900	-11.230228	PASS
			NV	20	-63900	-11.230228	PASS
			NV	40	-63900	-11.230228	PASS
			NV	85	-63900	-11.230228	PASS
		5775	NV	-20	-64900	-11.238095	PASS
			NV	0	-64900	-11.238095	PASS
			NV	20	-64900	-11.238095	PASS
			NV	40	-64900	-11.238095	PASS
			NV	85	-64900	-11.238095	PASS

9.7 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

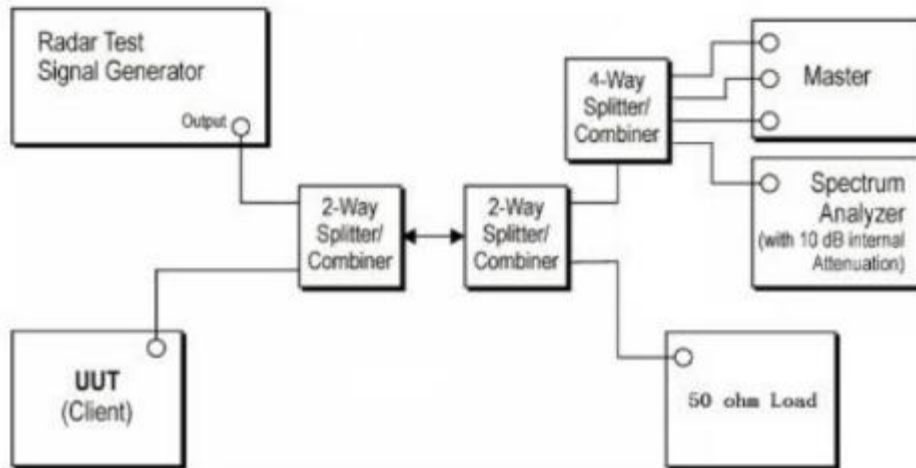
According to KDB 905462 D02 Table 4 DFS Response Requirement Values

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:

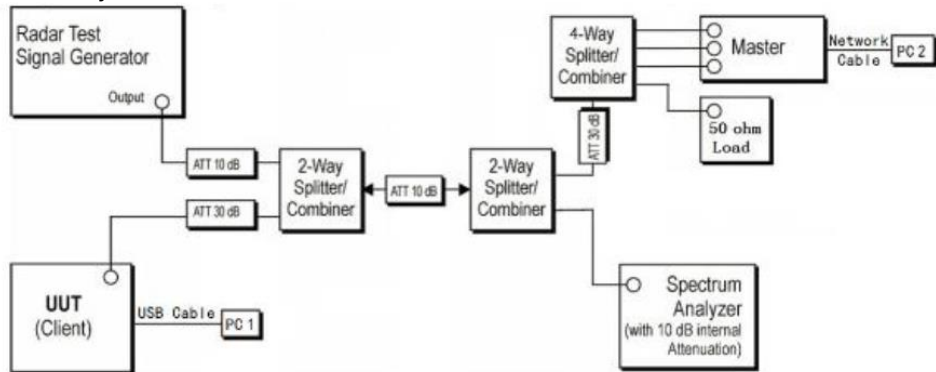
Channel Closing Transmission Time, Channel Move Time and Non-Occupancy Period.

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:

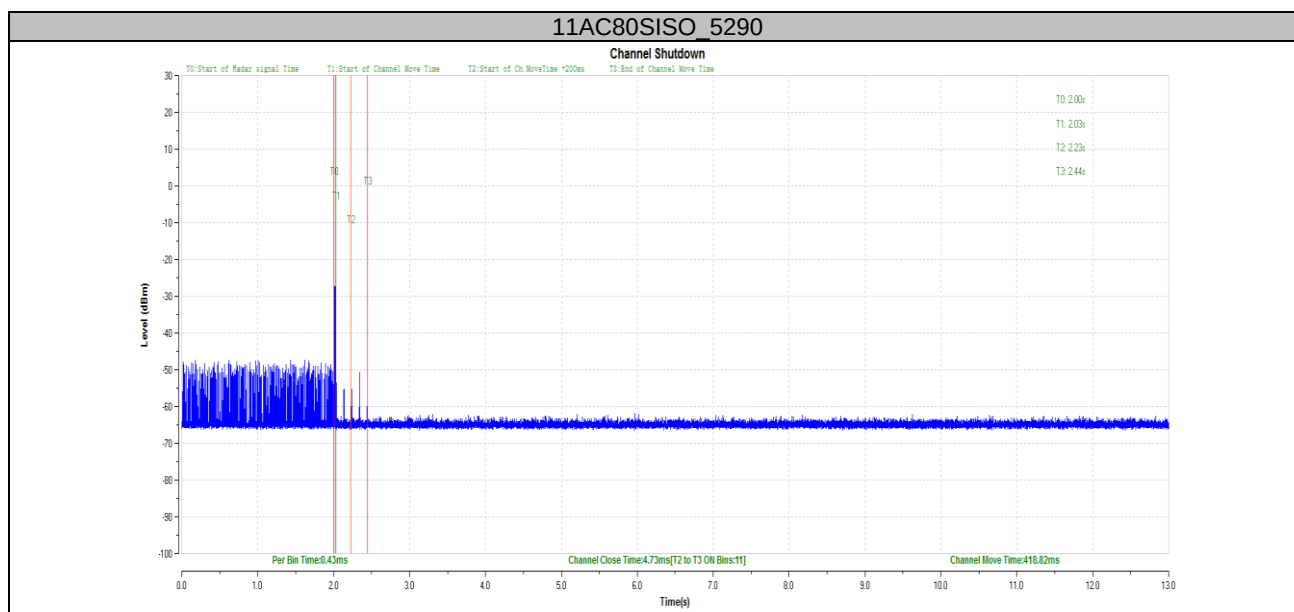
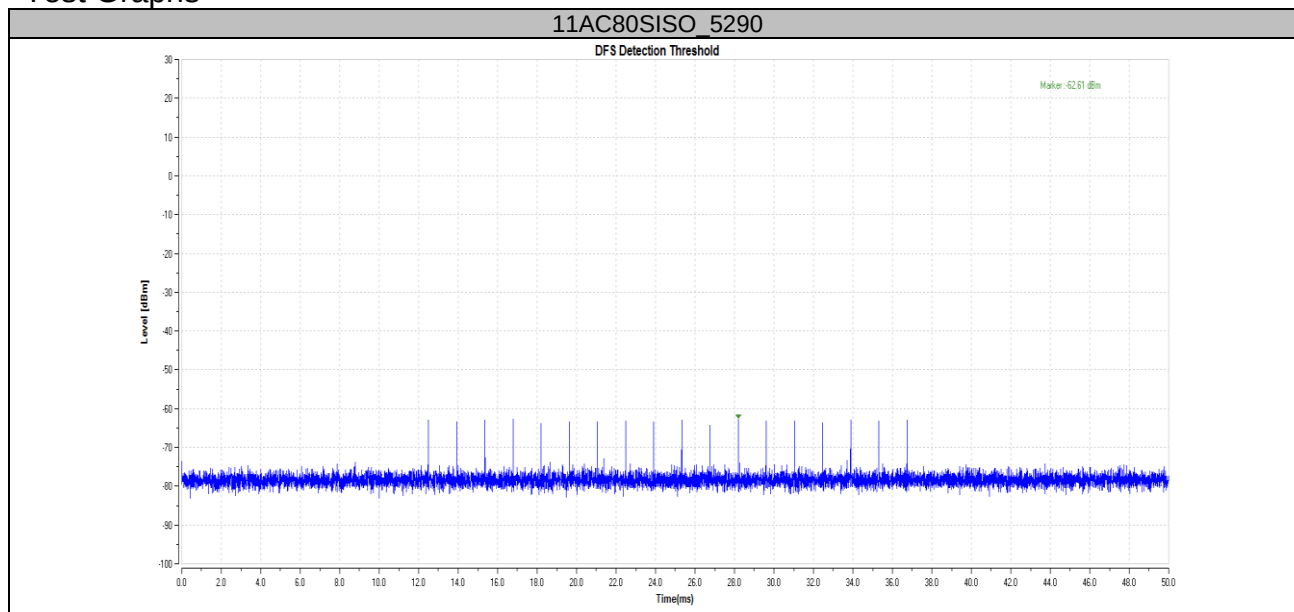
Setup for client with injection at the master.

**Test Result**

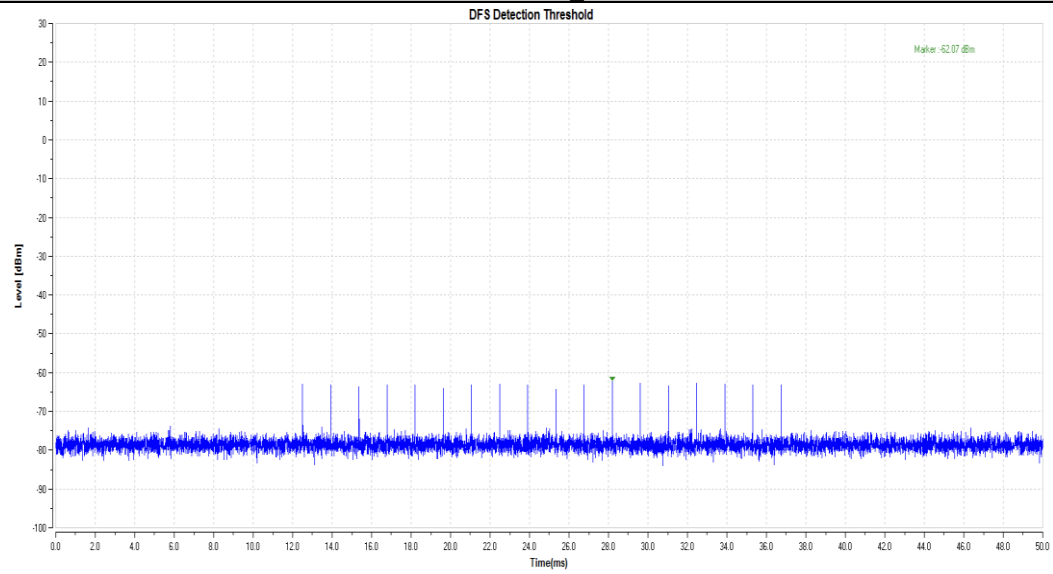
Clause	Test Parameter	Remarks	Pass/Fail
15.407	DFS Detection Threshold	No Applicable	N/A
15.407	Channel Availability Check time	No Applicable	N/A
15.407	Channel Move time	Applicable	Pass
15.407	Channel Closing Transmission Time	Applicable	Pass
15.407	Non-Occupancy Period	Applicable	Pass
15.407	Uniform 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
11AC80SISO	5290	4.73	60	418.82	10000	PASS
	5530	7.31	60	448.06	10000	PASS

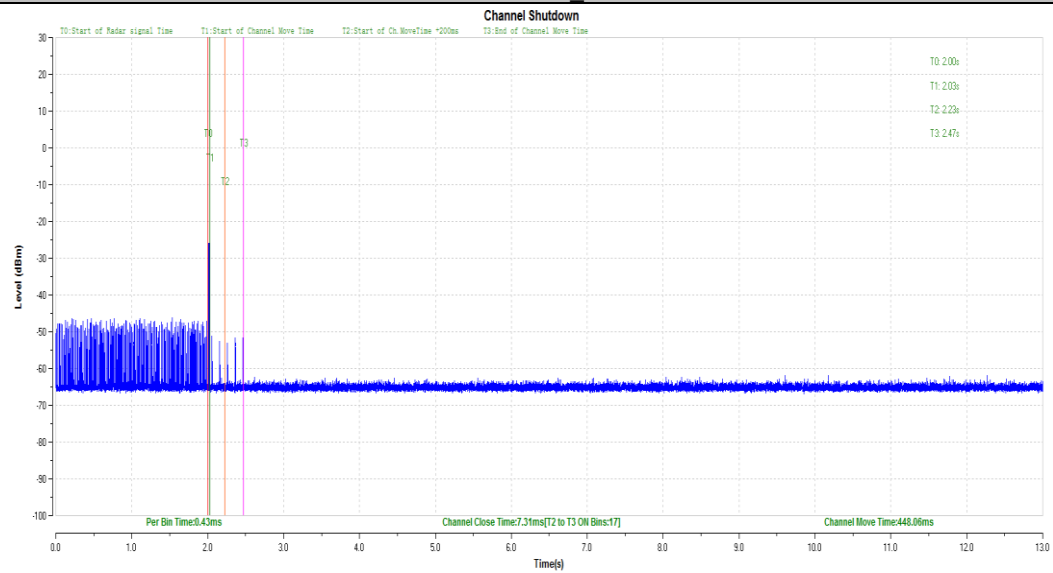
Test Graphs



11AC80SISO_5530



11AC80SISO_5530



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	68-4-74-19-002	102590	1	2022-6-4
LISN	Rohde & Schwarz	ENV216	68-4-87-19-001	102472	1	2022-6-5
Attenuator	Shanghai Huaxiang	TS2-26-3	68-4-81-16-003	080928189	1	2022-6-3
Test software	Rohde & Schwarz	EMC32	68-4-90-19-005-A01	Version10.35.02	N/A	N/A
Shielding Room	TDK	CSR #2	68-4-90-19-005	----	1	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	2022-6-4
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9162	68-4-80-19-003	284	1	2022-2-2
Wave Guide Antenna	ETS	3117	68-4-80-19-001	00218954	1	2022-5-24
Pre-amplifier	Rohde & Schwarz	SCU 18F	68-4-29-19-001	100745	1	2022-10-10
Pre-amplifier	Rohde & Schwarz	SCU 18F	68-4-29-19-002	100746	1	2022-10-10
Sideband Horn Antenna	Q-PAR	QWH-SL-18-40-K-SG	68-4-80-14-008	12827	1	2022-7-21
Pre-amplifier	Rohde & Schwarz	SCU 40A	68-4-29-14-002	100432	1	2022-7-27
Attenuator	Mini-circuits	UNAT-6+	68-4-81-21-002	15542	1	2022-8-23
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 Analyzer	Rohde & Schwarz	FSV40	68-4-74-14-004	101030	1	2022-6-3

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-3000MHz	Horizontal: 4.67dB; Vertical: 4.65dB;
Uncertainty for Radiated Spurious Emission 3000MHz-18000MHz	Horizontal: 4.77dB; Vertical: 4.75dB;
Uncertainty for Radiated Spurious Emission 18000MHz-40000MHz	Horizontal: 3.12dB; Vertical: 3.10dB;
Uncertainty for Conducted RF test	RF Power Conducted: 1.27dB Frequency test involved: 0.6×10^{-7} or 1%

---THE END OF REPORT---