j) Adjust the modulation domain analyzer to trigger on the falling edge of the transmitter waveform in order to capture a single-shot turn-off transient of the transmitter signal.

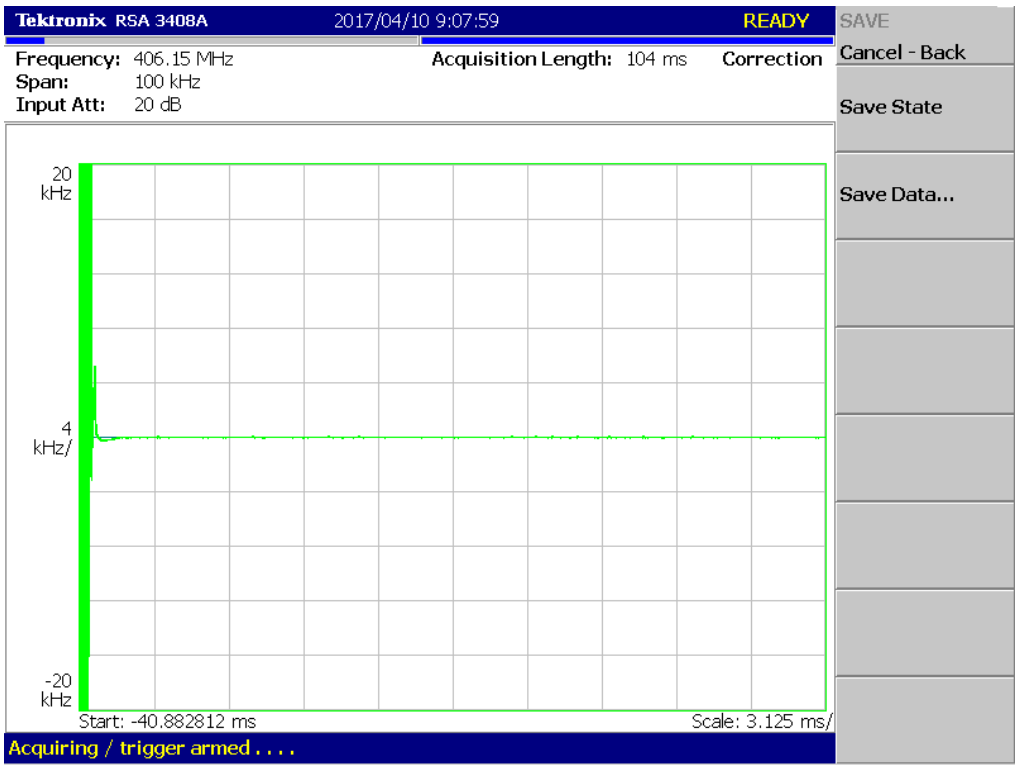
k) Adjust the display of the modulation domain analyzer for proper viewing of the transmitter transient behavior. Set the time base reference to the right for observing the transmitter turn-off transient.

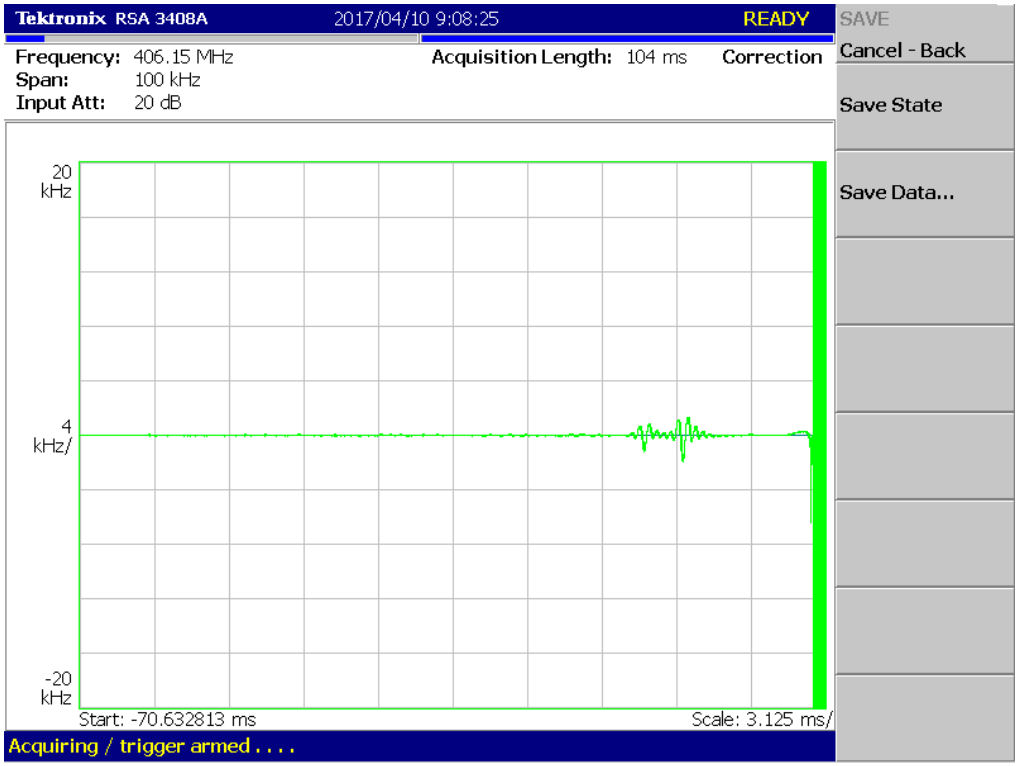
l) Unkey the transmitter.

m) Observe the stored display of the modulation domain analyzer. The signal trace shall be maintained within the allowable limits during the period t_3.

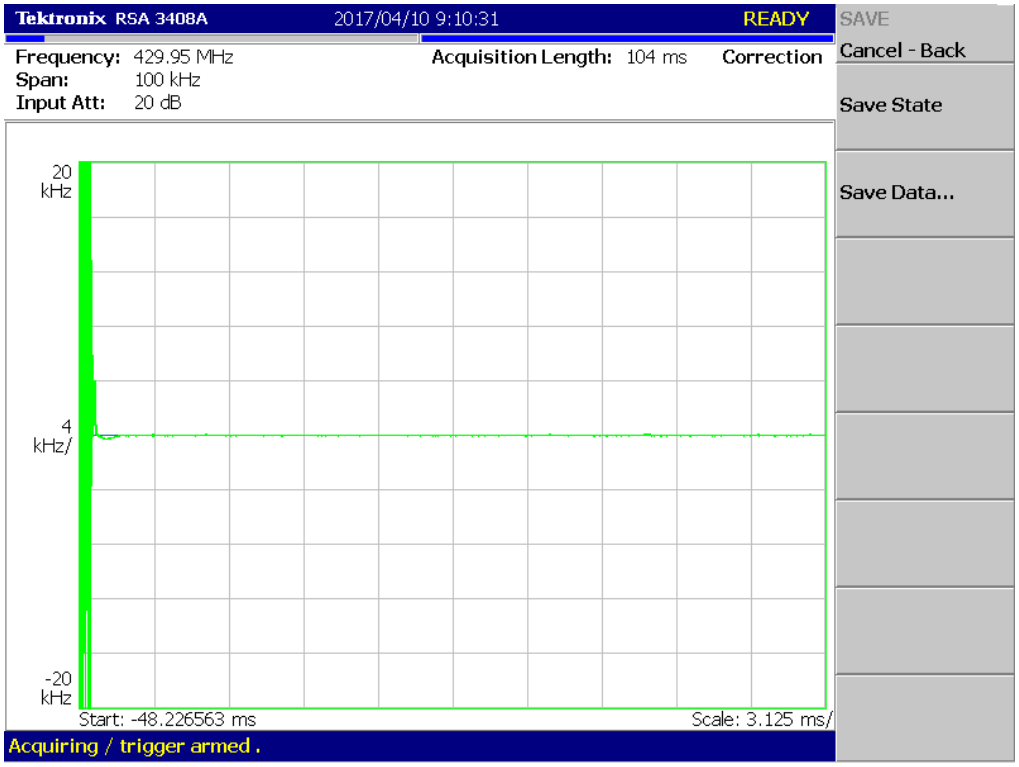
▣ Plots of Transient Frequency Behavior

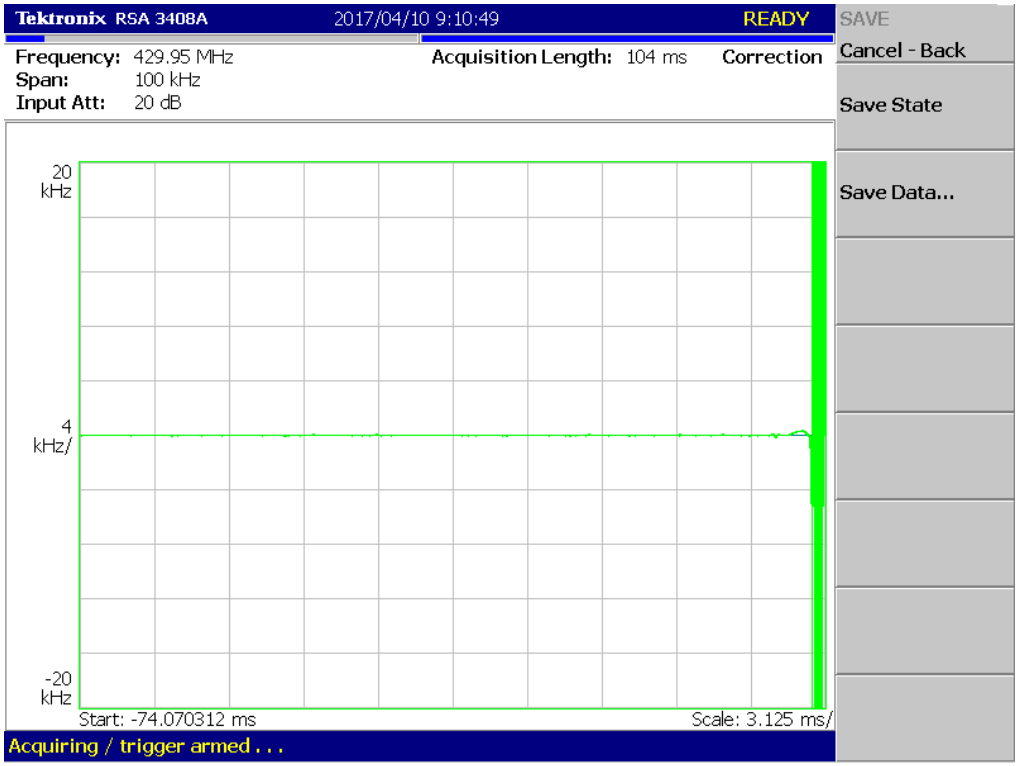
(11K0F3E _ 406.15 MHz)_High



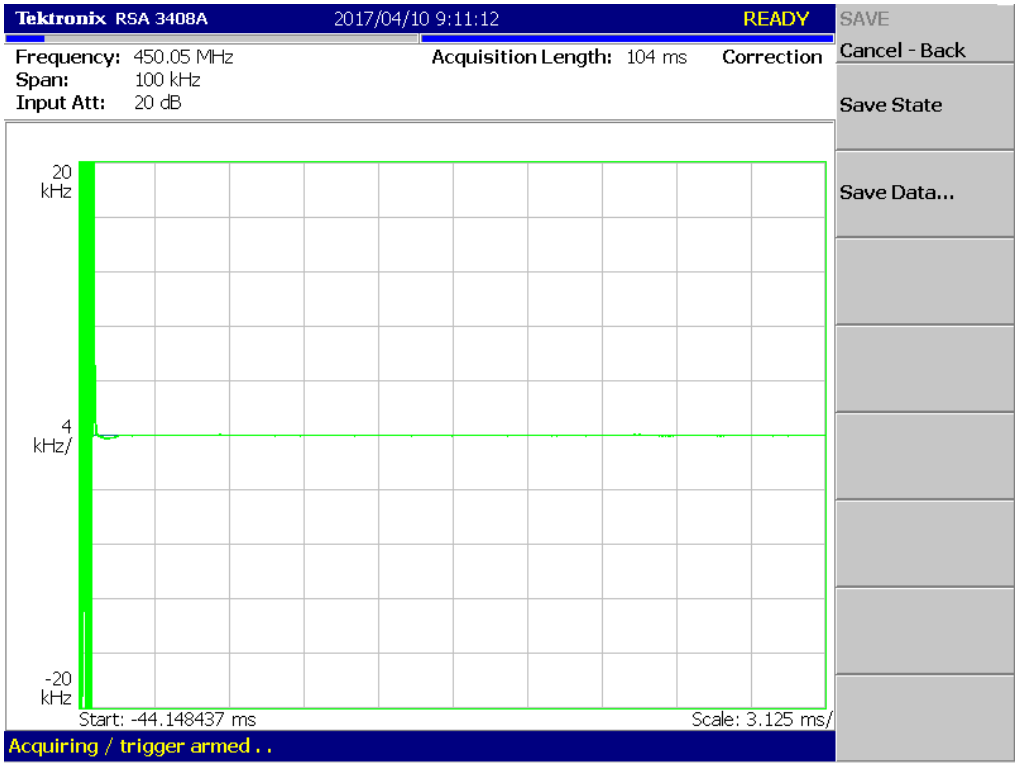


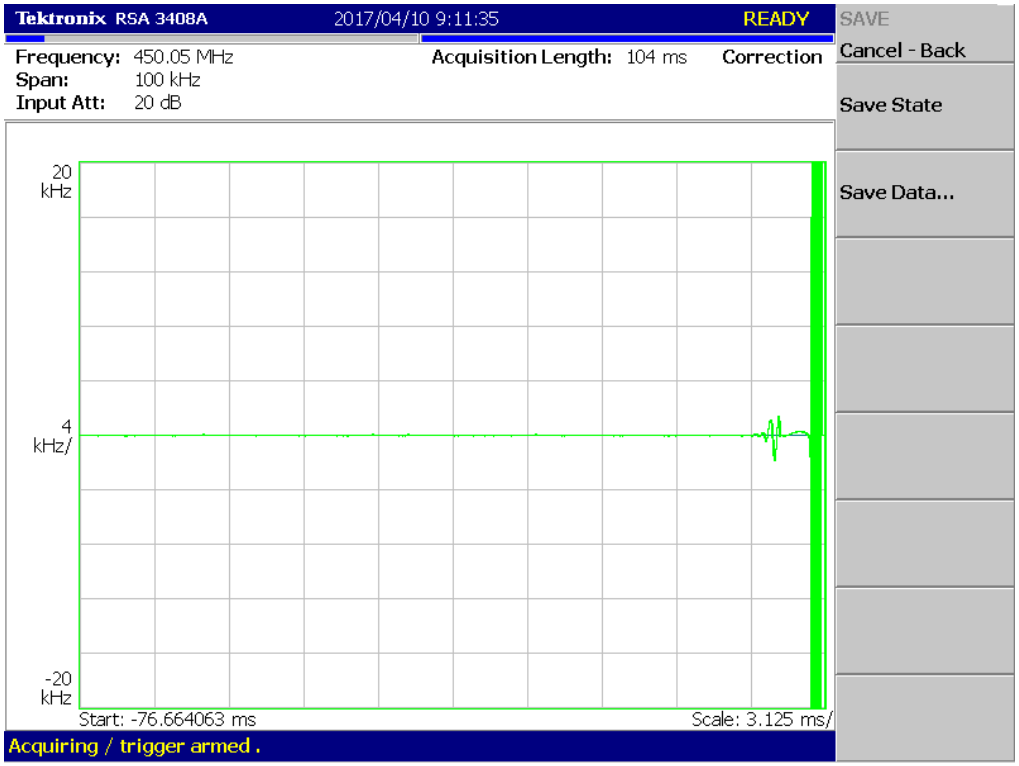
(11K0F3E _ 429.95 MHz)_High



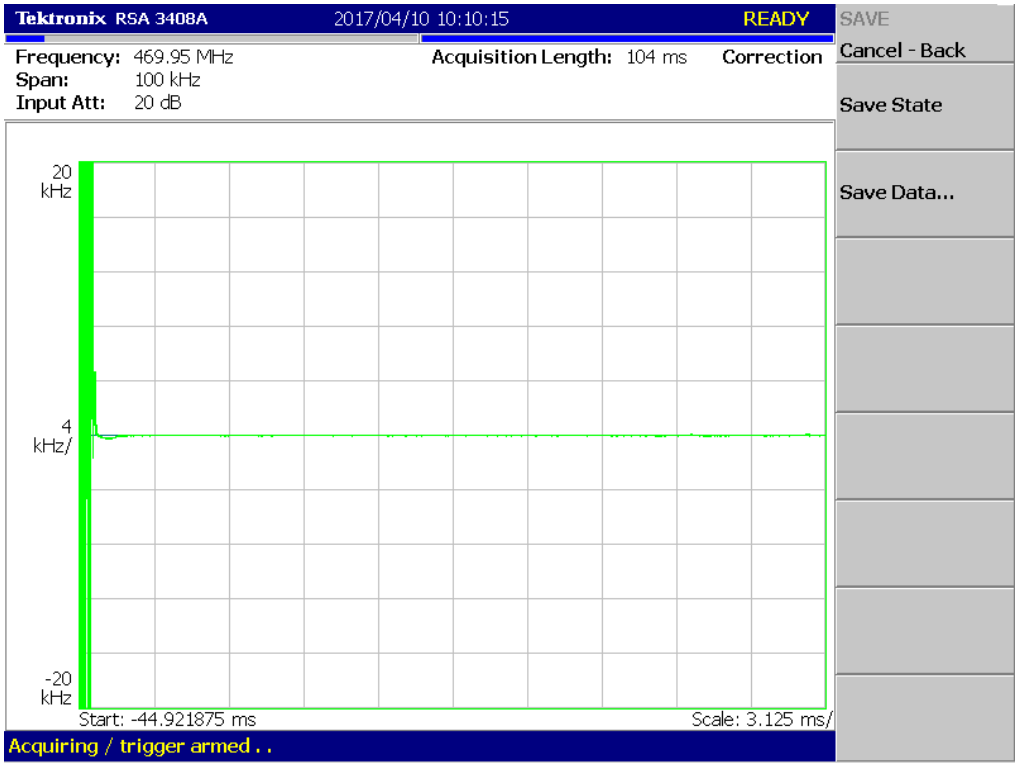


(11K0F3E _ 450.05 MHz)_High

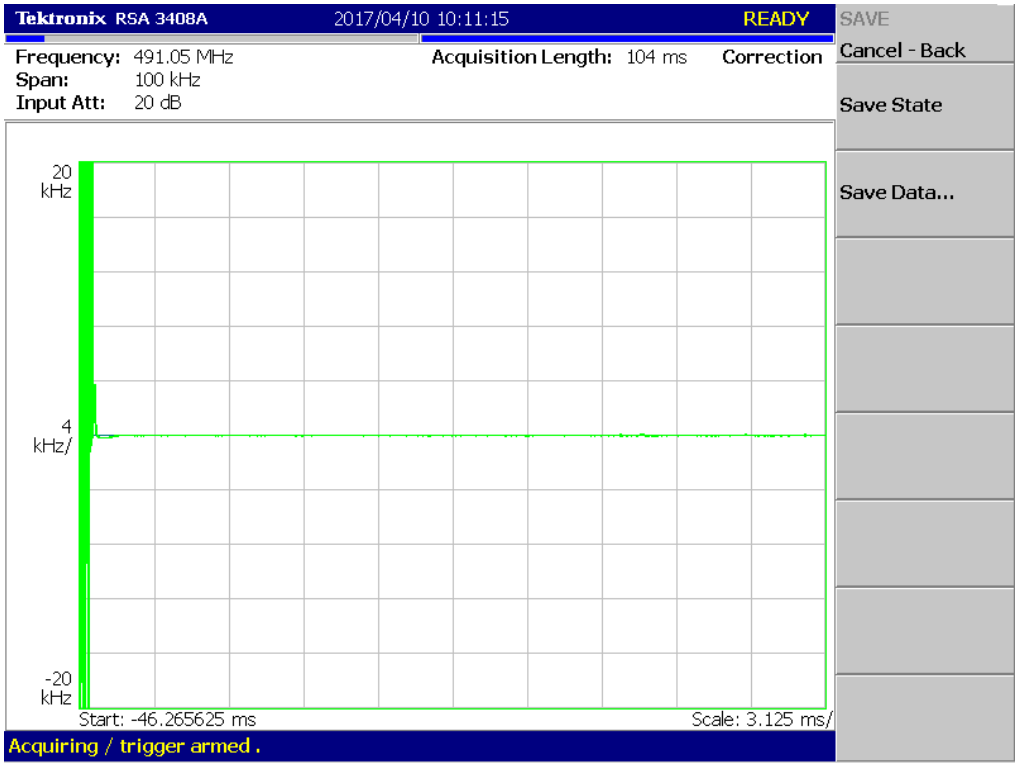


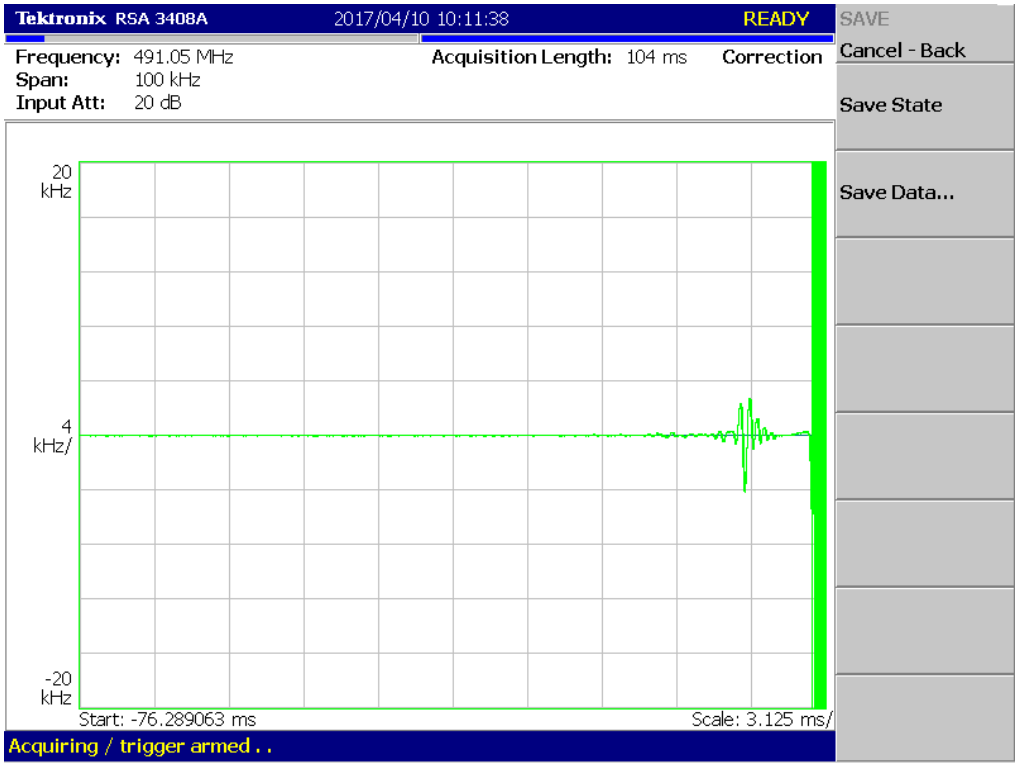


(11K0F3E _ 469.95 MHz)_High

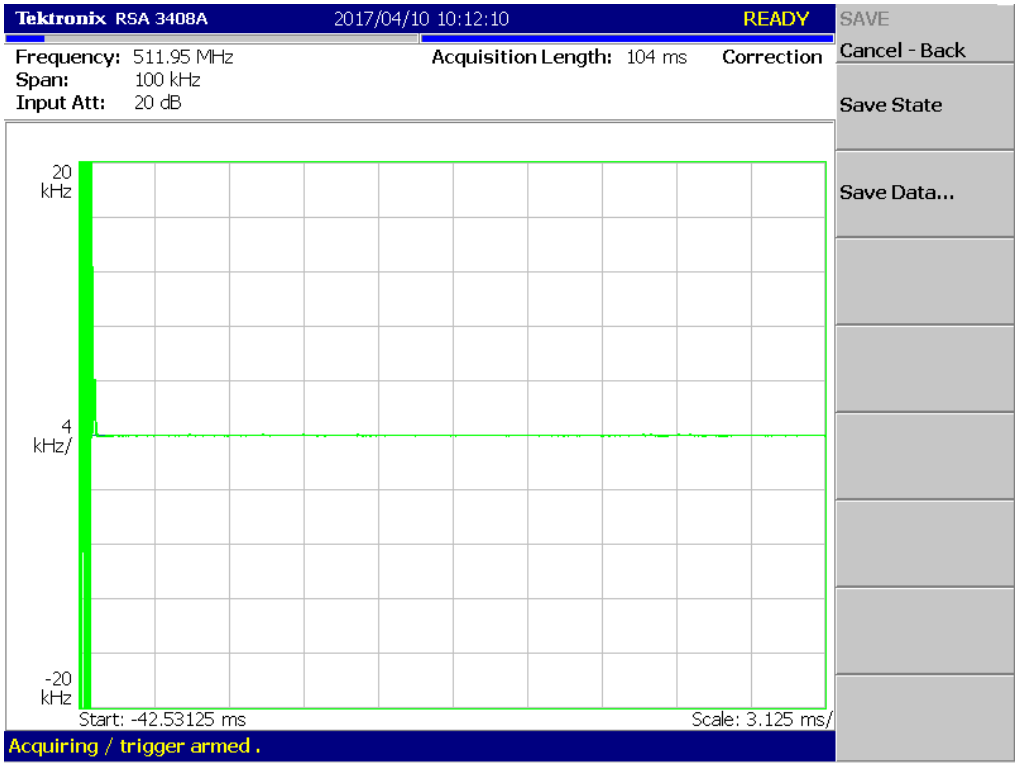


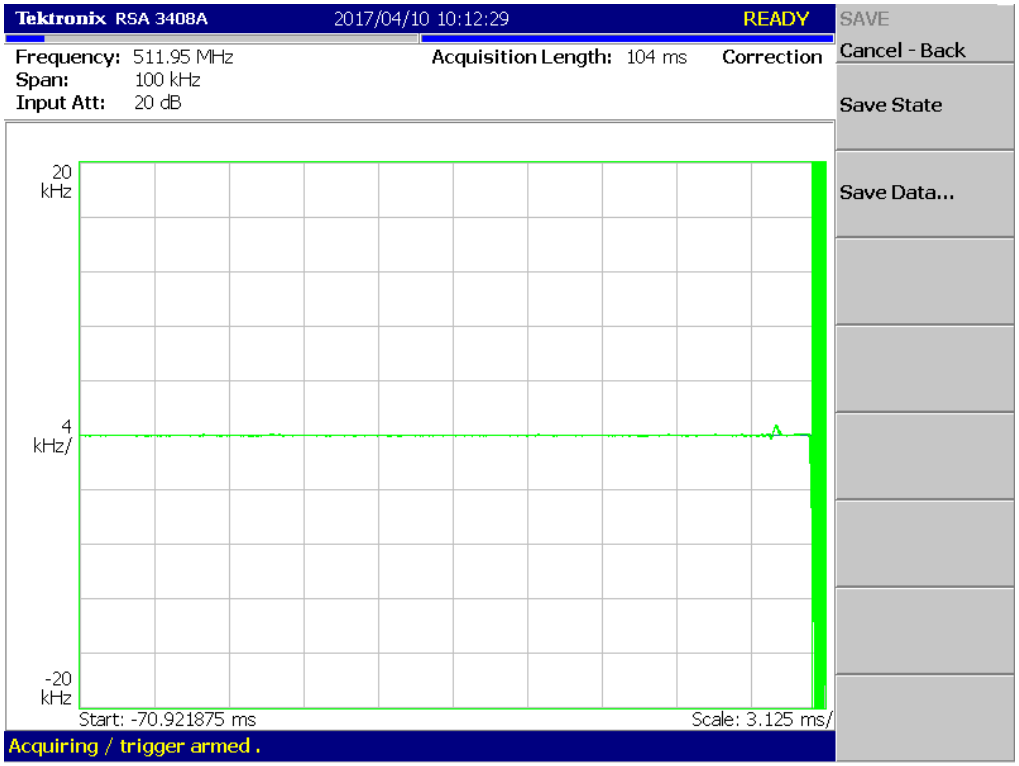
(11K0F3E _ 491.05 MHz)_High



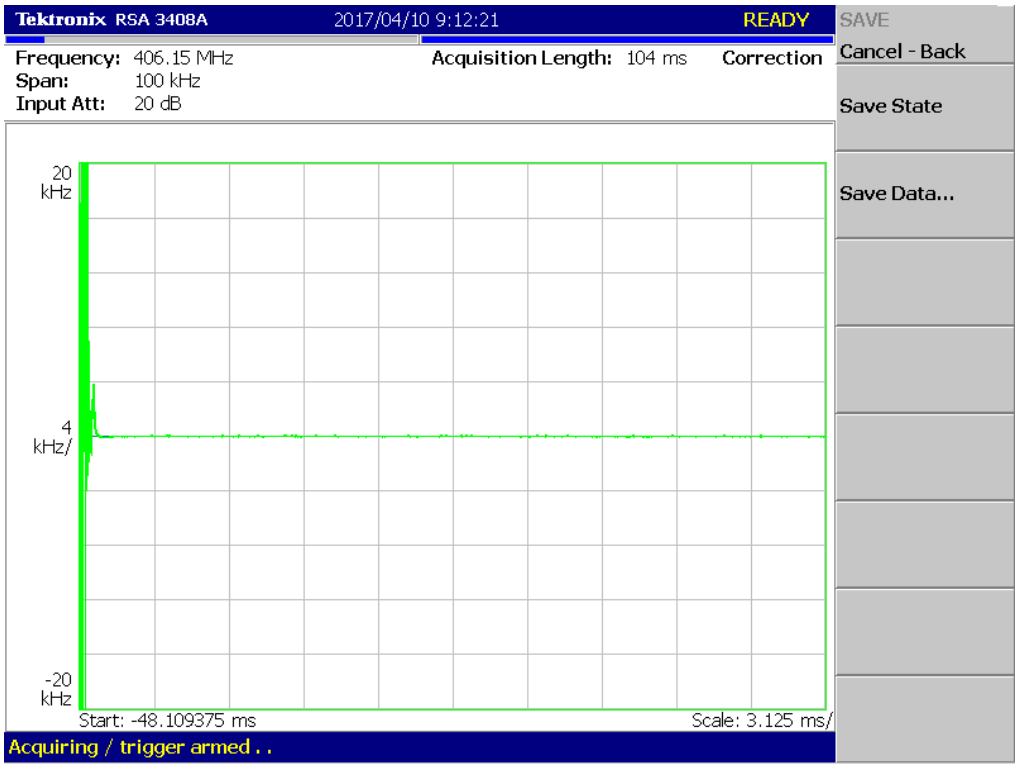


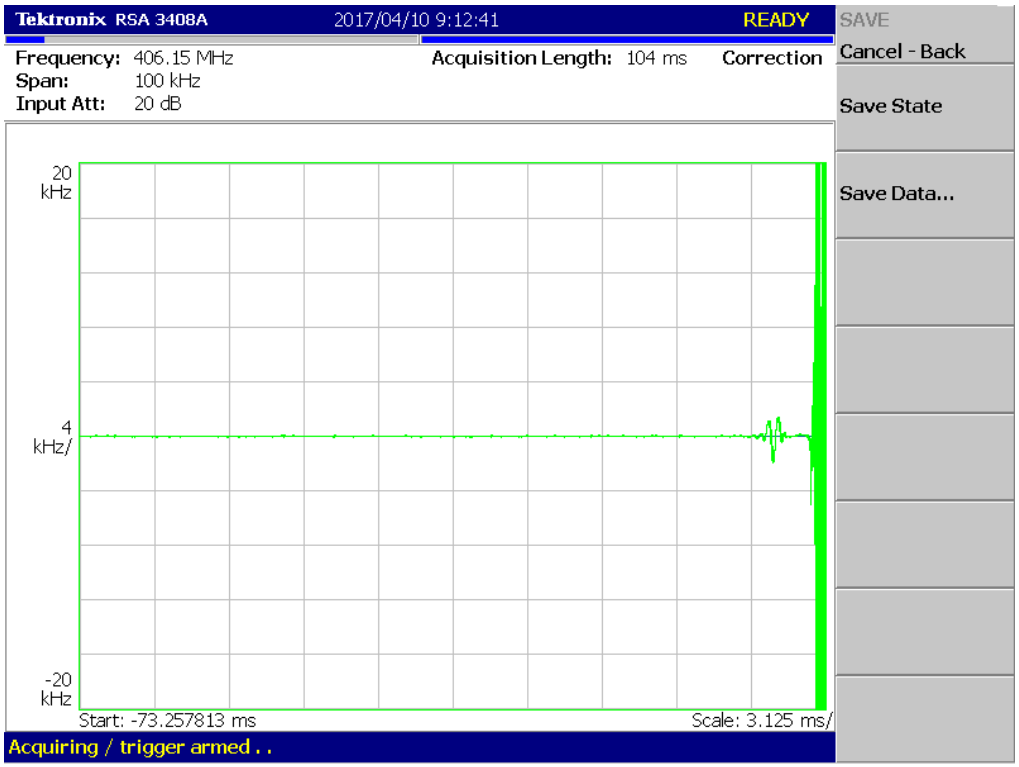
(11K0F3E _ 511.95 MHz)_High



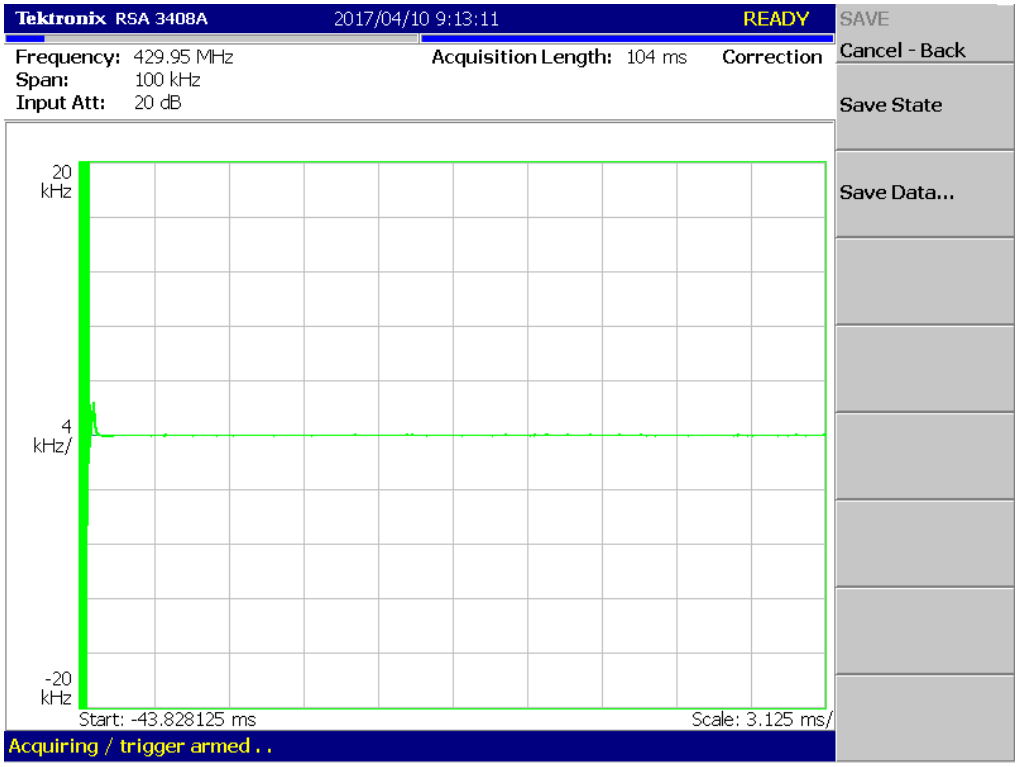


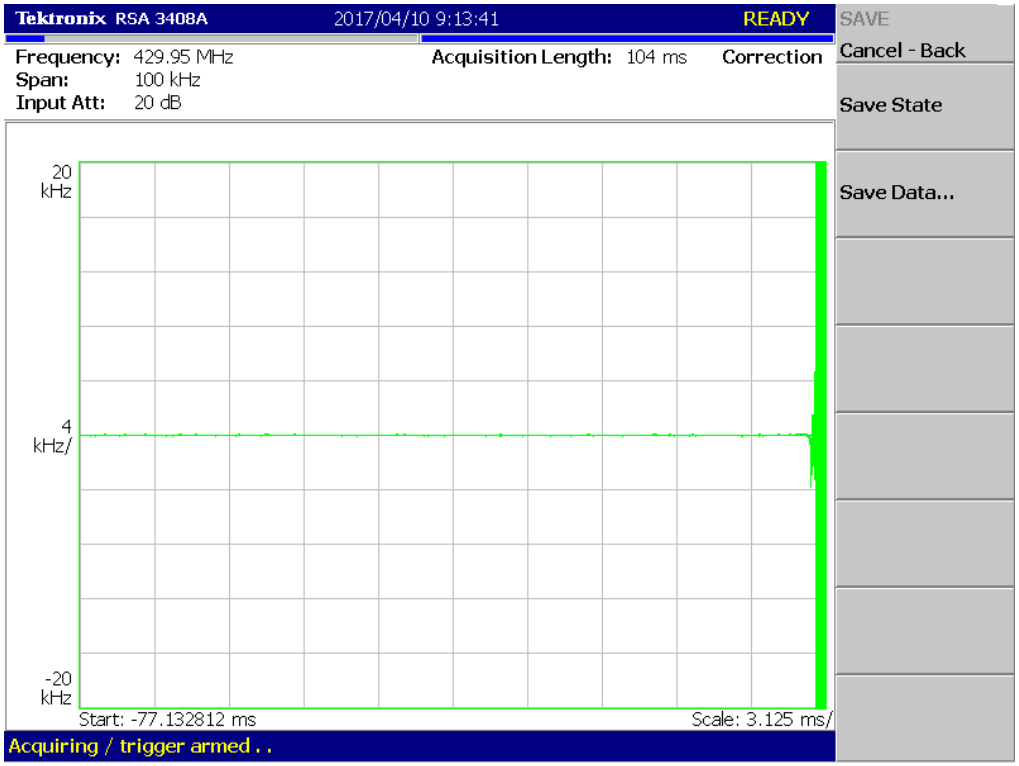
(11K0F3E _ 406.15 MHz)_Low



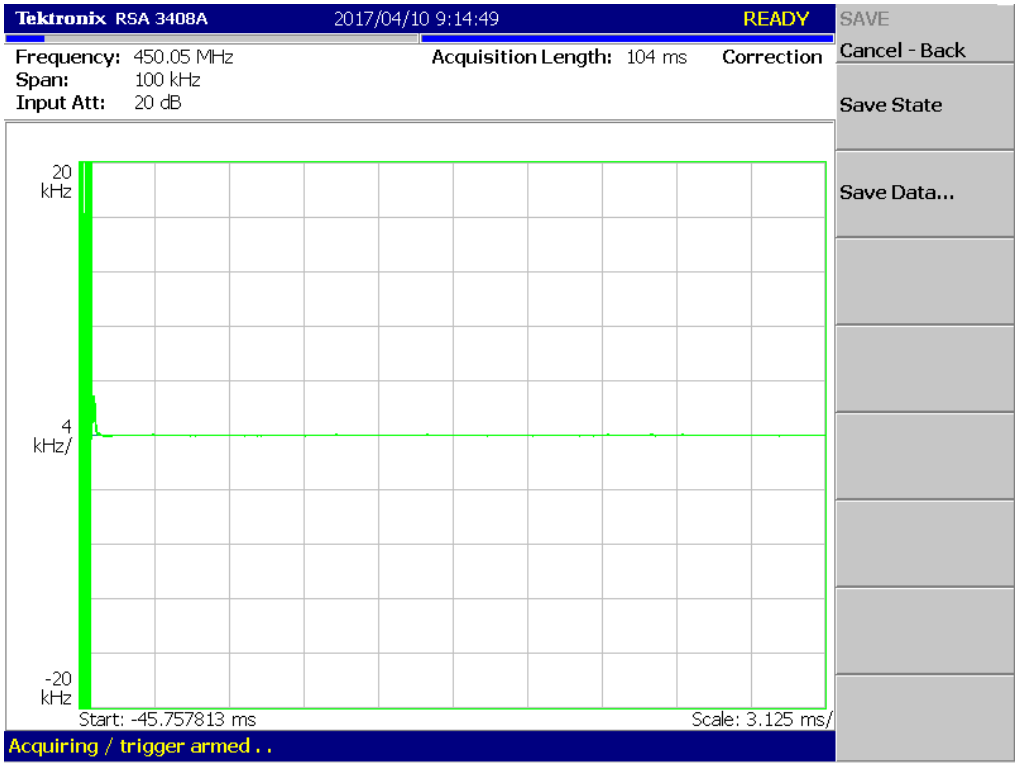


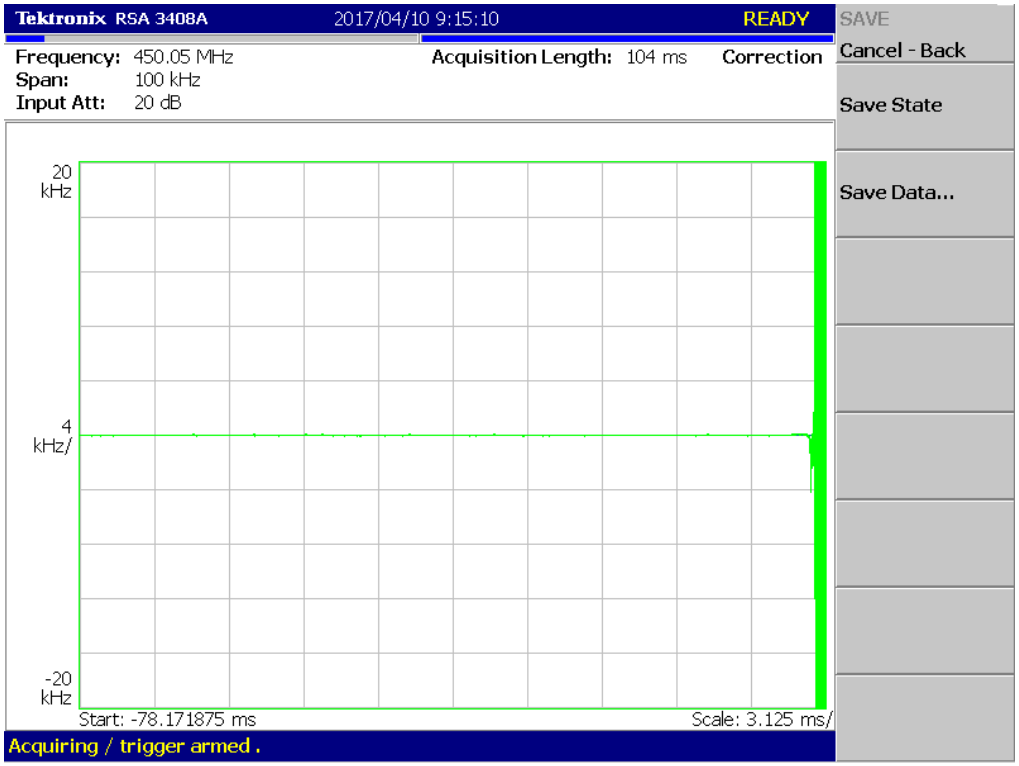
(11K0F3E _ 429.95 MHz)_Low



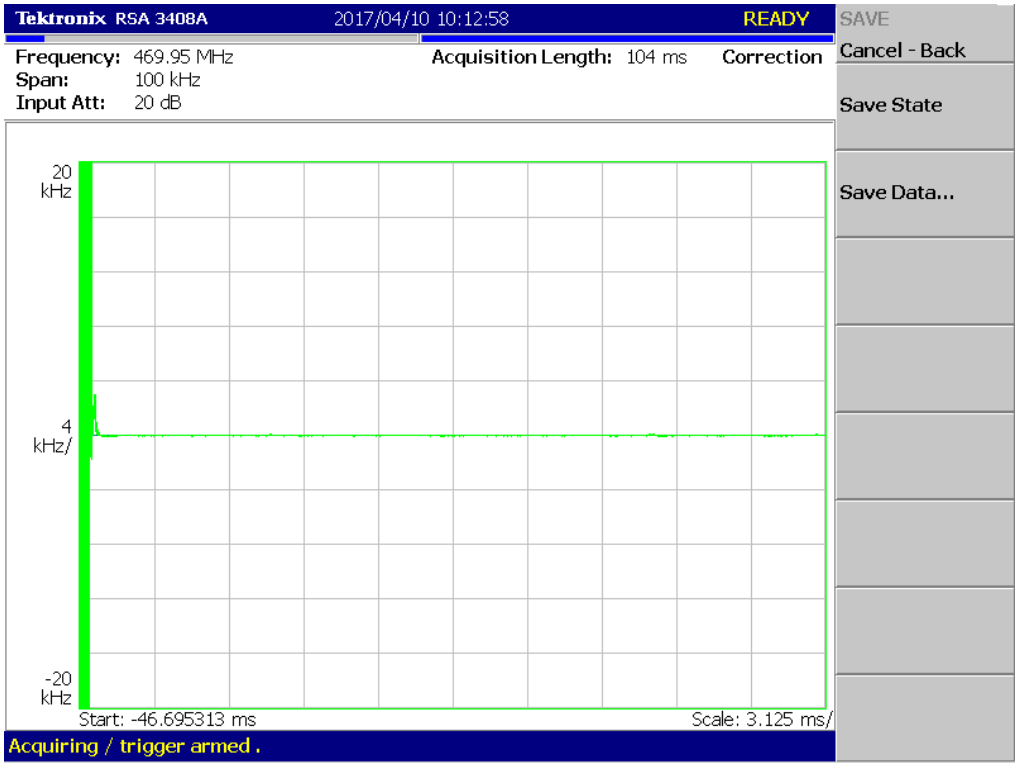


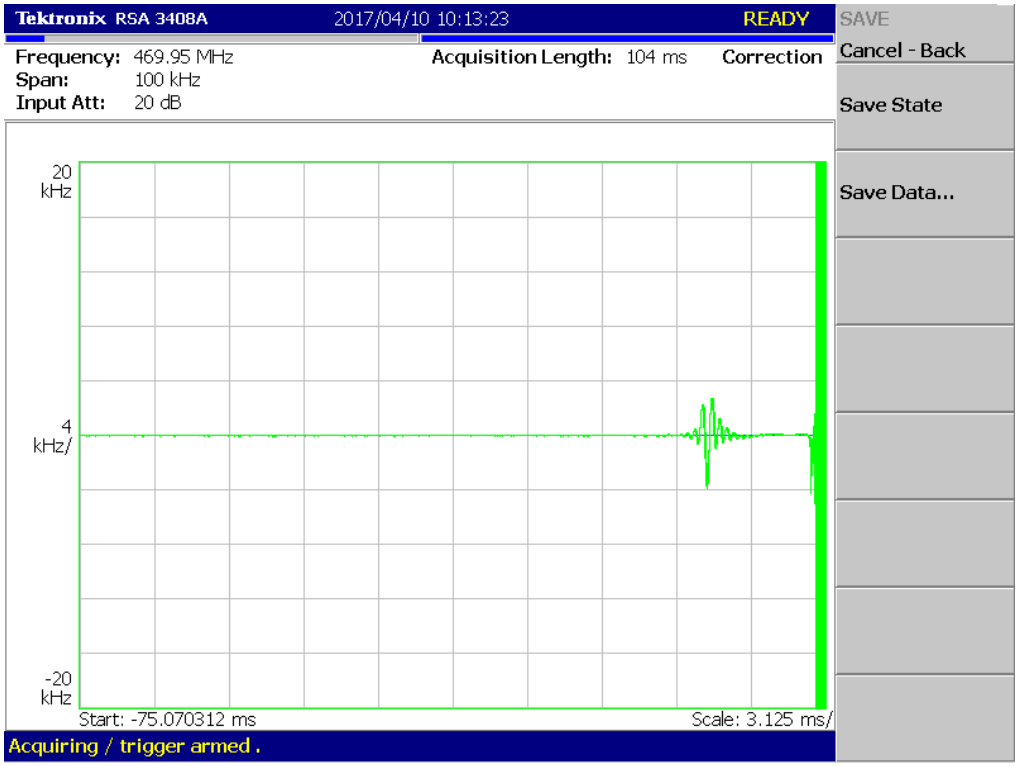
(11K0F3E _ 450.05 MHz)_Low



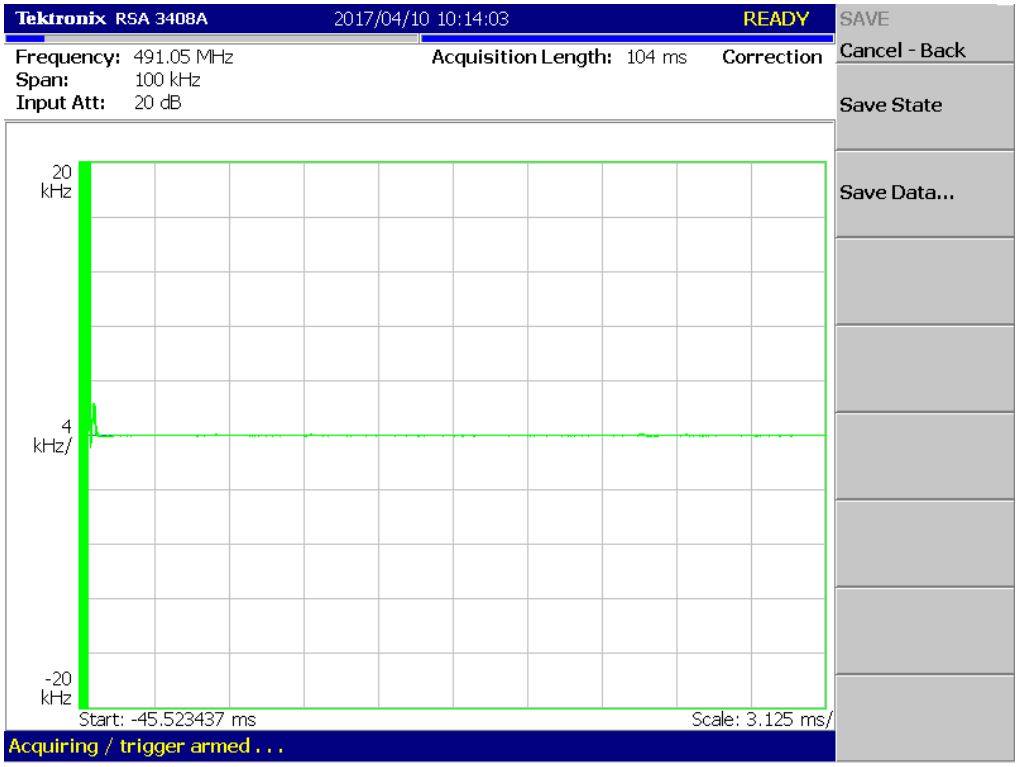


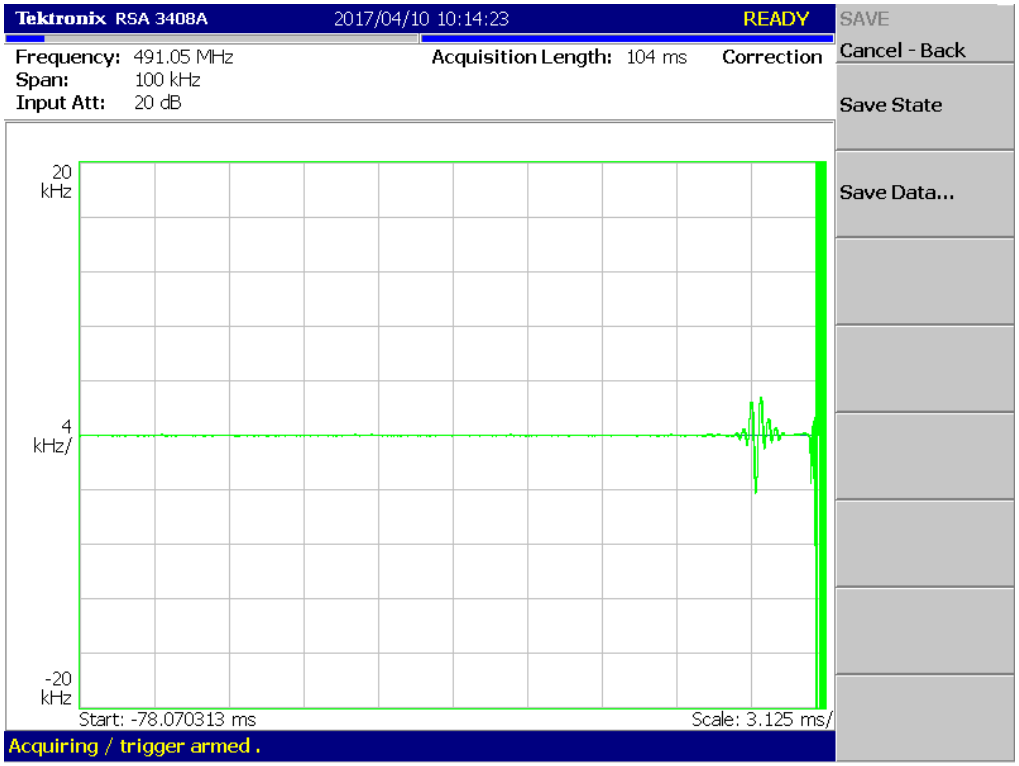
(11K0F3E _ 469.95 MHz)_Low



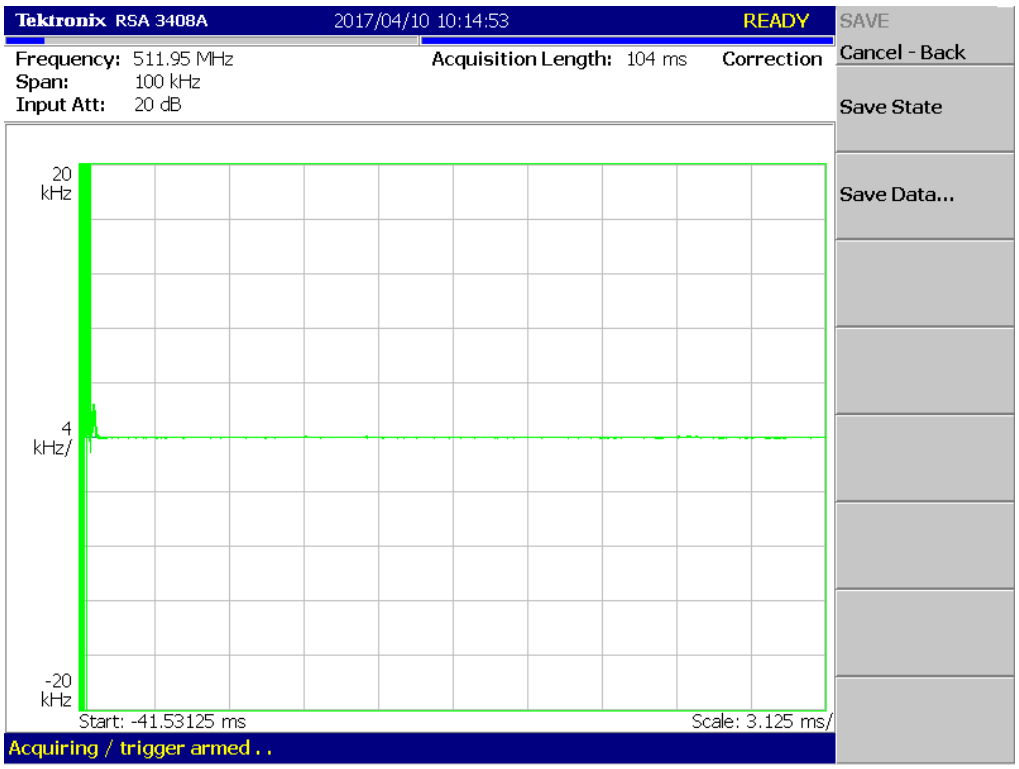


(11K0F3E _ 491.05 MHz)_Low

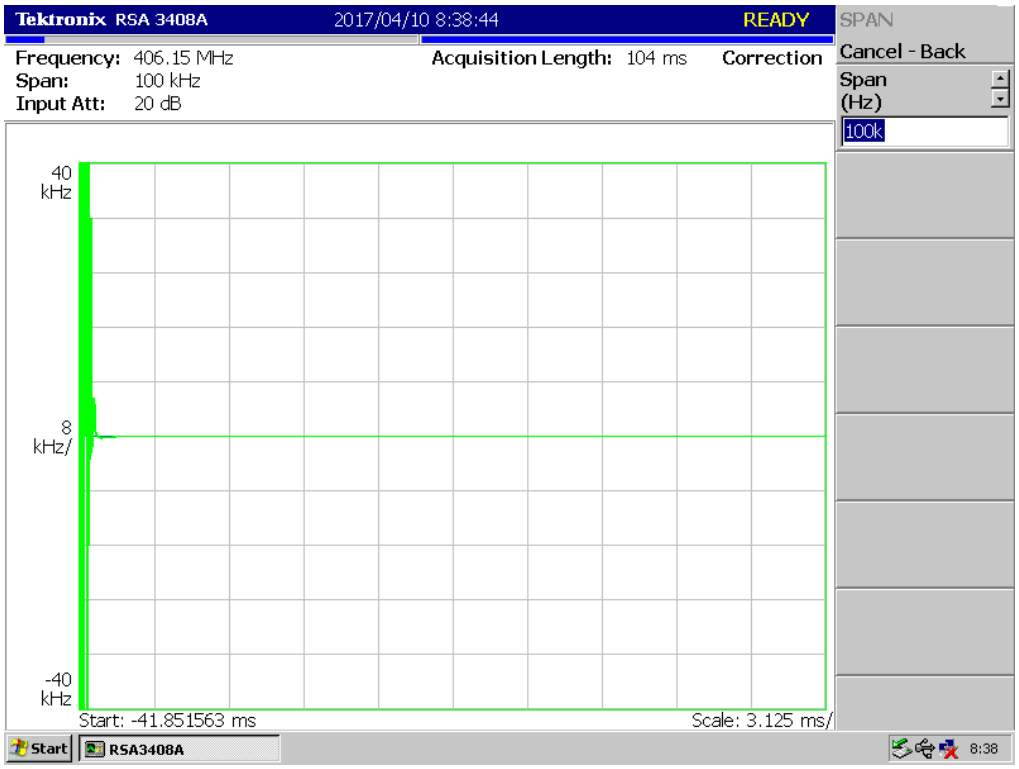


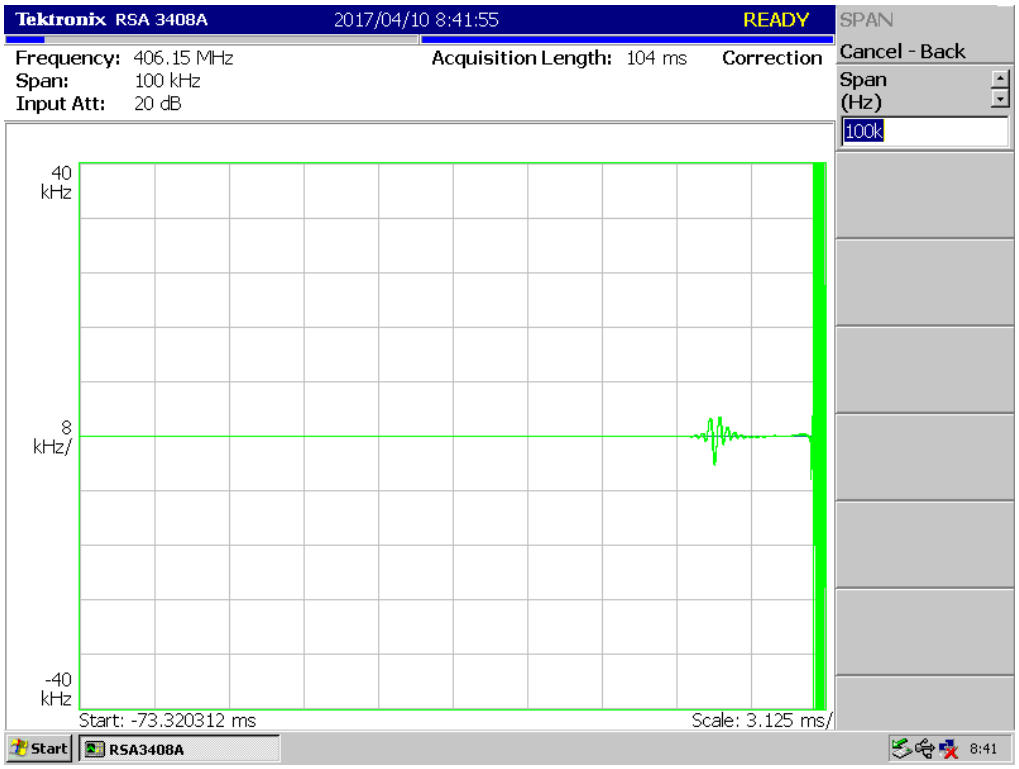


(11K0F3E _ 511.95 MHz)_Low

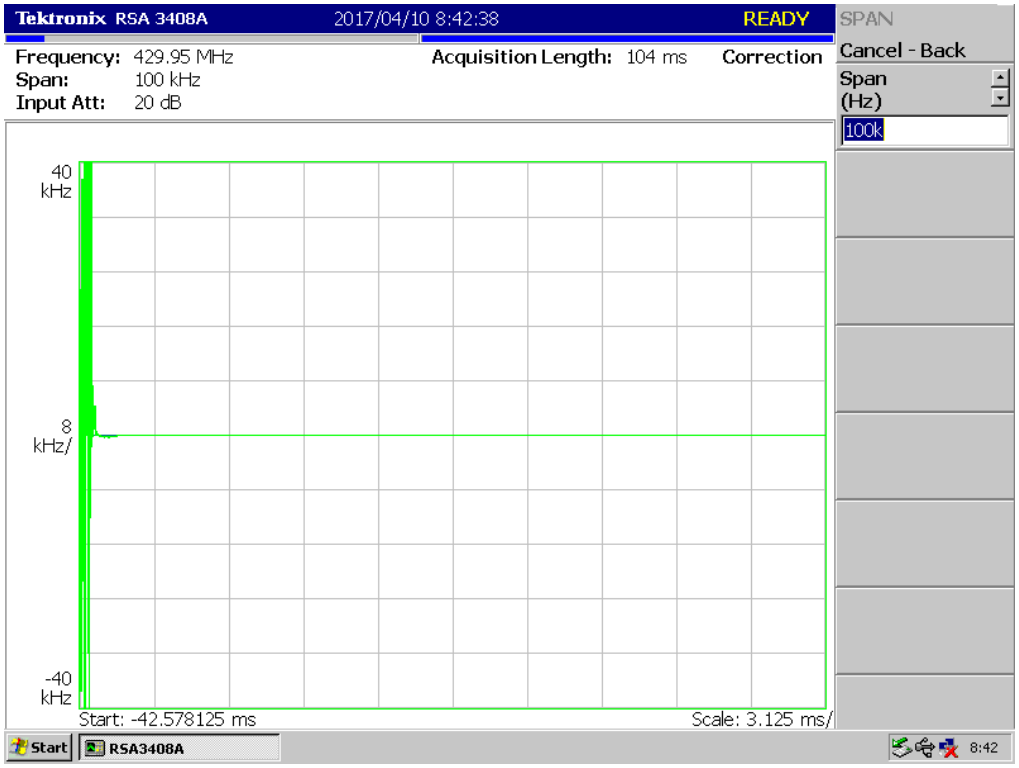


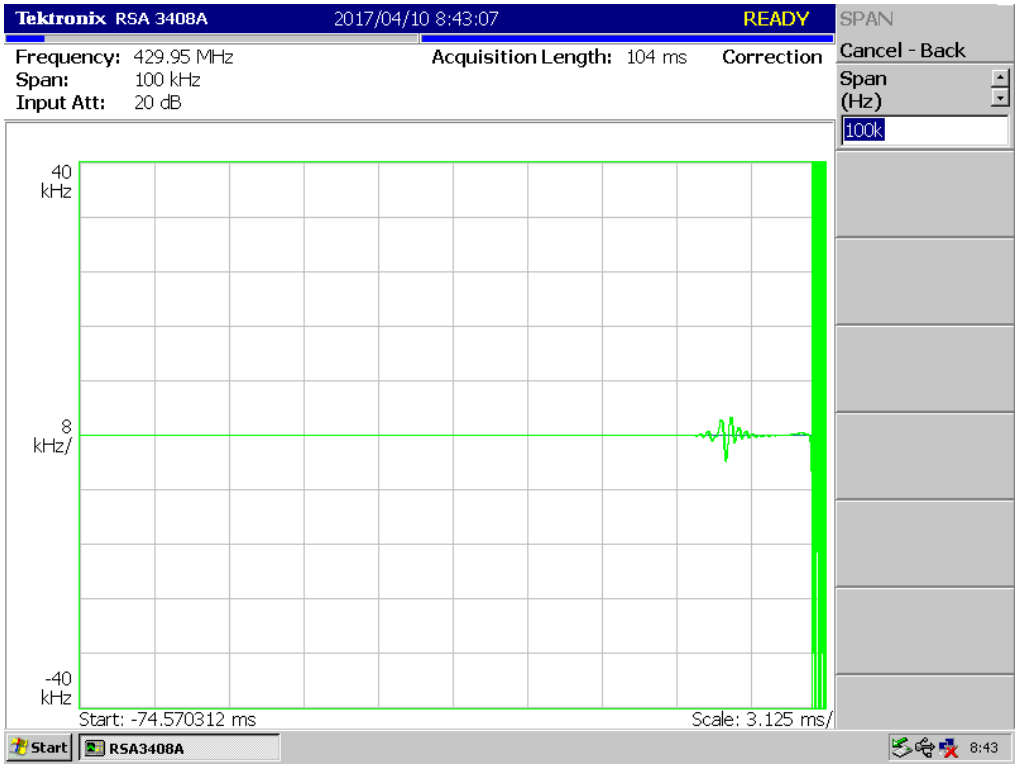
(16K0F3E _ 406.15 MHz)_High



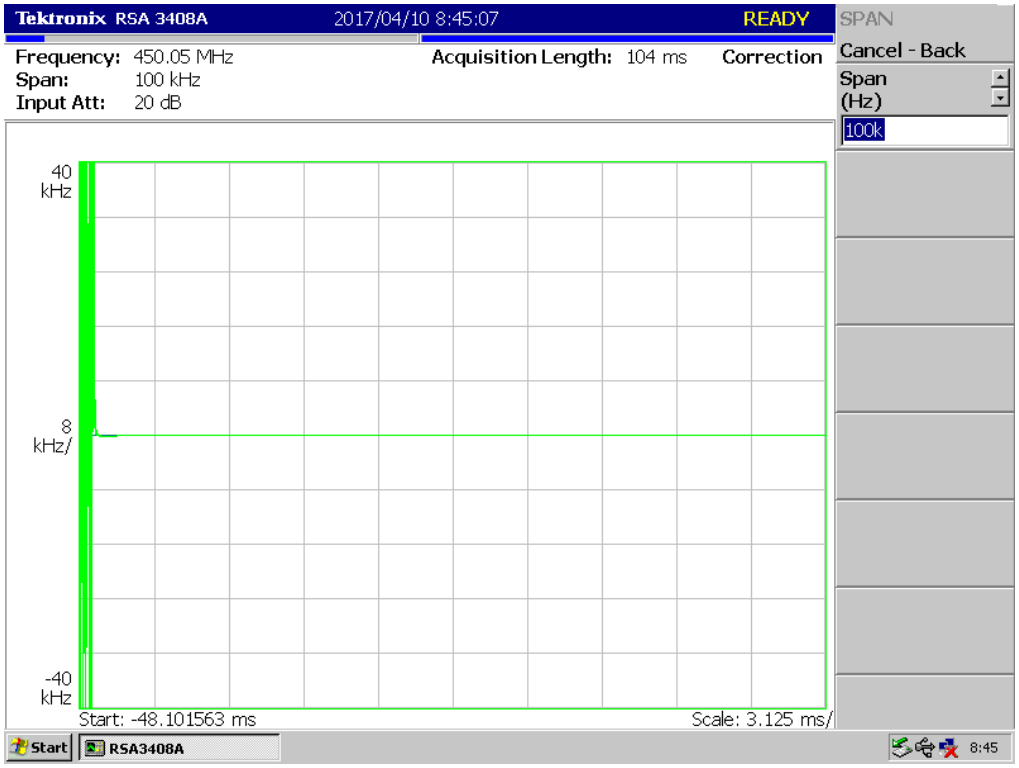


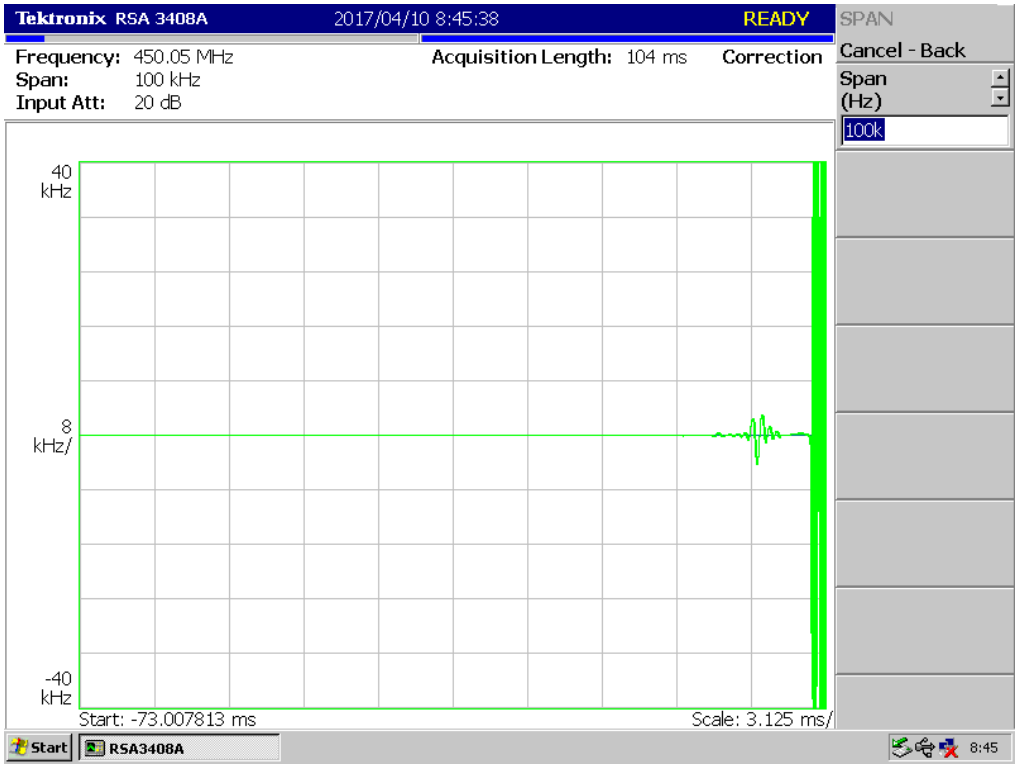
(16K0F3E _ 429.95 MHz)_High



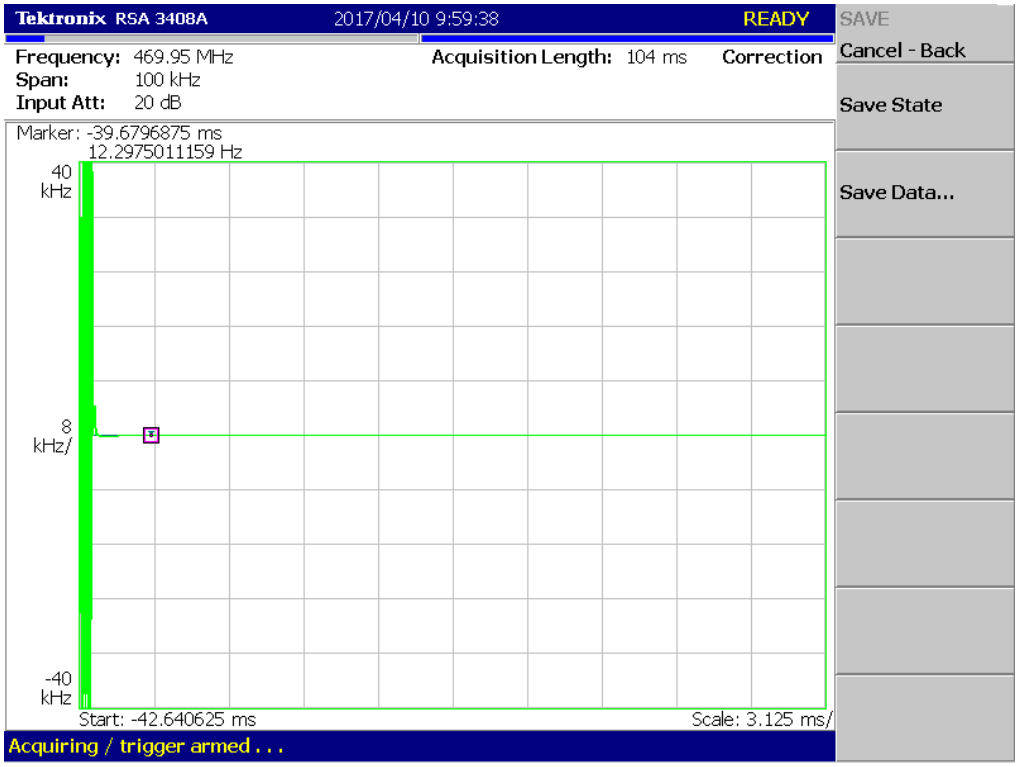


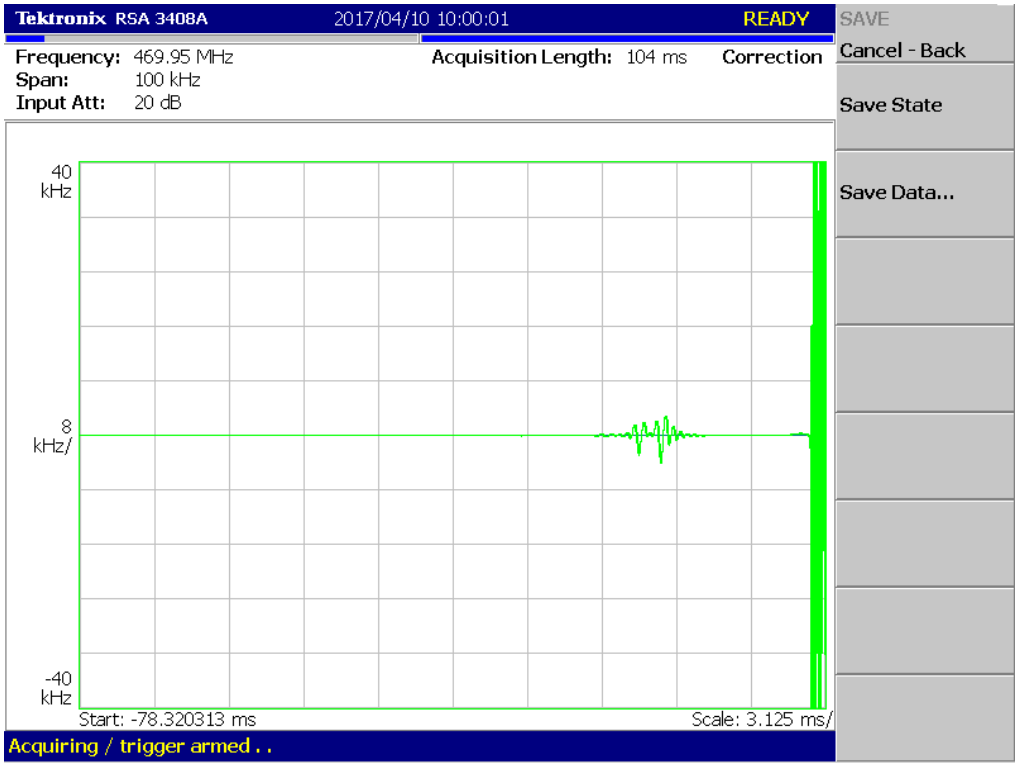
(16K0F3E _ 450.05 MHz)_High



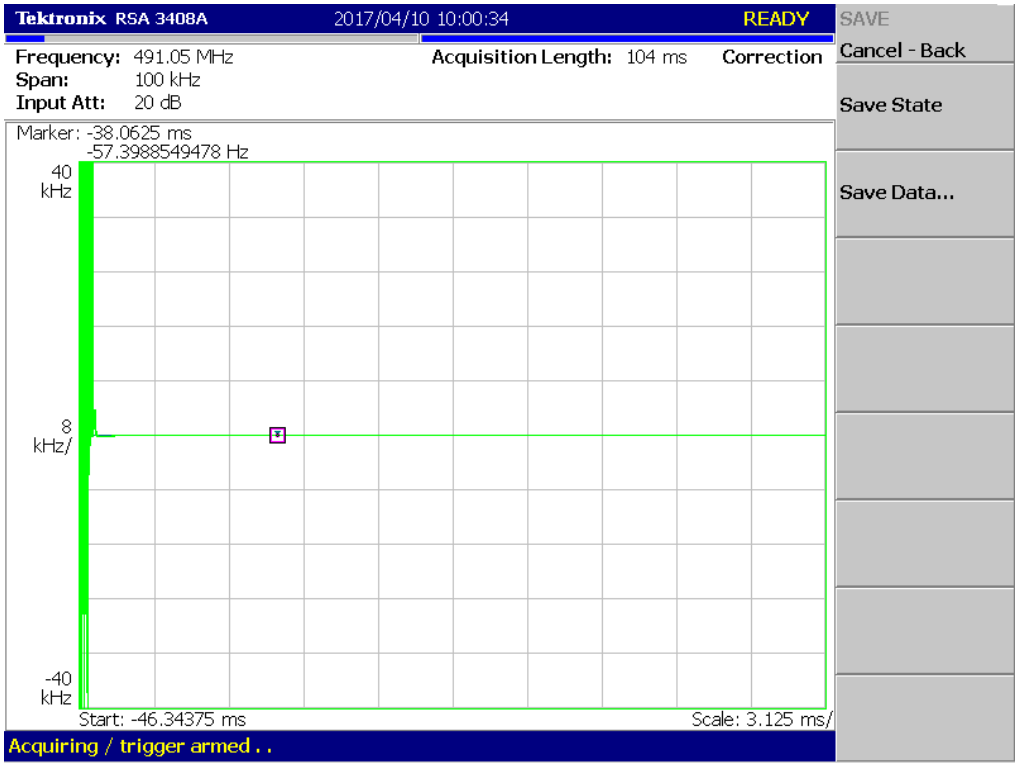


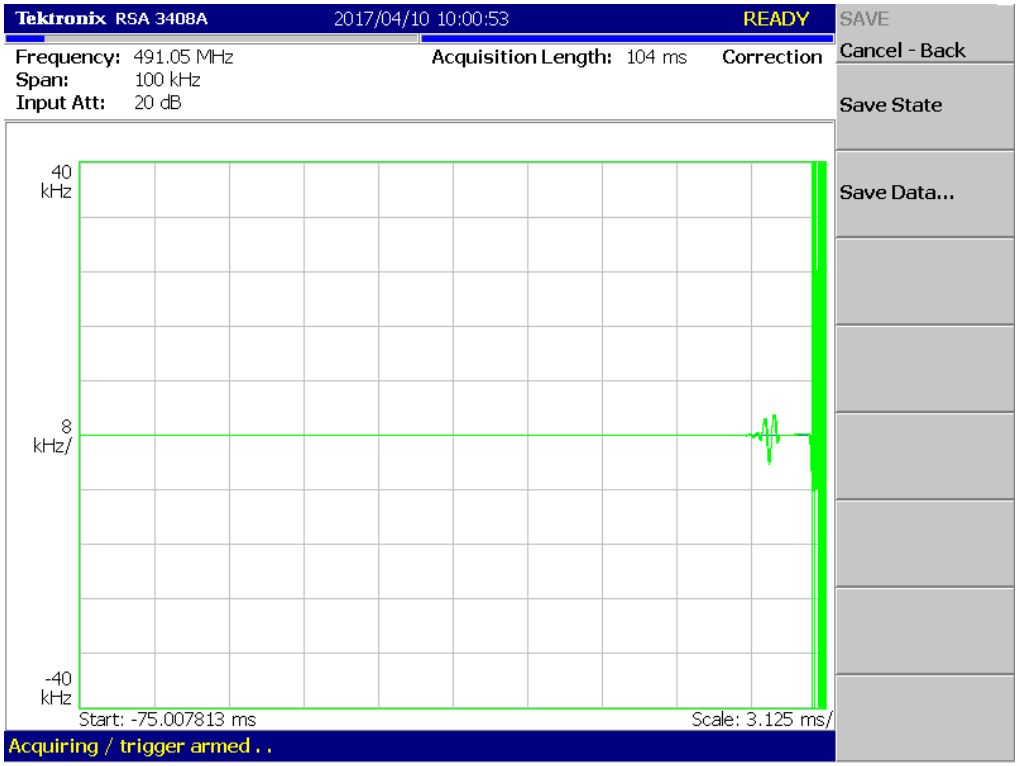
(16K0F3E _ 469.95 MHz)_High



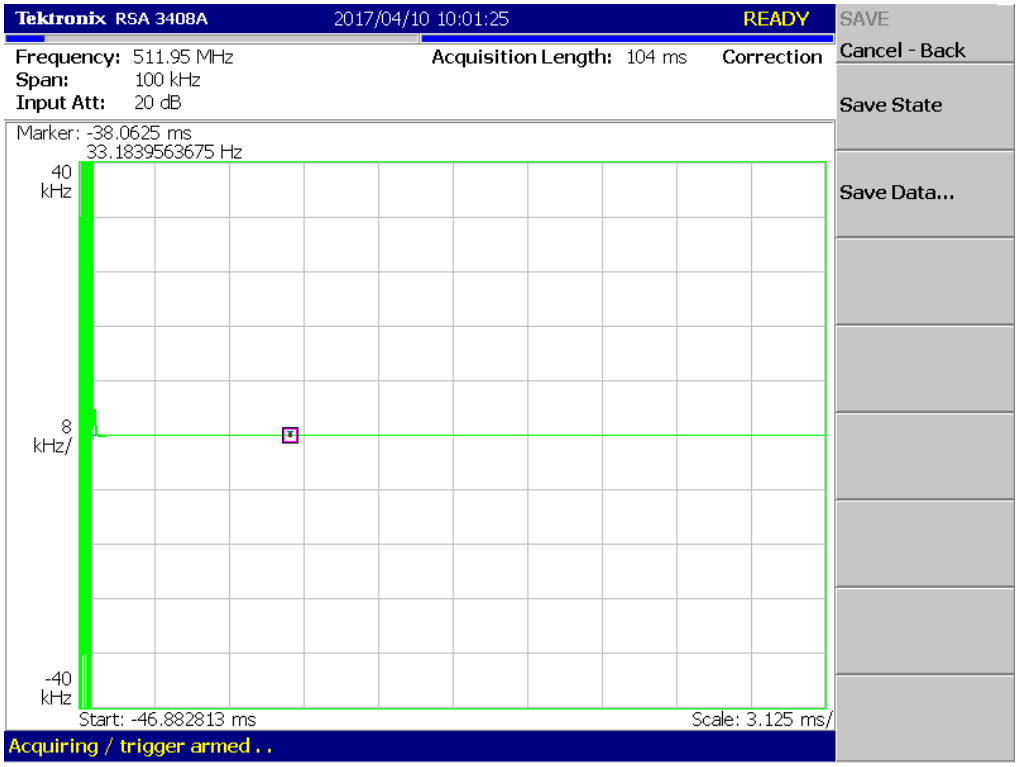


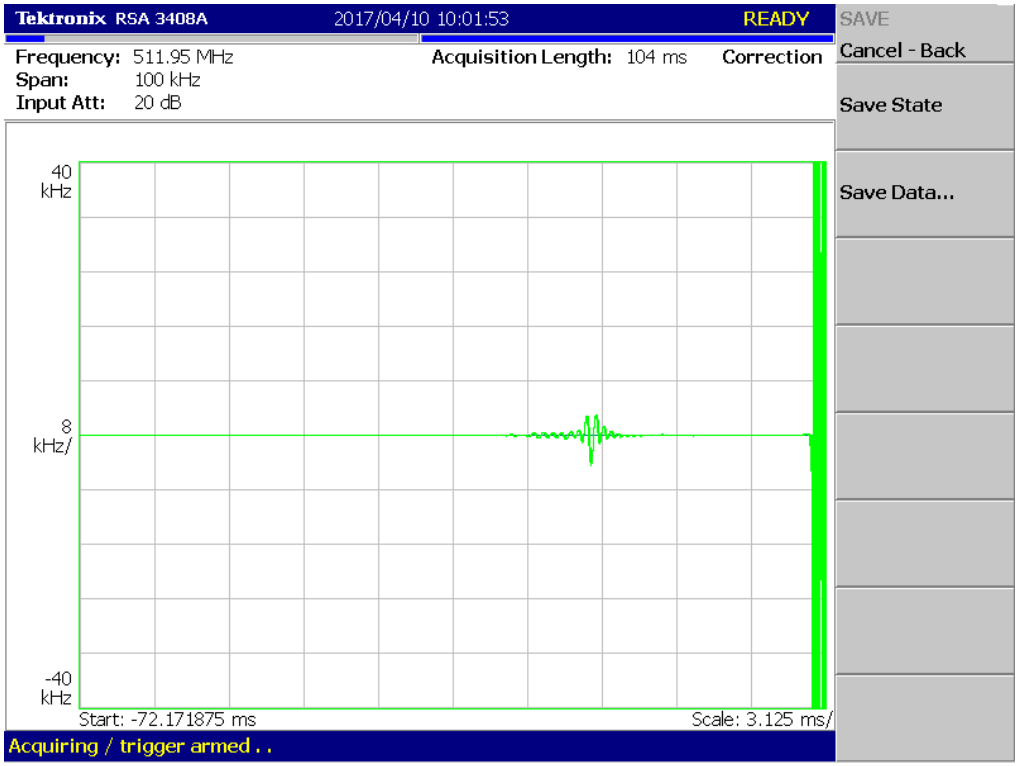
(16K0F3E _ 491.05 MHz)_High



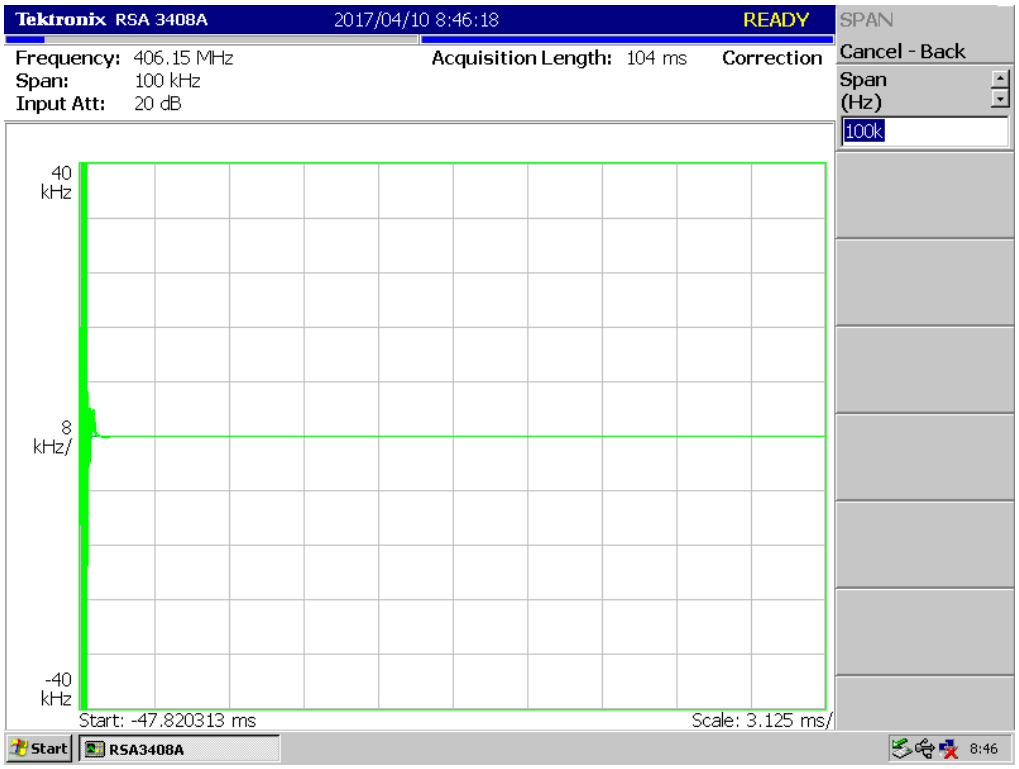


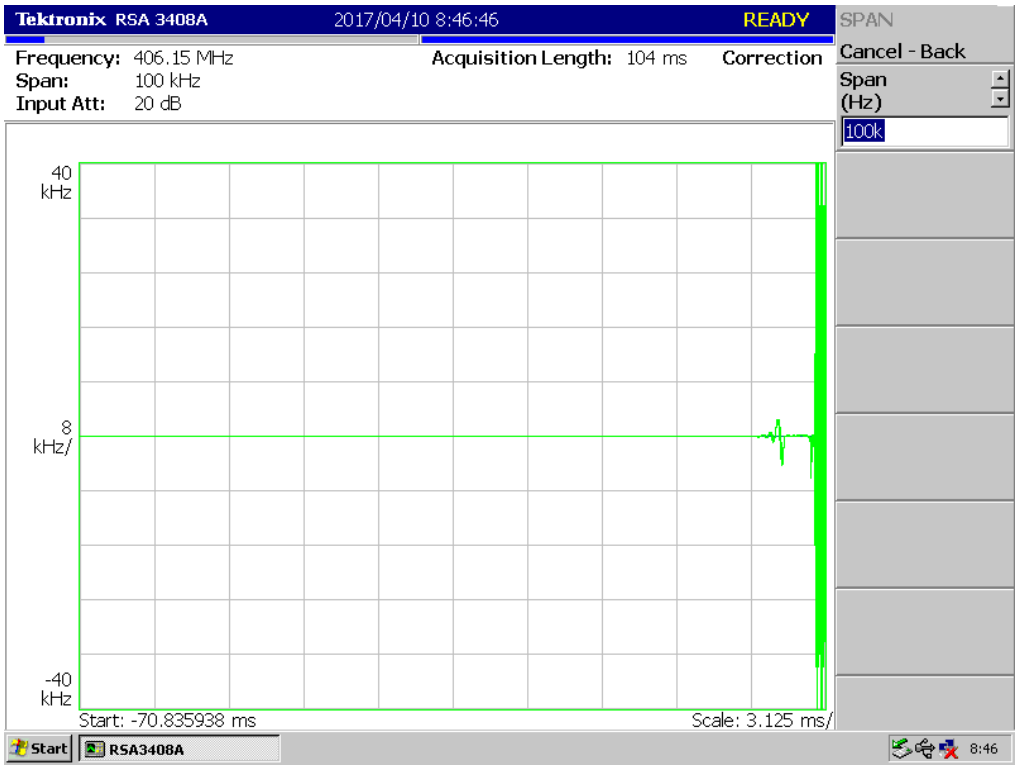
(16K0F3E _ 511.95 MHz)_High



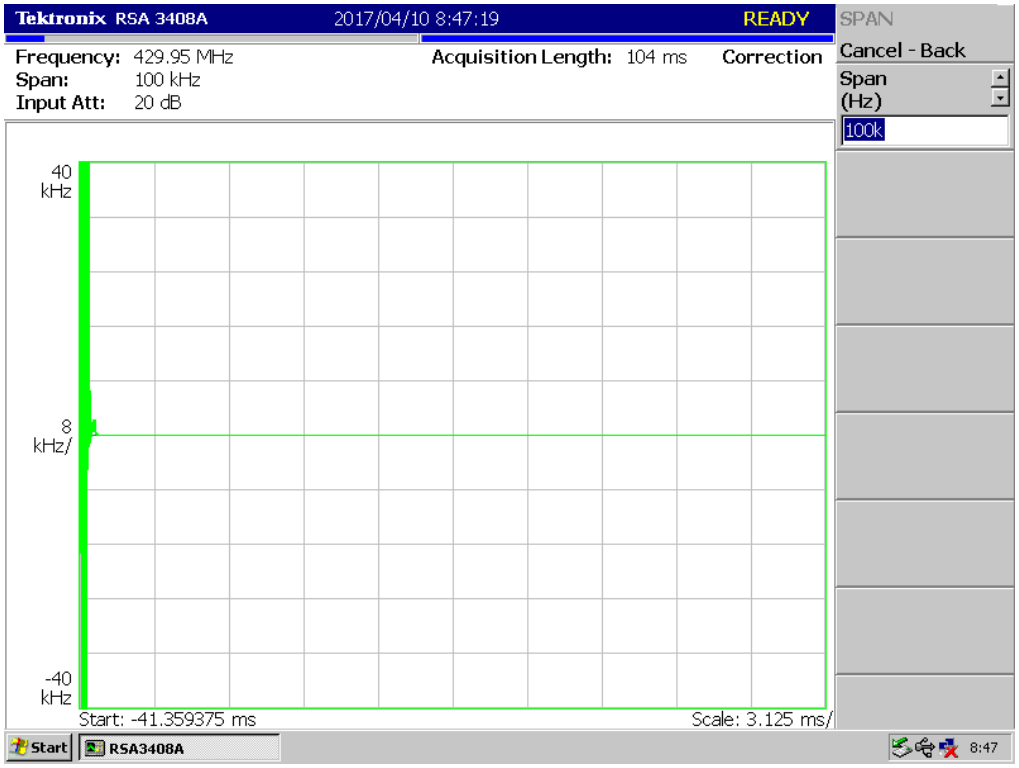


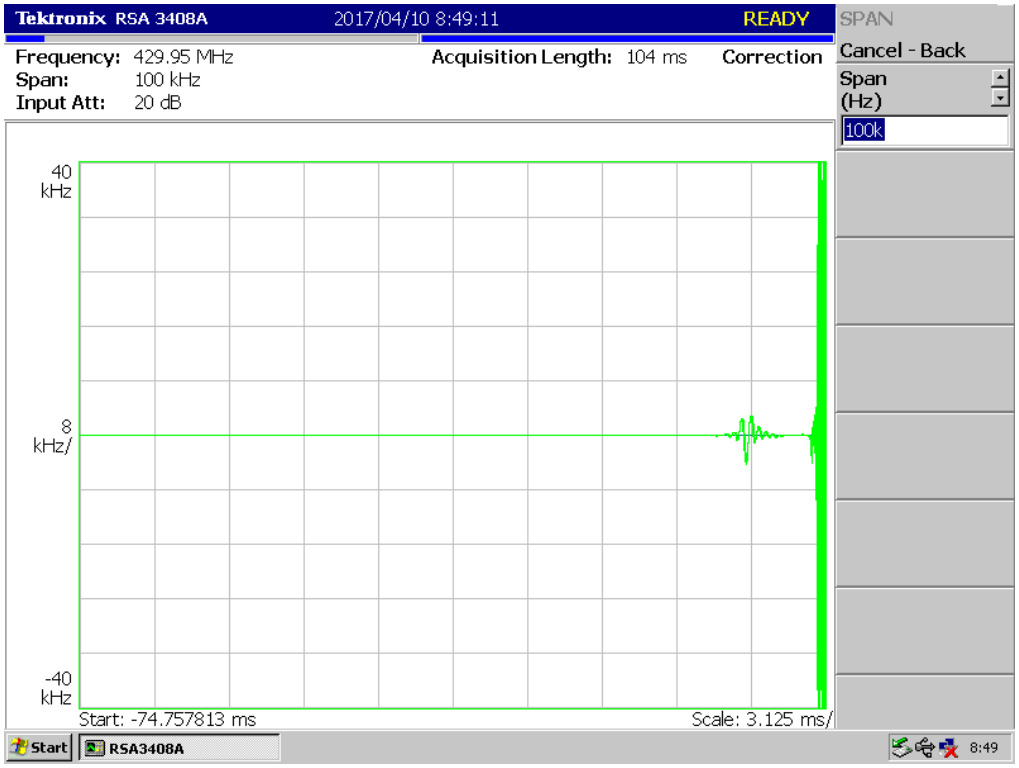
(16K0F3E _ 406.15 MHz)_Low



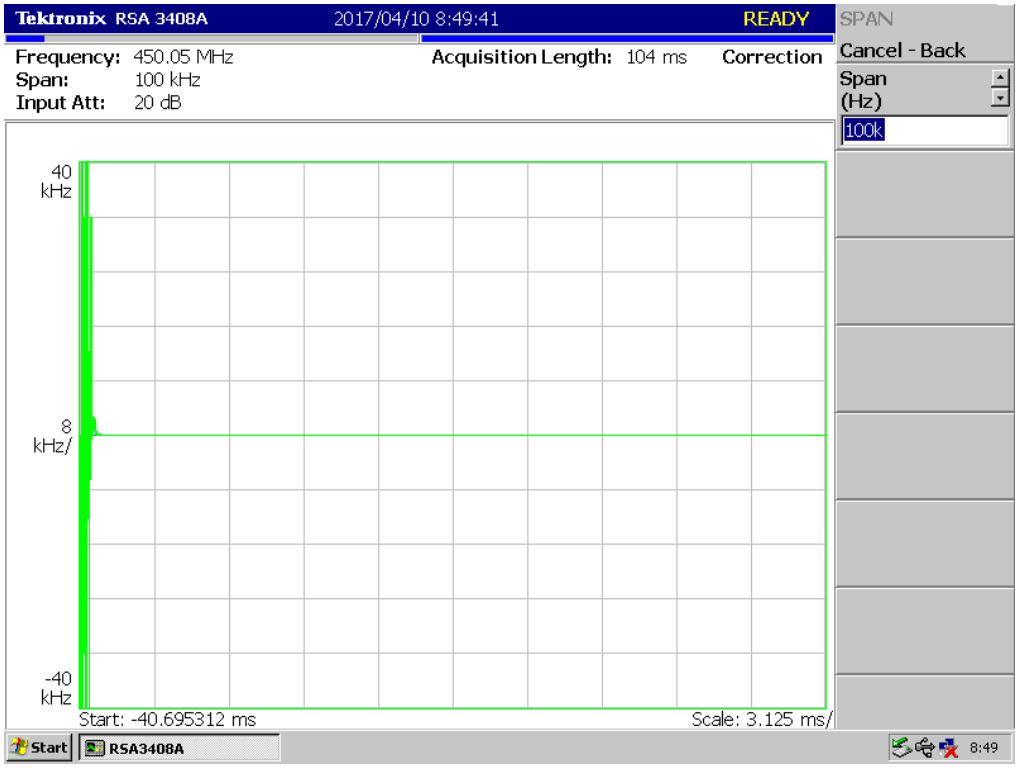


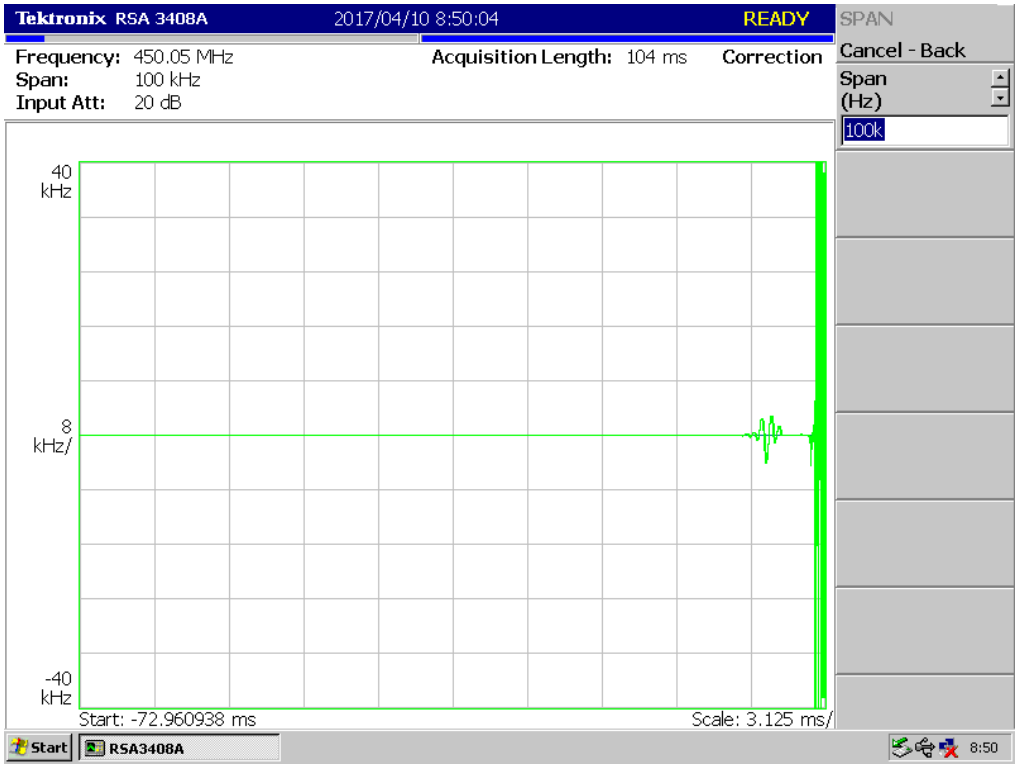
(16K0F3E _ 429.95 MHz)_Low



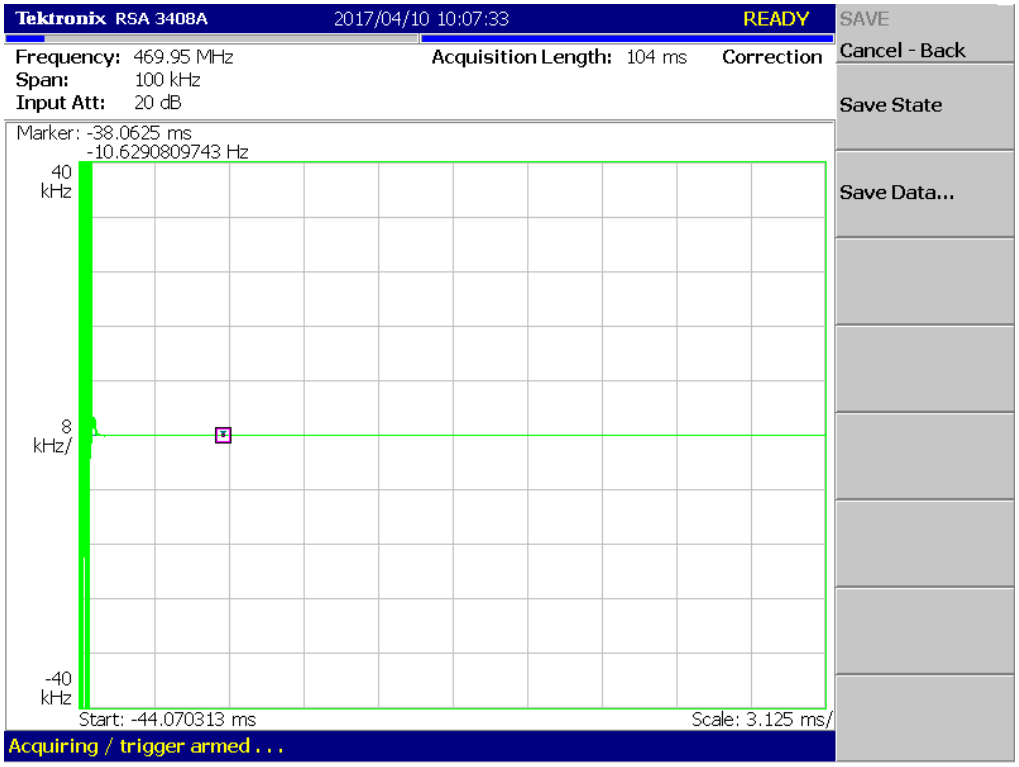


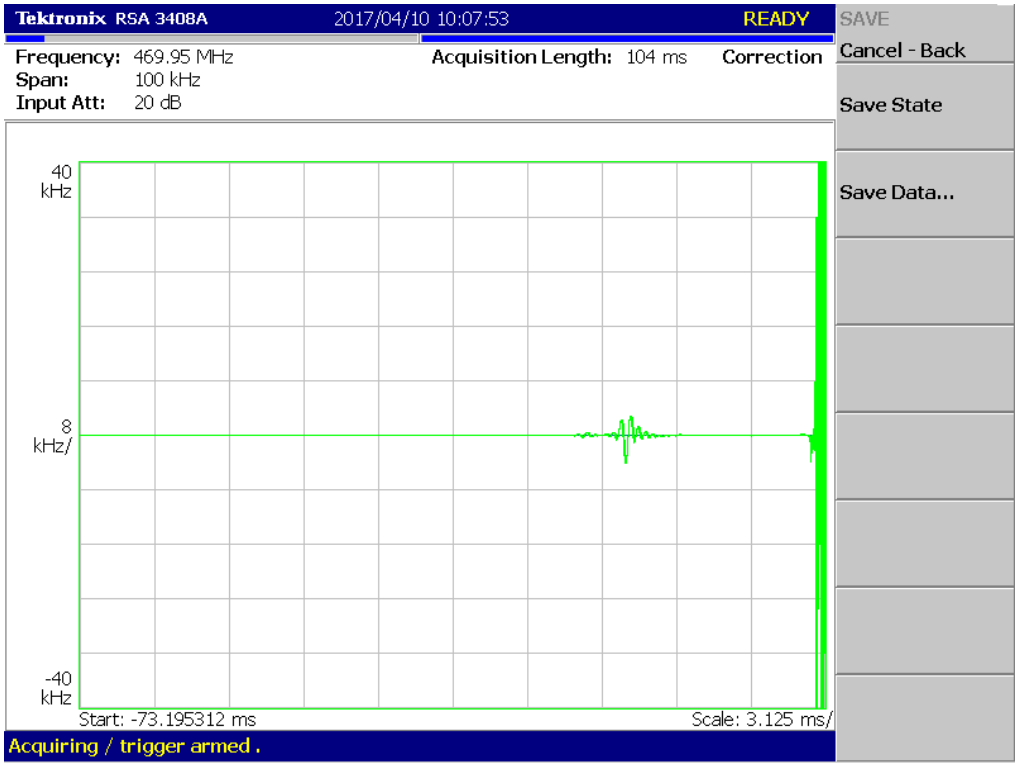
(16K0F3E _ 450.05 MHz)_Low



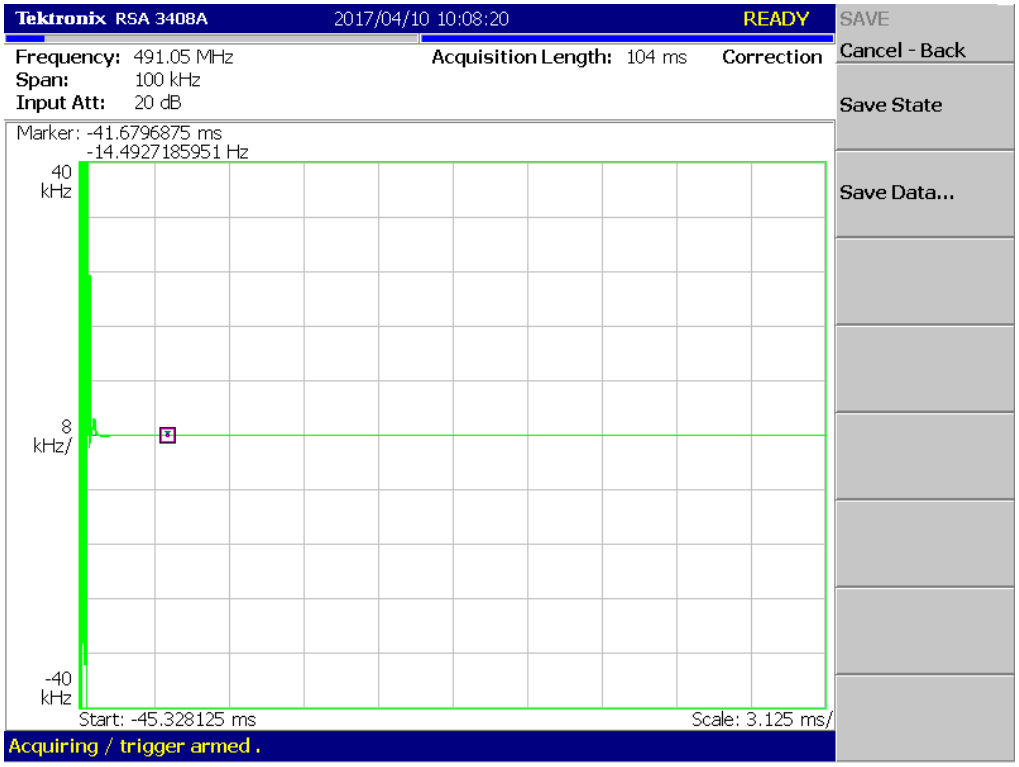


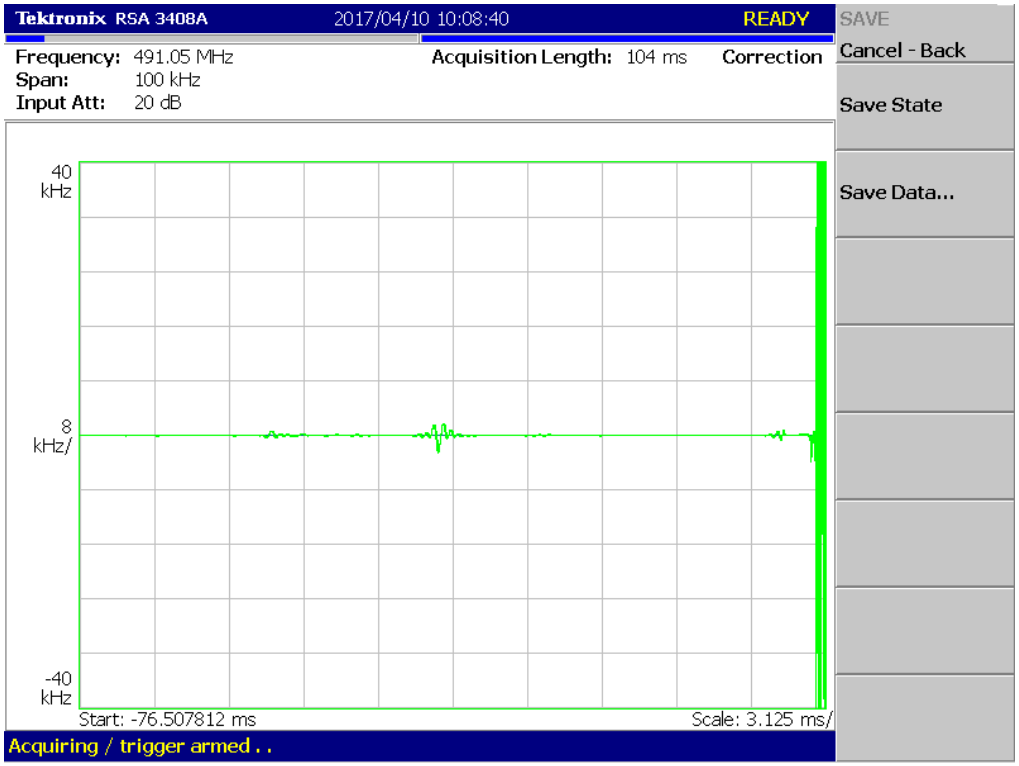
(16K0F3E _ 469.95 MHz)_Low



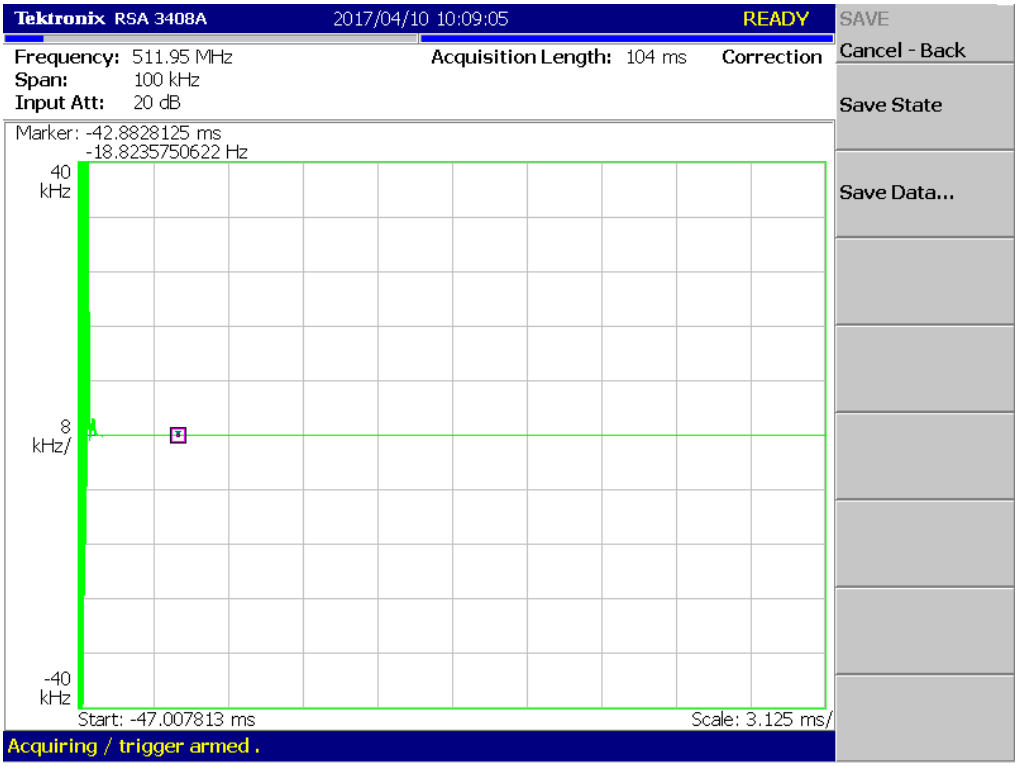


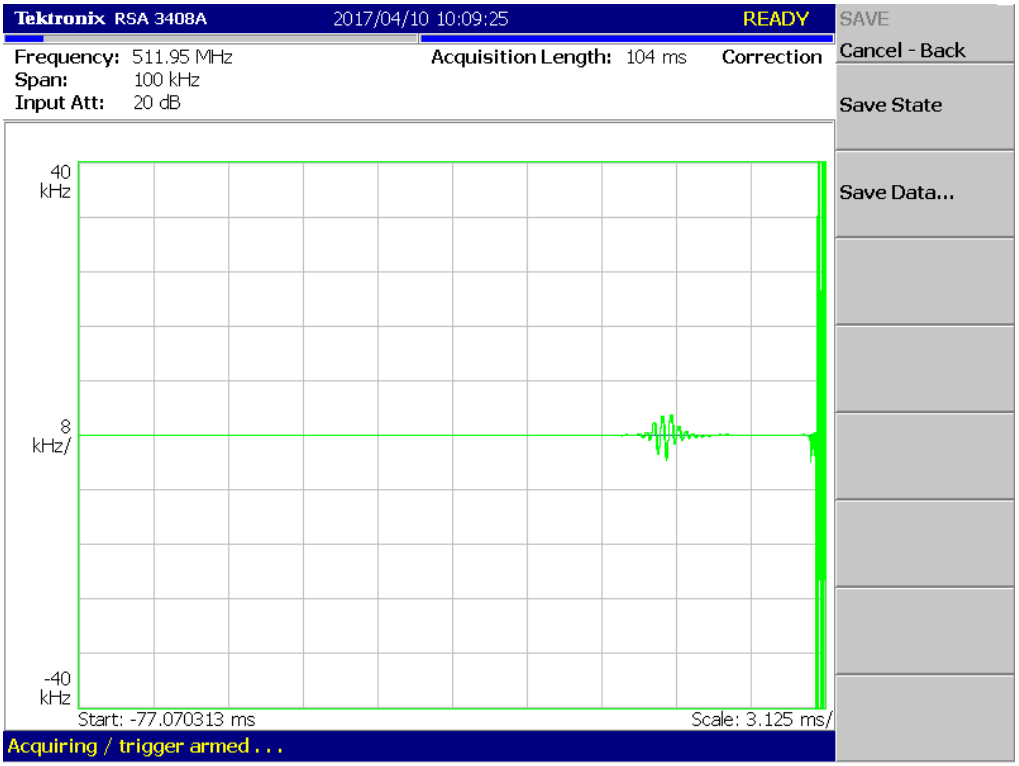
(16K0F3E _ 491.05 MHz)_Low



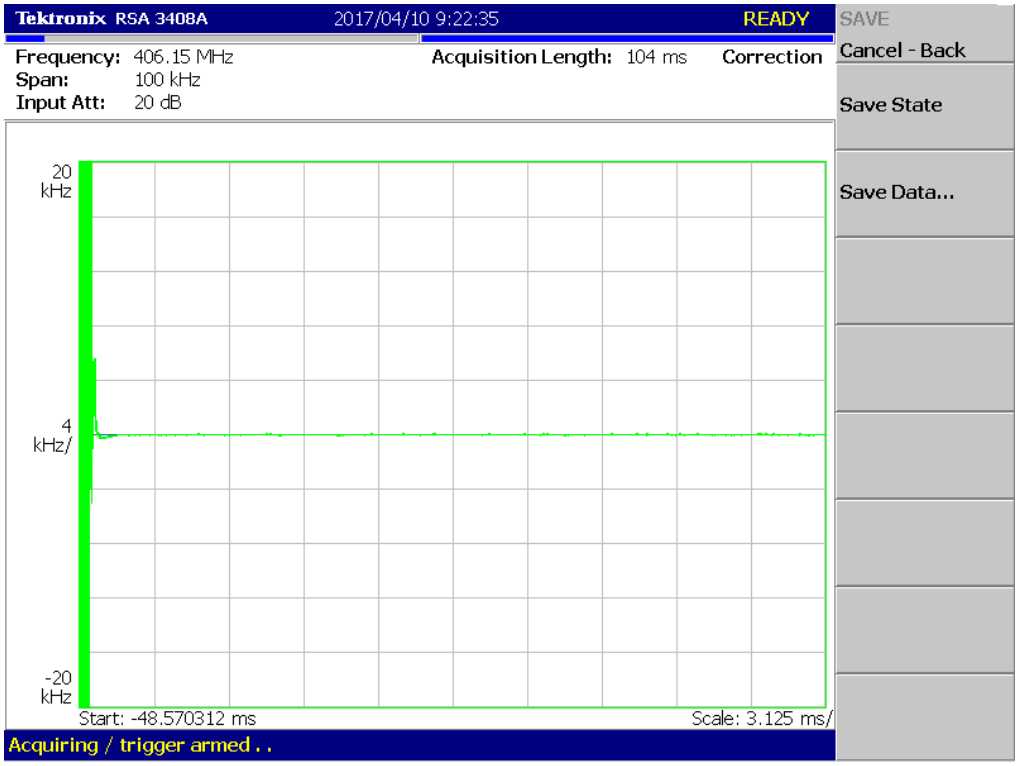


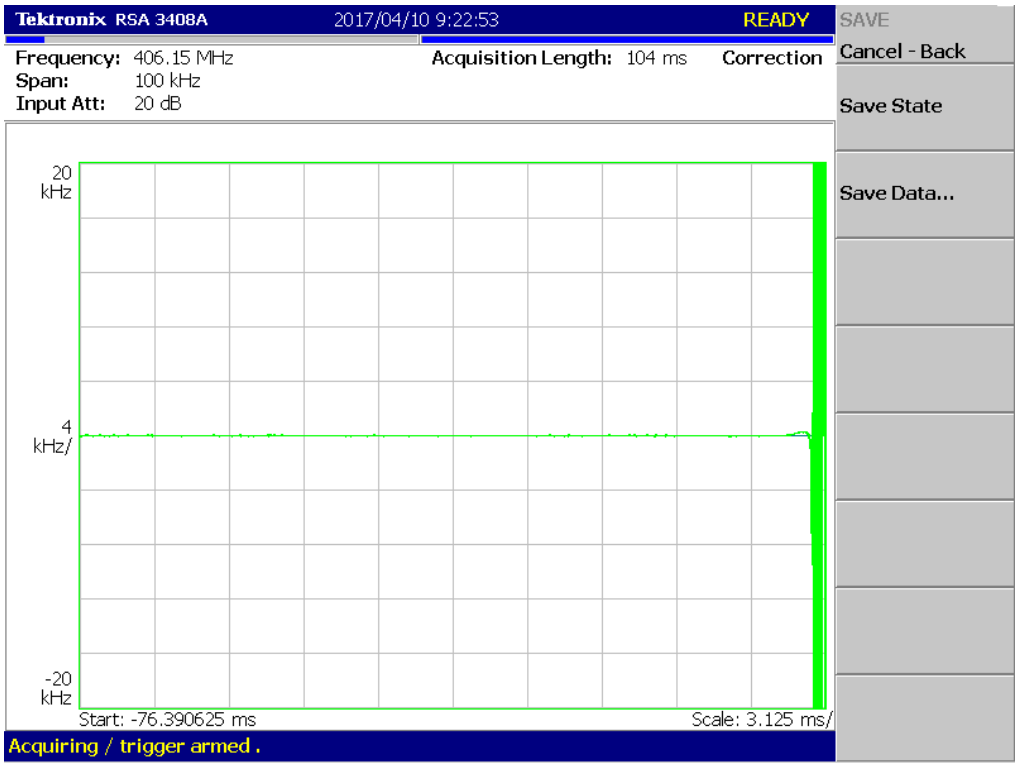
(16K0F3E _ 511.95 MHz)_Low



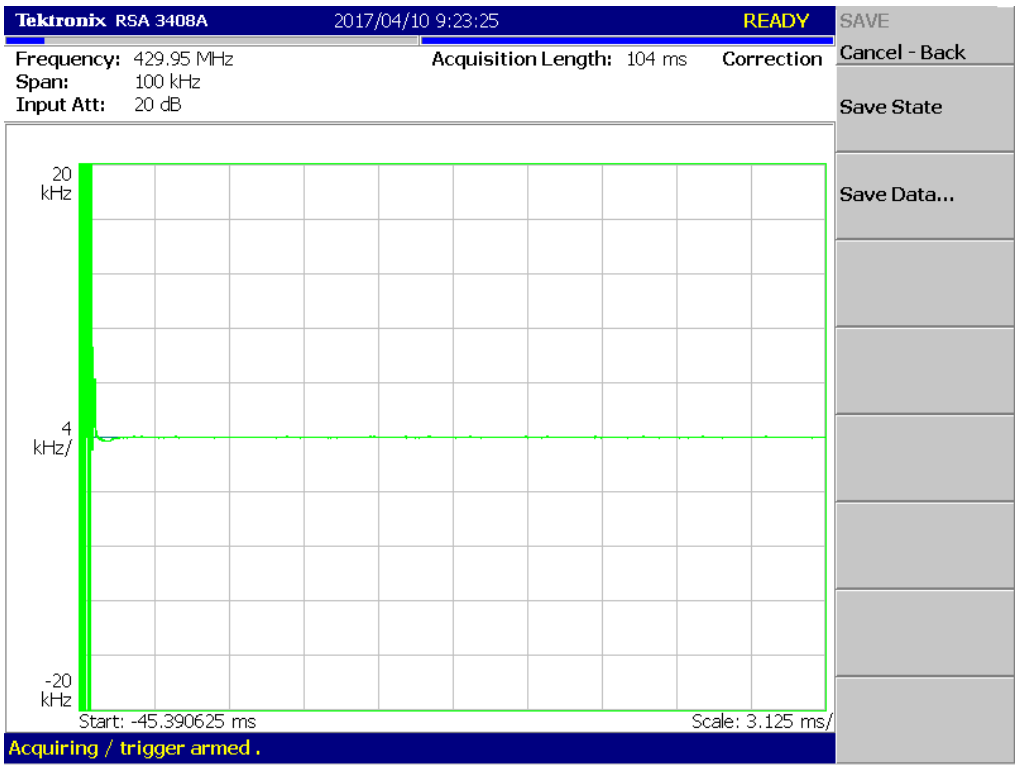


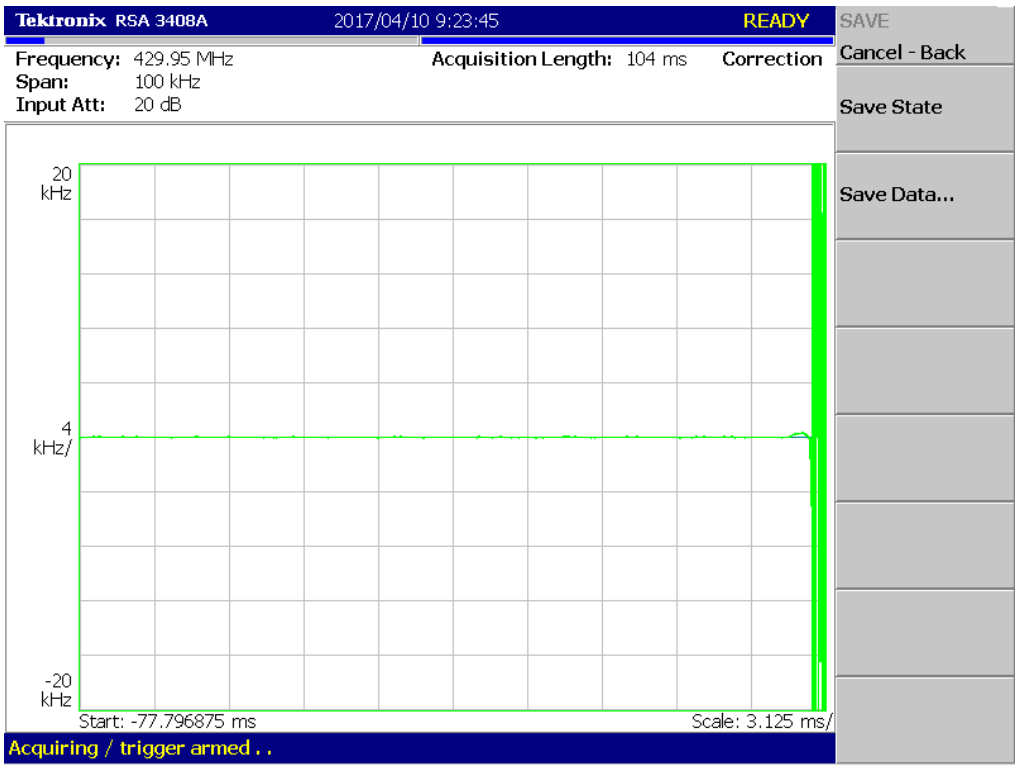
(7K60FXD, 7K60FXE _ 406.15 MHz)_High



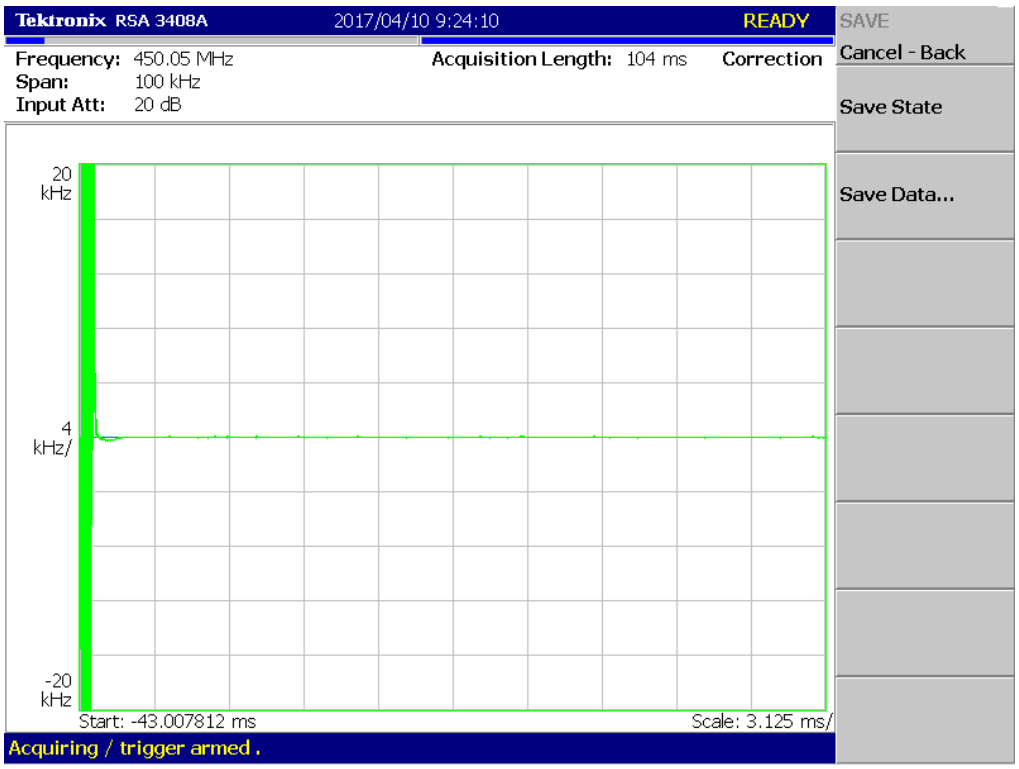


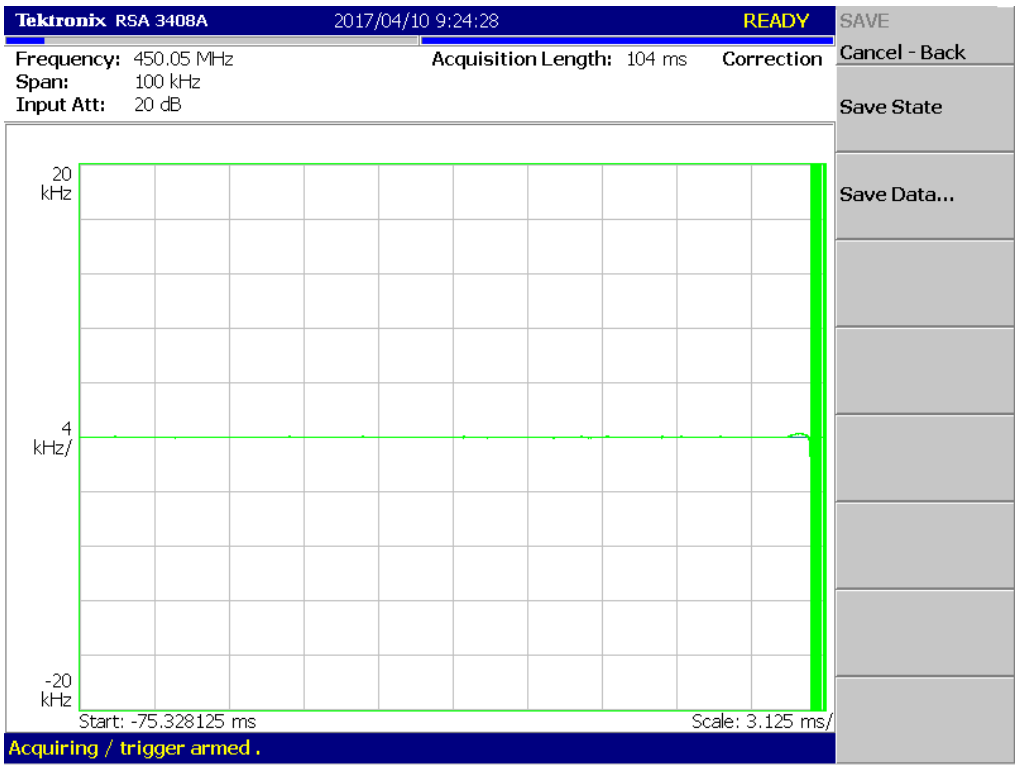
(7K60FXD, 7K60FXE _ 429.95 MHz)_High



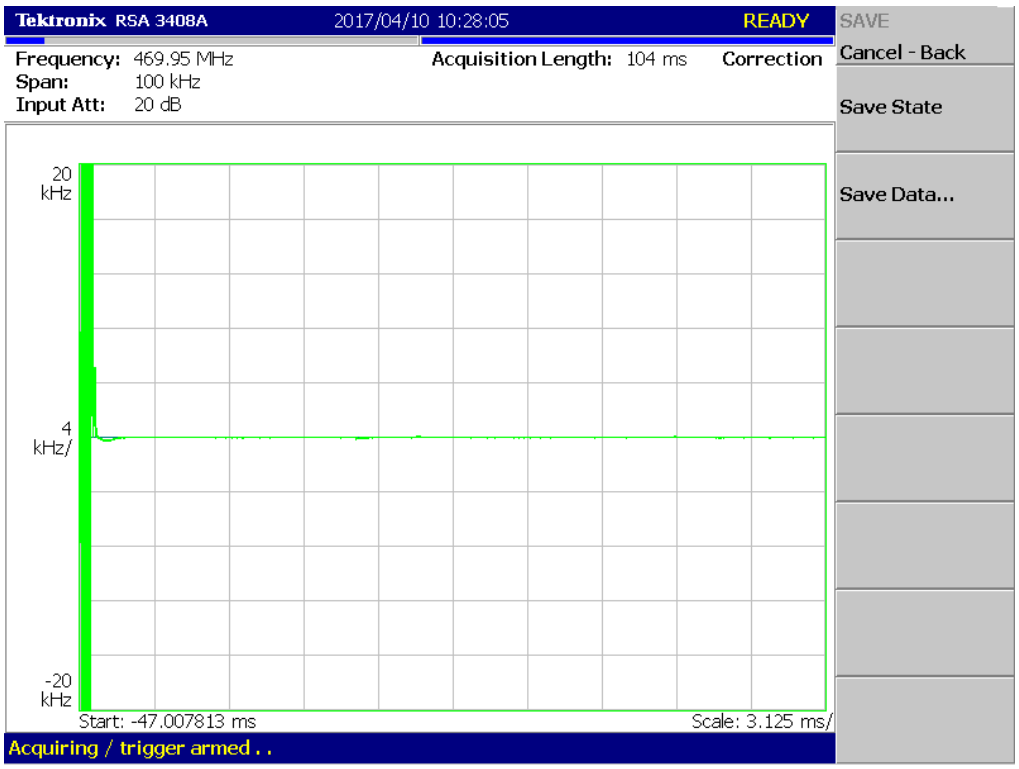


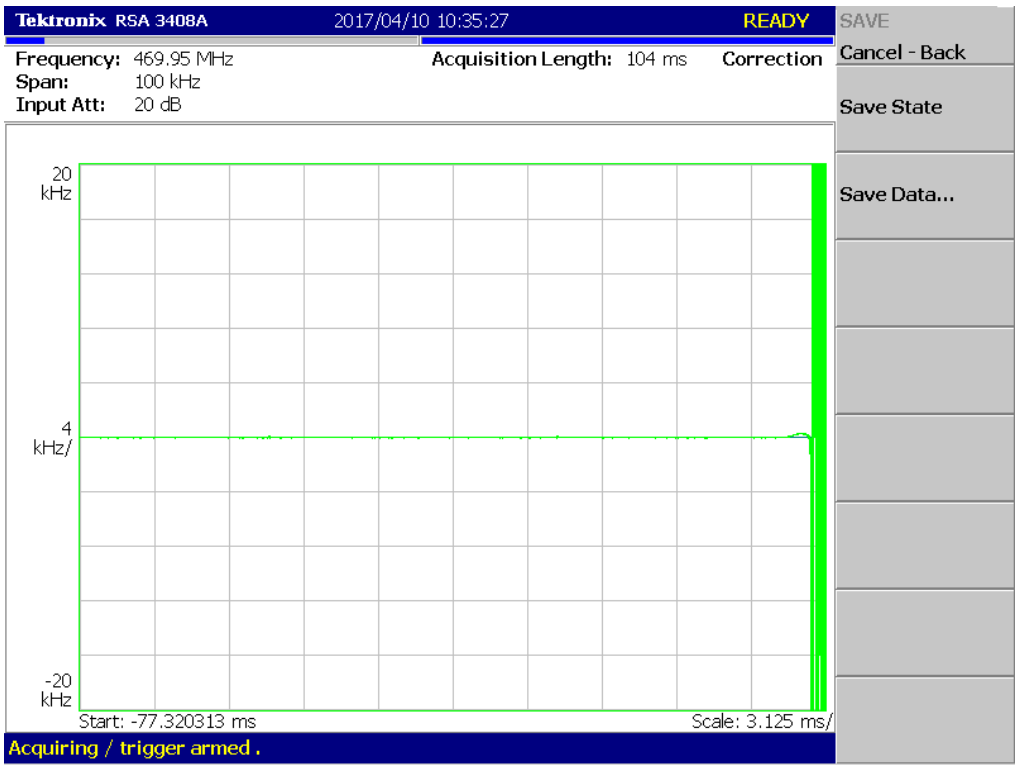
(7K60FXD, 7K60FXE _ 450.05 MHz)_High



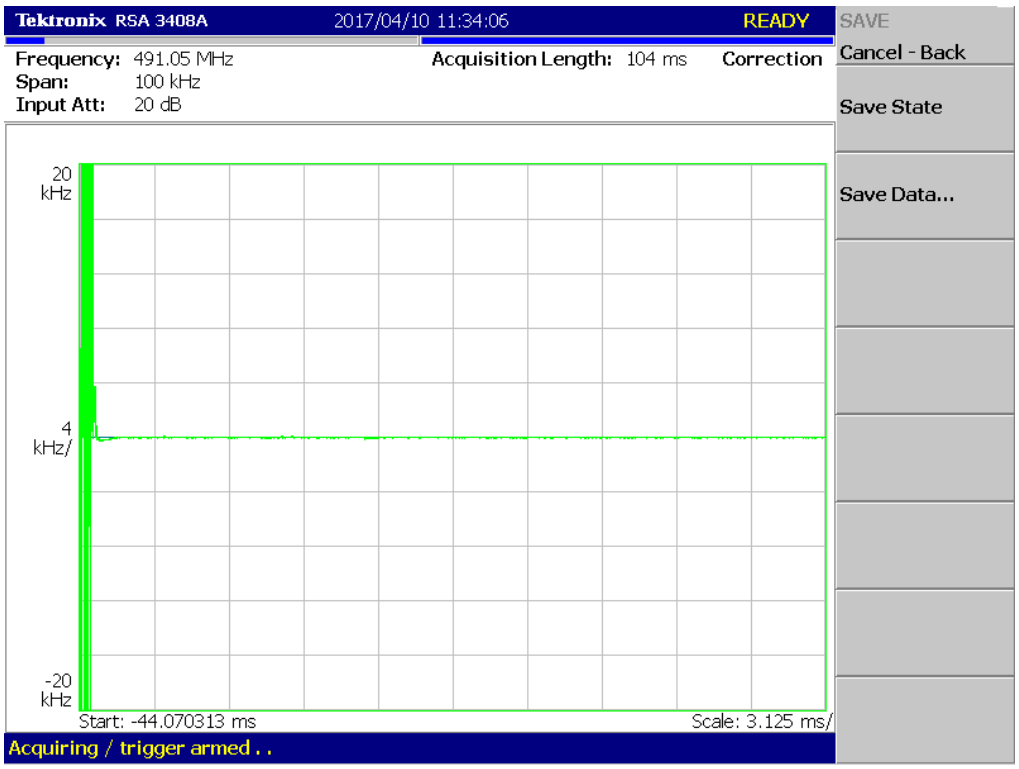


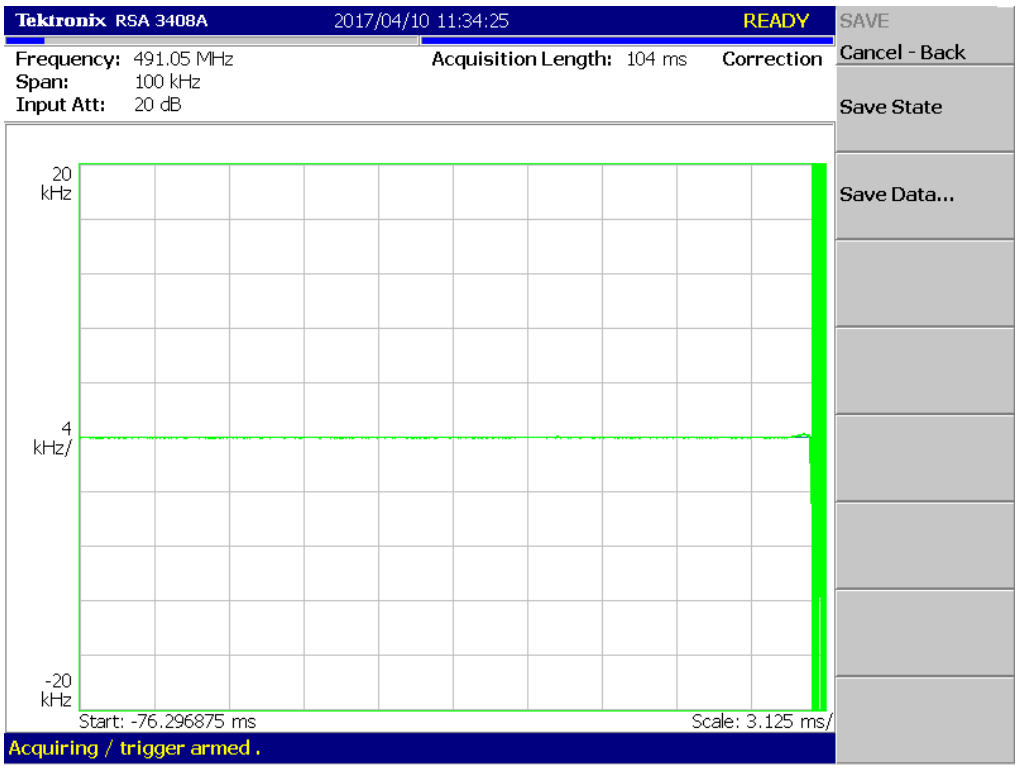
(7K60FXD, 7K60FXE _ 469.95 MHz)_High



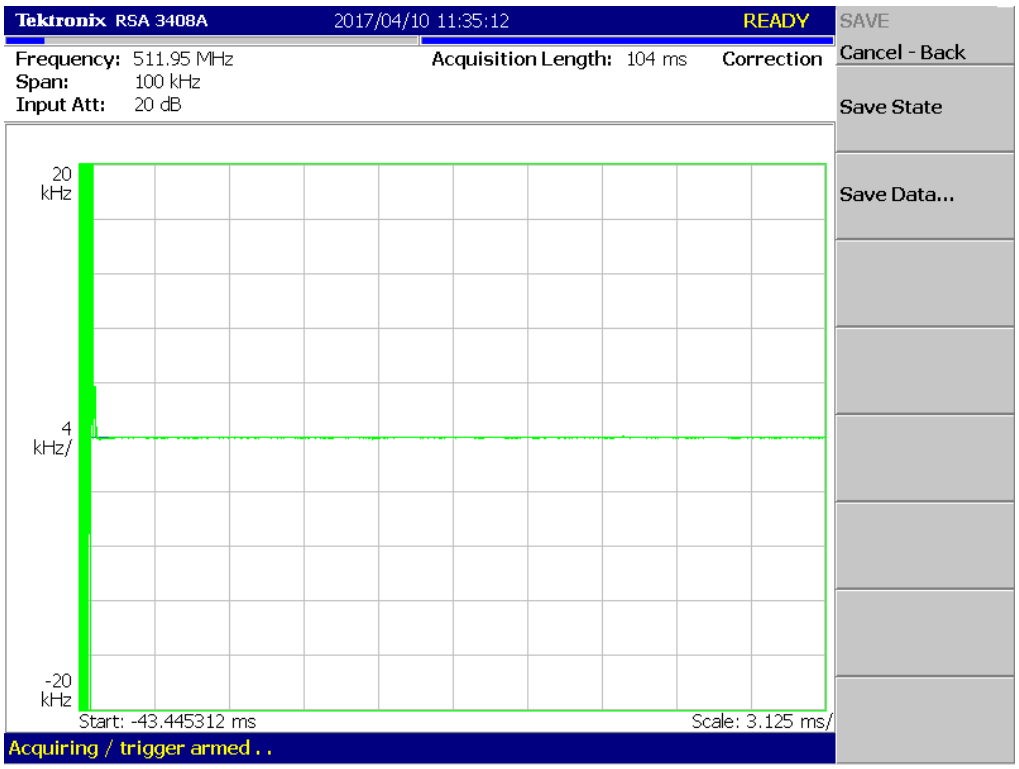


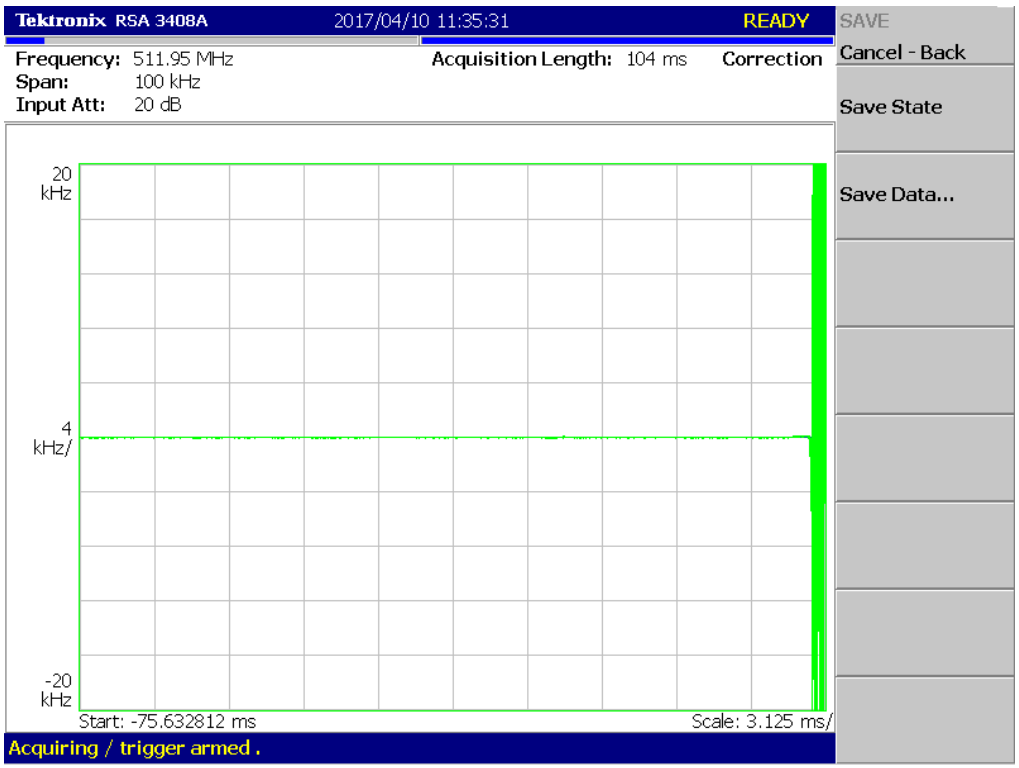
(7K60FXD, 7K60FXE _ 491.05 MHz)_High



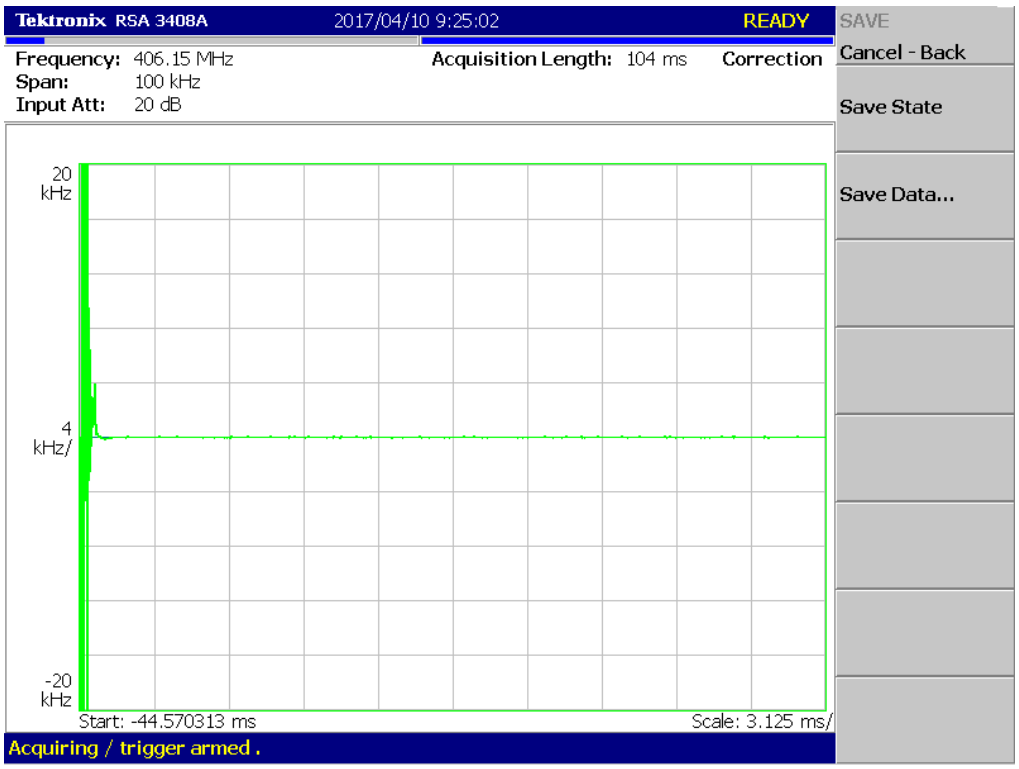


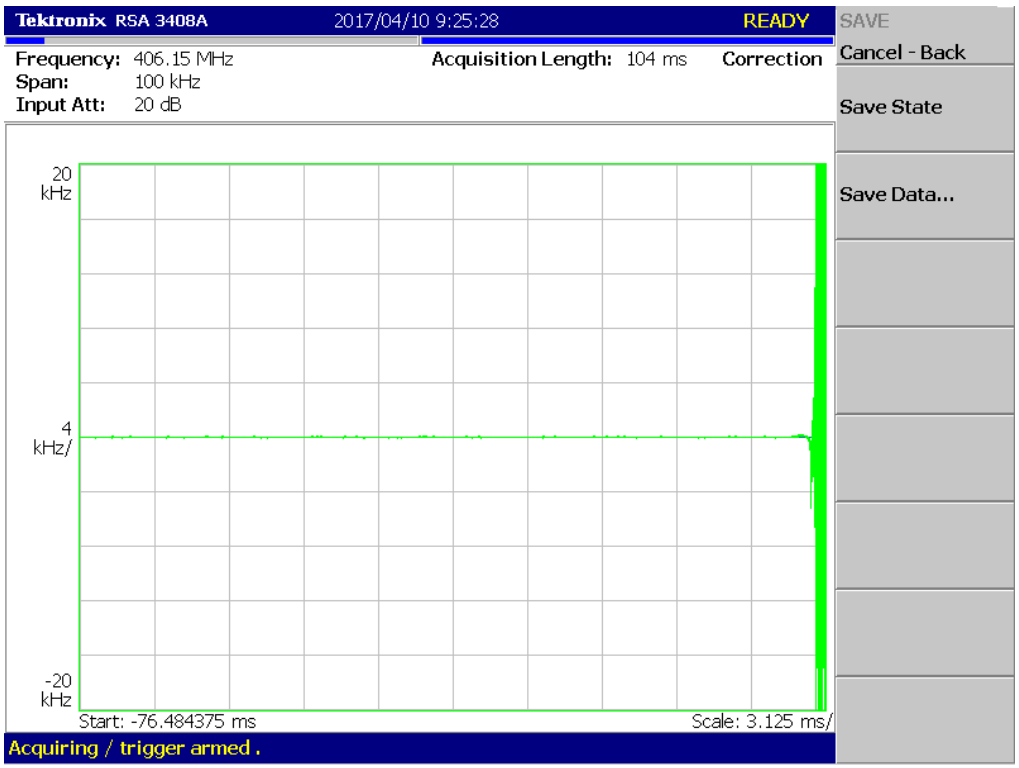
(7K60FXD, 7K60FXE _ 511.95 MHz)_High



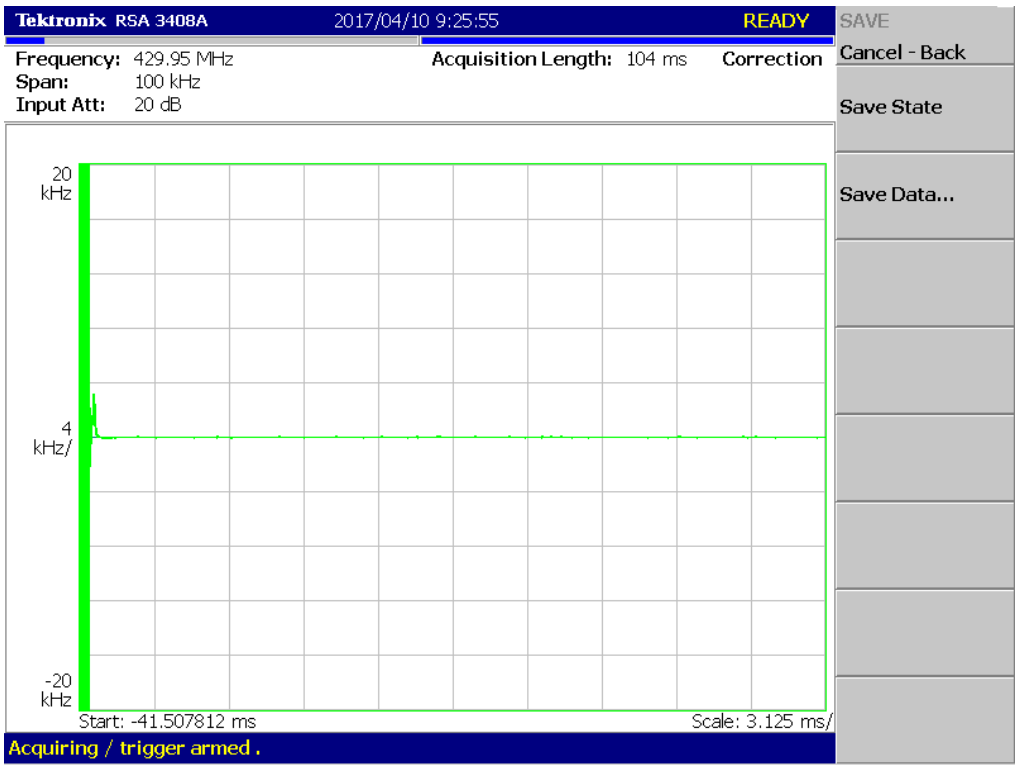


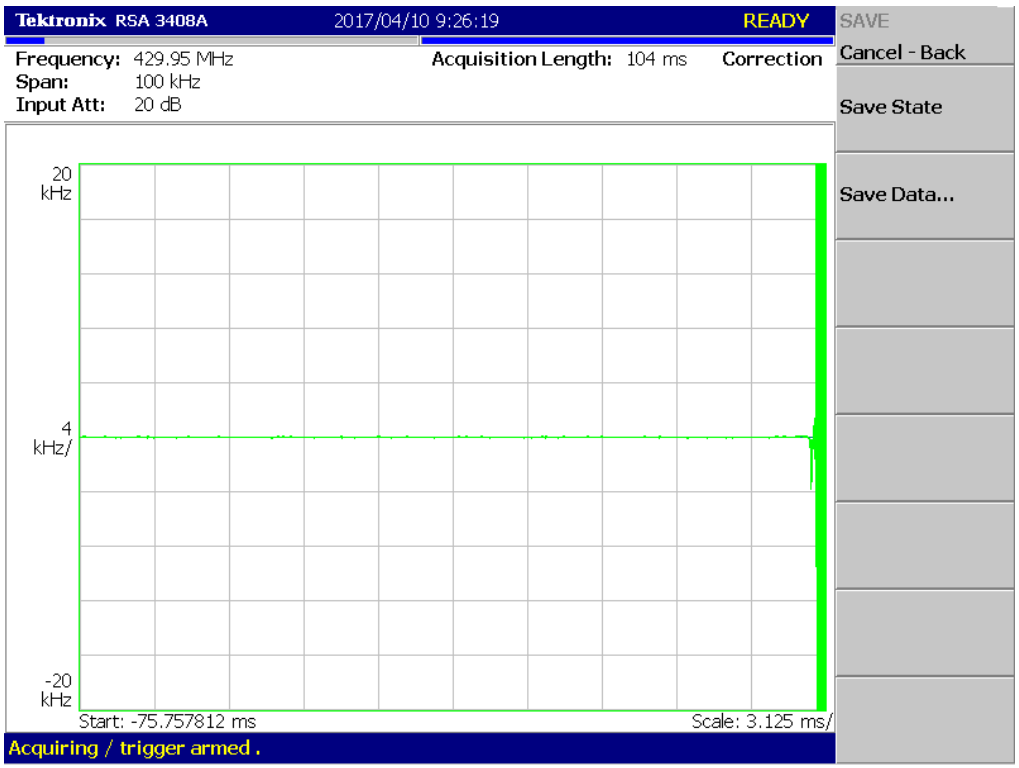
(7K60FXD, 7K60FXE _ 406.15 MHz)_Low



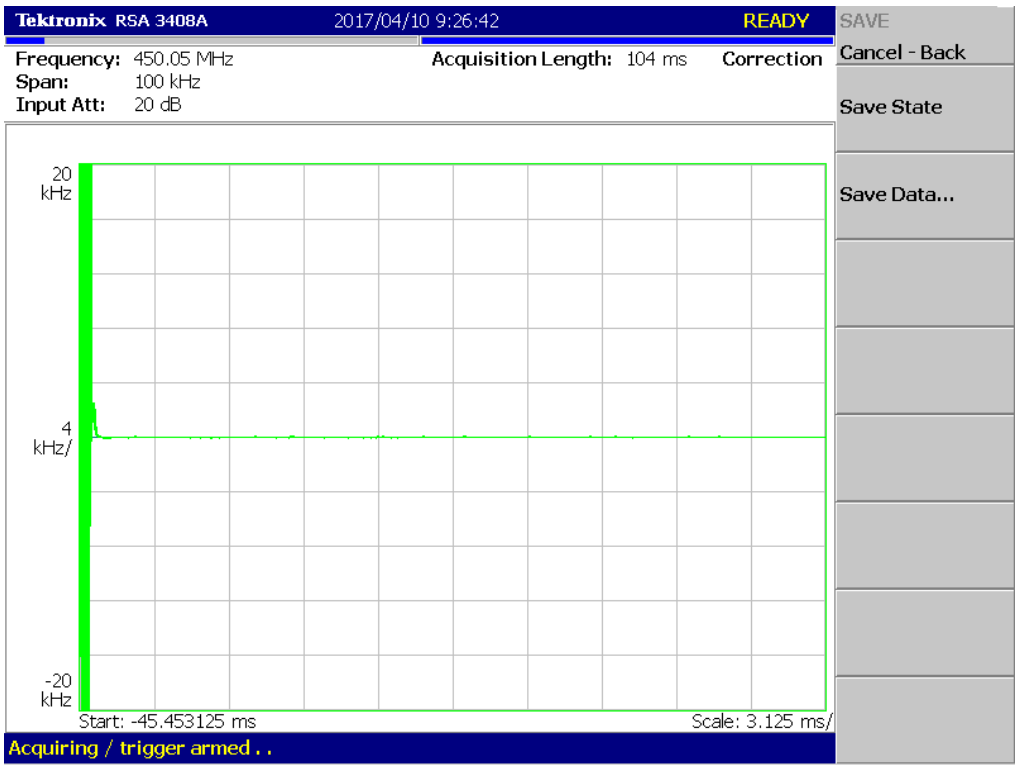


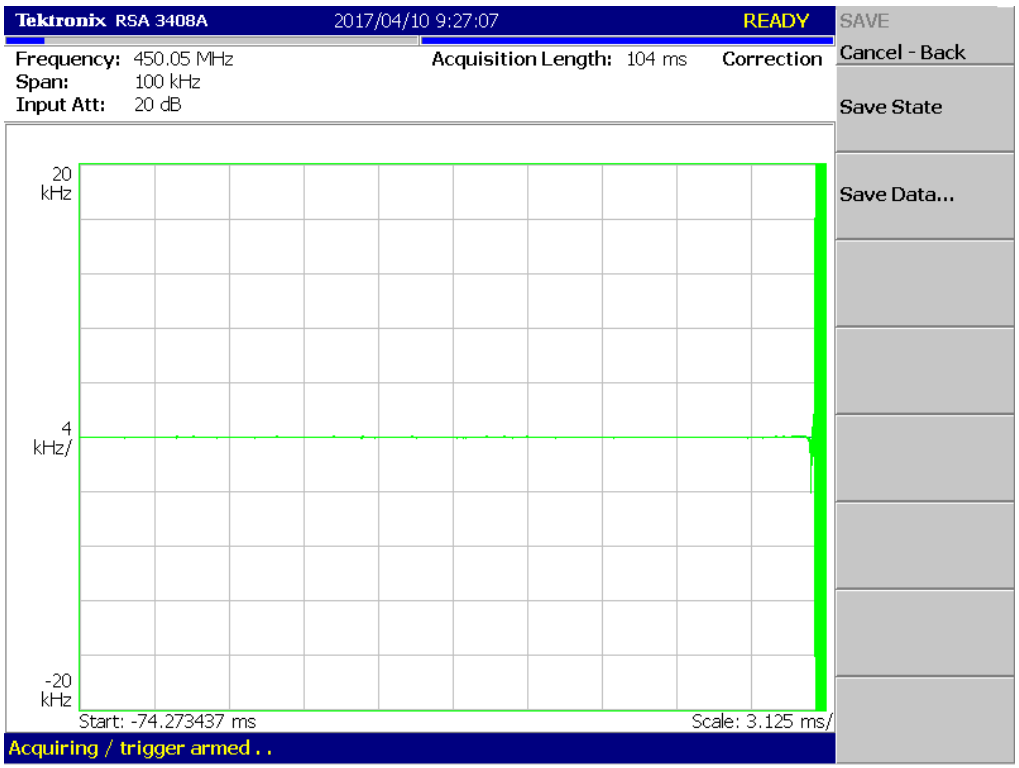
(7K60FXD, 7K60FXE _ 429.95 MHz)_Low



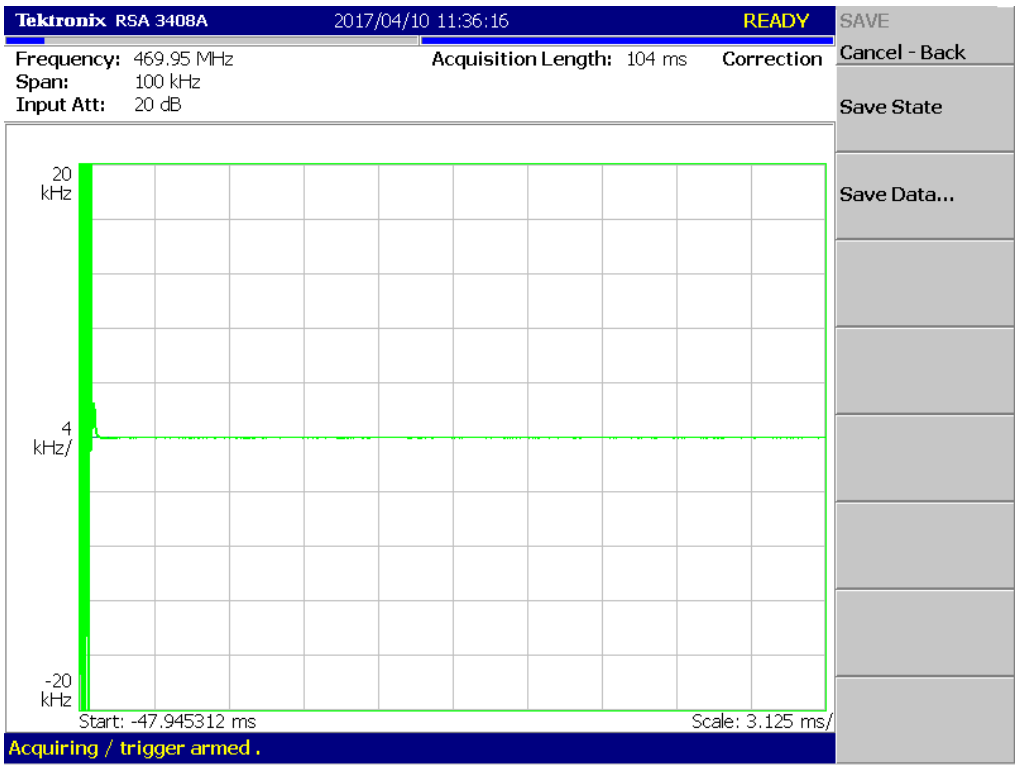


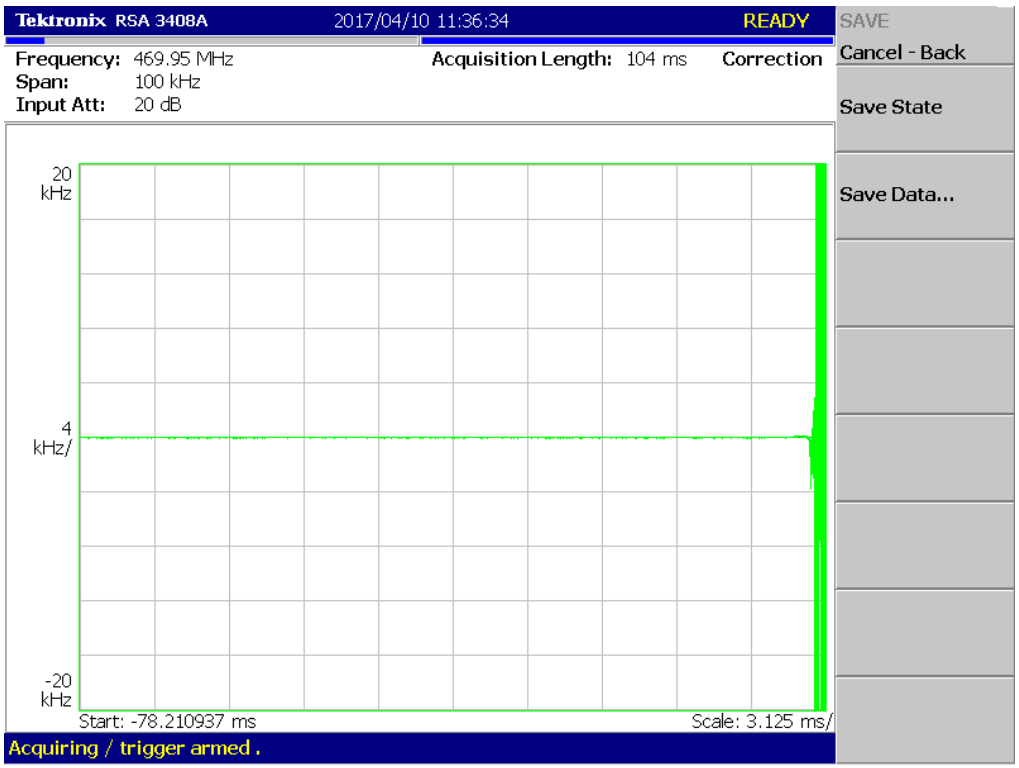
(7K60FXD, 7K60FXE _ 450.05 MHz)_Low



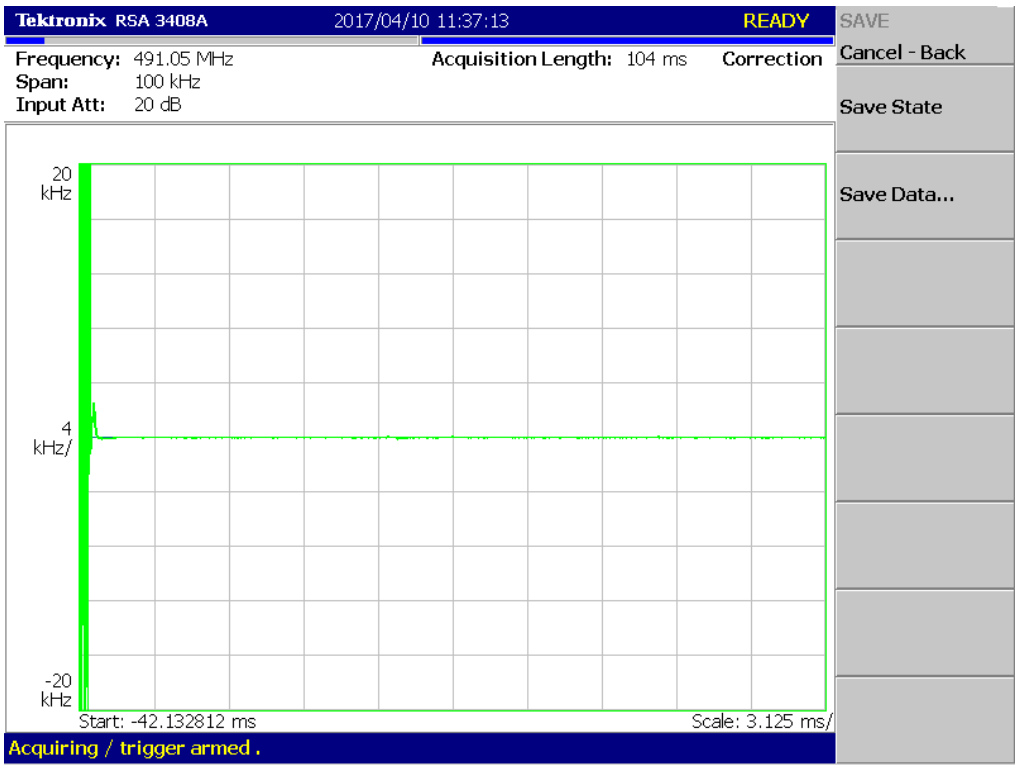


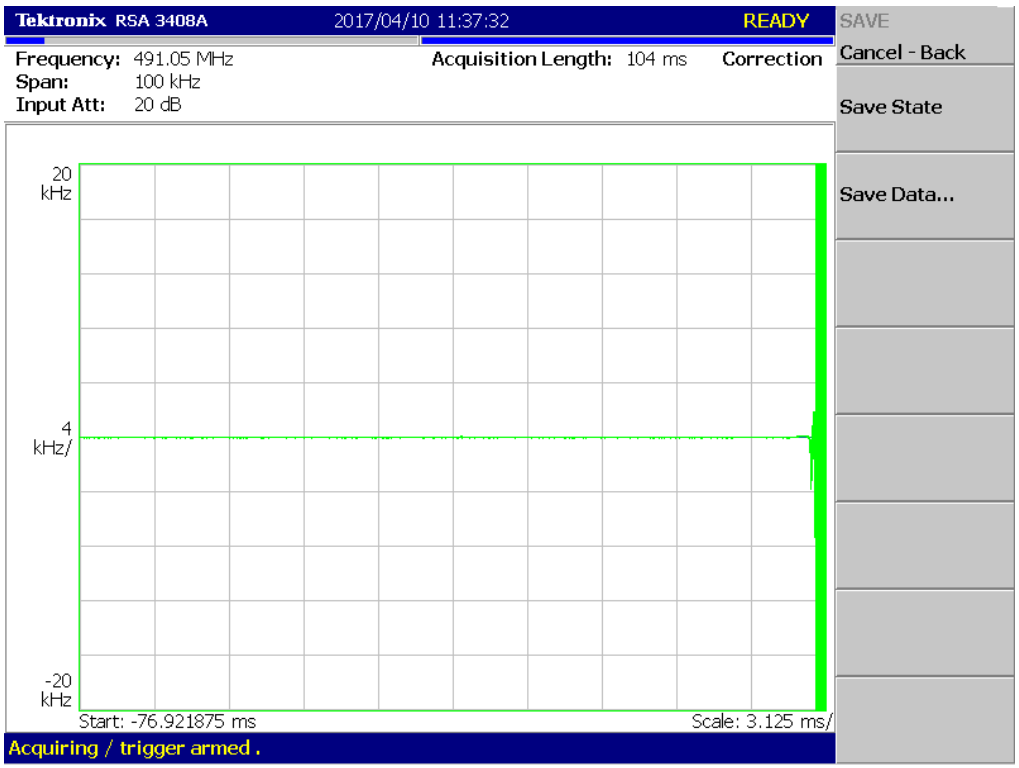
(7K60FXD, 7K60FXE _ 469.95 MHz)_Low



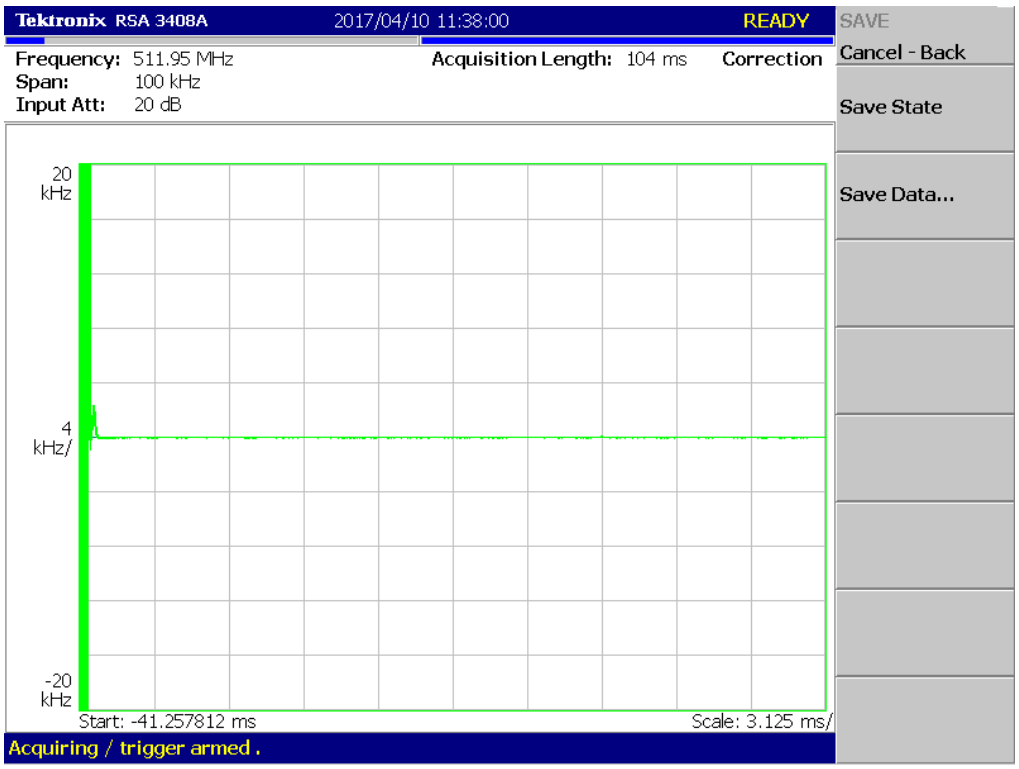


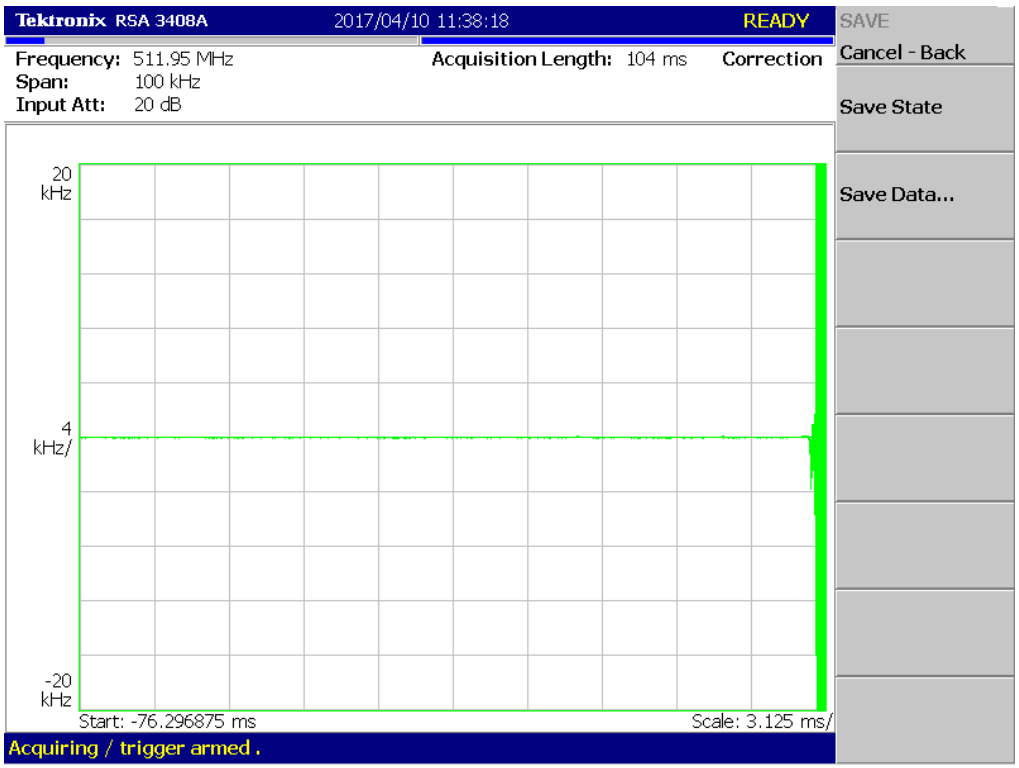
(7K60FXD, 7K60FXE _ 491.05 MHz)_Low



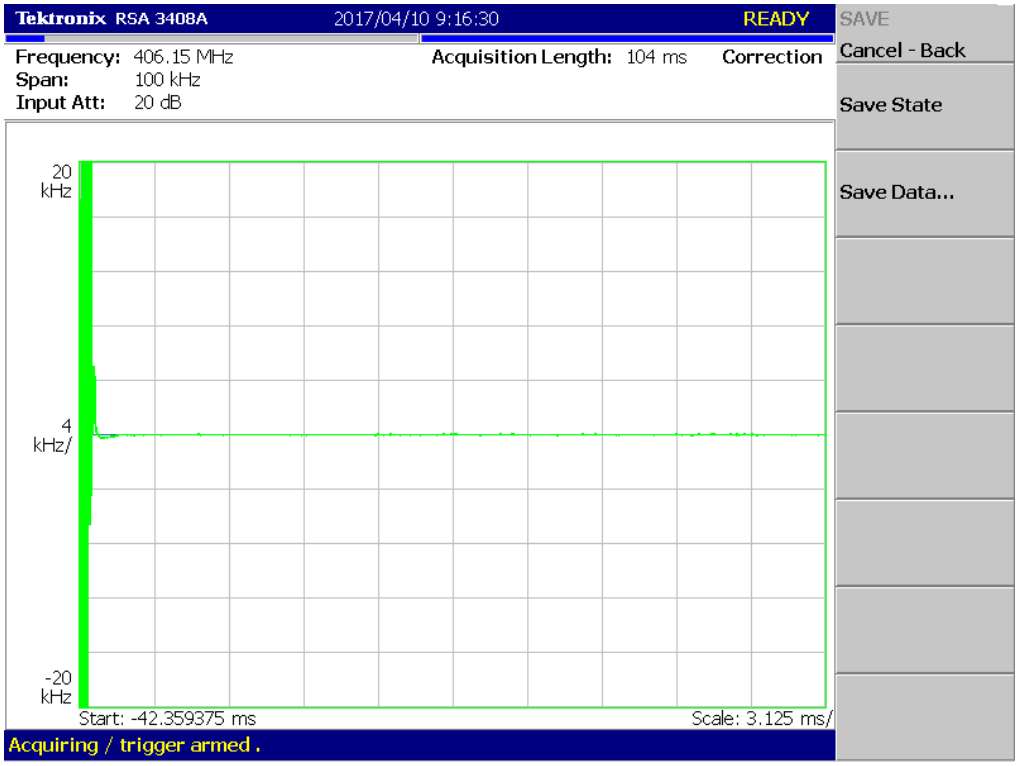


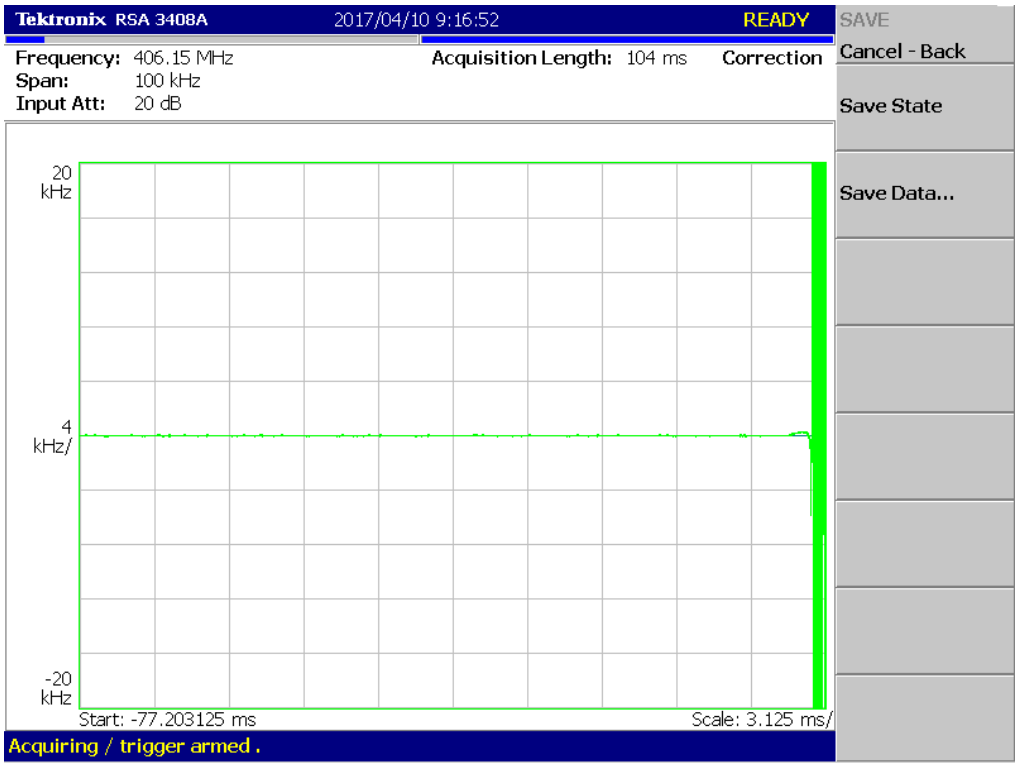
(7K60FXD, 7K60FXE _ 511.95 MHz)_Low



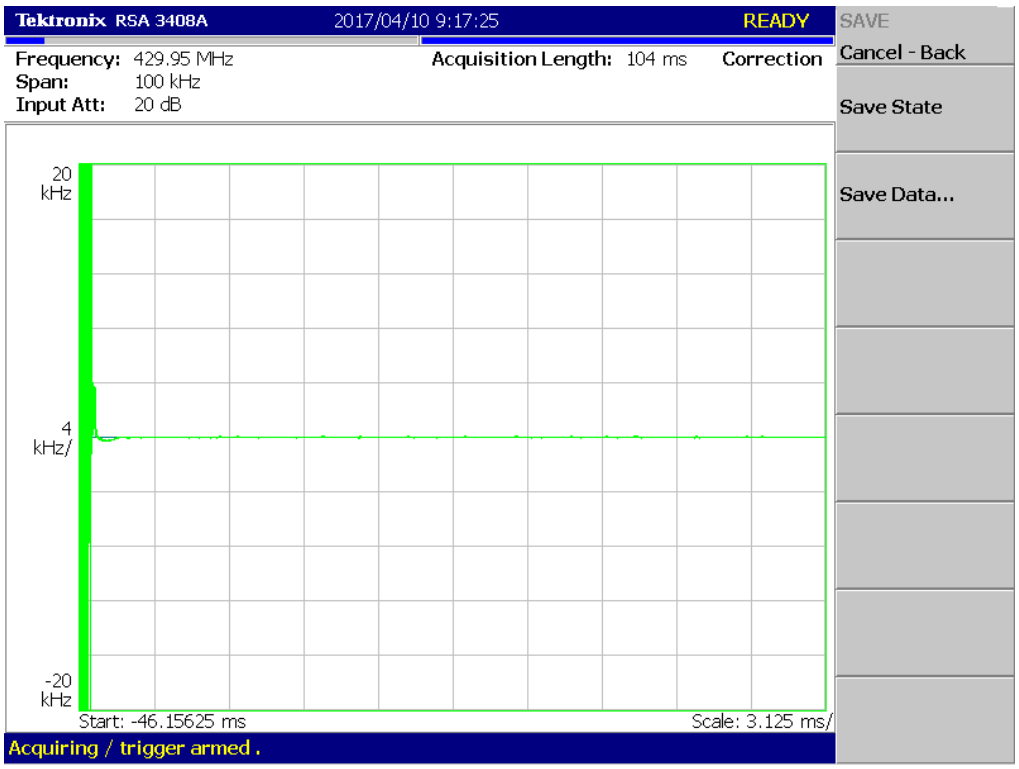


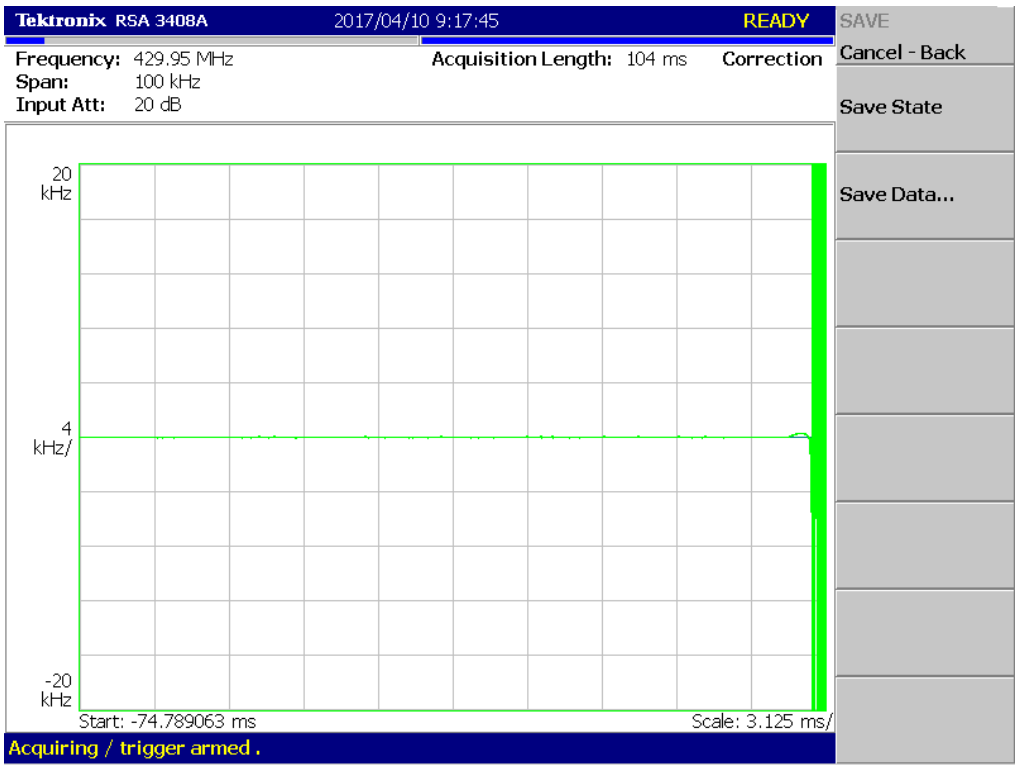
(8K30F1E, 8K30F1D, 8K30F7W _ 406.15 MHz)_High



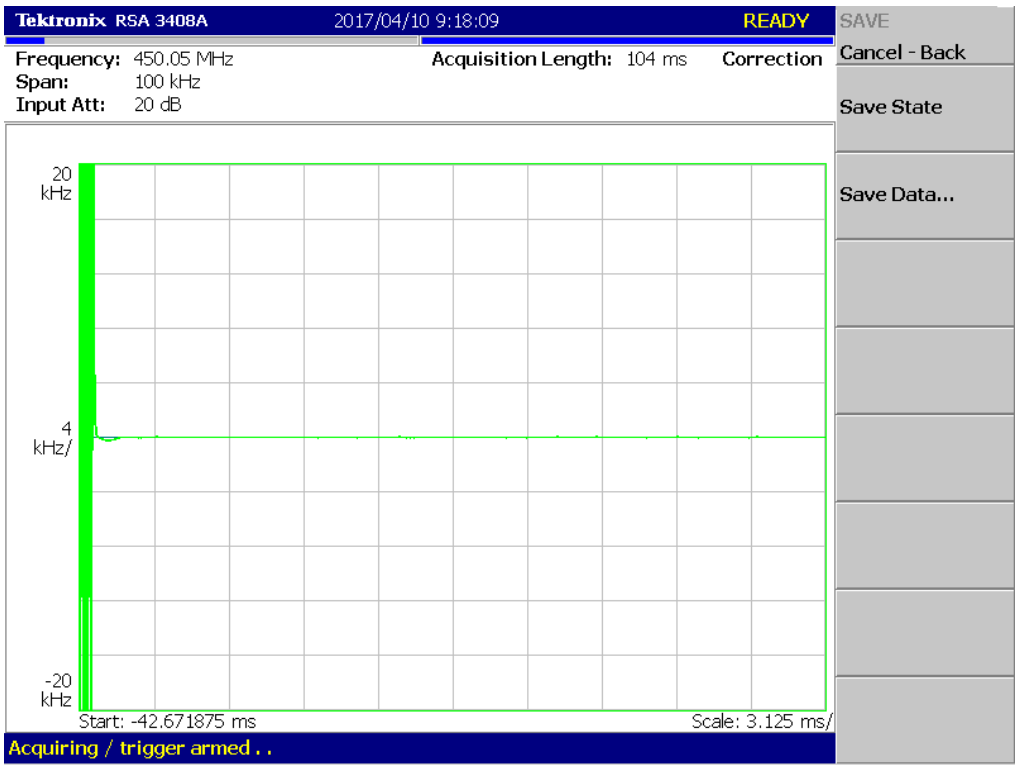


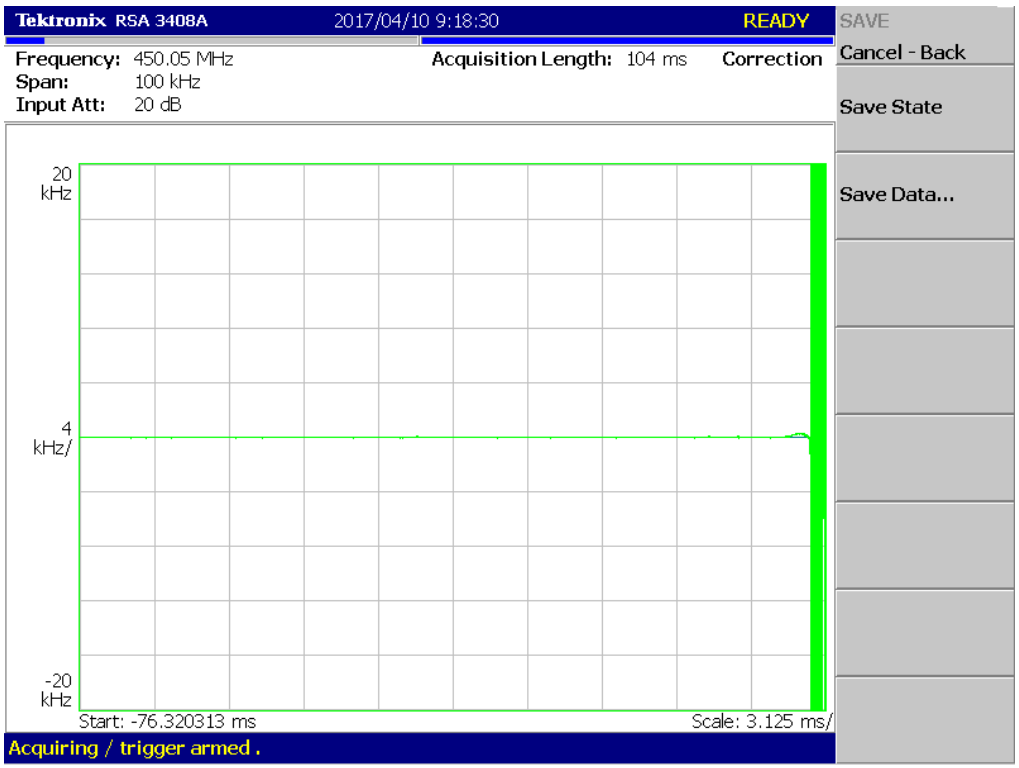
(8K30F1E, 8K30F1D, 8K30F7W _ 429.95 MHz)_High



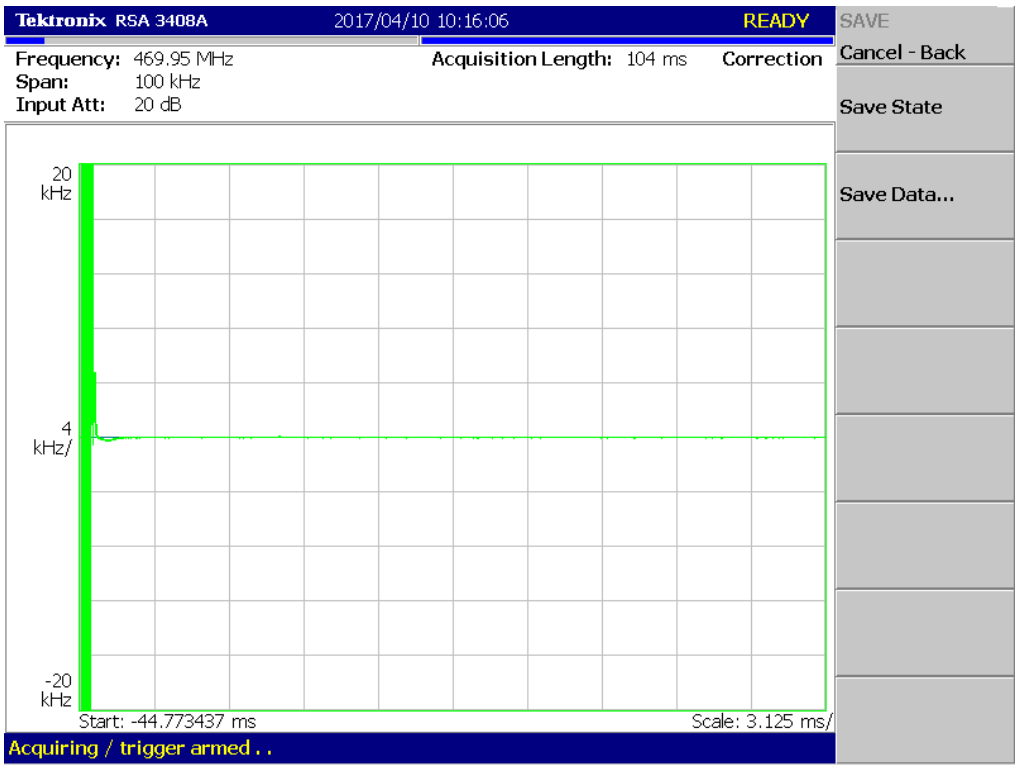


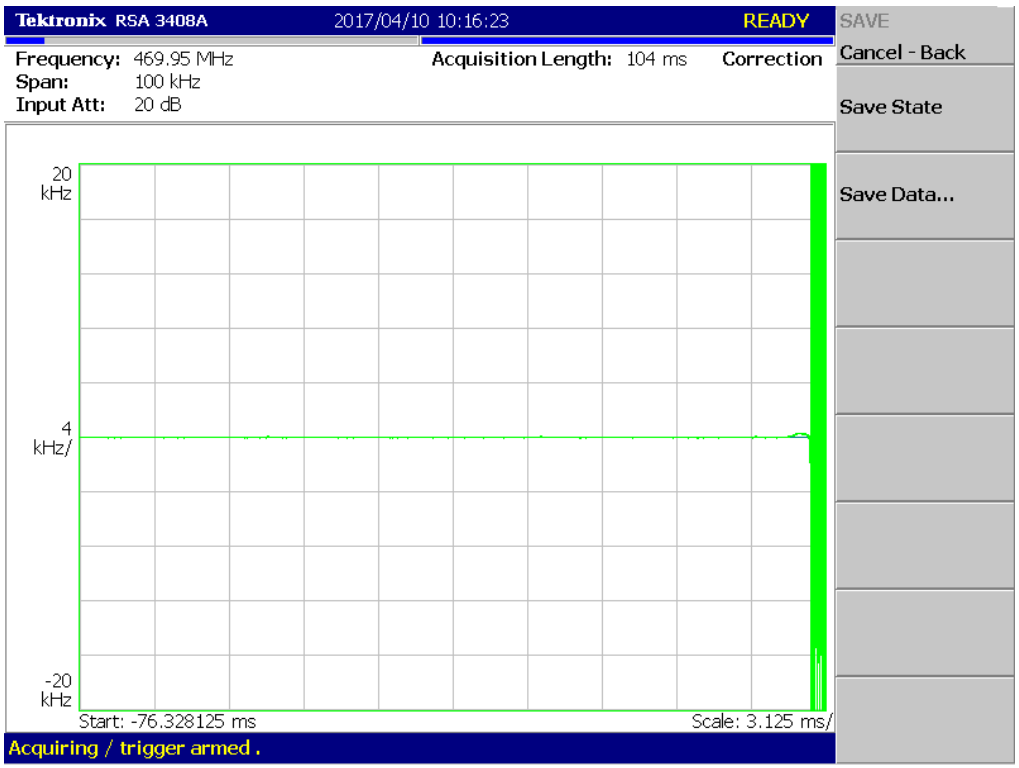
(8K30F1E, 8K30F1D, 8K30F7W _ 450.05 MHz)_High



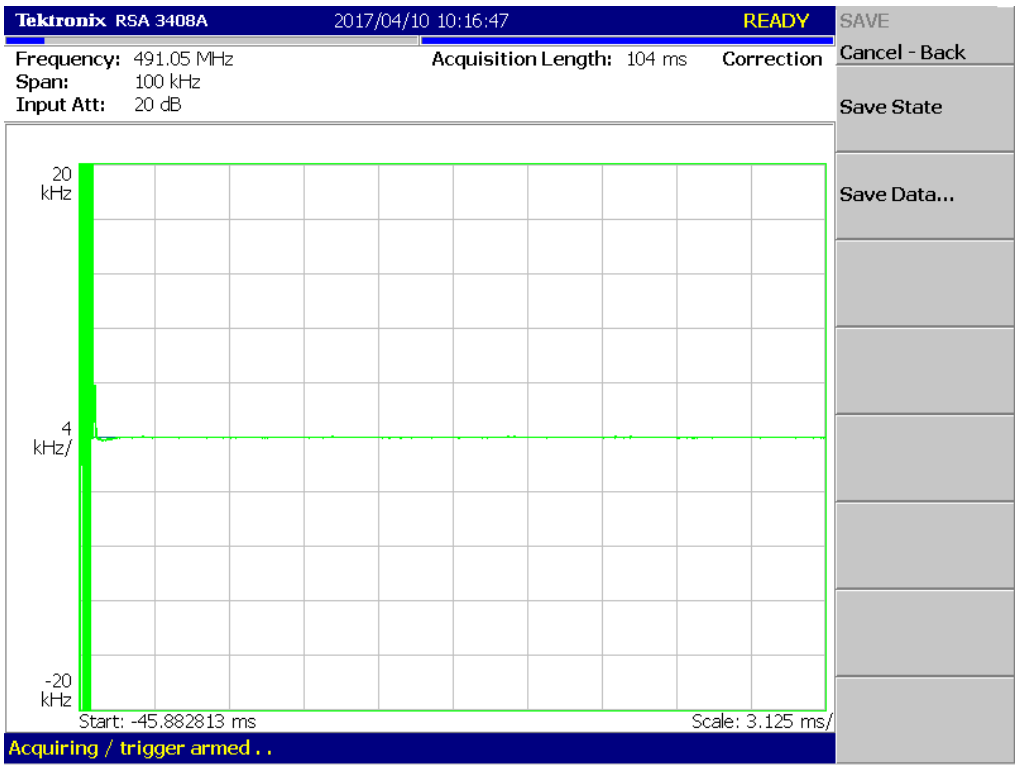


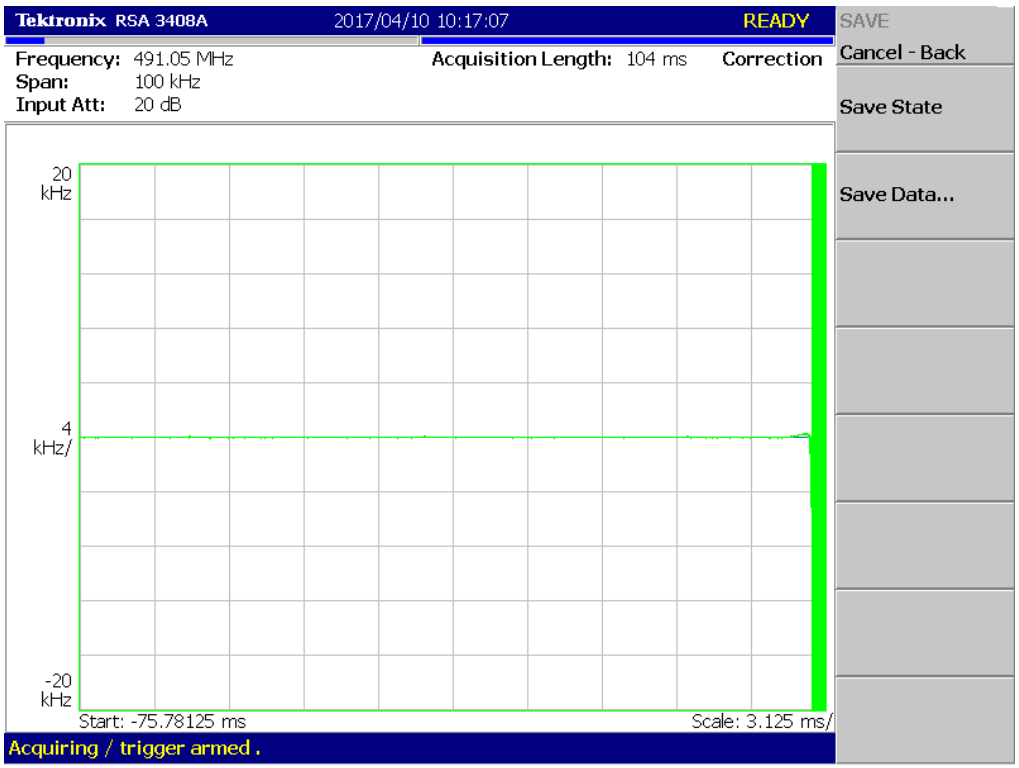
(8K30F1E, 8K30F1D, 8K30F7W _ 469.95 MHz)_High



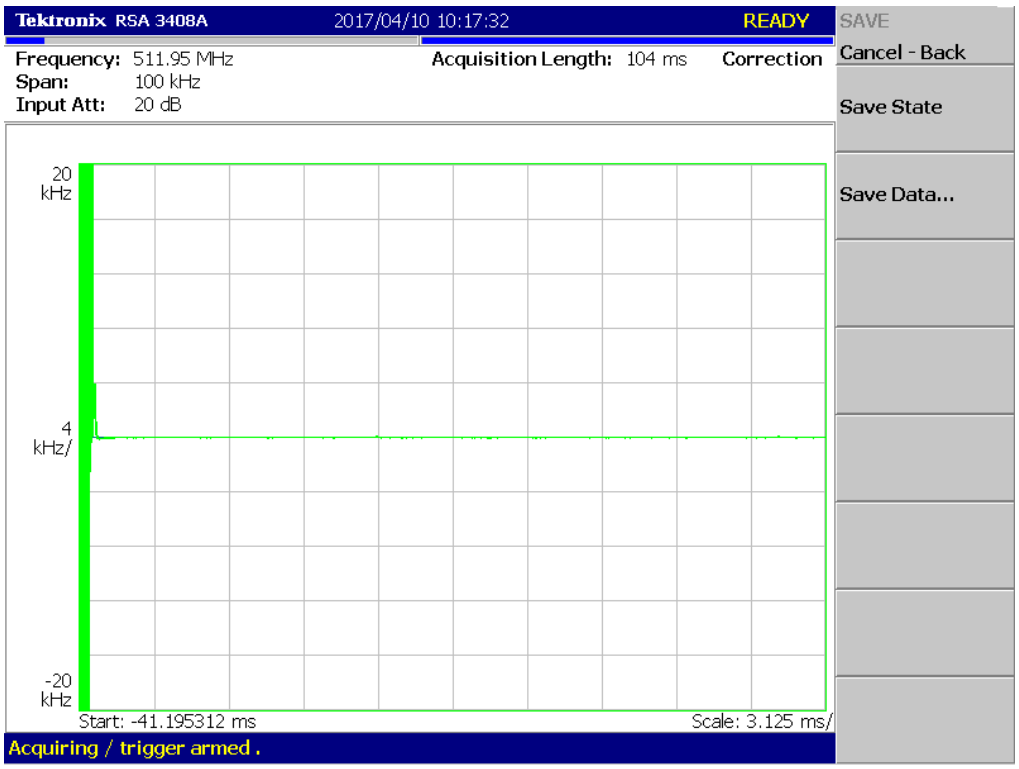


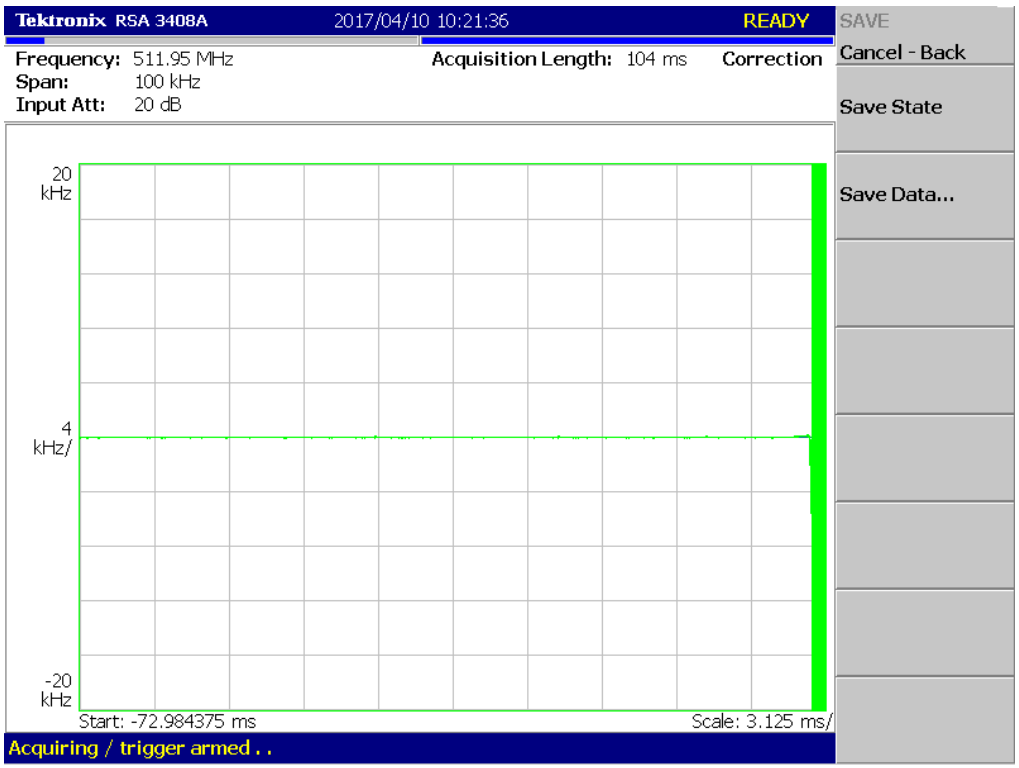
(8K30F1E, 8K30F1D, 8K30F7W _ 491.05 MHz)_High



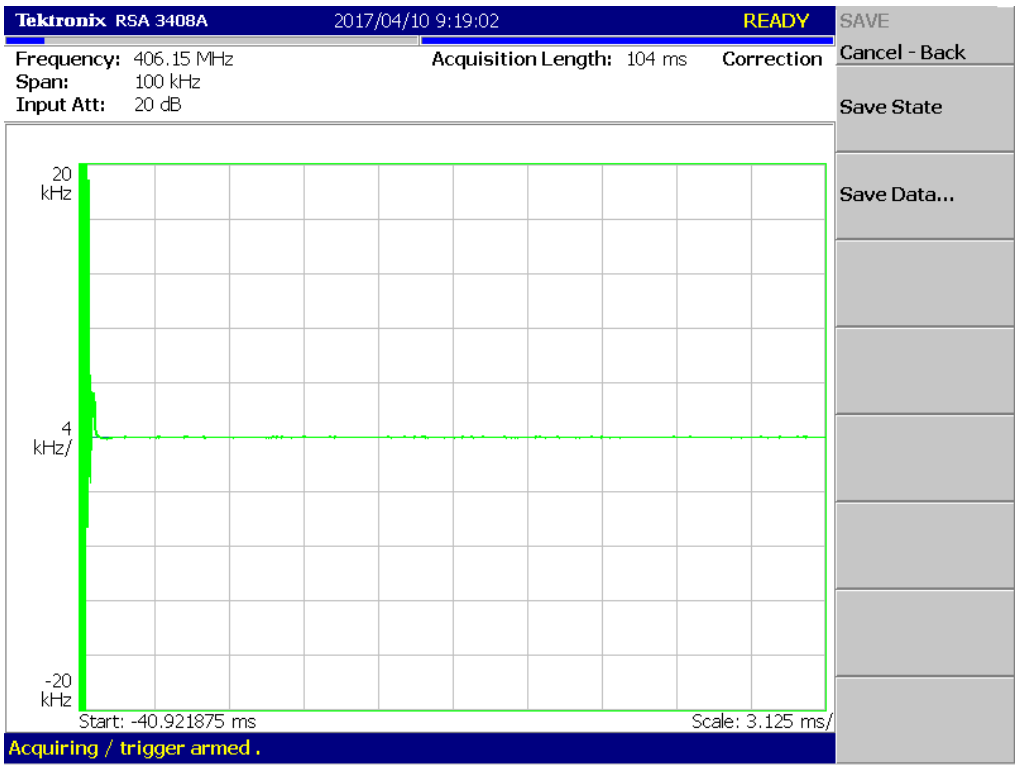


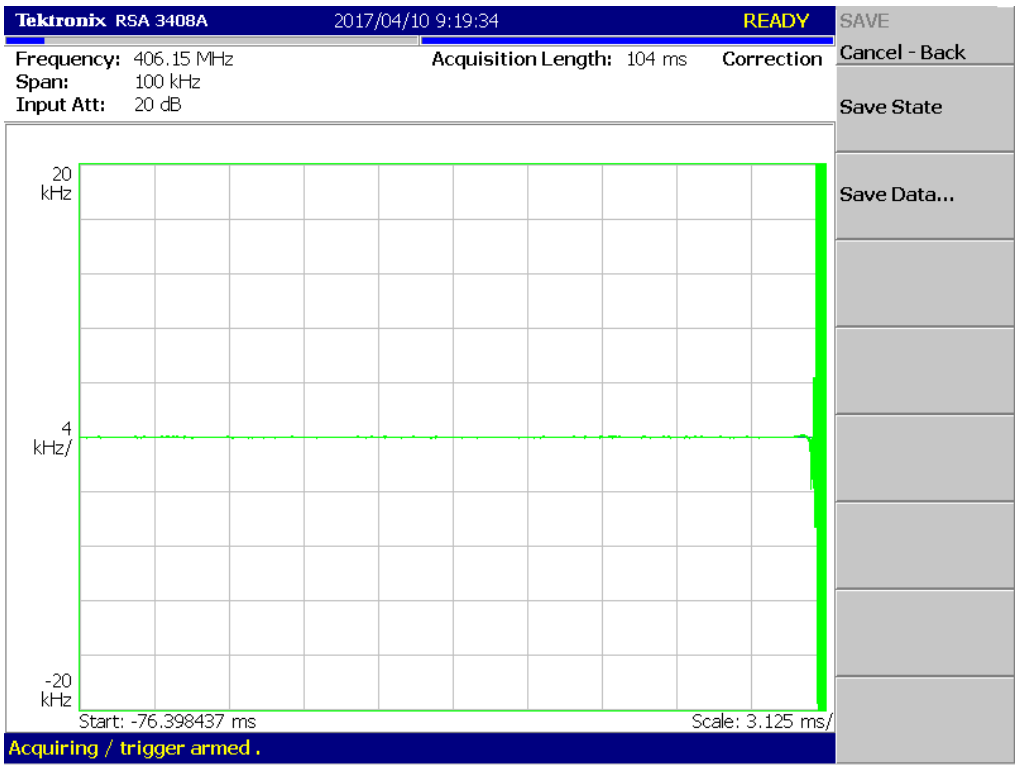
(8K30F1E, 8K30F1D, 8K30F7W _ 511.95 MHz)_High



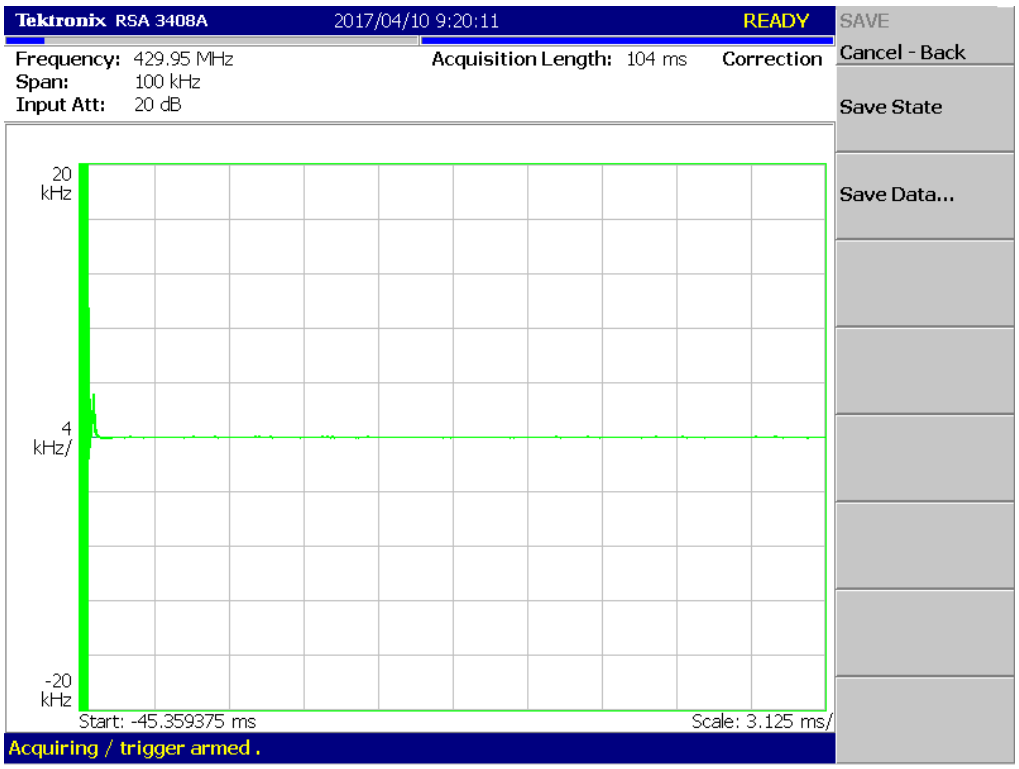


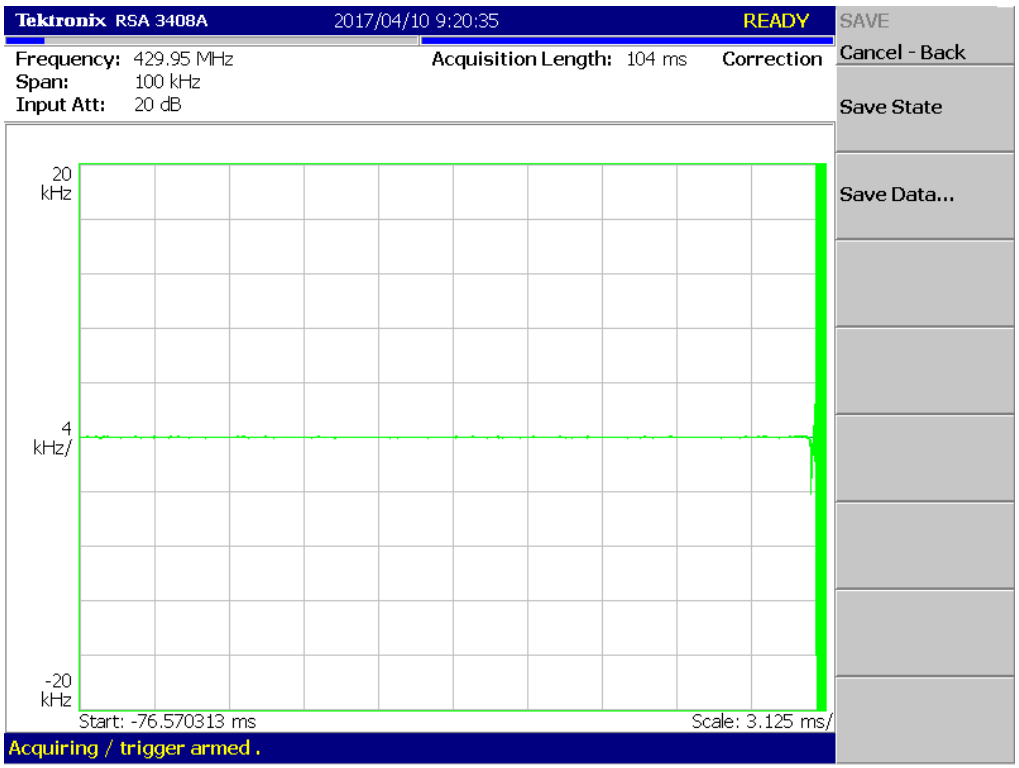
(8K30F1E, 8K30F1D, 8K30F7W _ 406.15 MHz)_Low



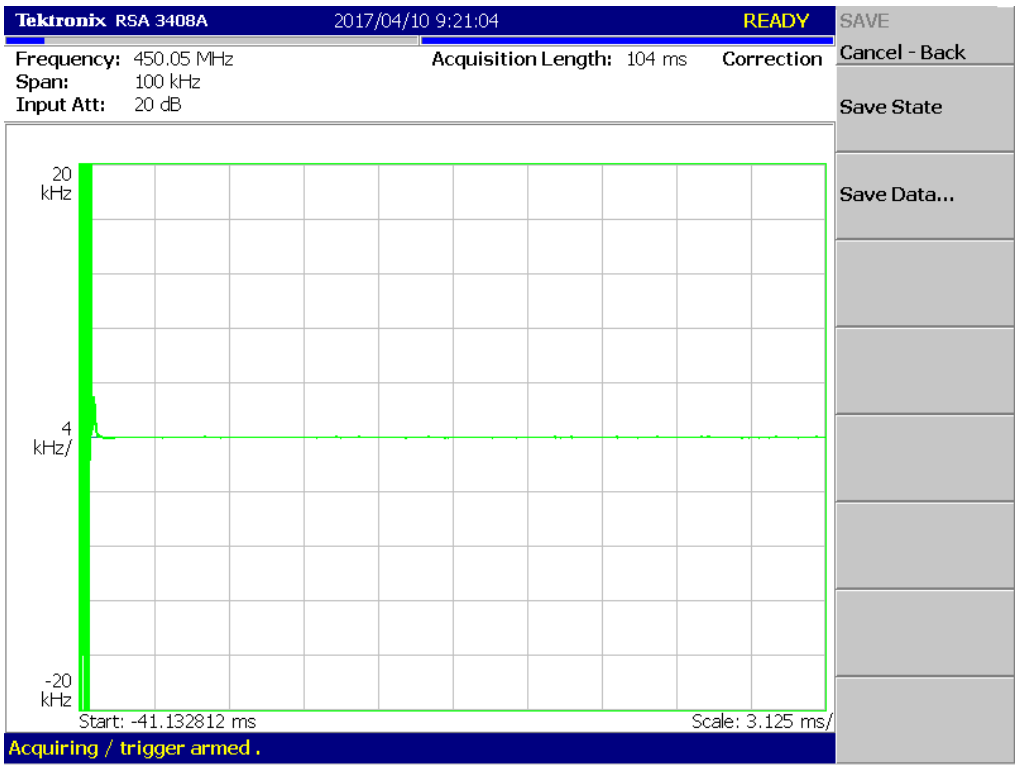


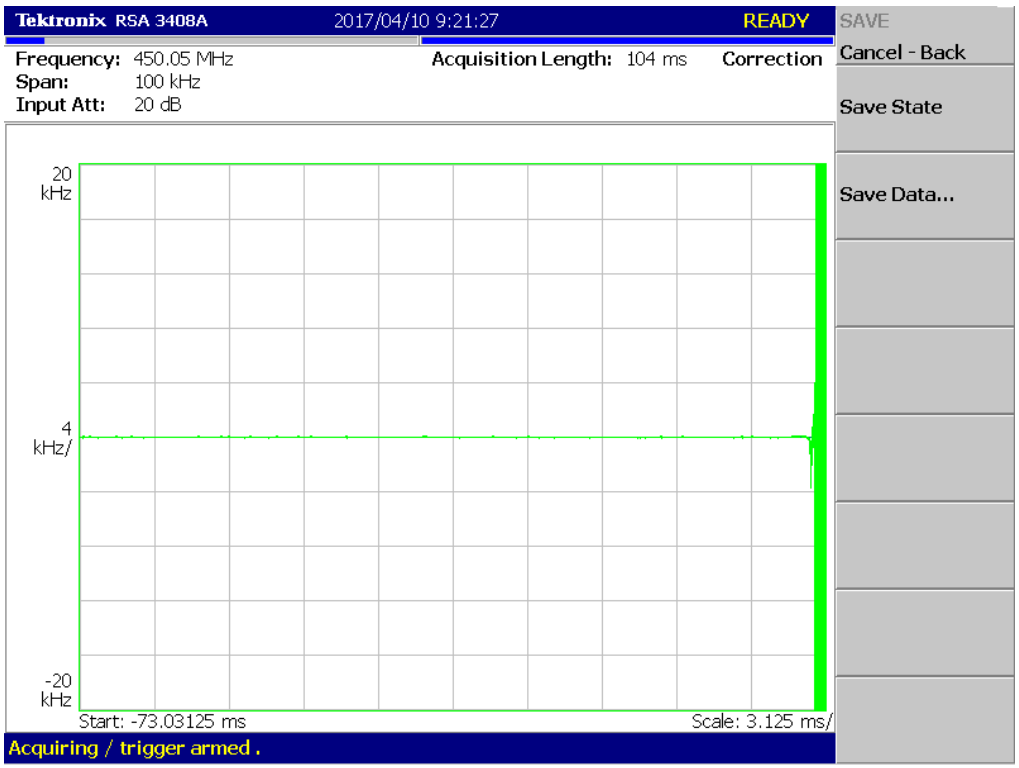
(8K30F1E, 8K30F1D, 8K30F7W _ 429.95 MHz)_Low



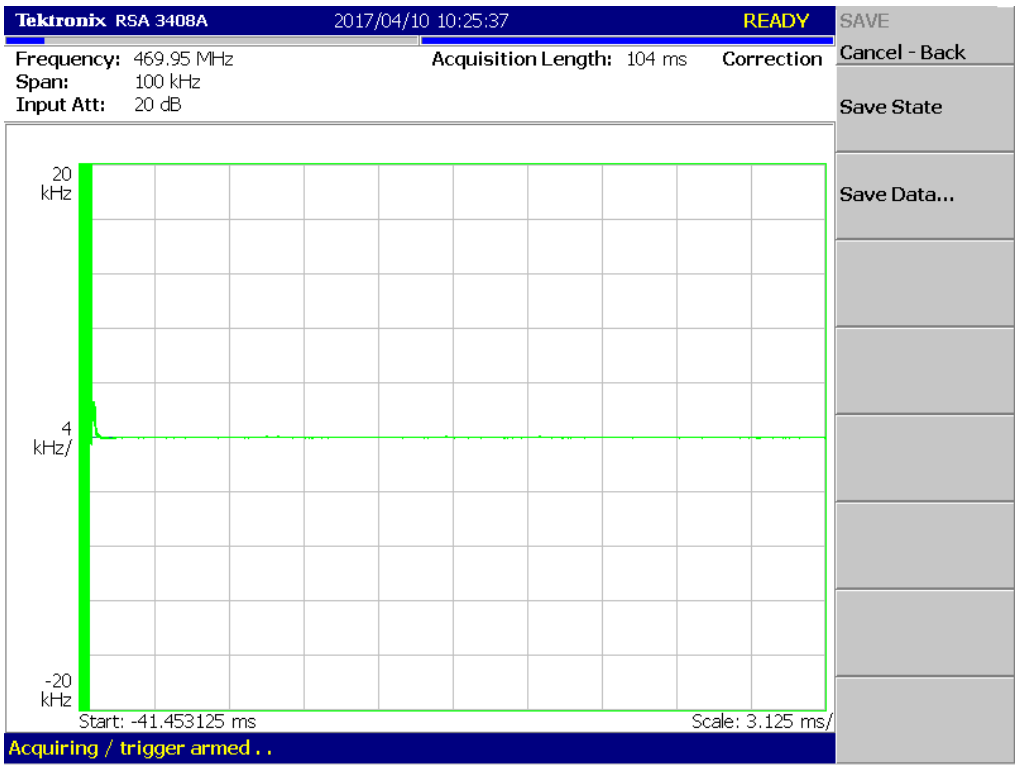


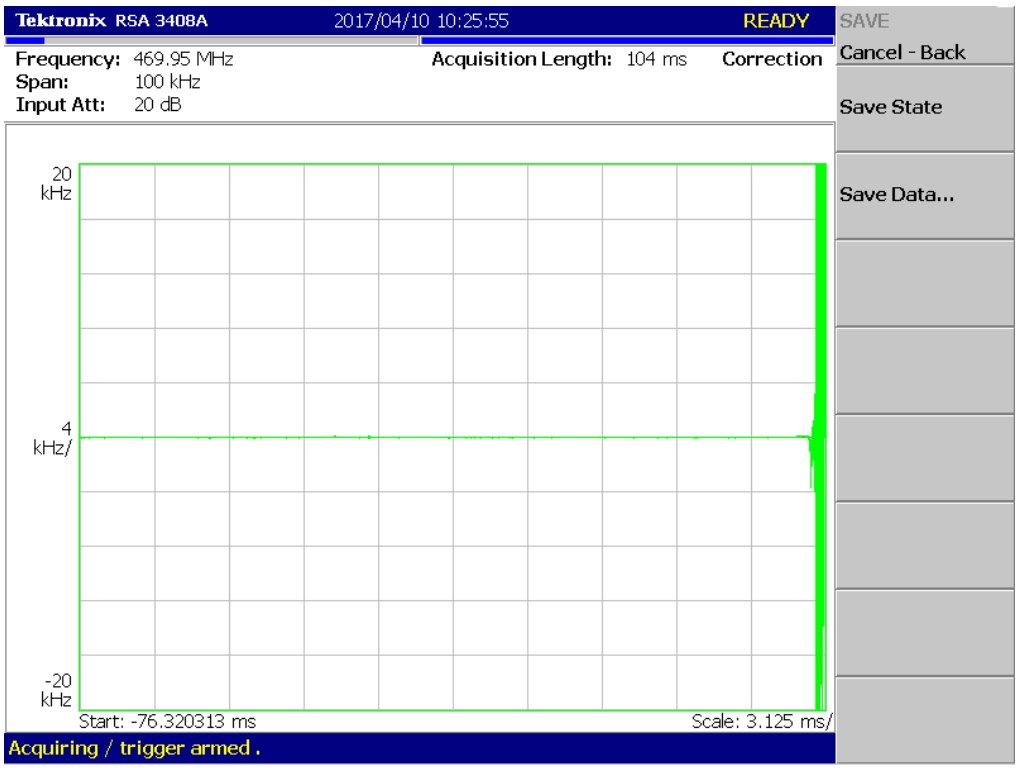
(8K30F1E, 8K30F1D, 8K30F7W _ 450.05 MHz)_Low



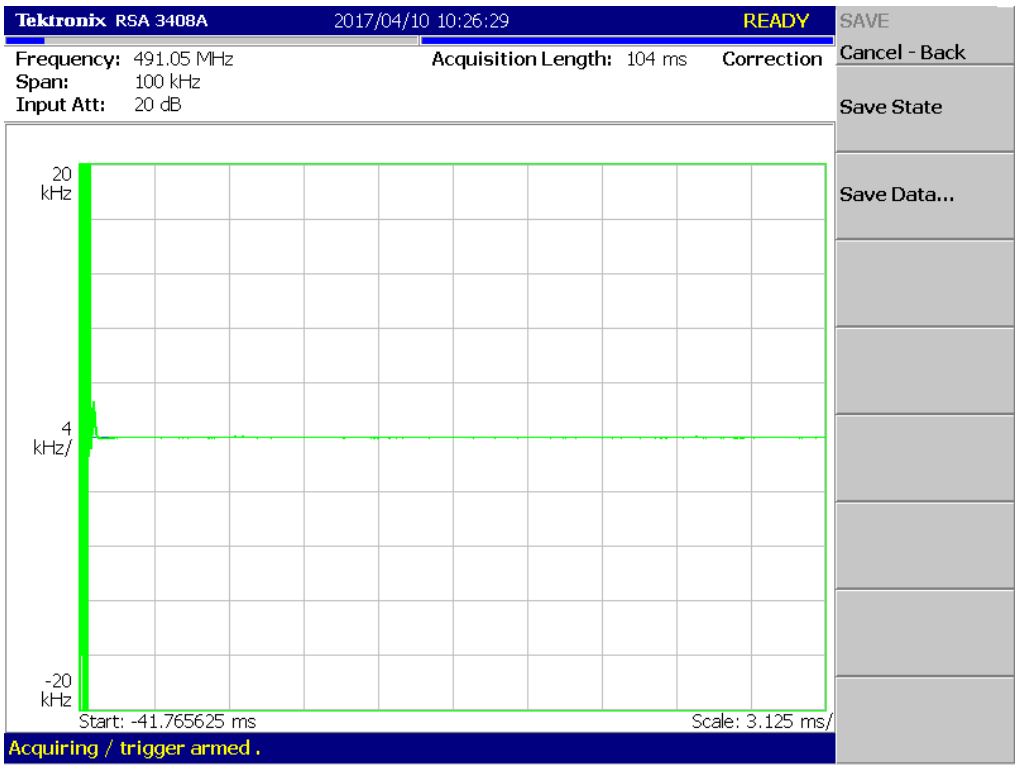


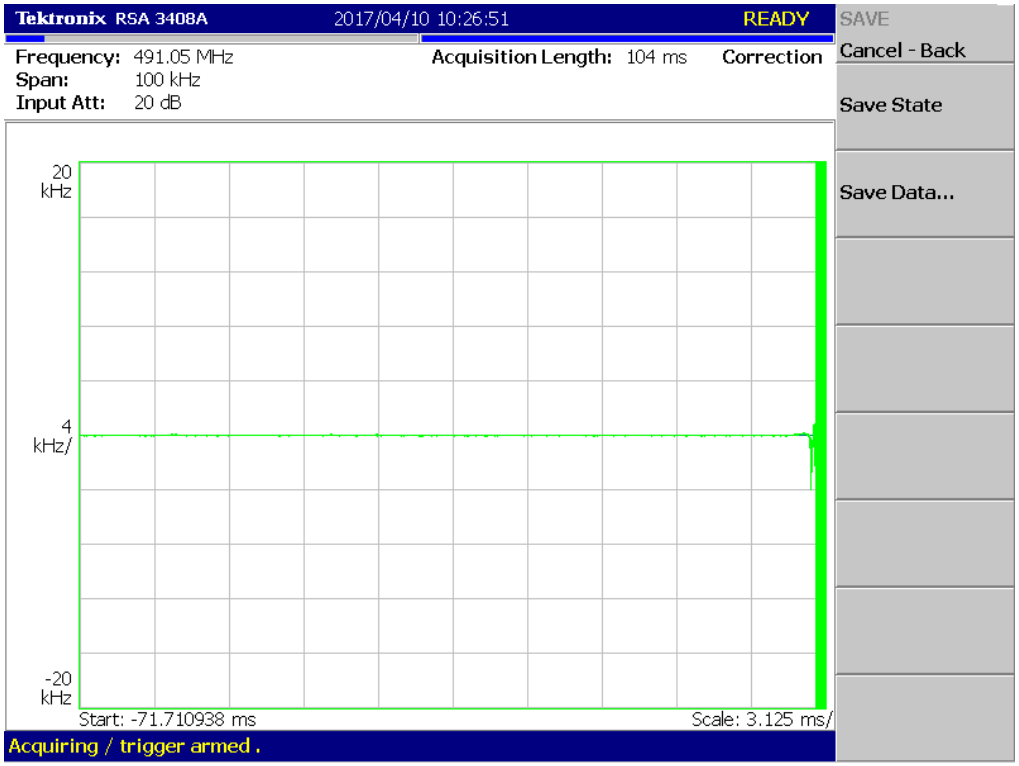
(8K30F1E, 8K30F1D, 8K30F7W _ 469.95 MHz)_Low



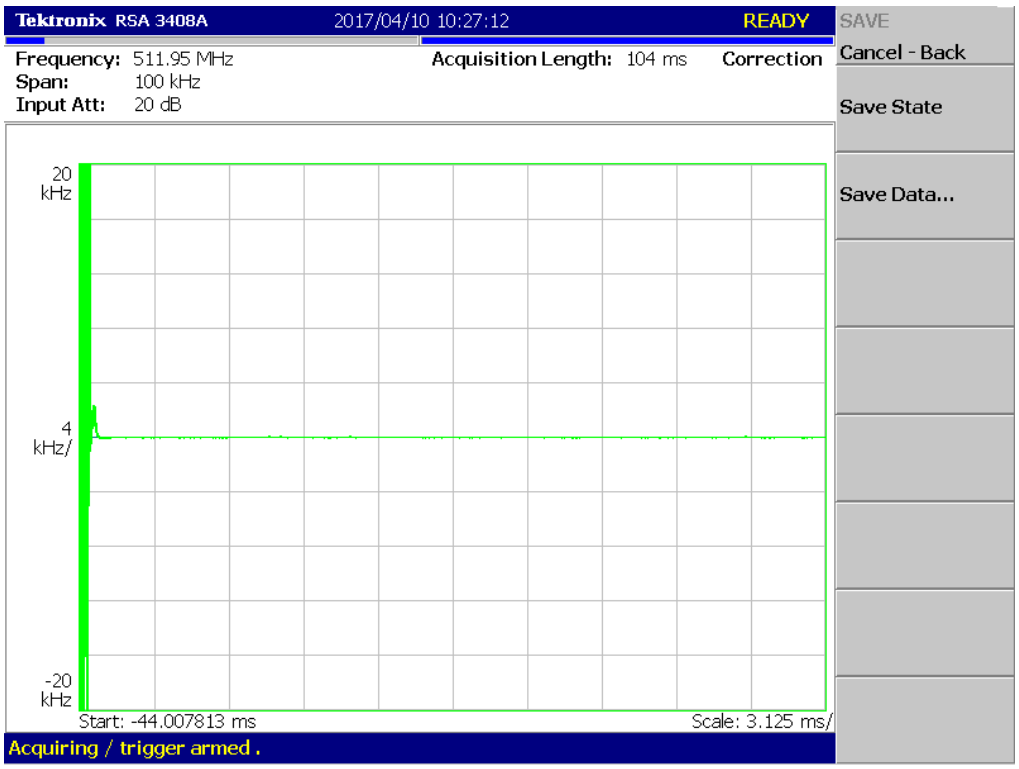


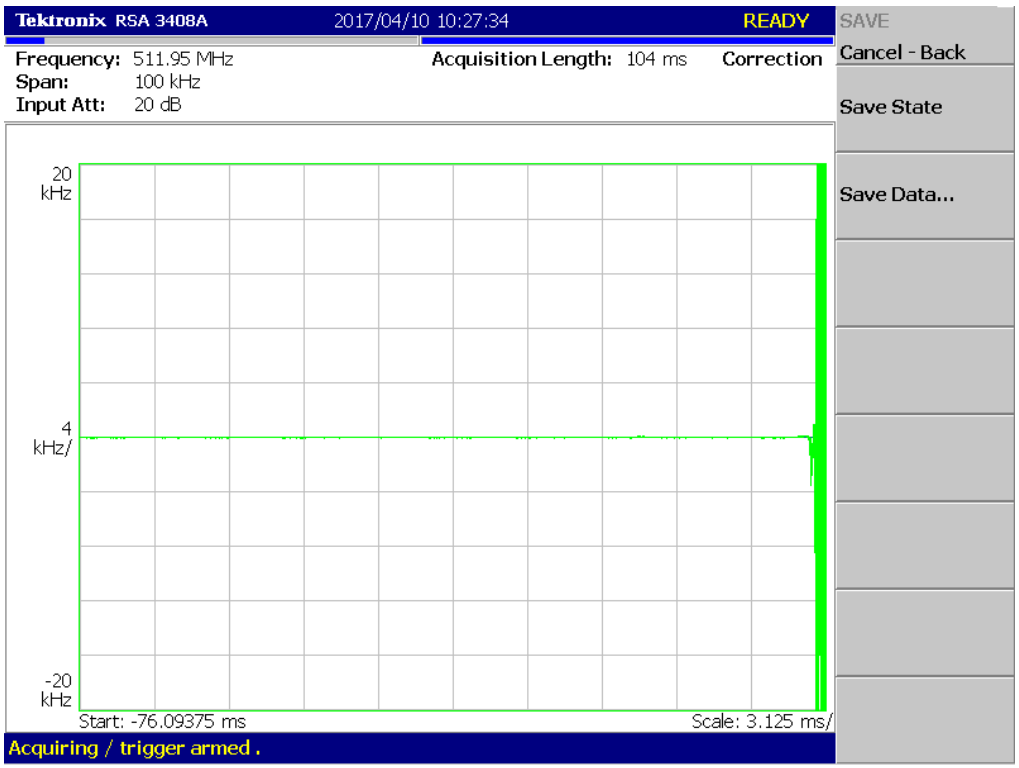
(8K30F1E, 8K30F1D, 8K30F7W _ 491.05 MHz)_Low



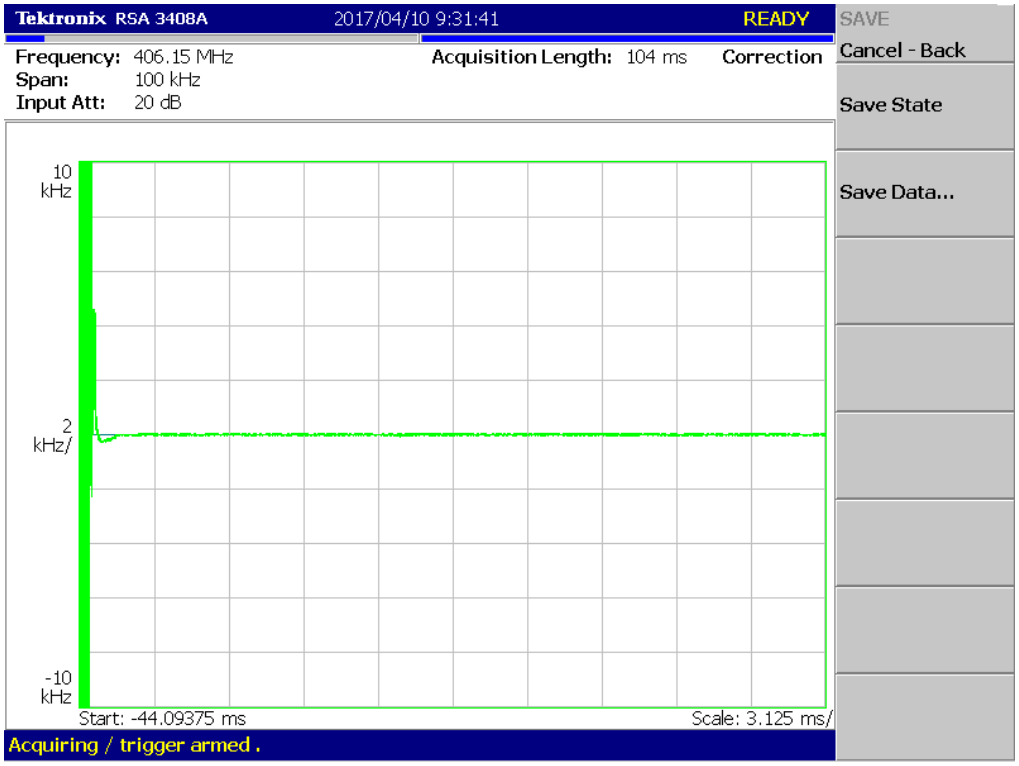


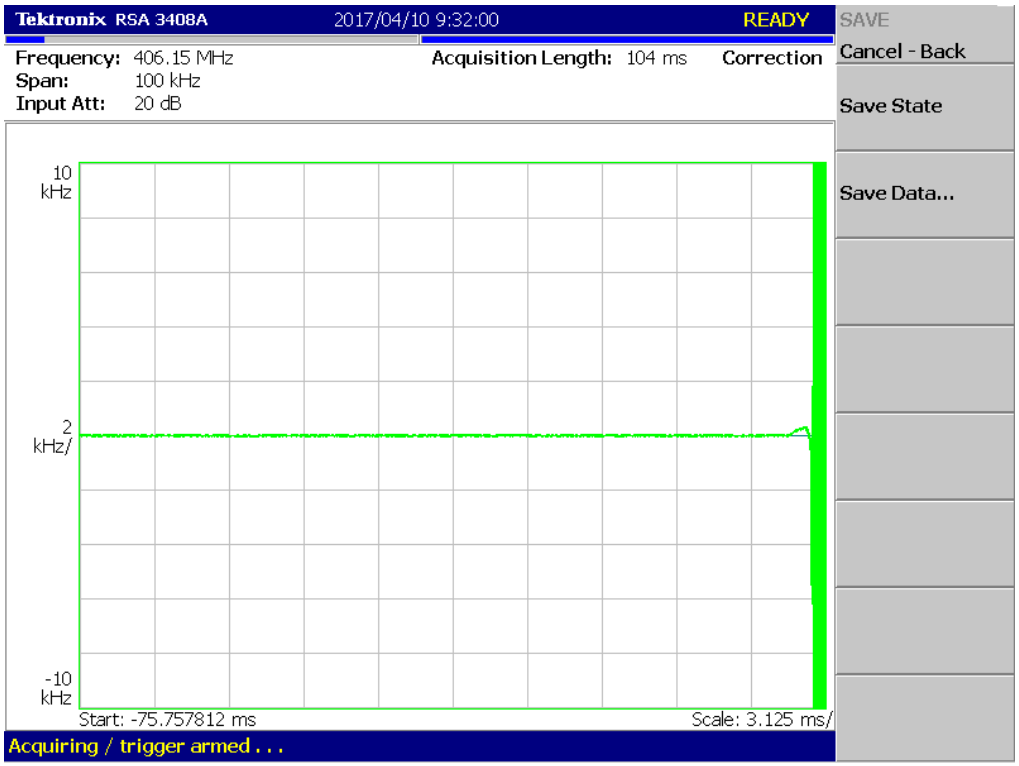
(8K30F1E, 8K30F1D, 8K30F7W _ 511.95 MHz)_Low



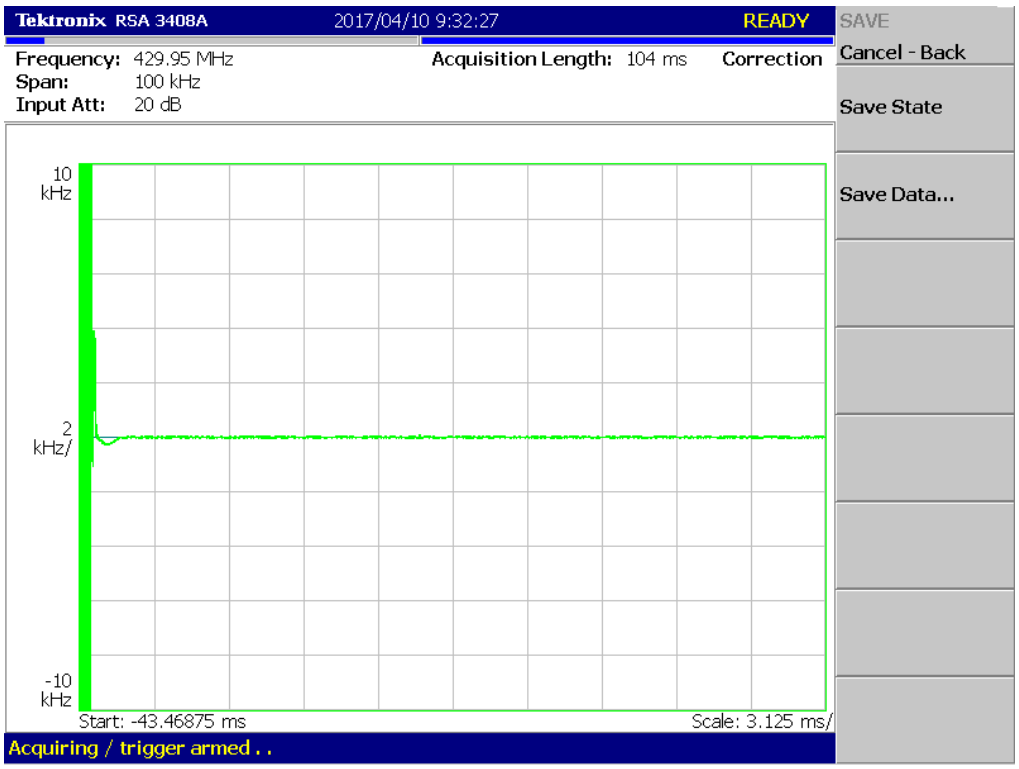


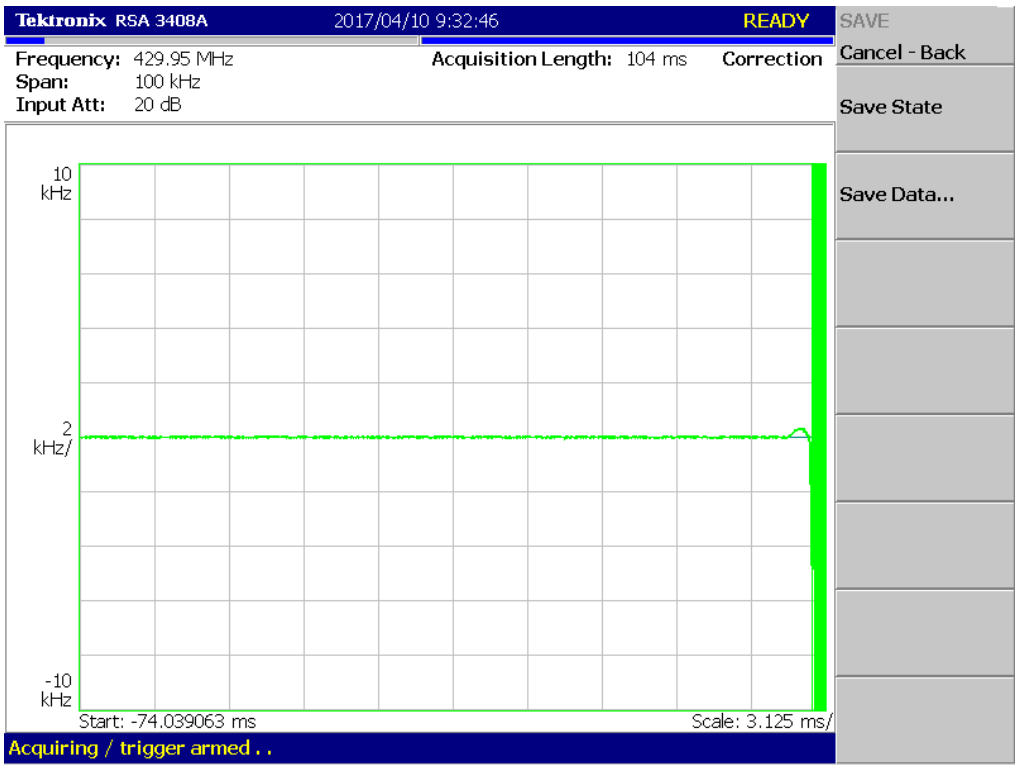
(4K00F1E, 4K00F1D, 4K00F7W _ 406.15 MHz)_High



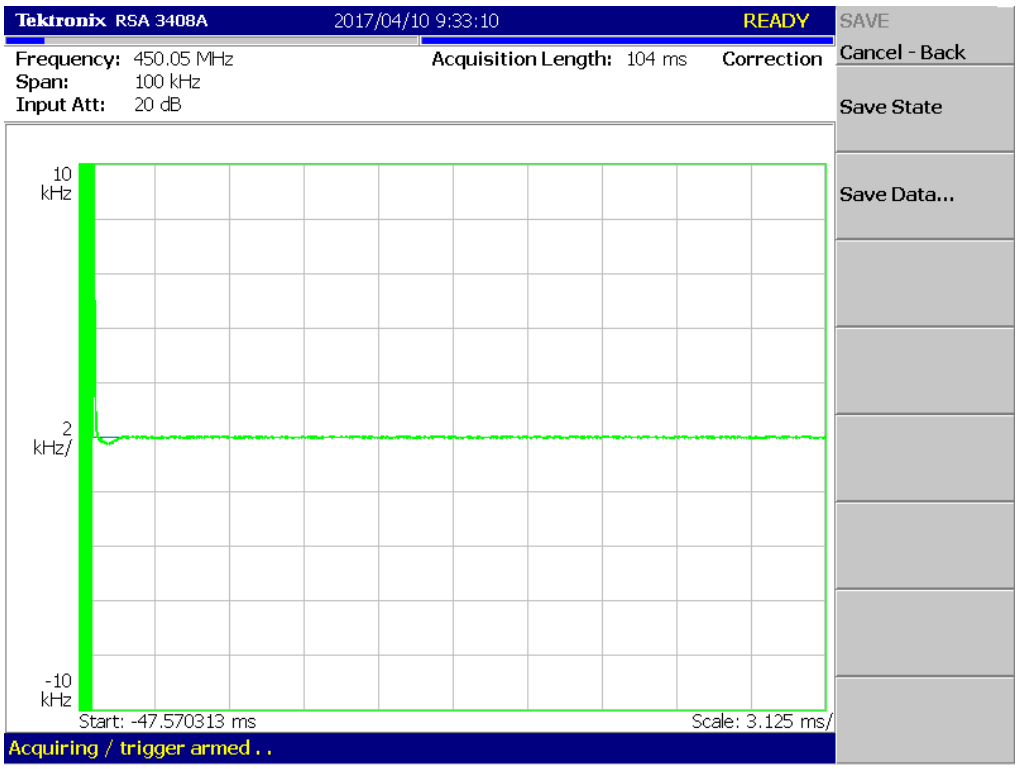


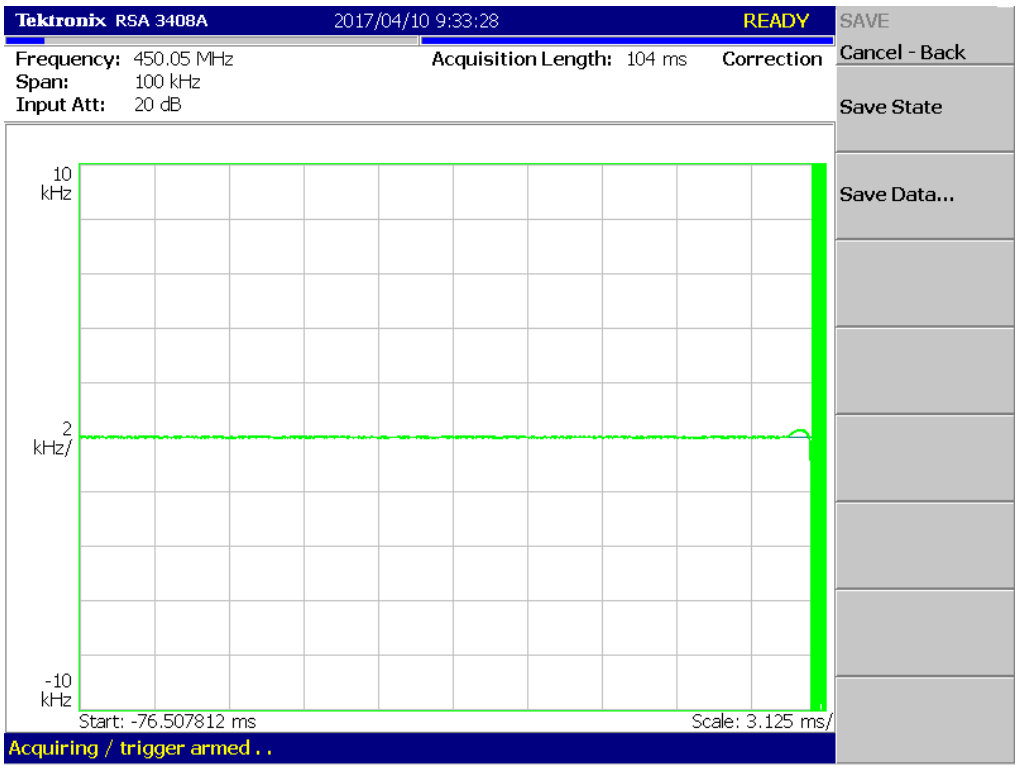
(4K00F1E, 4K00F1D, 4K00F7W _ 429.95 MHz)_High



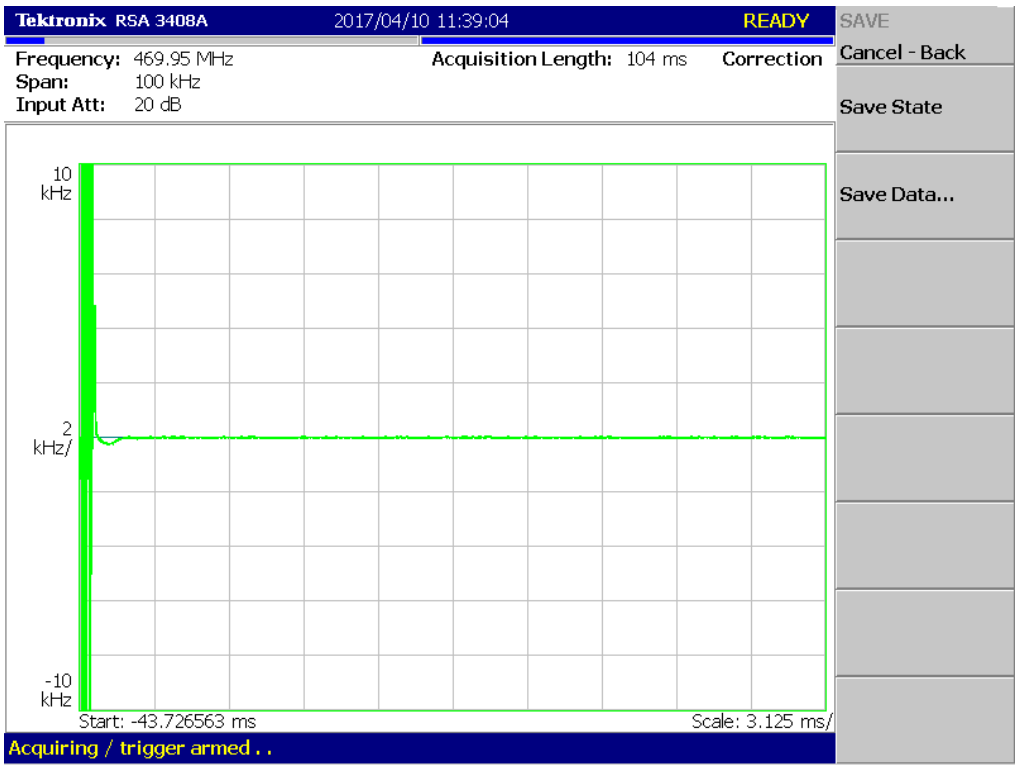


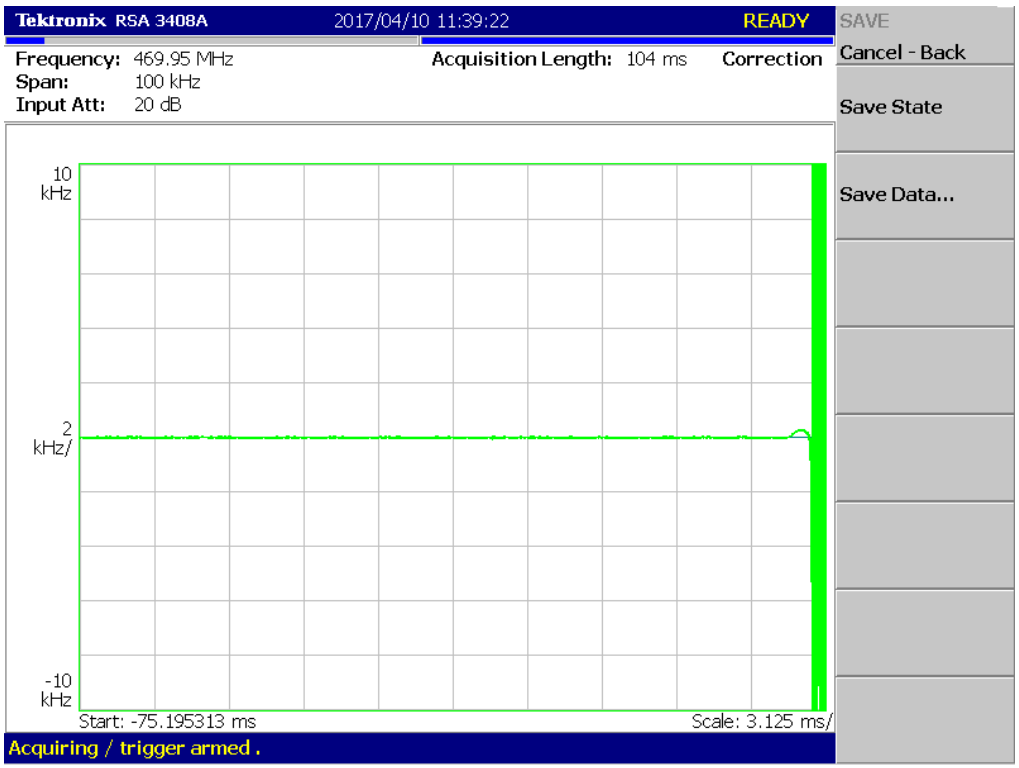
(4K00F1E, 4K00F1D, 4K00F7W _ 450.05 MHz)_High



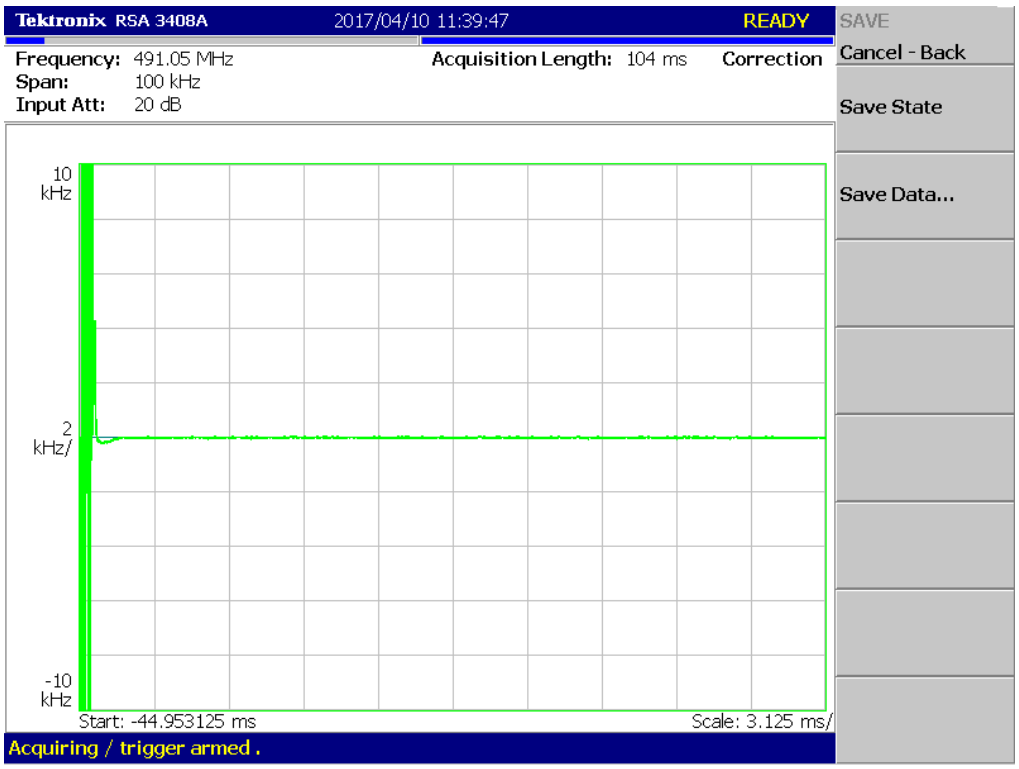


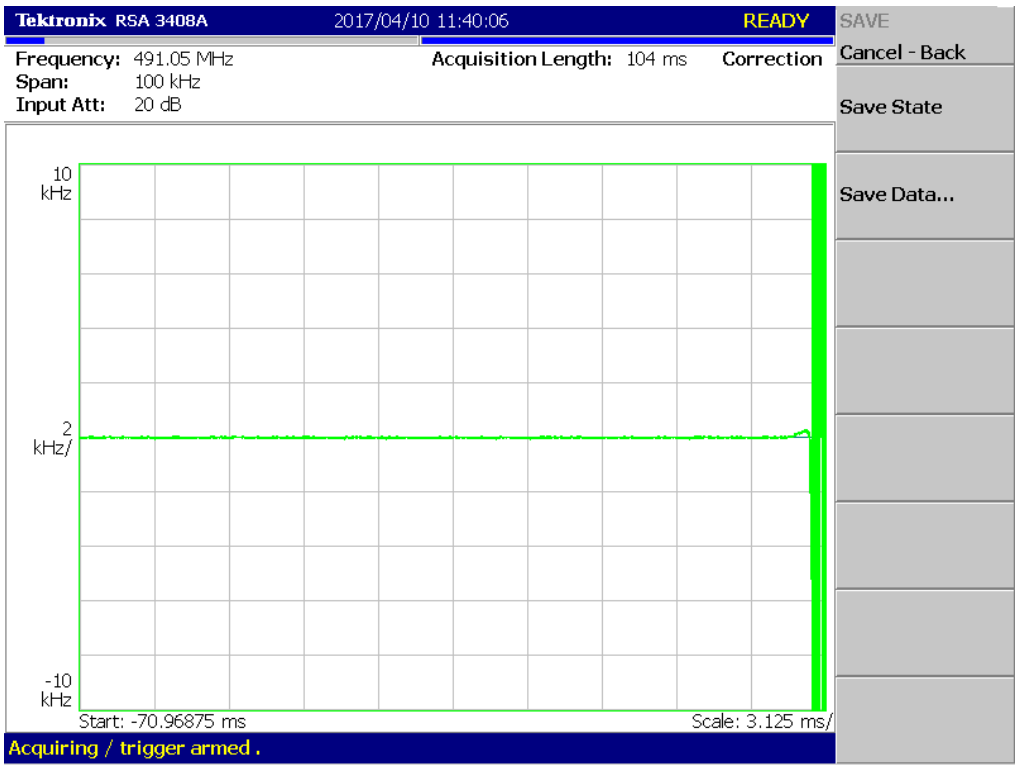
(4K00F1E, 4K00F1D, 4K00F7W _ 469.95 MHz)_High



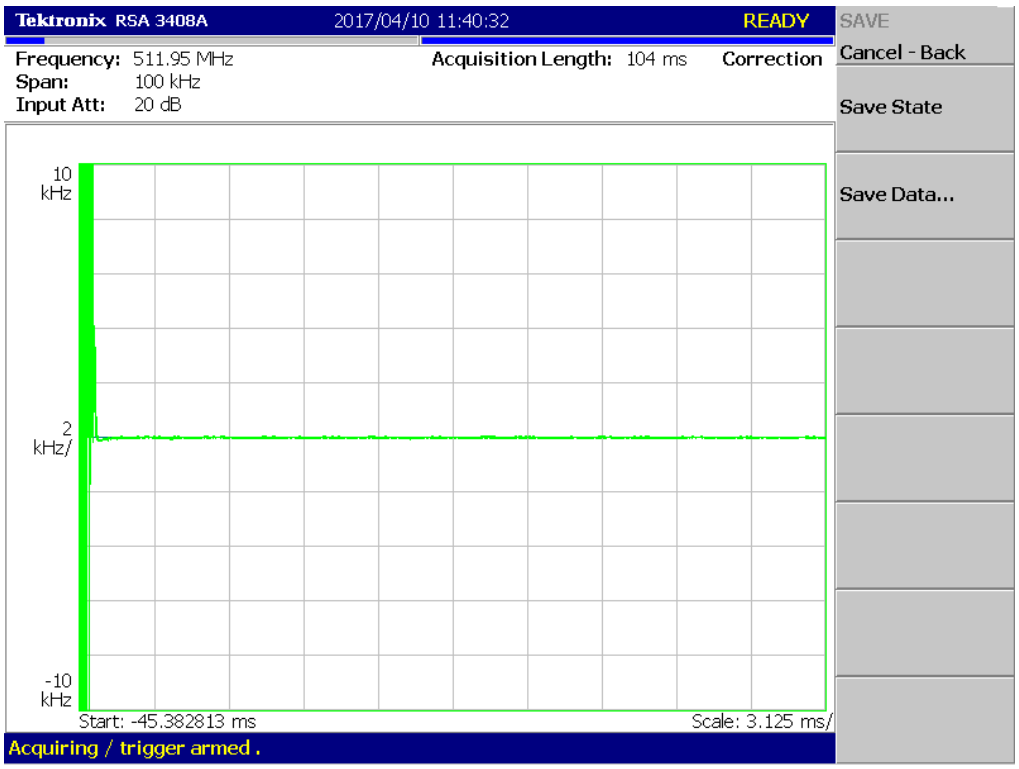


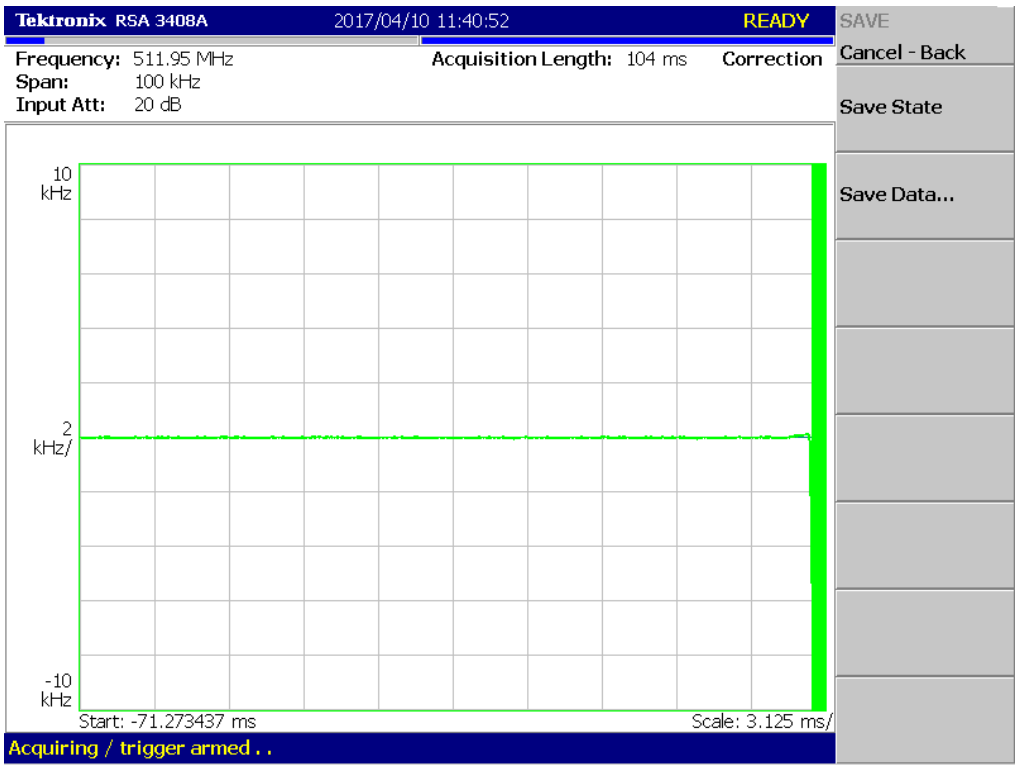
(4K00F1E, 4K00F1D, 4K00F7W _ 491.05 MHz)_High



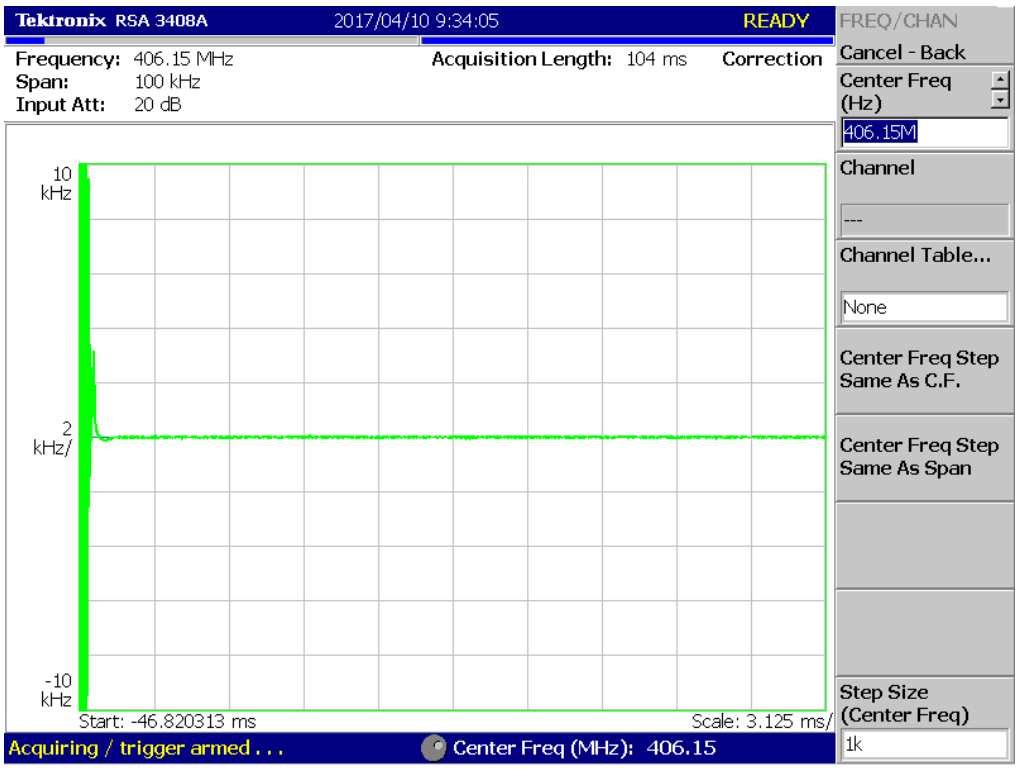


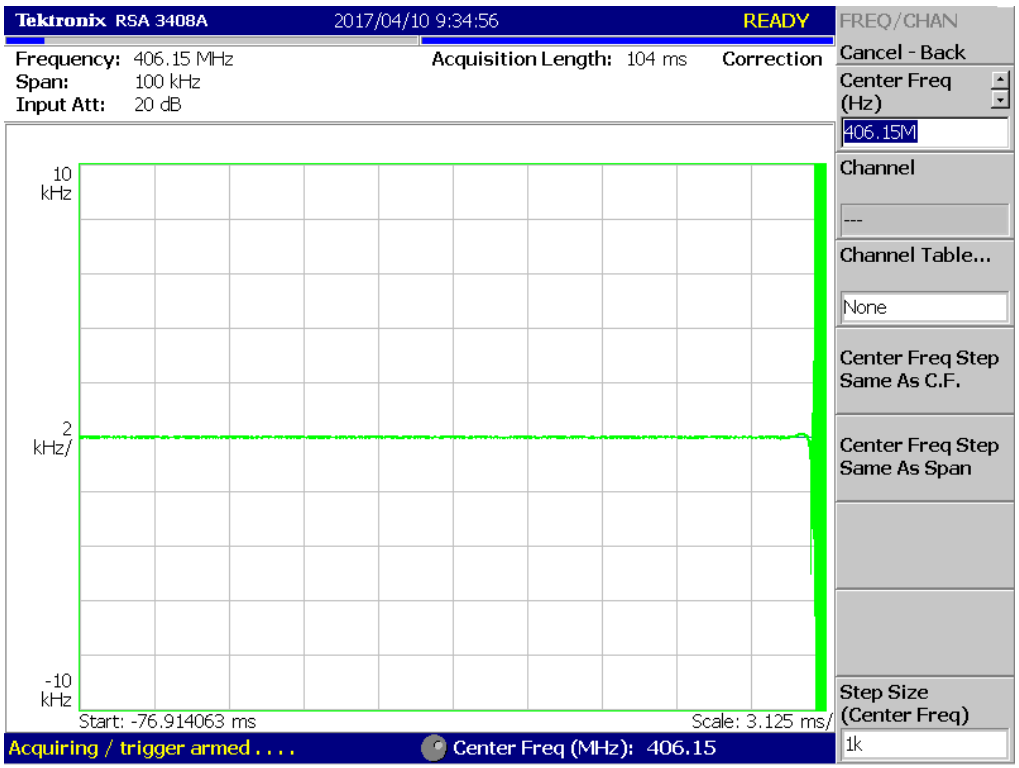
(4K00F1E, 4K00F1D, 4K00F7W _ 511.95 MHz)_High



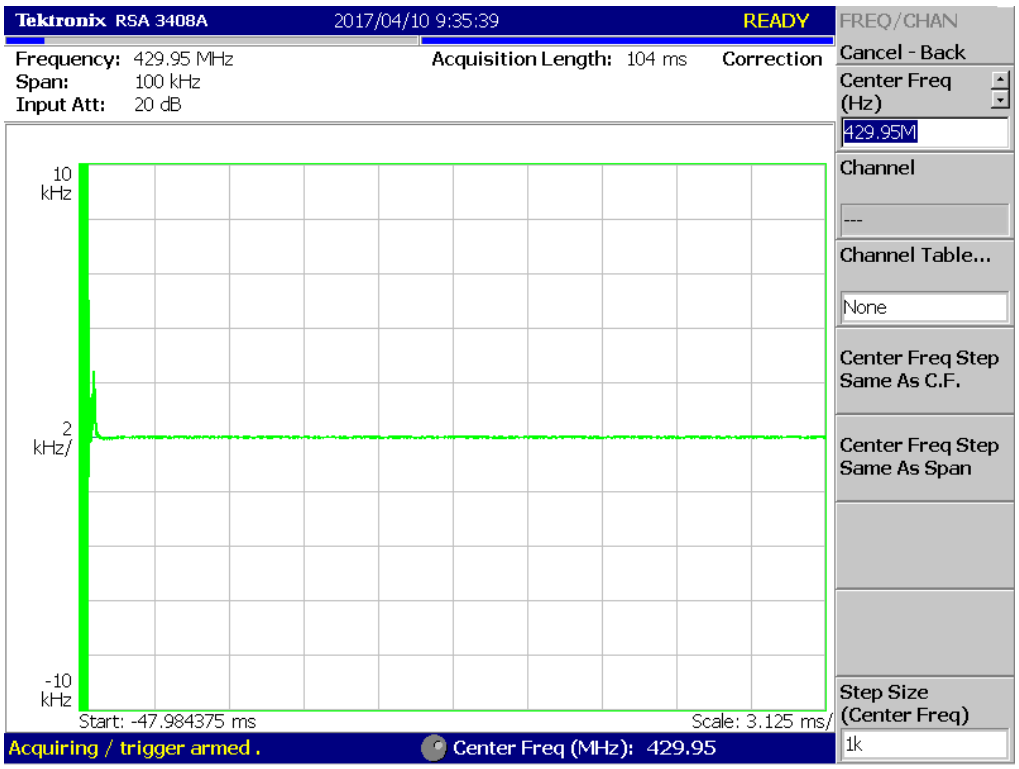


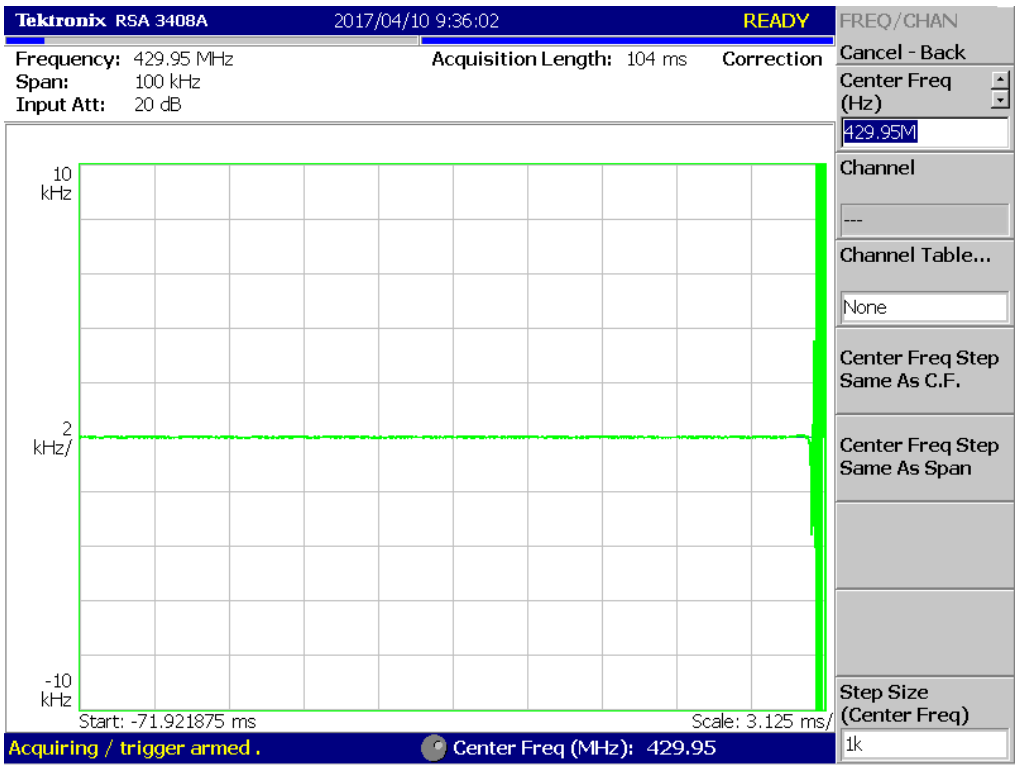
(4K00F1E, 4K00F1D, 4K00F7W _ 406.15 MHz)_Low



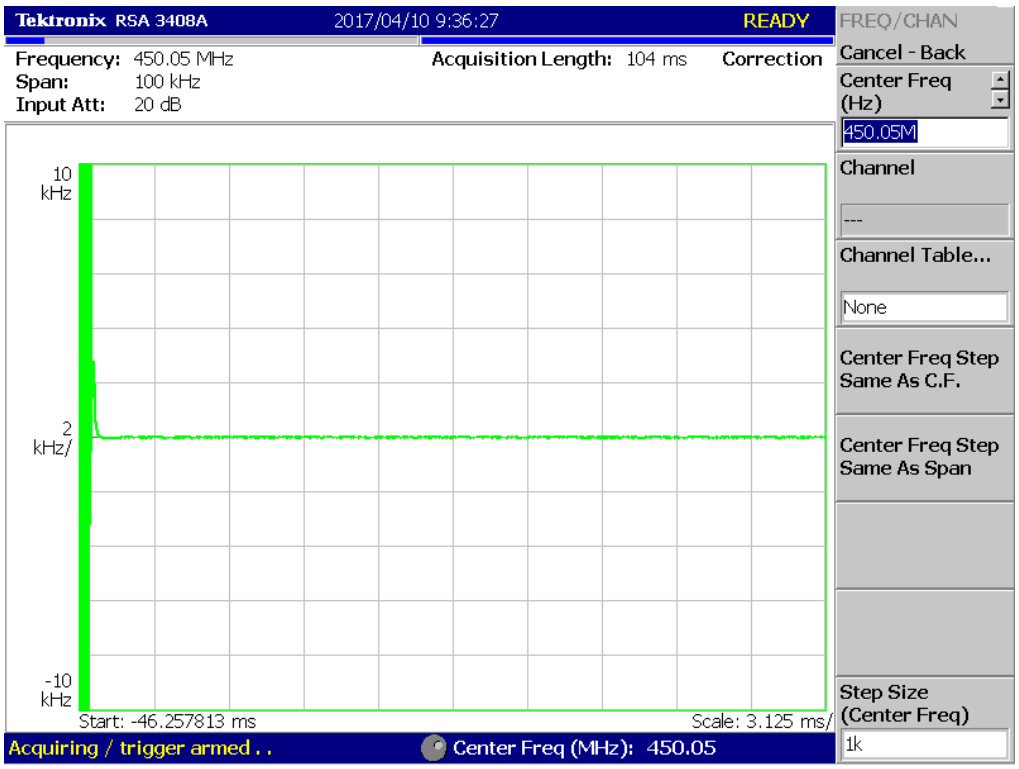


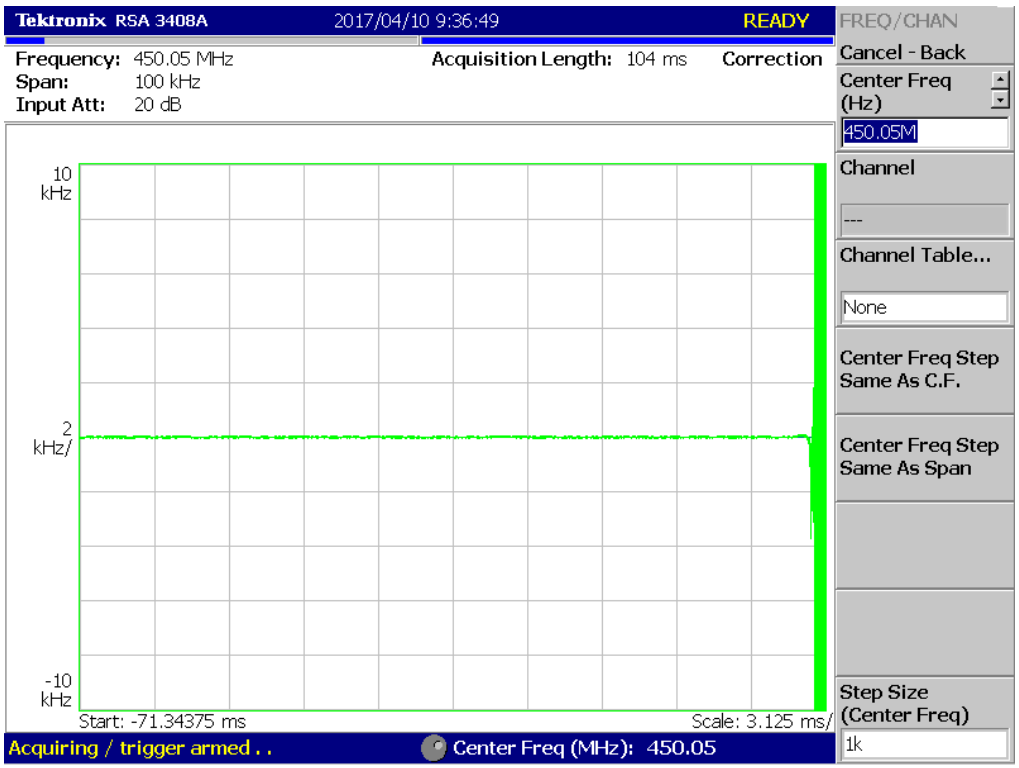
(4K00F1E, 4K00F1D, 4K00F7W _ 429.95 MHz)_Low



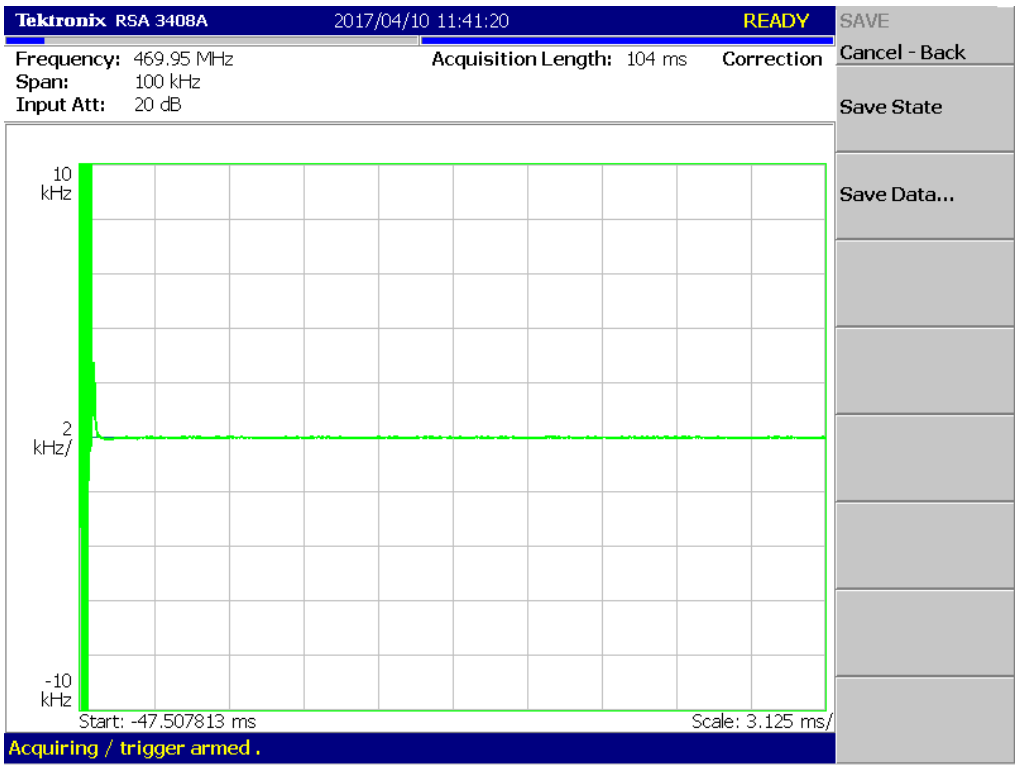


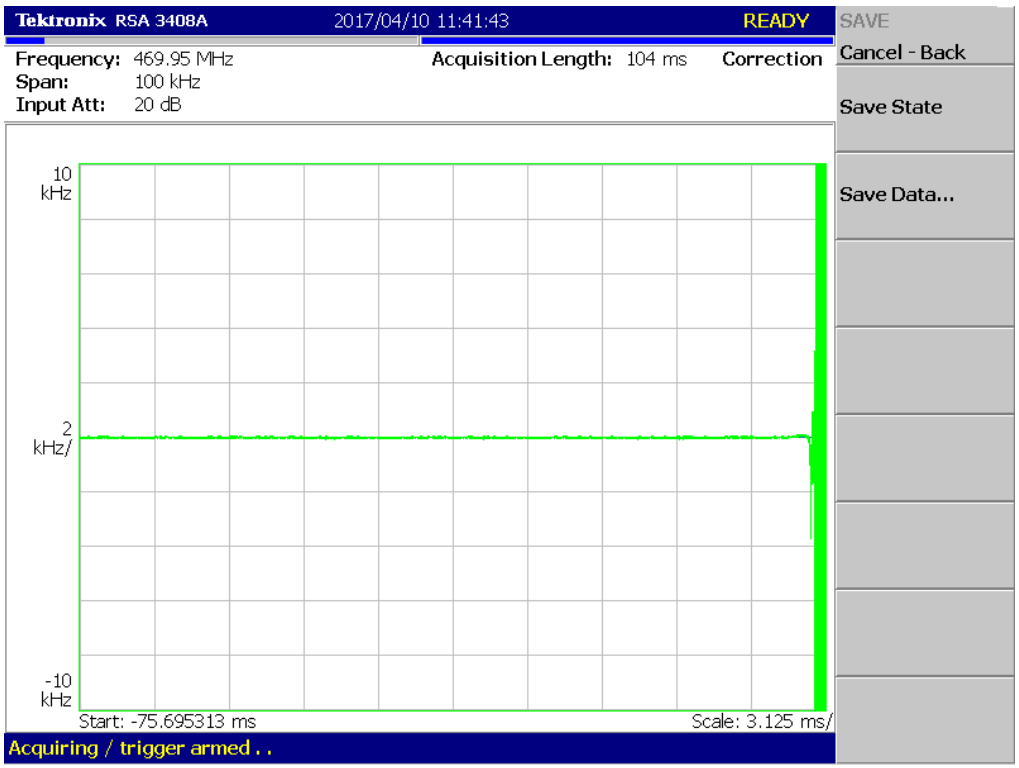
(4K00F1E, 4K00F1D, 4K00F7W _ 450.05 MHz)_Low



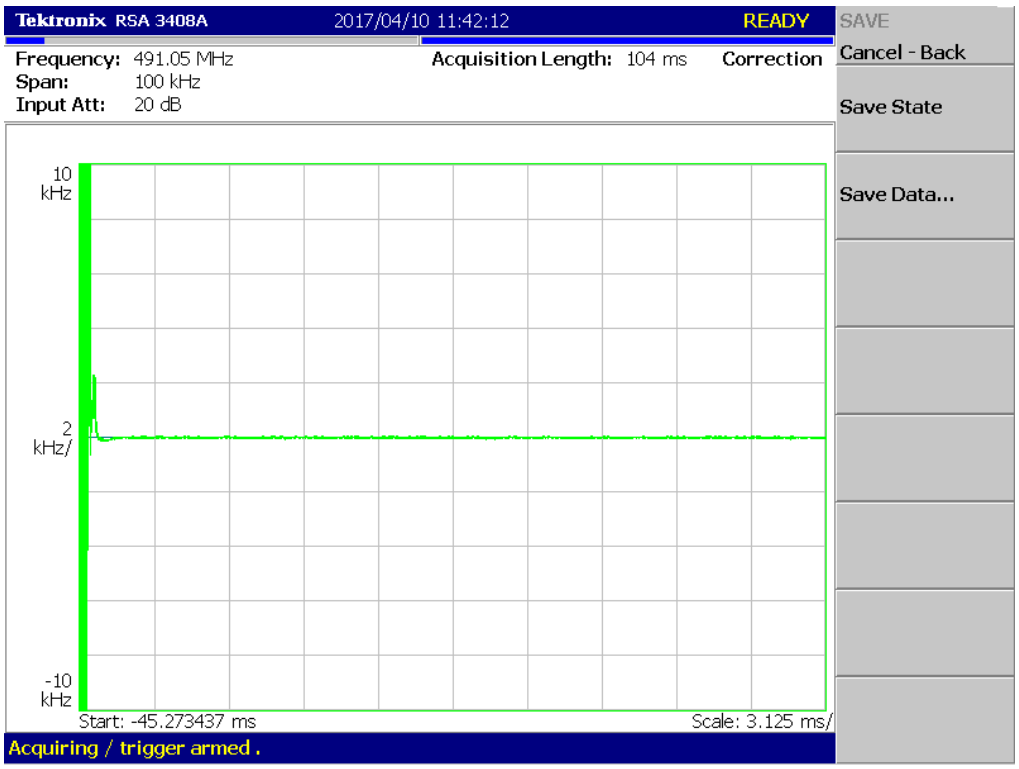


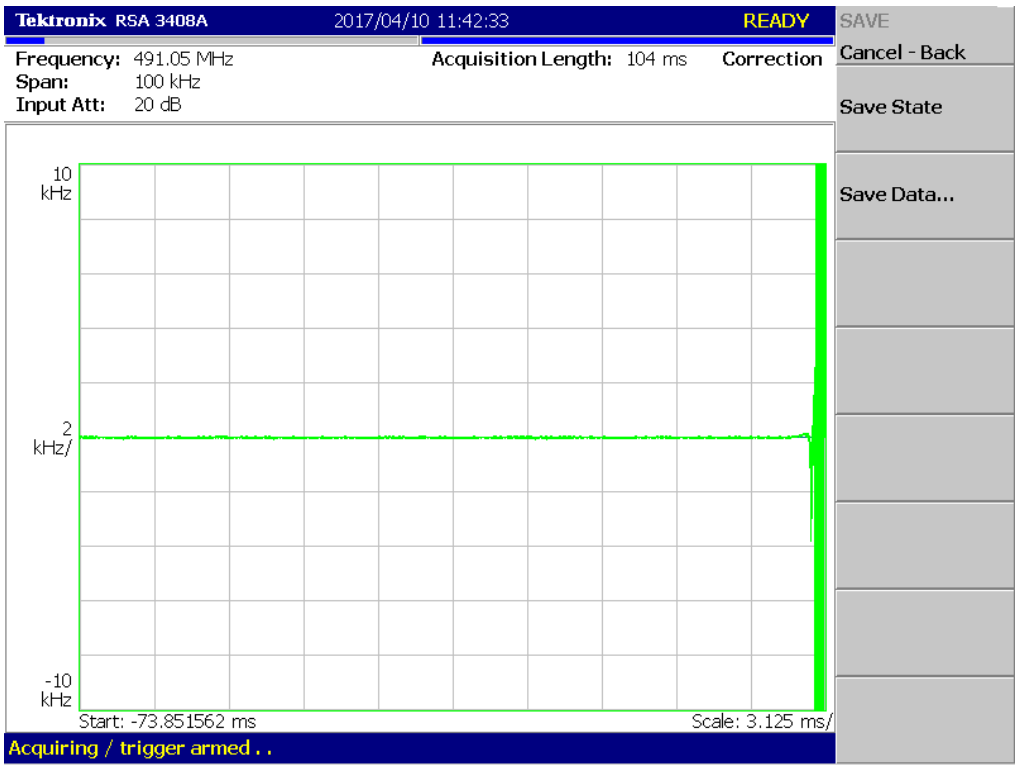
(4K00F1E, 4K00F1D, 4K00F7W _ 469.95 MHz)_Low



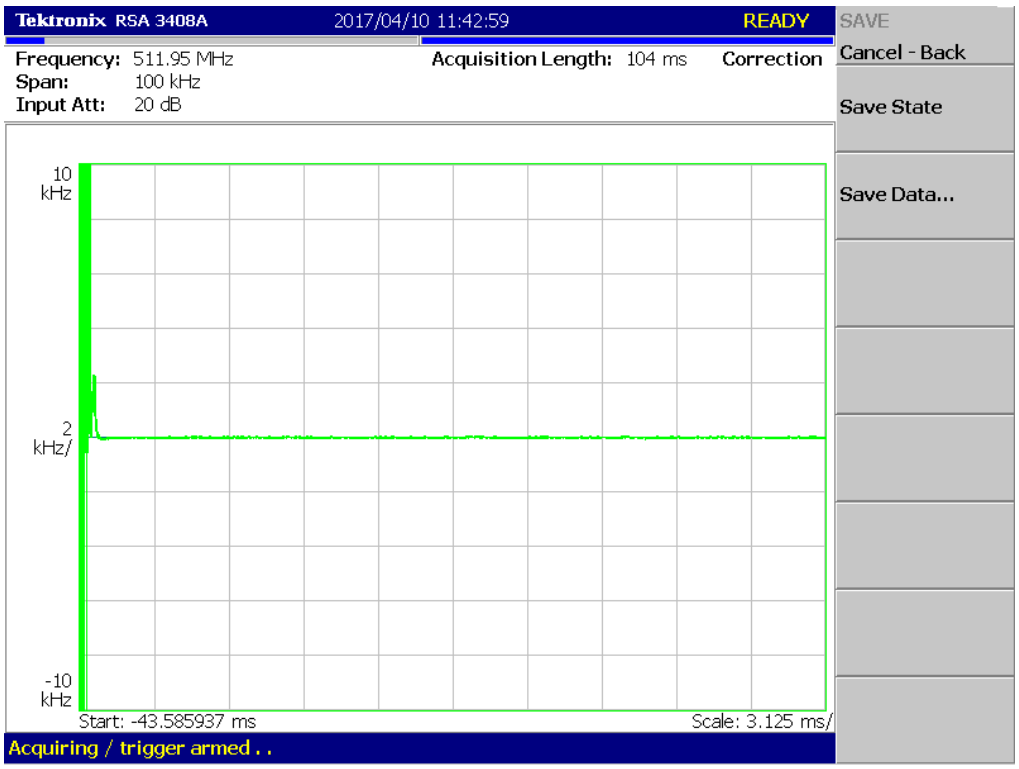


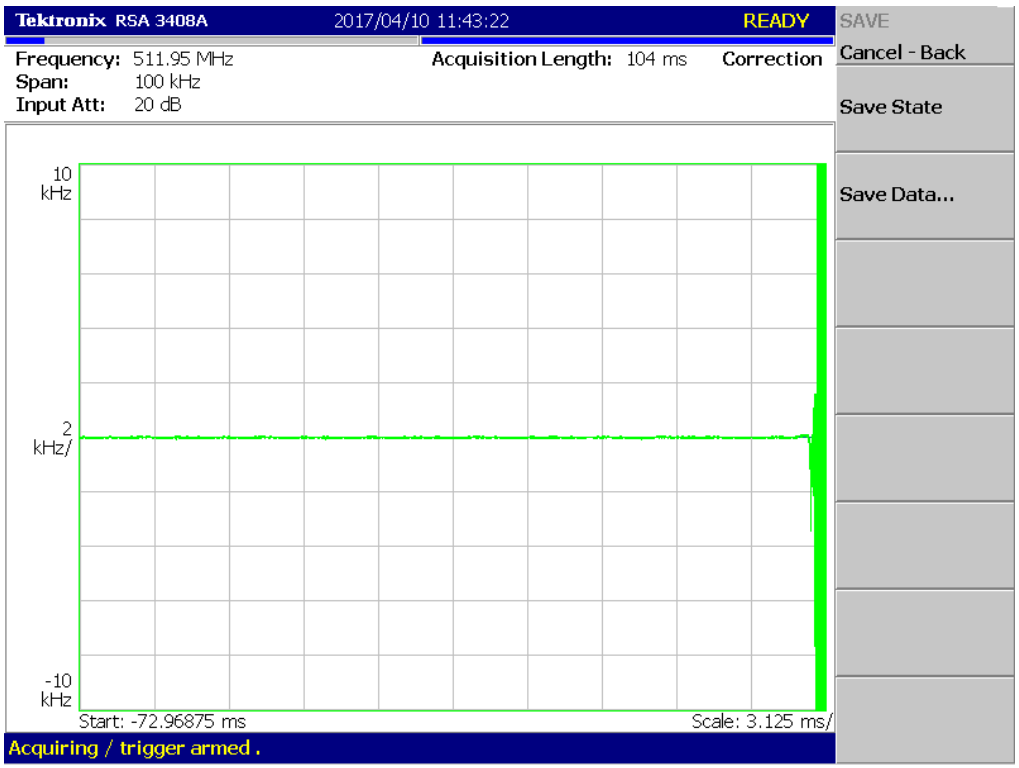
(4K00F1E, 4K00F1D, 4K00F7W _ 491.05 MHz)_Low



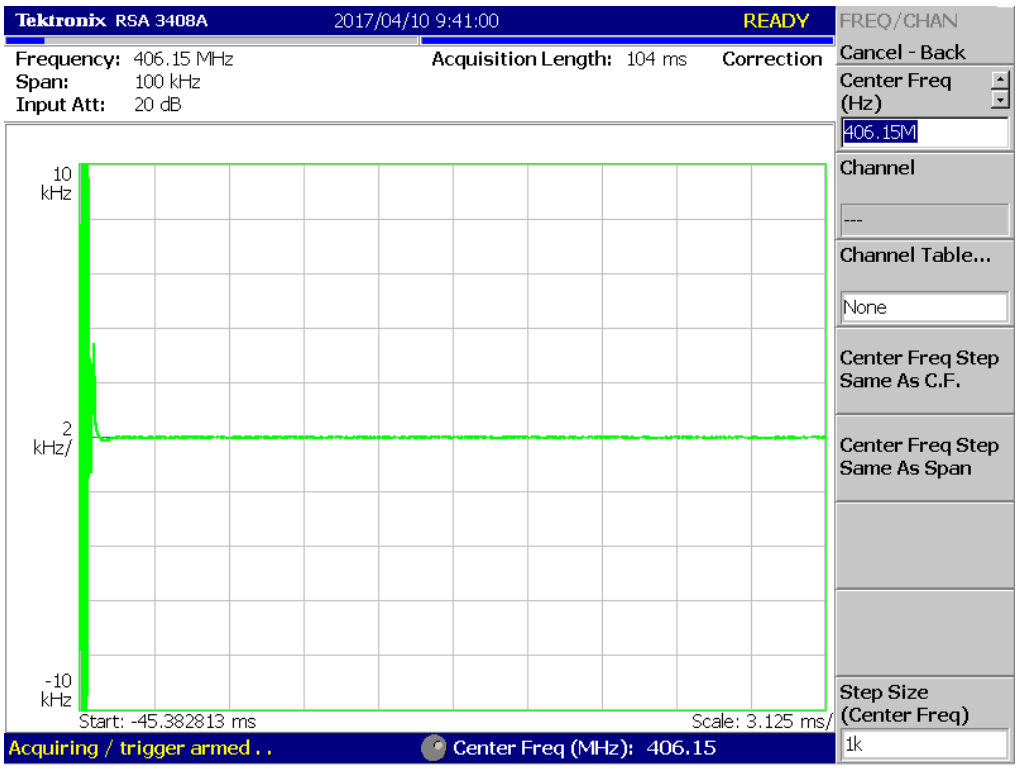


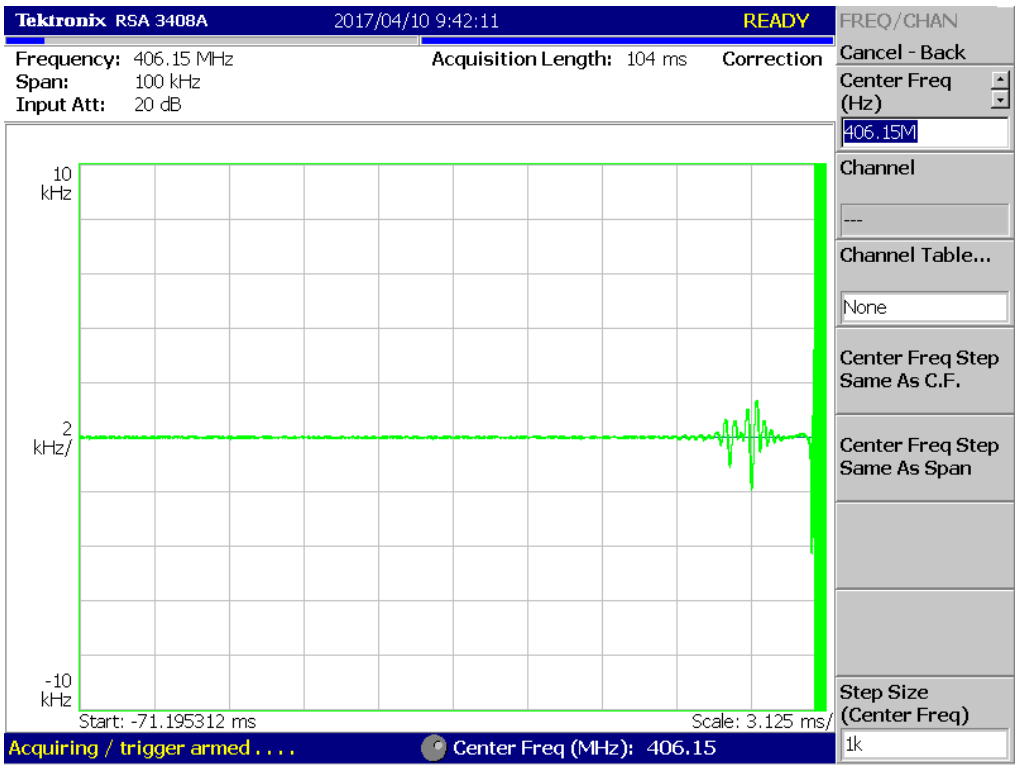
(4K00F1E, 4K00F1D, 4K00F7W _ 511.95 MHz)_Low



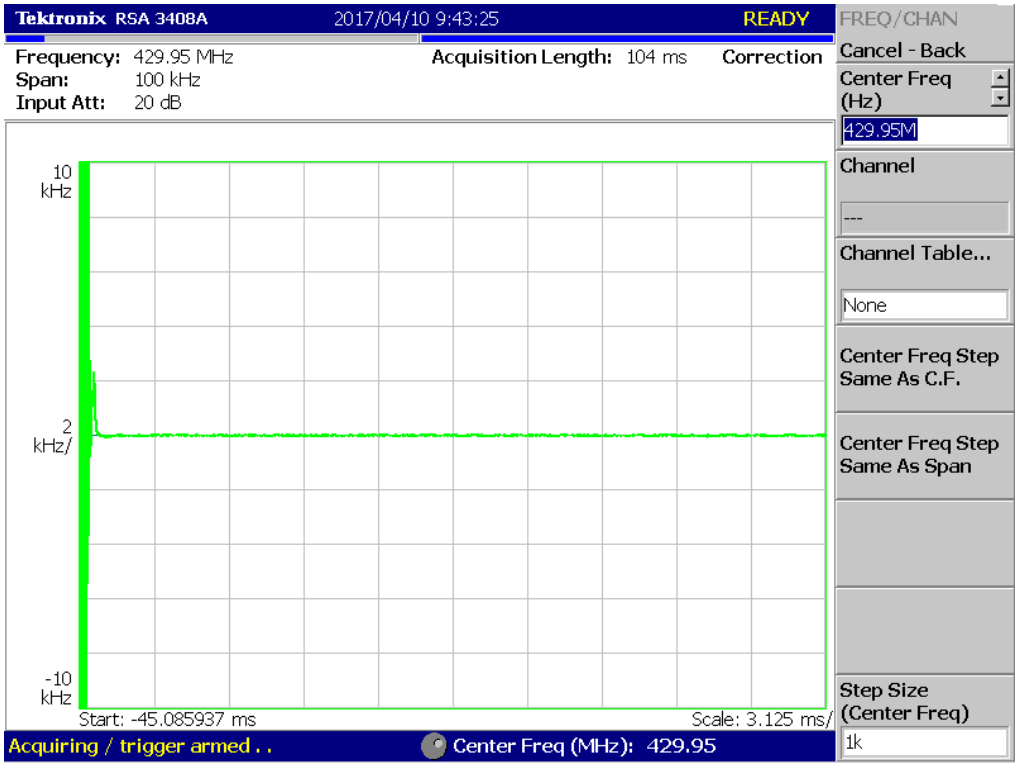


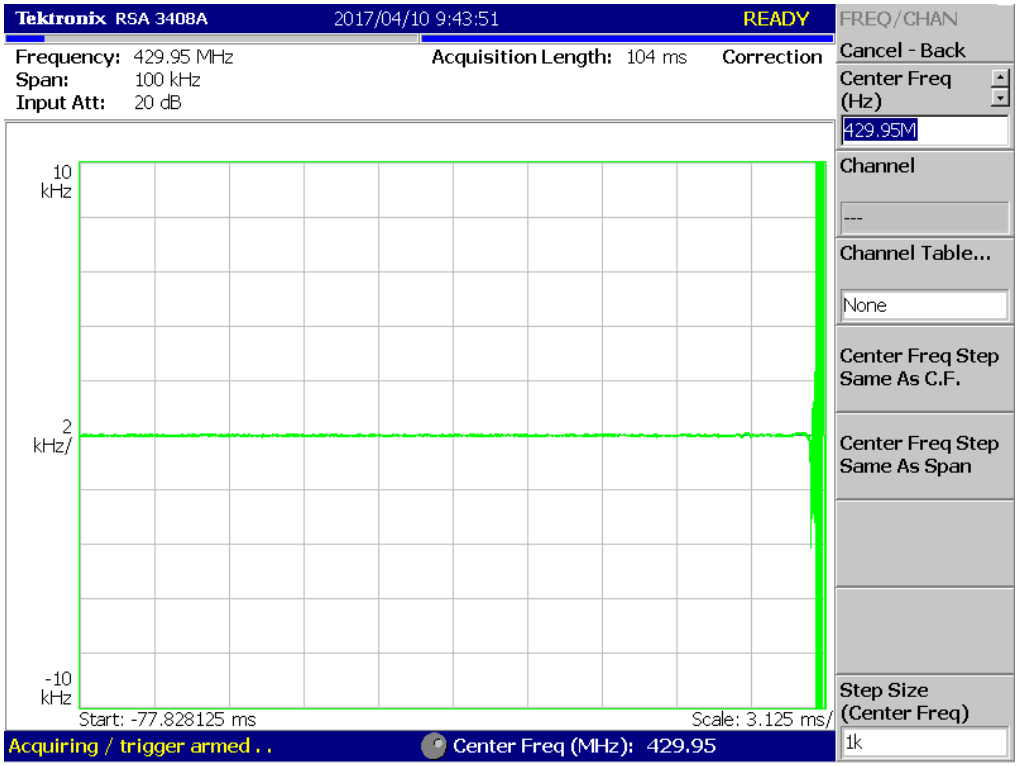
(4K00F2D_ 406.15 MHz)_Low



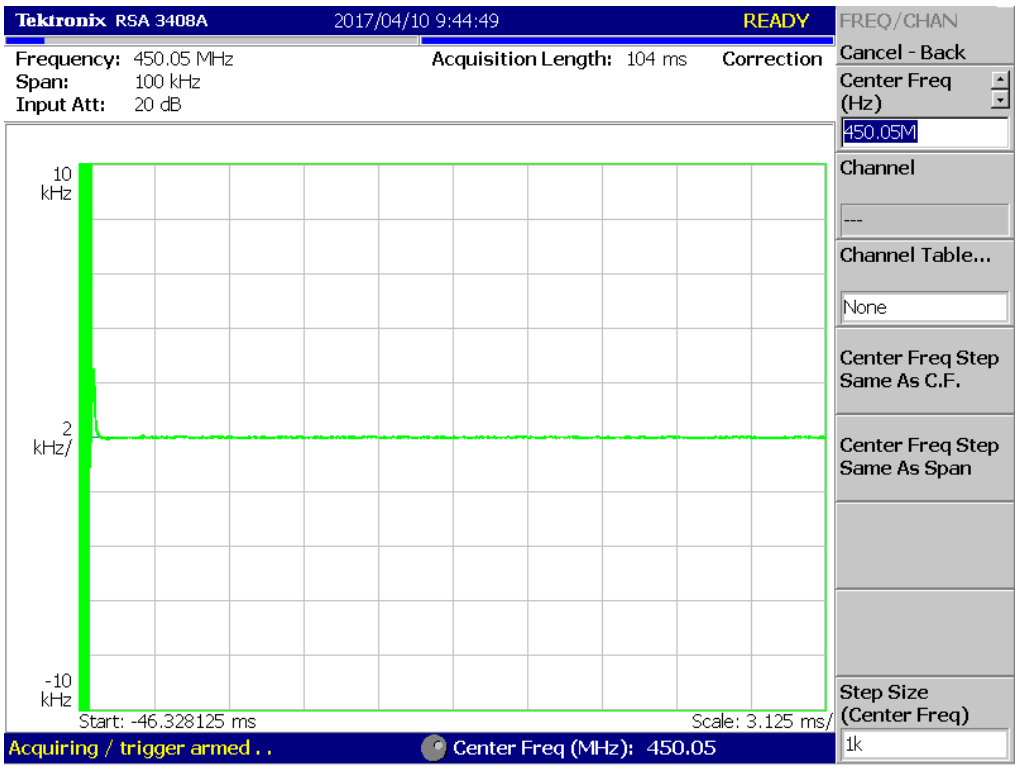


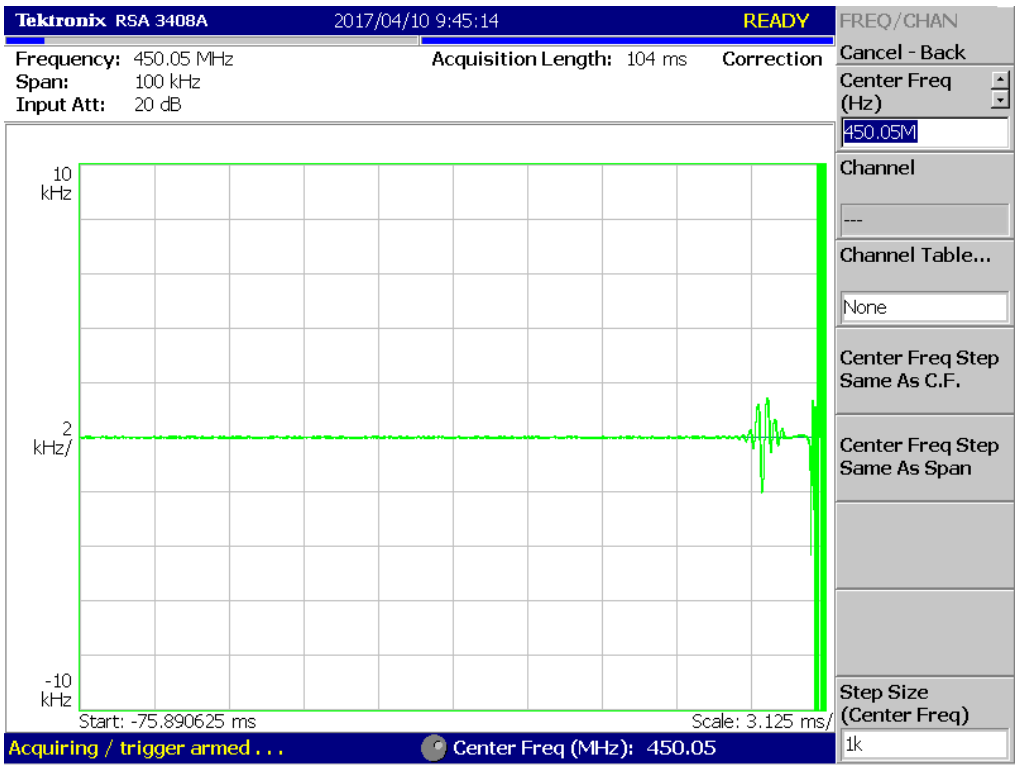
(4K00F2D_ 429.95 MHz)_Low



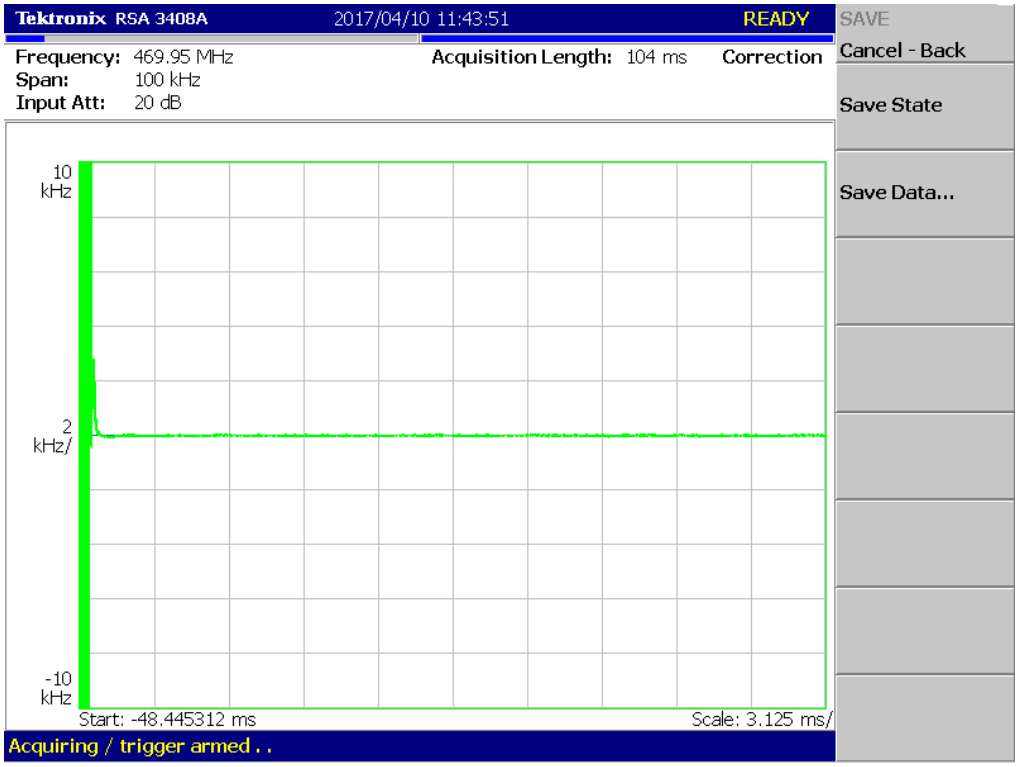


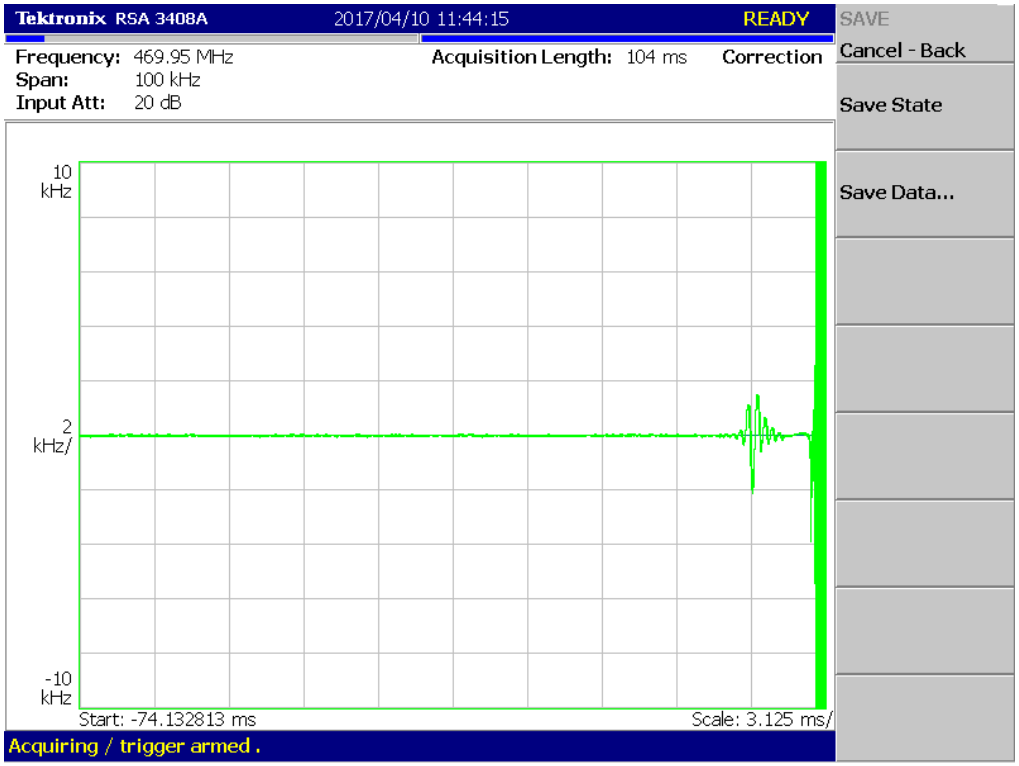
(4K00F2D_ 450.05 MHz)_Low



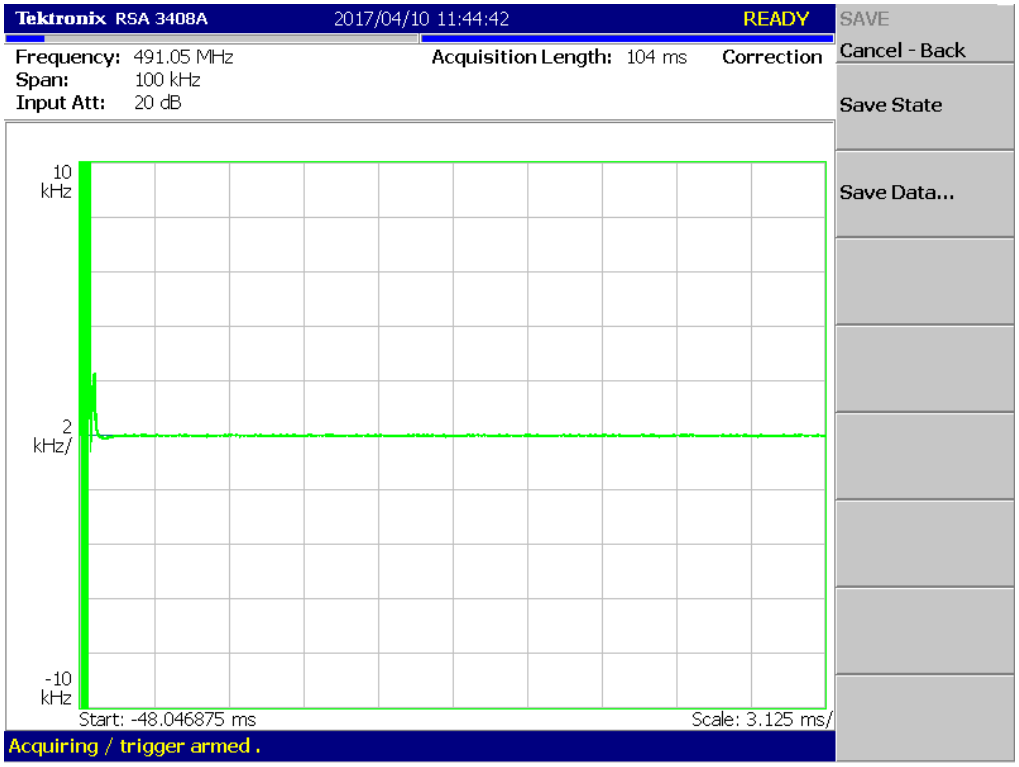


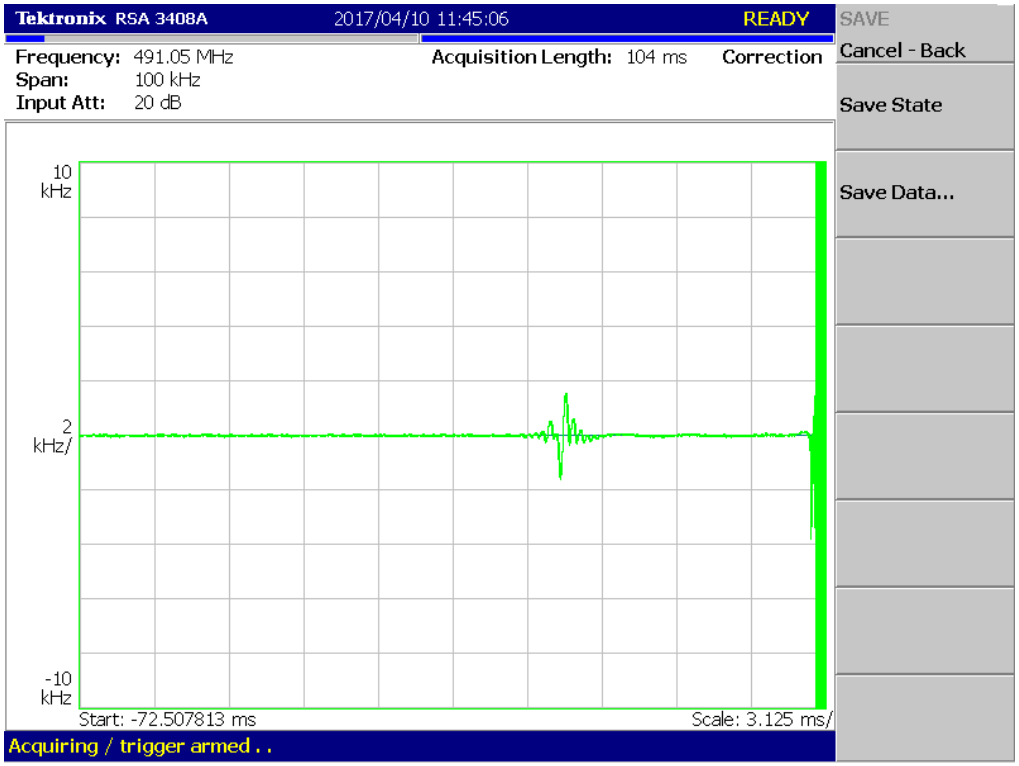
(4K00F2D_ 469.95 MHz)_Low



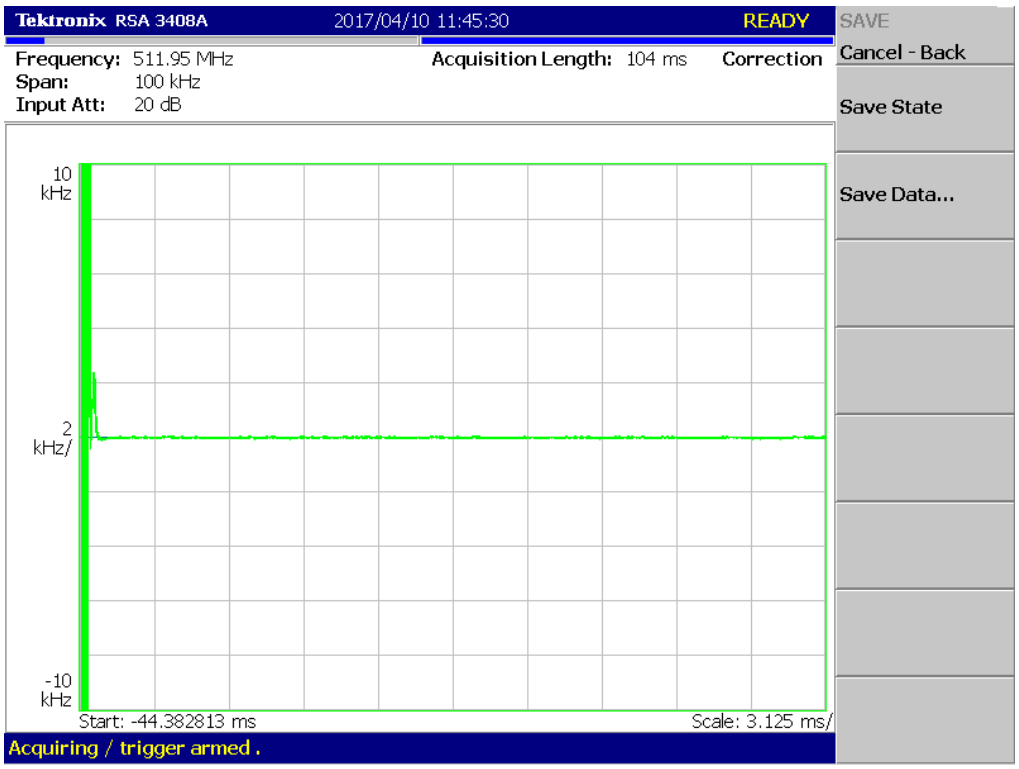


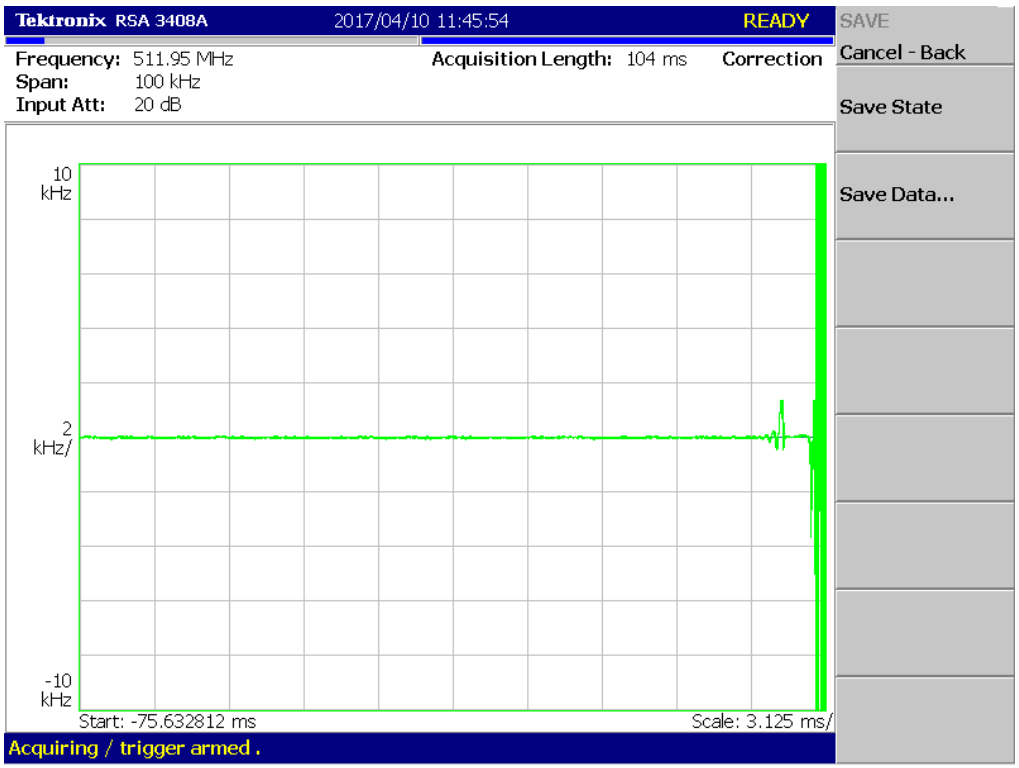
(4K00F2D_ 491.05 MHz)_Low





(4K00F2D_ 511.95 MHz)_Low



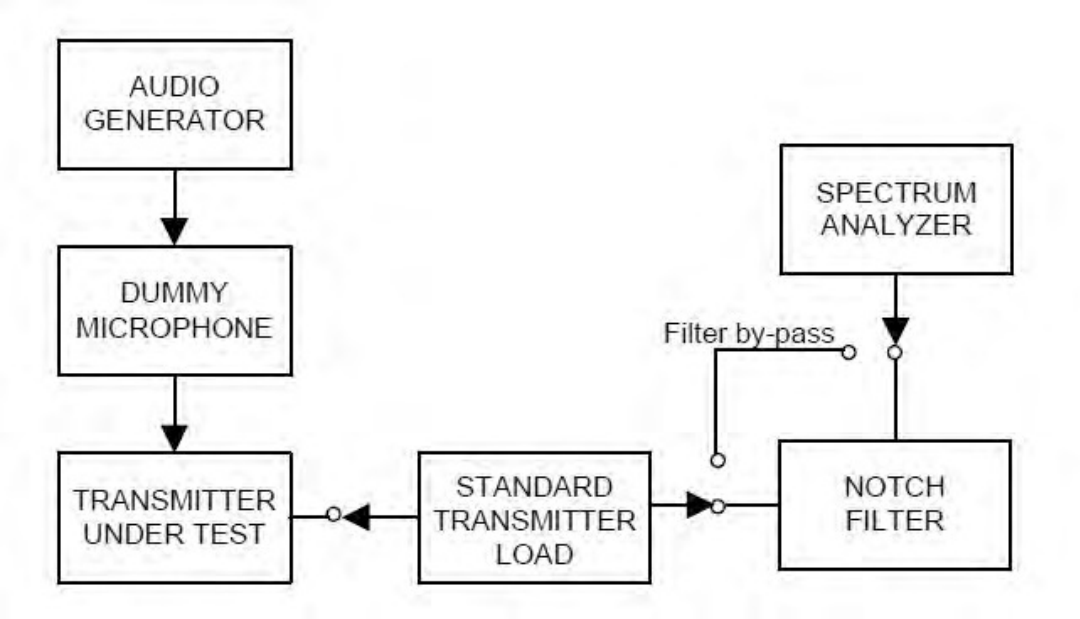


7.8 Unwanted Emissions : Conducted Spurious Emission

▣ Definition

Conducted spurious emissions are emissions at the antenna terminals on a frequency or frequencies that are outside a band sufficient to ensure transmission of information of required quality for the class of communication desired.

▣ TEST CONFIGURATION



▣ TEST PROCEDURE

According to 2.2.13 in TIA-603-D Standard.

e) Connect the equipment as illustrated, with the notch filter by-passed.

f) Set the center frequency of the spectrum analyzer to the assigned transmitter frequency, key the transmitter, and set the level of the carrier to the full scale reference line.

g) Modulate the transmitter with a 2500 Hz sine wave at an input level 16 dB greater than that necessary to produce 50% of rated system deviation. The input level shall be established at the frequency of maximum response of the audio modulation circuit.

h) Adjust the spectrum analyzer for the following settings:

1) Resolution Bandwidth = 10 kHz for spurious emissions below 1 GHz, and 1 MHz for spurious emissions above 1 GHz.

2) Video Bandwidth ≥3 times the resolution bandwidth.

3) Sweep Speed ≤2000 Hz per second.

4) Detector Mode = mean or average power.

e) Adjust the center frequency of the spectrum analyzer for incremental coverage of the range from:

1) The lowest radio frequency generated in the equipment to the carrier frequency minus the test bandwidth (see 1.3.4.4).

2) The carrier frequency plus the test bandwidth to a frequency less than 2 times the carrier frequency.

f) Record the frequencies and levels of spurious emissions from step e).

g) Unkey the transmitter. Replace the transmitter under test with the signal generator and adjust the signal level to reproduce the frequencies and levels of every spurious emission recorded in step f). Record the signal generator levels in dBm.

h) Insert the notch filter.

i) Adjust the spectrum analyzer for the following settings:

1) Resolution Bandwidth = 10 kHz for spurious emissions below 1 GHz, and 1 MHz for spurious emissions above 1 GHz.

2) Video Bandwidth ≥3 times the resolution bandwidth.

3) Sweep Speed ≤2000 Hz per second.

4) Detector Mode = mean or average power.

j) Key the transmitter. Adjust the center frequency of the spectrum analyzer for incremental coverage of the range from a frequency equal to 2 times the carrier frequency and to the tenth harmonic of the carrier frequency.

▣ LIMIT

Frequency Band (MHz)	Channel bandwidth (kHz)	Limit (dB)
406.1 – 512 and 406.1 – 430, 450-470	12.5	50+10Log(P) or 70 dB
	6.25	55+10Log(P) or 65 dB
	25	43+10Log(p)

Note

1. Correct Level (dBm) : Substitute SG Level (dBm)
2. Emission Level (dBc) : Correct Level – 10Log(P*1000)
3. P = Carrier Output Power(W)

(P value, please refer to Section 7.1)

▣ TEST RESULTS

11K0F3E

No.	Frequency (MHz)	Band	Setting	Spurious Frequency (MHz)	Correct Level (dBm)	Emission Level (dBc)	Limit (dBc)	Margin (dB)
1	406.15	Low	High Power	0.01	-37.180	-73.992	-56.812	17.180
				0.15	-36.150	-72.962	-56.812	16.150
				812.79	-36.088	-72.900	-56.812	16.088
				1218.52	-35.834	-72.646	-56.812	15.834
2	429.95	Low		0.01	-37.916	-74.589	-56.673	17.916
				0.15	-35.983	-72.656	-56.673	15.983
				860.32	-38.625	-75.298	-56.673	18.625
				4965.94	-36.599	-73.272	-56.673	16.599
3	450.05	Middle		0.01	-36.852	-73.526	-56.674	16.852
				0.16	-39.239	-75.913	-56.674	19.239
				900.09	-40.458	-77.132	-56.674	20.458
				4971.94	-37.102	-73.776	-56.674	17.102
4	406.15	Low	Low Power	0.01	-38.240	-68.468	-50.228	18.240
				0.15	-36.043	-66.271	-50.228	16.043
				811.82	-36.693	-66.921	-50.228	16.693
				3155.24	-36.745	-66.973	-50.228	16.745
5	429.95	Low		0.01	-38.212	-68.168	-49.956	18.212
				0.15	-39.086	-69.042	-49.956	19.086
				837.04	-49.540	-79.496	-49.956	29.540
				5293.98	-36.141	-66.097	-49.956	16.141
6	450.05	Middle		0.01	-36.189	-66.101	-49.912	16.189
				0.15	-39.422	-69.334	-49.912	19.422
				900.09	-41.736	-71.648	-49.912	21.736
				4826.43	-36.794	-66.706	-49.912	16.794

No.	Frequency (MHz)	Band	Setting	Spurious Frequency (MHz)	Correct Level (dBm)	Emission Level (dBc)	Limit (dBc)	Margin (dB)
1	470.05	Low	High Power	0.01	-38.173	-74.737	-56.564	18.173
				0.17	-37.984	-74.548	-56.564	17.984
				939.86	-38.992	-75.556	-56.564	18.992
				3112.73	-36.509	-73.073	-56.564	16.509
2	469.95	Low		0.01	-35.917	-72.413	-56.496	15.917
				0.15	-38.974	-75.470	-56.496	18.974
				939.86	-38.972	-75.468	-56.496	18.972
				3115.24	-37.288	-73.784	-56.496	17.288
3	491.05	Middle		0.01	-35.923	-72.626	-56.703	15.923
				0.16	-38.440	-75.143	-56.703	18.440
				982.54	-39.459	-76.162	-56.703	19.459
				3204.74	-37.193	-73.896	-56.703	17.193
4	511.95	High		0.01	-37.581	-74.226	-56.645	17.581
				0.15	-35.942	-72.587	-56.645	15.942
				397.63	-46.710	-83.355	-56.645	26.710
				1024.00	-35.796	-72.441	-56.645	15.796
5	470.05	Low	Low Power	0.01	-37.997	-67.543	-49.546	17.997
				0.16	-38.977	-68.523	-49.546	18.977
				939.86	-42.119	-71.665	-49.546	22.119
				5195.97	-36.320	-65.866	-49.546	16.320
6	469.95	Low		0.01	-37.842	-67.389	-49.547	17.842
				0.16	-39.672	-69.219	-49.547	19.672
				939.86	-41.379	-70.926	-49.547	21.379
				5056.95	-36.934	-66.481	-49.547	16.934
7	491.05	Middle		0.01	-36.577	-66.528	-49.951	16.577
				0.15	-40.144	-70.095	-49.951	20.144
				982.54	-42.973	-72.924	-49.951	22.973
				5165.96	-36.407	-66.358	-49.951	16.407
8	511.95	High		0.01	-36.977	-66.774	-49.797	16.977
				0.16	-38.637	-68.434	-49.797	18.637
				101.78	-43.536	-73.333	-49.797	23.536
				4873.93	-37.322	-67.119	-49.797	17.322

16K0F3E

No.	Frequency (MHz)	Band	Setting	Spurious Frequency (MHz)	Correct Level (dBm)	Emission Level (dBc)	Limit (dBc)	Margin (dB)
1	406.15	Low	High Power	0.01	-36.332	-73.186	-56.854	16.332
				0.15	-38.703	-75.557	-56.854	18.703
				811.82	-36.034	-72.888	-56.854	16.034
				1218.52	-36.523	-73.377	-56.854	16.523
2	429.95	Low		0.01	-37.186	-73.887	-56.701	17.186
				0.16	-38.277	-74.978	-56.701	18.277
				860.32	-38.704	-75.405	-56.701	18.704
				3152.24	-36.839	-73.540	-56.701	16.839
3	450.05	Middle		0.01	-37.628	-74.215	-56.587	17.628
				0.15	-37.454	-74.041	-56.587	17.454
				900.09	-40.245	-76.832	-56.587	20.245
				5107.46	-36.062	-72.649	-56.587	16.062
4	406.15	Low	Low Power	0.01	-36.113	-66.351	-50.238	16.113
				0.15	-39.143	-69.381	-50.238	19.143
				811.82	-37.086	-67.324	-50.238	17.086
				5123.46	-36.785	-67.023	-50.238	16.785
5	429.95	Low		0.01	-36.702	-66.659	-49.957	16.702
				0.16	-37.927	-67.884	-49.957	17.927
				860.32	-43.277	-73.234	-49.957	23.277
				5141.96	-37.085	-67.042	-49.957	17.085
6	450.05	Middle		0.01	-37.403	-67.375	-49.972	17.403
				0.15	-36.334	-66.306	-49.972	16.334
				900.09	-41.119	-71.091	-49.972	21.119
				4999.44	-36.738	-66.710	-49.972	16.738

No.	Frequency (MHz)	Band	Setting	Spurious Frequency (MHz)	Correct Level (dBm)	Emission Level (dBc)	Limit (dBc)	Margin (dB)
1	470.05	Low	High Power	0.01	-38.201	-74.996	-56.795	18.201
				0.15	-37.244	-74.039	-56.795	17.244
				939.86	-39.316	-76.111	-56.795	19.316
				3151.74	-36.338	-73.133	-56.795	16.338
2	469.95	Low		0.01	-34.196	-70.734	-56.538	14.196
				0.16	-39.518	-76.056	-56.538	19.518
				939.86	-38.887	-75.425	-56.538	18.887
				2807.70	-36.811	-73.349	-56.538	16.811
3	491.05	Middle		0.01	-36.644	-73.529	-56.885	16.644
				0.16	-38.785	-75.670	-56.885	18.785
				982.54	-39.169	-76.054	-56.885	19.169
				3021.72	-37.076	-73.961	-56.885	17.076
4	511.95	High		0.01	-37.991	-74.784	-56.793	17.991
				0.15	-36.475	-73.268	-56.793	16.475
				394.72	-45.353	-82.146	-56.793	25.353
				1024.00	-34.873	-71.666	-56.793	14.873
5	470.05	Low	Low Power	0.01	-38.201	-74.996	-56.795	18.201
				0.15	-37.244	-74.039	-56.795	17.244
				939.86	-39.316	-76.111	-56.795	19.316
				3151.74	-36.338	-73.133	-56.795	16.338
6	469.95	Low		0.01	-36.581	-66.115	-49.534	16.581
				0.15	-37.189	-66.723	-49.534	17.189
				939.86	-41.974	-71.508	-49.534	21.974
				2709.69	-36.805	-66.339	-49.534	16.805
7	491.05	Middle		0.01	-35.179	-65.164	-49.985	15.179
				0.16	-37.557	-67.542	-49.985	17.557
				982.54	-43.024	-73.009	-49.985	23.024
				2679.69	-37.050	-67.035	-49.985	17.050
8	511.95	High		0.01	-37.022	-66.866	-49.844	17.022
				0.16	-38.480	-68.324	-49.844	18.480
				106.63	-43.855	-73.699	-49.844	23.855
				3165.24	-36.871	-66.715	-49.844	16.871

7K60FXD, 7K60FXE

No.	Frequency (MHz)	Band	Setting	Spurious Frequency (MHz)	Correct Level (dBm)	Emission Level (dBc)	Limit (dBc)	Margin (dB)
1	406.15	Low	High Power	0.01	-34.660	-71.511	-56.851	14.660
				0.15	-37.735	-74.586	-56.851	17.735
				812.79	-36.449	-73.300	-56.851	16.449
				1218.52	-36.513	-73.364	-56.851	16.513
2	429.95	Low		0.01	-35.648	-72.351	-56.703	15.648
				0.15	-36.660	-73.363	-56.703	16.660
				860.32	-39.303	-76.006	-56.703	19.303
				3191.24	-36.986	-73.689	-56.703	16.986
3	450.05	Middle		0.01	-35.808	-72.323	-56.515	15.808
				0.15	-37.291	-73.806	-56.515	17.291
				900.09	-40.552	-77.067	-56.515	20.552
				5423.99	-37.094	-73.609	-56.515	17.094
4	406.15	Low	Low Power	0.01	-35.786	-65.978	-50.192	15.786
				0.17	-39.152	-69.344	-50.192	19.152
				811.82	-37.016	-67.208	-50.192	17.016
				3174.74	-37.338	-67.530	-50.192	17.338
5	429.95	Low		0.01	-36.498	-66.446	-49.948	16.498
				0.16	-35.983	-65.931	-49.948	15.983
				860.32	-44.303	-74.251	-49.948	24.303
				5226.47	-36.896	-66.844	-49.948	16.896
6	450.05	Middle		0.01	-36.881	-66.711	-49.830	16.881
				0.16	-37.212	-67.042	-49.830	17.212
				900.09	-41.595	-71.425	-49.830	21.595
				5159.96	-36.599	-66.429	-49.830	16.599

No.	Frequency (MHz)	Band	Setting	Spurious Frequency (MHz)	Correct Level (dBm)	Emission Level (dBc)	Limit (dBc)	Margin (dB)
1	469.95	Low	High Power	0.01	-38.048	-74.690	-56.642	18.048
				0.15	-38.053	-74.695	-56.642	18.053
				939.86	-39.360	-76.002	-56.642	19.360
				3166.74	-35.664	-72.306	-56.642	15.664
2	491.05	Low		0.01	-36.102	-72.865	-56.763	16.102
				0.15	-37.375	-74.138	-56.763	17.375
				982.54	-39.557	-76.320	-56.763	19.557
				5071.95	-36.661	-73.424	-56.763	16.661
3	511.95	Middle		0.01	-35.607	-72.322	-56.715	15.607
				0.19	-39.120	-75.835	-56.715	19.120
				404.42	-46.260	-82.975	-56.715	26.260
				1024.00	-35.530	-72.245	-56.715	15.530
4	469.95	Low	Low Power	0.01	-37.242	-66.897	-49.655	17.242
				0.16	-38.895	-68.550	-49.655	18.895
				939.86	-42.134	-71.789	-49.655	22.134
				5157.46	-36.461	-66.116	-49.655	16.461
5	491.05	Low		0.01	-36.591	-66.566	-49.975	16.591
				0.15	-38.055	-68.030	-49.975	18.055
				982.54	-43.491	-73.466	-49.975	23.491
				5162.96	-37.257	-67.232	-49.975	17.257
6	511.95	Middle		0.02	-36.614	-66.447	-49.833	16.614
				0.16	-39.661	-69.494	-49.833	19.661
				104.69	-41.511	-71.344	-49.833	21.511
				5102.96	-36.616	-66.449	-49.833	16.616

8K30F1E, 8K30F1D, 8K30F7W

No.	Frequency (MHz)	Band	Setting	Spurious Frequency (MHz)	Correct Level (dBm)	Emission Level (dBc)	Limit (dBc)	Margin (dB)
1	406.15	Low	High Power	0.01	-38.659	-75.593	-56.934	18.659
				0.15	-37.283	-74.217	-56.934	17.283
				812.79	-36.316	-73.250	-56.934	16.316
				1218.52	-36.517	-73.451	-56.934	16.517
2	429.95	Low		0.01	-37.715	-74.504	-56.789	17.715
				0.15	-39.317	-76.106	-56.789	19.317
				860.32	-38.764	-75.553	-56.789	18.764
				2679.69	-37.079	-73.868	-56.789	17.079
3	450.05	Middle		0.01	-35.122	-71.632	-56.510	15.122
				0.16	-37.029	-73.539	-56.510	17.029
				900.09	-41.068	-77.578	-56.510	21.068
				5116.46	-37.011	-73.521	-56.510	17.011
4	406.15	Low	Low Power	0.01	-37.020	-67.210	-50.190	17.020
				0.16	-39.235	-69.425	-50.190	19.235
				812.79	-37.380	-67.570	-50.190	17.380
				5173.96	-36.030	-66.220	-50.190	16.030
5	429.95	Low		0.01	-35.931	-65.902	-49.971	15.931
				0.20	-40.429	-70.400	-49.971	20.429
				860.32	-43.767	-73.738	-49.971	23.767
				5482.50	-35.646	-65.617	-49.971	15.646
6	450.05	Middle		0.01	-34.467	-64.337	-49.870	14.467
				0.15	-38.222	-68.092	-49.870	18.222
				900.09	-40.931	-70.801	-49.870	20.931
				5168.96	-36.771	-66.641	-49.870	16.771

No.	Frequency (MHz)	Band	Setting	Spurious Frequency (MHz)	Correct Level (dBm)	Emission Level (dBc)	Limit (dBc)	Margin (dB)
1	469.95	Low	High Power	0.01	-38.083	-74.654	-56.571	18.083
				0.15	-37.590	-74.161	-56.571	17.590
				939.86	-38.757	-75.328	-56.571	18.757
				5413.49	-36.867	-73.438	-56.571	16.867
2	491.05	Low		0.01	-37.052	-73.788	-56.736	17.052
				0.16	-38.098	-74.834	-56.736	18.098
				982.54	-39.560	-76.296	-56.736	19.560
				5245.97	-36.619	-73.355	-56.736	16.619
3	511.95	Middle		0.01	-36.980	-73.680	-56.700	16.980
				0.16	-37.548	-74.248	-56.700	17.548
				376.29	-46.303	-83.003	-56.700	26.303
				1024.00	-34.764	-71.464	-56.700	14.764
4	469.95	Low	Low Power	0.01	-36.383	-65.985	-49.602	16.383
				0.15	-37.132	-66.734	-49.602	17.132
				939.86	-41.745	-71.347	-49.602	21.745
				5389.99	-36.771	-66.373	-49.602	16.771
5	491.05	Low		0.01	-35.955	-65.922	-49.967	15.955
				0.16	-39.034	-69.001	-49.967	19.034
				982.54	-43.432	-73.399	-49.967	23.432
				3046.23	-36.626	-66.593	-49.967	16.626
6	511.95	Middle		0.01	-37.510	-67.332	-49.822	17.510
				0.16	-37.553	-67.375	-49.822	17.553
				102.75	-43.302	-73.124	-49.822	23.302
				5468.50	-36.424	-66.246	-49.822	16.424

4K00F1E, 4K00F1D, 4K00F7W

No.	Frequency (MHz)	Band	Setting	Spurious Frequency (MHz)	Correct Level (dBm)	Emission Level (dBc)	Limit (dBc)	Margin (dB)
1	406.15	Low	High Power	0.01	-37.507	-74.325	-56.818	17.507
				0.16	-39.273	-76.091	-56.818	19.273
				812.79	-35.989	-72.807	-56.818	15.989
				1219.02	-36.363	-73.181	-56.818	16.363
2	429.95	Low		0.01	-36.411	-73.124	-56.713	16.411
				0.15	-38.268	-74.981	-56.713	18.268
				860.32	-39.159	-75.872	-56.713	19.159
				3140.74	-36.221	-72.934	-56.713	16.221
3	450.05	Middle		0.01	-34.210	-70.730	-56.520	14.210
				0.15	-37.093	-73.613	-56.520	17.093
				900.09	-40.609	-77.129	-56.520	20.609
				3065.23	-36.813	-73.333	-56.520	16.813
4	406.15	Low	Low Power	0.01	-38.089	-74.907	-56.818	18.089
				0.17	-37.732	-74.550	-56.818	17.732
				812.79	-37.547	-74.365	-56.818	17.547
				3036.23	-36.855	-73.673	-56.818	16.855
5	429.95	Low		0.01	-36.652	-73.342	-56.690	16.652
				0.15	-38.833	-75.523	-56.690	18.833
				860.32	-45.502	-82.192	-56.690	25.502
				5137.96	-36.790	-73.480	-56.690	16.790
6	450.05	Middle		0.01	-36.219	-72.726	-56.507	16.219
				0.16	-38.676	-75.183	-56.507	18.676
				900.09	-41.008	-77.515	-56.507	21.008
				3165.24	-36.699	-73.206	-56.507	16.699

No.	Frequency (MHz)	Band	Setting	Spurious Frequency (MHz)	Correct Level (dBm)	Emission Level (dBc)	Limit (dBc)	Margin (dB)
1	469.95	Low	High Power	0.01	-34.043	-70.762	-56.719	14.043
				0.16	-39.525	-76.244	-56.719	19.525
				939.86	-38.922	-75.641	-56.719	18.922
				3688.30	-36.551	-73.270	-56.719	16.551
2	491.05	Low		0.01	-37.419	-74.232	-56.813	17.419
				0.15	-40.002	-76.815	-56.813	20.002
				982.54	-38.777	-75.590	-56.813	18.777
				3109.73	-36.701	-73.514	-56.813	16.701
3	511.95	Middle		0.01	-36.518	-73.276	-56.758	16.518
				0.15	-37.319	-74.077	-56.758	17.319
				372.41	-46.819	-83.577	-56.758	26.819
				1024.00	-35.628	-72.386	-56.758	15.628
4	469.95	Low	Low Power	0.01	-36.929	-66.598	-49.669	16.929
				0.15	-40.610	-70.279	-49.669	20.610
				939.86	-41.815	-71.484	-49.669	21.815
				5033.95	-36.646	-66.315	-49.669	16.646
5	491.05	Low		0.01	-36.683	-66.663	-49.980	16.683
				0.16	-38.931	-68.911	-49.980	18.931
				982.54	-43.068	-73.048	-49.980	23.068
				3200.74	-36.964	-66.944	-49.980	16.964
6	511.95	Middle		0.01	-36.381	-66.157	-49.776	16.381
				0.15	-39.561	-69.337	-49.776	19.561
				101.78	-43.908	-73.684	-49.776	23.908
				3183.24	-36.740	-66.516	-49.776	16.740

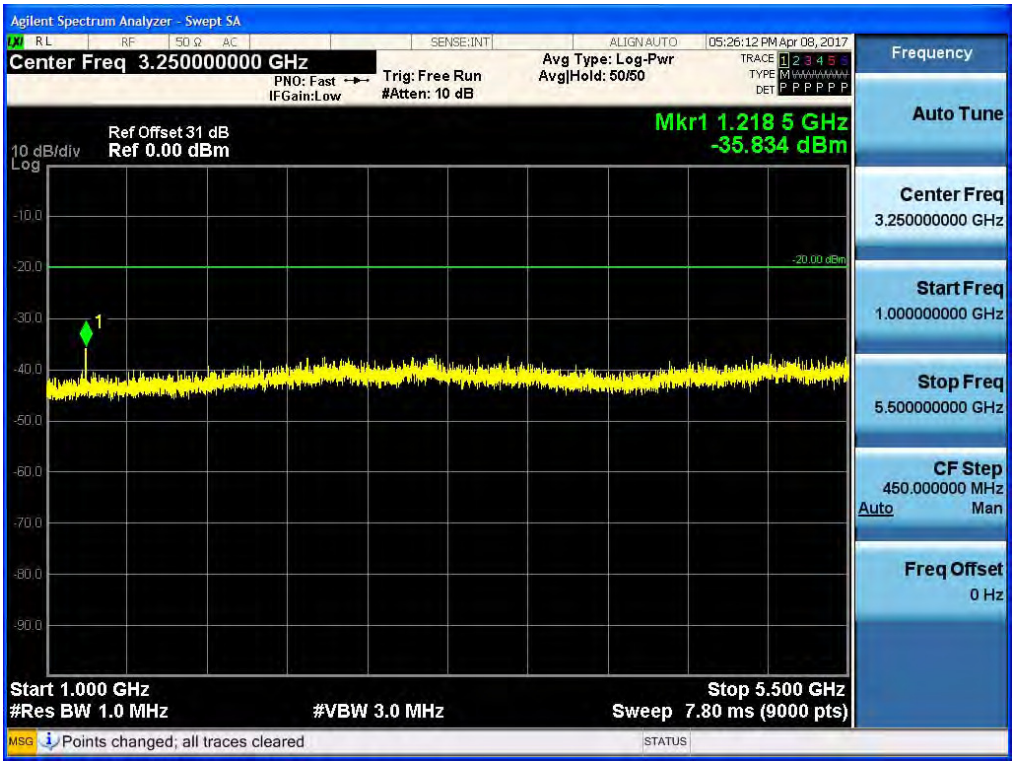
4K00F2D

No.	Frequency (MHz)	Band	Setting	Spurious Frequency (MHz)	Correct Level (dBm)	Emission Level (dBc)	Limit (dBc)	Margin (dB)
1	406.15	Low	Low Power	0.01	-35.020	-65.221	-50.201	15.020
				0.15	-38.274	-68.475	-50.201	18.274
				812.79	-37.576	-67.777	-50.201	17.576
				3159.24	-36.933	-67.134	-50.201	16.933
2	429.95	Middle		0.01	-37.126	-67.105	-49.979	17.126
				0.16	-38.551	-68.530	-49.979	18.551
				860.32	-44.149	-74.128	-49.979	24.149
				2749.19	-37.357	-67.336	-49.979	17.357
3	450.05	High		0.01	-36.636	-66.501	-49.865	16.636
				0.16	-37.889	-67.754	-49.865	17.889
				900.09	-40.936	-70.801	-49.865	20.936
				3668.30	-37.081	-66.946	-49.865	17.081
4	469.95	Low	Low Power	0.01	-37.227	-66.882	-49.655	17.227
				0.17	-39.500	-69.155	-49.655	19.500
				939.86	-42.313	-71.968	-49.655	22.313
				3199.24	-36.186	-65.841	-49.655	16.186
5	491.05	Middle		0.01	-37.478	-67.443	-49.965	17.478
				0.16	-37.773	-67.738	-49.965	17.773
				982.54	-42.710	-72.675	-49.965	22.710
				5142.46	-37.257	-67.222	-49.965	17.257
6	511.95	High		0.01	-34.461	-64.283	-49.822	14.461
				0.20	-40.589	-70.411	-49.822	20.589
				108.57	-43.767	-73.589	-49.822	23.767
				5113.96	-36.967	-66.789	-49.822	16.967

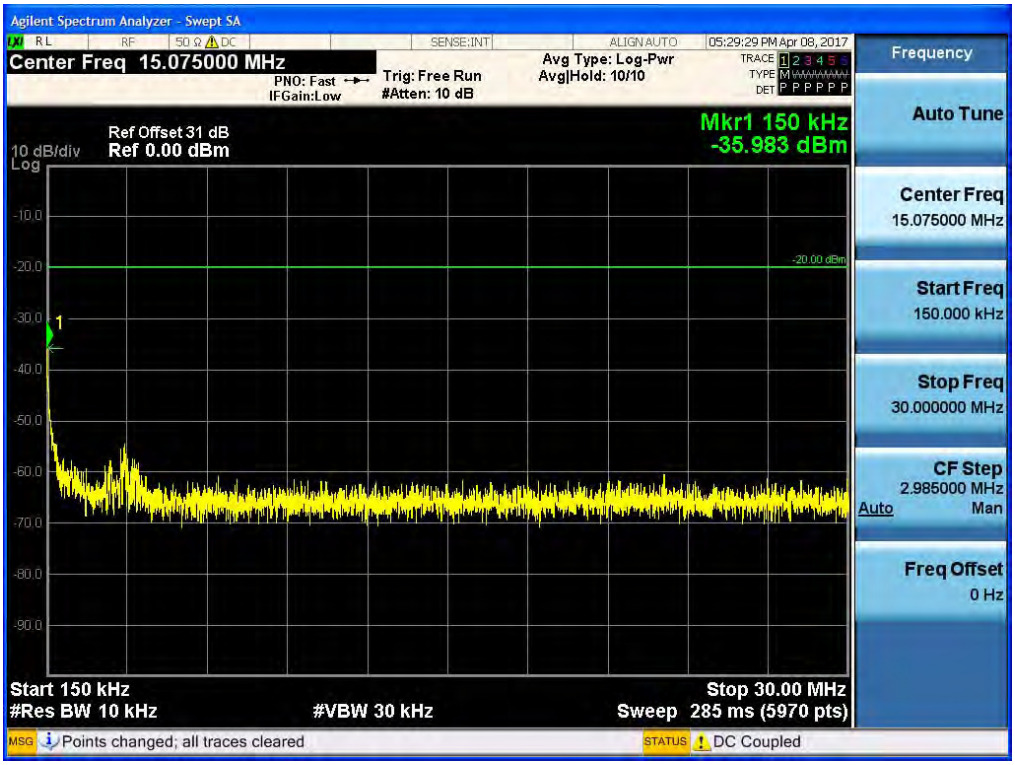
▣ Plots of Unwanted Emissions : Conducted Spurious Emission FCC

(11K0F3E _ 406.15 MHz)_High

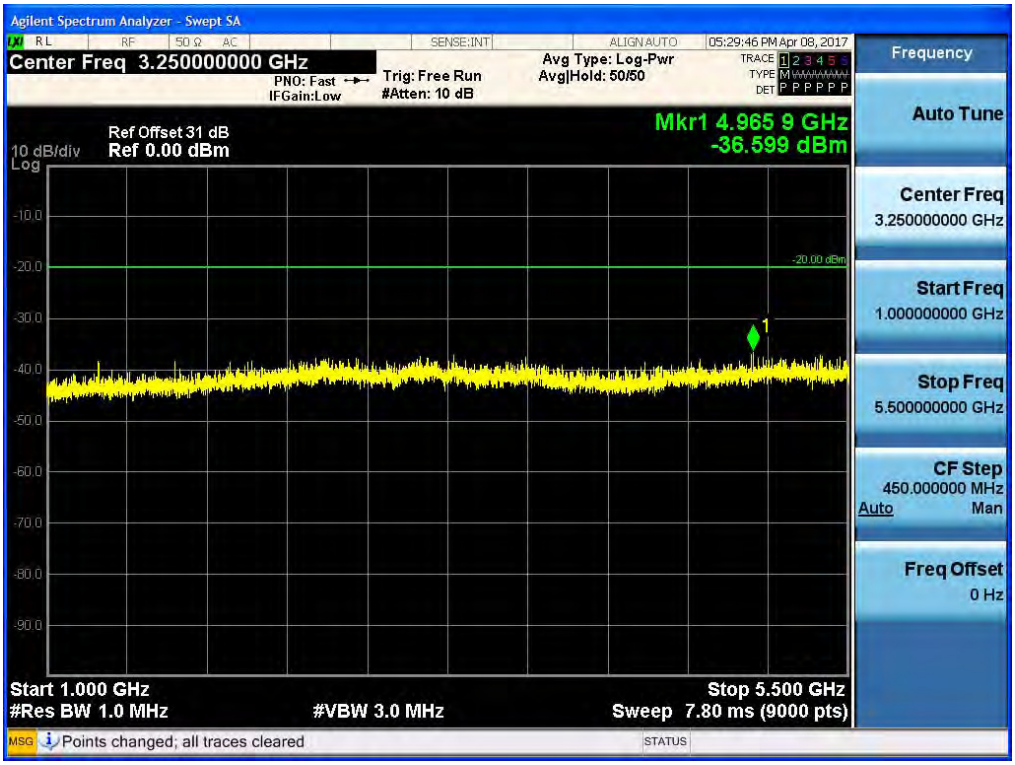

Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
05:26:01 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 812.79 MHz
-36.088 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
05:26:12 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 1.218 5 GHz
-35.834 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz

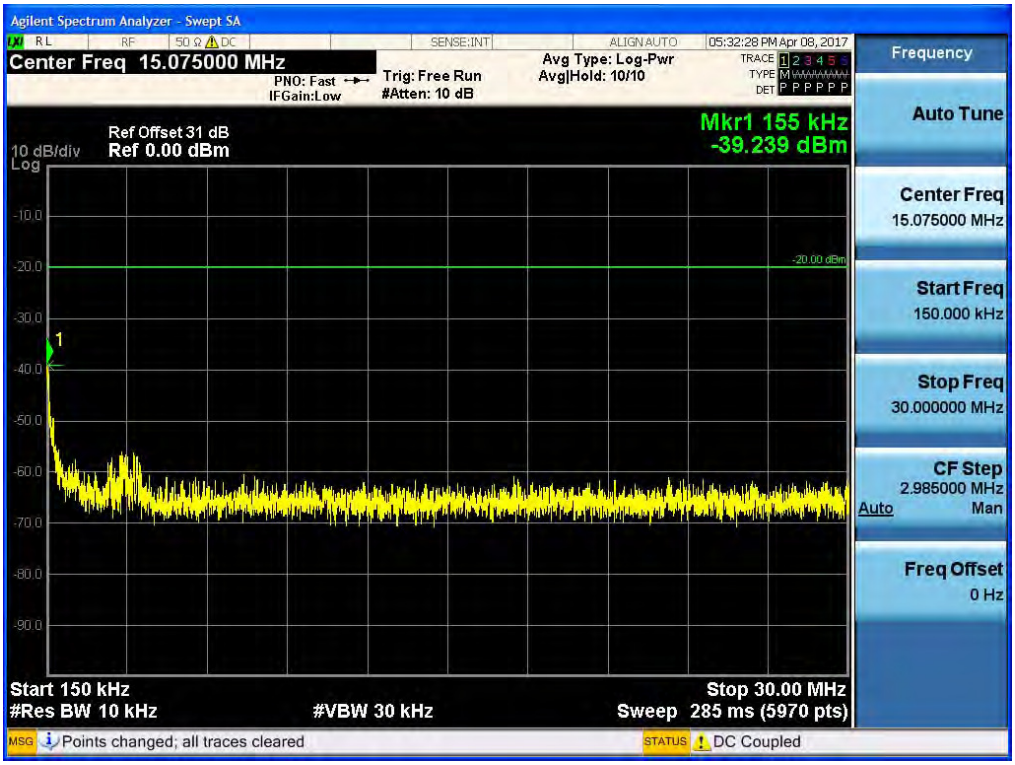
(11K0F3E _ 429.95 MHz)_High



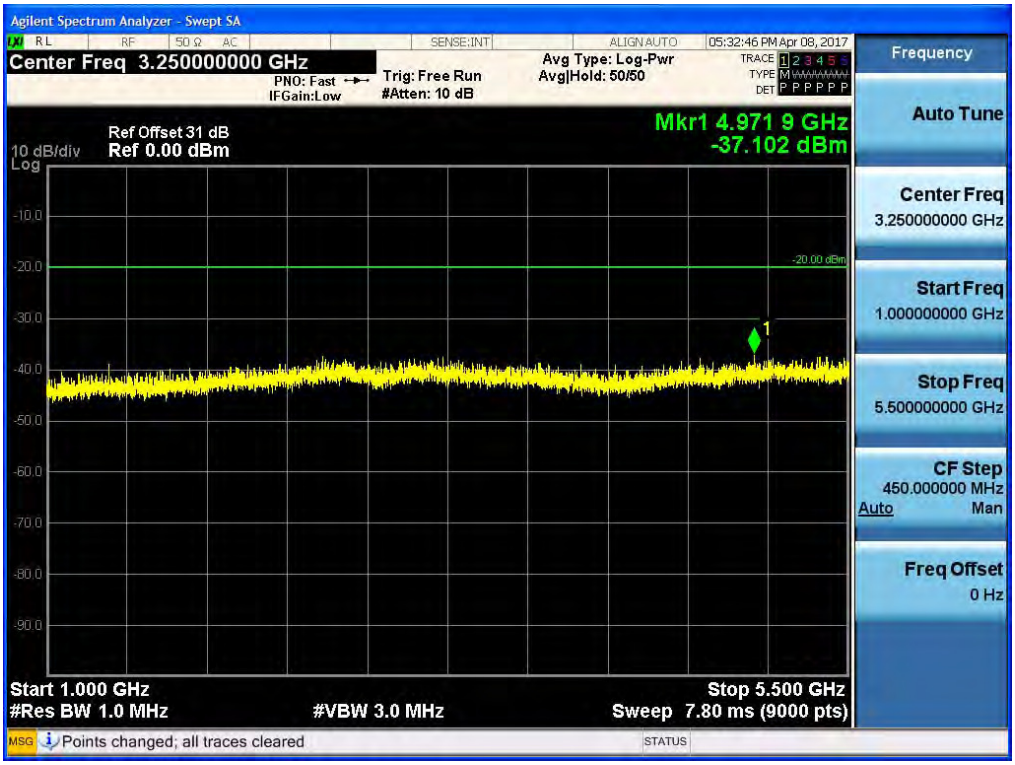

Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
05:29:36 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 860.32 MHz
-38.625 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
05:29:46 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 4.965 9 GHz
-36.599 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz

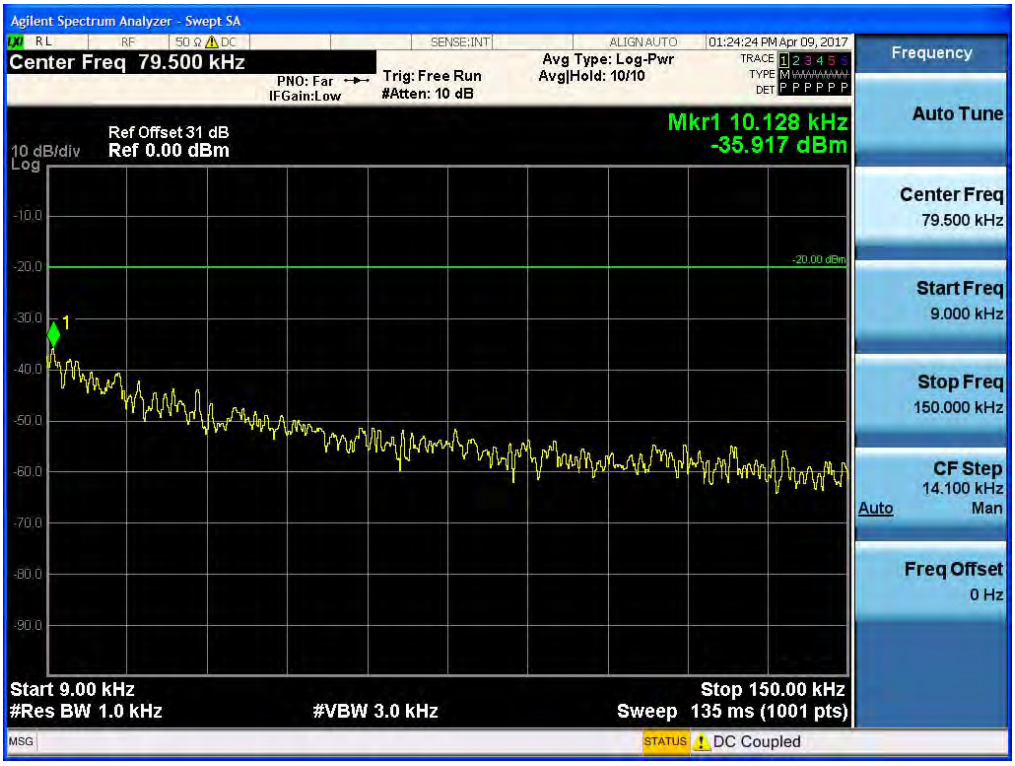
(11K0F3E _ 450.05 MHz)_High

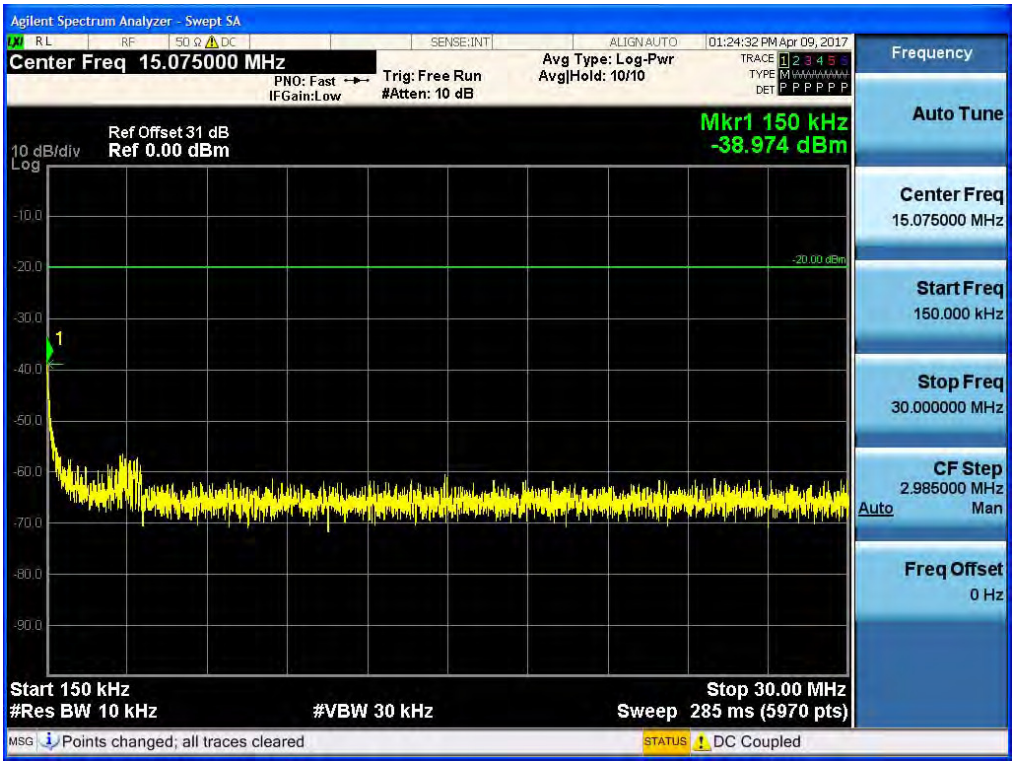


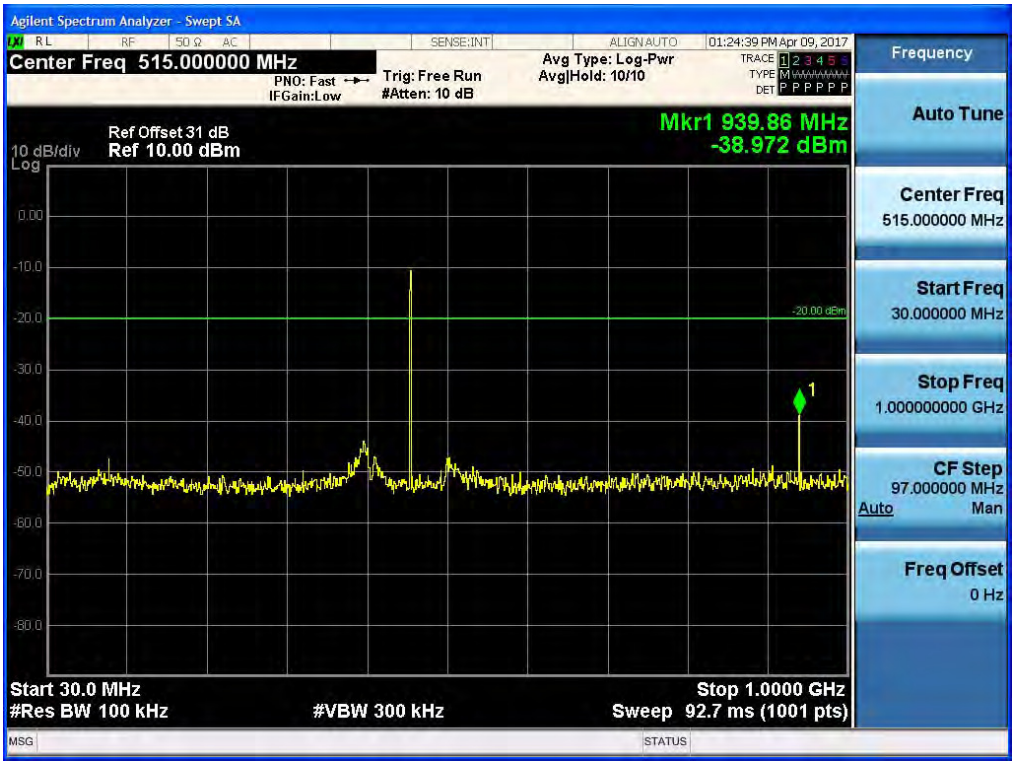

Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
05:32:35 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 900.09 MHz
-40.458 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

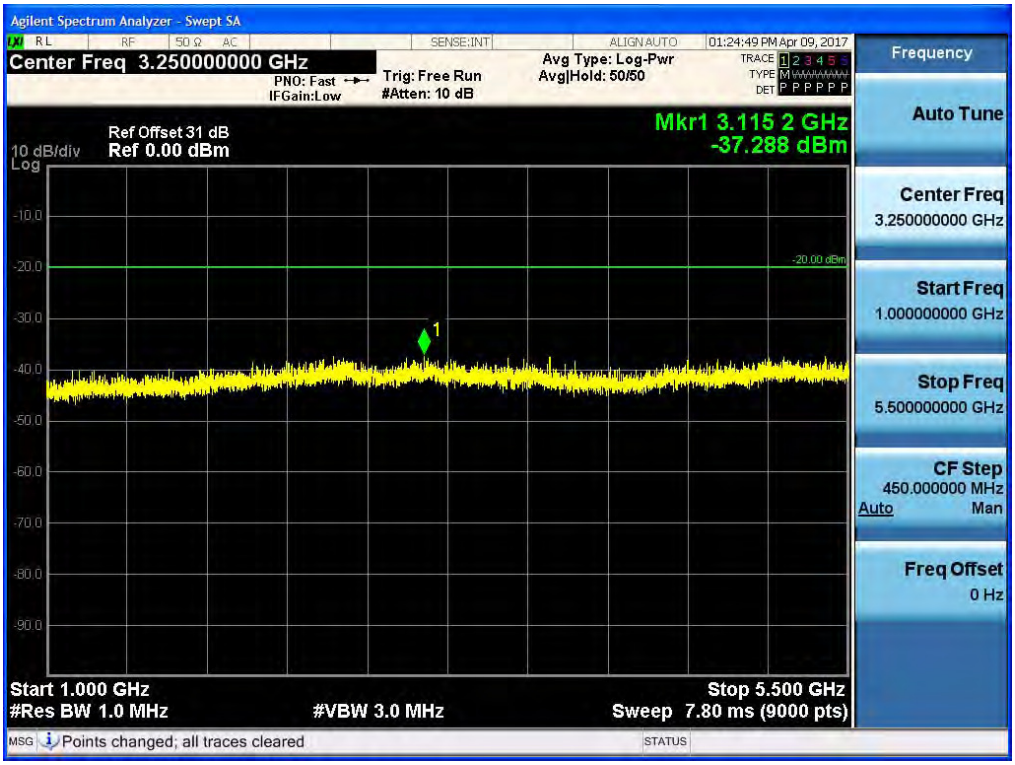

Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
05:32:46 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 4.971 9 GHz
-37.102 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

(11K0F3E _ 469.95 MHz)_High

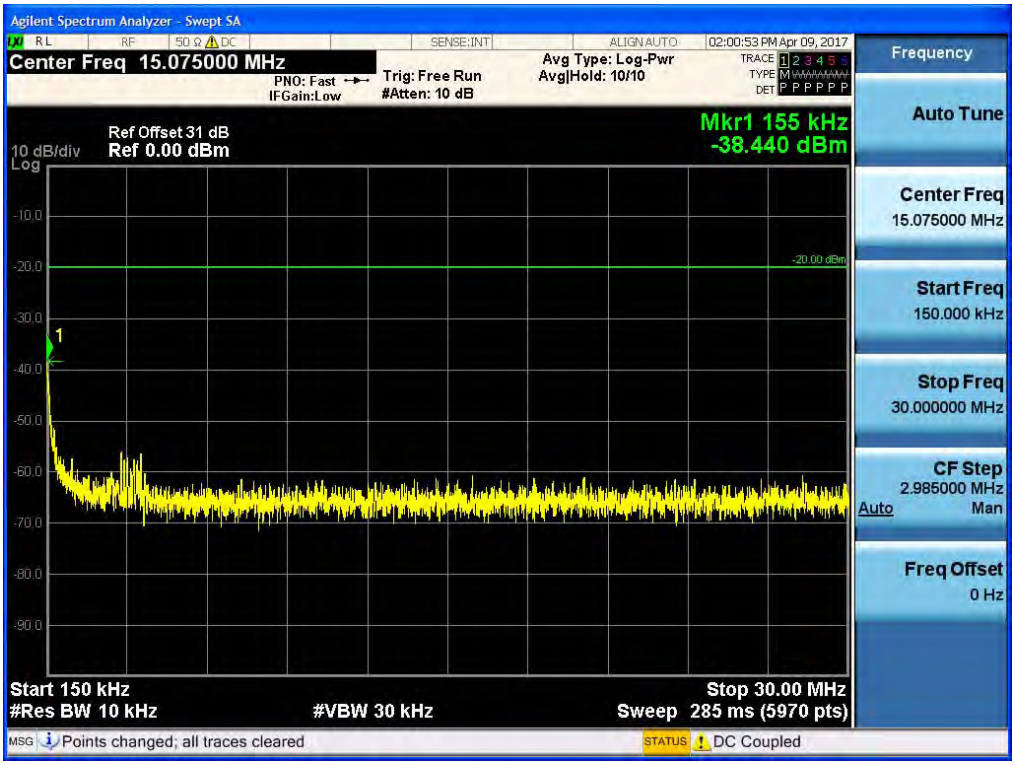


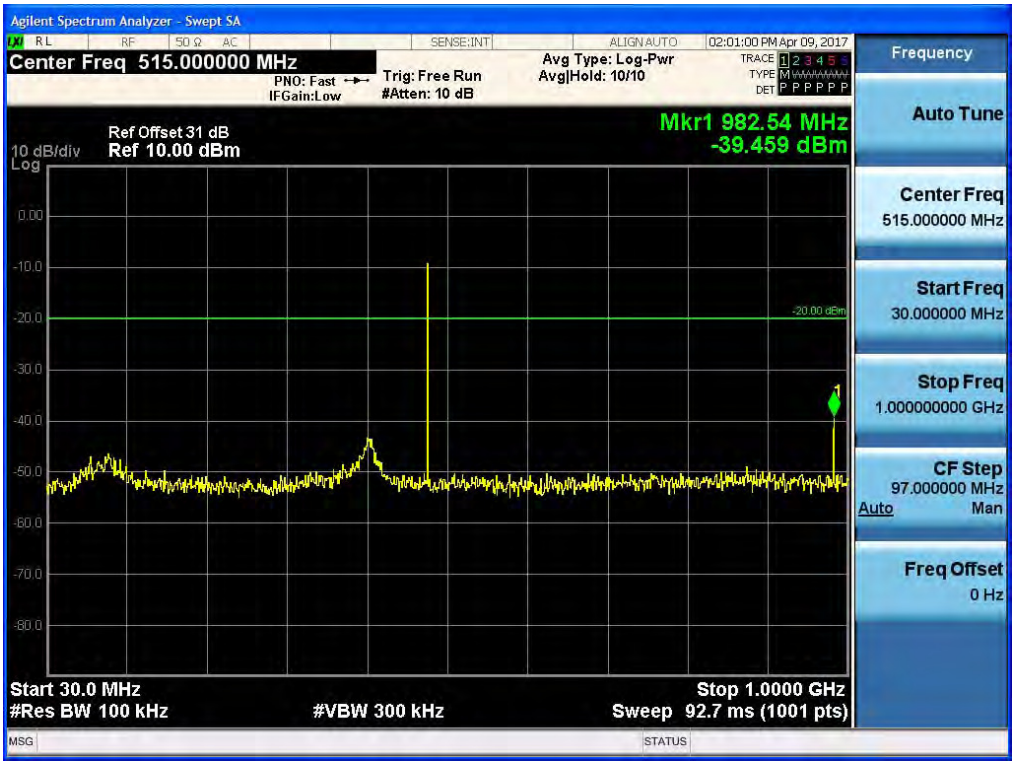


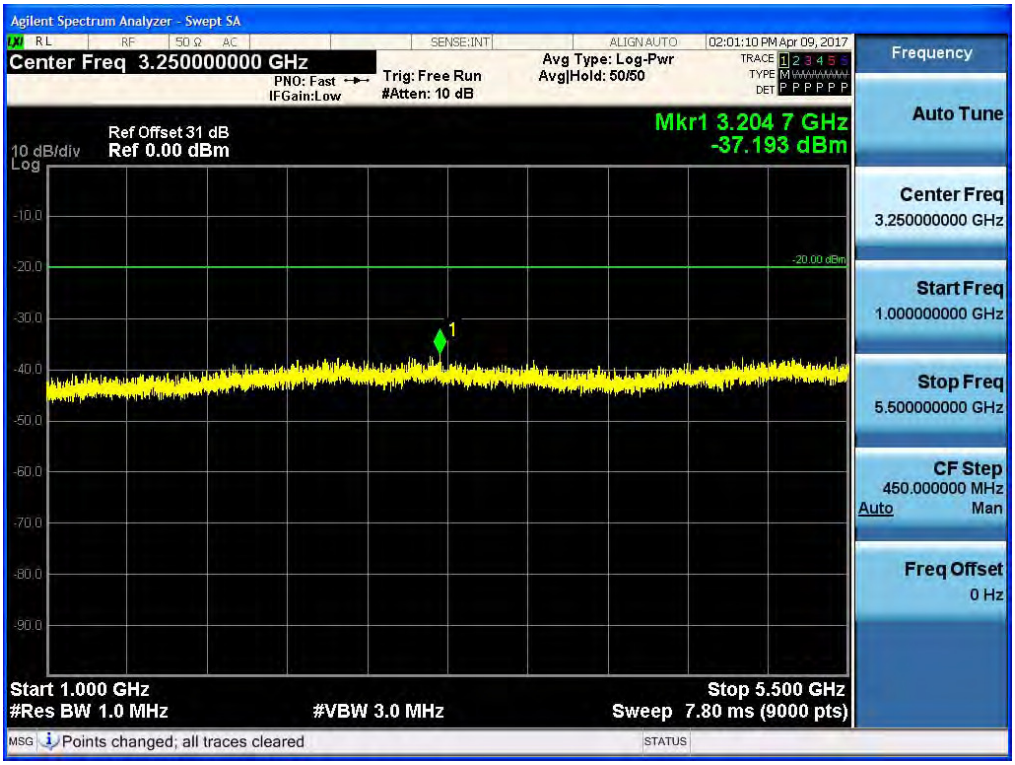

Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
01:24:39 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 939.86 MHz
-38.972 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
01:24:49 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 3.115 2 GHz
-37.288 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz

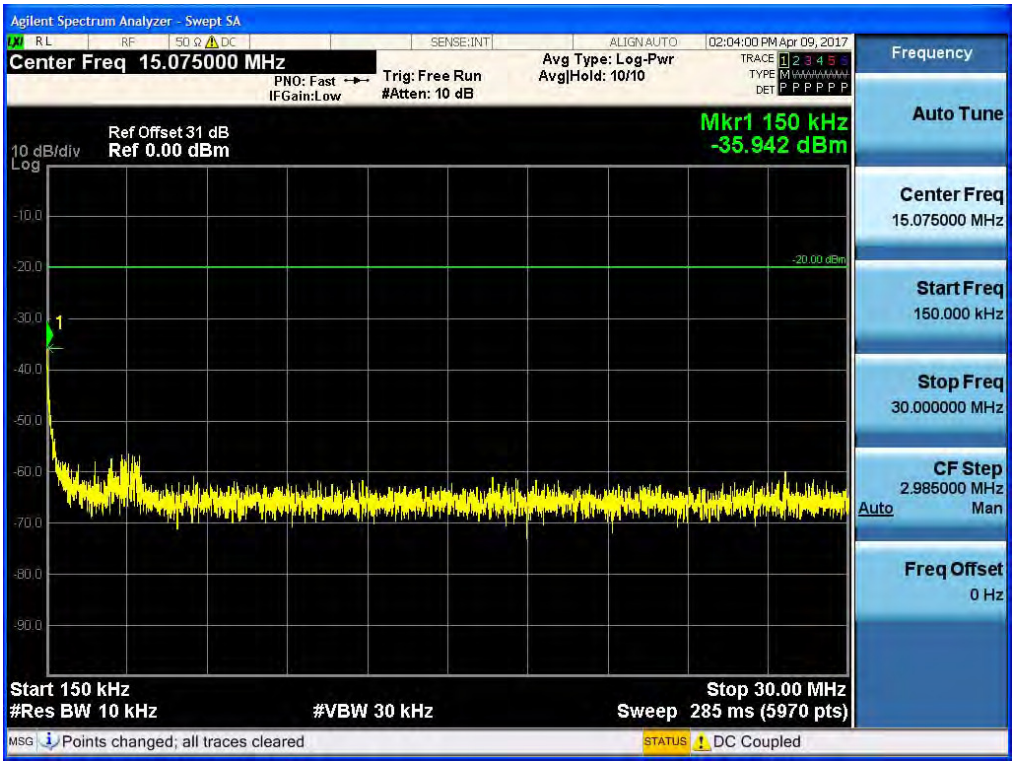
(11K0F3E _ 491.05 MHz)_High



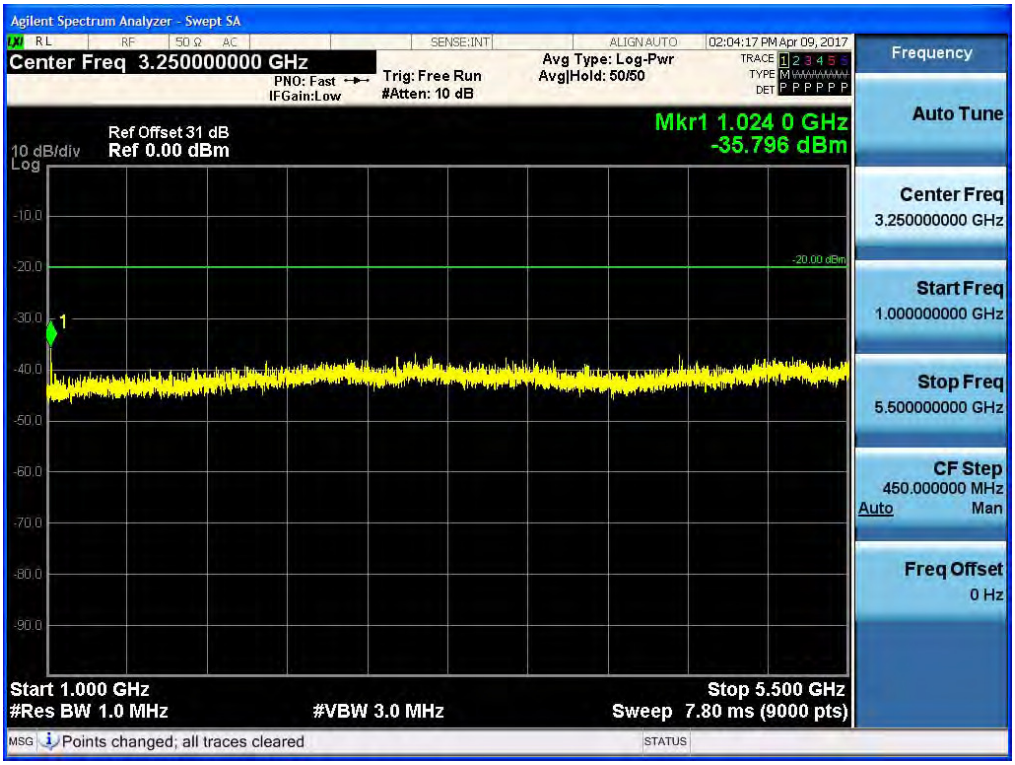

Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
02:01:00 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 982.54 MHz
-39.459 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
02:01:10 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 3.204 7 GHz
-37.193 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz

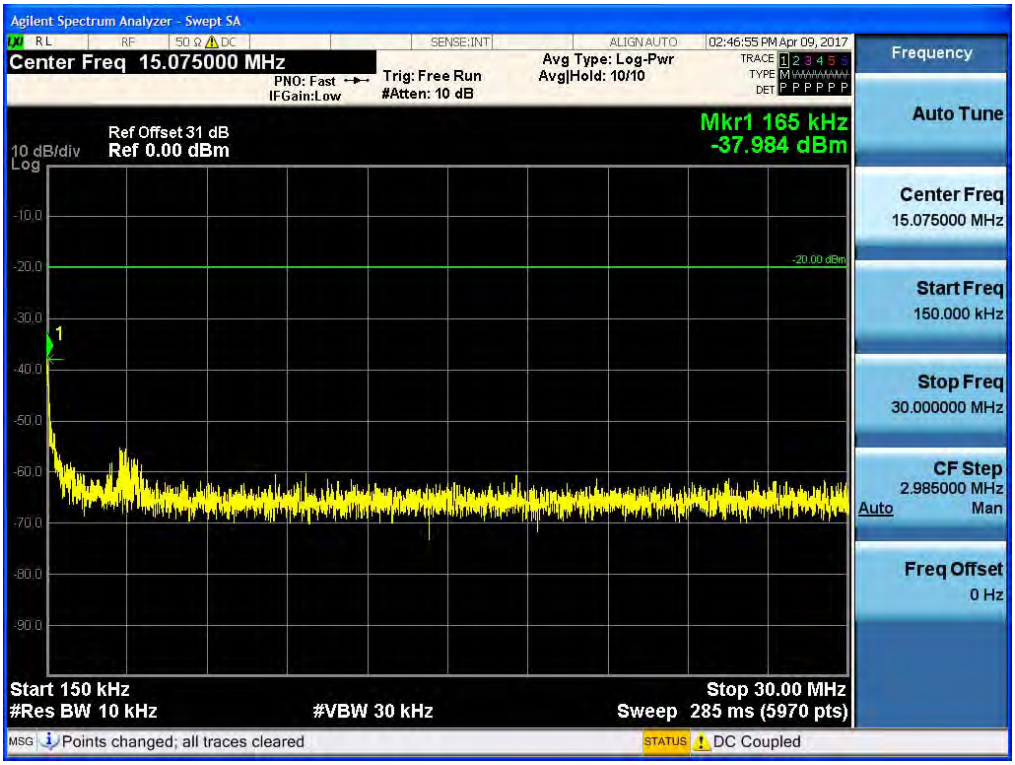
(11K0F3E _ 511.95 MHz)_High

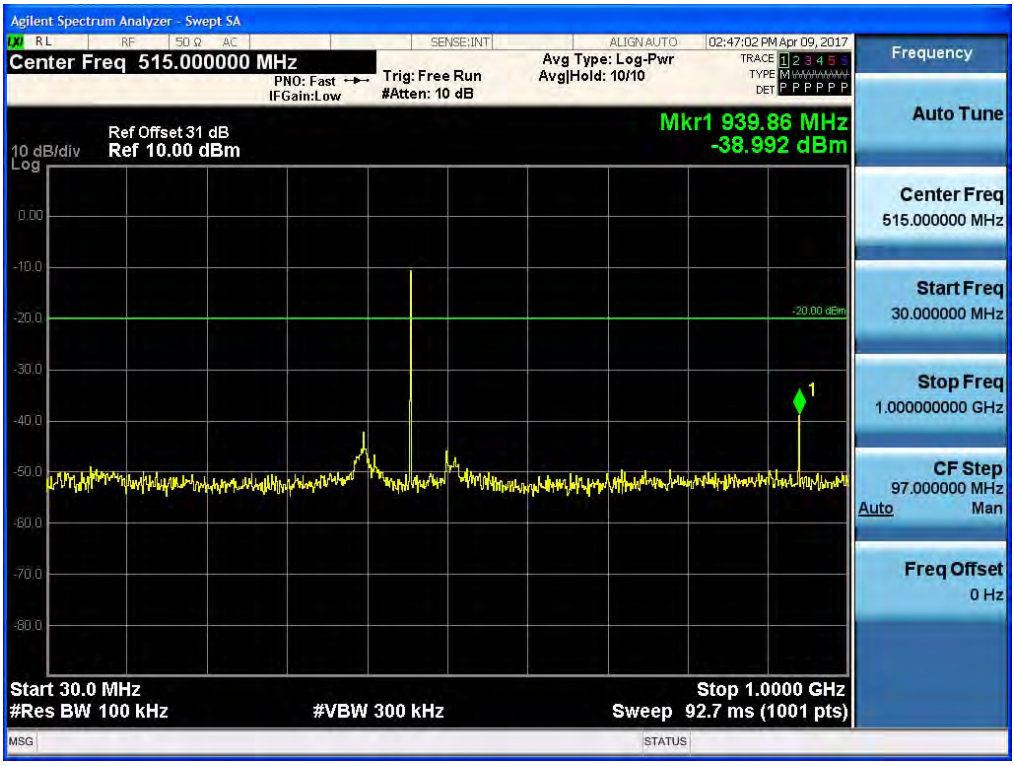


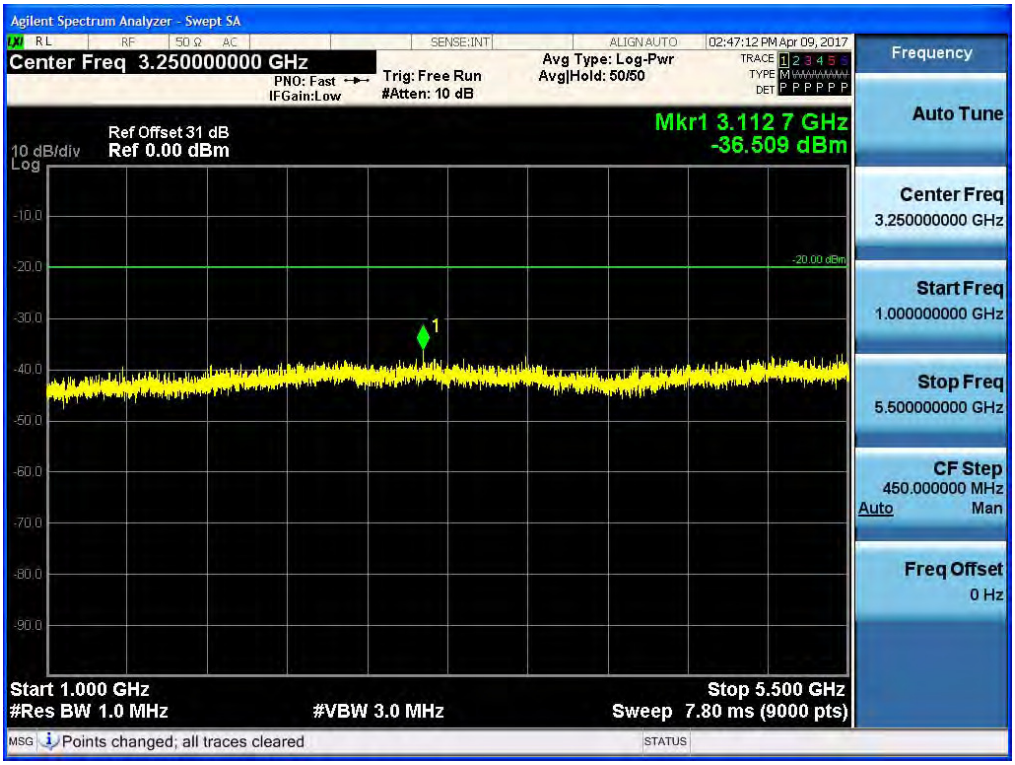

Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
02:04:07 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 397.63 MHz
-46.710 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
02:04:17 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 1.024 0 GHz
-35.796 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz

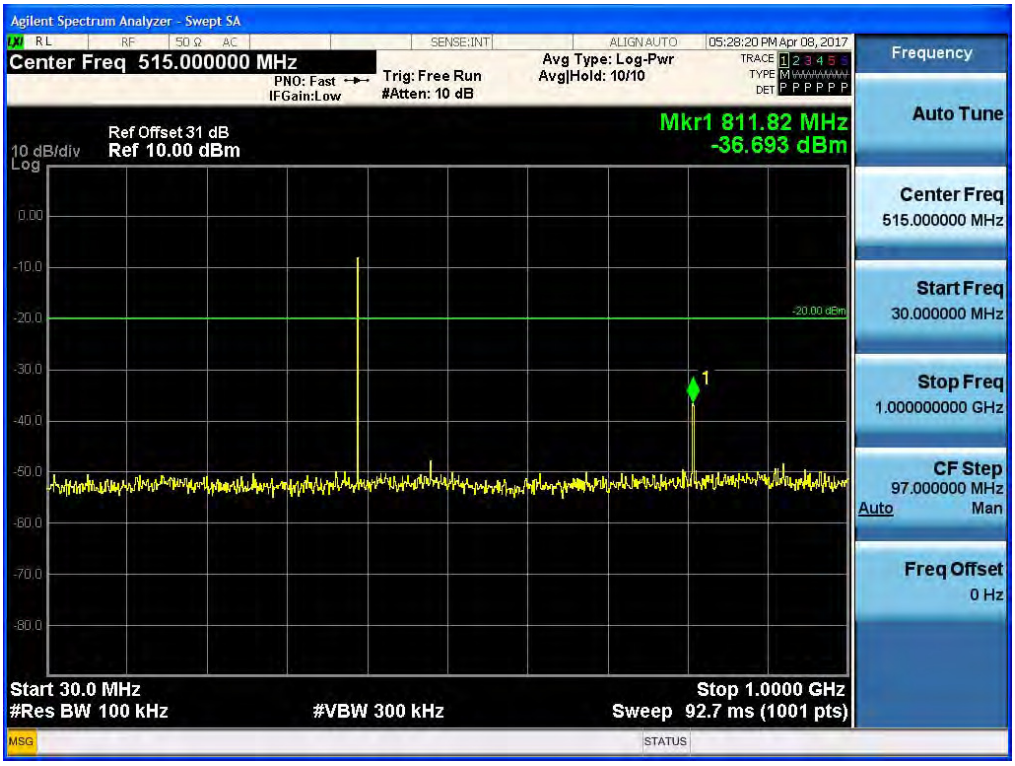
(11K0F3E _ 470.05 MHz)_High

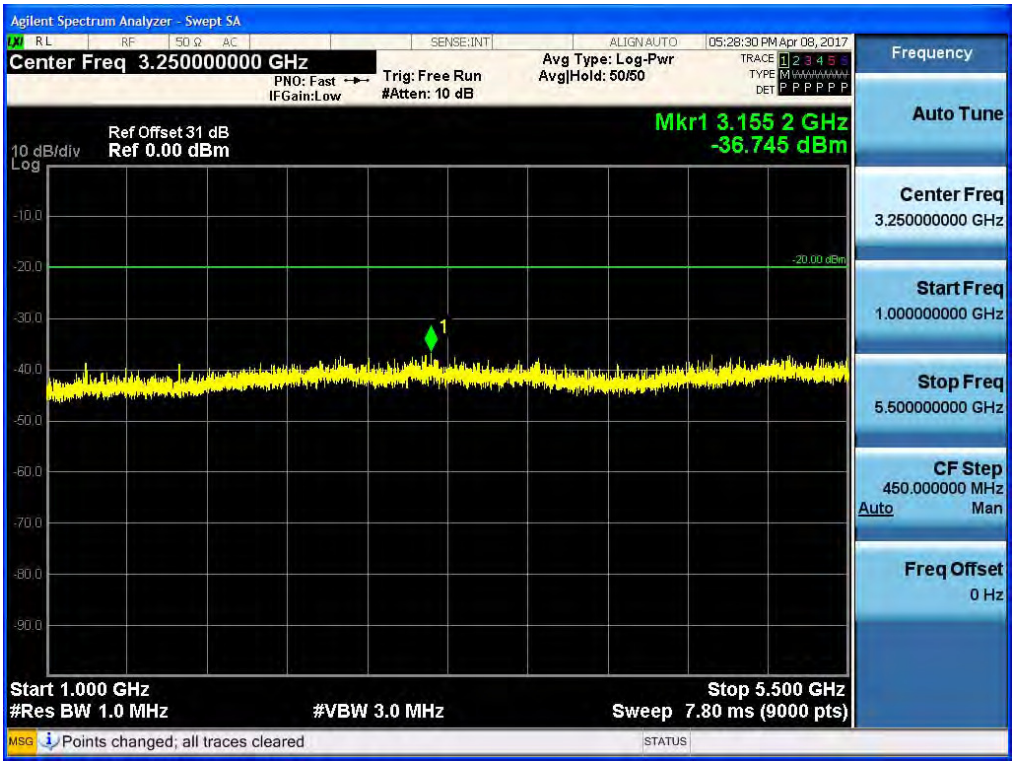



Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
02:47:02 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 939.86 MHz
-38.992 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

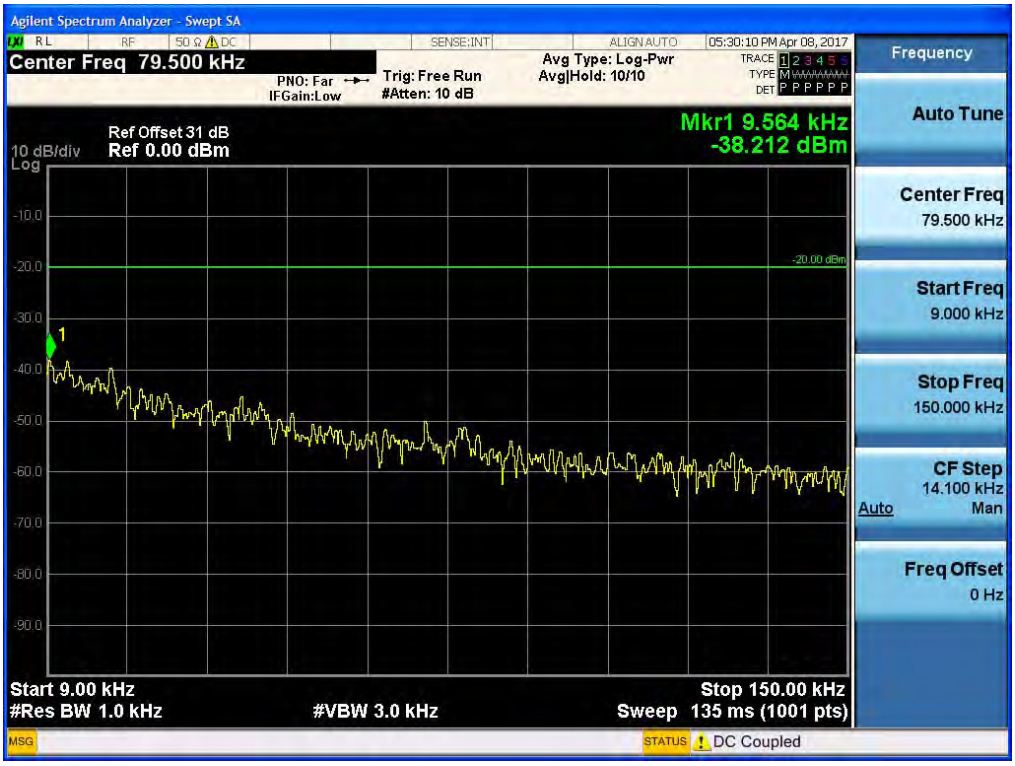

Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
02:47:12 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 3.112 7 GHz
-36.509 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz

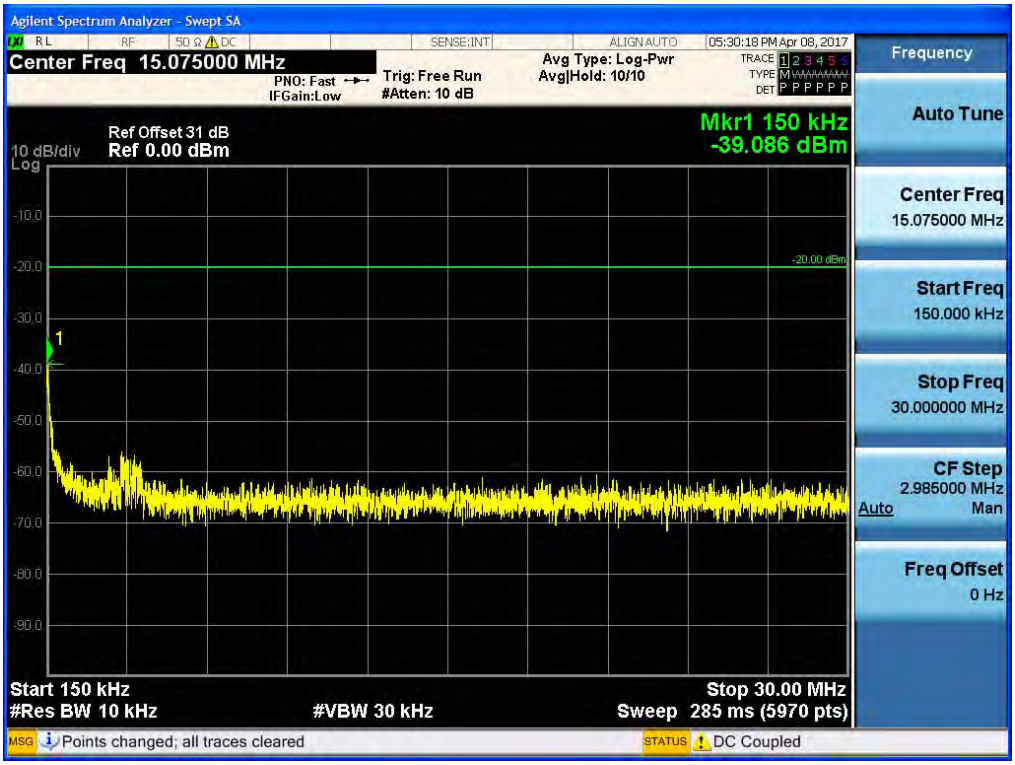
(11K0F3E _ 406.15 MHz)_Low

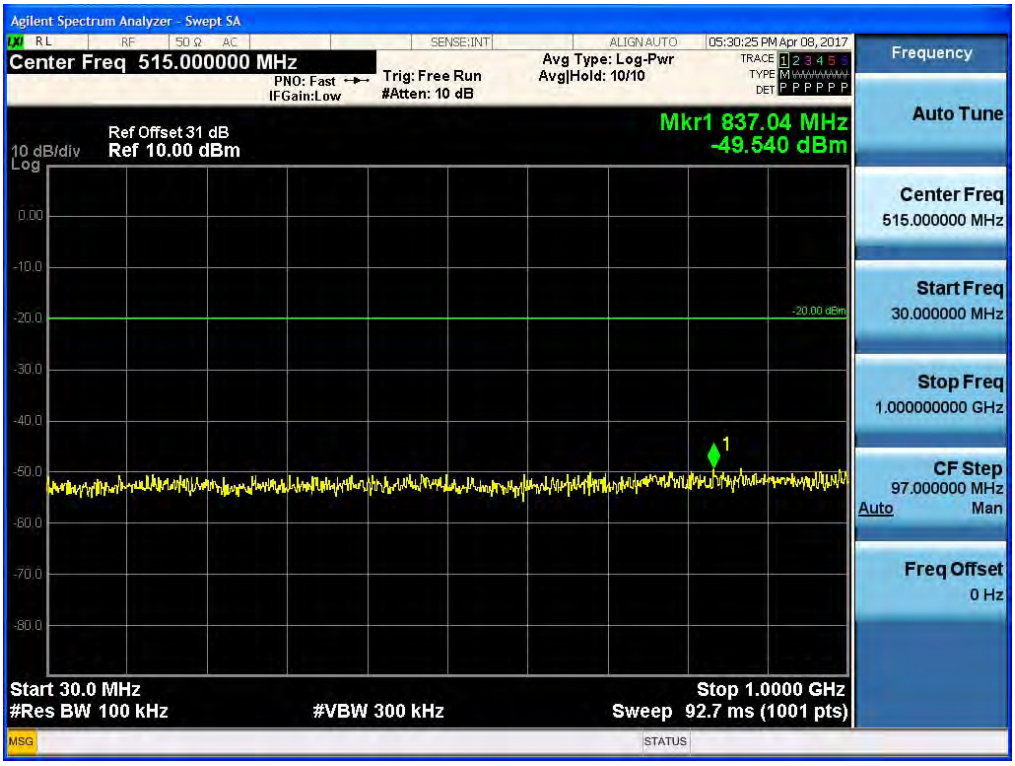

Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
05:28:20 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 811.82 MHz
-36.693 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

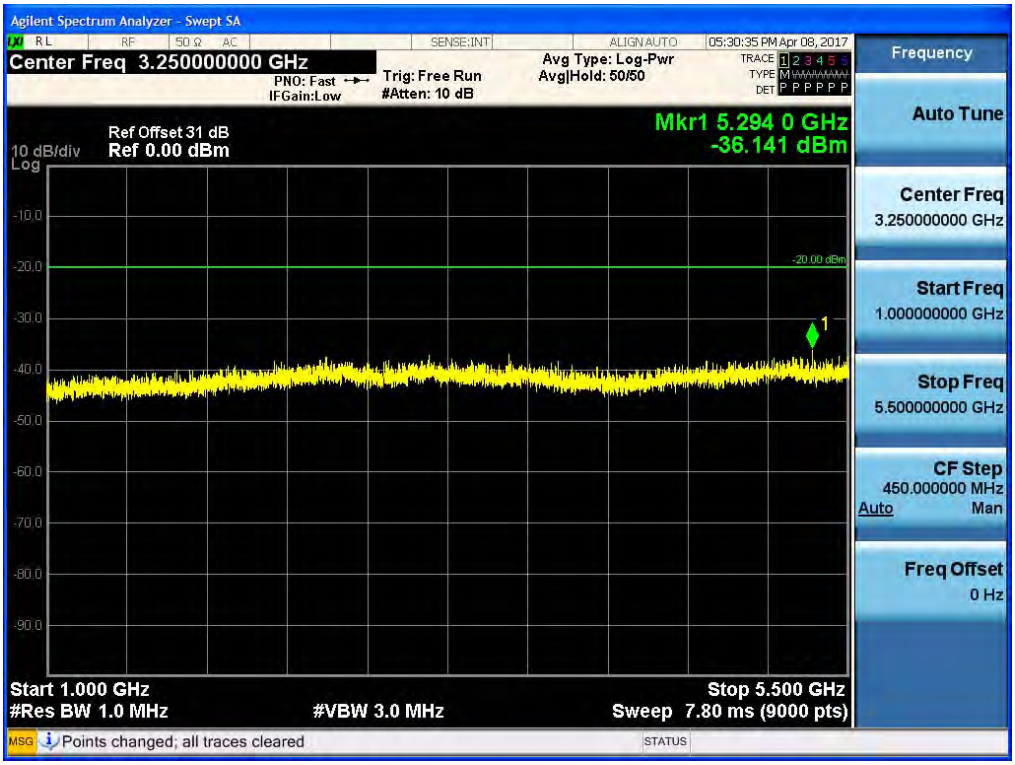

Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
05:28:30 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 3.155 2 GHz
-36.745 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz

(11K0F3E _ 429.95 MHz)_Low

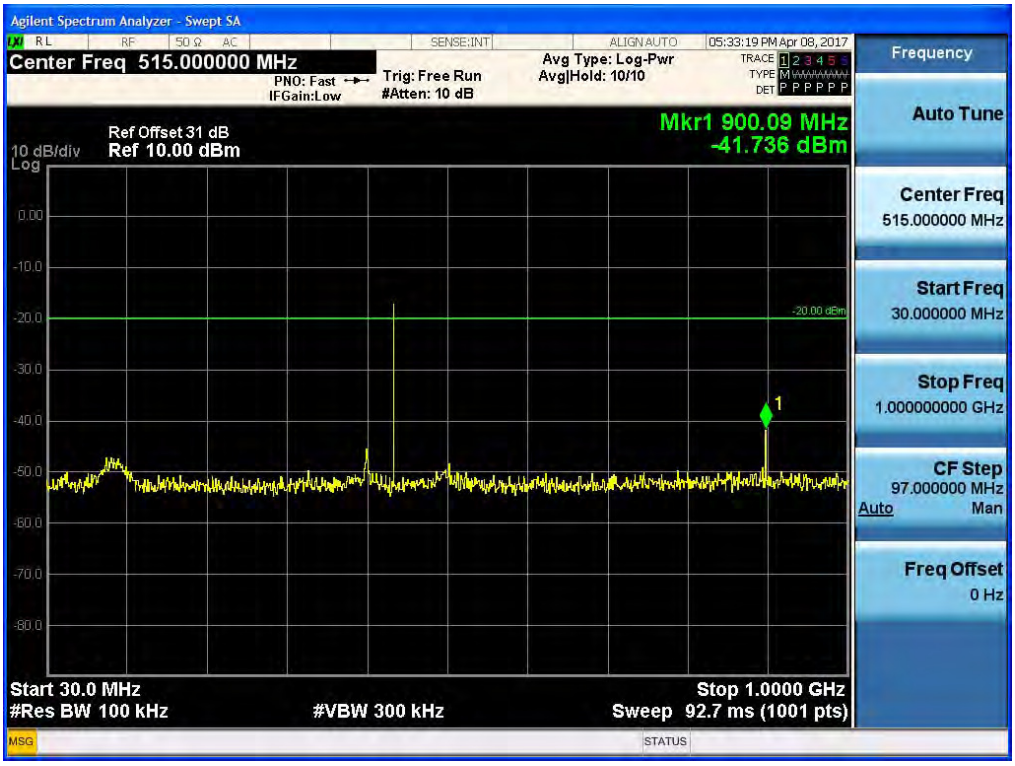


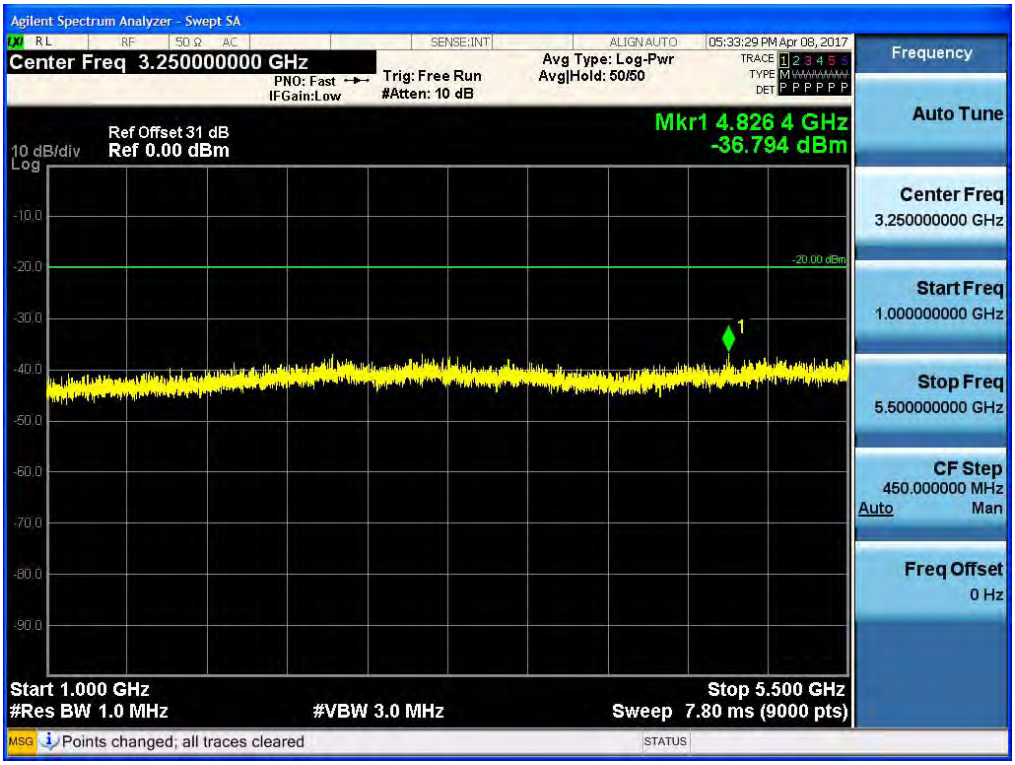



Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
05:30:25 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 837.04 MHz
-49.540 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

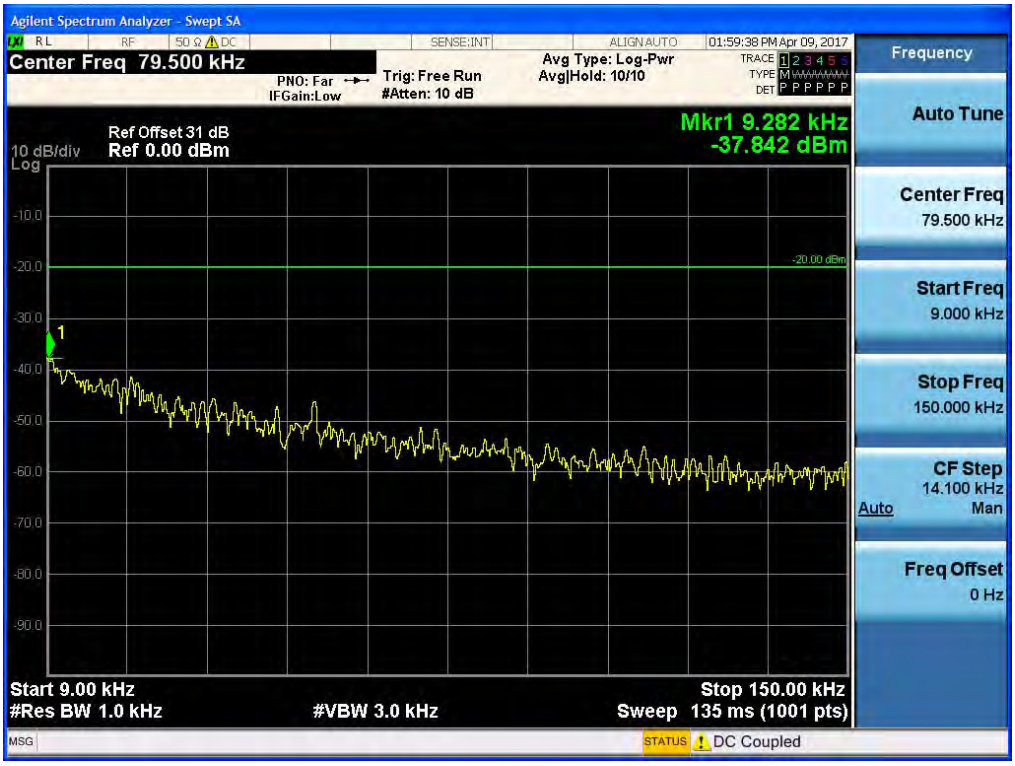

Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
05:30:35 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 5.294 0 GHz
-36.141 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz

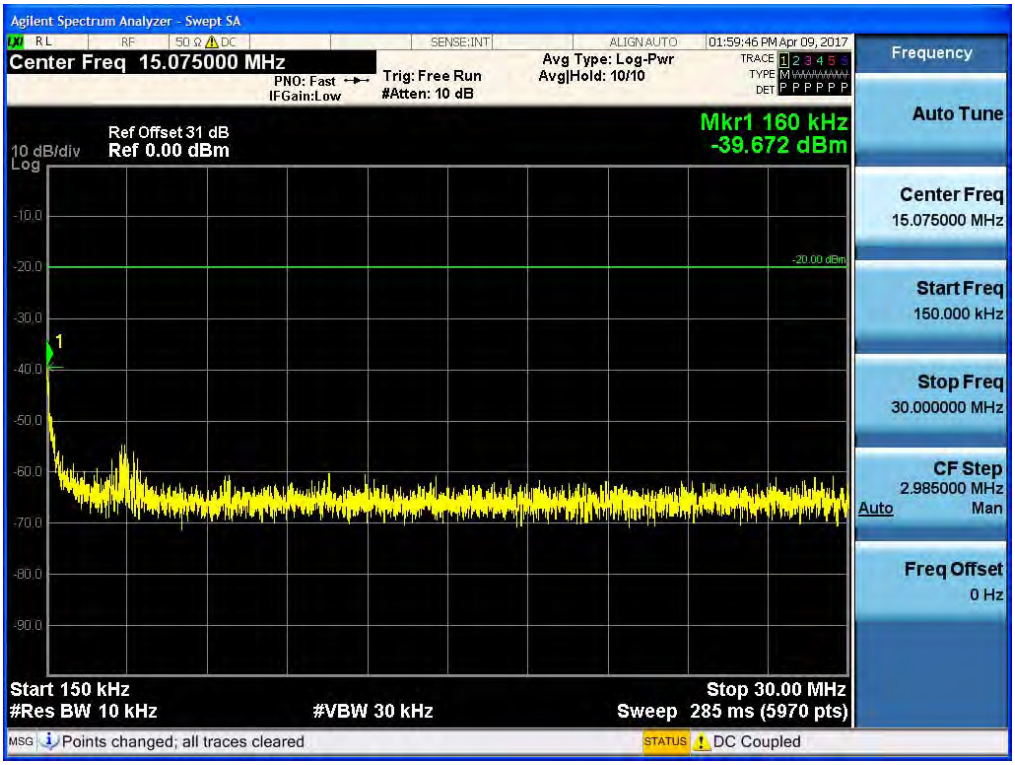
(11K0F3E _ 450.05 MHz)_Low

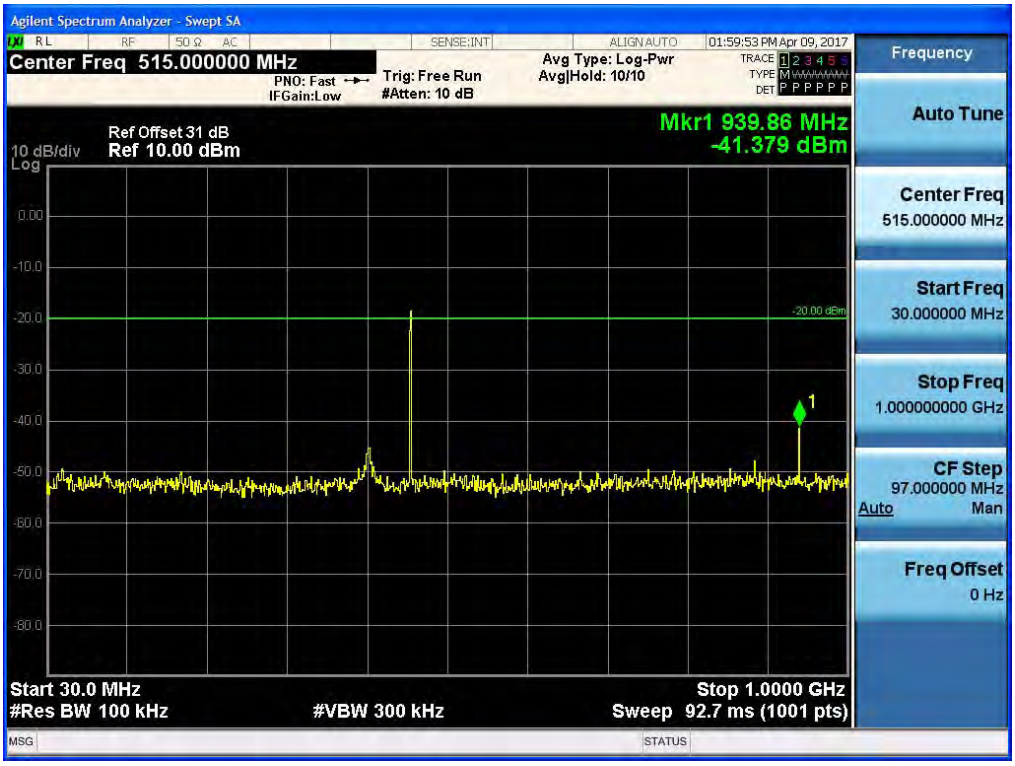

Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
05:33:19 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 900.09 MHz
-41.736 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

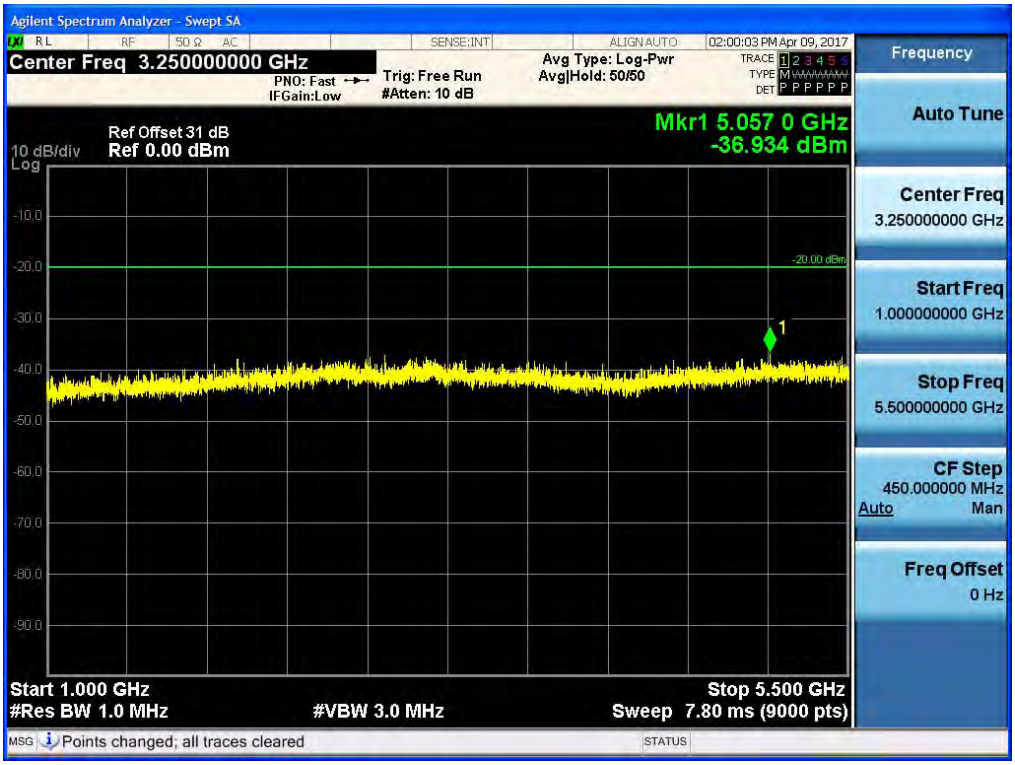

Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
05:33:29 PM Apr 08, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 4.826 4 GHz
-36.794 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

(11K0F3E _ 469.95 MHz)_Low

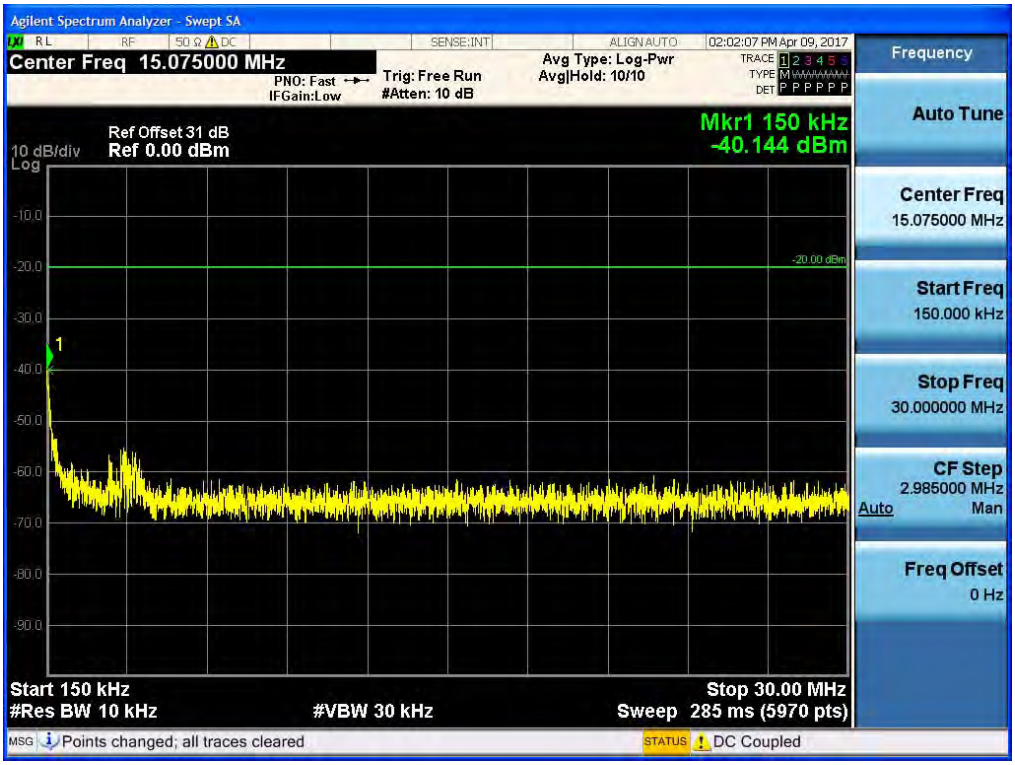


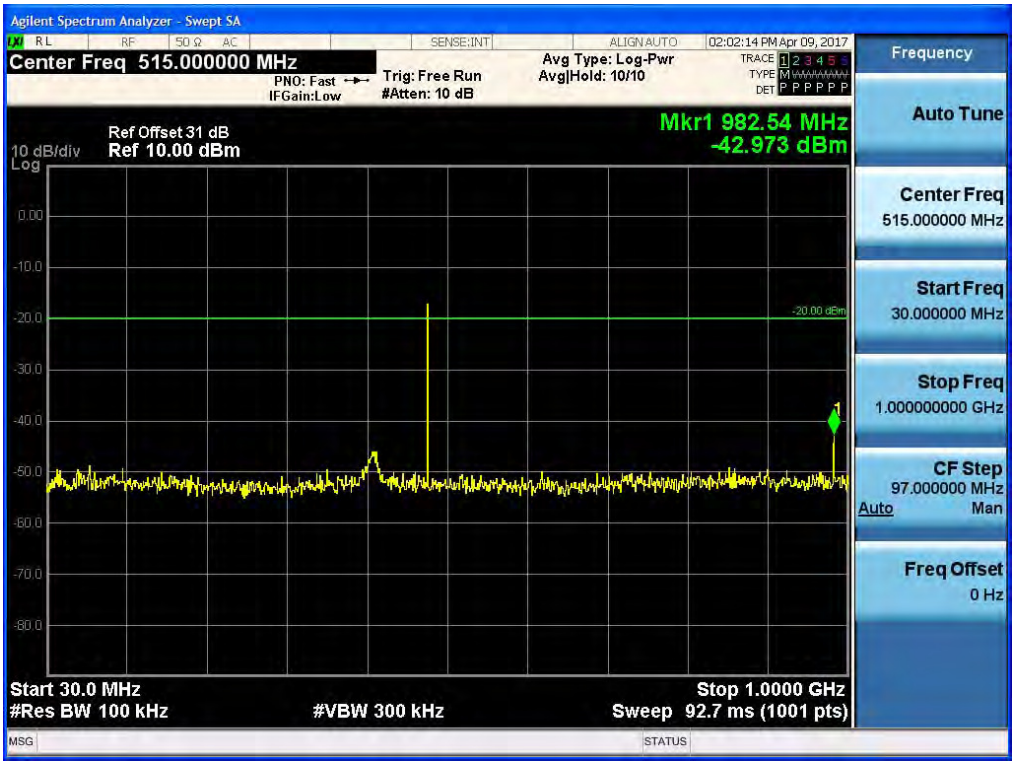


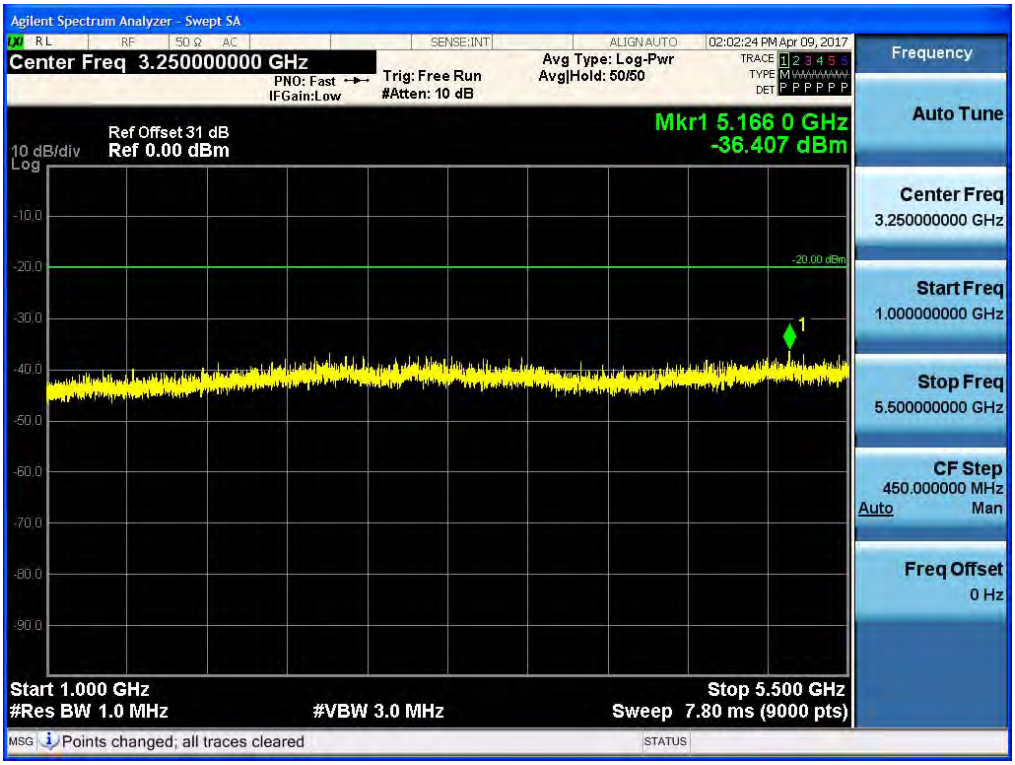

Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
01:59:53 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Log
Ref 10.00 dBm
Mkr1 939.86 MHz
-41.379 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
02:00:03 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 5.057 0 GHz
-36.934 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

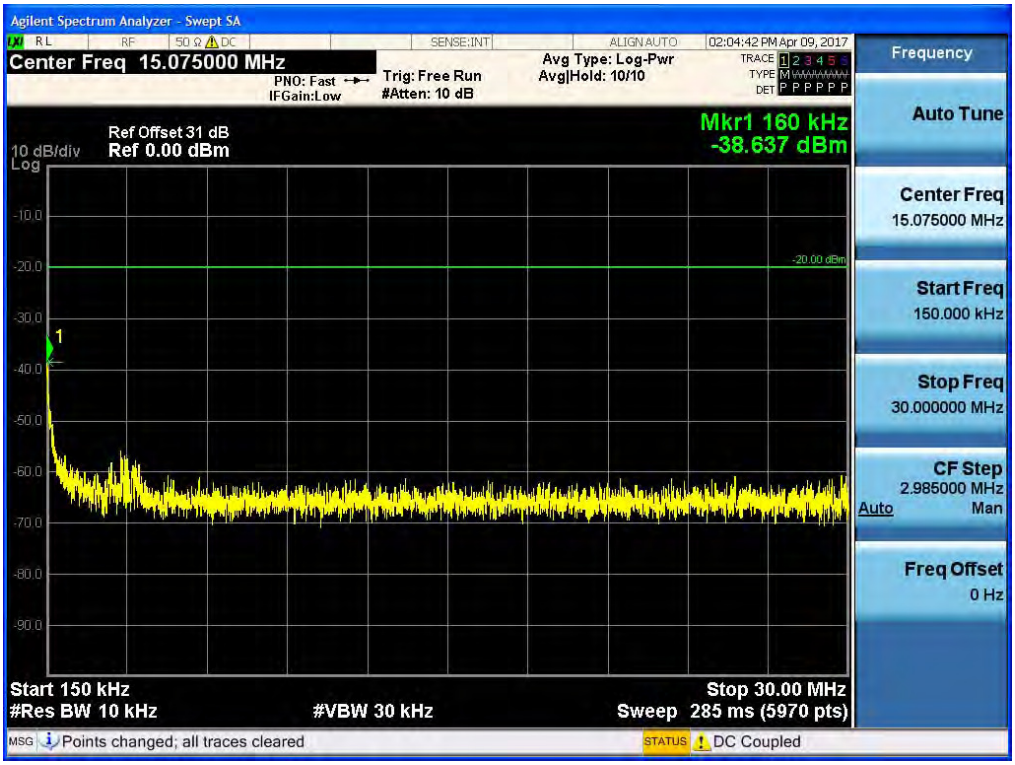
(11K0F3E _ 491.05 MHz)_Low

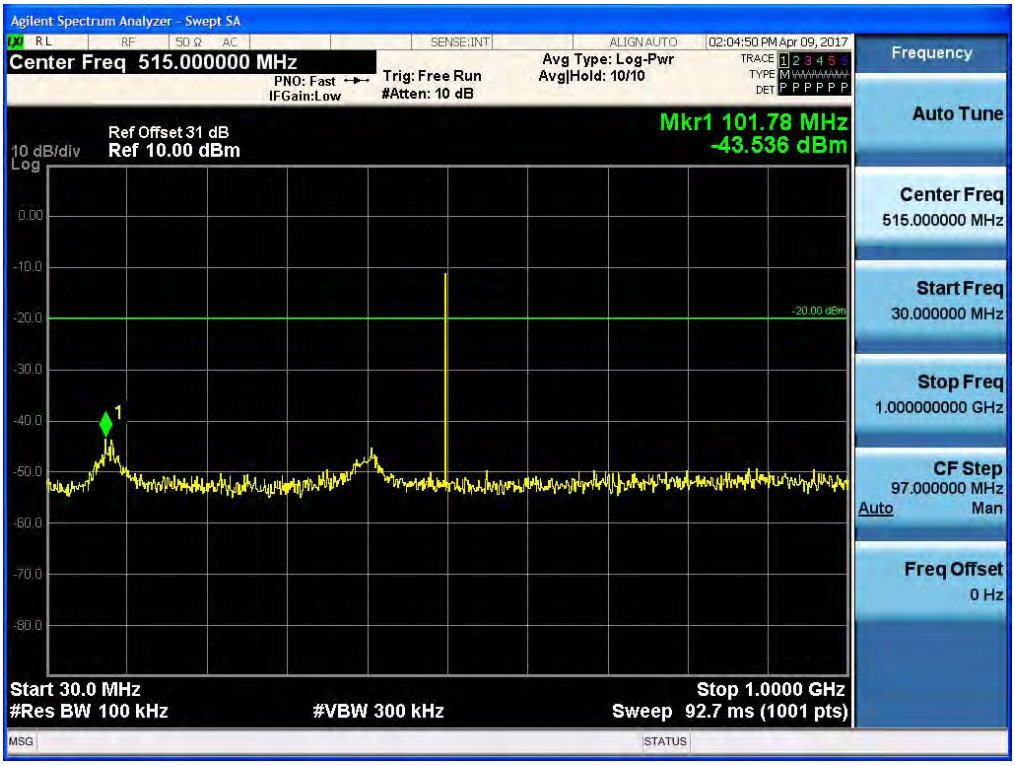


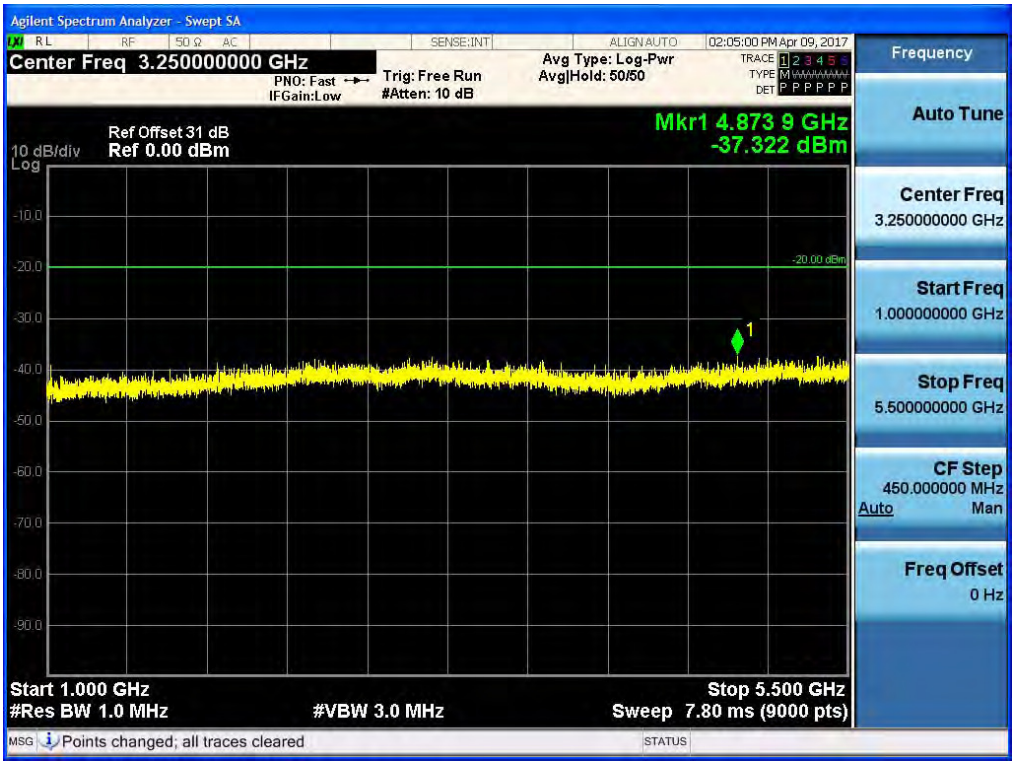

Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
02:02:14 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Log
Ref 10.00 dBm
Mkr1 982.54 MHz
-42.973 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
02:02:24 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 5.166 0 GHz
-36.407 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

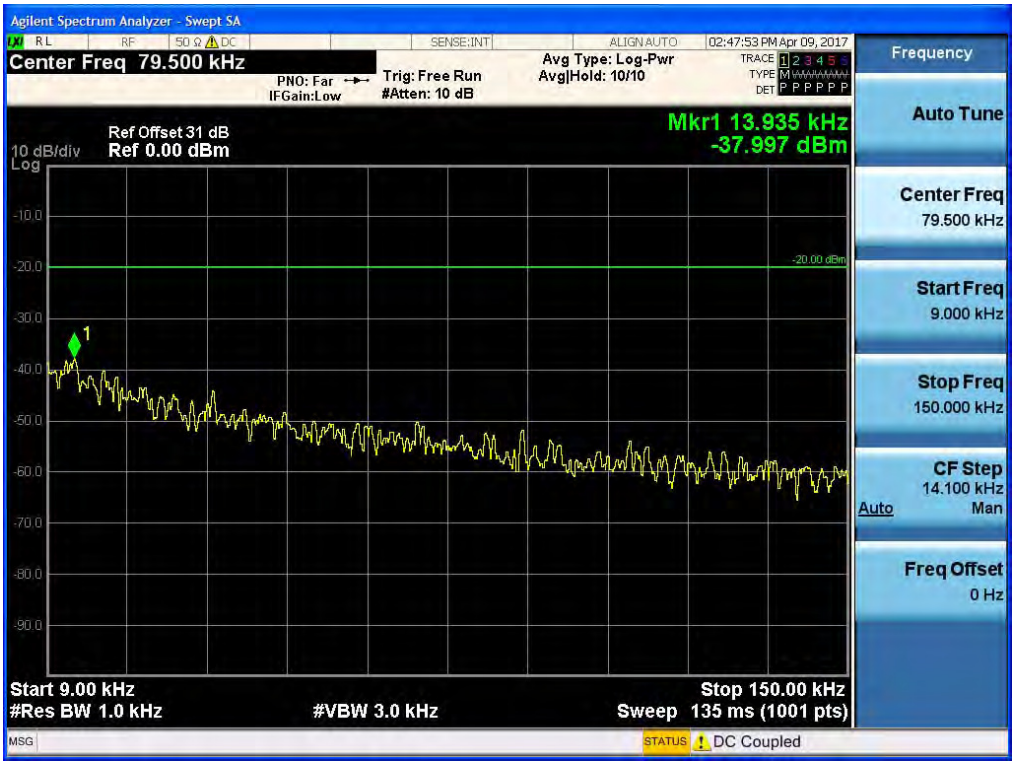
(11K0F3E _ 511.95 MHz)_Low

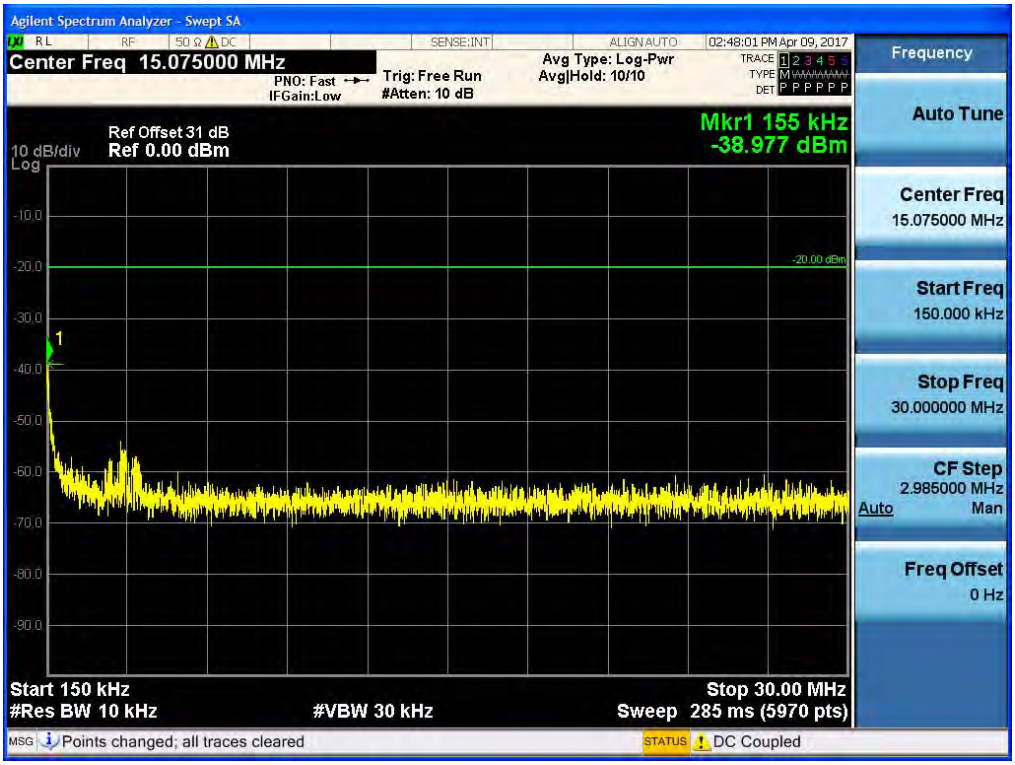


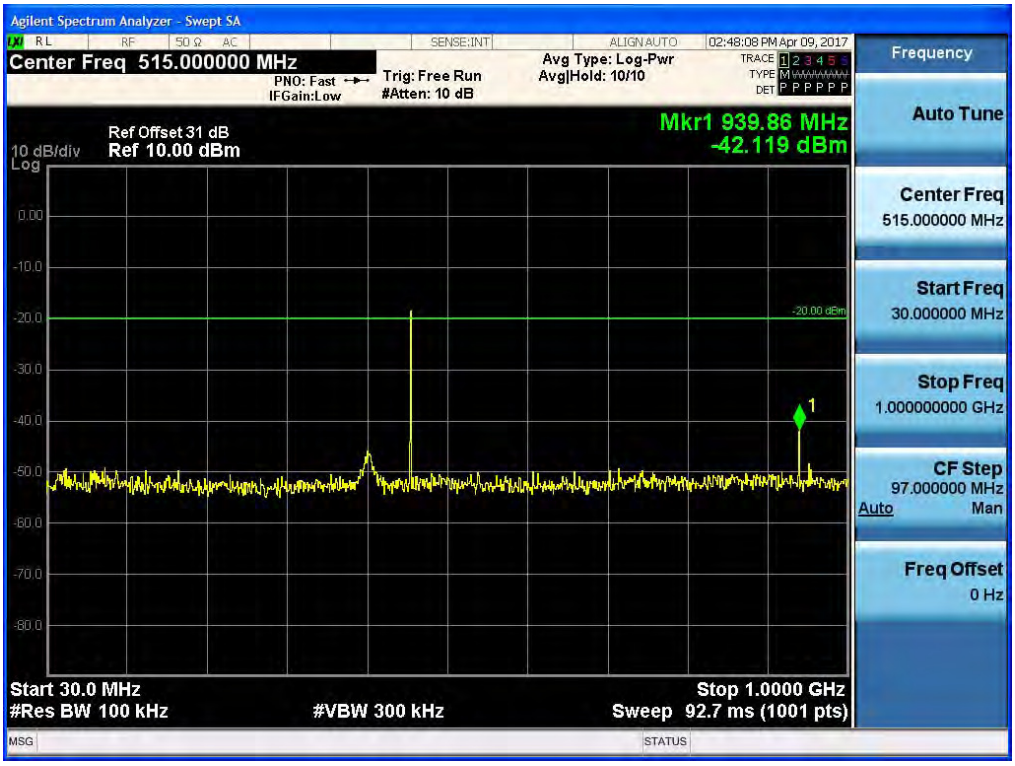

Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
02:04:50 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 101.78 MHz
-43.536 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

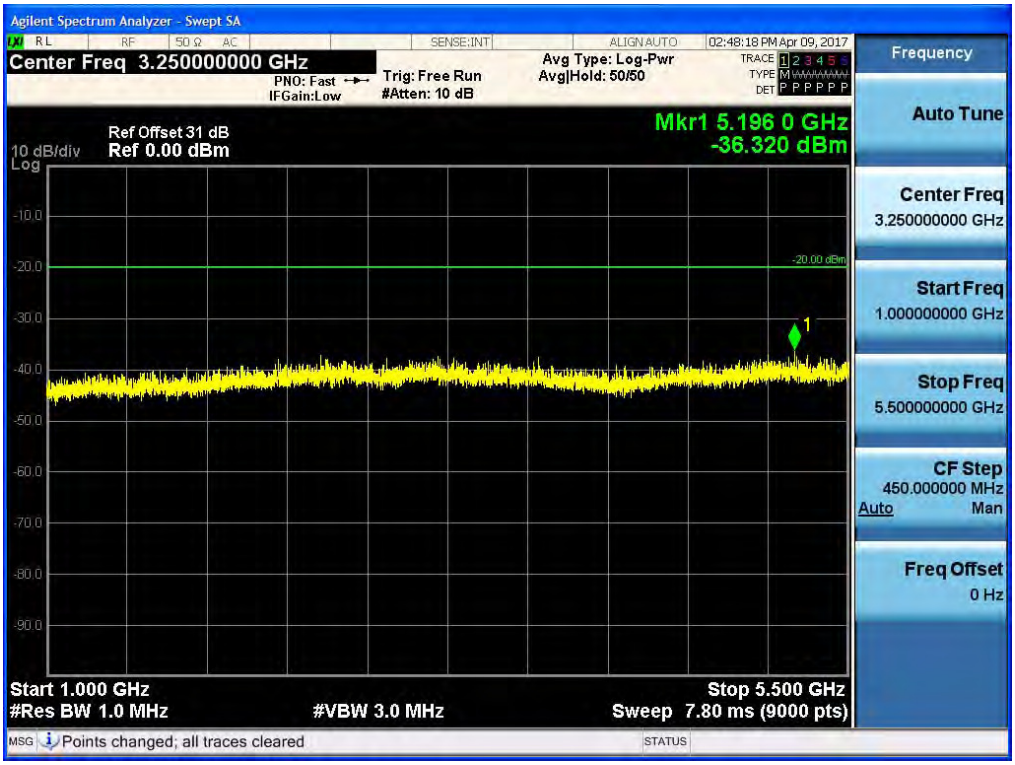

Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
02:05:00 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 4.873 9 GHz
-37.322 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
Points changed; all traces cleared
STATUS

(11K0F3E _ 470.05 MHz)_Low






Agilent Spectrum Analyzer - Swept SA
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
02:48:08 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 10.00 dBm
Mkr1 939.86 MHz
-42.119 dBm
-20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 3.250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 50/50
02:48:18 PM Apr 09, 2017
Ref Offset 31 dB
10 dB/div
Ref 0.00 dBm
Mkr1 5.196 0 GHz
-36.320 dBm
-20.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.500 GHz
Sweep 7.80 ms (9000 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
3.250000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.500000000 GHz
CF Step
450.000000 MHz
Auto
Man
Freq Offset
0 Hz

(16K0F3E _ 406.15 MHz)_High