

**ZHONGHAN****B7. Frequency Stability**

ANT 1

Voltage							
TestMode	Channel	Voltage [Vdc]	Temperature (°C)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
a	5180	NV	NT	-20000	-3.86	Within 5150-5250MHz- 22.9 -22.9	Pass
		LV	NT	-20000	-3.86		
		HV	NT	-20000	-3.86		
	5200	NV	NT	-20000	-3.85		
		LV	NT	-20000	-3.85		
		HV	NT	-20000	-3.85		
	5240	NV	NT	-20000	-3.82		
		LV	NT	-20000	-3.82		
		HV	NT	-20000	-3.82		
n20	5180	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
	5200	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
	5240	NV	NT	-20000	-3.82		
		LV	NT	-20000	-3.82		
		HV	NT	-20000	-3.82		
ac20	5180	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
	5200	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
	5240	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		



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n40	5190	NV	NT	0	0	Within 5150-5250MHz	Pass
		LV	NT	0	0		
		HV	NT	0	0		
	5230	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
ac40	5190	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
	5230	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
ac80	5210	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
ax20	5180	NV	NT	-80000	-15.44	Within 5150-5250MHz	Pass
		LV	NT	-80000	-15.44		
		HV	NT	-80000	-15.44		
	5200	NV	NT	-60000	-11.54		
		LV	NT	-60000	-11.54		
		HV	NT	-60000	-11.54		
	5240	NV	NT	-80000	-15.27		
		LV	NT	-80000	-15.27		
		HV	NT	-80000	-15.27		
ax40	5190	NV	NT	-120000	-23.12	Within 5150-5250MHz	Pass
		LV	NT	-120000	-23.12		
		HV	NT	-120000	-23.12		
	5230	NV	NT	40000	7.65		
		LV	NT	40000	7.65		
		HV	NT	40000	7.65		
ax80	5210	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		



ANT 1

Voltage							
TestMode	Channel	Voltage [Vdc]	Temperature (°C)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
a	5180	NV	-20	-20000	-3.86	Within 5150-5250MHz	Pass
		NV	30	-20000	-3.86		
		NV	50	-20000	-3.86		
	5200	NV	20	-20000	-3.85		
		NV	30	-20000	-3.85		
		NV	50	-20000	-3.85		
	5240	NV	-20	-20000	-3.82		
		NV	30	-20000	-3.82		
		NV	50	-20000	-3.82		
n20	5180	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
	5200	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
	5240	NV	-20	-20000	-3.82		
		NV	30	-20000	-3.82		
		NV	50	-20000	-3.82		
ac20	5180	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
	5200	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
	5240	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
n40	5190	NV	-20	0	0	Within 5150-5250MHz	Pass
		NV	30	0	0		
		NV	50	0	0		
	5230	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		



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ac40	5190	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
	5230	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
ac80	5210	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
ax20	5180	NV	-20	-80000	-15.44	Within 5150-5250MH	Pass
		NV	30	-80000	-15.44		
		NV	50	-80000	-15.44		
	5200	NV	-20	-60000	-11.54		
		NV	30	-60000	-11.54		
		NV	50	-60000	-11.54		
	5240	NV	-20	-80000	-15.27		
		NV	30	-80000	-15.27		
		NV	50	-80000	-15.27		
ax40	5190	NV	-20	-120000	-23.12	Within 5150-5250MHz	Pass
		NV	30	-120000	-23.12		
		NV	50	-120000	-23.12		
	5230	NV	-20	40000	7.65		
		NV	30	40000	7.65		
		NV	50	40000	7.65		
ax80	5210	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		



ANT 2

Voltage							
TestMode	Channel	Voltage [Vdc]	Temperature (°C)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
a	5180	NV	NT	0	0	Within 5150-5250MHz- 22.9 -22.9-3.86	Pass
		LV	NT	0	0		
		HV	NT	0	0		
	5200	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
	5240	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
n20	5180	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
	5200	NV	NT	20000	3.85		
		LV	NT	20000	3.85		
		HV	NT	20000	3.85		
	5240	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
ac20	5180	NV	NT	20000	3.86		
		LV	NT	20000	3.86		
		HV	NT	20000	3.86		
	5200	NV	NT	-20000	-3.85		
		LV	NT	-20000	-3.85		
		HV	NT	-20000	-3.85		
	5240	NV	NT	20000	3.82		
		LV	NT	20000	3.82		
		HV	NT	20000	3.82		



n40	5190	NV	NT	0	0	Within 5150-5250MHz	Pass
		LV	NT	0	0		
		HV	NT	0	0		
	5230	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
ac40	5190	NV	NT	40000	7.71		
		LV	NT	40000	7.71		
		HV	NT	40000	7.71		
	5230	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
ac80	5210	NV	NT	0	0		
		LV	NT	0	0		
		HV	NT	0	0		
ax20	5180	NV	NT	-80000	-15.44	Within 5150-5250MH	Pass
		LV	NT	-80000	-15.44		
		HV	NT	-80000	-15.44		
	5200	NV	NT	-80000	-15.38		
		LV	NT	-80000	-15.38		
		HV	NT	-80000	-15.38		
	5240	NV	NT	-80000	-15.27		
		LV	NT	-80000	-15.27		
		HV	NT	-80000	-15.27		
ax40	5190	NV	NT	-80000	-15.41	Within 5150-5250MHz	Pass
		LV	NT	-80000	-15.41		
		HV	NT	-80000	-15.41		
	5230	NV	NT	-80000	-15.3		
		LV	NT	-80000	-15.3		
		HV	NT	-80000	-15.3		
ax80	5210	NV	NT	-80000	-15.36		
		LV	NT	-80000	-15.36		
		HV	NT	-80000	-15.36		



ANT 2

Voltage							
TestMode	Channel	Voltage [Vdc]	Temperature (°C)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
a	5180	NV	-20	0	0	Within 5150-5250MHz- 22.9 -22.9-3.86	Pass
		NV	30	0	0		
		NV	50	0	0		
	5200	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
	5240	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
n20	5180	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
	5200	NV	-20	20000	3.85		
		NV	30	20000	3.85		
		NV	50	20000	3.85		
	5240	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
ac20	5180	NV	-20	20000	3.86		
		NV	30	20000	3.86		
		NV	50	20000	3.86		
	5200	NV	-20	-20000	-3.85		
		NV	30	-20000	-3.85		
		NV	50	-20000	-3.85		
	5240	NV	-20	20000	3.82		
		NV	30	20000	3.82		
		NV	50	20000	3.82		



n40	5190	NV	-20	0	0	Within 5150-5250MHz	Pass
		NV	30	0	0		
		NV	50	0	0		
	5230	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
ac40	5190	NV	-20	40000	7.71		
		NV	30	40000	7.71		
		NV	50	40000	7.71		
	5230	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
ac80	5210	NV	-20	0	0		
		NV	30	0	0		
		NV	50	0	0		
ax20	5180	NV	-20	-80000	-15.44	Within 5150-5250MH	Pass
		NV	30	-80000	-15.44		
		NV	50	-80000	-15.44		
	5200	NV	-20	-80000	-15.38		
		NV	30	-80000	-15.38		
		NV	50	-80000	-15.38		
	5240	NV	-20	-80000	-15.27		
		NV	30	-80000	-15.27		
		NV	50	-80000	-15.27		
ax40	5190	NV	-20	-80000	-15.41	Within 5150-5250MHz	Pass
		NV	30	-80000	-15.41		
		NV	50	-80000	-15.41		
	5230	NV	-20	-80000	-15.3		
		NV	30	-80000	-15.3		
		NV	50	-80000	-15.3		
ax80	5210	NV	-20	-80000	-15.36		
		NV	30	-80000	-15.36		
		NV	50	-80000	-15.36		

Note: Test temperature: -20° to +50°

At room temperature, the test results are the worst, only reflecting the test results at room temperature.

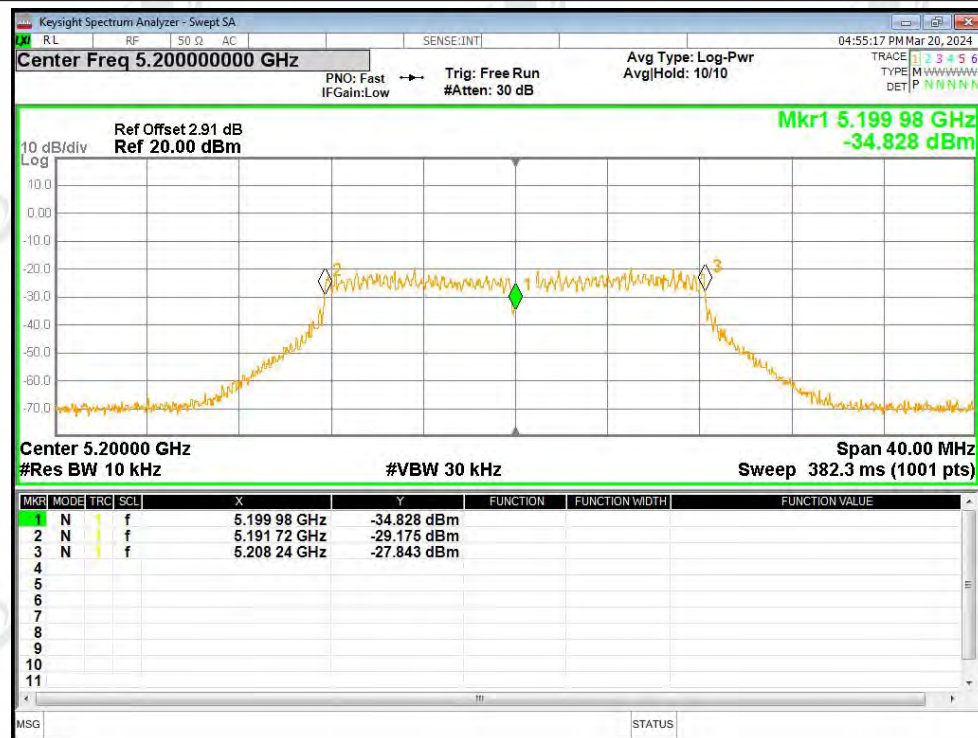


Test Graphs

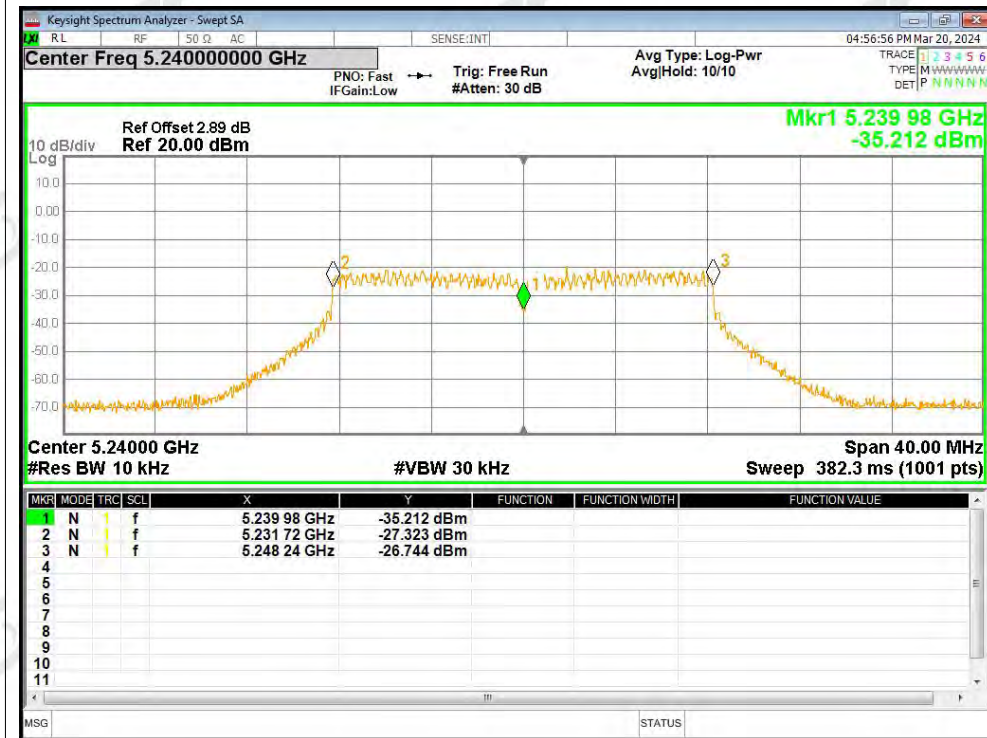
Freq. Stability NVNT a 5180MHz Ant1



Freq. Stability NVNT a 5200MHz Ant1



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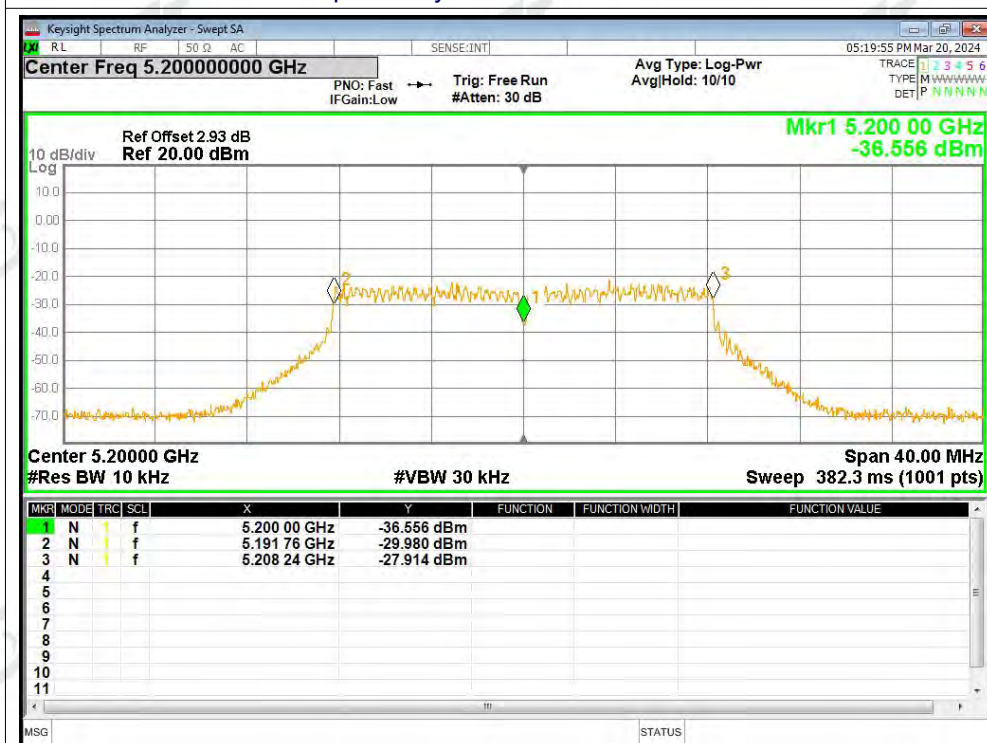


Freq. Stability NVNT a 5180MHz Ant2

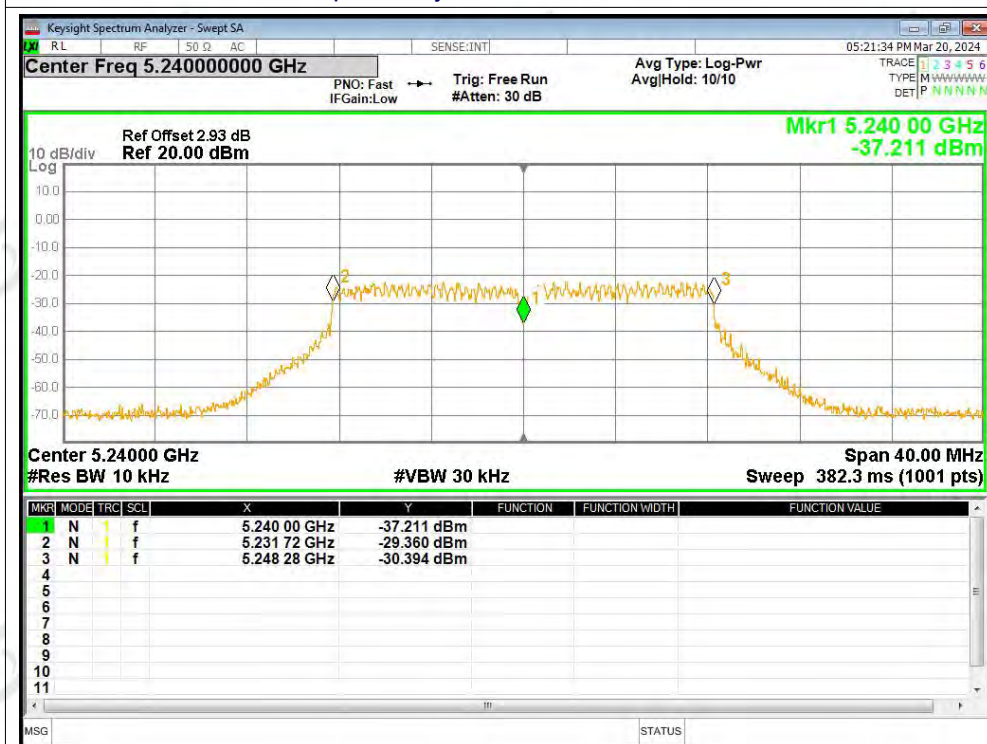




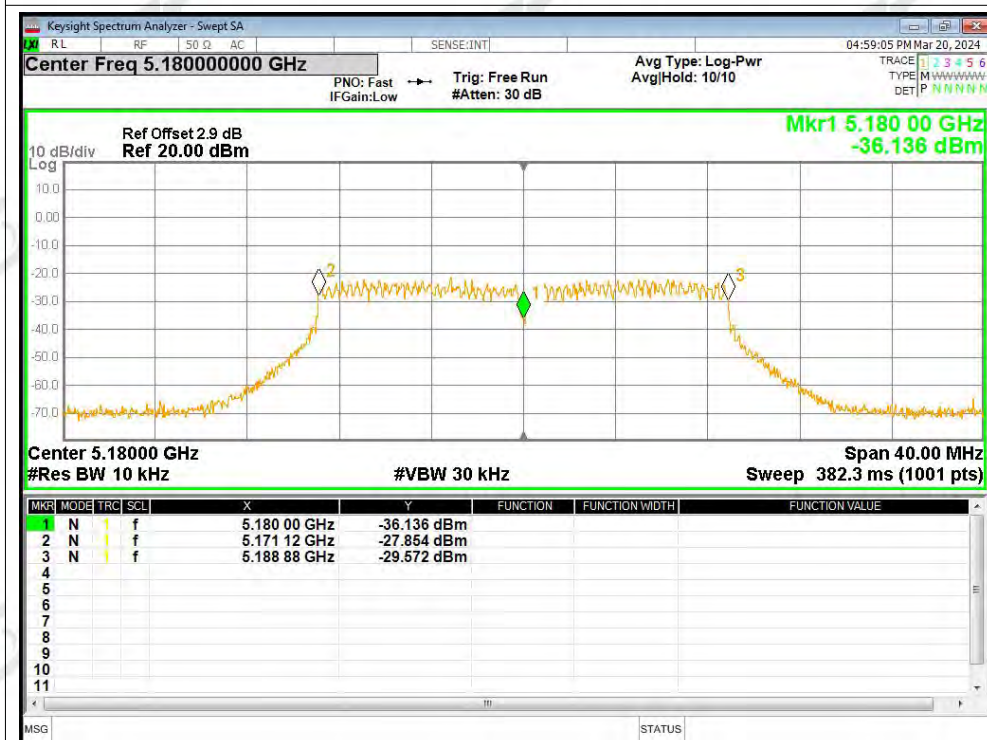
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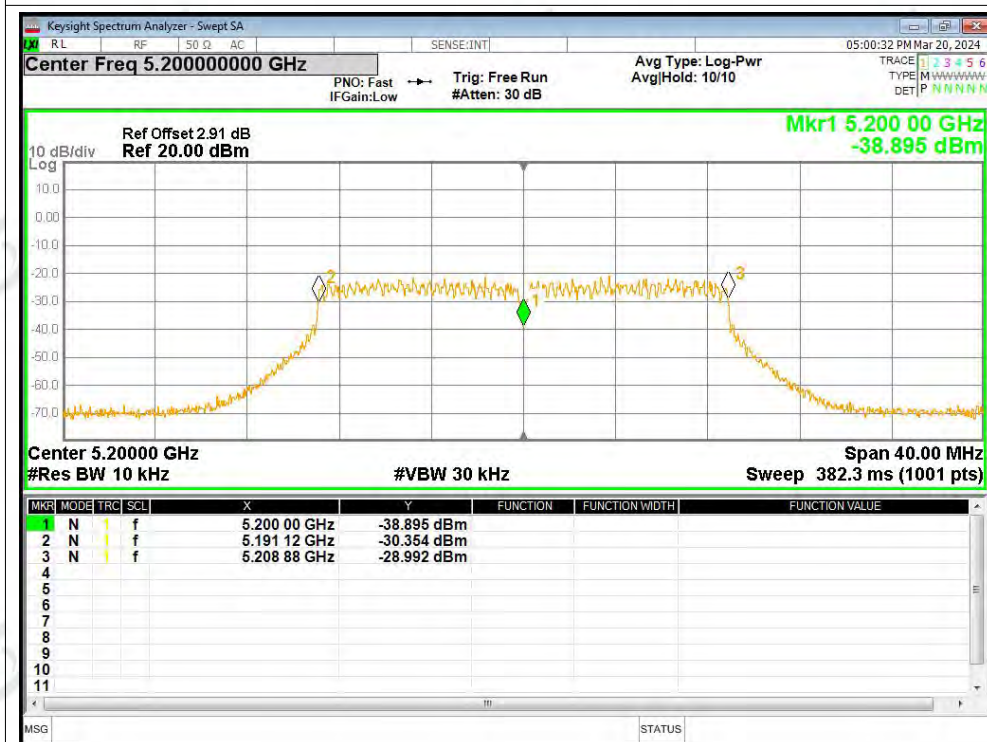
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Freq. Stability NVNT n20 5180MHz Ant1

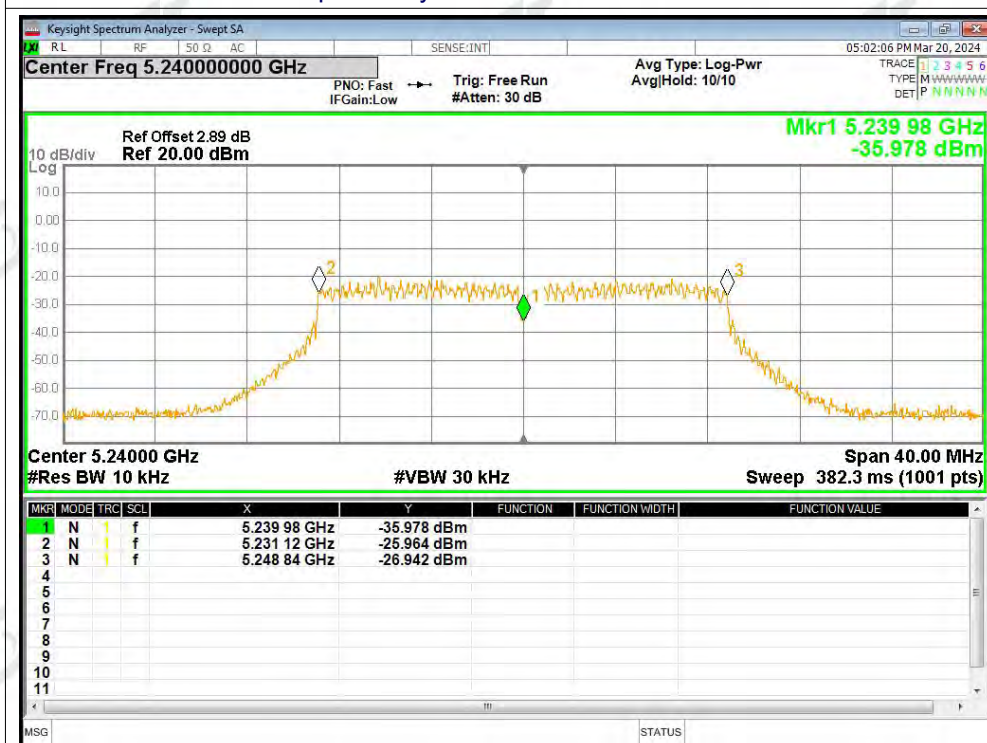


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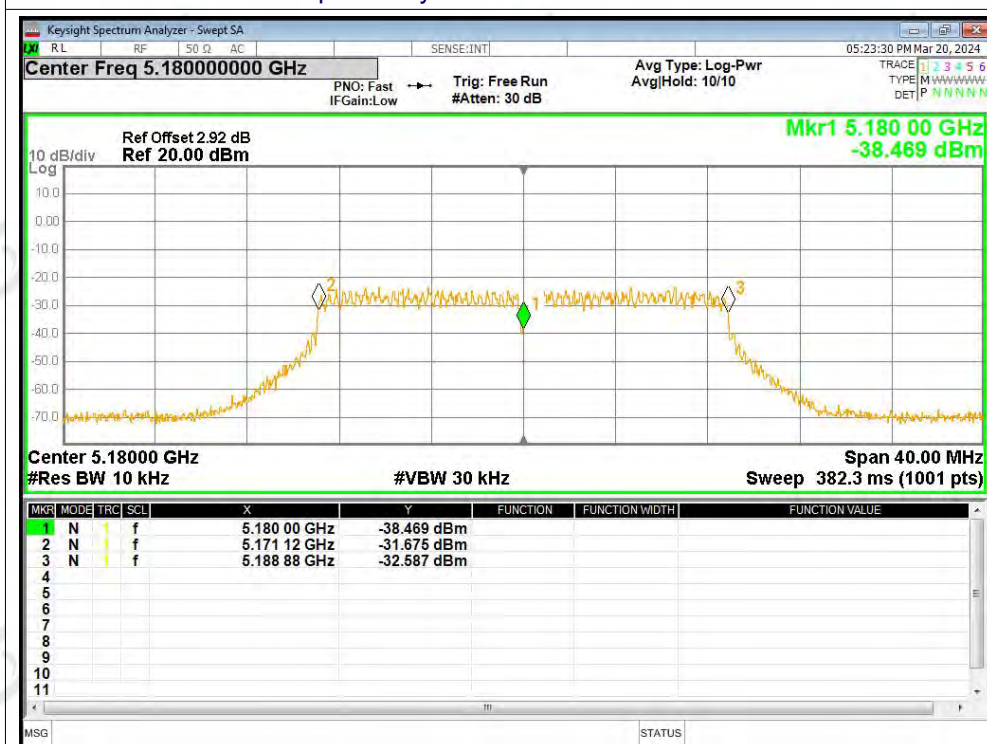




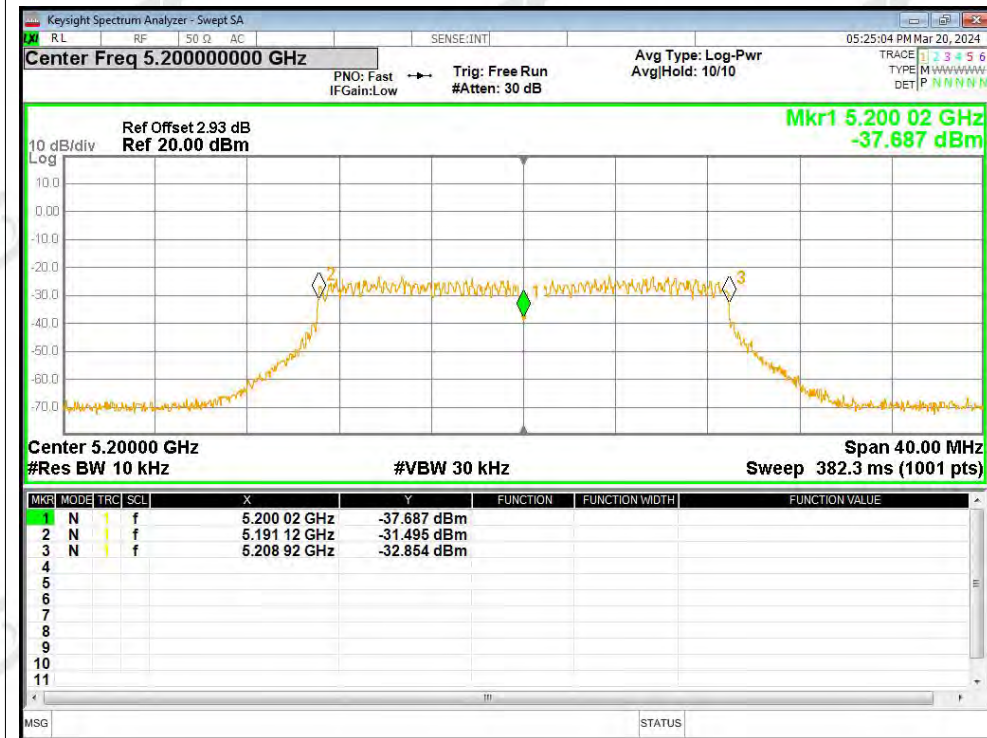
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Freq. Stability NVNT n20 5180MHz Ant2



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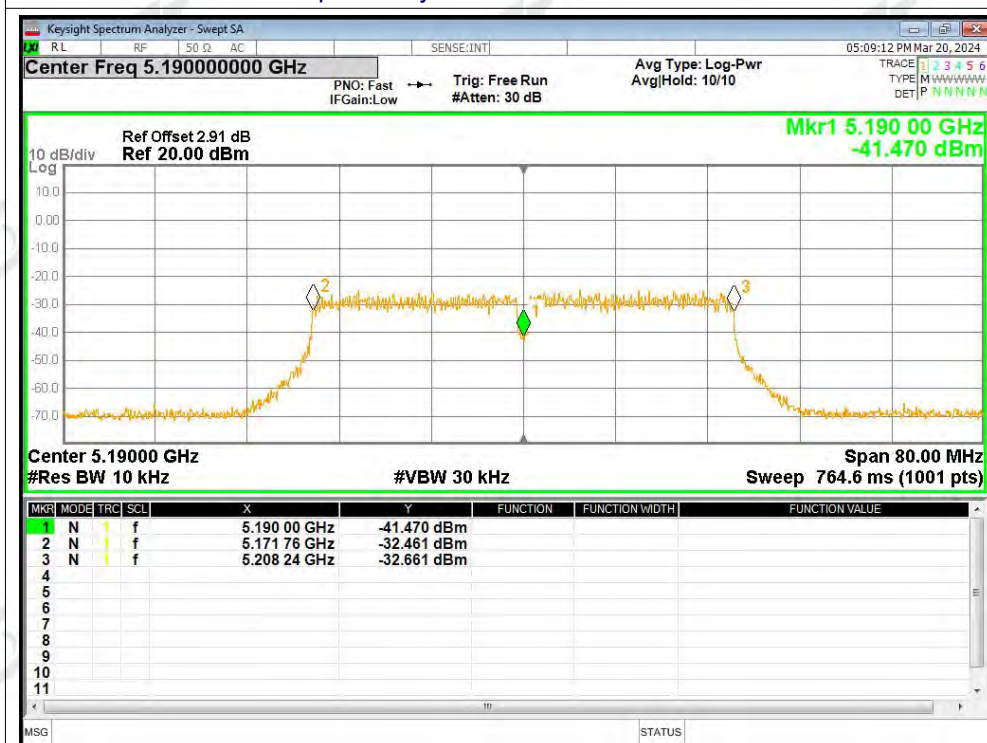


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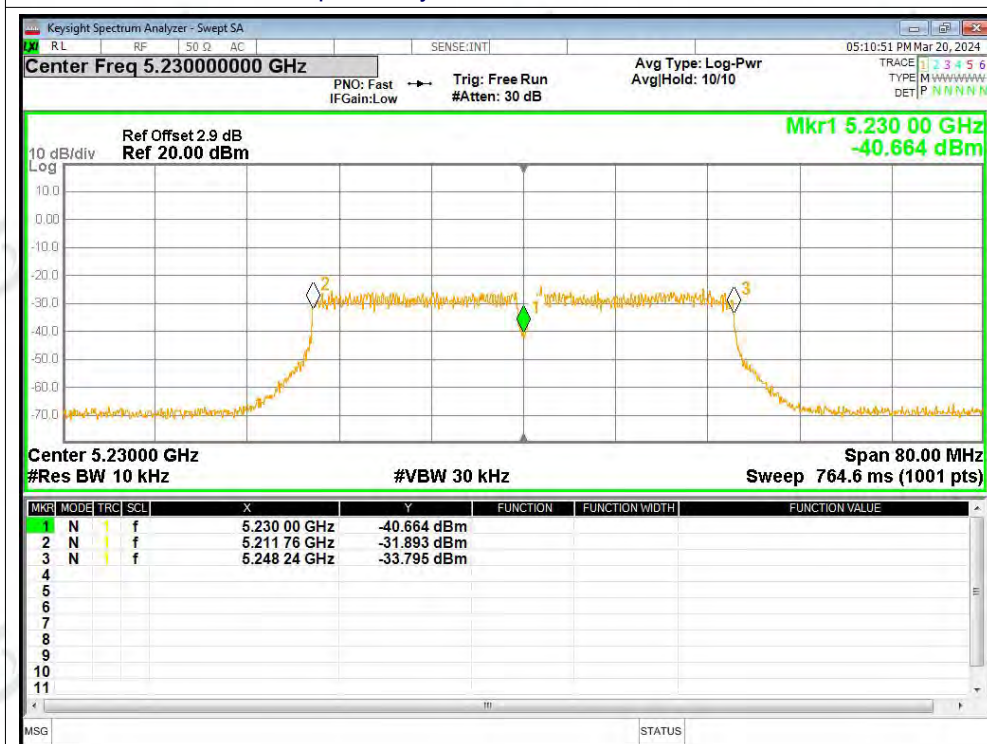




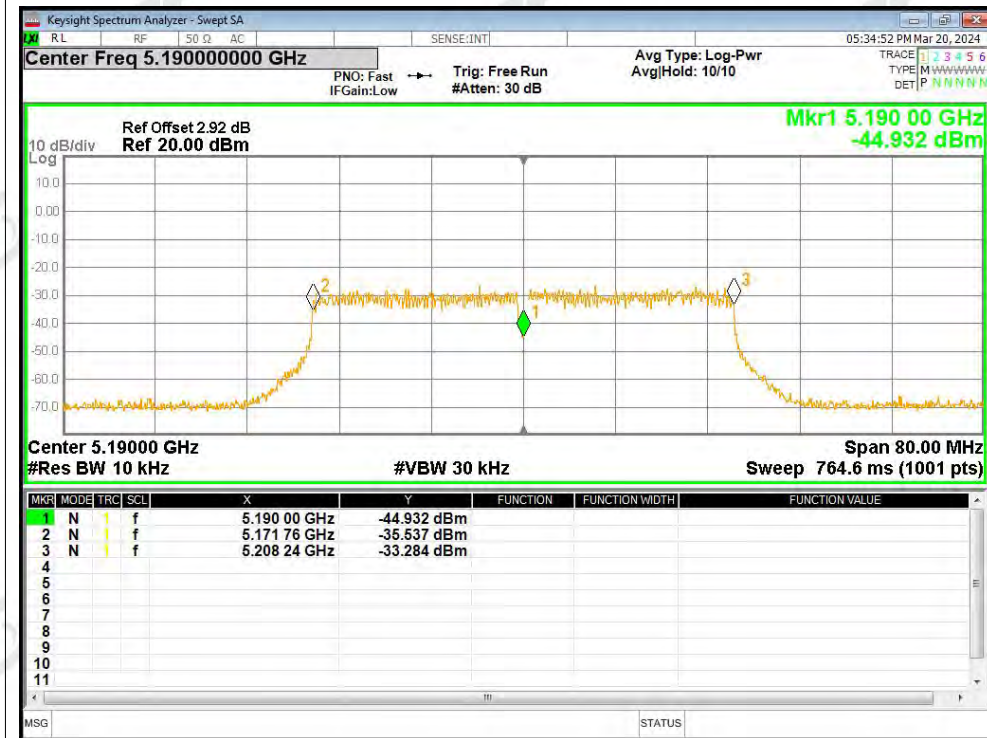
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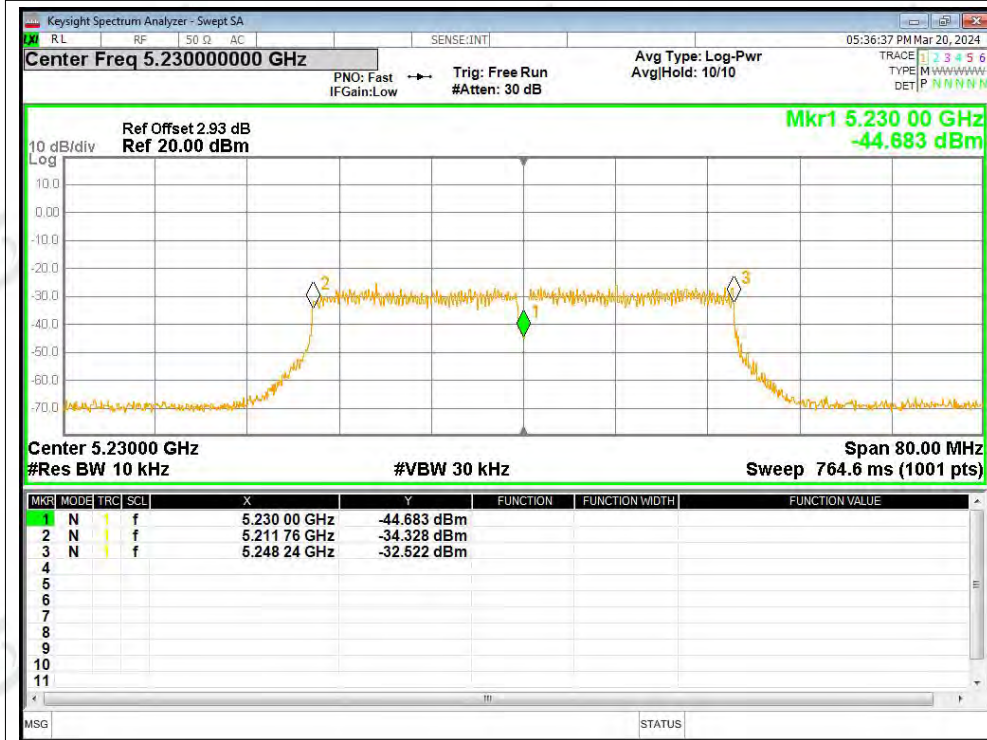
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Freq. Stability NVNT n40 5190MHz Ant2



Freq. Stability NVNT n40 5230MHz Ant2



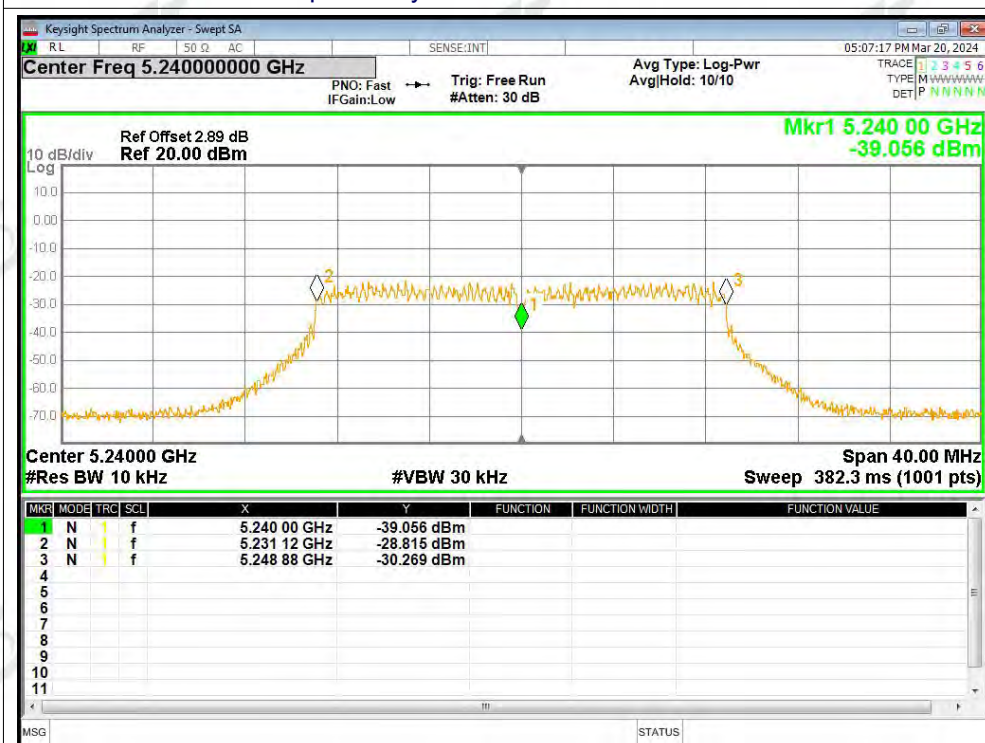
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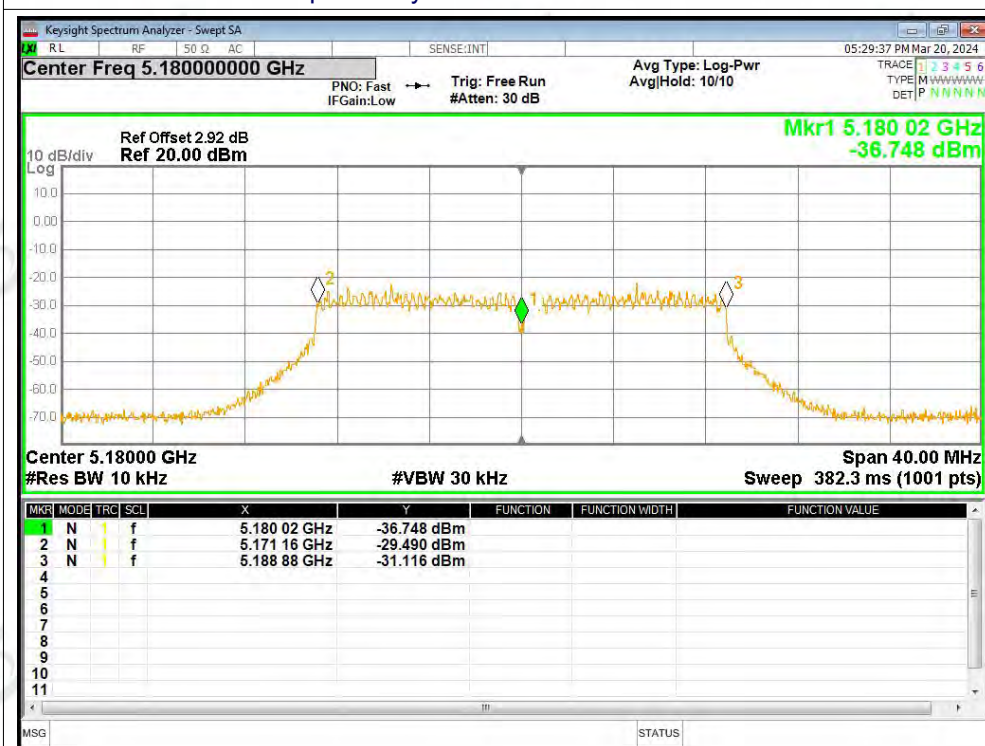
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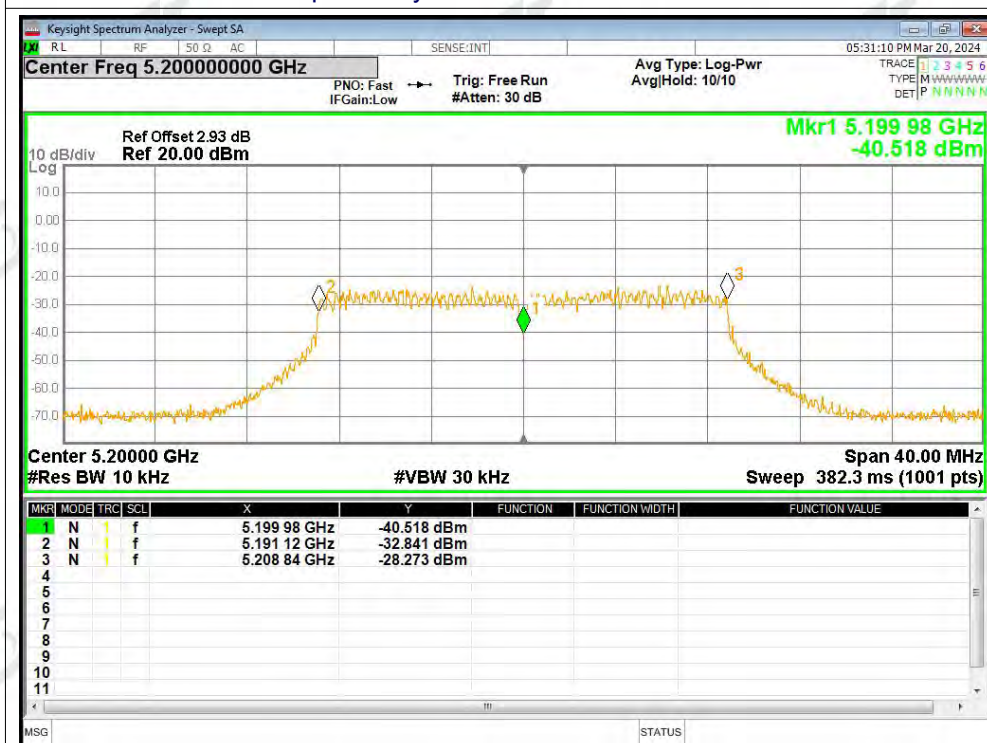


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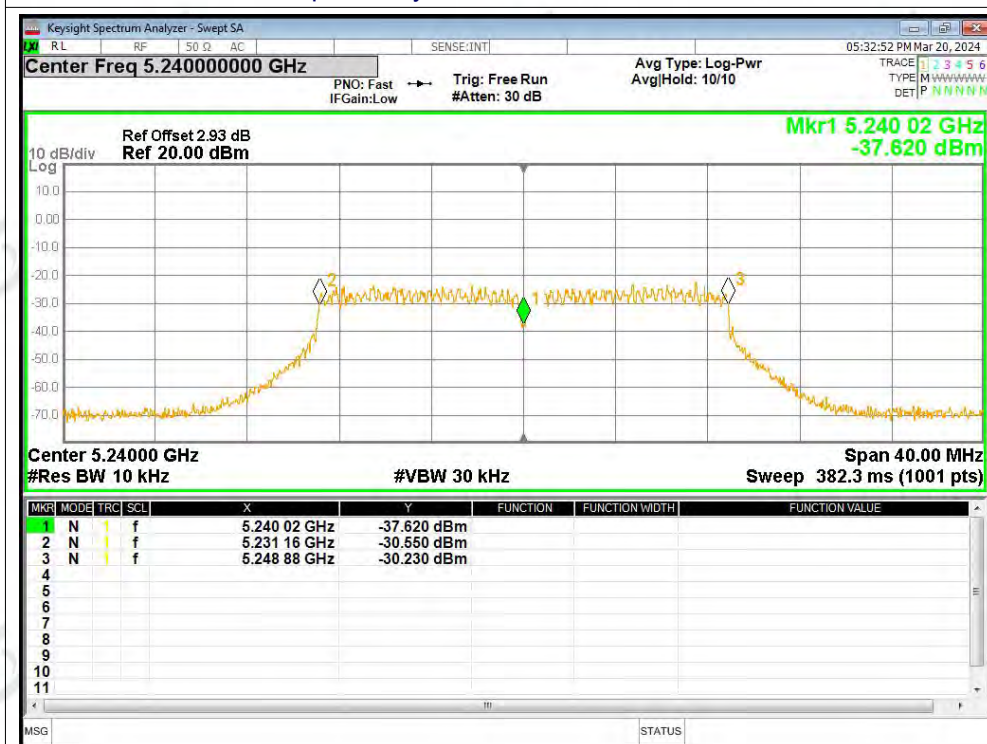




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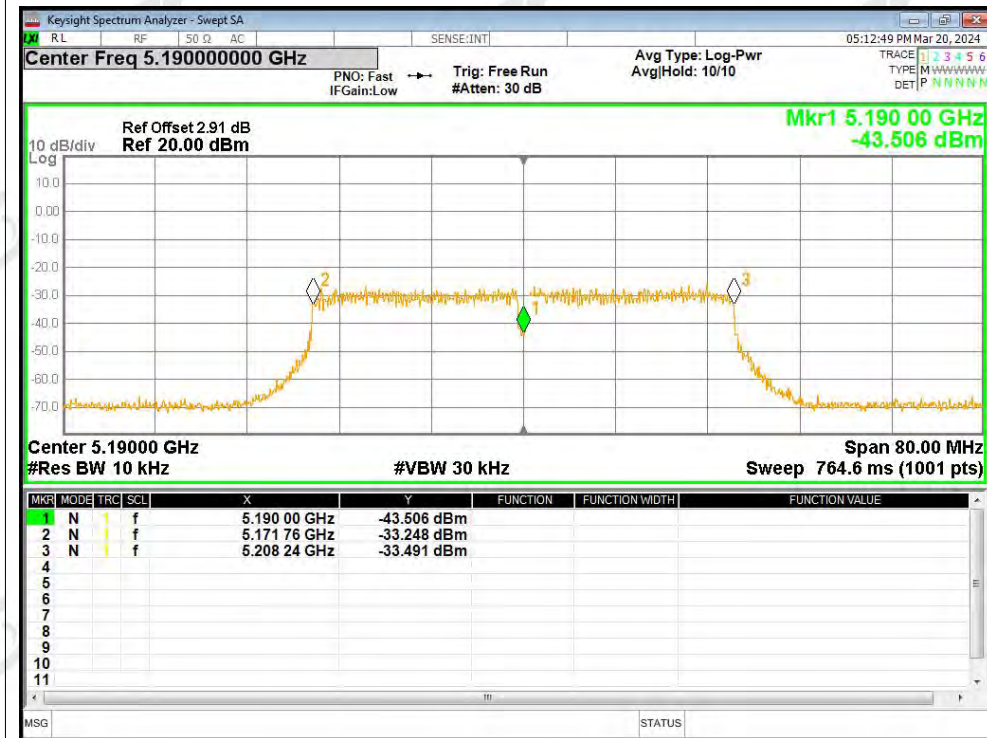


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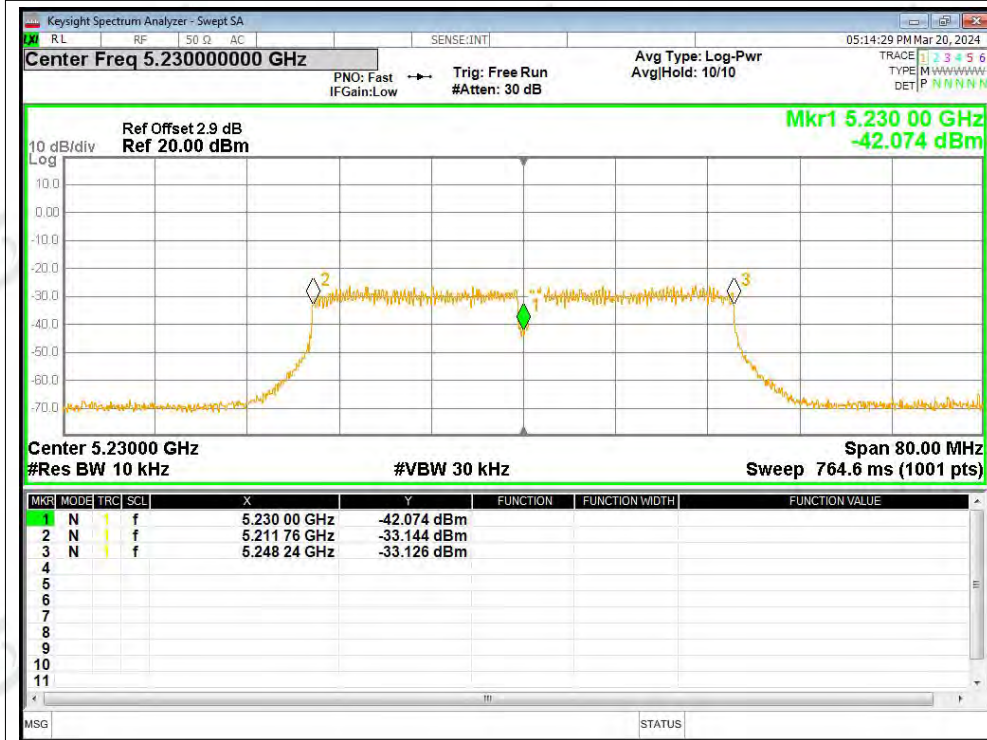




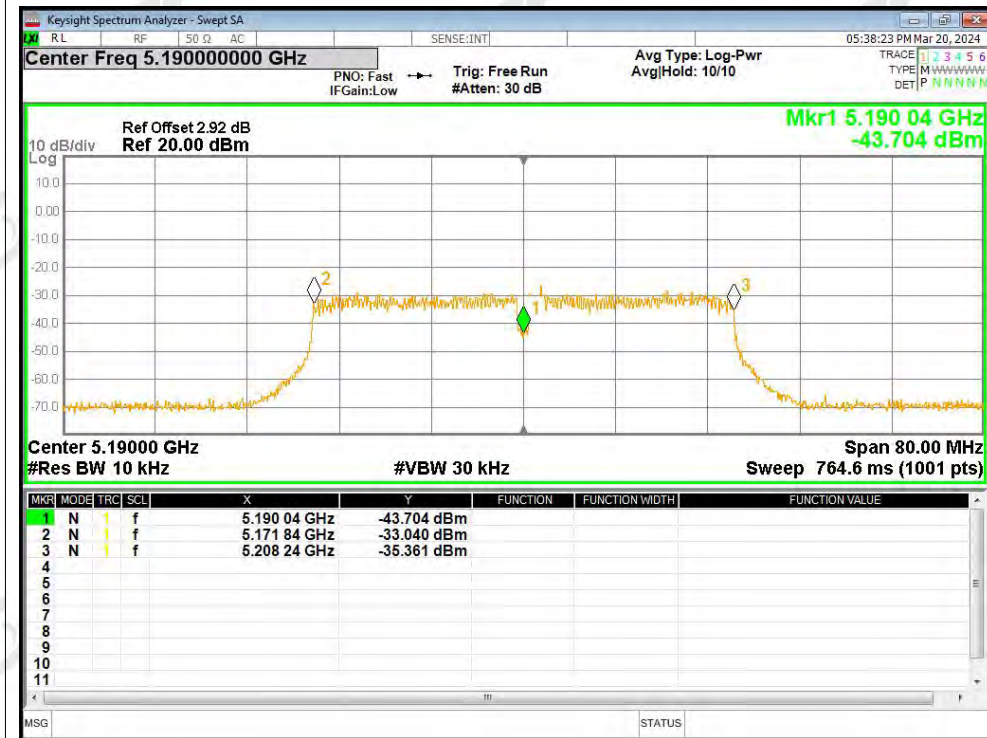
Freq. Stability NVNT ac40 5190MHz Ant1



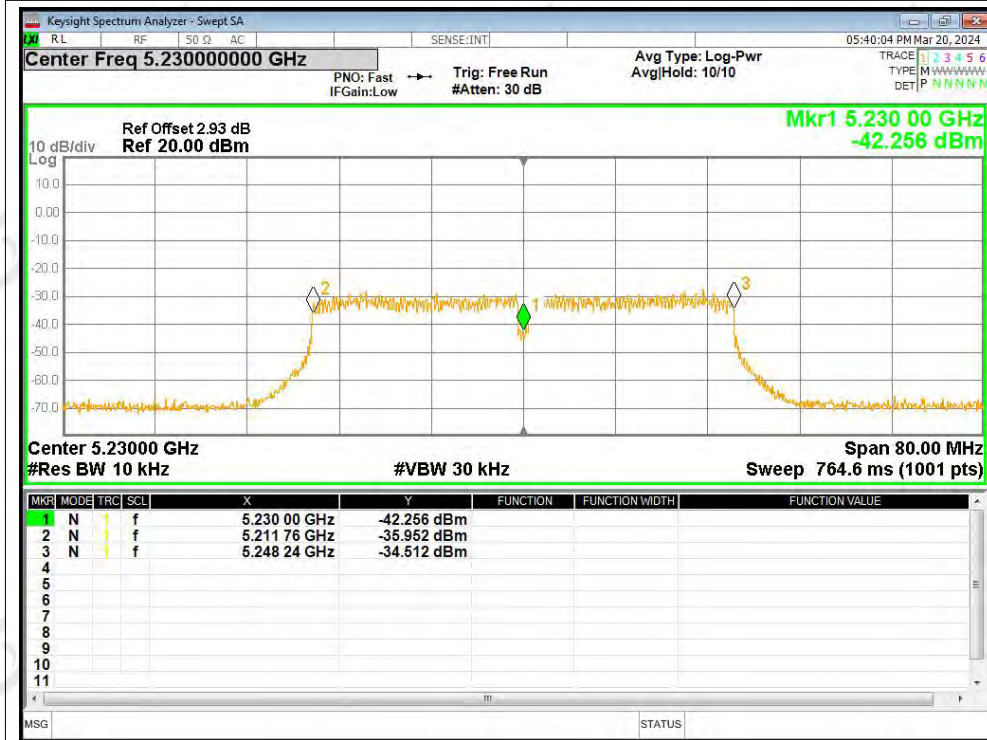
Freq. Stability NVNT ac40 5230MHz Ant1



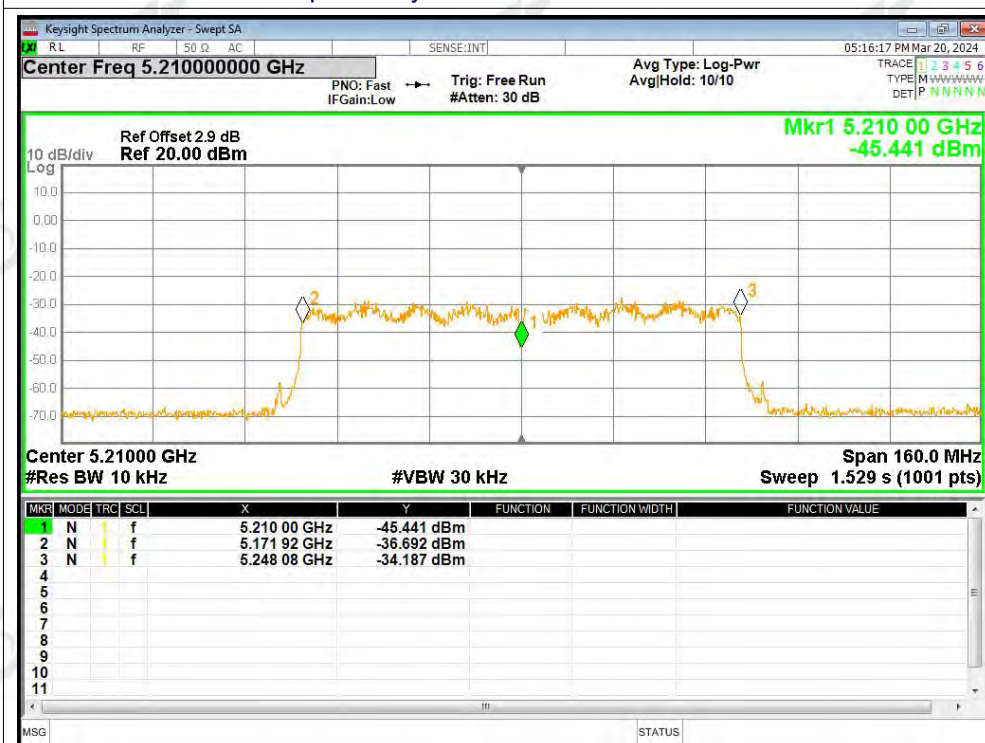
Freq. Stability NVNT ac40 5190MHz Ant2



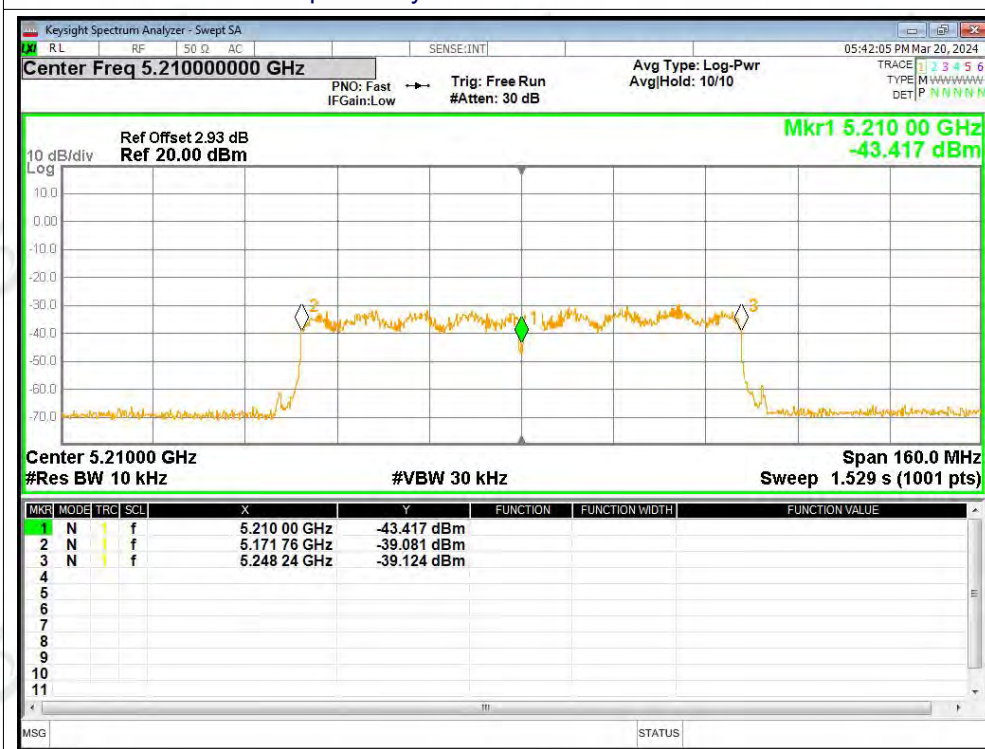
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Freq. Stability NVNT ac80 5210MHz Ant1



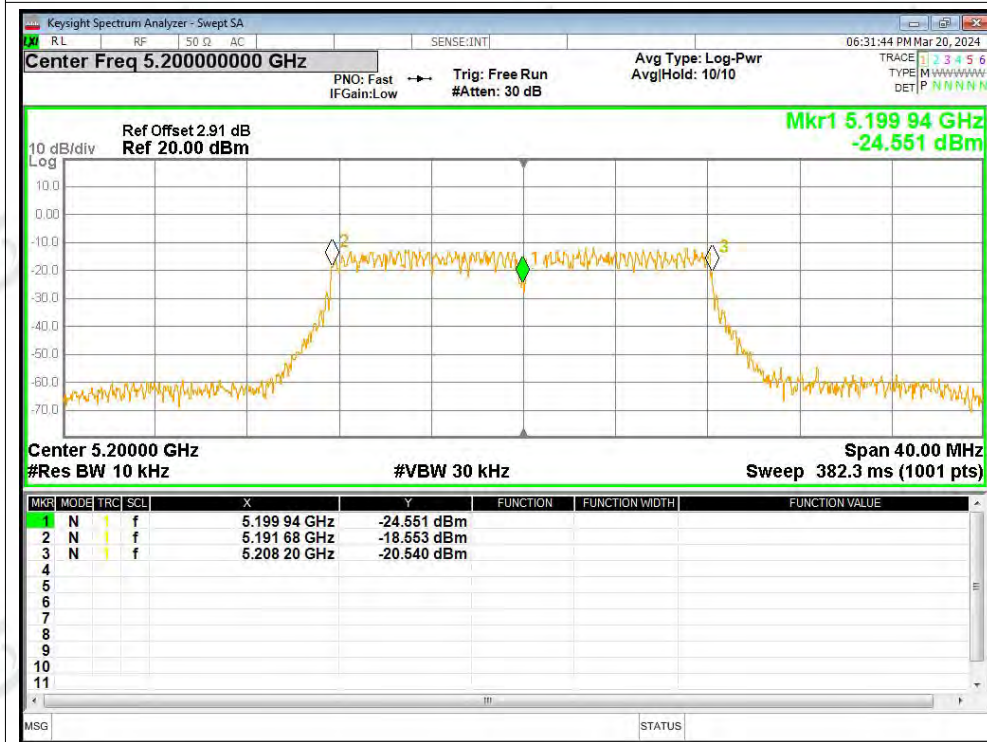
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Freq. Stability NVNT ax20 5180MHz Ant1

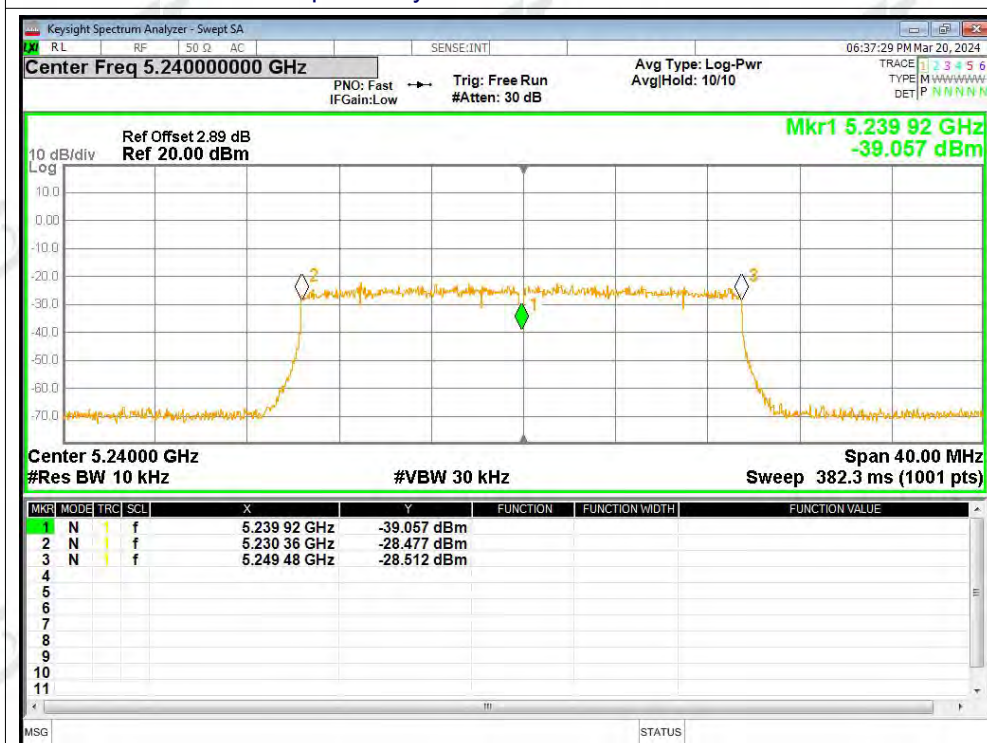


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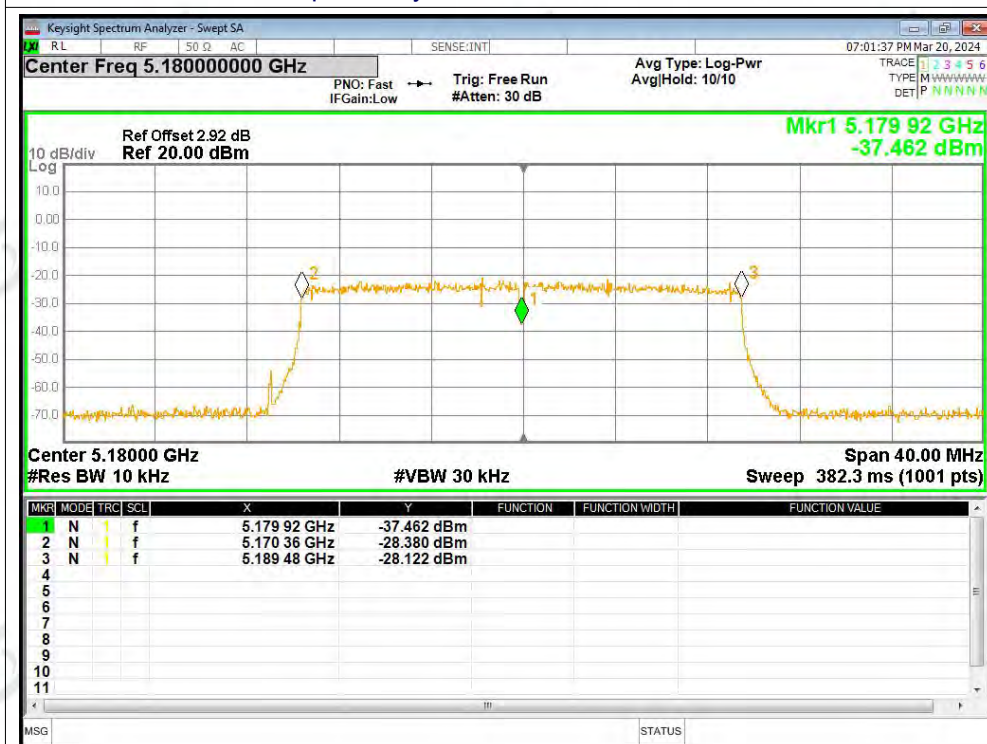




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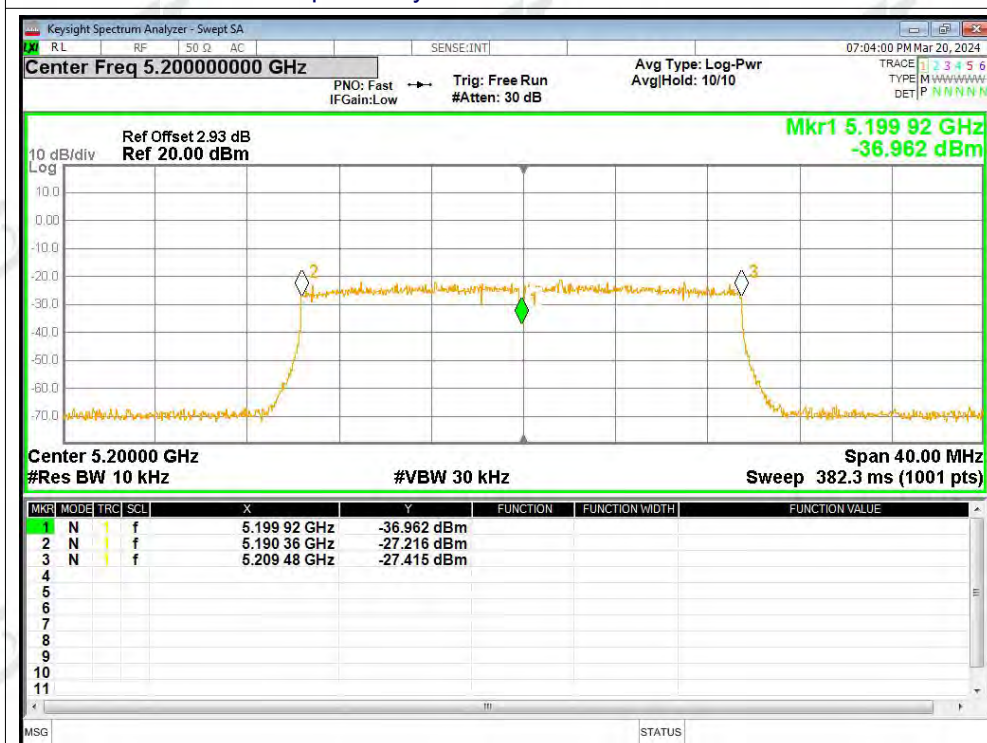


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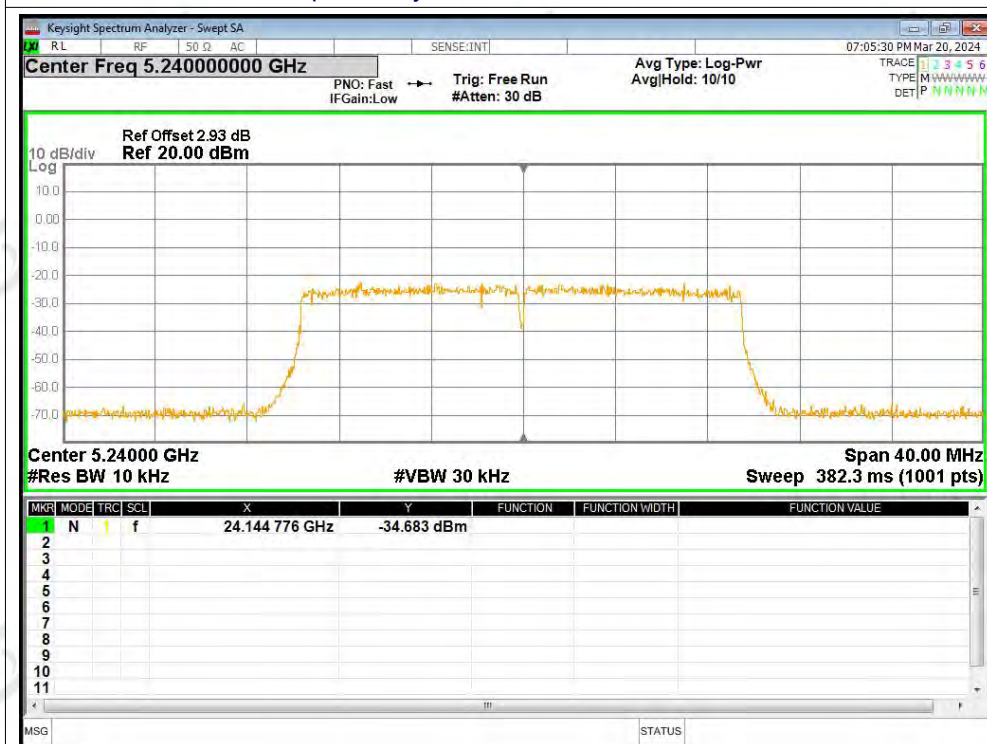




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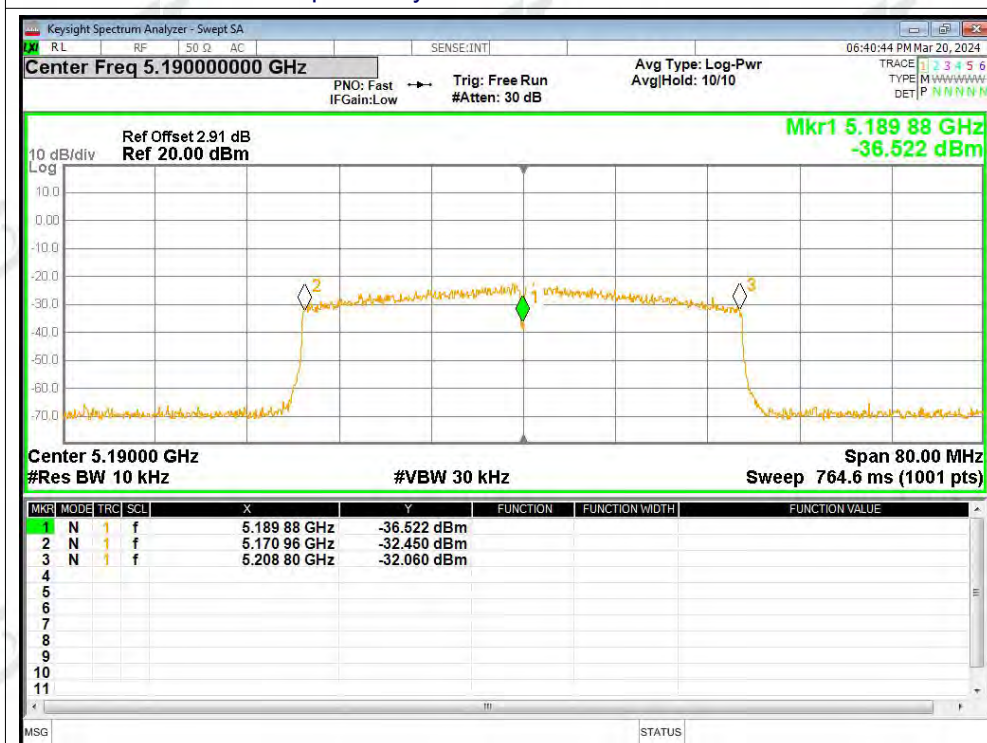


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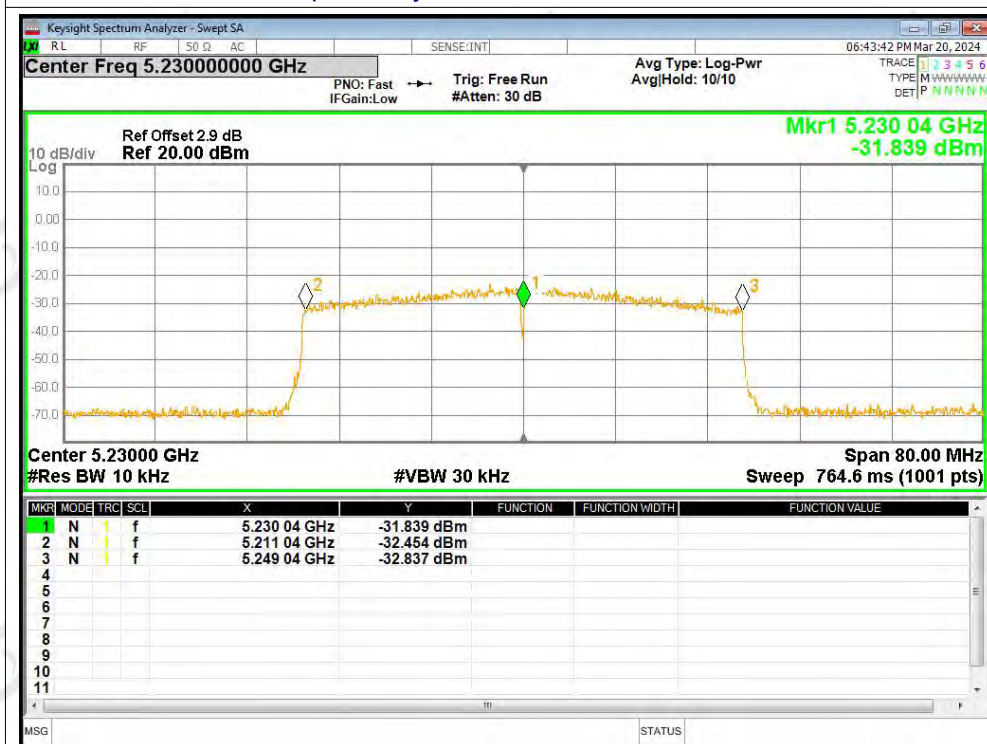




Freq. Stability NVNT ax40 5190MHz Ant1

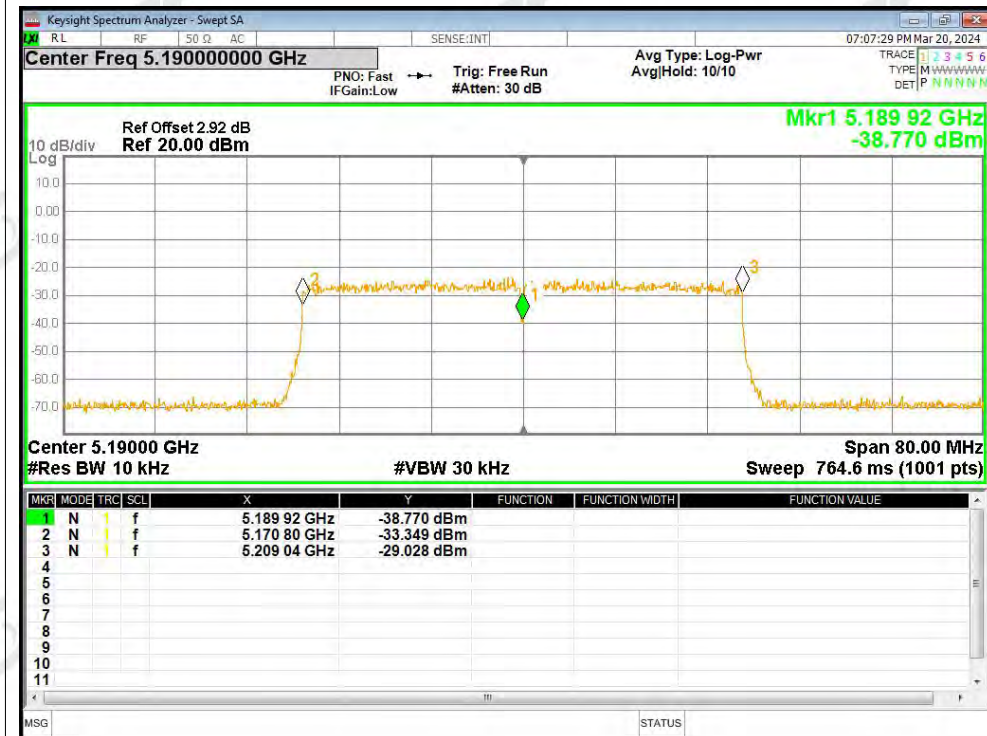


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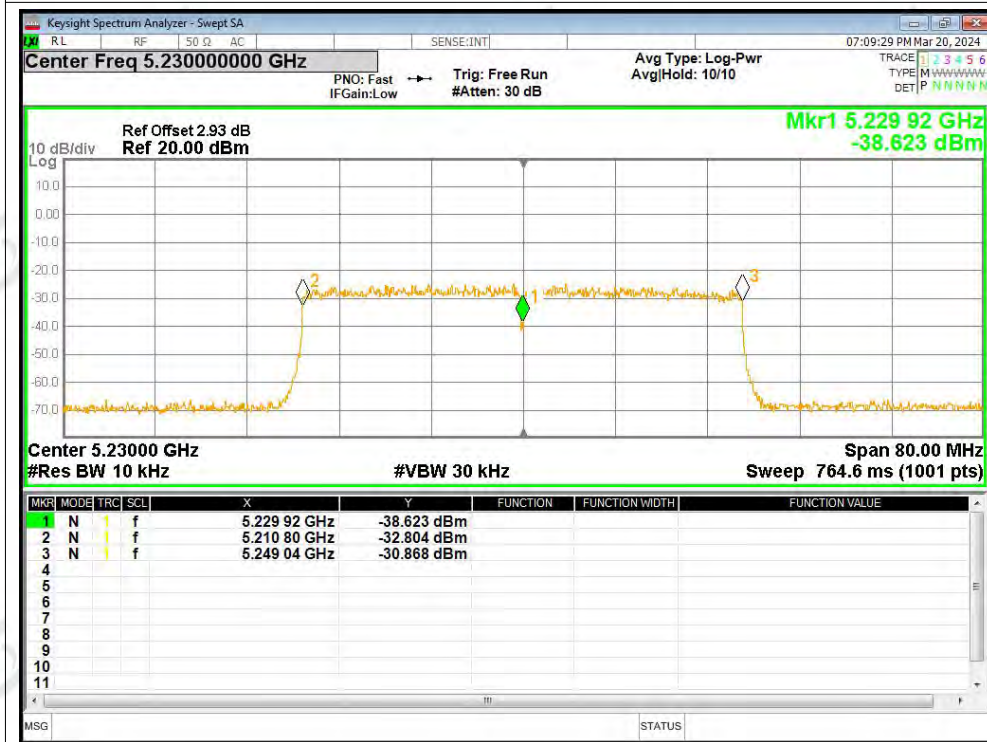




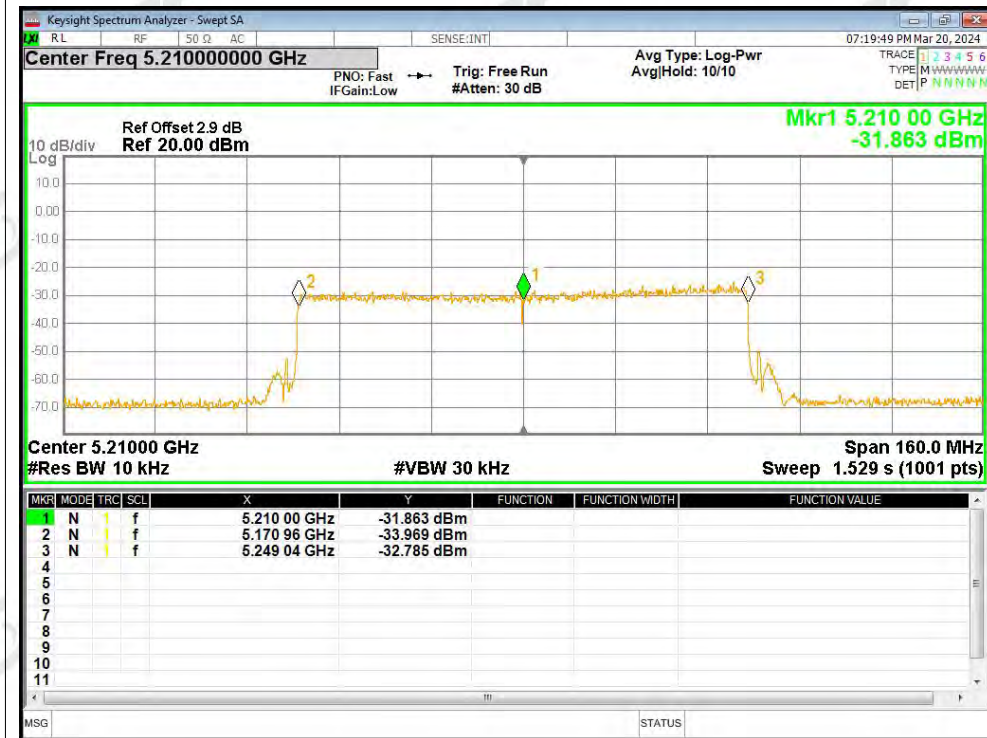
Freq. Stability NVNT ax40 5190MHz Ant2



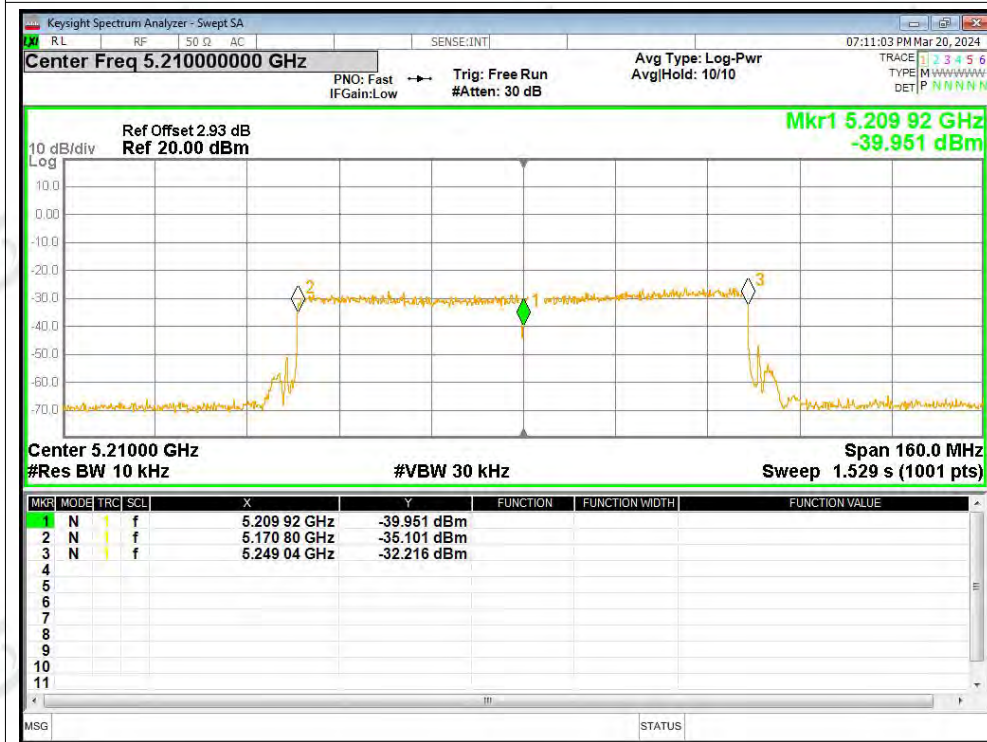
Freq. Stability NVNT ax40 5230MHz Ant2



Freq. Stability NVNT ax80 5210MHz Ant1



Freq. Stability NVNT ax80 5210MHz Ant2



**B8. Conducted RF Spurious Emission**

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-35.81	-27	Pass
NVNT	a	5200	Ant1	-35.32	-27	Pass
NVNT	a	5240	Ant1	-35.34	-27	Pass
NVNT	a	5180	Ant2	-35.6	-27	Pass
NVNT	a	5200	Ant2	-35.72	-27	Pass
NVNT	a	5240	Ant2	-35.88	-27	Pass
NVNT	n20	5180	Ant1	-35.38	-27	Pass
NVNT	n20	5200	Ant1	-35.38	-27	Pass
NVNT	n20	5240	Ant1	-35.47	-27	Pass
NVNT	n20	5180	Ant2	-35.1	-27	Pass
NVNT	n20	5200	Ant2	-35.07	-27	Pass
NVNT	n20	5240	Ant2	-35.48	-27	Pass
NVNT	n40	5190	Ant1	-35.58	-27	Pass
NVNT	n40	5230	Ant1	-35.59	-27	Pass
NVNT	n40	5190	Ant2	-35.73	-27	Pass
NVNT	n40	5230	Ant2	-35.98	-27	Pass
NVNT	ac20	5180	Ant1	-36.36	-27	Pass
NVNT	ac20	5200	Ant1	-35.9	-27	Pass
NVNT	ac20	5240	Ant1	-35.2	-27	Pass
NVNT	ac20	5180	Ant2	-35.72	-27	Pass
NVNT	ac20	5200	Ant2	-35.76	-27	Pass
NVNT	ac20	5240	Ant2	-35.08	-27	Pass
NVNT	ac40	5190	Ant1	-35.36	-27	Pass
NVNT	ac40	5230	Ant1	-35	-27	Pass
NVNT	ac40	5190	Ant2	-35.29	-27	Pass
NVNT	ac40	5230	Ant2	-35.23	-27	Pass
NVNT	ac80	5210	Ant1	-35.69	-27	Pass
NVNT	ac80	5210	Ant2	-35.44	-27	Pass
NVNT	ax20	5180	Ant1	-35.16	-27	Pass
NVNT	ax20	5200	Ant1	-35.83	-27	Pass
NVNT	ax20	5240	Ant1	-35.27	-27	Pass
NVNT	ax20	5180	Ant2	-35.48	-27	Pass
NVNT	ax20	5200	Ant2	-36.13	-27	Pass
NVNT	ax20	5240	Ant2	-34.68	-27	Pass
NVNT	ax40	5190	Ant1	-35.43	-27	Pass
NVNT	ax40	5230	Ant1	-35.68	-27	Pass
NVNT	ax40	5190	Ant2	-35.58	-27	Pass
NVNT	ax40	5230	Ant2	-35.49	-27	Pass
NVNT	ax80	5210	Ant1	-35.27	-27	Pass
NVNT	ax80	5210	Ant2	-35.02	-27	Pass



ZHONGHAN



FCC ID:2BFJ3-N16

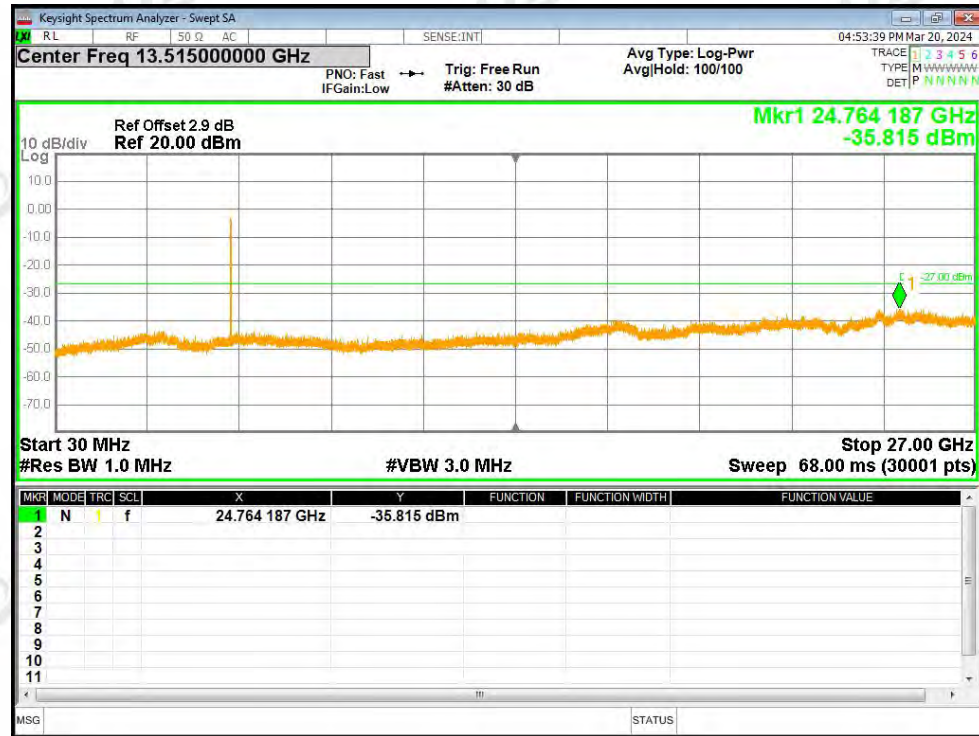


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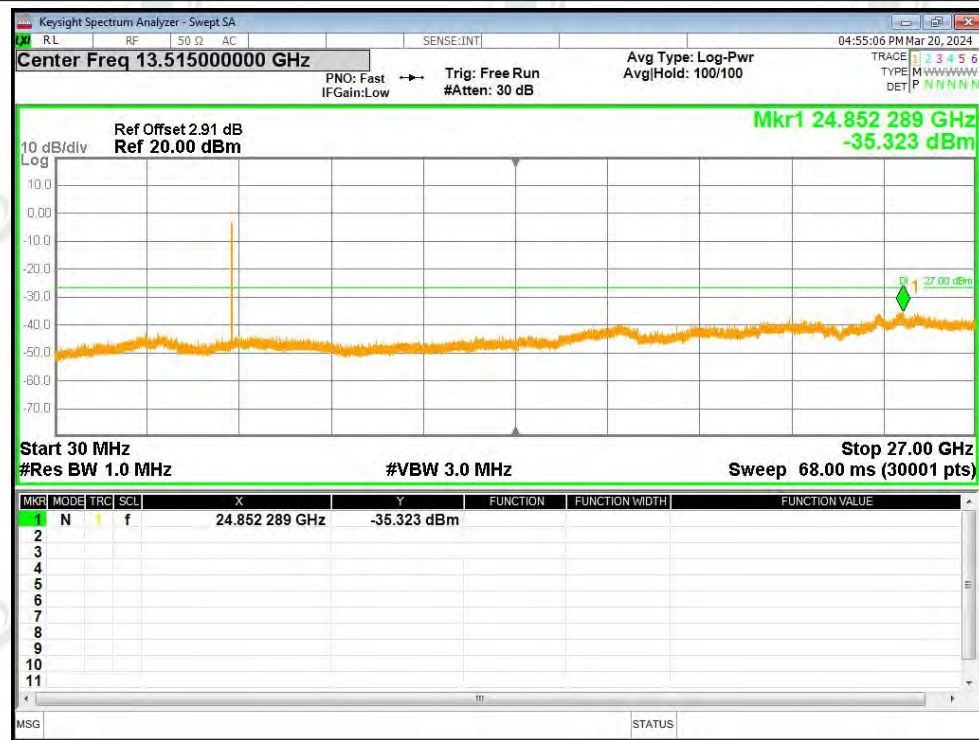


Test Graphs

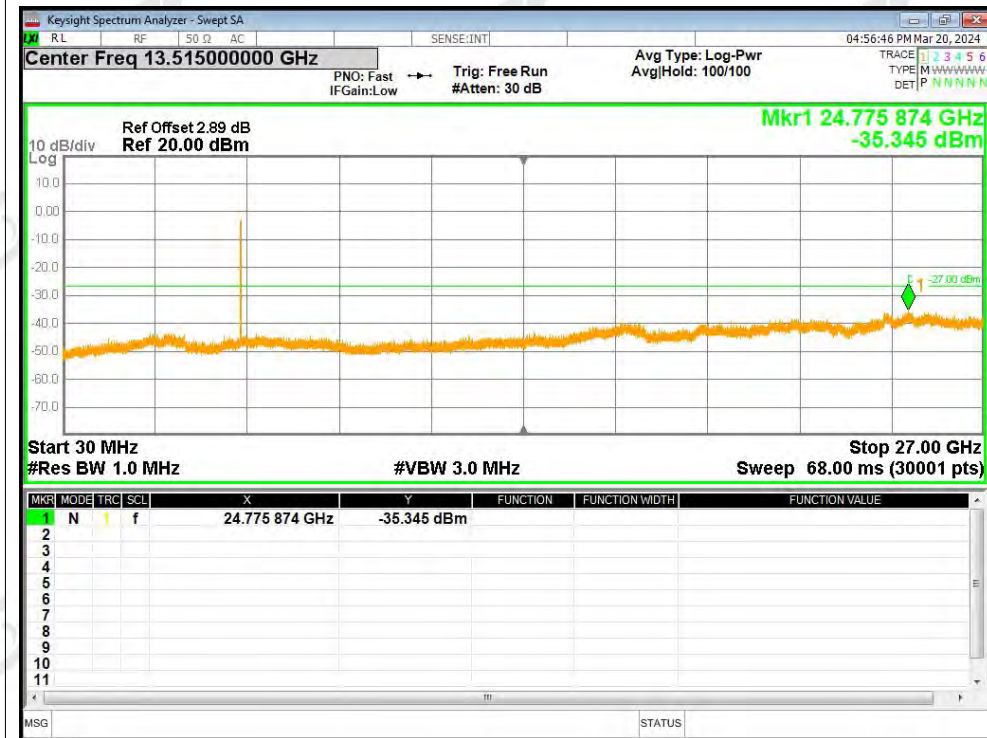
Tx. Spurious NVNT a 5180MHz Ant1 Emission



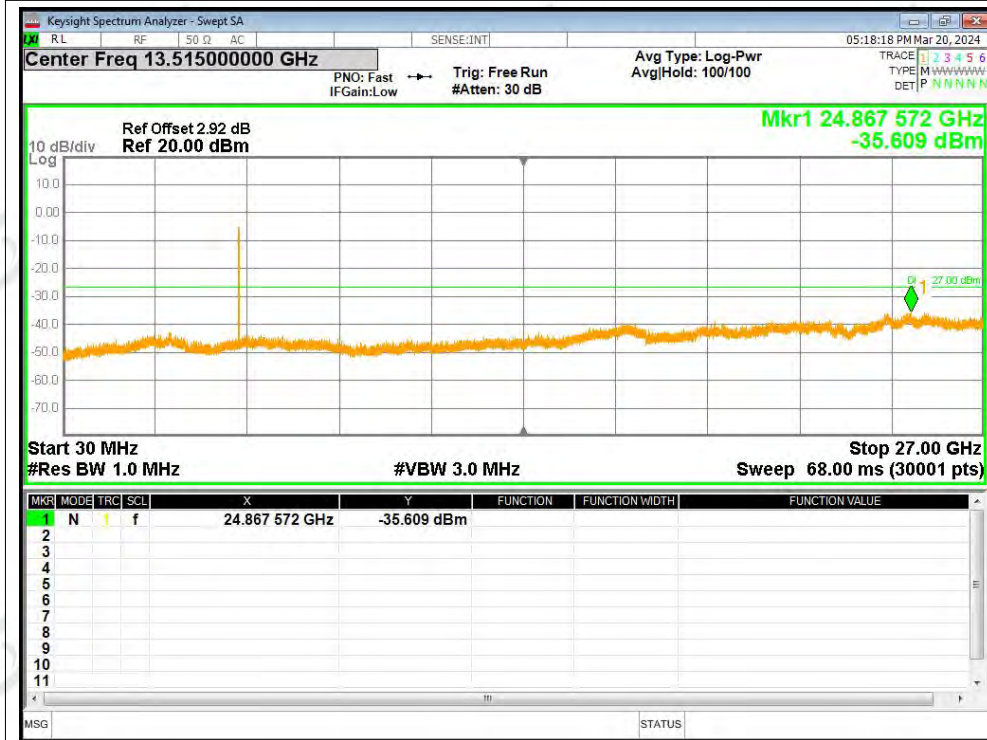
Tx. Spurious NVNT a 5200MHz Ant1 Emission



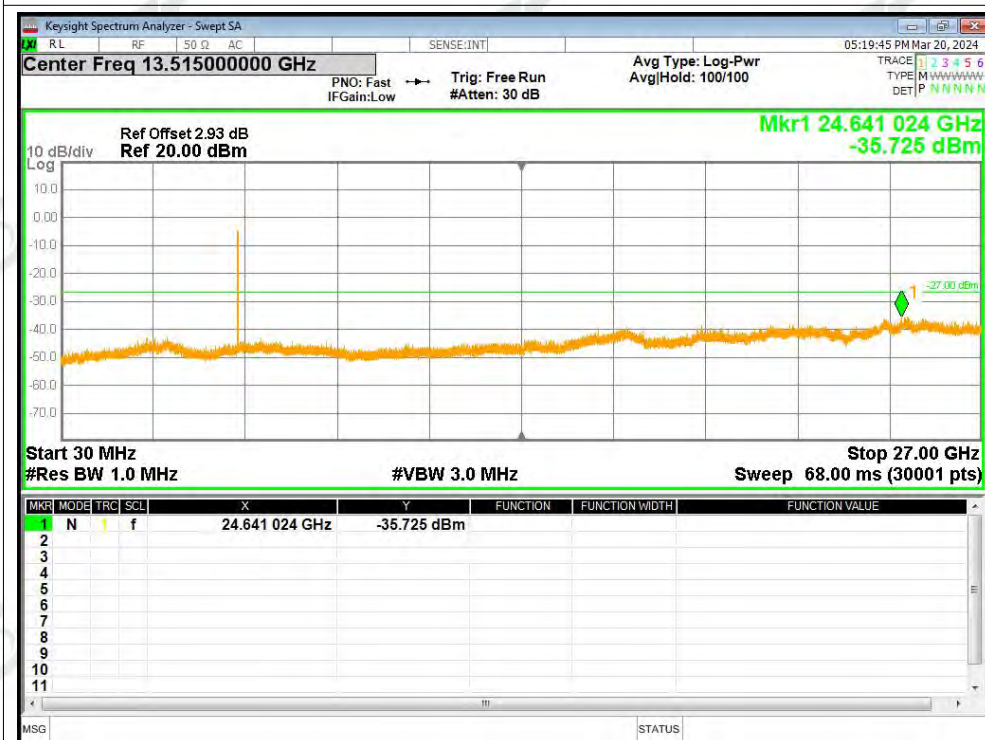
Tx. Spurious NVNT a 5240MHz Ant1 Emission



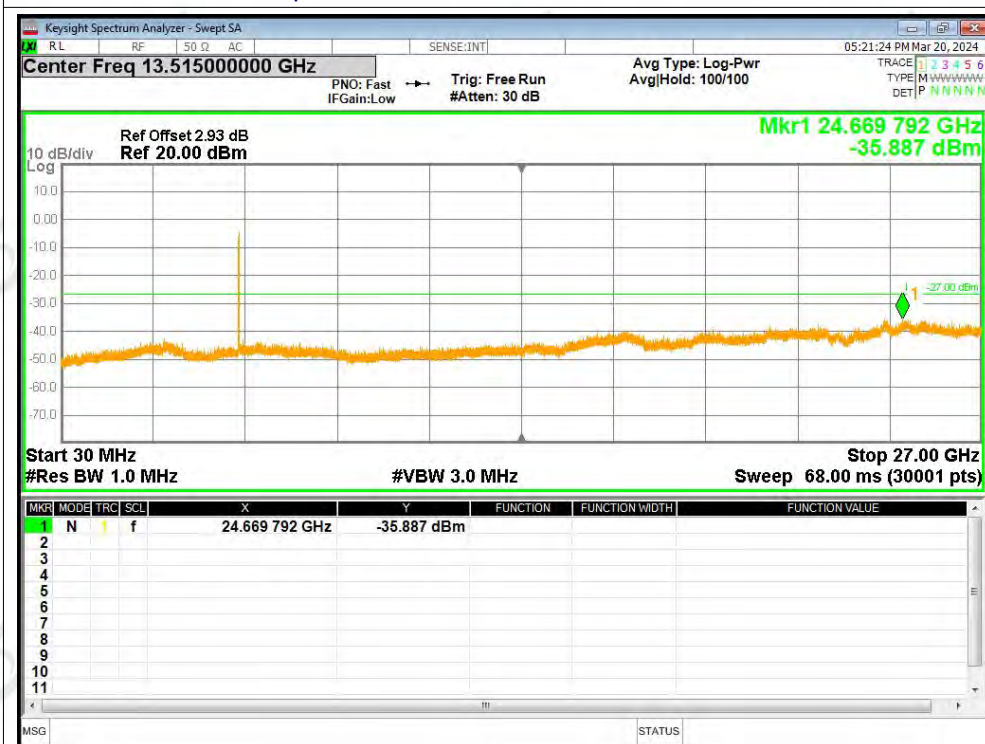
Tx. Spurious NVNT a 5180MHz Ant2 Emission



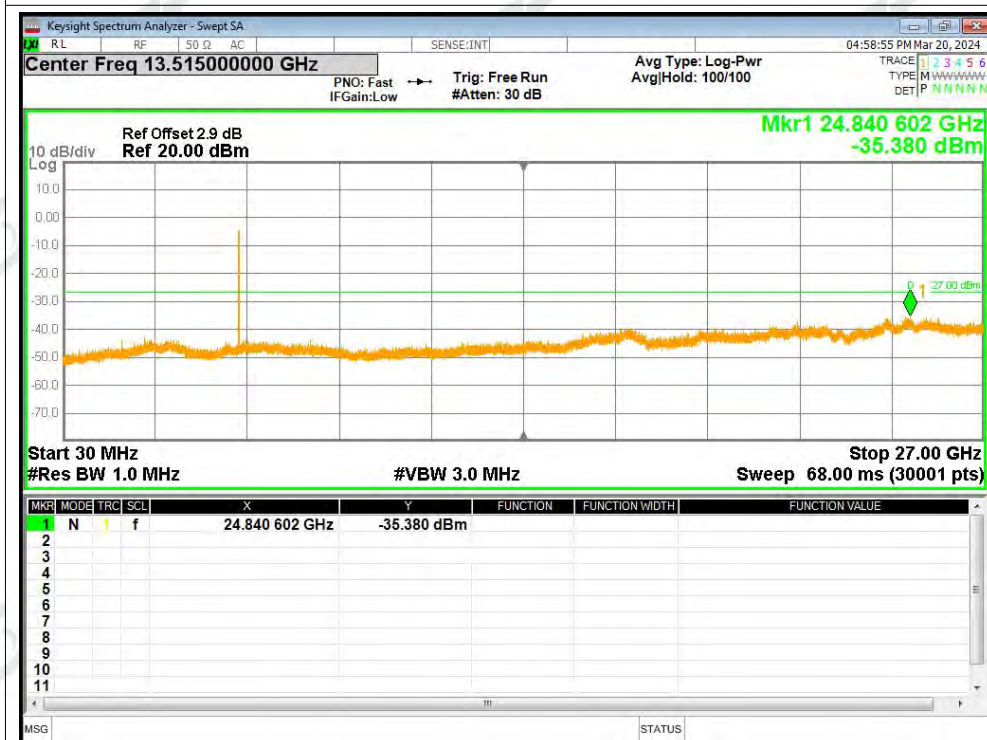
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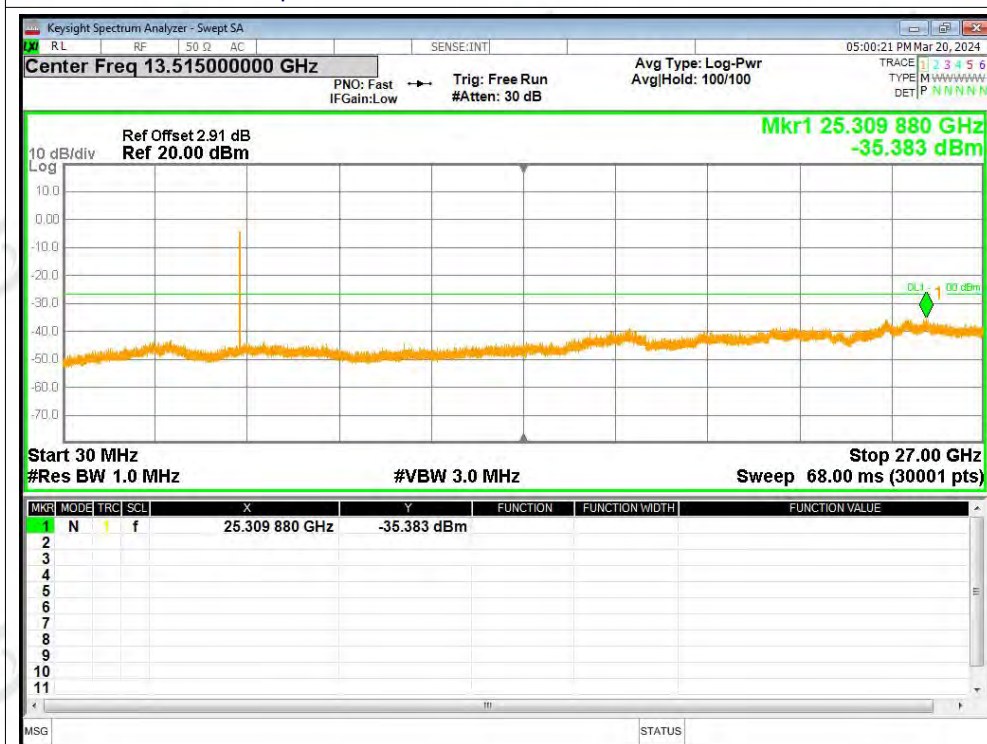
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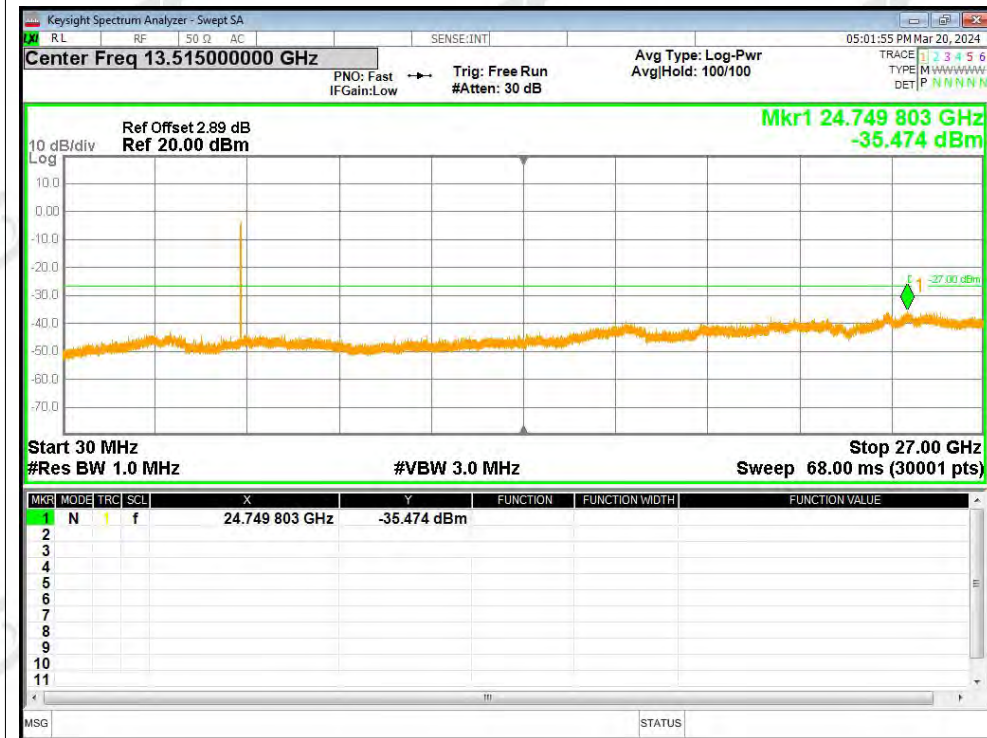
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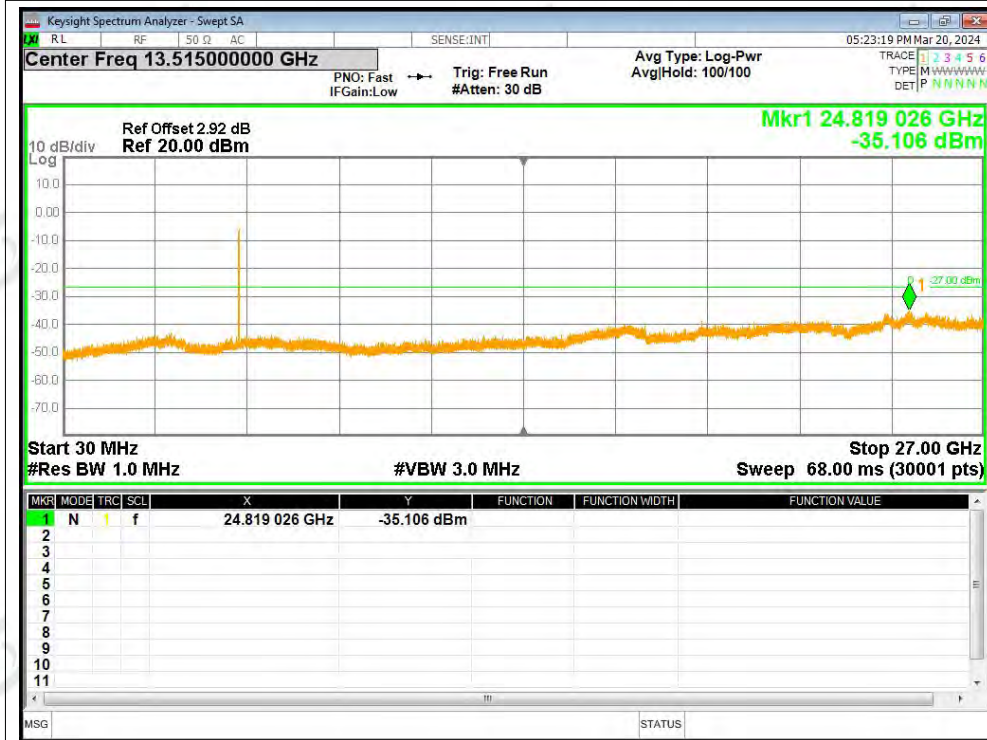
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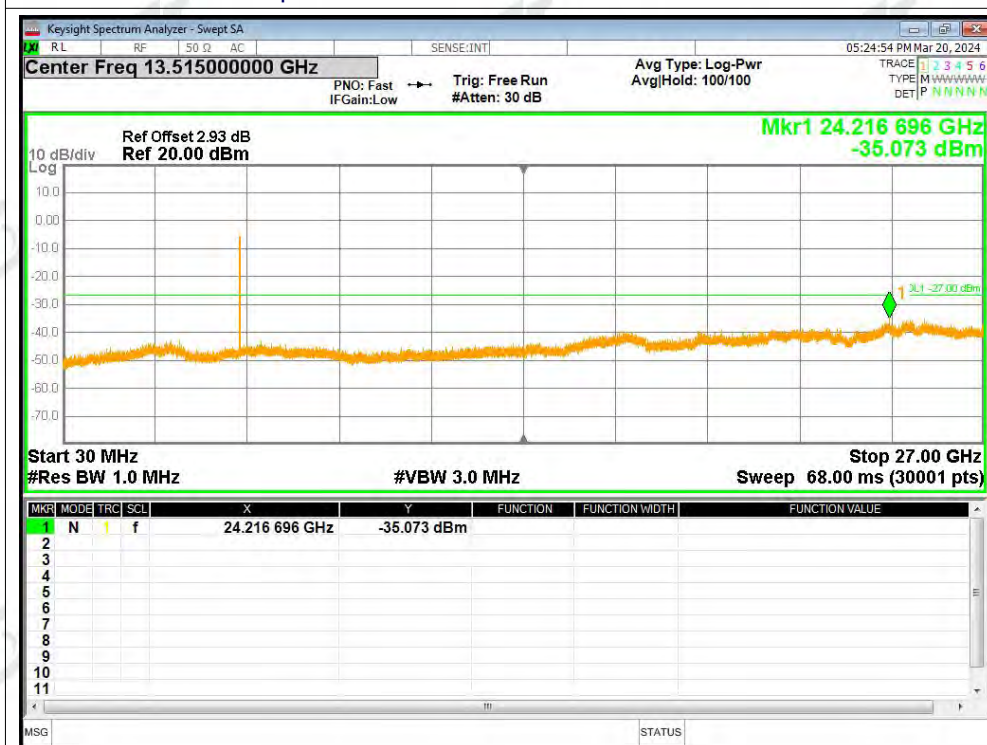
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Tx. Spurious NVNT n20 5180MHz Ant2 Emission



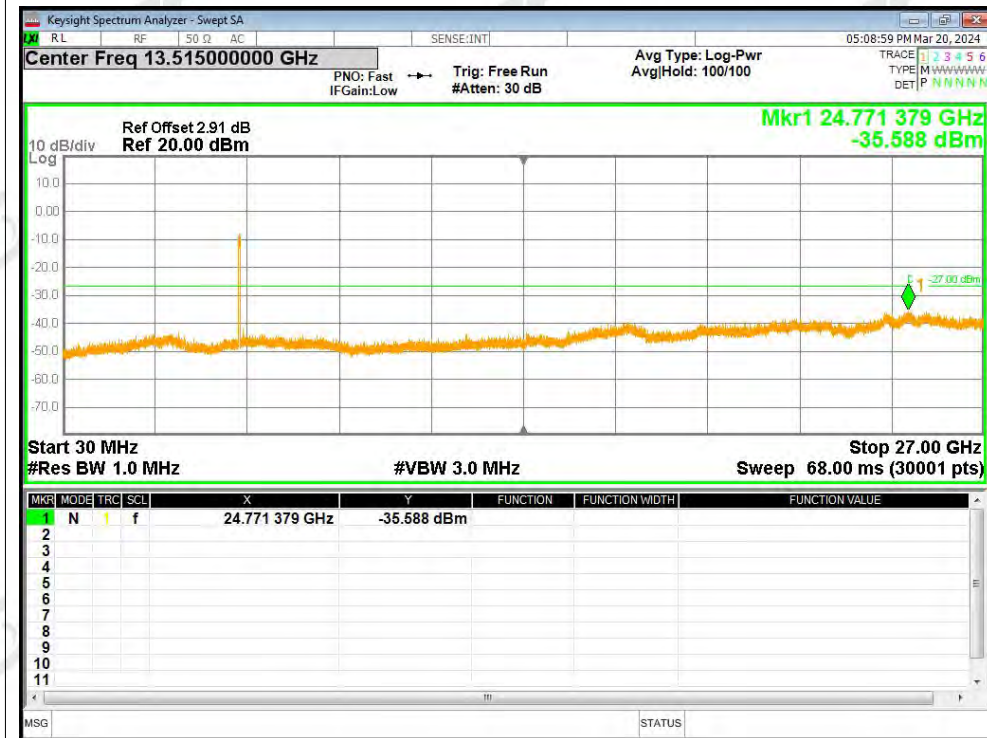
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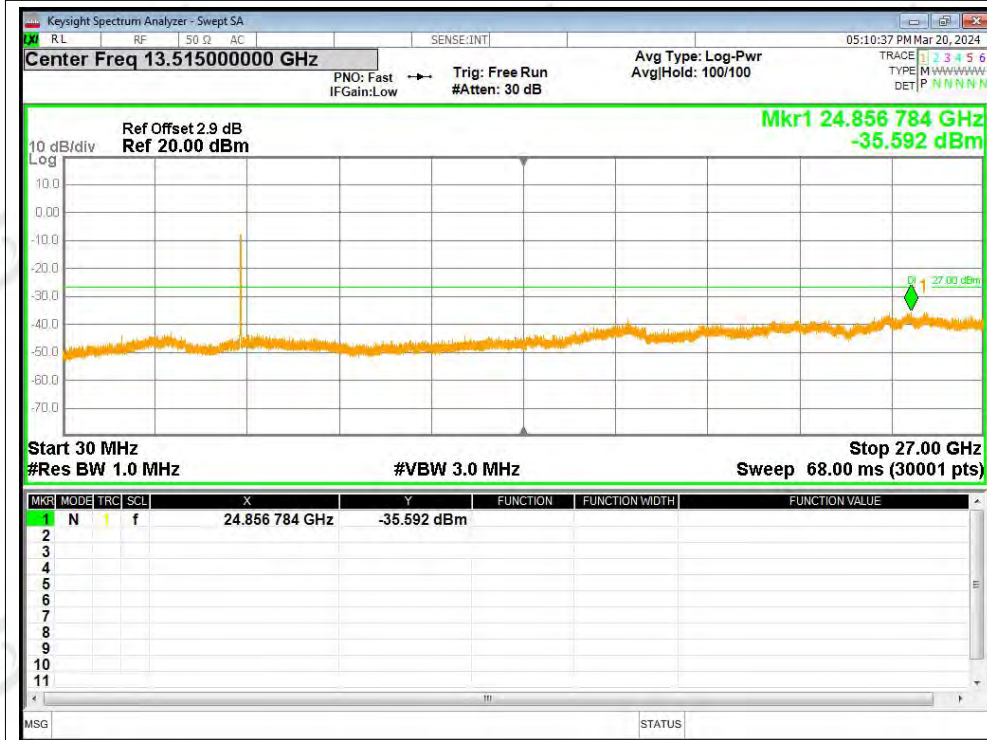
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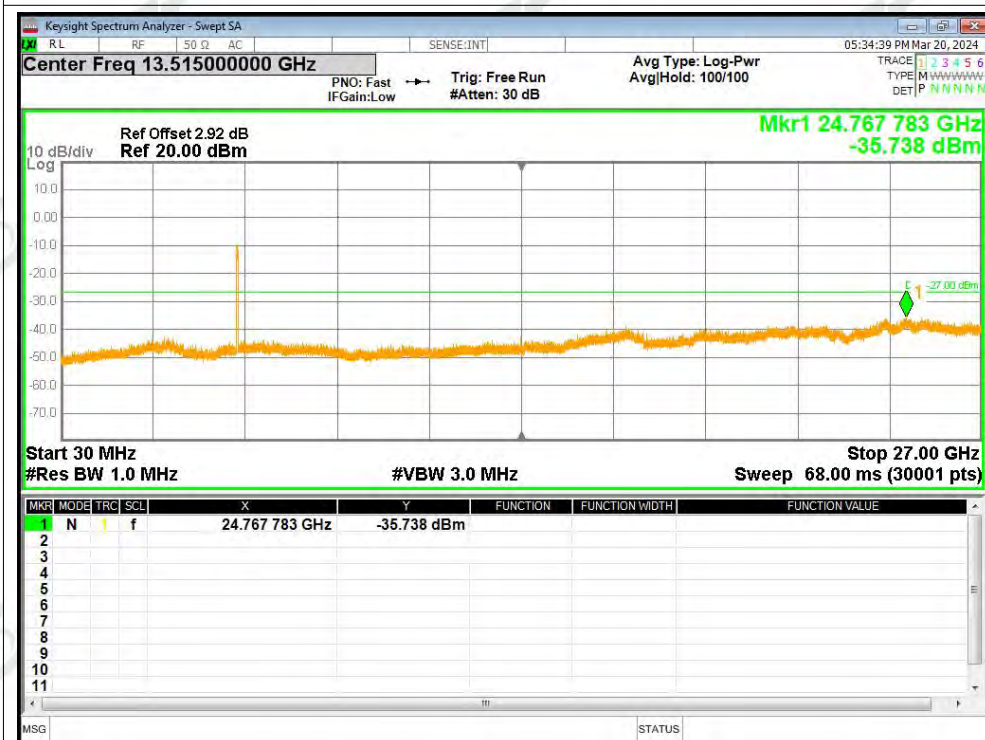
Tx. Spurious NVNT n40 5190MHz Ant1 Emission



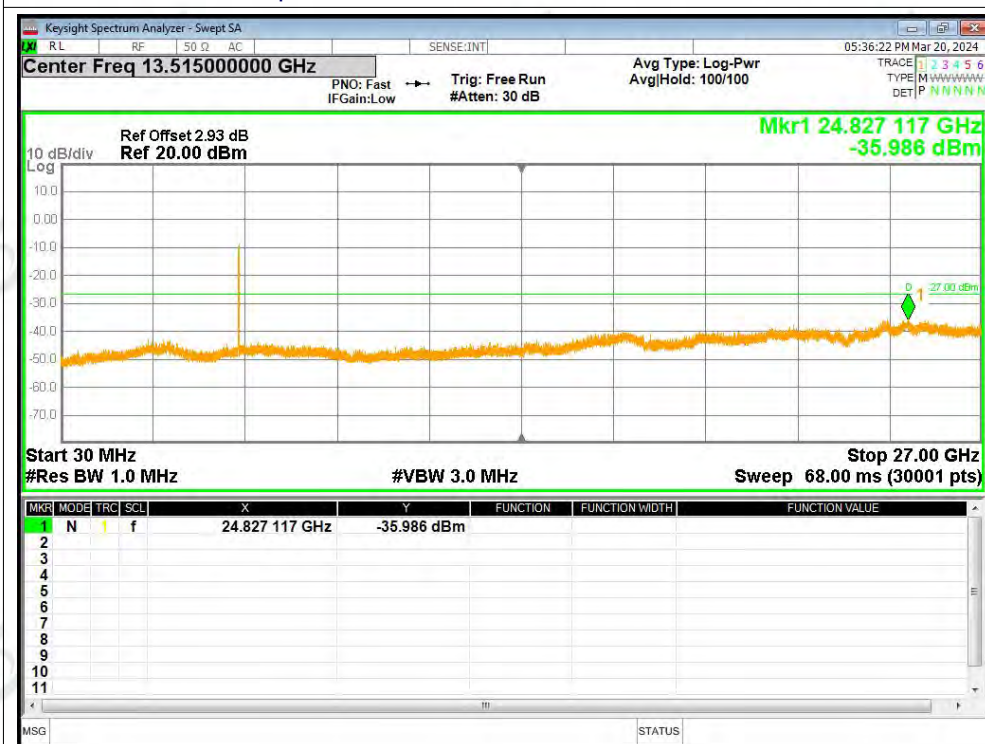
Tx. Spurious NVNT n40 5230MHz Ant1 Emission



Tx. Spurious NVNT n40 5190MHz Ant2 Emission

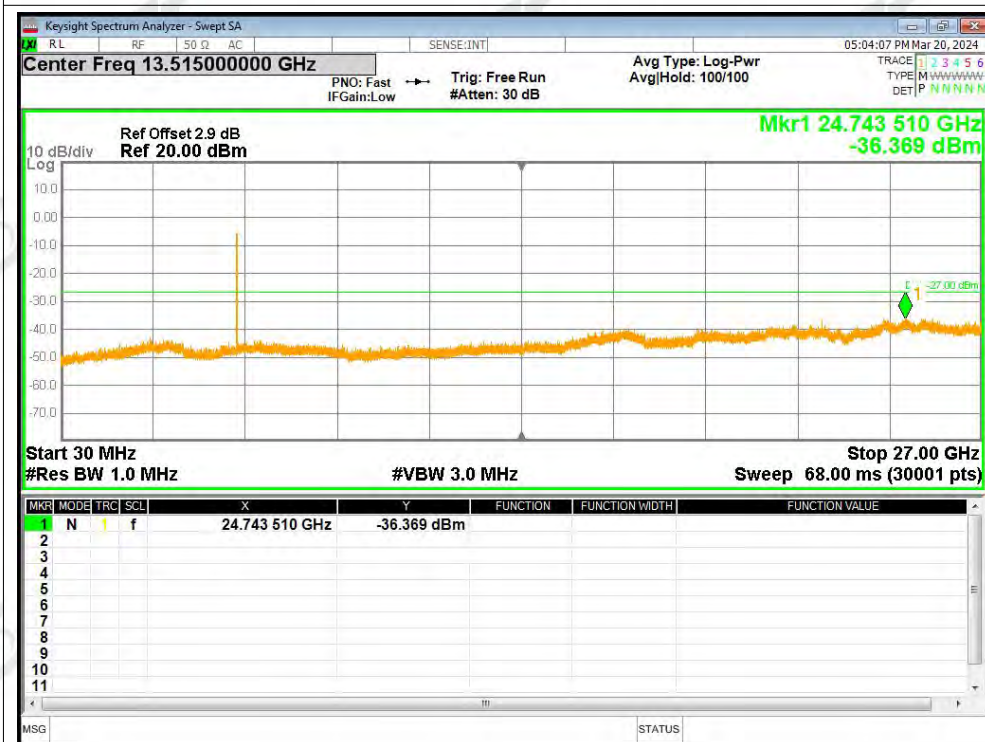


Tx. Spurious NVNT n40 5230MHz Ant2 Emission

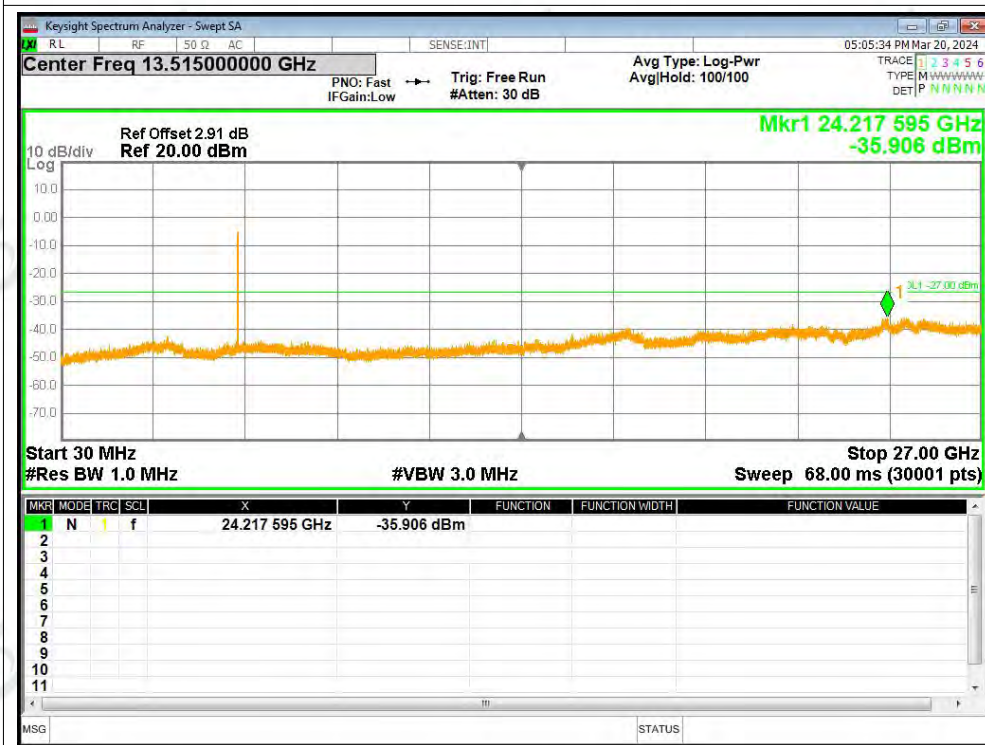




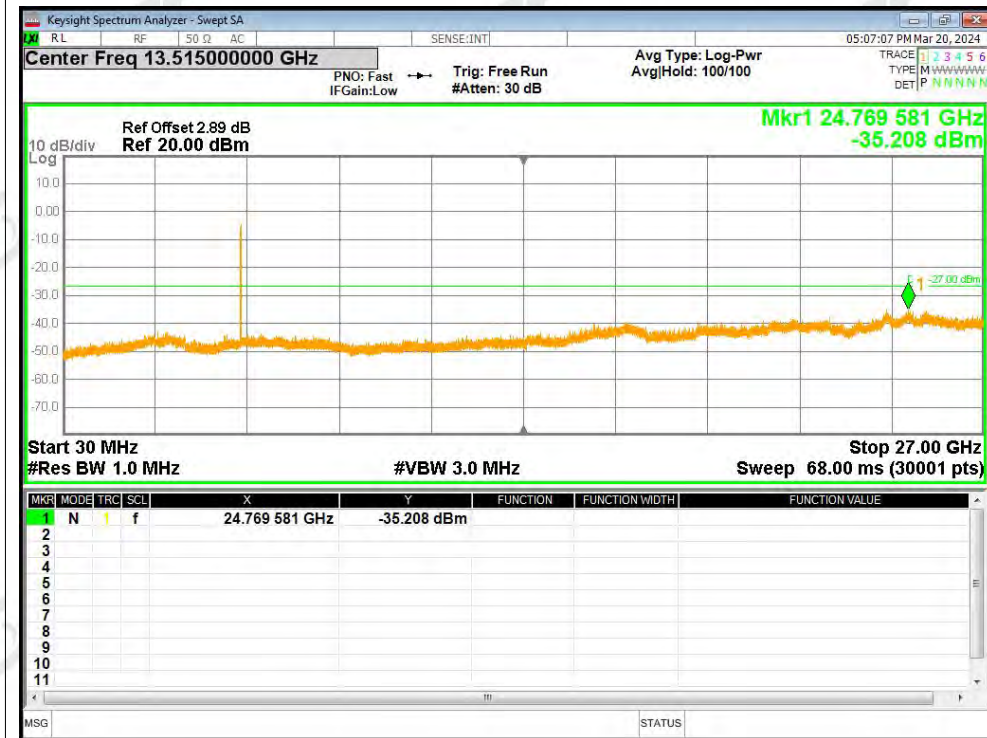
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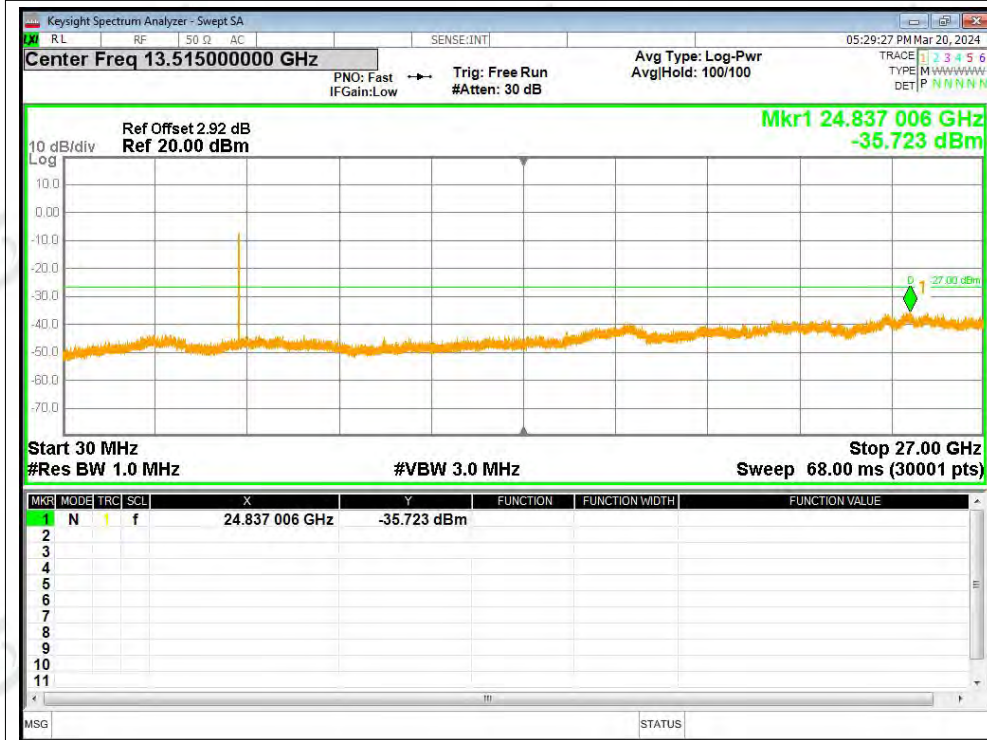
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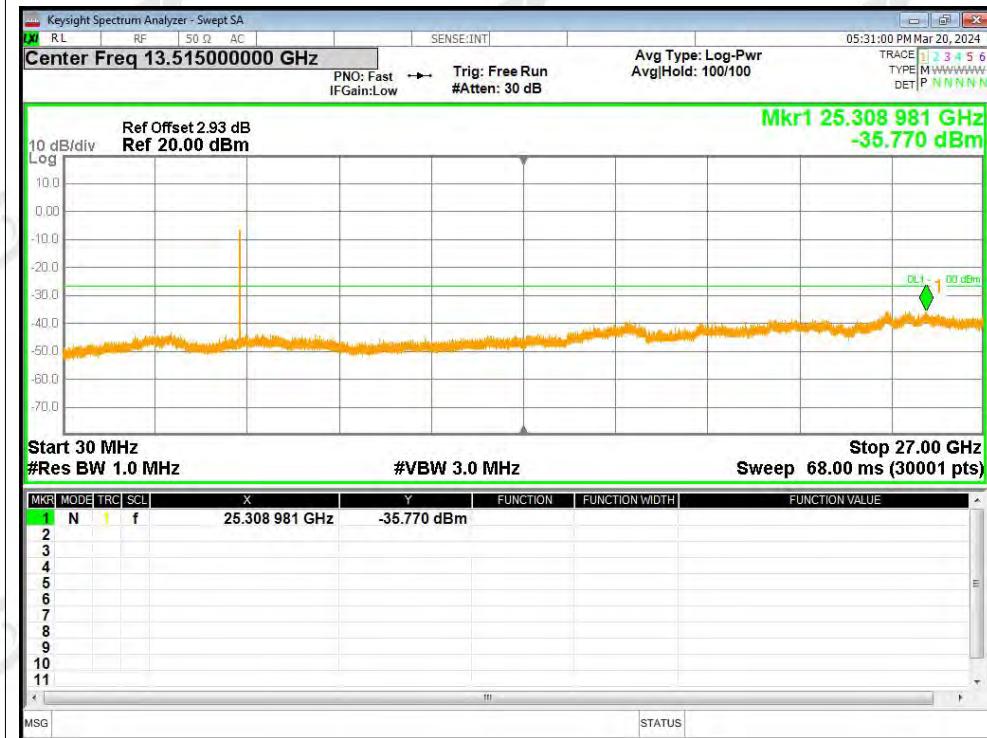
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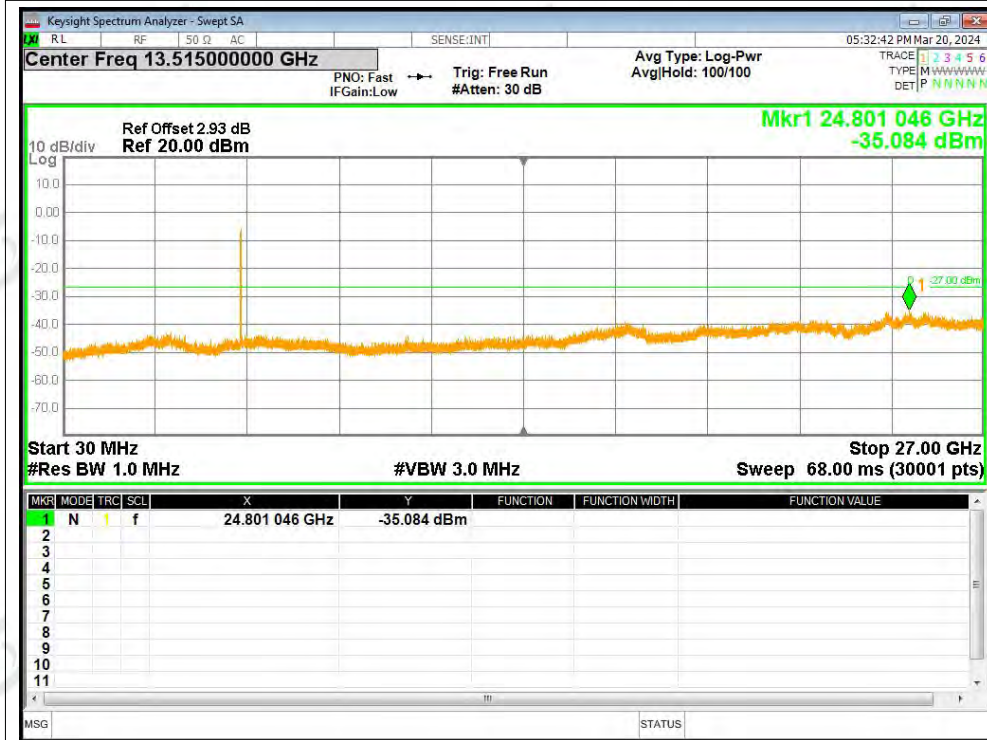
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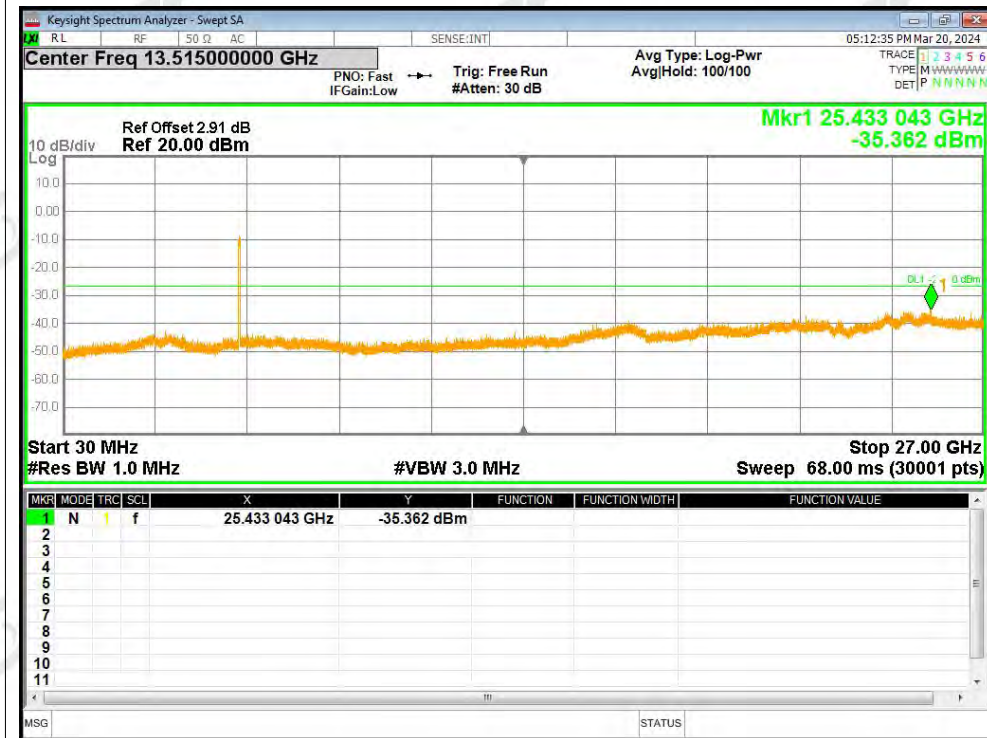
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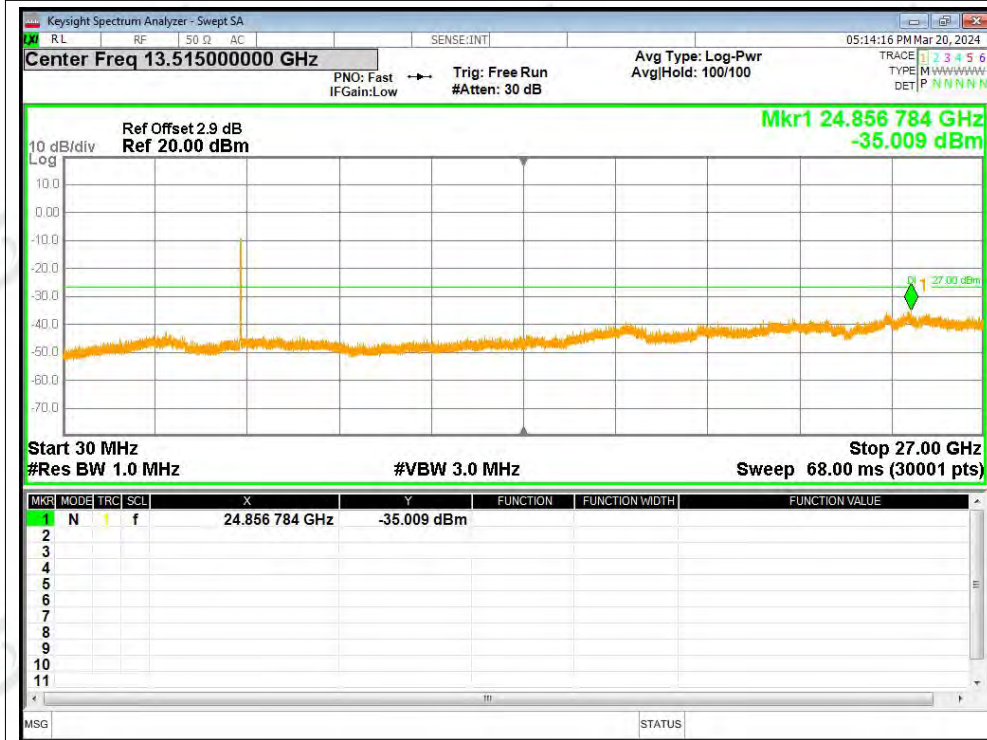
Tx. Spurious NVNT ac20 5240MHz Ant2 Emission



Tx. Spurious NVNT ac40 5190MHz Ant1 Emission

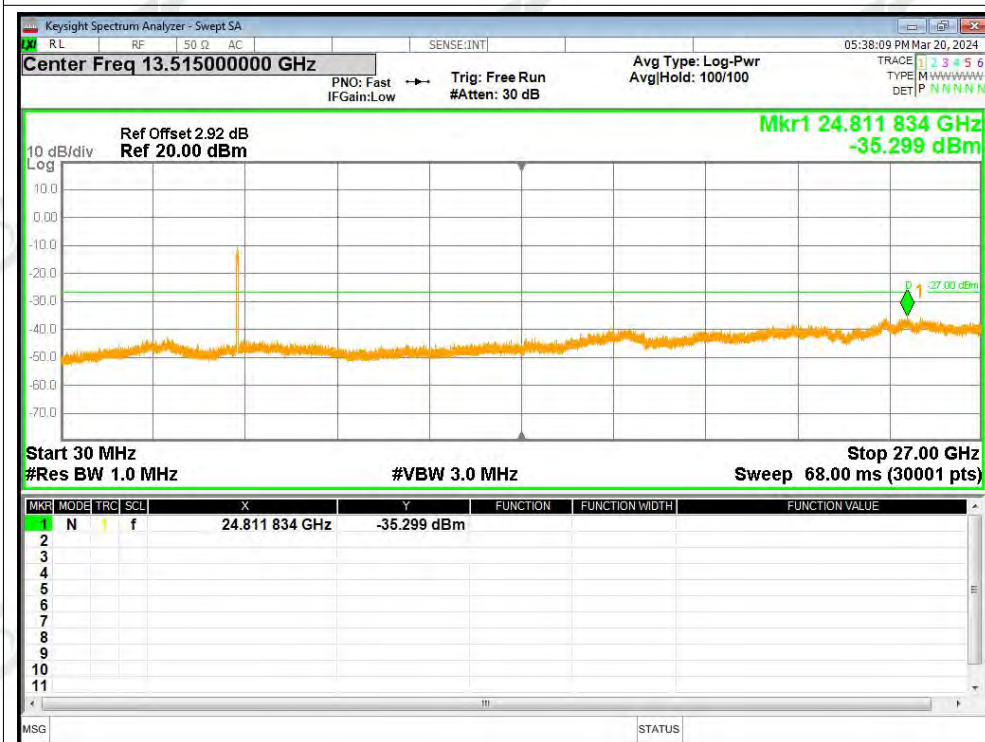


Tx. Spurious NVNT ac40 5230MHz Ant1 Emission

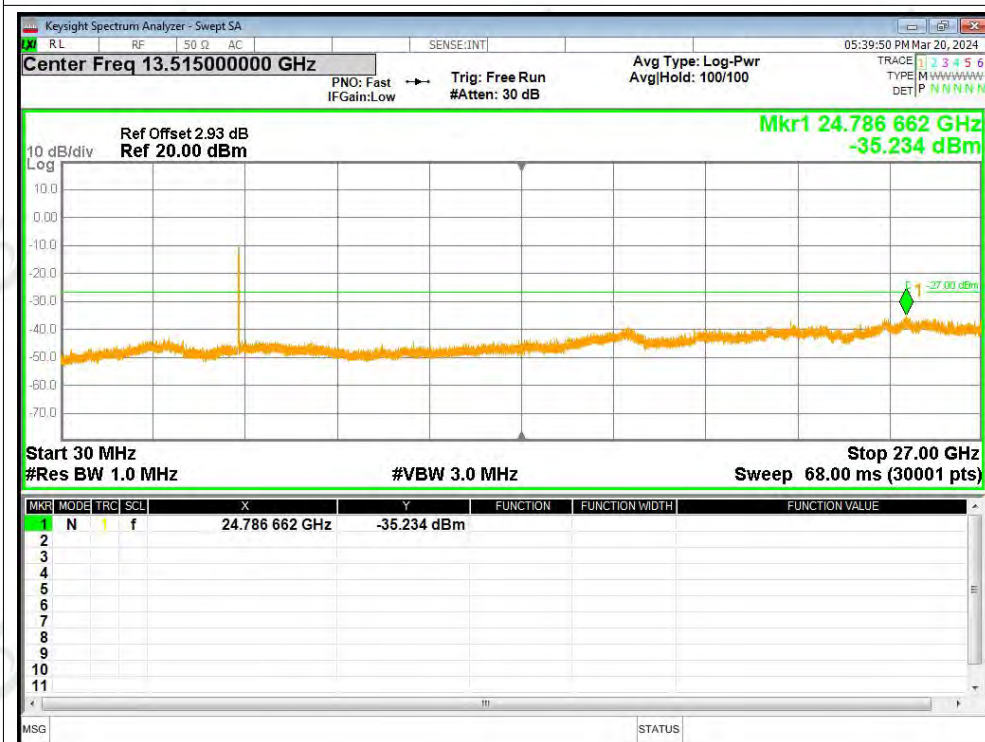




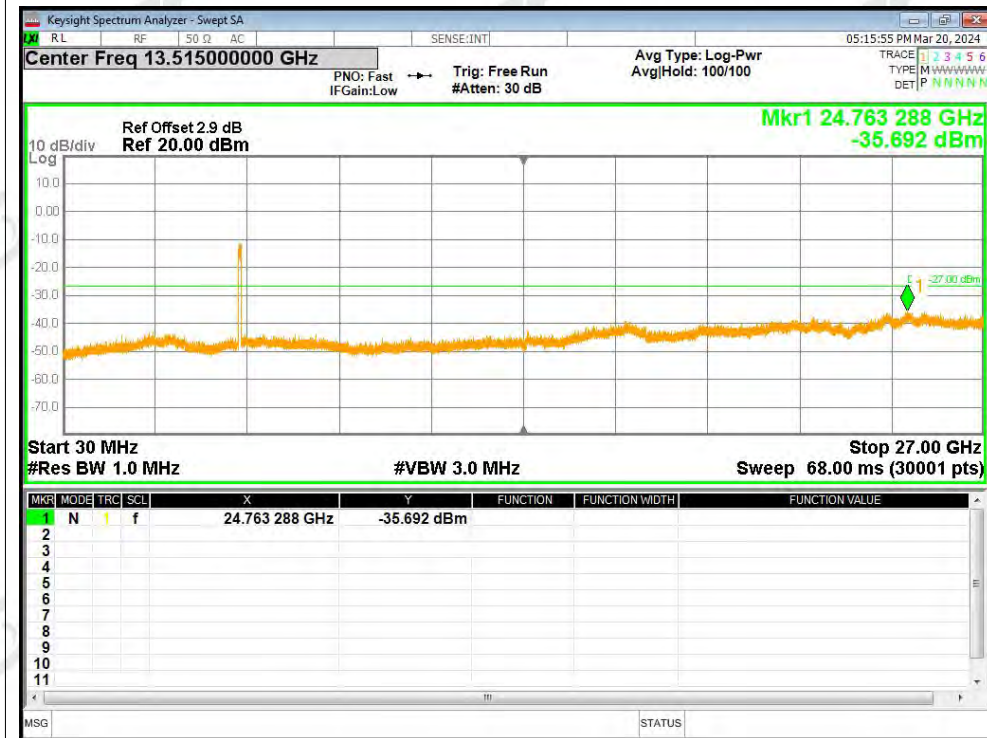
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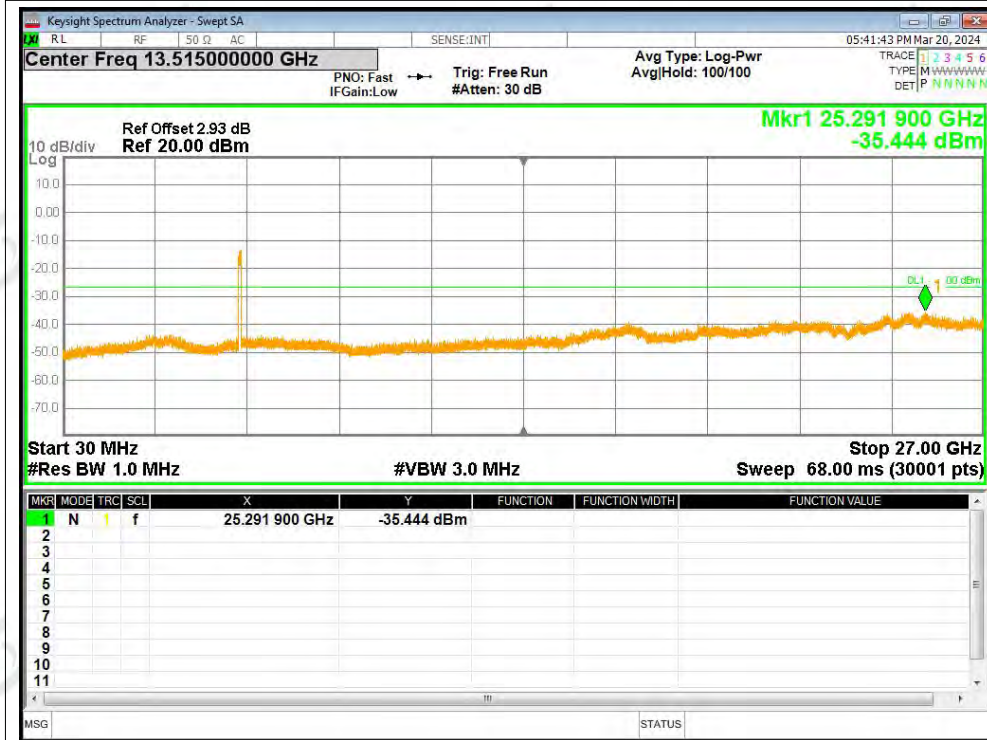
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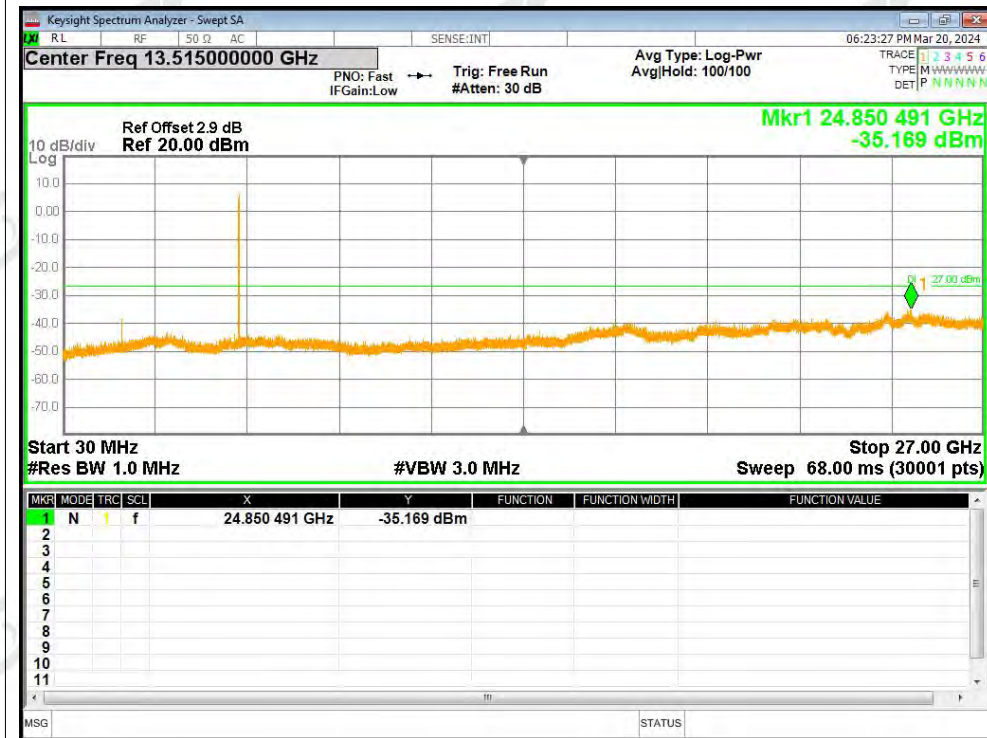
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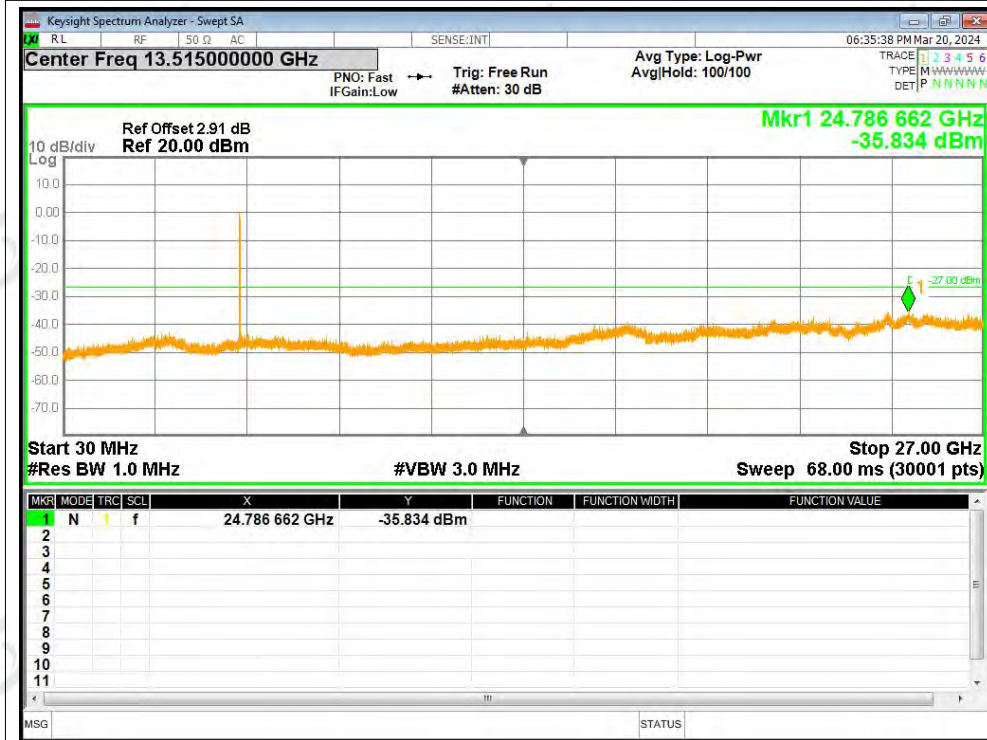
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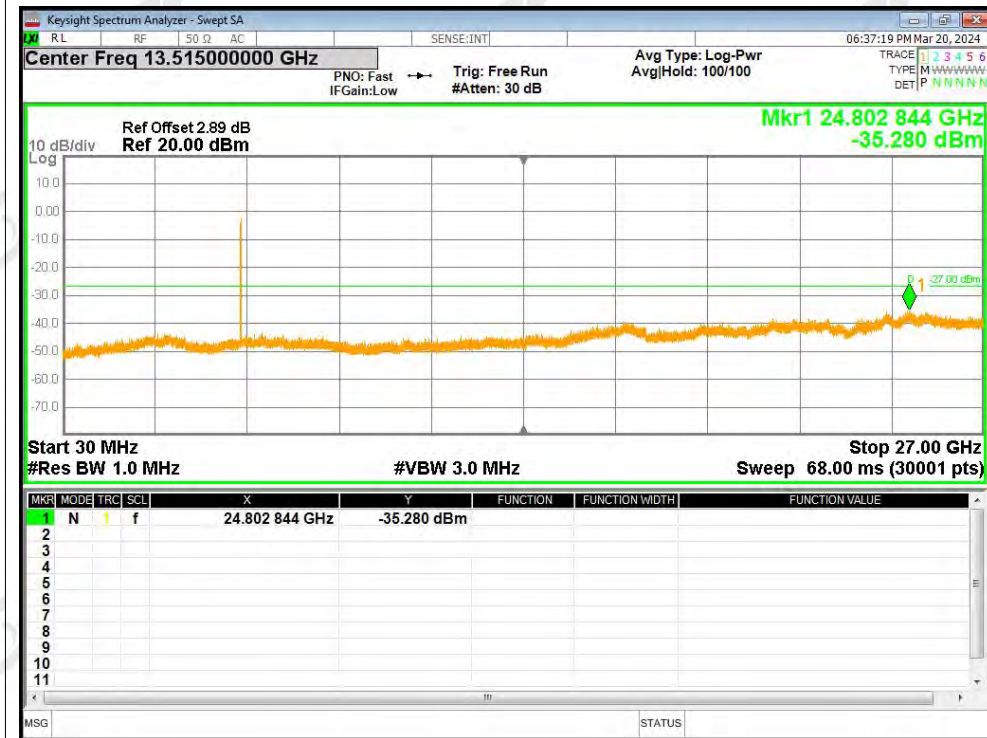
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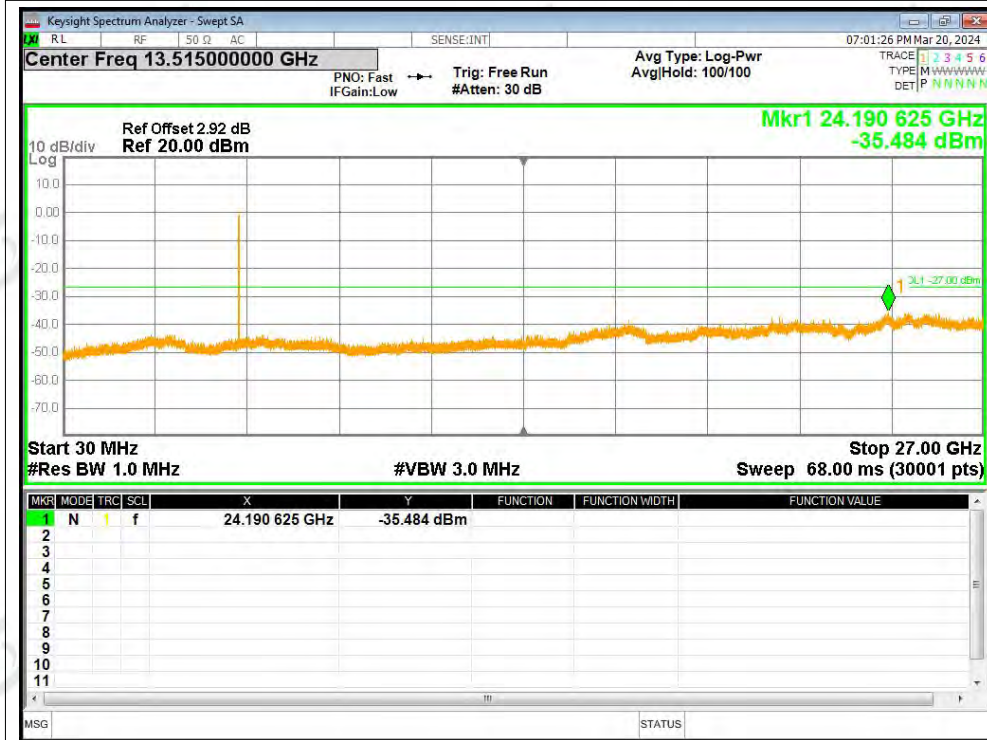
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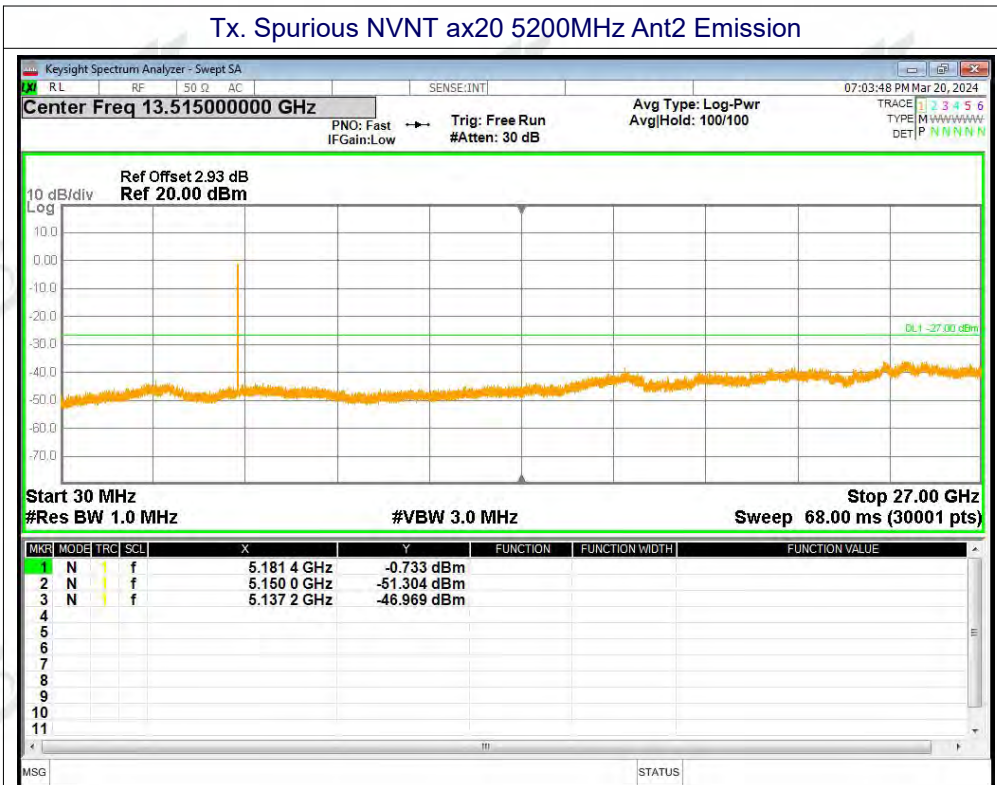
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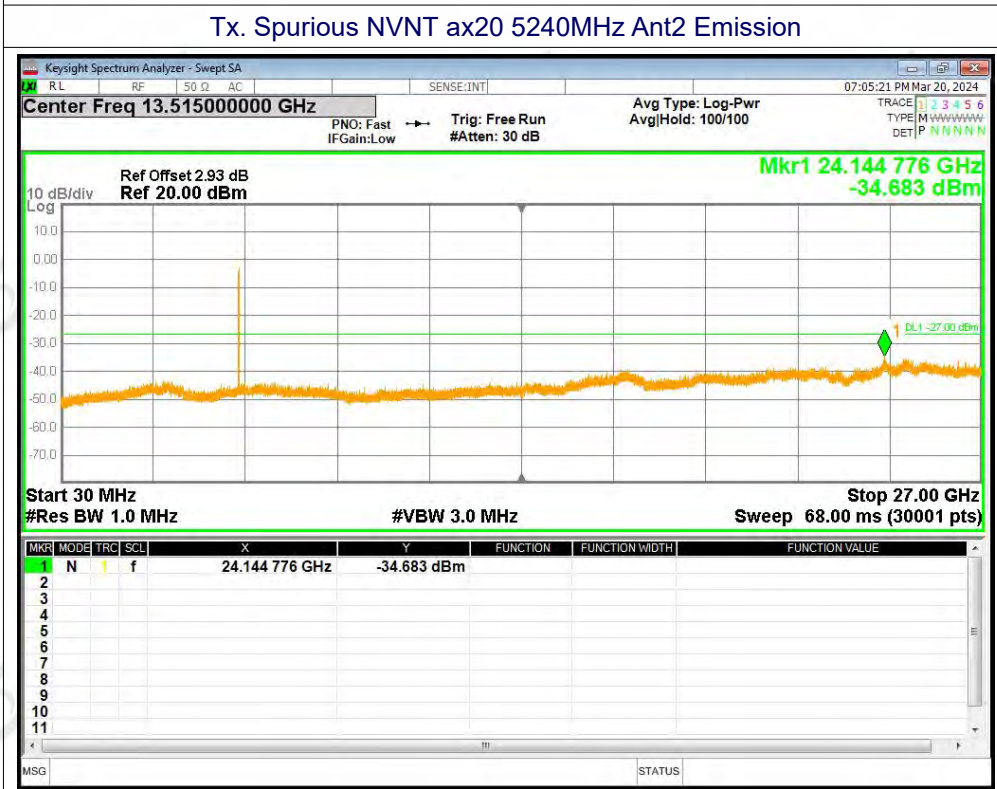
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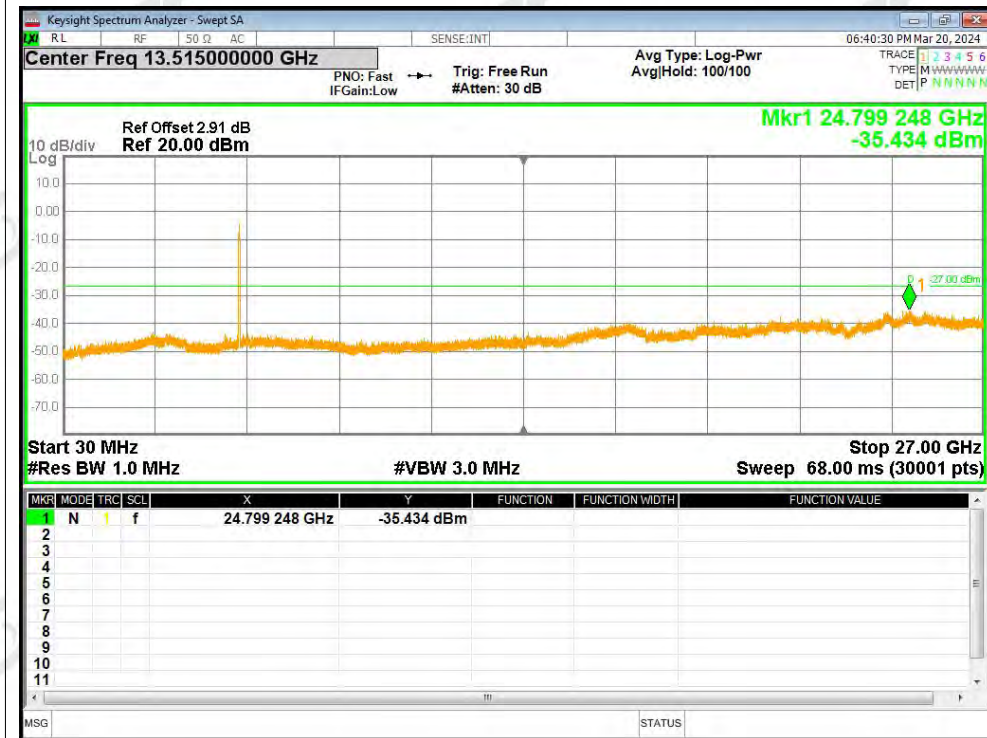
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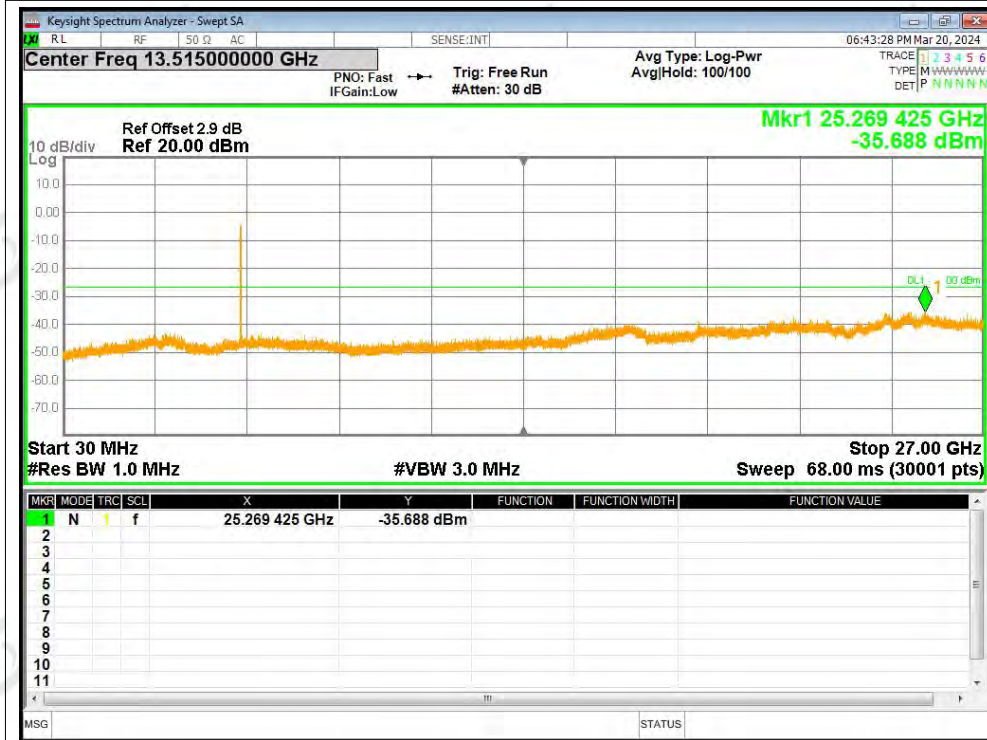
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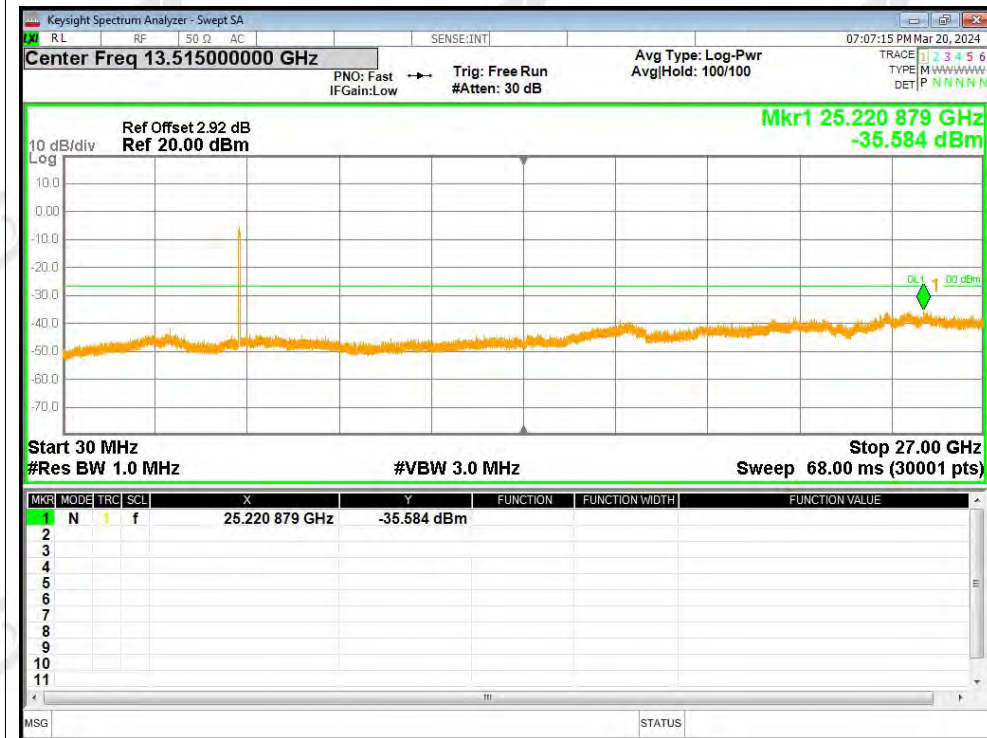
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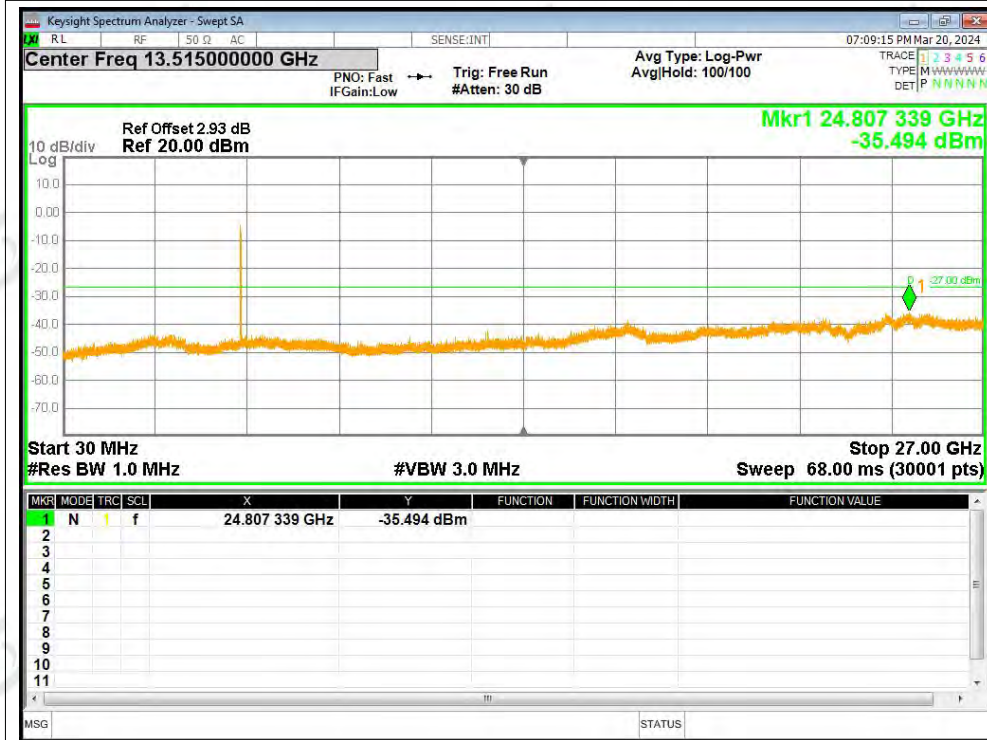
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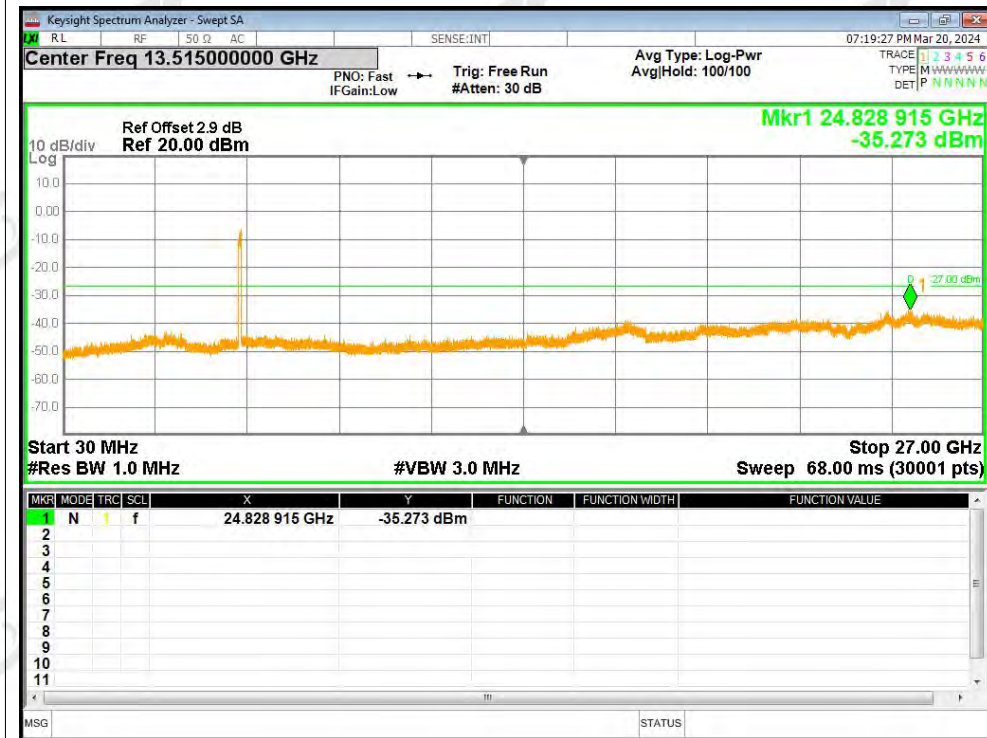
Tx. Spurious NVNT ax40 5190MHz Ant2 Emission



Tx. Spurious NVNT ax40 5230MHz Ant2 Emission



Tx. Spurious NVNT ax80 5210MHz Ant1 Emission



Tx. Spurious NVNT ax80 5210MHz Ant2 Emission

