1. Out of band rejection

1.1 Test Result

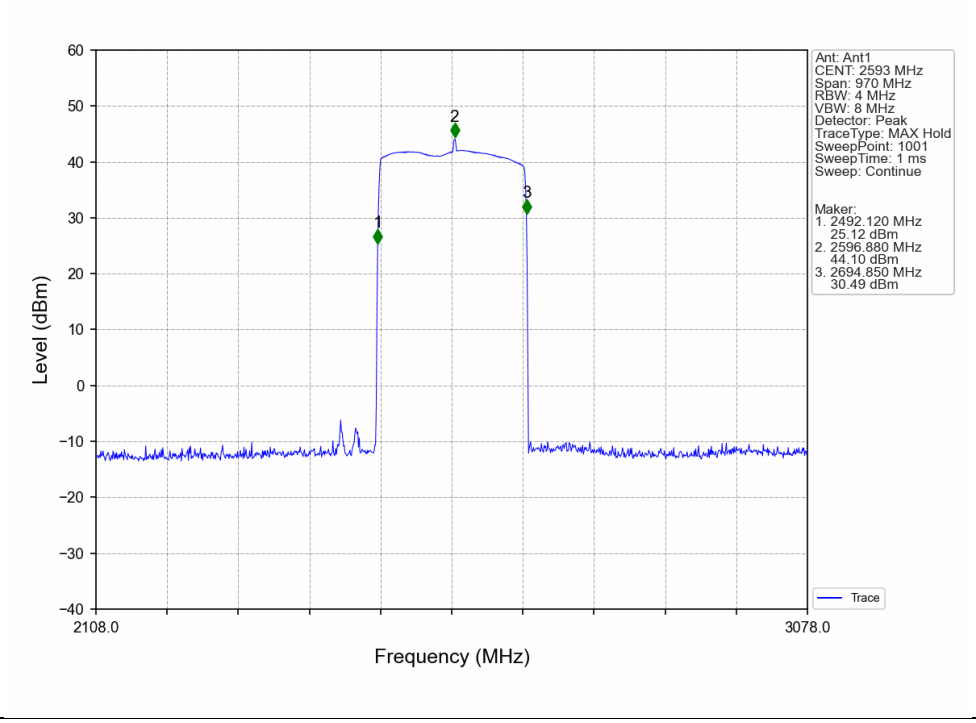
1.1.1 Band41

Band: 41 / NTNV							
Signal	Sweep Frequency Range (MHz)	TX Type	ANT	F0 (MHz)	FL (MHz)	FH (MHz)	Verdict
CW	2108 - 3078	SISO	1	2596.880	2492.120	2694.850	Pass

1.2 Test Graph

1.2.1 Band41

Band41_CW_SISO_Ant1_NTNV



2. AGC threshold

2.1 Test Result

2.1.1 Band41

Band: 41 / NTNV					
Signal	Frequency (MHz)	TX Type	ANT	AGC Threshold (dBm)	Verdict
GMSK 0.2MHz	2596.88	SISO	1	-0.10	Pass
AWGN 5MHz	2596.88	SISO	1	-0.10	Pass
AWGN 100MHz	2596.88	SISO	1	-0.10	Pass

3. Input-versus-output signal comparison

3.1 Test Result

3.1.1 Band41_OBW

Band: 41 / NTNV							
Signal			TX Type	ANT	99% OBW (MHz)		Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input	
GMSK 0.2MHz	-0.1	2596.88	SISO	1	0.246	0.244	Pass
	2.9	2596.88	SISO	1	0.244	0.244	Pass
AWGN 5MHz	-0.1	2596.88	SISO	1	4.530	4.550	Pass
	2.9	2596.88	SISO	1	4.538	4.550	Pass
AWGN 100MHz	-0.1	2596.88	SISO	1	97.585	97.265	Pass
	2.9	2596.88	SISO	1	97.394	97.382	Pass

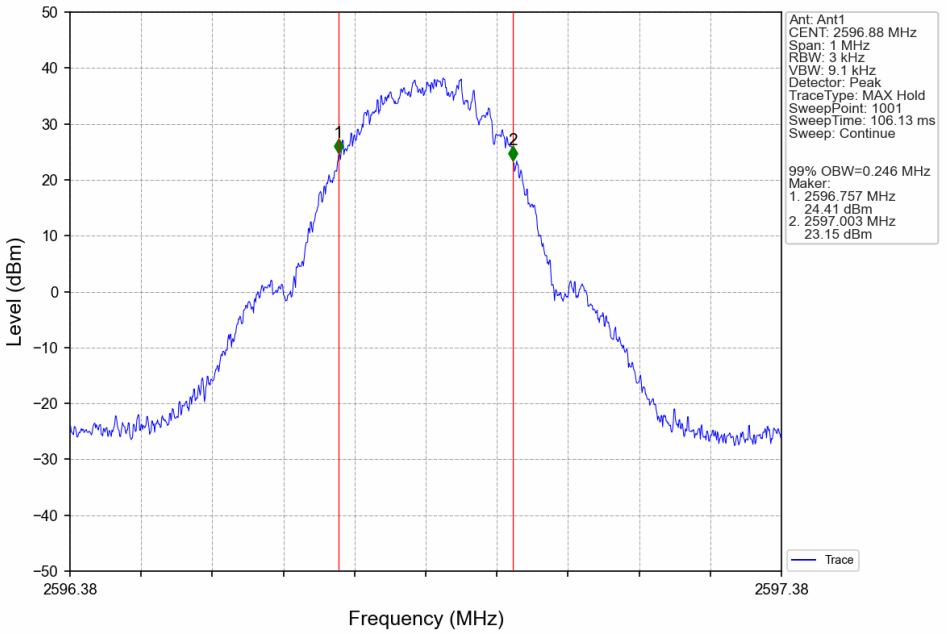
3.1.2 Band41_EBW

Band: 41 / NTNV							
Signal			TX Type	ANT	26dB EBW (MHz)		Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input	
GMSK 0.2MHz	-0.1	2596.88	SISO	1	0.316	0.311	Pass
	2.9	2596.88	SISO	1	0.318	0.315	Pass
AWGN 5MHz	-0.1	2596.88	SISO	1	5.121	5.136	Pass
	2.9	2596.88	SISO	1	5.146	5.133	Pass
AWGN 100MHz	-0.1	2596.88	SISO	1	100.659	100.722	Pass
	2.9	2596.88	SISO	1	100.669	100.812	Pass

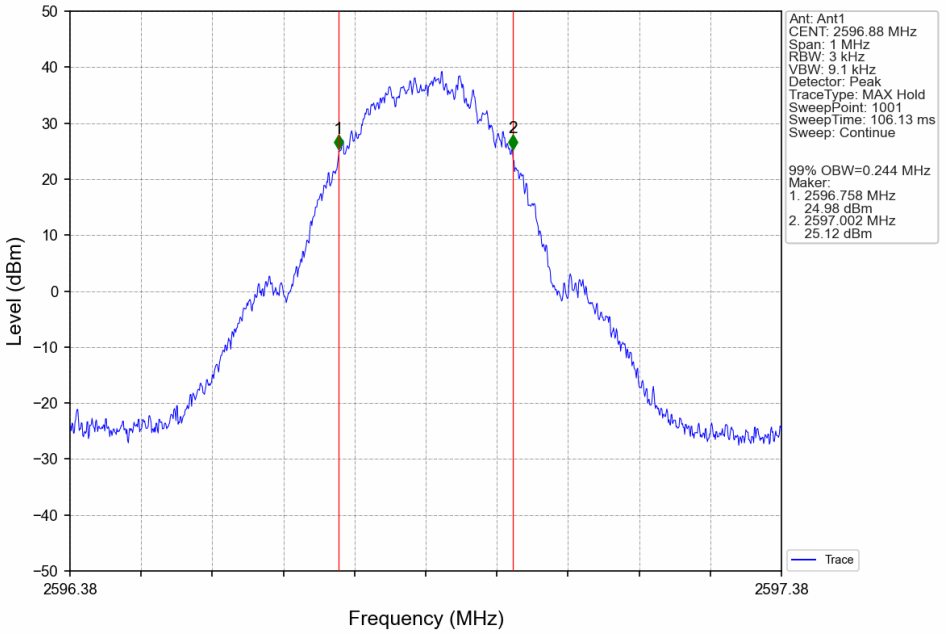
3.2 Test Graph

3.2.1 Band41_OBW

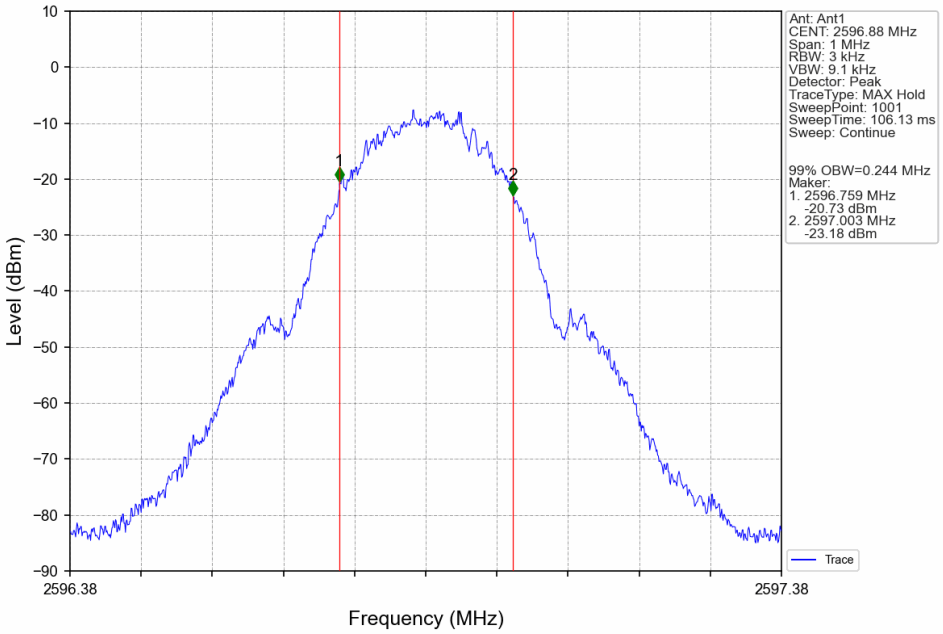
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_Output_AGC



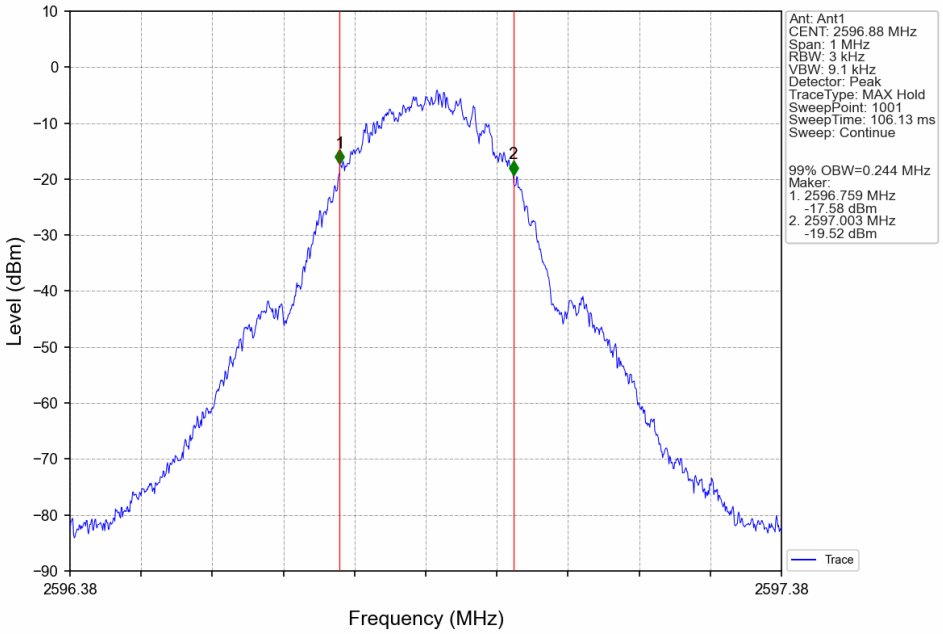
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_Output_AGC+3



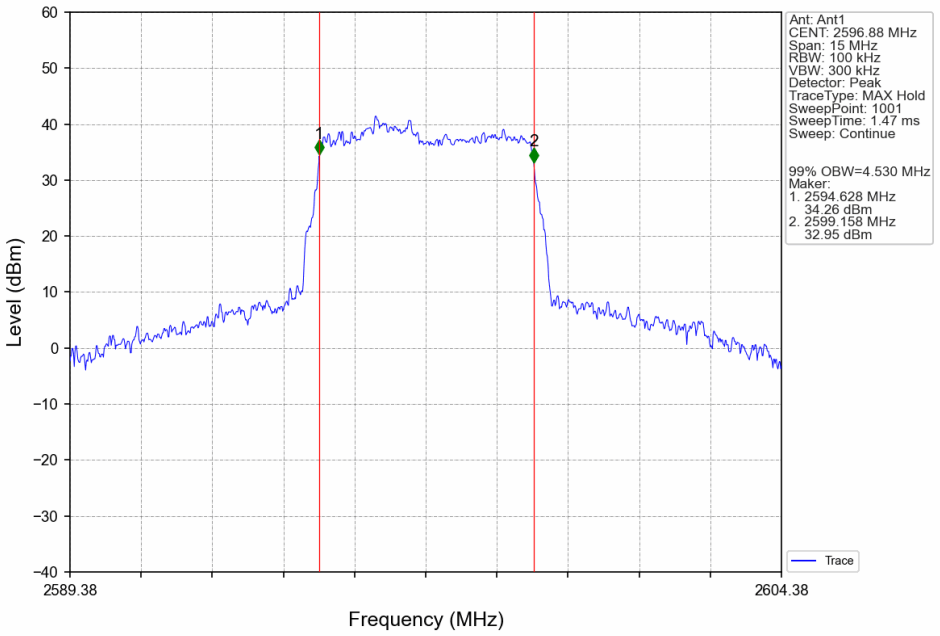
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_Input_AGC



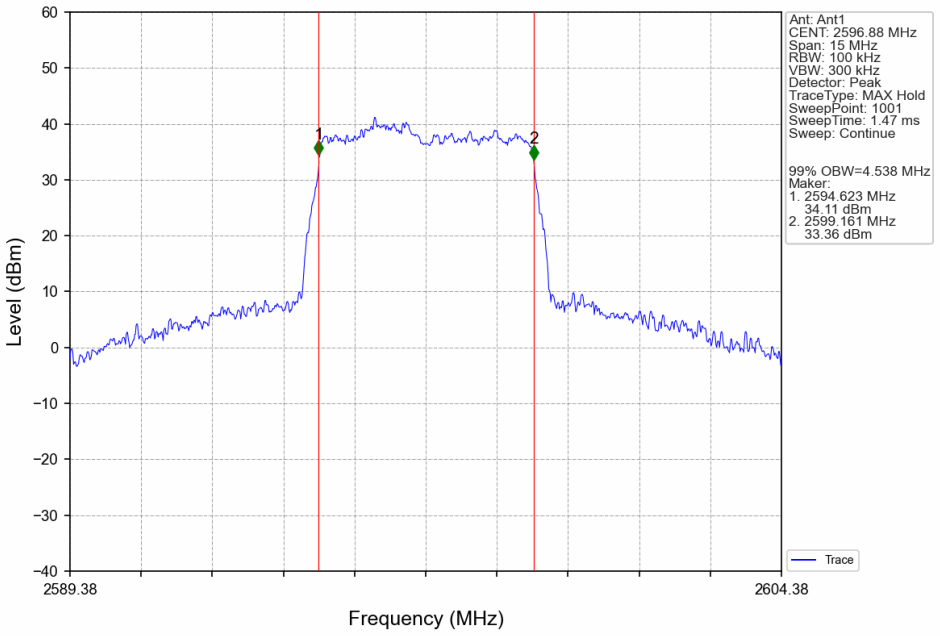
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_Input_AGC+3



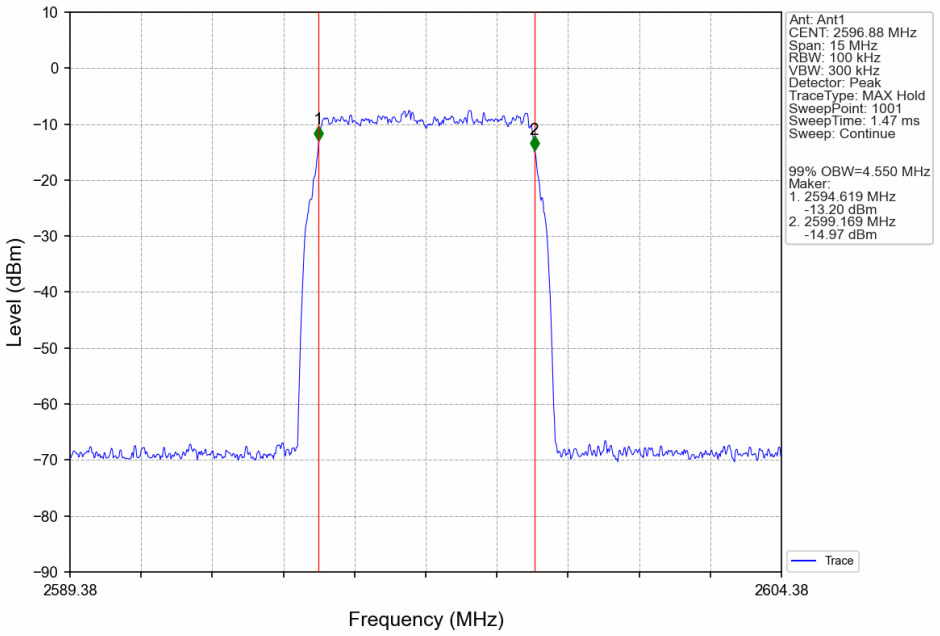
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_Output_AGC



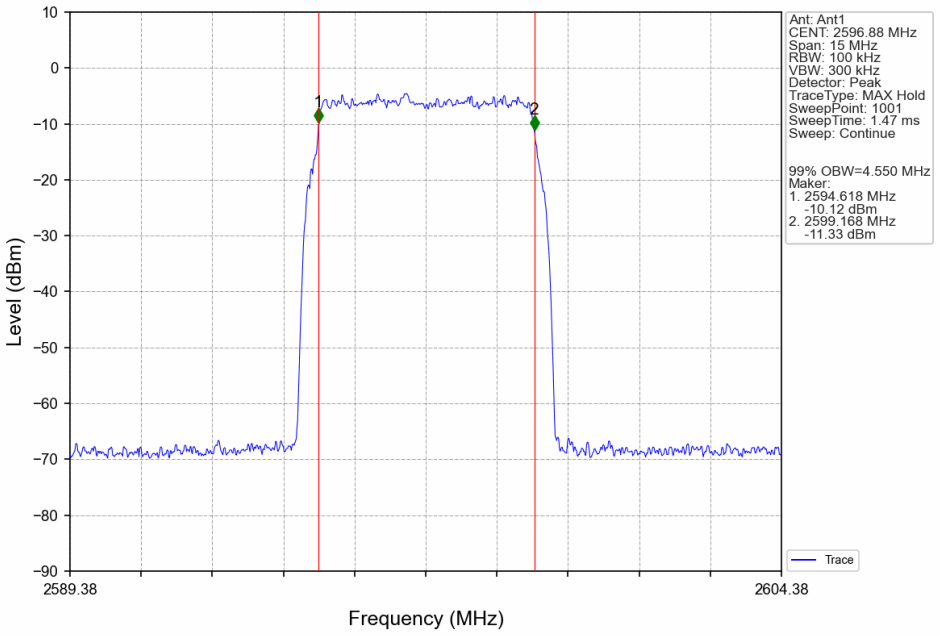
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_Output_AGC+3



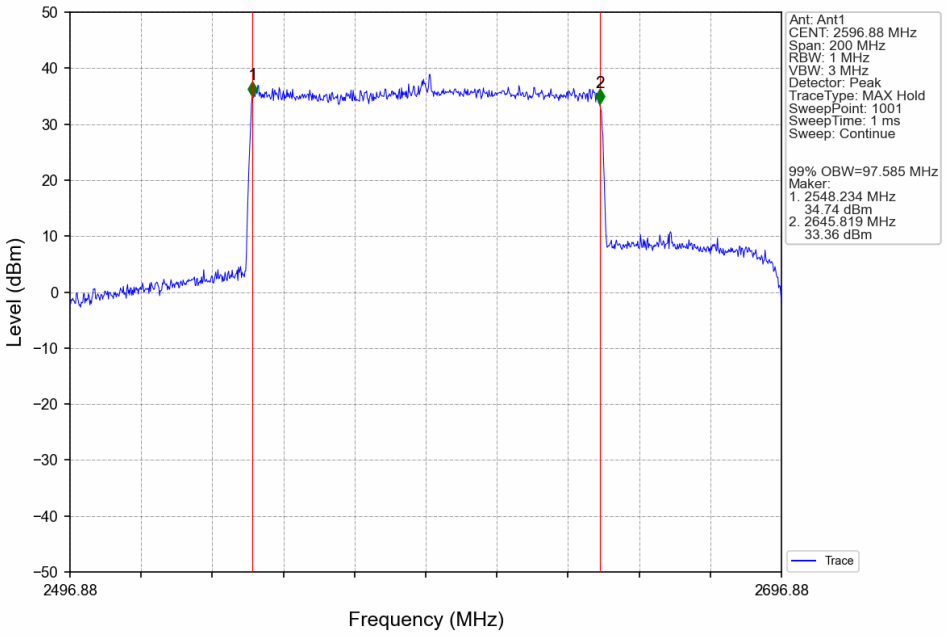
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_Input_AGC



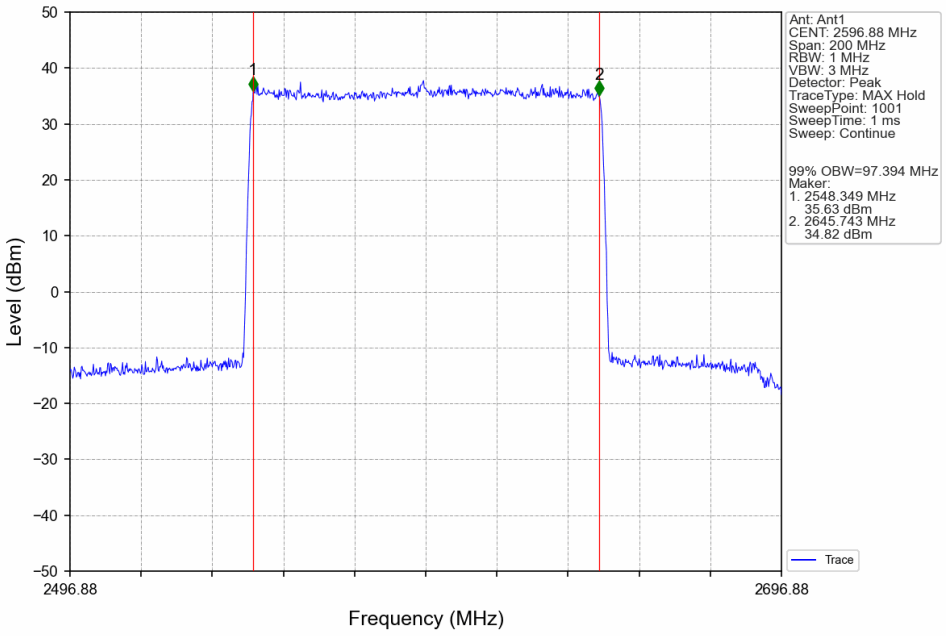
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_Input_AGC+3



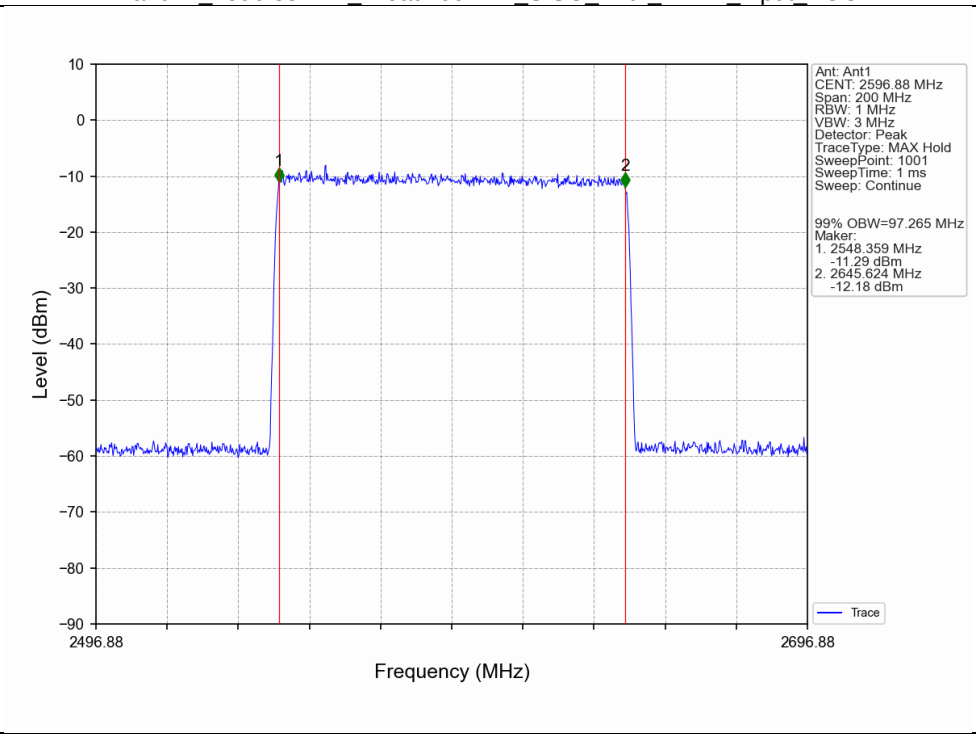
Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC



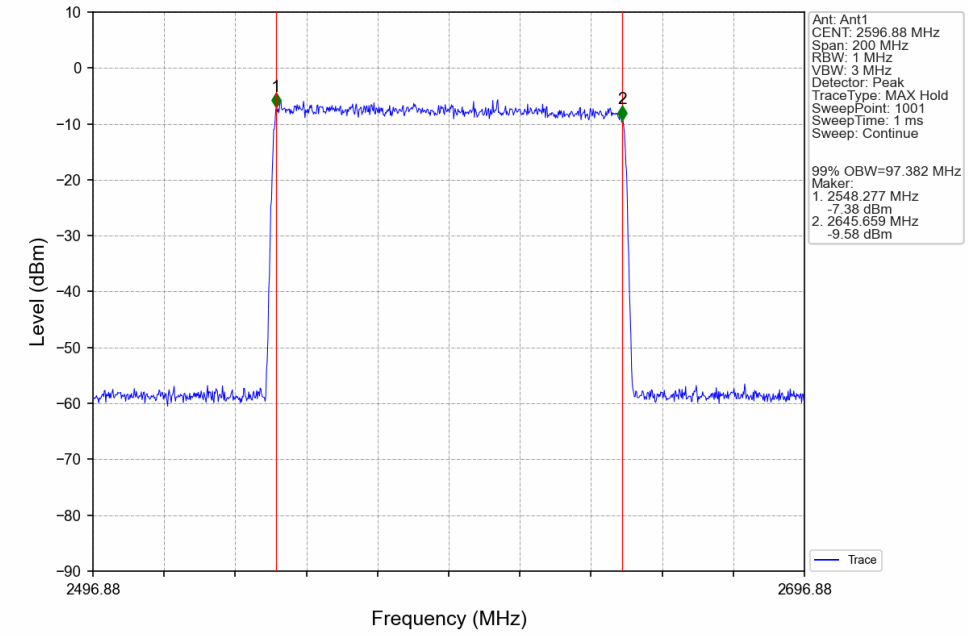
Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC+3



Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC

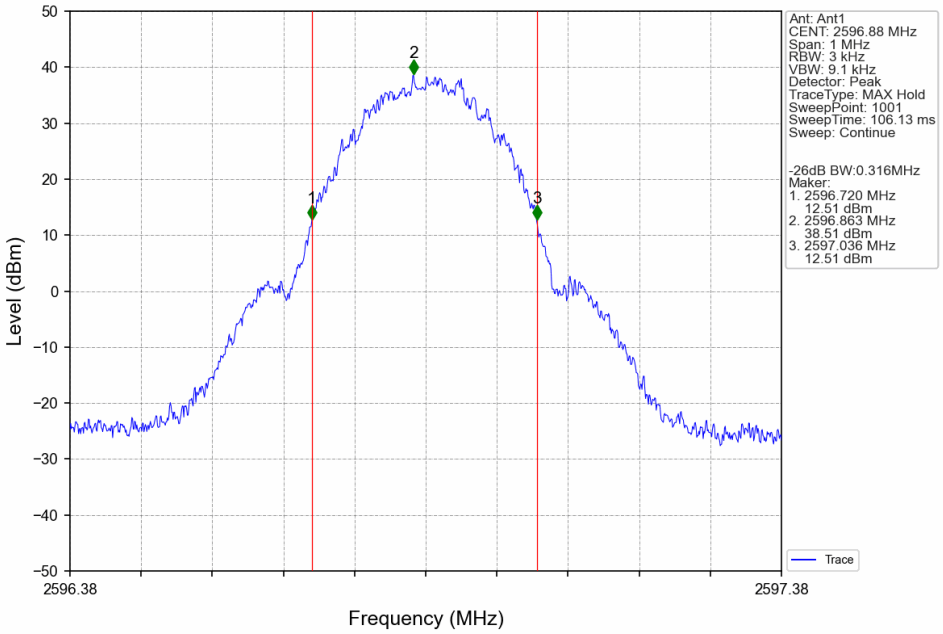


Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC+3

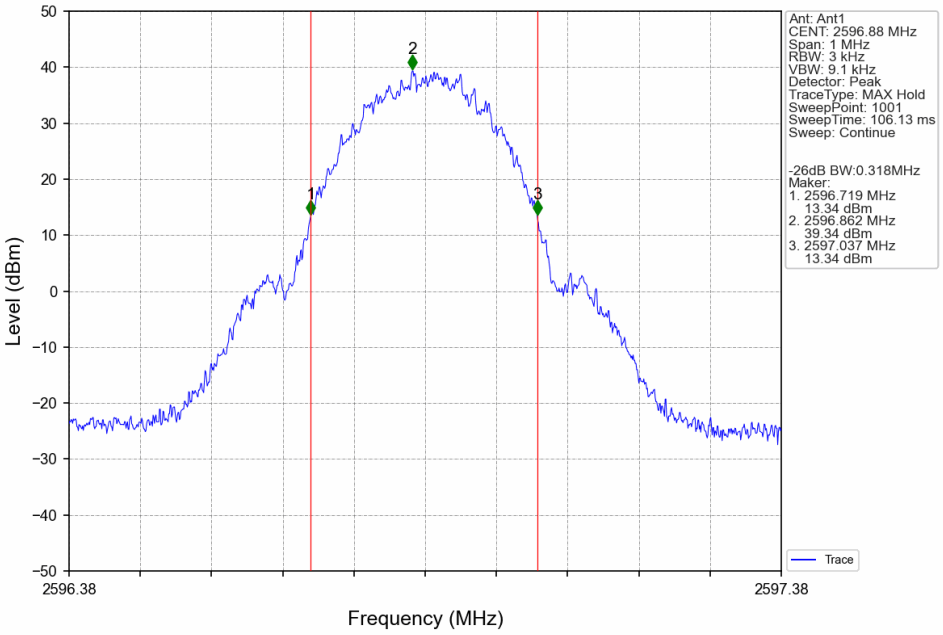


3.2.2 Band41_EBW

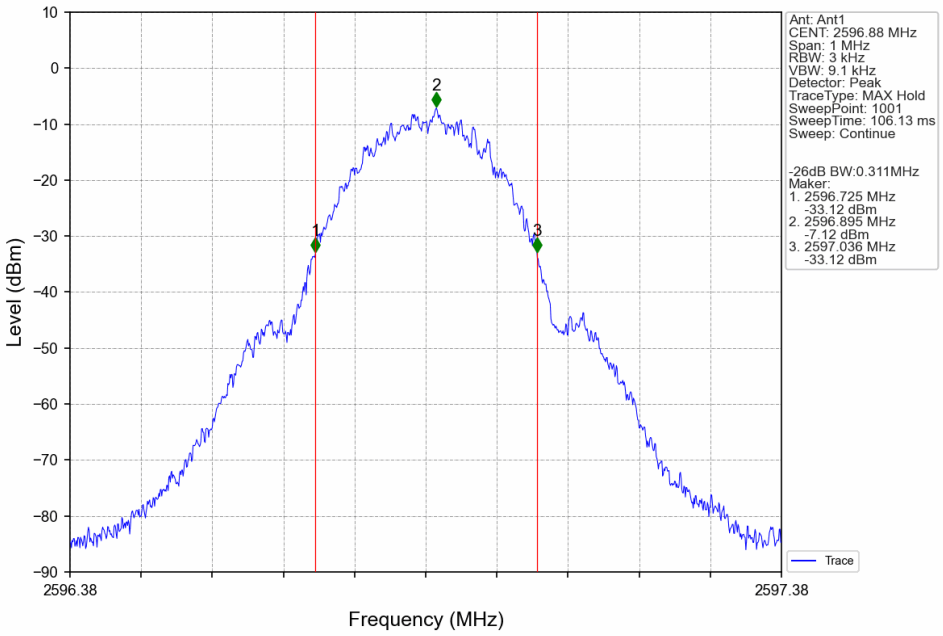
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_Output_AGC



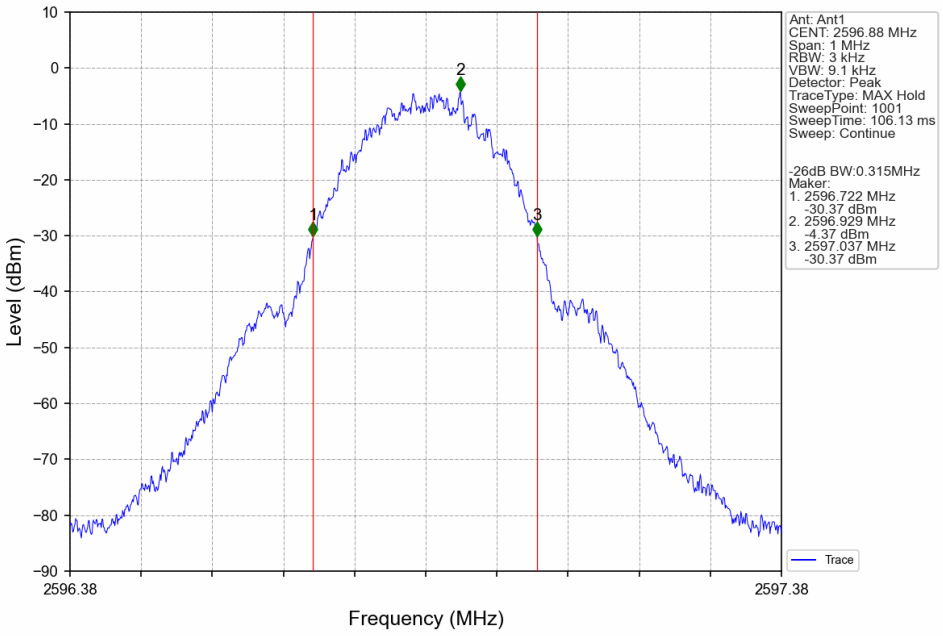
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_Output_AGC+3



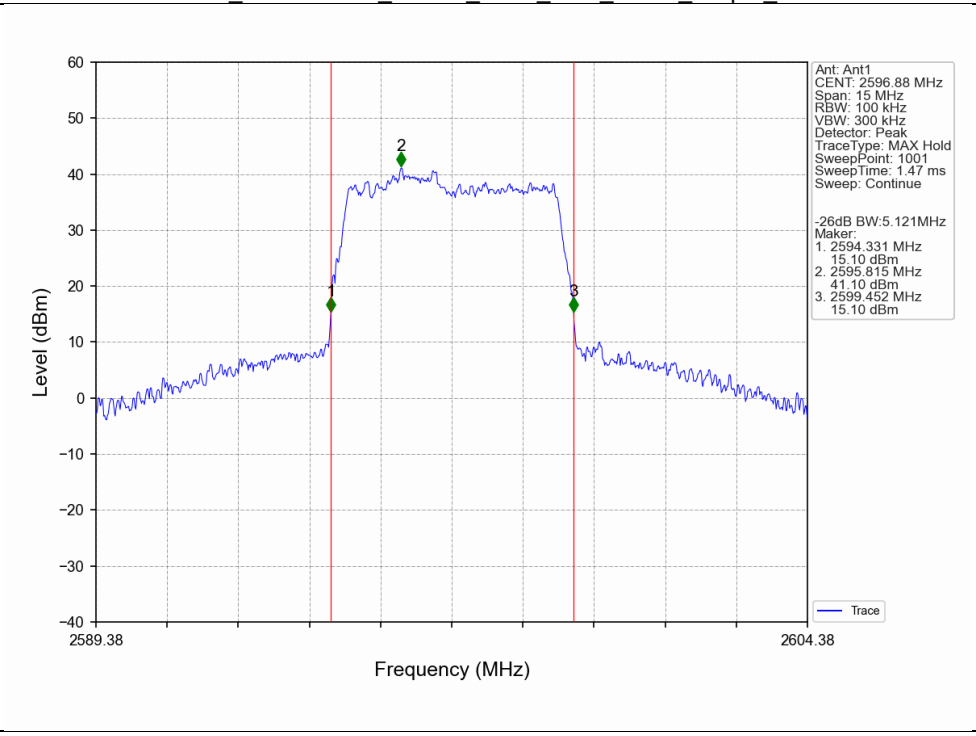
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_Input_AGC



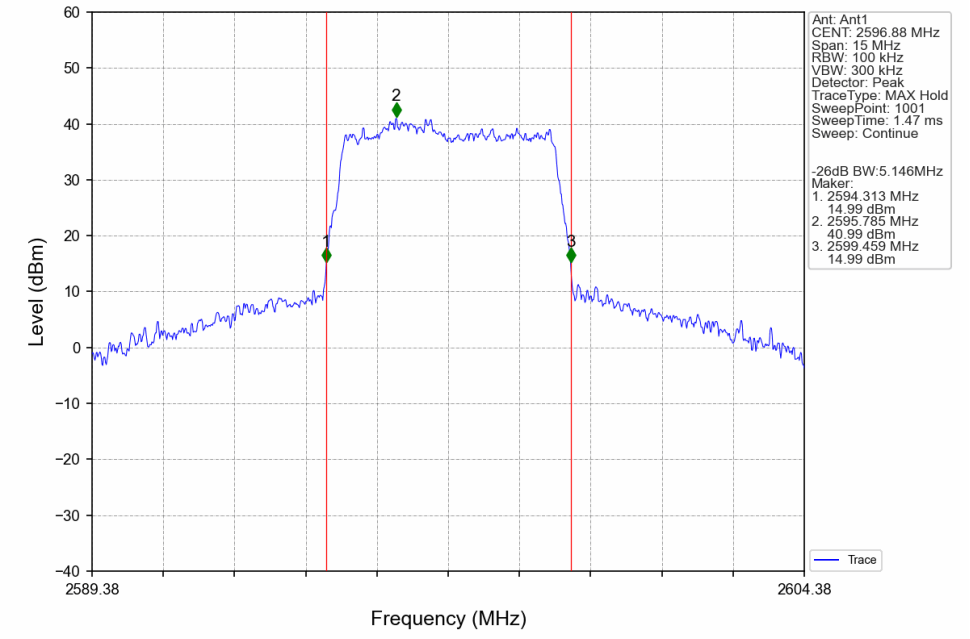
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_Input_AGC+3



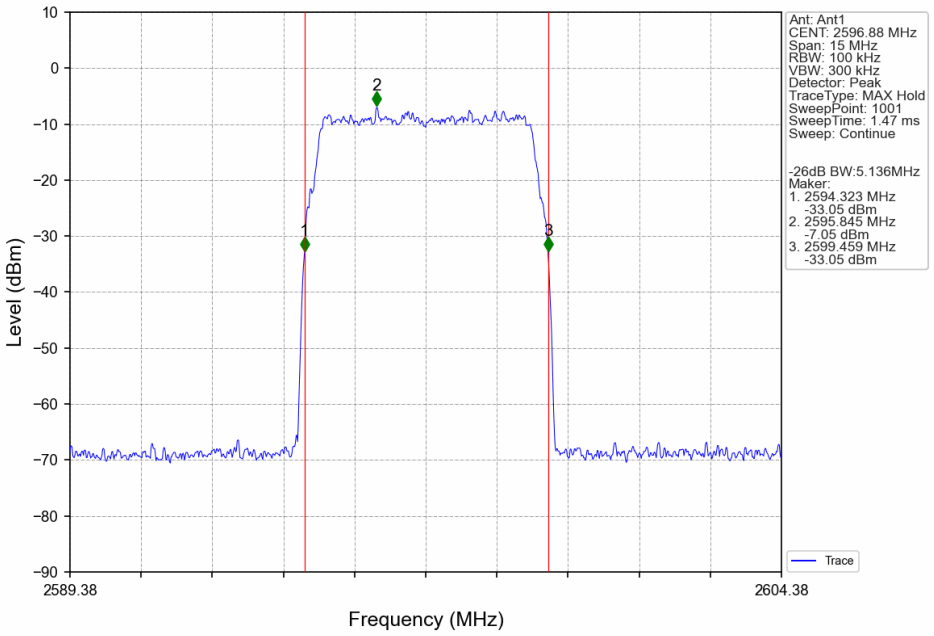
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_Output_AGC



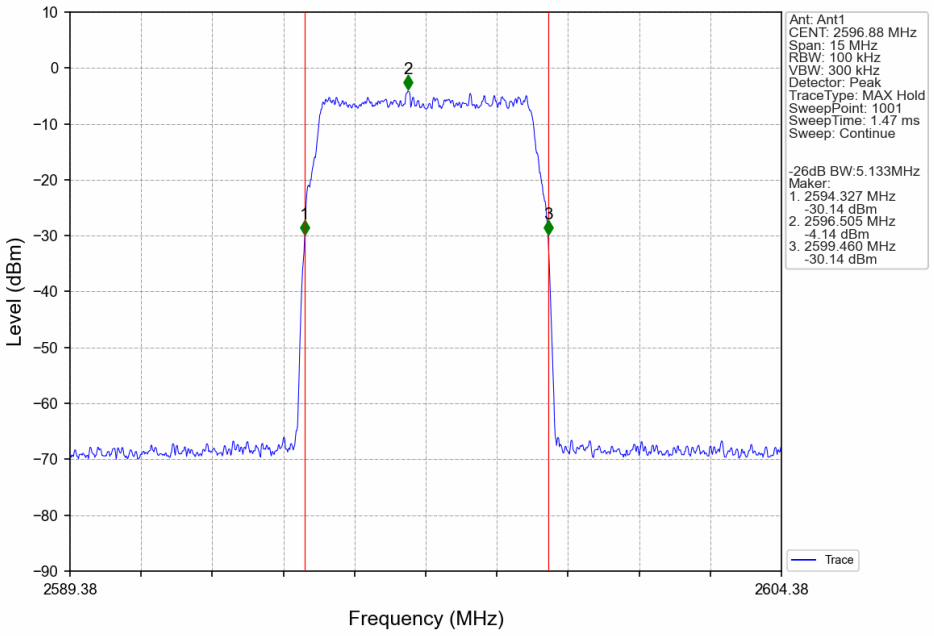
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_Output_AGC+3



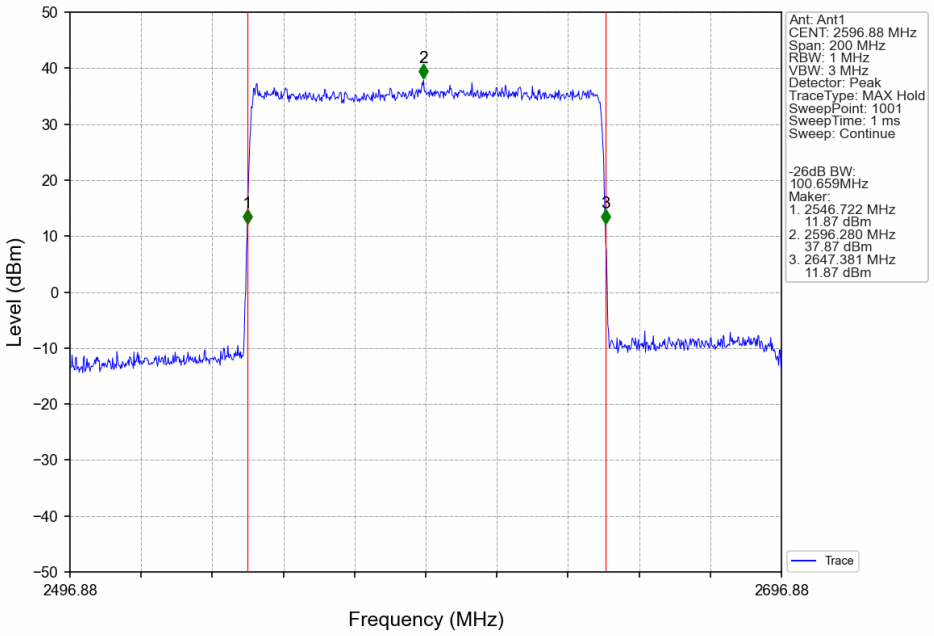
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_Input_AGC



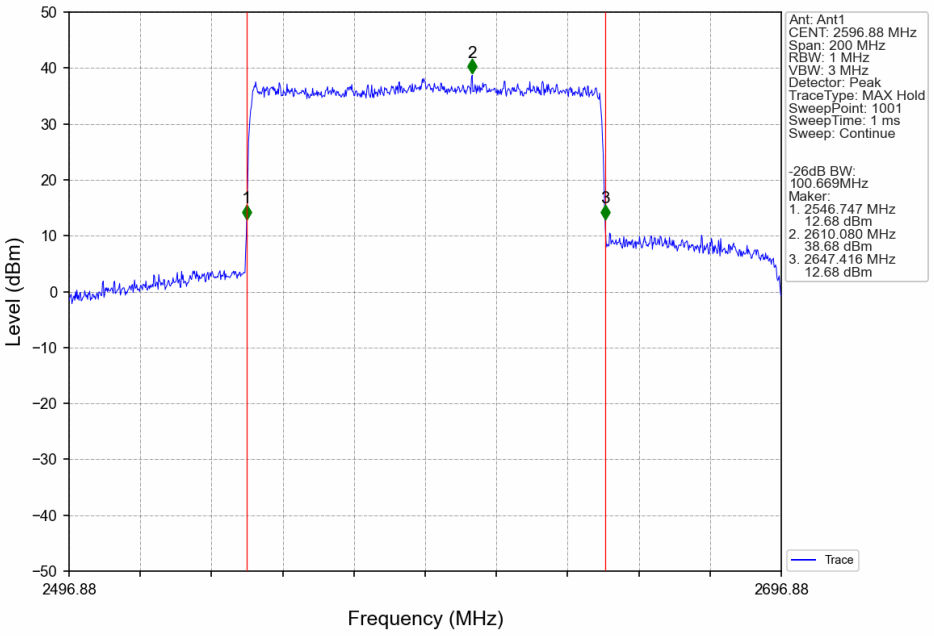
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_Input_AGC+3



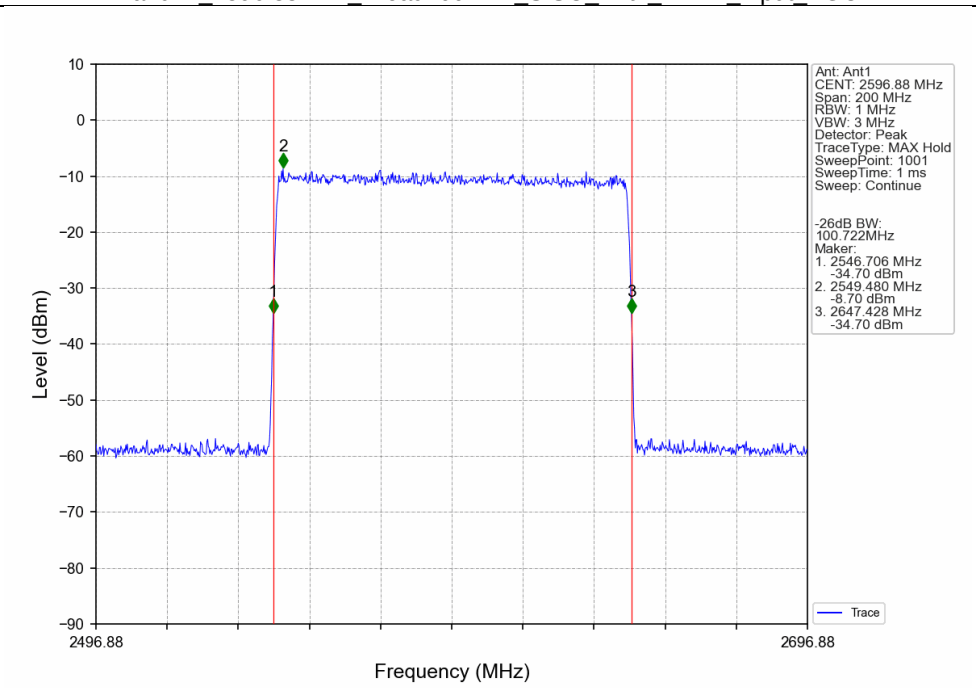
Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC



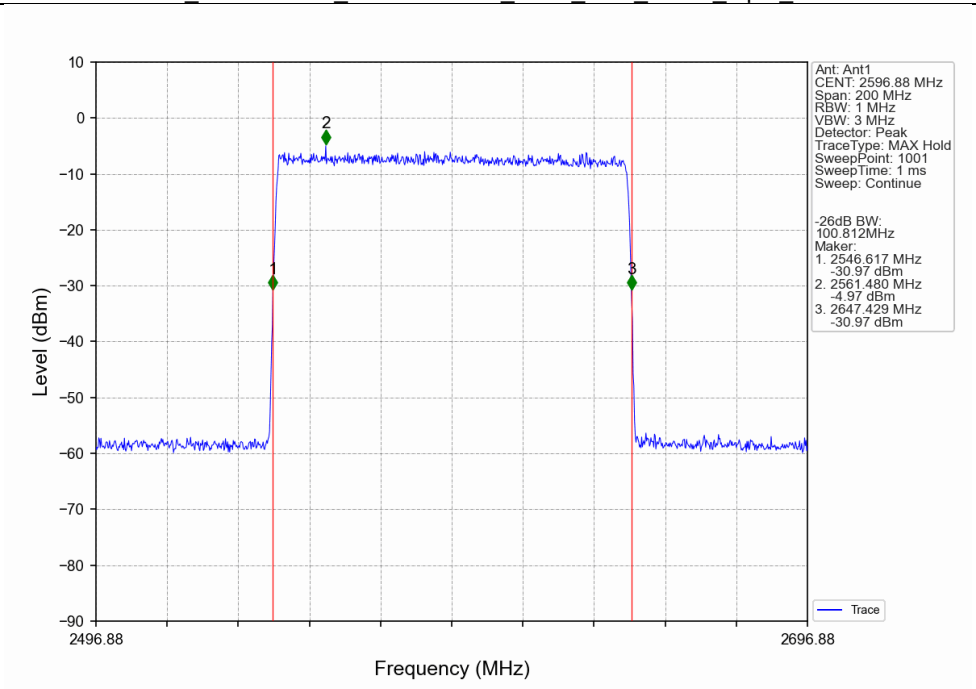
Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC+3



Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC



Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC+3



4. Input/output power and amplifier/booster gain

4.1 Test Result

4.1.1 Band41_EIRP

Band: 41 / NTNV											
Signal			TX Type	ANT	Conducted Power (dBm)		Antenna Gain (dB)	EIRP (dBm)		Booster Gain (dB)	Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input		Result	Limit		
GMSK	-0.1	2596.88	SISO	1	45.78	-0.05	11	56.78	<=63	45.83	Pass
0.2MHz	2.9	2596.88	SISO	1	45.81	2.93	11	56.81	<=63	/	Pass
AWGN	-0.1	2596.88	SISO	1	45.01	-0.07	11	56.01	<=63	45.08	Pass
5MHz	2.9	2596.88	SISO	1	45.09	2.91	11	56.09	<=63	/	Pass
AWGN	-0.1	2596.88	SISO	1	45.03	-0.08	11	56.03	<=63	45.11	Pass
100MHz	2.9	2596.88	SISO	1	45.23	2.92	11	56.23	<=63	/	Pass

Band: 41 / NTNV											
Signal			Conducted Power (dBm)			Antenna Gain (dB)	EIRP (dBm)			Limit (dBm)	Verdict
Type	Level (dBm)	Frequency (MHz)	SISO	2X2	4X4		SISO	2X2	4X4		
GMSK	-0.1	2596.88	45.78	48.79	51.80	11	56.78	59.79	62.80	<=63	Pass
0.2MHz	2.9	2596.88	45.81	48.82	51.83	11	56.81	59.82	62.83	<=63	Pass
AWGN	-0.1	2596.88	45.01	48.02	51.03	11	56.01	59.02	62.03	<=63	Pass
5MHz	2.9	2596.88	45.09	48.10	51.11	11	56.09	59.10	62.11	<=63	Pass
AWGN	-0.1	2596.88	45.03	48.04	51.05	11	56.03	59.04	62.05	<=63	Pass
100MHz	2.9	2596.88	45.23	48.24	51.25	11	56.23	59.24	62.25	<=63	Pass

Note: EUT supports MIMO and each antenna port is the same, according to C63.26 6.4,a coefficient is added to the single antenna port power to calculate the total power.2x2 MIMO add 10lg(2)=3.01 dB,4x4 MIMO add 10lg(4)=6.02 dB.

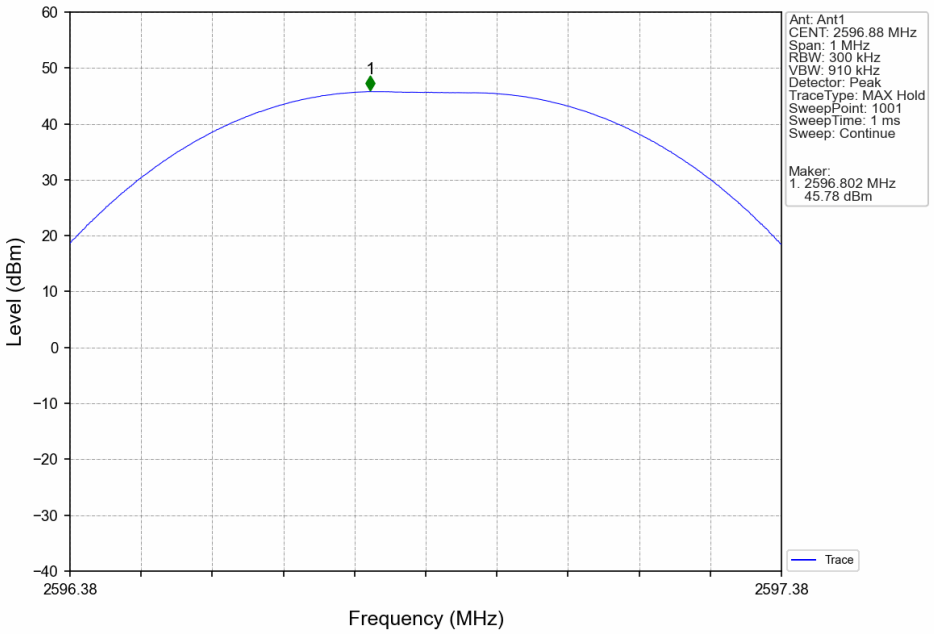
4.1.2 Band41_PAPR

Band: 41 / NTNV						
Signal			TX Type	ANT	PAPR (dB)		Verdict
Type	Level (dBm)	Frequency (MHz)			Result	Limit	
GMSK	-0.1	2596.88	SISO	1	0.40	<=13	Pass
0.2MHz	2.9	2596.88	SISO	1	0.37	<=13	Pass
AWGN	-0.1	2596.88	SISO	1	7.77	<=13	Pass
5MHz	2.9	2596.88	SISO	1	7.38	<=13	Pass
AWGN	-0.1	2596.88	SISO	1	8.47	<=13	Pass
100MHz	2.9	2596.88	SISO	1	8.41	<=13	Pass

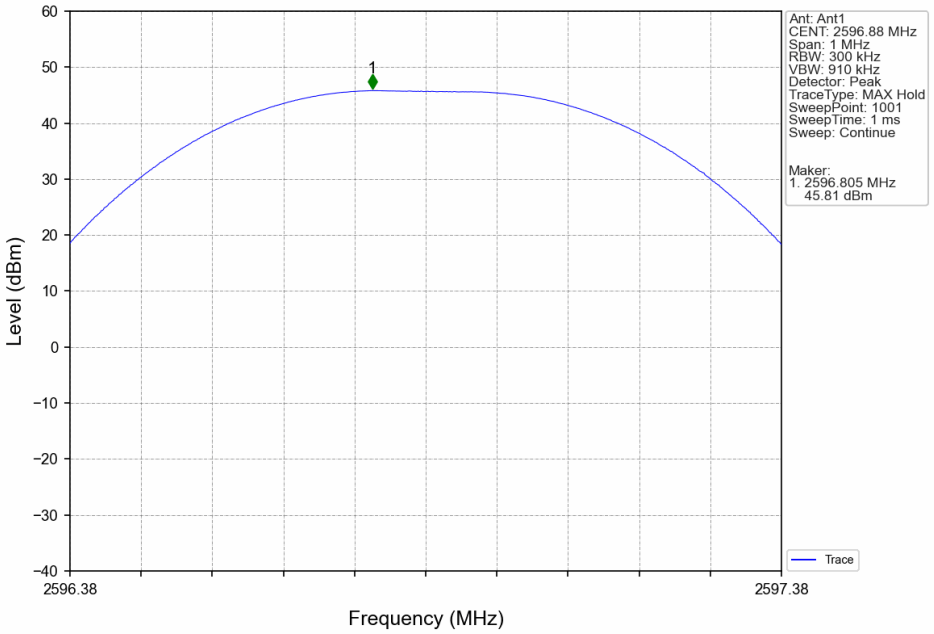
4.2 Test Graph

4.2.1 Band41_EIRP

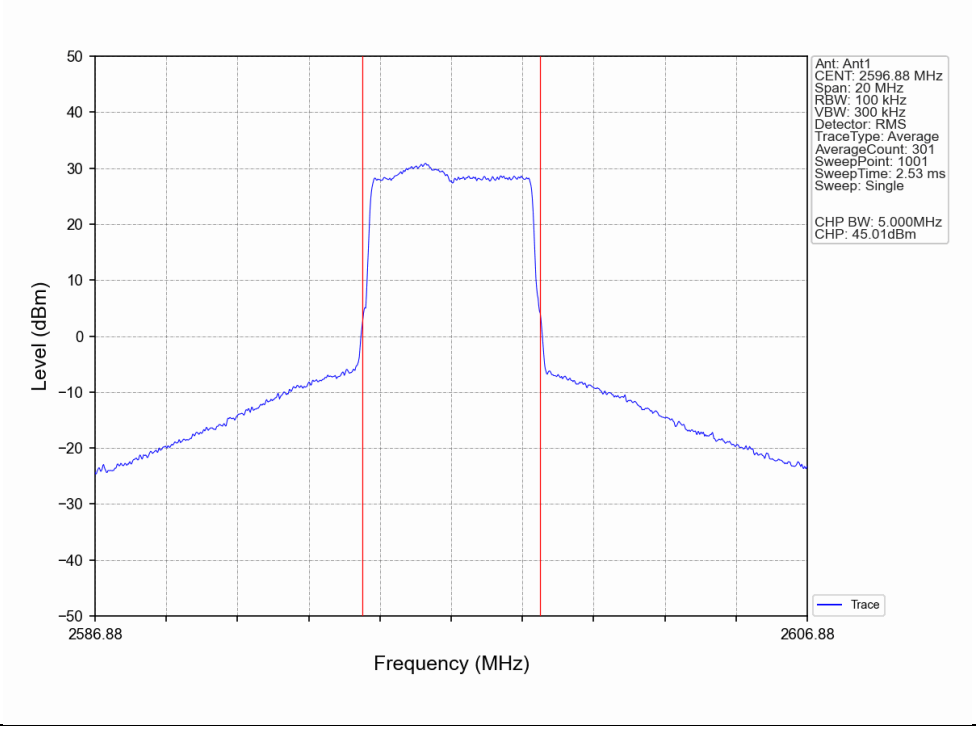
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_AGC



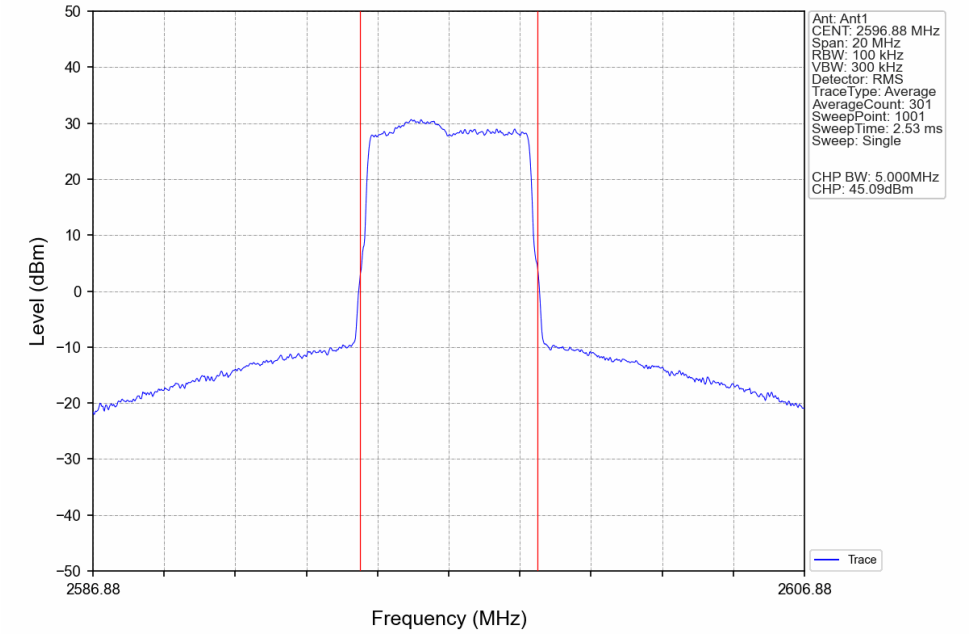
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_AGC+3



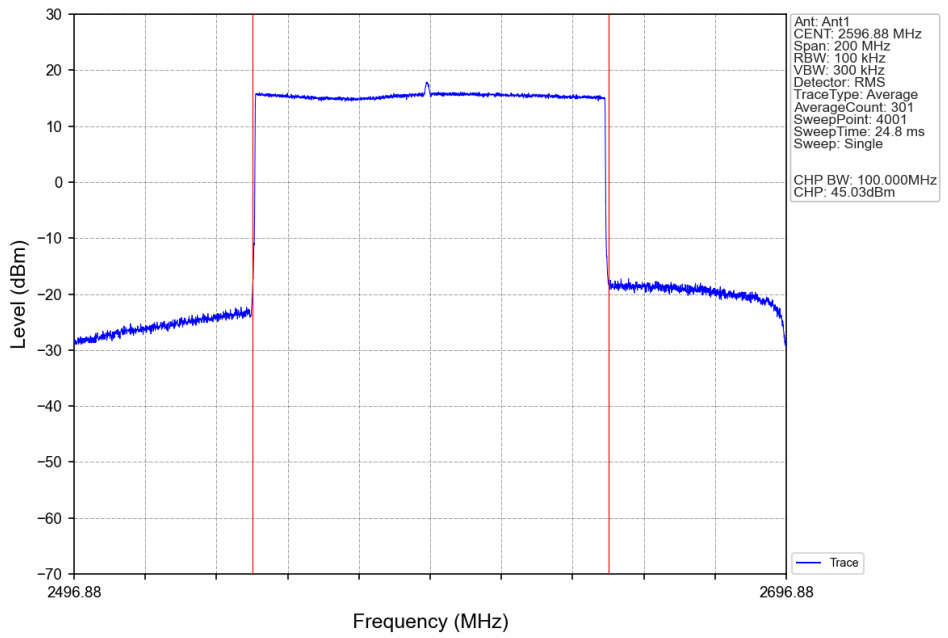
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_AGC



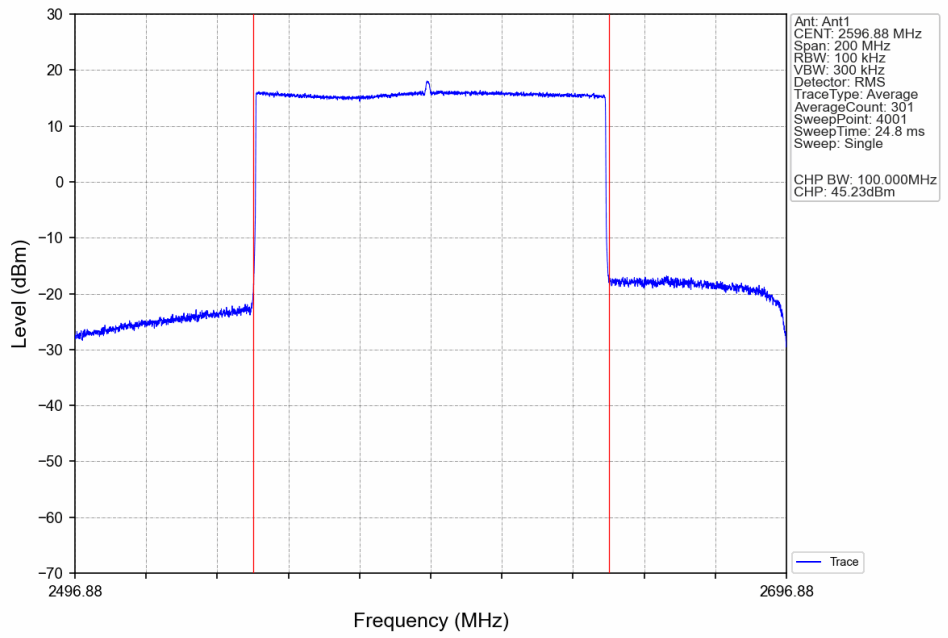
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_AGC+3



Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_AGC

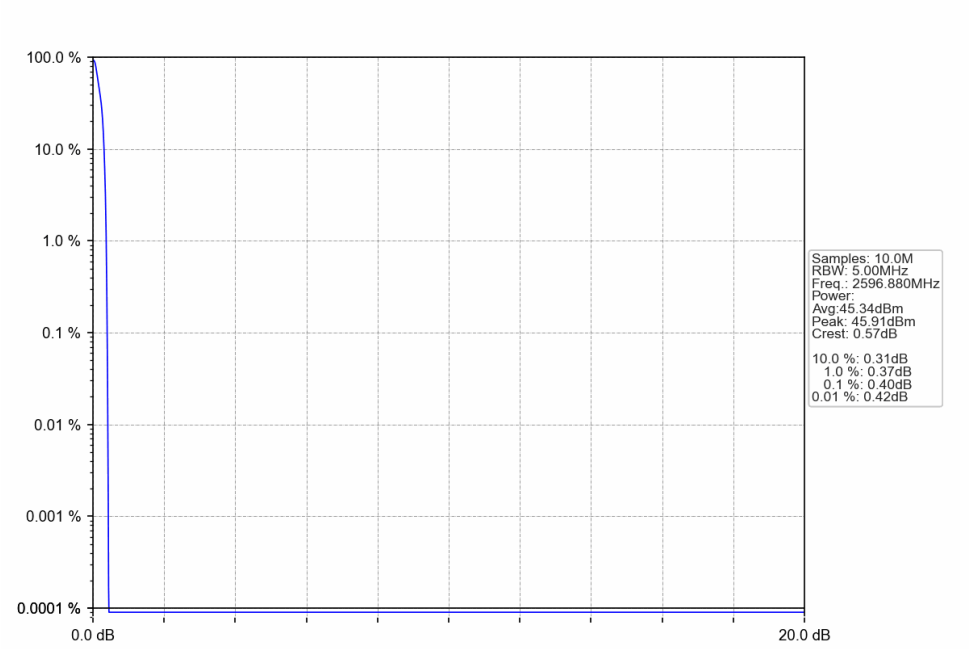


Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3

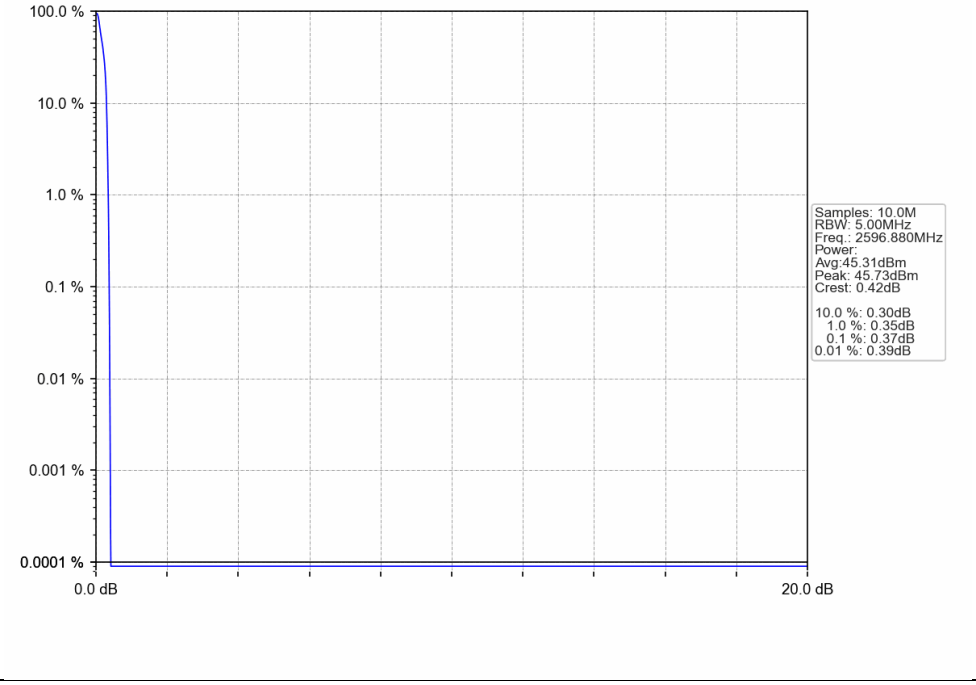


4.2.2 Band41_PAPR

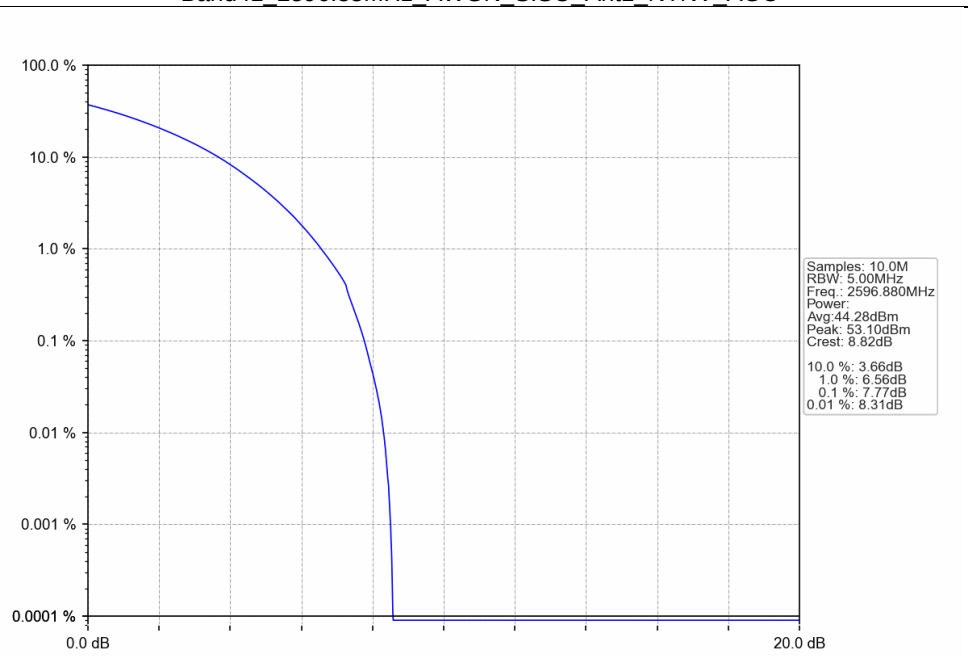
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_AGC



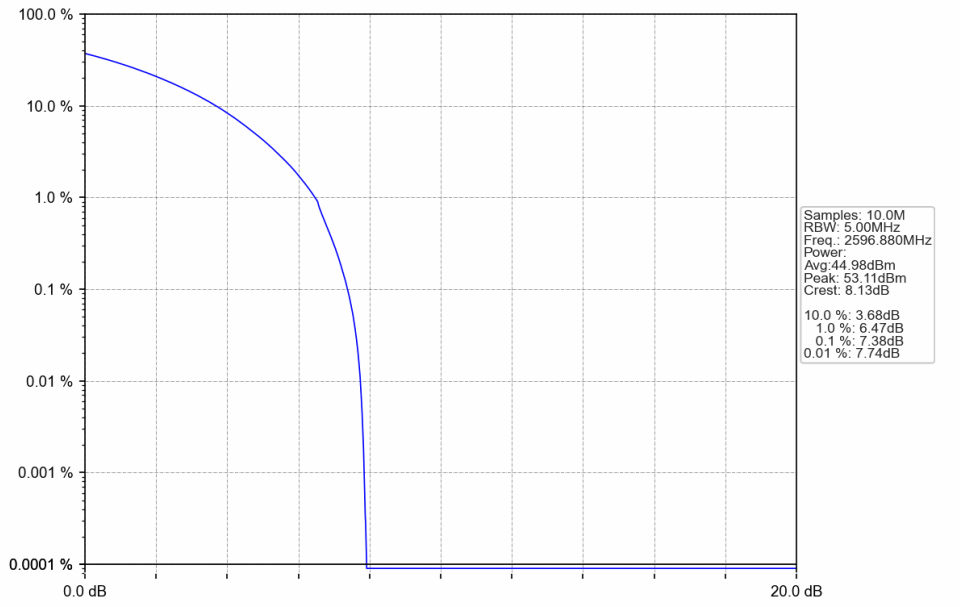
Band41_2596.88MHz_GMSK_SISO_Ant1_NTNV_AGC+3



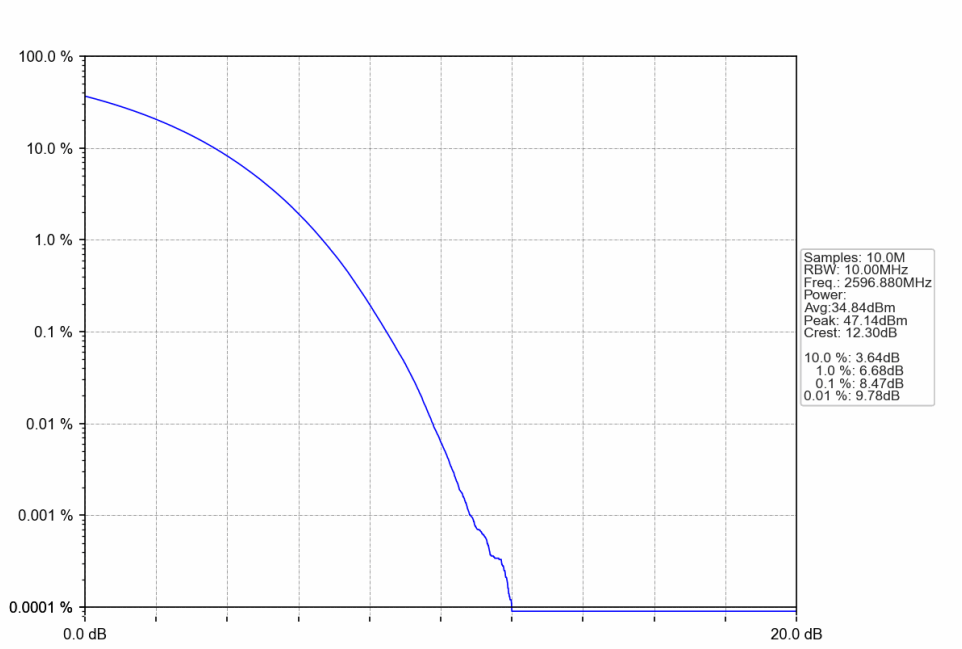
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_AGC



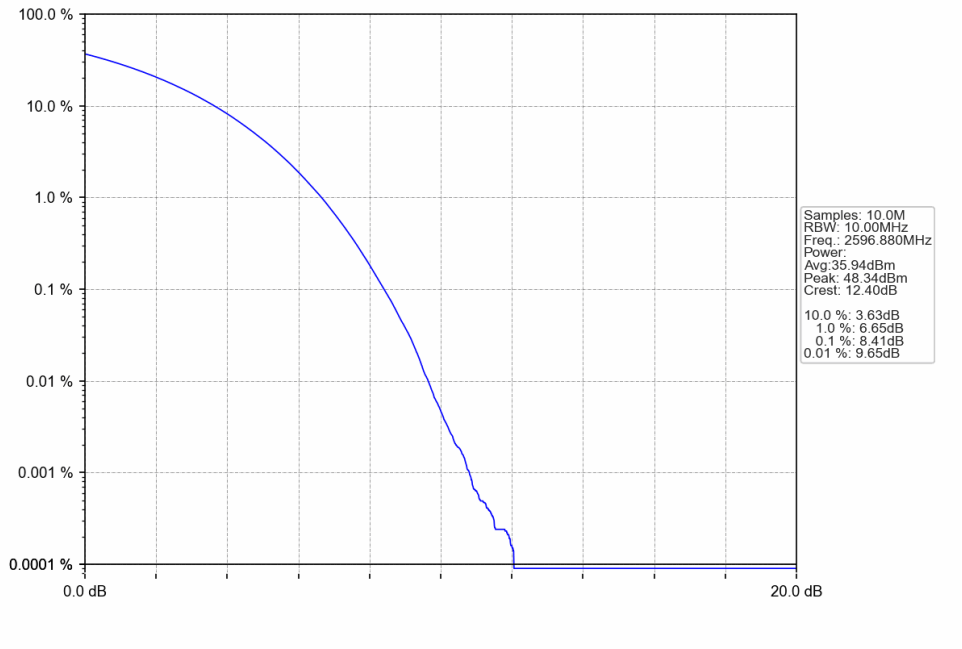
Band41_2596.88MHz_AWGN_SISO_Ant1_NTNV_AGC+3



Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



Band41_2596.88MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3



5. Out-of-band/out-of-block (including intermodulation) emissions

5.1 Test Result

5.1.1 Band41

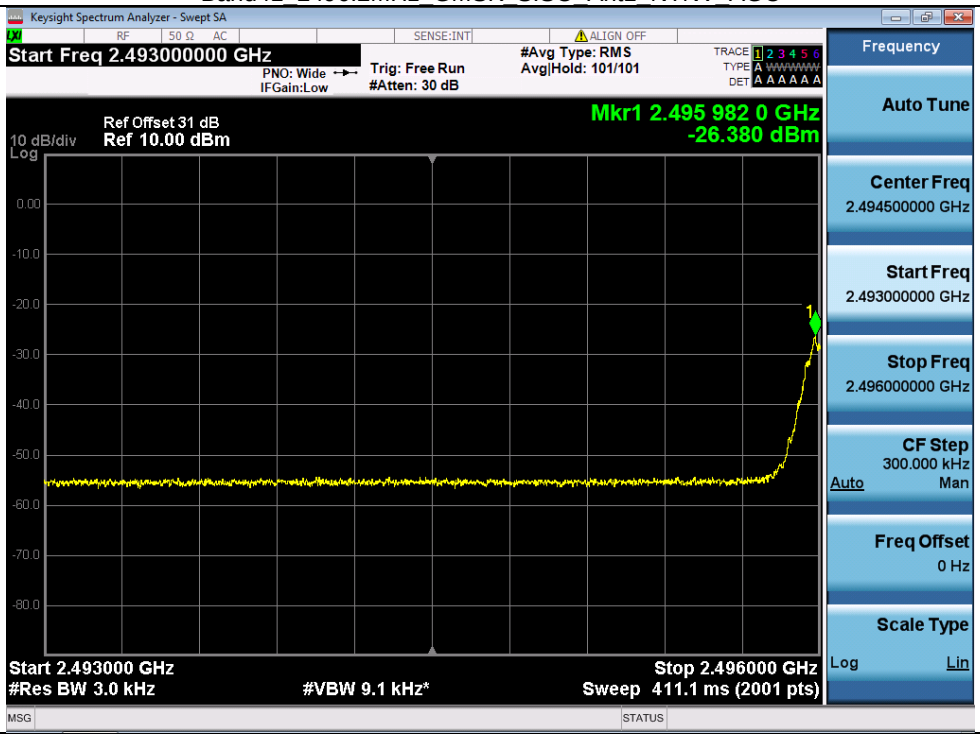
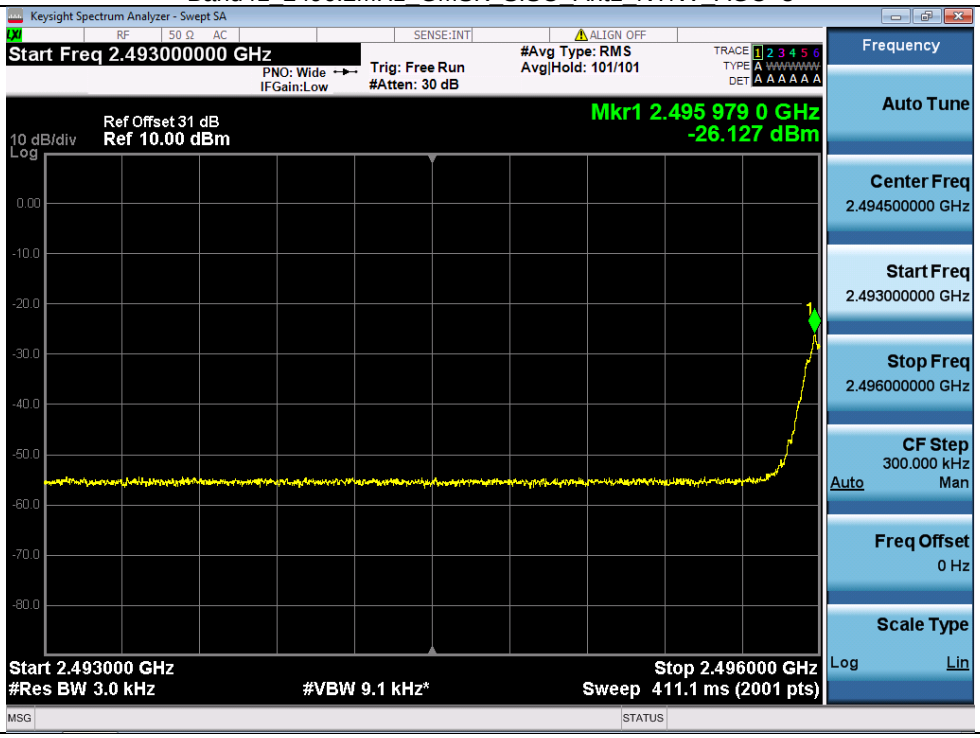
Band: 41 / NTNV									
Signal				Channel	TX Type	ANT	OOB (dBm)		Verdict
Input	Type	Level (dBm)	Frequency (MHz)				Result	Limit	
Two	GMSK 0.2MHz	-0.1	2496.2	LCH	SISO	1	-26.380	Refer To Test Graph	Pass
		2.9	2496.2	LCH	SISO	1	-26.127	Refer To Test Graph	Pass
One	GMSK 0.2MHz	-0.1	2496.2	LCH	SISO	1	-25.982	Refer To Test Graph	Pass
		2.9	2496.2	LCH	SISO	1	-26.538	Refer To Test Graph	Pass
Two	GMSK 0.2MHz	-0.1	2689.8	HCH	SISO	1	-25.642	Refer To Test Graph	Pass
		2.9	2689.8	HCH	SISO	1	-25.975	Refer To Test Graph	Pass
One	GMSK 0.2MHz	-0.1	2689.8	HCH	SISO	1	-25.823	Refer To Test Graph	Pass
		2.9	2689.8	HCH	SISO	1	-25.794	Refer To Test Graph	Pass
Two	AWGN 5MHz	-0.1	2498.5	LCH	SISO	1	-21.894	Refer To Test Graph	Pass
		2.9	2498.5	LCH	SISO	1	-22.823	Refer To Test Graph	Pass
One	AWGN 5MHz	-0.1	2498.5	LCH	SISO	1	-23.000	Refer To Test Graph	Pass
		2.9	2498.5	LCH	SISO	1	-22.026	Refer To Test Graph	Pass
Two	AWGN 5MHz	-0.1	2687.5	HCH	SISO	1	-21.500	Refer To Test Graph	Pass
		2.9	2687.5	HCH	SISO	1	-21.844	Refer To Test Graph	Pass
One	AWGN 5MHz	-0.1	2687.5	HCH	SISO	1	-22.041	Refer To Test Graph	Pass
		2.9	2687.5	HCH	SISO	1	-23.456	Refer To Test Graph	Pass
Two	AWGN 100MHz	-0.1	2546	LCH	SISO	1	-22.503	Refer To Test Graph	Pass
		2.9	2546	LCH	SISO	1	-22.302	Refer To Test Graph	Pass
One	AWGN 100MHz	-0.1	2546	LCH	SISO	1	-22.815	Refer To Test Graph	Pass
		2.9	2546	LCH	SISO	1	-22.532	Refer To Test Graph	Pass
Two	AWGN 100MHz	-0.1	2640	HCH	SISO	1	-23.294	Refer To Test Graph	Pass
		2.9	2640	HCH	SISO	1	-23.178	Refer To Test Graph	Pass
One	AWGN 100MHz	-0.1	2640	HCH	SISO	1	-23.952	Refer To Test Graph	Pass

		2.9	2640	HCH	SISO	1	-23.347	Refer To Test Graph	Pass

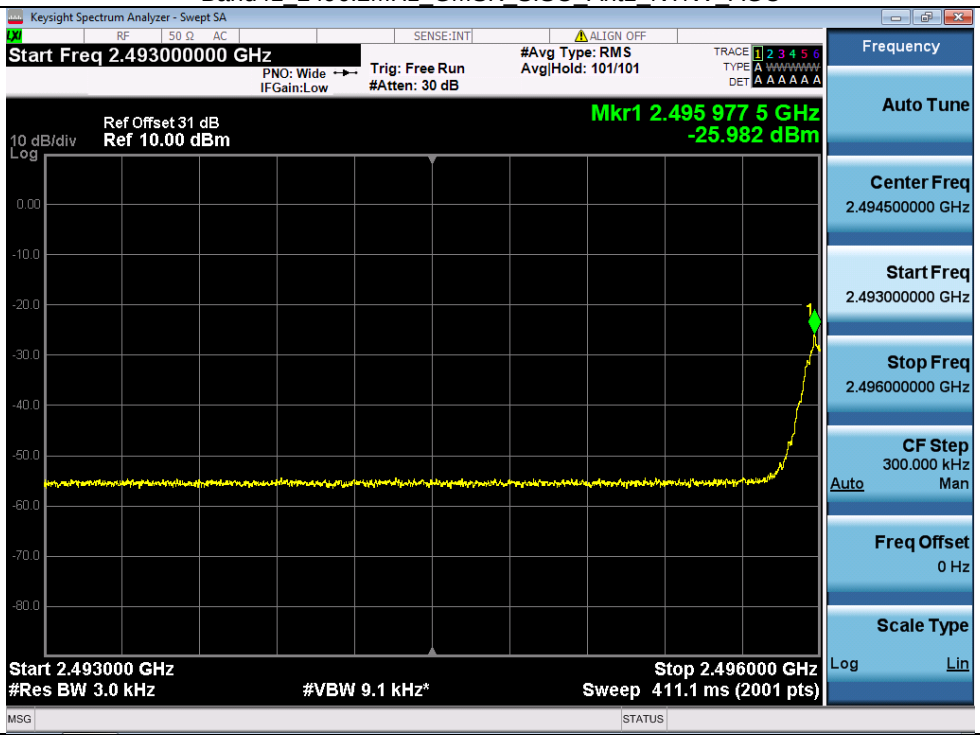
Note: EUT supports 4X4 MIMO, with 4 antenna ports having the same power. The test results show that the single antenna port has a margin of over 6dB, so the 4x4 MIMO test results determine the pass.

5.2 Test Graph

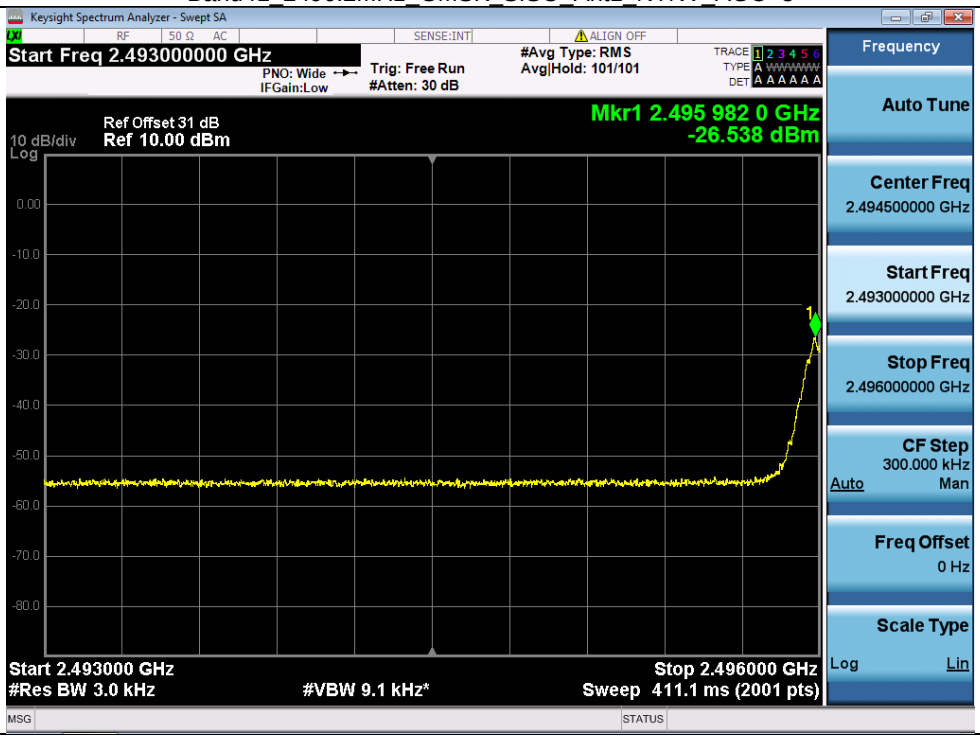
5.2.1 Band41

Band41_2496.2MHz_GMSK_SISO_Ant1_NTNV_AGC

Band41_2496.2MHz_GMSK_SISO_Ant1_NTNV_AGC+3


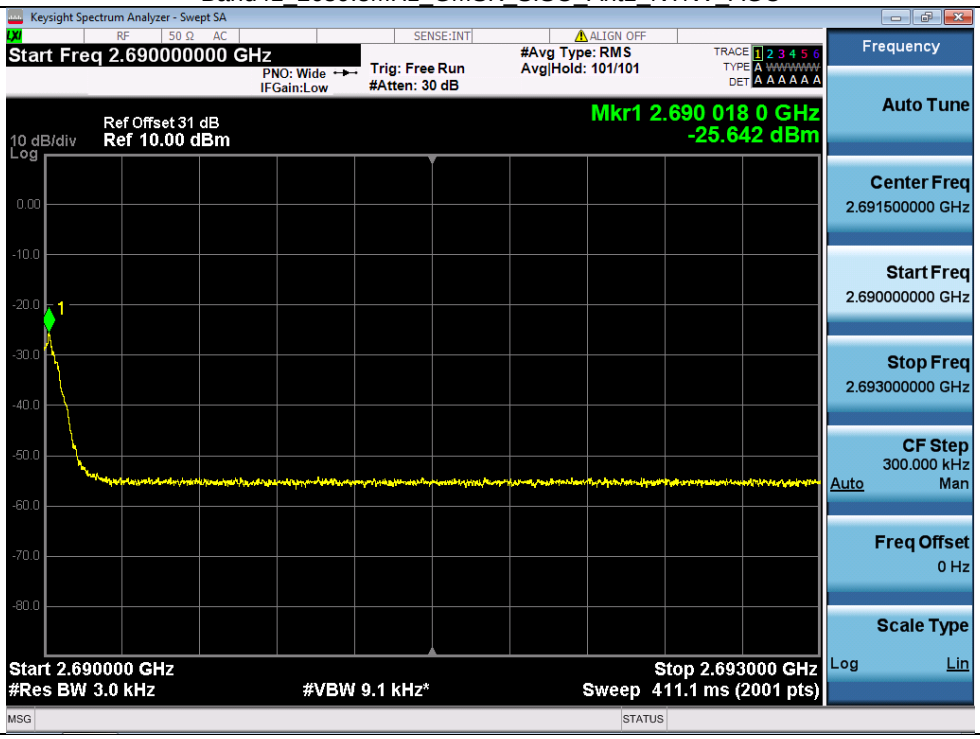
Band41_2496.2MHz_GMSK_SISO_Ant1_NTNV_AGC



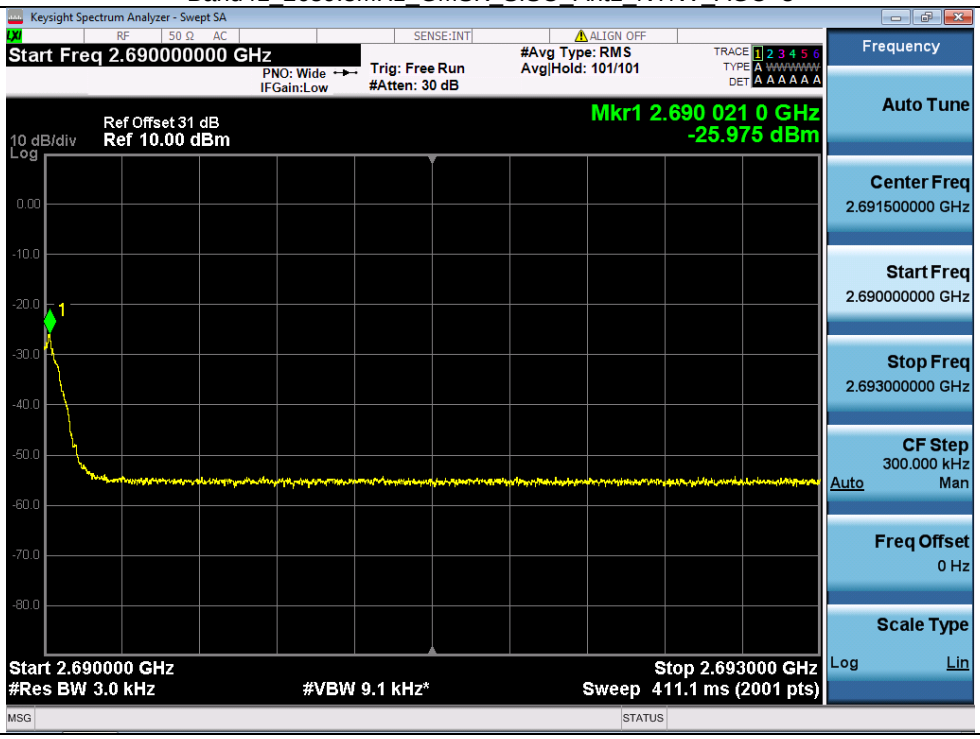
Band41_2496.2MHz_GMSK_SISO_Ant1_NTNV_AGC+3



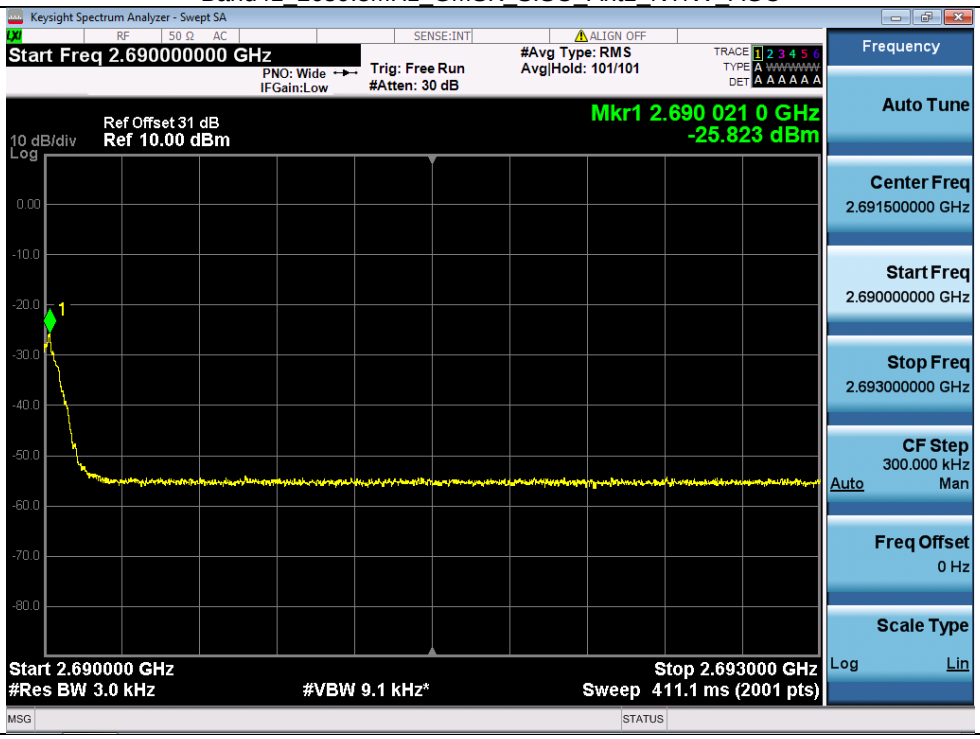
Band41_2689.8MHz_GMSK_SISO_Ant1_NTNV_AGC



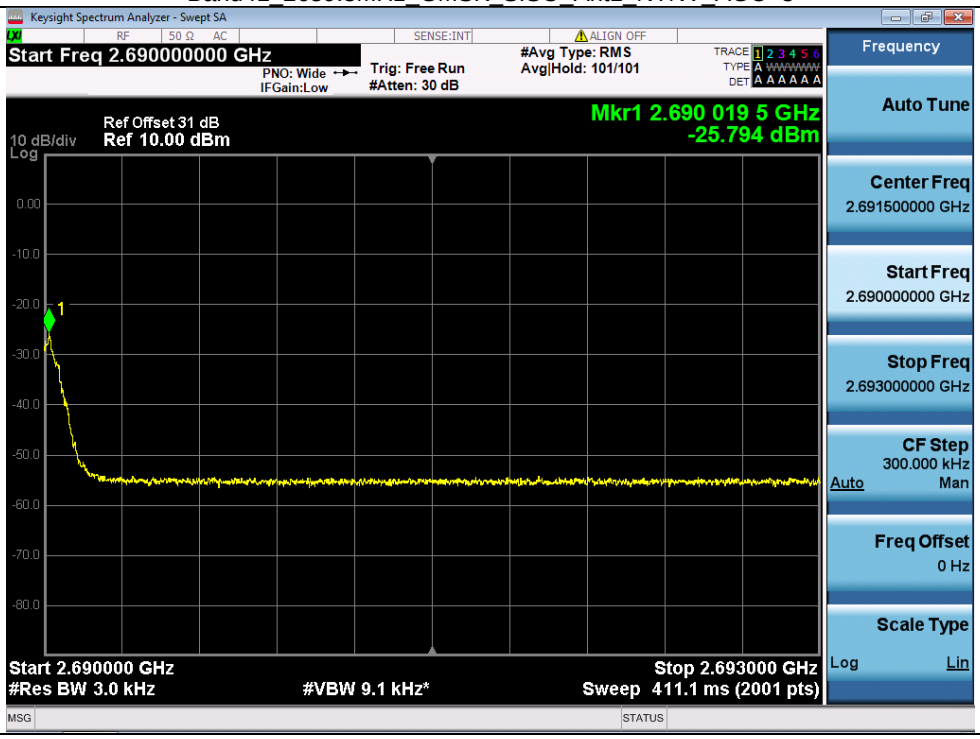
Band41_2689.8MHz_GMSK_SISO_Ant1_NTNV_AGC+3



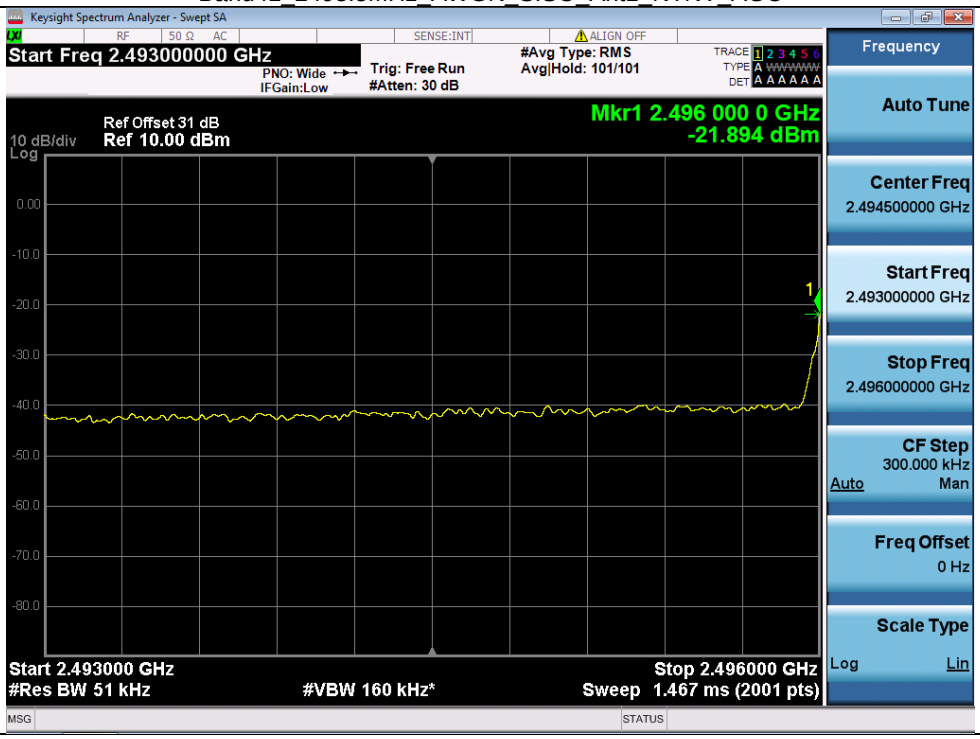
Band41_2689.8MHz_GMSK_SISO_Ant1_NTNV_AGC



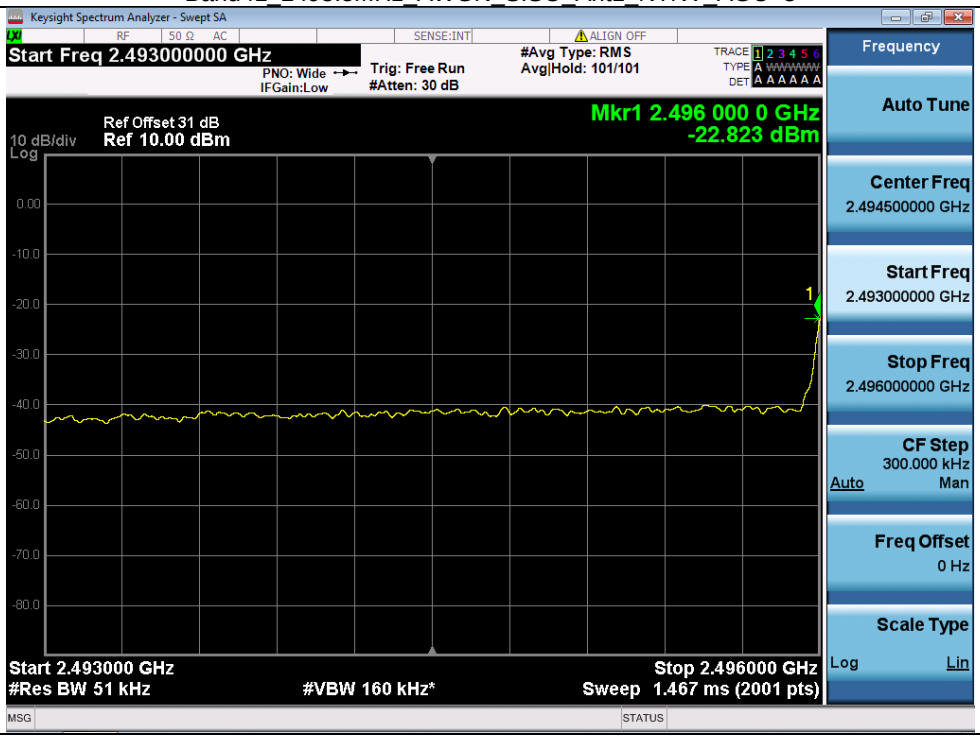
Band41_2689.8MHz_GMSK_SISO_Ant1_NTNV_AGC+3



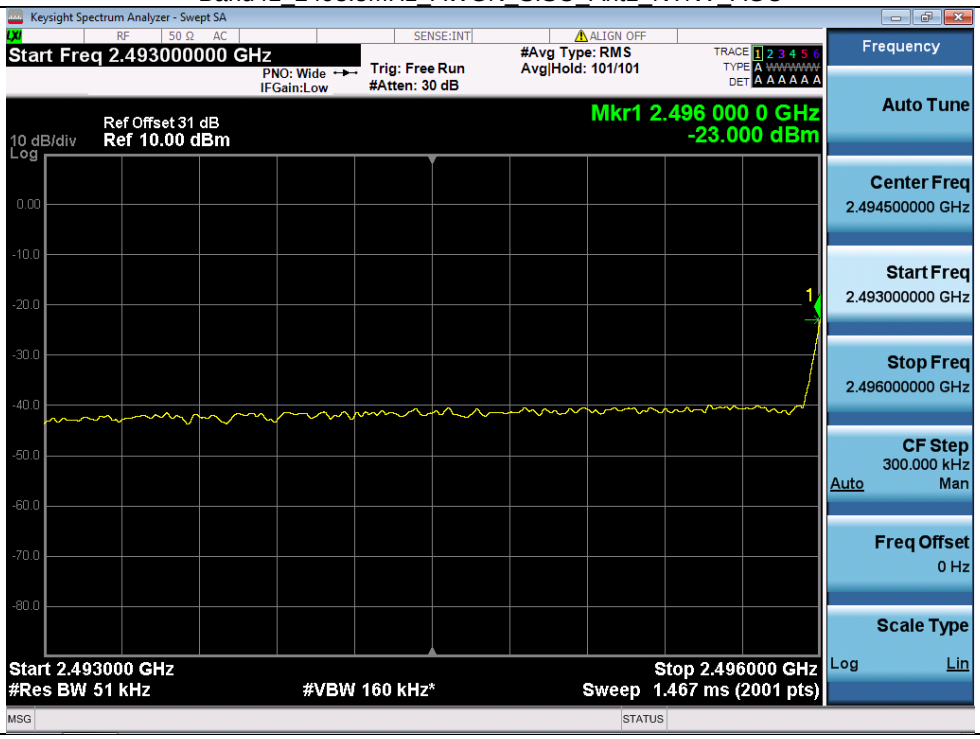
Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV_AGC



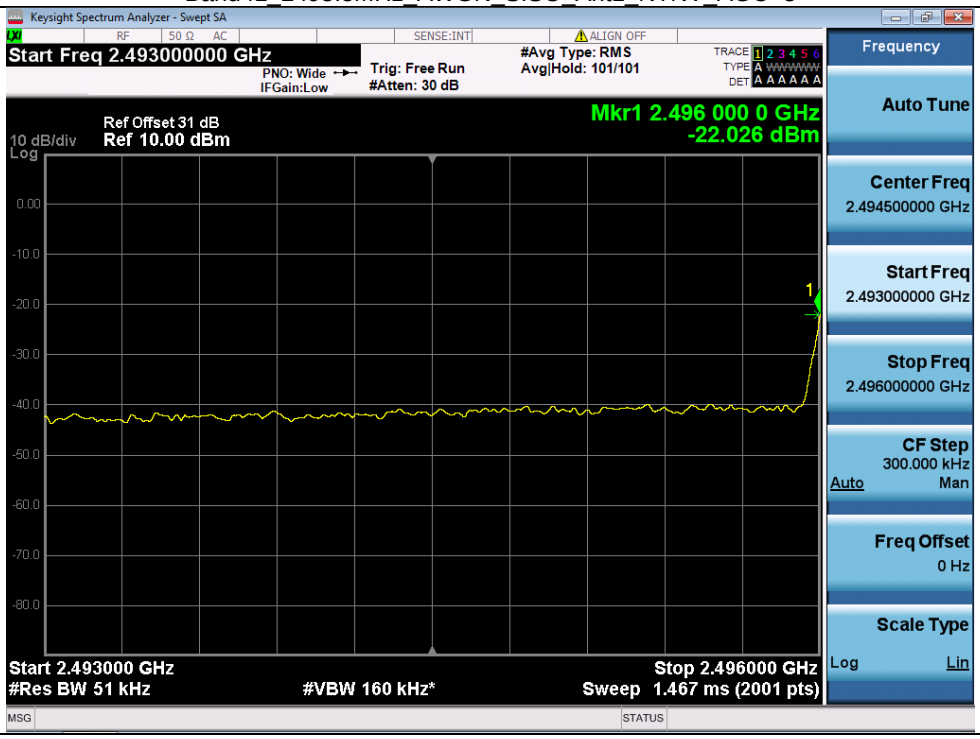
Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3



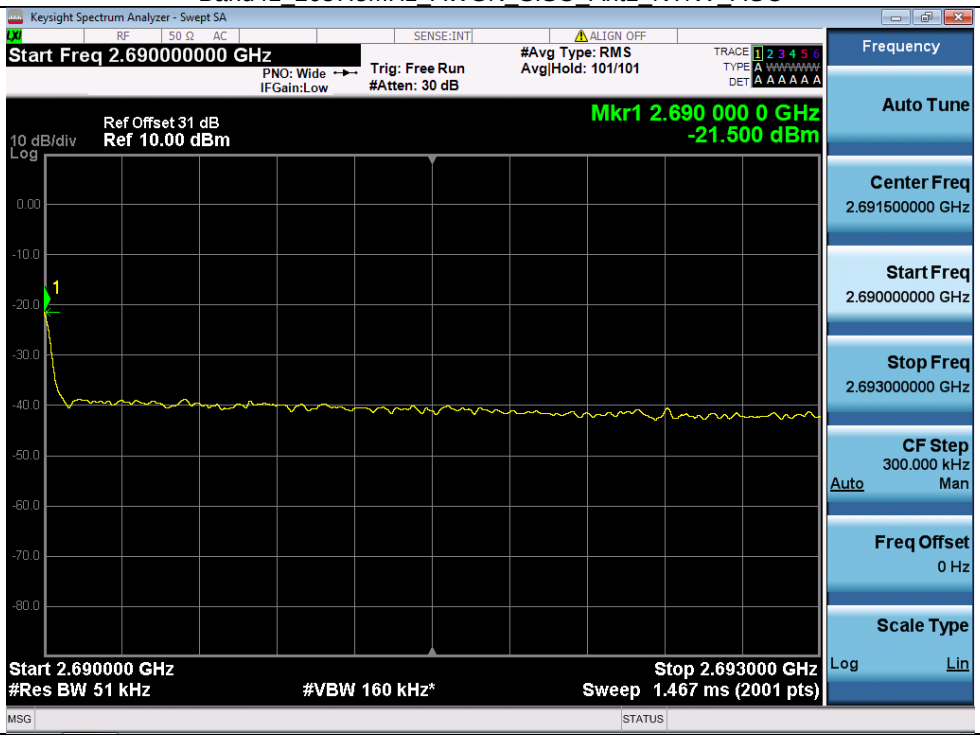
Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV_AGC



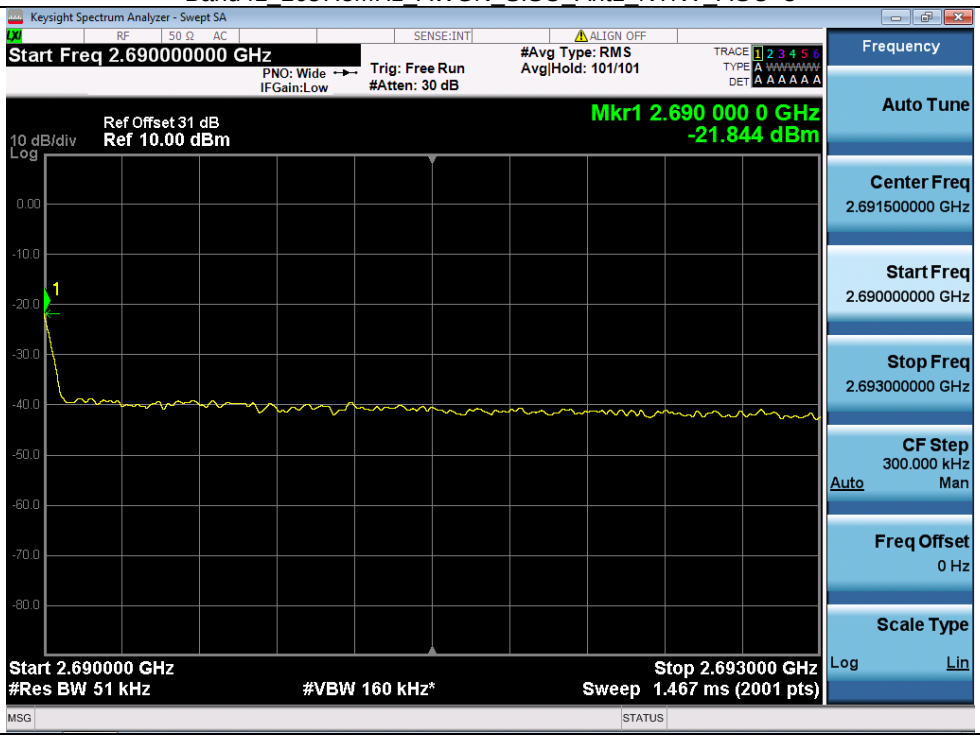
Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3



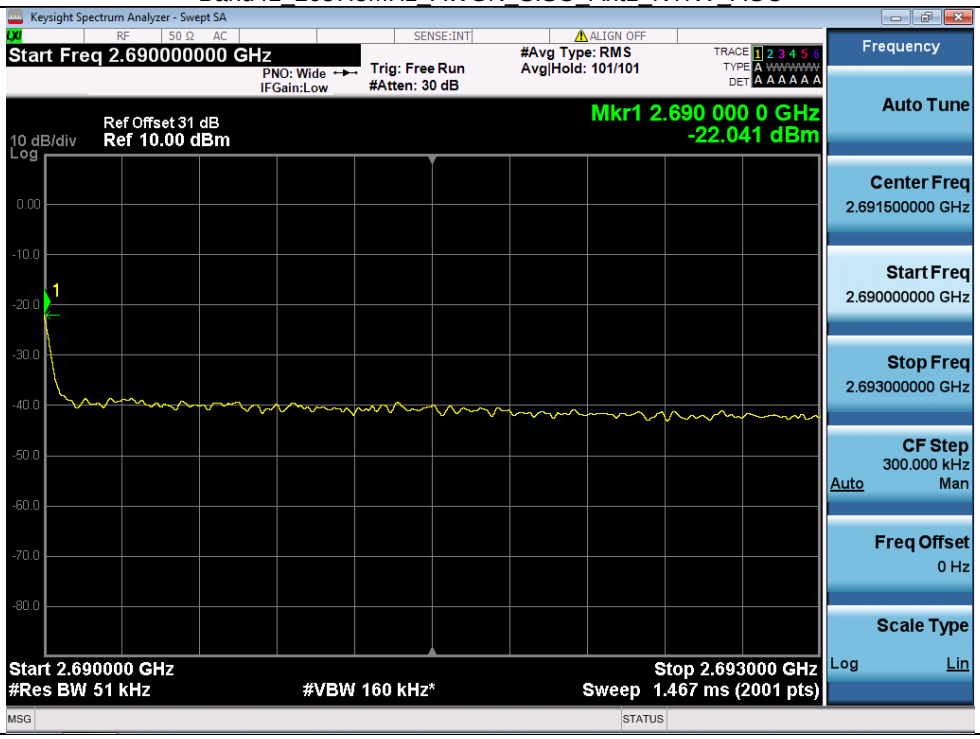
Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV_AGC



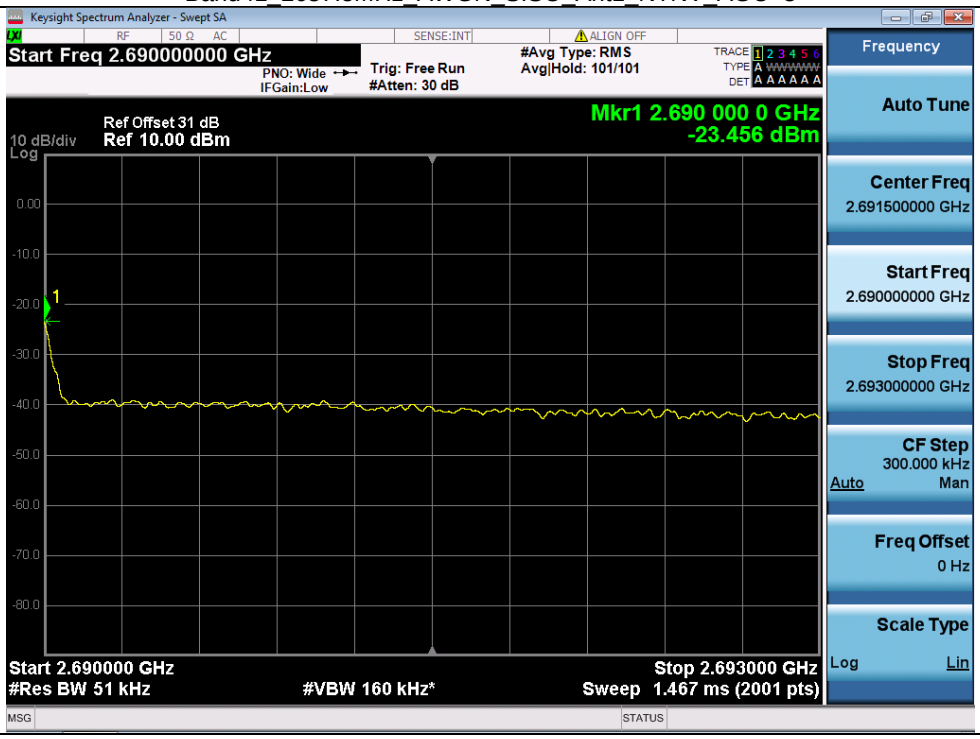
Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3



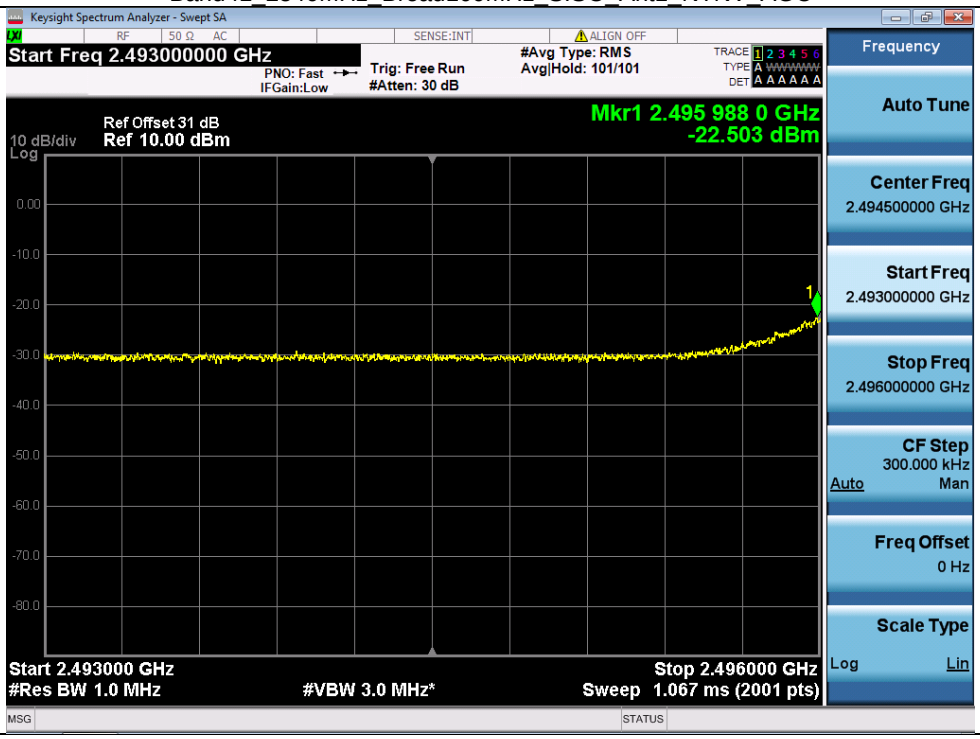
Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV_AGC



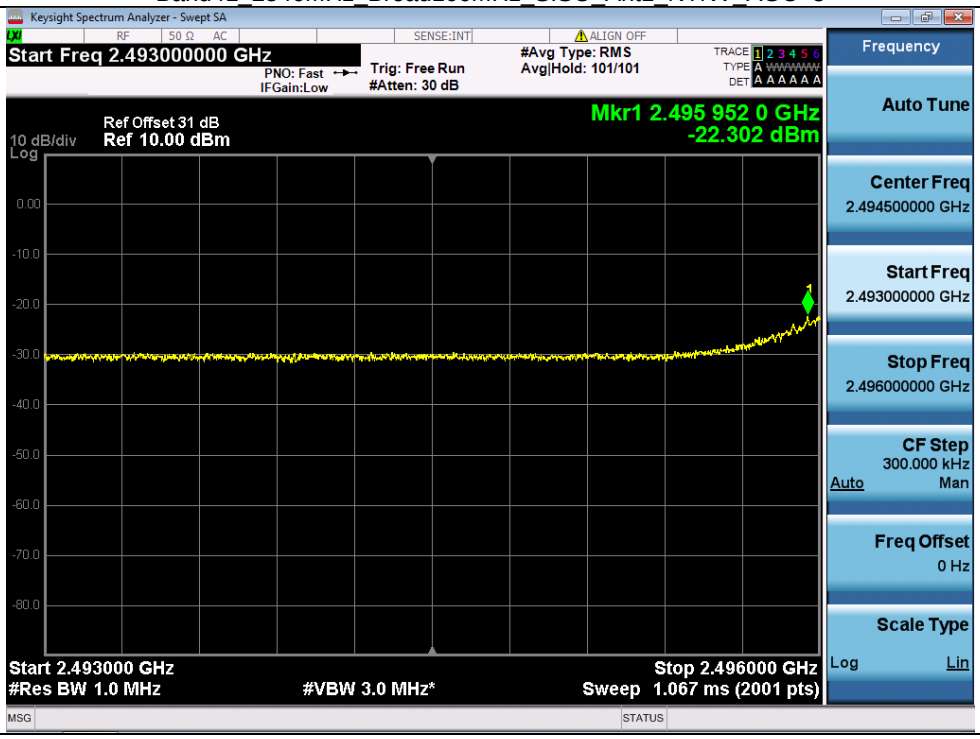
Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3



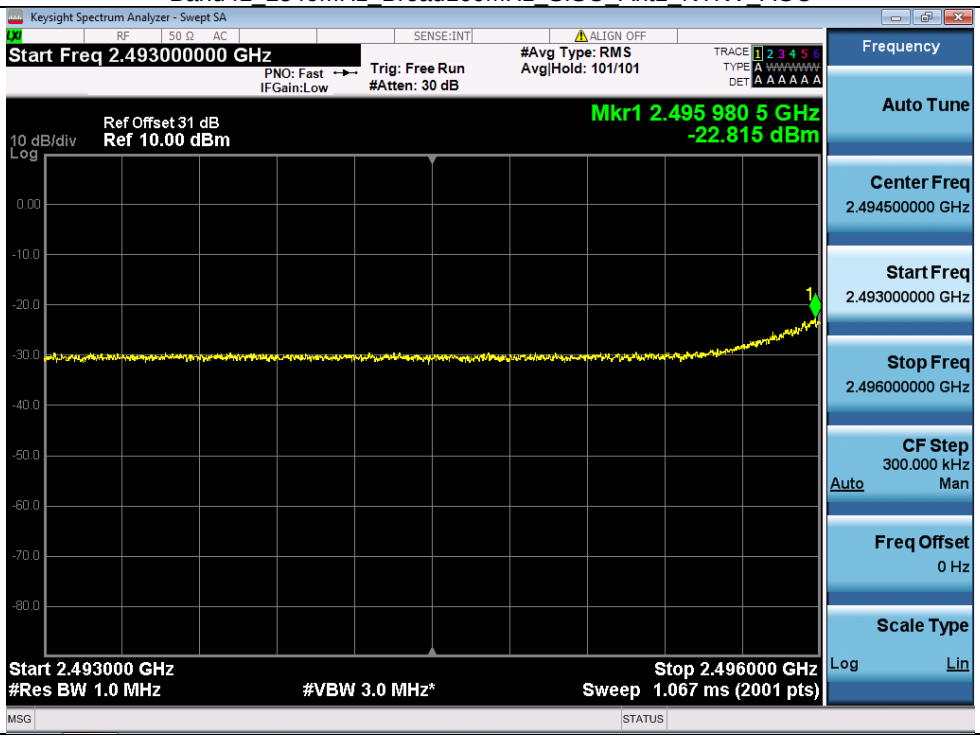
Band41_2546MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



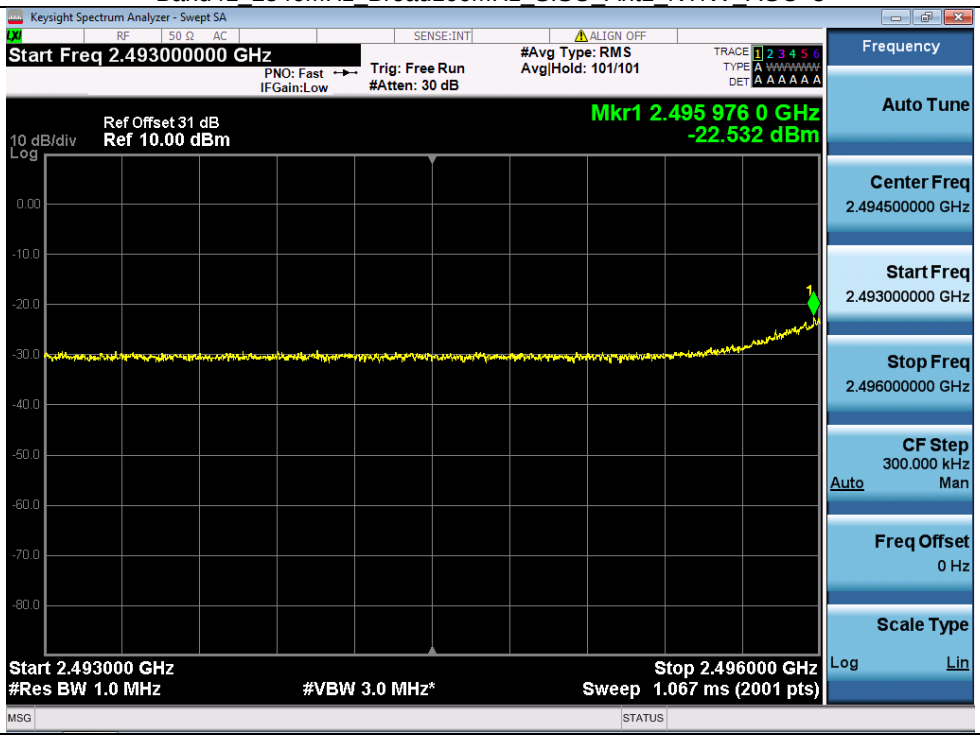
Band41_2546MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3



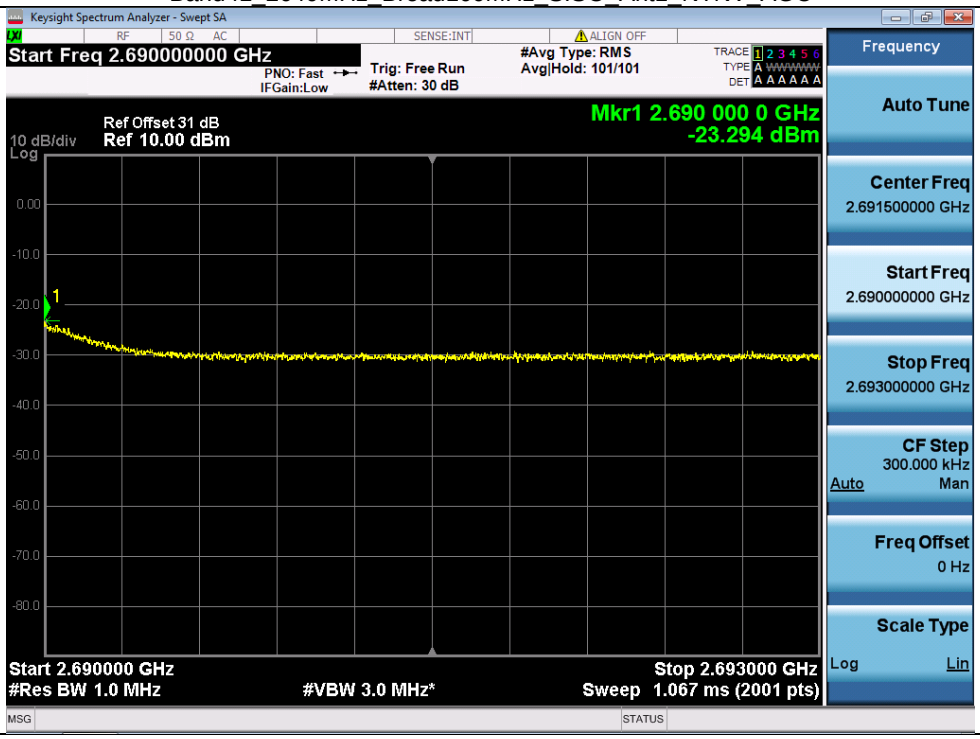
Band41_2546MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



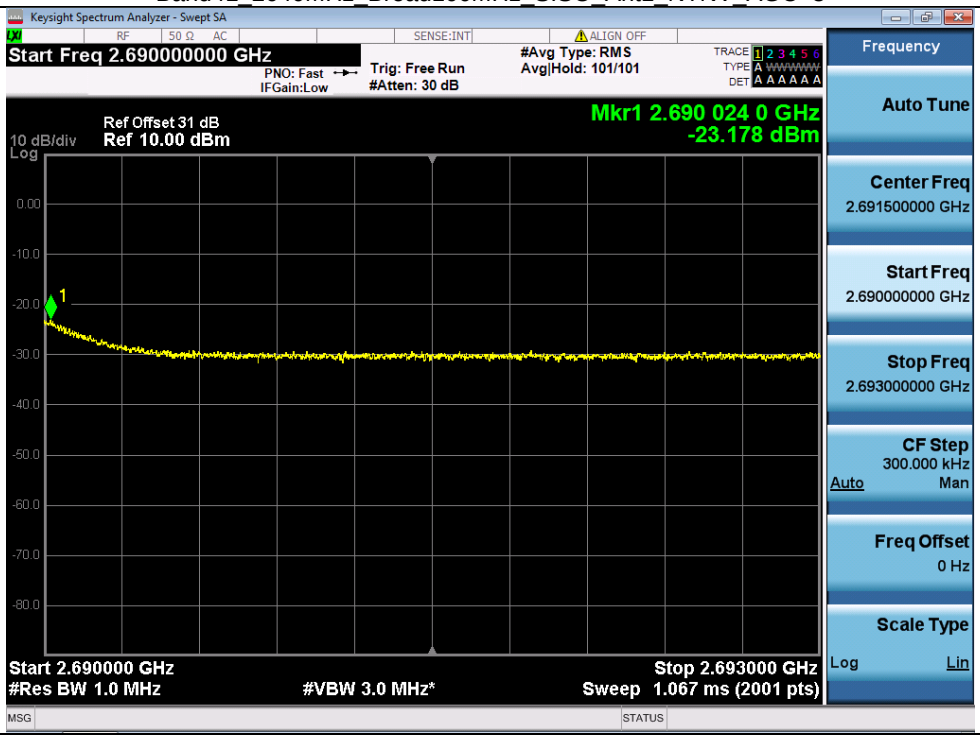
Band41_2546MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3



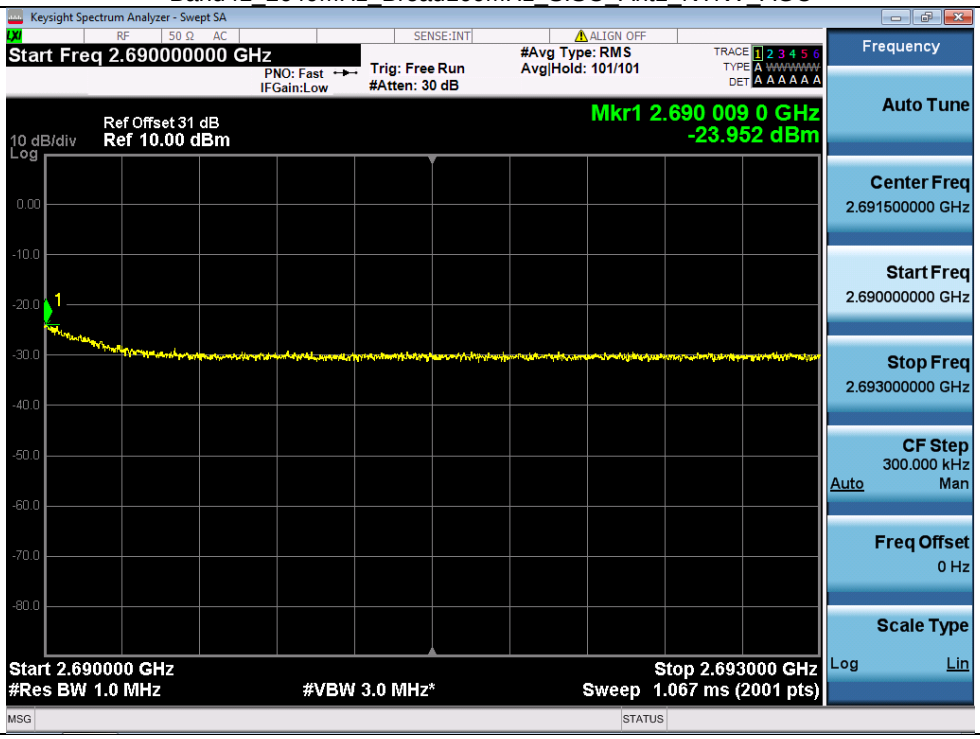
Band41_2640MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



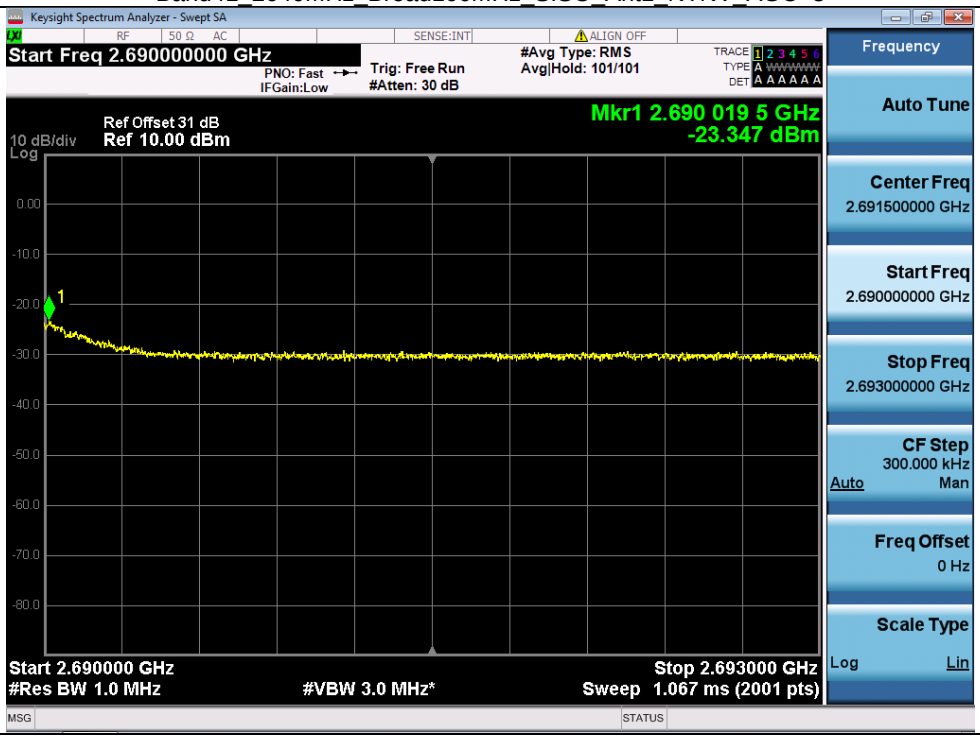
Band41_2640MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3



Band41_2640MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



Band41_2640MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3



6. Spurious emissions

6.1 Test Result

6.1.1 Band41

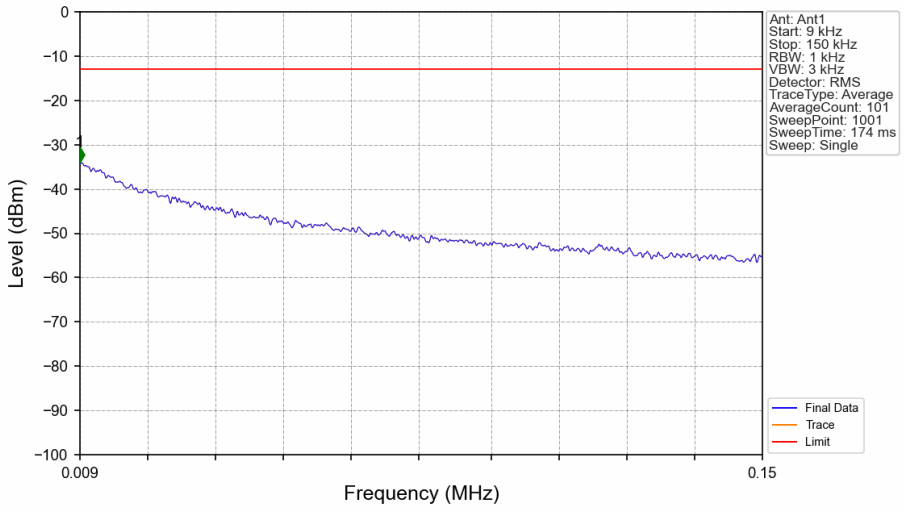
Band: 41 / NTNV								
Signal			Channel	TX Type	ANT	SE (dBm)		Verdict
Type	Level (dBm)	Frequency (MHz)				Result	Limit	
GMSK 0.2MHz	-0.1	2496.2	LCH	SISO	1	Refer To Test Graph		Pass
		2593	MCH	SISO	1	Refer To Test Graph		Pass
		2689.8	HCH	SISO	1	Refer To Test Graph		Pass
AWGN 5MHz	-0.1	2498.5	LCH	SISO	1	Refer To Test Graph		Pass
		2593	MCH	SISO	1	Refer To Test Graph		Pass
		2687.5	HCH	SISO	1	Refer To Test Graph		Pass
AWGN 100MHz	-0.1	2546	LCH	SISO	1	Refer To Test Graph		Pass
		2593	MCH	SISO	1	Refer To Test Graph		Pass
		2640	HCH	SISO	1	Refer To Test Graph		Pass

Note: EUT supports 4X4 MIMO, with 4 antenna ports having the same power. The test results show that the single antenna port has a margin of over 6dB, so the 4x4 MIMO test results determine the pass.

6.2 Test Graph

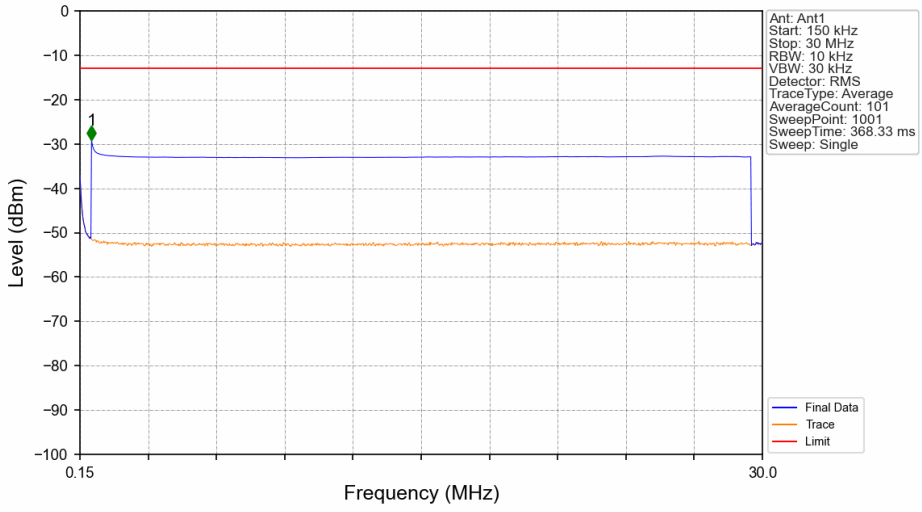
6.2.1 Band41

Band41_2496.2MHz_GMSK_SISO_Ant1_NTNV



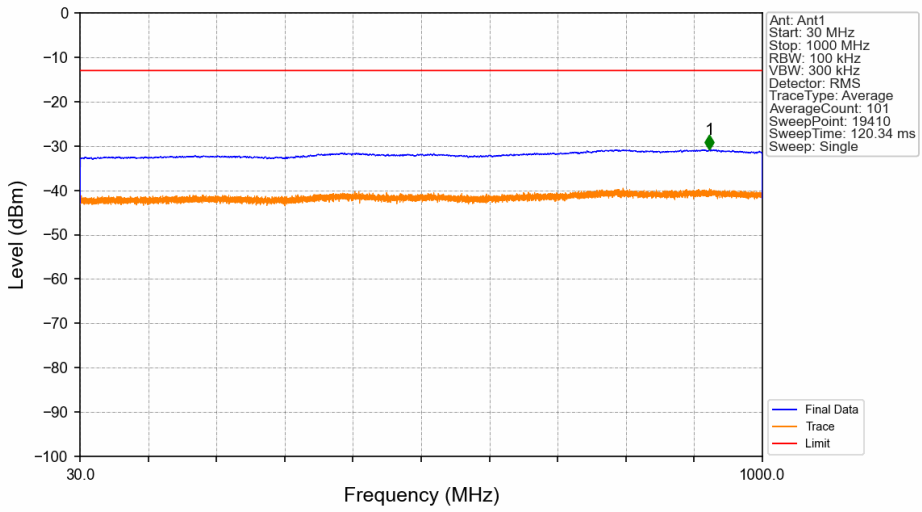
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.009	-33.83	-13	Pass

Band41_2496.2MHz_GMSK_SISO_Ant1_NTNV



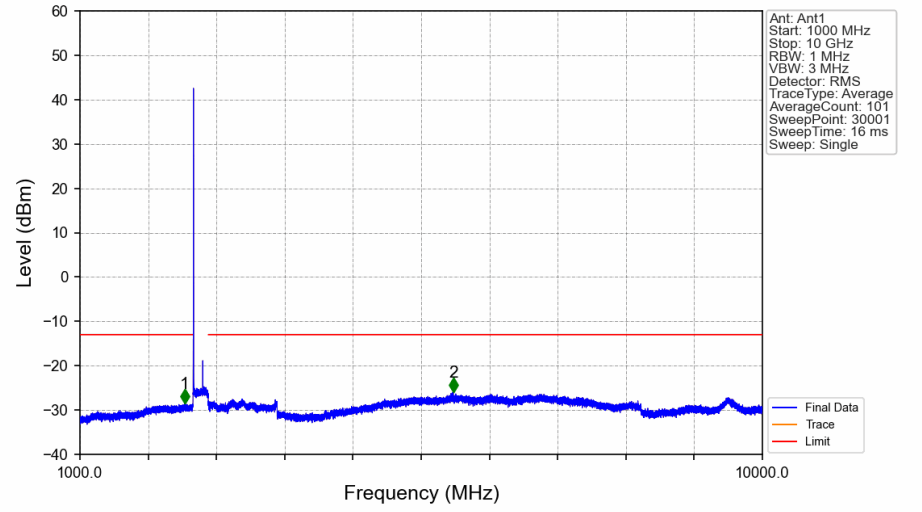
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.15	30	1	CHP	1	0.657	-29.09	-13	Pass

Band41_2496.2MHz_GMSK_SISO_Ant1_NTNV



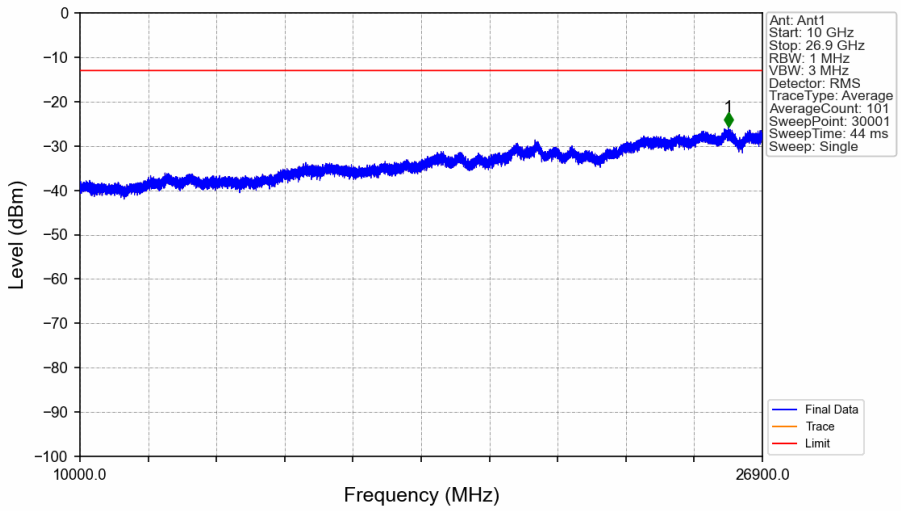
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	924.835	-30.76	-13	Pass

Band41_2496.2MHz_GMSK_SISO_Ant1_NTNV



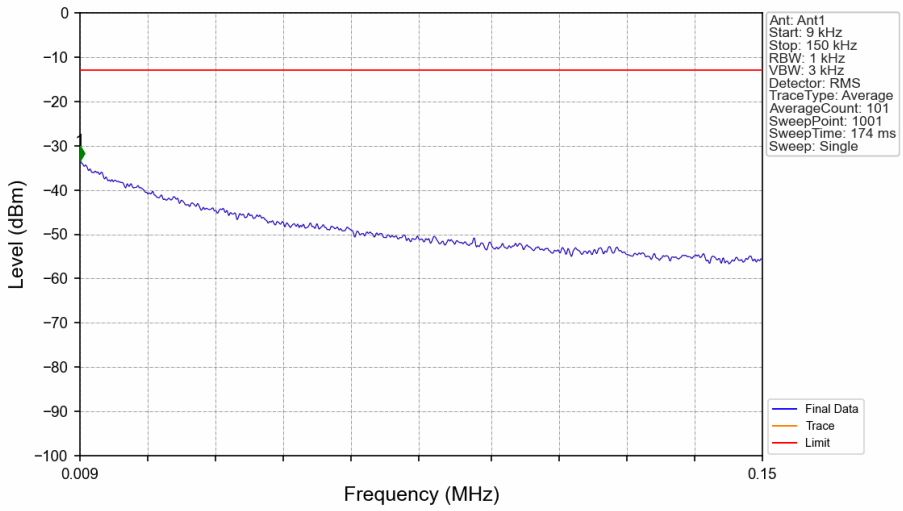
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	10000	1	/	1	2381.500	-28.44	-13	Pass
10000	2696	1	/	/	/	/	/	/
2696	10000	1	/	2	5922.700	-25.95	-13	Pass

Band41_2496.2MHz_GMSK_SISO_Ant1_NTNV



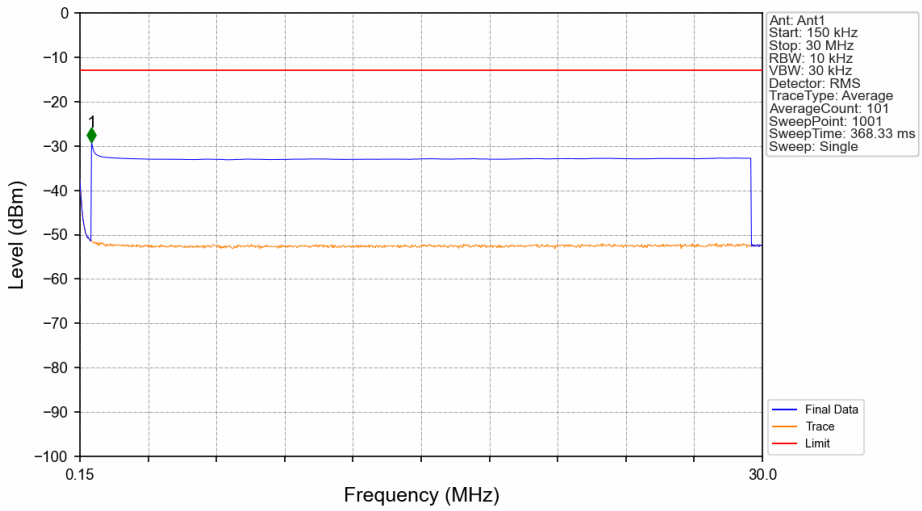
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	26900	1	/	1	26055.000	-25.55	-13	Pass

Band41_2593MHz_GMSK_SISO_Ant1_NTNV



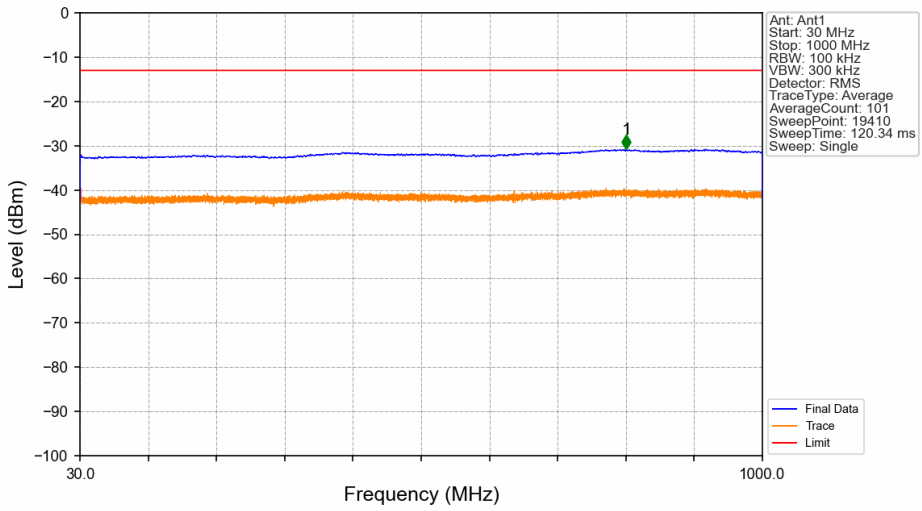
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.009	-33.20	-13	Pass

Band41_2593MHz_GMSK_SISO_Ant1_NTNV



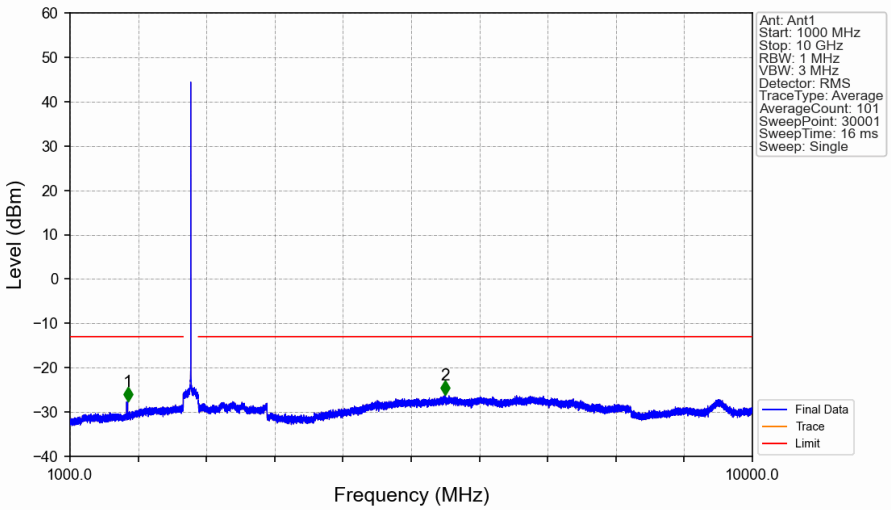
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.15	30	1	CHP	1	0.657	-29.06	-13	Pass

Band41_2593MHz_GMSK_SISO_Ant1_NTNV



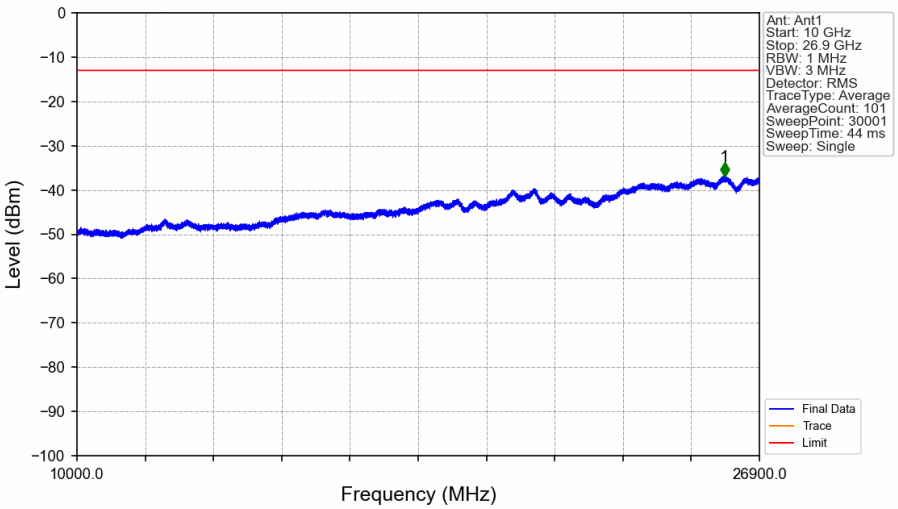
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	806.440	-30.77	-13	Pass

Band41_2593MHz_GMSK_SISO_Ant1_NTNV



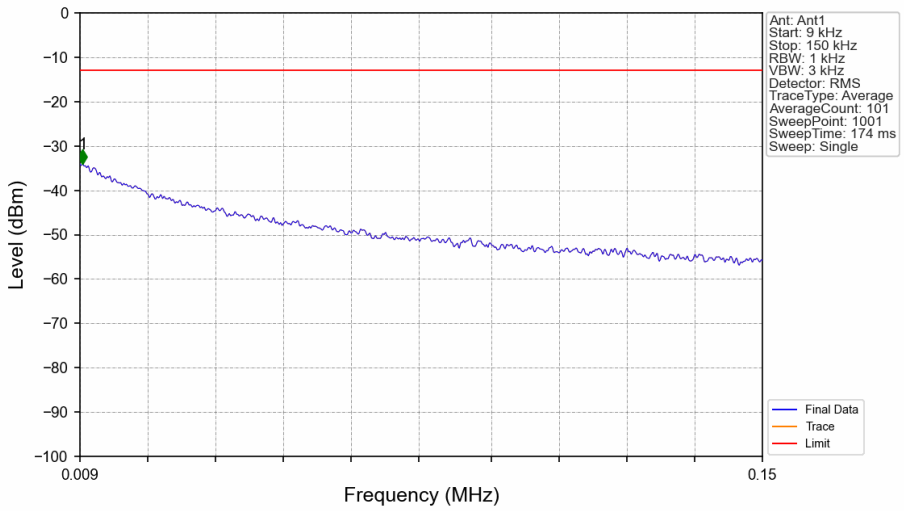
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	10000	1	/	1	1762.300	-27.62	-13	Pass
10000	2696	1	/	/	/	/	/	/
2696	10000	1	/	2	5946.700	-26.14	-13	Pass

Band41_2593MHz_GMSK_SISO_Ant1_NTNV



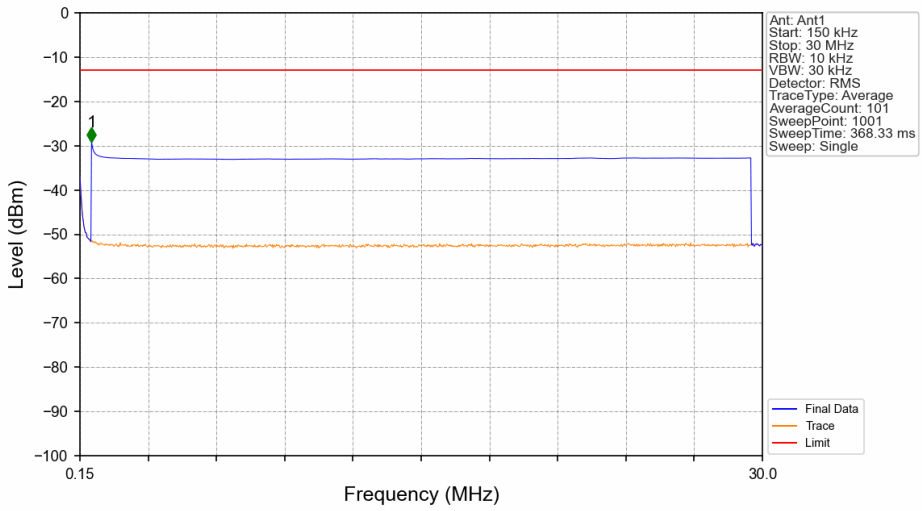
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	26900	1	/	1	26033.030	-36.84	-13	Pass

Band41_2689.8MHz_GMSK_SISO_Ant1_NTNV



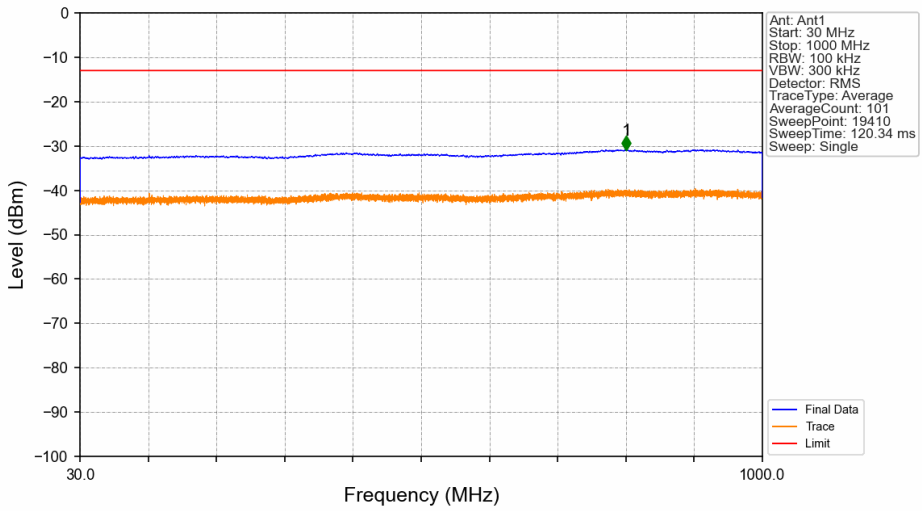
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.010	-34.01	-13	Pass

Band41_2689.8MHz_GMSK_SISO_Ant1_NTNV



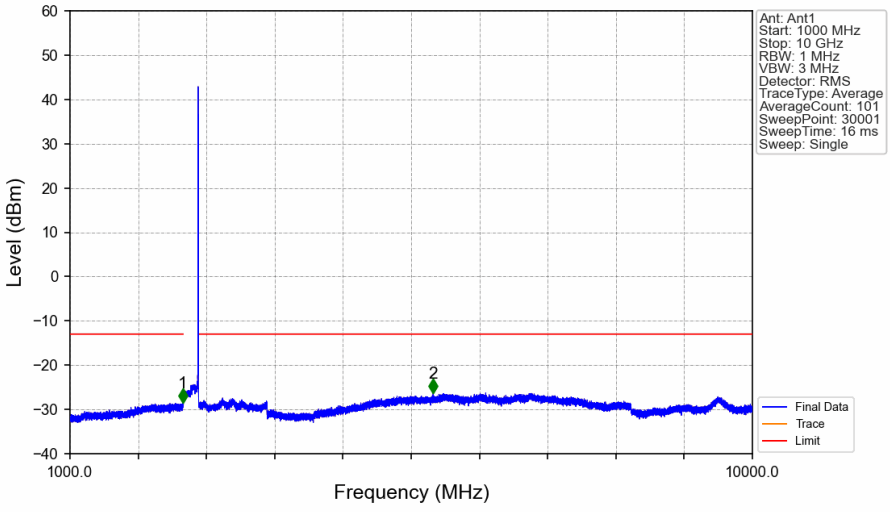
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.15	30	1	CHP	1	0.657	-29.01	-13	Pass

Band41_2689.8MHz_GMSK_SISO_Ant1_NTNV



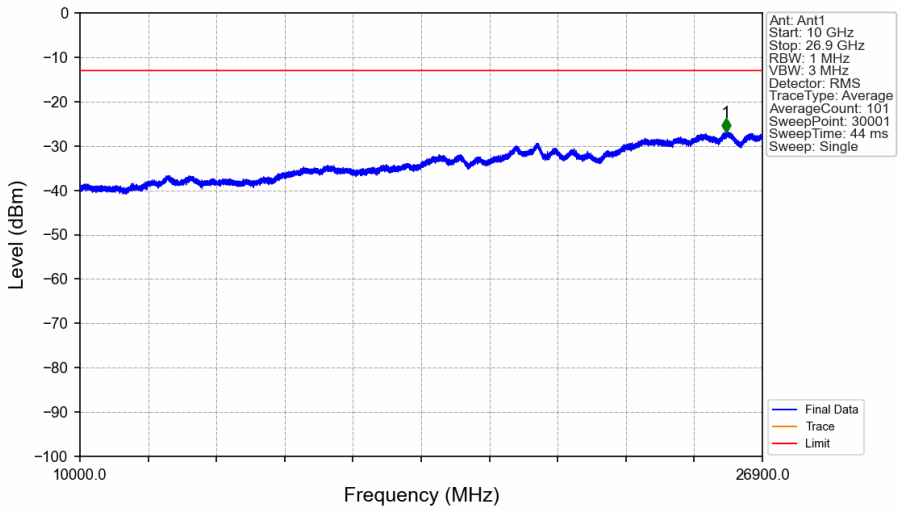
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	806.490	-30.84	-13	Pass

Band41_2689.8MHz_GMSK_SISO_Ant1_NTNV



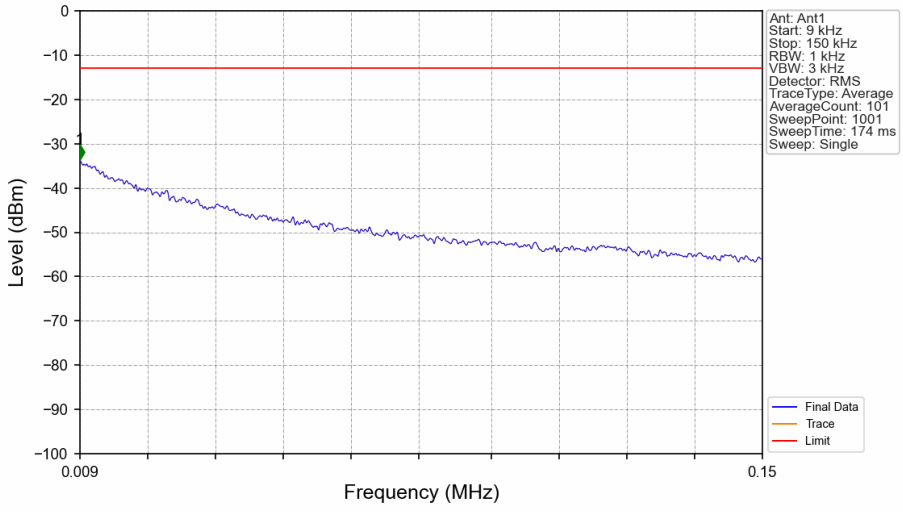
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	10000	1	/	1	2489.200	-28.47	-13	Pass
10000	2696	1	/	/	/	/	/	/
2696	10000	1	/	2	5789.500	-26.20	-13	Pass

Band41_2689.8MHz_GMSK_SISO_Ant1_NTNV



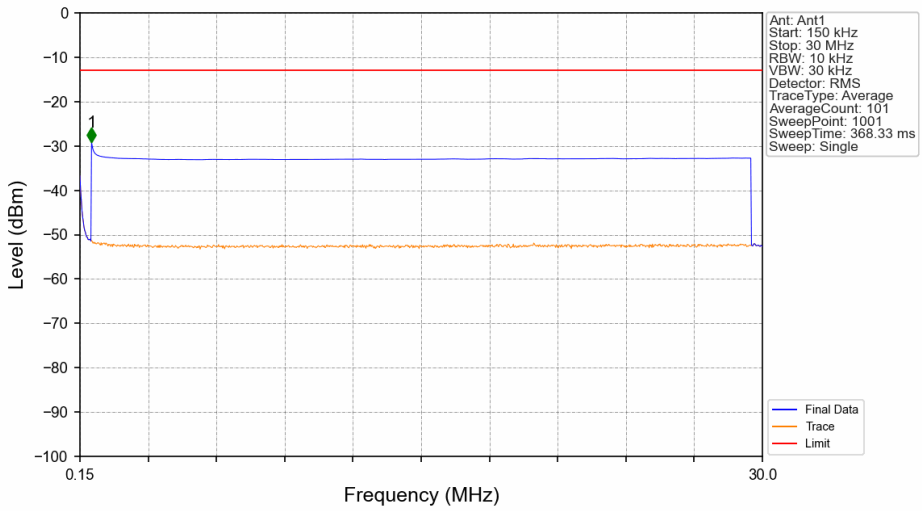
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	26900	1	/	1	25997.540	-26.85	-13	Pass

Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV



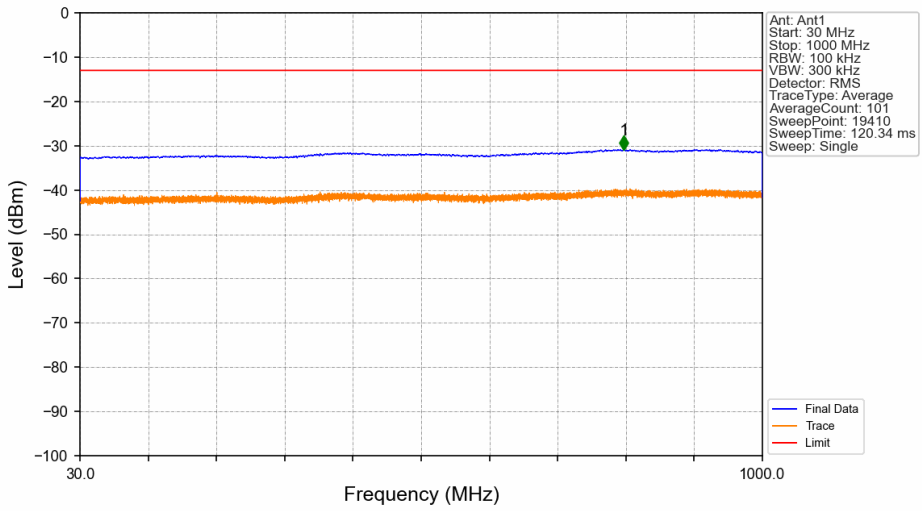
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.009	-33.51	-13	Pass

Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV



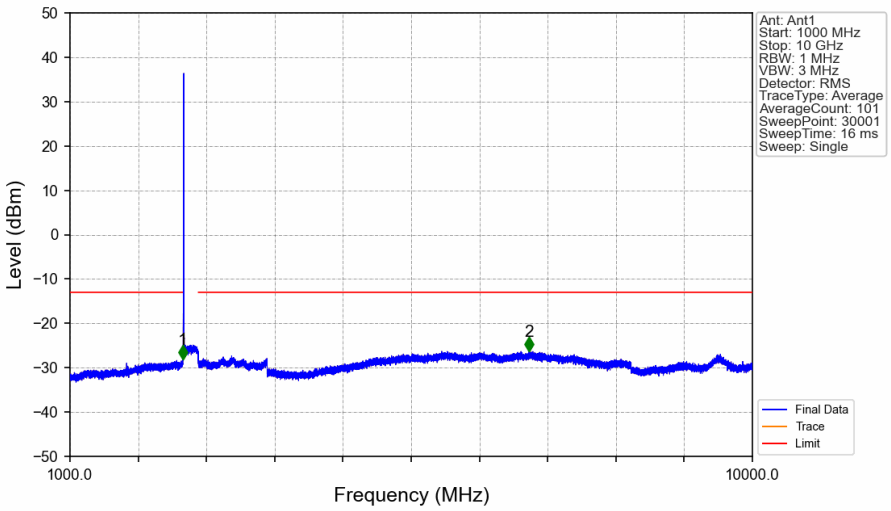
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.15	30	1	CHP	1	0.657	-29.07	-13	Pass

Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV



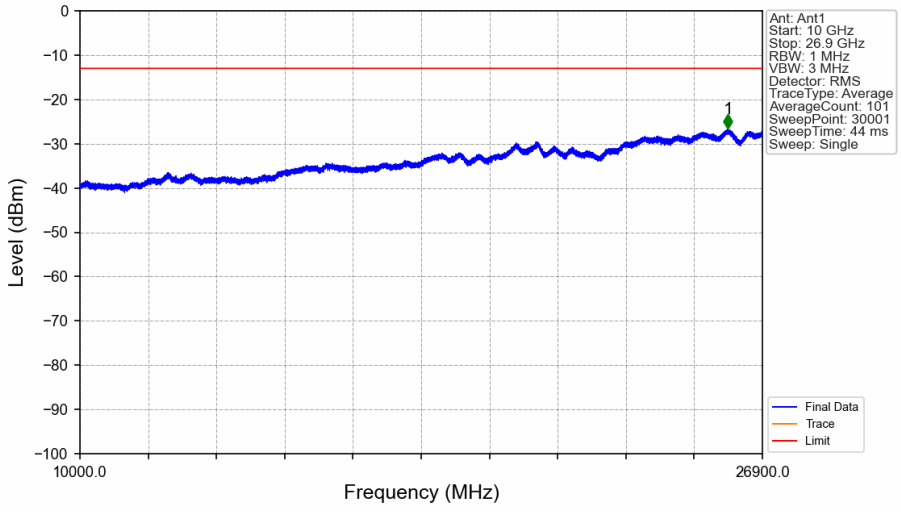
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	803.291	-30.84	-13	Pass

Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV



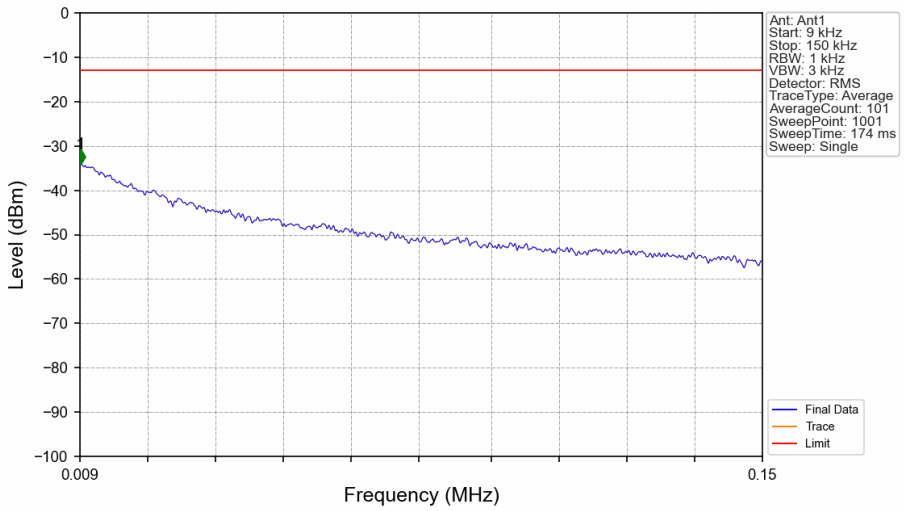
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	10000	1	/	1	2489.500	-28.14	-13	Pass
10000	2696	1	/	/	/	/	/	/
2696	10000	1	/	2	7054.000	-26.28	-13	Pass

Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV



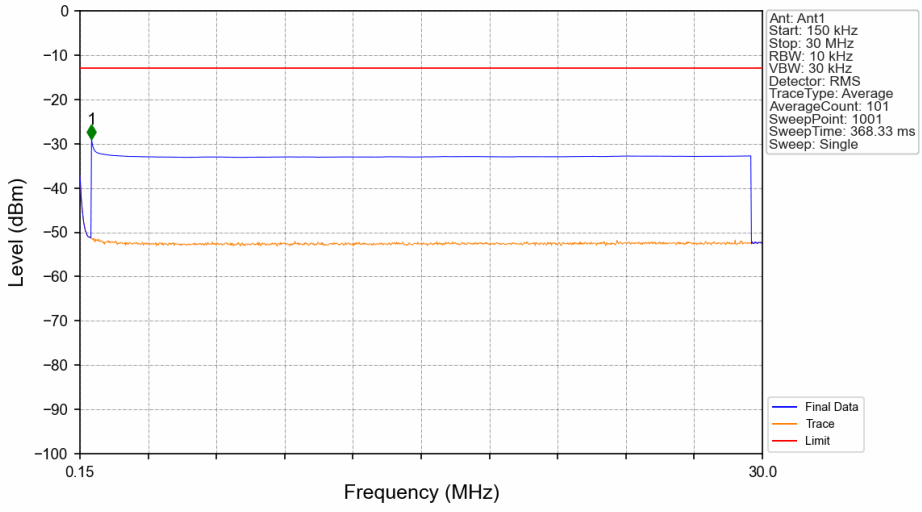
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	26900	1	/	1	26048.240	-26.59	-13	Pass

Band41_2593MHz_AWGN_SISO_Ant1_NTNV



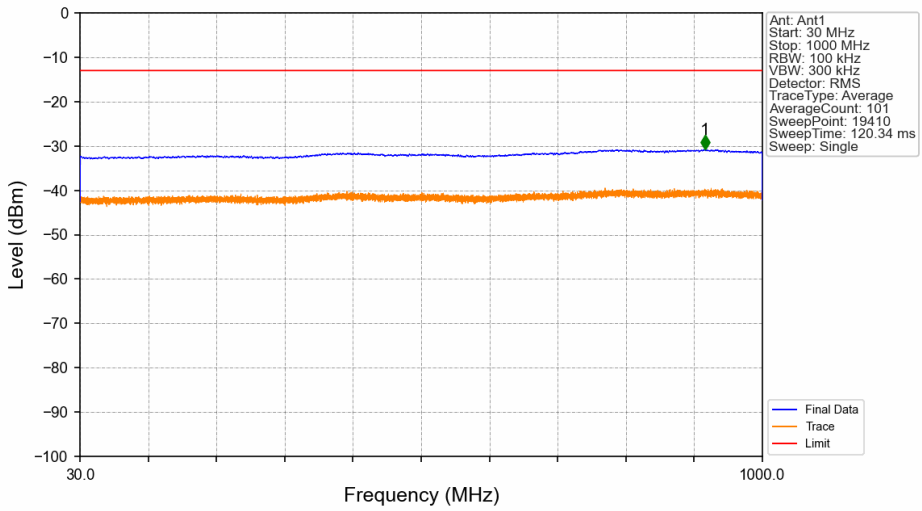
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.009	-33.99	-13	Pass

Band41_2593MHz_AWGN_SISO_Ant1_NTNV



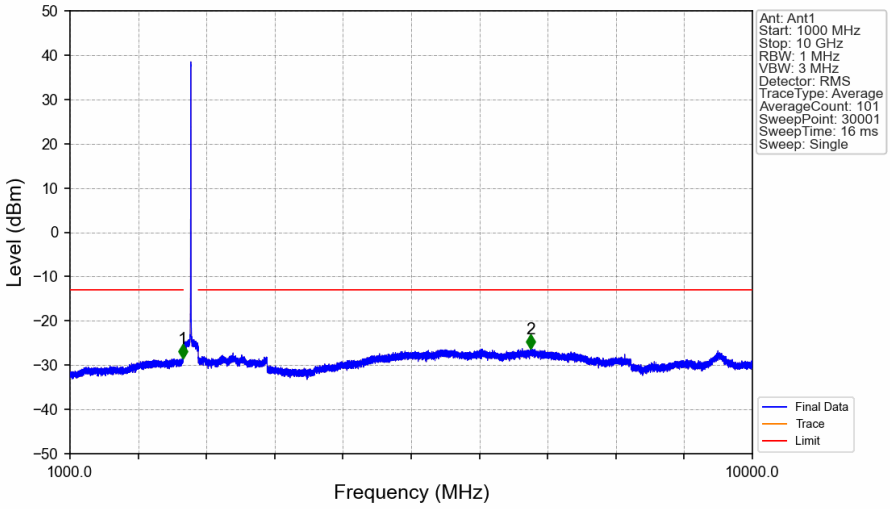
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.15	30	1	CHP	1	0.657	-28.95	-13	Pass

Band41_2593MHz_AWGN_SISO_Ant1_NTNV



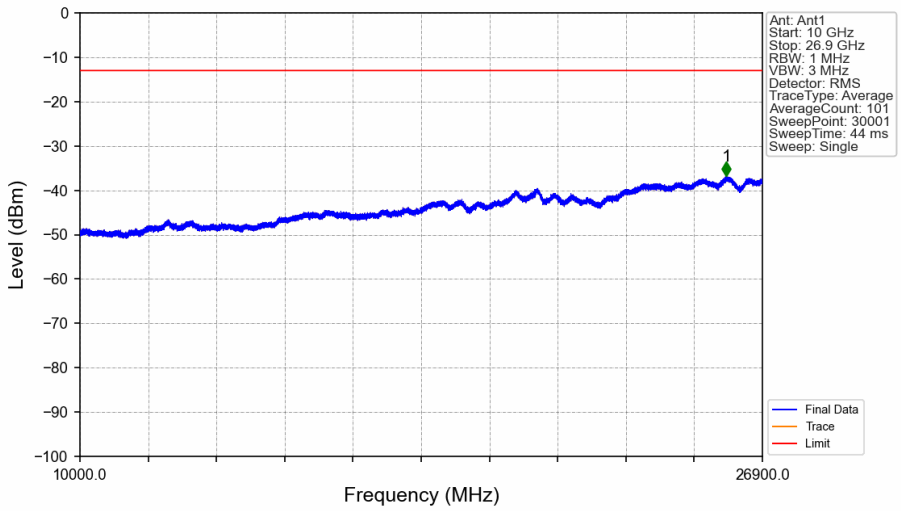
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	918.188	-30.80	-13	Pass

Band41_2593MHz_AWGN_SISO_Ant1_NTNV



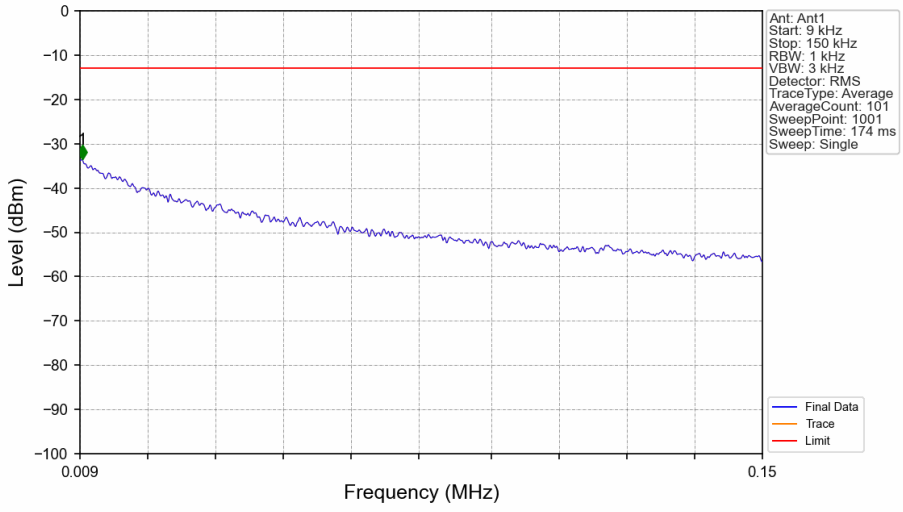
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	10000	1	/	1	2484.700	-28.46	-13	Pass
10000	2696	1	/	/	/	/	/	/
2696	10000	1	/	2	7078.000	-26.25	-13	Pass

Band41_2593MHz_AWGN_SISO_Ant1_NTNV



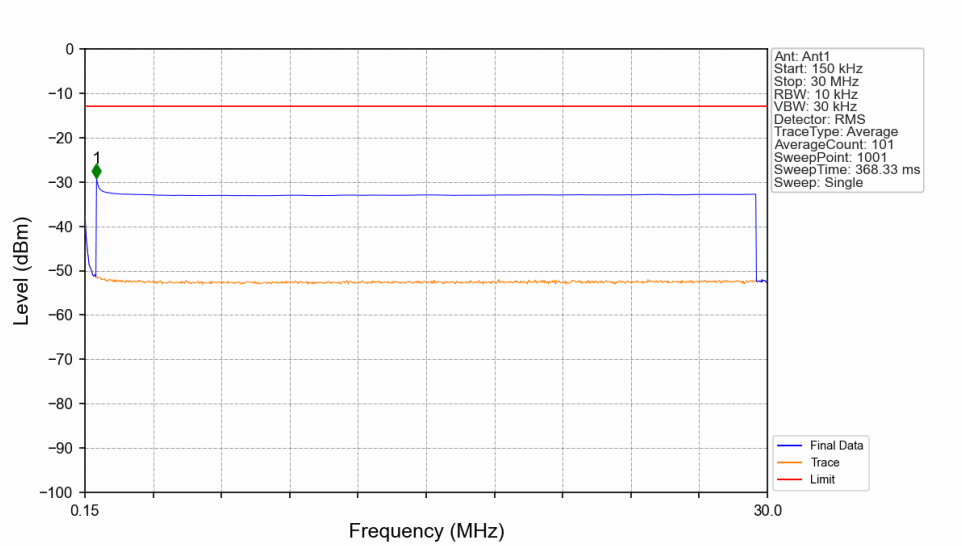
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	26900	1	/	1	26003.173	-36.79	-13	Pass

Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV



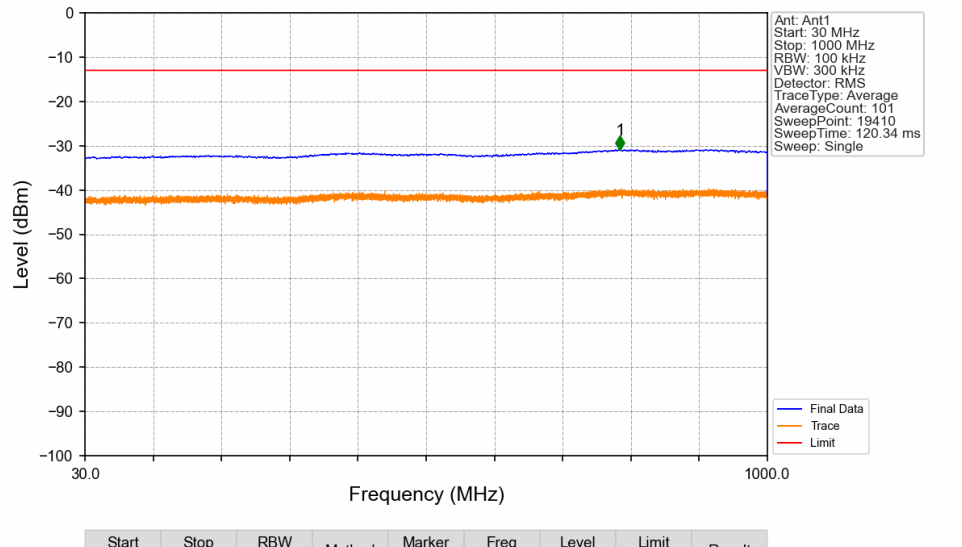
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.009	-33.54	-13	Pass

Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV



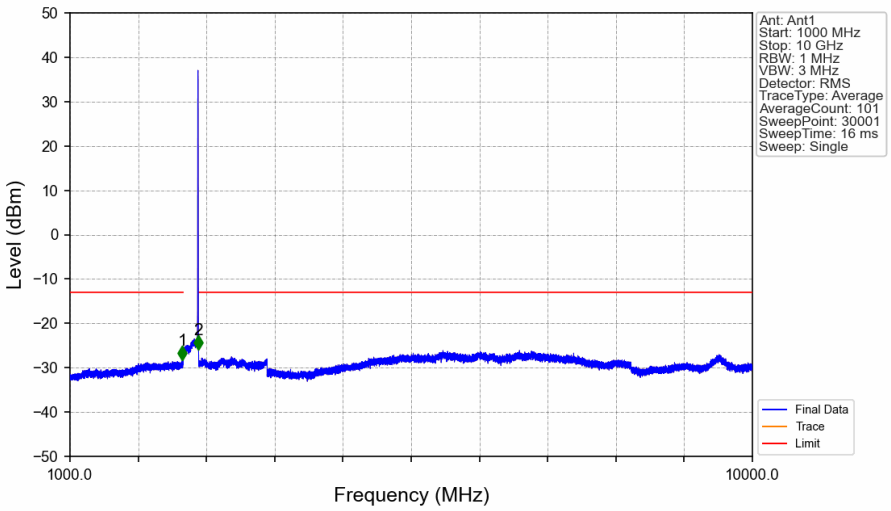
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.15	30	1	CHP	1	0.657	-29.08	-13	Pass

Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV



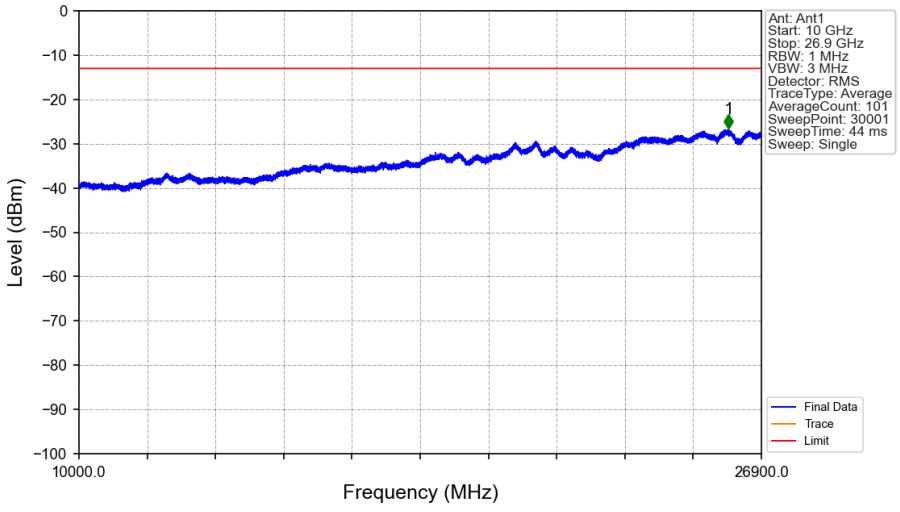
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	790.747	-30.83	-13	Pass

Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV



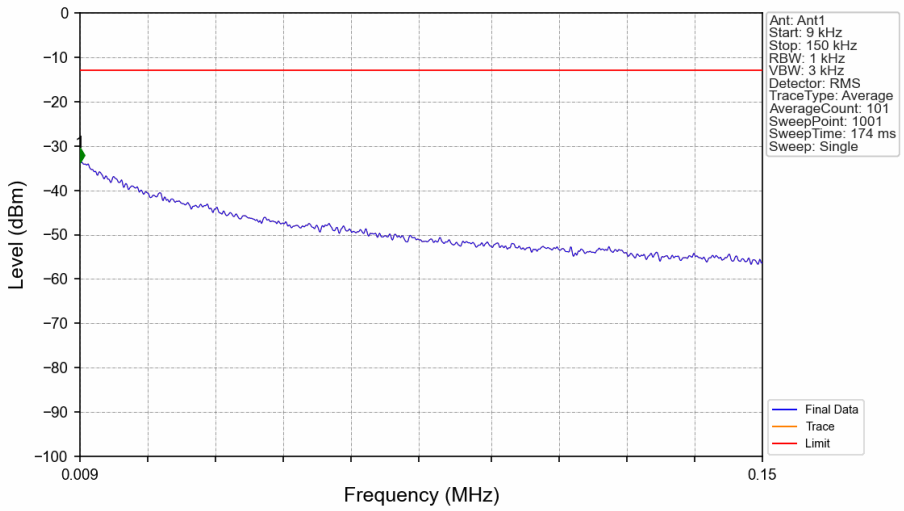
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	10000	1	/	1	2481.700	-28.33	-13	Pass
10000	2696	1	/	/	/	/	/	/
2696	10000	1	/	2	2696.200	-25.83	-13	Pass

Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV



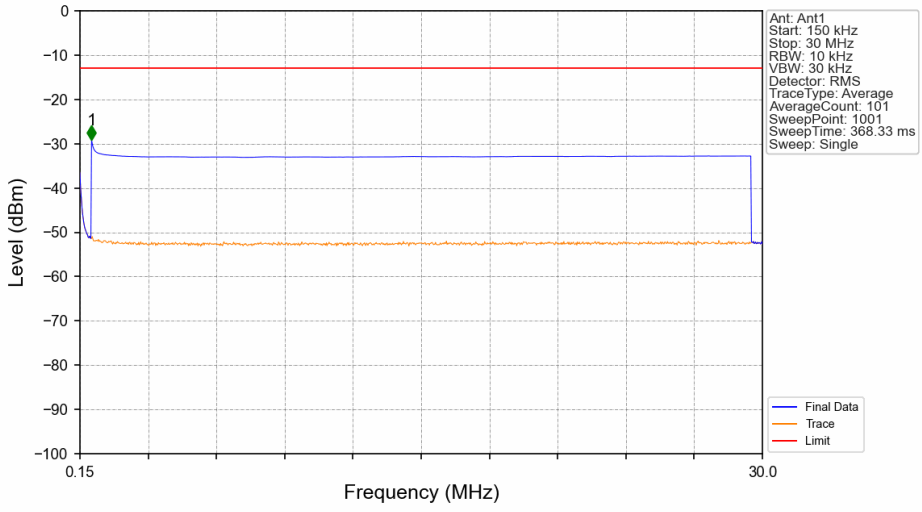
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	26900	1	/	1	26088.800	-26.51	-13	Pass

Band41_2546MHz_Broad100MHz_SISO_Ant1_NTNV



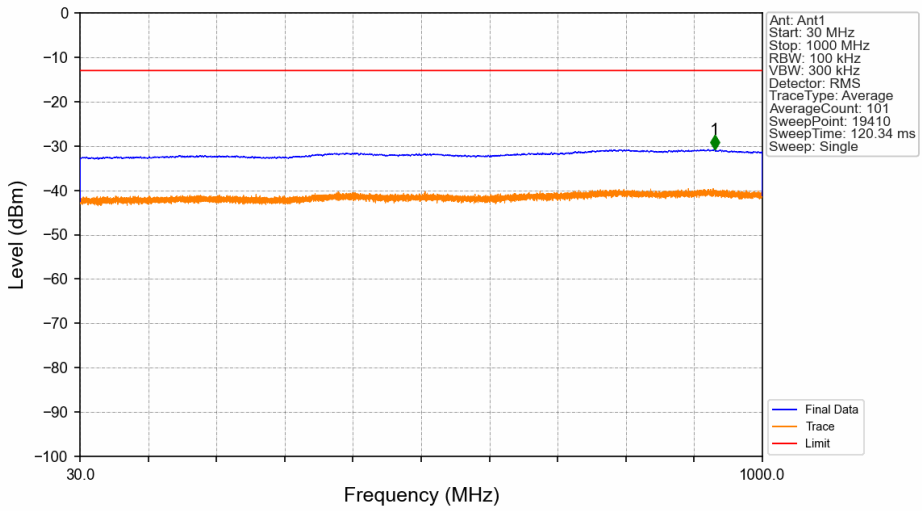
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.009	-33.67	-13	Pass

Band41_2546MHz_Broad100MHz_SISO_Ant1_NTNV



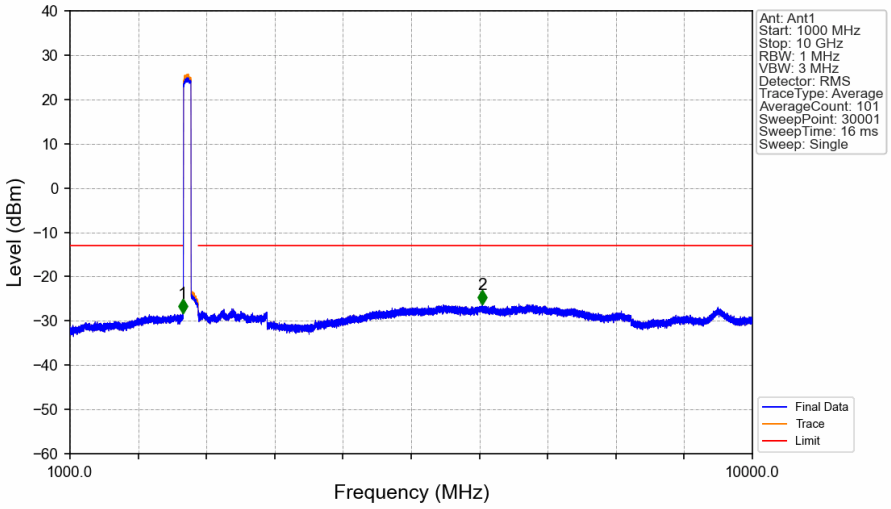
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.15	30	1	CHP	1	0.657	-29.03	-13	Pass

Band41_2546MHz_Broad100MHz_SISO_Ant1_NTNV



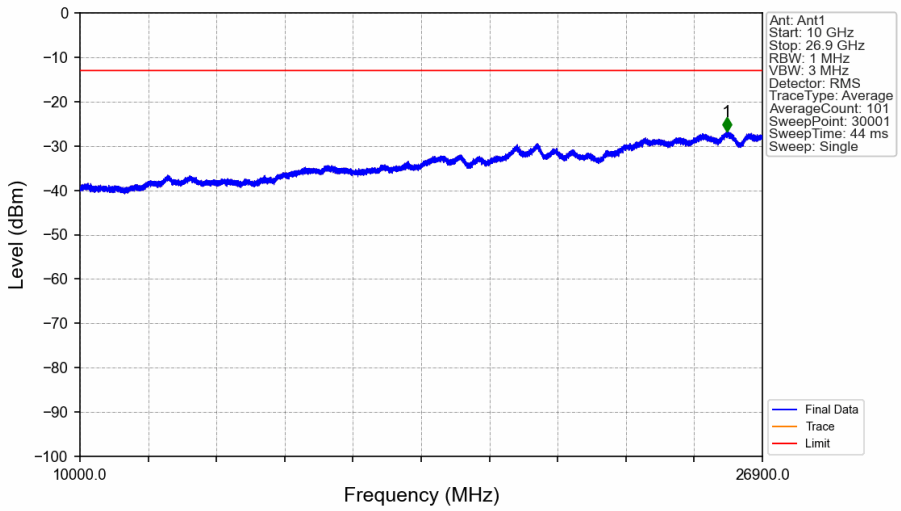
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	931.782	-30.69	-13	Pass

Band41_2546MHz_Broad100MHz_SISO_Ant1_NTNV



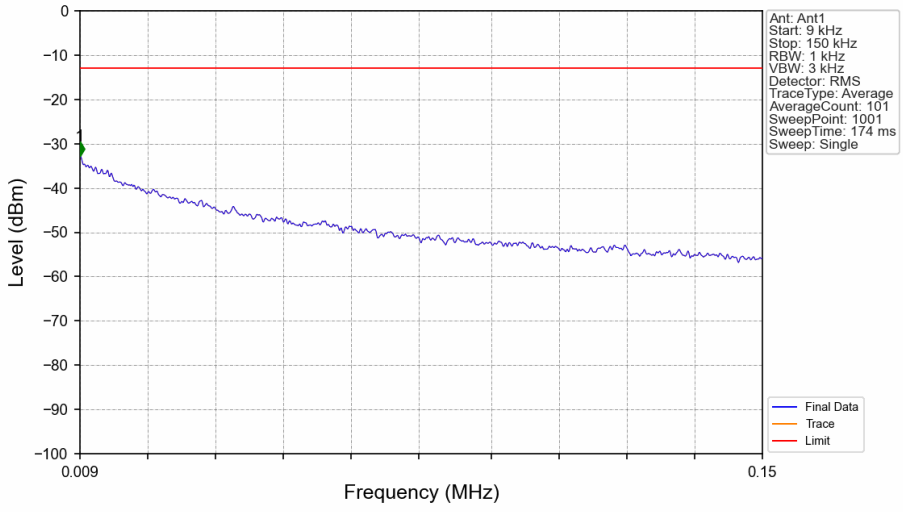
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	10000	1	/	1	2489.500	-28.30	-13	Pass
10000	2696	1.007	CHP	/	/	/	/	/
2696	10000	1	/	2	6437.500	-26.18	-13	Pass

Band41_2546MHz_Broad100MHz_SISO_Ant1_NTNV



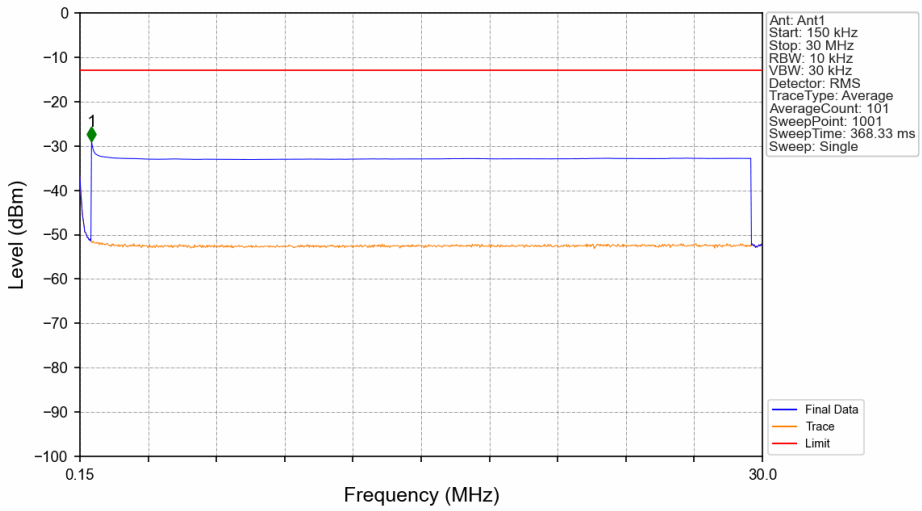
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	26900	1	/	1	26021.763	-26.72	-13	Pass

Band41_2593MHz_Broad100MHz_SISO_Ant1_NTNV



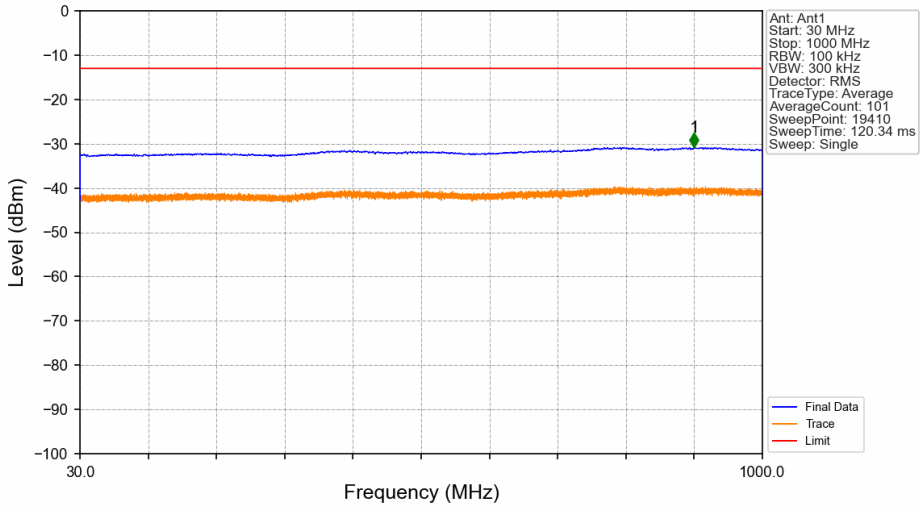
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.009	-32.69	-13	Pass

Band41_2593MHz_Broad100MHz_SISO_Ant1_NTNV



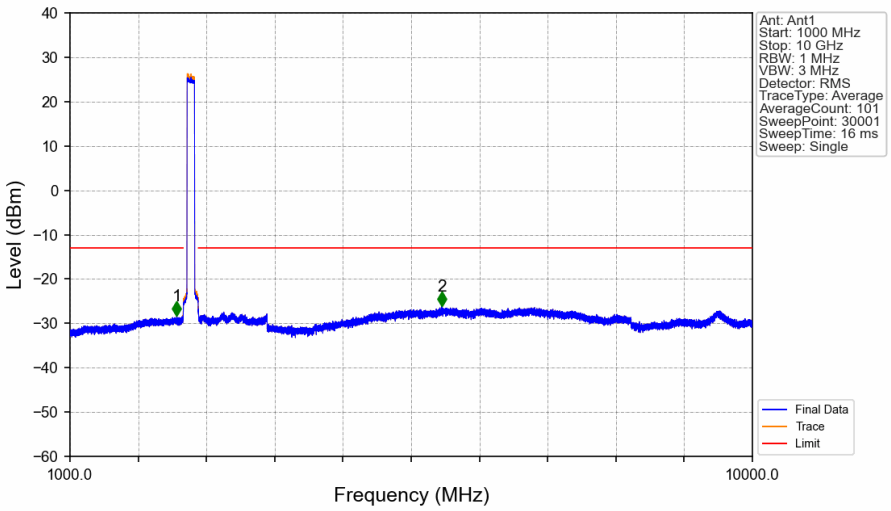
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.15	30	1	CHP	1	0.657	-28.92	-13	Pass

Band41_2593MHz_Broad100MHz_SISO_Ant1_NTNV



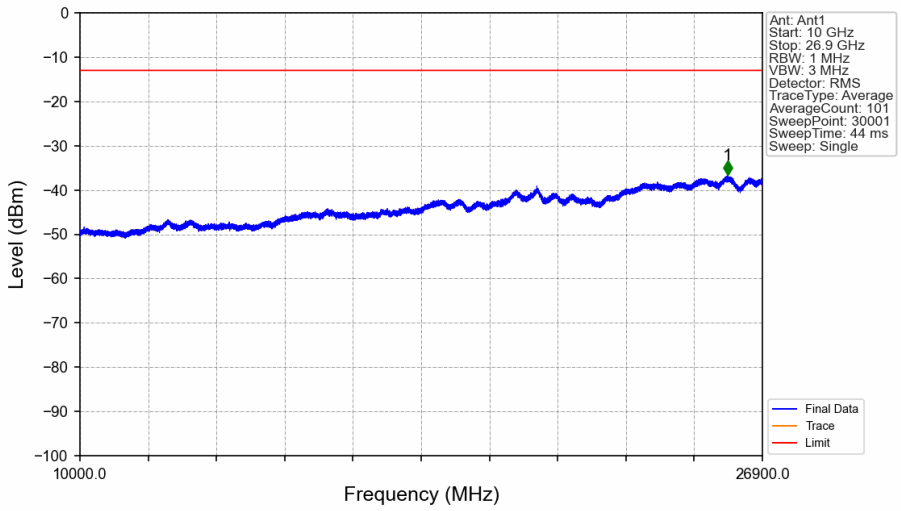
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	902.795	-30.81	-13	Pass

Band41_2593MHz_Broad100MHz_SISO_Ant1_NTNV



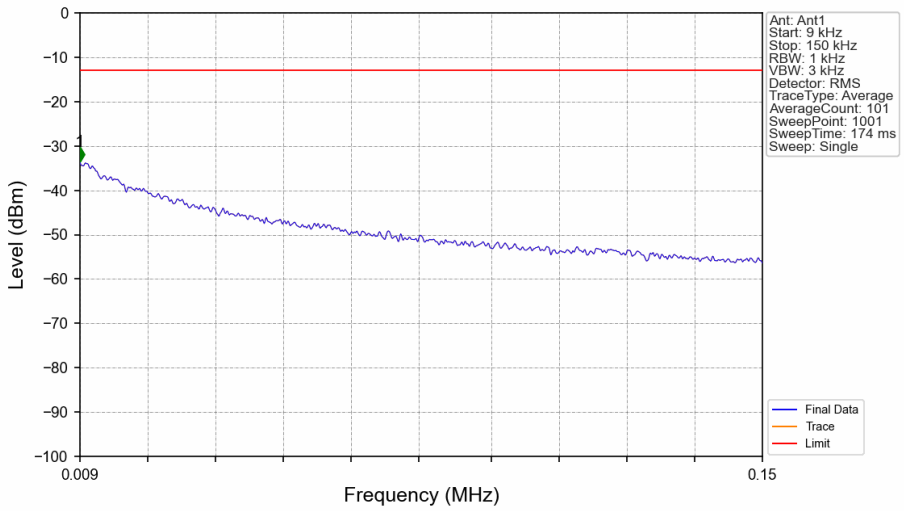
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	10000	1	/	1	2408.200	-28.32	-13	Pass
10000	2696	1.007	CHP	/	/	/	/	/
2696	10000	1	/	2	5903.500	-26.11	-13	Pass

Band41_2593MHz_Broad100MHz_SISO_Ant1_NTNV



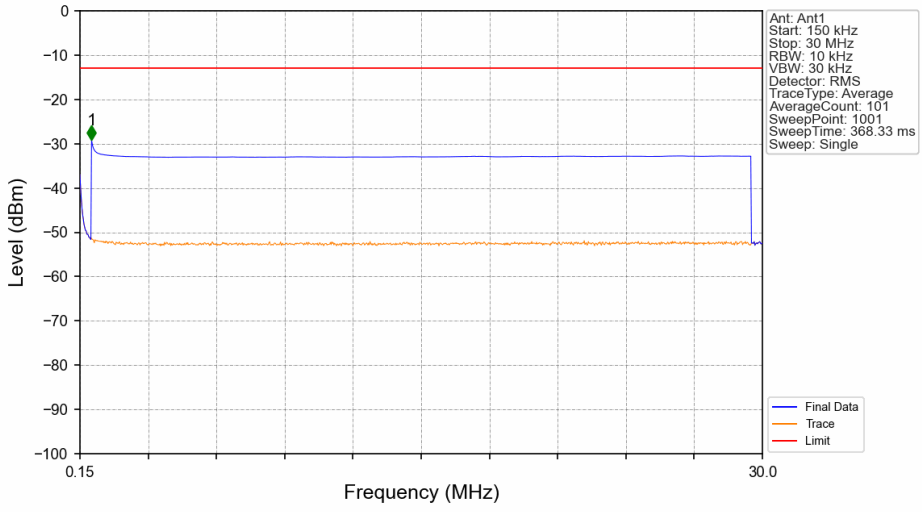
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	26900	1	/	1	26039.790	-36.60	-13	Pass

Band41_2640MHz_Broad100MHz_SISO_Ant1_NTNV



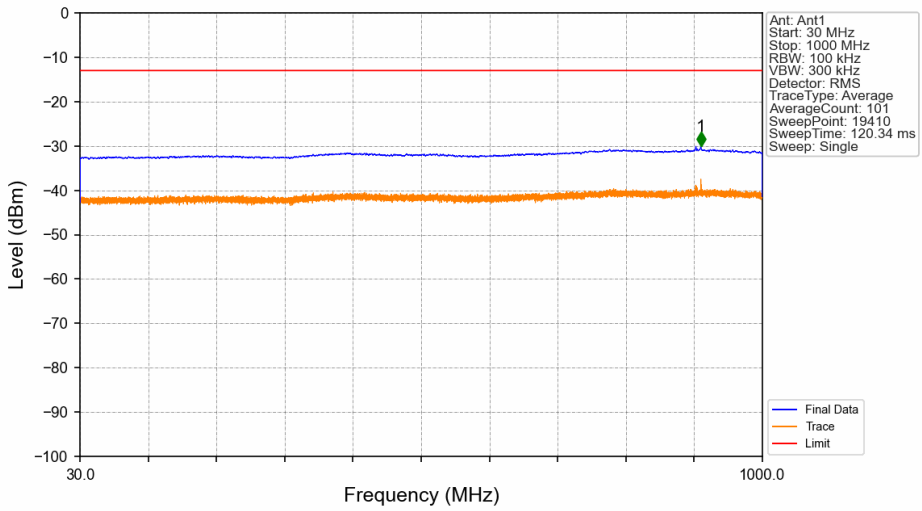
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.009	-33.44	-13	Pass

Band41_2640MHz_Broad100MHz_SISO_Ant1_NTNV



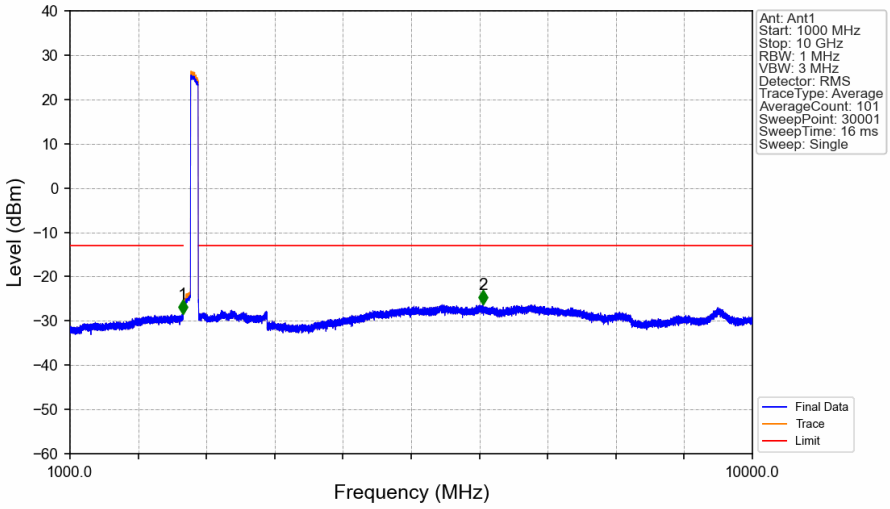
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.15	30	1	CHP	1	0.657	-29.08	-13	Pass

Band41_2640MHz_Broad100MHz_SISO_Ant1_NTNV



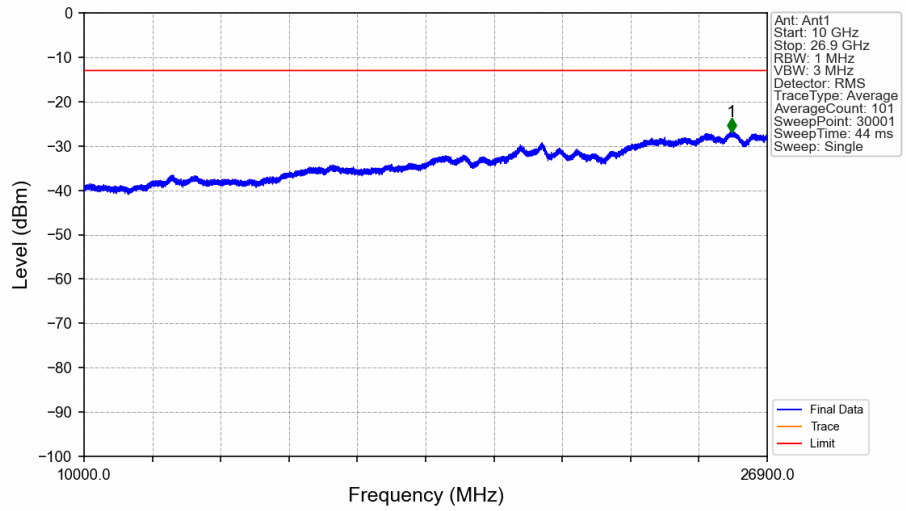
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	912.291	-29.92	-13	Pass

Band41_2640MHz_Broad100MHz_SISO_Ant1_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	10000	1	/	1	2486.500	-28.44	-13	Pass
10000	2696	1.007	CHP	/	/	/	/	/
2696	10000	1	/	2	6444.400	-26.28	-13	Pass

Band41_2640MHz_Broad100MHz_SISO_Ant1_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	26900	1	/	1	26020.073	-26.81	-13	Pass

7. Frequency stability measurements

7.1 Bandn41_Ant1

7.1.1 Test Result

Band: 41 / NTNV							
Signal			Temp (°C)	Voltage (VAC)	Result (MHz)	Limit (MHz)	Verdict
Type	Level (dBm)	Frequency (MHz)					
GMSK 0.2MHz	-0.1	2496.2	20	102	2496.088	>2496	Pass
				120	2496.091	>2496	Pass
				138	2496.073	>2496	Pass
			-40	120	2496.066	>2496	Pass
			-30	120	2496.063	>2496	Pass
			-20	120	2496.081	>2496	Pass
			-10	120	2496.083	>2496	Pass
			0	120	2496.079	>2496	Pass
			10	120	2496.068	>2496	Pass
			30	120	2496.089	>2496	Pass
			40	120	2496.095	>2496	Pass
			50	120	2496.098	>2496	Pass
			55	120	2496.069	>2496	Pass
		2689.8	20	102	2689.938	<2690	Pass
				120	2689.918	<2690	Pass
				138	2689.954	<2690	Pass
			-40	120	2689.956	<2690	Pass
			-30	120	2689.947	<2690	Pass
			-20	120	2689.944	<2690	Pass
			-10	120	2689.939	<2690	Pass
			0	120	2689.919	<2690	Pass
			10	120	2689.844	<2690	Pass
			30	120	2689.899	<2690	Pass
			40	120	2689.906	<2690	Pass
			50	120	2689.932	<2690	Pass
			55	120	2689.941	<2690	Pass
AWGN 5MHz	-0.1	2498.5	20	102	2496.212	>2496	Pass
				120	2496.256	>2496	Pass
				138	2496.237	>2496	Pass
			-40	120	2496.291	>2496	Pass
			-30	120	2496.295	>2496	Pass
			-20	120	2496.267	>2496	Pass
			-10	120	2496.264	>2496	Pass
			0	120	2496.282	>2496	Pass
			10	120	2496.276	>2496	Pass
			30	120	2496.293	>2496	Pass
			40	120	2496.269	>2496	Pass
			50	120	2496.257	>2496	Pass
			55	120	2496.284	>2496	Pass
		2687.5	20	102	2689.709	<2690	Pass
				120	2689.732	<2690	Pass
				138	2689.715	<2690	Pass
			-40	120	2689.733	<2690	Pass
			-30	120	2689.746	<2690	Pass
			-20	120	2689.730	<2690	Pass

			-10	120	2689.726	<2690	Pass
			0	120	2689.737	<2690	Pass
			10	120	2689.718	<2690	Pass
			30	120	2689.726	<2690	Pass
			40	120	2689.729	<2690	Pass
			50	120	2689.718	<2690	Pass
			55	120	2689.767	<2690	Pass
AWGN 100MHz	-0.1	2546	20	102	2498.026	>2496	Pass
				120	2498.058	>2496	Pass
				138	2498.062	>2496	Pass
			-40	120	2498.087	>2496	Pass
			-30	120	2498.081	>2496	Pass
			-20	120	2498.067	>2496	Pass
			-10	120	2498.049	>2496	Pass
			0	120	2498.056	>2496	Pass
			10	120	2498.072	>2496	Pass
			30	120	2498.081	>2496	Pass
			40	120	2498.098	>2496	Pass
			50	120	2498.091	>2496	Pass
			55	120	2498.075	>2496	Pass
		2640	20	102	2687.459	<2690	Pass
				120	2687.461	<2690	Pass
				138	2687.472	<2690	Pass
			-40	120	2687.481	<2690	Pass
			-30	120	2687.484	<2690	Pass
			-20	120	2687.463	<2690	Pass
			-10	120	2687.485	<2690	Pass
			0	120	2687.494	<2690	Pass
			10	120	2687.492	<2690	Pass
			30	120	2687.474	<2690	Pass
			40	120	2687.488	<2690	Pass
			50	120	2687.465	<2690	Pass
			55	120	2687.449	<2690	Pass

8. Radiated Spurious Emissions

8.1 Band 41_Ant1

8.1.1 Test Result

GMSK _Low channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over limit	Result
MHz	polarization	dBm	dBm	dB	
595.929	Horizontal	-75.38	-13	-62.38	pass
821.835	Horizontal	-72.63	-13	-59.63	pass
898.875	Horizontal	-67.61	-13	-54.61	pass
1587.460	Horizontal	-71.49	-13	-58.49	pass
3554.770	Horizontal	-66.79	-13	-53.79	pass
5394.490	Horizontal	-61.24	-13	-48.24	pass
387.862	Vertical	-69.17	-13	-56.17	pass
582.759	Vertical	-69.39	-13	-56.39	pass
811.415	Vertical	-62.71	-13	-49.71	pass
1614.290	Vertical	-66.04	-13	-53.04	pass
3562.400	Vertical	-58.05	-13	-45.05	pass
5393.140	Vertical	-56.14	-13	-43.14	pass

GMSK _Middle channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over limit	Result
MHz	polarization	dBm	dBm	dB	
573.339	Horizontal	-78.95	-13	-65.95	pass
817.385	Horizontal	-71.74	-13	-58.74	pass
893.815	Horizontal	-66.62	-13	-53.62	pass
1590.130	Horizontal	-70.57	-13	-57.57	pass
3571.340	Horizontal	-70.05	-13	-57.05	pass
5347.000	Horizontal	-60.72	-13	-47.72	pass
367.622	Vertical	-65.94	-13	-52.94	pass
609.509	Vertical	-71.82	-13	-58.82	pass
806.625	Vertical	-64.68	-13	-51.68	pass
2236.700	Vertical	-64.80	-13	-51.80	pass
4346.270	Vertical	-56.44	-13	-43.44	pass
7558.410	Vertical	-54.56	-13	-41.56	pass

GMSK_High channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over limit	Result
MHz	polarization	dBm	dBm	dB	
383.172	Horizontal	-79.36	-13	-66.36	pass
592.009	Horizontal	-69.97	-13	-56.97	pass
780.475	Horizontal	-64.61	-13	-51.61	pass
2245.220	Horizontal	-68.59	-13	-55.59	pass
4330.090	Horizontal	-69.82	-13	-56.82	pass
7563.000	Horizontal	-57.64	-13	-44.64	pass
255.529	Vertical	-66.29	-13	-53.29	pass
489.476	Vertical	-70.84	-13	-57.84	pass
682.882	Vertical	-62.25	-13	-49.25	pass
2211.210	Vertical	-63.88	-13	-50.88	pass
4337.010	Vertical	-59.97	-13	-46.97	pass
7585.940	Vertical	-59.45	-13	-46.45	pass

AWGN_5MHz_Low channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over limit	Result
MHz	polarization	dBm	dBm	dB	
381.602	Horizontal	-74.35	-13	-61.35	pass
571.049	Horizontal	-73.81	-13	-60.81	pass
796.505	Horizontal	-71.18	-13	-58.18	pass
2223.560	Horizontal	-71.87	-13	-58.87	pass
4350.020	Horizontal	-67.39	-13	-54.39	pass
7545.040	Horizontal	-61.13	-13	-48.13	pass
384.952	Vertical	-68.13	-13	-55.13	pass
595.539	Vertical	-67.22	-13	-54.22	pass
786.115	Vertical	-65.60	-13	-52.6	pass
2241.760	Vertical	-68.02	-13	-55.02	pass
4320.380	Vertical	-58.43	-13	-45.43	pass
7575.380	Vertical	-52.29	-13	-39.29	pass

AWGN_5MHz_Middle channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over limit	Result
MHz	polarization	dBm	dBm	dB	
389.022	Horizontal	-75.84	-13	-62.84	pass
564.029	Horizontal	-68.89	-13	-55.89	pass
818.215	Horizontal	-69.41	-13	-56.41	pass
2221.270	Horizontal	-71.38	-13	-58.38	pass
4301.770	Horizontal	-69.84	-13	-56.84	pass
7564.450	Horizontal	-58.86	-13	-45.86	pass
235.799	Vertical	-70.09	-13	-57.09	pass
505.566	Vertical	-72.95	-13	-59.95	pass
680.832	Vertical	-63.22	-13	-50.22	pass
2211.970	Vertical	-64.45	-13	-51.45	pass
4315.420	Vertical	-59.43	-13	-46.43	pass
7543.420	Vertical	-52.31	-13	-39.31	pass
AWGN_5MHz_High channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over limit	Result
MHz	polarization	dBm	dBm	dB	
592.609	Horizontal	-79.19	-13	-66.19	pass
782.695	Horizontal	-74.27	-13	-61.27	pass
875.905	Horizontal	-63.63	-13	-50.63	pass
2206.810	Horizontal	-72.36	-13	-59.36	pass
4340.940	Horizontal	-67.76	-13	-54.76	pass
7559.480	Horizontal	-62.19	-13	-49.19	pass
408.972	Vertical	-72.05	-13	-59.05	pass
582.509	Vertical	-68.50	-13	-55.50	pass
815.375	Vertical	-65.18	-13	-52.18	pass
2205.360	Vertical	-68.44	-13	-55.44	pass
4324.020	Vertical	-60.56	-13	-47.56	pass
7587.910	Vertical	-52.87	-13	-39.87	pass

AWGN_100MHz_Low channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over limit	Result
MHz	polarization	dBm	dBm	dB	
408.232	Horizontal	-76.33	-13	-63.33	pass
585.659	Horizontal	-73.28	-13	-60.28	pass
783.045	Horizontal	-66.67	-13	-53.67	pass
2238.300	Horizontal	-68.95	-13	-55.95	pass
4333.570	Horizontal	-70.50	-13	-57.50	pass
7584.670	Horizontal	-63.56	-13	-50.56	pass
246.529	Vertical	-69.20	-13	-56.20	pass
508.806	Vertical	-69.32	-13	-56.32	pass
699.192	Vertical	-64.29	-13	-51.29	pass
2231.030	Vertical	-62.58	-13	-49.58	pass
4330.460	Vertical	-55.54	-13	-42.54	pass
7542.150	Vertical	-54.62	-13	-41.62	pass

AWGN_100MHz_Middle channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over limit	Result
MHz	polarization	dBm	dBm	dB	
378.882	Horizontal	-73.73	-13	-60.73	pass
606.309	Horizontal	-69.70	-13	-56.70	pass
787.675	Horizontal	-70.36	-13	-57.36	pass
2229.280	Horizontal	-69.30	-13	-56.30	pass
4307.830	Horizontal	-63.32	-13	-50.32	pass
7577.160	Horizontal	-57.89	-13	-44.89	pass
389.402	Vertical	-65.24	-13	-52.24	pass
592.029	Vertical	-72.95	-13	-59.95	pass
798.065	Vertical	-63.47	-13	-50.47	pass
2204.110	Vertical	-69.92	-13	-56.92	pass
4349.310	Vertical	-61.80	-13	-48.80	pass
7582.020	Vertical	-52.46	-13	-39.46	pass

AWGN_100MHz_High channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over limit	Result
MHz	polarization	dBm	dBm	dB	
397.262	Horizontal	-74.91	-13	-61.91	pass
572.969	Horizontal	-72.10	-13	-59.10	pass
794.925	Horizontal	-66.78	-13	-53.78	pass
2205.470	Horizontal	-68.99	-13	-55.99	pass
4307.810	Horizontal	-66.10	-13	-53.10	pass
7572.340	Horizontal	-61.48	-13	-48.48	pass
241.829	Vertical	-68.68	-13	-55.68	pass
489.936	Vertical	-72.22	-13	-59.22	pass
681.032	Vertical	-63.14	-13	-50.14	pass
2245.090	Vertical	-69.63	-13	-56.63	pass
4325.010	Vertical	-59.64	-13	-46.64	pass
7585.140	Vertical	-56.69	-13	-43.69	pass