

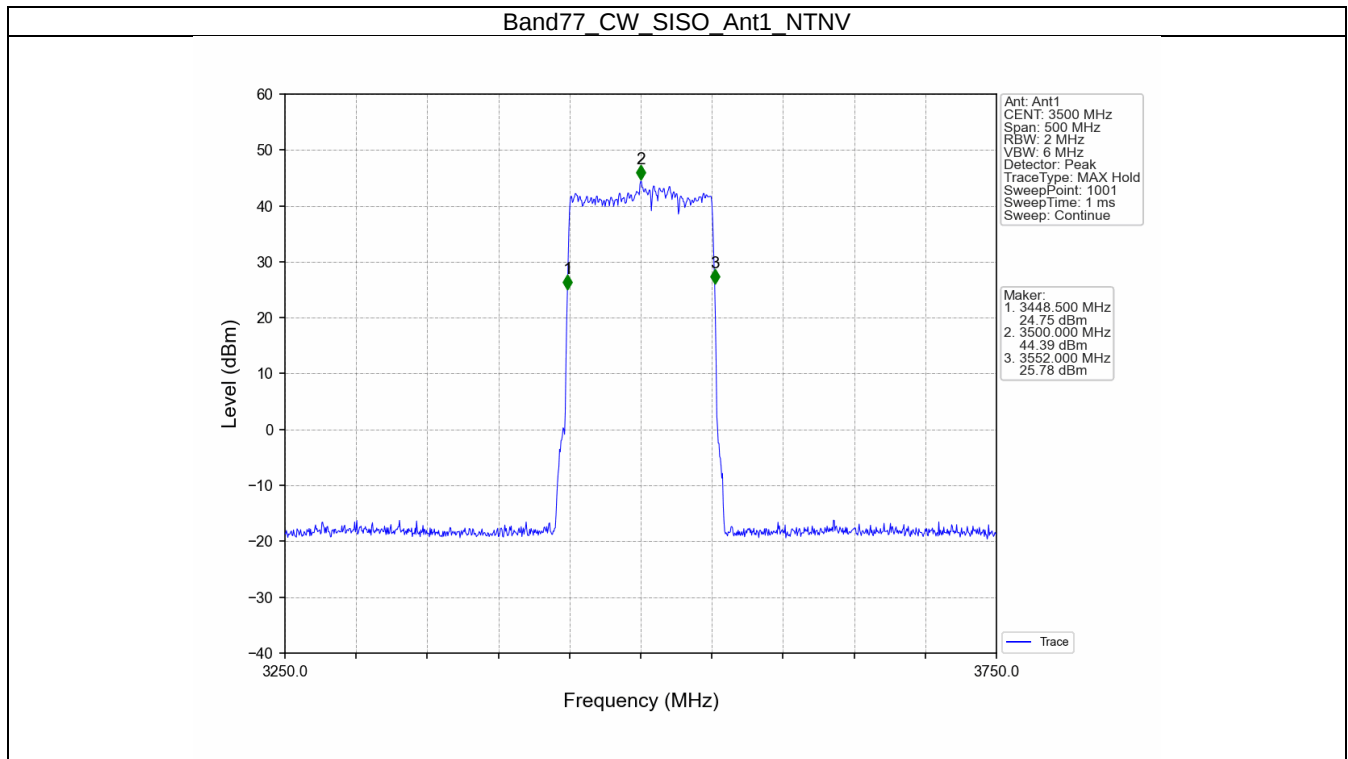
1. Out of band rejection

1.1 Band77

1.1.1 Test Result

Band: 77 / NTNV							
Signal	Sweep Frequency Range (MHz)	TX Type	ANT	F0 (MHz)	FL (MHz)	FH (MHz)	Verdict
CW	3250 - 3750	SISO	1	3500.000	3448.500	3552.000	Pass

1.1.2 Test Graph



2. AGC threshold

2.1 Band77

2.1.1 Test Result

Band: 77 / NTNV					
Signal	Frequency (MHz)	TX Type	ANT	AGC Threshold (dBm)	Verdict
GMSK 0.2MHz	3500	SISO	1	-3.50	Pass
AWGN 5MHz	3500	SISO	1	-3.50	Pass
AWGN 100MHz	3500	SISO	1	-3.50	Pass

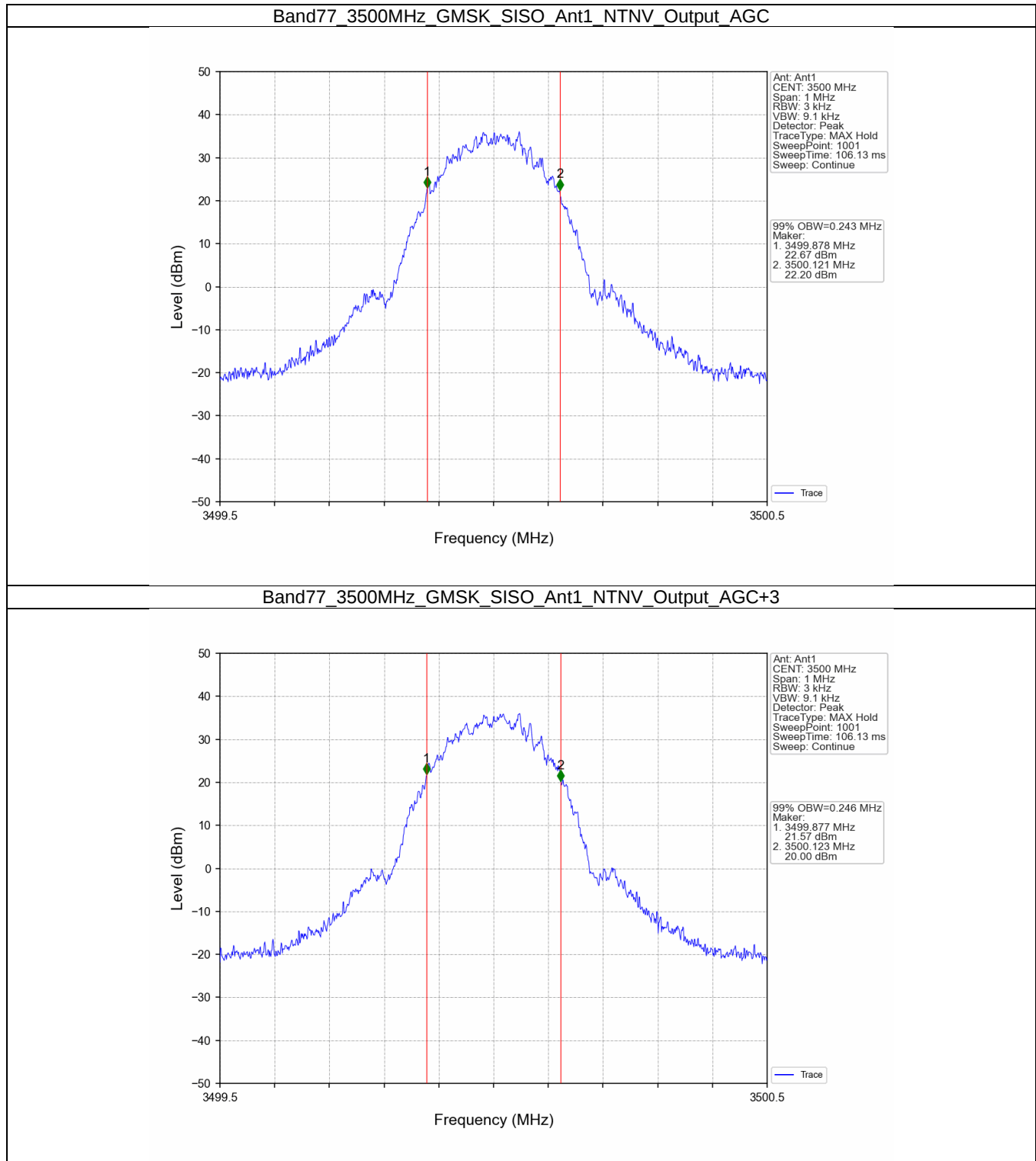
3. Input-versus-output signal comparison

3.1 Band77_OBW

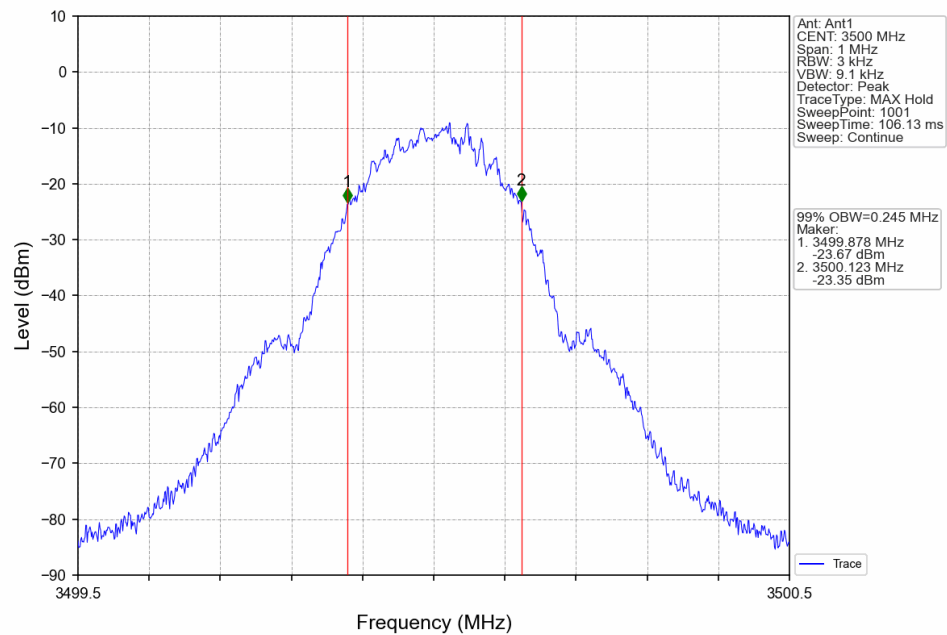
3.1.1 Test Result

Band: 77 / NTNV							
Signal			TX Type	ANT	99% OBW (MHz)		Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input	
GMSK 0.2MHz	-3.5	3500	SISO	1	0.243	0.245	Pass
	-0.5	3500	SISO	1	0.246	0.244	Pass
AWGN 5MHz	-3.5	3500	SISO	1	4.544	4.531	Pass
	-0.5	3500	SISO	1	4.544	4.536	Pass
AWGN 100MHz	-3.5	3500	SISO	1	96.250	97.194	Pass
	-0.5	3500	SISO	1	96.182	97.149	Pass

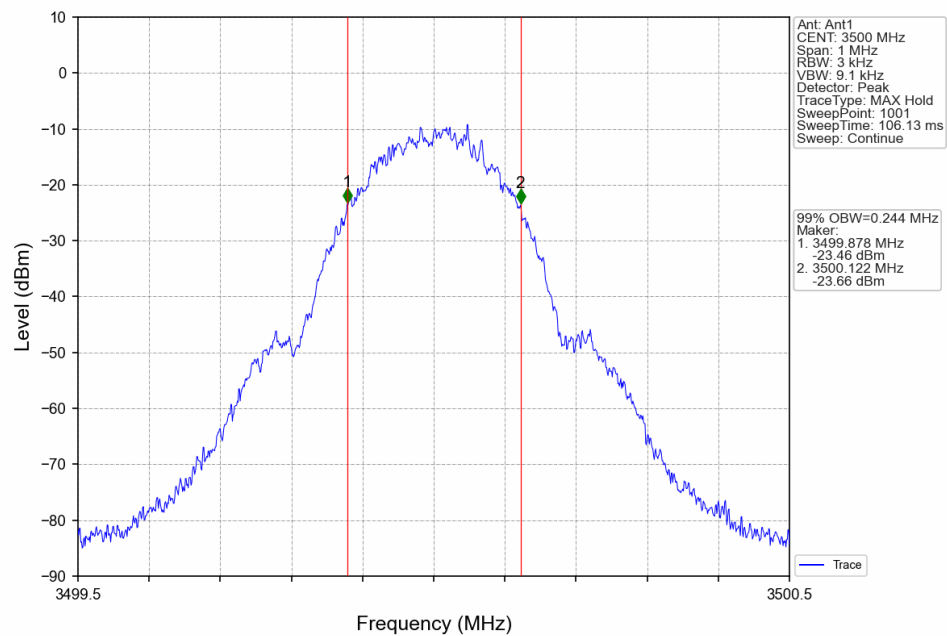
3.1.2 Test Graph



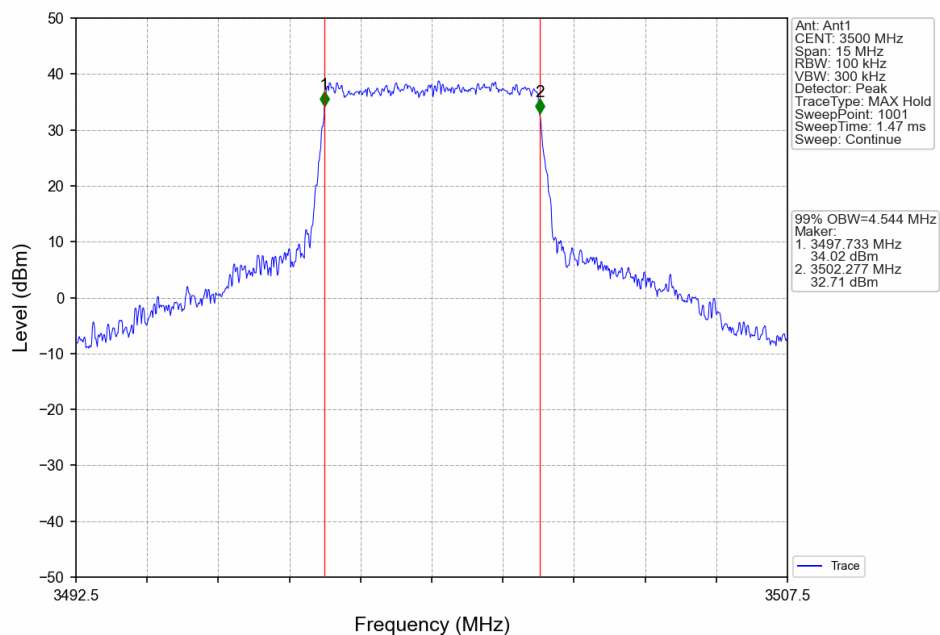
Band77_3500MHz_GMSK_SISO_Ant1_NTNV_Input_AGC



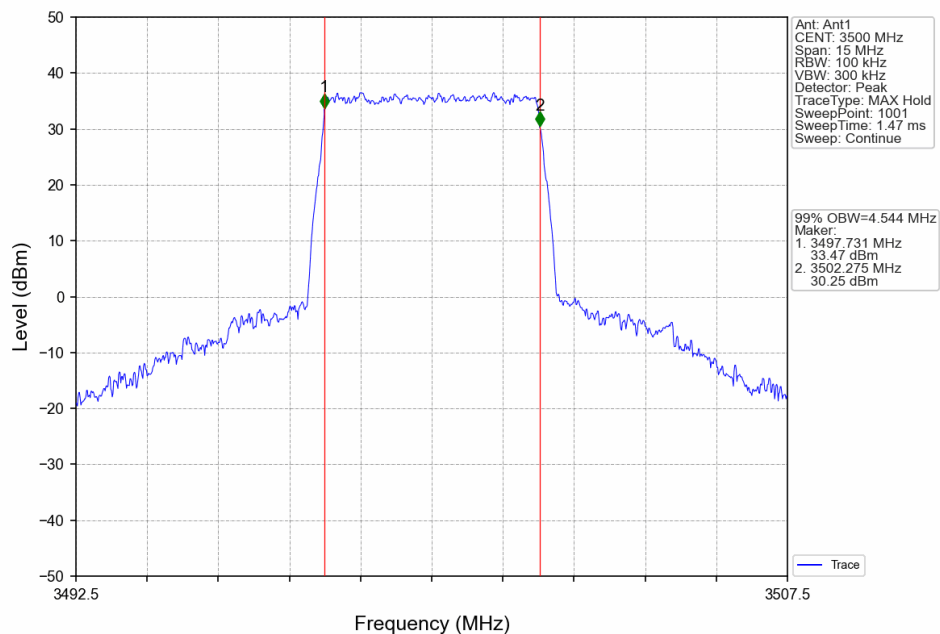
Band77_3500MHz_GMSK_SISO_Ant1_NTNV_Input_AGC+3



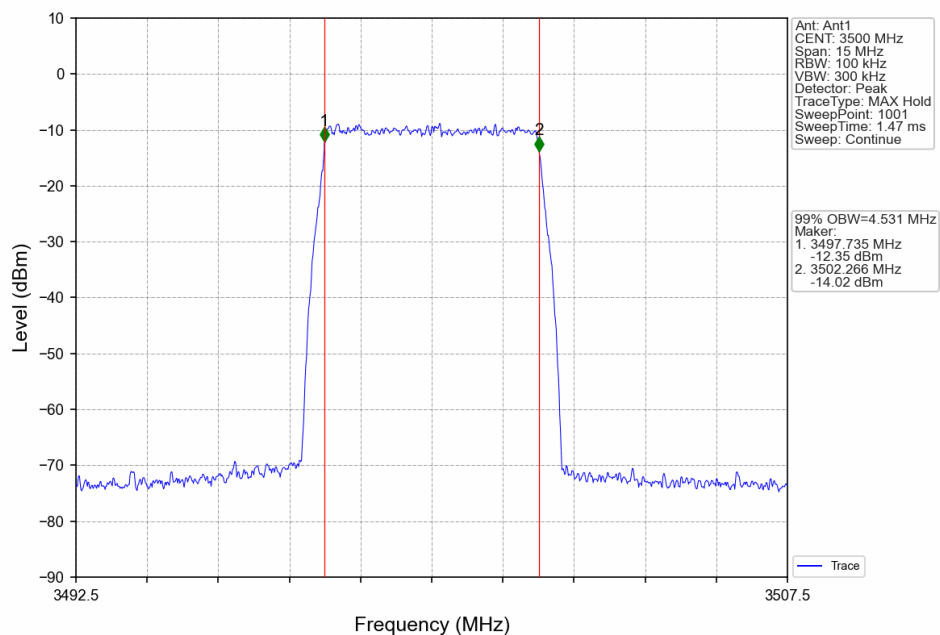
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_Output_AGC



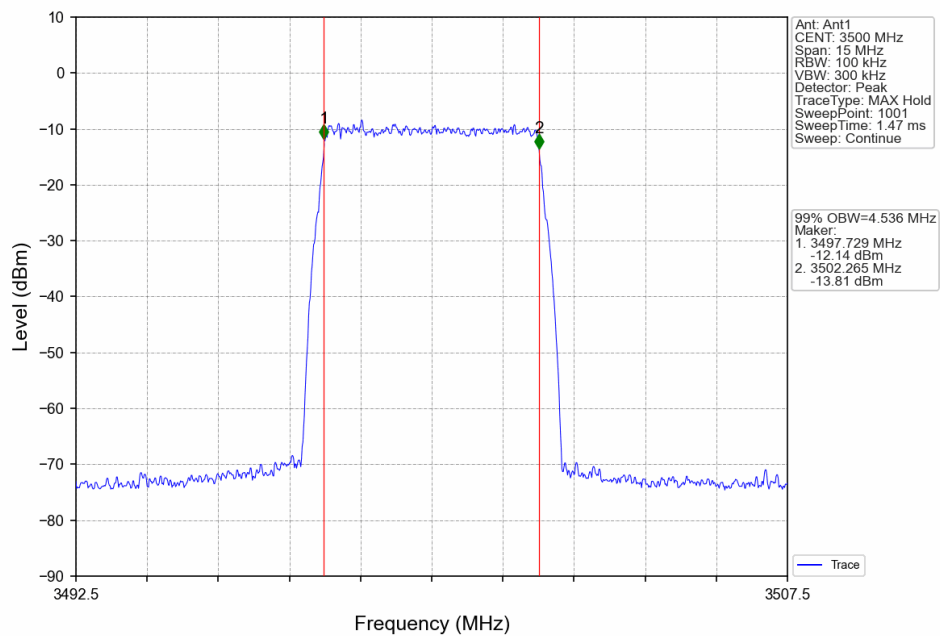
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_Output_AGC+3



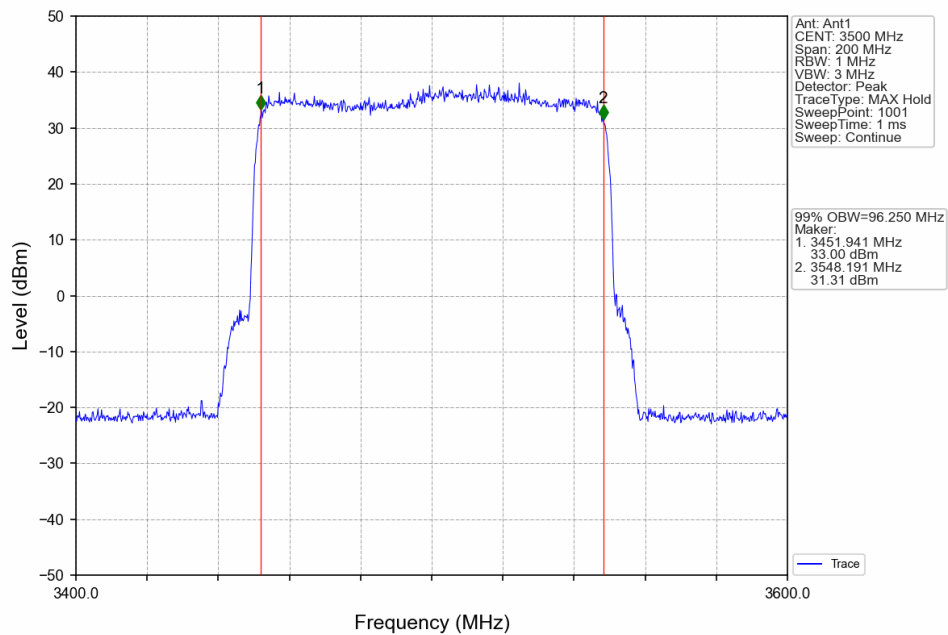
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_Input_AGC



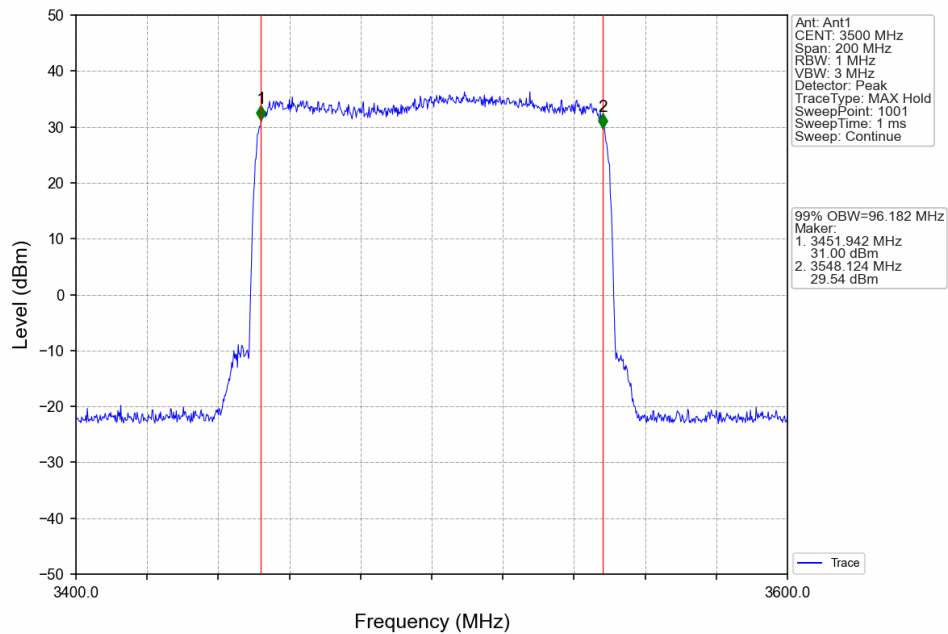
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_Input_AGC+3



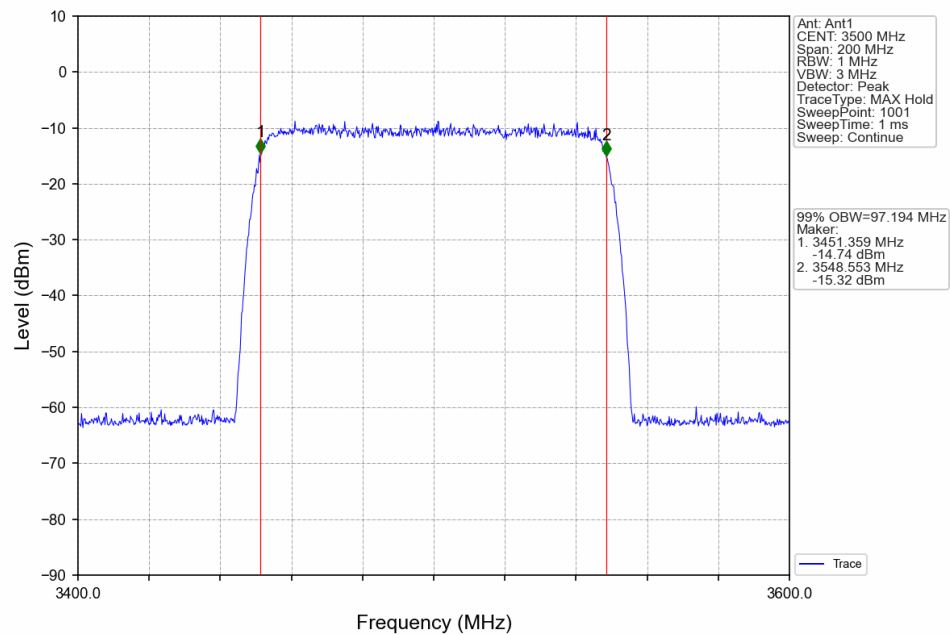
Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC



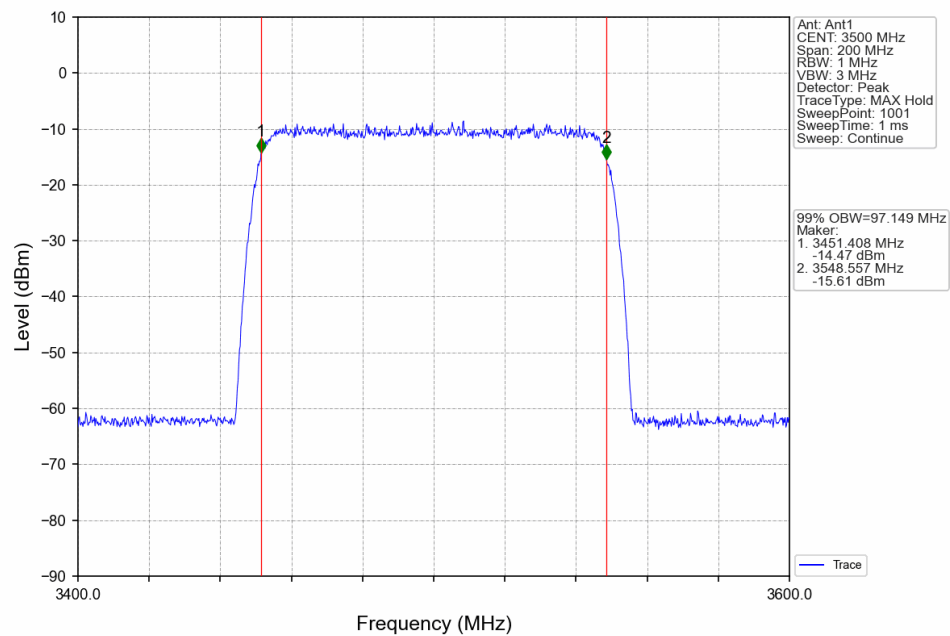
Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC+3



Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC



Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC+3

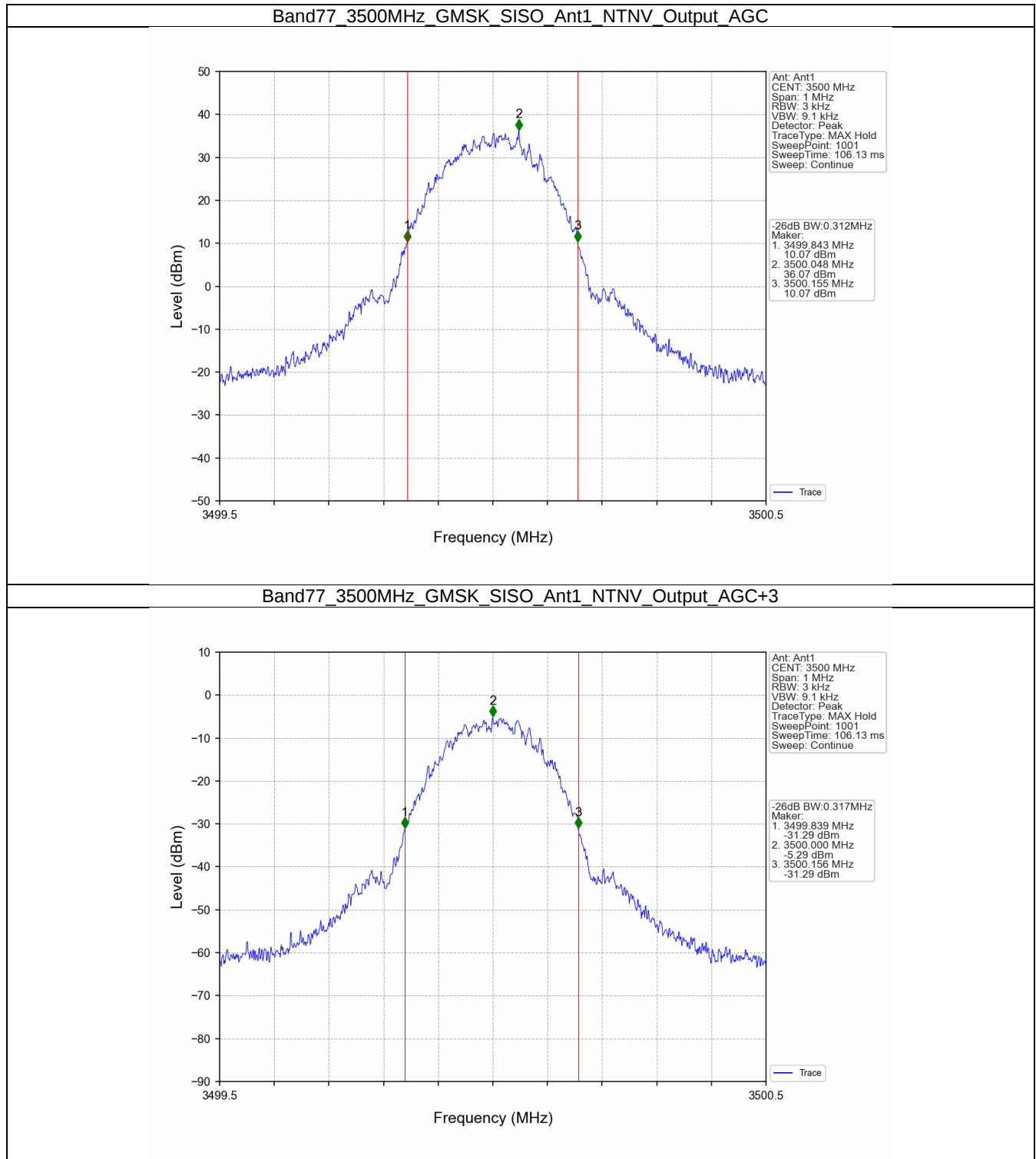


3.2 Band77_EBW

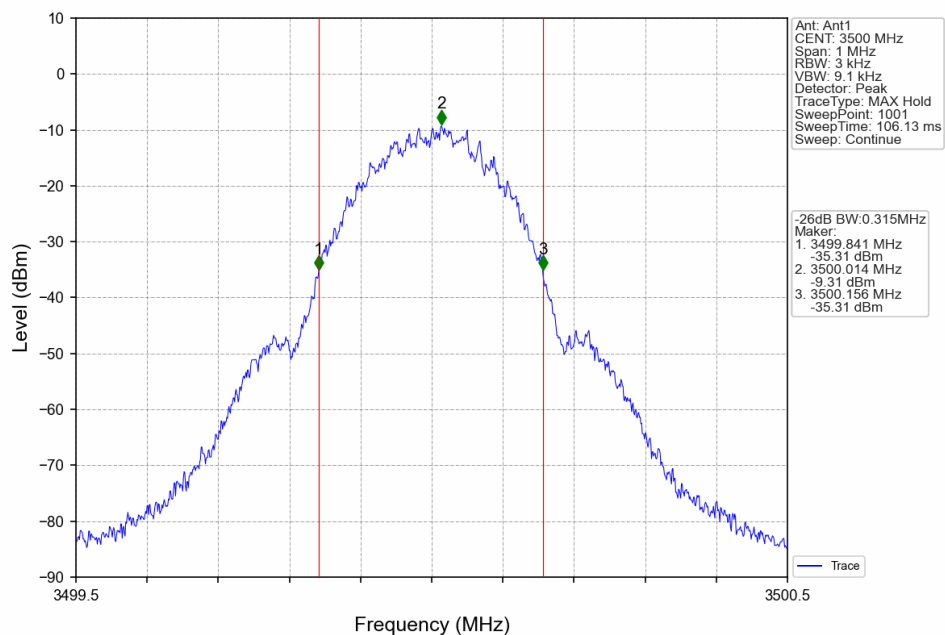
3.2.1 Test Result

Band: 77 / NTNV							
Signal			TX Type	ANT	26dB EBW (MHz)		Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input	
GMSK 0.2MHz	-3.5	3500	SISO	1	0.312	0.315	Pass
	-0.5	3500	SISO	1	0.317	0.316	Pass
AWGN 5MHz	-3.5	3500	SISO	1	5.072	5.071	Pass
	-0.5	3500	SISO	1	5.083	5.054	Pass
AWGN 100MHz	-3.5	3500	SISO	1	101.224	105.795	Pass
	-0.5	3500	SISO	1	101.184	106.034	Pass

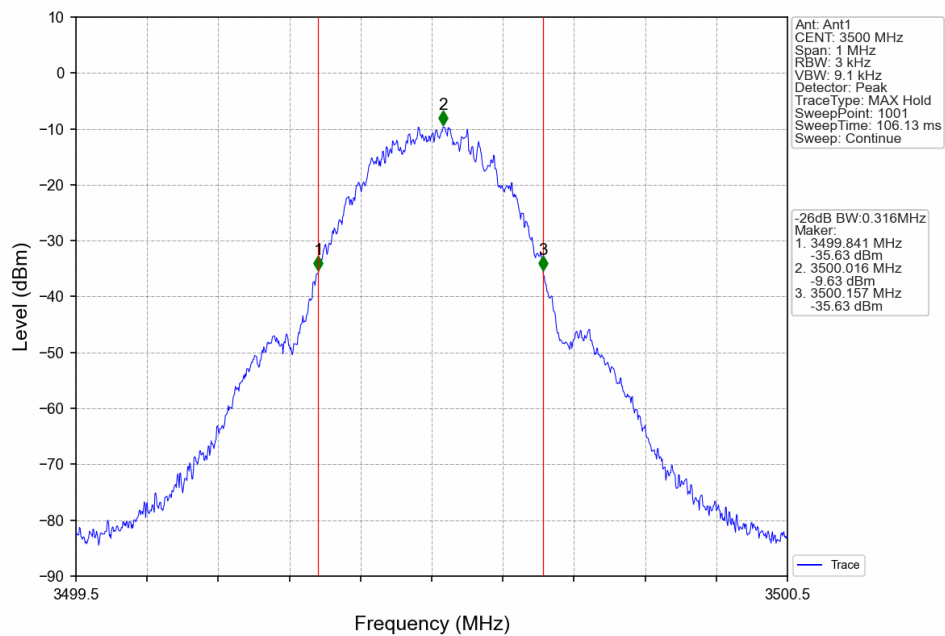
3.2.2 Test Graph



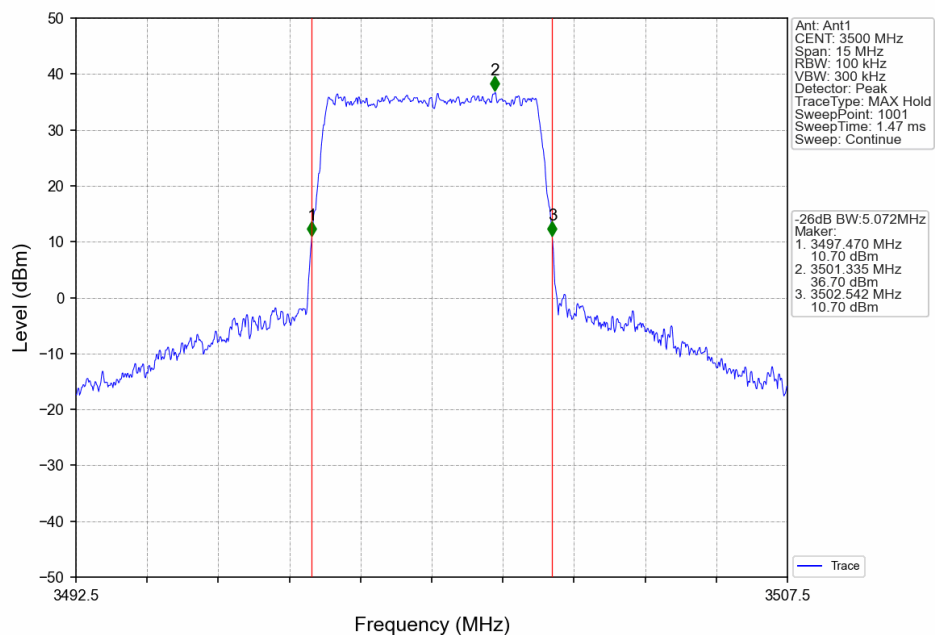
Band77_3500MHz_GMSK_SISO_Ant1_NTNV_Input_AGC



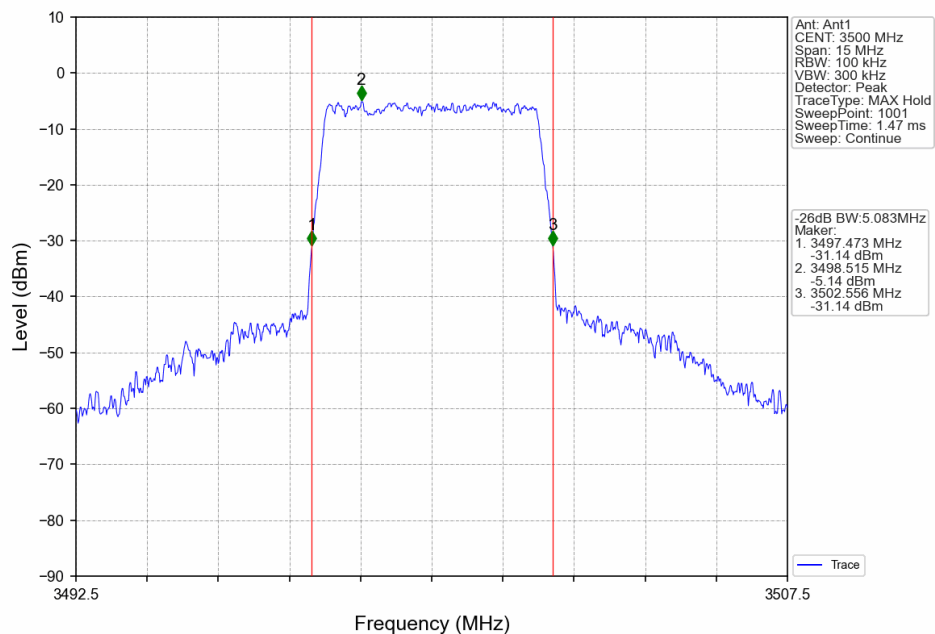
Band77_3500MHz_GMSK_SISO_Ant1_NTNV_Input_AGC+3



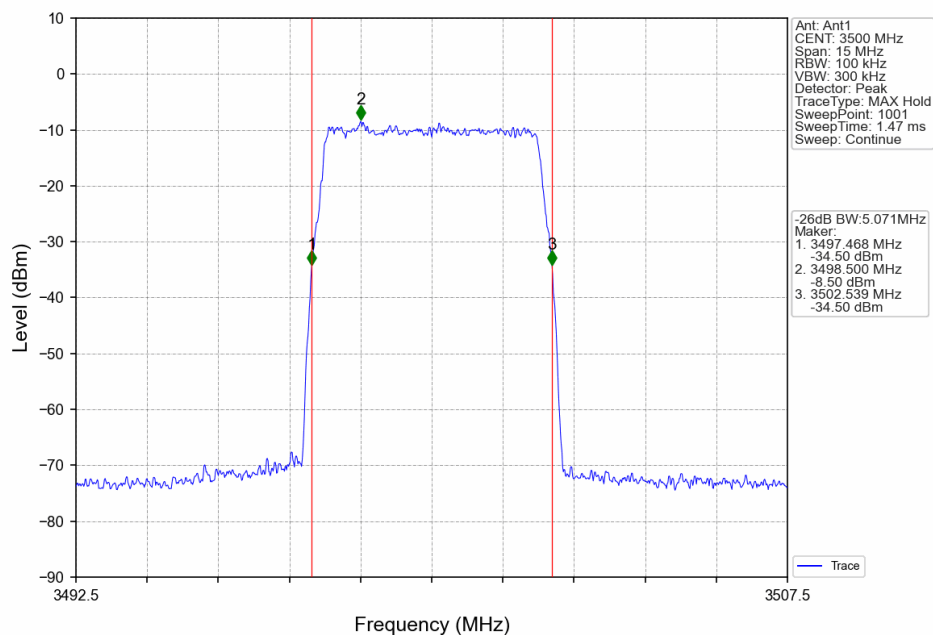
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_Output_AGC



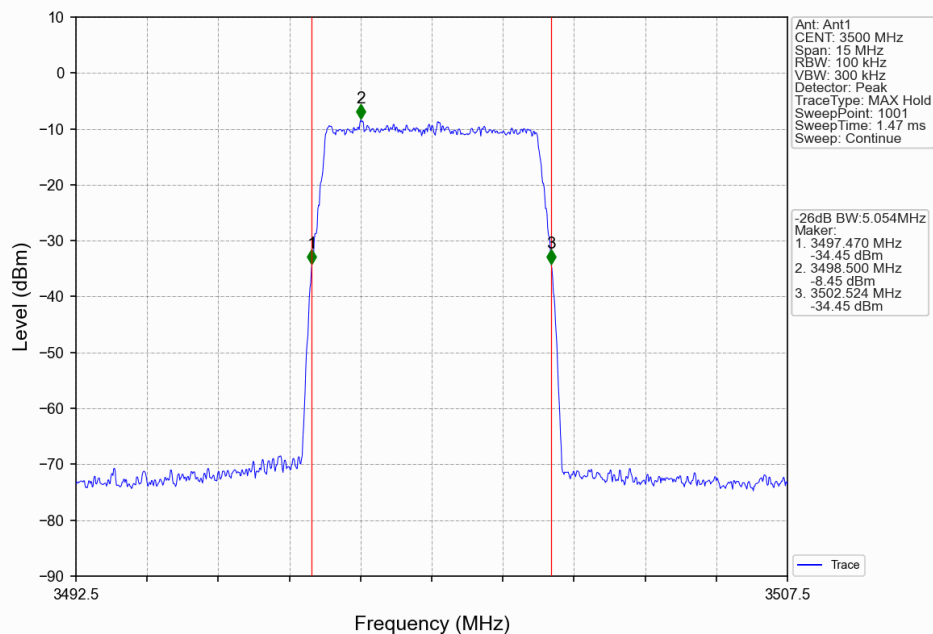
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_Output_AGC+3



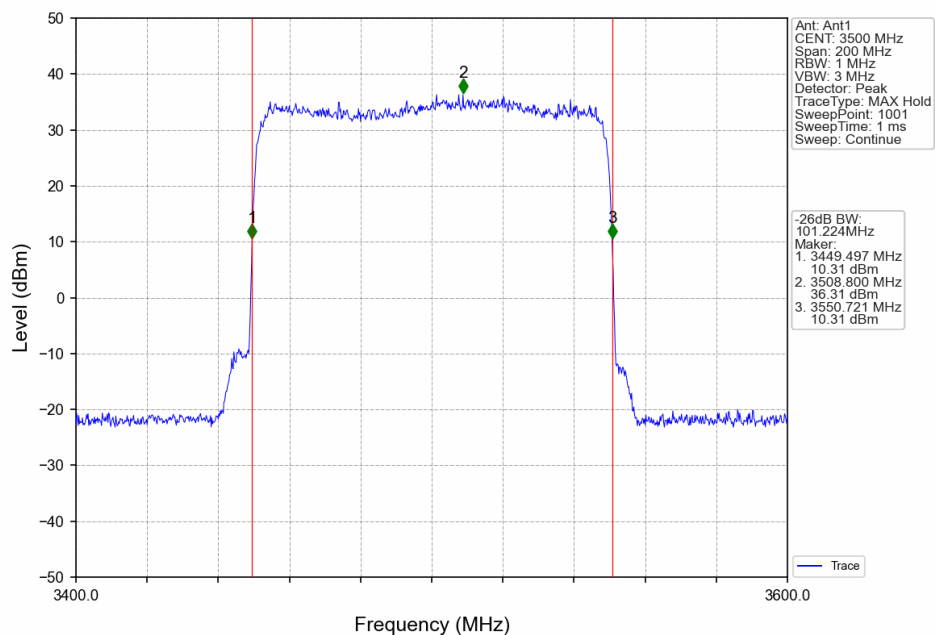
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_Input_AGC



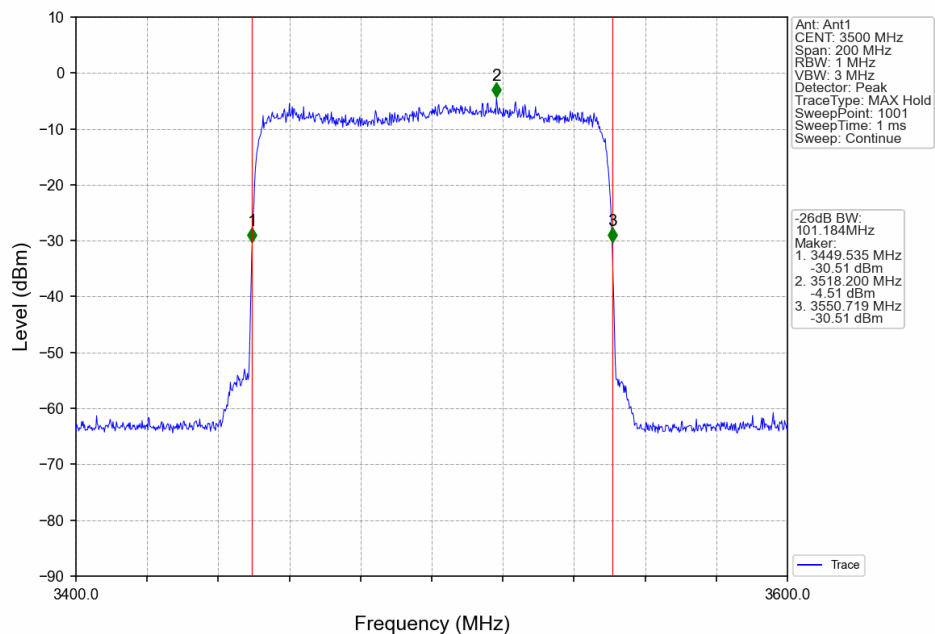
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_Input_AGC+3



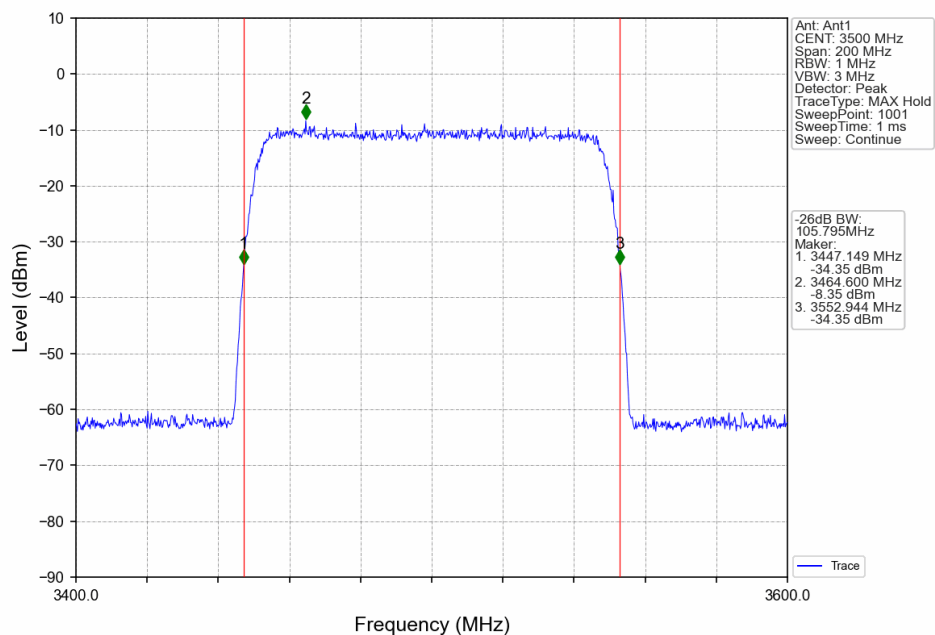
Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC



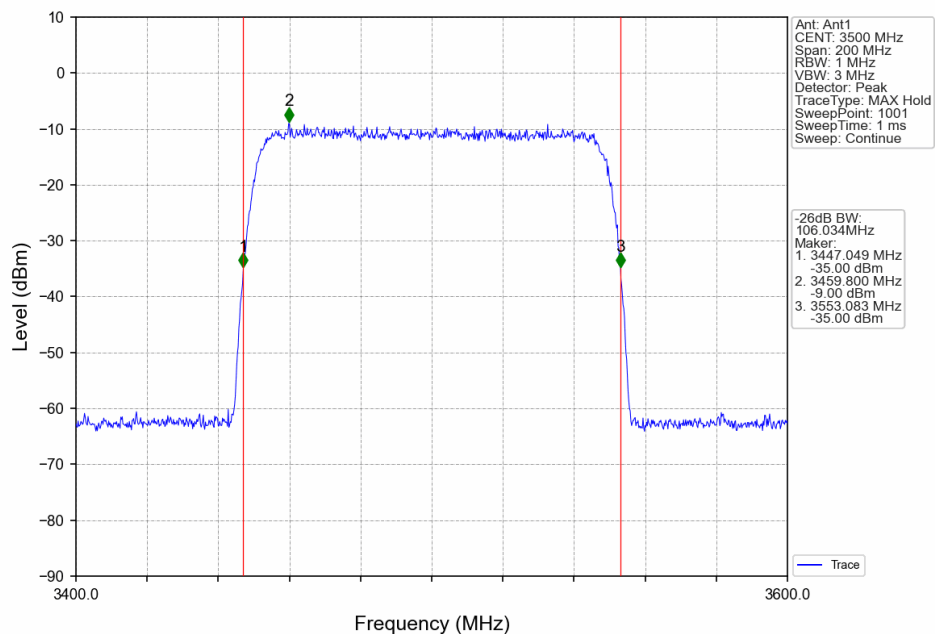
Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC+3



Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC



Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC+3



4. Input/output power and amplifier/booster gain

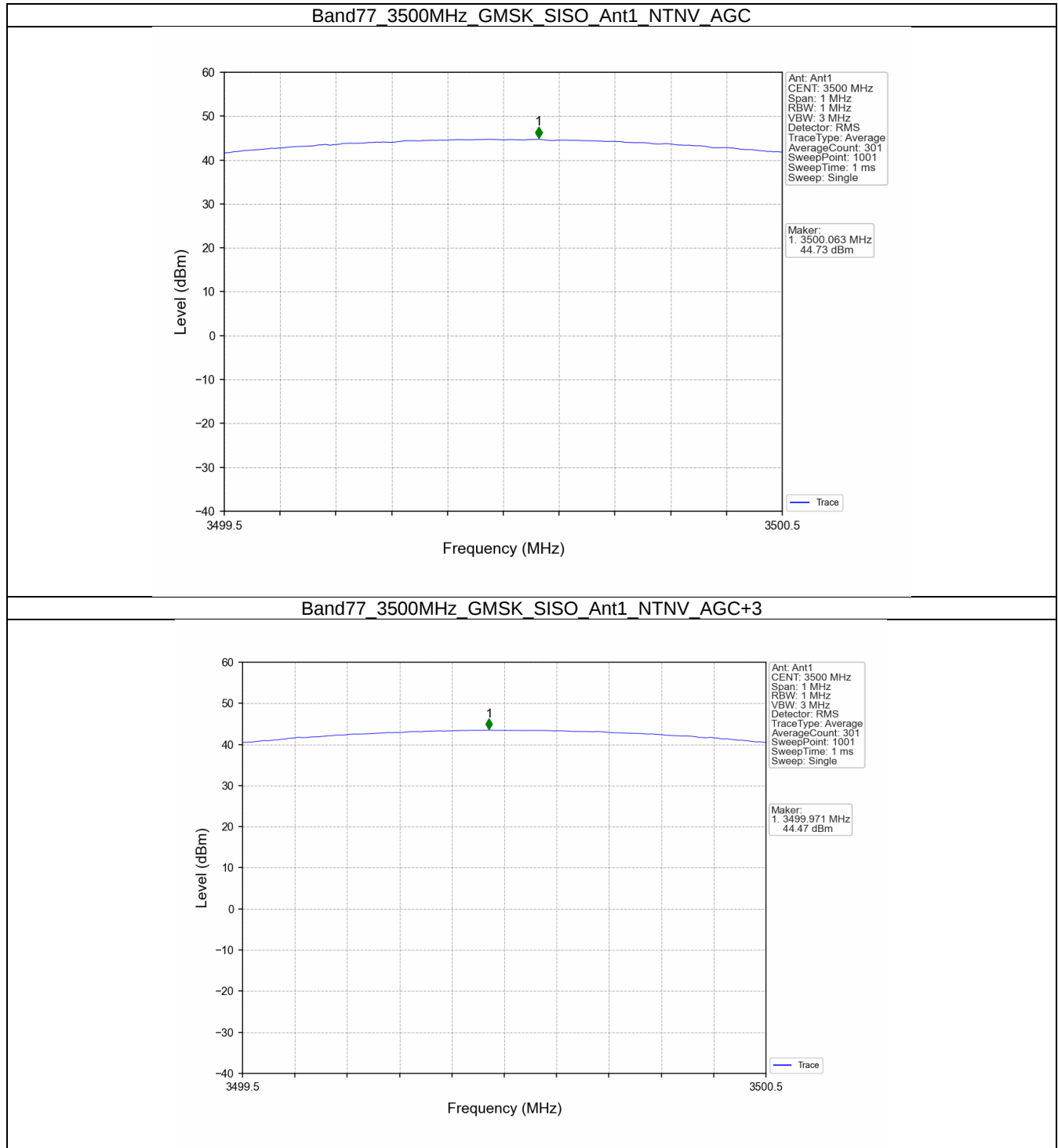
4.1 Band77_EIRP

4.1.1 Test Result

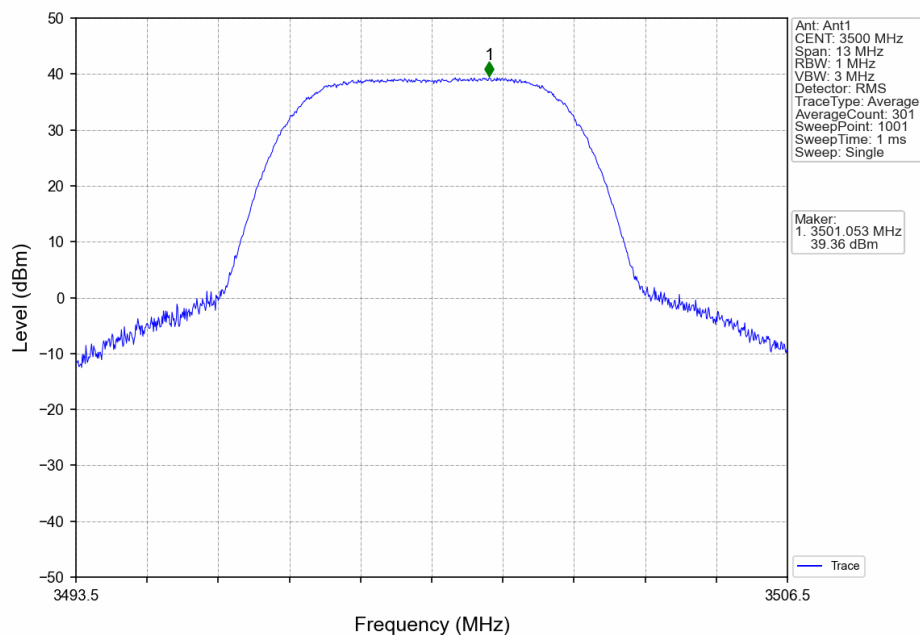
Band: N77 / NTNV										
Signal			TX Type	ANT	Conducted Power (dBm/MHz)		EIRP (dBm/MHz)		Booster Gain (dB)	Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input	Result	Limit		
GMSK 0.2MHz	-3.5	3500	SISO	1	44.73	-4.15	59.73	<=65.16	48.89	Pass
	-0.5	3500	SISO	1	44.47	-1.14	58.47	<=65.16	/	Pass
AWGN 5MHz	-3.5	3500	SISO	1	39.36	-10.11	54.36	<=65.16	49.46	Pass
	-0.5	3500	SISO	1	39.17	-6.94	54.17	<=65.16	/	Pass
AWGN 100MHz	-3.5	3500	SISO	1	25.60	-23.55	40.60	<=65.16	49.15	Pass
	-0.5	3500	SISO	1	25.35	-20.77	40.35	<=65.16	/	Pass

Band: N77 / NTNV					
Signal			Conducted Power (dBm)	EIRP (dBm)	Booster Gain (dB)
Type	Level (dBm)	Frequency (MHz)	SISO	SISO	
GMSK 0.2MHz	-3.5	3500	45.52	60.52	/
	-0.5	3500	45.61	60.61	/
AWGN 5MHz	-3.5	3500	45.47	60.47	/
	-0.5	3500	45.58	60.58	/
AWGN 100MHz	-3.5	3500	45.59	60.59	/
	-0.5	3500	45.65	60.65	/

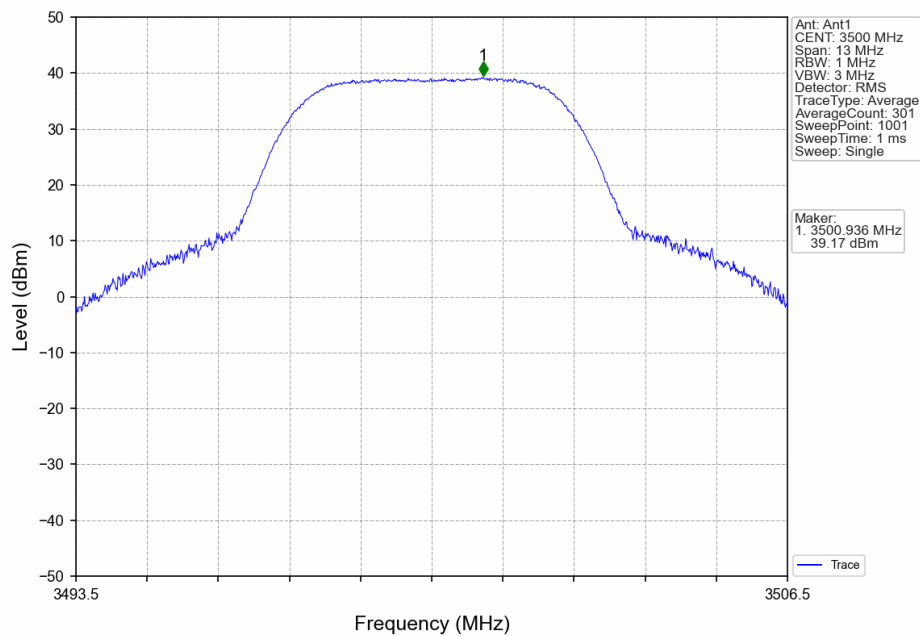
4.1.2 Test Graph



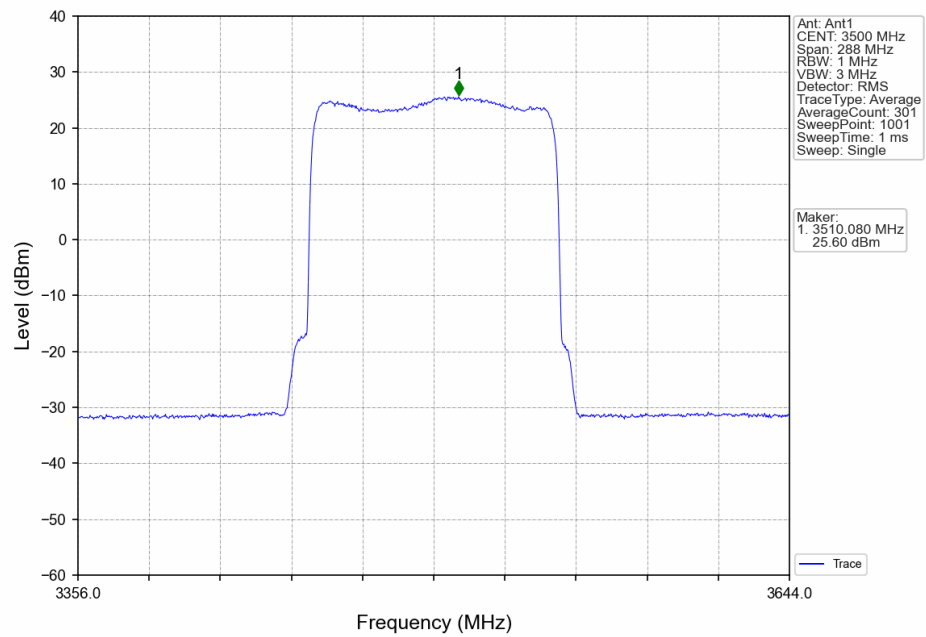
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_AGC



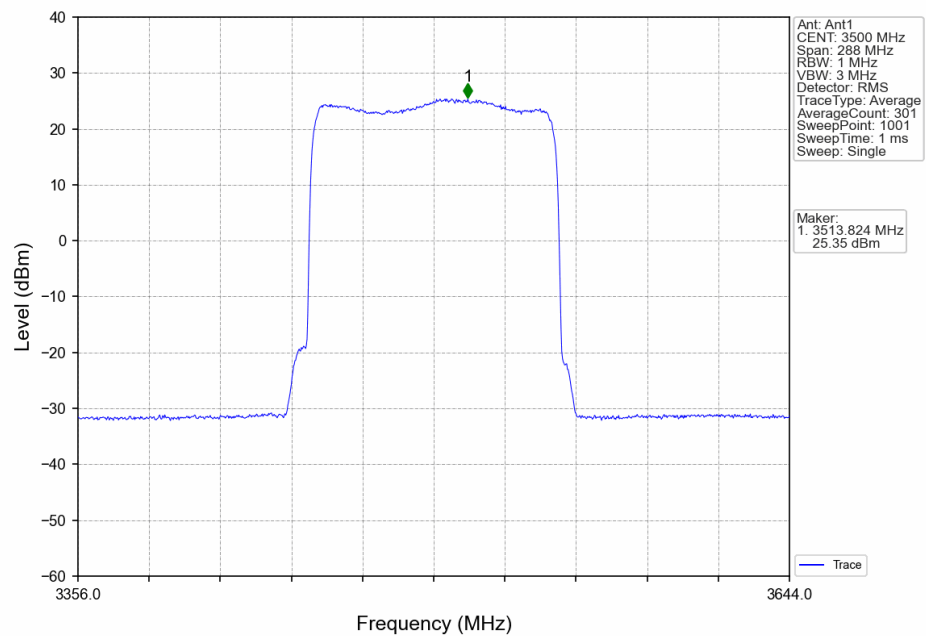
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_AGC+3



Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3

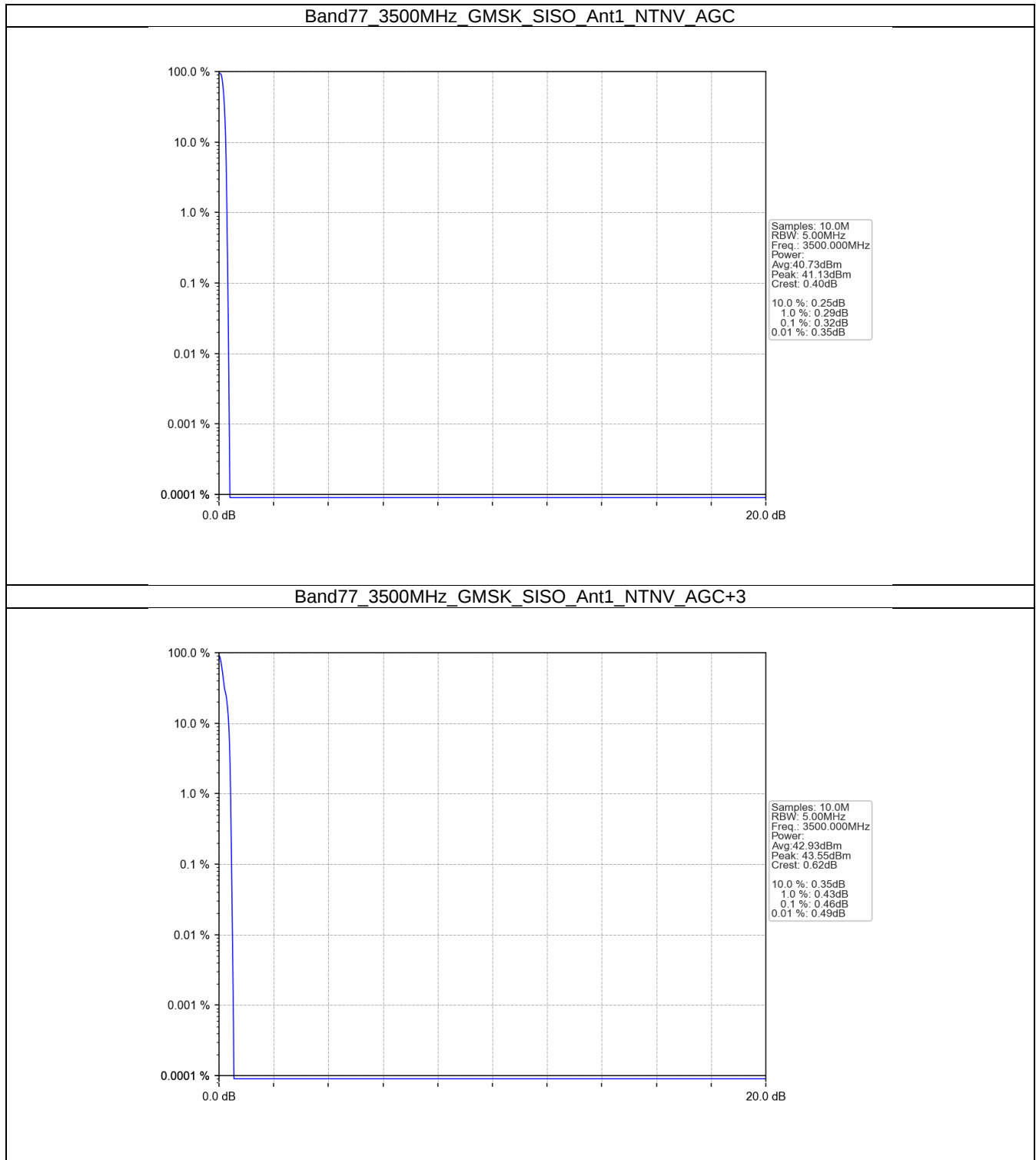


4.2 Band77_PAPR

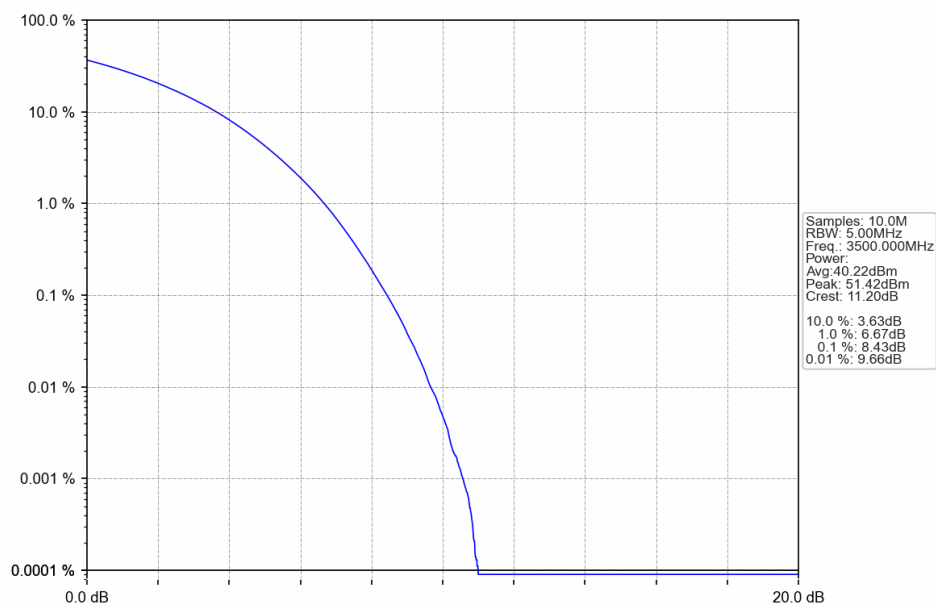
4.2.1 Test Result

Band: 77 / NTNV							
Signal			TX Type	ANT	PAPR (dB)		Verdict
Type	Level (dBm)	Frequency (MHz)			Result	Limit	
GMSK 0.2MHz	-3.5	3500	SISO	1	0.32	<=13	Pass
	-0.5	3500	SISO	1	0.46	<=13	Pass
AWGN 5MHz	-3.5	3500	SISO	1	8.43	<=13	Pass
	-0.5	3500	SISO	1	8.59	<=13	Pass
AWGN 100MHz	-3.5	3500	SISO	1	8.53	<=13	Pass
	-0.5	3500	SISO	1	8.53	<=13	Pass

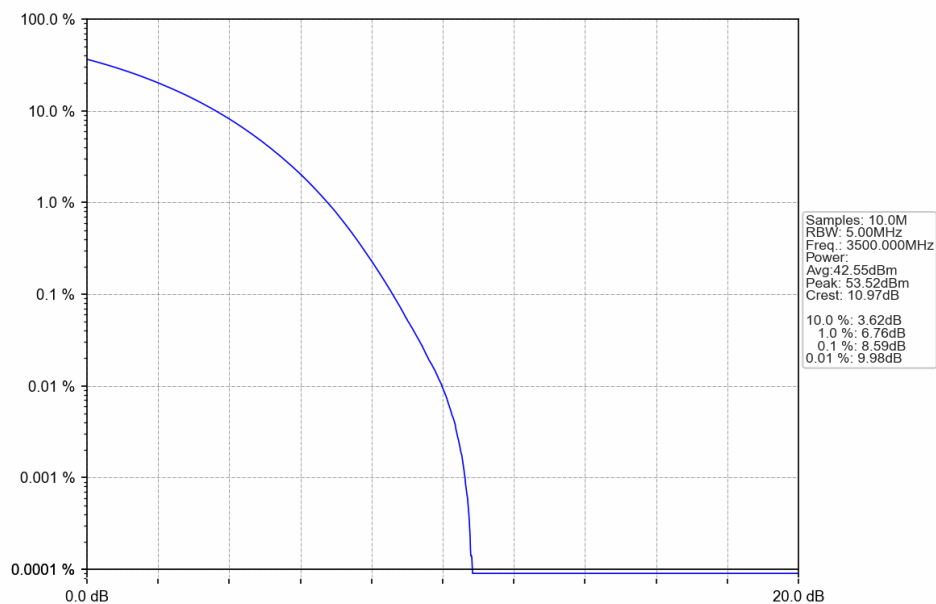
4.2.2 Test Graph



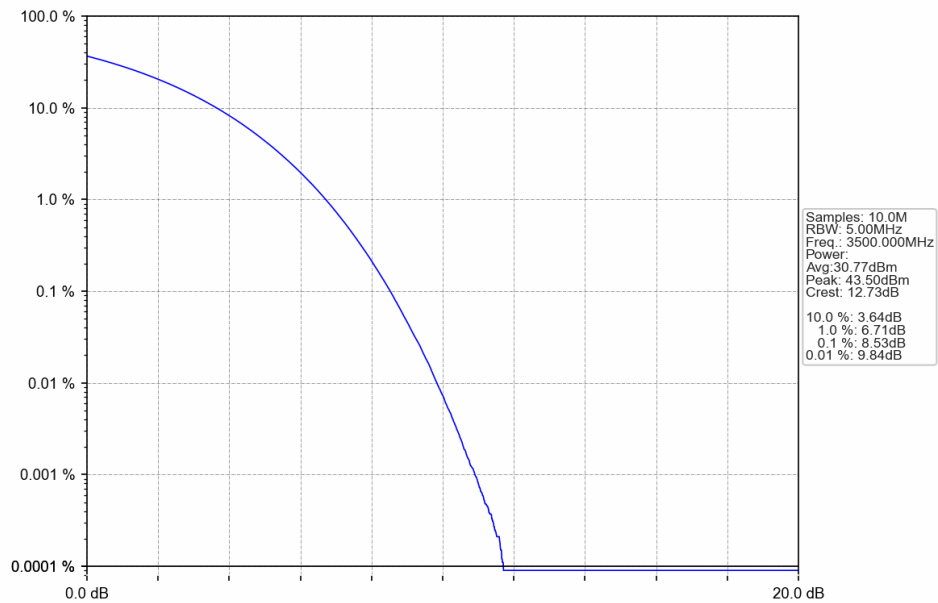
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_AGC



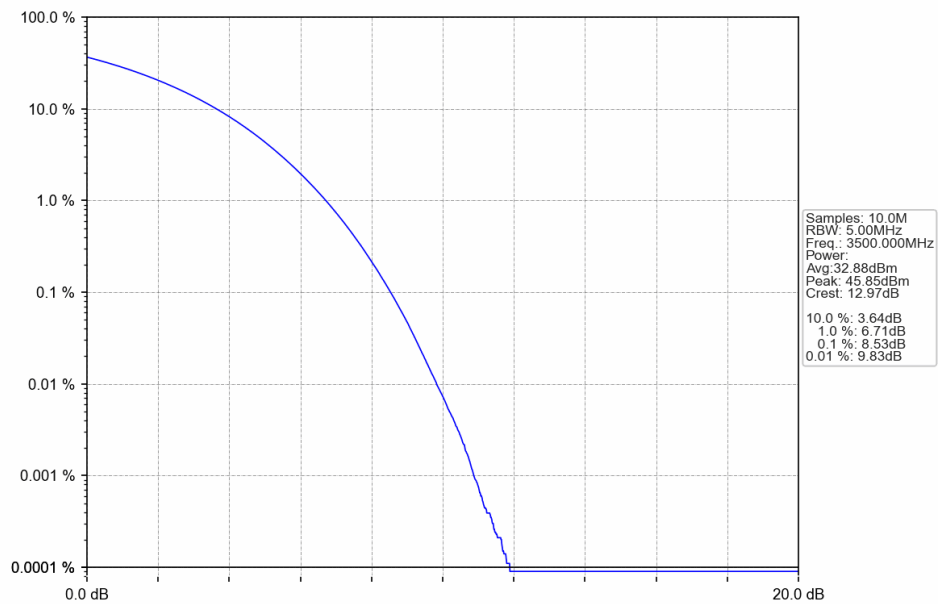
Band77_3500MHz_AWGN_SISO_Ant1_NTNV_AGC+3



Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3



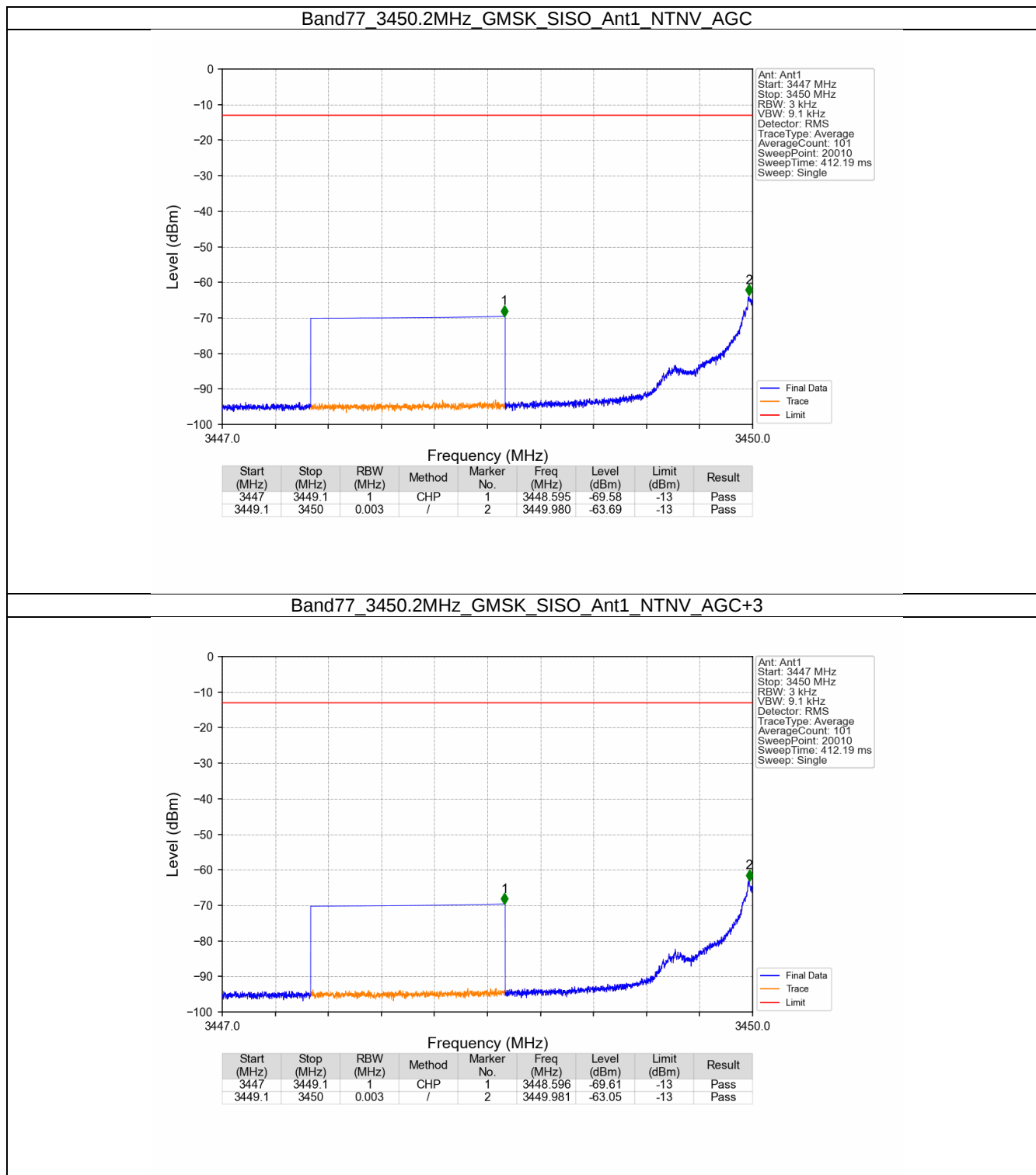
5. Out-of-band/out-of-block (including intermodulation) emissions

5.1 Band77

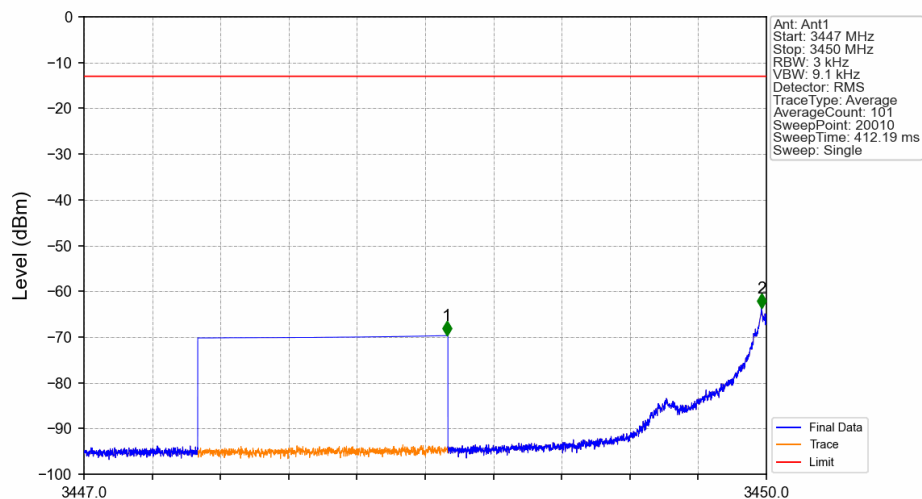
5.1.1 Test Result

Band: 77 / NTNV									
Signal				Channel	TX Type	ANT	OOB (dBm)		Verdict
Input	Type	Level (dBm)	Frequency (MHz)				Result	Limit	
Two	GMSK 0.2MHz	-3.5	3450.2	LCH	SISO	1	-63.69	Refer To Test Graph	Pass
		-0.5	3450.2	LCH	SISO	1	-63.05	Refer To Test Graph	Pass
One	GMSK 0.2MHz	-3.5	3450.2	LCH	SISO	1	-63.65	Refer To Test Graph	Pass
		-0.5	3450.2	LCH	SISO	1	-63.23	Refer To Test Graph	Pass
Two	GMSK 0.2MHz	-3.5	3549.8	HCH	SISO	1	-58.56	Refer To Test Graph	Pass
		-0.5	3549.8	HCH	SISO	1	-59.26	Refer To Test Graph	Pass
One	GMSK 0.2MHz	-3.5	3549.8	HCH	SISO	1	-59.37	Refer To Test Graph	Pass
		-0.5	3549.8	HCH	SISO	1	-59.34	Refer To Test Graph	Pass
Two	AWGN 5MHz	-3.5	3452.5	LCH	SISO	1	-48.56	Refer To Test Graph	Pass
		-0.5	3452.5	LCH	SISO	1	-49.26	Refer To Test Graph	Pass
One	AWGN 5MHz	-3.5	3452.5	LCH	SISO	1	-51.85	Refer To Test Graph	Pass
		-0.5	3452.5	LCH	SISO	1	-55.76	Refer To Test Graph	Pass
Two	AWGN 5MHz	-3.5	3547.5	HCH	SISO	1	-49.28	Refer To Test Graph	Pass
		-0.5	3547.5	HCH	SISO	1	-44.63	Refer To Test Graph	Pass
One	AWGN 5MHz	-3.5	3547.5	HCH	SISO	1	-45.36	Refer To Test Graph	Pass
		-0.5	3547.5	HCH	SISO	1	-50.49	Refer To Test Graph	Pass
Two	AWGN 100MHz	-3.5	3500	LCH	SISO	1	-36.31	Refer To Test Graph	Pass
		-0.5	3500	MCH	SISO	1	-34.15	Refer To Test Graph	Pass
One	AWGN 100MHz	-3.5	3500	MCH	SISO	1	-35.54	Refer To Test Graph	Pass
		-0.5	3500	MCH	SISO	1	-34.19	Refer To Test Graph	Pass

5.1.2 Test Graph

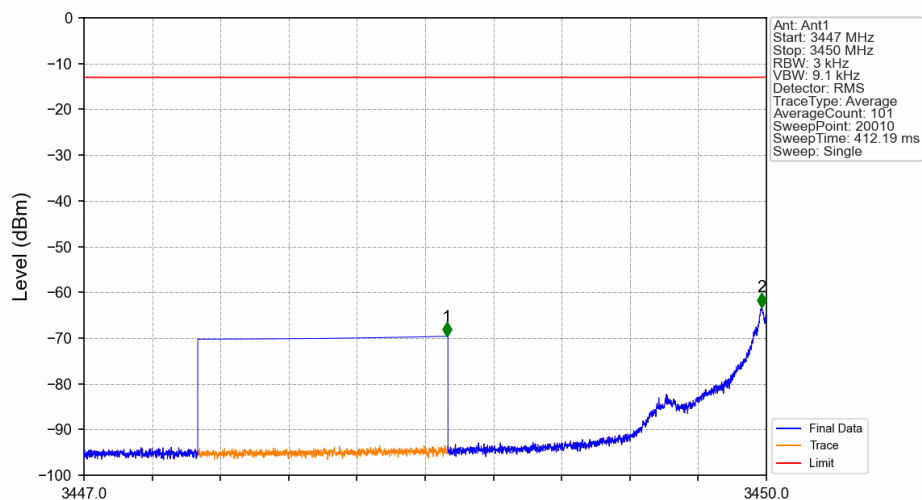


Band77_3450.2MHz_GMSK_SISO_Ant1_NTNV_AGC



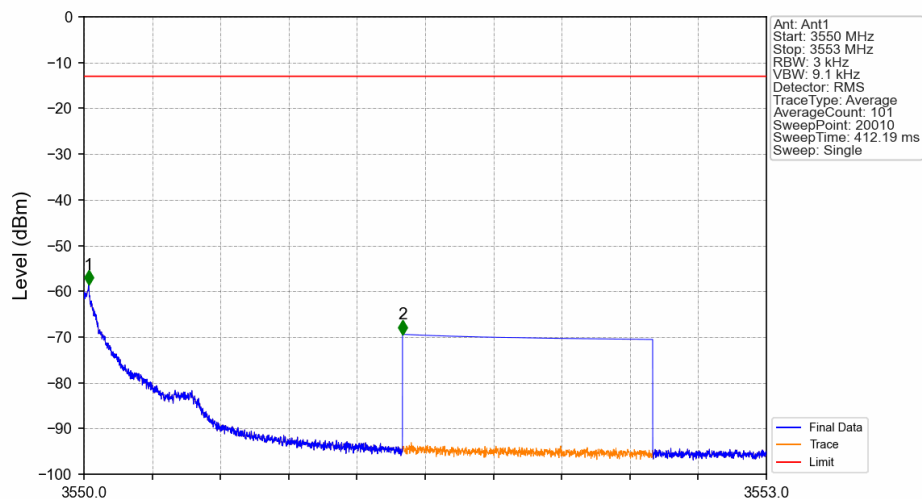
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449.1	1	CHP	1	3448.594	-69.70	-13	Pass
3449.1	3450	0.003	/	2	3449.978	-63.65	-13	Pass

Band77_3450.2MHz_GMSK_SISO_Ant1_NTNV_AGC+3

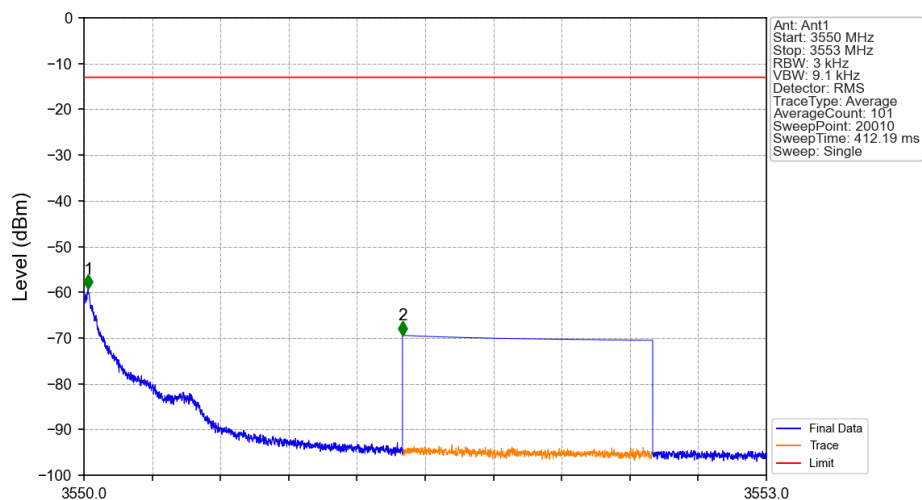


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449.1	1	CHP	1	3448.595	-69.62	-13	Pass
3449.1	3450	0.003	/	2	3449.978	-63.23	-13	Pass

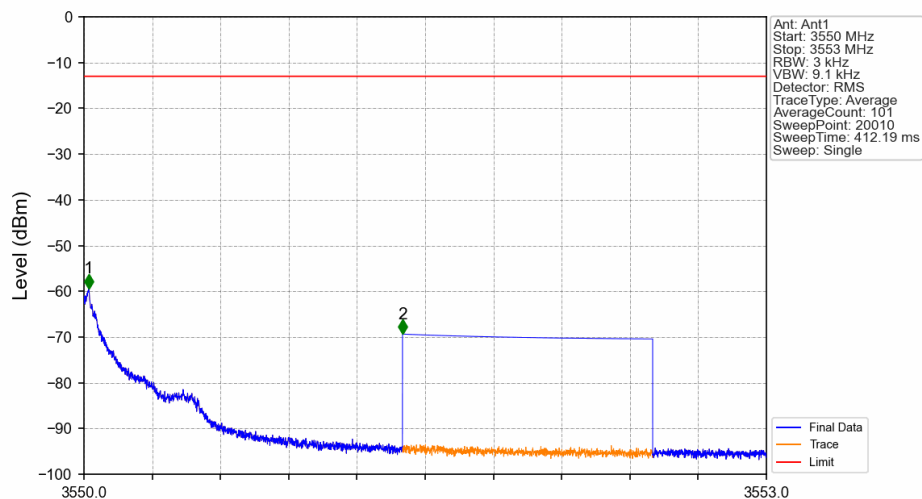
Band77_3549.8MHz_GMSK_SISO_Ant1_NTNV_AGC



Band77_3549.8MHz_GMSK_SISO_Ant1_NTNV_AGC+3

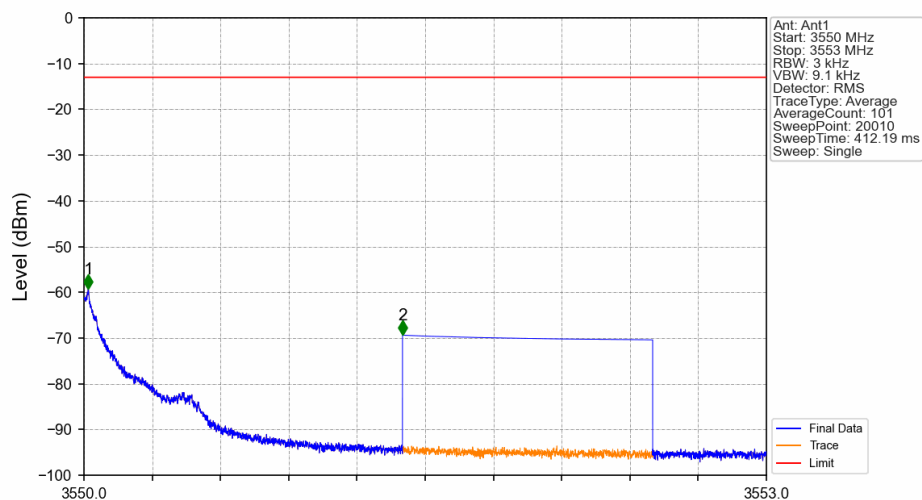


Band77_3549.8MHz_GMSK_SISO_Ant1_NTNV_AGC



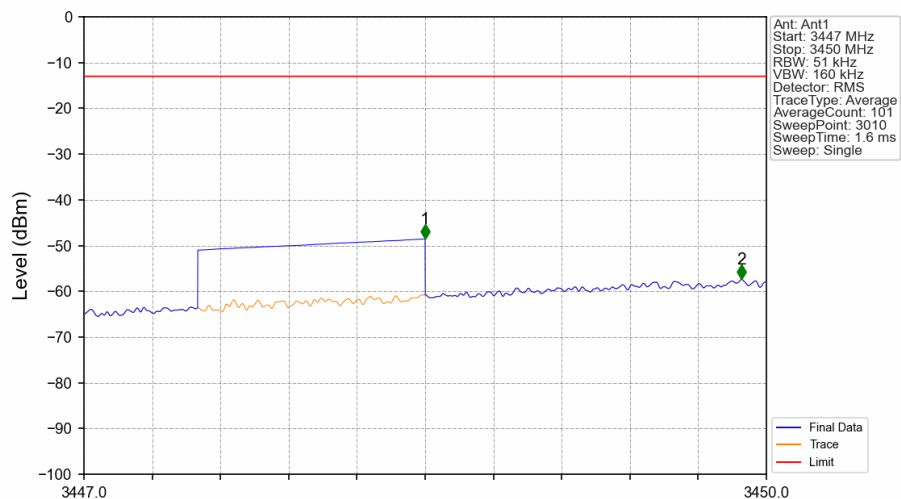
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3550.9	0.003	/	1	3550.021	-59.37	-13	Pass
3550.9	3553	1	CHP	2	3551.400	-69.36	-13	Pass

Band77_3549.8MHz_GMSK_SISO_Ant1_NTNV_AGC+3



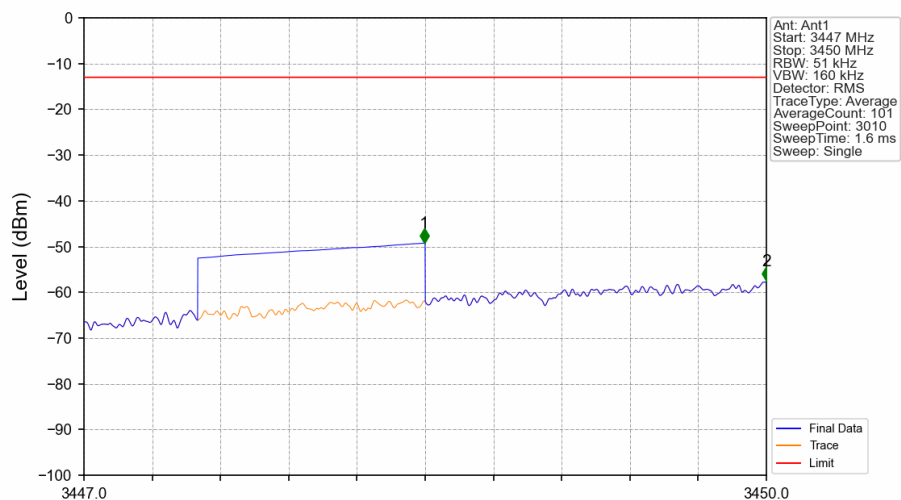
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3550.9	0.003	/	1	3550.018	-59.34	-13	Pass
3550.9	3553	1	CHP	2	3551.400	-69.38	-13	Pass

Band77 3452.5MHz AWGN SISO Ant1 NTN AGC



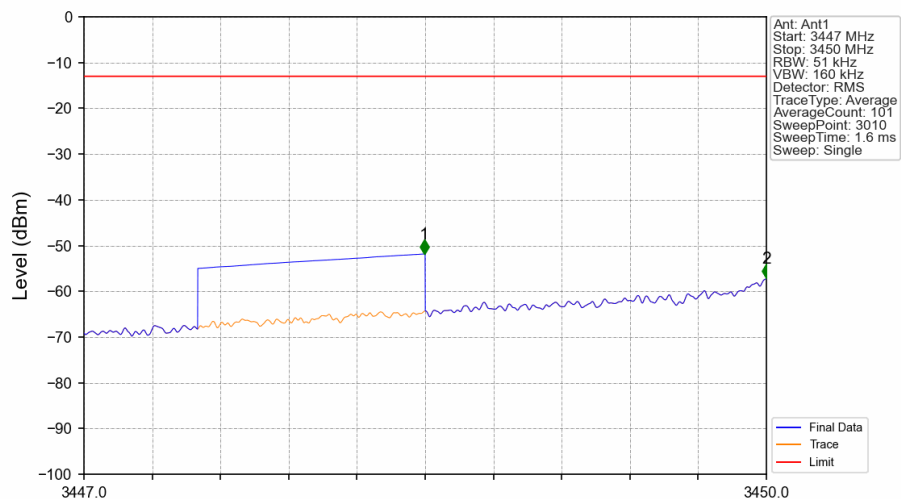
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449	1	CHP	1	3448.499	-48.56	-13	Pass
3449	3450	0.051	/	2	3449.891	-57.38	-13	Pass

Band77 3452.5MHz AWGN SISO Ant1 NTN AGC+3



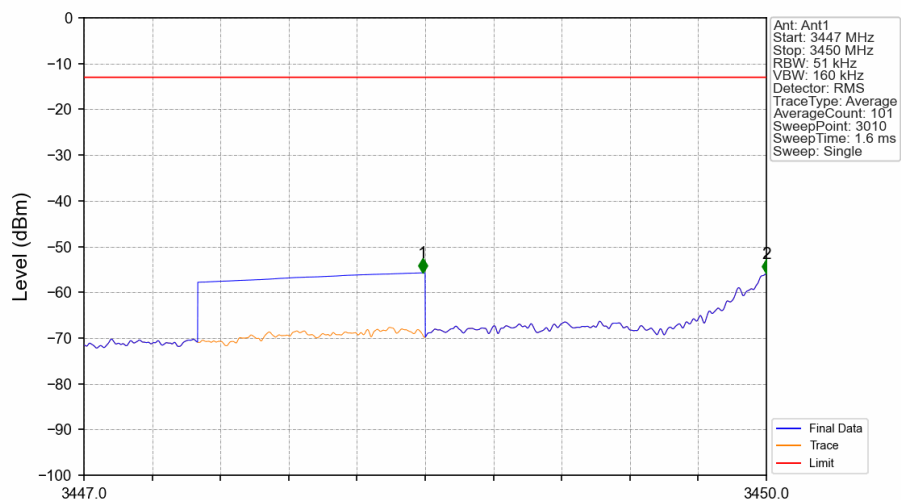
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449	1	CHP	1	3448.497	-49.26	-13	Pass
3449	3450	0.051	/	2	3450.000	-57.50	-13	Pass

Band77 3452.5MHz AWGN SISO Ant1 NTN AGC



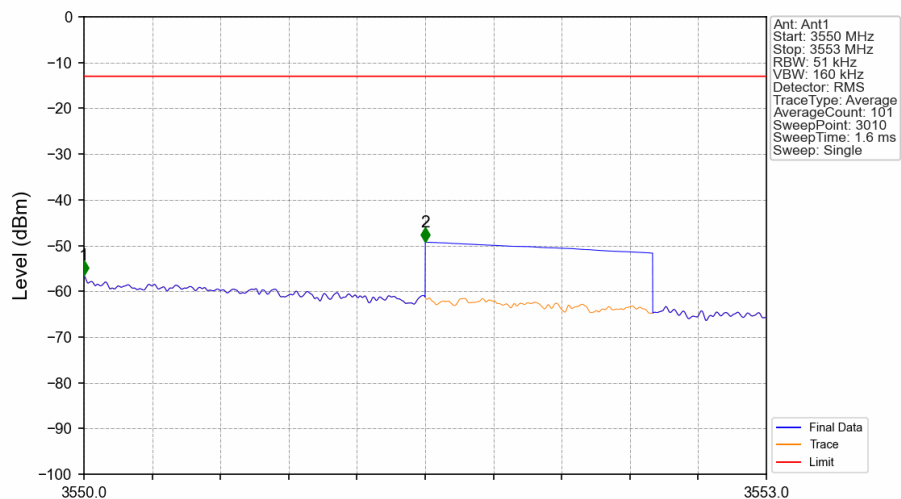
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449	1	CHP	1	3448.496	-51.85	-13	Pass
3449	3450	0.051	/	2	3450.000	-57.22	-13	Pass

Band77 3452.5MHz AWGN SISO Ant1 NTN AGC+3



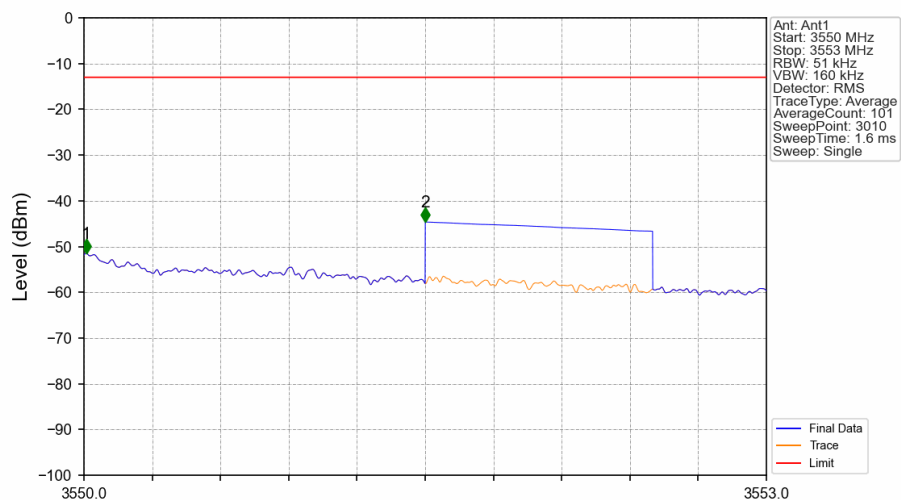
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449	1	CHP	1	3448.489	-55.76	-13	Pass
3449	3450	0.051	/	2	3450.000	-55.86	-13	Pass

Band77_3547.5MHz_AWGN_SISO_Ant1_NTNV_AGC



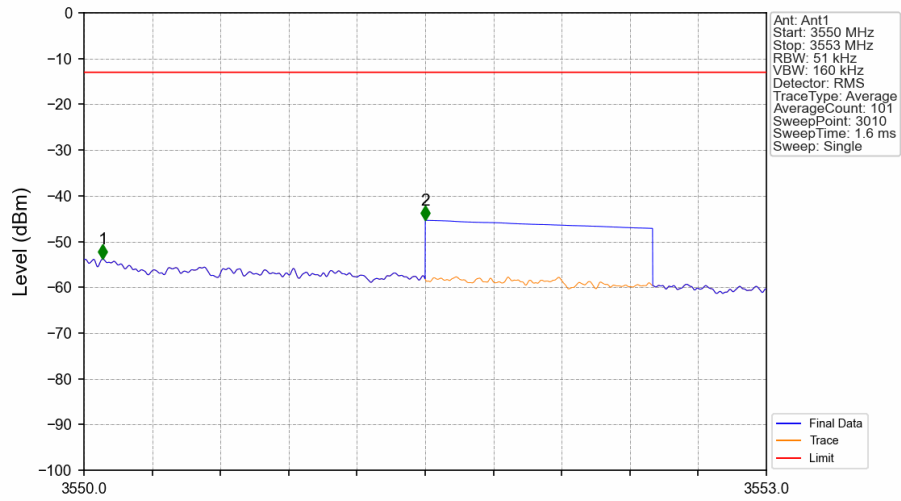
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3551	0.051	/	1	3550.000	-56.51	-13	Pass
3551	3553	1	CHP	2	3551.500	-49.28	-13	Pass

Band77_3547.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3



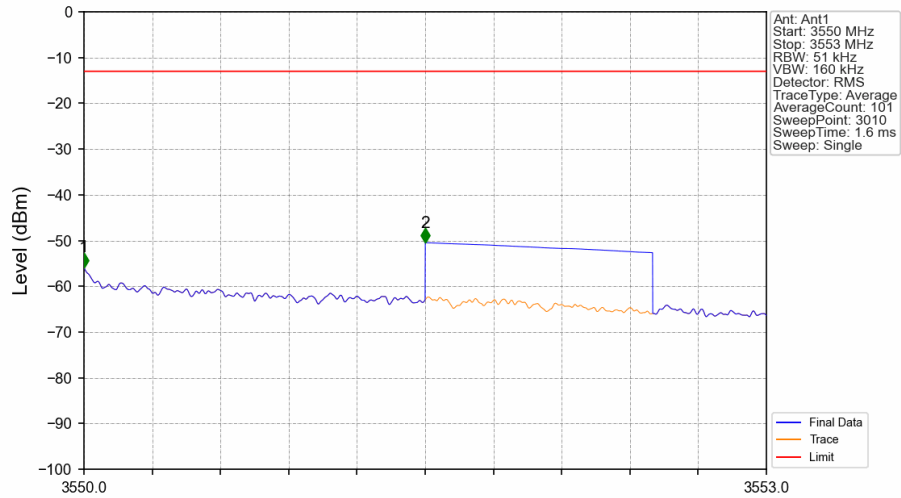
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3551	0.051	/	1	3550.010	-51.44	-13	Pass
3551	3553	1	CHP	2	3551.500	-44.63	-13	Pass

Band77 3547.5MHz AWGN SISO Ant1 NTN AGC



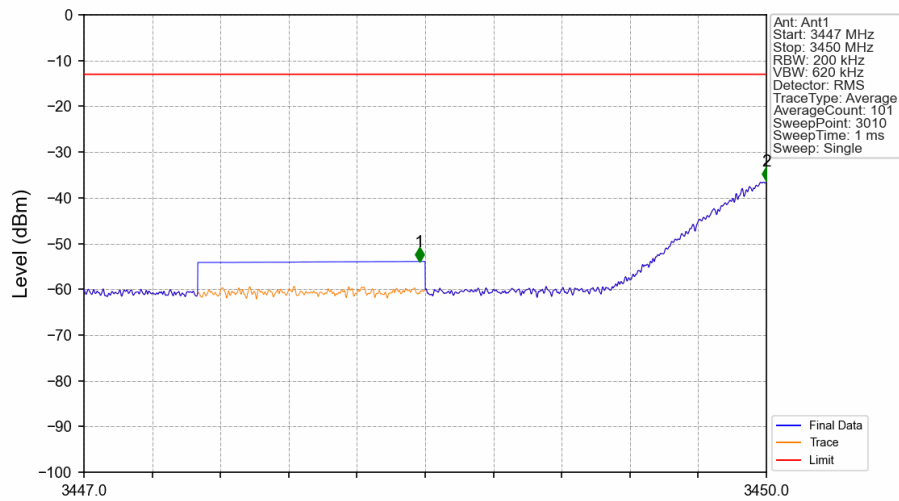
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3551	0.051	/	1	3550.083	-53.83	-13	Pass
3551	3553	1	CHP	2	3551.500	-45.36	-13	Pass

Band77 3547.5MHz AWGN SISO Ant1 NTN AGC+3



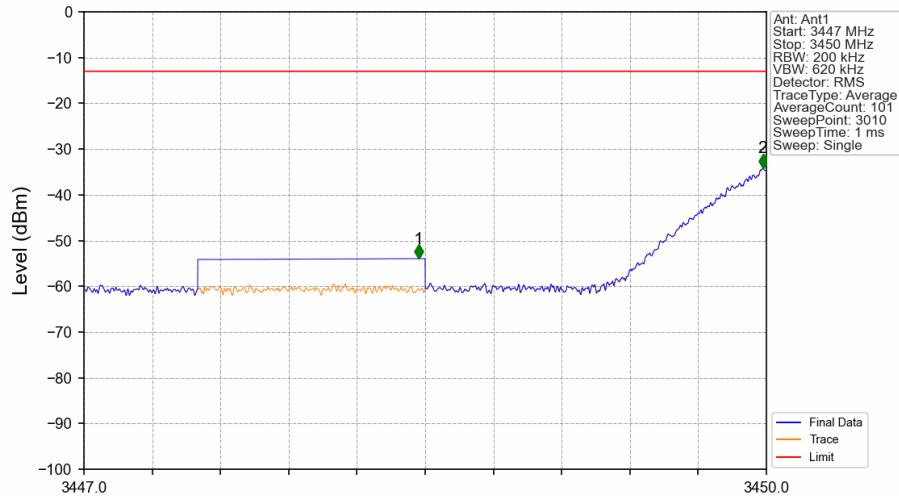
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3551	0.051	/	1	3550.000	-55.85	-13	Pass
3551	3553	1	CHP	2	3551.500	-50.49	-13	Pass

Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



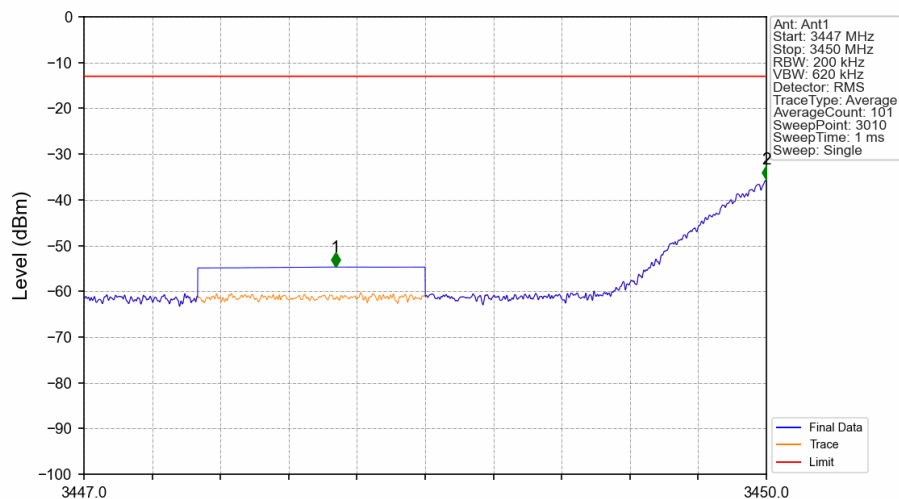
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449	1	CHP	1	3448.475	-53.92	-13	Pass
3449	3450	0.2	/	2	3450.000	-36.31	-13	Pass

Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3



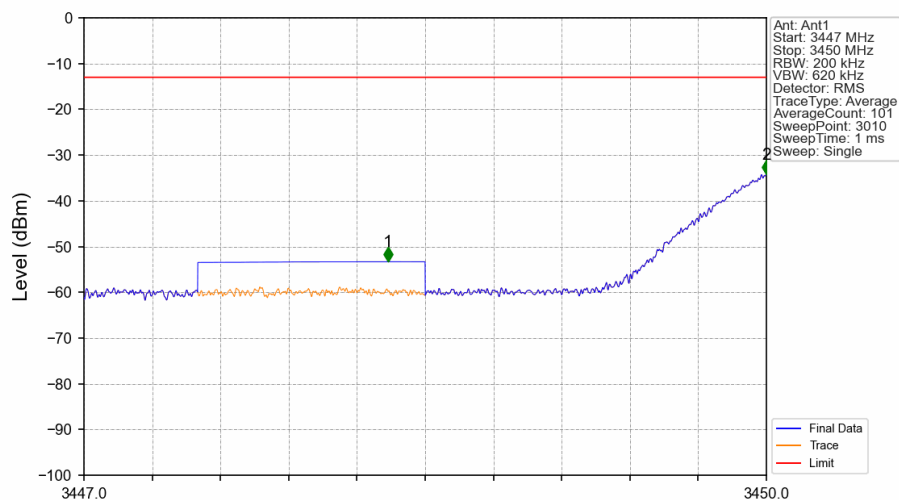
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449	1	CHP	1	3448.471	-53.95	-13	Pass
3449	3450	0.2	/	2	3449.984	-34.15	-13	Pass

Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449	1	CHP	1	3448.105	-54.70	-13	Pass
3449	3450	0.2	/	2	3450.000	-35.54	-13	Pass

Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449	1	CHP	1	3448.337	-53.33	-13	Pass
3449	3450	0.2	/	2	3450.000	-34.19	-13	Pass

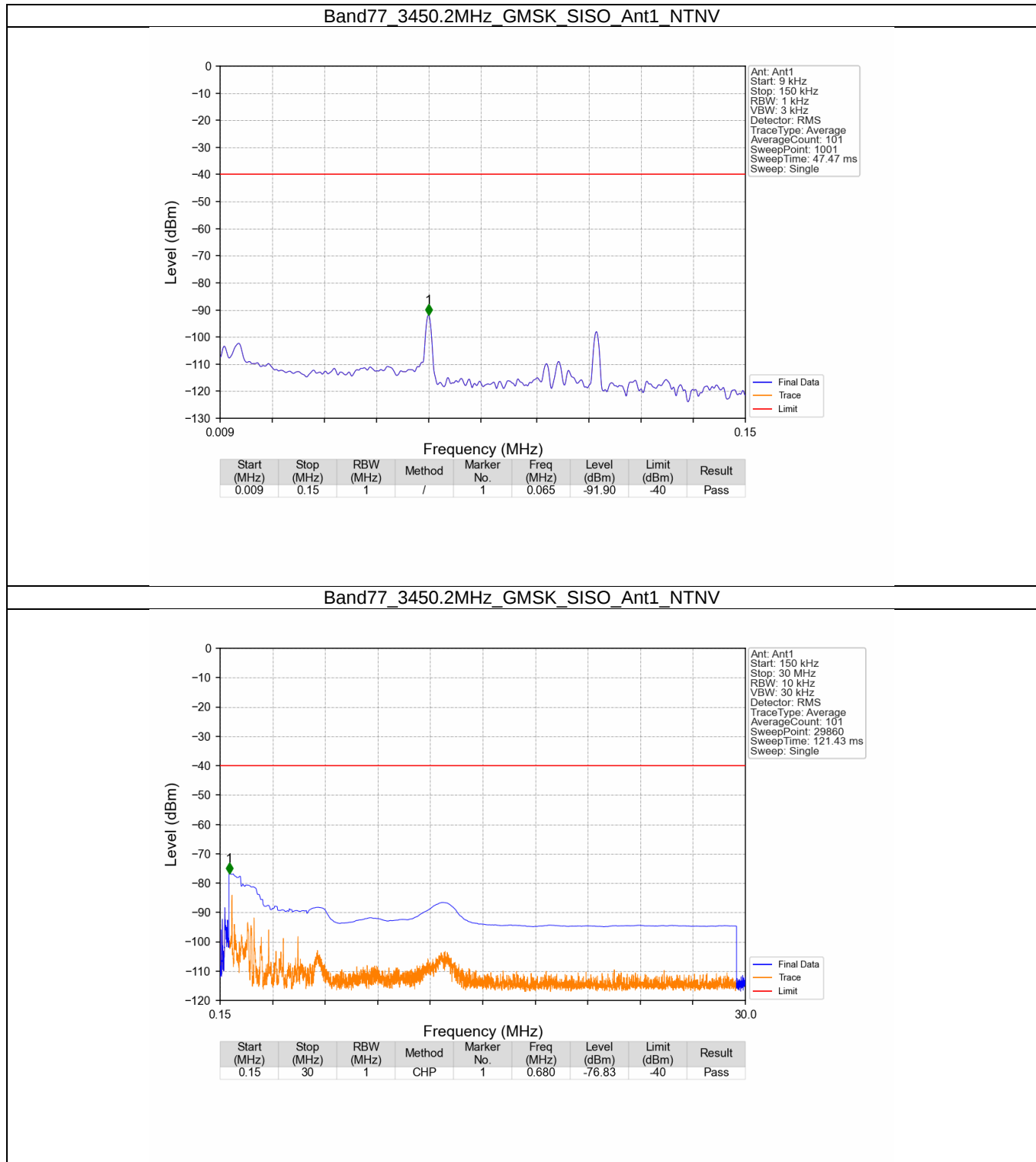
6. Spurious emissions

6.1 Band77

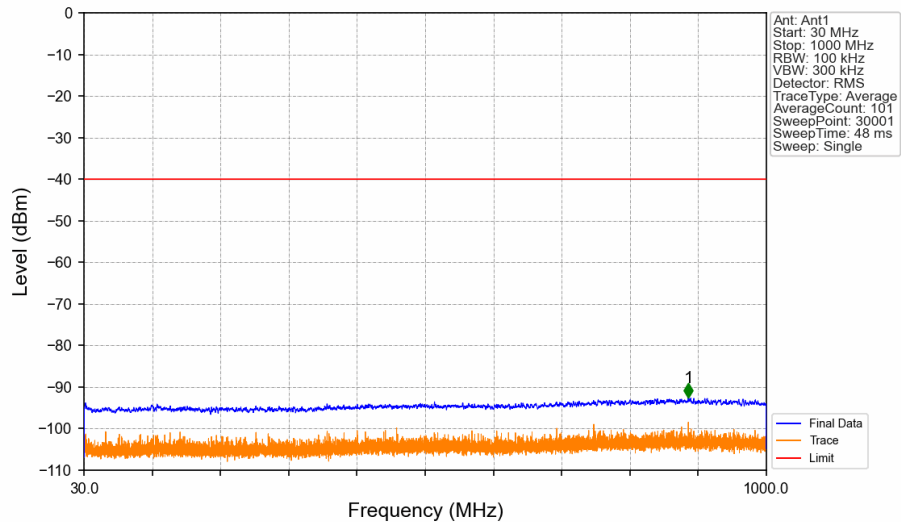
6.1.1 Test Result

Band: 77 / NTNV								
Signal			Channel	TX Type	ANT	SE (dBm)		Verdict
Type	Level (dBm)	Frequency (MHz)				Result	Limit	
GMSK 0.2MHz	-3.5	3450.2	LCH	SISO	1	Refer To Test Graph		Pass
		3500	MCH	SISO	1	Refer To Test Graph		Pass
		3549.8	HCH	SISO	1	Refer To Test Graph		Pass
AWGN 5MHz	-3.5	3452.5	LCH	SISO	1	Refer To Test Graph		Pass
		3500	MCH	SISO	1	Refer To Test Graph		Pass
		3547.5	HCH	SISO	1	Refer To Test Graph		Pass
AWGN 100MHz	-3.5	3500	MCH	SISO	1	Refer To Test Graph		Pass

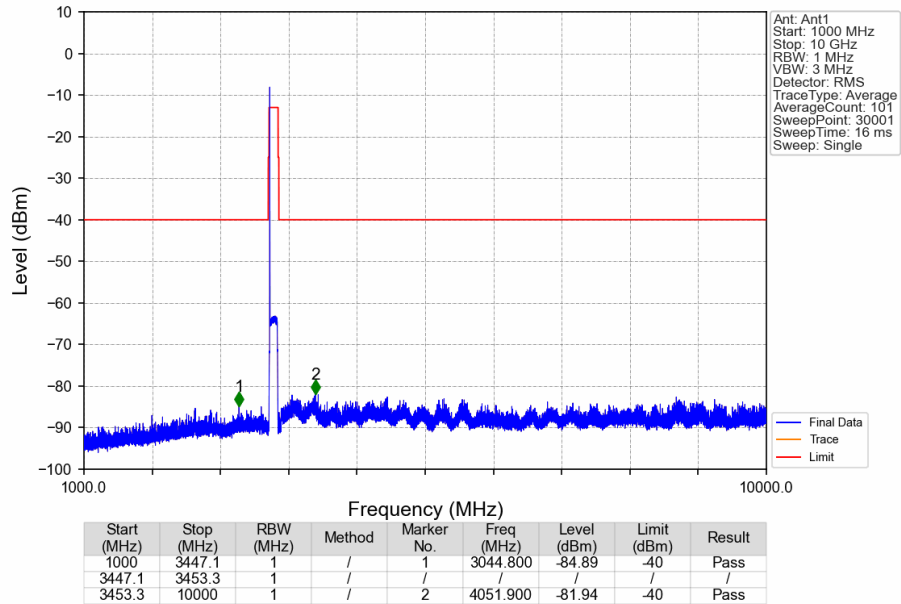
6.1.2 Test Graph



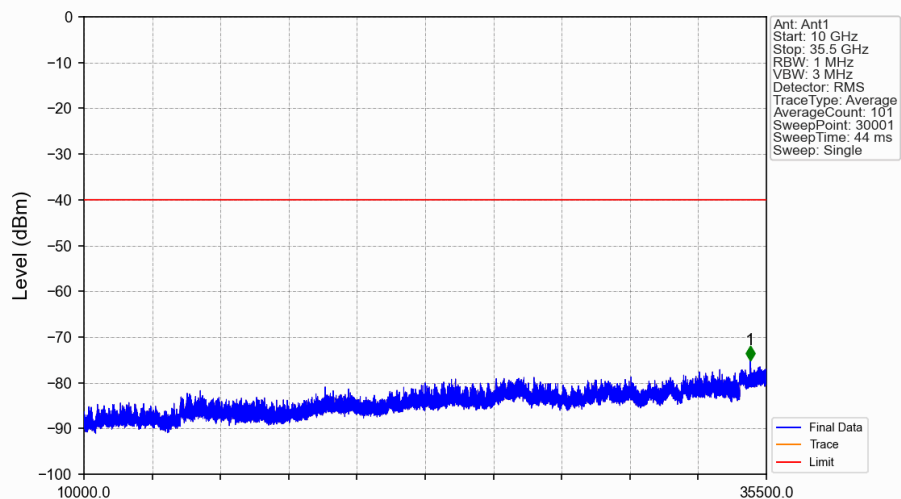
Band77_3450.2MHz_GMSK_SISO_Ant1_NTNV



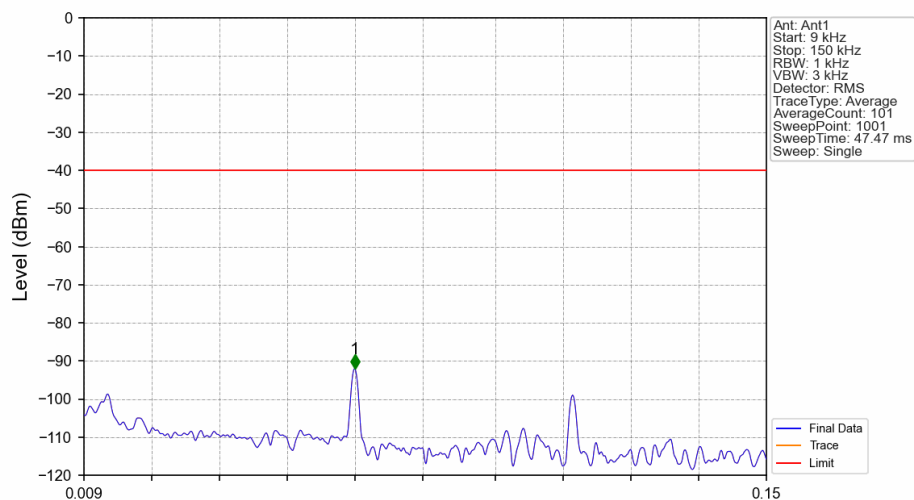
Band77_3450.2MHz_GMSK_SISO_Ant1_NTNV



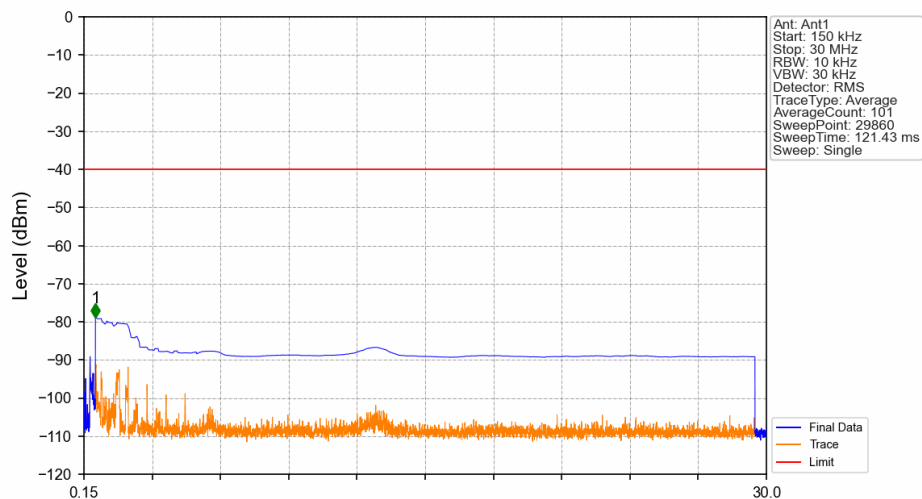
Band77_3450.2MHz_GMSK_SISO_Ant1_NTNV



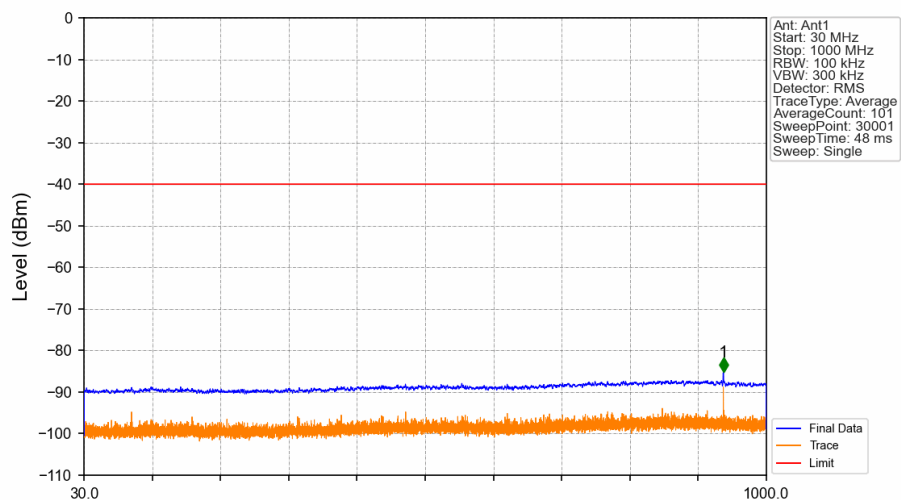
Band77_3500MHz_GMSK_SISO_Ant1_NTNV



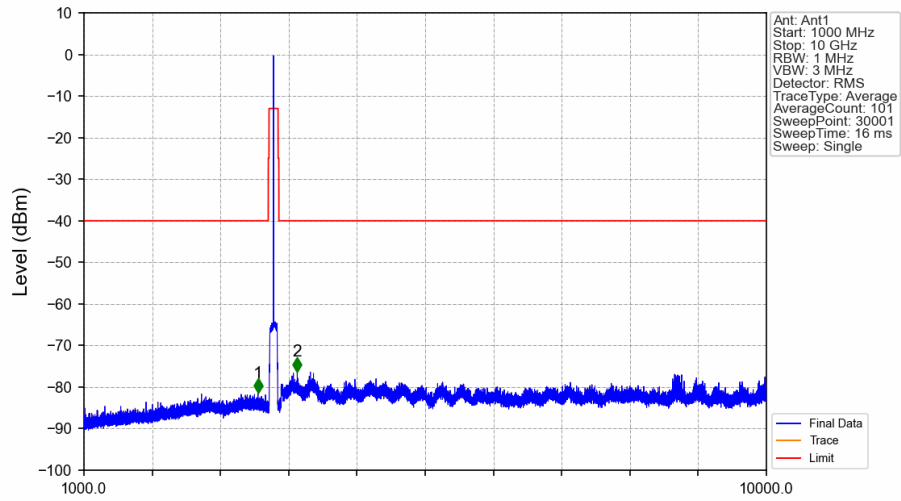
Band77_3500MHz_GMSK_SISO_Ant1_NTNV



Band77_3500MHz_GMSK_SISO_Ant1_NTNV

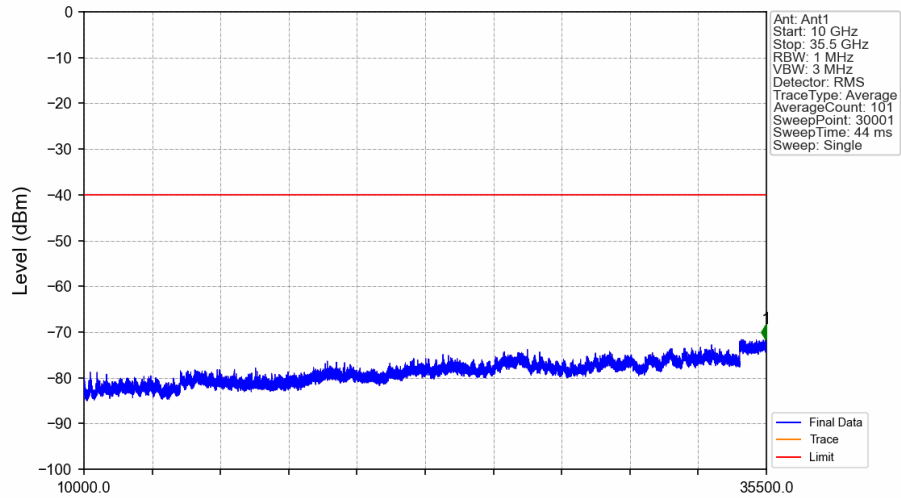


Band77_3500MHz_GMSK_SISO_Ant1_NTNV



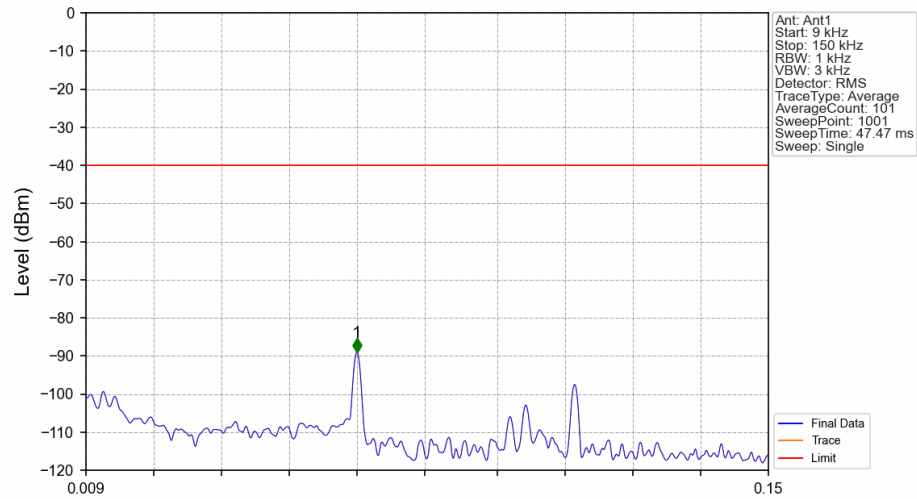
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	3496.9	1	/	1	3295.000	-81.42	-40	Pass
3496.9	3503.1	1	/	/	/	/	/	/
3503.1	10000	1	/	2	3813.100	-76.26	-40	Pass

Band77_3500MHz_GMSK_SISO_Ant1_NTNV



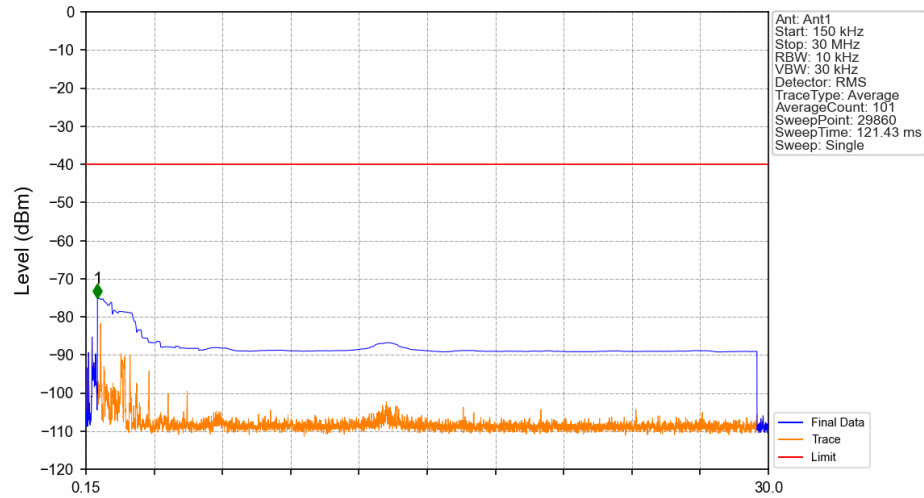
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	35500	1	/	1	35476.200	-71.52	-40	Pass

Band77_3549.8MHz_GMSK_SISO_Ant1_NTNV



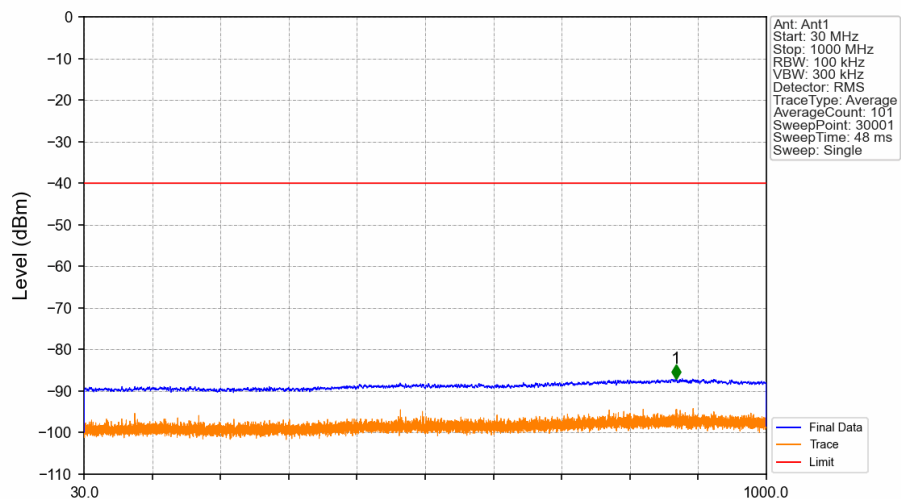
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.065	-89.07	-40	Pass

Band77_3549.8MHz_GMSK_SISO_Ant1_NTNV



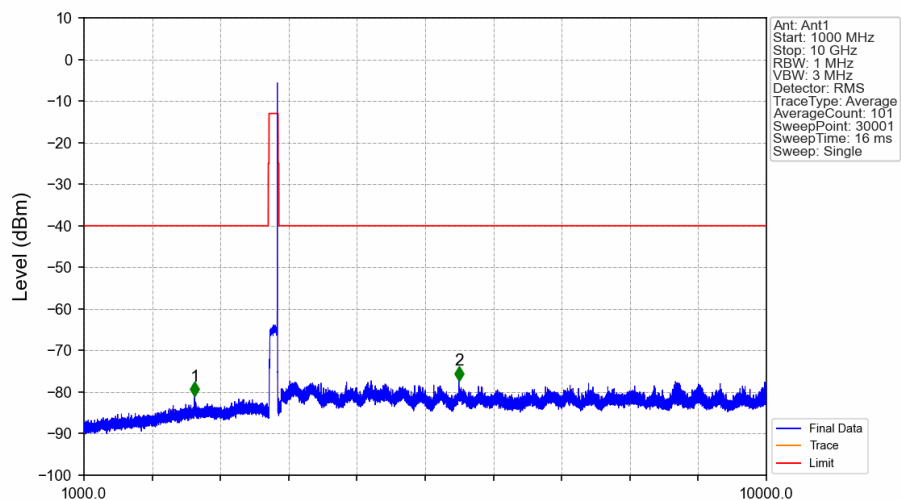
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.15	30	1	CHP	1	0.659	-75.17	-40	Pass

Band77_3549.8MHz_GMSK_SISO_Ant1_NTNV



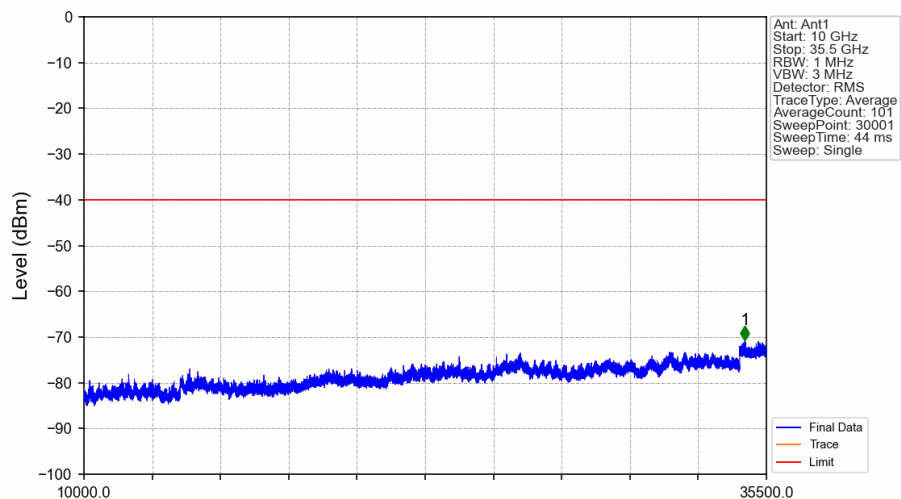
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	871.055	-87.04	-40	Pass

Band77_3549.8MHz_GMSK_SISO_Ant1_NTNV



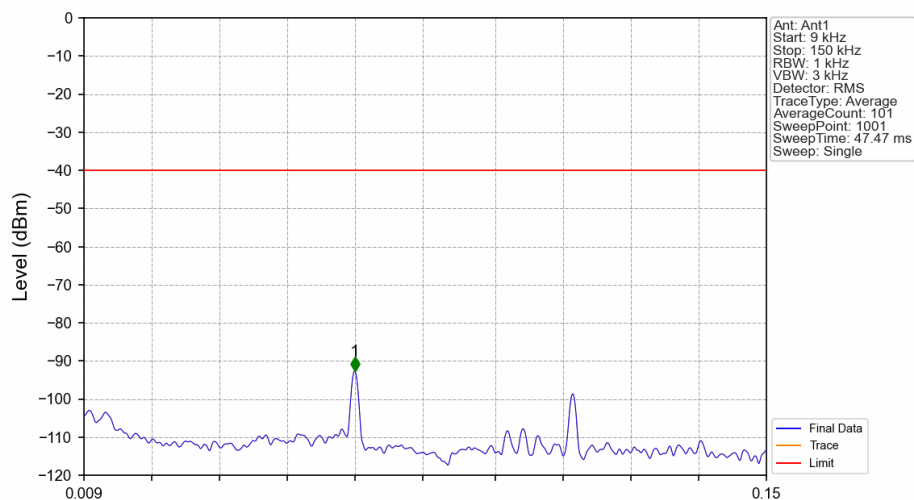
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	3546.7	1	/	1	2459.800	-80.96	-40	Pass
3546.7	3552.9	1	/	/	/	/	/	/
3552.9	10000	1	/	2	5944.600	-77.21	-40	Pass

Band77_3549.8MHz_GMSK_SISO_Ant1_NTNV



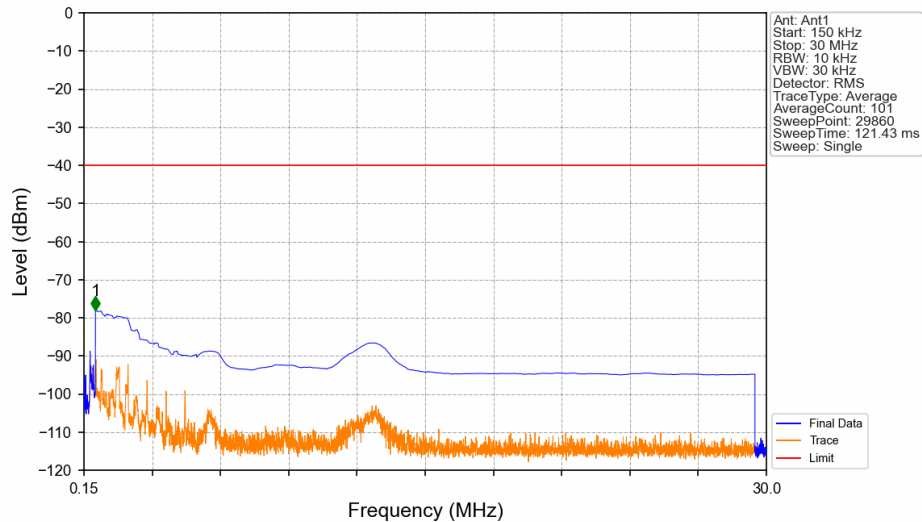
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	35500	1	/	1	34695.900	-70.64	-40	Pass

Band77_3452.5MHz_AWGN_SISO_Ant1_NTNV

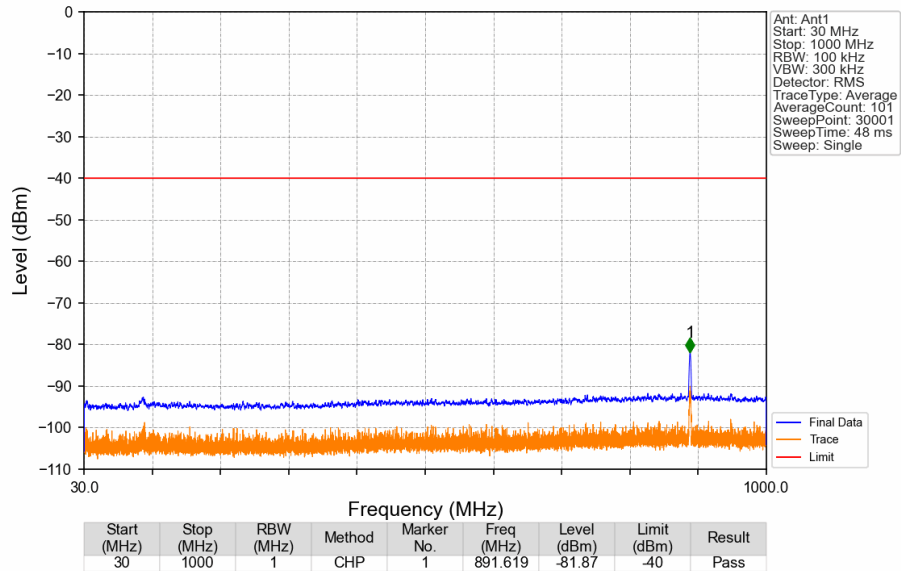


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.065	-92.69	-40	Pass

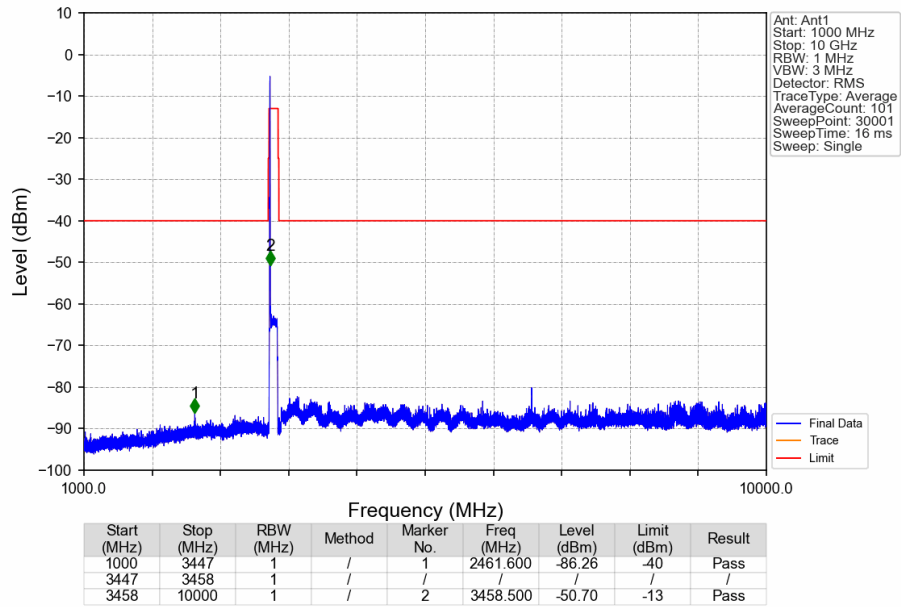
Band77_3452.5MHz_AWGN_SISO_Ant1_NTNV



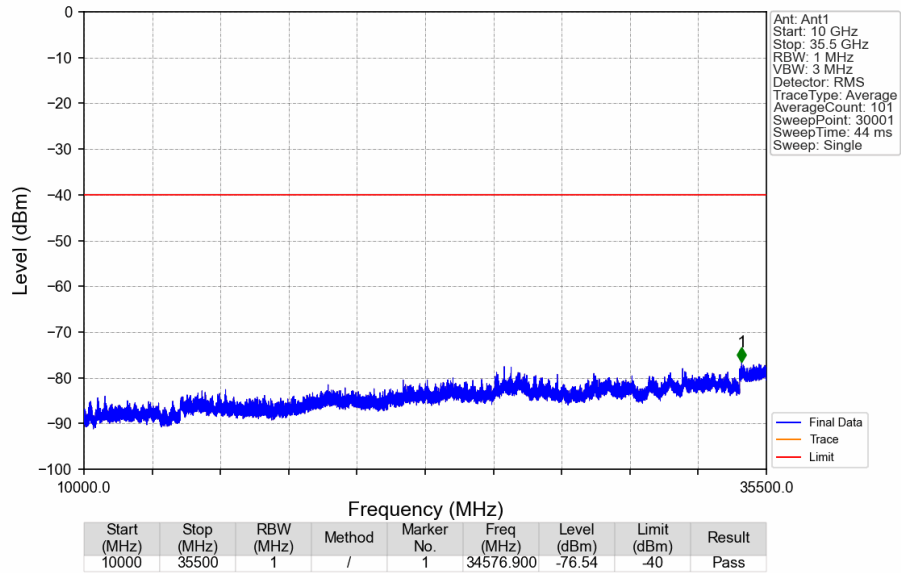
Band77_3452.5MHz_AWGN_SISO_Ant1_NTNV



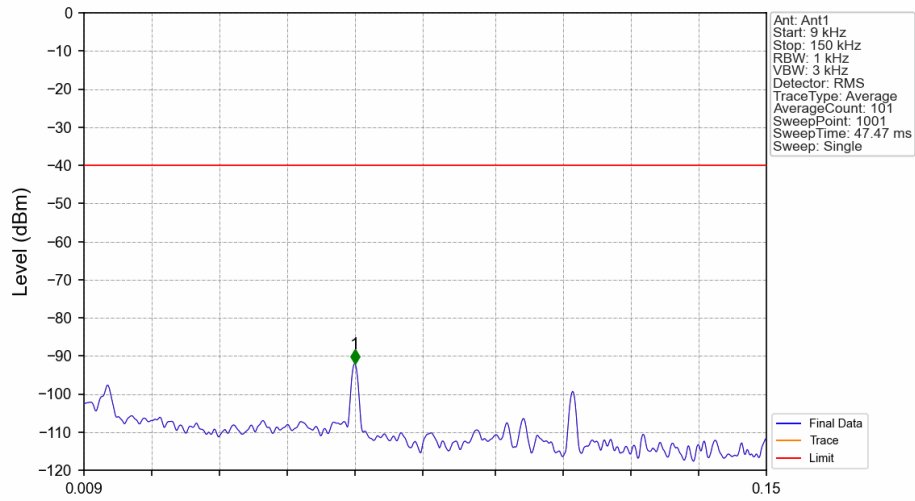
Band77_3452.5MHz_AWGN_SISO_Ant1_NTNV



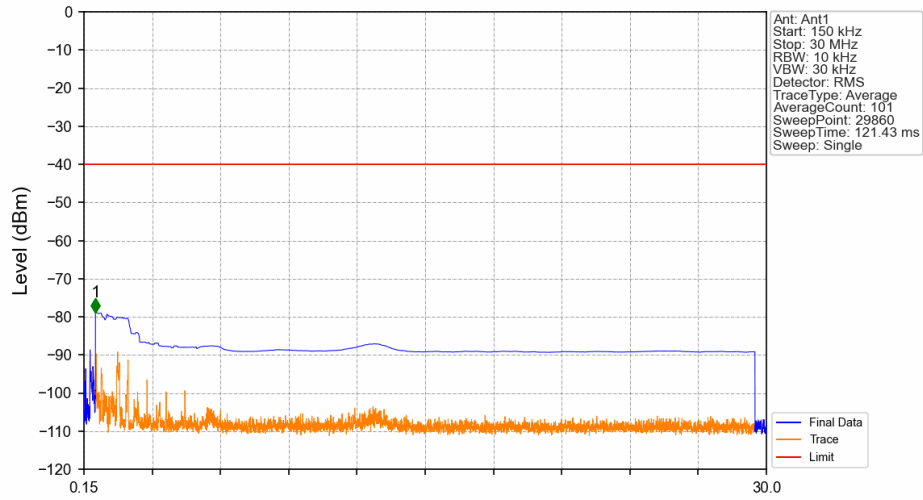
Band77_3452.5MHz_AWGN_SISO_Ant1_NTNV



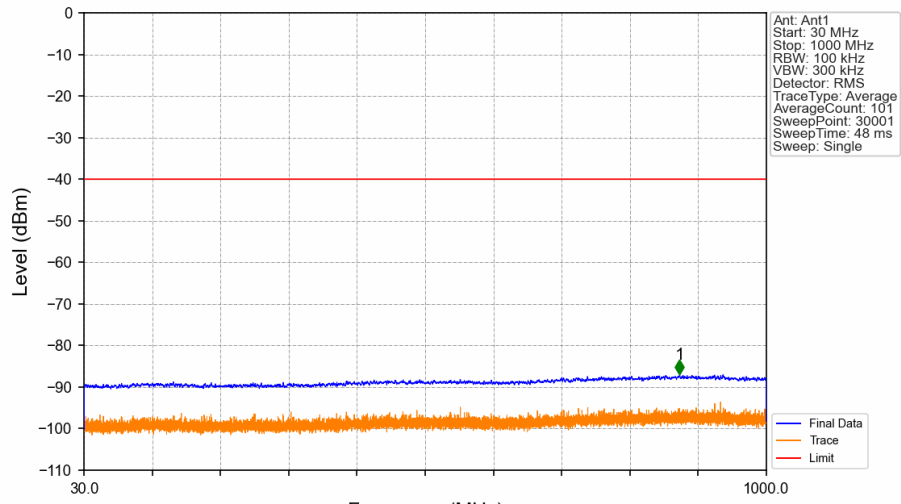
Band77_3500MHz_AWGN_SISO_Ant1_NTNV



Band77_3500MHz_AWGN_SISO_Ant1_NTNV

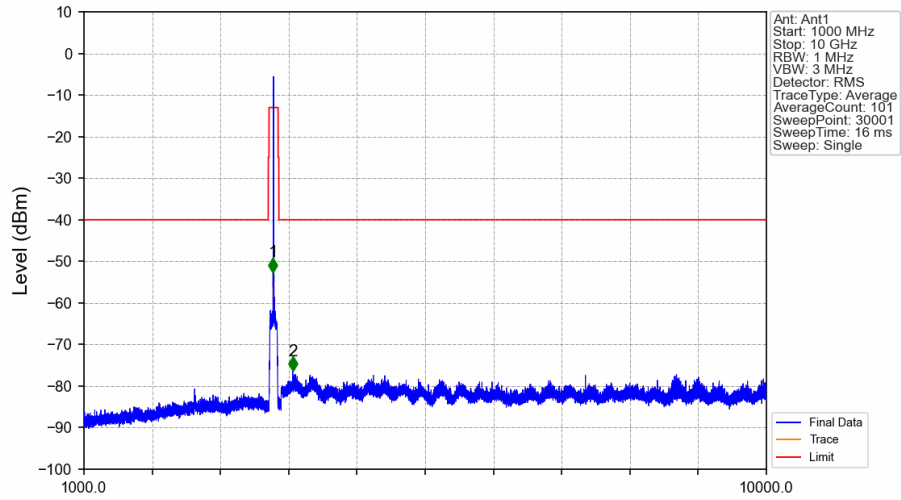


Band77_3500MHz_AWGN_SISO_Ant1_NTNV



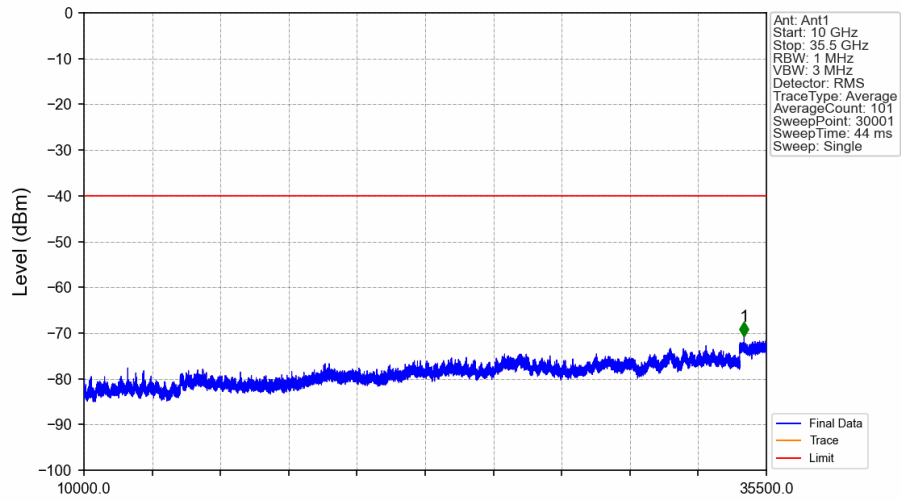
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	876.648	-86.93	-40	Pass

Band77_3500MHz_AWGN_SISO_Ant1_NTNV



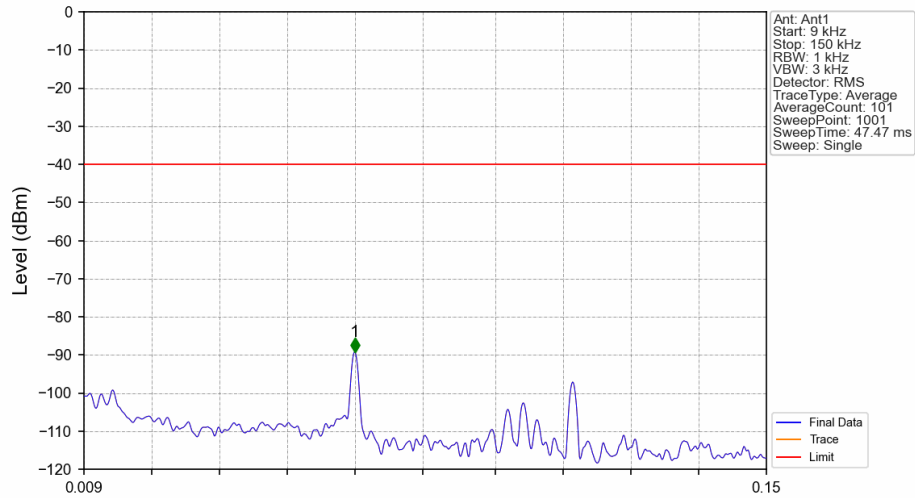
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	3494.5	1	/	1	3493.300	-52.58	-13	Pass
3494.5	3505.5	1	/	/	/	/	/	/
3505.5	10000	1	/	2	3752.800	-76.41	-40	Pass

Band77 3500MHz AWGN SISO Ant1 NTN



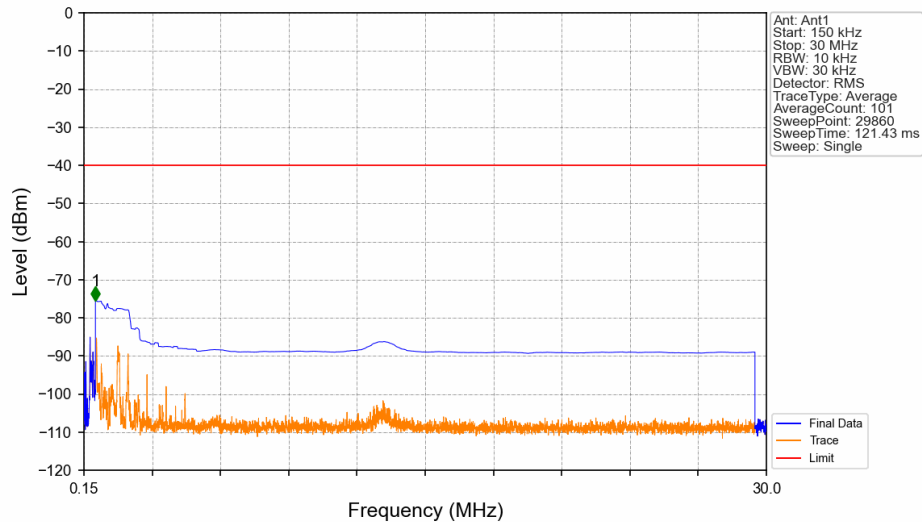
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	35500	1	/	1	34667.000	-70.80	-40	Pass

Band77 3547.5MHz AWGN SISO Ant1 NTN

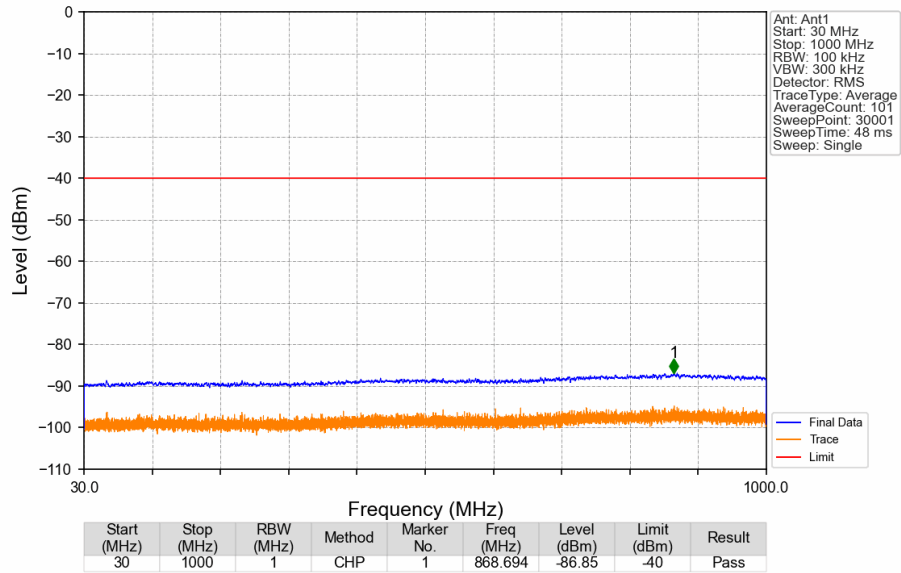


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.065	-89.21	-40	Pass

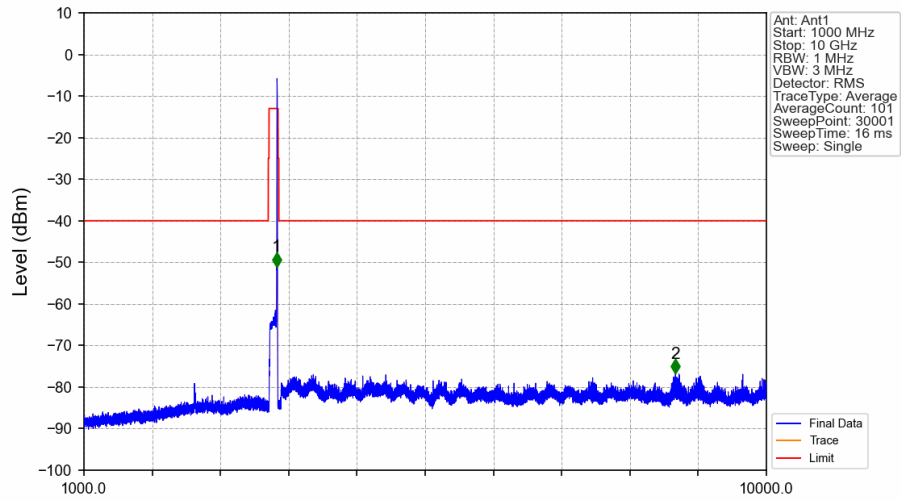
Band77 3547.5MHz AWGN SISO Ant1 NTN



Band77 3547.5MHz AWGN SISO Ant1 NTN

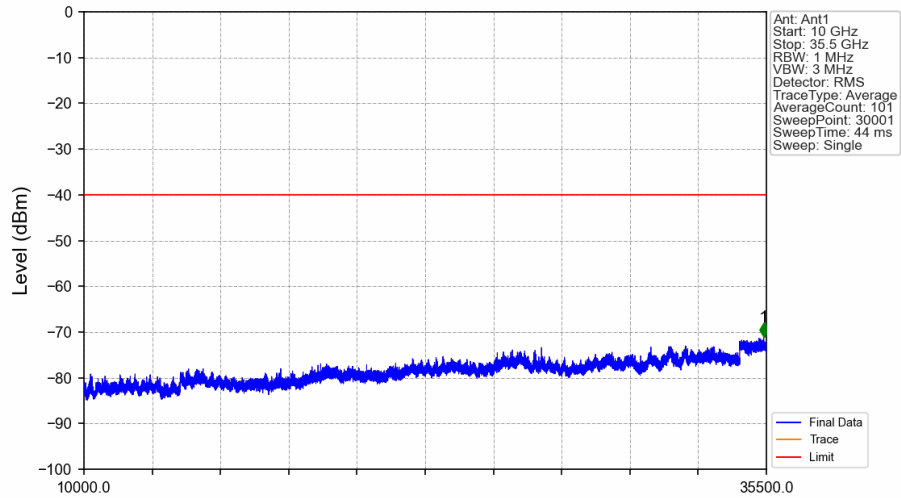


Band77_3547.5MHz_AWGN_SISO_Ant1_NTNV



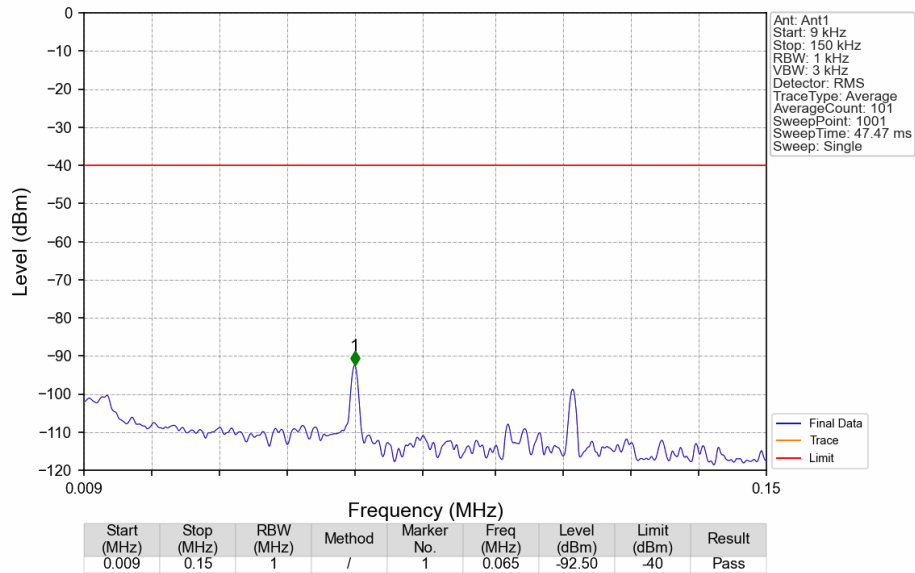
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	3542	1	/	1	3541.600	-51.04	-13	Pass
3542	3553	1	/	/	/	/	/	/
3553	10000	1	/	2	8800.600	-76.74	-40	Pass

Band77_3547.5MHz_AWGN_SISO_Ant1_NTNV

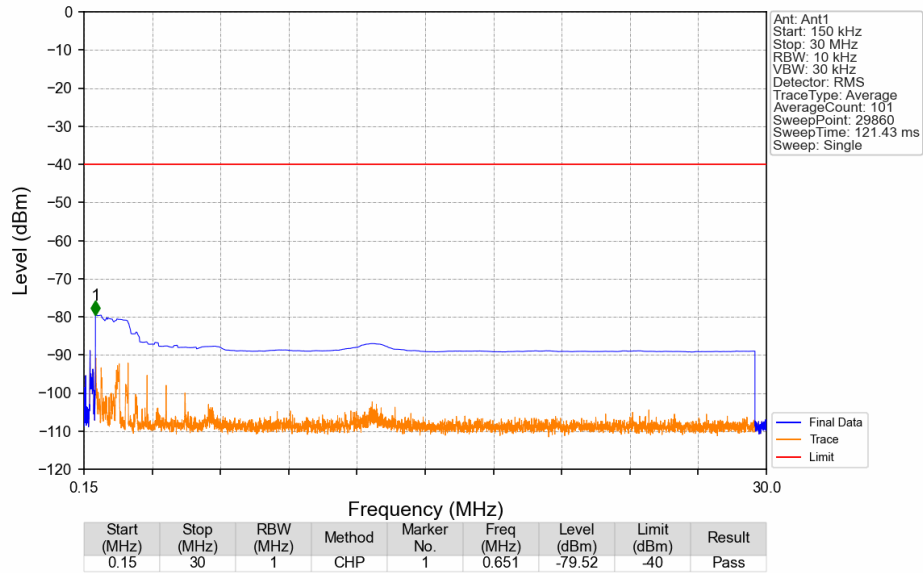


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	35500	1	/	1	35398.850	-71.11	-40	Pass

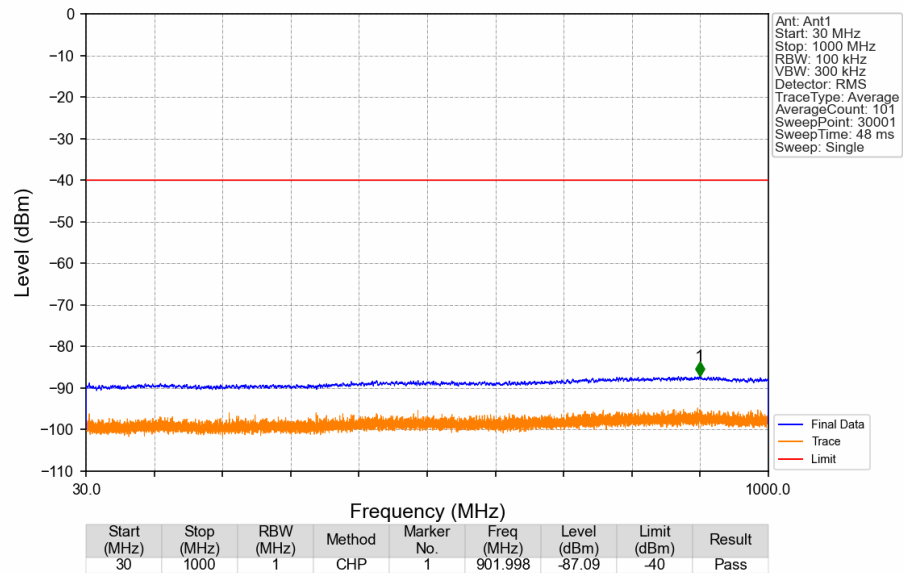
Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV



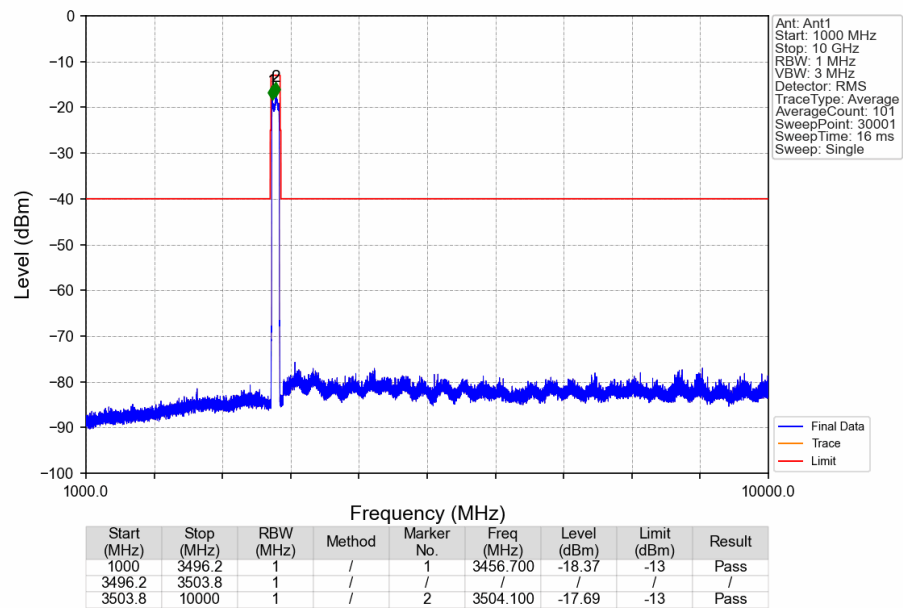
Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV



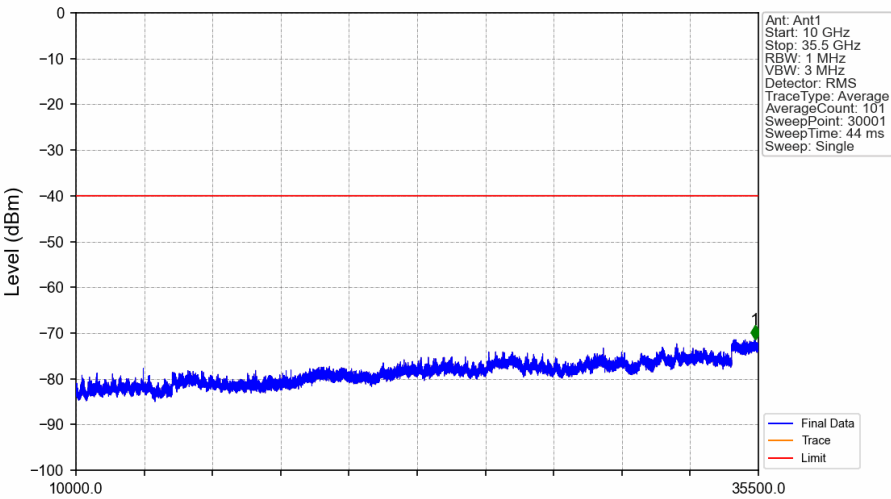
Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV



Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV



Band77_3500MHz_Broad100MHz_SISO_Ant1_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	35500	1	/	1	35379.300	-71.43	-40	Pass

7. Frequency stability measurements

7.1 Band77_Ant1

7.1.1 Test Result

Band: 77 / NTNV							
Signal			Temp (°C)	Voltage (VAC)	Freq. Error (Hz)	Tolerance (ppm)	Verdict
Type	Level (dBm)	Frequency (MHz)					
CW	-3.5	3450.1	20	102	-18	-0.00522	Pass
				120	-19	-0.00551	Pass
				138	-18	-0.00522	Pass
			-30	120	-16	-0.00464	Pass
			-20	120	-19	-0.00551	Pass
			-10	120	-16	-0.00464	Pass
			0	120	-11	-0.00319	Pass
			10	120	-14	-0.00406	Pass
			30	120	-16	-0.00464	Pass
			40	120	-12	-0.00348	Pass
			55	120	-15	-0.00435	Pass
		3500	20	102	-16	-0.00457	Pass
				120	-19	-0.00543	Pass
				138	-18	-0.00514	Pass
			-30	120	-15	-0.00429	Pass
			-20	120	-15	-0.00429	Pass
			-10	120	-14	-0.00400	Pass
			0	120	-13	-0.00371	Pass
			10	120	-19	-0.00543	Pass
			30	120	-19	-0.00543	Pass
			40	120	-16	-0.00457	Pass
			55	120	-18	-0.00514	Pass
		3549.9	20	102	-15	-0.00423	Pass
				120	-14	-0.00394	Pass
				138	-16	-0.00451	Pass
			-30	120	-19	-0.00535	Pass
			-20	120	-19	-0.00535	Pass
			-10	120	-16	-0.00451	Pass
			0	120	-18	-0.00507	Pass
			10	120	-19	-0.00535	Pass
			30	120	-15	-0.00423	Pass
			40	120	-17	-0.00479	Pass
			55	120	-15	-0.00423	Pass

8. Radiated Spurious Emissions

8.1 Bandn 77

8.1.1 Test Result

GMSK_Low Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
112.03	Horizontal	-64.15	-40	-24.15	Pass
332.25	Horizontal	-59.62	-40	-19.62	Pass
708.96	Horizontal	-60.51	-40	-20.51	Pass
3055.84	Horizontal	-50.12	-40	-10.12	Pass
7015.87	Horizontal	-42.03	-40	-2.03	Pass
13108.48	Horizontal	-40.21	-40	-0.21	Pass
103.46	Vertical	-61.57	-40	-21.57	Pass
421.52	Vertical	-58.72	-40	-18.72	Pass
700.81	Vertical	-58.15	-40	-18.15	Pass
2990.17	Vertical	-50.8	-40	-10.80	Pass
7041.59	Vertical	-50.08	-40	-10.08	Pass
13560.21	Vertical	-41.17	-40	-1.17	Pass

GMSK_Middle Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
97.92	Horizontal	-65.02	-40	-25.02	Pass
351.25	Horizontal	-62.00	-40	-22.00	Pass
698.20	Horizontal	-57.25	-40	-17.25	Pass
2998.70	Horizontal	-40.59	-40	-0.59	Pass
6996.53	Horizontal	-40.86	-40	-0.86	Pass
13073.38	Horizontal	-43.34	-40	-3.34	Pass
127.61	Vertical	-62.16	-40	-22.16	Pass
415.35	Vertical	-58.53	-40	-18.53	Pass
735.29	Vertical	-59.82	-40	-19.82	Pass
2941.11	Vertical	-50.10	-40	-10.10	Pass
7046.95	Vertical	-49.48	-40	-9.48	Pass
13562.69	Vertical	-41.56	-40	-1.56	Pass

GMSK_High Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
128.40	Horizontal	-64.12	-40	-24.12	Pass
342.85	Horizontal	-60.73	-40	-20.73	Pass
699.53	Horizontal	-57.34	-40	-17.34	Pass
3001.48	Horizontal	-44.72	-40	-4.72	Pass
7042.05	Horizontal	-37.56	-40	2.44	Pass
13067.12	Horizontal	-37.14	-40	2.86	Pass
115.17	Vertical	-63.97	-40	-23.97	Pass
403.81	Vertical	-61.56	-40	-21.56	Pass
711.59	Vertical	-57.81	-40	-17.81	Pass
2938.03	Vertical	-54.83	-40	-14.83	Pass
7056.89	Vertical	-46.25	-40	-6.25	Pass
13551.57	Vertical	-40.27	-40	-0.27	Pass

AWGN_Low Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
110.01	Horizontal	-65.04	-40	-25.04	Pass
320.50	Horizontal	-60.52	-40	-20.52	Pass
678.71	Horizontal	-58.47	-40	-18.47	Pass
2994.24	Horizontal	-47.69	-40	-7.69	Pass
6979.97	Horizontal	-41.16	-40	-1.16	Pass
13068.18	Horizontal	-38.44	-40	1.56	Pass
97.00	Vertical	-65.24	-40	-25.24	Pass
450.59	Vertical	-59.69	-40	-19.69	Pass
707.48	Vertical	-58.04	-40	-18.04	Pass
2956.63	Vertical	-55.03	-40	-15.03	Pass
6997.83	Vertical	-47.75	-40	-7.75	Pass
13598.85	Vertical	-40.67	-40	-0.67	Pass

AWGN_Middle Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
97.42	Horizontal	-63.58	-40	-23.58	Pass
331.14	Horizontal	-58.99	-40	-18.99	Pass
714.74	Horizontal	-59.88	-40	-19.88	Pass
3081.34	Horizontal	-41.46	-40	-1.46	Pass
7220.13	Horizontal	-36.50	-40	3.50	Pass
13705.36	Horizontal	-43.21	-40	-3.21	Pass
113.71	Vertical	-62.47	-40	-22.47	Pass
423.54	Vertical	-61.73	-40	-21.73	Pass
735.77	Vertical	-55.95	-40	-15.95	Pass
3037.73	Vertical	-51.40	-40	-11.40	Pass
7281.55	Vertical	-49.38	-40	-9.38	Pass
13686.67	Vertical	-42.50	-40	-2.50	Pass

AWGN_High Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
129.05	Horizontal	-66.71	-40	-26.71	Pass
309.61	Horizontal	-58.80	-40	-18.80	Pass
682.44	Horizontal	-60.00	-40	-20.00	Pass
3073.68	Horizontal	-46.32	-40	-6.32	Pass
7203.75	Horizontal	-44.10	-40	-4.10	Pass
13736.70	Horizontal	-36.74	-40	3.26	Pass
141.97	Vertical	-63.18	-40	-23.18	Pass
427.88	Vertical	-58.55	-40	-18.55	Pass
701.66	Vertical	-56.92	-40	-16.92	Pass
2990.01	Vertical	-54.00	-40	-14.00	Pass
7357.33	Vertical	-42.02	-40	-2.02	Pass
13615.51	Vertical	-42.97	-40	-2.97	Pass

AWGN_100M_Middle Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
92.05	Horizontal	-62.64	-40	-22.64	Pass
354.77	Horizontal	-58.92	-40	-18.92	Pass
705.93	Horizontal	-59.01	-40	-19.01	Pass
3248.70	Horizontal	-44.42	-40	-4.42	Pass
7279.61	Horizontal	-36.76	-40	3.24	Pass
13589.42	Horizontal	-34.68	-40	5.32	Pass
137.83	Vertical	-63.61	-40	-23.61	Pass
409.44	Vertical	-60.20	-40	-20.20	Pass
706.60	Vertical	-56.48	-40	-16.48	Pass
3317.59	Vertical	-57.30	-40	-17.30	Pass
7409.21	Vertical	-49.22	-40	-9.22	Pass
13665.27	Vertical	-40.50	-40	-0.50	Pass