

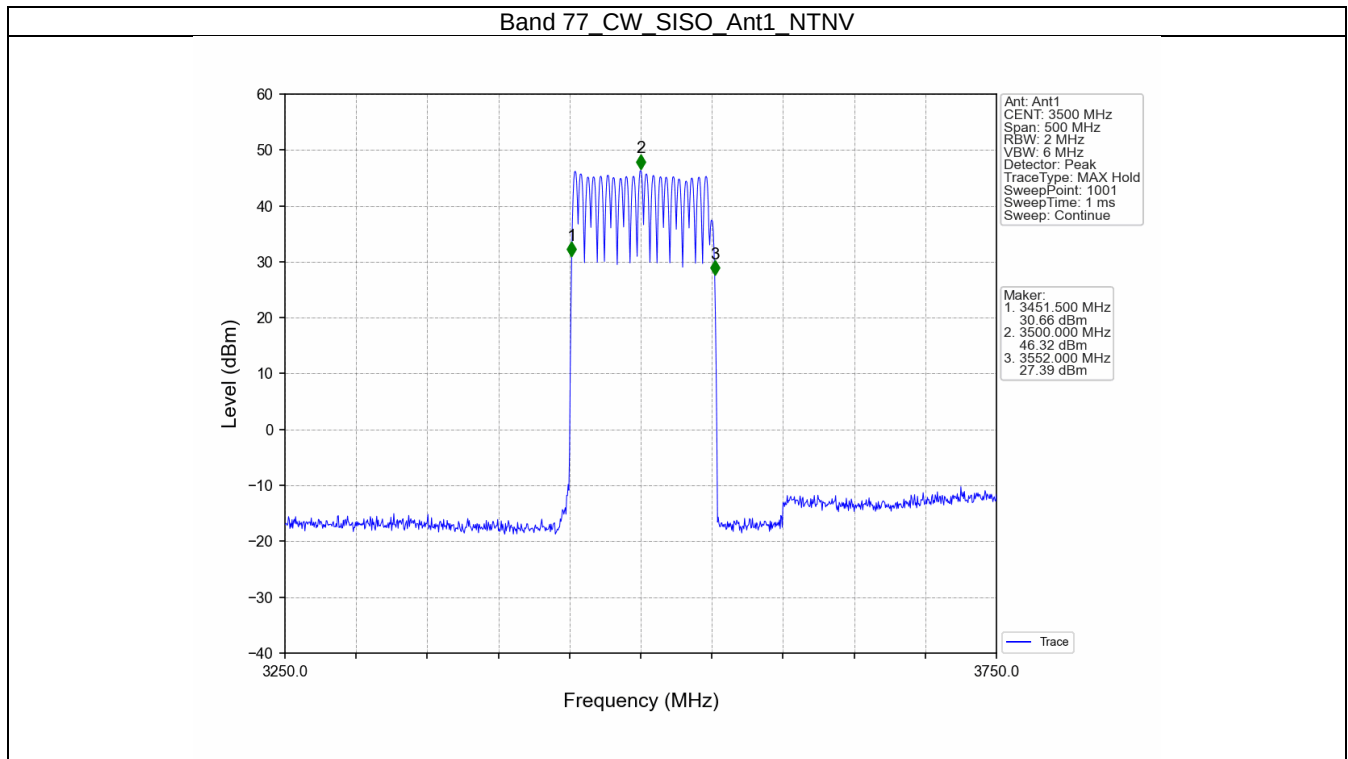
1. Out of band rejection

1.1 Band 77

1.1.1 Test Result

Band: 77 / NTN							
Signal	Sweep Frequency Range (MHz)	TX Type	ANT	F0 (MHz)	FL (MHz)	FH (MHz)	Verdict
CW	3250 - 3750	SISO	1	3500.000	3451.500	3552.000	Pass

1.1.2 Test Graph



2. AGC threshold

2.1 Band 77

2.1.1 Test Result

Band: 77 / NTNV					
Signal	Frequency (MHz)	TX Type	ANT	AGC Threshold (dBm)	Verdict
GMSK 0.2MHz	3500	SISO	1	-4.50	Pass
AWGN 5MHz	3500	SISO	1	-4.50	Pass
AWGN 100MHz	3500	SISO	1	-4.50	Pass

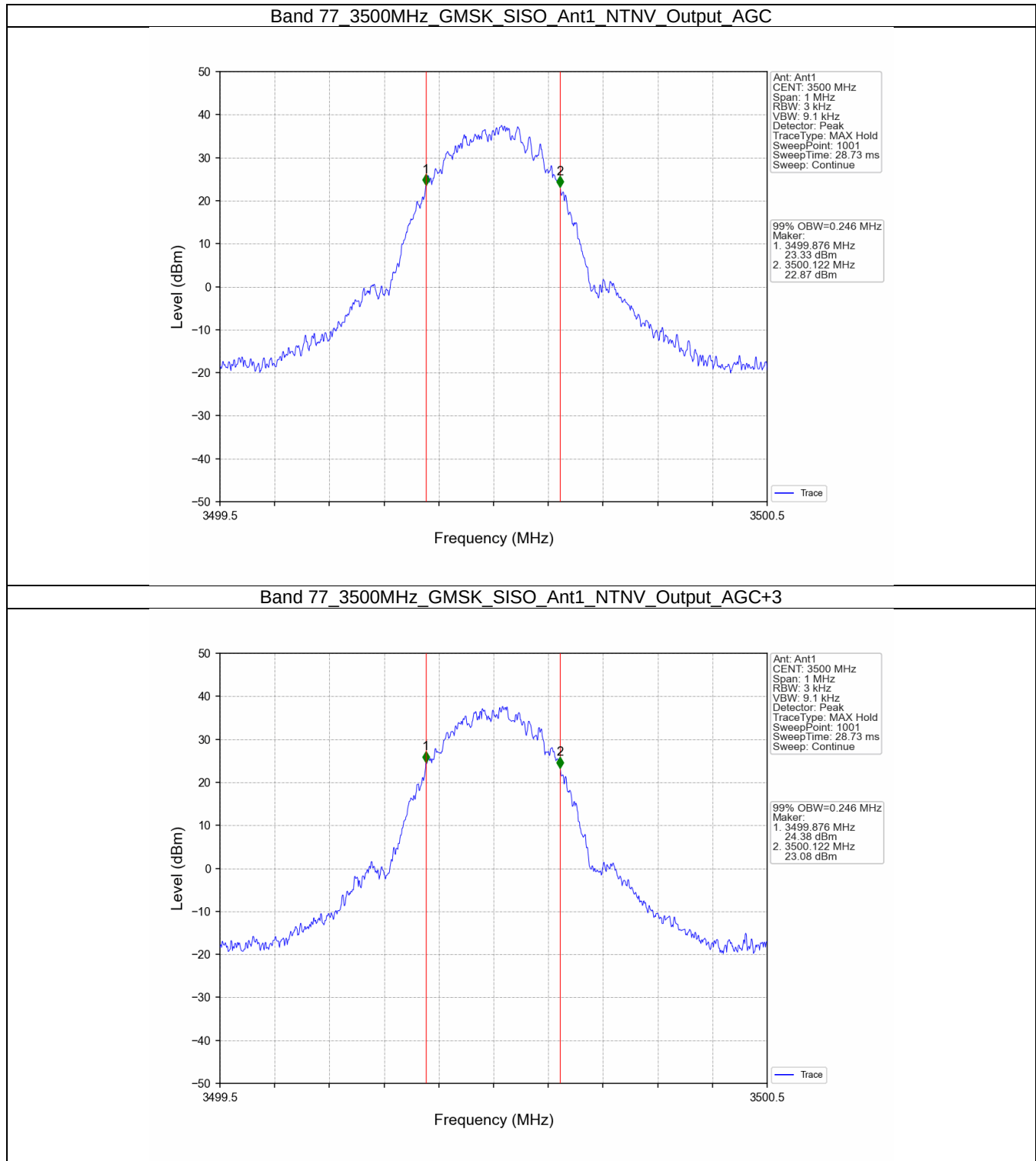
3. Input-versus-output signal comparison

3.1 Band 77_OBW

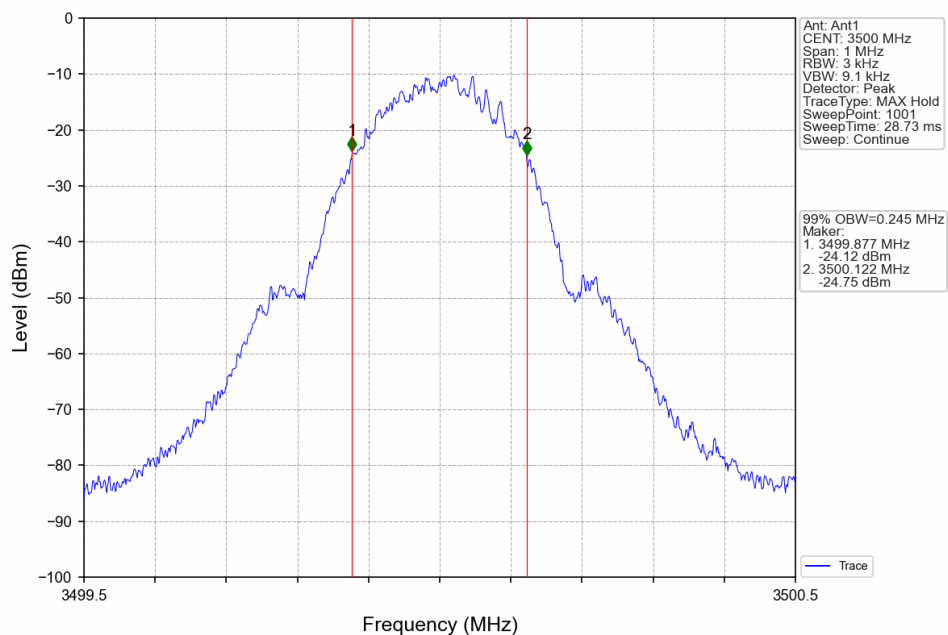
3.1.1 Test Result

Band: 77 / NTNV							
Signal			TX Type	ANT	99% OBW (MHz)		Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input	
GMSK 0.2MHz	-1.5	3500	SISO	1	0.246	0.245	Pass
	-4.5	3500	SISO	1	0.246	0.246	Pass
AWGN 5MHz	-1.5	3500	SISO	1	4.571	4.549	Pass
	-4.5	3500	SISO	1	4.560	4.532	Pass
AWGN 100MHz	-1.5	3500	SISO	1	96.049	97.188	Pass
	-4.5	3500	SISO	1	96.360	97.167	Pass

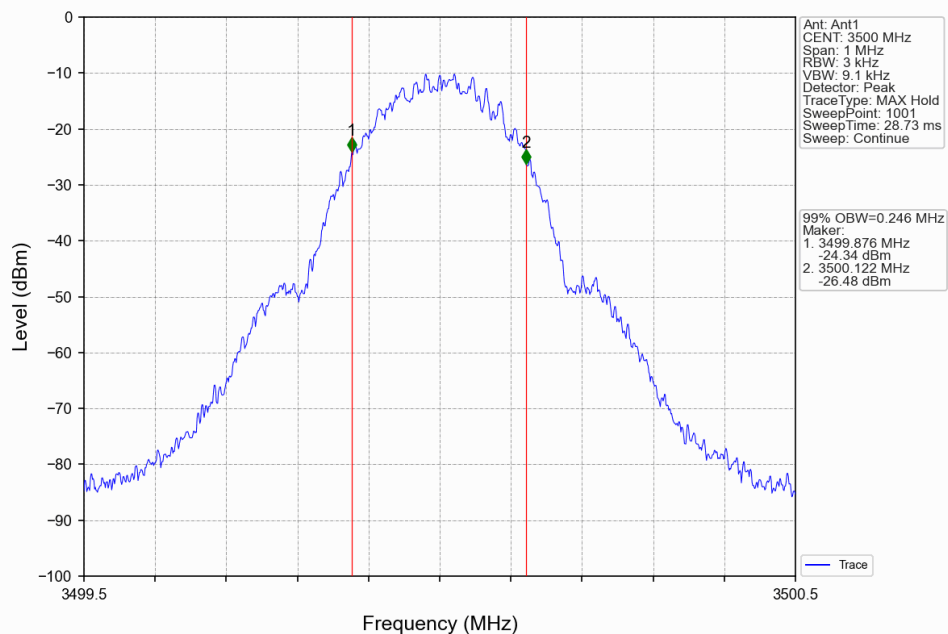
3.1.2 Test Graph



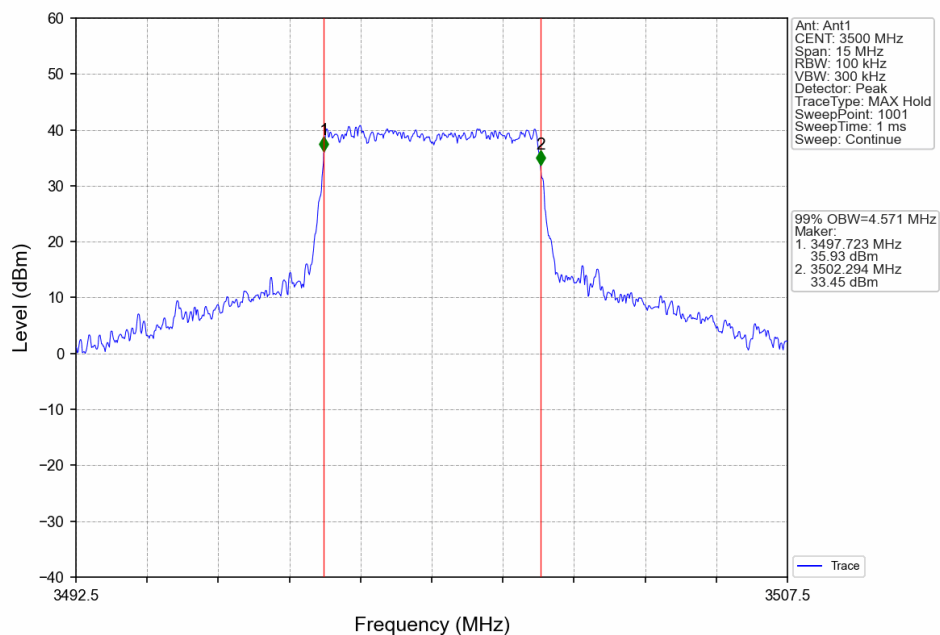
Band 77_3500MHz_GMSK_SISO_Ant1_NTNV_Input_AGC



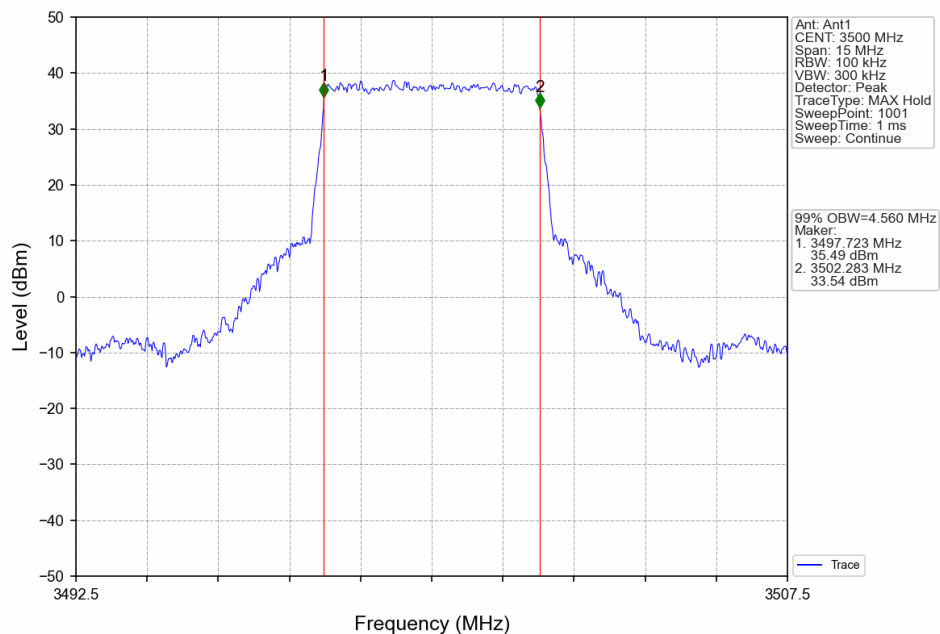
Band 77_3500MHz_GMSK_SISO_Ant1_NTNV_Input_AGC+3



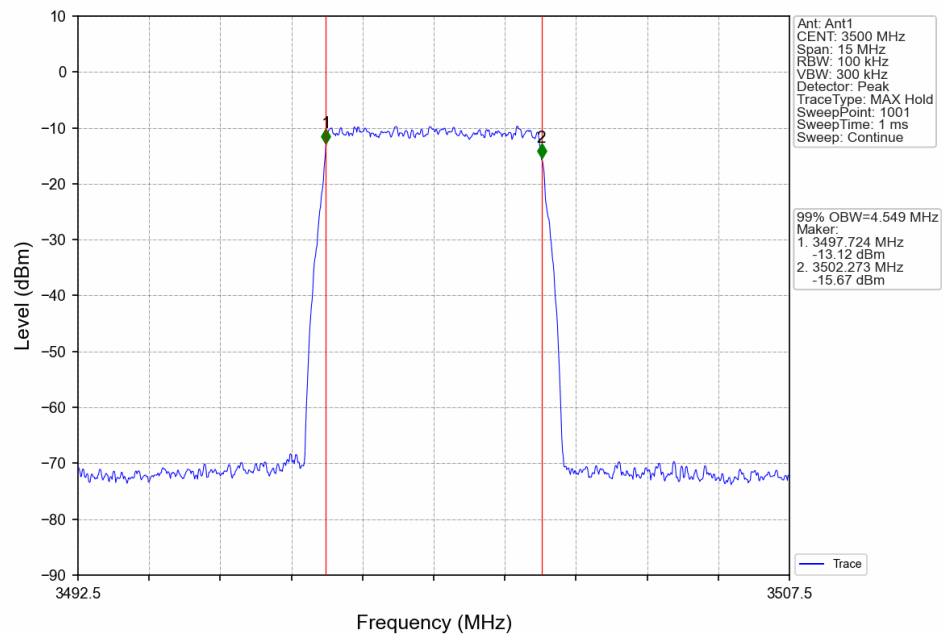
Band 77_3500MHz_AWGN_SISO_Ant1_NTNV_Output_AGC



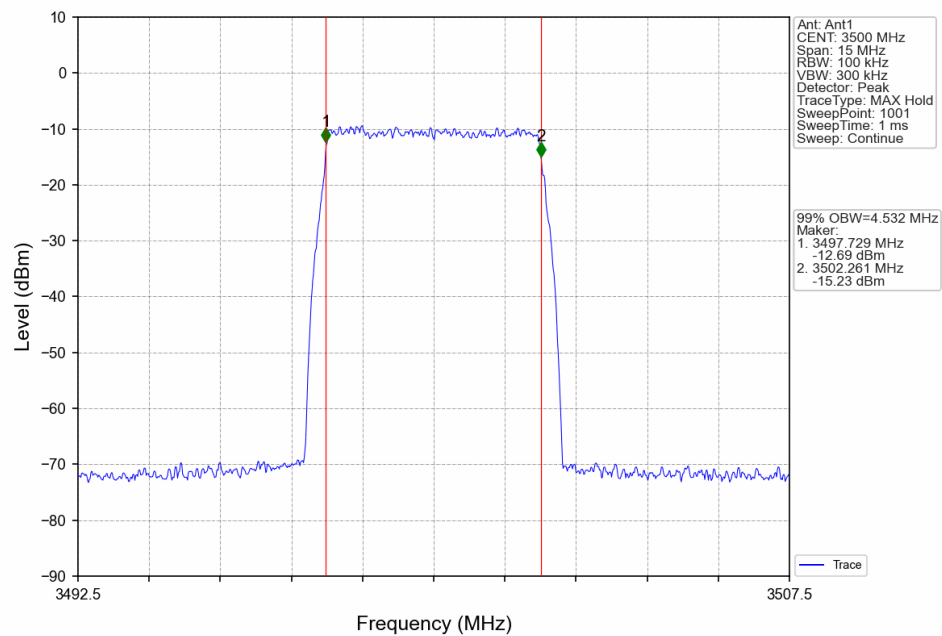
Band 77_3500MHz_AWGN_SISO_Ant1_NTNV_Output_AGC+3



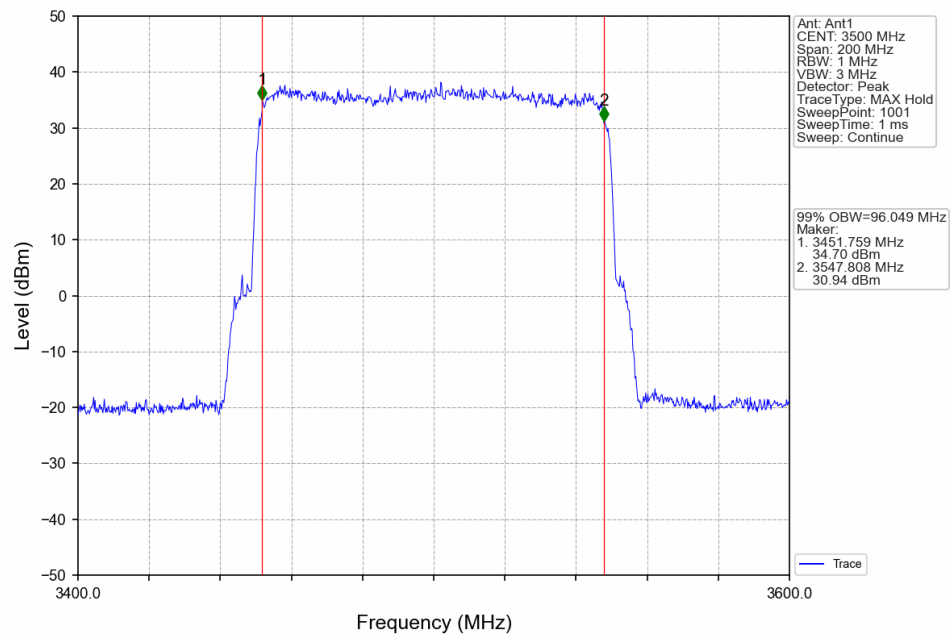
Band 77_3500MHz_AWGN_SISO_Ant1_NTNV_Input_AGC



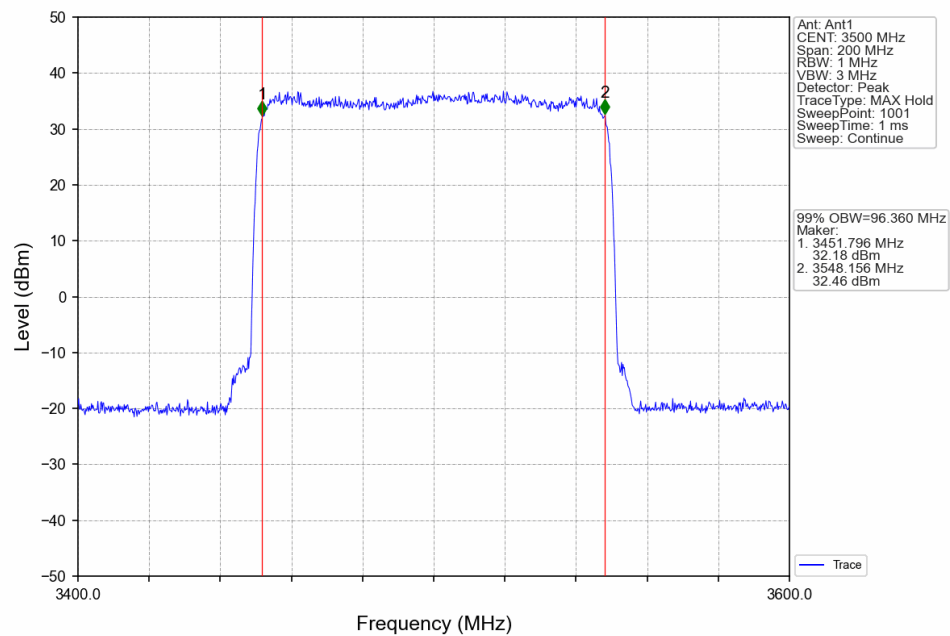
Band 77_3500MHz_AWGN_SISO_Ant1_NTNV_Input_AGC+3



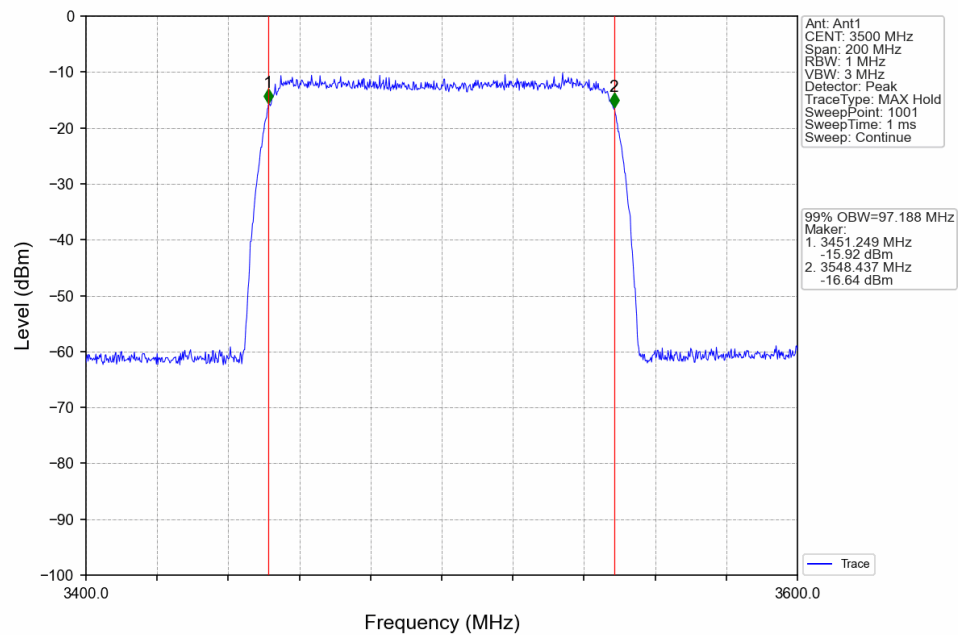
Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC



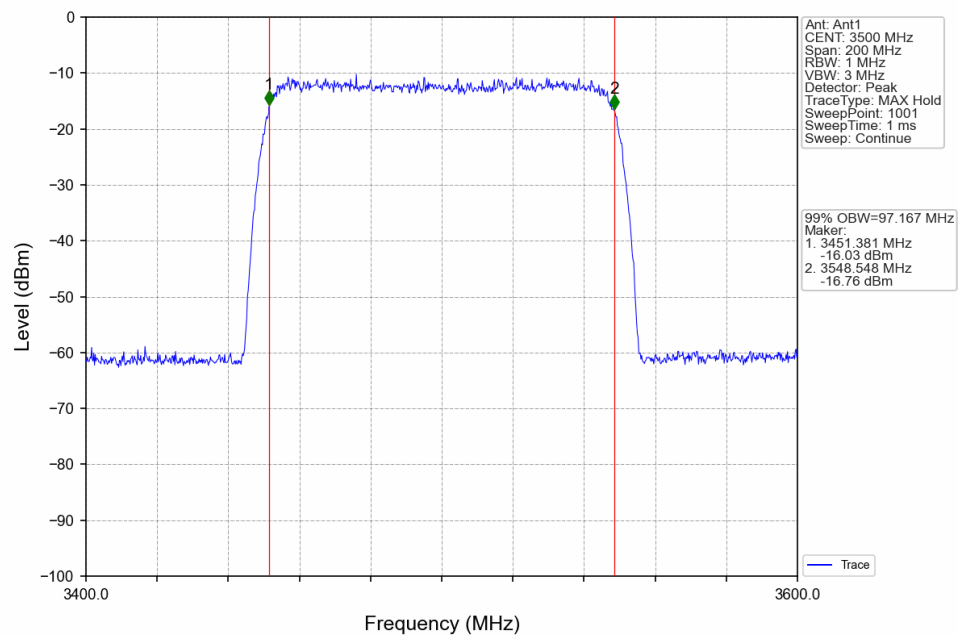
Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC+3



Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC



Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC+3

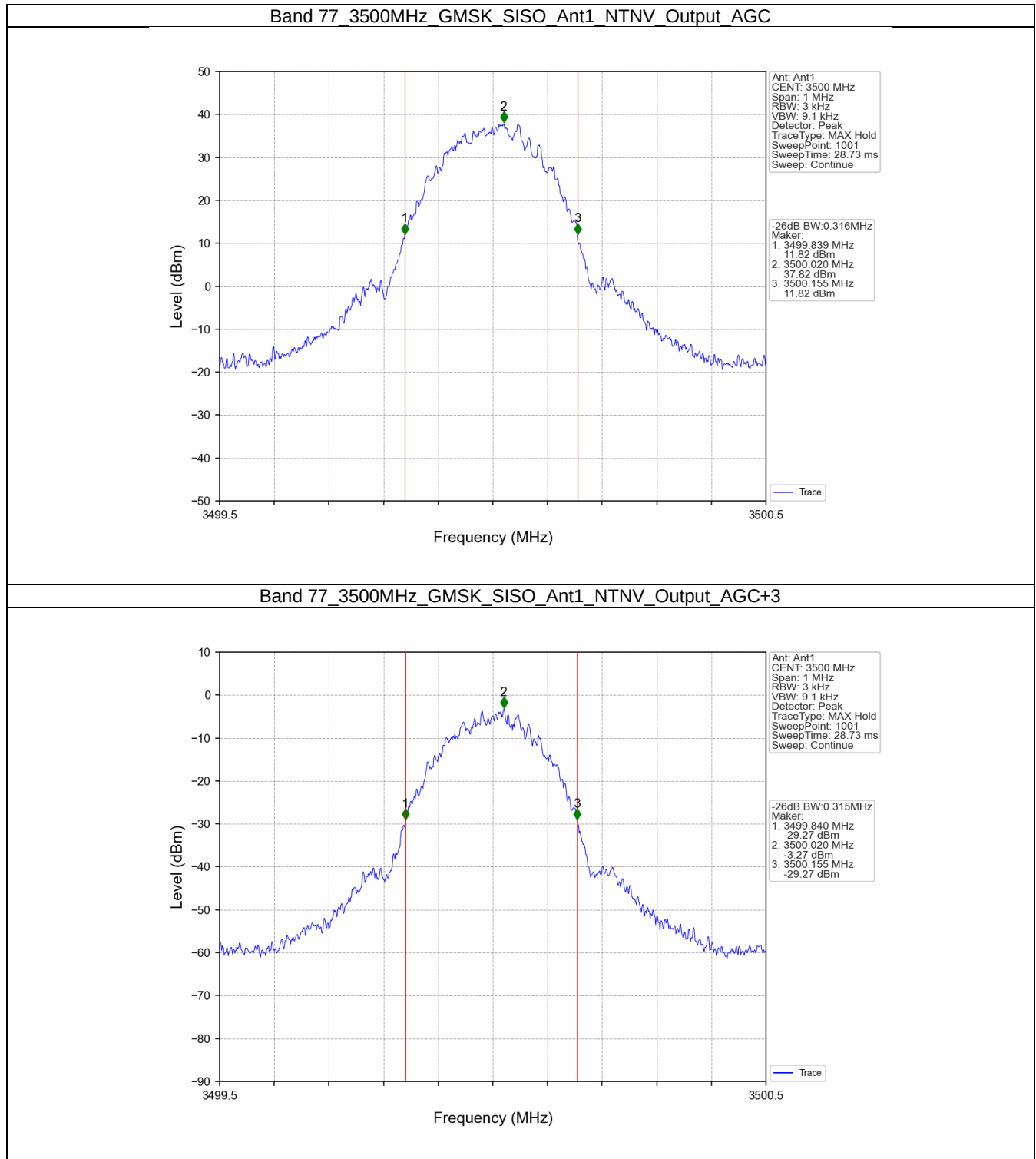


3.2 Band 77_EBW

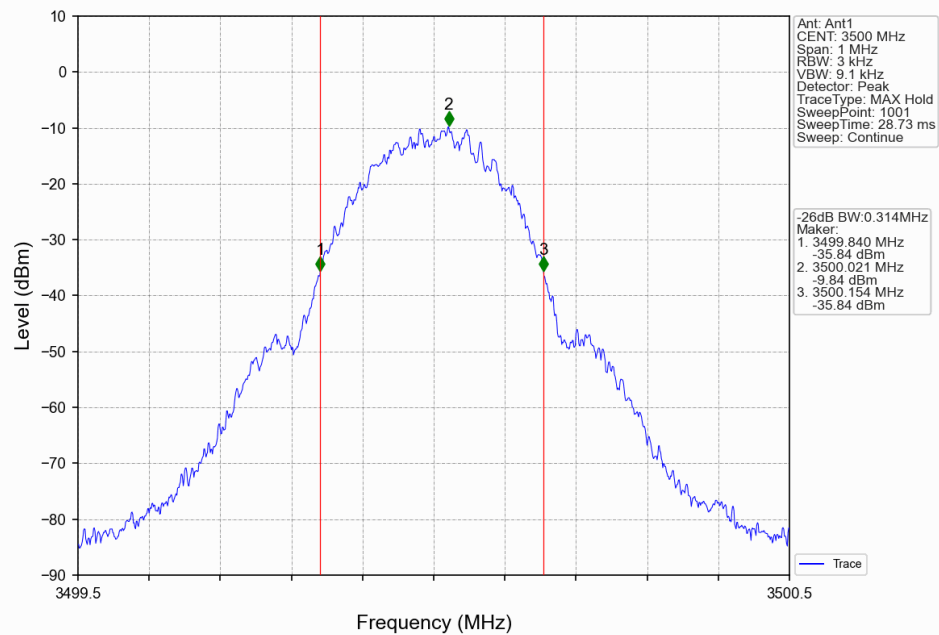
3.2.1 Test Result

Band: 77 / NTNV							
Signal			TX Type	ANT	26dB EBW (MHz)		Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input	
GMSK 0.2MHz	-1.5	3500	SISO	1	0.316	0.314	Pass
	-4.5	3500	SISO	1	0.315	0.316	Pass
AWGN 5MHz	-1.5	3500	SISO	1	5.059	5.065	Pass
	-4.5	3500	SISO	1	5.065	5.045	Pass
AWGN 100MHz	-1.5	3500	SISO	1	101.223	105.747	Pass
	-4.5	3500	SISO	1	101.227	105.683	Pass

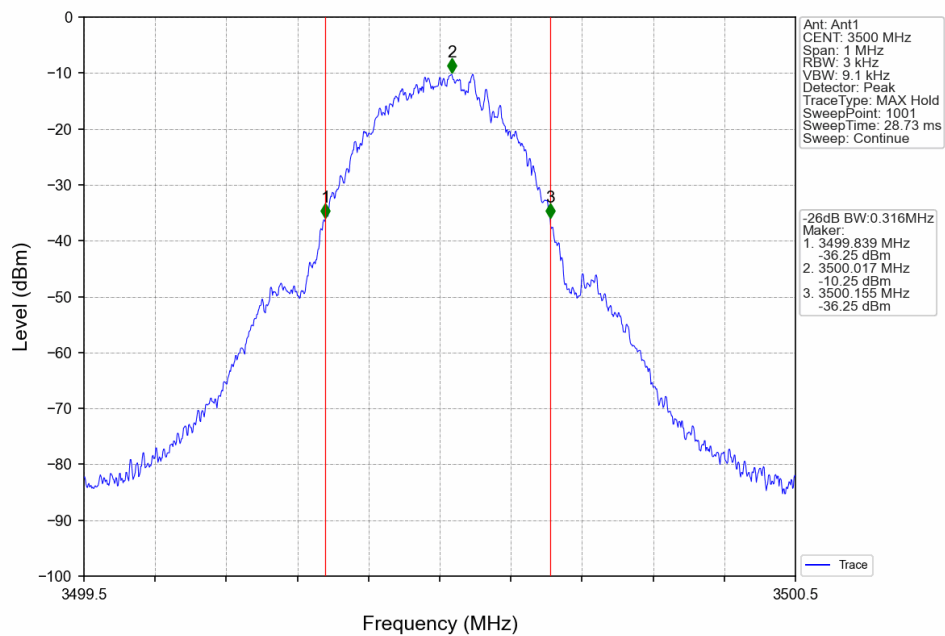
3.2.2 Test Graph



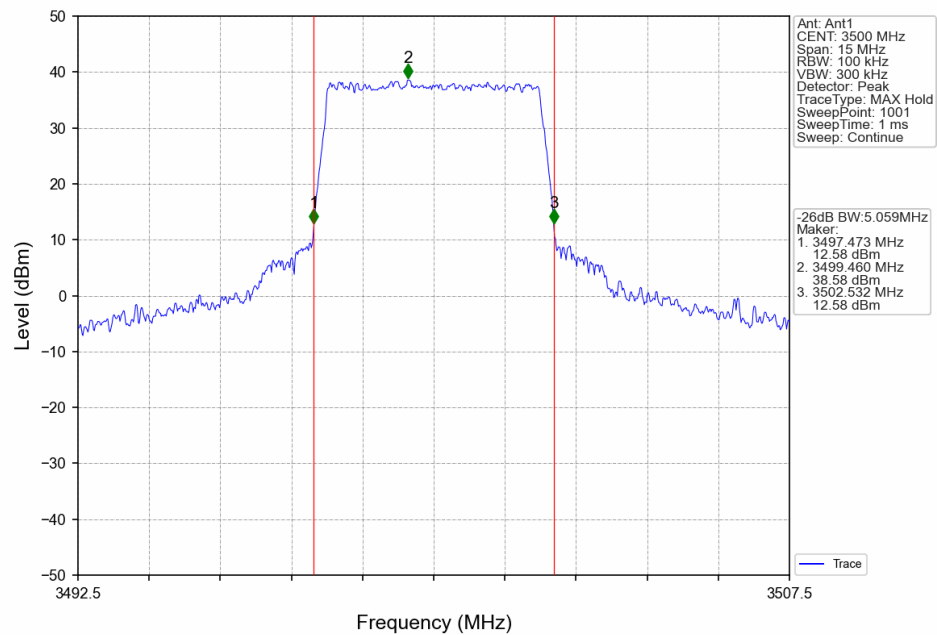
Band 77_3500MHz_GMSK_SISO_Ant1_NTNV_Input_AGC



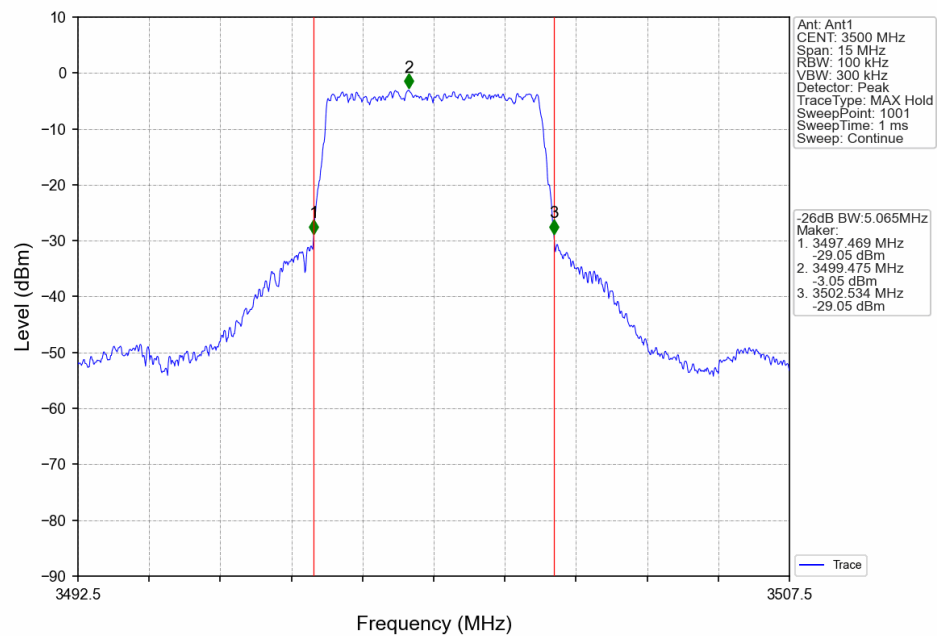
Band 77_3500MHz_GMSK_SISO_Ant1_NTNV_Input_AGC+3



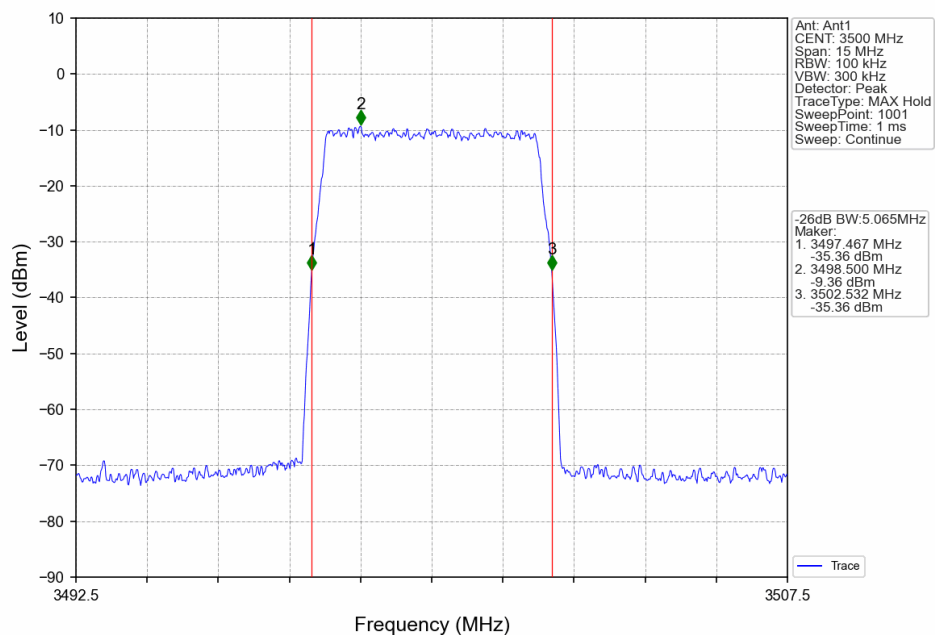
Band 77_3500MHz_AWGN_SISO_Ant1_NTNV_Output_AGC



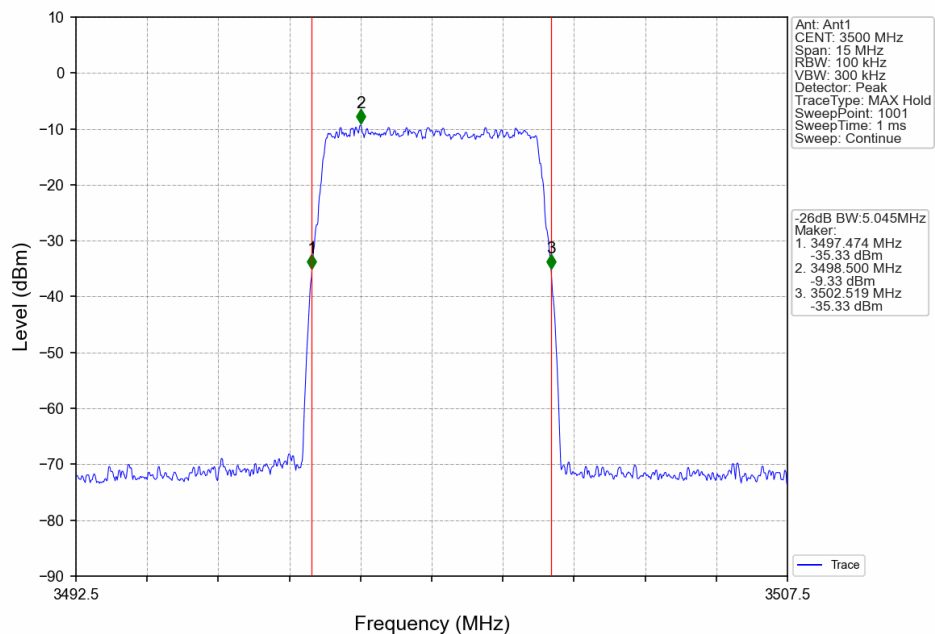
Band 77_3500MHz_AWGN_SISO_Ant1_NTNV_Output_AGC+3



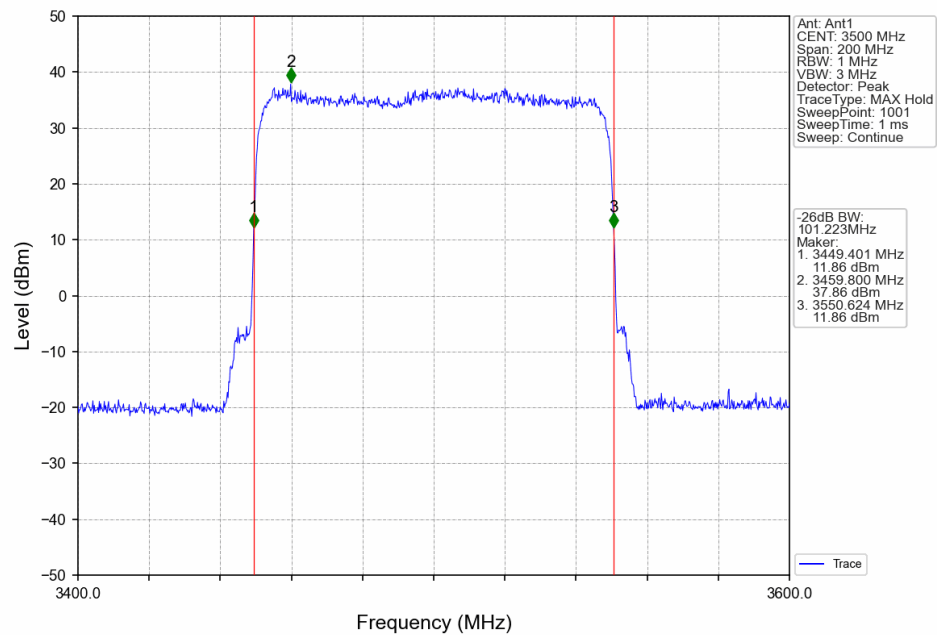
Band 77_3500MHz_AWGN_SISO_Ant1_NTNV_Input_AGC



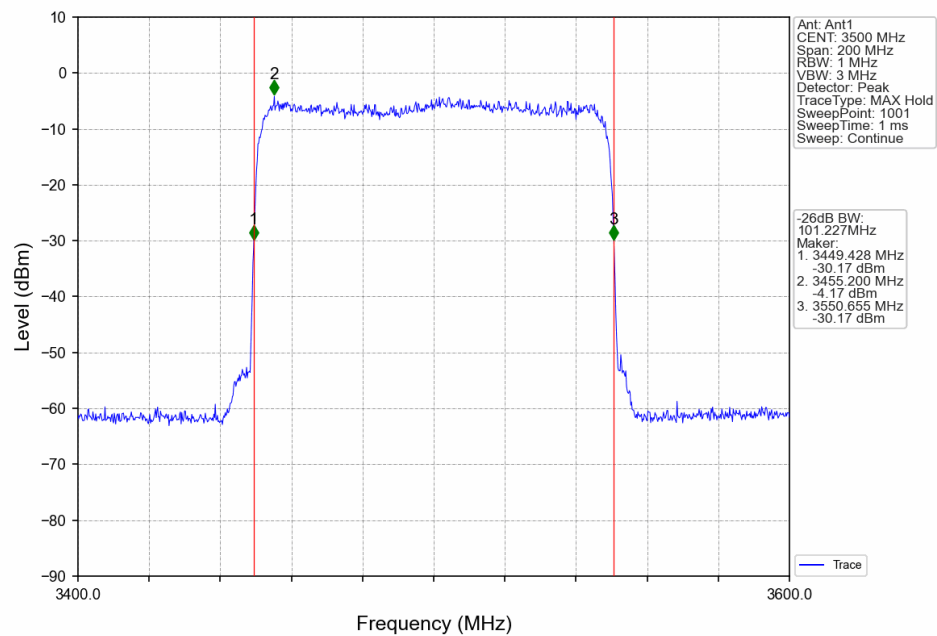
Band 77_3500MHz_AWGN_SISO_Ant1_NTNV_Input_AGC+3



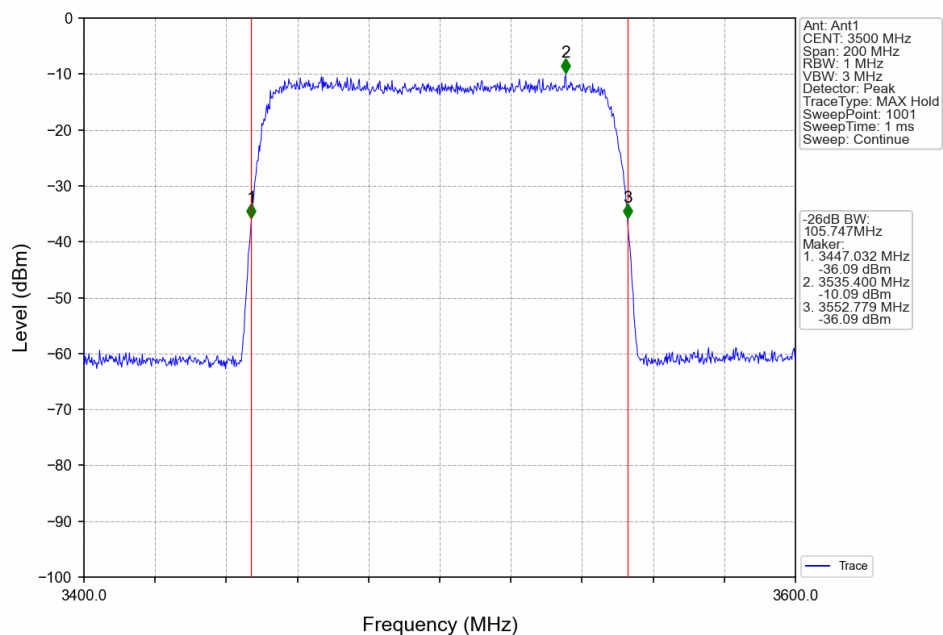
Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC



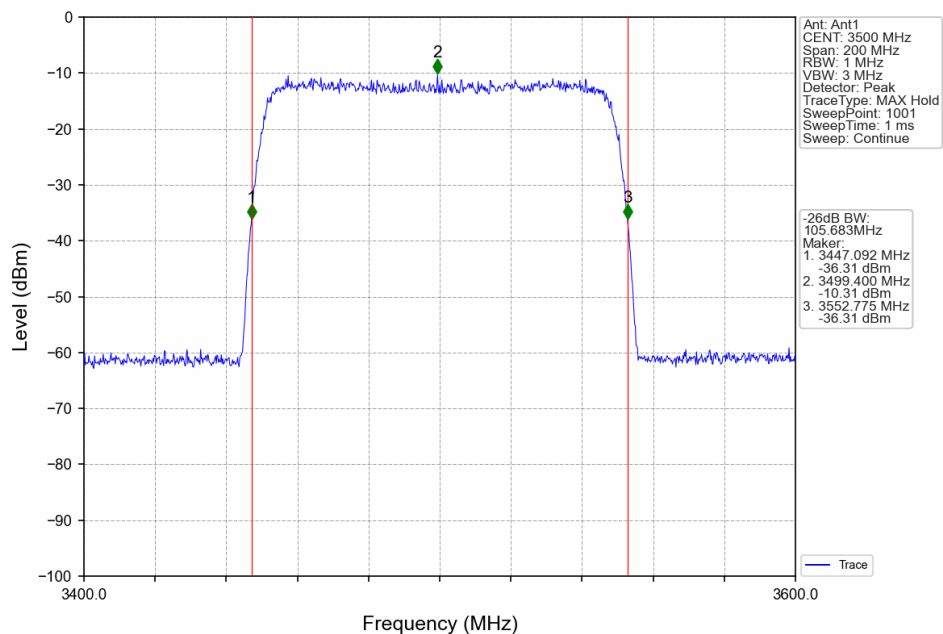
Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Output_AGC+3



Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC



Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_Input_AGC+3



4. Input/output power and amplifier/booster gain

4.1 Band 77_EIRP

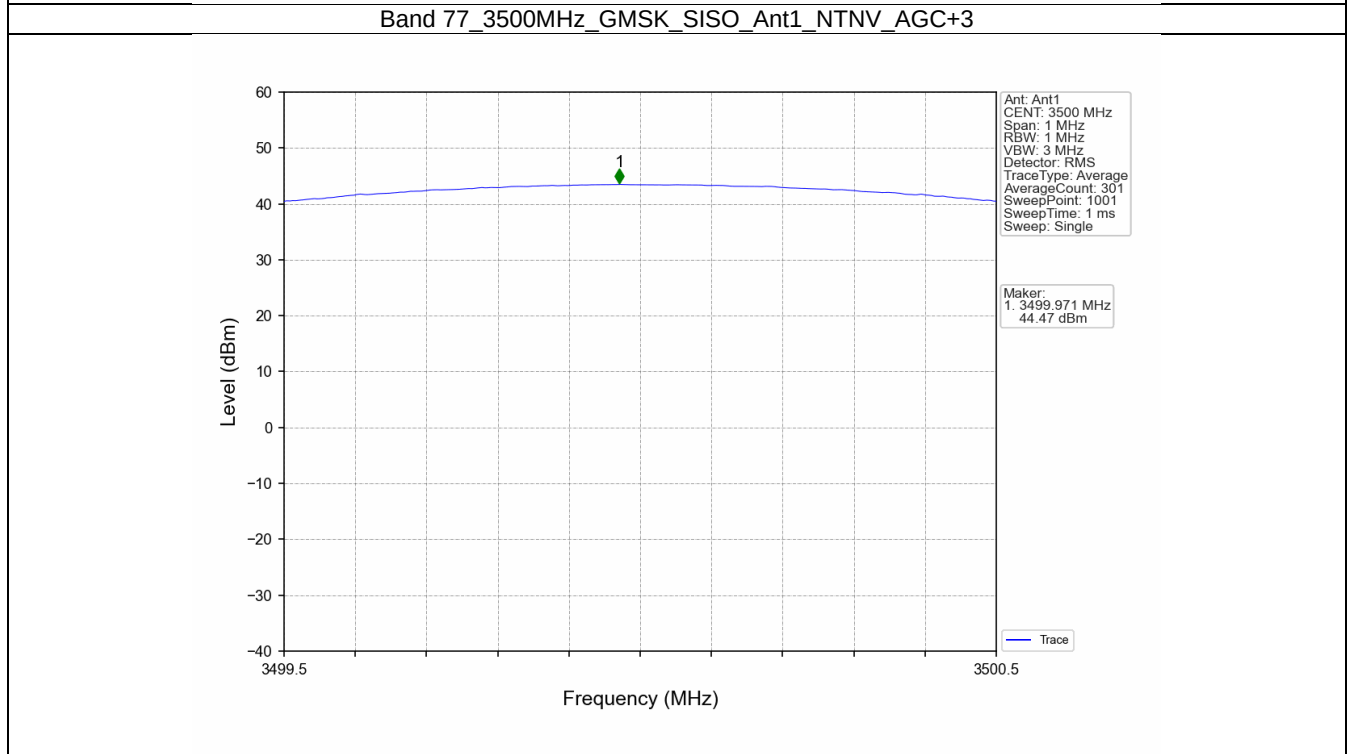
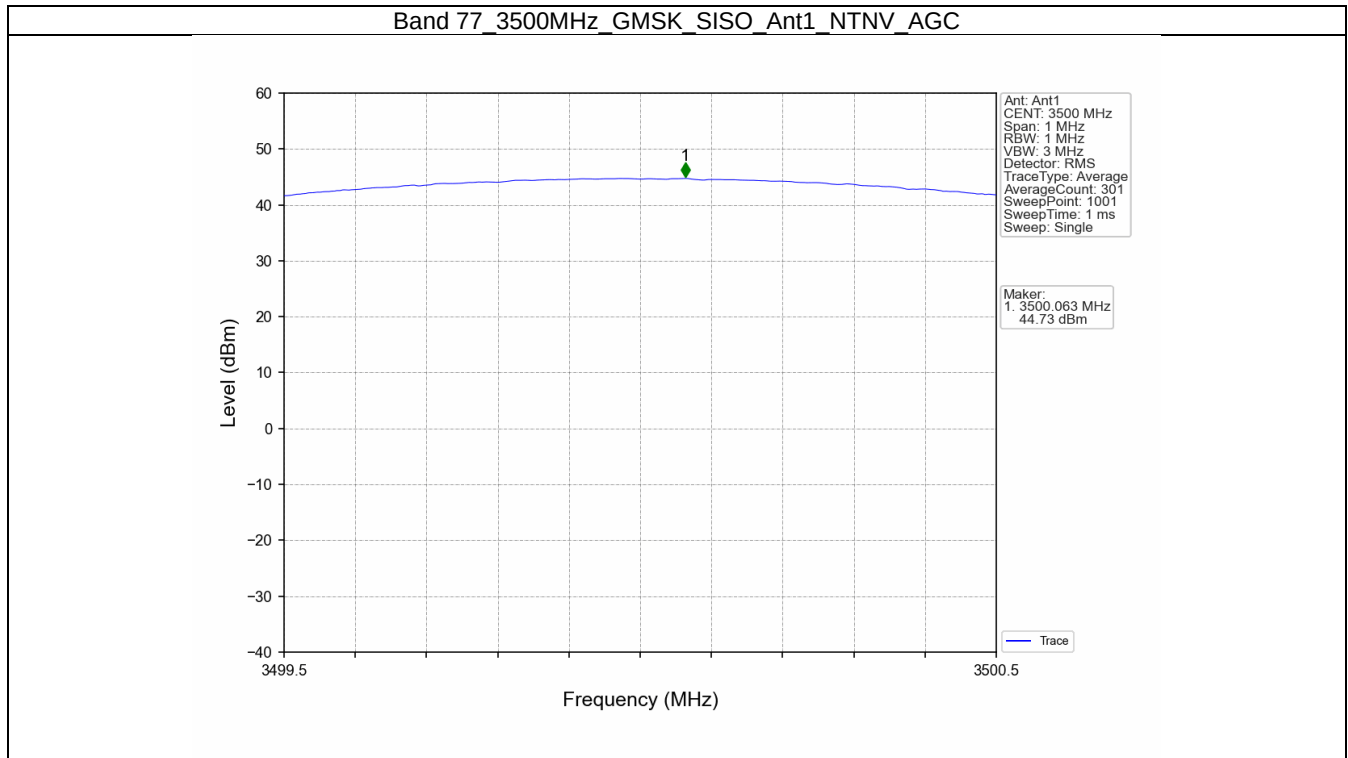
4.1.1 Test Result

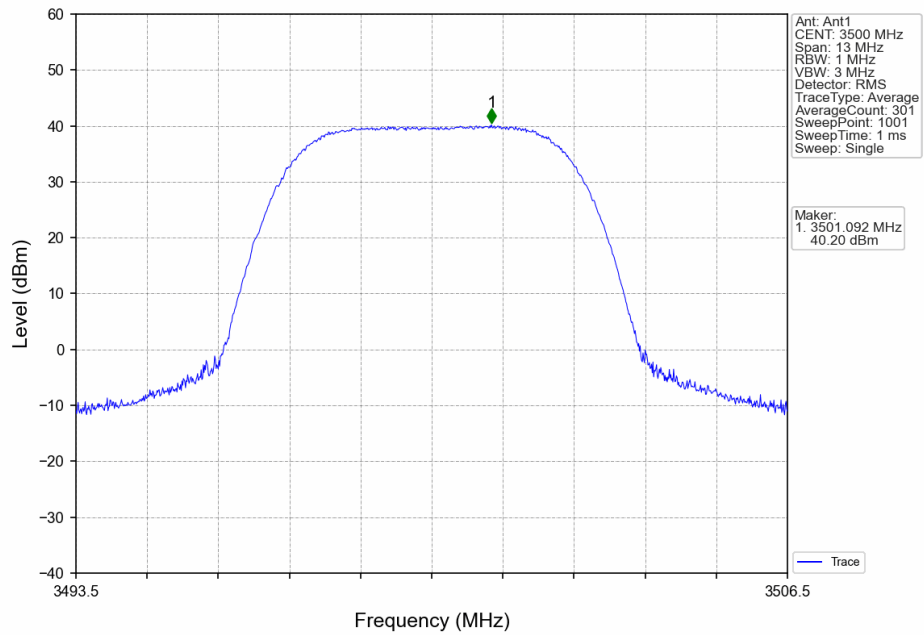
Band: 77 / NTNV										
Signal			TX Type	ANT	Conducted Power (dBm/MHz)		EIRP (dBm/MHz)		Booster Gain (dB)	Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input	Result	Limit		
GMSK 0.2MHz	-4.5	3500	SISO	1	44.73	-4.37	59.73	<=65.16	49.10	Pass
	-1.5	3500	SISO	1	44.47	-1.35	59.47	<=65.16	/	Pass
AWGN 5MHz	-4.5	3500	SISO	1	40.20	-9.13	55.20	<=65.16	49.33	Pass
	-1.5	3500	SISO	1	39.63	-6.14	54.63	<=65.16	/	Pass
AWGN 100MHz	-4.5	3500	SISO	1	26.36	-23.32	41.36	<=65.16	49.68	Pass
	-1.5	3500	SISO	1	26.12	-20.07	41.13	<=65.16	/	Pass

Band: N77 / NTNV								
Signal			Conducted Power (dBm/MHz)		EIRP (dBm/MHz)		Limit (dBm)	Verdict
Type	Level (dBm)	Frequency (MHz)	SISO	2*2	SISO	2*2		
GMSK 0.2MHz	-4.5	3500	44.73	47.75	59.73	62.75	/	Pass
	-1.5	3500	44.47	47.49	59.47	62.49	/	Pass
AWGN 5MHz	-4.5	3500	40.20	43.22	55.20	58.22	/	Pass
	-1.5	3500	39.63	42.65	54.63	57.65	/	Pass
AWGN 100MHz	-4.5	3500	26.36	29.38	41.36	44.38	/	Pass
	-1.5	3500	26.12	29.14	41.12	44.14	/	Pass

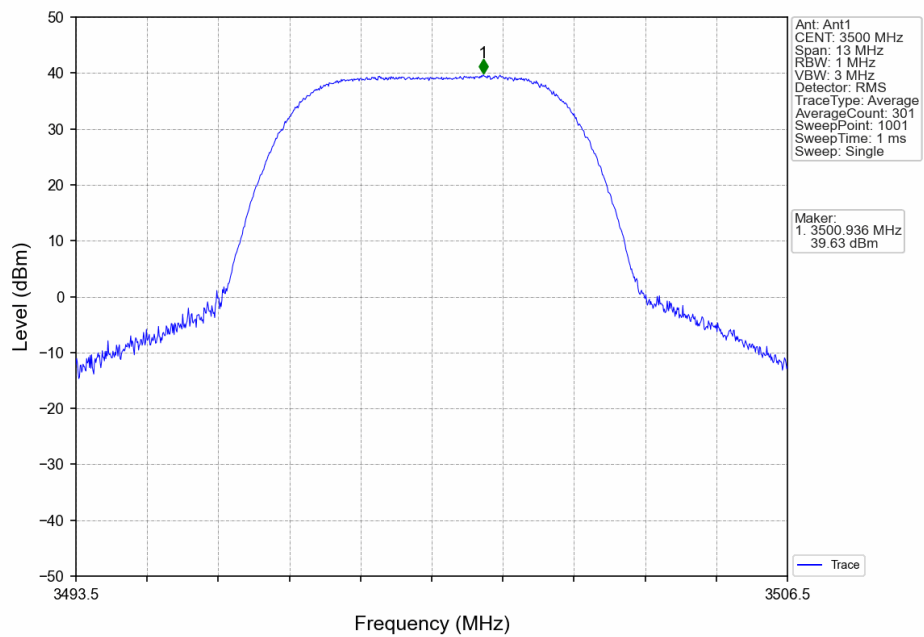
Band: N77 / NTNV						
Signal			Conducted Power (dBm)	EIRP (dBm)	EIRP (dBm)	Booster Gain (dB)
Type	Level (dBm)	Frequency (MHz)	SISO	SISO	2*2 MIMO	
GMSK 0.2MHz	-4.5	3500	45.43	60.43	63.45	/
	-1.5	3500	45.47	60.47	63.49	/
AWGN 5MHz	-4.5	3500	45.51	60.51	63.53	/
	-1.5	3500	45.55	60.55	63.57	/
AWGN 100MHz	-4.5	3500	45.49	60.49	63.51	/
	-1.5	3500	45.53	60.53	63.55	/

4.1.2 Test Graph

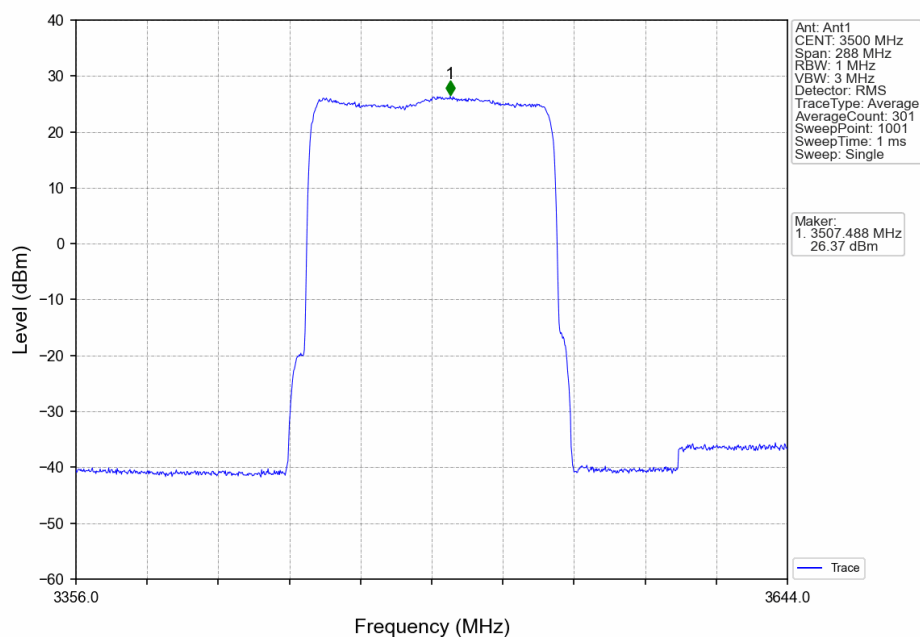




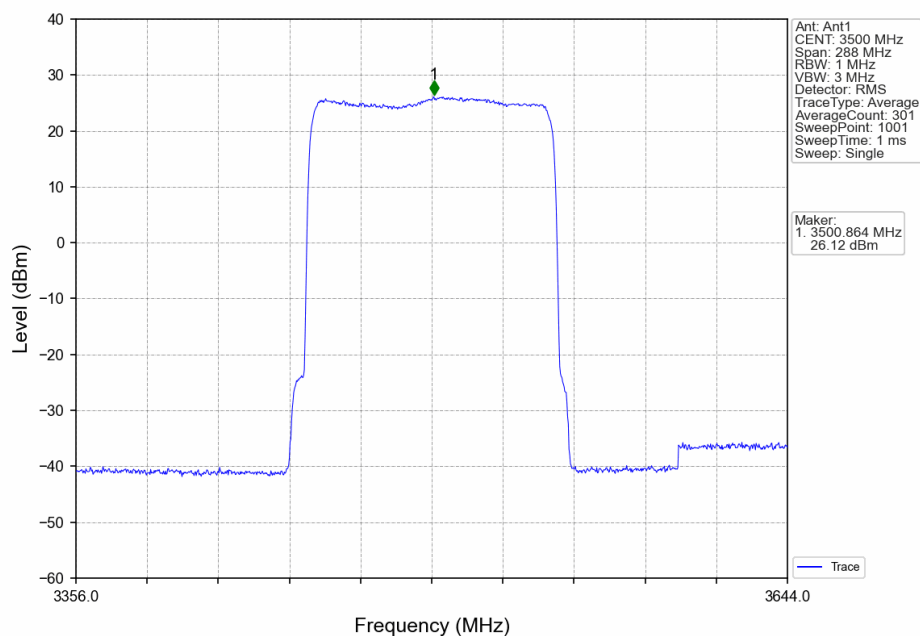
Band 77_3500MHz_AWGN_SISO_Ant1_NTNV_AGC+3



Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3

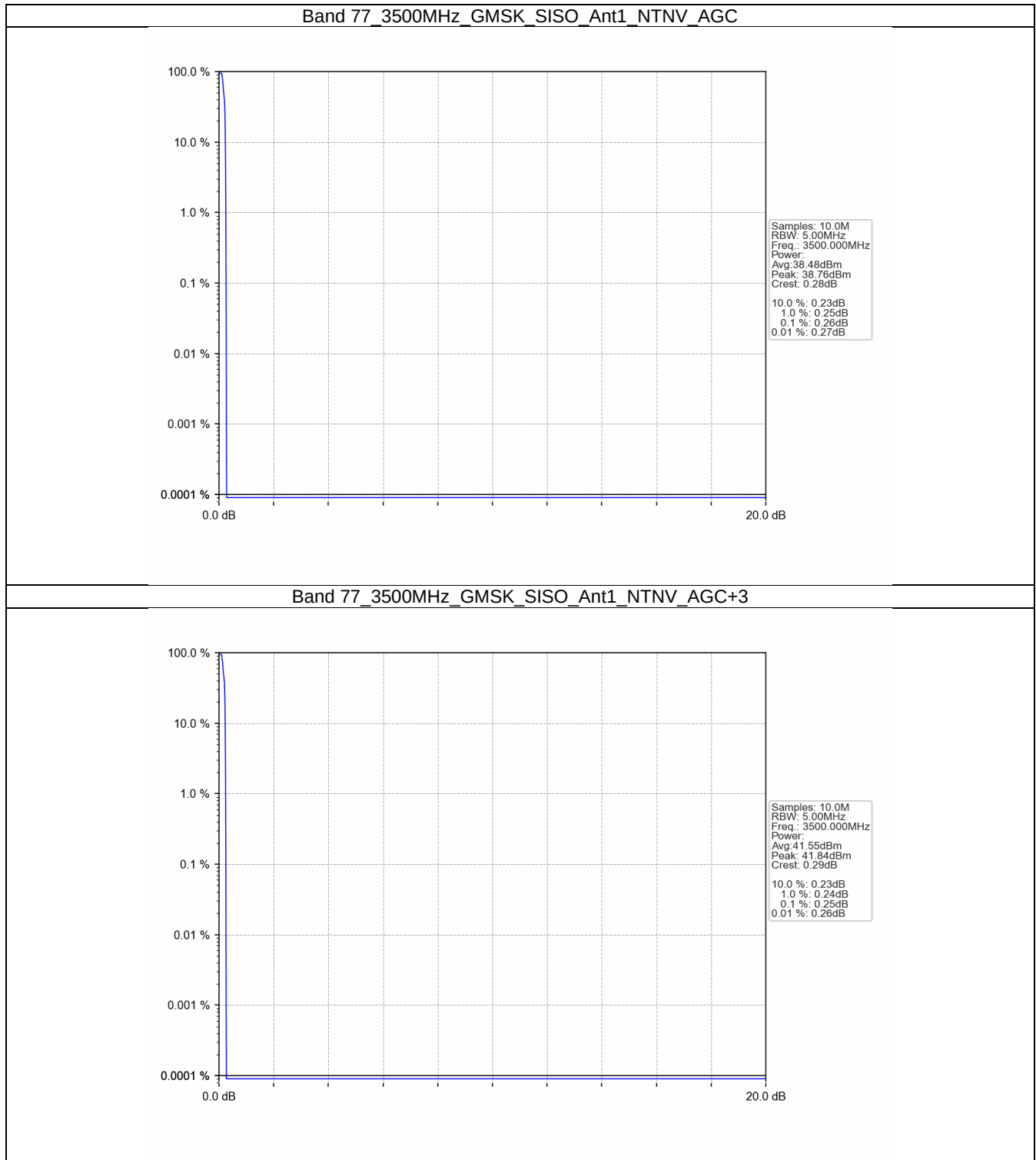


4.2 Band 77_PAPR

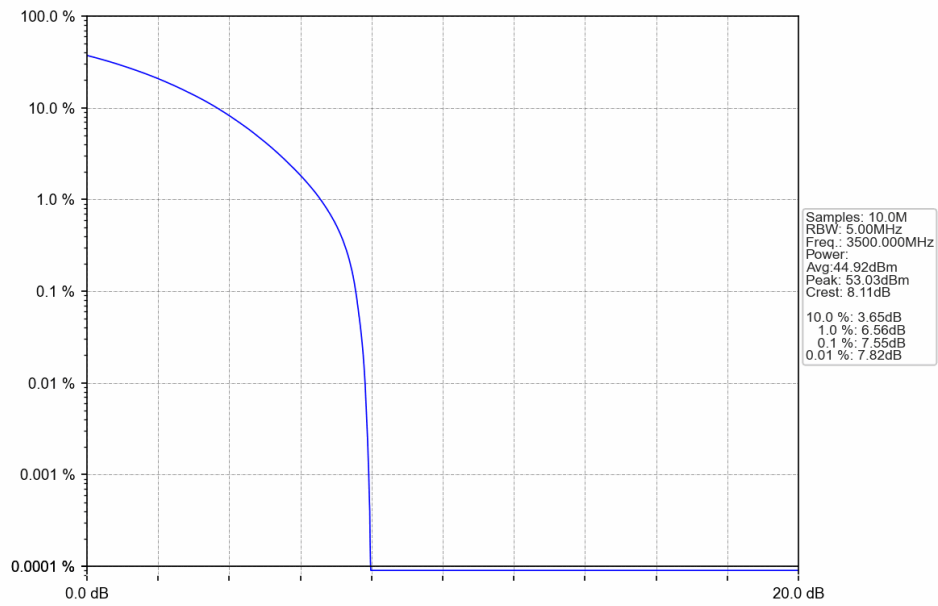
4.2.1 Test Result

Band: 77 / NTNV							
Signal			TX Type	ANT	PAPR (dB)		Verdict
Type	Level (dBm)	Frequency (MHz)			Result	Limit	
GMSK 0.2MHz	-4.5	3500	SISO	1	0.26	<=13	Pass
	-1.5	3500	SISO	1	0.25	<=13	Pass
AWGN 5MHz	-4.5	3500	SISO	1	7.55	<=13	Pass
	-1.5	3500	SISO	1	7.80	<=13	Pass
AWGN 100MHz	-4.5	3500	SISO	1	8.48	<=13	Pass
	-1.5	3500	SISO	1	8.40	<=13	Pass

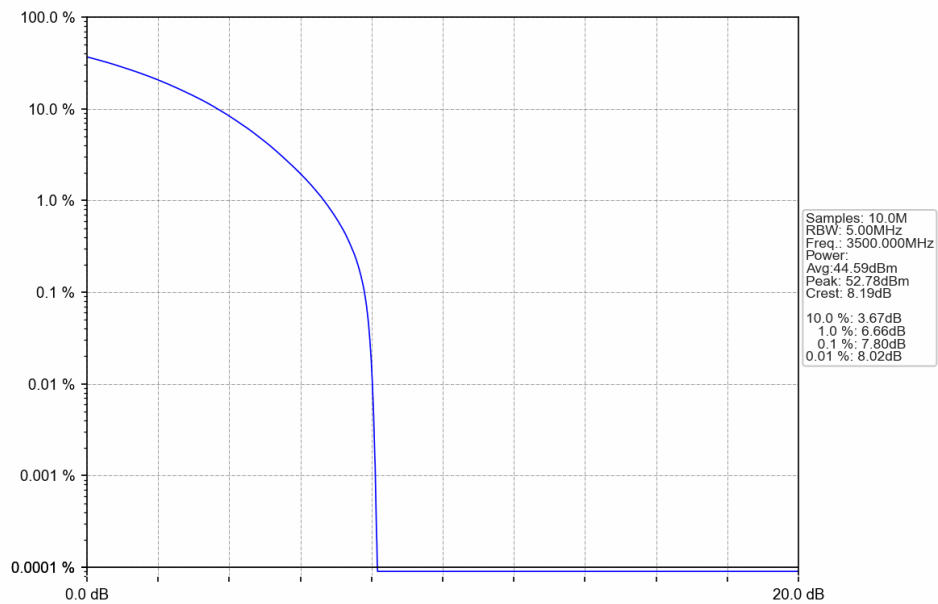
4.2.2 Test Graph



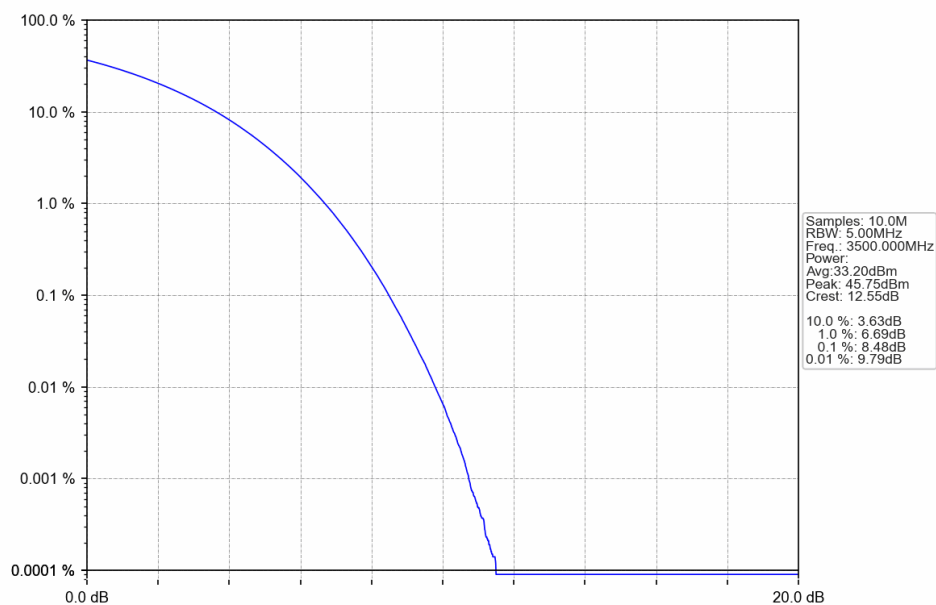
Band 77 3500MHz AWGN SISO Ant1 NTN AGC



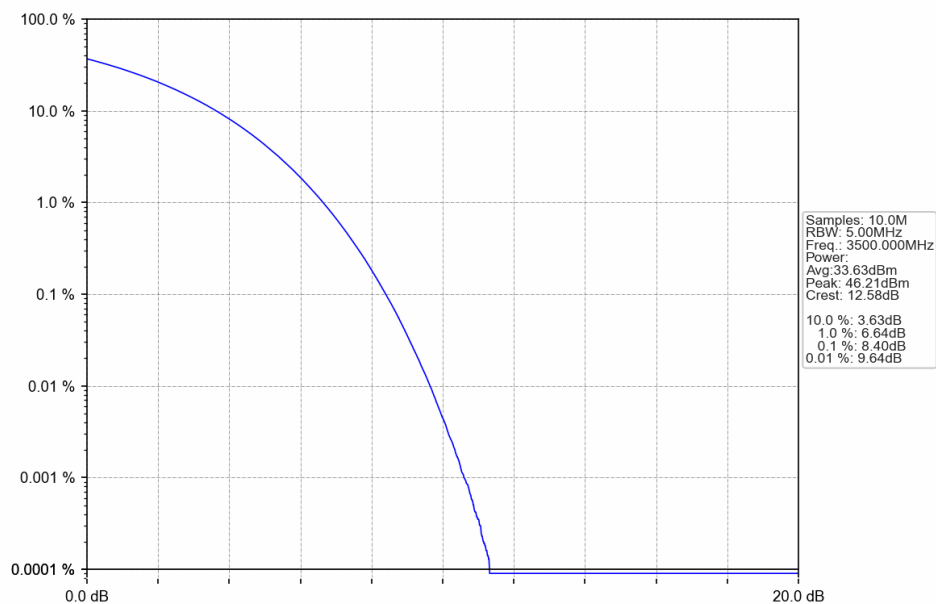
Band 77 3500MHz AWGN SISO Ant1 NTN AGC+3



Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3



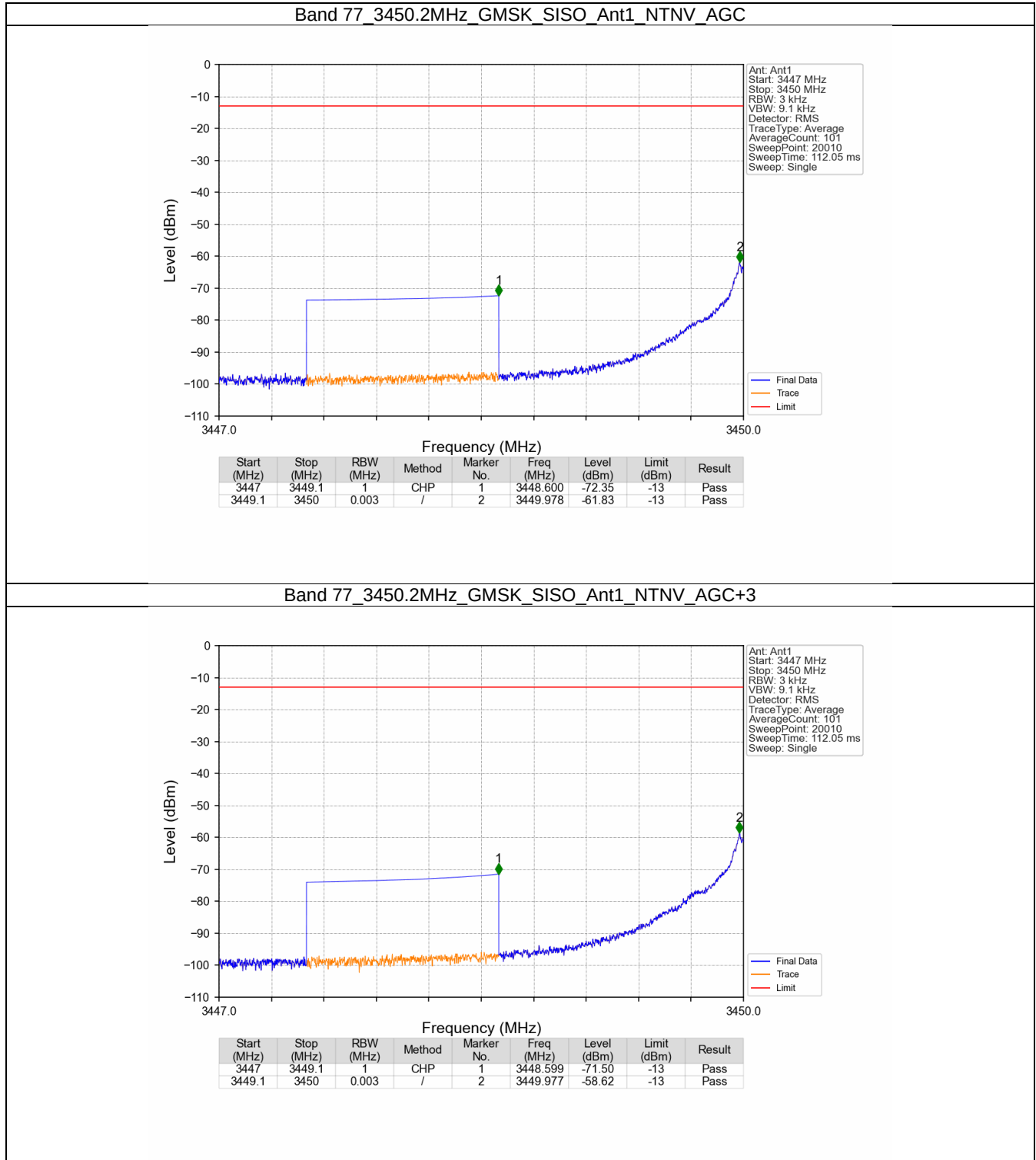
5. Out-of-band/out-of-block (including intermodulation) emissions

5.1 Band 77

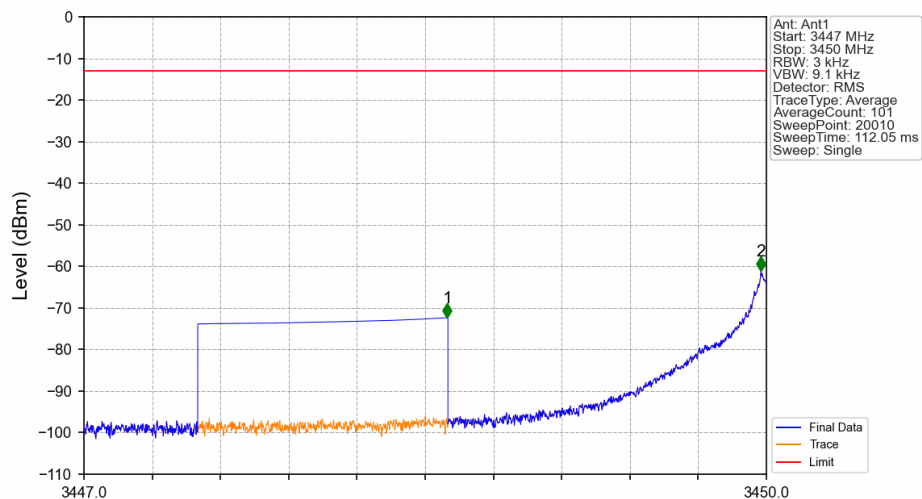
5.1.1 Test Result

Band: 77 / NTNV									
Signal				Channel	TX Type	ANT	OOB (dBm)		Verdict
Input	Type	Level (dBm)	Frequency (MHz)				Result	Limit	
Two	GMSK 0.2MHz	-4.5	3450.2	LCH	SISO	1	-61.83	Refer To Test Graph	Pass
		-1.5	3450.2	LCH	SISO	1	-58.62	Refer To Test Graph	Pass
One	GMSK 0.2MHz	-4.5	3450.2	LCH	SISO	1	-61.19	Refer To Test Graph	Pass
		-1.5	3450.2	LCH	SISO	1	-57.67	Refer To Test Graph	Pass
Two	GMSK 0.2MHz	-4.5	3549.8	HCH	SISO	1	-56.49	Refer To Test Graph	Pass
		-1.5	3549.8	HCH	SISO	1	-53.70	Refer To Test Graph	Pass
One	GMSK 0.2MHz	-4.5	3549.8	HCH	SISO	1	-56.36	Refer To Test Graph	Pass
		-1.5	3549.8	HCH	SISO	1	-54.51	Refer To Test Graph	Pass
Two	AWGN 5MHz	-4.5	3452.5	LCH	SISO	1	-46.14	Refer To Test Graph	Pass
		-1.5	3452.5	LCH	SISO	1	-52.65	Refer To Test Graph	Pass
One	AWGN 5MHz	-4.5	3452.5	LCH	SISO	1	-53.55	Refer To Test Graph	Pass
		-1.5	3452.5	LCH	SISO	1	-55.49	Refer To Test Graph	Pass
Two	AWGN 5MHz	-4.5	3547.5	HCH	SISO	1	-47.86	Refer To Test Graph	Pass
		-1.5	3547.5	HCH	SISO	1	-47.96	Refer To Test Graph	Pass
One	AWGN 5MHz	-4.5	3547.5	HCH	SISO	1	-53.18	Refer To Test Graph	Pass
		-1.5	3547.5	HCH	SISO	1	-56.35	Refer To Test Graph	Pass
Two	AWGN 100MHz	-4.5	3500	LCH	SISO	1	-35.16	Refer To Test Graph	Pass
		-1.5	3500	LCH	SISO	1	-35.42	Refer To Test Graph	Pass
One	AWGN 100MHz	-4.5	3500	LCH	SISO	1	-35.81	Refer To Test Graph	Pass
		-1.5	3500	LCH	SISO	1	-35.75	Refer To Test Graph	Pass

5.1.2 Test Graph

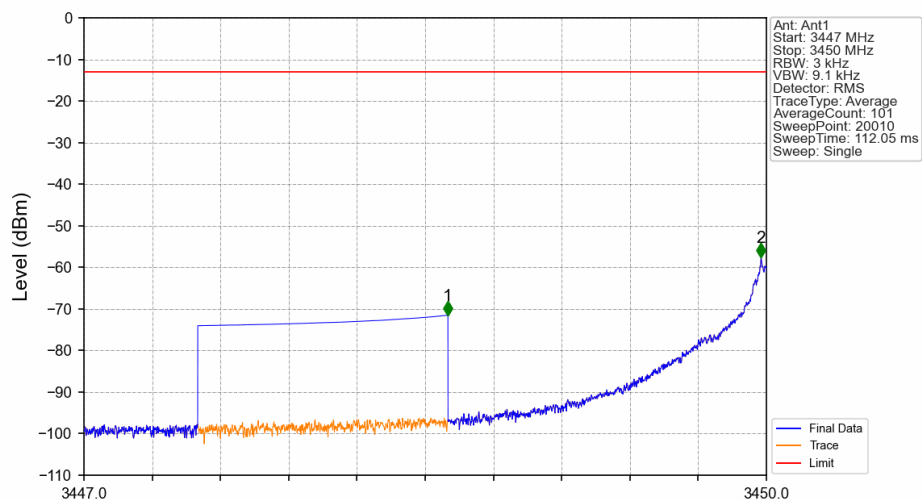


Band 77_3450.2MHz_GMSK_SISO_Ant1_NTNV_AGC



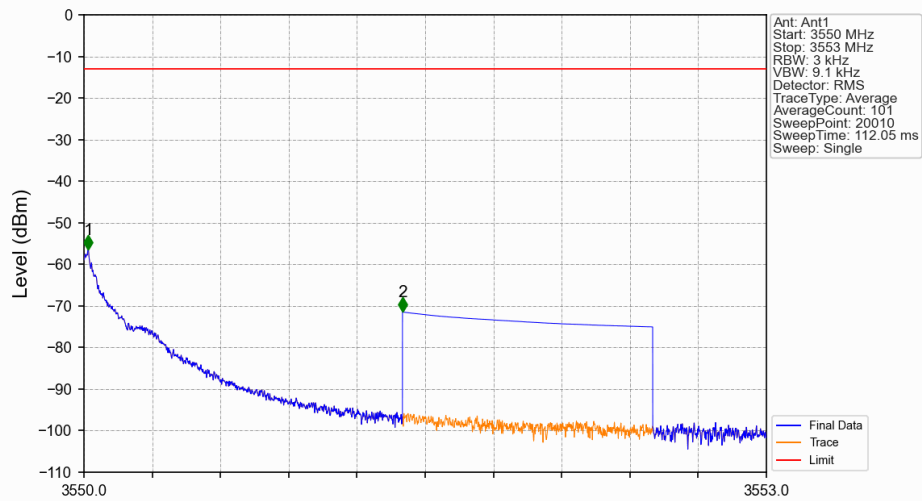
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449.1	1	CHP	1	3448.597	-72.35	-13	Pass
3449.1	3450	0.003	/	2	3449.976	-61.19	-13	Pass

Band 77_3450.2MHz_GMSK_SISO_Ant1_NTNV_AGC+3



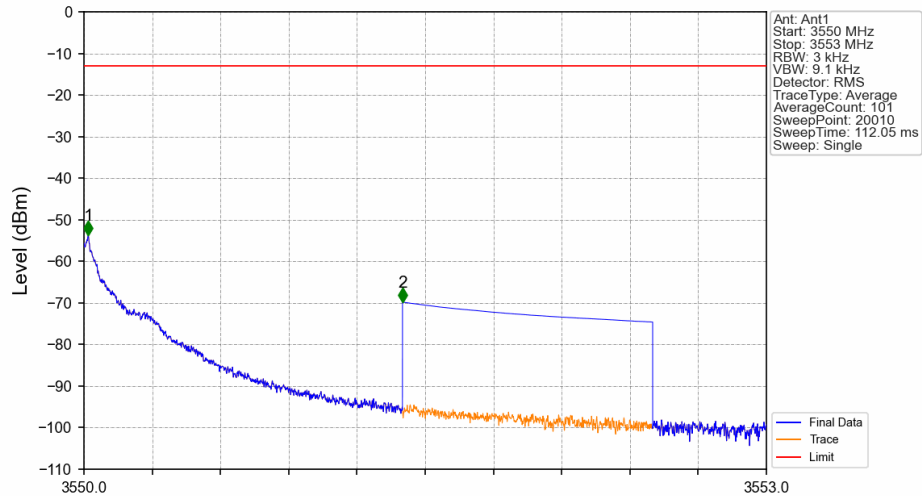
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449.1	1	CHP	1	3448.599	-71.53	-13	Pass
3449.1	3450	0.003	/	2	3449.977	-57.67	-13	Pass

Band 77 3549.8MHz GMSK SISO Ant1 NTNv AGC



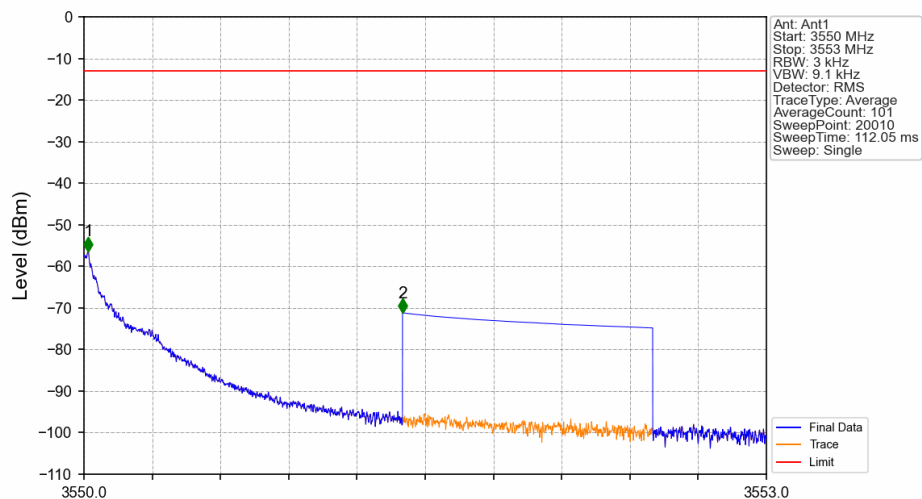
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3550.9	0.003	/	1	3550.019	-56.49	-13	Pass
3550.9	3553	1	CHP	2	3551.400	-71.47	-13	Pass

Band 77 3549.8MHz GMSK SISO Ant1 NTNv AGC+3



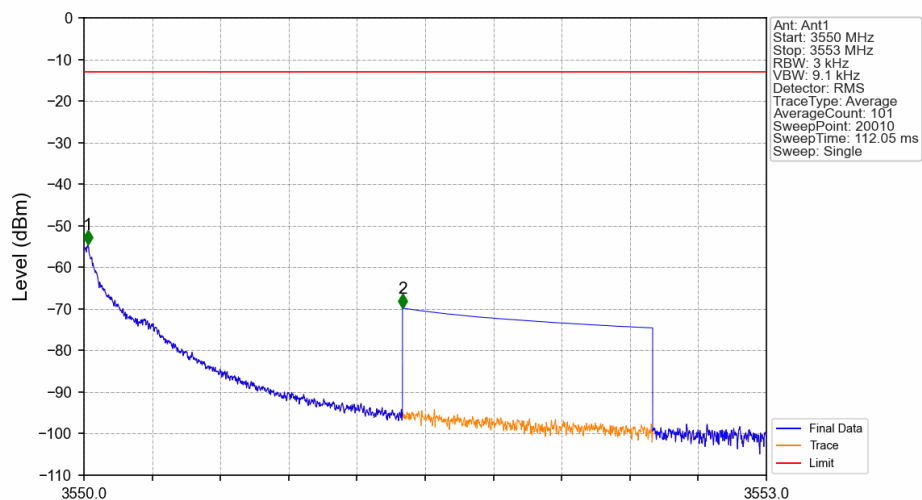
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3550.9	0.003	/	1	3550.018	-53.70	-13	Pass
3550.9	3553	1	CHP	2	3551.400	-69.81	-13	Pass

Band 77 3549.8MHz GMSK_SISO_Ant1_NTNV_AGC



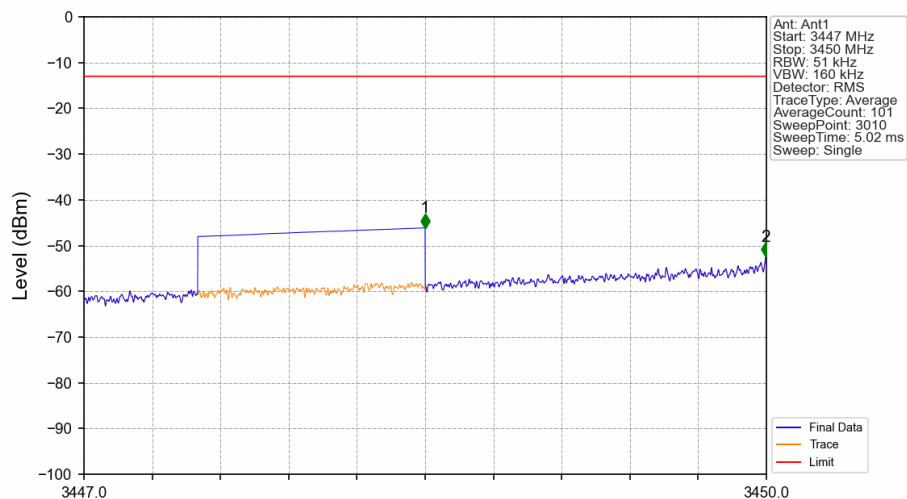
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3550.9	0.003	/	1	3550.019	-56.36	-13	Pass
3550.9	3553	1	CHP	2	3551.400	-71.20	-13	Pass

Band 77 3549.8MHz GMSK_SISO_Ant1_NTNV_AGC+3



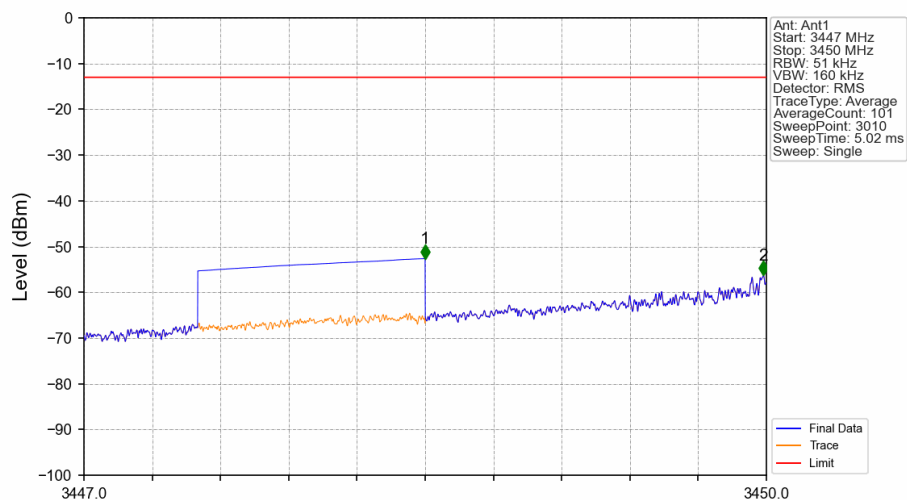
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3550.9	0.003	/	1	3550.016	-54.51	-13	Pass
3550.9	3553	1	CHP	2	3551.400	-69.80	-13	Pass

Band 77_3452.5MHz_AWGN_SISO_Ant1_NTNV_AGC



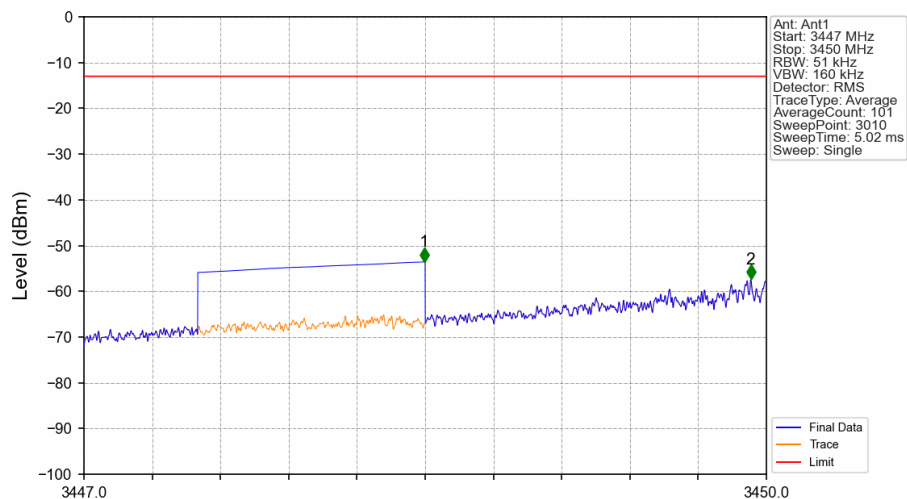
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449	1	CHP	1	3448.499	-46.14	-13	Pass
3449	3450	0.051	/	2	3449.997	-52.41	-13	Pass

Band 77_3452.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3

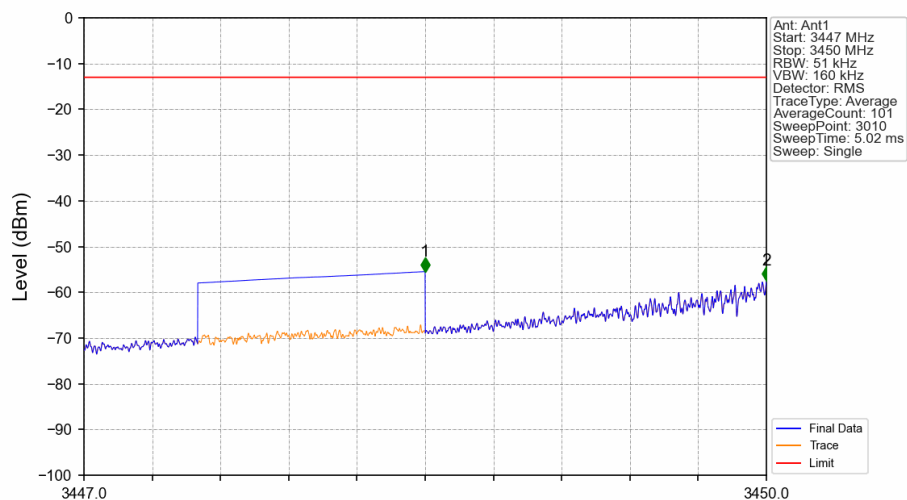


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3447	3449	1	CHP	1	3448.499	-52.65	-13	Pass
3449	3450	0.051	/	2	3449.987	-56.34	-13	Pass

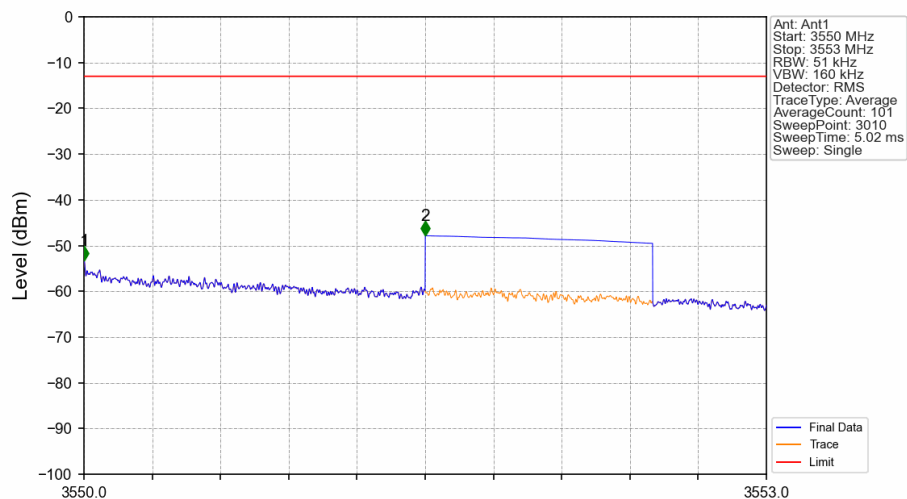
Band 77_3452.5MHz_AWGN_SISO_Ant1_NTNV_AGC



Band 77_3452.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3

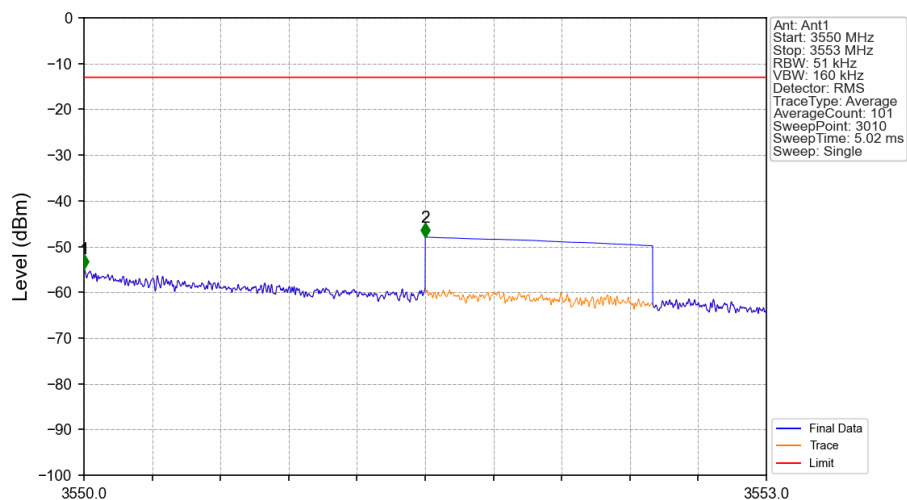


Band 77_3547.5MHz_AWGN_SISO_Ant1_NTNV_AGC



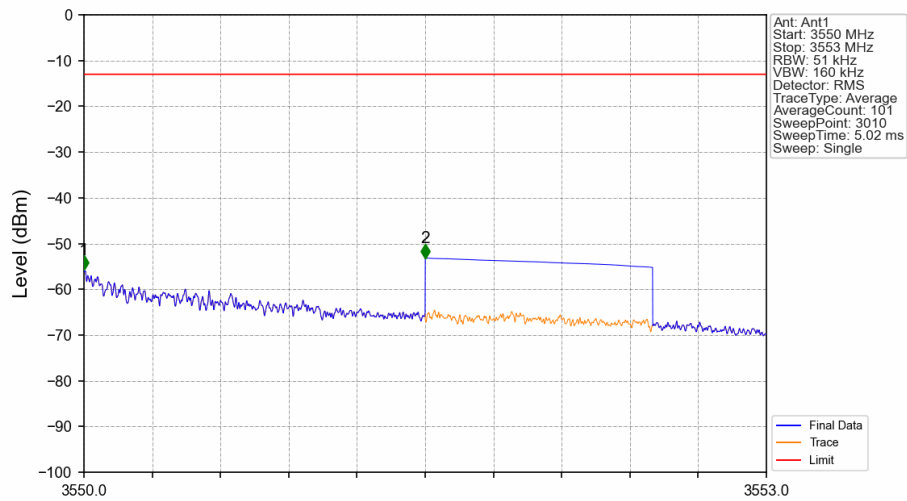
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3551	0.051	/	1	3550.001	-53.28	-13	Pass
3551	3553	1	CHP	2	3551.500	-47.86	-13	Pass

Band 77_3547.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3



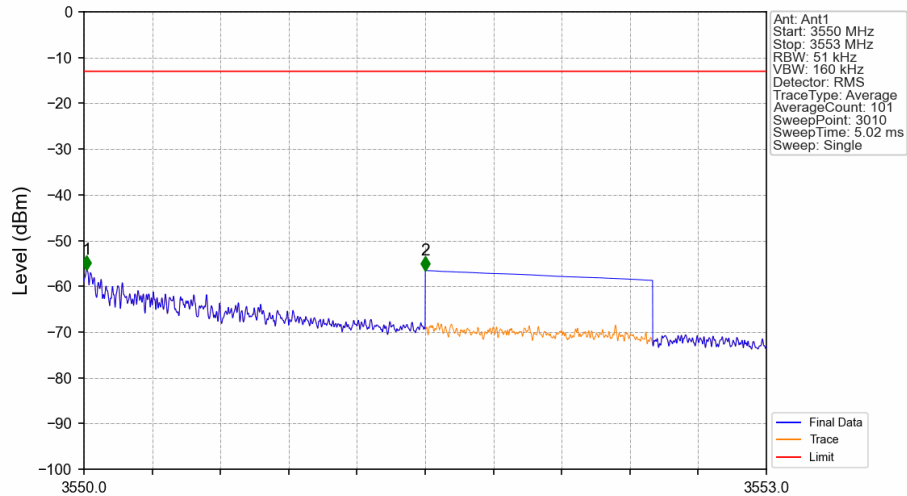
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3551	0.051	/	1	3550.001	-54.84	-13	Pass
3551	3553	1	CHP	2	3551.500	-47.96	-13	Pass

Band 77_3547.5MHz_AWGN_SISO_Ant1_NTNV_AGC



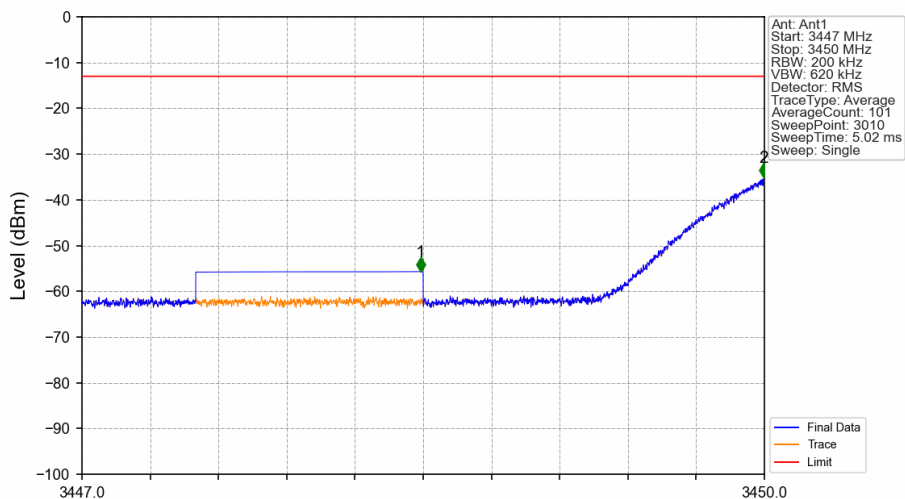
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3551	0.051	/	1	3550.000	-55.69	-13	Pass
3551	3553	1	CHP	2	3551.500	-53.18	-13	Pass

Band 77_3547.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3

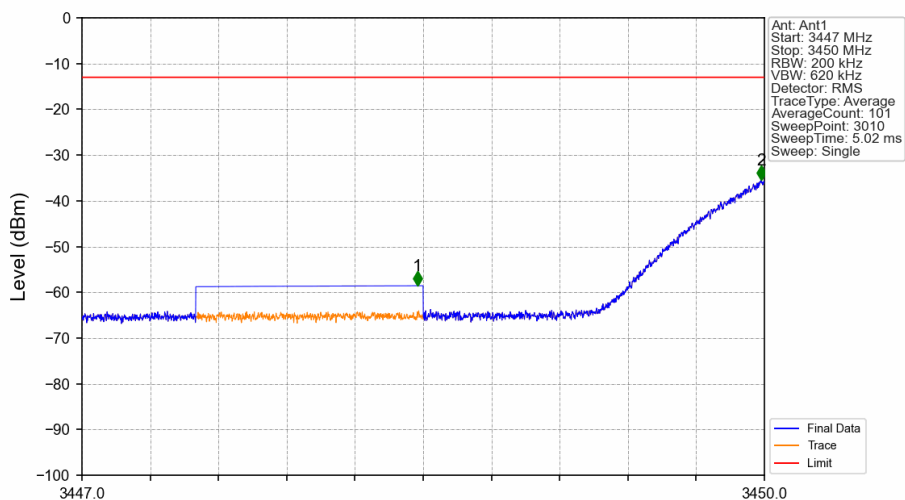


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3550	3551	0.051	/	1	3550.012	-56.35	-13	Pass
3551	3553	1	CHP	2	3551.500	-56.55	-13	Pass

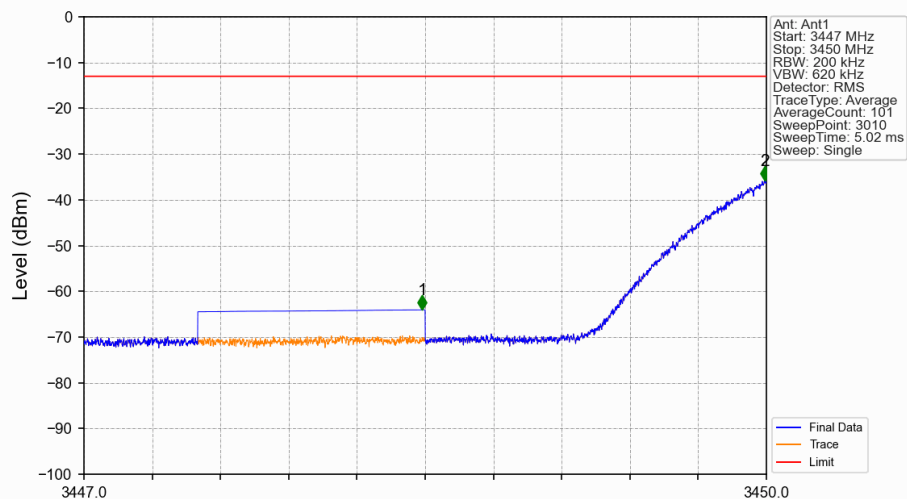
Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



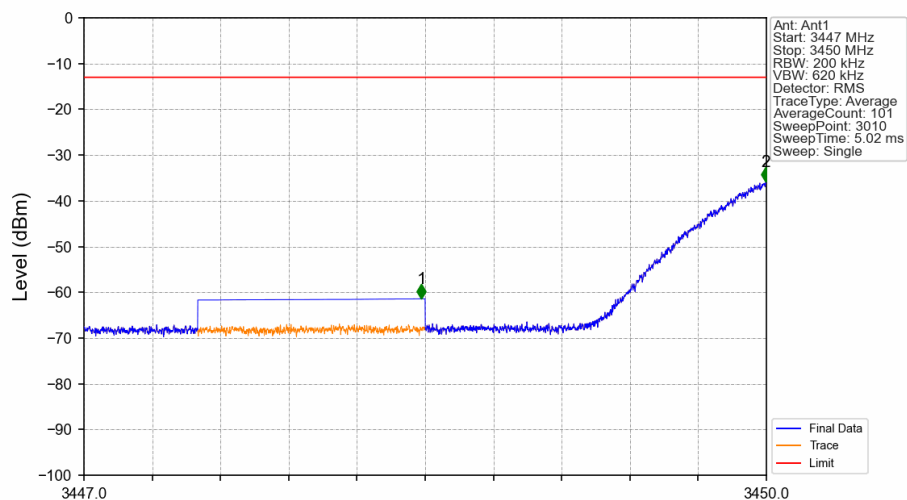
Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3



Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC



Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV_AGC+3



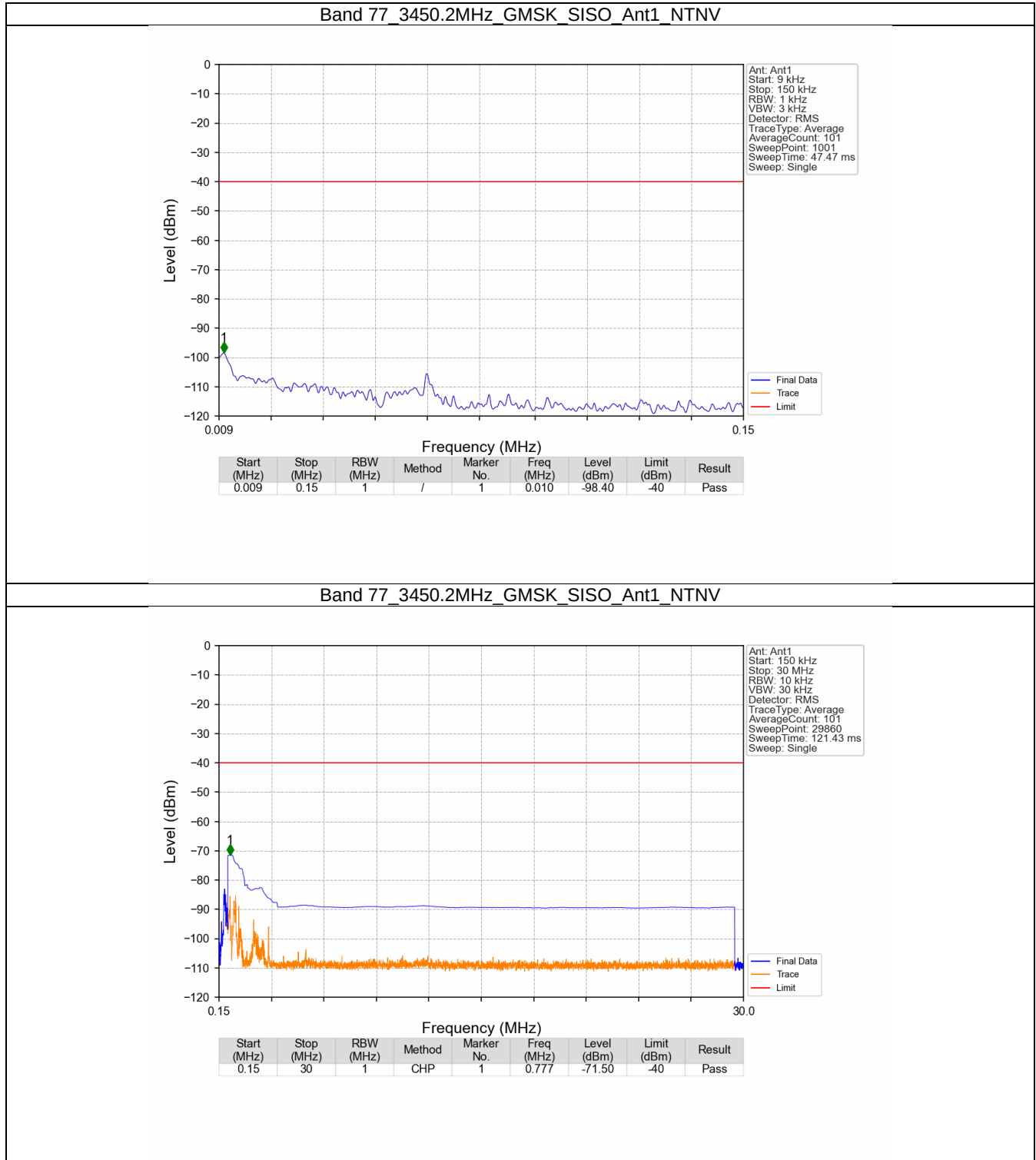
6. Spurious emissions

6.1 Band 77

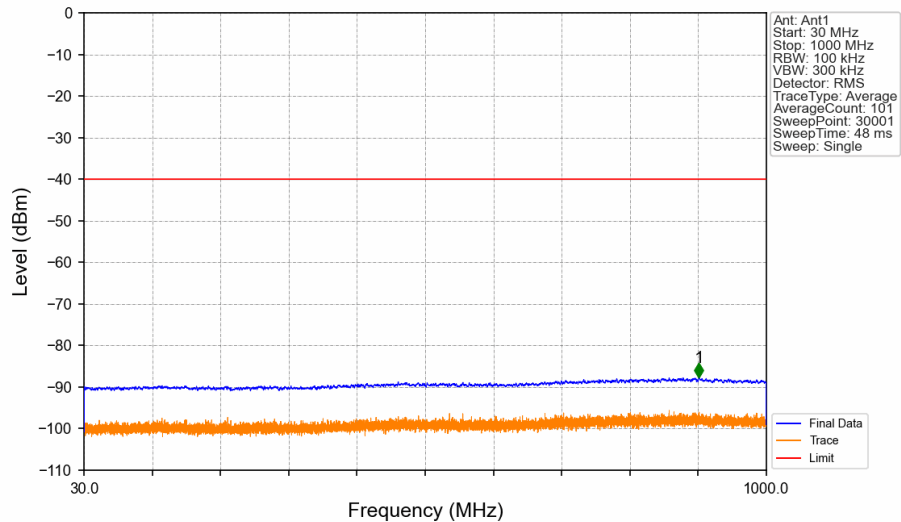
6.1.1 Test Result

Band: 77 / NTNV								
Signal			Channel	TX Type	ANT	SE (dBm)		Verdict
Type	Level (dBm)	Frequency (MHz)				Result	Limit	
GMSK 0.2MHz	-4.5	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	-4.5	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	-4.5	3500	LCH	SISO	1	Refer To Test Graph		Pass

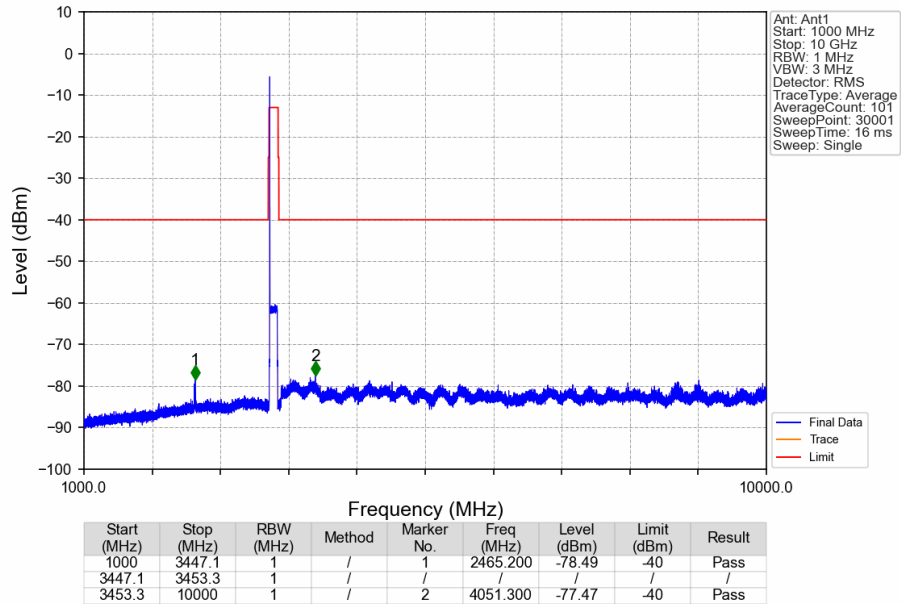
6.1.2 Test Graph



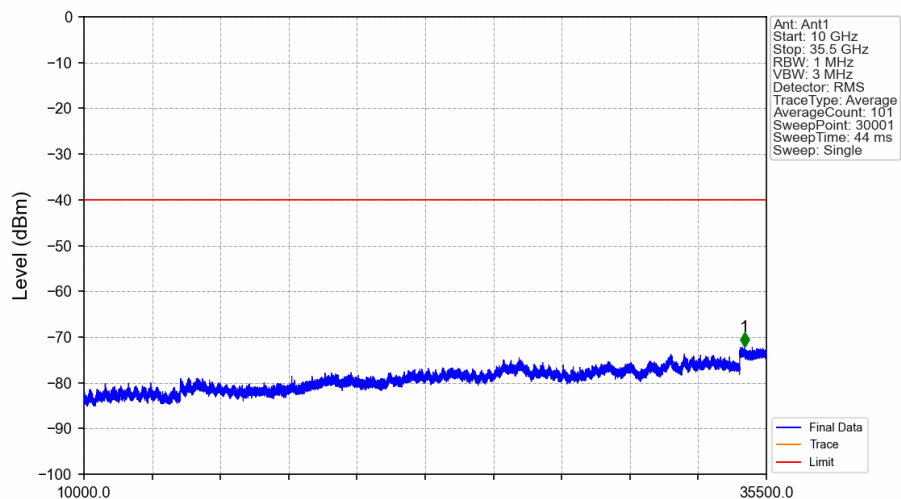
Band 77 3450.2MHz GMSK SISO Ant1 NTN



Band 77 3450.2MHz GMSK SISO Ant1 NTN

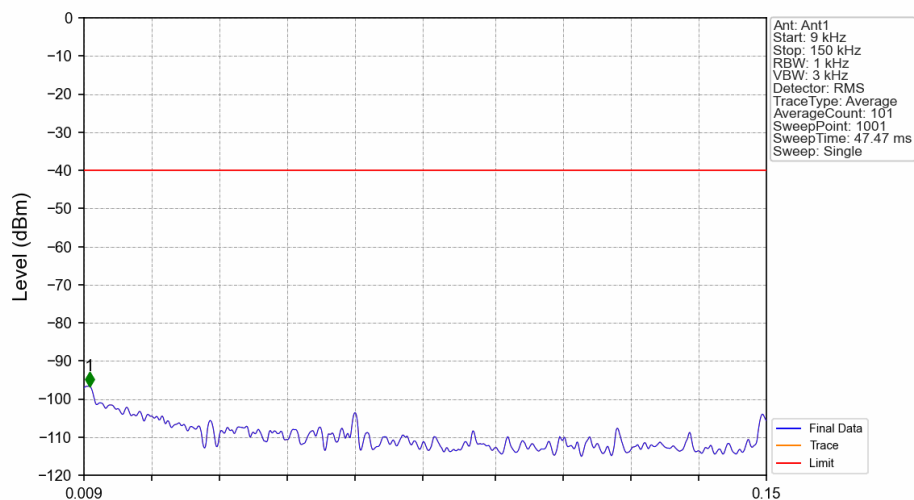


Band 77_3450.2MHz_GMSK_SISO_Ant1_NTNV



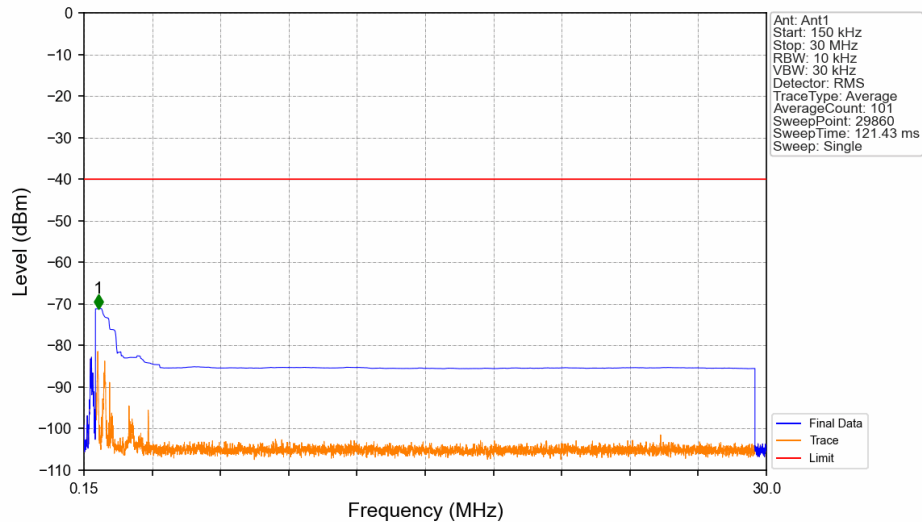
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	35500	1	/	1	34673.800	-72.09	-40	Pass

Band 77_3500MHz_GMSK_SISO_Ant1_NTNV

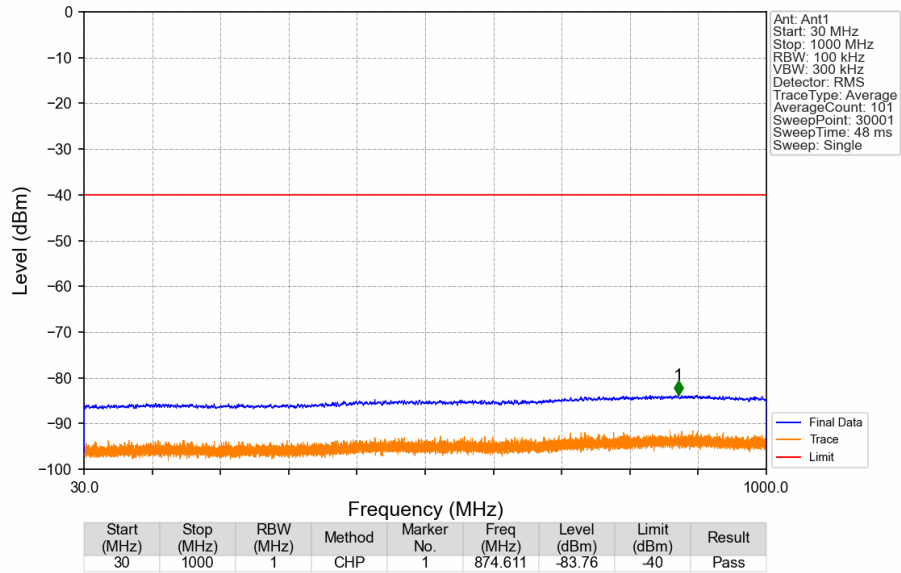


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.010	-96.63	-40	Pass

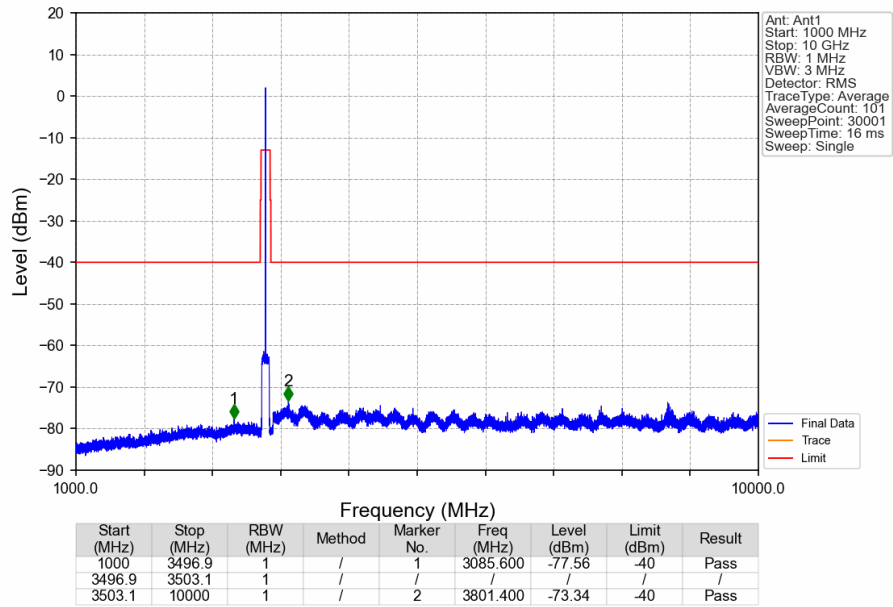
Band 77_3500MHz_GMSK_SISO_Ant1_NTNV



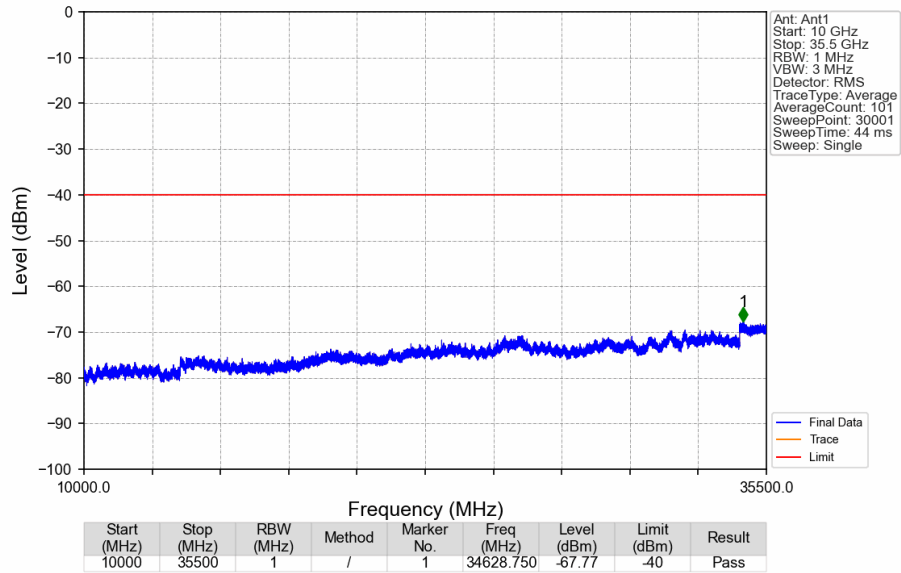
Band 77_3500MHz_GMSK_SISO_Ant1_NTNV



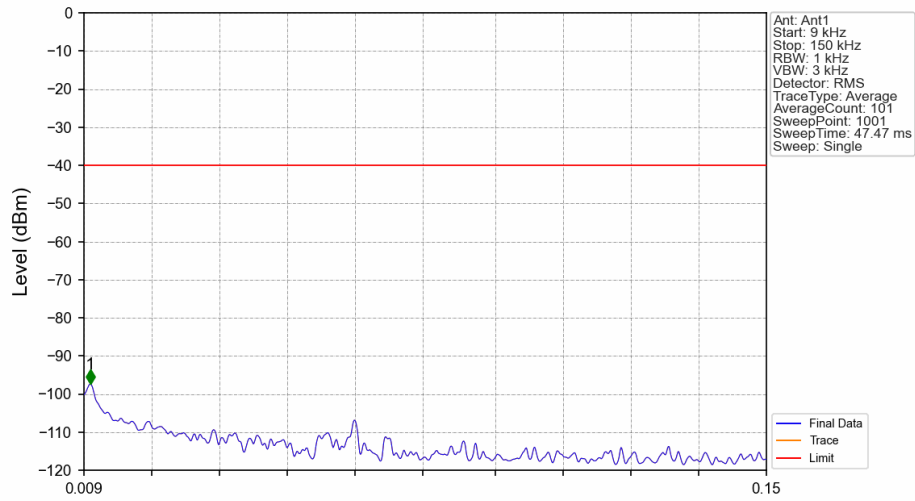
Band 77_3500MHz_GMSK_SISO_Ant1_NTNV



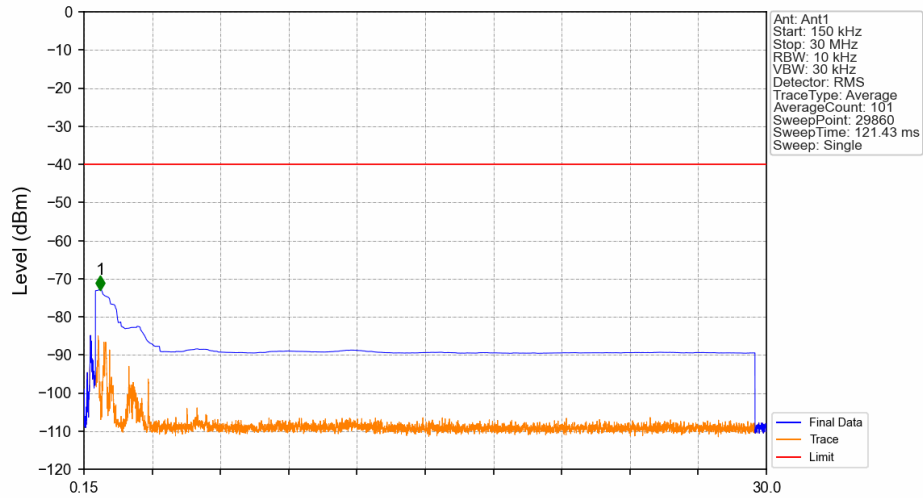
Band 77_3500MHz_GMSK_SISO_Ant1_NTNV



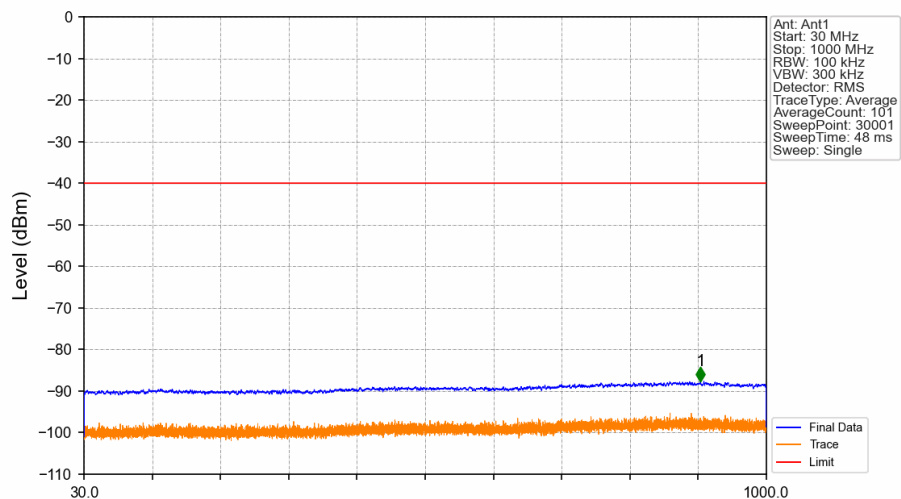
Band 77 3549.8MHz GMSK SISO Ant1 NTN



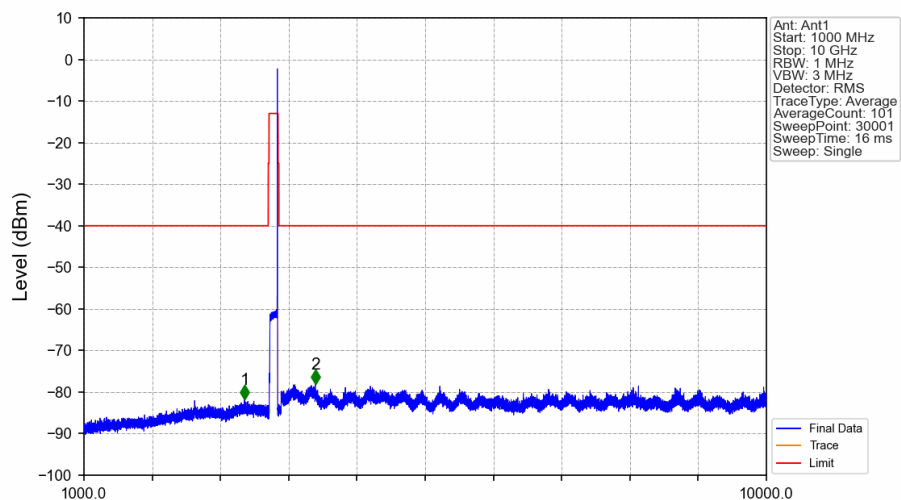
Band 77 3549.8MHz GMSK SISO Ant1 NTN



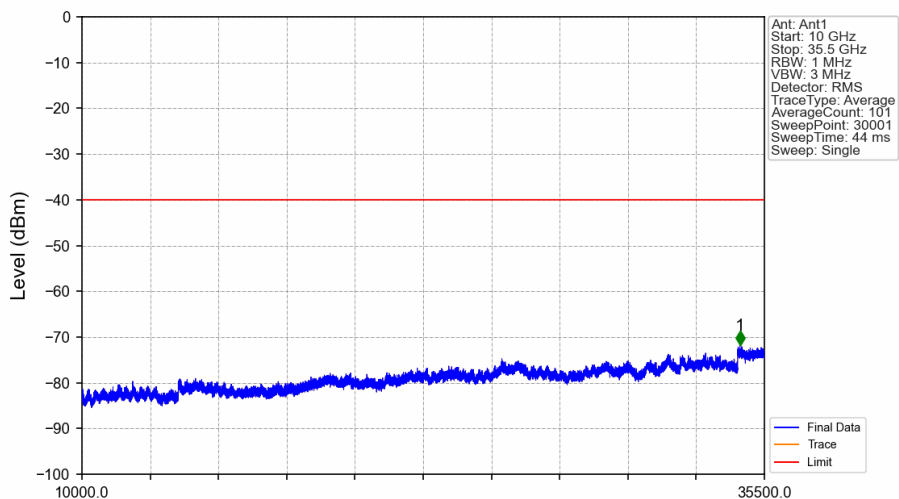
Band 77 3549.8MHz GMSK SISO Ant1 NTN



Band 77 3549.8MHz GMSK SISO Ant1 NTN

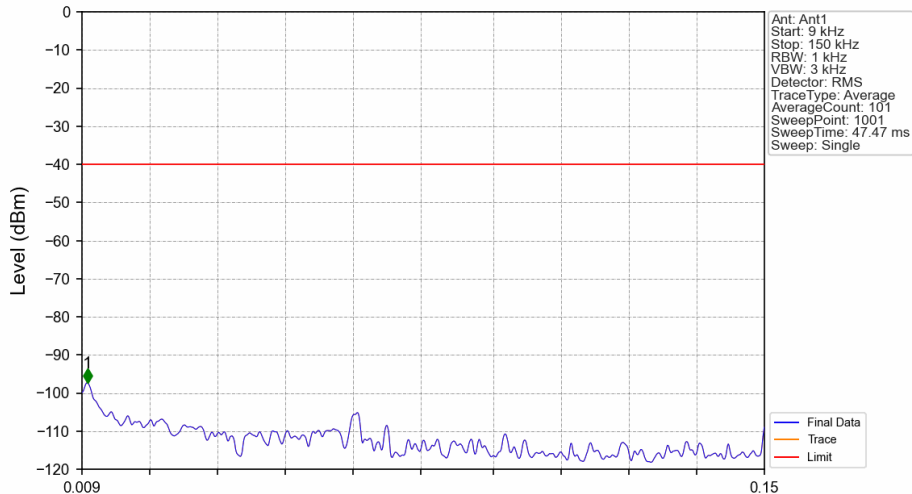


Band 77_3549.8MHz_GMSK_SISO_Ant1_NTNV



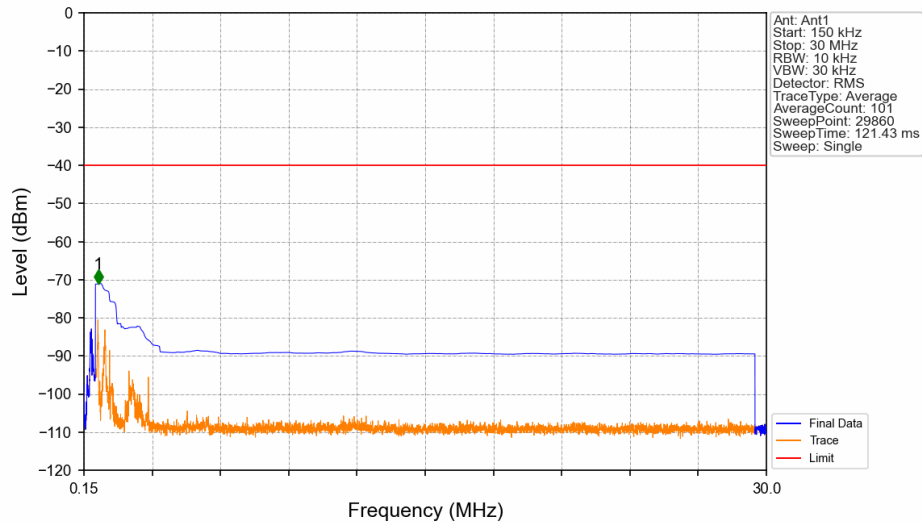
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	35500	1	/	1	34584.550	-71.78	-40	Pass

Band 77_3452.5MHz_AWGN_SISO_Ant1_NTNV

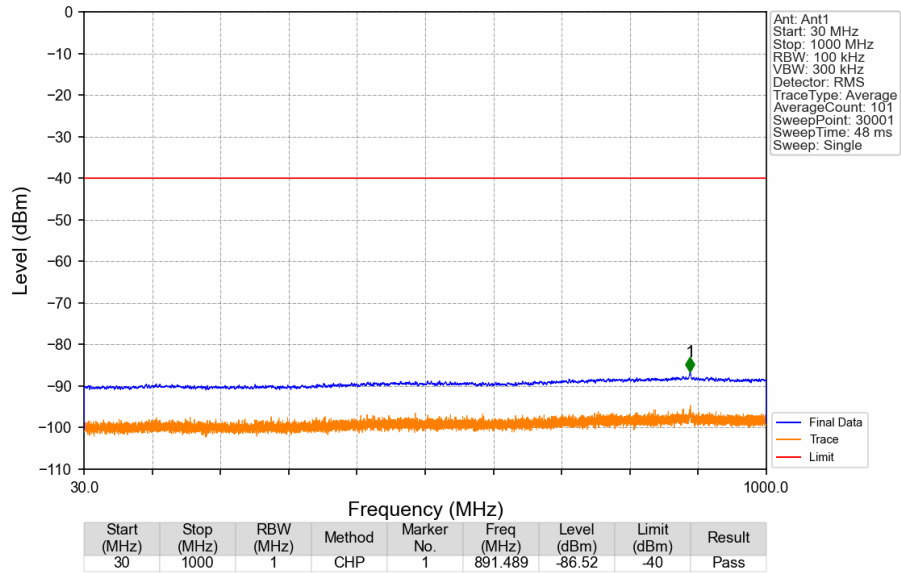


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.010	-97.33	-40	Pass

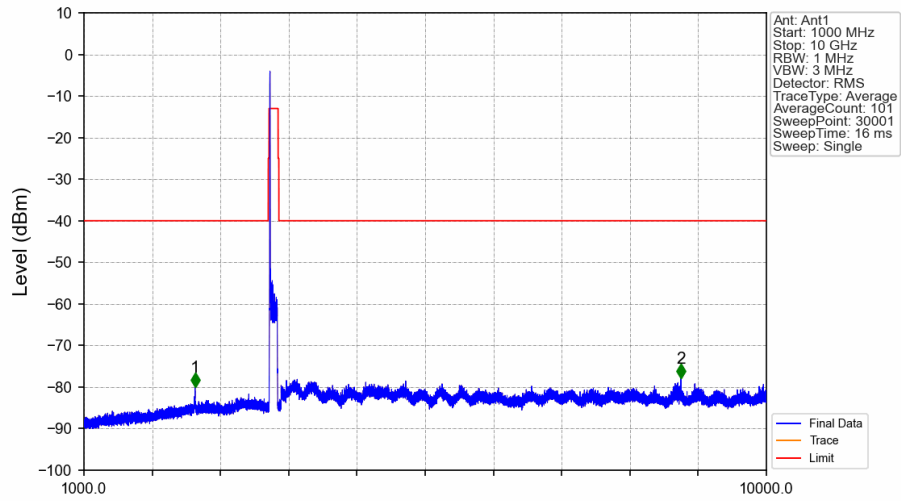
Band 77_3452.5MHz_AWGN_SISO_Ant1_NTNV



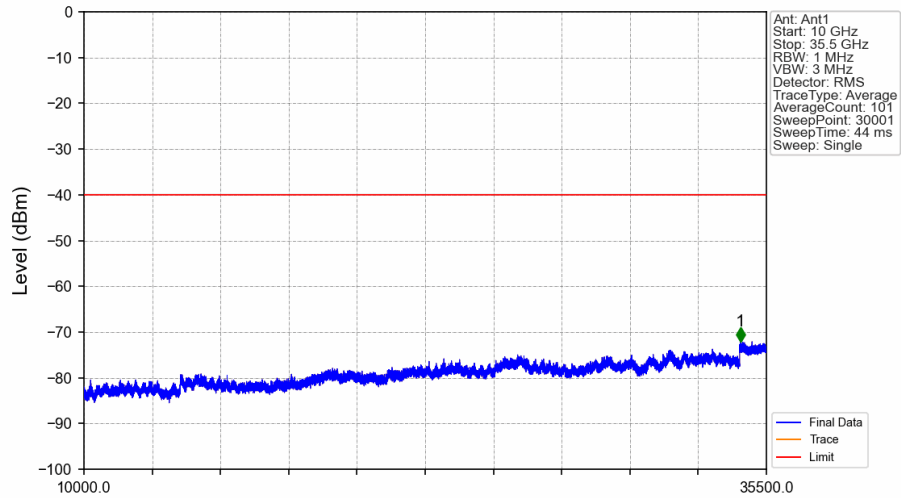
Band 77_3452.5MHz_AWGN_SISO_Ant1_NTNV



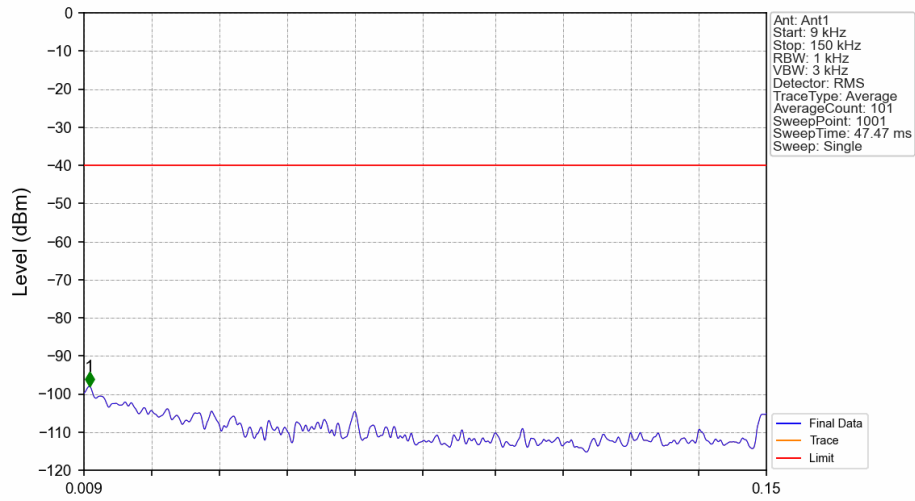
Band 77_3452.5MHz_AWGN_SISO_Ant1_NTNV



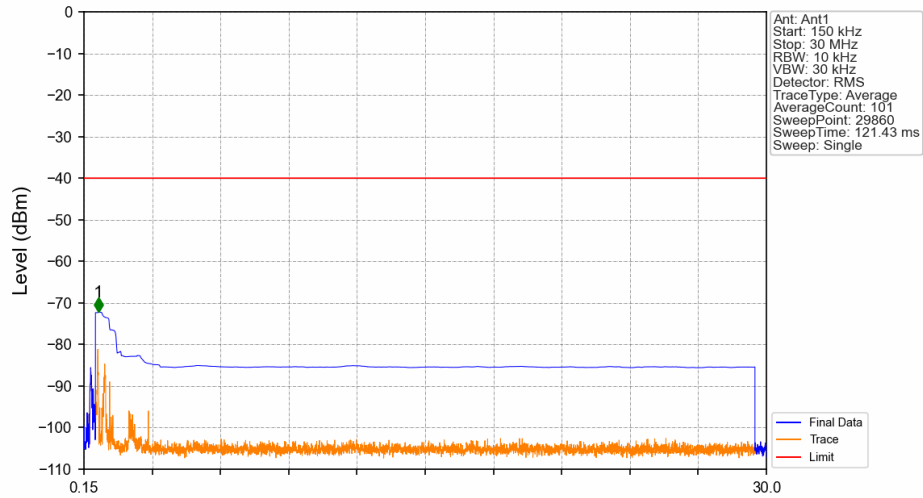
Band 77_3452.5MHz_AWGN_SISO_Ant1_NTNV



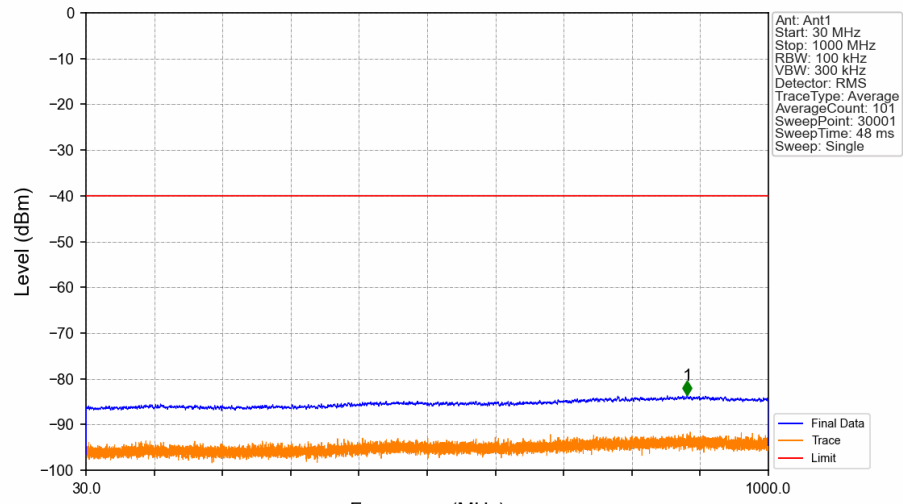
Band 77 3500MHz AWGN SISO Ant1 NTNV



Band 77 3500MHz AWGN SISO Ant1 NTNV

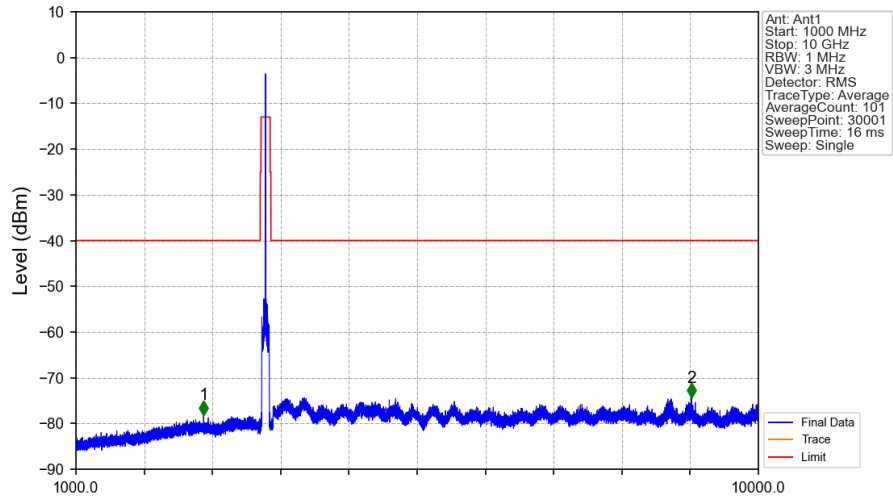


Band 77 3500MHz_AWGN_SISO_Ant1_NTNV



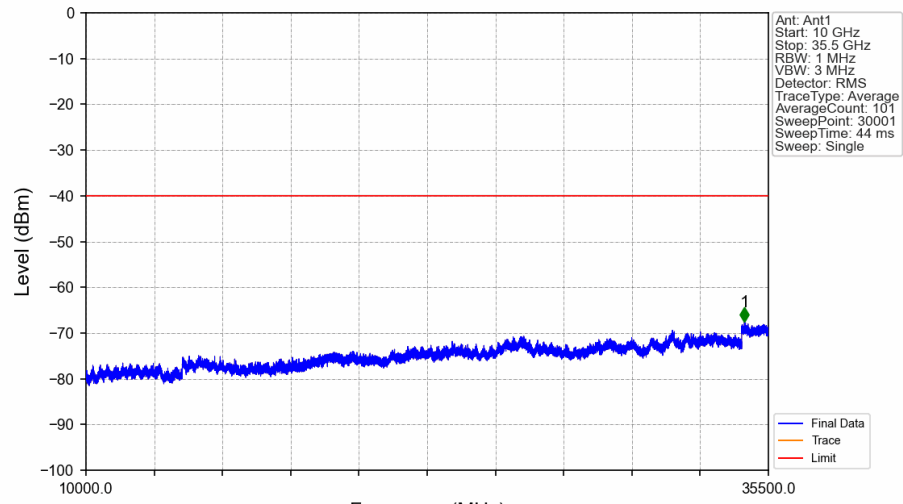
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	884.764	-83.65	-40	Pass

Band 77 3500MHz_AWGN_SISO_Ant1_NTNV



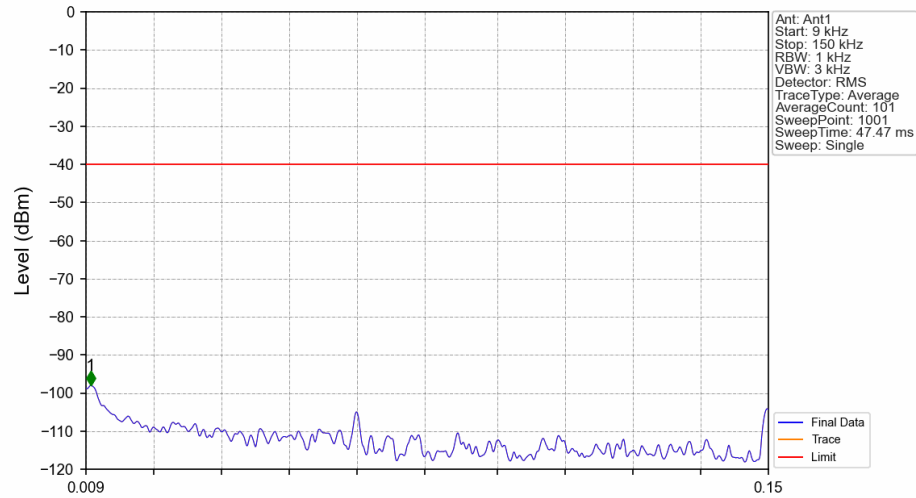
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	3494.5	1	/	1	2683.300	-78.11	-40	Pass
3494.5	3505.5	1	/	/	/	/	/	/
3505.5	10000	1	/	2	9117.400	-74.34	-40	Pass

Band 77_3500MHz_AWGN_SISO_Ant1_NTNV



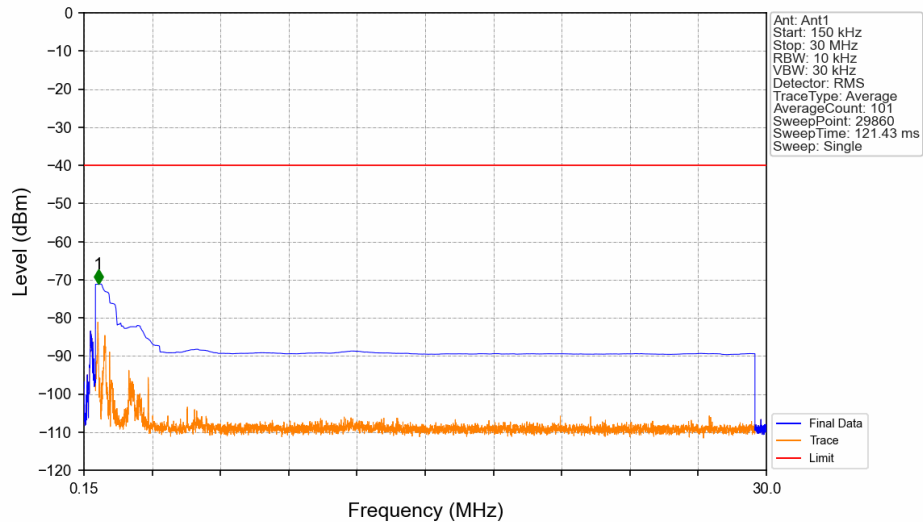
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	35500	1	/	1	34603.250	-67.49	-40	Pass

Band 77_3547.5MHz_AWGN_SISO_Ant1_NTNV

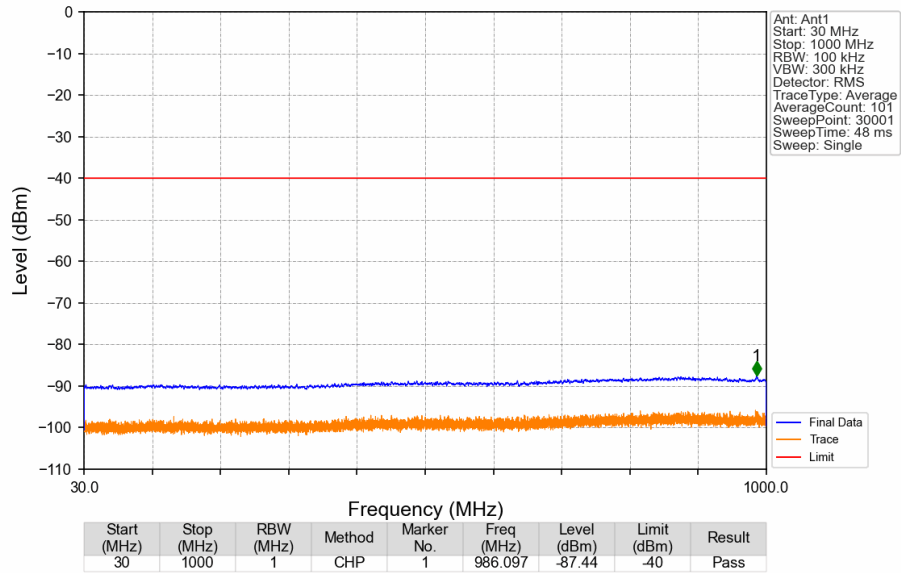


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.010	-98.00	-40	Pass

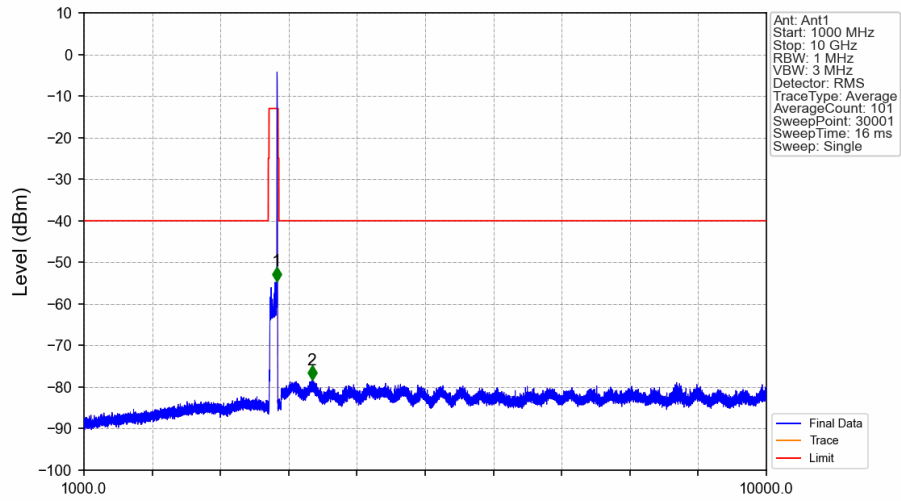
Band 77_3547.5MHz_AWGN_SISO_Ant1_NTNV



Band 77_3547.5MHz_AWGN_SISO_Ant1_NTNV

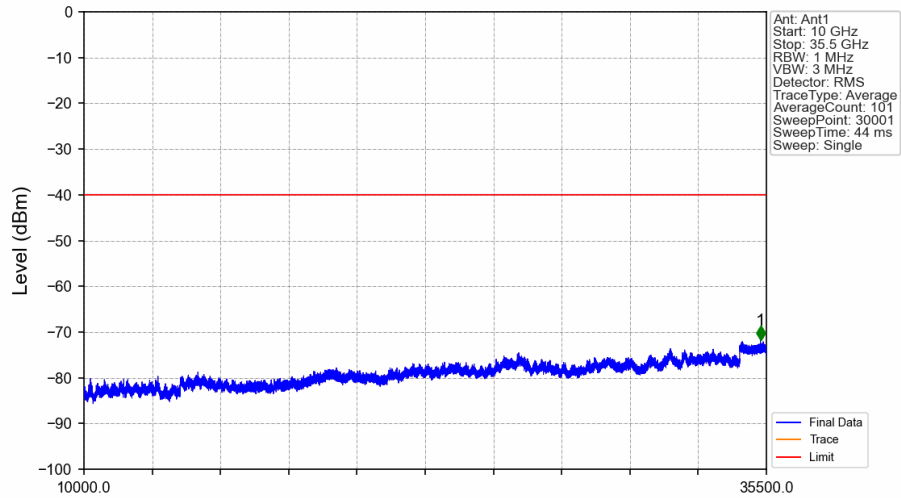


Band 77_3547.5MHz_AWGN_SISO_Ant1_NTNV



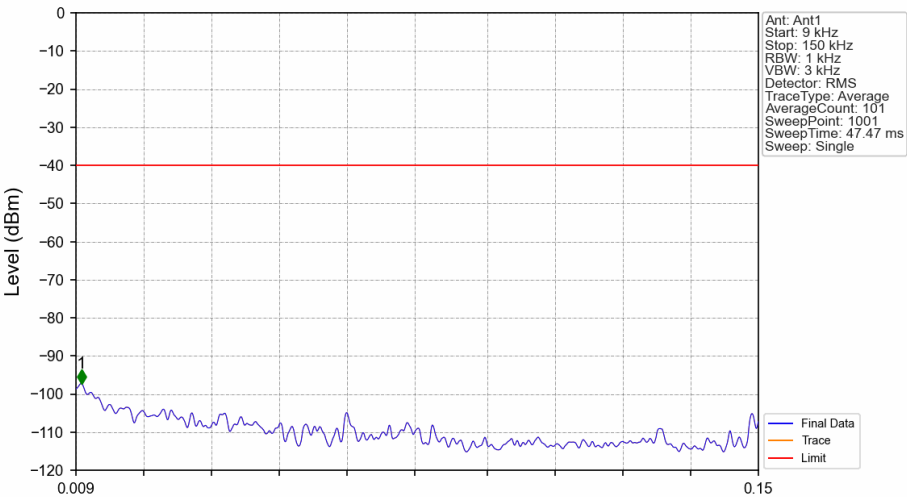
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	3542	1	/	1	3541.900	-54.50	-13	Pass
3542	3553	1	/	/	/	/	/	/
3553	10000	1	/	2	4006.300	-78.31	-40	Pass

Band 77_3547.5MHz_AWGN_SISO_Ant1_NTNV



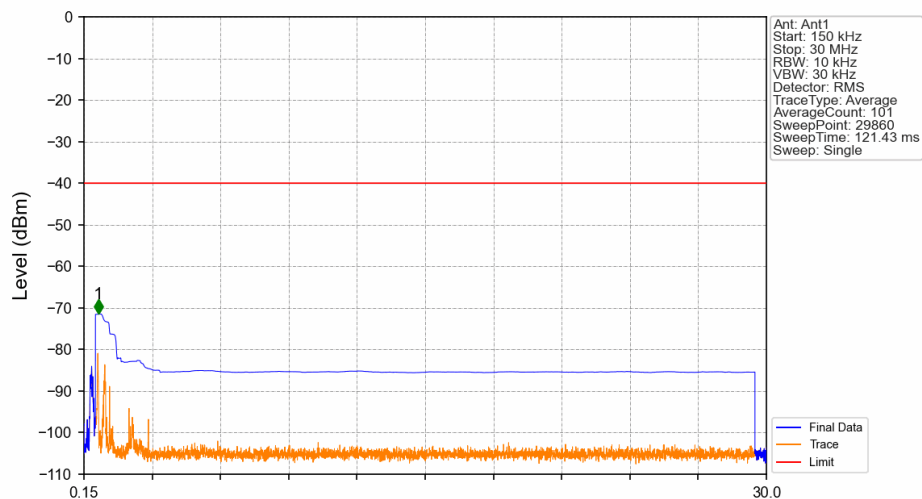
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
10000	35500	1	/	1	35275.600	-71.85	-40	Pass

Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV

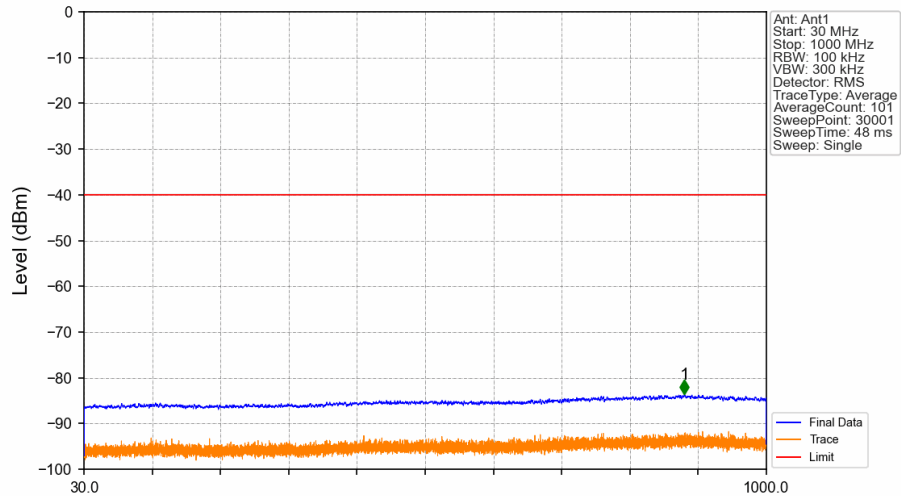


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
0.009	0.15	1	/	1	0.010	-97.27	-40	Pass

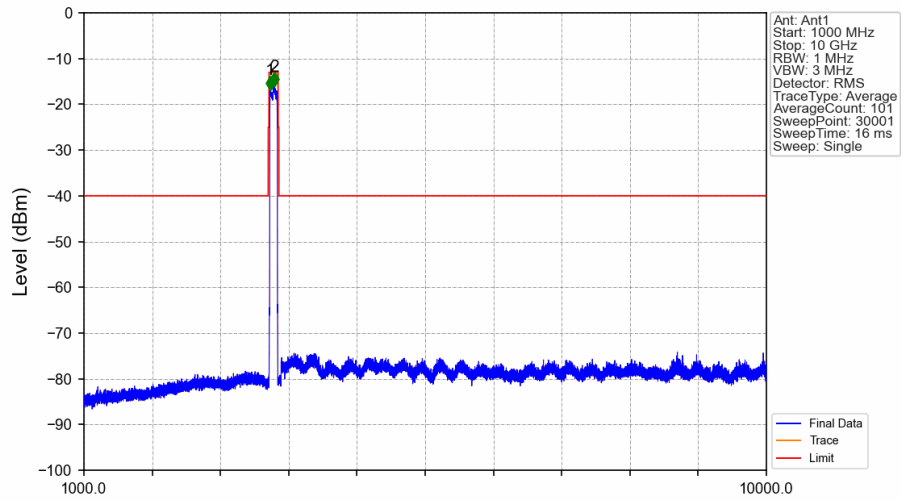
Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV



Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV

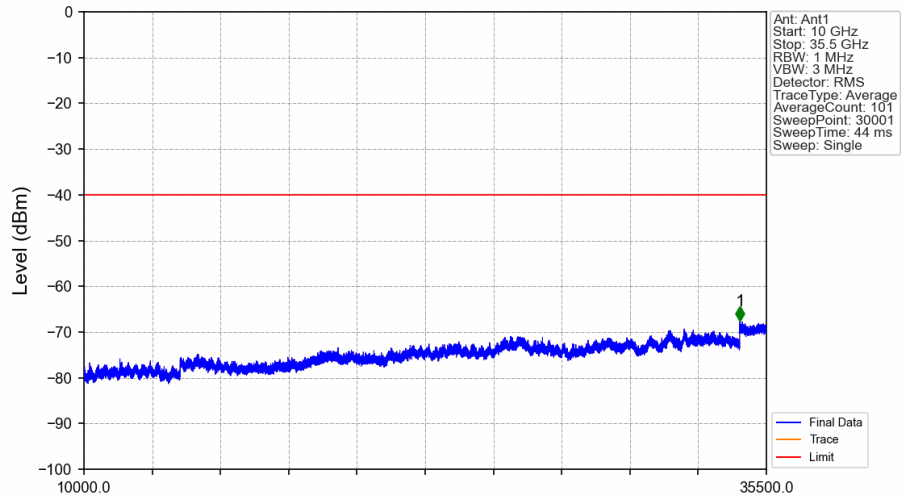


Band 77_3500MHz_Broad100MHz_SISO_Ant1_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	3496.2	1	/	1	3457.600	-16.85	-13	Pass
3496.2	3503.8	1	/	/	/	/	/	/
3503.8	10000	1	/	2	3513.400	-16.07	-13	Pass

Band 77_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	34509.750	-67.61	-40	Pass

7. Frequency stability measurements

7.1 Band 77_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	-4.5	3450.1	20	102	-21	-0.00609	Pass
				120	-19	-0.00551	Pass
				138	-20	-0.0058	Pass
			-30	120	-20	-0.0058	Pass
			-20	120	-21	-0.00609	Pass
			-10	120	-18	-0.00522	Pass
			0	120	-17	-0.00493	Pass
			10	120	-21	-0.00609	Pass
			30	120	-20	-0.0058	Pass
			40	120	-19	-0.00551	Pass
			55	120	-20	-0.00580	Pass
		3500	20	102	-19	-0.00543	Pass
				120	-20	-0.00571	Pass
				138	-20	-0.00571	Pass
			-30	120	-19	-0.00543	Pass
			-20	120	-18	-0.00514	Pass
			-10	120	-20	-0.00571	Pass
			0	120	-19	-0.00543	Pass
			10	120	-18	-0.00514	Pass
			30	120	-17	-0.00486	Pass
			40	120	-18	-0.00514	Pass
			55	120	-19	-0.00543	Pass
		3549.9	20	102	-20	-0.00563	Pass
				120	-18	-0.00507	Pass
				138	-19	-0.00535	Pass
			-30	120	-18	-0.00507	Pass
			-20	120	-19	-0.00535	Pass
			-10	120	-20	-0.00563	Pass
			0	120	-18	-0.00507	Pass
			10	120	-19	-0.00535	Pass
			30	120	-17	-0.00479	Pass

			40	120	-20	-0.00563	Pass
			55	120	-21	-0.00592	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	
93.51	Horizontal	-66.18	-40	-26.18	Pass
349.26	Horizontal	-60.40	-40	-20.40	Pass
657.68	Horizontal	-59.58	-40	-19.58	Pass
2635.78	Horizontal	-52.76	-40	-12.76	Pass
7145.15	Horizontal	-48.90	-40	-8.90	Pass
14048.54	Horizontal	-46.38	-40	-6.38	Pass
103.19	Vertical	-62.40	-40	-22.40	Pass
423.27	Vertical	-61.92	-40	-21.92	Pass
634.61	Vertical	-55.85	-40	-15.85	Pass
2580.79	Vertical	-51.03	-40	-11.03	Pass
7081.41	Vertical	-48.85	-40	-8.85	Pass
14137.21	Vertical	-47.04	-40	-7.04	Pass

GMSK_Middle Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
118.56	Horizontal	-62.55	-40	-22.55	Pass
319.73	Horizontal	-62.79	-40	-22.79	Pass
659.86	Horizontal	-60.07	-40	-20.07	Pass
2651.92	Horizontal	-51.09	-40	-11.09	Pass
7095.41	Horizontal	-47.70	-40	-7.70	Pass
14105.68	Horizontal	-48.98	-40	-8.98	Pass
99.90	Vertical	-65.58	-40	-25.58	Pass
416.87	Vertical	-61.29	-40	-21.29	Pass
633.53	Vertical	-56.25	-40	-16.25	Pass
2575.01	Vertical	-48.50	-40	-8.50	Pass
7109.87	Vertical	-49.95	-40	-9.95	Pass
14080.77	Vertical	-46.87	-40	-6.87	Pass

GMSK_High Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
94.98	Horizontal	-63.78	-40	-23.78	Pass
311.21	Horizontal	-60.53	-40	-20.53	Pass
650.77	Horizontal	-59.65	-40	-19.65	Pass
2637.56	Horizontal	-49.39	-40	-9.39	Pass
7116.61	Horizontal	-50.39	-40	-10.39	Pass
14052.34	Horizontal	-46.86	-40	-6.86	Pass
98.20	Vertical	-62.56	-40	-22.56	Pass
441.61	Vertical	-61.68	-40	-21.68	Pass
630.25	Vertical	-57.40	-40	-17.40	Pass
2580.53	Vertical	-48.53	-40	-8.53	Pass
7117.05	Vertical	-48.80	-40	-8.80	Pass
14148.35	Vertical	-48.11	-40	-8.11	Pass

AWGN_Low Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
86.43	Horizontal	-64.25	-40	-24.25	Pass
328.95	Horizontal	-61.39	-40	-21.39	Pass
669.07	Horizontal	-57.08	-40	-17.08	Pass
2656.18	Horizontal	-50.66	-40	-10.66	Pass
7070.87	Horizontal	-48.73	-40	-8.73	Pass
14095.20	Horizontal	-47.48	-40	-7.48	Pass
120.07	Vertical	-64.46	-40	-24.46	Pass
422.51	Vertical	-62.42	-40	-22.42	Pass
634.12	Vertical	-58.55	-40	-18.55	Pass
2553.25	Vertical	-57.10	-40	-17.10	Pass
7121.49	Vertical	-51.38	-40	-11.38	Pass
14112.67	Vertical	-47.34	-40	-7.34	Pass

AWGN_Middle Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
104.06	Horizontal	-66.41	-40	-26.41	Pass
320.39	Horizontal	-62.00	-40	-22.00	Pass
671.40	Horizontal	-57.72	-40	-17.72	Pass
2604.76	Horizontal	-49.76	-40	-9.76	Pass
7146.15	Horizontal	-47.03	-40	-7.03	Pass
14117.20	Horizontal	-46.68	-40	-6.68	Pass
97.57	Vertical	-61.76	-40	-21.76	Pass
404.21	Vertical	-61.89	-40	-21.89	Pass
662.96	Vertical	-57.48	-40	-17.48	Pass
2545.13	Vertical	-52.07	-40	-12.07	Pass
7143.91	Vertical	-48.98	-40	-8.98	Pass
14074.13	Vertical	-46.50	-40	-6.50	Pass

AWGN_High Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
113.77	Horizontal	-64.84	-40	-24.84	Pass
345.04	Horizontal	-61.22	-40	-21.22	Pass
664.58	Horizontal	-57.92	-40	-17.92	Pass
2605.80	Horizontal	-51.09	-40	-11.09	Pass
7117.61	Horizontal	-49.96	-40	-9.96	Pass
14137.94	Horizontal	-47.31	-40	-7.31	Pass
133.16	Vertical	-64.18	-40	-24.18	Pass
436.87	Vertical	-59.79	-40	-19.79	Pass
642.98	Vertical	-56.74	-40	-16.74	Pass
2505.29	Vertical	-56.37	-40	-16.37	Pass
7048.89	Vertical	-50.05	-40	-10.05	Pass
14126.61	Vertical	-47.94	-40	-7.94	Pass

AWGN_100M_Middle Channel					
Frequency	Spurious Emission Polarization and Level		Limit	Over Limit	Verdict
MHz	Polarization	dBm	dBm	dB	
108.86	Horizontal	-64.41	-40	-24.41	Pass
323.48	Horizontal	-62.20	-40	-22.20	Pass
662.12	Horizontal	-57.88	-40	-17.88	Pass
2321.30	Horizontal	-50.69	-40	-10.69	Pass
7163.55	Horizontal	-47.00	-40	-7.00	Pass
14429.94	Horizontal	-46.38	-40	-6.38	Pass
133.97	Vertical	-61.98	-40	-21.98	Pass
446.25	Vertical	-59.69	-40	-19.69	Pass
644.90	Vertical	-56.90	-40	-16.90	Pass
2291.67	Vertical	-55.40	-40	-15.40	Pass
7480.71	Vertical	-46.05	-40	-6.05	Pass
14444.37	Vertical	-47.77	-40	-7.77	Pass