Appendix F for KSCR2307001146AT-N41

1. Out of band rejection

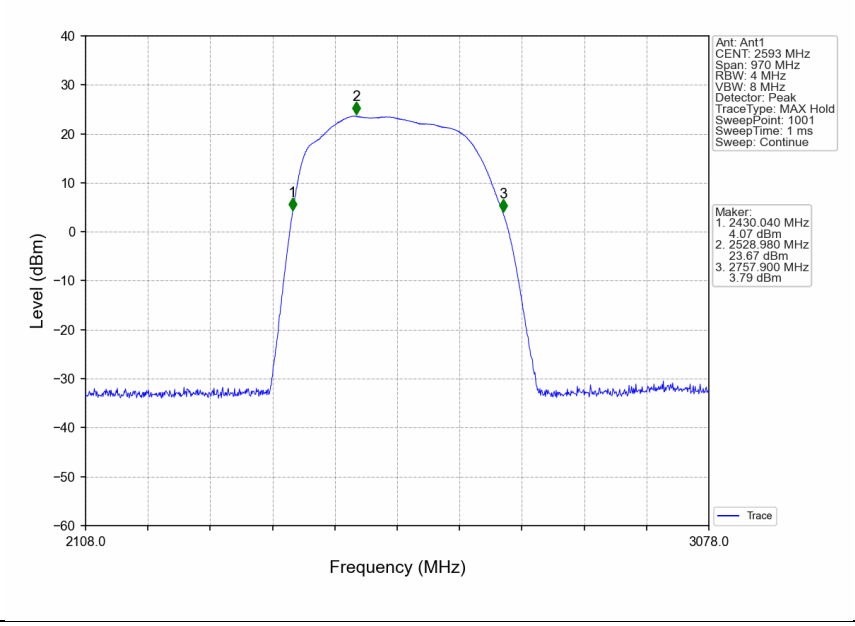
1.1 Band41

1.1.1 Test Result

Band: 41 / NTNV							
Signal	Sweep Frequency Range (MHz)	TX Type	ANT	F0 (MHz)	FL (MHz)	FH (MHz)	Verdict
CW	2108 - 3078	SISO	1	2528.980	2430.040	2757.900	Pass

1.1.2 Test Graph

Band41_CW_SISO_Ant1_NTNV



2. AGC threshold

2.1 Band41

2.1.1 Test Result

Band: 41 / NTNV					
Signal	Frequency (MHz)	TX Type	ANT	AGC Threshold (dBm)	Verdict
AWGN	2528.98	SISO	1	-4.00	Pass
GMSK	2528.98	SISO	1	-4.00	Pass

3. Input-versus-output signal comparison

3.1 Band41_OBW

3.1.1 Test Result

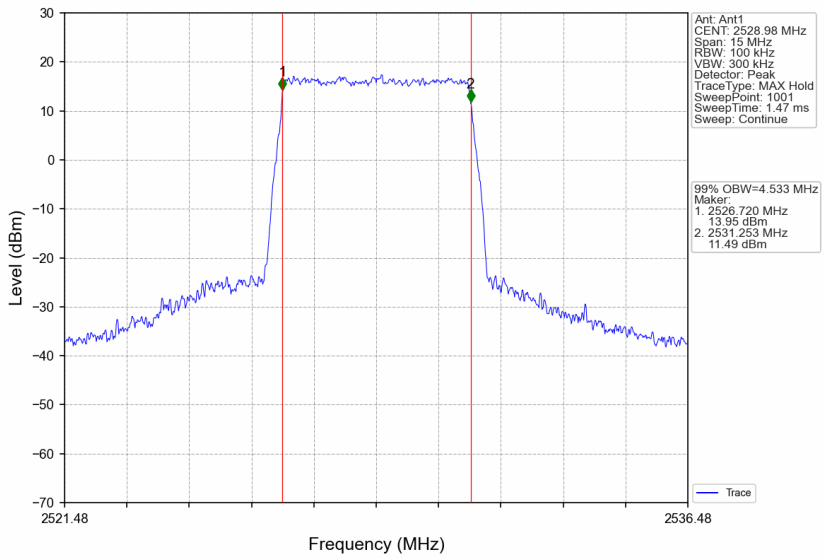
Band: 41 / NTNV									
Signal			TX Type	ANT	99% OBW (MHz)		Discrepancy (%)	Limit (%)	Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input			
AWGN	-1	2528.98	SISO	1	4.533	4.528	0.1104	5	Pass
	-4	2528.98	SISO	1	4.538	4.532	0.1324	5	Pass
GMSK	-1	2528.98	SISO	1	0.245	0.244	0.4098	5	Pass
	-4	2528.98	SISO	1	0.242	0.244	-0.8200	5	Pass

For 100MHz BW

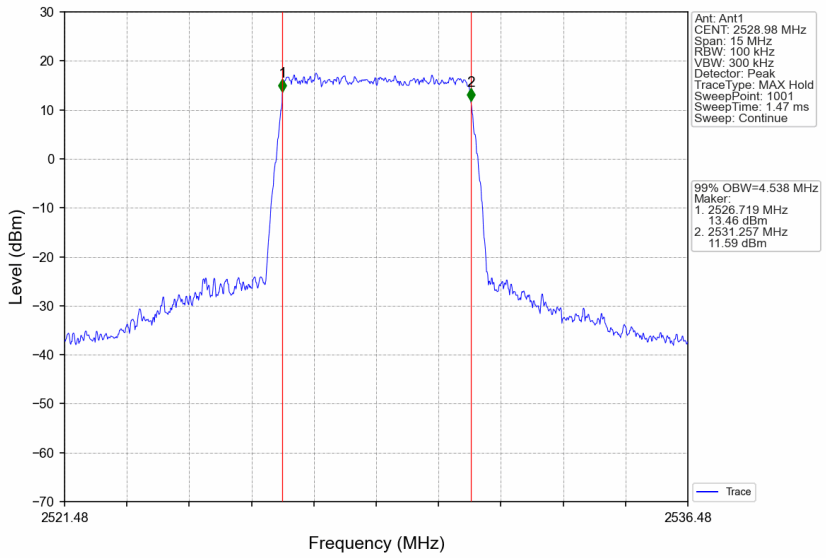
Band: 41 / NTNV									
Signal			TX Type	ANT	99% OBW (MHz)		Discrepancy (%)	Limit (%)	Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input			
AWGN	-1	2593	SISO	1	97.267	97.350	-0.0850	5	Pass
	-4	2593	SISO	1	97.283	97.331	-0.0490	5	Pass

3.1.2 Test Graph

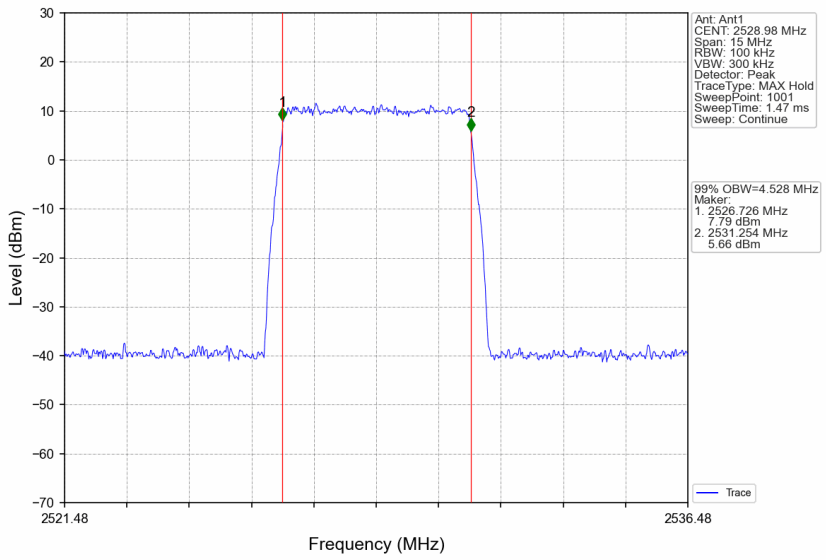
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_Output_AGC



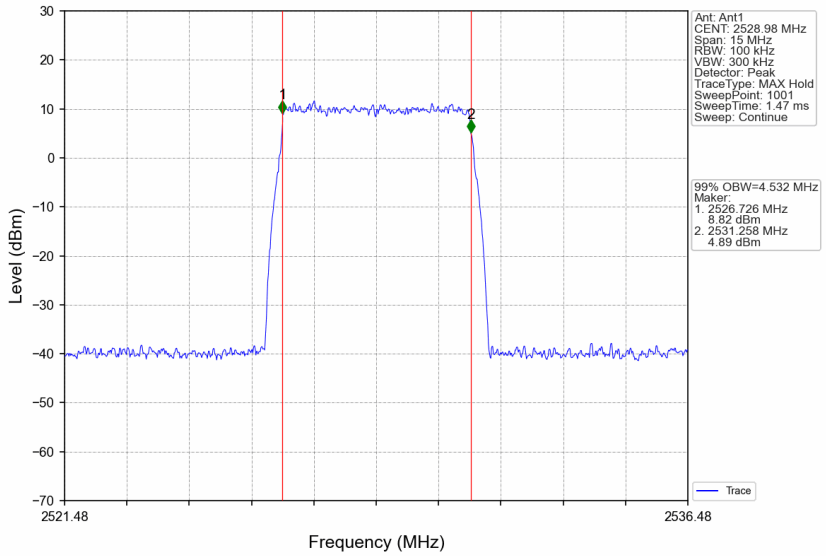
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_Output_AGC+3



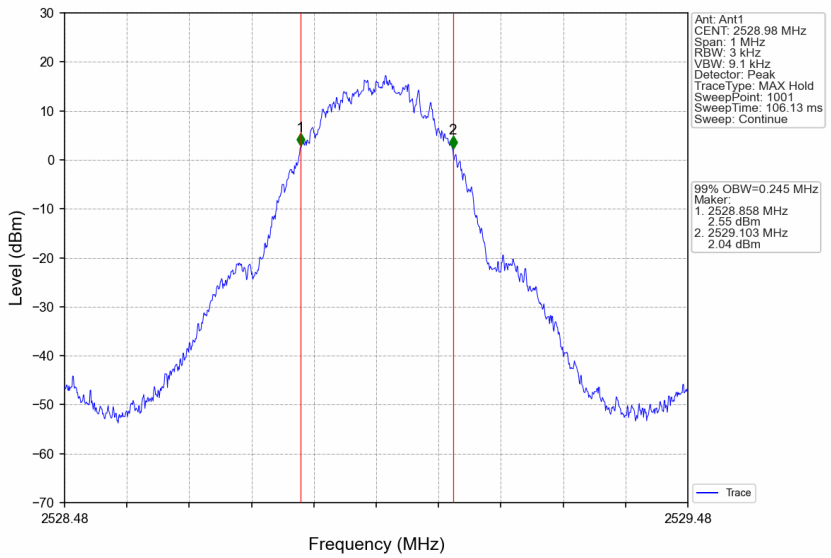
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_Input_AGC



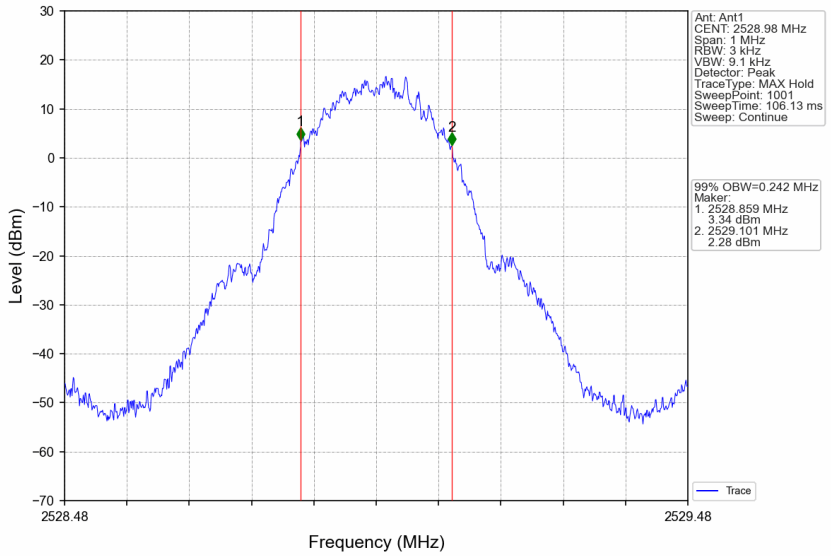
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_Input_AGC+3



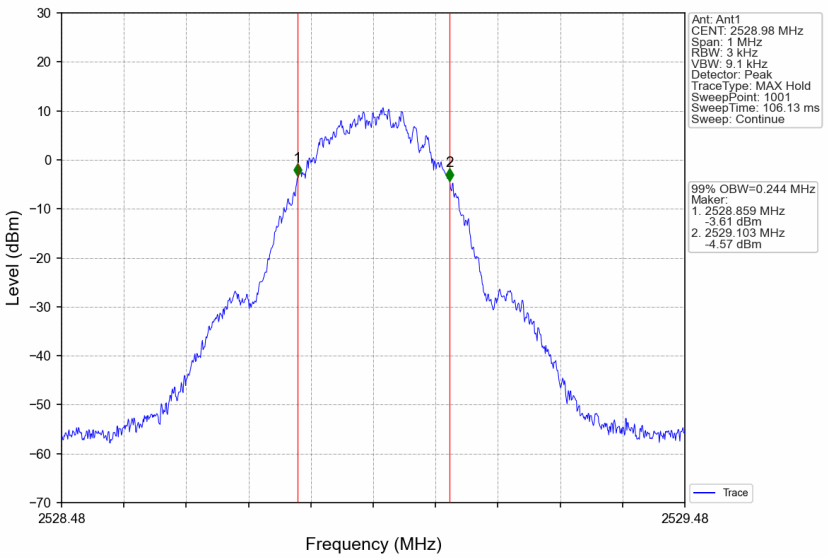
Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_Output_AGC



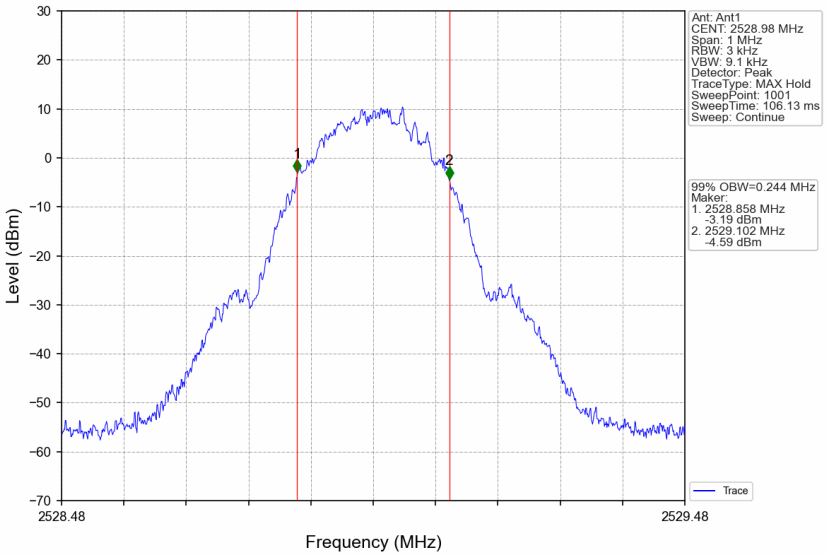
Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_Output_AGC+3



Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_Input_AGC

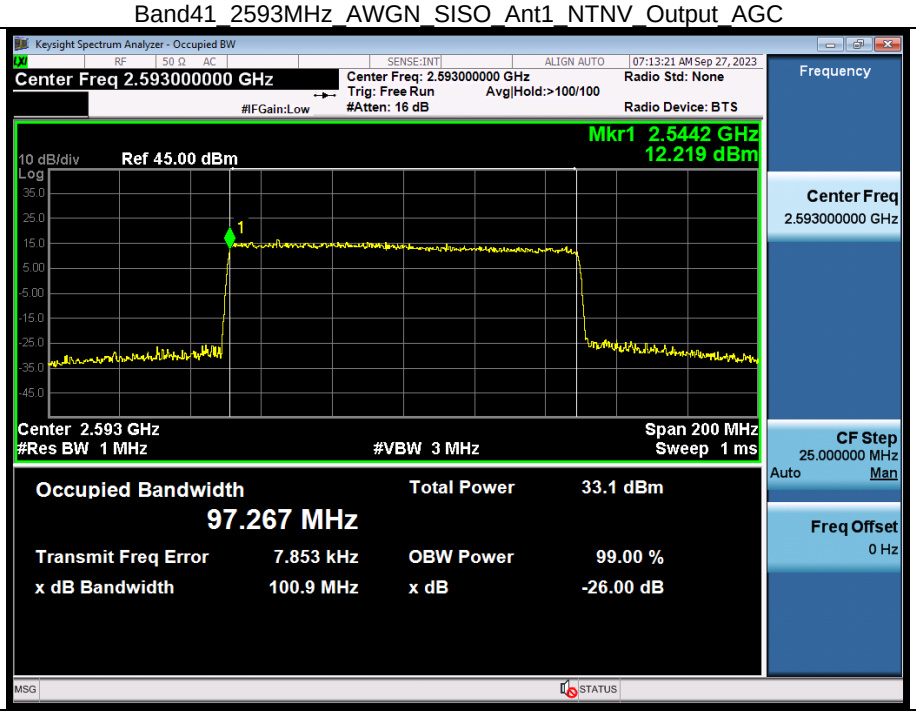


Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_Input_AGC+3



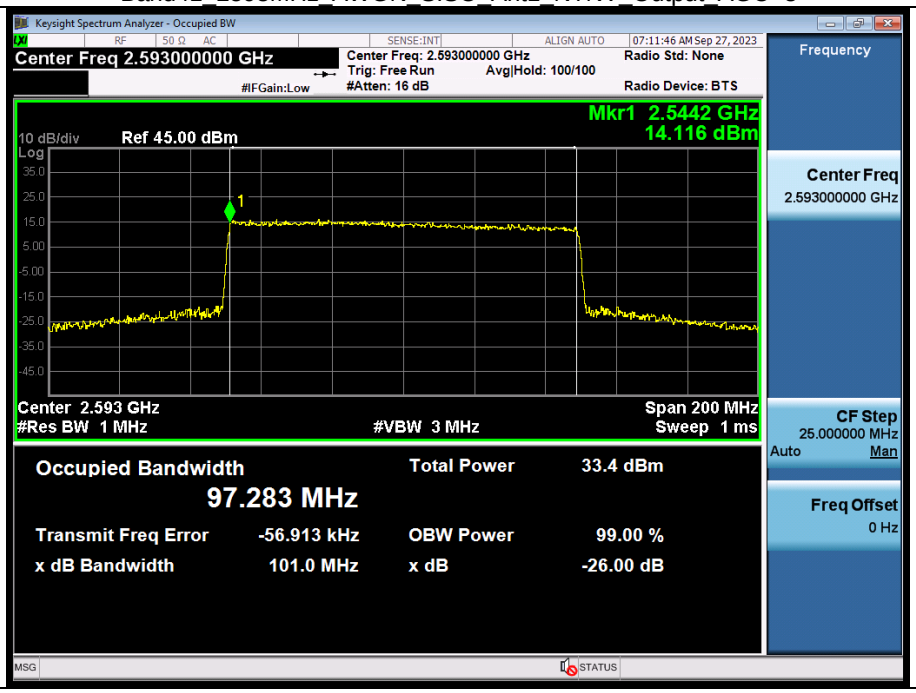
For 100MHz BW

Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Output_AGC



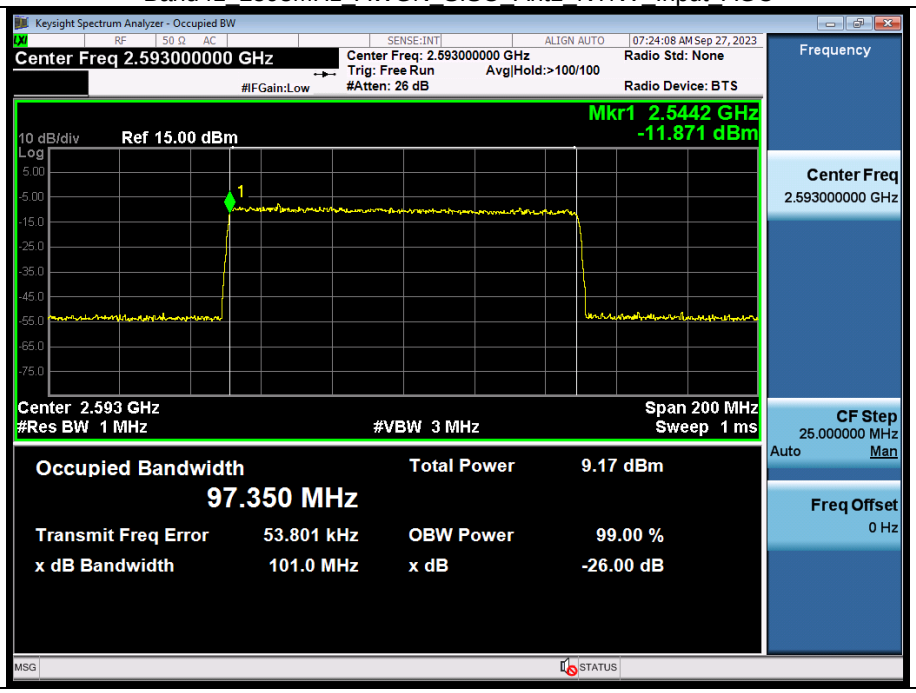
Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Output_AGC

Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Output_AGC+3

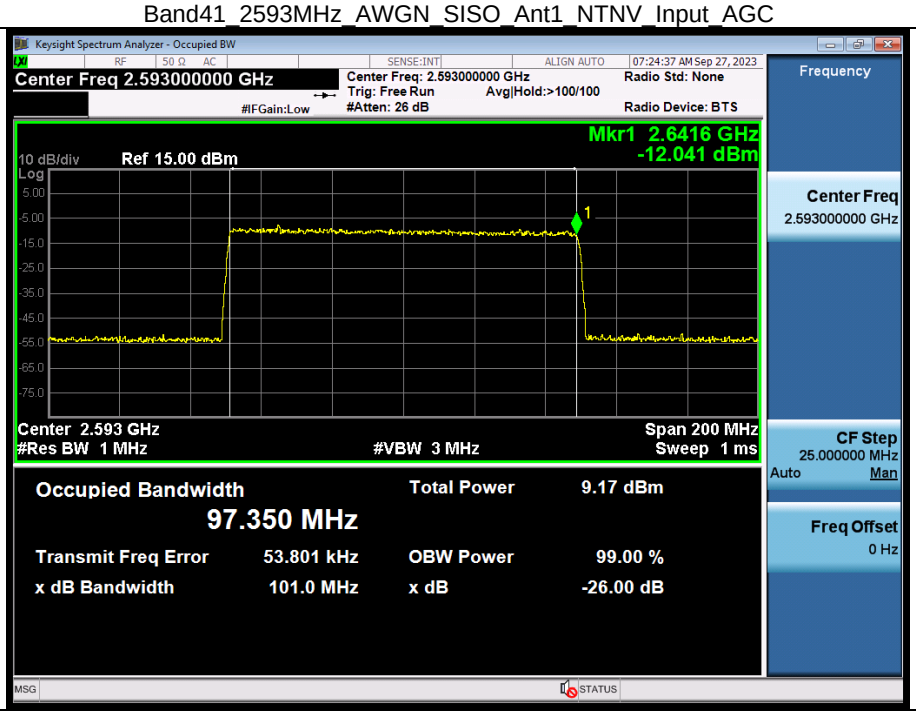


Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Output_AGC+3

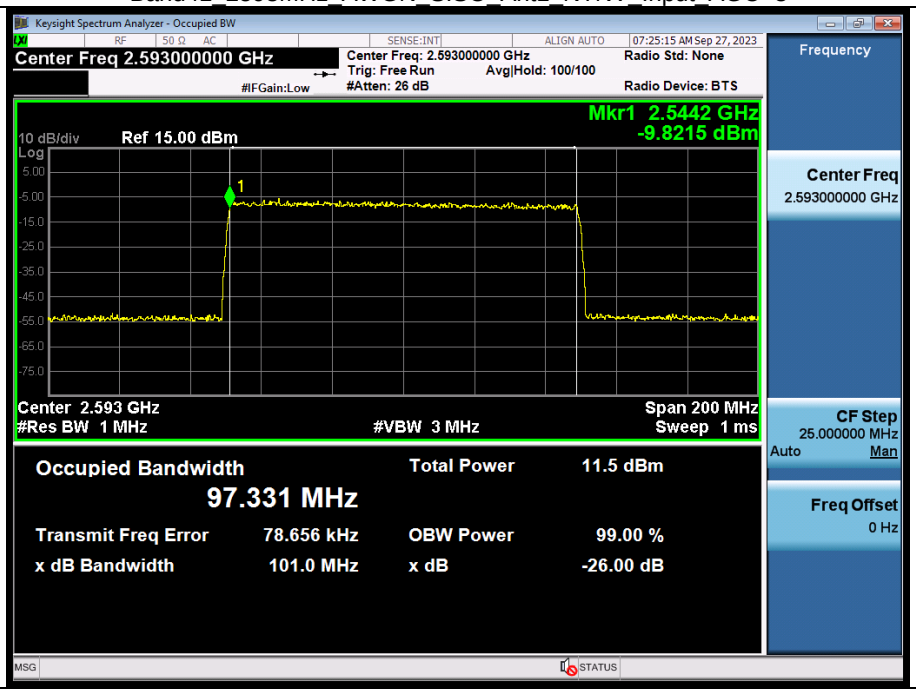
Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Input_AGC



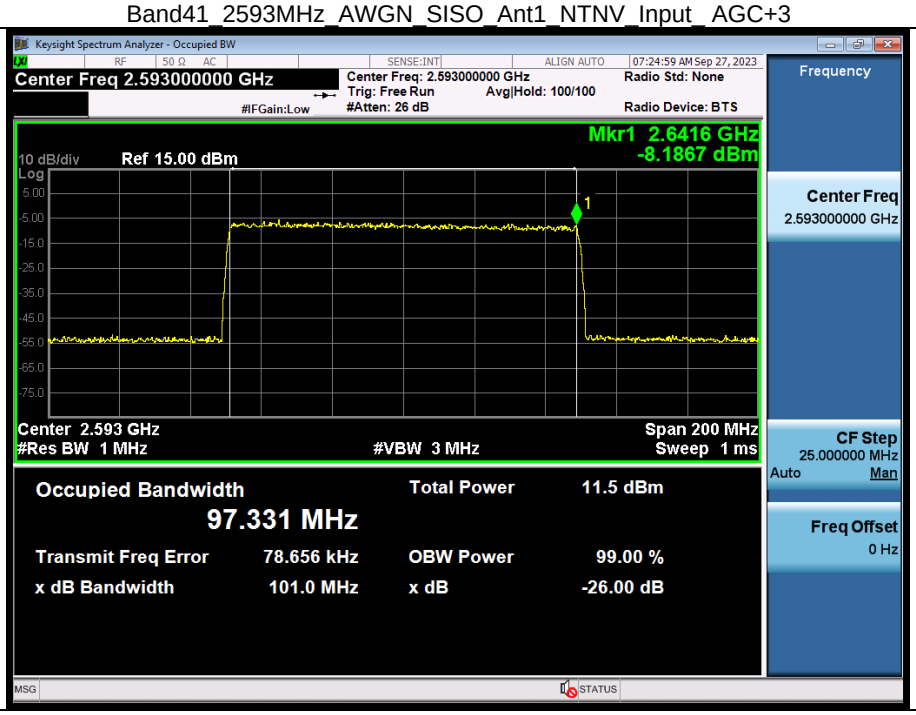
Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Input_AGC



Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Input_AGC+3



Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Input_ AGC+3



3.2 Band41_EBW

3.2.1 Test Result

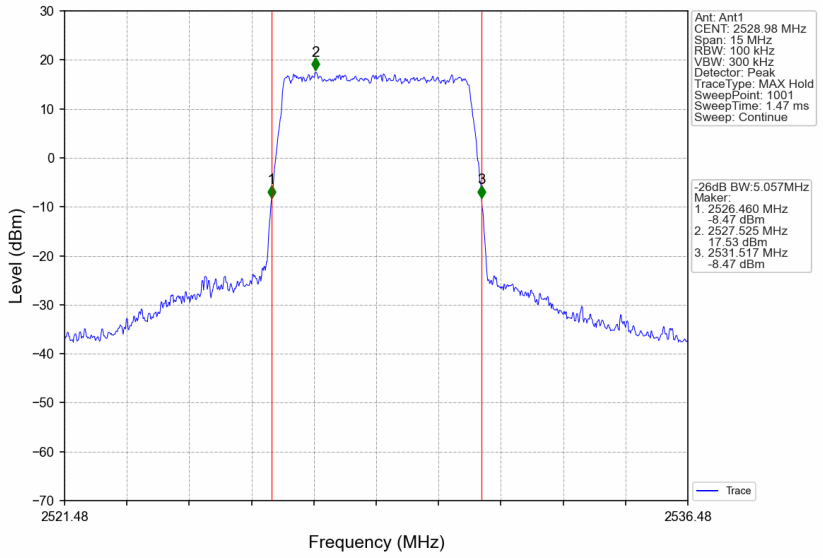
Band: 41 / NTNV									
Signal			TX Type	ANT	26dB EBW (MHz)		Discrepancy (%)	Limit (%)	Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input			
AWGN	-1	2528.98	SISO	1	5.057	5.053	0.0792	5	Pass
	-4	2528.98	SISO	1	5.071	5.056	0.2967	5	Pass
GMSK	-1	2528.98	SISO	1	0.316	0.313	0.9585	5	Pass
	-4	2528.98	SISO	1	0.316	0.315	0.3175	5	Pass

For 100MHz BW

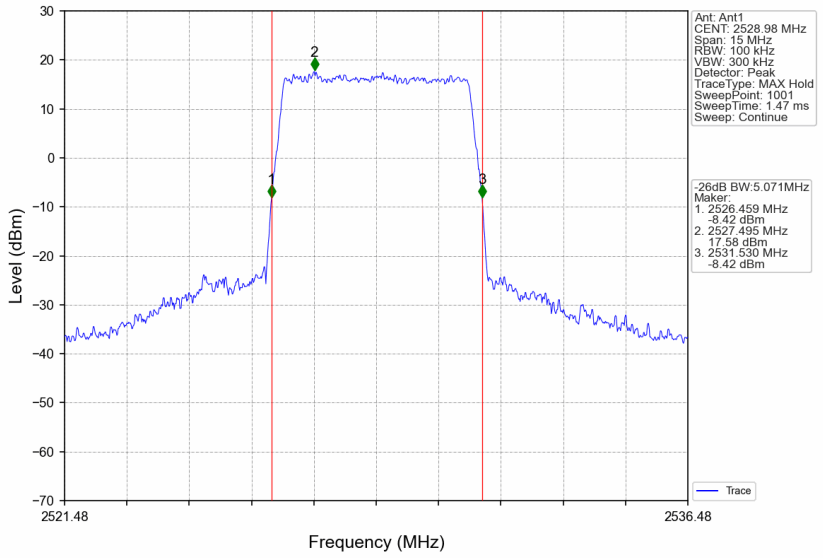
Band: 41 / NTNV									
Signal			TX Type	ANT	26dB EBW (MHz)		Discrepancy (%)	Limit (%)	Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input			
AWGN	-1	2593	SISO	1	100.74	100.90	-0.1590	5	Pass
	-4	2593	SISO	1	100.76	100.70	0.0596	5	Pass

3.2.2 Test Graph

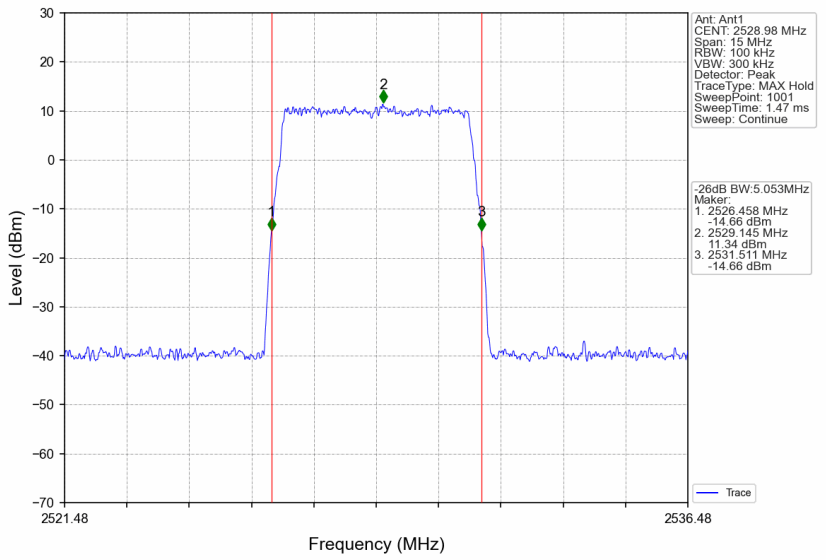
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_Output_AGC



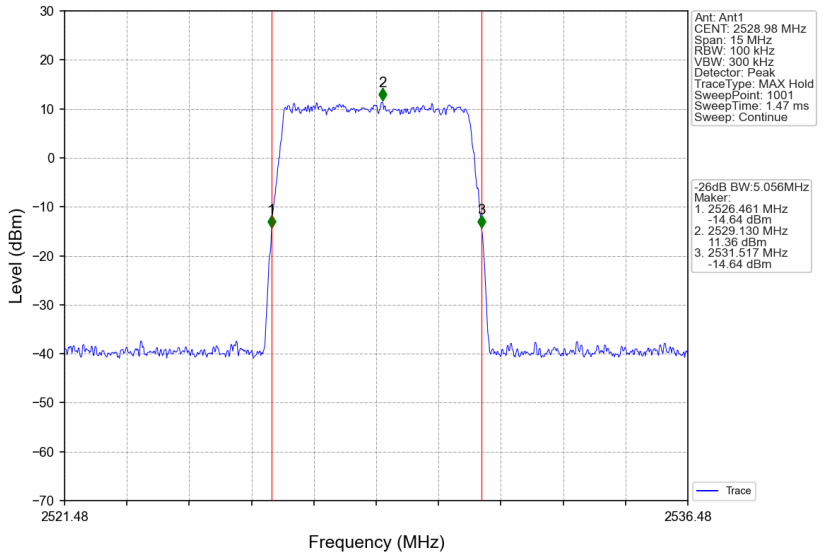
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_Output_AGC+3



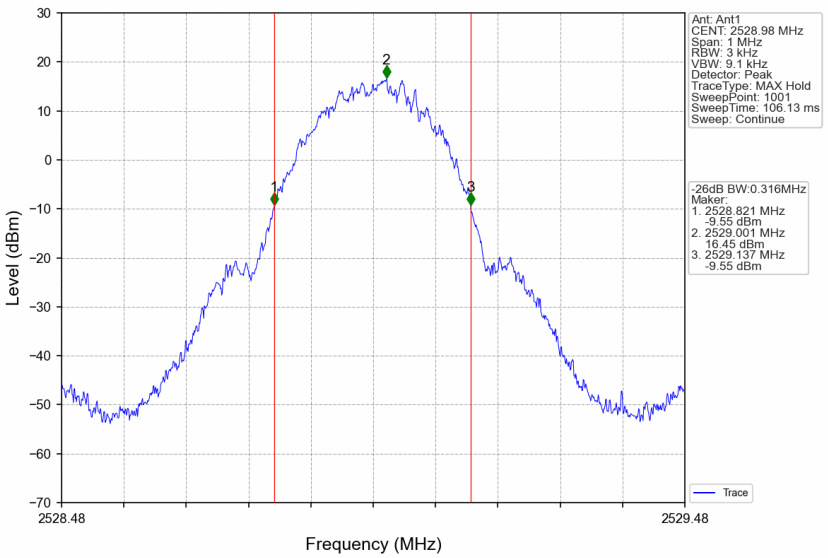
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_Input_AGC



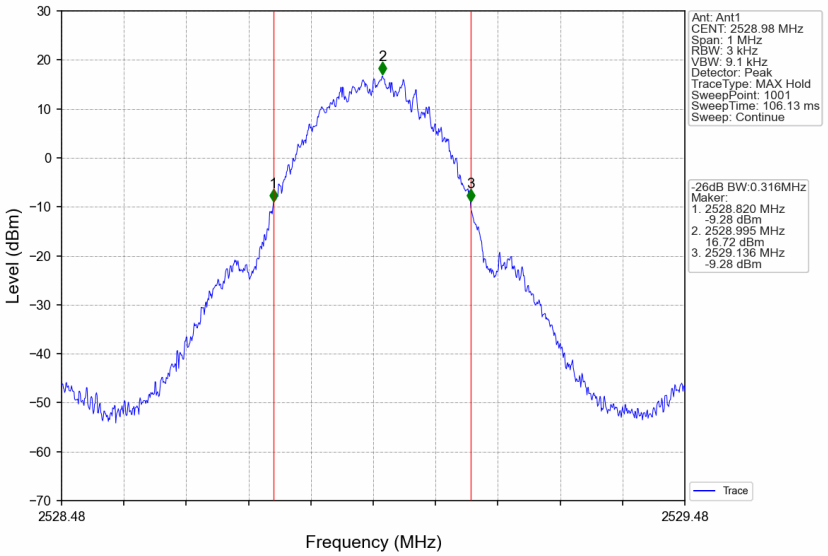
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_Input_AGC+3



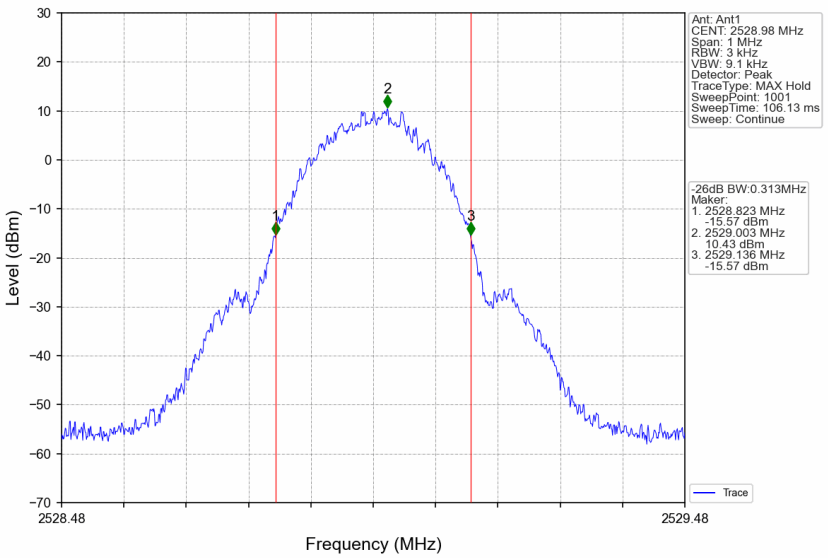
Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_Output_AGC



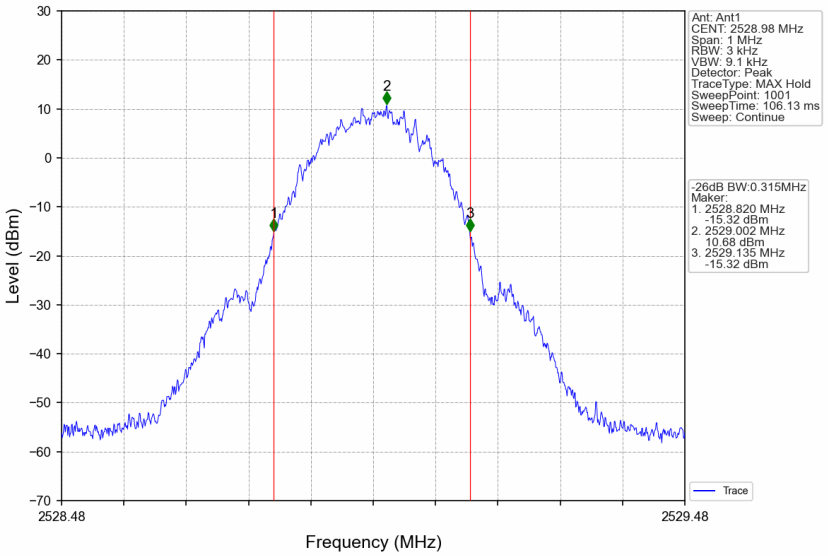
Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_Output_AGC+3



Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_Input_AGC

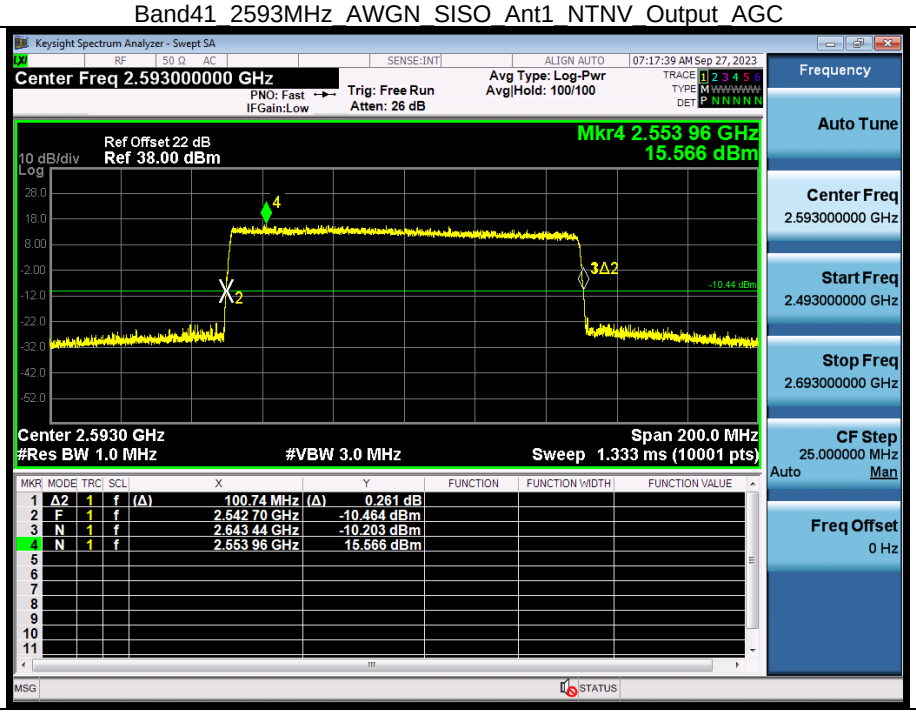


Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_Input_AGC+3



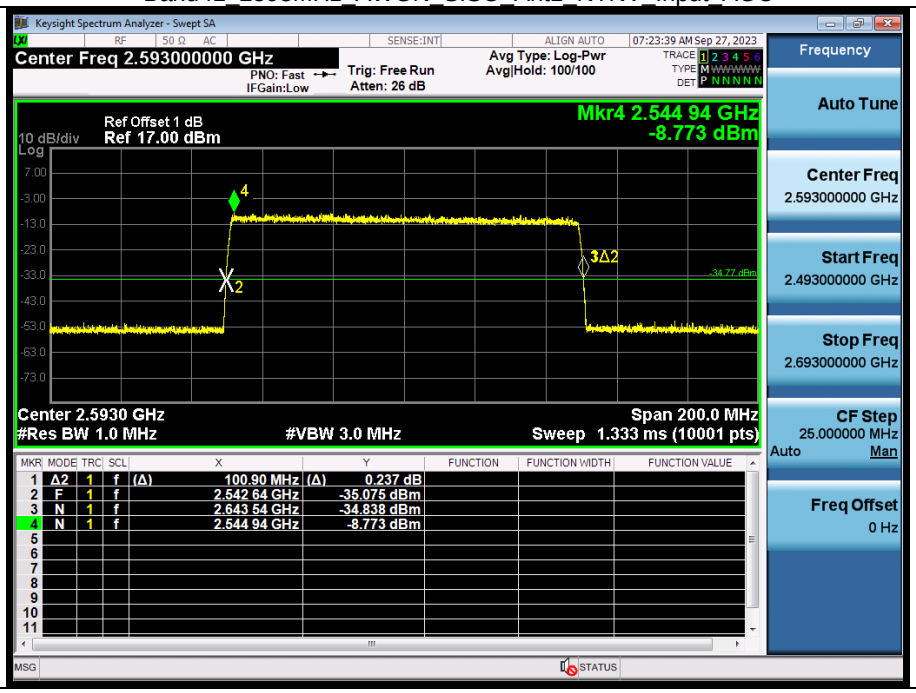
For 100MHz BW

Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Output_AGC

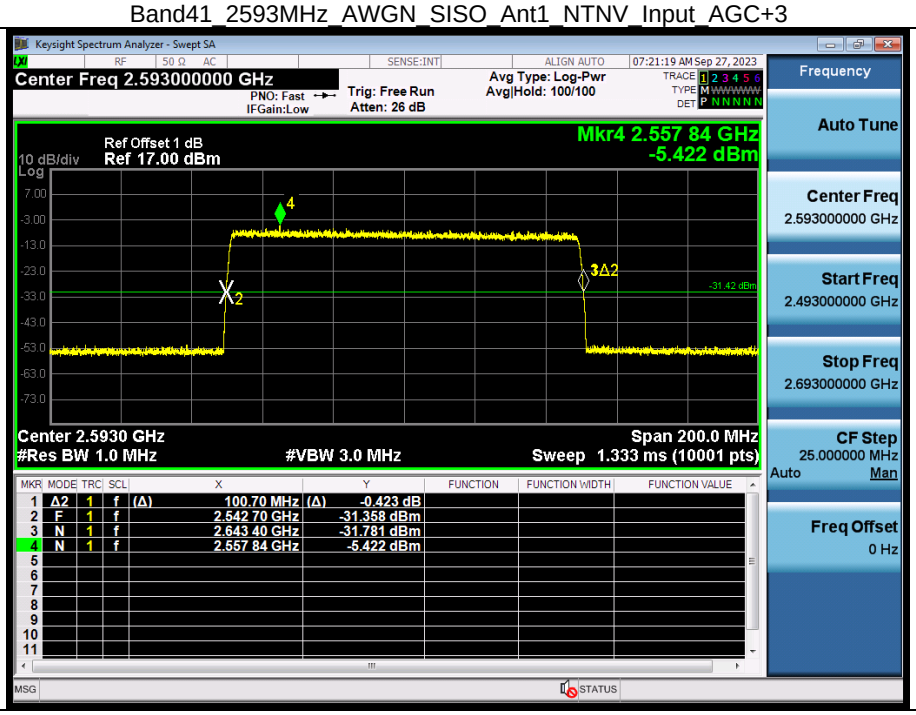


Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Output_AGC+3

Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Input_AGC



Band41_2593MHz_AWGN_SISO_Ant1_NTNV_Input_AGC+3



4. Input/output power and amplifier/booster gain

4.1 Band41_EIRP

4.1.1 Test Result

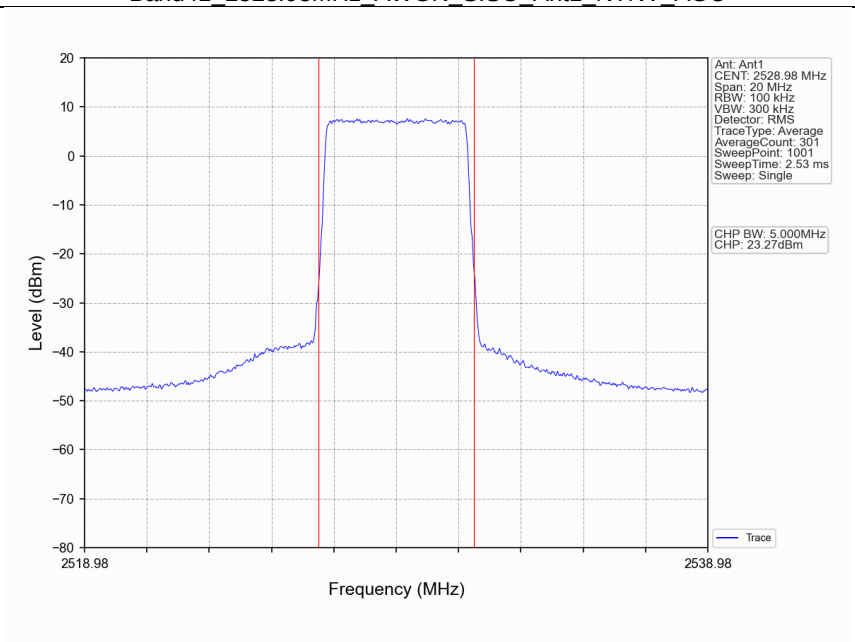
Band: 41 / NTNV										
Signal			TX Type	ANT	Conducted Power (dBm)		EIRP (dBm)		Booster Gain (dB)	Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input	Result	Limit		
AWGN	-4	2528.98	SISO	1	23.27	-4.64	28.41	<=92.64	27.91	Pass
	-1	2528.98	SISO	1	23.92	-1.63	29.06	<=92.64	/	Pass
GMSK	-4	2528.98	SISO	1	23.57	-4.33	28.71	<=80.59	27.90	Pass
	-1	2528.98	SISO	1	24.16	-1.32	29.30	<=80.59	/	Pass

For 100MHz BW

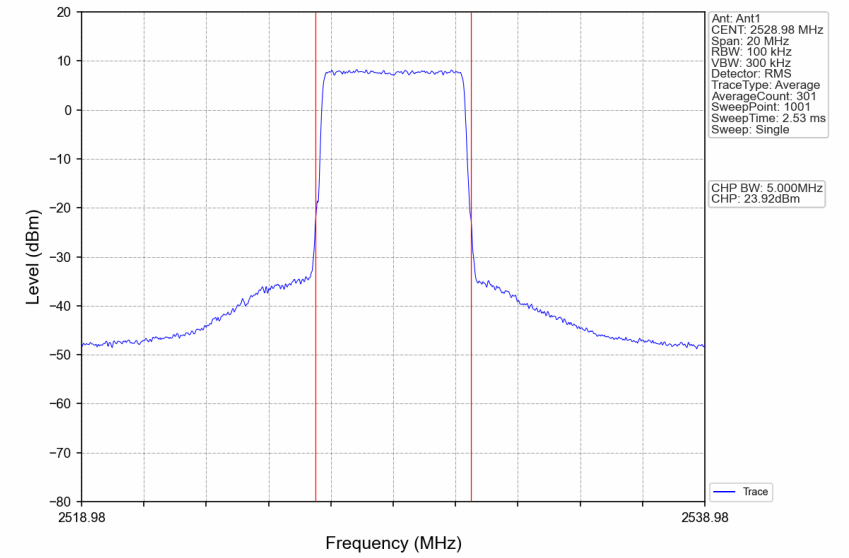
Band: 41 / NTNV										
Signal			TX Type	ANT	Conducted Power (dBm)		EIRP (dBm)		Booster Gain (dB)	Verdict
Type	Level (dBm)	Frequency (MHz)			Output	Input	Result	Limit		
AWGN	-4	2593	SISO	1	23.57	-4.39	28.71	<=92.64	27.96	Pass
	-1	2593	SISO	1	23.52	-1.55	28.66	<=92.64	/	Pass

4.1.2 Test Graph

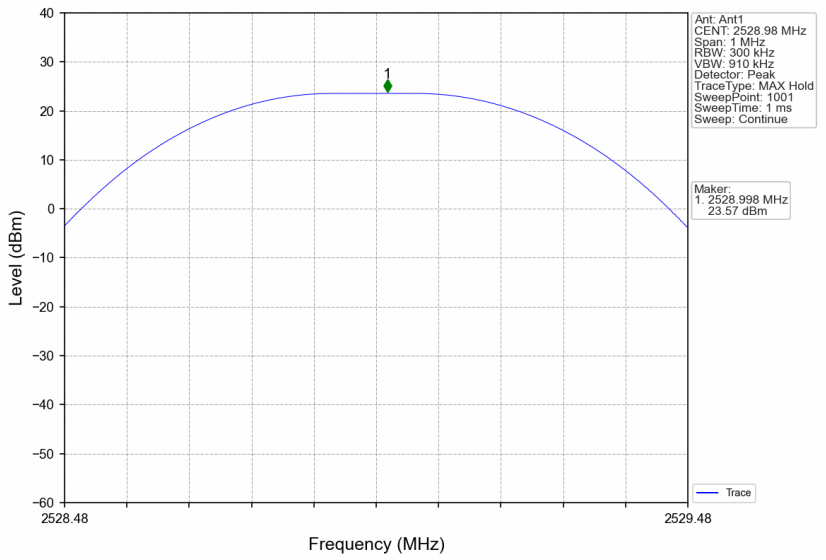
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_AGC



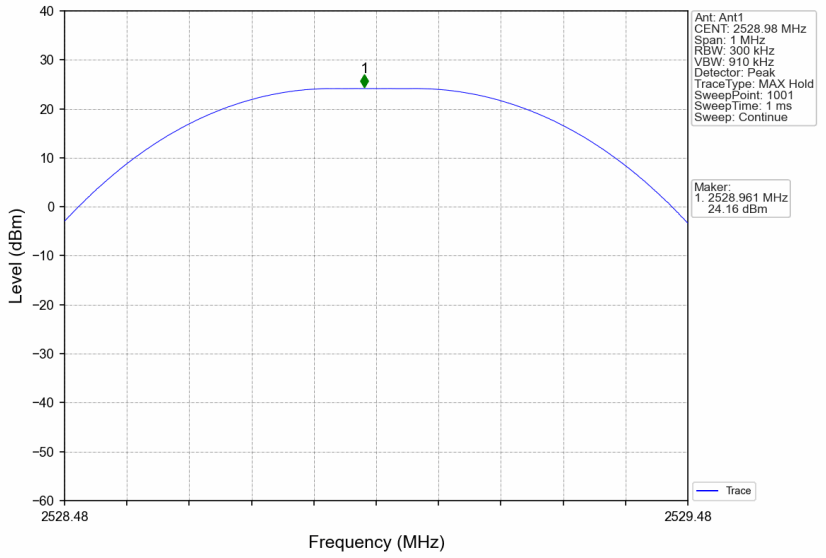
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_AGC+3



Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_AGC

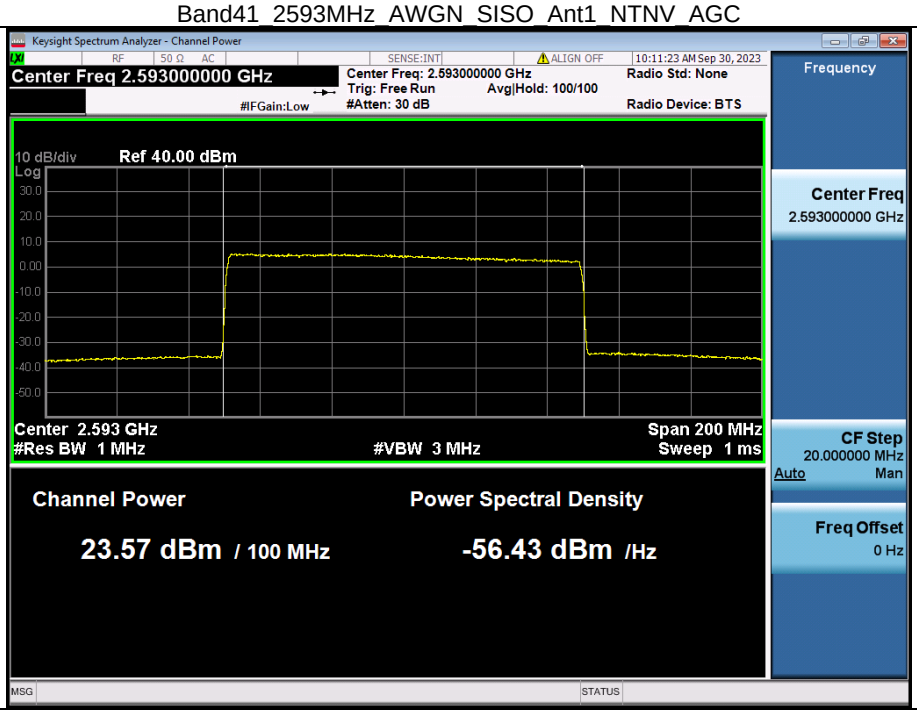


Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_AGC+3

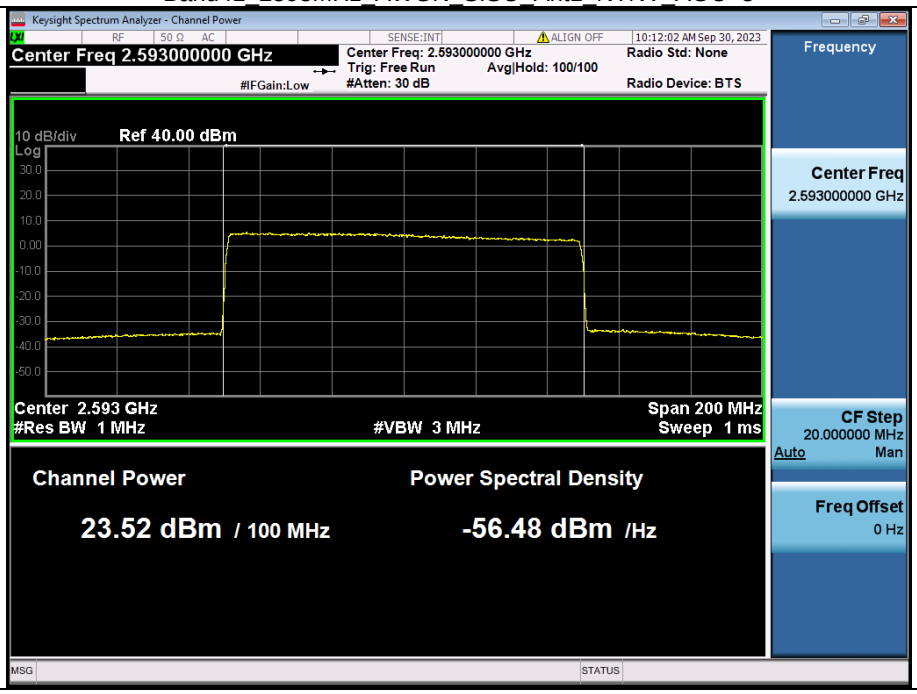


For 100MHz BW

Band41_2593MHz_AWGN_SISO_Ant1_NTNV_AGC



Band41_2593MHz_AWGN_SISO_Ant1_NTNV_AGC+3



4.2 Band41_PAPR

4.2.1 Test Result

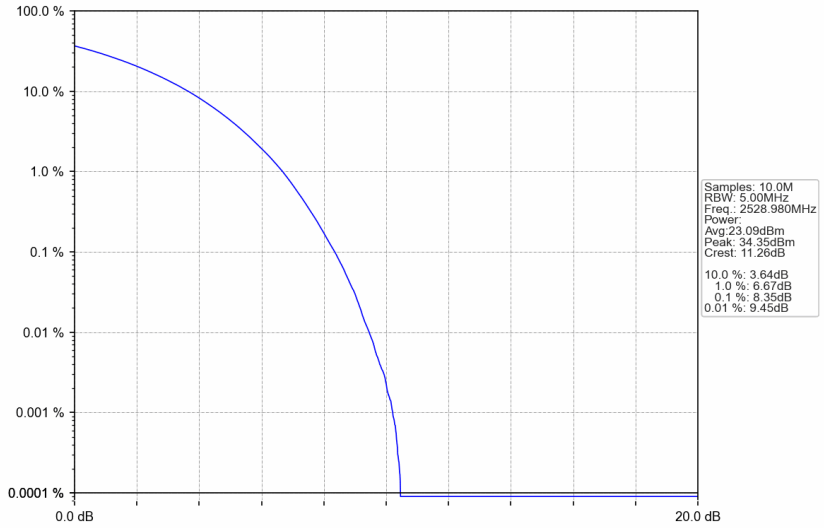
Band: 41 / NTNV							
Signal			TX Type	ANT	PAPR (dB)		Verdict
Type	Level (dBm)	Frequency (MHz)			Result	Limit	
AWGN	-4	2528.98	SISO	1	8.35	<=13	Pass
	-1	2528.98	SISO	1	8.16	<=13	Pass
GMSK	-4	2528.98	SISO	1	0.30	<=13	Pass
	-1	2528.98	SISO	1	0.31	<=13	Pass

For 100MHz BW

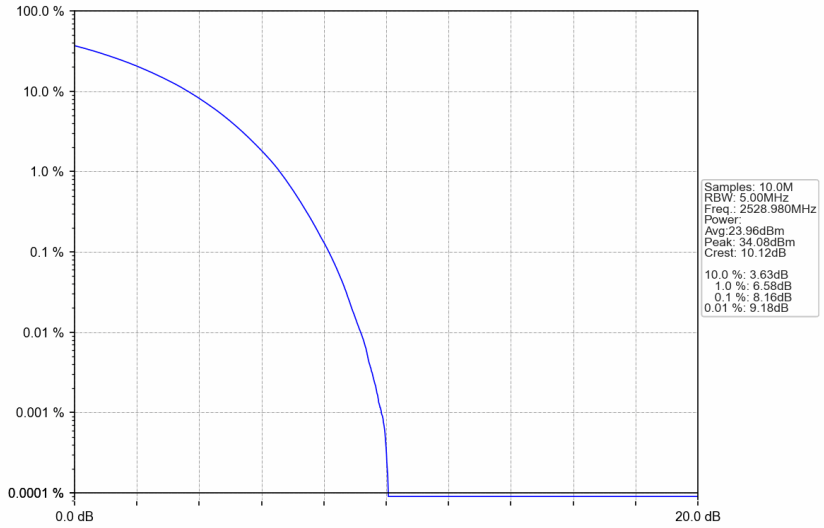
Band: 41 / NTNV							
Signal			TX Type	ANT	PAPR (dB)		Verdict
Type	Level (dBm)	Frequency (MHz)			Result	Limit	
AWGN	-4	2593	SISO	1	8.45	<=13	Pass
	-1	2593	SISO	1	8.44	<=13	Pass

4.2.2 Test Graph

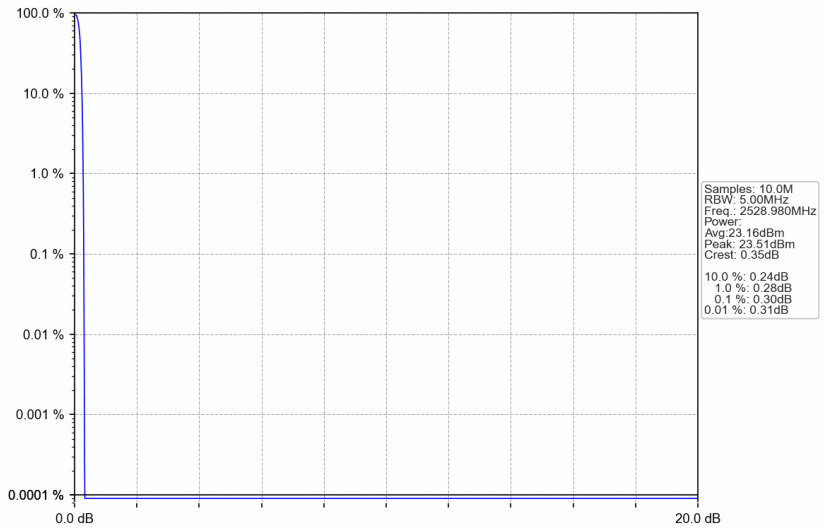
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_AGC



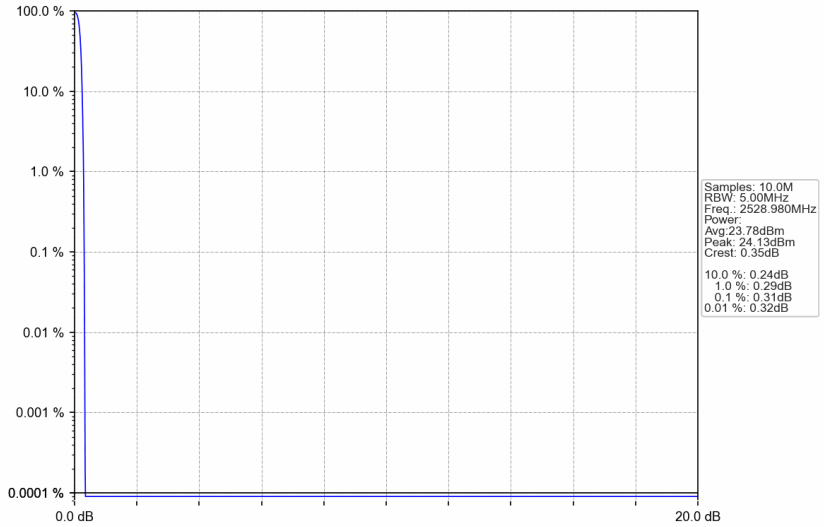
Band41_2528.98MHz_AWGN_SISO_Ant1_NTNV_AGC+3



Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_AGC

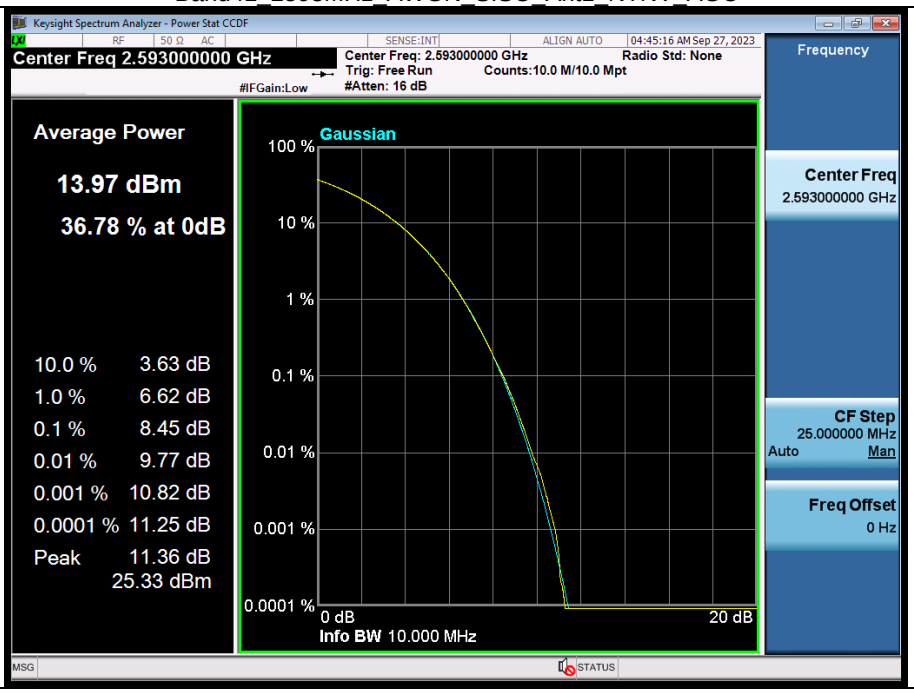


Band41_2528.98MHz_GMSK_SISO_Ant1_NTNV_AGC+3

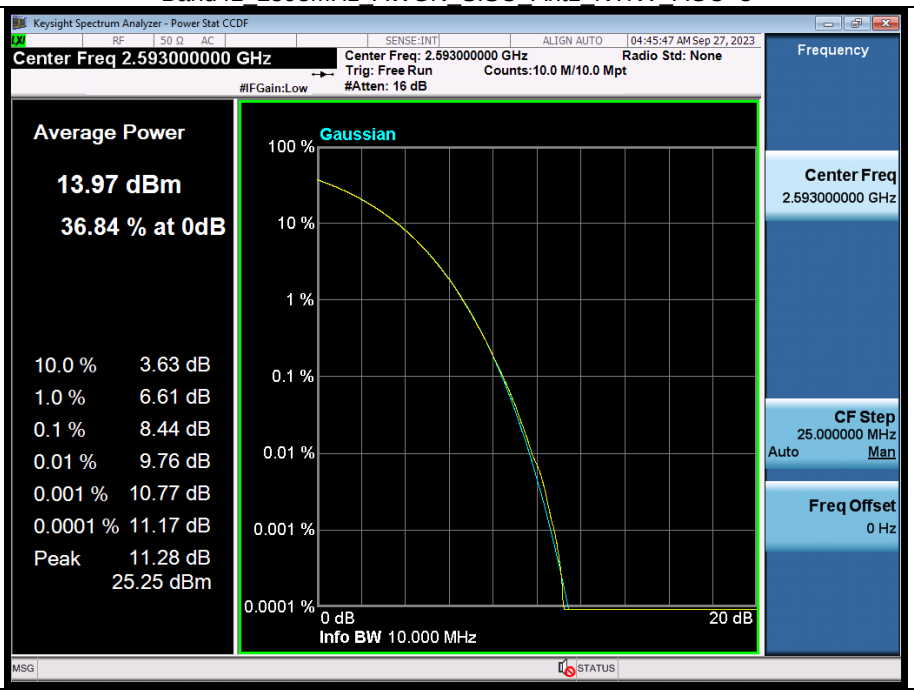


For 100MHz BW

Band41_2593MHz_AWGN_SISO_Ant1_NTNV_AGC



Band41_2593MHz_AWGN_SISO_Ant1_NTNV_AGC+3



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

5.1 Band41

5.1.1 Test Result

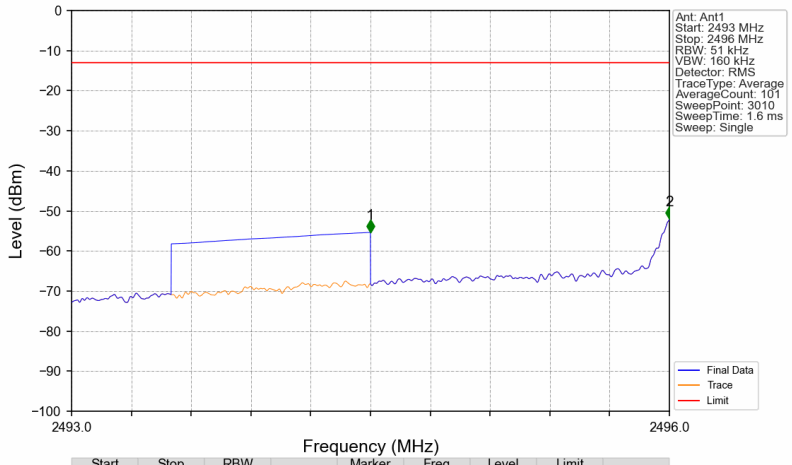
Band: 41 / NTNV									
Signal				Channel	TX Type	ANT	OOB (dBm)		Verdict
Input	Type	Level (dBm)	Frequency (MHz)				Result	Limit	
Two	AWGN	-4	2498.5	LCH	SISO	1	-52.08	Refer To Test Graph	Pass
		-1	2498.5	LCH	SISO	1	-47.77	Refer To Test Graph	Pass
One	AWGN	-4	2498.5	LCH	SISO	1	-50.74	Refer To Test Graph	Pass
		-1	2498.5	LCH	SISO	1	-49.15	Refer To Test Graph	Pass
Two	AWGN	-4	2687.5	HCH	SISO	1	-52.04	Refer To Test Graph	Pass
		-1	2687.5	HCH	SISO	1	-48.89	Refer To Test Graph	Pass
One	AWGN	-4	2687.5	HCH	SISO	1	-52.31	Refer To Test Graph	Pass
		-1	2687.5	HCH	SISO	1	-48.92	Refer To Test Graph	Pass
Two	GMSK	-4	2496.1	LCH	SISO	1	-24.72	Refer To Test Graph	Pass
		-1	2496.1	LCH	SISO	1	-23.43	Refer To Test Graph	Pass
One	GMSK	-4	2496.1	LCH	SISO	1	-24.72	Refer To Test Graph	Pass
		-1	2496.1	LCH	SISO	1	-22.81	Refer To Test Graph	Pass
Two	GMSK	-4	2689.9	HCH	SISO	1	-26.44	Refer To Test Graph	Pass
		-1	2689.9	HCH	SISO	1	-23.45	Refer To Test Graph	Pass
One	GMSK	-4	2689.9	HCH	SISO	1	-26.42	Refer To Test Graph	Pass
		-1	2689.9	HCH	SISO	1	-23.48	Refer To Test Graph	Pass

For 100MHz BW

Band: 41 / NTNV									
Signal				Channel	TX Type	ANT	OOB (dBm)		Verdict
Input	Type	Level (dBm)	Frequency (MHz)				Result	Limit	
Two	AWGN	-4	2546	LCH	SISO	1	-19.382	Refer To Test Graph	Pass
		-1	2546	LCH	SISO	1	-18.497	Refer To Test Graph	Pass
One	AWGN	-4	2546	LCH	SISO	1	-19.116	Refer To Test Graph	Pass
		-1	2546	LCH	SISO	1	-18.484	Refer To Test Graph	Pass
Two	AWGN	-4	2640	HCH	SISO	1	-21.668	Refer To Test Graph	Pass
		-1	2640	HCH	SISO	1	-20.775	Refer To Test Graph	Pass
One	AWGN	-4	2640	HCH	SISO	1	-21.484	Refer To Test Graph	Pass
		-1	2640	HCH	SISO	1	-20.553	Refer To Test Graph	Pass

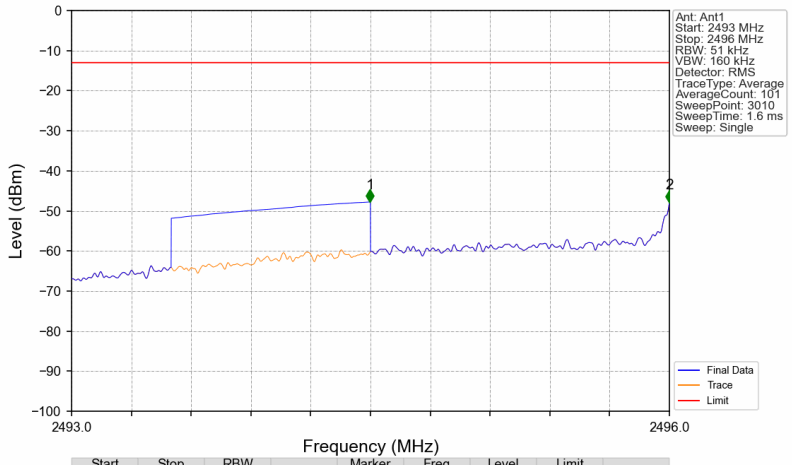
5.1.2 Test Graph

Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV_AGC



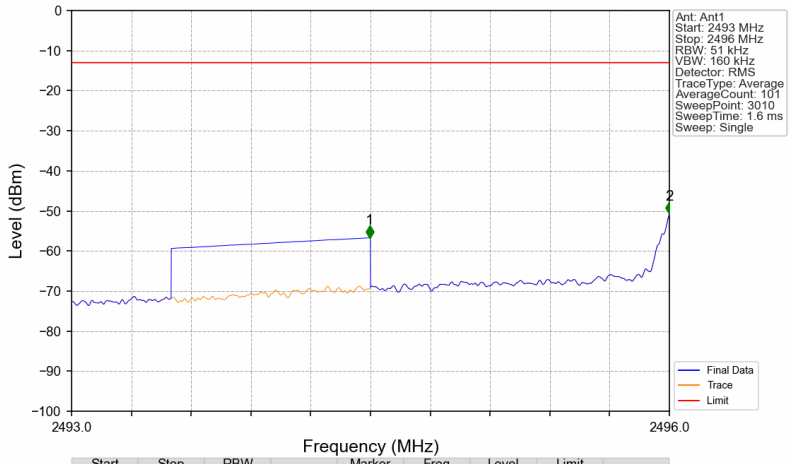
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2493	2495	1	CHP	1	2494.499	-55.36	-13	Pass
2495	2496	0.051	/	2	2496.000	-52.08	-13	Pass

Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3



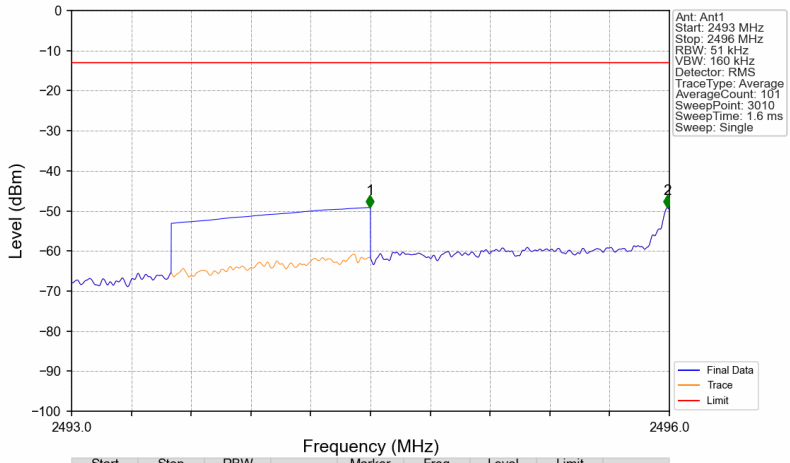
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2493	2495	1	CHP	1	2494.498	-47.77	-13	Pass
2495	2496	0.051	/	2	2496.000	-47.88	-13	Pass

Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV_AGC



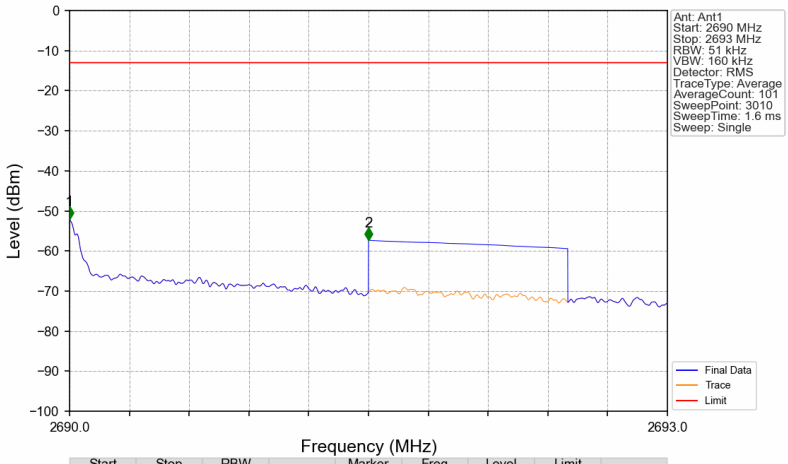
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2493	2495	1	CHP	1	2494.497	-56.71	-13	Pass
2495	2496	0.051	/	2	2496.000	-50.74	-13	Pass

Band41_2498.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3



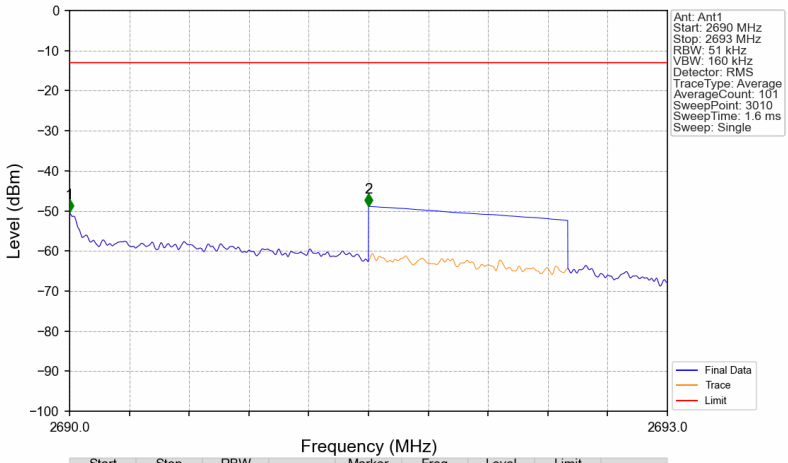
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2493	2495	1	CHP	1	2494.498	-49.15	-13	Pass
2495	2496	0.051	/	2	2495.989	-49.24	-13	Pass

Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV_AGC



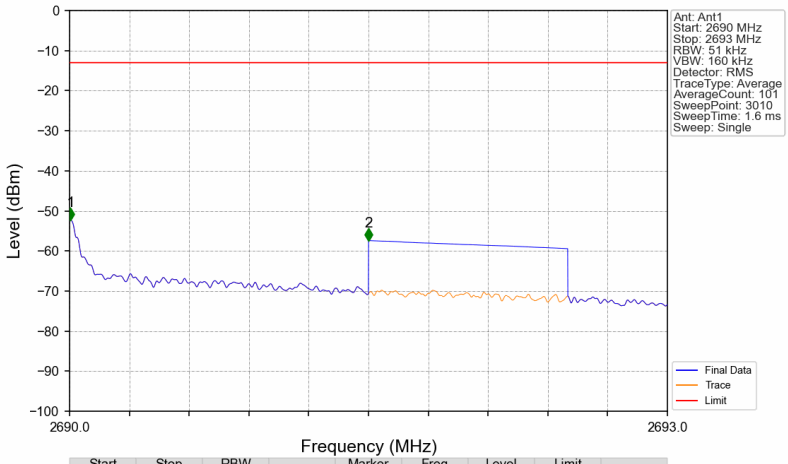
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2690	2691	0.051	/	1	2690.000	-52.04	-13	Pass
2691	2693	1	CHP	2	2691.500	-57.35	-13	Pass

Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3



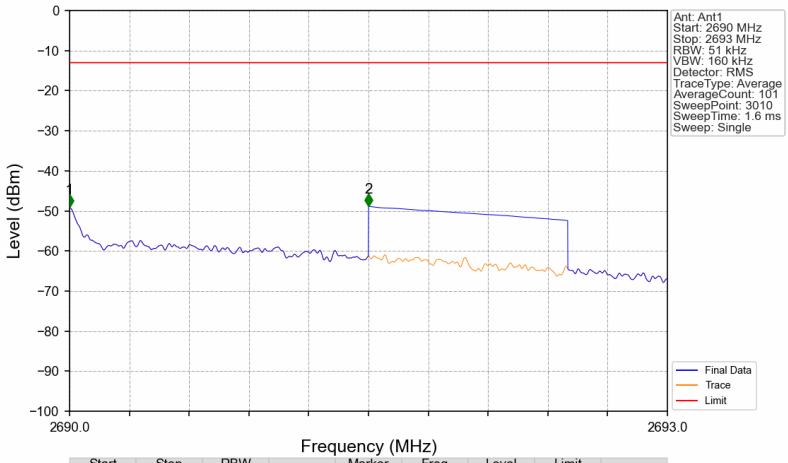
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2690	2691	0.051	/	1	2690.000	-50.24	-13	Pass
2691	2693	1	CHP	2	2691.500	-48.89	-13	Pass

Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV_AGC



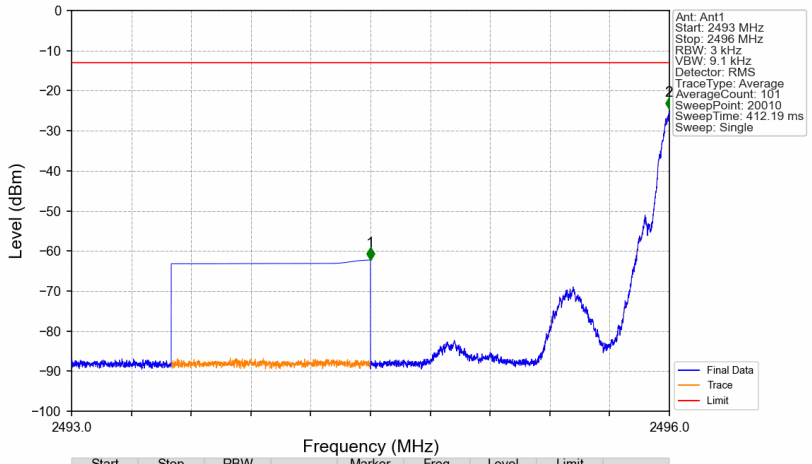
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2690	2691	0.051	/	1	2690.005	-52.31	-13	Pass
2691	2693	1	CHP	2	2691.500	-57.42	-13	Pass

Band41_2687.5MHz_AWGN_SISO_Ant1_NTNV_AGC+3



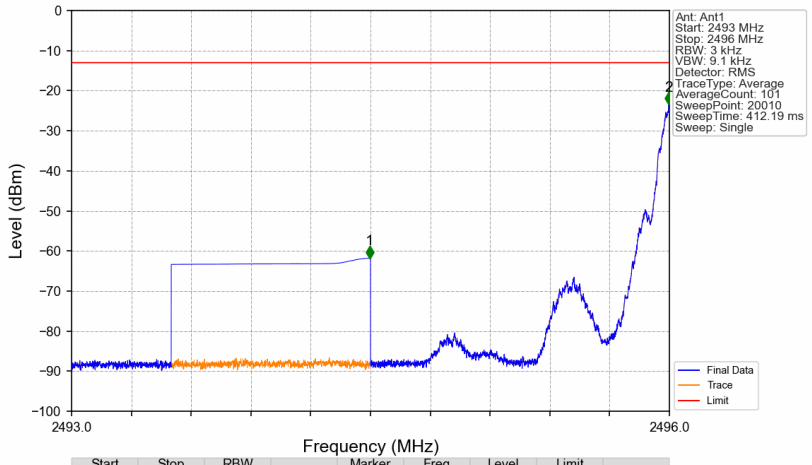
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2690	2691	0.051	/	1	2690.000	-49.09	-13	Pass
2691	2693	1	CHP	2	2691.500	-48.92	-13	Pass

Band41_2496.1MHz_GMSK_SISO_Ant1_NTNV_AGC



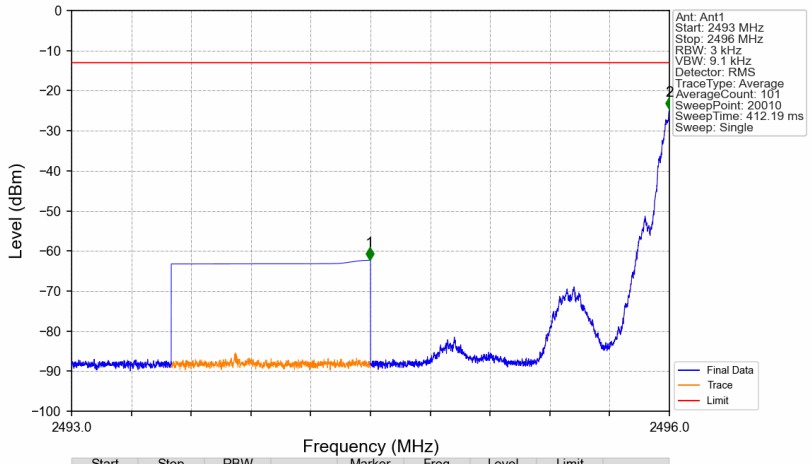
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2493	2495	1	CHP	1	2494.499	-62.26	-13	Pass
2495	2496	0.003	/	2	2495.999	-24.72	-13	Pass

Band41_2496.1MHz_GMSK_SISO_Ant1_NTNV_AGC+3



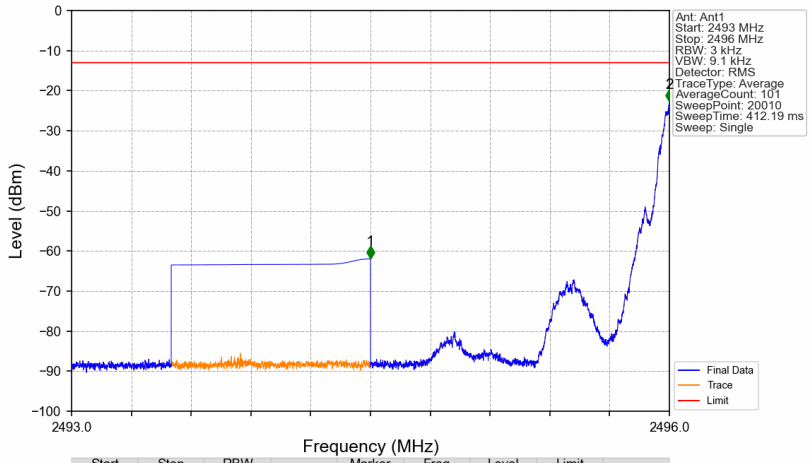
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2493	2495	1	CHP	1	2494.496	-61.81	-13	Pass
2495	2496	0.003	/	2	2495.996	-23.43	-13	Pass

Band41_2496.1MHz_GMSK_SISO_Ant1_NTNV_AGC



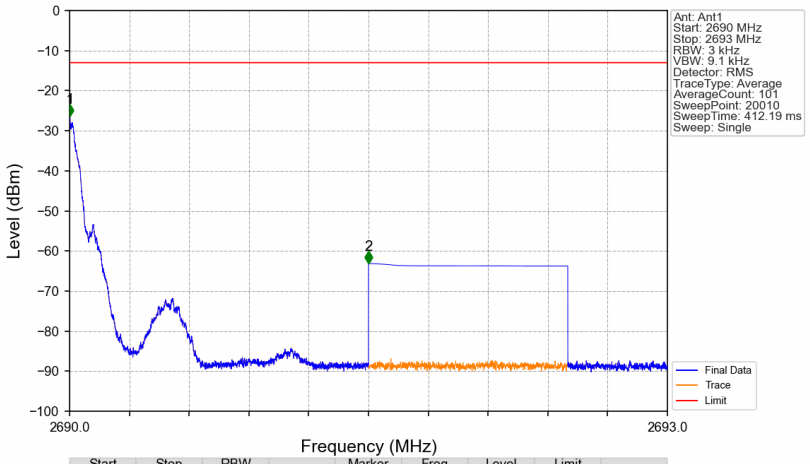
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2493	2495	1	CHP	1	2494.496	-62.31	-13	Pass
2495	2496	0.003	/	2	2496.000	-24.72	-13	Pass

Band41_2496.1MHz_GMSK_SISO_Ant1_NTNV_AGC+3



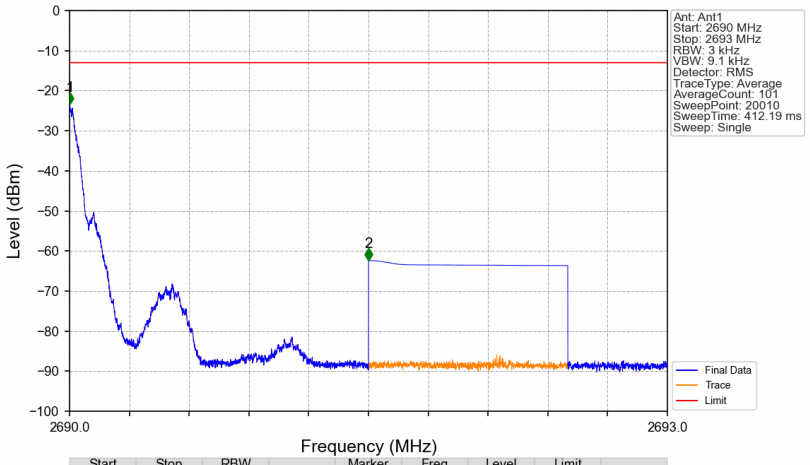
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2493	2495	1	CHP	1	2494.500	-61.97	-13	Pass
2495	2496	0.003	/	2	2496.000	-22.81	-13	Pass

Band41_2689.9MHz_GMSK_SISO_Ant1_NTNV_AGC



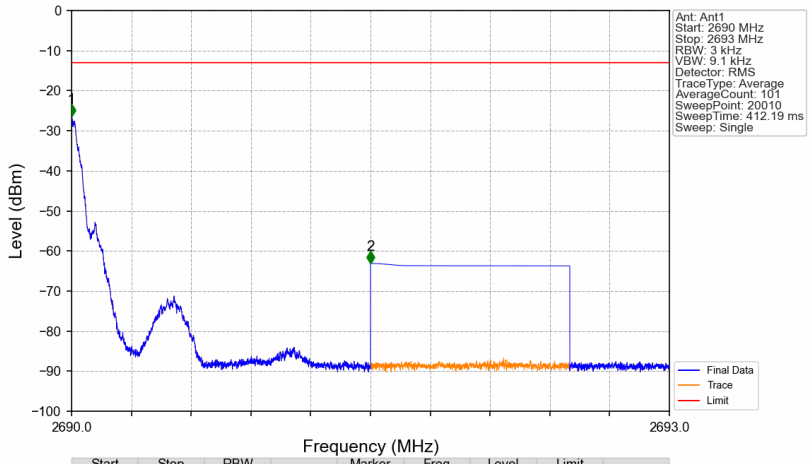
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2690	2691	0.003	/	1	2690.001	-26.44	-13	Pass
2691	2693	1	CHP	2	2691.500	-63.15	-13	Pass

Band41_2689.9MHz_GMSK_SISO_Ant1_NTNV_AGC+3



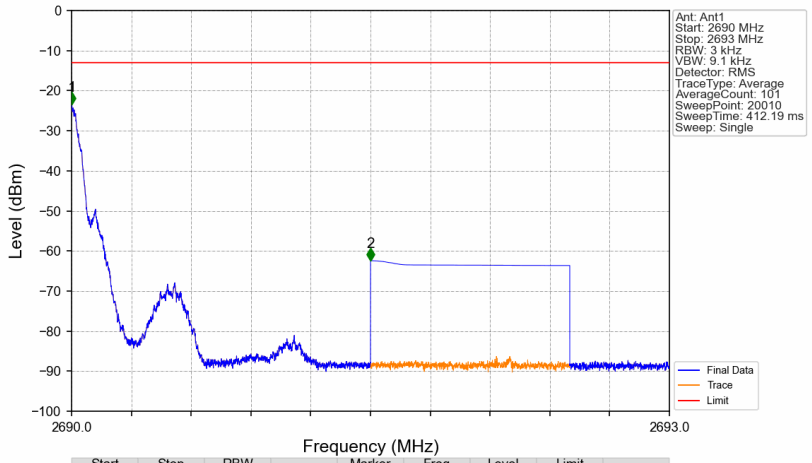
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2690	2691	0.003	/	1	2690.001	-23.45	-13	Pass
2691	2693	1	CHP	2	2691.500	-62.38	-13	Pass

Band41_2689.9MHz_GMSK_SISO_Ant1_NTNV_AGC



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2690	2691	0.003	/	1	2690.000	-26.42	-13	Pass
2691	2693	1	CHP	2	2691.500	-63.12	-13	Pass

Band41_2689.9MHz_GMSK_SISO_Ant1_NTNV_AGC+3



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2690	2691	0.003	/	1	2690.002	-23.48	-13	Pass
2691	2693	1	CHP	2	2691.500	-62.42	-13	Pass

For 100MHz BW

Band41_2546MHz_AWGN_SISO_Ant1_NTNV_AGC

Band41_2546MHz_AWGN_SISO_Ant1_NTNV_AGC+3

Band41_2546MHz_AWGN_SISO_Ant1_NTNV_AGC

Band41_2546MHz_AWGN_SISO_Ant1_NTNV_AGC+3

Band41_2640MHz_AWGN_SISO_Ant1_NTNV_AGC

Band41_2640MHz_AWGN_SISO_Ant1_NTNV_AGC+3

Band41_2640MHz_AWGN_SISO_Ant1_NTNV_AGC

Band41_2640MHz_AWGN_SISO_Ant1_NTNV_AGC+3

6. Spurious emissions

6.1 Band41

6.1.1 Test Result

Band: 41 / NTNV								
Signal			Channel	TX Type	ANT	SE (dBm)		Verdict
Type	Level (dBm)	Frequency (MHz)				Result	Limit	
AWGN	-4	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
GMSK	-4	2496.1	LCH	SISO	1	Refer To Test Graph		Pass
		2593	MCH	SISO	1	Refer To Test Graph		Pass
		2689.9	HCH	SISO	1	Refer To Test Graph		Pass

For 100MHz BW

Band: 41 / NTNV								
Signal			Channel	TX Type	ANT	SE (dBm)		Verdict
Type	Level (dBm)	Frequency (MHz)				Result	Limit	
AWGN	-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