

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B7_5MHz_EIRP

Band: 7 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2502.5	1	0	23.51	2.17	25.68	<=33.01	Pass
			24	23.52	2.17	25.69	<=33.01	Pass
		25	0	22.69	2.17	24.86	<=33.01	Pass
	2535	1	0	23.59	2.17	25.76	<=33.01	Pass
			24	23.47	2.17	25.64	<=33.01	Pass
		25	0	22.52	2.17	24.69	<=33.01	Pass
	2567.5	1	0	23.19	2.17	25.36	<=33.01	Pass
			24	22.65	2.17	24.82	<=33.01	Pass
		25	0	22.00	2.17	24.17	<=33.01	Pass
16QAM	2502.5	1	0	22.82	2.17	24.99	<=33.01	Pass
			24	22.79	2.17	24.96	<=33.01	Pass
		25	0	21.68	2.17	23.85	<=33.01	Pass
	2535	1	0	22.70	2.17	24.87	<=33.01	Pass
			24	22.57	2.17	24.74	<=33.01	Pass
		25	0	21.58	2.17	23.75	<=33.01	Pass
	2567.5	1	0	22.46	2.17	24.63	<=33.01	Pass
			24	21.96	2.17	24.13	<=33.01	Pass
		25	0	21.24	2.17	23.41	<=33.01	Pass

Note1: EIRP=Conducted Power+Antenna Gain

1.1.2 B7_10MHz_EIRP

Band: 7 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2505	1	0	23.88	2.17	26.05	<=33.01	Pass
			49	23.37	2.17	25.54	<=33.01	Pass
		50	0	22.64	2.17	24.81	<=33.01	Pass
	2535	1	0	23.81	2.17	25.98	<=33.01	Pass
			49	23.64	2.17	25.81	<=33.01	Pass
		50	0	22.82	2.17	24.99	<=33.01	Pass
	2565	1	0	23.51	2.17	25.68	<=33.01	Pass
			49	22.74	2.17	24.91	<=33.01	Pass
		50	0	22.24	2.17	24.41	<=33.01	Pass
16QAM	2505	1	0	23.06	2.17	25.23	<=33.01	Pass
			49	22.76	2.17	24.93	<=33.01	Pass
	2535	1	0	22.97	2.17	25.14	<=33.01	Pass
			49	22.70	2.17	24.87	<=33.01	Pass
	2565	1	0	22.30	2.17	24.47	<=33.01	Pass
			49	21.46	2.17	23.63	<=33.01	Pass

Note1: EIRP=Conducted Power+Antenna Gain

1.1.3 B7_15MHz_EIRP

Band: 7 / Bandwidth: 15MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2507.5	1	0	23.83	2.17	26.00	<=33.01	Pass
			74	23.12	2.17	25.29	<=33.01	Pass
		75	0	22.65	2.17	24.82	<=33.01	Pass
	2535	1	0	23.88	2.17	26.05	<=33.01	Pass
			74	23.54	2.17	25.71	<=33.01	Pass
		75	0	22.67	2.17	24.84	<=33.01	Pass
	2562.5	1	0	23.47	2.17	25.64	<=33.01	Pass
			74	22.84	2.17	25.01	<=33.01	Pass
		75	0	22.40	2.17	24.57	<=33.01	Pass
16QAM	2507.5	1	0	22.90	2.17	25.07	<=33.01	Pass
			74	22.17	2.17	24.34	<=33.01	Pass
	2535	1	0	22.89	2.17	25.06	<=33.01	Pass
			74	22.53	2.17	24.70	<=33.01	Pass
	2562.5	1	0	22.38	2.17	24.55	<=33.01	Pass
			74	21.75	2.17	23.92	<=33.01	Pass

Note1: EIRP=Conducted Power+Antenna Gain

1.1.4 B7_20MHz_EIRP

Band: 7 / Bandwidth: 20MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	2510	1	0	23.99	2.17	26.16	<=33.01	Pass
			99	23.30	2.17	25.47	<=33.01	Pass
		100	0	22.65	2.17	24.82	<=33.01	Pass
	2535	1	0	23.88	2.17	26.05	<=33.01	Pass
			99	23.52	2.17	25.69	<=33.01	Pass
		100	0	22.83	2.17	25.00	<=33.01	Pass
	2560	1	0	23.08	2.17	25.25	<=33.01	Pass
			99	22.76	2.17	24.93	<=33.01	Pass
		100	0	22.42	2.17	24.59	<=33.01	Pass
16QAM	2510	1	0	23.34	2.17	25.51	<=33.01	Pass
			99	22.65	2.17	24.82	<=33.01	Pass
	2535	1	0	23.21	2.17	25.38	<=33.01	Pass
			99	22.84	2.17	25.01	<=33.01	Pass
	2560	1	0	22.59	2.17	24.76	<=33.01	Pass
			99	22.19	2.17	24.36	<=33.01	Pass

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 Test Result

2.1.1 B7_10MHz

Band: 7 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	2535	50	0	20	3.40	-3.018	-0.0012	-2.5 to 2.5	Pass

					3.80	-3.219	-0.0013	-2.5 to 2.5	Pass
					4.20	-2.503	-0.0010	-2.5 to 2.5	Pass
				-30	3.80	-2.289	-0.0009	-2.5 to 2.5	Pass
				-20	3.80	-0.916	-0.0004	-2.5 to 2.5	Pass
				-10	3.80	-2.217	-0.0009	-2.5 to 2.5	Pass
				0	3.80	-2.217	-0.0009	-2.5 to 2.5	Pass
				10	3.80	-1.330	-0.0005	-2.5 to 2.5	Pass
				30	3.80	-0.257	-0.0001	-2.5 to 2.5	Pass
				40	3.80	-0.286	-0.0001	-2.5 to 2.5	Pass
				50	3.80	-1.073	-0.0004	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band7_OBW

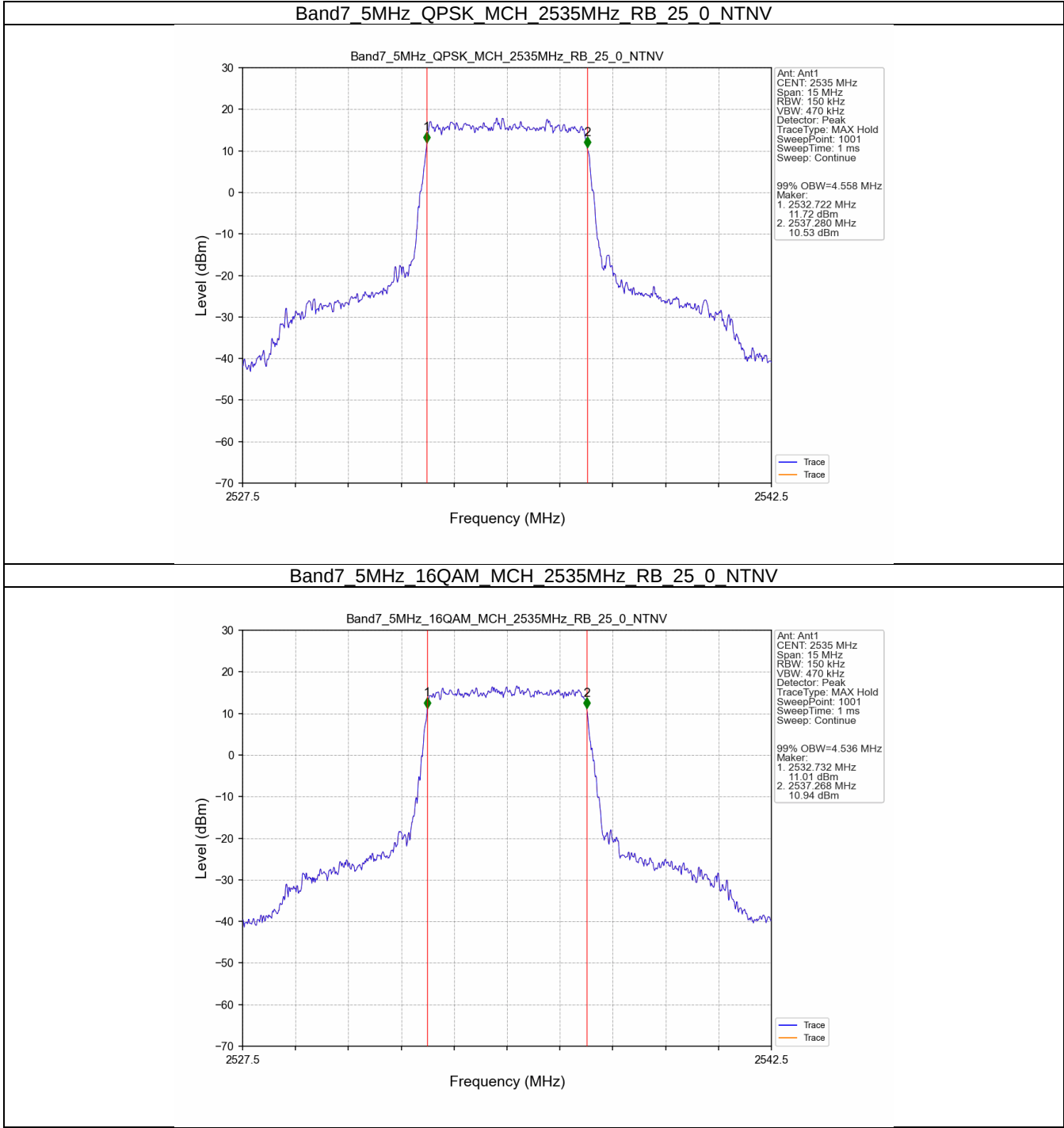
Band: 7 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	2535	25	0	4.558	/	Pass
	16QAM	2535	25	0	4.536	/	Pass
10	QPSK	2535	50	0	9.058	/	Pass
	16QAM	2535	27	0	5.167	/	Pass
15	QPSK	2535	75	0	13.639	/	Pass
	16QAM	2535	27	0	5.388	/	Pass
20	QPSK	2535	100	0	18.154	/	Pass
	16QAM	2535	27	0	5.750	/	Pass

3.1.2 Band7_XDB

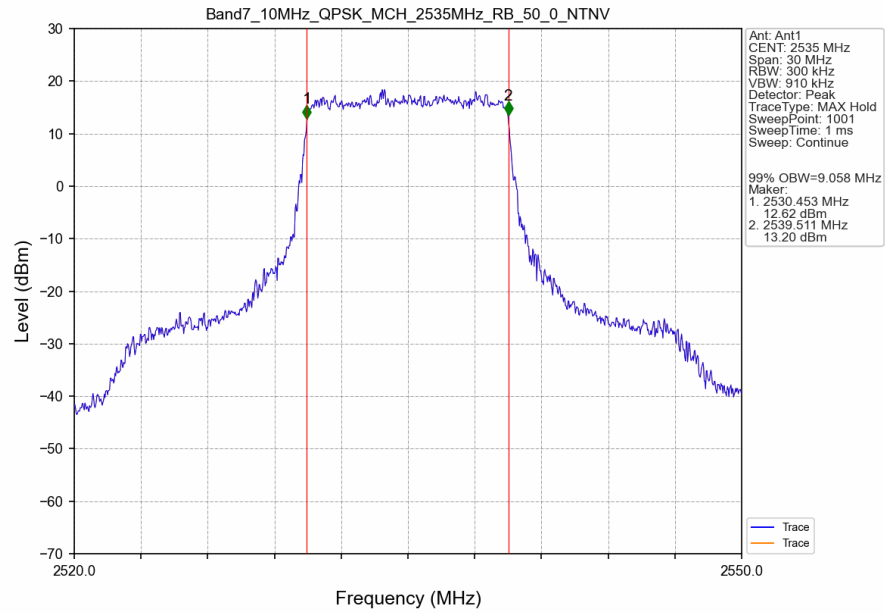
Band: 7 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	2535	25	0	5.077	/	Pass
	16QAM	2535	25	0	5.095	/	Pass
10	QPSK	2535	50	0	10.317	/	Pass
	16QAM	2535	27	0	6.285	/	Pass
15	QPSK	2535	75	0	15.568	/	Pass
	16QAM	2535	27	0	7.166	/	Pass
20	QPSK	2535	100	0	20.564	/	Pass
	16QAM	2535	27	0	7.604	/	Pass

3.2 Test Graph

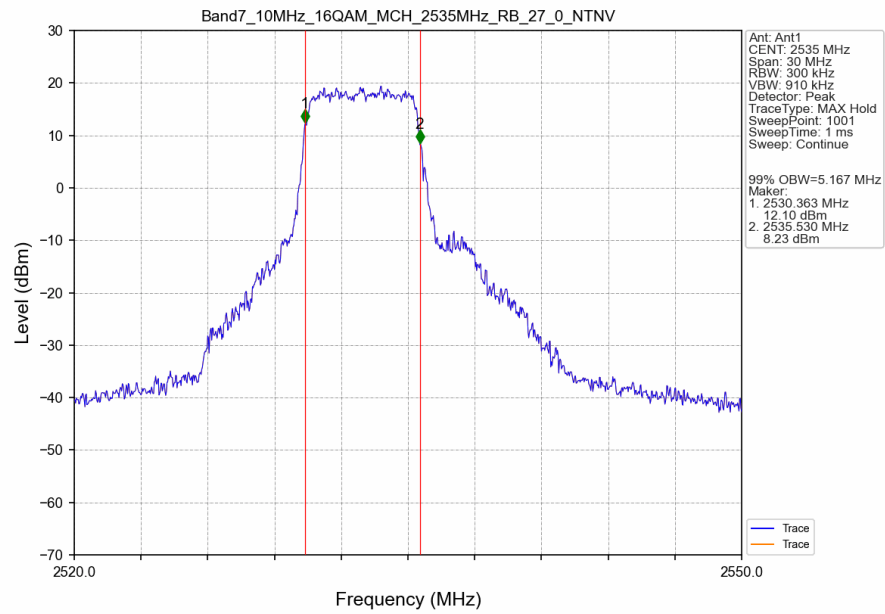
3.2.1 Band7_OBW



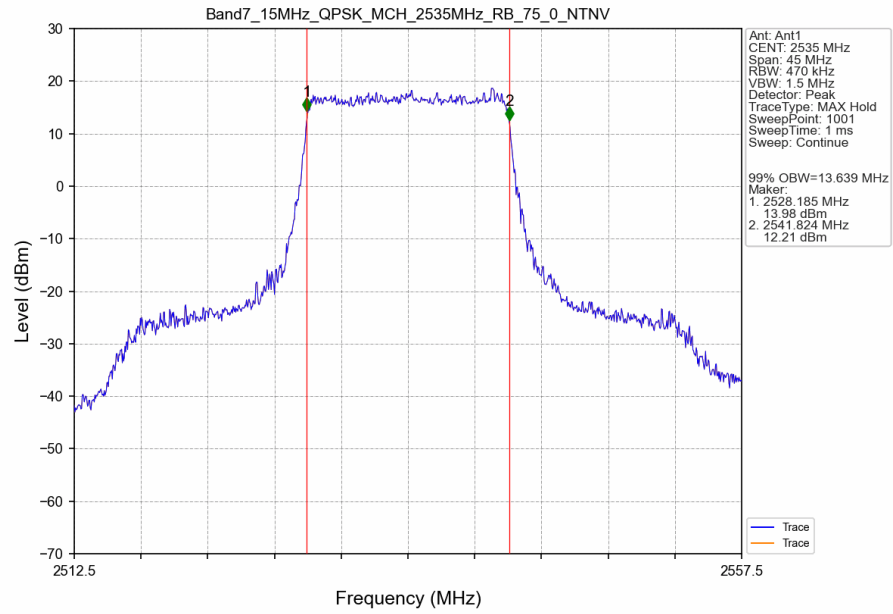
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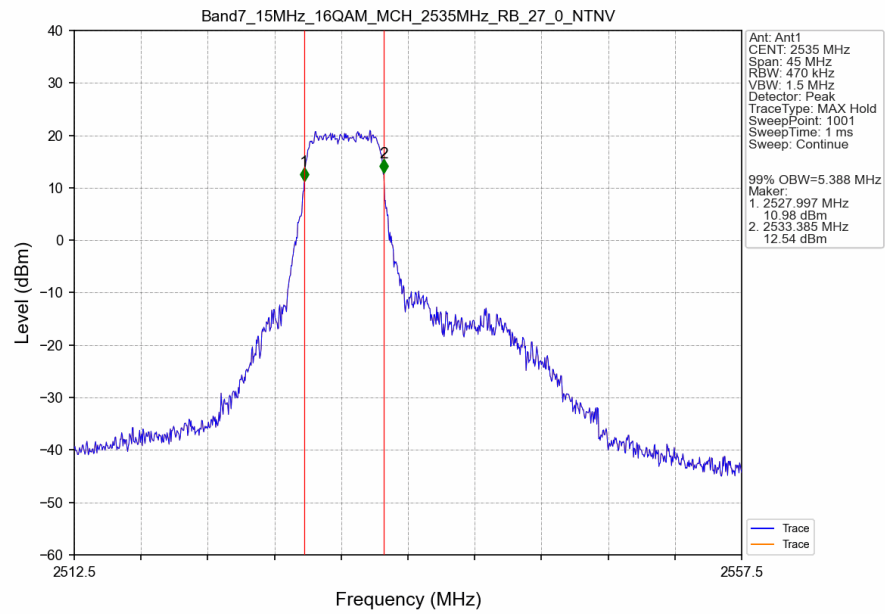
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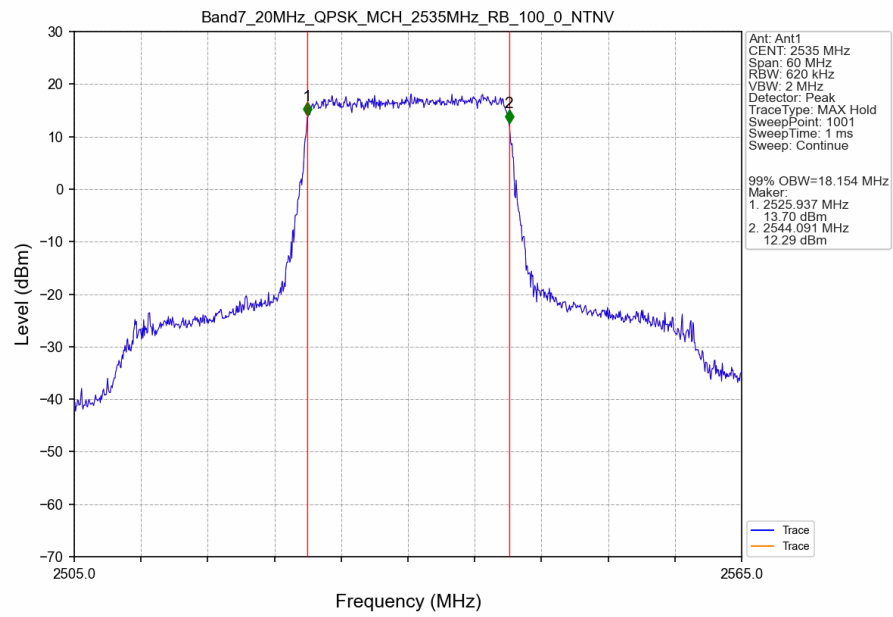
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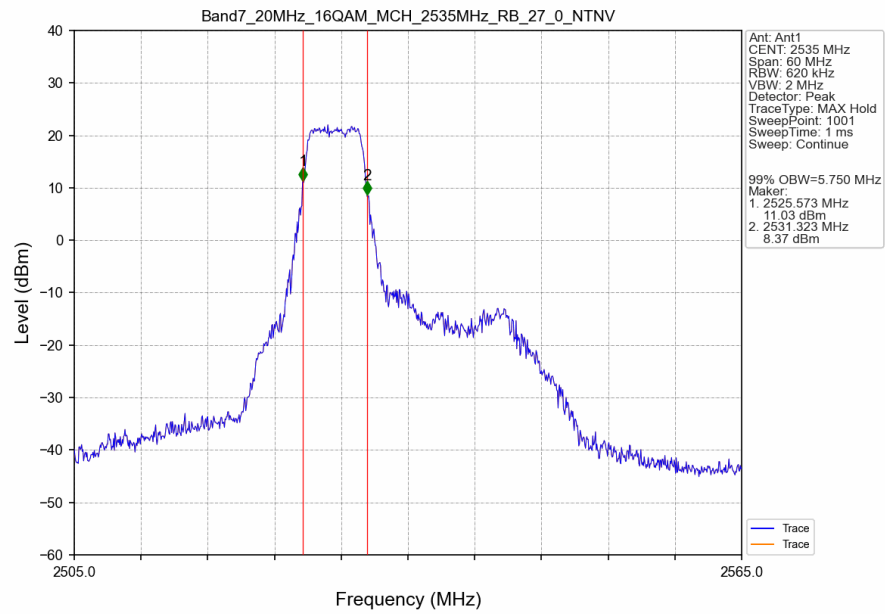
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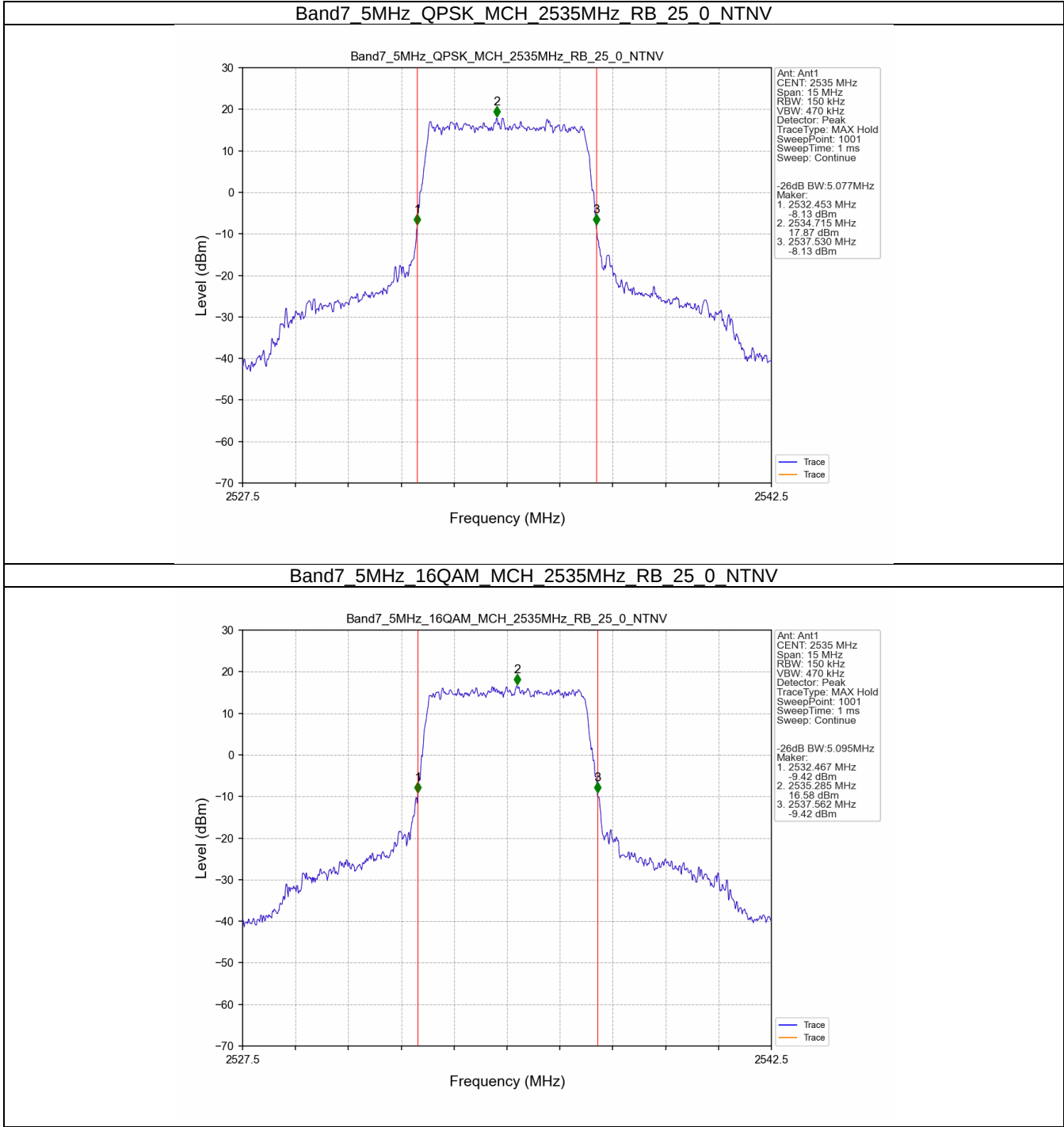
Band7_20MHz_QPSK_MCH_2535MHz_RB_100_0_NTNV



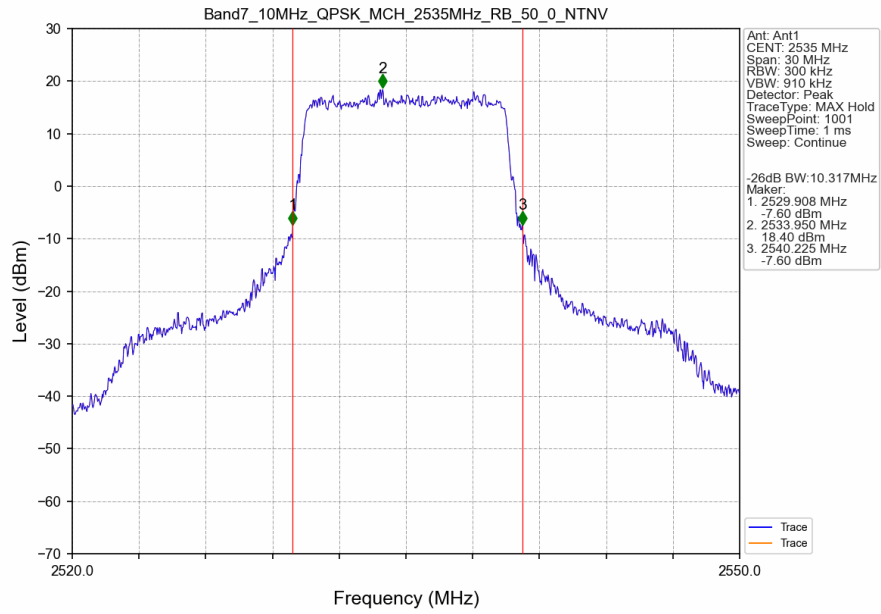
Band7_20MHz_16QAM_MCH_2535MHz_RB_27_0_NTNV



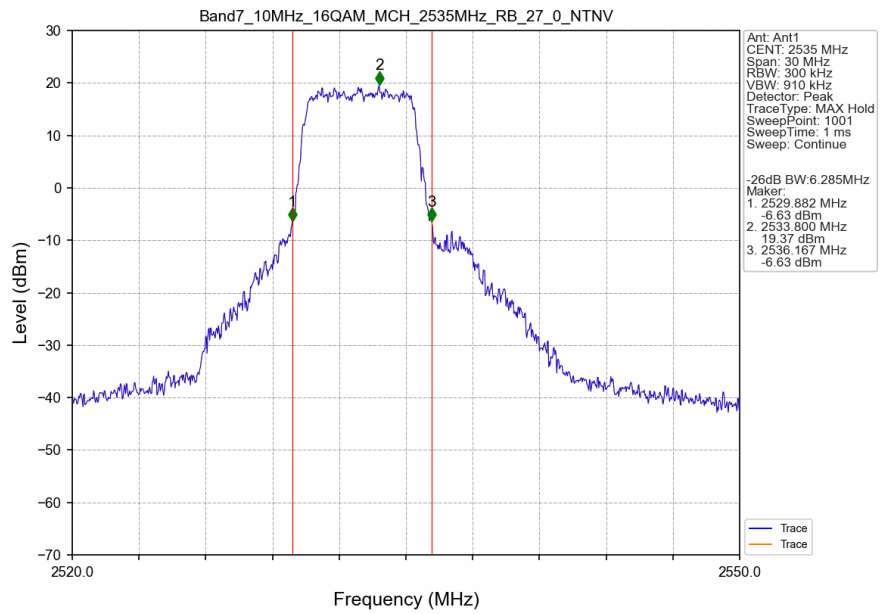
3.2.2 Band7_XDB



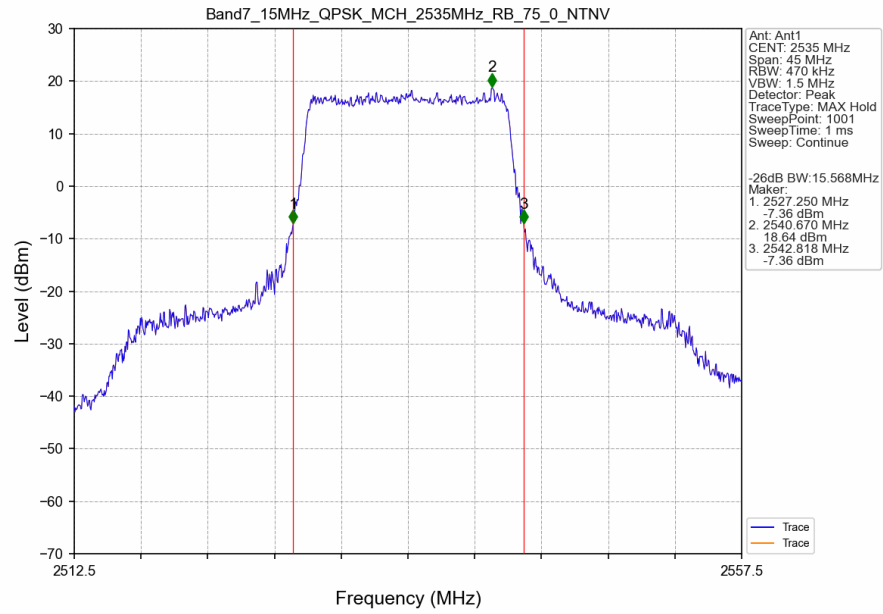
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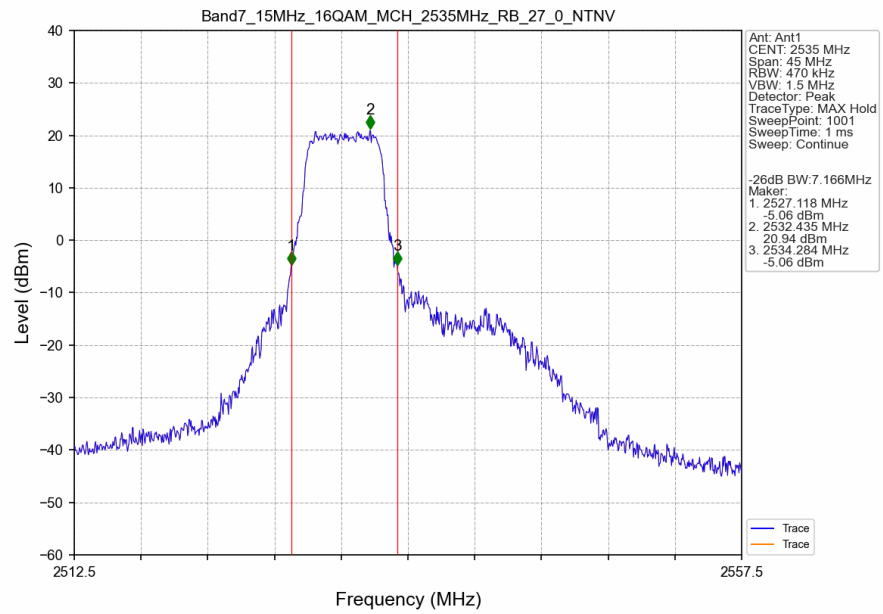
Band7_10MHz_16QAM_MCH_2535MHz_RB_27_0_NTNV



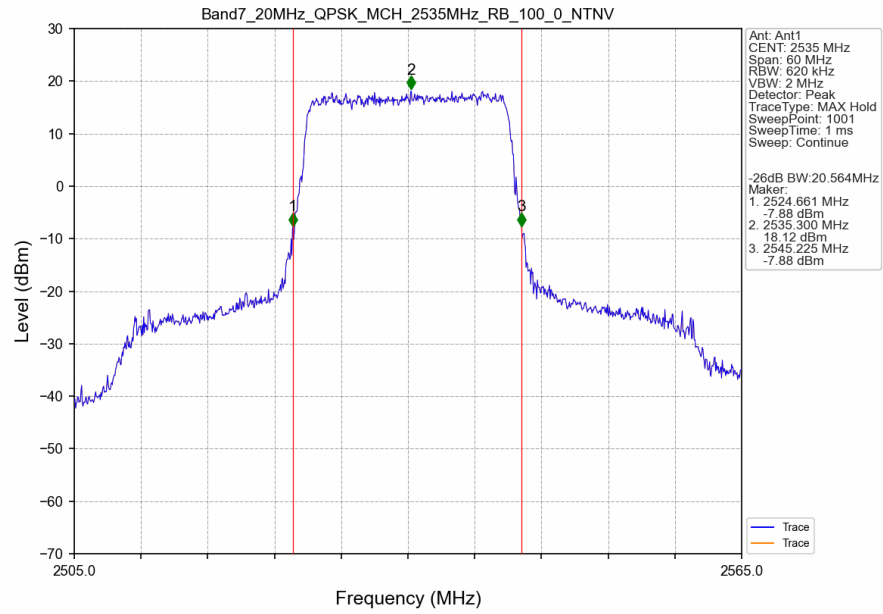
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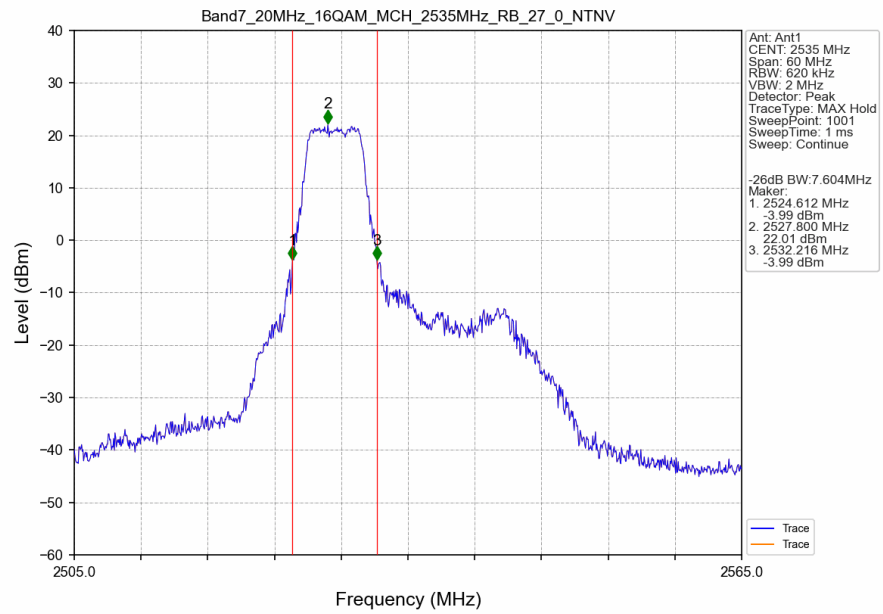
Band7_15MHz_16QAM_MCH_2535MHz_RB_27_0_NTNV



Band7_20MHz_QPSK_MCH_2535MHz_RB_100_0_NTNV



Band7_20MHz_16QAM_MCH_2535MHz_RB_27_0_NTNV



4. Peak-Average Ratio

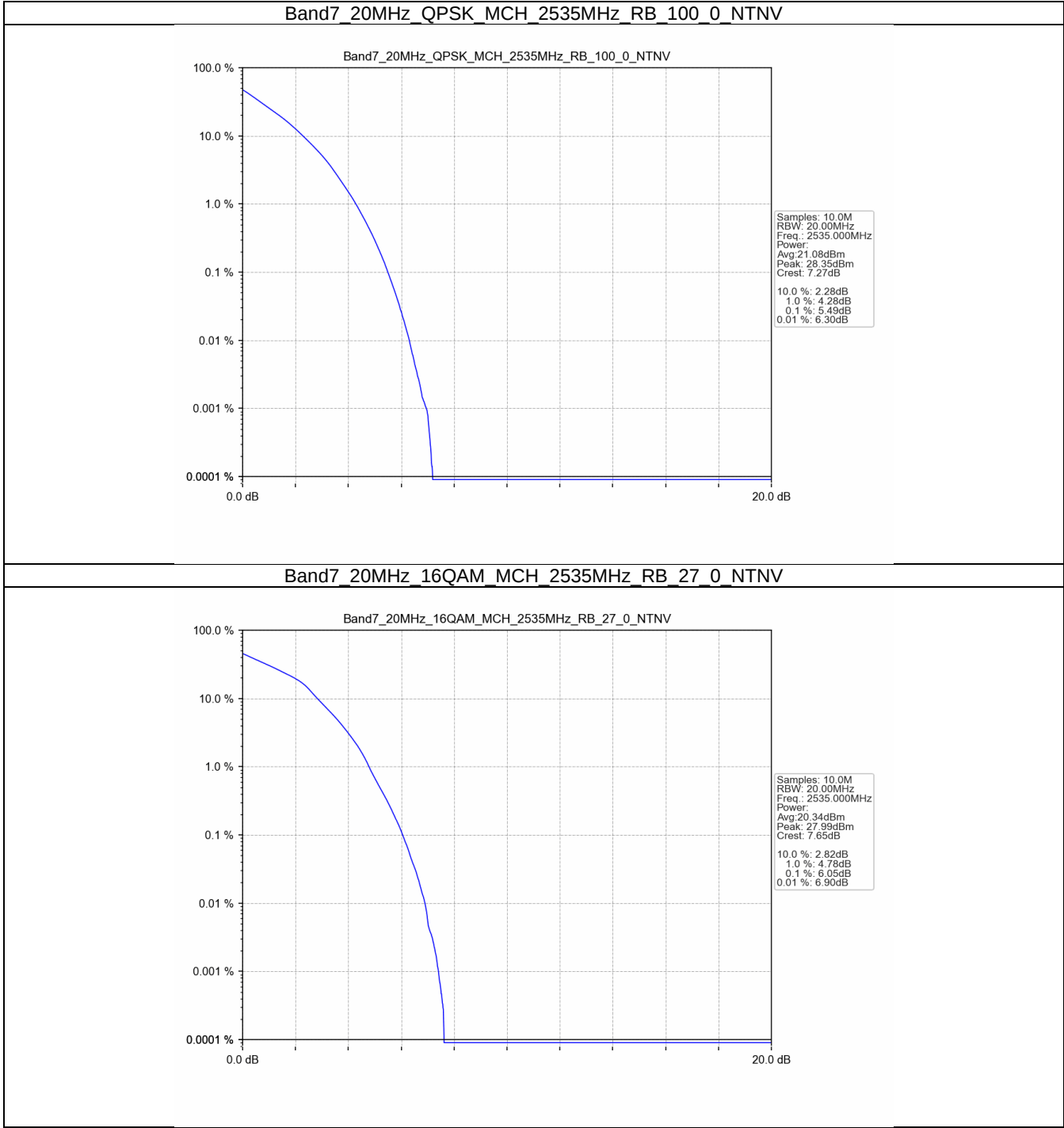
4.1 Test Result

4.1.1 B7_20MHz

Band: 7 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	2535	100	0	5.49	<=13	Pass
16QAM	2535	27	0	6.05	<=13	Pass

4.2 Test Graph

4.2.1 B7_20MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B7_5MHz

Band: 7 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	2502.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	2535	1	0	Refer To Test Graph		Pass
		2567.5	1	0	Refer To Test Graph	
	24			Refer To Test Graph		Pass
	25		0	Refer To Test Graph		Pass

5.1.2 B7_10MHz

Band: 7 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	2505	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	2535	1	0	Refer To Test Graph		Pass
		2565	1	0	Refer To Test Graph	
	49			Refer To Test Graph		Pass
	50		0	Refer To Test Graph		Pass

5.1.3 B7_15MHz

Band: 7 / Bandwidth: 15MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	2507.5	1	0	Refer To Test Graph		Pass
		75	0	Refer To Test Graph		Pass
	2535	1	0	Refer To Test Graph		Pass
	2562.5	1	0	Refer To Test Graph		Pass
			74	Refer To Test Graph		Pass
		75	0	Refer To Test Graph		Pass

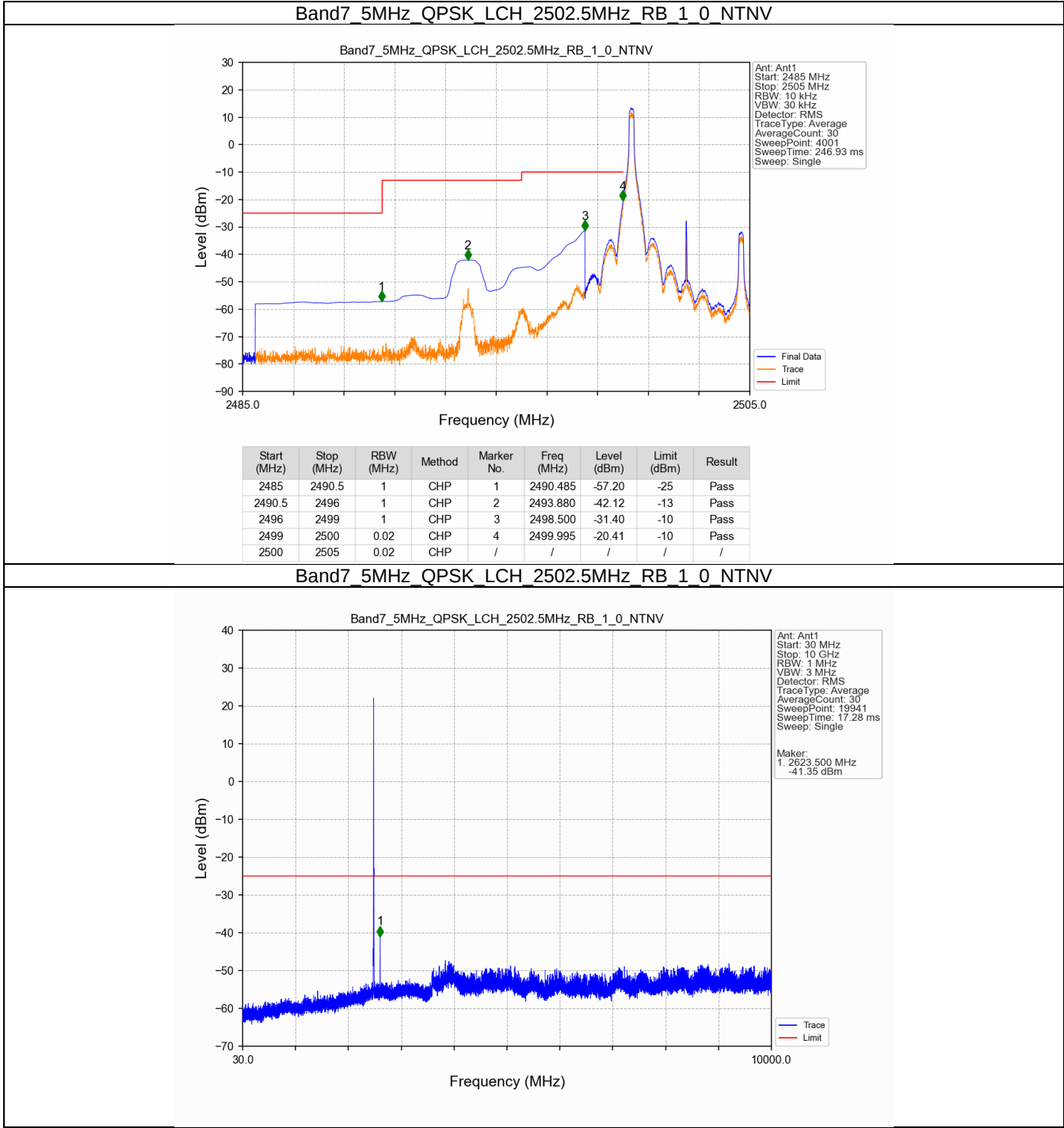
5.1.4 B7_20MHz

Band: 7 / Bandwidth: 20MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	2510	1	0	Refer To Test Graph		Pass
		100	0	Refer To Test Graph		Pass
	2535	1	0	Refer To Test Graph		Pass

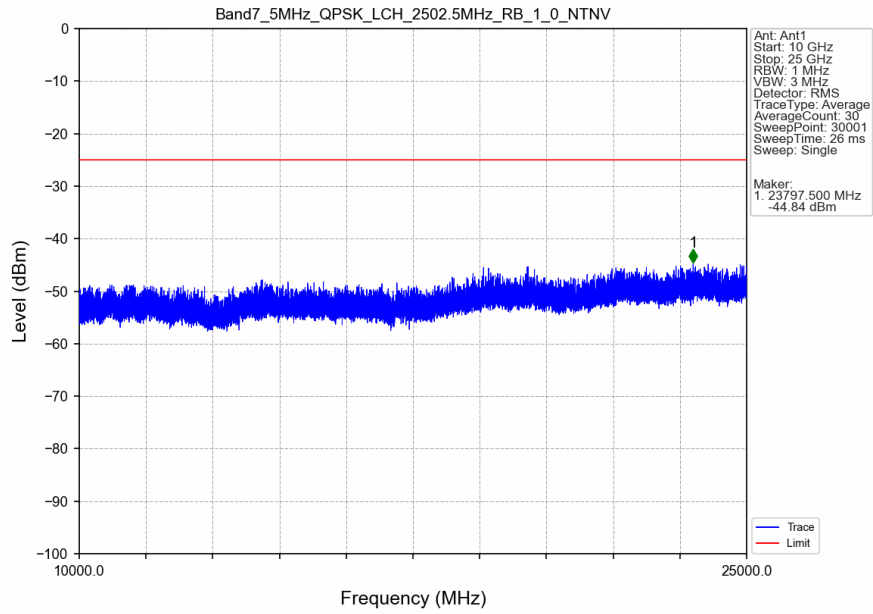
	2560	1	0	Refer To Test Graph	Pass
			99	Refer To Test Graph	Pass
		100	0	Refer To Test Graph	Pass

5.2 Test Graph

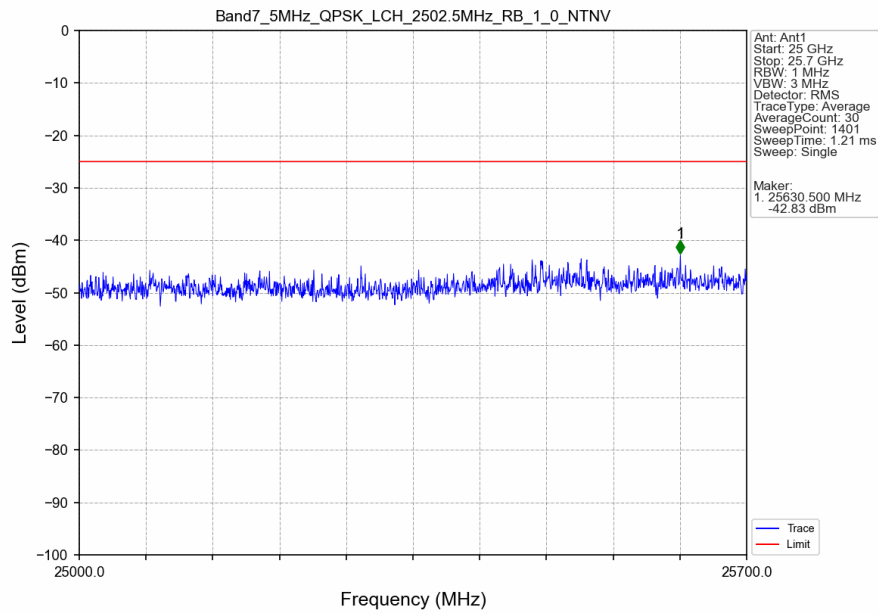
5.2.1 B7_5MHz



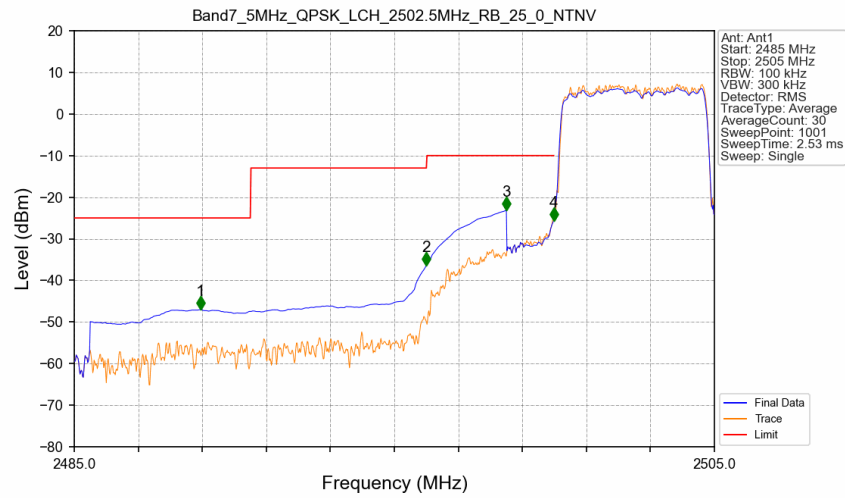
Band7 5MHz QPSK LCH 2502.5MHz RB 1 0 NTN



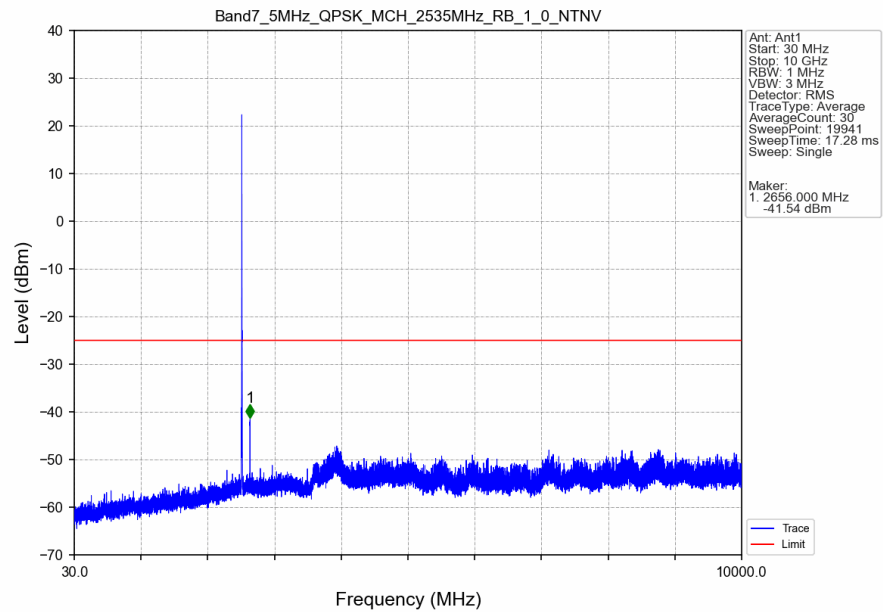
Band7 5MHz QPSK LCH 2502.5MHz RB 1 0 NTN



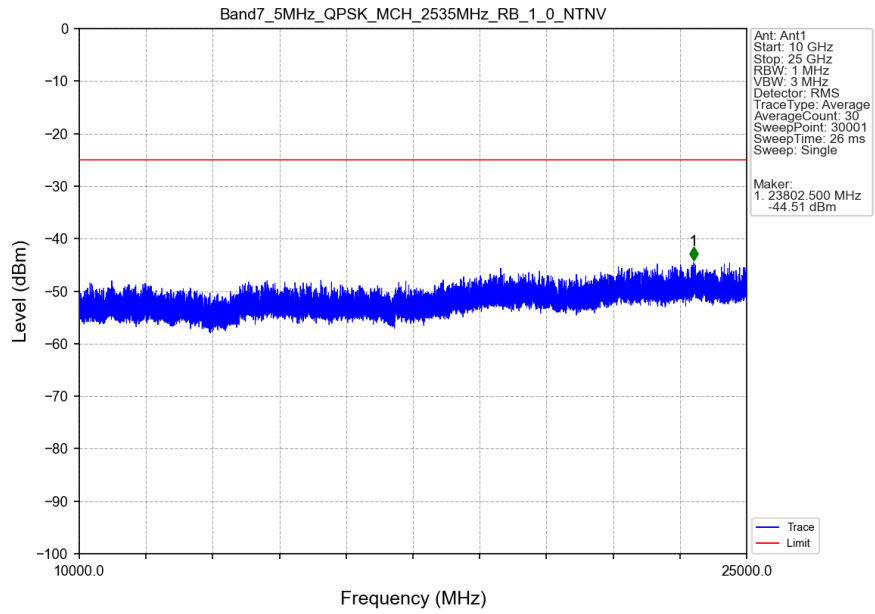
Band7 5MHz QPSK LCH 2502.5MHz RB 25 0 NTNV



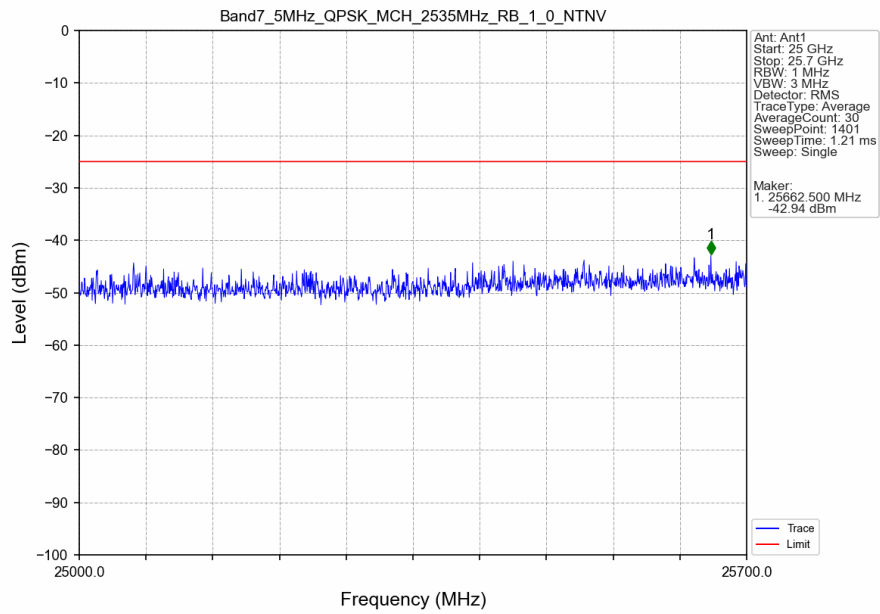
Band7 5MHz QPSK MCH 2535MHz RB 1 0 NTNV



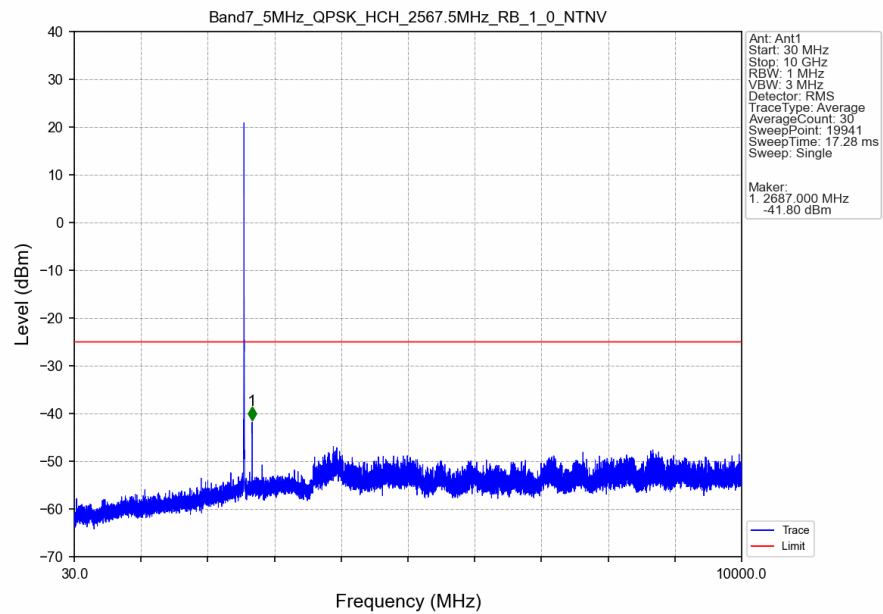
Band7_5MHz_QPSK_MCH_2535MHz_RB_1_0_NTNV



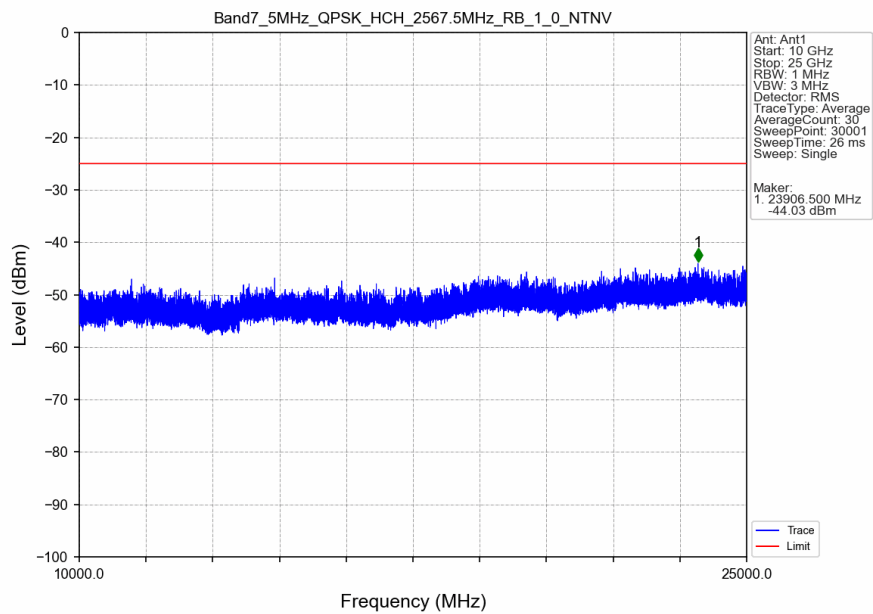
Band7_5MHz_QPSK_MCH_2535MHz_RB_1_0_NTNV



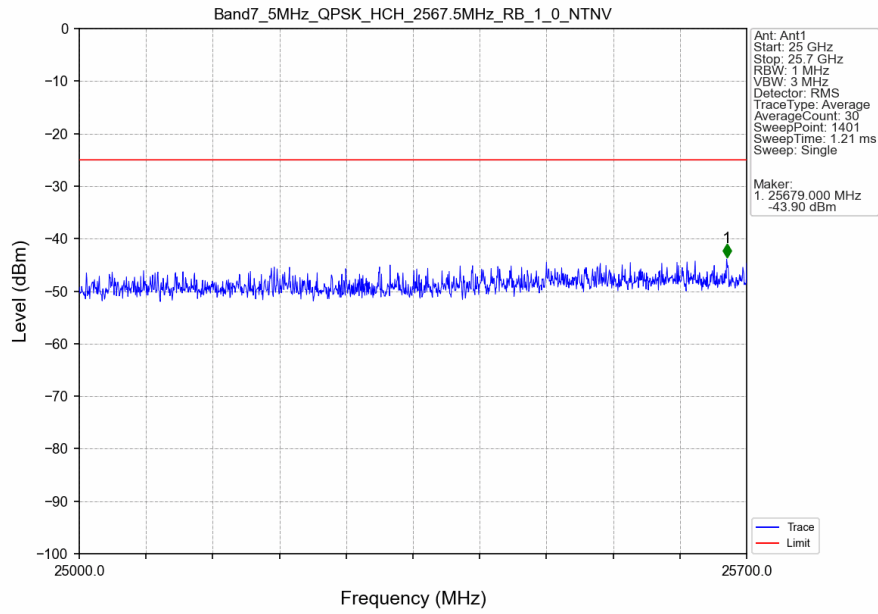
Band7 5MHz QPSK HCH 2567.5MHz RB 1 0 NTN



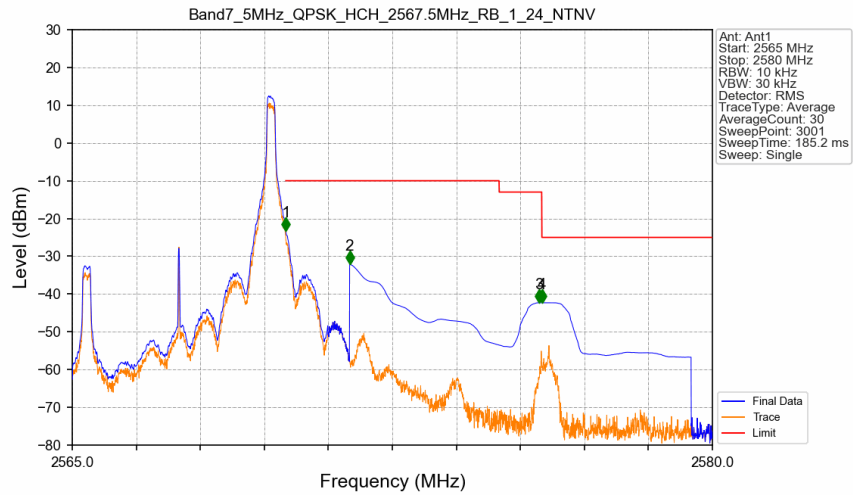
Band7 5MHz QPSK HCH 2567.5MHz RB 1 0 NTN



Band7_5MHz_QPSK_HCH_2567.5MHz_RB_1_0_NTNV

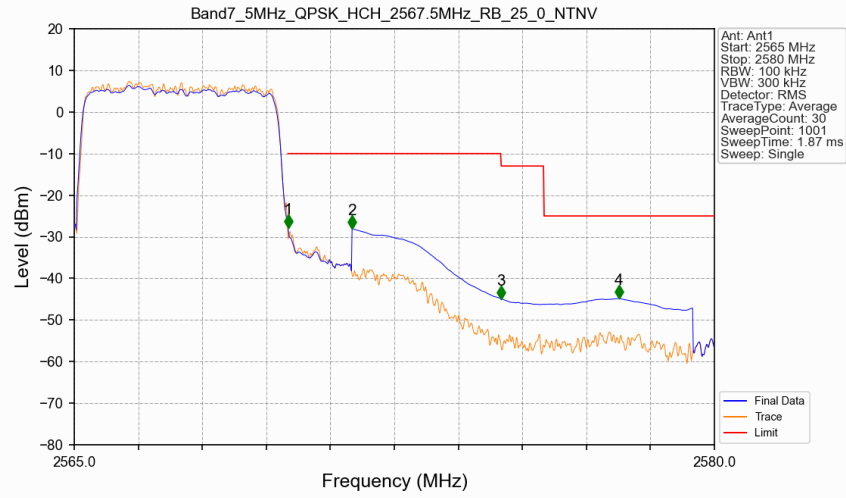


Band7_5MHz_QPSK_HCH_2567.5MHz_RB_1_24_NTNV



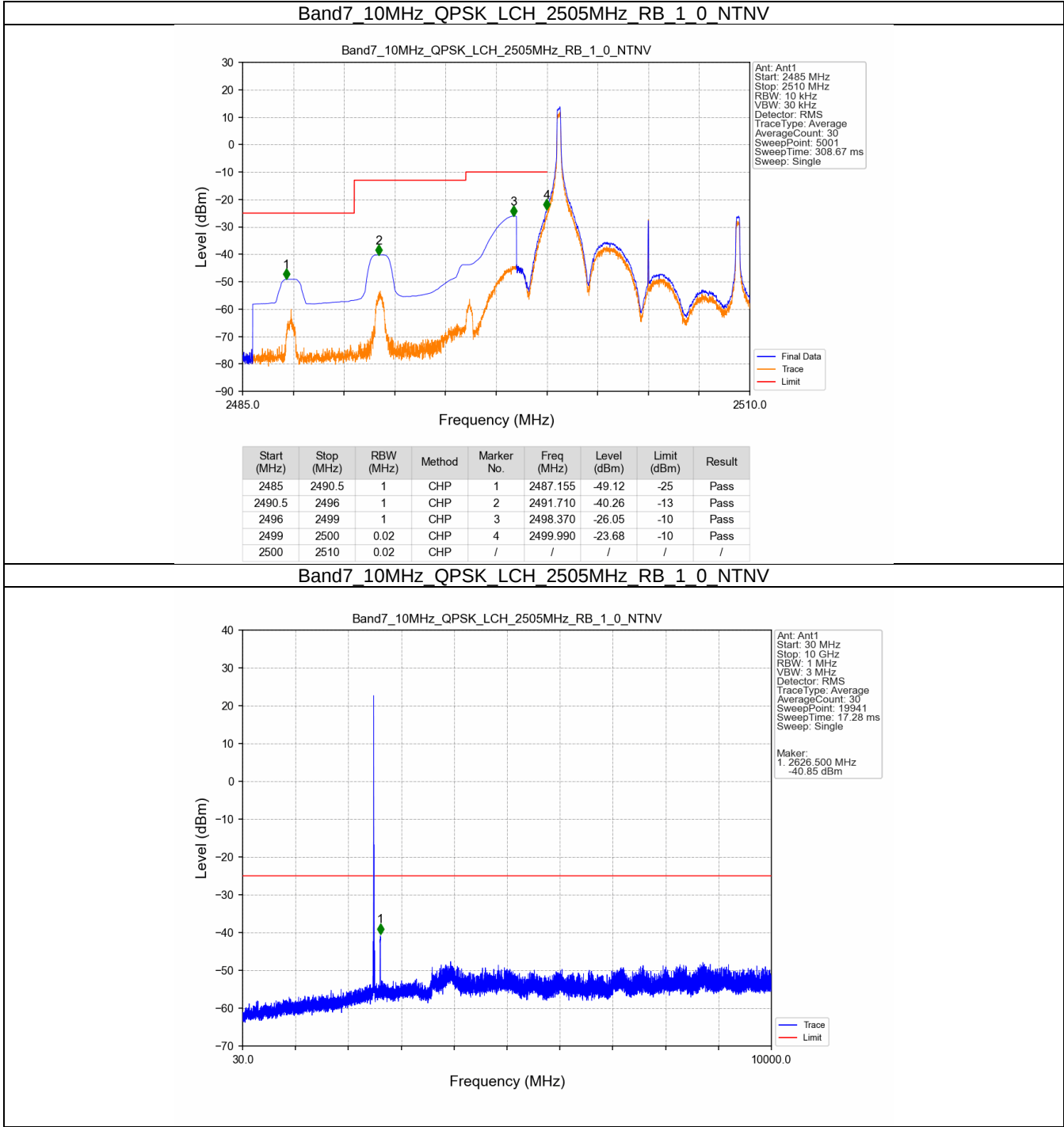
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2565	2570	0.02	CHP	/	/	/	/	/
2570	2571	0.02	CHP	1	2570.005	-23.15	-10	Pass
2571	2575	1	CHP	2	2571.500	-32.05	-10	Pass
2575	2576	1	CHP	3	2575.945	-42.29	-13	Pass
2576	2580	1	CHP	4	2576.005	-42.29	-25	Pass

Band7 5MHz QPSK HCH 2567.5MHz RB 25_0_NTNV

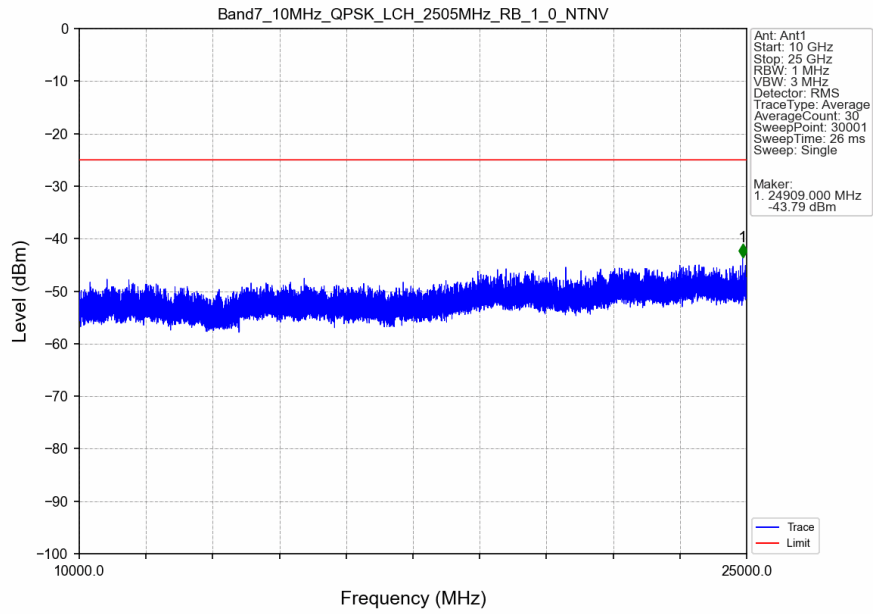


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2565	2570	0.102	CHP	/	/	/	/	/
2570	2571	0.102	CHP	1	2570.010	-27.79	-10	Pass
2571	2575	1	CHP	2	2571.510	-28.07	-10	Pass
2575	2576	1	CHP	3	2575.005	-44.91	-13	Pass
2576	2580	1	CHP	4	2577.765	-44.84	-25	Pass

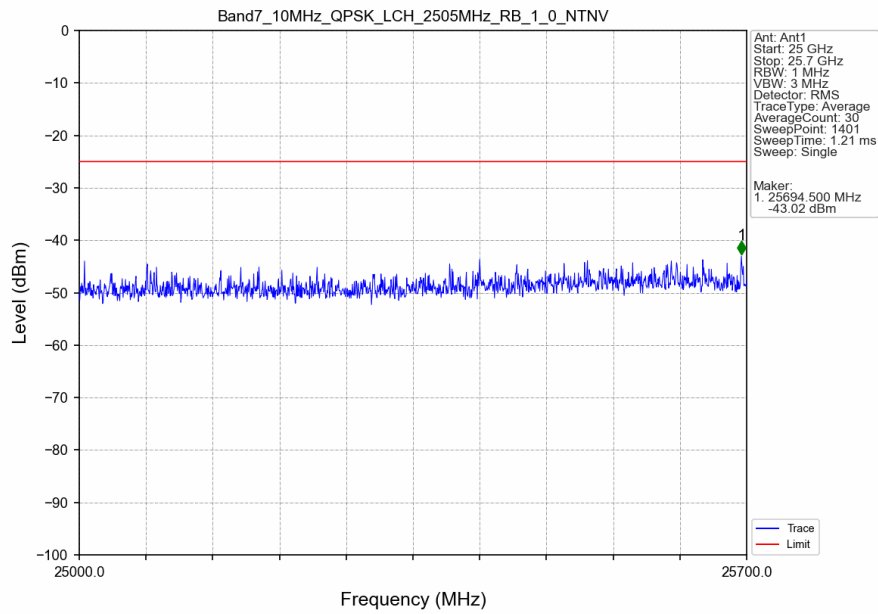
5.2.2 B7_10MHz



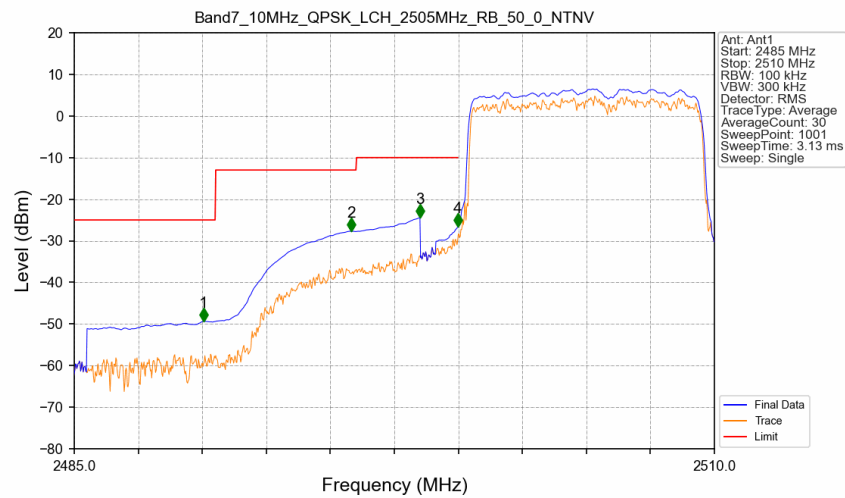
Band7_10MHz_QPSK_LCH_2505MHz_RB_1_0_NTNV



Band7_10MHz_QPSK_LCH_2505MHz_RB_1_0_NTNV

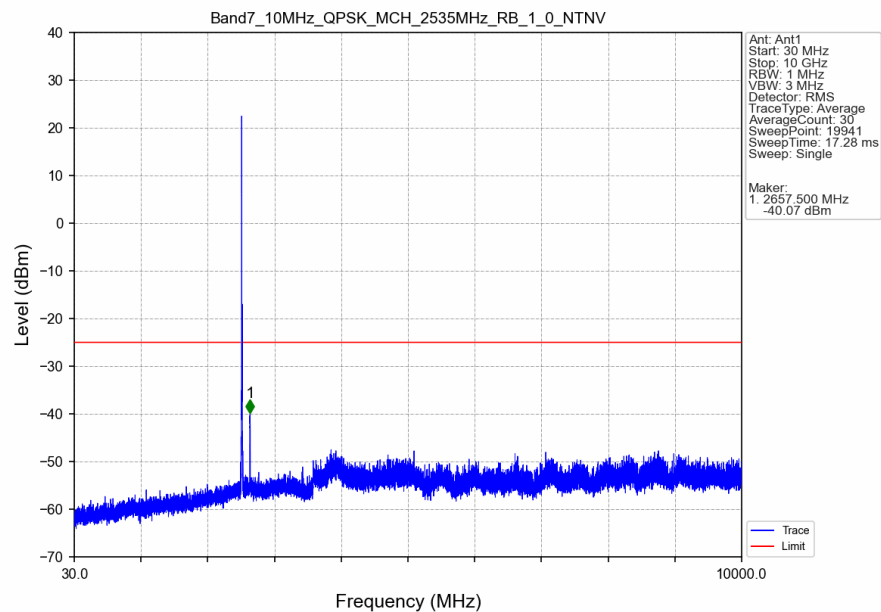


Band7 10MHz QPSK LCH 2505MHz RB 50 0 NTN

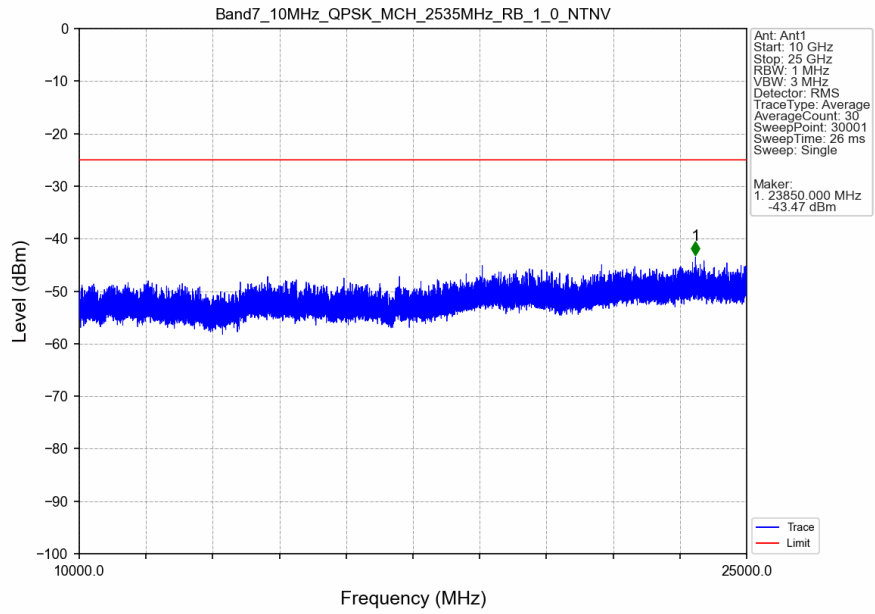


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2485	2490.5	1	CHP	1	2490.050	-49.34	-25	Pass
2490.5	2496	1	CHP	2	2495.825	-27.71	-13	Pass
2496	2499	1	CHP	3	2498.500	-24.35	-10	Pass
2499	2500	0.206	CHP	4	2499.975	-26.56	-10	Pass
2500	2510	0.206	CHP	/	/	/	/	/

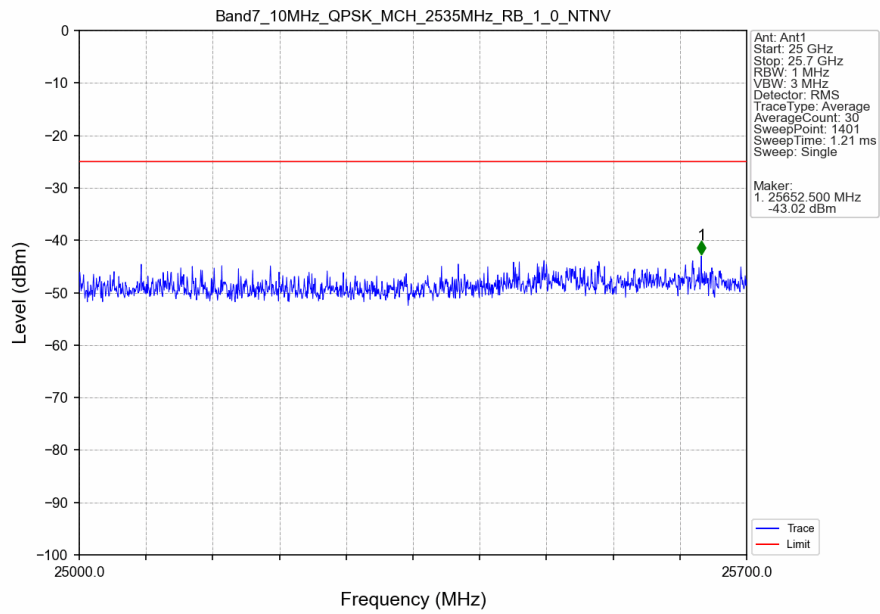
Band7 10MHz QPSK MCH 2535MHz RB 1 0 NTN



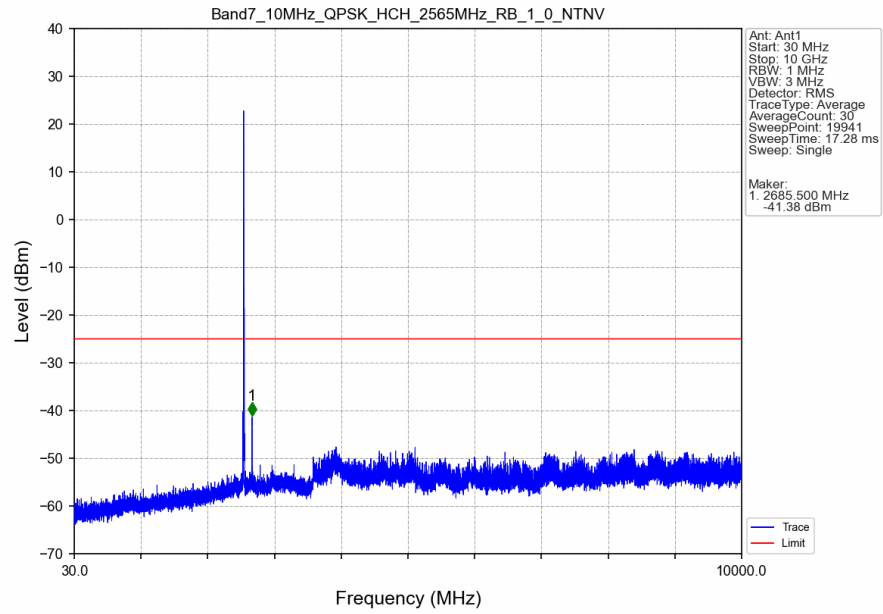
Band7_10MHz_QPSK_MCH_2535MHz_RB_1_0_NTNV



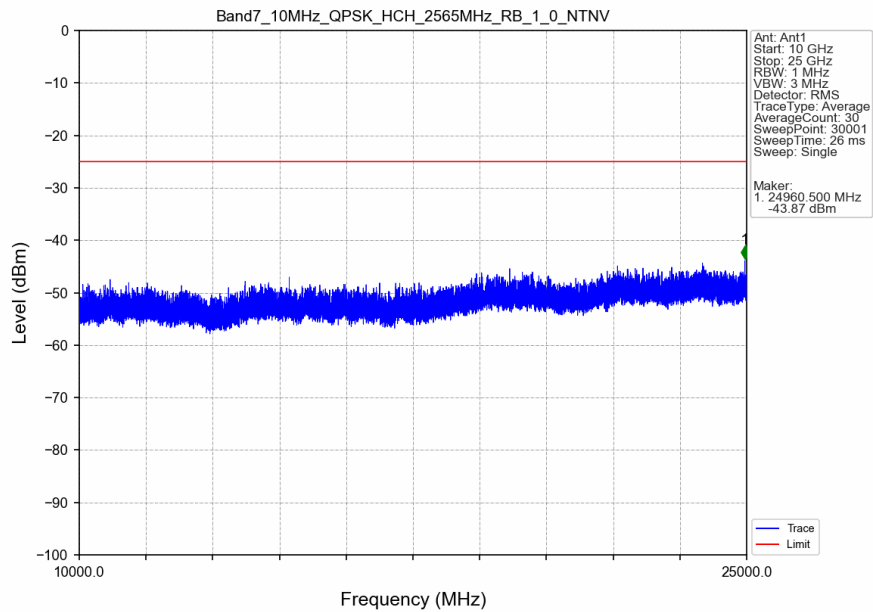
Band7_10MHz_QPSK_MCH_2535MHz_RB_1_0_NTNV



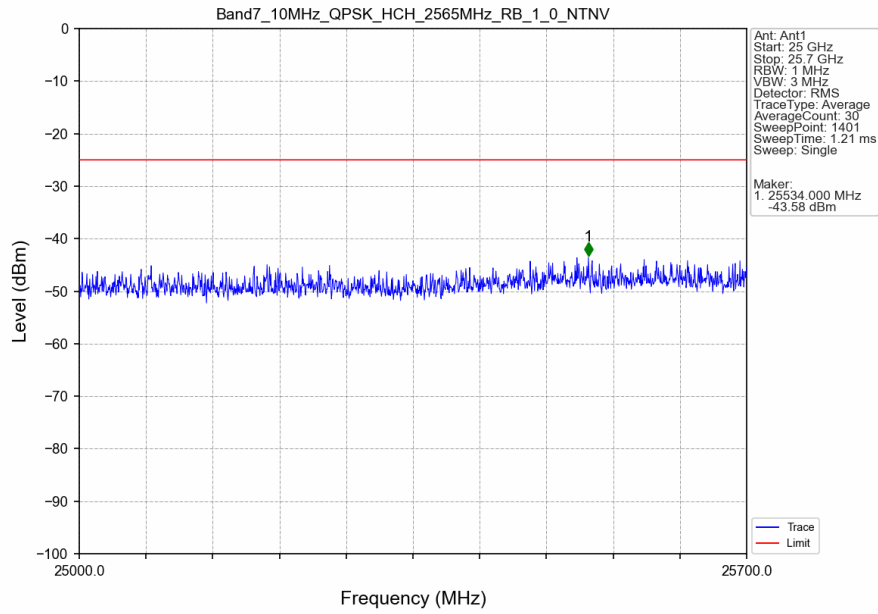
Band7_10MHz_QPSK_HCH_2565MHz_RB_1_0_NTNV



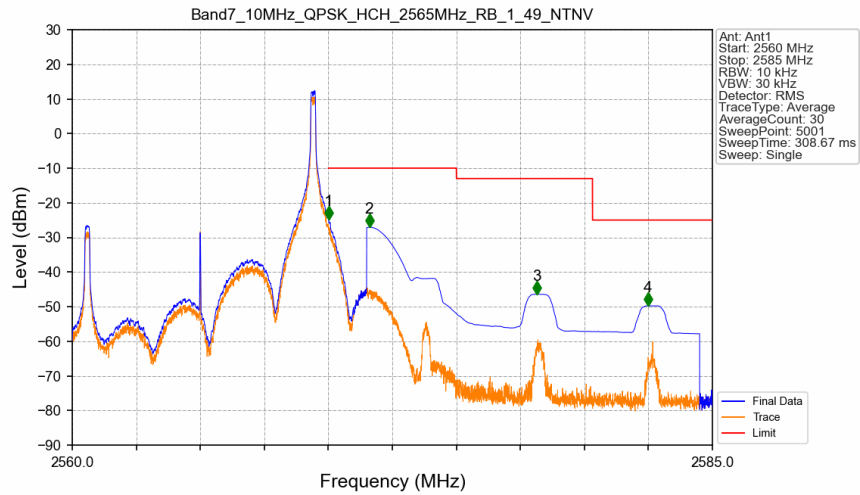
Band7_10MHz_QPSK_HCH_2565MHz_RB_1_0_NTNV



Band7_10MHz_QPSK_HCH_2565MHz_RB_1_0_NTNV

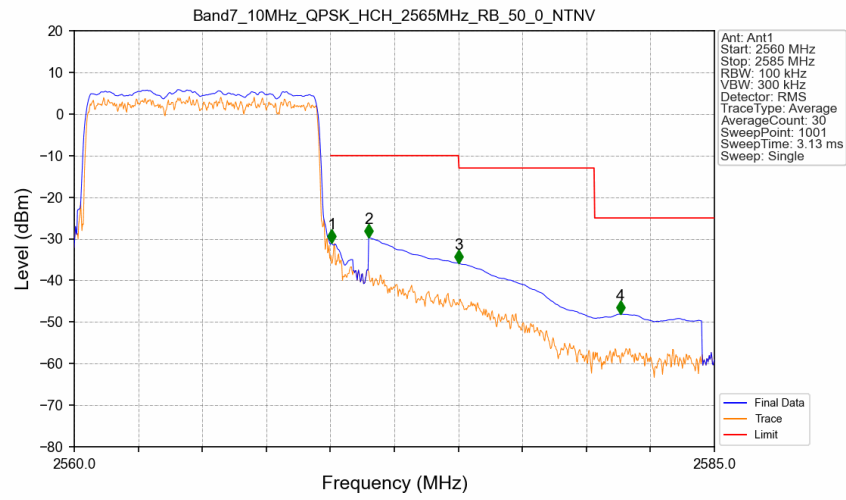


Band7_10MHz_QPSK_HCH_2565MHz_RB_1_49_NTNV



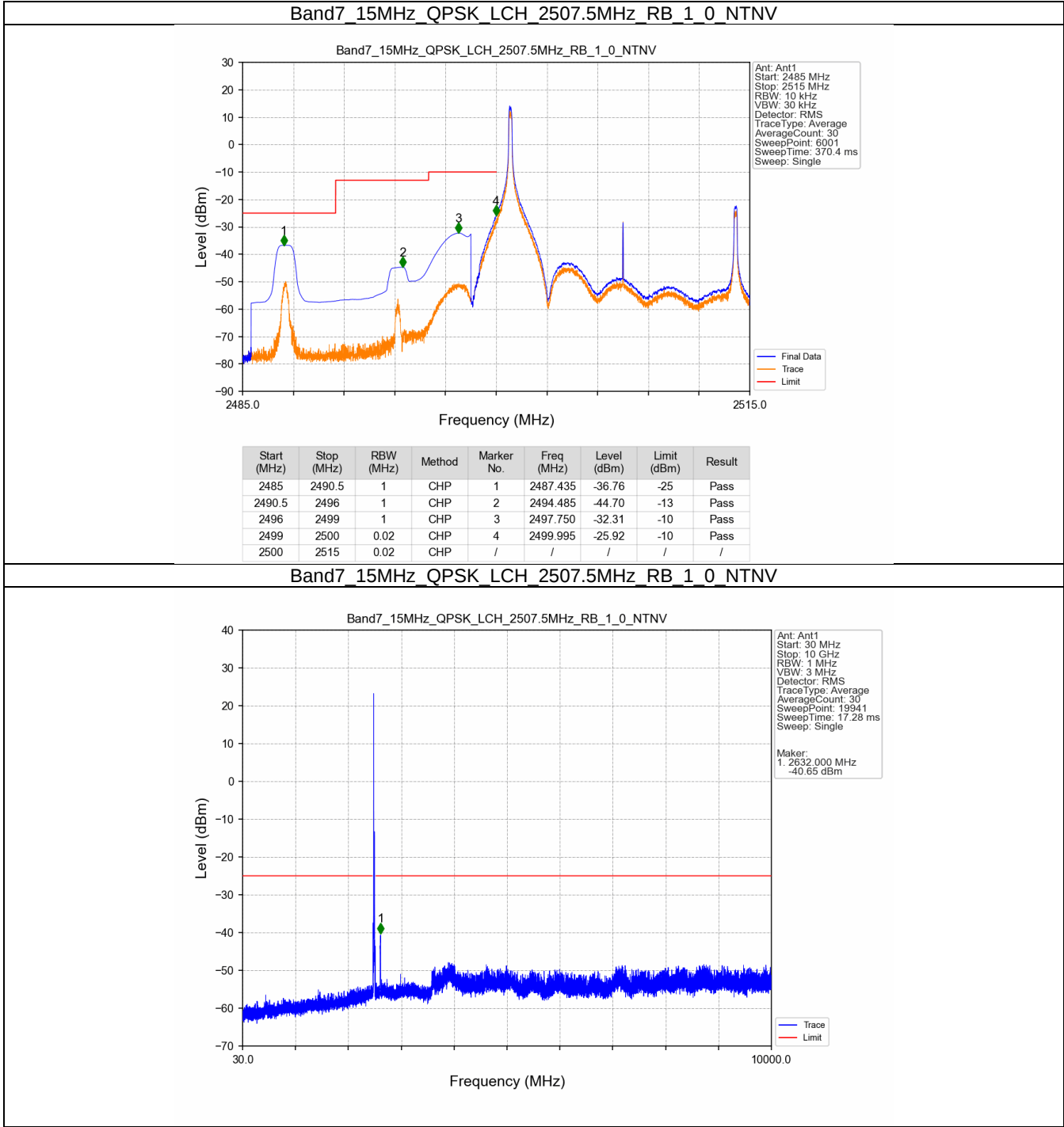
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2560	2570	0.02	CHP	/	/	/	/	/
2570	2571	0.02	CHP	1	2570.005	-24.75	-10	Pass
2571	2575	1	CHP	2	2571.600	-27.07	-10	Pass
2575	2580.317	1	CHP	3	2578.155	-46.42	-13	Pass
2580.317	2585	1	CHP	4	2582.480	-49.77	-25	Pass

Band7 10MHz QPSK HCH 2565MHz RB 50 0 NTN

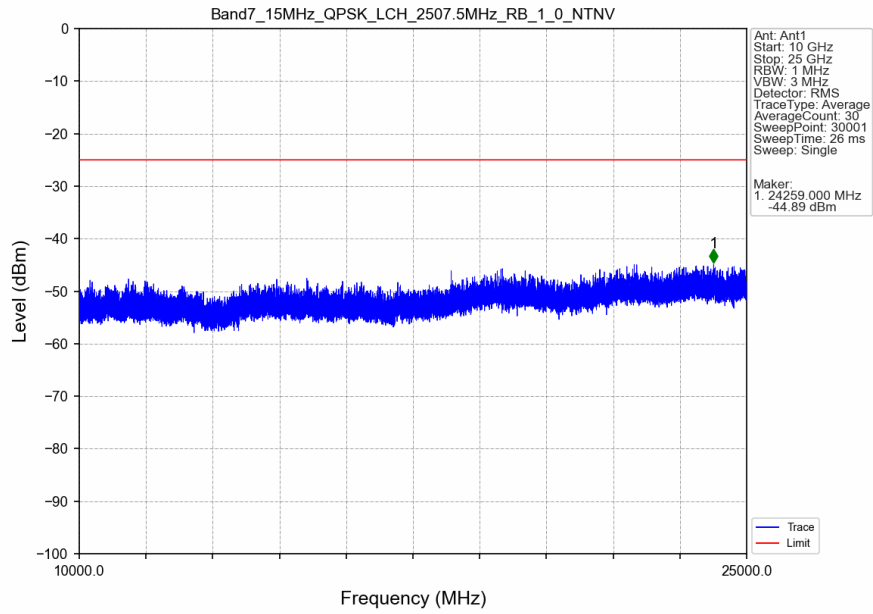


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2560	2570	0.206	CHP	/	/	/	/	/
2570	2571	0.206	CHP	1	2570.050	-31.01	-10	Pass
2571	2575	1	CHP	2	2571.500	-29.73	-10	Pass
2575	2580.317	1	CHP	3	2575.025	-35.88	-13	Pass
2580.317	2585	1	CHP	4	2581.325	-48.12	-25	Pass

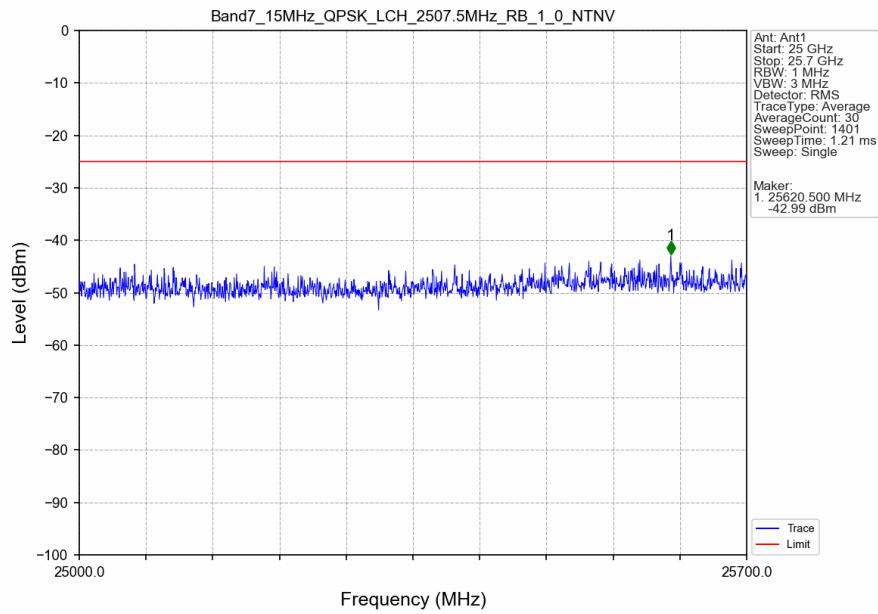
5.2.3 B7_15MHz



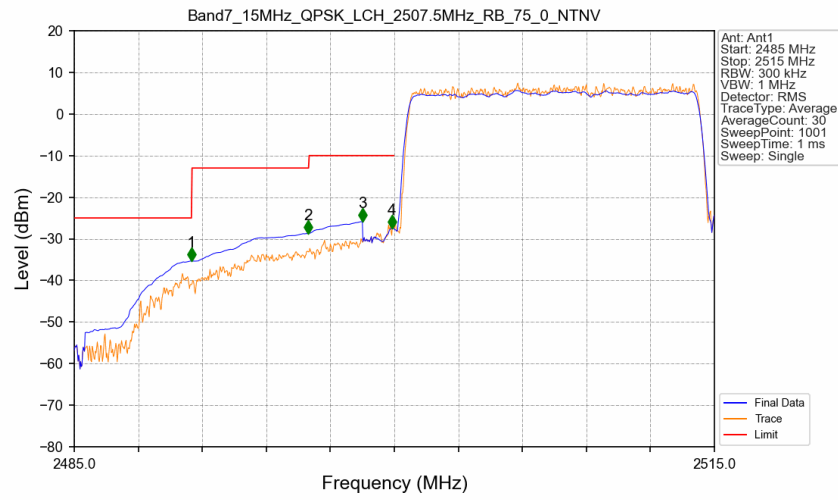
Band7_15MHz_QPSK_LCH_2507.5MHz_RB_1_0_NTNV



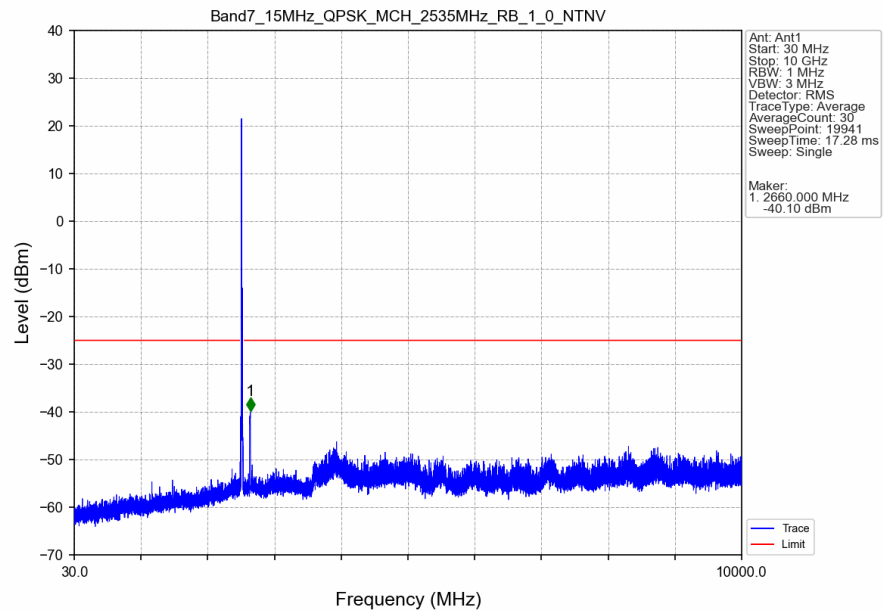
Band7_15MHz_QPSK_LCH_2507.5MHz_RB_1_0_NTNV



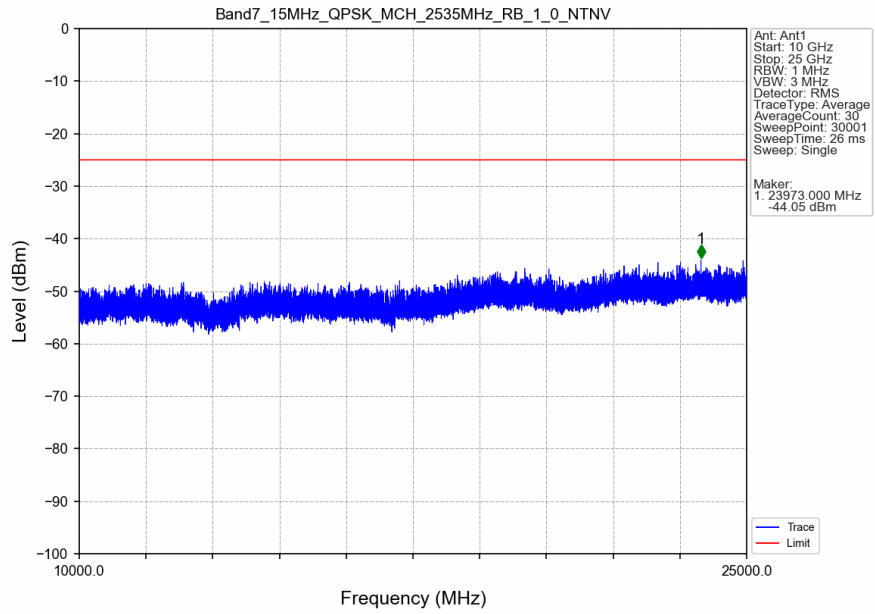
Band7_15MHz_QPSK_LCH_2507.5MHz_RB_75_0_NTNV



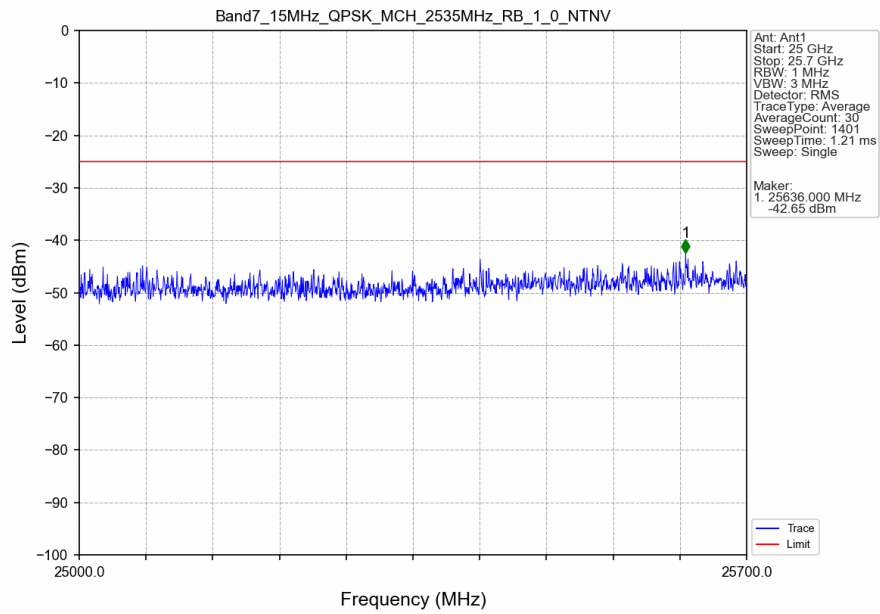
Band7_15MHz_QPSK_MCH_2535MHz_RB_1_0_NTNV



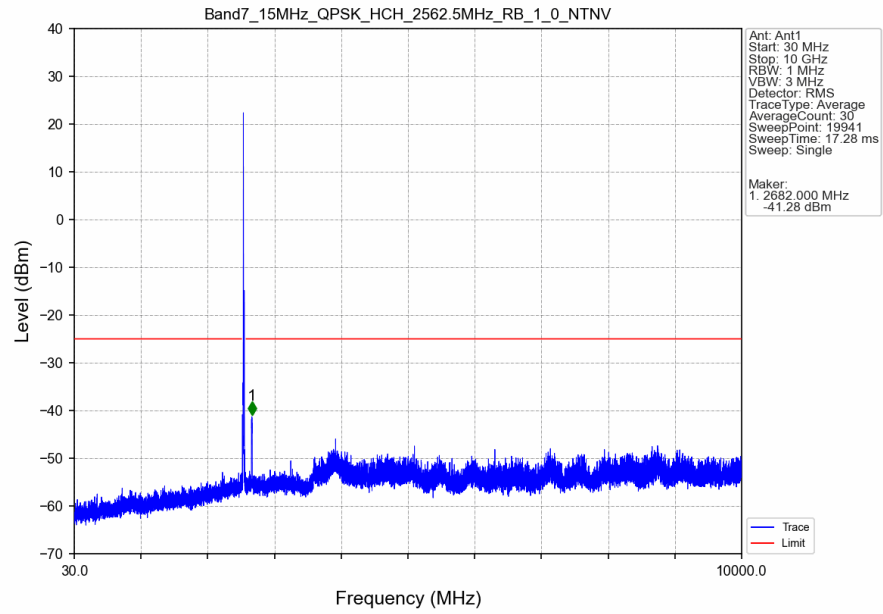
Band7_15MHz_QPSK_MCH_2535MHz_RB_1_0_NTNV



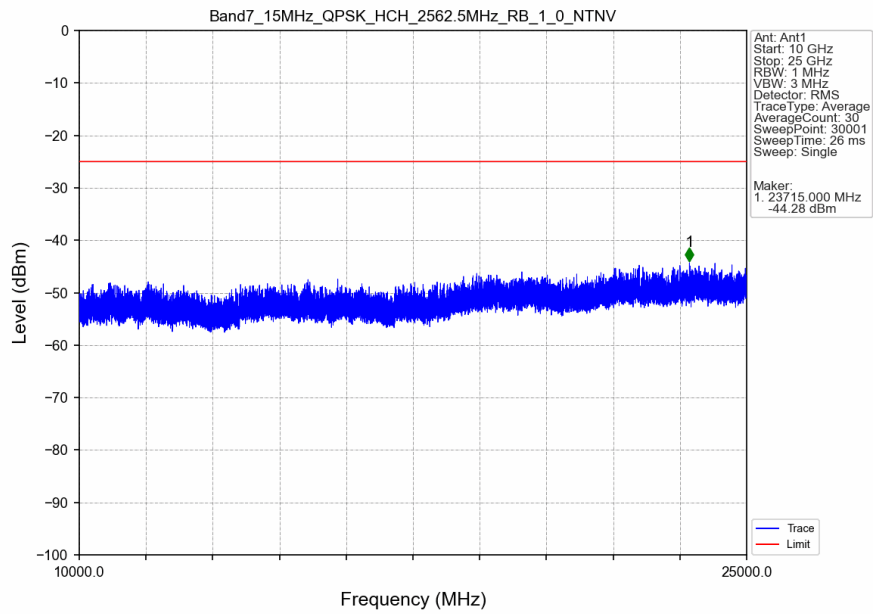
Band7_15MHz_QPSK_MCH_2535MHz_RB_1_0_NTNV



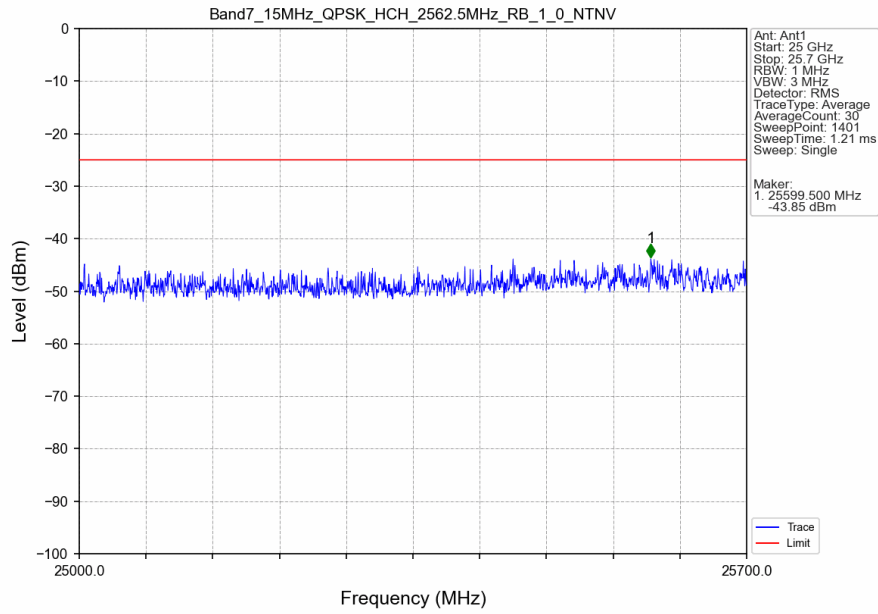
Band7_15MHz_QPSK_HCH_2562.5MHz_RB_1_0_NTNV



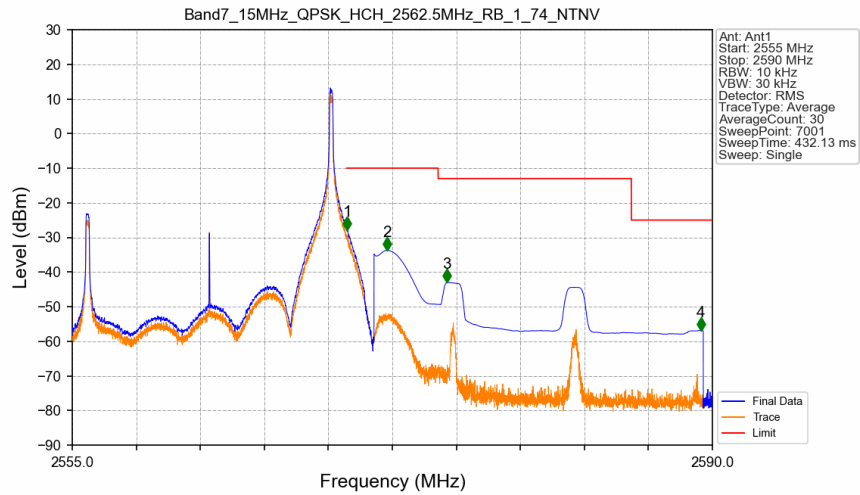
Band7_15MHz_QPSK_HCH_2562.5MHz_RB_1_0_NTNV



Band7_15MHz_QPSK_HCH_2562.5MHz_RB_1_0_NTNV

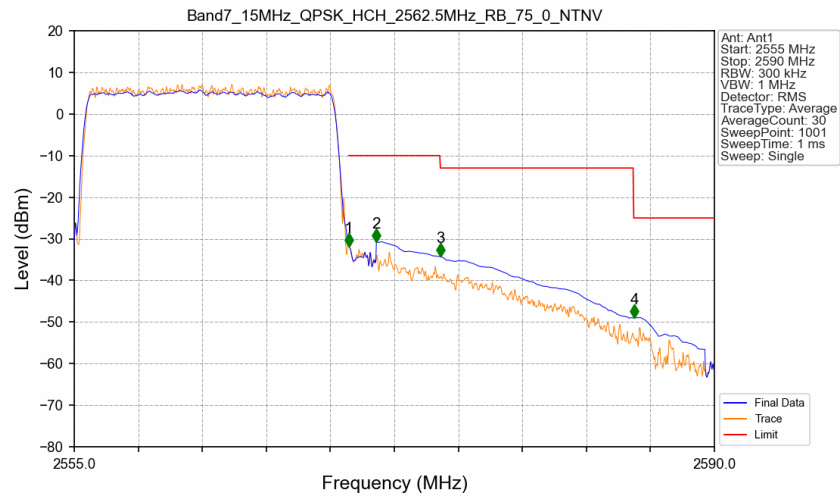


Band7_15MHz_QPSK_HCH_2562.5MHz_RB_1_74_NTNV



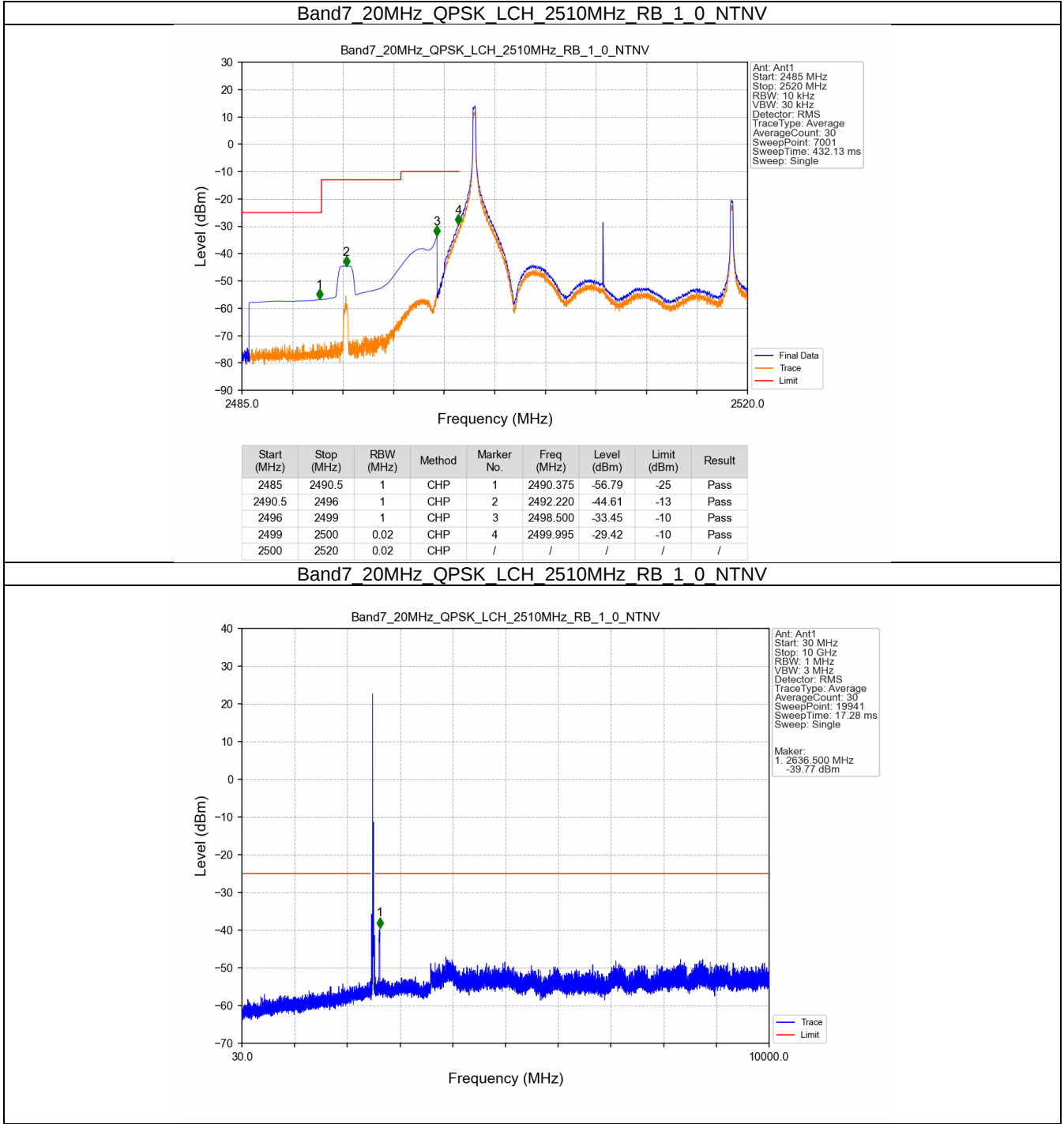
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2555	2570	0.02	CHP	/	/	/	/	/
2570	2571	0.02	CHP	1	2570.035	-27.78	-10	Pass
2571	2575	1	CHP	2	2572.220	-33.72	-10	Pass
2575	2585.568	1	CHP	3	2575.485	-43.00	-13	Pass
2585.568	2590	1	CHP	4	2589.370	-56.87	-25	Pass

Band7_15MHz_QPSK_HCH_2562.5MHz_RB_75_0_NTNV

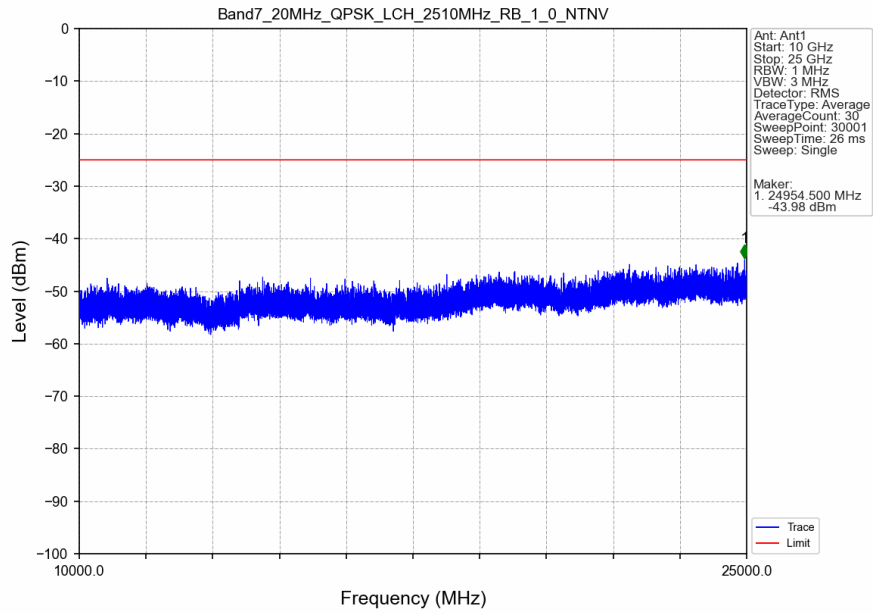


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2555	2570	0.311	CHP	/	/	/	/	/
2570	2571	0.311	CHP	1	2570.015	-31.82	-10	Pass
2571	2575	1	CHP	2	2571.520	-30.70	-10	Pass
2575	2585.568	1	CHP	3	2575.020	-34.31	-13	Pass
2585.568	2590	1	CHP	4	2585.625	-48.96	-25	Pass

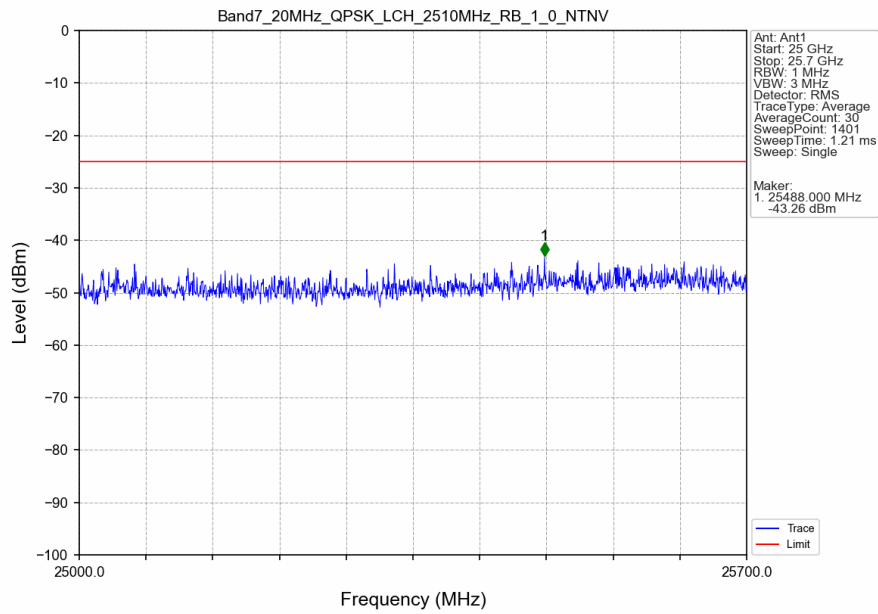
5.2.4 B7_20MHz



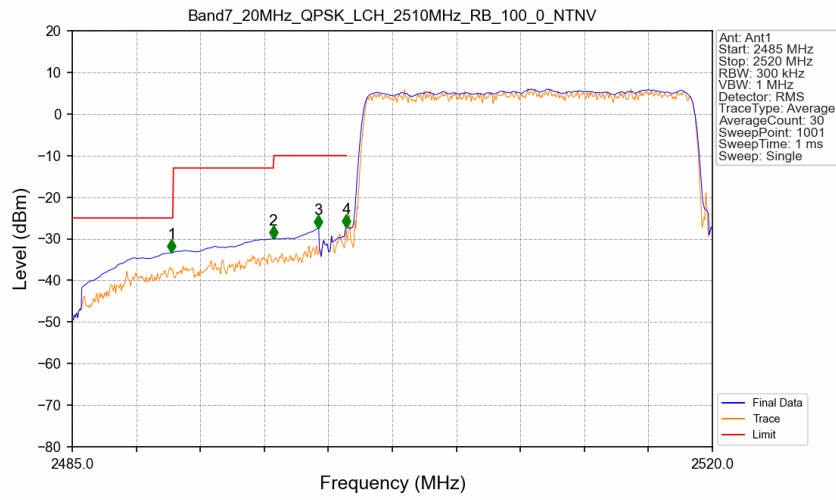
Band7_20MHz_QPSK_LCH_2510MHz_RB_1_0_NTNV



Band7_20MHz_QPSK_LCH_2510MHz_RB_1_0_NTNV

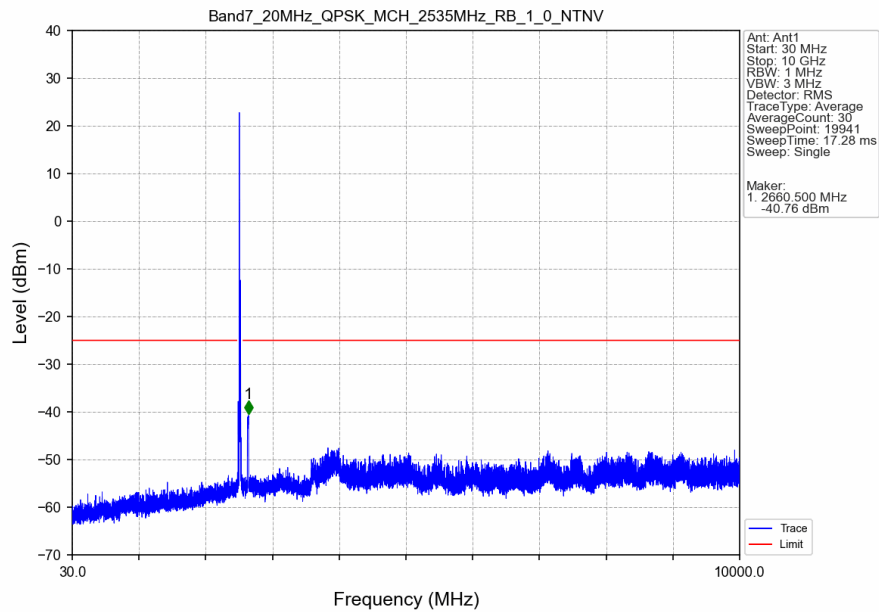


Band7_20MHz_QPSK_LCH_2510MHz_RB_100_0_NTNV

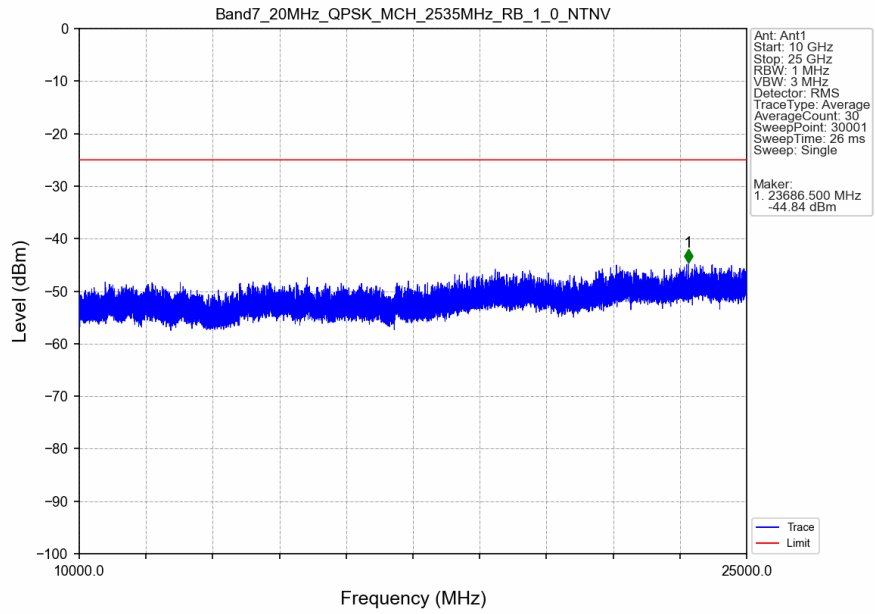


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2485	2490.5	1	CHP	1	2490.425	-33.31	-25	Pass
2490.5	2496	1	CHP	2	2495.990	-29.96	-13	Pass
2496	2499	1	CHP	3	2498.440	-27.55	-10	Pass
2499	2500	0.411	CHP	4	2499.980	-27.30	-10	Pass
2500	2520	0.411	CHP	/	/	/	/	/

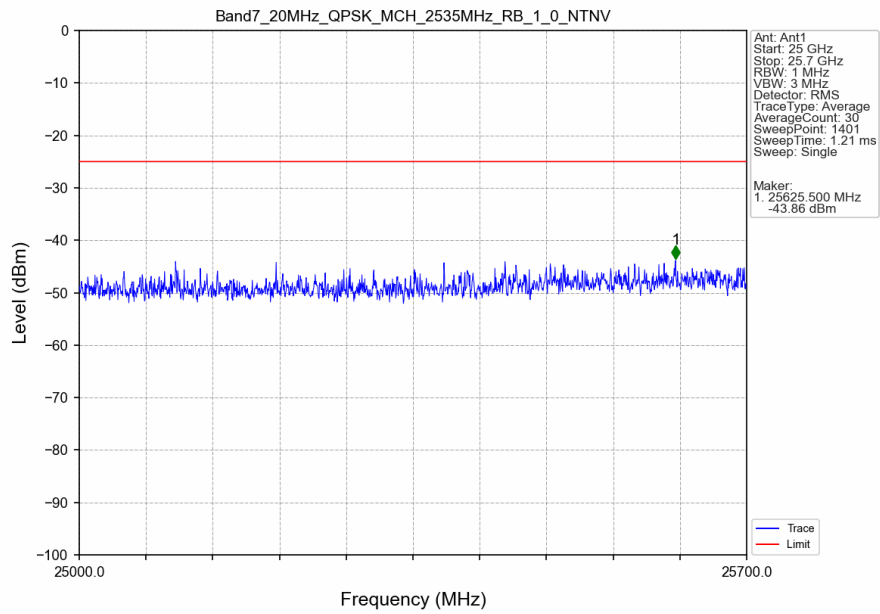
Band7_20MHz_QPSK_MCH_2535MHz_RB_1_0_NTNV



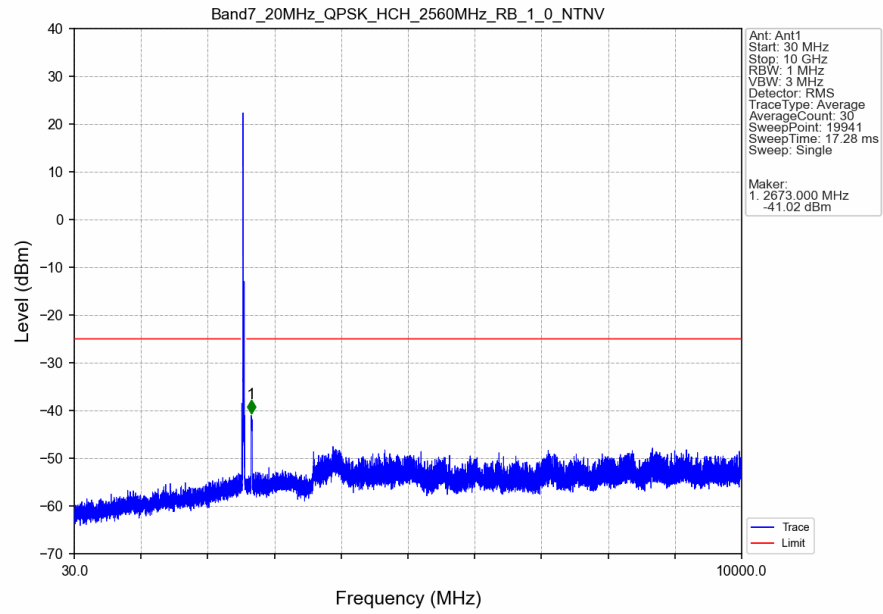
Band7 20MHz QPSK MCH 2535MHz RB 1 0 NTNV



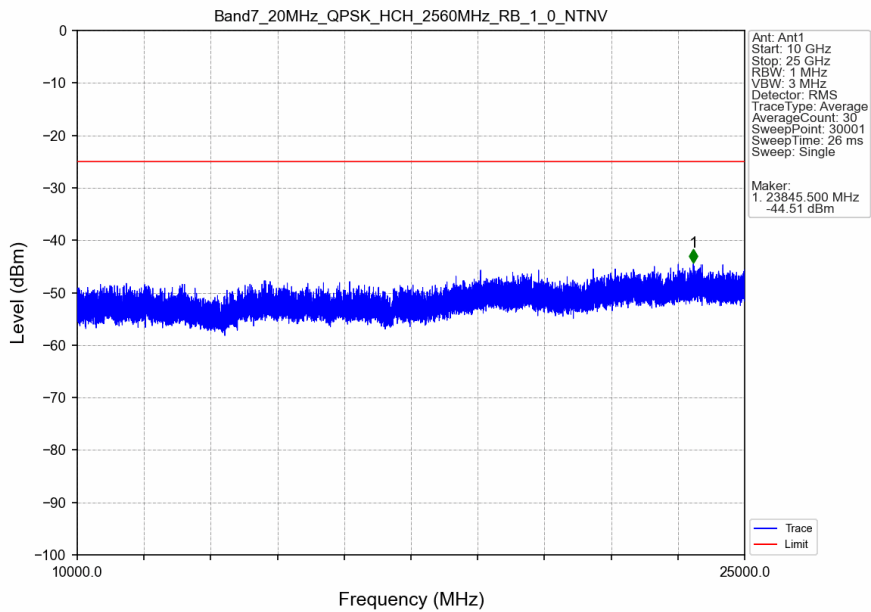
Band7 20MHz QPSK MCH 2535MHz RB 1 0 NTNV



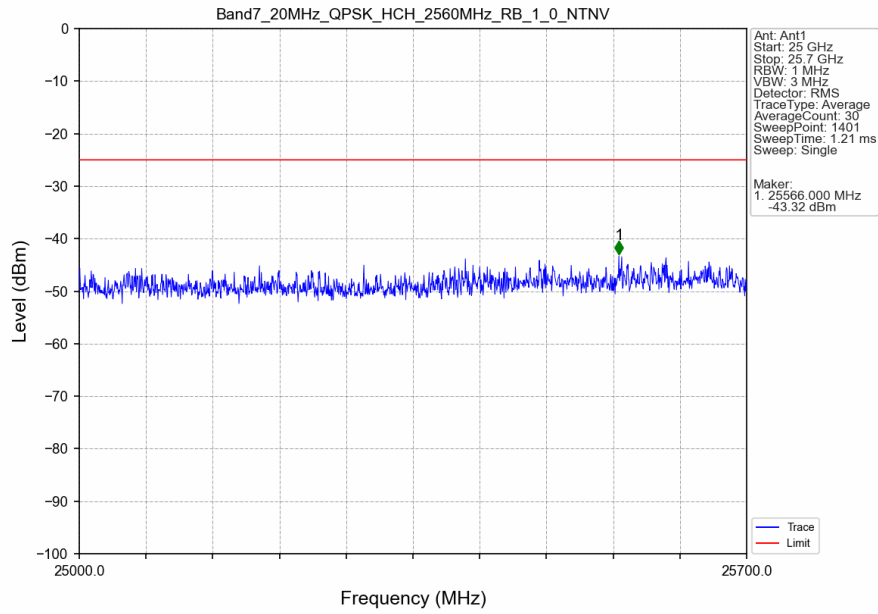
Band7_20MHz_QPSK_HCH_2560MHz_RB_1_0_NTNV



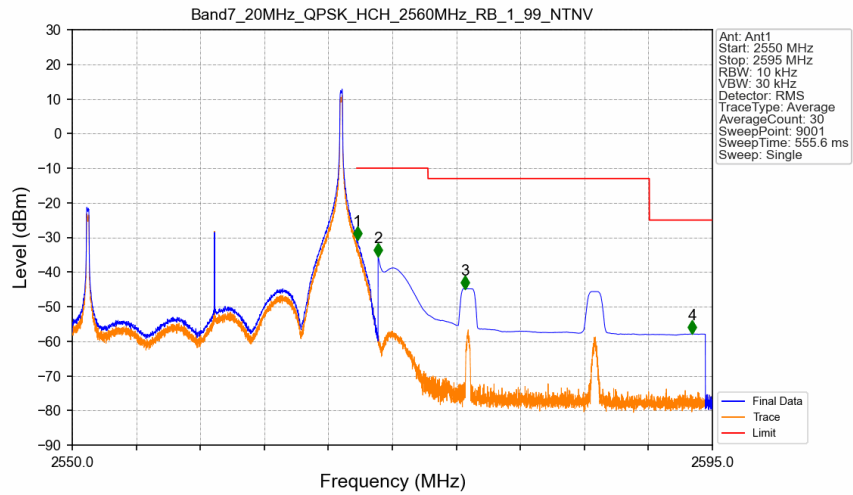
Band7_20MHz_QPSK_HCH_2560MHz_RB_1_0_NTNV



Band7 20MHz QPSK HCH 2560MHz RB 1 0 NTN

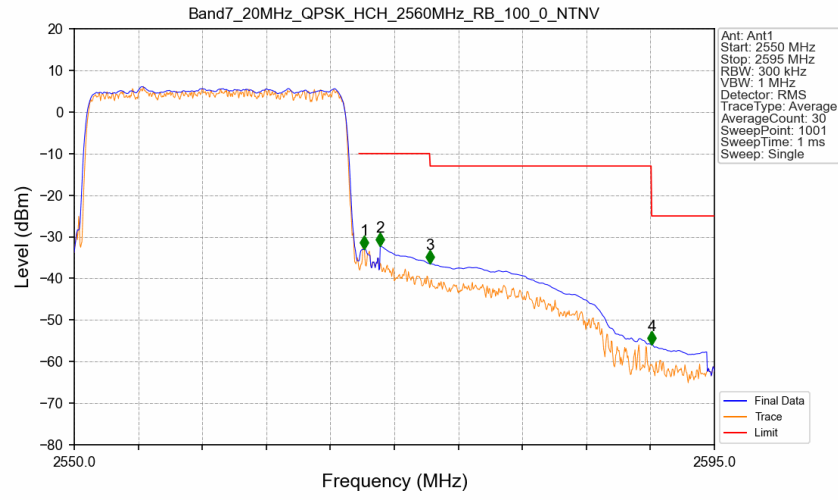


Band7 20MHz QPSK HCH 2560MHz RB 1 99 NTN



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2550	2570	0.02	CHP	/	/	/	/	/
2570	2571	0.02	CHP	1	2570.035	-30.60	-10	Pass
2571	2575	1	CHP	2	2571.500	-35.42	-10	Pass
2575	2590.564	1	CHP	3	2577.625	-44.83	-13	Pass
2590.564	2595	1	CHP	4	2593.570	-57.87	-25	Pass

Band7 20MHz QPSK HCH 2560MHz RB 100 0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
2550	2570	0.411	CHP	/	/	/	/	/
2570	2571	0.411	CHP	1	2570.385	-32.93	-10	Pass
2571	2575	1	CHP	2	2571.510	-32.26	-10	Pass
2575	2590.564	1	CHP	3	2575.020	-36.49	-13	Pass
2590.564	2595	1	CHP	4	2590.590	-55.94	-25	Pass