

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B8_1.4MHz_ERP

Band: 8 / Bandwidth: 1.4MHz / NTV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	898.2	1	0	23.31	5.17	26.33	/	Pass
			5	23.47	5.17	26.49	/	Pass
		6	0	22.34	5.17	25.36	/	Pass
	899	1	0	23.11	5.17	26.13	/	Pass
			5	22.93	5.17	25.95	/	Pass
		6	0	22.02	5.17	25.04	/	Pass
	899.8	1	0	22.86	5.17	25.88	/	Pass
			5	22.87	5.17	25.89	/	Pass
		6	0	21.86	5.17	24.88	/	Pass
16QAM	898.2	1	0	22.28	5.17	25.30	/	Pass
			5	22.38	5.17	25.40	/	Pass
		6	0	21.41	5.17	24.43	/	Pass
	899	1	0	21.94	5.17	24.96	/	Pass
			5	21.78	5.17	24.80	/	Pass
		6	0	21.07	5.17	24.09	/	Pass
	899.8	1	0	21.94	5.17	24.96	/	Pass
			5	22.03	5.17	25.05	/	Pass
		6	0	20.99	5.17	24.01	/	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

1.1.2 B8_3MHz_ERP

Band: 8 / Bandwidth: 3MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	899	1	0	23.01	5.17	26.03	/	Pass
			14	22.92	5.17	25.94	/	Pass
		15	0	22.18	5.17	25.20	/	Pass
16QAM	899	1	0	21.88	5.17	24.90	/	Pass
			14	21.77	5.17	24.79	/	Pass
		15	0	21.15	5.17	24.17	/	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

1.1.3 B8_5MHz_ERP

Band: 8 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	900	1	0	23.23	5.17	26.25	/	Pass
			24	22.93	5.17	25.95	/	Pass
		25	0	22.24	5.17	25.26	/	Pass
	899	1	0	23.22	5.17	26.24	/	Pass
			24	23.05	5.17	26.07	/	Pass

16QAM	898	25	0	22.17	5.17	25.19	/	Pass
		1	0	23.59	5.17	26.61	/	Pass
			24	23.35	5.17	26.37	/	Pass
	900	25	0	22.39	5.17	25.41	/	Pass
		1	0	22.53	5.17	25.55	/	Pass
			24	22.30	5.17	25.32	/	Pass
	899	25	0	21.31	5.17	24.33	/	Pass
		1	0	22.33	5.17	25.35	/	Pass
			24	22.20	5.17	25.22	/	Pass
	898	25	0	21.24	5.17	24.26	/	Pass
		1	0	22.73	5.17	25.75	/	Pass
			24	22.54	5.17	25.56	/	Pass
	898	25	0	21.54	5.17	24.56	/	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.4 B8_10MHz_ERP

Band: 8 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	902.5	1	0	23.49	5.17	26.51	/	Pass
			49	22.79	5.17	25.81	/	Pass
		50	0	22.09	5.17	25.11	/	Pass
	899	1	0	23.11	5.17	26.13	/	Pass
			49	22.71	5.17	25.73	/	Pass
		50	0	22.13	5.17	25.15	/	Pass
	895.5	1	0	23.23	5.17	26.25	/	Pass
			49	23.19	5.17	26.21	/	Pass
		50	0	22.24	5.17	25.26	/	Pass
16QAM	902.5	1	0	22.74	5.17	25.76	/	Pass
			49	22.11	5.17	25.13	/	Pass
	899	1	0	22.09	5.17	25.11	/	Pass
			49	21.74	5.17	24.76	/	Pass
	895.5	1	0	22.09	5.17	25.11	/	Pass
			49	22.08	5.17	25.10	/	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

2. Frequency Stability

2.1 Test Result

2.1.1 B8_10MHz

Band: 8 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	899	50	0	20	3.40	-0.029	0.0000	-2.5 to 2.5	Pass
					3.80	-0.157	-0.0002	-2.5 to 2.5	Pass
					4.20	0.129	0.0001	-2.5 to 2.5	Pass
				-30	3.80	-0.129	-0.0001	-2.5 to 2.5	Pass
				-20	3.80	-0.644	-0.0007	-2.5 to 2.5	Pass
				-10	3.80	-0.429	-0.0005	-2.5 to 2.5	Pass

				0	3.80	0.215	0.0002	-2.5 to 2.5	Pass
				10	3.80	0.057	0.0001	-2.5 to 2.5	Pass
				30	3.80	-0.257	-0.0003	-2.5 to 2.5	Pass
				40	3.80	0.386	0.0004	-2.5 to 2.5	Pass
				50	3.80	-0.343	-0.0004	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band8_OBW

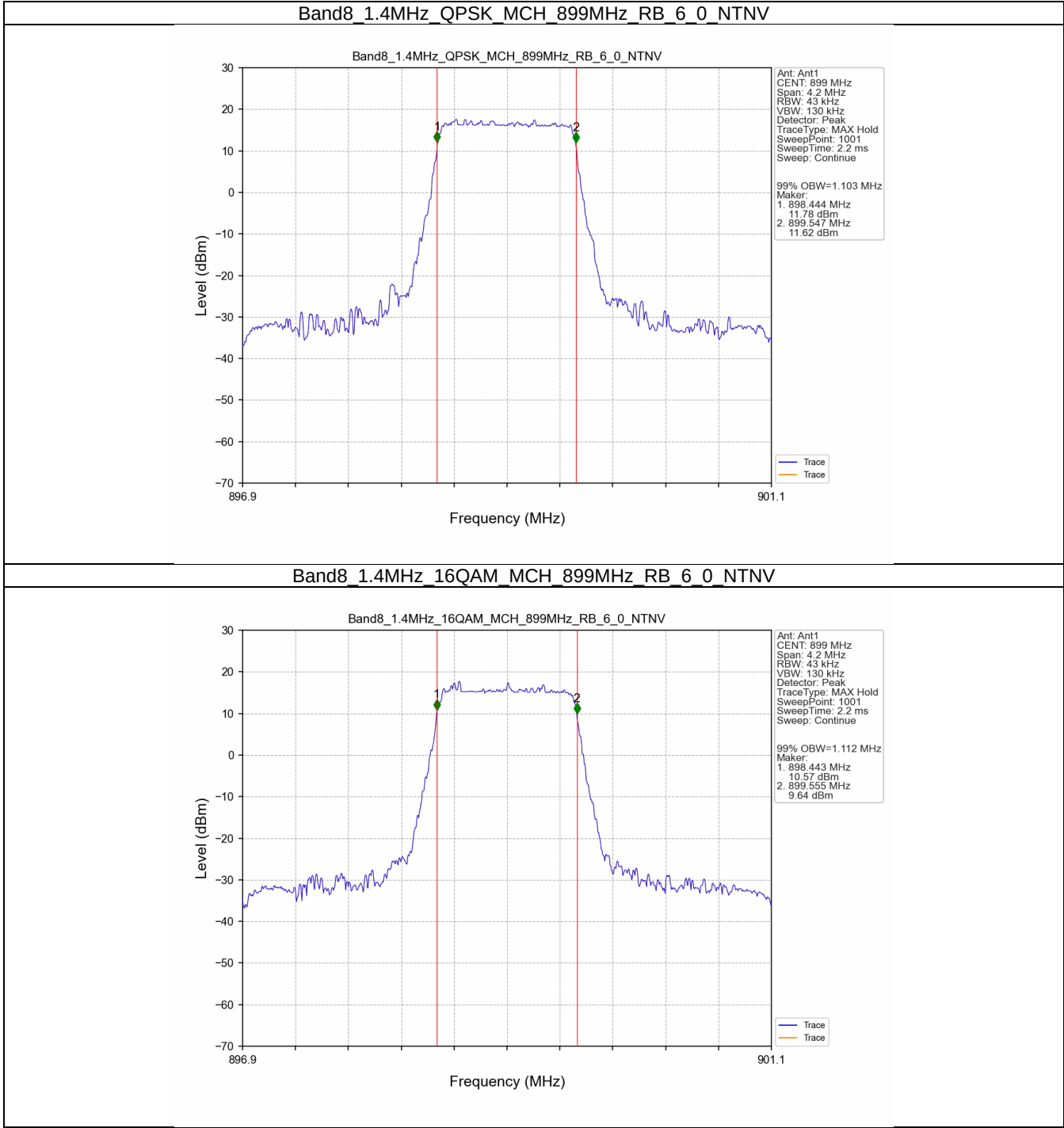
Band: 8 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	899	6	0	1.103	/	Pass
	16QAM	899	6	0	1.112	/	Pass
3	QPSK	899	15	0	2.731	/	Pass
	16QAM	899	15	0	2.745	/	Pass
5	QPSK	899	25	0	4.558	/	Pass
	16QAM	899	25	0	4.534	/	Pass
10	QPSK	899	50	0	9.039	/	Pass
	16QAM	899	27	0	5.135	/	Pass

3.1.2 Band8_XDB

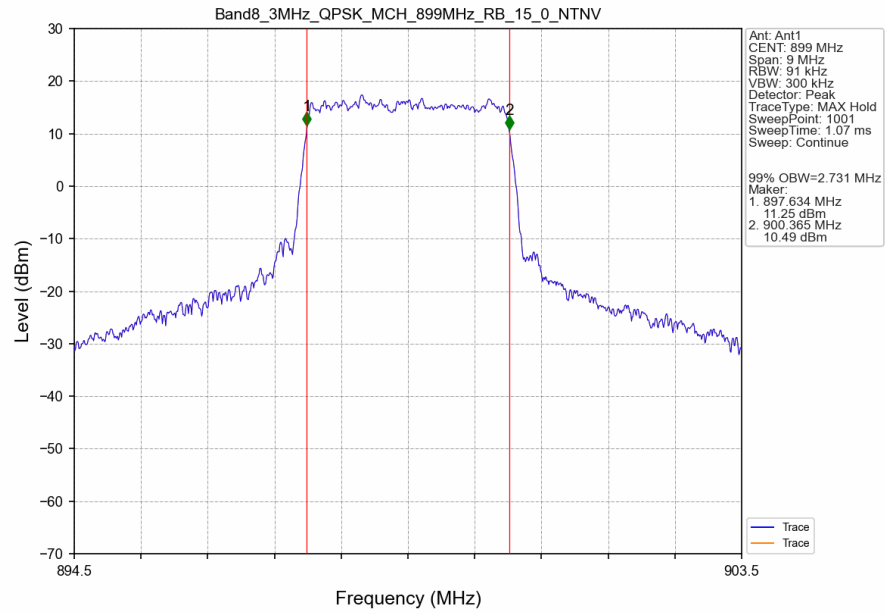
Band: 8 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	899	6	0	1.300	/	Pass
	16QAM	899	6	0	1.310	/	Pass
3	QPSK	899	15	0	3.033	/	Pass
	16QAM	899	15	0	3.087	/	Pass
5	QPSK	899	25	0	5.120	/	Pass
	16QAM	899	25	0	5.094	/	Pass
10	QPSK	899	50	0	10.401	/	Pass
	16QAM	899	27	0	6.309	/	Pass

3.2 Test Graph

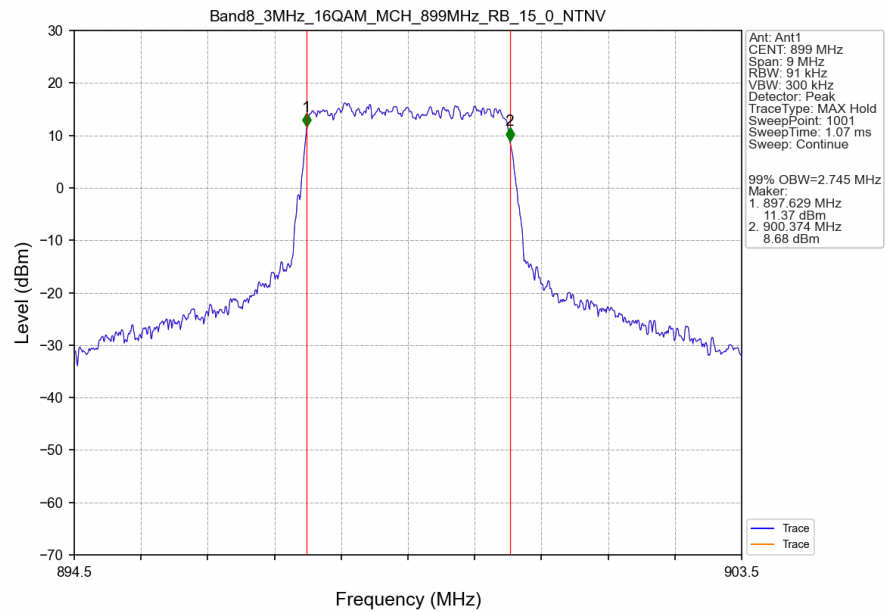
3.2.1 Band8_OBW



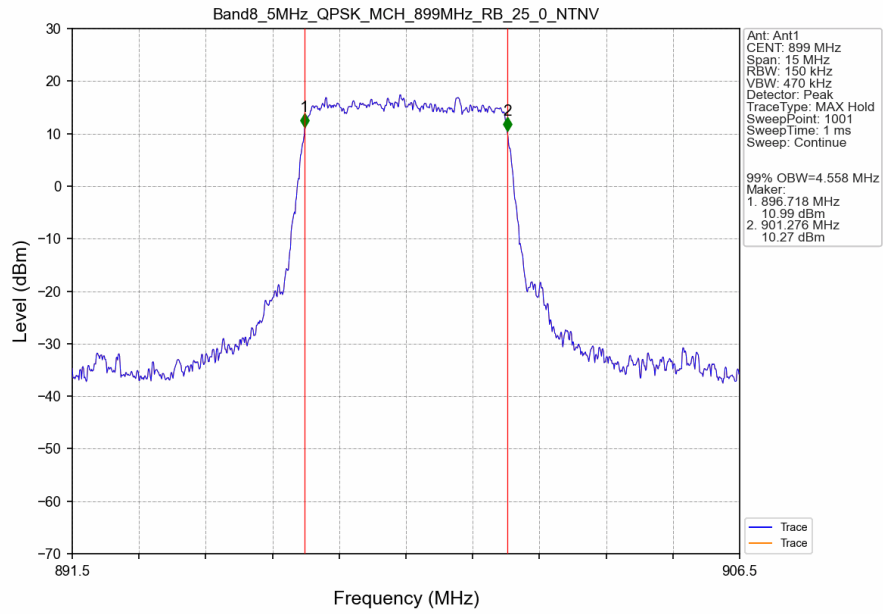
Band8 3MHz QPSK MCH 899MHz RB 15 0 NTN



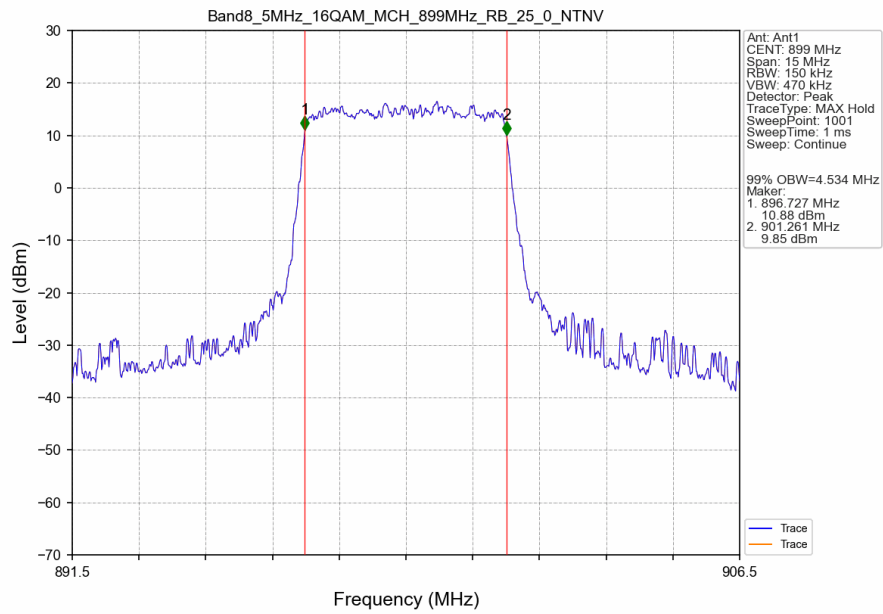
Band8 3MHz 16QAM MCH 899MHz RB 15 0 NTN



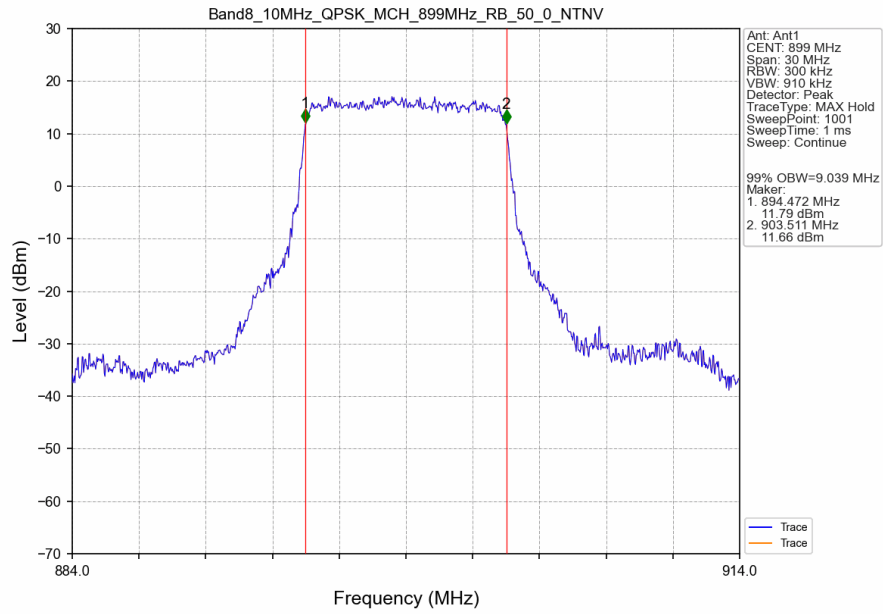
Band8 5MHz QPSK MCH 899MHz RB 25_0_NTNV



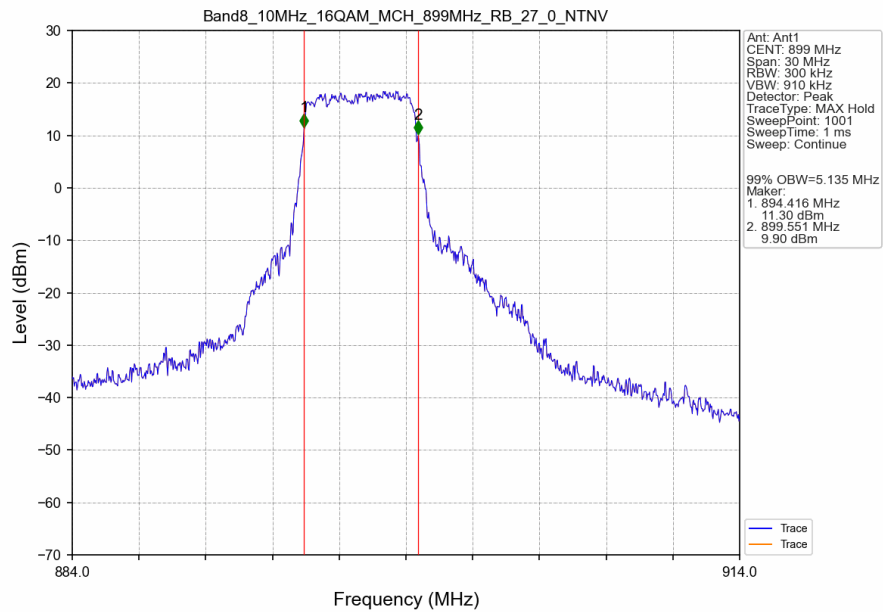
Band8 5MHz 16QAM MCH 899MHz RB 25_0_NTNV



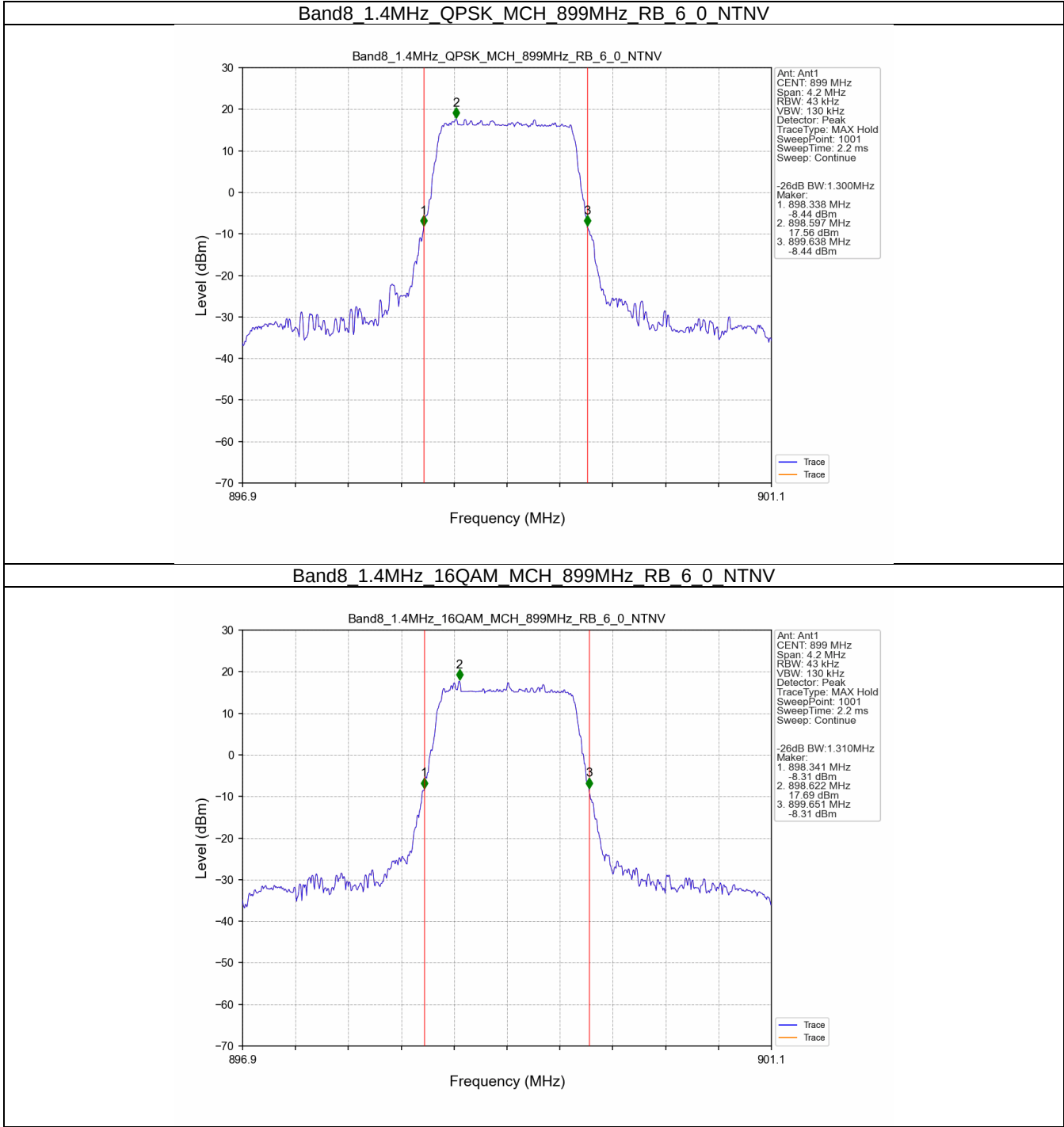
Band8_10MHz_QPSK_MCH_899MHz_RB_50_0_NTNV



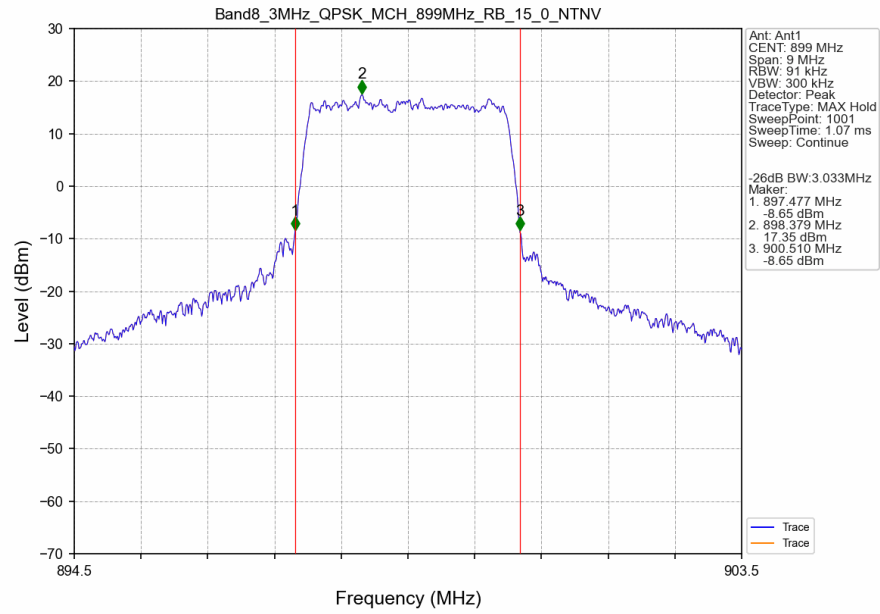
Band8_10MHz_16QAM_MCH_899MHz_RB_27_0_NTNV



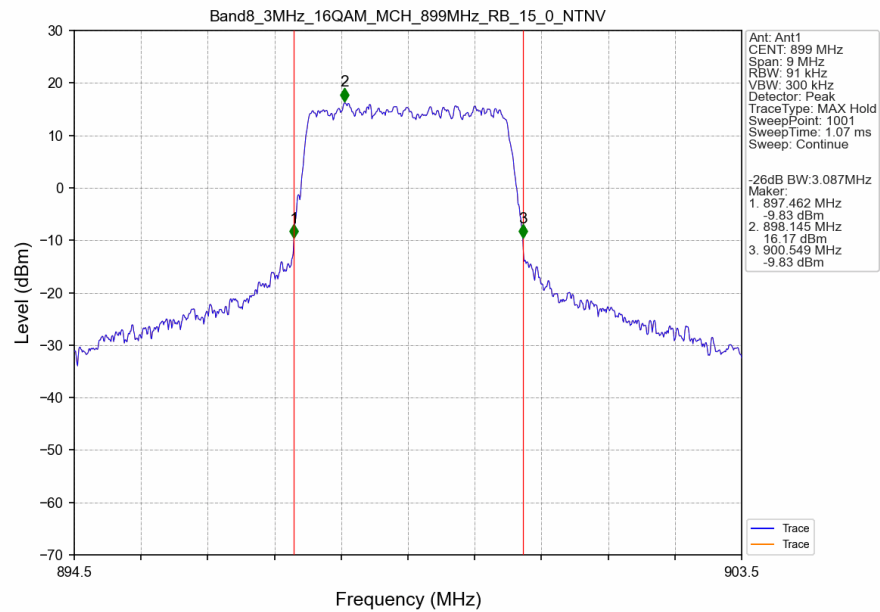
3.2.2 Band8_XDB



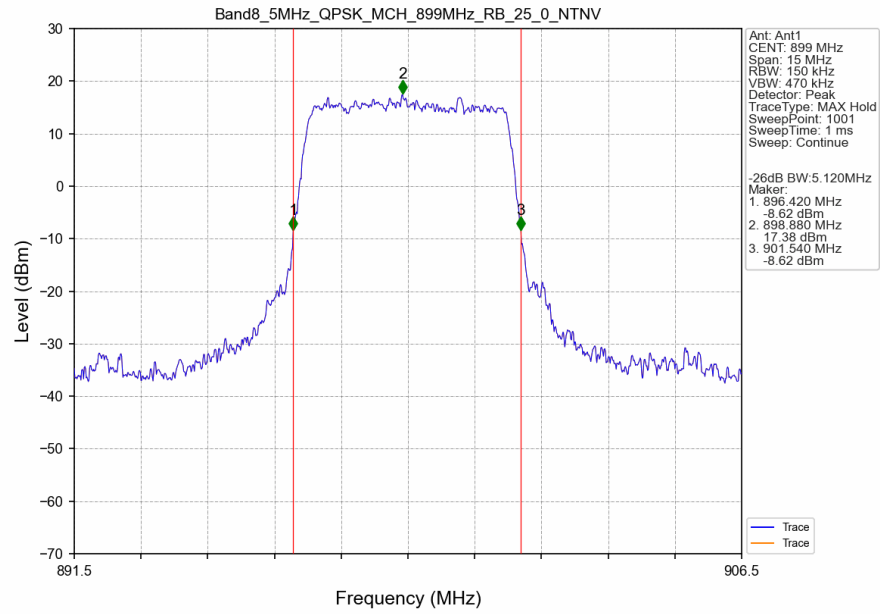
Band8 3MHz QPSK MCH 899MHz RB 15 0 NTN



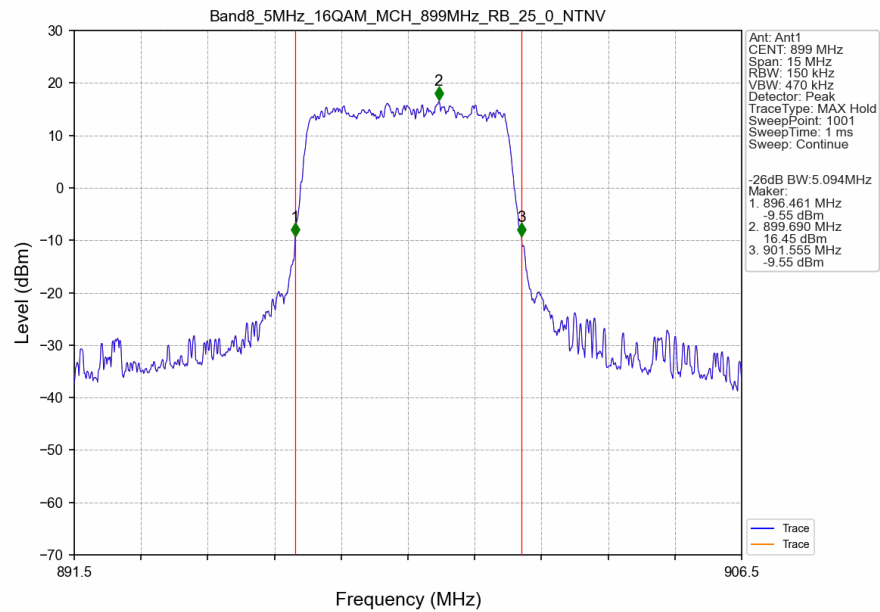
Band8 3MHz 16QAM MCH 899MHz RB 15 0 NTN



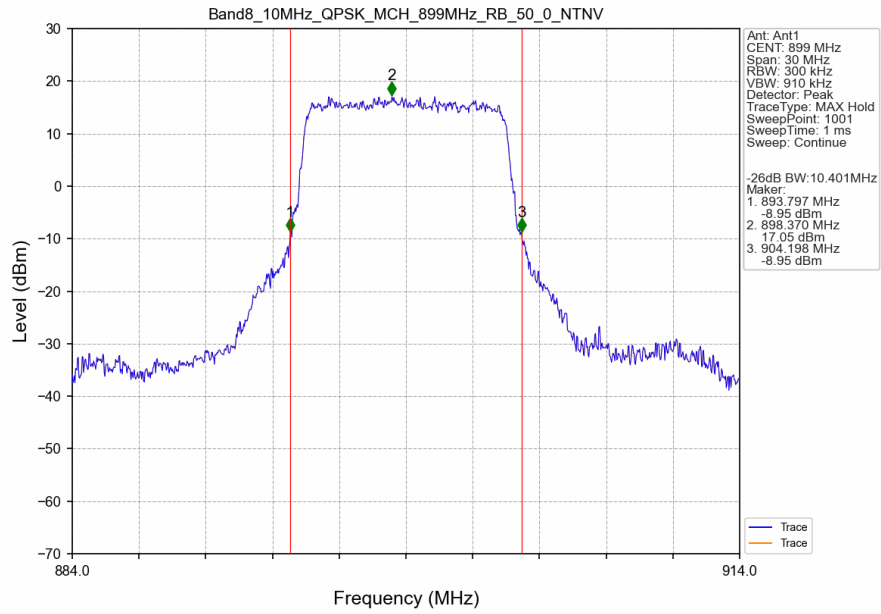
Band8 5MHz QPSK MCH 899MHz RB 25_0_NTNV



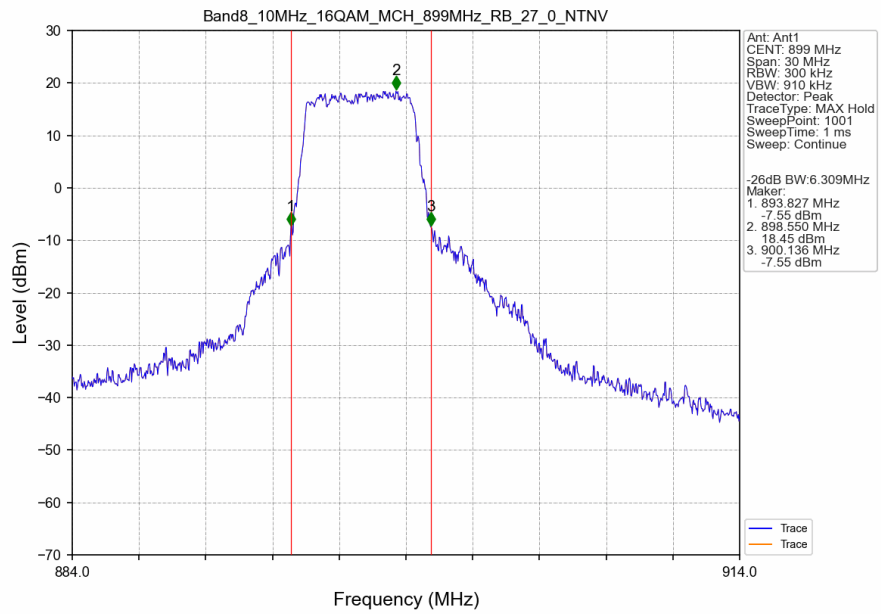
Band8 5MHz 16QAM MCH 899MHz RB 25_0_NTNV



Band8_10MHz_QPSK_MCH_899MHz_RB_50_0_NTNV



Band8_10MHz_16QAM_MCH_899MHz_RB_27_0_NTNV



4. Peak-Average Ratio

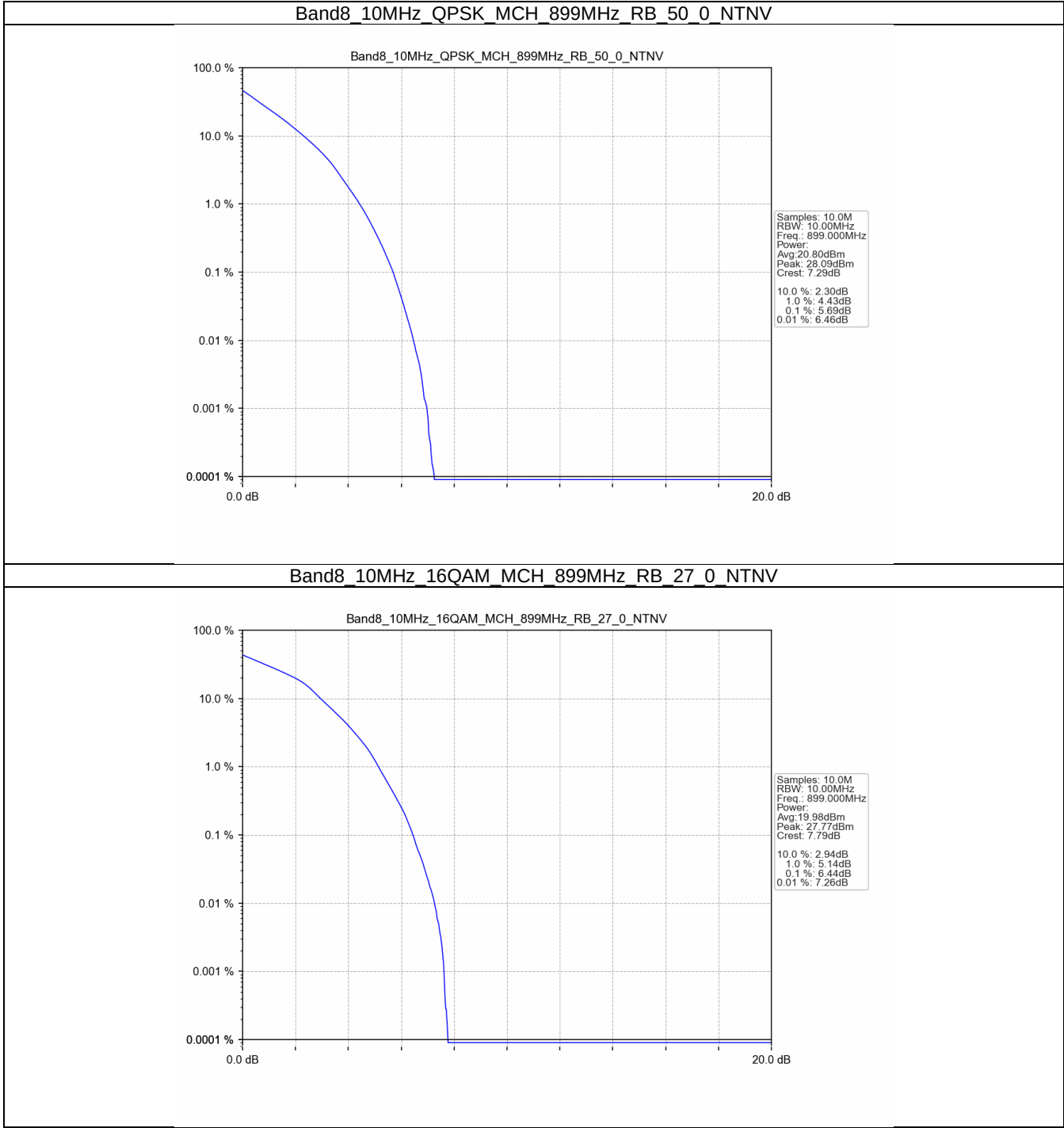
4.1 Test Result

4.1.1 B8_10MHz

Band: 8 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	899	50	0	5.69	<=13	Pass
16QAM	899	27	0	6.44	<=13	Pass

4.2 Test Graph

4.2.1 B8_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B8_1.4MHz

Band: 8 / Bandwidth: 1.4MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	898.2	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	899	1	0	Refer To Test Graph		Pass
		899.8	1	0	Refer To Test Graph	
	5			Refer To Test Graph		Pass
	6		0	Refer To Test Graph		Pass

5.1.2 B8_3MHz

Band: 8 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	899	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	899	1	14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

5.1.3 B8_5MHz

Band: 8 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	900	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	899	1	0	Refer To Test Graph		Pass
	898	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

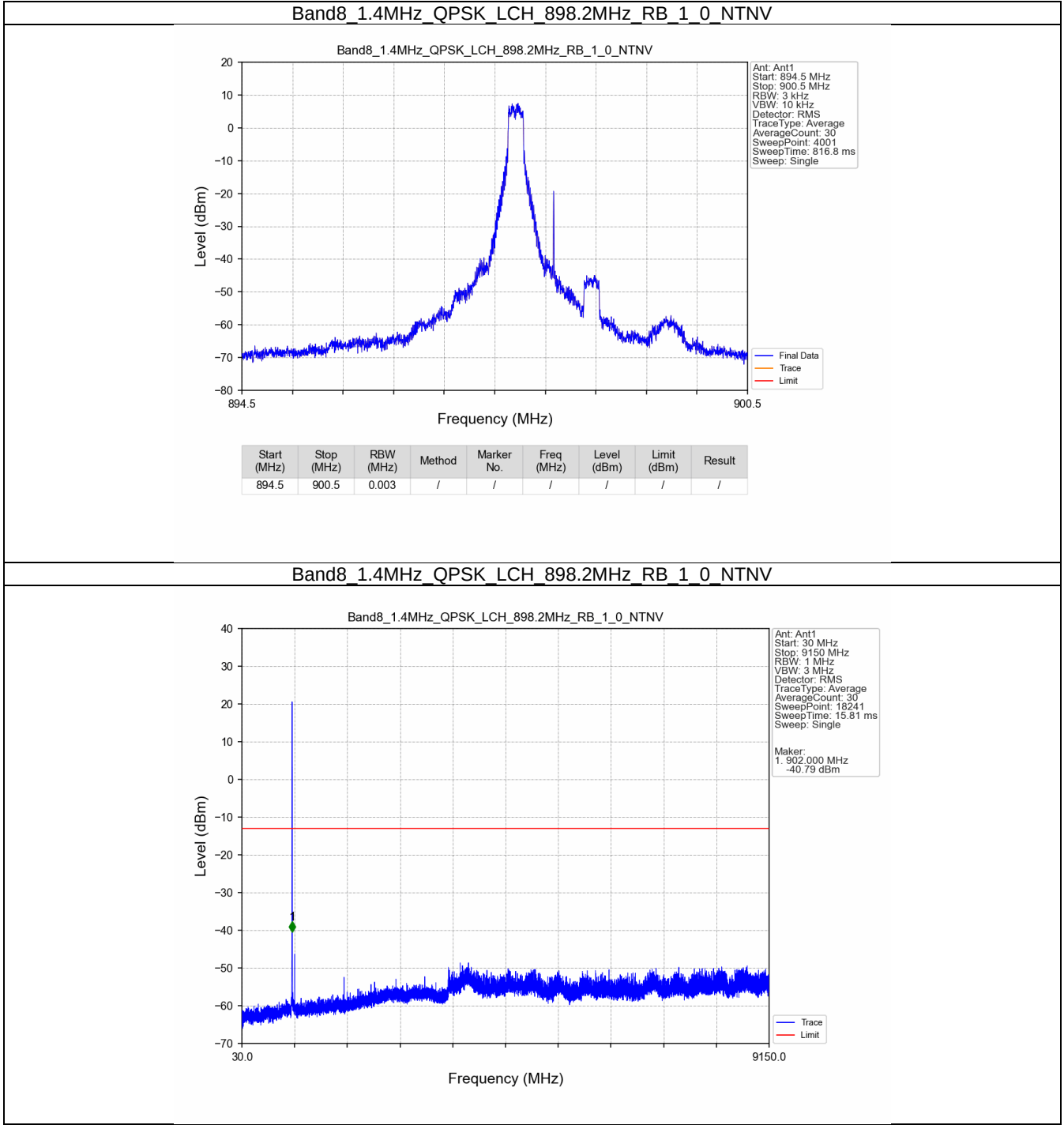
5.1.4 B8_10MHz

Band: 8 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	902.5	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	899	1	0	Refer To Test Graph		Pass
	895.5	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass

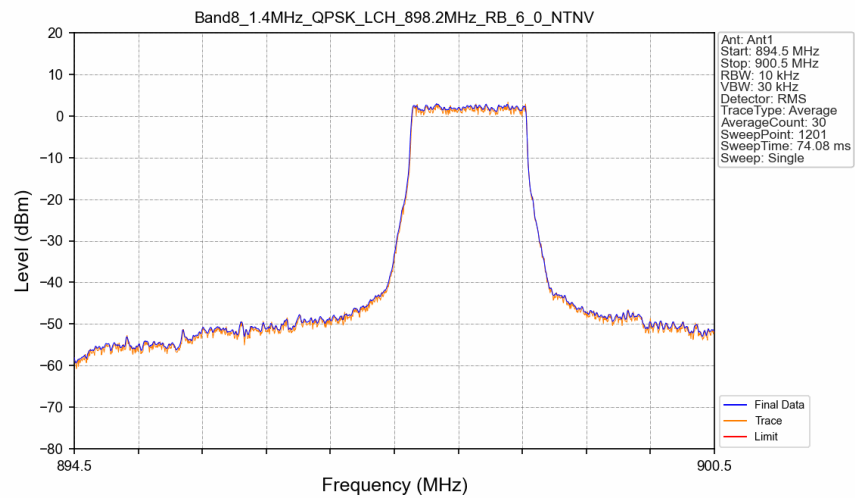
		50	0	Refer To Test Graph	Pass
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5.2 Test Graph

5.2.1 B8_1.4MHz

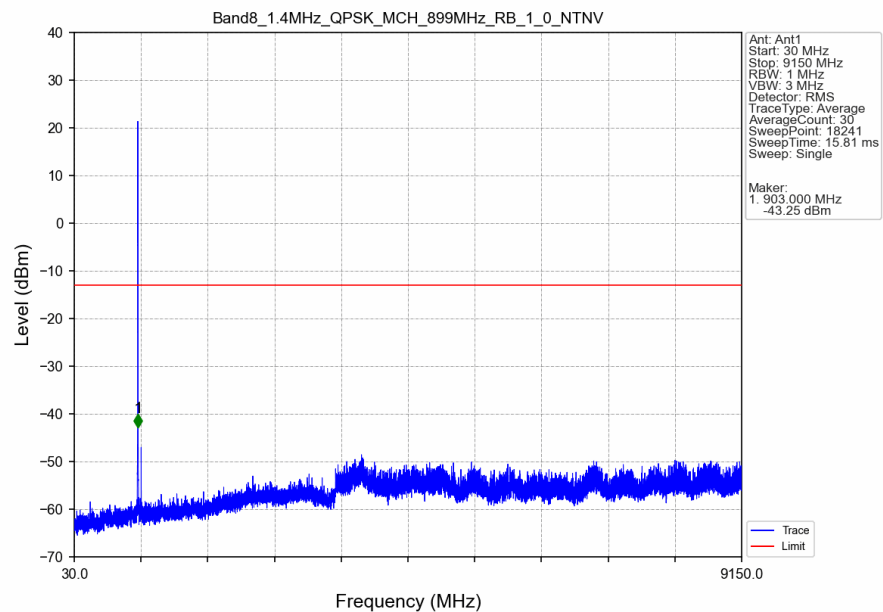


Band8 1.4MHz QPSK LCH 898.2MHz RB 6 0 NTN

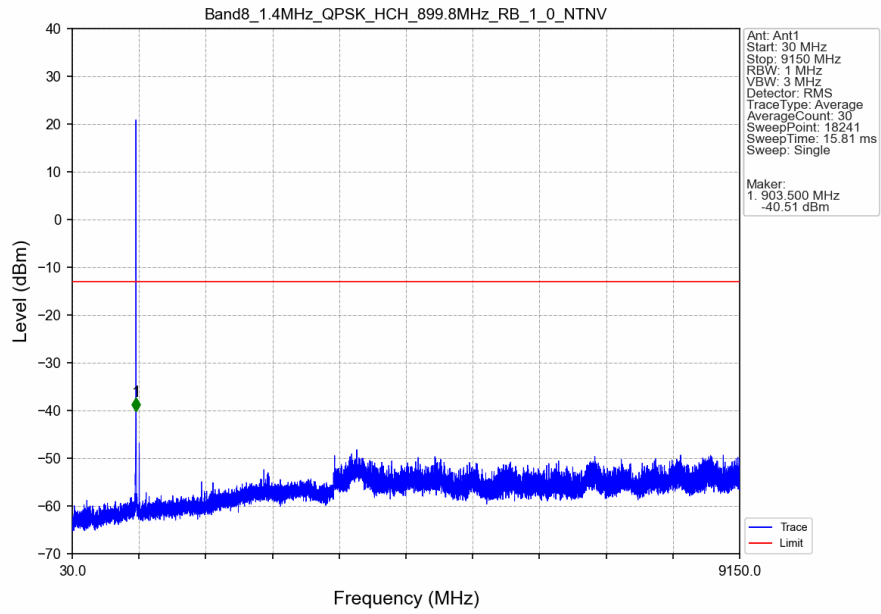


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
894.5	900.5	0.013	CHP	/	/	/	/	/

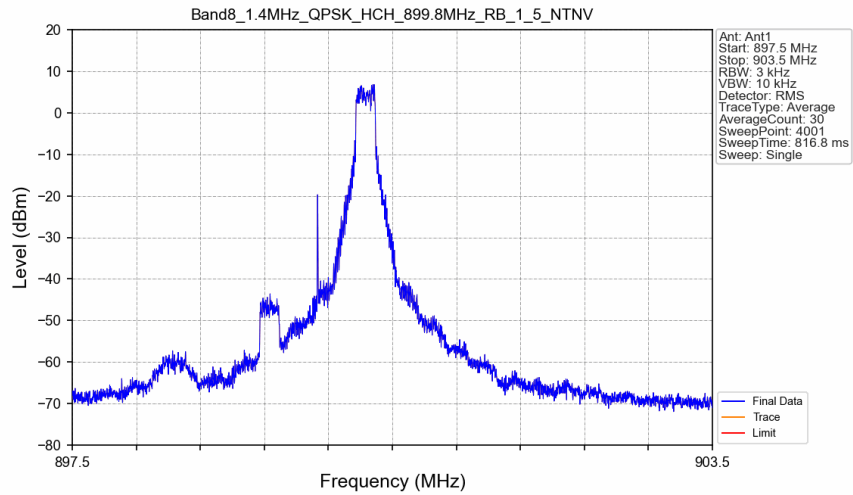
Band8 1.4MHz QPSK MCH 899MHz RB 1 0 NTN



Band8 1.4MHz QPSK HCH 899.8MHz RB 1 0 NTN

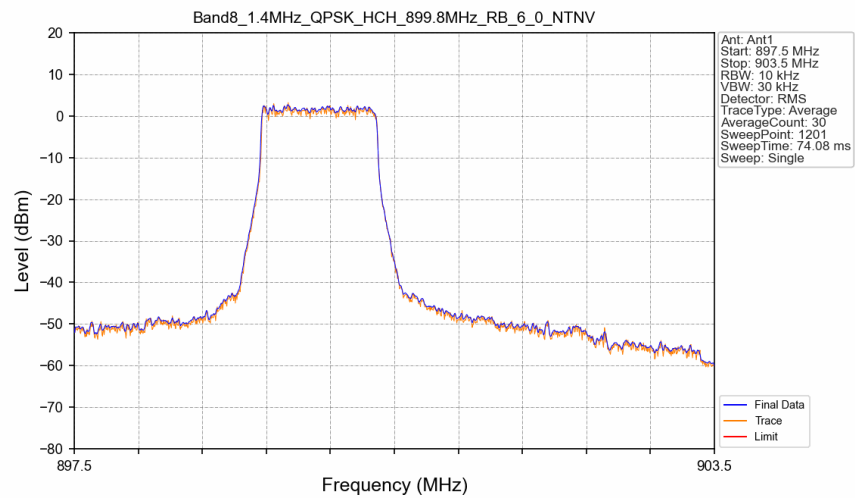


Band8 1.4MHz QPSK HCH 899.8MHz RB 1 5 NTN



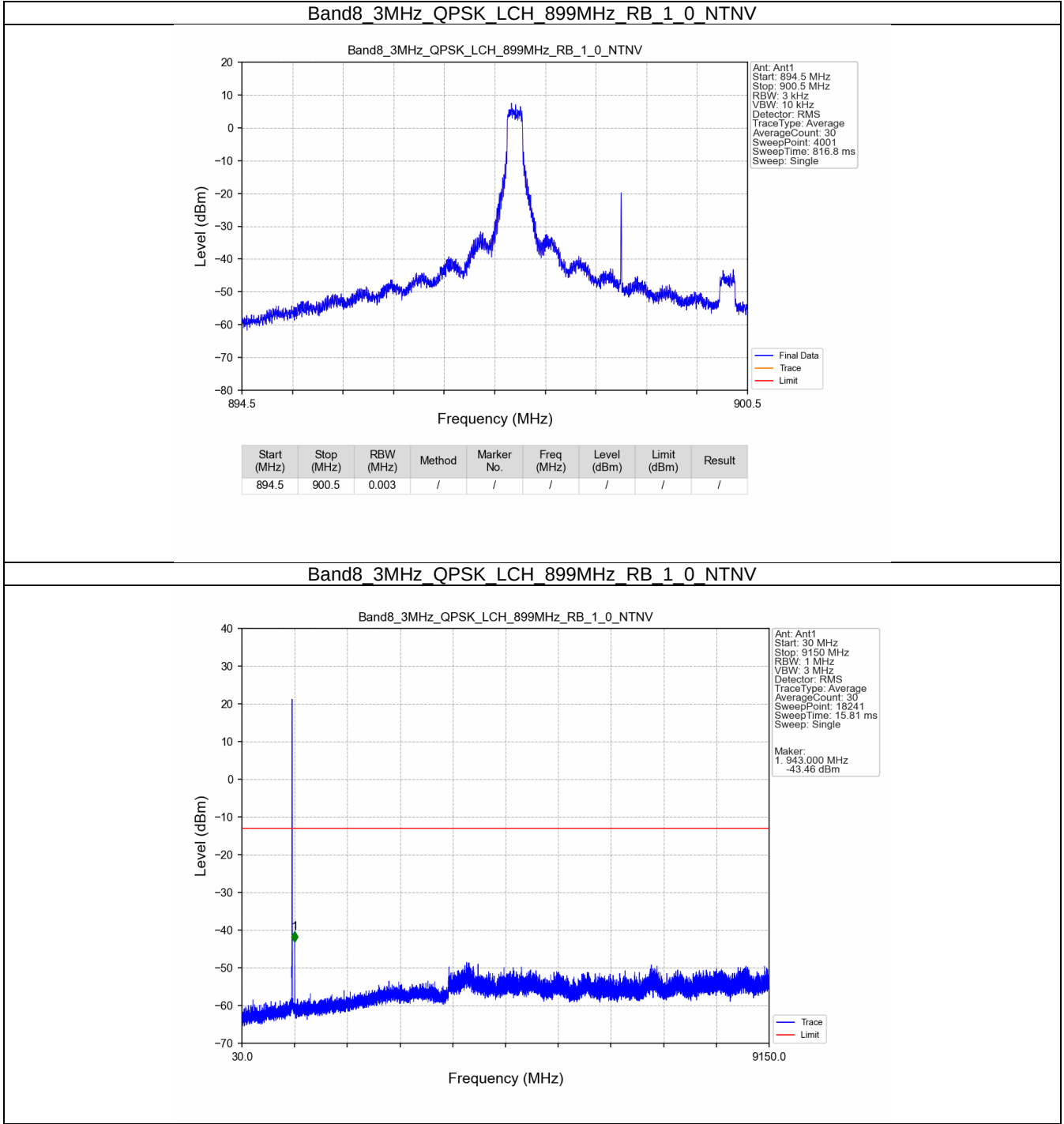
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
897.5	903.5	0.003	/	/	/	/	/	/

Band8 1.4MHz QPSK HCH 899.8MHz RB 6 0 NTN

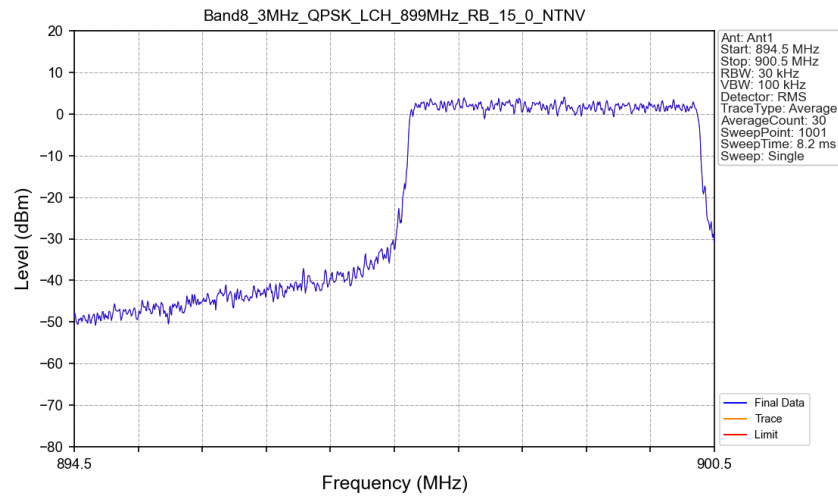


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
897.5	903.5	0.013	CHP	/	/	/	/	/

5.2.2 B8_3MHz

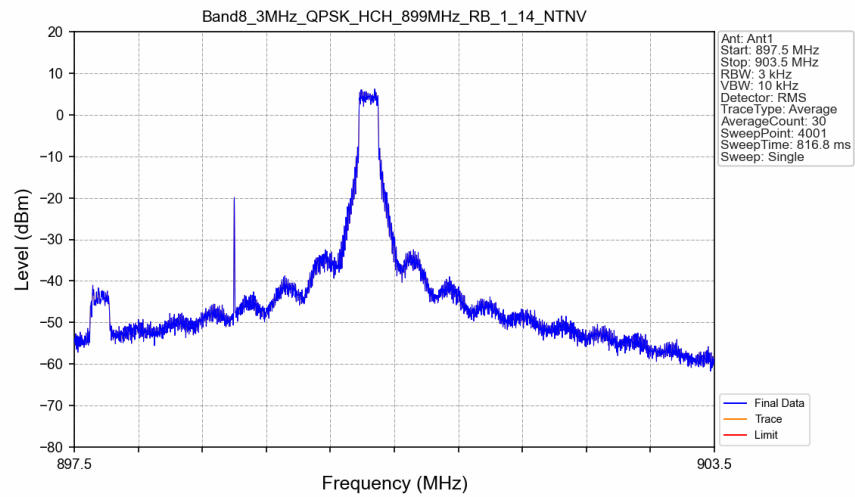


Band8 3MHz QPSK LCH 899MHz RB 15_0_NTNV



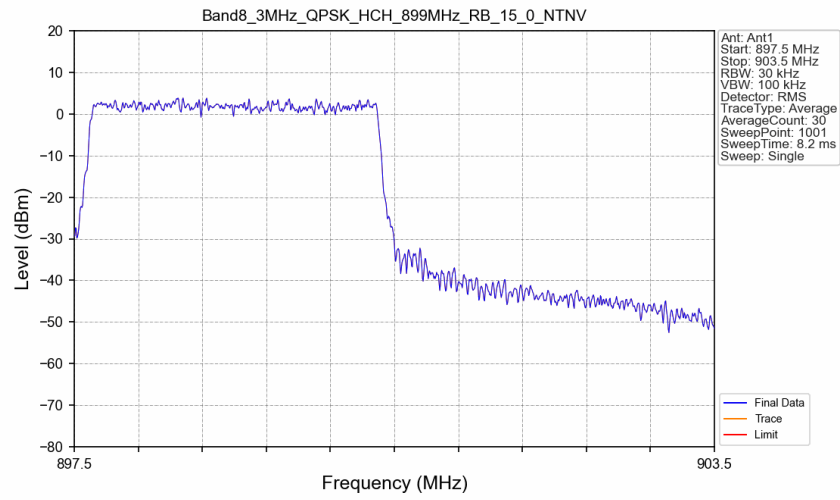
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
894.5	900.5	0.03	/	/	/	/	/	/

Band8 3MHz QPSK HCH 899MHz RB 1_14_NTNV



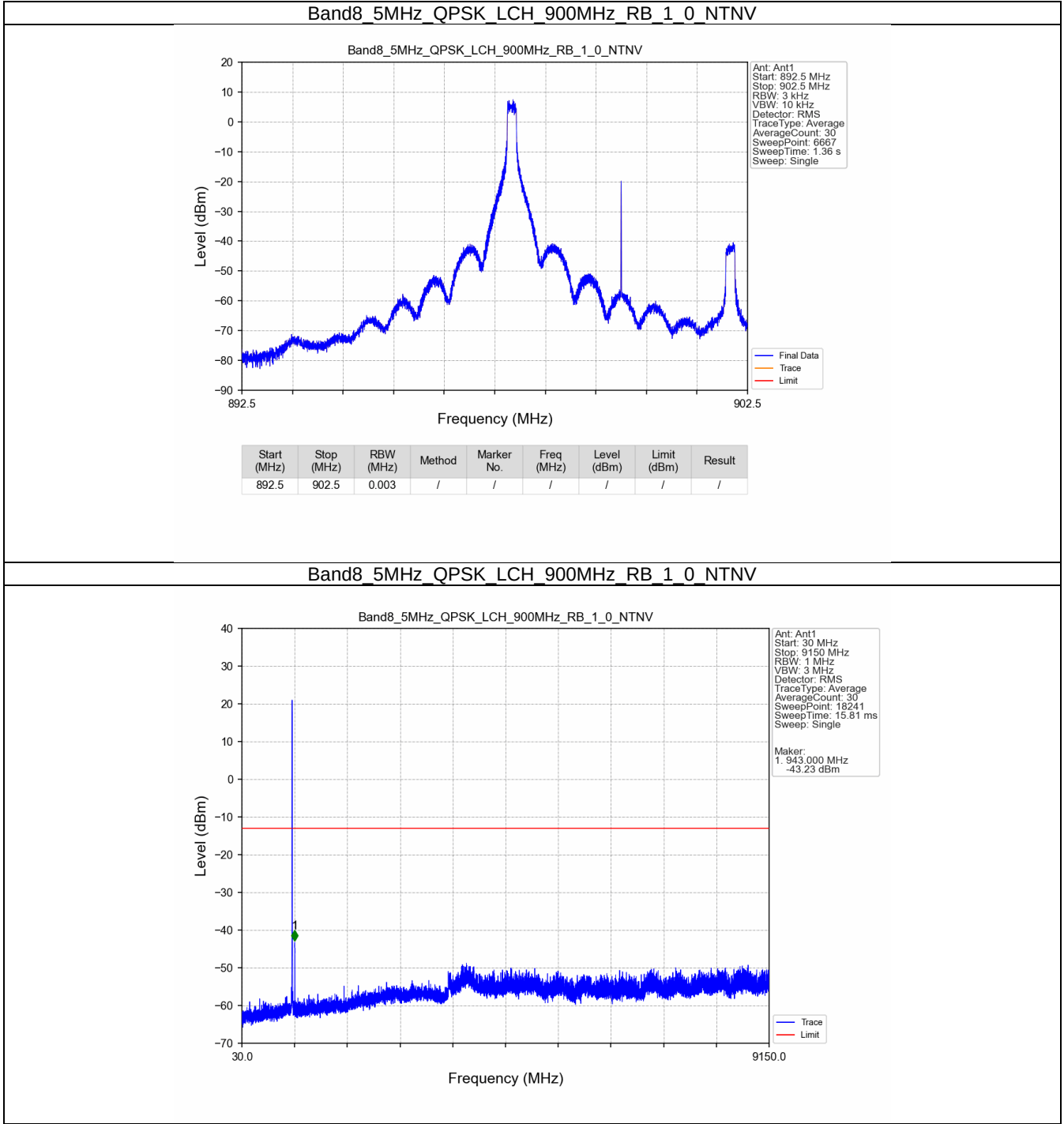
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
897.5	903.5	0.003	/	/	/	/	/	/

Band8 3MHz QPSK HCH 899MHz RB 15_0 NTN

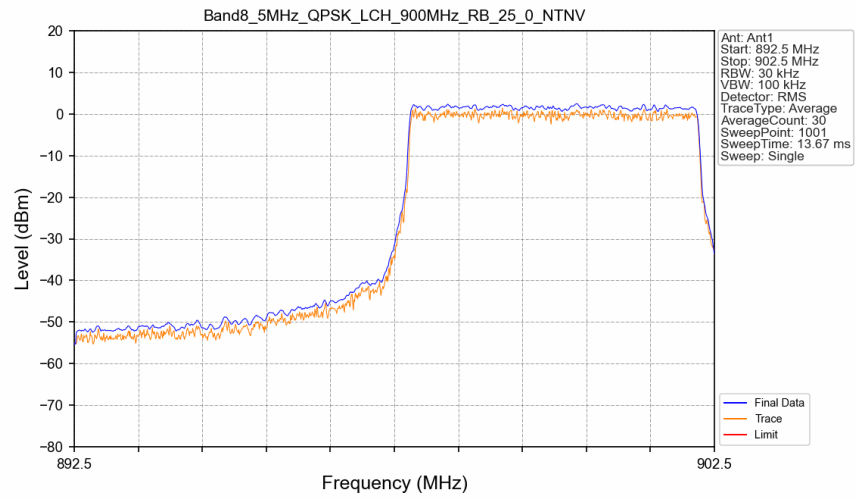


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
897.5	903.5	0.03	/	/	/	/	/	/

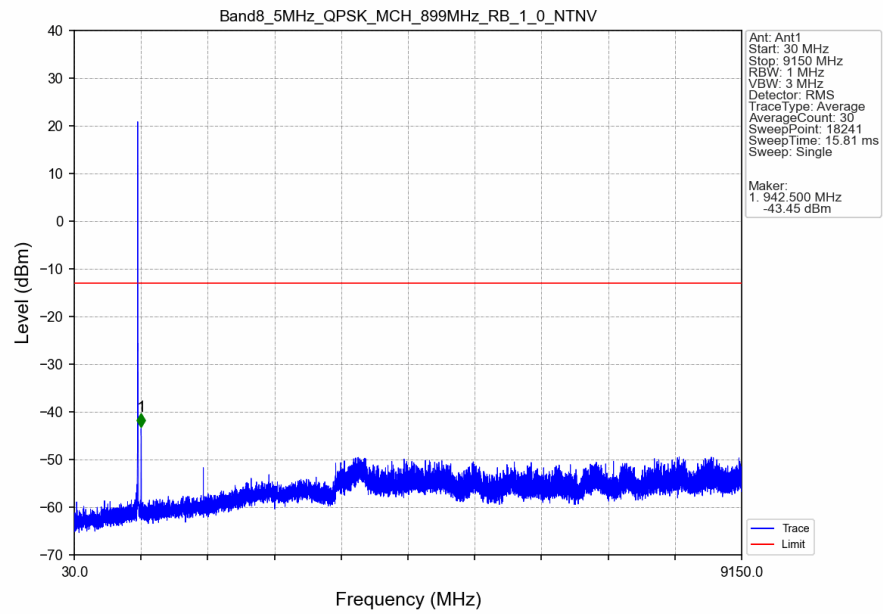
5.2.3 B8_5MHz



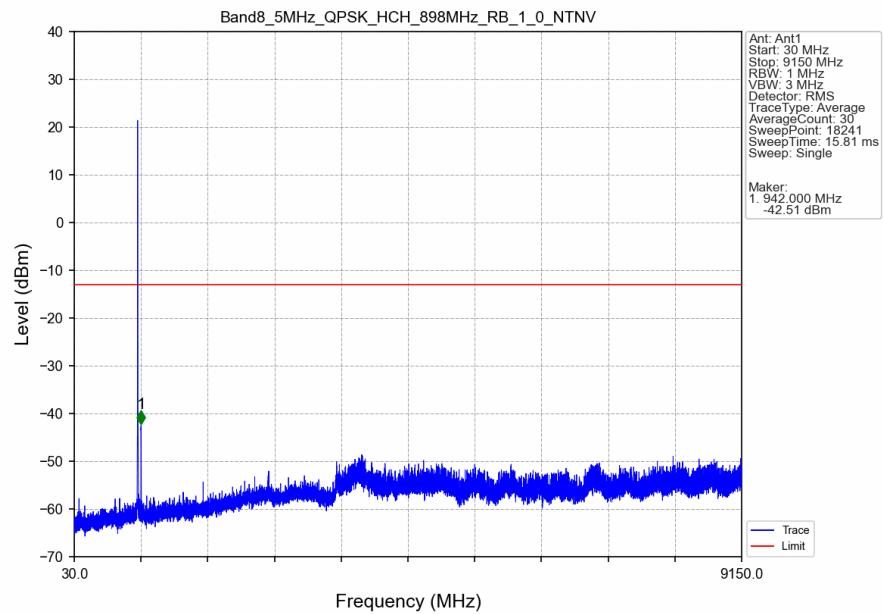
Band8 5MHz QPSK LCH 900MHz RB 25_0 NTN



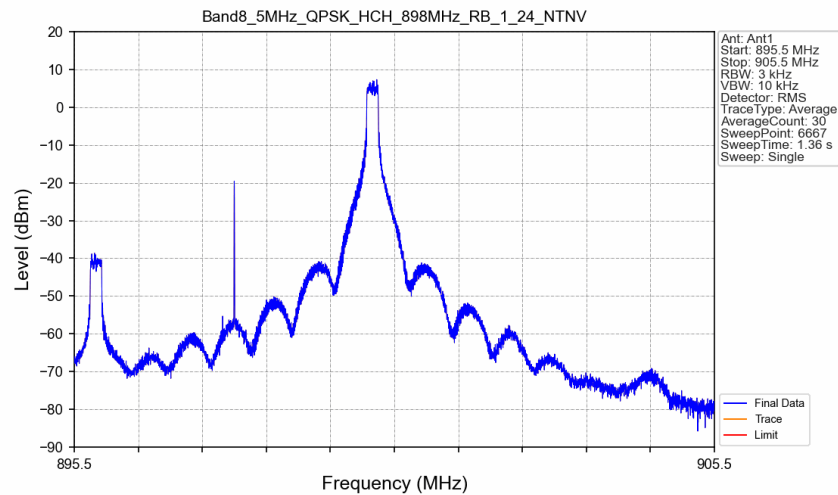
Band8 5MHz QPSK MCH 899MHz RB 1_0 NTN



Band8_5MHz_QPSK_HCH_898MHz_RB_1_0_NTNV

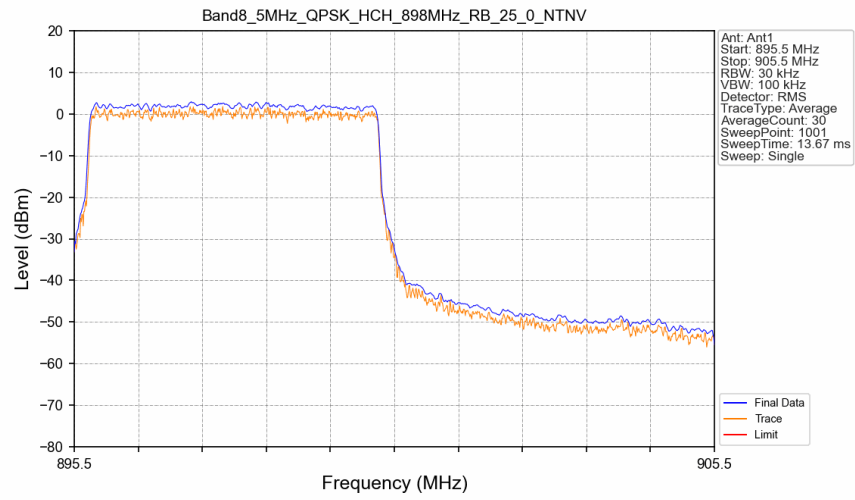


Band8_5MHz_QPSK_HCH_898MHz_RB_1_24_NTNV



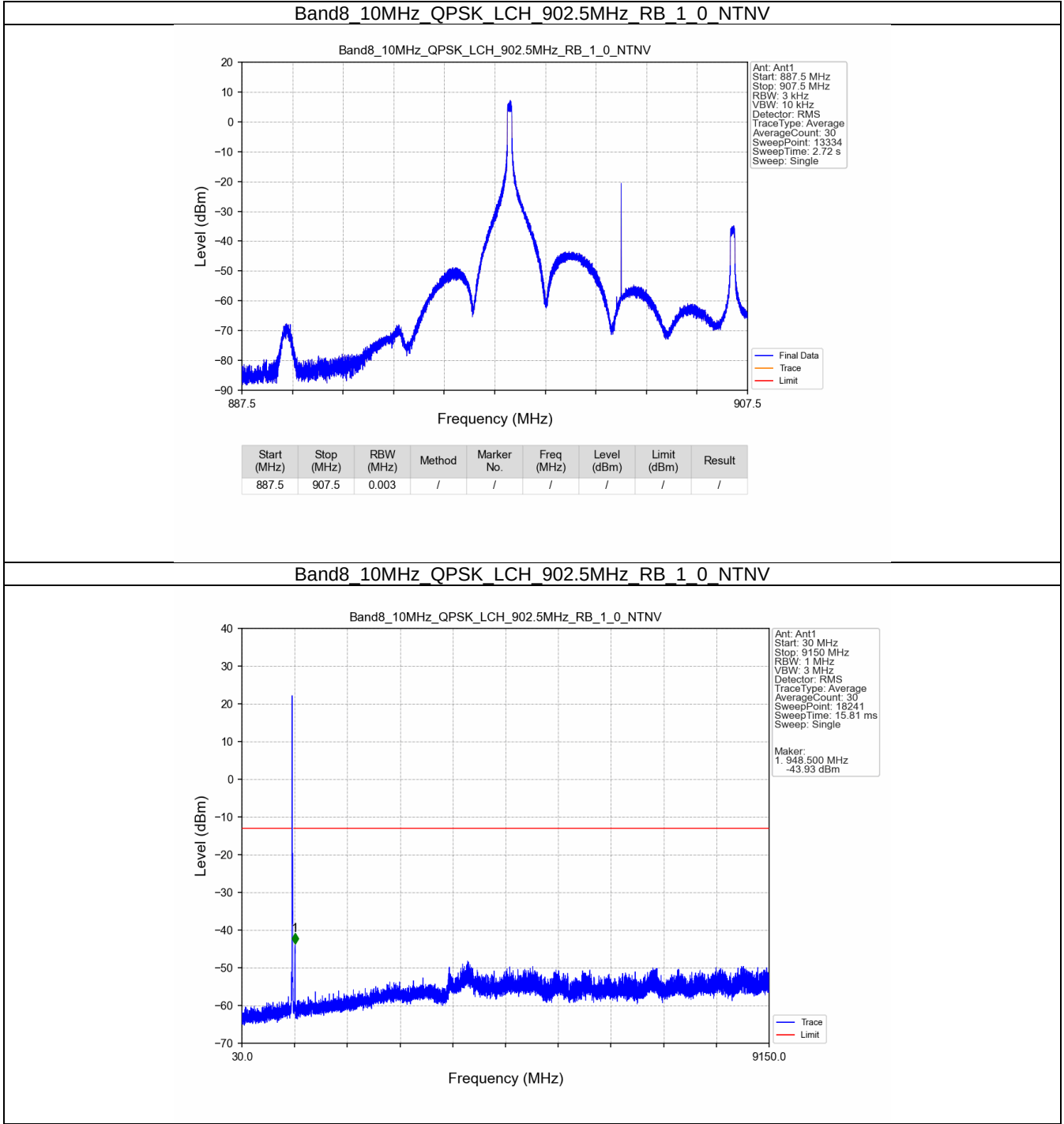
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
895.5	905.5	0.003	/	/	/	/	/	/

Band8 5MHz QPSK HCH 898MHz RB 25_0_NTNV

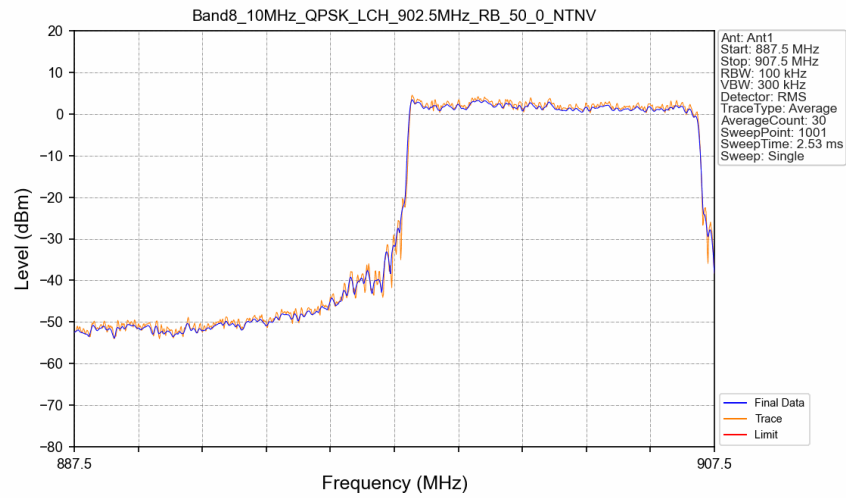


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
895.5	905.5	0.051	CHP	/	/	/	/	/

5.2.4 B8_10MHz

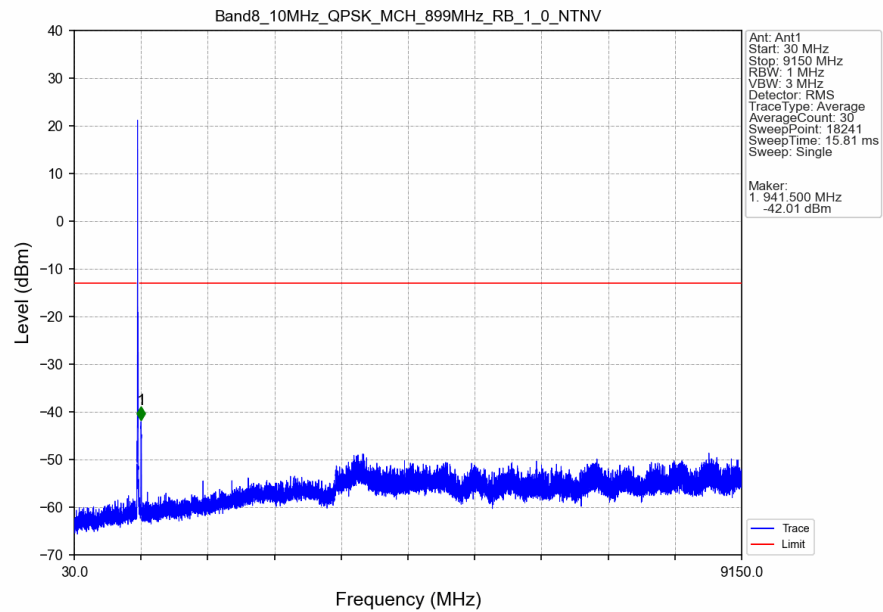


Band8 10MHz QPSK LCH 902.5MHz RB 50_0 NTN

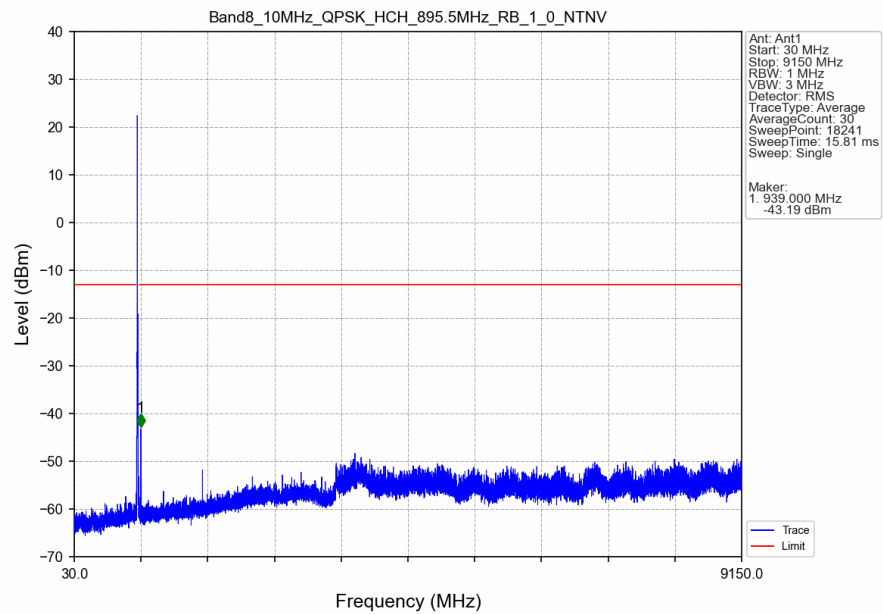


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
887.5	907.5	0.104	CHP	/	/	/	/	/

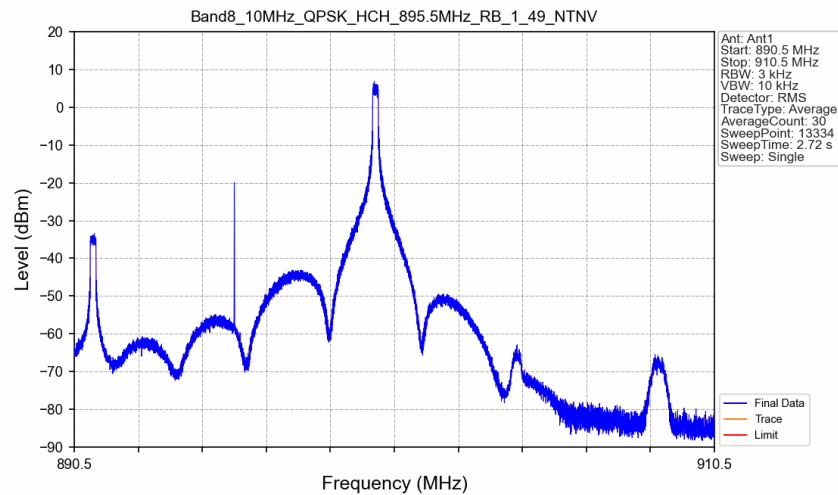
Band8 10MHz QPSK MCH 899MHz RB 1_0 NTN



Band8_10MHz_QPSK_HCH_895.5MHz_RB_1_0_NTNV

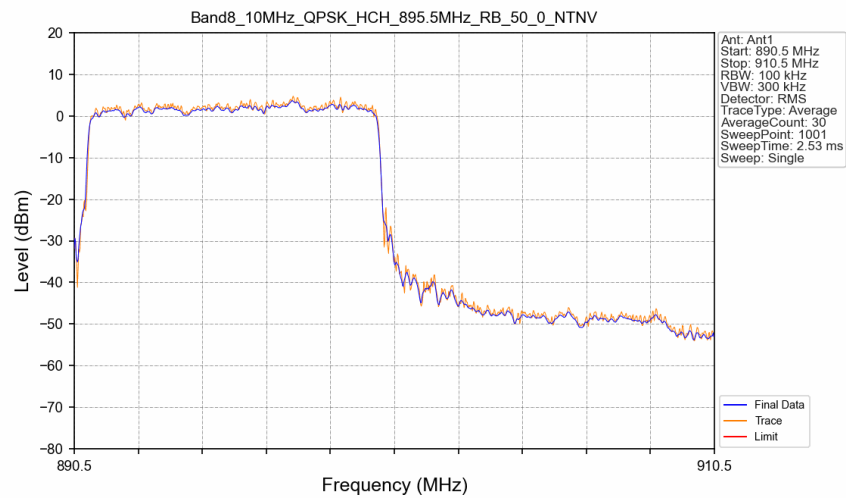


Band8_10MHz_QPSK_HCH_895.5MHz_RB_1_49_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
890.5	910.5	0.003	/	/	/	/	/	/

Band8_10MHz_QPSK_HCH_895.5MHz_RB_50_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
890.5	910.5	0.104	CHP	/	/	/	/	/