

4. Peak-Average Ratio

4.1 Test Result

4.1.1 B4_1.4MHz

Band: 4 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1710.7	6	0	6.11	<=13	Pass
	1732.5	6	0	5.88	<=13	Pass
	1754.3	6	0	6.16	<=13	Pass
16QAM	1710.7	6	0	6.96	<=13	Pass
	1732.5	6	0	6.59	<=13	Pass
	1754.3	6	0	6.84	<=13	Pass

4.1.2 B4_3MHz

Band: 4 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1711.5	15	0	6.15	<=13	Pass
	1732.5	15	0	5.93	<=13	Pass
	1753.5	15	0	6.09	<=13	Pass
16QAM	1711.5	15	0	6.88	<=13	Pass
	1732.5	15	0	6.72	<=13	Pass
	1753.5	15	0	6.83	<=13	Pass

4.1.3 B4_5MHz

Band: 4 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1712.5	25	0	6.04	<=13	Pass
	1732.5	25	0	5.92	<=13	Pass
	1752.5	25	0	5.98	<=13	Pass
16QAM	1712.5	25	0	6.63	<=13	Pass
	1732.5	25	0	6.59	<=13	Pass
	1752.5	25	0	6.67	<=13	Pass

4.1.4 B4_10MHz

Band: 4 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1715	50	0	5.87	<=13	Pass
	1732.5	50	0	5.82	<=13	Pass
	1750	50	0	5.80	<=13	Pass
16QAM	1715	27	0	6.60	<=13	Pass
	1732.5	27	0	6.66	<=13	Pass
	1750	27	23	6.63	<=13	Pass

4.1.5 B4_15MHz

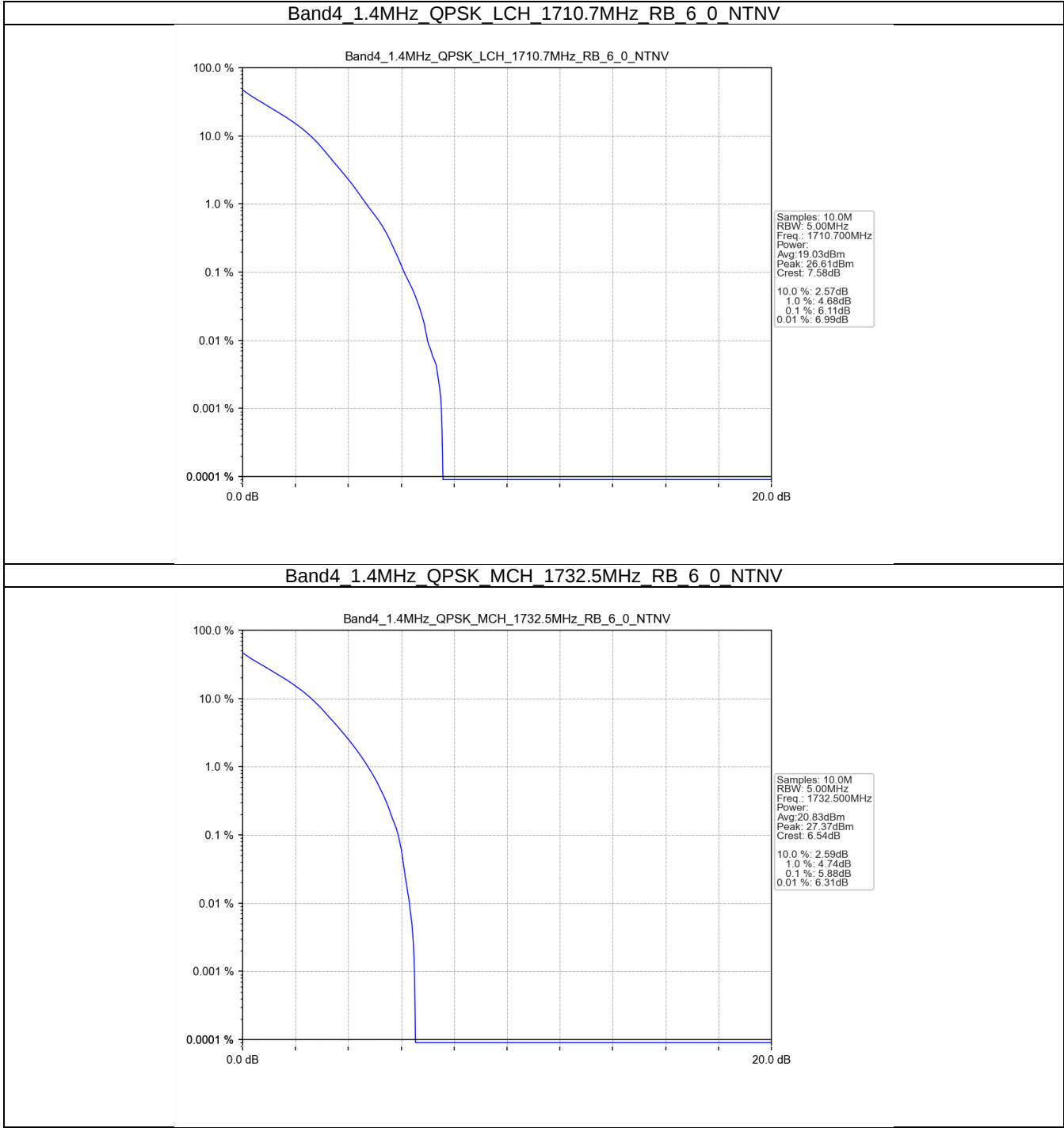
Band: 4 / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1717.5	75	0	6.23	<=13	Pass
	1732.5	75	0	6.03	<=13	Pass
	1747.5	75	0	6.05	<=13	Pass
16QAM	1717.5	27	0	6.71	<=13	Pass
	1732.5	27	0	6.59	<=13	Pass
	1747.5	27	48	6.73	<=13	Pass

4.1.6 B4_20MHz

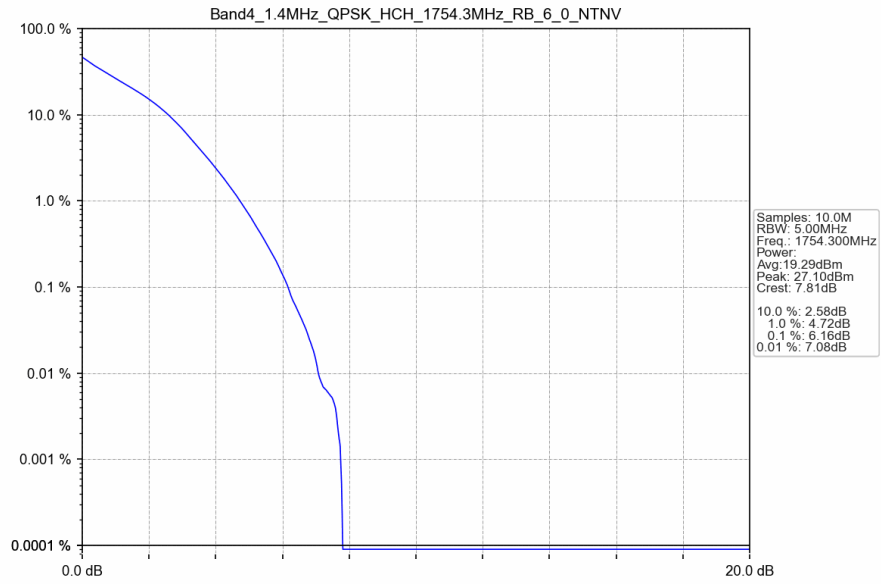
Band: 4 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1720	100	0	5.73	<=13	Pass
	1732.5	100	0	5.30	<=13	Pass
	1745	100	0	5.61	<=13	Pass
16QAM	1720	27	0	6.84	<=13	Pass
	1732.5	27	0	7.84	<=13	Pass
	1745	27	73	6.64	<=13	Pass

4.2 Test Graph

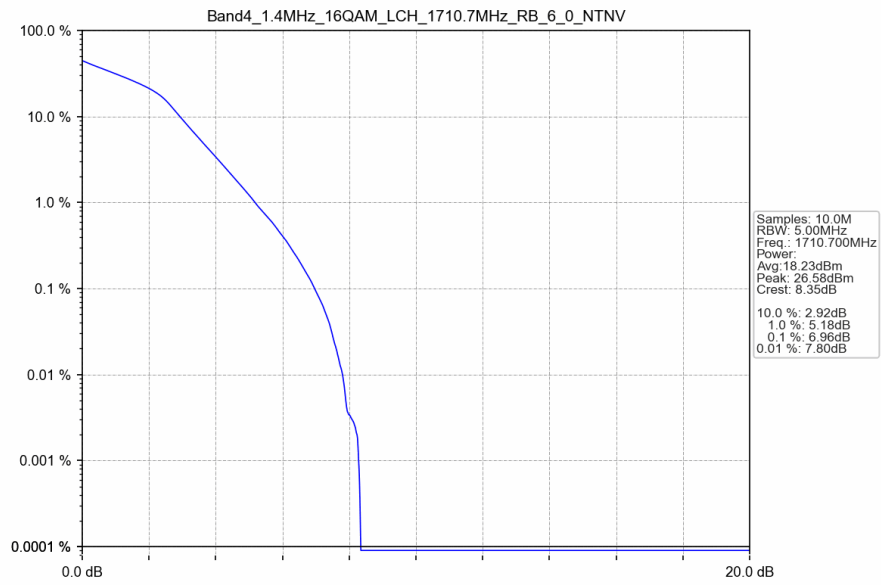
4.2.1 B4_1.4MHz



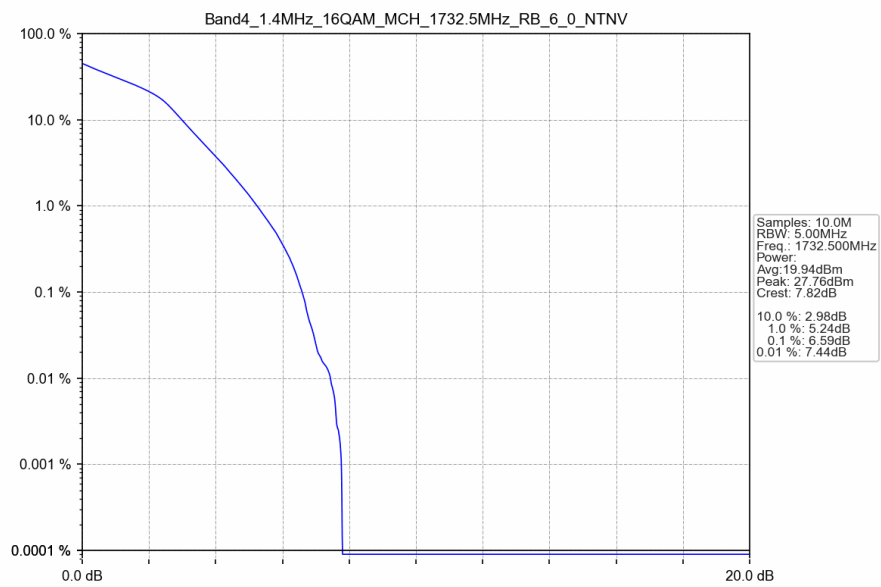
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_6_0_NTNV



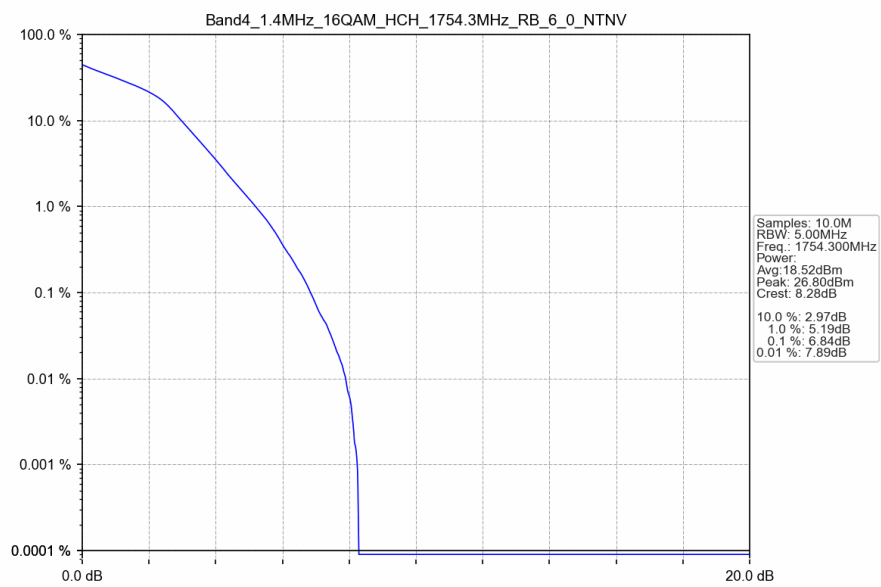
Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_6_0_NTNV



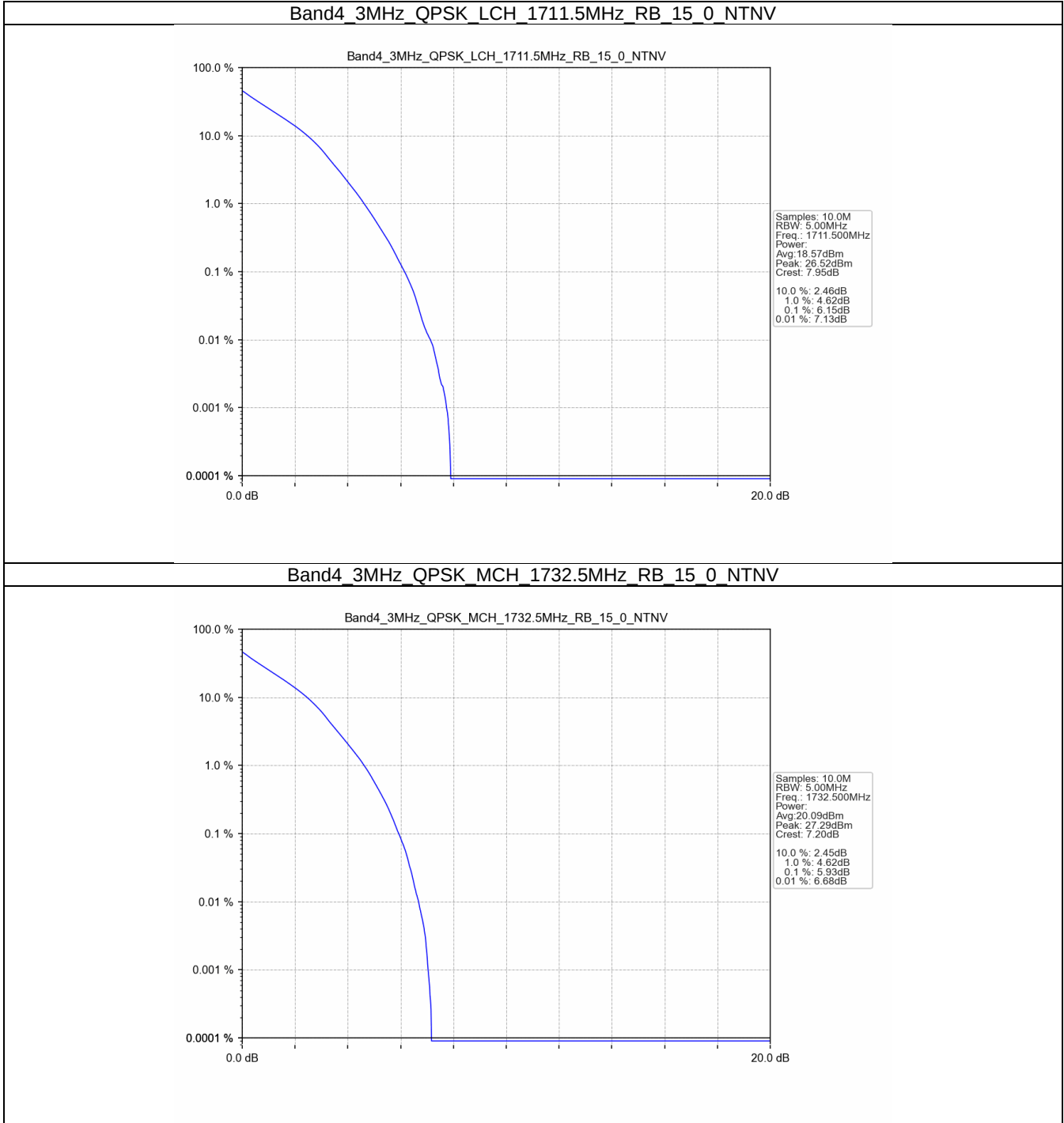
Band4 1.4MHz 16QAM MCH 1732.5MHz RB 6 0 NTN



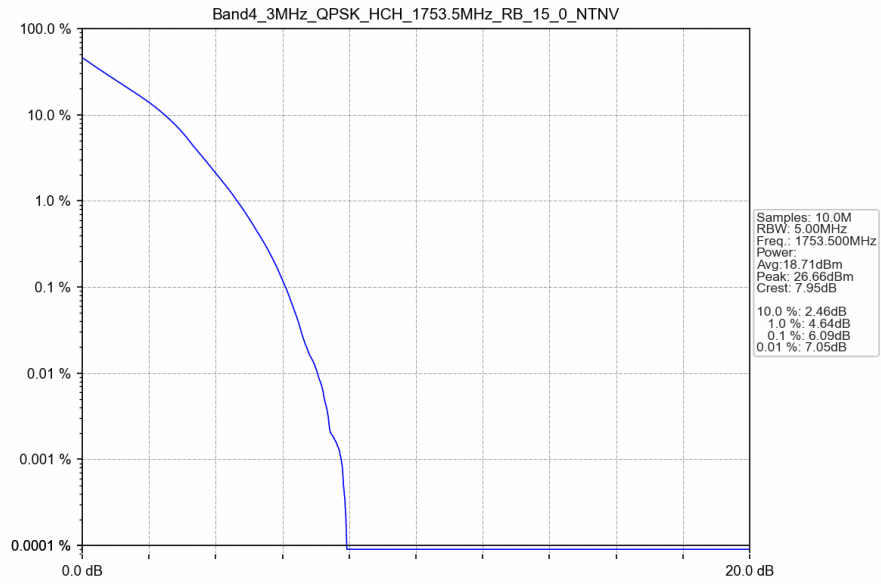
Band4 1.4MHz 16QAM HCH 1754.3MHz RB 6 0 NTN



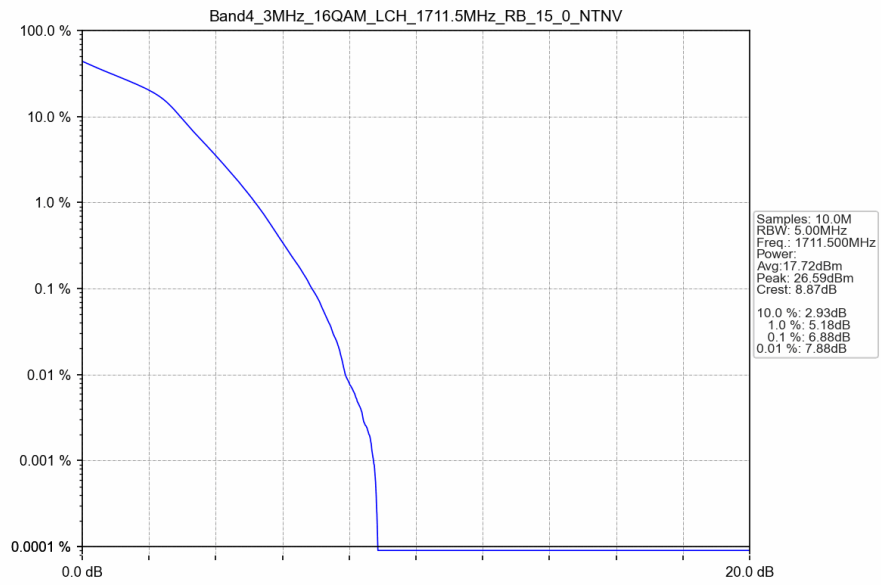
4.2.2 B4_3MHz



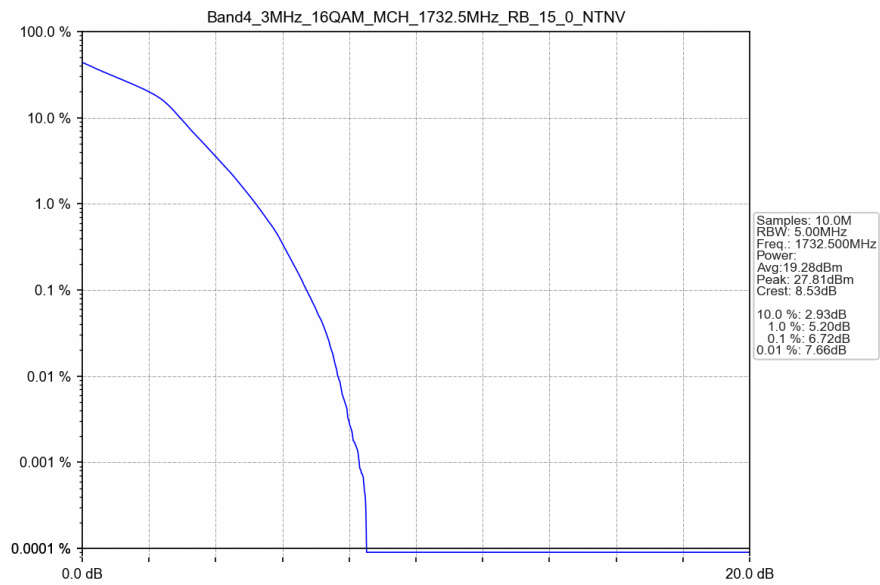
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_15_0_NTNV



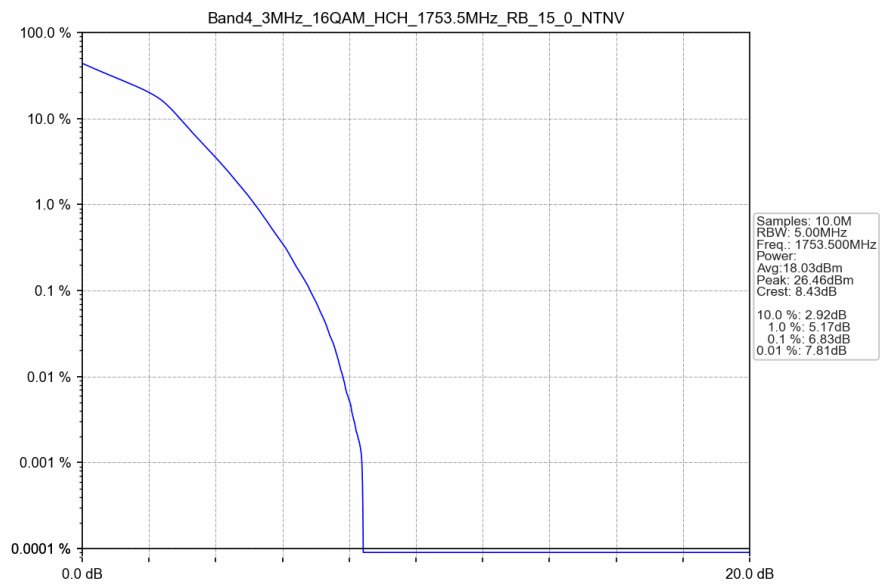
Band4_3MHz_16QAM_LCH_1711.5MHz_RB_15_0_NTNV



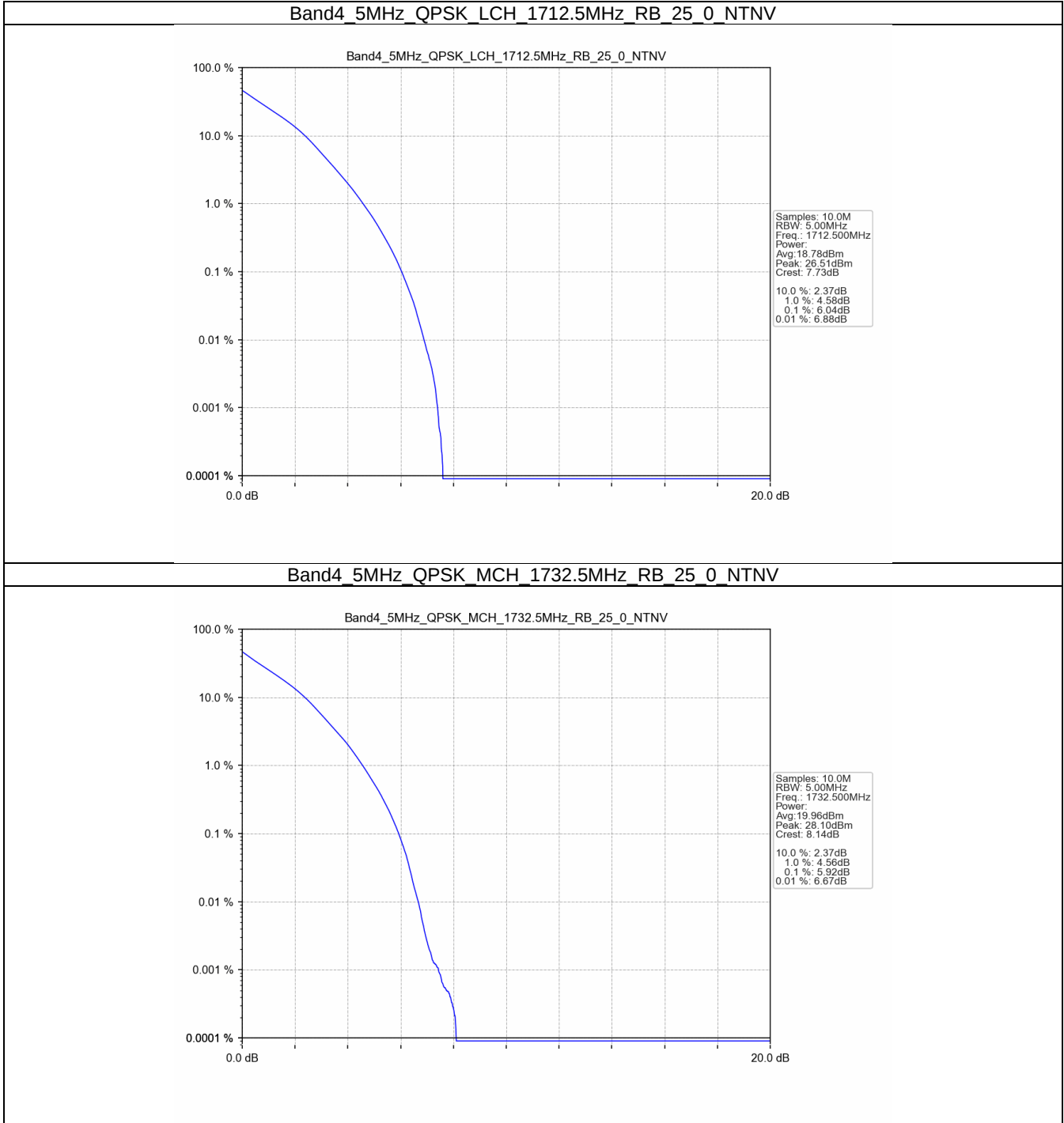
Band4_3MHz_16QAM_MCH_1732.5MHz_RB_15_0_NTNV



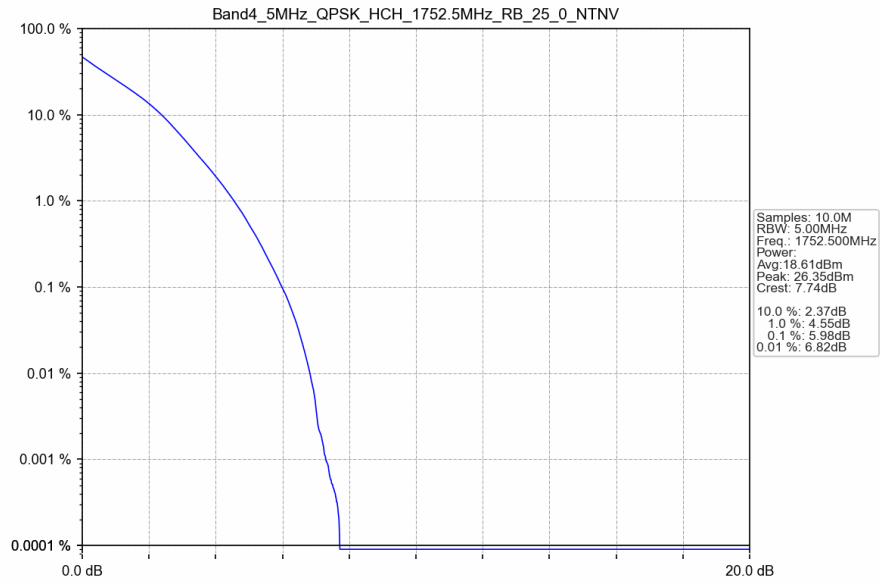
Band4_3MHz_16QAM_HCH_1753.5MHz_RB_15_0_NTNV



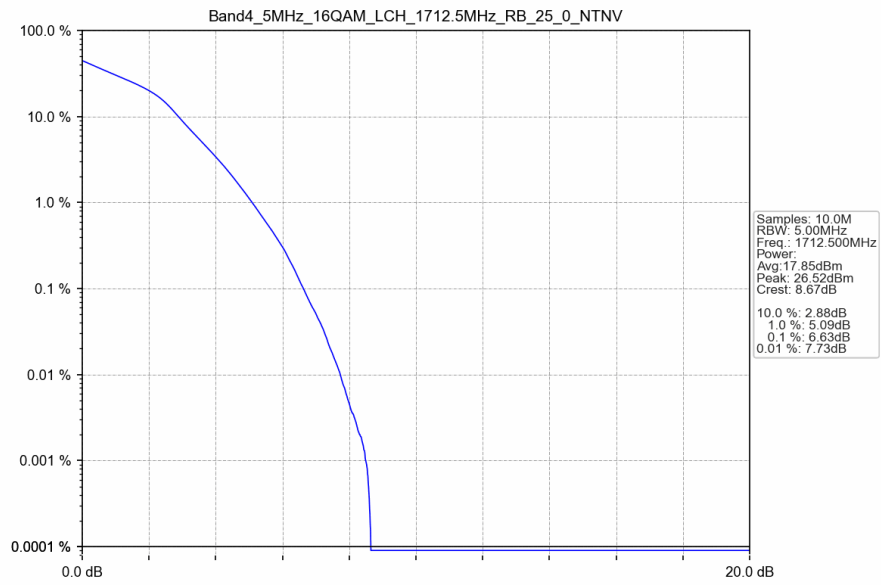
4.2.3 B4_5MHz



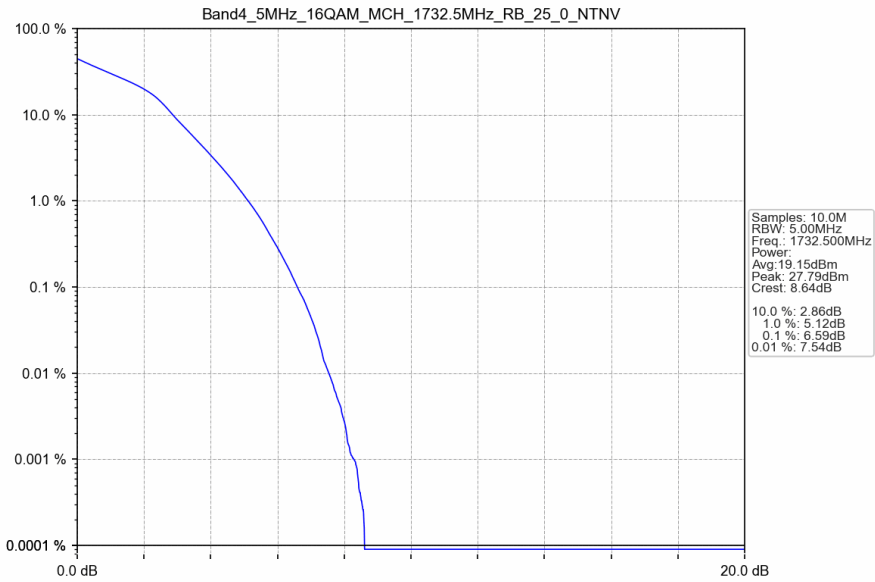
Band4_5MHz_QPSK_HCH_1752.5MHz_RB_25_0_NTNV



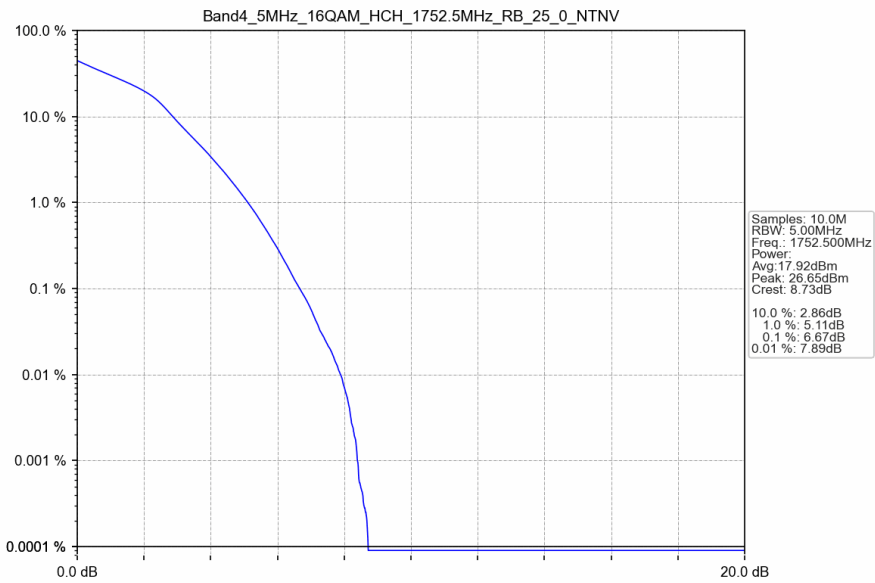
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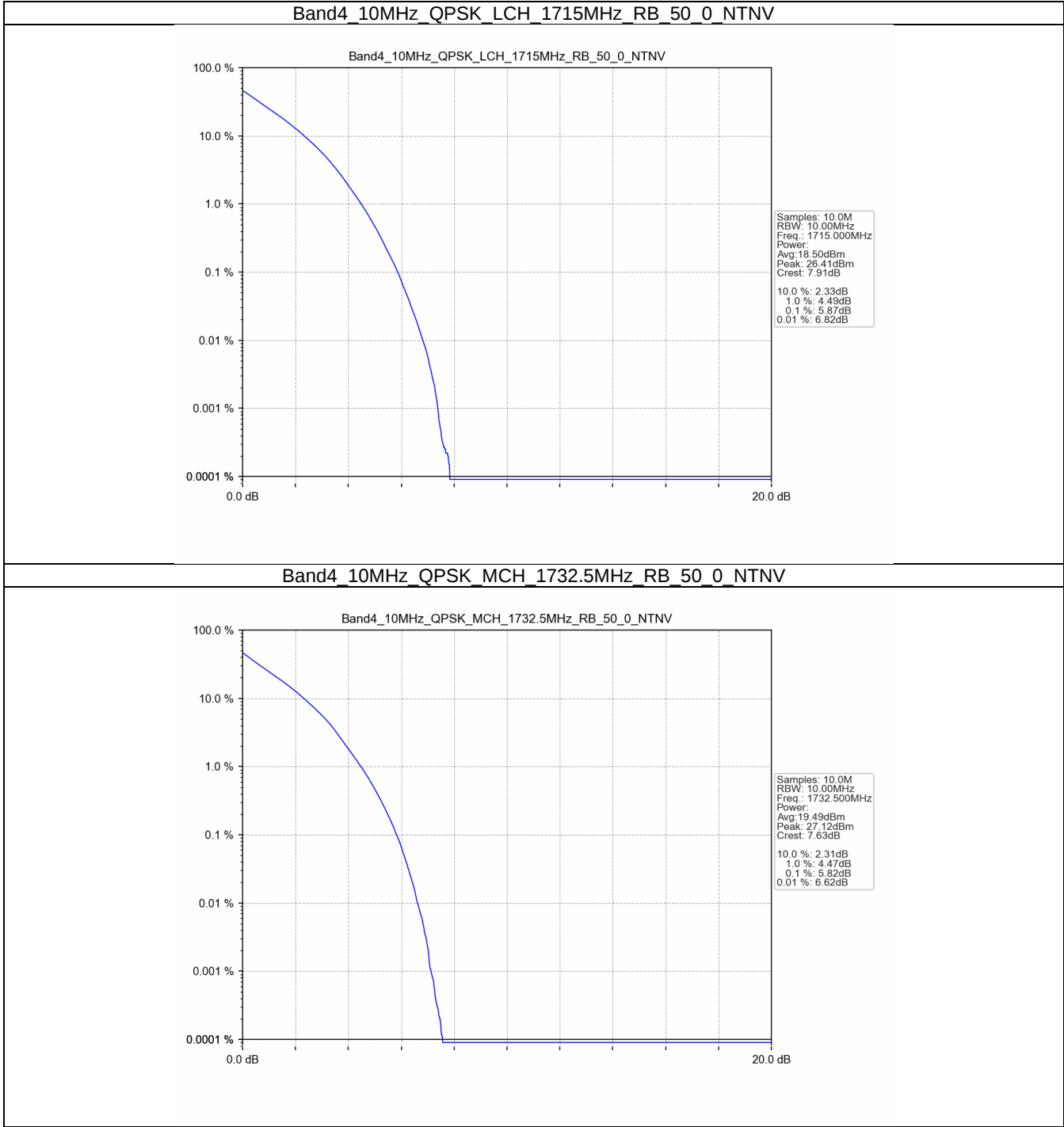
Band4_5MHz_16QAM_MCH_1732.5MHz_RB_25_0_NTNV



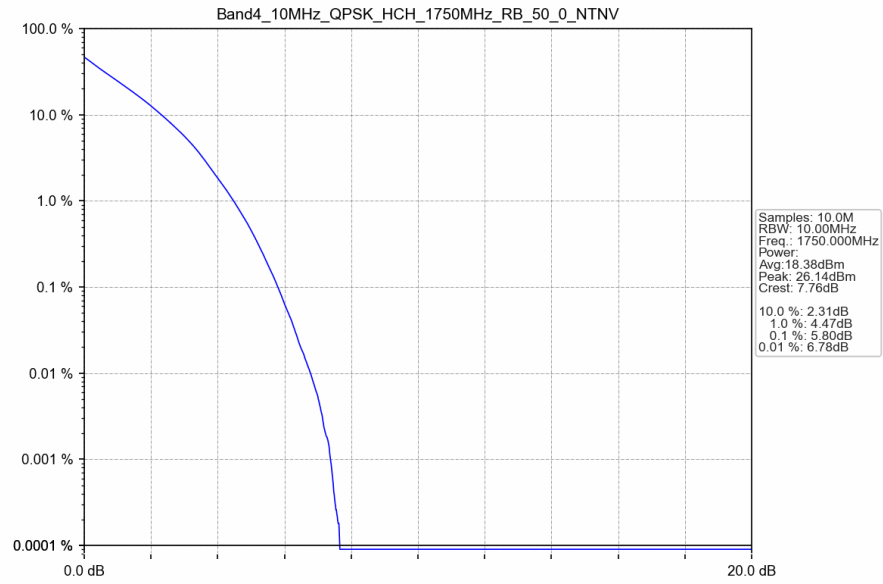
Band4_5MHz_16QAM_HCH_1752.5MHz_RB_25_0_NTNV



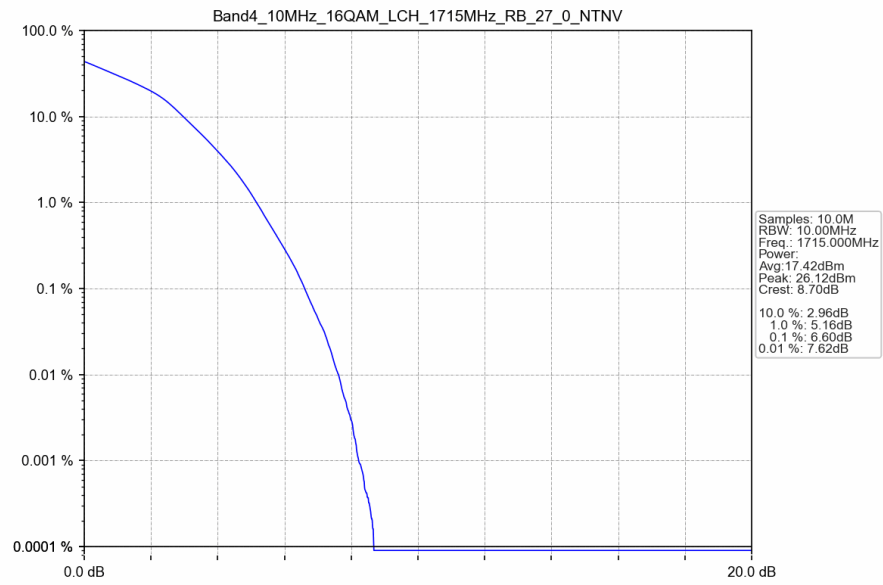
4.2.4 B4_10MHz



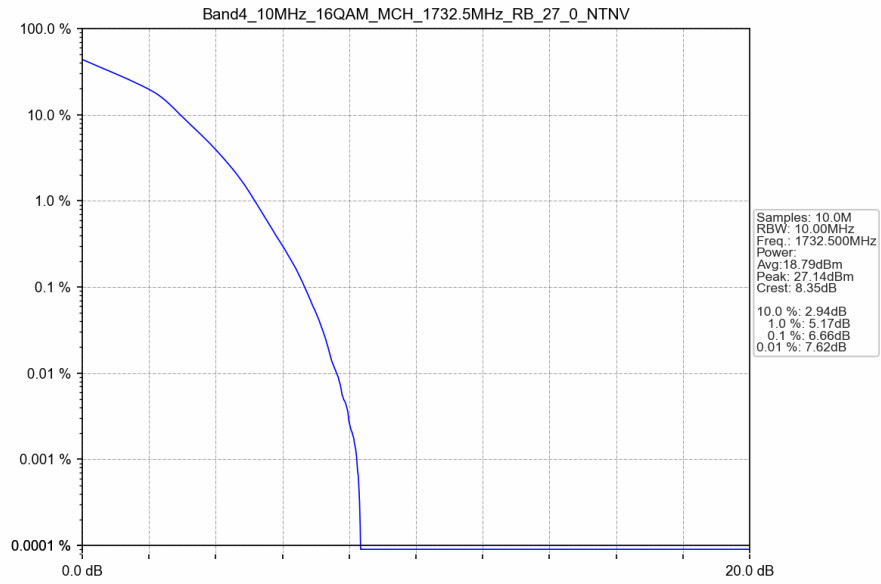
Band4 10MHz QPSK HCH 1750MHz RB 50 0 NTV



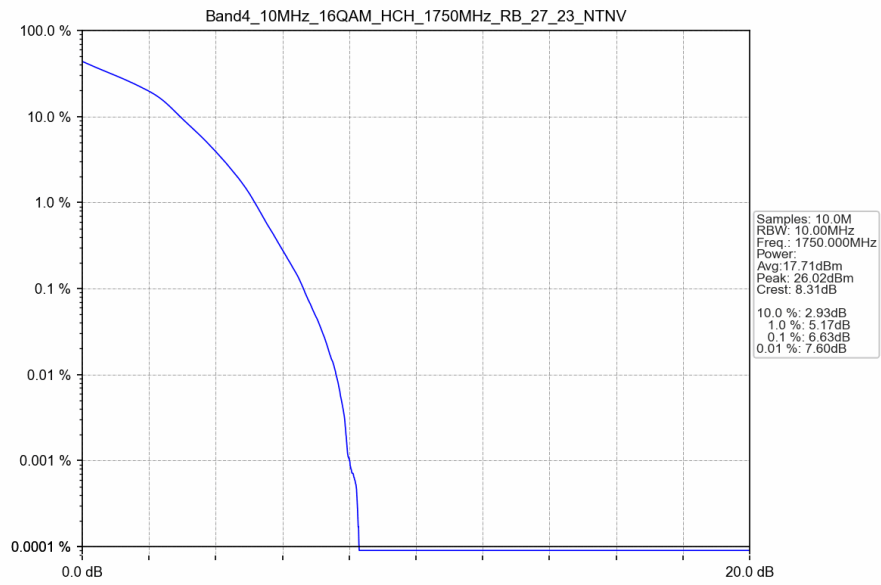
Band4 10MHz 16QAM LCH 1715MHz RB 27 0 NTV



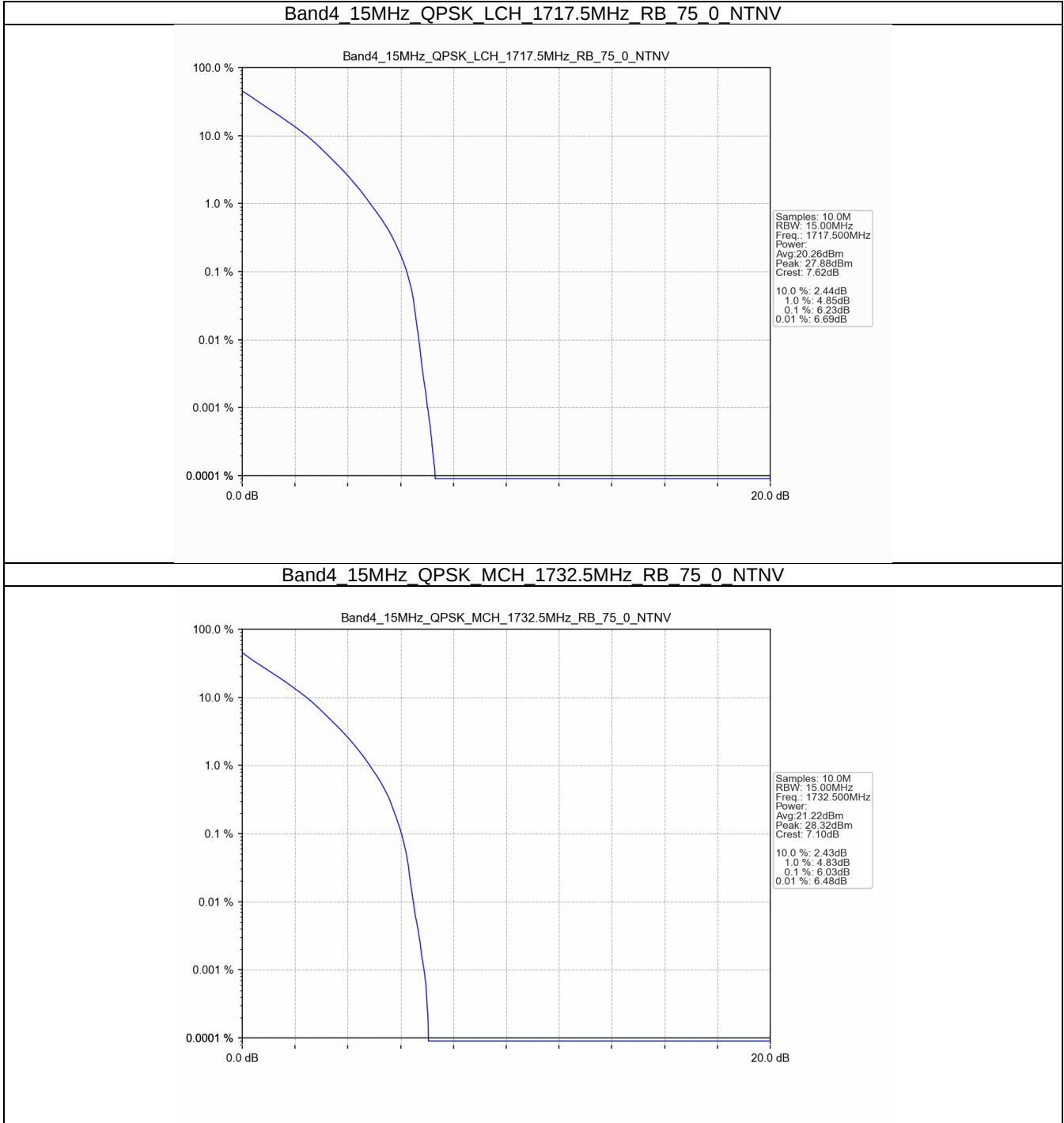
Band4_10MHz_16QAM_MCH_1732.5MHz_RB_27_0_NTNV



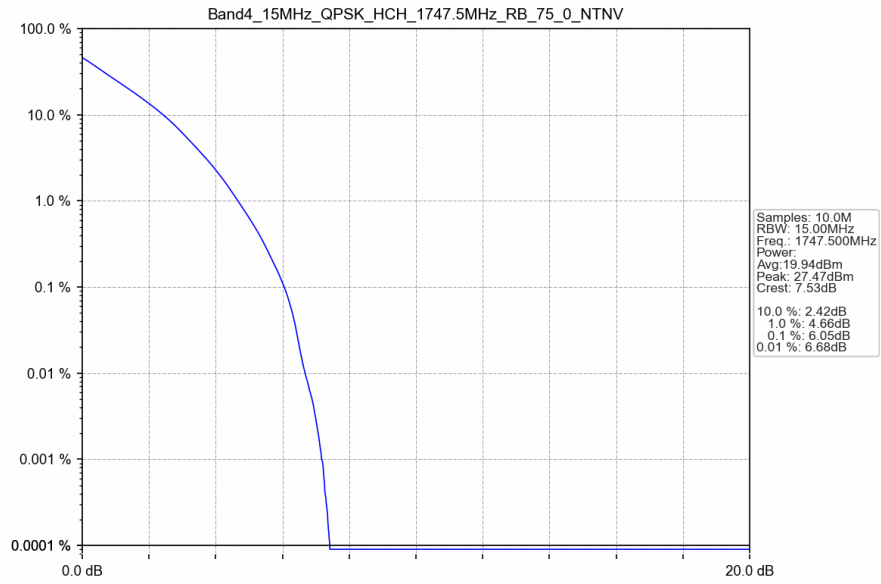
Band4_10MHz_16QAM_HCH_1750MHz_RB_27_23_NTNV



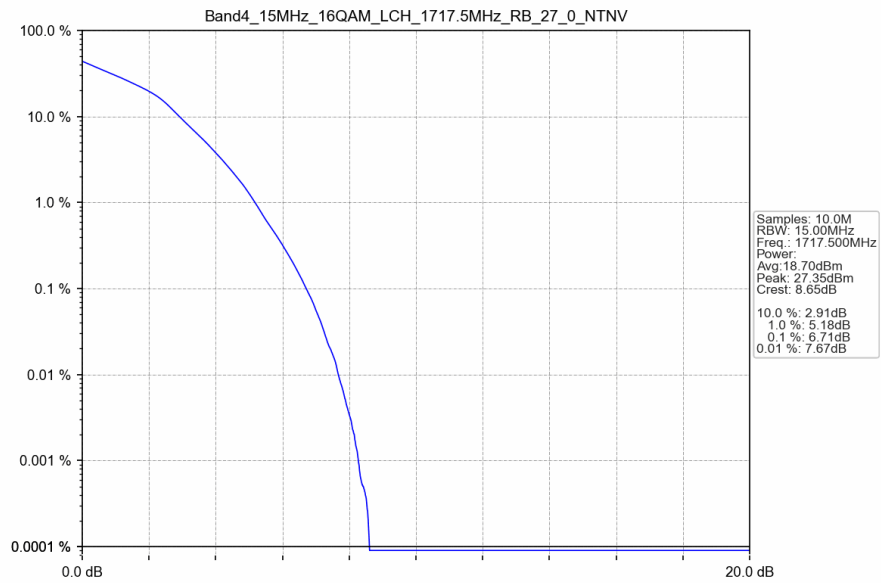
4.2.5 B4_15MHz



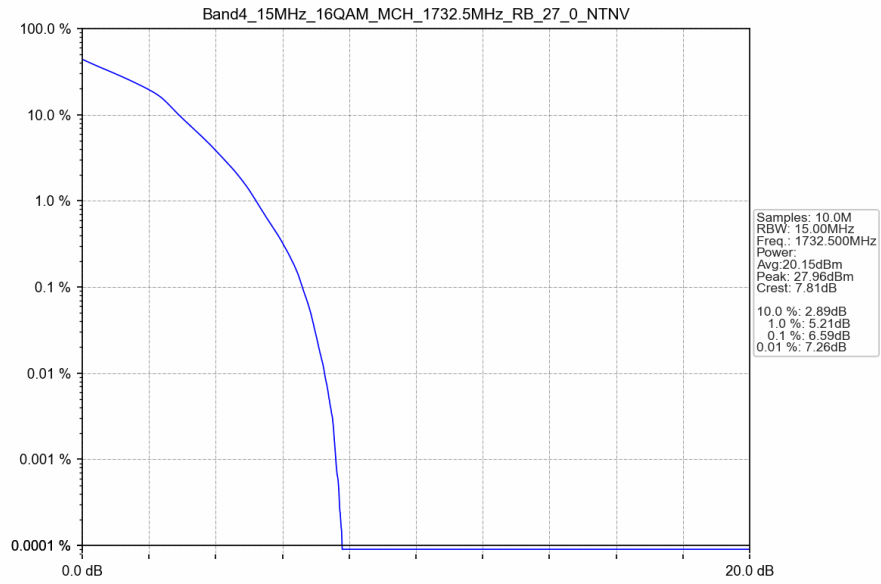
Band4_15MHz_QPSK_HCH_1747.5MHz_RB_75_0_NTNV



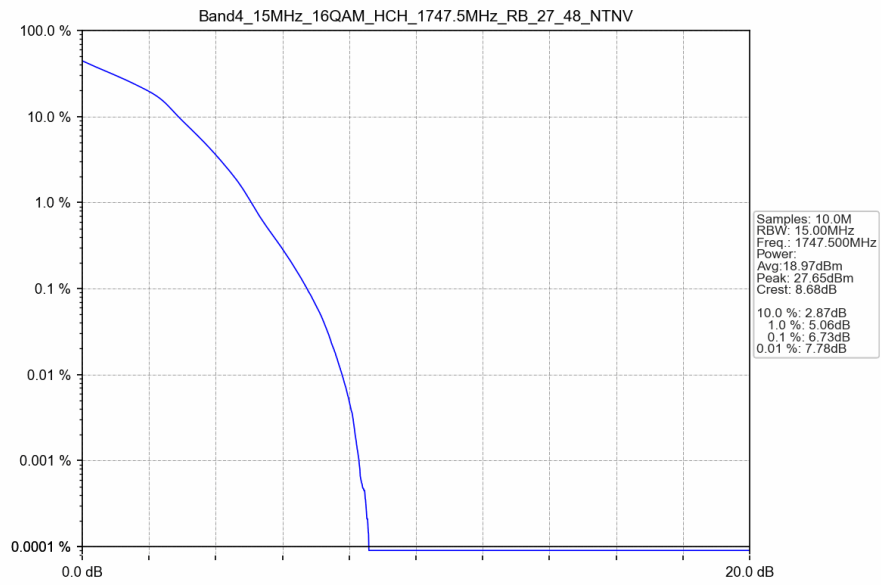
Band4_15MHz_16QAM_LCH_1717.5MHz_RB_27_0_NTNV



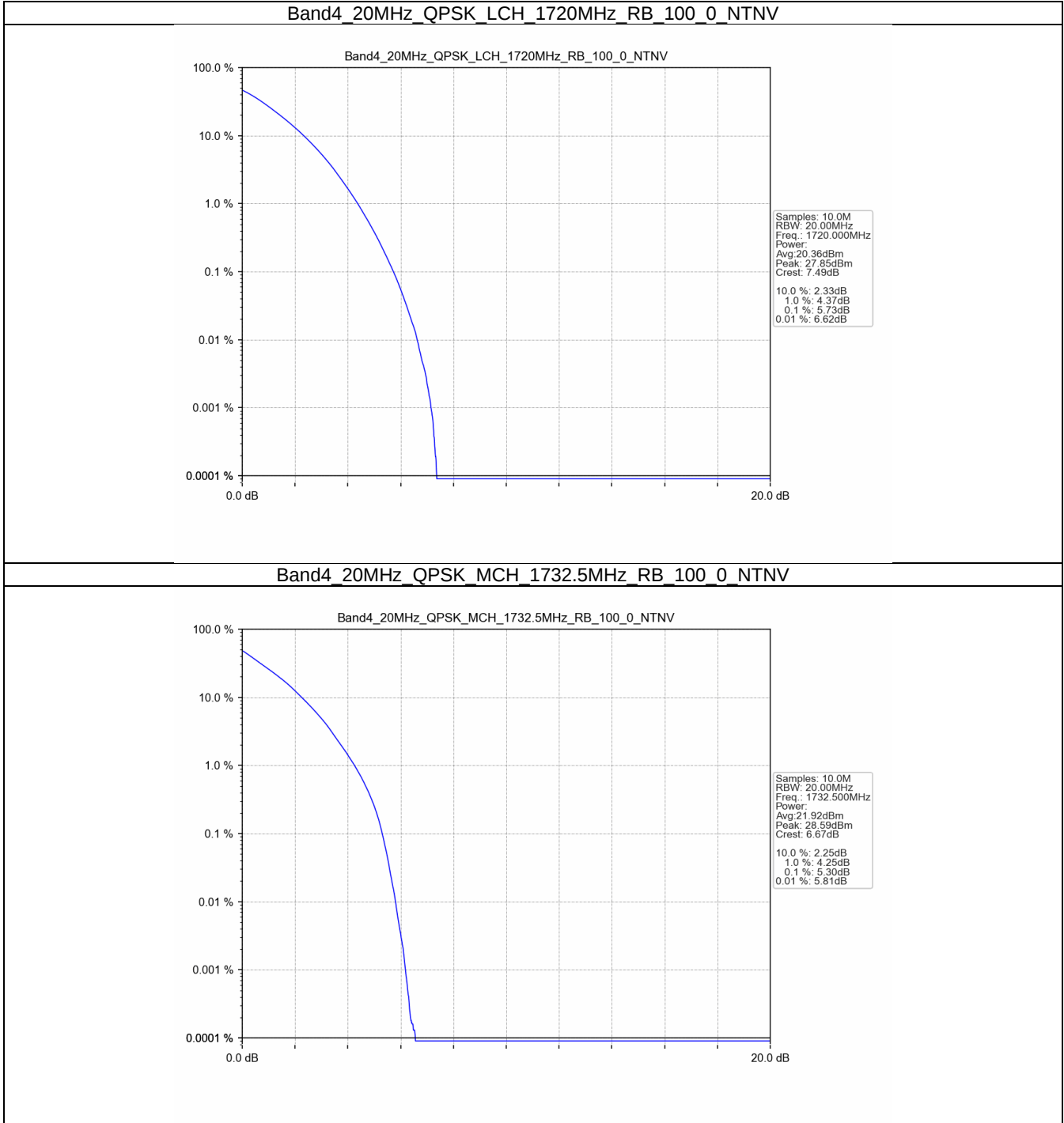
Band4_15MHz_16QAM_MCH_1732.5MHz_RB_27_0_NTNV



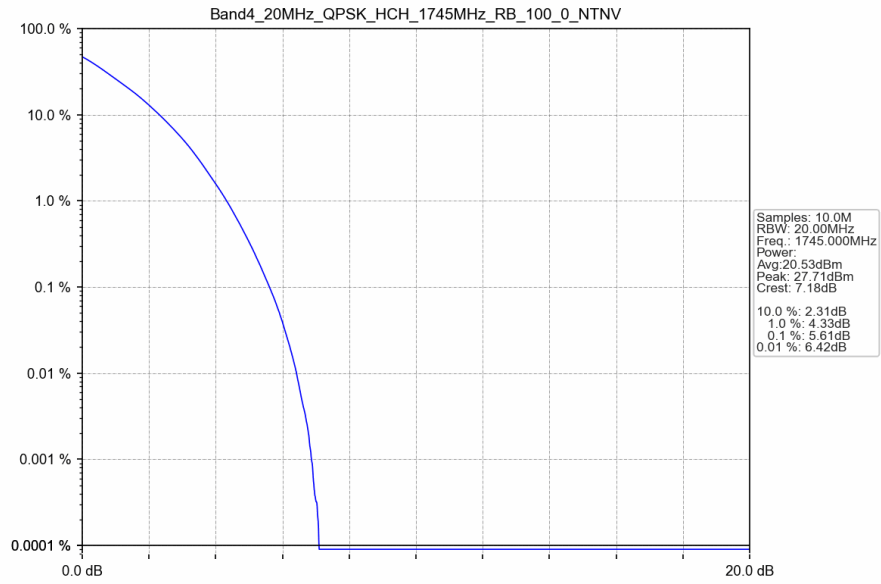
Band4_15MHz_16QAM_HCH_1747.5MHz_RB_27_48_NTNV



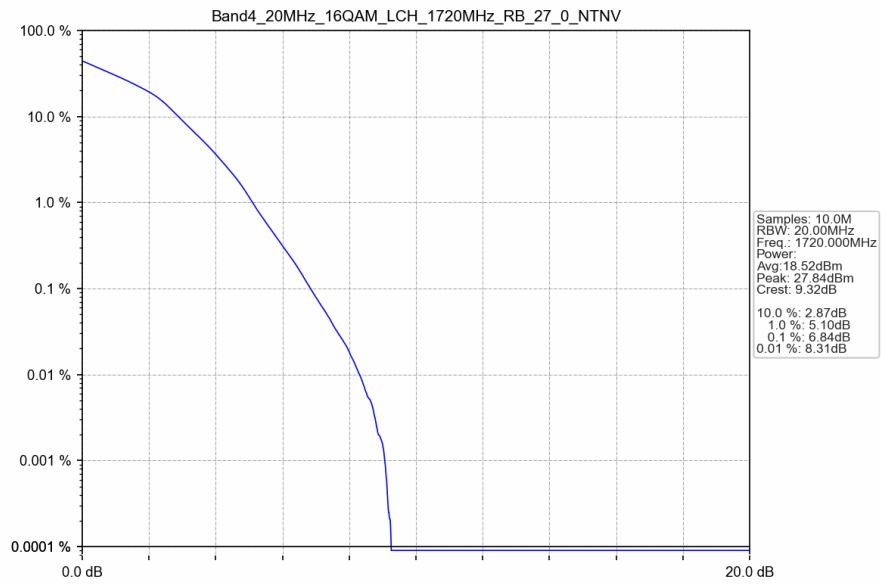
4.2.6 B4_20MHz



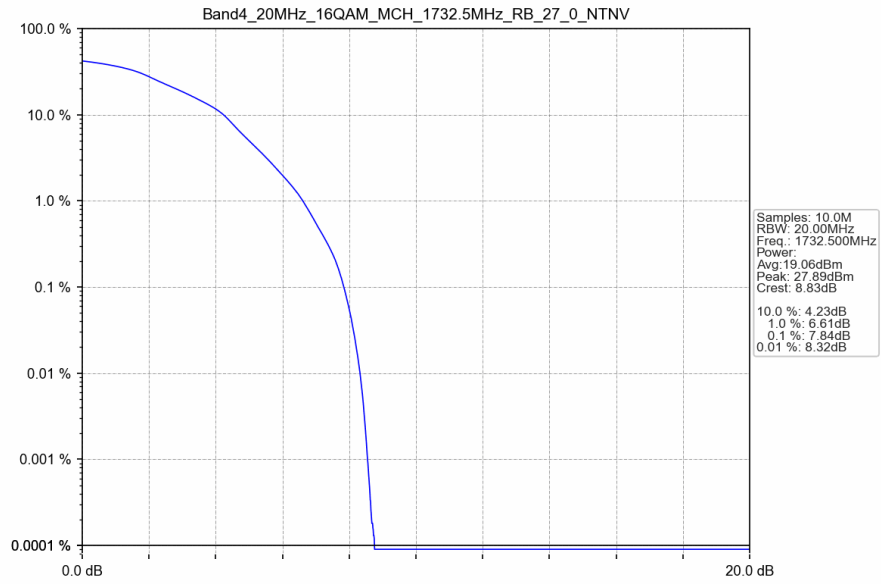
Band4_20MHz_QPSK_HCH_1745MHz_RB_100_0_NTNV



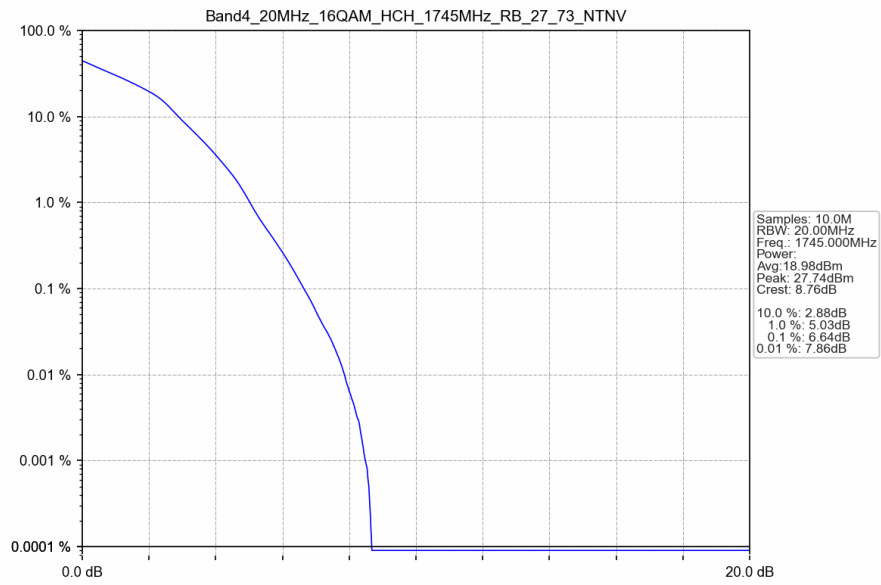
Band4_20MHz_16QAM_LCH_1720MHz_RB_27_0_NTNV



Band4 20MHz 16QAM MCH 1732.5MHz RB 27 0 NTN



Band4 20MHz 16QAM HCH 1745MHz RB 27 73 NTN



5. Spurious Emission

5.1 Test Result

5.1.1 B4_1.4MHz

Band: 4 / Bandwidth: 1.4MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1710.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
		1754.3	1	0	Refer To Test Graph	
	5			Refer To Test Graph		Pass
	6		0	Refer To Test Graph		Pass

5.1.2 B4_3MHz

Band: 4 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1711.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
	1753.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

5.1.3 B4_5MHz

Band: 4 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1712.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
	1752.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

5.1.4 B4_10MHz

Band: 4 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1715	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass

	1750	1	0	Refer To Test Graph	Pass
			49	Refer To Test Graph	Pass
		50	0	Refer To Test Graph	Pass

5.1.5 B4_15MHz

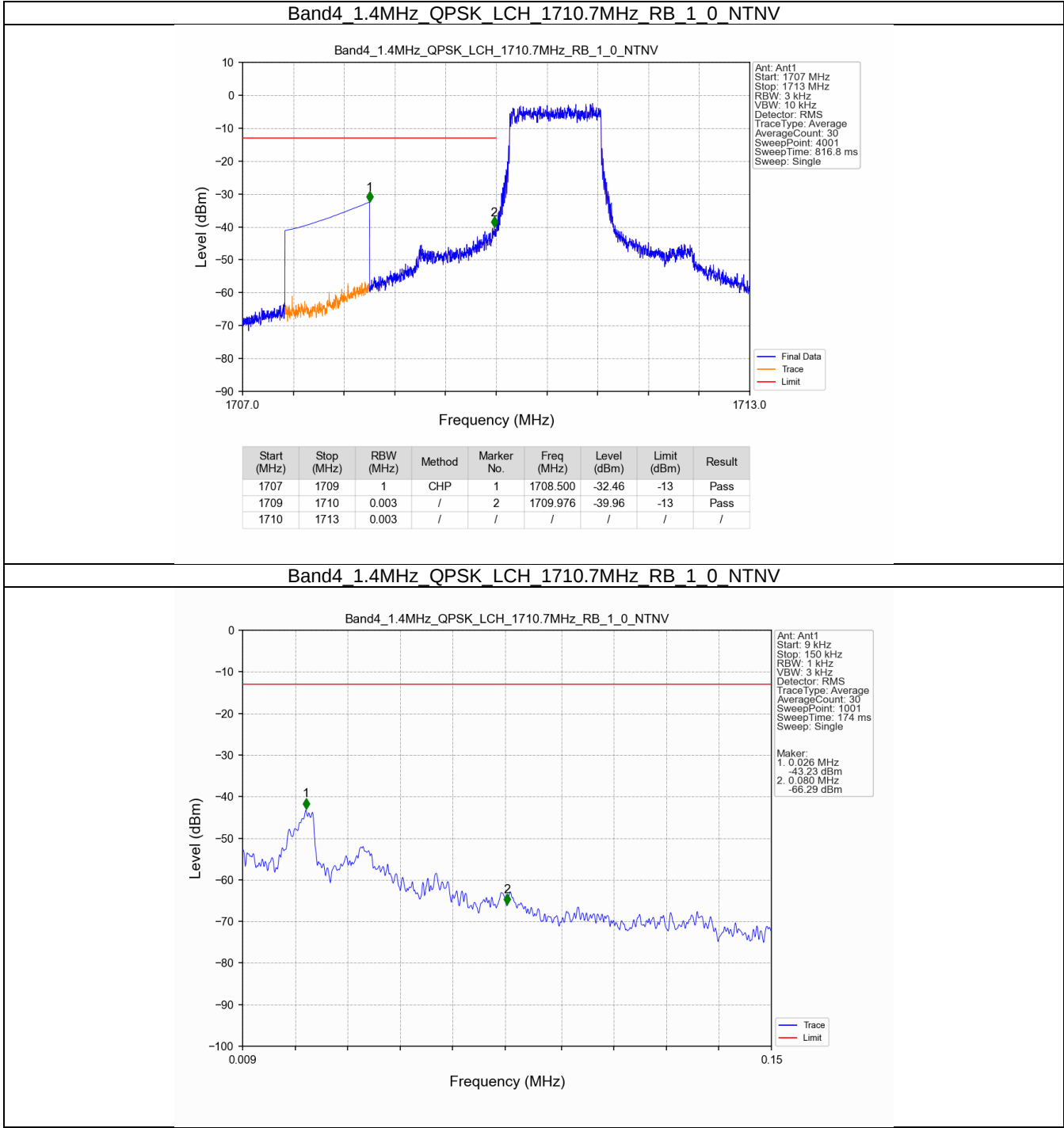
Band: 4 / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1717.5	1	0	Refer To Test Graph		Pass
		75	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
	1747.5	1	0	Refer To Test Graph		Pass
			74	Refer To Test Graph		Pass
		75	0	Refer To Test Graph		Pass

5.1.6 B4_20MHz

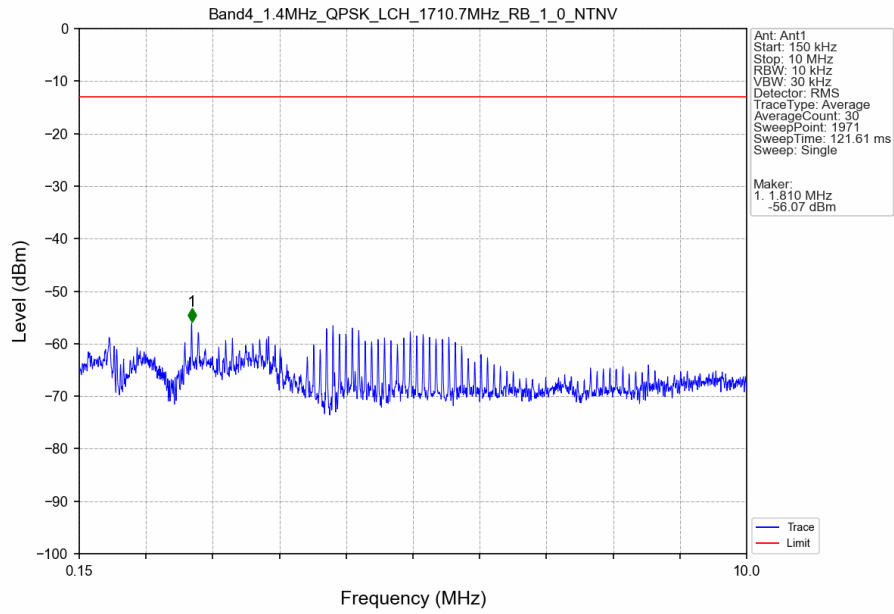
Band: 4 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	1720	1	0	Refer To Test Graph		Pass
		100	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
	1745	1	0	Refer To Test Graph		Pass
			99	Refer To Test Graph		Pass
		100	0	Refer To Test Graph		Pass

5.2 Test Graph

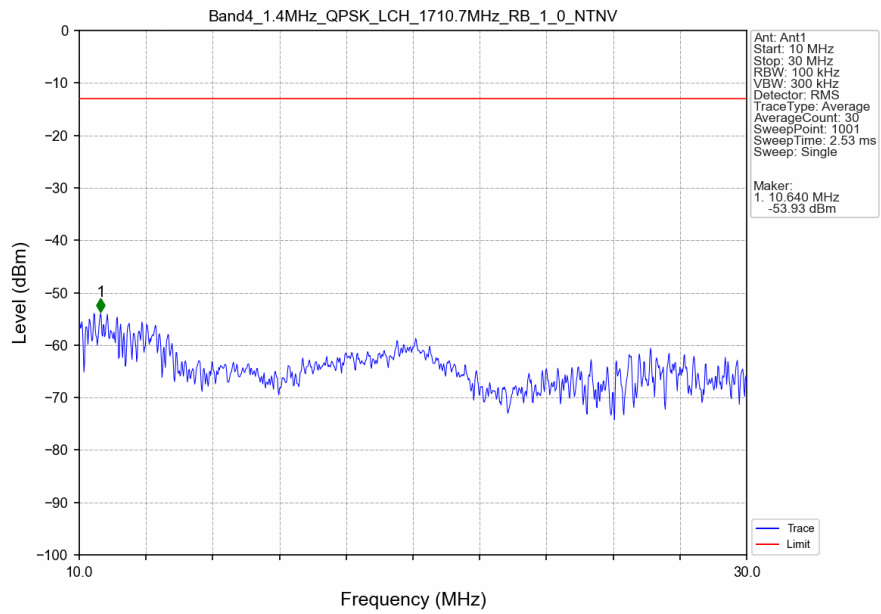
5.2.1 B4_1.4MHz



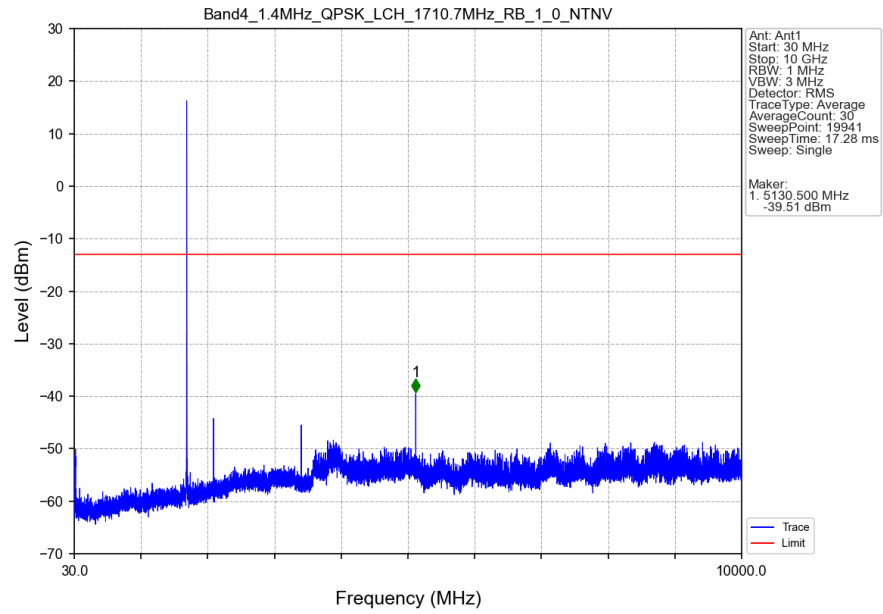
Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_1_0_NTNV



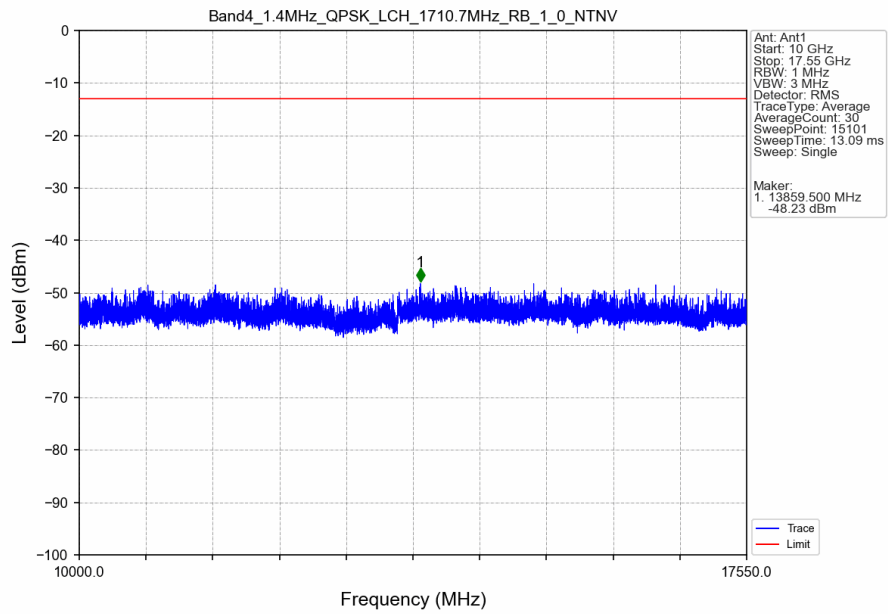
Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_1_0_NTNV



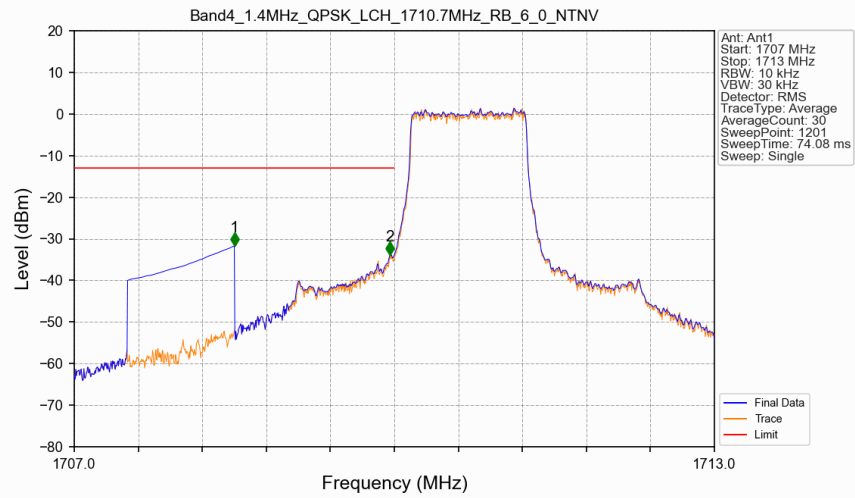
Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_1_0_NTNV



Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_1_0_NTNV

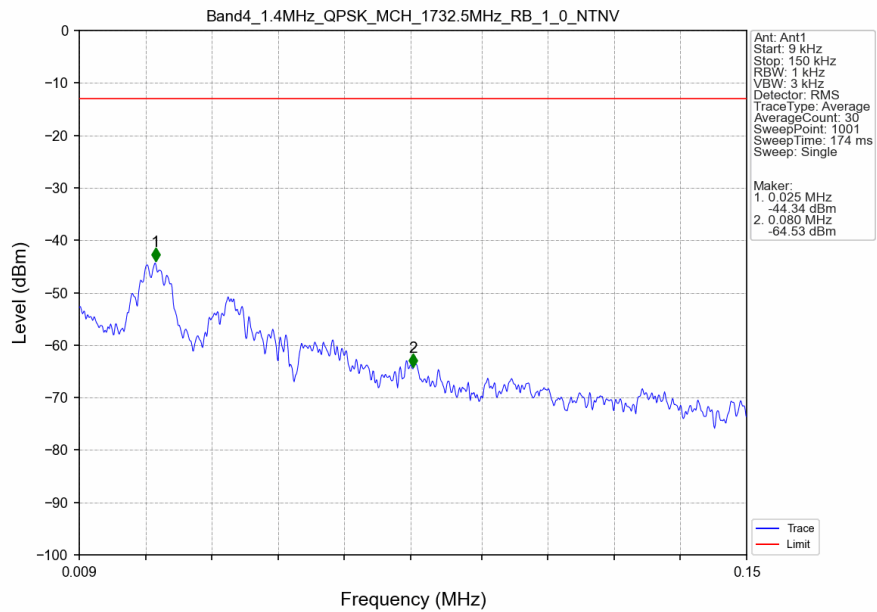


Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_6_0_NTNV

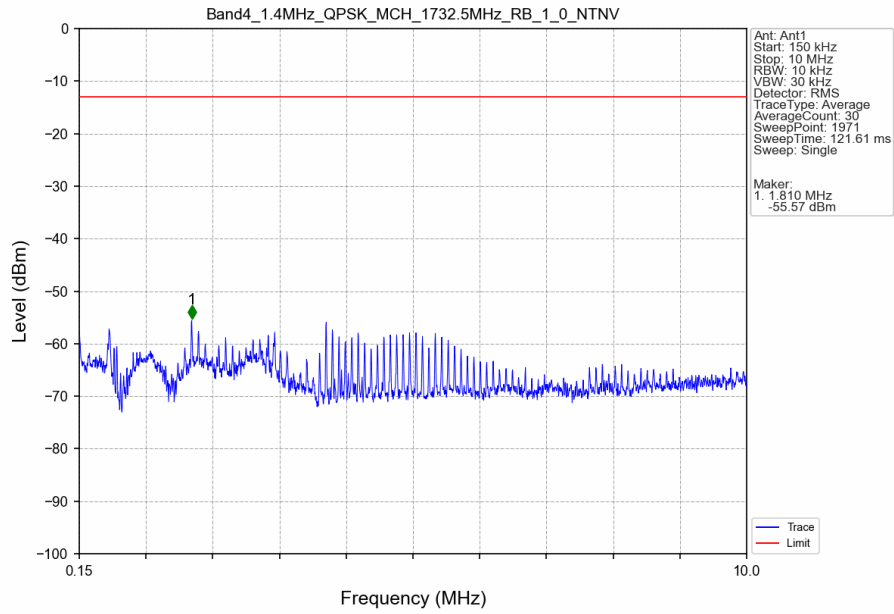


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1707	1709	1	CHP	1	1708.500	-31.70	-13	Pass
1709	1710	0.013	CHP	2	1709.960	-33.85	-13	Pass
1710	1713	0.013	CHP	/	/	/	/	/

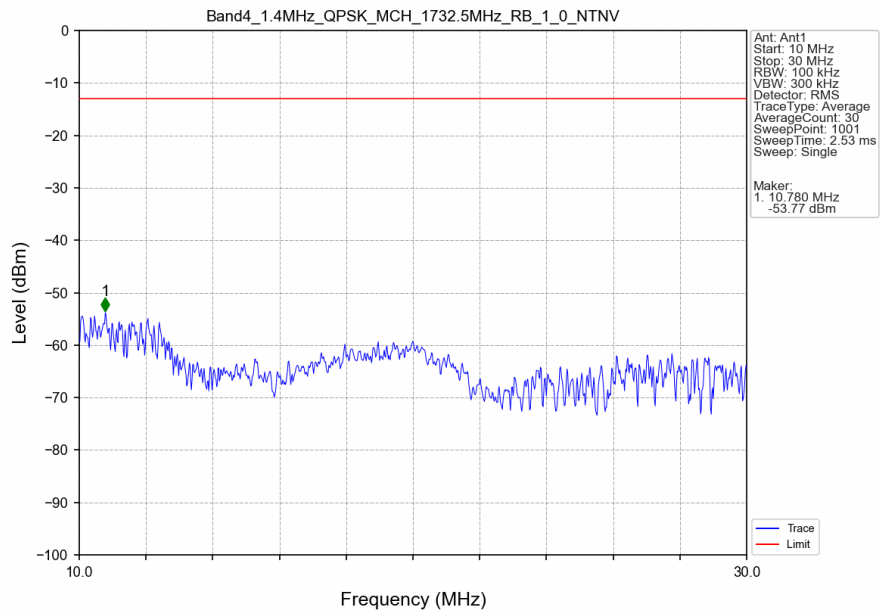
Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



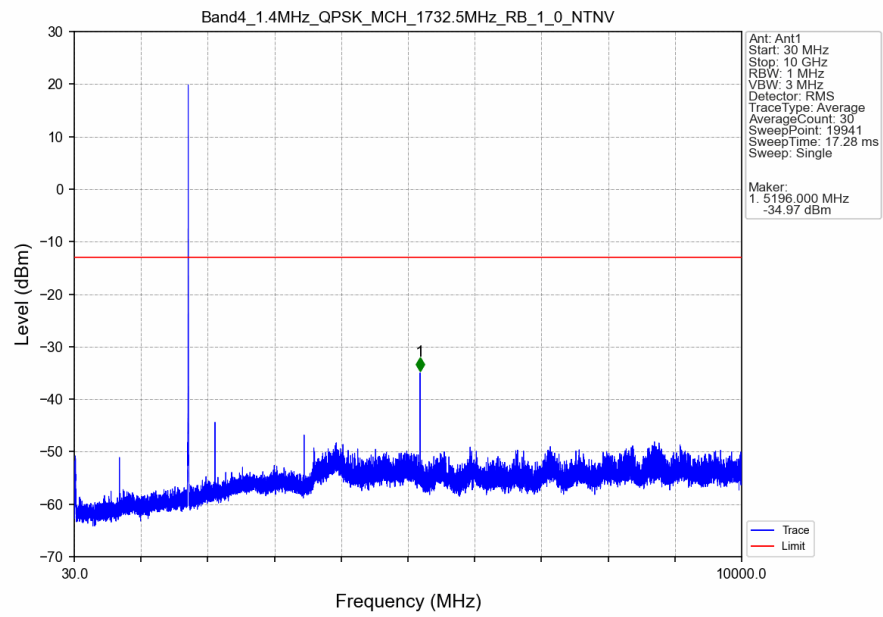
Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



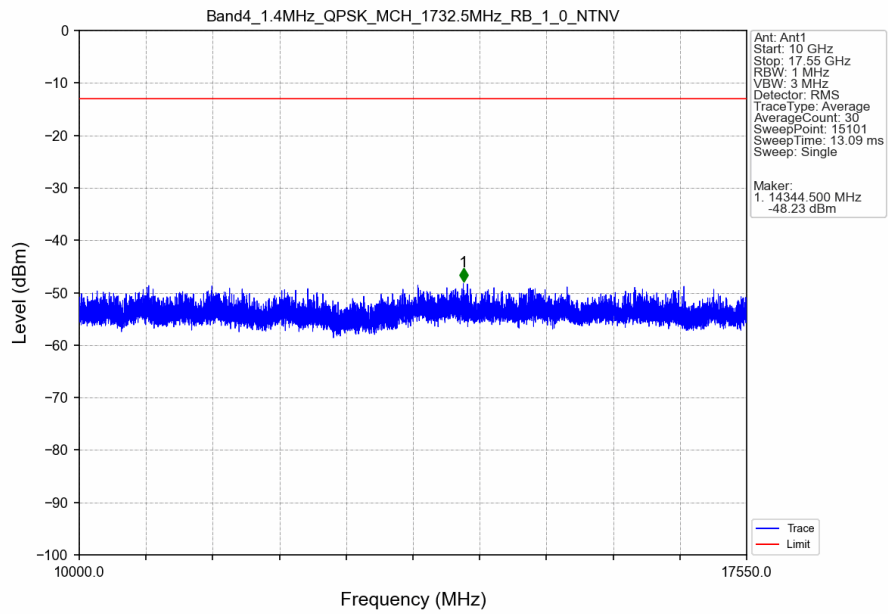
Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



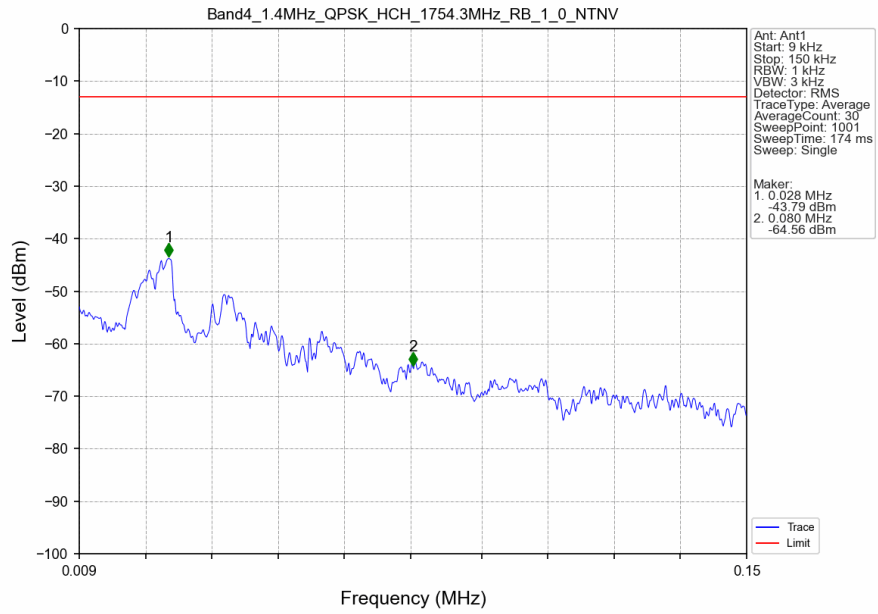
Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



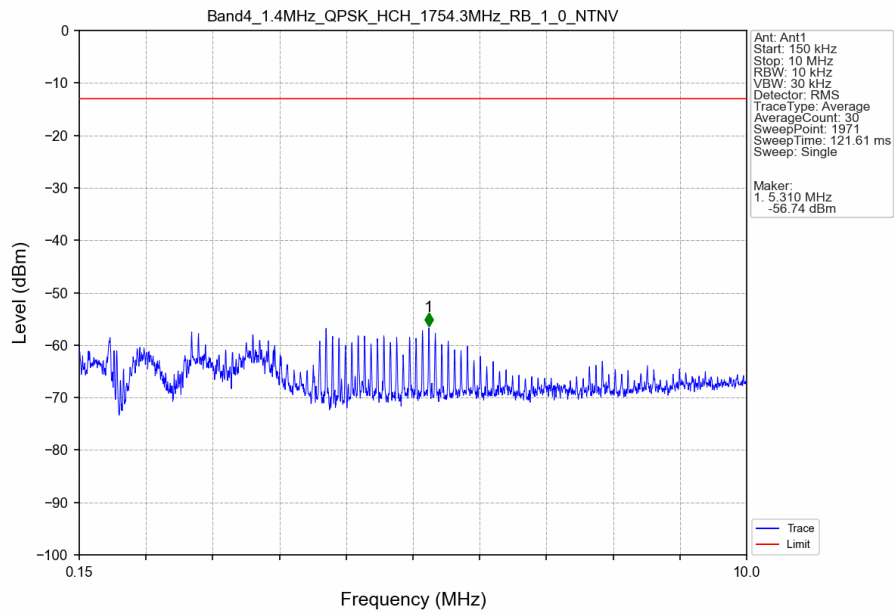
Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



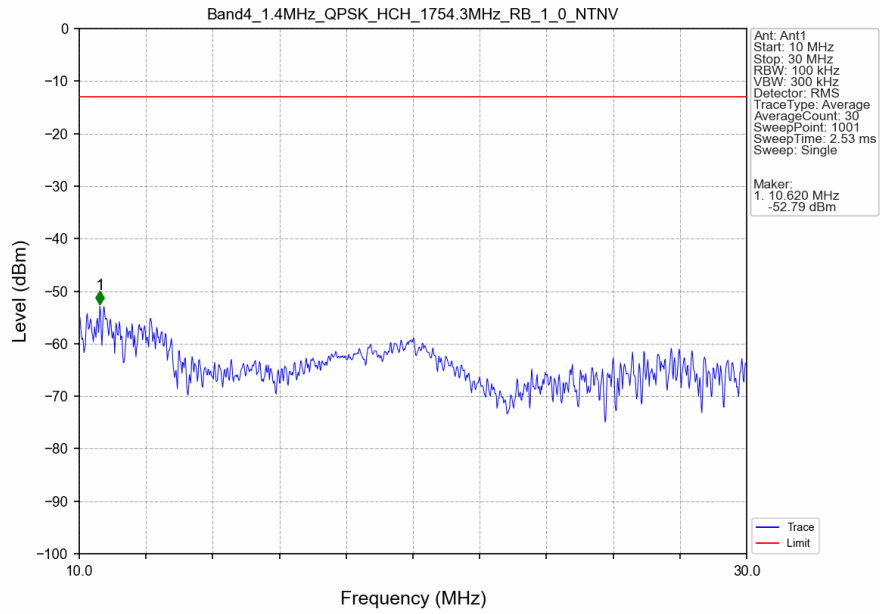
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_0_NTNV



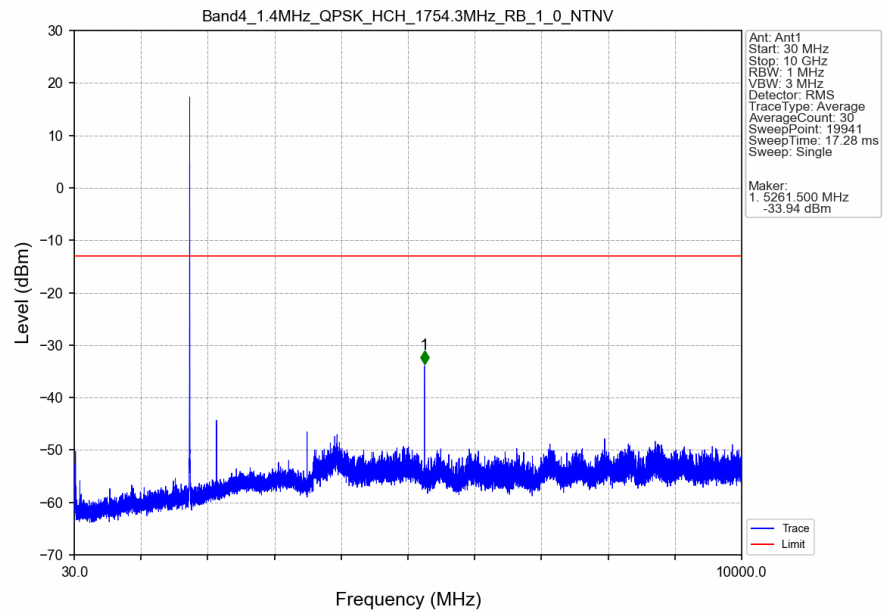
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_0_NTNV



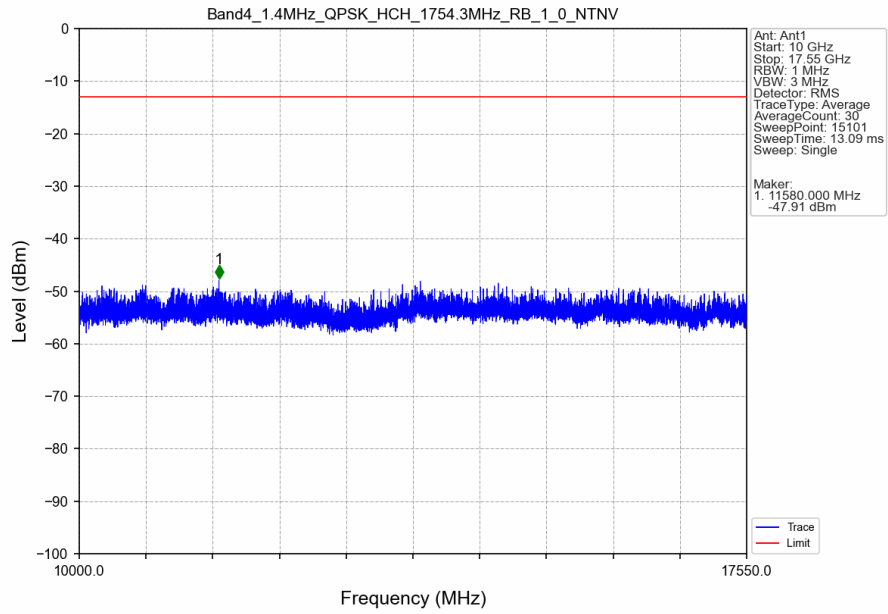
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_0_NTNV



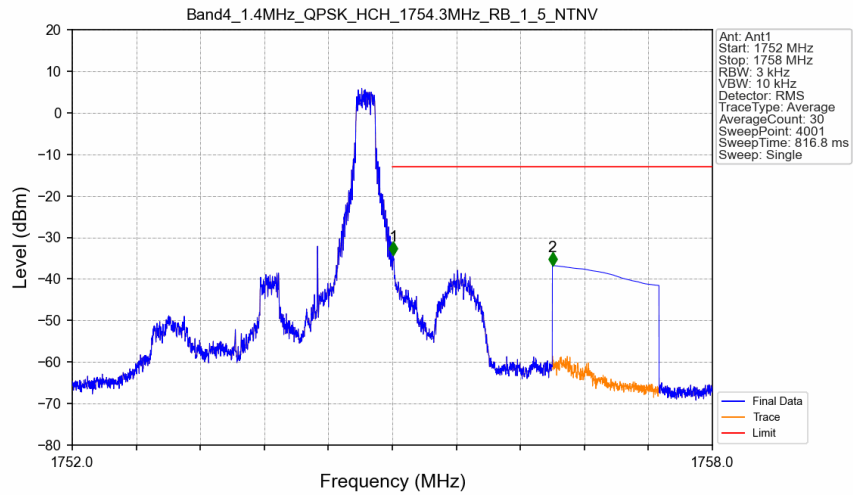
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_0_NTNV



Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_0_NTNV

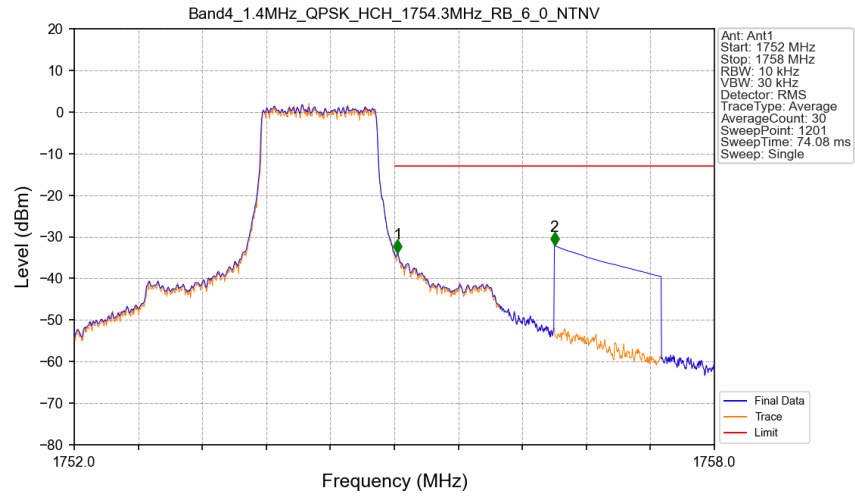


Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_5_NTNV



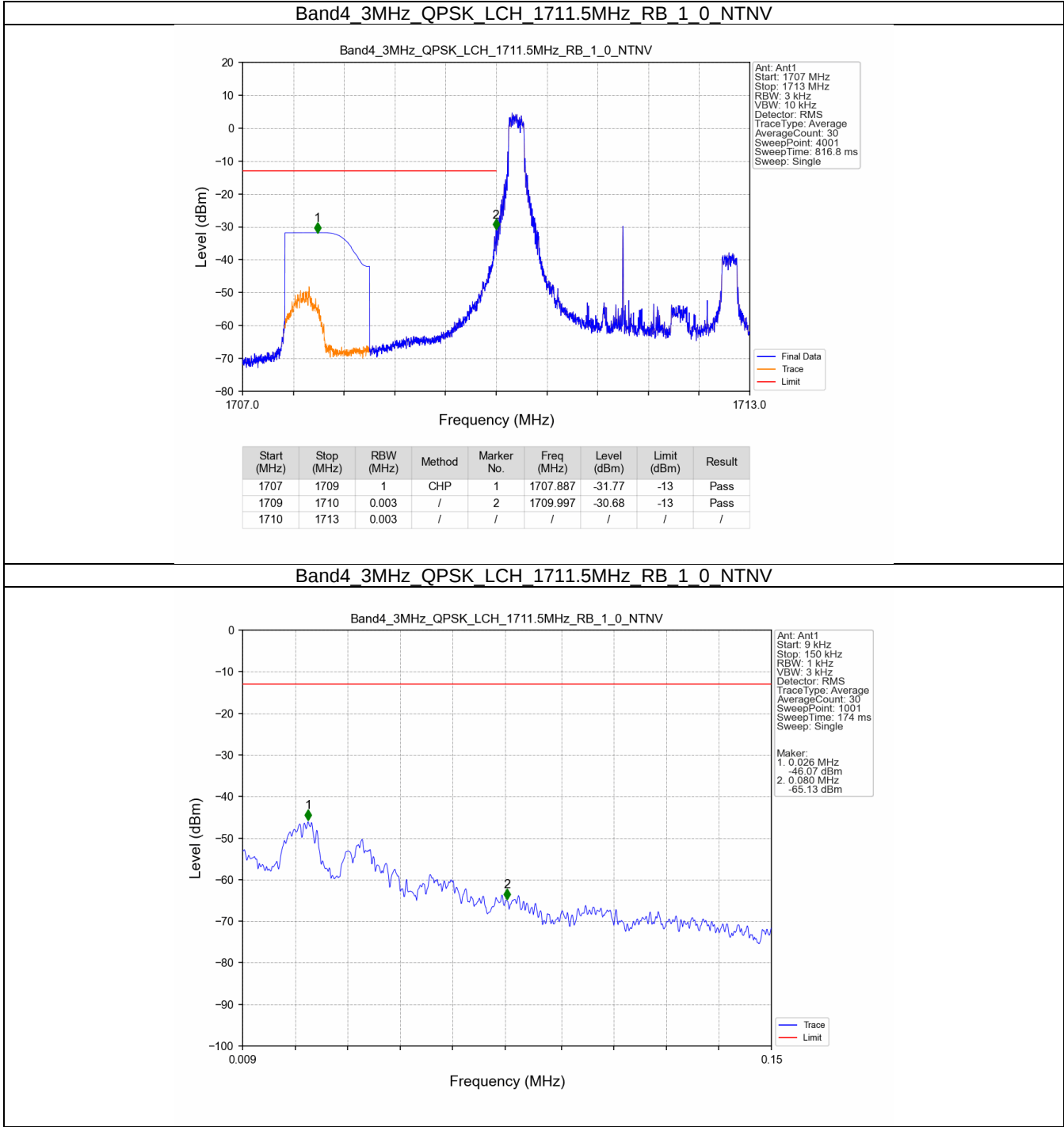
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1752	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.009	-34.29	-13	Pass
1756	1758	1	CHP	2	1756.500	-36.78	-13	Pass

Band4 1.4MHz QPSK HCH 1754.3MHz RB 6 0_NTNV

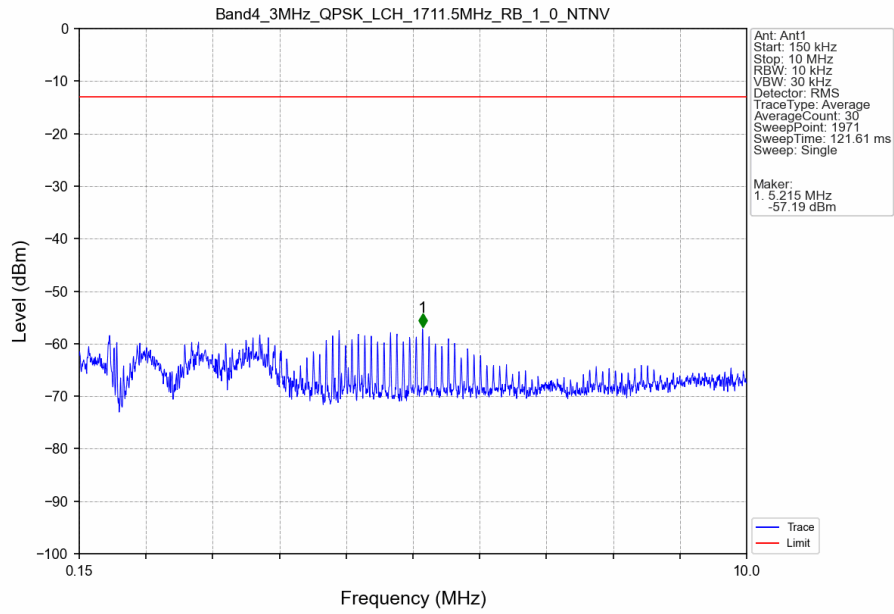


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1752	1755	0.013	CHP	/	/	/	/	/
1755	1756	0.013	CHP	1	1755.030	-33.93	-13	Pass
1756	1758	1	CHP	2	1756.500	-32.10	-13	Pass

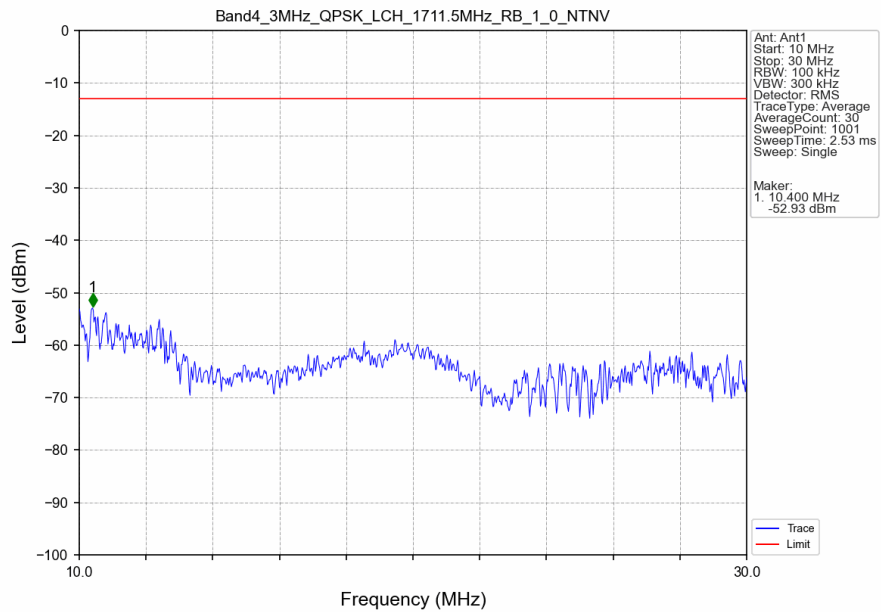
5.2.2 B4_3MHz



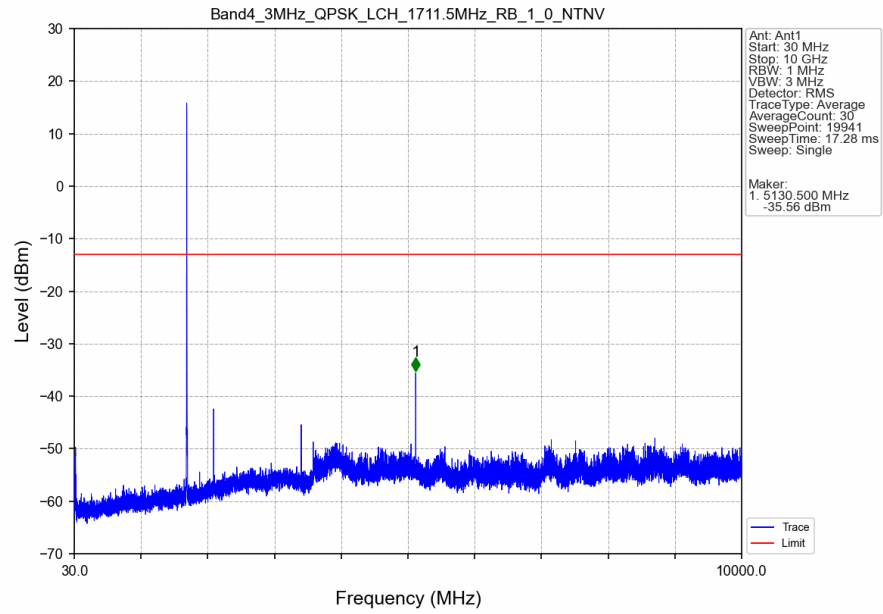
Band4_3MHz_QPSK_LCH_1711.5MHz_RB_1_0_NTNV



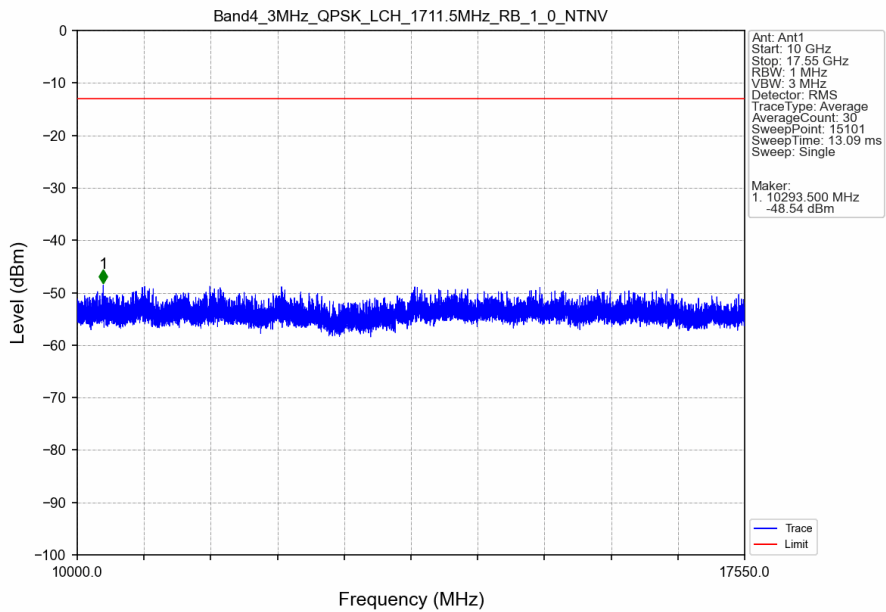
Band4_3MHz_QPSK_LCH_1711.5MHz_RB_1_0_NTNV



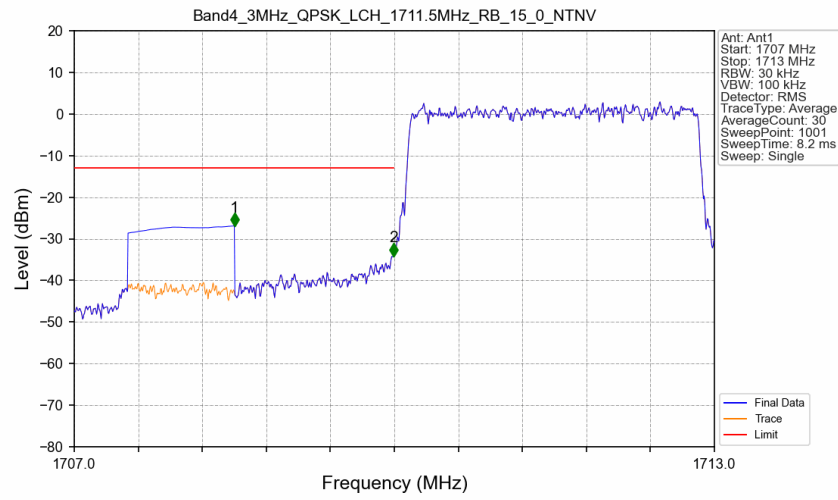
Band4_3MHz_QPSK_LCH_1711.5MHz_RB_1_0_NTNV



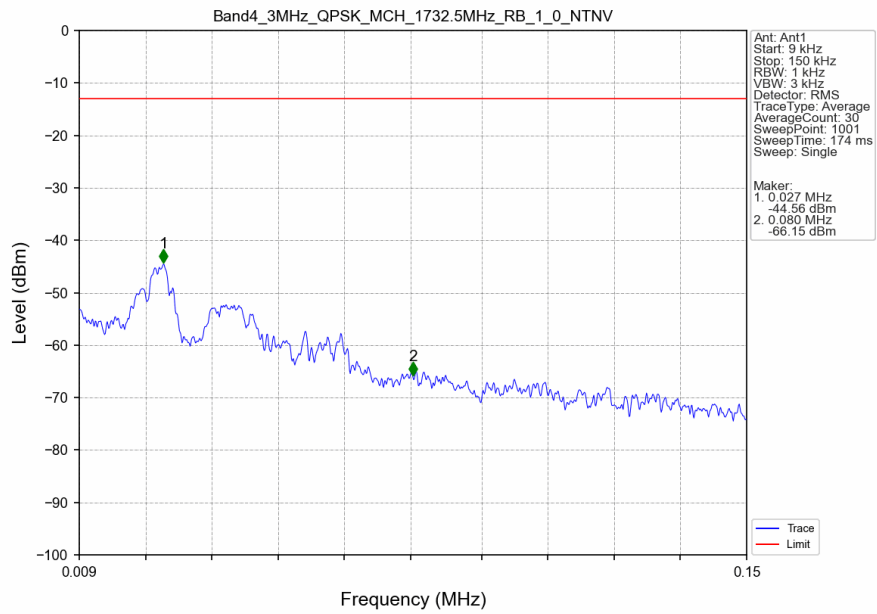
Band4_3MHz_QPSK_LCH_1711.5MHz_RB_1_0_NTNV



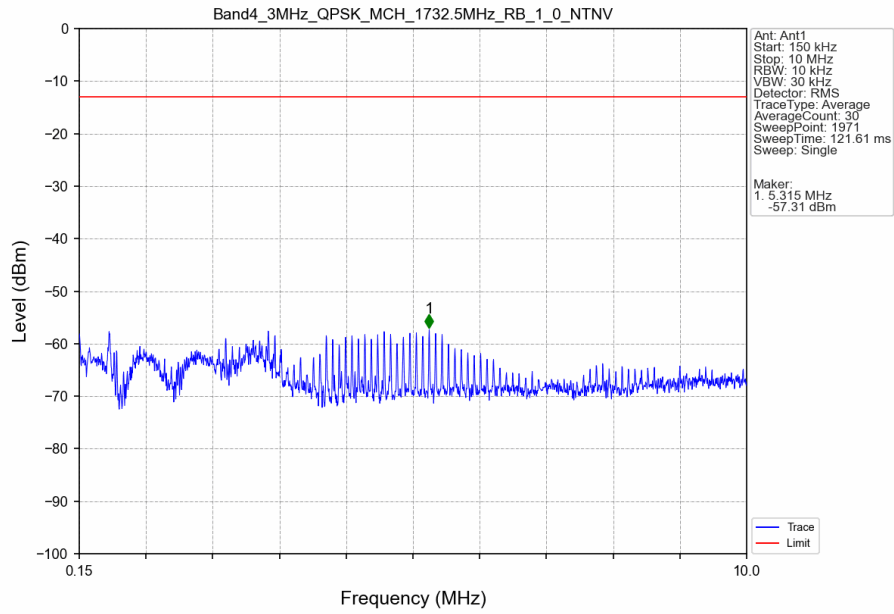
Band4 3MHz QPSK LCH 1711.5MHz RB 15_0 NTN



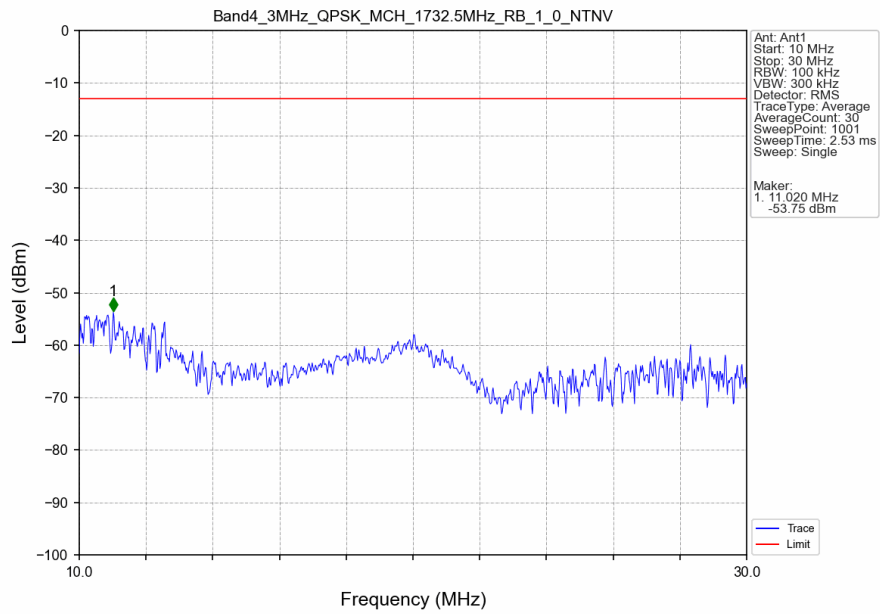
Band4 3MHz QPSK MCH 1732.5MHz RB 1_0 NTN



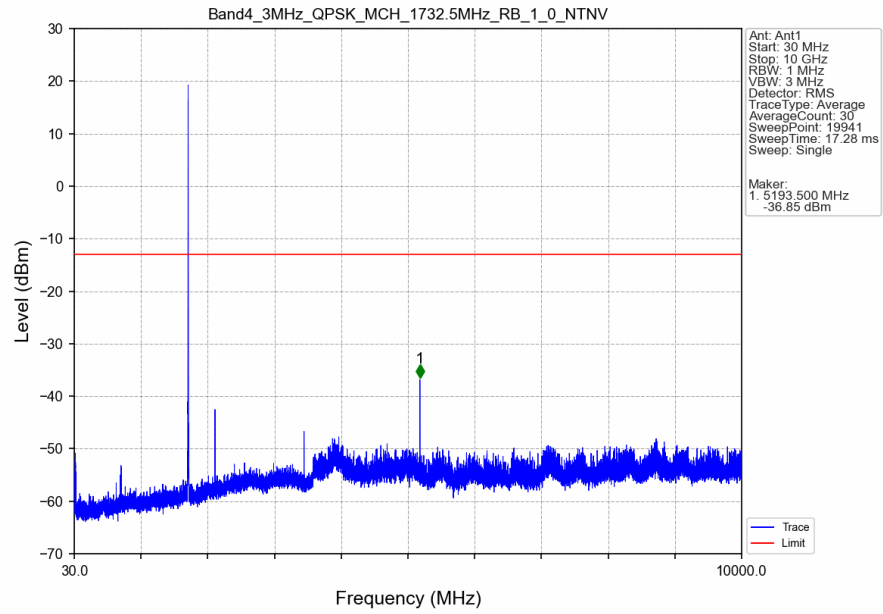
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



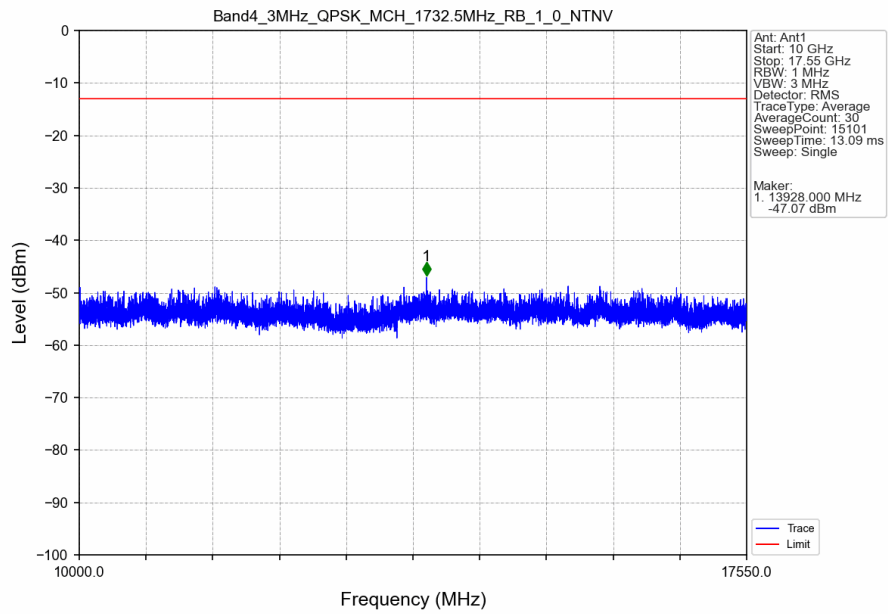
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



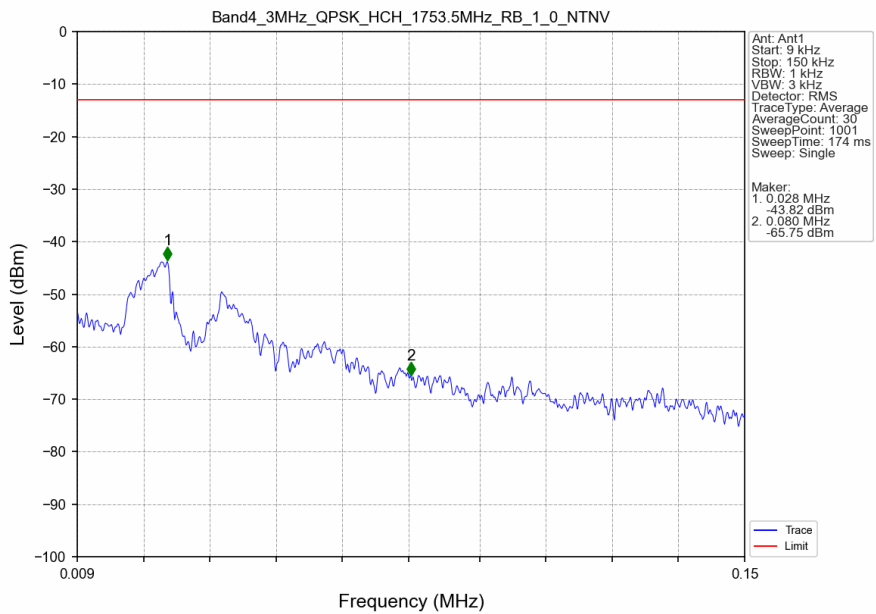
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



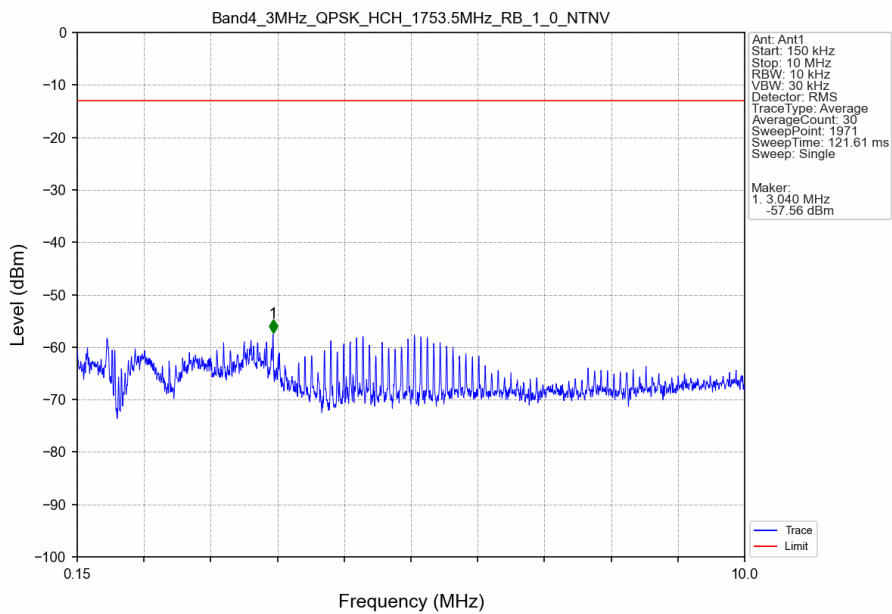
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



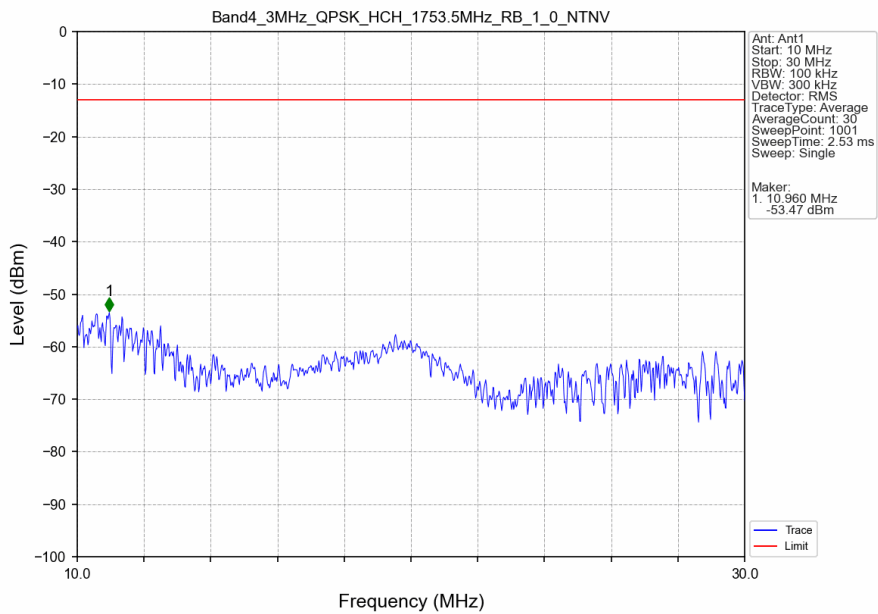
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_0_NTNV



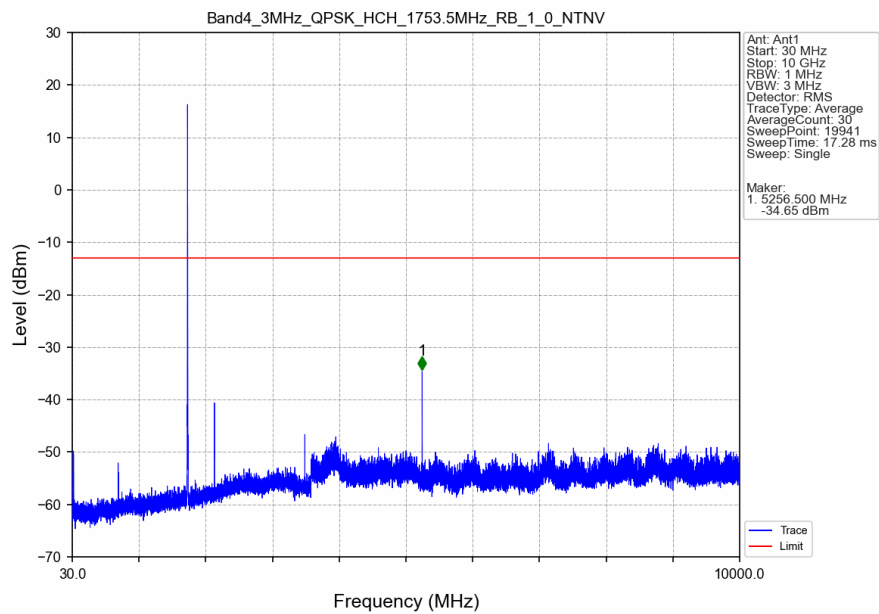
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_0_NTNV



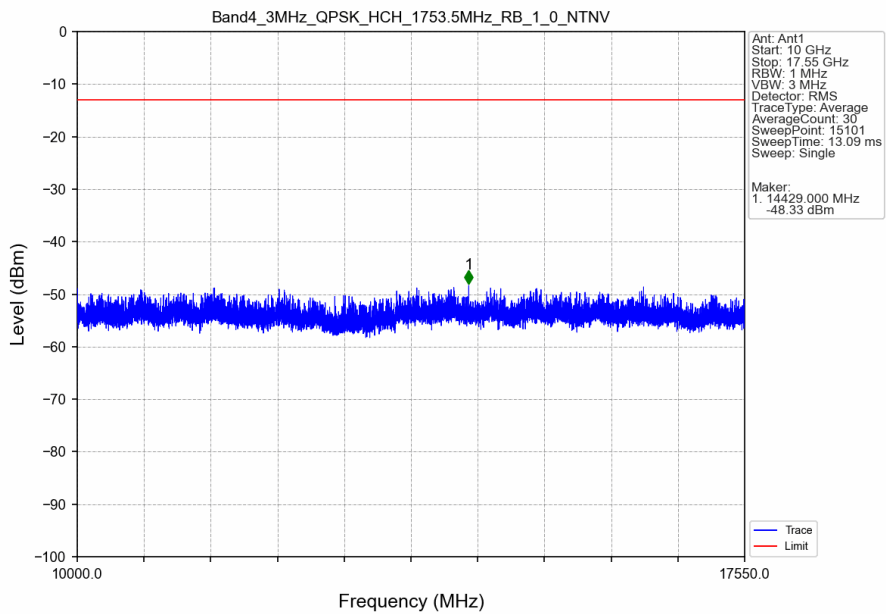
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_0_NTNV



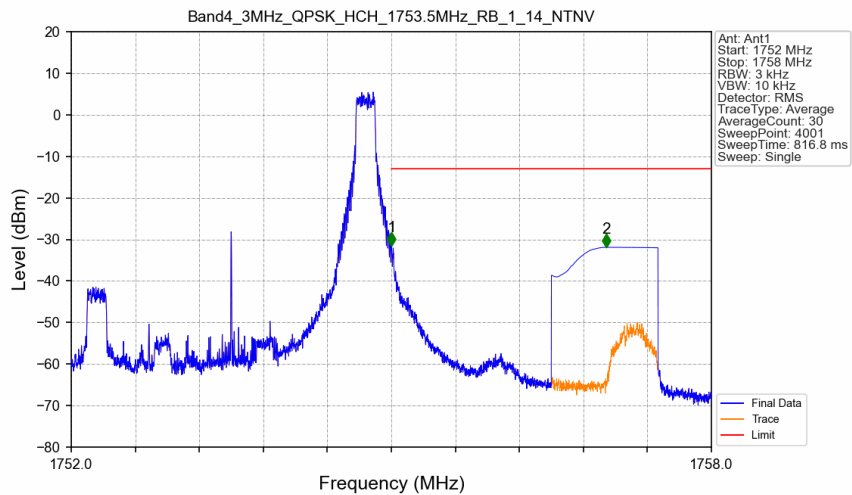
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_0_NTNV



Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_0_NTNV

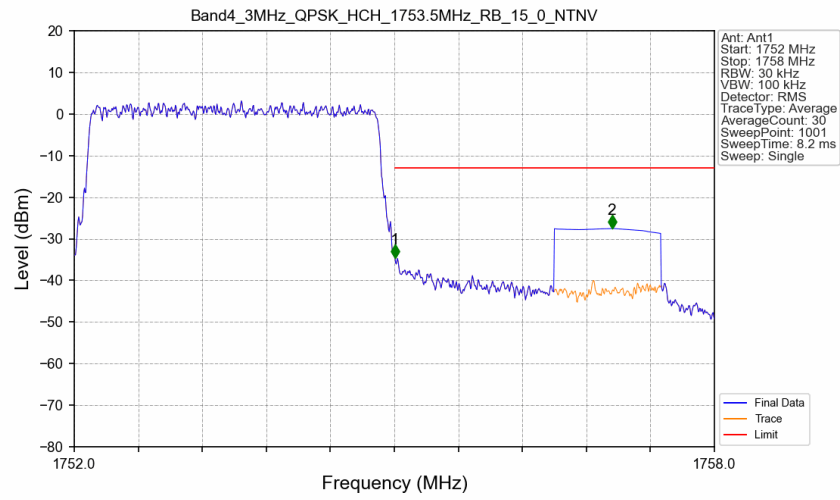


Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_14_NTNV



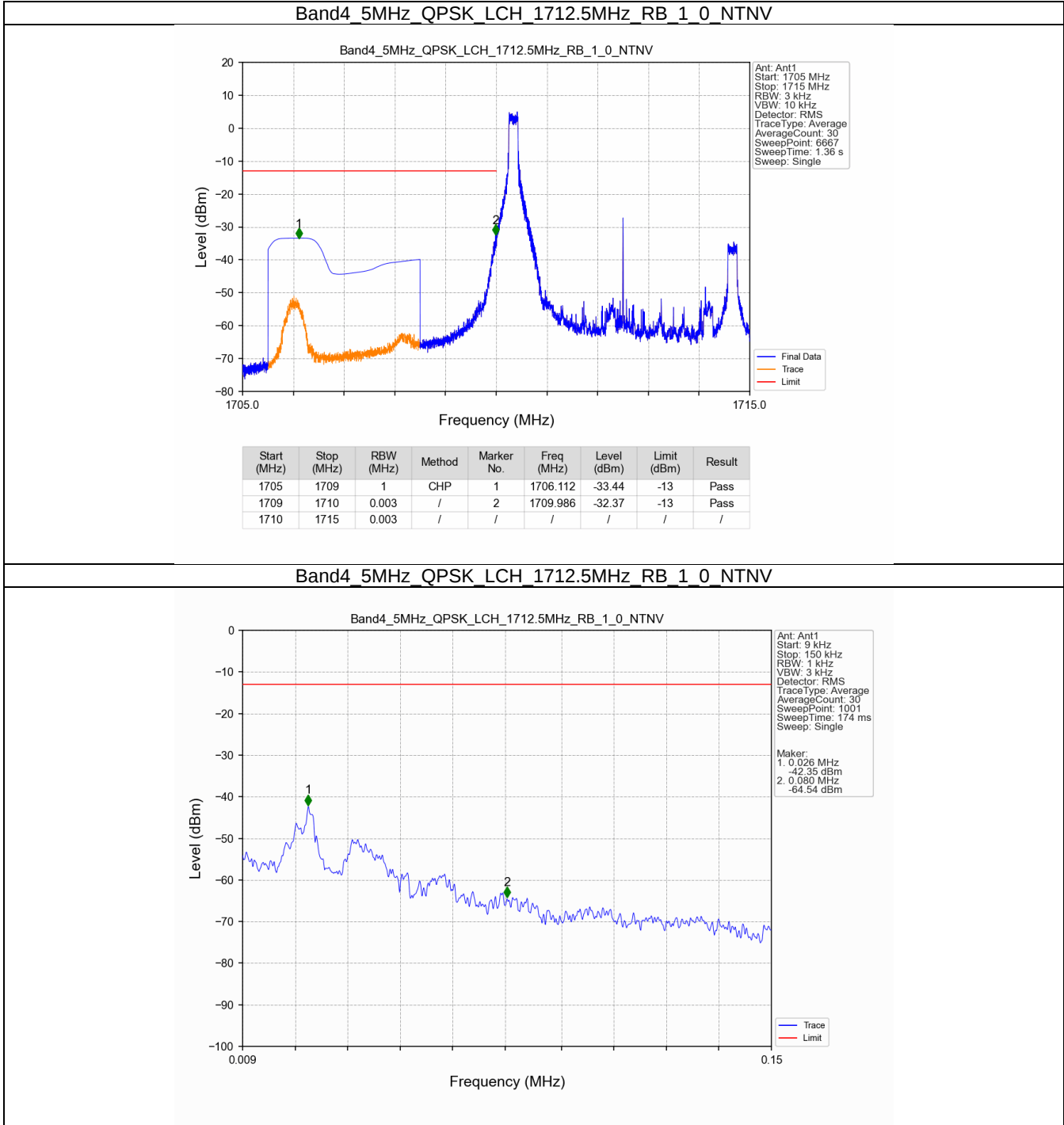
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1752	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.003	-31.49	-13	Pass
1756	1758	1	CHP	2	1757.013	-31.91	-13	Pass

Band4 3MHz QPSK HCH 1753.5MHz RB 15 0_NTNV

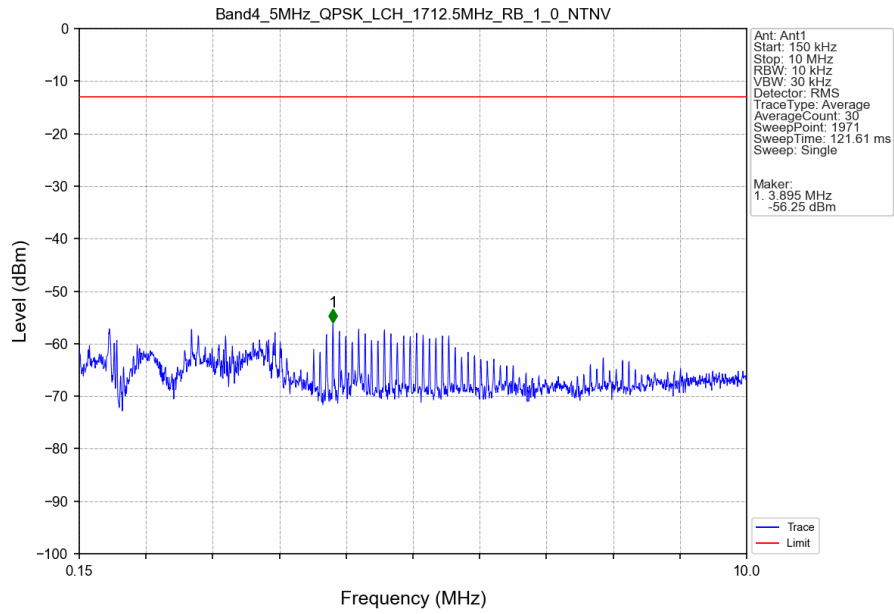


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1752	1755	0.03	/	/	/	/	/	/
1755	1756	0.03	/	1	1755.006	-34.56	-13	Pass
1756	1758	1	CHP	2	1757.040	-27.53	-13	Pass

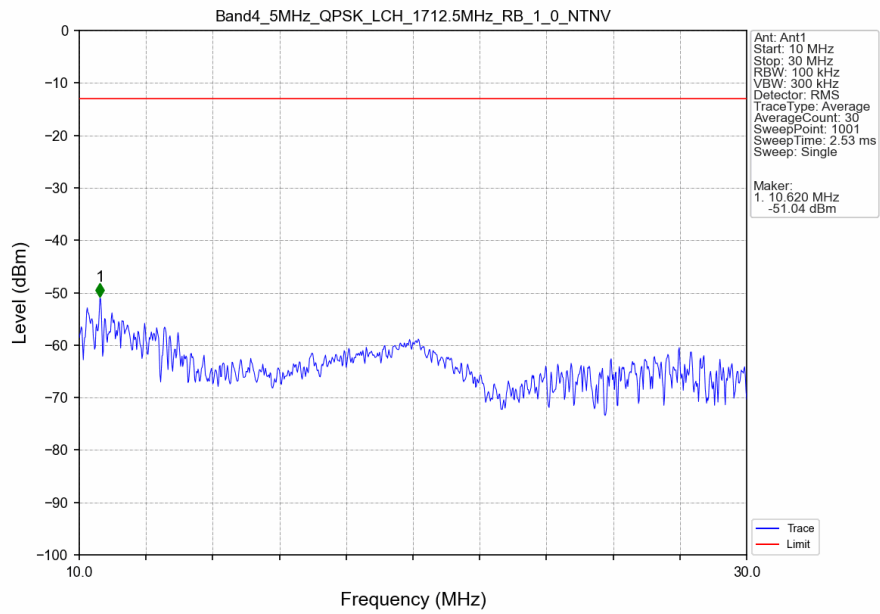
5.2.3 B4_5MHz



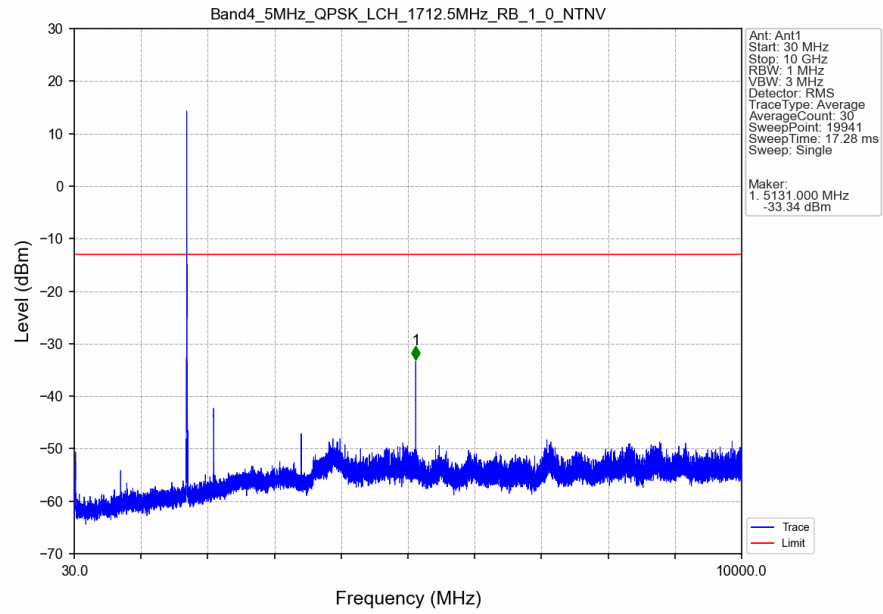
Band4_5MHz_QPSK_LCH_1712.5MHz_RB_1_0_NTNV



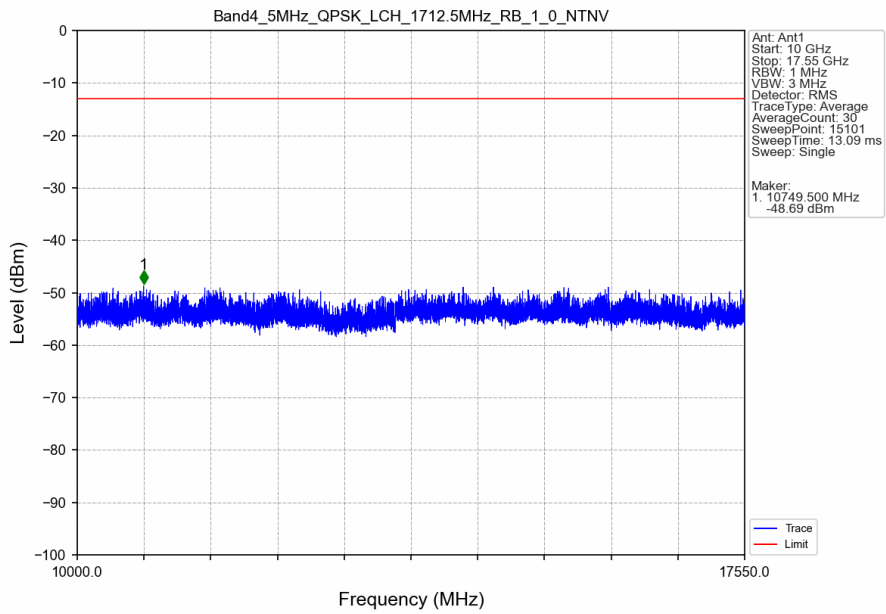
Band4_5MHz_QPSK_LCH_1712.5MHz_RB_1_0_NTNV



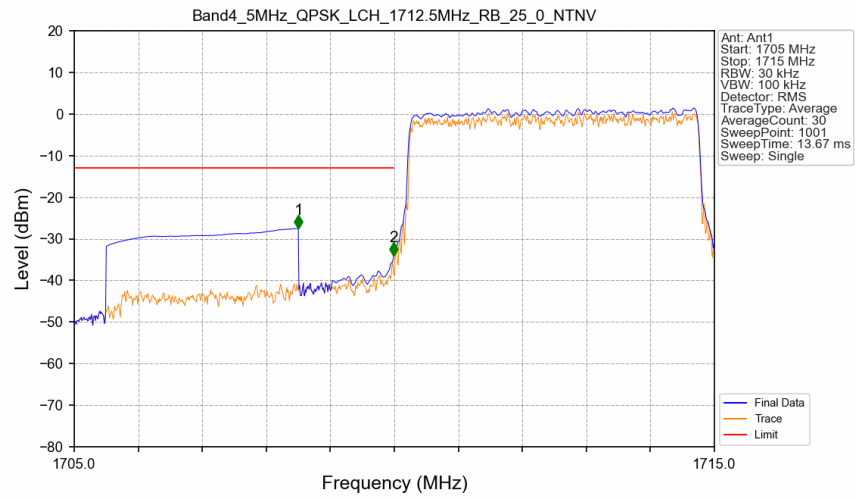
Band4_5MHz_QPSK_LCH_1712.5MHz_RB_1_0_NTNV



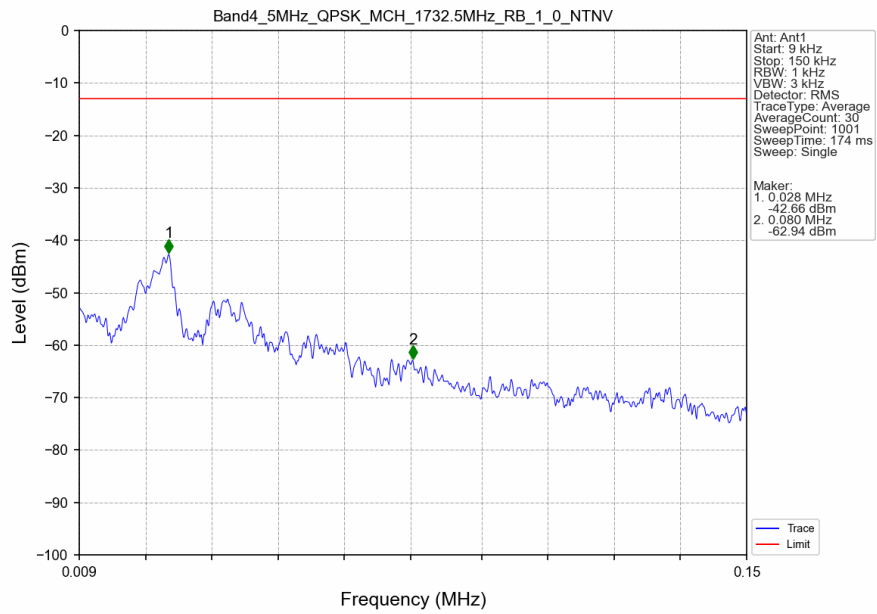
Band4_5MHz_QPSK_LCH_1712.5MHz_RB_1_0_NTNV



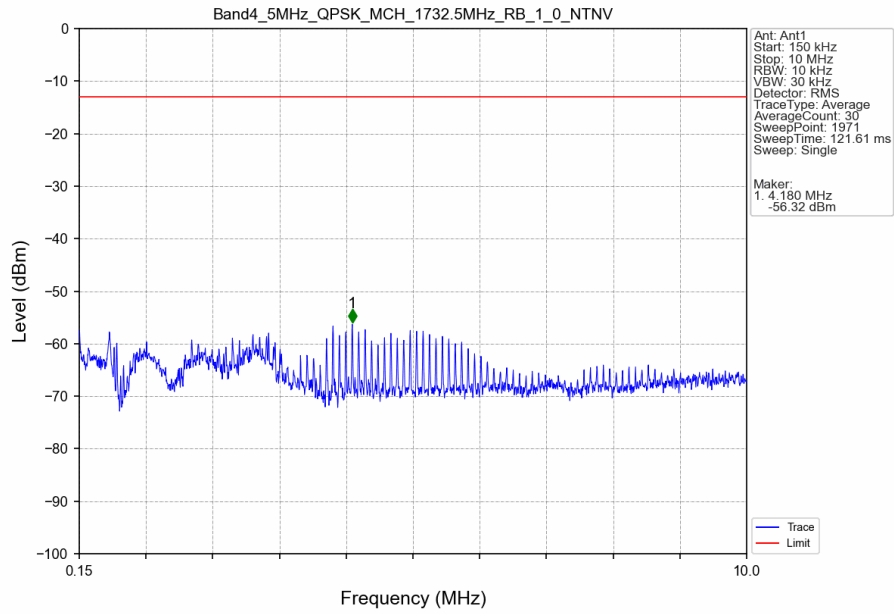
Band4 5MHz QPSK LCH 1712.5MHz RB 25_0 NTNV



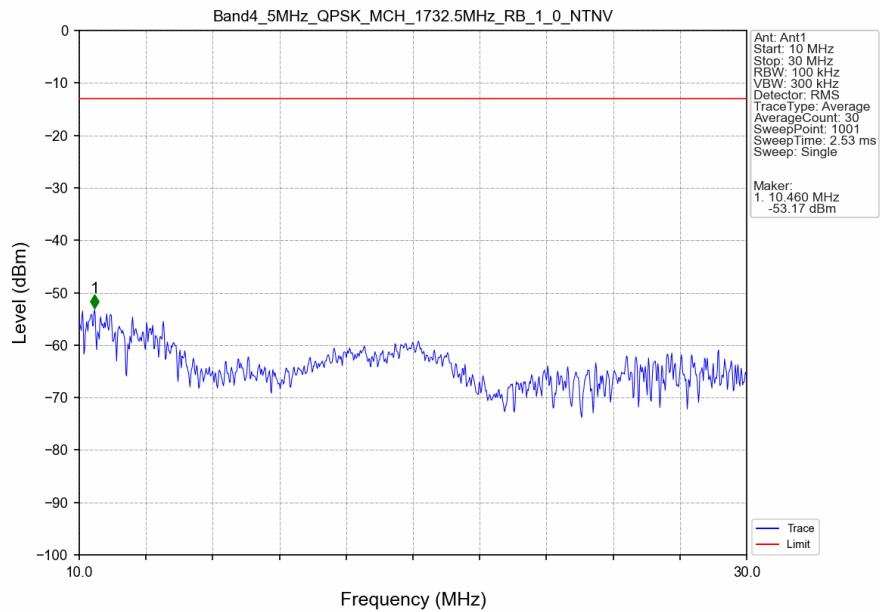
Band4 5MHz QPSK MCH 1732.5MHz RB 1_0 NTNV



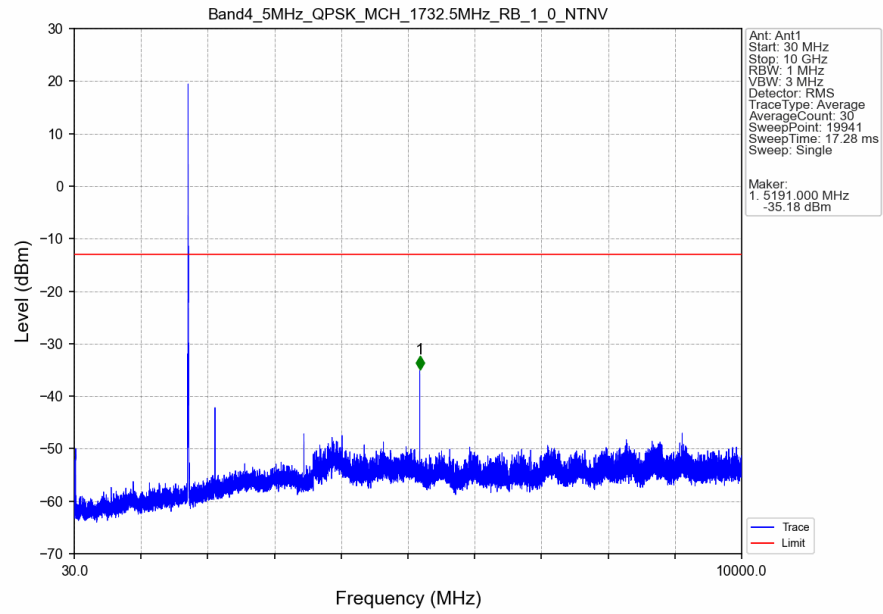
Band4 5MHz QPSK MCH 1732.5MHz RB 1_0 NTN



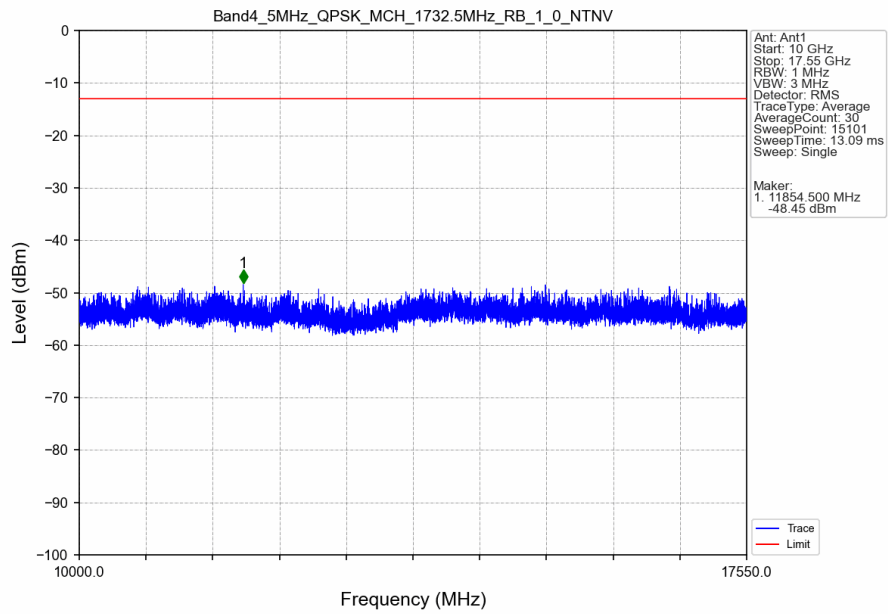
Band4 5MHz QPSK MCH 1732.5MHz RB 1_0 NTN



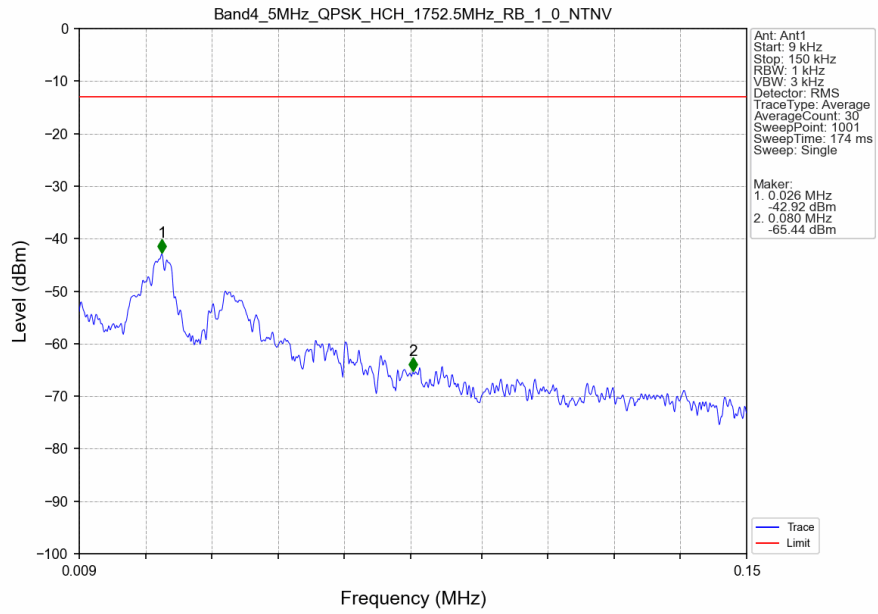
Band4 5MHz QPSK MCH 1732.5MHz RB 1_0 NTN



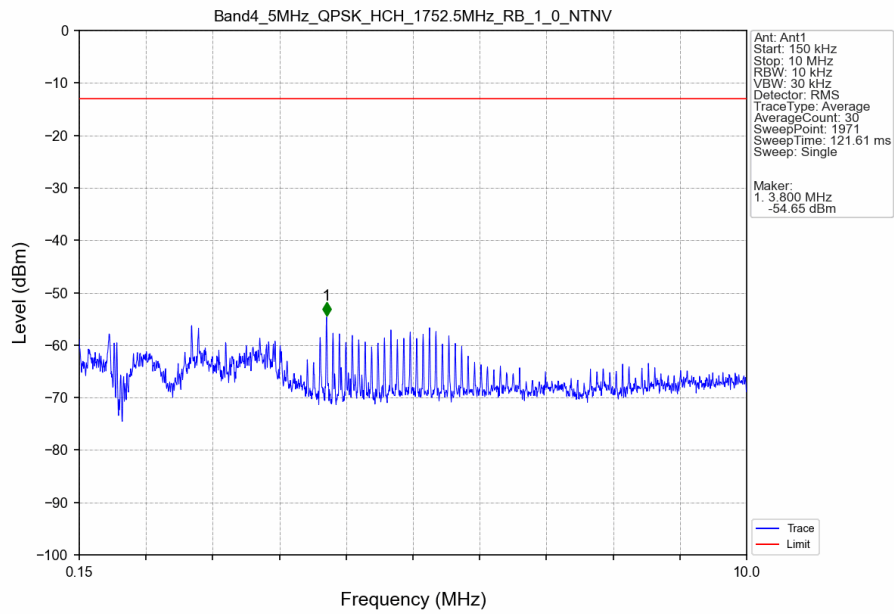
Band4 5MHz QPSK MCH 1732.5MHz RB 1_0 NTN



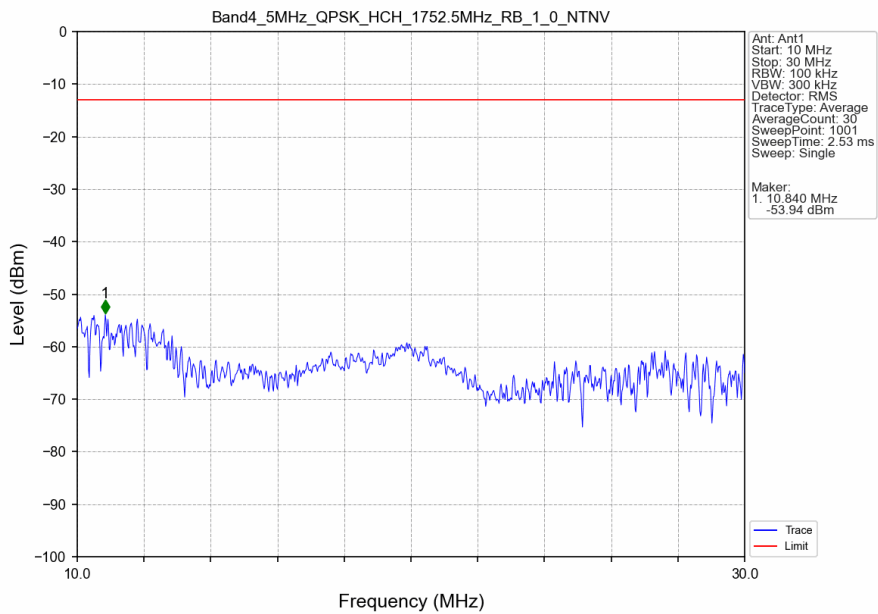
Band4_5MHz_QPSK_HCH_1752.5MHz_RB_1_0_NTNV



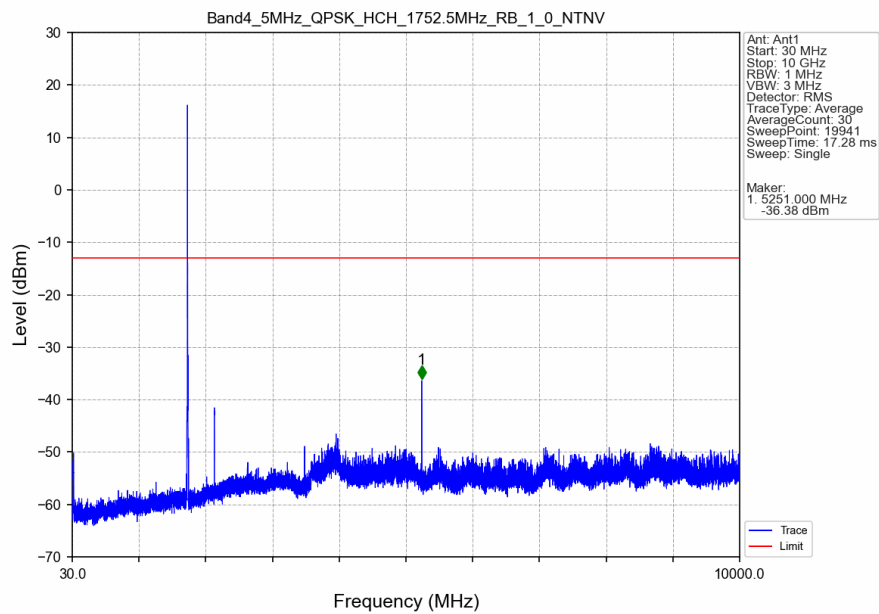
Band4_5MHz_QPSK_HCH_1752.5MHz_RB_1_0_NTNV



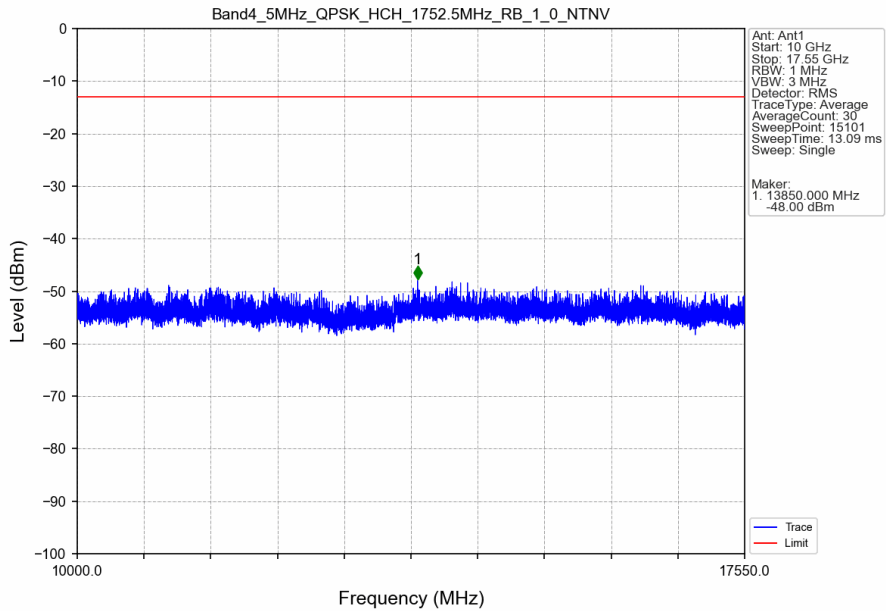
Band4_5MHz_QPSK_HCH_1752.5MHz_RB_1_0_NTNV



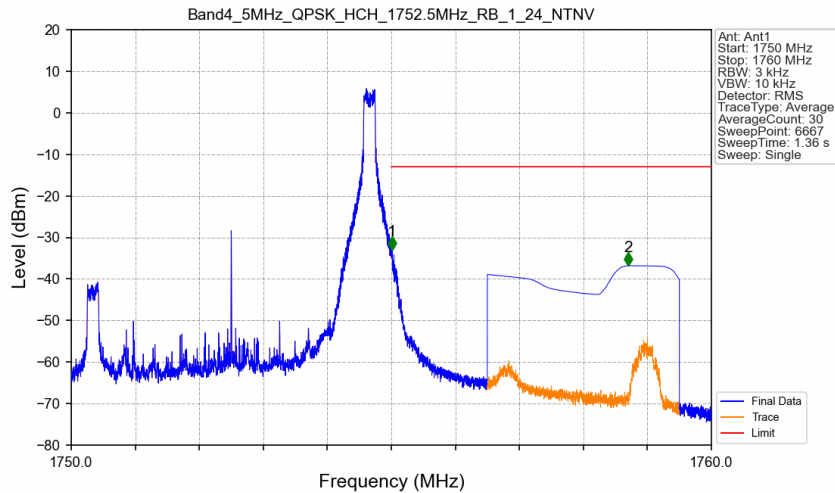
Band4_5MHz_QPSK_HCH_1752.5MHz_RB_1_0_NTNV



Band4_5MHz_QPSK_HCH_1752.5MHz_RB_1_0_NTNV

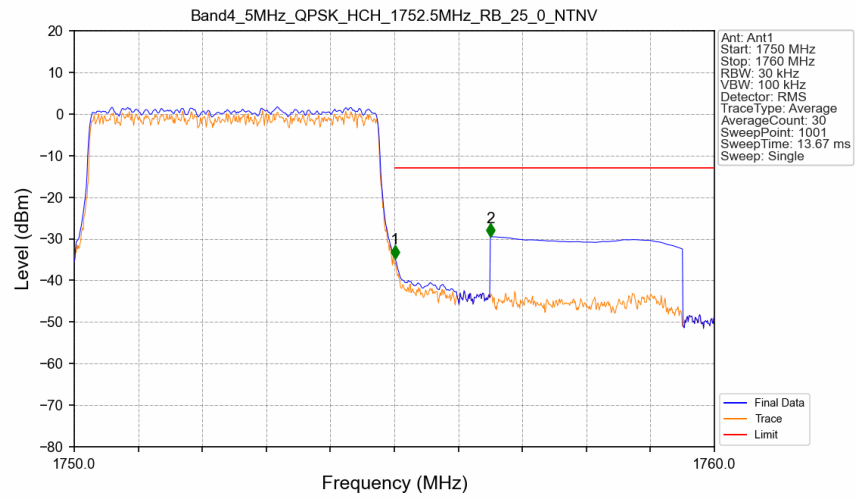


Band4_5MHz_QPSK_HCH_1752.5MHz_RB_1_24_NTNV



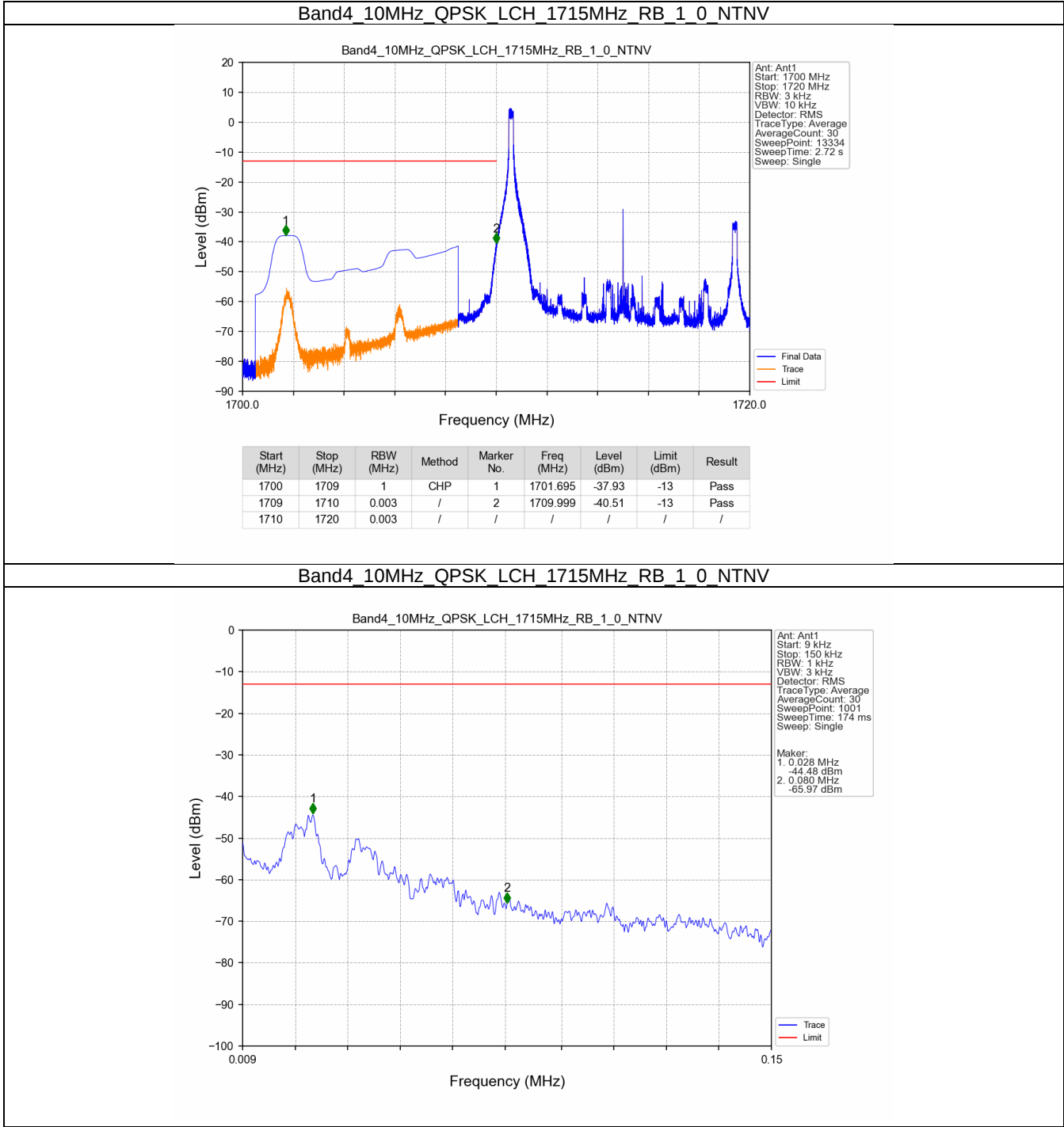
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1750	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.011	-32.90	-13	Pass
1756	1760	1	CHP	2	1758.698	-36.81	-13	Pass

Band4 5MHz QPSK HCH 1752.5MHz RB 25_0_NTNV

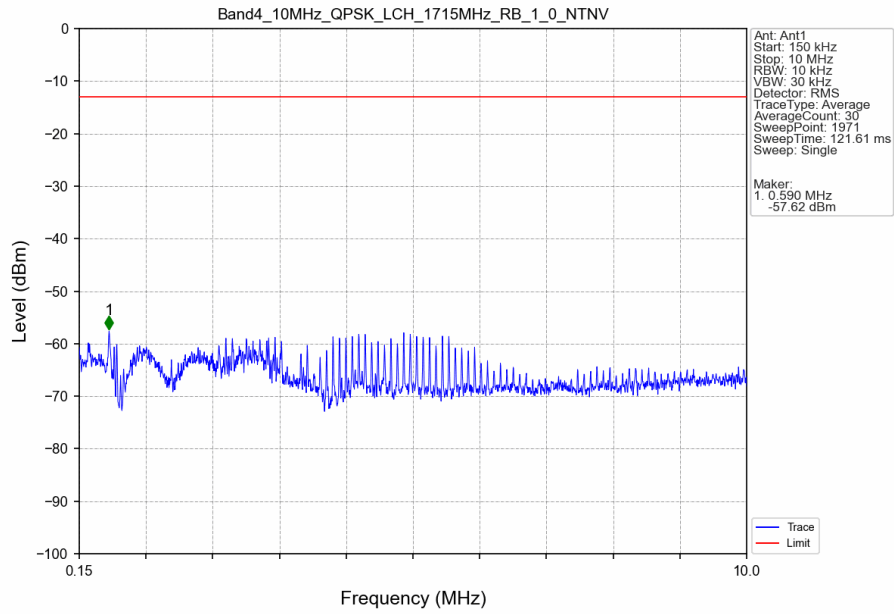


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1750	1755	0.05	CHP	/	/	/	/	/
1755	1756	0.05	CHP	1	1755.010	-34.68	-13	Pass
1756	1760	1	CHP	2	1756.500	-29.50	-13	Pass

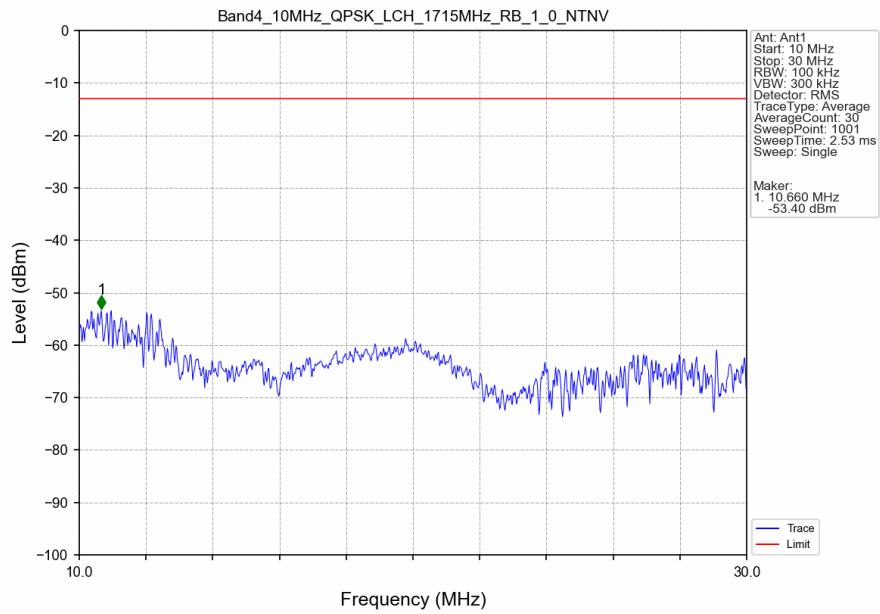
5.2.4 B4_10MHz



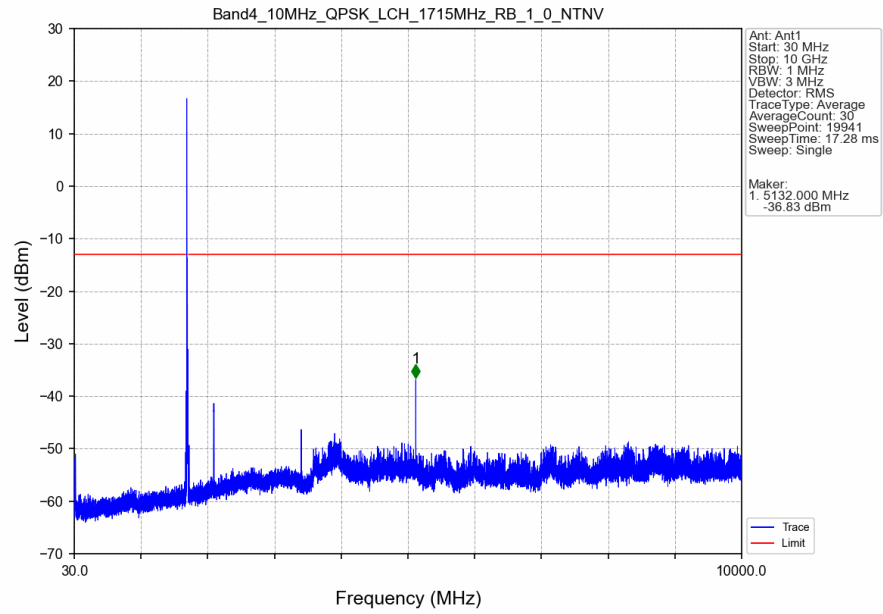
Band4_10MHz_QPSK_LCH_1715MHz_RB_1_0_NTNV



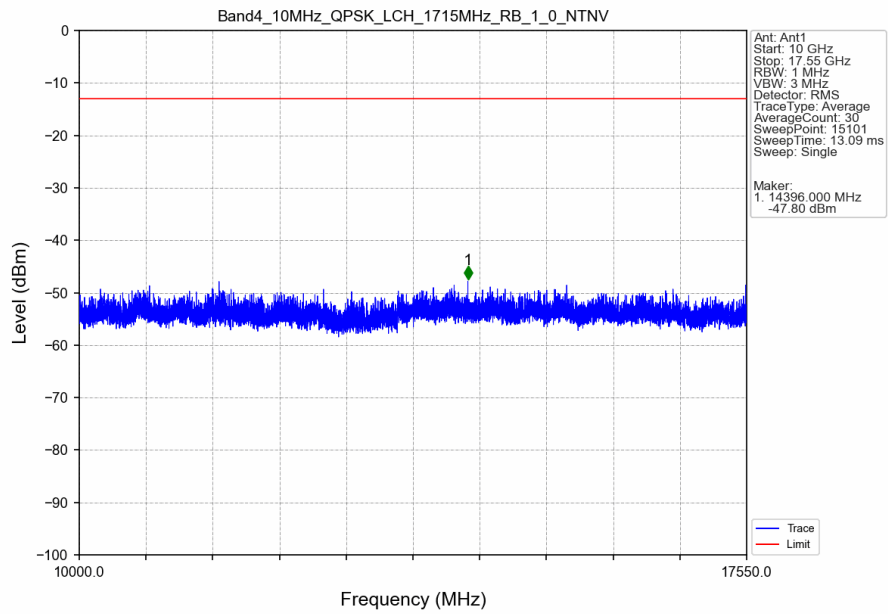
Band4_10MHz_QPSK_LCH_1715MHz_RB_1_0_NTNV



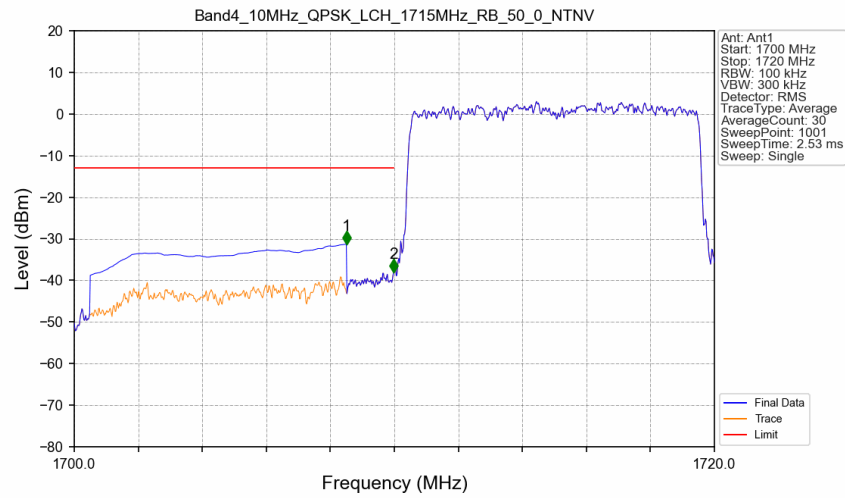
Band4_10MHz_QPSK_LCH_1715MHz_RB_1_0_NTNV



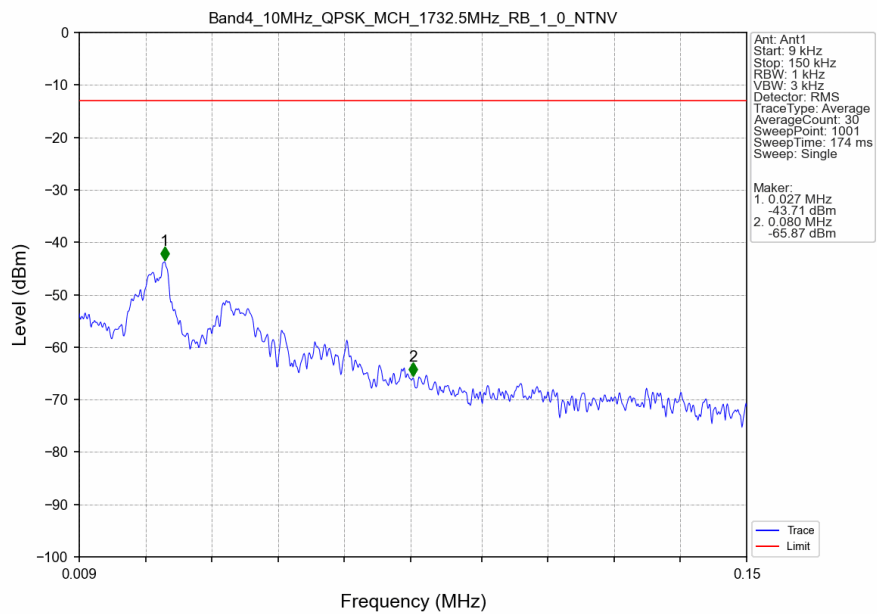
Band4_10MHz_QPSK_LCH_1715MHz_RB_1_0_NTNV



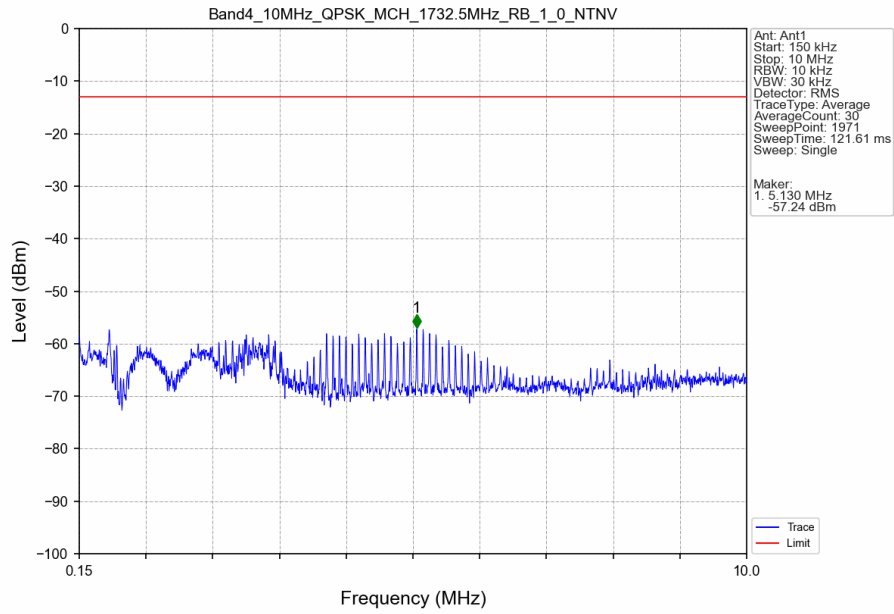
Band4 10MHz QPSK LCH 1715MHz RB 50 0 NTNV



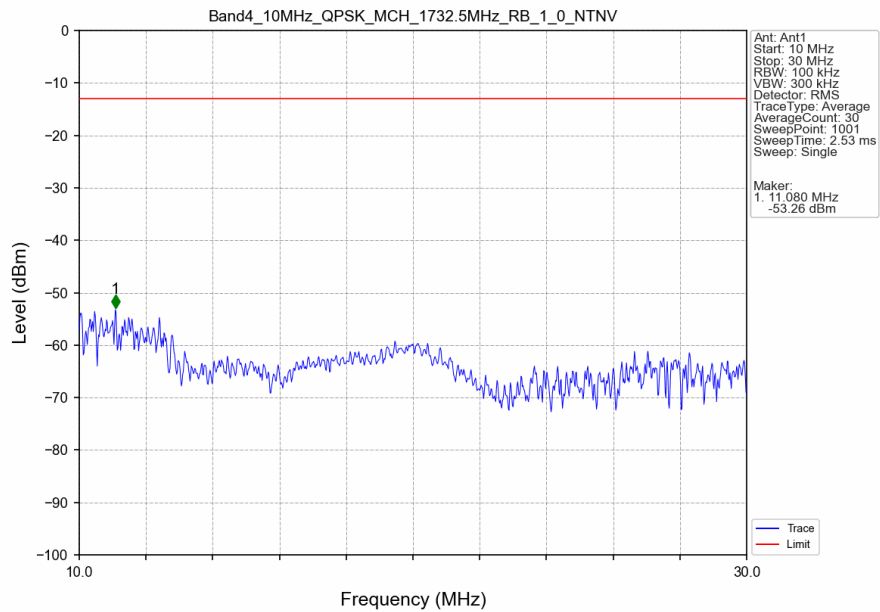
Band4 10MHz QPSK MCH 1732.5MHz RB 1 0 NTNV



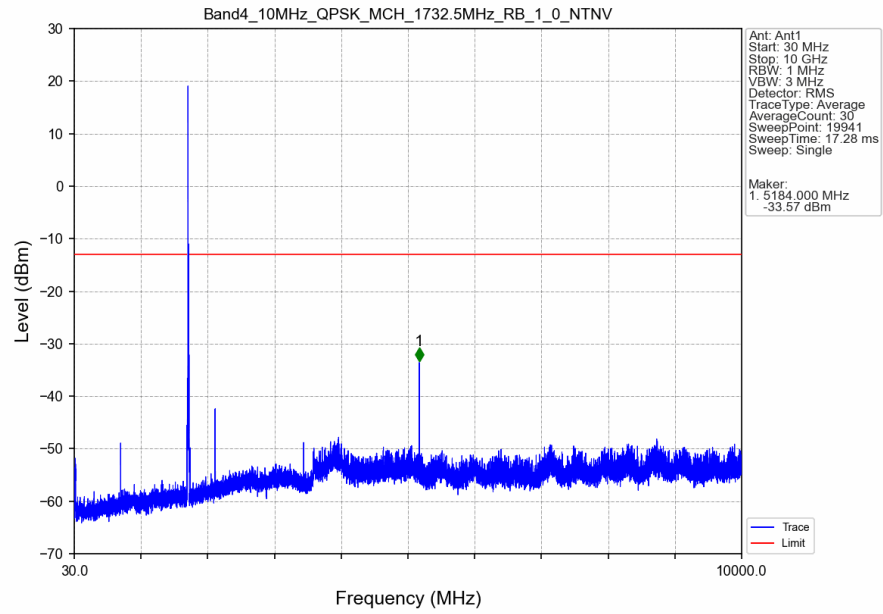
Band4_10MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



Band4_10MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



Band4_10MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



Band4_10MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV

