

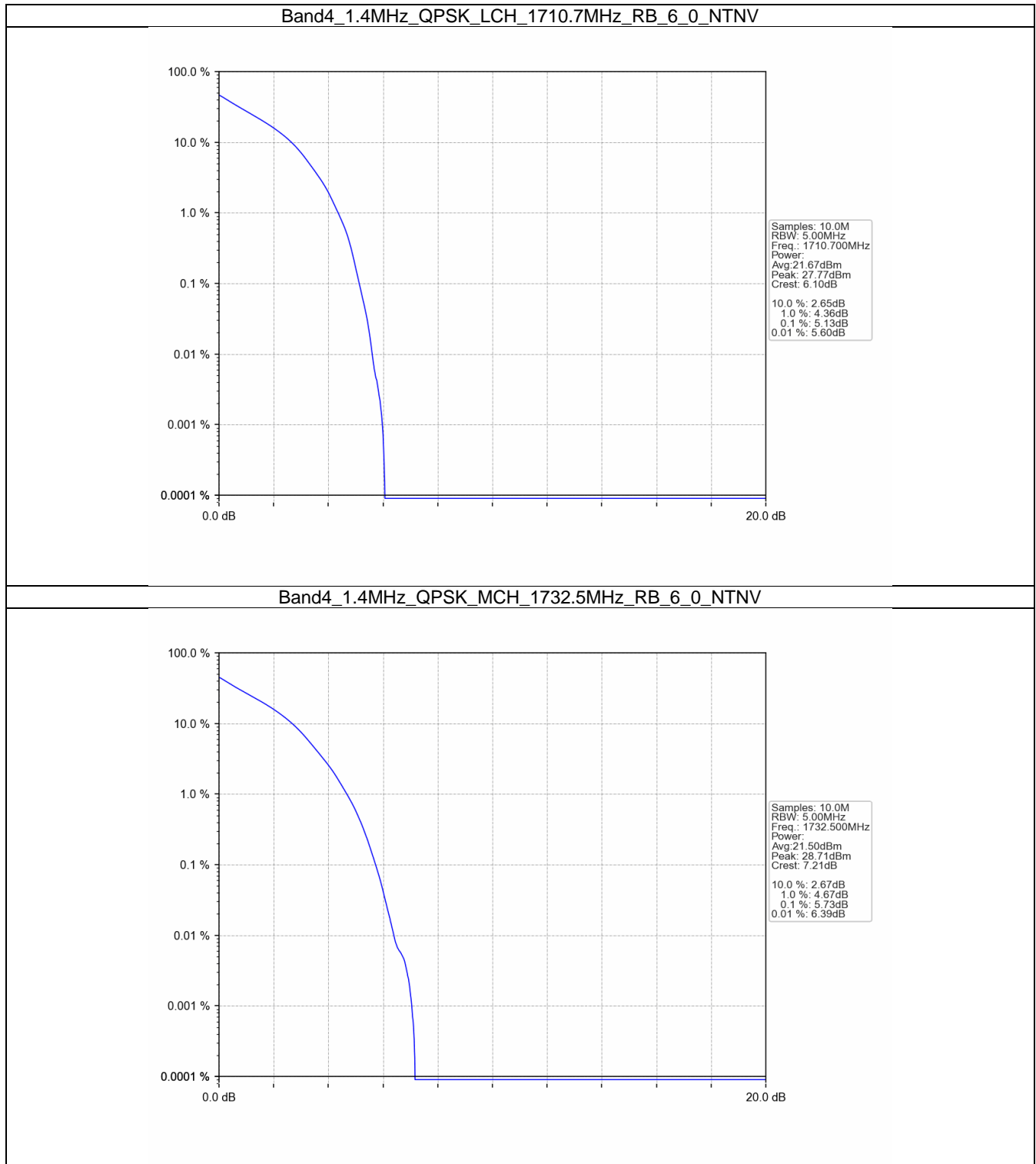
5. Peak-Average Ratio

5.1 B4_1.4MHz

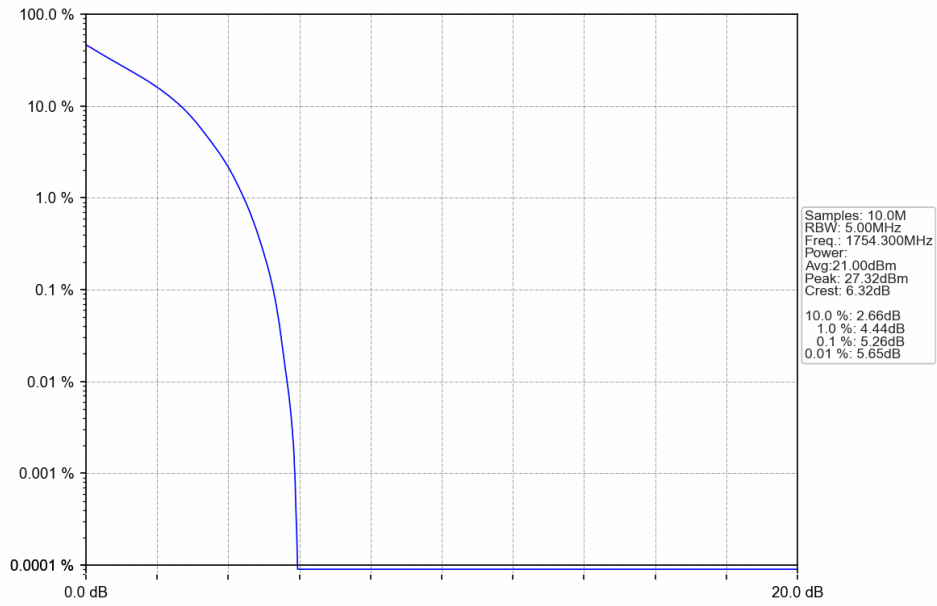
5.1.1 Test Result

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	5.13	<=13	Pass
	1732.5	6	0	5.73	<=13	Pass
	1754.3	6	0	5.26	<=13	Pass
16QAM	1710.7	6	0	5.99	<=13	Pass
	1732.5	6	0	6.50	<=13	Pass
	1754.3	6	0	6.08	<=13	Pass

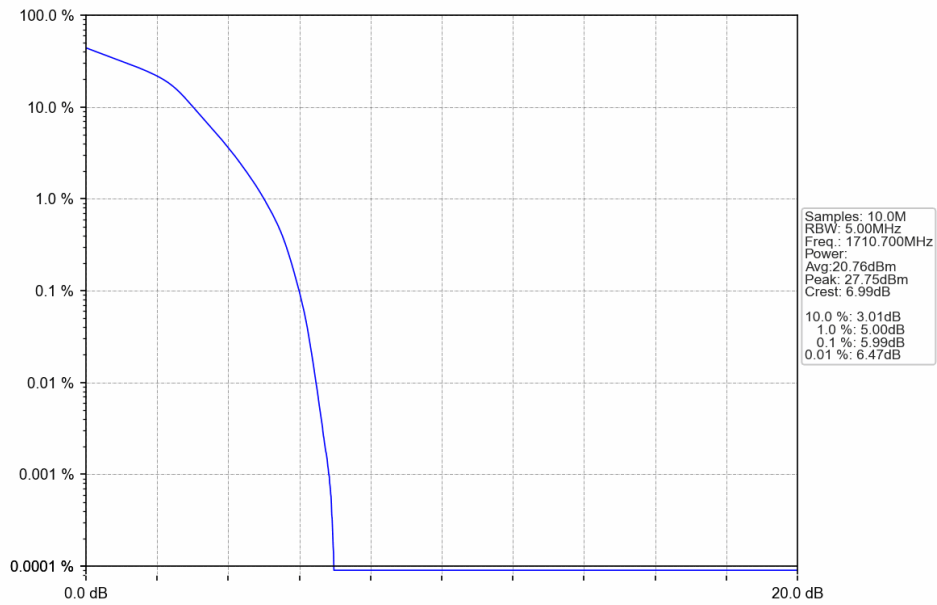
5.1.2 Test Graph



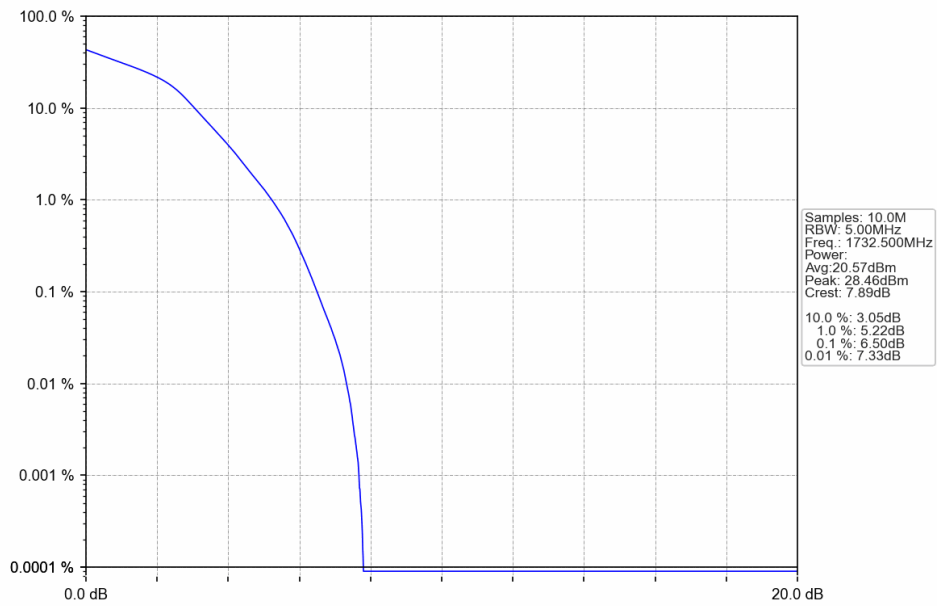
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_6_0_NTNV



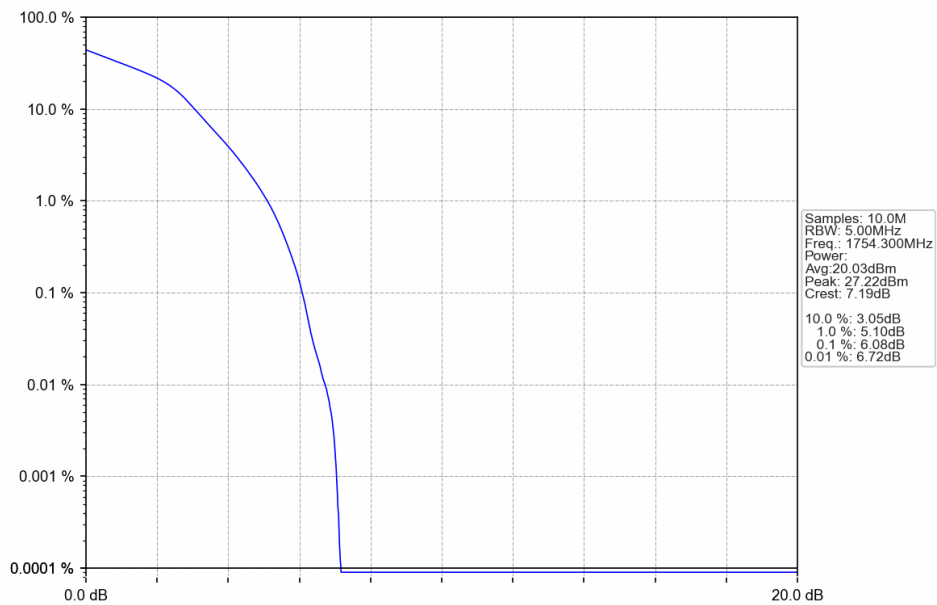
Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_6_0_NTNV



Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_6_0_NTNV



Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_6_0_NTNV

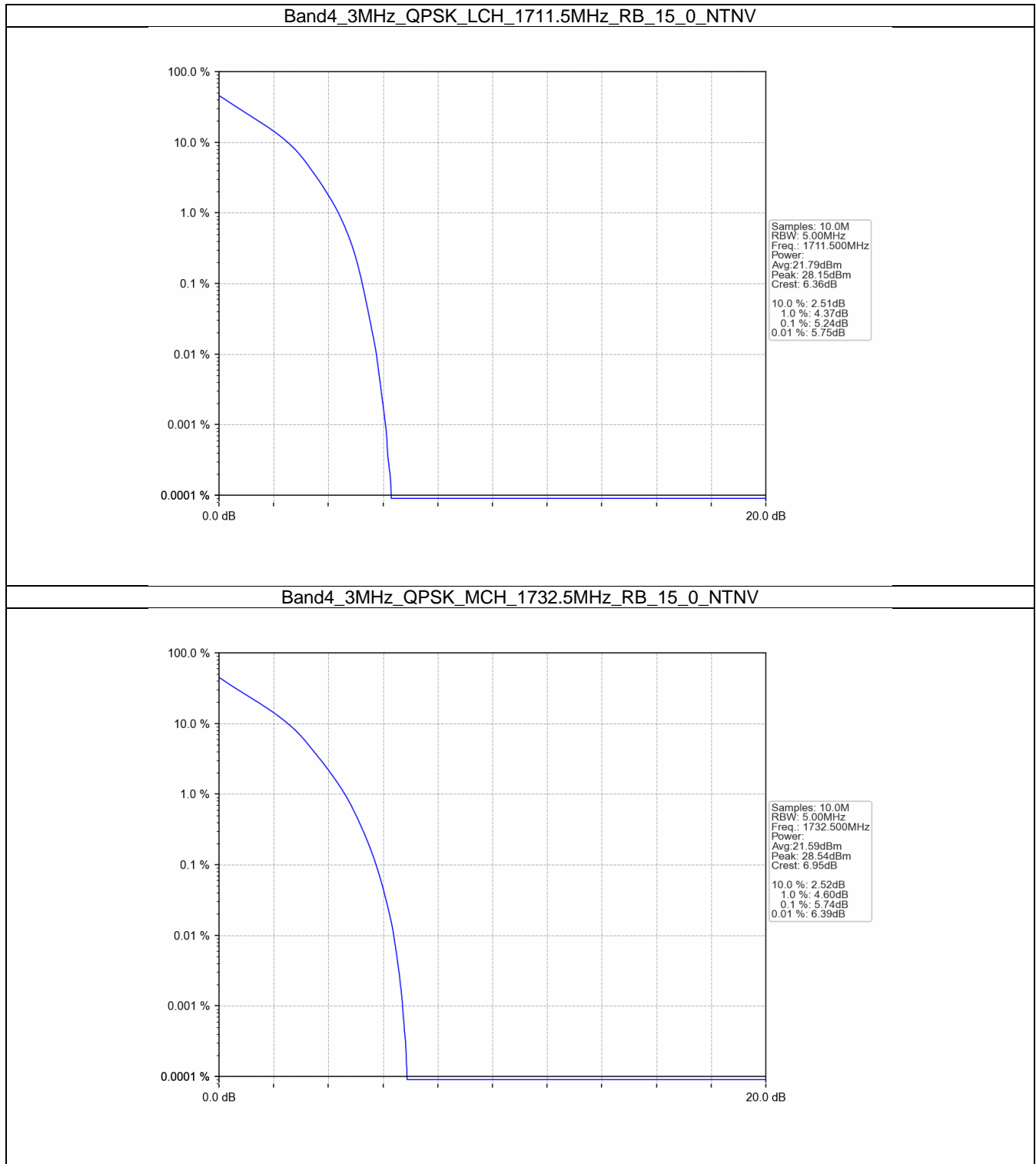


5.2 B4_3MHz

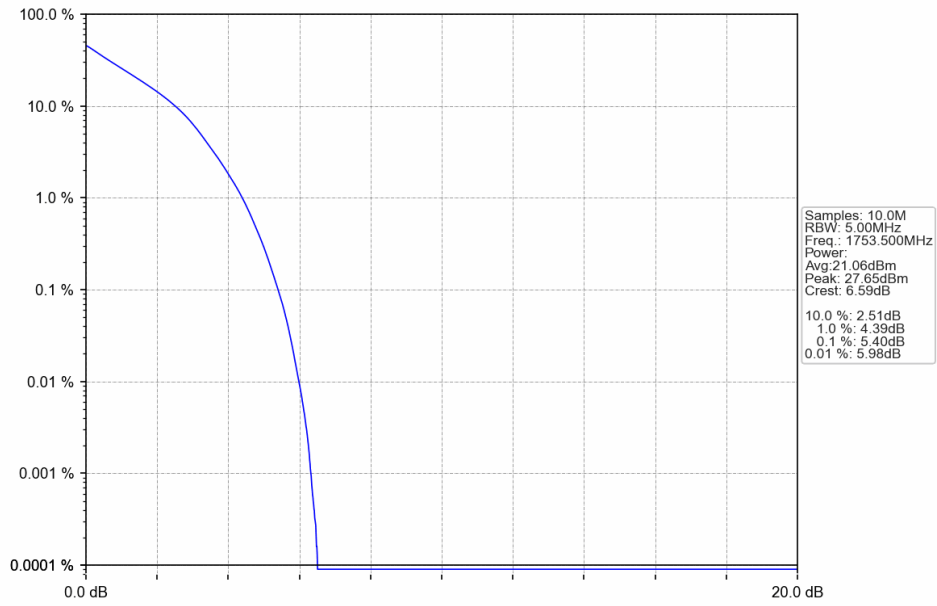
5.2.1 Test Result

Band: 4 / Bandwidth: 3MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1711.5	15	0	5.24	<=13	Pass
	1732.5	15	0	5.74	<=13	Pass
	1753.5	15	0	5.40	<=13	Pass
16QAM	1711.5	15	0	6.04	<=13	Pass
	1732.5	15	0	6.58	<=13	Pass
	1753.5	15	0	6.20	<=13	Pass

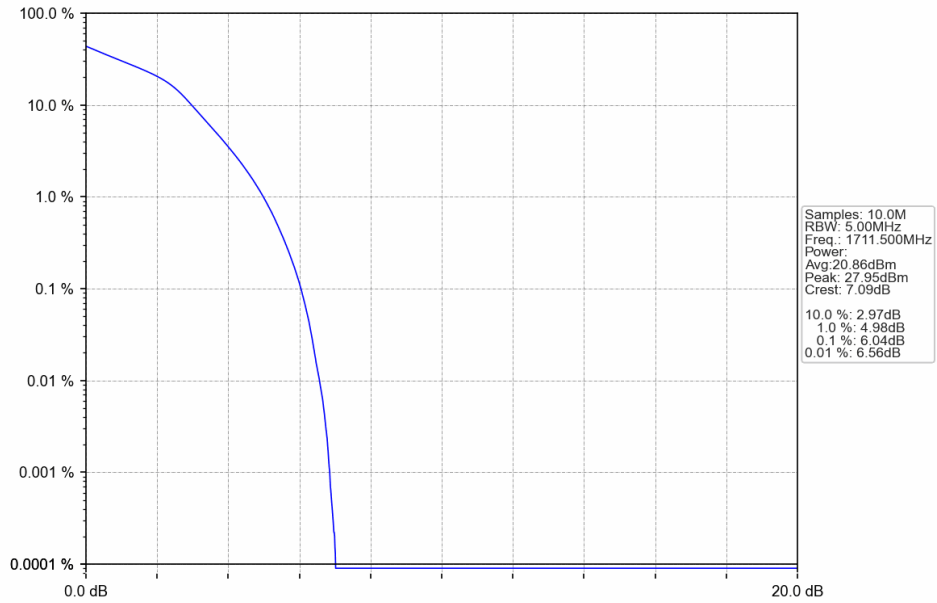
5.2.2 Test Graph



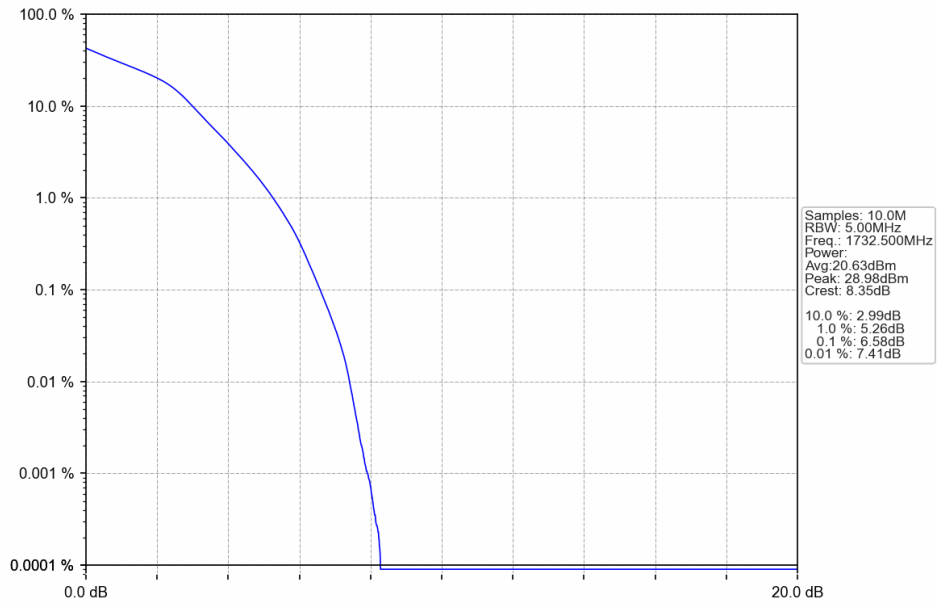
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_15_0_NTNV



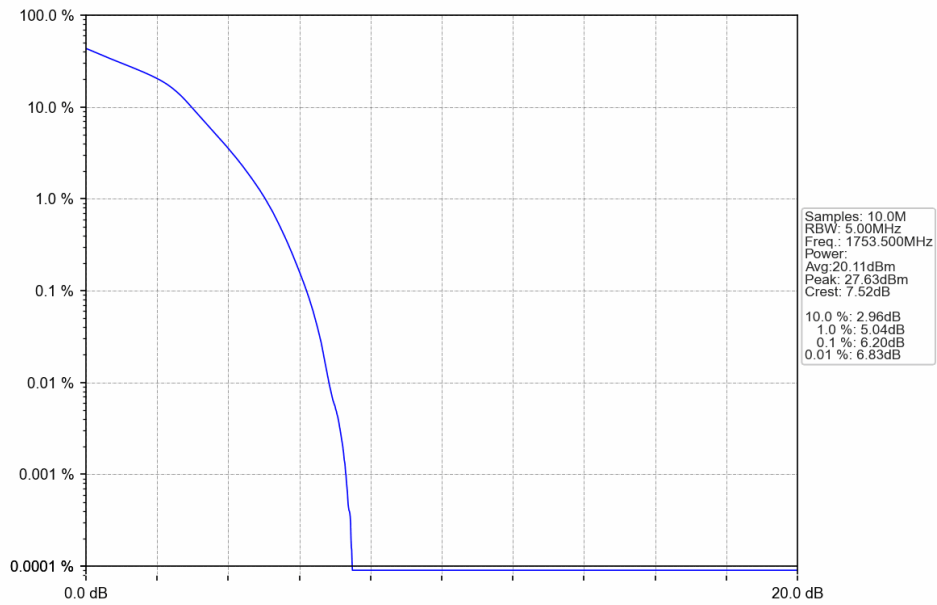
Band4_3MHz_16QAM_LCH_1711.5MHz_RB_15_0_NTNV



Band4_3MHz_16QAM_MCH_1732.5MHz_RB_15_0_NTNV



Band4_3MHz_16QAM_HCH_1753.5MHz_RB_15_0_NTNV

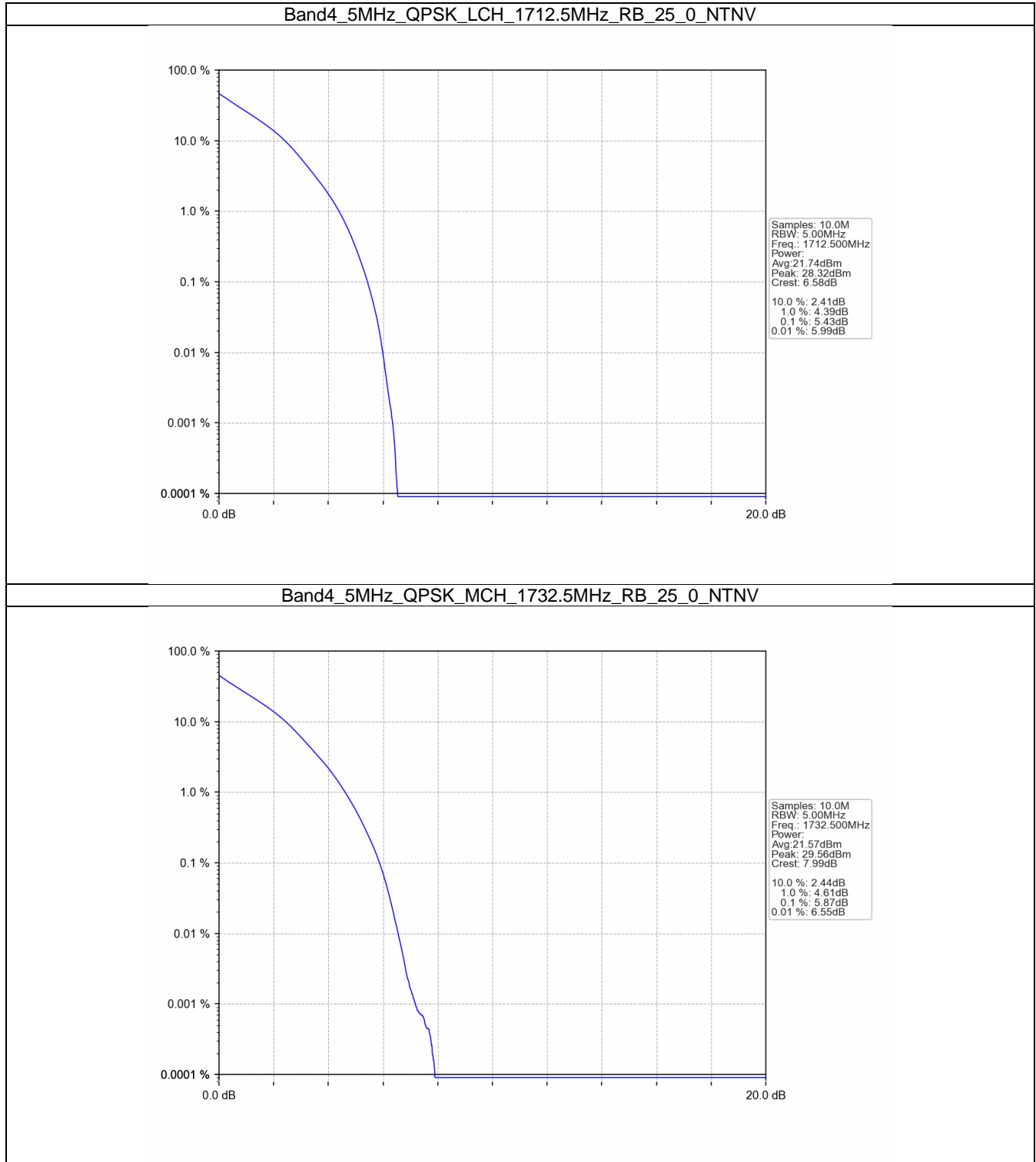


5.3 B4_5MHz

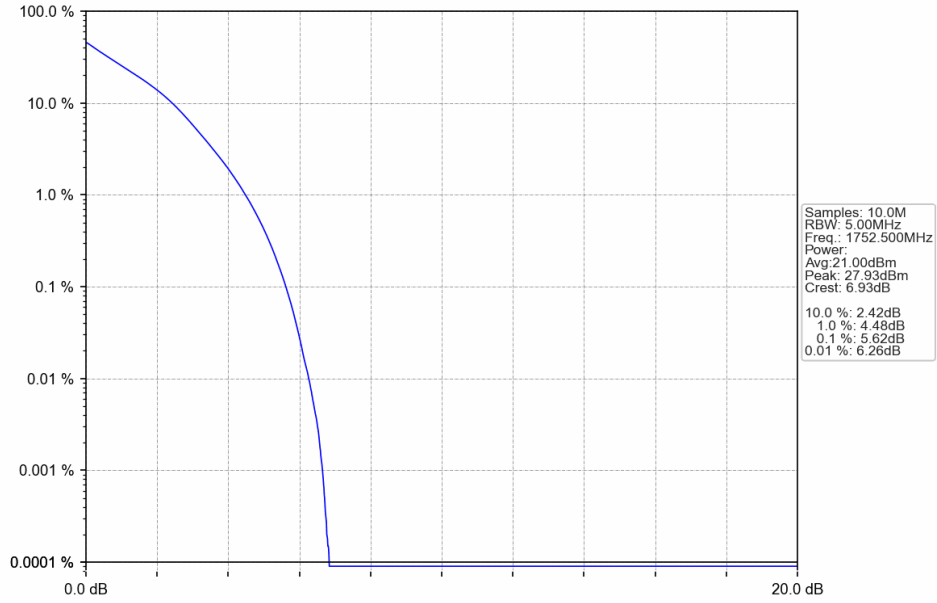
5.3.1 Test Result

Band: 4 / Bandwidth: 5MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1712.5	25	0	5.43	<=13	Pass
	1732.5	25	0	5.87	<=13	Pass
	1752.5	25	0	5.62	<=13	Pass
16QAM	1712.5	25	0	6.15	<=13	Pass
	1732.5	25	0	6.56	<=13	Pass
	1752.5	25	0	6.29	<=13	Pass

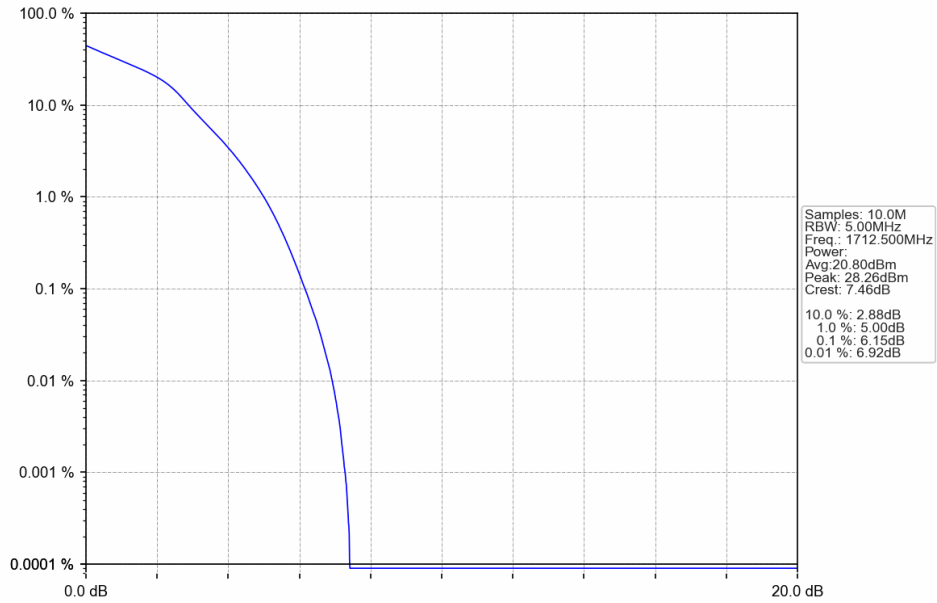
5.3.2 Test Graph



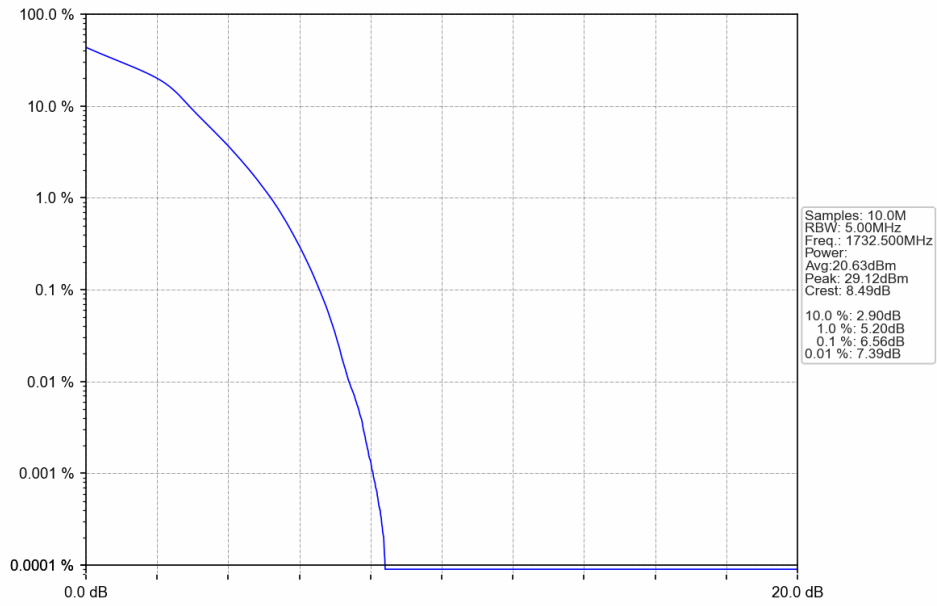
Band4_5MHz_QPSK_HCH_1752.5MHz_RB_25_0_NTNV



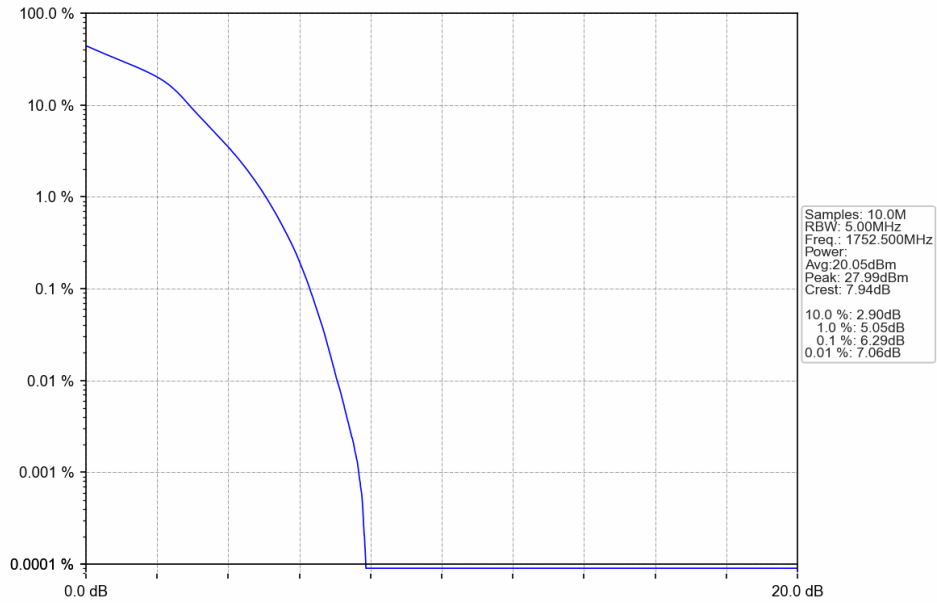
Band4_5MHz_16QAM_LCH_1712.5MHz_RB_25_0_NTNV



Band4_5MHz_16QAM_MCH_1732.5MHz_RB_25_0_NTNV



Band4_5MHz_16QAM_HCH_1752.5MHz_RB_25_0_NTNV

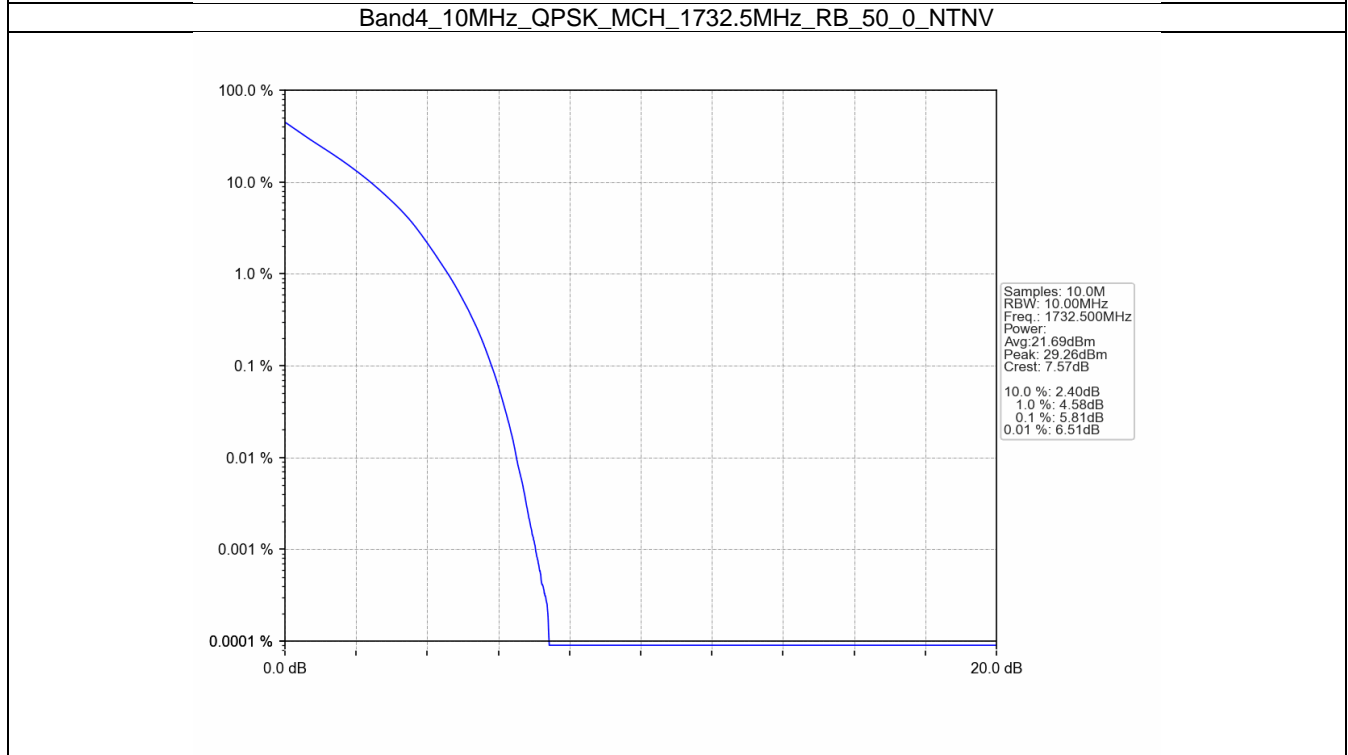
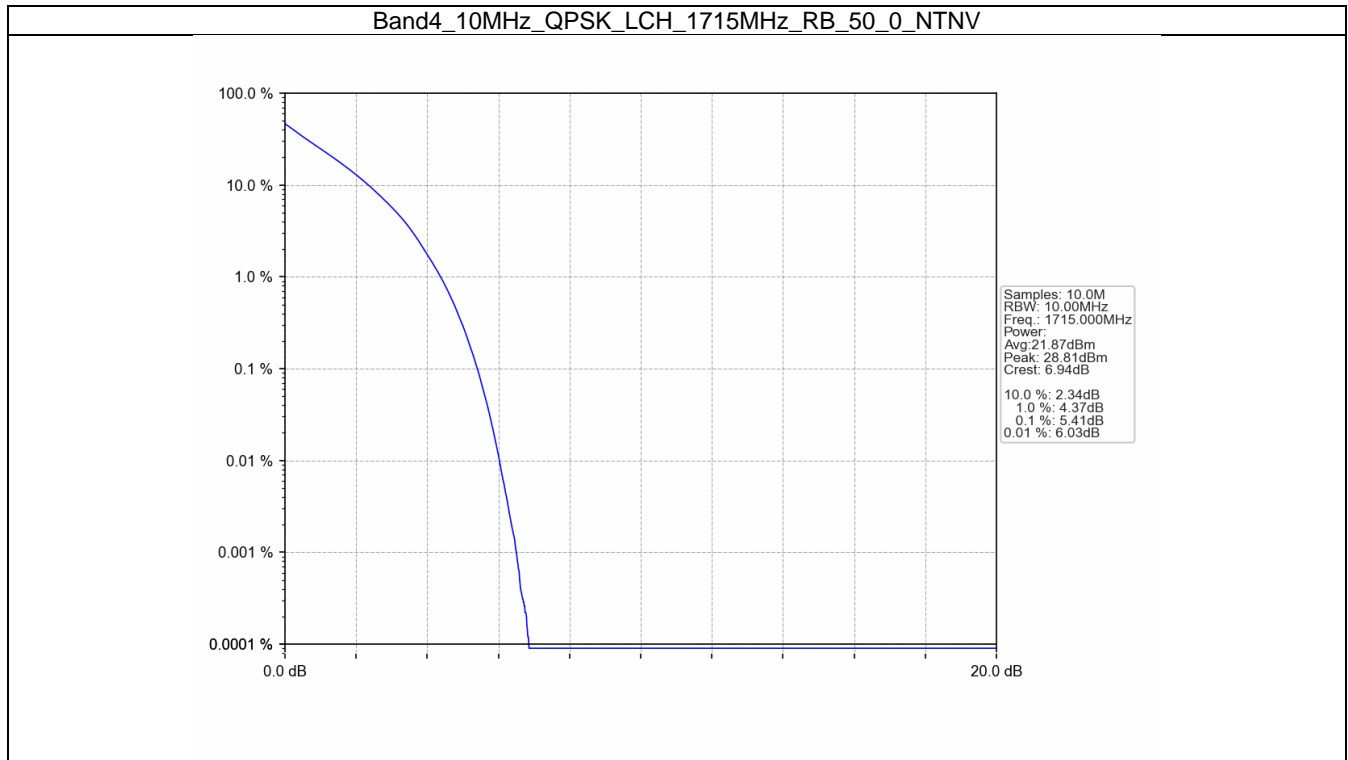


5.4 B4_10MHz

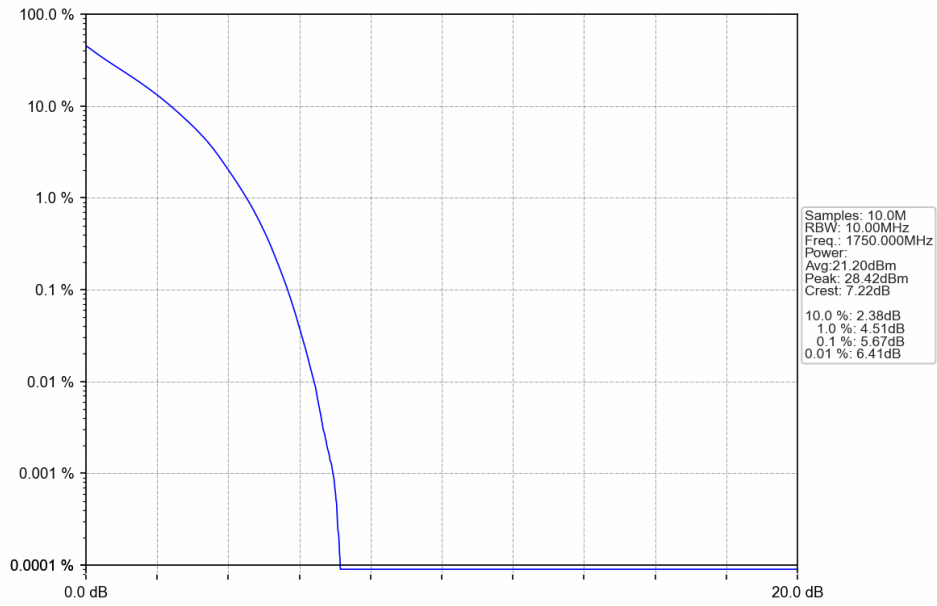
5.4.1 Test Result

Band: 4 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1715	50	0	5.41	<=13	Pass
	1732.5	50	0	5.81	<=13	Pass
	1750	50	0	5.67	<=13	Pass
16QAM	1715	50	0	6.16	<=13	Pass
	1732.5	50	0	6.58	<=13	Pass
	1750	50	0	6.38	<=13	Pass

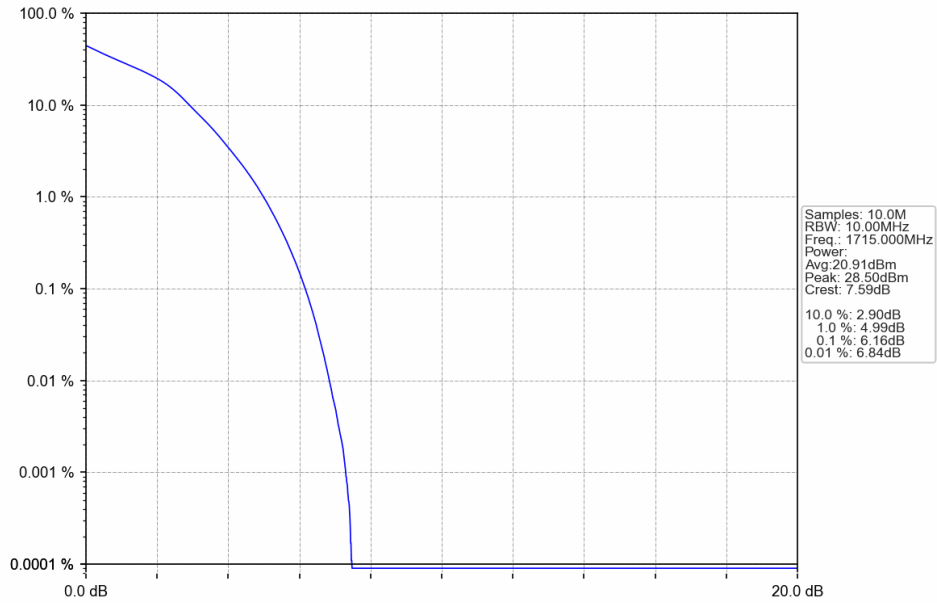
5.4.2 Test Graph



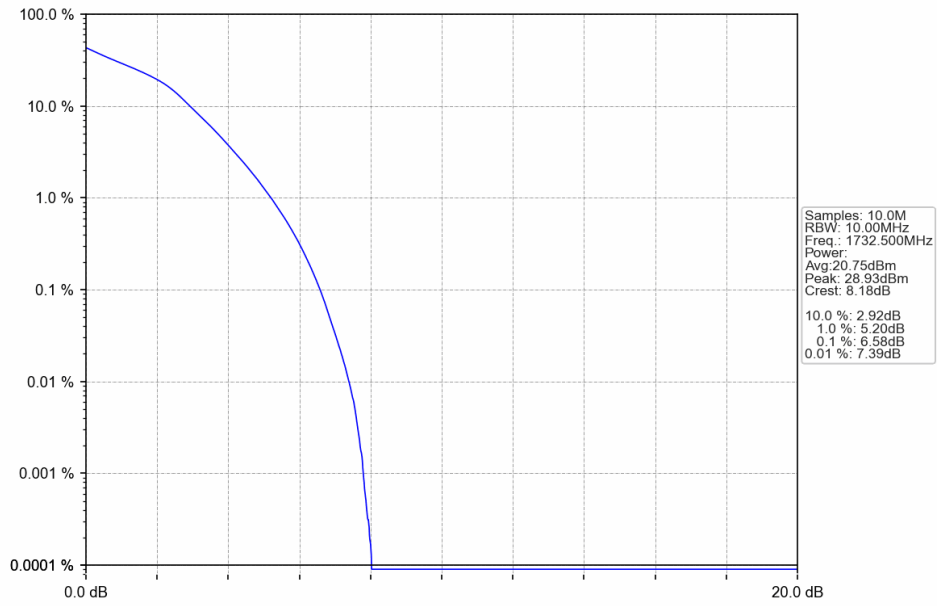
Band4_10MHz_QPSK_HCH_1750MHz_RB_50_0_NTNV



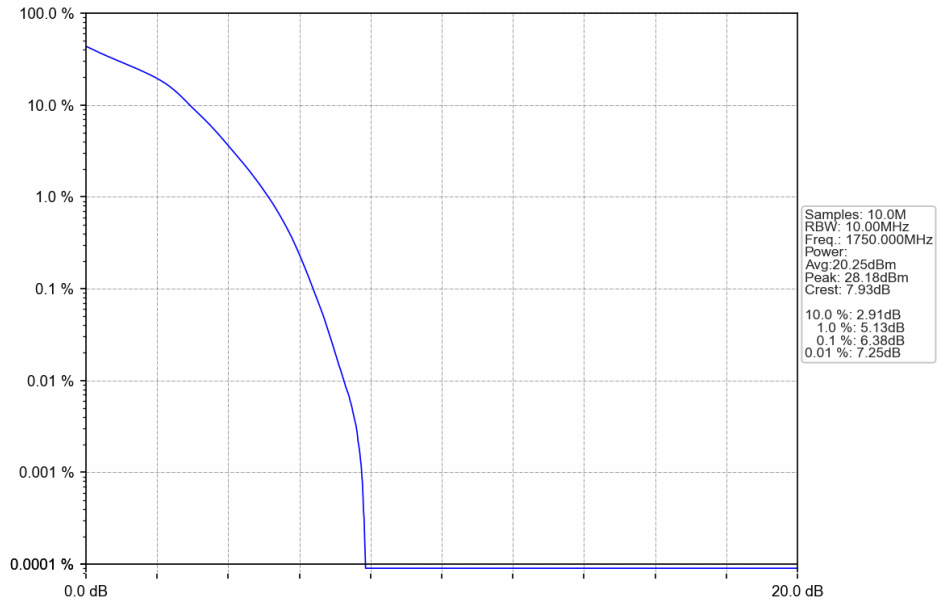
Band4_10MHz_16QAM_LCH_1715MHz_RB_50_0_NTNV



Band4_10MHz_16QAM_MCH_1732.5MHz_RB_50_0_NTNV



Band4_10MHz_16QAM_HCH_1750MHz_RB_50_0_NTNV

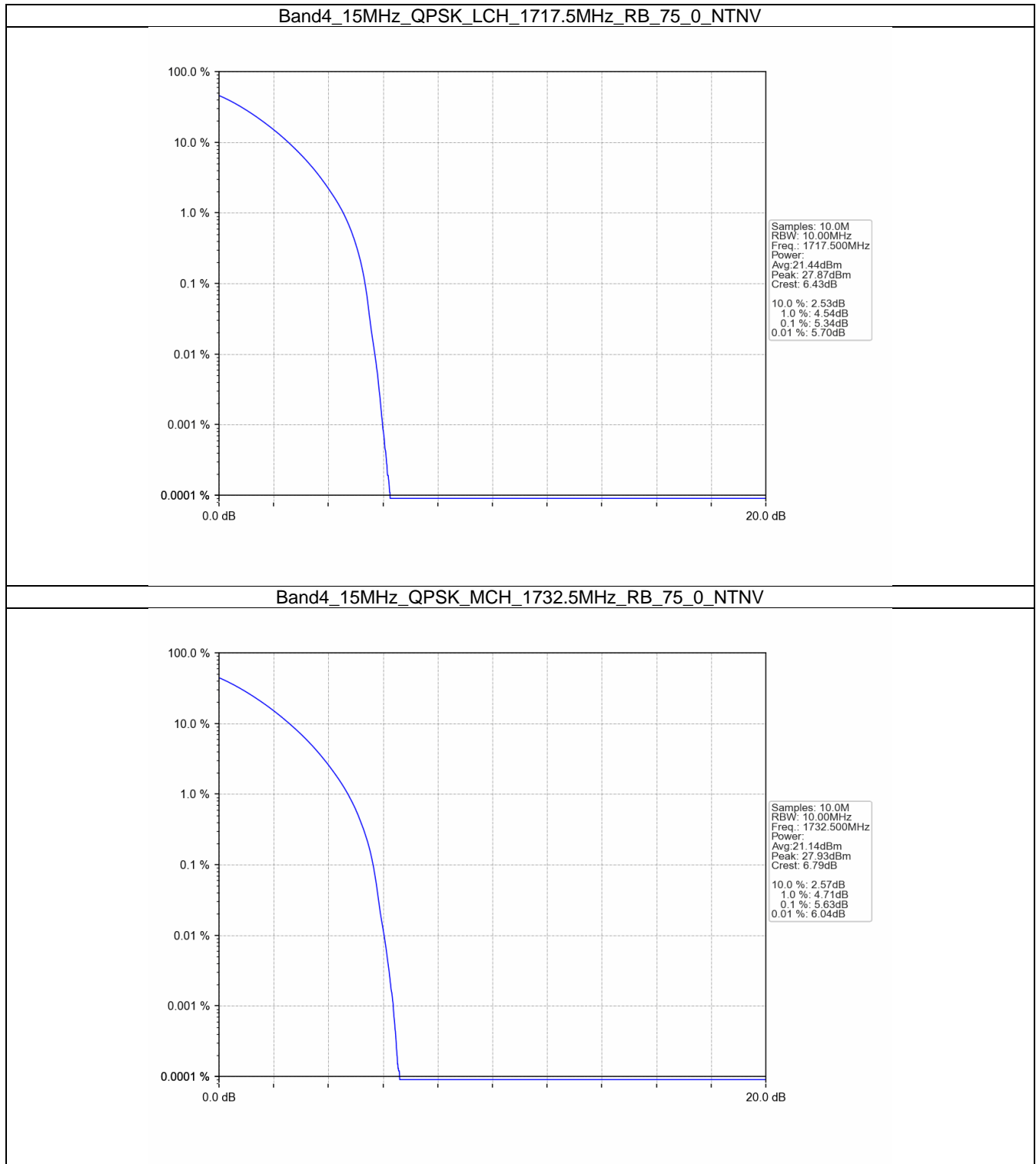


5.5 B4_15MHz

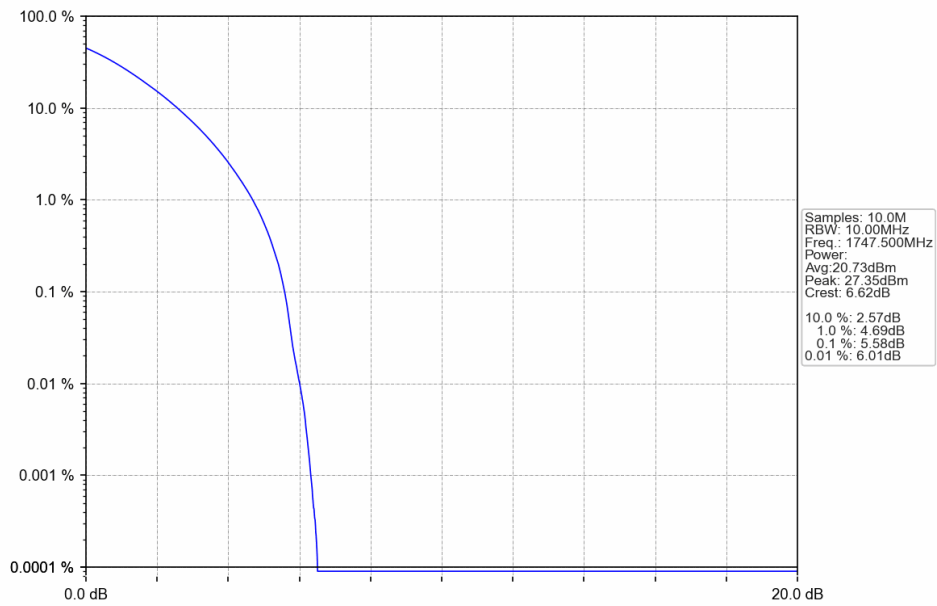
5.5.1 Test Result

Band: 4 / Bandwidth: 15MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1717.5	75	0	5.34	<=13	Pass
	1732.5	75	0	5.63	<=13	Pass
	1747.5	75	0	5.58	<=13	Pass
16QAM	1717.5	75	0	6.11	<=13	Pass
	1732.5	75	0	6.37	<=13	Pass
	1747.5	75	0	6.31	<=13	Pass

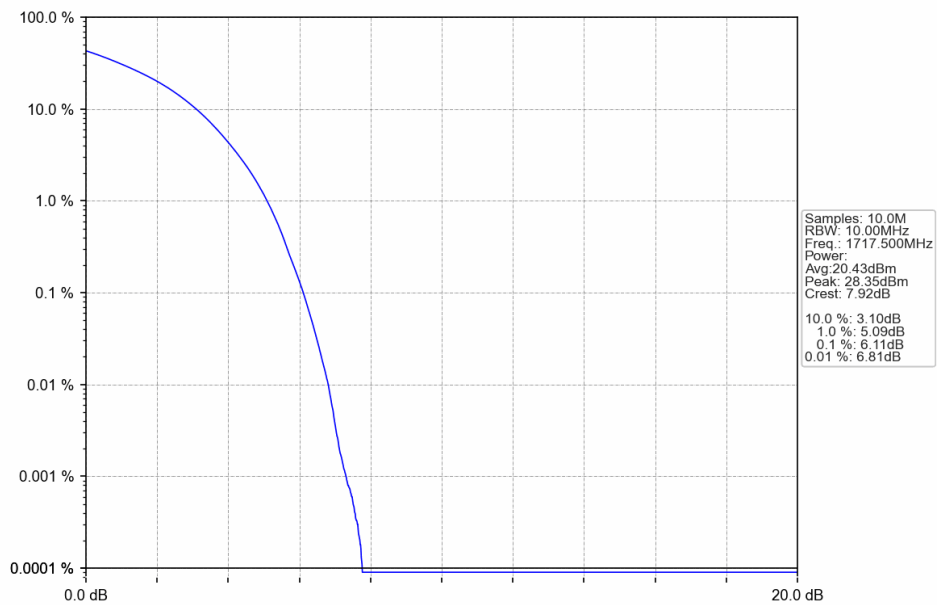
5.5.2 Test Graph



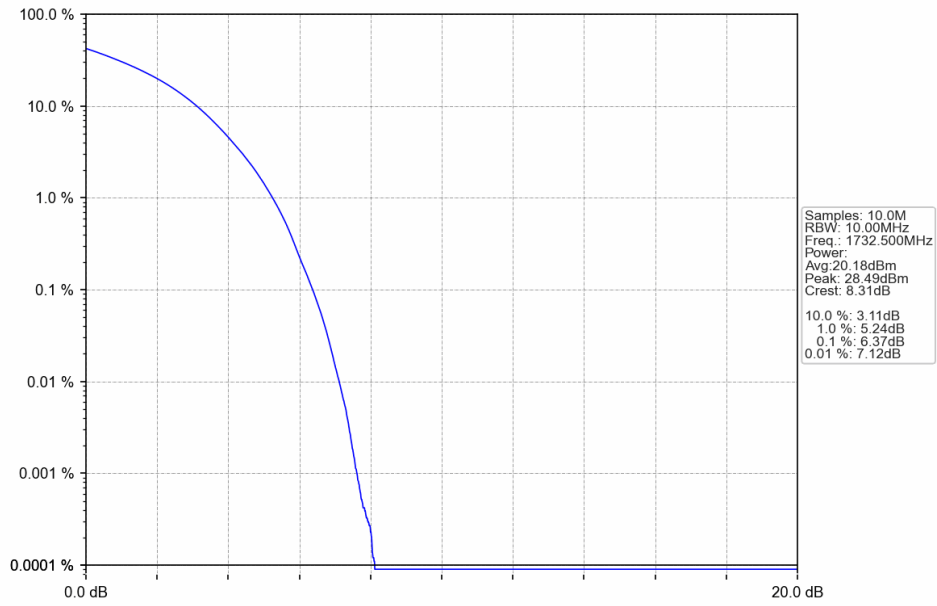
Band4_15MHz_QPSK_HCH_1747.5MHz_RB_75_0_NTNV



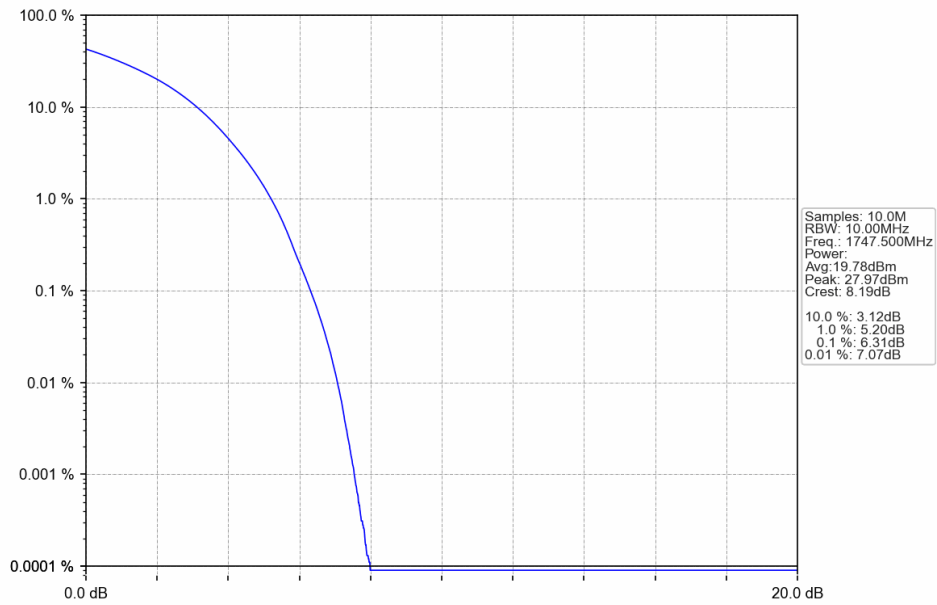
Band4_15MHz_16QAM_LCH_1717.5MHz_RB_75_0_NTNV



Band4_15MHz_16QAM_MCH_1732.5MHz_RB_75_0_NTNV



Band4_15MHz_16QAM_HCH_1747.5MHz_RB_75_0_NTNV

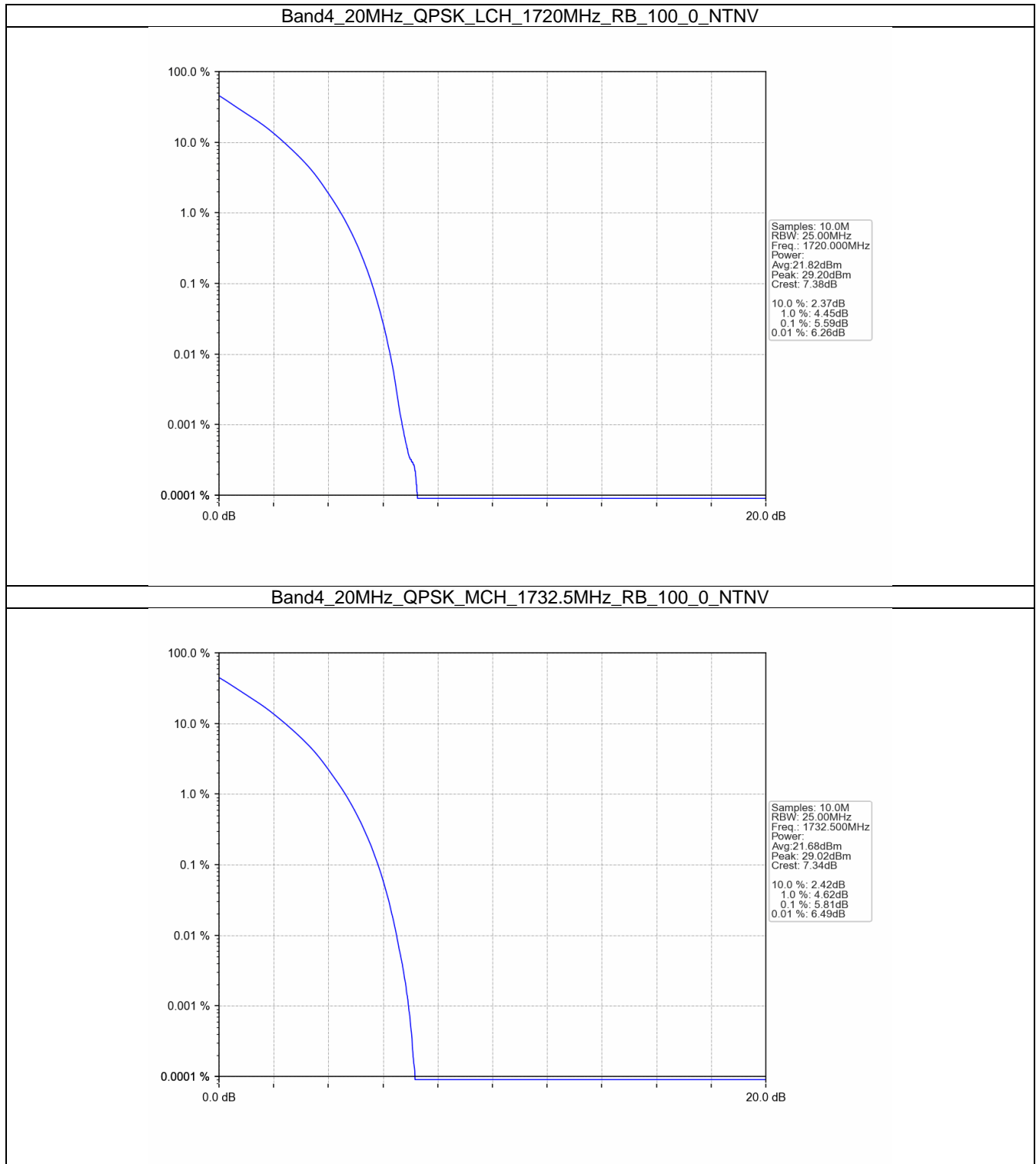


5.6 B4_20MHz

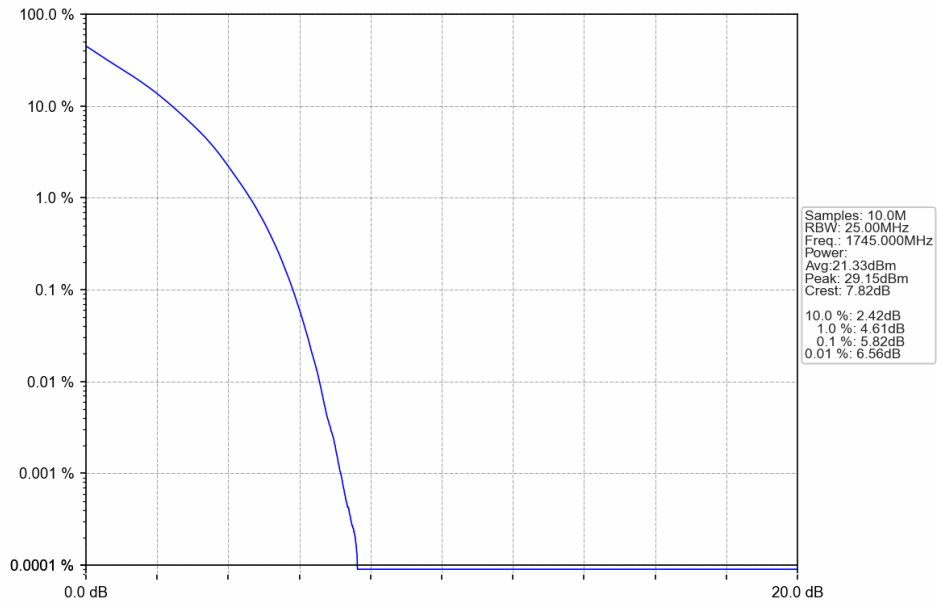
5.6.1 Test Result

Band: 4 / Bandwidth: 20MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1720	100	0	5.59	<=13	Pass
	1732.5	100	0	5.81	<=13	Pass
	1745	100	0	5.82	<=13	Pass
16QAM	1720	100	0	6.29	<=13	Pass
	1732.5	100	0	6.56	<=13	Pass
	1745	100	0	6.55	<=13	Pass

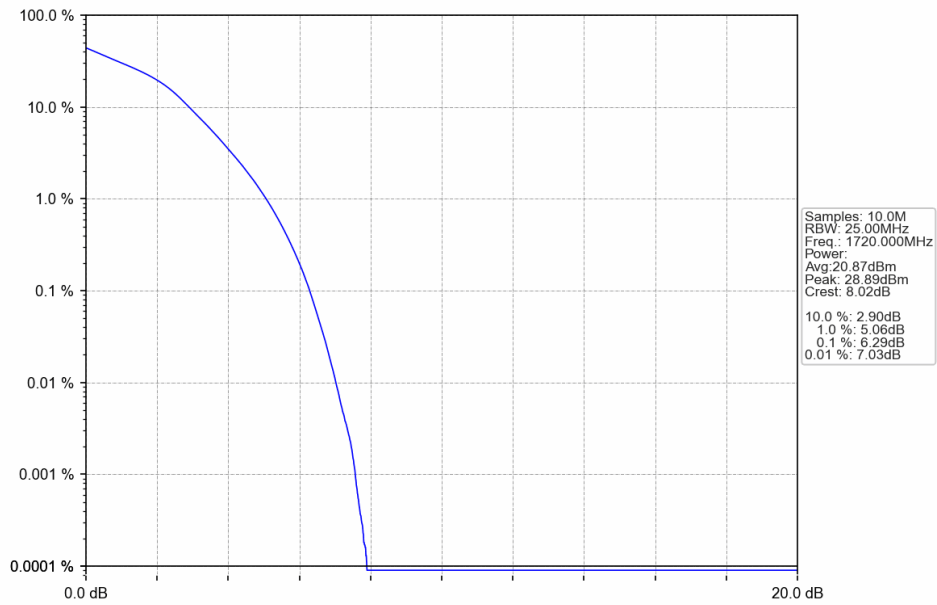
5.6.2 Test Graph



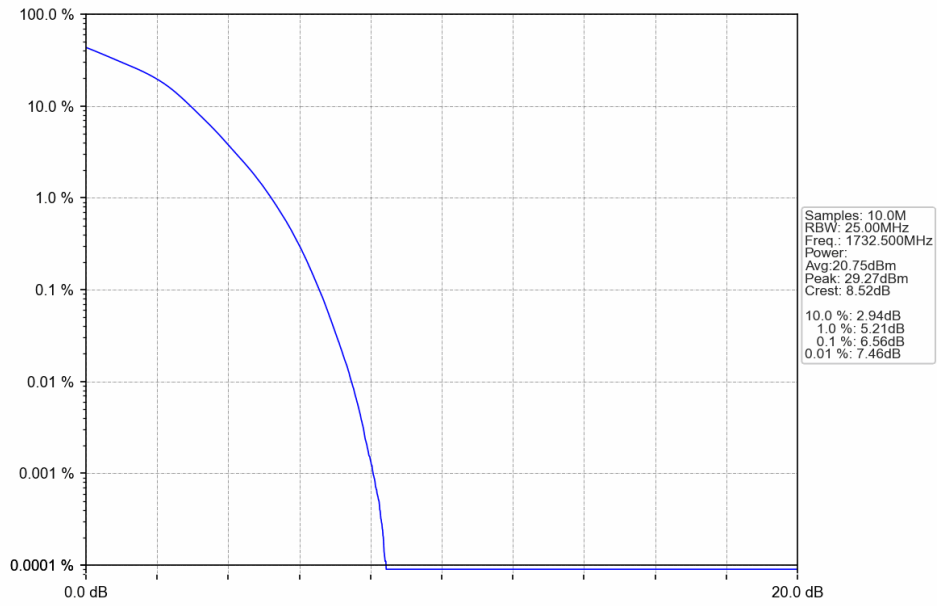
Band4_20MHz_QPSK_HCH_1745MHz_RB_100_0_NTNV



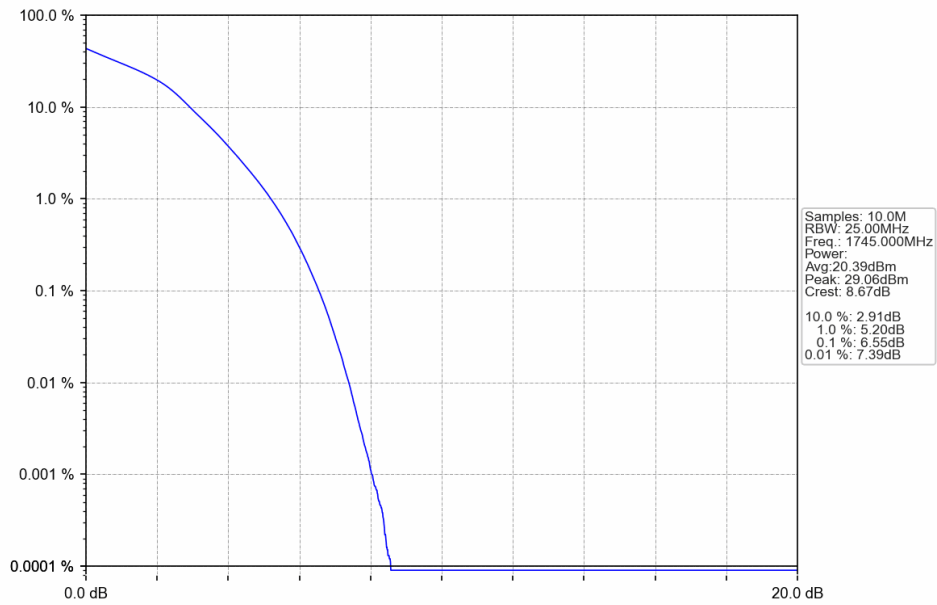
Band4_20MHz_16QAM_LCH_1720MHz_RB_100_0_NTNV



Band4_20MHz_16QAM_MCH_1732.5MHz_RB_100_0_NTNV



Band4_20MHz_16QAM_HCH_1745MHz_RB_100_0_NTNV



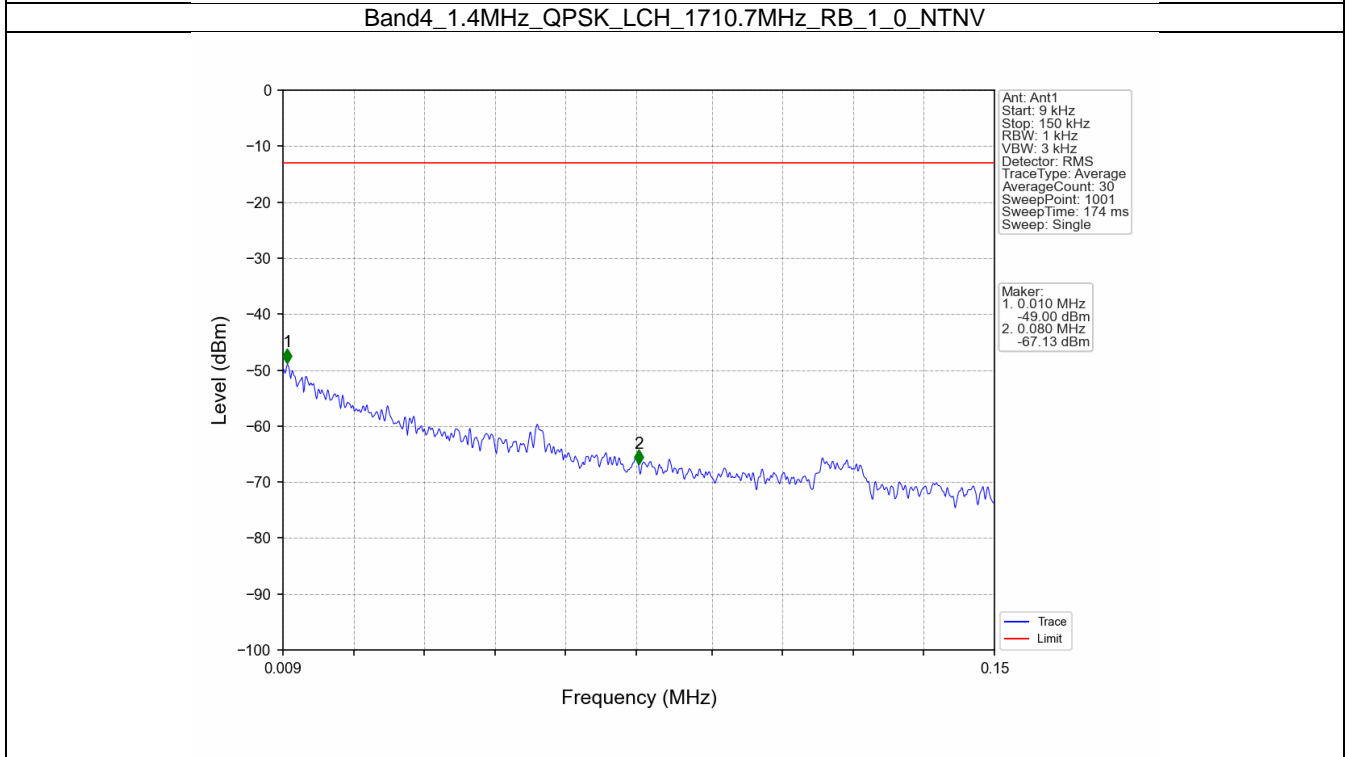
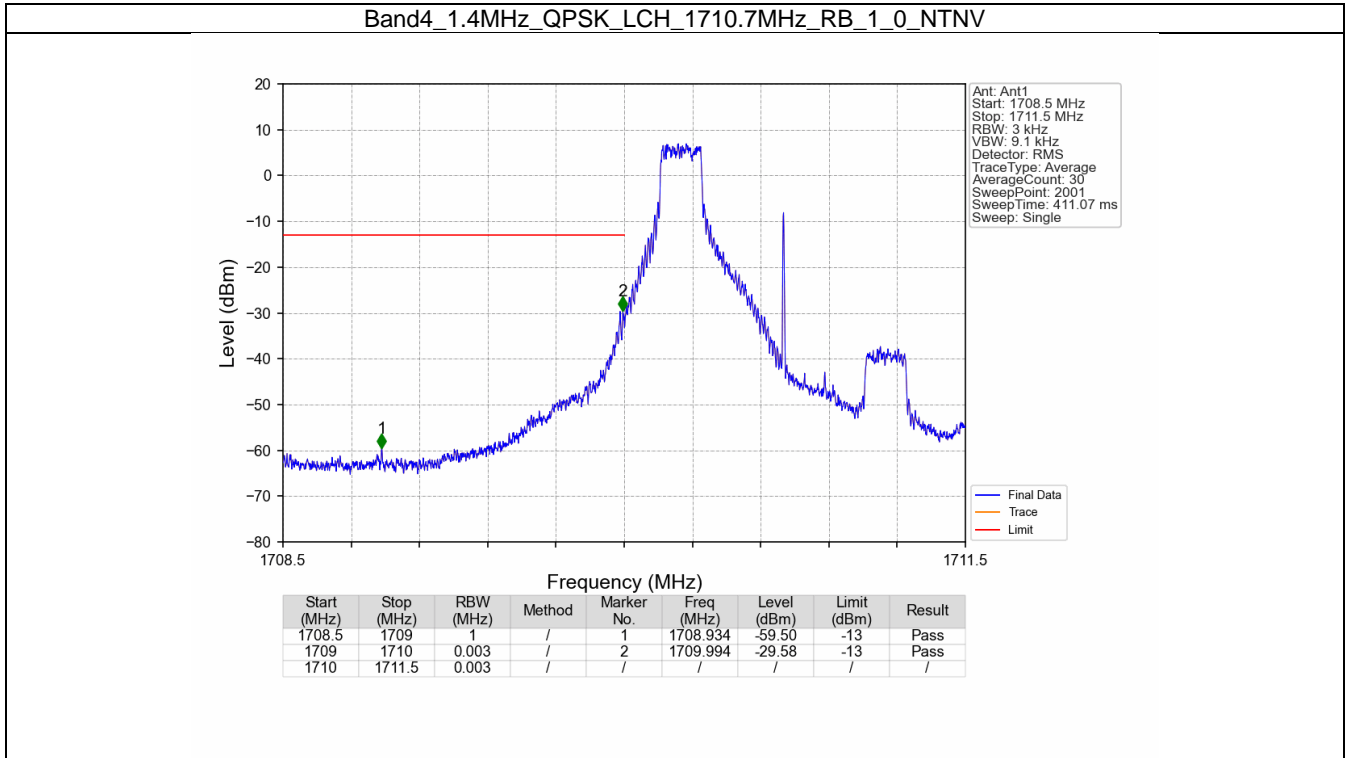
6. Spurious Emission

6.1 B4_1.4MHz

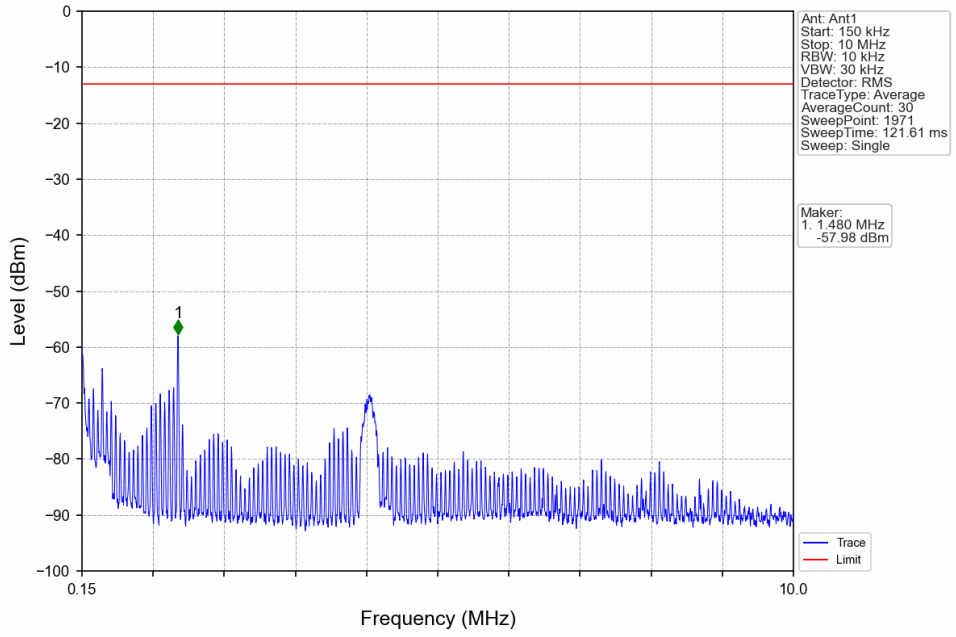
6.1.1 Test Result

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
		1	0	Refer To Test Graph		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
16QAM	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
		1	0	Refer To Test Graph		Pass
	1754.3		5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

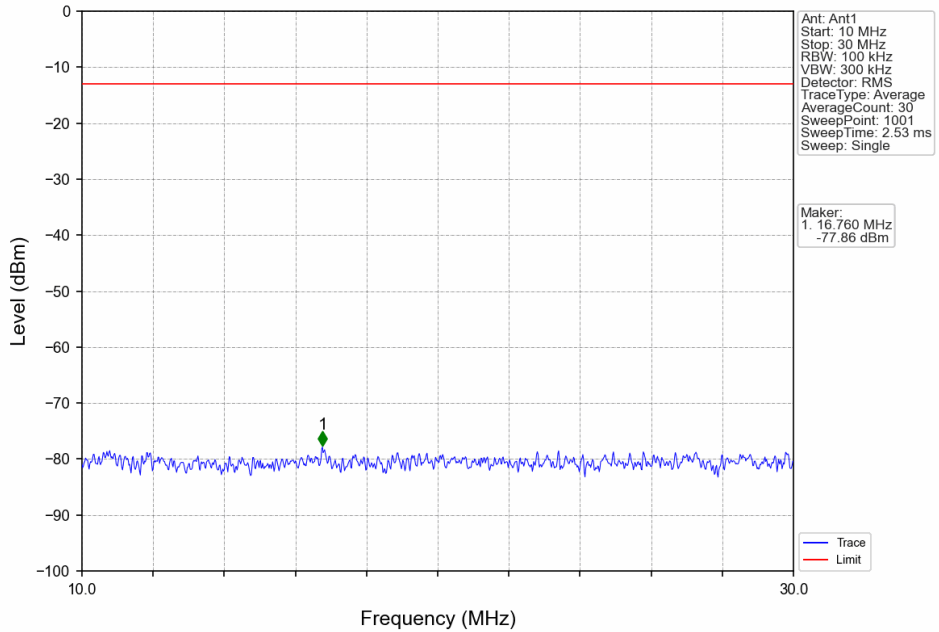
6.1.2 Test Graph



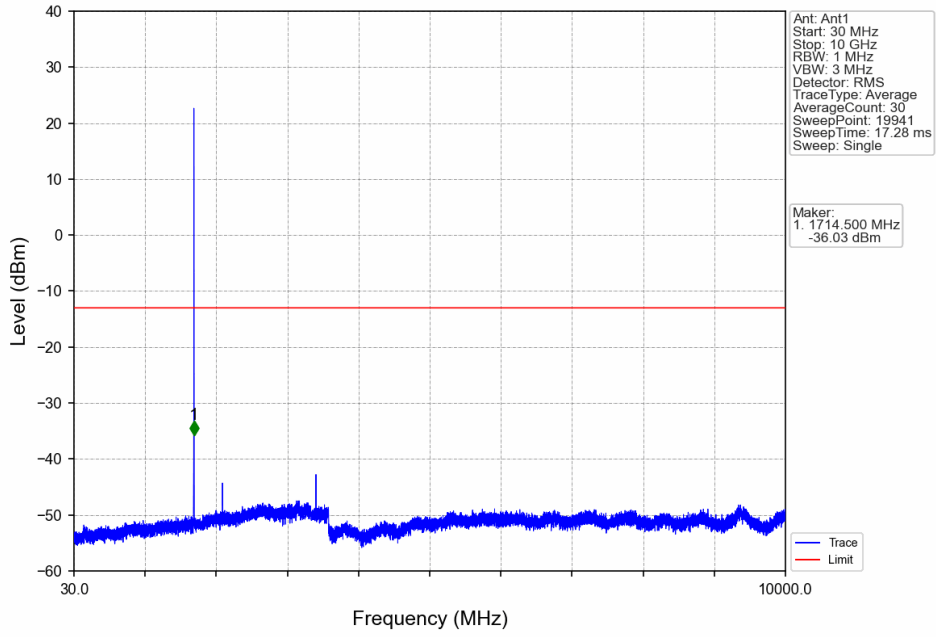
Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_1_0_NTNV



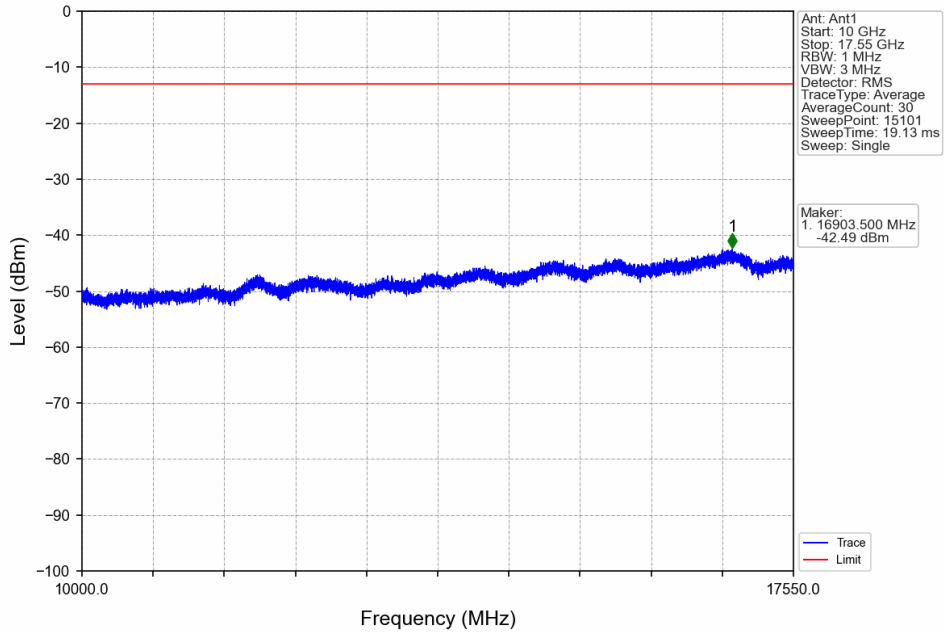
Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_1_0_NTNV



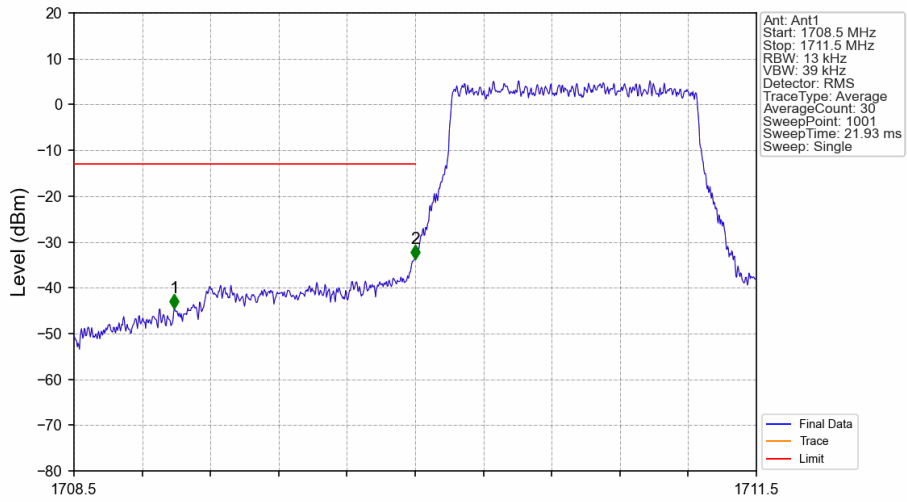
Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_1_0_NTNV



Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_1_0_NTNV

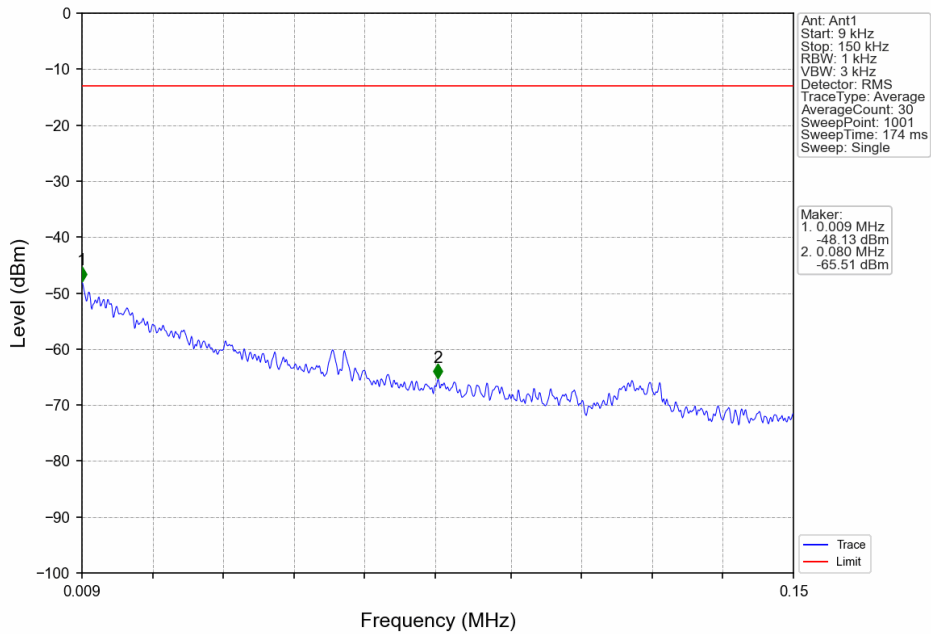


Band4_1.4MHz_QPSK_LCH_1710.7MHz_RB_6_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1708.5	1709	1	/	1	1708.941	-44.47	-13	Pass
1709	1710	0.013	/	2	1710.000	-33.72	-13	Pass
1710	1711.5	0.013	/	/	/	/	/	/

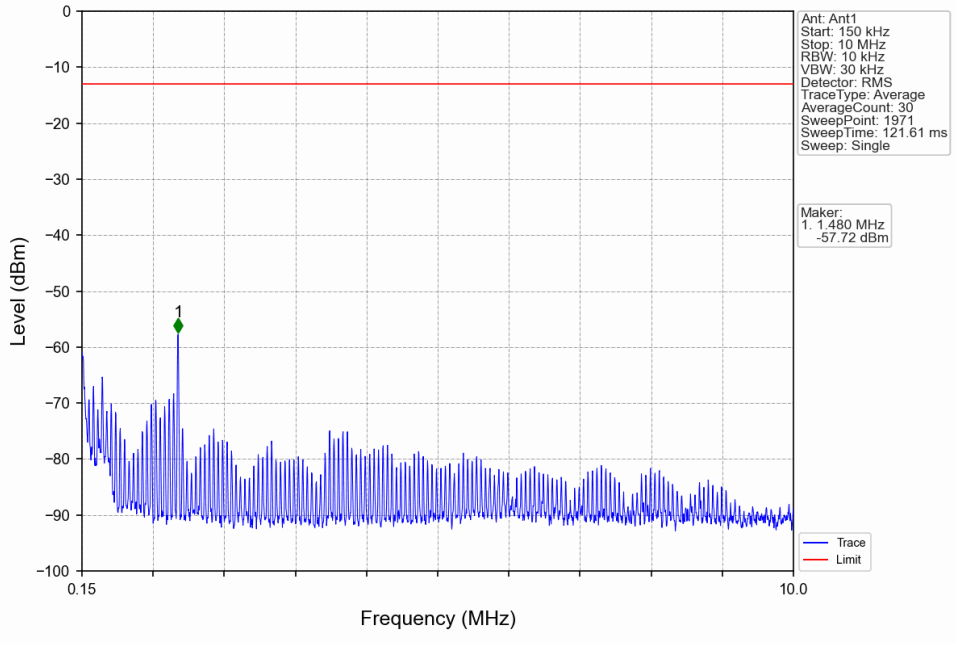
Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



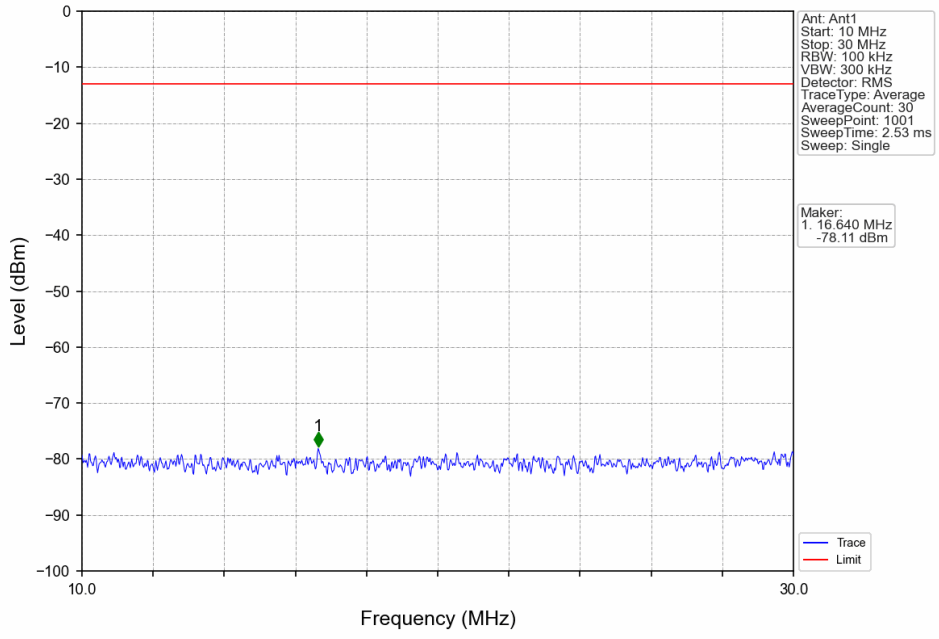
Ant: Ant1
 Start: 9 kHz
 Stop: 150 kHz
 RBW: 1 kHz
 VBW: 3 kHz
 Detector: RMS
 Trace Type: Average
 Average Count: 30
 Sweep Point: 1001
 Sweep Time: 174 ms
 Sweep: Single

Marker:
 1 0.009 MHz
 -48.13 dBm
 2 0.080 MHz
 -65.51 dBm

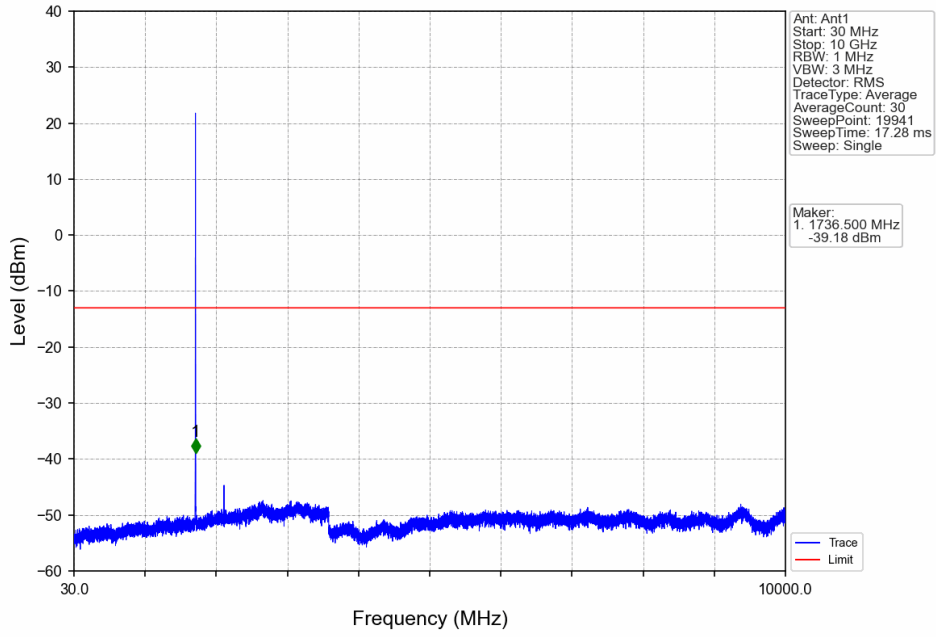
Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



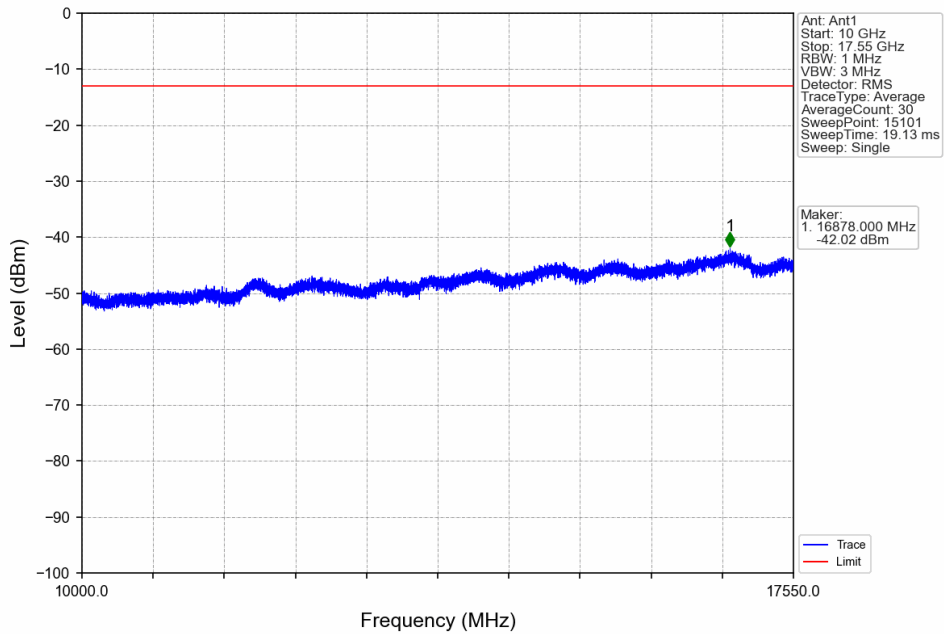
Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



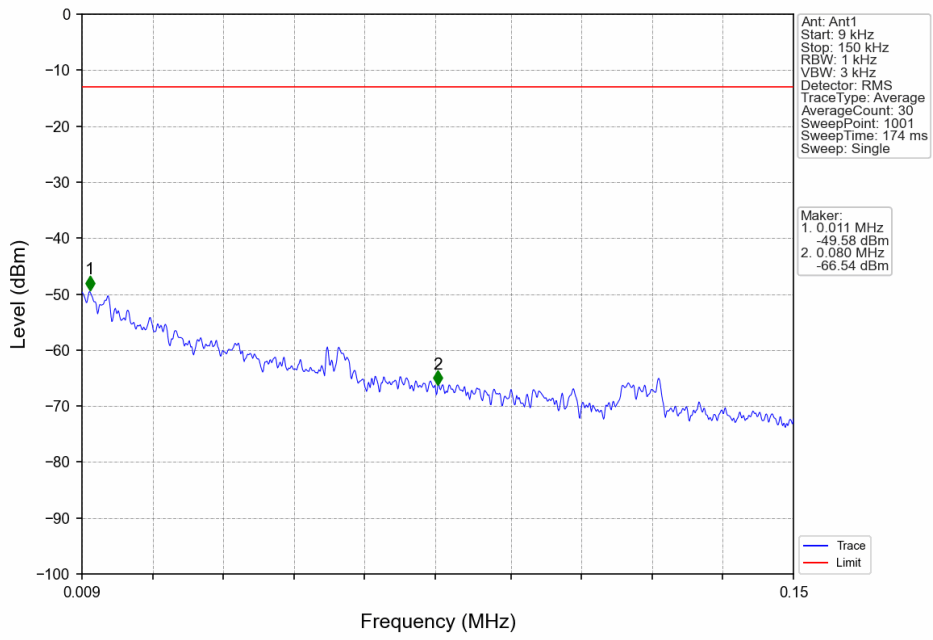
Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



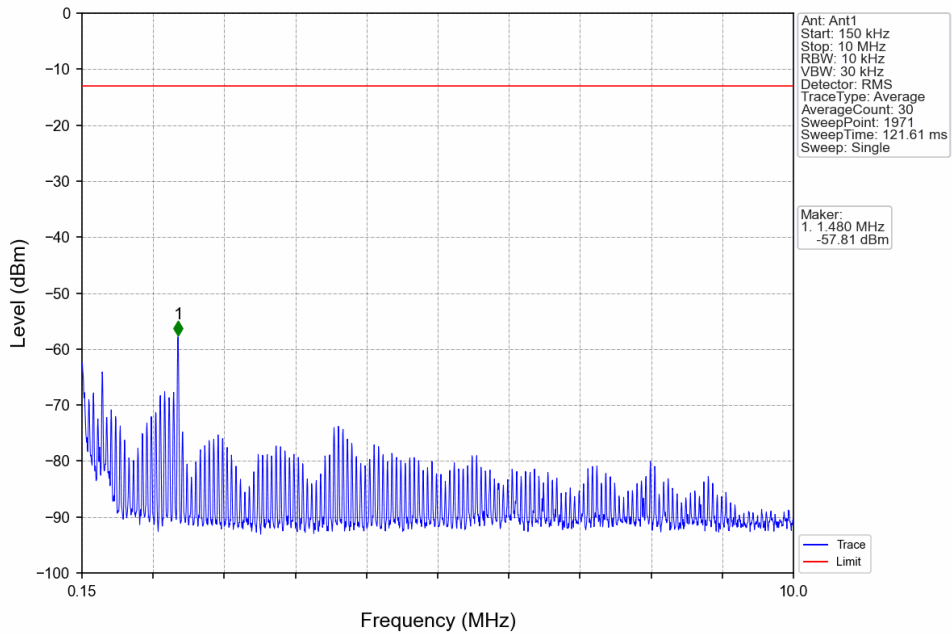
Band4_1.4MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



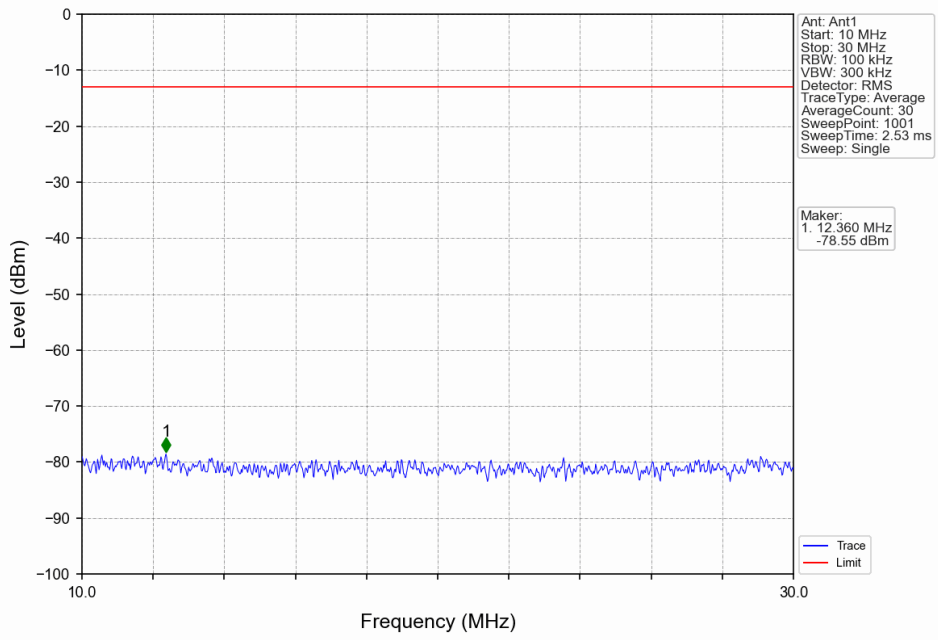
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_0_NTNV



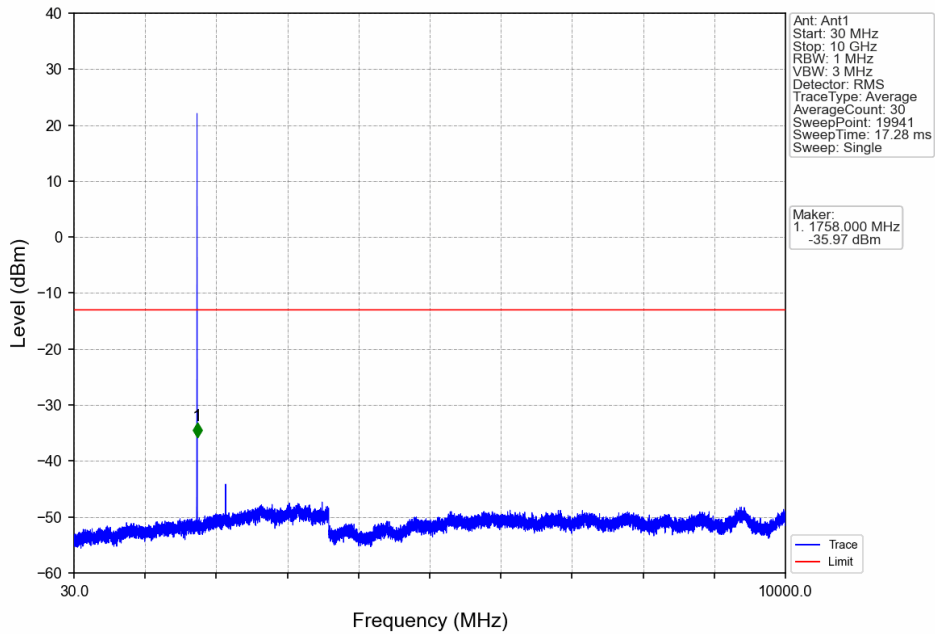
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_0_NTNV



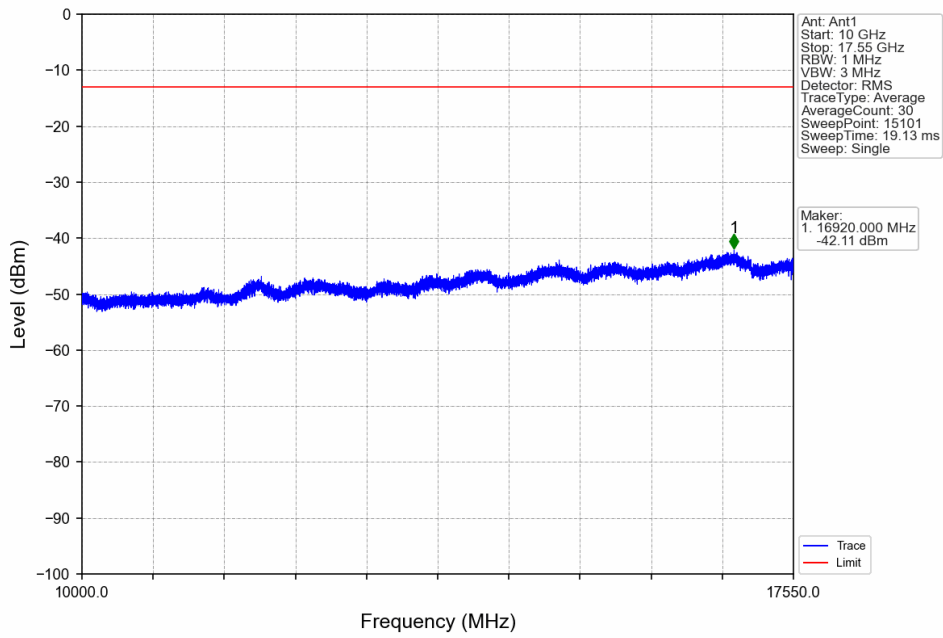
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_0_NTNV



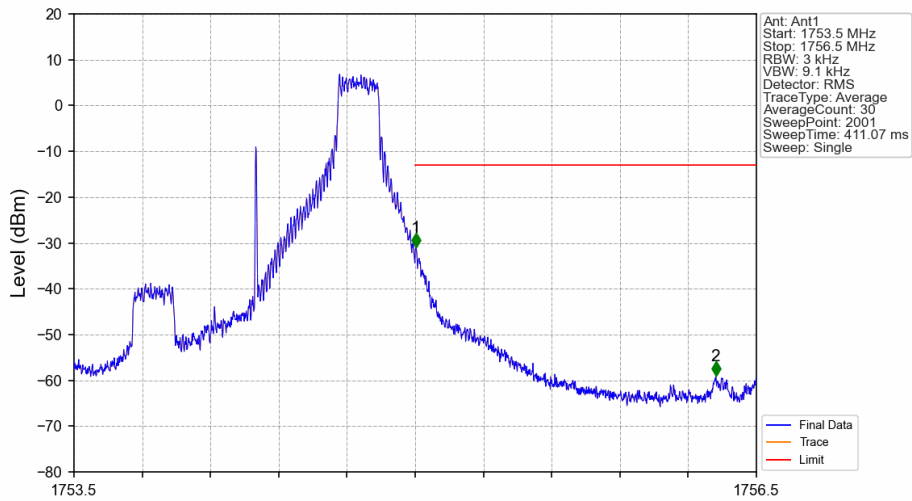
Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_0_NTNV



Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_0_NTNV

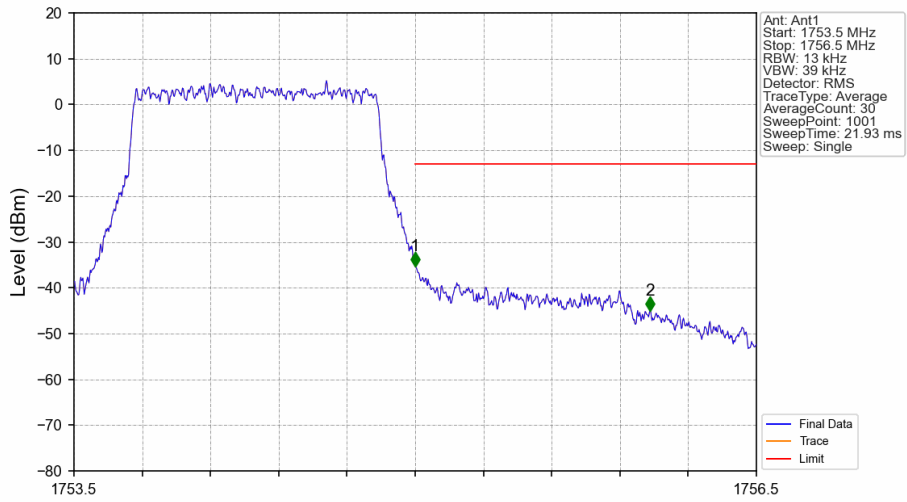


Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_1_5_NTNV



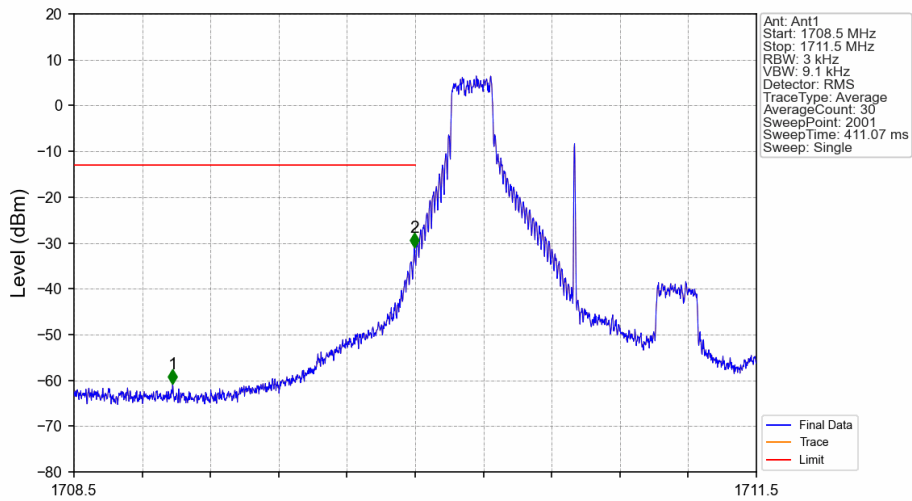
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1753.5	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.003	-30.97	-13	Pass
1756	1756.5	1	/	2	1756.322	-59.09	-13	Pass

Band4_1.4MHz_QPSK_HCH_1754.3MHz_RB_6_0_NTNV



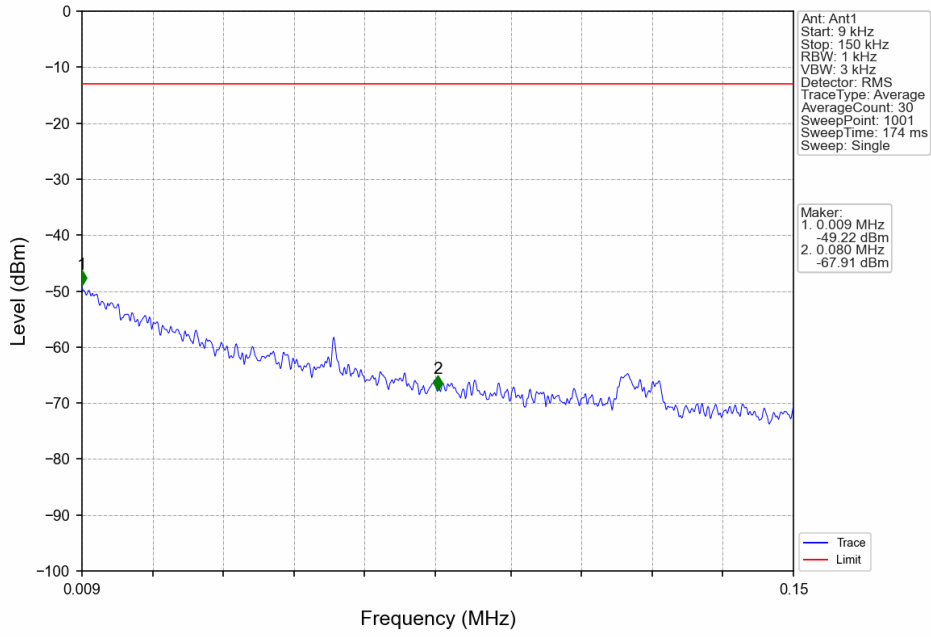
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1753.5	1755	0.013	/	/	/	/	/	/
1755	1756	0.013	/	1	1755.000	-35.32	-13	Pass
1756	1756.5	1	/	2	1756.032	-45.00	-13	Pass

Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_1_0_NTNV

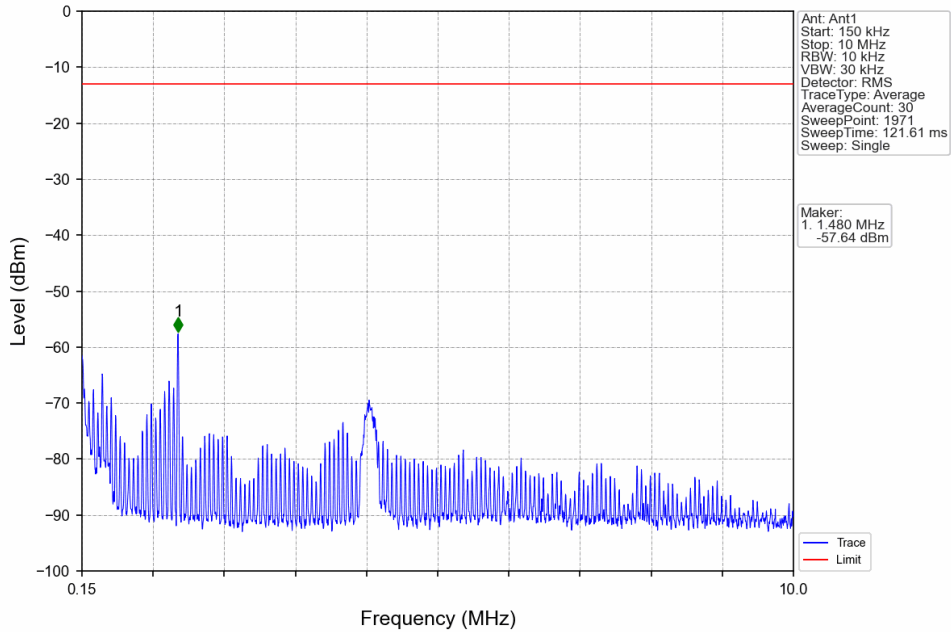


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1708.5	1709	1	/	/	/	/	/	/
1709	1710	0.003	/	2	1709.997	-31.00	-13	Pass
1710	1711.5	0.003	/	1	1708.934	-60.82	-13	Pass

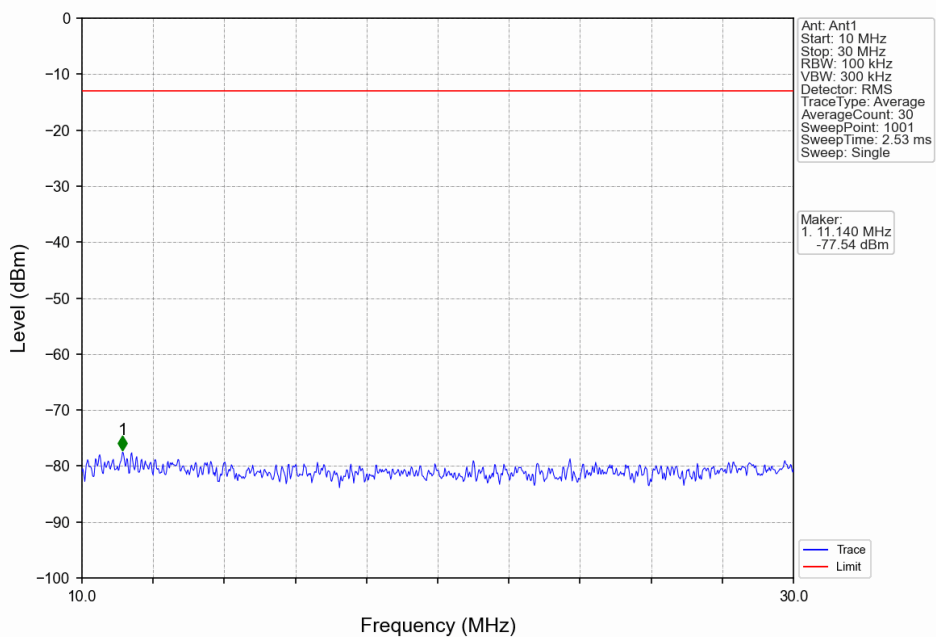
Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_1_0_NTNV



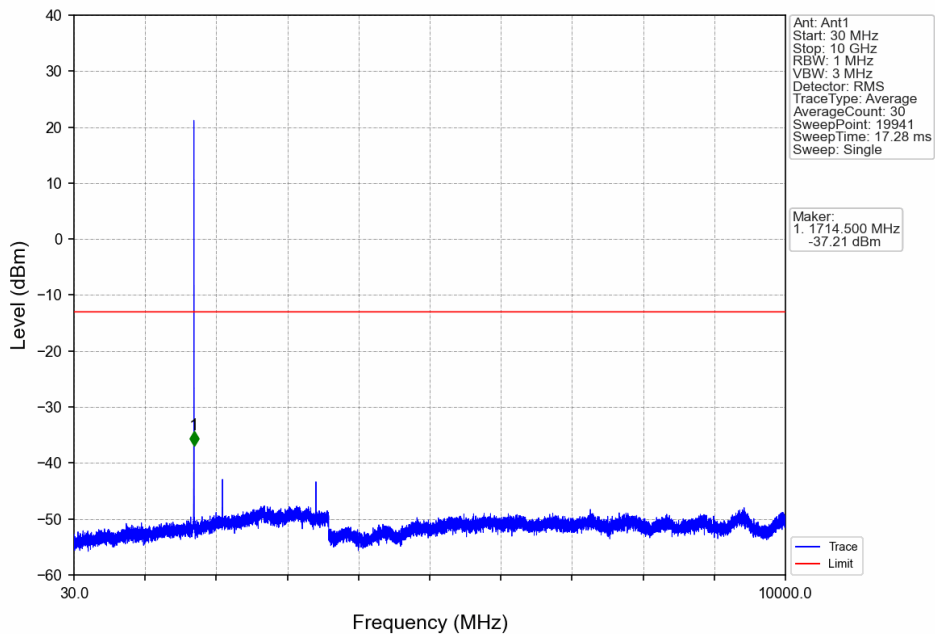
Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_1_0_NTNV



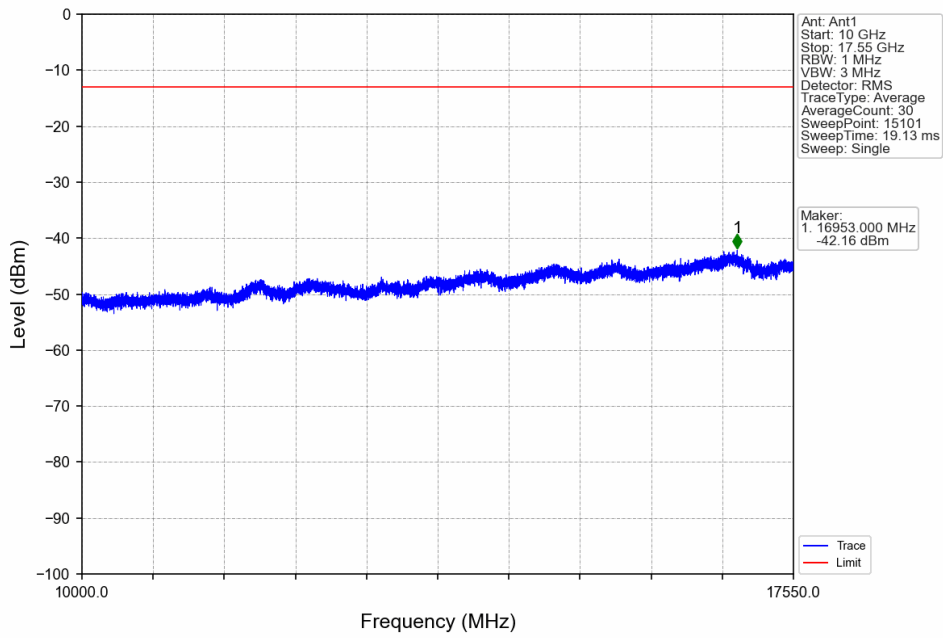
Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_1_0_NTNV



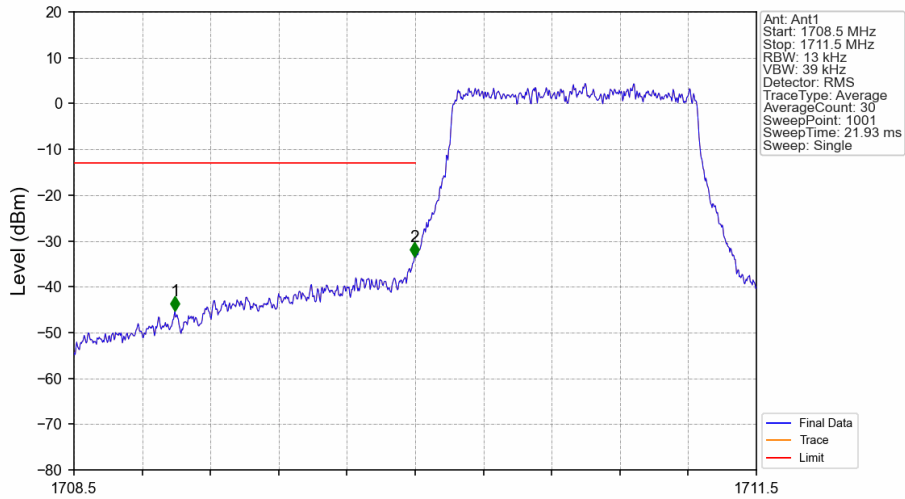
Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_1_0_NTNV



Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_1_0_NTNV

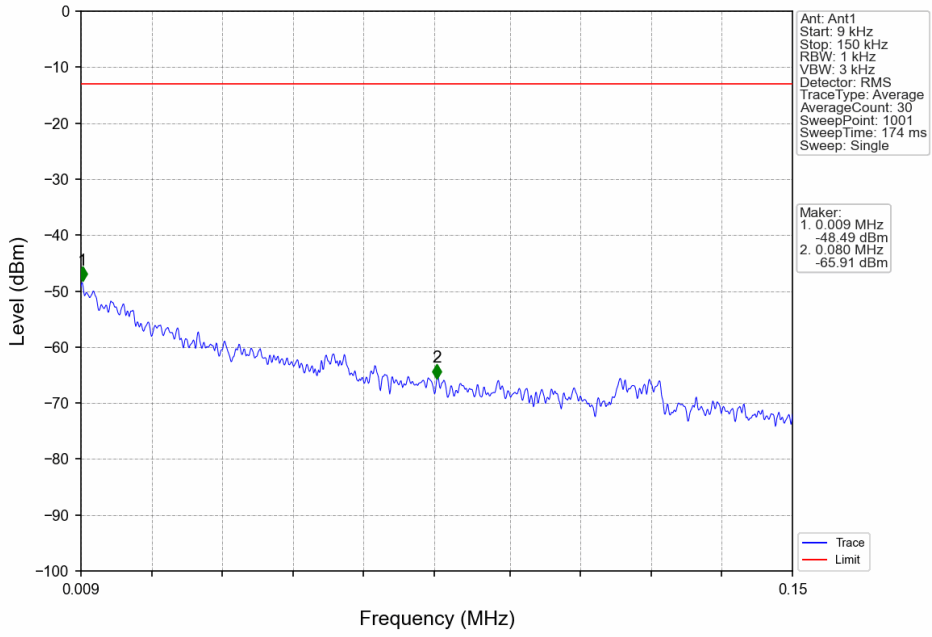


Band4_1.4MHz_16QAM_LCH_1710.7MHz_RB_6_0_NTNV

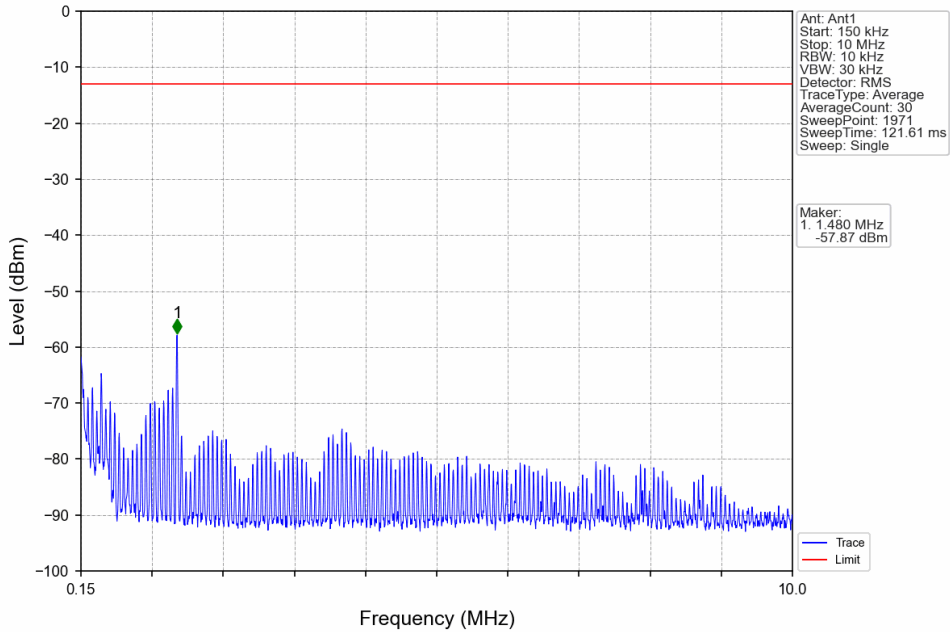


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1708.5	1709	1	/	1	1708.944	-45.23	-13	Pass
1709	1710	0.013	/	2	1709.997	-33.45	-13	Pass
1710	1711.5	0.013	/	/	/	/	/	/

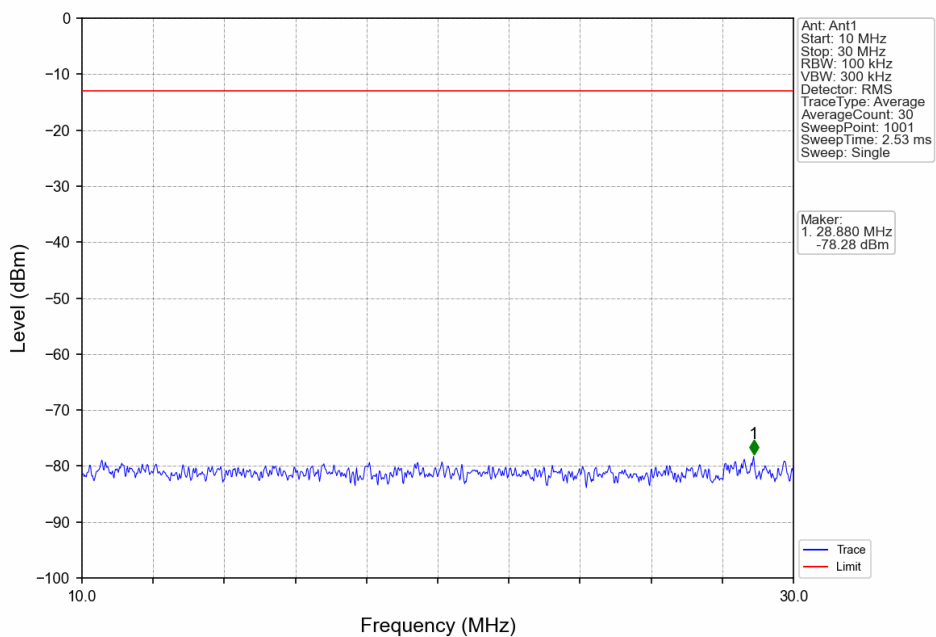
Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_1_0_NTNV



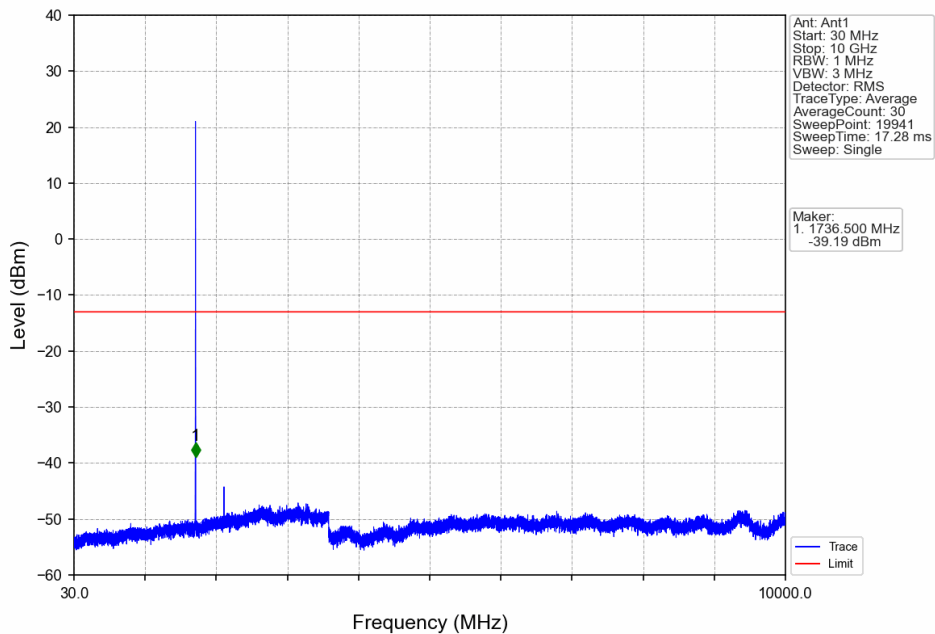
Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_1_0_NTNV



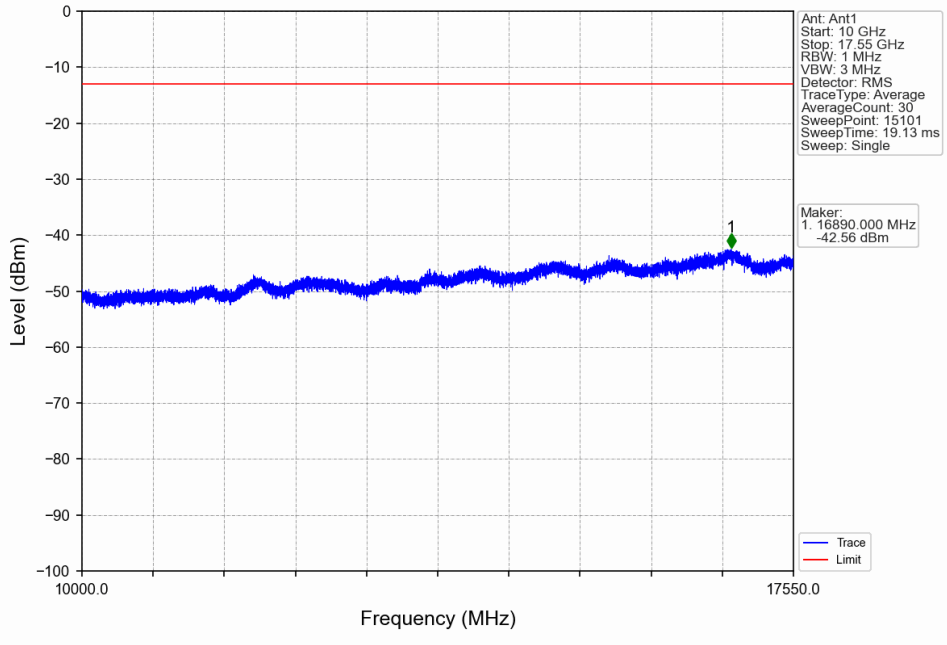
Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_1_0_NTNV



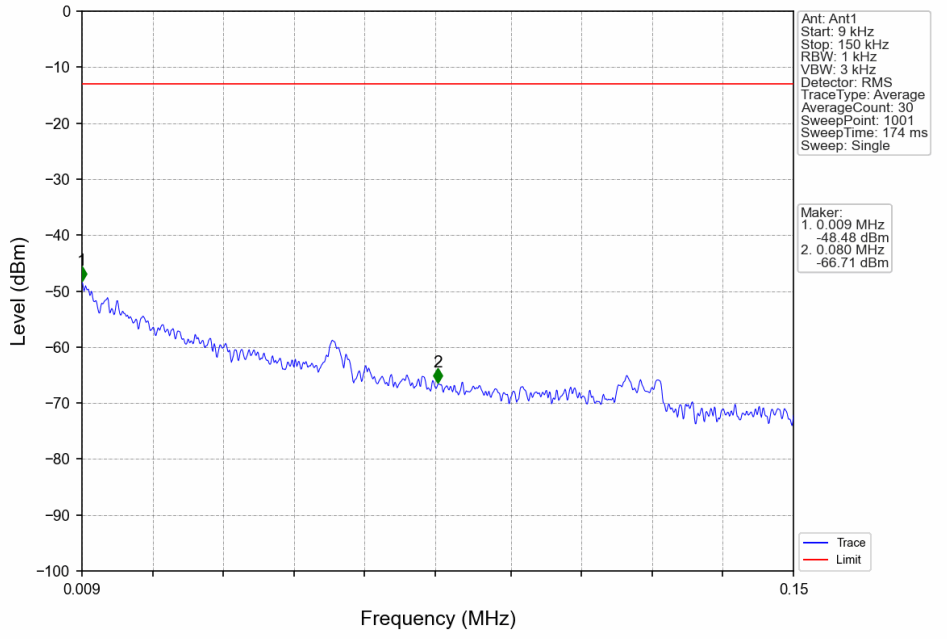
Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_1_0_NTNV



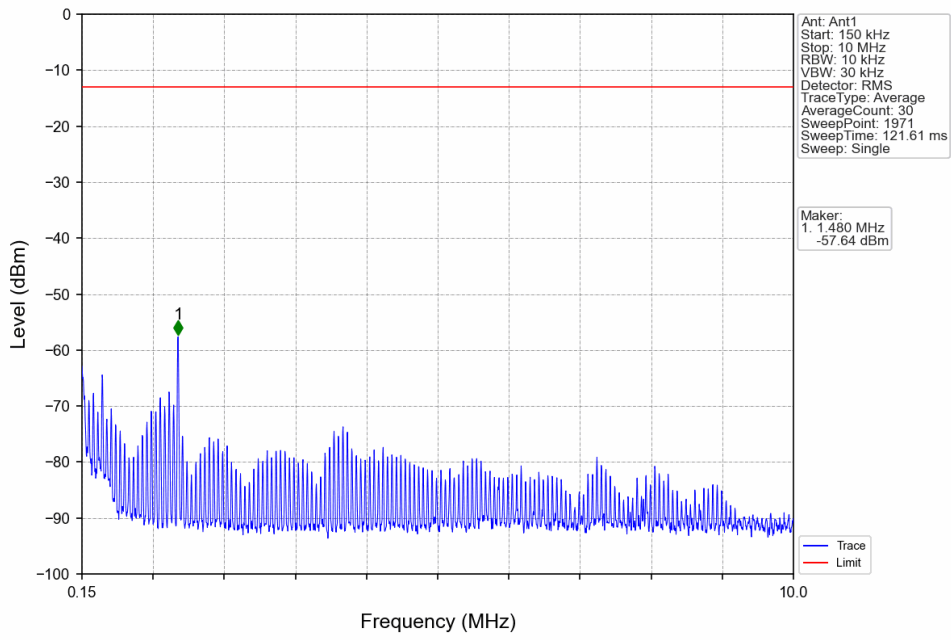
Band4_1.4MHz_16QAM_MCH_1732.5MHz_RB_1_0_NTNV



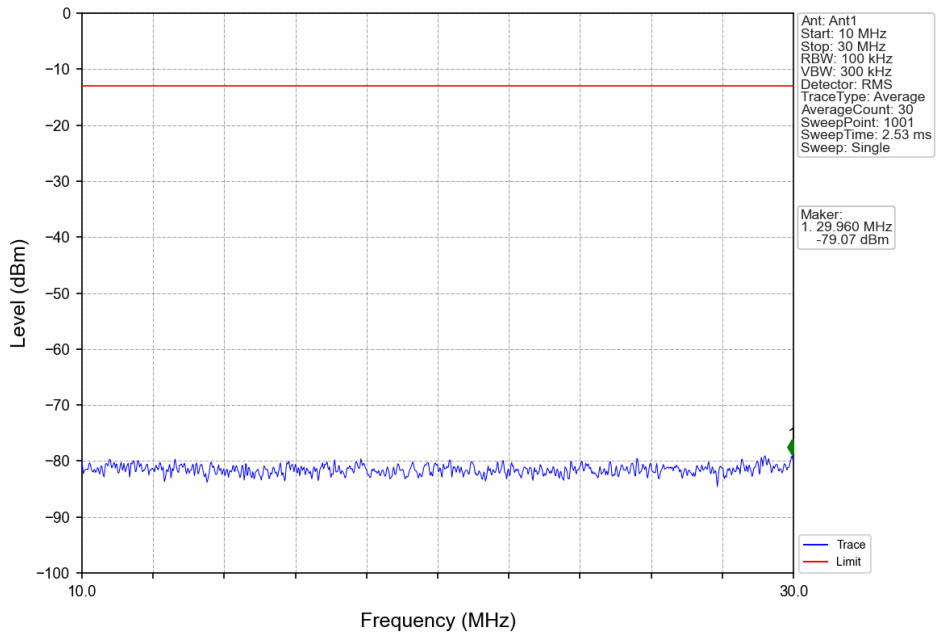
Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_1_0_NTNV



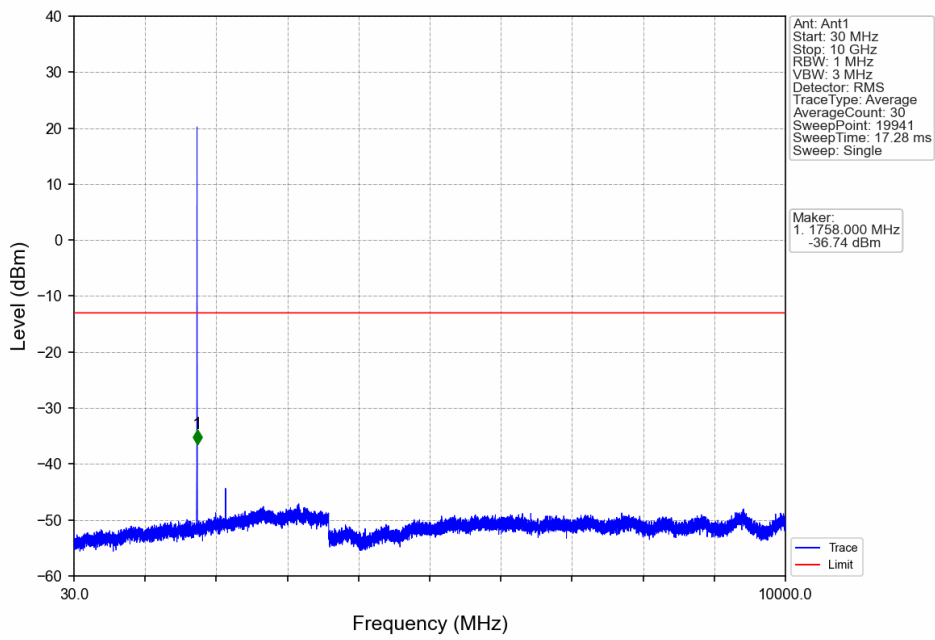
Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_1_0_NTNV



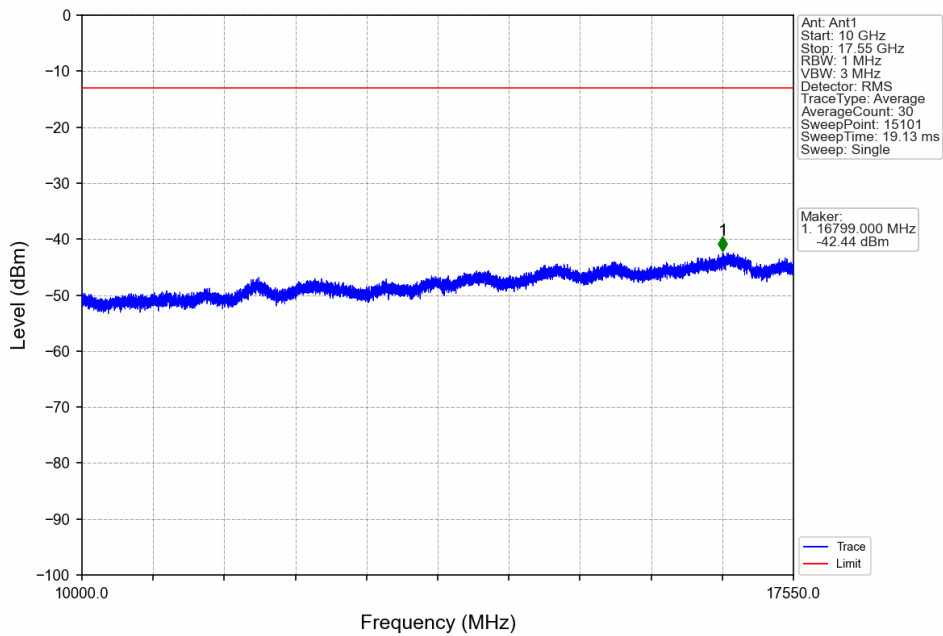
Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_1_0_NTNV



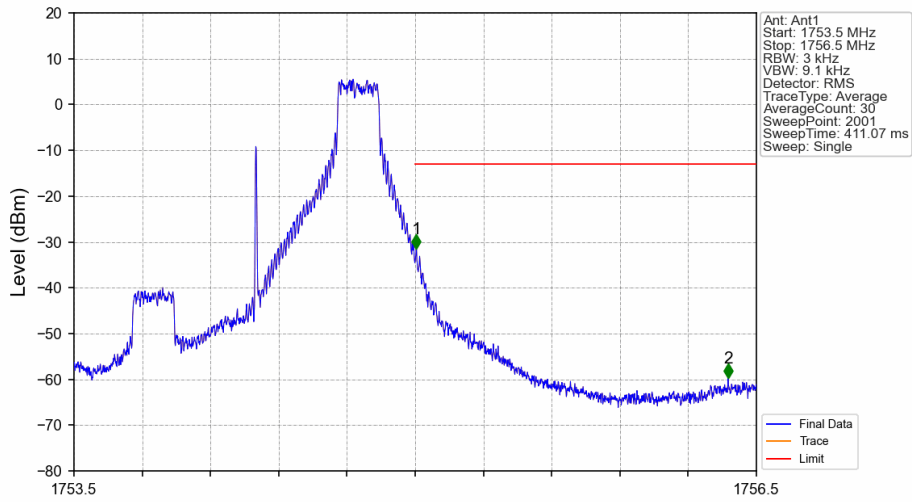
Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_1_0_NTNV



Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_1_0_NTNV

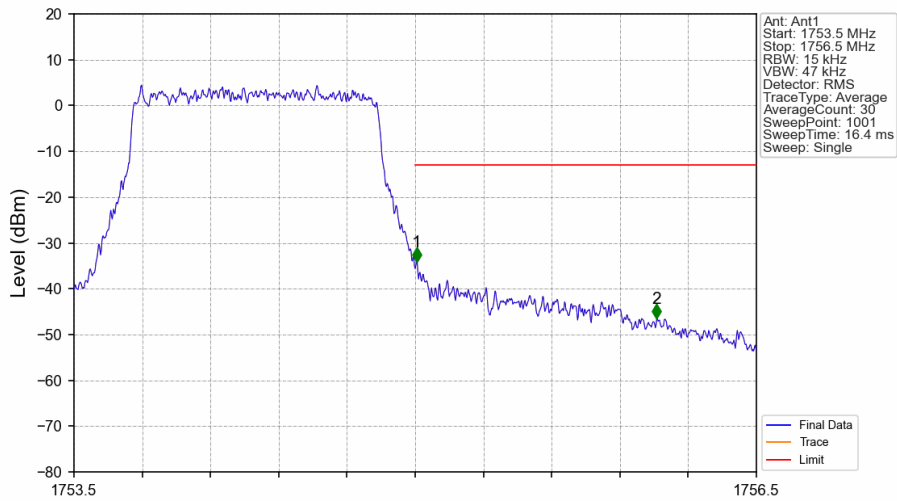


Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_1_5_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1753.5	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.005	-31.47	-13	Pass
1756	1756.5	1	/	2	1756.376	-59.78	-13	Pass

Band4_1.4MHz_16QAM_HCH_1754.3MHz_RB_6_0_NTNV



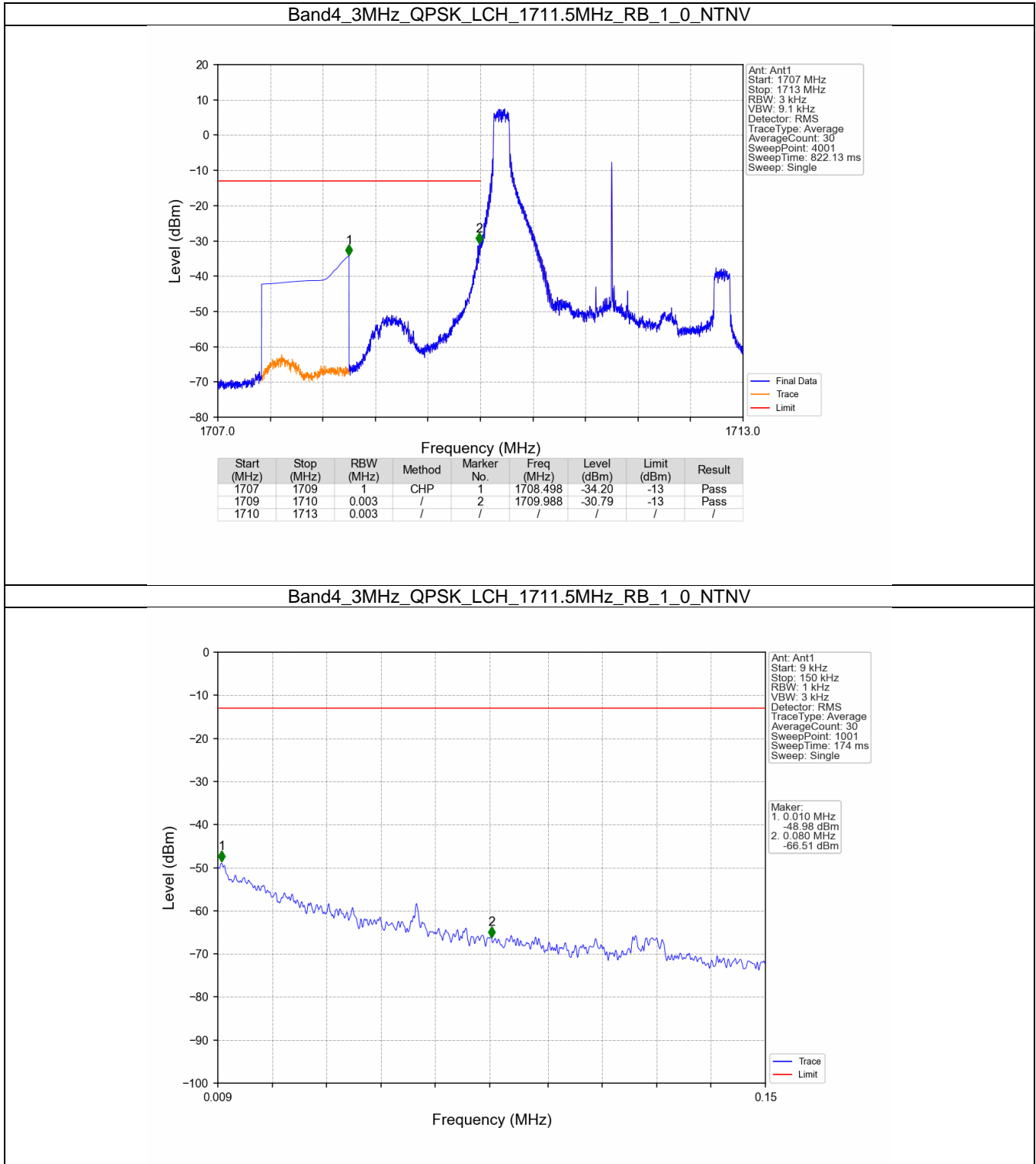
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1753.5	1755	0.015	/	/	/	/	/	/
1755	1756	0.015	/	1	1755.006	-34.11	-13	Pass
1756	1756.5	1	/	2	1756.062	-46.51	-13	Pass

6.2 B4_3MHz

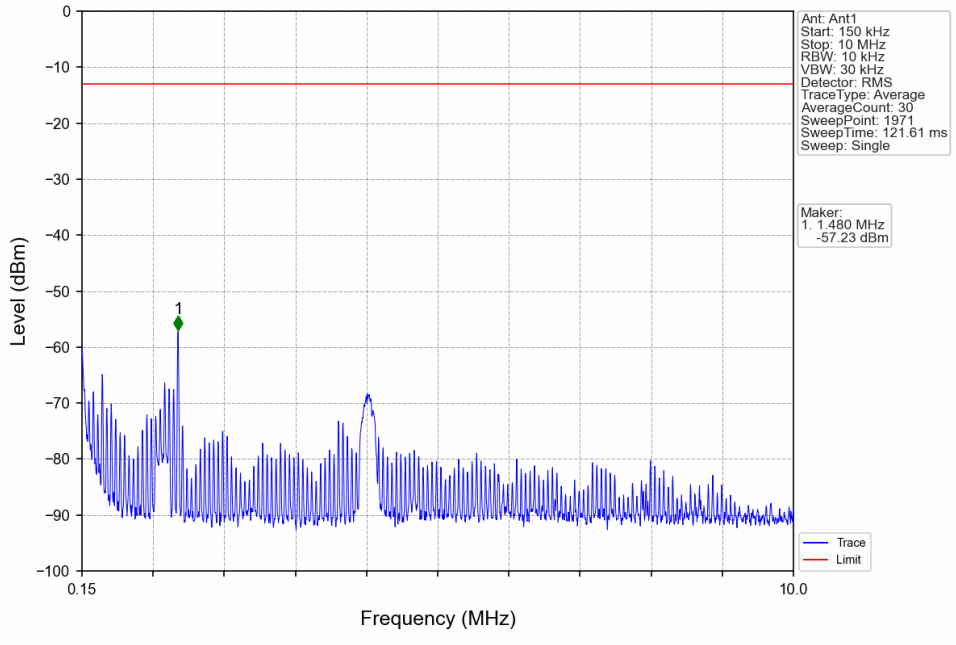
6.2.1 Test Result

Band: 4 / Bandwidth: 3MHz / NTN						
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
16QAM	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

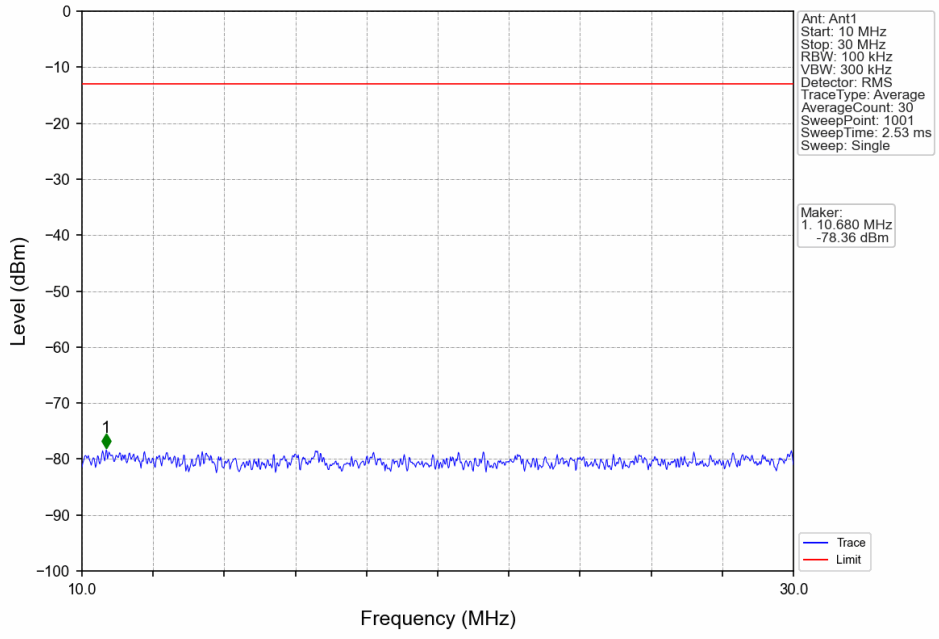
6.2.2 Test Graph



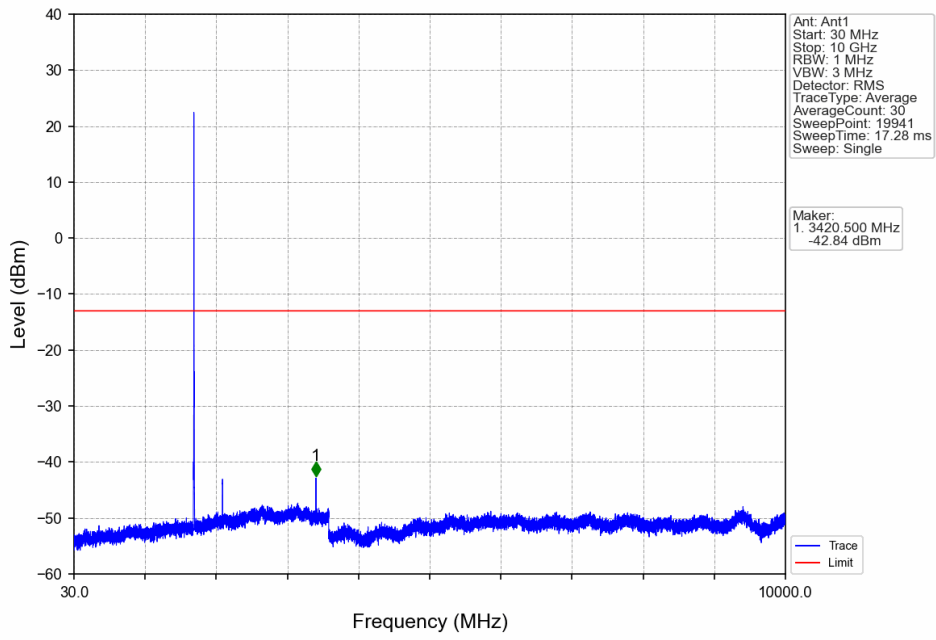
Band4_3MHz_QPSK_LCH_1711.5MHz_RB_1_0_NTNV



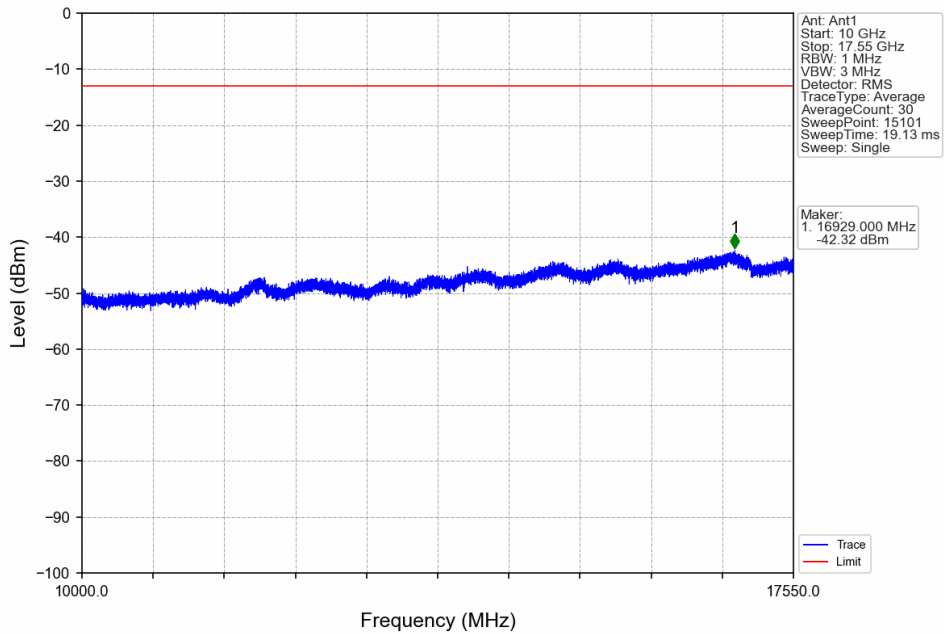
Band4_3MHz_QPSK_LCH_1711.5MHz_RB_1_0_NTNV



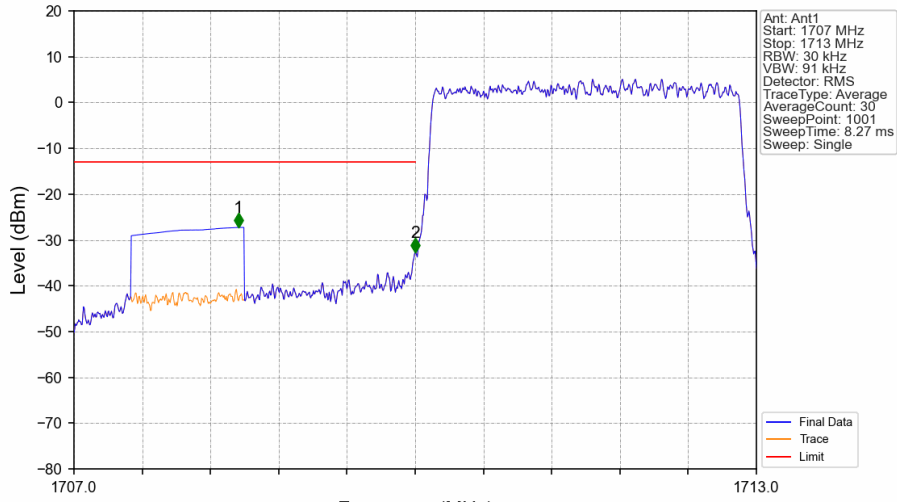
Band4_3MHz_QPSK_LCH_1711.5MHz_RB_1_0_NTNV



Band4_3MHz_QPSK_LCH_1711.5MHz_RB_1_0_NTNV

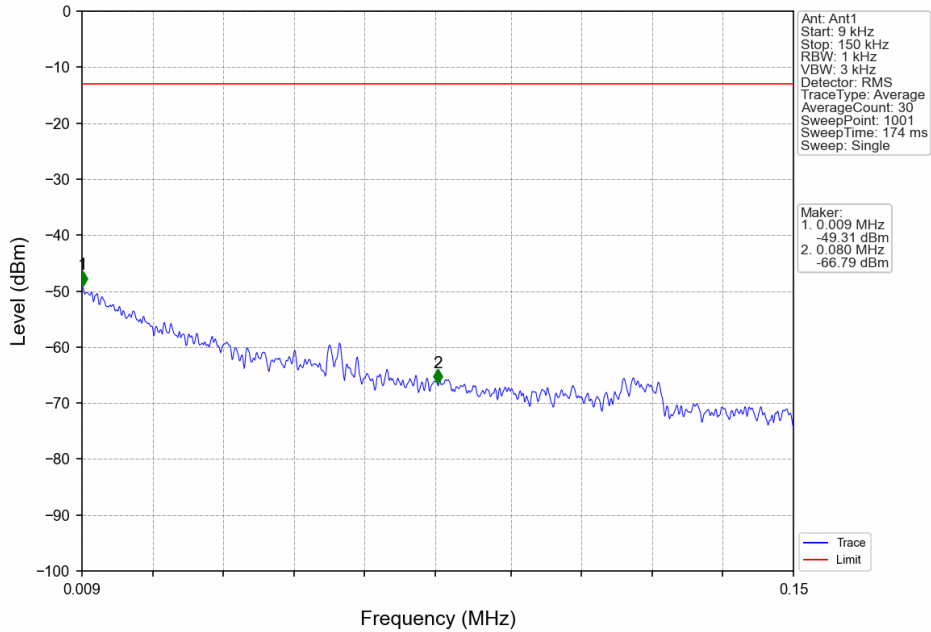


Band4_3MHz_QPSK_LCH_1711.5MHz_RB_15_0_NTNV

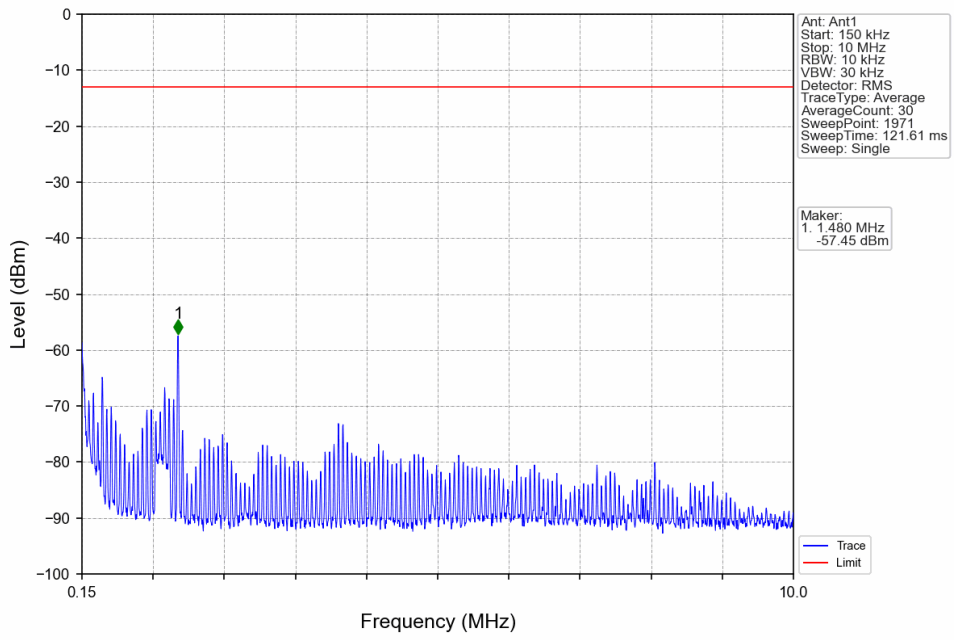


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1707	1709	1	CHP	1	1708.446	-27.27	-13	Pass
1709	1710	0.03	/	2	1710.000	-32.74	-13	Pass
1710	1713	0.03	/	/	/	/	/	/

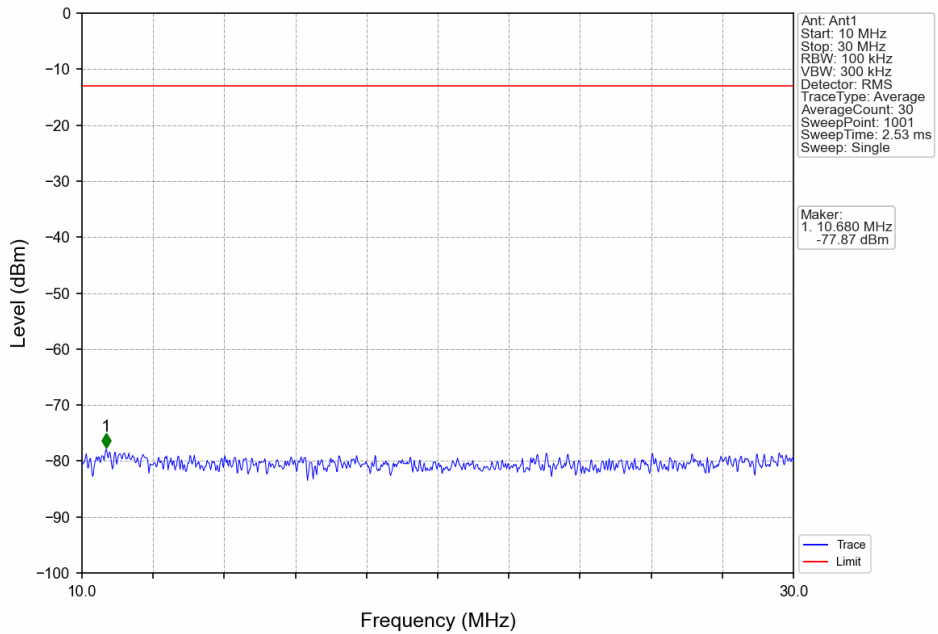
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



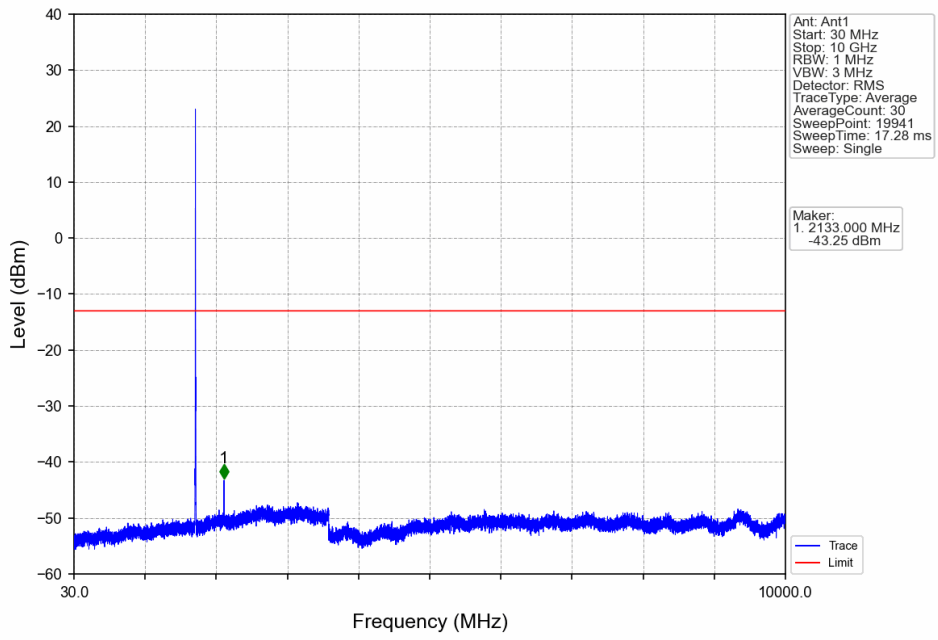
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



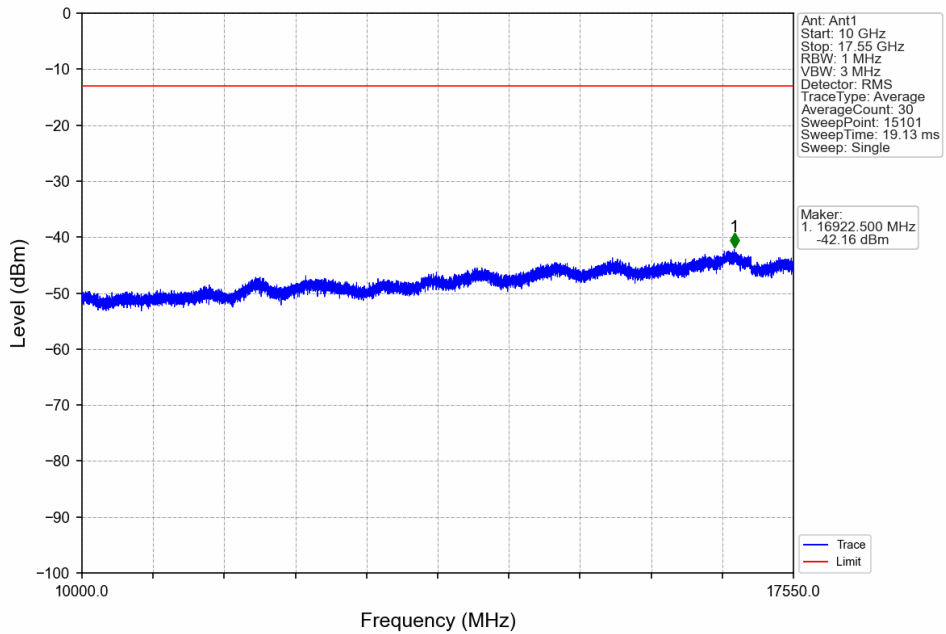
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



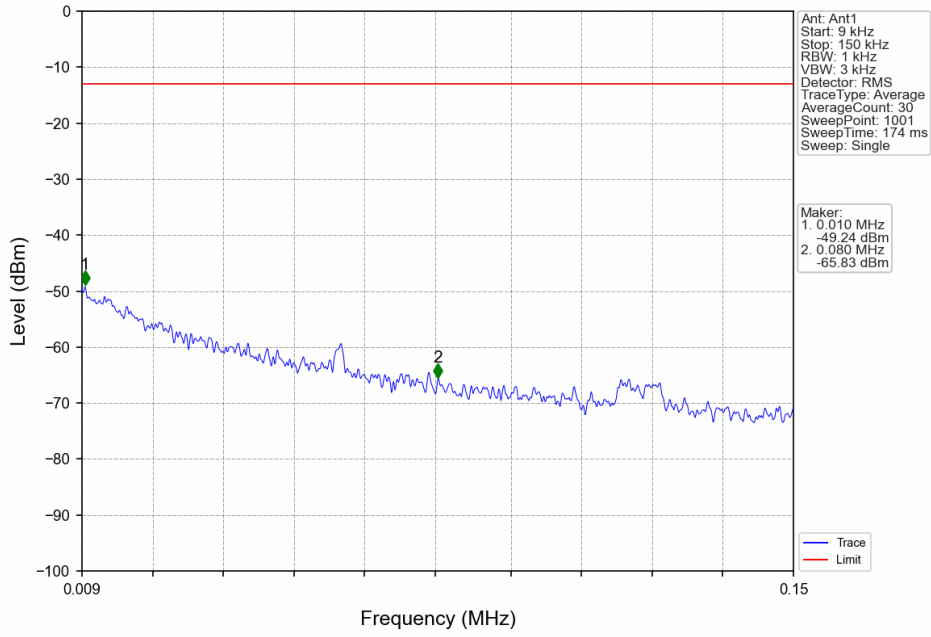
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



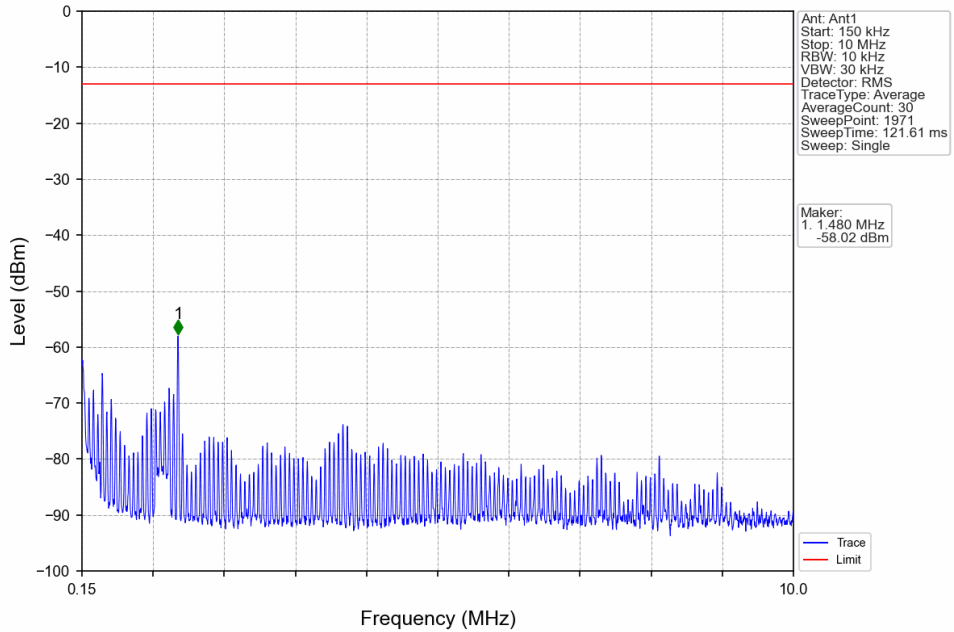
Band4_3MHz_QPSK_MCH_1732.5MHz_RB_1_0_NTNV



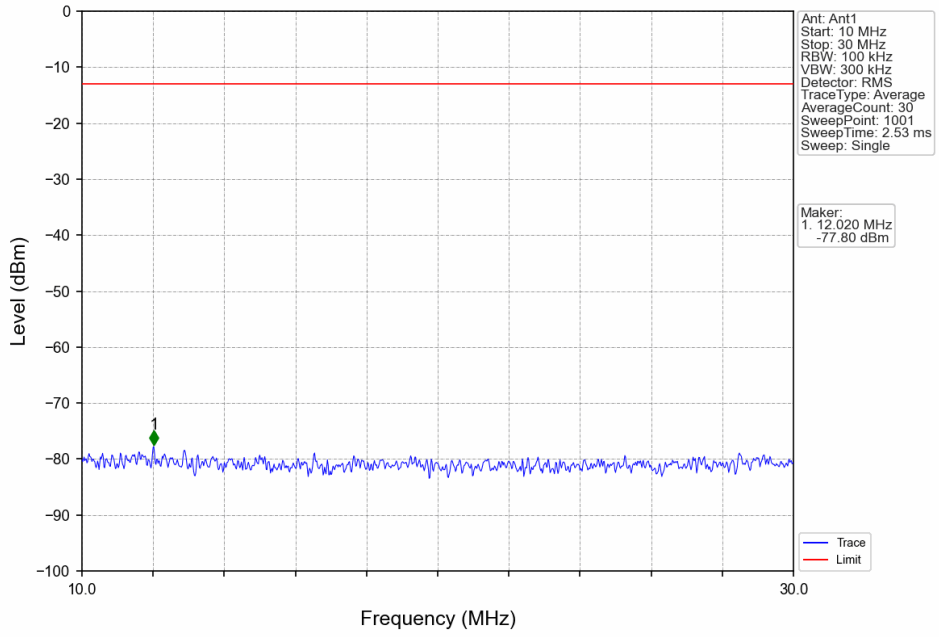
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_0_NTNV



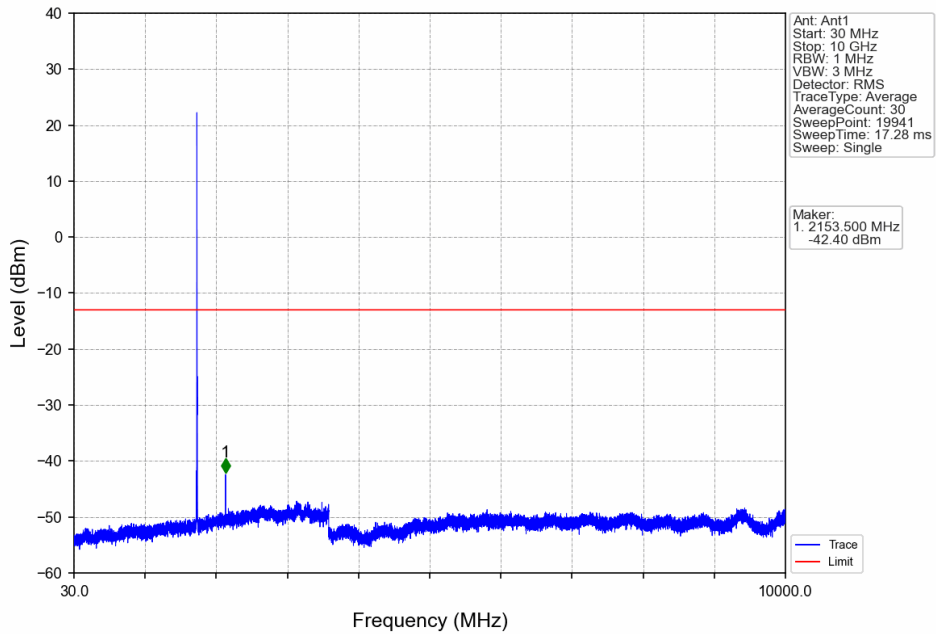
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_0_NTNV



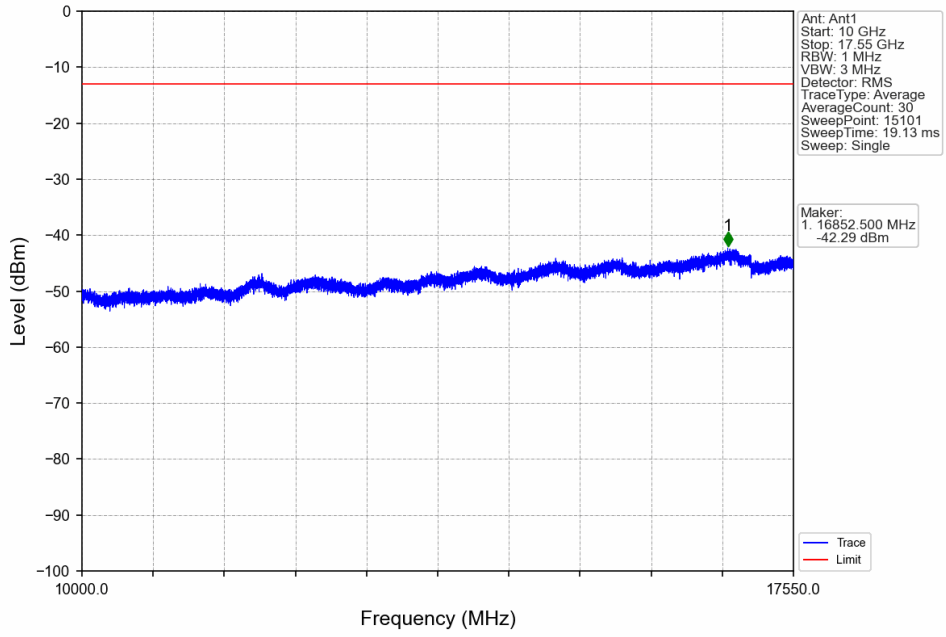
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_0_NTNV



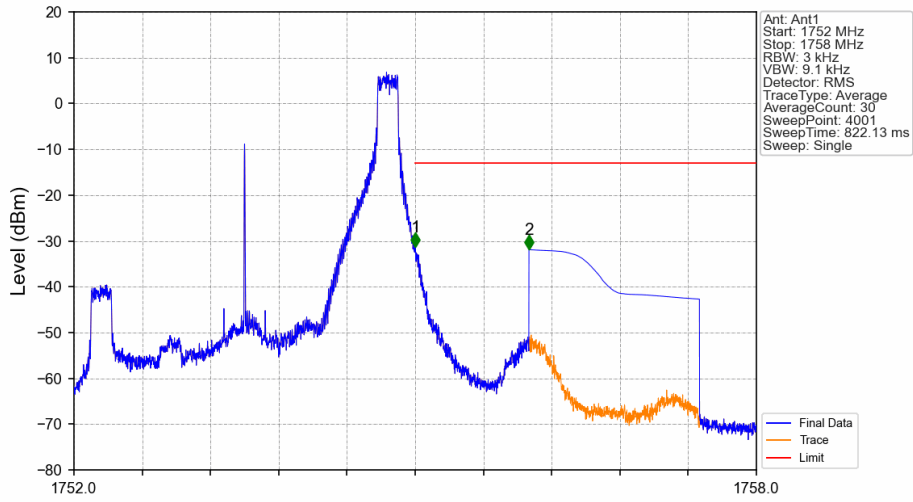
Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_0_NTNV



Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_0_NTNV

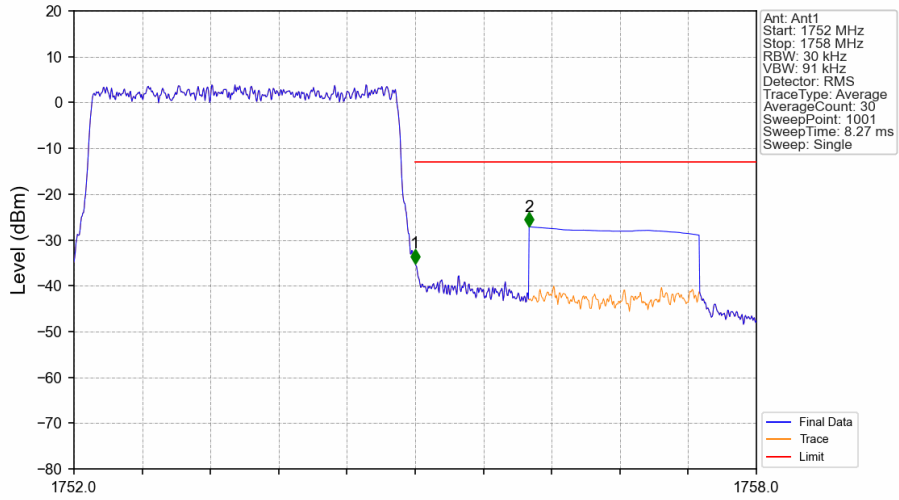


Band4_3MHz_QPSK_HCH_1753.5MHz_RB_1_14_NTNV



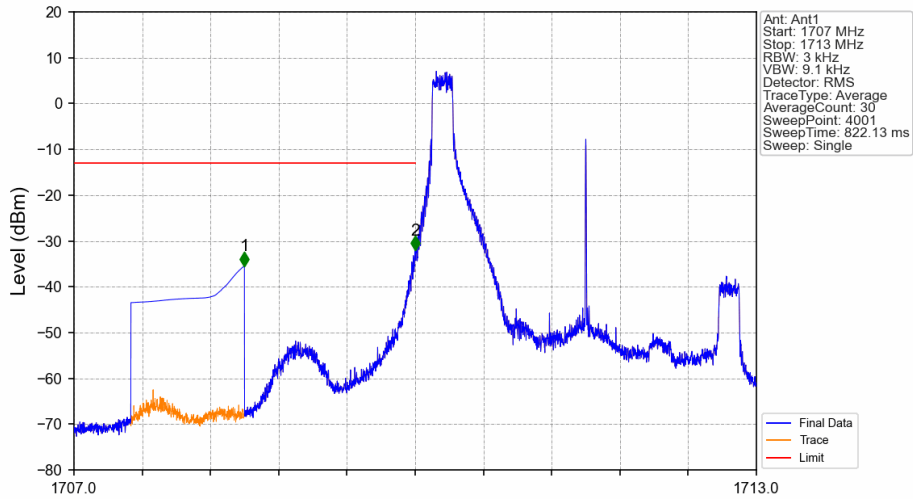
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1752	1755	0.003	/	/	/	/	/	/
1755	1756	0.003	/	1	1755.002	-31.27	-13	Pass
1756	1758	1	CHP	2	1756.001	-31.91	-13	Pass

Band4_3MHz_QPSK_HCH_1753.5MHz_RB_15_0_NTNV



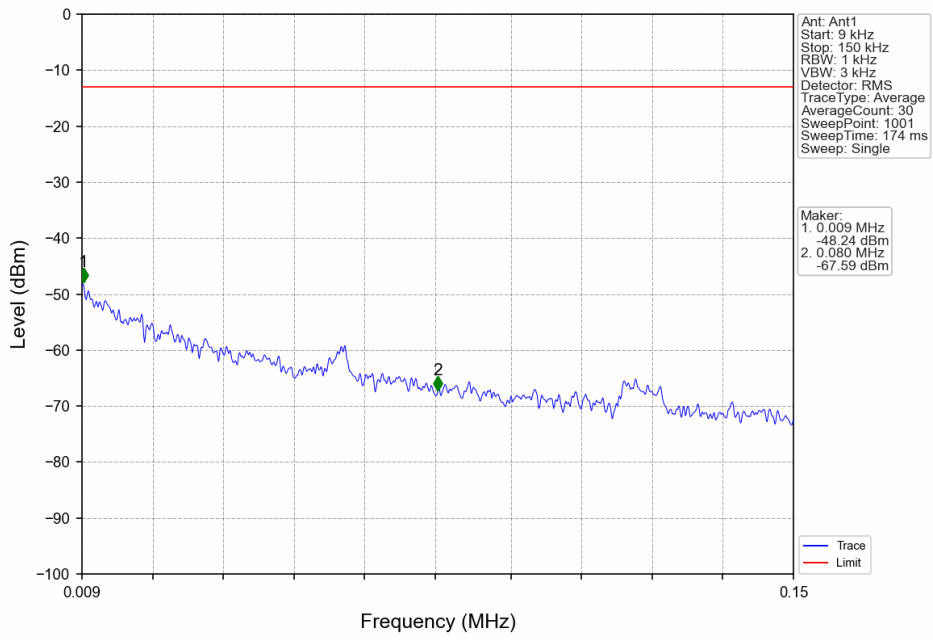
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1752	1755	0.03	/	/	/	/	/	/
1755	1756	0.03	/	1	1755.000	-35.13	-13	Pass
1756	1758	1	CHP	2	1756.002	-27.14	-13	Pass

Band4_3MHz_16QAM_LCH_1711.5MHz_RB_1_0_NTNV

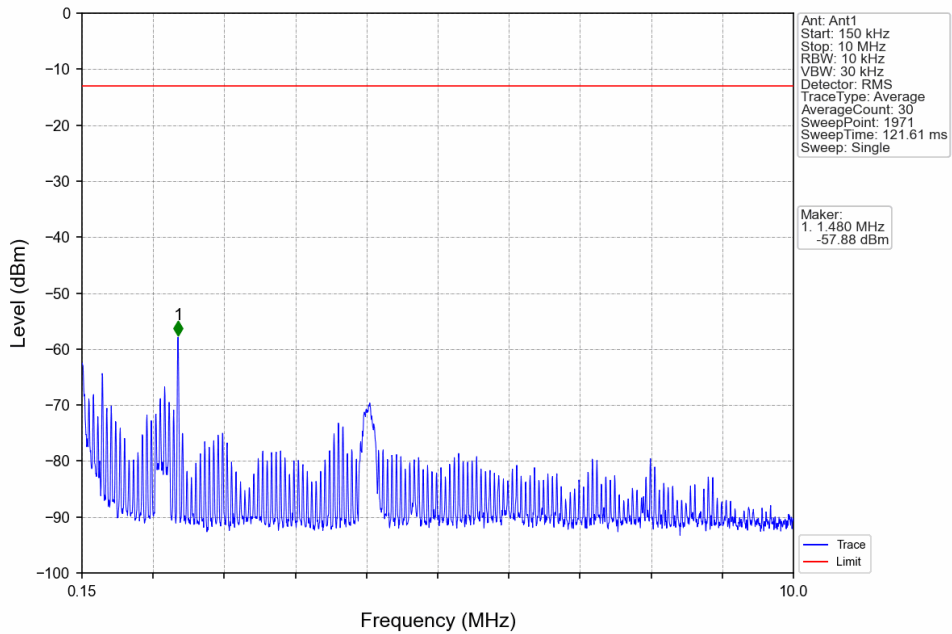


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1707	1709	1	CHP	1	1708.498	-35.48	-13	Pass
1709	1710	0.003	/	2	1710.000	-31.98	-13	Pass
1710	1713	0.003	/	/	/	/	/	/

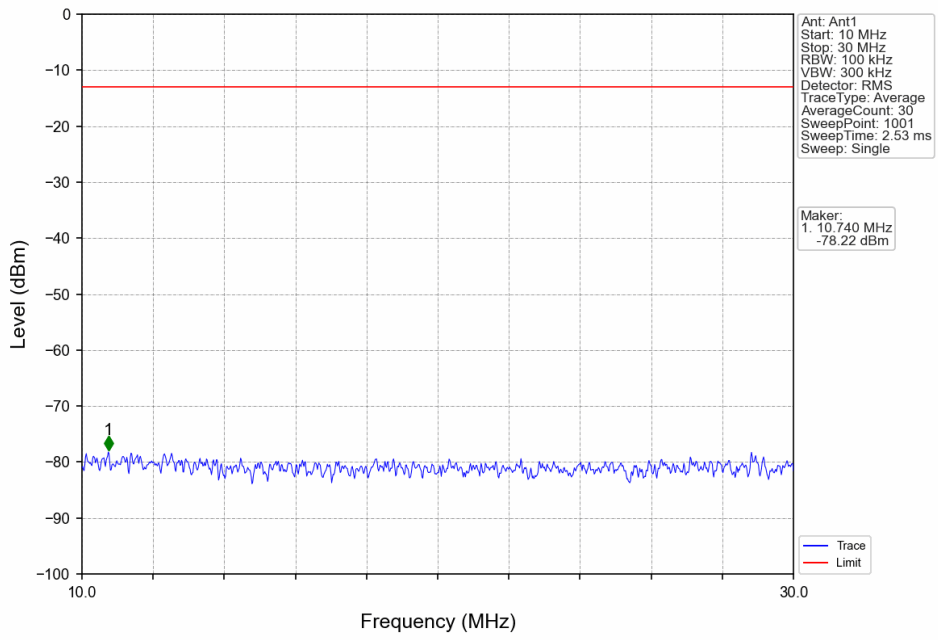
Band4_3MHz_16QAM_LCH_1711.5MHz_RB_1_0_NTNV



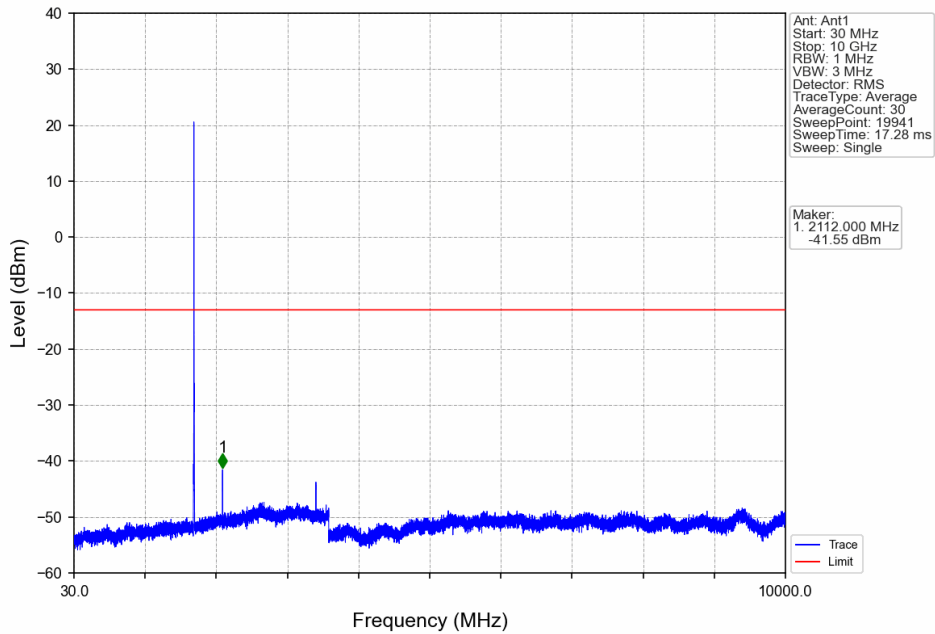
Band4_3MHz_16QAM_LCH_1711.5MHz_RB_1_0_NTNV



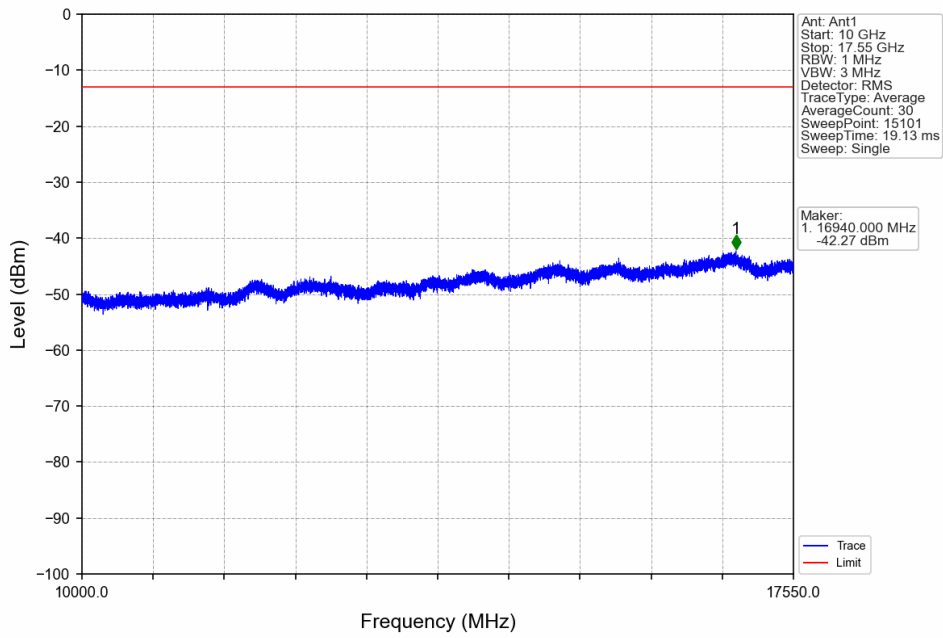
Band4_3MHz_16QAM_LCH_1711.5MHz_RB_1_0_NTNV



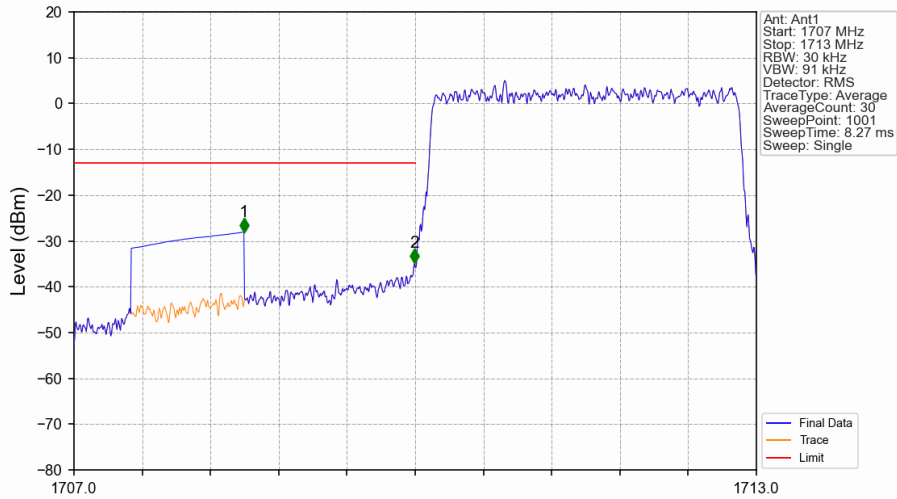
Band4_3MHz_16QAM_LCH_1711.5MHz_RB_1_0_NTNV



Band4_3MHz_16QAM_LCH_1711.5MHz_RB_1_0_NTNV

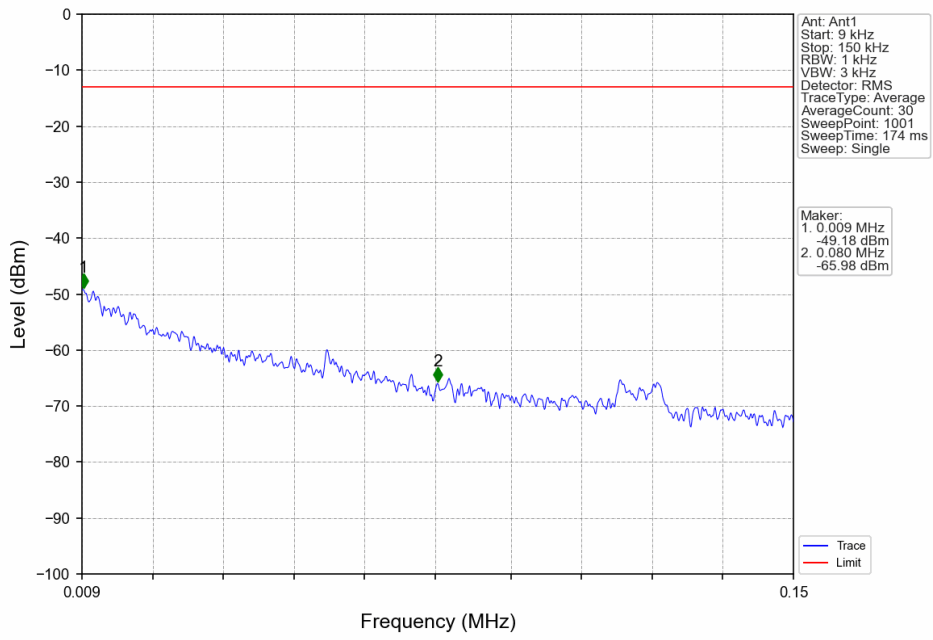


Band4_3MHz_16QAM_LCH_1711.5MHz_RB_15_0_NTNV

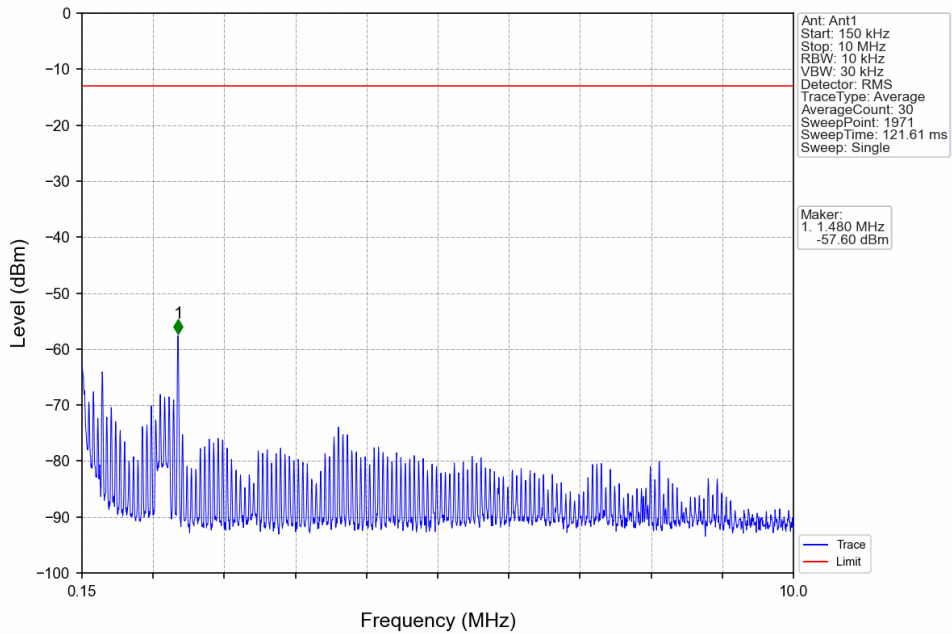


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1707	1709	1	CHP	1	1708.494	-28.08	-13	Pass
1709	1710	0.03	/	2	1709.994	-34.77	-13	Pass
1710	1713	0.03	/	/	/	/	/	/

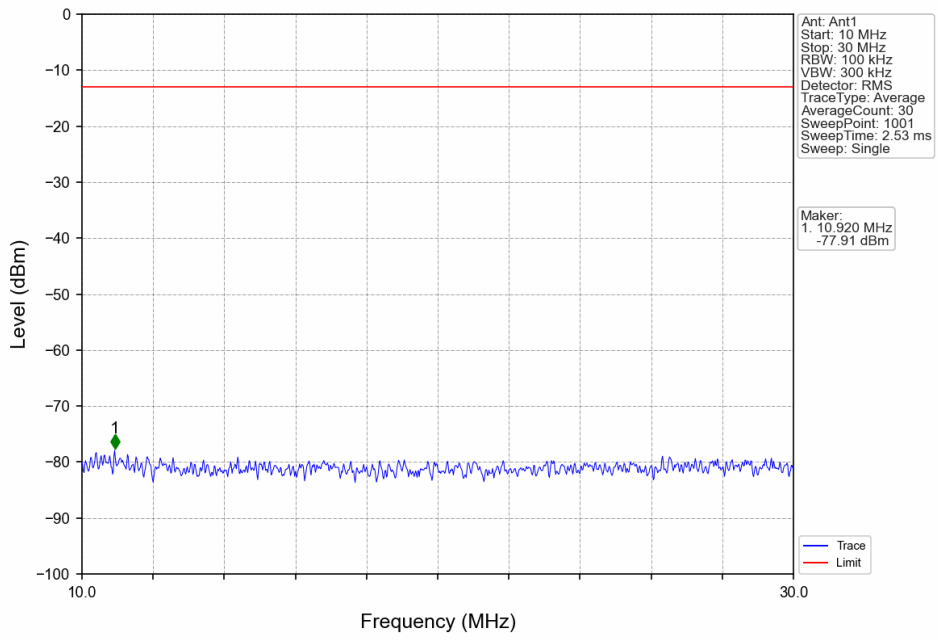
Band4_3MHz_16QAM_MCH_1732.5MHz_RB_1_0_NTNV



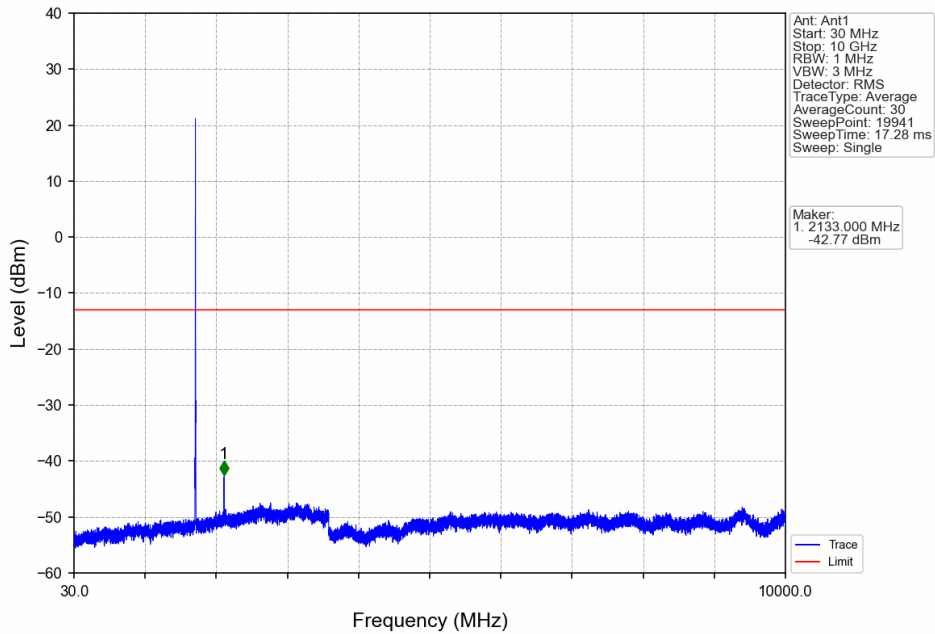
Band4_3MHz_16QAM_MCH_1732.5MHz_RB_1_0_NTNV



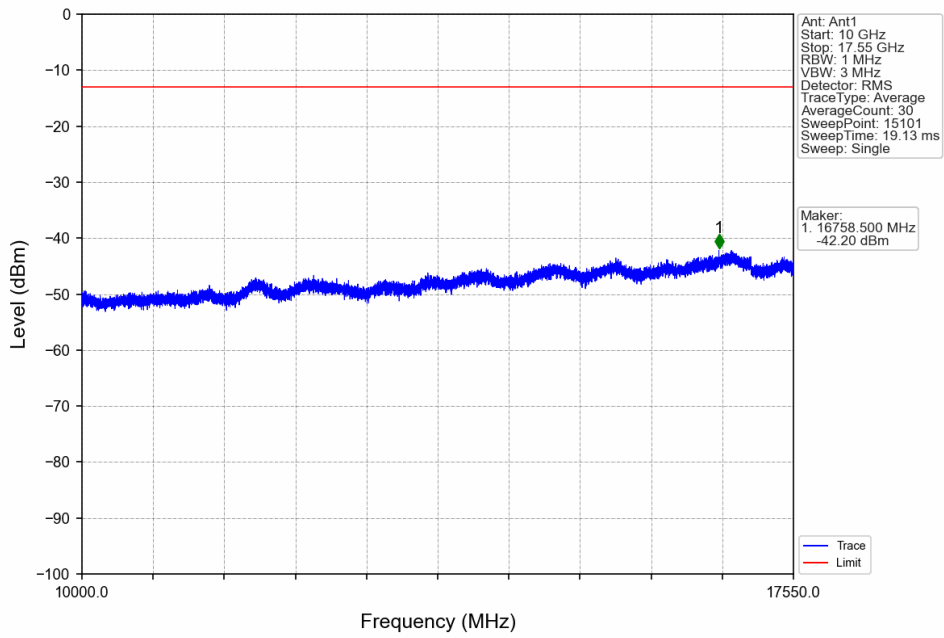
Band4_3MHz_16QAM_MCH_1732.5MHz_RB_1_0_NTNV



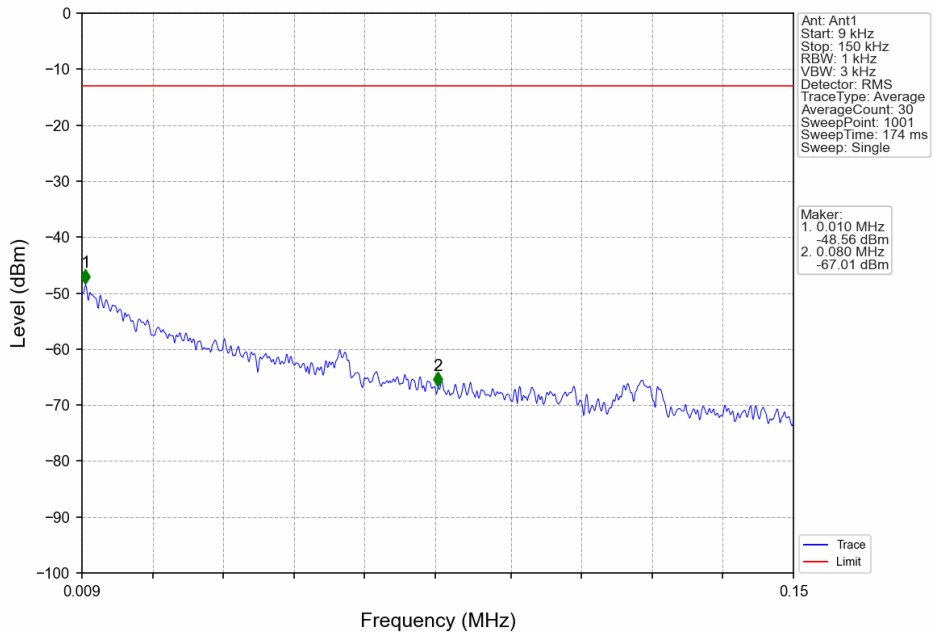
Band4_3MHz_16QAM_MCH_1732.5MHz_RB_1_0_NTNV



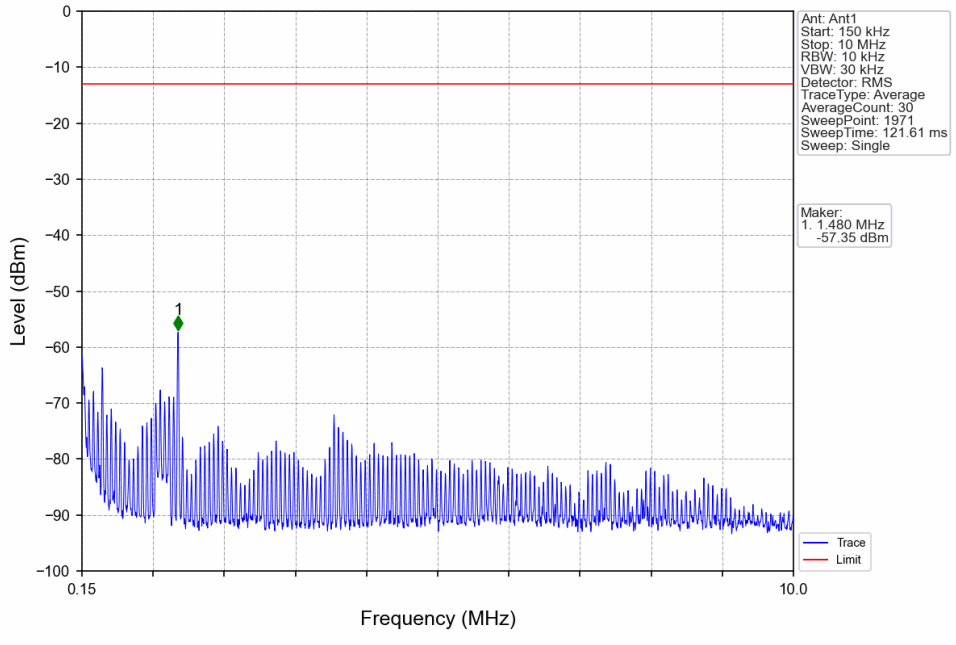
Band4_3MHz_16QAM_MCH_1732.5MHz_RB_1_0_NTNV



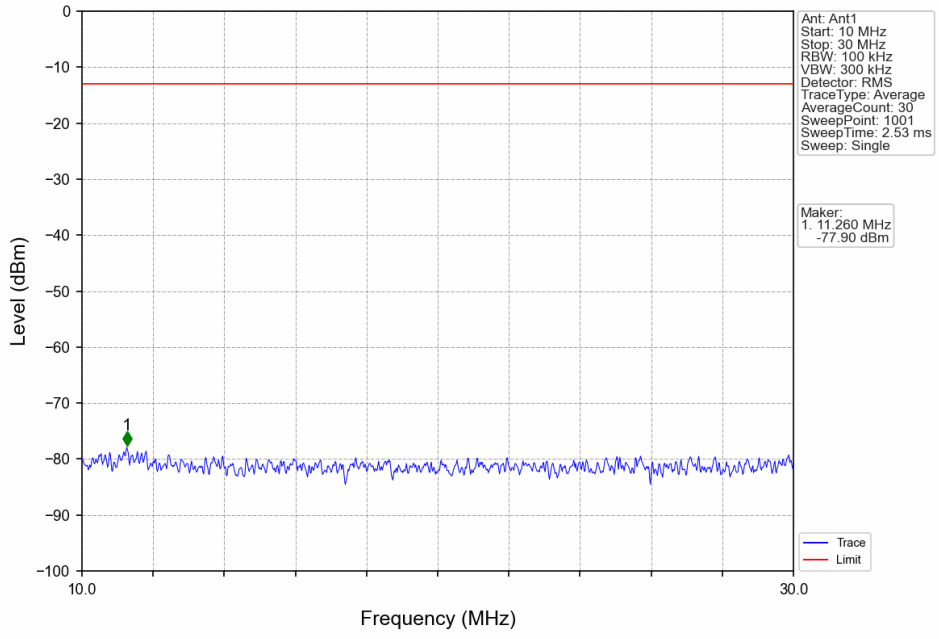
Band4_3MHz_16QAM_HCH_1753.5MHz_RB_1_0_NTNV



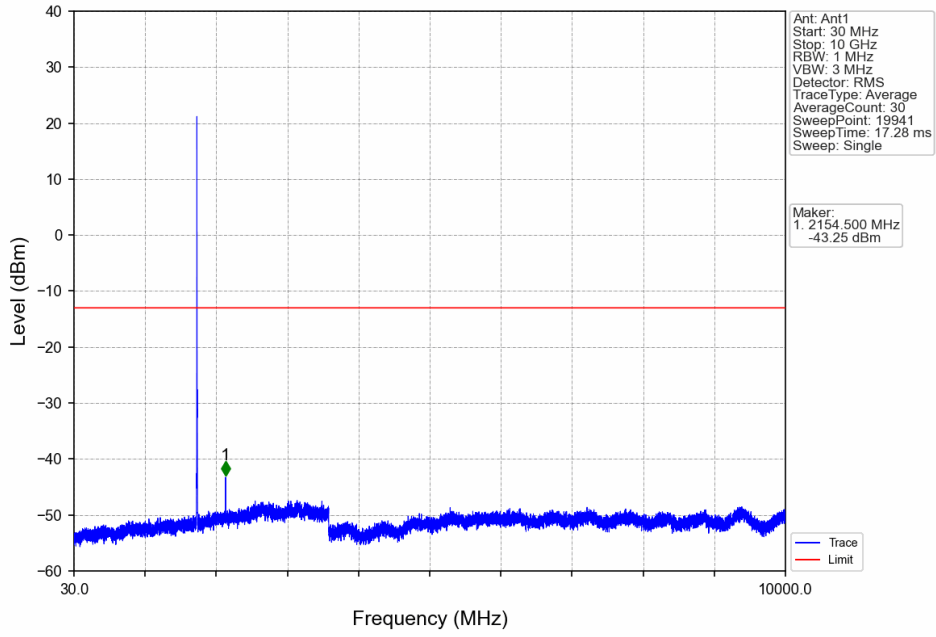
Band4_3MHz_16QAM_HCH_1753.5MHz_RB_1_0_NTNV



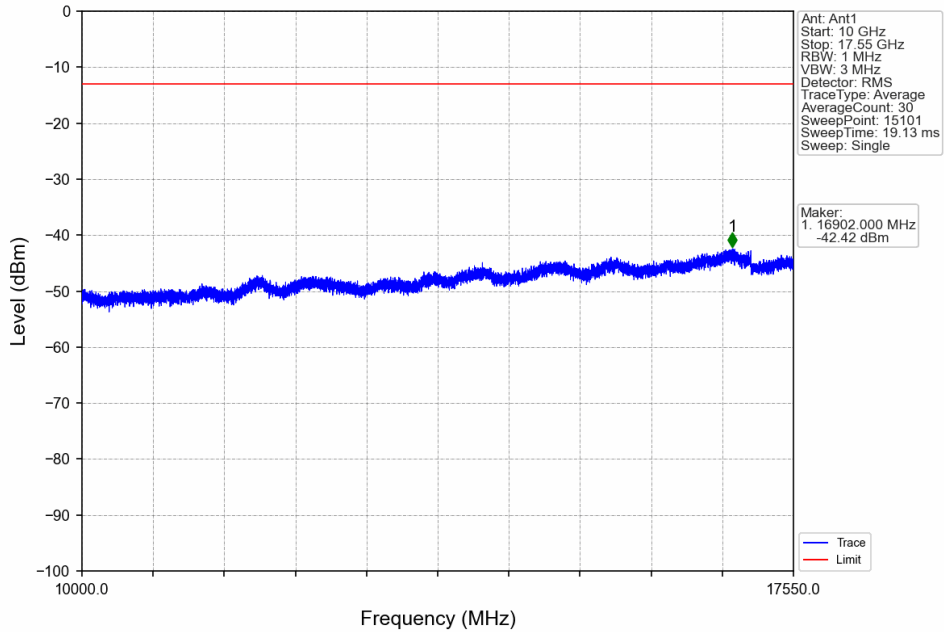
Band4_3MHz_16QAM_HCH_1753.5MHz_RB_1_0_NTNV



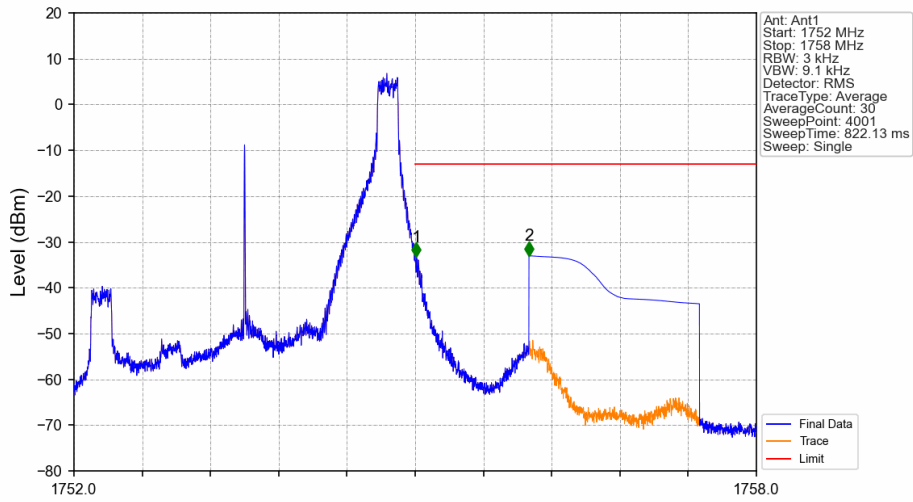
Band4_3MHz_16QAM_HCH_1753.5MHz_RB_1_0_NTNV



Band4_3MHz_16QAM_HCH_1753.5MHz_RB_1_0_NTNV

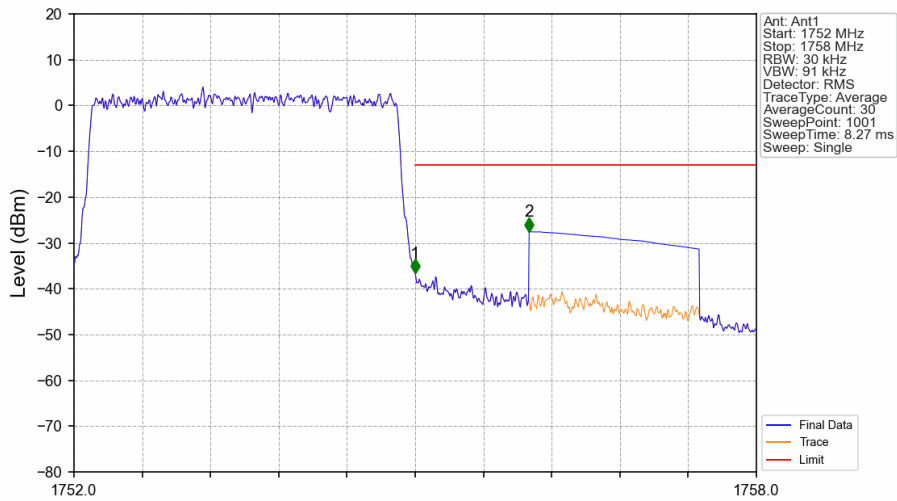


Band4_3MHz_16QAM_HCH_1753.5MHz_RB_1_14_NTNV



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	1755.011	-33.21	-13	Pass
1756	1758	1	CHP	2	1756.001	-33.02	-13	Pass

Band4_3MHz_16QAM_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	1755.000	-36.56	-13	Pass
1756	1758	1	CHP	2	1756.002	-27.55	-13	Pass

6.3 B4_5MHz

6.3.1 Test Result

Band: 4 / Bandwidth: 5MHz / NTN						
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
16QAM	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