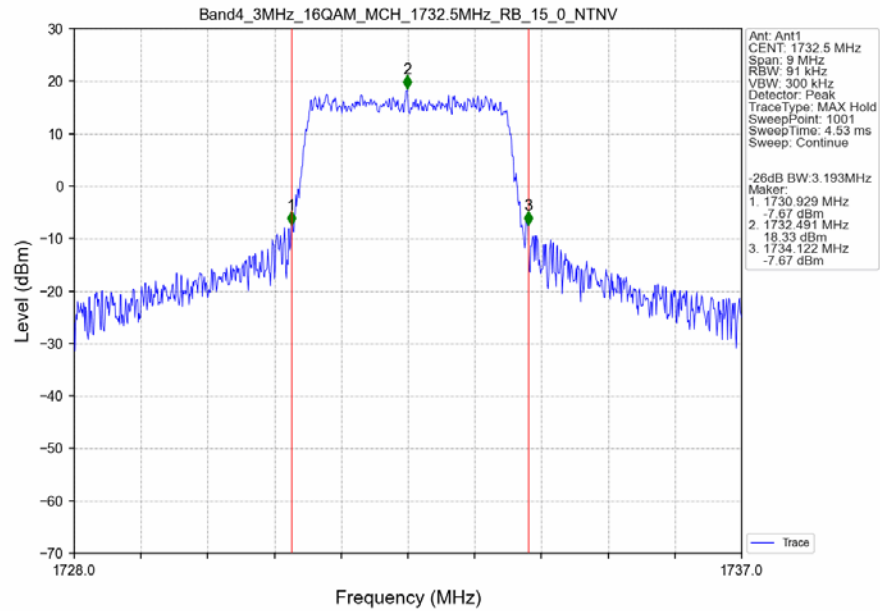
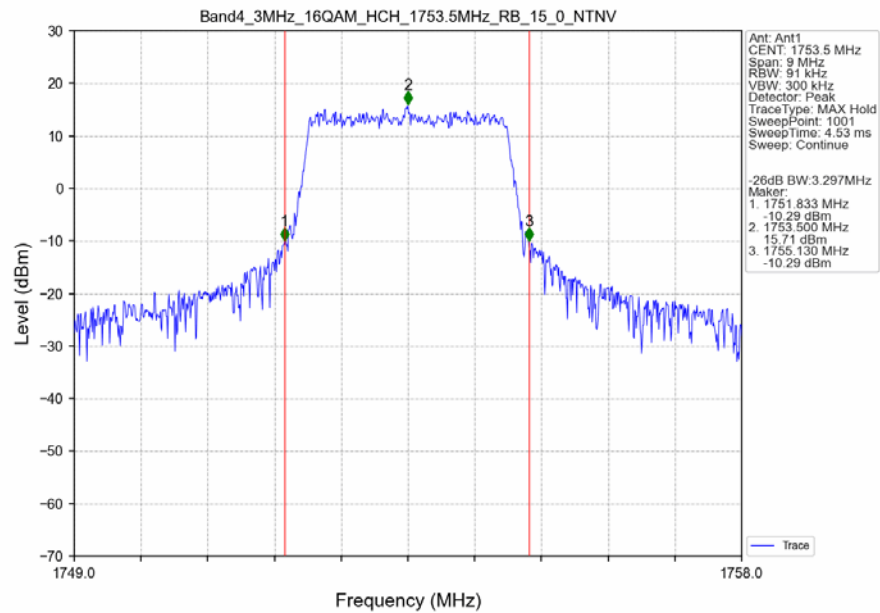


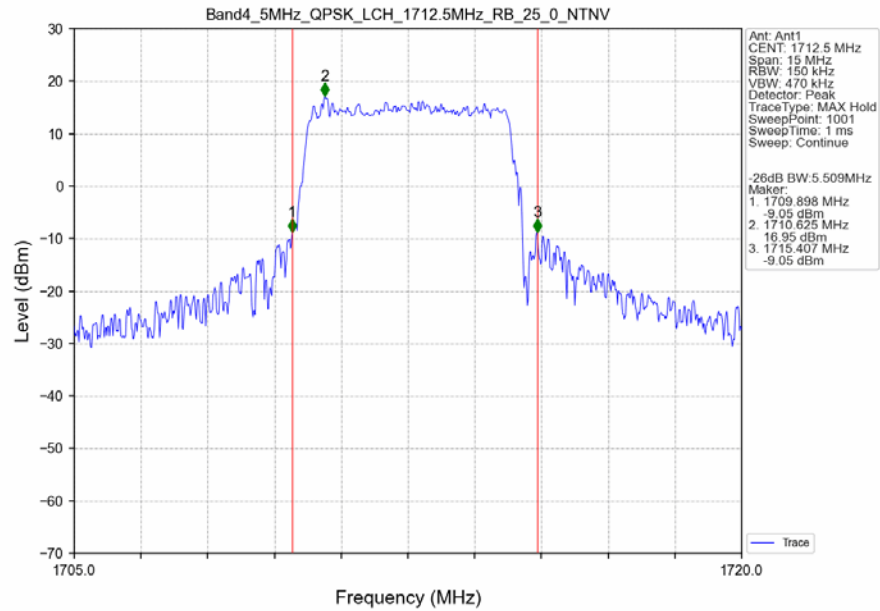
Band4 3MHz 16QAM MCH 1732.5MHz RB 15 0 NTV



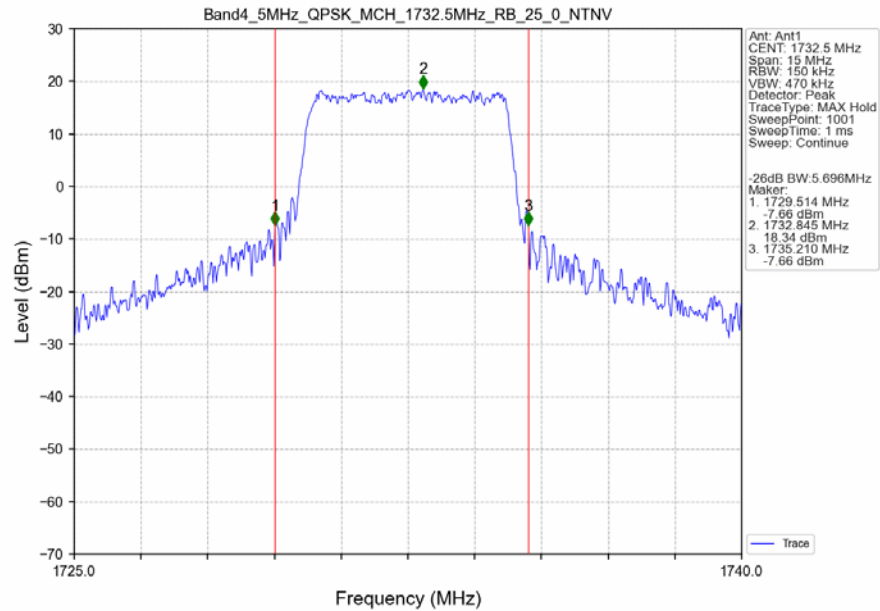
Band4 3MHz 16QAM HCH 1753.5MHz RB 15 0 NTV



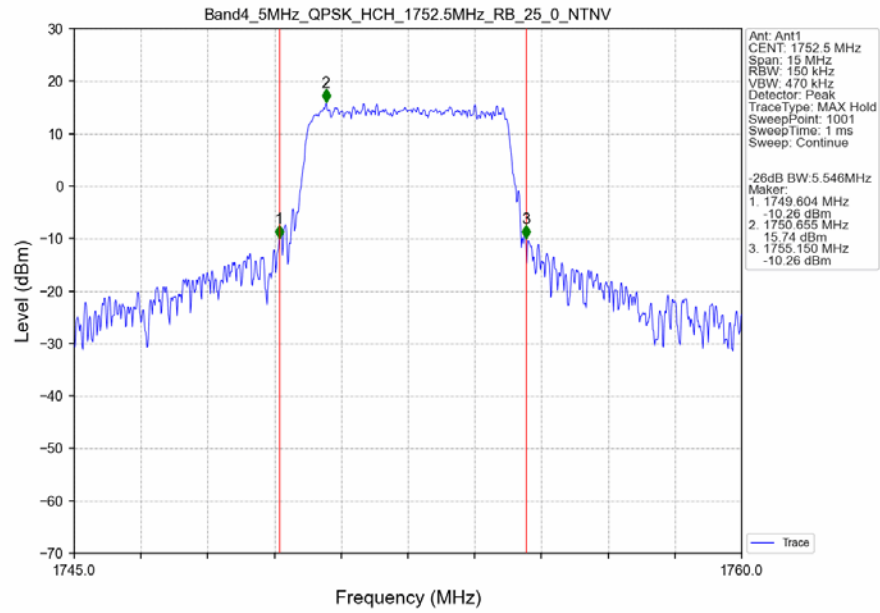
Band4 5MHz QPSK LCH 1712.5MHz RB 25 0 NTN



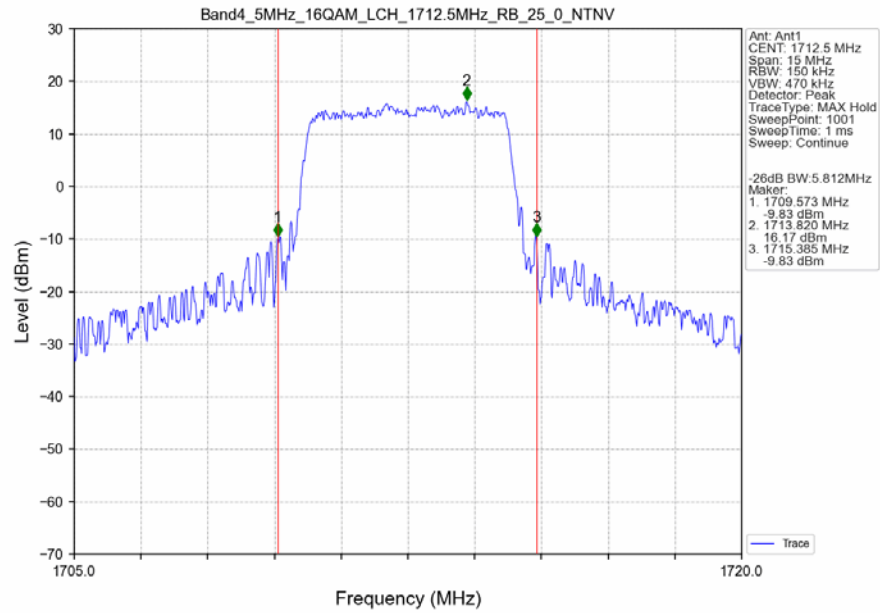
Band4 5MHz QPSK MCH 1732.5MHz RB 25 0 NTN



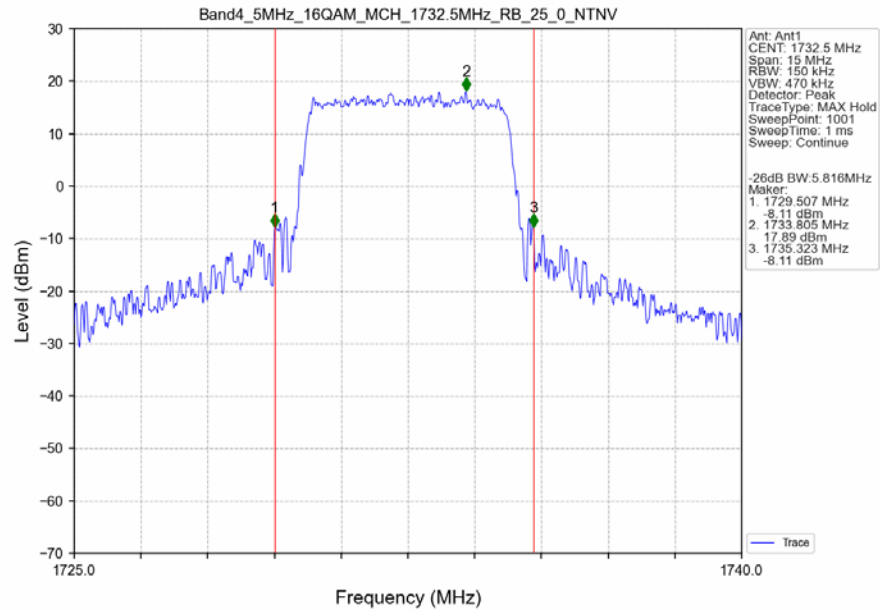
Band4 5MHz QPSK HCH 1752.5MHz RB 25 0 NTNV



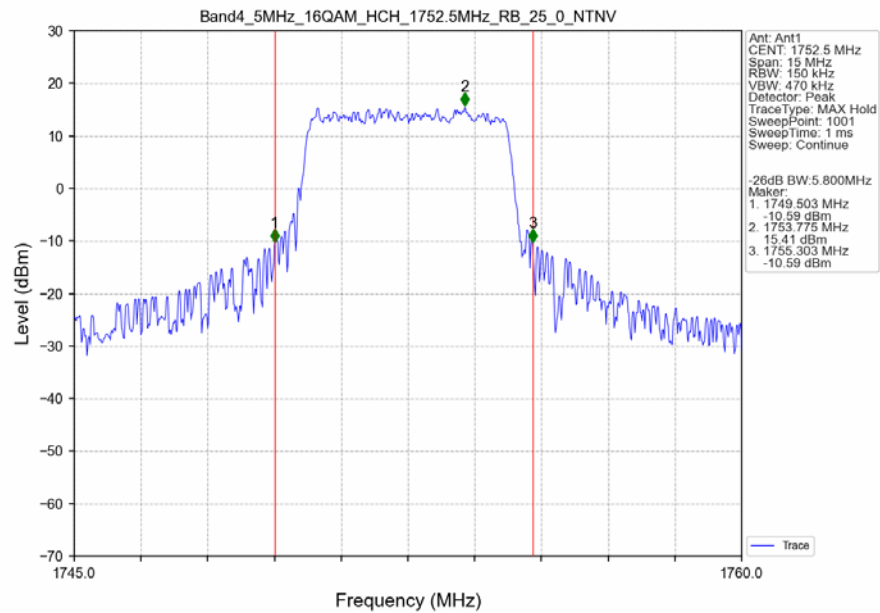
Band4 5MHz 16QAM LCH 1712.5MHz RB 25 0 NTNV



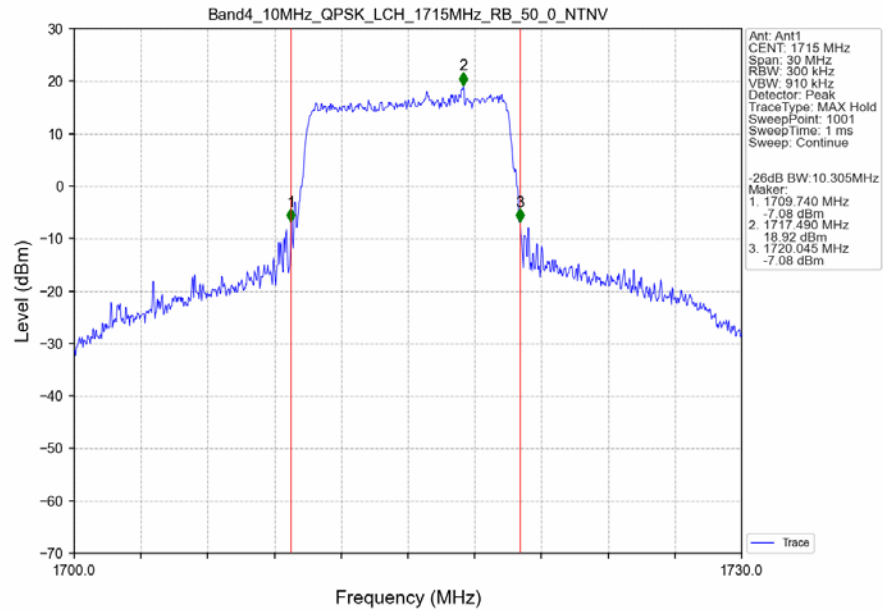
Band4 5MHz 16QAM MCH 1732.5MHz RB 25 0 NTV



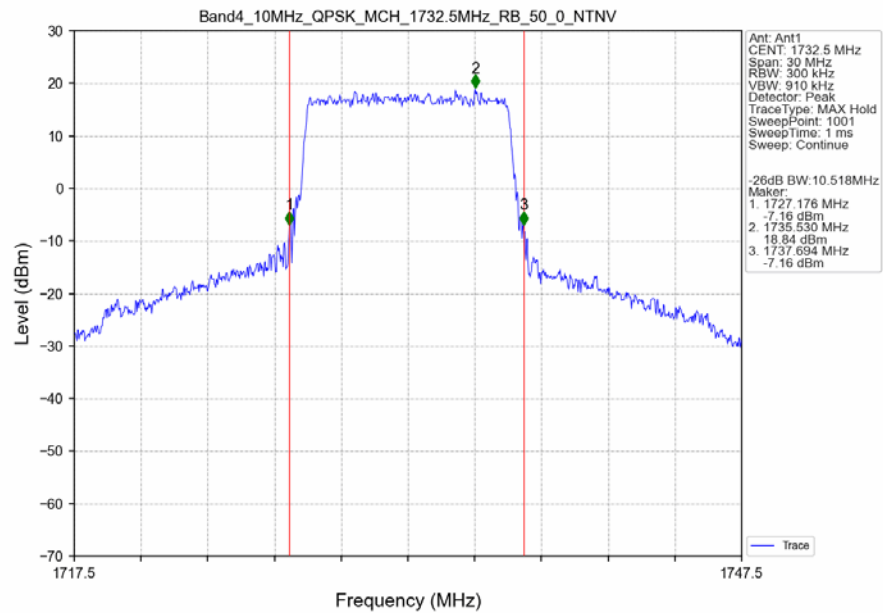
Band4 5MHz 16QAM HCH 1752.5MHz RB 25 0 NTV



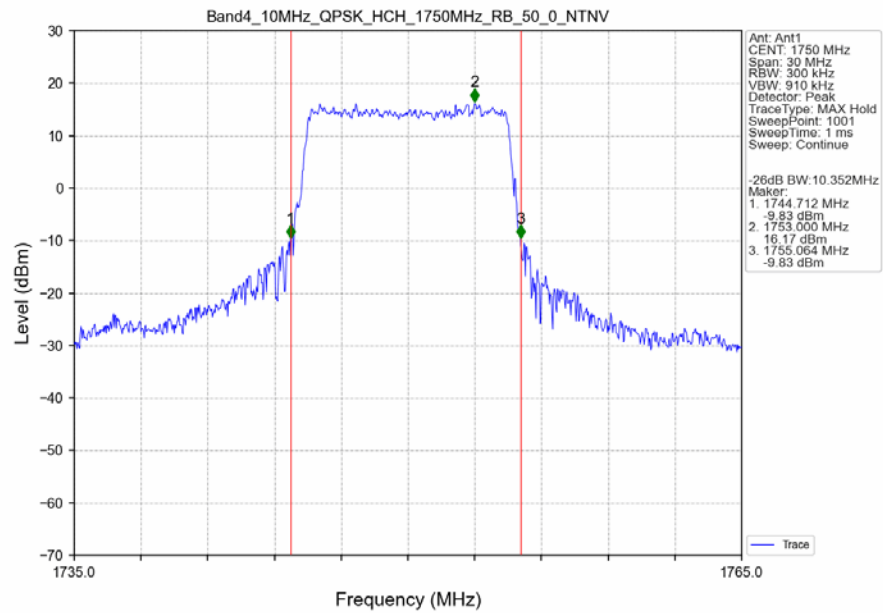
Band4_10MHz_QPSK_LCH_1715MHz_RB_50_0_NTNV



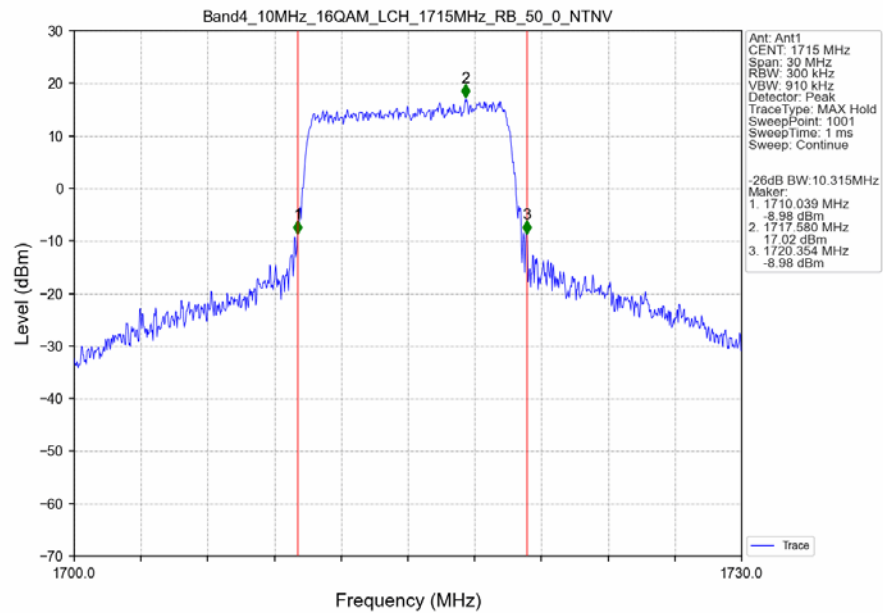
Band4_10MHz_QPSK_MCH_1732.5MHz_RB_50_0_NTNV



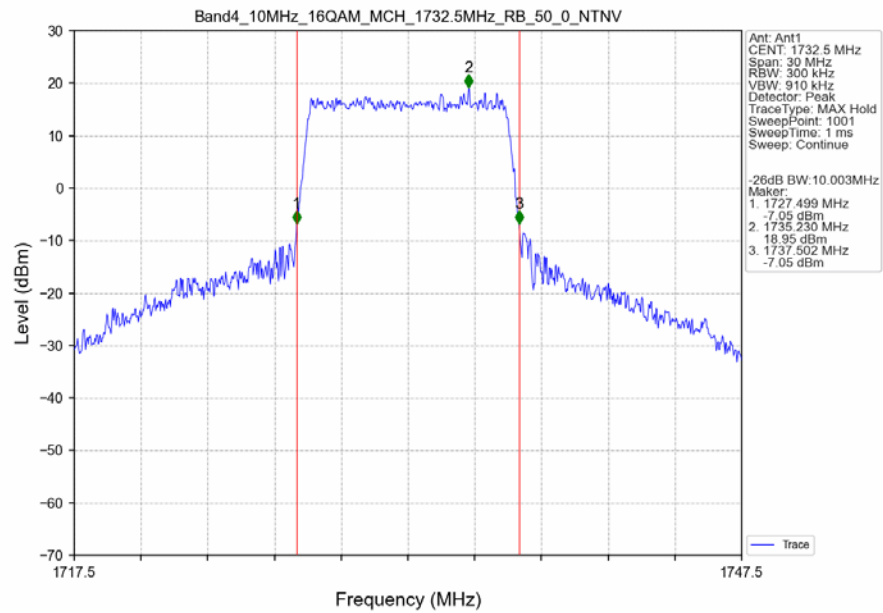
Band4 10MHz QPSK HCH 1750MHz RB 50 0 NTNV



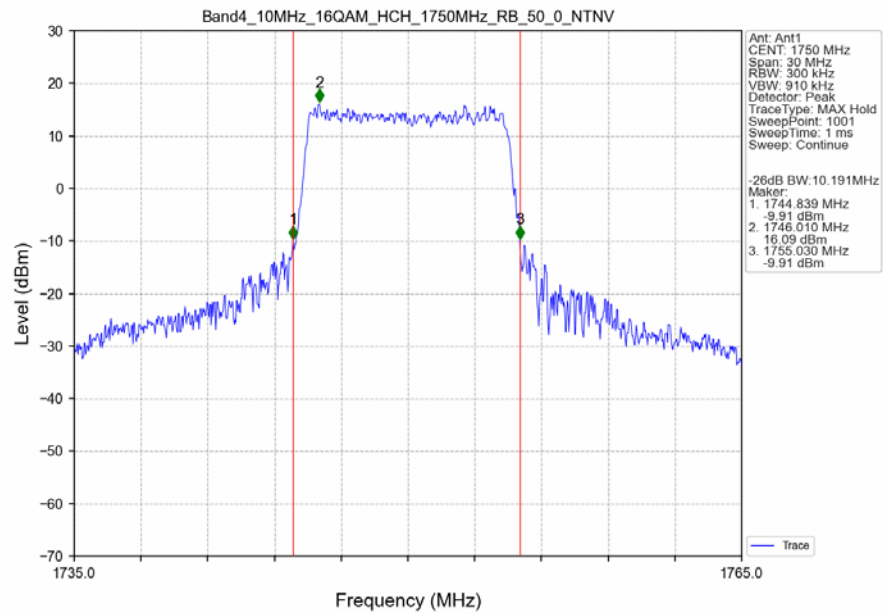
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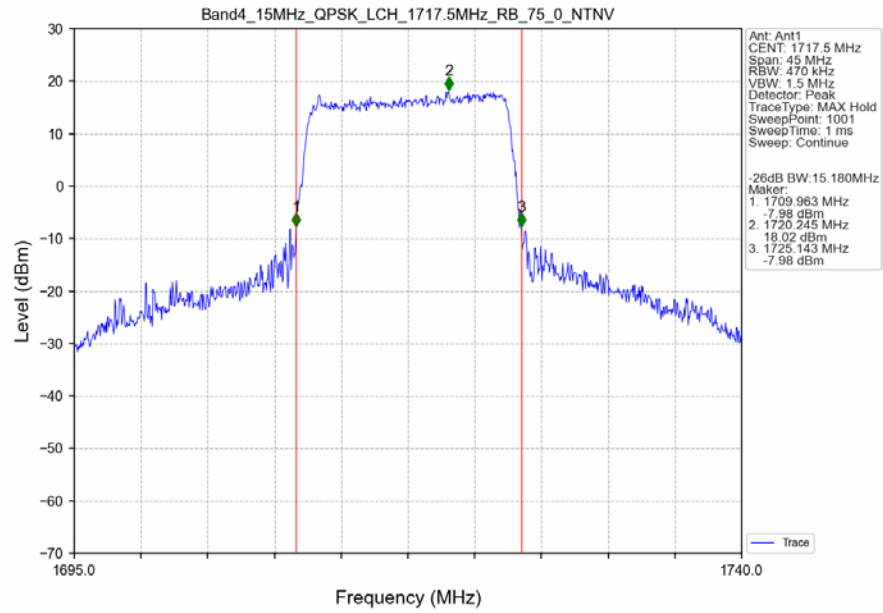
Band4 10MHz 16QAM MCH 1732.5MHz RB 50 0 NTNV



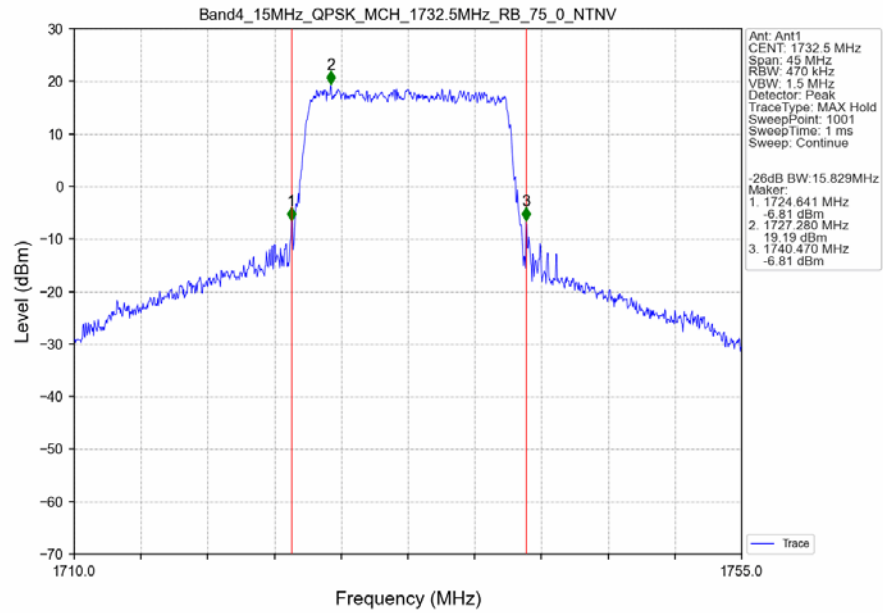
Band4 10MHz 16QAM HCH 1750MHz RB 50 0 NTNV



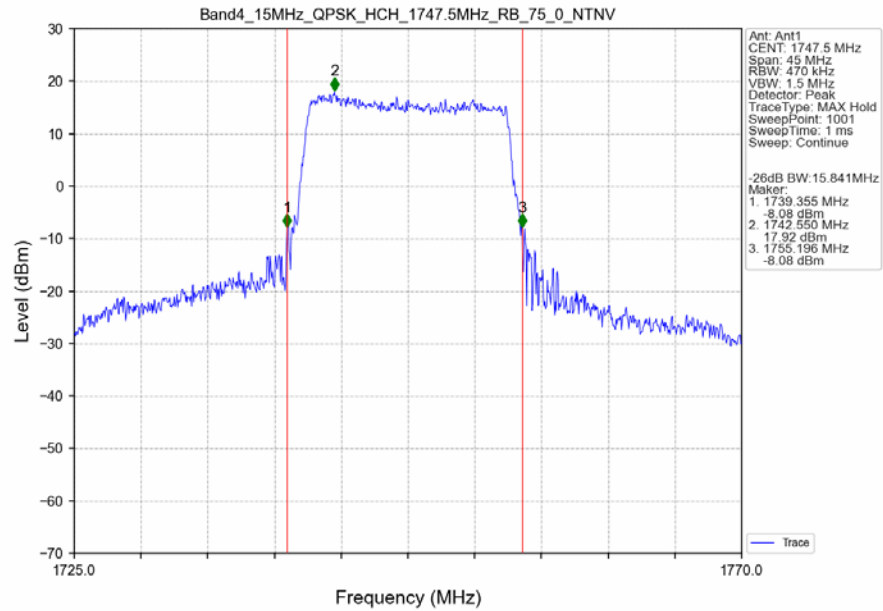
Band4_15MHz_QPSK_LCH_1717.5MHz_RB_75_0_NTNV



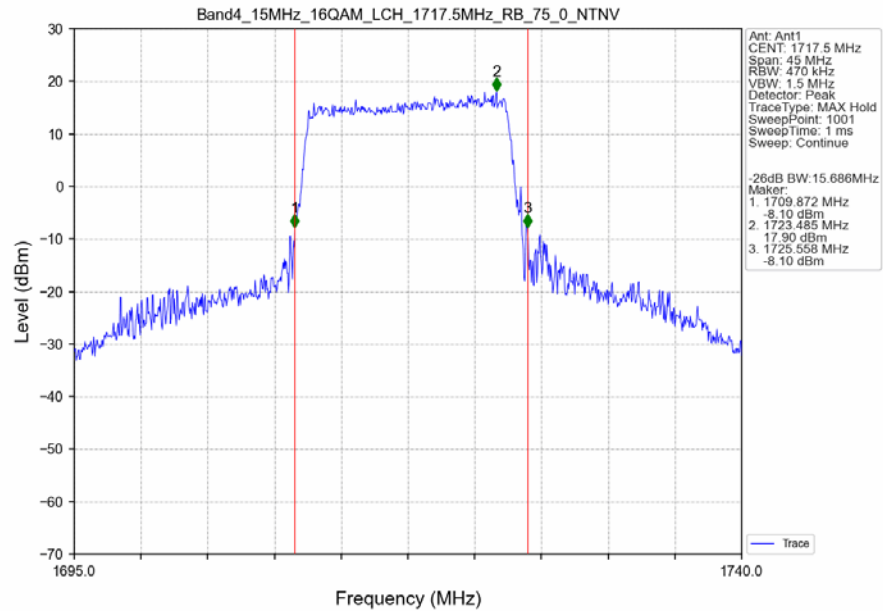
Band4_15MHz_QPSK_MCH_1732.5MHz_RB_75_0_NTNV



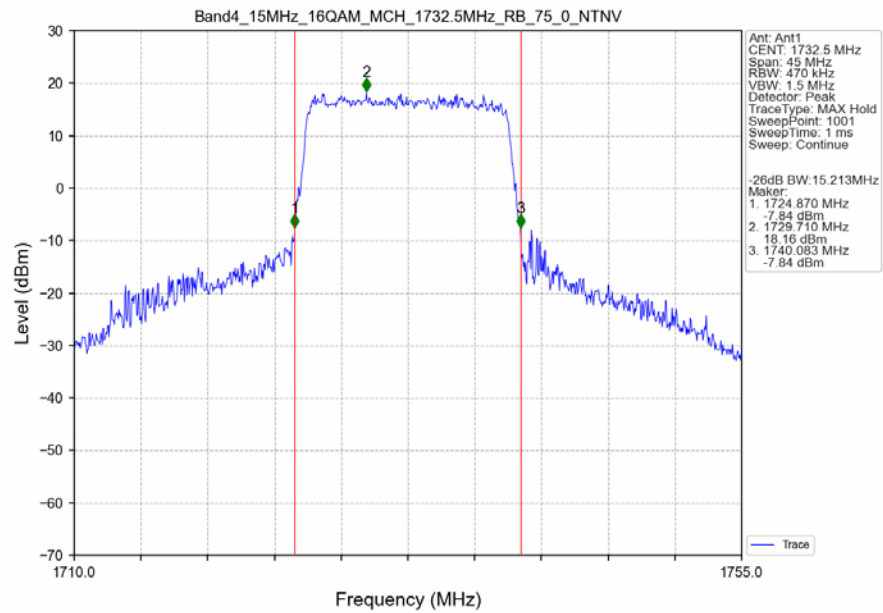
Band4 15MHz QPSK HCH 1747.5MHz RB 75 0 NTNV



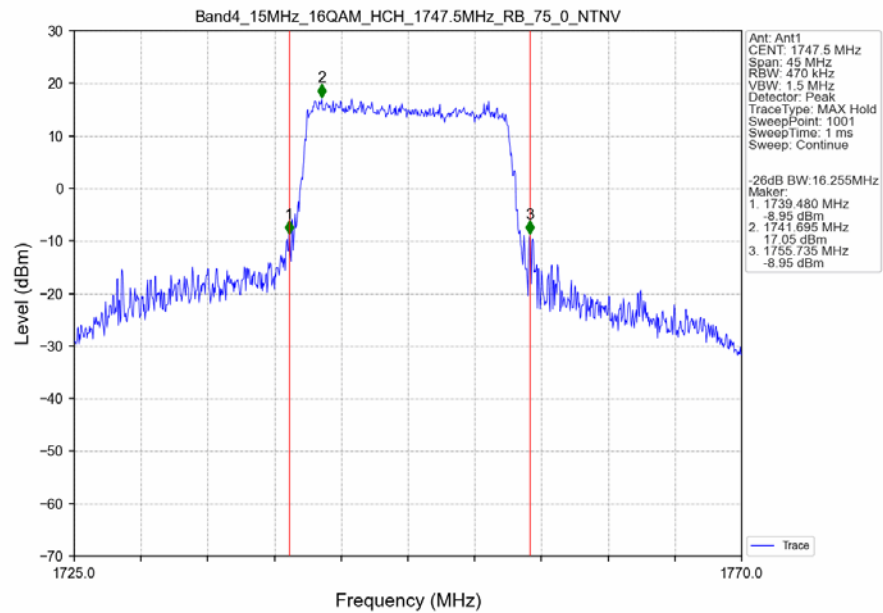
Band4 15MHz 16QAM LCH 1717.5MHz RB 75 0 NTNV



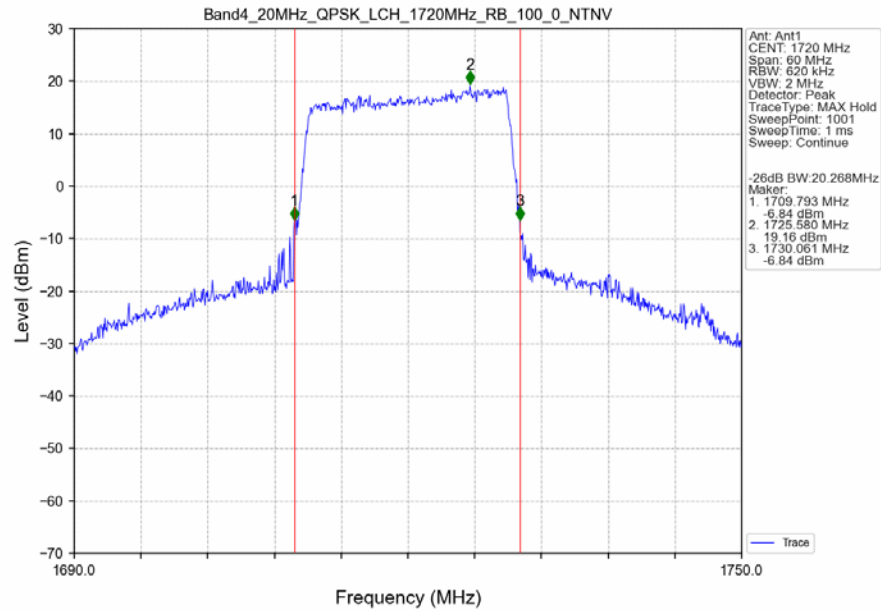
Band4 15MHz 16QAM MCH 1732.5MHz RB 75 0 NTNV



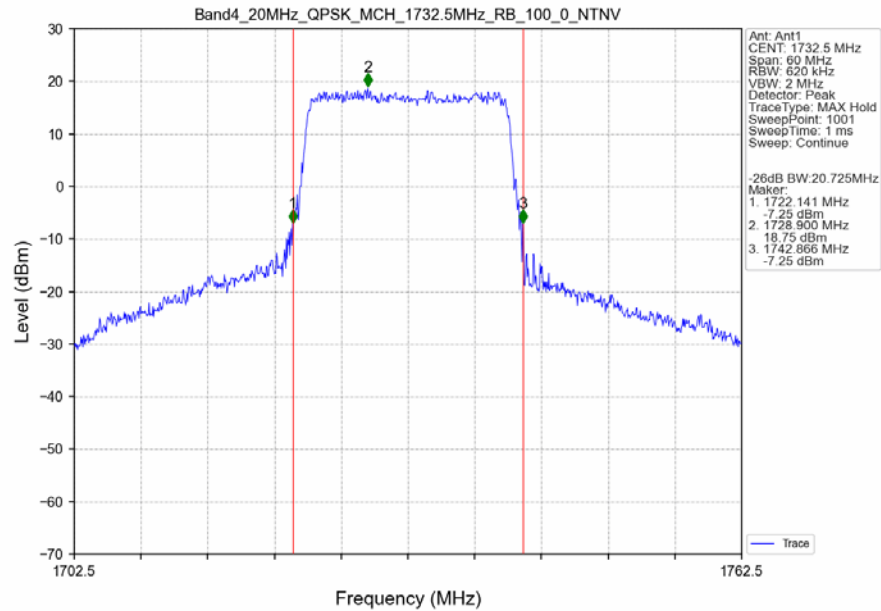
Band4 15MHz 16QAM HCH 1747.5MHz RB 75 0 NTNV



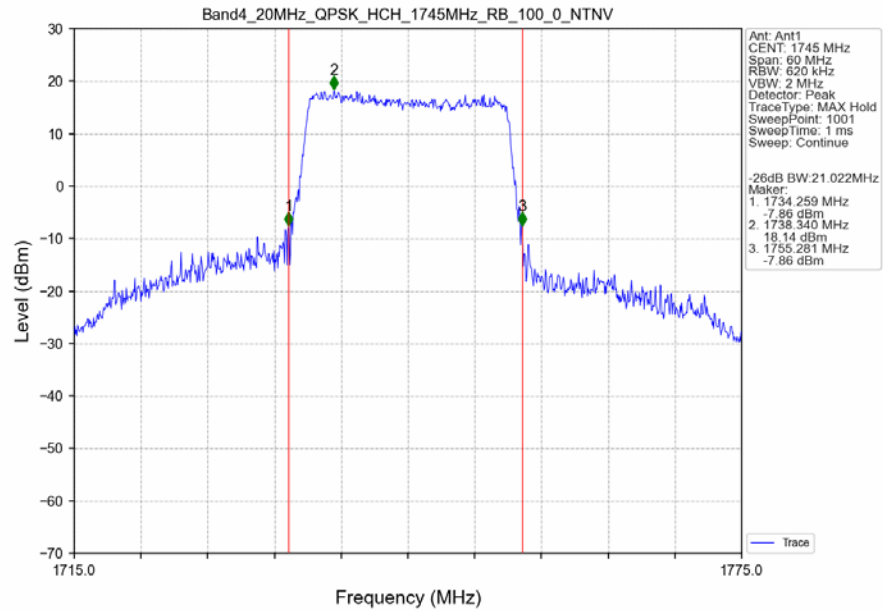
Band4 20MHz QPSK LCH 1720MHz RB 100 0 NTNV



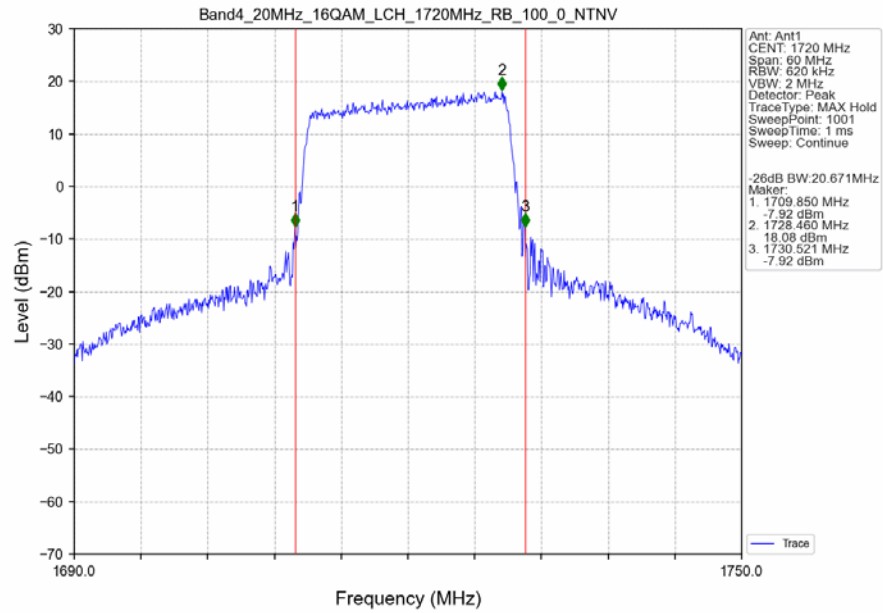
Band4 20MHz QPSK MCH 1732.5MHz RB 100 0 NTNV



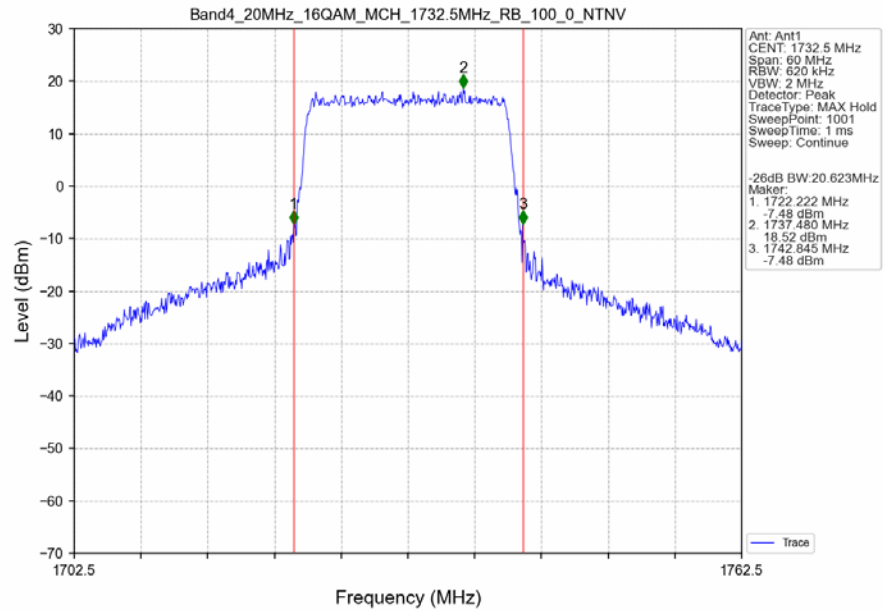
Band4 20MHz QPSK HCH 1745MHz RB 100 0 NTNV



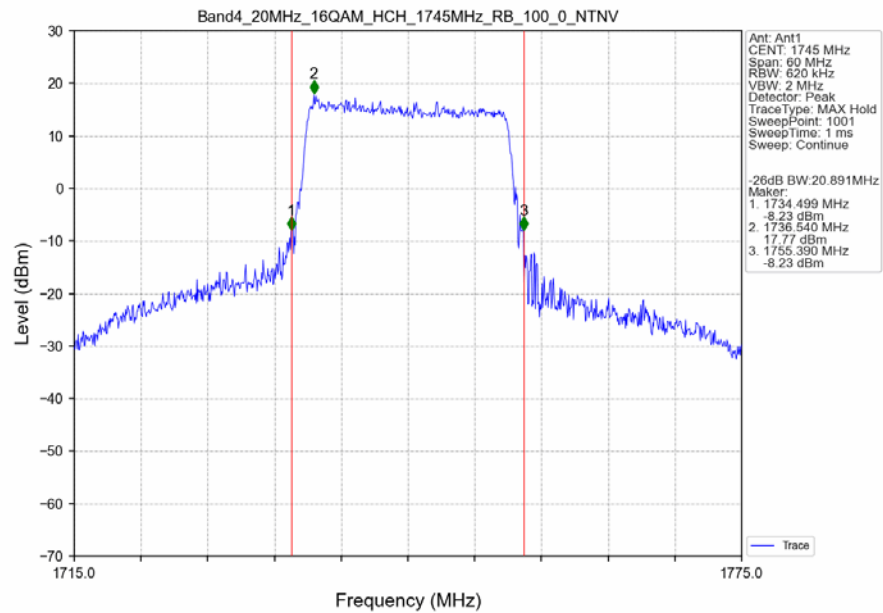
Band4 20MHz 16QAM LCH 1720MHz RB 100 0 NTNV



Band4 20MHz 16QAM MCH 1732.5MHz RB 100 0 NTNV



Band4 20MHz 16QAM HCH 1745MHz RB 100 0 NTNV



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	5.27	<=13	Pass
	1732.5	6	0	5.00	<=13	Pass
	1754.3	6	0	6.31	<=13	Pass
16QAM	1710.7	6	0	6.15	<=13	Pass
	1732.5	6	0	5.88	<=13	Pass
	1754.3	6	0	6.59	<=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	5.26	<=13	Pass
	1732.5	15	0	5.08	<=13	Pass
	1753.5	15	0	6.10	<=13	Pass
16QAM	1711.5	15	0	6.09	<=13	Pass
	1732.5	15	0	5.97	<=13	Pass
	1753.5	15	0	6.50	<=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	5.27	<=13	Pass
	1732.5	25	0	4.84	<=13	Pass
	1752.5	25	0	5.71	<=13	Pass
16QAM	1712.5	25	0	6.08	<=13	Pass
	1732.5	25	0	5.86	<=13	Pass
	1752.5	25	0	6.31	<=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	5.25	<=13	Pass
	1732.5	50	0	5.16	<=13	Pass
	1750	50	0	5.64	<=13	Pass
16QAM	1715	50	0	5.99	<=13	Pass
	1732.5	50	0	5.93	<=13	Pass
	1750	50	0	6.36	<=13	Pass

4.1.5 B4_15MHz

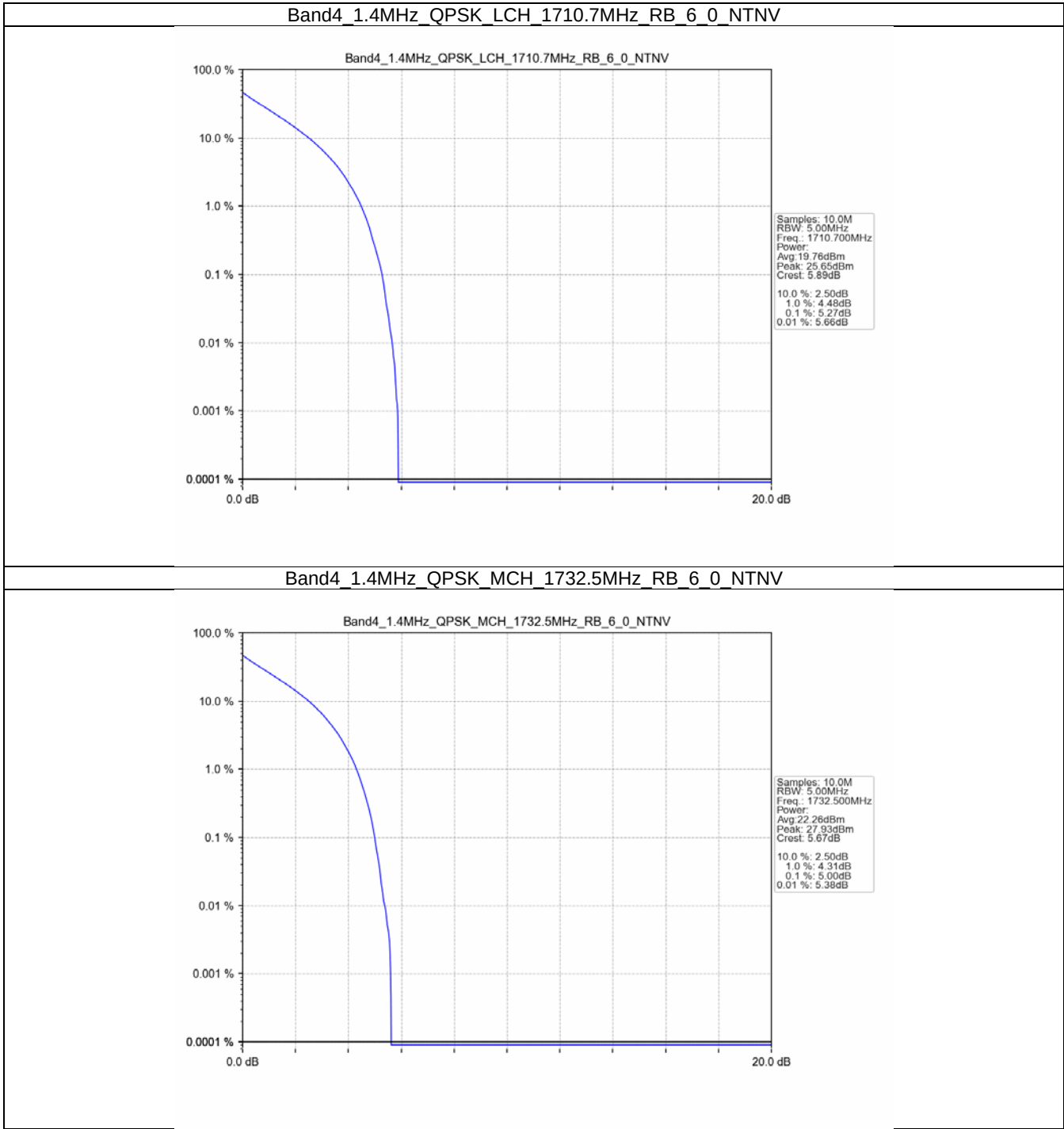
Band: 4 / Bandwidth: 15MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1717.5	75	0	5.30	<=13	Pass
	1732.5	75	0	5.28	<=13	Pass
	1747.5	75	0	5.67	<=13	Pass
16QAM	1717.5	75	0	6.07	<=13	Pass
	1732.5	75	0	5.98	<=13	Pass
	1747.5	75	0	6.21	<=13	Pass

4.1.6 B4_20MHz

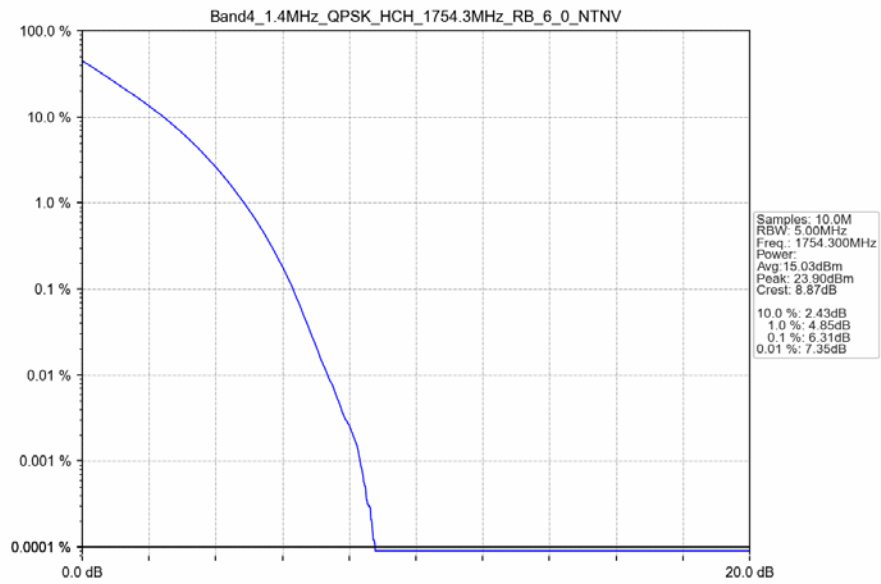
Band: 4 / Bandwidth: 20MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1720	100	0	5.27	<=13	Pass
	1732.5	100	0	5.27	<=13	Pass
	1745	100	0	5.50	<=13	Pass
16QAM	1720	100	0	6.11	<=13	Pass
	1732.5	100	0	6.03	<=13	Pass
	1745	100	0	6.32	<=13	Pass

4.2 Test Graph

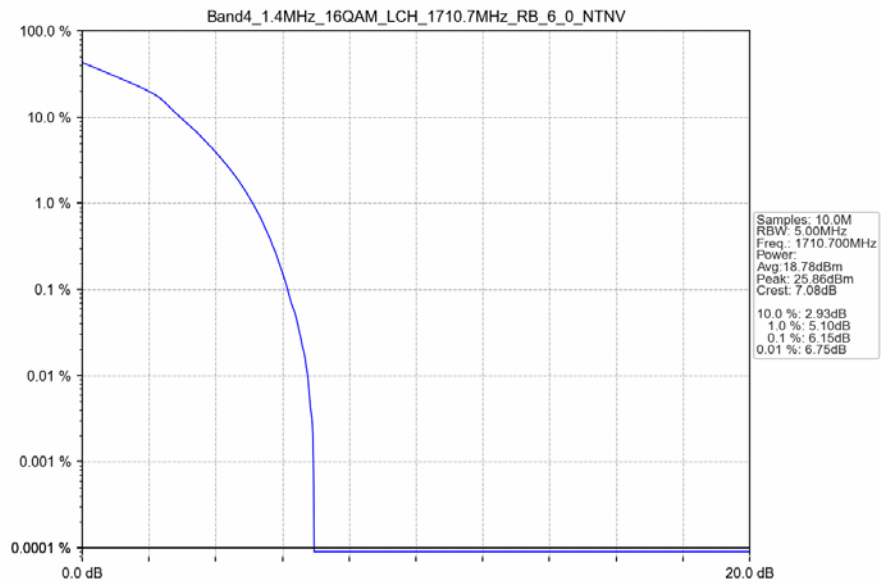
4.2.1 B4_1.4MHz



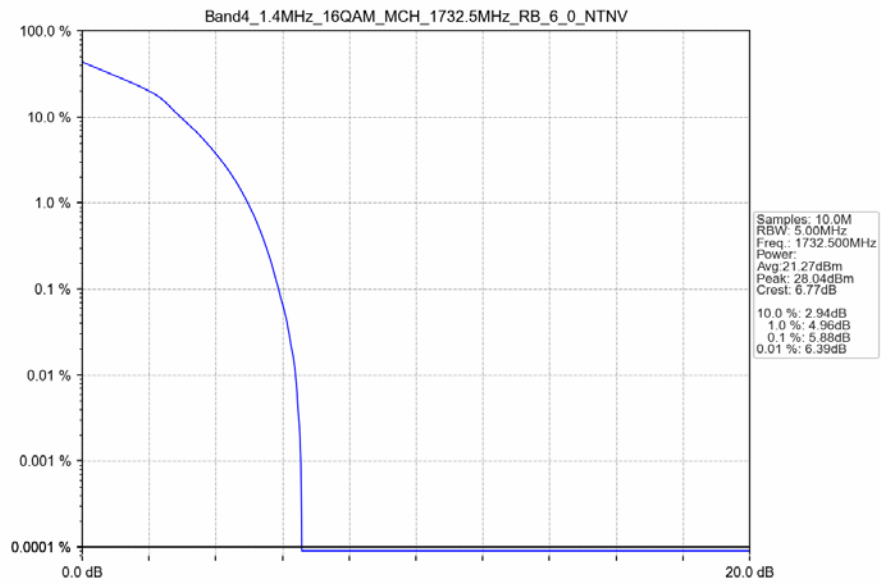
Band4 1.4MHz QPSK HCH 1754.3MHz RB 6 0 NTNV



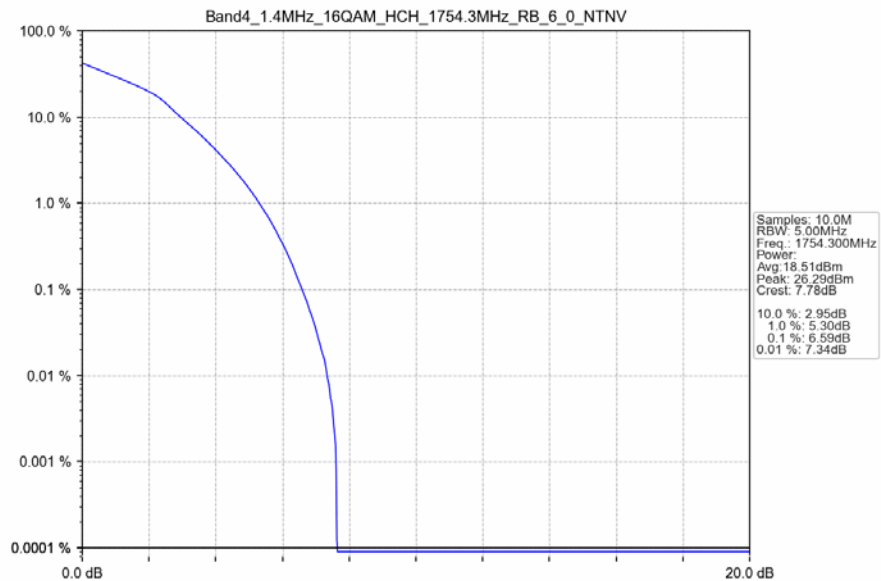
Band4 1.4MHz 16QAM LCH 1710.7MHz RB 6 0 NTNV



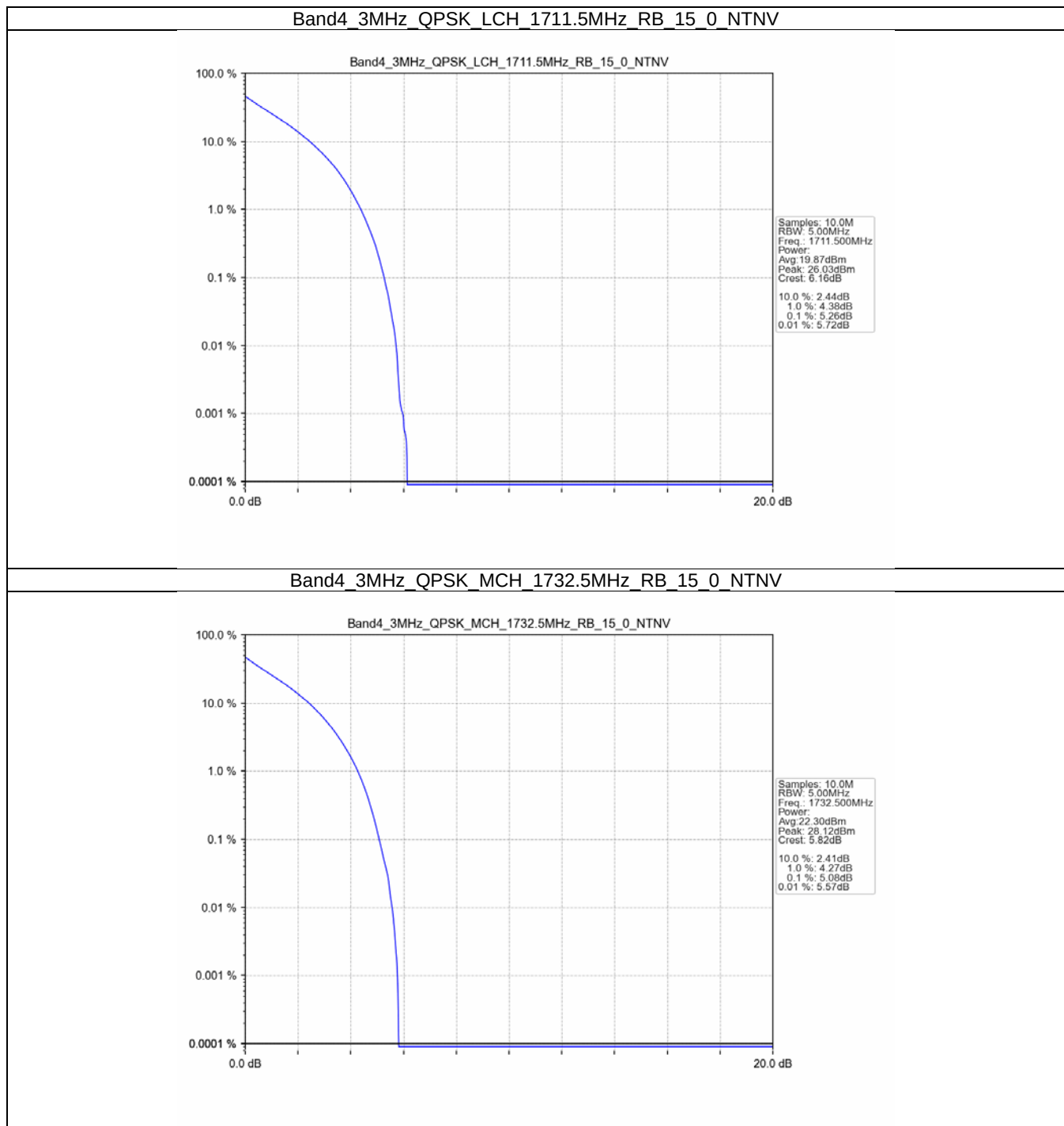
Band4 1.4MHz 16QAM MCH 1732.5MHz RB 6 0 NTN



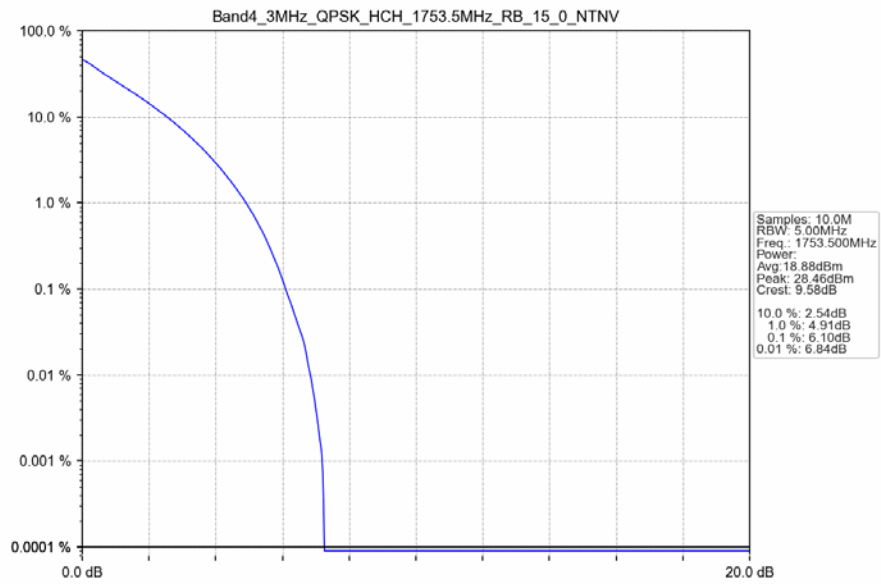
Band4 1.4MHz 16QAM HCH 1754.3MHz RB 6 0 NTN



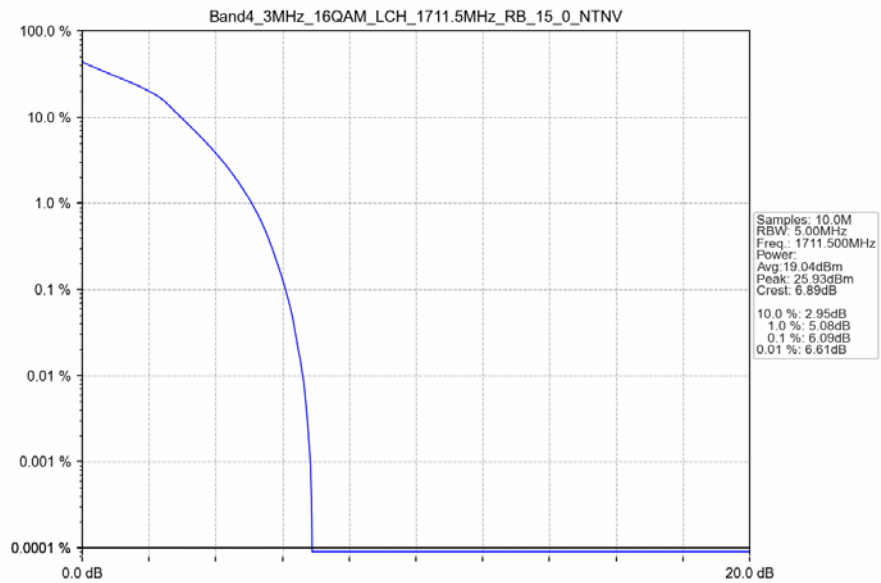
4.2.2 B4_3MHz



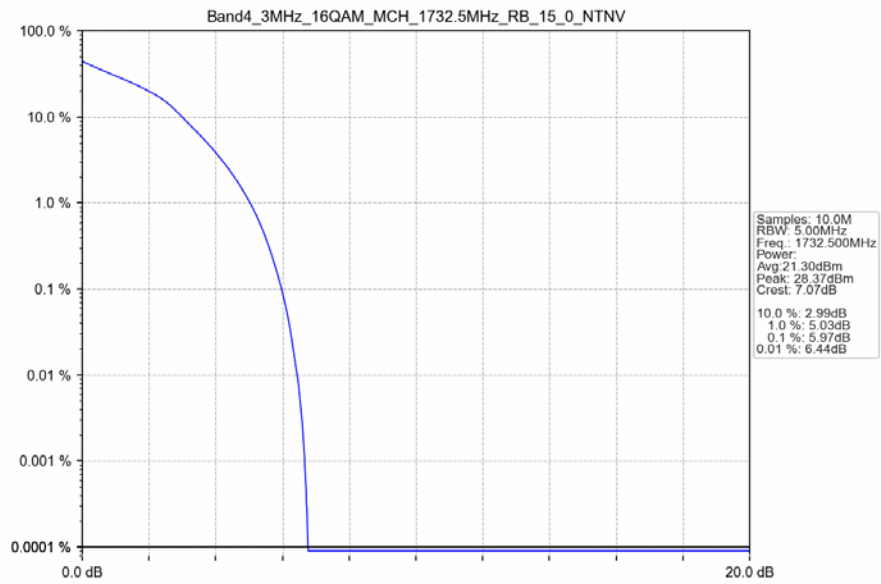
Band4 3MHz QPSK HCH 1753.5MHz RB 15 0 NTV



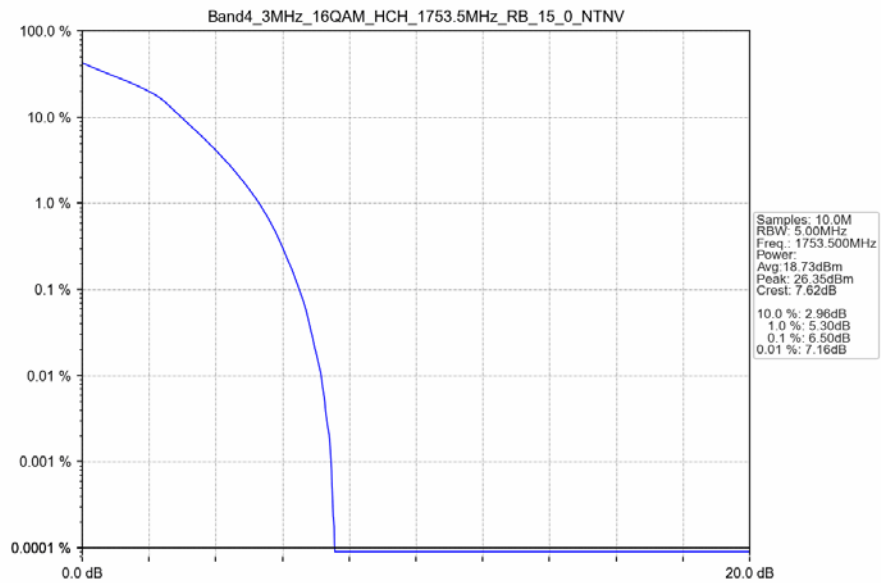
Band4 3MHz 16QAM LCH 1711.5MHz RB 15 0 NTV



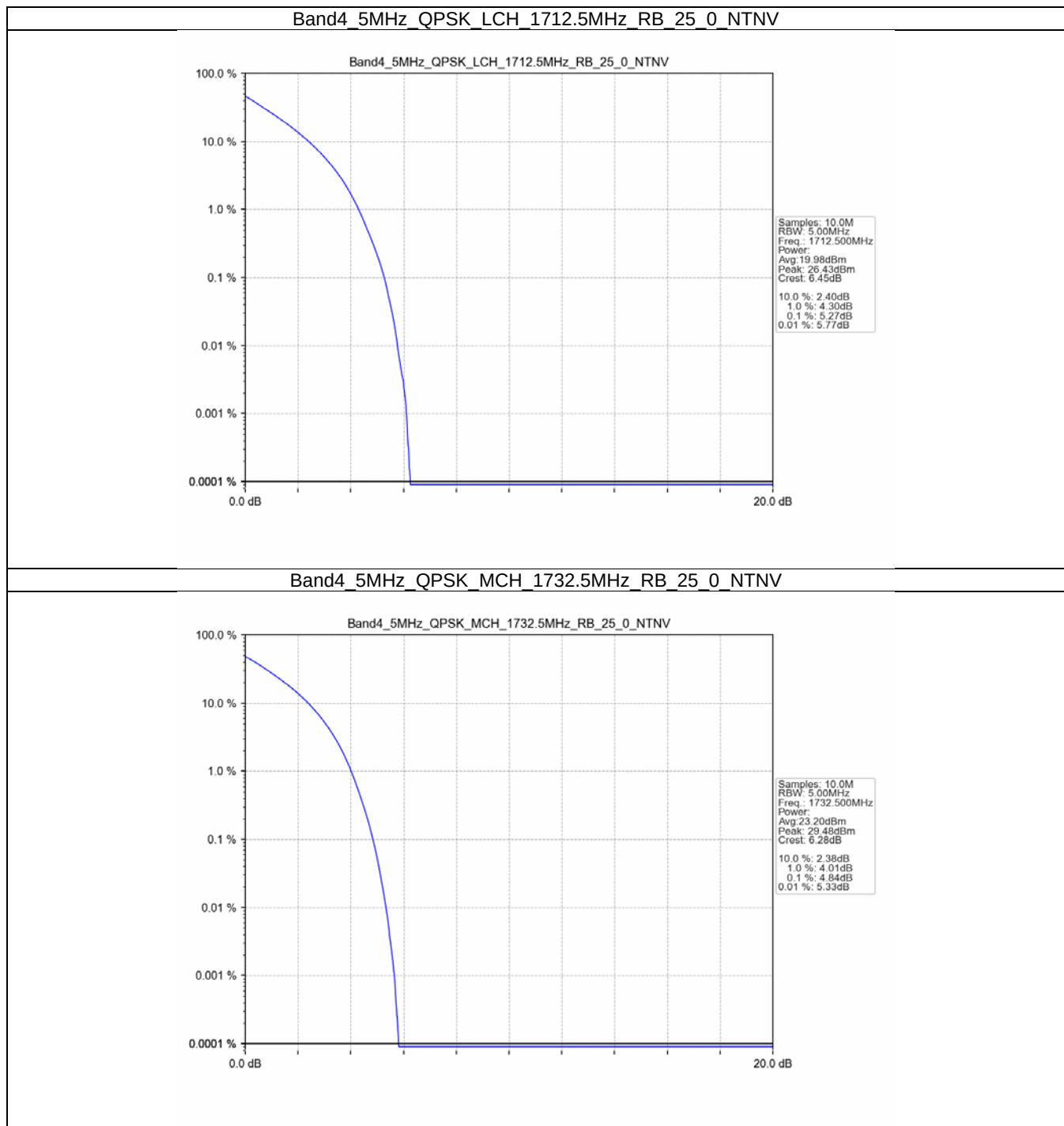
Band4 3MHz 16QAM MCH 1732.5MHz RB 15 0 NTNV



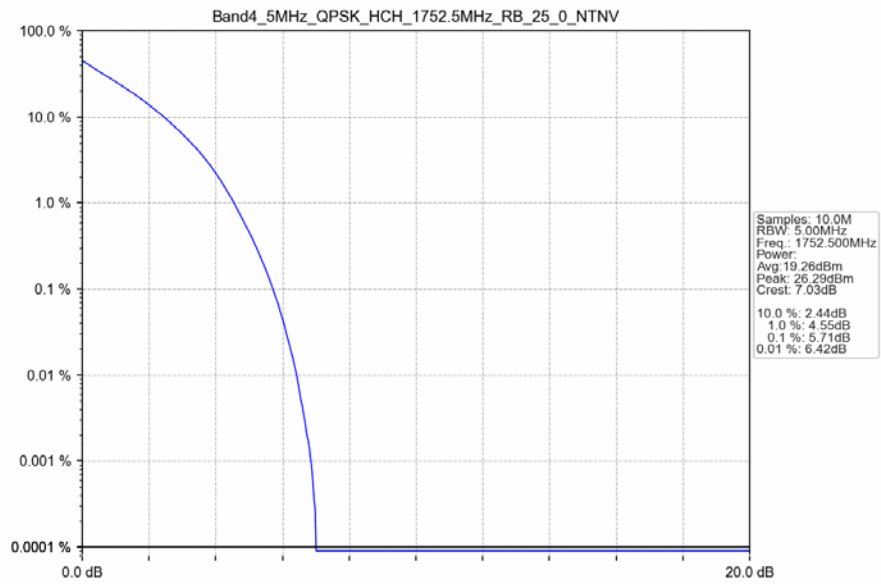
Band4 3MHz 16QAM HCH 1753.5MHz RB 15 0 NTNV



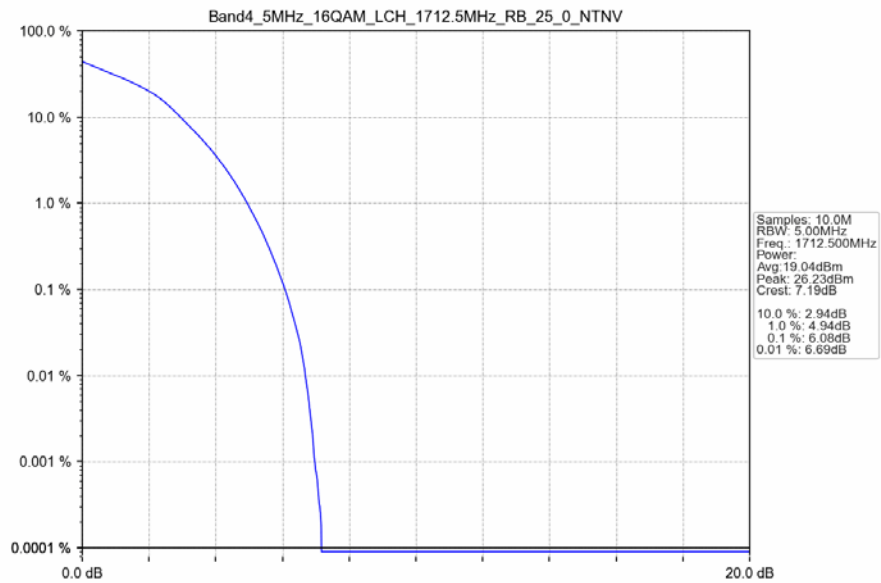
4.2.3 B4_5MHz



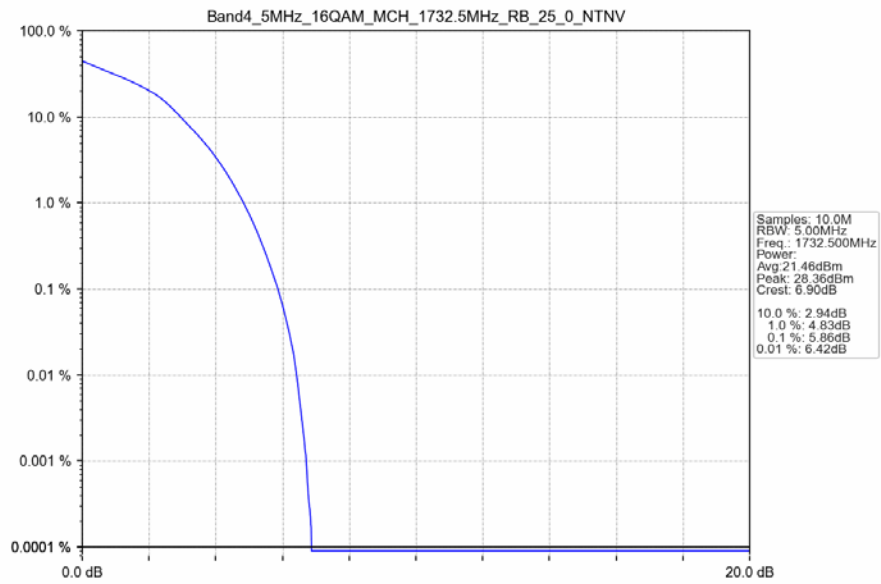
Band4 5MHz QPSK HCH 1752.5MHz RB 25 0 NTV



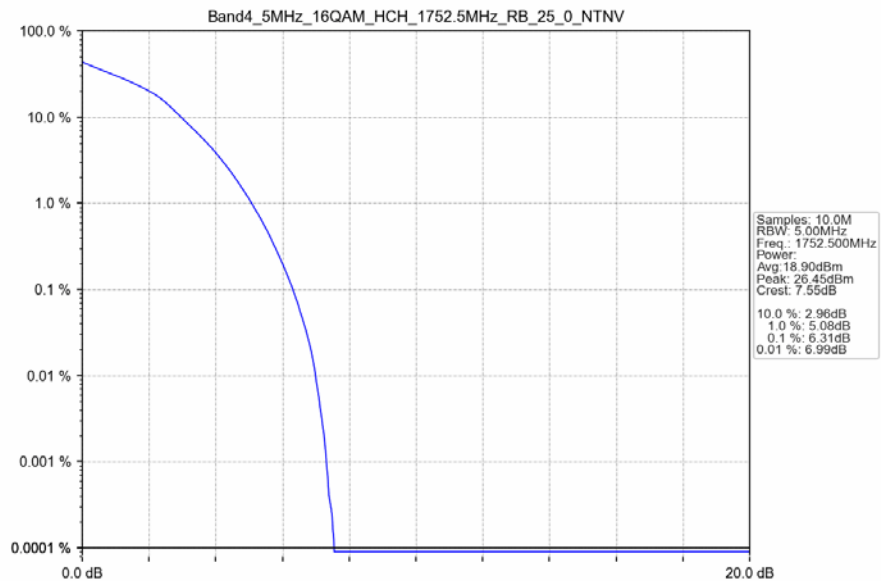
Band4 5MHz 16QAM LCH 1712.5MHz RB 25 0 NTV



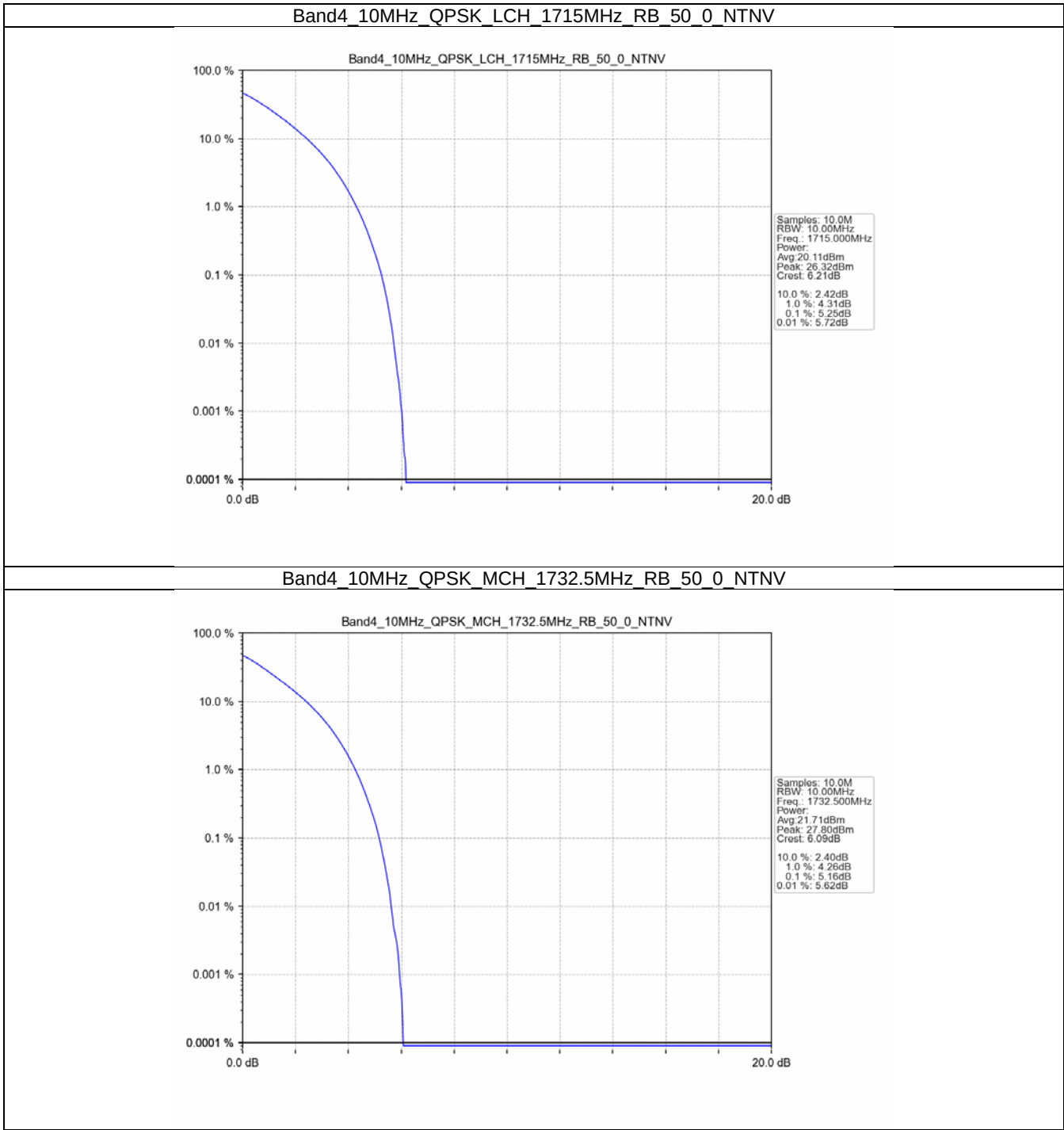
Band4 5MHz 16QAM MCH 1732.5MHz RB 25 0 NTNV



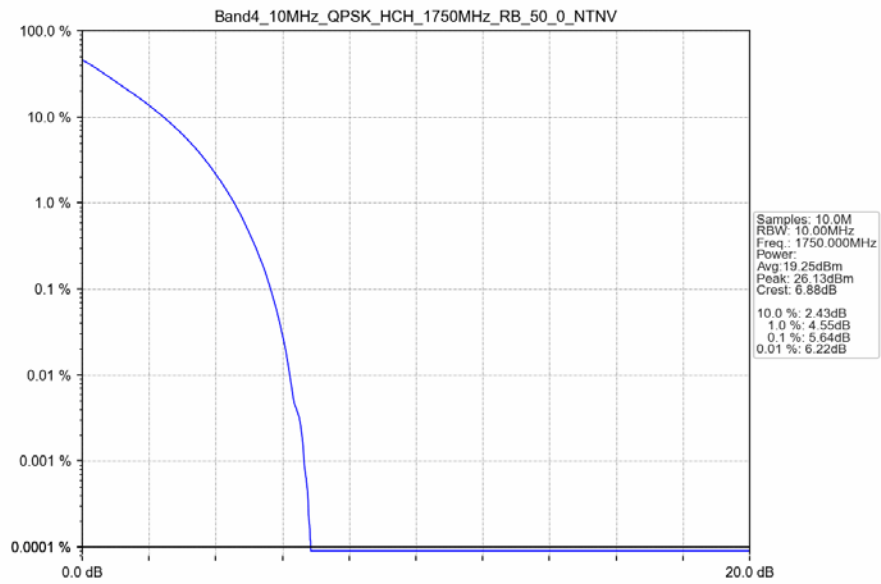
Band4 5MHz 16QAM HCH 1752.5MHz RB 25 0 NTNV



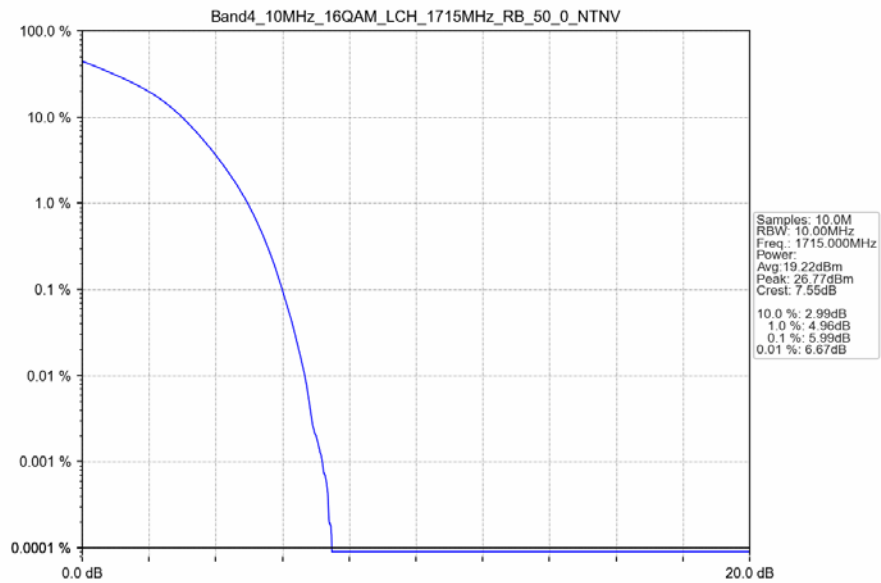
4.2.4 B4_10MHz



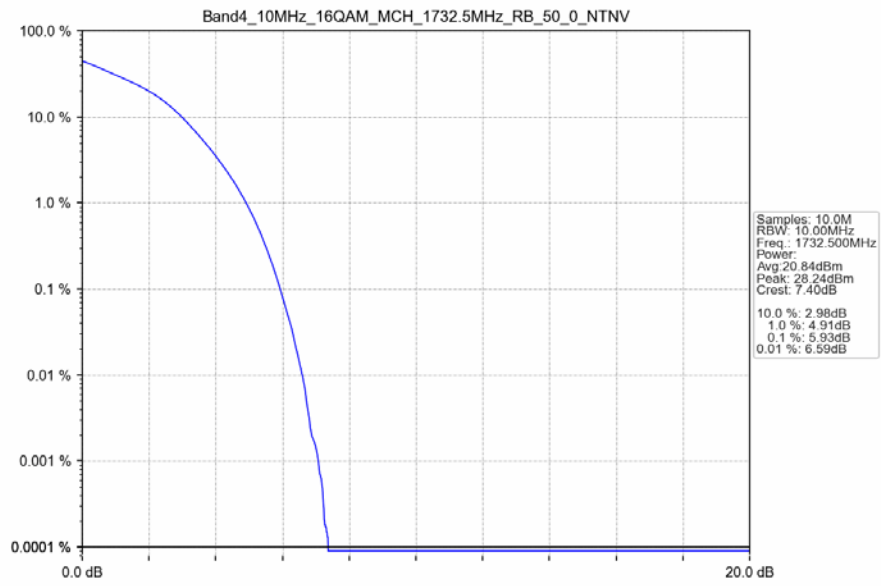
Band4 10MHz QPSK HCH 1750MHz RB 50 0 NTN



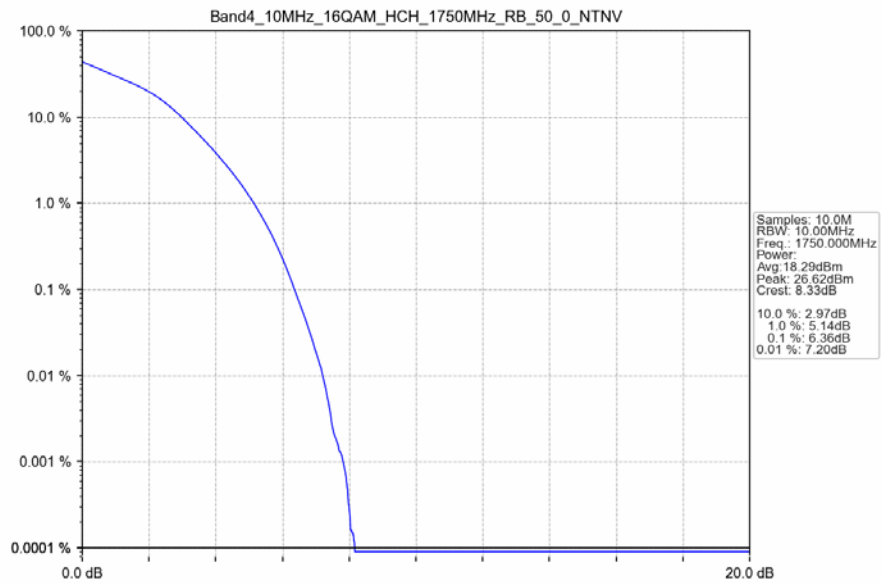
Band4 10MHz 16QAM LCH 1715MHz RB 50 0 NTN



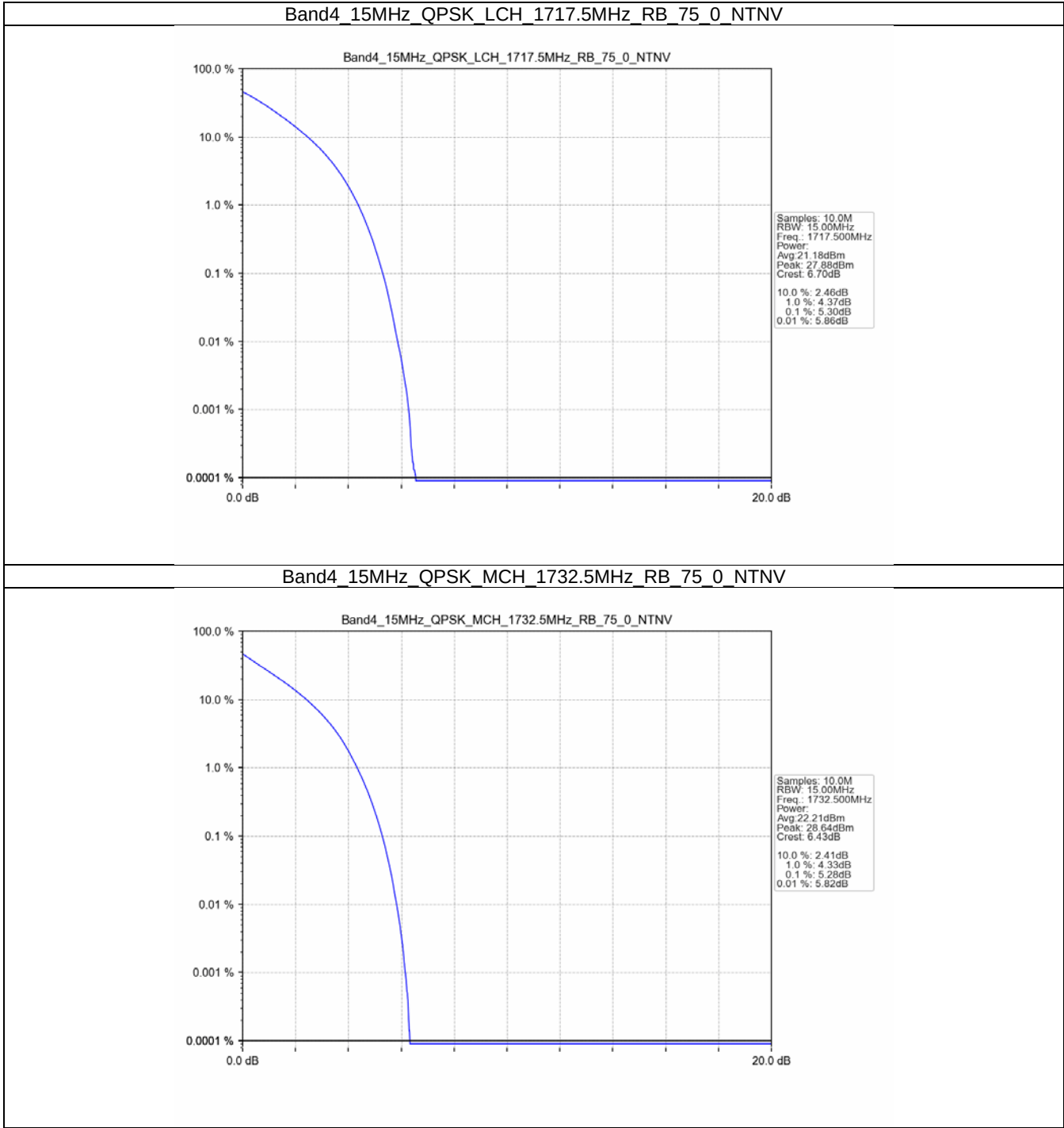
Band4 10MHz 16QAM MCH 1732.5MHz RB 50 0 NTNV



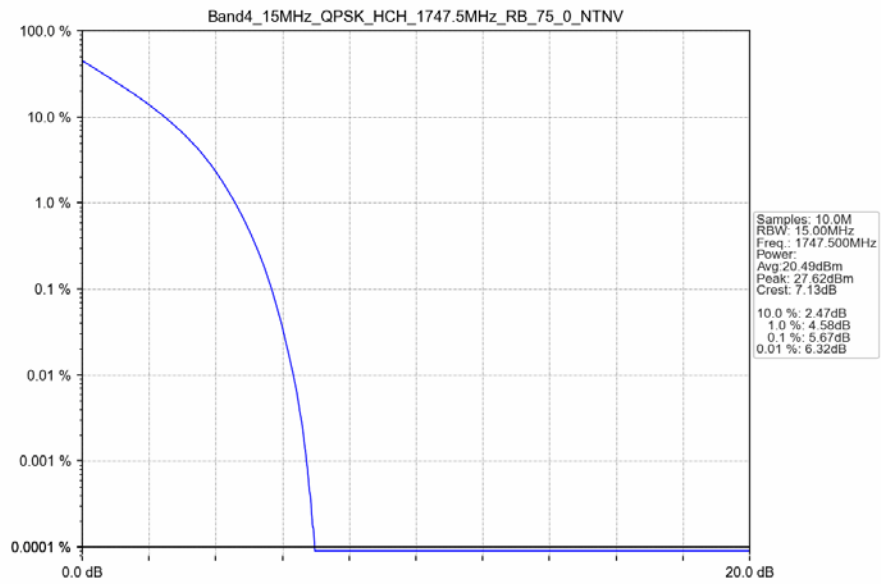
Band4 10MHz 16QAM HCH 1750MHz RB 50 0 NTNV



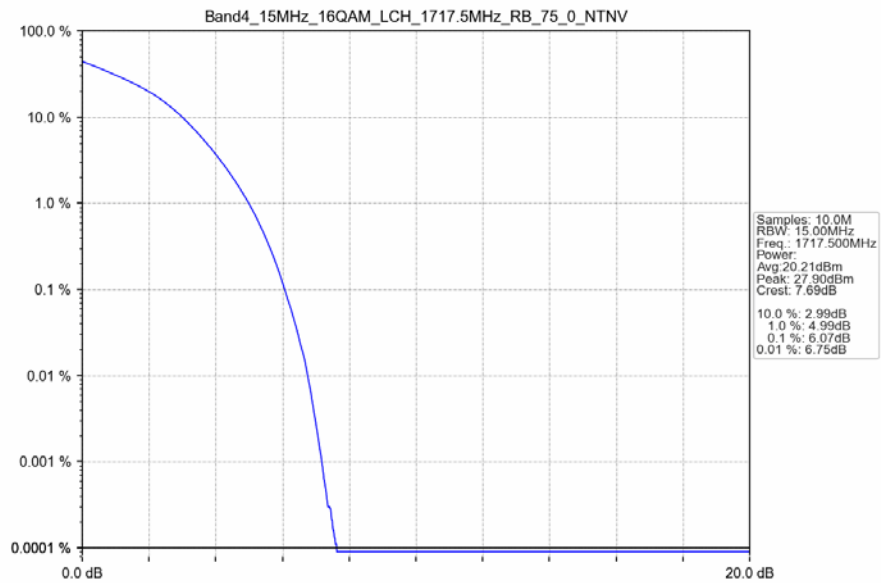
4.2.5 B4_15MHz



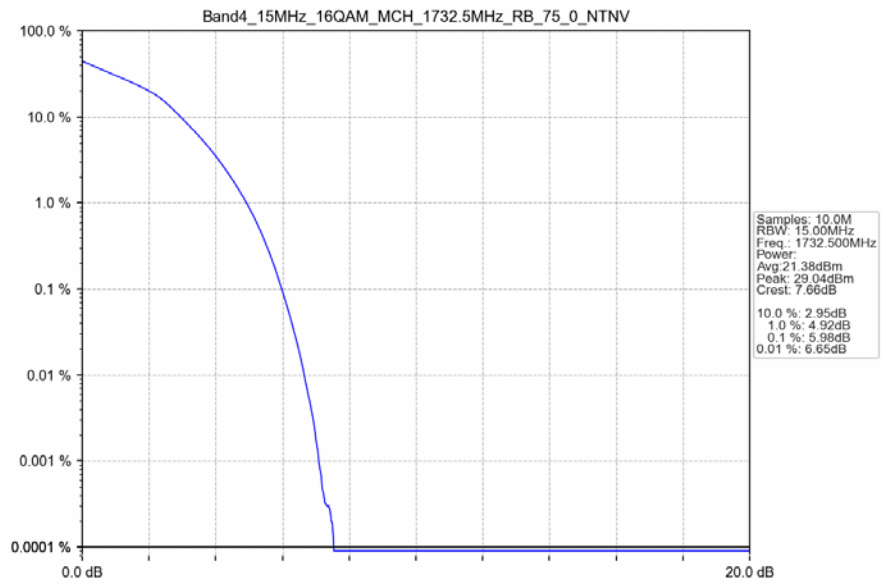
Band4 15MHz QPSK HCH 1747.5MHz RB 75 0 NTNV



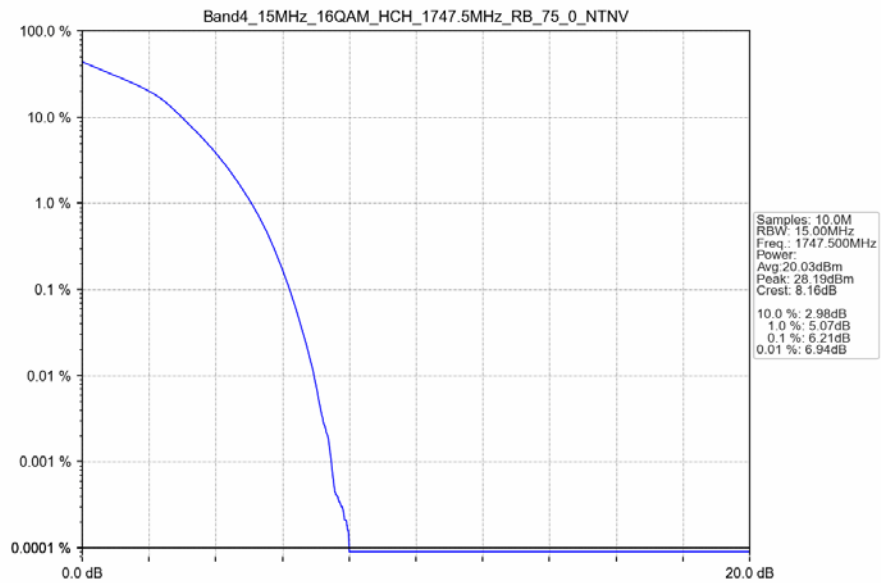
Band4 15MHz 16QAM LCH 1717.5MHz RB 75 0 NTNV



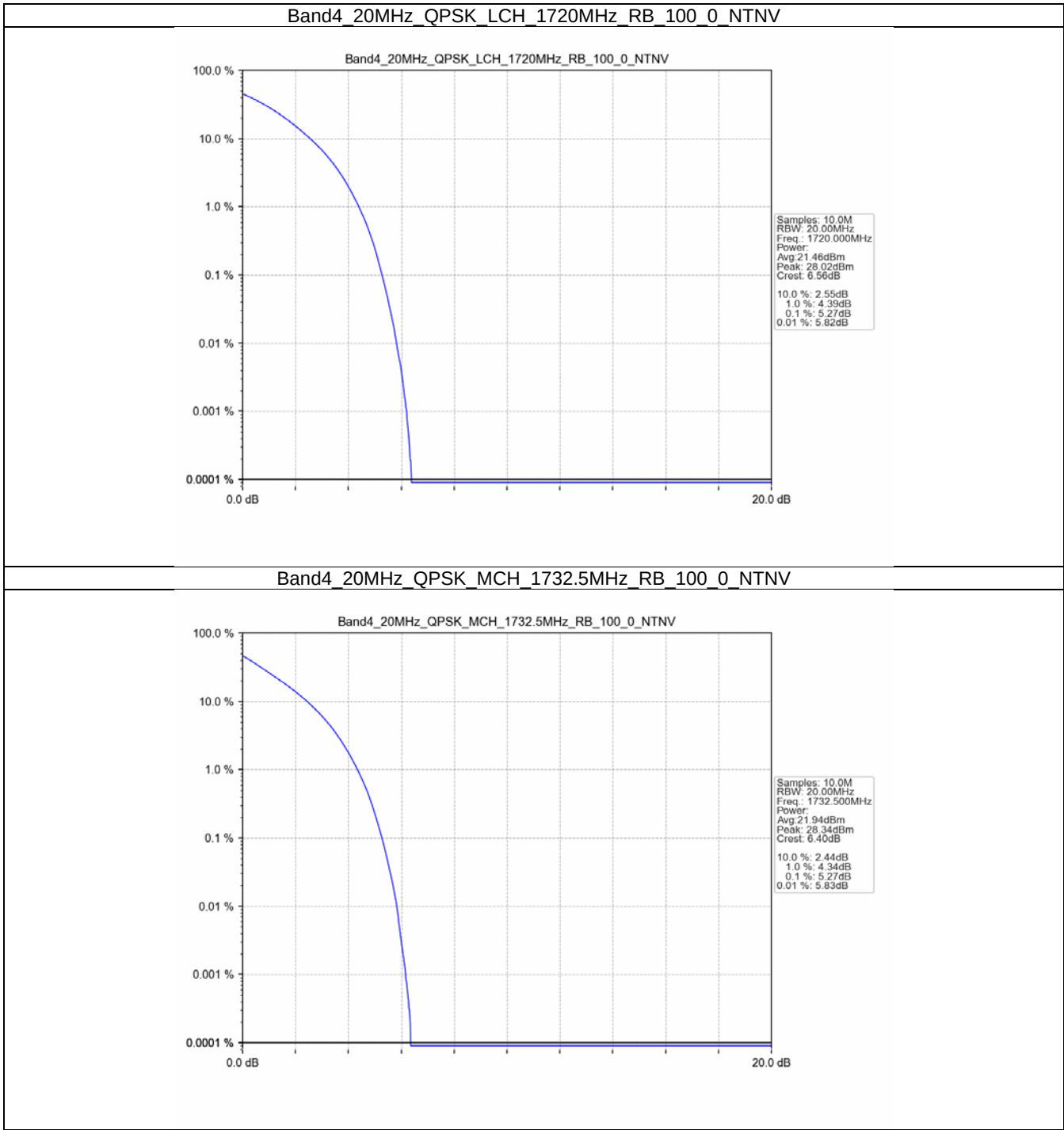
Band4 15MHz 16QAM MCH 1732.5MHz RB 75 0 NTN



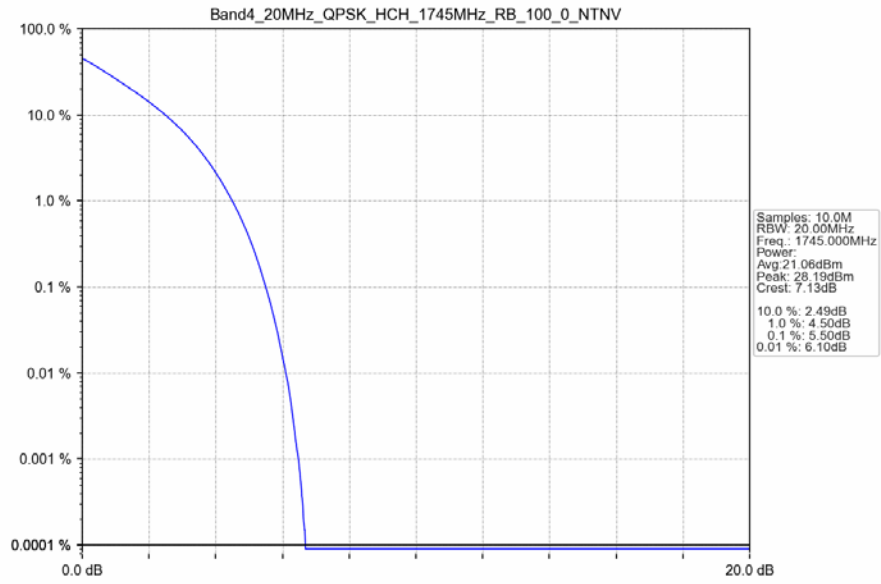
Band4 15MHz 16QAM HCH 1747.5MHz RB 75 0 NTN



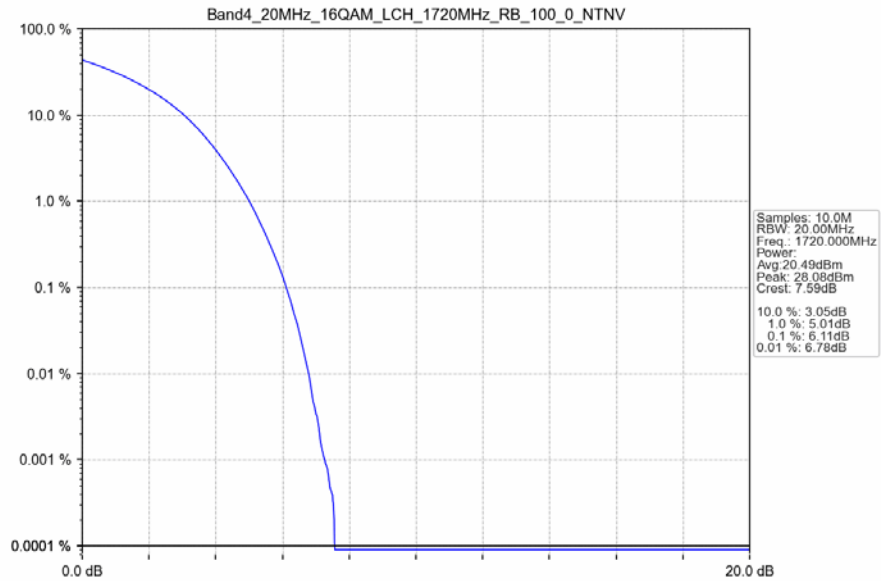
4.2.6 B4_20MHz



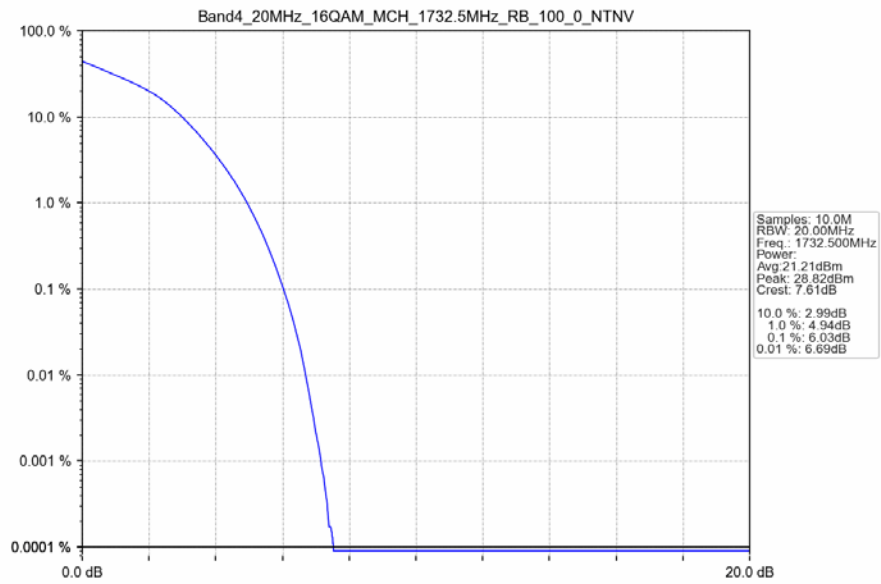
Band4 20MHz QPSK HCH 1745MHz RB 100 0 NTNV



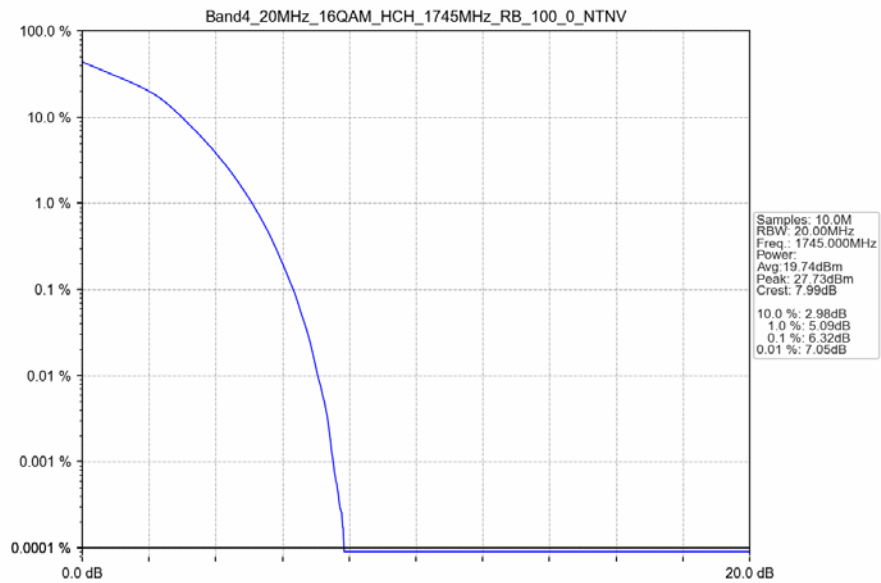
Band4 20MHz 16QAM LCH 1720MHz RB 100 0 NTNV



Band4 20MHz 16QAM MCH 1732.5MHz RB 100 0 NTNV



Band4 20MHz 16QAM HCH 1745MHz RB 100 0 NTNV



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		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
	1754.3	1	0	Refer To Test Graph		Pass
			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
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

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
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

5.1.4 B4_10MHz

Band: 4 / Bandwidth: 10MHz / NTNV						
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
16QAM	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
16QAM	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

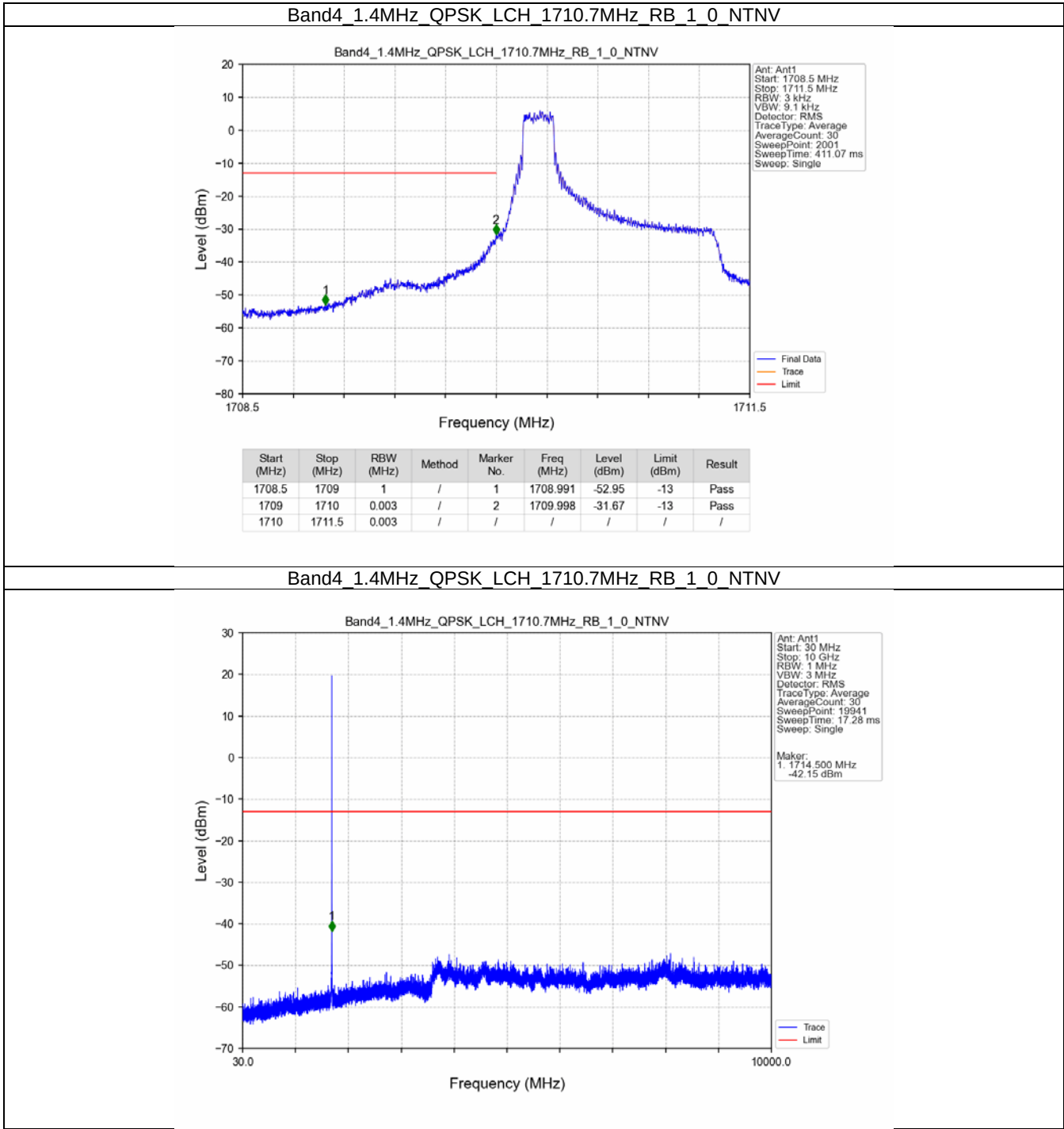
5.1.6 B4_20MHz

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	
	99			Refer To Test Graph		Pass
	100		0	Refer To Test Graph		Pass
16QAM	1720	1	0	Refer To Test Graph		Pass
		100	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass

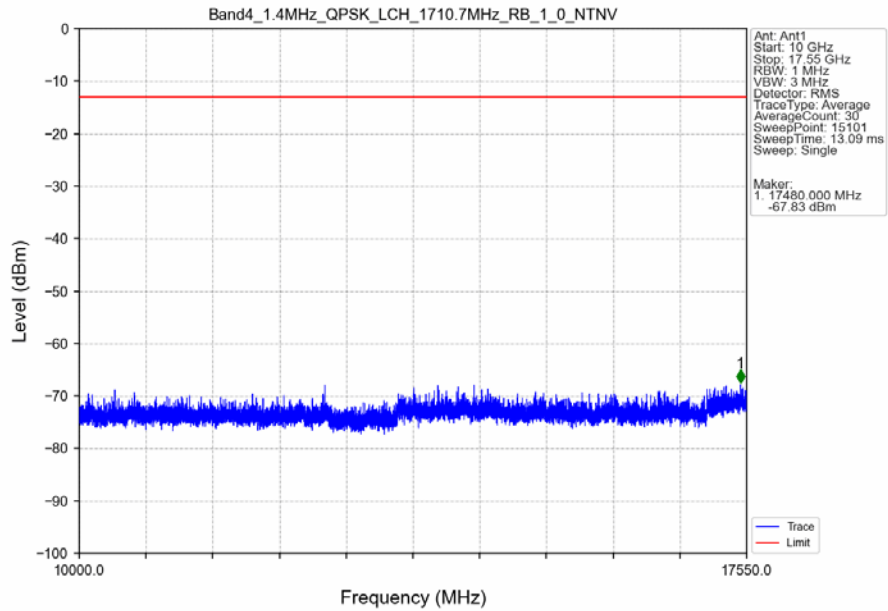
	1745	1	0	Refer To Test Graph	Pass
			99	Refer To Test Graph	Pass
		100	0	Refer To Test Graph	Pass

5.2 Test Graph

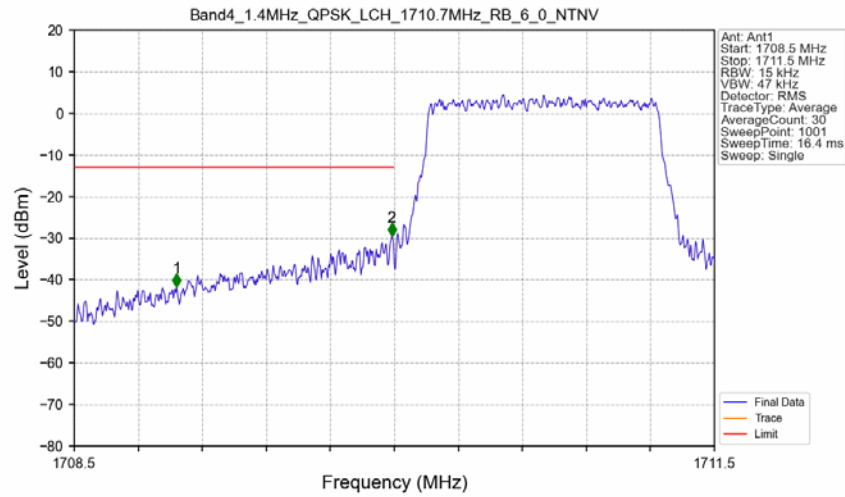
5.2.1 B4_1.4MHz



Band4 1.4MHz QPSK LCH 1710.7MHz RB 1 0 NTNV

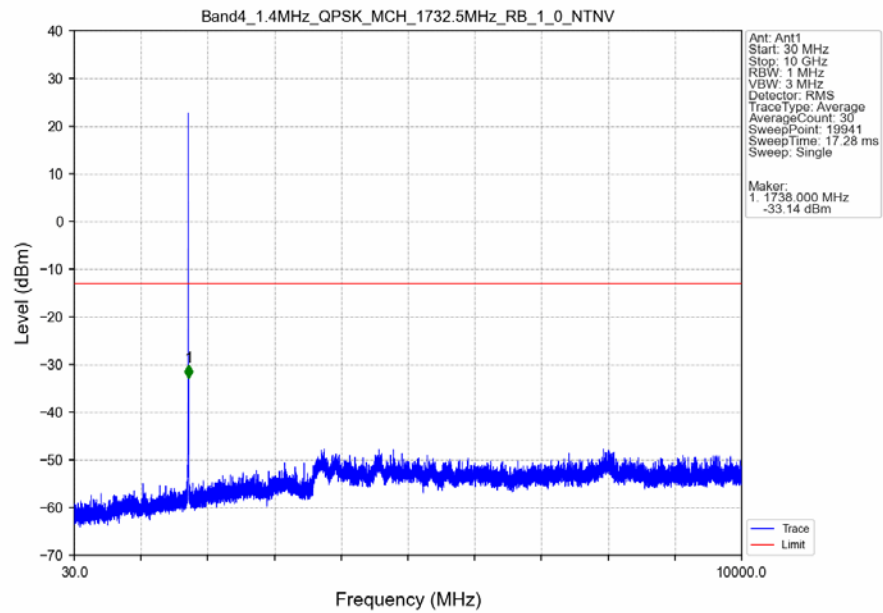


Band4 1.4MHz QPSK LCH 1710.7MHz RB 6 0 NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1708.5	1709	1	/	1	1708.980	-41.64	-13	Pass
1709	1710	0.015	/	2	1709.988	-29.44	-13	Pass
1710	1711.5	0.015	/	/	/	/	/	/

Band4 1.4MHz QPSK MCH 1732.5MHz RB 1 0 NTV



Band4 1.4MHz QPSK MCH 1732.5MHz RB 1 0 NTV

