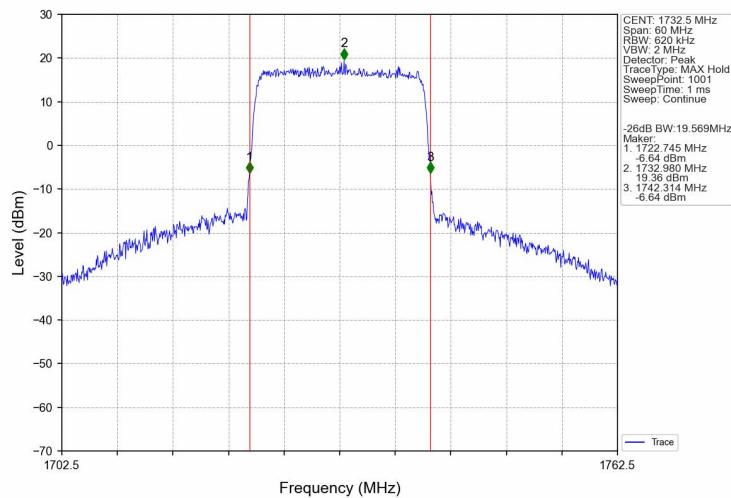
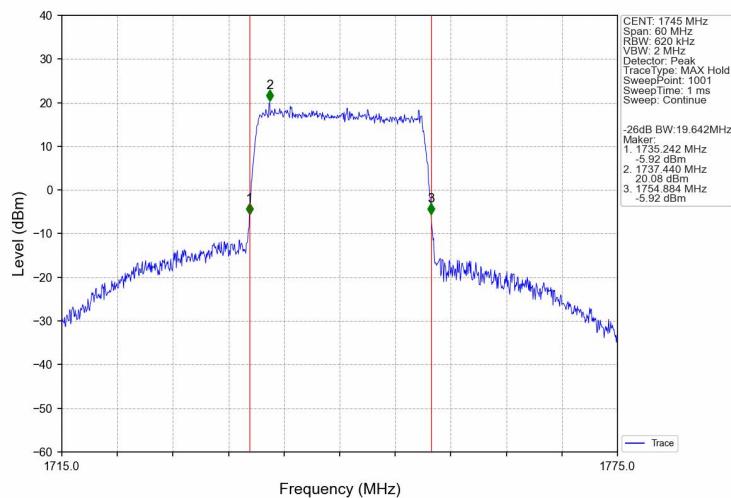


## Band4\_20MHz\_16QAM\_MCH\_1732.5MHz\_RB\_100\_0\_NTNV



## Band4\_20MHz\_16QAM\_HCH\_1745MHz\_RB\_100\_0\_NTNV



## 5. Peak-Average Ratio

### 5.1 Test Result

#### 5.1.1 B4\_1.4MHz

Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1710.7	6	0	5.12	<=13	Pass
	1732.5	6	0	4.61	<=13	Pass
	1754.3	6	0	5.14	<=13	Pass
16QAM	1710.7	6	0	5.92	<=13	Pass
	1732.5	6	0	5.50	<=13	Pass
	1754.3	6	0	5.92	<=13	Pass

#### 5.1.2 B4\_3MHz

Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1711.5	15	0	5.23	<=13	Pass
	1732.5	15	0	4.84	<=13	Pass
	1753.5	15	0	5.27	<=13	Pass
16QAM	1711.5	15	0	6.02	<=13	Pass
	1732.5	15	0	5.70	<=13	Pass
	1753.5	15	0	6.08	<=13	Pass

#### 5.1.3 B4\_5MHz

Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1712.5	25	0	5.45	<=13	Pass
	1732.5	25	0	5.19	<=13	Pass
	1752.5	25	0	5.46	<=13	Pass
16QAM	1712.5	25	0	6.16	<=13	Pass
	1732.5	25	0	5.88	<=13	Pass
	1752.5	25	0	6.15	<=13	Pass

#### 5.1.4 B4\_10MHz

Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1715	50	0	5.42	<=13	Pass
	1732.5	50	0	5.17	<=13	Pass
	1750	50	0	5.46	<=13	Pass
16QAM	1715	50	0	6.16	<=13	Pass
	1732.5	50	0	5.95	<=13	Pass
	1750	50	0	6.16	<=13	Pass

#### 5.1.5 B4\_15MHz

Band: 4 / Bandwidth: 15MHz / NTVN

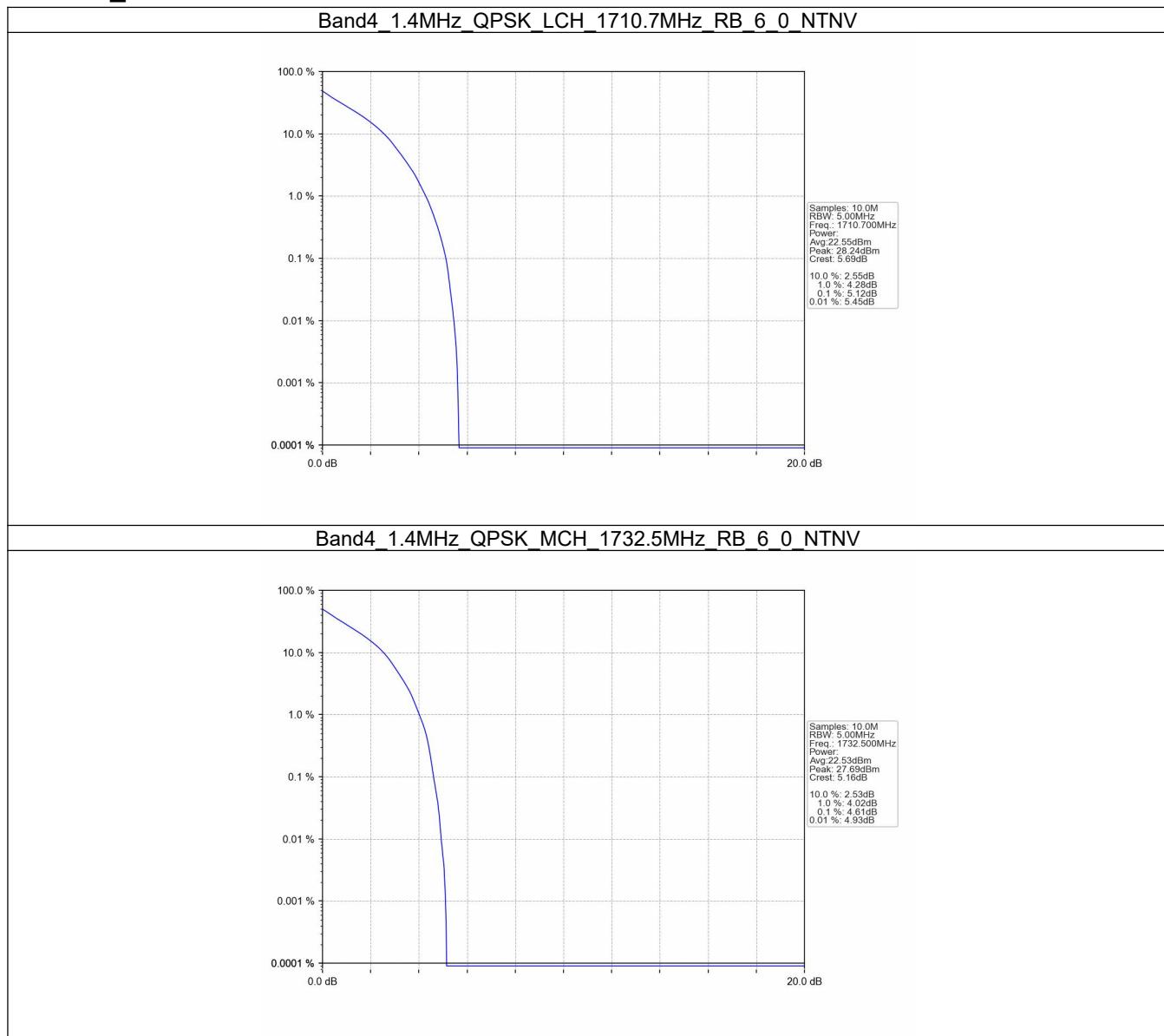
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1717.5	75	0	5.13	<=13	Pass
	1732.5	75	0	5.02	<=13	Pass
	1747.5	75	0	5.16	<=13	Pass
16QAM	1717.5	75	0	6.11	<=13	Pass
	1732.5	75	0	6.00	<=13	Pass
	1747.5	75	0	6.10	<=13	Pass

### 5.1.6 B4\_20MHz

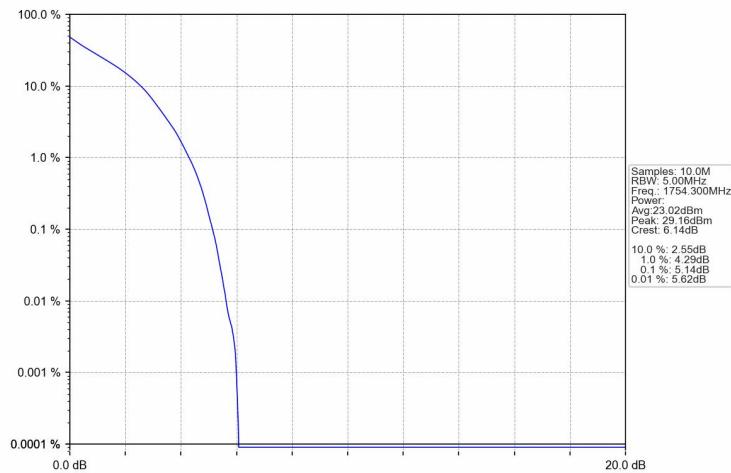
Band: 4 / Bandwidth: 20MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	1720	100	0	5.67	<=13	Pass
	1732.5	100	0	5.64	<=13	Pass
	1745	100	0	5.60	<=13	Pass
16QAM	1720	100	0	6.55	<=13	Pass
	1732.5	100	0	6.51	<=13	Pass
	1745	100	0	6.59	<=13	Pass

## 5.2 Test Graph

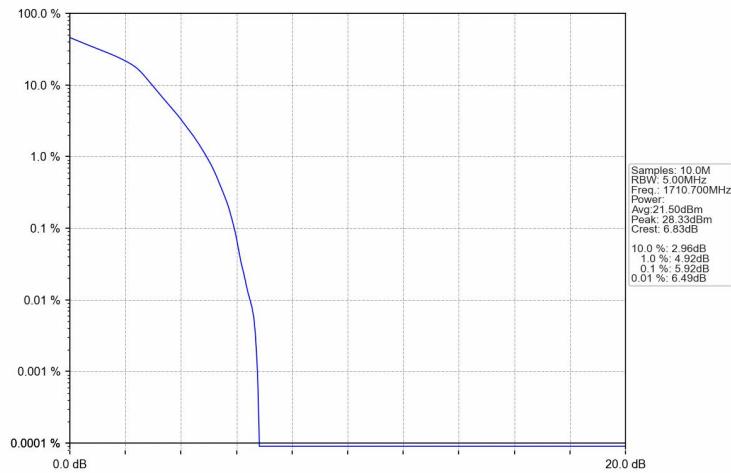
### 5.2.1 B4\_1.4MHz



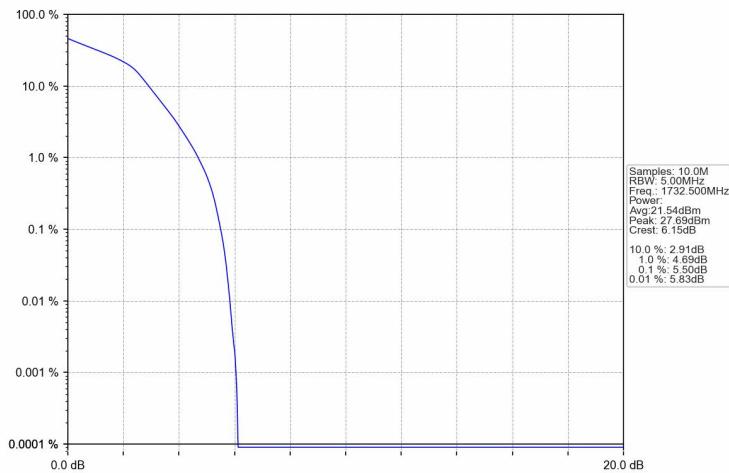
## Band4\_1.4MHz\_QPSK\_HCH\_1754.3MHz\_RB\_6\_0\_NTNV



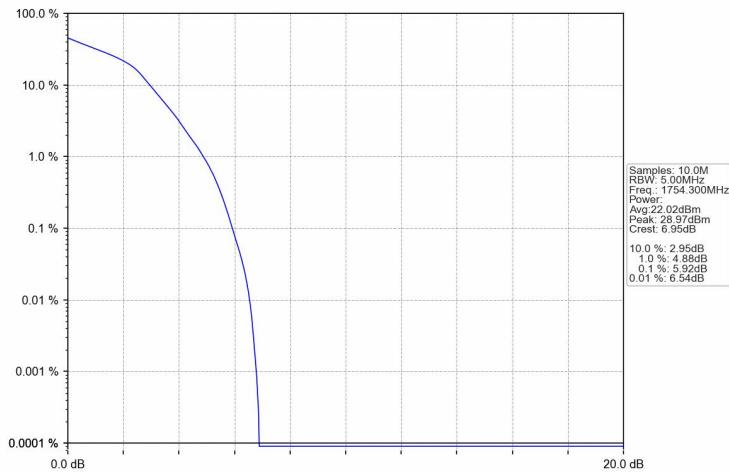
## Band4\_1.4MHz\_16QAM\_LCH\_1710.7MHz\_RB\_6\_0\_NTNV



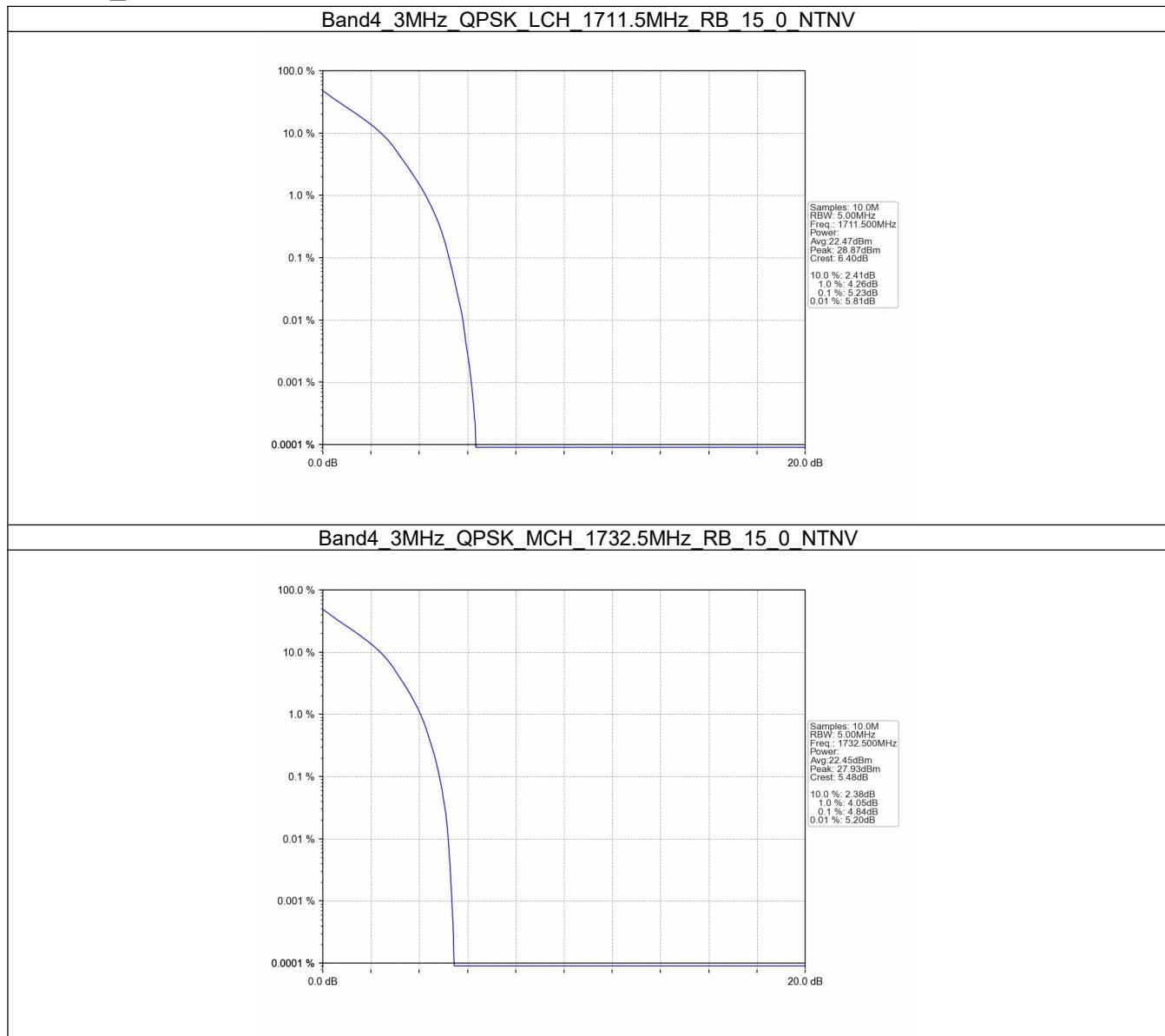
## Band4 1.4MHz\_16QAM\_MCH\_1732.5MHz\_RB\_6\_0\_NTNV



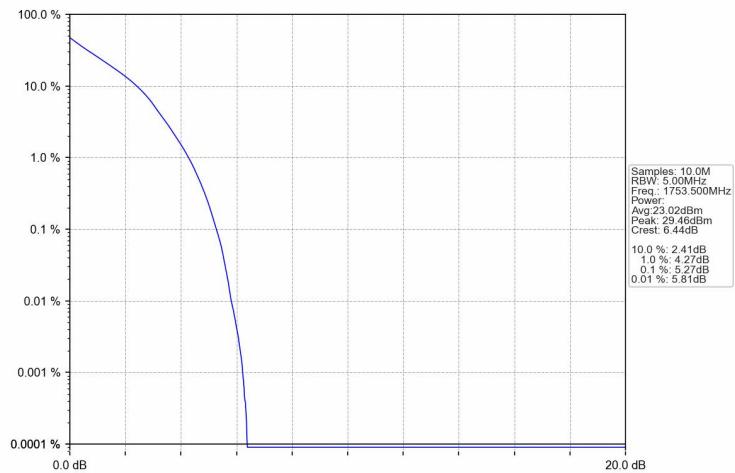
## Band4 1.4MHz\_16QAM\_HCH\_1754.3MHz\_RB\_6\_0\_NTNV



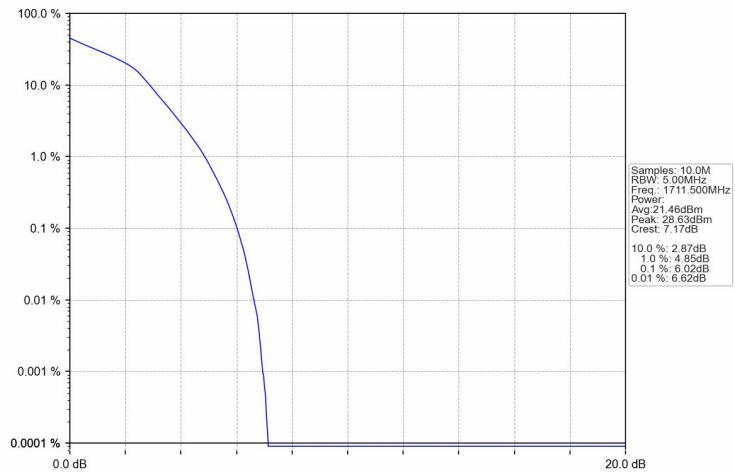
### 5.2.2 B4\_3MHz



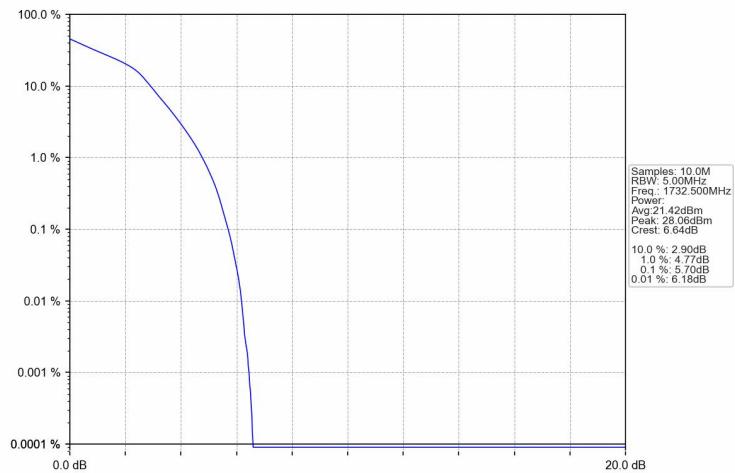
## Band4\_3MHz\_QPSK\_HCH\_1753.5MHz\_RB\_15\_0\_NTNV



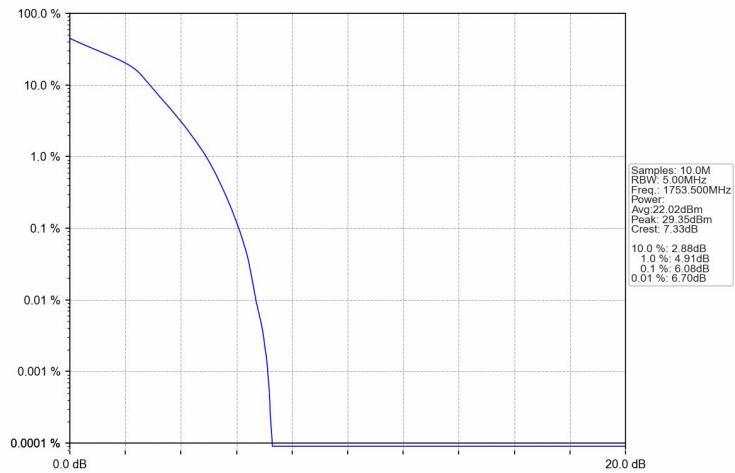
## Band4\_3MHz\_16QAM\_LCH\_1711.5MHz\_RB\_15\_0\_NTNV



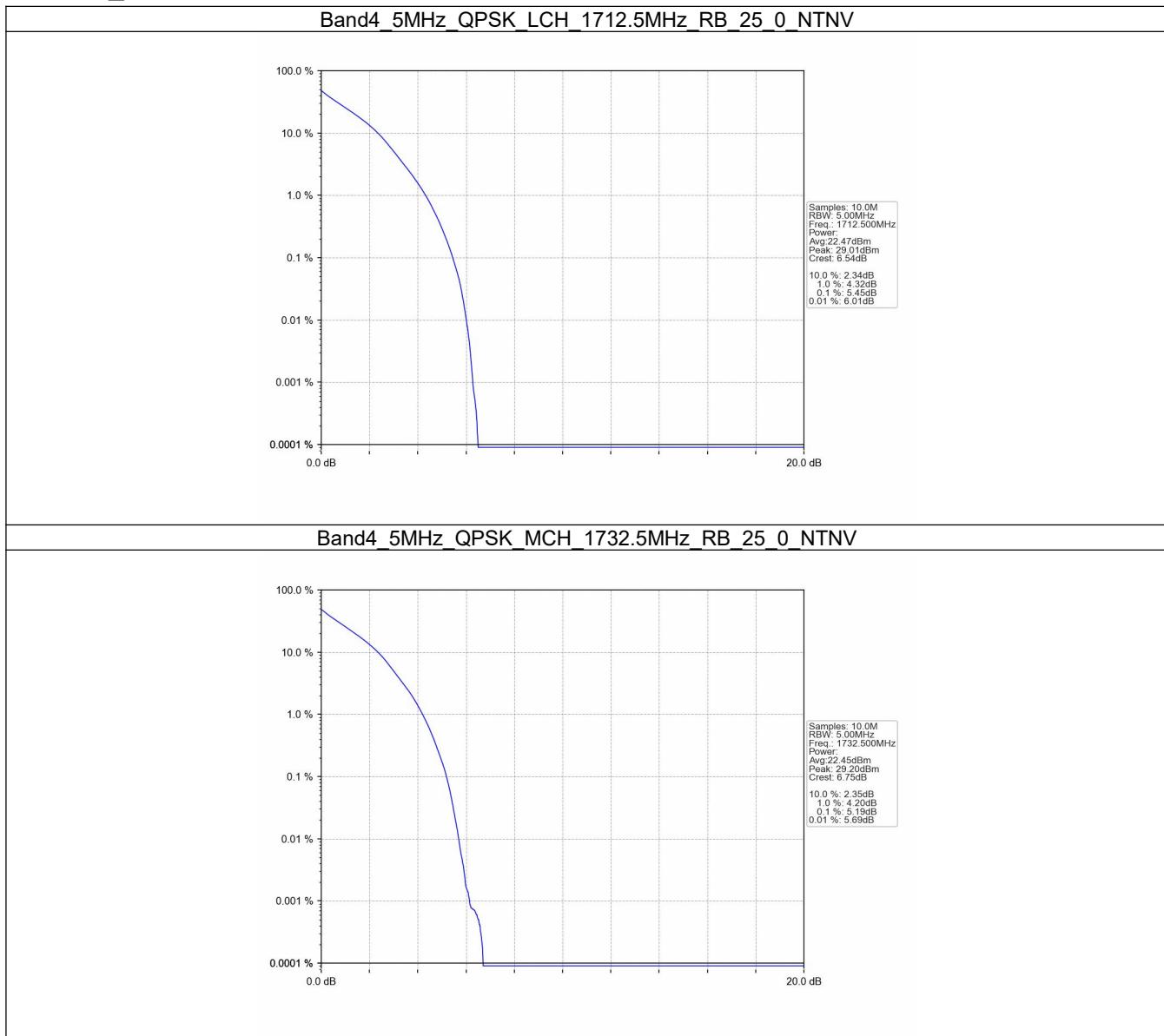
## Band4\_3MHz\_16QAM\_MCH\_1732.5MHz\_RB\_15\_0\_NTNV

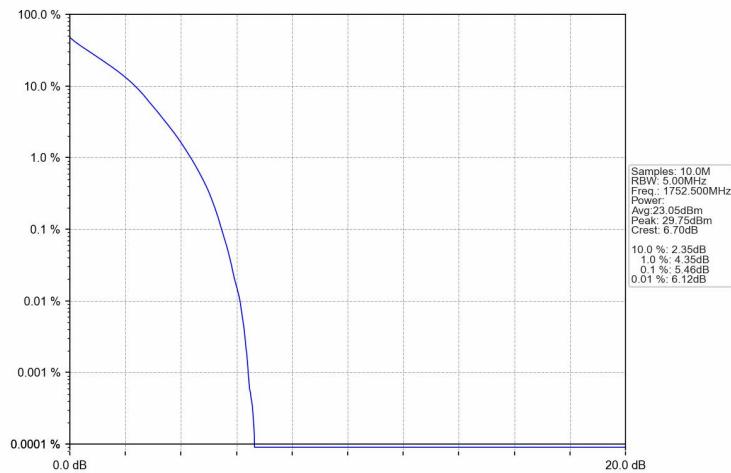
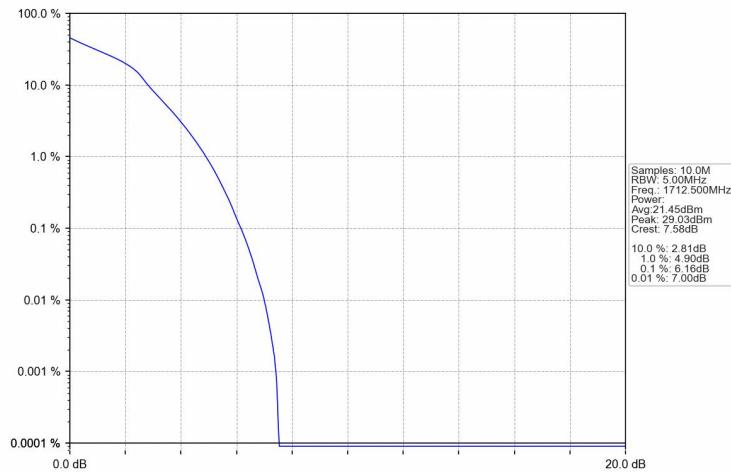


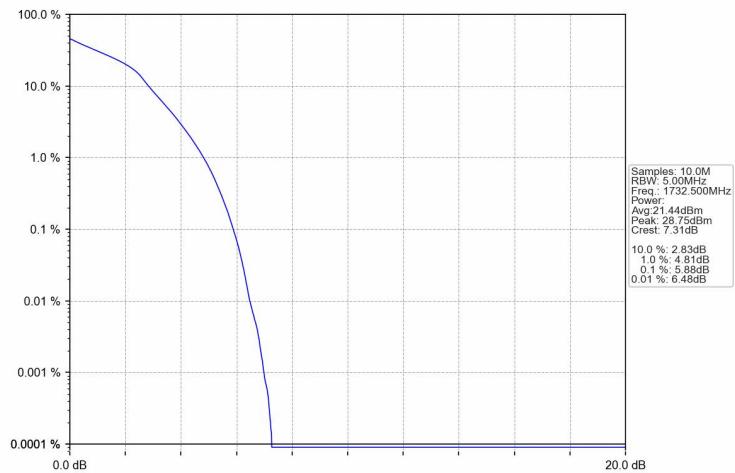
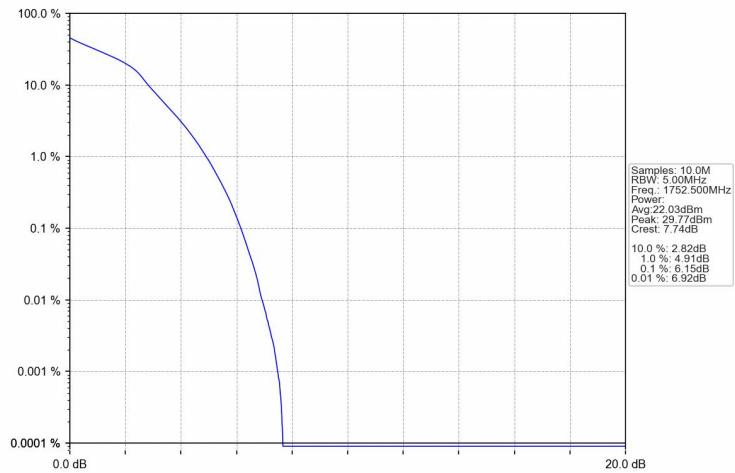
## Band4\_3MHz\_16QAM\_HCH\_1753.5MHz\_RB\_15\_0\_NTNV



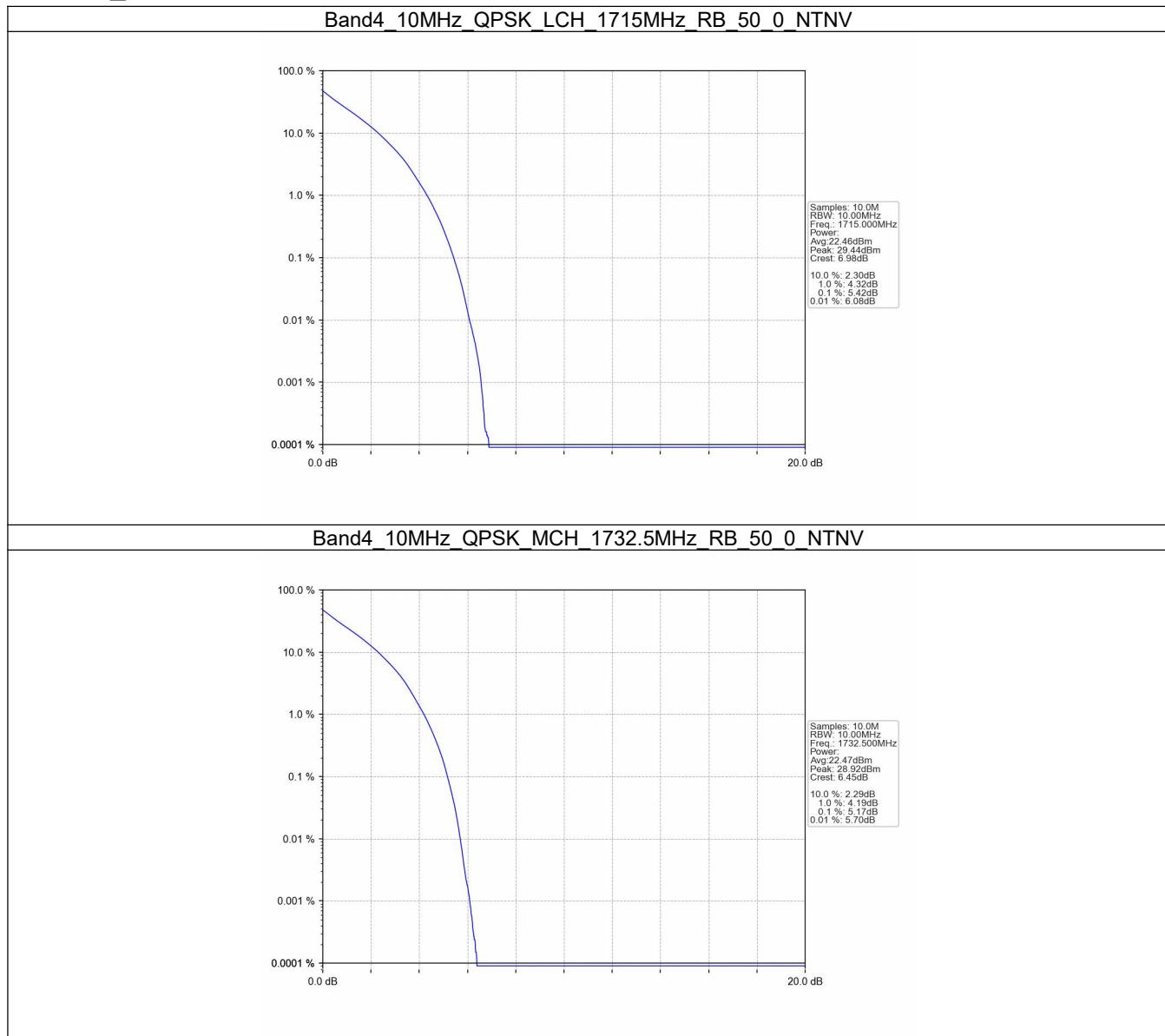
### 5.2.3 B4\_5MHz



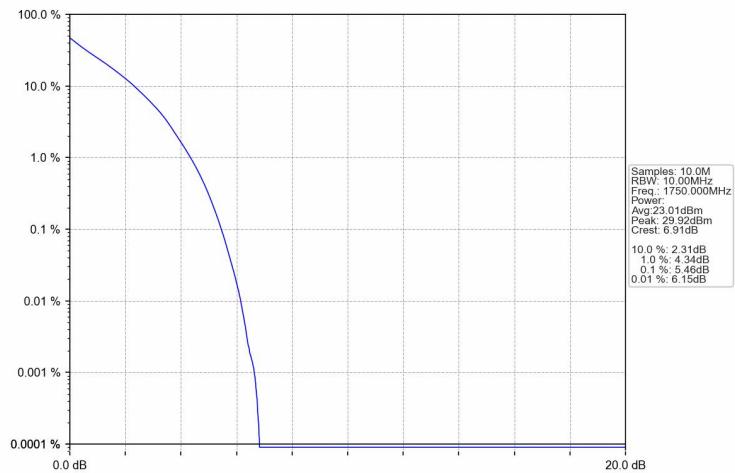
**Band4\_5MHz\_QPSK\_HCH\_1752.5MHz\_RB\_25\_0\_NTNV****Band4\_5MHz\_16QAM\_LCH\_1712.5MHz\_RB\_25\_0\_NTNV**

**Band4\_5MHz\_16QAM\_MCH\_1732.5MHz\_RB\_25\_0\_NTNV****Band4\_5MHz\_16QAM\_HCH\_1752.5MHz\_RB\_25\_0\_NTNV**

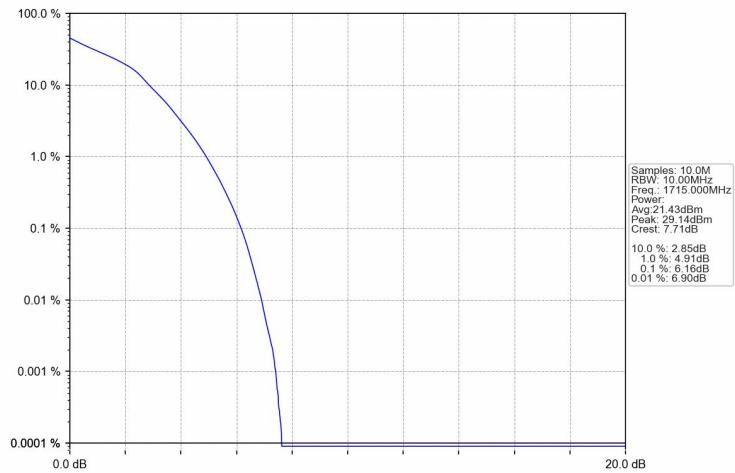
### 5.2.4 B4\_10MHz



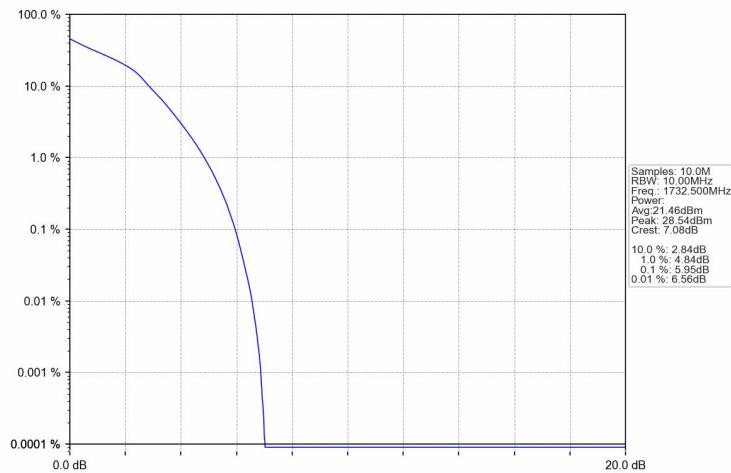
## Band4\_10MHz\_QPSK\_HCH\_1750MHz\_RB\_50\_0\_NTNV



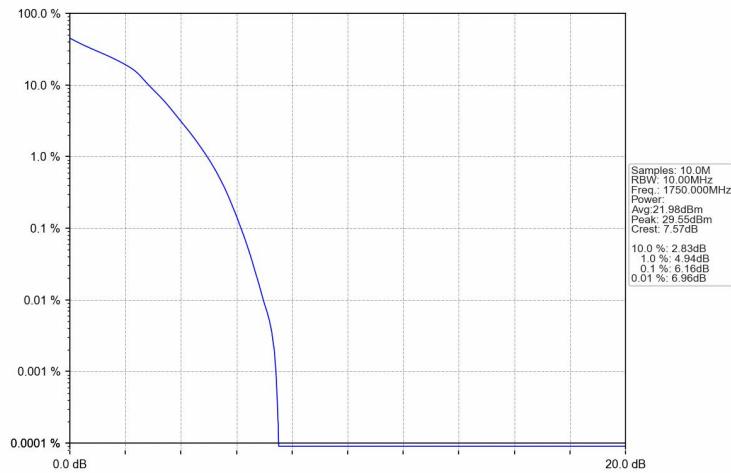
## Band4\_10MHz\_16QAM\_LCH\_1715MHz\_RB\_50\_0\_NTNV



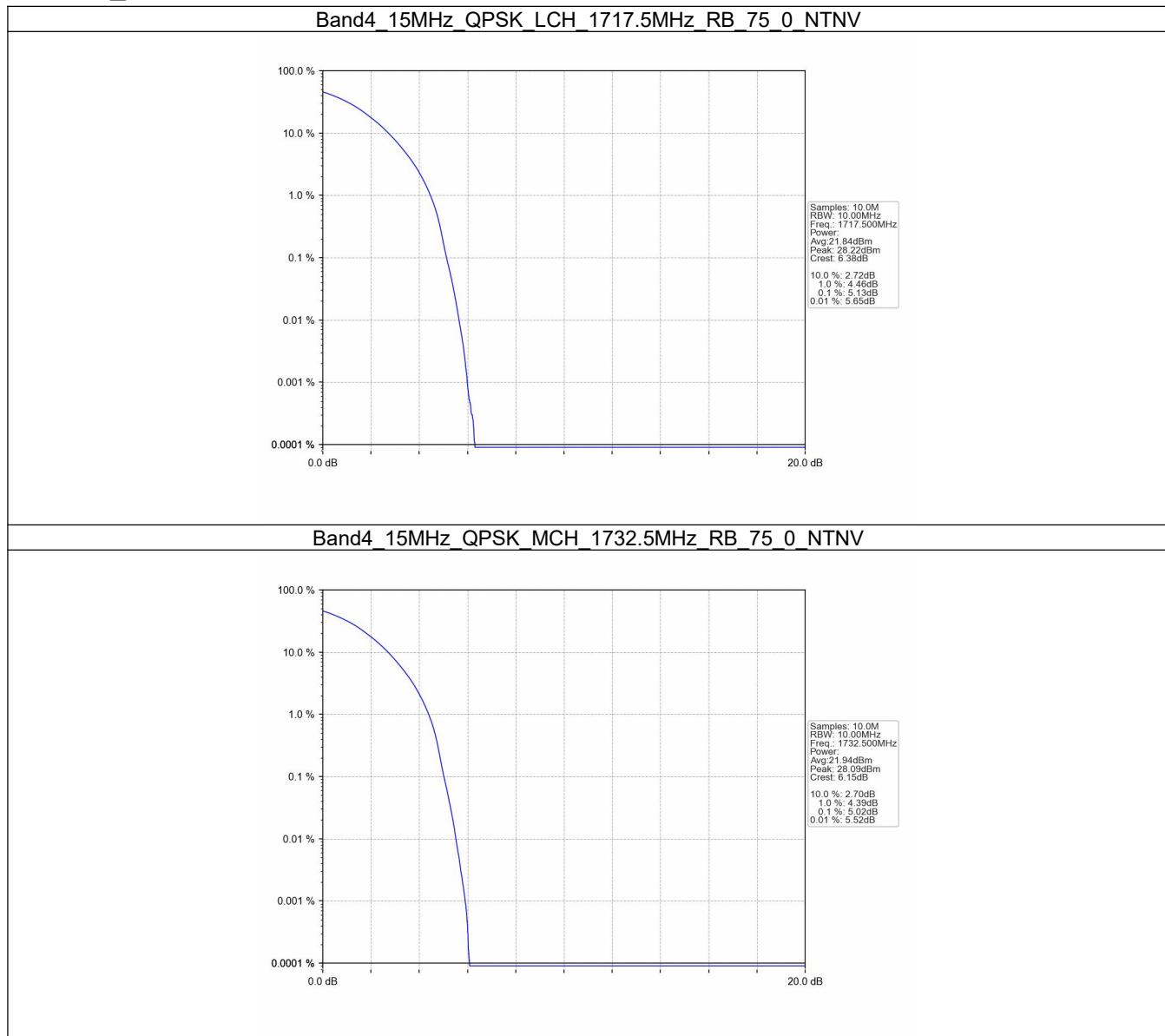
## Band4\_10MHz\_16QAM\_MCH\_1732.5MHz\_RB\_50\_0\_NTNV



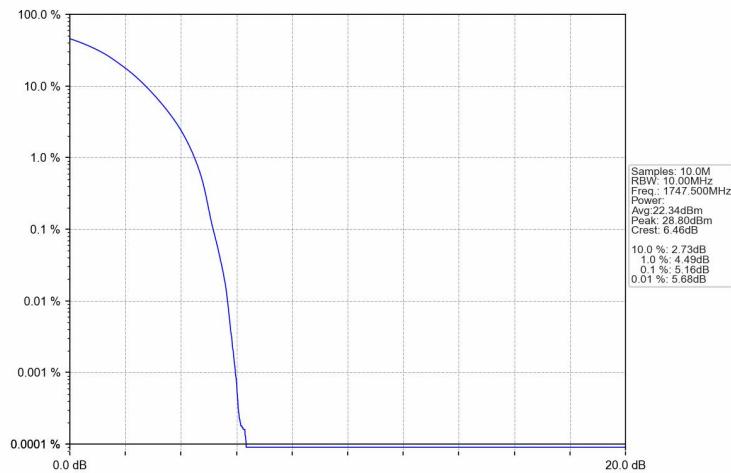
## Band4\_10MHz\_16QAM\_HCH\_1750MHz\_RB\_50\_0\_NTNV



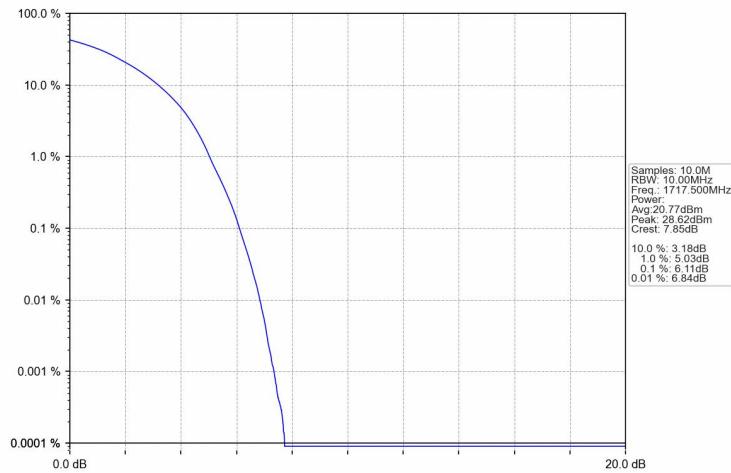
### 5.2.5 B4\_15MHz



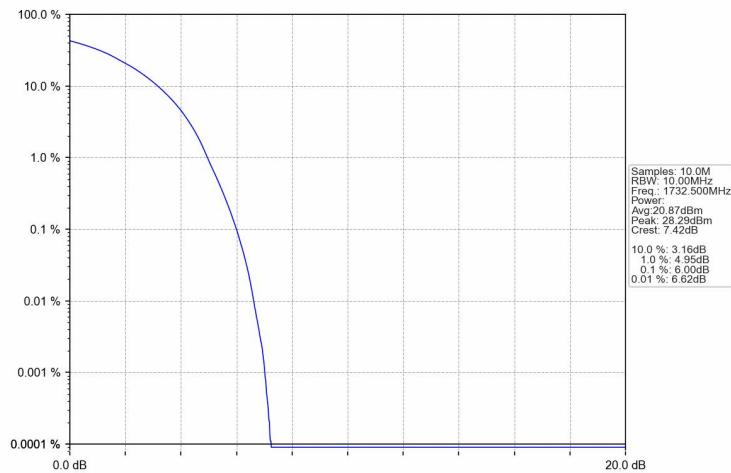
## Band4\_15MHz\_QPSK\_HCH\_1747.5MHz\_RB\_75\_0\_NTNV



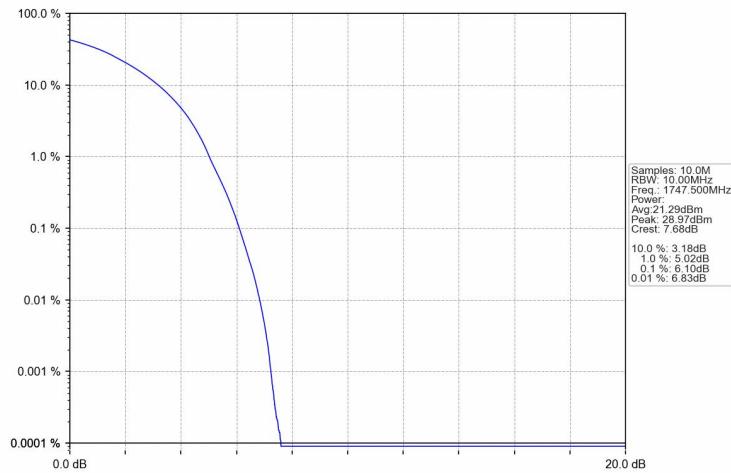
## Band4\_15MHz\_16QAM\_LCH\_1717.5MHz\_RB\_75\_0\_NTNV



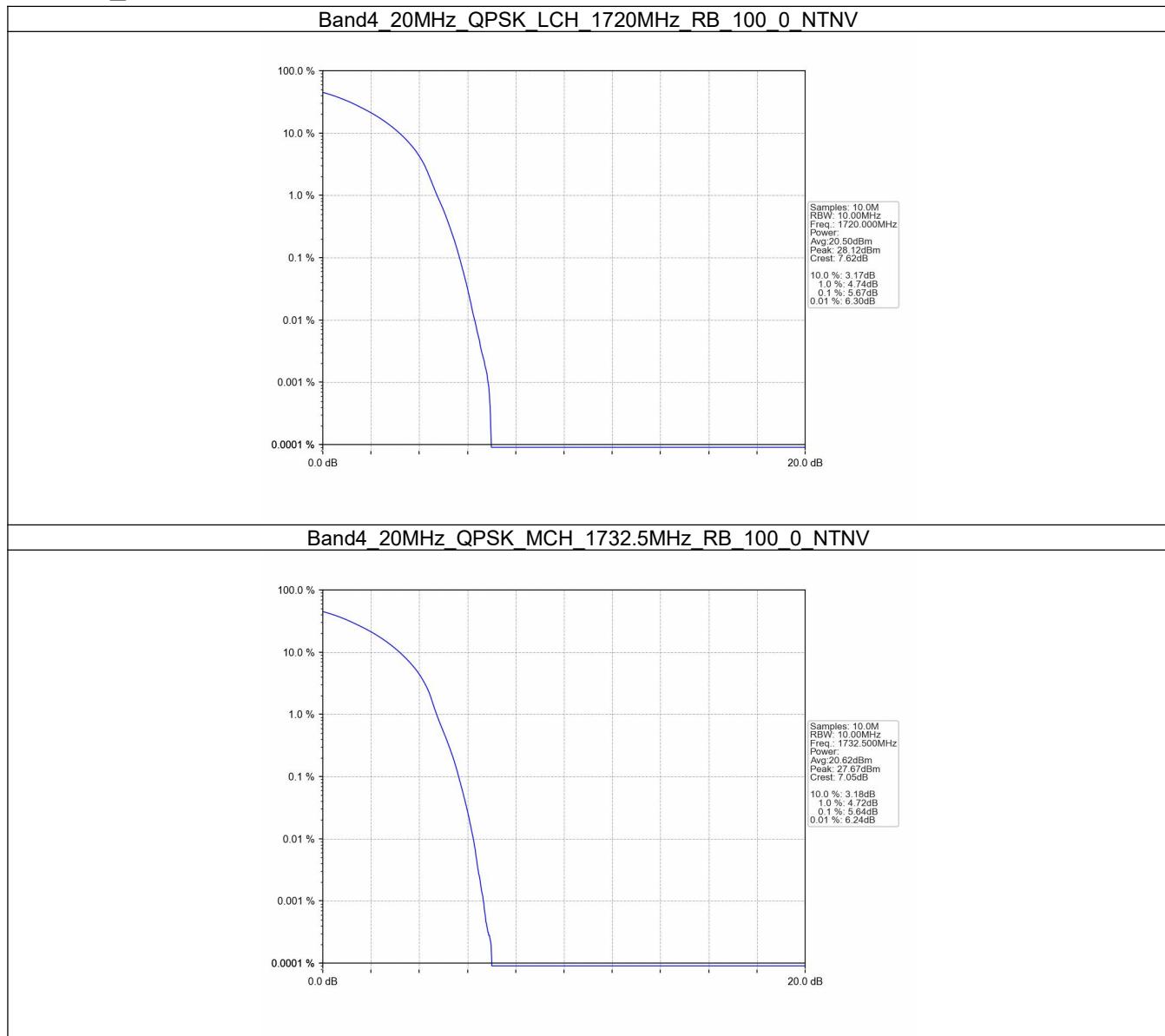
## Band4\_15MHz\_16QAM\_MCH\_1732.5MHz\_RB\_75\_0\_NTNV



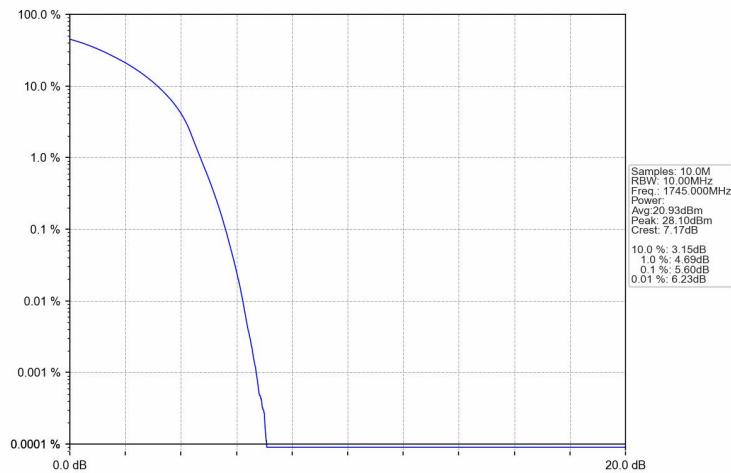
## Band4\_15MHz\_16QAM\_HCH\_1747.5MHz\_RB\_75\_0\_NTNV



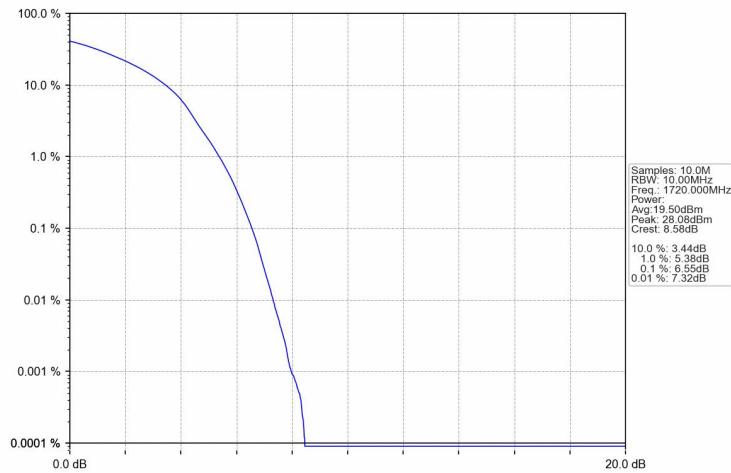
### 5.2.6 B4\_20MHz



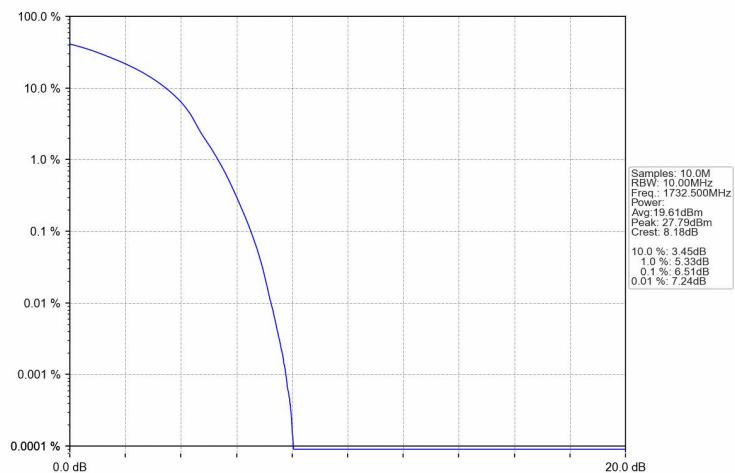
## Band4\_20MHz\_QPSK\_HCH\_1745MHz\_RB\_100\_0\_NTNV



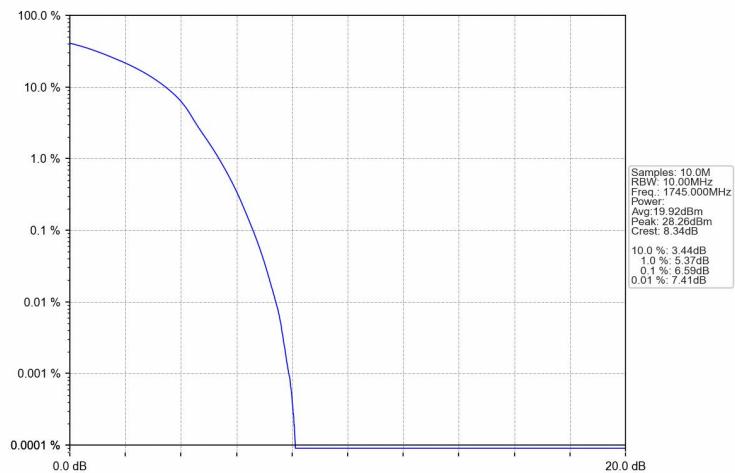
## Band4\_20MHz\_16QAM\_LCH\_1720MHz\_RB\_100\_0\_NTNV



## Band4\_20MHz\_16QAM\_MCH\_1732.5MHz\_RB\_100\_0\_NTNV



## Band4\_20MHz\_16QAM\_HCH\_1745MHz\_RB\_100\_0\_NTNV



## 6. Spurious Emission

### 6.1 Test Result

#### 6.1.1 B4\_1.4MHz

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
			0	Refer To Test Graph		Pass
	1754.3	1	5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass
16QAM	1710.7	6	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
			0	Refer To Test Graph		Pass
	1754.3	1	5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass

#### 6.1.2 B4\_3MHz

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
			0	Refer To Test Graph		Pass
	1753.5	1	14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass
16QAM	1711.5	15	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
			0	Refer To Test Graph		Pass
	1753.5	1	14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

#### 6.1.3 B4\_5MHz

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
			0	Refer To Test Graph		Pass
	1752.5	1	24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass
16QAM	1712.5	25	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass
	1732.5	1	0	Refer To Test Graph		Pass
			0	Refer To Test Graph		Pass
	1752.5	1	24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

### 6.1.4 B4\_10MHz

Modulation	Frequency (MHz)	Band: 4 / Bandwidth: 10MHz / NTV				Verdict
		RB Allocation	Size	Offset	Spurious Emission	
QPSK	1715	1	0	0	Refer To Test Graph	Pass
		50	0	0	Refer To Test Graph	Pass
	1732.5	1	0	0	Refer To Test Graph	Pass
		1	0	0	Refer To Test Graph	Pass
	1750	1	49	0	Refer To Test Graph	Pass
		50	0	0	Refer To Test Graph	Pass
	1715	1	0	0	Refer To Test Graph	Pass
		50	0	0	Refer To Test Graph	Pass
16QAM	1732.5	1	0	0	Refer To Test Graph	Pass
		1	0	0	Refer To Test Graph	Pass
	1750	1	49	0	Refer To Test Graph	Pass
		50	0	0	Refer To Test Graph	Pass

### 6.1.5 B4\_15MHz

Modulation	Frequency (MHz)	Band: 4 / Bandwidth: 15MHz / NTV				Verdict
		RB Allocation	Size	Offset	Spurious Emission	
QPSK	1717.5	1	0	0	Refer To Test Graph	Pass
		75	0	0	Refer To Test Graph	Pass
	1732.5	1	0	0	Refer To Test Graph	Pass
		1	0	0	Refer To Test Graph	Pass
	1747.5	1	74	0	Refer To Test Graph	Pass
		75	0	0	Refer To Test Graph	Pass
	1717.5	1	0	0	Refer To Test Graph	Pass
		75	0	0	Refer To Test Graph	Pass
16QAM	1732.5	1	0	0	Refer To Test Graph	Pass
		1	0	0	Refer To Test Graph	Pass
	1747.5	1	74	0	Refer To Test Graph	Pass
		75	0	0	Refer To Test Graph	Pass

### 6.1.6 B4\_20MHz

Modulation	Frequency (MHz)	Band: 4 / Bandwidth: 20MHz / NTV				Verdict
		RB Allocation	Size	Offset	Spurious Emission	
QPSK	1720	1	0	0	Refer To Test Graph	Pass
		100	0	0	Refer To Test Graph	Pass
	1732.5	1	0	0	Refer To Test Graph	Pass
		1	99	0	Refer To Test Graph	Pass
	1745	100	0	0	Refer To Test Graph	Pass
		1	0	0	Refer To Test Graph	Pass
	1720	100	0	0	Refer To Test Graph	Pass
		1	0	0	Refer To Test Graph	Pass
16QAM	1732.5	1	0	0	Refer To Test Graph	Pass
		1	0	0	Refer To Test Graph	Pass
	1745	100	0	0	Refer To Test Graph	Pass
		1	99	0	Refer To Test Graph	Pass
	1720	100	0	0	Refer To Test Graph	Pass

## 6.2 Test Graph

### 6.2.1 B4\_1.4MHz

