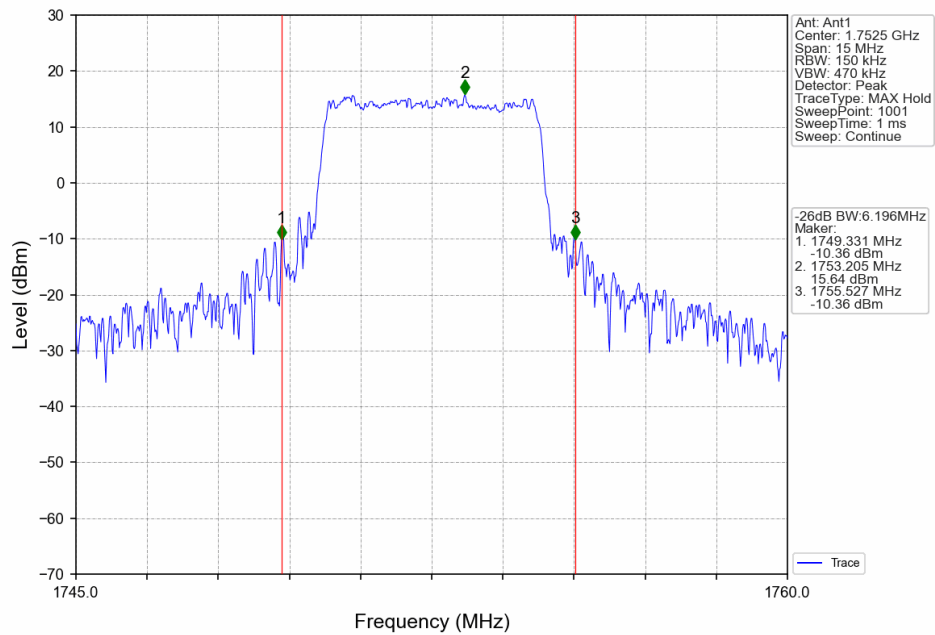
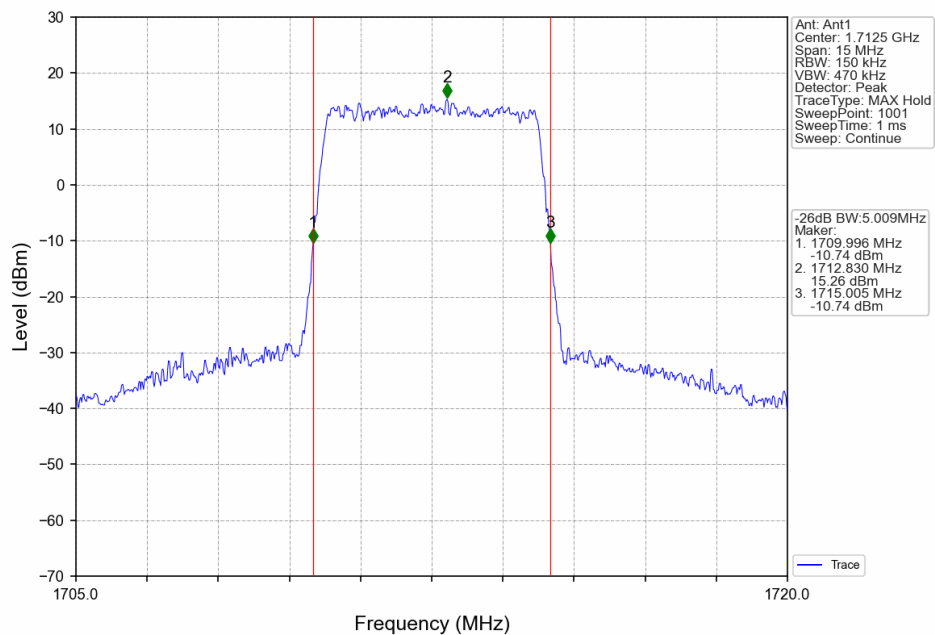


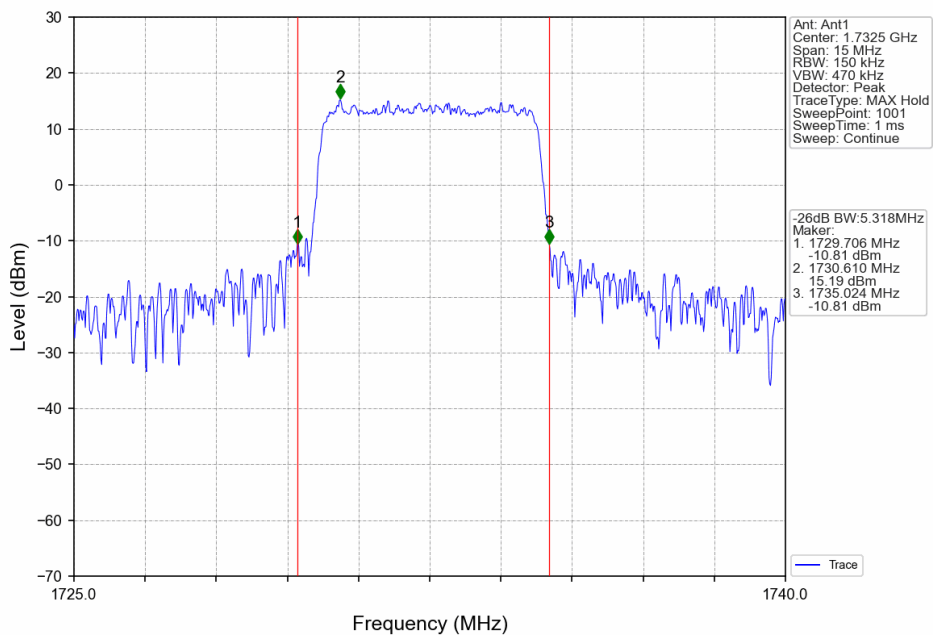
Band4\_5MHz\_QPSK\_HCH\_1752.5MHz\_RB\_25\_0\_NTNV



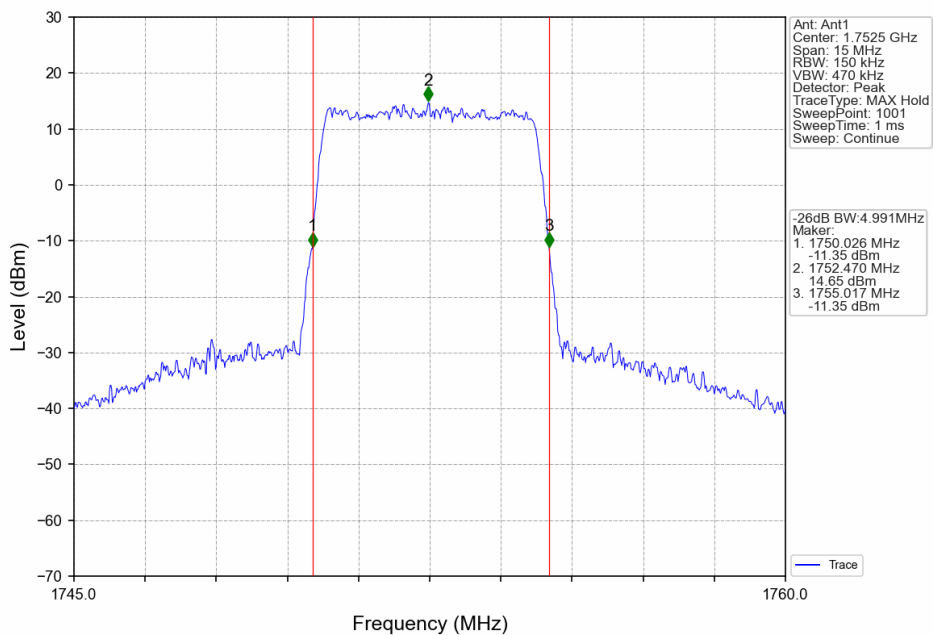
Band4\_5MHz\_16QAM\_LCH\_1712.5MHz\_RB\_25\_0\_NTNV



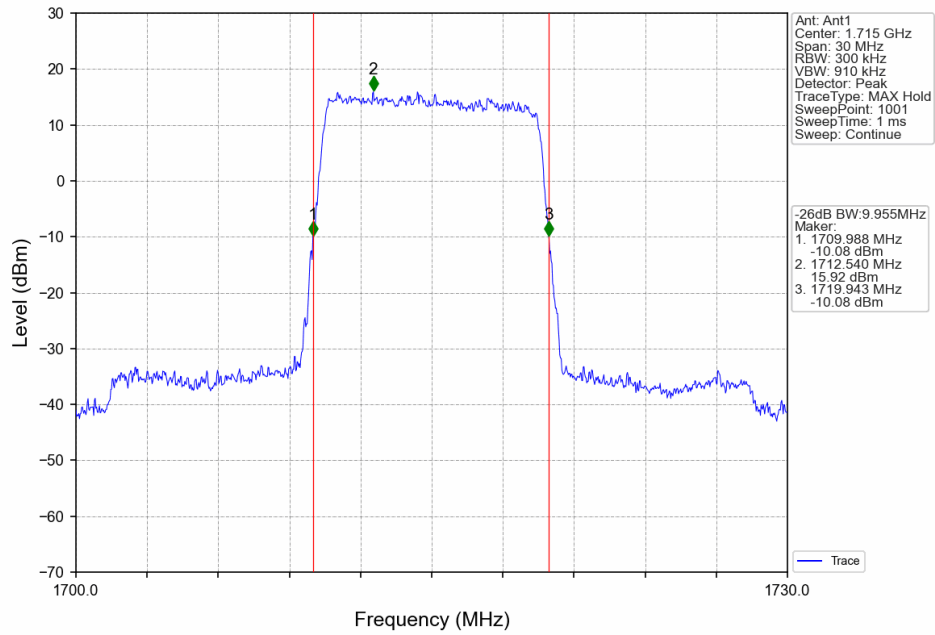
Band4\_5MHz\_16QAM\_MCH\_1732.5MHz\_RB\_25\_0\_NTNV



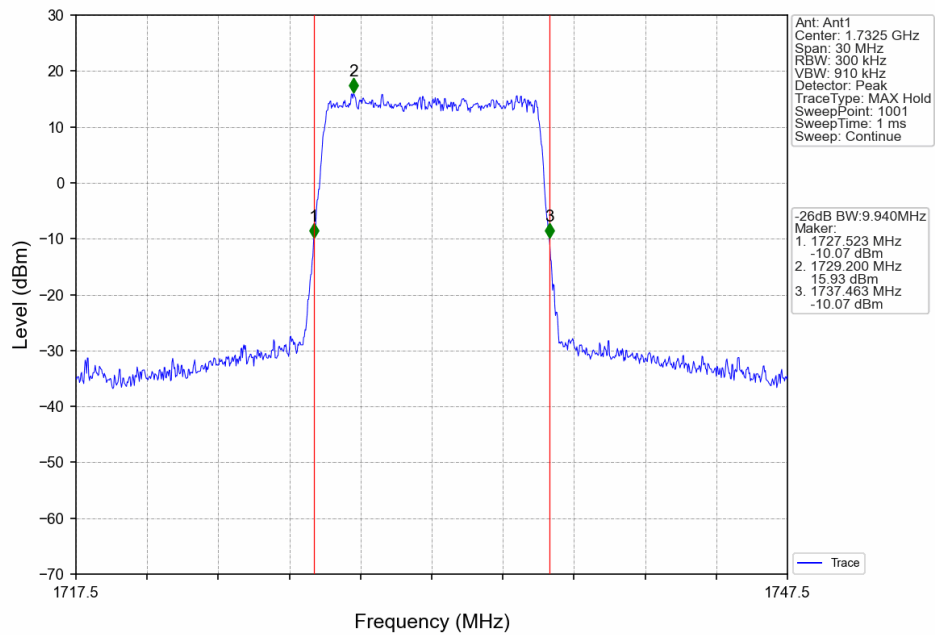
Band4\_5MHz\_16QAM\_HCH\_1752.5MHz\_RB\_25\_0\_NTNV



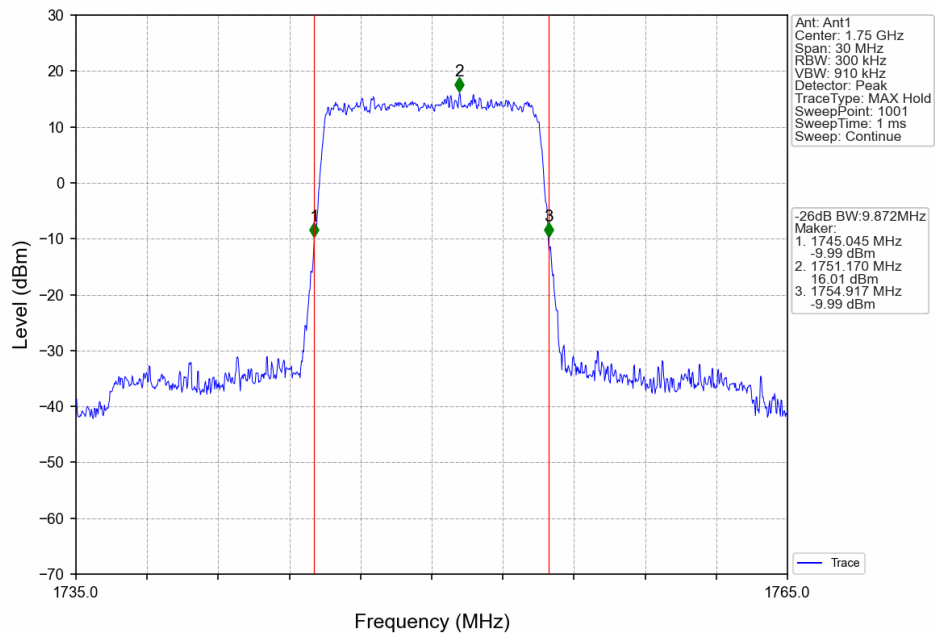
Band4\_10MHz\_QPSK\_LCH\_1715MHz\_RB\_50\_0\_NTNV



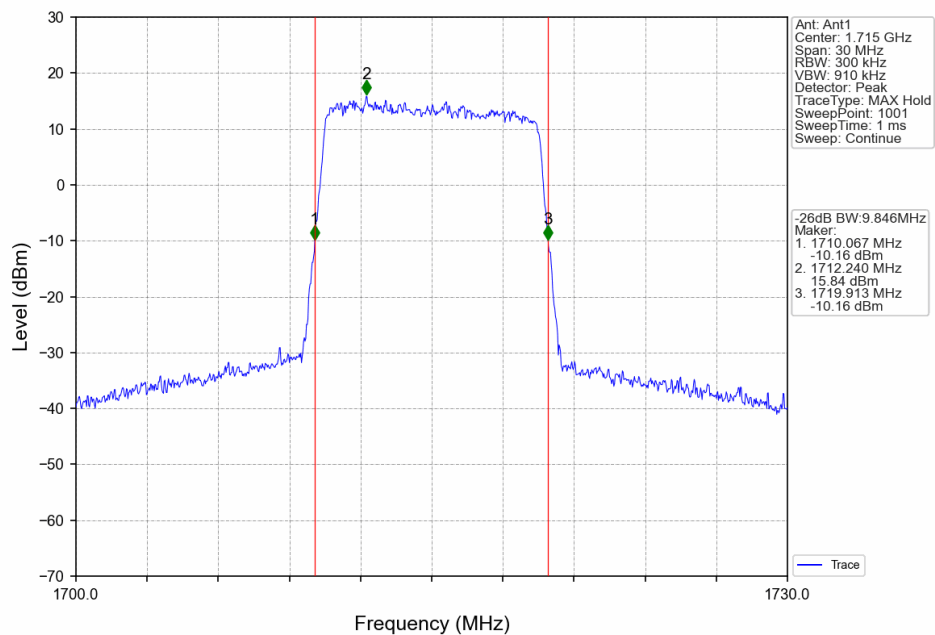
Band4\_10MHz\_QPSK\_MCH\_1732.5MHz\_RB\_50\_0\_NTNV



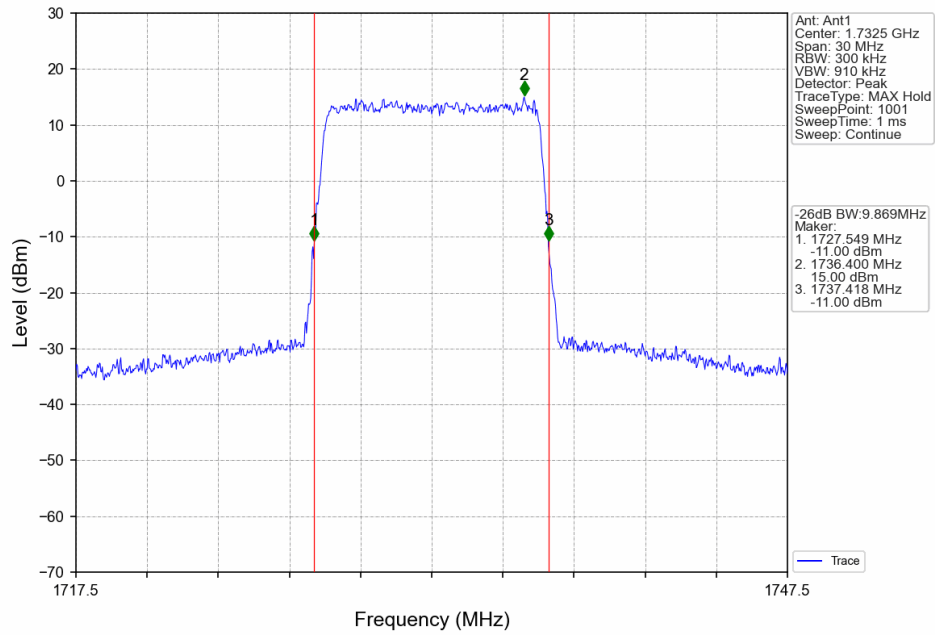
Band4\_10MHz\_QPSK\_HCH\_1750MHz\_RB\_50\_0\_NTNV



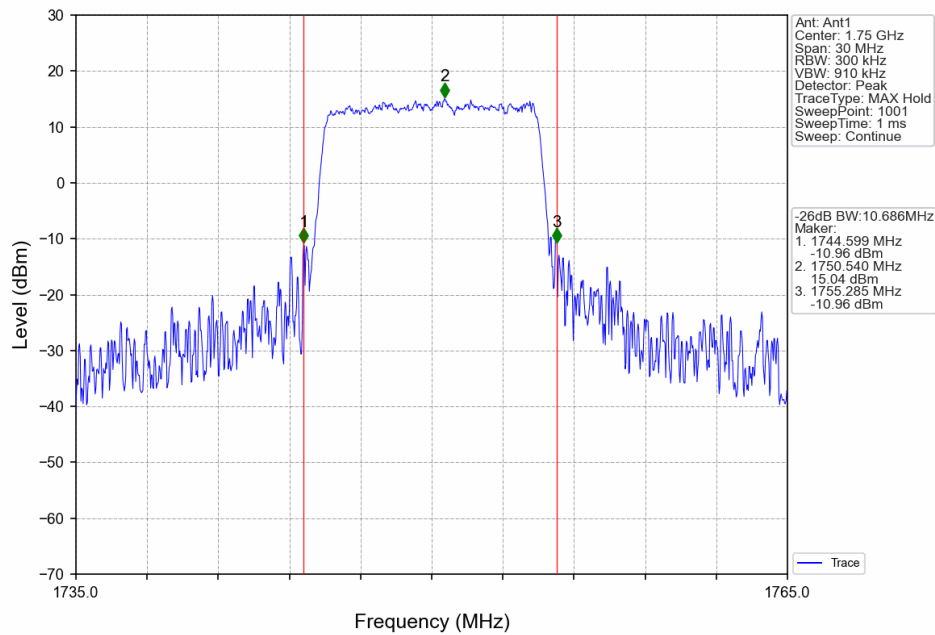
Band4\_10MHz\_16QAM\_LCH\_1715MHz\_RB\_50\_0\_NTNV



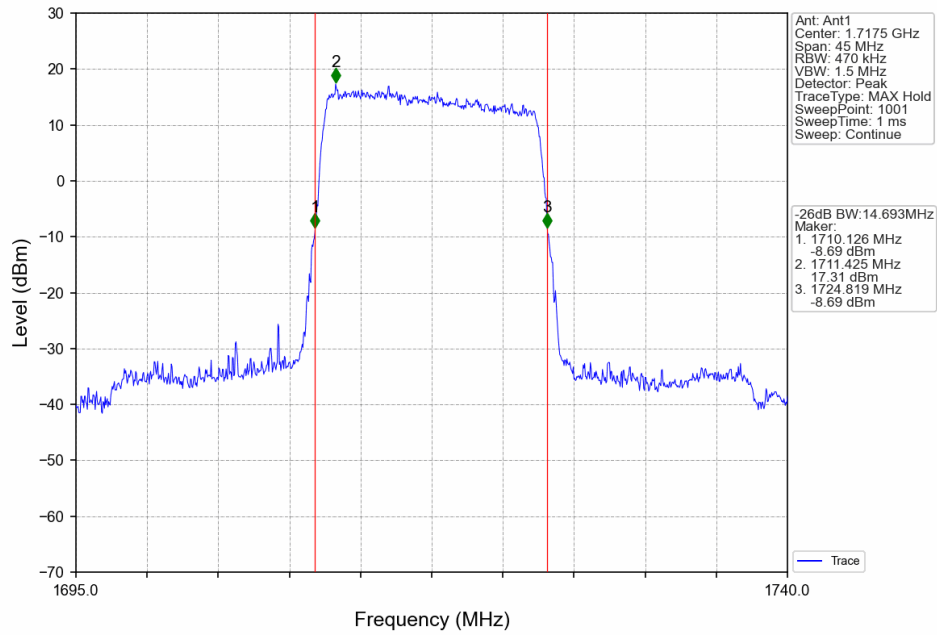
Band4\_10MHz\_16QAM\_MCH\_1732.5MHz\_RB\_50\_0\_NTNV



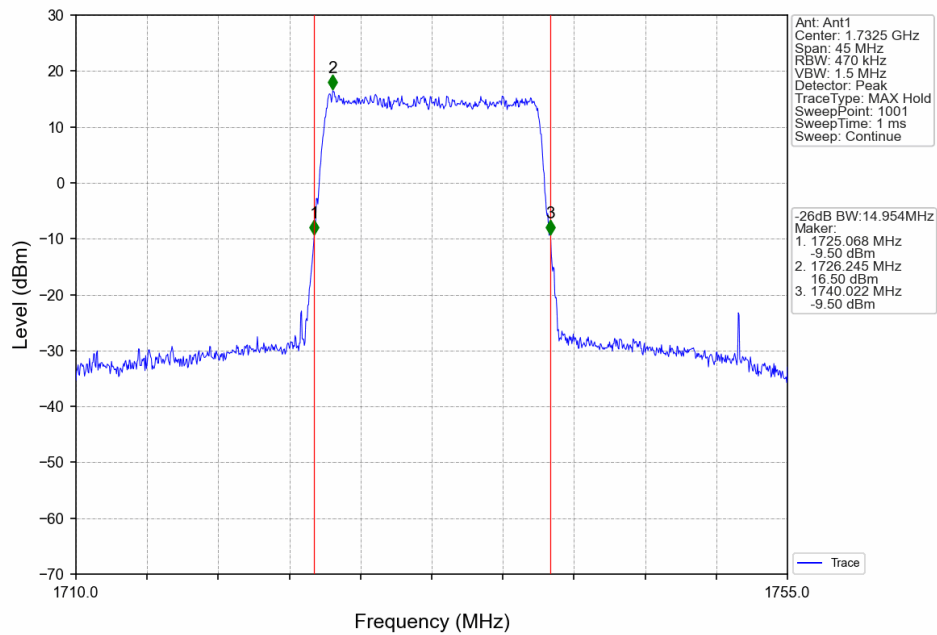
Band4\_10MHz\_16QAM\_HCH\_1750MHz\_RB\_50\_0\_NTNV



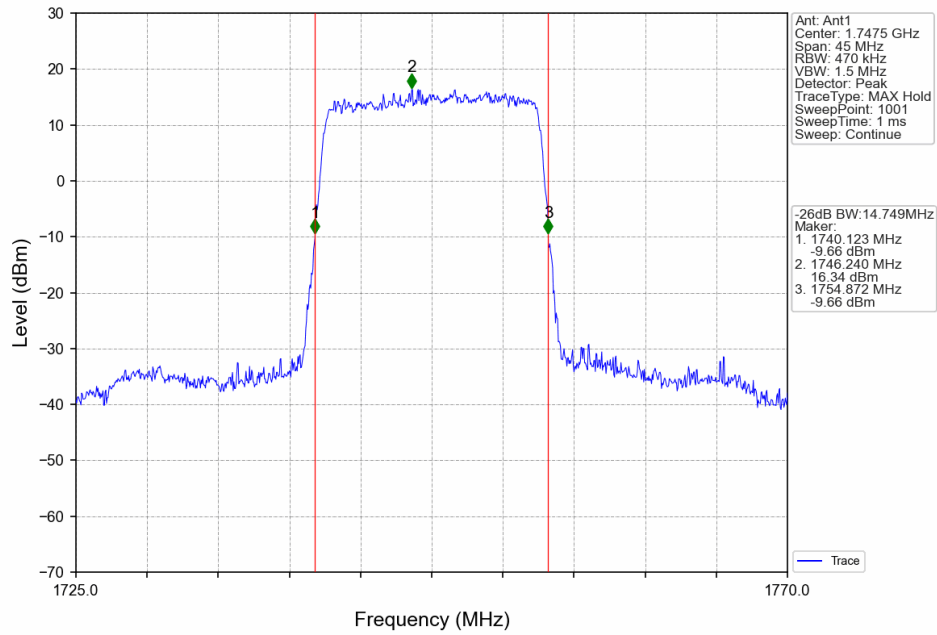
Band4\_15MHz\_QPSK\_LCH\_1717.5MHz\_RB\_75\_0\_NTNV



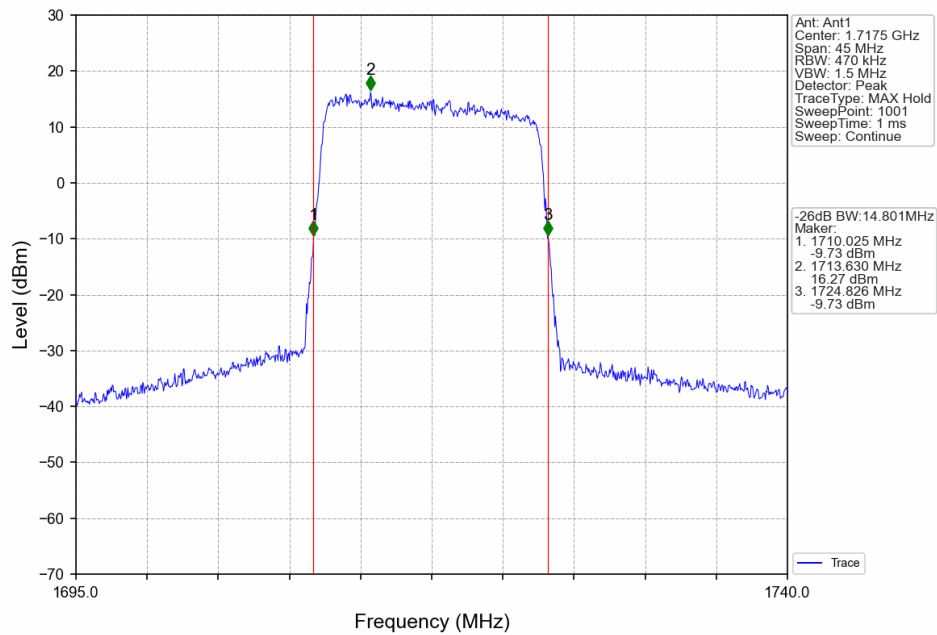
Band4\_15MHz\_QPSK\_MCH\_1732.5MHz\_RB\_75\_0\_NTNV



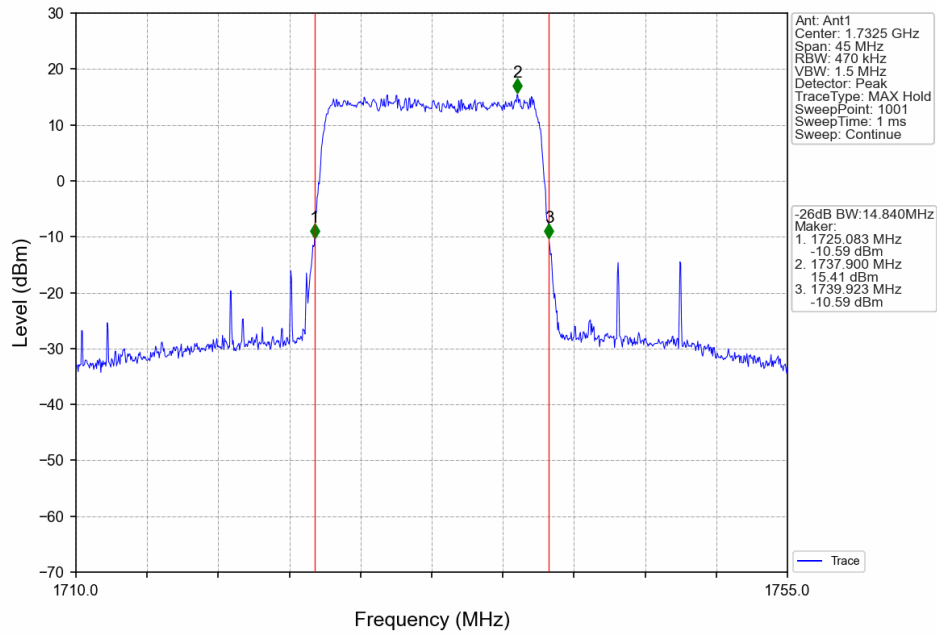
Band4\_15MHz\_QPSK\_HCH\_1747.5MHz\_RB\_75\_0\_NTNV



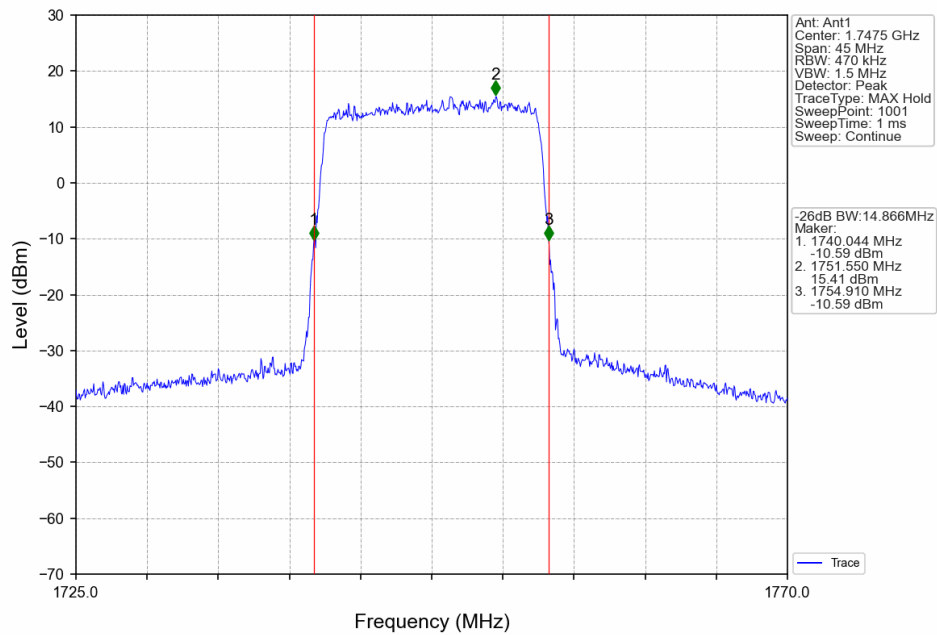
Band4\_15MHz\_16QAM\_LCH\_1717.5MHz\_RB\_75\_0\_NTNV



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

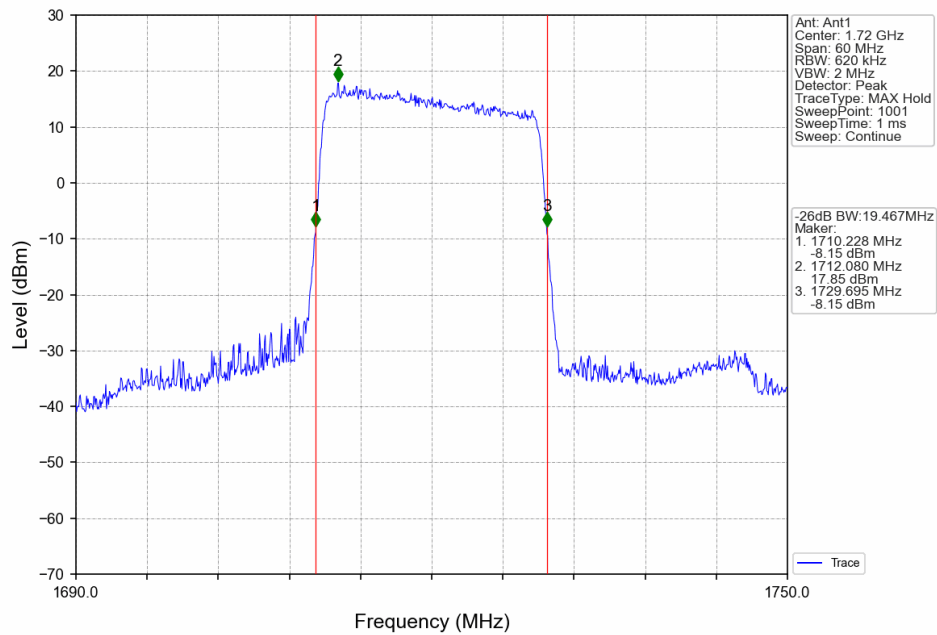


Band4\_15MHz\_16QAM\_HCH\_1747.5MHz\_RB\_75\_0\_NTNV

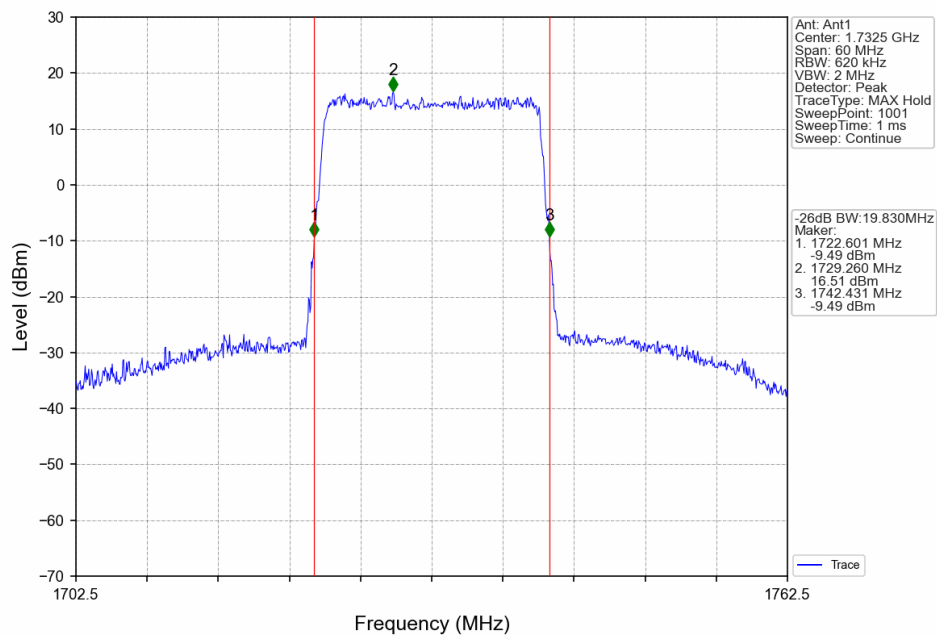




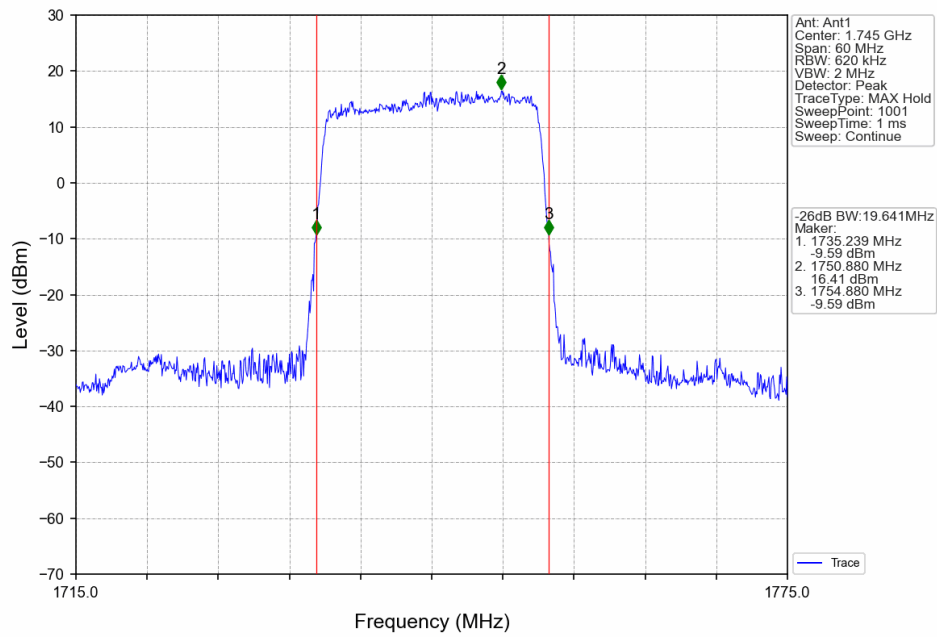
Band4\_20MHz\_QPSK\_LCH\_1720MHz\_RB\_100\_0\_NTNV



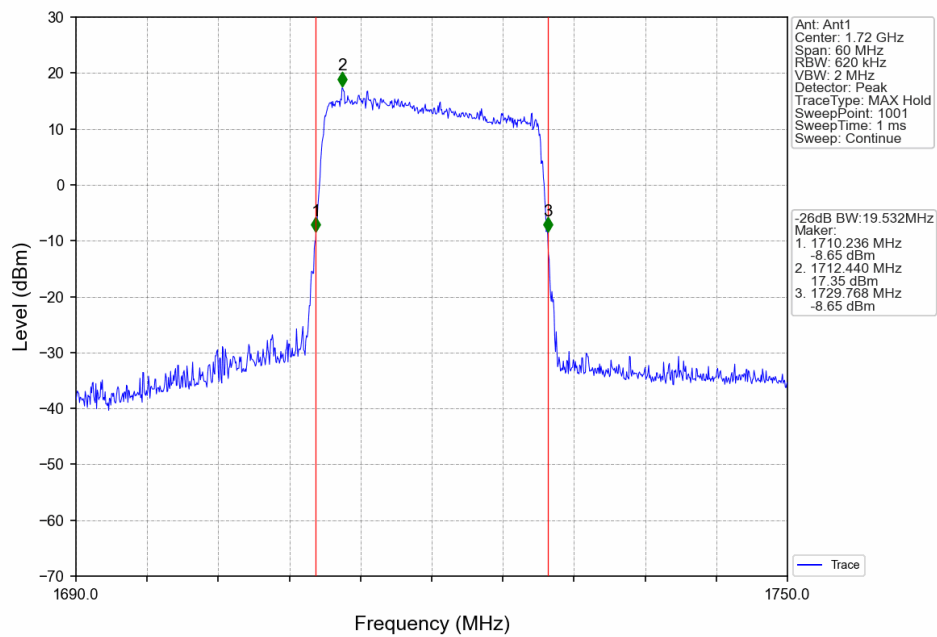
Band4\_20MHz\_QPSK\_MCH\_1732.5MHz\_RB\_100\_0\_NTNV



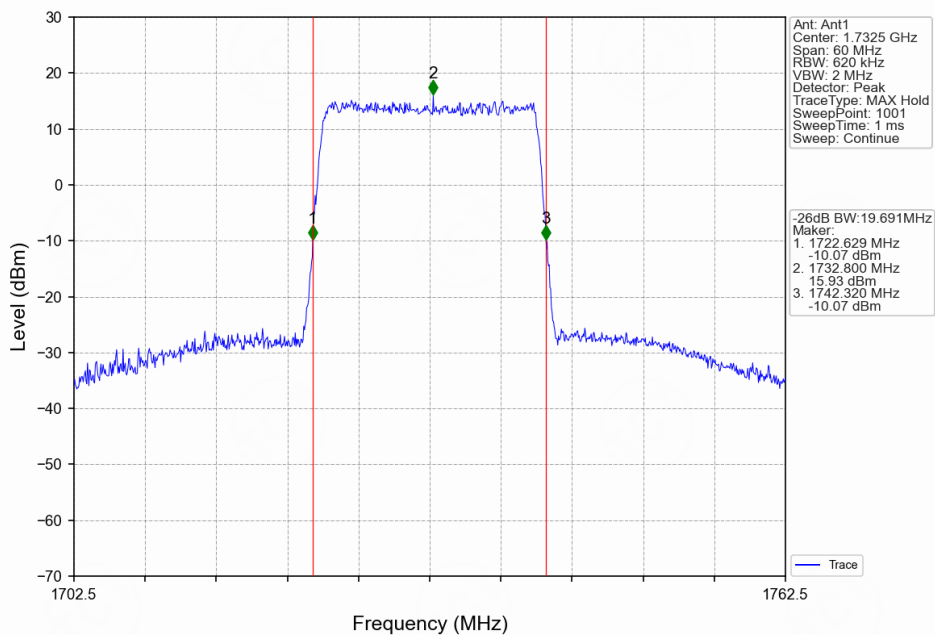
Band4\_20MHz\_QPSK\_HCH\_1745MHz\_RB\_100\_0\_NTNV



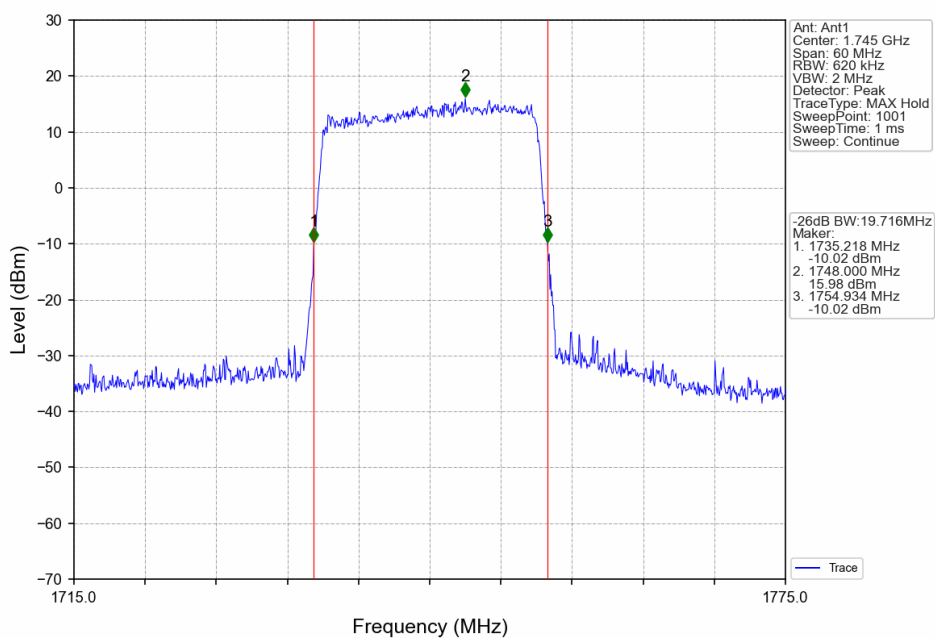
Band4\_20MHz\_16QAM\_LCH\_1720MHz\_RB\_100\_0\_NTNV



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



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



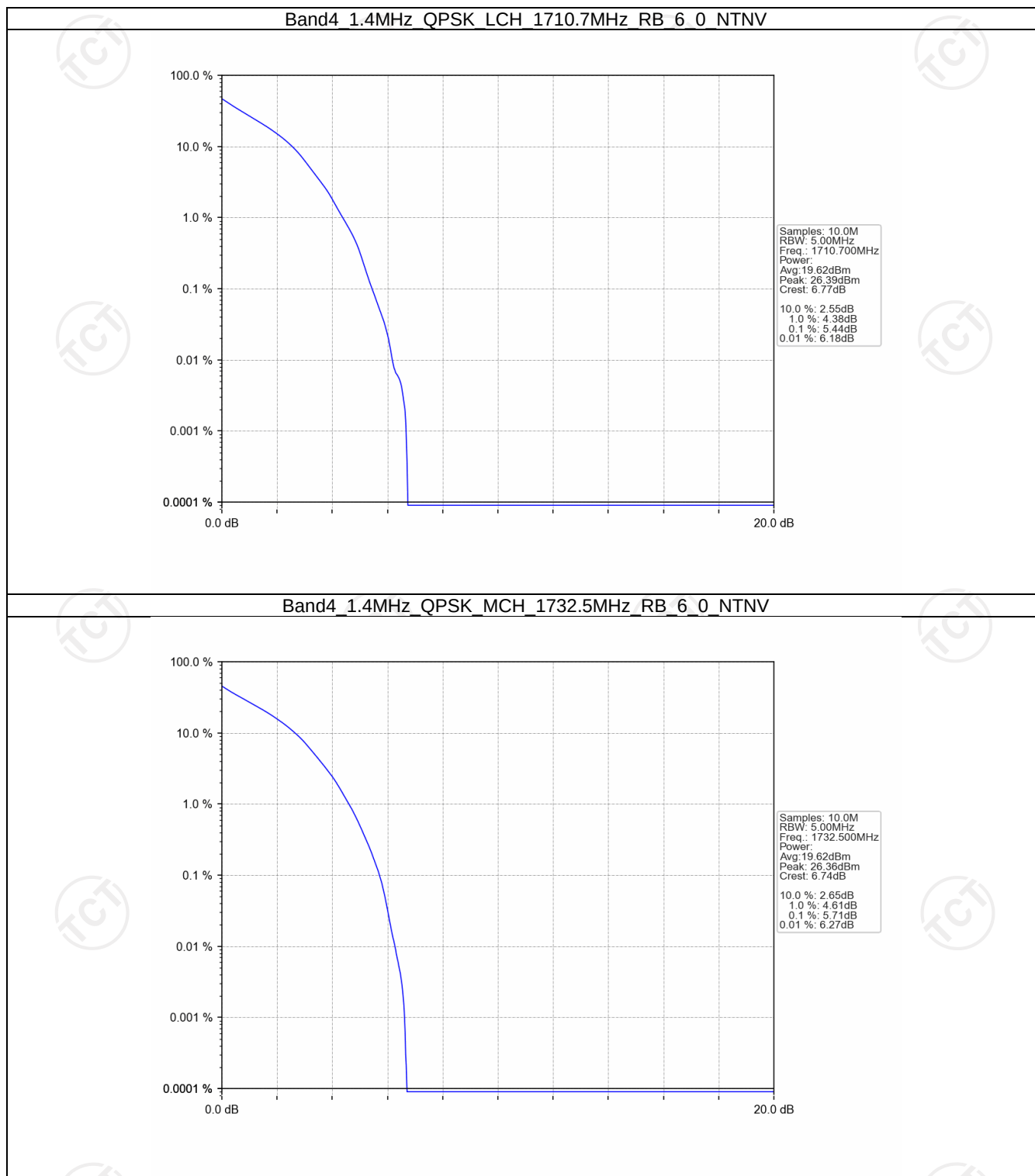
## 5. Peak-Average Ratio

### 5.1 B4\_1.4MHz

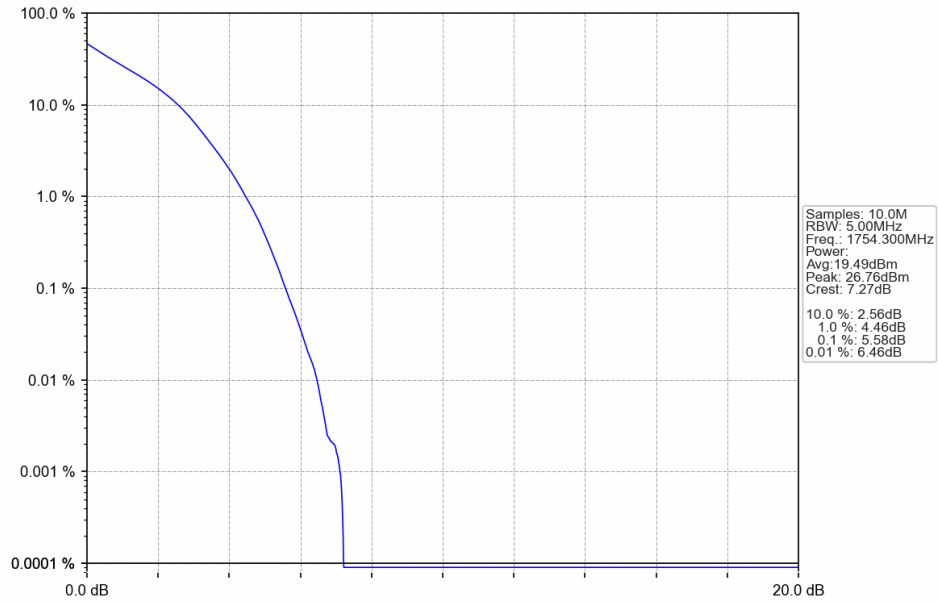
#### 5.1.1 Test Result

| Band: 4 / Bandwidth: 1.4MHz / NTV |                 |               |        |                         |       |         |
|-----------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                   |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                              | 1710.7          | 6             | 0      | 5.44                    | <=13  | Pass    |
|                                   | 1732.5          | 6             | 0      | 5.71                    | <=13  | Pass    |
|                                   | 1754.3          | 6             | 0      | 5.58                    | <=13  | Pass    |
| 16QAM                             | 1710.7          | 6             | 0      | 6.29                    | <=13  | Pass    |
|                                   | 1732.5          | 6             | 0      | 6.42                    | <=13  | Pass    |
|                                   | 1754.3          | 6             | 0      | 6.21                    | <=13  | Pass    |

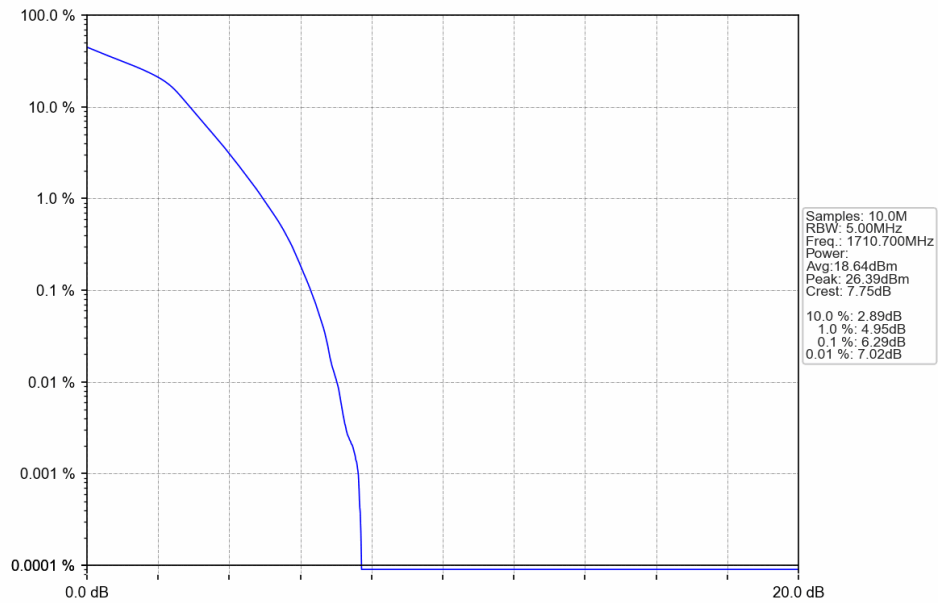
## 5.1.2 Test Graph



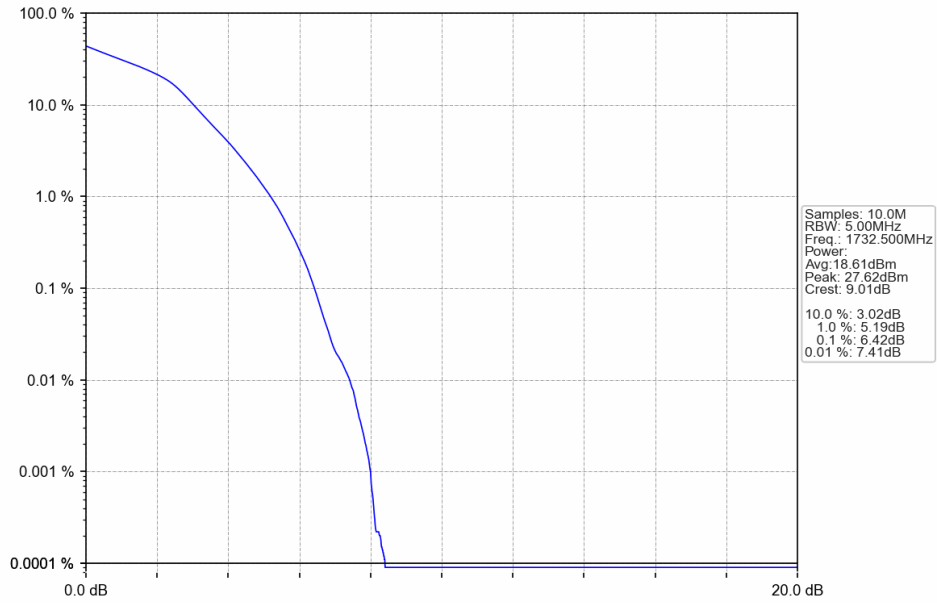
Band4 1.4MHz QPSK HCH 1754.3MHz RB 6 0 NTNV



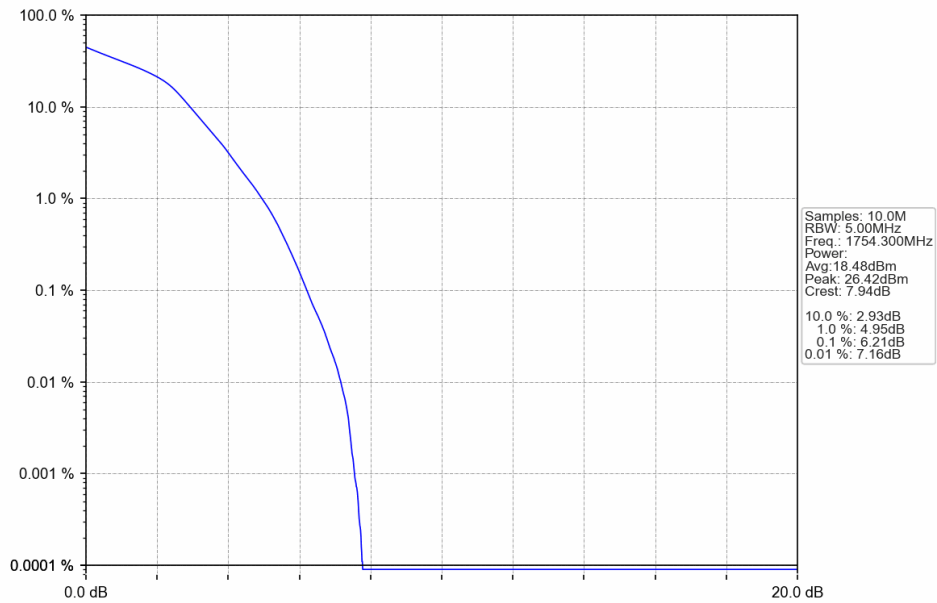
Band4 1.4MHz 16QAM LCH 1710.7MHz RB 6 0 NTNV



Band4\_1.4MHz\_16QAM\_MCH\_1732.5MHz\_RB\_6\_0\_NTNV



Band4\_1.4MHz\_16QAM\_HCH\_1754.3MHz\_RB\_6\_0\_NTNV



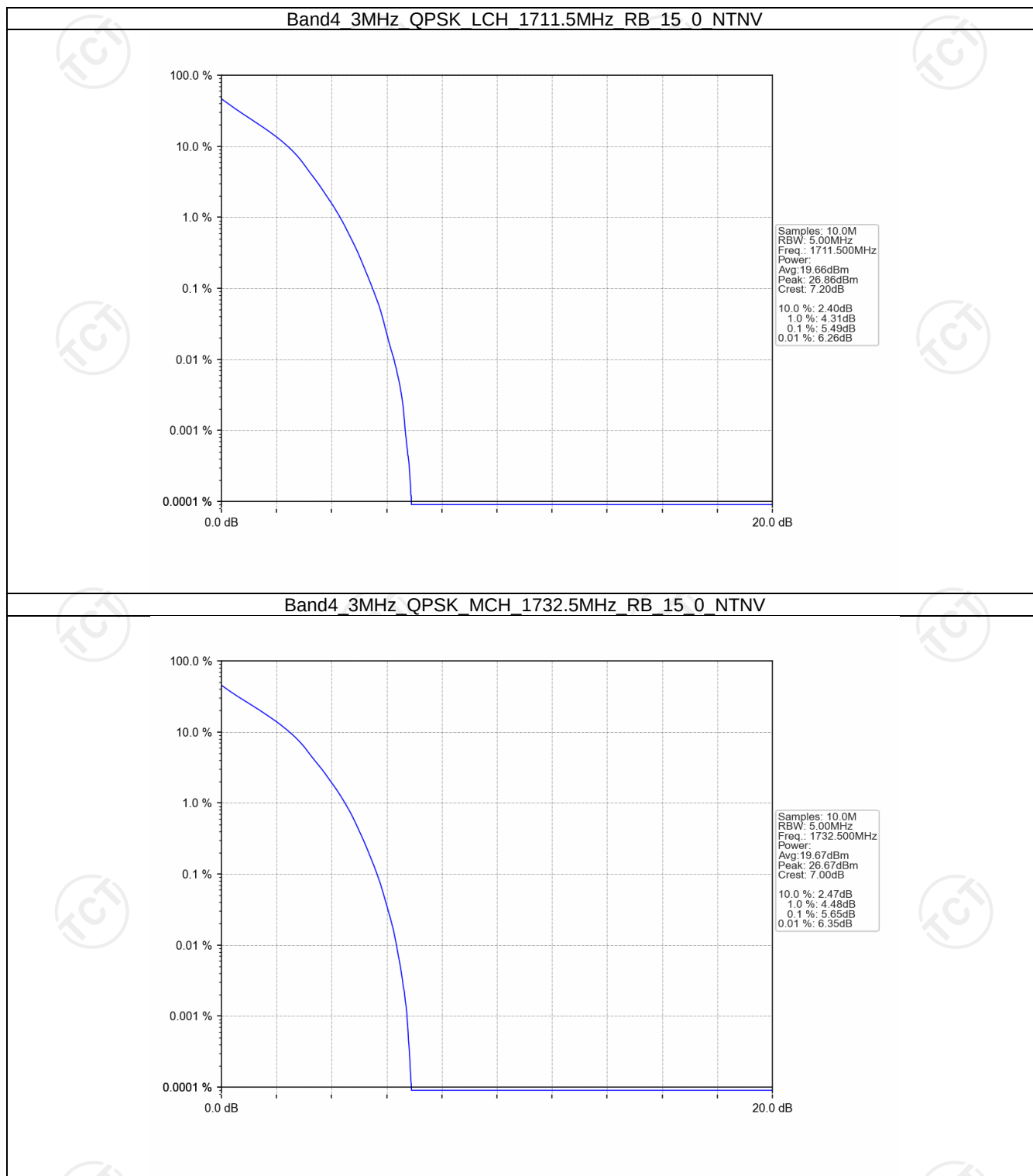
## 5.2 B4\_3MHz

### 5.2.1 Test Result

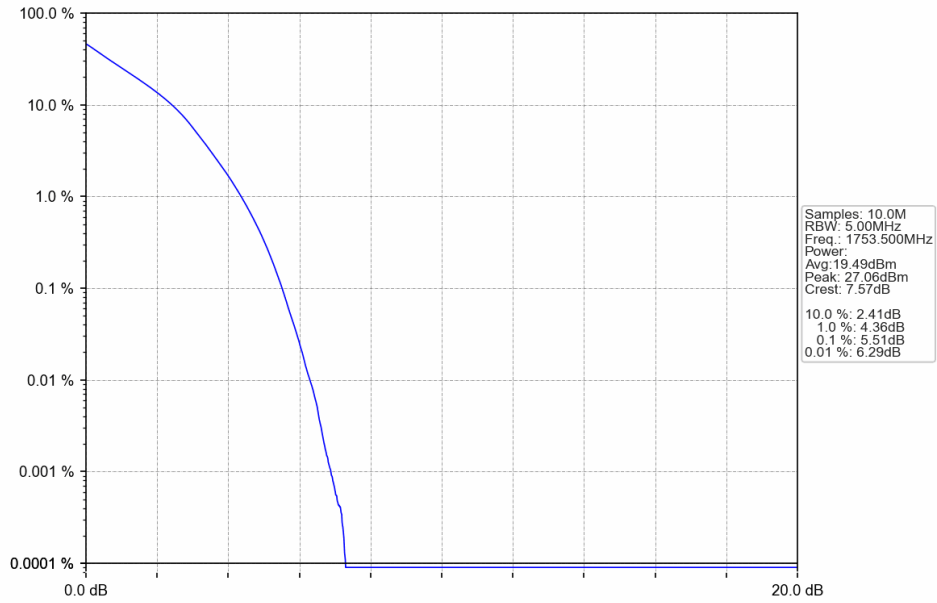
| Band: 4 / Bandwidth: 3MHz / NTNV |                 |               |        |                         |       |         |
|----------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                       | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                  |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                             | 1711.5          | 15            | 0      | 5.49                    | <=13  | Pass    |
|                                  | 1732.5          | 15            | 0      | 5.65                    | <=13  | Pass    |
|                                  | 1753.5          | 15            | 0      | 5.51                    | <=13  | Pass    |
| 16QAM                            | 1711.5          | 15            | 0      | 6.27                    | <=13  | Pass    |
|                                  | 1732.5          | 15            | 0      | 6.51                    | <=13  | Pass    |
|                                  | 1753.5          | 15            | 0      | 6.21                    | <=13  | Pass    |



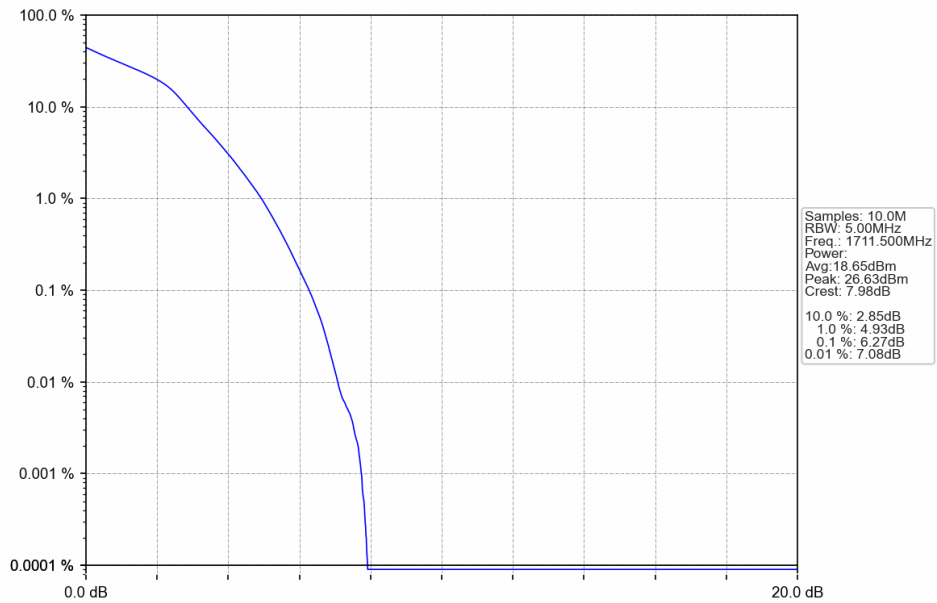
## 5.2.2 Test Graph



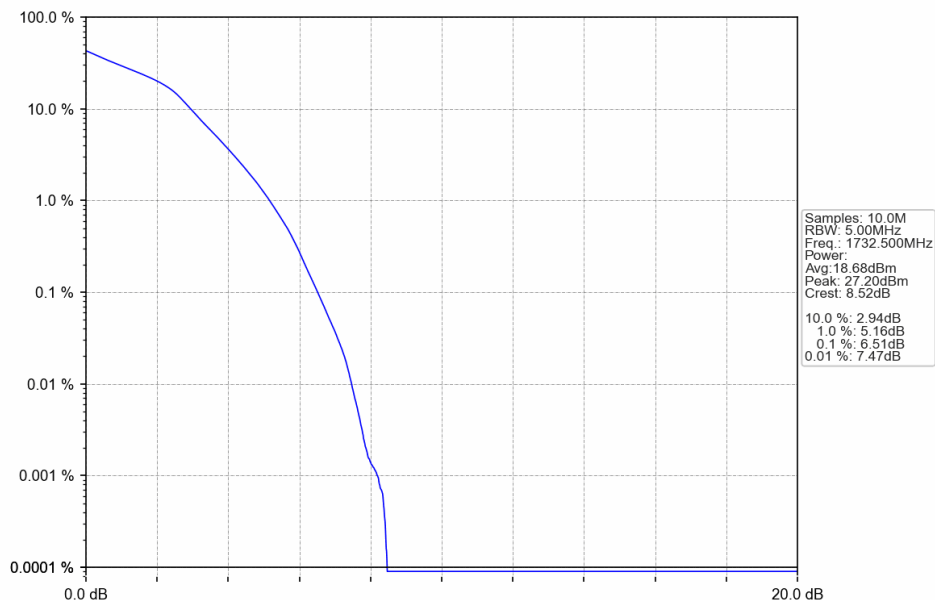
Band4\_3MHz\_QPSK\_HCH\_1753.5MHz\_RB\_15\_0\_NTNV



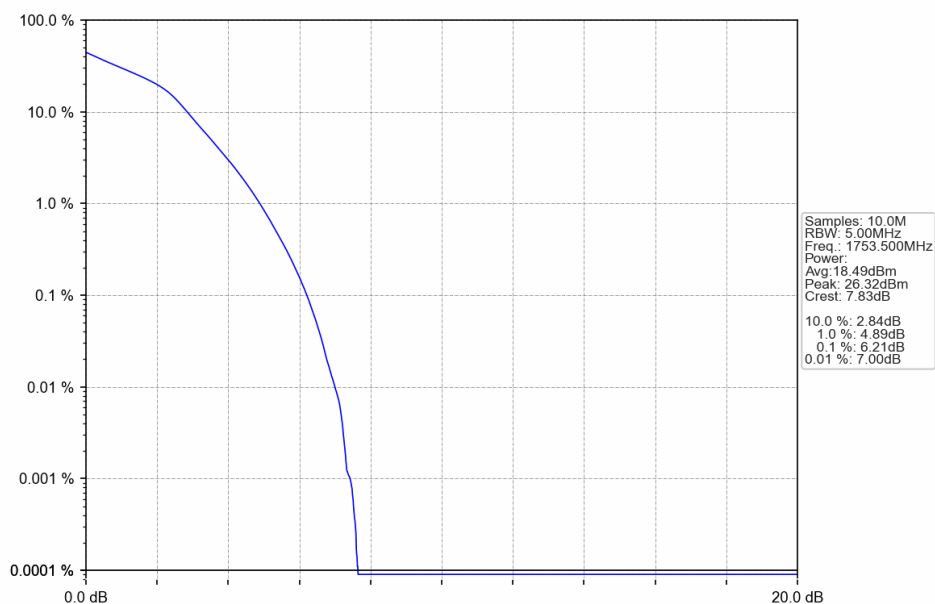
Band4\_3MHz\_16QAM\_LCH\_1711.5MHz\_RB\_15\_0\_NTNV



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



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

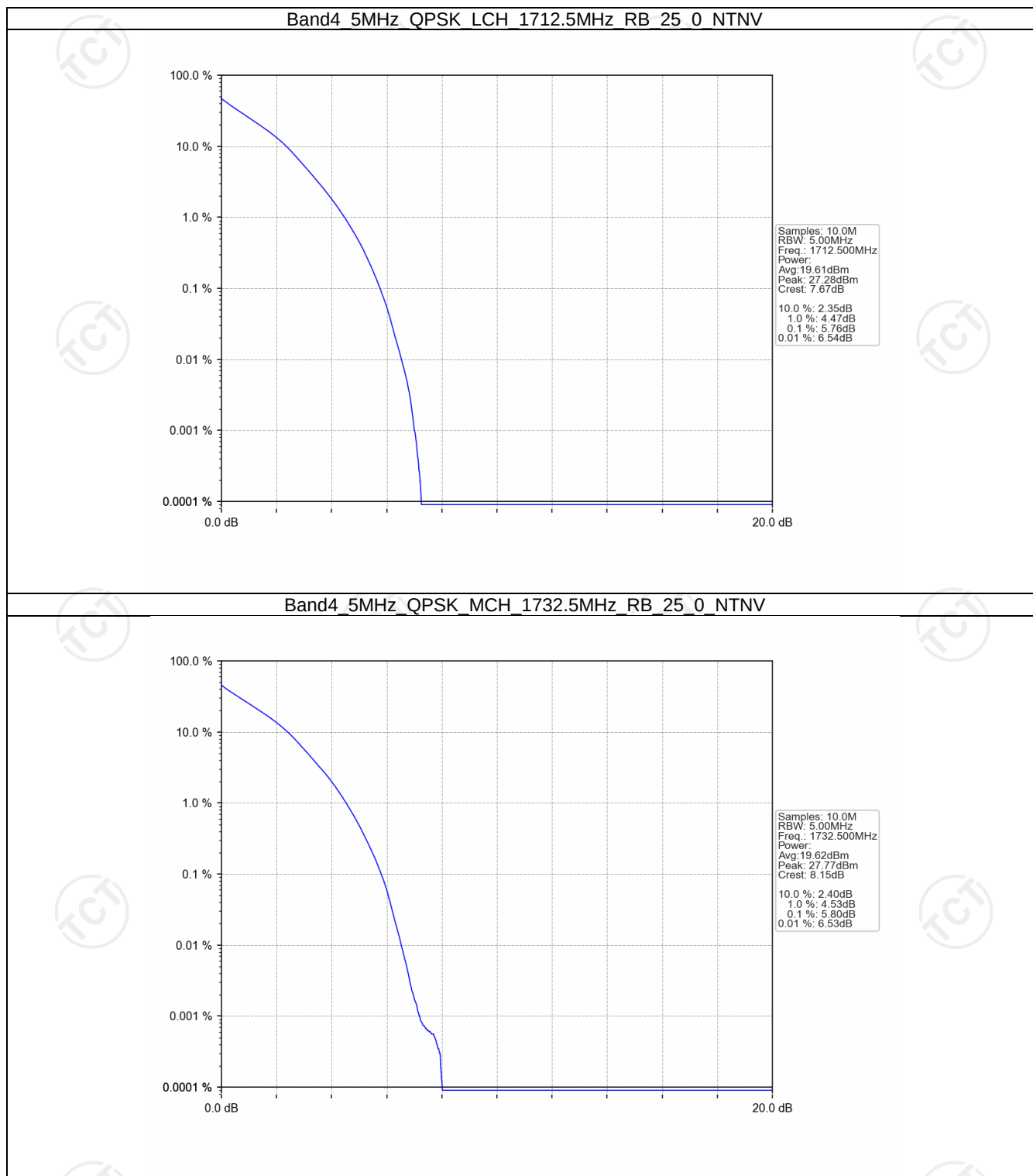


### 5.3 B4\_5MHz

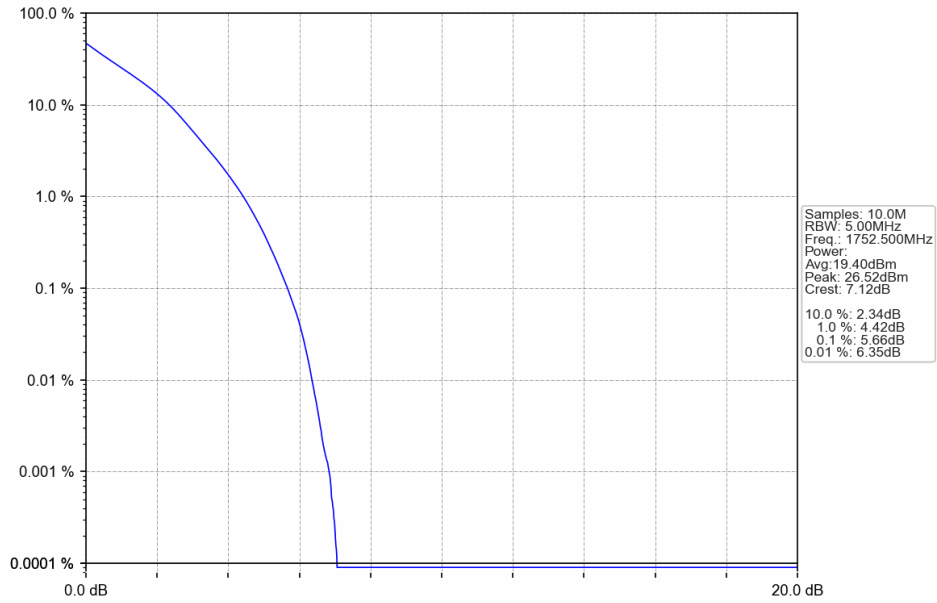
#### 5.3.1 Test Result

| Band: 4 / Bandwidth: 5MHz / NTNV |                 |               |        |                         |       |         |
|----------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                       | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                  |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                             | 1712.5          | 25            | 0      | 5.76                    | <=13  | Pass    |
|                                  | 1732.5          | 25            | 0      | 5.80                    | <=13  | Pass    |
|                                  | 1752.5          | 25            | 0      | 5.66                    | <=13  | Pass    |
| 16QAM                            | 1712.5          | 25            | 0      | 6.36                    | <=13  | Pass    |
|                                  | 1732.5          | 25            | 0      | 6.50                    | <=13  | Pass    |
|                                  | 1752.5          | 25            | 0      | 6.36                    | <=13  | Pass    |

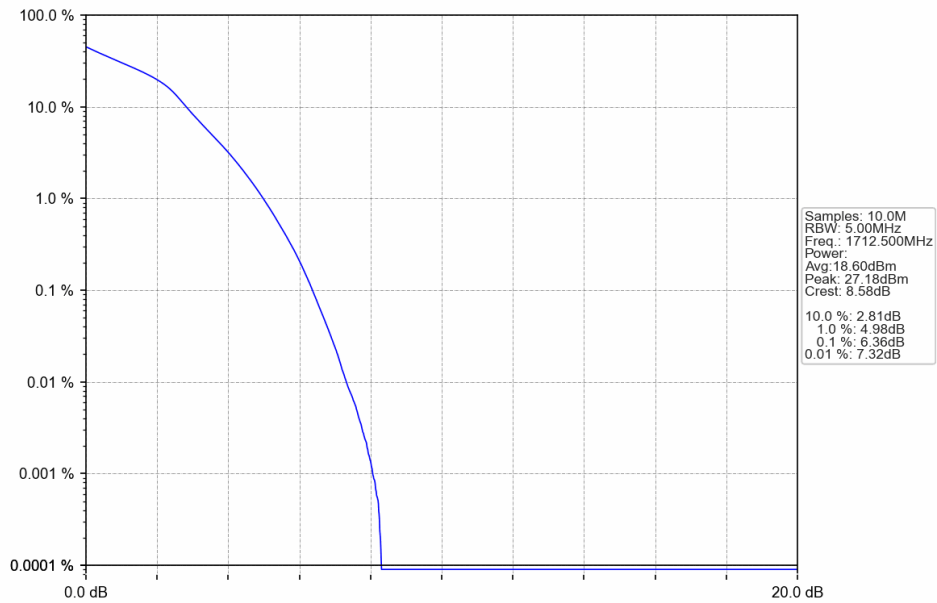
### 5.3.2 Test Graph



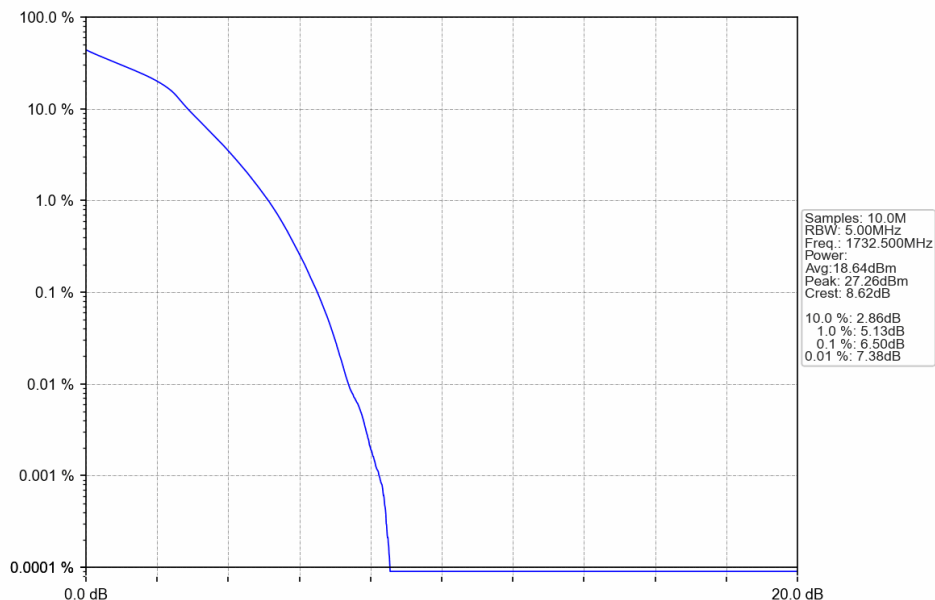
Band4\_5MHz\_QPSK\_HCH\_1752.5MHz\_RB\_25\_0\_NTNV



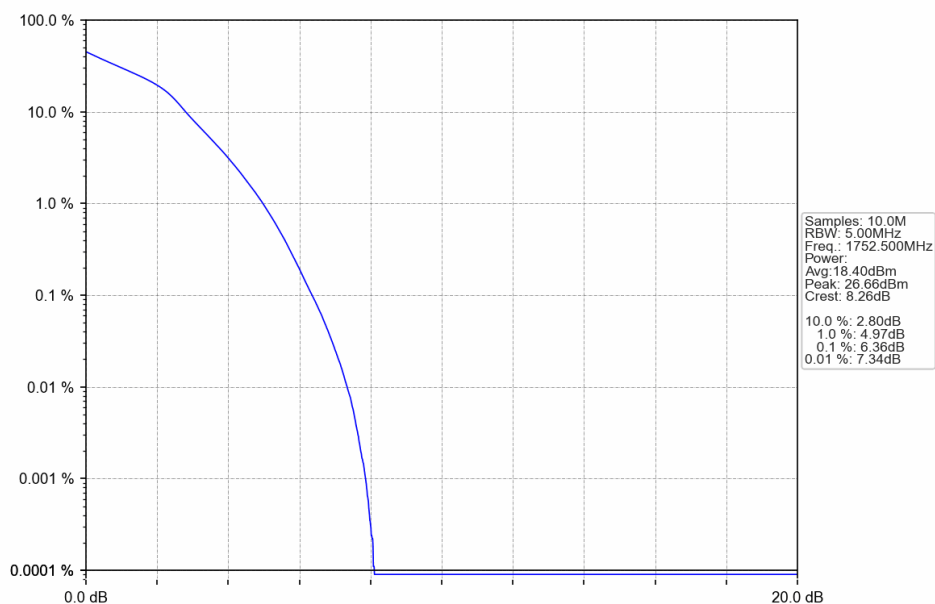
Band4\_5MHz\_16QAM\_LCH\_1712.5MHz\_RB\_25\_0\_NTNV



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



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



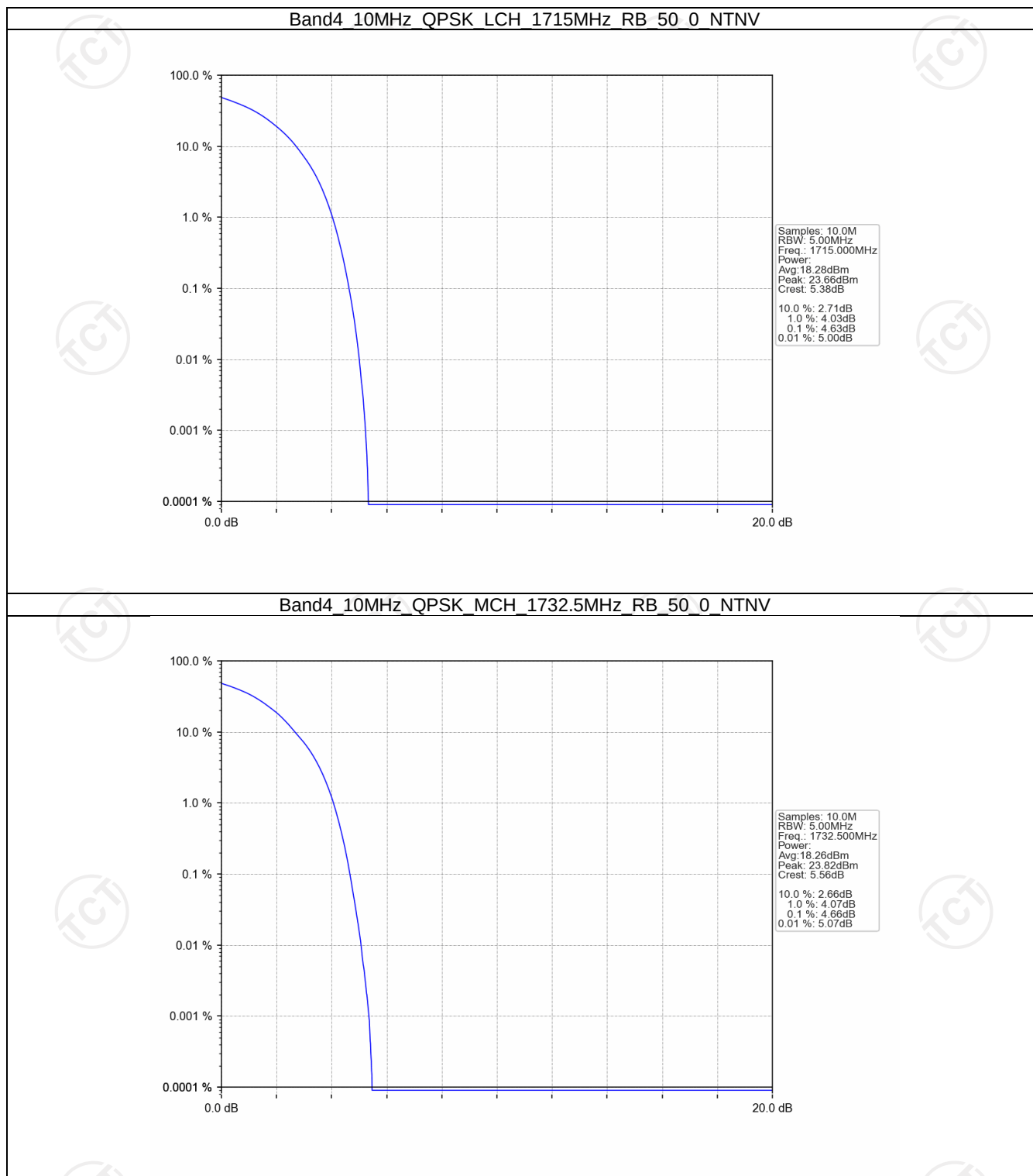
## 5.4 B4\_10MHz

### 5.4.1 Test Result

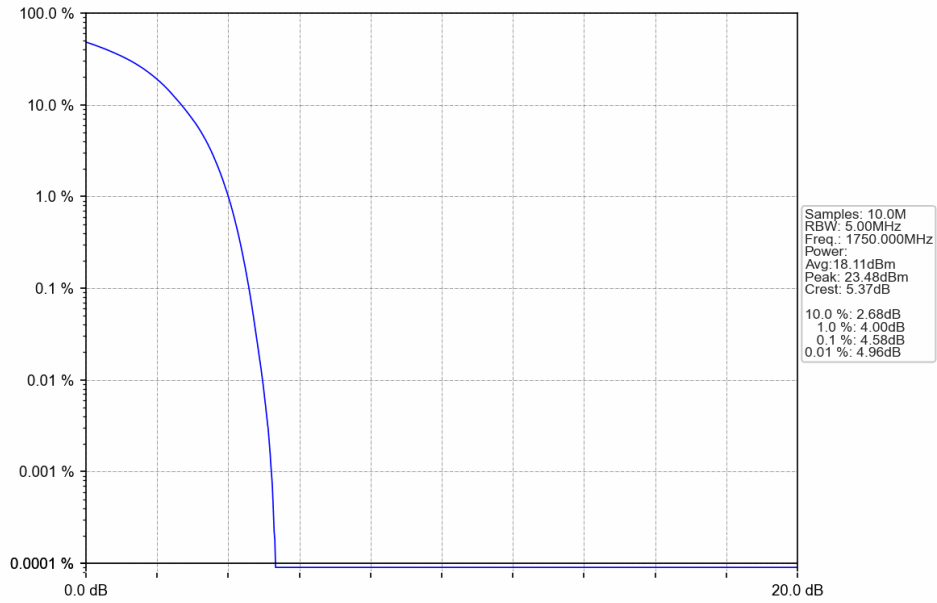
| Band: 4 / Bandwidth: 10MHz / NTNV |                 |               |        |                         |       |         |
|-----------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                   |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                              | 1715            | 50            | 0      | 4.63                    | <=13  | Pass    |
|                                   | 1732.5          | 50            | 0      | 4.66                    | <=13  | Pass    |
|                                   | 1750            | 50            | 0      | 4.58                    | <=13  | Pass    |
| 16QAM                             | 1715            | 50            | 0      | 6.13                    | <=13  | Pass    |
|                                   | 1732.5          | 50            | 0      | 6.14                    | <=13  | Pass    |
|                                   | 1750            | 50            | 0      | 6.11                    | <=13  | Pass    |



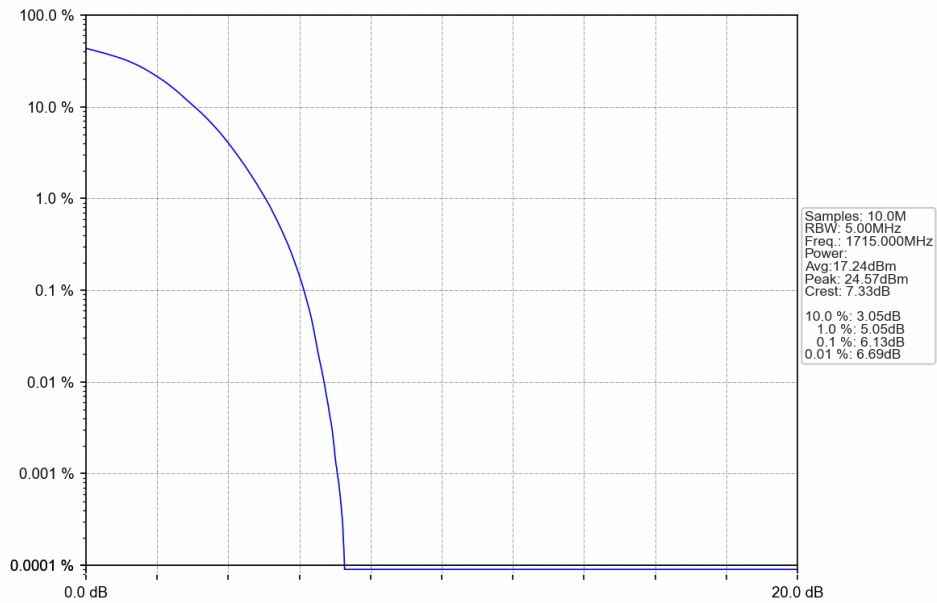
## 5.4.2 Test Graph



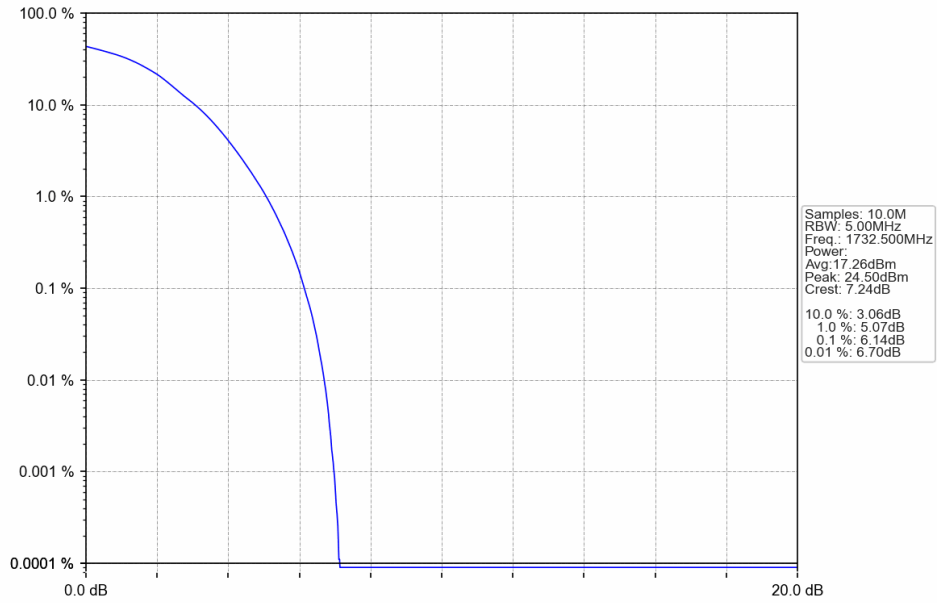
Band4\_10MHz\_QPSK\_HCH\_1750MHz\_RB\_50\_0\_NTNV



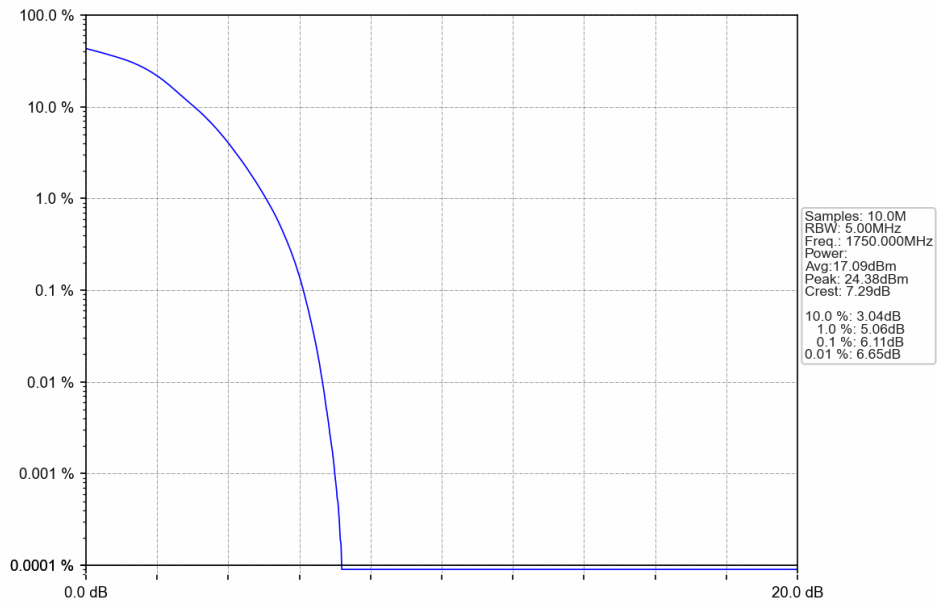
Band4\_10MHz\_16QAM\_LCH\_1715MHz\_RB\_50\_0\_NTNV



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



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

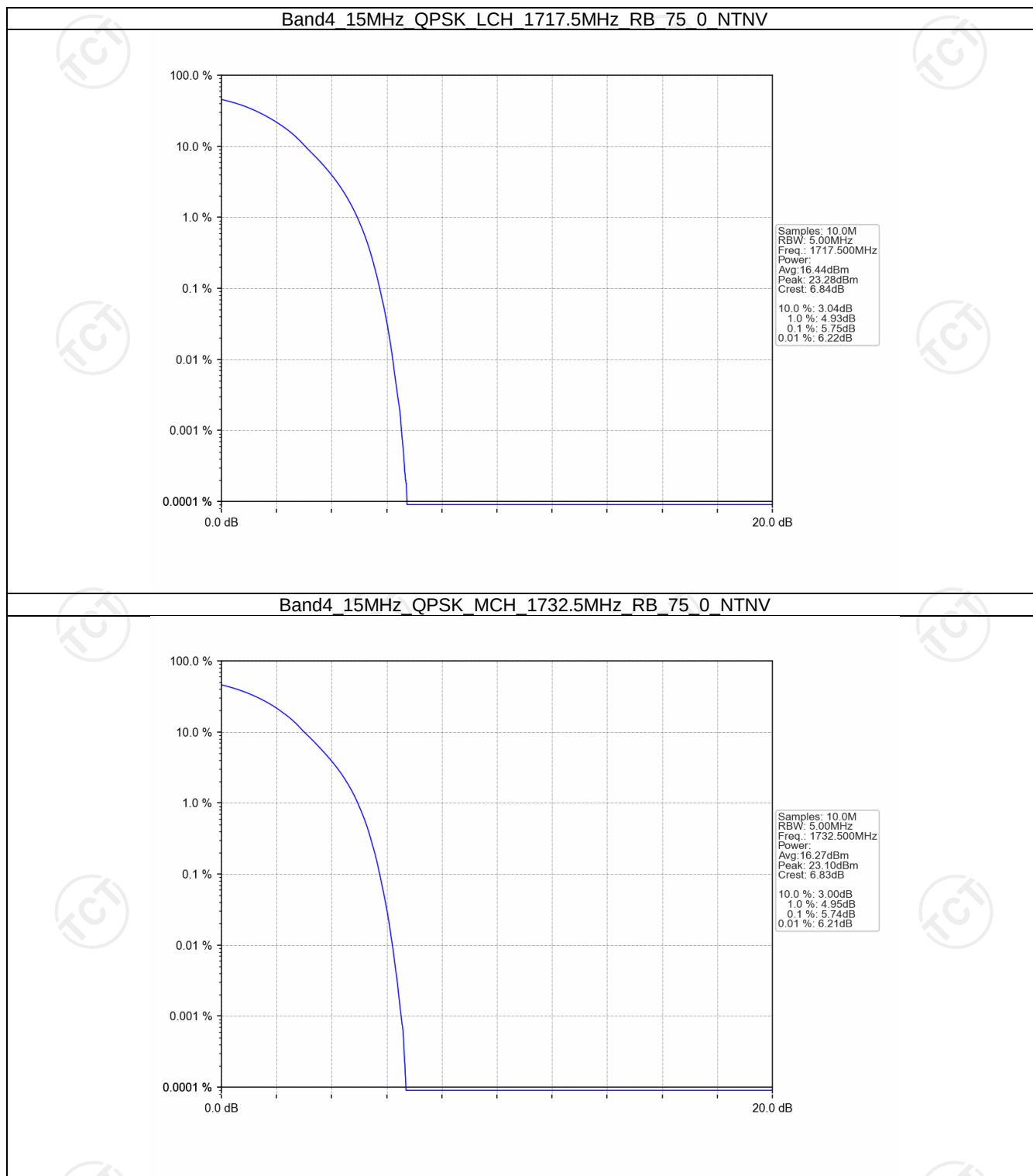


## 5.5 B4\_15MHz

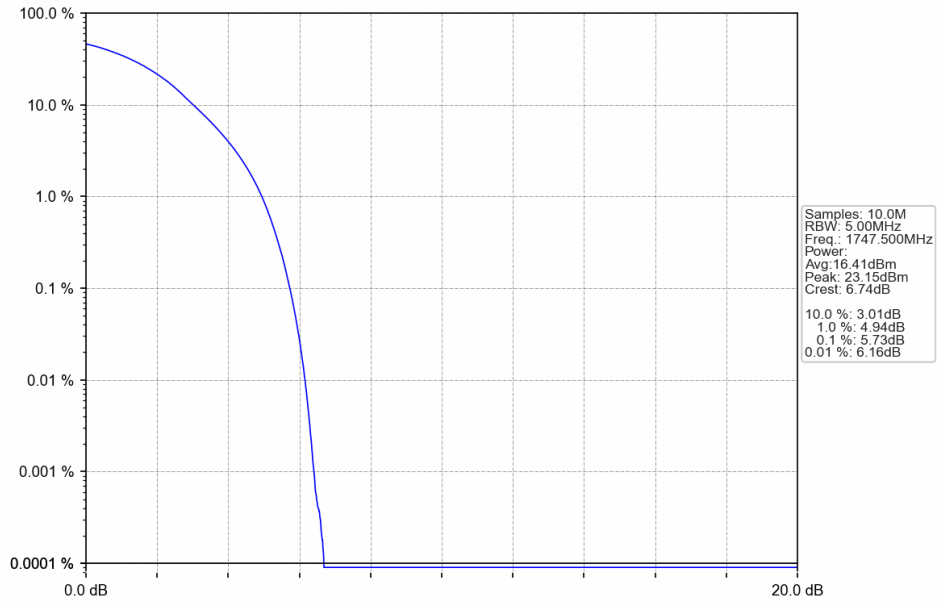
### 5.5.1 Test Result

| Band: 4 / Bandwidth: 15MHz / NTNV |                 |               |        |                         |       |         |
|-----------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                   |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                              | 1717.5          | 75            | 0      | 5.75                    | <=13  | Pass    |
|                                   | 1732.5          | 75            | 0      | 5.74                    | <=13  | Pass    |
|                                   | 1747.5          | 75            | 0      | 5.73                    | <=13  | Pass    |
| 16QAM                             | 1717.5          | 75            | 0      | 6.70                    | <=13  | Pass    |
|                                   | 1732.5          | 75            | 0      | 6.80                    | <=13  | Pass    |
|                                   | 1747.5          | 75            | 0      | 6.81                    | <=13  | Pass    |

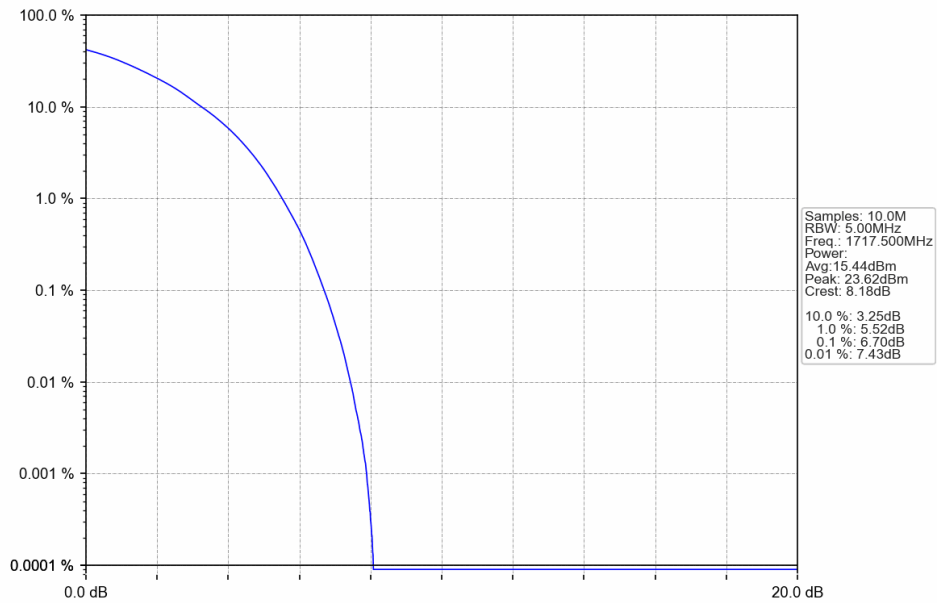
## 5.5.2 Test Graph



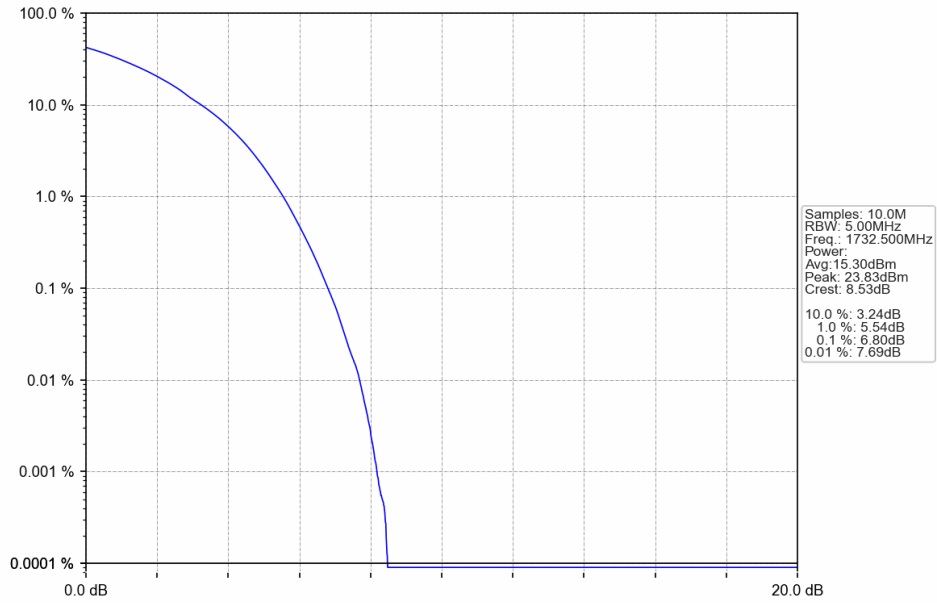
Band4\_15MHz\_QPSK\_HCH\_1747.5MHz\_RB\_75\_0\_NTNV



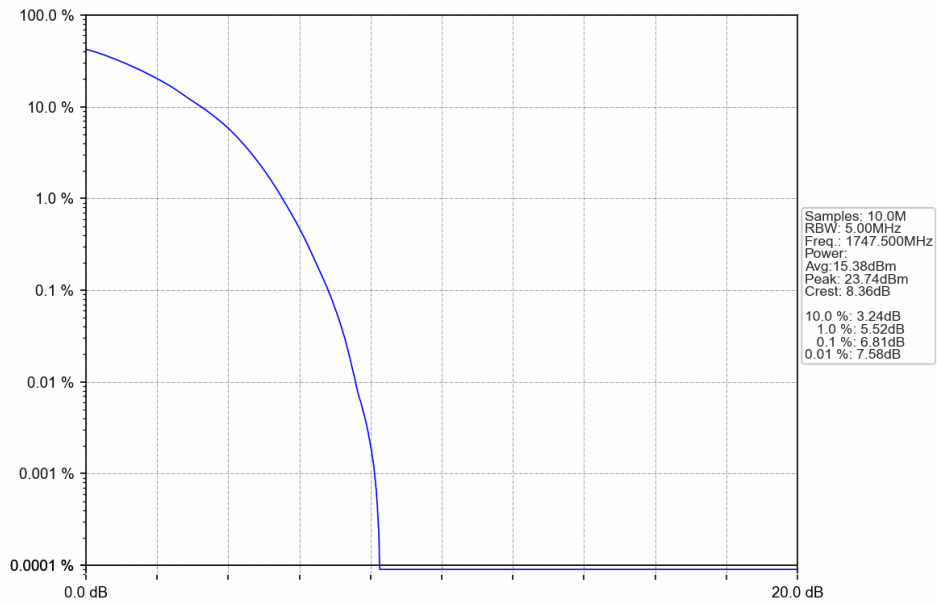
Band4\_15MHz\_16QAM\_LCH\_1717.5MHz\_RB\_75\_0\_NTNV



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



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



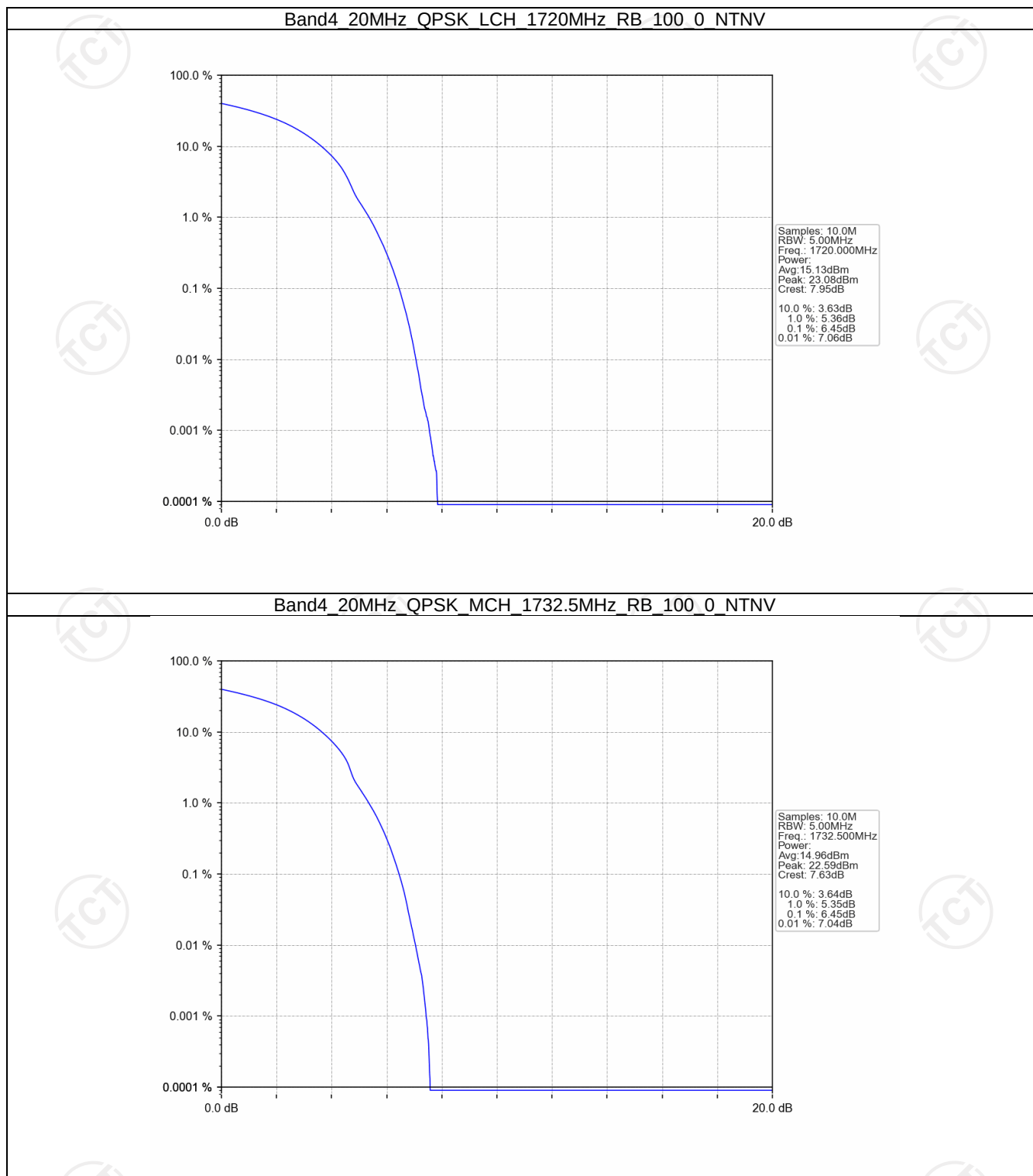
## 5.6 B4\_20MHz

### 5.6.1 Test Result

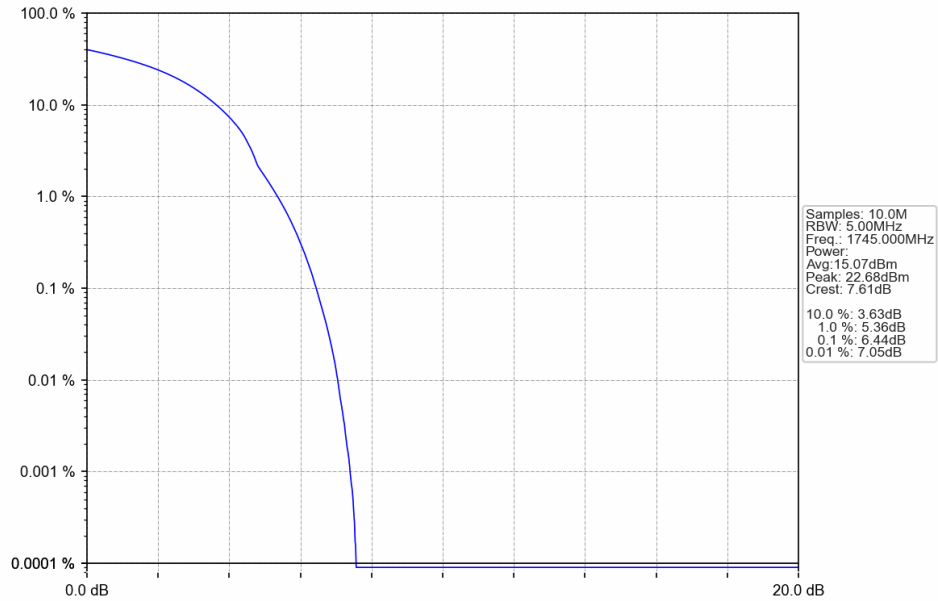
| Band: 4 / Bandwidth: 20MHz / NTNV |                 |               |        |                         |       |         |
|-----------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                   |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                              | 1720            | 100           | 0      | 6.45                    | <=13  | Pass    |
|                                   | 1732.5          | 100           | 0      | 6.45                    | <=13  | Pass    |
|                                   | 1745            | 100           | 0      | 6.44                    | <=13  | Pass    |
| 16QAM                             | 1720            | 100           | 0      | 7.18                    | <=13  | Pass    |
|                                   | 1732.5          | 100           | 0      | 7.20                    | <=13  | Pass    |
|                                   | 1745            | 100           | 0      | 7.12                    | <=13  | Pass    |



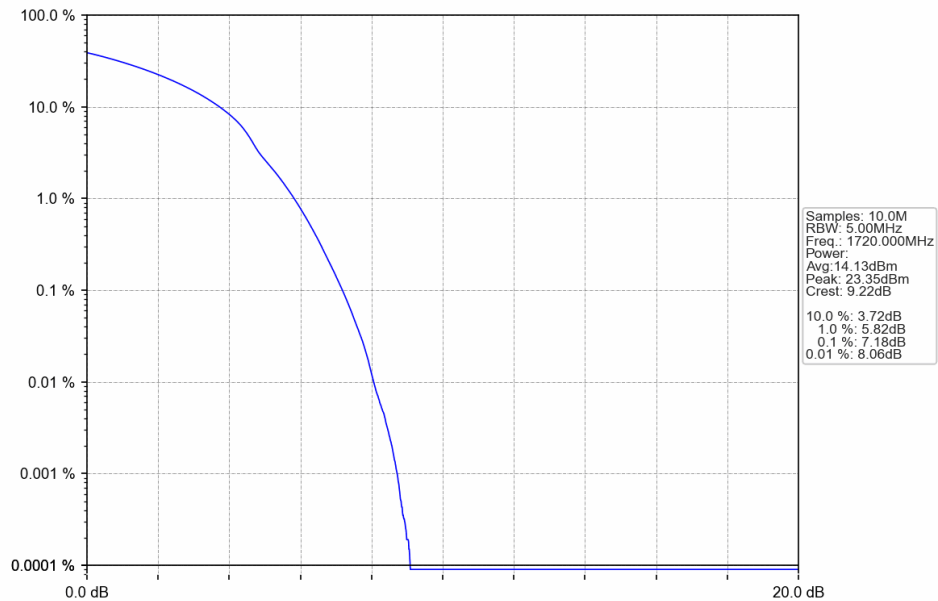
## 5.6.2 Test Graph



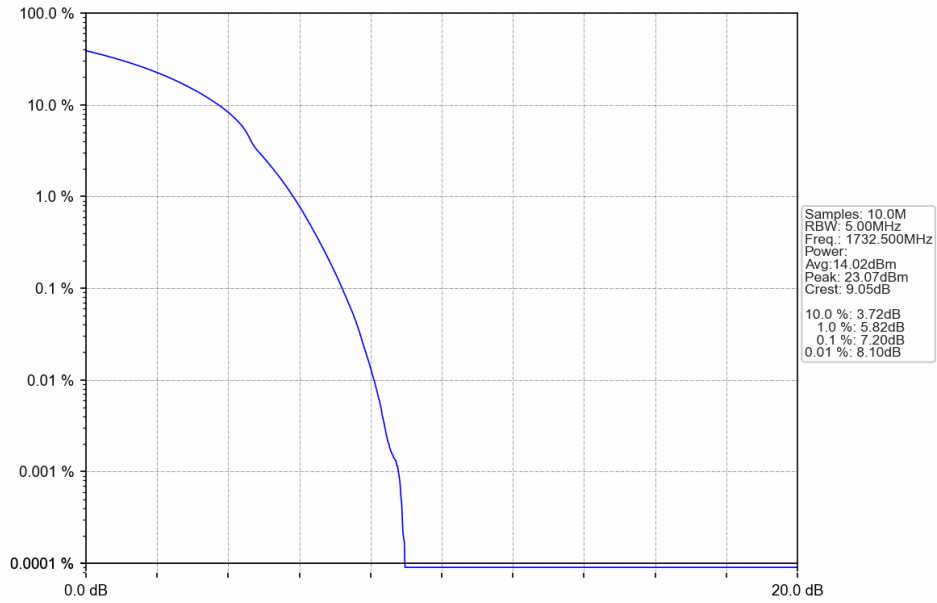
Band4 20MHz\_QPSK\_HCH\_1745MHz\_RB\_100\_0\_NTNV



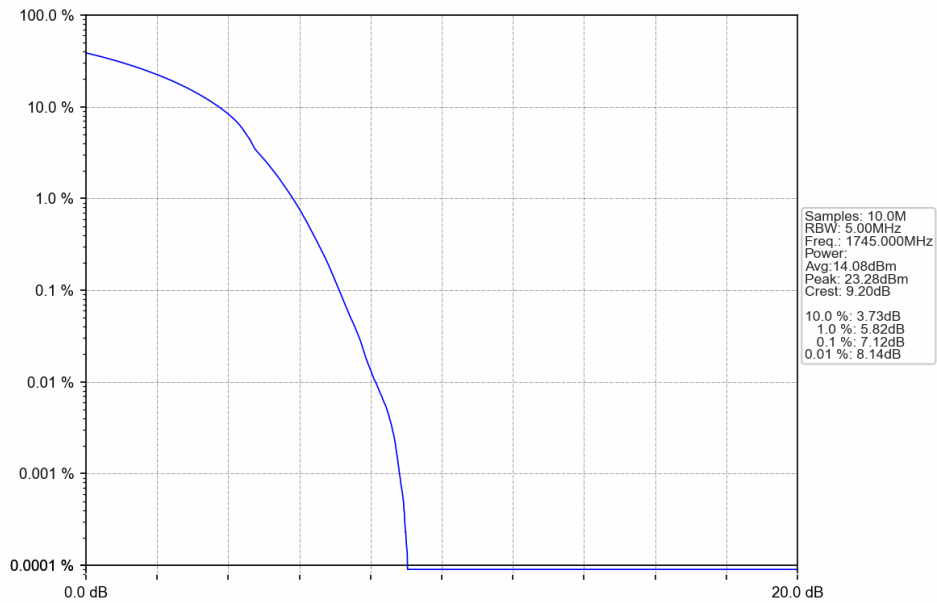
Band4 20MHz\_16QAM\_LCH\_1720MHz\_RB\_100\_0\_NTNV



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



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



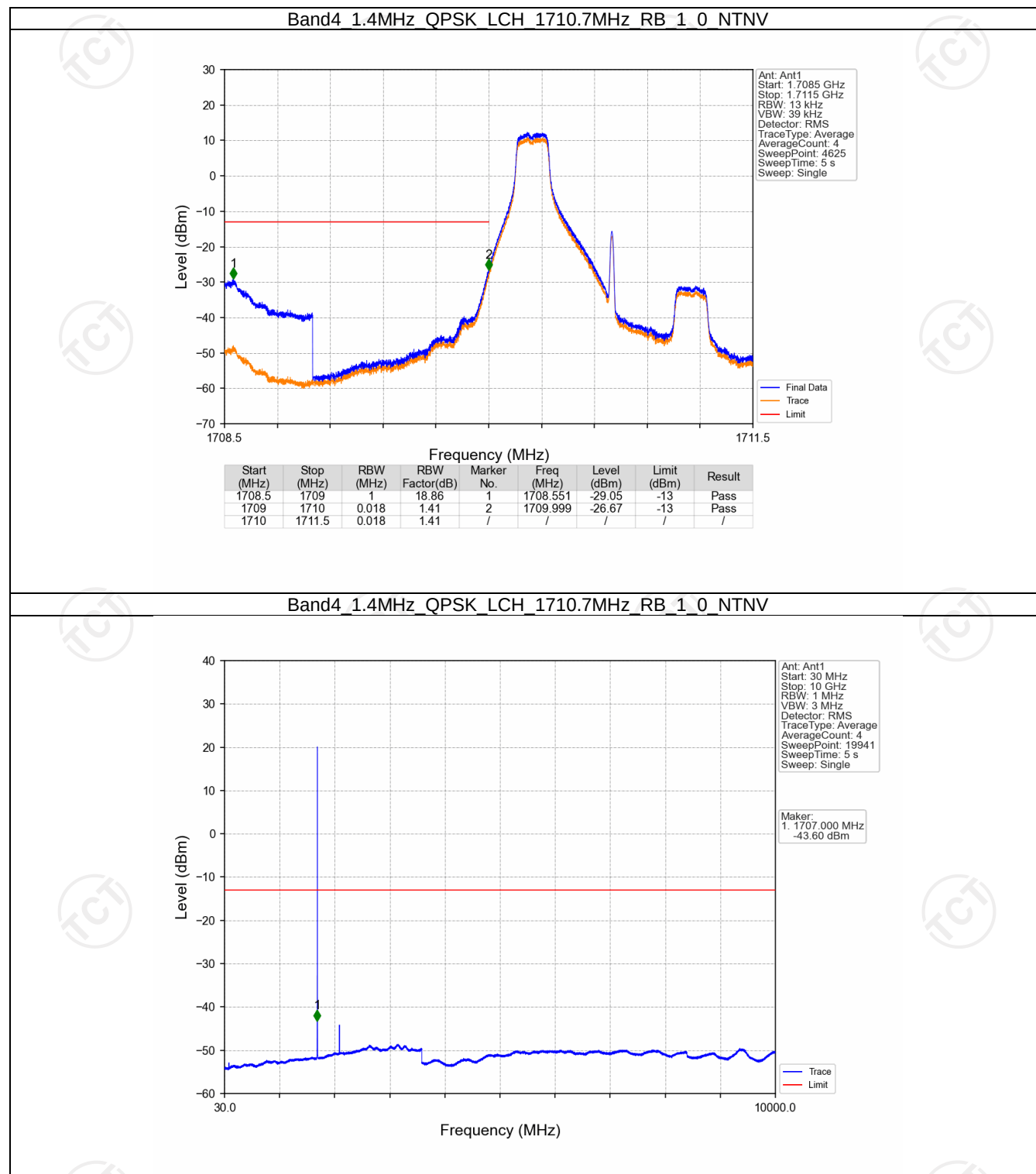
## 6. Spurious Emission

### 6.1 B4\_1.4MHz

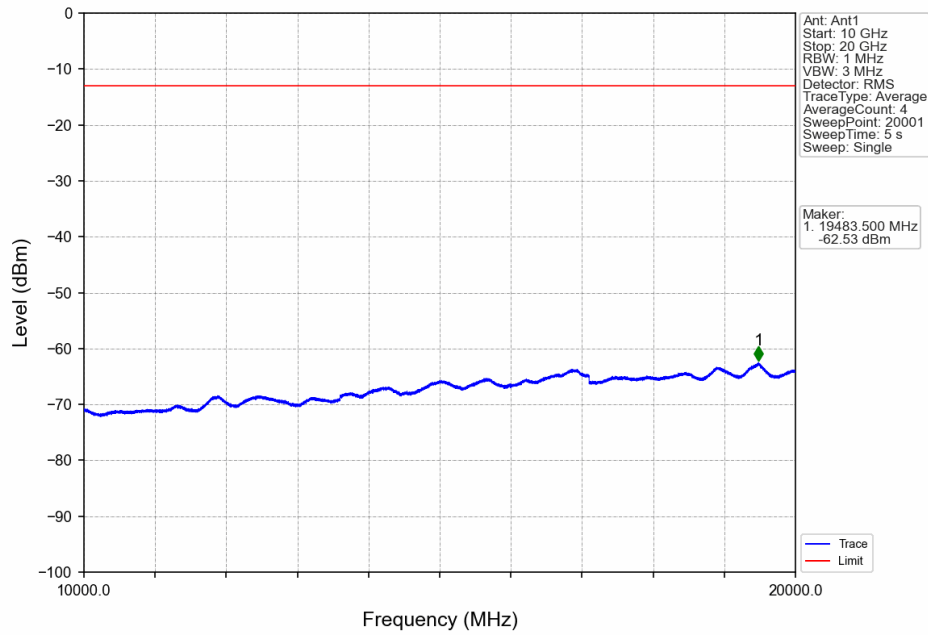
#### 6.1.1 Test Result

| 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    |
|                                   | 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    |

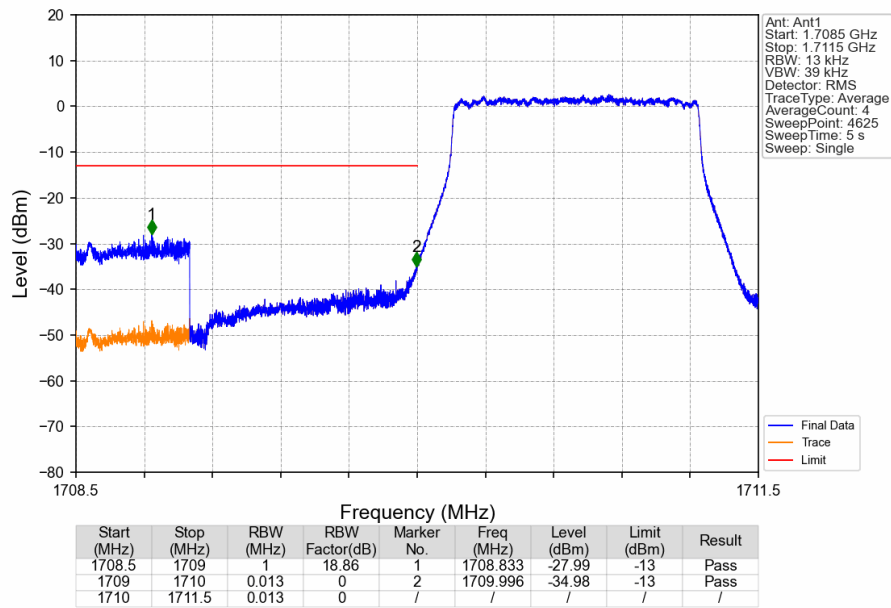
## 6.1.2 Test Graph



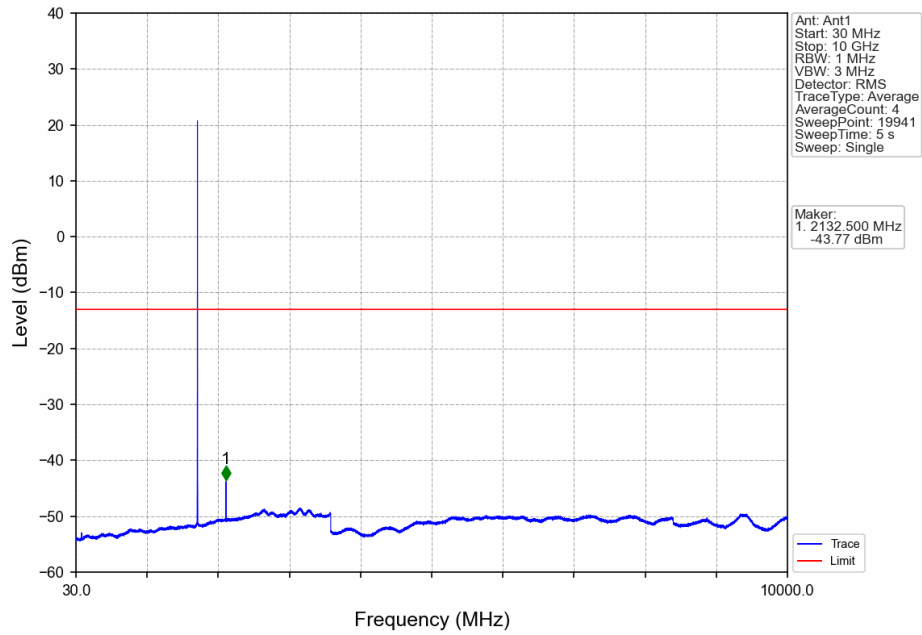
Band4\_1.4MHz\_QPSK\_LCH\_1710.7MHz\_RB\_1\_0\_NTNV



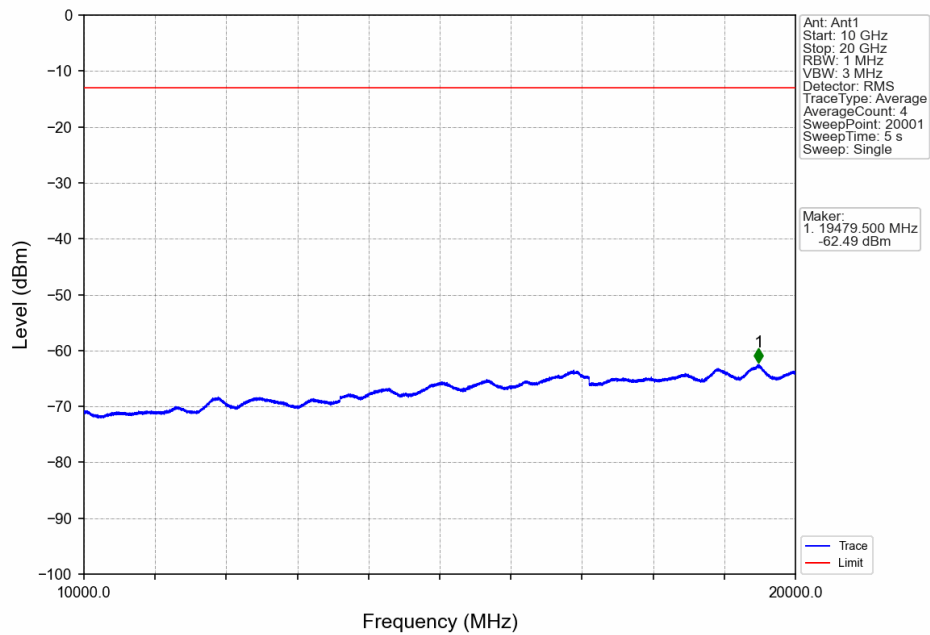
Band4\_1.4MHz\_QPSK\_LCH\_1710.7MHz\_RB\_6\_0\_NTNV



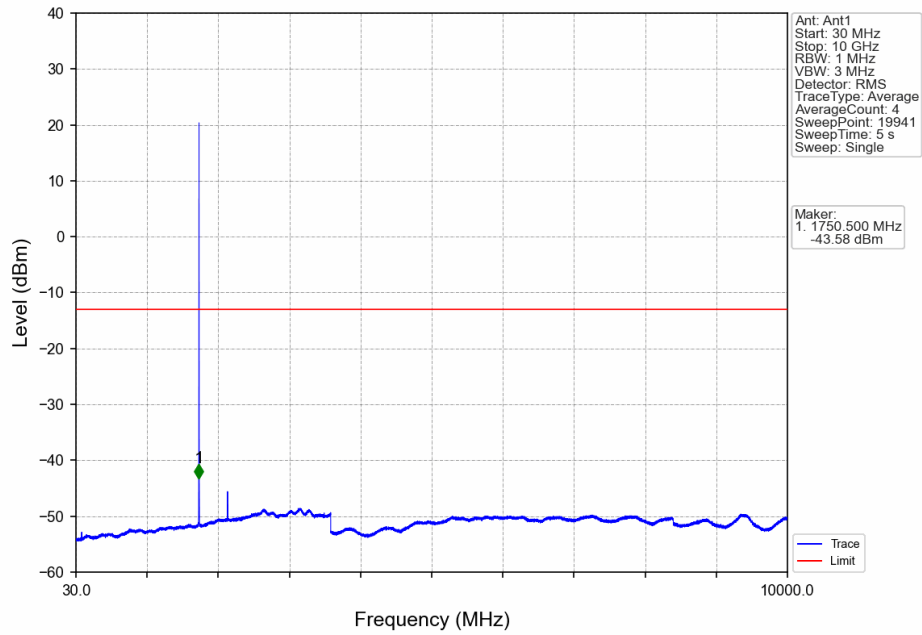
Band4\_1.4MHz\_QPSK\_MCH\_1732.5MHz\_RB\_1\_0\_NTNV



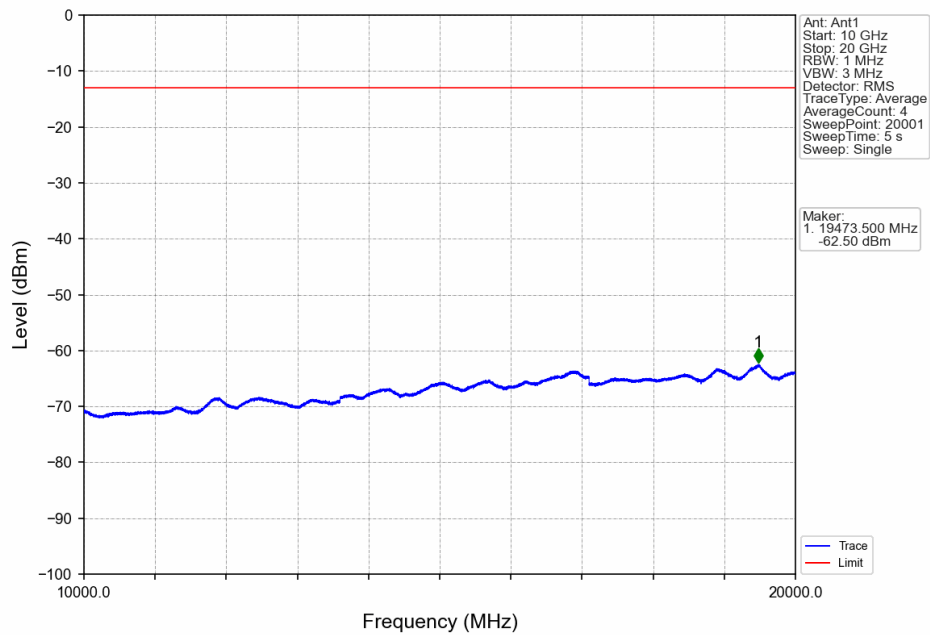
Band4\_1.4MHz\_QPSK\_MCH\_1732.5MHz\_RB\_1\_0\_NTNV



Band4 1.4MHz QPSK HCH 1754.3MHz RB 1 0 NTV

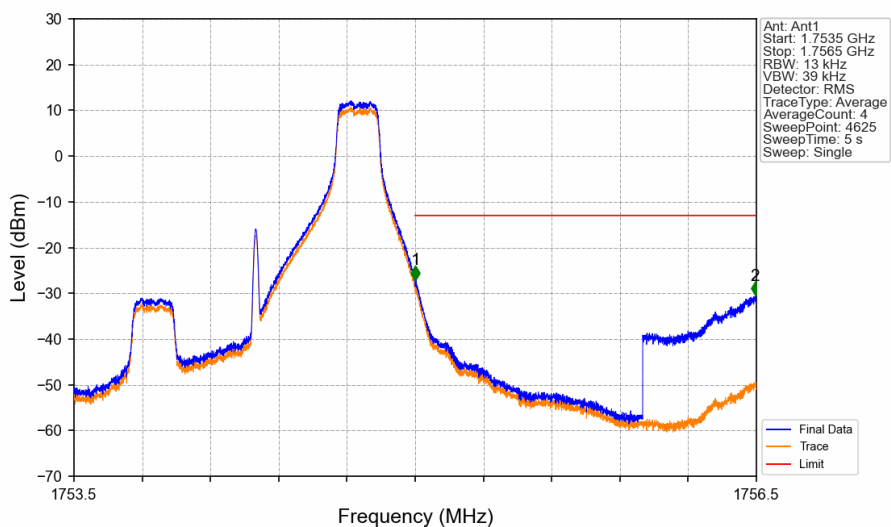


Band4 1.4MHz QPSK HCH 1754.3MHz RB 1 0 NTV



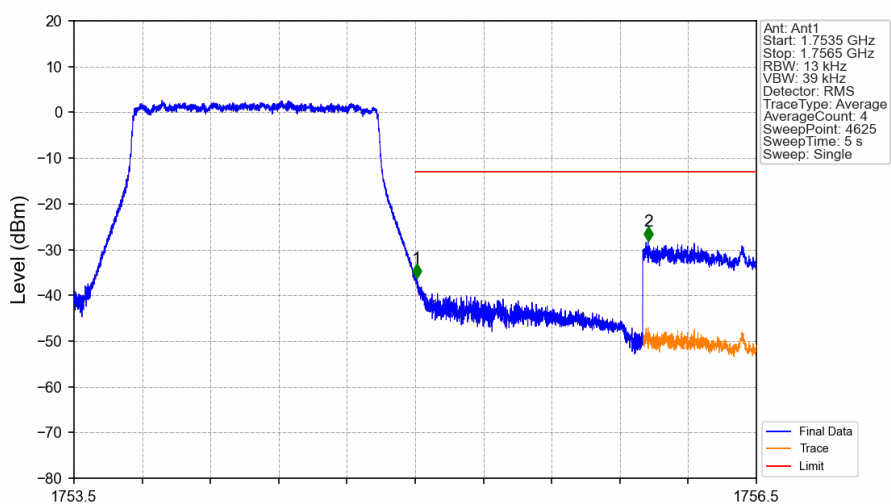


## Band4\_1.4MHz\_QPSK\_HCH\_1754.3MHz\_RB\_1\_5\_NTNV



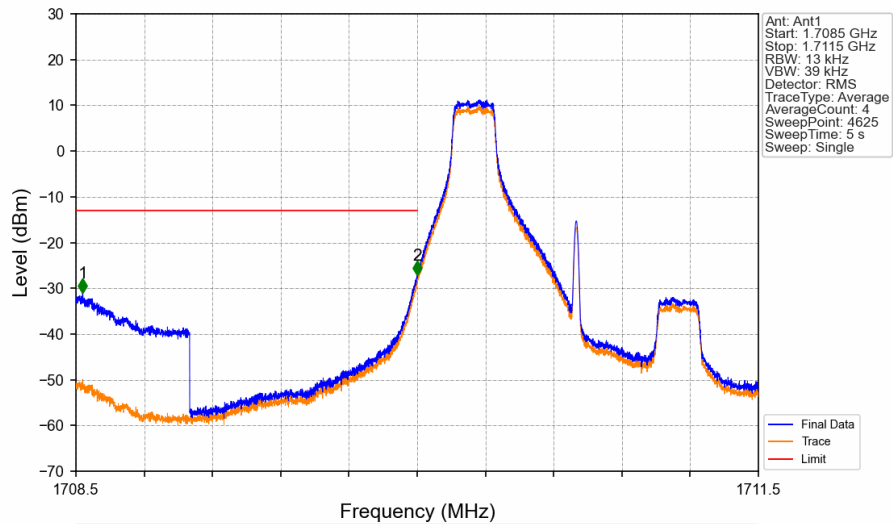
| Start (MHz) | Stop (MHz) | RBW (MHz) | RBW Factor(dB) | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|----------------|------------|------------|-------------|-------------|--------|
| 1753.5      | 1755       | 0.018     | 1.41           | /          | /          | /           | /           | /      |
| 1755        | 1756       | 0.018     | 1.41           | 1          | 1755.001   | -27.07      | -13         | Pass   |
| 1756        | 1756.5     | 1         | 18.86          | 2          | 1756.495   | -30.55      | -13         | Pass   |

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

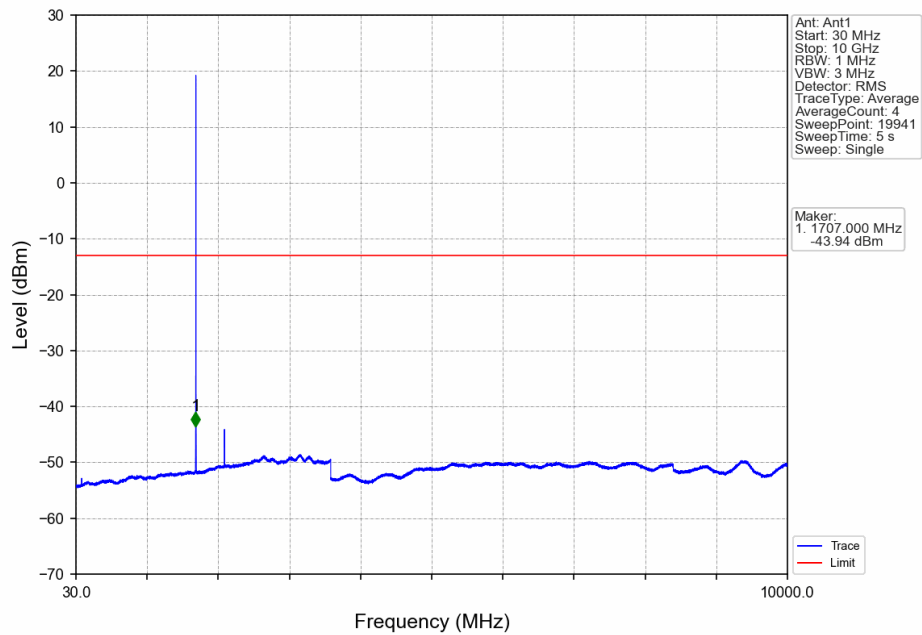


| Start (MHz) | Stop (MHz) | RBW (MHz) | RBW Factor(dB) | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|----------------|------------|------------|-------------|-------------|--------|
| 1753.5      | 1755       | 0.013     | 0              | /          | /          | /           | /           | /      |
| 1755        | 1756       | 0.013     | 0              | 1          | 1755.007   | -36.21      | -13         | Pass   |
| 1756        | 1756.5     | 1         | 18.86          | 2          | 1756.024   | -28.20      | -13         | Pass   |

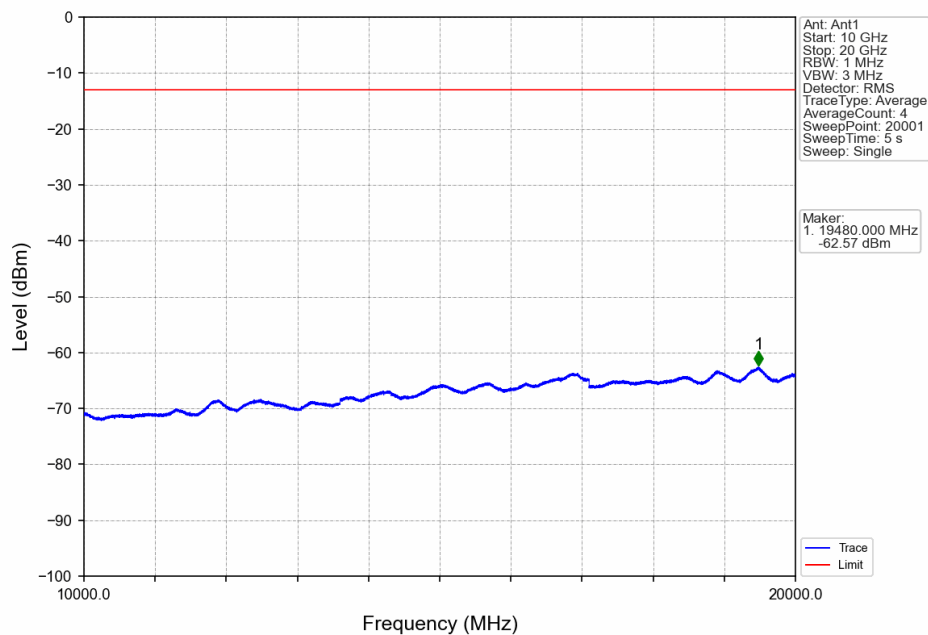
Band4 1.4MHz 16QAM LCH 1710.7MHz RB 1 0 NTN



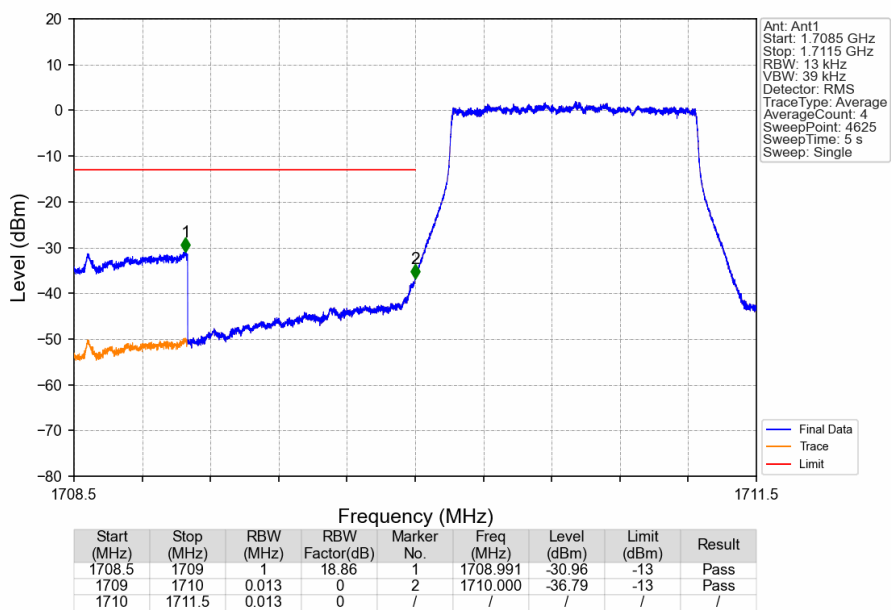
Band4 1.4MHz 16QAM LCH 1710.7MHz RB 1 0 NTN



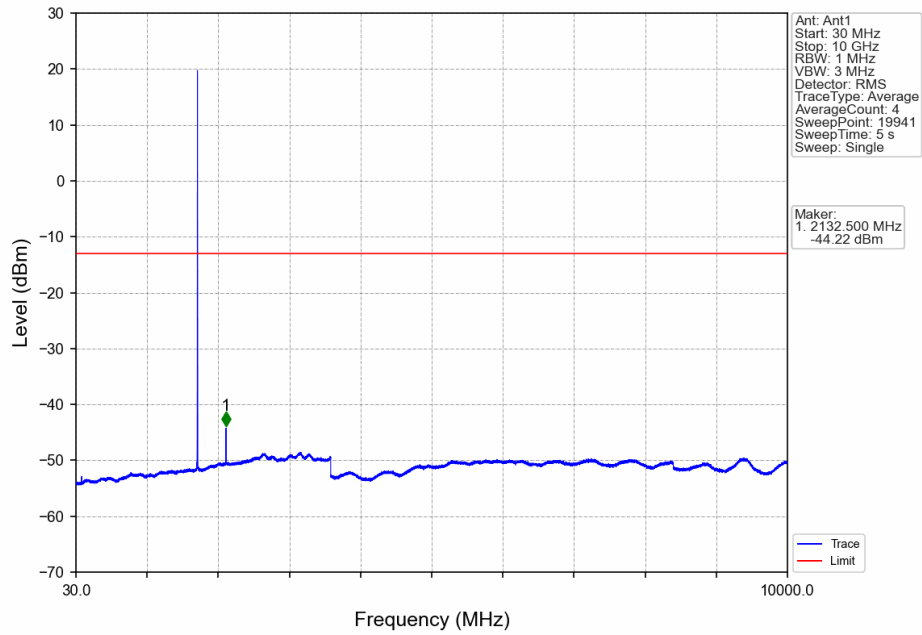
Band4 1.4MHz 16QAM LCH 1710.7MHz RB 1 0 NTNV



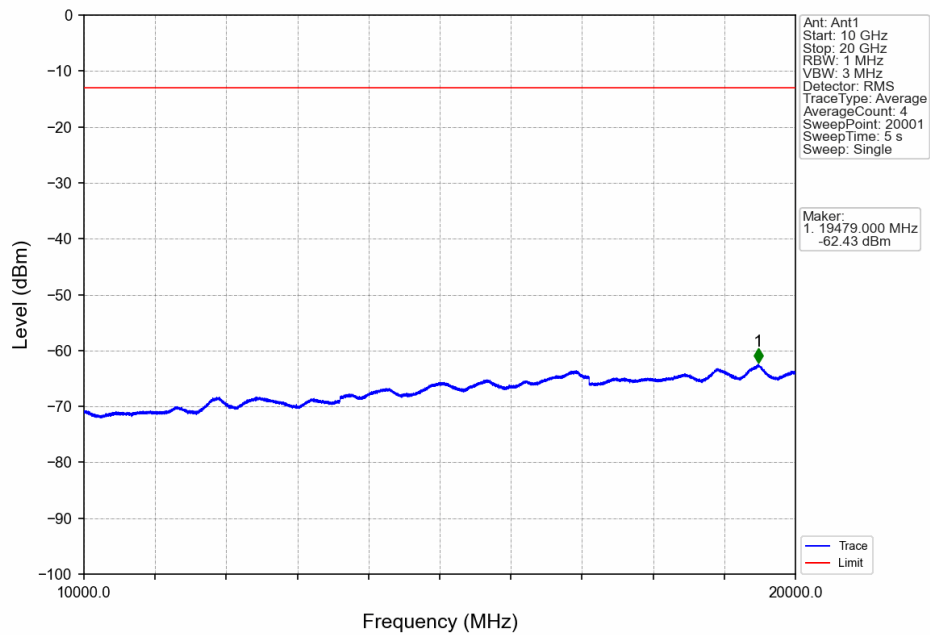
Band4 1.4MHz 16QAM LCH 1710.7MHz RB 6 0 NTNV



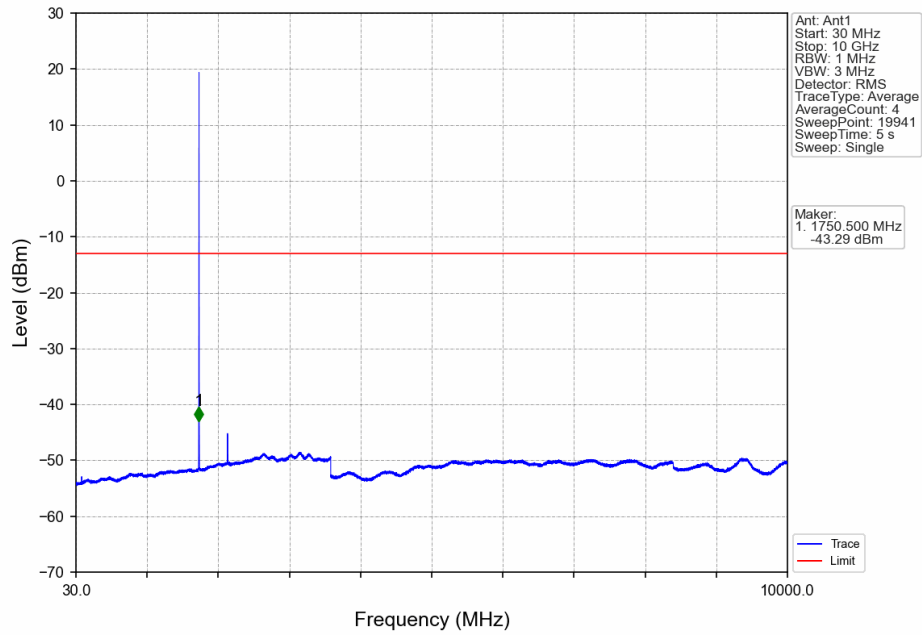
Band4\_1.4MHz\_16QAM\_MCH\_1732.5MHz\_RB\_1\_0\_NTNV



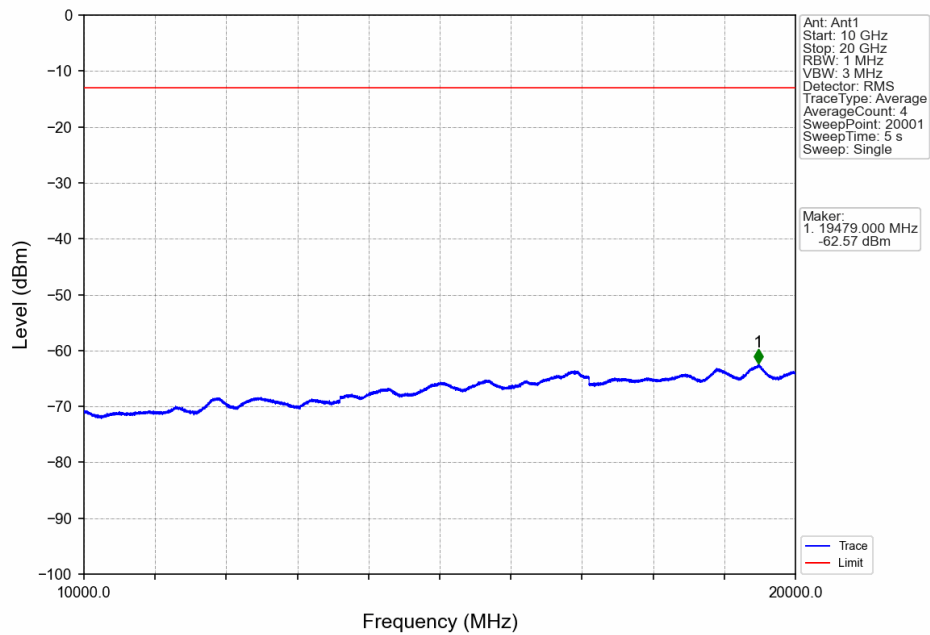
Band4\_1.4MHz\_16QAM\_MCH\_1732.5MHz\_RB\_1\_0\_NTNV



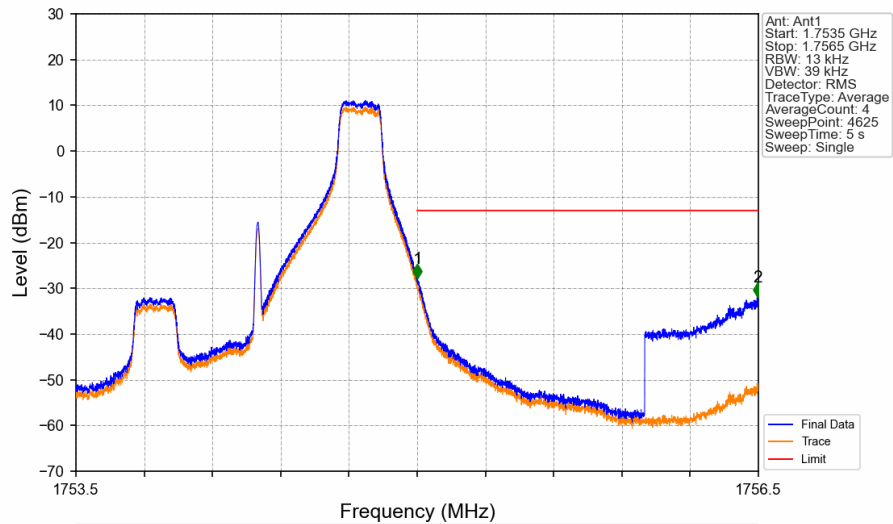
Band4\_1.4MHz\_16QAM\_HCH\_1754.3MHz\_RB\_1\_0\_NTNV



Band4\_1.4MHz\_16QAM\_HCH\_1754.3MHz\_RB\_1\_0\_NTNV

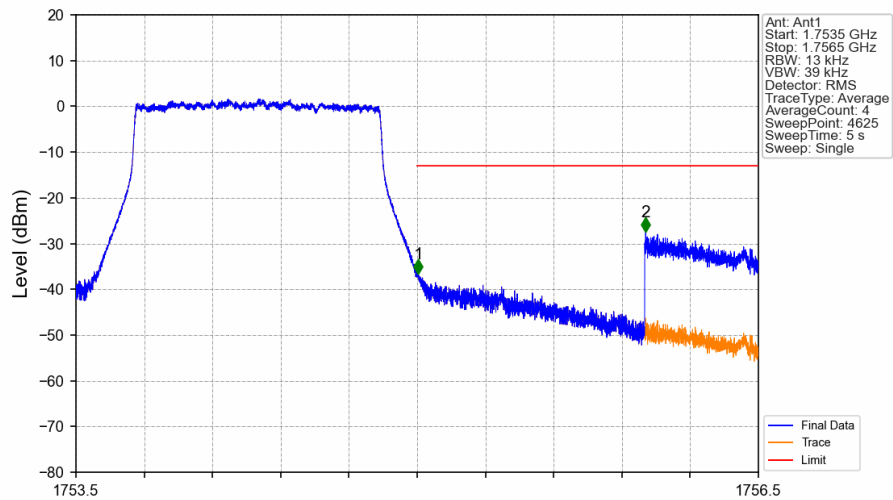


## Band4\_1.4MHz\_16QAM\_HCH\_1754.3MHz\_RB\_1\_5\_NTNV



| Start (MHz) | Stop (MHz) | RBW (MHz) | RBW Factor(dB) | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|----------------|------------|------------|-------------|-------------|--------|
| 1753.5      | 1755       | 0.018     | 1.41           | /          | /          | -27.86      | -13         | Pass   |
| 1755        | 1756       | 0.018     | 1.41           | 1          | 1755.001   | -27.86      | -13         | Pass   |
| 1756        | 1756.5     | 1         | 18.86          | 2          | 1756.497   | -31.92      | -13         | Pass   |

## Band4\_1.4MHz\_16QAM\_HCH\_1754.3MHz\_RB\_6\_0\_NTNV



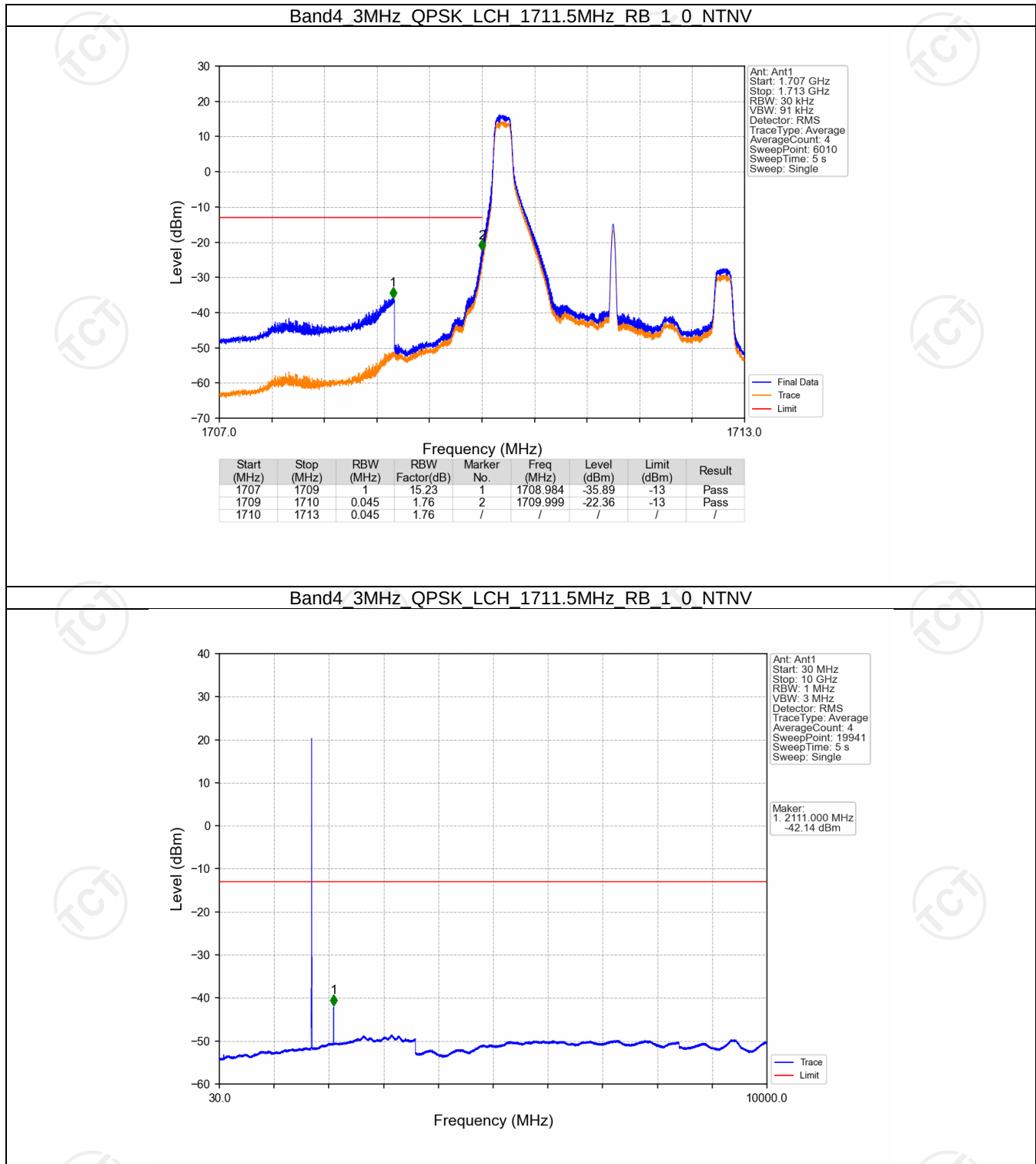
| Start (MHz) | Stop (MHz) | RBW (MHz) | RBW Factor(dB) | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|----------------|------------|------------|-------------|-------------|--------|
| 1753.5      | 1755       | 0.013     | 0              | /          | /          | -36.63      | -13         | Pass   |
| 1755        | 1756       | 0.013     | 0              | 1          | 1755.005   | -36.63      | -13         | Pass   |
| 1756        | 1756.5     | 1         | 18.86          | 2          | 1756.004   | -27.46      | -13         | Pass   |

## 6.2 B4\_3MHz

### 6.2.1 Test Result

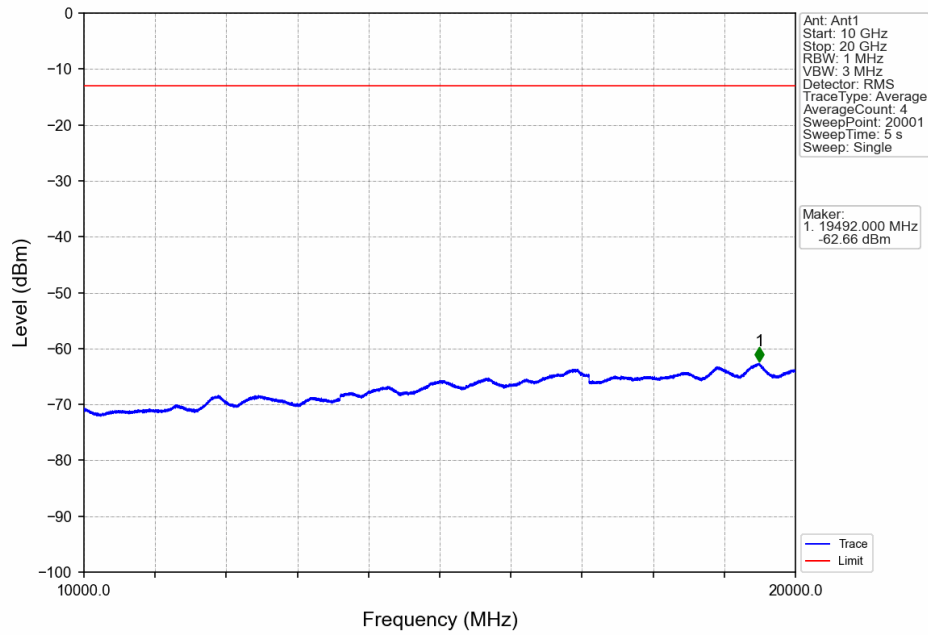
| Band: 4 / Bandwidth: 3MHz / NTNV |                 |               |        |                     |       |         |
|----------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                       | Frequency (MHz) | RB Allocation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

## 6.2.2 Test Graph

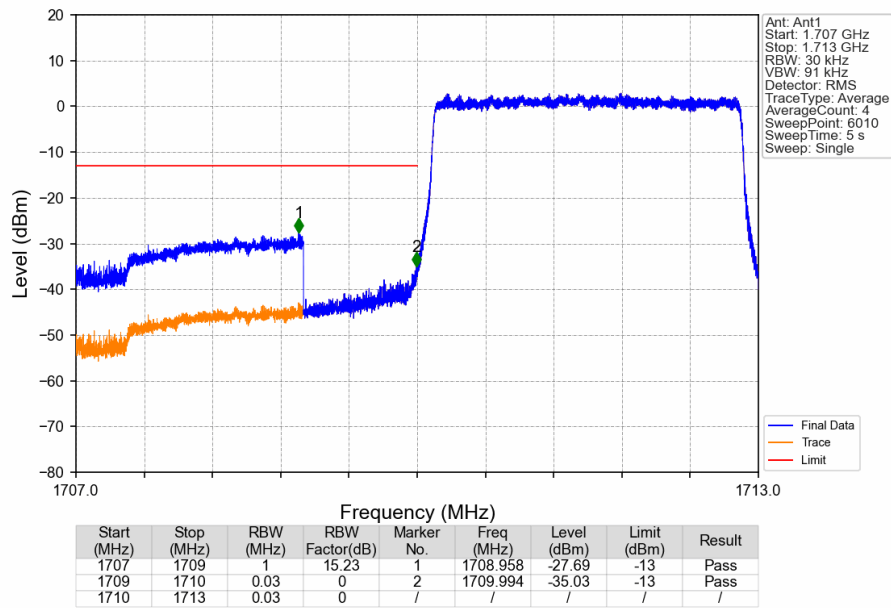




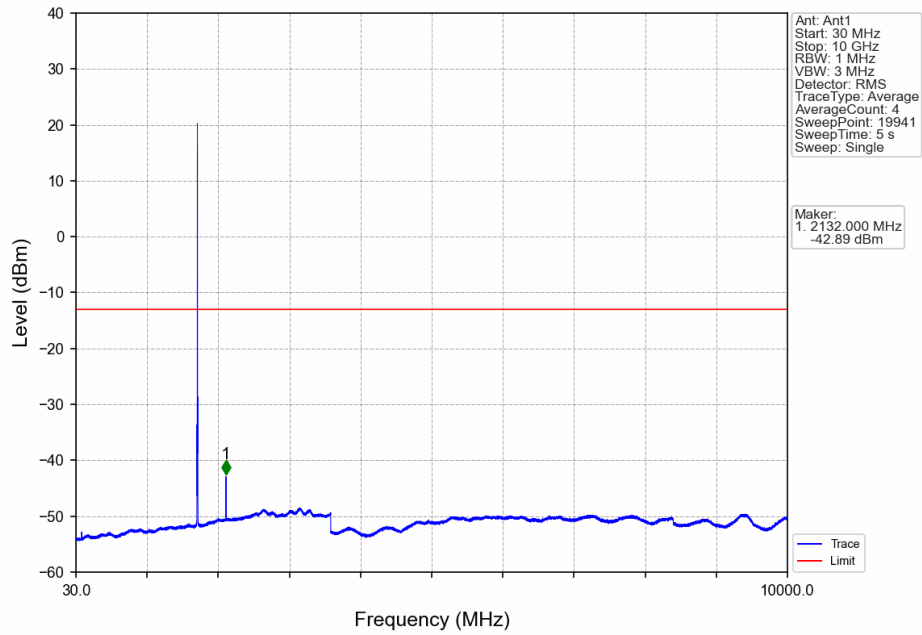
Band4\_3MHz\_QPSK\_LCH\_1711.5MHz\_RB\_1\_0\_NTNV



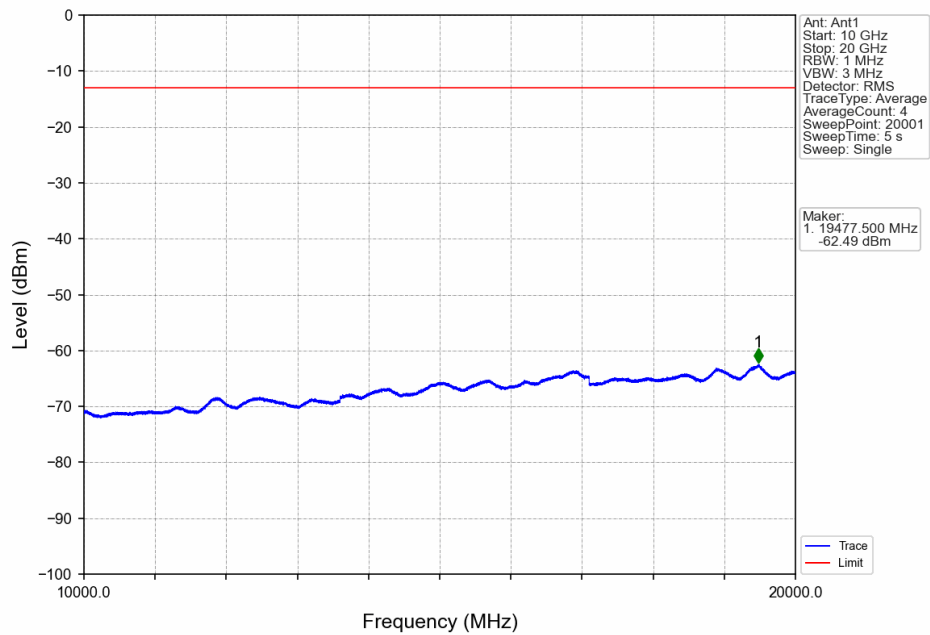
Band4\_3MHz\_QPSK\_LCH\_1711.5MHz\_RB\_15\_0\_NTNV



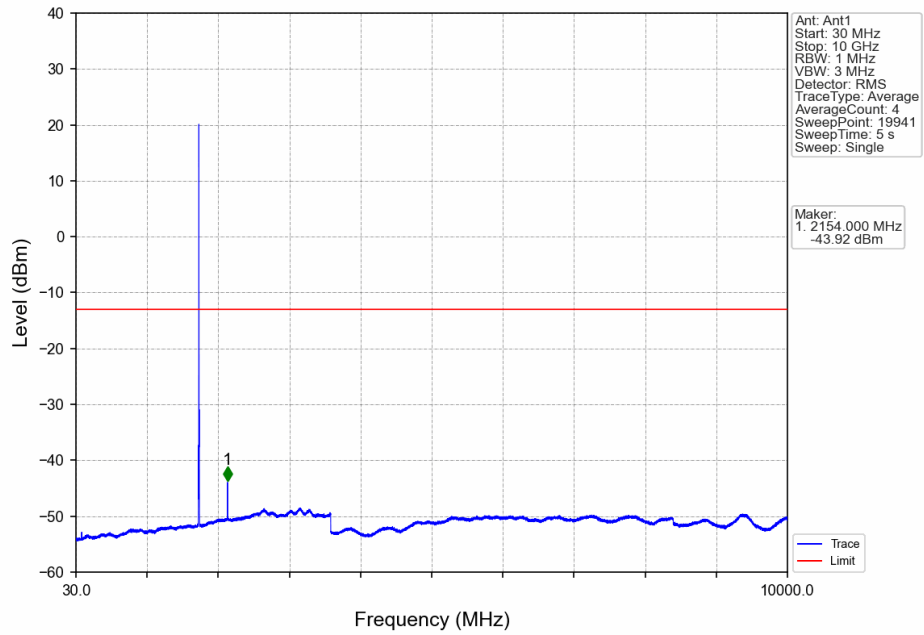
Band4\_3MHz\_QPSK\_MCH\_1732.5MHz\_RB\_1\_0\_NTNV



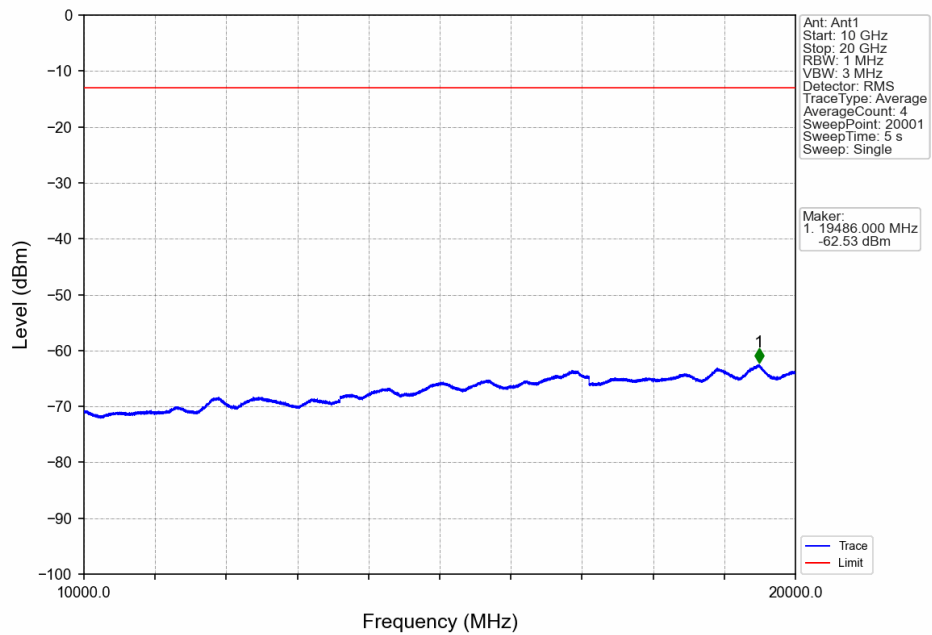
Band4\_3MHz\_QPSK\_MCH\_1732.5MHz\_RB\_1\_0\_NTNV



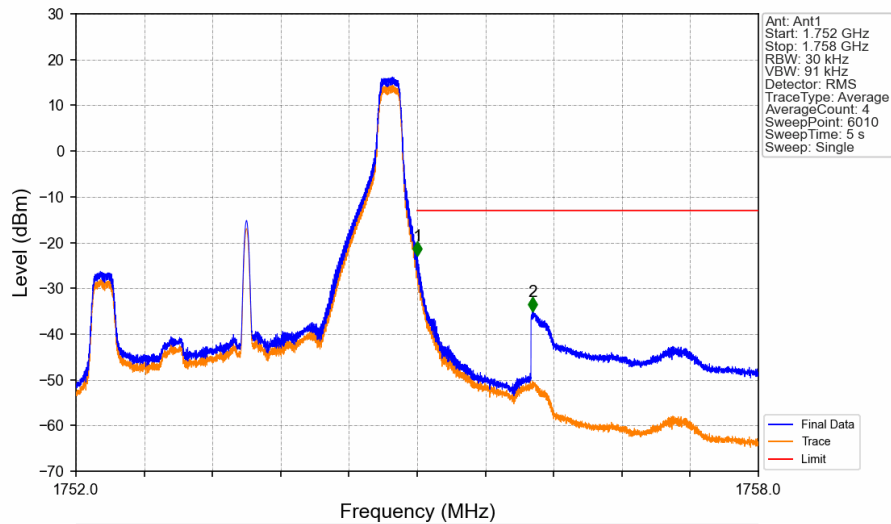
Band4\_3MHz\_QPSK\_HCH\_1753.5MHz\_RB\_1\_0\_NTNV



Band4\_3MHz\_QPSK\_HCH\_1753.5MHz\_RB\_1\_0\_NTNV

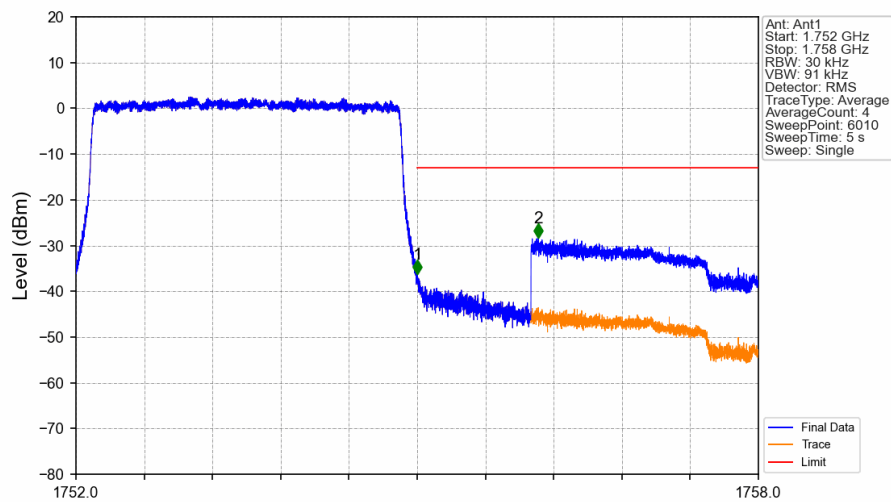


## Band4\_3MHz\_QPSK\_HCH\_1753.5MHz\_RB\_1\_14\_NTNV



| Start (MHz) | Stop (MHz) | RBW (MHz) | RBW Factor(dB) | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|----------------|------------|------------|-------------|-------------|--------|
| 1752        | 1755       | 0.045     | 1.76           | /          | /          | /           | /           | /      |
| 1755        | 1756       | 0.045     | 1.76           | 1          | 1755.000   | -22.99      | -13         | Pass   |
| 1756        | 1758       | 1         | 15.23          | 2          | 1756.012   | -35.12      | -13         | Pass   |

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



| Start (MHz) | Stop (MHz) | RBW (MHz) | RBW Factor(dB) | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|----------------|------------|------------|-------------|-------------|--------|
| 1752        | 1755       | 0.03      | 0              | /          | /          | /           | /           | /      |
| 1755        | 1756       | 0.03      | 0              | 1          | 1755.001   | -36.22      | -13         | Pass   |
| 1756        | 1758       | 1         | 15.23          | 2          | 1756.065   | -28.34      | -13         | Pass   |