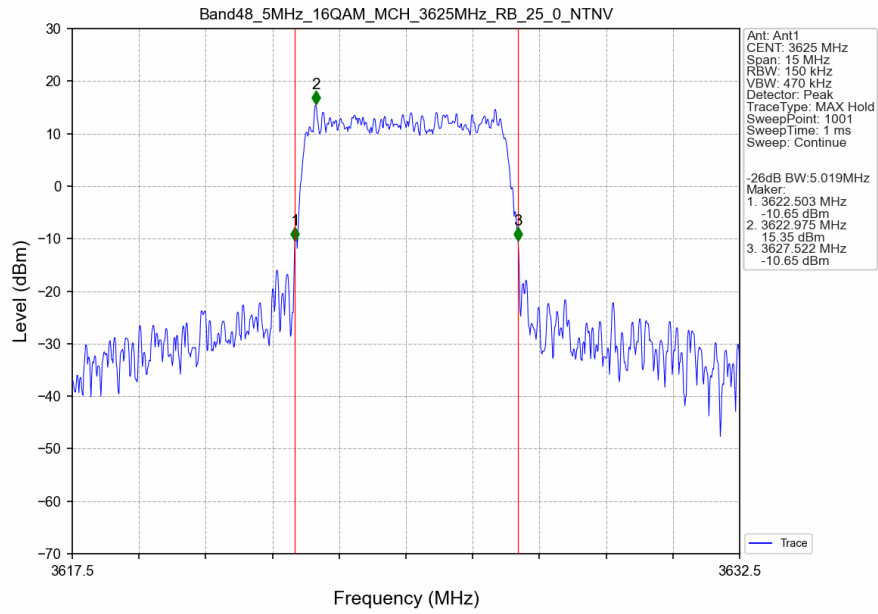
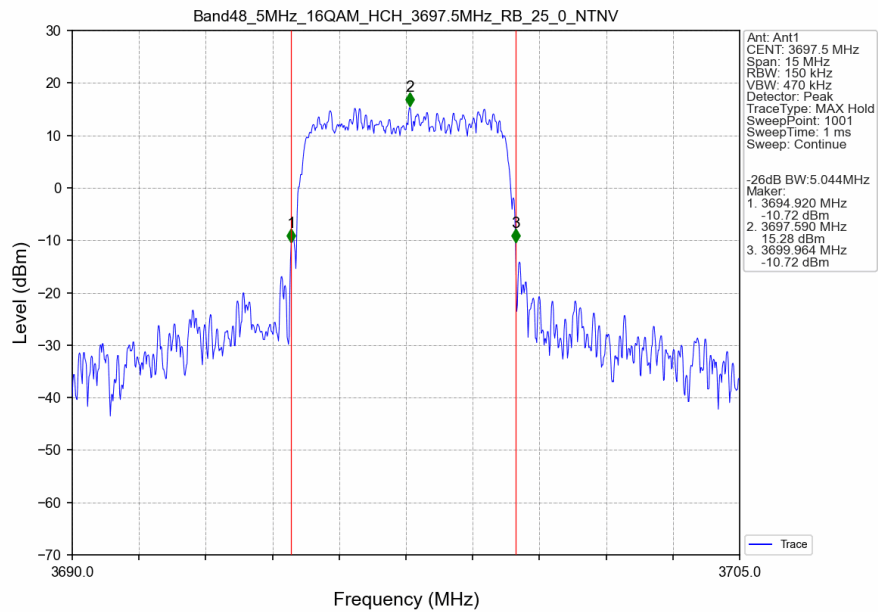


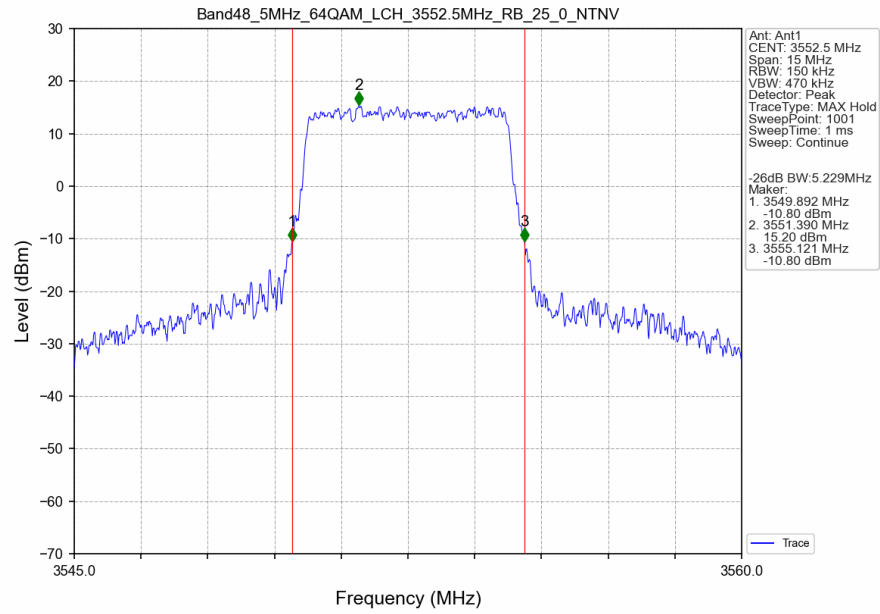
# Band48 5MHz 16QAM MCH 3625MHz RB 25 0 NTV



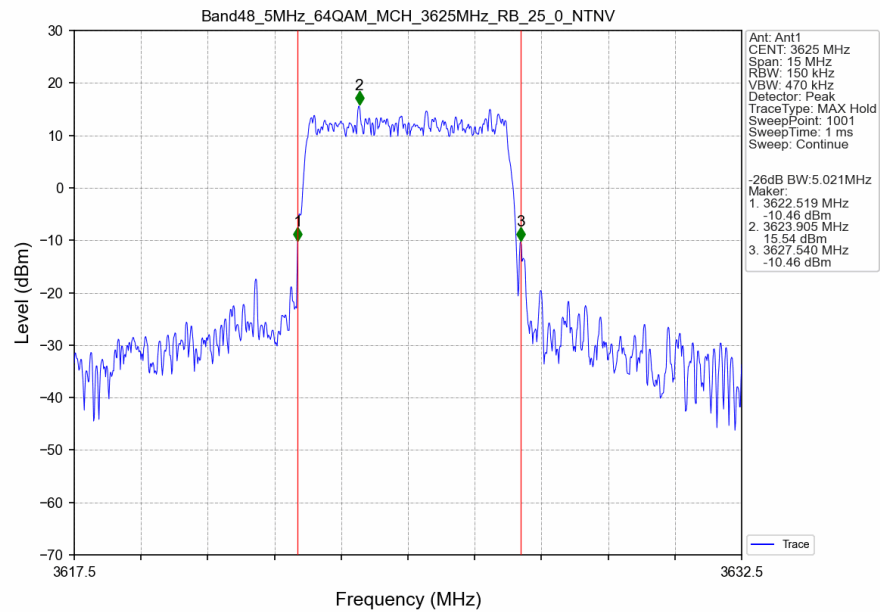
# Band48 5MHz 16QAM HCH 3697.5MHz RB 25 0 NTV



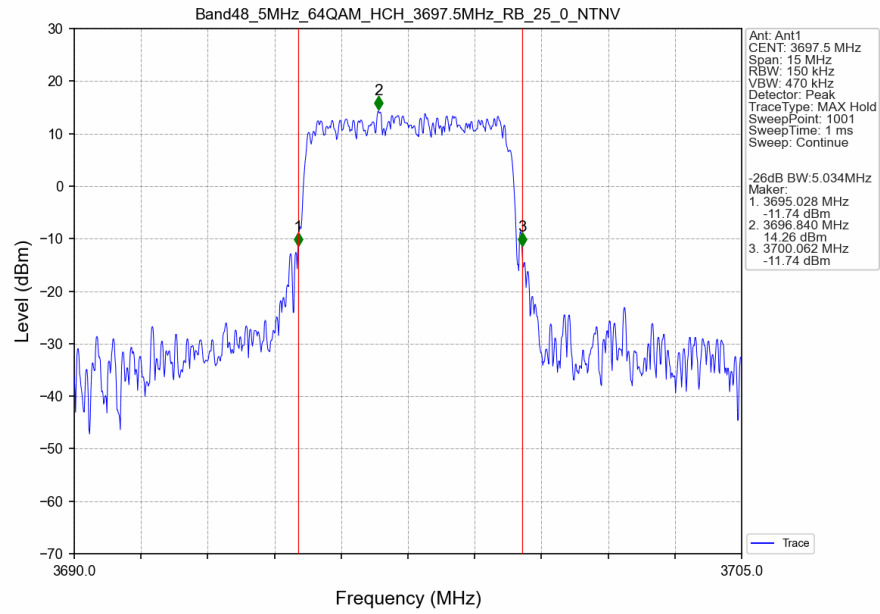
# Band48 5MHz 64QAM LCH 3552.5MHz RB 25 0 NTNV



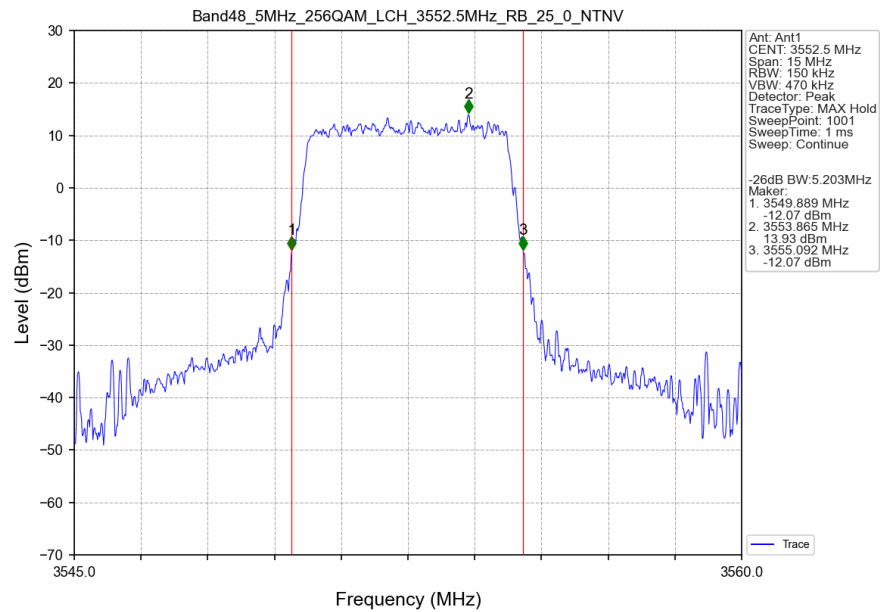
# Band48 5MHz 64QAM MCH 3625MHz RB 25 0 NTNV



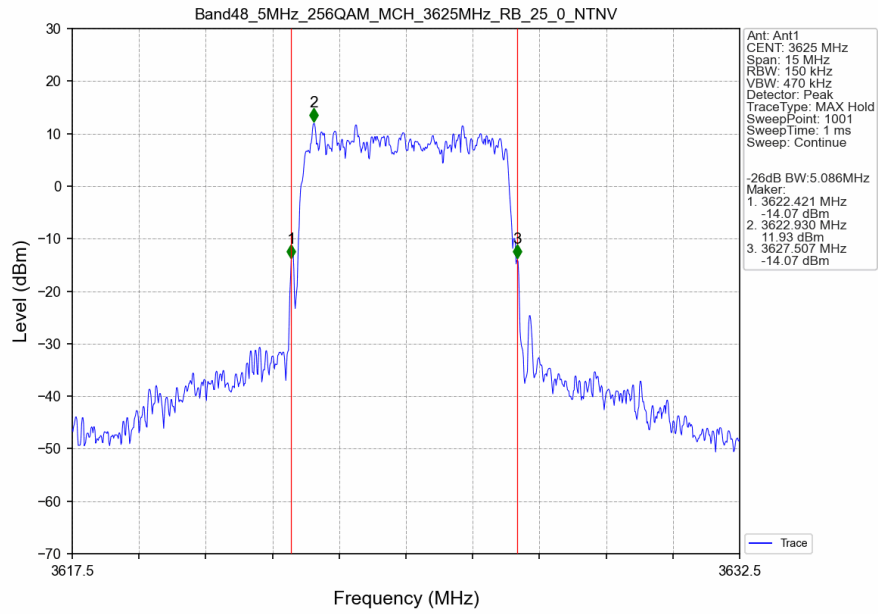
# Band48 5MHz 64QAM HCH 3697.5MHz RB 25\_0 NTN



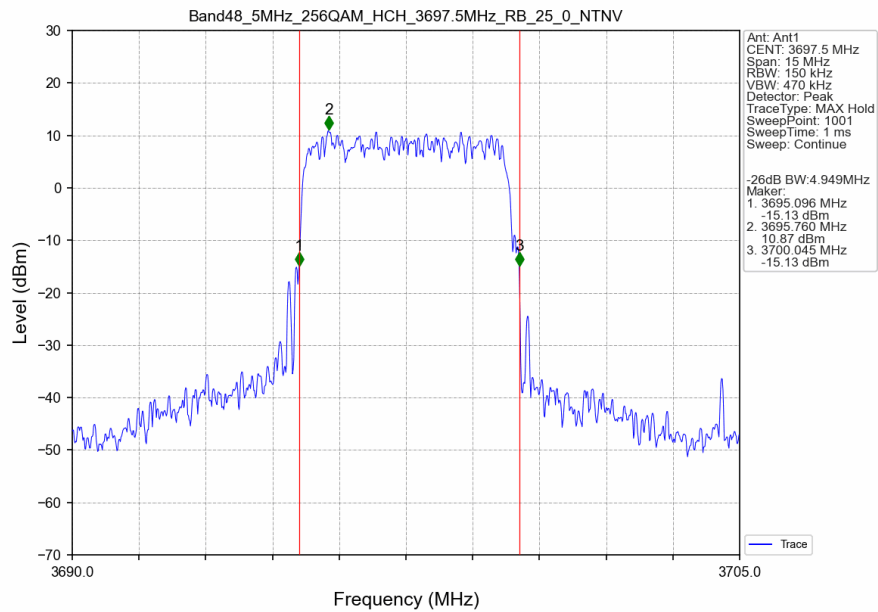
# Band48 5MHz 256QAM LCH 3552.5MHz RB 25\_0 NTN



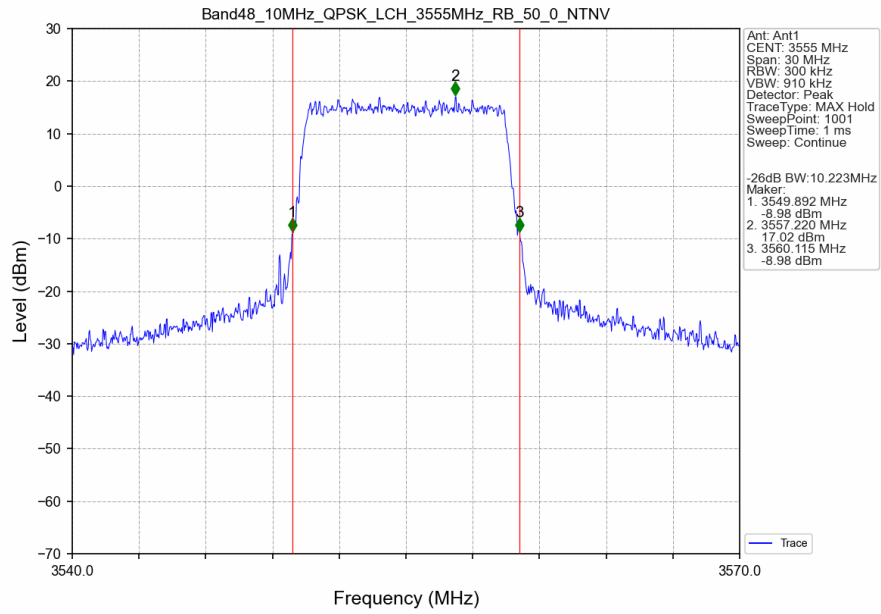
# Band48 5MHz 256QAM MCH 3625MHz RB 25 0 NTN



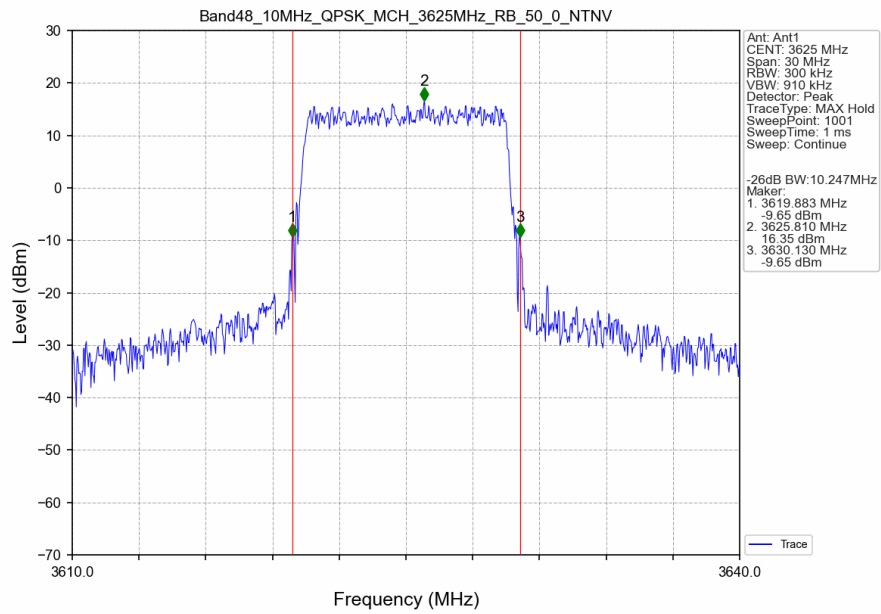
# Band48 5MHz 256QAM HCH 3697.5MHz RB 25 0 NTN



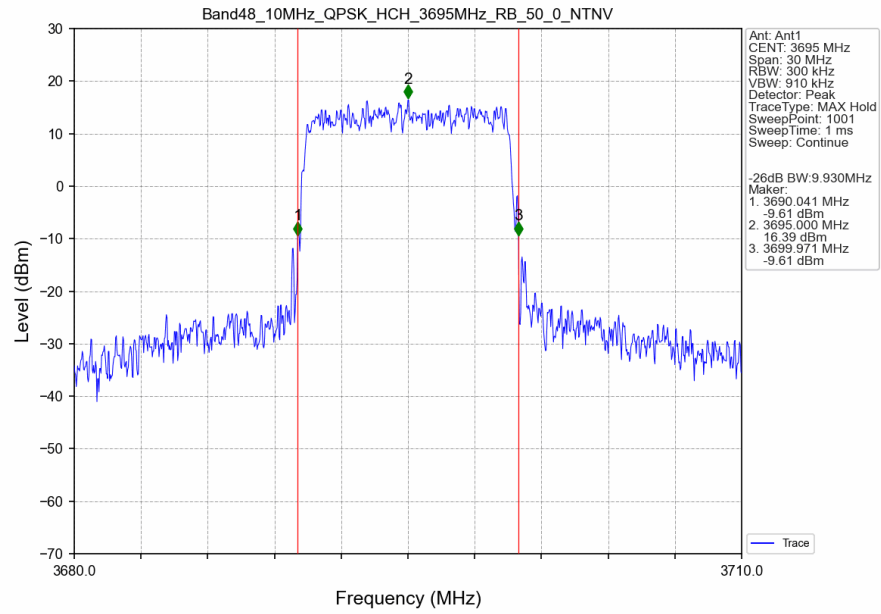
# Band48\_10MHz\_QPSK\_LCH\_3555MHz\_RB\_50\_0\_NTNV



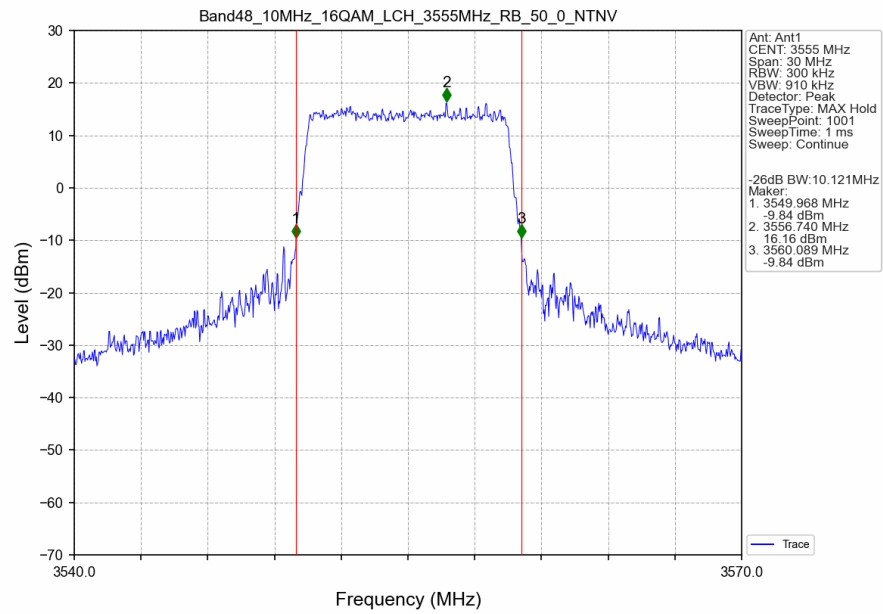
# Band48\_10MHz\_QPSK\_MCH\_3625MHz\_RB\_50\_0\_NTNV



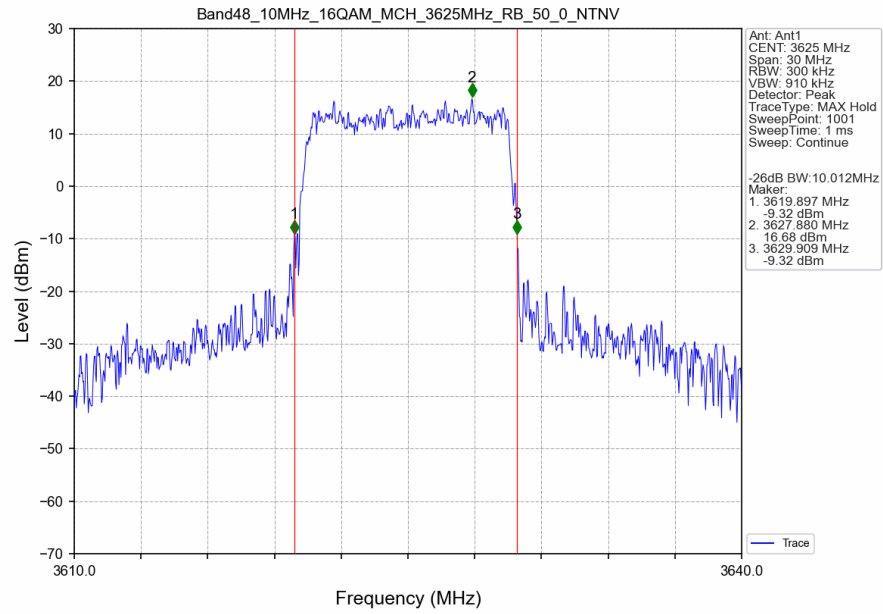
# Band48\_10MHz\_QPSK\_HCH\_3695MHz\_RB\_50\_0\_NTNV



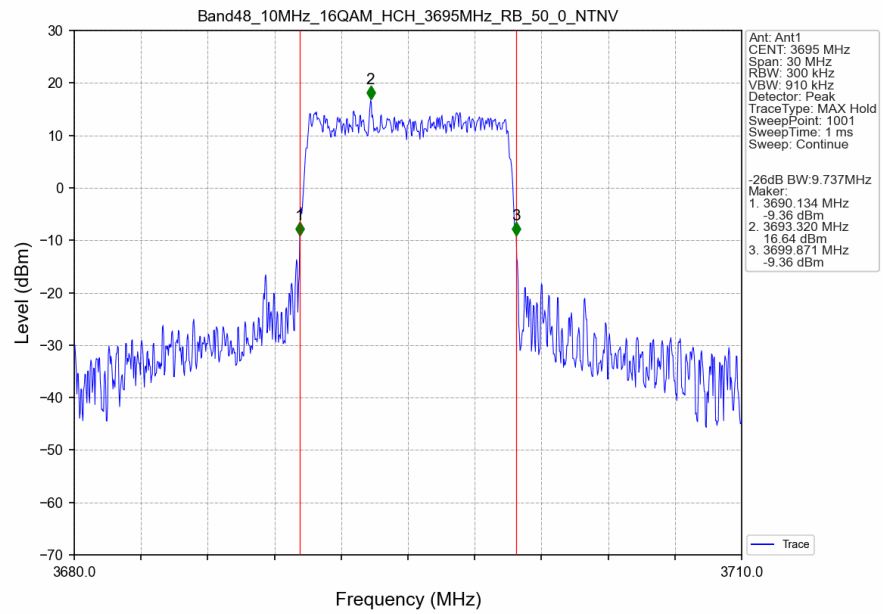
# Band48\_10MHz\_16QAM\_LCH\_3555MHz\_RB\_50\_0\_NTNV



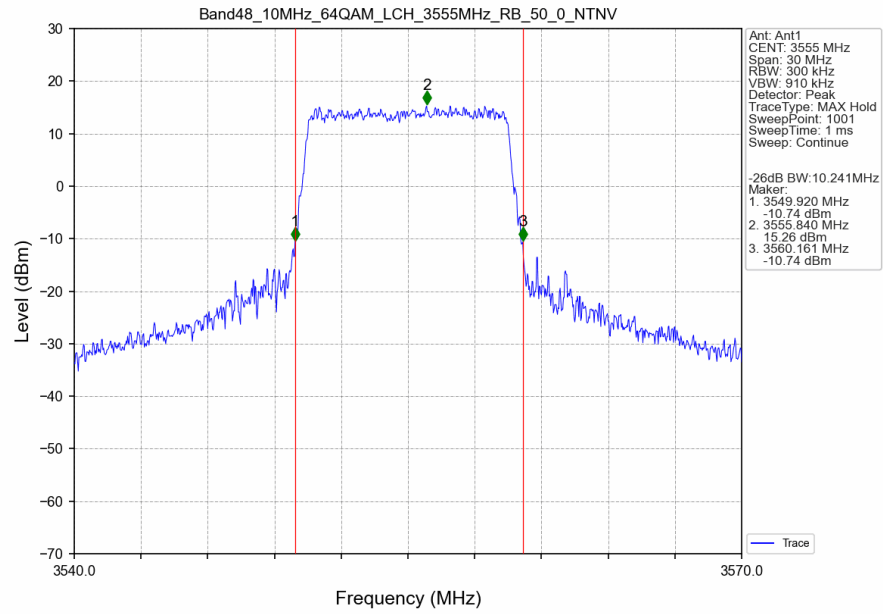
# Band48 10MHz 16QAM MCH 3625MHz RB 50 0 NTNV



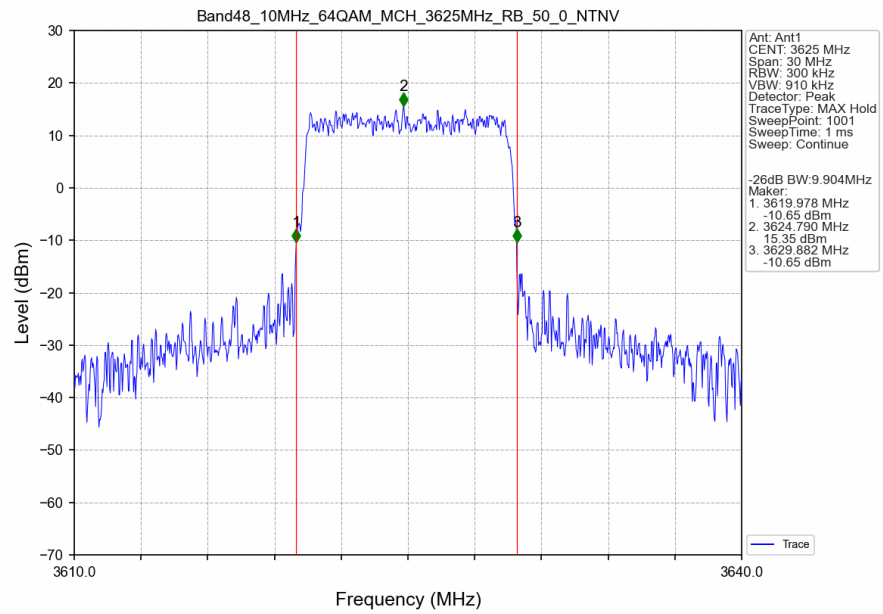
# Band48 10MHz 16QAM HCH 3695MHz RB 50 0 NTNV



# Band48 10MHz 64QAM LCH 3555MHz RB 50 0 NTN

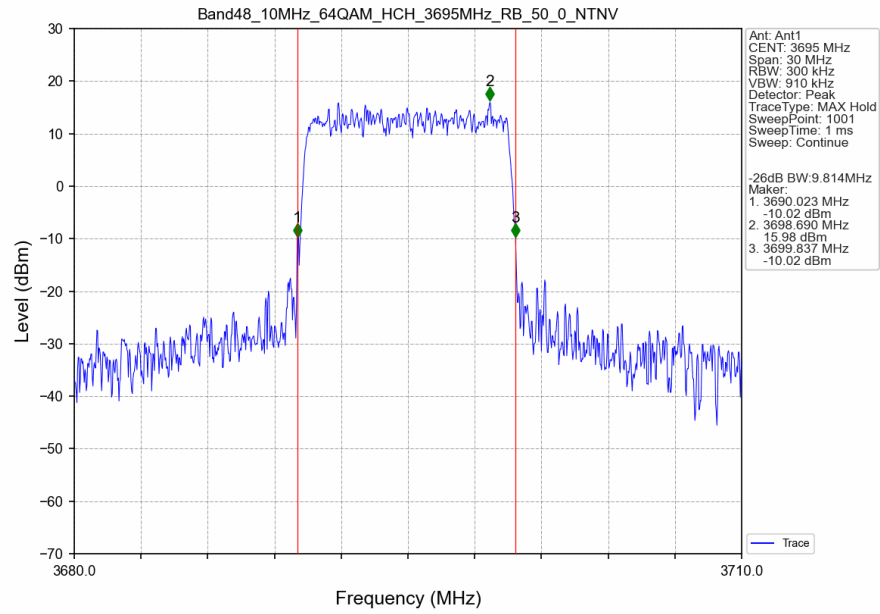


# Band48 10MHz 64QAM MCH 3625MHz RB 50 0 NTN

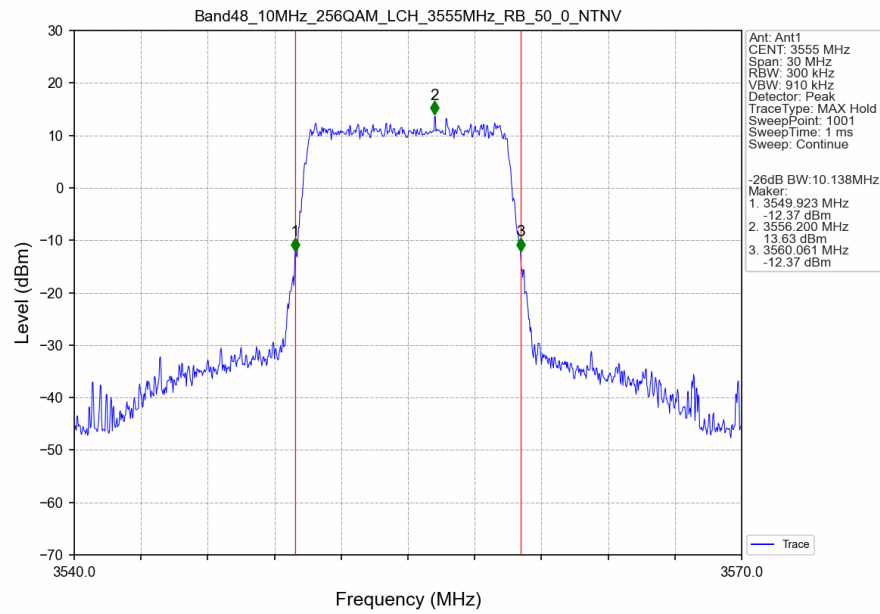




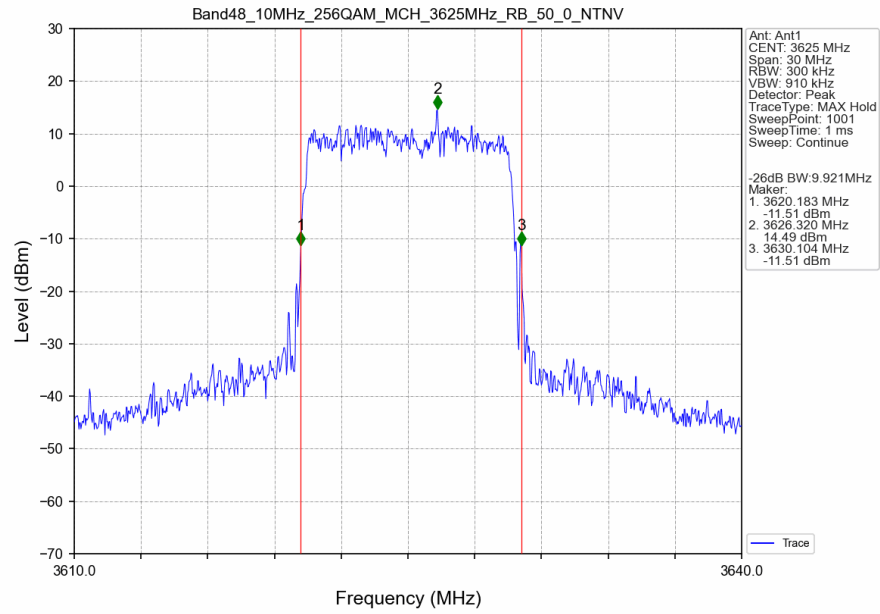
# Band48 10MHz 64QAM HCH 3695MHz RB 50 0 NTN



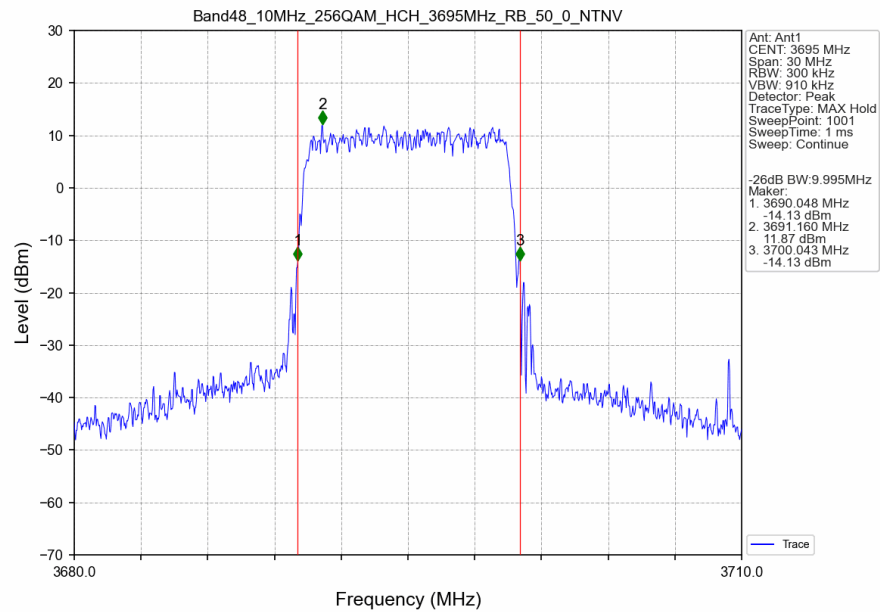
# Band48 10MHz 256QAM LCH 3555MHz RB 50 0 NTN



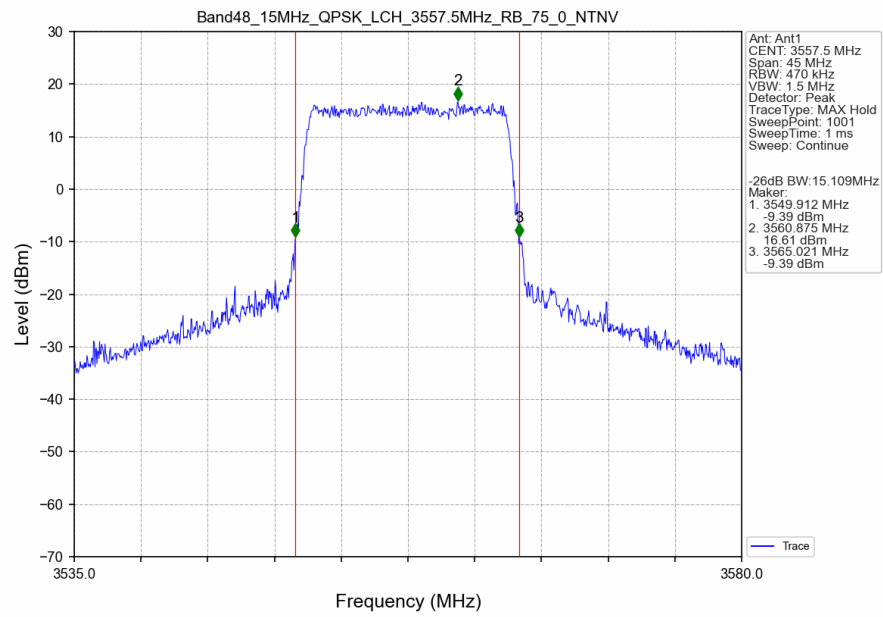
# Band48\_10MHz\_256QAM\_MCH\_3625MHz\_RB\_50\_0\_NTNV



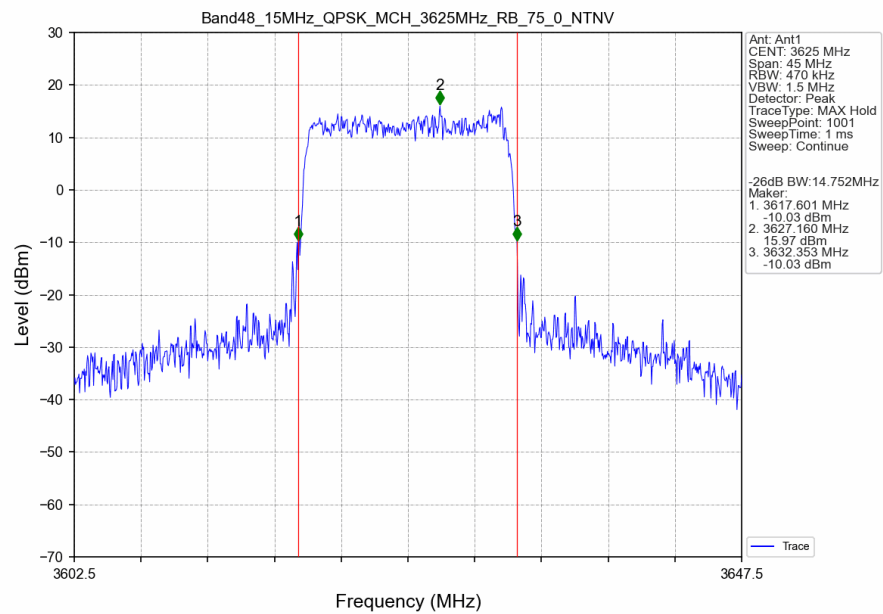
# Band48\_10MHz\_256QAM\_HCH\_3695MHz\_RB\_50\_0\_NTNV



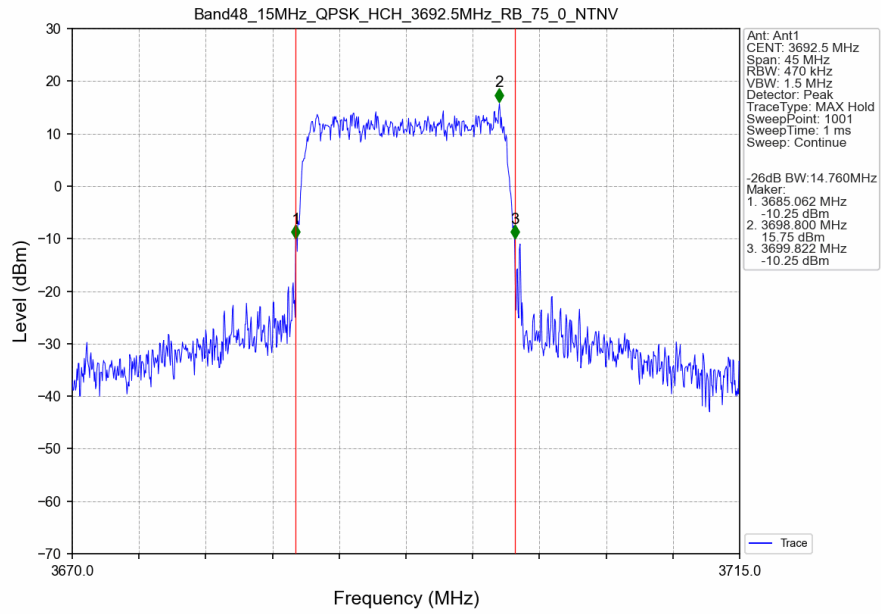
# Band48 15MHz QPSK LCH 3557.5MHz RB 75 0 NTNV



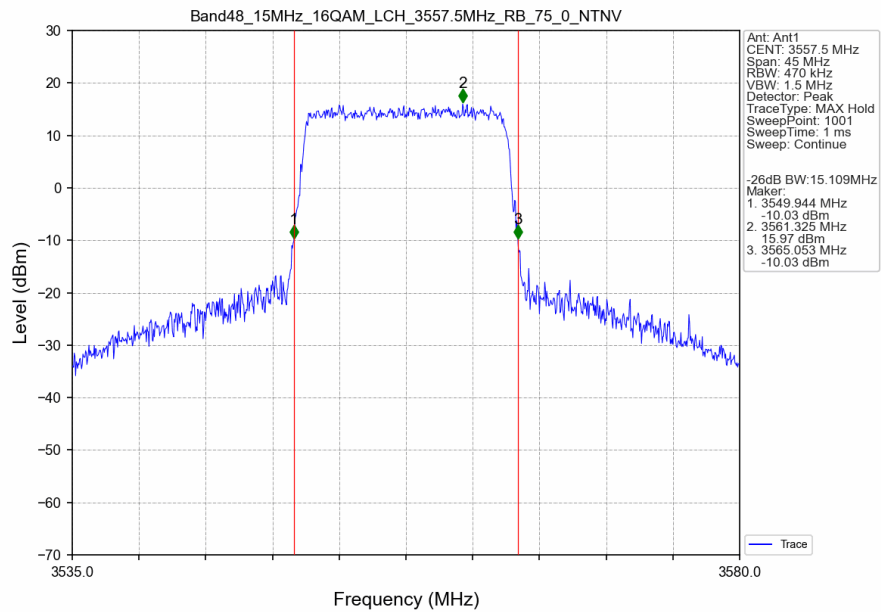
# Band48 15MHz QPSK MCH 3625MHz RB 75 0 NTNV



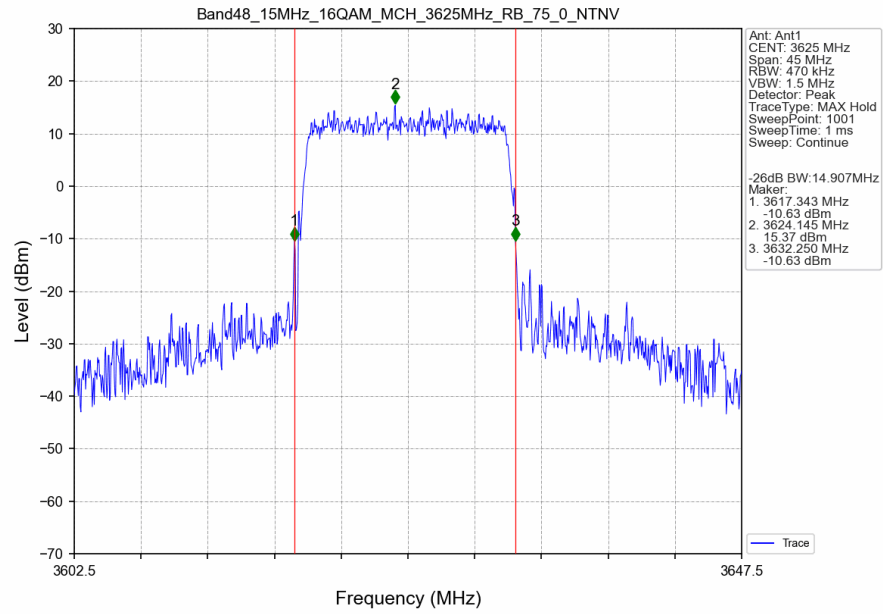
# Band48\_15MHz\_QPSK\_HCH\_3692.5MHz\_RB\_75\_0\_NTNV



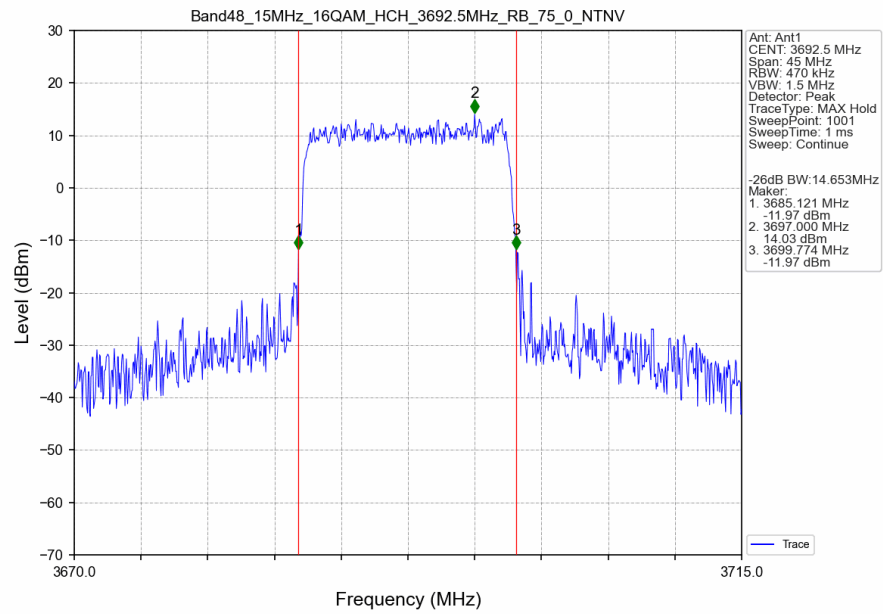
# Band48\_15MHz\_16QAM\_LCH\_3557.5MHz\_RB\_75\_0\_NTNV



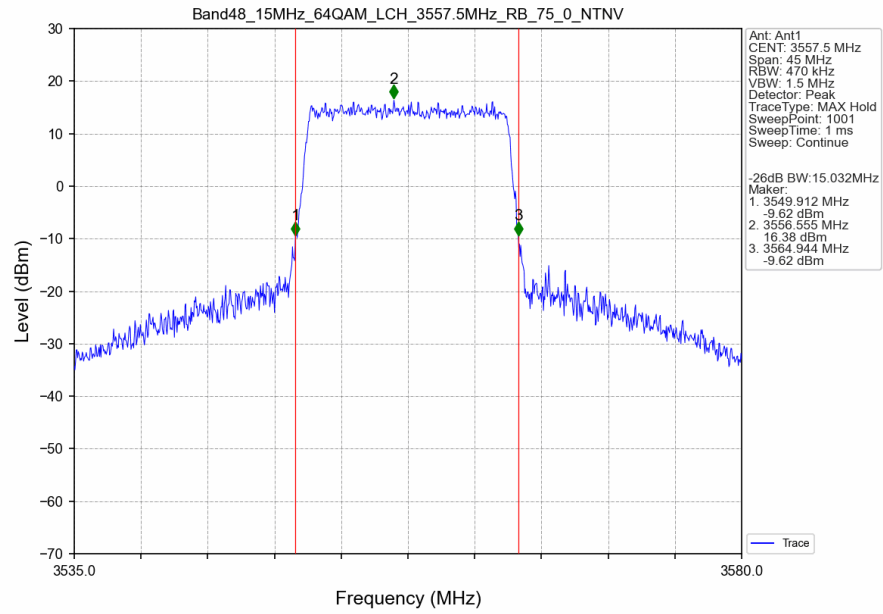
# Band48 15MHz 16QAM MCH 3625MHz RB 75 0 NTNV



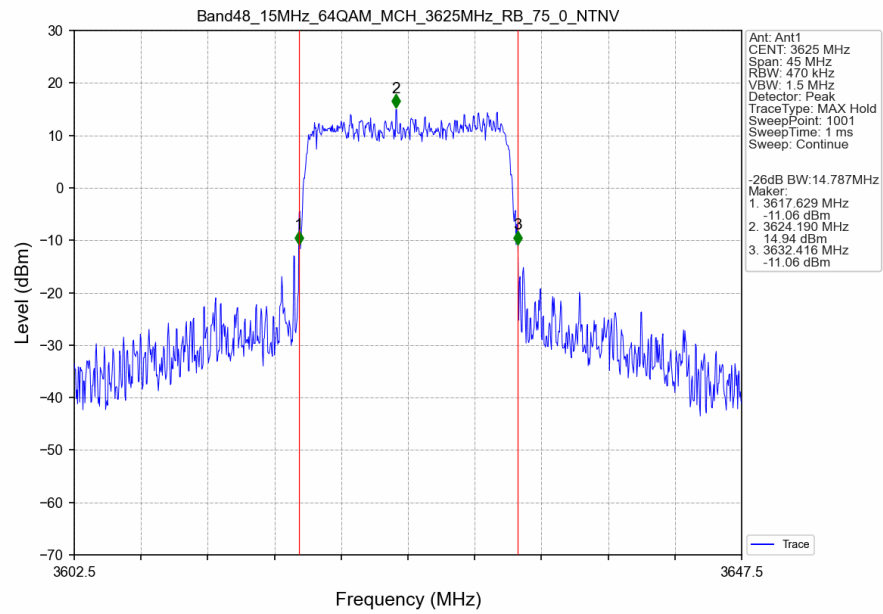
# Band48 15MHz 16QAM HCH 3692.5MHz RB 75 0 NTNV



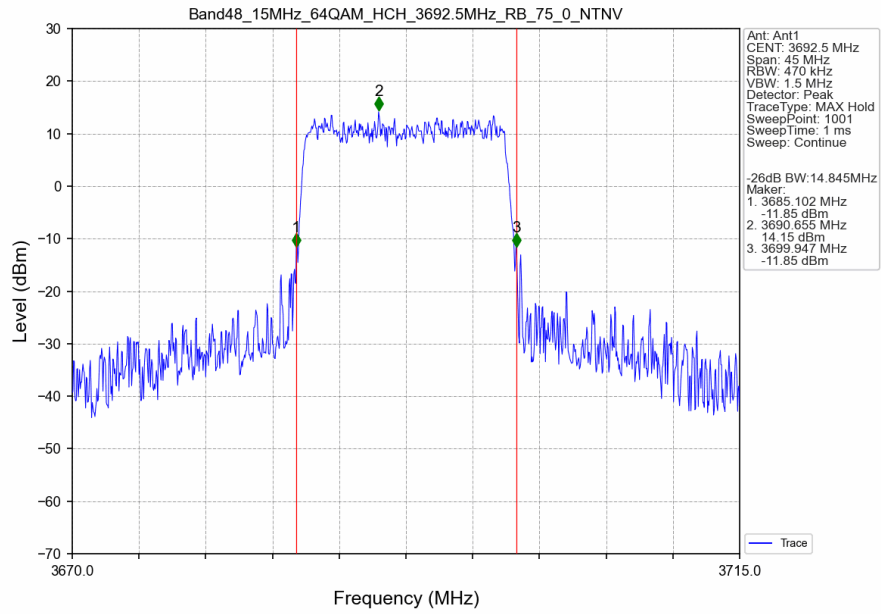
# Band48\_15MHz\_64QAM\_LCH\_3557.5MHz\_RB\_75\_0\_NTNV



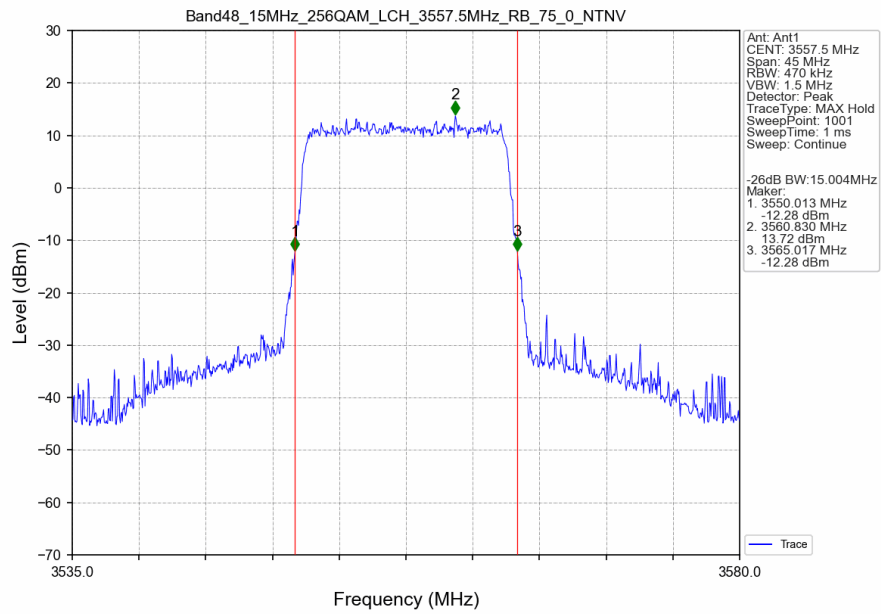
# Band48\_15MHz\_64QAM\_MCH\_3625MHz\_RB\_75\_0\_NTNV



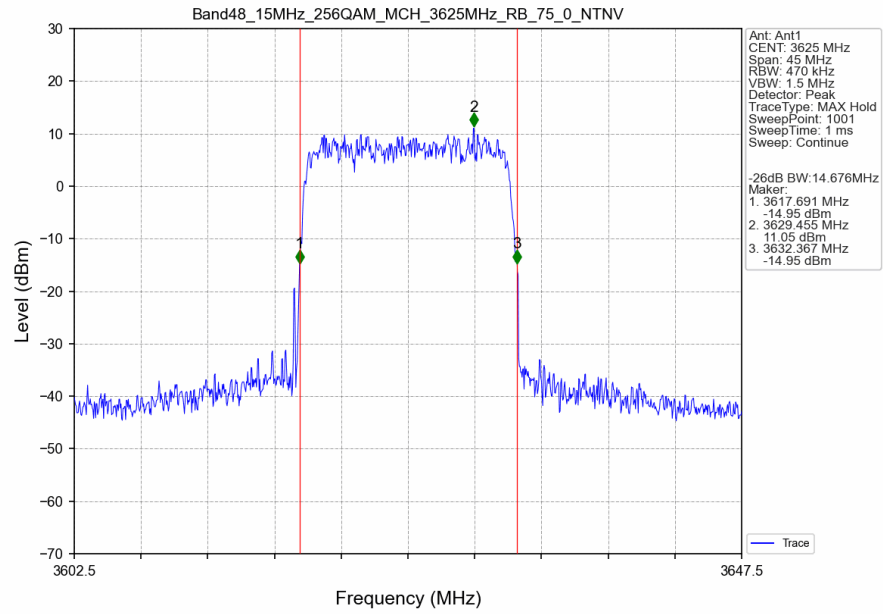
# Band48\_15MHz\_64QAM\_HCH\_3692.5MHz\_RB\_75\_0\_NTNV



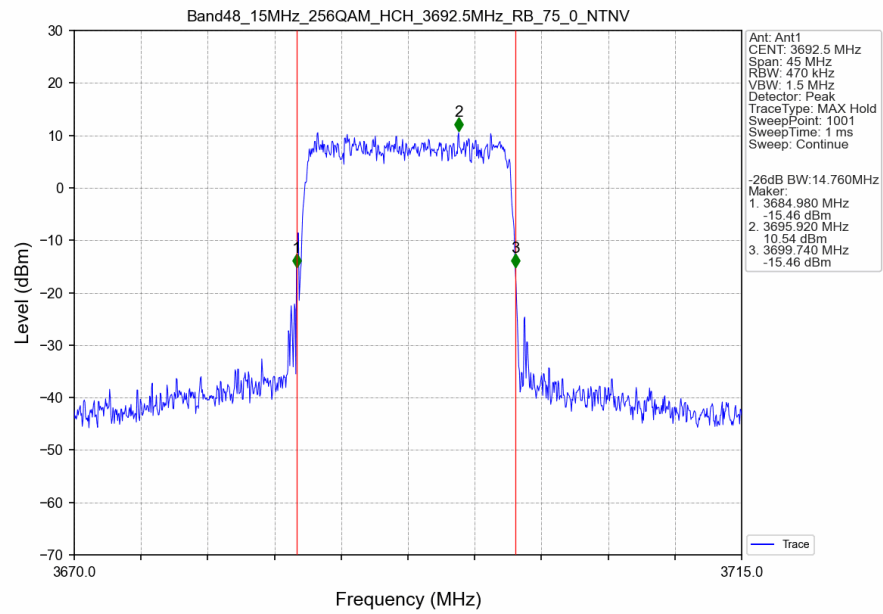
# Band48\_15MHz\_256QAM\_LCH\_3557.5MHz\_RB\_75\_0\_NTNV



# Band48\_15MHz\_256QAM\_MCH\_3625MHz\_RB\_75\_0\_NTNV

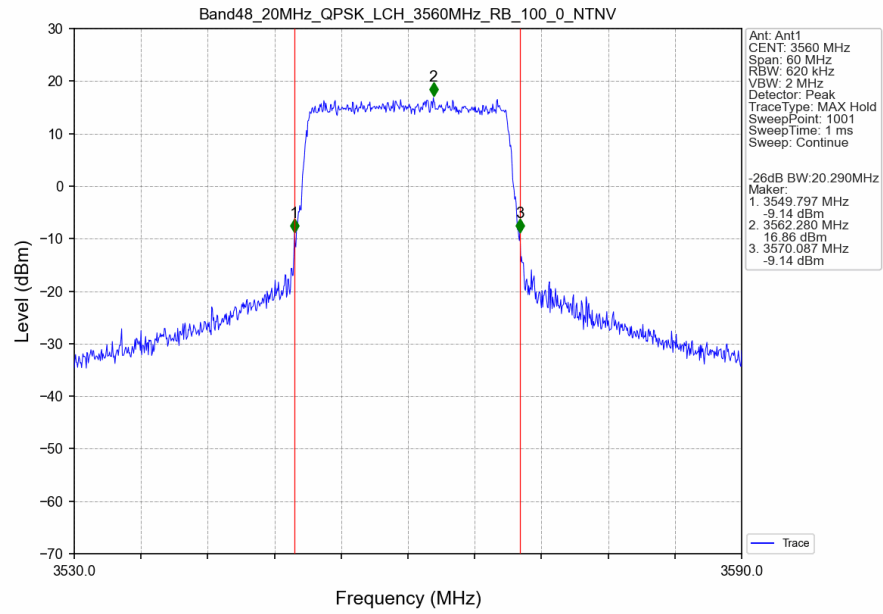


# Band48\_15MHz\_256QAM\_HCH\_3692.5MHz\_RB\_75\_0\_NTNV

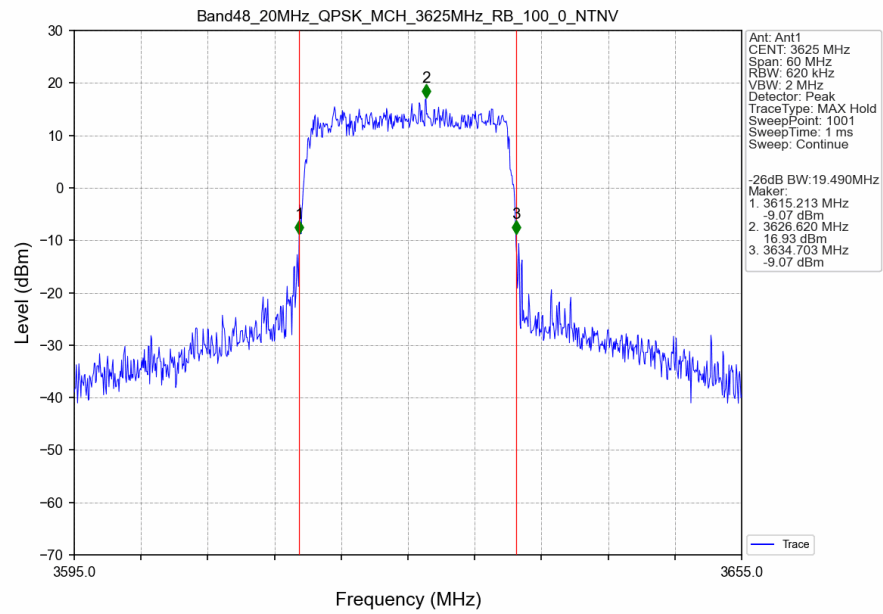




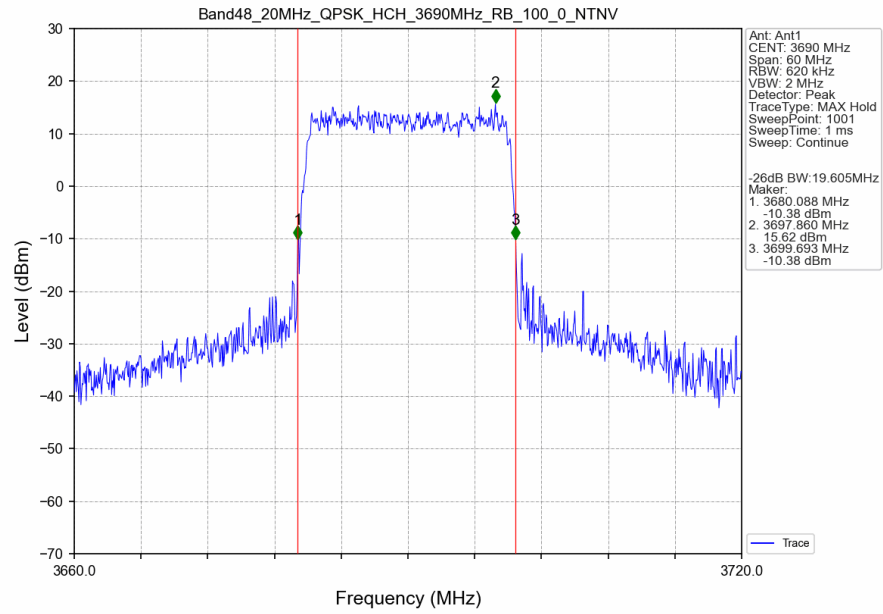
# Band48 20MHz QPSK LCH 3560MHz RB 100 0 NTV



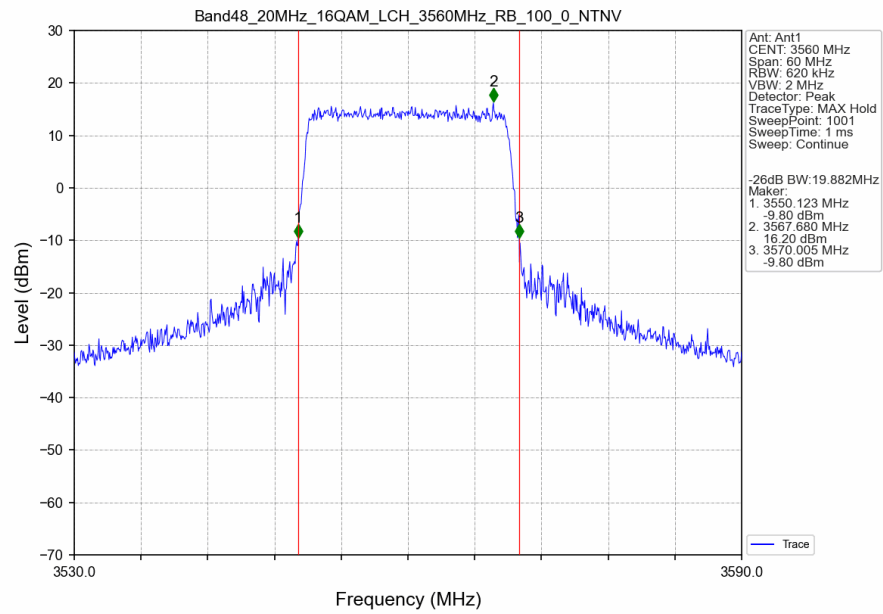
# Band48 20MHz QPSK MCH 3625MHz RB 100 0 NTV



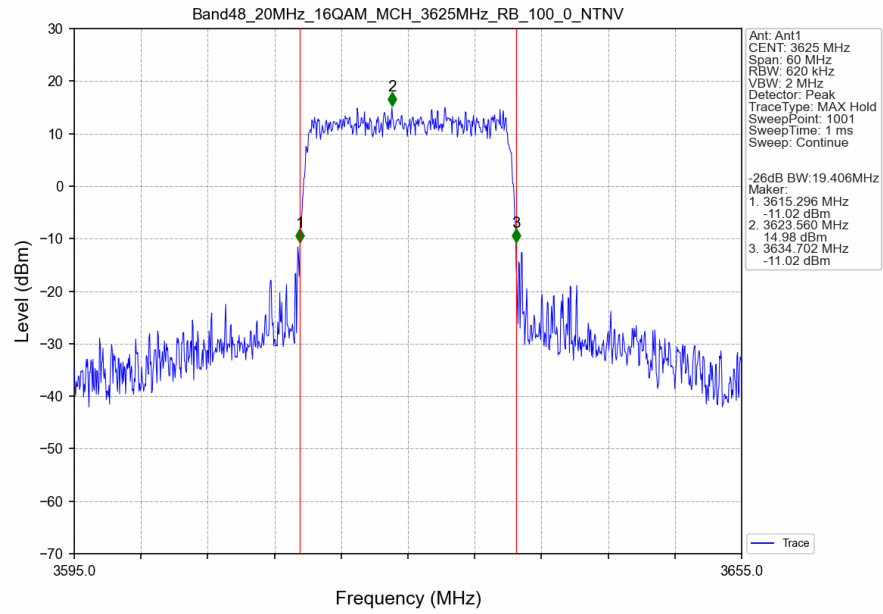
# Band48 20MHz QPSK HCH 3690MHz RB 100 0 NTNV



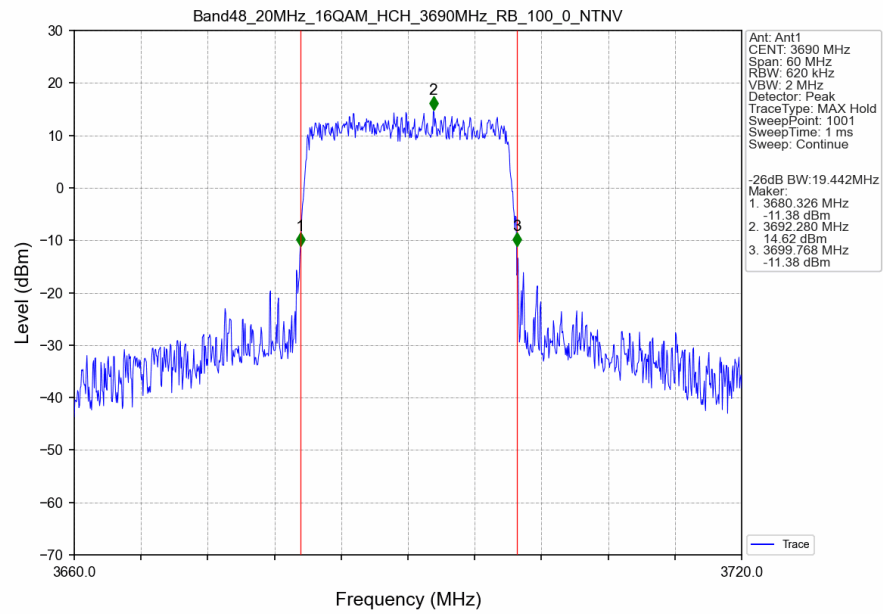
# Band48 20MHz 16QAM LCH 3560MHz RB 100 0 NTNV



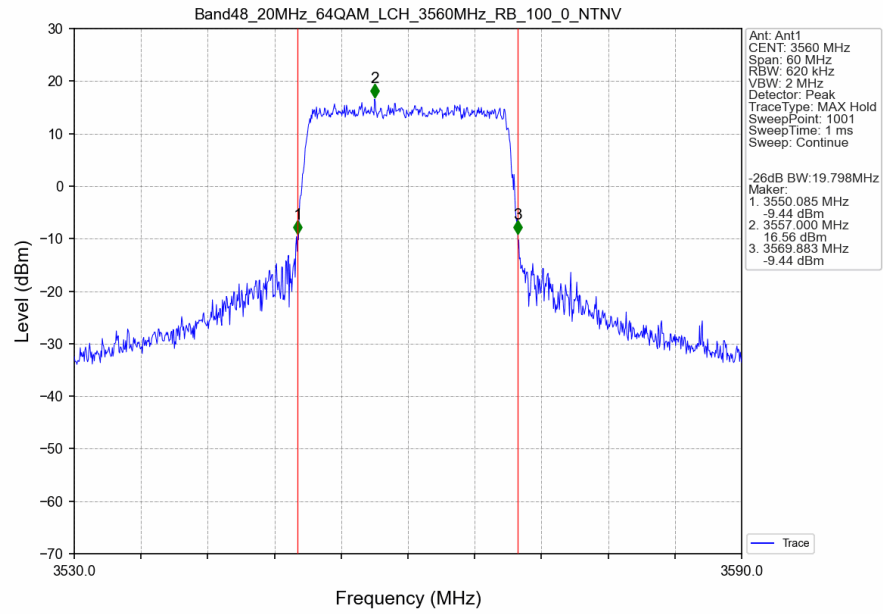
# Band48\_20MHz\_16QAM\_MCH\_3625MHz\_RB\_100\_0\_NTNV



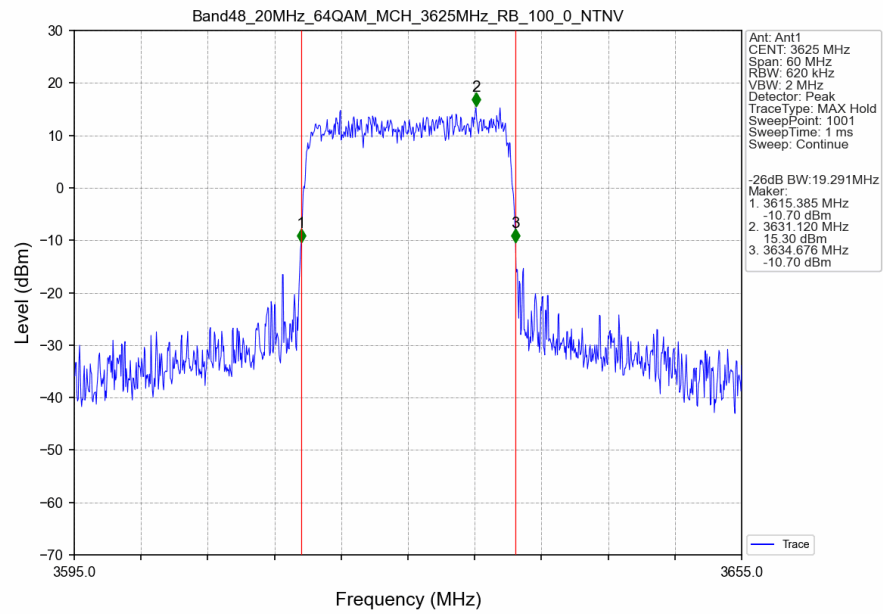
# Band48\_20MHz\_16QAM\_HCH\_3690MHz\_RB\_100\_0\_NTNV



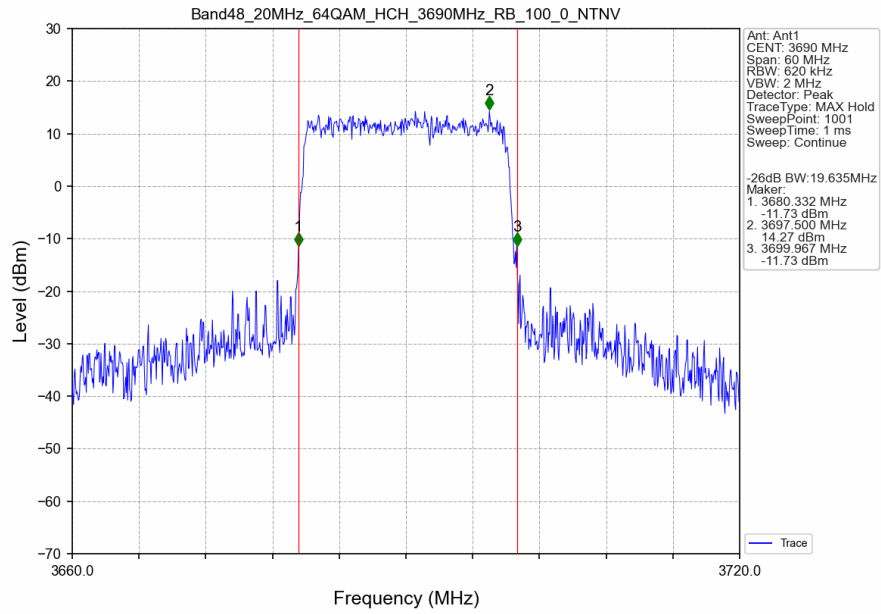
# Band48 20MHz 64QAM LCH 3560MHz RB 100\_0 NTN



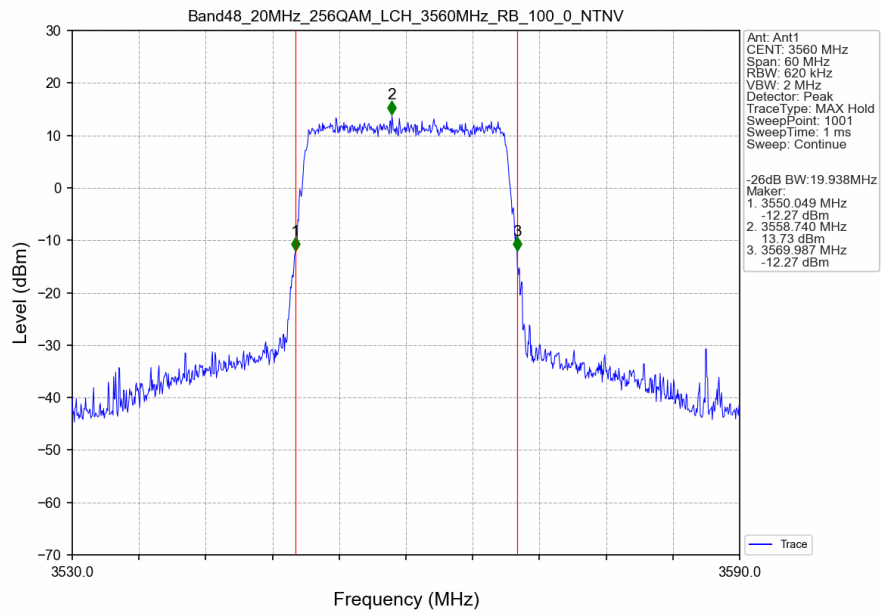
# Band48 20MHz 64QAM MCH 3625MHz RB 100\_0 NTN



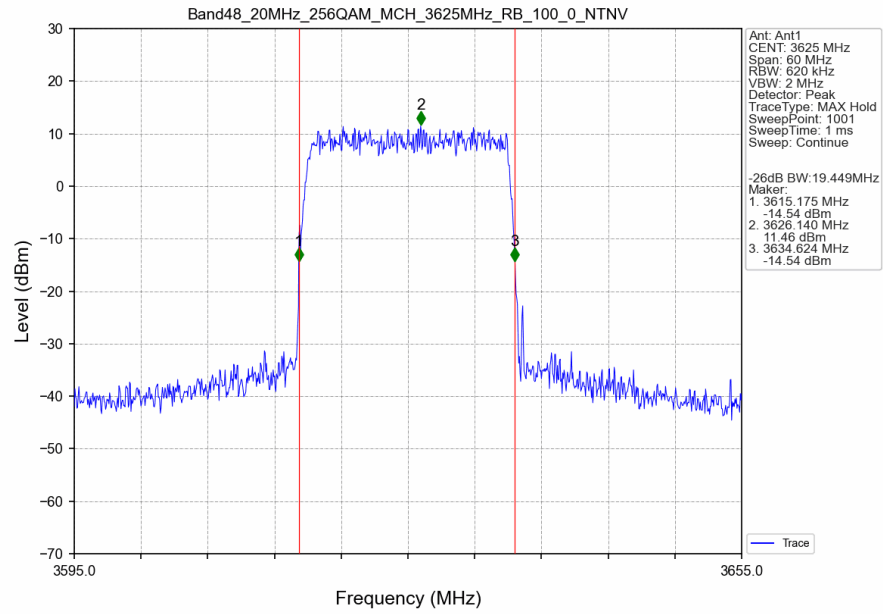
# Band48\_20MHz\_64QAM\_HCH\_3690MHz\_RB\_100\_0\_NTNV



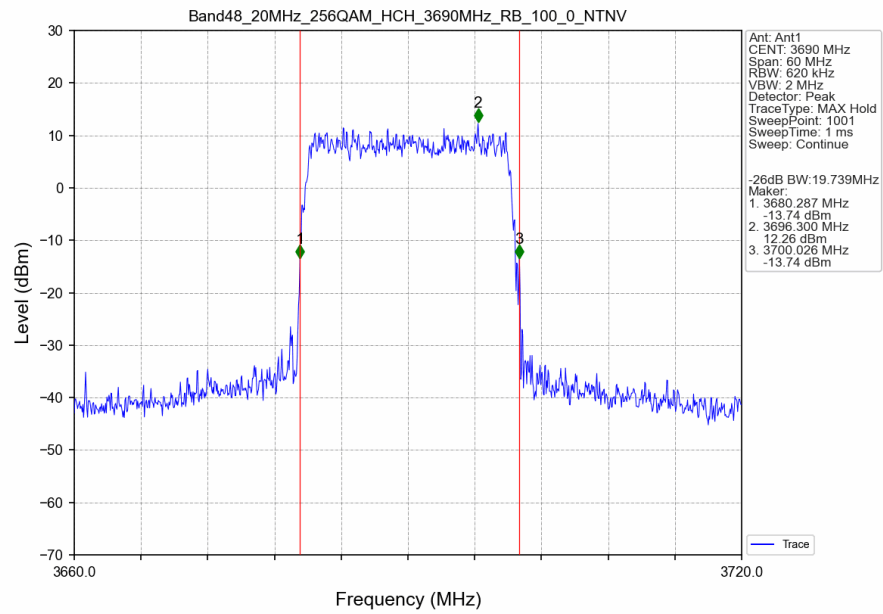
# Band48\_20MHz\_256QAM\_LCH\_3560MHz\_RB\_100\_0\_NTNV



# Band48 20MHz 256QAM MCH 3625MHz RB 100 0 NTN



# Band48 20MHz 256QAM HCH 3690MHz RB 100 0 NTN



## 4. Peak-Average Ratio

### 4.1 Test Result

#### 4.1.1 B48\_5MHz

| Band: 48 / Bandwidth: 5MHz / NTNV |                 |               |        |                         |       |         |
|-----------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                   |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                              | 3552.5          | 25            | 0      | 7.61                    | <=13  | Pass    |
|                                   | 3625            | 25            | 0      | 7.62                    | <=13  | Pass    |
|                                   | 3697.5          | 25            | 0      | 7.61                    | <=13  | Pass    |
| 16QAM                             | 3552.5          | 25            | 0      | 8.23                    | <=13  | Pass    |
|                                   | 3625            | 25            | 0      | 8.46                    | <=13  | Pass    |
|                                   | 3697.5          | 25            | 0      | 8.25                    | <=13  | Pass    |
| 64QAM                             | 3552.5          | 25            | 0      | 8.44                    | <=13  | Pass    |
|                                   | 3625            | 25            | 0      | 8.44                    | <=13  | Pass    |
|                                   | 3697.5          | 25            | 0      | 8.16                    | <=13  | Pass    |
| 256QAM                            | 3552.5          | 25            | 0      | 8.70                    | <=13  | Pass    |
|                                   | 3625            | 25            | 0      | 8.68                    | <=13  | Pass    |
|                                   | 3697.5          | 25            | 0      | 8.66                    | <=13  | Pass    |

#### 4.1.2 B48\_10MHz

| Band: 48 / Bandwidth: 10MHz / NTNV |                 |               |        |                         |       |         |
|------------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                    |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                               | 3555            | 50            | 0      | 7.66                    | <=13  | Pass    |
|                                    | 3625            | 50            | 0      | 7.56                    | <=13  | Pass    |
|                                    | 3695            | 50            | 0      | 7.66                    | <=13  | Pass    |
| 16QAM                              | 3555            | 50            | 0      | 8.43                    | <=13  | Pass    |
|                                    | 3625            | 50            | 0      | 8.51                    | <=13  | Pass    |
|                                    | 3695            | 50            | 0      | 8.39                    | <=13  | Pass    |
| 64QAM                              | 3555            | 50            | 0      | 8.43                    | <=13  | Pass    |
|                                    | 3625            | 50            | 0      | 8.39                    | <=13  | Pass    |
|                                    | 3695            | 50            | 0      | 8.44                    | <=13  | Pass    |
| 256QAM                             | 3555            | 50            | 0      | 8.77                    | <=13  | Pass    |
|                                    | 3625            | 50            | 0      | 8.72                    | <=13  | Pass    |
|                                    | 3695            | 50            | 0      | 8.63                    | <=13  | Pass    |

#### 4.1.3 B48\_15MHz

| Band: 48 / Bandwidth: 15MHz / NTNV |                 |               |        |                         |       |         |
|------------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                    |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                               | 3557.5          | 75            | 0      | 7.58                    | <=13  | Pass    |
|                                    | 3625            | 75            | 0      | 7.72                    | <=13  | Pass    |
|                                    | 3692.5          | 75            | 0      | 7.42                    | <=13  | Pass    |
| 16QAM                              | 3557.5          | 75            | 0      | 8.28                    | <=13  | Pass    |
|                                    | 3625            | 75            | 0      | 8.31                    | <=13  | Pass    |

|        |        |    |   |      |      |      |
|--------|--------|----|---|------|------|------|
|        | 3692.5 | 75 | 0 | 8.35 | <=13 | Pass |
| 64QAM  | 3557.5 | 75 | 0 | 8.38 | <=13 | Pass |
|        | 3625   | 75 | 0 | 8.31 | <=13 | Pass |
|        | 3692.5 | 75 | 0 | 8.28 | <=13 | Pass |
|        | 3557.5 | 75 | 0 | 8.49 | <=13 | Pass |
| 256QAM | 3625   | 75 | 0 | 8.52 | <=13 | Pass |
|        | 3692.5 | 75 | 0 | 8.46 | <=13 | Pass |

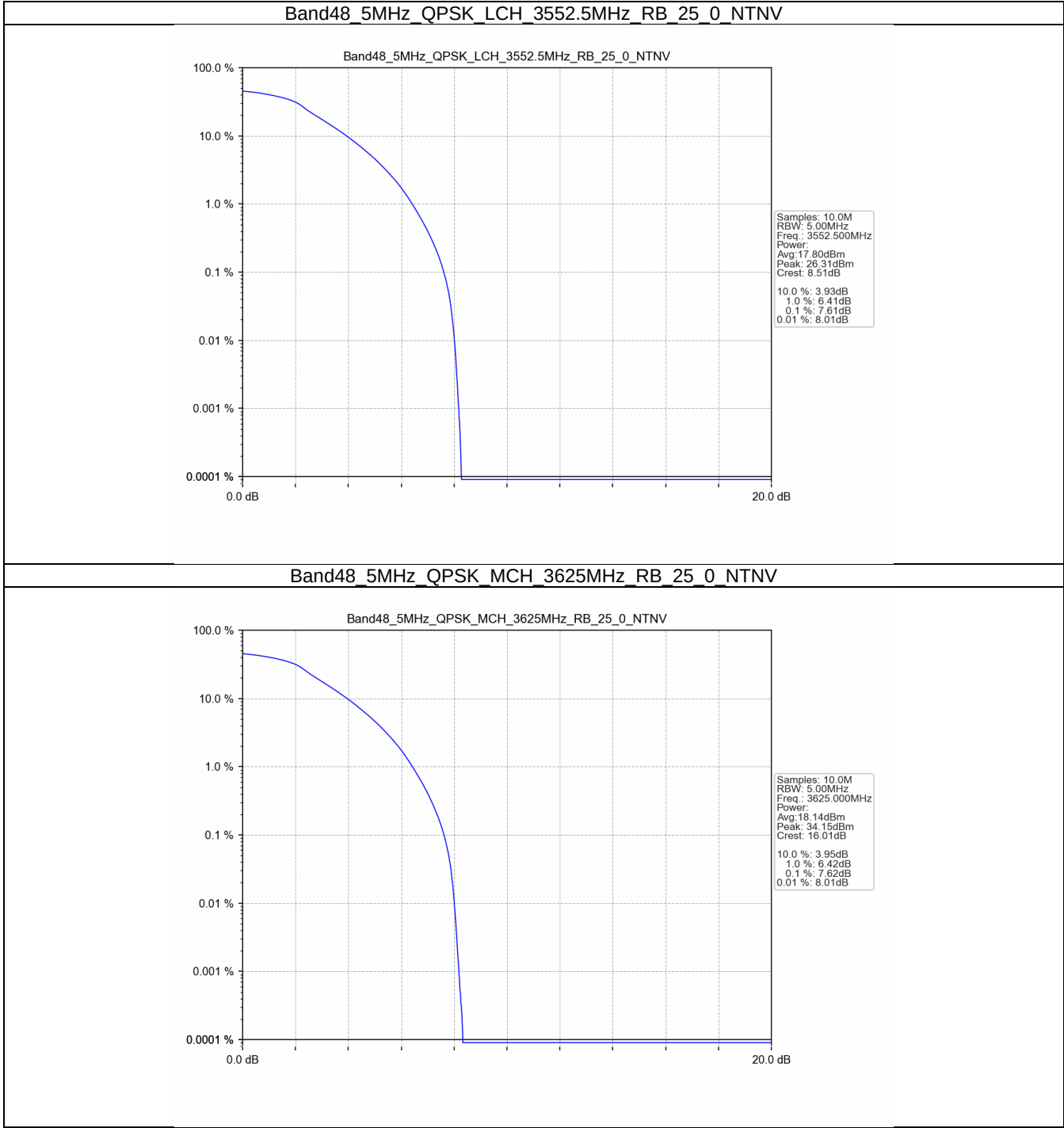
#### 4.1.4 B48\_20MHz

| Band: 48 / Bandwidth: 20MHz / NTNV |                 |               |        |                         |       |         |
|------------------------------------|-----------------|---------------|--------|-------------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                    |                 | Size          | Offset | Result                  | Limit |         |
| QPSK                               | 3560            | 100           | 0      | 7.74                    | <=13  | Pass    |
|                                    | 3625            | 100           | 0      | 7.53                    | <=13  | Pass    |
|                                    | 3690            | 100           | 0      | 7.11                    | <=13  | Pass    |
| 16QAM                              | 3560            | 100           | 0      | 8.40                    | <=13  | Pass    |
|                                    | 3625            | 100           | 0      | 8.43                    | <=13  | Pass    |
|                                    | 3690            | 100           | 0      | 8.24                    | <=13  | Pass    |
| 64QAM                              | 3560            | 100           | 0      | 8.32                    | <=13  | Pass    |
|                                    | 3625            | 100           | 0      | 8.19                    | <=13  | Pass    |
|                                    | 3690            | 100           | 0      | 8.38                    | <=13  | Pass    |
| 256QAM                             | 3560            | 100           | 0      | 8.58                    | <=13  | Pass    |
|                                    | 3625            | 100           | 0      | 8.46                    | <=13  | Pass    |
|                                    | 3690            | 100           | 0      | 8.58                    | <=13  | Pass    |

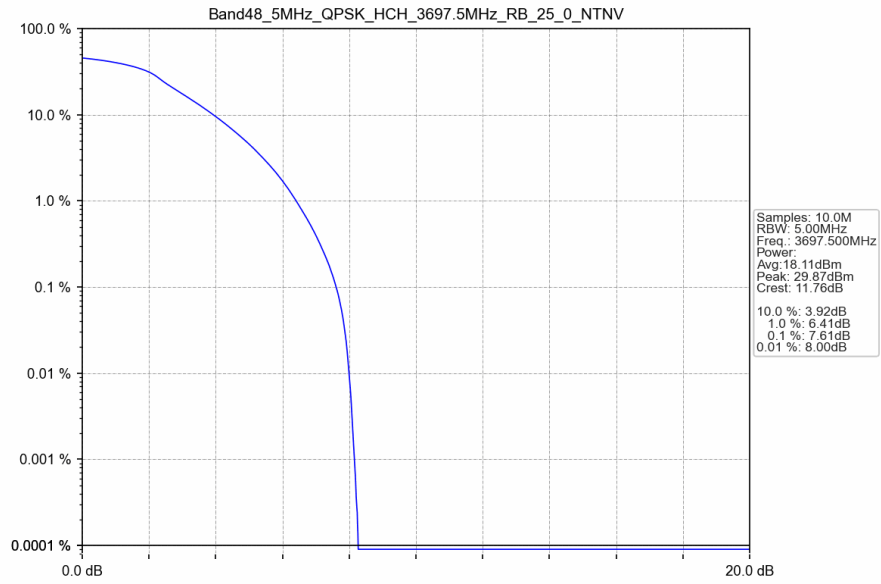


4.2 Test Graph

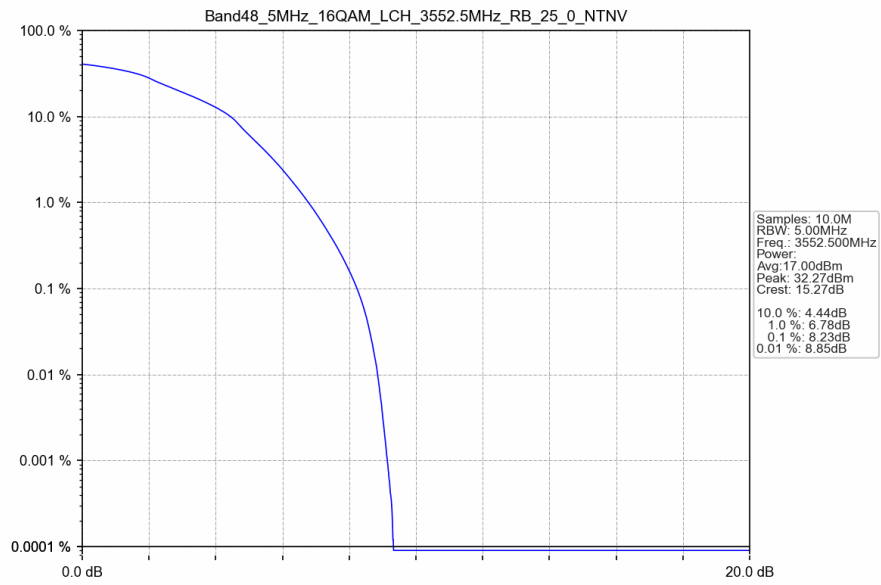
4.2.1 B48\_5MHz



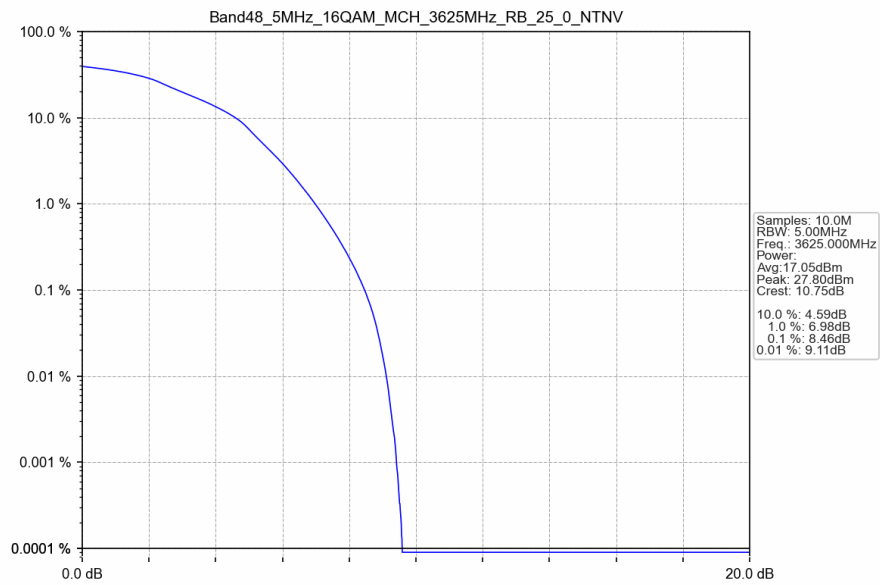
Band48 5MHz QPSK HCH 3697.5MHz RB 25 0 NTNV



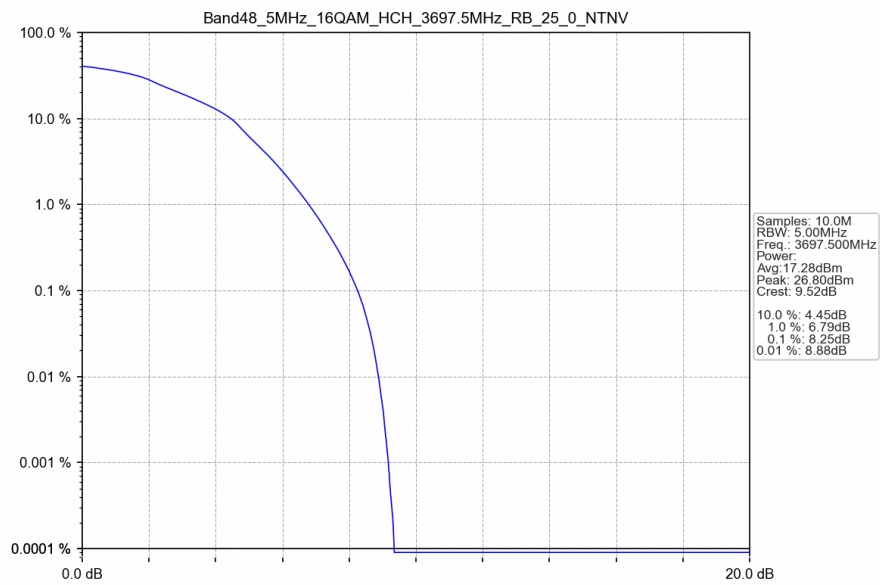
Band48 5MHz 16QAM LCH 3552.5MHz RB 25 0 NTNV



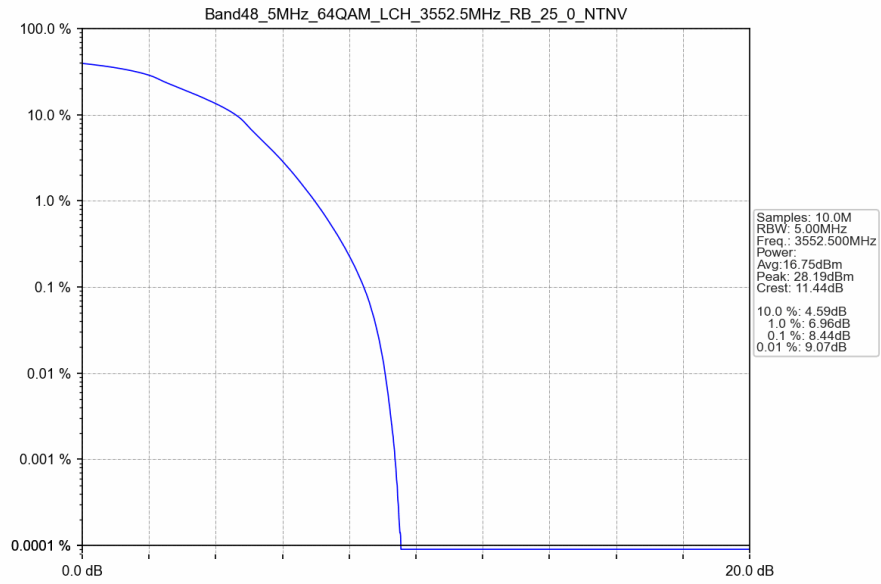
# Band48 5MHz 16QAM MCH 3625MHz RB 25 0 NTV



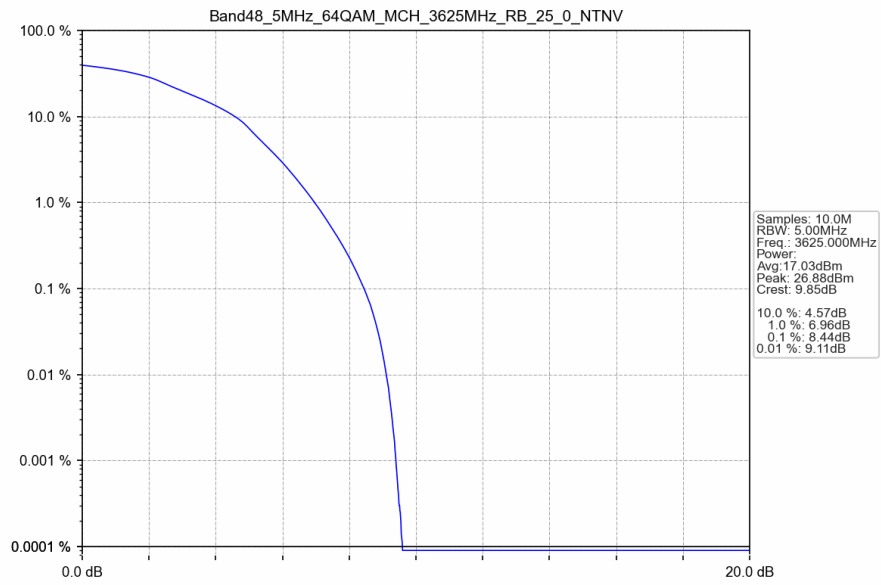
# Band48 5MHz 16QAM HCH 3697.5MHz RB 25 0 NTV



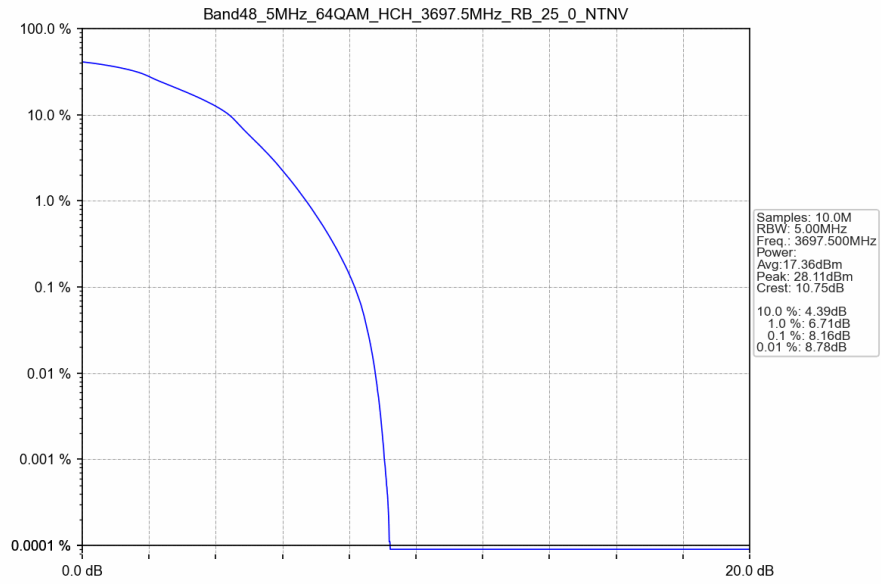
# Band48 5MHz 64QAM LCH 3552.5MHz RB 25 0 NTNV



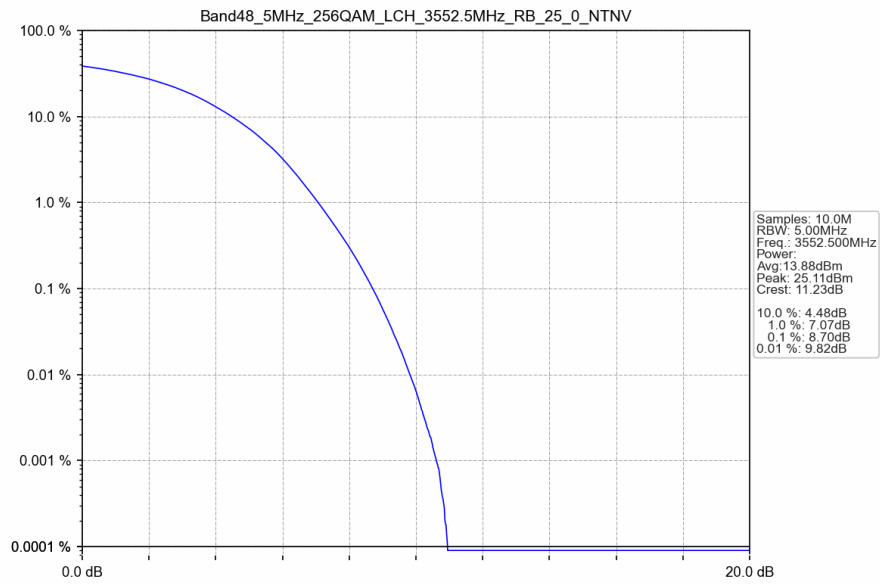
# Band48 5MHz 64QAM MCH 3625MHz RB 25 0 NTNV



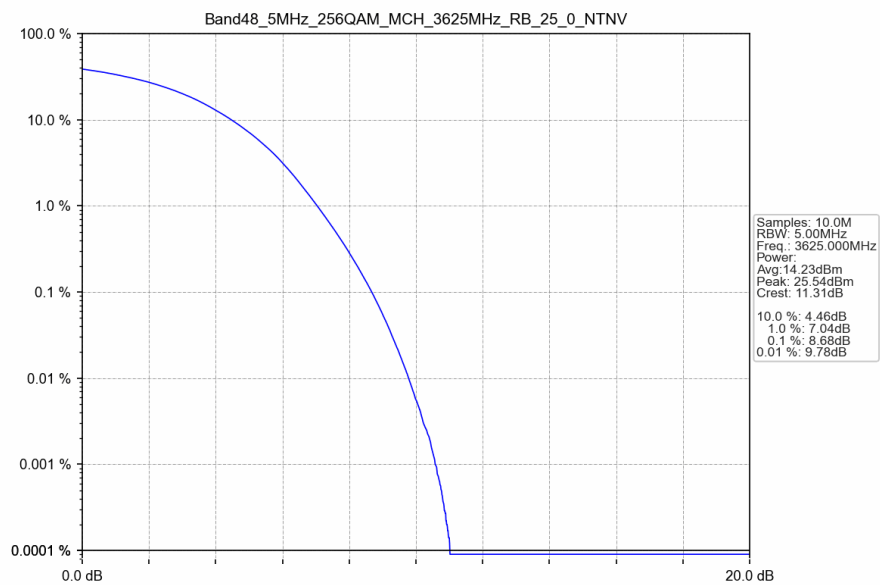
# Band48 5MHz 64QAM HCH 3697.5MHz RB 25\_0 NTN



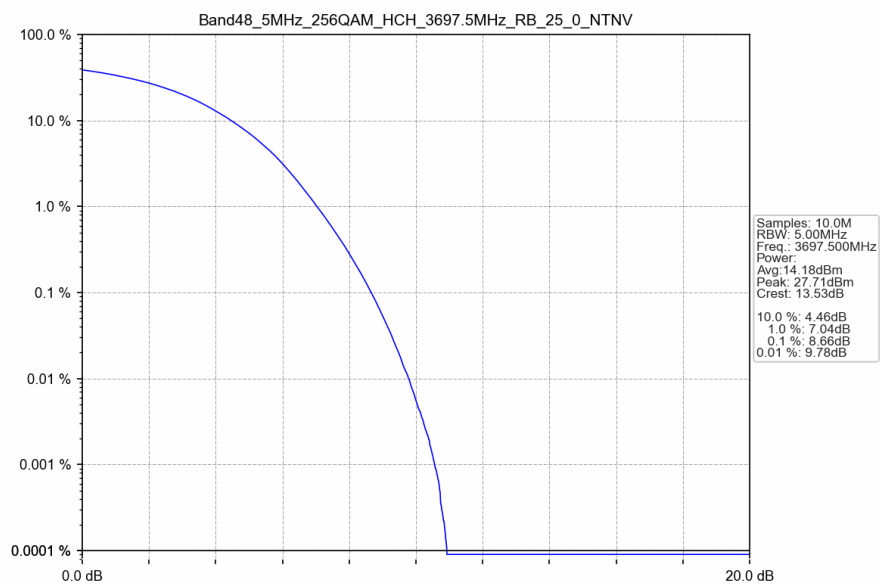
# Band48 5MHz 256QAM LCH 3552.5MHz RB 25\_0 NTN



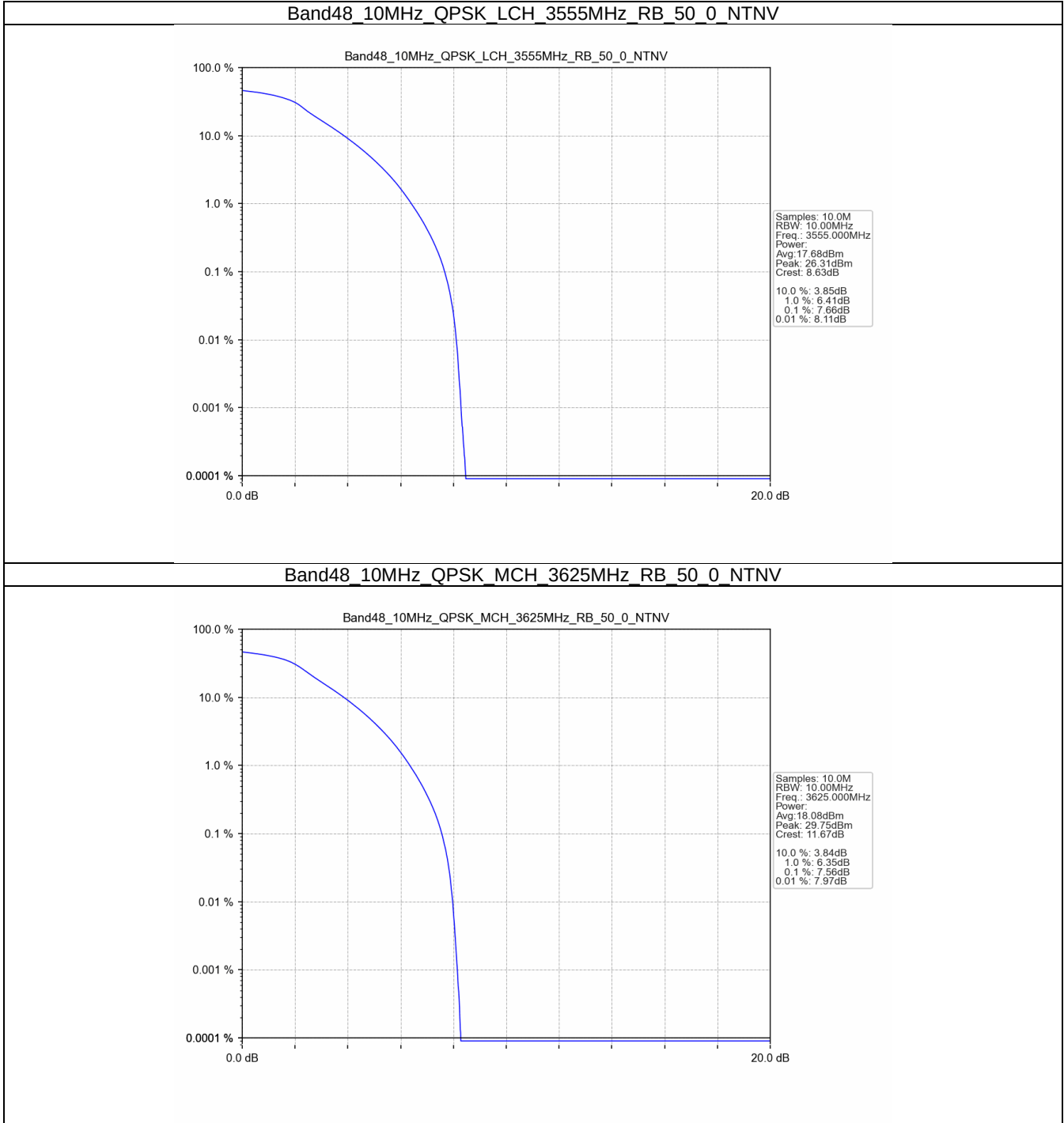
# Band48 5MHz 256QAM MCH 3625MHz RB 25 0 NTNV



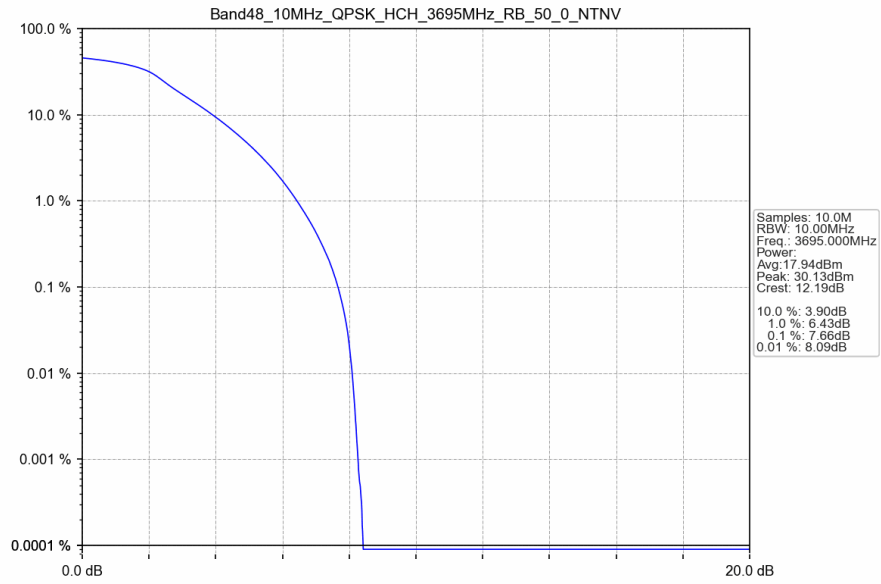
# Band48 5MHz 256QAM HCH 3697.5MHz RB 25 0 NTNV



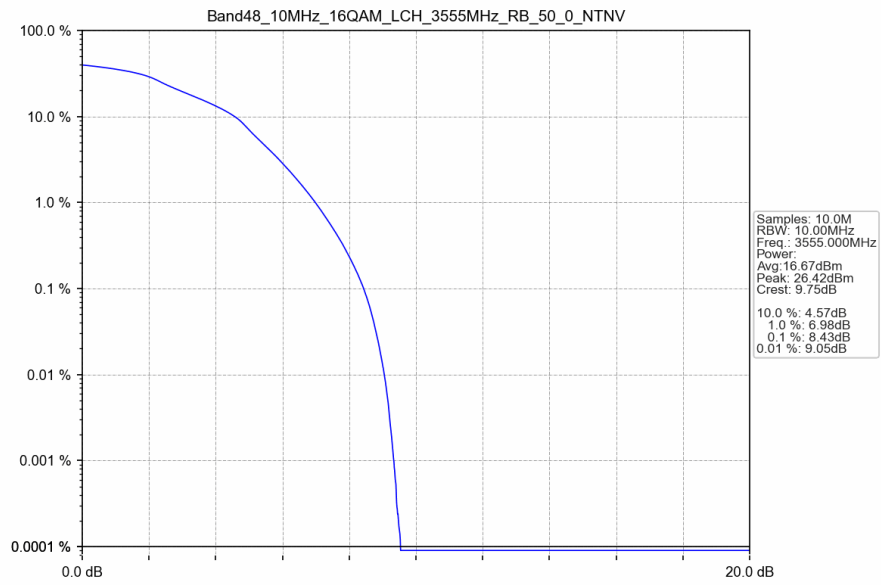
4.2.2 B48\_10MHz



Band48\_10MHz\_QPSK\_HCH\_3695MHz\_RB\_50\_0\_NTNV

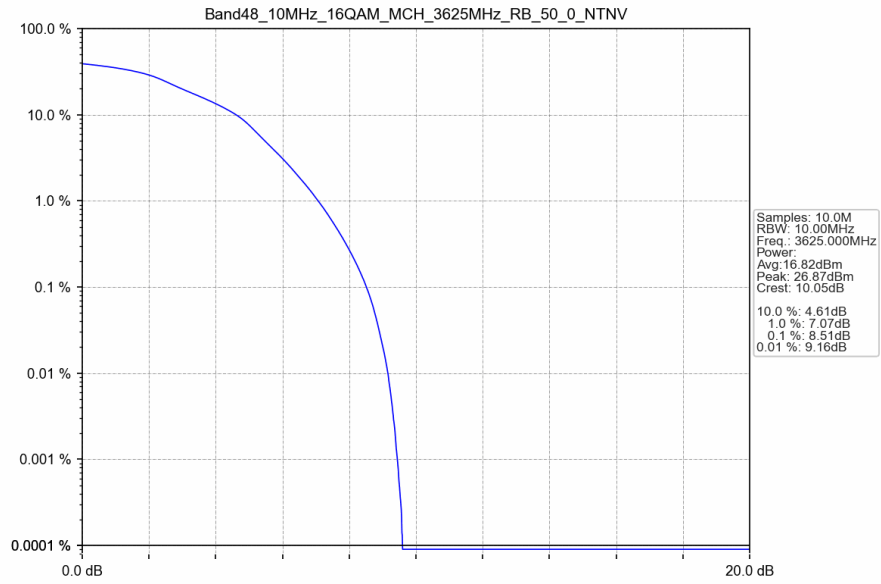


Band48\_10MHz\_16QAM\_LCH\_3555MHz\_RB\_50\_0\_NTNV

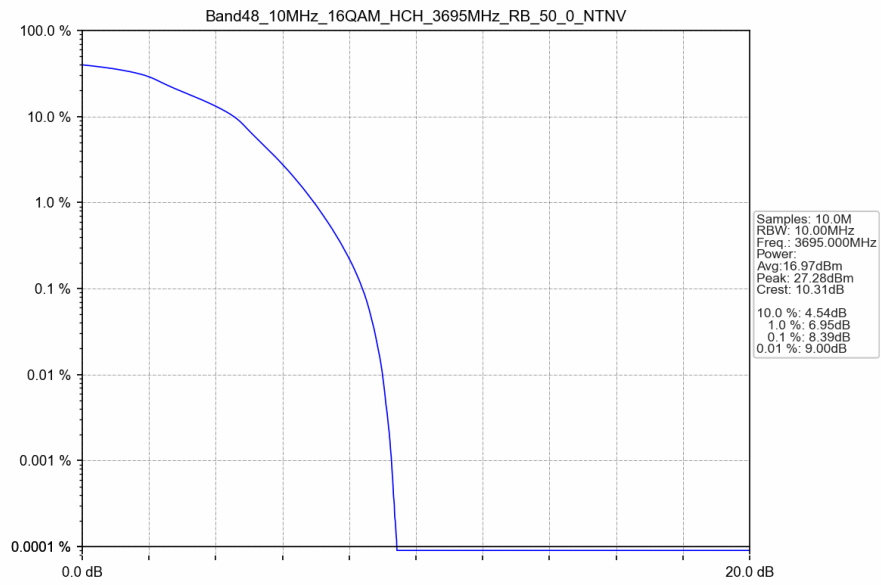




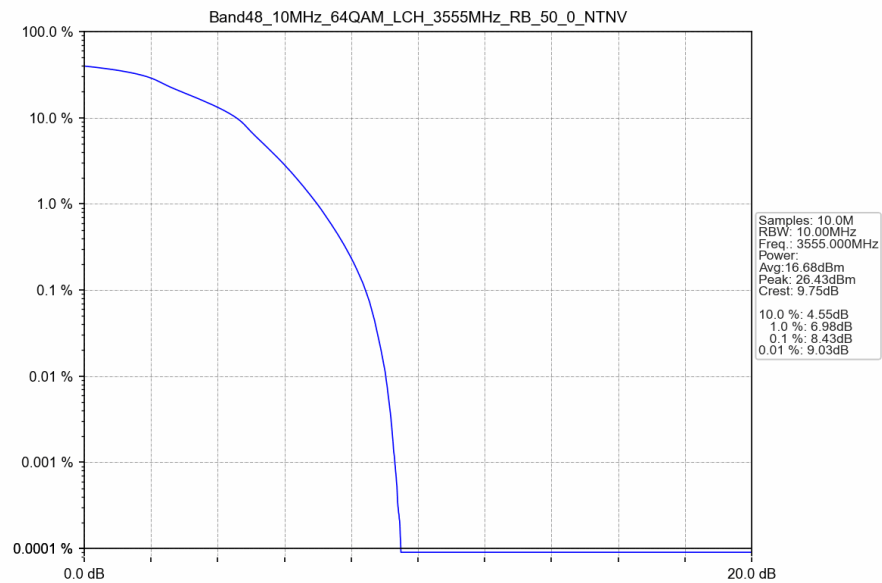
# Band48 10MHz 16QAM MCH 3625MHz RB 50 0 NTN



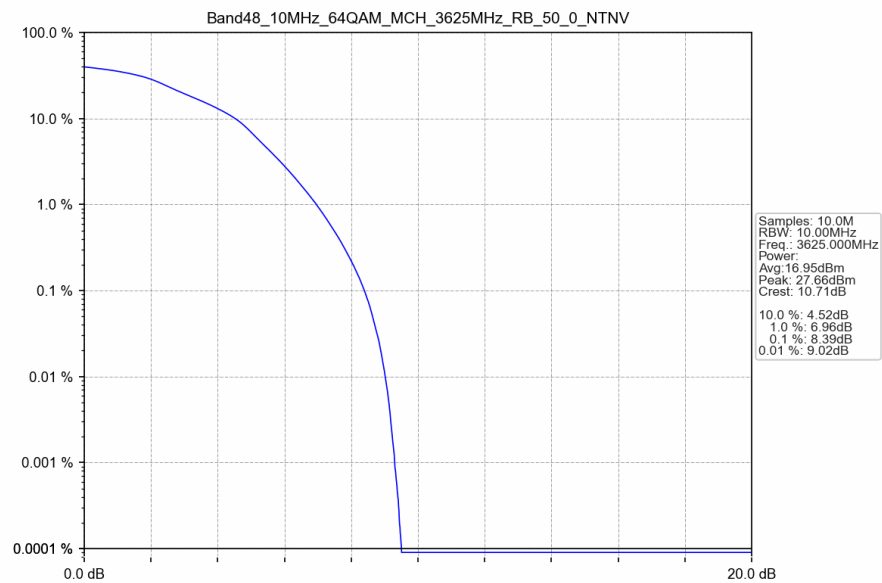
# Band48 10MHz 16QAM HCH 3695MHz RB 50 0 NTN



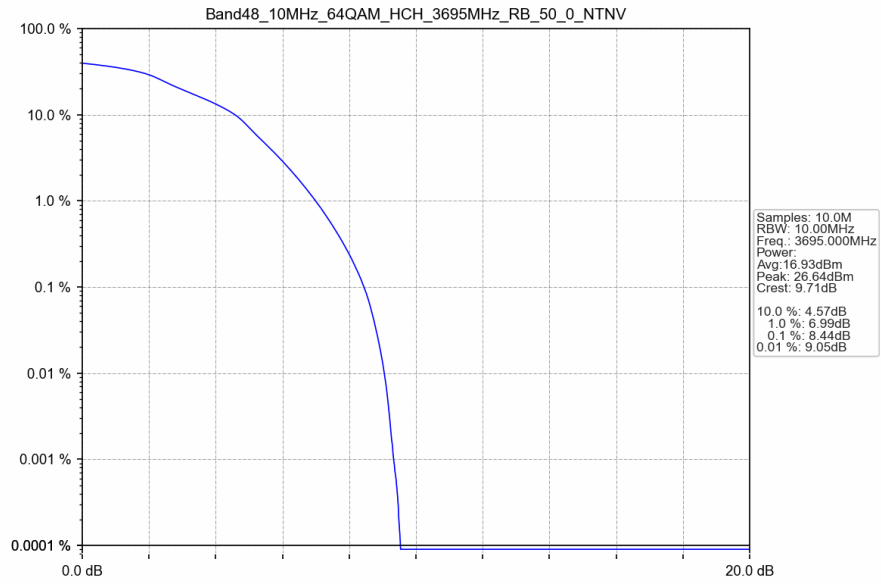
Band48\_10MHz\_64QAM\_LCH\_3555MHz\_RB\_50\_0\_NTNV



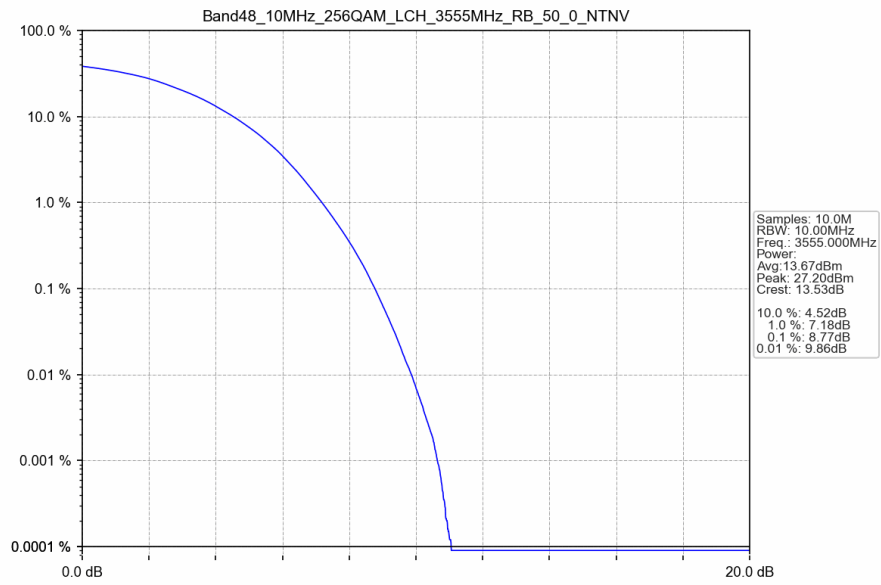
Band48\_10MHz\_64QAM\_MCH\_3625MHz\_RB\_50\_0\_NTNV



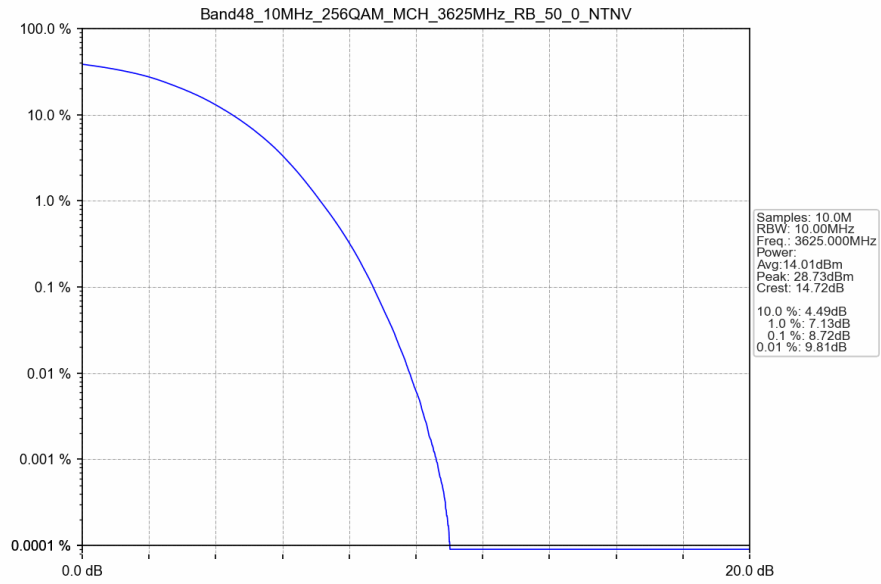
# Band48 10MHz 64QAM HCH 3695MHz RB 50 0 NTV



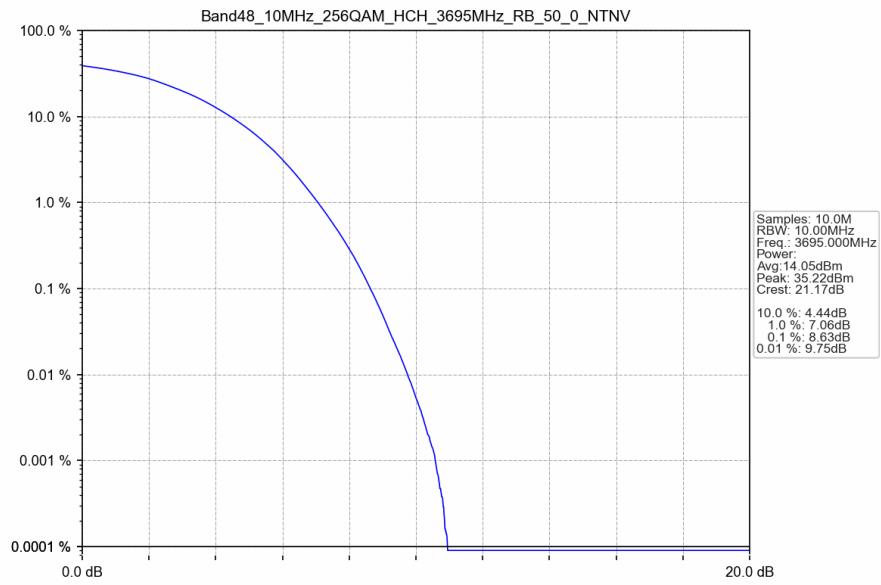
# Band48 10MHz 256QAM LCH 3555MHz RB 50 0 NTV



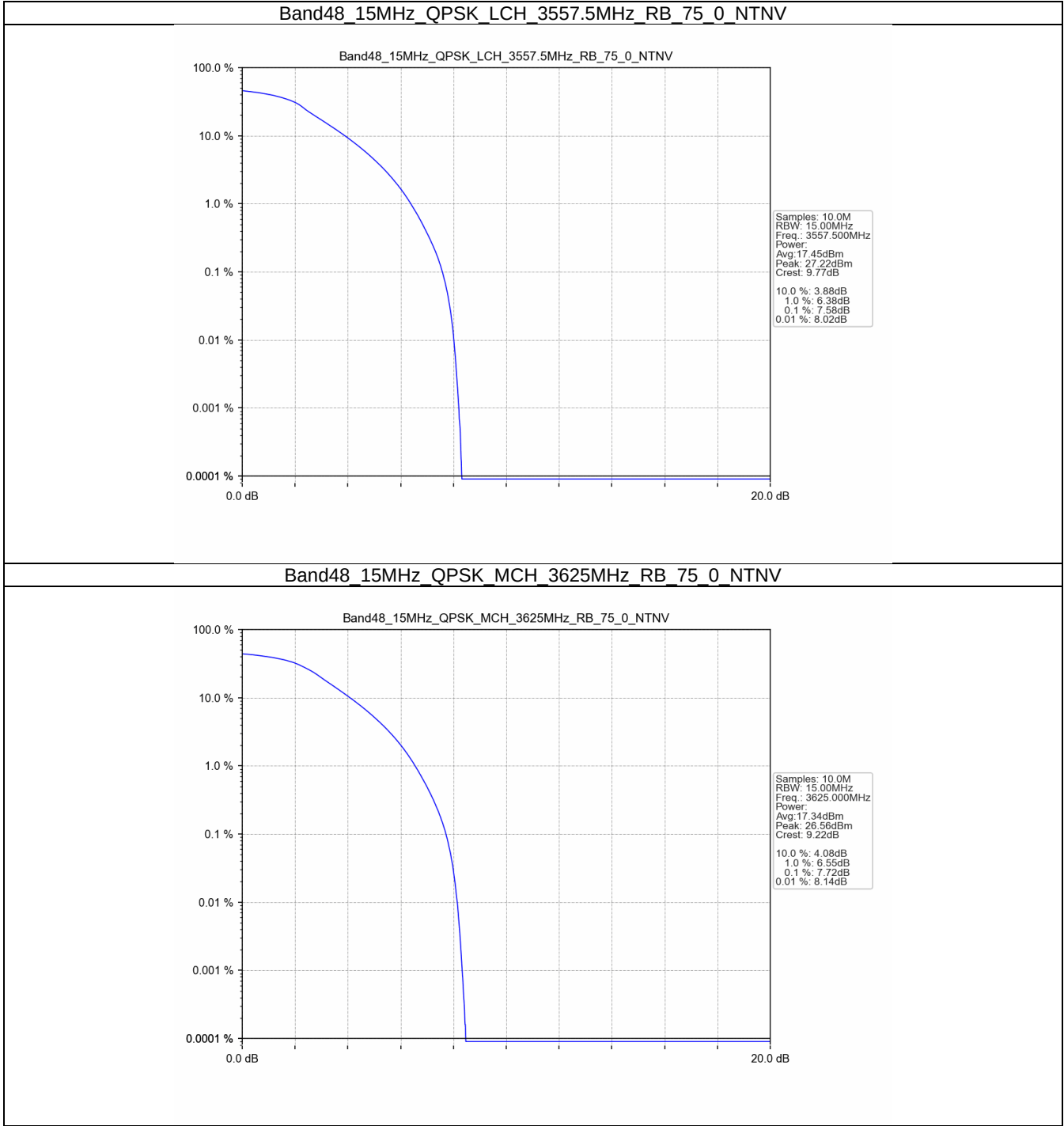
# Band48\_10MHz\_256QAM\_MCH\_3625MHz\_RB\_50\_0\_NTNV



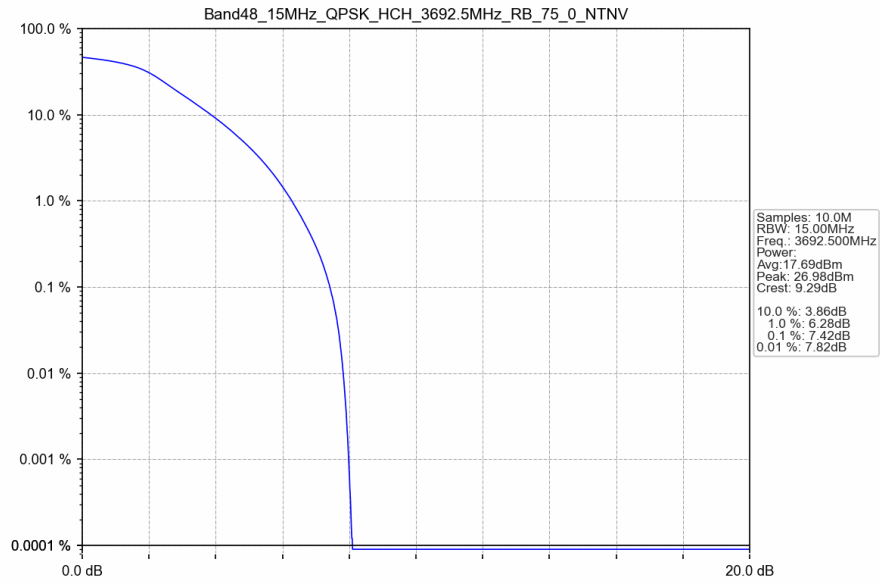
# Band48\_10MHz\_256QAM\_HCH\_3695MHz\_RB\_50\_0\_NTNV



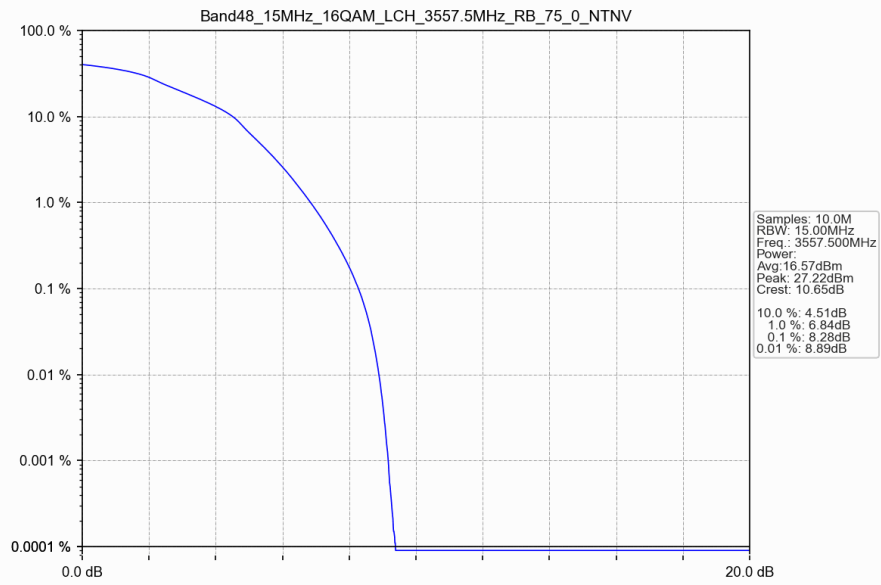
4.2.3 B48\_15MHz



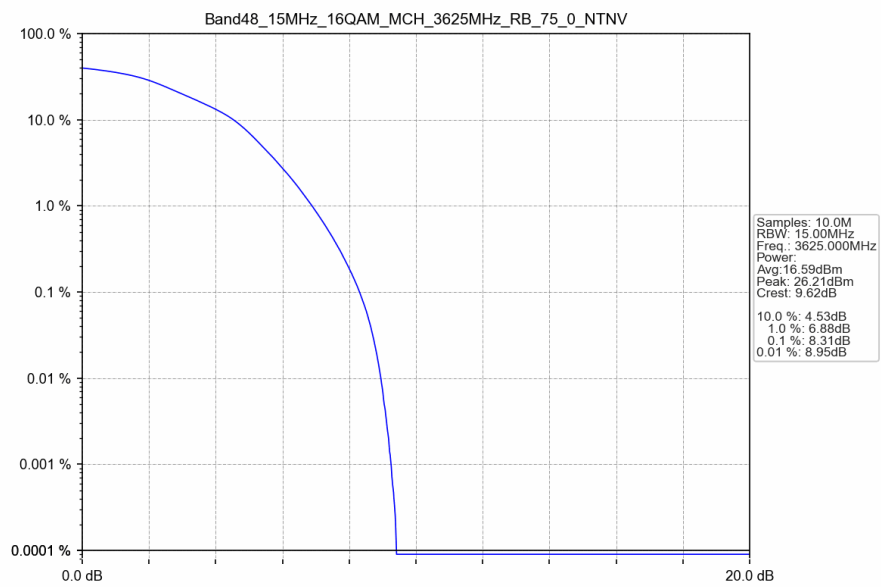
# Band48\_15MHz\_QPSK\_HCH\_3692.5MHz\_RB\_75\_0\_NTNV



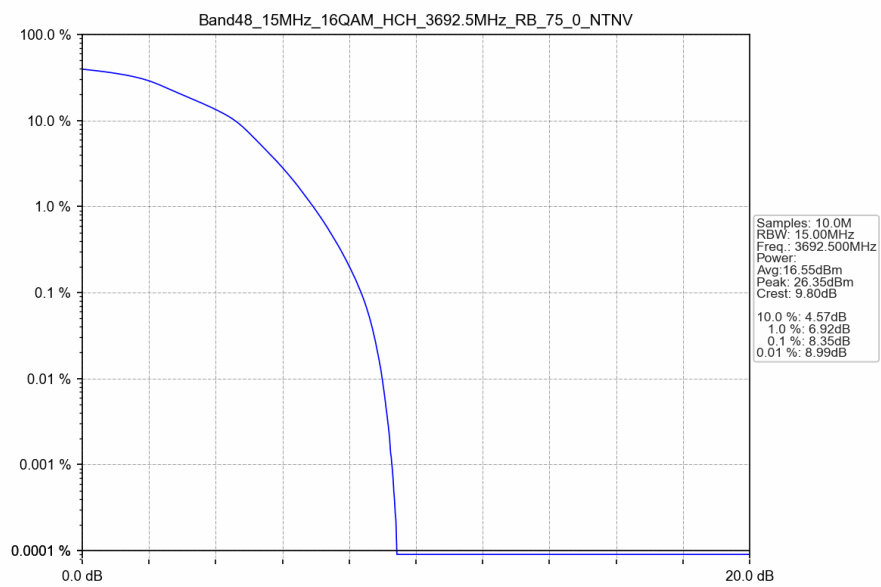
# Band48\_15MHz\_16QAM\_LCH\_3557.5MHz\_RB\_75\_0\_NTNV



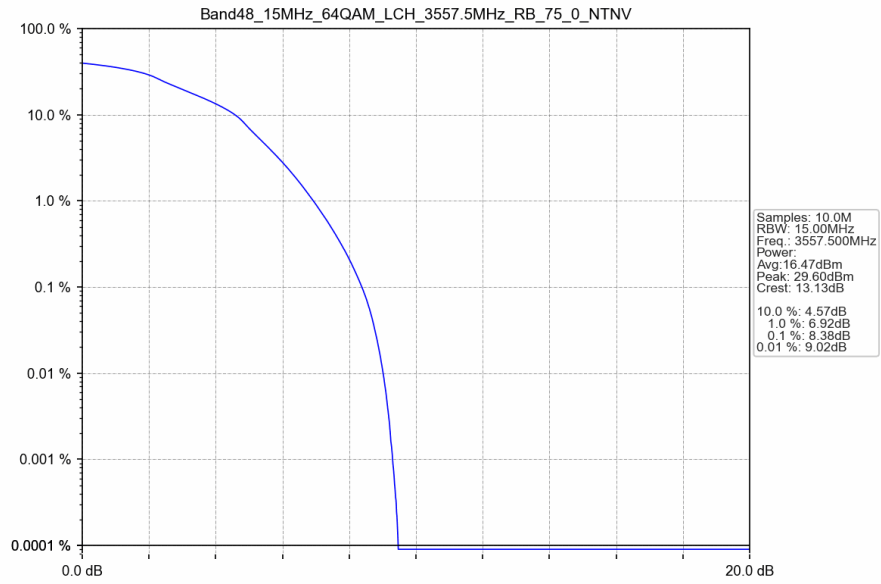
# Band48\_15MHz\_16QAM\_MCH\_3625MHz\_RB\_75\_0\_NTNV



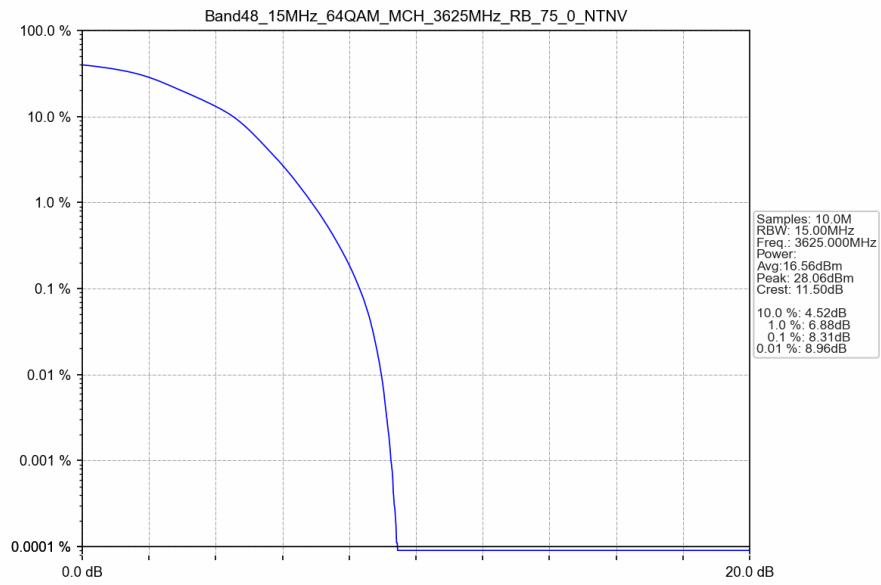
# Band48\_15MHz\_16QAM\_HCH\_3692.5MHz\_RB\_75\_0\_NTNV



Band48\_15MHz\_64QAM\_LCH\_3557.5MHz\_RB\_75\_0\_NTNV

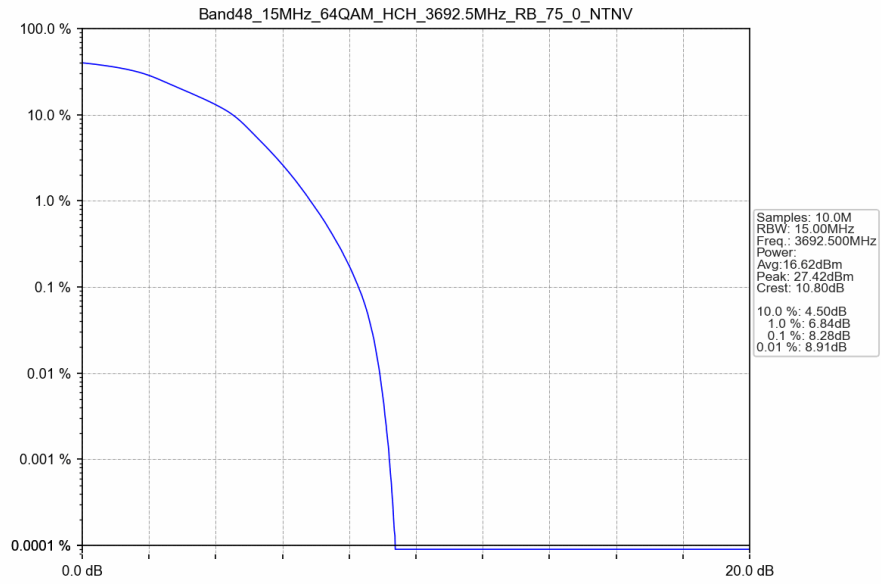


Band48\_15MHz\_64QAM\_MCH\_3625MHz\_RB\_75\_0\_NTNV

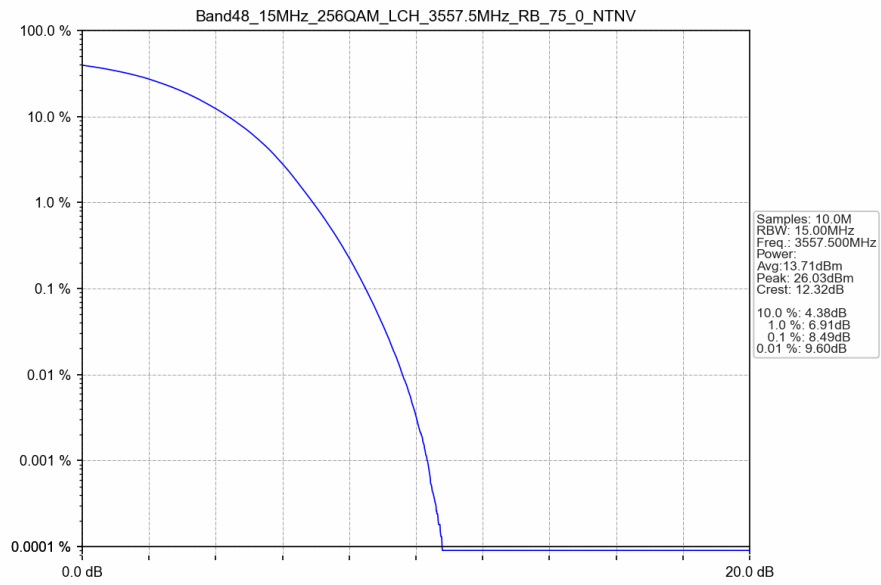




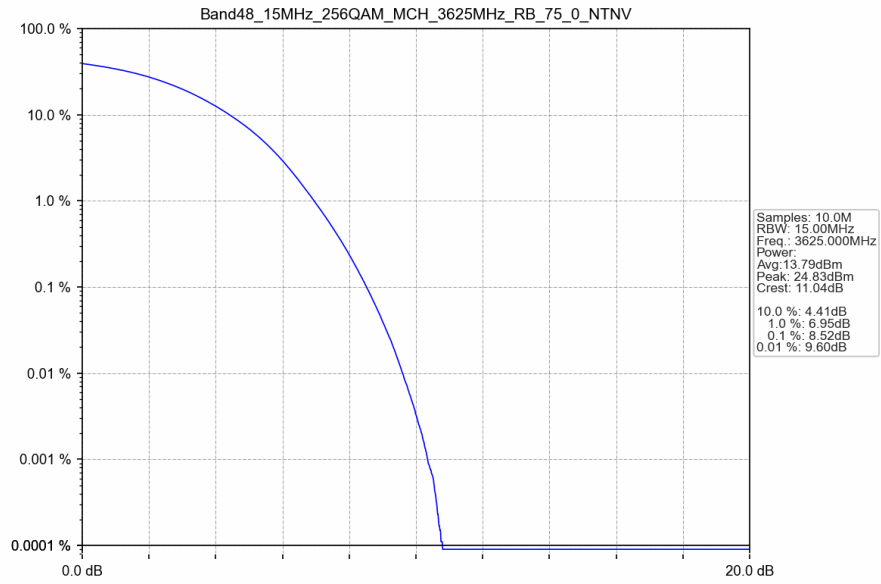
# Band48\_15MHz\_64QAM\_HCH\_3692.5MHz\_RB\_75\_0\_NTNV



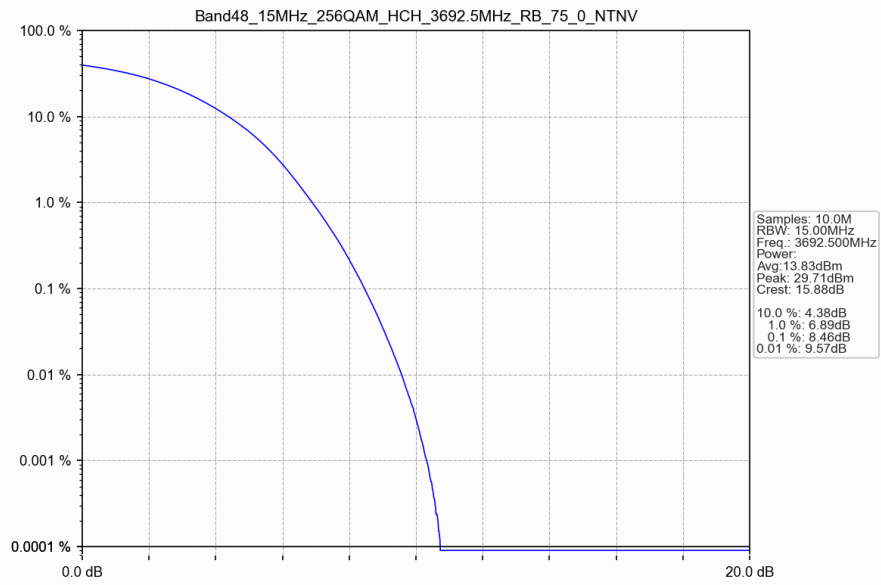
# Band48\_15MHz\_256QAM\_LCH\_3557.5MHz\_RB\_75\_0\_NTNV



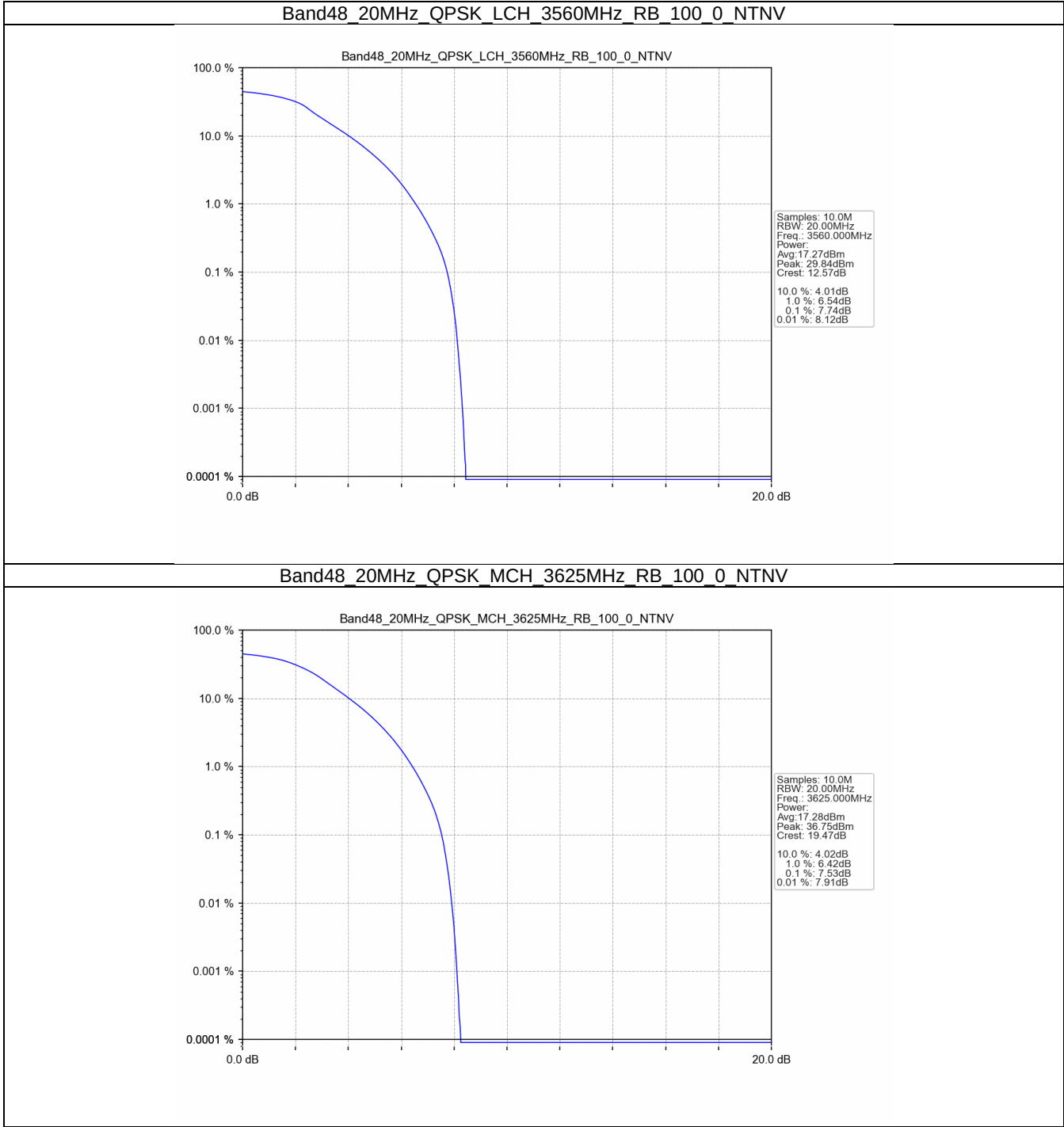
Band48\_15MHz\_256QAM\_MCH\_3625MHz\_RB\_75\_0\_NTNV



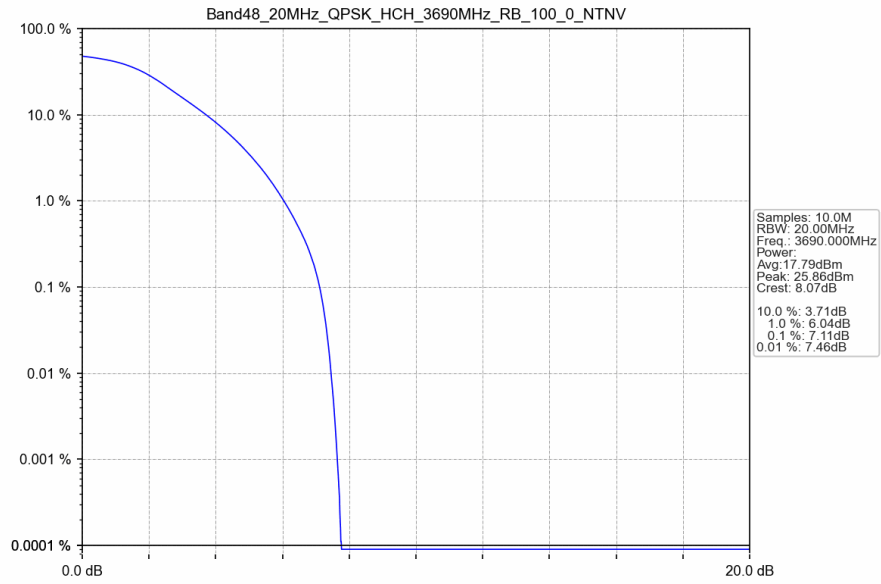
Band48\_15MHz\_256QAM\_HCH\_3692.5MHz\_RB\_75\_0\_NTNV



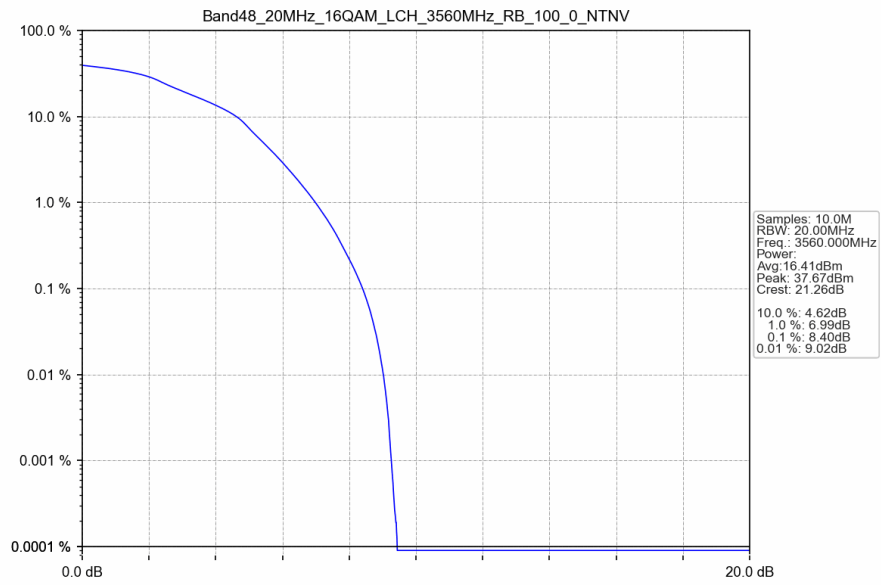
4.2.4 B48\_20MHz



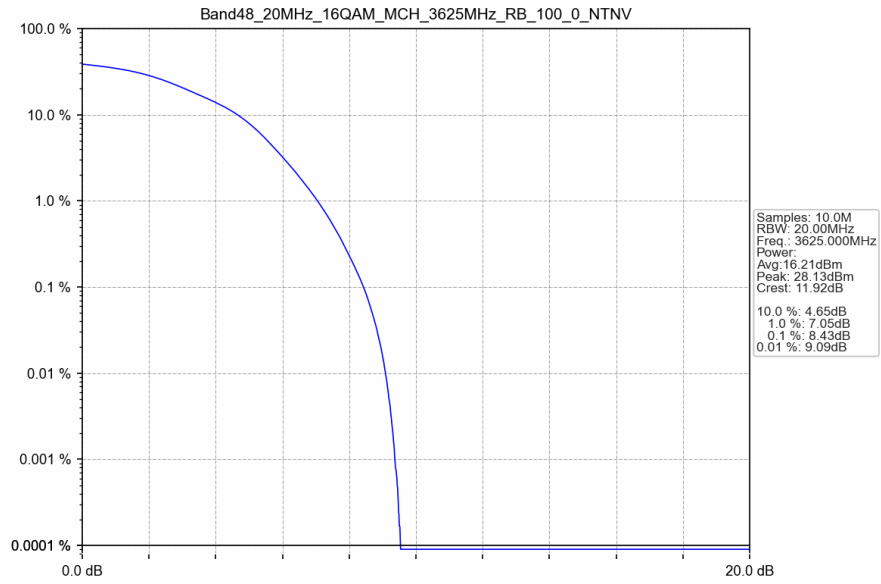
Band48 20MHz QPSK HCH 3690MHz RB 100 0 NTV



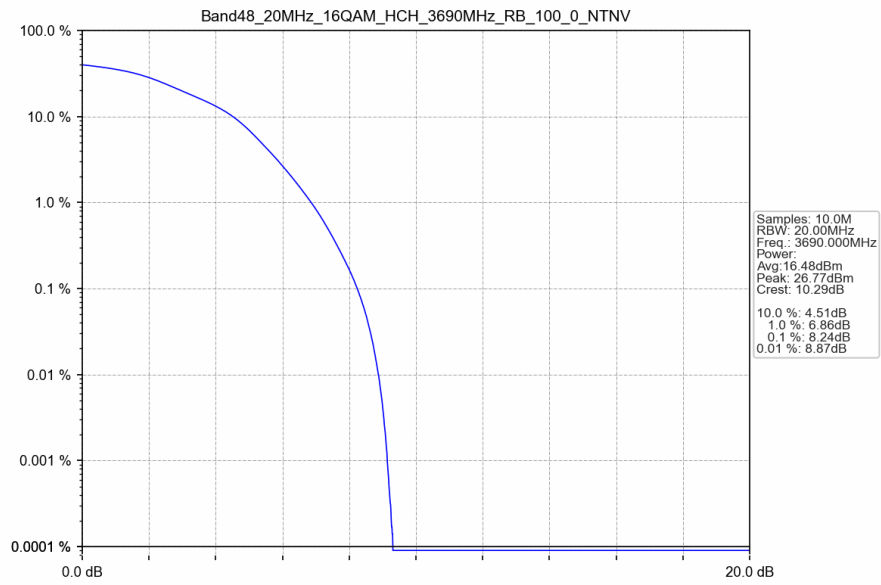
Band48 20MHz 16QAM LCH 3560MHz RB 100 0 NTV



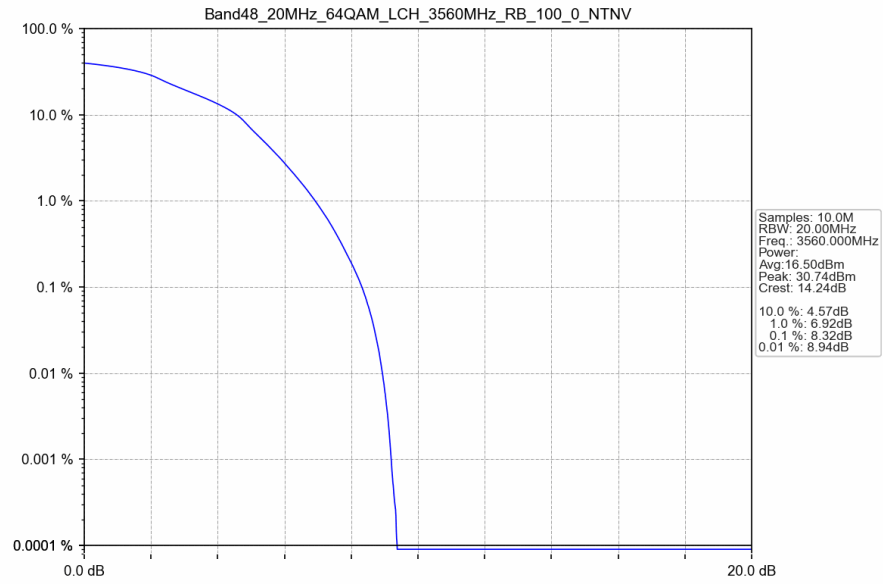
# Band48\_20MHz\_16QAM\_MCH\_3625MHz\_RB\_100\_0\_NTNV



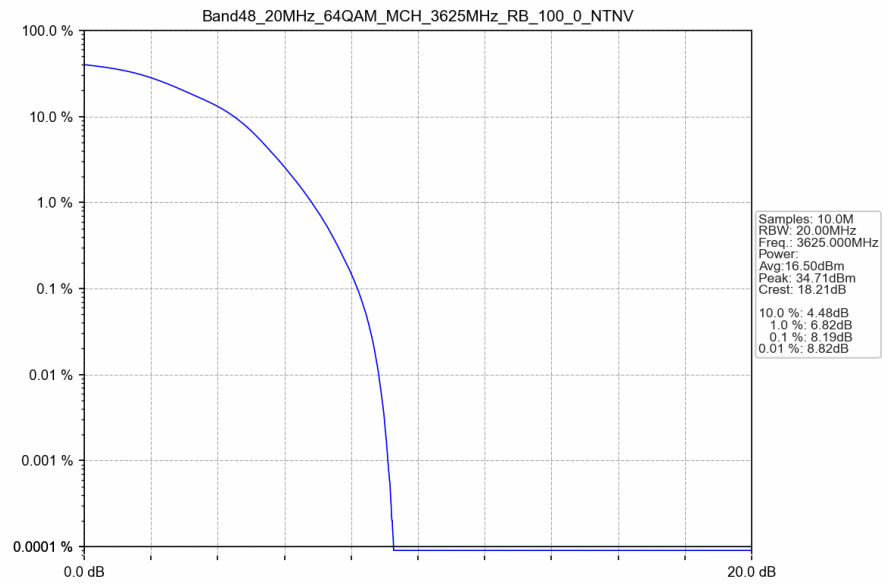
# Band48\_20MHz\_16QAM\_HCH\_3690MHz\_RB\_100\_0\_NTNV



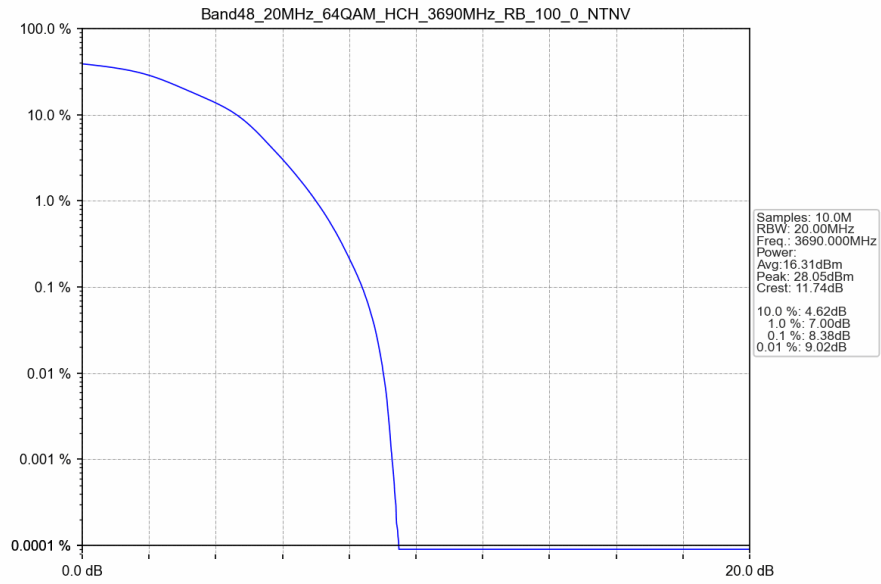
Band48\_20MHz\_64QAM\_LCH\_3560MHz\_RB\_100\_0\_NTNV



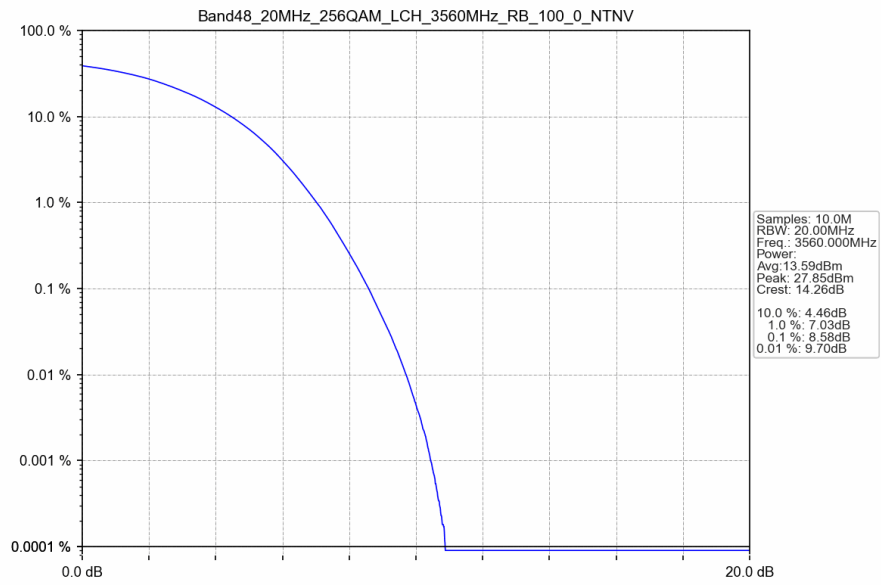
Band48\_20MHz\_64QAM\_MCH\_3625MHz\_RB\_100\_0\_NTNV



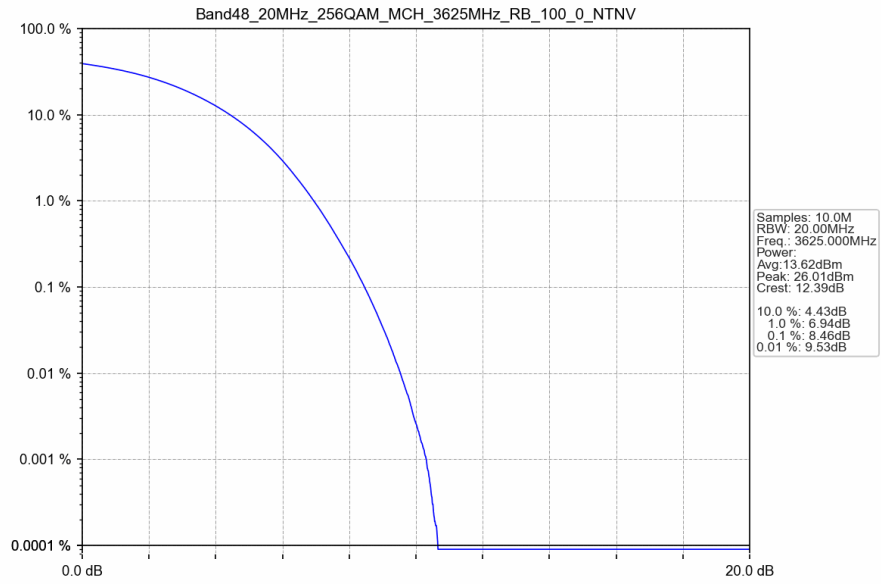
# Band48\_20MHz\_64QAM\_HCH\_3690MHz\_RB\_100\_0\_NTNV



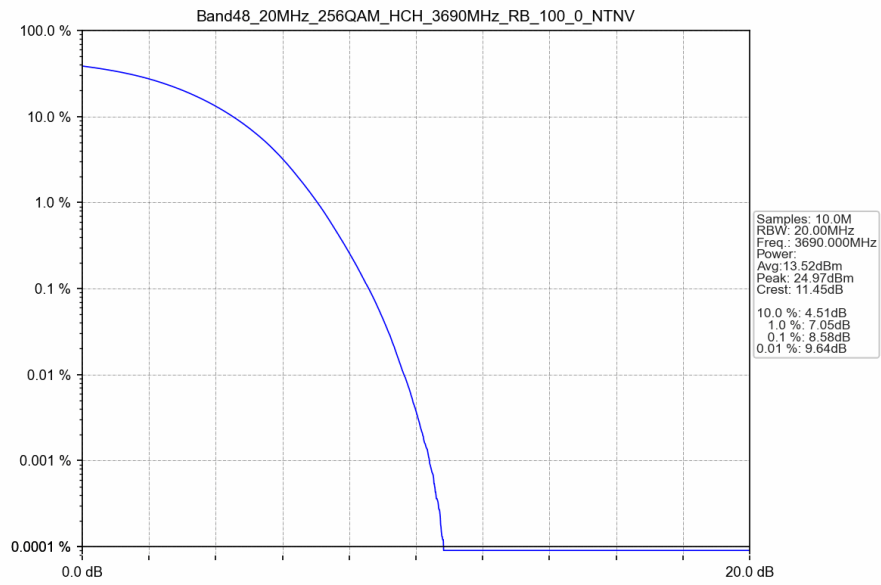
# Band48\_20MHz\_256QAM\_LCH\_3560MHz\_RB\_100\_0\_NTNV



# Band48 20MHz 256QAM MCH 3625MHz RB 100 0 NTN



# Band48 20MHz 256QAM HCH 3690MHz RB 100 0 NTN





## 5. Spurious Emission

### 5.1 Test Result

#### 5.1.1 B48\_5MHz

| Band: 48 / Bandwidth: 5MHz / NTV |                 |               |        |                     |                     |         |
|----------------------------------|-----------------|---------------|--------|---------------------|---------------------|---------|
| Modulation                       | Frequency (MHz) | RB Allocation |        | Spurious Emission   |                     | Verdict |
|                                  |                 | Size          | Offset | Result              | Limit               |         |
| QPSK                             | 3552.5          | 1             | 0      | Refer To Test Graph |                     | Pass    |
|                                  |                 | 25            | 0      | Refer To Test Graph |                     | Pass    |
|                                  | 3625            | 1             | 0      | Refer To Test Graph |                     | Pass    |
|                                  |                 | 3697.5        | 1      | 0                   | Refer To Test Graph |         |
|                                  | 24              |               |        | Refer To Test Graph |                     | Pass    |
|                                  | 25              |               | 0      | Refer To Test Graph |                     | Pass    |

#### 5.1.2 B48\_10MHz

| Band: 48 / Bandwidth: 10MHz / NTNV |                 |               |        |                     |       |         |
|------------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                    |                 | Size          | Offset | Result              | Limit |         |
| QPSK                               | 3555            | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |
|                                    | 3625            | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    | 3695            | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 |               | 49     | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |

#### 5.1.3 B48\_15MHz

| Band: 48 / Bandwidth: 15MHz / NTNV |                 |               |        |                     |       |         |
|------------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                    |                 | Size          | Offset | Result              | Limit |         |
| QPSK                               | 3557.5          | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 | 75            | 0      | Refer To Test Graph |       | Pass    |
|                                    | 3625            | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    | 3692.5          | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 |               | 74     | Refer To Test Graph |       | Pass    |
|                                    |                 | 75            | 0      | Refer To Test Graph |       | Pass    |

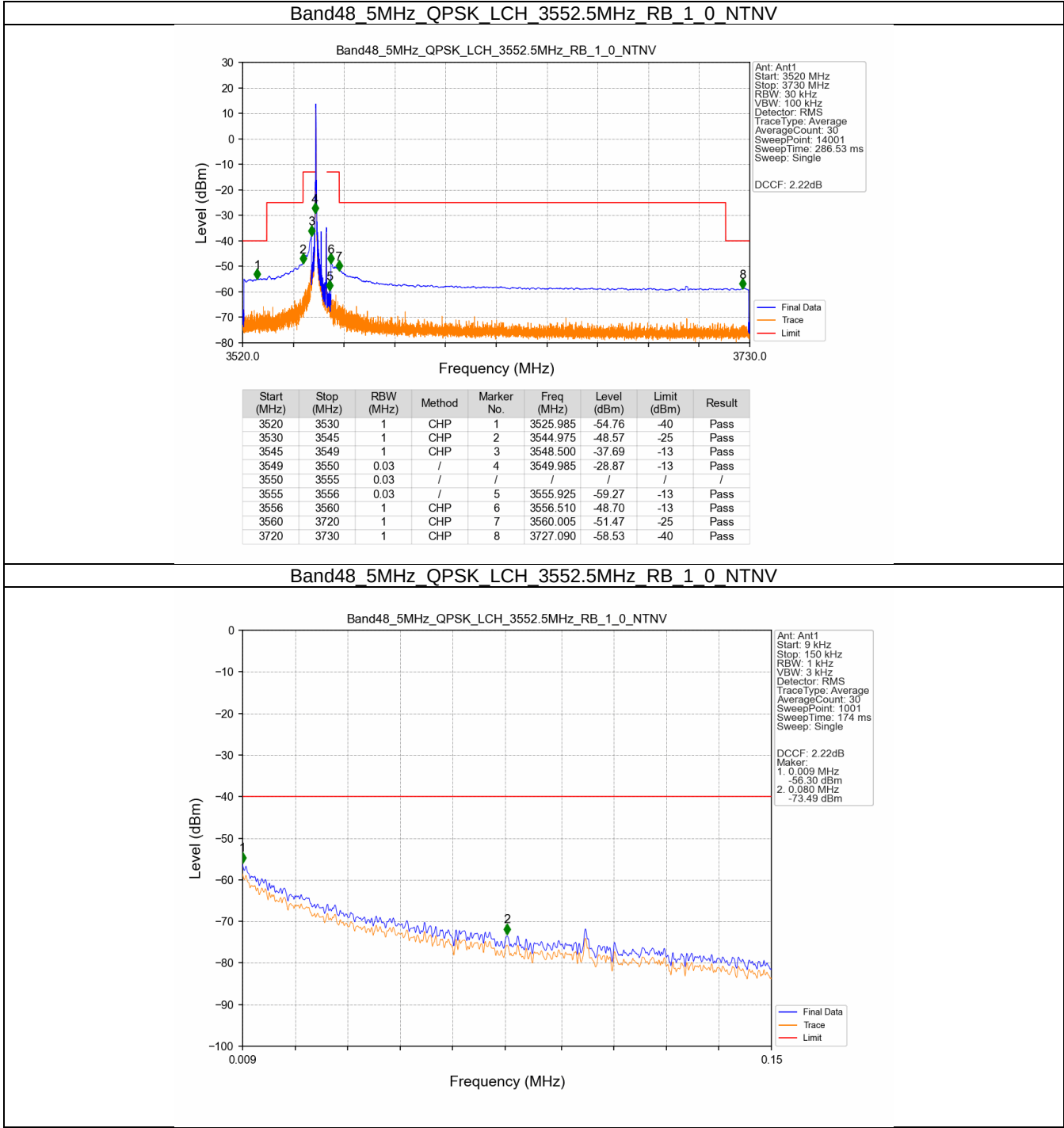
#### 5.1.4 B48\_20MHz

| Band: 48 / Bandwidth: 20MHz / NTNV |                 |               |        |                     |                     |         |
|------------------------------------|-----------------|---------------|--------|---------------------|---------------------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Spurious Emission   |                     | Verdict |
|                                    |                 | Size          | Offset | Result              | Limit               |         |
| QPSK                               | 3560            | 1             | 0      | Refer To Test Graph |                     | Pass    |
|                                    |                 | 100           | 0      | Refer To Test Graph |                     | Pass    |
|                                    | 3625            | 1             | 0      | Refer To Test Graph |                     | Pass    |
|                                    |                 | 3690          | 1      | 0                   | Refer To Test Graph |         |
|                                    | 99              |               |        | Refer To Test Graph |                     | Pass    |
|                                    |                 |               |        |                     |                     |         |

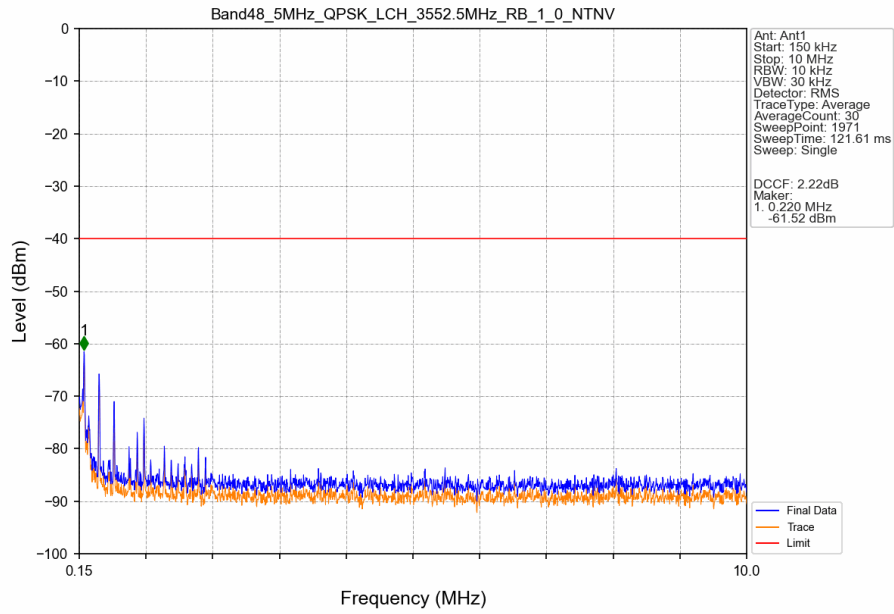
|  |  |     |   |                     |      |
|--|--|-----|---|---------------------|------|
|  |  | 100 | 0 | Refer To Test Graph | Pass |
|--|--|-----|---|---------------------|------|

5.2 Test Graph

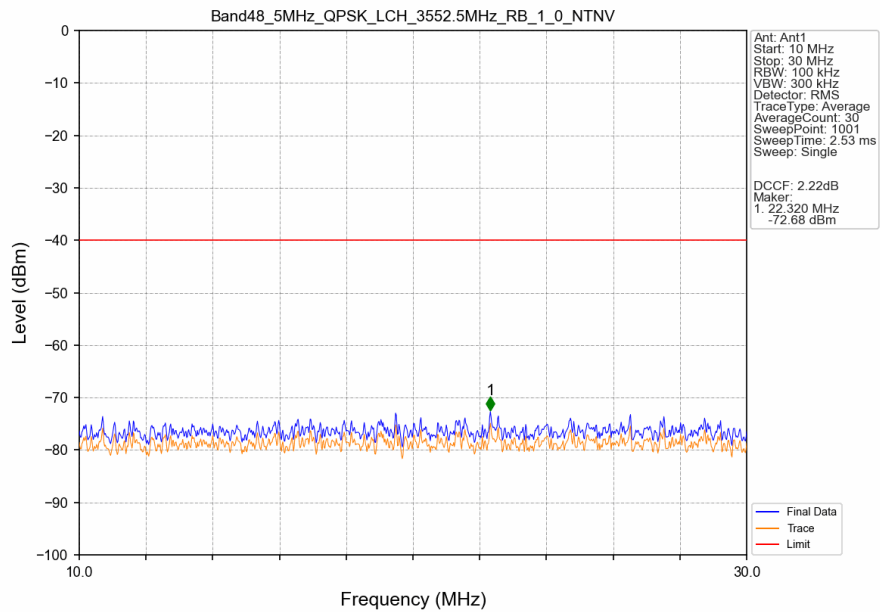
5.2.1 B48\_5MHz



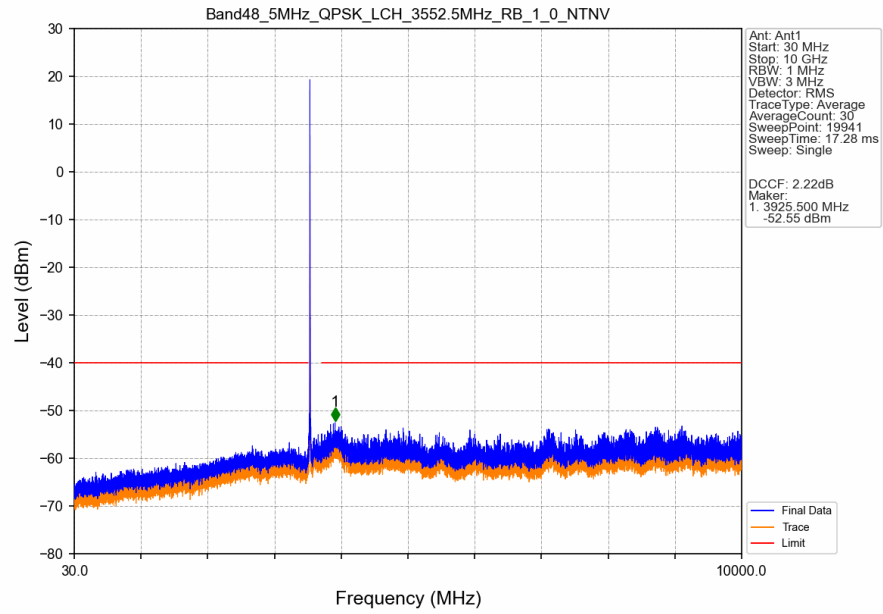
# Band48 5MHz QPSK LCH 3552.5MHz RB 1 0 NTNV



# Band48 5MHz QPSK LCH 3552.5MHz RB 1 0 NTNV



# Band48 5MHz QPSK LCH 3552.5MHz RB 1 0 NTN



# Band48 5MHz QPSK LCH 3552.5MHz RB 1 0 NTN

