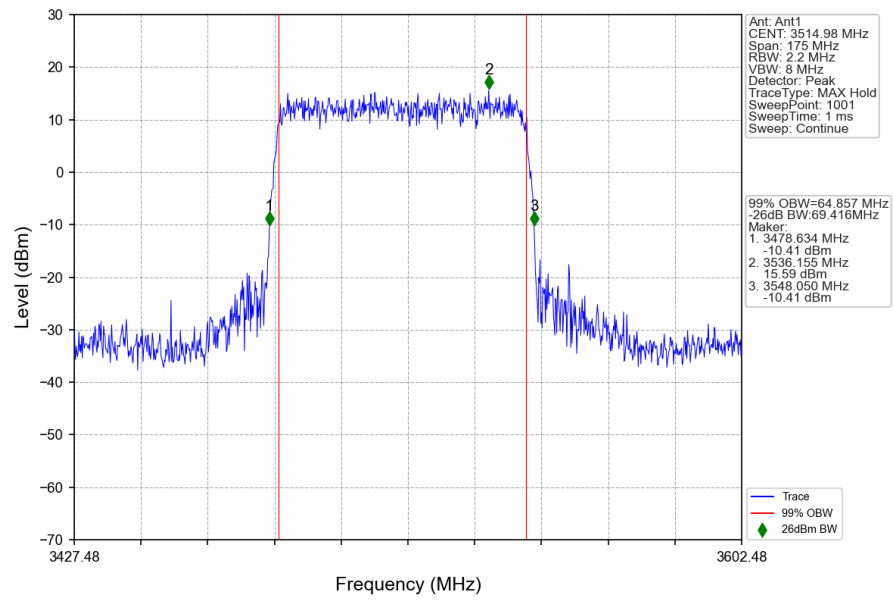
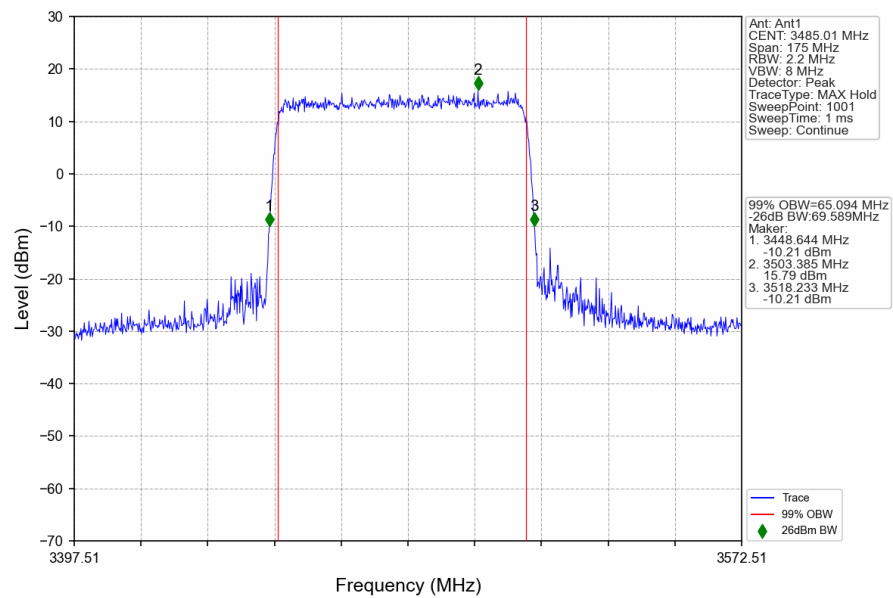


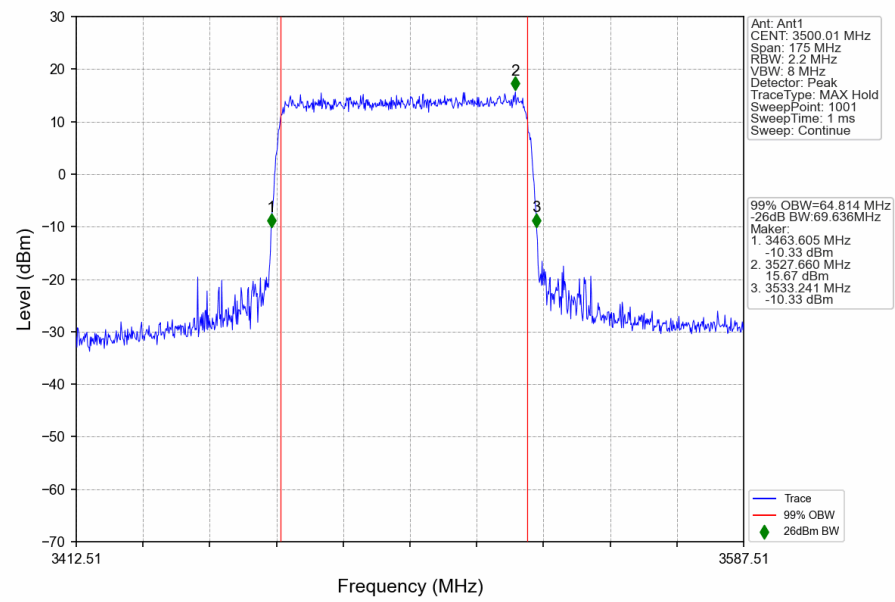
n78e\_30kHz\_SISO\_NTNV\_70MHz\_DFT-s-OFDM\_QPSK\_3514.98MHz\_Outer\_Full



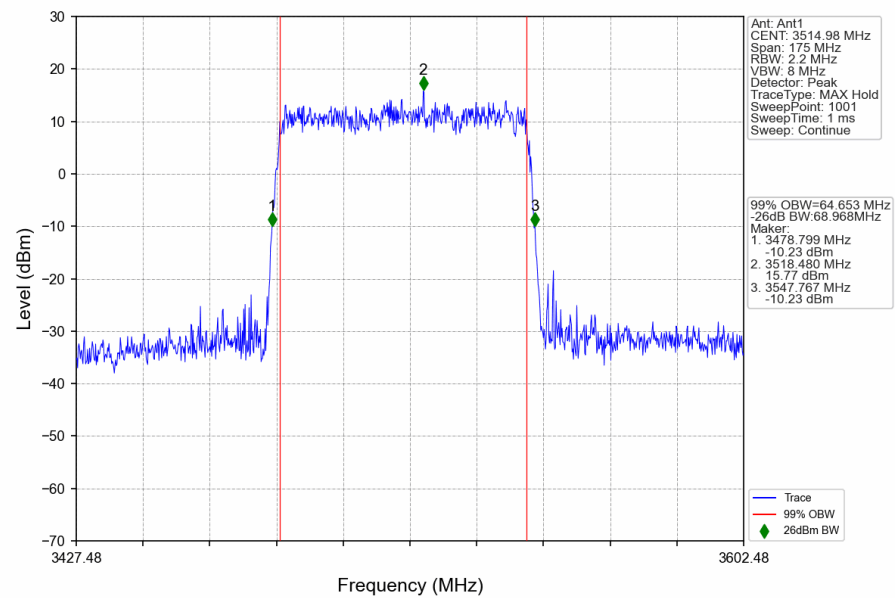
n78e\_30kHz\_SISO\_NTNV\_70MHz\_DFT-s-OFDM\_64\_QAM\_3485.01MHz\_Outer\_Full



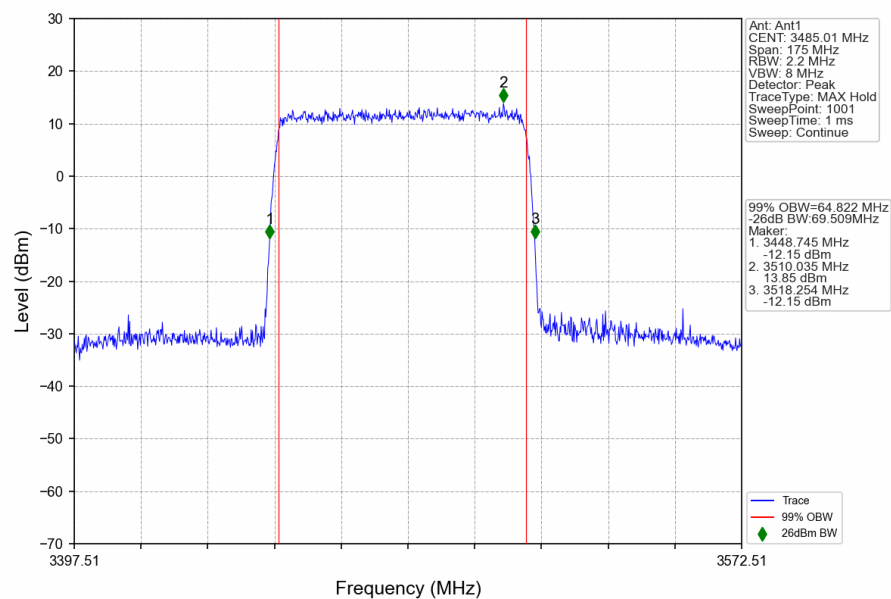
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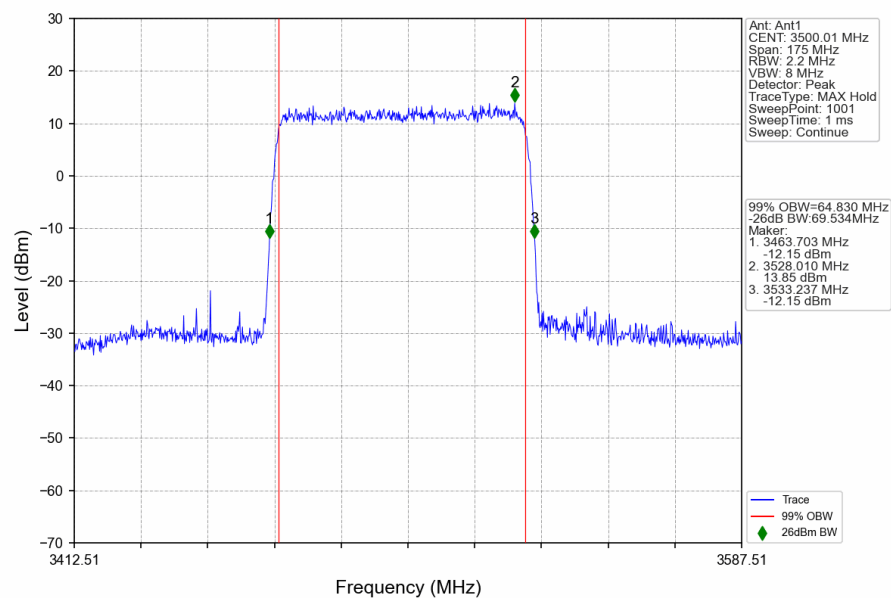
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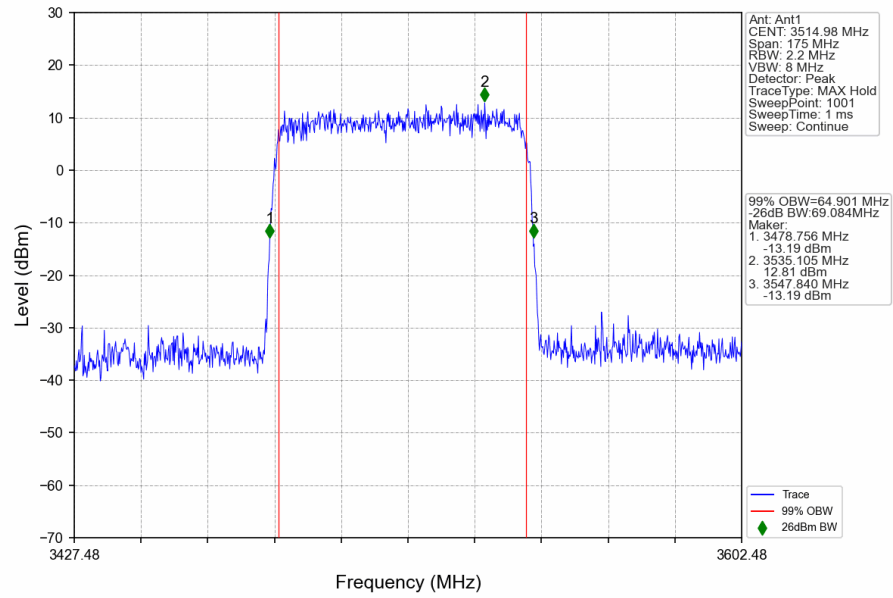
n78e\_30kHz\_SISO\_NTNV\_70MHz\_DFT-s-OFDM\_256\_QAM\_3485.01MHz\_Outer\_Full



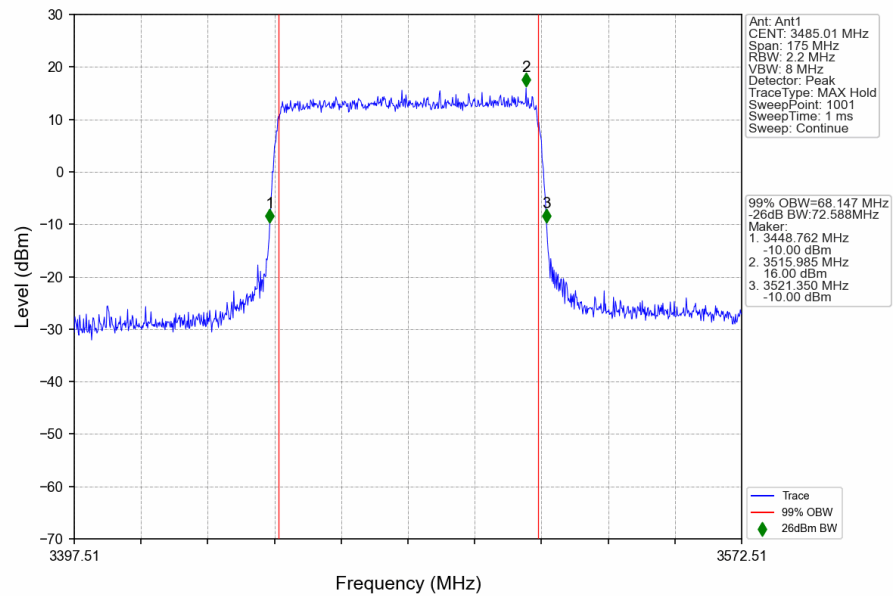
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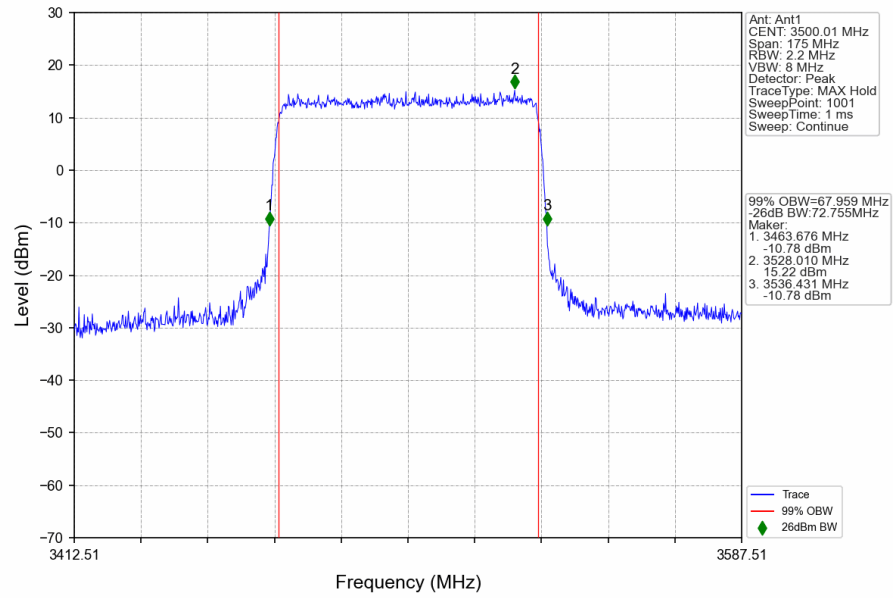
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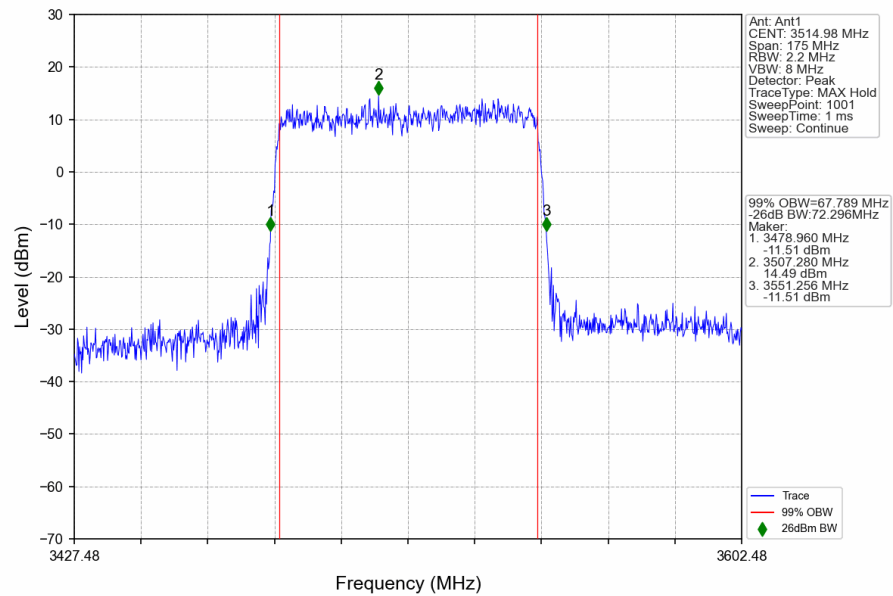
n78e\_30kHz\_SISO\_NTNV\_70MHz\_CP-OFDM\_QPSK\_3485.01MHz\_Outer\_Full



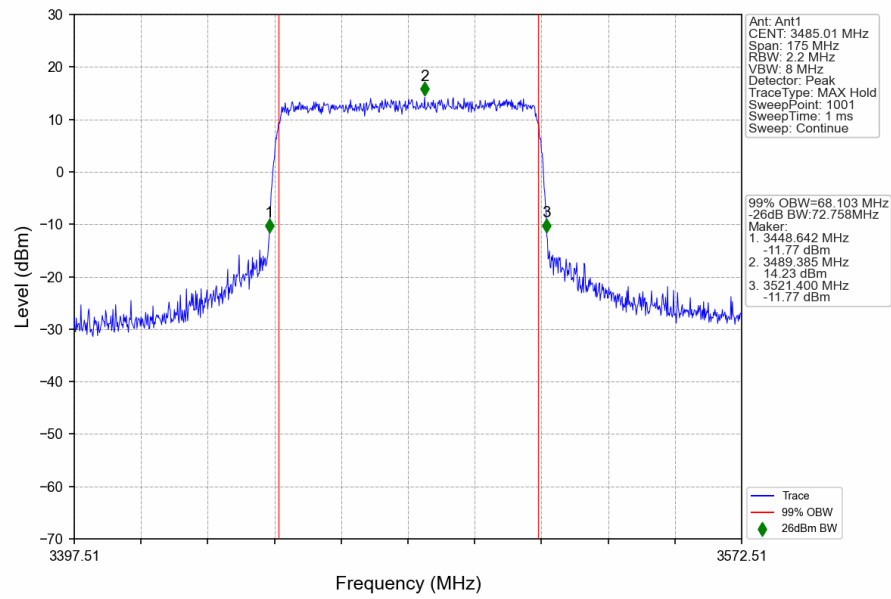
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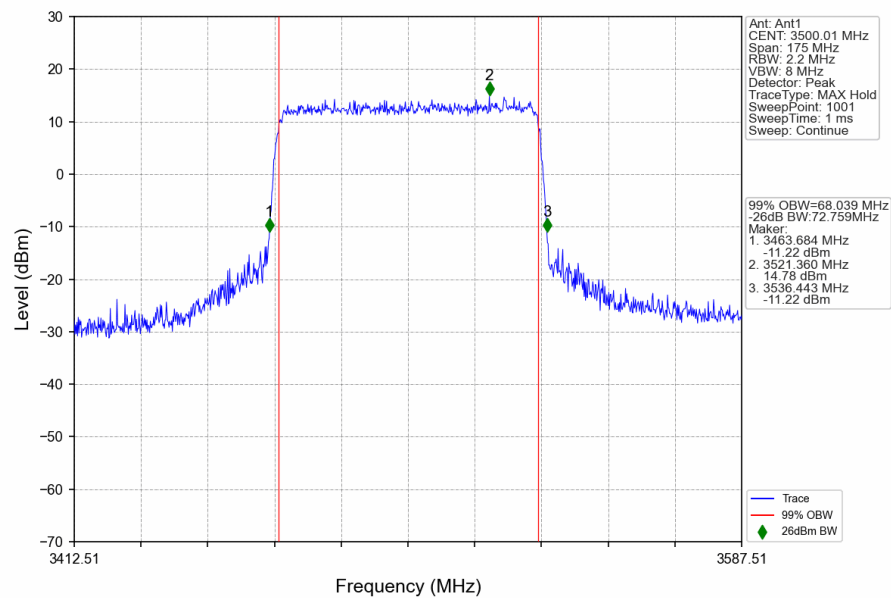
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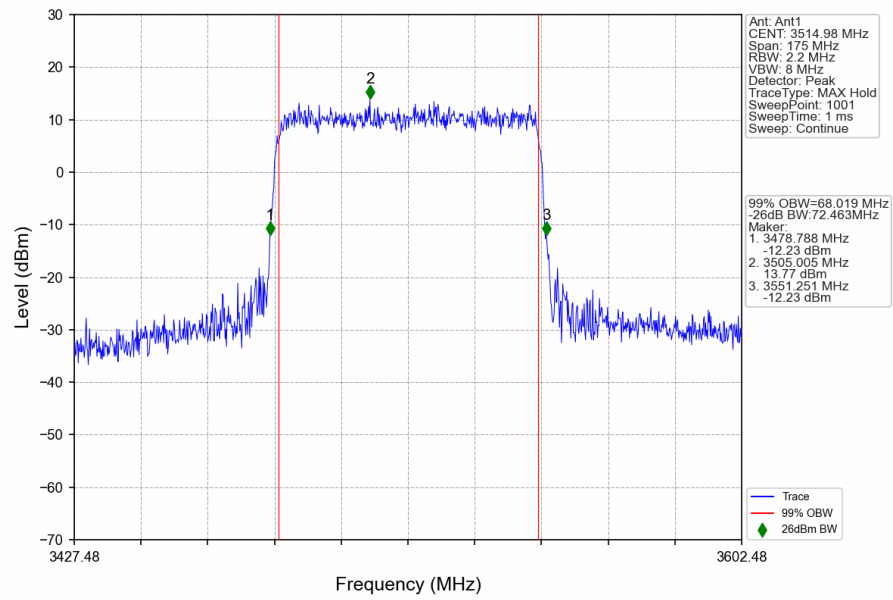
n78e\_30kHz\_SISO\_NTNV\_70MHz\_CP-OFDM\_64\_QAM\_3485.01MHz\_Outer\_Full



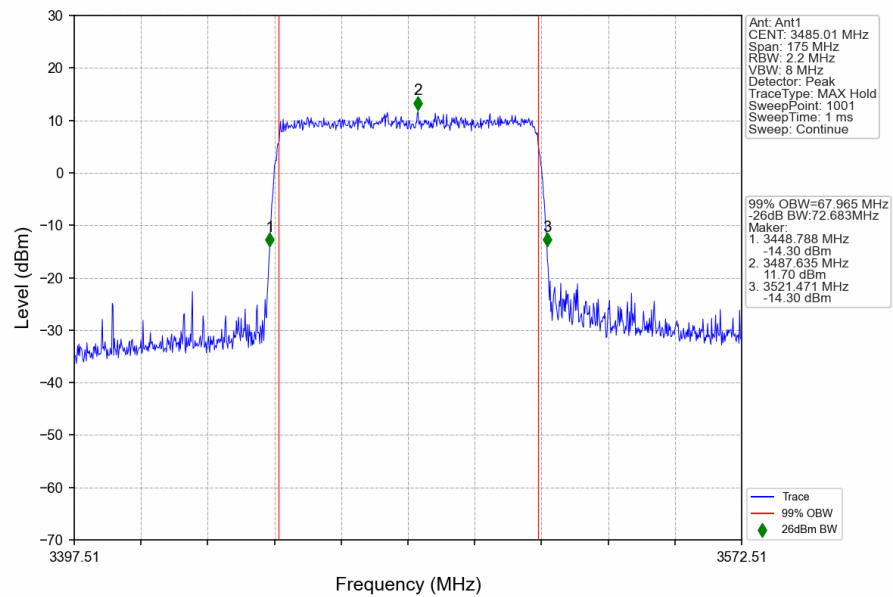
n78e\_30kHz\_SISO\_NTNV\_70MHz\_CP-OFDM\_64\_QAM\_3500.01MHz\_Outer\_Full



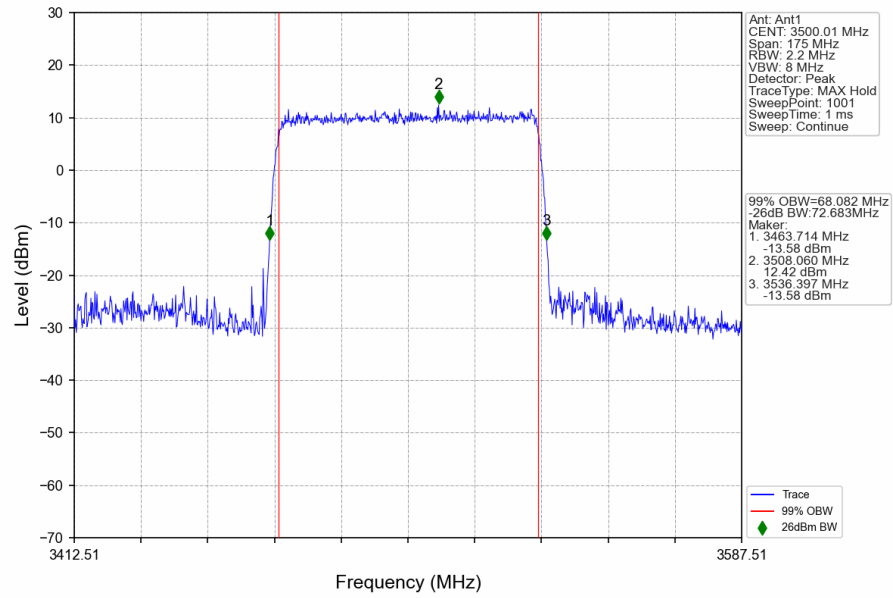
n78e\_30kHz\_SISO\_NTNV\_70MHz\_CP-OFDM\_64\_QAM\_3514.98MHz\_Outer\_Full



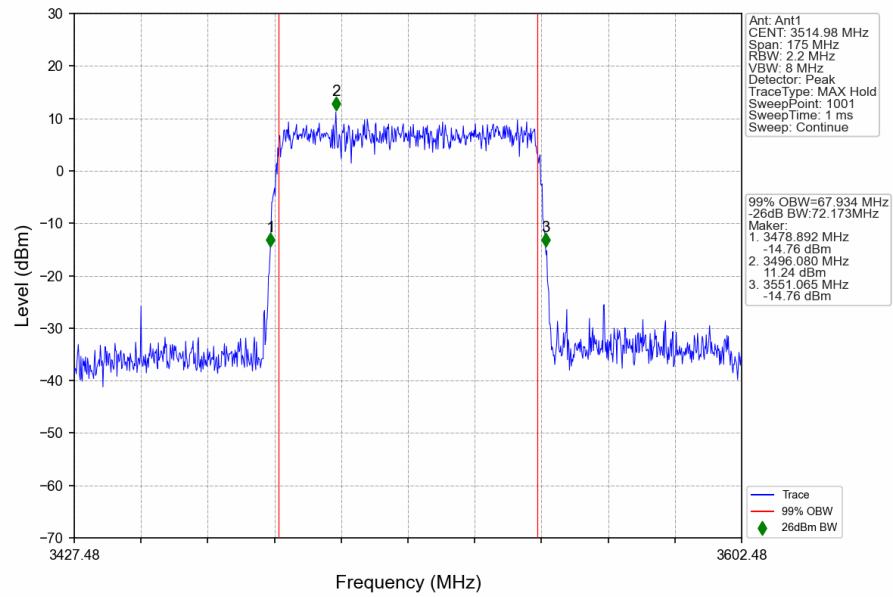
n78e\_30kHz\_SISO\_NTNV\_70MHz\_CP-OFDM\_256\_QAM\_3485.01MHz\_Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_70MHz\_CP-OFDM\_256\_QAM\_3500.01MHz\_Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_70MHz\_CP-OFDM\_256\_QAM\_3514.98MHz\_Outer\_Full



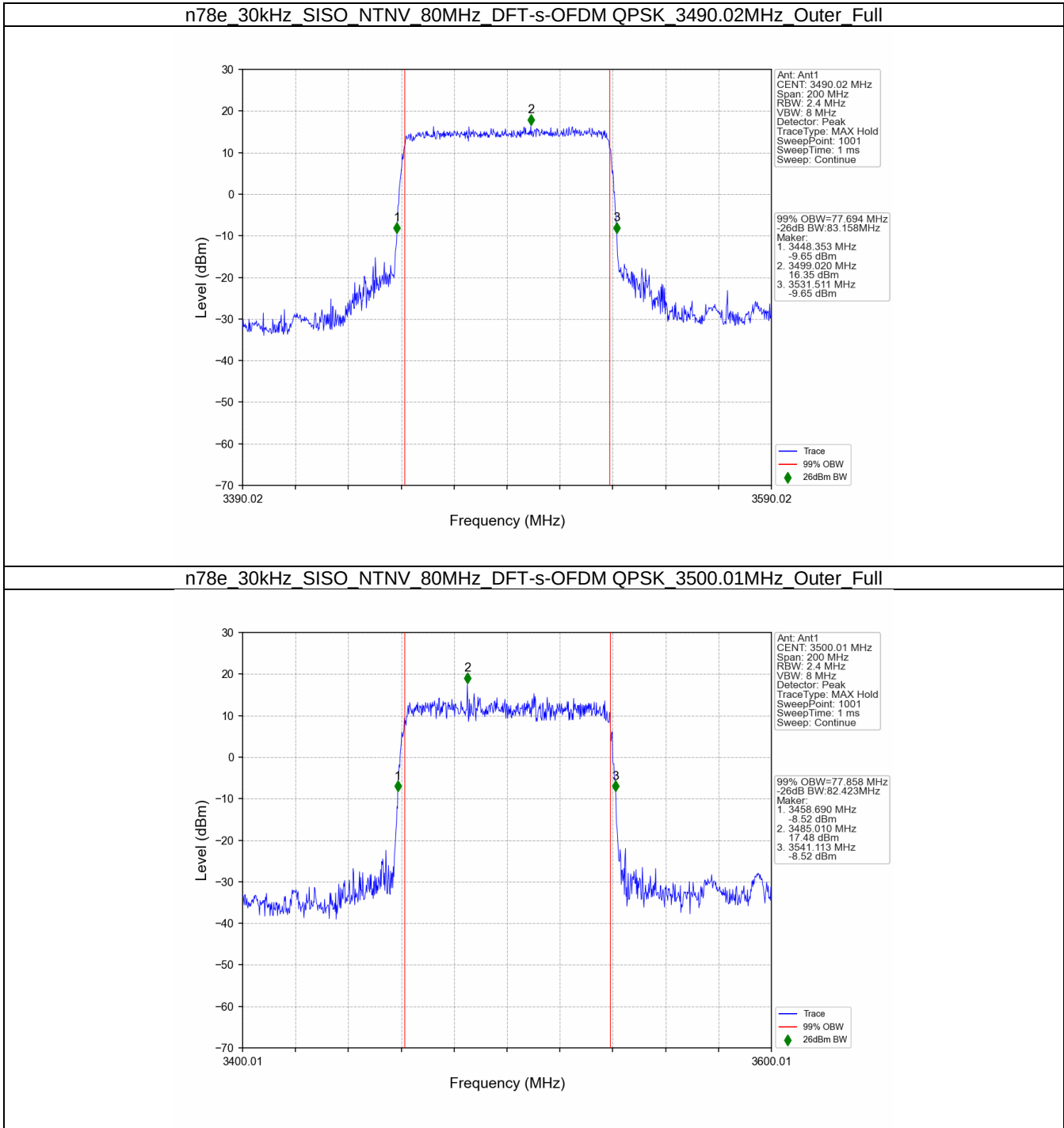


## 1.7 30k\_SISO\_80MHz\_NTNV

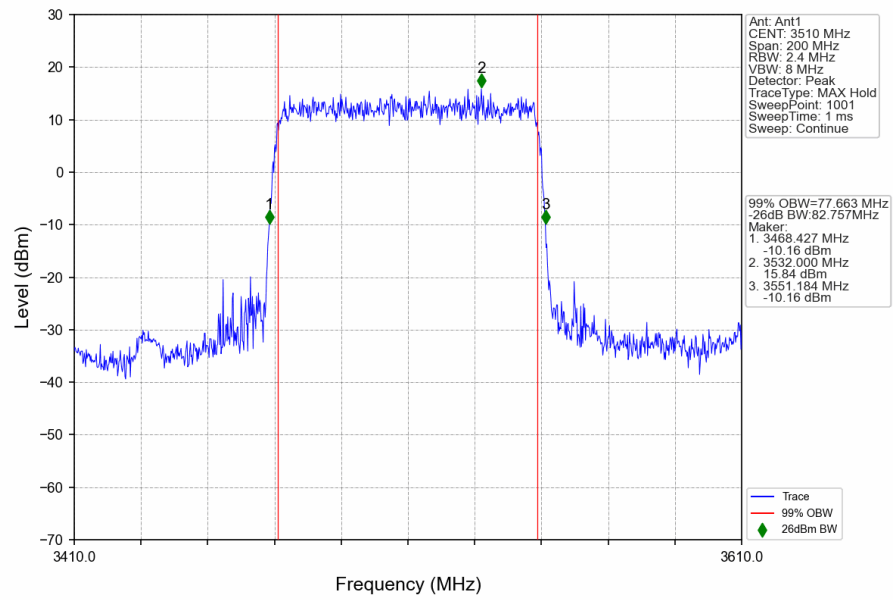
### 1.7.1 Test Result

| 5G NR n78e SCS=30kHz SISO 80MHz NTN |                 |               |                     |                      |             |         |
|-------------------------------------|-----------------|---------------|---------------------|----------------------|-------------|---------|
| Modulation                          | Frequency (MHz) | RB Allocation | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit (MHz) | Verdict |
| DFT-s-OFDM QPSK                     | 3490.02         | Outer_Full    | 77.69               | 83.16                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 77.86               | 82.42                | /           | Pass    |
|                                     | 3510            | Outer_Full    | 77.66               | 82.76                | /           | Pass    |
| DFT-s-OFDM 64 QAM                   | 3490.02         | Outer_Full    | 77.76               | 82.94                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 77.55               | 82.56                | /           | Pass    |
|                                     | 3510            | Outer_Full    | 77.70               | 82.78                | /           | Pass    |
| DFT-s-OFDM 256 QAM                  | 3490.02         | Outer_Full    | 77.68               | 82.96                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 77.47               | 82.62                | /           | Pass    |
|                                     | 3510            | Outer_Full    | 77.66               | 82.67                | /           | Pass    |
| CP-OFDM QPSK                        | 3490.02         | Outer_Full    | 78.09               | 83.52                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 77.71               | 83.26                | /           | Pass    |
|                                     | 3510            | Outer_Full    | 77.68               | 82.95                | /           | Pass    |
| CP-OFDM 64 QAM                      | 3490.02         | Outer_Full    | 78.12               | 83.38                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 77.78               | 83.05                | /           | Pass    |
|                                     | 3510            | Outer_Full    | 77.91               | 83.04                | /           | Pass    |
| CP-OFDM 256 QAM                     | 3490.02         | Outer_Full    | 78.13               | 83.30                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 77.95               | 82.80                | /           | Pass    |
|                                     | 3510            | Outer_Full    | 78.14               | 83.02                | /           | Pass    |

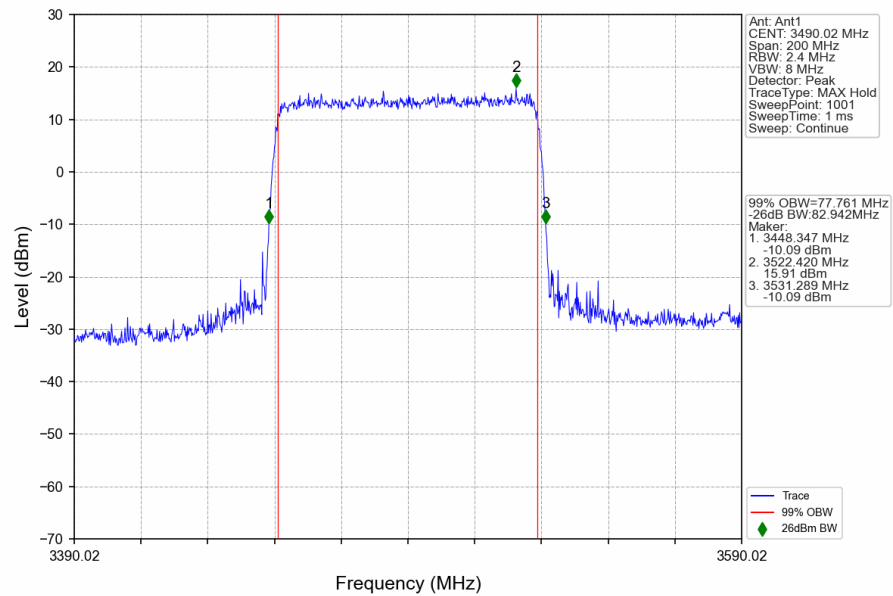
1.7.2 Test Graph



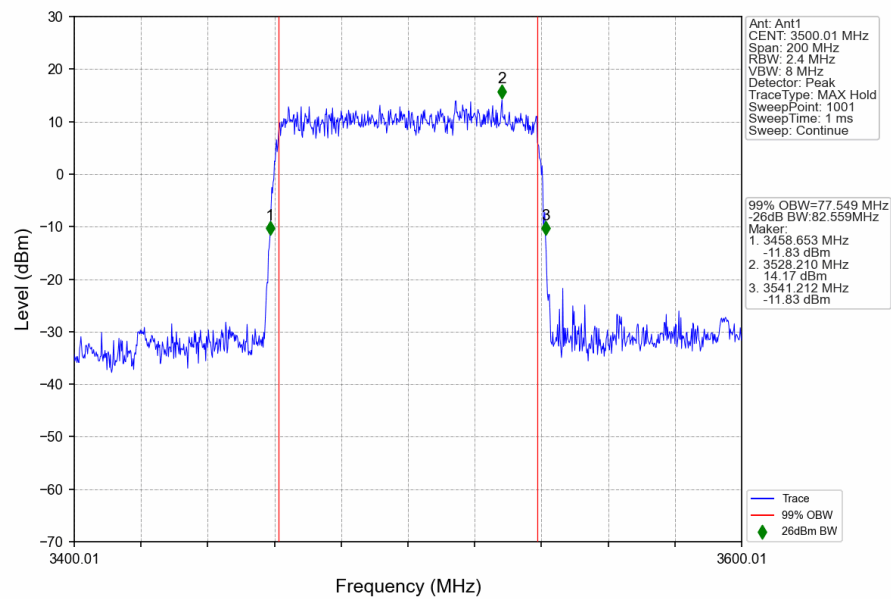
n78e\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM\_QPSK\_3510MHz\_Outer\_Full



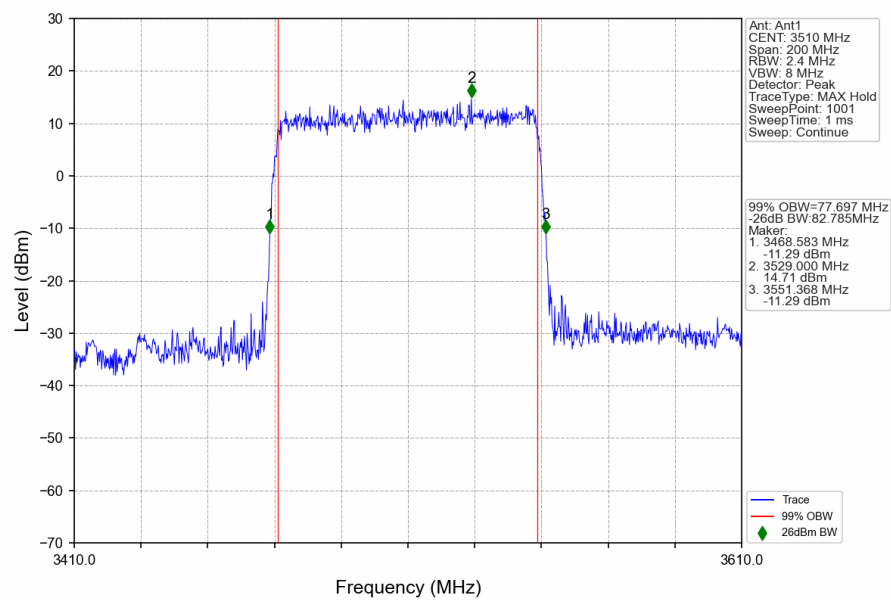
n78e\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM\_64\_QAM\_3490.02MHz\_Outer\_Full



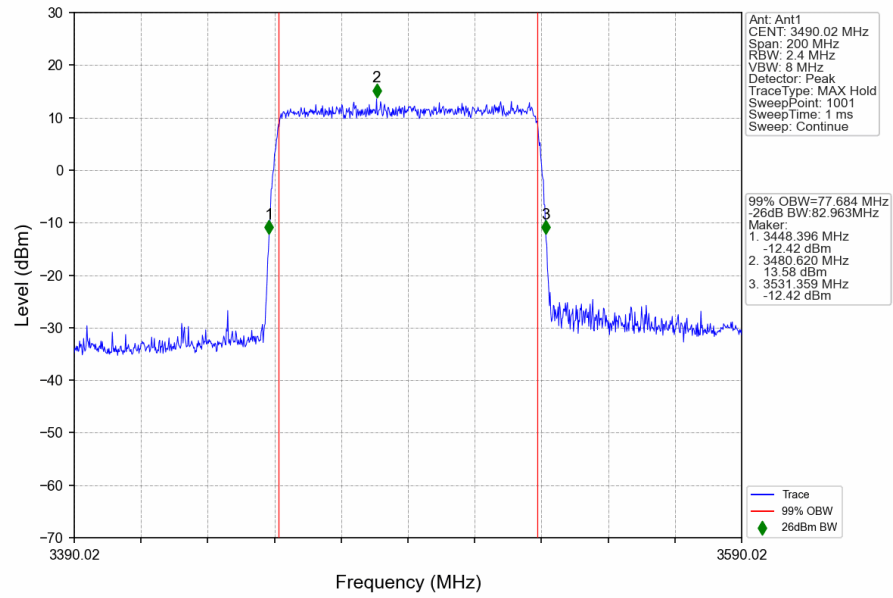
n78e\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM\_64\_QAM\_3500.01MHz\_Outer\_Full



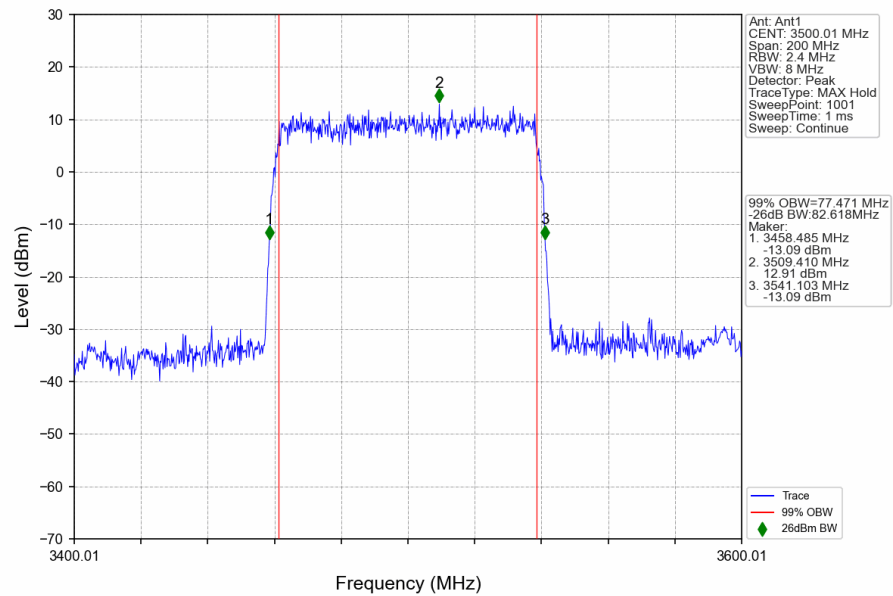
n78e\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM\_64\_QAM\_3510MHz\_Outer\_Full



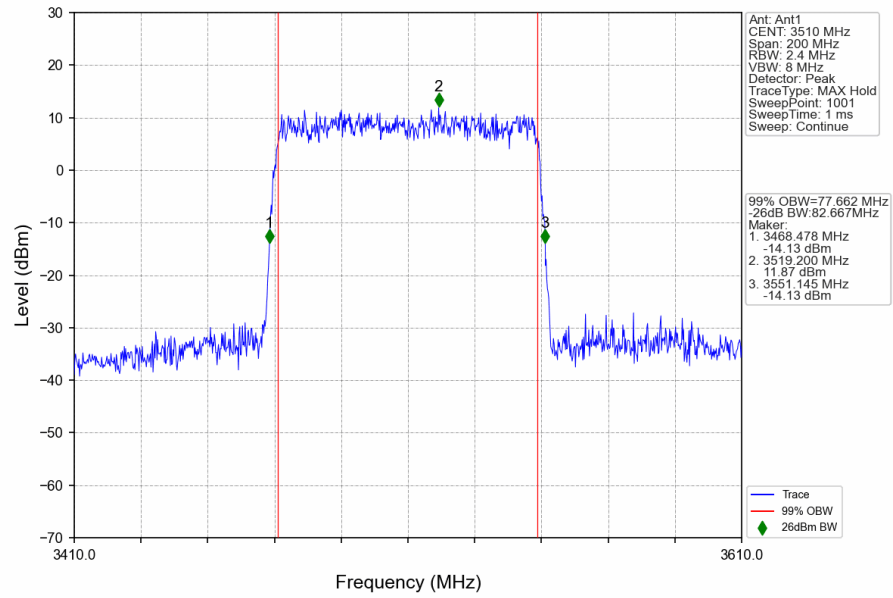
n78e\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM\_256\_QAM\_3490.02MHz\_Outer\_Full



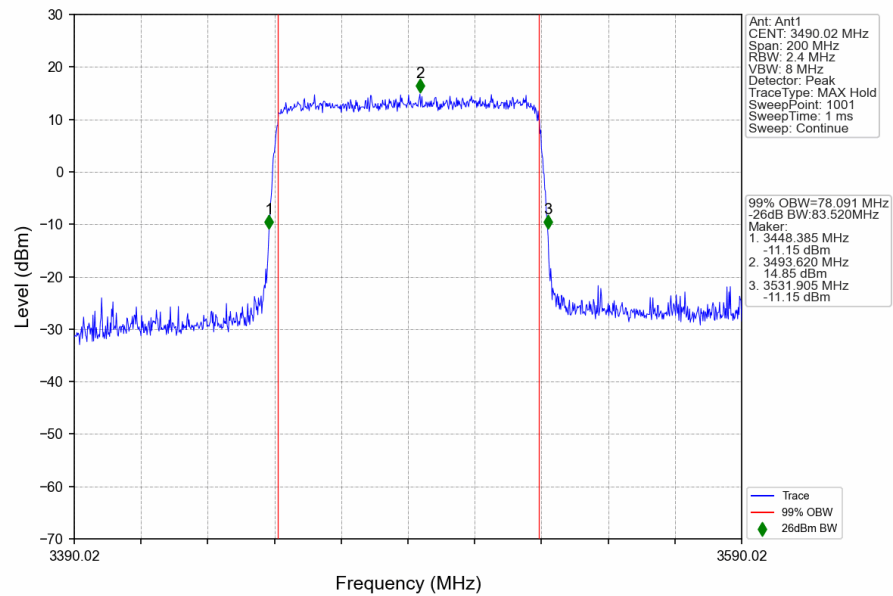
n78e\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM\_256\_QAM\_3500.01MHz\_Outer\_Full



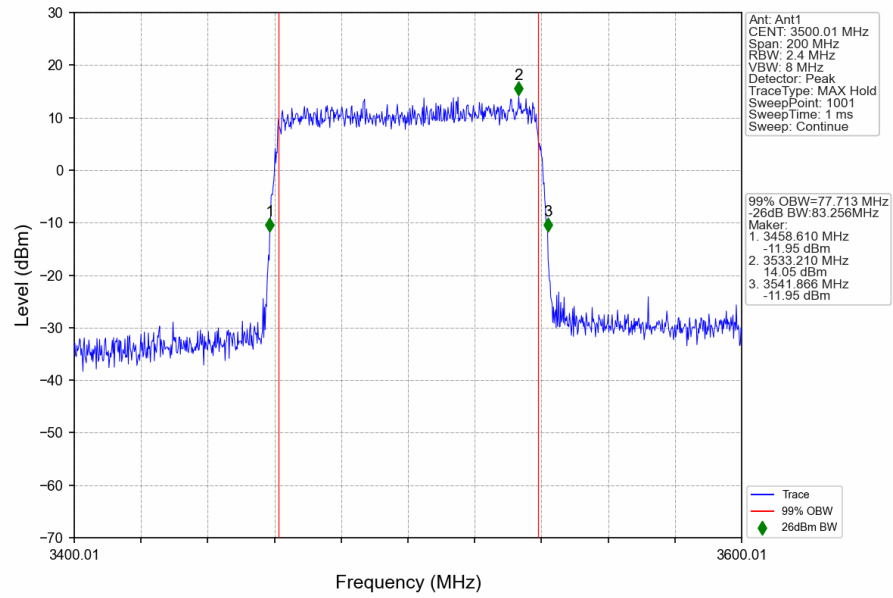
n78e\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM\_256\_QAM\_3510MHz\_Outer\_Full



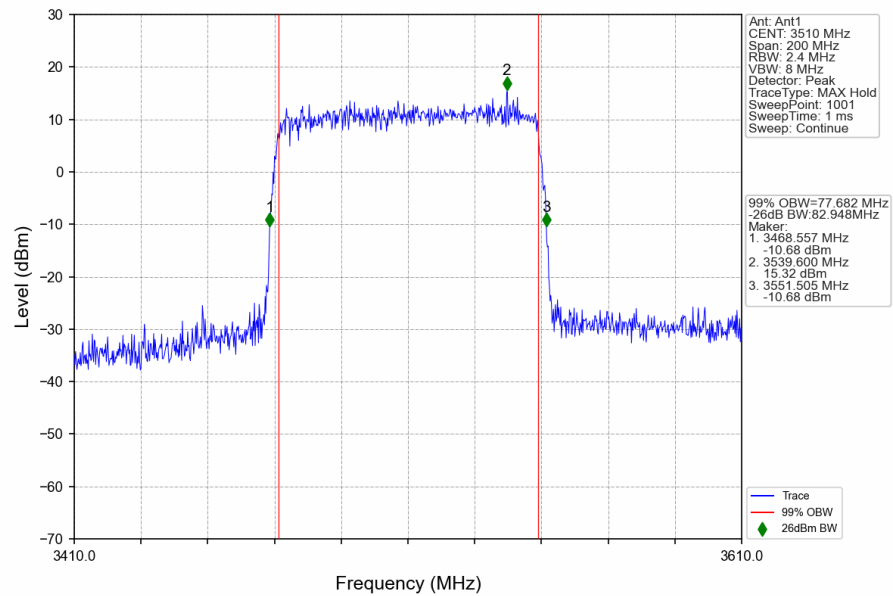
n78e\_30kHz\_SISO\_NTNV\_80MHz\_CP-OFDM\_QPSK\_3490.02MHz\_Outer\_Full



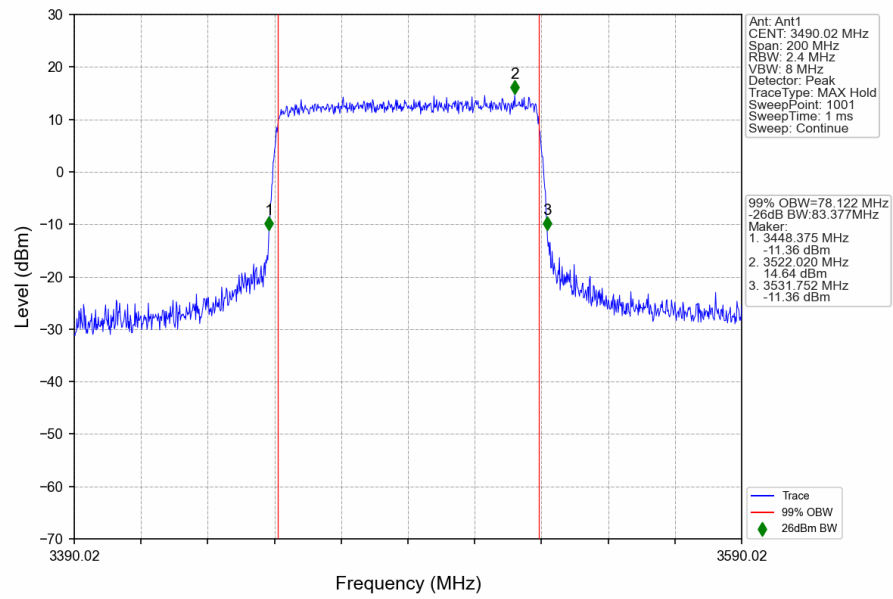
n78e\_30kHz\_SISO\_NTNV\_80MHz\_CP-OFDM\_QPSK\_3500.01MHz\_Outer\_Full



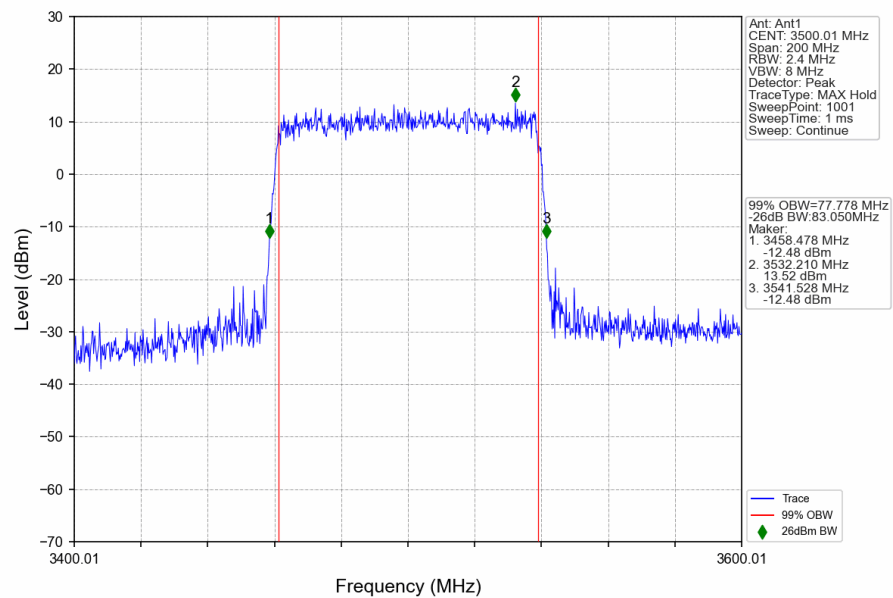
n78e\_30kHz\_SISO\_NTNV\_80MHz\_CP-OFDM\_QPSK\_3510MHz\_Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_80MHz\_CP-OFDM\_64\_QAM\_3490.02MHz\_Outer\_Full

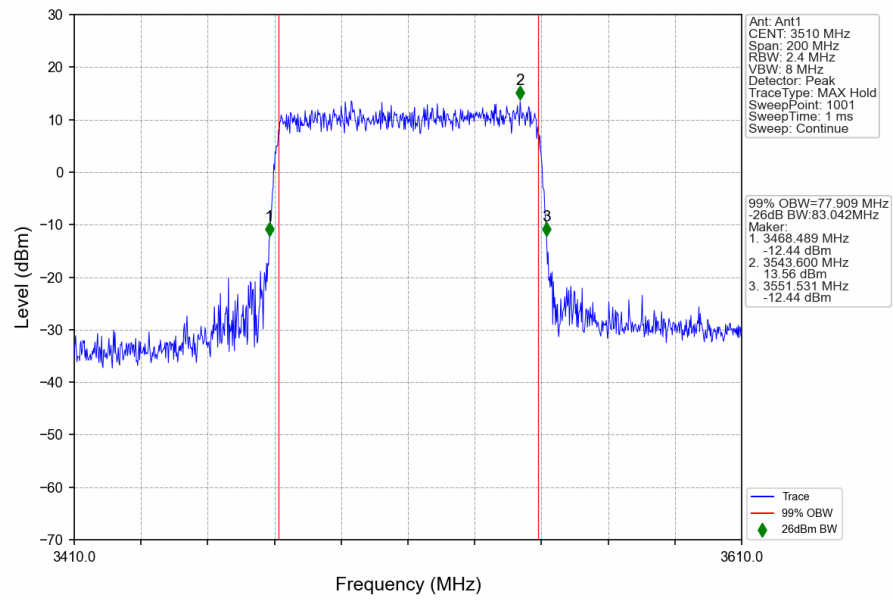


n78e\_30kHz\_SISO\_NTNV\_80MHz\_CP-OFDM\_64\_QAM\_3500.01MHz\_Outer\_Full

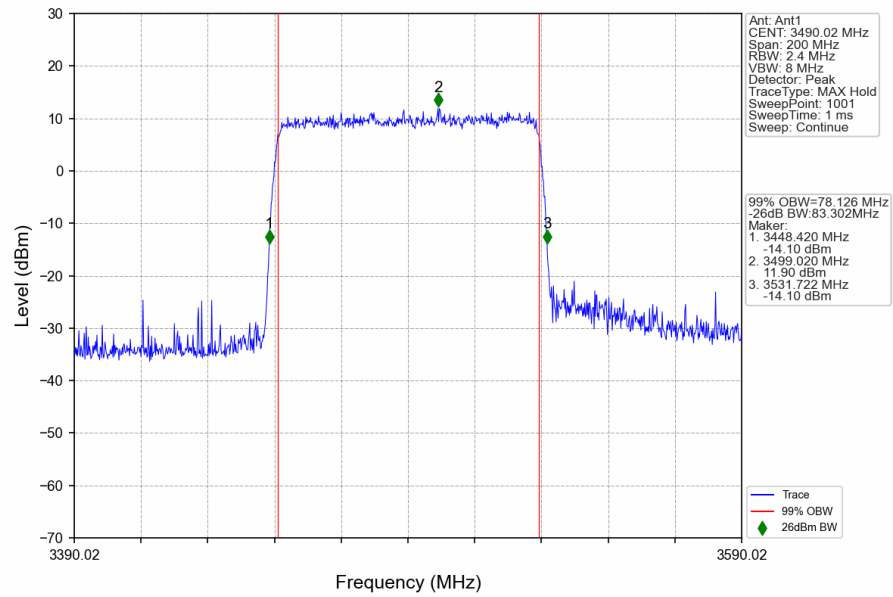




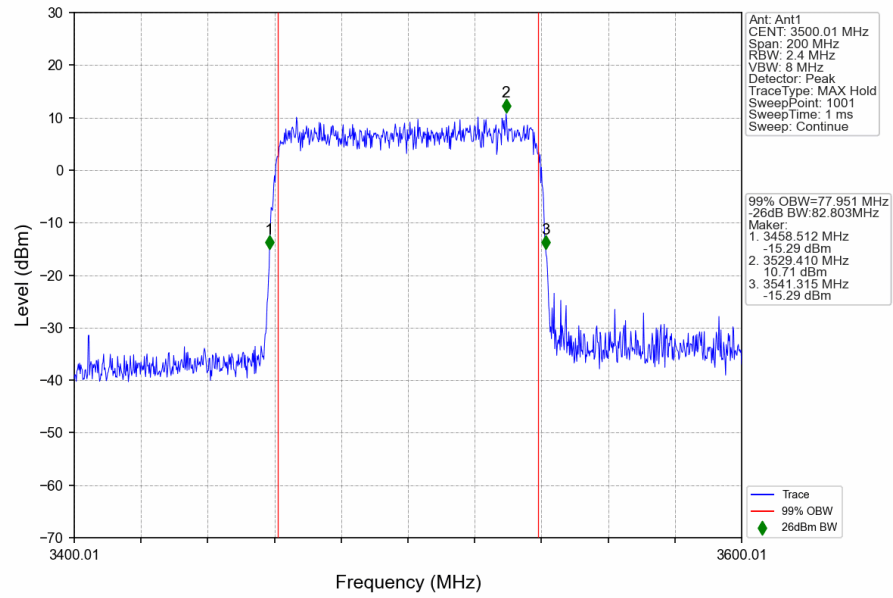
n78e\_30kHz\_SISO\_NTNV\_80MHz\_CP-OFDM\_64\_QAM\_3510MHz\_Outer\_Full



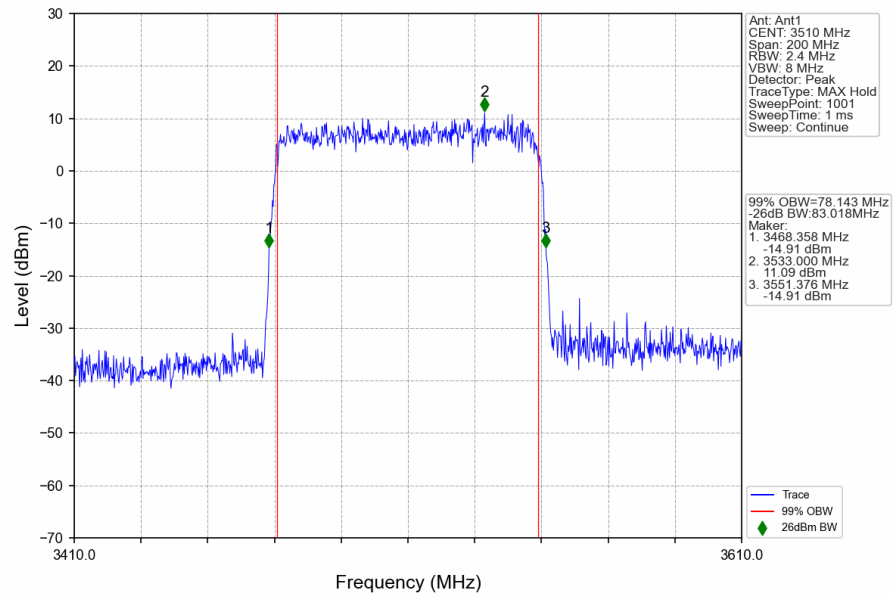
n78e\_30kHz\_SISO\_NTNV\_80MHz\_CP-OFDM\_256\_QAM\_3490.02MHz\_Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_80MHz\_CP-OFDM\_256\_QAM\_3500.01MHz\_Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_80MHz\_CP-OFDM\_256\_QAM\_3510MHz\_Outer\_Full

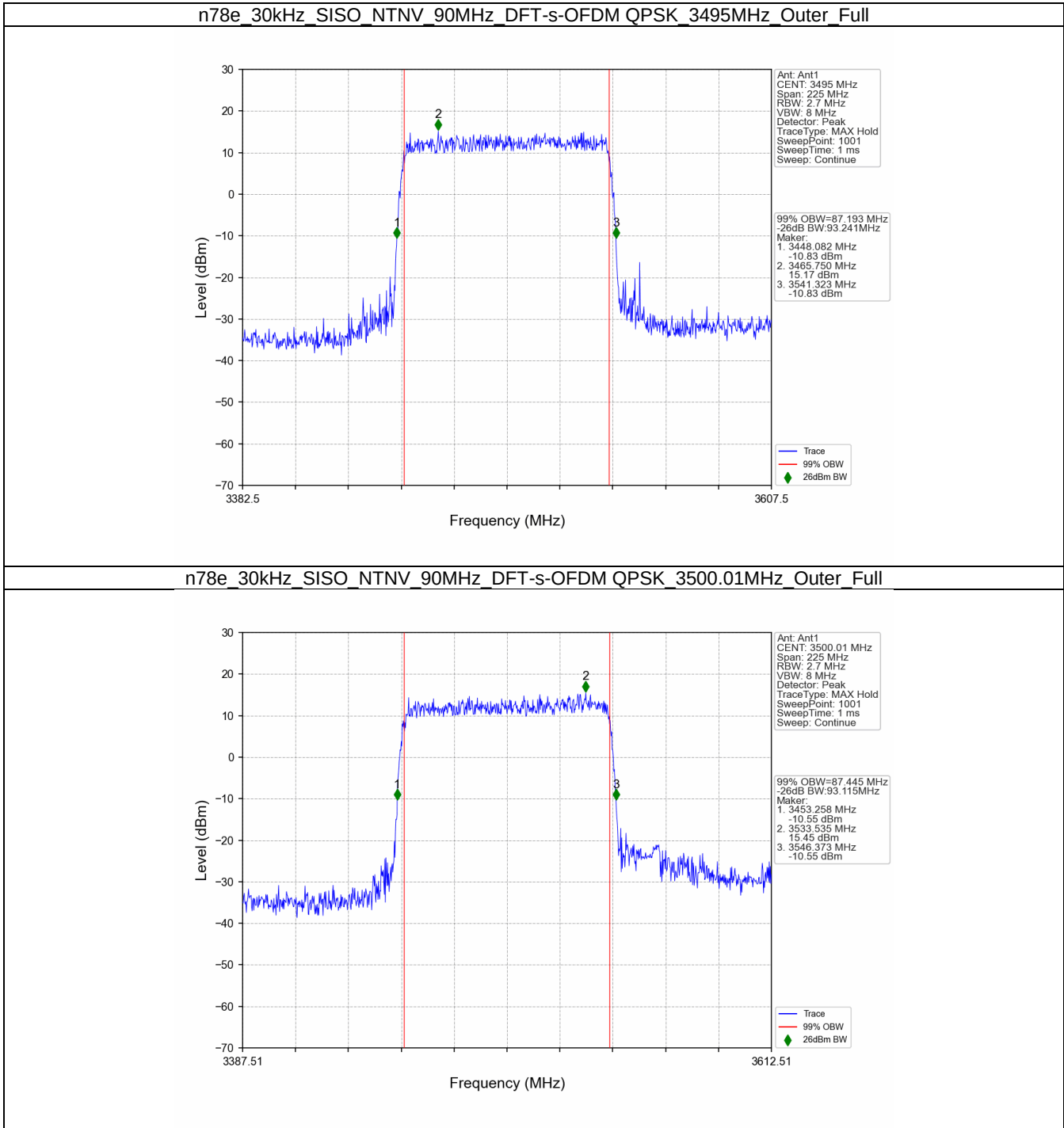


## 1.8 30k\_SISO\_90MHz\_NTNV

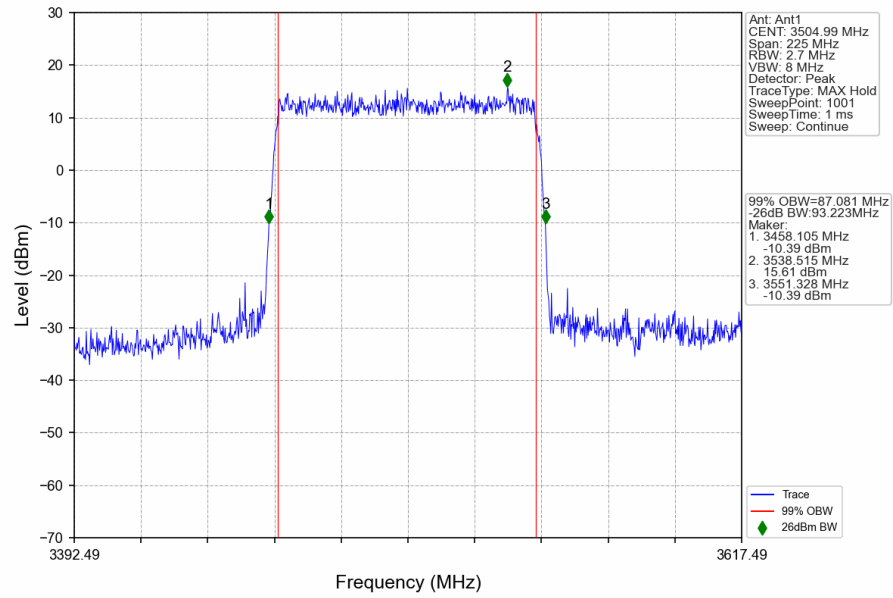
### 1.8.1 Test Result

| 5G NR n78e SCS=30kHz SISO 90MHz NTN |                 |               |                     |                      |             |         |
|-------------------------------------|-----------------|---------------|---------------------|----------------------|-------------|---------|
| Modulation                          | Frequency (MHz) | RB Allocation | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit (MHz) | Verdict |
| DFT-s-OFDM QPSK                     | 3495            | Outer_Full    | 87.19               | 93.24                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 87.44               | 93.11                | /           | Pass    |
|                                     | 3504.99         | Outer_Full    | 87.08               | 93.22                | /           | Pass    |
| DFT-s-OFDM 64 QAM                   | 3495            | Outer_Full    | 86.99               | 92.60                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 87.04               | 92.92                | /           | Pass    |
|                                     | 3504.99         | Outer_Full    | 87.48               | 92.56                | /           | Pass    |
| DFT-s-OFDM 256 QAM                  | 3495            | Outer_Full    | 87.56               | 92.55                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 87.10               | 92.77                | /           | Pass    |
|                                     | 3504.99         | Outer_Full    | 87.27               | 92.94                | /           | Pass    |
| CP-OFDM QPSK                        | 3495            | Outer_Full    | 87.78               | 93.19                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 87.86               | 93.21                | /           | Pass    |
|                                     | 3504.99         | Outer_Full    | 87.90               | 93.27                | /           | Pass    |
| CP-OFDM 64 QAM                      | 3495            | Outer_Full    | 88.11               | 93.52                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 87.77               | 93.53                | /           | Pass    |
|                                     | 3504.99         | Outer_Full    | 88.11               | 94.05                | /           | Pass    |
| CP-OFDM 256 QAM                     | 3495            | Outer_Full    | 87.80               | 93.72                | /           | Pass    |
|                                     | 3500.01         | Outer_Full    | 87.71               | 93.64                | /           | Pass    |
|                                     | 3504.99         | Outer_Full    | 87.64               | 93.33                | /           | Pass    |

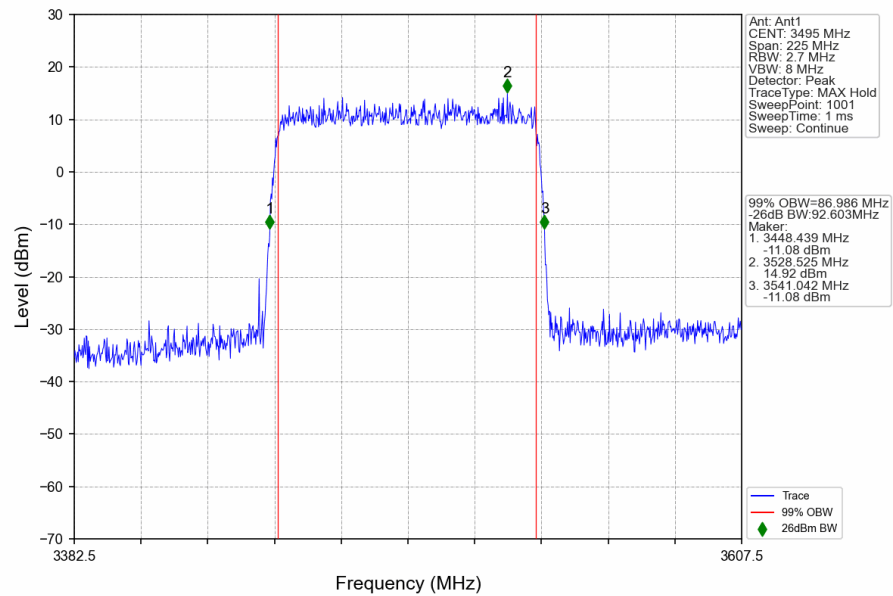
1.8.2 Test Graph



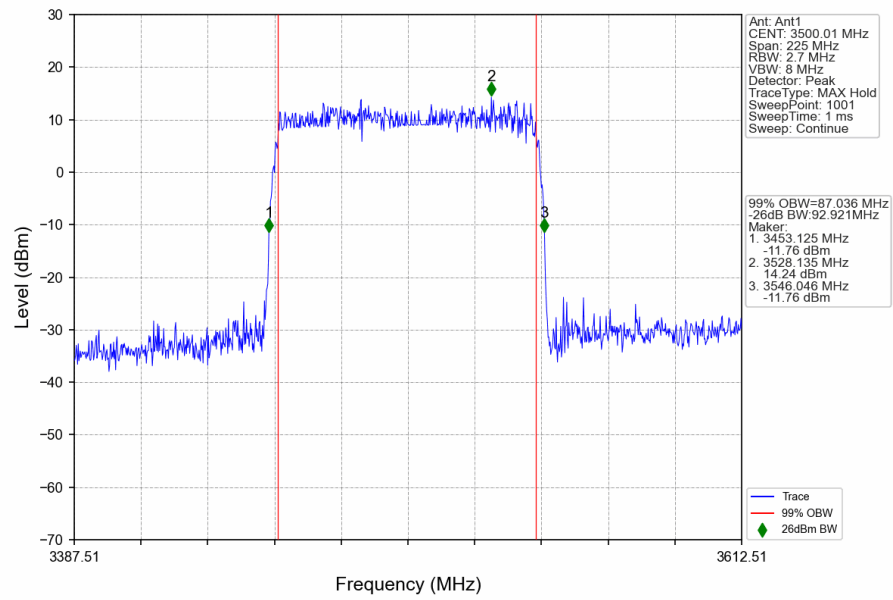
n78e\_30kHz\_SISO\_NTNV\_90MHz\_DFT-s-OFDM QPSK\_3504.99MHz\_Outer\_Full



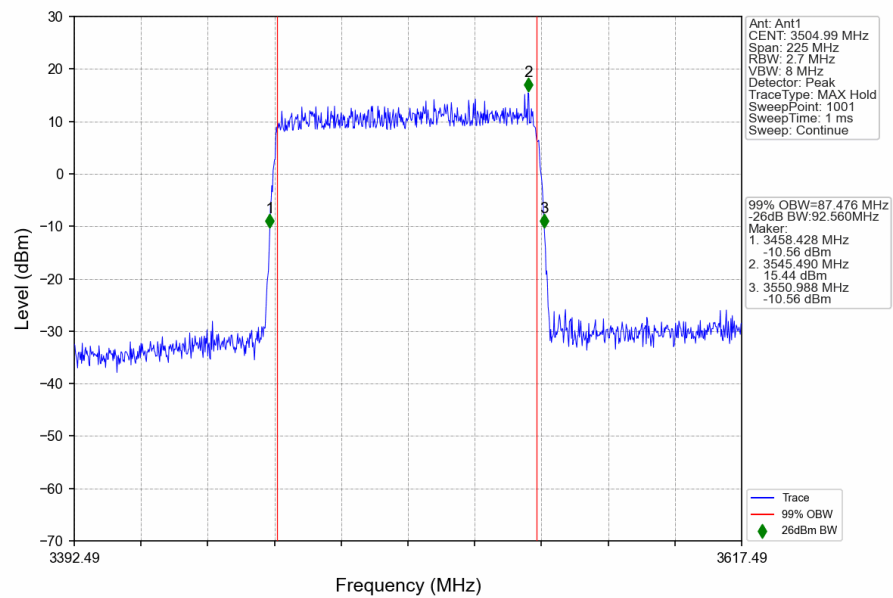
n78e\_30kHz\_SISO\_NTNV\_90MHz\_DFT-s-OFDM 64 QAM\_3495MHz\_Outer\_Full



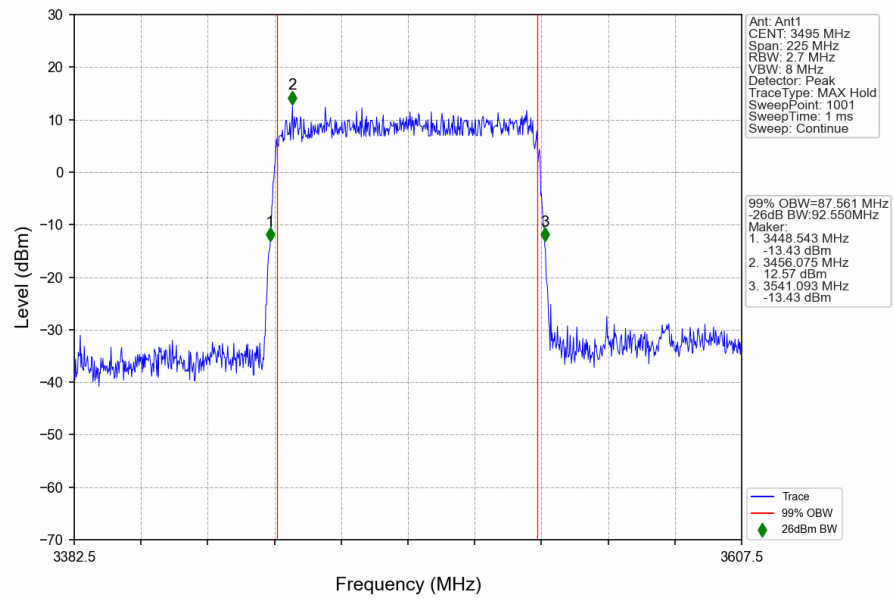
n78e\_30kHz\_SISO\_NTNV\_90MHz\_DFT-s-OFDM\_64\_QAM\_3500.01MHz\_Outer\_Full



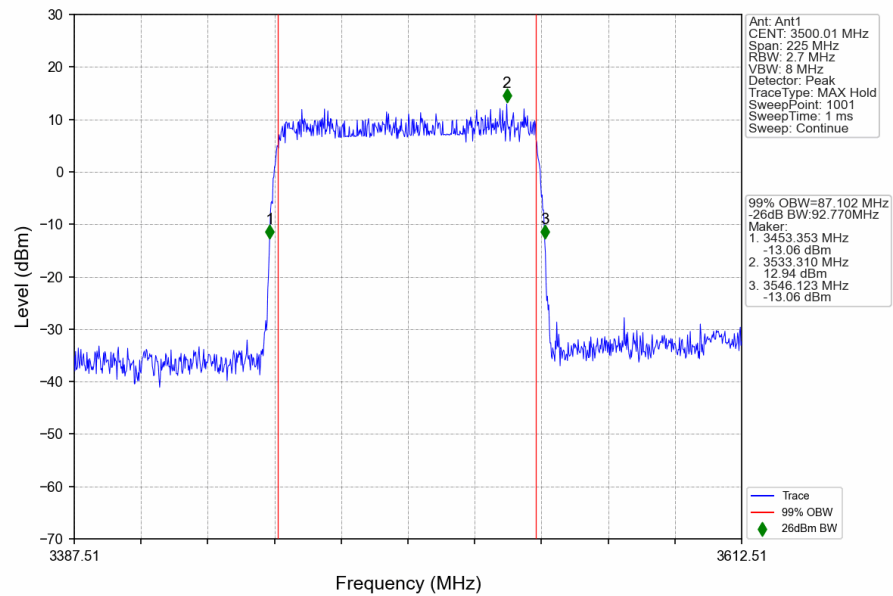
n78e\_30kHz\_SISO\_NTNV\_90MHz\_DFT-s-OFDM\_64\_QAM\_3504.99MHz\_Outer\_Full



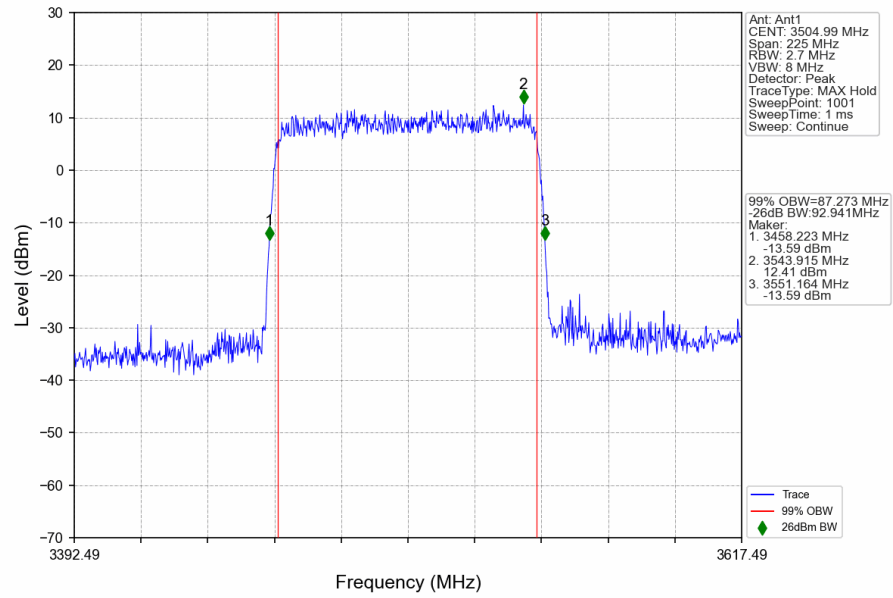
n78e\_30kHz\_SISO\_NTNV\_90MHz\_DFT-s-OFDM\_256\_QAM\_3495MHz\_Outer\_Full



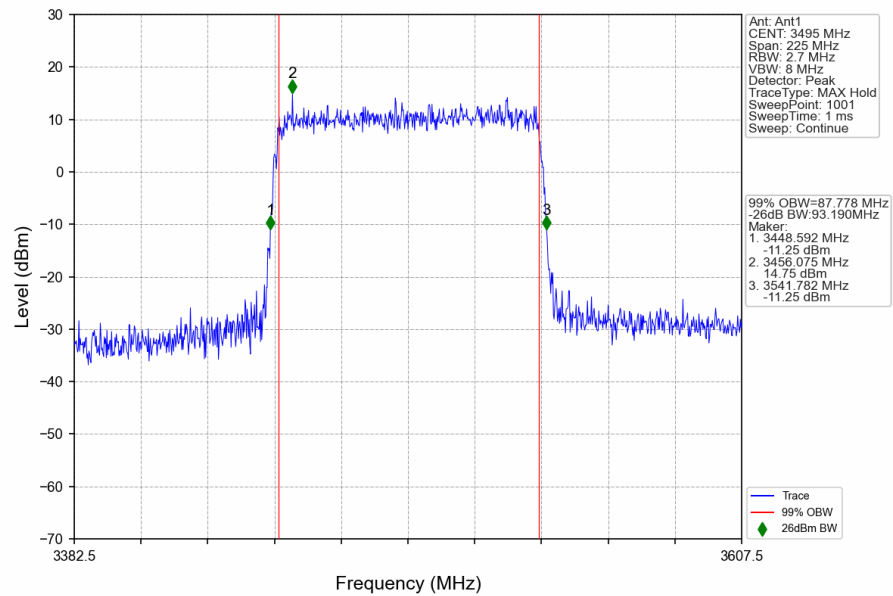
n78e\_30kHz\_SISO\_NTNV\_90MHz\_DFT-s-OFDM\_256\_QAM\_3500.01MHz\_Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_90MHz\_DFT-s-OFDM\_256\_QAM\_3504.99MHz\_Outer\_Full

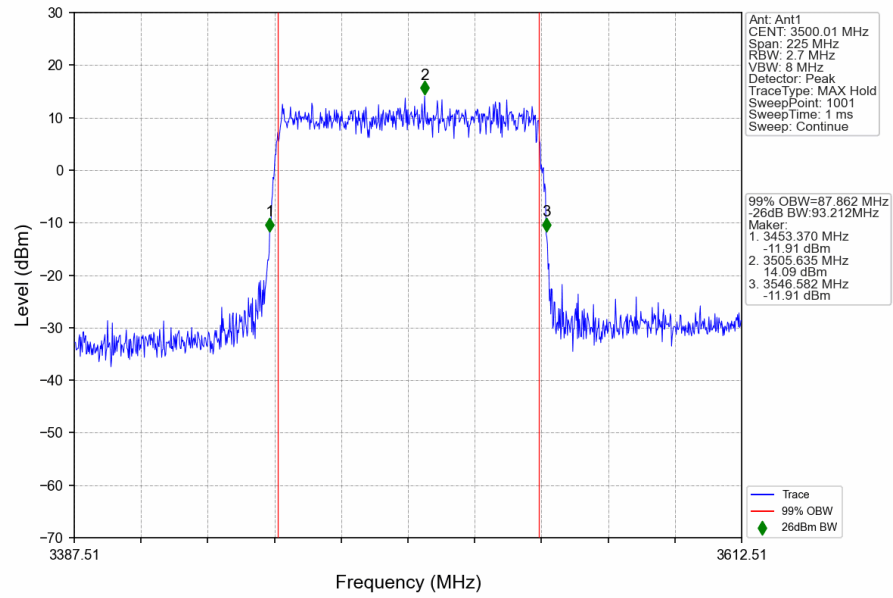


n78e\_30kHz\_SISO\_NTNV\_90MHz\_CP-OFDM\_QPSK\_3495MHz\_Outer\_Full

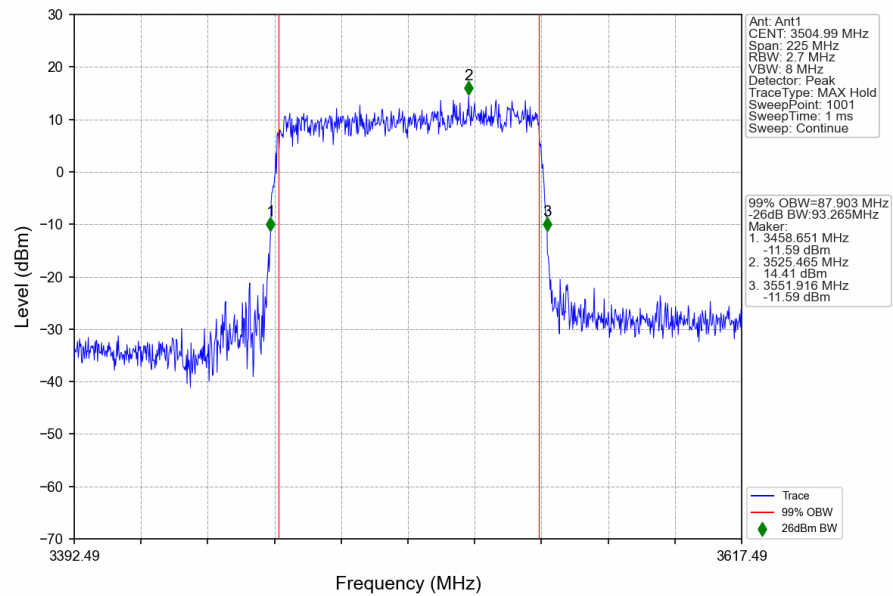




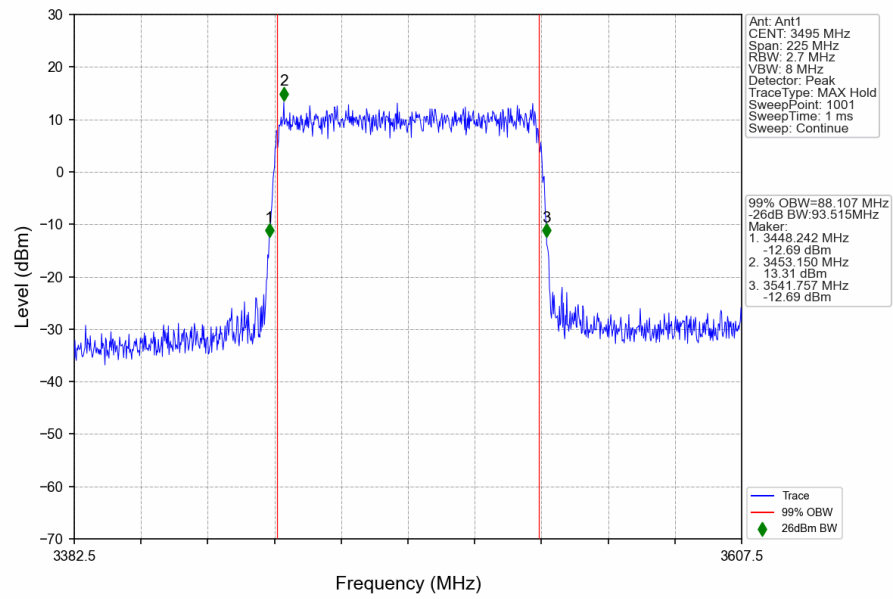
n78e\_30kHz\_SISO\_NTNV\_90MHz\_CP-OFDM\_QPSK\_3500.01MHz\_Outer\_Full



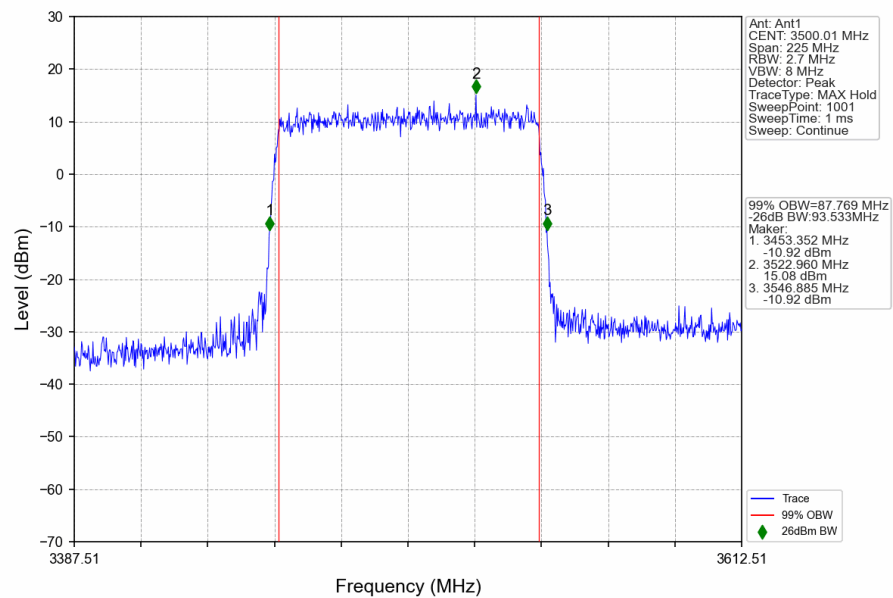
n78e\_30kHz\_SISO\_NTNV\_90MHz\_CP-OFDM\_QPSK\_3504.99MHz\_Outer\_Full



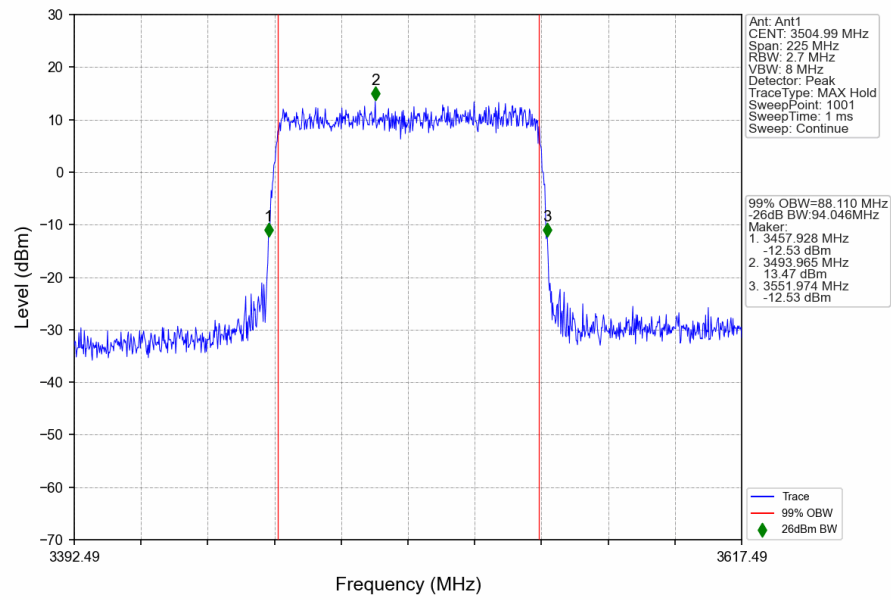
n78e\_30kHz\_SISO\_NTNV\_90MHz\_CP-OFDM\_64\_QAM\_3495MHz\_Outer\_Full



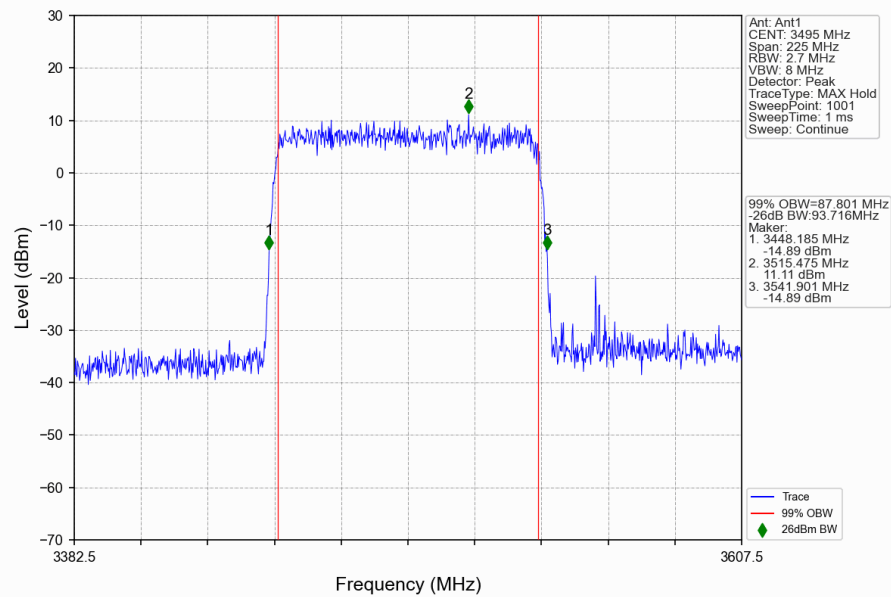
n78e\_30kHz\_SISO\_NTNV\_90MHz\_CP-OFDM\_64\_QAM\_3500.01MHz\_Outer\_Full



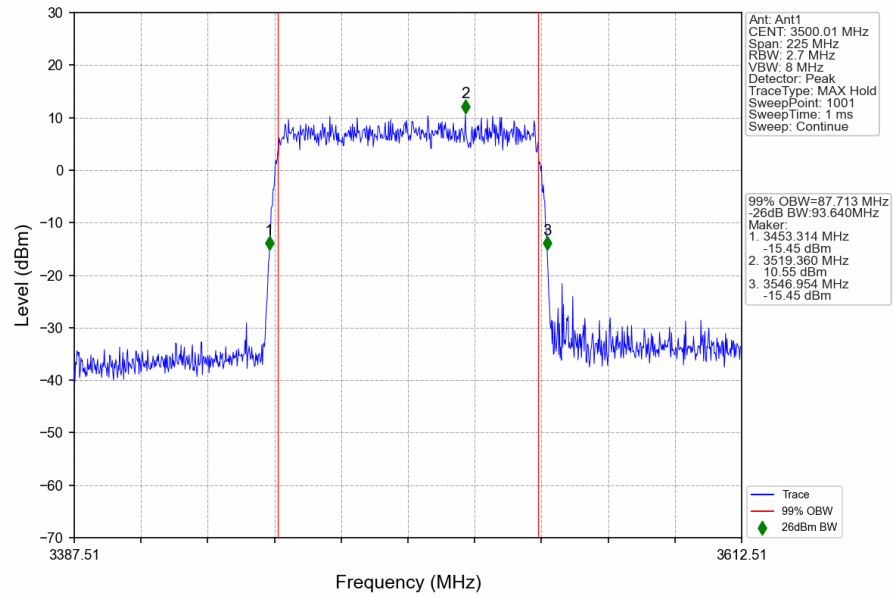
n78e 30kHz SISO\_NTNV\_90MHz\_CP-OFDM 64 QAM 3504.99MHz Outer\_Full



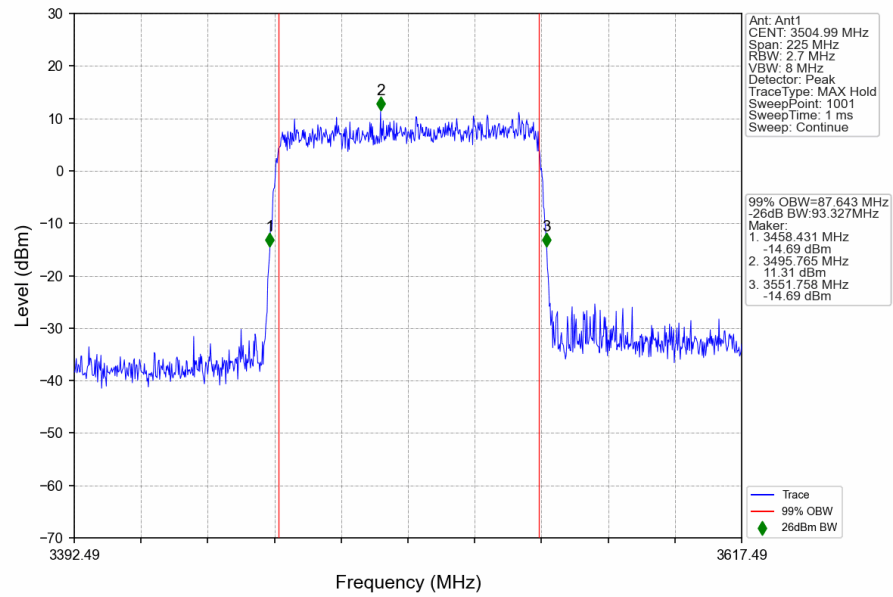
n78e 30kHz SISO\_NTNV\_90MHz\_CP-OFDM 256 QAM 3495MHz Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_90MHz\_CP-OFDM\_256\_QAM\_3500.01MHz\_Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_90MHz\_CP-OFDM\_256\_QAM\_3504.99MHz\_Outer\_Full

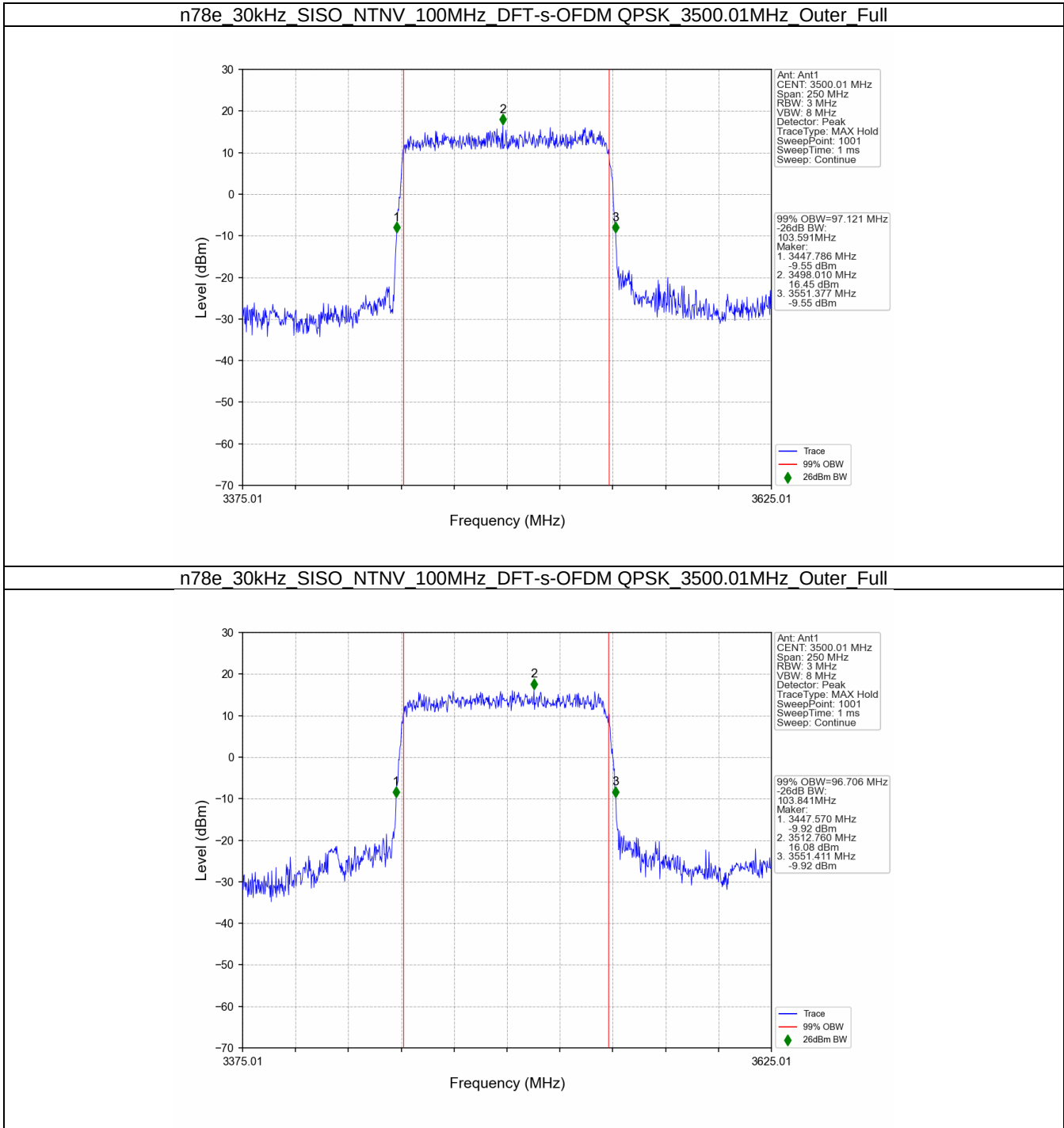


## 1.9 30k\_SISO\_100MHz\_NTNV

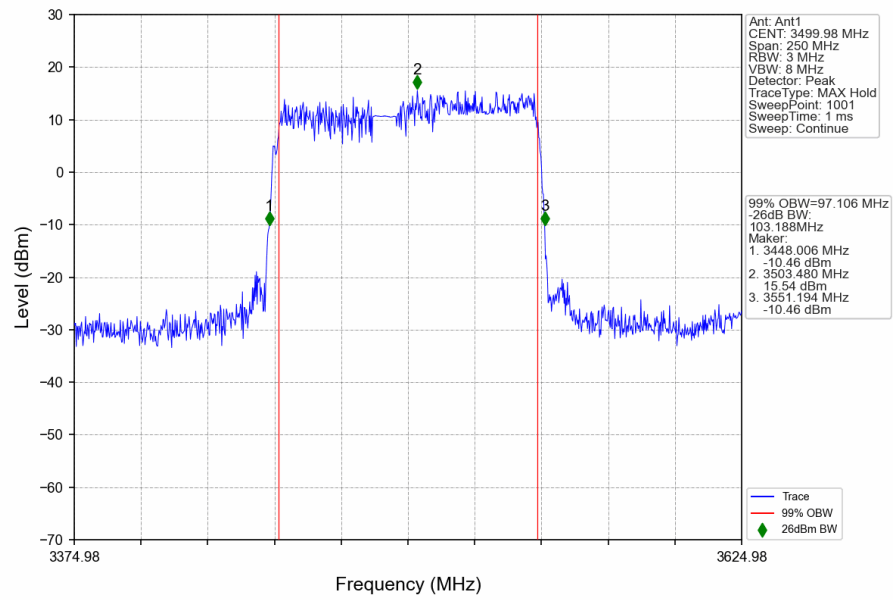
### 1.9.1 Test Result

| 5G NR n78e SCS=30kHz SISO 100MHz NTV |                 |               |                     |                      |             |         |
|--------------------------------------|-----------------|---------------|---------------------|----------------------|-------------|---------|
| Modulation                           | Frequency (MHz) | RB Allocation | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit (MHz) | Verdict |
| DFT-s-OFDM QPSK                      | 3500.01         | Outer_Full    | 97.12               | 103.59               | /           | Pass    |
|                                      | 3500.01         | Outer_Full    | 96.71               | 103.84               | /           | Pass    |
|                                      | 3499.98         | Outer_Full    | 97.11               | 103.19               | /           | Pass    |
| DFT-s-OFDM 64 QAM                    | 3500.01         | Outer_Full    | 96.83               | 103.40               | /           | Pass    |
|                                      | 3500.01         | Outer_Full    | 96.71               | 102.99               | /           | Pass    |
|                                      | 3499.98         | Outer_Full    | 96.95               | 103.48               | /           | Pass    |
| DFT-s-OFDM 256 QAM                   | 3500.01         | Outer_Full    | 97.22               | 103.28               | /           | Pass    |
|                                      | 3500.01         | Outer_Full    | 96.67               | 103.06               | /           | Pass    |
|                                      | 3499.98         | Outer_Full    | 96.95               | 103.42               | /           | Pass    |
| CP-OFDM QPSK                         | 3500.01         | Outer_Full    | 98.13               | 104.37               | /           | Pass    |
|                                      | 3500.01         | Outer_Full    | 97.73               | 104.44               | /           | Pass    |
|                                      | 3499.98         | Outer_Full    | 98.00               | 104.45               | /           | Pass    |
| CP-OFDM 64 QAM                       | 3500.01         | Outer_Full    | 97.88               | 104.20               | /           | Pass    |
|                                      | 3500.01         | Outer_Full    | 97.91               | 104.18               | /           | Pass    |
|                                      | 3499.98         | Outer_Full    | 97.98               | 104.47               | /           | Pass    |
| CP-OFDM 256 QAM                      | 3500.01         | Outer_Full    | 97.81               | 104.08               | /           | Pass    |
|                                      | 3500.01         | Outer_Full    | 98.01               | 104.09               | /           | Pass    |
|                                      | 3499.98         | Outer_Full    | 98.31               | 104.17               | /           | Pass    |

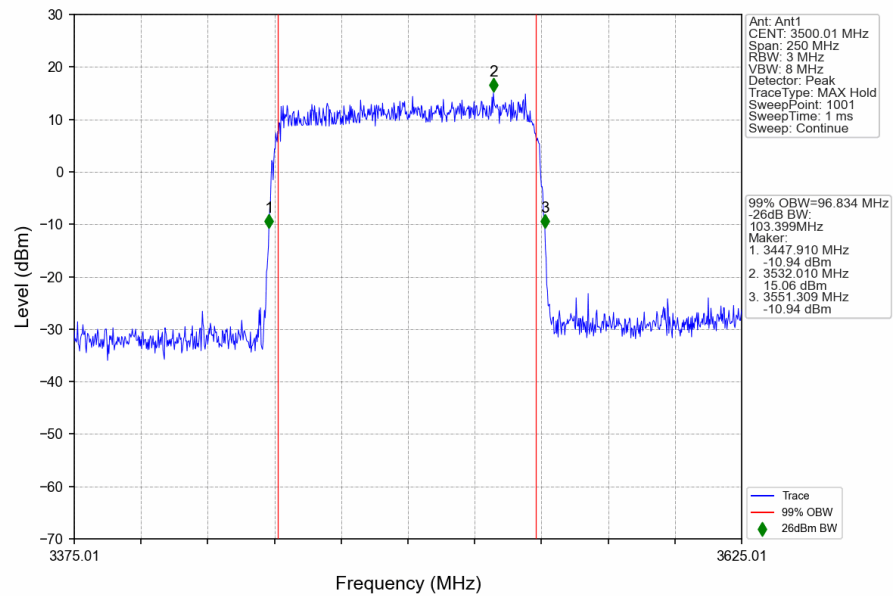
1.9.2 Test Graph



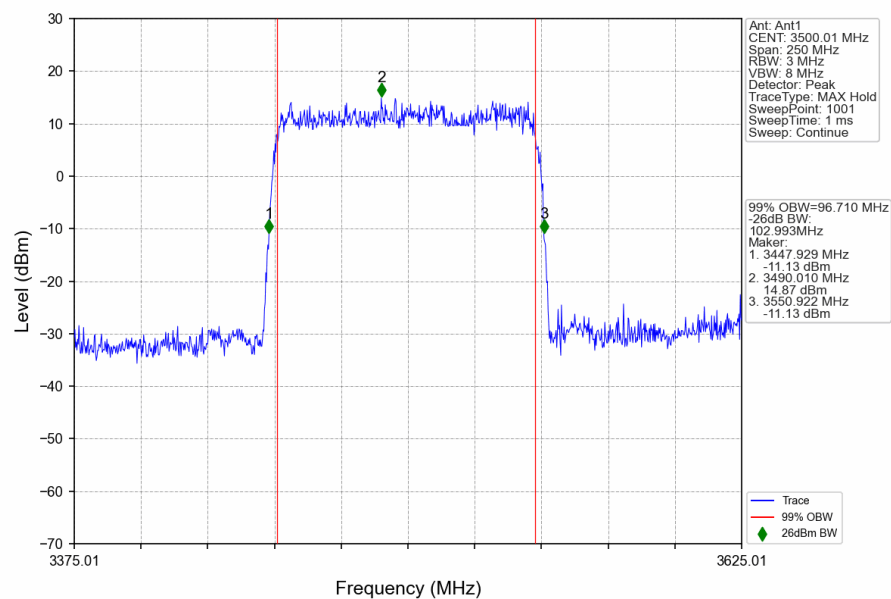
n78e\_30kHz\_SISO\_NTNV\_100MHz\_DFT-s-OFDM\_QPSK\_3499.98MHz\_Outer\_Full



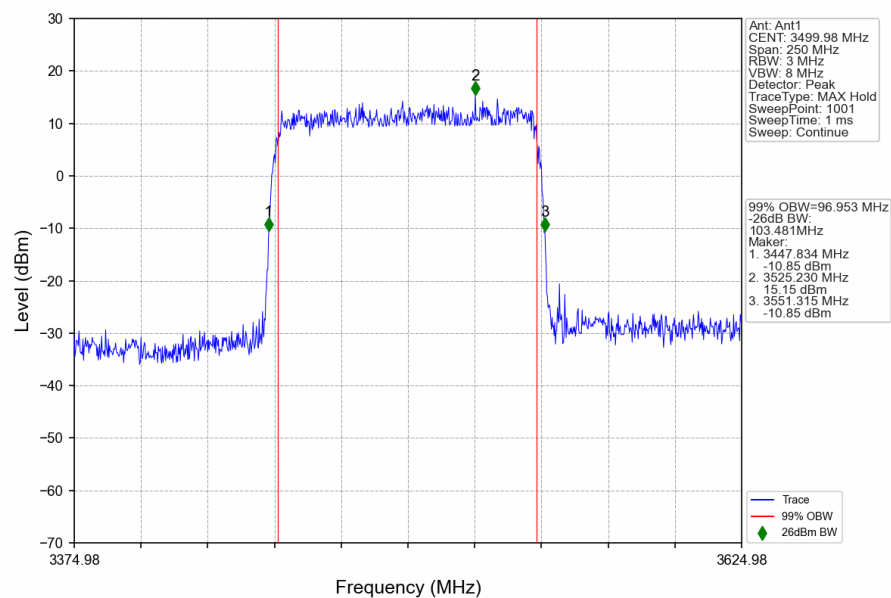
n78e\_30kHz\_SISO\_NTNV\_100MHz\_DFT-s-OFDM\_64\_QAM\_3500.01MHz\_Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_100MHz\_DFT-s-OFDM\_64\_QAM\_3500.01MHz\_Outer\_Full

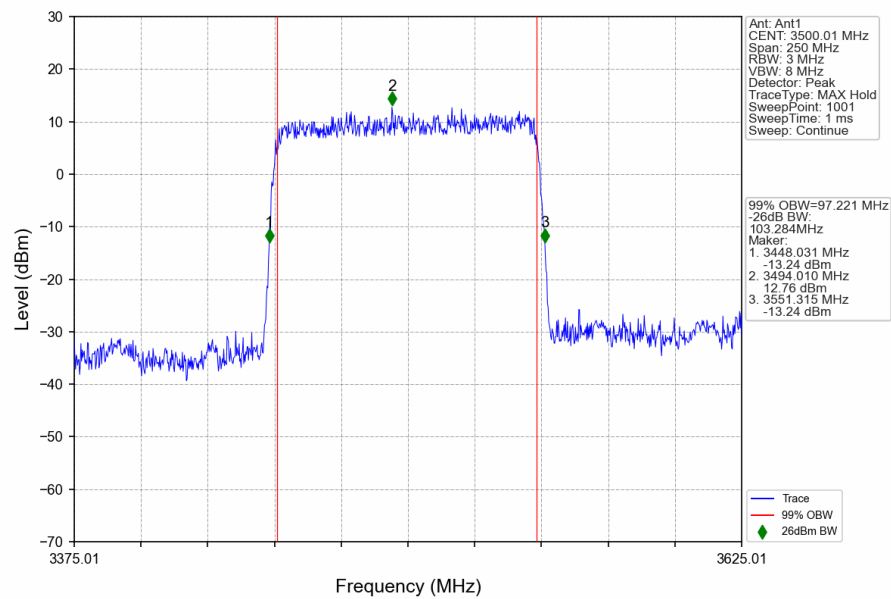


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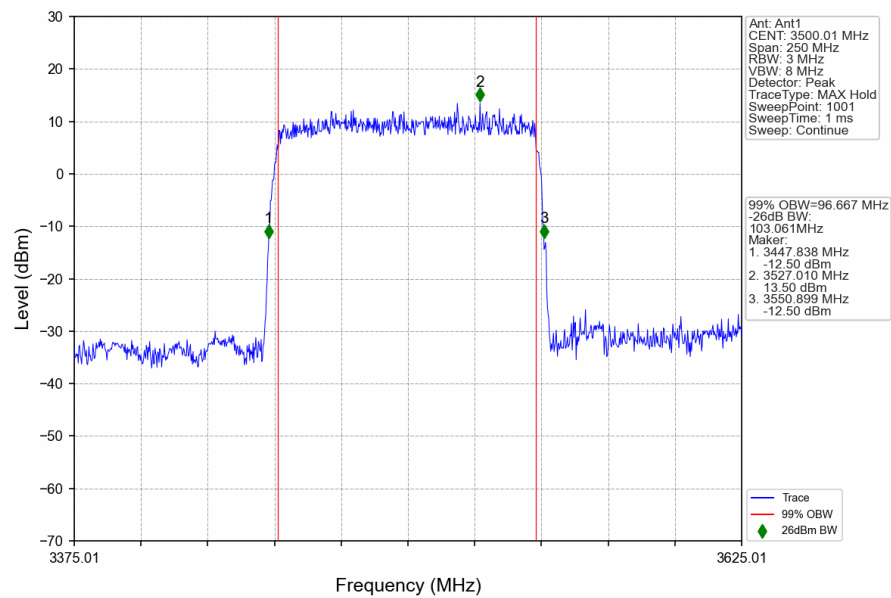




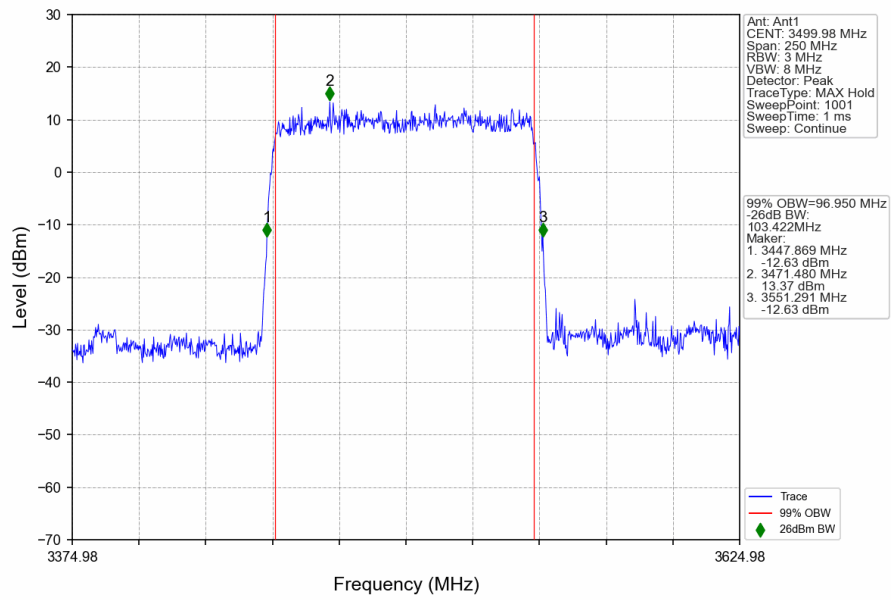
n78e\_30kHz\_SISO\_NTNV\_100MHz\_DFT-s-OFDM\_256\_QAM\_3500.01MHz\_Outer\_Full



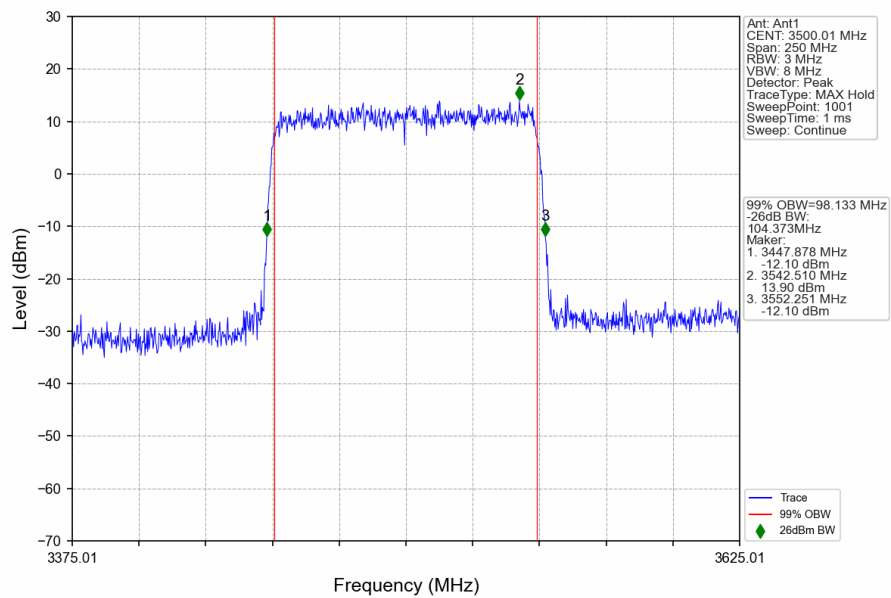
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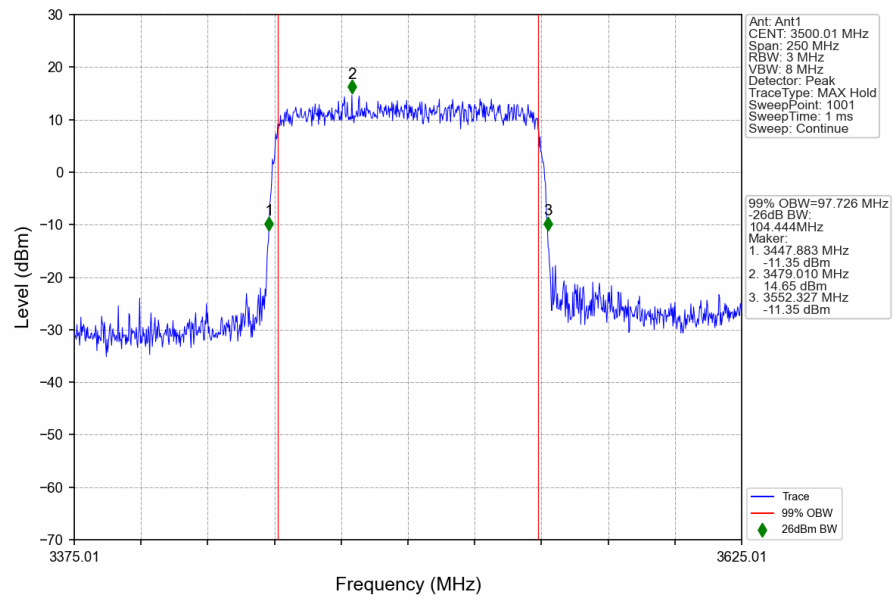
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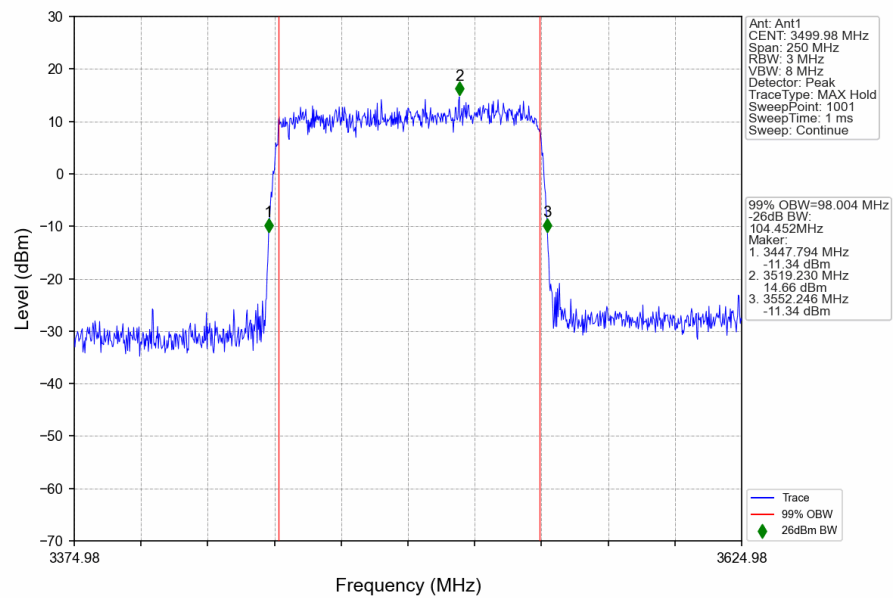
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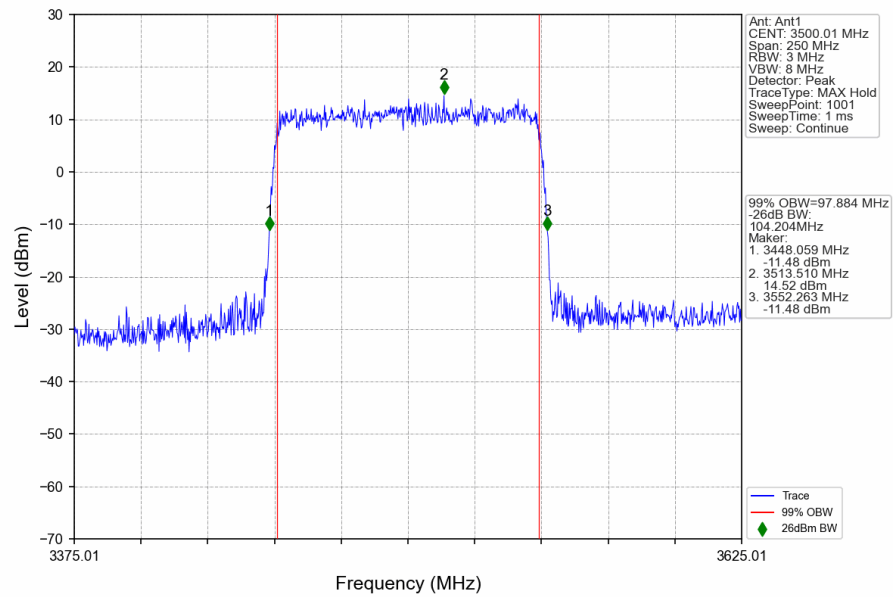
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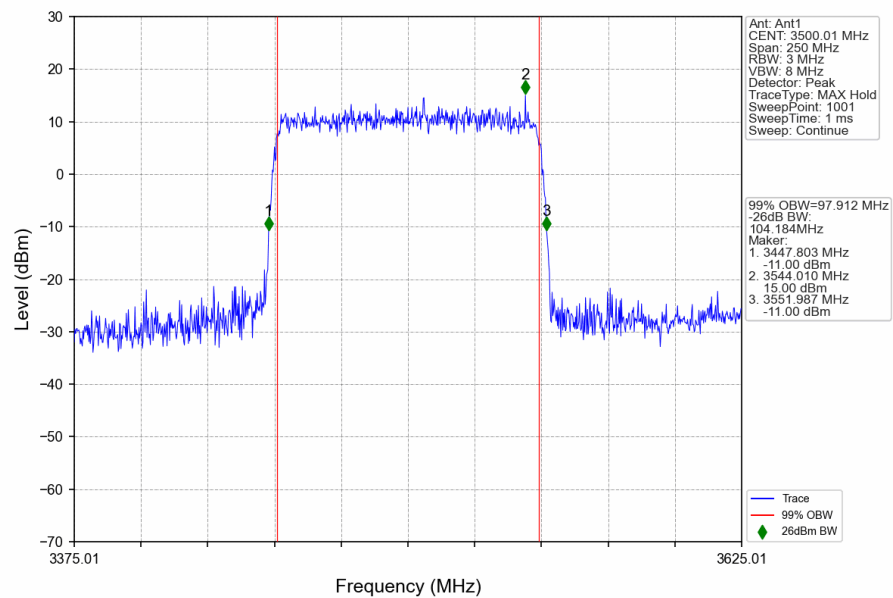
n78e\_30kHz\_SISO\_NTNV\_100MHz\_CP-OFDM\_QPSK\_3499.98MHz\_Outer\_Full



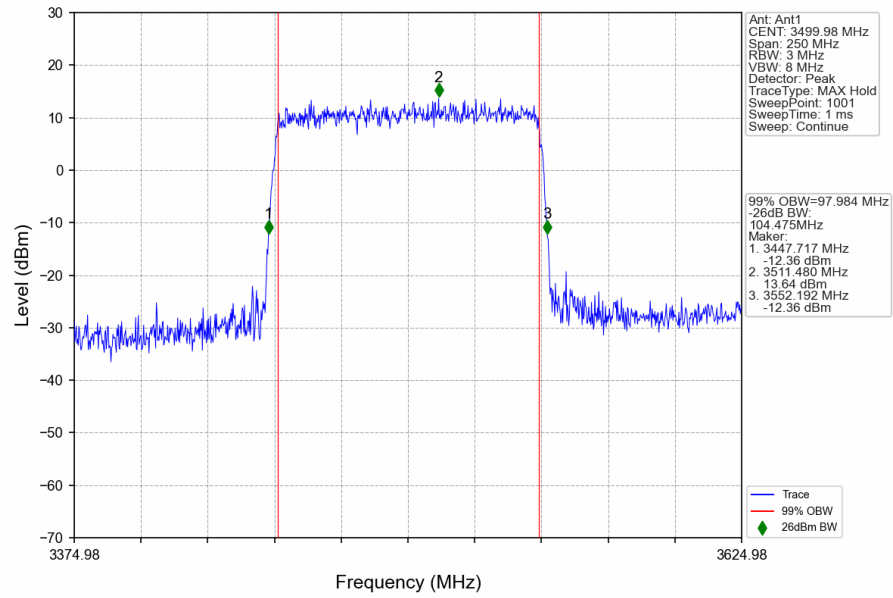
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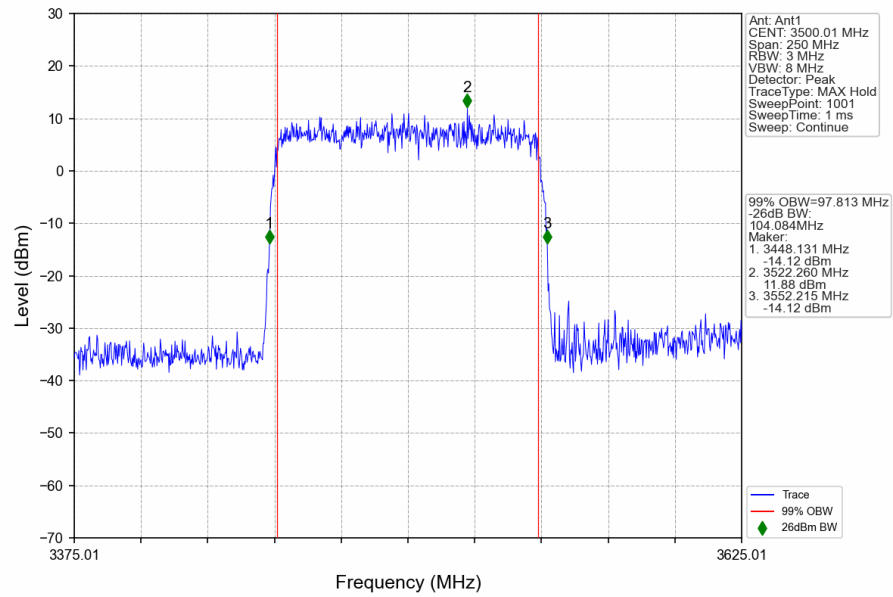
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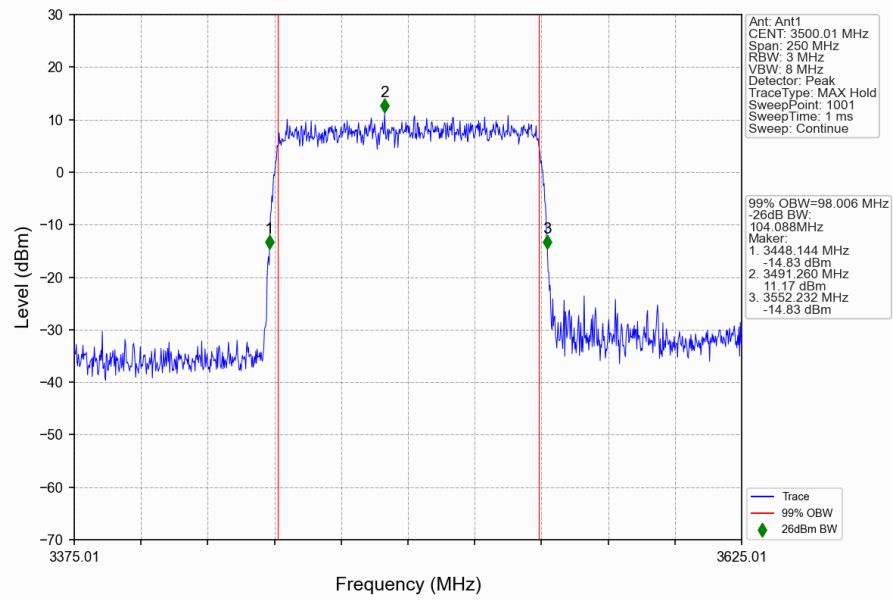
n78e\_30kHz\_SISO\_NTNV\_100MHz\_CP-OFDM 64 QAM\_3499.98MHz\_Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_100MHz\_CP-OFDM 256 QAM\_3500.01MHz\_Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_100MHz\_CP-OFDM\_256\_QAM\_3500.01MHz\_Outer\_Full



n78e\_30kHz\_SISO\_NTNV\_100MHz\_CP-OFDM\_256\_QAM\_3499.98MHz\_Outer\_Full

