

## Appendix H for KSCR2307001146AT-N77-DOD

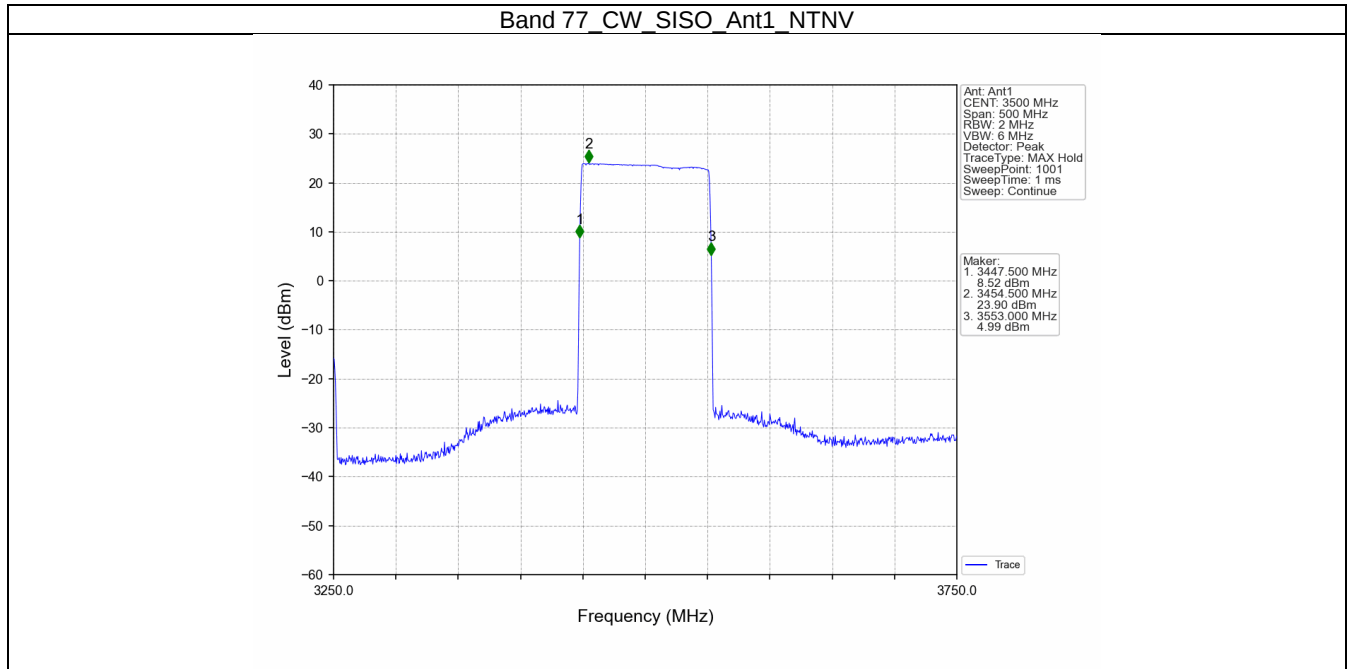
## 1. Out of band rejection

## 1.1 Band 77

## 1.1.1 Test Result

| Band: 77 / NTNV |                             |         |     |          |          |          |         |
|-----------------|-----------------------------|---------|-----|----------|----------|----------|---------|
| Signal          | Sweep Frequency Range (MHz) | TX Type | ANT | F0 (MHz) | FL (MHz) | FH (MHz) | Verdict |
| CW              | 3250 - 3750                 | SISO    | 1   | 3454.500 | 3447.500 | 3553.000 | Pass    |

## 1.1.2 Test Graph



## 2. AGC threshold

### 2.1 Band 77

#### 2.1.1 Test Result

| Band:77 / NTNV |                 |         |     |                     |         |
|----------------|-----------------|---------|-----|---------------------|---------|
| Signal         | Frequency (MHz) | TX Type | ANT | AGC Threshold (dBm) | Verdict |
| AWGN           | 3454.5          | SISO    | 1   | -4.00               | Pass    |
| GMSK           | 3454.5          | SISO    | 1   | -4.00               | Pass    |

## 3. Input-versus-output signal comparison

### 3.1 Band 77\_OBW

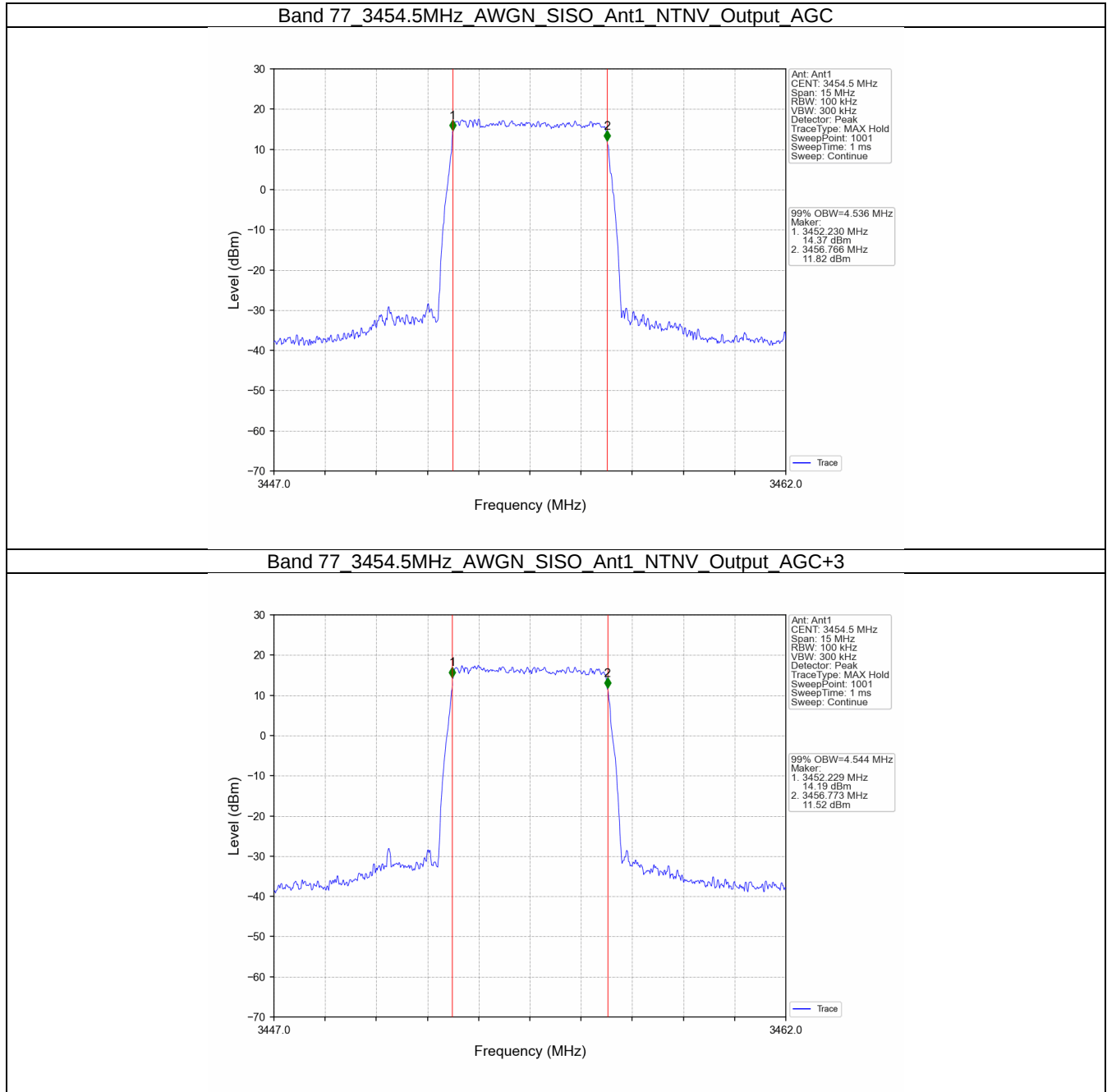
#### 3.1.1 Test Result

| Band:77 / NTNV |             |                 |         |     |                  |       |                 |           |         |
|----------------|-------------|-----------------|---------|-----|------------------|-------|-----------------|-----------|---------|
| Signal         |             |                 | TX Type | ANT | 99%<br>OBW (MHz) |       | Discrepancy (%) | Limit (%) | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |         |     | Output           | Input |                 |           |         |
| AWGN           | -1          | 3454.5          | SISO    | 1   | 4.536            | 4.538 | -0.044          | 5         | Pass    |
|                | -4          | 3454.5          | SISO    | 1   | 4.544            | 4.544 | 0.000           | 5         | Pass    |
| GMSK           | -1          | 3454.5          | SISO    | 1   | 0.245            | 0.245 | 0.000           | 5         | Pass    |
|                | -4          | 3454.5          | SISO    | 1   | 0.246            | 0.245 | 0.4082          | 5         | Pass    |

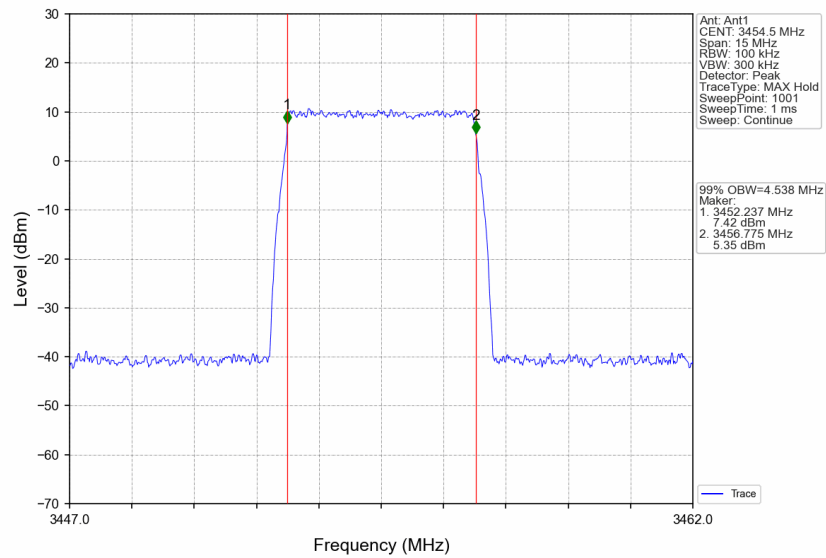
For 100MHz BW

| Band:77 / NTNV |             |                 |         |     |                  |        |                 |           |         |
|----------------|-------------|-----------------|---------|-----|------------------|--------|-----------------|-----------|---------|
| Signal         |             |                 | TX Type | ANT | 99%<br>OBW (MHz) |        | Discrepancy (%) | Limit (%) | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |         |     | Output           | Input  |                 |           |         |
| AWGN           | -1          | 3500            | SISO    | 1   | 97.319           | 97.391 | -0.0740         | 5         | Pass    |
|                | -4          | 3500            | SISO    | 1   | 97.325           | 97.464 | -0.1430         | 5         | Pass    |

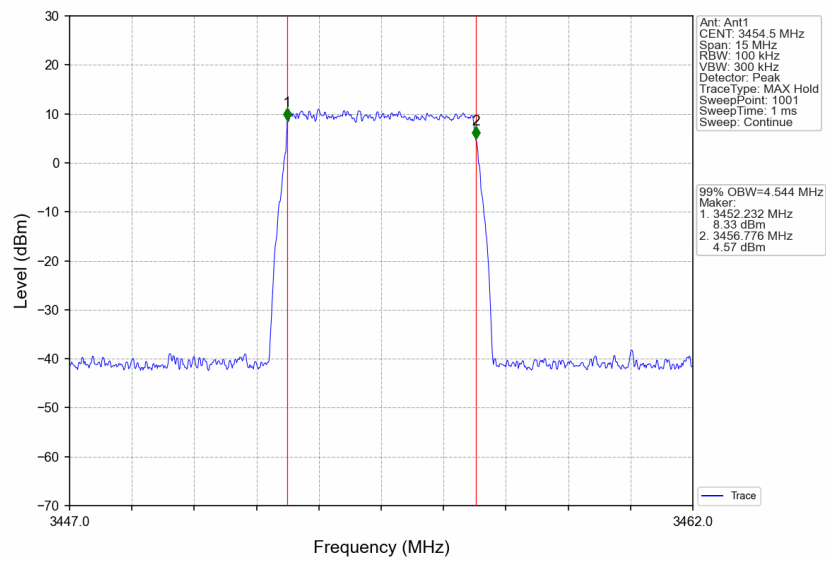
## 3.1.2 Test Graph



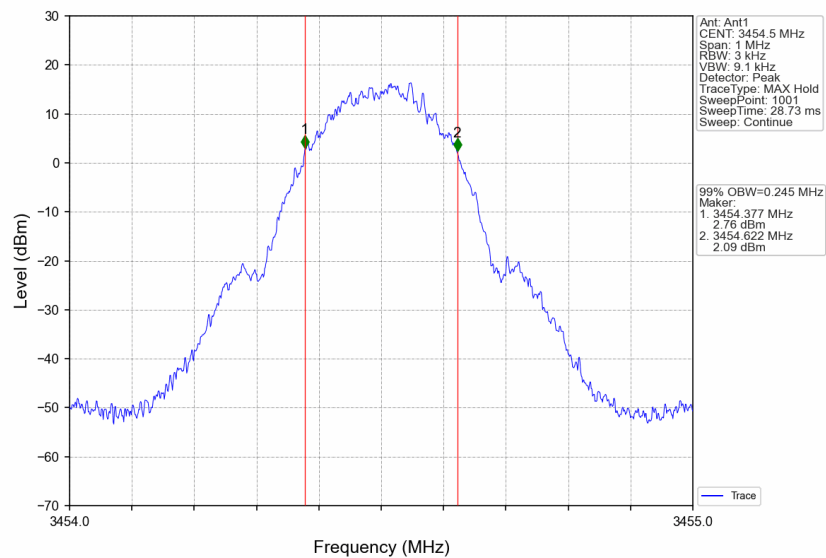
Band 77\_3454.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_Input\_AGC



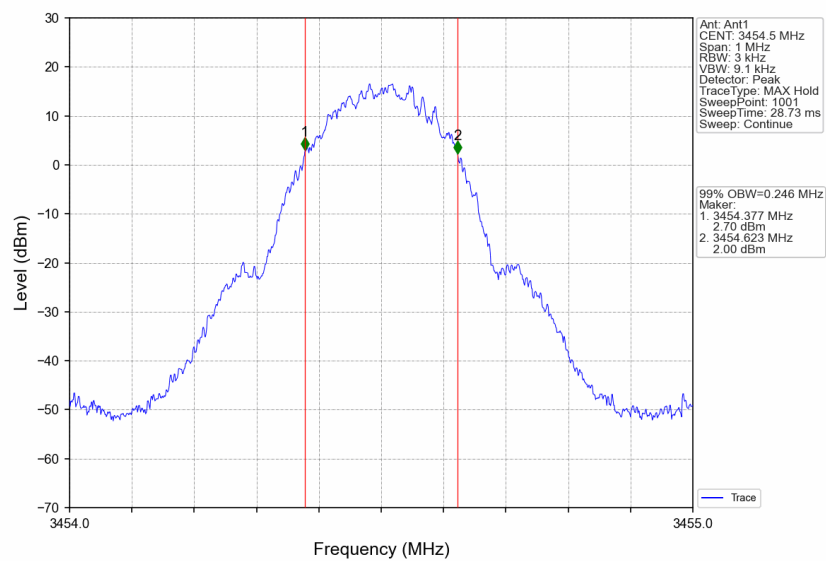
Band 77\_3454.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_Input\_AGC+3



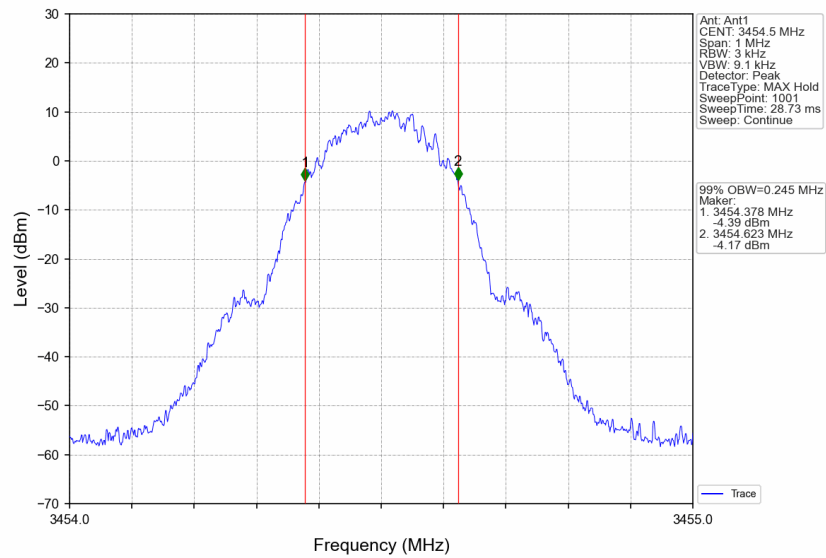
Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_Output\_AGC



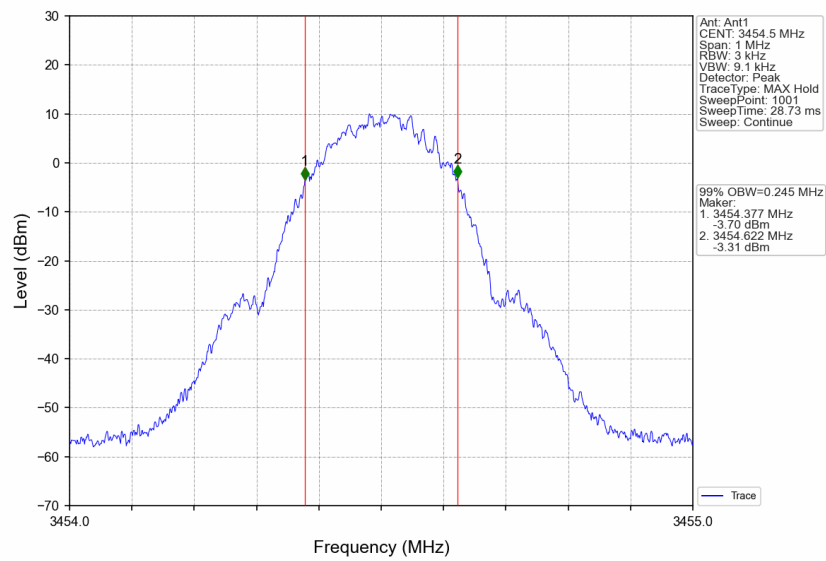
Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_Output\_AGC+3



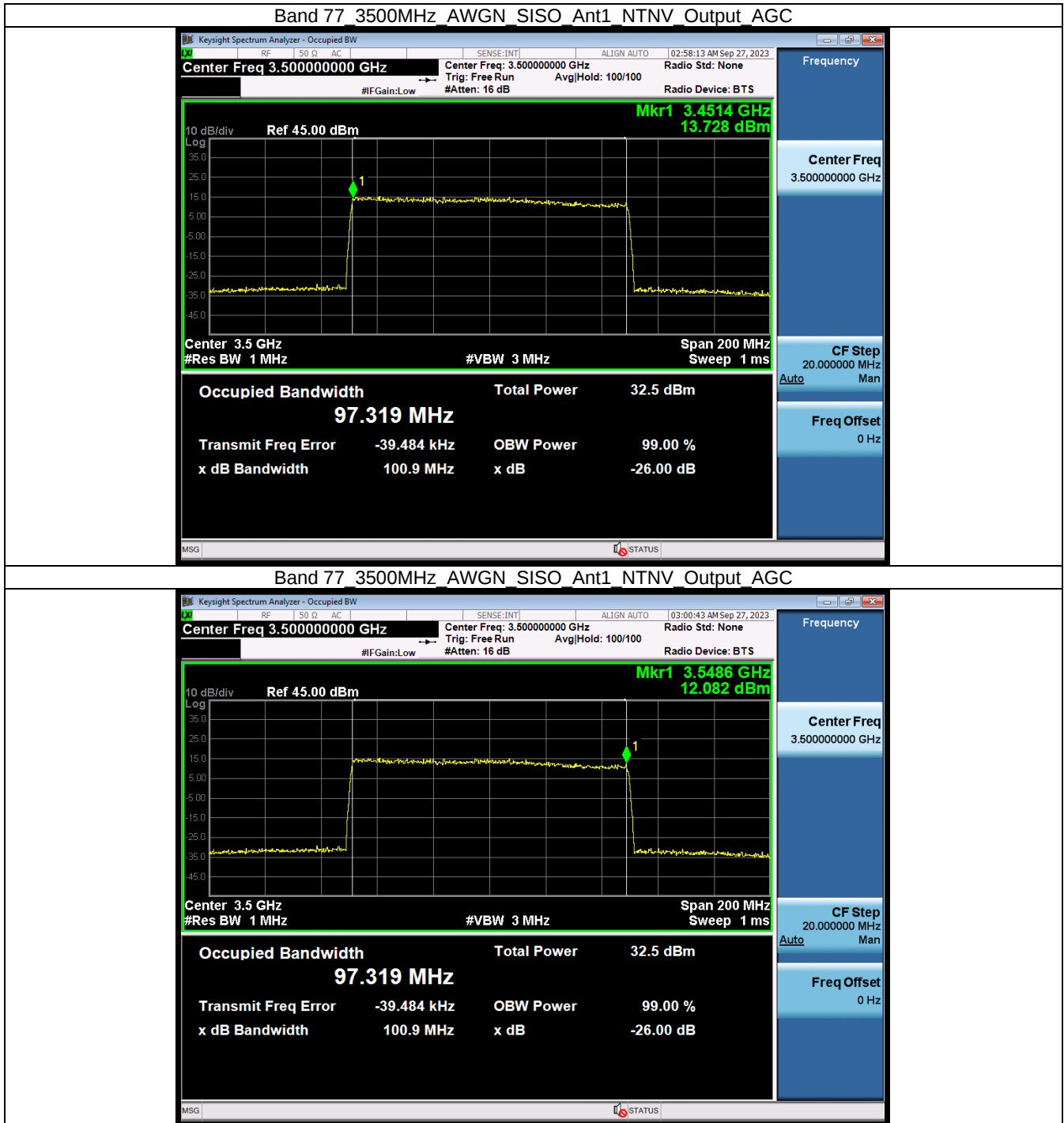
Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_Input\_AGC



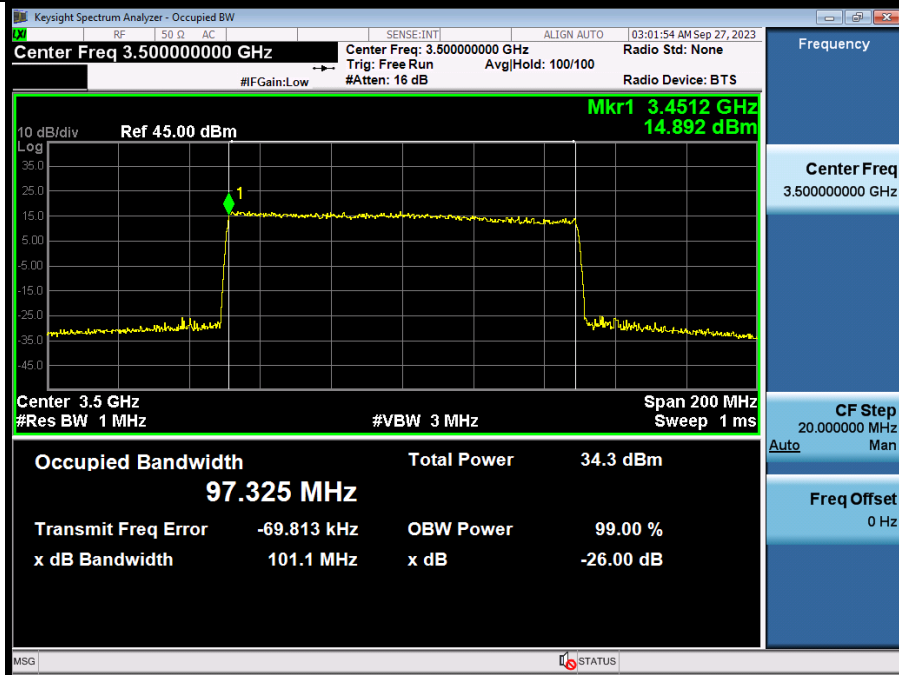
Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_Input\_AGC+3



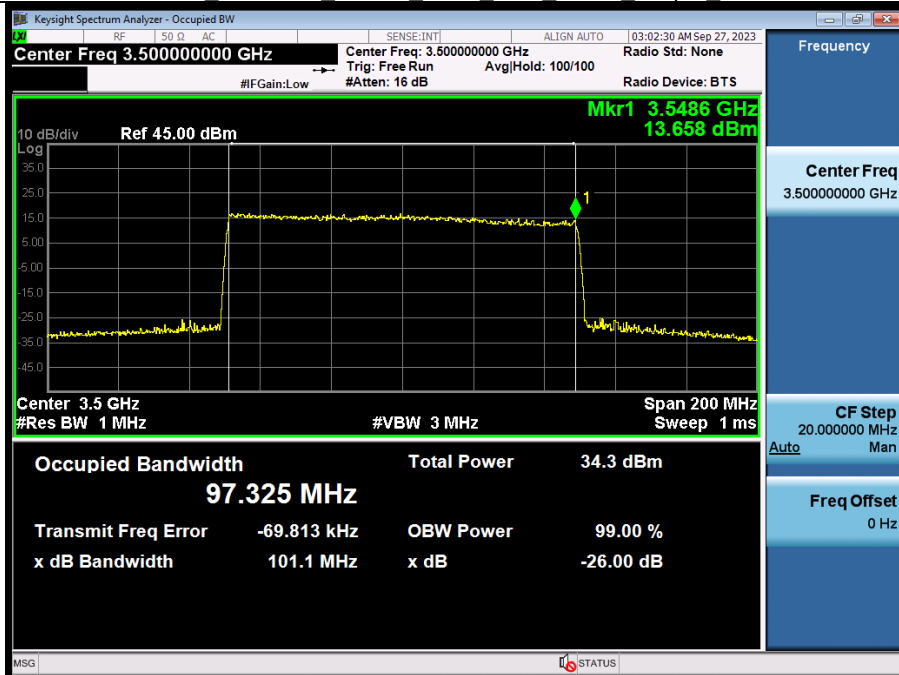
For 100MHz BW



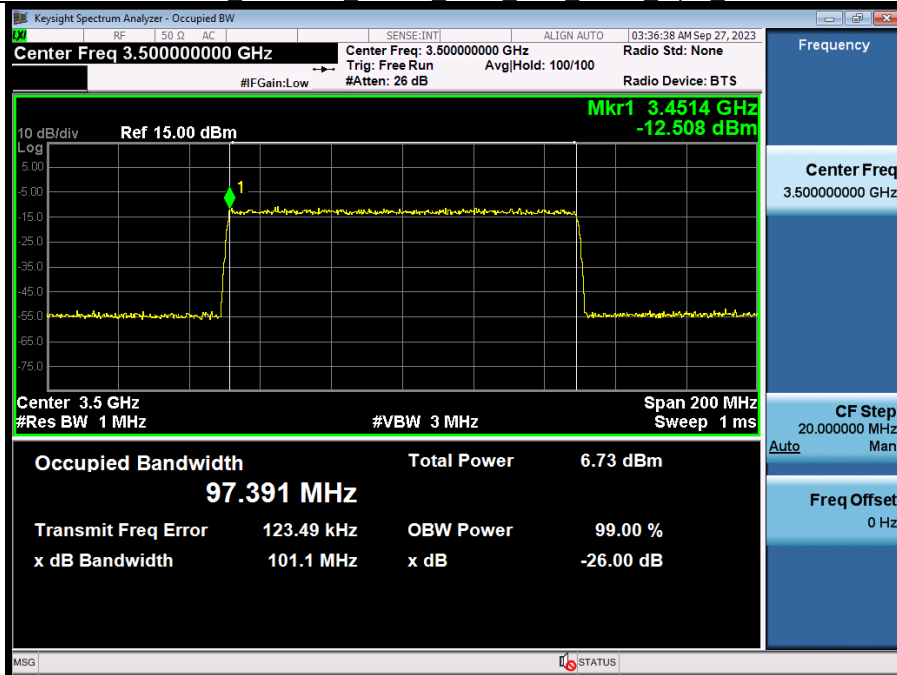
Band 77 3500MHz AWGN SISO Ant1 NTN Output AGC+3



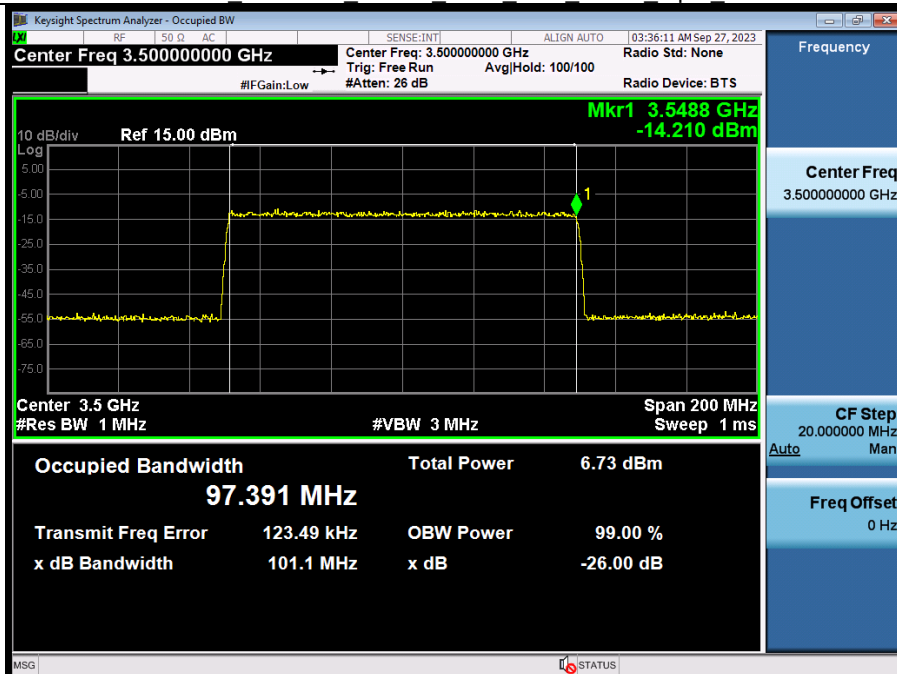
Band 77 3500MHz AWGN SISO Ant1 NTN Output AGC+3



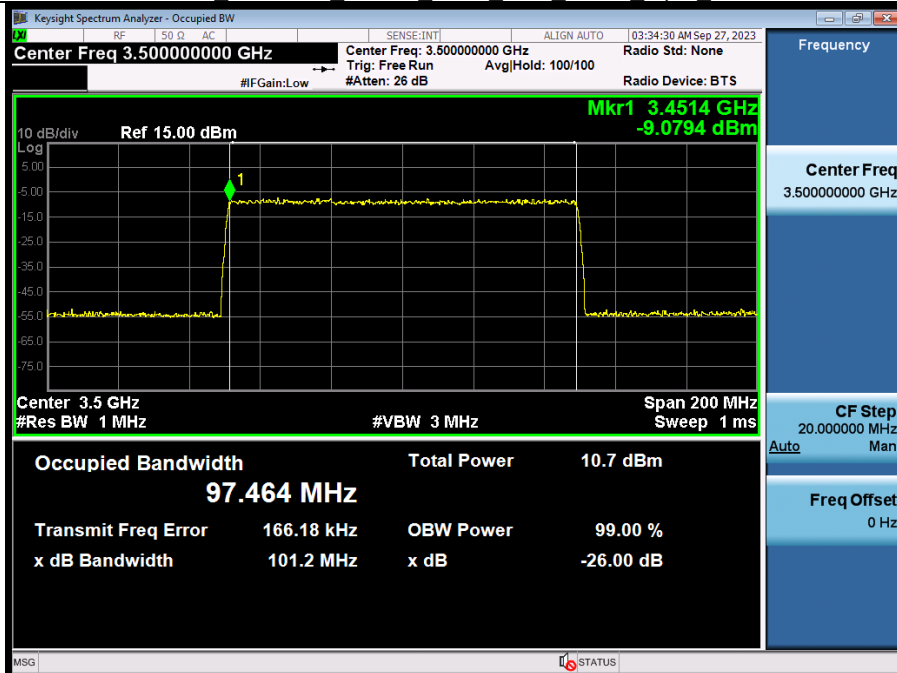
Band 77 3500MHz AWGN SISO Ant1 NTN Input AGC



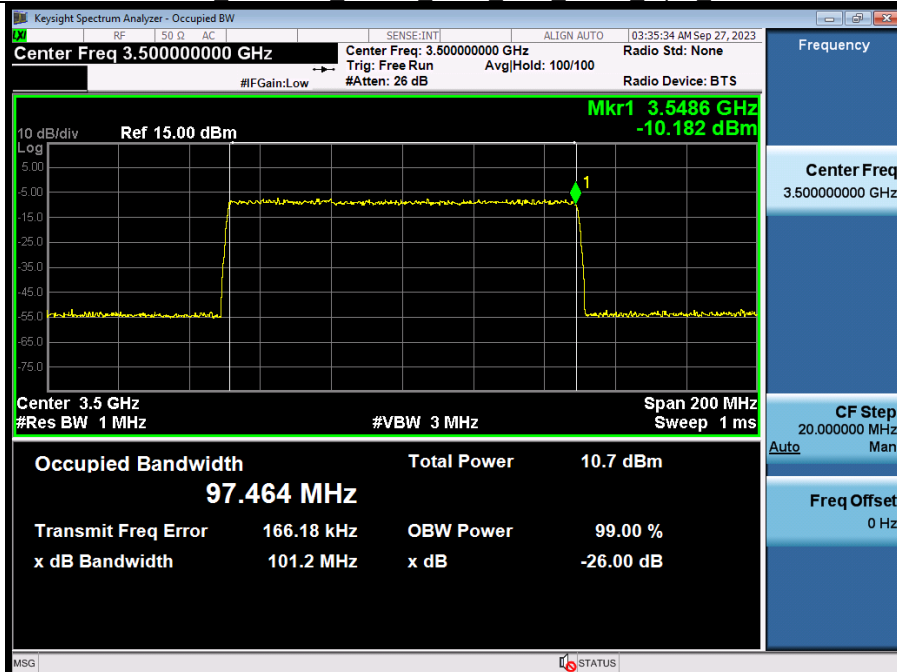
Band 77 3500MHz AWGN SISO Ant1 NTN Input AGC



## Band 77 3500MHz AWGN SISO Ant1 NTVN Input AGC+3



## Band 77 3500MHz AWGN SISO Ant1 NTVN Input AGC+3



## 3.2 Band 77\_EBW

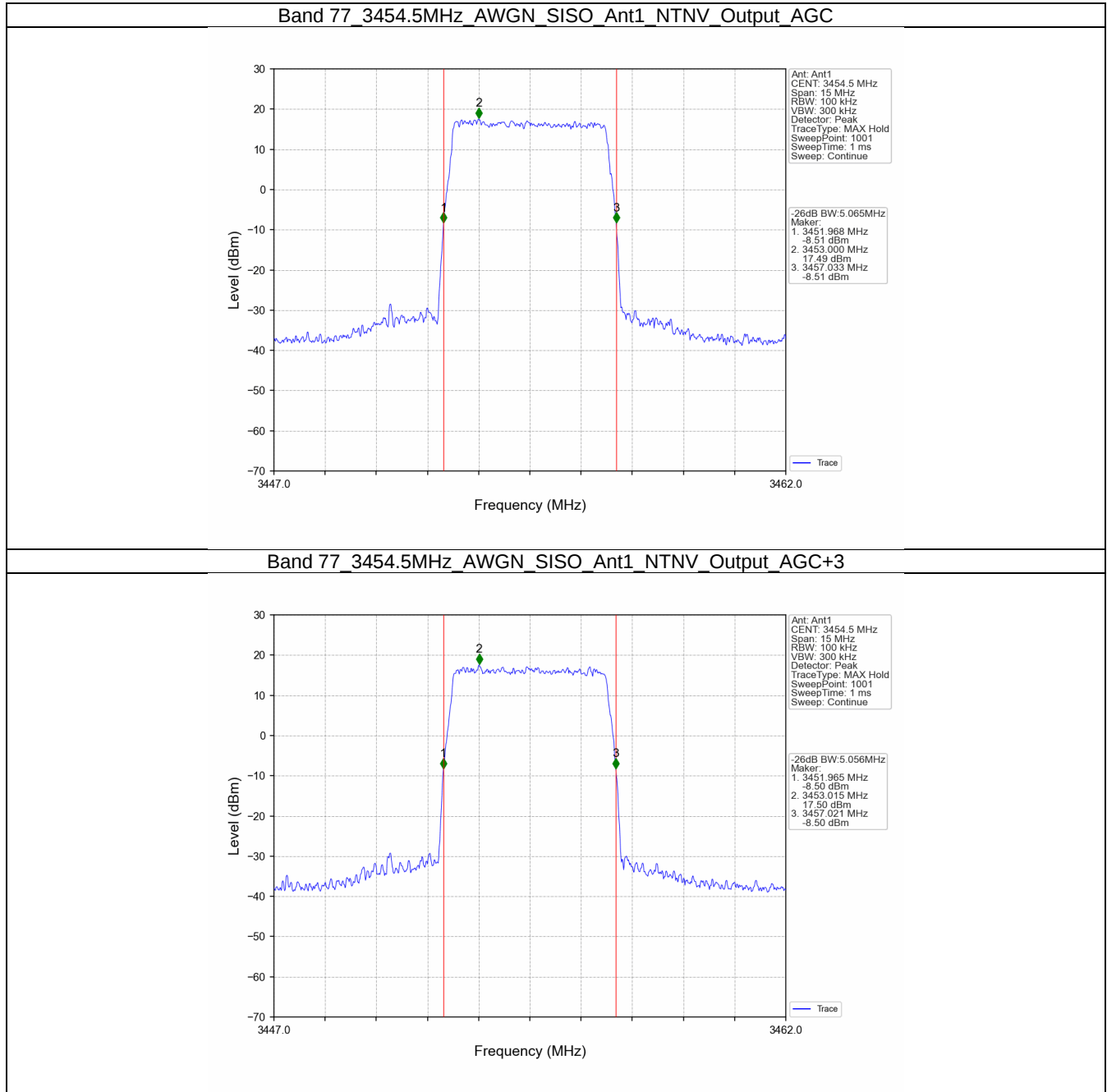
### 3.2.1 Test Result

| Band:77 / NTNV |             |                 |         |     |                |       |                 |           |         |
|----------------|-------------|-----------------|---------|-----|----------------|-------|-----------------|-----------|---------|
| Signal         |             |                 | TX Type | ANT | 26dB EBW (MHz) |       | Discrepancy (%) | Limit (%) | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |         |     | Output         | Input |                 |           |         |
| AWGN           | -1          | 3454.5          | SISO    | 1   | 5.065          | 5.055 | 0.1978          | 5         | Pass    |
|                | -4          | 3454.5          | SISO    | 1   | 5.056          | 5.057 | -0.0200         | 5         | Pass    |
| GMSK           | -1          | 3454.5          | SISO    | 1   | 0.313          | 0.315 | -0.6350         | 5         | Pass    |
|                | -4          | 3454.5          | SISO    | 1   | 0.316          | 0.315 | 0.3175          | 5         | Pass    |

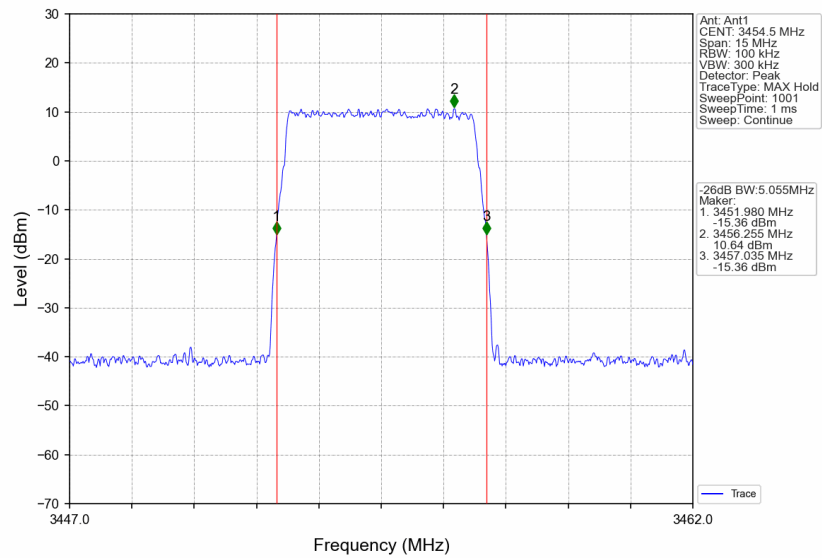
For 100MHz BW

| Band:77 / NTNV |             |                 |         |     |                |        |                 |           |         |
|----------------|-------------|-----------------|---------|-----|----------------|--------|-----------------|-----------|---------|
| Signal         |             |                 | TX Type | ANT | 26dB EBW (MHz) |        | Discrepancy (%) | Limit (%) | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |         |     | Output         | Input  |                 |           |         |
| AWGN           | -1          | 3500            | SISO    | 1   | 102.10         | 100.76 | 1.3299          | 5         | Pass    |
|                | -4          | 3500            | SISO    | 1   | 101.98         | 100.94 | 1.0303          | 5         | Pass    |

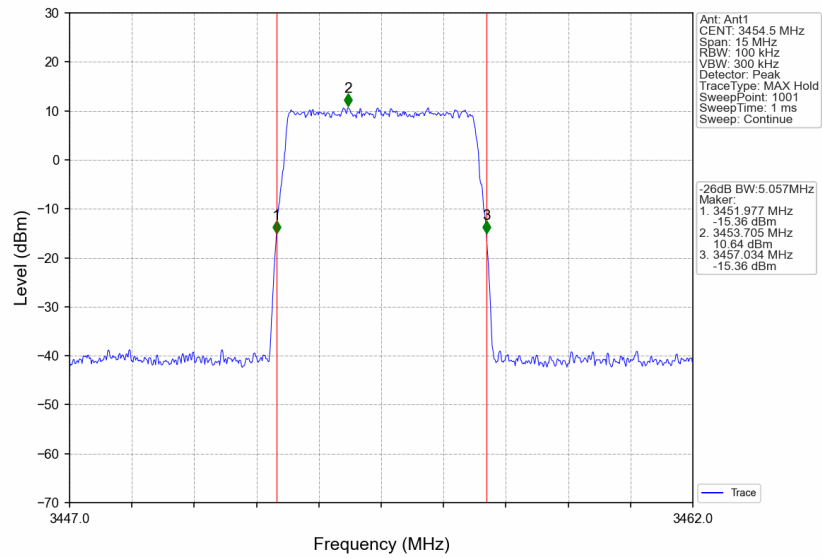
## 3.2.2 Test Graph



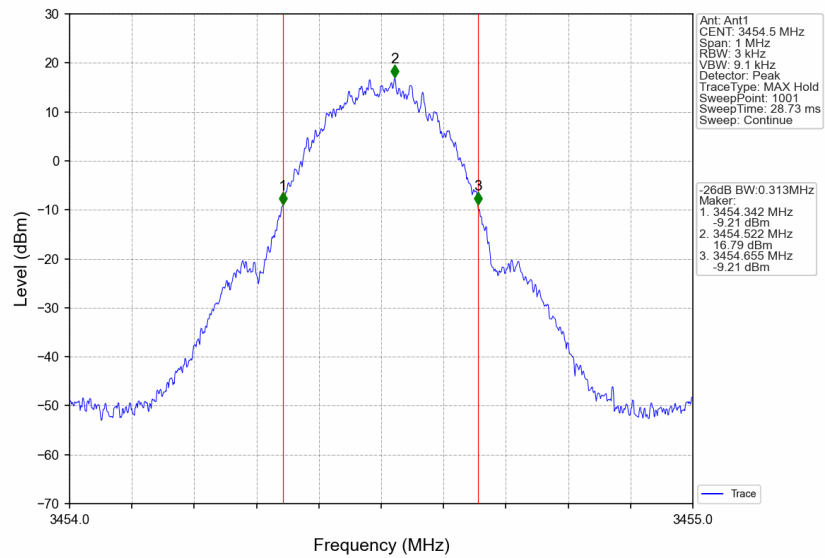
Band 77\_3454.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_Input\_AGC



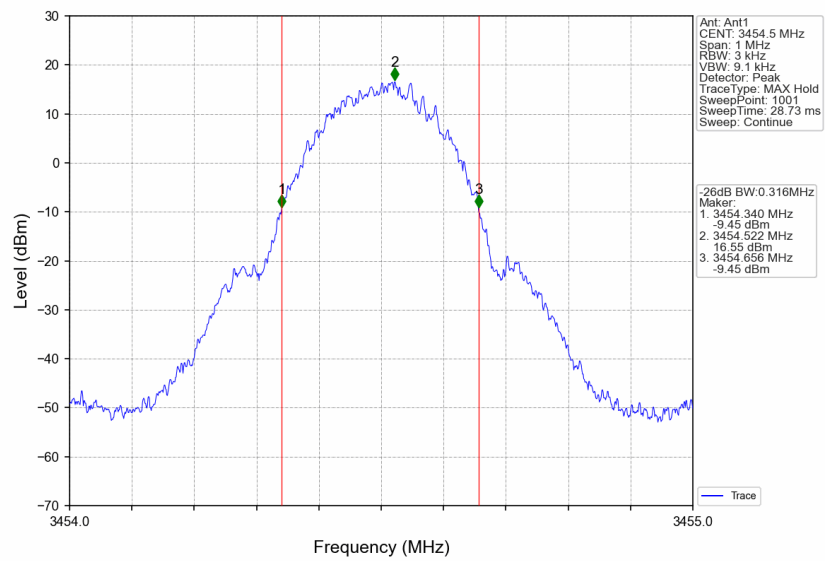
Band 77\_3454.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_Input\_AGC+3



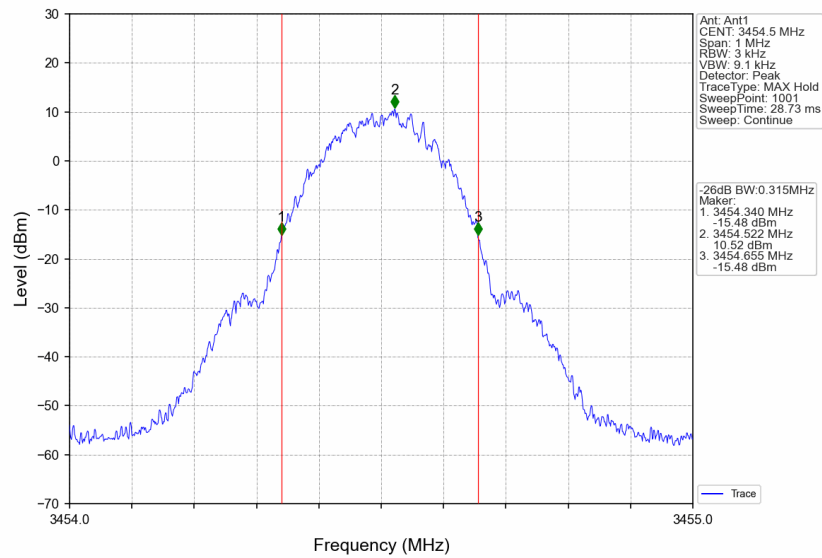
Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_Output\_AGC



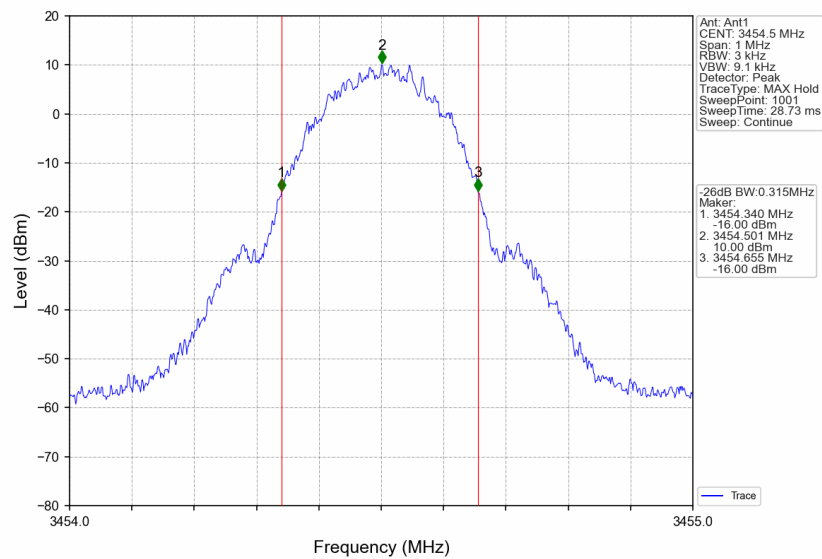
Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_Output\_AGC+3



Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_Input\_AGC

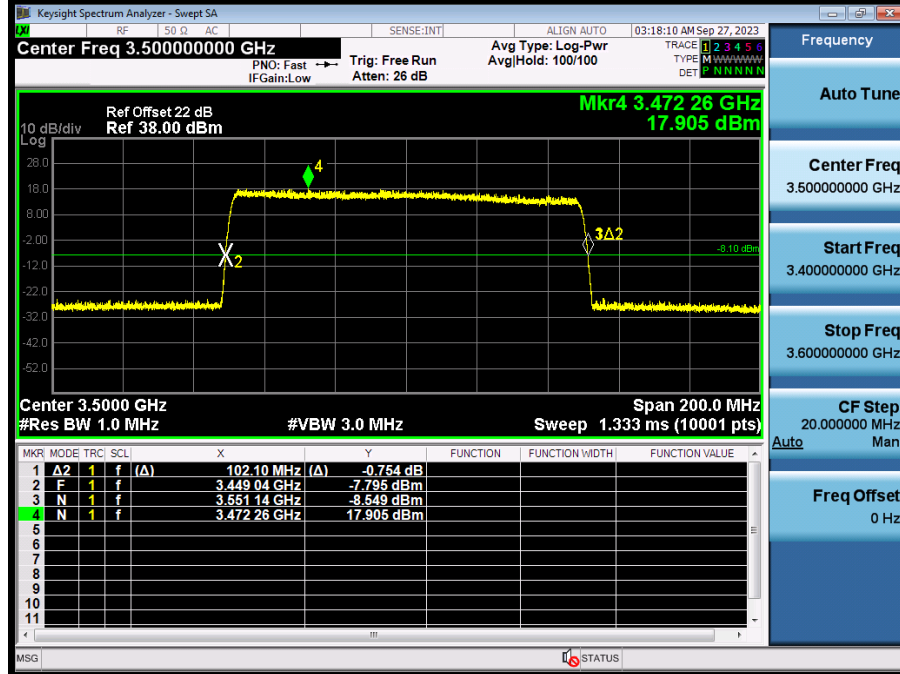


Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_Input\_AGC+3

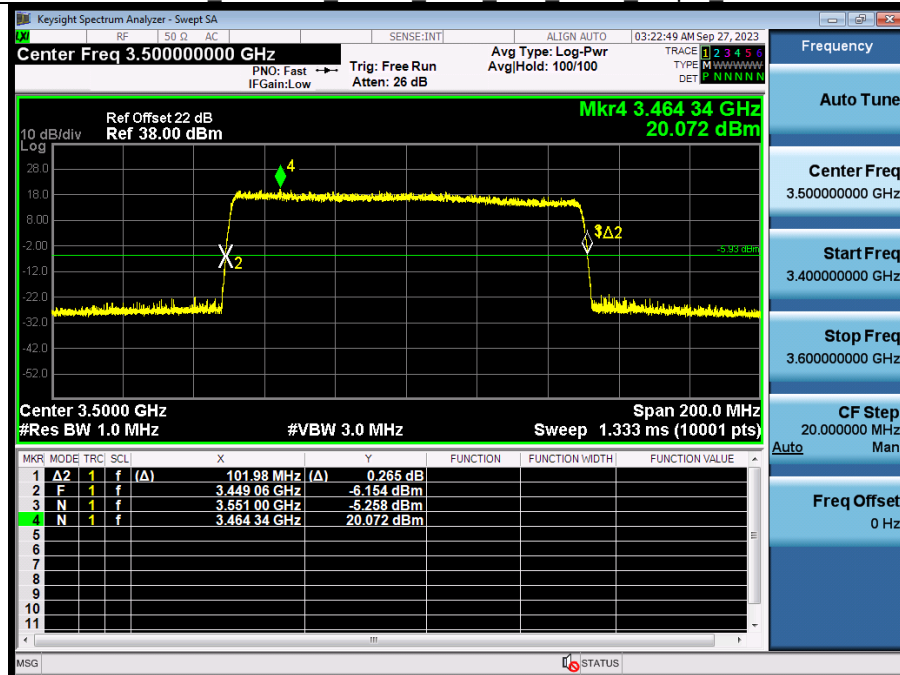


For 100MHz BW

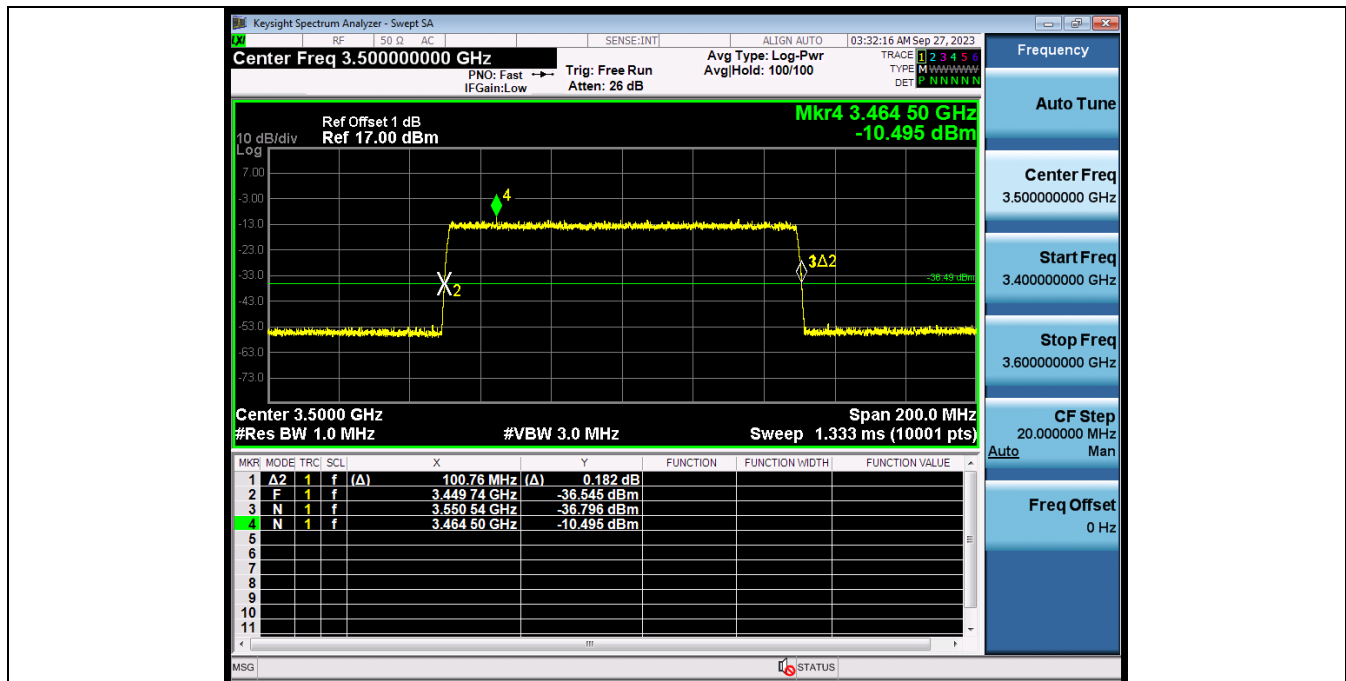
### Band 77 3500MHz AWGN SISO Ant1 NTN Output AGC



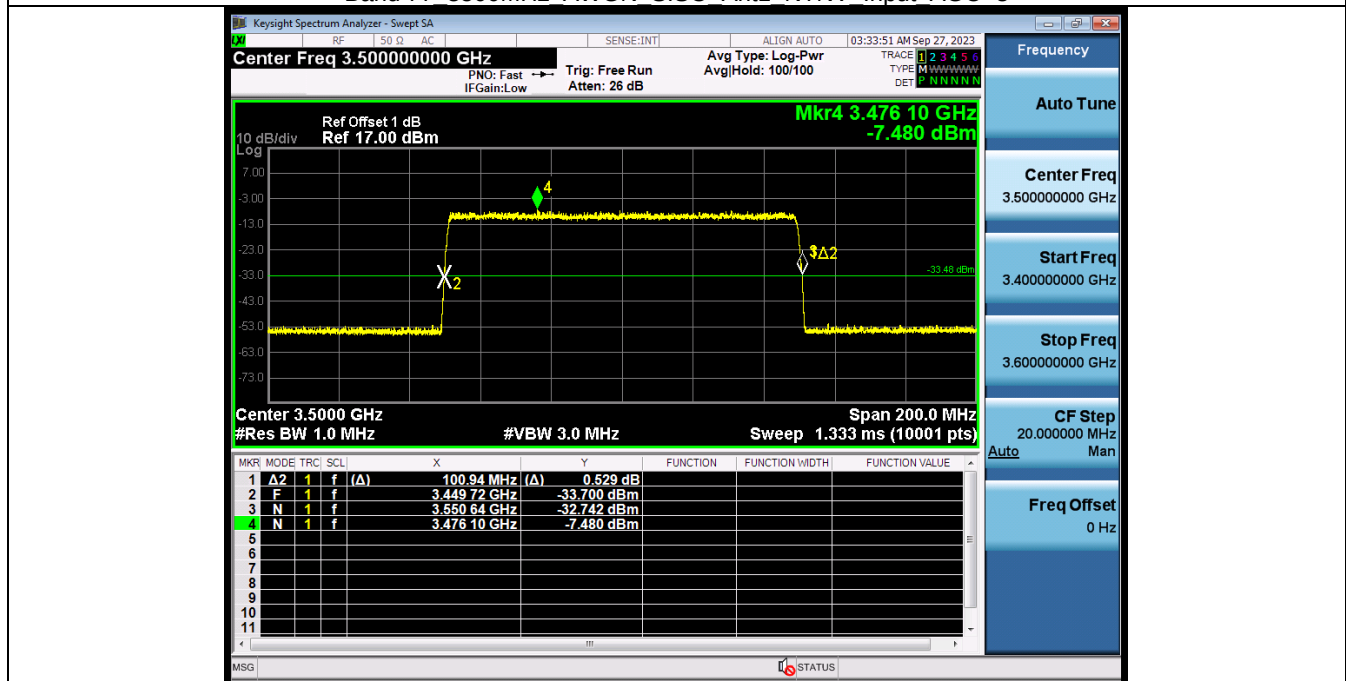
### Band 77 3500MHz AWGN SISO Ant1 NTN Output AGC+3



### Band 77 3500MHz AWGN SISO Ant1 NTN Input AGC



Band 77 3500MHz AWGN SISO Ant1 NTVN Input AGC+3



#### 4. Input/output power and amplifier/booster gain

##### 4.1 Band 77\_EIRP

##### 4.1.1 Test Result

| Band:77 / NTNV |             |                 |         |     |                           |        |                |         |                   |                   |         |
|----------------|-------------|-----------------|---------|-----|---------------------------|--------|----------------|---------|-------------------|-------------------|---------|
| Signal         |             |                 | TX Type | ANT | Conducted Power (dBm/MHz) |        | EIRP (dBm/MHz) |         | Booster Gain (dB) | Nominal gain (dB) | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |         |     | Output                    | Input  | Result         | Limit   |                   |                   |         |
| AWGN           | -4          | 3454.5          | SISO    | 1   | 18.17                     | -10.14 | 20.17          | <=62.15 | 28.30             | 27±2              | Pass    |
|                | -1          | 3454.5          | SISO    | 1   | 18.13                     | -7.30  | 20.13          | <=62.15 | /                 | /                 | Pass    |
| GMSK           | -4          | 3454.5          | SISO    | 1   | 18.16                     | -10.24 | 20.16          | <=62.15 | 28.41             | 27±2              | Pass    |
|                | -1          | 3454.5          | SISO    | 1   | 18.02                     | -7.38  | 20.02          | <=62.15 | /                 | /                 | Pass    |

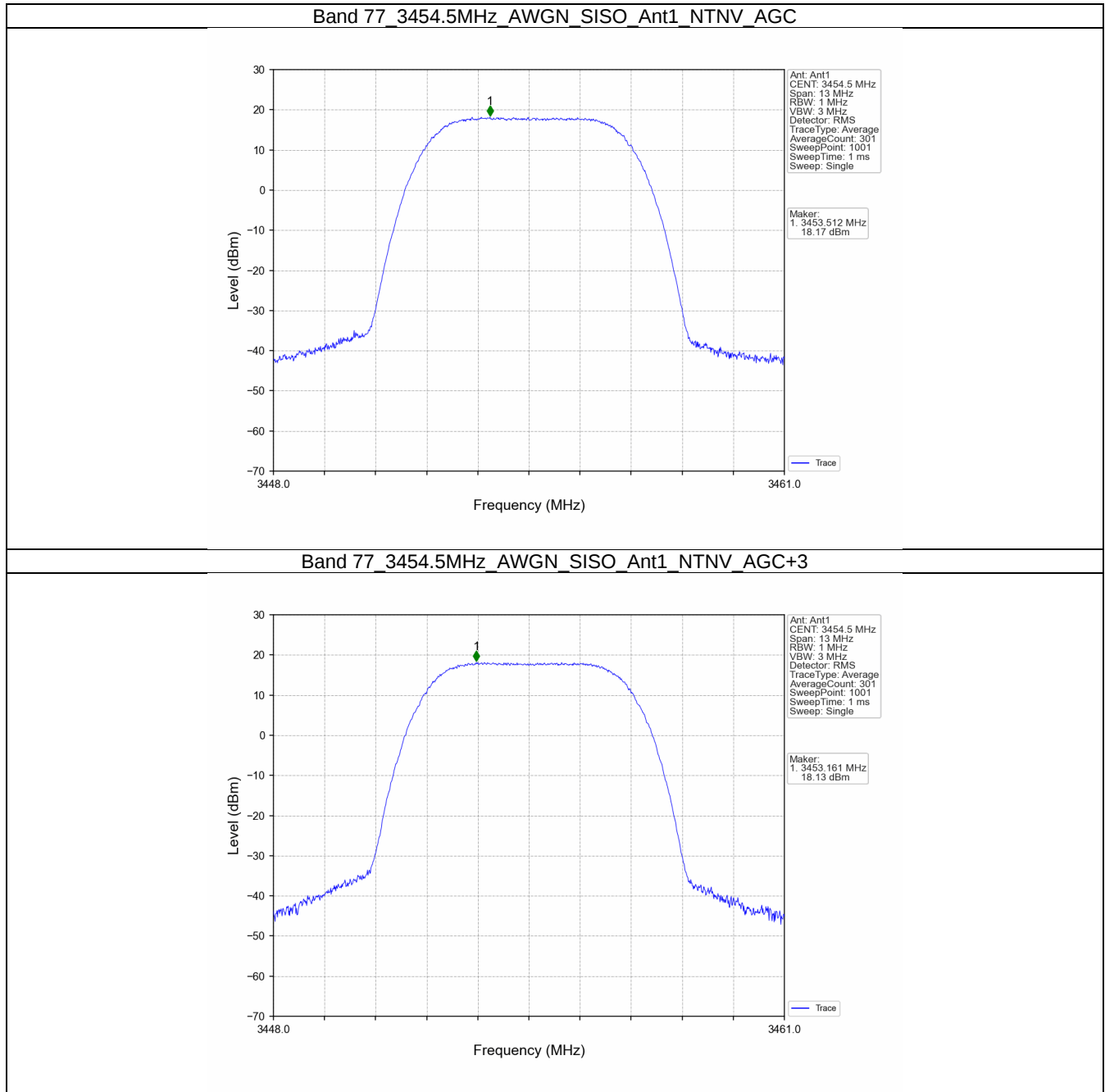
| Band:77 / NTNV  |                 |             |               |                   |                          |            |           |
|-----------------|-----------------|-------------|---------------|-------------------|--------------------------|------------|-----------|
| Operation Band  | Frequency (MHz) | Signal Type | Signal Level  | Input Power (dBm) | Total Output Power (dBm) | EIRP (dBm) | Gain (dB) |
| 3450MHz-3550MHz | 3454.5          | AWGN        | Pre-AGC       | -4                | 24.47                    | 26.47      | /         |
|                 |                 |             | 3dB Above AGC | -1                | 24.53                    | 26.53      | /         |
|                 | 3454.5          | GMSK        | Pre-AGC       | -4                | 24.55                    | 26.55      | /         |
|                 |                 |             | 3dB Above AGC | -1                | 24.59                    | 26.59      | /         |

For 100MHz BW

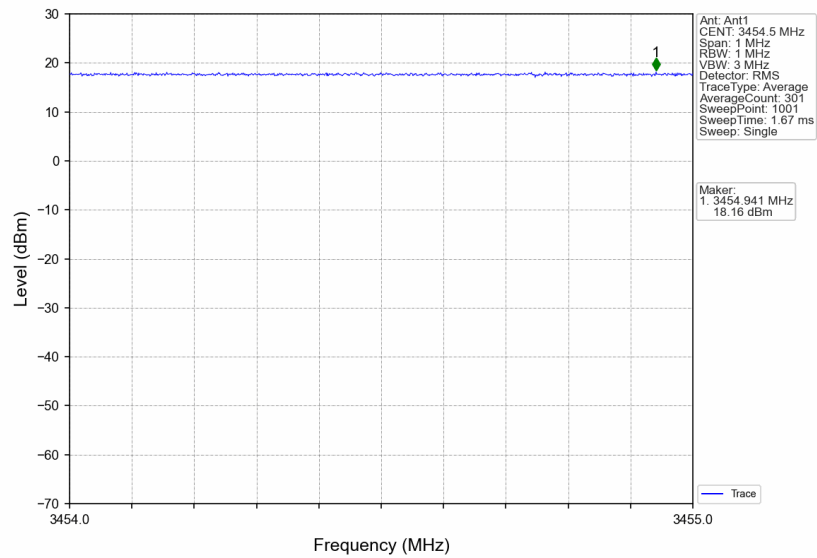
| Band:77 / NTNV |             |                 |         |     |                           |        |                |         |                   |                   |         |
|----------------|-------------|-----------------|---------|-----|---------------------------|--------|----------------|---------|-------------------|-------------------|---------|
| Signal         |             |                 | TX Type | ANT | Conducted Power (dBm/MHz) |        | EIRP (dBm/MHz) |         | Booster Gain (dB) | Nominal gain (dB) | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |         |     | Output                    | Input  | Result         | Limit   |                   |                   |         |
| AWGN           | -4          | 3500            | SISO    | 1   | 6.659                     | -22.07 | 8.659          | <=62.15 | 28.729            | 27±2              | Pass    |
|                | -1          | 3500            | SISO    | 1   | 6.604                     | -18.79 | 8.604          | <=62.15 | /                 | /                 | Pass    |

| Band:77 / NTNV  |                 |             |               |                   |                          |            |           |
|-----------------|-----------------|-------------|---------------|-------------------|--------------------------|------------|-----------|
| Operation Band  | Frequency (MHz) | Signal Type | Signal Level  | Input Power (dBm) | Total Output Power (dBm) | EIRP (dBm) | Gain (dB) |
| 3450MHz-3550MHz | 3500            | AWGN        | Pre-AGC       | -4                | 24.51                    | 26.51      | /         |
|                 |                 |             | 3dB Above AGC | -1                | 24.55                    | 26.55      | /         |

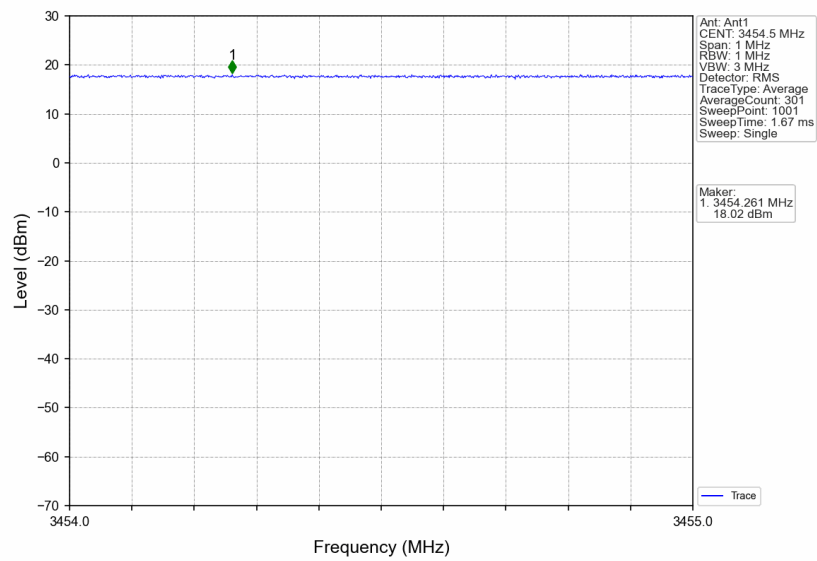
## 4.1.2 Test Graph



Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC

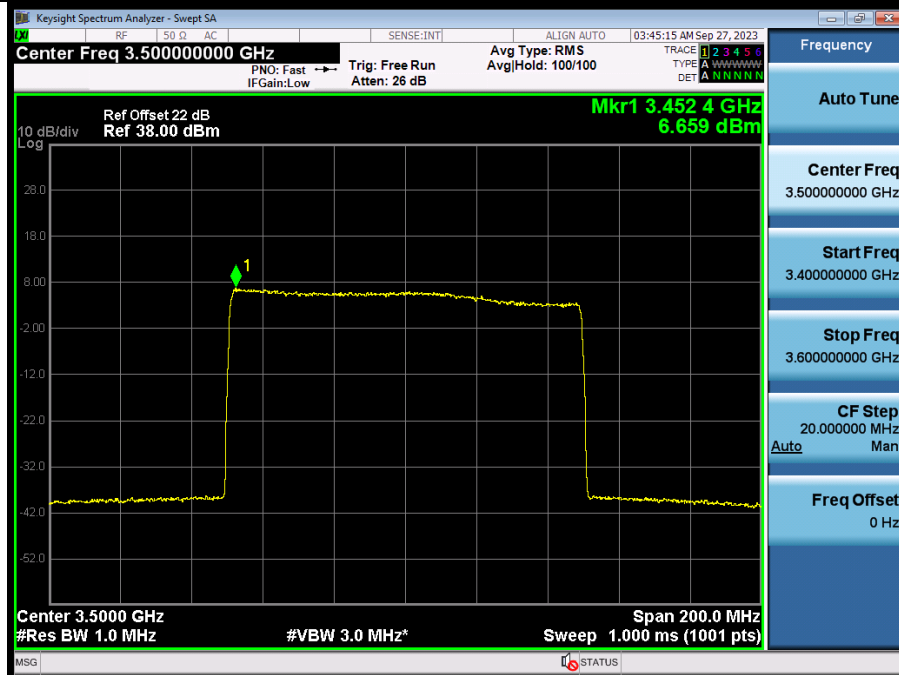


Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC+3



For 100MHz BW

Band 77 3500MHz AWGN SISO Ant1 NTVN AGC



Band 77 3500MHz AWGN SISO Ant1 NTVN AGC+3



## 4.2 Band 77\_PAPR

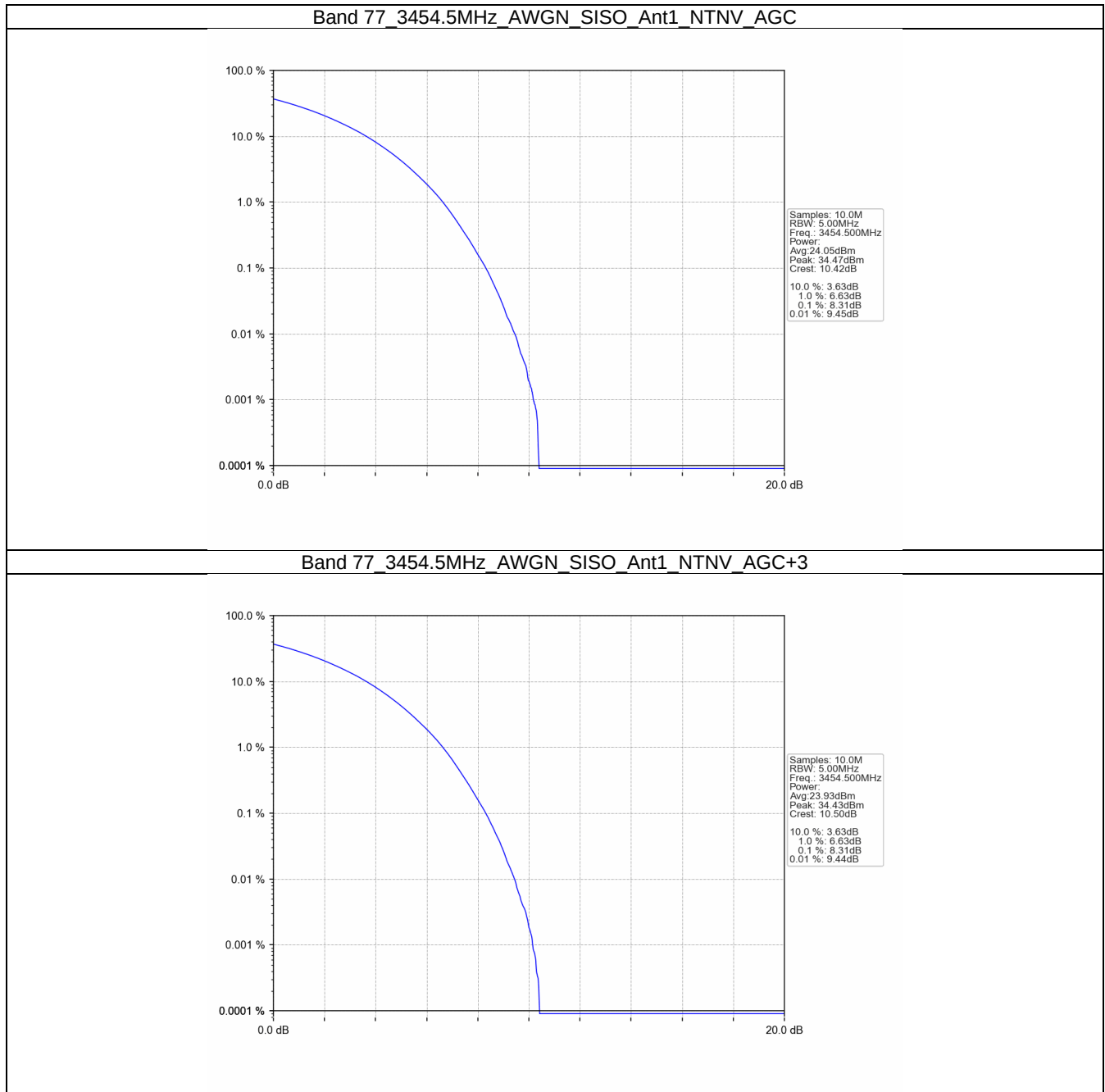
### 4.2.1 Test Result

| Band:77 / NTNV |             |                 |         |     |           |       |         |
|----------------|-------------|-----------------|---------|-----|-----------|-------|---------|
| Signal         |             |                 | TX Type | ANT | PAPR (dB) |       | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |         |     | Result    | Limit |         |
| AWGN           | -4          | 3454.5          | SISO    | 1   | 8.31      | <=13  | Pass    |
|                | -1          | 3454.5          | SISO    | 1   | 8.31      | <=13  | Pass    |
| GMSK           | -4          | 3454.5          | SISO    | 1   | 0.30      | <=13  | Pass    |
|                | -1          | 3454.5          | SISO    | 1   | 0.30      | <=13  | Pass    |

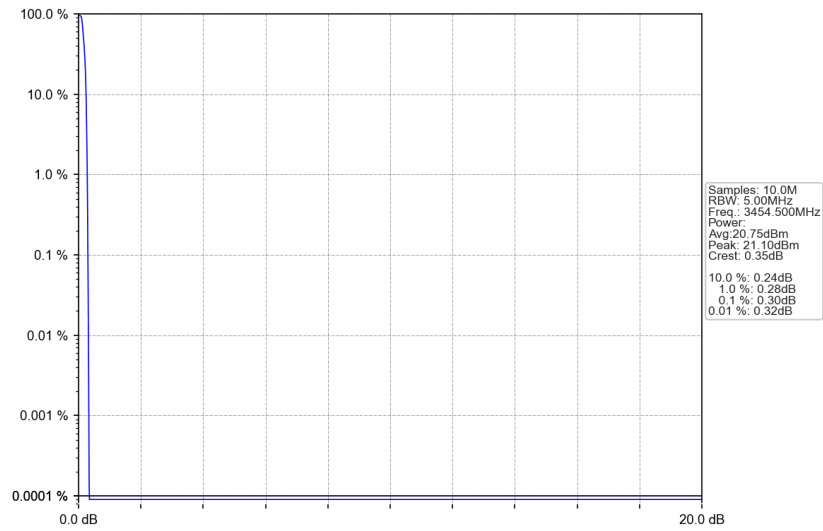
For 100MHz BW

| Band:77 / NTNV |             |                 |         |     |           |       |         |
|----------------|-------------|-----------------|---------|-----|-----------|-------|---------|
| Signal         |             |                 | TX Type | ANT | PAPR (dB) |       | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |         |     | Result    | Limit |         |
| AWGN           | -4          | 3500            | SISO    | 1   | 8.47      | <=13  | Pass    |
|                | -1          | 3500            | SISO    | 1   | 8.45      | <=13  | Pass    |

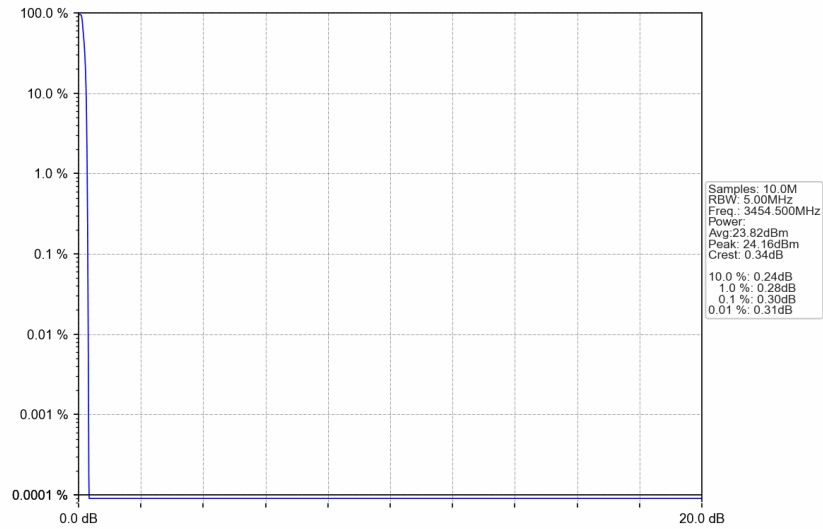
## 4.2.2 Test Graph



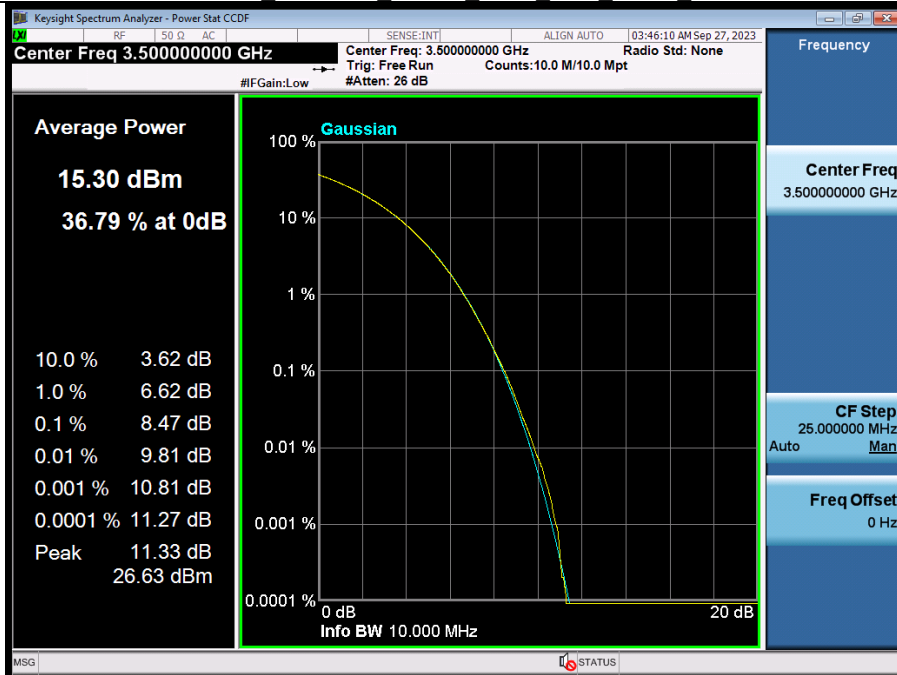
Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC



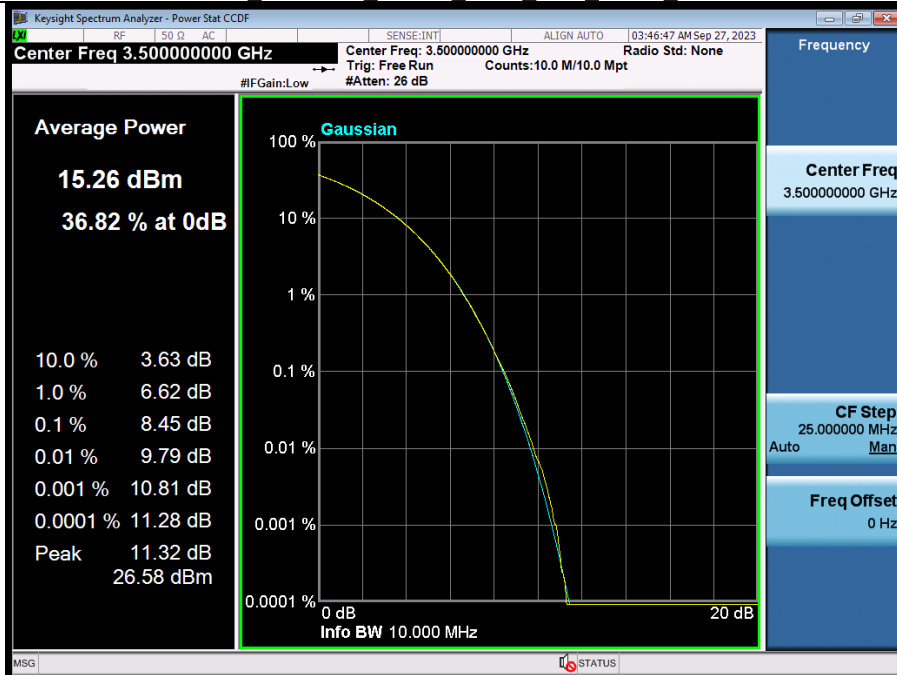
Band 77\_3454.5MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC+3



### Band 77 3500MHz AWGN SISO Ant1 NTN AGC



### Band 77 3500MHz AWGN SISO Ant1 NTN AGC+3



## 5. Out-of-band/out-of-block (including intermodulation) emissions

### 5.1 Band 77

#### 5.1.1 Test Result

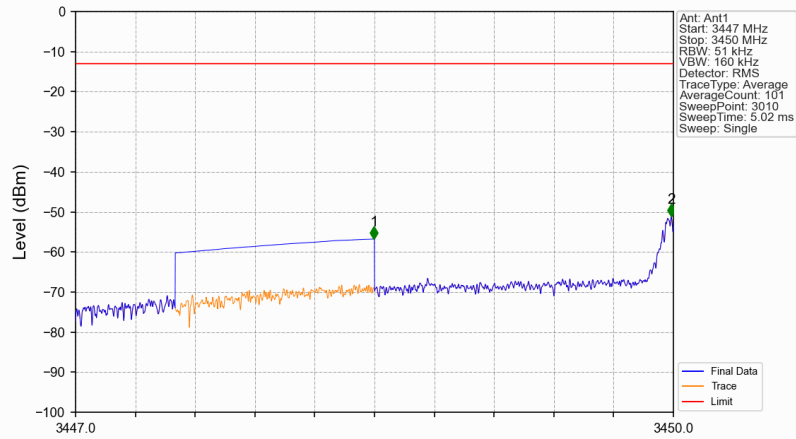
| Band:77 / NTNV |      |             |                 |         |         |     |           |                     |         |
|----------------|------|-------------|-----------------|---------|---------|-----|-----------|---------------------|---------|
| Signal         |      |             |                 | Channel | TX Type | ANT | OOB (dBm) |                     | Verdict |
| Input          | Type | Level (dBm) | Frequency (MHz) |         |         |     | Result    | Limit               |         |
| Two            | AWGN | -4          | 3452.5          | LCH     | SISO    | 1   | -51.19    | Refer To Test Graph | Pass    |
|                |      | -1          | 3452.5          | LCH     | SISO    | 1   | -49.21    | Refer To Test Graph | Pass    |
| One            | AWGN | -4          | 3452.5          | LCH     | SISO    | 1   | -49.48    | Refer To Test Graph | Pass    |
|                |      | -1          | 3452.5          | LCH     | SISO    | 1   | -47.83    | Refer To Test Graph | Pass    |
| Two            | AWGN | -4          | 3547.5          | HCH     | SISO    | 1   | -48.67    | Refer To Test Graph | Pass    |
|                |      | -1          | 3547.5          | HCH     | SISO    | 1   | -46.68    | Refer To Test Graph | Pass    |
| One            | AWGN | -4          | 3547.5          | HCH     | SISO    | 1   | -49.90    | Refer To Test Graph | Pass    |
|                |      | -1          | 3547.5          | HCH     | SISO    | 1   | -48.43    | Refer To Test Graph | Pass    |
| Two            | GMSK | -4          | 3450.1          | LCH     | SISO    | 1   | -23.27    | Refer To Test Graph | Pass    |
|                |      | -1          | 3450.1          | LCH     | SISO    | 1   | -22.86    | Refer To Test Graph | Pass    |
| One            | GMSK | -4          | 3450.1          | LCH     | SISO    | 1   | -22.97    | Refer To Test Graph | Pass    |
|                |      | -1          | 3450.1          | LCH     | SISO    | 1   | -23.29    | Refer To Test Graph | Pass    |
| Two            | GMSK | -4          | 3549.9          | HCH     | SISO    | 1   | -23.14    | Refer To Test Graph | Pass    |
|                |      | -1          | 3549.9          | HCH     | SISO    | 1   | -23.03    | Refer To Test Graph | Pass    |
| One            | GMSK | -4          | 3549.9          | HCH     | SISO    | 1   | -22.37    | Refer To Test Graph | Pass    |
|                |      | -1          | 3549.9          | HCH     | SISO    | 1   | -22.81    | Refer To Test Graph | Pass    |

For 100MHz BW

| Band: n78e / NTNV |      |             |                 |         |         |     |           |                     |         |
|-------------------|------|-------------|-----------------|---------|---------|-----|-----------|---------------------|---------|
| Signal            |      |             |                 | Channel | TX Type | ANT | OOB (dBm) |                     | Verdict |
| Input             | Type | Level (dBm) | Frequency (MHz) |         |         |     | Result    | Limit               |         |
| Two               | AWGN | -4          | 3500            | MCH     | SISO    | 1   | -18.372   | Refer To Test Graph | Pass    |
|                   |      | -1          | 3500            | MCH     | SISO    | 1   | -17.836   | Refer To Test Graph | Pass    |
| One               | AWGN | -4          | 3500            | MCH     | SISO    | 1   | -18.263   | Refer To Test Graph | Pass    |
|                   |      | -1          | 3500            | MCH     | SISO    | 1   | -17.948   | Refer To Test Graph | Pass    |
| Two               | AWGN | -4          | 3500            | MCH     | SISO    | 1   | -19.045   | Refer To Test Graph | Pass    |
|                   |      | -1          | 3500            | MCH     | SISO    | 1   | -18.618   | Refer To Test Graph | Pass    |
| One               | AWGN | -4          | 3500            | MCH     | SISO    | 1   | -19.372   | Refer To Test Graph | Pass    |
|                   |      | -1          | 3500            | MCH     | SISO    | 1   | -18.178   | Refer To Test Graph | Pass    |

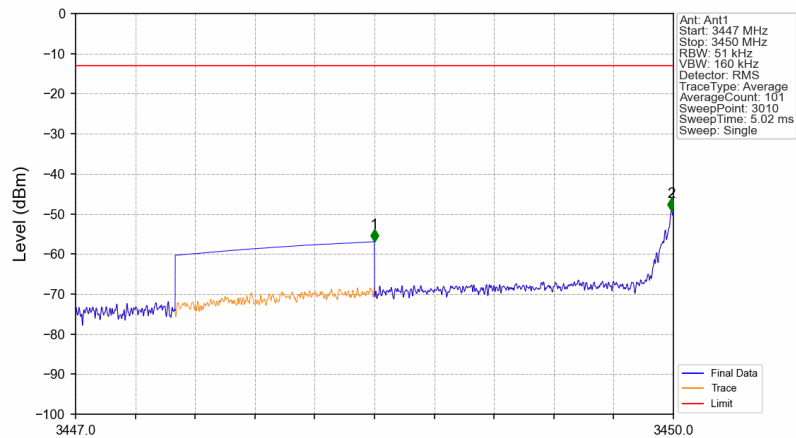
#### 5.1.2 Test Graph

Band 77\_3452.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_AGC



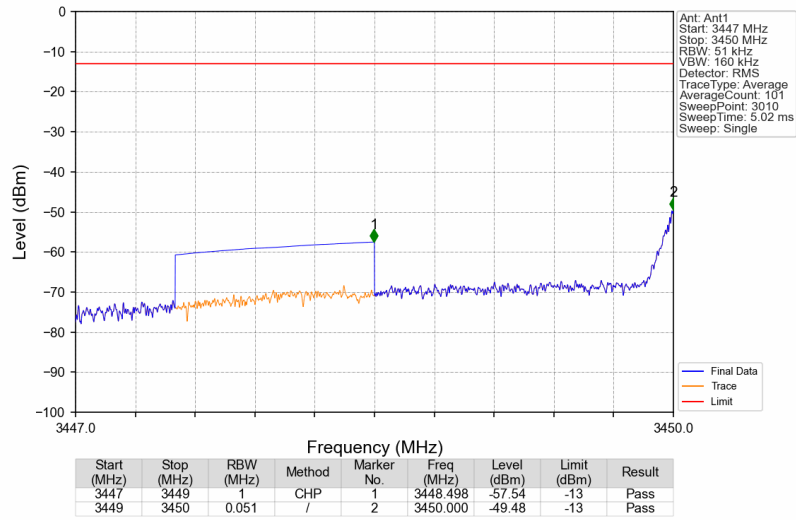
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 3447        | 3449       | 1         | CHP    | 1          | 3448.498   | -56.77      | -13         | Pass   |
| 3449        | 3450       | 0.051     | /      | 2          | 3449.989   | -51.19      | -13         | Pass   |

Band 77\_3452.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_AGC+3

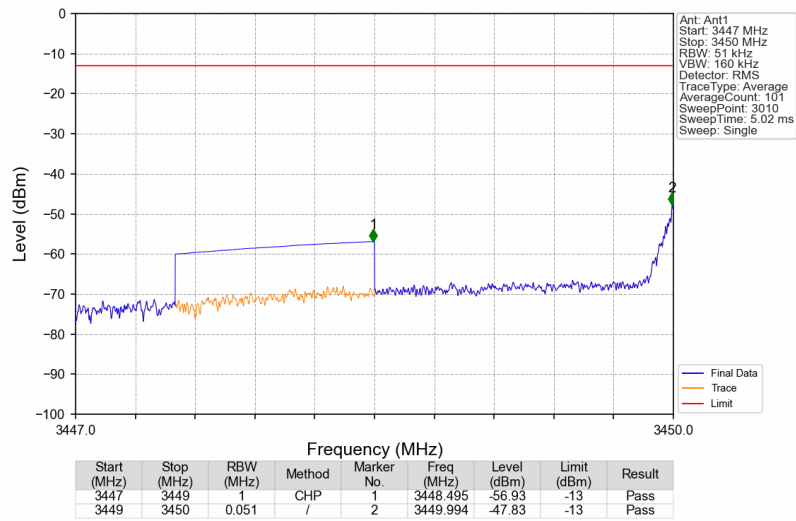


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 3447        | 3449       | 1         | CHP    | 1          | 3448.499   | -56.94      | -13         | Pass   |
| 3449        | 3450       | 0.051     | /      | 2          | 3449.991   | -49.21      | -13         | Pass   |

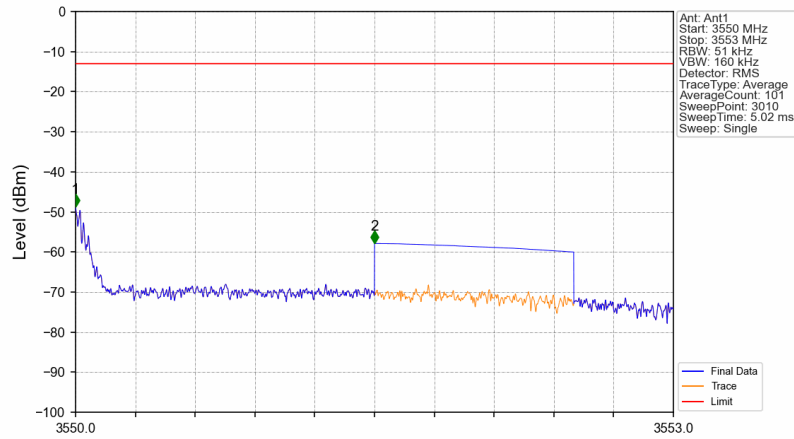
Band 77\_3452.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_AGC



Band 77\_3452.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_AGC+3

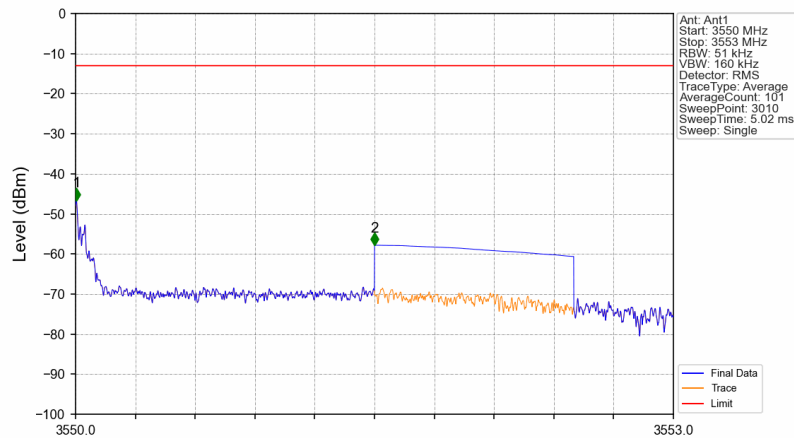


### Band 77\_3547.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_AGC



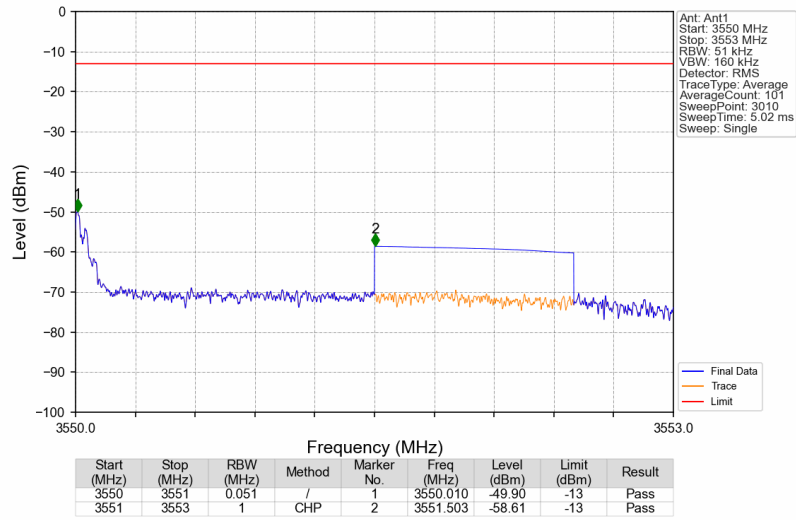
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 3550        | 3551       | 0.051     | /      | 1          | 3550.000   | -48.67      | -13         | Pass   |
| 3551        | 3553       | 1         | CHP    | 2          | 3551.500   | -57.88      | -13         | Pass   |

### Band 77\_3547.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_AGC+3

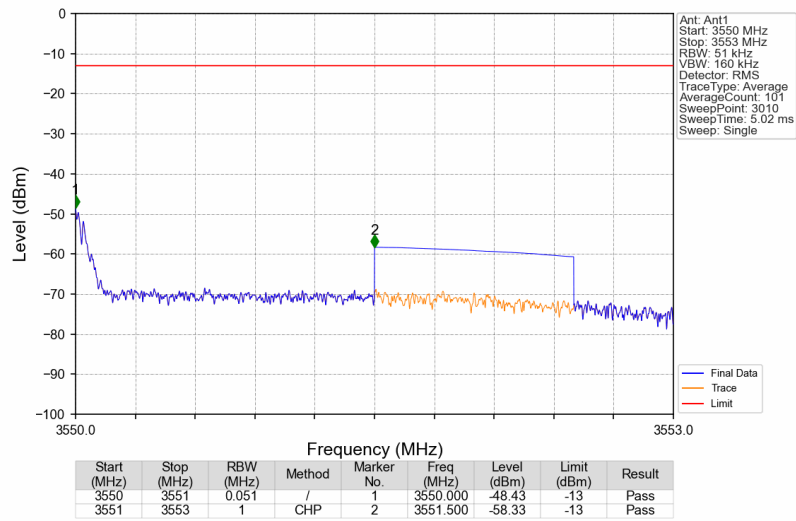


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 3550        | 3551       | 0.051     | /      | 1          | 3550.004   | -46.68      | -13         | Pass   |
| 3551        | 3553       | 1         | CHP    | 2          | 3551.500   | -57.83      | -13         | Pass   |

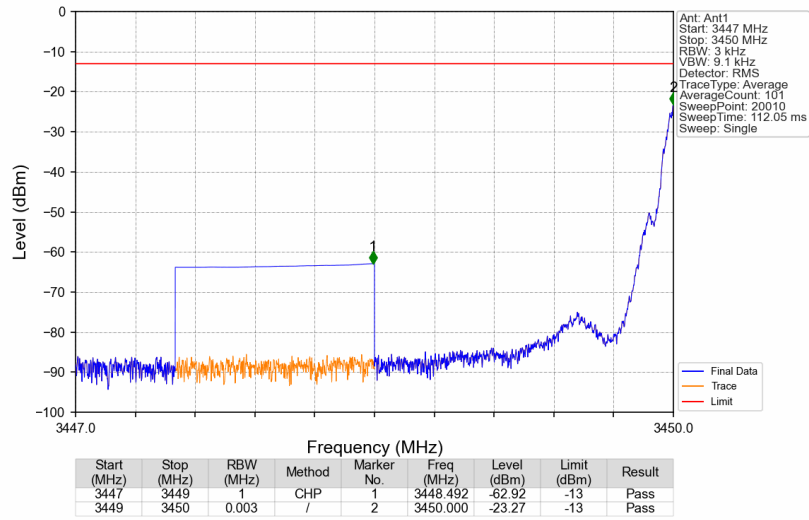
Band 77\_3547.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_AGC



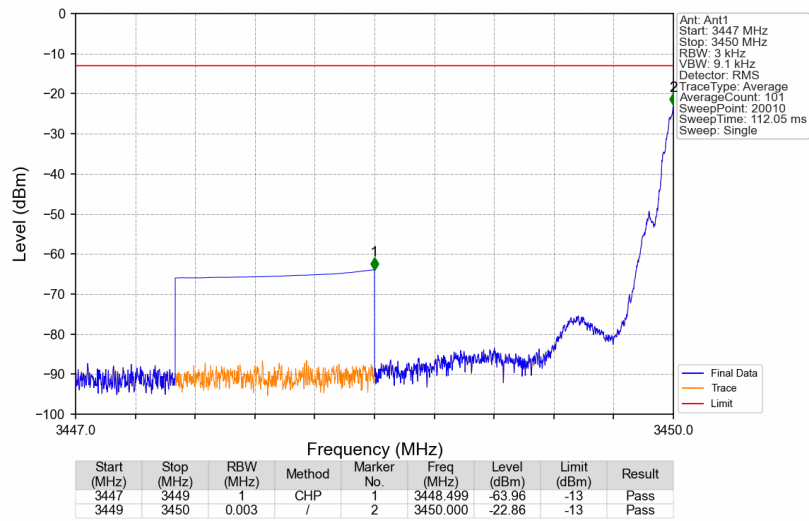
Band 77\_3547.5MHz\_AWGN\_SISO\_Ant1\_NTNV\_AGC+3



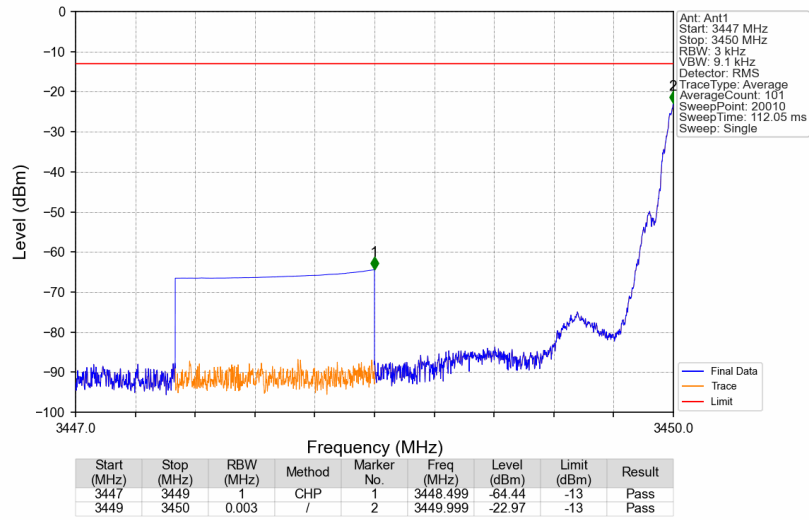
Band 77\_3450.1MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC



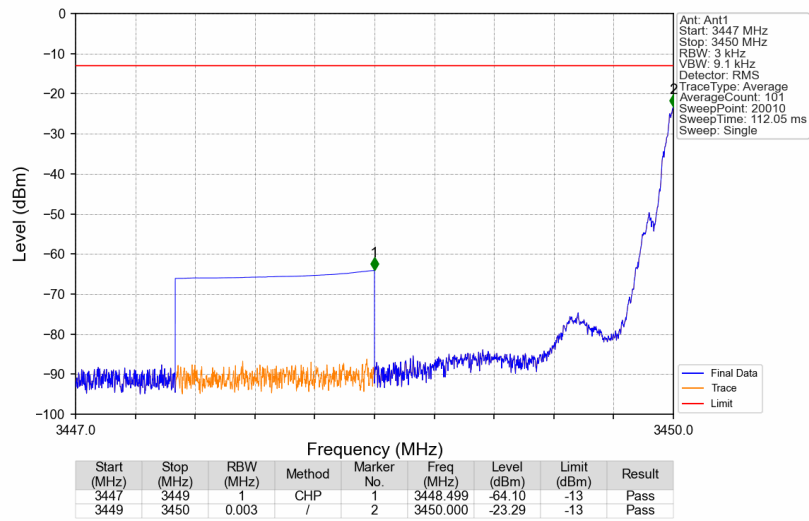
Band 77\_3450.1MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC+3



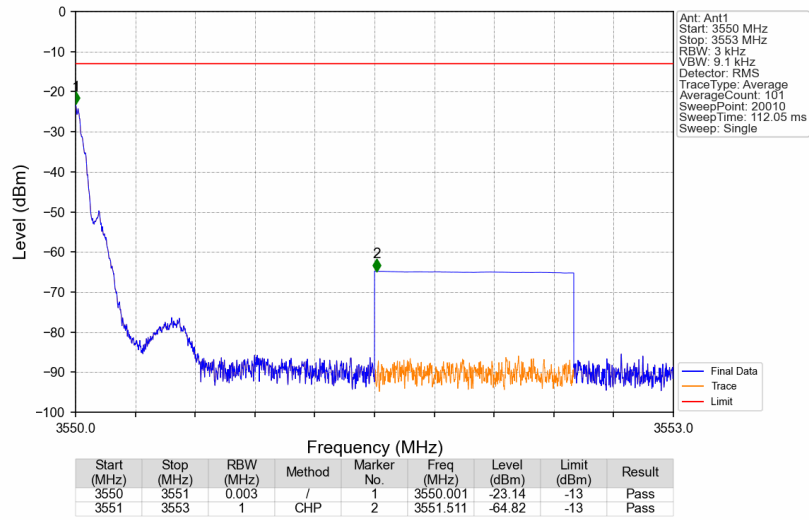
Band 77\_3450.1MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC



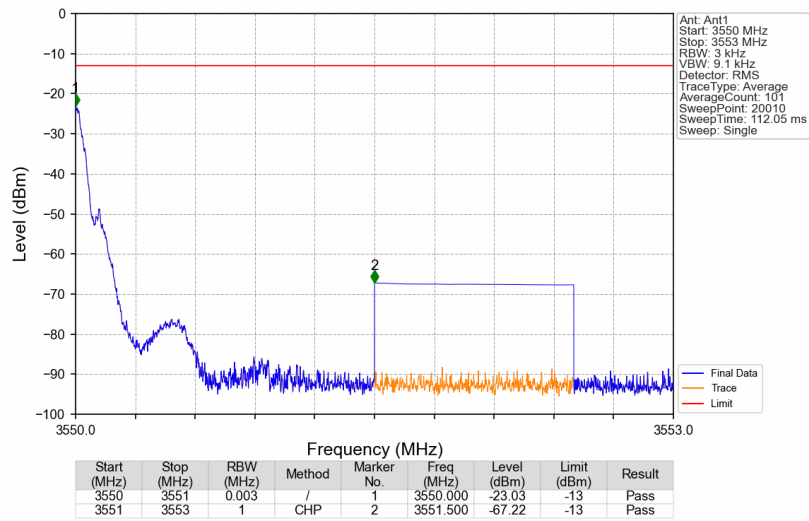
Band 77\_3450.1MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC+3



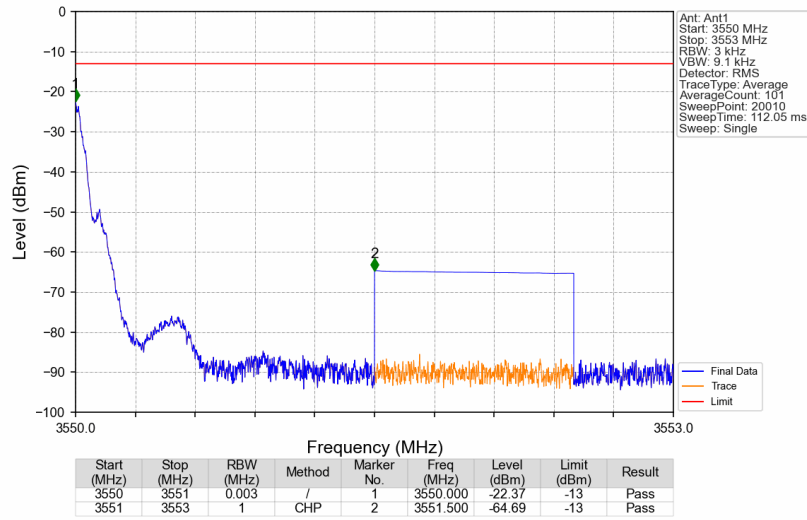
Band 77\_3549.9MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC



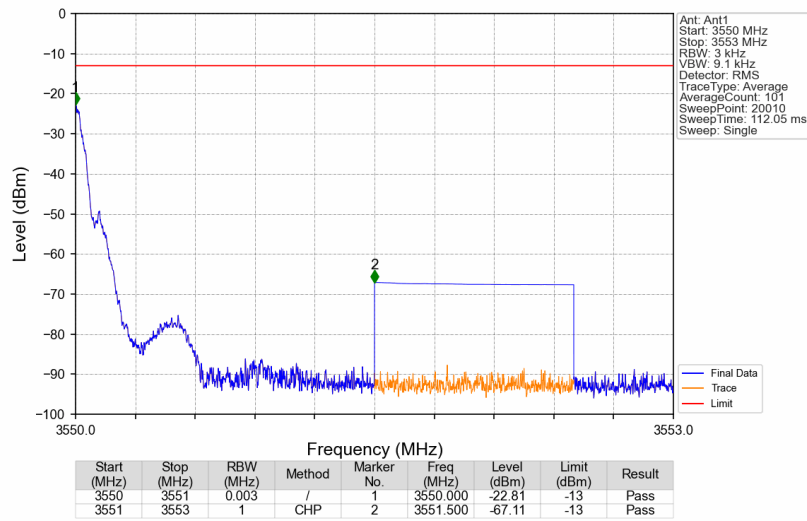
Band 77\_3549.9MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC+3



Band 77\_3549.9MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC

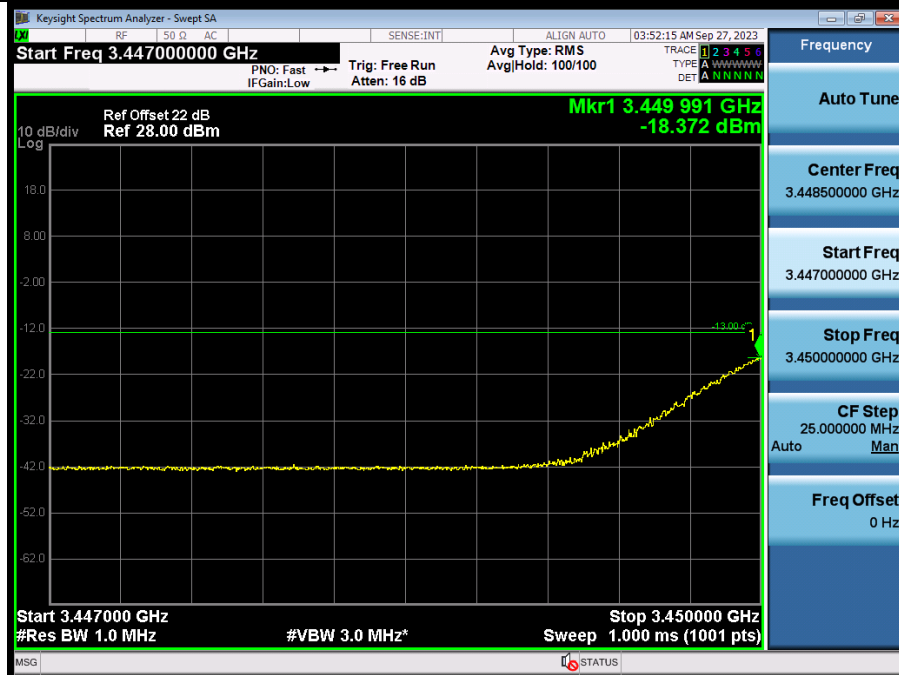


Band 77\_3549.9MHz\_GMSK\_SISO\_Ant1\_NTNV\_AGC+3



For 100MHz BW

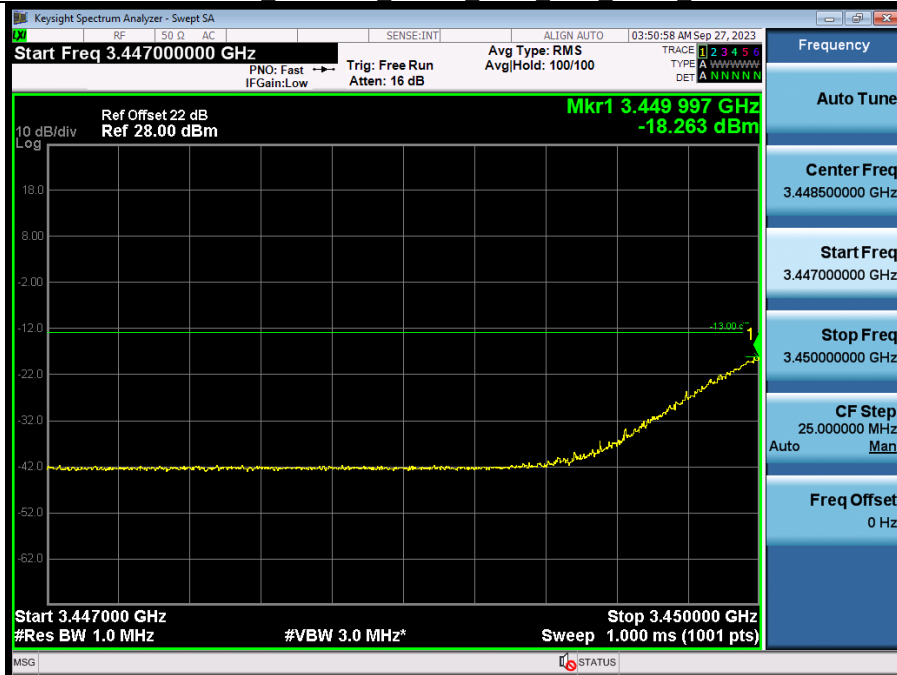
Band 77 3500MHz AWGN SISO Ant1 NTN AGC



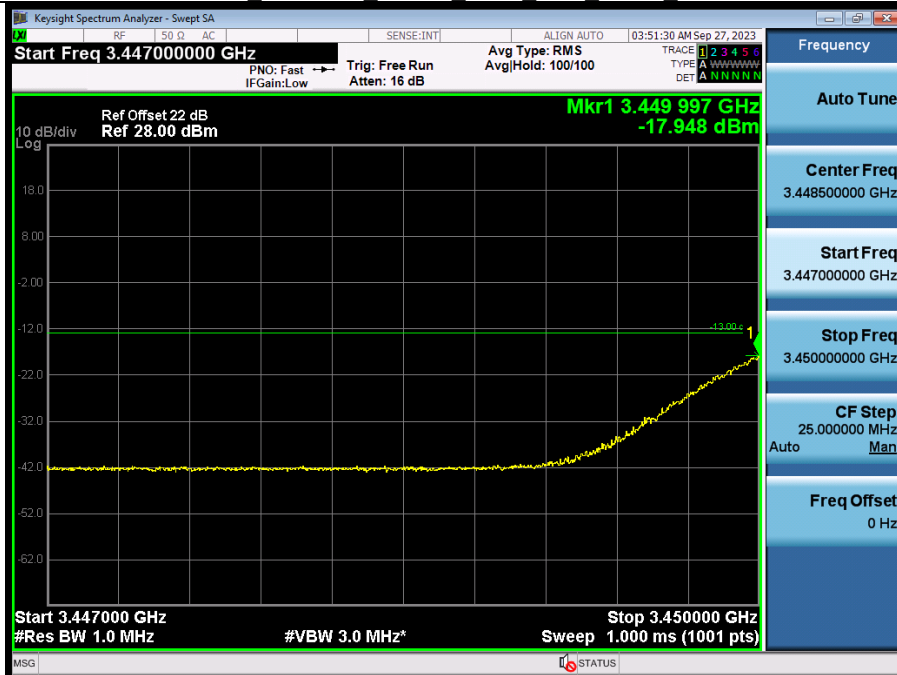
Band 77 3500MHz AWGN SISO Ant1 NTN AGC+3



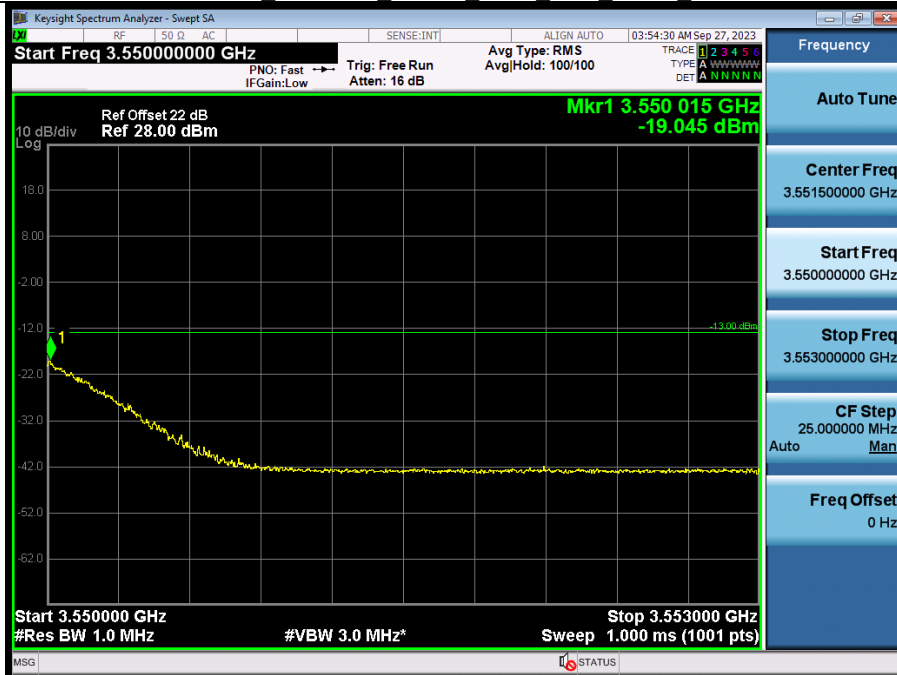
### Band 77 3500MHz AWGN SISO Ant1 NTN AGC



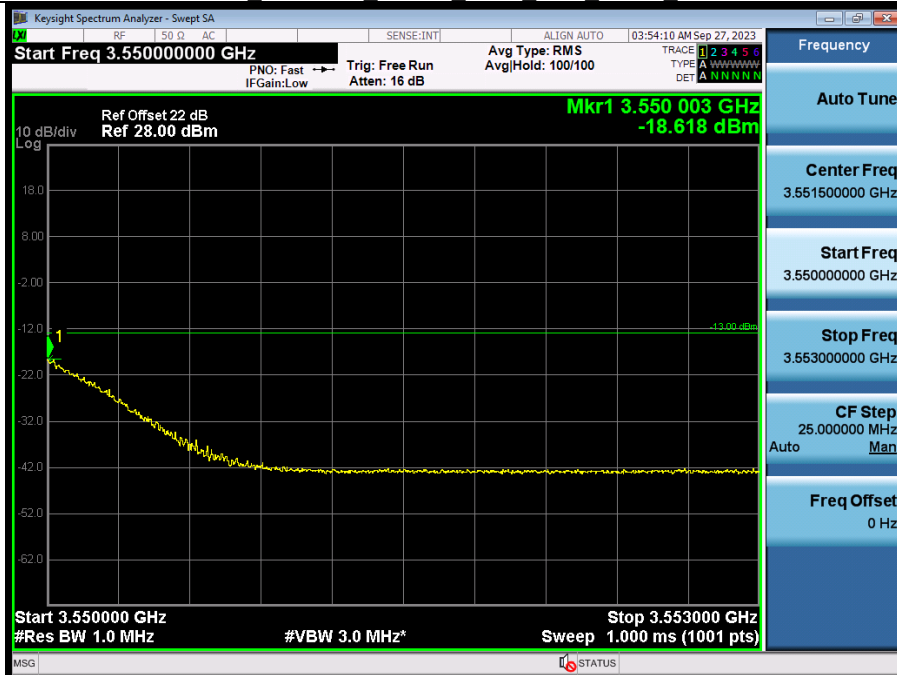
### Band 77 3500MHz AWGN SISO Ant1 NTN AGC+3



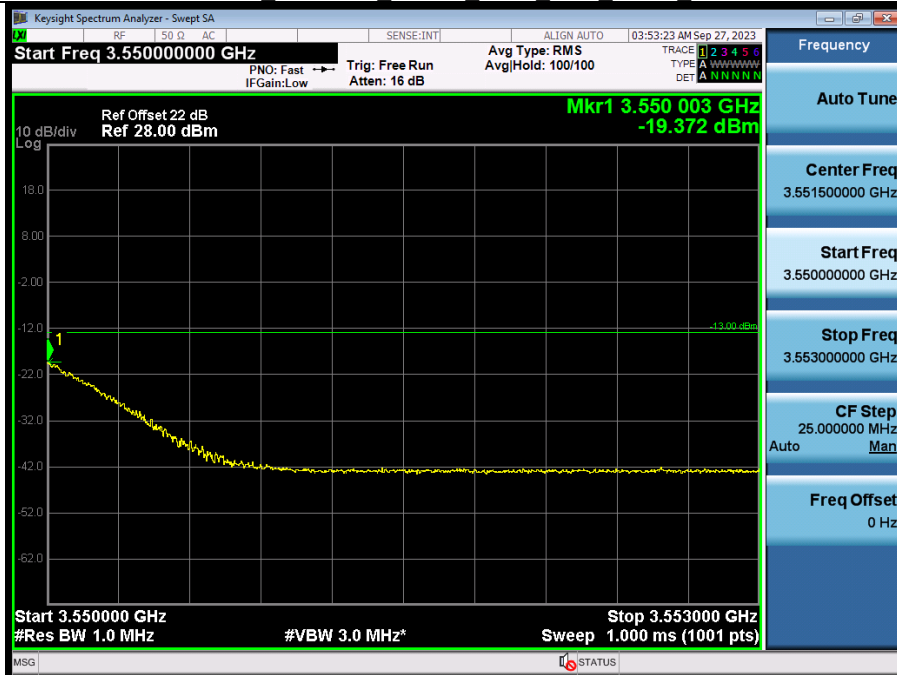
Band 77 3500MHz AWGN SISO Ant1 NTN AGC



Band 77 3500MHz AWGN SISO Ant1 NTN AGC+3



Band 77 3500MHz AWGN SISO Ant1 NTN AGC



Band 77 3500MHz AWGN SISO Ant1 NTN AGC+3



## 6. Spurious emissions

### 6.1 Band 77

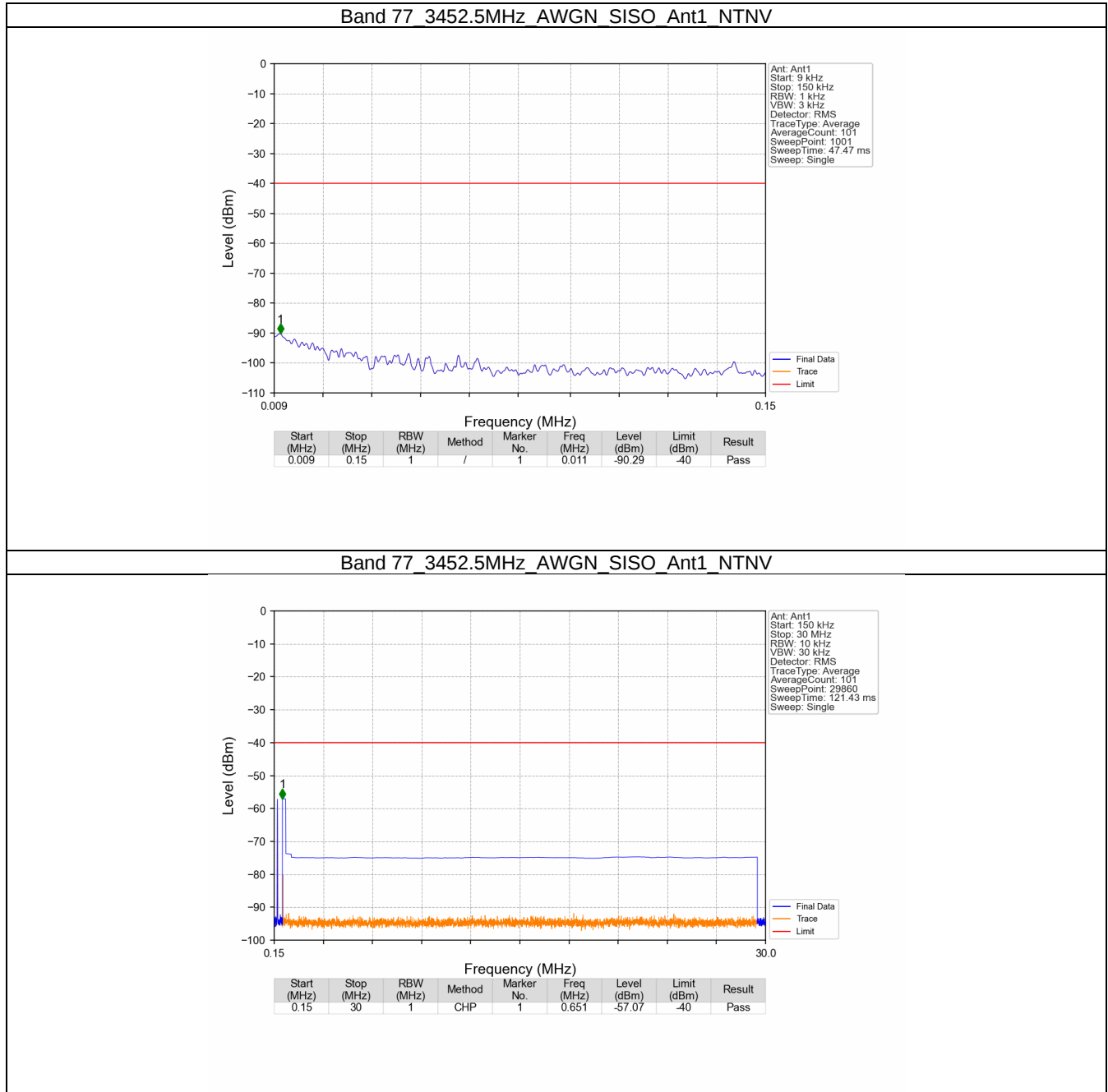
#### 6.1.1 Test Result

| Band:77 / NTNV |             |                 |         |         |     |                     |       |         |
|----------------|-------------|-----------------|---------|---------|-----|---------------------|-------|---------|
| Signal         |             |                 | Channel | TX Type | ANT | SE (dBm)            |       | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |         |         |     | Result              | Limit |         |
| AWGN           | -4          | 3452.5          | LCH     | SISO    | 1   | Refer To Test Graph |       | Pass    |
|                |             | 3500            | MCH     | SISO    | 1   | Refer To Test Graph |       | Pass    |
|                |             | 3547.5          | HCH     | SISO    | 1   | Refer To Test Graph |       | Pass    |
| GMSK           | -4          | 3450.1          | LCH     | SISO    | 1   | Refer To Test Graph |       | Pass    |
|                |             | 3500            | MCH     | SISO    | 1   | Refer To Test Graph |       | Pass    |
|                |             | 3549.9          | HCH     | SISO    | 1   | Refer To Test Graph |       | Pass    |

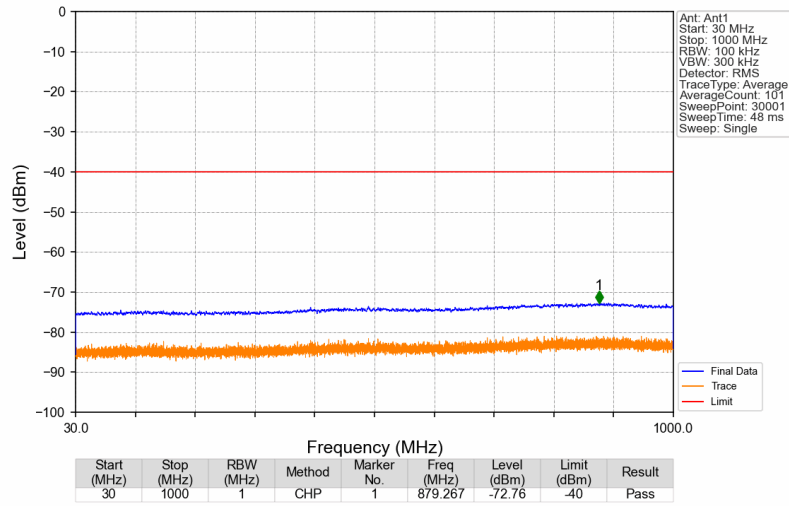
For 100MHz BW

| Band: 77 / NTV |             |                 |         |         |     |                     |       |         |
|----------------|-------------|-----------------|---------|---------|-----|---------------------|-------|---------|
| Signal         |             |                 | Channel | TX Type | ANT | SE (dBm)            |       | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |         |         |     | Result              | Limit |         |
| AWGN           | 0.1         | 3500            | MCH     | SISO    | 1   | Refer To Test Graph |       | Pass    |

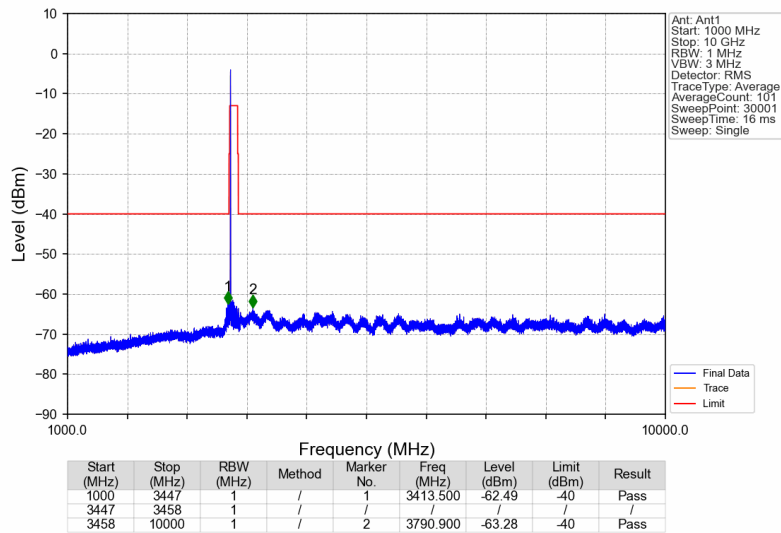
## 6.1.2 Test Graph



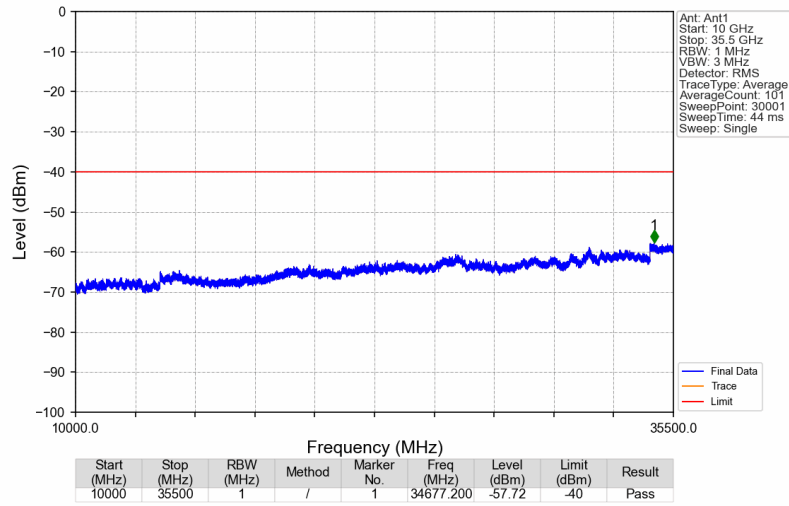
Band 77\_3452.5MHz\_AWGN\_SISO\_Ant1\_NTNV



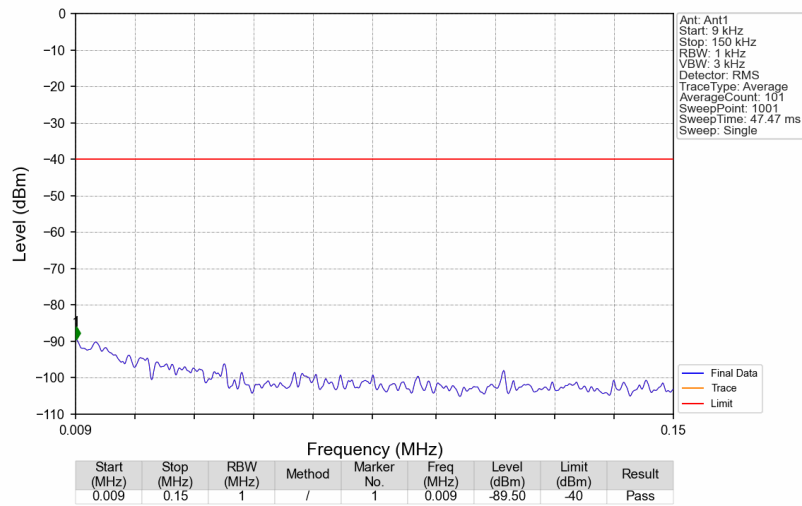
Band 77\_3452.5MHz\_AWGN\_SISO\_Ant1\_NTNV



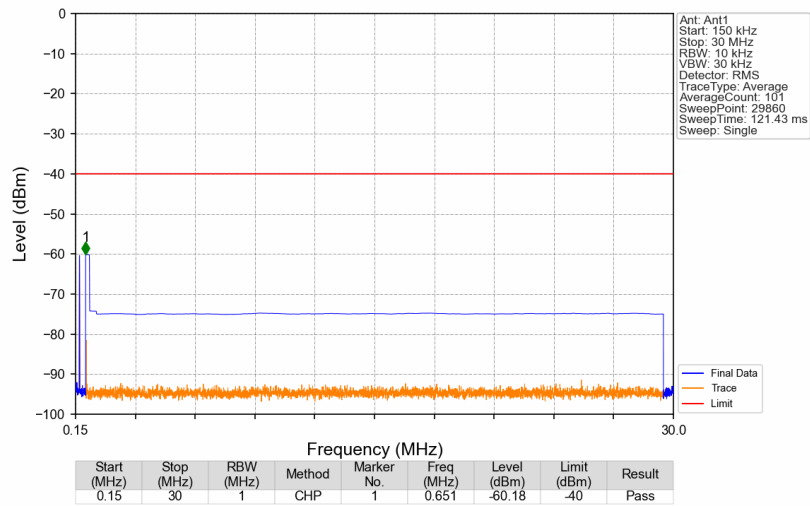
### Band 77\_3452.5MHz\_AWGN\_SISO\_Ant1\_NTNV



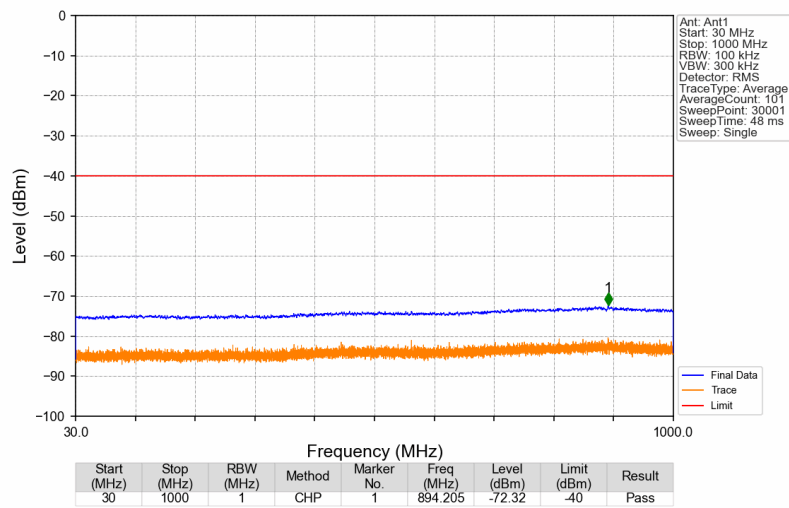
### Band 77\_3500MHz\_AWGN\_SISO\_Ant1\_NTNV



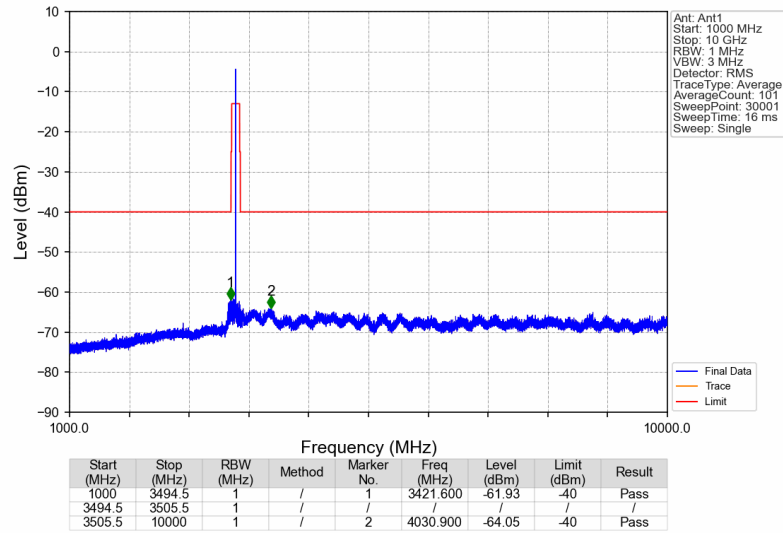
Band 77\_3500MHz\_AWGN\_SISO\_Ant1\_NTNV



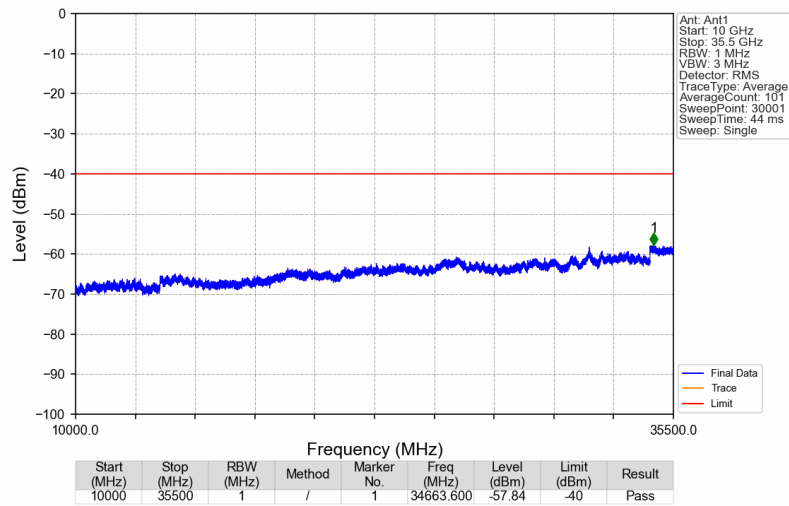
Band 77\_3500MHz\_AWGN\_SISO\_Ant1\_NTNV



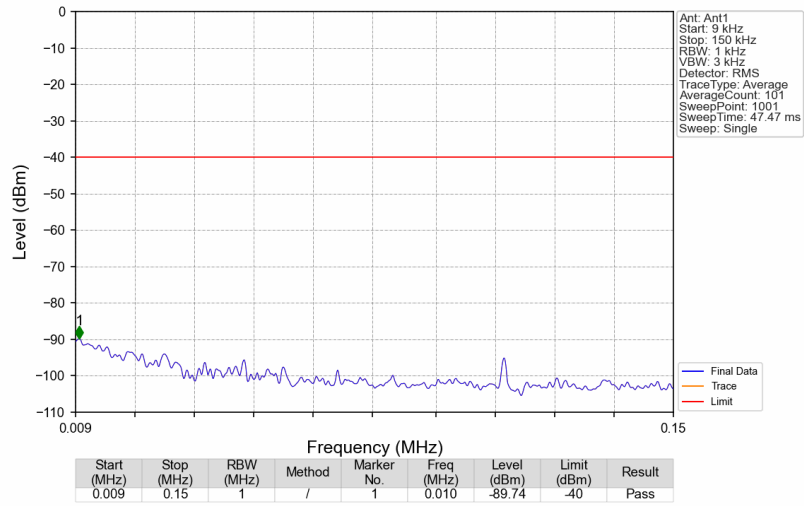
### Band 77\_3500MHz\_AWGN\_SISO\_Ant1\_NTNV



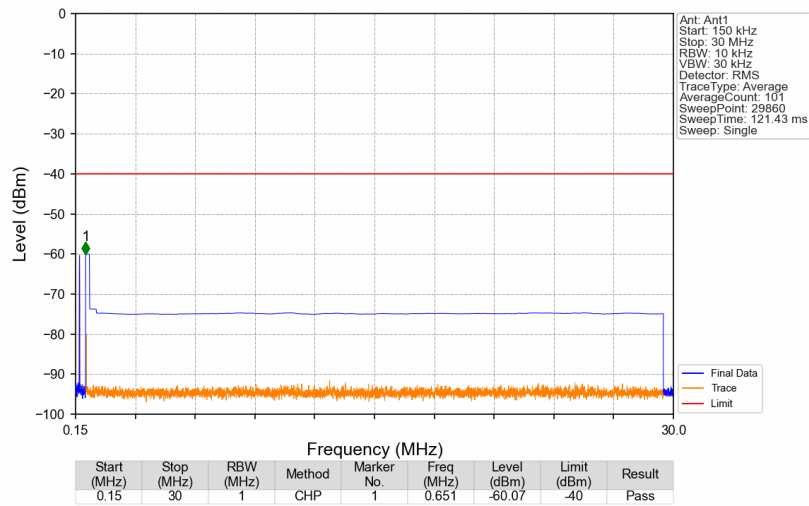
### Band 77\_3500MHz\_AWGN\_SISO\_Ant1\_NTNV



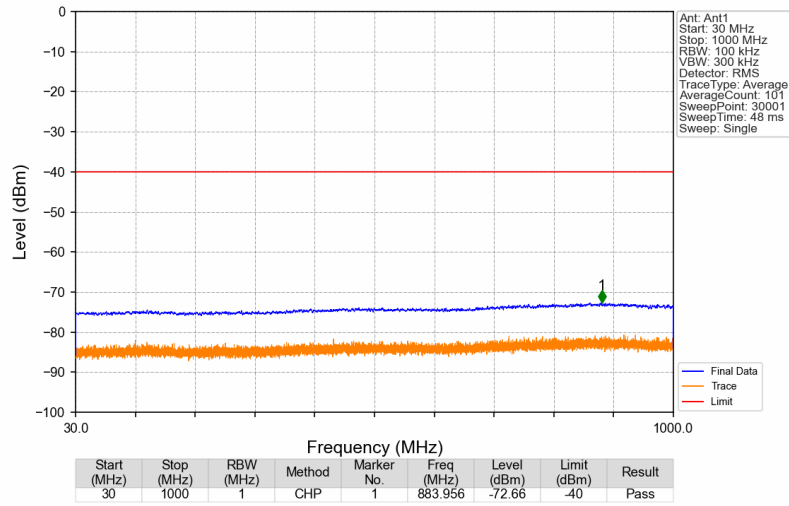
Band 77\_3547.5MHz\_AWGN\_SISO\_Ant1\_NTNV



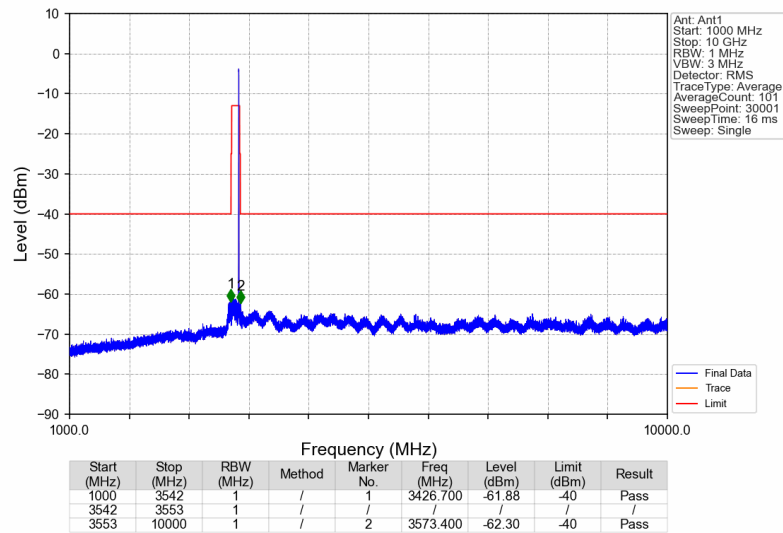
Band 77\_3547.5MHz\_AWGN\_SISO\_Ant1\_NTNV



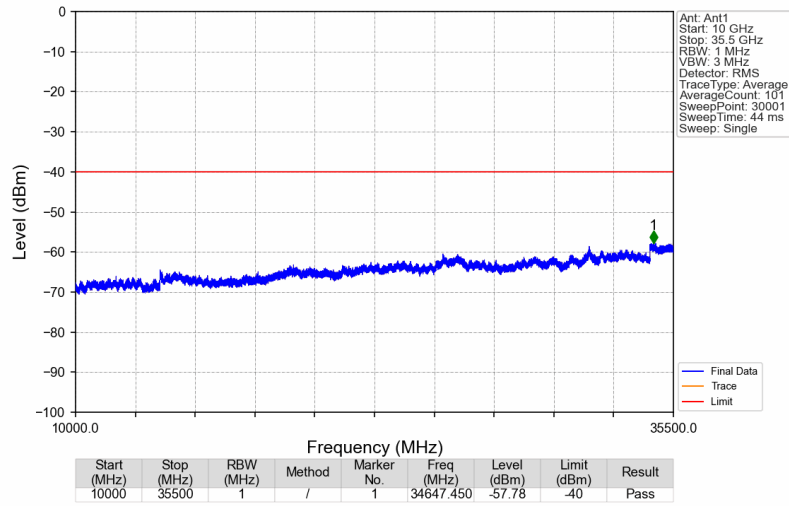
Band 77\_3547.5MHz\_AWGN\_SISO\_Ant1\_NTNV



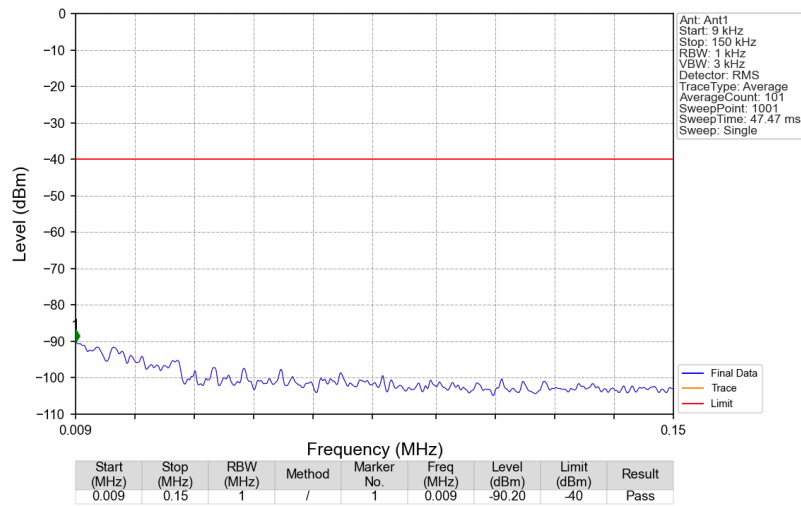
Band 77\_3547.5MHz\_AWGN\_SISO\_Ant1\_NTNV



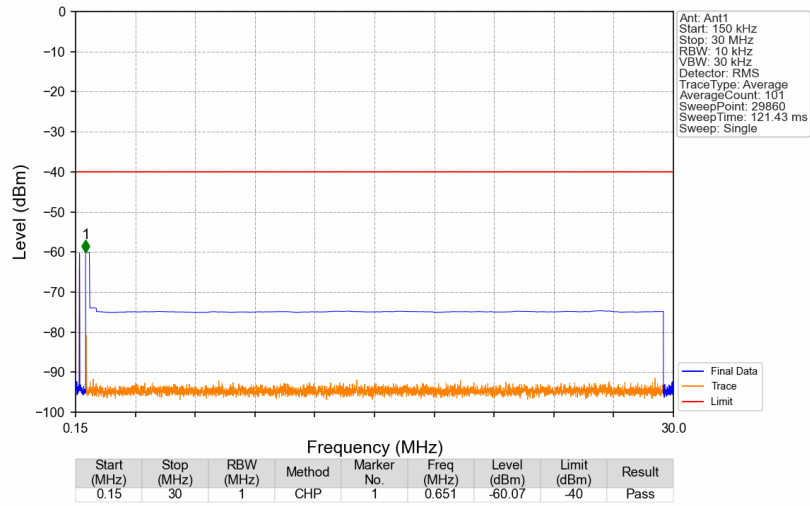
### Band 77\_3547.5MHz\_AWGN\_SISO\_Ant1\_NTNV



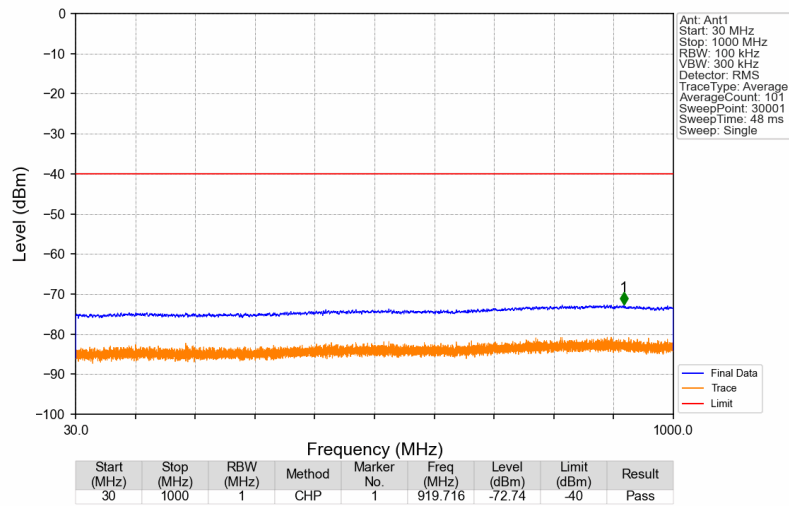
### Band 77\_3450.1MHz\_GMSK\_SISO\_Ant1\_NTNV



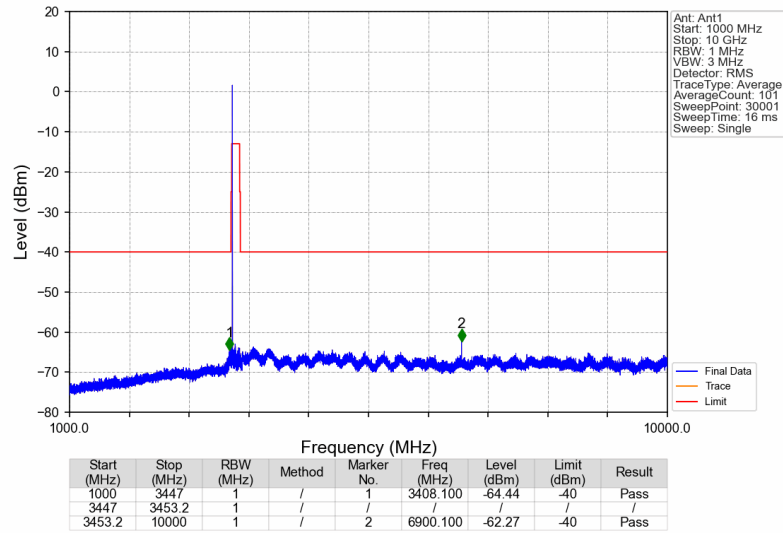
Band 77\_3450.1MHz\_GMSK\_SISO\_Ant1\_NTNV



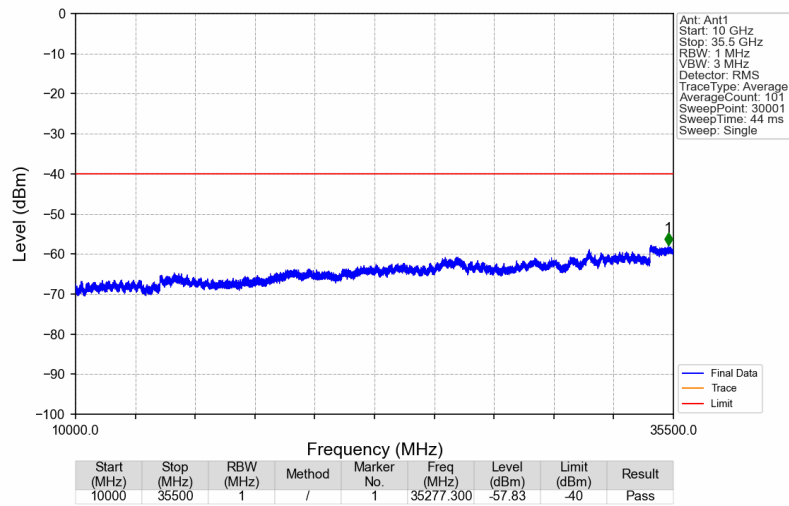
Band 77\_3450.1MHz\_GMSK\_SISO\_Ant1\_NTNV



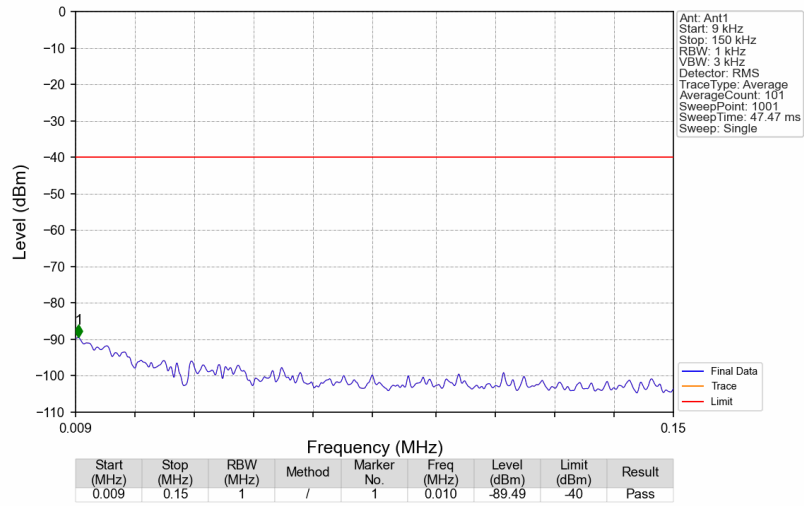
Band 77\_3450.1MHz\_GMSK\_SISO\_Ant1\_NTNV



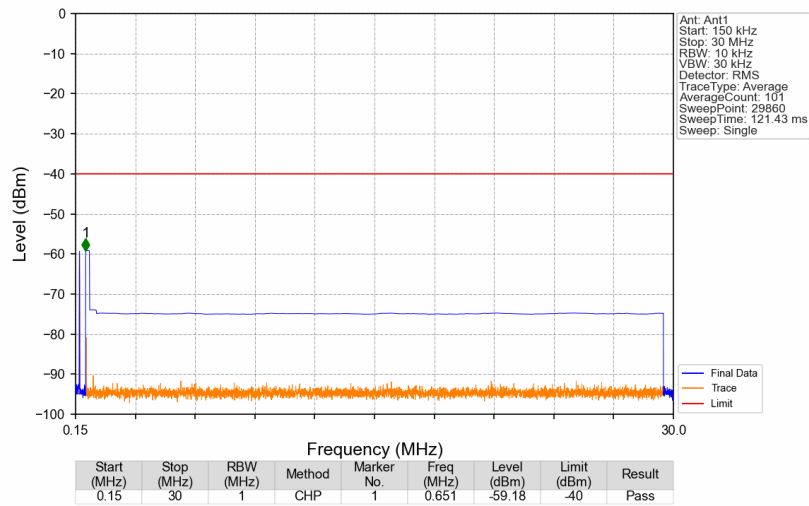
Band 77\_3450.1MHz\_GMSK\_SISO\_Ant1\_NTNV



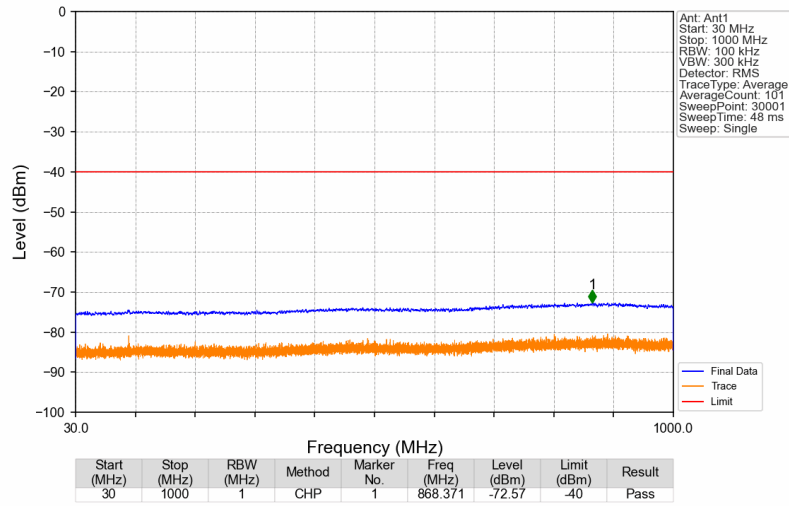
Band 77\_3500MHz\_GMSK\_SISO\_Ant1\_NTNV



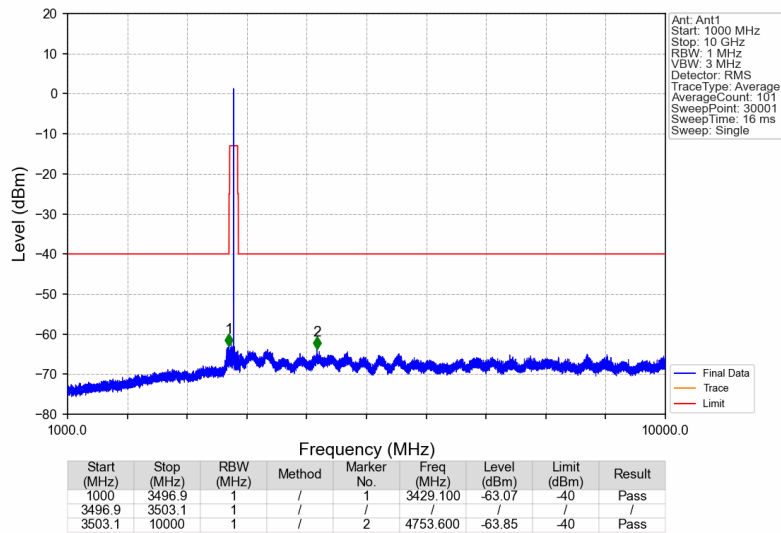
Band 77\_3500MHz\_GMSK\_SISO\_Ant1\_NTNV



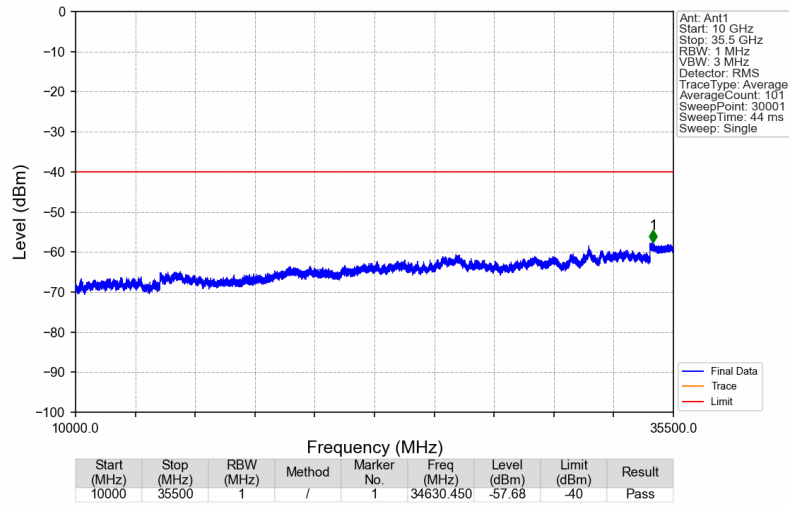
Band 77\_3500MHz\_GMSK\_SISO\_Ant1\_NTNV



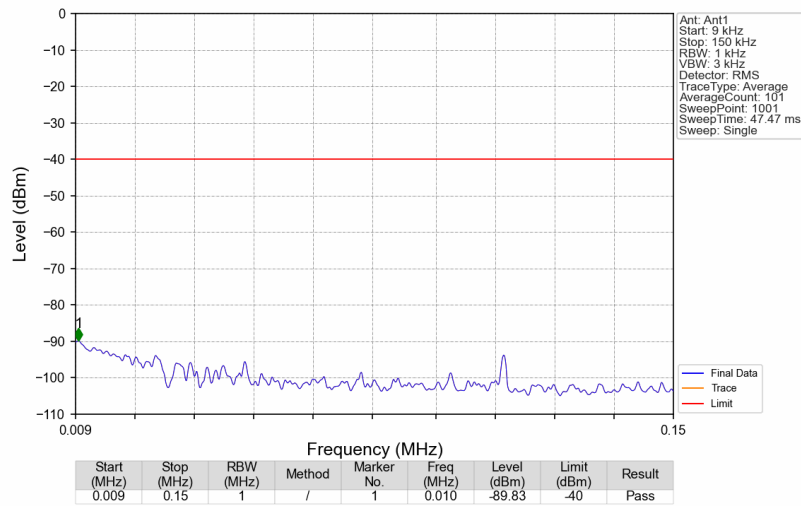
Band 77\_3500MHz\_GMSK\_SISO\_Ant1\_NTNV



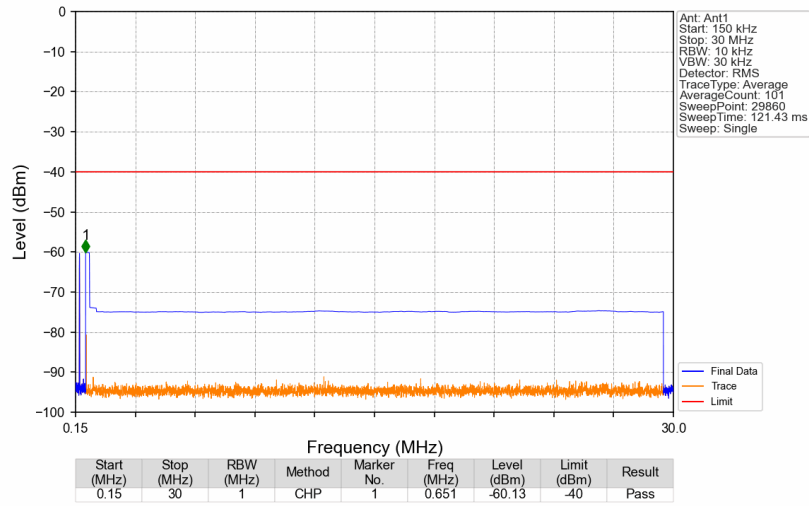
### Band 77\_3500MHz\_GMSK\_SISO\_Ant1\_NTNV



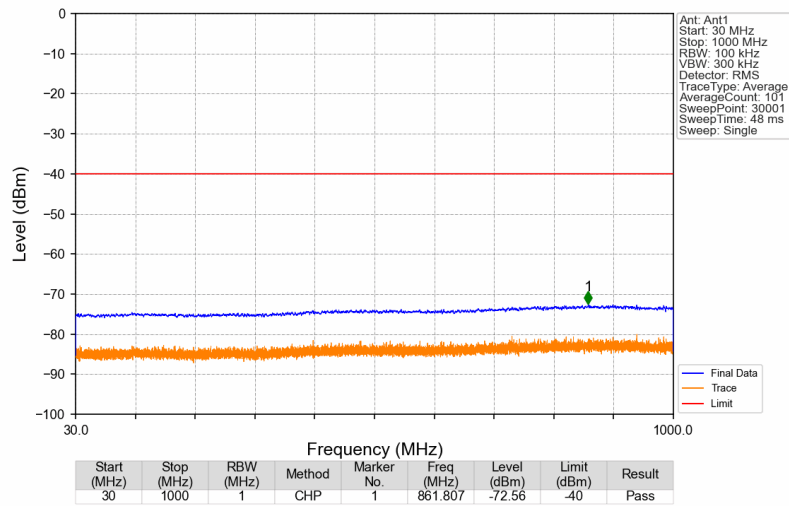
### Band 77\_3549.9MHz\_GMSK\_SISO\_Ant1\_NTNV



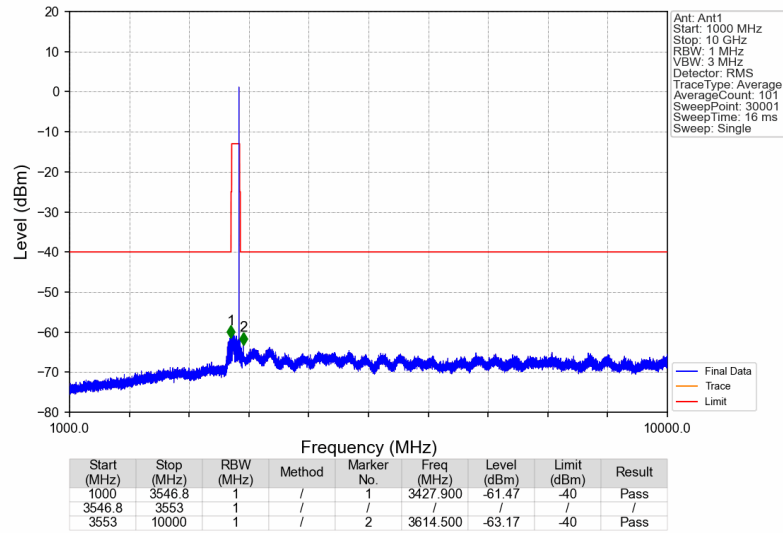
Band 77\_3549.9MHz\_GMSK\_SISO\_Ant1\_NTNV



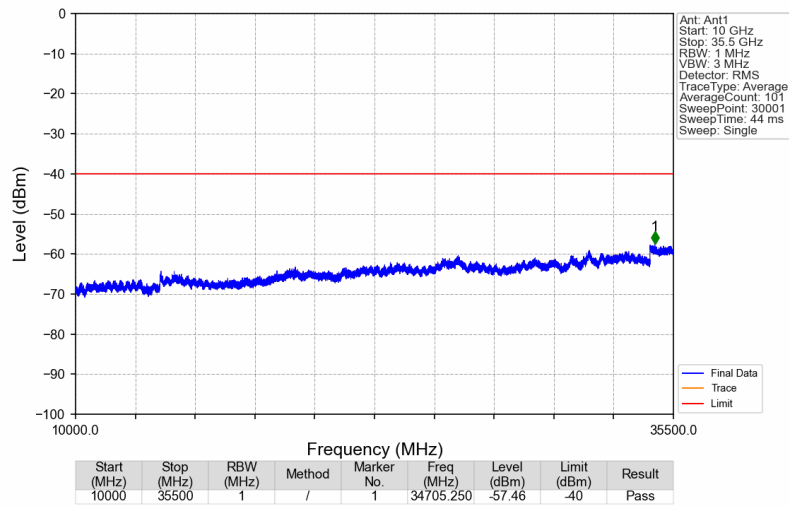
Band 77\_3549.9MHz\_GMSK\_SISO\_Ant1\_NTNV



Band 77\_3549.9MHz\_GMSK\_SISO\_Ant1\_NTNV

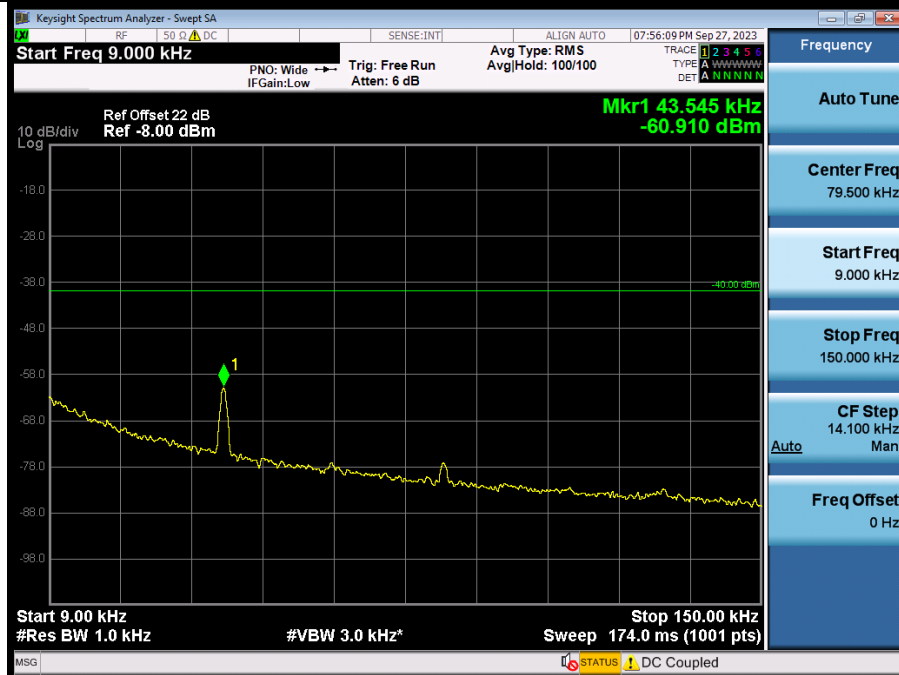


Band 77\_3549.9MHz\_GMSK\_SISO\_Ant1\_NTNV

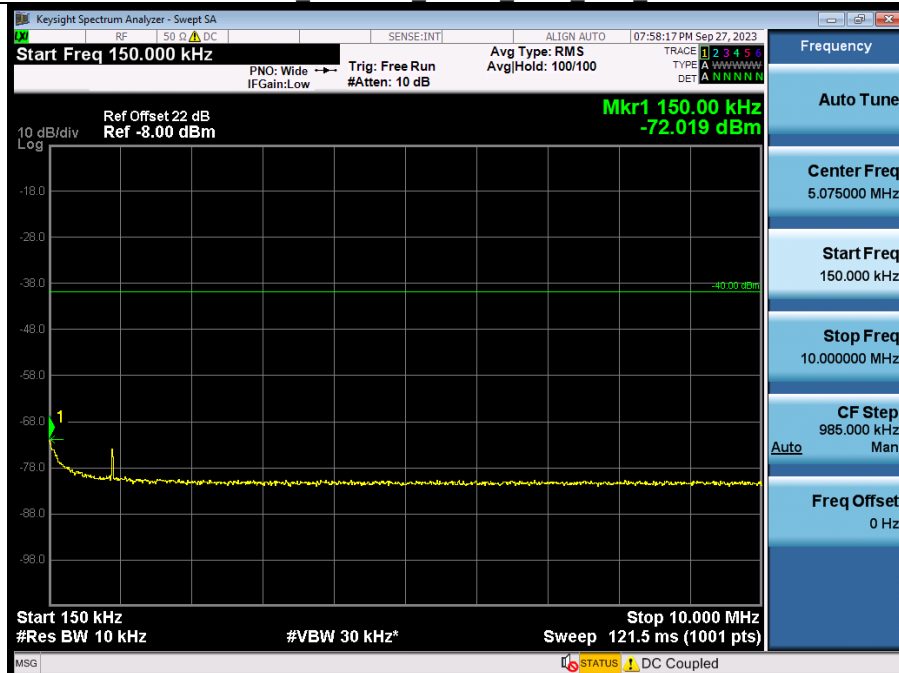


For 100MHz BW

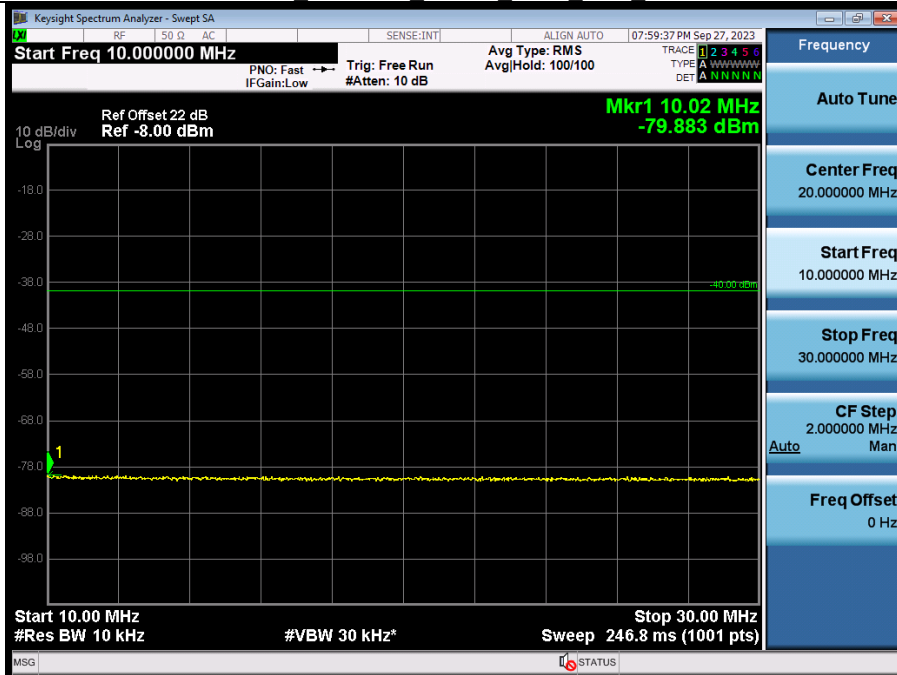
Band 77 3500MHz AWGN SISO Ant1 NTNV



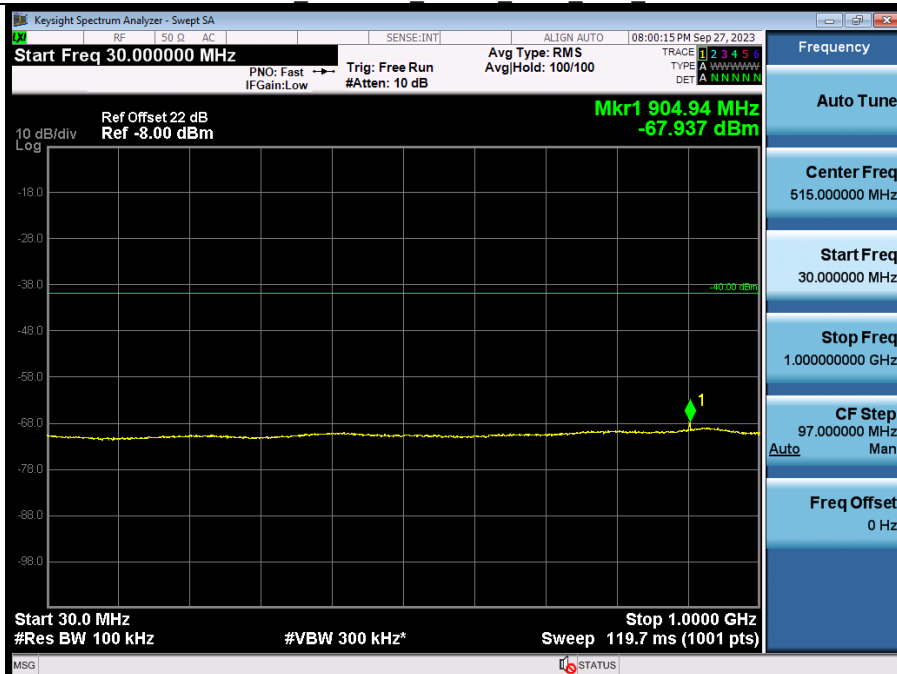
Band 77 3500MHz AWGN SISO Ant1 NTNV



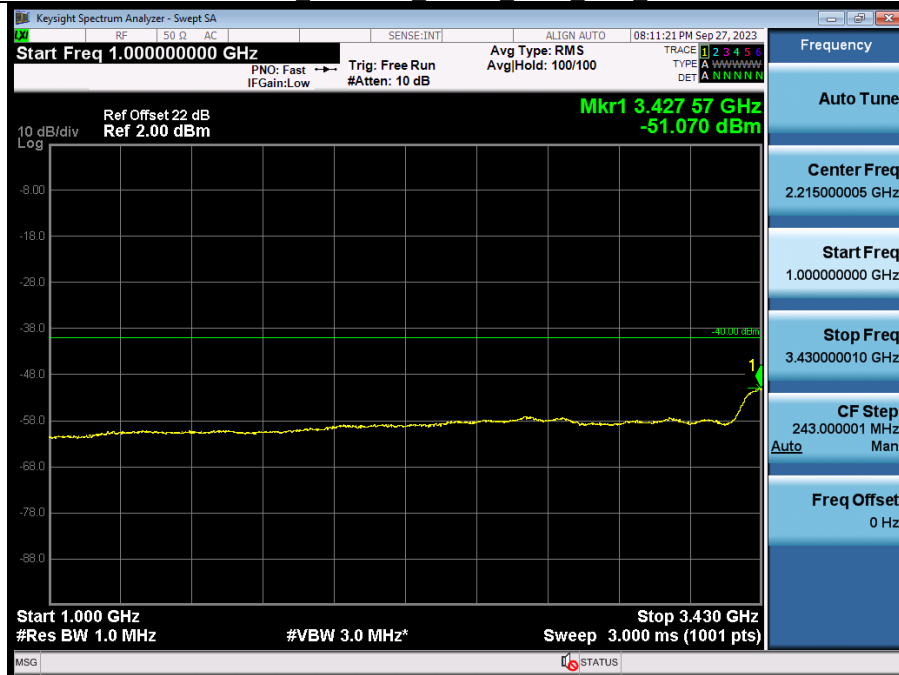
## Band 77 3500MHz AWGN SISO Ant1 NTNV



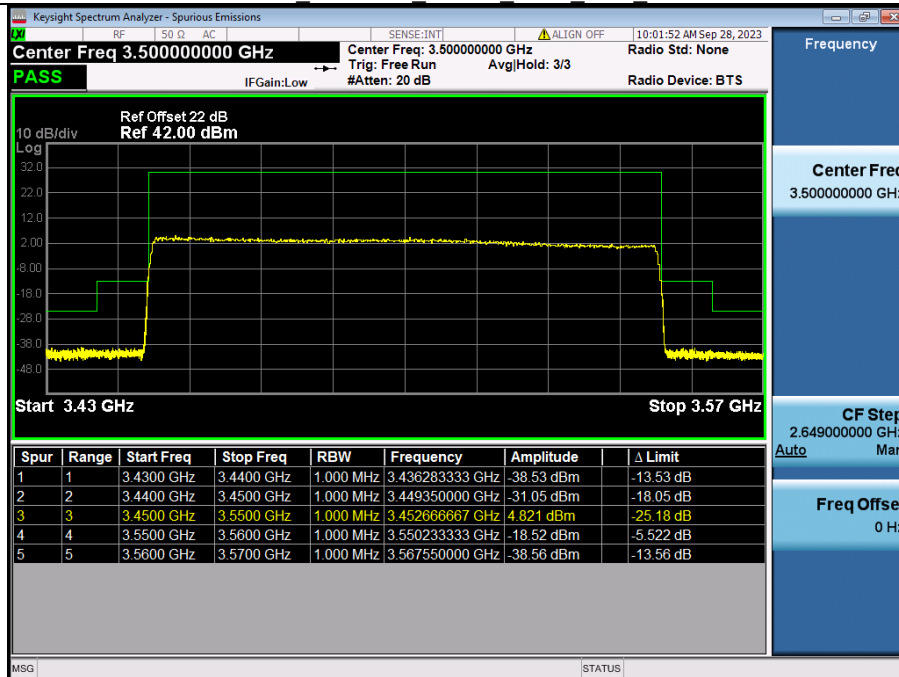
## Band 77 3500MHz AWGN SISO Ant1 NTNV



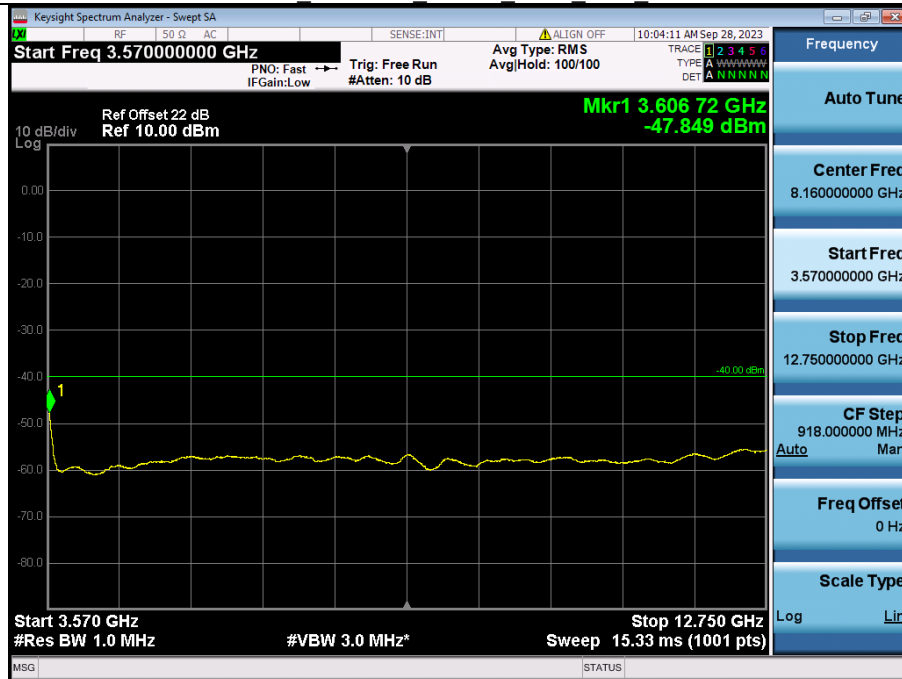
### Band 77 3500MHz AWGN SISO Ant1 NTNV



### Band 77 3500MHz AWGN SISO Ant1 NTNV

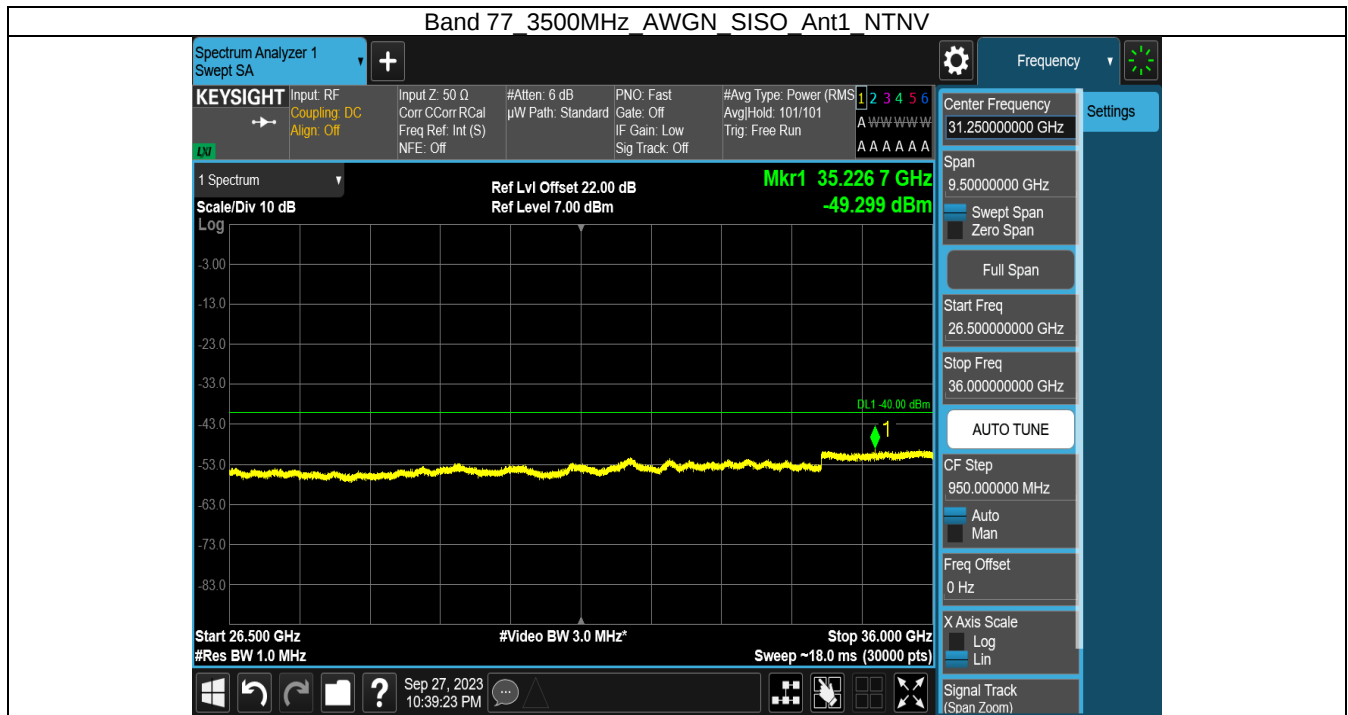


Band 77 3500MHz AWGN SISO Ant1 NTNV



Band 77 3500MHz AWGN SISO Ant1 NTNV





Note:

The above test results also meet the IC -30dBm/MHz requirements, so it does not reflect the test data of -30dBm/MHz

## 7. Frequency stability measurements

### 7.1 Band 77\_Ant1

#### 7.1.1 Test Result

| Band:77 / NTNV |             |                 |              |                  |                     |                    |         |
|----------------|-------------|-----------------|--------------|------------------|---------------------|--------------------|---------|
| Signal         |             |                 | Temp<br>(°C) | Voltage<br>(VAC) | Freq. Error<br>(Hz) | Tolerance<br>(ppm) | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |              |                  |                     |                    |         |
| CW             | -4          | 3450.1          | 20           | 102              | -234                | -0.0678            | Pass    |
|                |             |                 |              | 120              | -236                | -0.0684            | Pass    |
|                |             |                 |              | 138              | -241                | -0.0699            | Pass    |
|                |             |                 | -30          | 120              | -236                | -0.0684            | Pass    |
|                |             |                 | -20          | 120              | -238                | -0.0690            | Pass    |
|                |             |                 | -10          | 120              | -239                | -0.0693            | Pass    |
|                |             |                 | 0            | 120              | -235                | -0.0681            | Pass    |
|                |             |                 | 10           | 120              | -231                | -0.0670            | Pass    |
|                |             |                 | 30           | 120              | -237                | -0.0687            | Pass    |
|                |             |                 | 40           | 120              | -230                | -0.0667            | Pass    |
|                |             |                 | 50           | 120              | -238                | -0.0690            | Pass    |
|                |             | 3500            | 20           | 102              | -236                | -0.0674            | Pass    |
|                |             |                 |              | 120              | -241                | -0.0689            | Pass    |
|                |             |                 |              | 138              | -234                | -0.0669            | Pass    |
|                |             |                 | -30          | 120              | -232                | -0.0663            | Pass    |
|                |             |                 | -20          | 120              | -233                | -0.0666            | Pass    |
|                |             |                 | -10          | 120              | -239                | -0.0683            | Pass    |
|                |             |                 | 0            | 120              | -235                | -0.0671            | Pass    |
|                |             |                 | 10           | 120              | -231                | -0.0660            | Pass    |
|                |             |                 | 30           | 120              | -237                | -0.0677            | Pass    |
|                |             |                 | 40           | 120              | -230                | -0.0657            | Pass    |
|                |             |                 | 50           | 120              | -229                | -0.0654            | Pass    |
|                |             | 3549.9          | 20           | 102              | -228                | -0.0642            | Pass    |
|                |             |                 |              | 120              | -239                | -0.0673            | Pass    |
|                |             |                 |              | 138              | -235                | -0.0662            | Pass    |
|                |             |                 | -30          | 120              | -235                | -0.0662            | Pass    |
|                |             |                 | -20          | 120              | -231                | -0.0651            | Pass    |
|                |             |                 | -10          | 120              | -235                | -0.0662            | Pass    |
|                |             |                 | 0            | 120              | -231                | -0.0651            | Pass    |
|                |             |                 | 10           | 120              | -237                | -0.0668            | Pass    |
|                |             |                 | 30           | 120              | -230                | -0.0648            | Pass    |
|                |             |                 | 40           | 120              | -238                | -0.0670            | Pass    |
|                |             |                 | 50           | 120              | -236                | -0.0665            | Pass    |

## 8. Radiated Spurious Emissions

### 8.1 Bandn77\_Ant1

#### 8.1.1 Test Result

| AWGN 3452.5MHz |                                          |        |       |            |         |
|----------------|------------------------------------------|--------|-------|------------|---------|
| Frequency      | Spurious Emission Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz            | Polarization                             | dBm    | dBm   | dB         |         |
| 111.084        | Horizontal                               | -63.25 | -40   | -23.25     | Pass    |
| 292.558        | Horizontal                               | -57.22 | -40   | -17.22     | Pass    |
| 703.562        | Horizontal                               | -58.23 | -40   | -18.23     | Pass    |
| 2055.740       | Horizontal                               | -55.76 | -40   | -15.76     | Pass    |
| 5637.990       | Horizontal                               | -52.01 | -40   | -12.01     | Pass    |
| 12458.120      | Horizontal                               | -47.85 | -40   | -7.85      | Pass    |
| 89.784         | Vertical                                 | -68.02 | -40   | -28.02     | Pass    |
| 304.468        | Vertical                                 | -54.83 | -40   | -14.83     | Pass    |
| 715.502        | Vertical                                 | -53.22 | -40   | -13.22     | Pass    |
| 2054.080       | Vertical                                 | -56.43 | -40   | -16.43     | Pass    |
| 5616.270       | Vertical                                 | -52.77 | -40   | -12.77     | Pass    |
| 12470.290      | Vertical                                 | -49.96 | -40   | -9.96      | Pass    |

| AWGN 3500MHz |                                          |        |       |            |         |
|--------------|------------------------------------------|--------|-------|------------|---------|
| Frequency    | Spurious Emission Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz          | Polarization                             | dBm    | dBm   | dB         |         |
| 88.170       | Horizontal                               | -67.96 | -40   | -27.96     | Pass    |
| 279.955      | Horizontal                               | -57.71 | -40   | -17.71     | Pass    |
| 653.889      | Horizontal                               | -60.44 | -40   | -20.44     | Pass    |
| 1646.380     | Horizontal                               | -52.91 | -40   | -12.91     | Pass    |
| 5592.970     | Horizontal                               | -53.56 | -40   | -13.56     | Pass    |
| 12395.600    | Horizontal                               | -50.45 | -40   | -10.45     | Pass    |
| 91.704       | Vertical                                 | -67.11 | -40   | -27.11     | Pass    |
| 301.458      | Vertical                                 | -55.01 | -40   | -15.01     | Pass    |
| 702.362      | Vertical                                 | -57.86 | -40   | -17.86     | Pass    |
| 1644.120     | Vertical                                 | -53.23 | -40   | -13.23     | Pass    |
| 5589.640     | Vertical                                 | -51.52 | -40   | -11.52     | Pass    |
| 12387.810    | Vertical                                 | -48.12 | -40   | -8.12      | Pass    |

| AWGN 3547.5MHz |                                             |        |       |            |         |
|----------------|---------------------------------------------|--------|-------|------------|---------|
| Frequency      | Spurious Emission<br>Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz            | Polarization                                | dBm    | dBm   | dB         |         |
| 99.004         | Horizontal                                  | -66.55 | -40   | -26.55     | Pass    |
| 291.078        | Horizontal                                  | -62.53 | -40   | -22.53     | Pass    |
| 705.222        | Horizontal                                  | -60.59 | -40   | -20.59     | Pass    |
| 1642.810       | Horizontal                                  | -54.56 | -40   | -14.56     | Pass    |
| 5567.660       | Horizontal                                  | -50.22 | -40   | -10.22     | Pass    |
| 12381.520      | Horizontal                                  | -48.17 | -40   | -8.17      | Pass    |
| 109.680        | Vertical                                    | -69.27 | -40   | -29.27     | Pass    |
| 269.905        | Vertical                                    | -60.16 | -40   | -20.16     | Pass    |
| 656.119        | Vertical                                    | -55.82 | -40   | -15.82     | Pass    |
| 1610.080       | Vertical                                    | -55.48 | -40   | -15.48     | Pass    |
| 5558.450       | Vertical                                    | -51.96 | -40   | -11.96     | Pass    |
| 12407.440      | Vertical                                    | -48.61 | -40   | -8.61      | Pass    |

| GMSK 3450.2MHz |                                             |        |       |            |         |
|----------------|---------------------------------------------|--------|-------|------------|---------|
| Frequency      | Spurious Emission<br>Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz            | Polarization                                | dBm    | dBm   | dB         |         |
| 105.704        | Horizontal                                  | -63.94 | -40   | -23.94     | Pass    |
| 414.148        | Horizontal                                  | -57.87 | -40   | -17.87     | Pass    |
| 672.462        | Horizontal                                  | -58.80 | -40   | -18.8      | Pass    |
| 1405.020       | Horizontal                                  | -57.26 | -40   | -17.26     | Pass    |
| 5961.120       | Horizontal                                  | -51.92 | -40   | -11.92     | Pass    |
| 12757.930      | Horizontal                                  | -48.64 | -40   | -8.64      | Pass    |
| 96.520         | Vertical                                    | -68.52 | -40   | -28.52     | Pass    |
| 233.615        | Vertical                                    | -61.24 | -40   | -21.24     | Pass    |
| 754.509        | Vertical                                    | -59.31 | -40   | -19.31     | Pass    |
| 1370.960       | Vertical                                    | -58.26 | -40   | -18.26     | Pass    |
| 5961.540       | Vertical                                    | -50.76 | -40   | -10.76     | Pass    |
| 12782.140      | Vertical                                    | -46.51 | -40   | -6.51      | Pass    |

| GMSK 3500MHz |                                          |        |       |            |         |
|--------------|------------------------------------------|--------|-------|------------|---------|
| Frequency    | Spurious Emission Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz          | Polarization                             | dBm    | dBm   | dB         |         |
| 103.664      | Horizontal                               | -62.16 | -40   | -22.16     | Pass    |
| 398.098      | Horizontal                               | -60.13 | -40   | -20.13     | Pass    |
| 673.062      | Horizontal                               | -57.07 | -40   | -17.07     | Pass    |
| 1390.040     | Horizontal                               | -53.66 | -40   | -13.66     | Pass    |
| 5952.010     | Horizontal                               | -54.65 | -40   | -14.65     | Pass    |
| 12743.460    | Horizontal                               | -50.74 | -40   | -10.74     | Pass    |
| 79.750       | Vertical                                 | -69.07 | -40   | -29.07     | Pass    |
| 276.955      | Vertical                                 | -54.77 | -40   | -14.77     | Pass    |
| 753.889      | Vertical                                 | -58.68 | -40   | -18.68     | Pass    |
| 1400.750     | Vertical                                 | -58.67 | -40   | -18.67     | Pass    |
| 5956.950     | Vertical                                 | -49.14 | -40   | -9.14      | Pass    |
| 12777.550    | Vertical                                 | -47.35 | -40   | -7.35      | Pass    |

| GMSK 3549.8MHz |                                          |        |       |            |         |
|----------------|------------------------------------------|--------|-------|------------|---------|
| Frequency      | Spurious Emission Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz            | Polarization                             | dBm    | dBm   | dB         |         |
| 84.370         | Horizontal                               | -67.34 | -40   | -27.34     | Pass    |
| 262.475        | Horizontal                               | -56.50 | -40   | -16.50     | Pass    |
| 768.299        | Horizontal                               | -60.00 | -40   | -20.00     | Pass    |
| 1315.430       | Horizontal                               | -55.79 | -40   | -15.79     | Pass    |
| 5905.110       | Horizontal                               | -53.93 | -40   | -13.93     | Pass    |
| 12604.420      | Horizontal                               | -48.94 | -40   | -8.94      | Pass    |
| 119.544        | Vertical                                 | -66.09 | -40   | -26.09     | Pass    |
| 392.898        | Vertical                                 | -59.17 | -40   | -19.17     | Pass    |
| 699.892        | Vertical                                 | -59.67 | -40   | -19.67     | Pass    |
| 1626.290       | Vertical                                 | -52.23 | -40   | -12.23     | Pass    |
| 5538.960       | Vertical                                 | -55.14 | -40   | -15.14     | Pass    |
| 12359.990      | Vertical                                 | -47.02 | -40   | -7.02      | Pass    |

For 100MHz BW

| AWGN 3500MHz |                   |  |       |            |         |
|--------------|-------------------|--|-------|------------|---------|
| Frequency    | Spurious Emission |  | Limit | Over Limit | Verdict |

|           | Polarization and Level |        |     |        |      |
|-----------|------------------------|--------|-----|--------|------|
| MHz       | Polarization           | dBm    | dBm | dB     |      |
| 119.864   | Horizontal             | -66.11 | -40 | -26.11 | Pass |
| 370.828   | Horizontal             | -58.41 | -40 | -18.41 | Pass |
| 664.832   | Horizontal             | -57.93 | -40 | -17.93 | Pass |
| 1336.950  | Horizontal             | -50.22 | -40 | -10.22 | Pass |
| 5907.190  | Horizontal             | -49.30 | -40 | -9.3   | Pass |
| 12624.160 | Horizontal             | -48.10 | -40 | -8.1   | Pass |
| 63.150    | Vertical               | -65.24 | -40 | -25.24 | Pass |
| 274.775   | Vertical               | -55.47 | -40 | -15.47 | Pass |
| 759.509   | Vertical               | -52.48 | -40 | -12.48 | Pass |
| 1629.890  | Vertical               | -52.69 | -40 | -12.69 | Pass |
| 5542.880  | Vertical               | -50.59 | -40 | -10.59 | Pass |
| 12361.750 | Vertical               | -47.78 | -40 | -7.78  | Pass |

**Note:**

The above test results also meet the requirements of IC -30dBm /MHz, so it does not reflect the test data of -30dBm/MHz