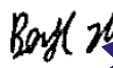
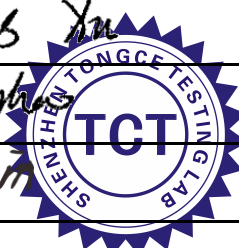


**TEST REPORT**

|                                        |                                                                                                                                                     |                                                                                       |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| FCC ID. .... :                         | RSN-UWBCBAND                                                                                                                                        |                                                                                       |
| Test Report No..... :                  | TCT240219E019                                                                                                                                       |                                                                                       |
| Date of issue..... :                   | Apr. 10, 2024                                                                                                                                       |                                                                                       |
| Testing laboratory .....               | SHENZHEN TONGCE TESTING LAB                                                                                                                         |                                                                                       |
| Testing location/ address:             | 2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China |                                                                                       |
| Applicant's name..... :                | Cellphone-Mate Inc. dba SureCall                                                                                                                    |                                                                                       |
| Address..... :                         | 48346 Milmont Drive, Fremont, California 94538, United States                                                                                       |                                                                                       |
| Manufacturer's name ... :              | Shenzhen Surecall Comm Tech Co Ltd                                                                                                                  |                                                                                       |
| Address..... :                         | 2nd Floor, Yutian Bldg Yangtian Rd. 72nd Zone Bao'an District, Shenzhen, 518100 China                                                               |                                                                                       |
| Standard(s) .....                      | FCC CFR Title 47 Part 20.21<br>FCC CFR Title 47 Part 27<br>FCC CFR Title 47 Part 2<br>KDB 935210 D05 Indus Booster Basic Meas v01r04                |                                                                                       |
| Product Name..... :                    | SureCall ULTRA WIDEBAND 5G C-BAND SIGNAL BOOSTER                                                                                                    |                                                                                       |
| Trade Mark .....                       | Surecall                                                                                                                                            |                                                                                       |
| Model/Type reference..... :            | SC-5G-CB                                                                                                                                            |                                                                                       |
| Rating(s)..... :                       | Adapter Information:<br>MODEL: KZI2802000<br>INPUT: AC 100-240V, 50/60Hz, 1.5A MAX<br>OUTPUT: DC 28.0V, 2.0A, 56.0W                                 |                                                                                       |
| Date of receipt of test item .....     | Feb. 19, 2024                                                                                                                                       |                                                                                       |
| Date (s) of performance of test..... : | Feb. 19, 2024 ~ Apr. 10, 2024                                                                                                                       |                                                                                       |
| Tested by (+signature) ... :           | Brews XU                                                                                                                                            |  |
| Check by (+signature).... :            | Beryl ZHAO                                                                                                                                          |  |
| Approved by (+signature):              | Tomsin                                                                                                                                              |  |

**General disclaimer:**

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## 1. General Product Information

### 1.1. EUT description

|                            |                                                                                                                                       |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Product Name.....:         | SureCall ULTRA WIDEBAND 5G C-BAND SIGNAL BOOSTER                                                                                      |
| Model/Type reference.....: | SC-5G-CB                                                                                                                              |
| Sample Number.....:        | TCT240219E019-0101                                                                                                                    |
| Operation Frequency .....  | Full Band Mode:<br>UL: 3700MHz – 3980MHz<br>DL: 3700MHz – 3980MHz<br>Sub-Band Mode:<br>UL: 3700MHz – 3840MHz<br>DL: 3700MHz – 3840MHz |
| Signal Booster Type.....:  | Industrial Signal Booster                                                                                                             |
| Emission Designator .....  | G7D, W7D                                                                                                                              |
| FCC Classification .....   | B2I-Part 20 Industrial Booster (CMRS)                                                                                                 |
| Antenna Gain.....:         | Outdoor: 20dBi<br>Indoor: 12dBi                                                                                                       |
| Cable Loss .....           | Outdoor: 10dB<br>Indoor: 10dB                                                                                                         |
| Rating(s).....:            | Adapter Information:<br>MODEL: KZI2802000<br>INPUT: AC 100-240V, 50/60Hz, 1.5A MAX<br>OUTPUT: DC 28.0V, 2.0A, 56.0W                   |

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

### 1.2. Model(s) list

None.

## 2. Test Result Summary

| Requirement                                     | CFR 47 Section                                 | Result |
|-------------------------------------------------|------------------------------------------------|--------|
| AGC threshold level                             | KDB 935210 D05 v01r04<br>Section 3.2           | PASS   |
| Out-of-band rejection                           | KDB 935210 D05 v01r04<br>Section 3.3           | PASS   |
| Input-versus-output signal<br>comparison        | KDB 935210 D05 v01r04<br>Section 3.4 & §2.1049 | PASS   |
| Mean output power and<br>amplifier/booster gain | §2.1046 & §27.50 (j)                           | PASS   |
| Out-of-band/Out-of-block<br>emissions           | §2.1051 & §27.53 (l)                           | PASS   |
| Conducted Spurious<br>Emission                  | §2.1051 & §27.53 (l)                           | PASS   |
| Frequency stability                             | §2.1055 & §27.54                               | PASS   |
| Radiated Spurious Emission                      | §2.1053 & §27.53 (l)                           | PASS   |

**Note:**

1. PASS: Test item meets the requirement.
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.

### 3. General Information

#### 3.1. Test environment

| Operating Environment: |           |
|------------------------|-----------|
| Temperature:           | 25.0 °C   |
| Humidity:              | 56 % RH   |
| Atmospheric Pressure:  | 1010 mbar |

#### 3.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Equipment | Model No. | Serial No. | FCC ID | Trade Name |
|-----------|-----------|------------|--------|------------|
| /         | /         | /          | /      | /          |

#### 3.3. Signal used in test

| Signal type | Bandwidth (MHz) | Modulation |
|-------------|-----------------|------------|
| 5G NR       | 20              | QPSK       |
| 5G NR       | 40              | QPSK       |
| 5G NR       | 60              | QPSK       |
| 5G NR       | 80              | QPSK       |
| 5G NR       | 100             | QPSK       |

## 4. Facilities and Accreditations

### 4.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

### 4.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

### 4.3. Measurement Uncertainty

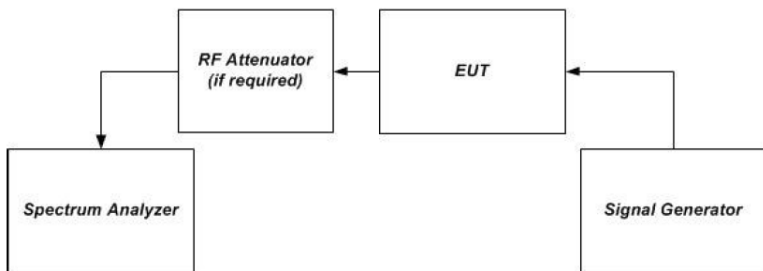
The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %.

| No. | Item                                    | MU            |
|-----|-----------------------------------------|---------------|
| 1   | Conducted Emission                      | $\pm 3.10$ dB |
| 2   | RF power, conducted                     | $\pm 0.12$ dB |
| 3   | Spurious emissions, conducted           | $\pm 0.11$ dB |
| 4   | All emissions, radiated(<1 GHz)         | $\pm 4.56$ dB |
| 5   | All emissions, radiated(1 GHz - 18 GHz) | $\pm 4.22$ dB |
| 6   | All emissions, radiated(18 GHz- 40 GHz) | $\pm 4.36$ dB |

## 5. Test Results and Measurement Data

### 5.1. AGC Threshold Level

#### 5.1.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | KDB 935210 D05 v01r04 Section 3.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Test Method:</b>      | KDB 935210 D05 Indus Booster Basic Meas v01r04                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Test Setup:</b>       |  <pre> graph LR     SG[Signal Generator] --&gt; EUT[EUT]     EUT --&gt; RA[RF Attenuator (if required)]     RA --&gt; SA[Spectrum Analyzer] </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Test Procedure:</b>   | <p>a) Connect a signal generator to the input of the EUT.</p> <p>b) Connect a spectrum analyzer or power meter to the output of the EUT using appropriate attenuation as necessary.</p> <p>c) The signal generator should initially be configured to produce either of the required test signals (i.e., broadband or narrowband).</p> <p>d) Set the signal generator frequency to the center frequency of the EUT operating band.</p> <p>e) While monitoring the output power of the EUT, measured using the methods of 3.5.3 or 3.5.4, increase the input level until a 1 dB increase in the input signal power no longer causes a 1 dB increase in the output signal power.</p> <p>f) Record this level as the AGC threshold level.</p> <p>g) Repeat the procedure with the remaining test signal.</p> |
| <b>Test Result:</b>      | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

#### 5.1.2. Test Instruments

| Equipment         | Manufacturer | Model  | Serial Number | Calibration Date | Calibration Due |
|-------------------|--------------|--------|---------------|------------------|-----------------|
| Signal Generator  | Agilent      | N5182B | MY53052214    | Jun. 29, 2023    | Jun. 28, 2024   |
| Spectrum Analyzer | Agilent      | N9020A | MY49100619    | Jun. 29, 2023    | Jun. 28, 2024   |
| Attenuator        | 50FP-006-H3  | JFW    | 907763        | /                | /               |

## 5.1.3. Test data

### Path1(Donor1↔Server1)

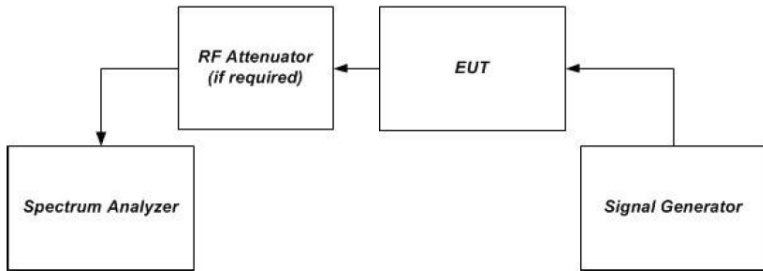
| Mode           | Link     | Signal Type   | Center Frequency (MHz) | AGC Threshold Level (dBm) |
|----------------|----------|---------------|------------------------|---------------------------|
| Full Band Mode | Uplink   | 5G NR 20 MHz  | 3840.00                | -49.0                     |
|                |          | 5G NR 40 MHz  | 3840.00                | -49.0                     |
|                |          | 5G NR 60 MHz  | 3840.00                | -49.0                     |
|                |          | 5G NR 80 MHz  | 3840.00                | -49.0                     |
|                |          | 5G NR 100 MHz | 3840.00                | -49.0                     |
|                | Downlink | 5G NR 20 MHz  | 3840.00                | -49.5                     |
|                |          | 5G NR 40 MHz  | 3840.00                | -49.5                     |
|                |          | 5G NR 60 MHz  | 3840.00                | -49.5                     |
|                |          | 5G NR 80 MHz  | 3840.00                | -48.0                     |
|                |          | 5G NR 100 MHz | 3840.00                | -48.0                     |
| Sub-Band Mode  | Uplink   | 5G NR 20 MHz  | 3770.00                | -47.0                     |
|                |          | 5G NR 40 MHz  | 3770.00                | -47.0                     |
|                |          | 5G NR 60 MHz  | 3770.00                | -47.5                     |
|                |          | 5G NR 80 MHz  | 3770.00                | -47.5                     |
|                |          | 5G NR 100 MHz | 3770.00                | -47.5                     |
|                | Downlink | 5G NR 20 MHz  | 3770.00                | -46.5                     |
|                |          | 5G NR 40 MHz  | 3770.00                | -46.5                     |
|                |          | 5G NR 60 MHz  | 3770.00                | -46.5                     |
|                |          | 5G NR 80 MHz  | 3770.00                | -46.5                     |
|                |          | 5G NR 100 MHz | 3770.00                | -46.5                     |

### Path2(Donor2↔Server2)

| Mode           | Link     | Signal Type   | Center Frequency (MHz) | AGC Threshold Level (dBm) |
|----------------|----------|---------------|------------------------|---------------------------|
| Full Band Mode | Uplink   | 5G NR 20 MHz  | 3840.00                | -47.0                     |
|                |          | 5G NR 40 MHz  | 3840.00                | -47.0                     |
|                |          | 5G NR 60 MHz  | 3840.00                | -47.5                     |
|                |          | 5G NR 80 MHz  | 3840.00                | -47.5                     |
|                |          | 5G NR 100 MHz | 3840.00                | -48.0                     |
|                | Downlink | 5G NR 20 MHz  | 3840.00                | -49.5                     |
|                |          | 5G NR 40 MHz  | 3840.00                | -49.5                     |
|                |          | 5G NR 60 MHz  | 3840.00                | -49.5                     |
|                |          | 5G NR 80 MHz  | 3840.00                | -50.0                     |
|                |          | 5G NR 100 MHz | 3840.00                | -50.0                     |
| Sub-Band Mode  | Uplink   | 5G NR 20 MHz  | 3770.00                | -45.5                     |
|                |          | 5G NR 40 MHz  | 3770.00                | -46.0                     |
|                |          | 5G NR 60 MHz  | 3770.00                | -46.0                     |
|                |          | 5G NR 80 MHz  | 3770.00                | -46.0                     |
|                |          | 5G NR 100 MHz | 3770.00                | -45.5                     |
|                | Downlink | 5G NR 20 MHz  | 3770.00                | -48.0                     |
|                |          | 5G NR 40 MHz  | 3770.00                | -48.0                     |
|                |          | 5G NR 60 MHz  | 3770.00                | -47.5                     |
|                |          | 5G NR 80 MHz  | 3770.00                | -47.5                     |
|                |          | 5G NR 100 MHz | 3770.00                | -47.5                     |

## 5.2. Out-of-band rejection

### 5.2.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | KDB 935210 D05 v01r04 Section 3.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Test Method:</b>      | KDB 935210 D05 Indus Booster Basic Meas v01r04                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Test Setup:</b>       |  <pre> graph LR     SG[Signal Generator] --&gt; EUT[EUT]     EUT --&gt; RA[RF Attenuator (if required)]     RA --&gt; SA[Spectrum Analyzer] </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Test Procedure:</b>   | <p>a) Connect a signal generator to the input of the EUT.</p> <p>b) Configure a swept CW signal with the following parameters:</p> <ol style="list-style-type: none"> <li>1) Frequency range = <math>\pm 250\%</math> of the passband, for each applicable CMRS band (see also KDB Publication 935210 D02 [R7] and KDB Publication 634817 [R5] about selection of frequencies for testing and for grant listings).</li> <li>2) Level = a sufficient level to affirm that the out-of-band rejection is <math>&gt; 20</math> dB above the noise floor and will not engage the AGC during the entire sweep.</li> <li>3) Dwell time = approximately 10 ms.</li> <li>4) Number of points = <math>\text{SPAN}/(\text{RBW}/2)</math>.</li> </ol> <p>c) Connect a spectrum analyzer to the output of the EUT using appropriate attenuation.</p> <p>d) Set the span of the spectrum analyzer to the same as the frequency range of the signal generator.</p> <p>e) Set the resolution bandwidth (RBW) of the spectrum analyzer to be 1 % to 5 % of the EUT passband, and the video bandwidth (VBW) shall be set to <math>\geq 3 \times \text{RBW}</math>.</p> <p>f) Set the detector to Peak Max-Hold and wait for the spectrum analyzer's spectral display to fill.</p> <p>g) Place a marker to the peak of the frequency response and record this frequency as <math>f_0</math>.</p> |
| <b>Test Result:</b>      | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

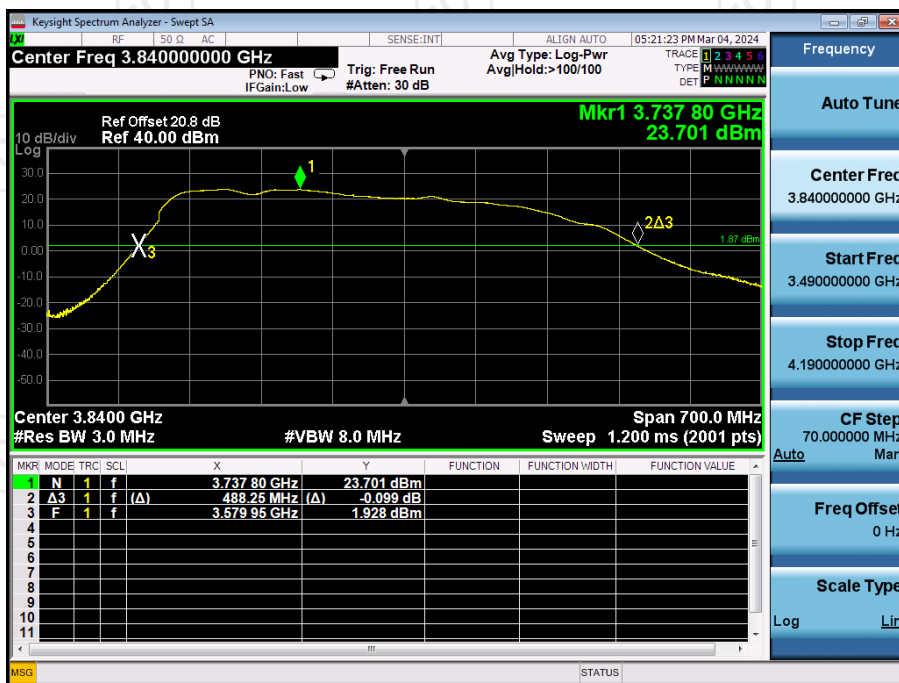
### 5.2.2. Test Instruments

| Equipment         | Manufacturer | Model  | Serial Number | Calibration Date | Calibration Due |
|-------------------|--------------|--------|---------------|------------------|-----------------|
| Signal Generator  | Agilent      | N5182B | MY53052214    | Jun. 29, 2023    | Jun. 28, 2024   |
| Spectrum Analyzer | Agilent      | N9020A | MY49100619    | Jun. 29, 2023    | Jun. 28, 2024   |
| Attenuator        | 50FP-006-H3  | JFW    | 907763        | /                | /               |

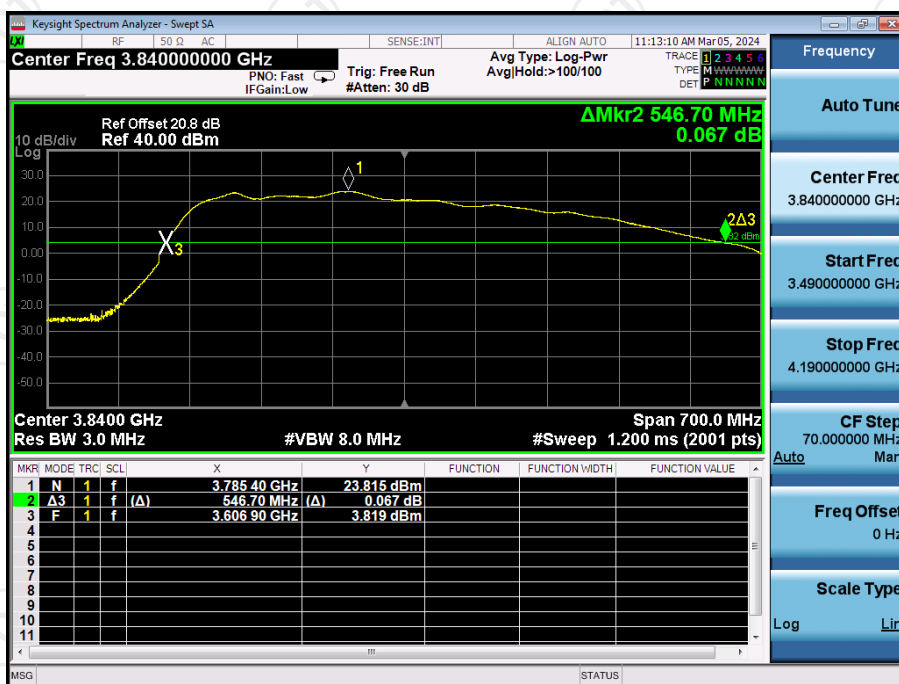
## 5.2.3. Test data

### Path 1

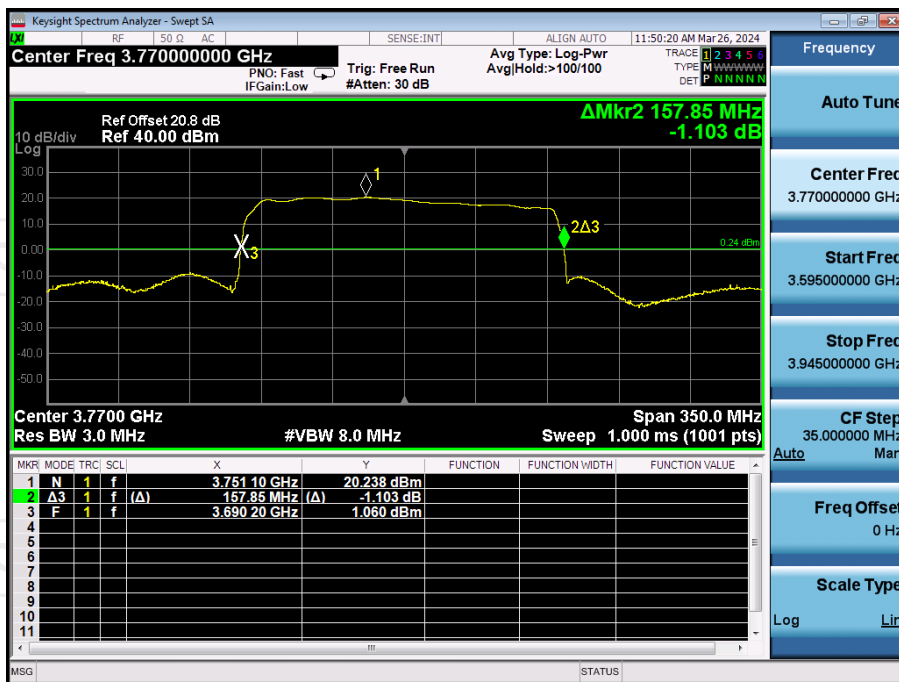
#### Full-Band Mode Uplink



#### Full-Band Mode Downlink



## Sub-Band Mode Uplink



## Sub-Band Mode Downlink



## Path 2

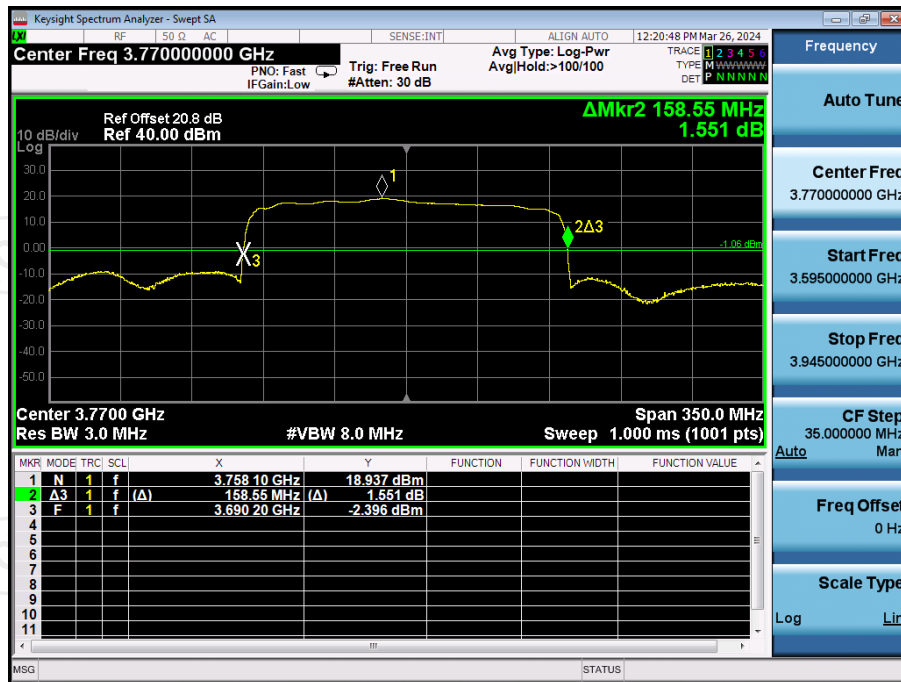
### Full-Band Mode Uplink



### Full-Band Mode Downlink



## Sub-Band Mode Uplink

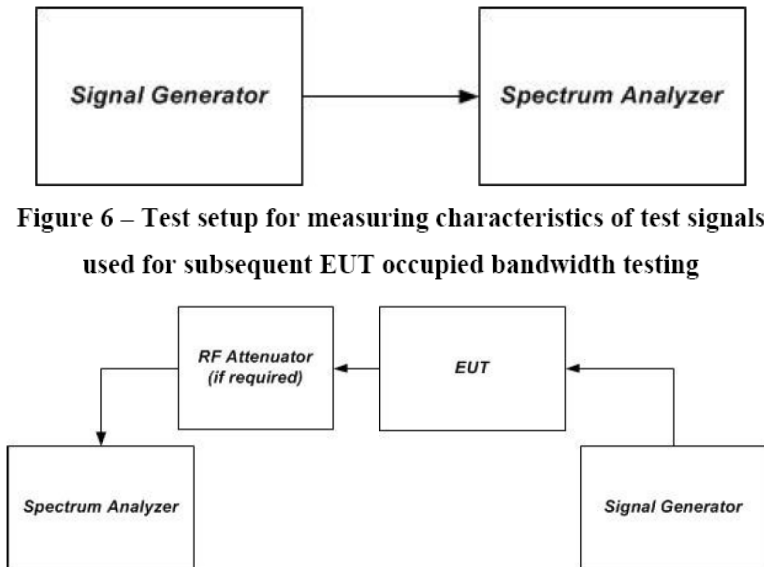


## Sub-Band Mode Downlink



### 5.3. Input-versus-output signal comparison

#### 5.3.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | FCC Part2 Section 2.1049                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Test Method:</b>      | KDB 935210 D05 Indus Booster Basic Meas v01r04                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Limit:</b>            | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Test setup:</b>       |  <p>Figure 6 – Test setup for measuring characteristics of test signals used for subsequent EUT occupied bandwidth testing</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Test Procedure:</b>   | <p>a) Connect a signal generator to the input of the EUT.</p> <p>b) Configure the signal generator to transmit the signal specified in section 3.3 of this report.</p> <p>c) Configure the signal amplitude to be just below the AGC threshold level (see 3.2), but not more than 0.5 dB below.</p> <p>d) Connect a spectrum analyzer to the output of the EUT using appropriate attenuation.</p> <p>e) Set the spectrum analyzer center frequency to the center frequency of the operational band under test. The span range of the spectrum analyzer shall be between <math>2 \times</math> to <math>5 \times</math> the emission bandwidth (EBW) or alternatively, the OBW.</p> <p>f) The nominal RBW shall be in the range of 1 % to 5 % of the anticipated OBW, and the VBW shall be <math>\geq 3 \times</math> RBW.</p> <p>g) Set the reference level of the instrument as required to preclude the signal from exceeding the maximum spectrum analyzer input mixer level for linear operation. In general, the peak of the spectral envelope must be more than <math>[10 \log (OBW / RBW)]</math> below the reference level. Steps f) and g) may require iteration to enable adjustments within the specified tolerances.</p> <p>h) The noise floor of the spectrum analyzer at the selected RBW shall be at least 36 dB below the</p> |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      | <p>reference level.</p> <p>i) Set spectrum analyzer detection function to positive peak.</p> <p>j) Set the trace mode to max hold.</p> <p>k) Determine the reference value: Allow the trace to stabilize. Set the spectrum analyzer marker to the highest amplitude level of the displayed trace (this is the reference value) and record the associated frequency.</p> <p>l) Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the -26 dB down amplitude. The 26 dB EBW (alternatively OBW) is the positive frequency difference between the two markers. If the spectral envelope crosses the -26 dB down amplitude at multiple points, the lowest or highest frequency shall be selected as the frequencies that are the furthest removed from the center frequency at which the spectral envelope crosses the -26 dB down amplitude point.</p> <p>m) Repeat steps e) to l) with the input signal connected directly to the spectrum analyzer (i.e., input signal measurement).</p> <p>n) Compare the spectral plot of the input signal (determined from step m) to the output signal (determined from step l) to affirm that they are similar (in passband and rolloff characteristic features and relative spectral locations), and include plot(s) and descriptions in test report.</p> <p>o) Repeat the procedure [steps e) to n)] with the input signal amplitude set to 3 dB above the AGC threshold.</p> <p>p) Repeat steps e) to o) with the signal generator set to the narrowband signal.</p> <p>q) Repeat steps e) to p) for all frequency bands authorized for use by the EUT.</p> |
| <b>Test results:</b> | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

### 5.3.2. Test Instruments

| Equipment         | Manufacturer | Model  | Serial Number | Calibration Date | Calibration Due |
|-------------------|--------------|--------|---------------|------------------|-----------------|
| Signal Generator  | Agilent      | N5182B | MY53052214    | Jun. 29, 2023    | Jun. 28, 2024   |
| Spectrum Analyzer | Agilent      | N9020A | MY49100619    | Jun. 29, 2023    | Jun. 28, 2024   |

### 5.3.3. Test Data

#### Path 1

| Operation Band              |          | Signal Type  | Input 99%OBW [MHz] | Output 99%OBW [MHz] |         |
|-----------------------------|----------|--------------|--------------------|---------------------|---------|
|                             |          |              |                    | Pre AGC             | AGC+3dB |
| Full-Band (3700MHz-3980MHz) | Uplink   | 5G NR 20MHz  | 18.004             | 17.955              | 17.969  |
|                             |          | 5G NR 40MHz  | 36.018             | 35.900              | 35.905  |
|                             |          | 5G NR 60MHz  | 58.031             | 58.141              | 58.131  |
|                             |          | 5G NR 80MHz  | 77.553             | 77.205              | 77.382  |
|                             |          | 5G NR 100MHz | 96.876             | 96.318              | 96.714  |
|                             | Downlink | 5G NR 20MHz  | 18.054             | 17.922              | 17.927  |
|                             |          | 5G NR 40MHz  | 35.972             | 35.884              | 35.894  |
|                             |          | 5G NR 60MHz  | 58.141             | 58.094              | 57.950  |
|                             |          | 5G NR 80MHz  | 77.490             | 77.433              | 77.461  |
|                             |          | 5G NR 100MHz | 96.998             | 96.565              | 96.619  |
| Sub-Band (3700MHz-3840MHz)  | Uplink   | 5G NR 20MHz  | 18.032             | 17.992              | 18.095  |
|                             |          | 5G NR 40MHz  | 36.076             | 35.979              | 36.076  |
|                             |          | 5G NR 60MHz  | 58.107             | 57.962              | 58.214  |
|                             |          | 5G NR 80MHz  | 77.571             | 77.445              | 77.766  |
|                             |          | 5G NR 100MHz | 96.930             | 96.790              | 96.782  |
|                             | Downlink | 5G NR 20MHz  | 18.044             | 17.991              | 17.956  |
|                             |          | 5G NR 40MHz  | 36.121             | 35.824              | 35.819  |
|                             |          | 5G NR 60MHz  | 58.194             | 57.629              | 57.764  |
|                             |          | 5G NR 80MHz  | 77.512             | 77.149              | 77.110  |
|                             |          | 5G NR 100MHz | 96.800             | 96.122              | 96.289  |

## Path 2

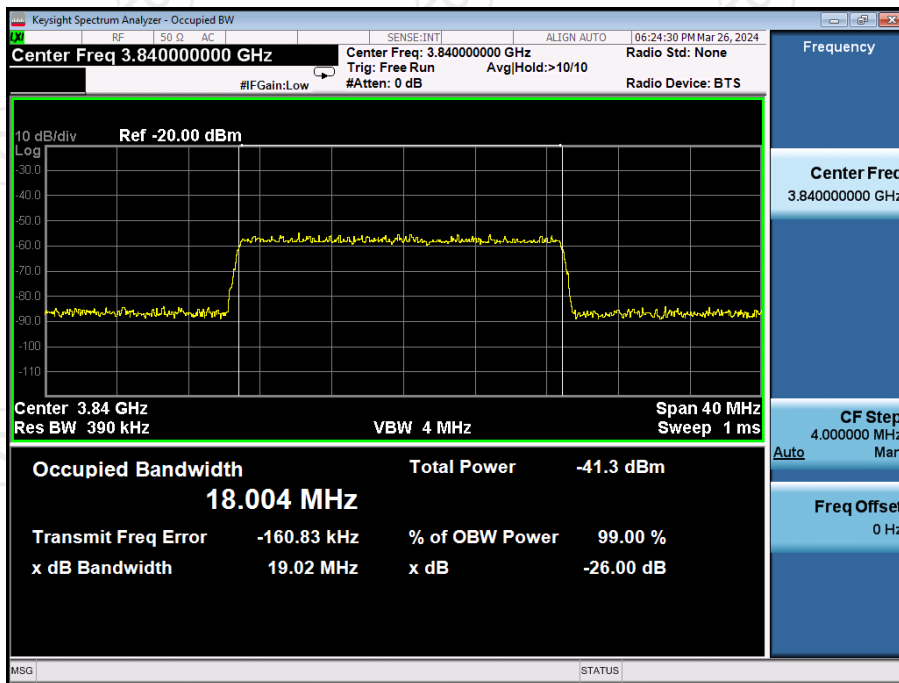
| Operation Band              |          | Signal Type  | Input 99%OBW [MHz] | Output 99%OBW [MHz] |         |
|-----------------------------|----------|--------------|--------------------|---------------------|---------|
|                             |          |              |                    | Pre AGC             | AGC+3dB |
| Full-Band (3700MHz-3980MHz) | Uplink   | 5G NR 20MHz  | 18.004             | 17.933              | 17.998  |
|                             |          | 5G NR 40MHz  | 36.018             | 35.855              | 35.935  |
|                             |          | 5G NR 60MHz  | 58.031             | 58.048              | 58.236  |
|                             |          | 5G NR 80MHz  | 77.553             | 77.536              | 77.551  |
|                             |          | 5G NR 100MHz | 96.876             | 96.853              | 96.846  |
|                             | Downlink | 5G NR 20MHz  | 18.054             | 17.960              | 17.936  |
|                             |          | 5G NR 40MHz  | 35.972             | 35.867              | 35.863  |
|                             |          | 5G NR 60MHz  | 58.141             | 57.927              | 57.923  |
|                             |          | 5G NR 80MHz  | 77.490             | 77.155              | 77.211  |
|                             |          | 5G NR 100MHz | 96.998             | 96.545              | 96.606  |
| Sub-Band (3700MHz-3840MHz)  | Uplink   | 5G NR 20MHz  | 18.032             | 17.982              | 18.107  |
|                             |          | 5G NR 40MHz  | 36.076             | 35.844              | 36.005  |
|                             |          | 5G NR 60MHz  | 58.107             | 57.799              | 58.361  |
|                             |          | 5G NR 80MHz  | 77.571             | 77.337              | 77.659  |
|                             |          | 5G NR 100MHz | 96.930             | 96.425              | 96.585  |
|                             | Downlink | 5G NR 20MHz  | 18.044             | 17.946              | 17.988  |
|                             |          | 5G NR 40MHz  | 36.121             | 35.818              | 35.732  |
|                             |          | 5G NR 60MHz  | 58.194             | 57.823              | 57.850  |
|                             |          | 5G NR 80MHz  | 77.512             | 77.067              | 77.117  |
|                             |          | 5G NR 100MHz | 96.800             | 96.501              | 96.595  |

## Test Plots

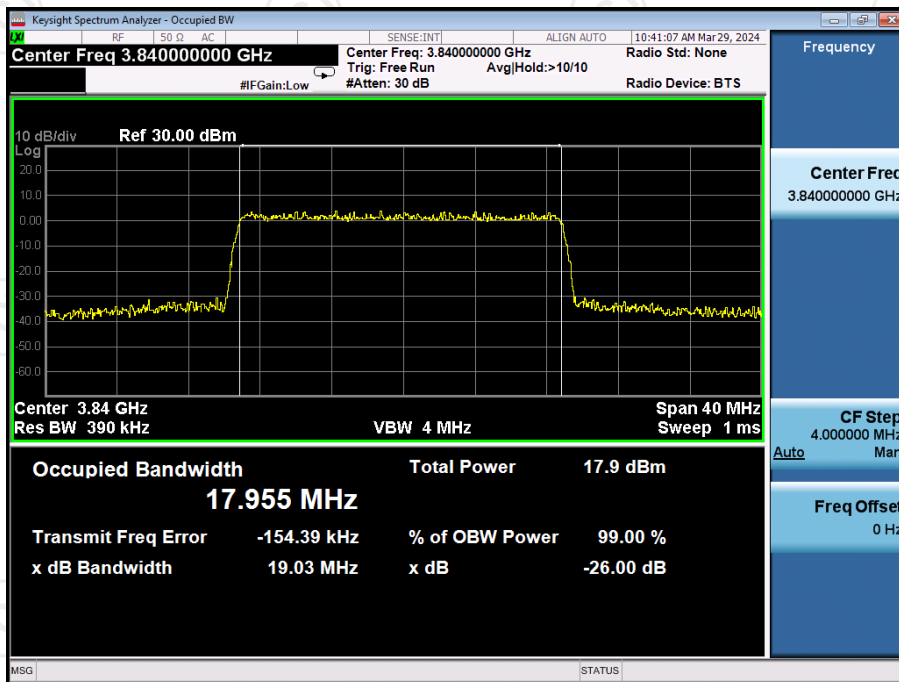
### Path 1

Full-Band Mode

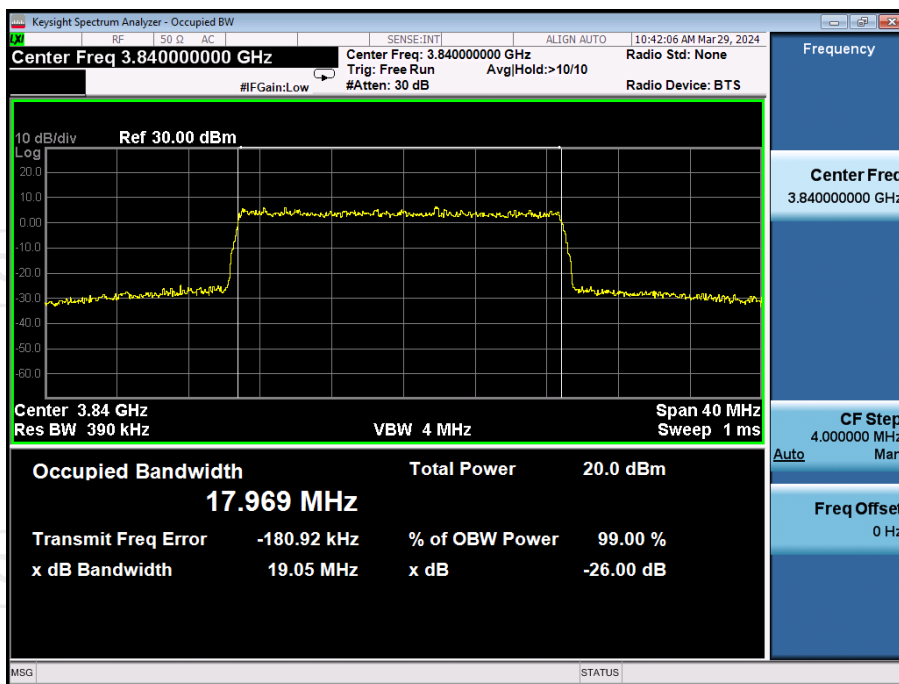
Input 5G NR 20MHz UL



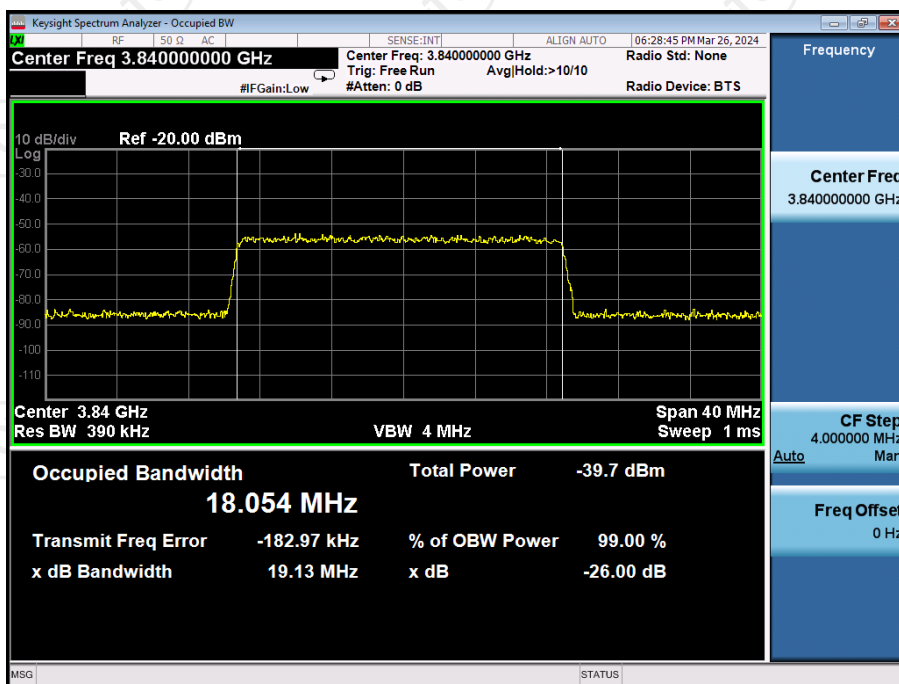
Output 5G NR 20MHz UL @Pre AGC



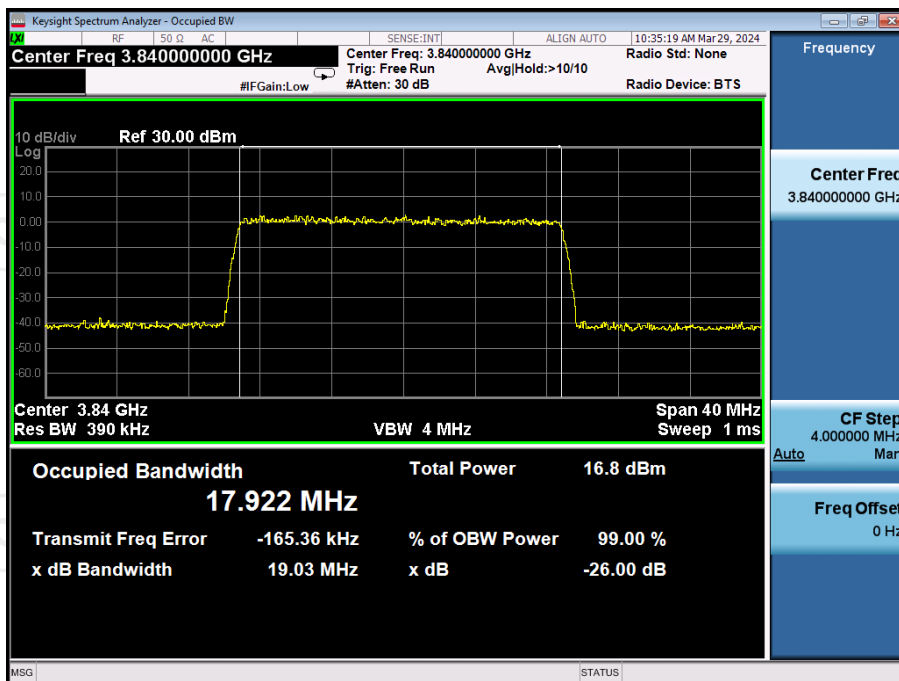
## Output 5G NR 20MHz UL @AGC + 3dB



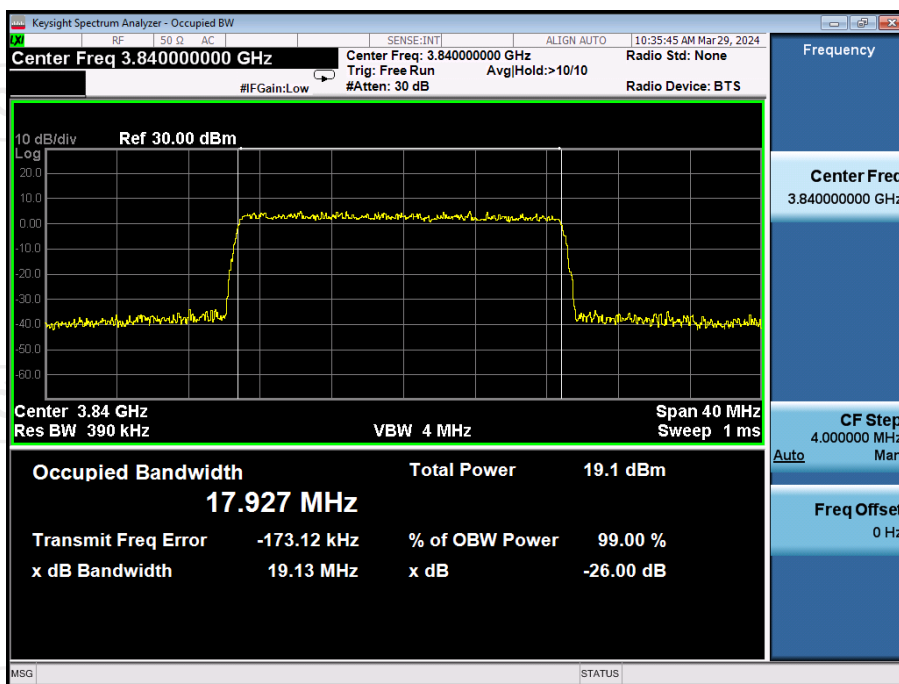
## Input 5G NR 20MHz DL



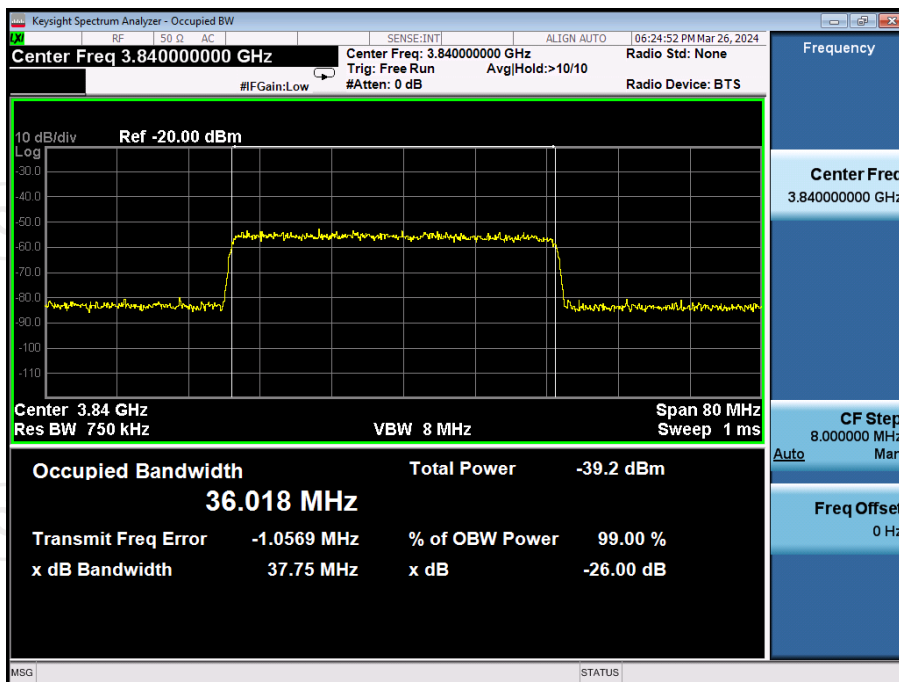
## Output 5G NR 20MHz DL @Pre AGC



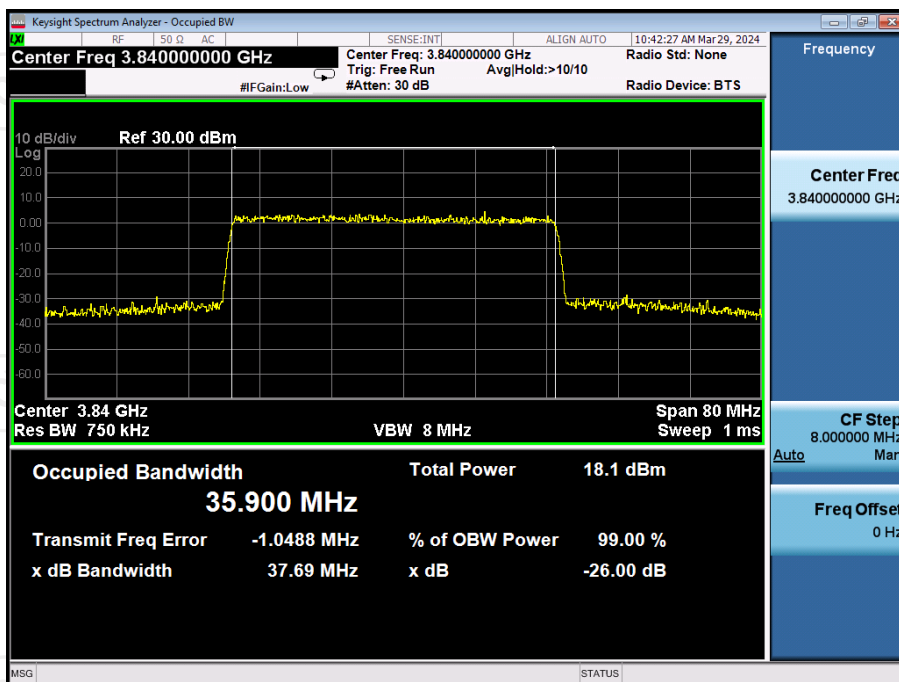
## Output 5G NR 20MHz DL @AGC + 3dB



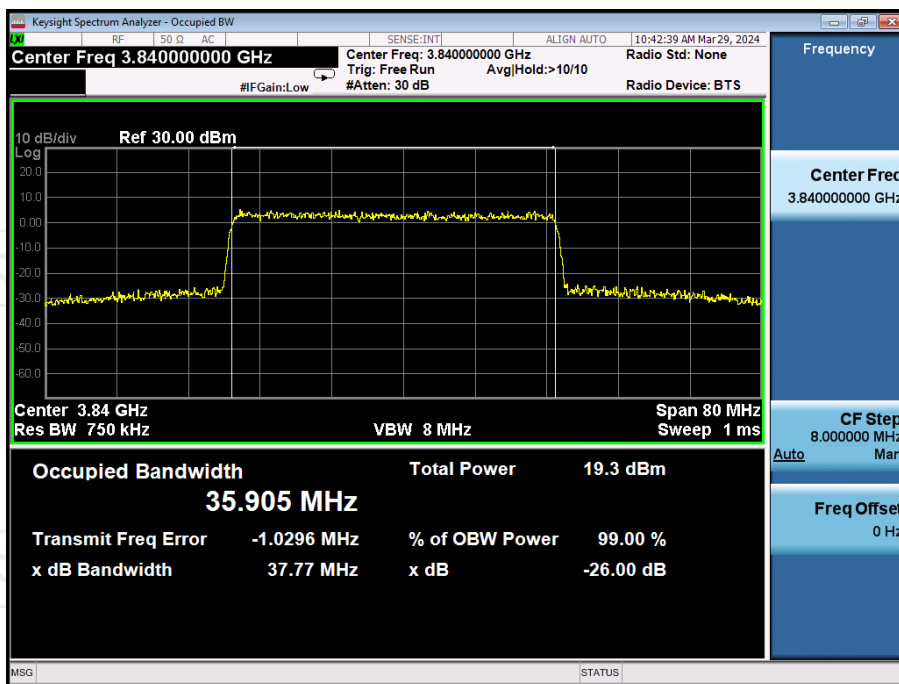
## Input 5G NR 40MHz UL



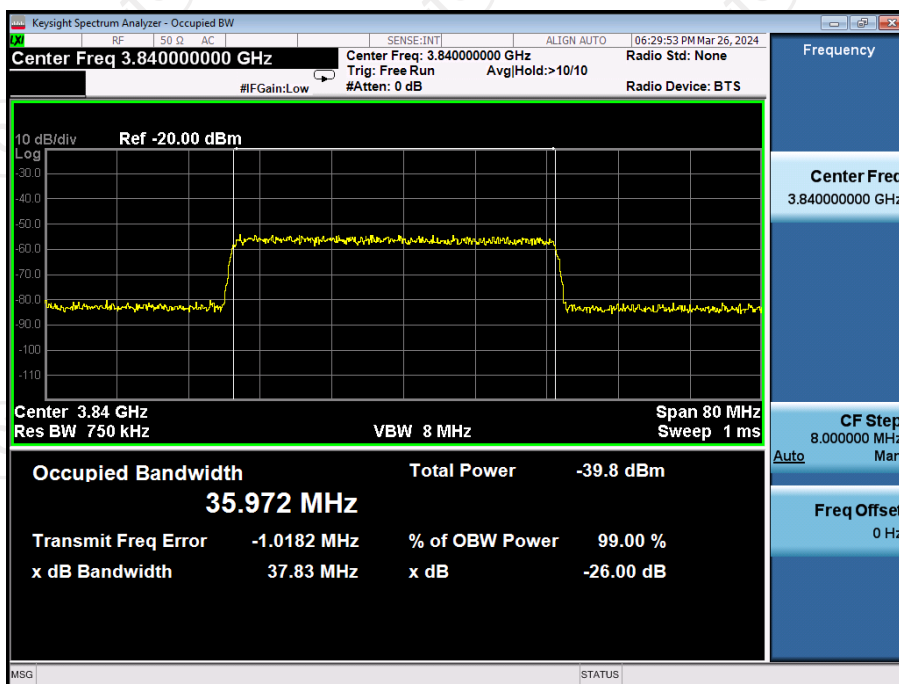
## Output 5G NR 40MHz UL @Pre AGC



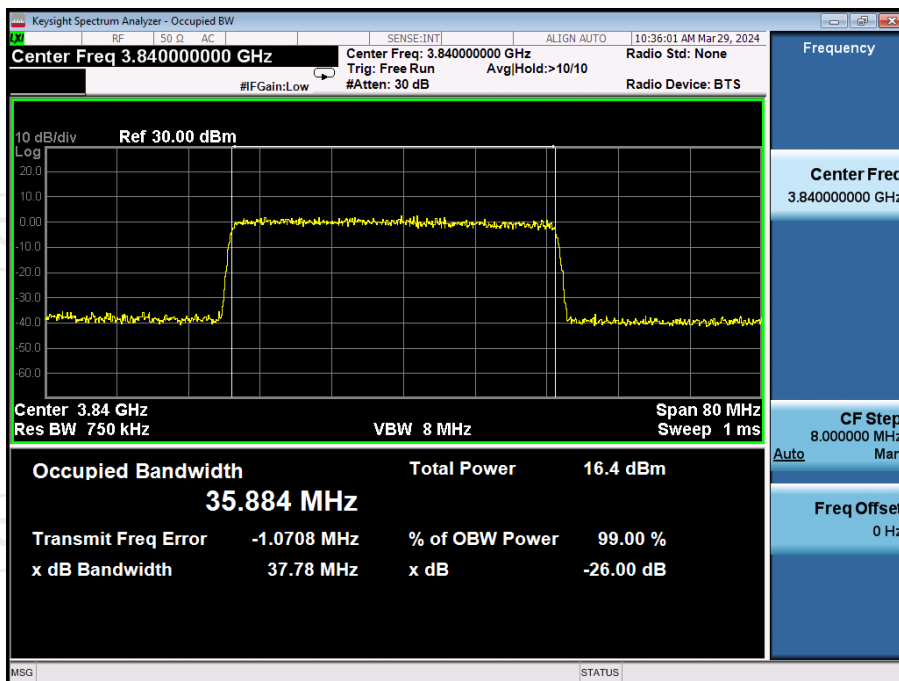
## Output 5G NR 40MHz UL @AGC + 3dB



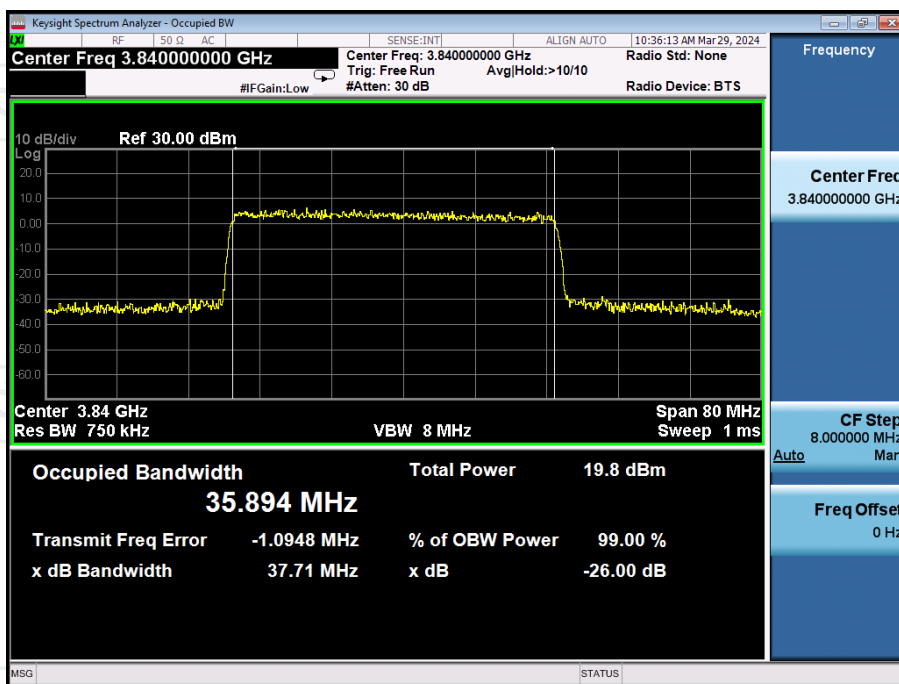
## Input 5G NR 40MHz DL



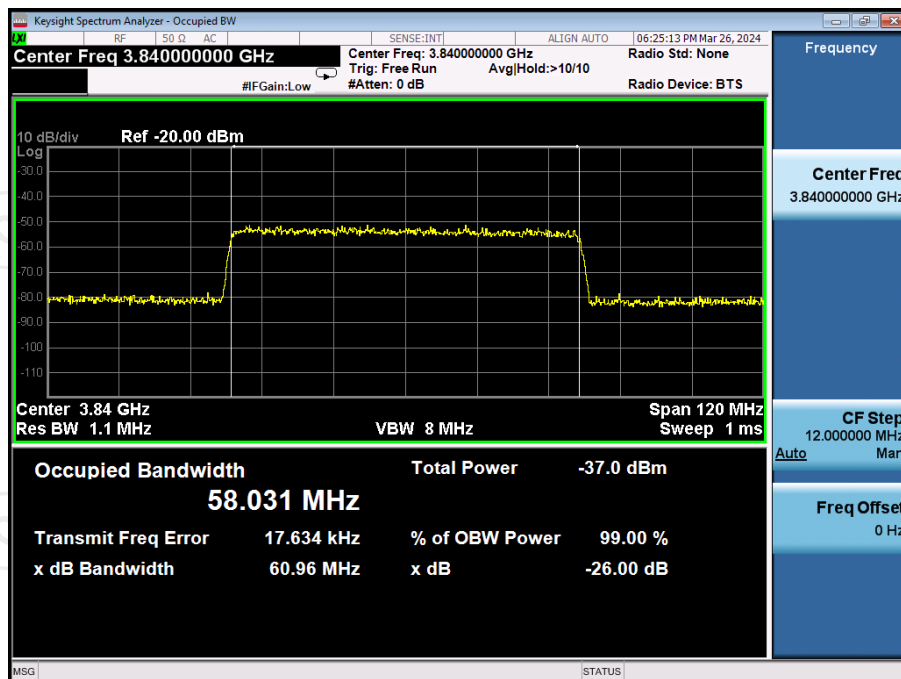
## Output 5G NR 40MHz DL @Pre AGC



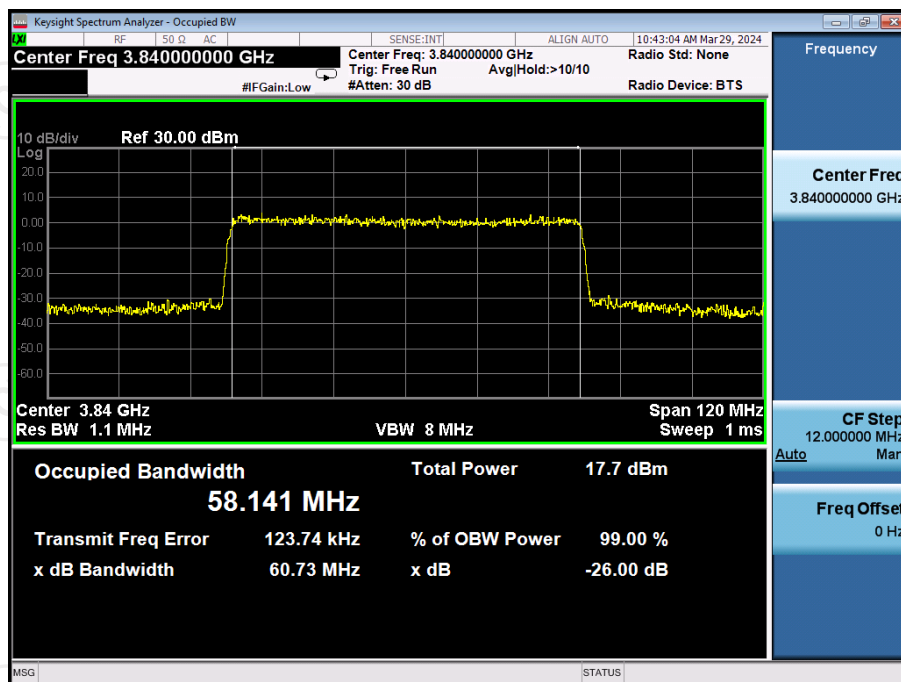
## Output 5G NR 40MHz DL @AGC + 3dB



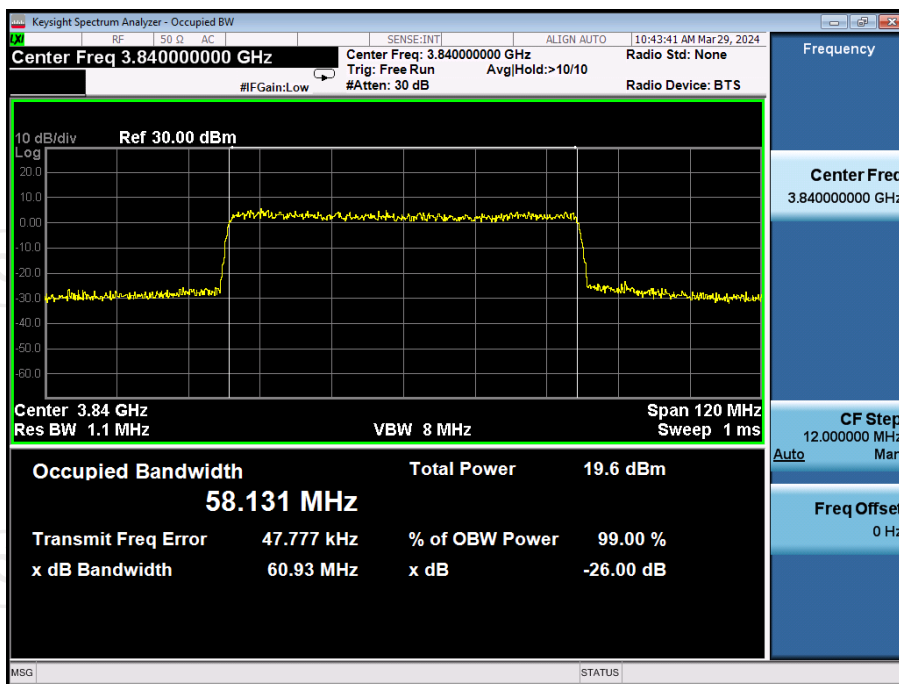
## Input 5G NR 60MHz UL



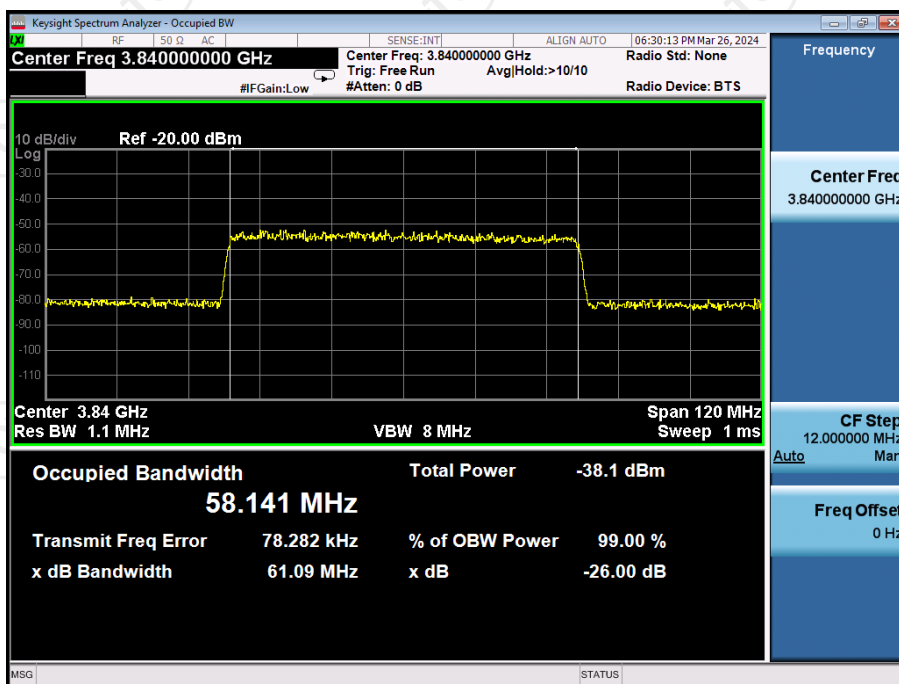
## Output 5G NR 60MHz UL @Pre AGC



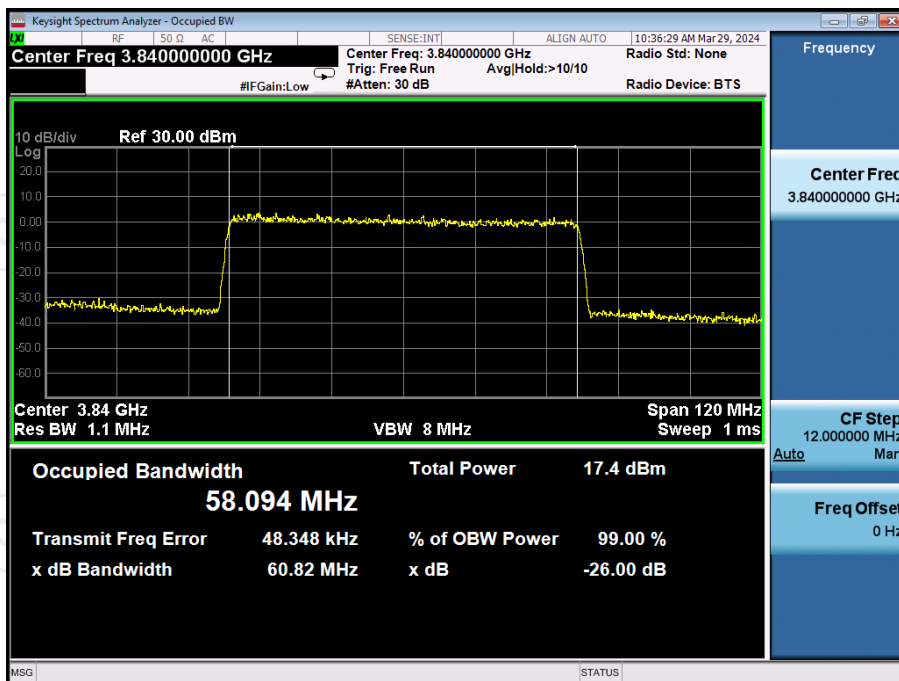
## Output 5G NR 60MHz UL @AGC + 3dB



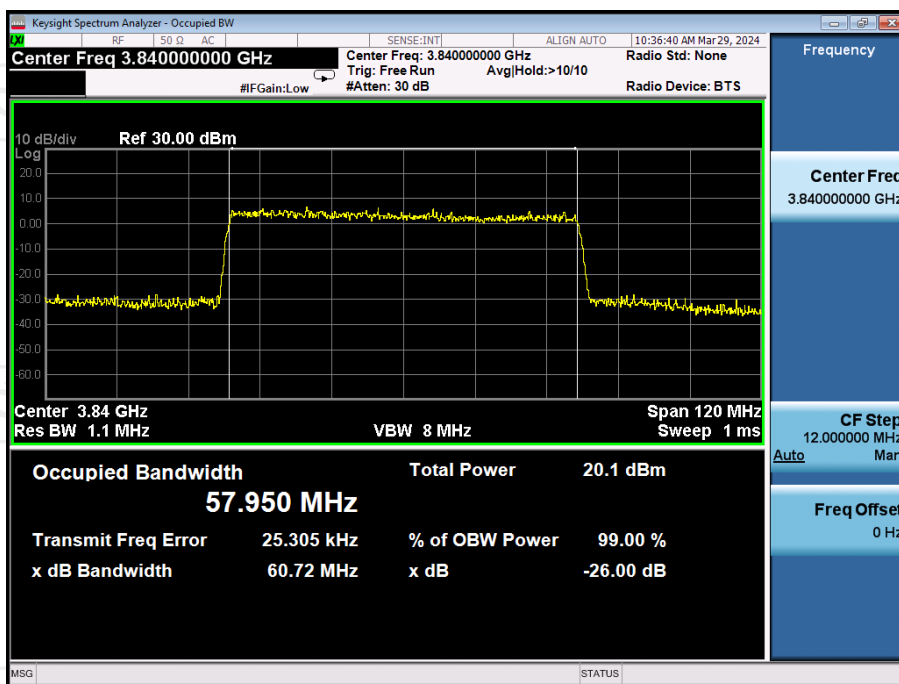
## Input 5G NR 60MHz DL



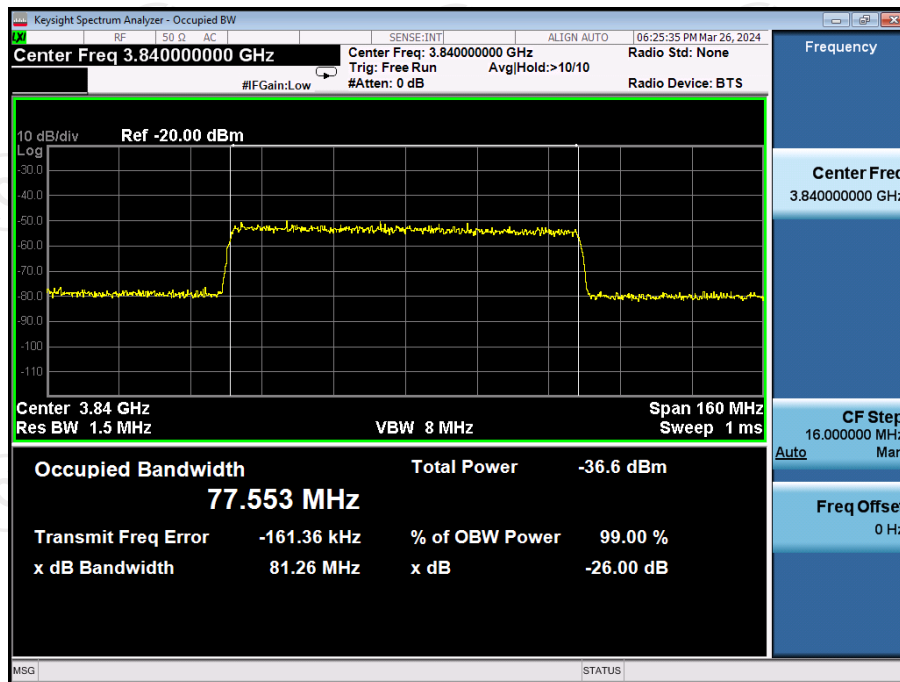
## Output 5G NR 60MHz DL @Pre AGC



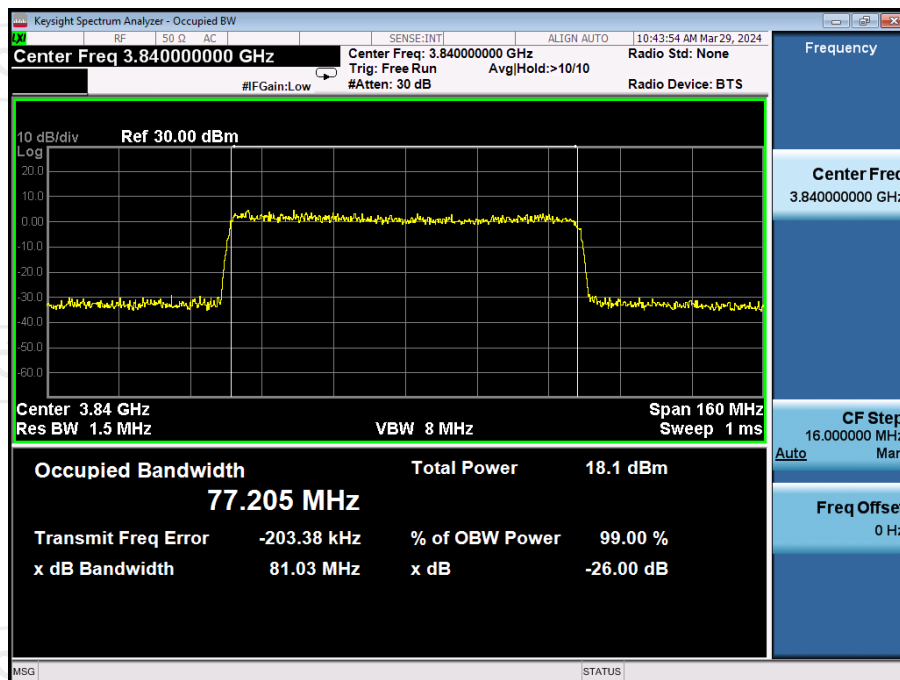
## Output 5G NR 60MHz DL @AGC + 3dB



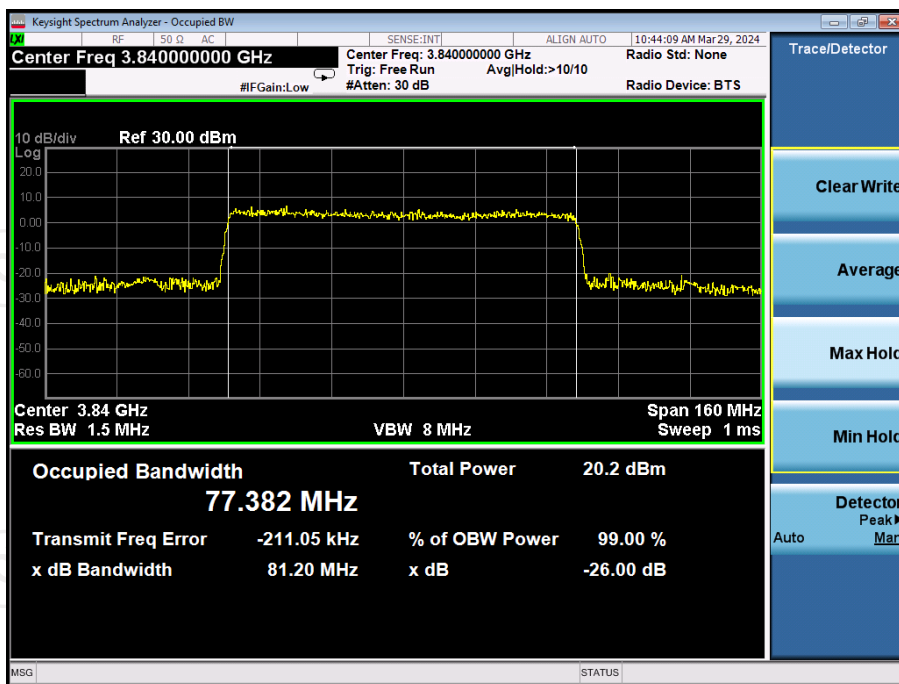
## Input 5G NR 80MHz UL



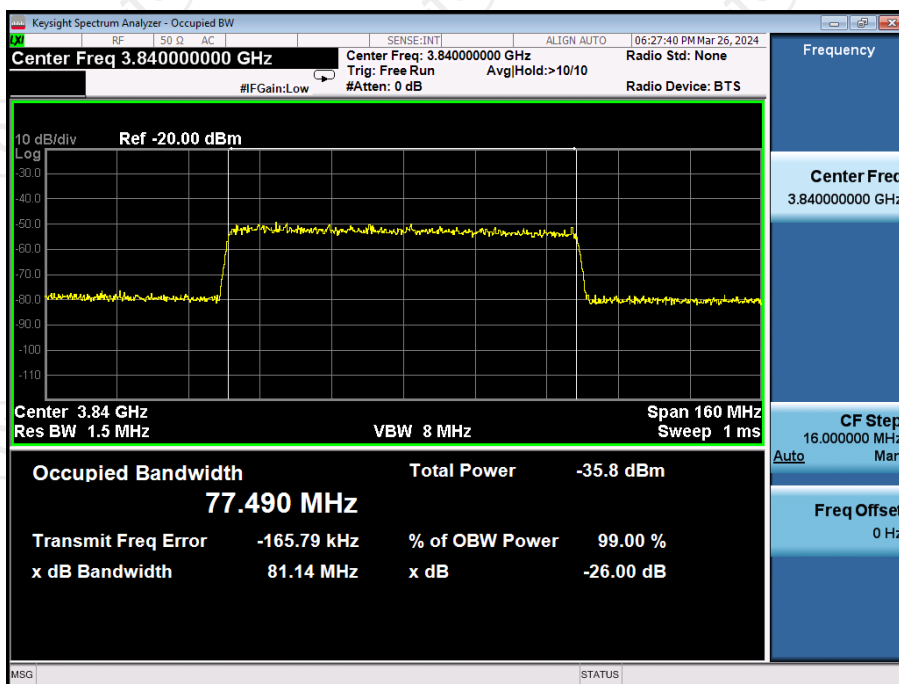
## Output 5G NR 80MHz UL @Pre AGC



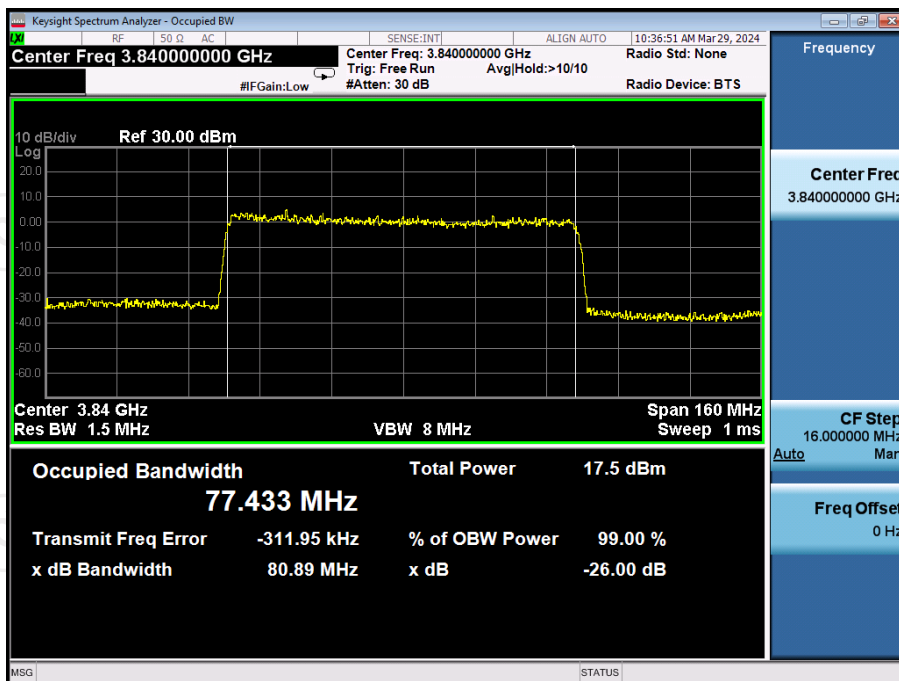
## Output 5G NR 80MHz UL @AGC + 3dB



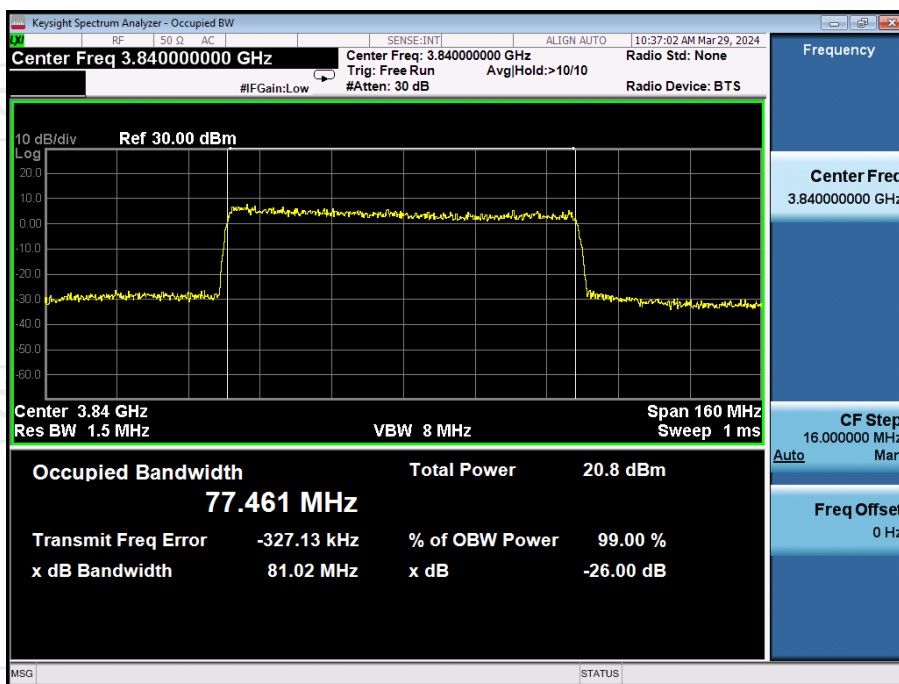
## Input 5G NR 80MHz DL



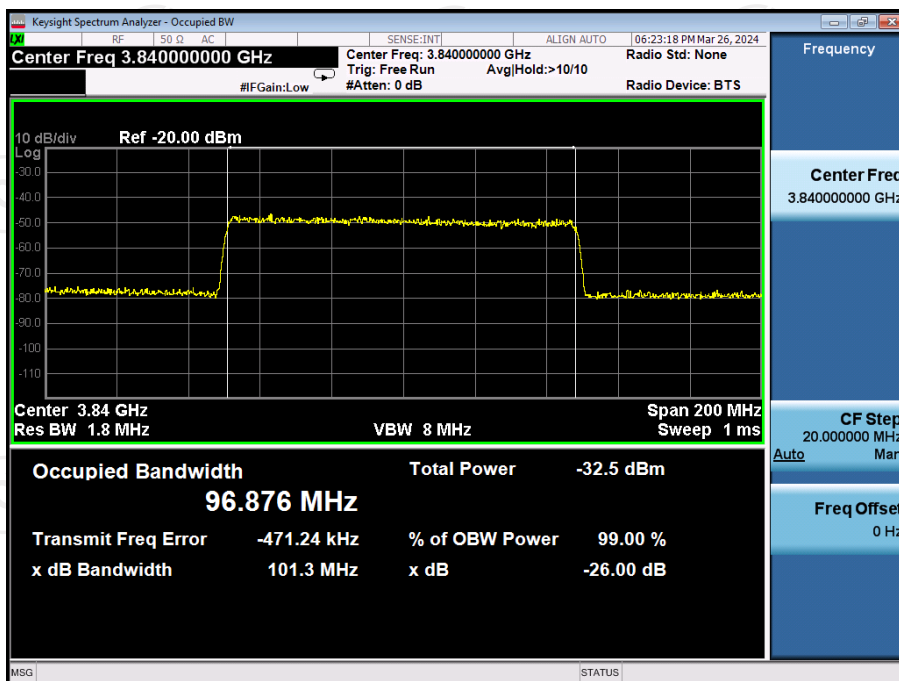
## Output 5G NR 80MHz DL @Pre AGC



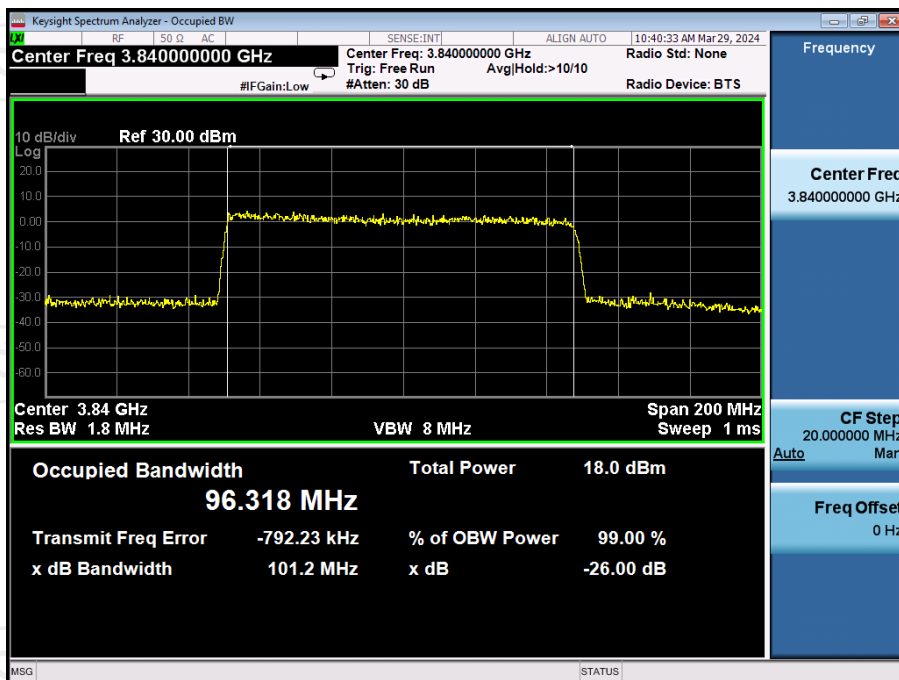
## Output 5G NR 80MHz DL @AGC + 3dB



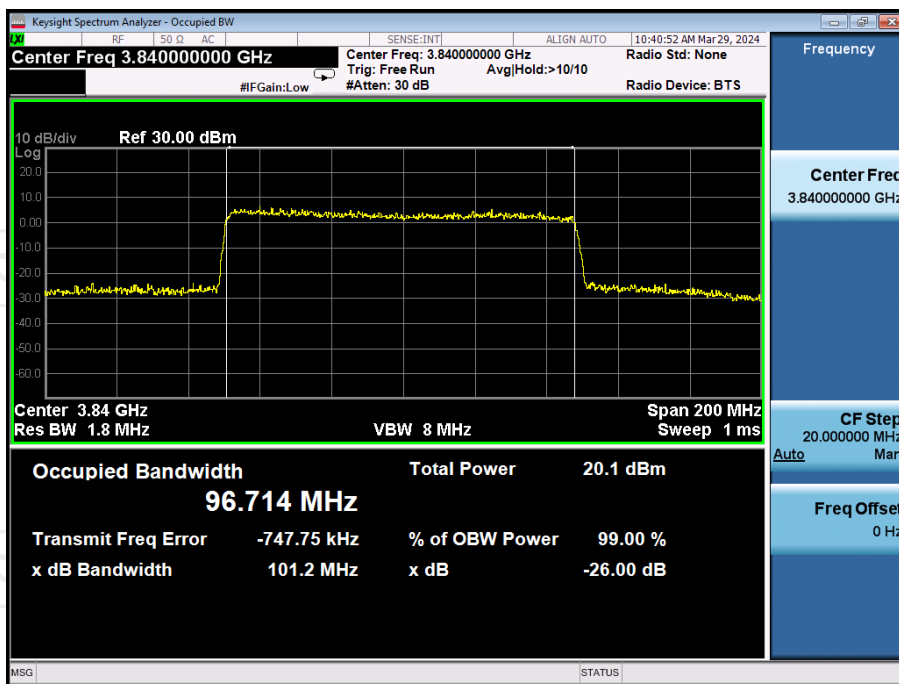
## Input 5G NR 100MHz UL



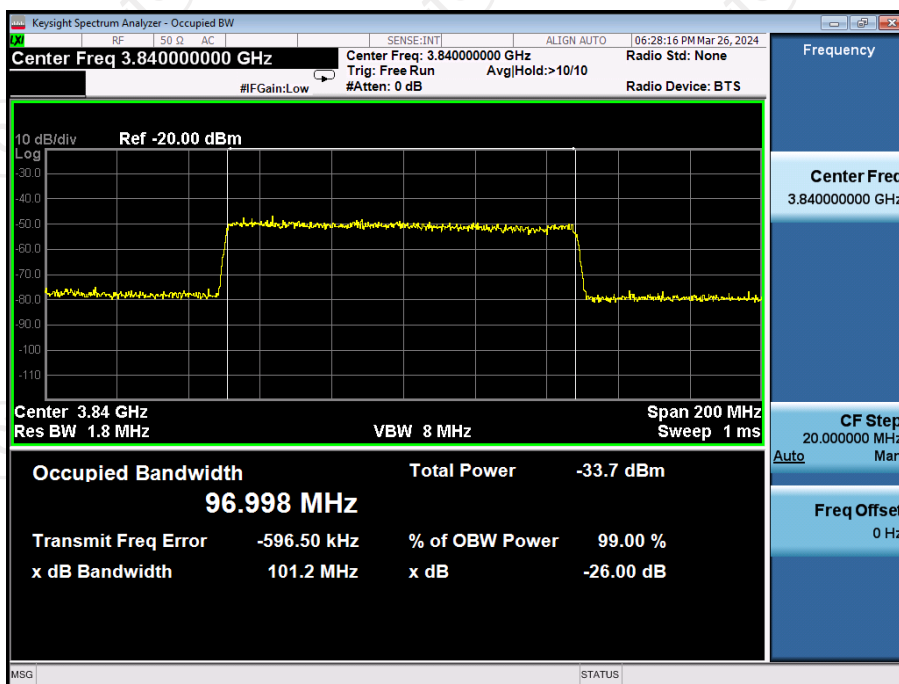
## Output 5G NR 100MHz UL @Pre AGC



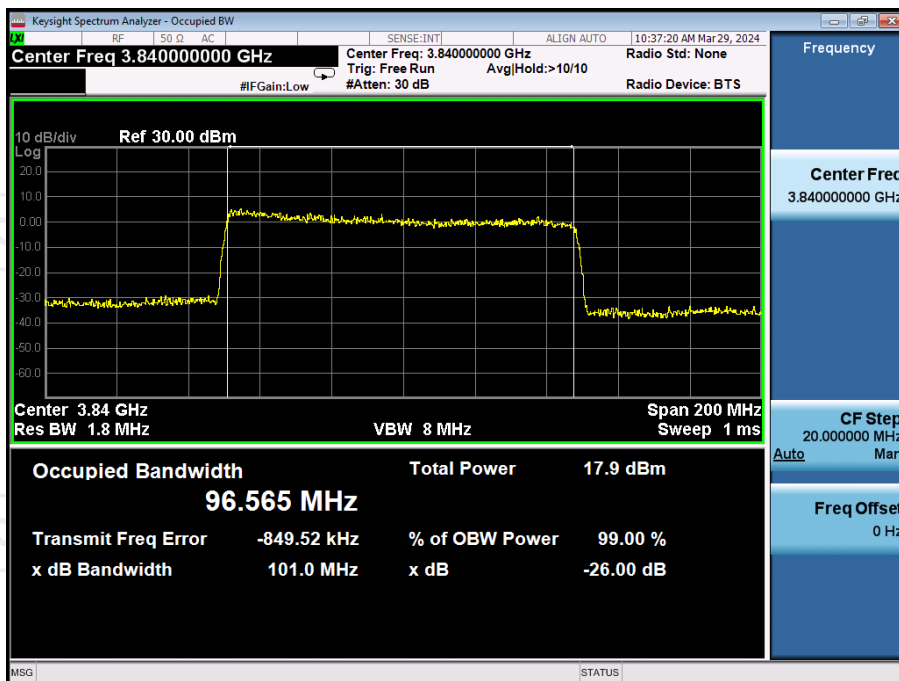
## Output 5G NR 100MHz UL @AGC + 3dB



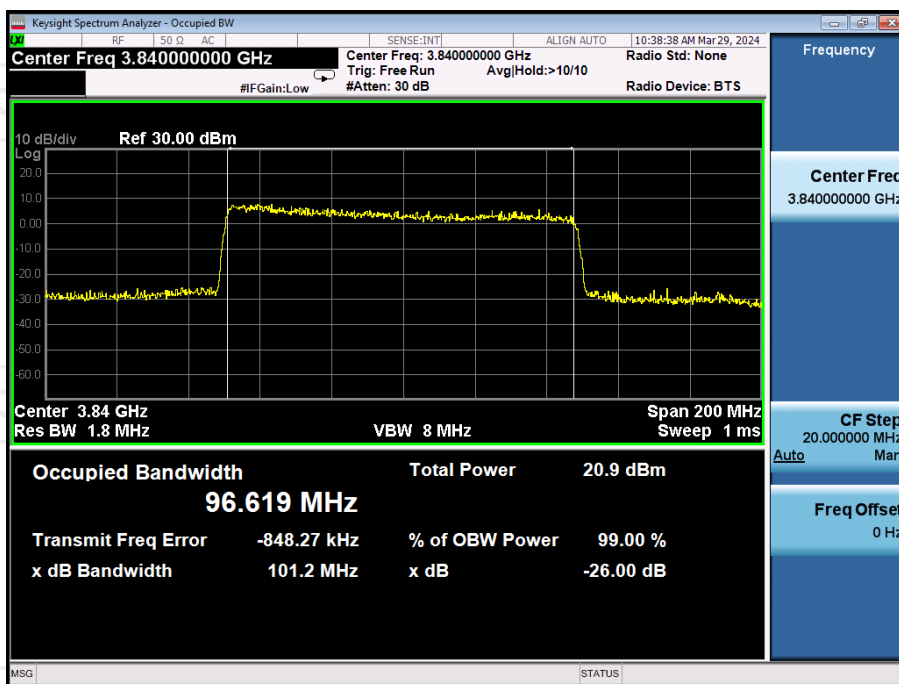
## Input 5G NR 100MHz DL



## Output 5G NR 100MHz DL @Pre AGC

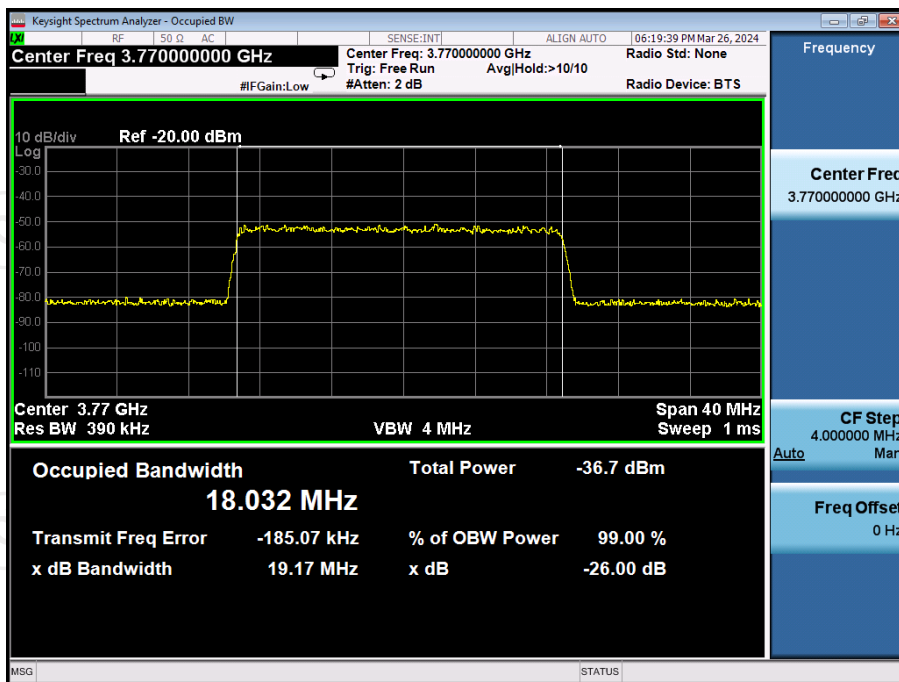


## Output 5G NR 100MHz DL @AGC + 3dB

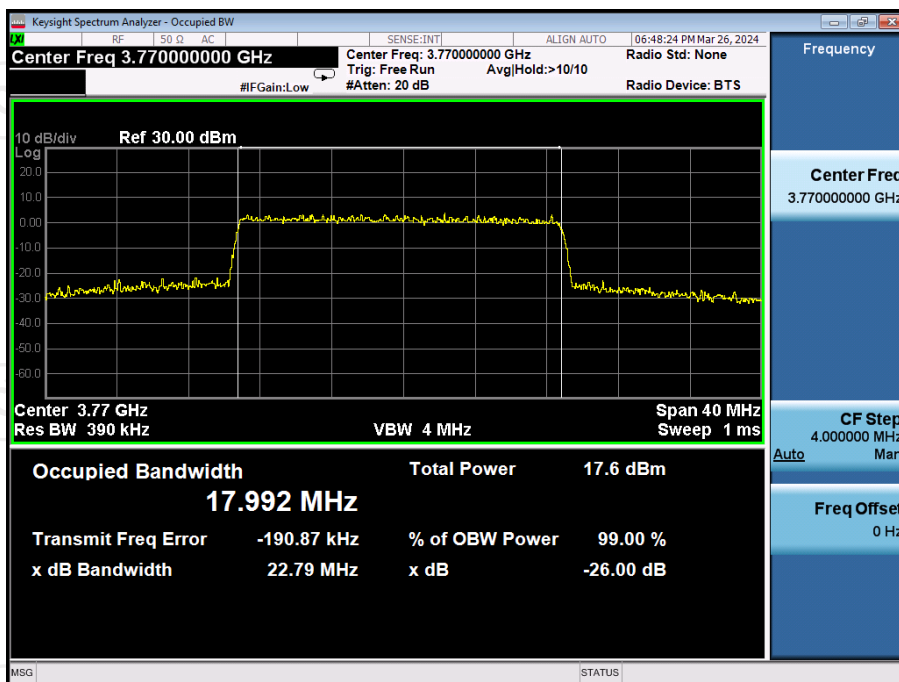


## Sub-Band Mode

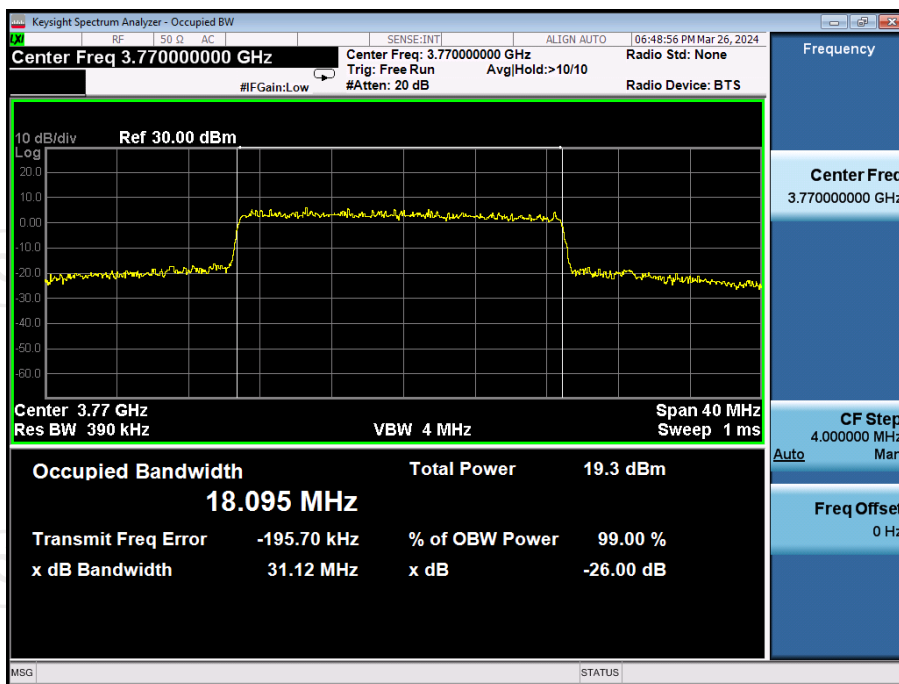
### Input 5G NR 20MHz UL



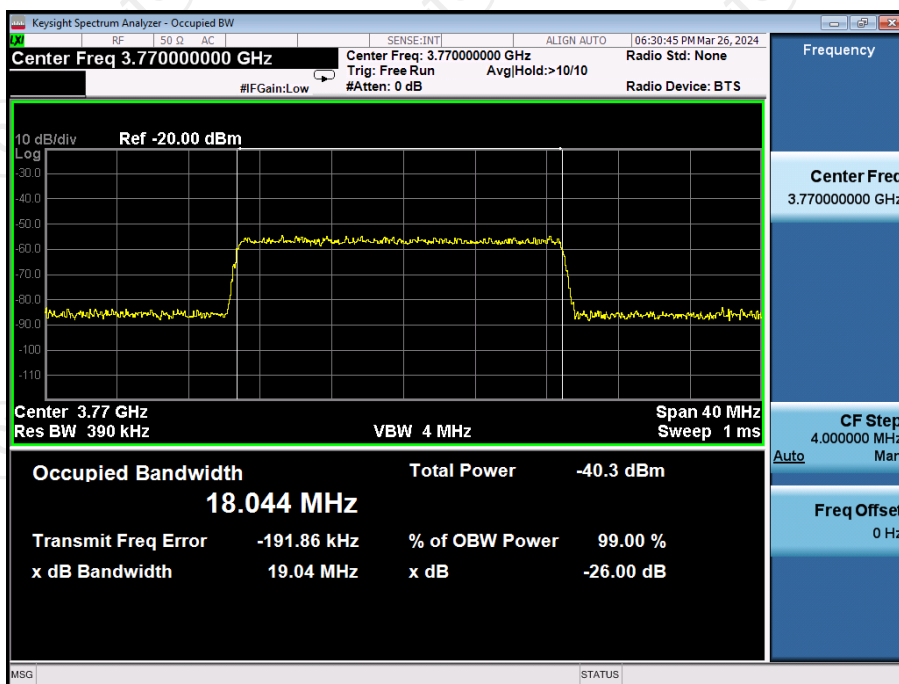
### Output 5G NR 20MHz UL @Pre AGC



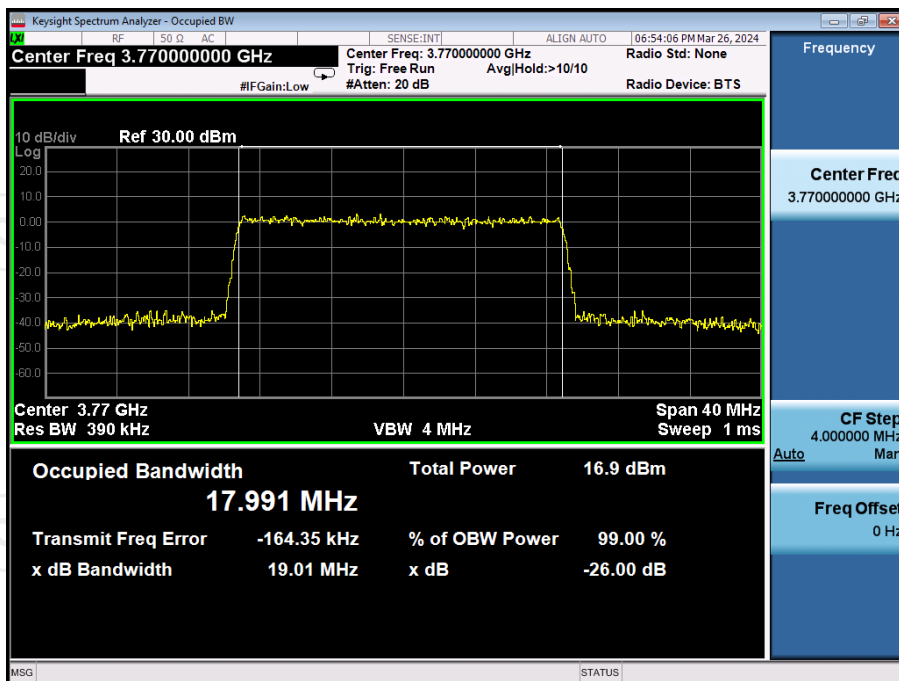
## Output 5G NR 20MHz UL @AGC + 3dB



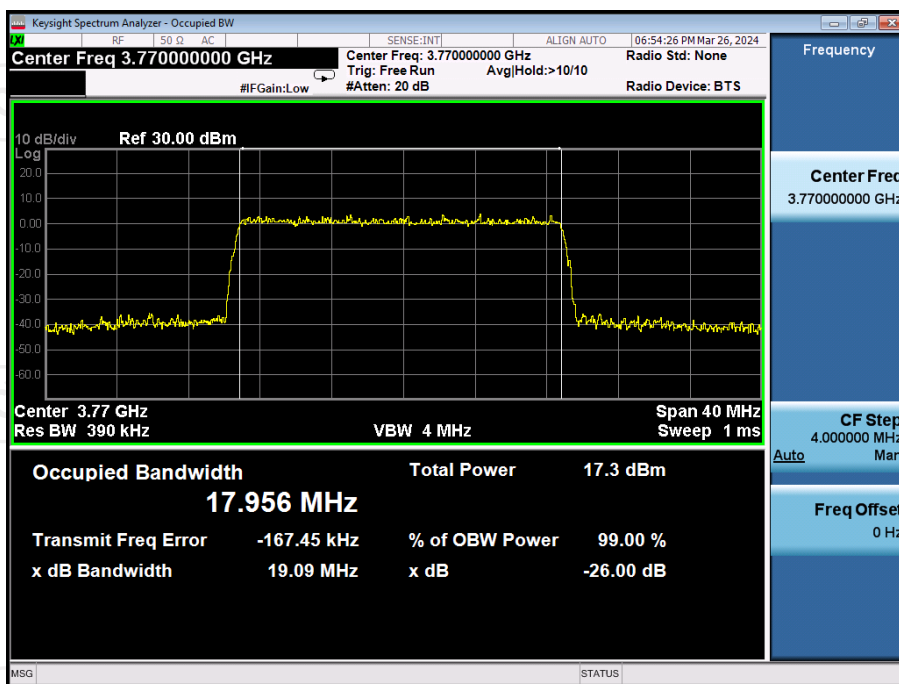
## Input 5G NR 20MHz DL



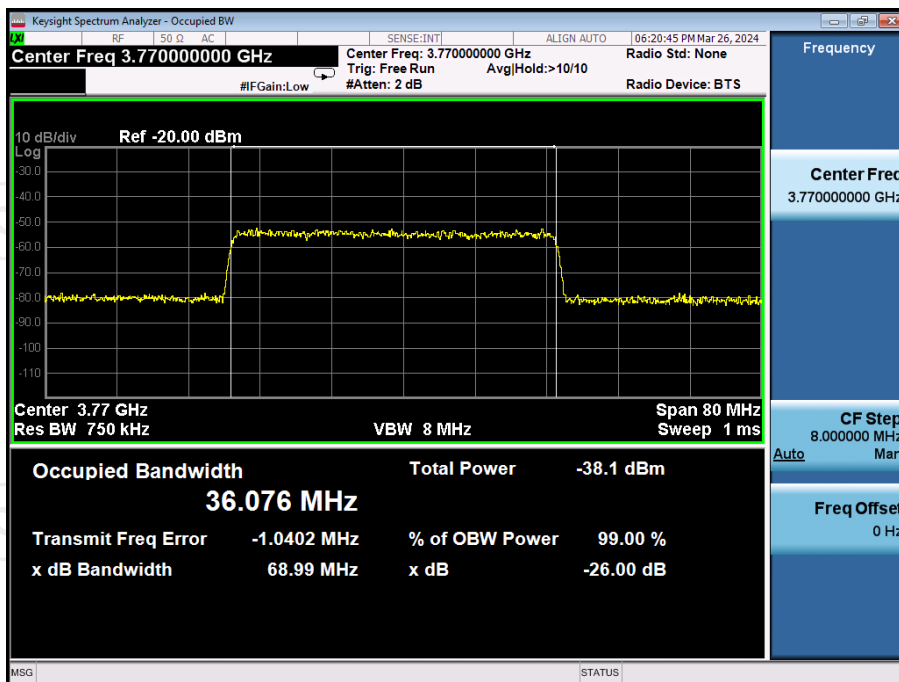
## Output 5G NR 20MHz DL @Pre AGC



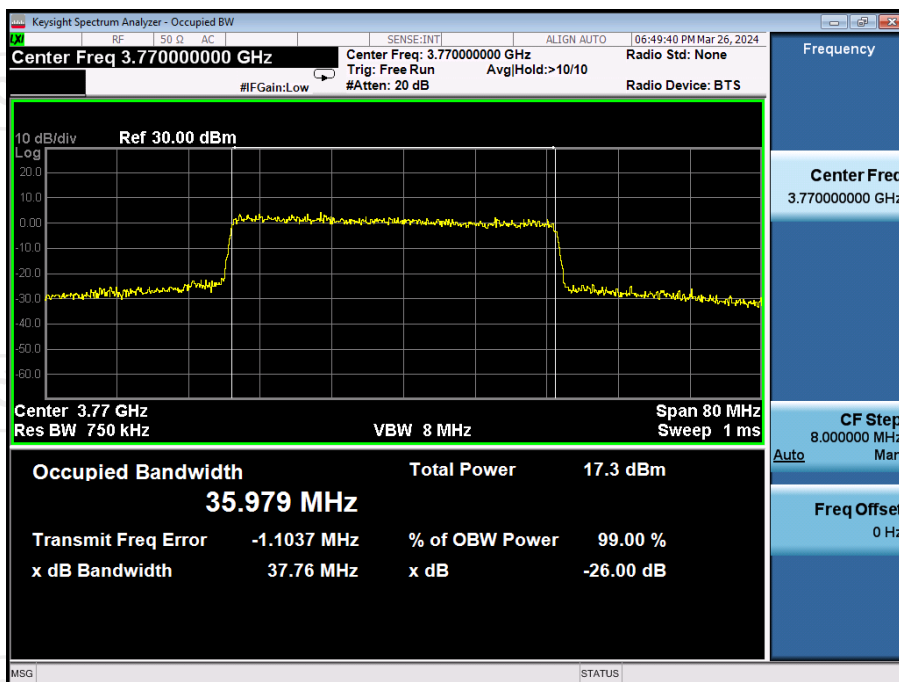
## Output 5G NR 20MHz DL @AGC + 3dB



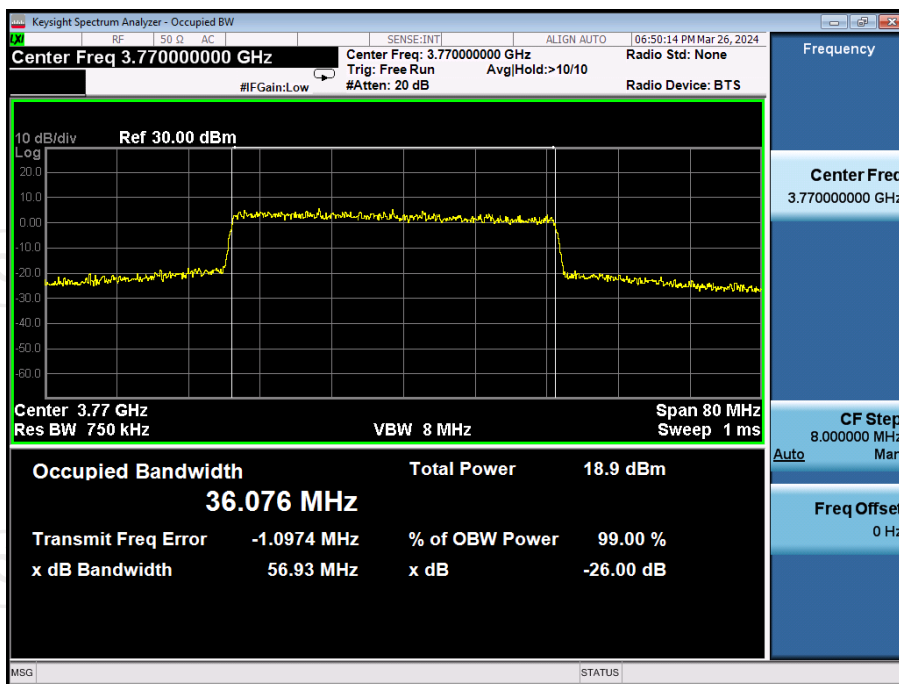
## Input 5G NR 40MHz UL



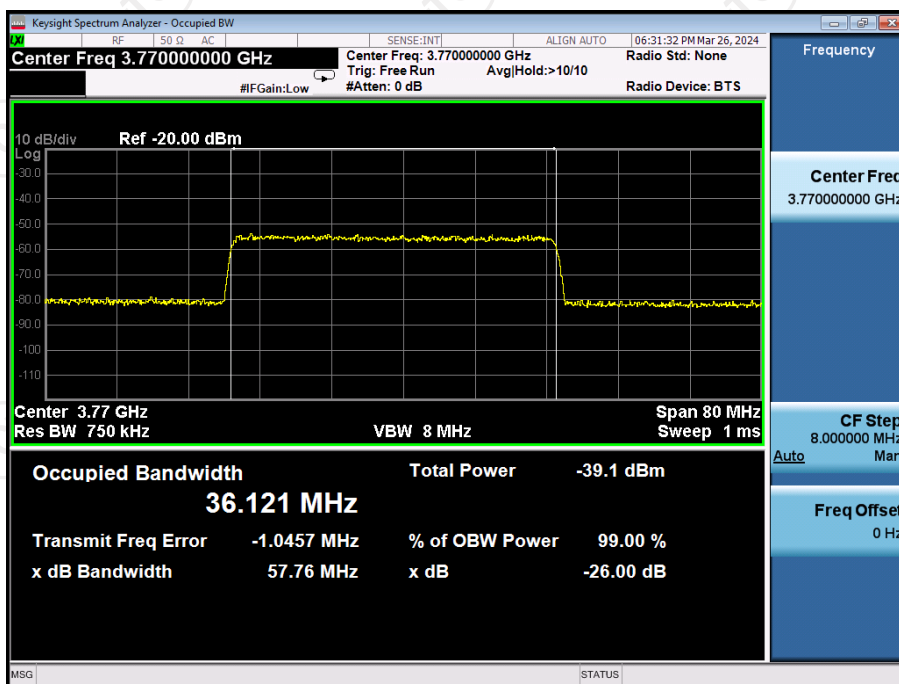
## Output 5G NR 40MHz UL @Pre AGC



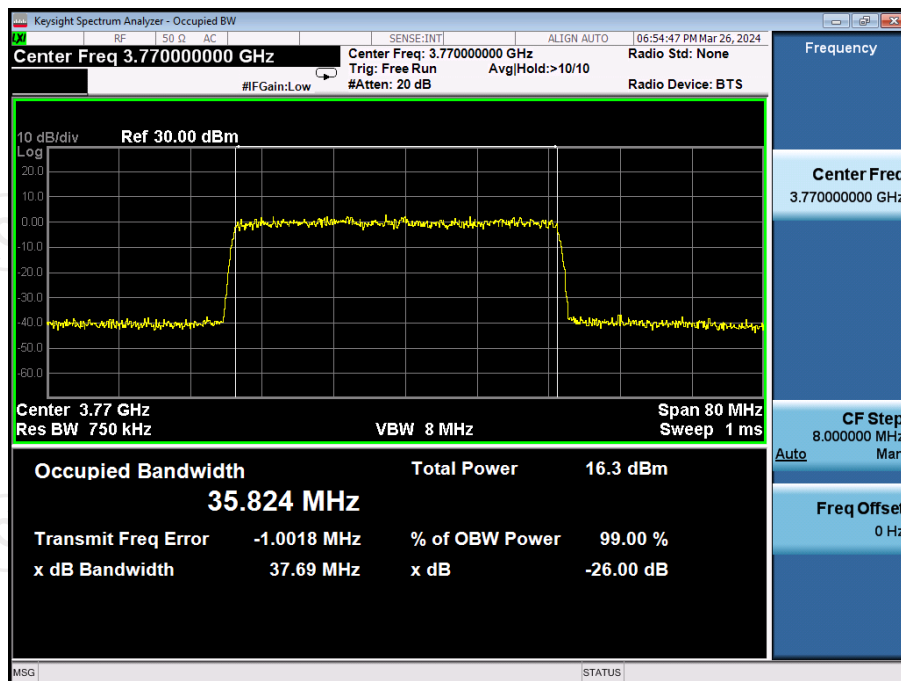
## Output 5G NR 40MHz UL @AGC + 3dB



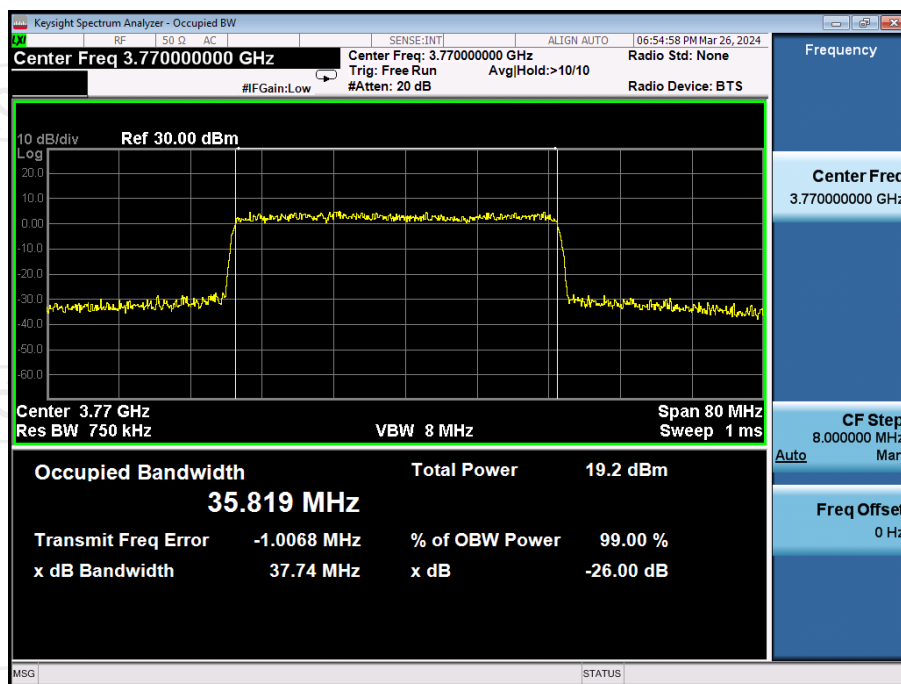
## Input 5G NR 40MHz DL



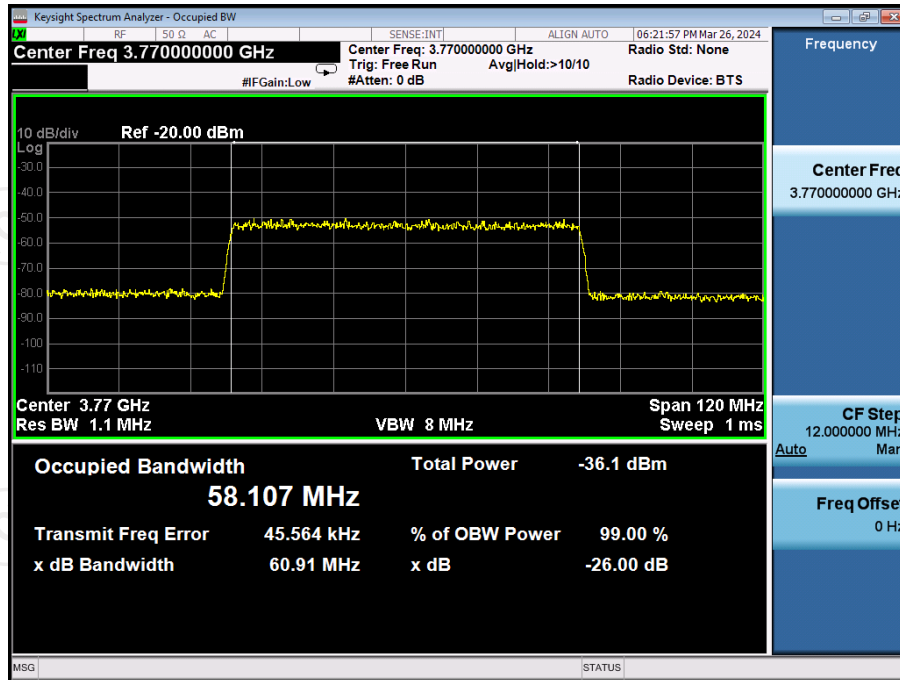
## Output 5G NR 40MHz DL @Pre AGC



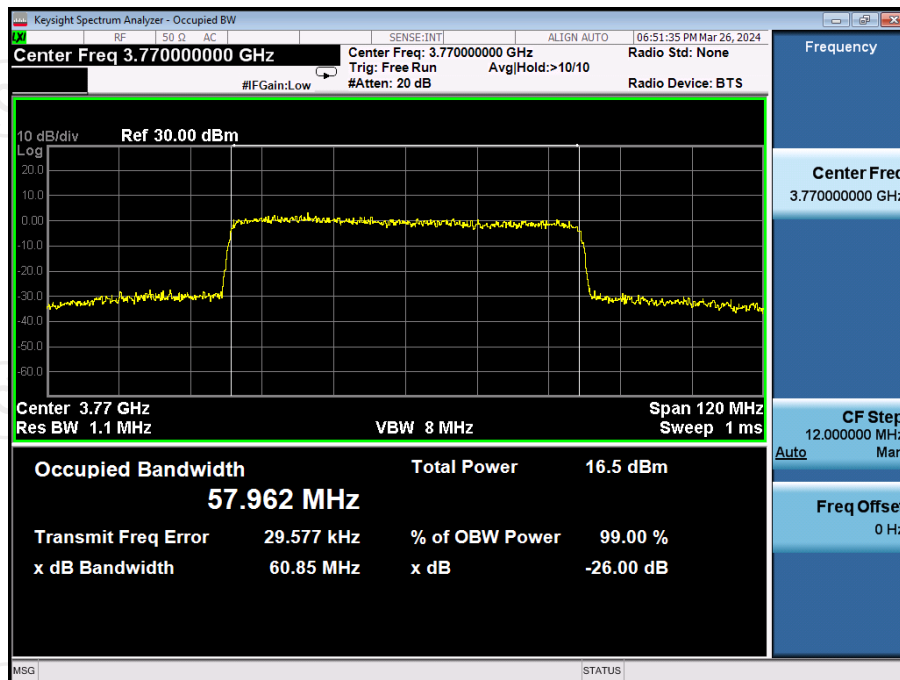
## Output 5G NR 40MHz DL @AGC + 3dB



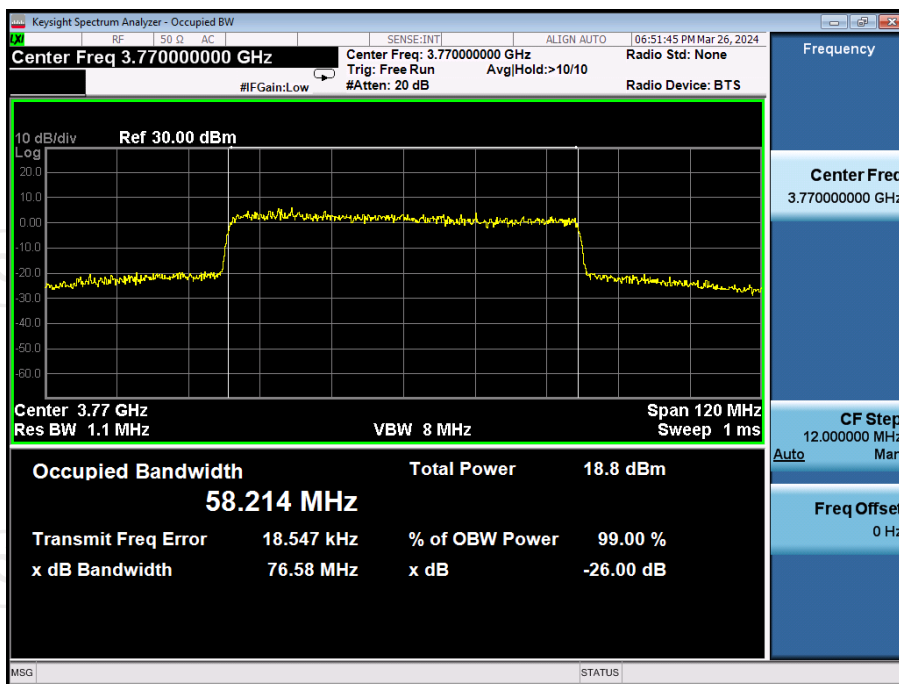
## Input 5G NR 60MHz UL



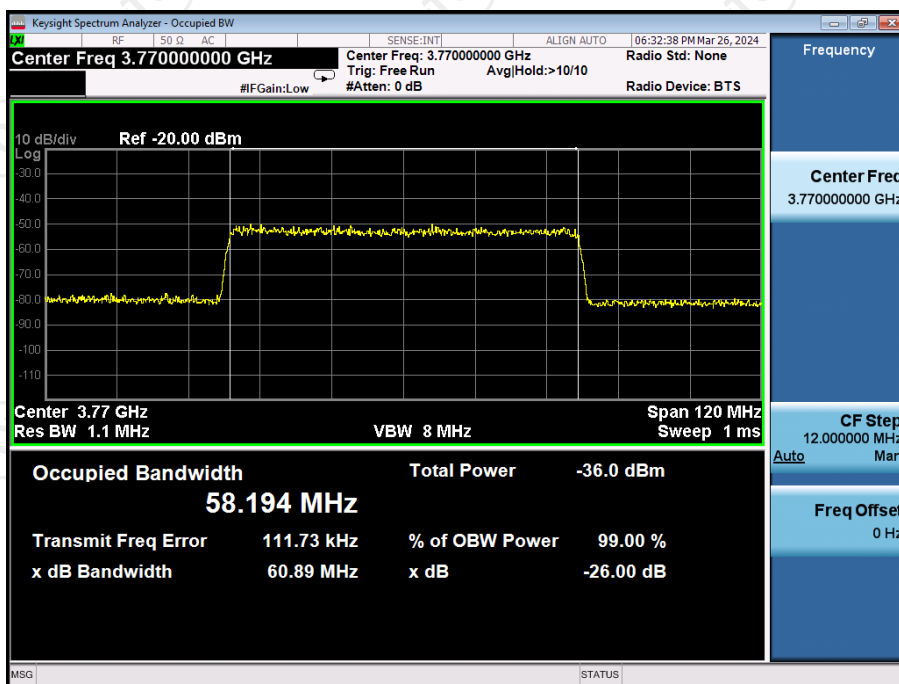
## Output 5G NR 60MHz UL @Pre AGC



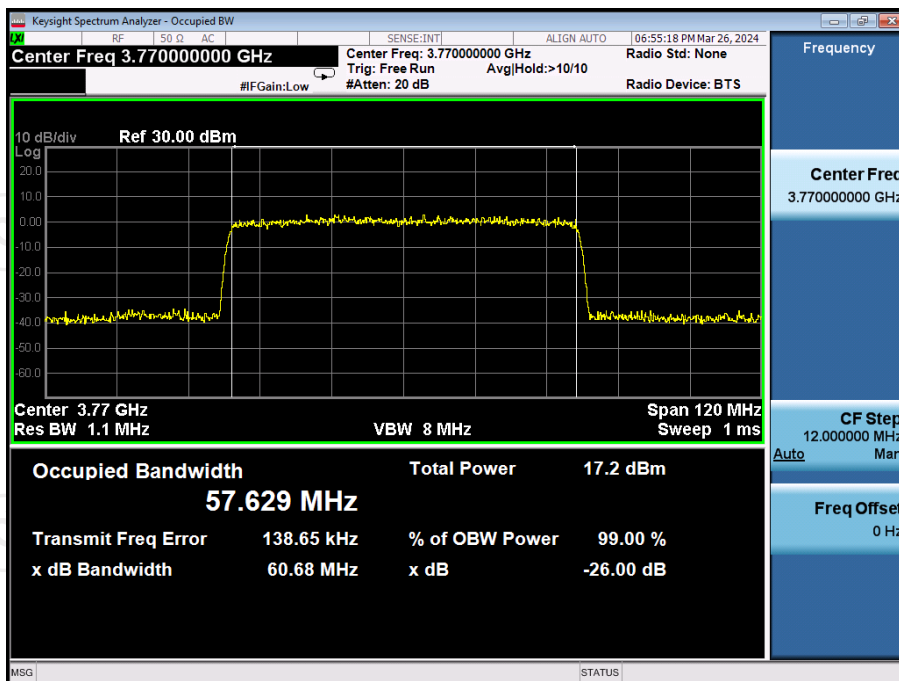
## Output 5G NR 60MHz UL @AGC + 3dB



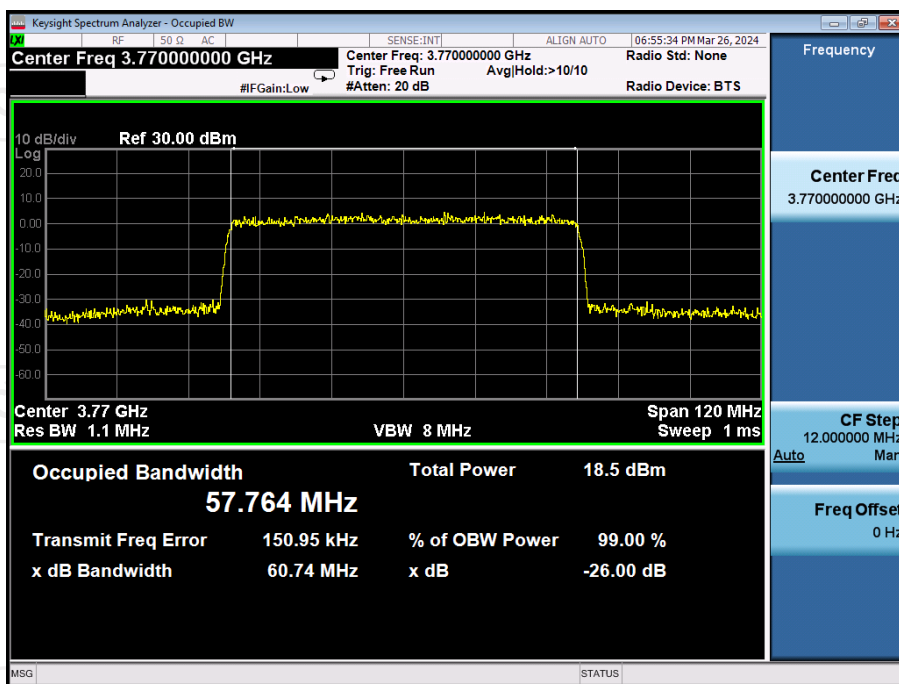
## Input 5G NR 60MHz DL



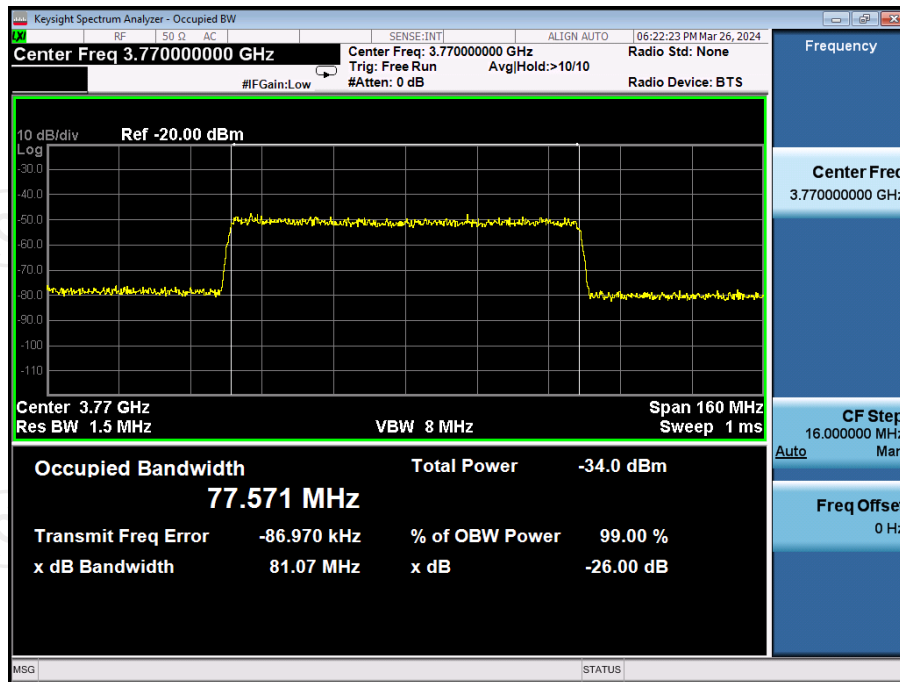
## Output 5G NR 60MHz DL @Pre AGC



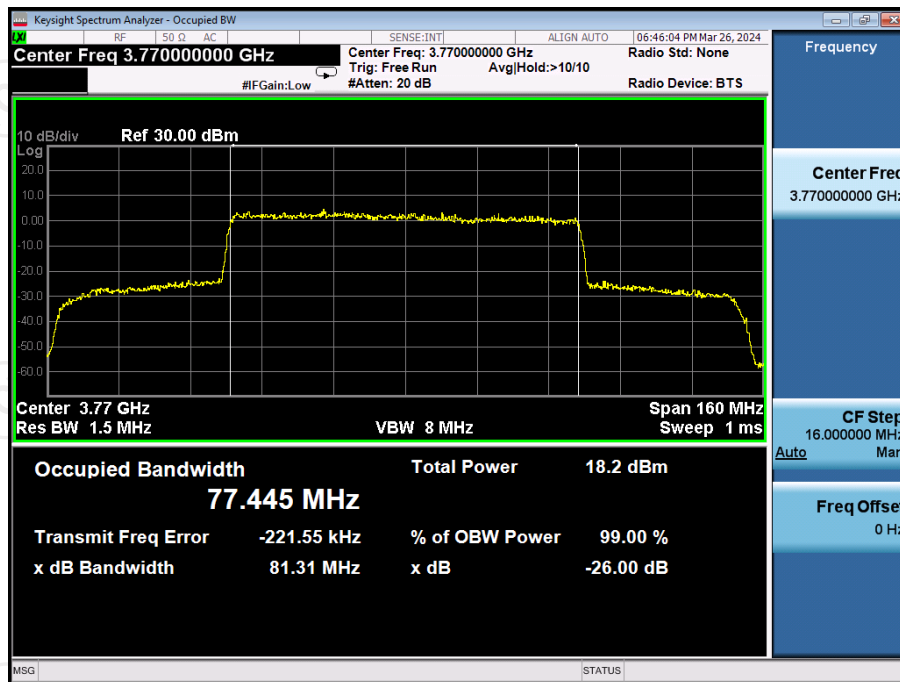
## Output 5G NR 60MHz DL @AGC + 3dB



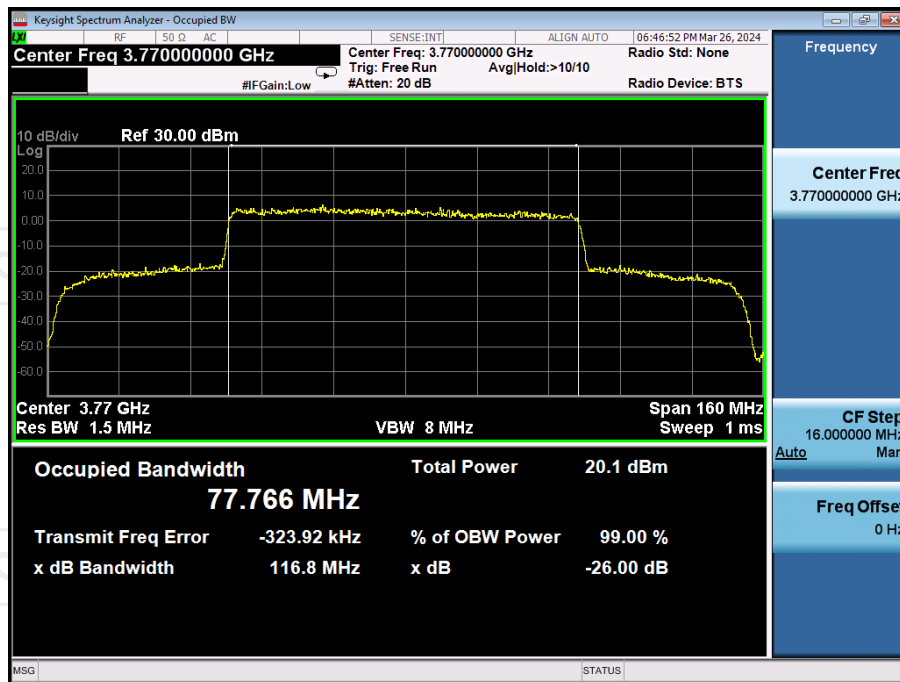
## Input 5G NR 80MHz UL



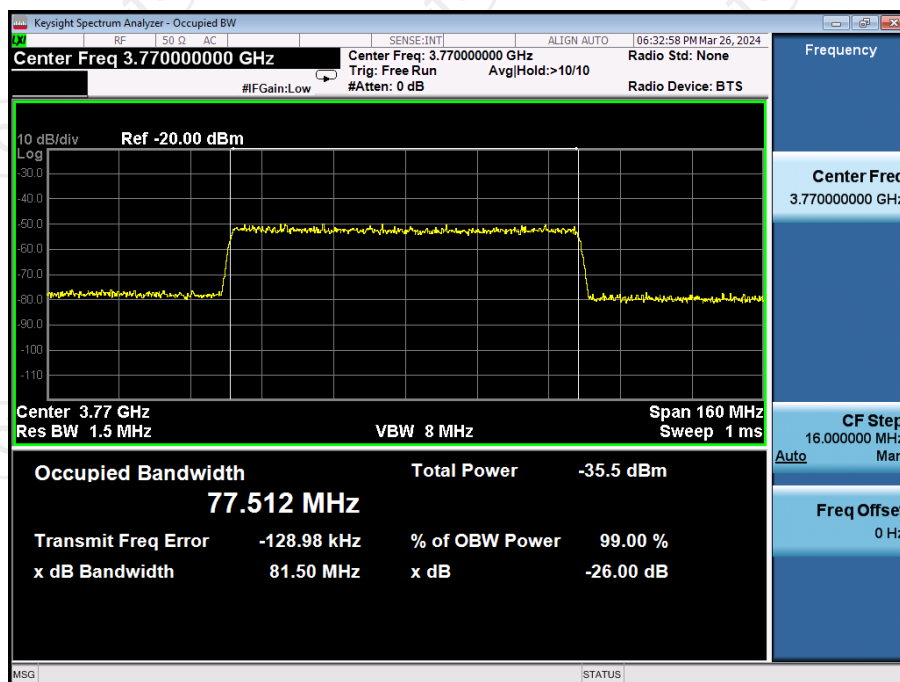
## Output 5G NR 80MHz UL @Pre AGC



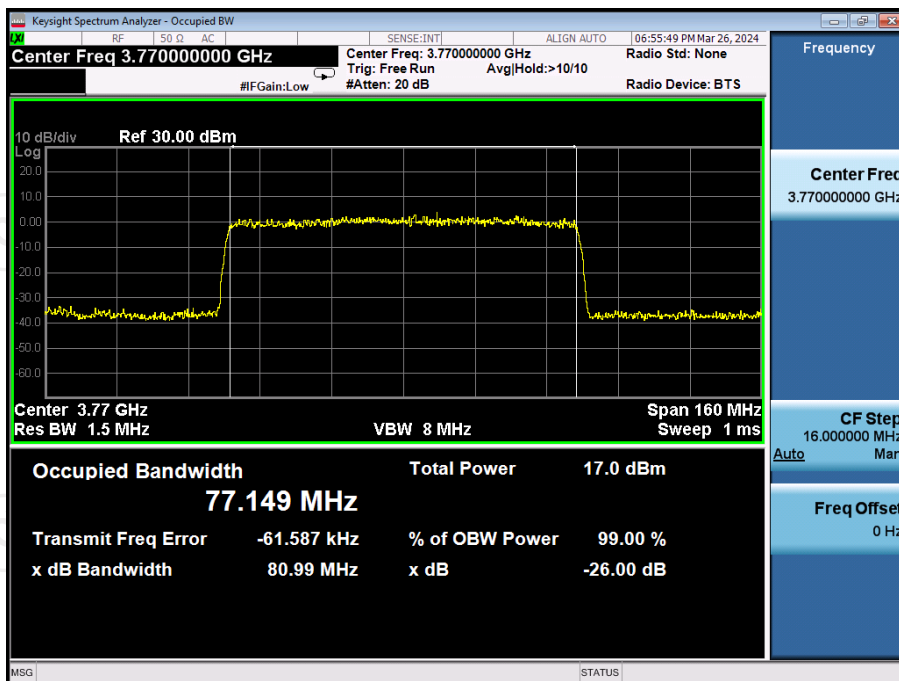
## Output 5G NR 80MHz UL @AGC + 3dB



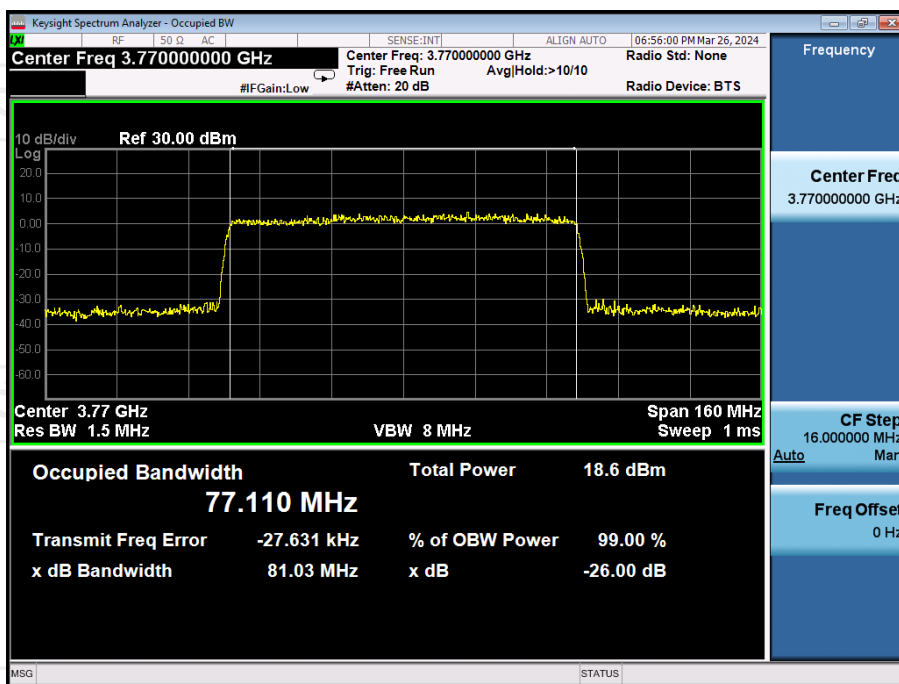
## Input 5G NR 80MHz DL



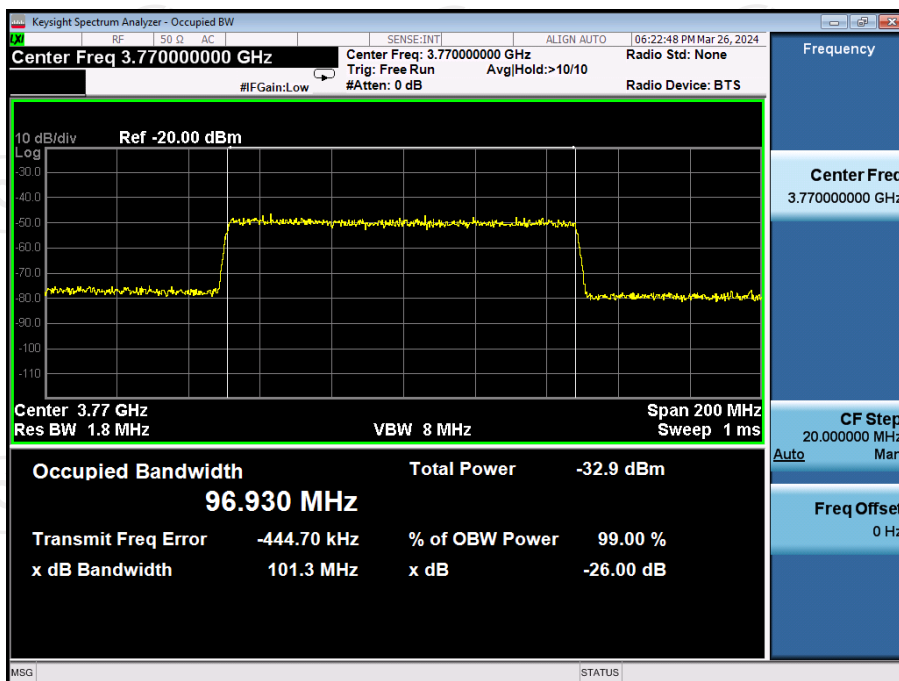
## Output 5G NR 80MHz DL @Pre AGC



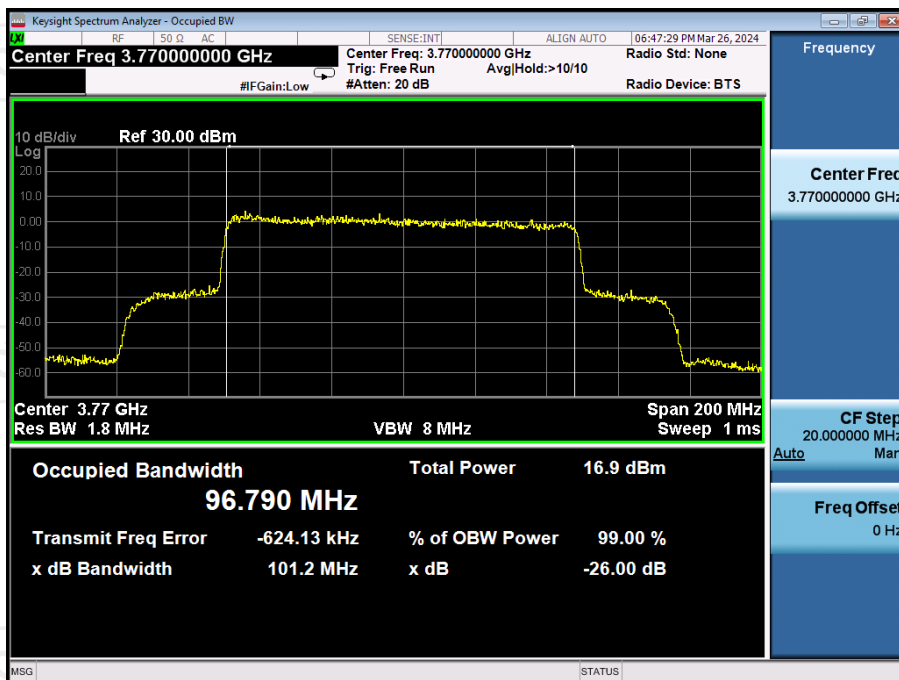
## Output 5G NR 80MHz DL @AGC + 3dB



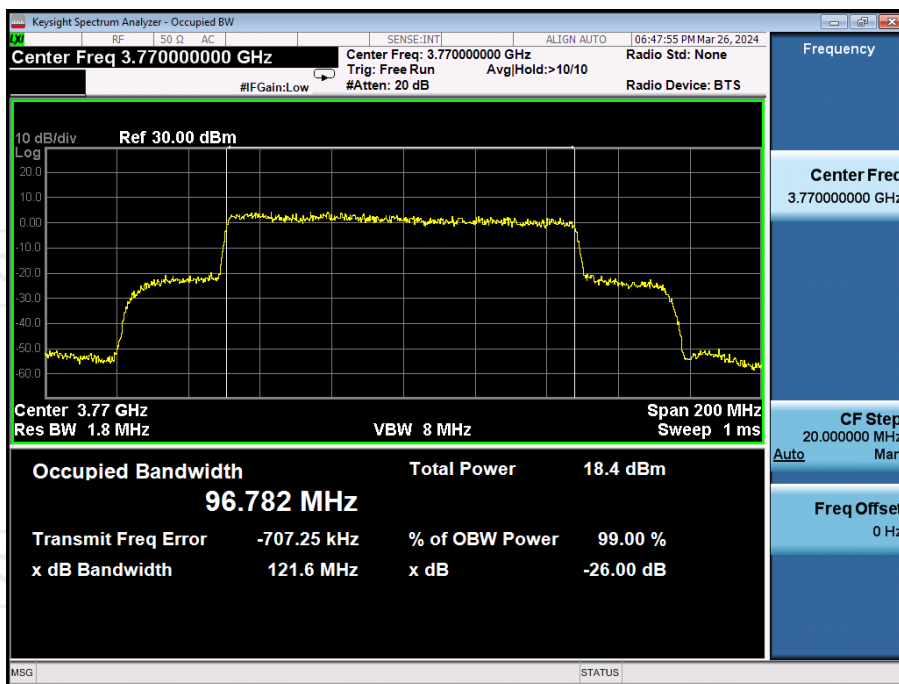
## Input 5G NR 100MHz UL



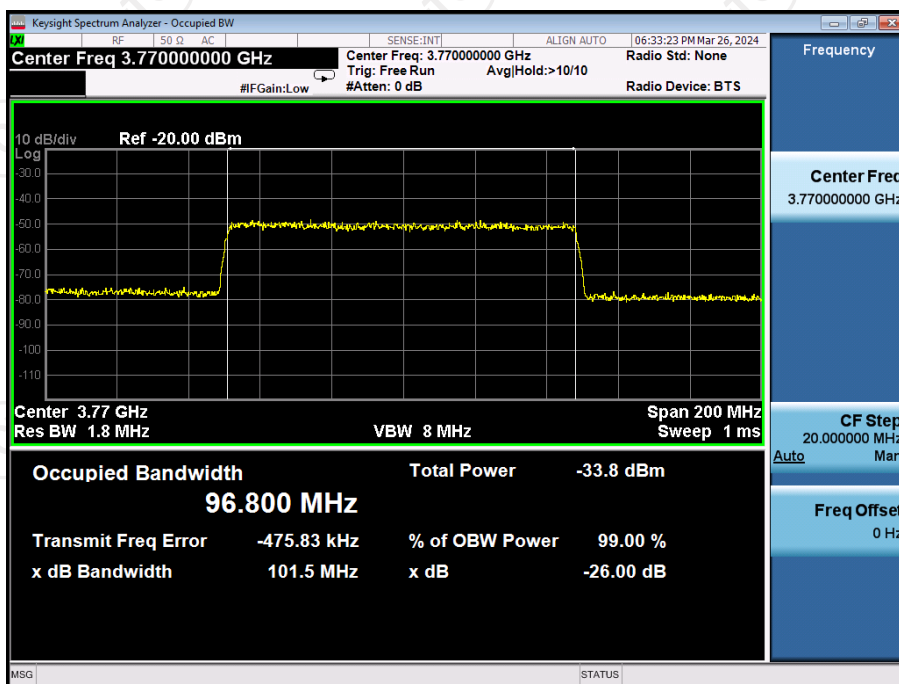
## Output 5G NR 100MHz UL @Pre AGC



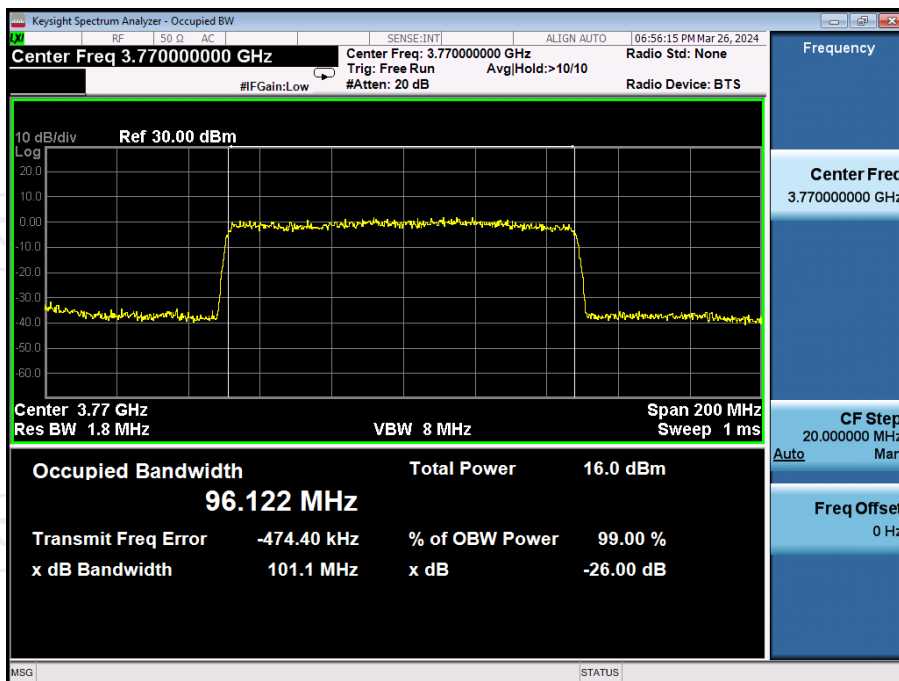
## Output 5G NR 100MHz UL @AGC + 3dB



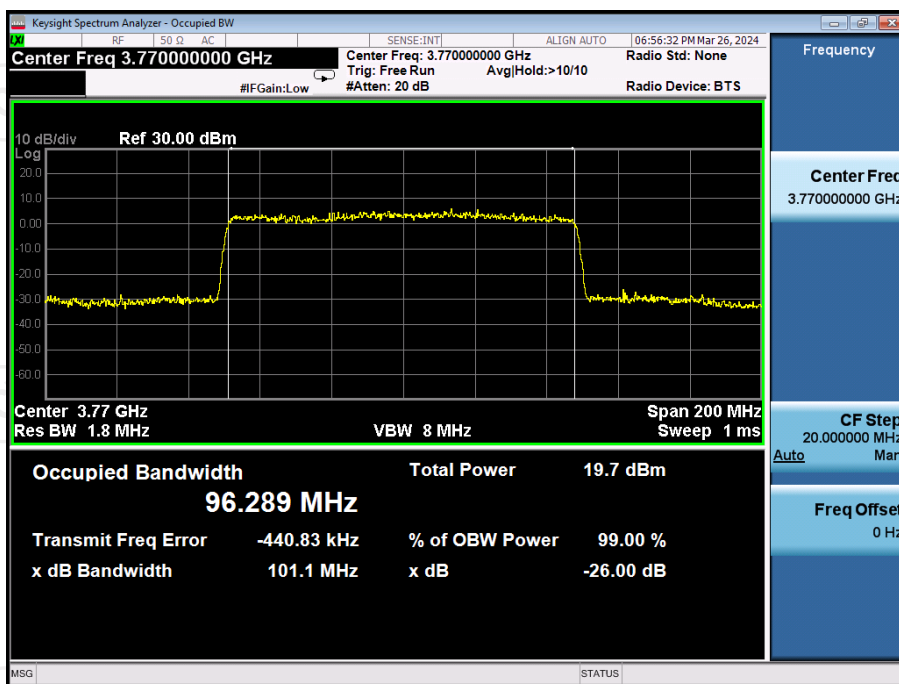
## Input 5G NR 100MHz DL



## Output 5G NR 100MHz DL @Pre AGC



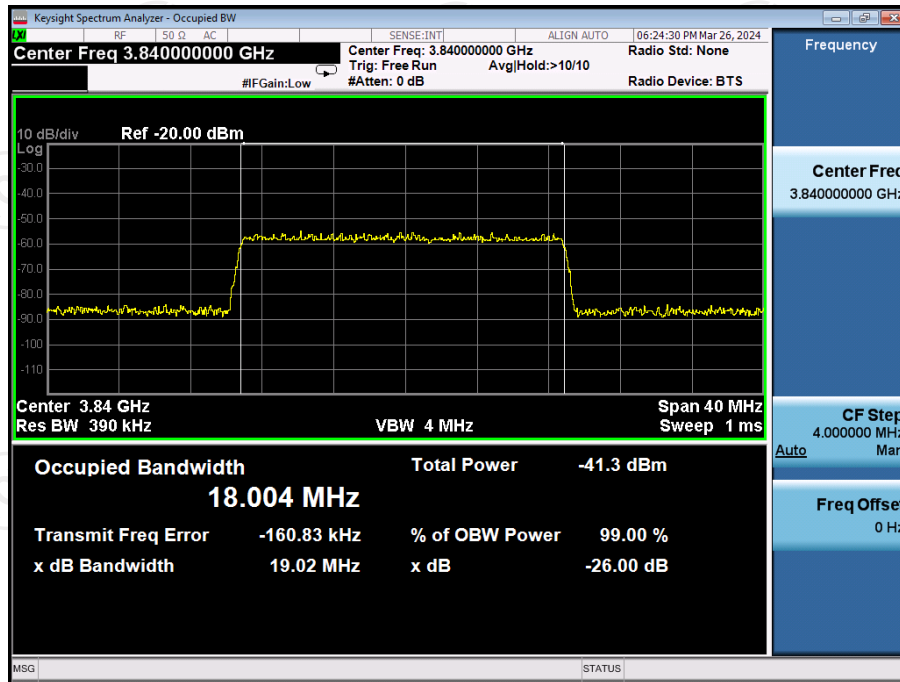
## Output 5G NR 100MHz DL @AGC + 3dB



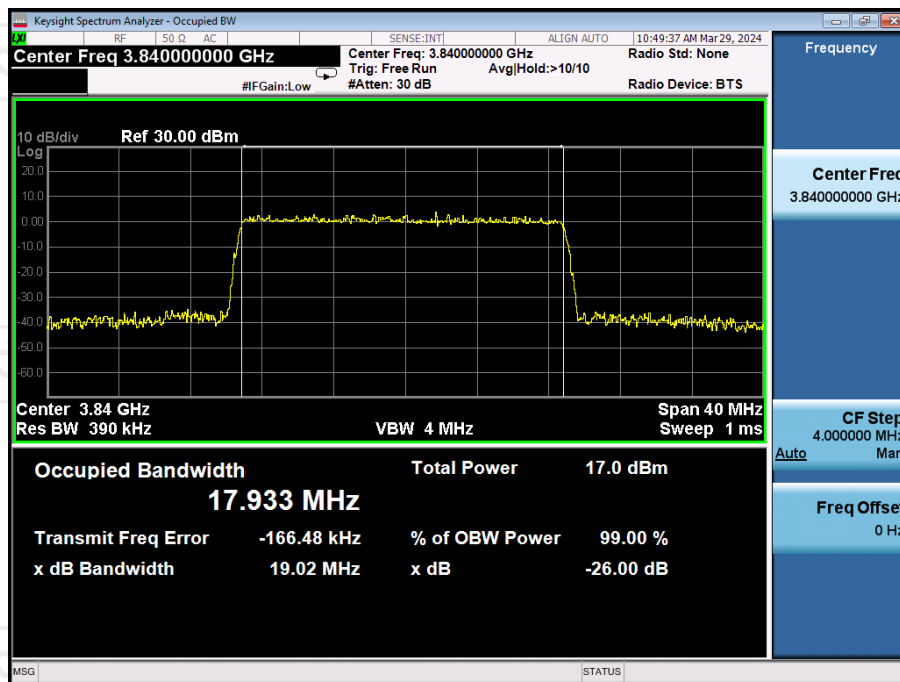
## Path 2

Full-Band Mode

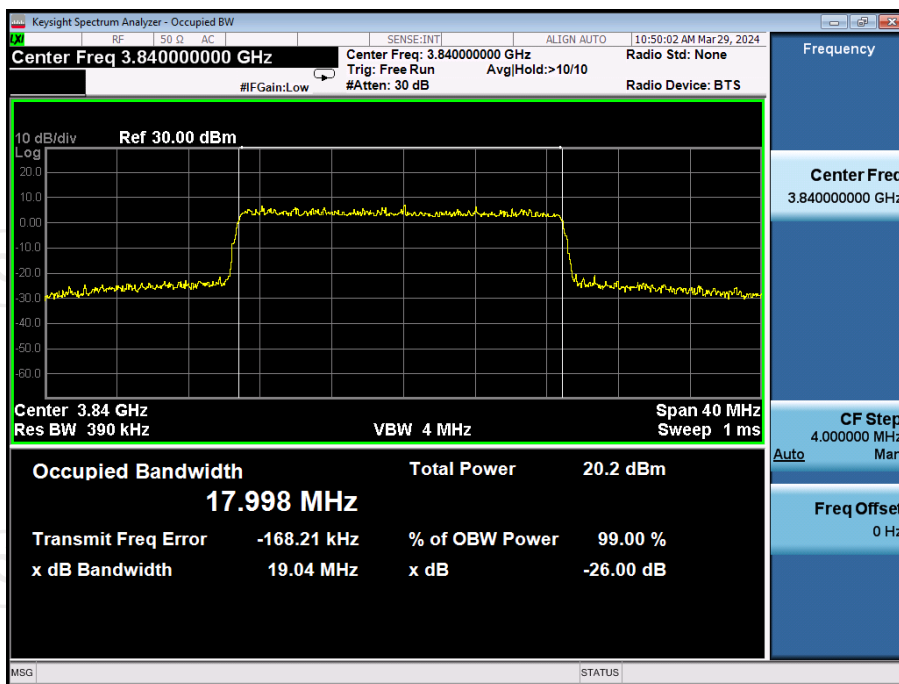
Input 5G NR 20MHz UL



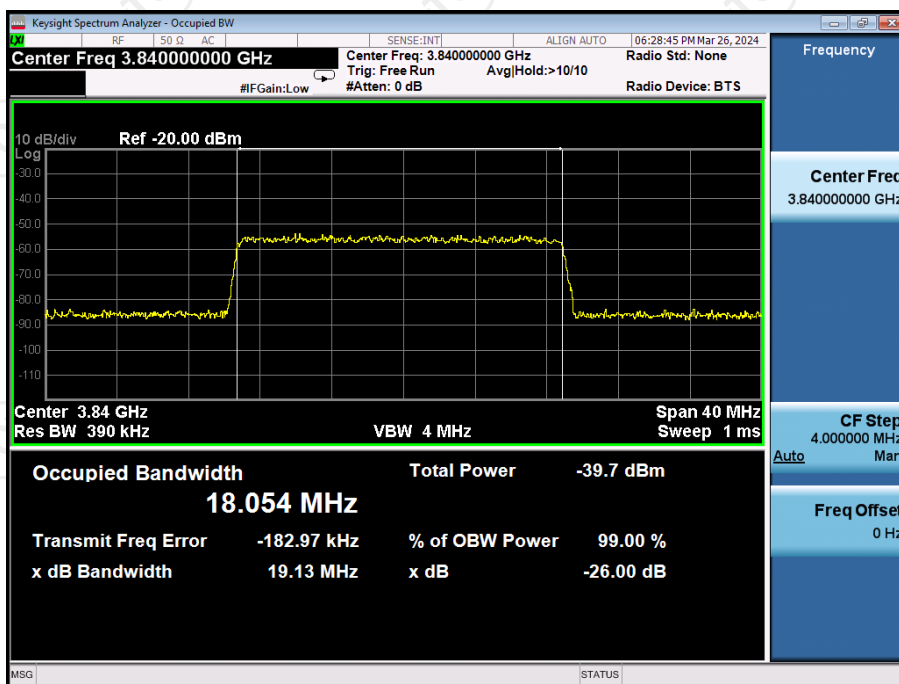
Output 5G NR 20MHz UL @Pre AGC



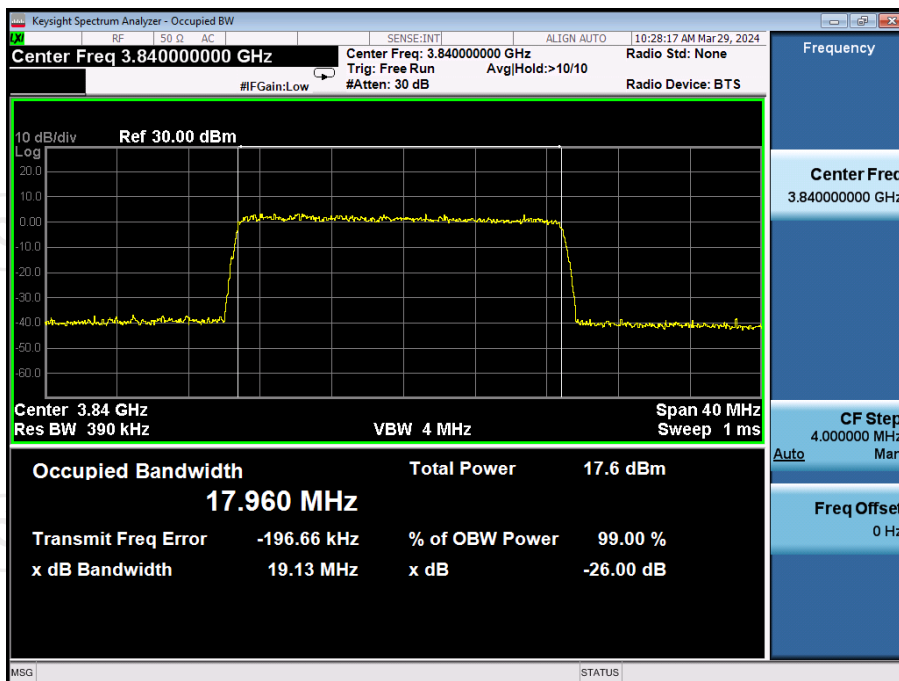
## Output 5G NR 20MHz UL @AGC + 3dB



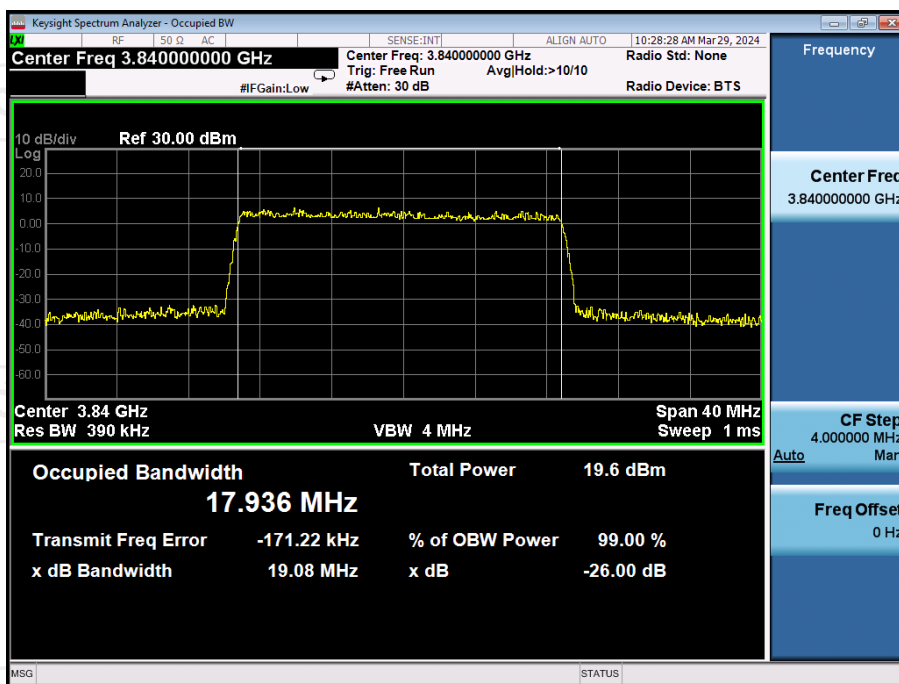
## Input 5G NR 20MHz DL



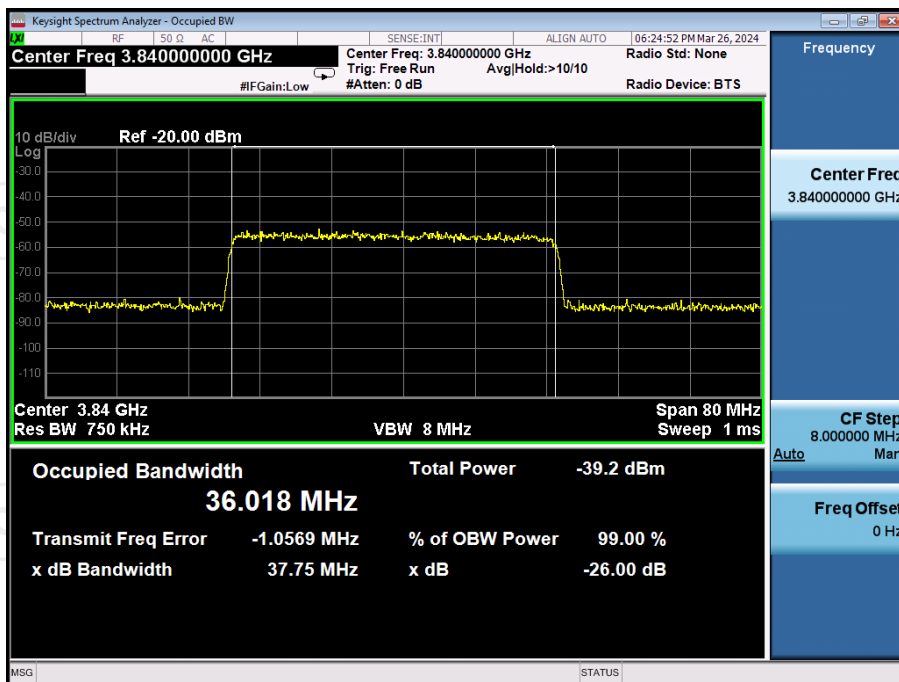
## Output 5G NR 20MHz DL @Pre AGC



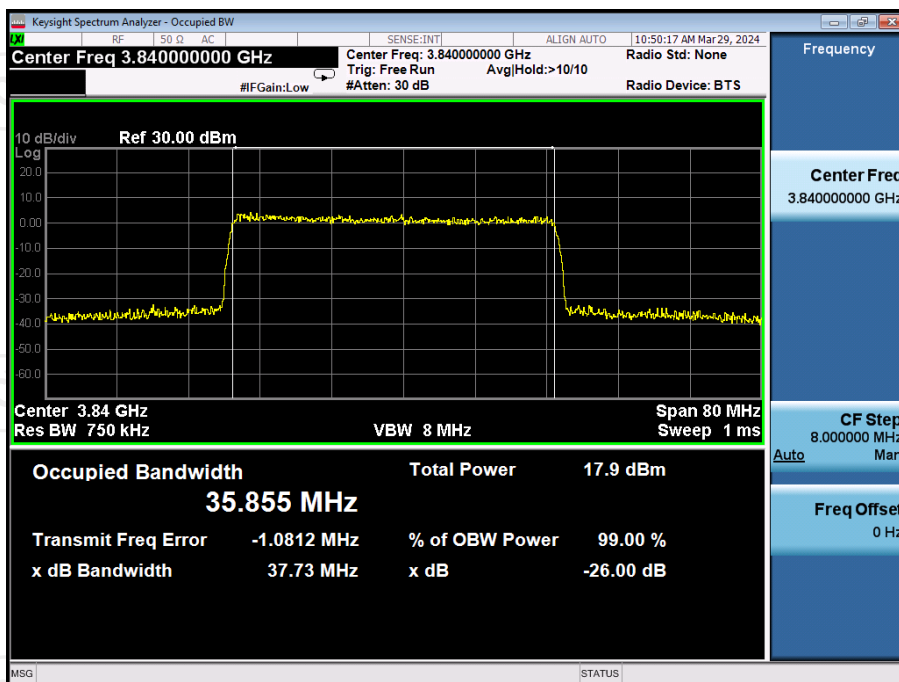
## Output 5G NR 20MHz DL @AGC + 3dB



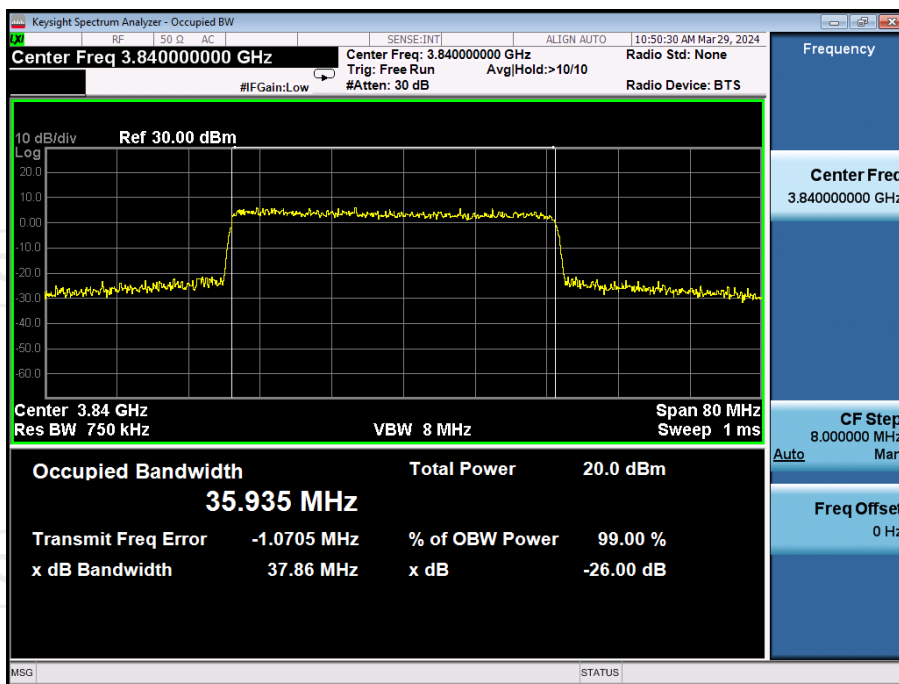
## Input 5G NR 40MHz UL



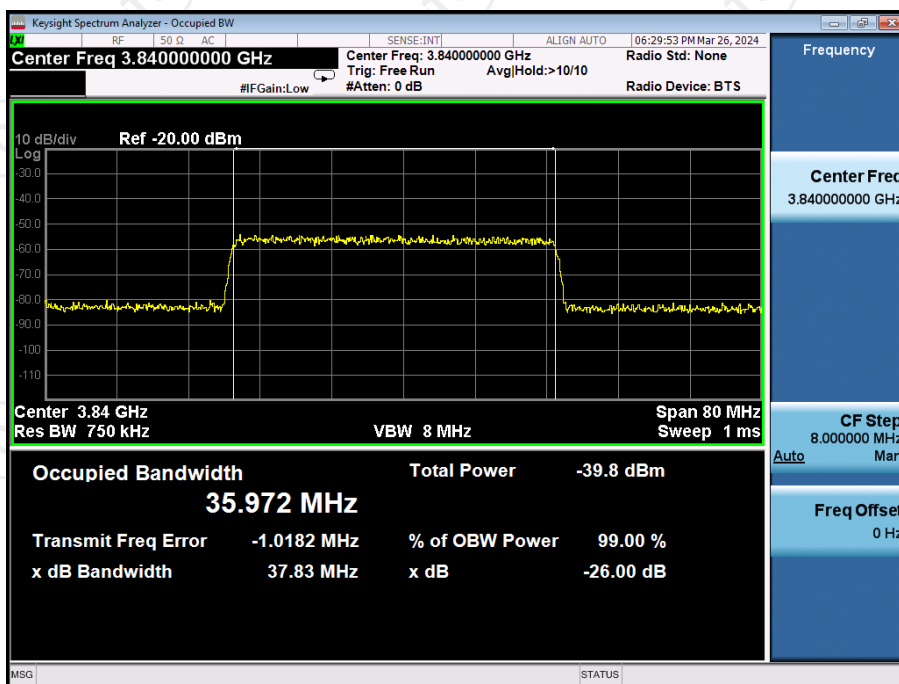
## Output 5G NR 40MHz UL @Pre AGC



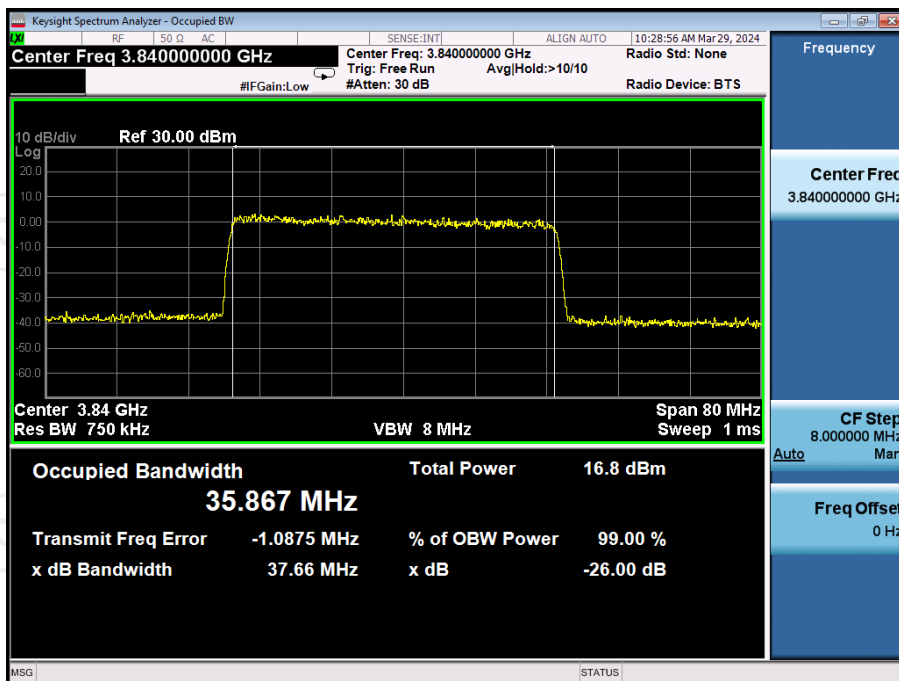
## Output 5G NR 40MHz UL @AGC + 3dB



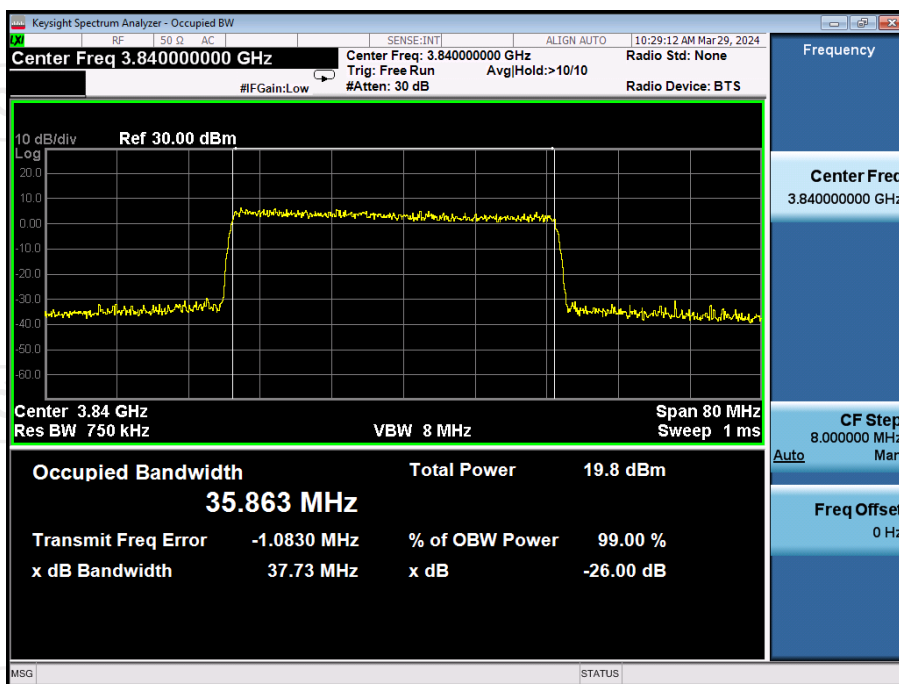
## Input 5G NR 40MHz DL



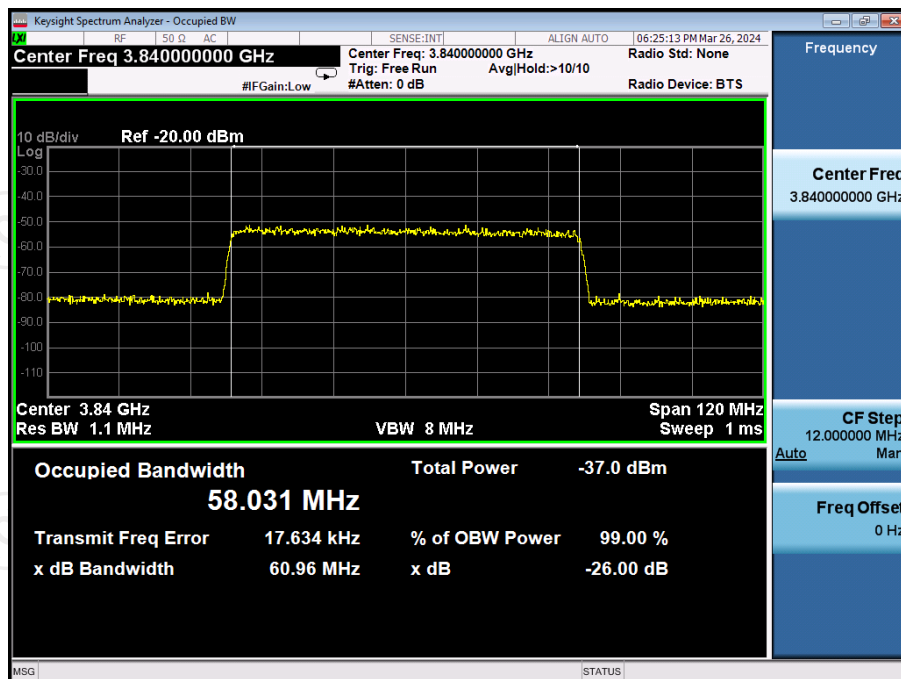
## Output 5G NR 40MHz DL @Pre AGC



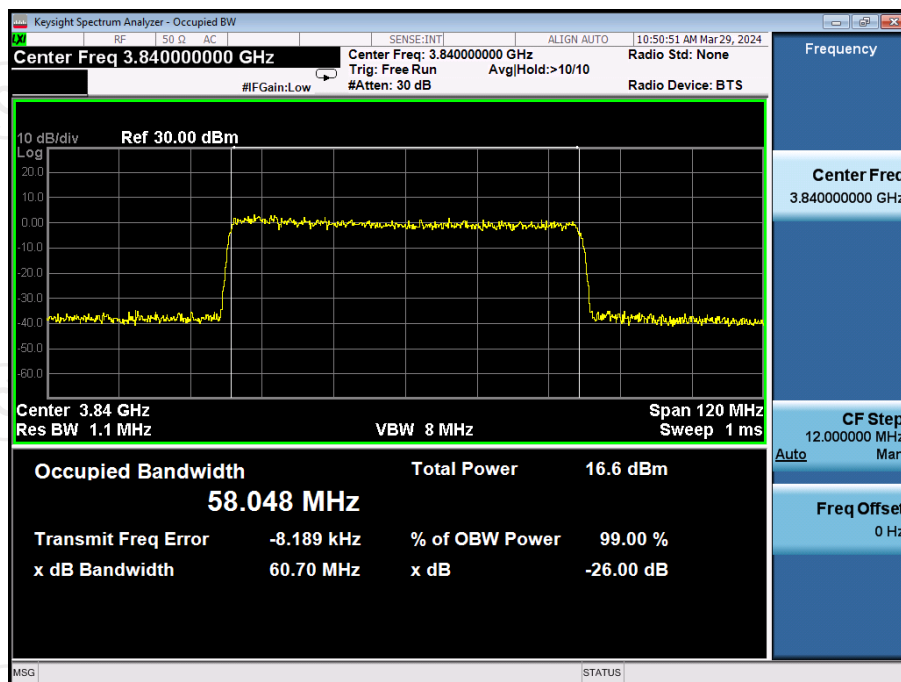
## Output 5G NR 40MHz DL @AGC + 3dB



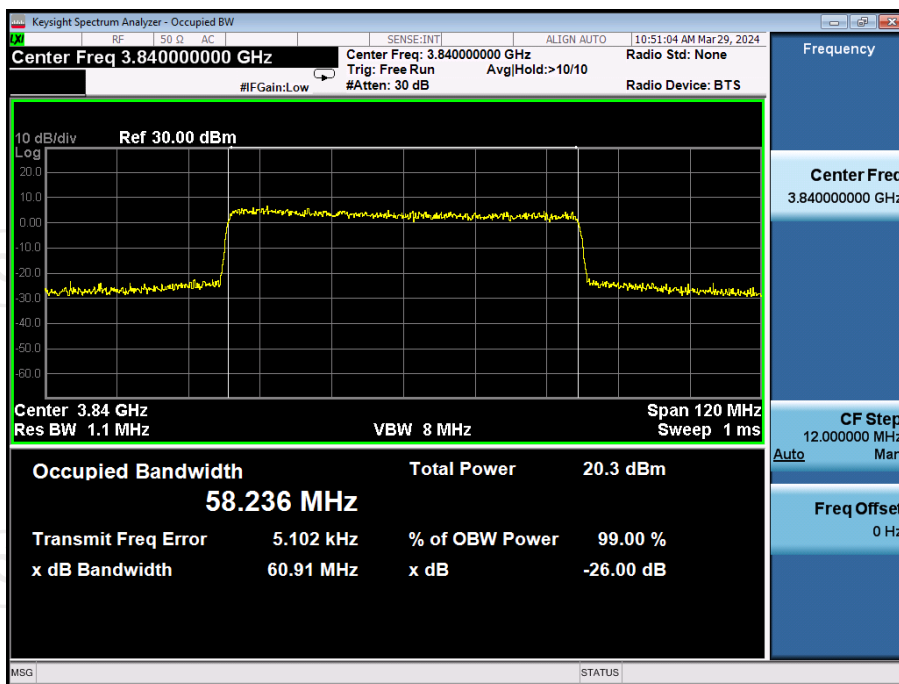
## Input 5G NR 60MHz UL



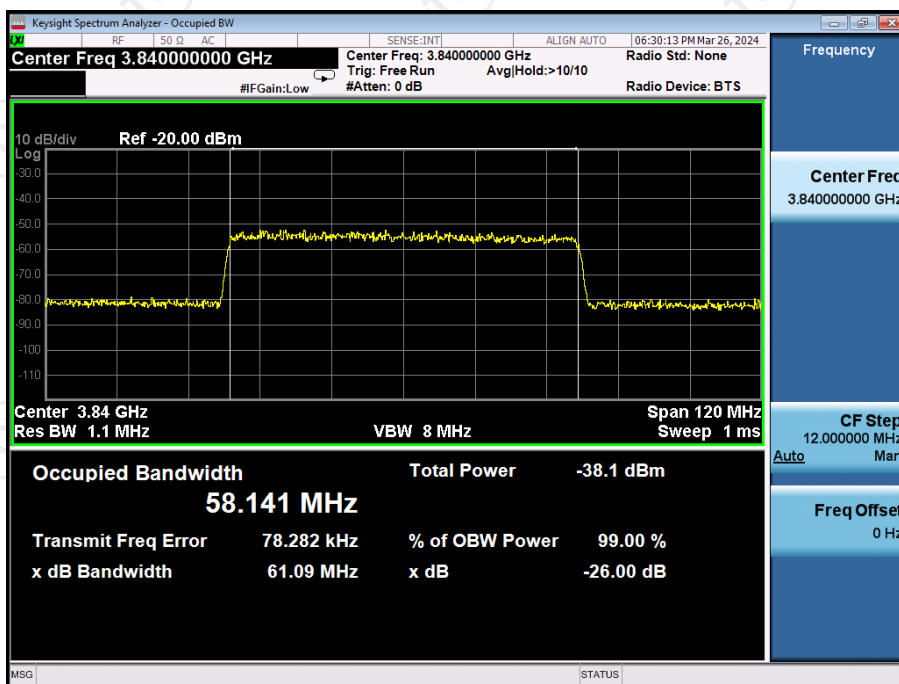
## Output 5G NR 60MHz UL @Pre AGC



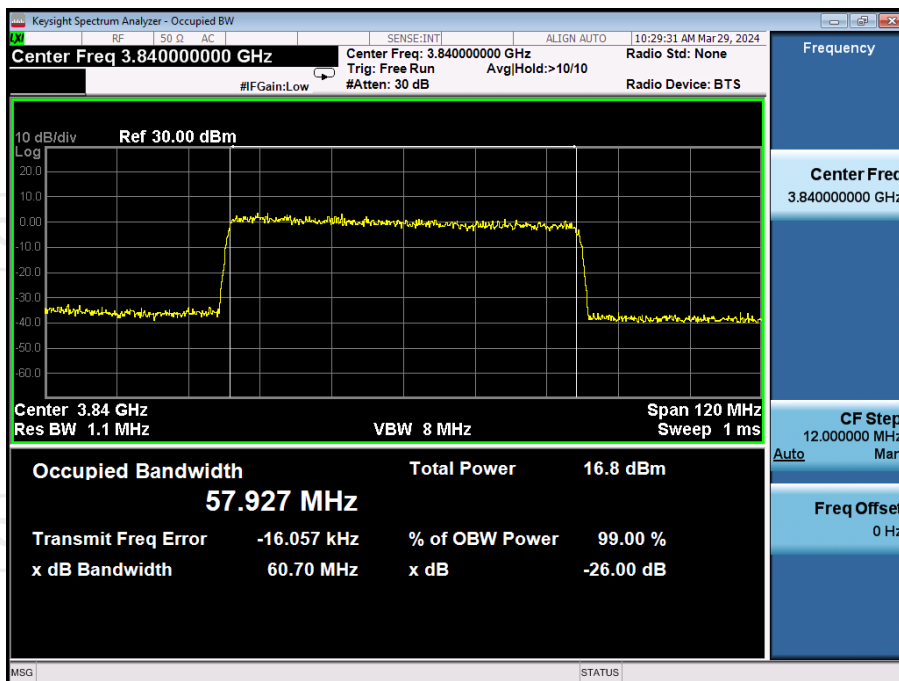
## Output 5G NR 60MHz UL @AGC + 3dB



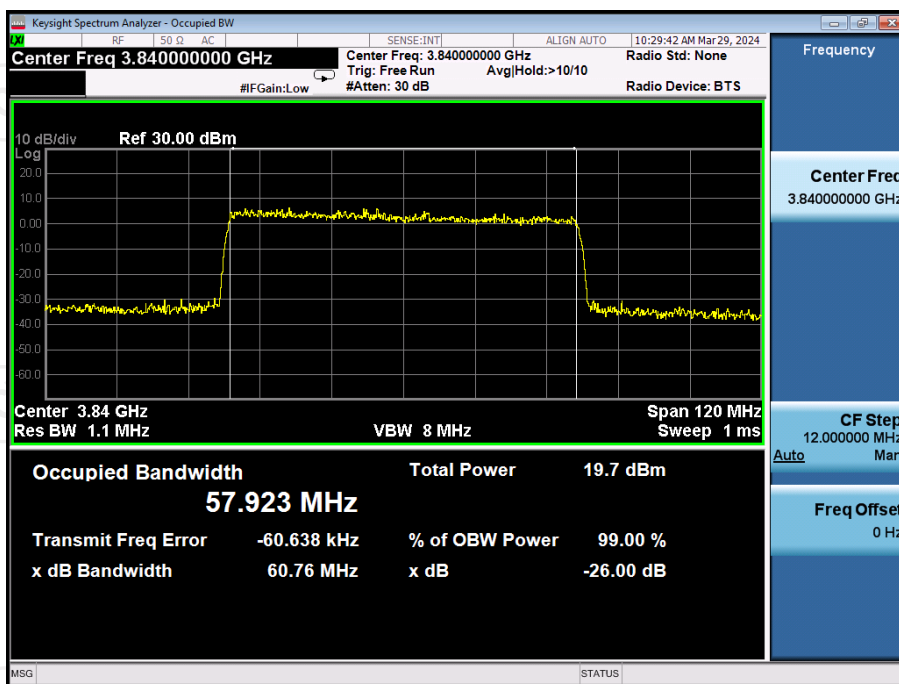
## Input 5G NR 60MHz DL



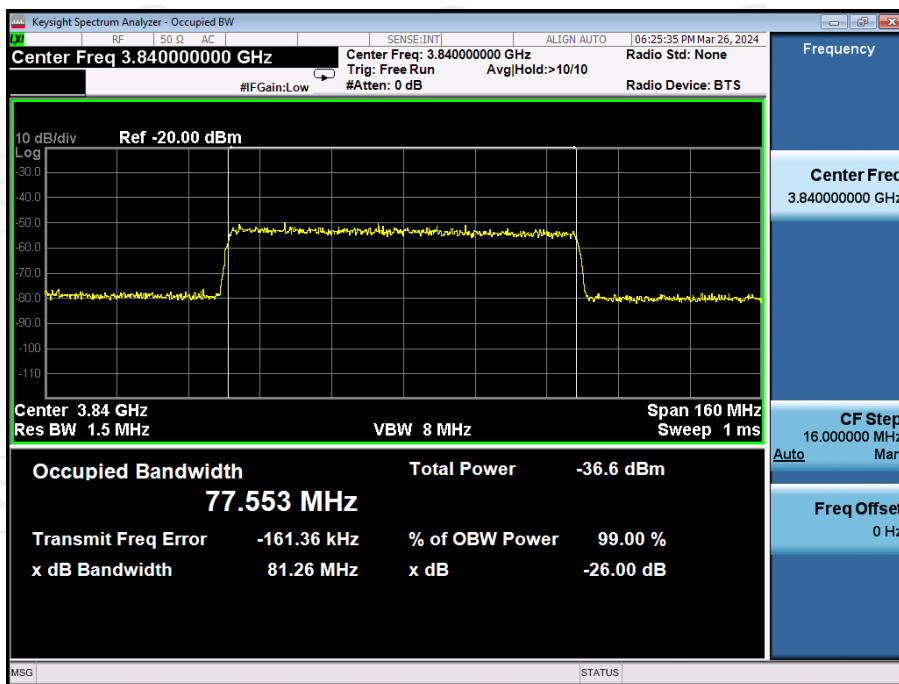
## Output 5G NR 60MHz DL @Pre AGC



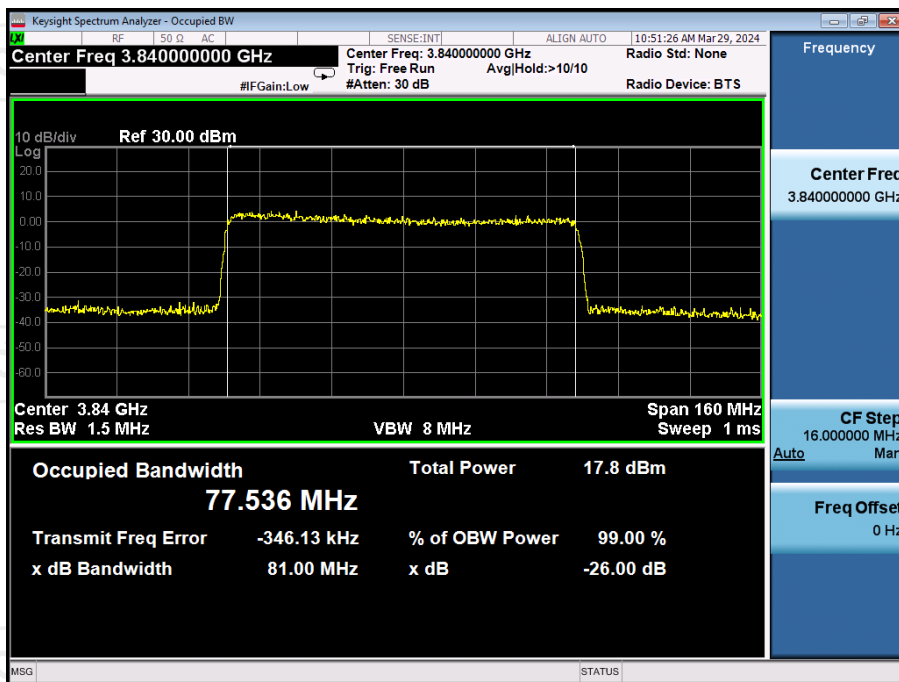
## Output 5G NR 60MHz DL @AGC + 3dB



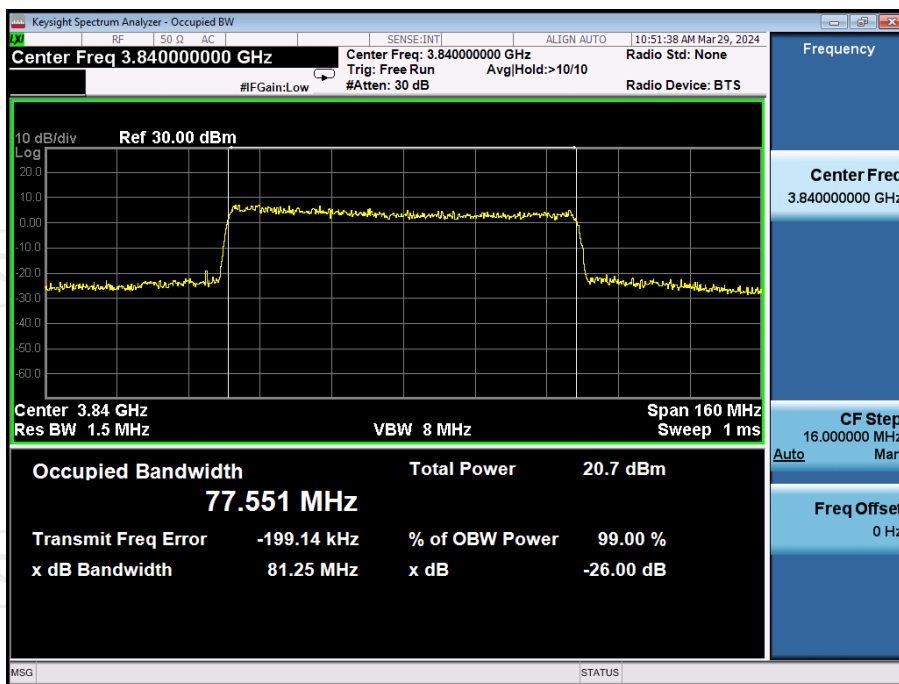
## Input 5G NR 80MHz UL



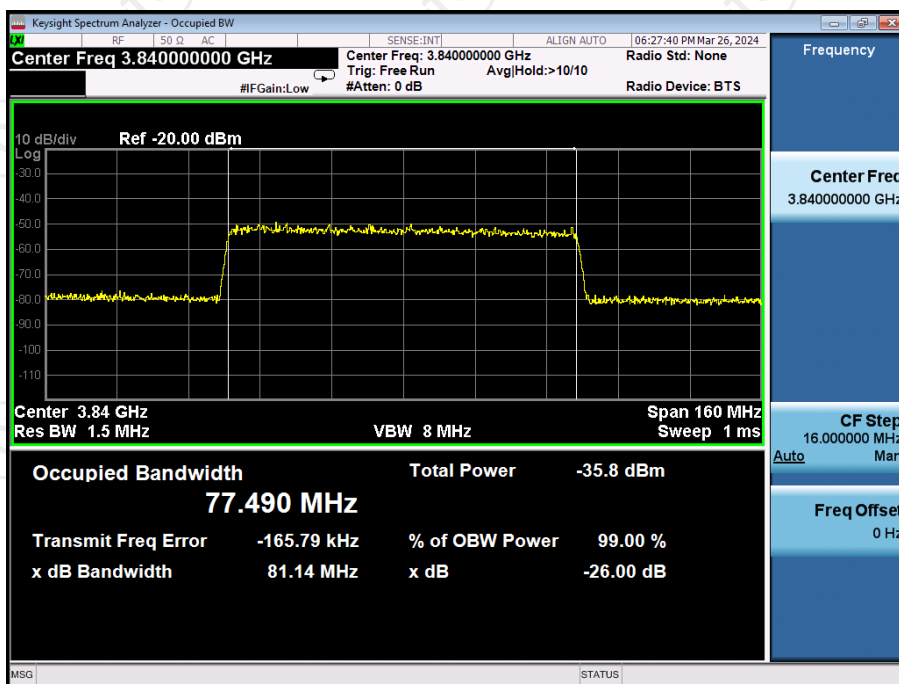
## Output 5G NR 80MHz UL @Pre AGC



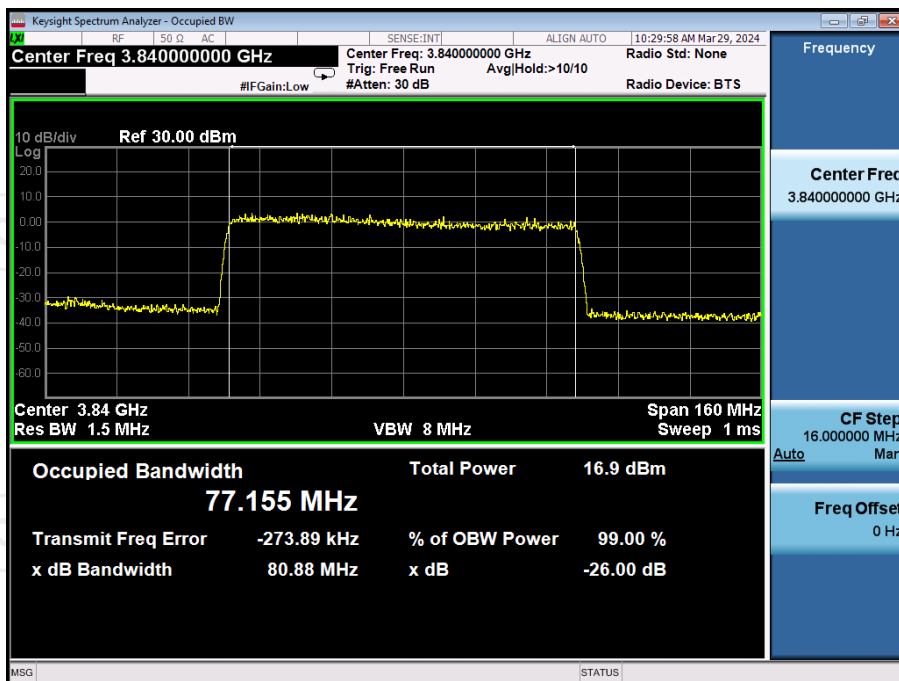
## Output 5G NR 80MHz UL @AGC + 3dB



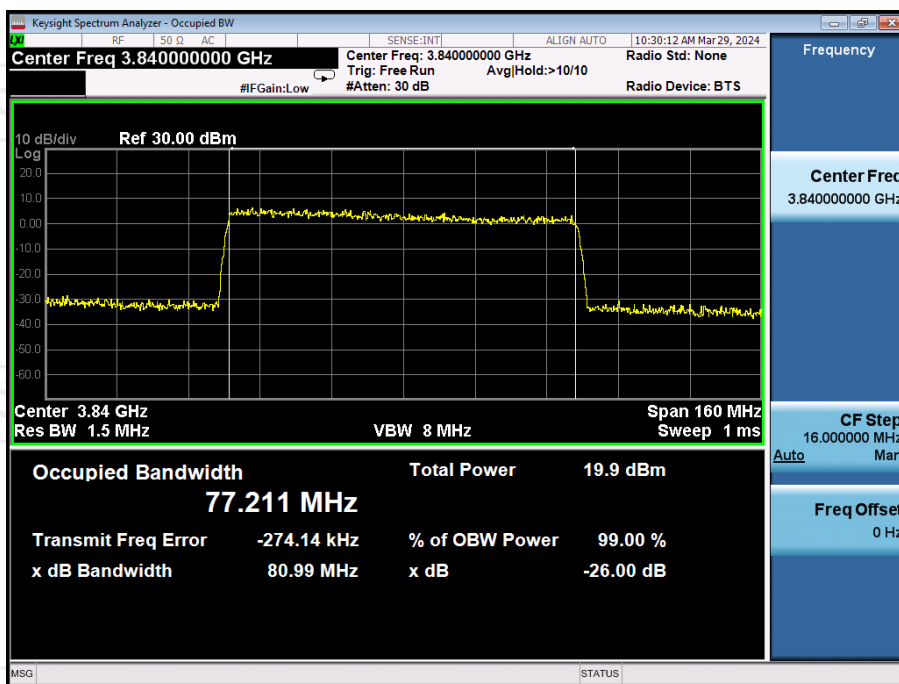
## Input 5G NR 80MHz DL



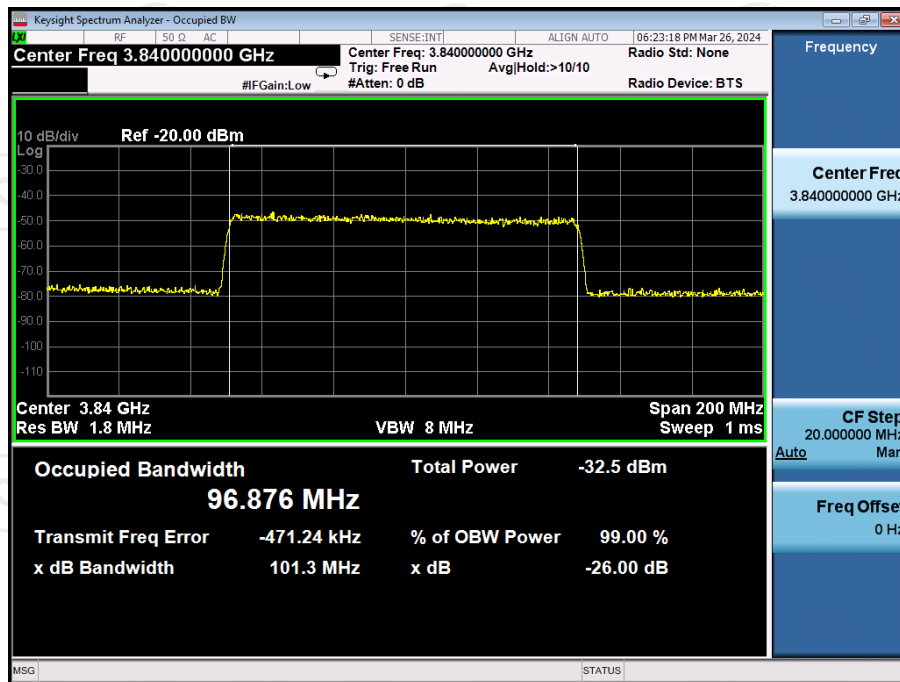
## Output 5G NR 80MHz DL @Pre AGC



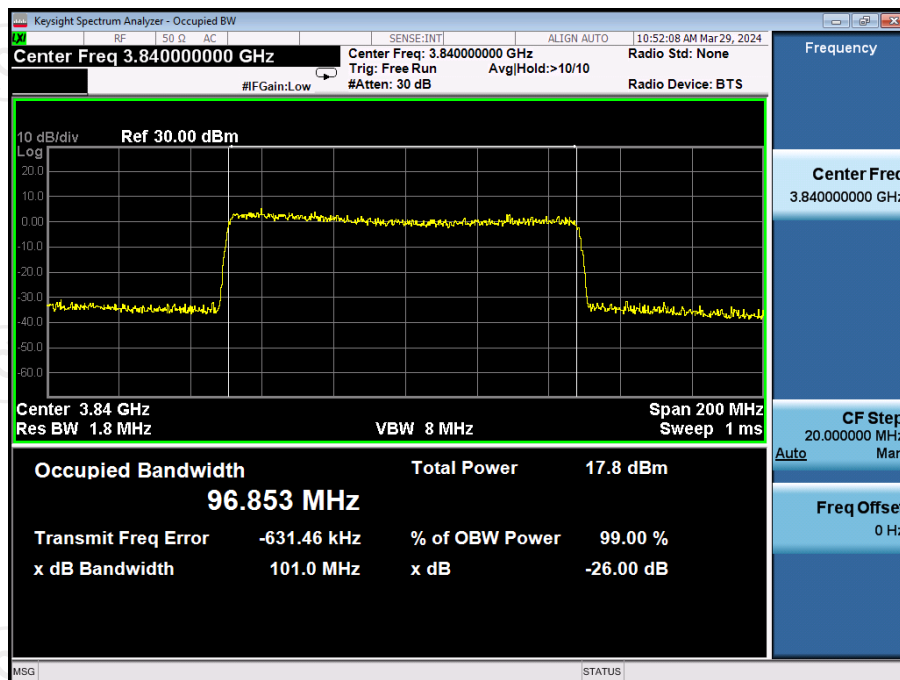
## Output 5G NR 80MHz DL @AGC + 3dB



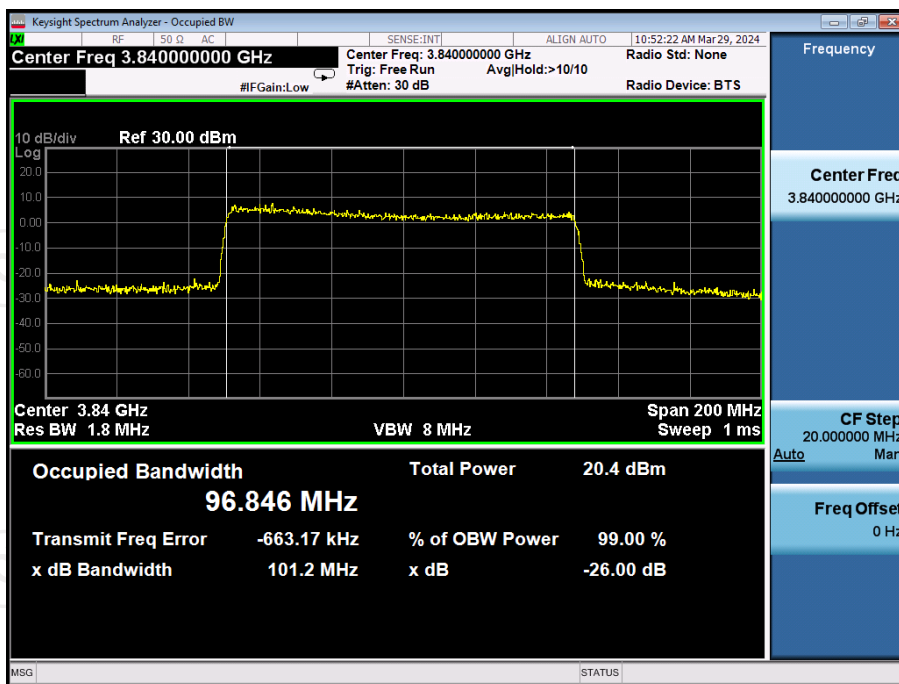
Input 5G NR 100MHz UL



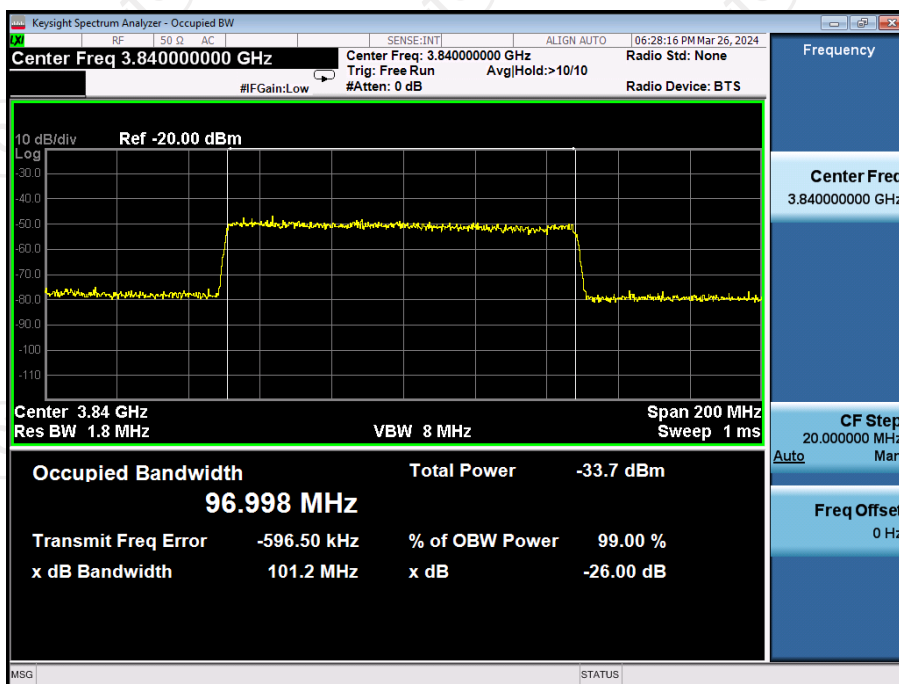
Output 5G NR 100MHz UL @Pre AGC



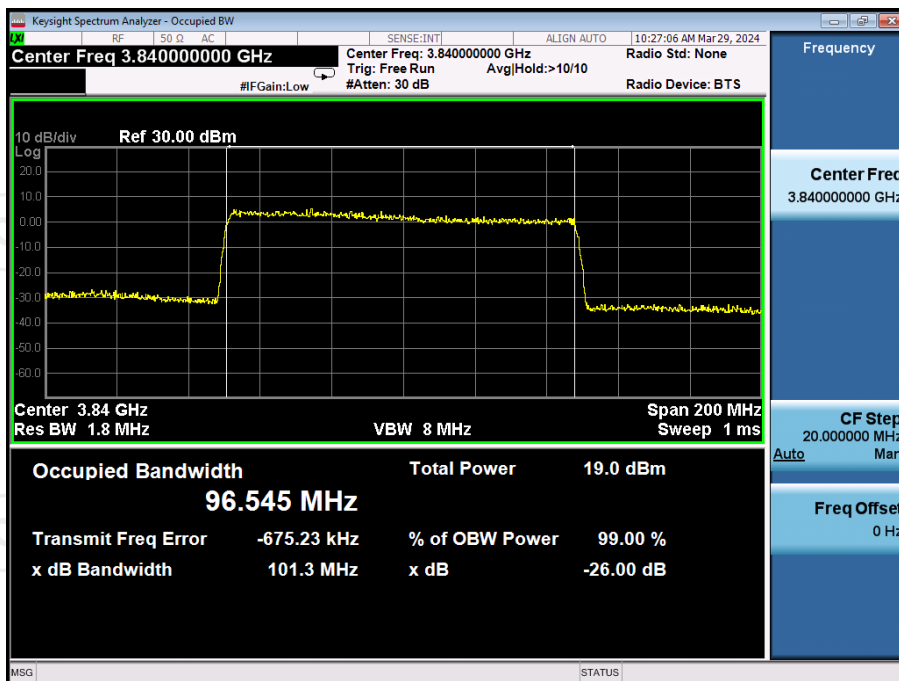
## Output 5G NR 100MHz UL @AGC + 3dB



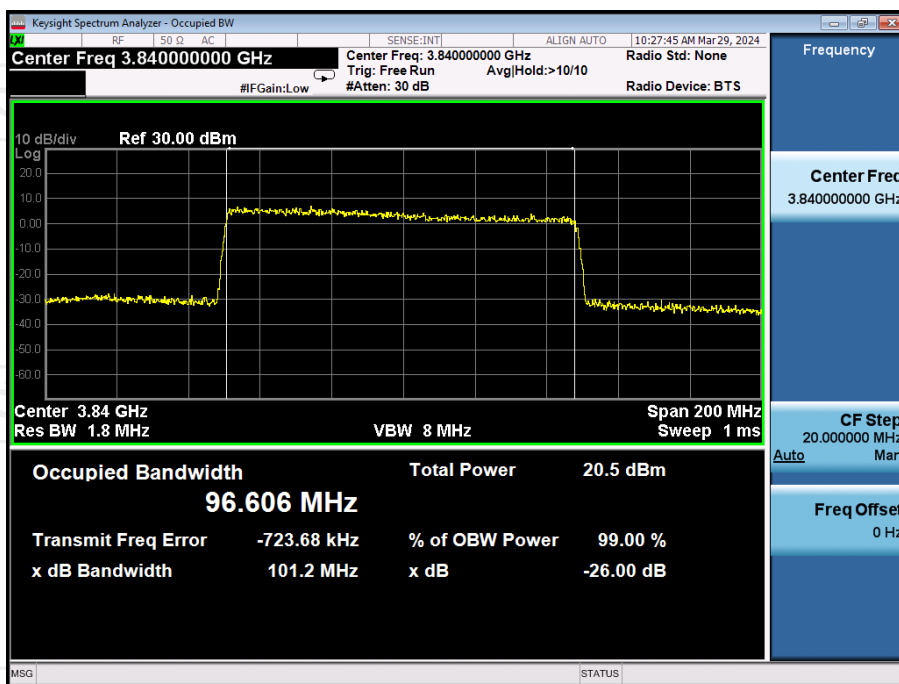
## Input 5G NR 100MHz DL



## Output 5G NR 100MHz DL @Pre AGC

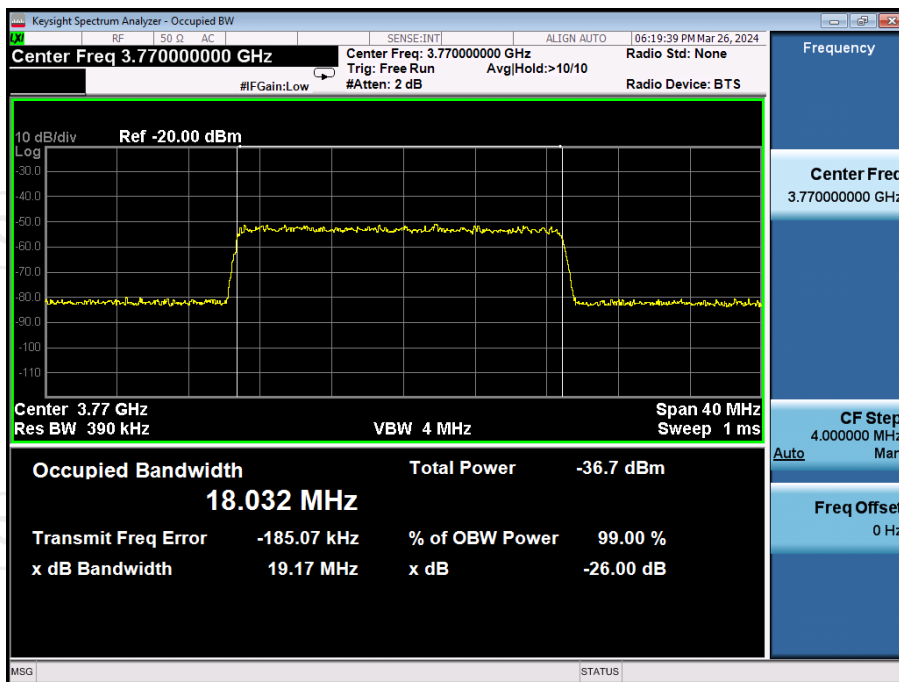


## Output 5G NR 100MHz DL @AGC + 3dB



## Sub-Band Mode

### Input 5G NR 20MHz UL



### Output 5G NR 20MHz UL @Pre AGC

