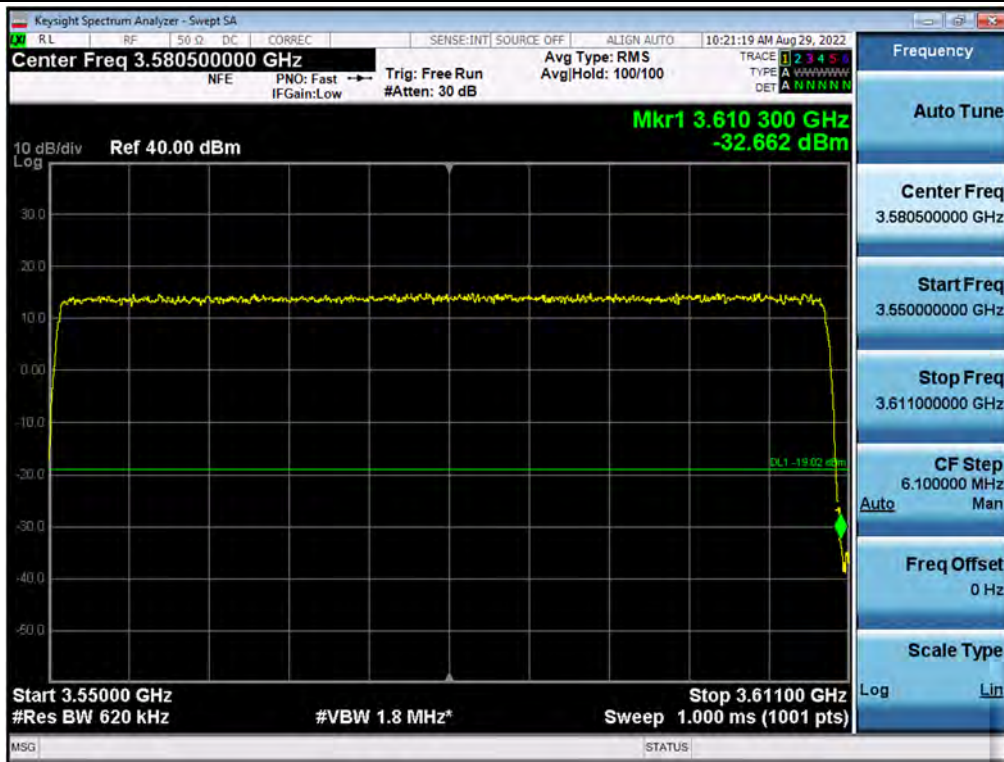


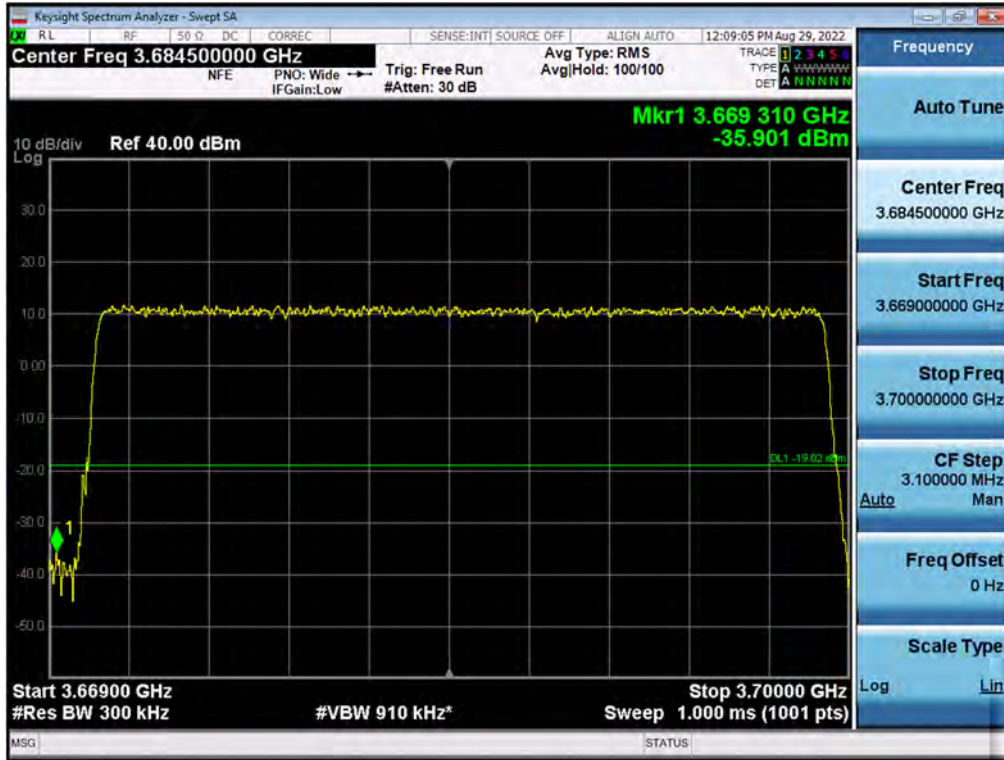
Antenna 0 / CBRS NR(60 MHz 1C + 30 MHz 1C)[2C] / Non-Contiguous / 16QAM / Low Left



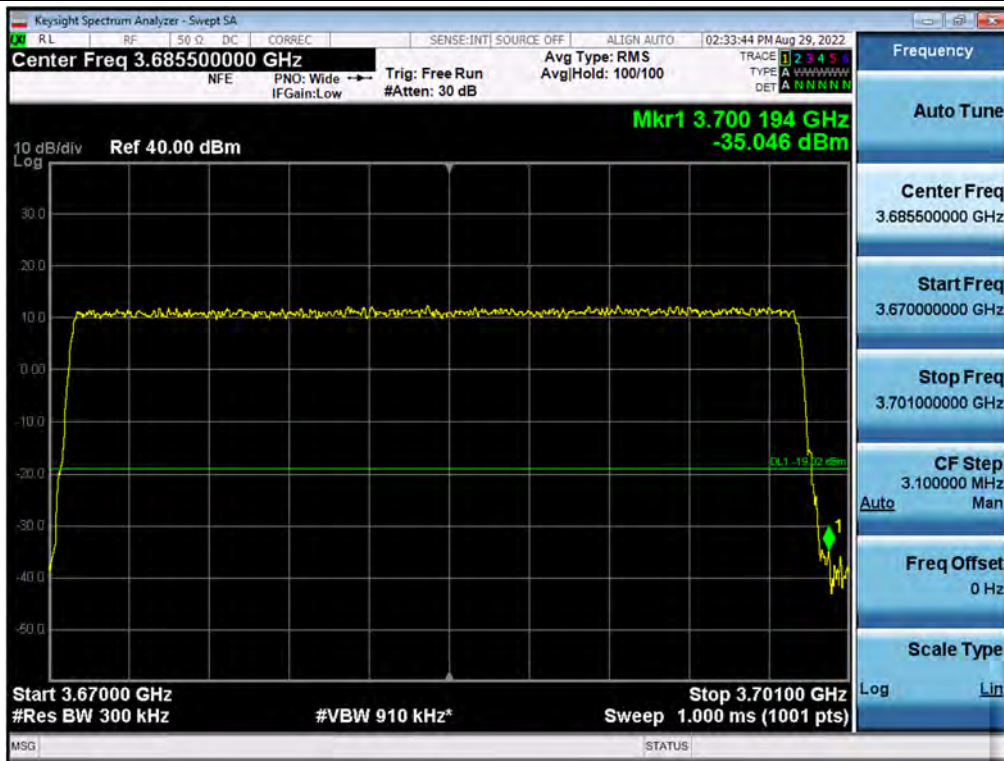
Antenna 1 / CBRS NR(60 MHz 1C + 30 MHz 1C)[2C] / Non-Contiguous / QPSK / Low Right



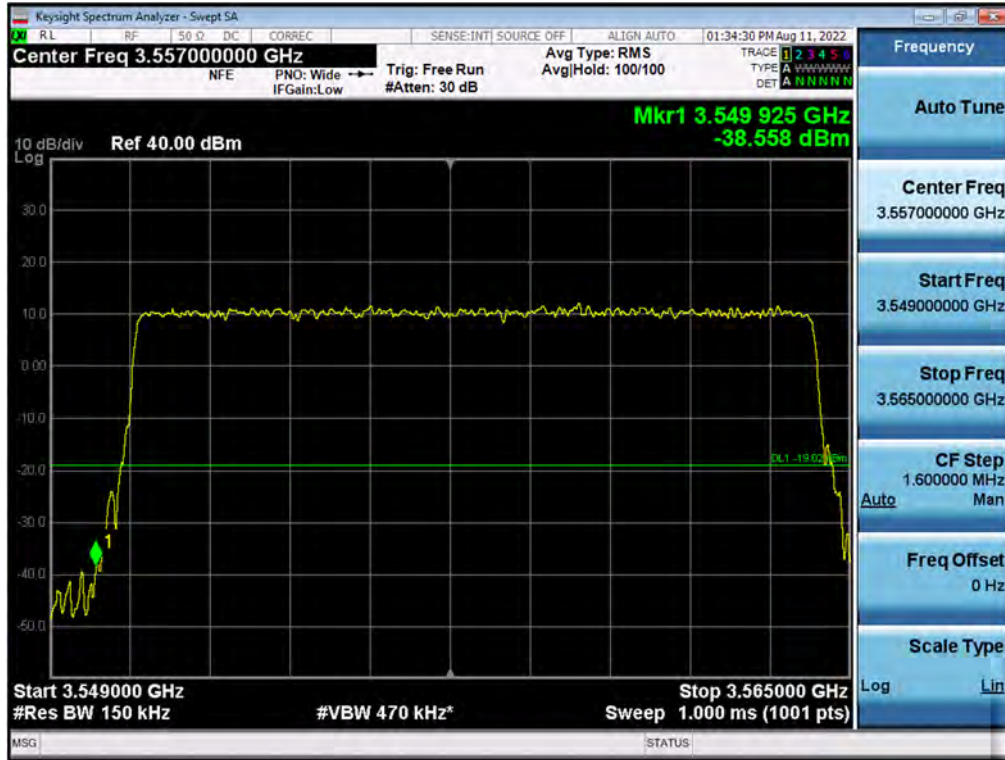
Antenna 0 / CBRS NR(60 MHz 1C + 30 MHz 1C)[2C] / Non-Contiguous / 16QAM / High Left



Antenna 1 / CBRS NR(60 MHz 1C + 30 MHz 1C)[2C] / Non-Contiguous / 64QAM / High Right



Antenna 2 / CBRS LTE(15 MHz 1C + 15 MHz 1C)[2C] / Non-Contiguous / QPSK / Low Left

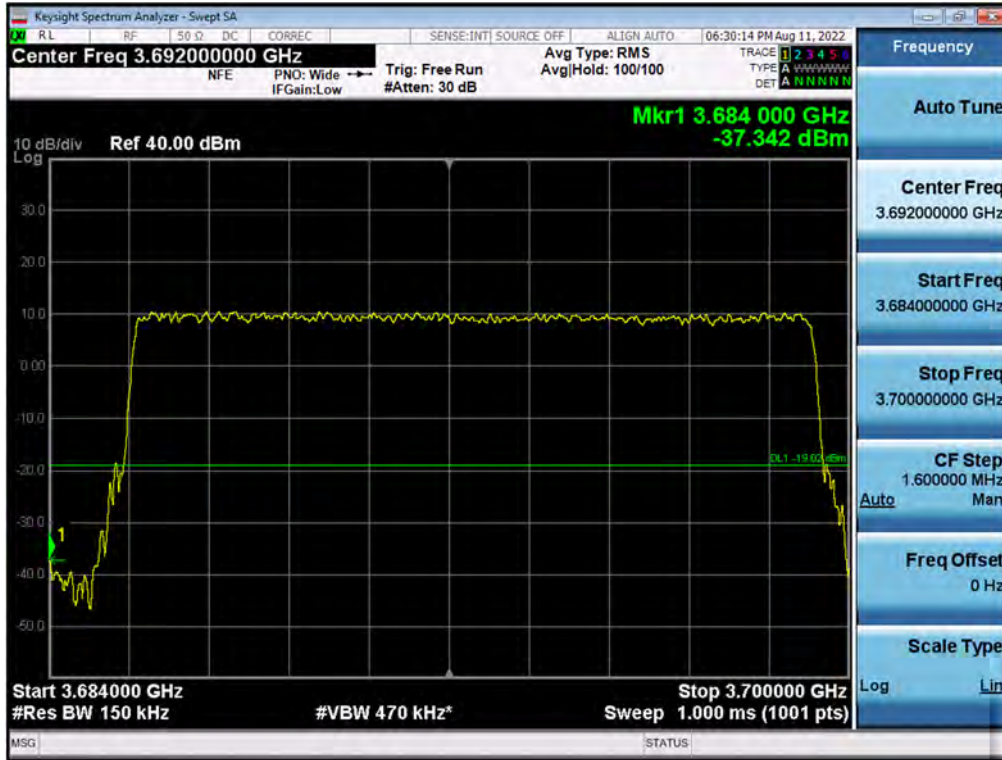


Antenna 0 / CBRS LTE(15 MHz 1C + 15 MHz 1C)[2C] / Non-Contiguous / 64QAM / Low Right

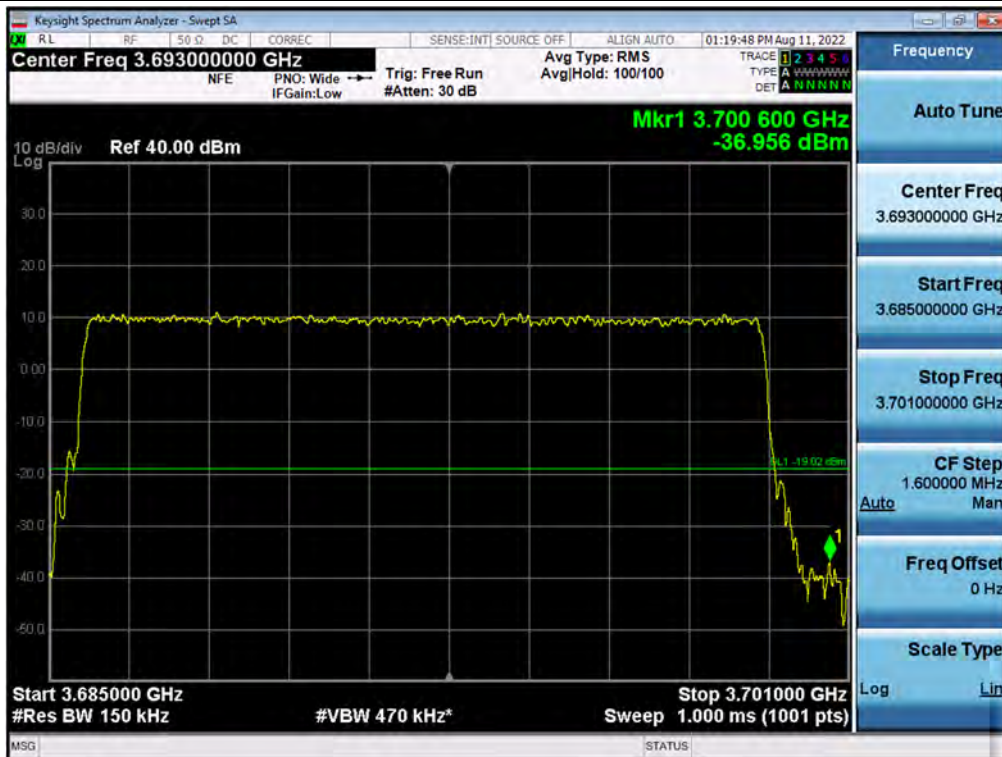




## Antenna 1 / CBRS LTE(15 MHz 1C + 15 MHz 1C)[2C] / Non-Contiguous / 256QAM / High Left



## Antenna 1 / CBRS LTE(15 MHz 1C + 15 MHz 1C)[2C] / Non-Contiguous / QPSKQAM / High Right



Antenna 2 / CBRS LTE 5 MHz 1C + NR 10 MHz 1C[2C] / Non-Contiguous / 256QAM / Low Left



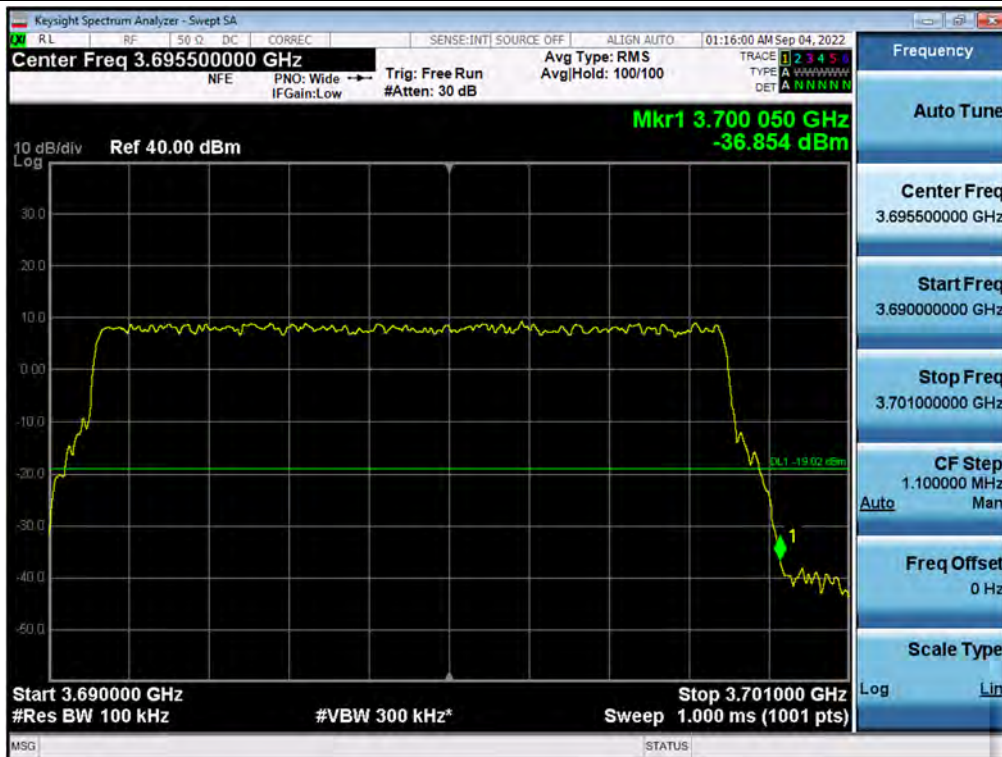
Antenna 3 / CBRS LTE 5 MHz 1C + NR 10 MHz 1C[2C] / Non-Contiguous / 16QAM / Low Right



Antenna 3 / CBRS LTE 5 MHz 1C + NR 10 MHz 1C[2C] / Non-Contiguous / 16QAM / High Left

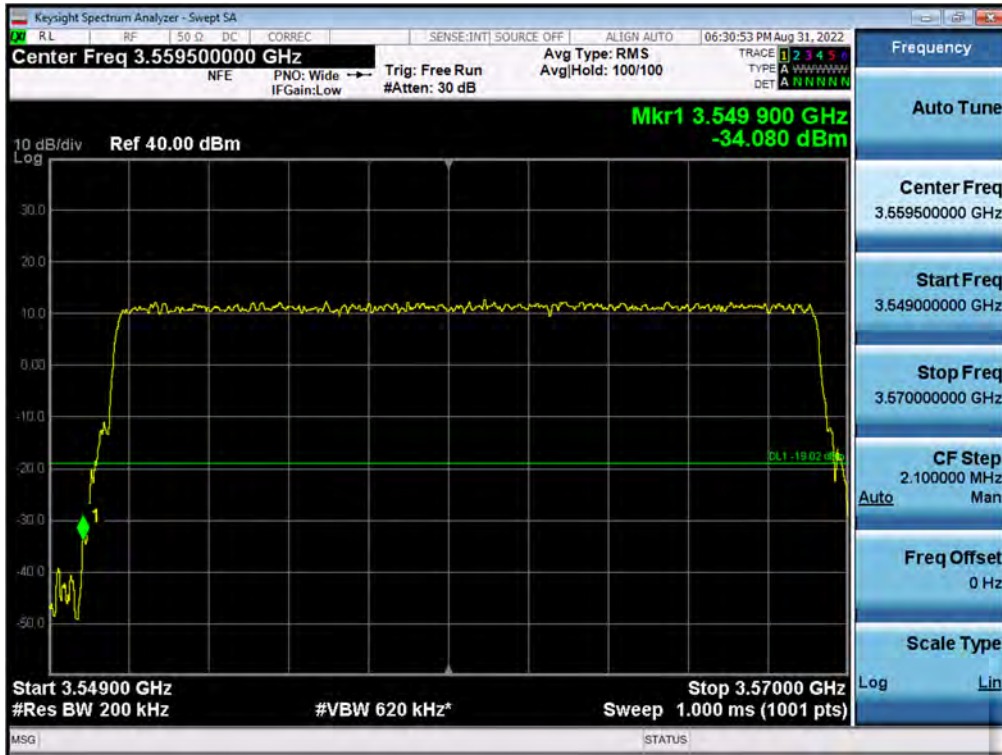


Antenna 3 / CBRS LTE 5 MHz 1C + NR 10 MHz 1C[2C] / Non-Contiguous / 16QAM / High Right

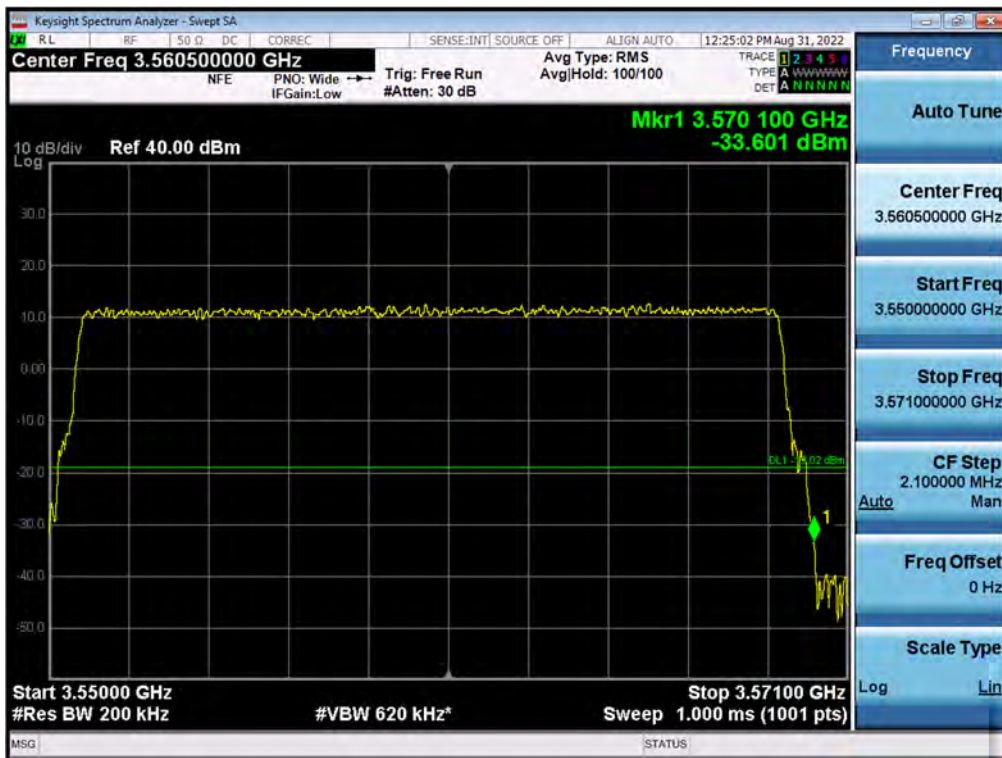




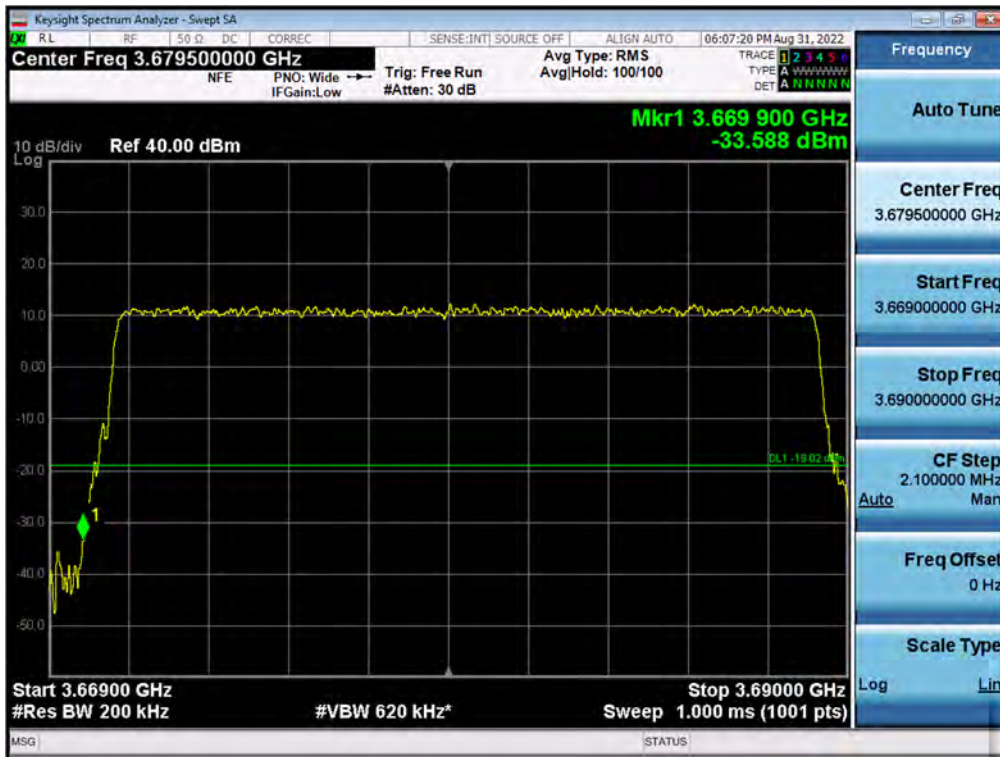
Antenna 2 / CBRS NR[20 MHz 1C + (20 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 256QAM / Low Left



Antenna 1 / CBRS NR[20 MHz 1C + (20 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / QPSK / Low Right



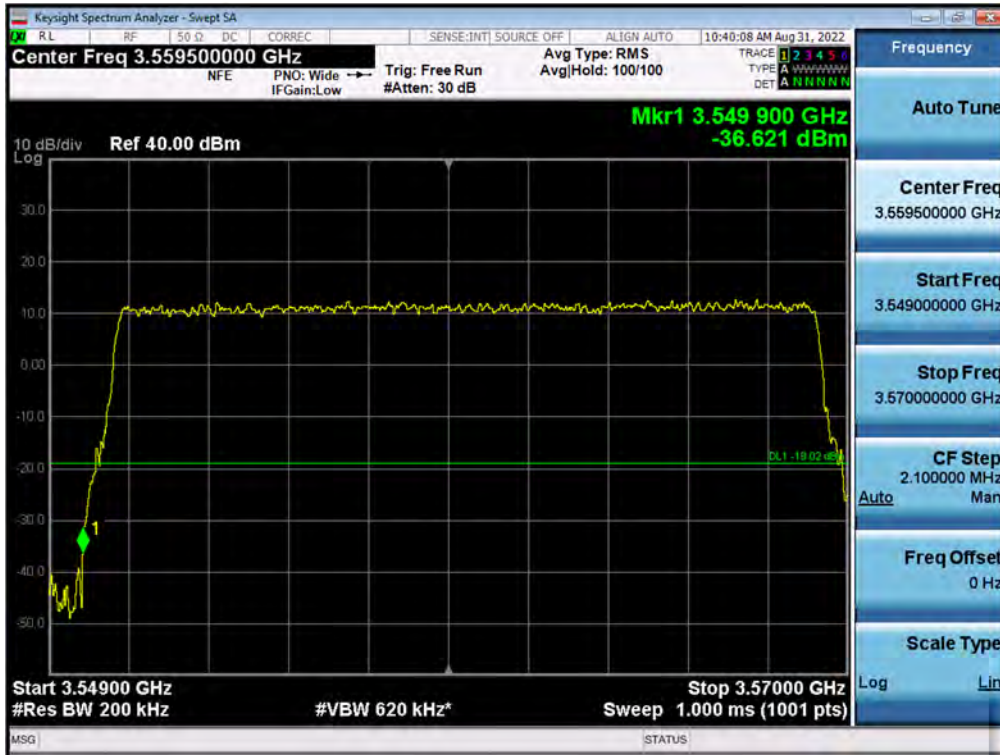
Antenna 1 / CBRS NR[20 MHz 1C + (20 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 256QAM / High Left



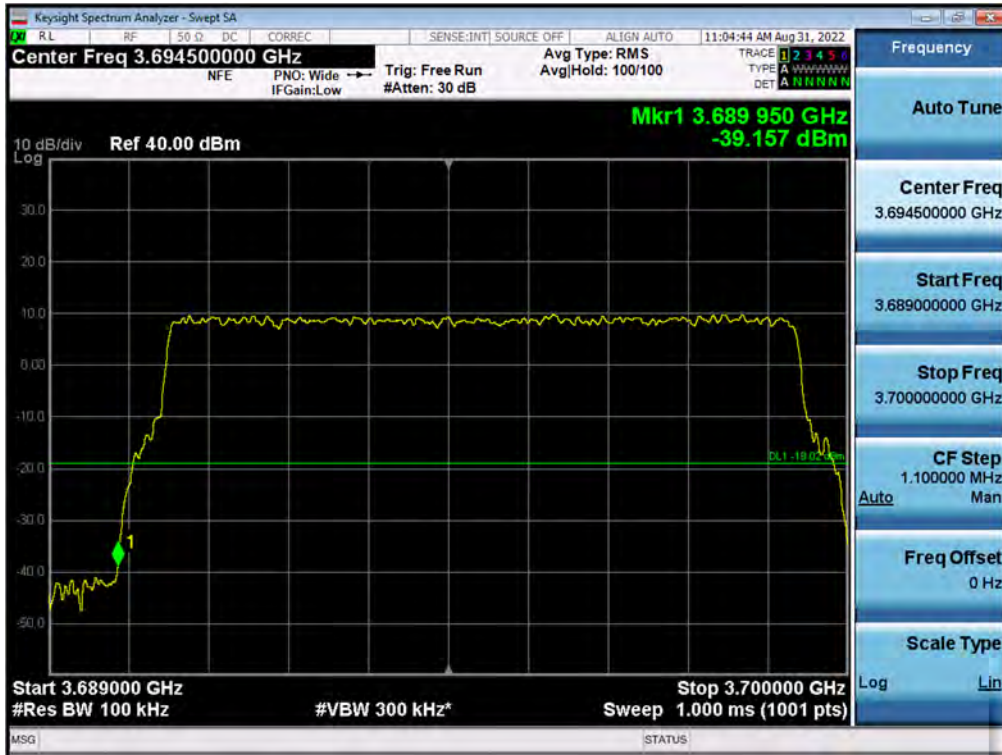
Antenna 1 / CBRS NR[20 MHz 1C + (20 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 256QAM / High Right



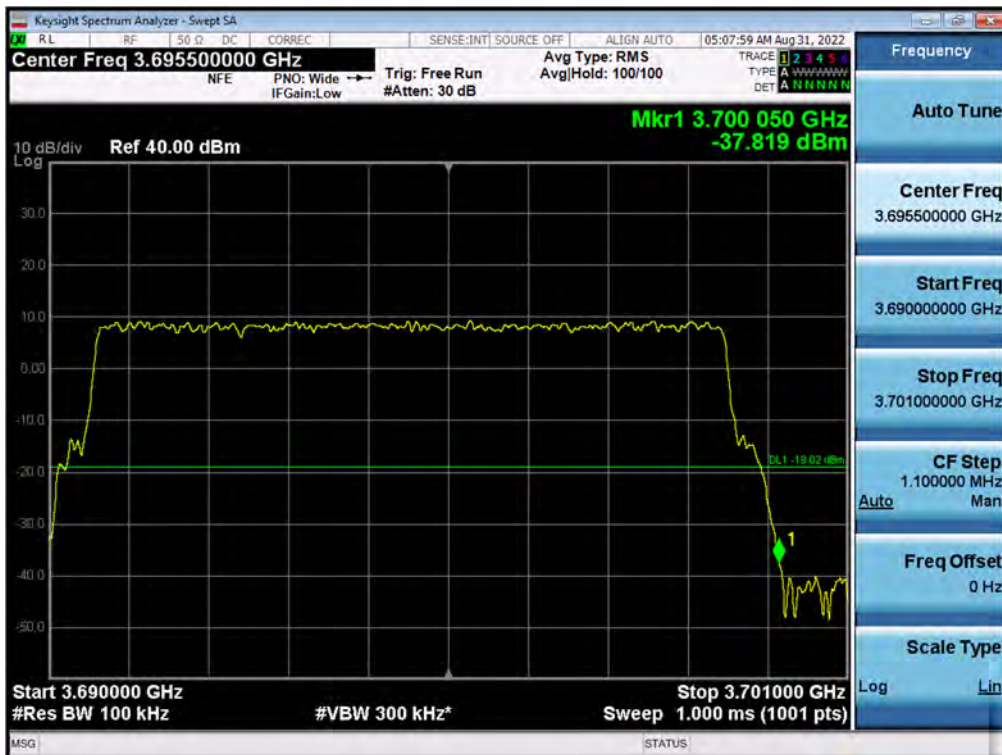


**Antenna 2 / CBRS NR[(20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / 256QAM / Low Left**

**Antenna 3 / CBRS NR[(20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / QPSK / Low Right**

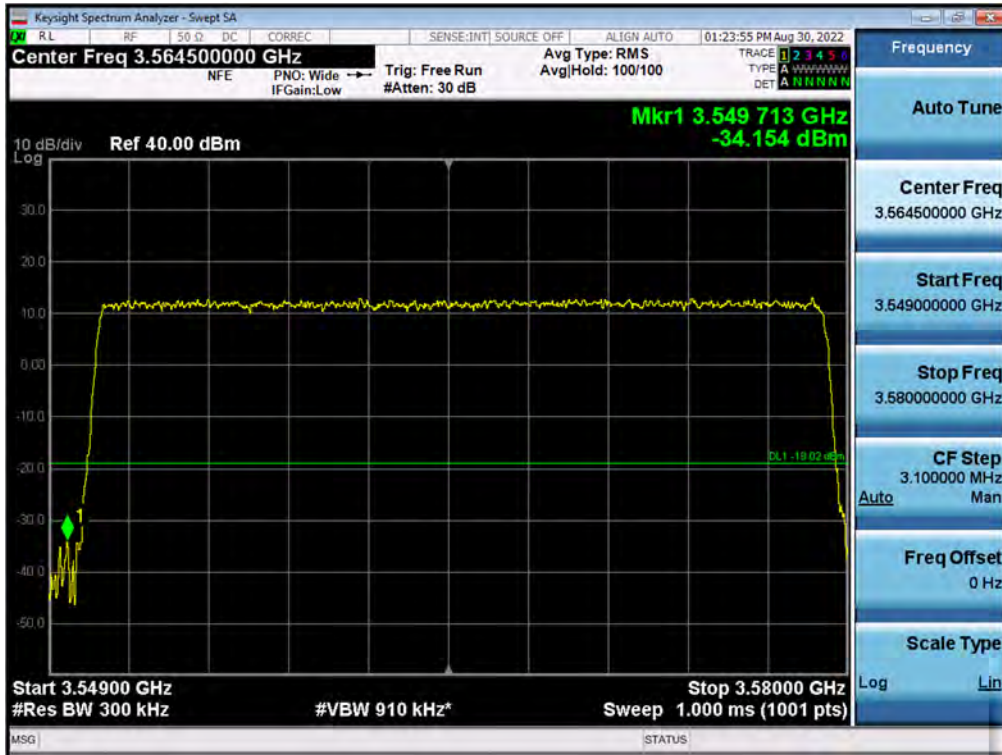

Antenna 3 / CBRS NR[(20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / 256QAM / High Left



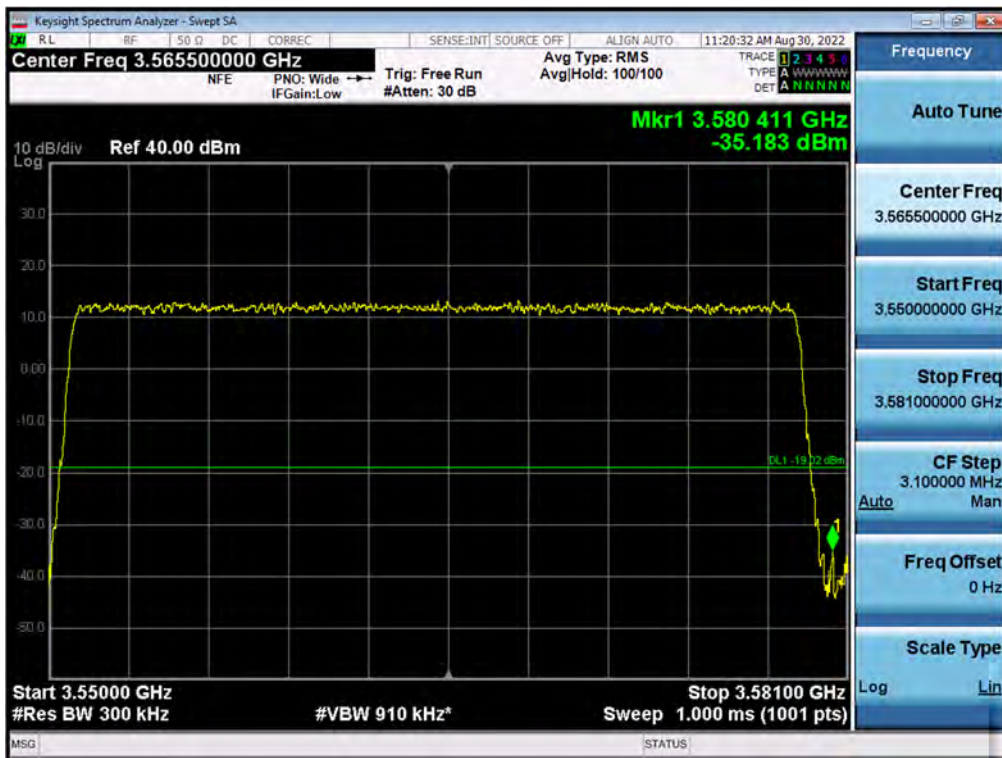
Antenna 1 / CBRS NR[(20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / 256QAM / High Right



Antenna 2 / CBRS NR[30 MHz 1C + (30 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 16QAM / Low Left

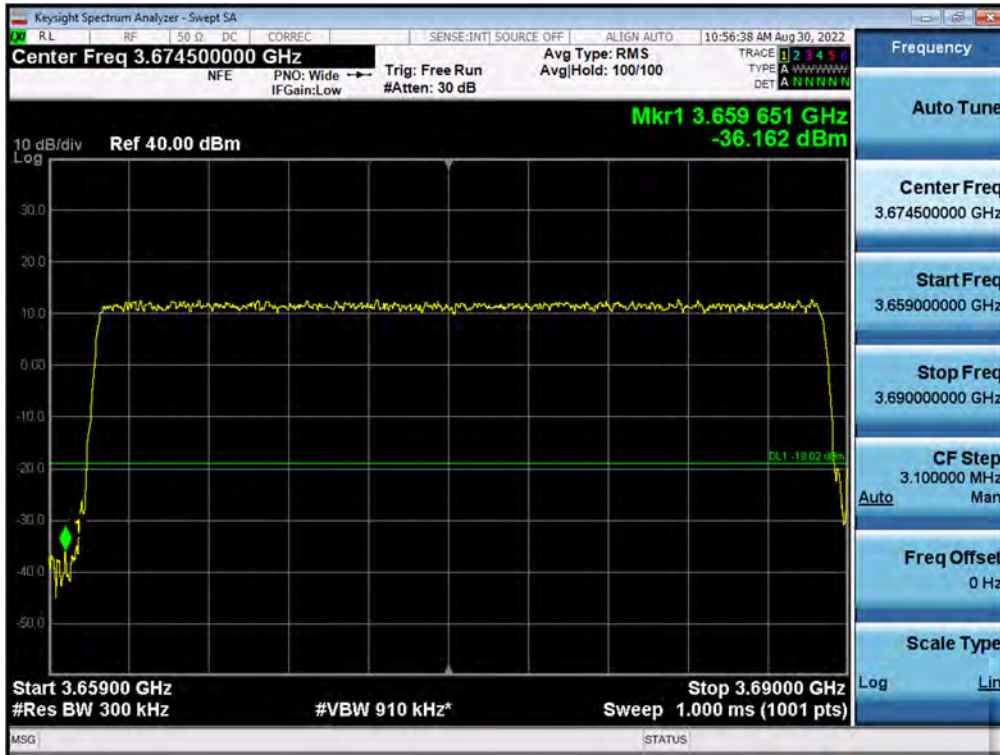


Antenna 1 / CBRS NR[30 MHz 1C + (30 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / QPSK / Low Right

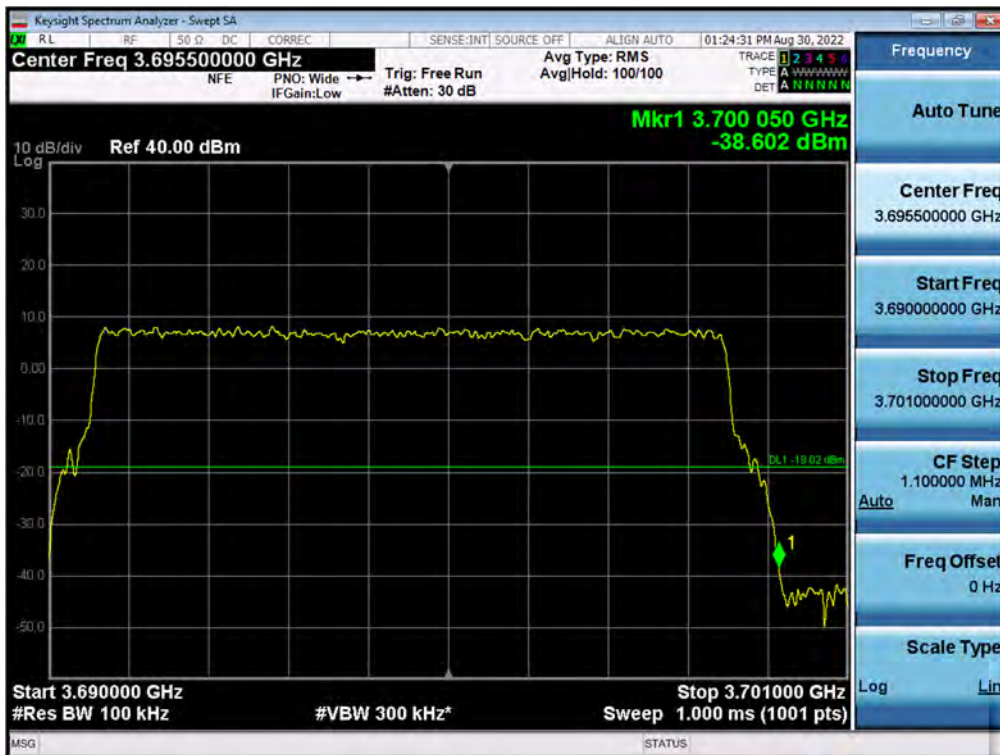




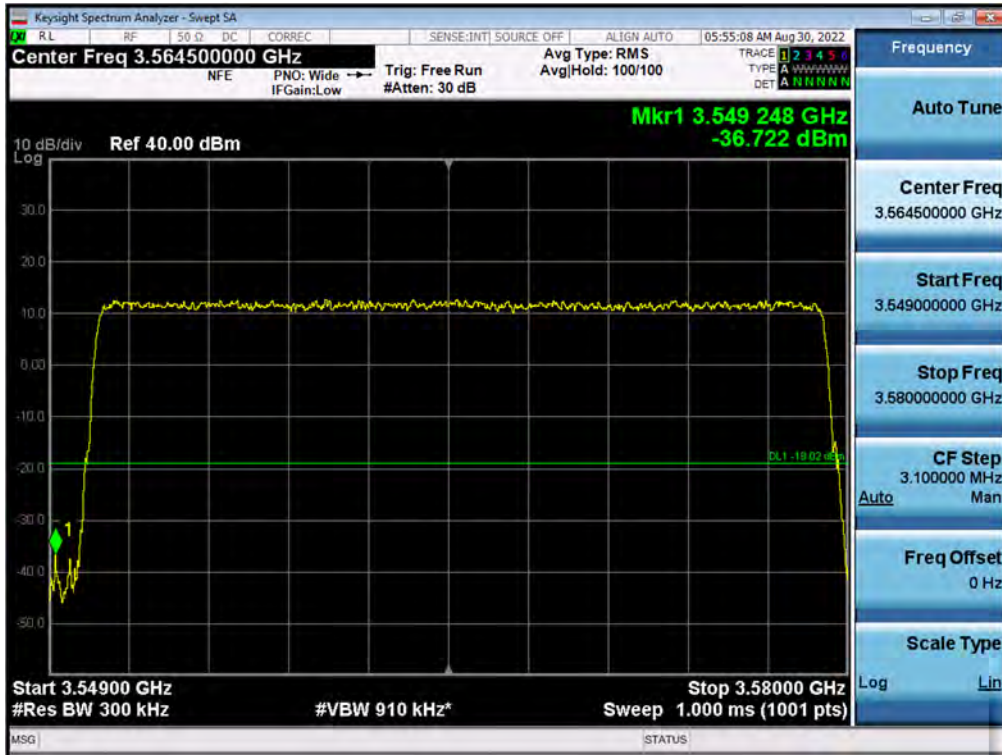
Antenna 1 / CBRS NR[30 MHz 1C + (30 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 256QAM / High Left



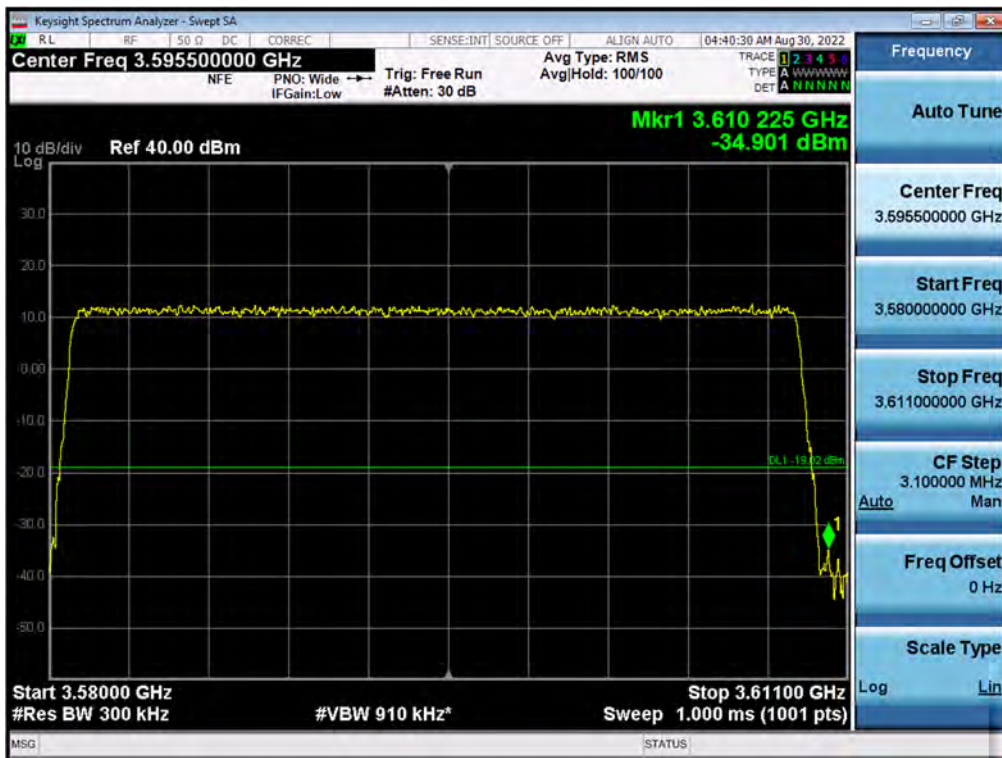
Antenna 3 / CBRS NR[30 MHz 1C + (30 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 64QAM / High Right



Antenna 0 / CBRS NR[(30 MHz 1C + 30 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / 16QAM / Low Left



Antenna 1 / CBRS NR[(30 MHz 1C + 30 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / QPSK / Low Right



Antenna 1 / CBRS NR[(30 MHz 1C + 30 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / 256QAM / High Left



Antenna 3 / CBRS NR[(30 MHz 1C + 30 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / 256QAM / High Right



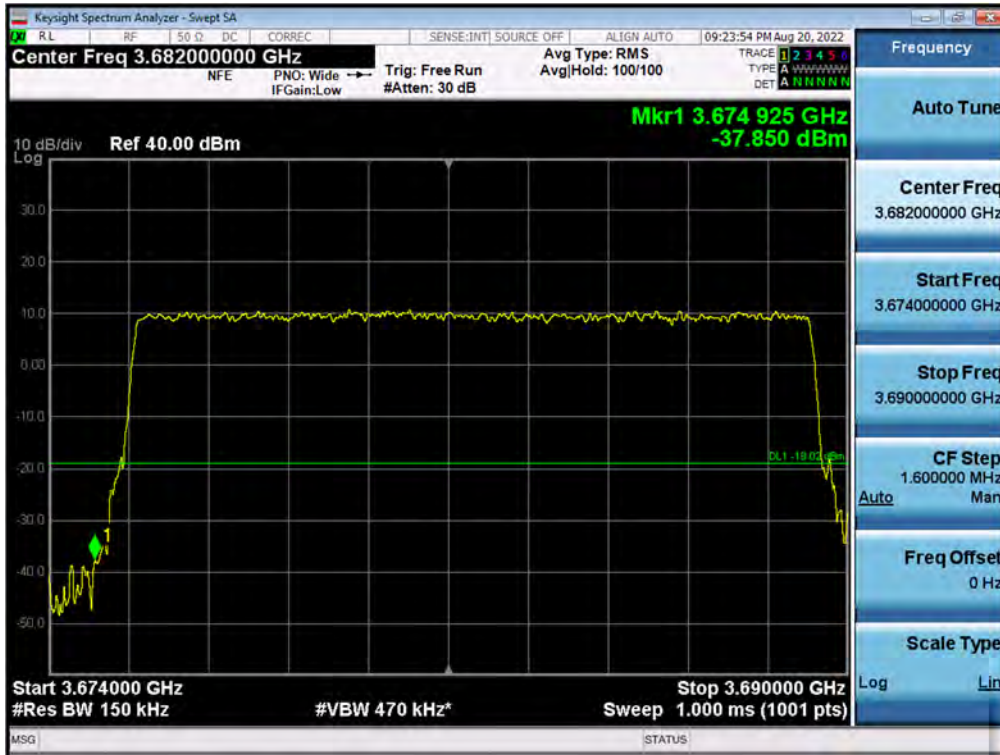


Antenna 1 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 16QAM / Low Left

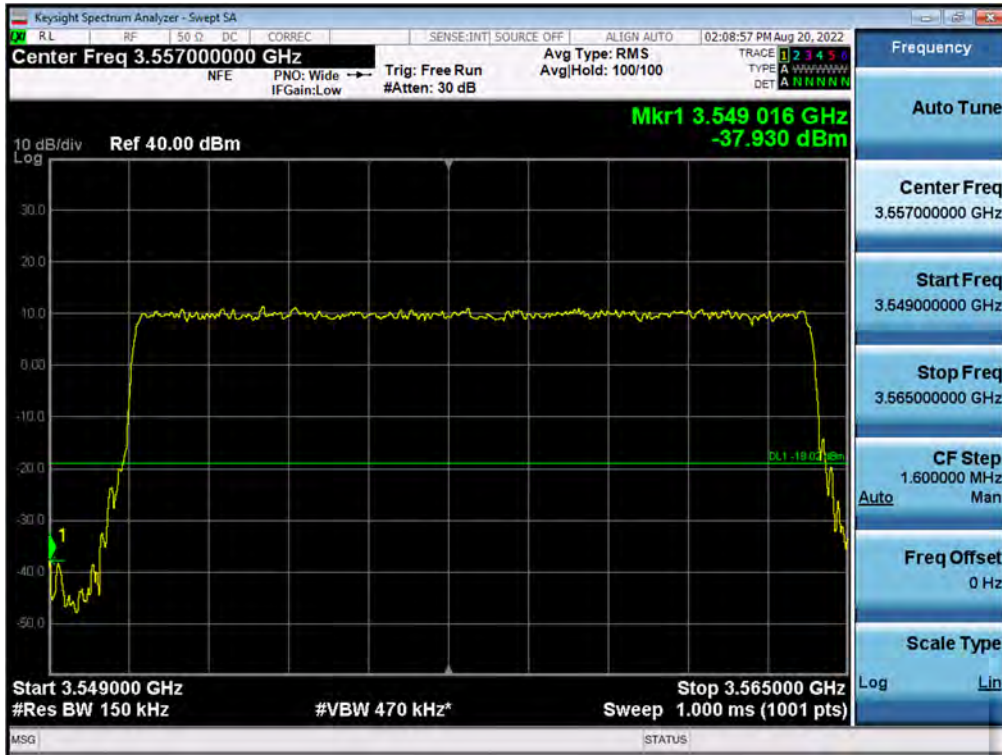


Antenna 1 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 16QAM / Low Right

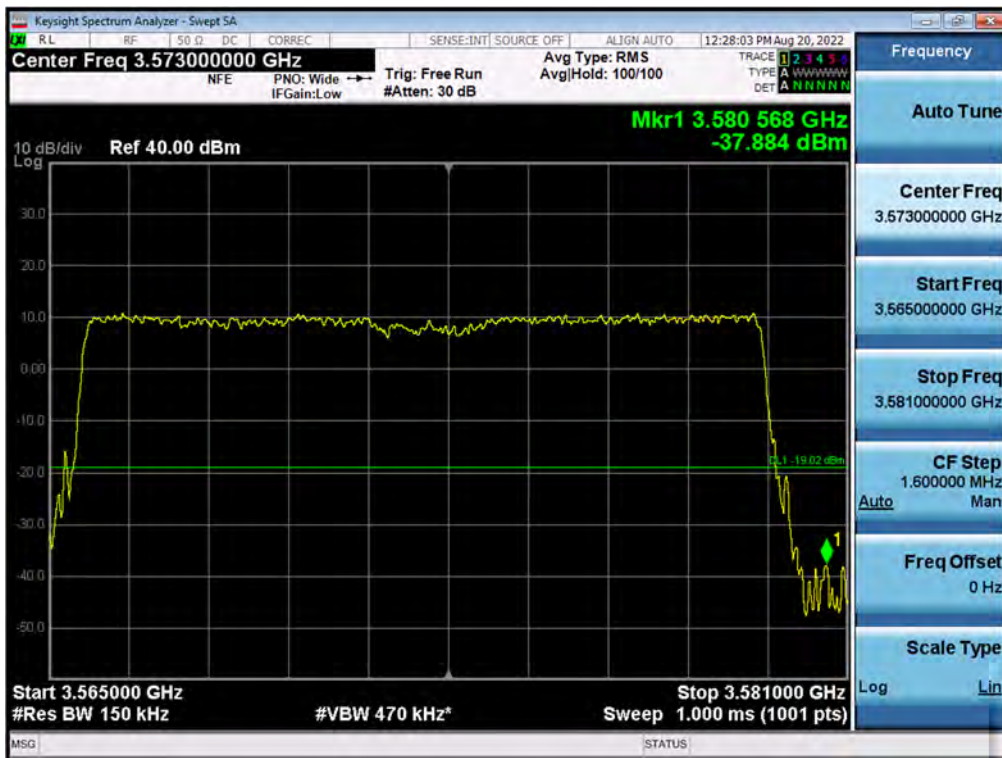


**Antenna 0 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 64QAM / High Left**

**Antenna 1 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 256QAM / High Right**

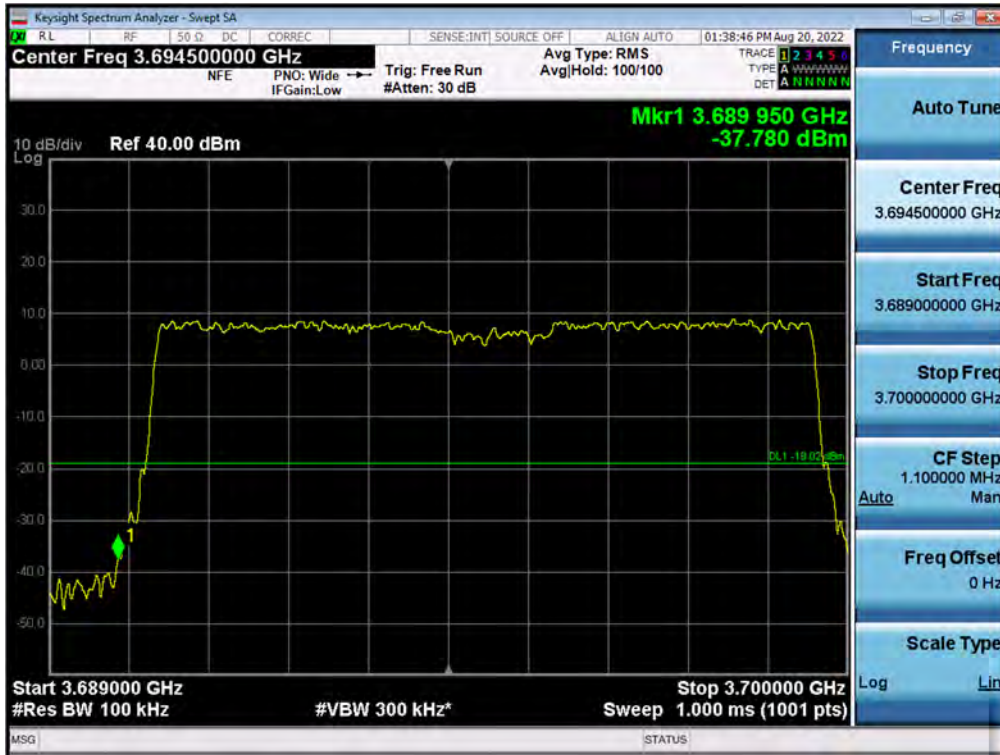
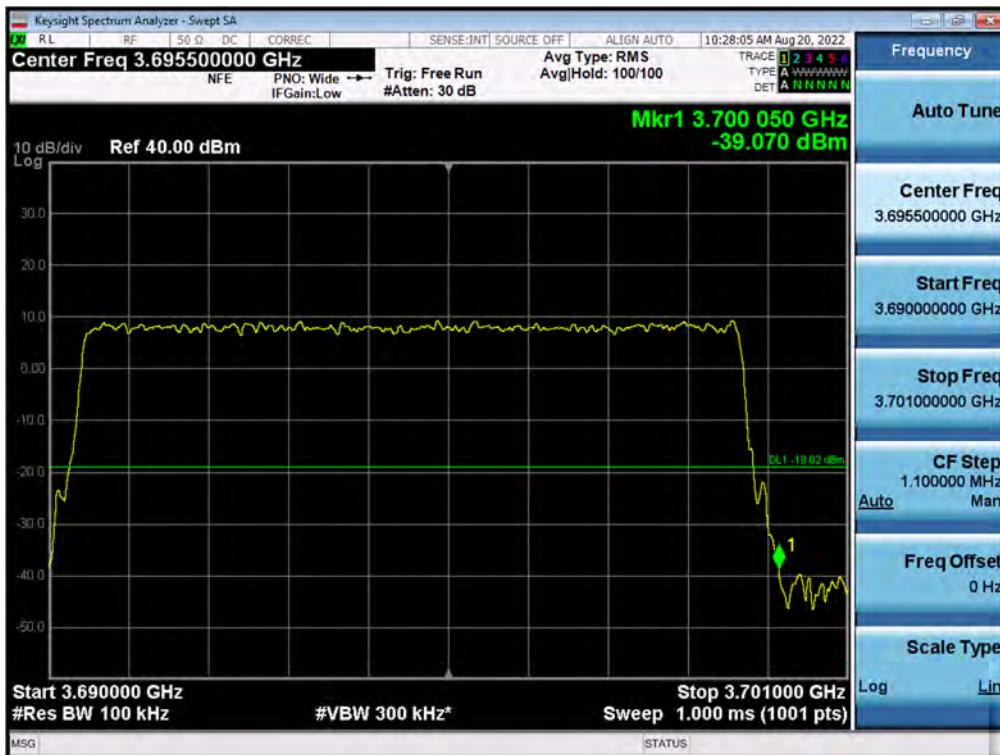

Antenna 0 / CBRS LTE[(15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / 64QAM / Low Left



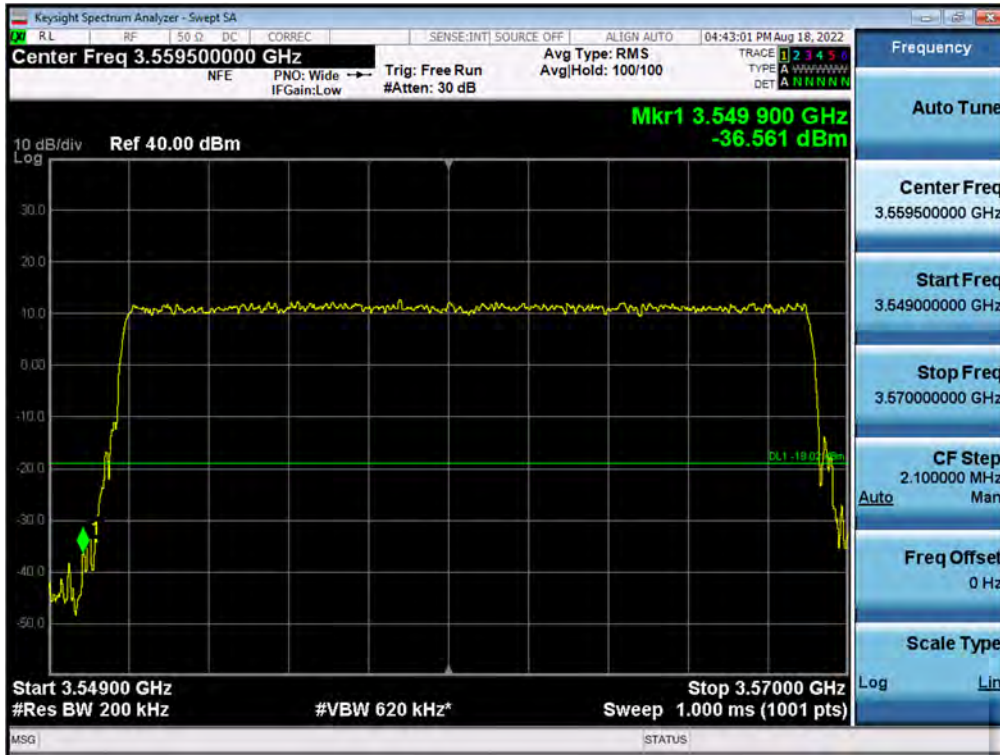
Antenna 1 / CBRS LTE[(15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / 16QAM / Low Right





**Antenna 3 / CBRS LTE[(15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / 16QAM / High Left**

**Antenna 1 / CBRS LTE[(15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / Non-Contiguous / QPSK / High Right**


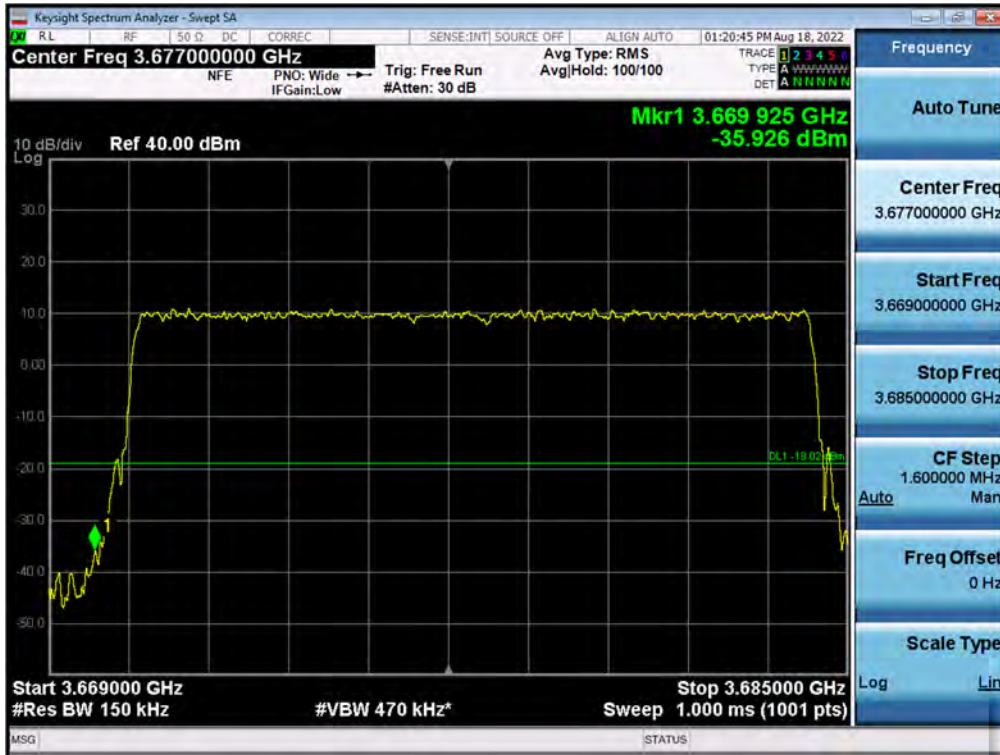
Antenna 1 / CBRS LTE[20 MHz 1C + (15 MHz 1C + 15 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 64QAM / Low Left



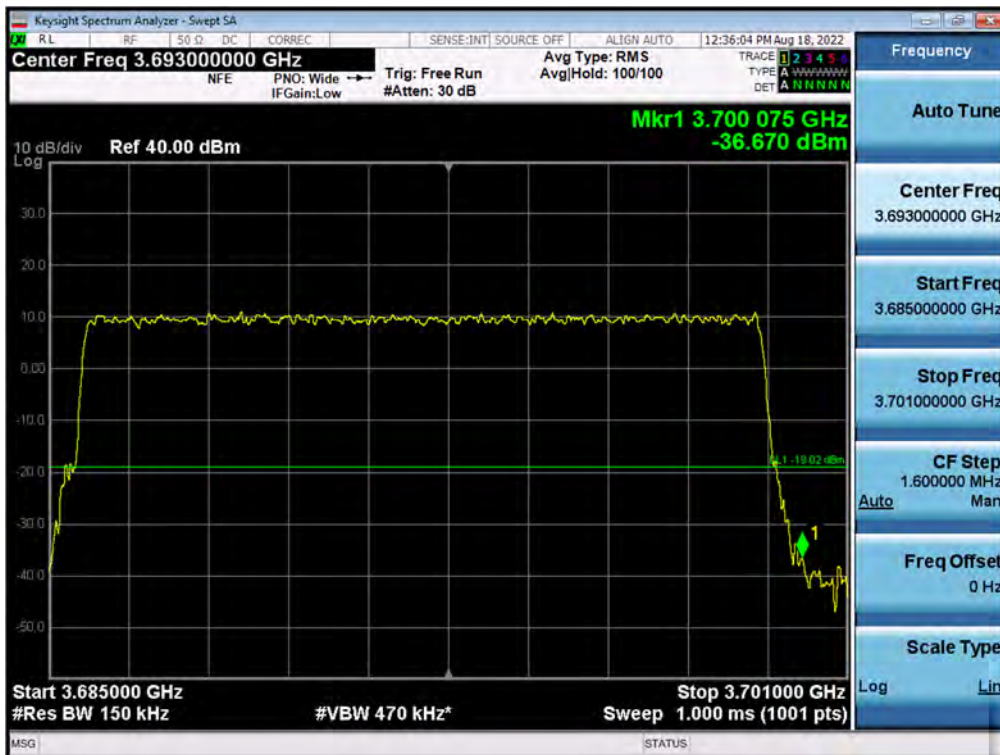
Antenna 0 / CBRS LTE[20 MHz 1C + (15 MHz 1C + 15 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 64QAM / Low Right



## Antenna 3 / CBRS LTE[20 MHz 1C + (15 MHz 1C + 15 MHz 1C)][3C(1C+2C)] / Non-Contiguous / QPSK / High Left

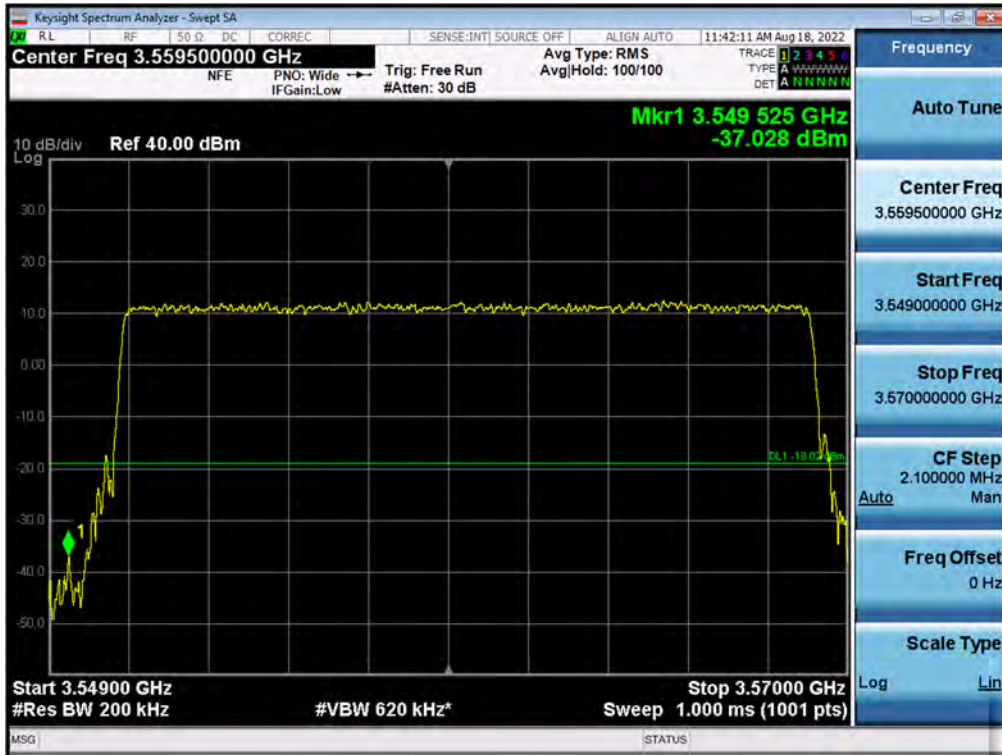


## Antenna 1 / CBRS LTE[20 MHz 1C + (15 MHz 1C + 15 MHz 1C)][3C(1C+2C)] / Non-Contiguous / QPSK / High Right

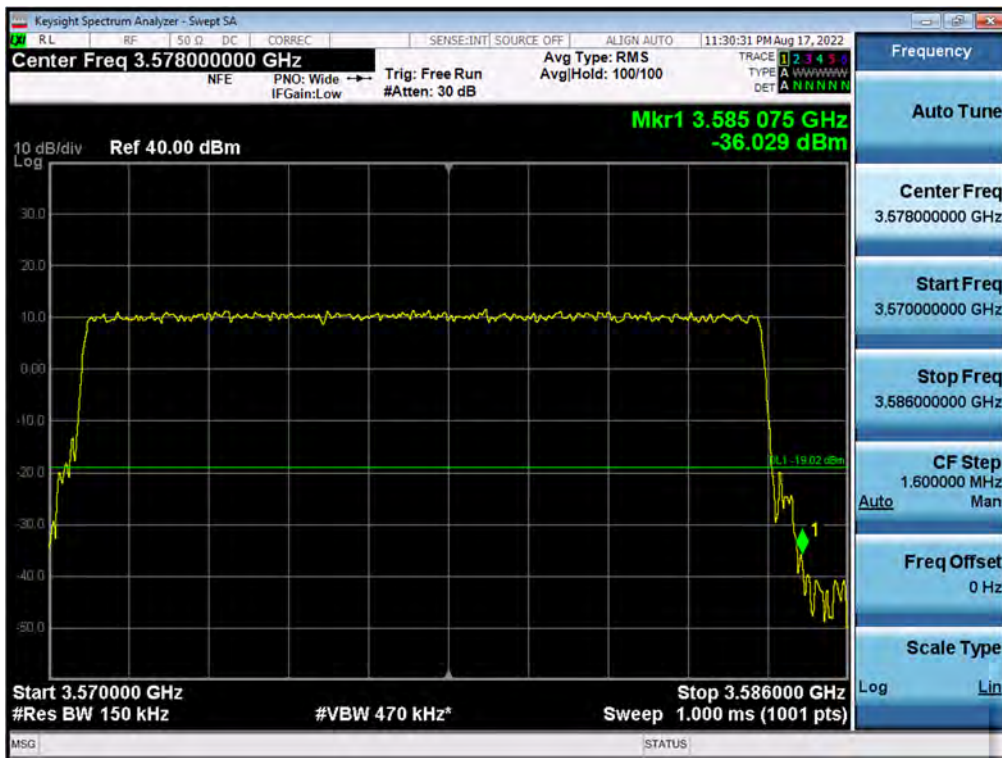




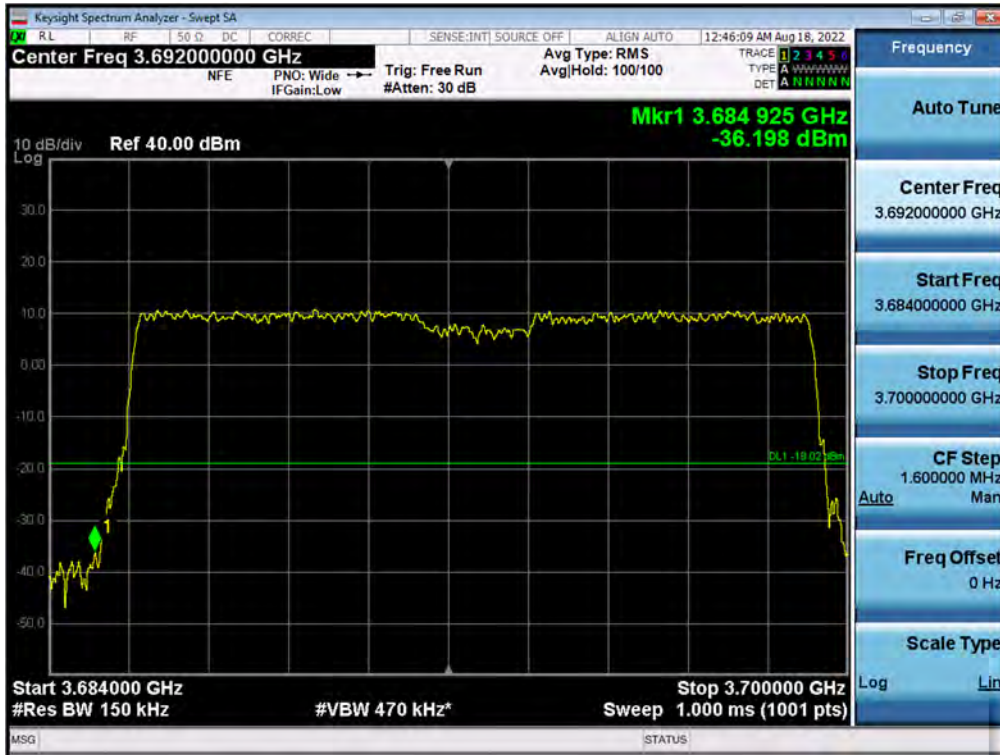
Antenna 3 / CBRS LTE[(20 MHz 1C + 15 MHz 1C) + 15 MHz 1C][3C(2C+1C)] / Non-Contiguous / 256QAM / Low Left



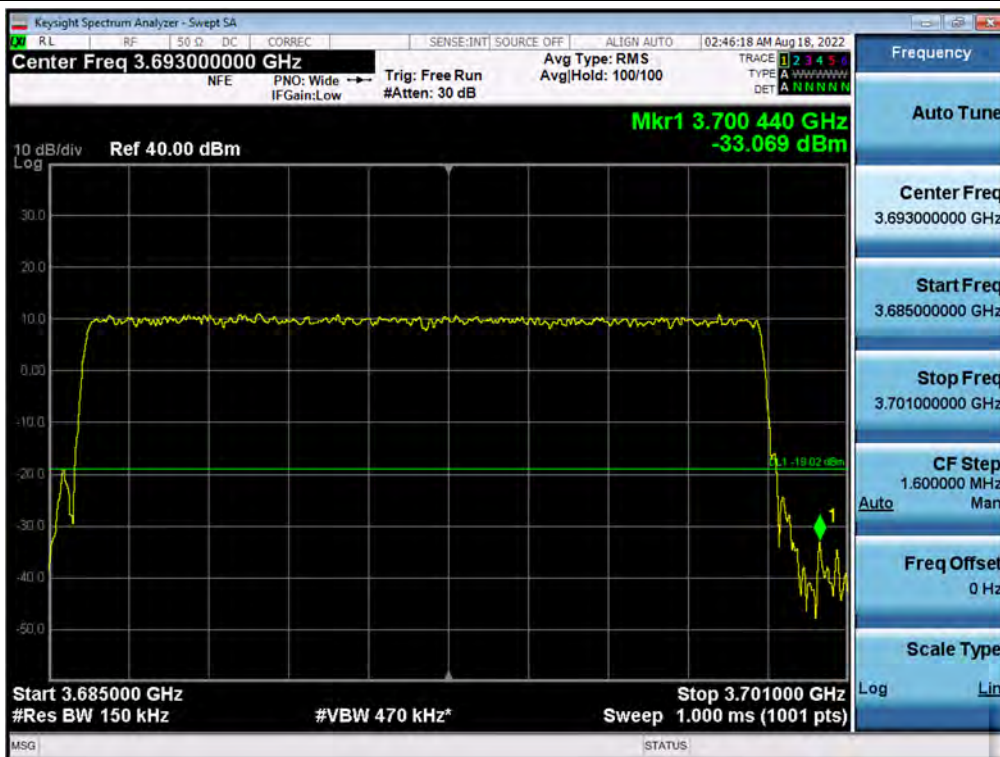
Antenna 3 / CBRS LTE[(20 MHz 1C + 15 MHz 1C) + 15 MHz 1C][3C(2C+1C)] / Non-Contiguous / QPSK / Low Right

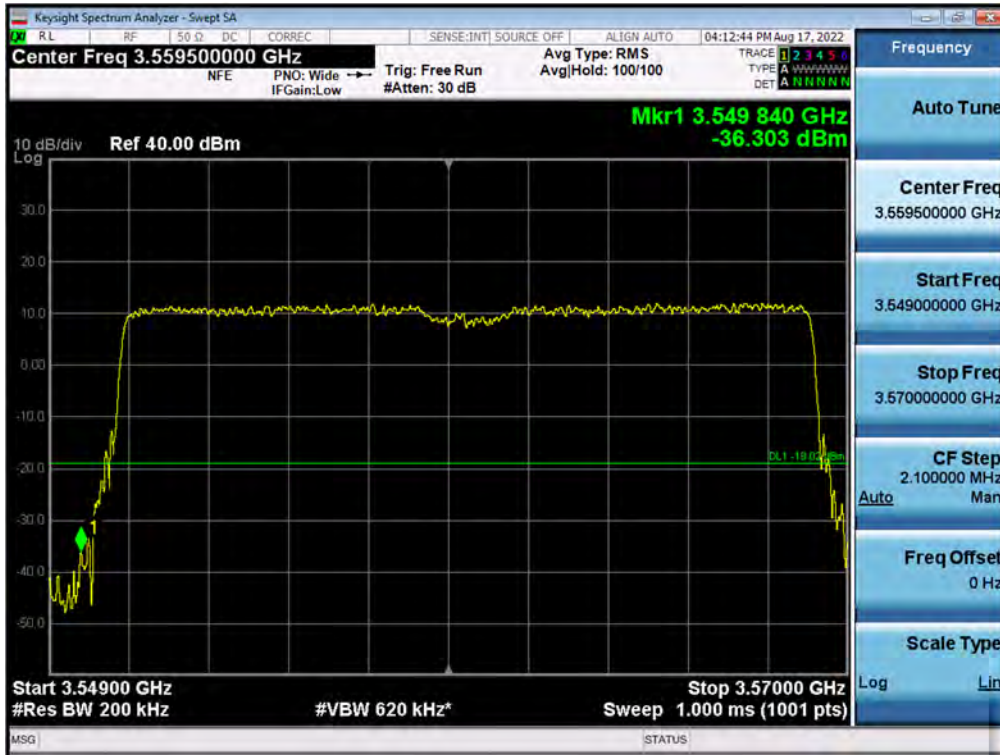
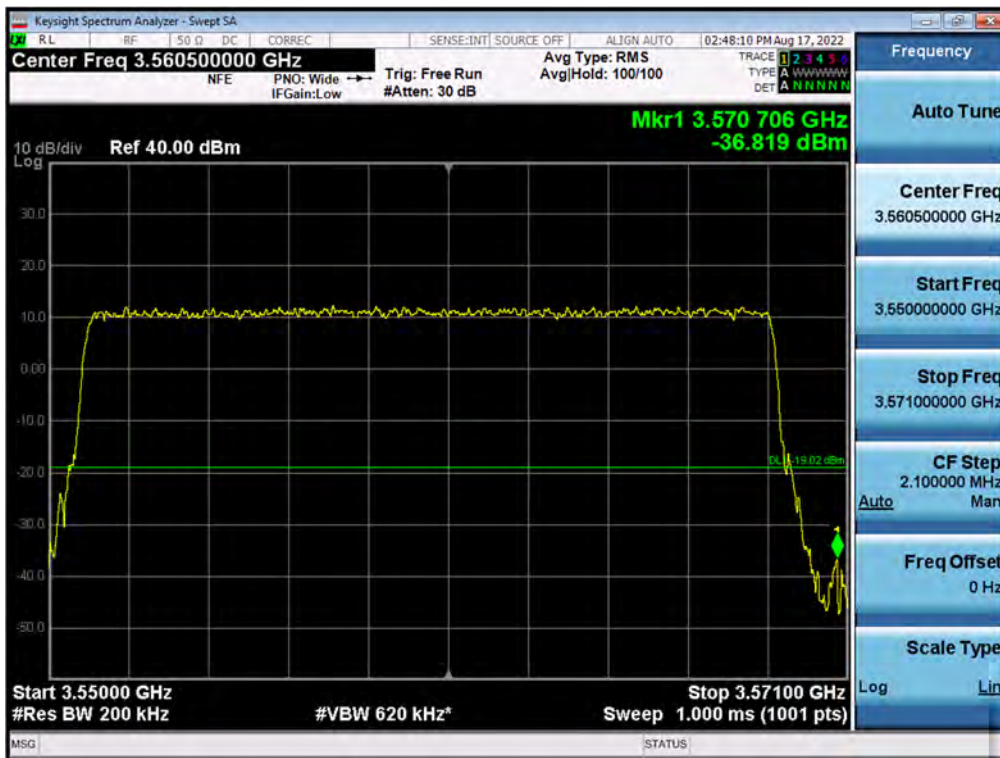


Antenna 1 / CBRS LTE[(20 MHz 1C + 15 MHz 1C) + 15 MHz 1C][3C(2C+1C)] / Non-Contiguous / 16QAM / High Left

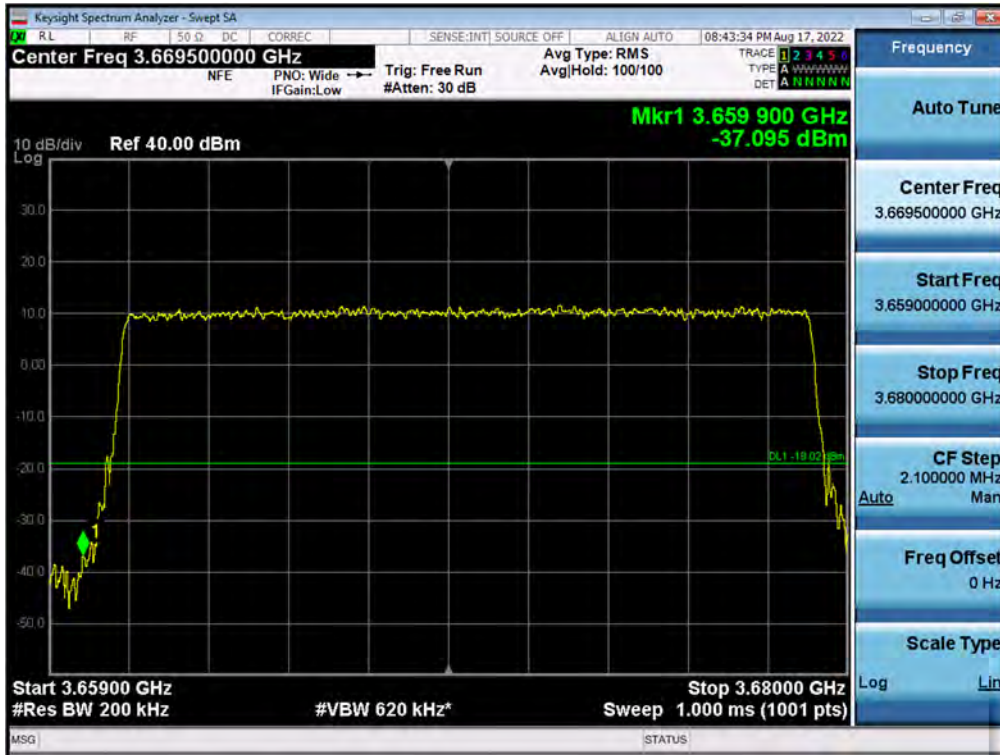
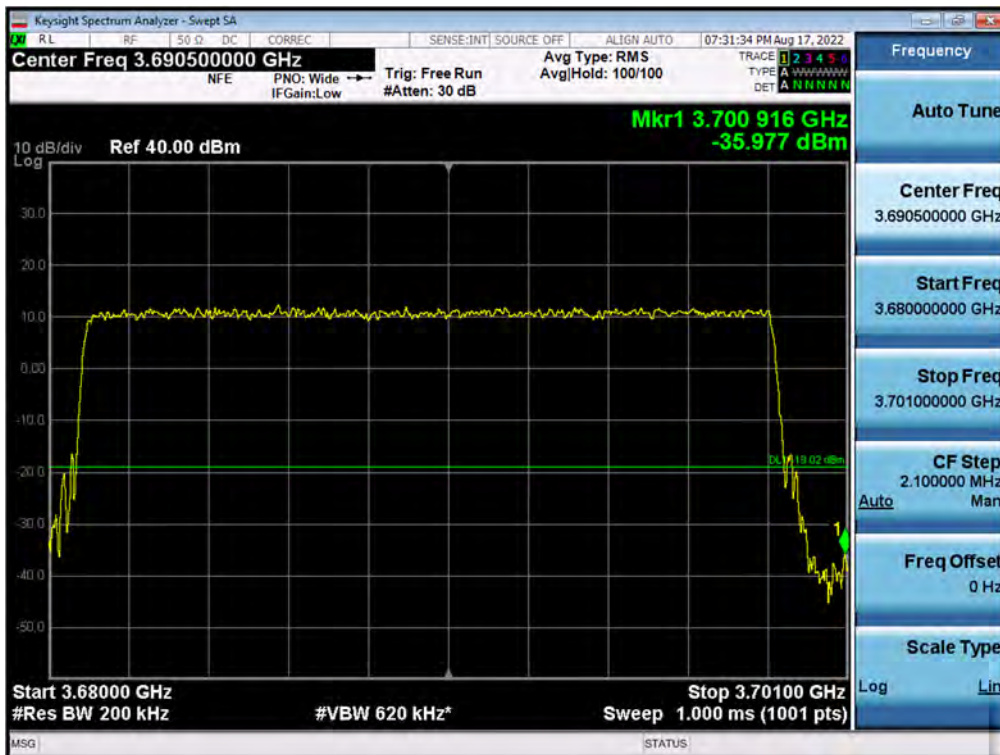


Antenna 1 / CBRS LTE[(20 MHz 1C + 15 MHz 1C) + 15 MHz 1C][3C(2C+1C)] / Non-Contiguous / 64QAM / High Right

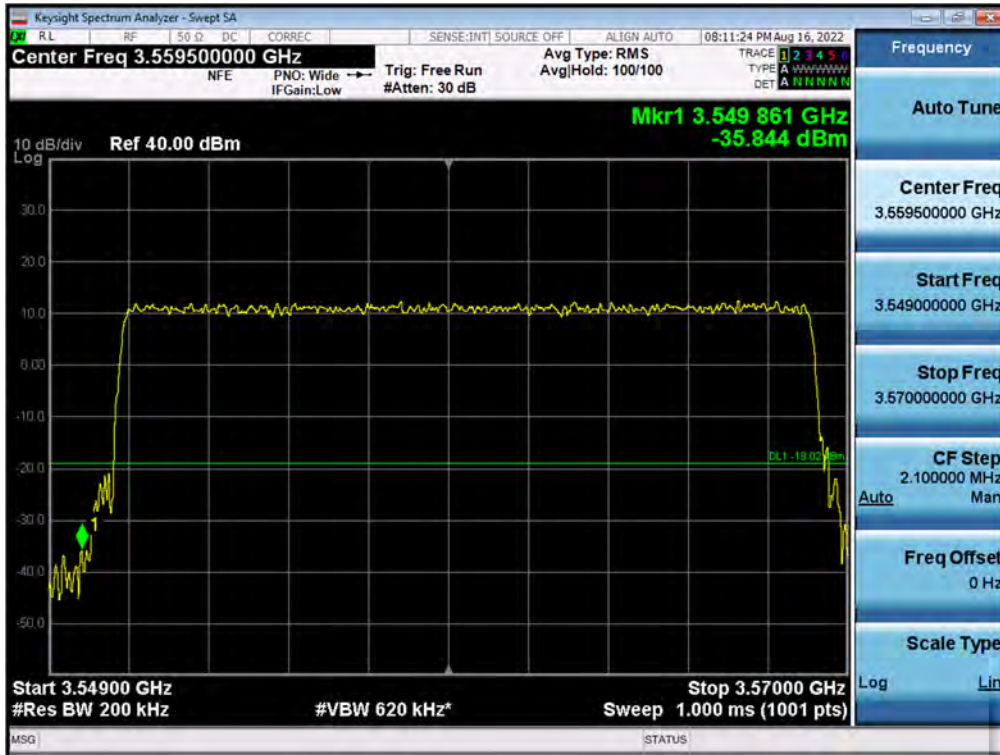


**Antenna 0 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 16QAM / Low Left**

**Antenna 1 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C)][3C(1C+2C)] / Non-Contiguous / QPSK / Low Right**


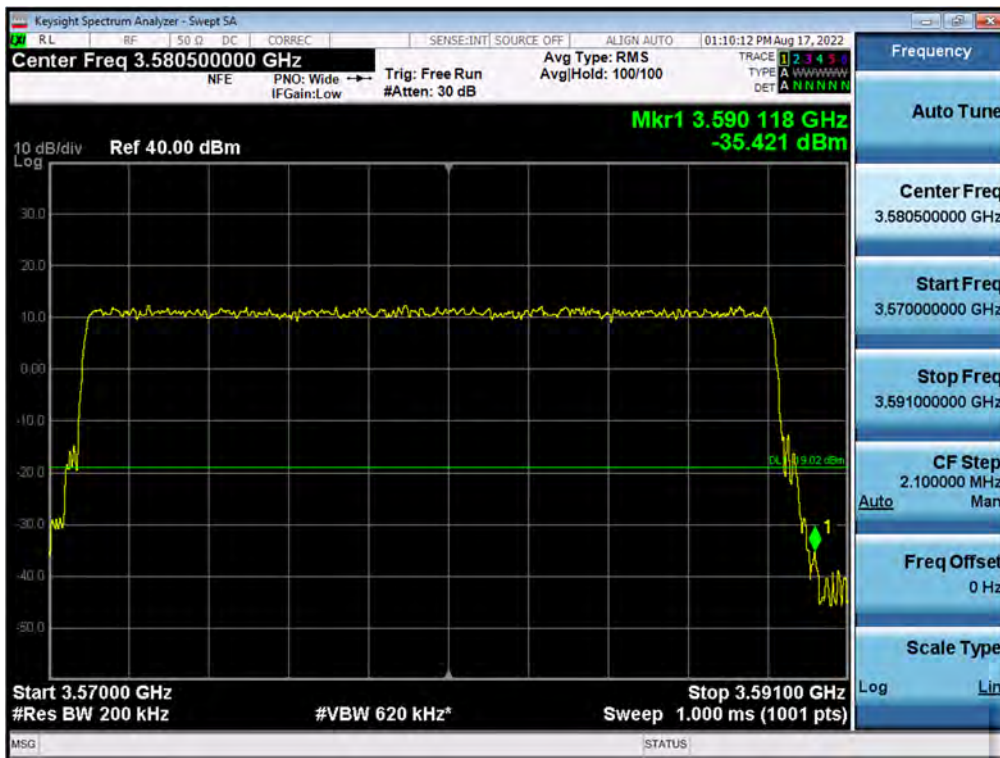


**Antenna 0 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 256QAM / High Left**

**Antenna 1 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C)][3C(1C+2C)] / Non-Contiguous / 64QAM / High Right**


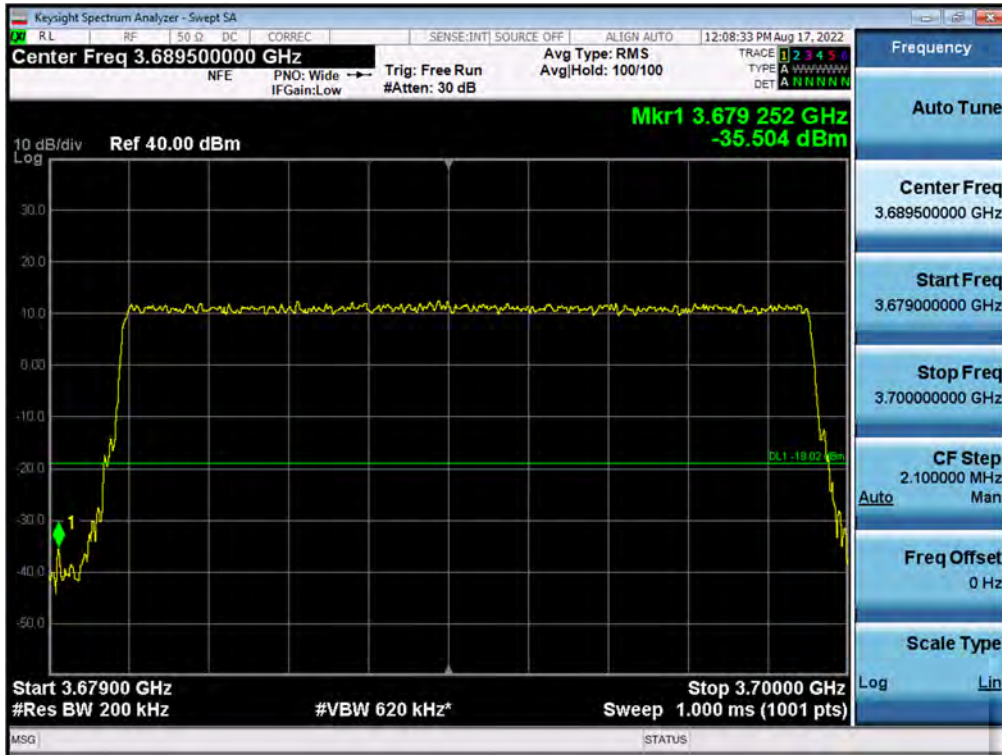
## Antenna 1 / CBRS LTE[(20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][3C(2C+1C)] / Non-Contiguous / QPSK / Low Left



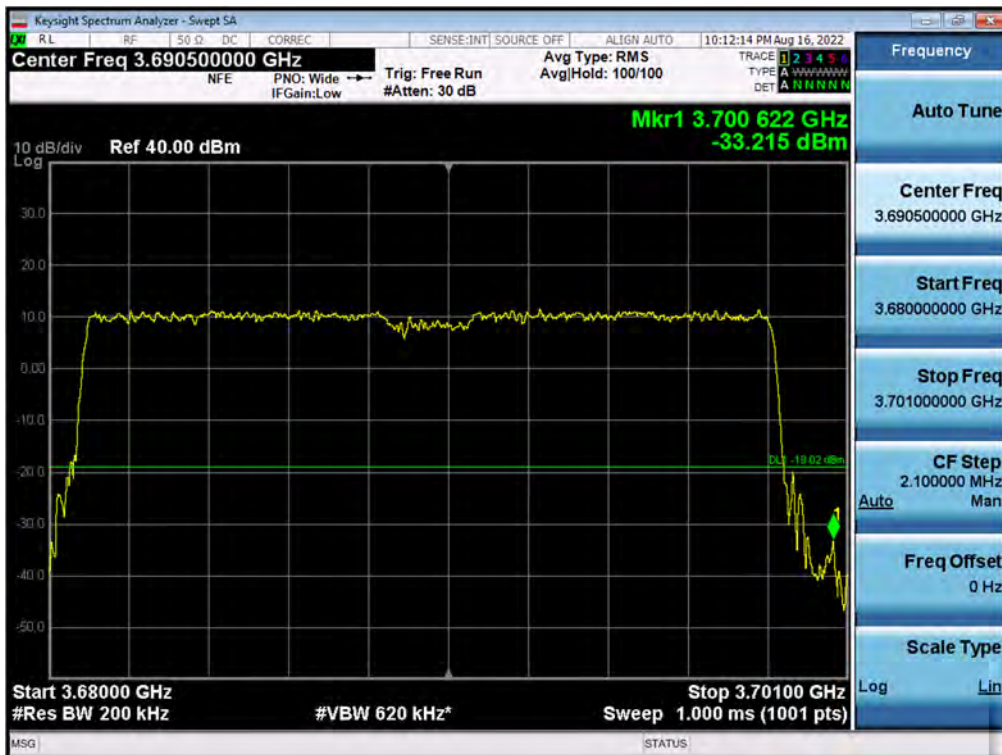
## Antenna 1 / CBRS LTE[(20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][3C(2C+1C)] / Non-Contiguous / 256QAM / Low Right



Antenna 3 / CBRS LTE[(20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][3C(2C+1C)] / Non-Contiguous / 64QAM / High Left



Antenna 1 / CBRS LTE[(20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][3C(2C+1C)] / Non-Contiguous / 16QAM / High Right

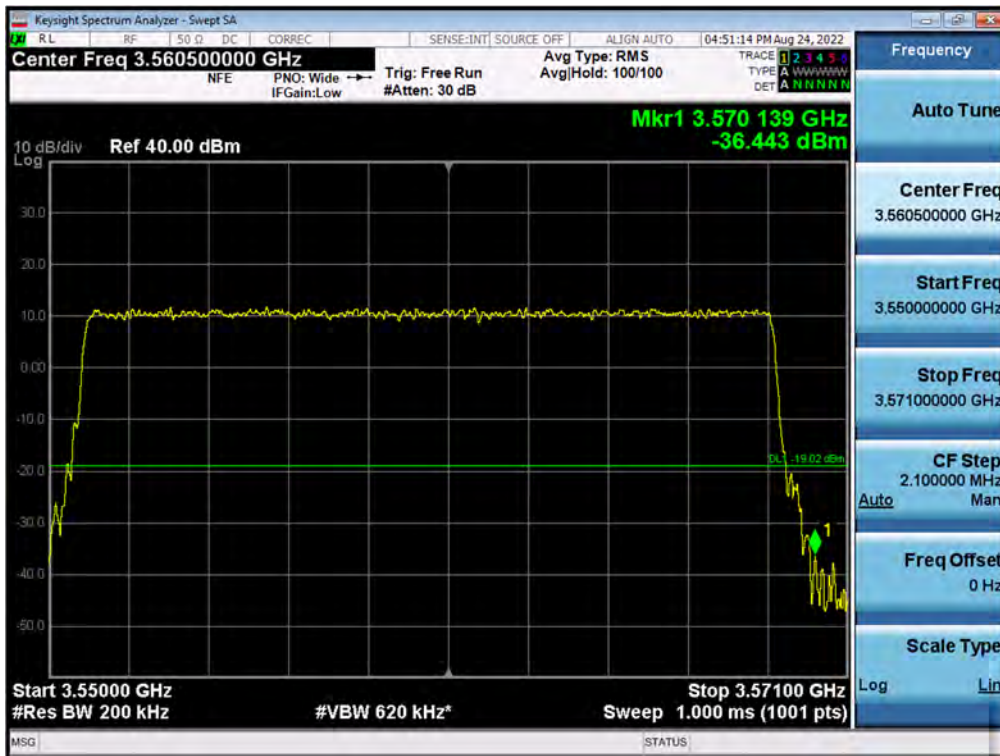




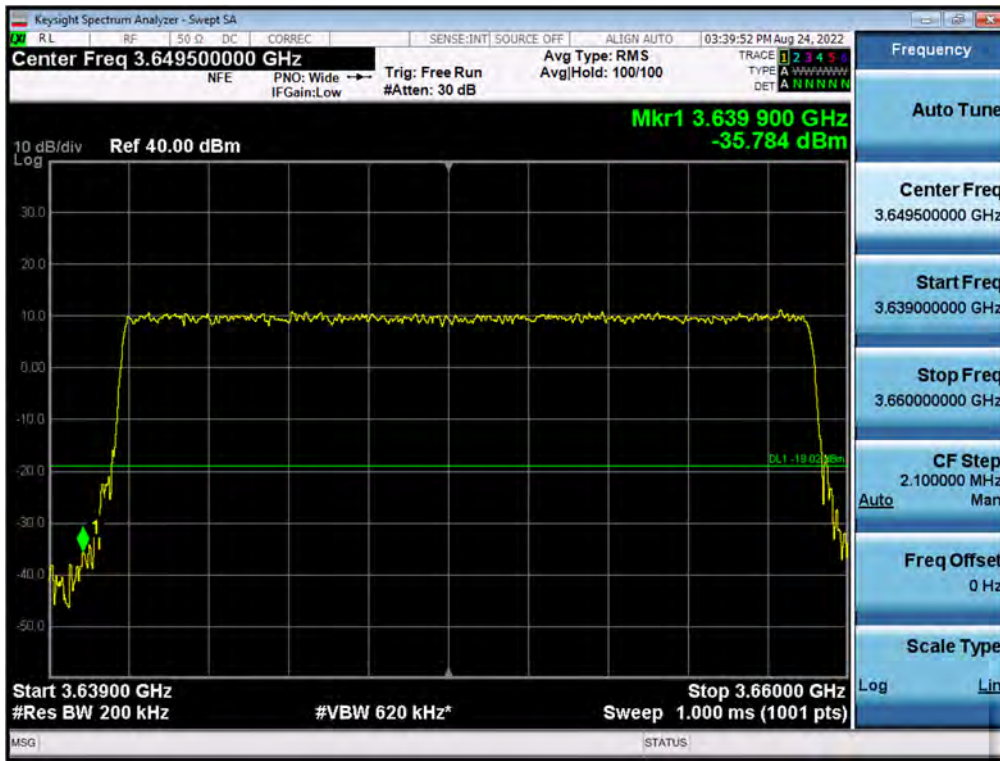
Antenna 1 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][4C(1C+3C)] / Non-Contiguous / 16QAM / Low Left



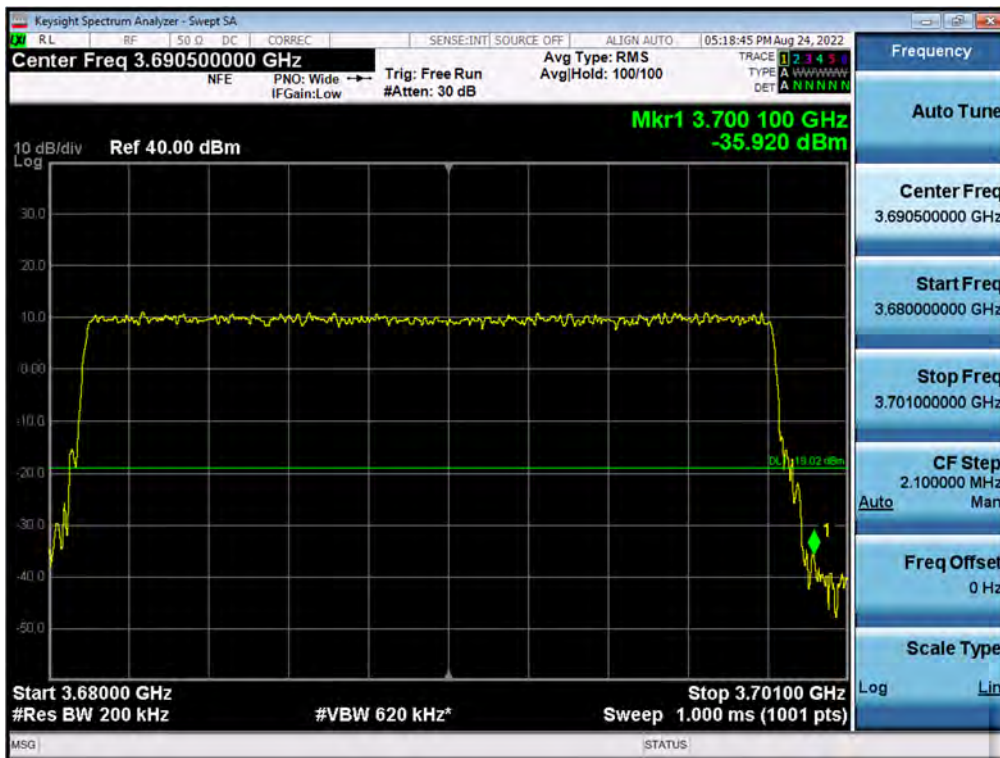
Antenna 3 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][4C(1C+3C)] / Non-Contiguous / 64QAM / Low Right



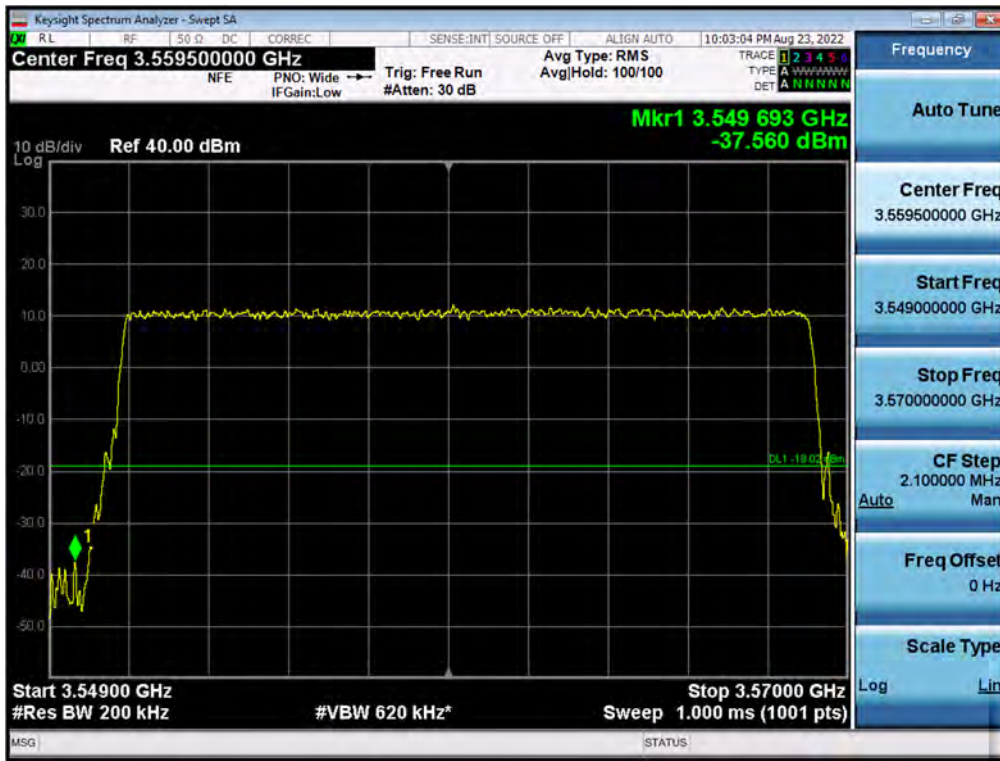
Antenna 0 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][4C(1C+3C)] / Non-Contiguous / 64QAM / High Left



Antenna 0 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][4C(1C+3C)] / Non-Contiguous / 256QAM / High Right



Antenna 1 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][4C(3C+1C)] / Non-Contiguous / QPSK / Low Left

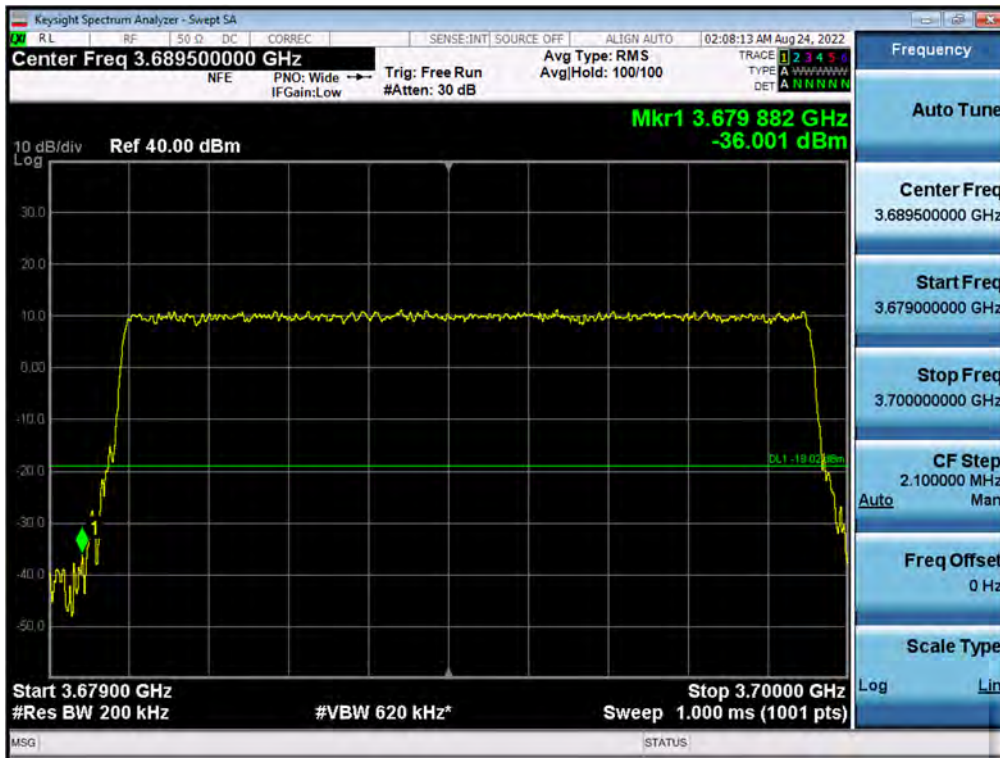


Antenna 1 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][4C(3C+1C)] / Non-Contiguous / 16QAM / Low Right

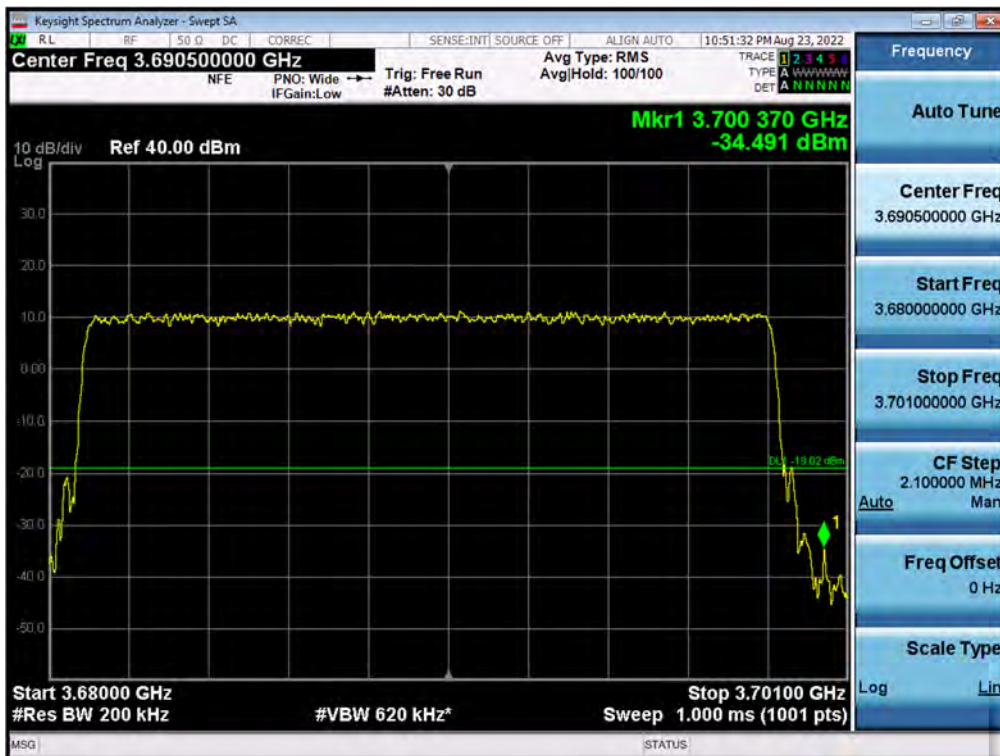




Antenna 1 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][4C(3C+1C)] / Non-Contiguous / 64QAM / High Left



Antenna 3 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][4C(3C+1C)] / Non-Contiguous / QPSK / High Right



Antenna 2 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / Non-Contiguous / 16QAM / Low Left



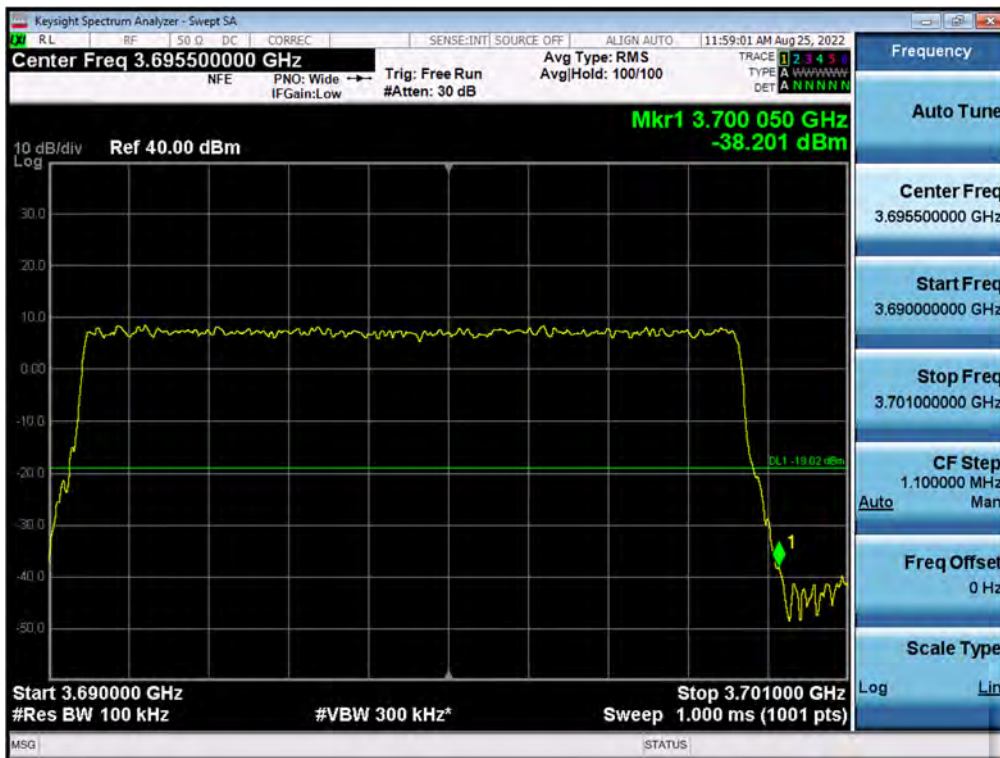
Antenna 1 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / Non-Contiguous / 16QAM / Low Right



Antenna 1 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / Non-Contiguous / 256QAM / High Left

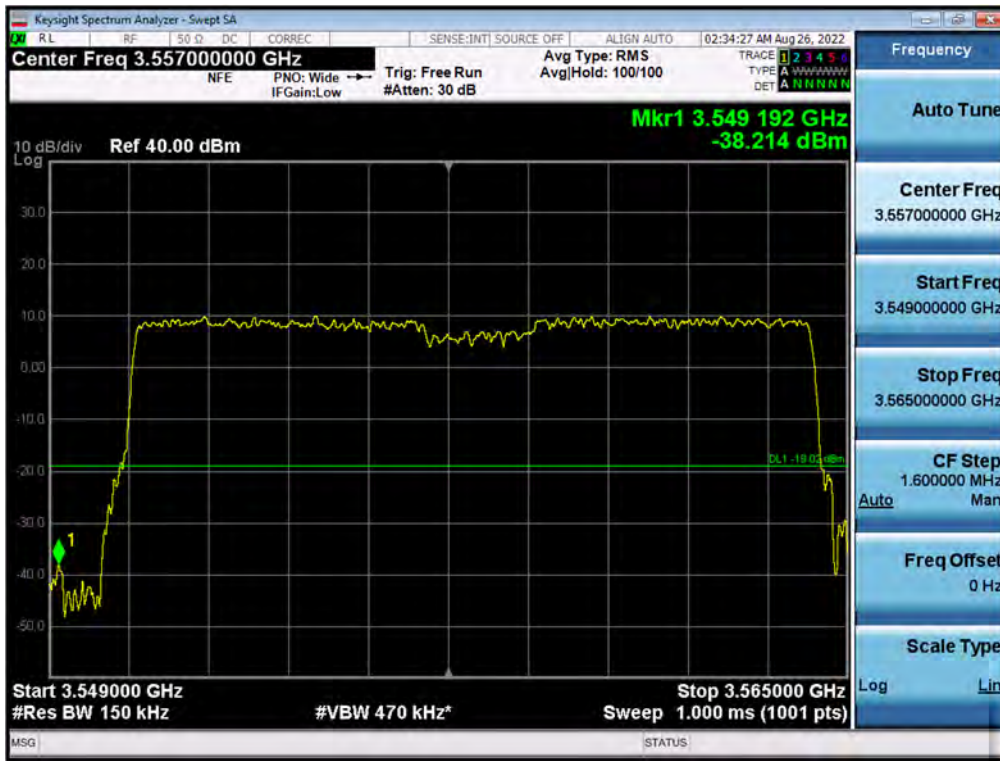


Antenna 1 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / Non-Contiguous / 64QAM / High Right

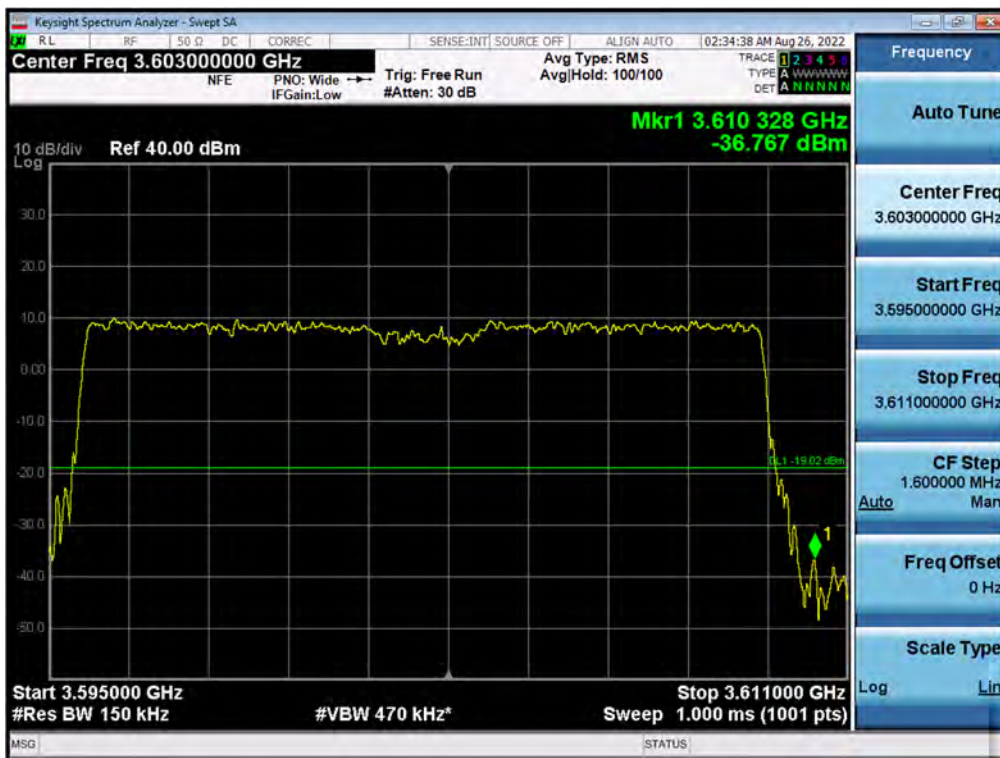




Antenna 1 / CBRS LTE[(15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / Non-Contiguous / 16QAM / Low Left



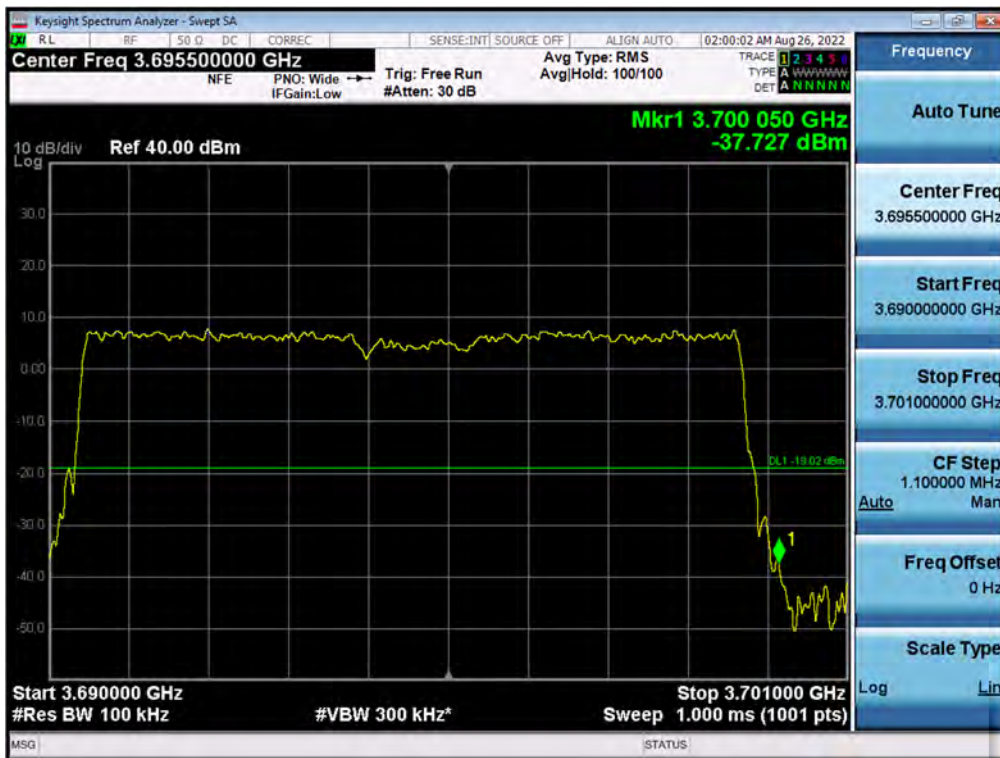
Antenna 1 / CBRS LTE[(15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / Non-Contiguous / 16QAM / Low Right



Antenna 3 / CBRS LTE[(15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / Non-Contiguous / 16QAM / High Left



Antenna 0 / CBRS LTE[(15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / Non-Contiguous / 16QAM / High Right



Antenna 1 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / Non-Contiguous / 16QAM / Low Left

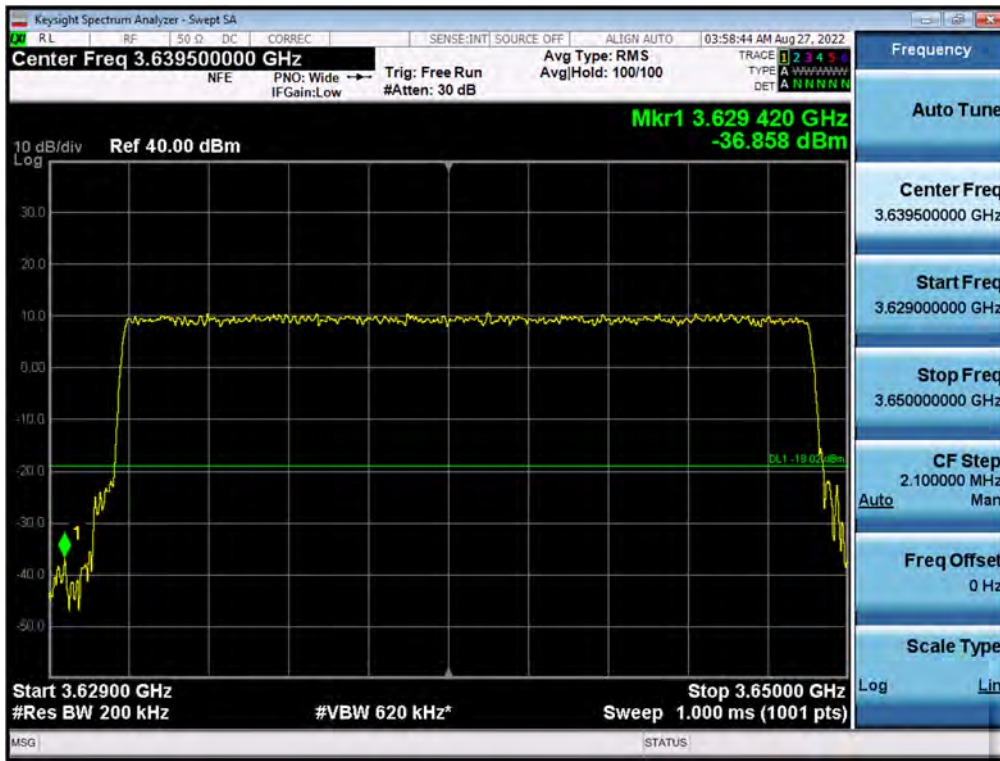


Antenna 1 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / Non-Contiguous / QPSK / Low Right

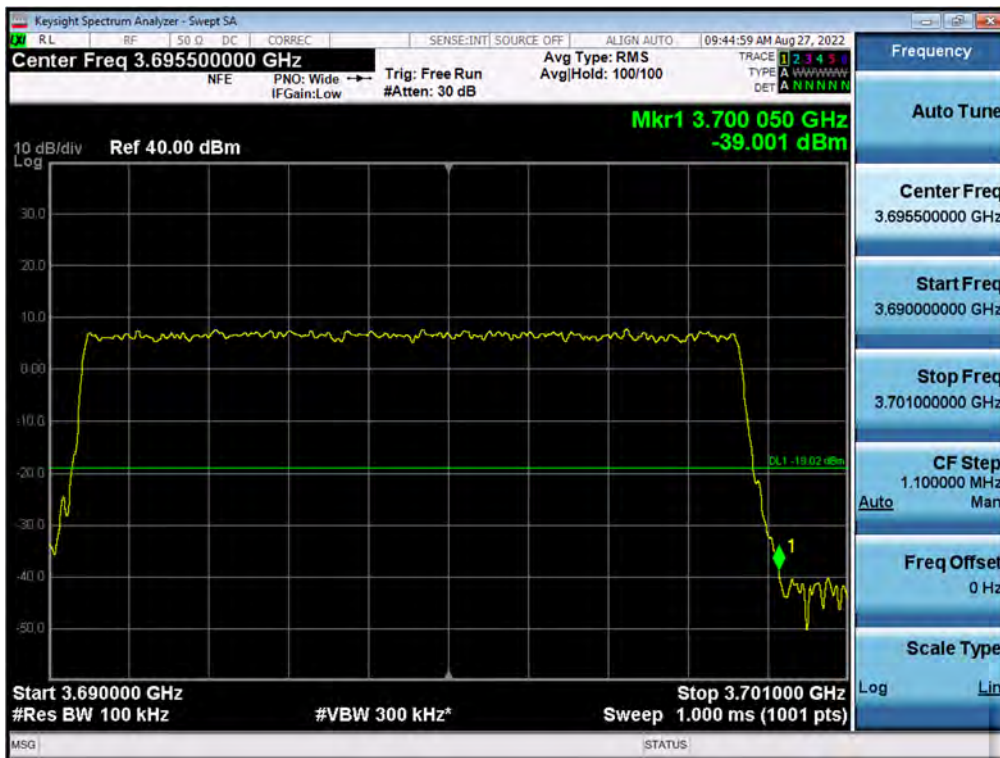




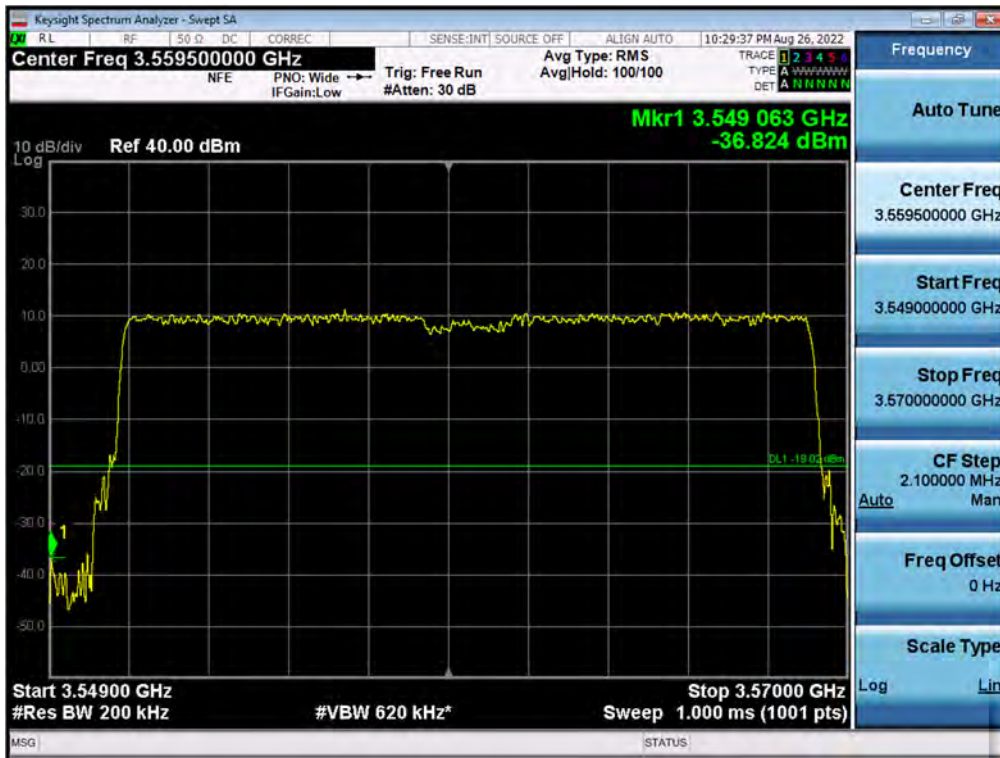
Antenna 1 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / Non-Contiguous / QPSK / High Left



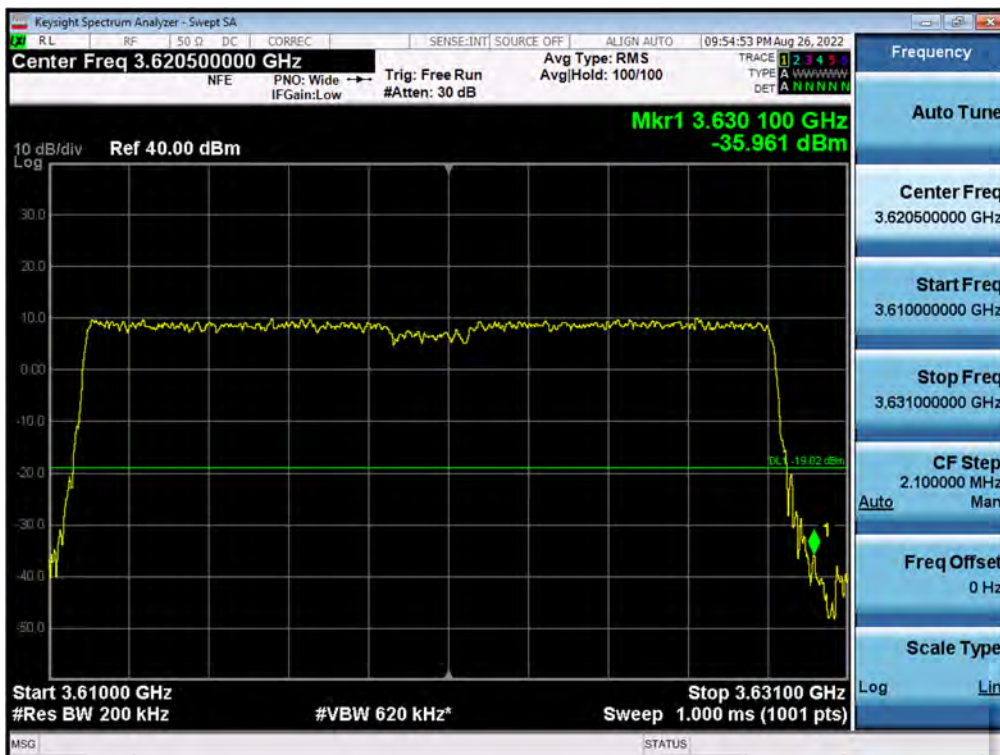
Antenna 1 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / Non-Contiguous / 256QAM / High Right



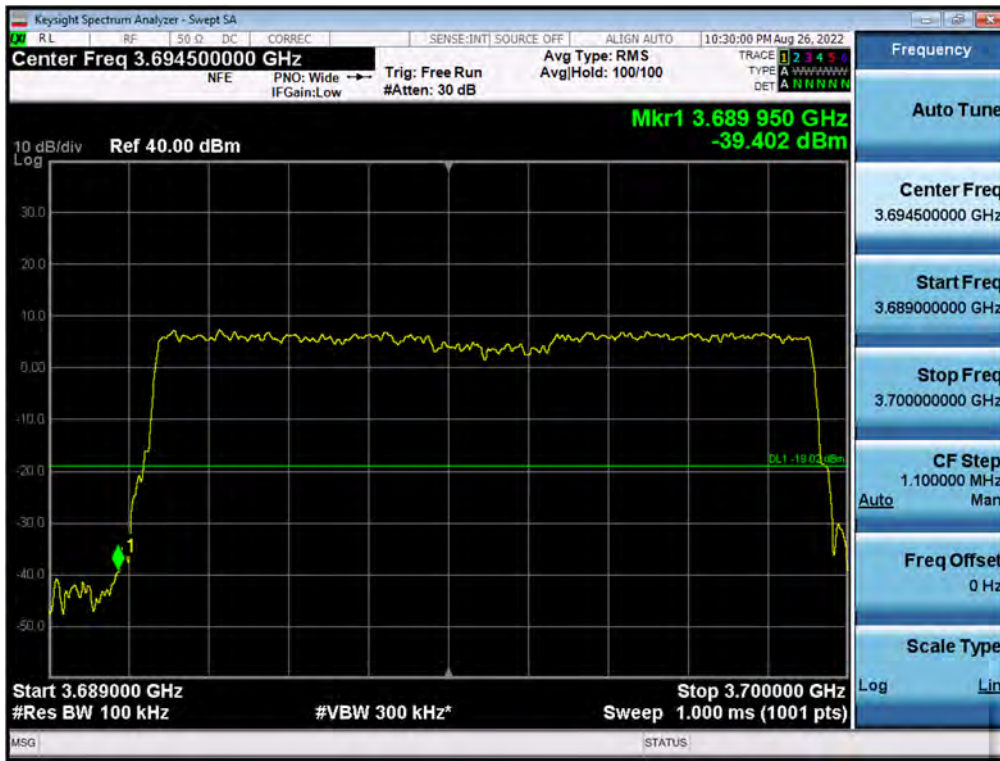
Antenna 1 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / Non-Contiguous / 16QAM / Low Left



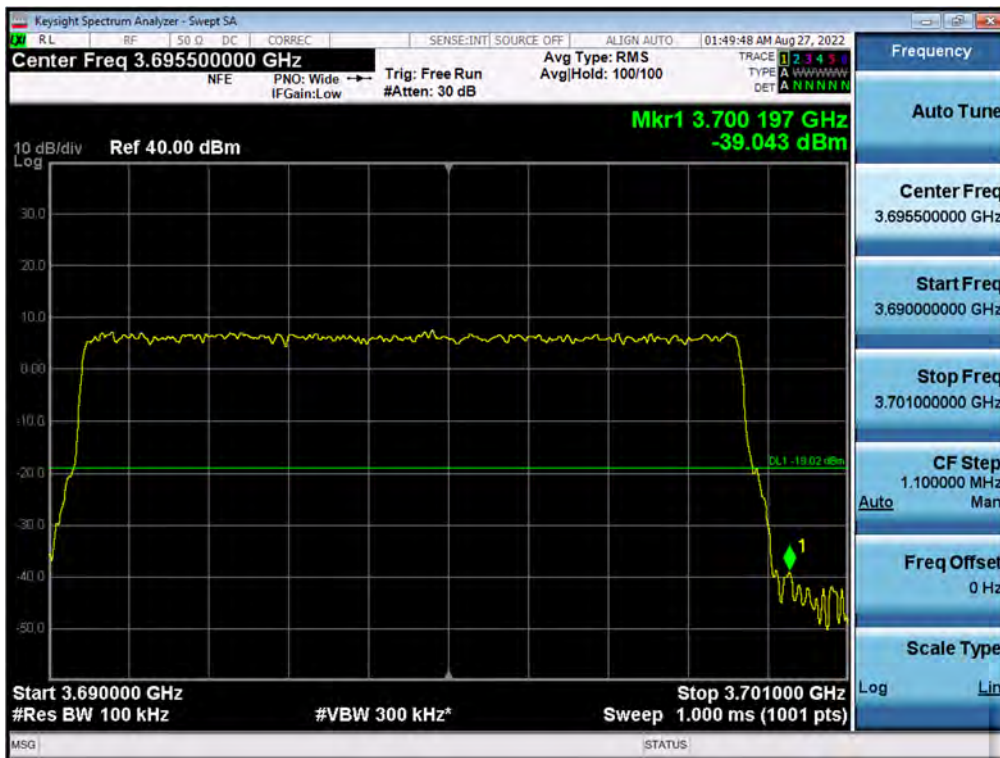
Antenna 0 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / Non-Contiguous / 16QAM / Low Right



Antenna 1 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / Non-Contiguous / 16QAM / High Left



Antenna 0 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / Non-Contiguous / 256QAM / High Right





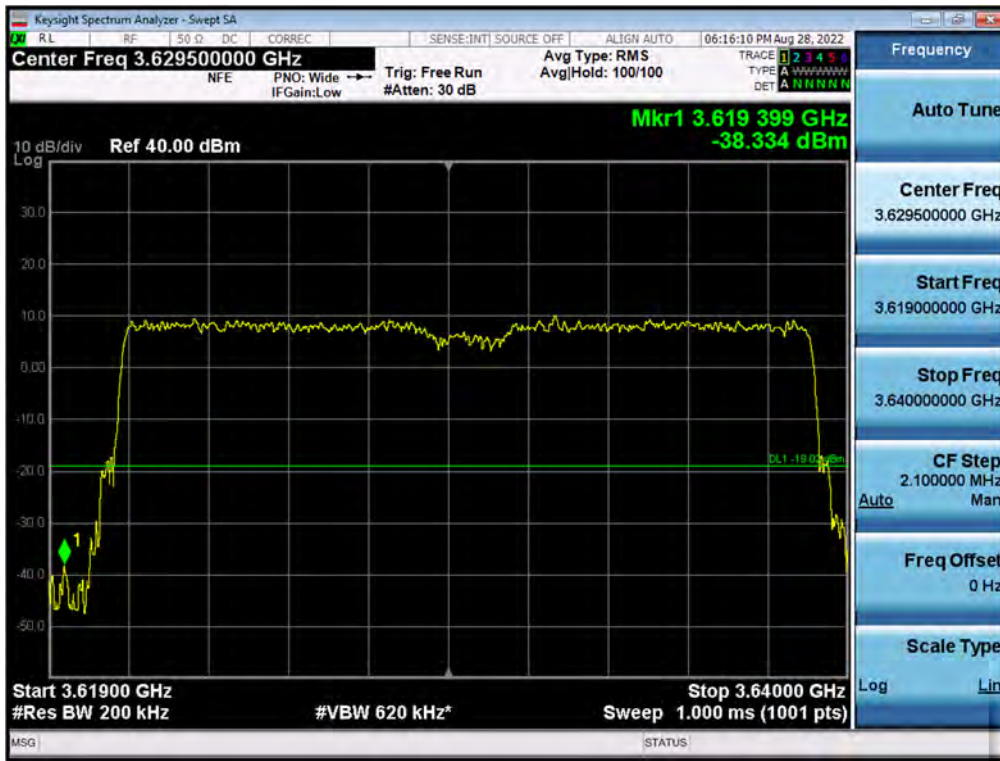
Antenna 1 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][5C(1C+4C)] / Non-Contiguous / 16QAM / Low Left



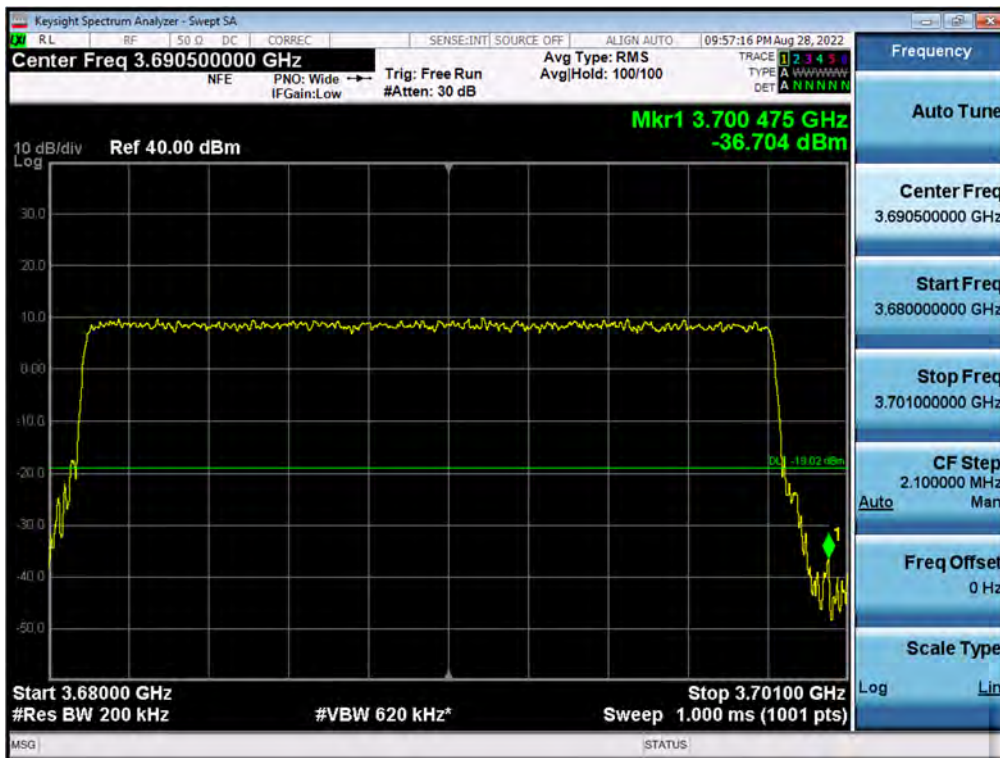
Antenna 0 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][5C(1C+4C)] / Non-Contiguous / 16QAM / Low Right



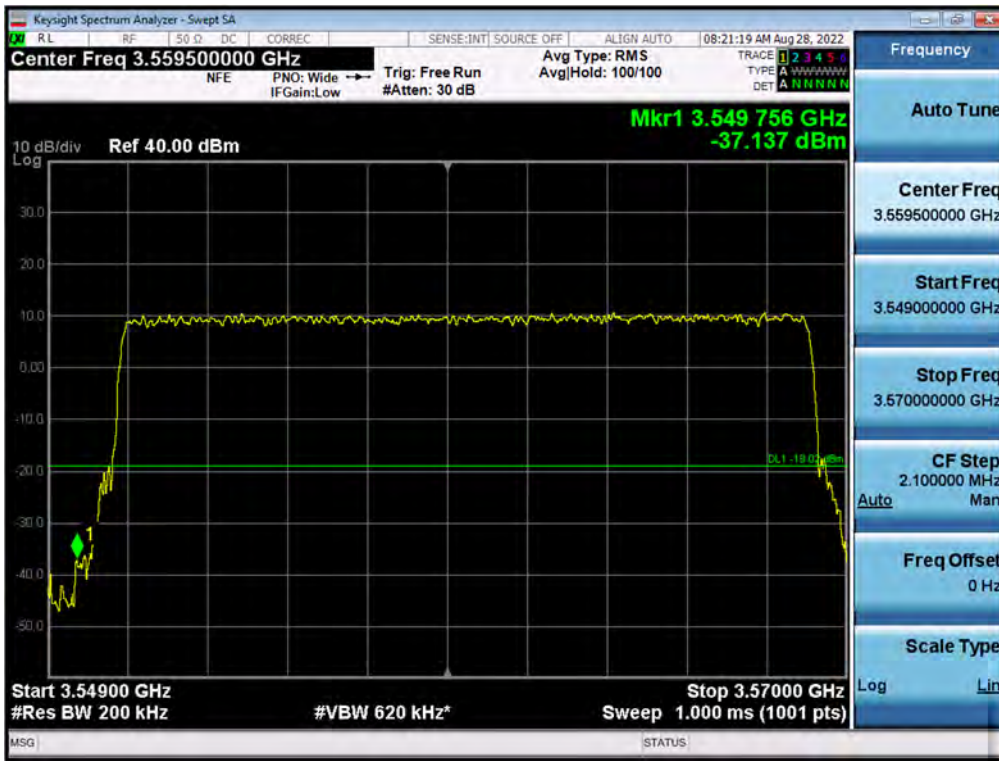
Antenna 1 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][5C(1C+4C)] / Non-Contiguous / 16QAM / High Left



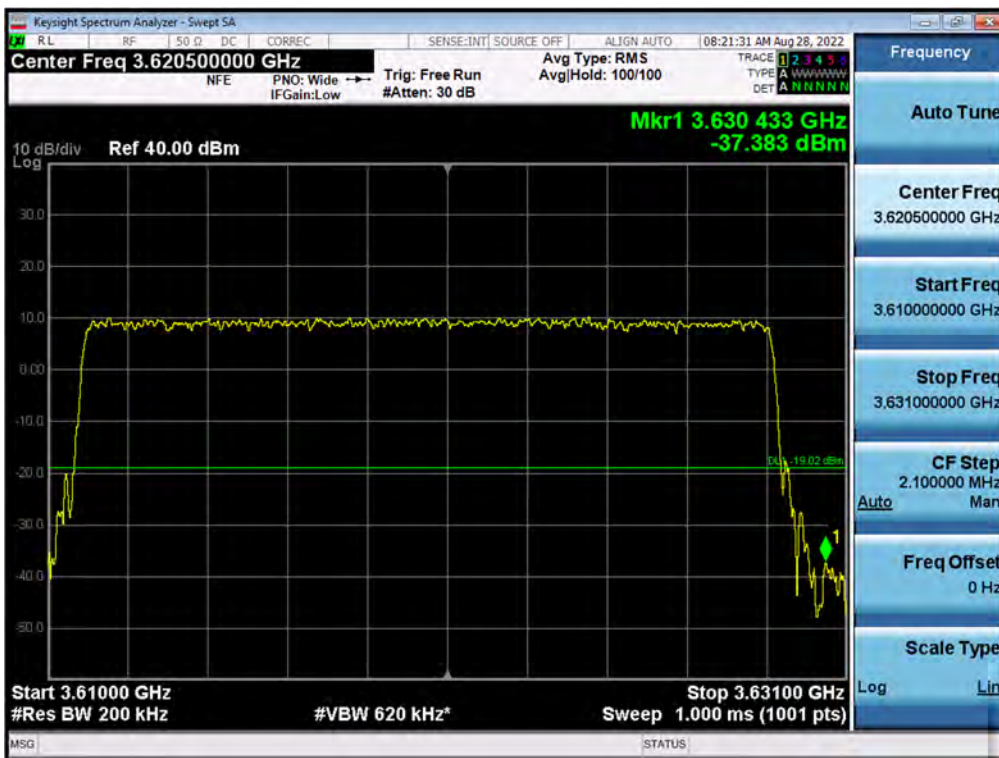
Antenna 1 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][5C(1C+4C)] / Non-Contiguous / 256QAM / High Right



Antenna 0 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][5C(4C+1C)] / Non-Contiguous / QPSK / Low Left

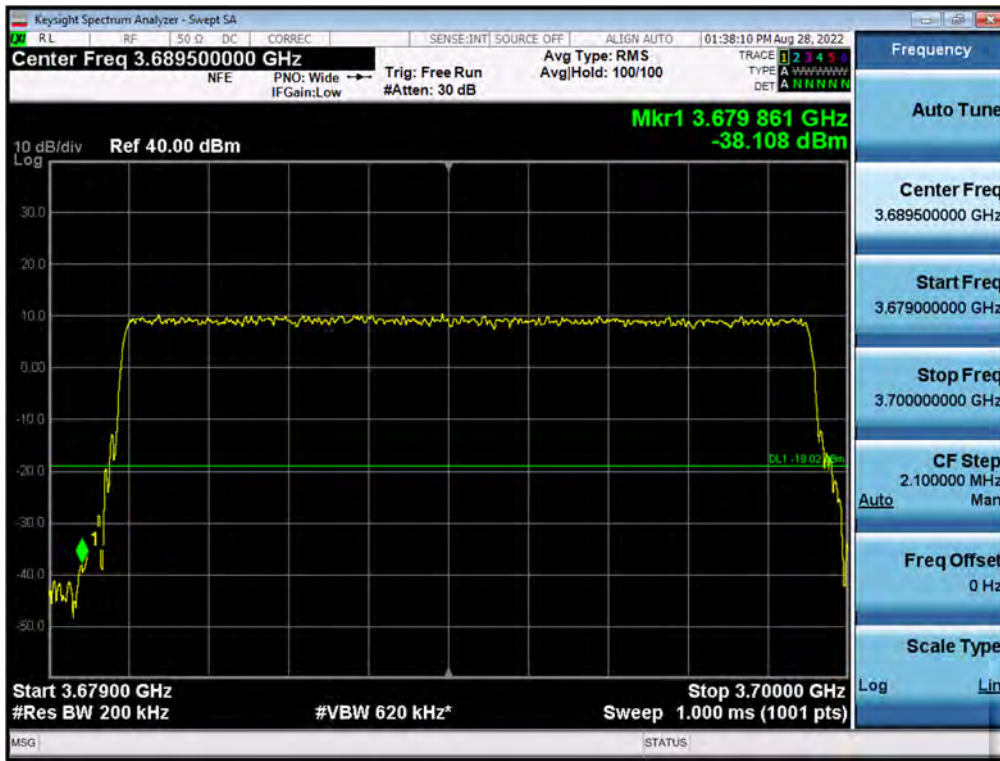


Antenna 0 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][5C(4C+1C)] / Non-Contiguous / QPSK / Low Right

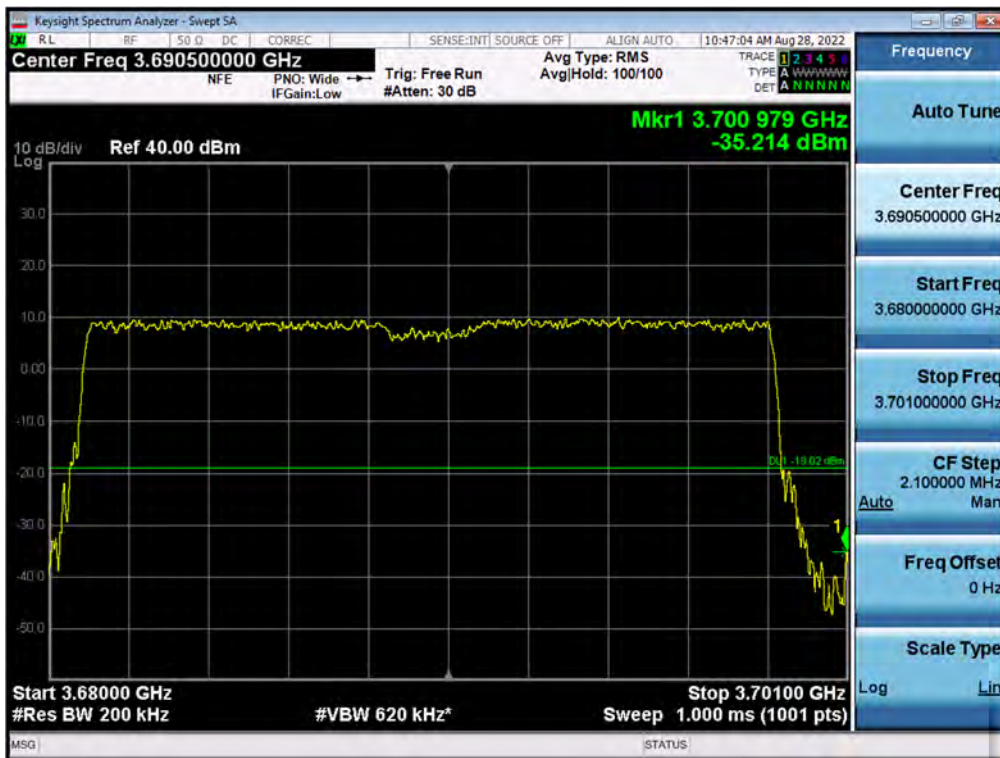




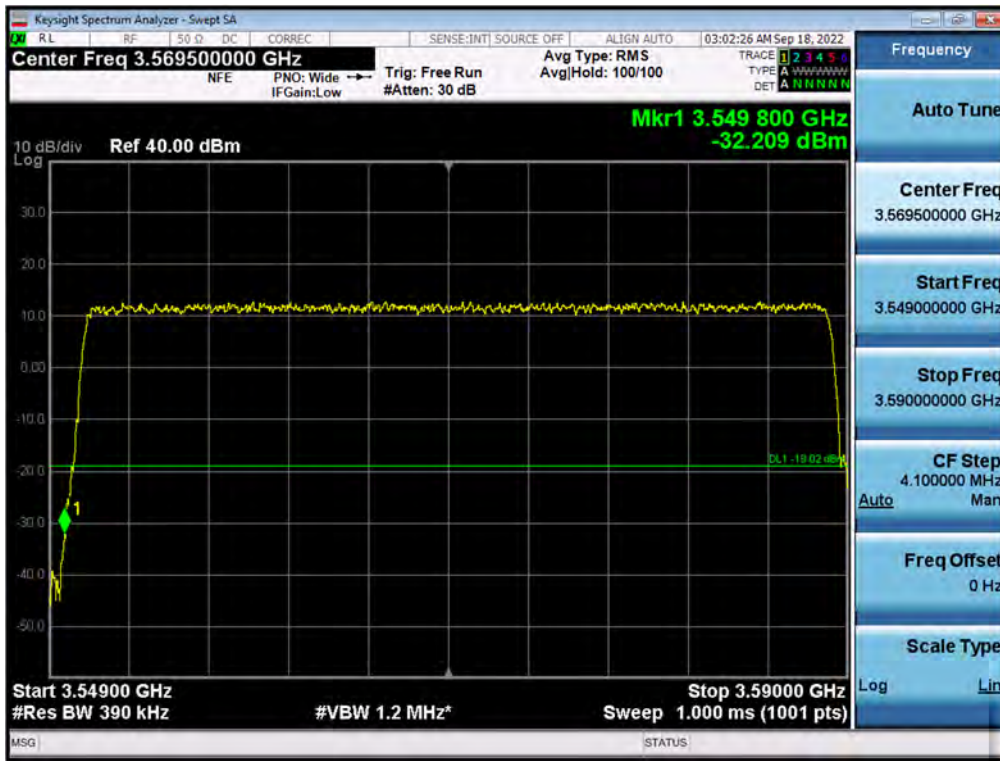
Antenna 3 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][5C(4C+1C)] / Non-Contiguous / 64QAM / High Left



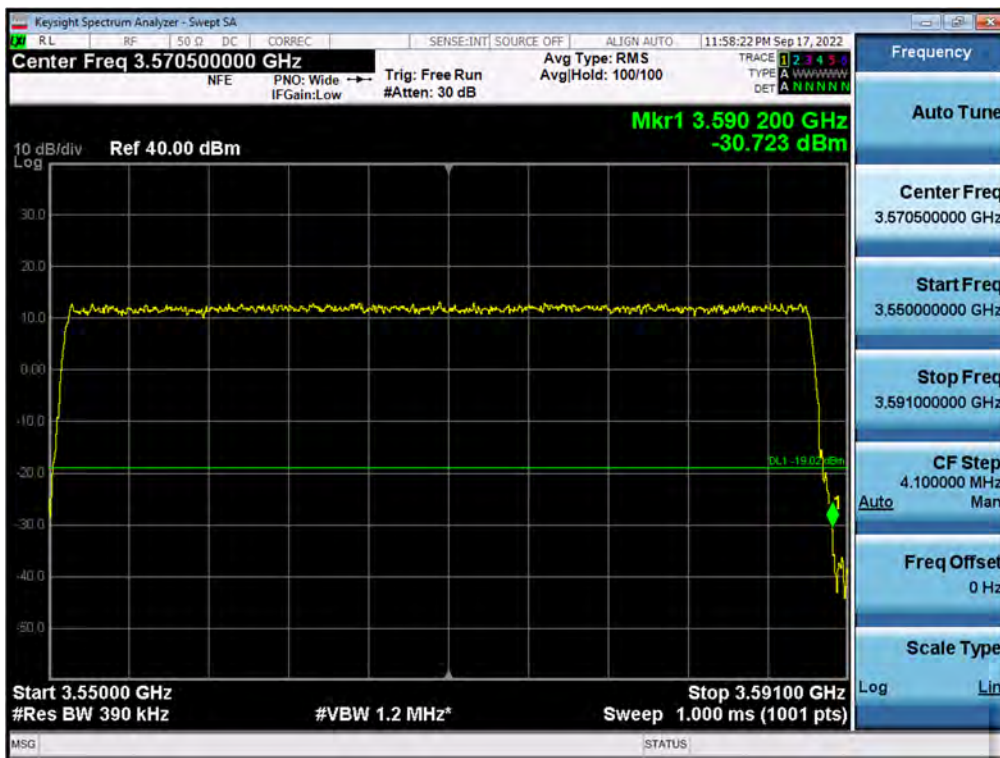
Antenna 1 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][5C(4C+1C)] / Non-Contiguous / 16QAM / High Right



Antenna 2 / CBRS NR 40 MHz 1C + (NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C + LTE 10 MHz 1C)5C(1C+4C) / Non-Contiguous / 256QAM / Low Left



Antenna 3 / CBRS NR 40 MHz 1C + (NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C + LTE 10 MHz 1C)5C(1C+4C) / Non-Contiguous / 16QAM / Low Right



Antenna 0 / CBRS NR 40 MHz 1C + (NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C + LTE 10 MHz 1C)[5C(1C+4C)] / Non-Contiguous / 64QAM / High Left

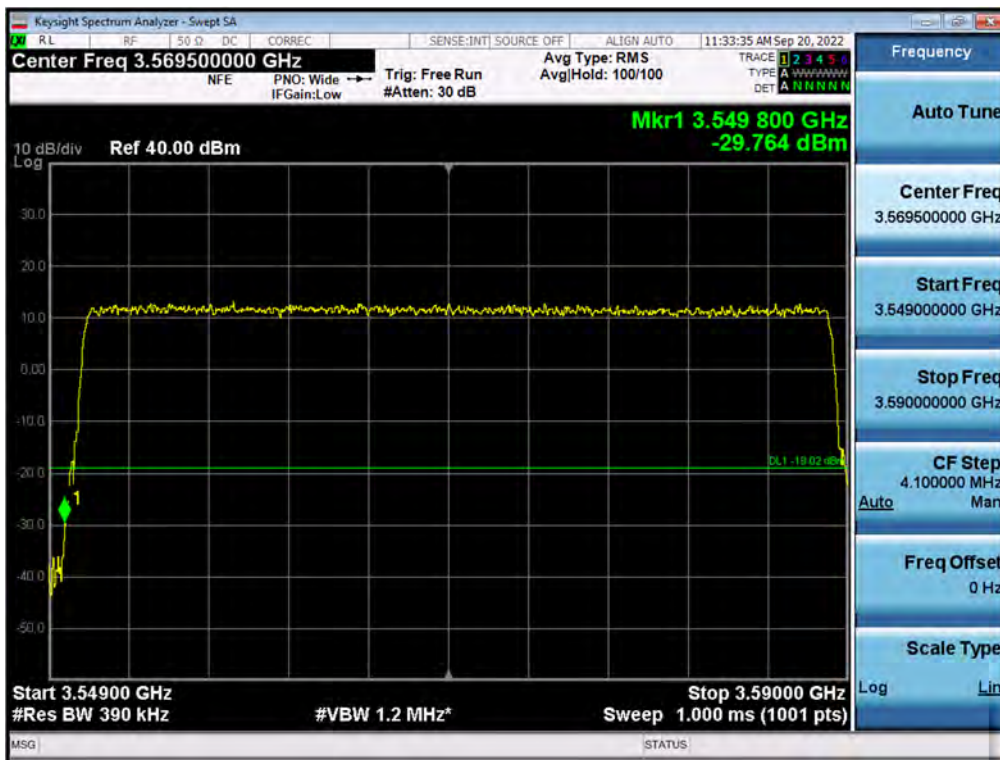


Antenna 3 / CBRS NR 40 MHz 1C + (NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C + LTE 10 MHz 1C)[5C(1C+4C)] / Non-Contiguous / 256QAM / High Right





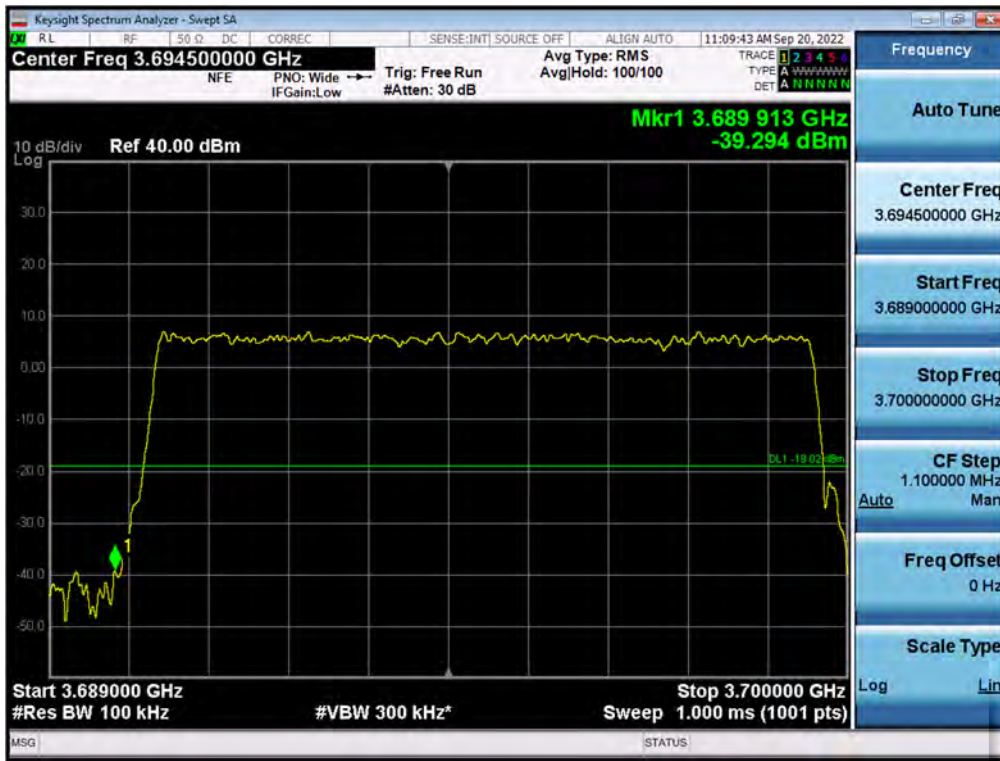
Antenna 1 / CBRS (NR 40 MHz 1C + NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C) + LTE 10 MHz 1C[5C(4C+1C)] / Non-Contiguous / QPSK / Low Left



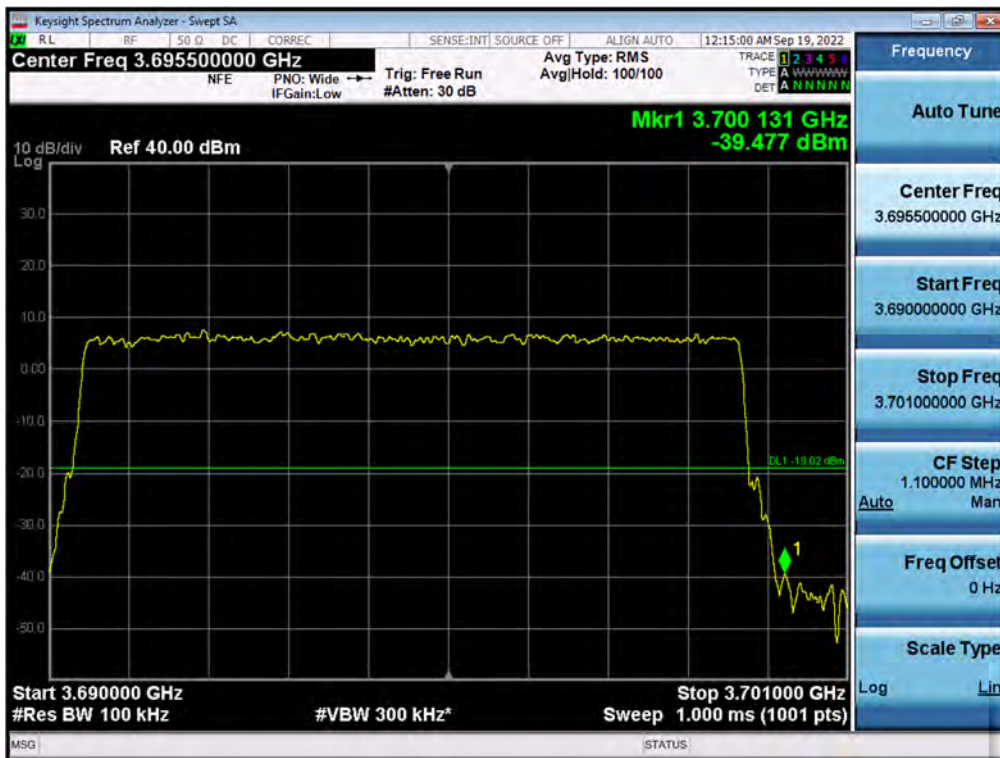
Antenna 0 / CBRS (NR 40 MHz 1C + NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C) + LTE 10 MHz 1C[5C(4C+1C)] / Non-Contiguous / QPSK / Low Right



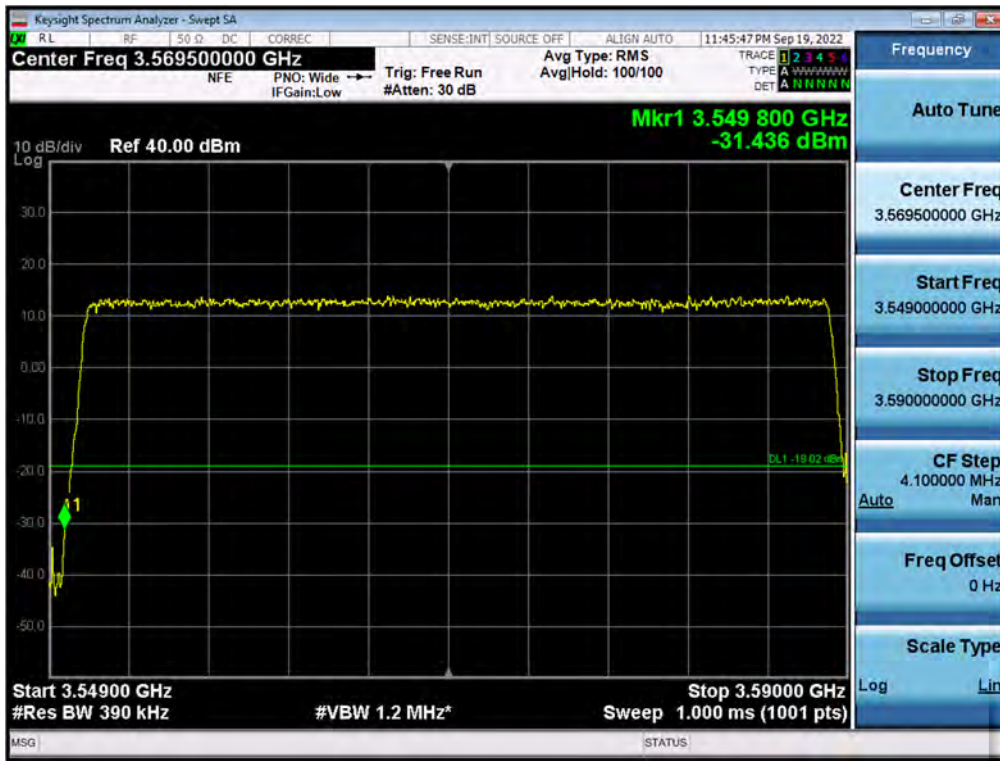
Antenna 0 / CBRS (NR 40 MHz 1C + NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C) + LTE 10 MHz 1C[5C(4C+1C)] / Non-Contiguous / QPSK / High Left



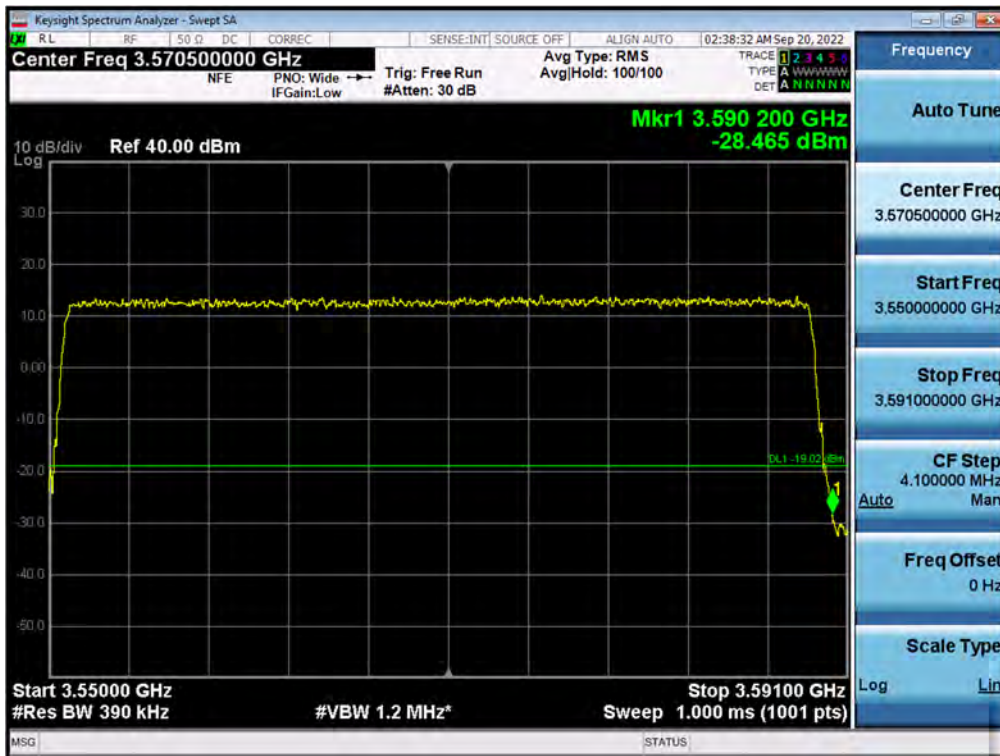
Antenna 3 / CBRS (NR 40 MHz 1C + NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C) + LTE 10 MHz 1C[5C(4C+1C)] / Non-Contiguous / 256QAM / High Right



Antenna 0 / CBRS NR 40 MHz 1C + (NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C + LTE 5 MHz 1C)5C(1C+4C) / Non-Contiguous / 64QAM / Low Left



Antenna 3 / CBRS NR 40 MHz 1C + (NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C + LTE 5 MHz 1C)5C(1C+4C) / Non-Contiguous / 256QAM / Low Right





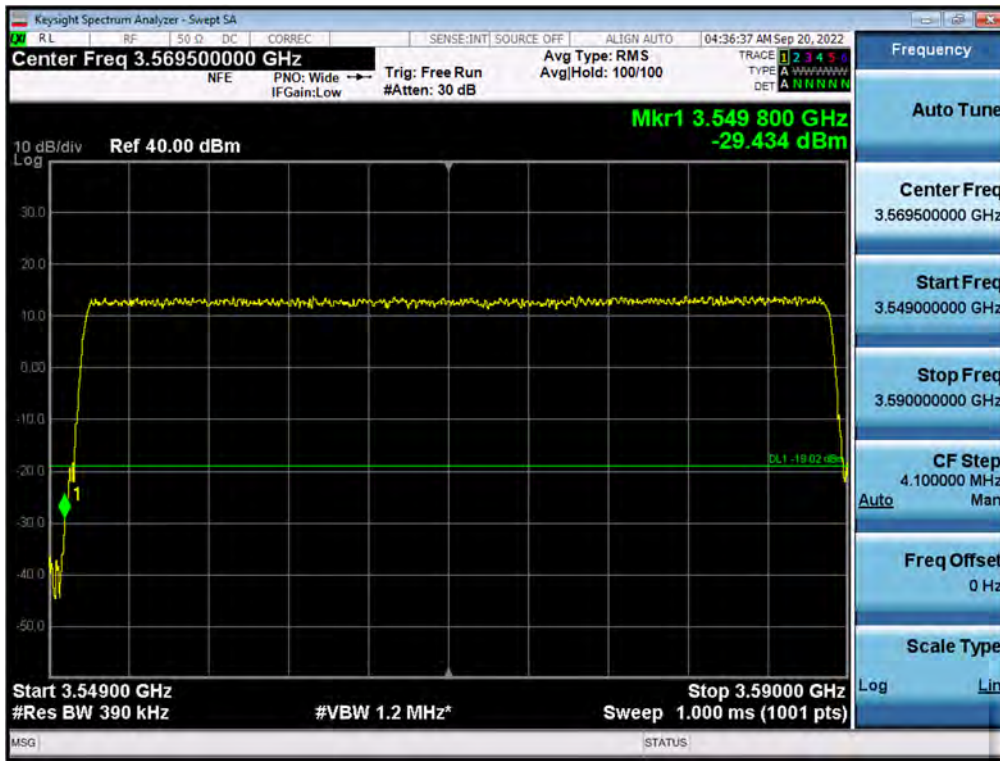
Antenna 3 / CBRS NR 40 MHz 1C + (NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C + LTE 5 MHz 1C)5C(1C+4C) / Non-Contiguous / 256QAM / High Left



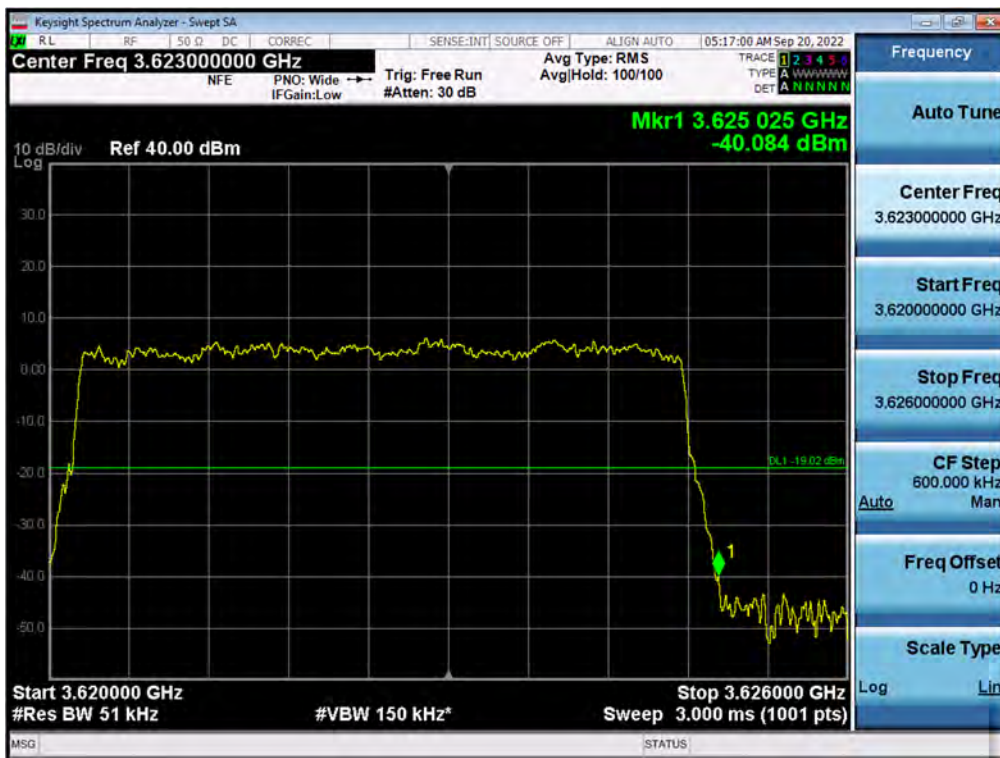
Antenna 3 / CBRS NR 40 MHz 1C + (NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C + LTE 5 MHz 1C)5C(1C+4C) / Non-Contiguous / 256QAM / High Right



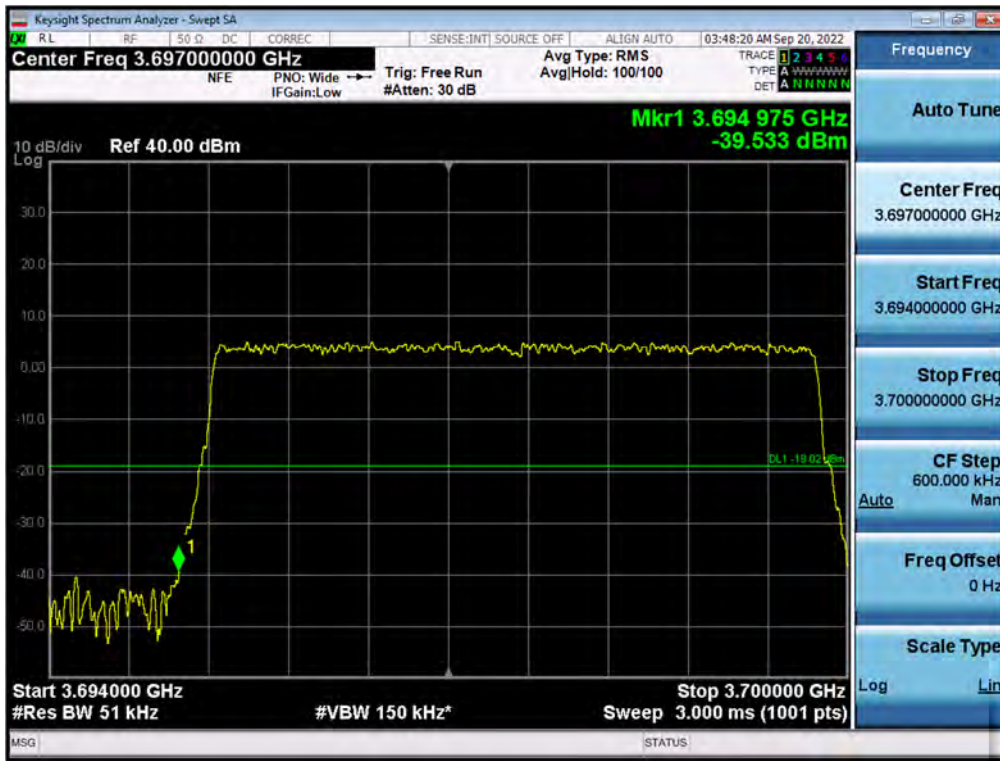
Antenna 3 / CBRS (NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C) + LTE 5 MHz 1C[5C(4C+1C)] / Non-Contiguous / QPSK / Low Left



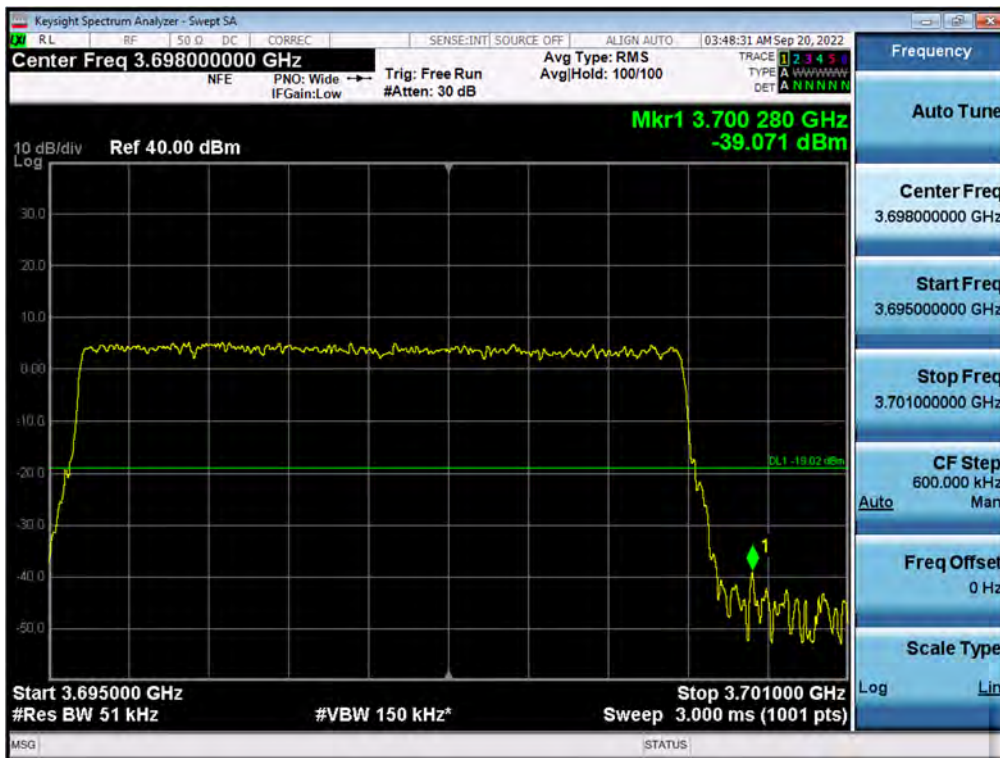
Antenna 0 / CBRS (NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C) + LTE 5 MHz 1C[5C(4C+1C)] / Non-Contiguous / 16QAM / Low Right



Antenna 1 / CBRS (NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C) + LTE 5 MHz 1C[5C(4C+1C)] / Non-Contiguous / QPSK / High Left



Antenna 1 / CBRS (NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C) + LTE 5 MHz 1C[5C(4C+1C)] / Non-Contiguous / QPSK / High Right





## 5.5. SPURIOUS UNWANTED EMISSIONS

### Test Requirements:

#### § 2.1051 Measurements required: Spurious emissions at antenna terminals.

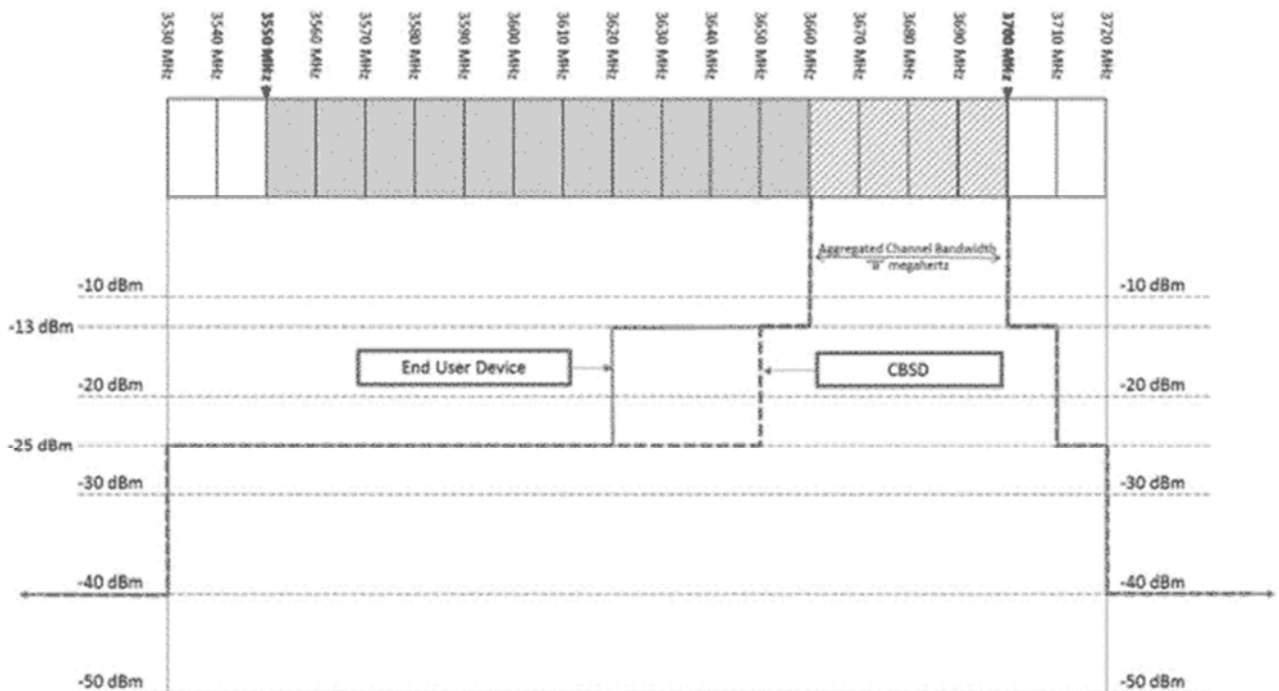
The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in § 2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

#### 96.41 General radio requirement.

#### (e) 3.5 GHz Emissions and Interference Limits –

##### (1) General protection levels.

Figure 1 to paragraph (e) – Protection levels



- (i) Except as otherwise specified in paragraph (e)(2) of this section, for channel and frequency assignments made by the SAS to CBSDs, the conducted power of any CBSD emission outside the fundamental emission bandwidth as specified in paragraph (e)(3) of this section (whether the emission is inside or outside of the authorized band) shall not exceed  $-13$  dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any CBSD emission shall not exceed  $-25$  dBm/MHz. The upper and lower SAS assigned channel edges are the upper and lower limits of any channel assigned to a CBSD by an SAS, or in the case of multiple contiguous channels, the upper and lower limits of the combined contiguous channels.

- (ii) Except as otherwise specified in paragraph (e)(2) of this section, for channel and frequency assignments made by a CBSD to End User Devices, the conducted power of any End User Device emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed  $-13$  dBm/MHz within 0 to B megahertz (where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B megahertz below the lower CBSD-assigned channel edge. At all frequencies greater than B megahertz above the upper CBSD assigned channel edge and less than B megahertz below the lower CBSD-assigned channel edge, the conducted power of any End User Device emission shall not exceed  $-25$  dBm/MHz. Notwithstanding the emission limits in this paragraph, the Adjacent Channel Leakage Ratio for End User Devices shall be at least 30 dB.
- (2) **Additional protection levels.** Notwithstanding paragraph (e)(1) of this section, for CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed  $-25$  dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed  $-40$  dBm/MHz.
- (3) **Measurement procedure.**
  - (i) Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, a resolution bandwidth of no less than one percent of the fundamental emission bandwidth may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full reference bandwidth (i.e., 1 MHz or 1 percent of emission bandwidth, as specified). The fundamental emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.
  - (ii) When measuring unwanted emissions to demonstrate compliance with the limits, the CBSD and End User Device nominal carrier frequency/channel shall be adjusted as close to the licensee's authorized frequency block edges, both upper and lower, as the design permits.
  - (iii) Compliance with emission limits shall be demonstrated using either average (RMS)-detected or peak-detected power measurement techniques.
- (4) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

### Test Procedures:

The measurement is performed in accordance with Section 5.7.4 of ANSI C63.26.

#### 5.7.4 Spurious unwanted emission measurements

- a) Set the spectrum analyzer start frequency to the lowest frequency generated by the EUT, without going below 9 kHz, and the stop frequency to the lower frequency covered by the measurements previously performed in 5.7.3. As an alternative, the stop frequency can be set to the value specified in 5.1.1, depending on the EUT operating range, if the resulting plot can clearly demonstrate compliance for all frequencies not addressed by the out-of-band emissions measurements performed as per 5.7.3.
- b) When using an average power (rms) detector, ensure that the number of points in the sweep  $\geq 2 \times (\text{span} / \text{RBW})$ . This may

require that the measurement range defined by the start and stop frequencies be subdivided, depending on the spectrum analyzer capabilities. This requirement does not apply to peak-detected power measurements. When average power is specified by the applicable regulation, a peak-detector can be utilized for preliminary measurements to accommodate wider frequency spans. Any emissions found in the preliminary measurement to exceed the applicable limit(s) shall be further examined using a power averaging (rms) detector with the minimum number of measurement points as defined above.

- c) The sweep time should be set to auto-couple for performing peak-detector measurements. For measurements that use a power averaging (rms) detector, the sweep time shall be set as described for out-of-band emissions measurements in item d) of 5.7.3.
- d) Identify and measure the Highest spurious emission levels in each frequency range. It is not necessary to re-measure the out-of-band emissions as a part of this test. Record the frequencies and amplitudes corresponding to the measured emissions and capture the data plots.
- e) Repeat step b) through step d) for the upper spurious emission frequency range if not already captured by a wide span measurement performed as per the alternative provided in step a). The upper frequency for this measurement is defined in 5.1.1 as a function of the EUT operating range.
- f) Compare the results with the corresponding limit in the applicable regulation.
- g) The test report shall include the data plots of the measuring instrument display and the measured data.

**Note:**

1. In 9 kHz to 30 MHz band, RBW narrower than reference bandwidth is used. So following correction factor is applied.
  - $10 \log [(reference\ bandwidth)/(resolution\ bandwidth)]$
  - : 9 kHz to 150 kHz applied 1 kHz RBW,  $10 \log (1\ kHz / 1\ MHz) = -30\ dB$
  - : 150 kHz to 30 MHz applied 10 kHz RBW,  $10 \log (10\ kHz / 1\ MHz) = -20\ dB$
2. Due to MIMO operations, a correction has been added to the limit according to KDB 662911 D01 v02r01. The EUT have multiple antennas transmitting correlated signals with the equal antenna gains and two outputs driving a cross-polarized antennas with  $N_{ant}=2$ .
  - MIMO correction:  $10 \log(N_{ANT}) = 10 \log(2) = 3.01\ dB$
  - From Channel Edge to Channel Edge  $\pm 10\ MHz$ ,  $-13\ dBm/MHz - 10*\log(2) = -16.01\ dBm/MHz$
  - From Channel Edge  $\pm 10\ MHz$  to 3 530 or 3 720 MHz,  $-25\ dBm/MHz - 10*\log(2) = -28.01\ dBm/MHz$
  - For the rest,  $-40\ dBm/MHz - 10*\log(2) = -43.01\ dBm/MHz$
3. The results of the Spurious Unwanted Emissions shown below the frequency measured values are very small and similar trend for each port, so we are attached only the worst case plot.



**Test Results:**
**Tabular Data of Spurious Unwanted Emissions**
**CBRS NR 10 MHz 1 Carrier  
Test Result for Output Port 2**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-49.500	-59.972	-49.346	-45.162	-32.376	-31.708	-33.656	-50.956	-53.359	-48.857
	Middle	-51.484	-59.937	-48.689	-33.597	-31.420	-32.026	-33.902	-51.353	-53.976	-49.214
	High	-49.196	-62.110	-49.888	-32.698	-31.541	-32.236	-44.046	-53.081	-53.388	-49.155
16QAM	Low	-49.203	-59.581	-49.444	-45.662	-32.362	-31.559	-33.457	-50.798	-53.528	-49.194
	Middle	-49.897	-59.786	-48.396	-34.136	-32.049	-32.053	-33.664	-50.248	-53.170	-49.297
	High	-50.801	-61.570	-49.848	-33.136	-30.672	-31.391	-44.359	-52.309	-54.420	-49.436
64QAM	Low	-51.467	-59.628	-48.712	-45.772	-32.737	-31.369	-33.561	-48.835	-54.516	-49.095
	Middle	-51.048	-60.877	-49.406	-34.614	-32.111	-31.817	-32.702	-50.360	-53.580	-48.931
	High	-51.419	-61.303	-48.874	-32.887	-31.752	-31.570	-43.904	-52.452	-54.069	-49.206
256QAM	Low	-50.787	-57.882	-49.555	-45.569	-32.088	-31.562	-33.416	-49.971	-54.408	-48.928
	Middle	-50.459	-60.191	-48.999	-33.777	-32.078	-31.943	-33.596	-50.734	-54.032	-49.002
	High	-51.988	-60.518	-49.545	-33.217	-30.930	-31.288	-44.952	-50.354	-54.035	-49.285

**CBRS NR 20 MHz 1 Carrier  
Test Result for Output Port 1**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-49.346	-51.276	-48.750	-41.182	-33.106	-32.582	-33.518	-49.092	-53.836	-49.409
	Middle	-51.426	-57.227	-48.659	-33.147	-32.654	-32.637	-34.069	-48.693	-53.400	-49.135
	High	-49.356	-61.078	-50.925	-32.903	-32.221	-32.686	-41.533	-49.082	-53.670	-49.103
16QAM	Low	-50.206	-52.190	-48.855	-42.028	-32.717	-31.725	-33.663	-48.806	-54.054	-49.049
	Middle	-51.264	-57.158	-48.493	-32.572	-32.762	-32.068	-33.886	-49.034	-53.478	-49.113
	High	-49.743	-61.753	-50.696	-33.254	-32.221	-32.557	-41.579	-49.380	-54.026	-49.226
64QAM	Low	-49.584	-52.049	-49.232	-41.294	-32.901	-32.475	-33.736	-49.286	-54.007	-49.286
	Middle	-48.460	-57.302	-48.131	-35.058	-32.783	-32.861	-33.960	-48.880	-53.791	-49.241
	High	-49.880	-61.756	-50.669	-32.696	-32.524	-32.717	-42.702	-49.191	-53.996	-49.317
256QAM	Low	-48.595	-52.720	-48.407	-41.806	-32.852	-31.721	-33.607	-49.620	-53.443	-48.789
	Middle	-49.828	-57.446	-48.445	-35.099	-32.553	-32.788	-33.981	-49.506	-53.879	-49.043
	High	-49.363	-61.731	-50.500	-33.498	-32.582	-33.049	-41.138	-49.232	-54.016	-49.500

**CBRS NR 30 MHz 1 Carrier  
Test Result for Output Port 2**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-50.871	-57.618	-48.475	-43.585	-33.822	-32.178	-32.485	-49.216	-52.321	-49.564
	Middle	-51.490	-58.043	-49.034	-32.490	-32.597	-32.336	-32.815	-49.043	-53.604	-48.933
	High	-51.192	-58.765	-48.745	-33.396	-32.692	-32.992	-44.366	-49.244	-52.729	-48.837
16QAM	Low	-51.206	-56.872	-48.816	-42.404	-33.885	-32.820	-32.476	-49.249	-54.067	-49.153
	Middle	-50.417	-57.462	-48.784	-32.480	-32.114	-32.883	-33.350	-49.344	-54.202	-49.240
	High	-49.232	-58.521	-48.791	-33.335	-32.260	-33.292	-43.791	-49.544	-54.330	-49.075
64QAM	Low	-50.800	-56.699	-48.165	-41.699	-33.498	-32.139	-33.009	-49.071	-52.492	-48.895
	Middle	-50.829	-57.472	-48.851	-32.810	-32.944	-33.050	-33.010	-48.931	-54.158	-48.820
	High	-50.270	-58.963	-48.490	-33.535	-32.713	-32.944	-44.319	-48.940	-52.892	-49.093
256QAM	Low	-50.936	-56.963	-48.409	-42.065	-33.207	-32.127	-32.786	-48.867	-53.059	-48.801
	Middle	-51.090	-57.680	-48.872	-32.859	-32.938	-33.001	-33.271	-48.891	-54.576	-49.221
	High	-49.052	-58.566	-48.506	-33.481	-32.892	-33.098	-44.618	-49.080	-53.827	-49.012



**CBRS NR 40 MHz 1 Carrier  
Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-50.433	-53.906	-47.337	-43.191	-32.259	-31.670	-33.642	-49.440	-53.403	-47.699
	Middle	-50.629	-55.502	-47.305	-33.314	-32.739	-32.121	-33.641	-48.693	-53.118	-47.860
	High	-49.567	-55.551	-47.374	-33.010	-32.743	-32.776	-43.721	-49.334	-53.808	-47.659
16QAM	Low	-51.426	-54.749	-47.335	-43.683	-33.554	-32.643	-33.964	-48.809	-53.474	-47.981
	Middle	-49.867	-55.632	-47.450	-33.044	-33.191	-32.697	-33.133	-48.550	-53.269	-47.837
	High	-49.009	-55.461	-47.273	-33.415	-32.847	-32.771	-43.614	-48.720	-53.578	-47.927
64QAM	Low	-48.800	-55.176	-47.464	-43.415	-32.134	-32.815	-33.545	-49.009	-54.391	-47.833
	Middle	-49.880	-54.750	-47.446	-33.202	-32.872	-32.499	-33.389	-49.032	-53.498	-47.681
	High	-49.439	-55.427	-47.463	-32.524	-32.798	-32.091	-43.529	-48.746	-53.863	-47.710
256QAM	Low	-49.655	-54.787	-47.392	-43.514	-33.427	-32.405	-34.186	-48.769	-53.360	-47.502
	Middle	-49.242	-55.531	-47.460	-33.329	-32.668	-32.227	-33.455	-49.110	-54.003	-47.808
	High	-51.533	-54.617	-47.275	-33.462	-33.303	-33.072	-43.650	-48.839	-53.998	-47.681

**CBRS NR 60 MHz 1 Carrier  
Test Result for Output Port 2**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-51.282	-52.423	-47.482	-42.280	-33.622	-32.212	-33.347	-48.704	-52.873	-48.029
	Middle	-49.501	-53.588	-47.368	-32.130	-32.822	-33.026	-32.872	-48.247	-54.124	-47.785
	High	-49.410	-53.516	-47.324	-32.308	-32.636	-32.408	-43.273	-48.803	-53.283	-47.586
16QAM	Low	-49.443	-52.729	-47.266	-43.314	-33.557	-33.238	-34.112	-48.712	-53.394	-47.954
	Middle	-49.621	-53.888	-47.251	-34.272	-33.169	-33.034	-33.042	-48.919	-53.956	-47.647
	High	-49.228	-53.833	-47.358	-33.318	-33.019	-32.479	-43.636	-48.693	-53.663	-47.763
64QAM	Low	-48.740	-51.484	-47.248	-42.398	-33.657	-32.474	-34.015	-49.350	-53.852	-47.792
	Middle	-49.626	-52.902	-47.463	-32.164	-32.397	-32.663	-33.815	-49.019	-53.953	-47.739
	High	-50.681	-53.718	-47.331	-33.339	-32.711	-33.120	-43.798	-48.951	-53.711	-47.754
256QAM	Low	-49.228	-52.022	-47.261	-43.467	-33.678	-32.384	-34.282	-48.657	-53.333	-47.917
	Middle	-50.666	-52.873	-47.188	-35.288	-32.483	-32.426	-33.446	-48.868	-53.500	-47.795
	High	-50.066	-53.776	-47.276	-33.050	-32.691	-33.209	-43.969	-49.452	-53.816	-47.599

**CBRS NR 80 MHz 1 Carrier  
Test Result for Output Port 1**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-51.778	-56.117	-47.186	-45.561	-33.802	-32.697	-47.924	-49.203	-53.663	-47.616
	Middle	-49.398	-53.021	-47.396	-32.154	-32.019	-32.833	-32.395	-48.629	-52.598	-47.706
	High	-50.417	-53.142	-47.287	-32.868	-33.101	-33.035	-43.281	-49.505	-54.247	-47.797
16QAM	Low	-49.563	-57.124	-47.425	-45.647	-32.972	-32.537	-48.192	-48.866	-53.839	-47.900
	Middle	-50.411	-53.554	-47.284	-34.840	-45.639	-44.639	-32.590	-48.858	-53.948	-47.672
	High	-49.951	-54.053	-47.217	-34.196	-33.233	-33.464	-43.677	-48.766	-53.008	-47.611
64QAM	Low	-49.870	-57.163	-47.187	-45.432	-33.226	-32.716	-48.032	-49.033	-53.965	-47.337
	Middle	-50.042	-52.692	-47.281	-32.183	-32.924	-32.441	-33.497	-49.235	-53.796	-47.856
	High	-50.332	-53.725	-47.362	-32.404	-33.427	-33.704	-44.517	-49.018	-52.884	-47.709
256QAM	Low	-49.678	-56.231	-47.348	-45.351	-33.499	-32.414	-47.991	-49.212	-53.718	-47.664
	Middle	-50.585	-53.167	-47.284	-34.421	-32.786	-32.353	-33.532	-48.356	-53.650	-47.772
	High	-52.223	-52.613	-47.356	-33.711	-33.216	-32.549	-43.674	-48.769	-53.614	-47.840



**CBRS NR 100 MHz 1 Carrier  
Test Result for Output Port 2**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-50.264	-52.931	-47.190	-42.510	-34.246	-33.147	-33.193	-49.240	-53.463	-47.577
	Middle	-50.749	-54.022	-47.236	-33.573	-32.896	-33.521	-33.124	-48.211	-52.601	-47.663
	High	-51.025	-53.732	-47.233	-32.590	-33.183	-32.831	-42.995	-48.874	-53.662	-47.610
16QAM	Low	-51.632	-52.640	-47.290	-43.822	-34.291	-32.623	-33.958	-48.679	-53.101	-47.786
	Middle	-51.525	-54.009	-47.385	-35.011	-32.876	-33.183	-33.351	-49.130	-52.705	-47.755
	High	-51.333	-53.191	-47.476	-34.822	-33.183	-33.933	-44.145	-48.751	-53.051	-47.780
64QAM	Low	-50.655	-53.126	-47.416	-43.730	-34.163	-33.015	-34.013	-49.187	-53.982	-47.864
	Middle	-49.314	-53.537	-47.447	-34.284	-32.993	-32.558	-33.896	-49.155	-54.178	-47.742
	High	-50.737	-53.507	-47.451	-34.588	-33.113	-33.002	-44.188	-48.553	-53.518	-47.621
256QAM	Low	-50.223	-53.614	-47.226	-43.844	-33.689	-33.079	-34.269	-49.184	-53.623	-47.874
	Middle	-51.432	-53.665	-47.399	-35.720	-32.941	-33.442	-33.356	-49.052	-54.106	-47.913
	High	-50.616	-53.924	-47.356	-35.018	-33.149	-33.326	-44.219	-49.037	-53.224	-47.672

**CBRS LTE 5 MHz 1 Carrier  
Test Result for Output Port 2**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-50.692	-60.963	-49.834	-46.159	-30.683	-31.485	-33.273	-54.476	-53.378	-49.227
	Middle	-50.491	-62.348	-50.268	-33.883	-31.843	-30.680	-33.680	-51.934	-52.319	-49.115
	High	-50.864	-61.642	-50.423	-33.354	-30.207	-29.393	-43.917	-52.597	-53.274	-49.147
16QAM	Low	-50.596	-61.858	-50.042	-45.987	-31.418	-30.622	-33.643	-52.824	-53.524	-48.319
	Middle	-49.737	-61.015	-49.661	-33.334	-30.830	-30.388	-33.258	-53.193	-54.160	-49.386
	High	-50.512	-60.641	-49.411	-33.607	-30.571	-30.209	-45.074	-52.721	-53.297	-49.209
64QAM	Low	-50.861	-60.705	-48.643	-46.316	-31.614	-31.359	-33.098	-53.207	-53.834	-48.923
	Middle	-48.752	-60.472	-49.352	-33.975	-30.975	-31.025	-33.896	-52.329	-53.859	-49.259
	High	-49.416	-61.465	-49.590	-32.973	-29.809	-30.001	-44.062	-52.675	-54.249	-48.974
256QAM	Low	-50.332	-61.544	-49.053	-46.185	-31.139	-31.190	-33.266	-53.628	-53.822	-49.220
	Middle	-49.003	-61.064	-50.316	-33.854	-30.717	-30.735	-33.726	-53.136	-54.200	-49.007
	High	-50.573	-60.728	-50.208	-33.270	-30.264	-30.128	-44.389	-52.711	-53.076	-48.706

**CBRS LTE 10 MHz 1 Carrier  
Test Result for Output Port 2**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-52.180	-58.886	-49.248	-45.593	-32.677	-32.411	-33.719	-52.546	-54.879	-49.179
	Middle	-50.662	-60.203	-49.495	-32.997	-32.224	-31.791	-32.899	-51.948	-53.635	-49.181
	High	-53.107	-61.282	-49.225	-32.886	-31.553	-32.633	-44.474	-52.055	-53.225	-49.105
16QAM	Low	-53.310	-60.064	-48.416	-44.830	-33.075	-31.972	-33.159	-51.997	-53.368	-49.009
	Middle	-50.526	-60.271	-49.464	-33.226	-32.003	-32.416	-33.354	-47.538	-54.027	-49.391
	High	-52.565	-60.863	-50.084	-32.834	-31.715	-29.829	-43.991	-52.409	-54.110	-49.078
64QAM	Low	-52.131	-58.218	-49.371	-45.632	-32.024	-31.614	-33.391	-51.841	-52.647	-49.112
	Middle	-52.874	-59.820	-49.346	-33.723	-31.878	-31.965	-33.296	-50.546	-53.766	-49.120
	High	-52.303	-60.567	-49.513	-32.953	-31.786	-32.157	-44.449	-50.796	-53.769	-49.282
256QAM	Low	-51.904	-59.832	-49.717	-45.349	-32.275	-31.948	-32.849	-53.215	-53.974	-48.863
	Middle	-51.612	-60.230	-49.119	-33.350	-32.498	-32.208	-33.014	-53.225	-54.486	-48.992
	High	-51.590	-61.126	-49.589	-32.998	-31.757	-31.661	-44.763	-49.746	-54.007	-49.271



**CBRS LTE 15 MHz 1 Carrier  
Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-51.136	-57.801	-48.643	-44.493	-27.308	-28.472	-33.142	-49.084	-52.679	-49.157
	Middle	-50.706	-59.233	-47.863	-33.082	-27.324	-27.600	-32.647	-48.163	-53.556	-49.268
	High	-50.400	-60.346	-49.389	-33.004	-26.574	-24.307	-37.829	-47.579	-53.593	-48.789
16QAM	Low	-52.502	-58.708	-49.063	-42.965	-32.232	-32.061	-32.997	-49.349	-53.509	-49.258
	Middle	-52.176	-58.241	-48.363	-32.839	-32.424	-31.769	-33.055	-48.425	-53.385	-48.536
	High	-51.529	-59.816	-48.712	-33.071	-31.167	-32.430	-37.898	-47.541	-53.453	-48.916
64QAM	Low	-53.097	-57.006	-47.982	-44.090	-33.113	-32.471	-33.435	-48.895	-52.987	-48.983
	Middle	-51.928	-58.521	-48.959	-33.616	-32.441	-32.370	-32.728	-47.948	-54.207	-49.122
	High	-51.478	-60.120	-49.040	-32.822	-31.634	-32.224	-37.420	-47.743	-53.028	-49.251
256QAM	Low	-52.855	-58.003	-48.835	-43.929	-33.556	-32.388	-32.862	-48.831	-53.675	-48.770
	Middle	-51.819	-58.603	-49.115	-33.612	-32.449	-32.426	-32.421	-47.502	-53.287	-49.292
	High	-50.530	-61.041	-48.562	-32.944	-31.803	-31.791	-37.626	-48.999	-54.014	-49.162

**CBRS LTE 20 MHz 1 Carrier  
Test Result for Output Port 2**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-49.401	-57.451	-48.680	-43.687	-32.635	-32.261	-33.539	-49.147	-52.688	-48.817
	Middle	-51.226	-57.980	-48.297	-33.087	-33.075	-32.585	-33.526	-49.211	-53.627	-48.754
	High	-51.489	-58.136	-48.929	-33.403	-32.230	-31.762	-43.235	-48.772	-53.668	-48.906
16QAM	Low	-49.967	-57.469	-47.762	-43.938	-33.537	-32.592	-32.741	-49.178	-53.573	-49.241
	Middle	-51.270	-57.339	-48.961	-32.921	-32.828	-33.019	-33.679	-48.795	-53.724	-49.039
	High	-50.952	-58.477	-48.526	-33.186	-31.114	-32.065	-43.641	-49.257	-52.614	-49.043
64QAM	Low	-51.940	-57.226	-49.013	-43.280	-33.290	-32.244	-33.310	-49.546	-53.665	-48.796
	Middle	-50.939	-57.977	-48.941	-33.486	-32.901	-32.863	-33.487	-48.938	-52.803	-48.989
	High	-49.356	-58.787	-47.732	-32.969	-32.347	-32.332	-42.830	-49.024	-54.180	-49.247
256QAM	Low	-50.519	-57.271	-48.191	-43.278	-32.668	-31.975	-33.009	-48.917	-53.176	-49.476
	Middle	-52.266	-57.761	-49.151	-33.378	-32.179	-31.920	-33.582	-48.719	-53.579	-49.214
	High	-50.873	-58.873	-48.737	-33.282	-31.696	-31.981	-42.947	-48.927	-54.164	-49.046

## Tabular Data of RF Contiguous

 CBRS NR(60 MHz 1C + 30 MHz 1C)[2C]  
 Test Result for Output Port 3

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-52.206	-50.372	-47.118	-42.265	-34.205	-33.502	-33.259	-48.953	-52.429	-49.031
	Middle	-50.067	-54.990	-47.122	-34.569	-33.142	-33.798	-33.149	-49.213	-53.957	-49.319
	High	-52.546	-49.114	-47.233	-33.197	-33.548	-33.162	-42.037	-48.961	-53.929	-49.274
16QAM	Low	-52.660	-52.968	-47.122	-42.586	-34.286	-33.539	-33.505	-49.442	-53.289	-49.395
	Middle	-50.962	-53.734	-47.105	-34.662	-33.259	-33.468	-32.638	-49.322	-53.038	-49.372
	High	-52.252	-54.367	-47.188	-32.228	-33.686	-33.503	-43.030	-49.352	-54.225	-48.474
64QAM	Low	-49.880	-52.883	-47.121	-42.719	-34.235	-33.831	-33.102	-48.716	-54.095	-48.568
	Middle	-50.179	-54.144	-47.161	-34.037	-32.706	-33.237	-32.129	-49.198	-53.096	-48.830
	High	-51.521	-54.521	-47.146	-33.278	-33.283	-33.290	-44.143	-49.448	-53.495	-49.172
256QAM	Low	-51.027	-52.329	-47.148	-42.882	-34.204	-33.302	-33.067	-49.283	-53.962	-49.390
	Middle	-50.105	-53.552	-47.226	-34.382	-32.961	-33.406	-32.969	-49.335	-53.891	-49.320
	High	-49.802	-54.199	-47.219	-32.770	-33.490	-33.012	-44.719	-49.669	-53.116	-49.335

Note: 1C: 1 Carrier, 2C: 2 Carrier



**CBRS LTE(15 MHz 1C + 15 MHz 1C)[2C]  
 Test Result for Output Port 2**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-49.448	-57.513	-47.611	-42.372	-33.837	-32.667	-33.428	-49.285	-53.650	-49.248
	Middle	-49.751	-57.570	-48.416	-32.894	-33.109	-32.511	-32.476	-49.080	-53.519	-49.177
	High	-50.505	-59.222	-49.131	-32.588	-32.044	-32.527	-43.681	-49.377	-52.640	-49.141
16QAM	Low	-50.095	-57.187	-47.687	-41.728	-33.391	-32.982	-33.454	-49.275	-51.661	-49.168
	Middle	-51.391	-58.412	-48.637	-32.458	-33.099	-33.189	-32.270	-49.591	-53.417	-48.938
	High	-48.585	-58.609	-49.219	-32.838	-32.782	-32.936	-42.303	-49.113	-53.054	-49.047
64QAM	Low	-49.018	-55.526	-47.782	-41.740	-33.652	-32.006	-33.215	-48.841	-52.638	-49.367
	Middle	-49.884	-58.082	-48.814	-32.982	-33.101	-32.442	-33.174	-48.760	-53.982	-48.923
	High	-50.094	-59.011	-48.266	-32.993	-31.996	-32.537	-43.778	-48.809	-53.914	-48.454
256QAM	Low	-48.876	-56.972	-47.668	-41.793	-33.552	-32.453	-32.888	-48.977	-52.193	-48.916
	Middle	-51.020	-58.344	-48.743	-32.793	-32.785	-32.620	-33.736	-49.354	-53.520	-49.092
	High	-50.326	-57.312	-49.016	-32.846	-32.173	-32.300	-43.597	-49.025	-54.172	-48.862

Note: 1C: 1 Carrier, 2C: 2 Carrier

**CBRS LTE 5 MHz 1C + NR 10 MHz 1C[2C]  
 Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-52.699	-57.133	-47.535	-43.213	-33.089	-32.248	-33.426	-48.801	-53.208	-47.770
	Middle	-52.232	-57.251	-47.316	-33.348	-32.310	-32.210	-33.736	-49.170	-54.196	-47.707
	High	-50.478	-57.158	-47.394	-32.497	-31.975	-32.180	-42.996	-48.742	-53.783	-47.845
16QAM	Low	-51.280	-57.064	-47.435	-43.225	-33.072	-32.206	-33.709	-49.038	-53.491	-47.863
	Middle	-50.861	-57.299	-47.437	-33.706	-32.504	-31.813	-33.994	-48.116	-53.786	-47.613
	High	-52.313	-57.012	-47.285	-33.192	-31.989	-32.097	-43.785	-49.153	-53.174	-47.900
64QAM	Low	-51.441	-57.102	-47.448	-43.371	-32.893	-32.580	-33.462	-49.114	-53.792	-47.900
	Middle	-49.731	-56.041	-47.481	-33.354	-32.091	-31.788	-33.763	-48.861	-53.687	-47.782
	High	-51.248	-56.667	-47.503	-32.471	-31.961	-32.210	-43.299	-48.973	-52.319	-47.726
256QAM	Low	-51.109	-56.679	-47.457	-42.427	-32.714	-31.843	-33.792	-49.576	-53.187	-47.604
	Middle	-51.650	-57.188	-47.145	-33.625	-31.472	-31.838	-33.834	-48.334	-53.913	-47.789
	High	-51.938	-56.944	-47.533	-32.440	-31.608	-32.060	-43.217	-49.215	-53.488	-47.717

Note: 1C: 1 Carrier, 2C: 2 Carrier

**CBRS NR(20 MHz 1C + 20 MHz 1C + 10 MHz 1C)[3C]  
 Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-50.400	-61.492	-50.786	-39.166	-33.847	-32.742	-32.537	-48.831	-54.043	-48.863
	Middle	-52.939	-61.693	-50.594	-32.251	-32.913	-32.482	-32.473	-48.602	-53.262	-49.100
	High	-51.863	-60.846	-50.451	-32.097	-32.316	-31.323	-42.597	-48.800	-53.704	-48.427
16QAM	Low	-52.084	-61.531	-50.897	-41.578	-34.333	-32.615	-32.933	-49.167	-52.426	-49.071
	Middle	-53.271	-60.991	-50.548	-32.833	-33.425	-33.413	-33.005	-49.207	-53.757	-49.352
	High	-52.065	-60.932	-50.660	-33.355	-33.082	-33.062	-43.266	-48.838	-53.609	-49.466
64QAM	Low	-52.610	-60.547	-50.468	-42.316	-33.651	-32.355	-33.424	-48.776	-53.308	-49.007
	Middle	-51.781	-61.362	-49.764	-33.351	-32.757	-33.206	-33.029	-48.828	-54.007	-48.974
	High	-52.672	-61.693	-49.901	-33.682	-33.021	-32.848	-43.241	-49.316	-53.482	-49.436
256QAM	Low	-52.550	-60.892	-50.459	-42.447	-33.551	-32.689	-33.095	-49.039	-54.347	-49.005
	Middle	-51.936	-60.891	-50.351	-33.655	-32.929	-33.316	-33.392	-49.268	-53.533	-48.718
	High	-50.744	-62.093	-49.835	-33.441	-33.352	-33.624	-43.273	-49.604	-53.833	-48.886

Note: 1C: 1 Carrier, 3C: 3 Carrier



**CBRS NR(30 MHz 1C + 30 MHz 1C + 10 MHz 1C)[3C]  
 Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-51.693	-53.187	-47.159	-39.254	-34.160	-33.066	-33.321	-49.180	-53.565	-49.351
	Middle	-53.123	-54.311	-47.210	-33.777	-33.141	-33.453	-32.173	-49.172	-52.817	-48.899
	High	-51.903	-54.484	-47.077	-33.905	-33.014	-33.033	-40.802	-48.963	-53.358	-49.133
16QAM	Low	-53.795	-54.166	-47.316	-38.634	-33.074	-32.497	-33.724	-48.926	-53.656	-49.235
	Middle	-53.690	-54.287	-47.130	-34.145	-33.316	-33.091	-32.330	-49.238	-54.117	-48.649
	High	-53.718	-54.723	-47.449	-34.442	-33.104	-33.216	-43.872	-48.721	-53.462	-49.234
64QAM	Low	-53.174	-54.041	-47.116	-38.181	-34.340	-32.338	-33.343	-48.981	-53.248	-49.000
	Middle	-53.720	-52.918	-47.207	-34.361	-33.204	-33.337	-32.910	-48.615	-53.491	-49.071
	High	-53.203	-54.246	-47.767	-34.113	-33.394	-33.382	-44.469	-49.310	-53.328	-49.298
256QAM	Low	-54.194	-51.308	-47.064	-37.681	-34.363	-33.261	-33.681	-48.826	-54.127	-49.269
	Middle	-53.896	-53.675	-47.117	-34.443	-33.238	-33.216	-33.230	-49.272	-52.771	-49.171
	High	-53.025	-54.436	-48.628	-34.002	-32.555	-33.482	-44.461	-49.109	-53.815	-48.544

Note: 1C: 1 Carrier, 3C: 3 Carrier

**CBRS LTE(15 MHz 1C + 15 MHz 1C + 10 MHz 1C)[3C]  
 Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-52.698	-54.786	-47.429	-43.227	-34.683	-32.625	-33.030	-48.248	-53.633	-47.850
	Middle	-52.379	-55.428	-47.342	-33.355	-33.470	-33.070	-33.090	-48.757	-54.162	-47.642
	High	-51.757	-55.829	-47.460	-32.614	-32.529	-33.068	-42.633	-49.206	-53.158	-47.529
16QAM	Low	-53.206	-53.660	-47.513	-43.589	-33.676	-32.855	-33.539	-49.002	-53.745	-47.581
	Middle	-50.598	-55.223	-47.495	-33.448	-33.194	-32.793	-33.093	-49.088	-54.223	-47.792
	High	-53.585	-54.923	-47.340	-33.267	-33.323	-32.707	-42.822	-48.008	-54.361	-47.649
64QAM	Low	-50.786	-54.630	-47.449	-43.407	-34.636	-33.173	-33.728	-48.807	-53.485	-47.664
	Middle	-52.576	-55.546	-47.467	-33.674	-33.386	-32.898	-33.435	-49.331	-53.941	-47.862
	High	-50.616	-55.671	-47.224	-33.324	-33.213	-33.286	-43.688	-49.123	-53.712	-47.675
256QAM	Low	-50.845	-54.432	-47.445	-43.475	-33.581	-32.767	-32.636	-49.097	-53.791	-47.831
	Middle	-53.519	-55.325	-47.590	-33.453	-33.553	-33.032	-33.227	-49.004	-52.920	-47.801
	High	-53.467	-55.501	-47.275	-33.590	-33.229	-33.076	-43.123	-48.505	-53.539	-47.693

Note: 1C: 1 Carrier, 3C: 3 Carrier

**CBRS LTE(20 MHz 1C + 15 MHz 1C + 15 MHz 1C)[3C]  
 Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-53.158	-53.658	-47.423	-43.390	-33.965	-32.277	-33.894	-48.813	-53.947	-47.619
	Middle	-50.868	-54.326	-47.559	-32.720	-32.934	-31.980	-33.618	-48.453	-53.455	-47.657
	High	-52.538	-54.420	-47.561	-33.591	-32.273	-32.488	-43.328	-49.166	-51.955	-47.786
16QAM	Low	-53.828	-53.609	-47.416	-43.453	-33.400	-33.501	-33.624	-49.397	-53.876	-47.752
	Middle	-53.324	-54.033	-47.485	-33.766	-32.212	-32.155	-32.935	-48.956	-53.894	-47.544
	High	-53.536	-54.854	-47.428	-34.055	-33.770	-33.132	-43.835	-48.833	-54.489	-47.779
64QAM	Low	-53.396	-53.474	-47.508	-43.456	-33.385	-32.308	-33.339	-48.954	-53.509	-47.766
	Middle	-51.003	-54.469	-47.389	-34.346	-32.868	-31.859	-33.327	-49.221	-54.399	-47.888
	High	-52.948	-54.425	-47.431	-33.714	-32.337	-31.935	-43.463	-48.786	-53.791	-47.783
256QAM	Low	-50.891	-53.595	-47.432	-43.725	-33.613	-33.053	-33.400	-48.404	-53.354	-47.903
	Middle	-53.556	-54.003	-47.378	-34.234	-32.220	-32.733	-33.589	-48.988	-53.395	-47.940
	High	-52.448	-54.500	-47.218	-33.278	-33.153	-33.138	-43.026	-48.301	-53.656	-47.623

Note: 1C: 1 Carrier, 3C: 3 Carrier

**CBRS LTE(20 MHz 1C + 20 MHz 1C + 20 MHz 1C)[3C]  
 Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-50.957	-52.181	-47.418	-43.384	-34.663	-33.615	-33.325	-48.767	-53.969	-47.886
	Middle	-52.554	-53.748	-47.432	-34.667	-33.158	-33.018	-32.292	-49.063	-53.700	-47.818
	High	-53.196	-54.214	-47.487	-33.166	-33.301	-32.844	-43.431	-48.955	-53.021	-47.635
16QAM	Low	-53.332	-52.508	-47.123	-43.568	-33.466	-33.459	-33.105	-49.071	-53.706	-47.763
	Middle	-51.747	-52.841	-47.386	-33.762	-32.514	-33.310	-33.353	-48.276	-54.203	-47.699
	High	-53.001	-53.411	-47.382	-34.124	-33.144	-32.469	-44.503	-48.797	-52.413	-47.746
64QAM	Low	-52.188	-52.358	-47.614	-43.681	-34.470	-33.230	-33.585	-49.016	-53.607	-47.721
	Middle	-51.258	-53.536	-47.521	-35.048	-33.174	-32.923	-33.631	-49.019	-53.399	-47.717
	High	-52.859	-53.553	-47.287	-34.100	-32.356	-32.638	-43.630	-49.285	-53.700	-47.879
256QAM	Low	-53.925	-52.822	-47.468	-43.451	-34.995	-33.397	-33.530	-49.424	-52.849	-47.821
	Middle	-51.046	-53.534	-47.348	-34.447	-33.164	-33.162	-32.987	-48.630	-53.573	-47.900
	High	-51.230	-53.463	-47.510	-34.459	-33.197	-33.223	-43.791	-49.195	-53.719	-47.918

Note: 1C: 1 Carrier, 3C: 3 Carrier



**CBRS LTE(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)[4C]  
 Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-50.619	-53.090	-47.485	-43.684	-33.478	-32.107	-32.761	-49.156	-53.785	-47.577
	Middle	-48.706	-53.401	-47.522	-33.253	-32.527	-32.173	-32.540	-49.386	-53.488	-47.645
	High	-49.318	-53.649	-47.410	-32.974	-33.109	-31.774	-43.880	-48.405	-53.158	-47.915
16QAM	Low	-50.846	-50.018	-47.191	-43.408	-33.002	-32.331	-33.150	-48.297	-53.934	-47.603
	Middle	-51.381	-51.602	-47.603	-35.031	-32.716	-32.472	-33.320	-48.507	-52.919	-47.760
	High	-51.277	-52.985	-47.510	-34.080	-32.901	-32.822	-44.307	-49.086	-53.918	-47.730
64QAM	Low	-49.123	-52.241	-47.458	-43.497	-34.144	-33.003	-33.239	-49.246	-53.685	-47.794
	Middle	-50.685	-53.481	-47.500	-35.216	-32.303	-32.151	-33.432	-49.214	-53.563	-47.836
	High	-48.769	-53.525	-47.628	-34.340	-33.293	-32.225	-42.912	-48.608	-53.524	-47.765
256QAM	Low	-51.093	-52.179	-47.418	-43.699	-34.189	-32.687	-33.343	-49.157	-53.327	-47.710
	Middle	-49.324	-52.497	-47.394	-35.057	-31.876	-32.444	-32.673	-49.005	-53.384	-47.918
	High	-48.782	-52.898	-47.377	-33.974	-33.110	-33.104	-43.845	-48.087	-53.628	-47.773

Note: 1C: 1 Carrier, 4C: 4 Carrier

**CBRS LTE(15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 10 MHz 1C)[5C]  
 Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-47.745	-52.337	-47.525	-43.085	-33.559	-32.610	-33.831	-48.956	-54.206	-47.977
	Middle	-49.967	-53.020	-47.485	-32.020	-32.622	-33.315	-32.381	-48.414	-54.055	-47.687
	High	-48.267	-53.935	-47.460	-32.465	-33.372	-33.697	-43.250	-48.415	-53.735	-47.648
16QAM	Low	-49.273	-53.222	-47.325	-43.728	-33.647	-32.738	-33.249	-48.549	-53.709	-47.666
	Middle	-49.682	-53.235	-47.282	-34.736	-33.310	-33.668	-33.913	-49.040	-53.593	-47.928
	High	-47.630	-53.579	-47.381	-32.426	-33.706	-33.476	-43.297	-48.864	-53.304	-47.769
64QAM	Low	-49.070	-53.360	-47.499	-43.608	-33.226	-32.337	-33.684	-49.179	-53.985	-47.628
	Middle	-49.752	-53.155	-47.229	-34.820	-33.473	-33.128	-33.412	-49.288	-53.363	-47.897
	High	-48.552	-53.483	-47.591	-33.184	-33.638	-33.245	-43.692	-48.840	-53.828	-47.877
256QAM	Low	-47.772	-53.008	-47.525	-43.405	-34.468	-32.793	-33.192	-49.020	-53.527	-47.939
	Middle	-50.144	-53.280	-47.497	-34.911	-33.414	-32.851	-33.891	-48.696	-53.602	-47.730
	High	-48.051	-52.055	-47.487	-32.466	-33.194	-33.517	-43.739	-48.878	-54.106	-47.712

Note: 1C: 1 Carrier, 5C: 5 Carrier

**CBRS LTE(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 10 MHz 1C)[5C]  
 Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-48.046	-52.736	-47.280	-38.853	-34.791	-33.645	-32.392	-48.747	-53.352	-47.898
	Middle	-49.414	-52.795	-47.528	-32.164	-32.594	-32.620	-33.183	-49.131	-52.813	-47.738
	High	-50.135	-53.256	-47.376	-32.737	-33.090	-32.716	-43.796	-49.233	-53.345	-47.915
16QAM	Low	-49.923	-52.715	-47.124	-43.419	-34.065	-33.348	-33.786	-49.011	-53.245	-47.685
	Middle	-48.114	-53.162	-47.504	-35.545	-32.713	-32.840	-33.234	-48.969	-53.001	-47.908
	High	-50.475	-52.757	-47.563	-34.237	-33.513	-33.215	-44.066	-49.070	-53.364	-47.538
64QAM	Low	-50.569	-51.744	-47.413	-43.600	-33.929	-33.364	-33.826	-49.136	-53.622	-47.662
	Middle	-49.731	-53.427	-47.502	-33.171	-33.109	-32.361	-32.621	-48.914	-53.624	-47.843
	High	-48.621	-53.051	-47.602	-33.879	-32.681	-32.005	-43.820	-49.285	-53.460	-47.700
256QAM	Low	-47.770	-53.435	-47.558	-43.305	-34.052	-32.715	-34.106	-48.841	-54.419	-47.777
	Middle	-47.794	-53.391	-47.551	-32.905	-33.540	-33.348	-33.151	-49.070	-53.429	-47.676
	High	-49.909	-53.482	-47.427	-33.821	-33.297	-32.723	-43.766	-49.330	-52.989	-47.668

Note: 1C: 1 Carrier, 5C: 5 Carrier

**CBRS LTE(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)[5C]  
 Test Result for Output Port 1**

Mod.	Channel	Measured Level (dBm)									
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-51.643	-51.275	-47.678	-43.658	-33.156	-32.386	-34.193	-49.332	-54.077	-47.272
	Middle	-52.872	-51.937	-47.642	-32.253	-33.583	-33.047	-32.505	-48.813	-53.978	-47.951
	High	-52.882	-53.681	-47.605	-32.765	-33.640	-33.807	-44.207	-48.595	-53.429	-47.884
16QAM	Low	-53.038	-51.104	-47.610	-43.391	-34.324	-33.252	-33.873	-49.163	-52.901	-47.763
	Middle	-52.282	-50.226	-47.564	-35.313	-33.315	-33.176	-32.674	-49.477	-53.756	-48.034
	High	-50.465	-53.700	-47.747	-34.227	-33.349	-34.042	-44.020	-49.649	-53.640	-47.830
64QAM	Low	-51.868	-47.648	-47.505	-43.597	-33.439	-32.969	-34.284	-49.270	-53.673	-47.839
	Middle	-51.263	-49.665	-47.656	-35.266	-33.645	-33.610	-32.667	-49.125	-52.919	-48.108
	High	-50.277	-53.492	-47.666	-34.491	-33.265	-33.622	-44.011	-49.537	-52.999	-47.791
256QAM	Low	-50.476	-52.089	-47.449	-43.857	-33.793	-33.043	-33.958	-49.201	-53.797	-47.704
	Middle	-52.975	-50.319	-47.709	-35.130	-33.730	-33.500	-33.422	-48.846	-53.447	-47.769
	High	-50.998	-53.326	-47.400	-34.307	-33.381	-33.810	-44.135	-49.304	-53.926	-47.972

Note: 1C: 1 Carrier, 5C: 5 Carrier



**CBRS NR 40 MHz 1C + NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C + LTE 10 MHz 1C[5C]  
 Test Result for Output Port 3**

Mod.	Channel	Measured Level (dBm)										
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3430 MHz	3430 MHz ~ 3530 MHz	3530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz
QPSK	Low	-50.714	-54.035	-48.469	-48.028	-46.039	-30.508	-32.676	-36.721	-49.263	-54.978	-51.254
	Middle	-48.359	-56.492	-48.467	-49.094	-38.699	-32.881	-32.645	-32.508	-49.238	-55.113	-51.456
	High	-50.514	-55.905	-48.561	-53.084	-32.379	-32.039	-32.914	-36.363	-47.910	-55.371	-51.126
16QAM	Low	-49.965	-54.568	-49.187	-53.434	-49.924	-33.691	-32.614	-34.404	-49.675	-54.990	-50.986
	Middle	-49.437	-55.234	-48.109	-52.228	-32.726	-33.091	-32.840	-35.475	-47.675	-55.403	-50.677
	High	-50.846	-55.353	-48.662	-51.376	-36.455	-32.979	-32.599	-40.659	-48.282	-54.707	-50.849
64QAM	Low	-50.520	-59.441	-49.332	-53.740	-49.875	-33.759	-32.868	-34.832	-49.048	-55.205	-50.948
	Middle	-47.978	-54.763	-48.614	-51.111	-34.766	-32.545	-32.242	-35.794	-49.252	-54.635	-51.109
	High	-48.679	-54.791	-47.891	-52.780	-37.772	-32.770	-32.775	-41.175	-48.030	-54.897	-50.802
256QAM	Low	-50.670	-59.116	-49.262	-52.252	-50.005	-33.467	-32.425	-34.762	-49.748	-54.756	-51.439
	Middle	-50.030	-55.307	-48.276	-52.432	-35.454	-32.800	-32.024	-36.054	-49.304	-54.457	-51.497
	High	-47.917	-55.108	-48.487	-52.736	-38.572	-32.543	-32.245	-41.714	-47.663	-55.009	-51.197

Note: 1C: 1 Carrier, 5C: 5 Carrier

**CBRS NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C + LTE 5 MHz 1C[5C]  
 Test Result for Output Port 0**

Mod.	Channel	Measured Level (dBm)										
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3430 MHz	3430 MHz ~ 3 530 MHz	3 530 MHz ~ Low Edge - 10 MHz	Low Edge - 10 MHz ~ Low Edge - 1 MHz	High Edge + 1 MHz ~ High Edge + 10 MHz	High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
QPSK	Low	-48.611	-59.287	-51.884	-53.367	-55.510	-33.553	-32.882	-42.985	-49.708	-55.257	-51.120
	Middle	-51.158	-55.376	-49.720	-50.993	-32.129	-33.073	-33.086	-32.636	-47.600	-55.260	-50.891
	High	-49.723	-55.915	-49.610	-52.973	-32.188	-32.566	-31.106	-39.103	-47.318	-55.543	-50.819
16QAM	Low	-49.994	-60.002	-52.256	-52.955	-48.547	-33.823	-33.330	-32.591	-49.575	-55.378	-50.746
	Middle	-48.403	-55.678	-49.863	-50.289	-32.589	-33.411	-32.148	-33.191	-47.356	-55.147	-50.761
	High	-49.389	-55.438	-49.440	-51.511	-32.347	-31.802	-31.944	-41.541	-47.378	-55.190	-51.577
64QAM	Low	-50.752	-59.842	-52.378	-54.201	-49.052	-34.184	-32.316	-32.343	-49.495	-55.105	-51.361
	Middle	-48.679	-55.686	-49.744	-50.747	-32.588	-33.339	-32.771	-32.969	-47.249	-55.155	-51.425
	High	-50.288	-55.527	-49.702	-51.254	-32.163	-32.814	-32.381	-41.157	-47.146	-54.458	-51.190
256QAM	Low	-50.363	-58.725	-49.208	-48.451	-41.845	-33.531	-32.605	-32.136	-48.580	-55.476	-51.095
	Middle	-49.133	-55.178	-49.541	-50.986	-32.646	-32.349	-31.990	-32.991	-47.313	-55.147	-51.241
	High	-48.876	-55.140	-49.276	-51.501	-32.536	-32.279	-32.060	-41.315	-47.204	-54.951	-51.347

Note: 1C: 1 Carrier, 5C: 5 Carrier

**Tabular Data of RF Non-Contiguous  
CBRS NR(60 MHz 1C + 30 MHz 1C)[2C]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz ~ 1 <sup>st</sup> Low Edge - 1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz ~ 2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
3	QPSK	-49.952	-56.816	-47.156	-43.301	-34.297	-26.999	-32.183	-30.629	-32.828	-42.729	-48.839	-53.603	-48.819	
	16QAM	-49.004	-55.125	-47.146	-42.152	-33.327	-28.151	-32.597	-30.642	-32.641	-44.066	-49.019	-53.379	-49.097	
	64QAM	-47.779	-55.828	-47.201	-40.965	-34.250	-28.793	-32.802	-31.468	-31.829	-44.369	-47.544	-53.278	-48.472	
	256QAM	-49.352	-55.760	-47.137	-40.729	-34.181	-29.285	-32.817	-31.867	-32.742	-44.451	-48.865	-54.330	-53.479	

Note: 1C: 1 Carrier, 2C: 2 Carrier

**CBRS LTE(15 MHz 1C + 15 MHz 1C)[2C]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz ~ 1 <sup>st</sup> Low Edge - 1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz ~ 2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
2	QPSK	-50.180	-58.003	-47.749	-42.133	-34.092	-20.978	-33.369	-26.759	-31.113	-36.800	-48.984	-54.281	-48.891	
	16QAM	-49.232	-57.584	-47.713	-42.543	-33.825	-25.813	-33.419	-28.840	-32.899	-36.796	-48.783	-53.738	-48.863	
	64QAM	-47.375	-58.875	-47.702	-42.936	-33.442	-29.731	-33.019	-29.546	-31.765	-36.719	-49.280	-53.005	-48.882	
	256QAM	-50.027	-57.869	-47.701	-43.021	-33.860	-28.671	-33.265	-28.883	-32.666	-37.223	-49.025	-53.912	-49.087	

Note: 1C: 1 Carrier, 2C: 2 Carrier

**CBRS LTE 5 MHz 1C + NR 10 MHz 1C[2C]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz ~ 1 <sup>st</sup> Low Edge - 1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz ~ 2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
3	QPSK	-50.345	-56.942	-47.567	-43.539	-33.429	-31.943	-33.575	-30.781	-32.469	-44.227	-48.640	-53.474	-47.865	
	16QAM	-51.060	-56.325	-47.530	-43.914	-33.698	-33.029	-33.548	-30.596	-32.882	-44.146	-48.373	-53.944	-47.827	
	64QAM	-48.227	-56.548	-47.510	-43.654	-33.849	-31.927	-33.384	-30.370	-32.469	-44.052	-49.083	-53.520	-47.452	
	256QAM	-48.264	-56.488	-47.516	-43.635	-32.064	-32.670	-33.457	-31.179	-33.119	-44.089	-49.143	-54.256	-47.821	

Note: 1C: 1 Carrier, 2C: 2 Carrier

**CBRS NR[20 MHz 1C + (20 MHz 1C + 10 MHz 1C)][3C(1C+2C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz ~ 1 <sup>st</sup> Low Edge - 1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz ~ 2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge + 10 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
3	QPSK	-49.429	-61.305	-51.052	-39.298	-33.743	-22.724	-32.284	-27.613	-31.997	-42.363	-49.304	-53.340	-48.964	
	16QAM	-47.655	-61.035	-49.930	-40.919	-34.152	-25.315	-32.716	-28.338	-32.594	-43.311	-49.240	-53.753	-49.274	
	64QAM	-47.549	-60.575	-50.423	-41.922	-33.756	-26.592	-33.509	-28.921	-31.379	-43.032	-48.209	-53.896	-49.255	
	256QAM	-47.573	-61.563	-50.093	-42.153	-34.414	-28.734	-33.661	-29.254	-32.918	-42.532	-49.292	-53.448	-60.866	

Note: 1C: 1 Carrier, 2C: 2 Carrier, 3C: 3 Carrier

**CBRS NR[(20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][3C(2C+1C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz ~ 1 <sup>st</sup> Low Edge - 1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz ~ 2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge + 10 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
3	QPSK	-48.639	-61.495	-50.764	-42.273	-34.386	-22.360	-32.156	-30.514	-33.405	-41.335	-48.971	-53.728	-48.802	
	16QAM	-47.781	-61.599	-50.293	-40.979	-34.914	-25.746	-32.558	-31.956	-33.212	-43.852	-48.981	-53.359	-49.081	
	64QAM	-47.891	-61.578	-50.680	-42.596	-34.451	-25.173	-32.427	-31.831	-32.701	-44.493	-48.600	-53.154	-48.890	
	256QAM	-50.545	-61.579	-50.558	-42.760	-34.188	-26.428	-32.518	-30.326	-34.051	-40.933	-49.173	-54.126	-48.941	

Note: 1C: 1 Carrier, 2C: 2 Carrier, 3C: 3 Carrier

**CBRS NR[30 MHz 1C + (30 MHz 1C + 10 MHz 1C)][3C(1C+2C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz ~ 1 <sup>st</sup> Low Edge - 1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz ~ 2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge + 10 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
3	QPSK	-49.583	-57.049	-47.677	-42.694	-33.351	-22.557	-32.195	-29.677	-32.627	-43.600	-48.580	-53.520	-49.101	
	16QAM	-49.705	-56.009	-47.323	-43.749	-32.875	-25.677	-32.423	-29.900	-33.258	-44.647	-49.154	-53.569	-48.942	
	64QAM	-46.793	-55.826	-47.856	-42.552	-33.790	-26.253	-33.205	-31.234	-31.944	-44.385	-48.843	-53.717	-49.168	
	256QAM	-48.481	-56.316	-47.878	-42.350	-33.740	-25.869	-33.389	-29.784	-31.137	-45.128	-48.623	-53.976	-49.102	

Note: 1C: 1 Carrier, 2C: 2 Carrier, 3C: 3 Carrier



**CBRS NR[(30 MHz 1C + 30 MHz 1C) + 10 MHz 1C][3C(2C+1C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz
3	QPSK	-49.766	-53.335	-47.731	-41.159	-34.530	-20.459	-32.528	-31.794	-33.501	-42.168	-49.008	-53.833	-49.001	
	16QAM	-49.854	-54.791	-47.739	-40.538	-34.090	-26.548	-32.742	-31.520	-33.783	-43.696	-47.989	-53.437	-49.401	
	64QAM	-47.983	-53.532	-47.785	-39.408	-34.162	-28.265	-33.010	-31.316	-30.259	-44.095	-49.106	-53.287	-48.813	
	256QAM	-47.161	-55.129	-47.684	-39.444	-34.443	-28.206	-32.533	-31.892	-32.582	-44.345	-48.951	-53.623	-49.251	

Note: 1C: 1 Carrier, 2C: 2 Carrier, 3C: 3 Carrier

**CBRS LTE[15 MHz 1C + (15 MHz 1C + 10 MHz 1C)][3C(1C+2C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz
3	QPSK	-49.458	-55.323	-47.371	-43.508	-33.609	-24.539	-32.349	-25.856	-33.929	-42.611	-49.400	-53.666	-47.781	
	16QAM	-48.482	-56.472	-47.492	-43.666	-33.644	-26.691	-32.793	-27.956	-32.901	-42.893	-48.957	-54.154	-47.851	
	64QAM	-48.765	-56.389	-47.544	-43.736	-34.013	-28.658	-33.139	-28.376	-33.625	-43.924	-48.511	-53.521	-47.600	
	256QAM	-50.647	-55.928	-47.327	-43.815	-33.784	-30.259	-33.385	-29.478	-32.461	-43.107	-49.043	-53.809	-47.747	

Note: 1C: 1 Carrier, 2C: 2 Carrier, 3C: 3 Carrier

**CBRS LTE[(15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][3C(2C+1C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz
3	QPSK	-48.908	-55.709	-47.570	-43.566	-33.855	-31.308	-32.534	-30.692	-33.505	-43.498	-48.183	-53.955	-47.811	
	16QAM	-47.826	-55.883	-47.397	-43.744	-33.237	-27.283	-33.179	-31.060	-32.164	-44.114	-49.503	-53.256	-47.877	
	64QAM	-49.882	-55.421	-47.375	-43.650	-35.115	-27.677	-32.997	-31.231	-33.198	-44.324	-48.756	-53.382	-47.696	
	256QAM	-48.548	-55.882	-47.176	-43.661	-33.651	-28.803	-33.440	-31.419	-32.820	-45.107	-48.886	-52.832	-47.815	

Note: 1C: 1 Carrier, 2C: 2 Carrier, 3C: 3 Carrier

**CBRS LTE[20 MHz 1C + (15 MHz 1C + 15 MHz 1C)][3C(1C+2C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz
3	QPSK	-48.893	-56.718	-47.416	-43.513	-34.130	-27.076	-32.894	-28.830	-31.257	-43.034	-48.330	-53.936	-47.732	
	16QAM	-50.210	-56.131	-47.248	-43.782	-32.335	-26.875	-32.989	-28.972	-31.765	-42.958	-48.107	-53.780	-47.939	
	64QAM	-47.554	-56.735	-47.436	-43.597	-32.623	-28.321	-33.195	-29.682	-30.661	-44.573	-49.088	-53.033	-47.683	
	256QAM	-50.423	-55.924	-47.517	-43.759	-33.555	-28.400	-33.355	-30.023	-32.288	-43.180	-48.888	-53.996	-47.816	

Note: 1C: 1 Carrier, 2C: 2 Carrier, 3C: 3 Carrier

**CBRS LTE[(20 MHz 1C + 15 MHz 1C) + 15 MHz 1C][3C(2C+1C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz
3	QPSK	-47.674	-55.613	-47.277	-43.811	-33.782	-25.828	-33.073	-28.312	-32.329	-43.677	-48.892	-53.590	-47.803	
	16QAM	-50.593	-55.257	-47.439	-43.854	-34.345	-26.717	-33.435	-29.950	-32.547	-44.117	-48.605	-53.229	-47.781	
	64QAM	-50.211	-55.362	-47.144	-43.782	-34.548	-26.259	-33.283	-28.163	-31.032	-44.586	-48.800	-54.095	-47.804	
	256QAM	-48.677	-55.558	-47.420	-43.717	-34.104	-27.352	-33.180	-29.286	-33.236	-44.667	-48.638	-53.259	-47.752	

Note: 1C: 1 Carrier, 2C: 2 Carrier, 3C: 3 Carrier

**CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C)][3C(1C+2C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz
3	QPSK	-50.819	-55.443	-47.477	-41.726	-34.103	-22.417	-32.272	-27.643	-32.991	-42.438	-48.349	-53.817	-47.629	
	16QAM	-52.598	-54.822	-47.346	-43.683	-32.786	-26.136	-33.092	-28.152	-32.508	-43.896	-48.444	-53.363	-47.586	
	64QAM	-50.154	-55.012	-47.469	-43.717	-33.625	-26.150	-33.476	-29.009	-33.574	-44.435	-49.059	-54.386	-47.867	
	256QAM	-53.145	-55.490	-47.271	-43.878	-34.784	-27.341	-33.553	-29.602	-33.156	-43.832	-48.897	-53.870	-47.841	

Note: 1C: 1 Carrier, 2C: 2 Carrier, 3C: 3 Carrier

**CBRS LTE[(20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][3C(2C+1C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
3	QPSK	-48.633	-52.669	-47.444	-42.256	-34.663	-20.369	-32.313	-30.572	-33.615	-41.633	-49.148	-53.765	-47.832	
	16QAM	-49.234	-53.991	-47.307	-43.591	-33.466	-25.064	-32.379	-29.717	-33.459	-43.841	-48.871	-53.772	-47.784	
	64QAM	-49.451	-54.157	-47.274	-43.539	-34.470	-25.494	-33.098	-30.137	-33.230	-43.879	-49.061	-52.797	-47.538	
	256QAM	-49.983	-53.979	-47.430	-43.957	-34.995	-25.711	-32.737	-31.060	-33.397	-43.484	-49.199	-54.330	-47.903	

Note: 1C: 1 Carrier, 2C: 2 Carrier, 3C: 3 Carrier

**CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][4C(1C+3C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
3	QPSK	-48.095	-51.663	-47.257	-41.675	-34.337	-21.091	-32.380	-28.882	-31.251	-43.046	-48.734	-53.749	-47.585	
	16QAM	-47.595	-51.369	-47.443	-43.715	-33.175	-27.029	-33.058	-30.213	-32.826	-44.348	-49.224	-52.863	-47.749	
	64QAM	-48.314	-52.257	-47.491	-43.579	-33.836	-27.537	-33.511	-30.237	-32.709	-44.133	-49.075	-53.501	-47.502	
	256QAM	-49.229	-53.409	-47.252	-43.584	-33.920	-27.784	-33.200	-30.799	-32.433	-44.611	-49.124	-53.779	-47.657	

Note: 1C: 1 Carrier, 3C: 3 Carrier, 4C: 4 Carrier

**CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][4C(3C+1C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
3	QPSK	-45.802	-54.265	-47.618	-41.900	-34.253	-20.986	-32.631	-30.128	-32.071	-42.268	-49.111	-54.207	-47.807	
	16QAM	-48.237	-54.480	-47.409	-43.451	-34.357	-27.981	-32.538	-29.615	-32.773	-43.959	-48.891	-53.533	-47.832	
	64QAM	-48.324	-53.733	-47.472	-43.703	-33.581	-27.609	-33.574	-32.294	-33.261	-44.897	-49.051	-53.740	-47.732	
	256QAM	-48.328	-53.989	-47.667	-43.567	-34.000	-27.676	-33.328	-31.354	-34.503	-44.034	-48.691	-52.839	-47.673	

Note: 1C: 1 Carrier, 3C: 3 Carrier, 4C: 4 Carrier

**CBRS LTE[15 MHz 1C + (15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 10 MHz 1C)][5C(1C+4C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
3	QPSK	-49.959	-54.460	-47.512	-36.128	-33.508	-24.882	-32.140	-29.527	-33.887	-40.332	-48.491	-54.194	-47.802	
	16QAM	-47.474	-54.252	-47.511	-43.012	-33.694	-27.266	-32.673	-30.011	-32.894	-43.349	-49.091	-54.237	-47.593	
	64QAM	-47.559	-54.616	-47.490	-43.494	-34.016	-28.093	-32.838	-30.396	-32.568	-43.833	-48.561	-53.744	-47.521	
	256QAM	-47.584	-54.655	-47.533	-42.909	-34.110	-27.497	-33.365	-30.643	-33.173	-43.654	-49.006	-53.342	-47.670	

Note: 1C: 1 Carrier, 4C: 4 Carrier, 5C: 5 Carrier

**CBRS LTE[(15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][5C(4C+1C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
3	QPSK	-48.264	-54.096	-47.438	-41.097	-33.791	-20.906	-32.454	-31.699	-33.332	-42.621	-49.113	-53.975	-47.711	
	16QAM	-47.773	-53.435	-47.442	-43.723	-33.497	-28.339	-33.023	-31.833	-30.621	-43.921	-48.399	-54.223	-47.942	
	64QAM	-46.172	-53.632	-47.615	-43.466	-34.554	-28.360	-32.989	-32.790	-33.723	-43.974	-49.200	-54.188	-47.646	
	256QAM	-46.459	-53.636	-47.600	-43.283	-34.553	-28.299	-33.277	-31.674	-31.827	-44.251	-48.825	-53.315	-47.743	

Note: 1C: 1 Carrier, 4C: 4 Carrier, 5C: 5 Carrier

**CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 10 MHz 1C)][5C(1C+4C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> High Edge +1 MHz	1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> High Edge + 1 MHz	2 <sup>nd</sup> High Edge + 10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
3	QPSK	-51.475	-51.710	-47.583	-40.572	-34.069	-20.804	-32.544	-29.550	-34.281	-42.356	-48.992	-53.377	-47.622	
	16QAM	-51.324	-53.530	-47.499	-43.403	-34.162	-27.918	-33.394	-30.434	-33.888	-44.344	-48.925	-53.166	-47.611	
	64QAM	-50.948	-54.883	-47.421	-43.803	-34.770	-27.850	-32.857	-30.810	-33.850	-44.364	-48.286	-53.430	-47.723	
	256QAM	-48.661	-54.261	-47.195	-43.669	-34.956	-28.242	-33.689	-30.686	-33.425	-44.120	-48.691	-53.328	-47.673	

Note: 1C: 1 Carrier, 4C: 4 Carrier, 5C: 5 Carrier



**CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][5C(4C+1C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge -10 MHz	1 <sup>st</sup> Low Edge -10 MHz ~ 1 <sup>st</sup> Low Edge -1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge -10 MHz	2 <sup>nd</sup> Low Edge -10 MHz ~ 2 <sup>nd</sup> Low Edge -1 MHz	2 <sup>nd</sup> High Edge +1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
3	QPSK	-50.325	-54.210	-47.384	-39.597	-34.664	-25.475	-32.290	-31.980	-33.862	-42.360	-48.940	-54.019	-47.894	
	16QAM	-49.329	-53.531	-47.326	-42.470	-34.542	-28.062	-32.405	-32.763	-33.395	-43.992	-48.835	-54.094	-47.874	
	64QAM	-47.437	-53.217	-47.475	-43.482	-34.119	-28.109	-32.802	-31.695	-34.164	-44.569	-48.696	-53.964	-47.780	
	256QAM	-47.753	-53.483	-47.494	-43.703	-34.511	-29.224	-32.284	-32.225	-33.662	-44.128	-49.001	-53.905	-47.660	

Note: 1C: 1 Carrier, 4C: 4 Carrier, 5C: 5 Carrier

**CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][5C(1C+4C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge -10 MHz	1 <sup>st</sup> Low Edge -10 MHz ~ 1 <sup>st</sup> Low Edge -1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge -10 MHz	2 <sup>nd</sup> Low Edge -10 MHz ~ 2 <sup>nd</sup> Low Edge -1 MHz	2 <sup>nd</sup> High Edge +1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
0	QPSK	-52.345	-53.558	-47.520	-42.614	-34.826	-30.047	-34.279	-31.837	-34.025	-43.365	-49.405	-53.279	-47.867	
	16QAM	-50.103	-53.529	-47.574	-43.826	-34.402	-29.539	-33.787	-32.194	-34.098	-44.213	-49.343	-52.253	-47.890	
	64QAM	-49.853	-53.543	-47.405	-43.806	-35.449	-29.894	-33.509	-32.679	-35.241	-44.130	-48.768	-54.404	-47.795	
	256QAM	-50.303	-54.186	-47.354	-43.831	-34.088	-30.566	-34.059	-31.947	-34.203	-44.180	-48.798	-53.055	-47.888	

Note: 1C: 1 Carrier, 4C: 4 Carrier, 5C: 5 Carrier

**CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][5C(4C+1C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge -10 MHz	1 <sup>st</sup> Low Edge -10 MHz ~ 1 <sup>st</sup> Low Edge -1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge -10 MHz	2 <sup>nd</sup> Low Edge -10 MHz ~ 2 <sup>nd</sup> Low Edge -1 MHz	2 <sup>nd</sup> High Edge +1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz	
1	QPSK	-53.504	-53.801	-47.511	-43.382	-33.868	-29.340	-33.818	-32.938	-33.649	-44.506	-48.612	-52.632	-47.886	
	16QAM	-51.061	-54.143	-47.459	-43.807	-33.589	-30.051	-33.092	-32.848	-34.000	-44.040	-48.860	-52.972	-47.776	
	64QAM	-50.920	-54.095	-47.391	-43.706	-34.621	-29.650	-33.324	-32.967	-34.341	-44.481	-48.875	-53.543	-47.728	
	256QAM	-53.639	-53.176	-47.387	-43.651	-34.599	-29.145	-33.564	-33.069	-33.738	-44.193	-49.112	-53.763	-47.652	

Note: 1C: 1 Carrier, 4C: 4 Carrier, 5C: 5 Carrier

**CBRS NR 40 MHz 1C + (NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C + LTE 10 MHz 1C)[5C(1C+4C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3430 MHz	3430 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz ~ 1 <sup>st</sup> Low Edge - 1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz ~ 2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
0	QPSK	-52.094	-58.386	-47.994	-51.165	-32.631	-33.098	-29.524	-32.234	-29.519	-32.685	-33.973	-50.321	-54.587	-51.120
	16QAM	-49.463	-58.763	-48.757	-51.698	-32.136	-34.185	-27.869	-33.028	-30.790	-32.662	-34.049	-50.315	-54.883	-50.672
	64QAM	-50.637	-58.600	-48.768	-50.746	-32.537	-32.489	-24.173	-32.132	-28.987	-31.823	-33.875	-50.942	-54.709	-51.128
	256QAM	-52.159	-58.335	-48.792	-51.523	-32.420	-33.680	-23.817	-34.365	-32.341	-32.927	-34.329	-50.551	-54.763	-50.936

Note: 1C: 1 Carrier, 4C: 4 Carrier, 5C: 5 Carrier

**CBRS (NR 40 MHz 1C + NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C) + LTE 10 MHz 1C[5C(4C+1C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3430 MHz	3430 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz ~ 1 <sup>st</sup> Low Edge - 1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz ~ 2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
0	QPSK	-50.270	-56.333	-47.980	-50.796	-35.371	-33.664	-28.141	-32.752	-30.508	-31.898	-38.095	-49.850	-55.109	-50.933
	16QAM	-50.101	-55.064	-48.369	-50.927	-34.561	-33.930	-27.838	-32.557	-30.708	-32.584	-37.736	-50.082	-55.145	-51.042
	64QAM	-52.584	-55.427	-48.281	-50.357	-33.569	-32.890	-28.641	-32.839	-32.944	-32.917	-37.761	-50.540	-54.701	-51.098
	256QAM	-50.052	-56.219	-48.019	-51.160	-34.143	-33.390	-28.766	-32.484	-33.263	-30.538	-37.857	-49.560	-55.228	-51.193

Note: 1C: 1 Carrier, 4C: 4 Carrier, 5C: 5 Carrier

**CBRS NR 40 MHz 1C + (NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C + LTE 5 MHz 1C)5C(1C+4C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3430 MHz	3430 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz ~ 1 <sup>st</sup> Low Edge - 1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz ~ 2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
0	QPSK	-51.970	-57.199	-48.557	-50.803	-39.595	-34.112	-22.767	-32.451	-30.601	-32.604	-38.328	-48.733	-55.443	-50.986
	16QAM	-50.619	-56.787	-47.747	-48.362	-45.081	-33.744	-22.057	-32.501	-30.971	-32.589	-40.864	-48.202	-55.540	-51.711
	64QAM	-49.460	-56.386	-48.203	-49.259	-45.057	-33.584	-22.146	-32.695	-31.242	-33.233	-40.854	-48.861	-55.498	-51.165
	256QAM	-50.759	-56.146	-48.225	-48.999	-45.141	-33.453	-22.786	-32.574	-31.161	-32.327	-40.911	-49.310	-55.713	-51.567

Note: 1C: 1 Carrier, 4C: 4 Carrier, 5C: 5 Carrier

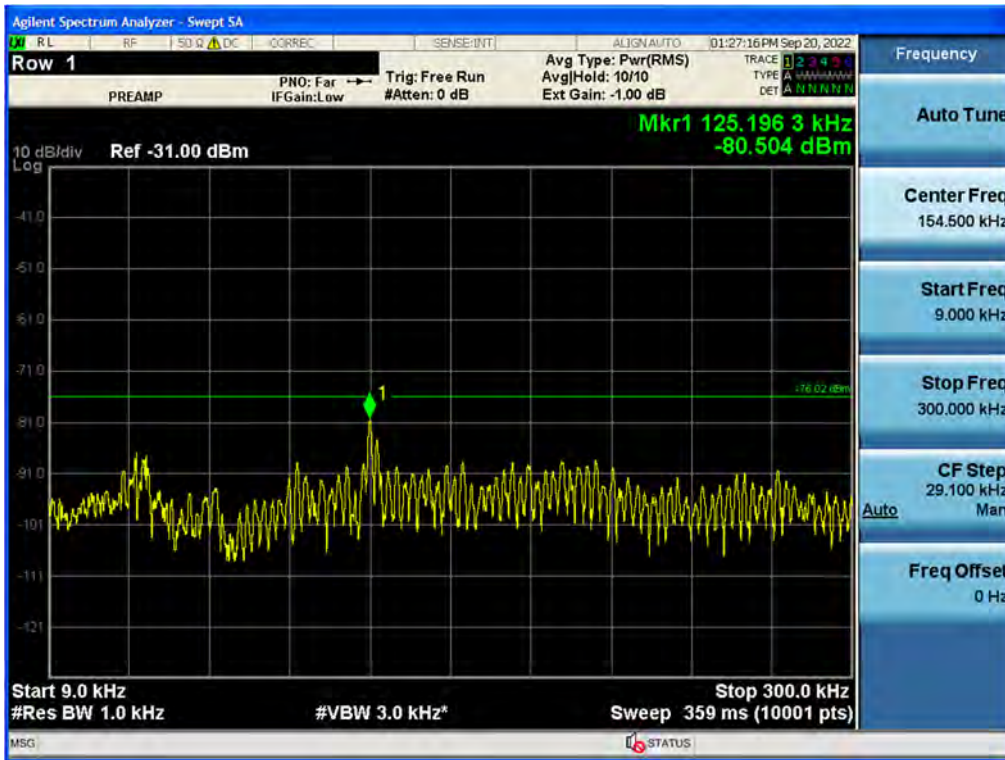
**CBRS (NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C) + LTE 5 MHz 1C[5C(4C+1C)]**

Port	Mod.	Measured Level (dBm)													
		9 kHz ~ 300 kHz	300 kHz ~ 30 MHz	30 MHz ~ 3430 MHz	3430 MHz ~ 3 530 MHz	3530 MHz ~ 1 <sup>st</sup> Low Edge - 10 MHz	1 <sup>st</sup> Low Edge - 10 MHz ~ 1 <sup>st</sup> Low Edge - 1 MHz	1 <sup>st</sup> High Edge +1 MHz ~ 1 <sup>st</sup> High Edge +10 MHz	1 <sup>st</sup> High Edge +10 MHz ~ 2 <sup>nd</sup> Low Edge - 10 MHz	2 <sup>nd</sup> Low Edge - 10 MHz ~ 2 <sup>nd</sup> Low Edge - 1 MHz	2 <sup>nd</sup> High Edge + 1 MHz ~ 2 <sup>nd</sup> High Edge +10 MHz	2 <sup>nd</sup> High Edge + 10 MHz ~ 3720 MHz	3720 MHz ~ 6 GHz	6 GHz ~ 18 GHz	18 GHz ~ 40 GHz
0	QPSK	-50.941	-56.942	-48.554	-50.133	-40.369	-33.122	-28.079	-32.510	-28.581	-31.550	-39.705	-49.671	-55.304	-51.254
	16QAM	-49.532	-55.564	-48.115	-48.299	-44.787	-32.492	-22.889	-32.325	-28.897	-31.415	-41.423	-50.288	-55.208	-51.492
	64QAM	-51.384	-55.256	-47.829	-49.092	-44.798	-33.698	-23.881	-32.167	-29.273	-32.449	-41.018	-50.059	-55.277	-51.267
	256QAM	-49.218	-55.028	-47.958	-48.613	-44.760	-33.347	-23.331	-32.601	-29.547	-31.858	-41.514	-50.511	-54.488	-50.608

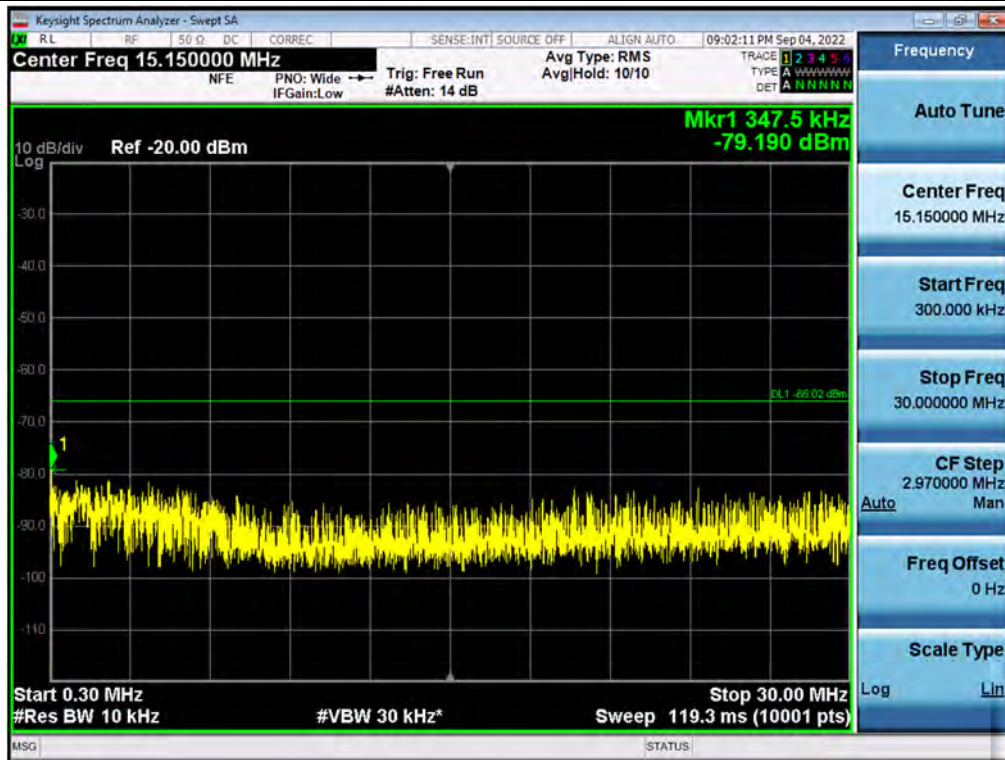
Note: 1C: 1 Carrier, 4C: 4 Carrier, 5C: 5 Carrier

Plot Data of Spurious Unwanted Emissions

Antenna 2 / 9 kHz ~ 300 kHz / CBRS NR 10 MHz 1 Carrier / QPSK / High



Antenna 2 / 300 kHz ~ 30 MHz / CBRS NR 10 MHz 1 Carrier / 256QAM / Low

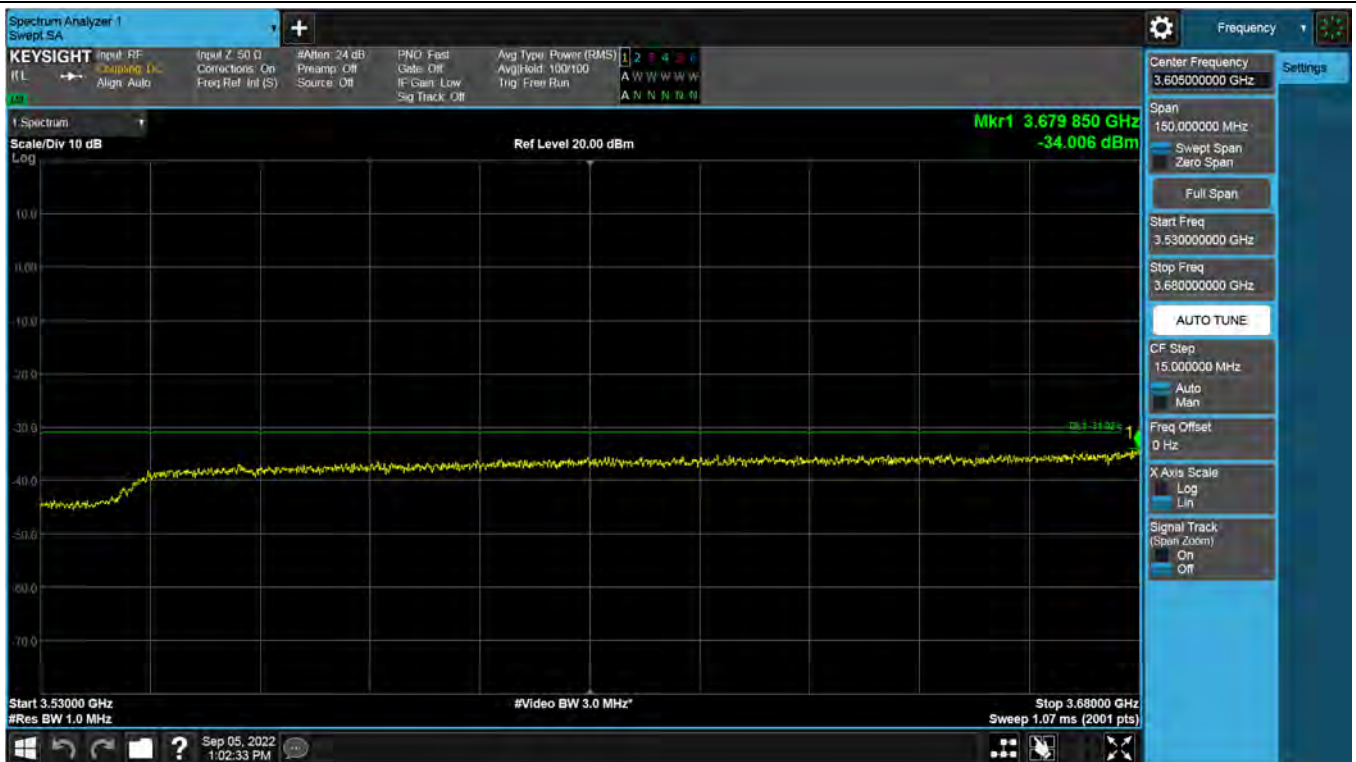




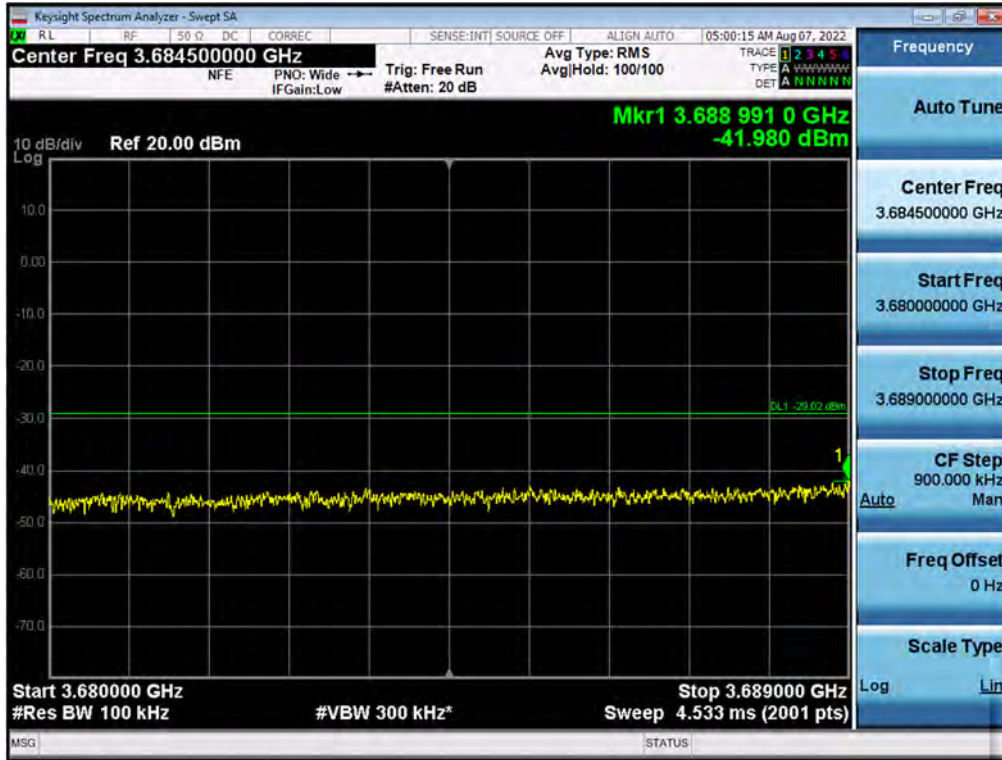
Antenna 2 / 30 MHz ~ 3530 MHz / CBRS NR 10 MHz 1 Carrier / 16QAM / Middle



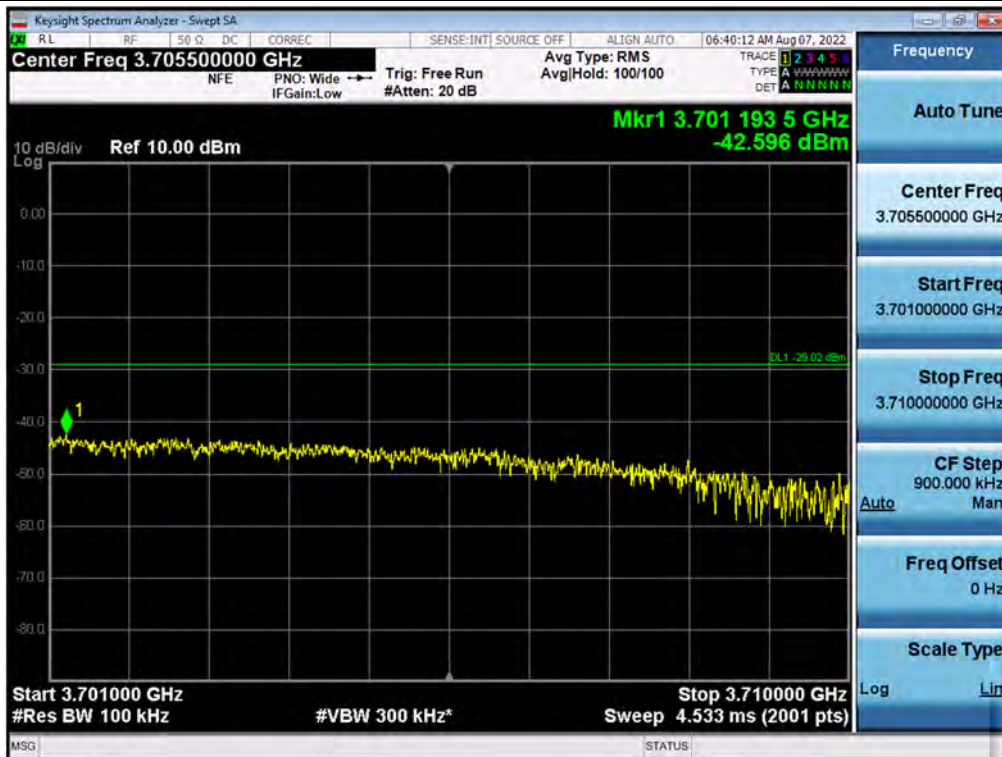
Antenna 2 / 3530 MHz ~ Low Edge - 10 MHz / CBRS NR 10 MHz 1 Carrier / QPSK / High



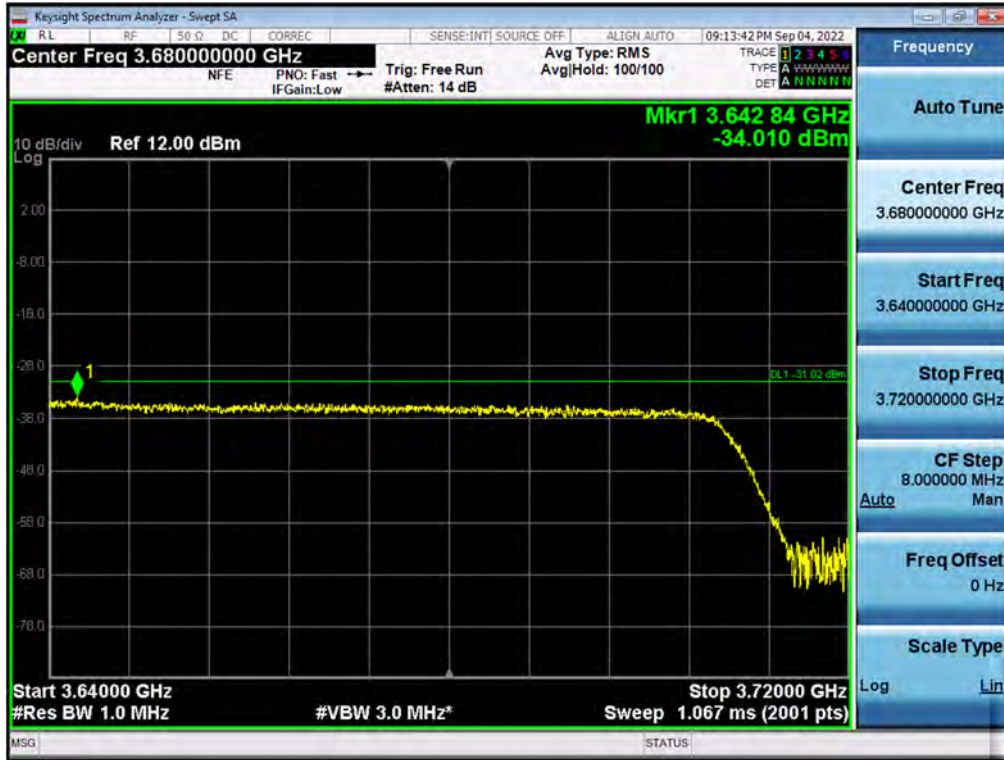
Antenna 2 / Low Edge - 10 MHz ~ Low Edge - 1 MHz / CBRS NR 10 MHz 1 Carrier / 16QAM / High



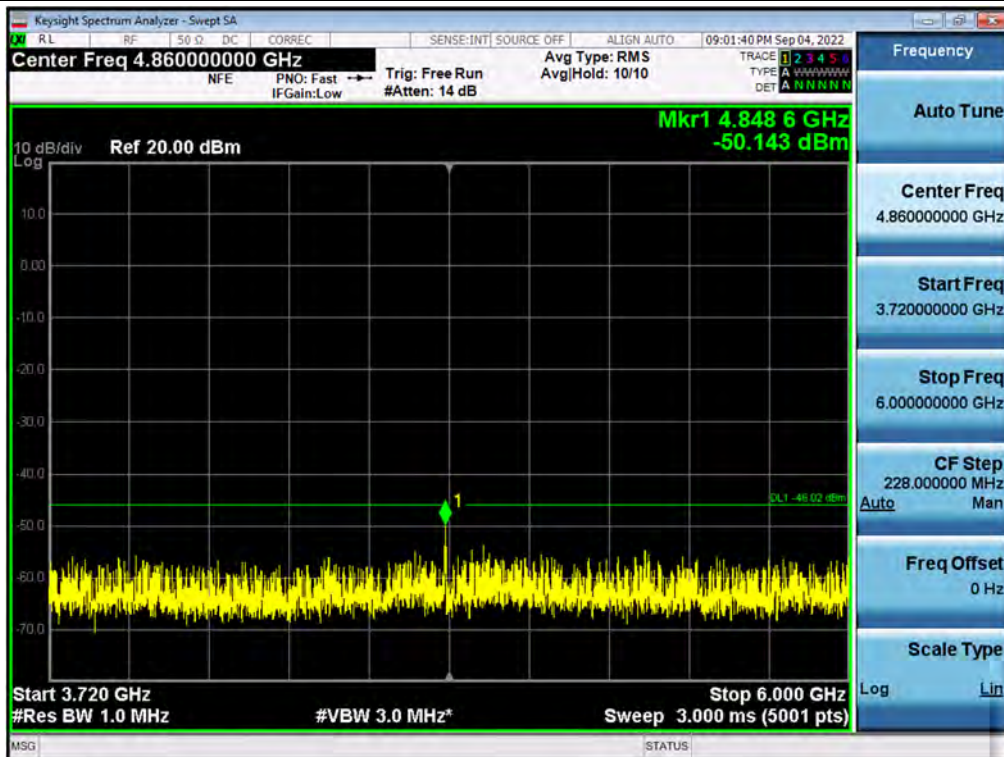
Antenna 2 / High Edge + 1 MHz ~ High Edge + 10 MHz / CBRS NR 10 MHz 1 Carrier / 256QAM / High



Antenna 2 / High Edge + 10 MHz ~ 3720 MHz / CBRS NR 10 MHz 1 Carrier / 64QAM / Middle

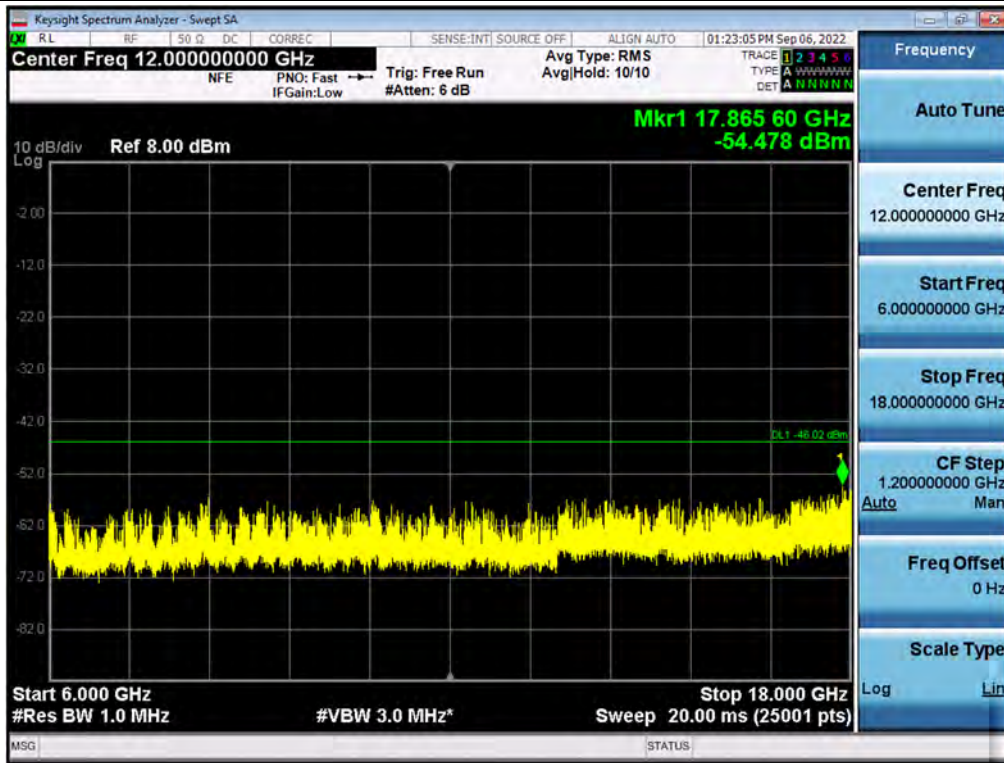


Antenna 2 / 3720 MHz ~ 6 GHz / CBRS NR 10 MHz 1 Carrier / 64QAM / Low





Antenna 2 / 6 GHz ~ 18 GHz / CBRS NR 10 MHz 1 Carrier / 16QAM / Middle



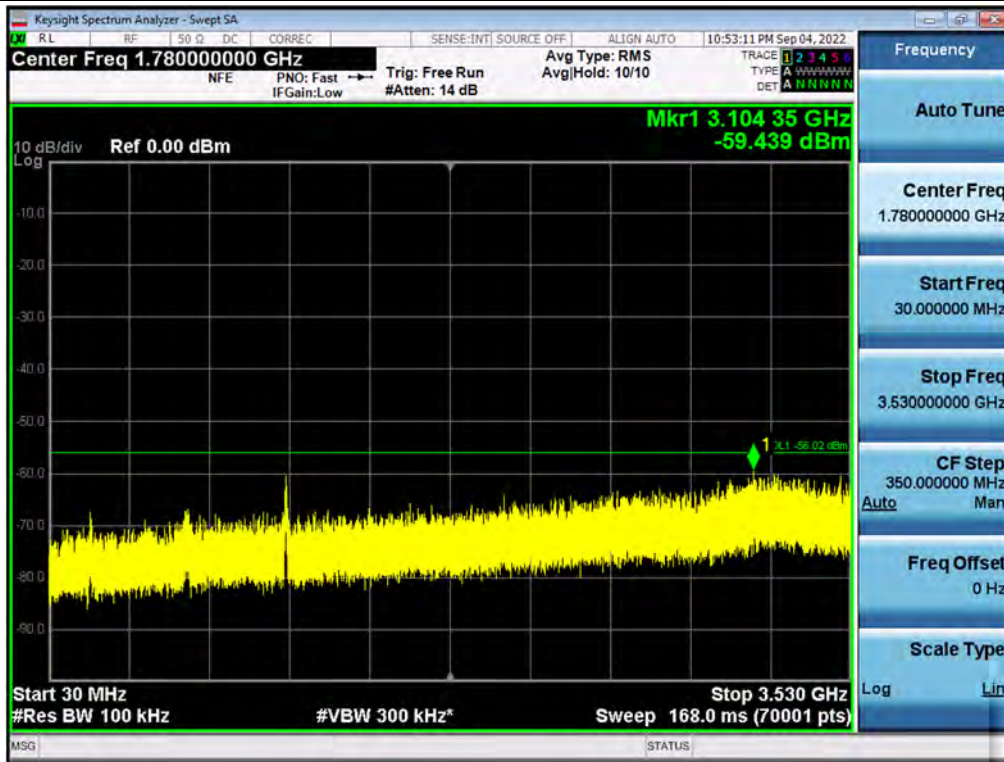
Antenna 2 / 18 GHz ~ 40 GHz / CBRS NR 10 MHz 1 Carrier / QPSK / Low







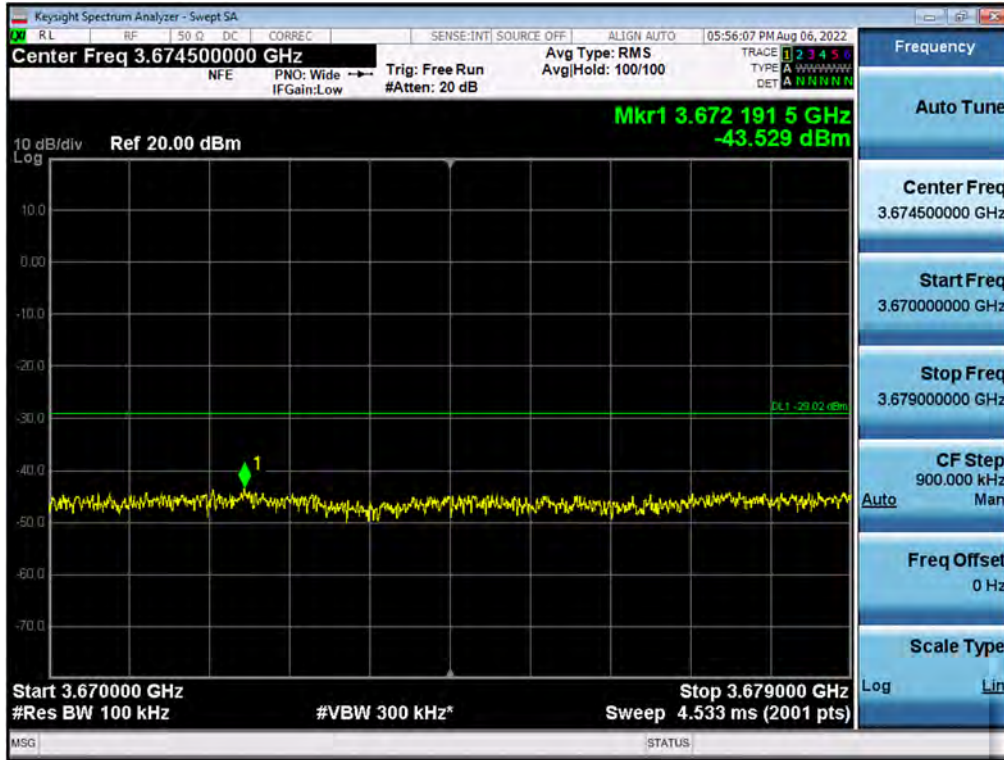
Antenna 1 / 30 MHz ~ 3530 MHz / CBRS NR 20 MHz 1 Carrier / 64QAM / Middle



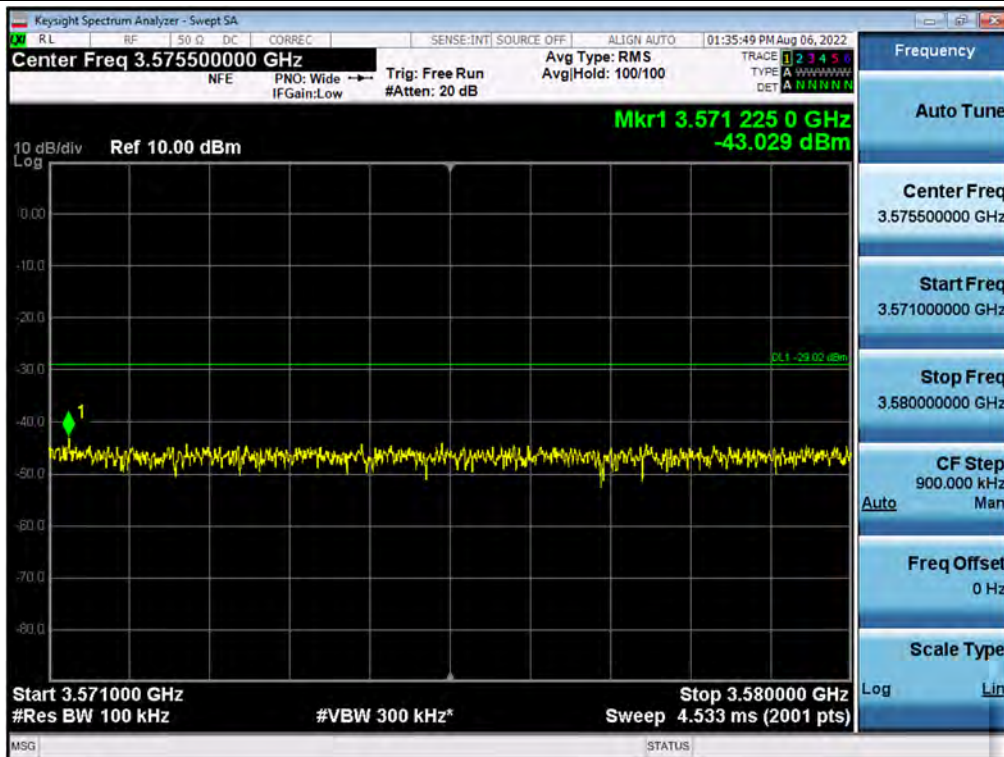
Antenna 1 / 3530 MHz ~ Low Edge - 10 MHz / CBRS NR 20 MHz 1 Carrier / 16QAM / Middle



Antenna 1 / Low Edge - 10 MHz ~ Low Edge - 1 MHz / CBRS NR 20 MHz 1 Carrier / QPSK / High

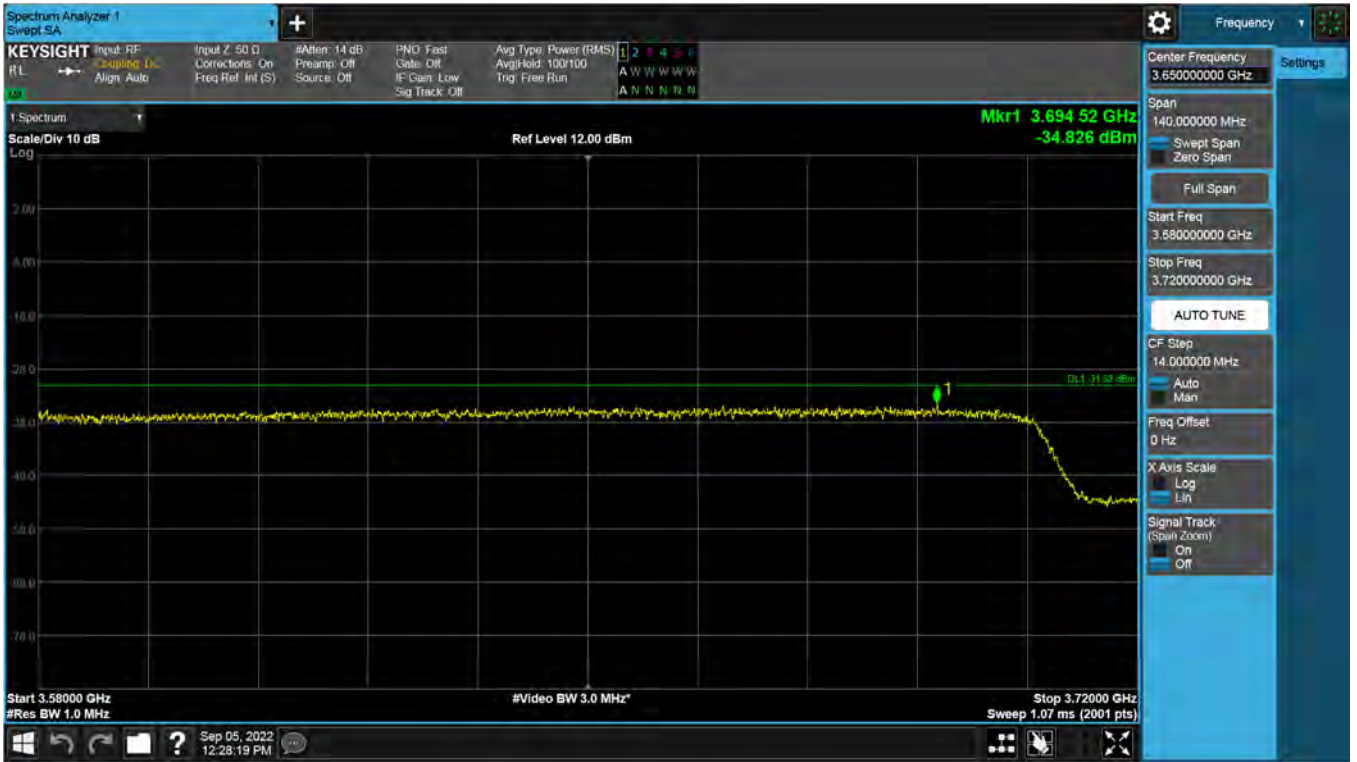


Antenna 1 / High Edge + 1 MHz ~ High Edge + 10 MHz / CBRS NR 20 MHz 1 Carrier / 256QAM / Low

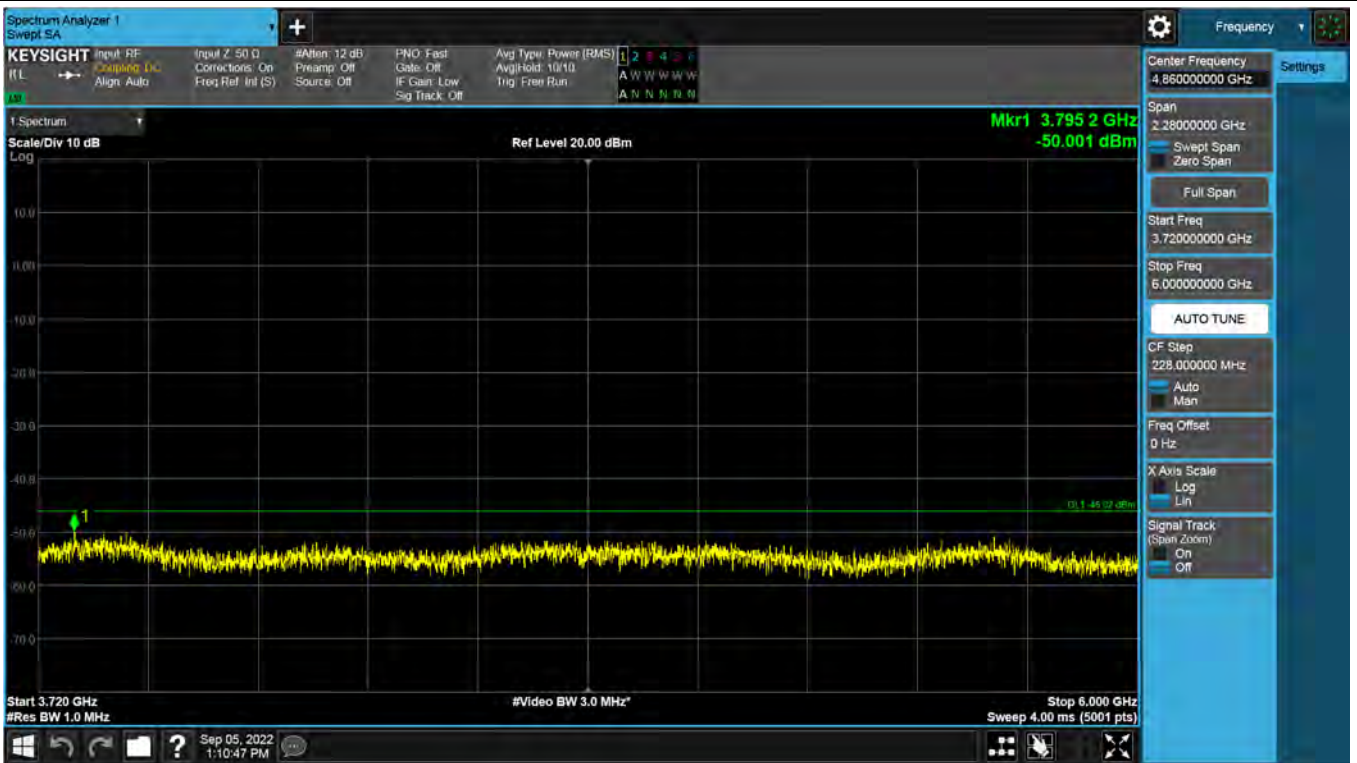




## Antenna 1 / High Edge + 10 MHz ~ 3720 MHz / CBRS NR 20 MHz 1 Carrier / QPSK / Low

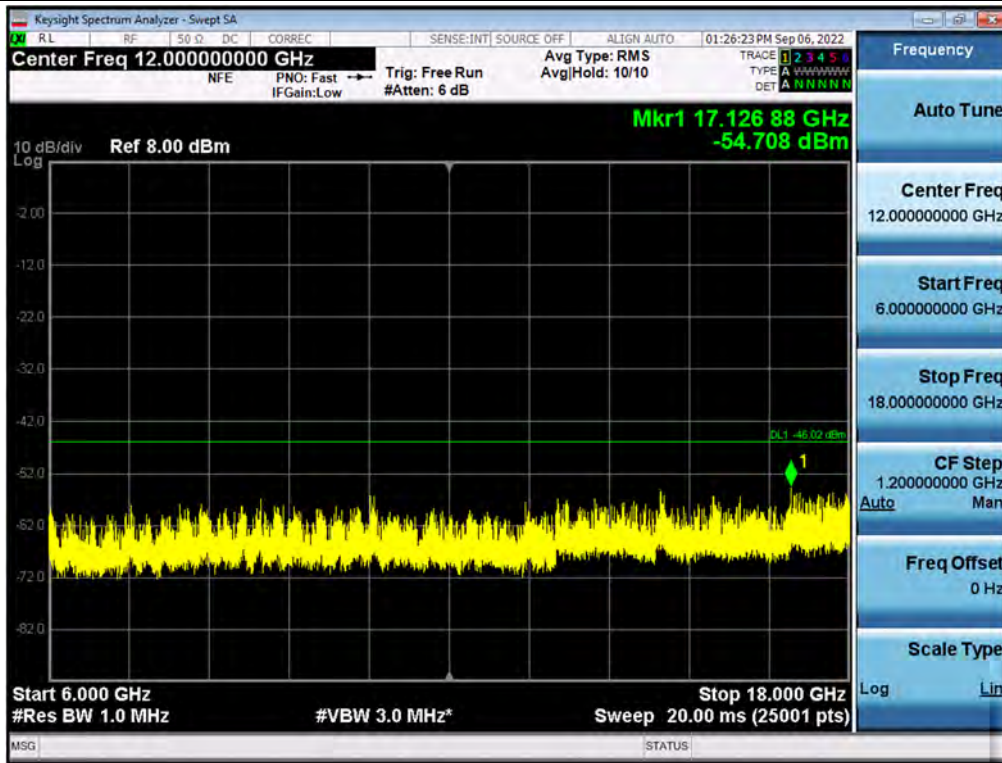


## Antenna 1 / 3720 MHz ~ 6 GHz / CBRS NR 20 MHz 1 Carrier / QPSK / Middle

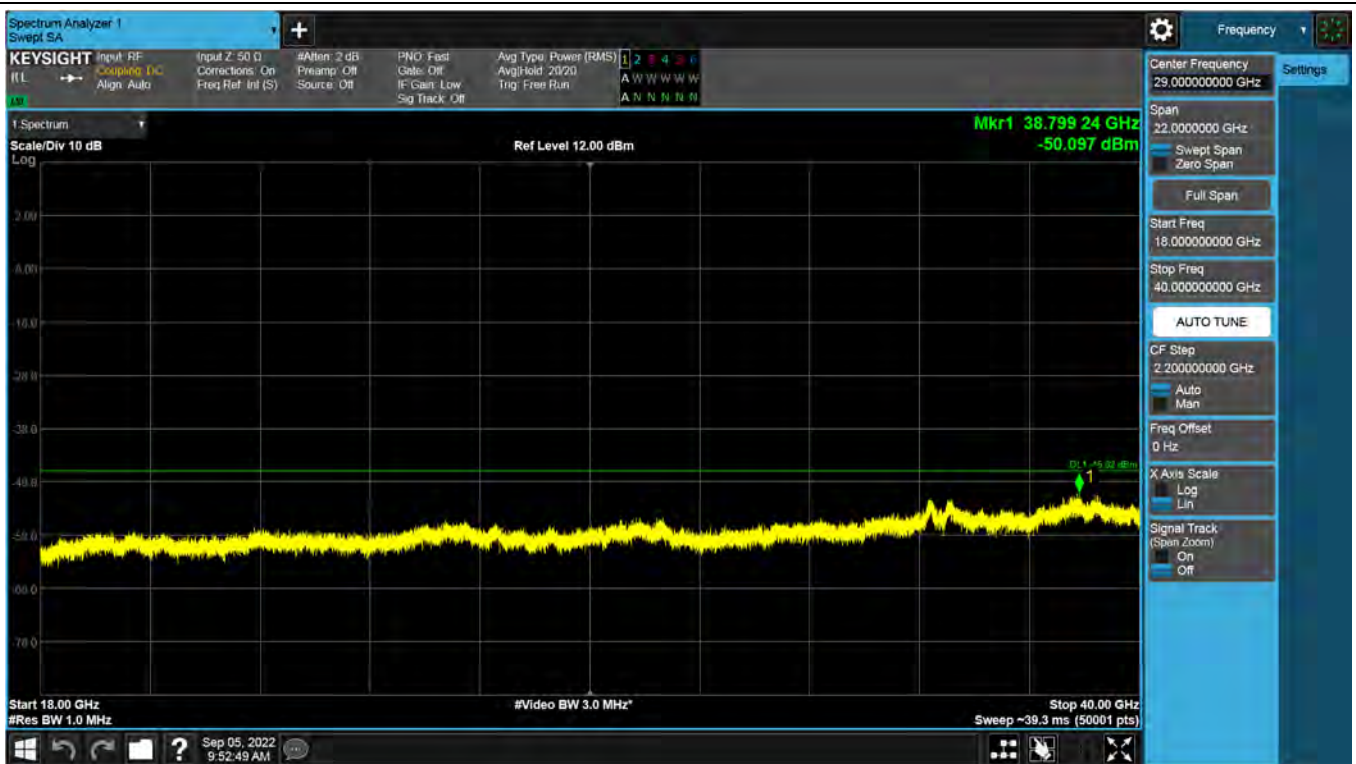




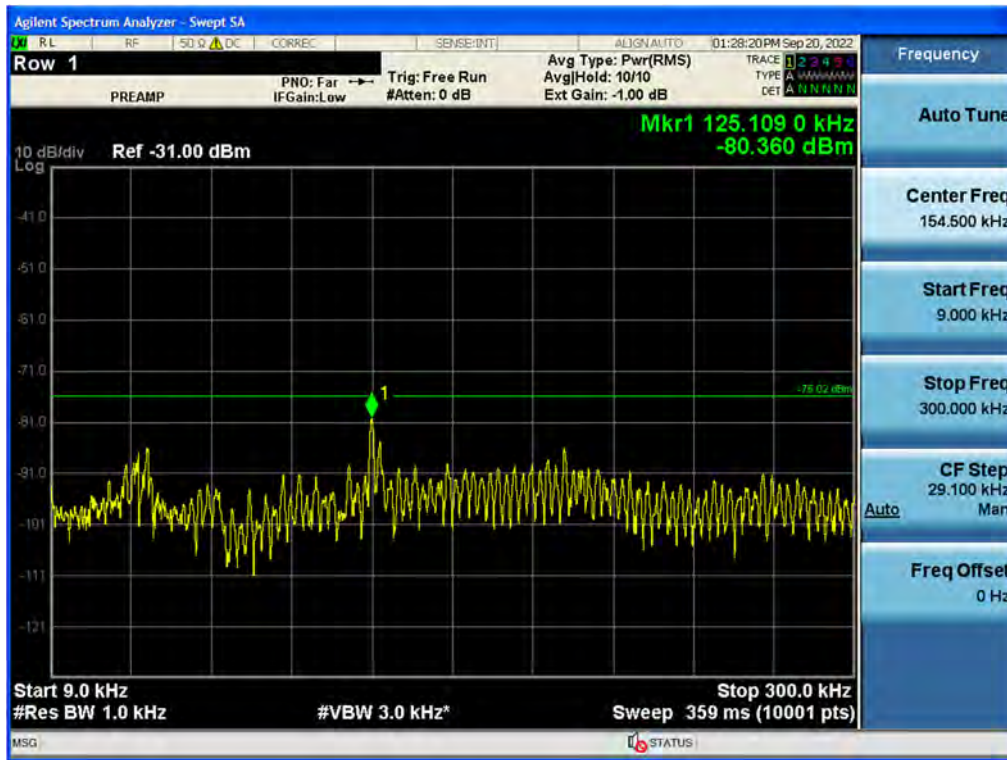
Antenna 1 / 6 GHz ~ 18 GHz / CBRS NR 20 MHz 1 Carrier / QPSK / Middle



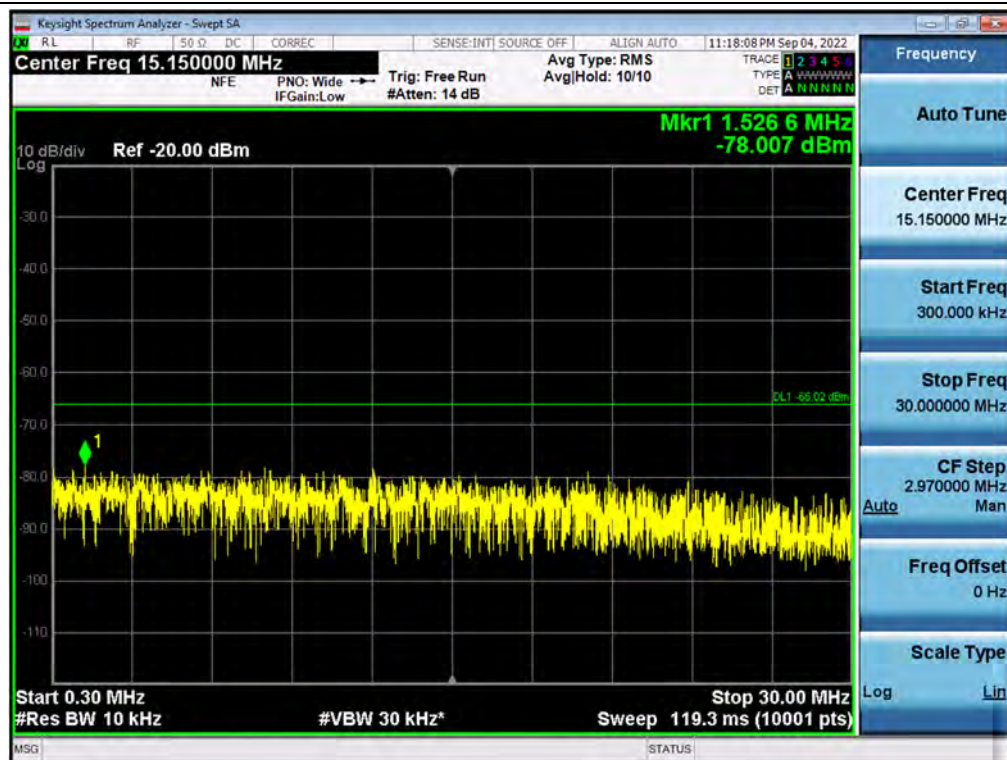
Antenna 1 / 18 GHz ~ 40 GHz / CBRS NR 20 MHz 1 Carrier / 256QAM / Low



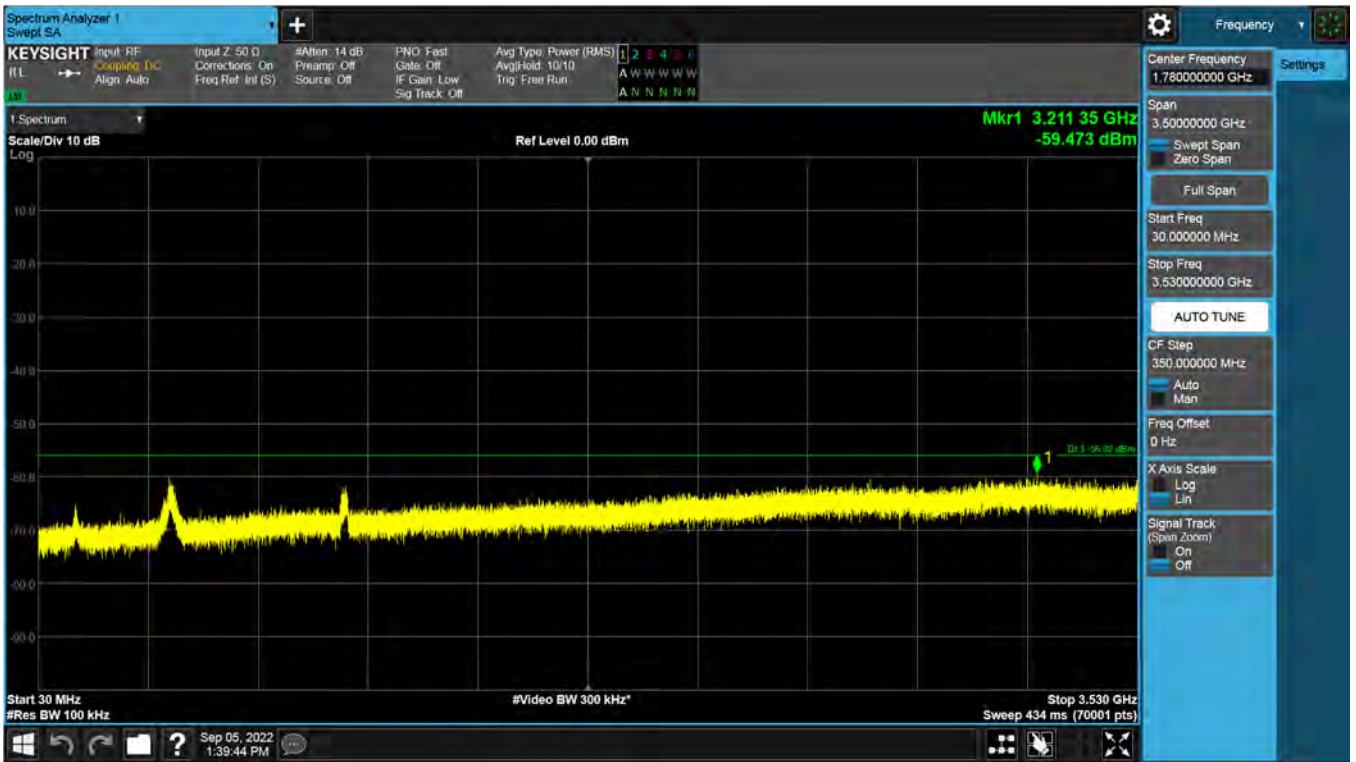
## Antenna 2 / 9 kHz ~ 300 kHz / CBRS NR 30 MHz 1 Carrier / 256QAM / High



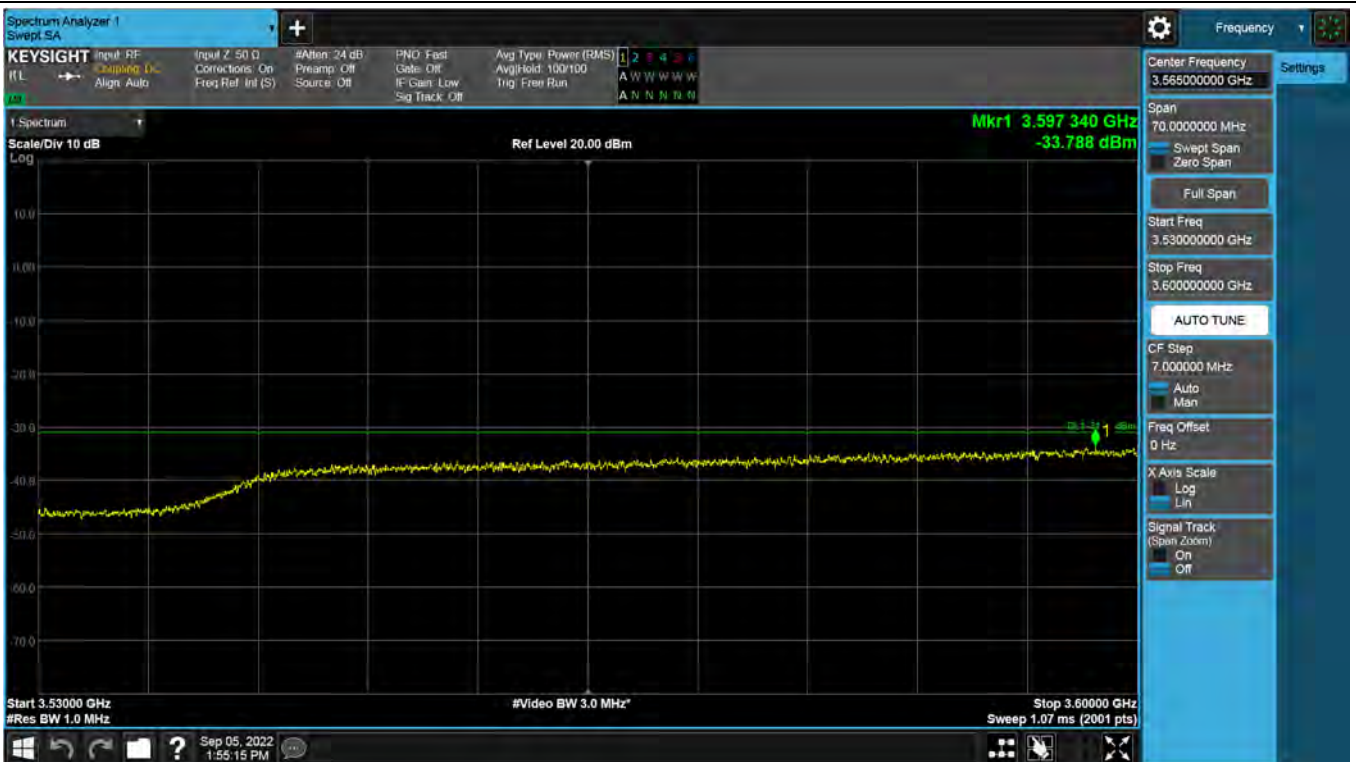
## Antenna 2 / 300 kHz ~ 30 MHz / CBRS NR 30 MHz 1 Carrier / 64QAM / Low



Antenna 2 / 30 MHz ~ 3530 MHz / CBRS NR 30 MHz 1 Carrier / 64QAM / Low

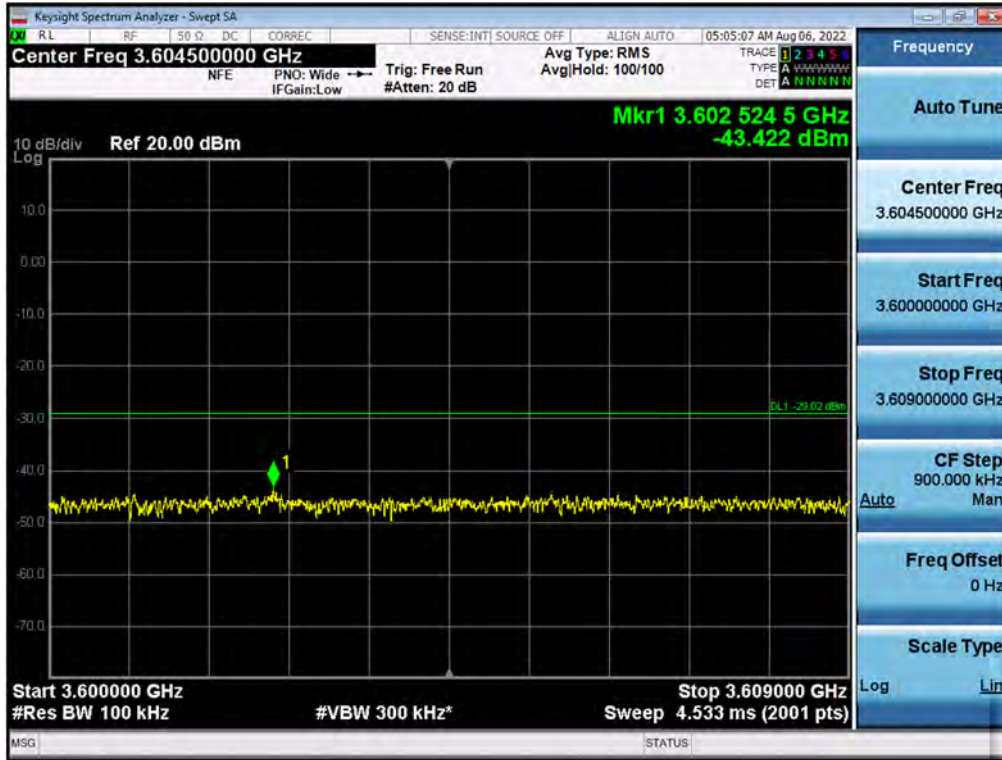


Antenna 2 / 3530 MHz ~ Low Edge - 10 MHz / CBRS NR 30 MHz 1 Carrier / 16QAM / Middle





Antenna 2 / Low Edge - 10 MHz ~ Low Edge - 1 MHz / CBRS NR 30 MHz 1 Carrier / 16QAM / Middle



Antenna 2 / High Edge + 1 MHz ~ High Edge + 10 MHz / CBRS NR 30 MHz 1 Carrier / 256QAM / Low

