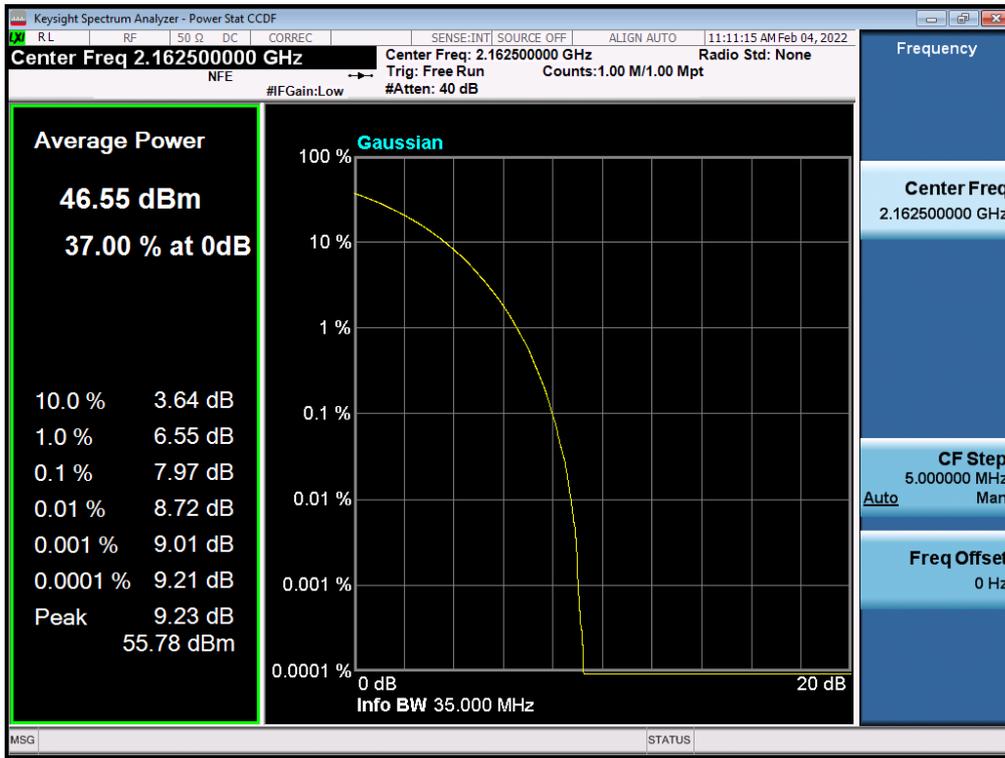
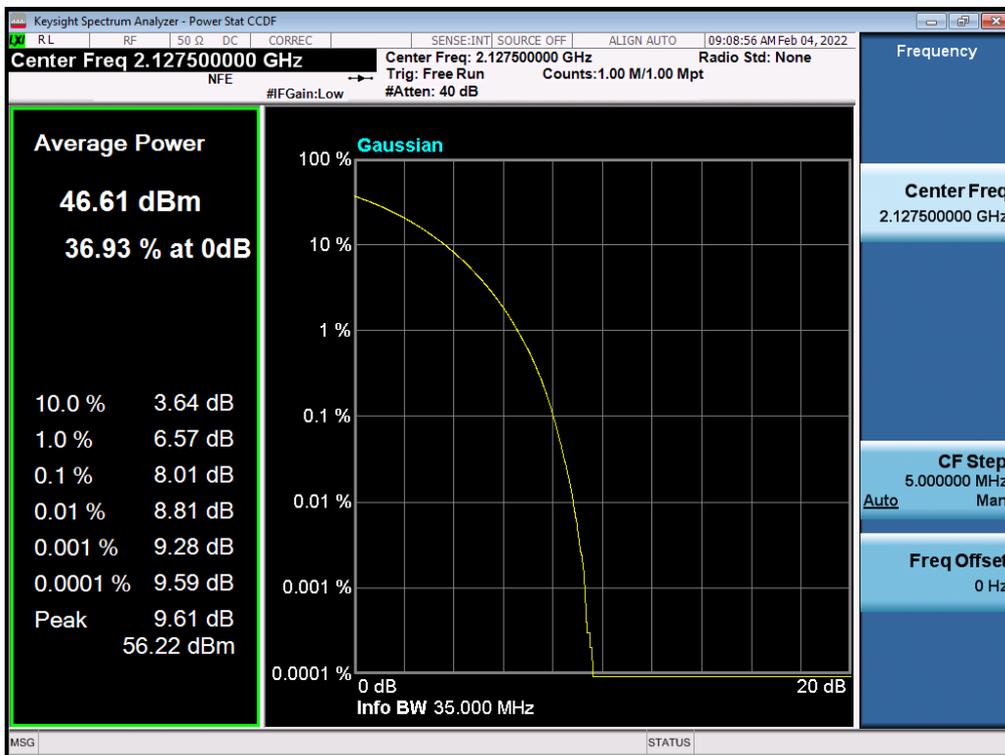


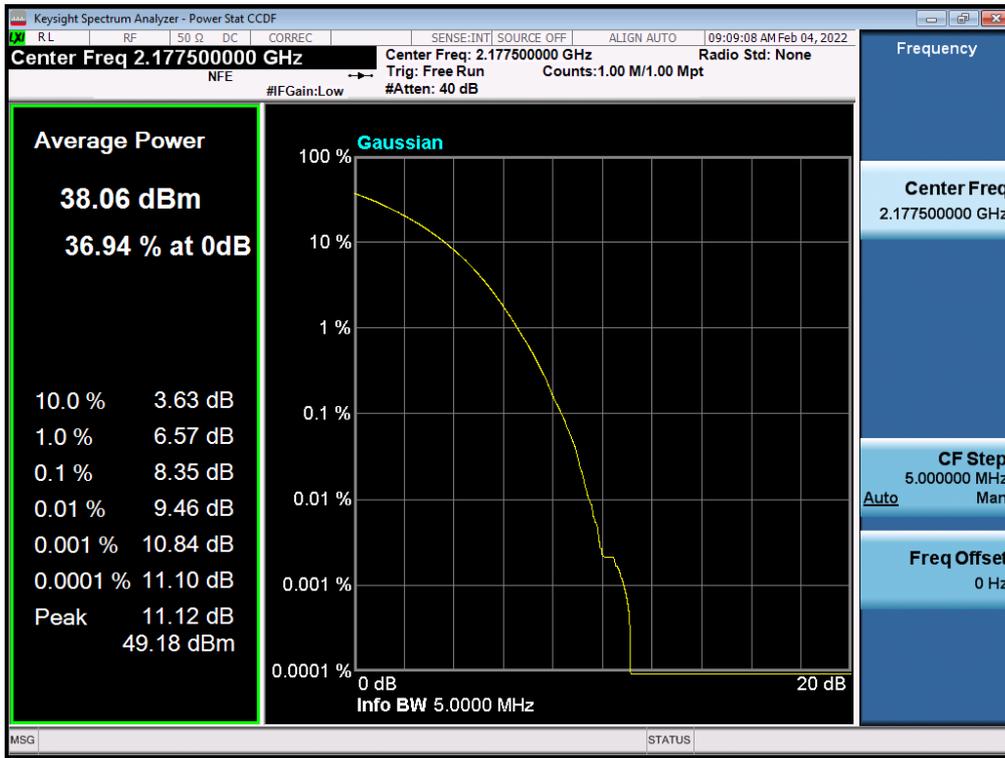
Antenna 1 / (4 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 10 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [4 Carrier] (1C+3C) / Non-Contiguous / LTE B66 5 MHz + LTE B66 10 MHz + 5G NR n66 20 MHz / 256QAM / High



Antenna 1 / (4 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 10 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [4 Carrier] (3C+1C) / Non-Contiguous / LTE B66 5 MHz + LTE B66 5 MHz + LTE B66 10 MHz / 64QAM / Low



Antenna 1 / (4 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 10 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [4 Carrier] (3C+1C) / Non-Contiguous / 5G NR n66 20 MHz / 64QAM / High



### 5.3. OCCUPIED BANDWIDTH

#### Test Requirements:

##### § 2.1049 Measurements required: Occupied bandwidth.

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the specified conditions of § 2.1049 (a) through (i) as applicable.

#### Test Procedures:

The measurement is performed in accordance with Section 5.4.3 and 5.4.4 of ANSI C63.26.

##### 5.4.3 Occupied bandwidth—Relative measurement procedure

The OBW is measured as the width of the spectral envelope of the modulated signal, at an amplitude level reduced from a reference value by a specified ratio (or in decibels, a specified number of dB down from the reference value). The typical ratio for transmitters is  $-26$  dB, corresponding to the 26 dB BW; however, other ratios can be specified. In this subclause, the ratio is designated by “ $-X$  dB.”

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
- b) The nominal RBW shall be in the range of 1 % to 5 % of the anticipated OBW, and the VBW shall be set  $\geq 3 \times$  RBW.
- c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.  
NOTE—Step a), step b), and step c) may require iteration to adjust within the specified tolerances.
- d) The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target “ $-X$  dB” requirement, i.e., if the requirement calls for measuring the  $-26$  dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
- e) Set spectrum analyzer detection mode to peak, and the trace mode to max hold.
- f) Determine the reference value by either of the following:
  - 1) Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the Highest level of the displayed trace (this is the reference value).
  - 2) Set the EUT to transmit an unmodulated carrier. Set the spectrum analyzer marker to the level of the carrier.
- g) Determine the “ $-X$  dB amplitude” as equal to (Reference Value  $- X$ ). Alternatively, this calculation can be performed on the spectrum analyzer using the delta-marker measurement function.
- h) If the reference value was determined using an unmodulated carrier, turn the EUT modulation on, then either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise the trace from step f) shall be used for step i).
- i) Place two markers, one at the lowest and the other at the Highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “ $-X$  dB amplitude” determined in step f). If a marker is below this “ $-X$  dB amplitude” value it should be as close as possible to this value. The OBW is the positive frequency difference between the two markers. The spectral envelope can cross the “ $-X$  dB amplitude” at multiple points. The lowest or Highest frequency

shall be selected as the frequencies that are the farthest away from the center frequency at which the spectral envelope crosses the “-X dB amplitude.”

- j) The OBW shall be reported by providing plot(s) of the measuring instrument display, to include markers depicting the relevant frequency and amplitude information (e.g., marker table). The frequency and amplitude axis and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

#### 5.4.4 Occupied bandwidth—Power bandwidth (99 %) measurement procedure

The OBW is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission.

The following procedure shall be used for measuring (99 %) power bandwidth:

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (typically a span of  $1.5 \times \text{OBW}$  is sufficient).
- b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1 % to 5 % of the anticipated OBW, and the VBW shall be set  $\geq 3 \times \text{RBW}$ .
- c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.  
NOTE—Step a), step b), and step c) may require iteration to adjust within the specified tolerances.
- d) Set the detection mode to peak, and the trace mode to max-hold.
- e) If the instrument does not have a 99 % OBW function, recover the trace data points and sum directly in linear power terms. Place the recovered amplitude data points, beginning at the lowest frequency, in a running sum until 0.5 % of the total is reached. Record that frequency as the lower OBW frequency. Repeat the process until 99.5 % of the total is reached and record that frequency as the upper OBW frequency. The 99 % power OBW can be determined by computing the difference these two frequencies.
- f) The OBW shall be reported and plot(s) of the measuring instrument display shall be provided with the test report. The frequency and amplitude axis and scale shall be clearly labeled. Tabular data can be reported in addition to the plot(s).

**Note:** The results of the Occupied Bandwidth test shown above 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 Occupied Bandwidth**

**(2 Port) B2 DSS 10 MHz 2to8 1 Carrier**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 935.00	9.2993
		Middle	1 960.00	9.3087
		High	1 985.00	9.3438
	16QAM	Low	1 935.00	9.2237
		Middle	1 960.00	9.2291
		High	1 985.00	9.2121
	64QAM	Low	1 935.00	9.2837
		Middle	1 960.00	9.2923
		High	1 985.00	9.2985
	256QAM	Low	1 935.00	9.3235
		Middle	1 960.00	9.2955
		High	1 985.00	9.3373
1	QPSK	Low	1 935.00	9.2895
		Middle	1 960.00	9.3195
		High	1 985.00	9.3432
	16QAM	Low	1 935.00	9.2233
		Middle	1 960.00	9.2461
		High	1 985.00	9.2451
	64QAM	Low	1 935.00	9.3200
		Middle	1 960.00	9.3057
		High	1 985.00	9.3033
	256QAM	Low	1 935.00	9.2975
		Middle	1 960.00	9.2934
		High	1 985.00	9.3148

## (2 Port) B2 DSS 10 MHz 5to5 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 935.00	9.2891
		Middle	1 960.00	9.2822
		High	1 985.00	9.3065
	16QAM	Low	1 935.00	9.2026
		Middle	1 960.00	9.2144
		High	1 985.00	9.1722
	64QAM	Low	1 935.00	9.3025
		Middle	1 960.00	9.2844
		High	1 985.00	9.2856
	256QAM	Low	1 935.00	9.3017
		Middle	1 960.00	9.3178
		High	1 985.00	9.2782
1	QPSK	Low	1 935.00	9.2905
		Middle	1 960.00	9.3090
		High	1 985.00	9.2955
	16QAM	Low	1 935.00	9.1607
		Middle	1 960.00	9.1610
		High	1 985.00	9.1922
	64QAM	Low	1 935.00	9.3067
		Middle	1 960.00	9.3179
		High	1 985.00	9.3012
	256QAM	Low	1 935.00	9.3091
		Middle	1 960.00	9.2798
		High	1 985.00	9.2805

## (2 Port) B2 DSS 10 MHz 9to1 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 935.00	9.2146
		Middle	1 960.00	9.2108
		High	1 985.00	9.2121
	16QAM	Low	1 935.00	9.0893
		Middle	1 960.00	9.1750
		High	1 985.00	9.0670
	64QAM	Low	1 935.00	9.1869
		Middle	1 960.00	9.2104
		High	1 985.00	9.2367
	256QAM	Low	1 935.00	9.2335
		Middle	1 960.00	9.2446
		High	1 985.00	9.2467
1	QPSK	Low	1 935.00	9.2307
		Middle	1 960.00	9.2572
		High	1 985.00	9.2429
	16QAM	Low	1 935.00	9.0887
		Middle	1 960.00	9.1865
		High	1 985.00	9.1149
	64QAM	Low	1 935.00	9.2092
		Middle	1 960.00	9.2192
		High	1 985.00	9.2315
	256QAM	Low	1 935.00	9.2205
		Middle	1 960.00	9.2027
		High	1 985.00	9.2232

## (2 Port) B2 DSS 15 MHz 2to8 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 937.50	14.121
		Middle	1 960.00	14.121
		High	1 982.50	14.117
	16QAM	Low	1 937.50	14.145
		Middle	1 960.00	14.134
		High	1 982.50	14.143
	64QAM	Low	1 937.50	14.117
		Middle	1 960.00	14.145
		High	1 982.50	14.157
	256QAM	Low	1 937.50	14.127
		Middle	1 960.00	14.127
		High	1 982.50	14.171
1	QPSK	Low	1 937.50	14.161
		Middle	1 960.00	14.145
		High	1 982.50	14.126
	16QAM	Low	1 937.50	14.134
		Middle	1 960.00	14.135
		High	1 982.50	14.152
	64QAM	Low	1 937.50	14.119
		Middle	1 960.00	14.107
		High	1 982.50	14.105
	256QAM	Low	1 937.50	14.108
		Middle	1 960.00	14.139
		High	1 982.50	14.122

## (2 Port) B2 DSS 15 MHz 5to5 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 937.50	14.066
		Middle	1 960.00	14.100
		High	1 982.50	14.105
	16QAM	Low	1 937.50	14.102
		Middle	1 960.00	14.074
		High	1 982.50	14.115
	64QAM	Low	1 937.50	14.112
		Middle	1 960.00	14.102
		High	1 982.50	14.094
	256QAM	Low	1 937.50	14.082
		Middle	1 960.00	14.109
		High	1 982.50	14.083
1	QPSK	Low	1 937.50	14.124
		Middle	1 960.00	14.122
		High	1 982.50	14.131
	16QAM	Low	1 937.50	14.127
		Middle	1 960.00	14.108
		High	1 982.50	14.138
	64QAM	Low	1 937.50	14.104
		Middle	1 960.00	14.060
		High	1 982.50	14.076
	256QAM	Low	1 937.50	14.110
		Middle	1 960.00	14.100
		High	1 982.50	14.092

(2 Port) B2 DSS 15 MHz 9to1 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 937.50	13.999
		Middle	1 960.00	13.945
		High	1 982.50	13.985
	16QAM	Low	1 937.50	14.010
		Middle	1 960.00	14.014
		High	1 982.50	14.035
	64QAM	Low	1 937.50	14.014
		Middle	1 960.00	14.049
		High	1 982.50	14.002
	256QAM	Low	1 937.50	13.899
		Middle	1 960.00	14.034
		High	1 982.50	13.994
1	QPSK	Low	1 937.50	13.958
		Middle	1 960.00	14.031
		High	1 982.50	14.026
	16QAM	Low	1 937.50	13.974
		Middle	1 960.00	14.005
		High	1 982.50	14.057
	64QAM	Low	1 937.50	13.922
		Middle	1 960.00	13.985
		High	1 982.50	14.036
	256QAM	Low	1 937.50	14.030
		Middle	1 960.00	13.988
		High	1 982.50	13.941

## (2 Port) B2 DSS 20 MHz 2to8 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 940.00	18.982
		Middle	1 960.00	18.945
		High	1 980.00	18.938
	16QAM	Low	1 940.00	19.017
		Middle	1 960.00	18.958
		High	1 980.00	19.016
	64QAM	Low	1 940.00	18.900
		Middle	1 960.00	18.945
		High	1 980.00	18.944
	256QAM	Low	1 940.00	18.930
		Middle	1 960.00	18.979
		High	1 980.00	18.918
1	QPSK	Low	1 940.00	18.955
		Middle	1 960.00	18.954
		High	1 980.00	18.948
	16QAM	Low	1 940.00	18.944
		Middle	1 960.00	18.995
		High	1 980.00	18.980
	64QAM	Low	1 940.00	18.932
		Middle	1 960.00	18.961
		High	1 980.00	18.940
	256QAM	Low	1 940.00	18.972
		Middle	1 960.00	18.913
		High	1 980.00	18.963

## (2 Port) B2 DSS 20 MHz 5to5 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 940.00	18.930
		Middle	1 960.00	18.992
		High	1 980.00	18.928
	16QAM	Low	1 940.00	18.952
		Middle	1 960.00	18.912
		High	1 980.00	18.951
	64QAM	Low	1 940.00	18.893
		Middle	1 960.00	18.948
		High	1 980.00	18.881
	256QAM	Low	1 940.00	18.873
		Middle	1 960.00	18.874
		High	1 980.00	18.973
1	QPSK	Low	1 940.00	18.905
		Middle	1 960.00	18.910
		High	1 980.00	18.885
	16QAM	Low	1 940.00	18.935
		Middle	1 960.00	18.912
		High	1 980.00	18.980
	64QAM	Low	1 940.00	18.936
		Middle	1 960.00	18.905
		High	1 980.00	18.902
	256QAM	Low	1 940.00	18.946
		Middle	1 960.00	18.926
		High	1 980.00	18.906

## (2 Port) B2 DSS 20 MHz 9to1 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 940.00	18.722
		Middle	1 960.00	18.671
		High	1 980.00	18.681
	16QAM	Low	1 940.00	18.839
		Middle	1 960.00	18.727
		High	1 980.00	18.692
	64QAM	Low	1 940.00	18.749
		Middle	1 960.00	18.669
		High	1 980.00	18.706
	256QAM	Low	1 940.00	18.766
		Middle	1 960.00	18.705
		High	1 980.00	18.821
1	QPSK	Low	1 940.00	18.640
		Middle	1 960.00	18.700
		High	1 980.00	18.720
	16QAM	Low	1 940.00	18.795
		Middle	1 960.00	18.793
		High	1 980.00	18.813
	64QAM	Low	1 940.00	18.737
		Middle	1 960.00	18.659
		High	1 980.00	18.789
	256QAM	Low	1 940.00	18.761
		Middle	1 960.00	18.763
		High	1 980.00	18.696

## (4 Port) B2 DSS 10 MHz 2to8 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 935.00	9.3198
		Middle	1 960.00	9.3157
		High	1 985.00	9.3332
	16QAM	Low	1 935.00	9.2435
		Middle	1 960.00	9.2331
		High	1 985.00	9.2242
	64QAM	Low	1 935.00	9.3421
		Middle	1 960.00	9.3432
		High	1 985.00	9.3213
	256QAM	Low	1 935.00	9.3004
		Middle	1 960.00	9.3473
		High	1 985.00	9.3095
1	QPSK	Low	1 935.00	9.3493
		Middle	1 960.00	9.3173
		High	1 985.00	9.3066
	16QAM	Low	1 935.00	9.2464
		Middle	1 960.00	9.2551
		High	1 985.00	9.2445
	64QAM	Low	1 935.00	9.3089
		Middle	1 960.00	9.3072
		High	1 985.00	9.2967
	256QAM	Low	1 935.00	9.3200
		Middle	1 960.00	9.3342
		High	1 985.00	9.3318

2	QPSK	Low	1 935.00	9.3546
		Middle	1 960.00	9.3141
		High	1 985.00	9.3269
	16QAM	Low	1 935.00	9.2083
		Middle	1 960.00	9.2427
		High	1 985.00	9.2074
	64QAM	Low	1 935.00	9.3208
		Middle	1 960.00	9.3376
		High	1 985.00	9.3138
256QAM	Low	1 935.00	9.3034	
	Middle	1 960.00	9.2964	
	High	1 985.00	9.3029	
3	QPSK	Low	1 935.00	9.3297
		Middle	1 960.00	9.3268
		High	1 985.00	9.2887
	16QAM	Low	1 935.00	9.2558
		Middle	1 960.00	9.2071
		High	1 985.00	9.2332
	64QAM	Low	1 935.00	9.3222
		Middle	1 960.00	9.3316
		High	1 985.00	9.3051
256QAM	Low	1 935.00	9.3445	
	Middle	1 960.00	9.3133	
	High	1 985.00	9.3073	

(4 Port) B2 DSS 10 MHz 5to5 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 935.00	9.3195
		Middle	1 960.00	9.2925
		High	1 985.00	9.3212
	16QAM	Low	1 935.00	9.2094
		Middle	1 960.00	9.1860
		High	1 985.00	9.1618
	64QAM	Low	1 935.00	9.3006
		Middle	1 960.00	9.3015
		High	1 985.00	9.2861
	256QAM	Low	1 935.00	9.2553
		Middle	1 960.00	9.3019
		High	1 985.00	9.2910
1	QPSK	Low	1 935.00	9.2663
		Middle	1 960.00	9.2706
		High	1 985.00	9.3135
	16QAM	Low	1 935.00	9.1784
		Middle	1 960.00	9.2290
		High	1 985.00	9.2015
	64QAM	Low	1 935.00	9.2978
		Middle	1 960.00	9.2871
		High	1 985.00	9.2858
	256QAM	Low	1 935.00	9.2996
		Middle	1 960.00	9.3262
		High	1 985.00	9.2774

2	QPSK	Low	1 935.00	9.2809
		Middle	1 960.00	9.2834
		High	1 985.00	9.3018
	16QAM	Low	1 935.00	9.2195
		Middle	1 960.00	9.2372
		High	1 985.00	9.1988
	64QAM	Low	1 935.00	9.2735
		Middle	1 960.00	9.2951
		High	1 985.00	9.3031
256QAM	Low	1 935.00	9.2828	
	Middle	1 960.00	9.2835	
	High	1 985.00	9.3047	
3	QPSK	Low	1 935.00	9.3318
		Middle	1 960.00	9.2832
		High	1 985.00	9.2851
	16QAM	Low	1 935.00	9.1942
		Middle	1 960.00	9.1792
		High	1 985.00	9.2346
	64QAM	Low	1 935.00	9.3225
		Middle	1 960.00	9.2797
		High	1 985.00	9.2693
256QAM	Low	1 935.00	9.3026	
	Middle	1 960.00	9.2807	
	High	1 985.00	9.3113	

(4 Port) B2 DSS 10 MHz 9to1 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 935.00	9.1579
		Middle	1 960.00	9.2036
		High	1 985.00	9.2672
	16QAM	Low	1 935.00	9.1177
		Middle	1 960.00	9.1059
		High	1 985.00	9.1159
	64QAM	Low	1 935.00	9.2153
		Middle	1 960.00	9.1917
		High	1 985.00	9.1923
	256QAM	Low	1 935.00	9.2013
		Middle	1 960.00	9.2058
		High	1 985.00	9.1507
1	QPSK	Low	1 935.00	9.2339
		Middle	1 960.00	9.2067
		High	1 985.00	9.2539
	16QAM	Low	1 935.00	9.1415
		Middle	1 960.00	9.0976
		High	1 985.00	9.0793
	64QAM	Low	1 935.00	9.2016
		Middle	1 960.00	9.3024
		High	1 985.00	9.2431
	256QAM	Low	1 935.00	9.1903
		Middle	1 960.00	9.2513
		High	1 985.00	9.2328

2	QPSK	Low	1 935.00	9.1499
		Middle	1 960.00	9.2441
		High	1 985.00	9.2285
	16QAM	Low	1 935.00	9.1008
		Middle	1 960.00	9.1261
		High	1 985.00	9.1087
	64QAM	Low	1 935.00	9.2028
		Middle	1 960.00	9.2630
		High	1 985.00	9.2097
256QAM	Low	1 935.00	9.2626	
	Middle	1 960.00	9.1811	
	High	1 985.00	9.2212	
3	QPSK	Low	1 935.00	9.2182
		Middle	1 960.00	9.2346
		High	1 985.00	9.1562
	16QAM	Low	1 935.00	9.0850
		Middle	1 960.00	9.1433
		High	1 985.00	9.1326
	64QAM	Low	1 935.00	9.2210
		Middle	1 960.00	9.1829
		High	1 985.00	9.2404
256QAM	Low	1 935.00	9.2028	
	Middle	1 960.00	9.2219	
	High	1 985.00	9.1287	

## (4 Port) B2 DSS 20 MHz 2to8 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 940.00	18.912
		Middle	1 960.00	18.918
		High	1 980.00	18.926
	16QAM	Low	1 940.00	18.997
		Middle	1 960.00	18.995
		High	1 980.00	19.025
	64QAM	Low	1 940.00	18.968
		Middle	1 960.00	18.954
		High	1 980.00	18.938
	256QAM	Low	1 940.00	18.924
		Middle	1 960.00	18.933
		High	1 980.00	18.949
1	QPSK	Low	1 940.00	18.981
		Middle	1 960.00	18.936
		High	1 980.00	18.972
	16QAM	Low	1 940.00	18.978
		Middle	1 960.00	19.028
		High	1 980.00	19.001
	64QAM	Low	1 940.00	18.942
		Middle	1 960.00	18.971
		High	1 980.00	18.969
	256QAM	Low	1 940.00	18.930
		Middle	1 960.00	18.964
		High	1 980.00	18.954

2	QPSK	Low	1 940.00	18.916
		Middle	1 960.00	18.954
		High	1 980.00	18.927
	16QAM	Low	1 940.00	18.986
		Middle	1 960.00	18.994
		High	1 980.00	18.978
	64QAM	Low	1 940.00	18.961
		Middle	1 960.00	18.994
		High	1 980.00	18.930
	256QAM	Low	1 940.00	18.931
		Middle	1 960.00	18.947
		High	1 980.00	19.004
3	QPSK	Low	1 940.00	18.947
		Middle	1 960.00	18.977
		High	1 980.00	18.946
	16QAM	Low	1 940.00	18.978
		Middle	1 960.00	18.982
		High	1 980.00	19.035
	64QAM	Low	1 940.00	18.956
		Middle	1 960.00	18.921
		High	1 980.00	18.974
	256QAM	Low	1 940.00	18.933
		Middle	1 960.00	18.949
		High	1 980.00	18.935

## (4 Port) B2 DSS 20 MHz 5to5 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 940.00	18.932
		Middle	1 960.00	18.935
		High	1 980.00	18.886
	16QAM	Low	1 940.00	18.980
		Middle	1 960.00	18.980
		High	1 980.00	18.941
	64QAM	Low	1 940.00	18.908
		Middle	1 960.00	18.933
		High	1 980.00	18.884
	256QAM	Low	1 940.00	18.894
		Middle	1 960.00	18.966
		High	1 980.00	18.875
1	QPSK	Low	1 940.00	18.932
		Middle	1 960.00	18.963
		High	1 980.00	18.893
	16QAM	Low	1 940.00	18.964
		Middle	1 960.00	18.966
		High	1 980.00	18.952
	64QAM	Low	1 940.00	18.947
		Middle	1 960.00	18.909
		High	1 980.00	18.903
	256QAM	Low	1 940.00	18.933
		Middle	1 960.00	18.947
		High	1 980.00	18.930

2	QPSK	Low	1 940.00	18.872
		Middle	1 960.00	18.964
		High	1 980.00	18.910
	16QAM	Low	1 940.00	18.994
		Middle	1 960.00	18.913
		High	1 980.00	18.913
	64QAM	Low	1 940.00	18.918
		Middle	1 960.00	18.939
		High	1 980.00	18.889
256QAM	Low	1 940.00	18.968	
	Middle	1 960.00	18.882	
	High	1 980.00	18.922	
3	QPSK	Low	1 940.00	18.887
		Middle	1 960.00	18.964
		High	1 980.00	18.890
	16QAM	Low	1 940.00	18.966
		Middle	1 960.00	18.965
		High	1 980.00	18.953
	64QAM	Low	1 940.00	18.912
		Middle	1 960.00	18.952
		High	1 980.00	18.926
256QAM	Low	1 940.00	18.868	
	Middle	1 960.00	18.926	
	High	1 980.00	18.933	

## (4 Port) B2 DSS 20 MHz 9to1 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 940.00	17.921
		Middle	1 960.00	18.765
		High	1 980.00	18.779
	16QAM	Low	1 940.00	18.786
		Middle	1 960.00	18.832
		High	1 980.00	18.868
	64QAM	Low	1 940.00	17.956
		Middle	1 960.00	18.824
		High	1 980.00	18.793
	256QAM	Low	1 940.00	18.017
		Middle	1 960.00	18.665
		High	1 980.00	18.766
1	QPSK	Low	1 940.00	17.942
		Middle	1 960.00	18.799
		High	1 980.00	18.797
	16QAM	Low	1 940.00	18.565
		Middle	1 960.00	18.723
		High	1 980.00	18.799
	64QAM	Low	1 940.00	17.968
		Middle	1 960.00	18.840
		High	1 980.00	18.720
	256QAM	Low	1 940.00	17.935
		Middle	1 960.00	18.711
		High	1 980.00	18.786

2	QPSK	Low	1 940.00	17.966
		Middle	1 960.00	18.787
		High	1 980.00	18.669
	16QAM	Low	1 940.00	18.834
		Middle	1 960.00	18.857
		High	1 980.00	18.819
	64QAM	Low	1 940.00	17.916
		Middle	1 960.00	18.877
		High	1 980.00	18.738
256QAM	Low	1 940.00	17.943	
	Middle	1 960.00	18.878	
	High	1 980.00	18.773	
3	QPSK	Low	1 940.00	17.958
		Middle	1 960.00	18.771
		High	1 980.00	18.700
	16QAM	Low	1 940.00	18.733
		Middle	1 960.00	18.804
		High	1 980.00	18.795
	64QAM	Low	1 940.00	18.017
		Middle	1 960.00	18.590
		High	1 980.00	18.719
256QAM	Low	1 940.00	17.944	
	Middle	1 960.00	18.754	
	High	1 980.00	18.708	

## (2 Port) 5G NR n2 5 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 932.50	4.4829
		Middle	1 960.00	4.4948
		High	1 987.50	4.4825
	16QAM	Low	1 932.50	4.5054
		Middle	1 960.00	4.5054
		High	1 987.50	4.5074
	64QAM	Low	1 932.50	4.4930
		Middle	1 960.00	4.4910
		High	1 987.50	4.4935
	256QAM	Low	1 932.50	4.4964
		Middle	1 960.00	4.4885
		High	1 987.50	4.4986
1	QPSK	Low	1 932.50	4.4919
		Middle	1 960.00	4.4933
		High	1 987.50	4.4907
	16QAM	Low	1 932.50	4.5088
		Middle	1 960.00	4.5052
		High	1 987.50	4.5080
	64QAM	Low	1 932.50	4.4927
		Middle	1 960.00	4.4870
		High	1 987.50	4.4974
	256QAM	Low	1 932.50	4.4777
		Middle	1 960.00	4.4914
		High	1 987.50	4.4926

## (2 Port) 5G NR n2 10 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 935.00	9.3425
		Middle	1 960.00	9.3066
		High	1 985.00	9.3051
	16QAM	Low	1 935.00	9.2545
		Middle	1 960.00	9.2545
		High	1 985.00	9.2551
	64QAM	Low	1 935.00	9.3294
		Middle	1 960.00	9.2998
		High	1 985.00	9.3137
	256QAM	Low	1 935.00	9.3246
		Middle	1 960.00	9.3312
		High	1 985.00	9.3440
1	QPSK	Low	1 935.00	9.3277
		Middle	1 960.00	9.3311
		High	1 985.00	9.3187
	16QAM	Low	1 935.00	9.2819
		Middle	1 960.00	9.2490
		High	1 985.00	9.2723
	64QAM	Low	1 935.00	9.3240
		Middle	1 960.00	9.3105
		High	1 985.00	9.3140
	256QAM	Low	1 935.00	9.3395
		Middle	1 960.00	9.2984
		High	1 985.00	9.3315

## (2 Port) 5G NR n2 15 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 937.50	14.131
		Middle	1 960.00	14.147
		High	1 982.50	14.199
	16QAM	Low	1 937.50	14.205
		Middle	1 960.00	14.212
		High	1 982.50	14.203
	64QAM	Low	1 937.50	14.140
		Middle	1 960.00	14.147
		High	1 982.50	14.139
	256QAM	Low	1 937.50	14.144
		Middle	1 960.00	14.163
		High	1 982.50	14.180
1	QPSK	Low	1 937.50	14.152
		Middle	1 960.00	14.155
		High	1 982.50	14.138
	16QAM	Low	1 937.50	14.173
		Middle	1 960.00	14.190
		High	1 982.50	14.197
	64QAM	Low	1 937.50	14.126
		Middle	1 960.00	14.155
		High	1 982.50	14.143
	256QAM	Low	1 937.50	14.164
		Middle	1 960.00	14.134
		High	1 982.50	14.178

## (2 Port) 5G NR n2 20 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 940.00	18.958
		Middle	1 960.00	18.954
		High	1 980.00	19.034
	16QAM	Low	1 940.00	19.046
		Middle	1 960.00	19.079
		High	1 980.00	19.085
	64QAM	Low	1 940.00	18.946
		Middle	1 960.00	18.959
		High	1 980.00	18.959
	256QAM	Low	1 940.00	18.973
		Middle	1 960.00	18.960
		High	1 980.00	18.931
1	QPSK	Low	1 940.00	18.948
		Middle	1 960.00	19.039
		High	1 980.00	18.992
	16QAM	Low	1 940.00	19.037
		Middle	1 960.00	19.039
		High	1 980.00	19.029
	64QAM	Low	1 940.00	18.950
		Middle	1 960.00	18.948
		High	1 980.00	18.984
	256QAM	Low	1 940.00	18.947
		Middle	1 960.00	19.002
		High	1 980.00	18.949

## (4 Port) 5G NR n2 5 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 932.50	4.5007
		Middle	1 960.00	4.5007
		High	1 987.50	4.4840
	16QAM	Low	1 932.50	4.5114
		Middle	1 960.00	4.5037
		High	1 987.50	4.5056
	64QAM	Low	1 932.50	4.4889
		Middle	1 960.00	4.5209
		High	1 987.50	4.5012
	256QAM	Low	1 932.50	4.4937
		Middle	1 960.00	4.4974
		High	1 987.50	4.4732
1	QPSK	Low	1 932.50	4.4906
		Middle	1 960.00	4.4865
		High	1 987.50	4.4844
	16QAM	Low	1 932.50	4.5018
		Middle	1 960.00	4.5054
		High	1 987.50	4.5250
	64QAM	Low	1 932.50	4.5027
		Middle	1 960.00	4.5021
		High	1 987.50	4.4946
	256QAM	Low	1 932.50	4.4921
		Middle	1 960.00	4.5068
		High	1 987.50	4.4889

2	QPSK	Low	1 932.50	4.5010
		Middle	1 960.00	4.5118
		High	1 987.50	4.4906
	16QAM	Low	1 932.50	4.4962
		Middle	1 960.00	4.5093
		High	1 987.50	4.5180
	64QAM	Low	1 932.50	4.4984
		Middle	1 960.00	4.4905
		High	1 987.50	4.4952
256QAM	Low	1 932.50	4.4910	
	Middle	1 960.00	4.4944	
	High	1 987.50	4.5063	
3	QPSK	Low	1 932.50	4.5031
		Middle	1 960.00	4.4838
		High	1 987.50	4.5005
	16QAM	Low	1 932.50	4.5051
		Middle	1 960.00	4.5148
		High	1 987.50	4.5134
	64QAM	Low	1 932.50	4.4864
		Middle	1 960.00	4.5202
		High	1 987.50	4.5074
256QAM	Low	1 932.50	4.4880	
	Middle	1 960.00	4.4922	
	High	1 987.50	4.5003	

## (4 Port) 5G NR n2 10 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 935.00	9.3350
		Middle	1 960.00	9.3216
		High	1 985.00	9.3282
	16QAM	Low	1 935.00	9.2458
		Middle	1 960.00	9.2774
		High	1 985.00	9.2621
	64QAM	Low	1 935.00	9.3290
		Middle	1 960.00	9.3157
		High	1 985.00	9.3171
	256QAM	Low	1 935.00	9.3496
		Middle	1 960.00	9.3313
		High	1 985.00	9.3339
1	QPSK	Low	1 935.00	9.3438
		Middle	1 960.00	9.2993
		High	1 985.00	9.3272
	16QAM	Low	1 935.00	9.2609
		Middle	1 960.00	9.2576
		High	1 985.00	9.2770
	64QAM	Low	1 935.00	9.3255
		Middle	1 960.00	9.3141
		High	1 985.00	9.3430
	256QAM	Low	1 935.00	9.3130
		Middle	1 960.00	9.3303
		High	1 985.00	9.3212

2	QPSK	Low	1 935.00	9.3295
		Middle	1 960.00	9.3344
		High	1 985.00	9.3219
	16QAM	Low	1 935.00	9.2910
		Middle	1 960.00	9.2757
		High	1 985.00	9.2887
	64QAM	Low	1 935.00	9.3118
		Middle	1 960.00	9.3262
		High	1 985.00	9.3417
256QAM	Low	1 935.00	9.3264	
	Middle	1 960.00	9.3270	
	High	1 985.00	9.3292	
3	QPSK	Low	1 935.00	9.3246
		Middle	1 960.00	9.3231
		High	1 985.00	9.3444
	16QAM	Low	1 935.00	9.2712
		Middle	1 960.00	9.2417
		High	1 985.00	9.3152
	64QAM	Low	1 935.00	9.3364
		Middle	1 960.00	9.3317
		High	1 985.00	9.3432
256QAM	Low	1 935.00	9.3406	
	Middle	1 960.00	9.3225	
	High	1 985.00	9.3296	

## (4 Port) 5G NR n2 15 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 937.50	14.143
		Middle	1 960.00	14.145
		High	1 982.50	14.138
	16QAM	Low	1 937.50	14.223
		Middle	1 960.00	14.216
		High	1 982.50	14.179
	64QAM	Low	1 937.50	14.158
		Middle	1 960.00	14.161
		High	1 982.50	14.149
	256QAM	Low	1 937.50	14.117
		Middle	1 960.00	14.151
		High	1 982.50	14.115
1	QPSK	Low	1 937.50	14.143
		Middle	1 960.00	14.157
		High	1 982.50	14.141
	16QAM	Low	1 937.50	14.187
		Middle	1 960.00	14.186
		High	1 982.50	14.192
	64QAM	Low	1 937.50	14.161
		Middle	1 960.00	14.140
		High	1 982.50	14.163
	256QAM	Low	1 937.50	14.128
		Middle	1 960.00	14.188
		High	1 982.50	14.142

2	QPSK	Low	1 937.50	14.140
		Middle	1 960.00	14.108
		High	1 982.50	14.107
	16QAM	Low	1 937.50	14.199
		Middle	1 960.00	14.229
		High	1 982.50	14.228
	64QAM	Low	1 937.50	14.122
		Middle	1 960.00	14.185
		High	1 982.50	14.113
256QAM	Low	1 937.50	14.125	
	Middle	1 960.00	14.143	
	High	1 982.50	14.160	
3	QPSK	Low	1 937.50	14.137
		Middle	1 960.00	14.177
		High	1 982.50	14.176
	16QAM	Low	1 937.50	14.211
		Middle	1 960.00	14.180
		High	1 982.50	14.185
	64QAM	Low	1 937.50	14.114
		Middle	1 960.00	14.142
		High	1 982.50	14.166
256QAM	Low	1 937.50	14.179	
	Middle	1 960.00	14.142	
	High	1 982.50	14.126	

## (4 Port) 5G NR n2 20 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 940.00	18.976
		Middle	1 960.00	19.005
		High	1 980.00	19.006
	16QAM	Low	1 940.00	19.052
		Middle	1 960.00	19.037
		High	1 980.00	19.064
	64QAM	Low	1 940.00	18.945
		Middle	1 960.00	18.939
		High	1 980.00	18.977
	256QAM	Low	1 940.00	18.992
		Middle	1 960.00	19.024
		High	1 980.00	18.987
1	QPSK	Low	1 940.00	18.949
		Middle	1 960.00	18.967
		High	1 980.00	18.985
	16QAM	Low	1 940.00	19.030
		Middle	1 960.00	18.992
		High	1 980.00	19.013
	64QAM	Low	1 940.00	18.969
		Middle	1 960.00	18.982
		High	1 980.00	18.953
	256QAM	Low	1 940.00	18.989
		Middle	1 960.00	18.986
		High	1 980.00	18.977

2	QPSK	Low	1 940.00	18.978
		Middle	1 960.00	18.921
		High	1 980.00	18.954
	16QAM	Low	1 940.00	19.040
		Middle	1 960.00	19.107
		High	1 980.00	19.014
	64QAM	Low	1 940.00	18.955
		Middle	1 960.00	18.955
		High	1 980.00	19.028
256QAM	Low	1 940.00	18.967	
	Middle	1 960.00	18.978	
	High	1 980.00	18.932	
3	QPSK	Low	1 940.00	18.968
		Middle	1 960.00	18.988
		High	1 980.00	18.935
	16QAM	Low	1 940.00	19.056
		Middle	1 960.00	19.010
		High	1 980.00	19.048
	64QAM	Low	1 940.00	18.986
		Middle	1 960.00	18.967
		High	1 980.00	18.945
256QAM	Low	1 940.00	18.966	
	Middle	1 960.00	18.981	
	High	1 980.00	18.995	

## (2 Port) B66 DSS 10 MHz 2to8 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 115.00	9.3148
		Middle	2 145.00	9.3209
		High	2 175.00	9.3508
	16QAM	Low	2 115.00	9.1965
		Middle	2 145.00	9.2187
		High	2 175.00	9.2009
	64QAM	Low	2 115.00	9.3043
		Middle	2 145.00	9.2953
		High	2 175.00	9.2716
	256QAM	Low	2 115.00	9.2962
		Middle	2 145.00	9.3071
		High	2 175.00	9.2905
1	QPSK	Low	2 115.00	9.3016
		Middle	2 145.00	9.3294
		High	2 175.00	9.3356
	16QAM	Low	2 115.00	9.1902
		Middle	2 145.00	9.2349
		High	2 175.00	9.2140
	64QAM	Low	2 115.00	9.3071
		Middle	2 145.00	9.3100
		High	2 175.00	9.3126
	256QAM	Low	2 115.00	9.2882
		Middle	2 145.00	9.3285
		High	2 175.00	9.3151

## (2 Port) B66 DSS 10 MHz 5to5 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 115.00	9.3165
		Middle	2 145.00	9.2859
		High	2 175.00	9.2943
	16QAM	Low	2 115.00	9.1617
		Middle	2 145.00	9.1899
		High	2 175.00	9.1817
	64QAM	Low	2 115.00	9.3060
		Middle	2 145.00	9.2581
		High	2 175.00	9.3248
	256QAM	Low	2 115.00	9.2805
		Middle	2 145.00	9.3067
		High	2 175.00	9.2714
1	QPSK	Low	2 115.00	9.2886
		Middle	2 145.00	9.3231
		High	2 175.00	9.2901
	16QAM	Low	2 115.00	9.1604
		Middle	2 145.00	9.2157
		High	2 175.00	9.1867
	64QAM	Low	2 115.00	9.2782
		Middle	2 145.00	9.2661
		High	2 175.00	9.2894
	256QAM	Low	2 115.00	9.2496
		Middle	2 145.00	9.2787
		High	2 175.00	9.2696

## (2 Port) B66 DSS 10 MHz 9to1 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 115.00	9.1657
		Middle	2 145.00	9.1385
		High	2 175.00	9.2065
	16QAM	Low	2 115.00	9.0652
		Middle	2 145.00	9.0939
		High	2 175.00	9.1247
	64QAM	Low	2 115.00	9.2707
		Middle	2 145.00	9.2023
		High	2 175.00	9.2117
	256QAM	Low	2 115.00	9.2115
		Middle	2 145.00	9.1767
		High	2 175.00	9.1612
1	QPSK	Low	2 115.00	9.2539
		Middle	2 145.00	9.2211
		High	2 175.00	9.2037
	16QAM	Low	2 115.00	9.0952
		Middle	2 145.00	9.1517
		High	2 175.00	9.0414
	64QAM	Low	2 115.00	9.2558
		Middle	2 145.00	9.2051
		High	2 175.00	9.2014
	256QAM	Low	2 115.00	9.1324
		Middle	2 145.00	9.2452
		High	2 175.00	9.1894

## (2 Port) B66 DSS 15 MHz 2to8 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 117.50	14.143
		Middle	2 145.00	14.166
		High	2 172.50	14.096
	16QAM	Low	2 117.50	14.114
		Middle	2 145.00	14.178
		High	2 172.50	14.125
	64QAM	Low	2 117.50	14.109
		Middle	2 145.00	14.127
		High	2 172.50	14.154
	256QAM	Low	2 117.50	14.109
		Middle	2 145.00	14.134
		High	2 172.50	14.138
1	QPSK	Low	2 117.50	14.114
		Middle	2 145.00	14.111
		High	2 172.50	14.129
	16QAM	Low	2 117.50	14.170
		Middle	2 145.00	14.169
		High	2 172.50	14.158
	64QAM	Low	2 117.50	14.133
		Middle	2 145.00	14.150
		High	2 172.50	14.125
	256QAM	Low	2 117.50	14.082
		Middle	2 145.00	14.131
		High	2 172.50	14.153

## (2 Port) B66 DSS 15 MHz 5to5 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 117.50	14.110
		Middle	2 145.00	14.065
		High	2 172.50	14.112
	16QAM	Low	2 117.50	14.117
		Middle	2 145.00	14.102
		High	2 172.50	14.145
	64QAM	Low	2 117.50	14.126
		Middle	2 145.00	14.100
		High	2 172.50	14.083
256QAM	Low	2 117.50	14.129	
	Middle	2 145.00	14.125	
	High	2 172.50	14.088	
1	QPSK	Low	2 117.50	14.086
		Middle	2 145.00	14.103
		High	2 172.50	14.097
	16QAM	Low	2 117.50	14.111
		Middle	2 145.00	14.117
		High	2 172.50	14.110
	64QAM	Low	2 117.50	14.090
		Middle	2 145.00	14.110
		High	2 172.50	14.127
256QAM	Low	2 117.50	14.136	
	Middle	2 145.00	14.112	
	High	2 172.50	14.095	

## (2 Port) B66 DSS 15 MHz 9to1 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 117.50	14.009
		Middle	2 145.00	14.034
		High	2 172.50	14.007
	16QAM	Low	2 117.50	13.990
		Middle	2 145.00	14.017
		High	2 172.50	14.033
	64QAM	Low	2 117.50	13.976
		Middle	2 145.00	13.977
		High	2 172.50	13.907
256QAM	Low	2 117.50	14.000	
	Middle	2 145.00	13.929	
	High	2 172.50	13.940	
1	QPSK	Low	2 117.50	14.006
		Middle	2 145.00	13.996
		High	2 172.50	14.060
	16QAM	Low	2 117.50	14.030
		Middle	2 145.00	13.959
		High	2 172.50	13.926
	64QAM	Low	2 117.50	13.909
		Middle	2 145.00	14.026
		High	2 172.50	14.023
256QAM	Low	2 117.50	14.032	
	Middle	2 145.00	14.065	
	High	2 172.50	14.023	

(2 Port) B66 DSS 20 MHz 2to8 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 120.00	18.959
		Middle	2 145.00	18.921
		High	2 170.00	18.949
	16QAM	Low	2 120.00	19.017
		Middle	2 145.00	18.964
		High	2 170.00	19.011
	64QAM	Low	2 120.00	18.999
		Middle	2 145.00	18.980
		High	2 170.00	18.967
	256QAM	Low	2 120.00	18.984
		Middle	2 145.00	18.919
		High	2 170.00	18.947
1	QPSK	Low	2 120.00	18.988
		Middle	2 145.00	18.975
		High	2 170.00	18.954
	16QAM	Low	2 120.00	18.993
		Middle	2 145.00	19.005
		High	2 170.00	18.981
	64QAM	Low	2 120.00	18.977
		Middle	2 145.00	18.982
		High	2 170.00	18.953
	256QAM	Low	2 120.00	18.989
		Middle	2 145.00	18.955
		High	2 170.00	18.946

## (2 Port) B66 DSS 20 MHz 5to5 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 120.00	18.924
		Middle	2 145.00	18.866
		High	2 170.00	18.947
	16QAM	Low	2 120.00	18.943
		Middle	2 145.00	18.942
		High	2 170.00	18.850
	64QAM	Low	2 120.00	18.896
		Middle	2 145.00	18.950
		High	2 170.00	18.925
	256QAM	Low	2 120.00	18.848
		Middle	2 145.00	18.956
		High	2 170.00	18.929
1	QPSK	Low	2 120.00	18.885
		Middle	2 145.00	18.889
		High	2 170.00	18.915
	16QAM	Low	2 120.00	18.883
		Middle	2 145.00	18.949
		High	2 170.00	18.929
	64QAM	Low	2 120.00	18.941
		Middle	2 145.00	18.963
		High	2 170.00	18.944
	256QAM	Low	2 120.00	18.876
		Middle	2 145.00	18.895
		High	2 170.00	18.896

## (2 Port) B66 DSS 20 MHz 9to1 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 120.00	18.749
		Middle	2 145.00	18.781
		High	2 170.00	18.749
	16QAM	Low	2 120.00	18.820
		Middle	2 145.00	18.787
		High	2 170.00	18.786
	64QAM	Low	2 120.00	18.744
		Middle	2 145.00	18.698
		High	2 170.00	18.739
	256QAM	Low	2 120.00	18.730
		Middle	2 145.00	18.790
		High	2 170.00	18.724
1	QPSK	Low	2 120.00	18.754
		Middle	2 145.00	18.805
		High	2 170.00	18.805
	16QAM	Low	2 120.00	18.769
		Middle	2 145.00	18.815
		High	2 170.00	18.875
	64QAM	Low	2 120.00	18.740
		Middle	2 145.00	18.798
		High	2 170.00	18.797
	256QAM	Low	2 120.00	18.759
		Middle	2 145.00	18.749
		High	2 170.00	18.772

## (4 Port) B66 DSS 10 MHz 2to8 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 115.00	9.3011
		Middle	2 145.00	9.3098
		High	2 175.00	9.2988
	16QAM	Low	2 115.00	9.2221
		Middle	2 145.00	9.2550
		High	2 175.00	9.2568
	64QAM	Low	2 115.00	9.3085
		Middle	2 145.00	9.3451
		High	2 175.00	9.3279
	256QAM	Low	2 115.00	9.3005
		Middle	2 145.00	9.3045
		High	2 175.00	9.3294
1	QPSK	Low	2 115.00	9.3174
		Middle	2 145.00	9.3038
		High	2 175.00	9.3152
	16QAM	Low	2 115.00	9.2322
		Middle	2 145.00	9.2146
		High	2 175.00	9.2404
	64QAM	Low	2 115.00	9.3030
		Middle	2 145.00	9.3520
		High	2 175.00	9.3205
	256QAM	Low	2 115.00	9.3093
		Middle	2 145.00	9.3054
		High	2 175.00	9.3217

2	QPSK	Low	2 115.00	9.3138
		Middle	2 145.00	9.3590
		High	2 175.00	9.2910
	16QAM	Low	2 115.00	9.2377
		Middle	2 145.00	9.2250
		High	2 175.00	9.2564
	64QAM	Low	2 115.00	9.3131
		Middle	2 145.00	9.3077
		High	2 175.00	9.3061
256QAM	Low	2 115.00	9.2989	
	Middle	2 145.00	9.3368	
	High	2 175.00	9.3264	
3	QPSK	Low	2 115.00	9.3098
		Middle	2 145.00	9.3460
		High	2 175.00	9.3597
	16QAM	Low	2 115.00	9.2222
		Middle	2 145.00	9.2510
		High	2 175.00	9.2382
	64QAM	Low	2 115.00	9.3188
		Middle	2 145.00	9.3375
		High	2 175.00	9.3205
256QAM	Low	2 115.00	9.3070	
	Middle	2 145.00	9.3100	
	High	2 175.00	9.3328	

## (4 Port) B66 DSS 10 MHz 5to5 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 115.00	9.2688
		Middle	2 145.00	9.3013
		High	2 175.00	9.2909
	16QAM	Low	2 115.00	9.1621
		Middle	2 145.00	9.2386
		High	2 175.00	9.1965
	64QAM	Low	2 115.00	9.2897
		Middle	2 145.00	9.2952
		High	2 175.00	9.1584
	256QAM	Low	2 115.00	9.2998
		Middle	2 145.00	9.2783
		High	2 175.00	9.2976
1	QPSK	Low	2 115.00	9.2703
		Middle	2 145.00	9.3206
		High	2 175.00	9.2879
	16QAM	Low	2 115.00	9.1764
		Middle	2 145.00	9.1879
		High	2 175.00	9.1723
	64QAM	Low	2 115.00	9.2840
		Middle	2 145.00	9.3010
		High	2 175.00	9.1875
	256QAM	Low	2 115.00	9.2523
		Middle	2 145.00	9.2642
		High	2 175.00	9.3060

2	QPSK	Low	2 115.00	9.2907
		Middle	2 145.00	9.2966
		High	2 175.00	9.3070
	16QAM	Low	2 115.00	9.1667
		Middle	2 145.00	9.1704
		High	2 175.00	9.2044
	64QAM	Low	2 115.00	9.2534
		Middle	2 145.00	9.2755
		High	2 175.00	9.2114
256QAM	Low	2 115.00	9.3016	
	Middle	2 145.00	9.2930	
	High	2 175.00	9.3123	
3	QPSK	Low	2 115.00	9.2594
		Middle	2 145.00	9.2917
		High	2 175.00	9.3176
	16QAM	Low	2 115.00	9.1661
		Middle	2 145.00	9.1697
		High	2 175.00	9.1727
	64QAM	Low	2 115.00	9.2933
		Middle	2 145.00	9.2843
		High	2 175.00	9.2087
256QAM	Low	2 115.00	9.2865	
	Middle	2 145.00	9.3134	
	High	2 175.00	9.2814	

## (4 Port) B66 DSS 10 MHz 9to1 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 115.00	9.1932
		Middle	2 145.00	9.2042
		High	2 175.00	9.2304
	16QAM	Low	2 115.00	9.0880
		Middle	2 145.00	9.1100
		High	2 175.00	9.0970
	64QAM	Low	2 115.00	9.2154
		Middle	2 145.00	9.3054
		High	2 175.00	9.3207
	256QAM	Low	2 115.00	9.1690
		Middle	2 145.00	9.2175
		High	2 175.00	9.2212
1	QPSK	Low	2 115.00	9.1127
		Middle	2 145.00	9.2492
		High	2 175.00	9.1748
	16QAM	Low	2 115.00	9.1057
		Middle	2 145.00	9.1000
		High	2 175.00	9.1236
	64QAM	Low	2 115.00	9.2080
		Middle	2 145.00	9.2069
		High	2 175.00	9.1680
	256QAM	Low	2 115.00	9.1121
		Middle	2 145.00	9.2355
		High	2 175.00	9.2219

2	QPSK	Low	2 115.00	9.1654
		Middle	2 145.00	9.2217
		High	2 175.00	9.2141
	16QAM	Low	2 115.00	9.1018
		Middle	2 145.00	9.0967
		High	2 175.00	9.1200
	64QAM	Low	2 115.00	9.2617
		Middle	2 145.00	9.2432
		High	2 175.00	9.2369
256QAM	Low	2 115.00	9.1660	
	Middle	2 145.00	9.1558	
	High	2 175.00	9.2385	
3	QPSK	Low	2 115.00	9.1853
		Middle	2 145.00	9.2150
		High	2 175.00	9.1845
	16QAM	Low	2 115.00	9.0945
		Middle	2 145.00	9.1249
		High	2 175.00	9.1282
	64QAM	Low	2 115.00	9.1503
		Middle	2 145.00	9.1488
		High	2 175.00	9.2781
256QAM	Low	2 115.00	9.2326	
	Middle	2 145.00	9.2061	
	High	2 175.00	9.1986	

## (4 Port) B66 DSS 15 MHz 2to8 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 117.50	14.111
		Middle	2 145.00	14.100
		High	2 172.50	14.133
	16QAM	Low	2 117.50	14.139
		Middle	2 145.00	14.141
		High	2 172.50	14.149
	64QAM	Low	2 117.50	14.111
		Middle	2 145.00	14.151
		High	2 172.50	14.131
	256QAM	Low	2 117.50	14.143
		Middle	2 145.00	14.170
		High	2 172.50	14.149
1	QPSK	Low	2 117.50	14.104
		Middle	2 145.00	14.155
		High	2 172.50	14.151
	16QAM	Low	2 117.50	14.150
		Middle	2 145.00	14.120
		High	2 172.50	14.166
	64QAM	Low	2 117.50	14.131
		Middle	2 145.00	14.157
		High	2 172.50	14.178
	256QAM	Low	2 117.50	14.118
		Middle	2 145.00	14.137
		High	2 172.50	14.173

2	QPSK	Low	2 117.50	14.137
		Middle	2 145.00	14.144
		High	2 172.50	14.143
	16QAM	Low	2 117.50	14.139
		Middle	2 145.00	14.170
		High	2 172.50	14.171
	64QAM	Low	2 117.50	14.130
		Middle	2 145.00	14.122
		High	2 172.50	14.110
	256QAM	Low	2 117.50	14.119
		Middle	2 145.00	14.159
		High	2 172.50	14.113
3	QPSK	Low	2 117.50	14.109
		Middle	2 145.00	14.151
		High	2 172.50	14.148
	16QAM	Low	2 117.50	14.135
		Middle	2 145.00	14.139
		High	2 172.50	14.178
	64QAM	Low	2 117.50	14.144
		Middle	2 145.00	14.162
		High	2 172.50	14.133
	256QAM	Low	2 117.50	14.155
		Middle	2 145.00	14.148
		High	2 172.50	14.109

## (4 Port) B66 DSS 15 MHz 5to5 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 117.50	14.095
		Middle	2 145.00	14.135
		High	2 172.50	14.103
	16QAM	Low	2 117.50	14.089
		Middle	2 145.00	14.086
		High	2 172.50	14.149
	64QAM	Low	2 117.50	14.120
		Middle	2 145.00	14.135
		High	2 172.50	14.152
	256QAM	Low	2 117.50	14.068
		Middle	2 145.00	14.122
		High	2 172.50	14.039
1	QPSK	Low	2 117.50	14.132
		Middle	2 145.00	14.095
		High	2 172.50	14.103
	16QAM	Low	2 117.50	14.135
		Middle	2 145.00	14.138
		High	2 172.50	14.141
	64QAM	Low	2 117.50	14.114
		Middle	2 145.00	14.133
		High	2 172.50	14.073
	256QAM	Low	2 117.50	14.090
		Middle	2 145.00	14.092
		High	2 172.50	14.101

2	QPSK	Low	2 117.50	14.124
		Middle	2 145.00	14.098
		High	2 172.50	14.065
	16QAM	Low	2 117.50	14.122
		Middle	2 145.00	14.103
		High	2 172.50	14.107
	64QAM	Low	2 117.50	14.054
		Middle	2 145.00	14.075
		High	2 172.50	14.061
256QAM	Low	2 117.50	14.083	
	Middle	2 145.00	14.111	
	High	2 172.50	14.101	
3	QPSK	Low	2 117.50	14.114
		Middle	2 145.00	14.104
		High	2 172.50	14.137
	16QAM	Low	2 117.50	14.116
		Middle	2 145.00	14.128
		High	2 172.50	14.092
	64QAM	Low	2 117.50	14.133
		Middle	2 145.00	14.151
		High	2 172.50	14.091
256QAM	Low	2 117.50	14.088	
	Middle	2 145.00	14.139	
	High	2 172.50	14.129	

## (4 Port) B66 DSS 15 MHz 9to1 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 117.50	13.918
		Middle	2 145.00	13.990
		High	2 172.50	13.999
	16QAM	Low	2 117.50	13.980
		Middle	2 145.00	13.952
		High	2 172.50	13.960
	64QAM	Low	2 117.50	13.956
		Middle	2 145.00	14.032
		High	2 172.50	14.014
	256QAM	Low	2 117.50	14.023
		Middle	2 145.00	14.024
		High	2 172.50	14.024
1	QPSK	Low	2 117.50	13.951
		Middle	2 145.00	14.037
		High	2 172.50	13.945
	16QAM	Low	2 117.50	13.997
		Middle	2 145.00	13.914
		High	2 172.50	14.046
	64QAM	Low	2 117.50	14.027
		Middle	2 145.00	14.002
		High	2 172.50	14.119
	256QAM	Low	2 117.50	13.970
		Middle	2 145.00	14.058
		High	2 172.50	14.041

2	QPSK	Low	2 117.50	13.944
		Middle	2 145.00	13.969
		High	2 172.50	13.882
	16QAM	Low	2 117.50	13.840
		Middle	2 145.00	14.088
		High	2 172.50	14.047
	64QAM	Low	2 117.50	14.015
		Middle	2 145.00	14.047
		High	2 172.50	13.999
256QAM	Low	2 117.50	13.982	
	Middle	2 145.00	14.001	
	High	2 172.50	13.961	
3	QPSK	Low	2 117.50	13.949
		Middle	2 145.00	13.937
		High	2 172.50	13.952
	16QAM	Low	2 117.50	14.000
		Middle	2 145.00	14.005
		High	2 172.50	14.065
	64QAM	Low	2 117.50	13.986
		Middle	2 145.00	14.013
		High	2 172.50	14.142
256QAM	Low	2 117.50	13.927	
	Middle	2 145.00	13.917	
	High	2 172.50	13.981	

## (4 Port) B66 DSS 20 MHz 2to8 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 120.00	18.924
		Middle	2 145.00	18.975
		High	2 170.00	18.934
	16QAM	Low	2 120.00	19.010
		Middle	2 145.00	18.996
		High	2 170.00	19.019
	64QAM	Low	2 120.00	18.971
		Middle	2 145.00	18.949
		High	2 170.00	18.972
	256QAM	Low	2 120.00	18.936
		Middle	2 145.00	18.994
		High	2 170.00	18.949
1	QPSK	Low	2 120.00	18.923
		Middle	2 145.00	18.948
		High	2 170.00	18.933
	16QAM	Low	2 120.00	18.986
		Middle	2 145.00	18.986
		High	2 170.00	18.931
	64QAM	Low	2 120.00	18.964
		Middle	2 145.00	18.985
		High	2 170.00	18.971
	256QAM	Low	2 120.00	18.965
		Middle	2 145.00	18.980
		High	2 170.00	18.936

2	QPSK	Low	2 120.00	18.967
		Middle	2 145.00	18.963
		High	2 170.00	18.959
	16QAM	Low	2 120.00	18.963
		Middle	2 145.00	19.002
		High	2 170.00	19.039
	64QAM	Low	2 120.00	18.930
		Middle	2 145.00	19.025
		High	2 170.00	18.923
256QAM	Low	2 120.00	18.901	
	Middle	2 145.00	18.946	
	High	2 170.00	18.983	
3	QPSK	Low	2 120.00	18.973
		Middle	2 145.00	18.936
		High	2 170.00	18.938
	16QAM	Low	2 120.00	19.025
		Middle	2 145.00	18.993
		High	2 170.00	19.013
	64QAM	Low	2 120.00	18.950
		Middle	2 145.00	18.973
		High	2 170.00	18.972
256QAM	Low	2 120.00	18.888	
	Middle	2 145.00	18.960	
	High	2 170.00	19.006	

## (4 Port) B66 DSS 20 MHz 5to5 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 120.00	18.904
		Middle	2 145.00	18.909
		High	2 170.00	18.921
	16QAM	Low	2 120.00	18.929
		Middle	2 145.00	18.972
		High	2 170.00	18.963
	64QAM	Low	2 120.00	18.942
		Middle	2 145.00	18.906
		High	2 170.00	18.933
	256QAM	Low	2 120.00	18.934
		Middle	2 145.00	18.890
		High	2 170.00	18.950
1	QPSK	Low	2 120.00	18.922
		Middle	2 145.00	18.899
		High	2 170.00	18.948
	16QAM	Low	2 120.00	18.931
		Middle	2 145.00	18.968
		High	2 170.00	18.968
	64QAM	Low	2 120.00	18.960
		Middle	2 145.00	18.956
		High	2 170.00	18.967
	256QAM	Low	2 120.00	18.942
		Middle	2 145.00	18.878
		High	2 170.00	18.914

2	QPSK	Low	2 120.00	18.918
		Middle	2 145.00	18.939
		High	2 170.00	18.939
	16QAM	Low	2 120.00	18.936
		Middle	2 145.00	18.966
		High	2 170.00	18.936
	64QAM	Low	2 120.00	18.864
		Middle	2 145.00	18.923
		High	2 170.00	18.929
	256QAM	Low	2 120.00	18.897
		Middle	2 145.00	18.921
		High	2 170.00	18.860
3	QPSK	Low	2 120.00	18.888
		Middle	2 145.00	18.971
		High	2 170.00	18.864
	16QAM	Low	2 120.00	18.956
		Middle	2 145.00	18.976
		High	2 170.00	18.952
	64QAM	Low	2 120.00	18.909
		Middle	2 145.00	19.017
		High	2 170.00	18.921
	256QAM	Low	2 120.00	18.863
		Middle	2 145.00	18.930
		High	2 170.00	18.862

(4 Port) B66 DSS 20 MHz 9to1 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 120.00	18.794
		Middle	2 145.00	18.714
		High	2 170.00	18.749
	16QAM	Low	2 120.00	18.778
		Middle	2 145.00	18.716
		High	2 170.00	18.789
	64QAM	Low	2 120.00	18.863
		Middle	2 145.00	18.767
		High	2 170.00	18.763
	256QAM	Low	2 120.00	18.834
		Middle	2 145.00	18.768
		High	2 170.00	18.701
1	QPSK	Low	2 120.00	18.731
		Middle	2 145.00	18.758
		High	2 170.00	18.775
	16QAM	Low	2 120.00	18.844
		Middle	2 145.00	18.785
		High	2 170.00	18.845
	64QAM	Low	2 120.00	18.715
		Middle	2 145.00	18.825
		High	2 170.00	18.702
	256QAM	Low	2 120.00	18.794
		Middle	2 145.00	18.873
		High	2 170.00	18.776

2	QPSK	Low	2 120.00	18.696
		Middle	2 145.00	18.856
		High	2 170.00	18.842
	16QAM	Low	2 120.00	18.761
		Middle	2 145.00	18.816
		High	2 170.00	18.829
	64QAM	Low	2 120.00	18.747
		Middle	2 145.00	18.632
		High	2 170.00	18.770
256QAM	Low	2 120.00	18.722	
	Middle	2 145.00	18.725	
	High	2 170.00	18.792	
3	QPSK	Low	2 120.00	18.759
		Middle	2 145.00	18.685
		High	2 170.00	18.738
	16QAM	Low	2 120.00	18.841
		Middle	2 145.00	18.870
		High	2 170.00	18.742
	64QAM	Low	2 120.00	18.784
		Middle	2 145.00	18.760
		High	2 170.00	18.732
256QAM	Low	2 120.00	18.759	
	Middle	2 145.00	18.760	
	High	2 170.00	18.735	

**(2 Port) LTE B66 5 MHz 1 Carrier**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
1	QPSK	Low	2 112.50	4.5026
		Middle	2 145.00	4.4960
		High	2 177.50	4.5019
	16QAM	Low	2 112.50	4.4874
		Middle	2 145.00	4.4771
		High	2 177.50	4.4674

**(2 Port) LTE B66 10 MHz 1 Carrier**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
1	QPSK	Low	2 115.00	8.9738
		Middle	2 145.00	9.0071
		High	2 175.00	8.9864
	16QAM	Low	2 115.00	8.9983
		Middle	2 145.00	9.0198
		High	2 175.00	8.9745

**(2 Port) LTE B66 15 MHz 1 Carrier**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
1	QPSK	Low	2 117.50	13.497
		Middle	2 145.00	13.491
		High	2 172.50	13.497
	16QAM	Low	2 117.50	13.542
		Middle	2 145.00	13.542
		High	2 172.50	13.518

**(2 Port) LTE B66 20 MHz 1 Carrier**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
1	QPSK	Low	2 120.00	17.904
		Middle	2 145.00	17.923
		High	2 170.00	17.931
	16QAM	Low	2 120.00	18.003
		Middle	2 145.00	17.999
		High	2 170.00	18.019

**(4 Port) LTE B66 5 MHz 1 Carrier**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 112.50	4.4907
		Middle	2 145.00	4.4957
		High	2 177.50	4.5100
	16QAM	Low	2 112.50	4.4639
		Middle	2 145.00	4.4546
		High	2 177.50	4.4567

**(4 Port) LTE B66 10 MHz 1 Carrier**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
3	QPSK	Low	2 115.00	8.9560
		Middle	2 145.00	8.9851
		High	2 175.00	8.9881
	16QAM	Low	2 115.00	9.0193
		Middle	2 145.00	9.0461
		High	2 175.00	9.0354

**(4 Port) LTE B66 15 MHz 1 Carrier**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
3	QPSK	Low	2 117.50	13.497
		Middle	2 145.00	13.506
		High	2 172.50	13.486
	16QAM	Low	2 117.50	13.510
		Middle	2 145.00	13.529
		High	2 172.50	13.538

**(4 Port) LTE B66 20 MHz 1 Carrier**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 120.00	17.933
		Middle	2 145.00	17.940
		High	2 170.00	17.950
	16QAM	Low	2 120.00	17.968
		Middle	2 145.00	17.956
		High	2 170.00	17.970

## (2 Port) 5G NR n66 5 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 112.50	4.4859
		Middle	2 145.00	4.4837
		High	2 177.50	4.4825
	16QAM	Low	2 112.50	4.5087
		Middle	2 145.00	4.5088
		High	2 177.50	4.5115
	64QAM	Low	2 112.50	4.4823
		Middle	2 145.00	4.4852
		High	2 177.50	4.4898
	256QAM	Low	2 112.50	4.4781
		Middle	2 145.00	4.4854
		High	2 177.50	4.4907
1	QPSK	Low	2 112.50	4.4759
		Middle	2 145.00	4.4929
		High	2 177.50	4.4848
	16QAM	Low	2 112.50	4.5014
		Middle	2 145.00	4.5126
		High	2 177.50	4.5046
	64QAM	Low	2 112.50	4.4869
		Middle	2 145.00	4.4917
		High	2 177.50	4.4938
	256QAM	Low	2 112.50	4.4729
		Middle	2 145.00	4.4829
		High	2 177.50	4.4836

## (2 Port) 5G NR n66 10 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 115.00	9.2934
		Middle	2 145.00	9.3156
		High	2 175.00	9.3511
	16QAM	Low	2 115.00	9.2490
		Middle	2 145.00	9.2517
		High	2 175.00	9.2828
	64QAM	Low	2 115.00	9.3326
		Middle	2 145.00	9.3429
		High	2 175.00	9.3140
	256QAM	Low	2 115.00	9.3351
		Middle	2 145.00	9.3339
		High	2 175.00	9.3394
1	QPSK	Low	2 115.00	9.3214
		Middle	2 145.00	9.3168
		High	2 175.00	9.3190
	16QAM	Low	2 115.00	9.2795
		Middle	2 145.00	9.2771
		High	2 175.00	9.2674
	64QAM	Low	2 115.00	9.2987
		Middle	2 145.00	9.3002
		High	2 175.00	9.3343
	256QAM	Low	2 115.00	9.3279
		Middle	2 145.00	9.3372
		High	2 175.00	9.2862

## (2 Port) 5G NR n66 15 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 117.50	14.121
		Middle	2 145.00	14.147
		High	2 172.50	14.156
	16QAM	Low	2 117.50	14.167
		Middle	2 145.00	14.244
		High	2 172.50	14.204
	64QAM	Low	2 117.50	14.112
		Middle	2 145.00	14.151
		High	2 172.50	14.125
	256QAM	Low	2 117.50	14.126
		Middle	2 145.00	14.142
		High	2 172.50	14.155
1	QPSK	Low	2 117.50	14.143
		Middle	2 145.00	14.159
		High	2 172.50	14.144
	16QAM	Low	2 117.50	14.175
		Middle	2 145.00	14.208
		High	2 172.50	14.179
	64QAM	Low	2 117.50	14.135
		Middle	2 145.00	14.162
		High	2 172.50	14.160
	256QAM	Low	2 117.50	14.160
		Middle	2 145.00	14.140
		High	2 172.50	14.159

## (2 Port) 5G NR n66 20 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 120.00	18.955
		Middle	2 145.00	18.968
		High	2 170.00	18.973
	16QAM	Low	2 120.00	19.038
		Middle	2 145.00	19.081
		High	2 170.00	19.007
	64QAM	Low	2 120.00	18.928
		Middle	2 145.00	18.943
		High	2 170.00	18.990
	256QAM	Low	2 120.00	18.947
		Middle	2 145.00	18.984
		High	2 170.00	18.967
1	QPSK	Low	2 120.00	18.955
		Middle	2 145.00	18.964
		High	2 170.00	18.955
	16QAM	Low	2 120.00	19.037
		Middle	2 145.00	19.052
		High	2 170.00	19.026
	64QAM	Low	2 120.00	18.967
		Middle	2 145.00	18.948
		High	2 170.00	18.969
	256QAM	Low	2 120.00	18.958
		Middle	2 145.00	18.965
		High	2 170.00	19.035

## (4 Port) 5G NR n66 5 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 112.50	4.4748
		Middle	2 145.00	4.4831
		High	2 177.50	4.4835
	16QAM	Low	2 112.50	4.5027
		Middle	2 145.00	4.5041
		High	2 177.50	4.4984
	64QAM	Low	2 112.50	4.4821
		Middle	2 145.00	4.4911
		High	2 177.50	4.4880
	256QAM	Low	2 112.50	4.4751
		Middle	2 145.00	4.4883
		High	2 177.50	4.4865
1	QPSK	Low	2 112.50	4.4747
		Middle	2 145.00	4.4879
		High	2 177.50	4.4828
	16QAM	Low	2 112.50	4.5048
		Middle	2 145.00	4.5068
		High	2 177.50	4.5042
	64QAM	Low	2 112.50	4.4859
		Middle	2 145.00	4.4770
		High	2 177.50	4.4859
	256QAM	Low	2 112.50	4.4696
		Middle	2 145.00	4.4854
		High	2 177.50	4.4834

2	QPSK	Low	2 112.50	4.4753
		Middle	2 145.00	4.4804
		High	2 177.50	4.4898
	16QAM	Low	2 112.50	4.4976
		Middle	2 145.00	4.5049
		High	2 177.50	4.5111
	64QAM	Low	2 112.50	4.4783
		Middle	2 145.00	4.4870
		High	2 177.50	4.4930
256QAM	Low	2 112.50	4.4788	
	Middle	2 145.00	4.4804	
	High	2 177.50	4.4836	
3	QPSK	Low	2 112.50	4.4693
		Middle	2 145.00	4.4880
		High	2 177.50	4.4839
	16QAM	Low	2 112.50	4.4953
		Middle	2 145.00	4.5023
		High	2 177.50	4.5027
	64QAM	Low	2 112.50	4.4799
		Middle	2 145.00	4.4882
		High	2 177.50	4.4961
256QAM	Low	2 112.50	4.4708	
	Middle	2 145.00	4.4886	
	High	2 177.50	4.4877	

## (4 Port) 5G NR n66 10 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 115.00	9.3261
		Middle	2 145.00	9.3249
		High	2 175.00	9.3111
	16QAM	Low	2 115.00	9.2455
		Middle	2 145.00	9.2619
		High	2 175.00	9.2990
	64QAM	Low	2 115.00	9.3196
		Middle	2 145.00	9.3395
		High	2 175.00	9.3246
	256QAM	Low	2 115.00	9.3092
		Middle	2 145.00	9.3203
		High	2 175.00	9.3355
1	QPSK	Low	2 115.00	9.3058
		Middle	2 145.00	9.3257
		High	2 175.00	9.3227
	16QAM	Low	2 115.00	9.2777
		Middle	2 145.00	9.2585
		High	2 175.00	9.2630
	64QAM	Low	2 115.00	9.3059
		Middle	2 145.00	9.3334
		High	2 175.00	9.2992
	256QAM	Low	2 115.00	9.3219
		Middle	2 145.00	9.3372
		High	2 175.00	9.3081

2	QPSK	Low	2 115.00	9.3113
		Middle	2 145.00	9.3019
		High	2 175.00	9.3081
	16QAM	Low	2 115.00	9.2806
		Middle	2 145.00	9.2620
		High	2 175.00	9.2595
	64QAM	Low	2 115.00	9.3158
		Middle	2 145.00	9.3220
		High	2 175.00	9.3207
	256QAM	Low	2 115.00	9.3144
		Middle	2 145.00	9.3463
		High	2 175.00	9.3419
3	QPSK	Low	2 115.00	9.2868
		Middle	2 145.00	9.3350
		High	2 175.00	9.3296
	16QAM	Low	2 115.00	9.2222
		Middle	2 145.00	9.2523
		High	2 175.00	9.2528
	64QAM	Low	2 115.00	9.2954
		Middle	2 145.00	9.3100
		High	2 175.00	9.3232
	256QAM	Low	2 115.00	9.3429
		Middle	2 145.00	9.3018
		High	2 175.00	9.3383

## (4 Port) 5G NR n66 15 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 117.50	14.130
		Middle	2 145.00	14.171
		High	2 172.50	14.161
	16QAM	Low	2 117.50	14.164
		Middle	2 145.00	14.192
		High	2 172.50	14.183
	64QAM	Low	2 117.50	14.154
		Middle	2 145.00	14.169
		High	2 172.50	14.162
256QAM	Low	2 117.50	14.100	
	Middle	2 145.00	14.135	
	High	2 172.50	14.149	
1	QPSK	Low	2 117.50	14.176
		Middle	2 145.00	14.114
		High	2 172.50	14.146
	16QAM	Low	2 117.50	14.223
		Middle	2 145.00	14.178
		High	2 172.50	14.196
	64QAM	Low	2 117.50	14.131
		Middle	2 145.00	14.143
		High	2 172.50	14.125
256QAM	Low	2 117.50	14.162	
	Middle	2 145.00	14.175	
	High	2 172.50	14.162	

2	QPSK	Low	2 117.50	14.131
		Middle	2 145.00	14.145
		High	2 172.50	14.160
	16QAM	Low	2 117.50	14.188
		Middle	2 145.00	14.172
		High	2 172.50	14.202
	64QAM	Low	2 117.50	14.150
		Middle	2 145.00	14.144
		High	2 172.50	14.124
256QAM	Low	2 117.50	14.145	
	Middle	2 145.00	14.132	
	High	2 172.50	14.185	
3	QPSK	Low	2 117.50	14.135
		Middle	2 145.00	14.134
		High	2 172.50	14.137
	16QAM	Low	2 117.50	14.217
		Middle	2 145.00	14.218
		High	2 172.50	14.188
	64QAM	Low	2 117.50	14.145
		Middle	2 145.00	14.135
		High	2 172.50	14.136
256QAM	Low	2 117.50	14.126	
	Middle	2 145.00	14.136	
	High	2 172.50	14.155	

## (4 Port) 5G NR n66 20 MHz 1 Carrier

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 120.00	18.915
		Middle	2 145.00	18.985
		High	2 170.00	18.970
	16QAM	Low	2 120.00	19.065
		Middle	2 145.00	19.037
		High	2 170.00	19.048
	64QAM	Low	2 120.00	18.915
		Middle	2 145.00	18.964
		High	2 170.00	18.960
	256QAM	Low	2 120.00	18.973
		Middle	2 145.00	18.985
		High	2 170.00	18.944
1	QPSK	Low	2 120.00	18.974
		Middle	2 145.00	18.951
		High	2 170.00	18.950
	16QAM	Low	2 120.00	19.042
		Middle	2 145.00	19.016
		High	2 170.00	19.007
	64QAM	Low	2 120.00	18.954
		Middle	2 145.00	18.971
		High	2 170.00	18.942
	256QAM	Low	2 120.00	19.006
		Middle	2 145.00	18.920
		High	2 170.00	18.981

2	QPSK	Low	2 120.00	19.007
		Middle	2 145.00	18.987
		High	2 170.00	18.988
	16QAM	Low	2 120.00	19.021
		Middle	2 145.00	19.007
		High	2 170.00	19.036
	64QAM	Low	2 120.00	18.930
		Middle	2 145.00	18.968
		High	2 170.00	18.947
256QAM	Low	2 120.00	18.994	
	Middle	2 145.00	18.976	
	High	2 170.00	18.986	
3	QPSK	Low	2 120.00	18.951
		Middle	2 145.00	18.947
		High	2 170.00	18.956
	16QAM	Low	2 120.00	19.071
		Middle	2 145.00	19.016
		High	2 170.00	19.037
	64QAM	Low	2 120.00	18.963
		Middle	2 145.00	18.948
		High	2 170.00	18.968
256QAM	Low	2 120.00	18.978	
	Middle	2 145.00	19.023	
	High	2 170.00	18.959	

**Tabular Data of Contiguous Occupied Bandwidth**
**(2 Port) B2 DSS 10 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier [2 Carrier]**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 937.50	14.253
		Middle	1 960.00	14.297
		High	1 982.50	14.295
	16QAM	Low	1 937.50	14.241
		Middle	1 960.00	14.163
		High	1 982.50	14.260
	64QAM	Low	1 937.50	14.290
		Middle	1 960.00	14.248
		High	1 982.50	14.301
	256QAM	Low	1 937.50	14.270
		Middle	1 960.00	14.289
		High	1 982.50	14.321
1	QPSK	Low	1 937.50	14.295
		Middle	1 960.00	14.298
		High	1 982.50	14.299
	16QAM	Low	1 937.50	14.208
		Middle	1 960.00	14.234
		High	1 982.50	14.214
	64QAM	Low	1 937.50	14.246
		Middle	1 960.00	14.323
		High	1 982.50	14.244
	256QAM	Low	1 937.50	14.305
		Middle	1 960.00	14.290
		High	1 982.50	14.258

**(4 Port) B2 DSS 10 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier [2 Carrier]**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 937.50	14.299
		Middle	1 960.00	14.257
		High	1 982.50	14.268
	16QAM	Low	1 937.50	14.176
		Middle	1 960.00	14.221
		High	1 982.50	14.226
	64QAM	Low	1 937.50	14.269
		Middle	1 960.00	14.282
		High	1 982.50	14.299
	256QAM	Low	1 937.50	14.274
		Middle	1 960.00	14.314
		High	1 982.50	14.286
1	QPSK	Low	1 937.50	14.253
		Middle	1 960.00	14.316
		High	1 982.50	14.323
	16QAM	Low	1 937.50	14.201
		Middle	1 960.00	14.181
		High	1 982.50	14.246
	64QAM	Low	1 937.50	14.241
		Middle	1 960.00	14.310
		High	1 982.50	14.253
	256QAM	Low	1 937.50	14.311
		Middle	1 960.00	14.299
		High	1 982.50	14.290

2	QPSK	Low	1 937.50	14.307
		Middle	1 960.00	14.260
		High	1 982.50	14.292
	16QAM	Low	1 937.50	14.230
		Middle	1 960.00	14.224
		High	1 982.50	14.280
	64QAM	Low	1 937.50	14.283
		Middle	1 960.00	14.298
		High	1 982.50	14.318
256QAM	Low	1 937.50	14.277	
	Middle	1 960.00	14.264	
	High	1 982.50	14.297	
3	QPSK	Low	1 937.50	14.317
		Middle	1 960.00	14.248
		High	1 982.50	14.308
	16QAM	Low	1 937.50	14.211
		Middle	1 960.00	14.224
		High	1 982.50	14.230
	64QAM	Low	1 937.50	14.321
		Middle	1 960.00	14.313
		High	1 982.50	14.317
256QAM	Low	1 937.50	14.309	
	Middle	1 960.00	14.326	
	High	1 982.50	14.311	

## (2 Port) LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [2 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 935.00	9.4889
		Middle	1 960.00	9.4409
		High	1 985.00	9.4697
	16QAM	Low	1 935.00	9.4887
		Middle	1 960.00	9.4902
		High	1 985.00	9.5248
	64QAM	Low	1 935.00	9.4518
		Middle	1 960.00	9.4834
		High	1 985.00	9.4703
	256QAM	Low	1 935.00	9.4663
		Middle	1 960.00	9.4740
		High	1 985.00	9.4724
1	QPSK	Low	1 935.00	9.4587
		Middle	1 960.00	9.4639
		High	1 985.00	9.4664
	16QAM	Low	1 935.00	9.5117
		Middle	1 960.00	9.4971
		High	1 985.00	9.4898
	64QAM	Low	1 935.00	9.4617
		Middle	1 960.00	9.4699
		High	1 985.00	9.4491
	256QAM	Low	1 935.00	9.4526
		Middle	1 960.00	9.4699
		High	1 985.00	9.4397

## (2 Port) LTE B2 10 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [2 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 945.00	28.891
		Middle	1 960.00	28.879
		High	1 975.00	28.951
	16QAM	Low	1 945.00	28.934
		Middle	1 960.00	29.020
		High	1 975.00	28.872
	64QAM	Low	1 945.00	28.893
		Middle	1 960.00	28.946
		High	1 975.00	28.892
	256QAM	Low	1 945.00	28.894
		Middle	1 960.00	28.940
		High	1 975.00	28.902
1	QPSK	Low	1 945.00	28.866
		Middle	1 960.00	28.895
		High	1 975.00	28.851
	16QAM	Low	1 945.00	28.963
		Middle	1 960.00	29.040
		High	1 975.00	28.931
	64QAM	Low	1 945.00	28.890
		Middle	1 960.00	28.899
		High	1 975.00	28.924
	256QAM	Low	1 945.00	28.876
		Middle	1 960.00	28.836
		High	1 975.00	28.892

## (4 Port) LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [2 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 935.00	9.4565
		Middle	1 960.00	9.4474
		High	1 985.00	9.4475
	16QAM	Low	1 935.00	9.4986
		Middle	1 960.00	9.4893
		High	1 985.00	9.4978
	64QAM	Low	1 935.00	9.4595
		Middle	1 960.00	9.4559
		High	1 985.00	9.4586
	256QAM	Low	1 935.00	9.4649
		Middle	1 960.00	9.4354
		High	1 985.00	9.4621
1	QPSK	Low	1 935.00	9.4593
		Middle	1 960.00	9.4586
		High	1 985.00	9.4363
	16QAM	Low	1 935.00	9.4854
		Middle	1 960.00	9.4794
		High	1 985.00	9.4681
	64QAM	Low	1 935.00	9.4718
		Middle	1 960.00	9.4703
		High	1 985.00	9.4550
	256QAM	Low	1 935.00	9.4939
		Middle	1 960.00	9.4309
		High	1 985.00	9.4591

2	QPSK	Low	1 935.00	9.4346
		Middle	1 960.00	9.4784
		High	1 985.00	9.4709
	16QAM	Low	1 935.00	9.5037
		Middle	1 960.00	9.4572
		High	1 985.00	9.5094
	64QAM	Low	1 935.00	9.4402
		Middle	1 960.00	9.4402
		High	1 985.00	9.4503
256QAM	Low	1 935.00	9.4364	
	Middle	1 960.00	9.4446	
	High	1 985.00	9.4592	
3	QPSK	Low	1 935.00	9.4595
		Middle	1 960.00	9.4480
		High	1 985.00	9.4590
	16QAM	Low	1 935.00	9.5158
		Middle	1 960.00	9.5104
		High	1 985.00	9.4772
	64QAM	Low	1 935.00	9.4894
		Middle	1 960.00	9.4486
		High	1 985.00	9.4683
256QAM	Low	1 935.00	9.4642	
	Middle	1 960.00	9.4550	
	High	1 985.00	9.4446	

## (4 Port) LTE B2 10 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [2 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 945.00	28.866
		Middle	1 960.00	28.856
		High	1 975.00	28.935
	16QAM	Low	1 945.00	29.040
		Middle	1 960.00	28.983
		High	1 975.00	28.910
	64QAM	Low	1 945.00	28.933
		Middle	1 960.00	28.890
		High	1 975.00	28.912
	256QAM	Low	1 945.00	28.935
		Middle	1 960.00	28.914
		High	1 975.00	28.958
1	QPSK	Low	1 945.00	28.864
		Middle	1 960.00	28.888
		High	1 975.00	28.885
	16QAM	Low	1 945.00	28.927
		Middle	1 960.00	28.966
		High	1 975.00	28.879
	64QAM	Low	1 945.00	28.870
		Middle	1 960.00	28.951
		High	1 975.00	28.935
	256QAM	Low	1 945.00	28.881
		Middle	1 960.00	28.891
		High	1 975.00	28.918

2	QPSK	Low	1 945.00	28.872
		Middle	1 960.00	28.857
		High	1 975.00	28.928
	16QAM	Low	1 945.00	28.956
		Middle	1 960.00	28.972
		High	1 975.00	28.921
	64QAM	Low	1 945.00	28.827
		Middle	1 960.00	28.928
		High	1 975.00	28.939
256QAM	Low	1 945.00	28.901	
	Middle	1 960.00	28.910	
	High	1 975.00	28.908	
3	QPSK	Low	1 945.00	28.880
		Middle	1 960.00	28.840
		High	1 975.00	28.922
	16QAM	Low	1 945.00	29.001
		Middle	1 960.00	29.015
		High	1 975.00	28.896
	64QAM	Low	1 945.00	28.915
		Middle	1 960.00	28.919
		High	1 975.00	28.911
256QAM	Low	1 945.00	28.862	
	Middle	1 960.00	28.869	
	High	1 975.00	28.882	

## (2 Port) B66 DSS 10 MHz 9to1 1 Carrier + LTE B66 5 MHz 1 Carrier [2 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 117.50	14.278
		Middle	2 145.00	14.305
		High	2 172.50	14.294
	16QAM	Low	2 117.50	14.129
		Middle	2 145.00	14.230
		High	2 172.50	14.295
	64QAM	Low	2 117.50	14.314
		Middle	2 145.00	14.292
		High	2 172.50	14.318
256QAM	Low	2 117.50	14.272	
	Middle	2 145.00	14.321	
	High	2 172.50	14.287	
1	QPSK	Low	2 117.50	14.297
		Middle	2 145.00	14.305
		High	2 172.50	14.313
	16QAM	Low	2 117.50	14.207
		Middle	2 145.00	14.198
		High	2 172.50	14.293
	64QAM	Low	2 117.50	14.206
		Middle	2 145.00	14.275
		High	2 172.50	14.363
256QAM	Low	2 117.50	14.291	
	Middle	2 145.00	14.279	
	High	2 172.50	14.215	

## (4 Port) B66 DSS 10 MHz 9to1 1 Carrier + LTE B66 5 MHz 1 Carrier [2 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 117.50	14.316
		Middle	2 145.00	14.250
		High	2 172.50	14.286
	16QAM	Low	2 117.50	14.221
		Middle	2 145.00	14.374
		High	2 172.50	14.192
	64QAM	Low	2 117.50	14.303
		Middle	2 145.00	14.179
		High	2 172.50	14.238
	256QAM	Low	2 117.50	14.270
		Middle	2 145.00	14.348
		High	2 172.50	14.276
1	QPSK	Low	2 117.50	14.286
		Middle	2 145.00	14.275
		High	2 172.50	14.333
	16QAM	Low	2 117.50	14.202
		Middle	2 145.00	14.346
		High	2 172.50	14.237
	64QAM	Low	2 117.50	14.268
		Middle	2 145.00	14.252
		High	2 172.50	14.276
	256QAM	Low	2 117.50	14.325
		Middle	2 145.00	14.352
		High	2 172.50	14.316

2	QPSK	Low	2 117.50	14.246
		Middle	2 145.00	14.308
		High	2 172.50	14.306
	16QAM	Low	2 117.50	14.206
		Middle	2 145.00	14.284
		High	2 172.50	14.218
	64QAM	Low	2 117.50	14.289
		Middle	2 145.00	14.268
		High	2 172.50	14.308
256QAM	Low	2 117.50	14.314	
	Middle	2 145.00	14.298	
	High	2 172.50	14.282	
3	QPSK	Low	2 117.50	14.258
		Middle	2 145.00	14.318
		High	2 172.50	14.294
	16QAM	Low	2 117.50	14.223
		Middle	2 145.00	14.301
		High	2 172.50	14.259
	64QAM	Low	2 117.50	14.265
		Middle	2 145.00	14.228
		High	2 172.50	14.377
256QAM	Low	2 117.50	14.256	
	Middle	2 145.00	14.325	
	High	2 172.50	14.316	

## (2 Port) LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier [2 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 115.00	9.4329
		Middle	2 145.00	9.4703
		High	2 175.00	9.5013
	16QAM	Low	2 115.00	9.4617
		Middle	2 145.00	9.4932
		High	2 175.00	9.4746
	64QAM	Low	2 115.00	9.4700
		Middle	2 145.00	9.4608
		High	2 175.00	9.4655
	256QAM	Low	2 115.00	9.4412
		Middle	2 145.00	9.4631
		High	2 175.00	9.4677
1	QPSK	Low	2 115.00	9.4357
		Middle	2 145.00	9.4742
		High	2 175.00	9.4686
	16QAM	Low	2 115.00	9.4851
		Middle	2 145.00	9.5007
		High	2 175.00	9.4956
	64QAM	Low	2 115.00	9.4449
		Middle	2 145.00	9.4566
		High	2 175.00	9.4631
	256QAM	Low	2 115.00	9.4371
		Middle	2 145.00	9.4487
		High	2 175.00	9.4667

## (2 Port) LTE B66 20 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [2 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 130.00	38.325
		Middle	2 145.00	38.442
		High	2 160.00	38.369
	16QAM	Low	2 130.00	38.404
		Middle	2 145.00	38.452
		High	2 160.00	38.480
	64QAM	Low	2 130.00	38.331
		Middle	2 145.00	38.340
		High	2 160.00	38.292
	256QAM	Low	2 130.00	38.346
		Middle	2 145.00	38.353
		High	2 160.00	38.327
1	QPSK	Low	2 130.00	38.332
		Middle	2 145.00	38.330
		High	2 160.00	38.311
	16QAM	Low	2 130.00	38.485
		Middle	2 145.00	38.423
		High	2 160.00	38.411
	64QAM	Low	2 130.00	38.341
		Middle	2 145.00	38.272
		High	2 160.00	38.297
	256QAM	Low	2 130.00	38.252
		Middle	2 145.00	38.300
		High	2 160.00	38.365

## (4 Port) LTE B66 5 MHz 1 Carrier + 5G NR n66 10 MHz 1 Carrier [2 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 117.50	14.335
		Middle	2 145.00	14.403
		High	2 172.50	14.360
	16QAM	Low	2 117.50	14.273
		Middle	2 145.00	14.306
		High	2 172.50	14.356
	64QAM	Low	2 117.50	14.394
		Middle	2 145.00	14.363
		High	2 172.50	14.346
	256QAM	Low	2 117.50	14.355
		Middle	2 145.00	14.390
		High	2 172.50	14.350
1	QPSK	Low	2 117.50	14.328
		Middle	2 145.00	14.355
		High	2 172.50	14.374
	16QAM	Low	2 117.50	14.249
		Middle	2 145.00	14.269
		High	2 172.50	14.332
	64QAM	Low	2 117.50	14.370
		Middle	2 145.00	14.361
		High	2 172.50	14.355
	256QAM	Low	2 117.50	14.349
		Middle	2 145.00	14.378
		High	2 172.50	14.347

2	QPSK	Low	2 117.50	14.321
		Middle	2 145.00	14.356
		High	2 172.50	14.380
	16QAM	Low	2 117.50	14.222
		Middle	2 145.00	14.296
		High	2 172.50	14.342
	64QAM	Low	2 117.50	14.351
		Middle	2 145.00	14.349
		High	2 172.50	14.353
256QAM	Low	2 117.50	14.393	
	Middle	2 145.00	14.390	
	High	2 172.50	14.365	
3	QPSK	Low	2 117.50	14.336
		Middle	2 145.00	14.363
		High	2 172.50	14.361
	16QAM	Low	2 117.50	14.250
		Middle	2 145.00	14.283
		High	2 172.50	14.377
	64QAM	Low	2 117.50	14.330
		Middle	2 145.00	14.380
		High	2 172.50	14.401
256QAM	Low	2 117.50	14.356	
	Middle	2 145.00	14.372	
	High	2 172.50	14.418	

## (4 Port) LTE B66 20 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [2 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 130.00	38.292
		Middle	2 145.00	38.296
		High	2 160.00	38.342
	16QAM	Low	2 130.00	38.447
		Middle	2 145.00	38.463
		High	2 160.00	38.329
	64QAM	Low	2 130.00	38.301
		Middle	2 145.00	38.317
		High	2 160.00	38.375
	256QAM	Low	2 130.00	38.308
		Middle	2 145.00	38.309
		High	2 160.00	38.420
1	QPSK	Low	2 130.00	38.297
		Middle	2 145.00	38.345
		High	2 160.00	38.327
	16QAM	Low	2 130.00	38.546
		Middle	2 145.00	38.536
		High	2 160.00	38.341
	64QAM	Low	2 130.00	38.385
		Middle	2 145.00	38.403
		High	2 160.00	38.336
	256QAM	Low	2 130.00	38.404
		Middle	2 145.00	38.353
		High	2 160.00	38.366

2	QPSK	Low	2 130.00	38.347
		Middle	2 145.00	38.299
		High	2 160.00	38.320
	16QAM	Low	2 130.00	38.498
		Middle	2 145.00	38.484
		High	2 160.00	38.403
	64QAM	Low	2 130.00	38.370
		Middle	2 145.00	38.368
		High	2 160.00	38.363
	256QAM	Low	2 130.00	38.387
		Middle	2 145.00	38.359
		High	2 160.00	38.346
3	QPSK	Low	2 130.00	38.373
		Middle	2 145.00	38.353
		High	2 160.00	38.355
	16QAM	Low	2 130.00	38.413
		Middle	2 145.00	38.530
		High	2 160.00	38.327
	64QAM	Low	2 130.00	38.305
		Middle	2 145.00	38.382
		High	2 160.00	38.330
	256QAM	Low	2 130.00	38.321
		Middle	2 145.00	38.332
		High	2 160.00	38.371

**(2 Port) B2 DSS 20 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier [3 Carrier]**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 945.00	28.914
		Middle	1 960.00	29.035
		High	1 975.00	29.070
	16QAM	Low	1 945.00	29.040
		Middle	1 960.00	29.053
		High	1 975.00	28.963
	64QAM	Low	1 945.00	28.923
		Middle	1 960.00	29.000
		High	1 975.00	29.006
	256QAM	Low	1 945.00	29.028
		Middle	1 960.00	28.883
		High	1 975.00	28.938
1	QPSK	Low	1 945.00	29.071
		Middle	1 960.00	29.038
		High	1 975.00	28.983
	16QAM	Low	1 945.00	29.041
		Middle	1 960.00	29.113
		High	1 975.00	28.970
	64QAM	Low	1 945.00	28.953
		Middle	1 960.00	29.061
		High	1 975.00	29.017
	256QAM	Low	1 945.00	28.982
		Middle	1 960.00	29.003
		High	1 975.00	28.984

**(4 Port) B2 DSS 20 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier [3 Carrier]**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 945.00	28.967
		Middle	1 960.00	28.924
		High	1 975.00	28.993
	16QAM	Low	1 945.00	29.084
		Middle	1 960.00	29.132
		High	1 975.00	29.067
	64QAM	Low	1 945.00	28.992
		Middle	1 960.00	28.978
		High	1 975.00	28.924
	256QAM	Low	1 945.00	28.946
		Middle	1 960.00	29.154
		High	1 975.00	29.069
1	QPSK	Low	1 945.00	28.982
		Middle	1 960.00	29.042
		High	1 975.00	28.916
	16QAM	Low	1 945.00	29.039
		Middle	1 960.00	28.998
		High	1 975.00	28.934
	64QAM	Low	1 945.00	29.018
		Middle	1 960.00	28.988
		High	1 975.00	29.037
	256QAM	Low	1 945.00	28.995
		Middle	1 960.00	29.037
		High	1 975.00	28.965

2	QPSK	Low	1 945.00	29.052
		Middle	1 960.00	28.640
		High	1 975.00	28.994
	16QAM	Low	1 945.00	29.063
		Middle	1 960.00	29.090
		High	1 975.00	28.981
	64QAM	Low	1 945.00	29.007
		Middle	1 960.00	28.683
		High	1 975.00	29.040
256QAM	Low	1 945.00	29.032	
	Middle	1 960.00	28.623	
	High	1 975.00	28.996	
3	QPSK	Low	1 945.00	29.103
		Middle	1 960.00	28.673
		High	1 975.00	28.971
	16QAM	Low	1 945.00	28.882
		Middle	1 960.00	29.092
		High	1 975.00	28.961
	64QAM	Low	1 945.00	28.956
		Middle	1 960.00	28.650
		High	1 975.00	28.978
256QAM	Low	1 945.00	28.939	
	Middle	1 960.00	28.596	
	High	1 975.00	29.049	

## (2 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [3 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 937.50	14.458
		Middle	1 960.00	14.440
		High	1 982.50	14.423
	16QAM	Low	1 937.50	14.469
		Middle	1 960.00	14.495
		High	1 982.50	14.459
	64QAM	Low	1 937.50	14.416
		Middle	1 960.00	14.439
		High	1 982.50	14.410
	256QAM	Low	1 937.50	14.415
		Middle	1 960.00	14.435
		High	1 982.50	14.420
1	QPSK	Low	1 937.50	14.446
		Middle	1 960.00	14.435
		High	1 982.50	14.453
	16QAM	Low	1 937.50	14.469
		Middle	1 960.00	14.447
		High	1 982.50	14.402
	64QAM	Low	1 937.50	14.411
		Middle	1 960.00	14.455
		High	1 982.50	14.441
	256QAM	Low	1 937.50	14.423
		Middle	1 960.00	14.422
		High	1 982.50	14.459

## (2 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [3 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 945.00	29.090
		Middle	1 960.00	29.170
		High	1 975.00	29.175
	16QAM	Low	1 945.00	29.311
		Middle	1 960.00	29.337
		High	1 975.00	29.095
	64QAM	Low	1 945.00	29.137
		Middle	1 960.00	29.141
		High	1 975.00	29.174
	256QAM	Low	1 945.00	29.113
		Middle	1 960.00	29.179
		High	1 975.00	29.151
1	QPSK	Low	1 945.00	29.132
		Middle	1 960.00	29.138
		High	1 975.00	29.225
	16QAM	Low	1 945.00	29.242
		Middle	1 960.00	29.227
		High	1 975.00	29.080
	64QAM	Low	1 945.00	29.144
		Middle	1 960.00	29.128
		High	1 975.00	29.155
	256QAM	Low	1 945.00	29.148
		Middle	1 960.00	29.137
		High	1 975.00	29.159

## (4 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [3 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 937.50	14.449
		Middle	1 960.00	14.438
		High	1 982.50	14.410
	16QAM	Low	1 937.50	14.459
		Middle	1 960.00	14.476
		High	1 982.50	14.457
	64QAM	Low	1 937.50	14.465
		Middle	1 960.00	14.445
		High	1 982.50	14.431
256QAM	Low	1 937.50	14.393	
	Middle	1 960.00	14.427	
	High	1 982.50	14.437	
1	QPSK	Low	1 937.50	14.428
		Middle	1 960.00	14.440
		High	1 982.50	14.450
	16QAM	Low	1 937.50	14.441
		Middle	1 960.00	14.450
		High	1 982.50	14.447
	64QAM	Low	1 937.50	14.489
		Middle	1 960.00	14.426
		High	1 982.50	14.449
256QAM	Low	1 937.50	14.447	
	Middle	1 960.00	14.420	
	High	1 982.50	14.444	

2	QPSK	Low	1 937.50	14.427
		Middle	1 960.00	14.443
		High	1 982.50	14.452
	16QAM	Low	1 937.50	14.481
		Middle	1 960.00	14.475
		High	1 982.50	14.475
	64QAM	Low	1 937.50	14.403
		Middle	1 960.00	14.427
		High	1 982.50	14.459
	256QAM	Low	1 937.50	14.411
		Middle	1 960.00	14.480
		High	1 982.50	14.438
3	QPSK	Low	1 937.50	14.432
		Middle	1 960.00	14.433
		High	1 982.50	14.440
	16QAM	Low	1 937.50	14.461
		Middle	1 960.00	14.476
		High	1 982.50	14.450
	64QAM	Low	1 937.50	14.445
		Middle	1 960.00	14.484
		High	1 982.50	14.470
	256QAM	Low	1 937.50	14.432
		Middle	1 960.00	14.440
		High	1 982.50	14.444

## (4 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [3 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	1 945.00	29.204
		Middle	1 960.00	29.215
		High	1 975.00	29.234
	16QAM	Low	1 945.00	29.218
		Middle	1 960.00	29.256
		High	1 975.00	29.079
	64QAM	Low	1 945.00	29.152
		Middle	1 960.00	29.171
		High	1 975.00	29.120
	256QAM	Low	1 945.00	29.146
		Middle	1 960.00	29.140
		High	1 975.00	29.162
1	QPSK	Low	1 945.00	29.139
		Middle	1 960.00	29.118
		High	1 975.00	29.188
	16QAM	Low	1 945.00	29.245
		Middle	1 960.00	29.249
		High	1 975.00	29.147
	64QAM	Low	1 945.00	29.119
		Middle	1 960.00	29.166
		High	1 975.00	29.197
	256QAM	Low	1 945.00	29.131
		Middle	1 960.00	29.178
		High	1 975.00	29.186

2	QPSK	Low	1 945.00	29.078
		Middle	1 960.00	29.126
		High	1 975.00	29.173
	16QAM	Low	1 945.00	29.152
		Middle	1 960.00	29.211
		High	1 975.00	29.111
	64QAM	Low	1 945.00	29.136
		Middle	1 960.00	29.190
		High	1 975.00	29.151
256QAM	Low	1 945.00	29.150	
	Middle	1 960.00	29.191	
	High	1 975.00	29.088	
3	QPSK	Low	1 945.00	29.199
		Middle	1 960.00	29.184
		High	1 975.00	29.185
	16QAM	Low	1 945.00	29.192
		Middle	1 960.00	29.320
		High	1 975.00	29.126
	64QAM	Low	1 945.00	29.128
		Middle	1 960.00	29.118
		High	1 975.00	29.166
256QAM	Low	1 945.00	29.212	
	Middle	1 960.00	29.085	
	High	1 975.00	29.136	

(2 Port) B66 DSS 20 MHz 9to1 1 Carrier + LTE B66 10 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier  
 [4 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 130.00	38.785
		Middle	2 145.00	38.919
		High	2 160.00	39.018
	16QAM	Low	2 130.00	38.985
		Middle	2 145.00	38.961
		High	2 160.00	38.775
	64QAM	Low	2 130.00	38.879
		Middle	2 145.00	38.945
		High	2 160.00	38.915
	256QAM	Low	2 130.00	38.977
		Middle	2 145.00	38.842
		High	2 160.00	38.761
1	QPSK	Low	2 130.00	38.901
		Middle	2 145.00	38.894
		High	2 160.00	38.969
	16QAM	Low	2 130.00	38.816
		Middle	2 145.00	38.977
		High	2 160.00	38.790
	64QAM	Low	2 130.00	38.999
		Middle	2 145.00	39.033
		High	2 160.00	38.813
	256QAM	Low	2 130.00	38.731
		Middle	2 145.00	38.944
		High	2 160.00	38.917

(4 Port) B66 DSS 20 MHz 9to1 1 Carrier + LTE B66 10 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier  
 [4 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 130.00	38.939
		Middle	2 145.00	38.868
		High	2 160.00	38.936
	16QAM	Low	2 130.00	38.859
		Middle	2 145.00	38.815
		High	2 160.00	38.825
	64QAM	Low	2 130.00	39.031
		Middle	2 145.00	38.982
		High	2 160.00	38.949
	256QAM	Low	2 130.00	38.938
		Middle	2 145.00	38.928
		High	2 160.00	38.798
1	QPSK	Low	2 130.00	38.777
		Middle	2 145.00	38.791
		High	2 160.00	38.893
	16QAM	Low	2 130.00	38.874
		Middle	2 145.00	38.911
		High	2 160.00	38.798
	64QAM	Low	2 130.00	38.903
		Middle	2 145.00	38.780
		High	2 160.00	39.052
	256QAM	Low	2 130.00	38.923
		Middle	2 145.00	38.984
		High	2 160.00	38.898

2	QPSK	Low	2 130.00	38.864
		Middle	2 145.00	38.840
		High	2 160.00	39.004
	16QAM	Low	2 130.00	38.988
		Middle	2 145.00	38.805
		High	2 160.00	38.778
	64QAM	Low	2 130.00	38.755
		Middle	2 145.00	39.088
		High	2 160.00	38.691
256QAM	Low	2 130.00	38.973	
	Middle	2 145.00	38.915	
	High	2 160.00	38.885	
3	QPSK	Low	2 130.00	38.906
		Middle	2 145.00	38.688
		High	2 160.00	38.809
	16QAM	Low	2 130.00	38.937
		Middle	2 145.00	38.954
		High	2 160.00	38.930
	64QAM	Low	2 130.00	38.874
		Middle	2 145.00	38.971
		High	2 160.00	38.822
256QAM	Low	2 130.00	39.053	
	Middle	2 145.00	38.949	
	High	2 160.00	38.883	

**(2 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier [4 Carrier]**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 120.00	19.394
		Middle	2 145.00	19.414
		High	2 170.00	19.429
	16QAM	Low	2 120.00	19.425
		Middle	2 145.00	19.440
		High	2 170.00	19.383
	64QAM	Low	2 120.00	19.377
		Middle	2 145.00	19.414
		High	2 170.00	19.400
	256QAM	Low	2 120.00	19.363
		Middle	2 145.00	19.435
		High	2 170.00	19.420
1	QPSK	Low	2 120.00	19.383
		Middle	2 145.00	19.383
		High	2 170.00	19.428
	16QAM	Low	2 120.00	19.372
		Middle	2 145.00	19.480
		High	2 170.00	19.393
	64QAM	Low	2 120.00	19.386
		Middle	2 145.00	19.411
		High	2 170.00	19.416
	256QAM	Low	2 120.00	19.443
		Middle	2 145.00	19.375
		High	2 170.00	19.415

(2 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 10 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier  
 [4 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 130.00	39.136
		Middle	2 145.00	39.053
		High	2 160.00	39.133
	16QAM	Low	2 130.00	39.161
		Middle	2 145.00	39.058
		High	2 160.00	39.070
	64QAM	Low	2 130.00	39.024
		Middle	2 145.00	39.117
		High	2 160.00	39.083
	256QAM	Low	2 130.00	39.000
		Middle	2 145.00	39.098
		High	2 160.00	39.100
1	QPSK	Low	2 130.00	39.035
		Middle	2 145.00	39.067
		High	2 160.00	39.080
	16QAM	Low	2 130.00	39.128
		Middle	2 145.00	39.184
		High	2 160.00	39.014
	64QAM	Low	2 130.00	39.103
		Middle	2 145.00	39.049
		High	2 160.00	39.109
	256QAM	Low	2 130.00	39.074
		Middle	2 145.00	39.129
		High	2 160.00	39.106

**(4 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier [4 Carrier]**

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 120.00	19.366
		Middle	2 145.00	19.430
		High	2 170.00	19.435
	16QAM	Low	2 120.00	19.404
		Middle	2 145.00	19.419
		High	2 170.00	19.397
	64QAM	Low	2 120.00	19.366
		Middle	2 145.00	19.411
		High	2 170.00	19.357
	256QAM	Low	2 120.00	19.387
		Middle	2 145.00	19.368
		High	2 170.00	19.402
1	QPSK	Low	2 120.00	19.402
		Middle	2 145.00	19.410
		High	2 170.00	19.463
	16QAM	Low	2 120.00	19.422
		Middle	2 145.00	19.410
		High	2 170.00	19.380
	64QAM	Low	2 120.00	19.392
		Middle	2 145.00	19.396
		High	2 170.00	19.427
	256QAM	Low	2 120.00	19.389
		Middle	2 145.00	19.414
		High	2 170.00	19.454

2	QPSK	Low	2 120.00	19.363
		Middle	2 145.00	19.413
		High	2 170.00	19.441
	16QAM	Low	2 120.00	19.417
		Middle	2 145.00	19.374
		High	2 170.00	19.376
	64QAM	Low	2 120.00	19.385
		Middle	2 145.00	19.436
		High	2 170.00	19.403
256QAM	Low	2 120.00	19.396	
	Middle	2 145.00	19.415	
	High	2 170.00	19.415	
3	QPSK	Low	2 120.00	19.386
		Middle	2 145.00	19.375
		High	2 170.00	19.378
	16QAM	Low	2 120.00	19.407
		Middle	2 145.00	19.438
		High	2 170.00	19.365
	64QAM	Low	2 120.00	19.371
		Middle	2 145.00	19.404
		High	2 170.00	19.365
256QAM	Low	2 120.00	19.346	
	Middle	2 145.00	19.428	
	High	2170.00	19.438	

(4 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 10 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier  
 [4 Carrier]

Ant	Mod	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	2 130.00	39.050
		Middle	2 145.00	39.113
		High	2 160.00	39.097
	16QAM	Low	2 130.00	39.157
		Middle	2 145.00	39.145
		High	2 160.00	39.100
	64QAM	Low	2 130.00	39.047
		Middle	2 145.00	39.115
		High	2 160.00	39.160
	256QAM	Low	2 130.00	39.058
		Middle	2 145.00	39.019
		High	2 160.00	39.022
1	QPSK	Low	2 130.00	39.104
		Middle	2 145.00	39.096
		High	2 160.00	39.198
	16QAM	Low	2 130.00	39.064
		Middle	2 145.00	39.176
		High	2 160.00	38.989
	64QAM	Low	2 130.00	39.038
		Middle	2 145.00	39.101
		High	2 160.00	39.097
	256QAM	Low	2 130.00	39.012
		Middle	2 145.00	39.077
		High	2 160.00	39.056

2	QPSK	Low	2 130.00	39.061
		Middle	2 145.00	39.129
		High	2 160.00	39.092
	16QAM	Low	2 130.00	39.128
		Middle	2 145.00	39.038
		High	2 160.00	39.110
	64QAM	Low	2 130.00	39.116
		Middle	2 145.00	39.083
		High	2 160.00	39.139
	256QAM	Low	2 130.00	39.079
		Middle	2 145.00	39.074
		High	2 160.00	39.083
3	QPSK	Low	2 130.00	39.013
		Middle	2 145.00	39.072
		High	2 160.00	39.073
	16QAM	Low	2 130.00	39.085
		Middle	2 145.00	39.166
		High	2 160.00	39.117
	64QAM	Low	2 130.00	39.066
		Middle	2 145.00	39.085
		High	2 160.00	39.105
	256QAM	Low	2 130.00	39.092
		Middle	2 145.00	39.001
		High	2 160.00	39.131

**Tabular Data of Non-Contiguous Occupied Bandwidth**
**(2 Port) B2 DSS 10 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier [2 Carrier]**

Ant	Mod	B2 DSS 10 MHz 9to1		LTE B2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 932.50	4.4986	1 985.00	9.2162	13.715
	16QAM	1 932.50	4.4701	1 985.00	9.1174	13.587
	64QAM	1 932.50	4.5023	1 985.00	9.2095	13.712
	256QAM	1 932.50	4.4952	1 985.00	9.2556	13.751
1	QPSK	1 932.50	4.4987	1 985.00	9.2060	13.705
	16QAM	1 932.50	4.4719	1 985.00	9.1001	13.572
	64QAM	1 932.50	4.4959	1 985.00	9.2153	13.711
	256QAM	1 932.50	4.4962	1 985.00	9.2351	13.731

**(4 Port) B2 DSS 10 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier [2 Carrier]**

Ant	Mod	B2 DSS 10 MHz 9to1		LTE B2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 932.50	4.5042	1 985.00	9.2564	13.761
	16QAM	1 932.50	4.4773	1 985.00	9.1068	13.584
	64QAM	1 932.50	4.4890	1 985.00	9.2309	13.720
	256QAM	1 932.50	4.5048	1 985.00	9.1890	13.694
1	QPSK	1 932.50	4.4976	1 985.00	9.2160	13.714
	16QAM	1 932.50	4.4875	1 985.00	9.0949	13.582
	64QAM	1 932.50	4.5111	1 985.00	9.2624	13.774
	256QAM	1 932.50	4.4944	1 985.00	9.2321	13.727
2	QPSK	1 932.50	4.5010	1 985.00	9.2261	13.727
	16QAM	1 932.50	4.4954	1 985.00	9.1041	13.600
	64QAM	1 932.50	4.5030	1 985.00	9.2299	13.733
	256QAM	1 932.50	4.5019	1 985.00	9.1945	13.696
3	QPSK	1 932.50	4.4997	1 985.00	9.1934	13.693
	16QAM	1 932.50	4.4861	1 985.00	9.0939	13.580
	64QAM	1 932.50	4.4898	1 985.00	9.2739	13.764
	256QAM	1 932.50	4.5085	1 985.00	9.2343	13.743

**(2 Port) LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [2 Carrier]**

Ant	Mod	LTE B2 5 MHz		5G NR n2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 932.50	4.5066	1 987.50	4.4794	8.9860
	16QAM	1 932.50	4.4831	1 987.50	4.5058	8.9890
	64QAM	1 932.50	4.5007	1 987.50	4.4853	8.9860
	256QAM	1 932.50	4.5130	1 987.50	4.4894	9.0025
1	QPSK	1 932.50	4.5038	1 987.50	4.4762	8.9799
	16QAM	1 932.50	4.4874	1 987.50	4.5106	8.9979
	64QAM	1 932.50	4.5031	1 987.50	4.4923	8.9954
	256QAM	1 932.50	4.5186	1 987.50	4.4913	9.0099

**(2 Port) LTE B2 10 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [2 Carrier]**

Ant	Mod	LTE B2 10 MHz		5G NR n2 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 935.00	8.9761	1 980.00	18.950	27.926
	16QAM	1 935.00	9.0108	1 980.00	19.017	28.028
	64QAM	1 935.00	8.9976	1 980.00	18.968	27.966
	256QAM	1 935.00	9.0054	1 980.00	18.995	28.000
1	QPSK	1 935.00	9.0042	1 980.00	18.954	27.958
	16QAM	1 935.00	9.0127	1 980.00	19.085	28.098
	64QAM	1 935.00	9.0093	1 980.00	18.957	27.966
	256QAM	1 935.00	9.0167	1 980.00	18.950	27.967

**(4 Port) LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [2 Carrier]**

Ant	Mod	LTE B2 5 MHz		5G NR n2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 932.50	4.5020	1 987.50	4.4882	8.9902
	16QAM	1 932.50	4.4724	1 987.50	4.4962	8.9686
	64QAM	1 932.50	4.4976	1 987.50	4.5038	9.0014
	256QAM	1 932.50	4.5033	1 987.50	4.4923	8.9955
1	QPSK	1 932.50	4.5148	1 987.50	4.4811	8.9959
	16QAM	1 932.50	4.4878	1 987.50	4.5085	8.9963
	64QAM	1 932.50	4.5070	1 987.50	4.4988	9.0057
	256QAM	1 932.50	4.5087	1 987.50	4.4977	9.0065
2	QPSK	1 932.50	4.5037	1 987.50	4.4826	8.9863
	16QAM	1 932.50	4.4931	1 987.50	4.5159	9.0090
	64QAM	1 932.50	4.5056	1 987.50	4.5082	9.0138
	256QAM	1 932.50	4.5113	1 987.50	4.5015	9.0128
3	QPSK	1 932.50	4.5012	1 987.50	4.4863	8.9875
	16QAM	1 932.50	4.4906	1 987.50	4.5107	9.0013
	64QAM	1 932.50	4.5035	1 987.50	4.5021	9.0056
	256QAM	1 932.50	4.5251	1 987.50	4.4914	9.0165

**(4 Port) LTE B2 10 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [2 Carrier]**

Ant	Mod	LTE B2 10 MHz		5G NR n2 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 935.00	8.9718	1 980.00	18.928	27.900
	16QAM	1 935.00	9.0152	1 980.00	19.008	28.024
	64QAM	1 935.00	9.0006	1 980.00	18.949	27.950
	256QAM	1 935.00	8.9973	1 980.00	18.975	27.972
1	QPSK	1 935.00	8.9812	1 980.00	18.975	27.956
	16QAM	1 935.00	8.9956	1 980.00	19.018	28.014
	64QAM	1 935.00	9.0023	1 980.00	19.007	28.009
	256QAM	1 935.00	9.0116	1 980.00	18.971	27.983
2	QPSK	1 935.00	8.9994	1 980.00	18.968	27.968
	16QAM	1 935.00	8.9936	1 980.00	19.079	28.073
	64QAM	1 935.00	8.9720	1 980.00	18.940	27.912
	256QAM	1 935.00	8.9796	1 980.00	18.959	27.939
3	QPSK	1 935.00	8.9924	1 980.00	18.950	27.942
	16QAM	1 935.00	9.0027	1 980.00	19.020	28.023
	64QAM	1 935.00	8.9985	1 980.00	18.943	27.942
	256QAM	1 935.00	8.9975	1 980.00	18.984	27.982

**(2 Port) B66 DSS 10 MHz 9to1 1 Carrier + LTE B66 5 MHz 1 Carrier [2 Carrier]**

Ant	Mod	B66 DSS 10 MHz 9to1		LTE B66 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 115.00	9.1872	2 177.50	4.5109	13.698
	16QAM	2 115.00	9.0841	2 177.50	4.4877	13.572
	64QAM	2 115.00	9.2529	2 177.50	4.4970	13.750
	256QAM	2 115.00	9.2229	2 177.50	4.4940	13.717
1	QPSK	2 115.00	9.1989	2 177.50	4.4969	13.696
	16QAM	2 115.00	9.1141	2 177.50	4.4859	13.600
	64QAM	2 115.00	9.1589	2 177.50	4.4898	13.649
	256QAM	2 115.00	9.2410	2 177.50	4.5014	13.742

**(4 Port) B66 DSS 10 MHz 9to1 1 Carrier + LTE B66 5 MHz 1 Carrier [2 Carrier]**

Ant	Mod	B66 DSS 10 MHz 9to1		LTE B66 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 115.00	9.2114	2 177.50	4.5139	13.725
	16QAM	2 115.00	9.1351	2 177.50	4.4842	13.619
	64QAM	2 115.00	9.0774	2 177.50	4.4958	13.573
	256QAM	2 115.00	9.1861	2 177.50	4.5000	13.686
1	QPSK	2 115.00	9.2297	2 177.50	4.5027	13.732
	16QAM	2 115.00	9.1092	2 177.50	4.4898	13.599
	64QAM	2 115.00	9.2177	2 177.50	4.5072	13.725
	256QAM	2 115.00	9.1804	2 177.50	4.5065	13.687
2	QPSK	2 115.00	9.2185	2 177.50	4.5053	13.724
	16QAM	2 115.00	9.1276	2 177.50	4.4880	13.616
	64QAM	2 115.00	9.2013	2 177.50	4.4977	13.699
	256QAM	2 115.00	9.1710	2 177.50	4.5095	13.681
3	QPSK	2 115.00	9.1906	2 177.50	4.5047	13.695
	16QAM	2 115.00	9.0912	2 177.50	4.4903	13.581
	64QAM	2 115.00	9.2487	2 177.50	4.4931	13.742
	256QAM	2 115.00	9.1390	2 177.50	4.5188	13.658

**(2 Port) LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier [2 Carrier]**

Ant	Mod	LTE B66 5 MHz		5G NR n66 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 112.50	4.4992	2 177.50	4.4867	8.9859
	16QAM	2 112.50	4.4839	2 177.50	4.5103	8.9941
	64QAM	2 112.50	4.4924	2 177.50	4.4866	8.9790
	256QAM	2 112.50	4.5092	2 177.50	4.4919	9.0011
1	QPSK	2 112.50	4.4968	2 177.50	4.4778	8.9745
	16QAM	2 112.50	4.4876	2 177.50	4.5150	9.0026
	64QAM	2 112.50	4.4990	2 177.50	4.4846	8.9836
	256QAM	2 112.50	4.4938	2 177.50	4.4865	8.9803

**(2 Port) LTE B66 20 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [2 Carrier]**

Ant	Mod	LTE B66 20 MHz		5G NR n66 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 120.00	17.951	2 170.00	18.976	36.927
	16QAM	2 120.00	17.969	2 170.00	19.064	37.033
	64QAM	2 120.00	17.971	2 170.00	18.979	36.950
	256QAM	2 120.00	17.932	2 170.00	18.958	36.890
1	QPSK	2 120.00	17.974	2 170.00	19.003	36.977
	16QAM	2 120.00	17.979	2 170.00	19.024	37.003
	64QAM	2 120.00	17.970	2 170.00	18.985	36.955
	256QAM	2 120.00	17.959	2 170.00	18.934	36.893

**(4 Port) LTE B66 5 MHz 1 Carrier + 5G NR n66 10 MHz 1 Carrier [2 Carrier]**

Ant	Mod	LTE B66 5 MHz		5G NR n66 10 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 112.50	4.4930	2 175.00	9.3066	13.800
	16QAM	2 112.50	4.4646	2 175.00	9.2932	13.758
	64QAM	2 112.50	4.5002	2 175.00	9.3388	13.839
	256QAM	2 112.50	4.5066	2 175.00	9.3283	13.835
1	QPSK	2 112.50	4.4949	2 175.00	9.3268	13.822
	16QAM	2 112.50	4.4839	2 175.00	9.2534	13.737
	64QAM	2 112.50	4.4914	2 175.00	9.3191	13.811
	256QAM	2 112.50	4.5072	2 175.00	9.3291	13.836
2	QPSK	2 112.50	4.5036	2 175.00	9.3255	13.829
	16QAM	2 112.50	4.4765	2 175.00	9.2713	13.748
	64QAM	2 112.50	4.4999	2 175.00	9.3494	13.849
	256QAM	2 112.50	4.5108	2 175.00	9.3559	13.867
3	QPSK	2 112.50	4.4841	2 175.00	9.3328	13.817
	16QAM	2 112.50	4.4859	2 175.00	9.2734	13.759
	64QAM	2 112.50	4.4897	2 175.00	9.3067	13.796
	256QAM	2 112.50	4.4937	2 175.00	9.3642	13.858

**(4 Port) LTE B66 20 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [2 Carrier]**

Ant	Mod	LTE B66 20 MHz		5G NR n66 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 120.00	17.937	2 170.00	18.961	36.898
	16QAM	2 120.00	18.020	2 170.00	19.016	37.037
	64QAM	2 120.00	17.891	2 170.00	18.978	36.869
	256QAM	2 120.00	17.963	2 170.00	18.972	36.935
1	QPSK	2 120.00	17.939	2 170.00	18.931	36.870
	16QAM	2 120.00	17.948	2 170.00	19.066	37.014
	64QAM	2 120.00	17.963	2 170.00	18.993	36.956
	256QAM	2 120.00	17.913	2 170.00	18.963	36.876
2	QPSK	2 120.00	17.923	2 170.00	18.982	36.905
	16QAM	2 120.00	18.054	2 170.00	19.063	37.116
	64QAM	2 120.00	17.973	2 170.00	18.981	36.955
	256QAM	2 120.00	17.915	2 170.00	18.963	36.878
3	QPSK	2 120.00	17.954	2 170.00	18.947	36.902
	16QAM	2 120.00	17.954	2 170.00	19.045	36.999
	64QAM	2 120.00	17.958	2 170.00	18.999	36.958
	256QAM	2 120.00	17.966	2 170.00	18.961	36.927

**(2 Port) B2 DSS 20 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier [3 Carrier] (1C+2C)**

Ant	Mod	B2 DSS 20 MHz 9to1		LTE B2 5 MHz + LTE B2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 940.00	18.691	1 985.00	9.4747	28.165
	16QAM	1 940.00	18.752	1 985.00	9.4274	28.180
	64QAM	1 940.00	18.794	1 985.00	9.4734	28.267
	256QAM	1 940.00	18.661	1 985.00	9.4737	28.135
1	QPSK	1 940.00	18.712	1 985.00	9.5022	28.215
	16QAM	1 940.00	18.548	1 985.00	9.4293	27.977
	64QAM	1 940.00	18.771	1 985.00	9.4732	28.245
	256QAM	1 940.00	18.641	1 985.00	9.4701	28.111

**(2 Port) B2 DSS 20 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier [3 Carrier] (2C+1C)**

Ant	Mod	B2 DSS 20 MHz 9to1 + LTE B2 5 MHz		LTE B2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 935.00	9.4817	1 980.00	18.677	28.159
	16QAM	1 935.00	9.4506	1 980.00	18.818	28.269
	64QAM	1 935.00	9.4726	1 980.00	18.759	28.232
	256QAM	1 935.00	9.4707	1 980.00	18.792	28.262
1	QPSK	1 935.00	9.4818	1 980.00	18.722	28.204
	16QAM	1 935.00	9.4543	1 980.00	18.737	28.191
	64QAM	1 935.00	9.4495	1 980.00	18.723	28.173
	256QAM	1 935.00	9.4823	1 980.00	18.757	28.239

**(4 Port) B2 DSS 20 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier [3 Carrier] (1C+2C)**

Ant	Mod	B2 DSS 20 MHz 9to1		LTE B2 5 MHz + LTE B2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 940.00	18.781	1 985.00	9.4795	28.260
	16QAM	1 940.00	18.829	1 985.00	9.4640	28.293
	64QAM	1 940.00	18.761	1 985.00	9.4845	28.246
	256QAM	1 940.00	18.648	1 985.00	9.4714	28.120
1	QPSK	1 940.00	18.827	1 985.00	9.4735	28.300
	16QAM	1 940.00	18.860	1 985.00	9.4459	28.306
	64QAM	1 940.00	18.837	1 985.00	9.4716	28.308
	256QAM	1 940.00	18.742	1 985.00	9.4616	28.204
2	QPSK	1 940.00	18.798	1 985.00	9.4664	28.265
	16QAM	1 940.00	18.694	1 985.00	9.4877	28.181
	64QAM	1 940.00	18.766	1 985.00	9.4799	28.246
	256QAM	1 940.00	18.837	1 985.00	9.4643	28.301
3	QPSK	1 940.00	18.825	1 985.00	9.4969	28.321
	16QAM	1 940.00	18.870	1 985.00	9.4715	28.341
	64QAM	1 940.00	18.796	1 985.00	9.4729	28.269
	256QAM	1 940.00	18.819	1 985.00	9.4902	28.309

**(4 Port) B2 DSS 20 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier [3 Carrier] (2C+1C)**

Ant	Mod	B2 DSS 20 MHz 9to1 + LTE B2 5 MHz		LTE B2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 935.00	9.4817	1 980.00	18.717	28.199
	16QAM	1 935.00	9.4461	1 980.00	18.769	28.215
	64QAM	1 935.00	9.4647	1 980.00	18.663	28.128
	256QAM	1 935.00	9.4710	1 980.00	18.799	28.270
1	QPSK	1 935.00	9.4902	1 980.00	18.826	28.316
	16QAM	1 935.00	9.4265	1 980.00	18.749	28.176
	64QAM	1 935.00	9.4596	1 980.00	18.722	28.182
	256QAM	1 935.00	9.4597	1 980.00	18.750	28.210
2	QPSK	1 935.00	9.4729	1 980.00	18.668	28.141
	16QAM	1 935.00	9.4285	1 980.00	18.817	28.246
	64QAM	1 935.00	9.4486	1 980.00	18.824	28.273
	256QAM	1 935.00	9.4745	1 980.00	18.633	28.107
3	QPSK	1 935.00	9.4651	1 980.00	18.825	28.290
	16QAM	1 935.00	9.4606	1 980.00	18.730	28.191
	64QAM	1 935.00	9.4566	1 980.00	18.805	28.261
	256QAM	1 935.00	9.4822	1 980.00	18.856	28.338

**(2 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [3 Carrier] (1C+2C)**

Ant	Mod	LTE B2 5 MHz		LTE B2 5 MHz + 5G NR n2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 932.50	4.4964	1 985.00	9.4715	13.968
	16QAM	1 932.50	4.4898	1 985.00	9.4502	13.940
	64QAM	1 932.50	4.5030	1 985.00	9.4520	13.955
	256QAM	1 932.50	4.5295	1 985.00	9.4543	13.984
1	QPSK	1 932.50	4.4970	1 985.00	9.4873	13.984
	16QAM	1 932.50	4.4882	1 985.00	9.4728	13.961
	64QAM	1 932.50	4.4947	1 985.00	9.4548	13.950
	256QAM	1 932.50	4.5129	1 985.00	9.4591	13.972

**(2 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [3 Carrier] (2C+1C)**

Ant	Mod	LTE B2 5 MHz + LTE B2 5 MHz		5G NR n2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 935.00	9.4590	1 987.50	4.4857	13.945
	16QAM	1 935.00	9.4346	1 987.50	4.5055	13.940
	64QAM	1 935.00	9.4645	1 987.50	4.5014	13.966
	256QAM	1 935.00	9.5010	1 987.50	4.4961	13.997
1	QPSK	1 935.00	9.4738	1 987.50	4.4792	13.953
	16QAM	1 935.00	9.4592	1 987.50	4.5061	13.965
	64QAM	1 935.00	9.4650	1 987.50	4.4880	13.953
	256QAM	1 935.00	9.4860	1 987.50	4.4948	13.981

**(2 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [3 Carrier] (1C+2C)**

Ant	Mod	LTE B2 5 MHz		LTE B2 5 MHz + 5G NR n2 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 932.50	4.5064	1 977.50	24.152	28.659
	16QAM	1 932.50	4.4828	1 977.50	24.173	28.656
	64QAM	1 932.50	4.5015	1 977.50	24.131	28.633
	256QAM	1 932.50	4.5160	1 977.50	24.162	28.678
1	QPSK	1 932.50	4.4909	1 977.50	24.237	28.728
	16QAM	1 932.50	4.4802	1 977.50	24.148	28.628
	64QAM	1 932.50	4.5059	1 977.50	24.216	28.722
	256QAM	1 932.50	4.5009	1 977.50	24.168	28.669

**(2 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [3 Carrier] (2C+1C)**

Ant	Mod	LTE B2 5 MHz + LTE B2 5 MHz		5G NR n2 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 942.50	24.180	1 987.50	4.5121	28.692
	16QAM	1 942.50	24.235	1 987.50	4.4775	28.712
	64QAM	1 942.50	24.163	1 987.50	4.5007	28.664
	256QAM	1 942.50	24.165	1 987.50	4.5027	28.668
1	QPSK	1 942.50	24.137	1 987.50	4.5134	28.650
	16QAM	1 942.50	24.331	1 987.50	4.4963	28.827
	64QAM	1 942.50	24.181	1 987.50	4.5033	28.684
	256QAM	1 942.50	24.167	1 987.50	4.5034	28.671

**(4 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [3 Carrier] (1C+2C)**

Ant	Mod	LTE B2 5 MHz		LTE B2 5 MHz + 5G NR n2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 932.50	4.5050	1 985.00	9.4692	13.974
	16QAM	1 932.50	4.4866	1 985.00	9.4958	13.982
	64QAM	1 932.50	4.4994	1 985.00	9.4644	13.964
	256QAM	1 932.50	4.5052	1 985.00	9.4751	13.980
1	QPSK	1 932.50	4.4982	1 985.00	9.4852	13.983
	16QAM	1 932.50	4.4860	1 985.00	9.4841	13.970
	64QAM	1 932.50	4.4997	1 985.00	9.4795	13.979
	256QAM	1 932.50	4.5228	1 985.00	9.4730	13.996
2	QPSK	1 932.50	4.4995	1 985.00	9.4643	13.964
	16QAM	1 932.50	4.4874	1 985.00	9.4817	13.969
	64QAM	1 932.50	4.5015	1 985.00	9.4687	13.970
	256QAM	1 932.50	4.5139	1 985.00	9.4654	13.979
3	QPSK	1 932.50	4.5018	1 985.00	9.4813	13.983
	16QAM	1 932.50	4.4893	1 985.00	9.5003	13.990
	64QAM	1 932.50	4.4964	1 985.00	9.4331	13.930
	256QAM	1 932.50	4.5200	1 985.00	9.4770	13.997

**(4 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [3 Carrier] (2C+1C)**

Ant	Mod	LTE B2 5 MHz + LTE B2 5 MHz		5G NR n2 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 935.00	9.4691	1 987.50	4.4838	13.953
	16QAM	1 935.00	9.4375	1 987.50	4.5115	13.949
	64QAM	1 935.00	9.4575	1 987.50	4.4913	13.949
	256QAM	1 935.00	9.4889	1 987.50	4.4924	13.981
1	QPSK	1 935.00	9.4763	1 987.50	4.4897	13.966
	16QAM	1 935.00	9.4564	1 987.50	4.5074	13.964
	64QAM	1 935.00	9.4769	1 987.50	4.4976	13.974
	256QAM	1 935.00	9.4811	1 987.50	4.4928	13.974
2	QPSK	1 935.00	9.4647	1 987.50	4.4892	13.954
	16QAM	1 935.00	9.5089	1 987.50	4.5099	14.019
	64QAM	1 935.00	9.4547	1 987.50	4.4946	13.949
	256QAM	1 935.00	9.4925	1 987.50	4.4929	13.985
3	QPSK	1 935.00	9.4823	1 987.50	4.4860	13.968
	16QAM	1 935.00	9.4939	1 987.50	4.5063	14.000
	64QAM	1 935.00	9.4851	1 987.50	4.5010	13.986
	256QAM	1 935.00	9.4740	1 987.50	4.4944	13.968

**(4 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [3 Carrier] (1C+2C)**

Ant	Mod	LTE B2 5 MHz		LTE B2 5 MHz + 5G NR n2 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 932.50	4.5000	1 977.50	24.202	28.702
	16QAM	1 932.50	4.4568	1 977.50	24.187	28.644
	64QAM	1 932.50	4.5029	1 977.50	24.157	28.660
	256QAM	1 932.50	4.5154	1 977.50	24.203	28.718
1	QPSK	1 932.50	4.4950	1 977.50	24.158	28.653
	16QAM	1 932.50	4.4839	1 977.50	24.142	28.626
	64QAM	1 932.50	4.4942	1 977.50	24.196	28.690
	256QAM	1 932.50	4.5202	1 977.50	24.220	28.740
2	QPSK	1 932.50	4.5043	1 977.50	24.143	28.647
	16QAM	1 932.50	4.4778	1 977.50	24.073	28.551
	64QAM	1 932.50	4.4996	1 977.50	24.128	28.628
	256QAM	1 932.50	4.5175	1 977.50	24.186	28.703
3	QPSK	1 932.50	4.4872	1 977.50	24.152	28.639
	16QAM	1 932.50	4.4774	1 977.50	24.150	28.628
	64QAM	1 932.50	4.4986	1 977.50	24.156	28.655
	256QAM	1 932.50	4.5087	1 977.50	24.146	28.655

**(4 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [3 Carrier] (2C+1C)**

Ant	Mod	LTE B2 5 MHz + LTE B2 5 MHz		5G NR n2 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	1 942.50	24.169	1 987.50	4.5079	28.677
	16QAM	1 942.50	24.225	1 987.50	4.4855	28.710
	64QAM	1 942.50	24.166	1 987.50	4.5045	28.671
	256QAM	1 942.50	24.159	1 987.50	4.5130	28.672
1	QPSK	1 942.50	24.116	1 987.50	4.5218	28.638
	16QAM	1 942.50	24.262	1 987.50	4.4924	28.754
	64QAM	1 942.50	24.148	1 987.50	4.5034	28.652
	256QAM	1 942.50	24.160	1 987.50	4.5032	28.663
2	QPSK	1 942.50	24.191	1 987.50	4.5158	28.707
	16QAM	1 942.50	24.271	1 987.50	4.4944	28.766
	64QAM	1 942.50	24.231	1 987.50	4.5016	28.733
	256QAM	1 942.50	24.139	1 987.50	4.5023	28.641
3	QPSK	1 942.50	24.167	1 987.50	4.5133	28.680
	16QAM	1 942.50	24.245	1 987.50	4.4822	28.727
	64QAM	1 942.50	24.143	1 987.50	4.5010	28.644
	256QAM	1 942.50	24.217	1 987.50	4.5030	28.720

**(2 Port) B66 DSS 20 MHz 9to1 1 Carrier + LTE B66 10 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier [4 Carrier] (1C+3C)**

Ant	Mod	B66 DSS 20 MHz 9to1		LTE B66 10 MHz + LTE B66 5 MHz + LTE B66 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 112.50	4.4919	2 162.50	33.902	38.394
	16QAM	2 112.50	4.4846	2 162.50	33.927	38.411
	64QAM	2 112.50	4.5009	2 162.50	33.887	38.388
	256QAM	2 112.50	4.5036	2 162.50	33.932	38.435
1	QPSK	2 112.50	4.4944	2 162.50	33.952	38.446
	16QAM	2 112.50	4.4786	2 162.50	33.894	38.372
	64QAM	2 112.50	4.5033	2 162.50	33.996	38.499
	256QAM	2 112.50	4.5108	2 162.50	33.897	38.407

**(2 Port) B66 DSS 20 MHz 9to1 1 Carrier + LTE B66 10 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier [4 Carrier] (3C+1C)**

Ant	Mod	B66 DSS 20 MHz 9to1 + LTE B66 10 MHz + LTE B66 5 MHz		LTE B66 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 127.50	33.886	2 177.50	4.5055	38.392
	16QAM	2 127.50	33.941	2 177.50	4.5057	38.447
	64QAM	2 127.50	33.869	2 177.50	4.5276	38.397
	256QAM	2 127.50	34.014	2 177.50	4.5231	38.537
1	QPSK	2 127.50	33.983	2 177.50	4.5090	38.492
	16QAM	2 127.50	33.883	2 177.50	4.5064	38.389
	64QAM	2 127.50	33.891	2 177.50	4.5232	38.414
	256QAM	2 127.50	33.736	2 177.50	4.5079	38.244

(4 Port) B66 DSS 20 MHz 9to1 1 Carrier + LTE B66 10 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier  
 [4 Carrier] (1C+3C)

Ant	Mod	B66 DSS 20 MHz 9to1		LTE B66 10 MHz + LTE B66 5 MHz + LTE B66 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 112.50	4.5006	2 162.50	33.997	38.498
	16QAM	2 112.50	4.4725	2 162.50	33.837	38.310
	64QAM	2 112.50	4.5072	2 162.50	33.920	38.428
	256QAM	2 115.00	4.4924	2 177.50	33.915	38.407
1	QPSK	2 112.50	4.4933	2 162.50	33.947	38.440
	16QAM	2 112.50	4.4715	2 162.50	33.903	38.375
	64QAM	2 112.50	4.4978	2 162.50	34.010	38.508
	256QAM	2 112.50	4.4964	2 162.50	33.899	38.395
2	QPSK	2 112.50	4.4991	2 162.50	33.945	38.444
	16QAM	2 112.50	4.4887	2 162.50	33.944	38.433
	64QAM	2 112.50	4.4936	2 162.50	33.943	38.437
	256QAM	2 112.50	4.4983	2 162.50	33.954	38.453
3	QPSK	2 112.50	4.5070	2 162.50	33.949	38.456
	16QAM	2 112.50	4.4767	2 162.50	33.757	38.234
	64QAM	2 112.50	4.5002	2 162.50	33.867	38.367
	256QAM	2 112.50	4.5054	2 162.50	33.892	38.398

**(4 Port) B66 DSS 20 MHz 9to1 1 Carrier + LTE B66 10 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier [4 Carrier] (3C+1C)**

Ant	Mod	B66 DSS 20 MHz 9to1 + LTE B66 10 MHz + LTE B66 5 MHz		LTE B66 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 127.50	33.838	2 177.50	4.5124	38.350
	16QAM	2 127.50	33.998	2 177.50	4.4921	38.490
	64QAM	2 127.50	33.896	2 177.50	4.5103	38.406
	256QAM	2 112.50	33.891	2 162.50	4.5049	38.396
1	QPSK	2 127.50	33.937	2 177.50	4.5093	38.446
	16QAM	2 127.50	33.681	2 177.50	4.4791	38.160
	64QAM	2 127.50	33.815	2 177.50	4.5098	38.324
	256QAM	2 127.50	33.909	2 177.50	4.5007	38.410
2	QPSK	2 127.50	33.854	2 177.50	4.5068	38.361
	16QAM	2 127.50	34.019	2 177.50	4.4900	38.509
	64QAM	2 127.50	33.829	2 177.50	4.5115	38.341
	256QAM	2 127.50	33.925	2 177.50	4.5043	38.429
3	QPSK	2 127.50	33.801	2 177.50	4.5200	38.321
	16QAM	2 127.50	34.057	2 177.50	4.4809	38.538
	64QAM	2 127.50	33.899	2 177.50	4.5156	38.415
	256QAM	2 127.50	33.940	2 177.50	4.5078	38.448

**(2 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier  
[4 Carrier] (1C+3C)**

Ant	Mod	LTE B66 5 MHz		LTE B66 5 MHz + LTE B66 5 MHz + 5G NR n66 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 112.50	4.5031	2 172.50	14.464	18.968
	16QAM	2 112.50	4.4820	2 172.50	14.443	18.925
	64QAM	2 112.50	4.4979	2 172.50	14.448	18.946
	256QAM	2 112.50	4.5051	2 172.50	14.444	18.949
1	QPSK	2 112.50	4.5024	2 172.50	14.452	18.955
	16QAM	2 112.50	4.4886	2 172.50	14.415	18.903
	64QAM	2 112.50	4.4947	2 172.50	14.442	18.936
	256QAM	2 112.50	4.5178	2 172.50	14.456	18.973

**(2 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier  
[4 Carrier] (3C+1C)**

Ant	Mod	LTE B66 5 MHz + LTE B66 5 MHz + LTE B66 5 MHz		5G NR n66 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 117.50	14.394	2 177.50	4.5018	18.895
	16QAM	2 117.50	14.429	2 177.50	4.4857	18.915
	64QAM	2 117.50	14.417	2 177.50	4.5053	18.922
	256QAM	2 117.50	14.413	2 177.50	4.5050	18.918
1	QPSK	2 117.50	14.377	2 177.50	4.4986	18.876
	16QAM	2 117.50	14.487	2 177.50	4.4770	18.964
	64QAM	2 117.50	14.436	2 177.50	4.4981	18.934
	256QAM	2 117.50	14.421	2 177.50	4.5000	18.921

**(2 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 10 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier  
[4 Carrier] (1C+3C)**

Ant	Mod	LTE B66 5 MHz		LTE B66 5 MHz + LTE B66 10 MHz + 5G NR n66 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 112.50	4.5036	2 162.50	34.137	38.640
	16QAM	2 112.50	4.4757	2 162.50	34.101	38.577
	64QAM	2 112.50	4.5008	2 162.50	34.117	38.618
	256QAM	2 112.50	4.5035	2 162.50	34.098	38.602
1	QPSK	2 112.50	4.5069	2 162.50	34.116	38.623
	16QAM	2 112.50	4.4783	2 162.50	34.140	38.618
	64QAM	2 112.50	4.4927	2 162.50	34.112	38.604
	256QAM	2 112.50	4.5020	2 162.50	34.089	38.591

**(2 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 10 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier  
[4 Carrier] (3C+1C)**

Ant	Mod	LTE B66 5 MHz + LTE B66 5 MHz + LTE B66 10 MHz		5G NR n66 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 127.50	34.042	2 177.50	4.5121	38.554
	16QAM	2 127.50	34.080	2 177.50	4.4913	38.571
	64QAM	2 127.50	34.104	2 177.50	4.5009	38.605
	256QAM	2 127.50	34.094	2 177.50	4.5070	38.601
1	QPSK	2 127.50	34.053	2 177.50	4.5202	38.573
	16QAM	2 127.50	34.097	2 177.50	4.4822	38.580
	64QAM	2 127.50	34.023	2 177.50	4.5016	38.524
	256QAM	2 127.50	34.113	2 177.50	4.5012	38.615

(4 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier  
 [4 Carrier] (1C+3C)

Ant	Mod	LTE B66 5 MHz		LTE B66 5 MHz + LTE B66 5 MHz + 5G NR n66 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 112.50	4.5007	2 172.50	14.453	18.954
	16QAM	2 112.50	4.4738	2 172.50	14.342	18.816
	64QAM	2 112.50	4.4921	2 172.50	14.454	18.946
	256QAM	2 112.50	4.5077	2 172.50	14.455	18.963
1	QPSK	2 112.50	4.4917	2 172.50	14.455	18.947
	16QAM	2 112.50	4.4747	2 172.50	14.444	18.919
	64QAM	2 112.50	4.4949	2 172.50	14.439	18.934
	256QAM	2 112.50	4.5124	2 172.50	14.465	18.977
2	QPSK	2 112.50	4.4944	2 172.50	14.462	18.956
	16QAM	2 112.50	4.4832	2 172.50	14.412	18.895
	64QAM	2 112.50	4.4922	2 172.50	14.451	18.944
	256QAM	2 112.50	4.5001	2 172.50	14.474	18.974
3	QPSK	2 112.50	4.4873	2 172.50	14.433	18.921
	16QAM	2 112.50	4.4722	2 172.50	14.467	18.939
	64QAM	2 112.50	4.4943	2 172.50	14.482	18.976
	256QAM	2 112.50	4.5074	2 172.50	14.466	18.973

(4 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier  
 [4 Carrier] (3C+1C)

Ant	Mod	LTE B66 5 MHz + LTE B66 5 MHz + LTE B66 5 MHz		5G NR n66 5 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 117.50	14.389	2 177.50	4.4981	18.887
	16QAM	2 117.50	14.437	2 177.50	4.4900	18.927
	64QAM	2 117.50	14.420	2 177.50	4.5047	18.924
	256QAM	2 117.50	14.441	2 177.50	4.5063	18.948
1	QPSK	2 117.50	14.408	2 177.50	4.4965	18.905
	16QAM	2 117.50	14.436	2 177.50	4.4936	18.930
	64QAM	2 117.50	14.398	2 177.50	4.4939	18.892
	256QAM	2 117.50	14.432	2 177.50	4.5077	18.940
2	QPSK	2 117.50	14.443	2 177.50	4.5077	18.951
	16QAM	2 117.50	14.430	2 177.50	4.4867	18.917
	64QAM	2 117.50	14.439	2 177.50	4.4981	18.937
	256QAM	2 117.50	14.401	2 177.50	4.5075	18.909
3	QPSK	2 117.50	14.465	2 177.50	4.4989	18.964
	16QAM	2 117.50	14.448	2 177.50	4.4822	18.931
	64QAM	2 117.50	14.459	2 177.50	4.5009	18.960
	256QAM	2 117.50	14.399	2 177.50	4.5052	18.904

(4 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 10 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier  
 [4 Carrier] (1C+3C)

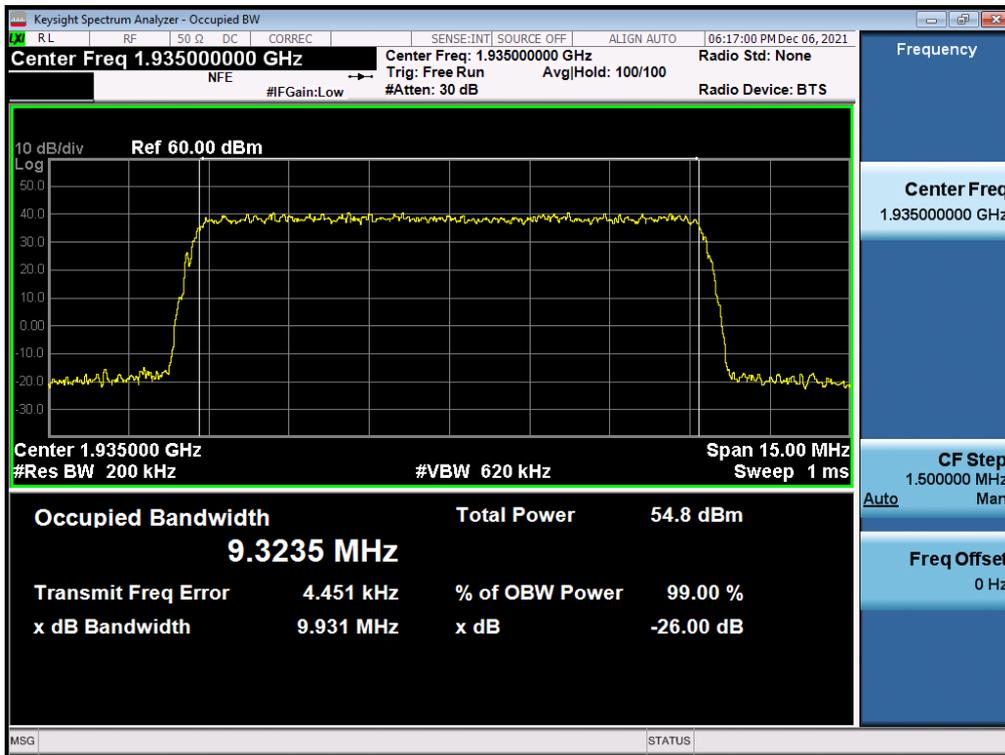
Ant	Mod	LTE B66 5 MHz		LTE B66 5 MHz + LTE B66 10 MHz + 5G NR n66 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 112.50	4.4977	2 162.50	34.081	38.579
	16QAM	2 112.50	4.4850	2 162.50	34.025	38.510
	64QAM	2 112.50	4.4841	2 162.50	34.132	38.617
	256QAM	2 112.50	4.5062	2 162.50	34.129	38.635
1	QPSK	2 112.50	4.4896	2 162.50	34.216	38.705
	16QAM	2 112.50	4.4826	2 162.50	34.047	38.530
	64QAM	2 112.50	4.4958	2 162.50	34.111	38.607
	256QAM	2 112.50	4.5001	2 162.50	34.098	38.598
2	QPSK	2 112.50	4.4987	2 162.50	34.155	38.654
	16QAM	2 112.50	4.4927	2 162.50	34.133	38.626
	64QAM	2 112.50	4.5055	2 162.50	34.088	38.593
	256QAM	2 112.50	4.5068	2 162.50	34.166	38.673
3	QPSK	2 112.50	4.4918	2 162.50	34.156	38.648
	16QAM	2 112.50	4.4762	2 162.50	34.118	38.594
	64QAM	2 112.50	4.4912	2 162.50	34.137	38.628
	256QAM	2 112.50	4.5070	2 162.50	34.095	38.602

(4 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 10 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier  
 [4 Carrier] (3C+1C)

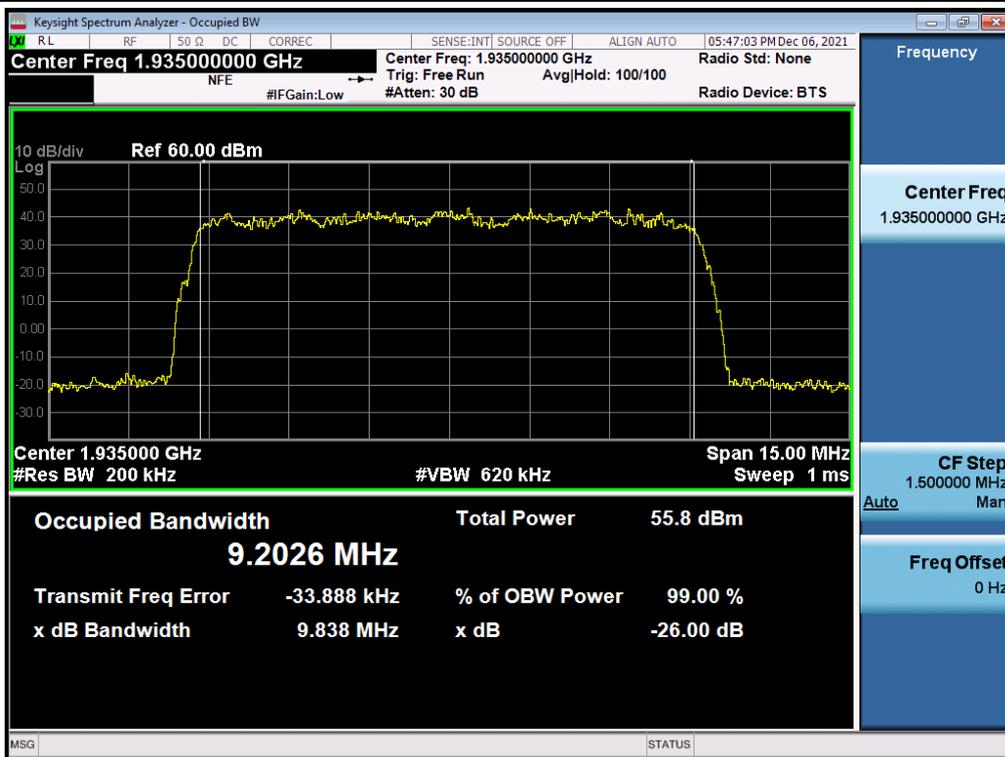
Ant	Mod	LTE B66 5 MHz + LTE B66 5 MHz + LTE B66 10 MHz		5G NR n66 20 MHz		Total OBW (MHz)
		Frequency (MHz)	Measured Value (MHz)	Frequency (MHz)	Measured Value (MHz)	
0	QPSK	2 127.50	33.990	2 177.50	4.5107	38.501
	16QAM	2 127.50	34.180	2 177.50	4.4867	38.666
	64QAM	2 127.50	34.074	2 177.50	4.5142	38.589
	256QAM	2 127.50	34.124	2 177.50	4.5130	38.637
1	QPSK	2 127.50	34.054	2 177.50	4.5126	38.566
	16QAM	2 127.50	34.183	2 177.50	4.4927	38.675
	64QAM	2 127.50	34.083	2 177.50	4.5186	38.602
	256QAM	2 127.50	34.047	2 177.50	4.5218	38.569
2	QPSK	2 127.50	34.027	2 177.50	4.5127	38.540
	16QAM	2 127.50	34.160	2 177.50	4.4770	38.637
	64QAM	2 127.50	34.011	2 177.50	4.5040	38.515
	256QAM	2 127.50	34.076	2 177.50	4.5093	38.585
3	QPSK	2 127.50	34.066	2 177.50	4.5164	38.582
	16QAM	2 127.50	34.124	2 177.50	4.4865	38.610
	64QAM	2 127.50	34.041	2 177.50	4.5135	38.555
	256QAM	2 127.50	34.031	2 177.50	4.5077	38.539

## Plot Data of Occupied bandwidth

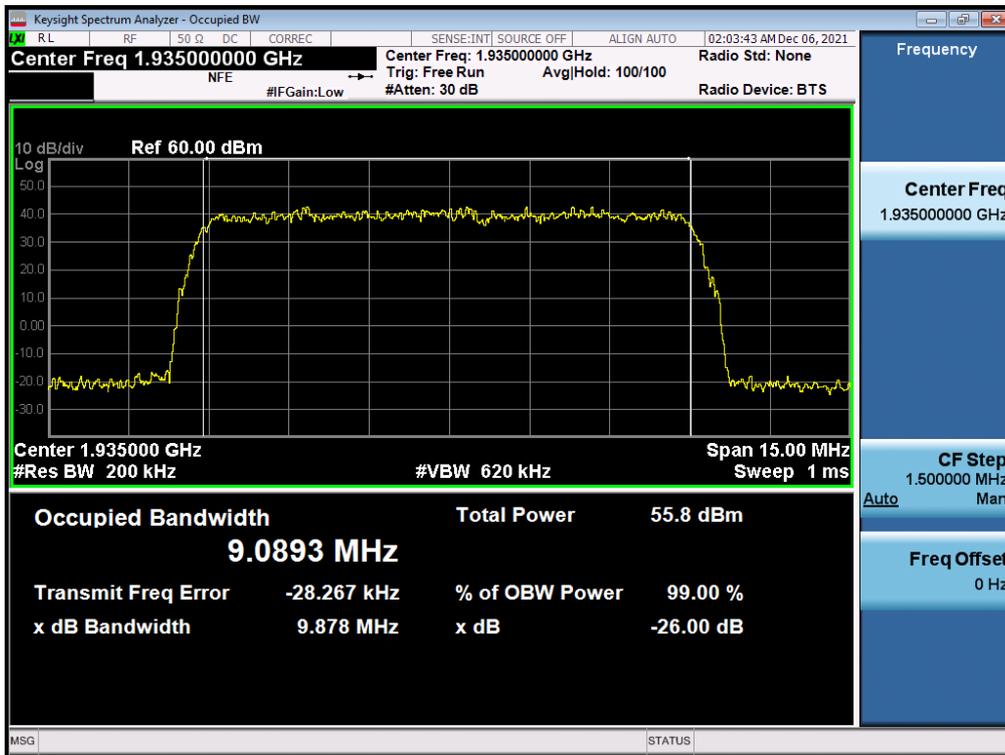
## Antenna 0 / (2 Port) B2 DSS 10 MHz 2to8 1 Carrier / 256QAM / Low



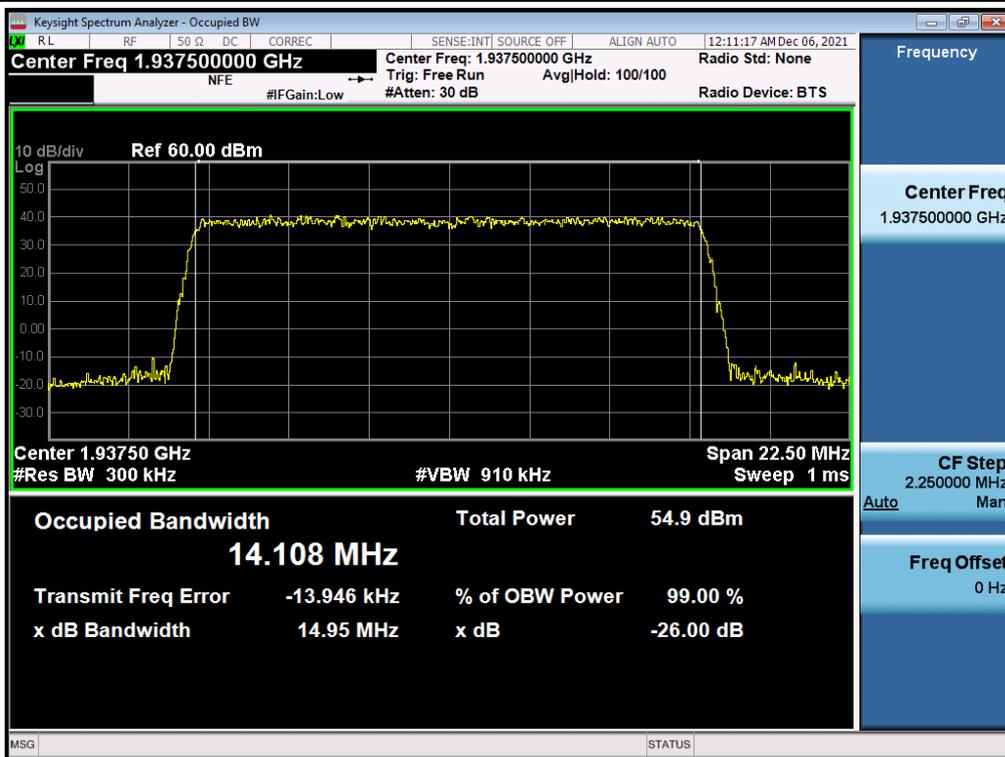
## Antenna 0 / (2 Port) B2 DSS 10 MHz 5to5 1 Carrier / 16QAM / Low



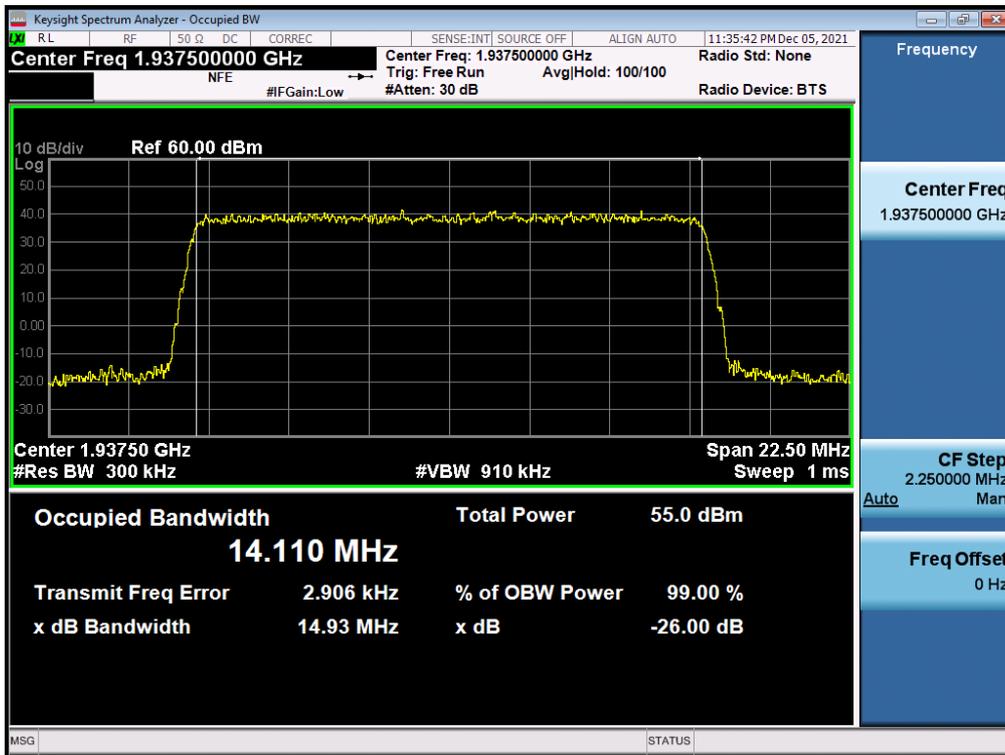
Antenna 0 / (2 Port) B2 DSS 10 MHz 9to1 1 Carrier / 16QAM / Low



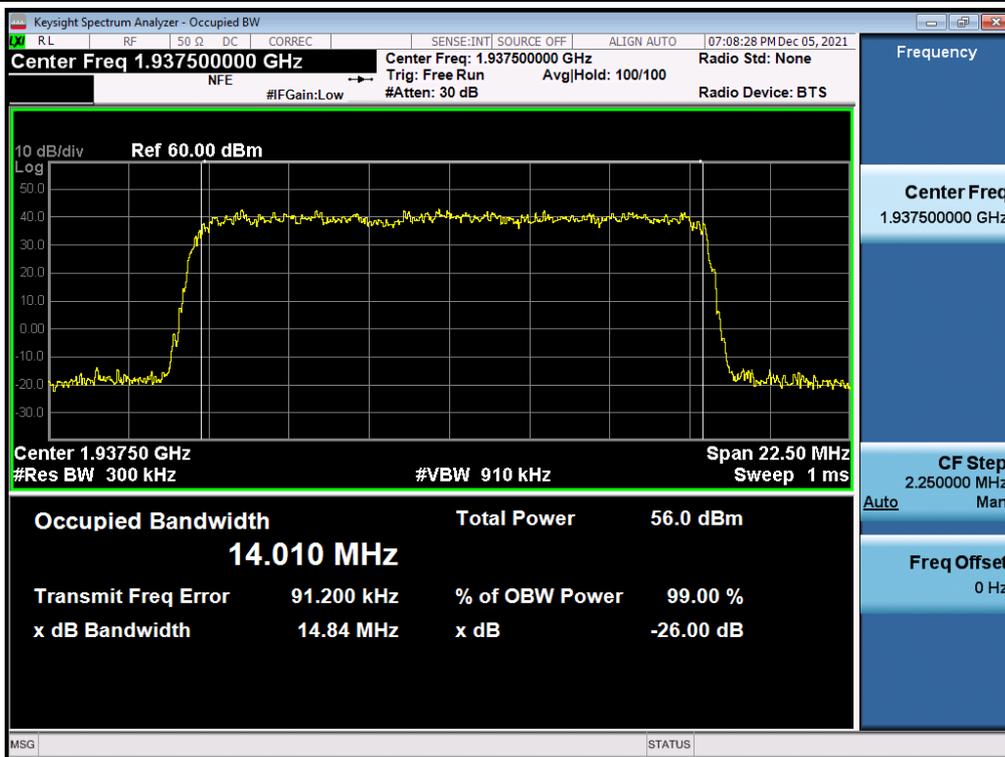
Antenna 1 / (2 Port) B2 DSS 15 MHz 2to8 1 Carrier / 256QAM / Low



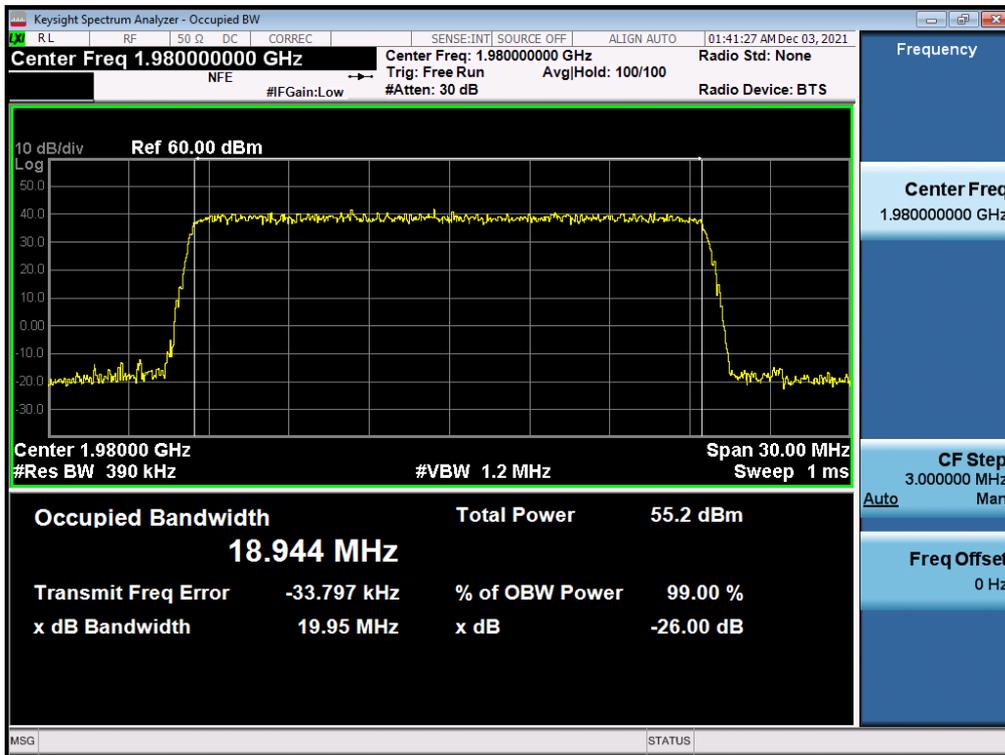
Antenna 1 / (2 Port) B2 DSS 15 MHz 5to5 1 Carrier / 256QAM / Low



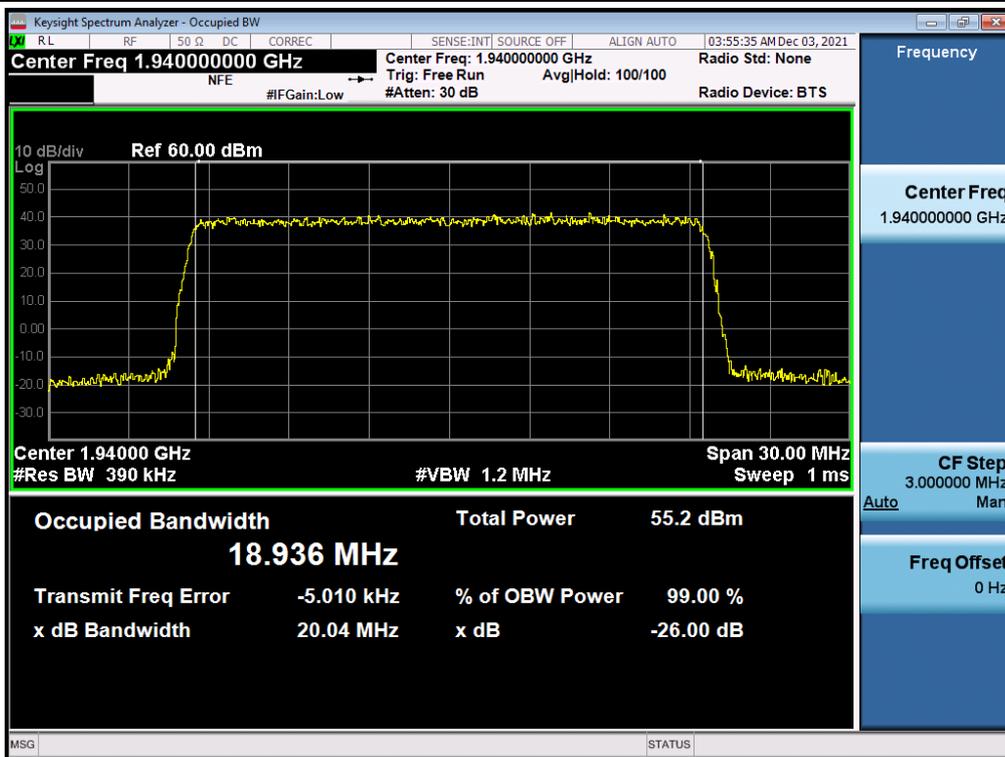
Antenna 0 / (2 Port) B2 DSS 15 MHz 9to1 1 Carrier / 16QAM / Low



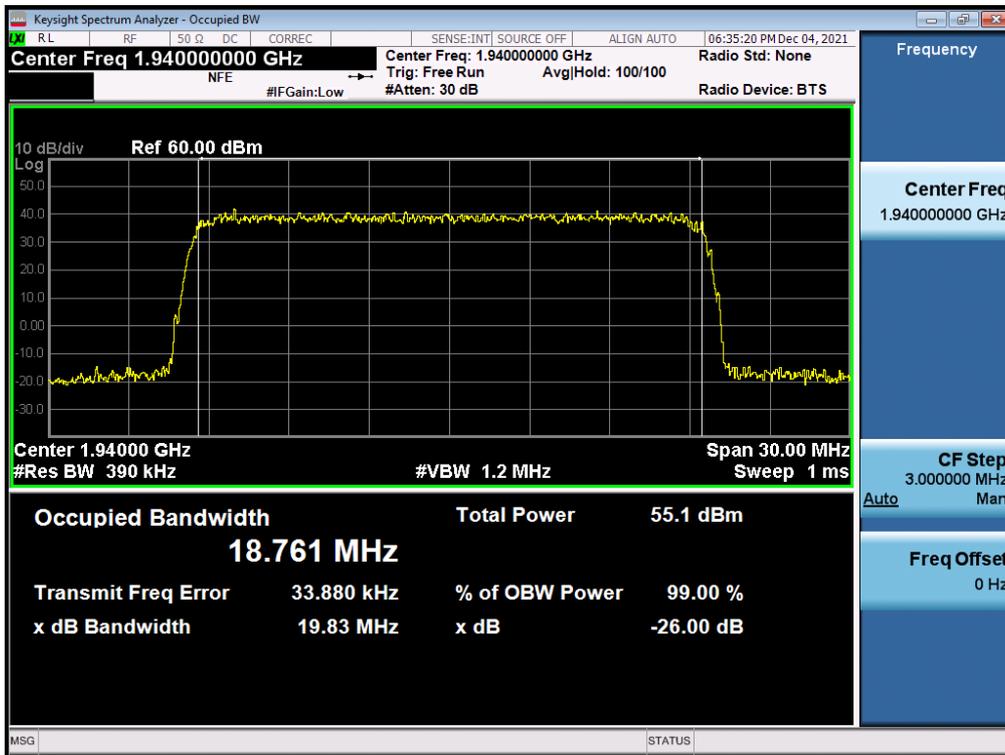
Antenna 0 / (2 Port) B2 DSS 20 MHz 2to8 1 Carrier / 64QAM / High



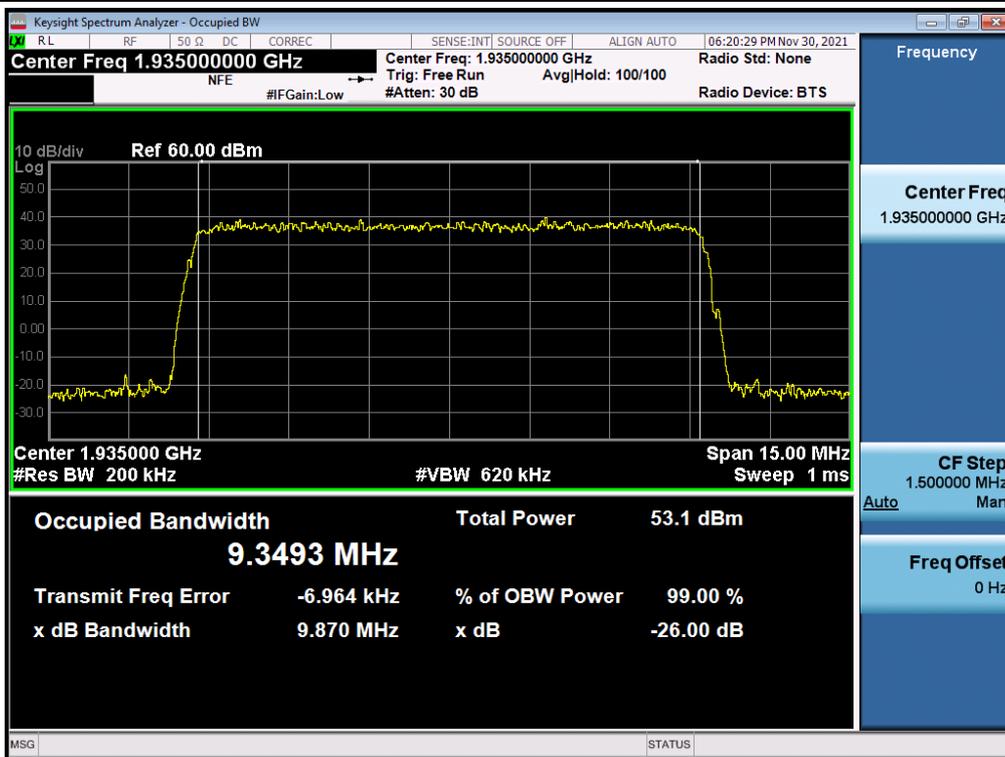
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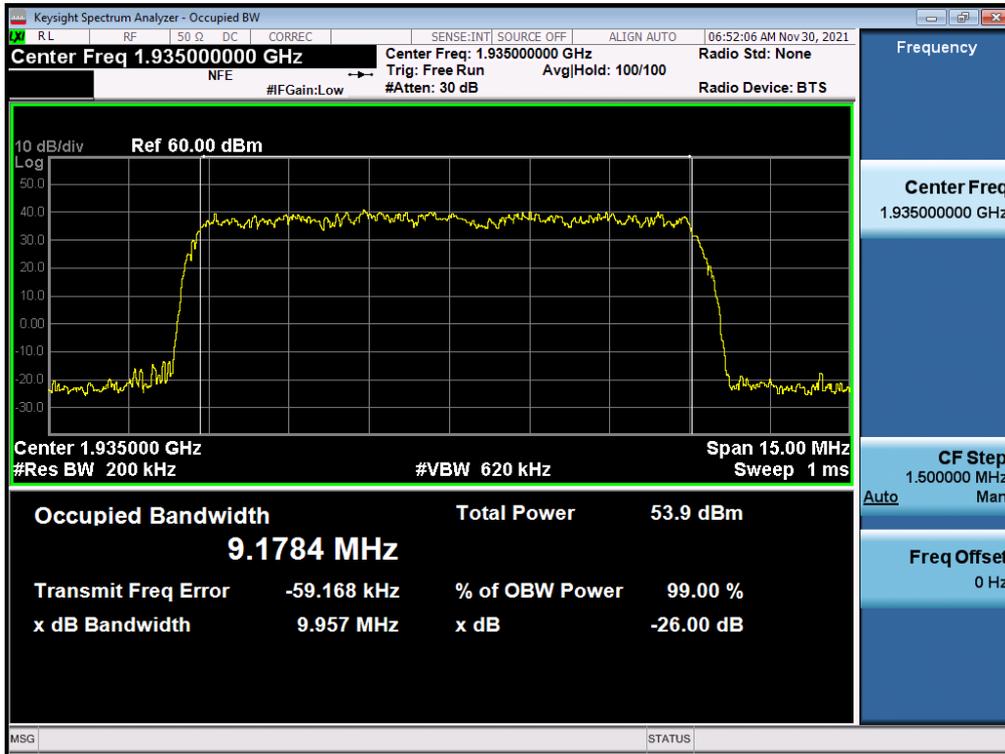
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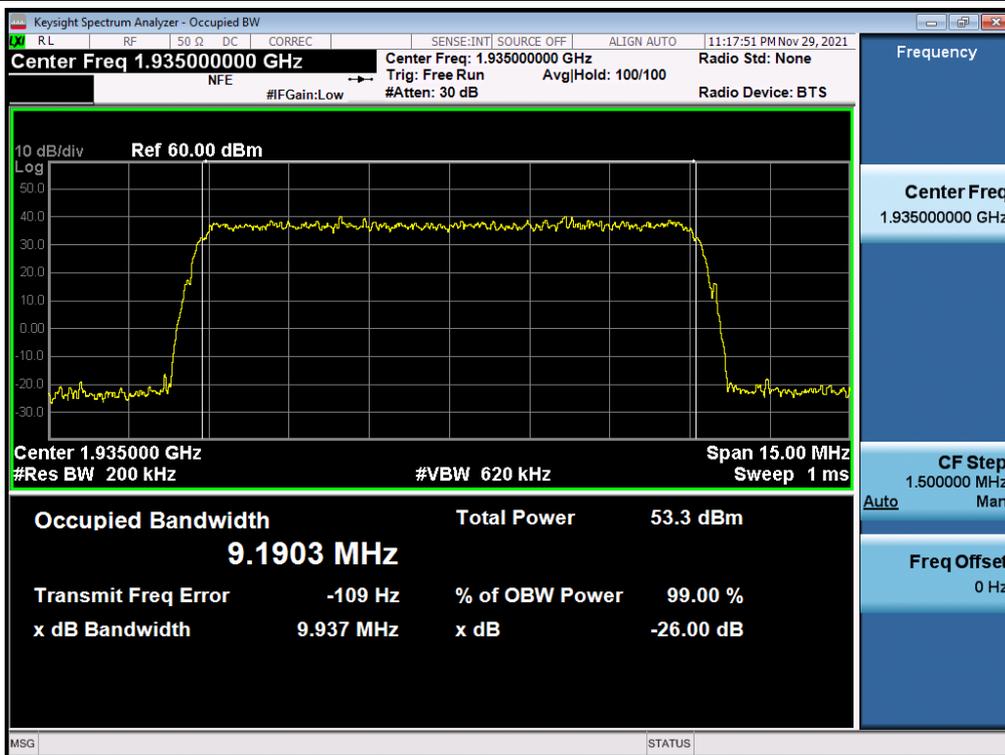
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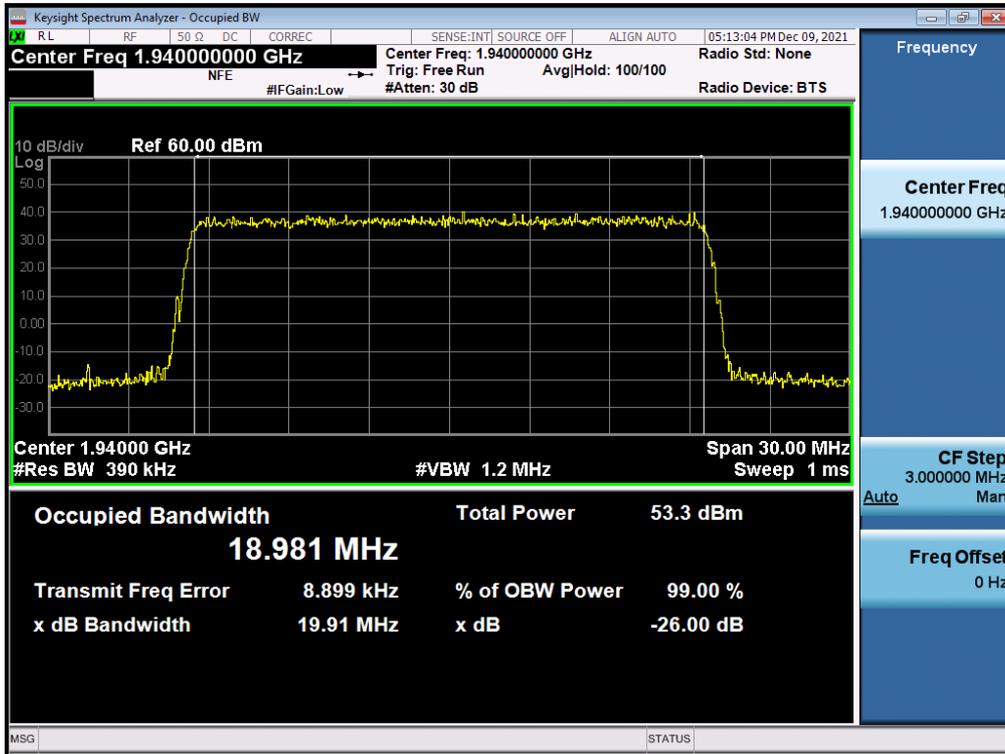
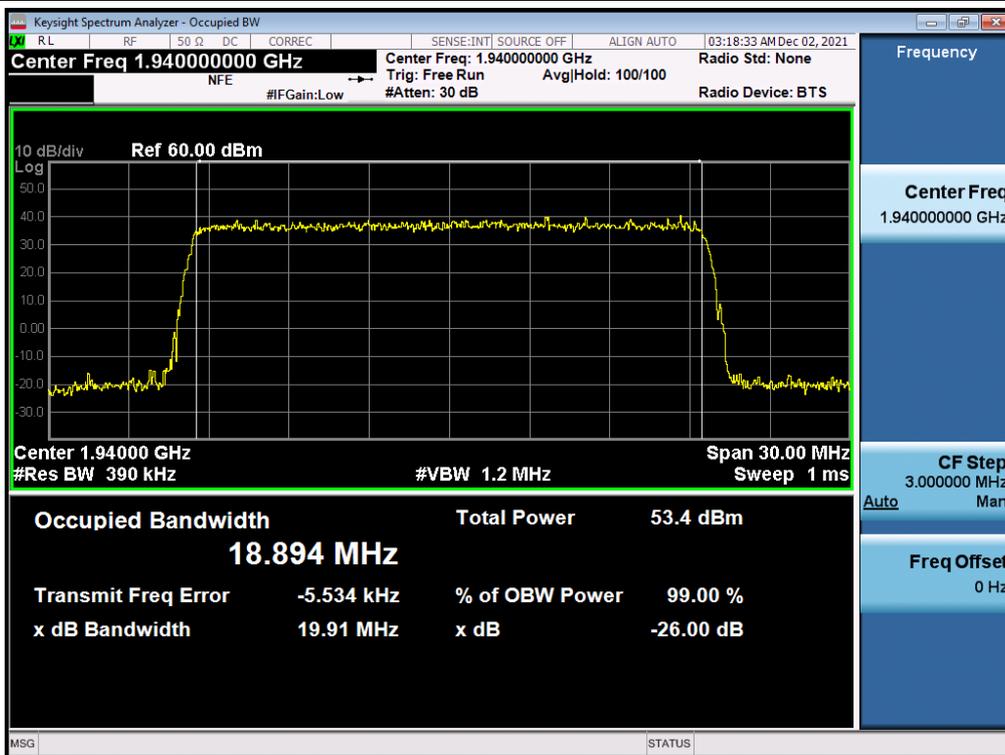


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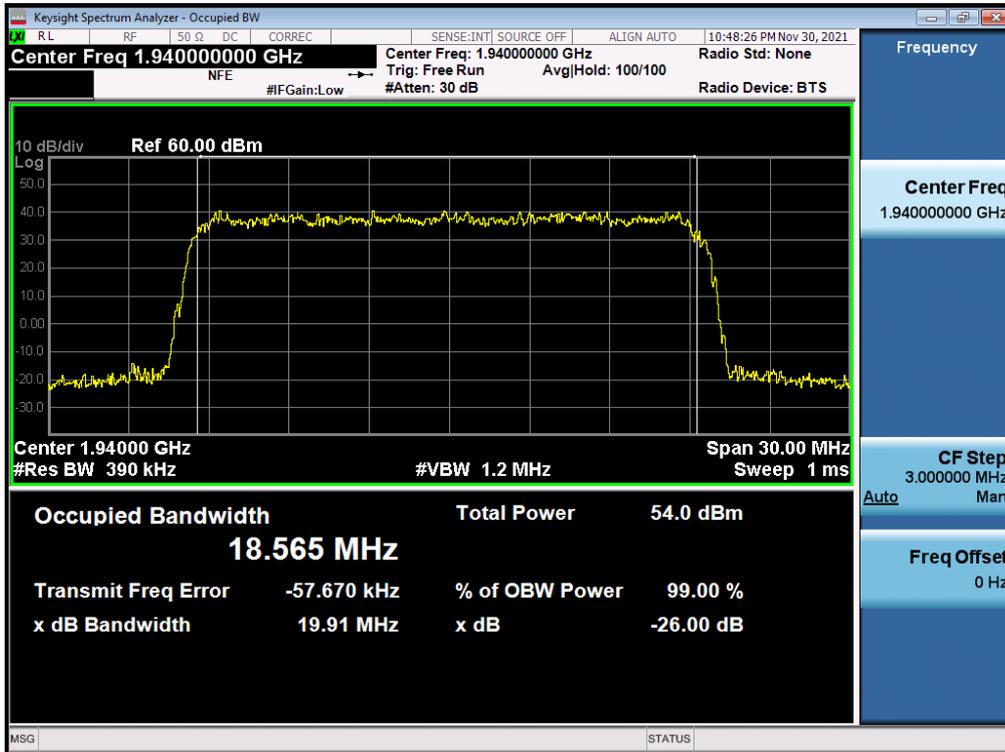


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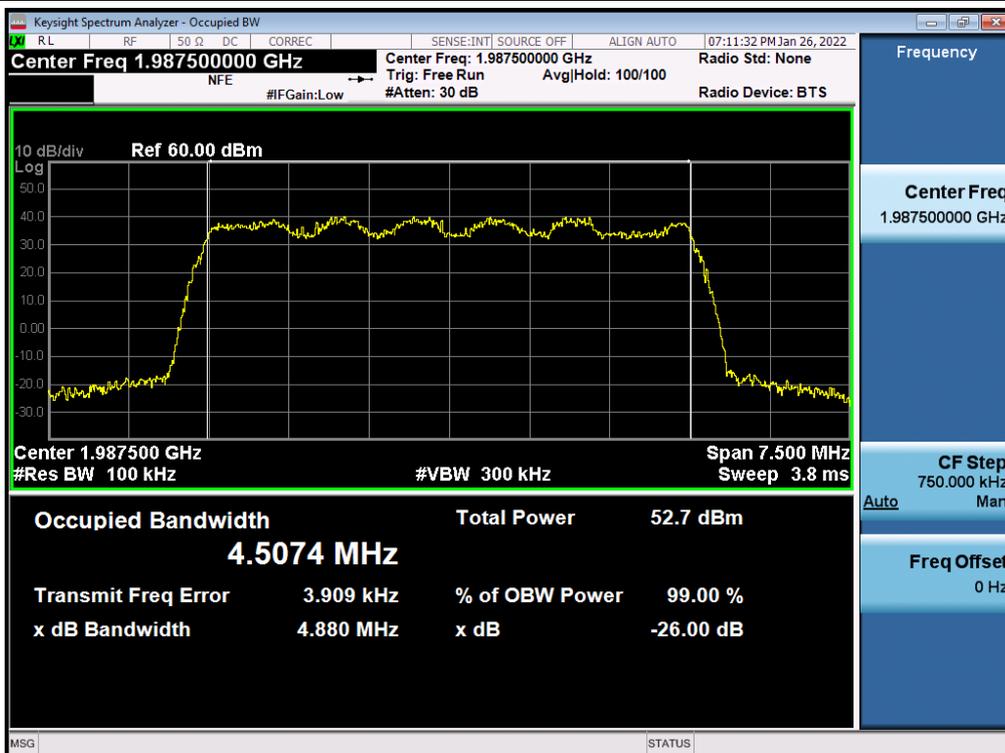


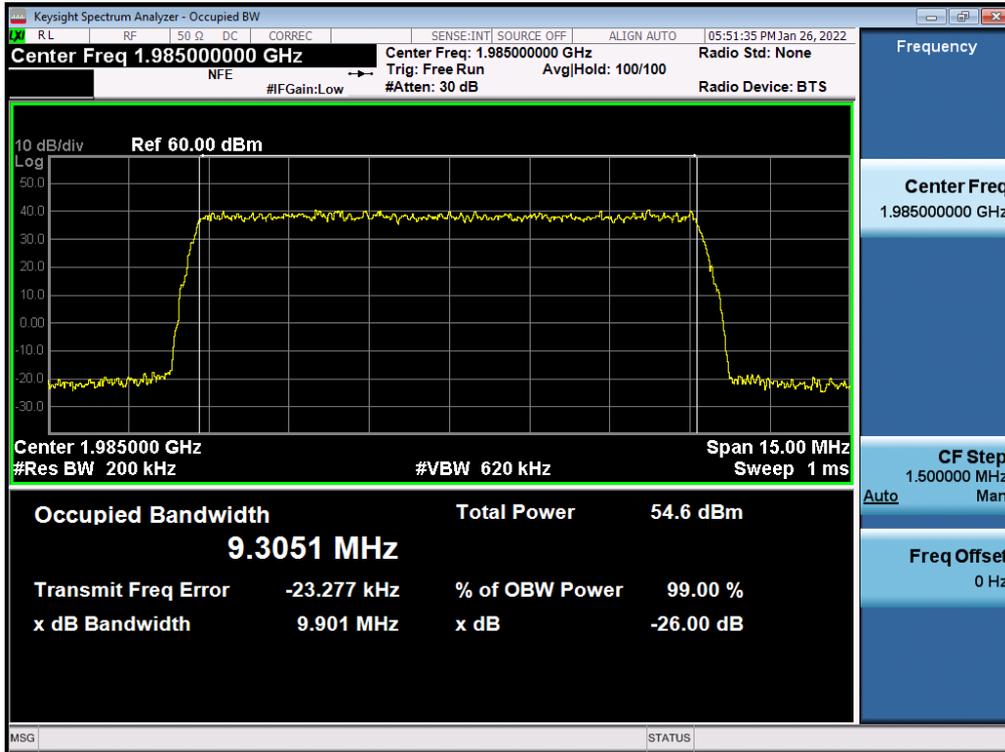
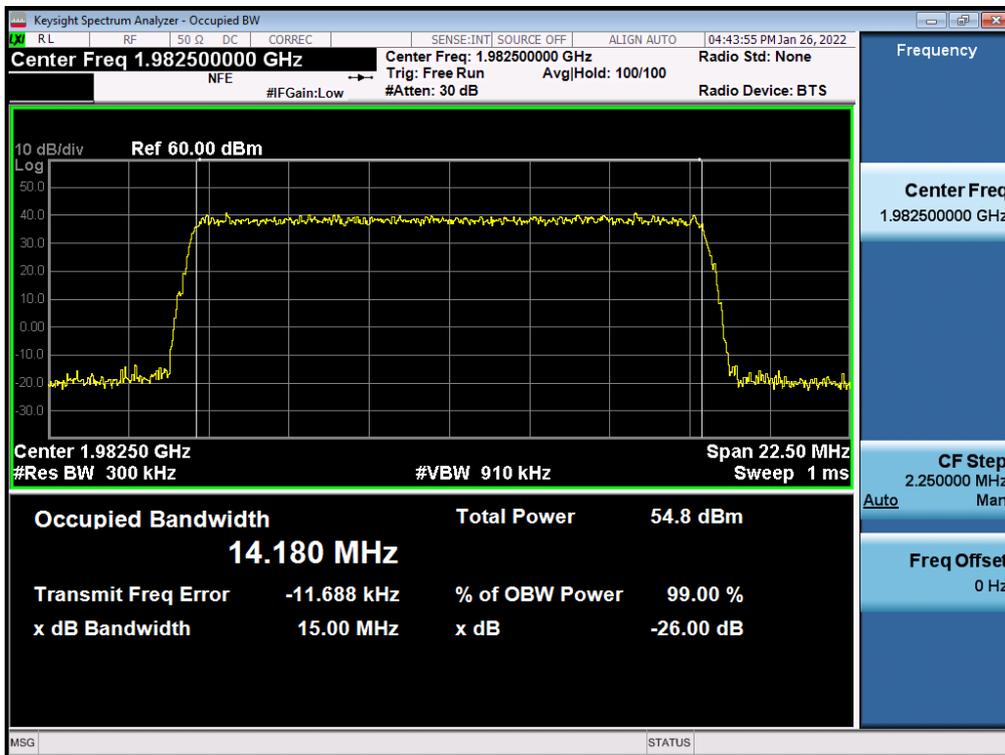
**Antenna 1 / (4 Port) B2 DSS 20 MHz 2to8 1 Carrier / QPSK / Low**

**Antenna 0 / (4 Port) B2 DSS 20 MHz 5to5 1 Carrier / 256QAM / Low**


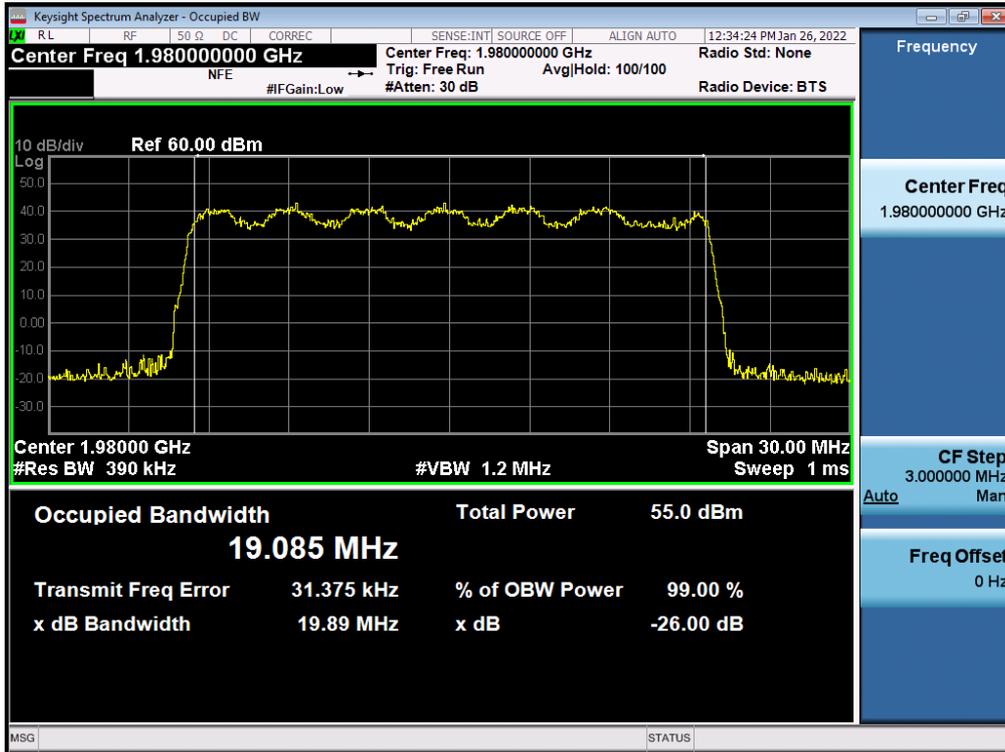
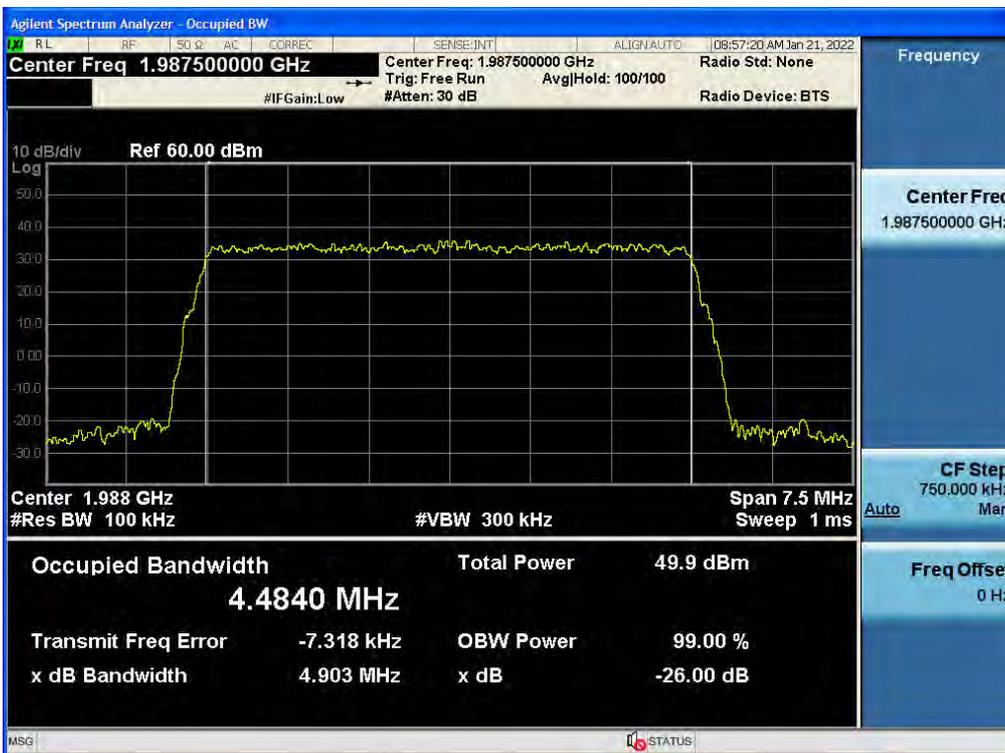
Antenna 1 / (4 Port) B2 DSS 20 MHz 9to1 1 Carrier / 16QAM / Low



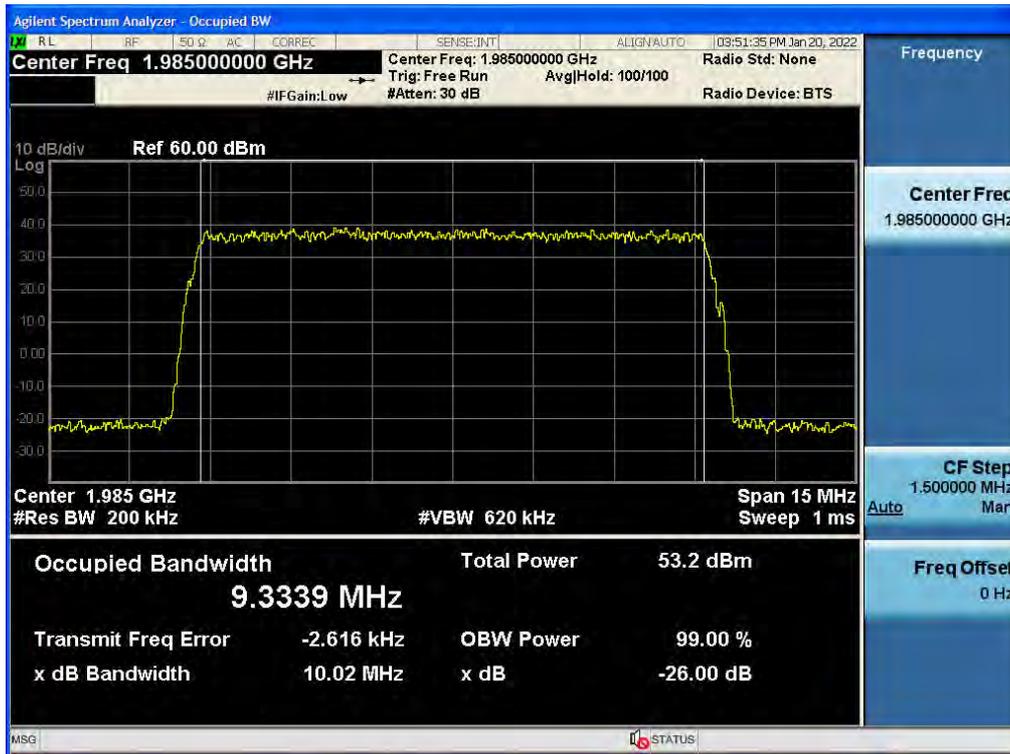
Antenna 0 / (2 Port) 5G NR n2 5 MHz 1 Carrier / 16QAM / High



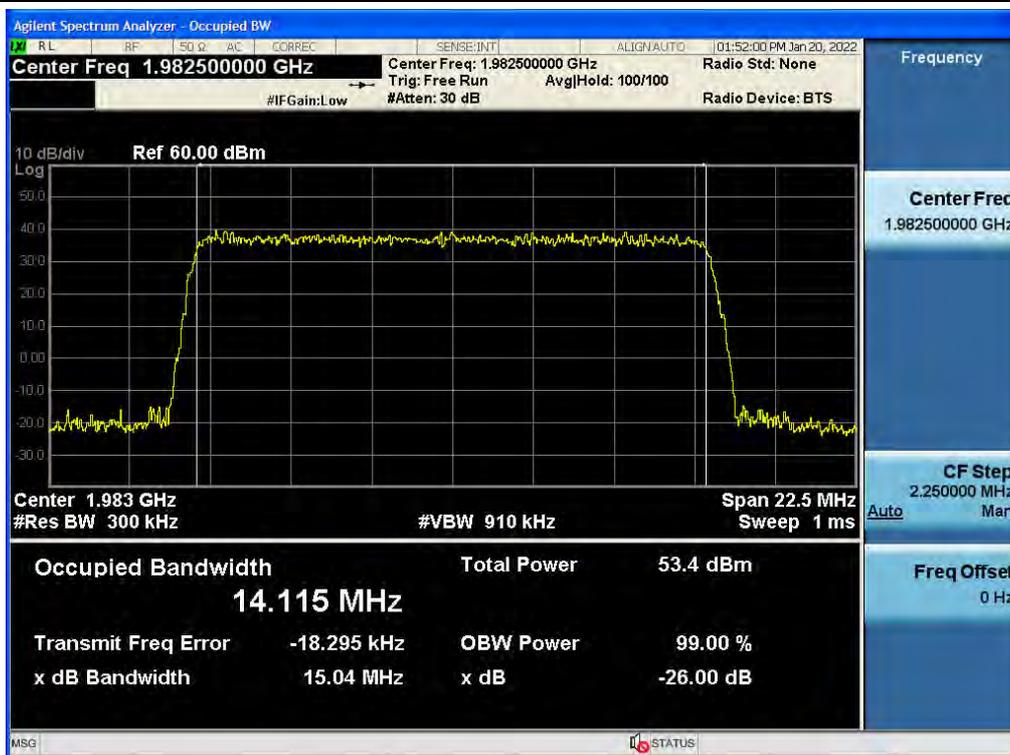
**Antenna 0 / (2 Port) 5G NR n2 10 MHz 1 Carrier / QPSK / High**

**Antenna 0 / (2 Port) 5G NR n2 15 MHz 1 Carrier / 256QAM / High**


**Antenna 0 / (2 Port) 5G NR n2 20 MHz 1 Carrier / 16QAM / High**

**Antenna 0 / (4 Port) 5G NR n2 5 MHz 1 Carrier / QPSK / High**


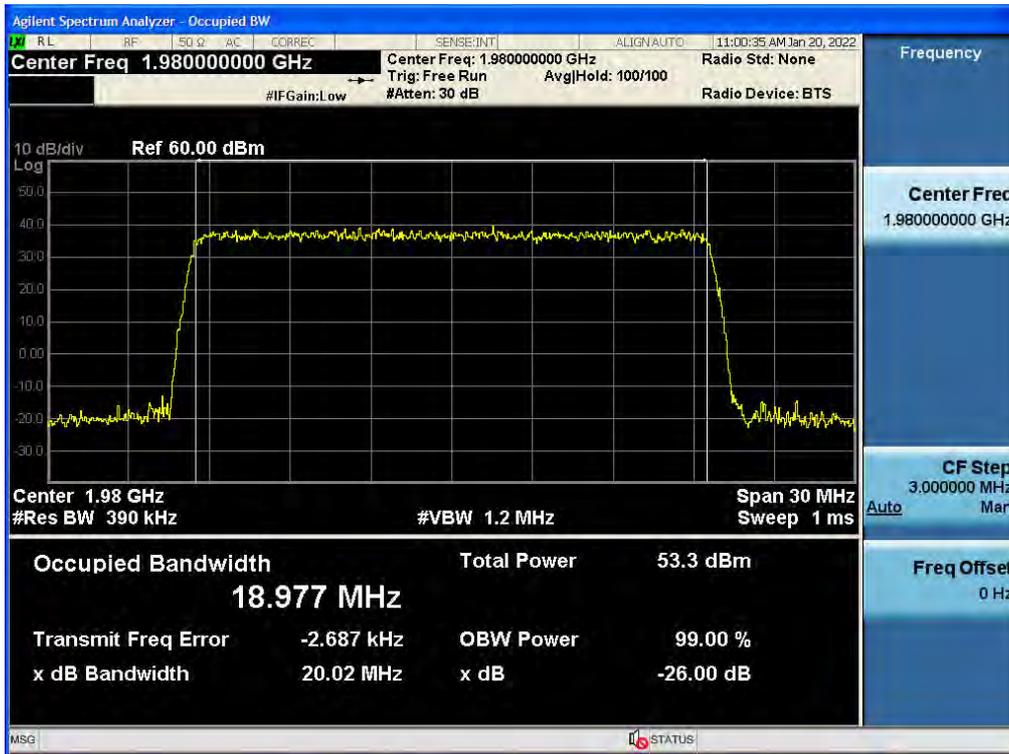
## Antenna 0 / (4 Port) 5G NR n2 10 MHz 1 Carrier / 256QAM / High



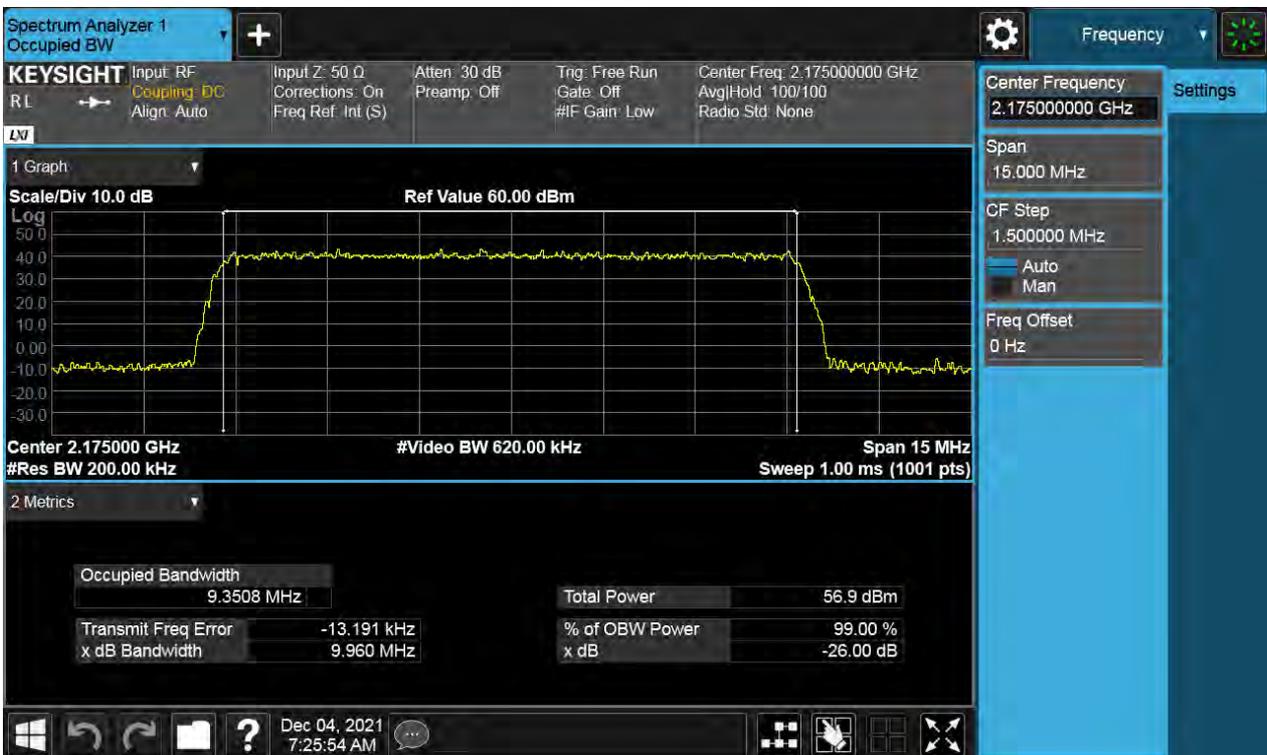
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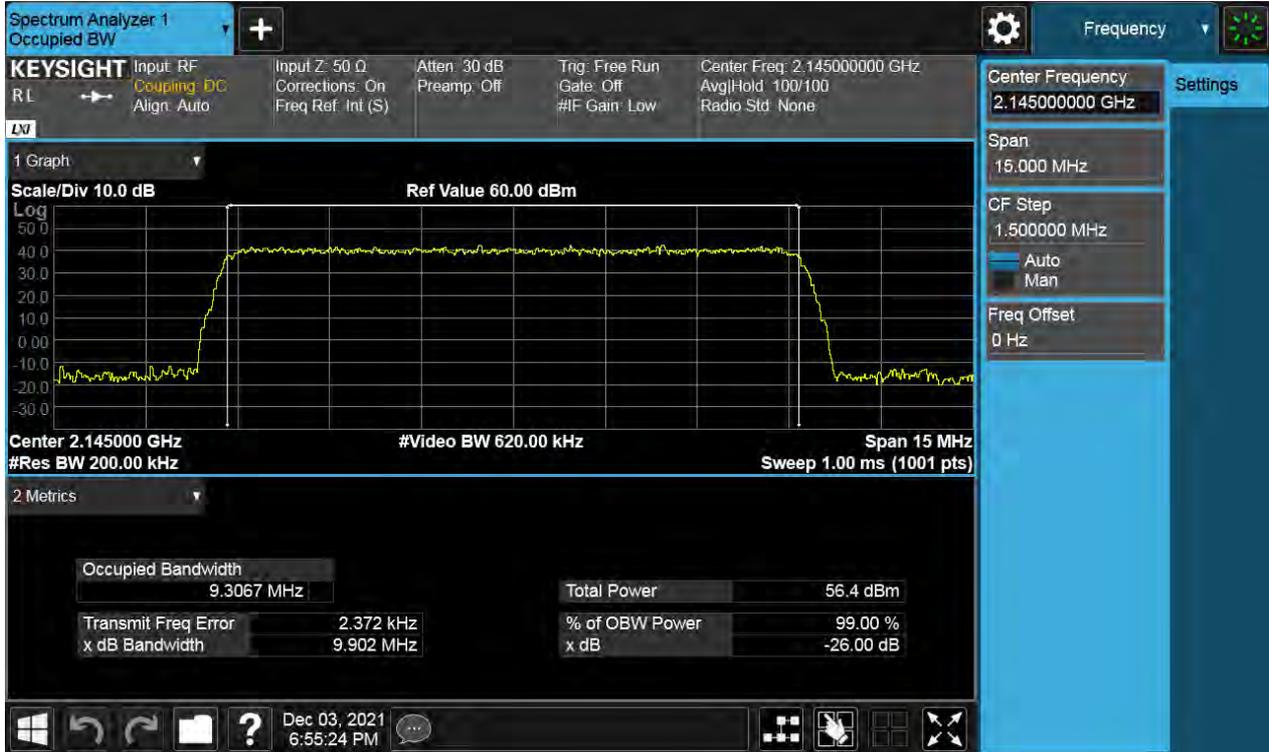
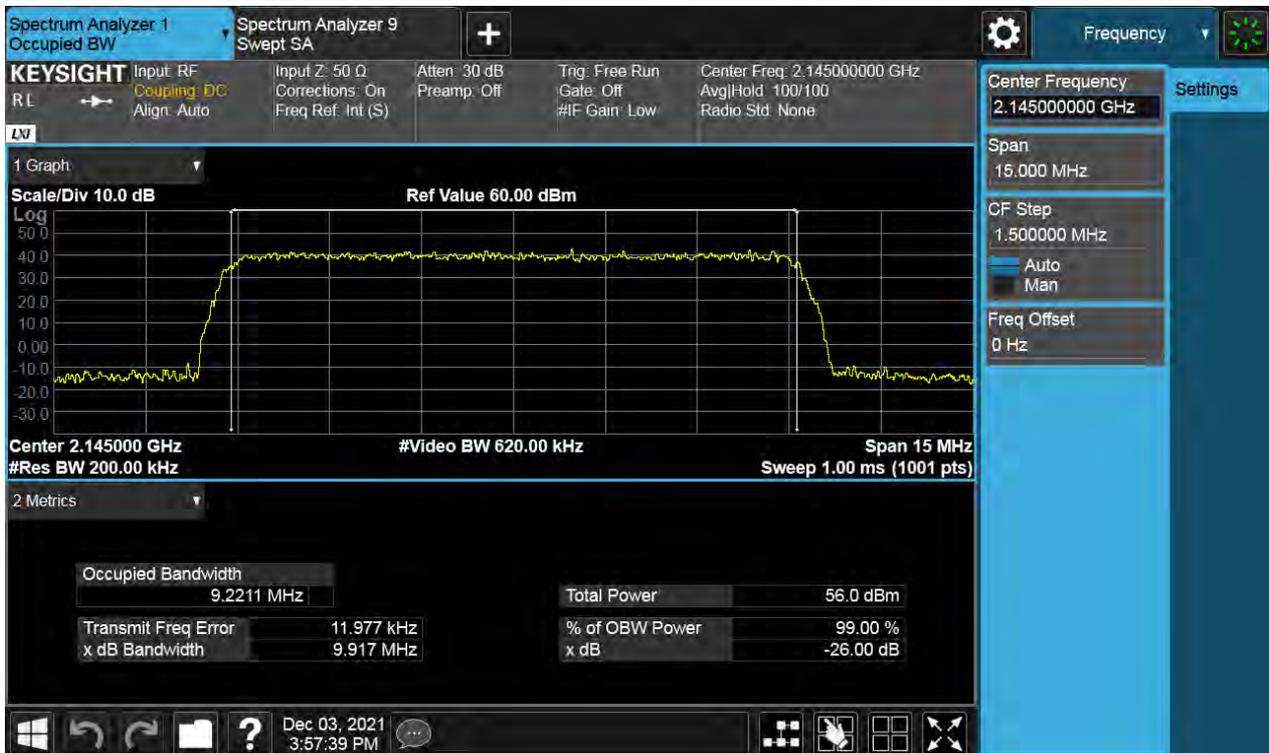


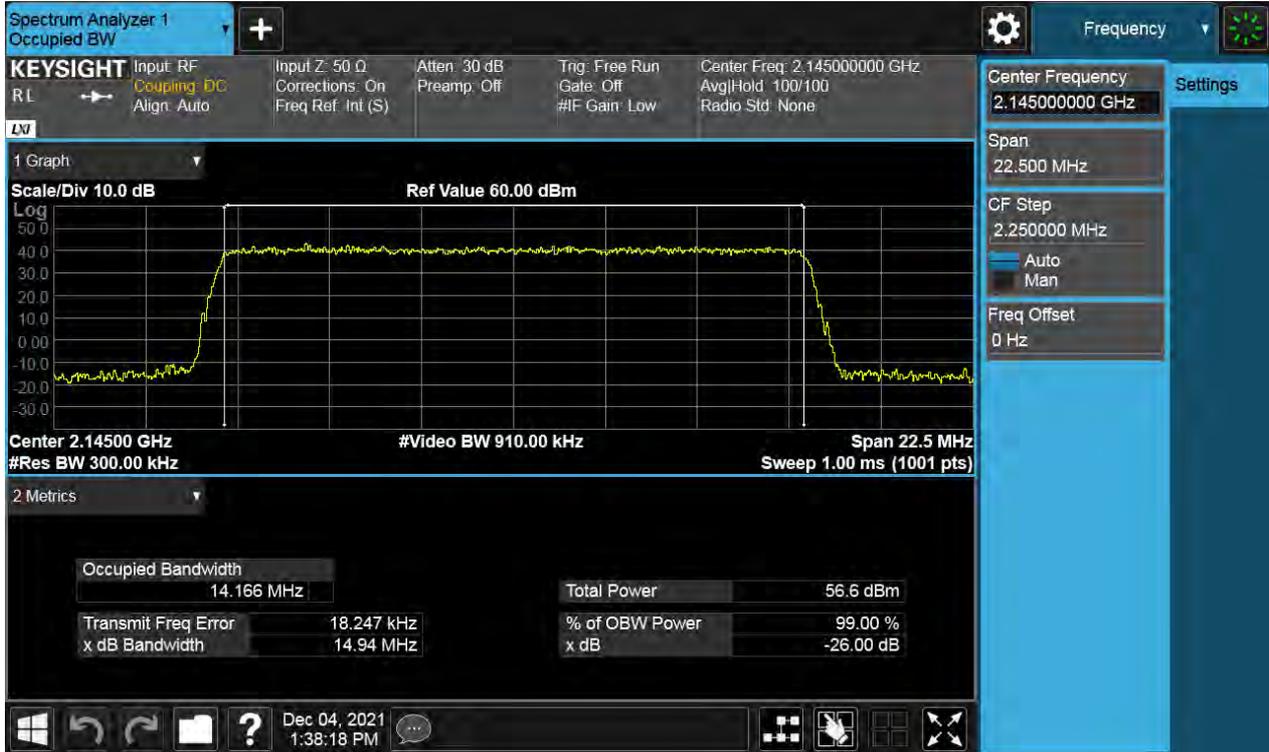
Antenna 0 / (4 Port) 5G NR n2 20 MHz 1 Carrier / 64QAM / High



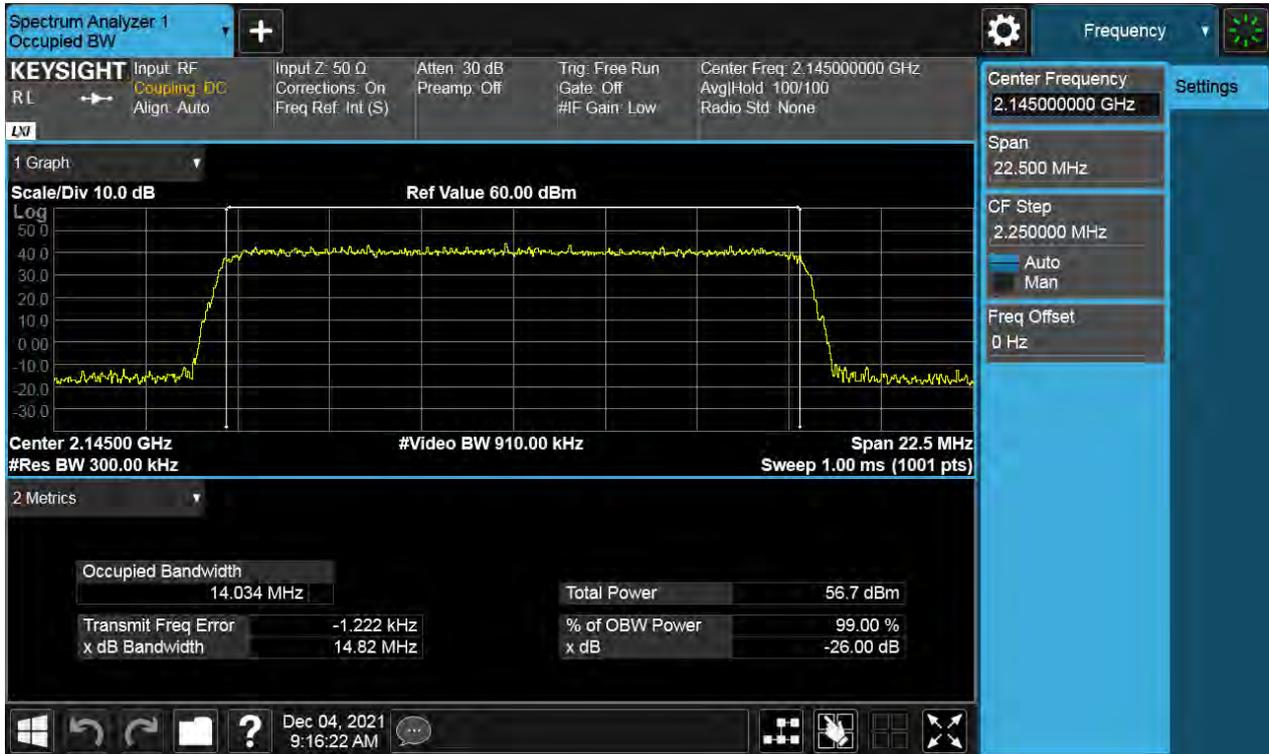
Antenna 0 / (2 Port) B66 DSS 10 MHz 2to8 1 Carrier / QPSK / High



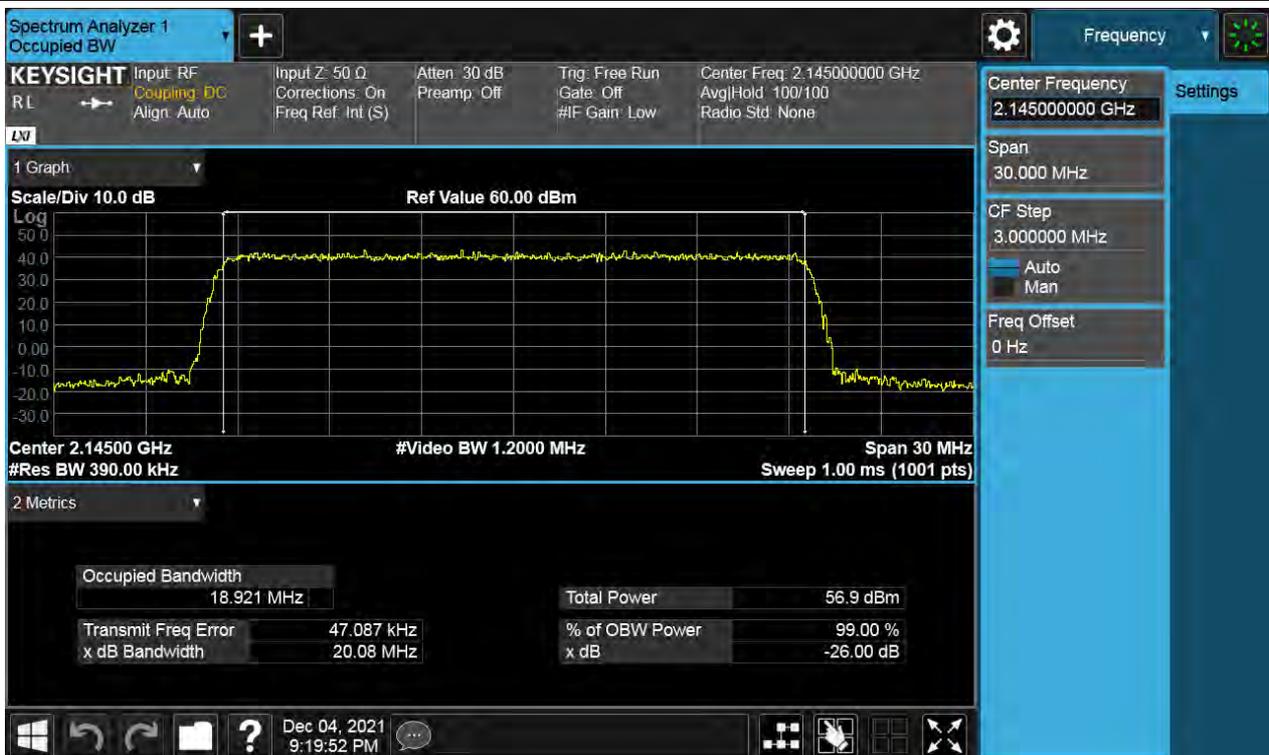
**Antenna 0 / (2 Port) B66 DSS 10 MHz 5to5 1 Carrier / 256QAM / Middle**

**Antenna 1 / (2 Port) B66 DSS 10 MHz 9to1 1 Carrier / QPSK / Middle**


**Antenna 0 / (2 Port) B66 DSS 15 MHz 2to8 1 Carrier / QPSK / Middle**

**Antenna 0 / (2 Port) B66 DSS 15 MHz 5to5 1 Carrier / 16QAM / Middle**

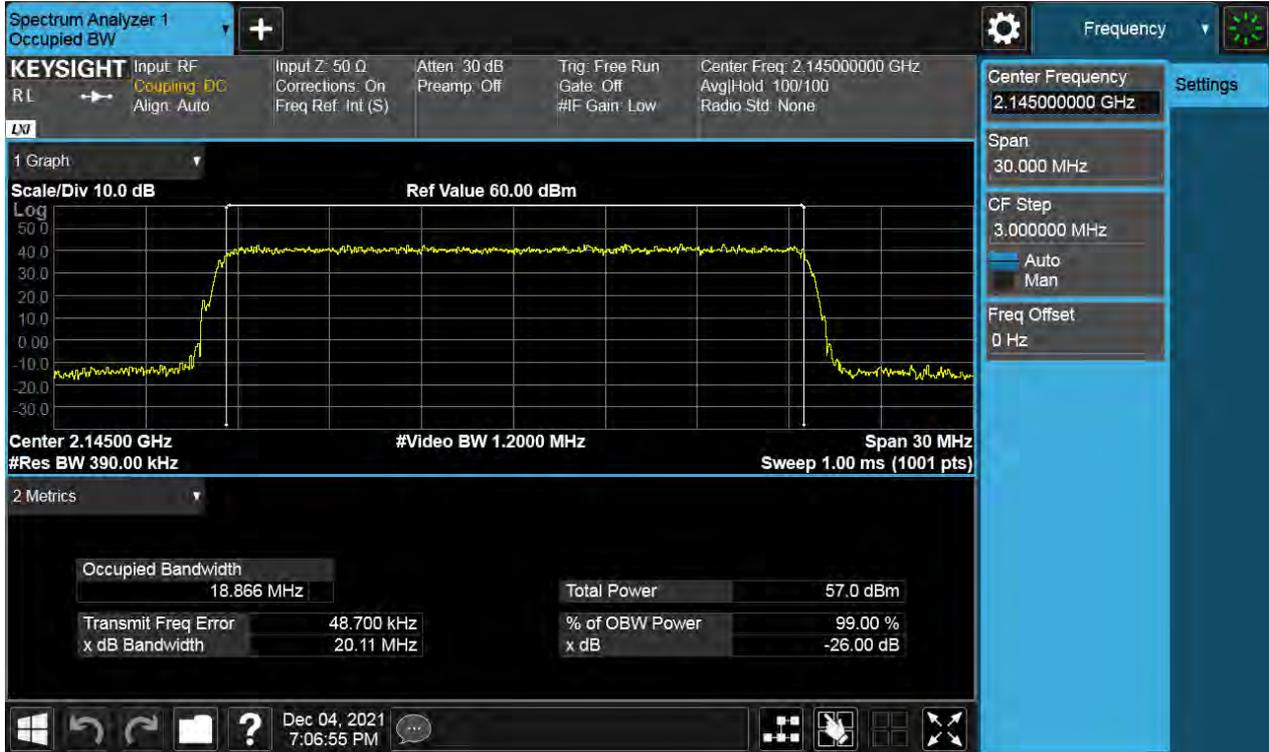

## Antenna 0 / (2 Port) B66 DSS 15 MHz 9to1 1 Carrier / QPSK / Middle



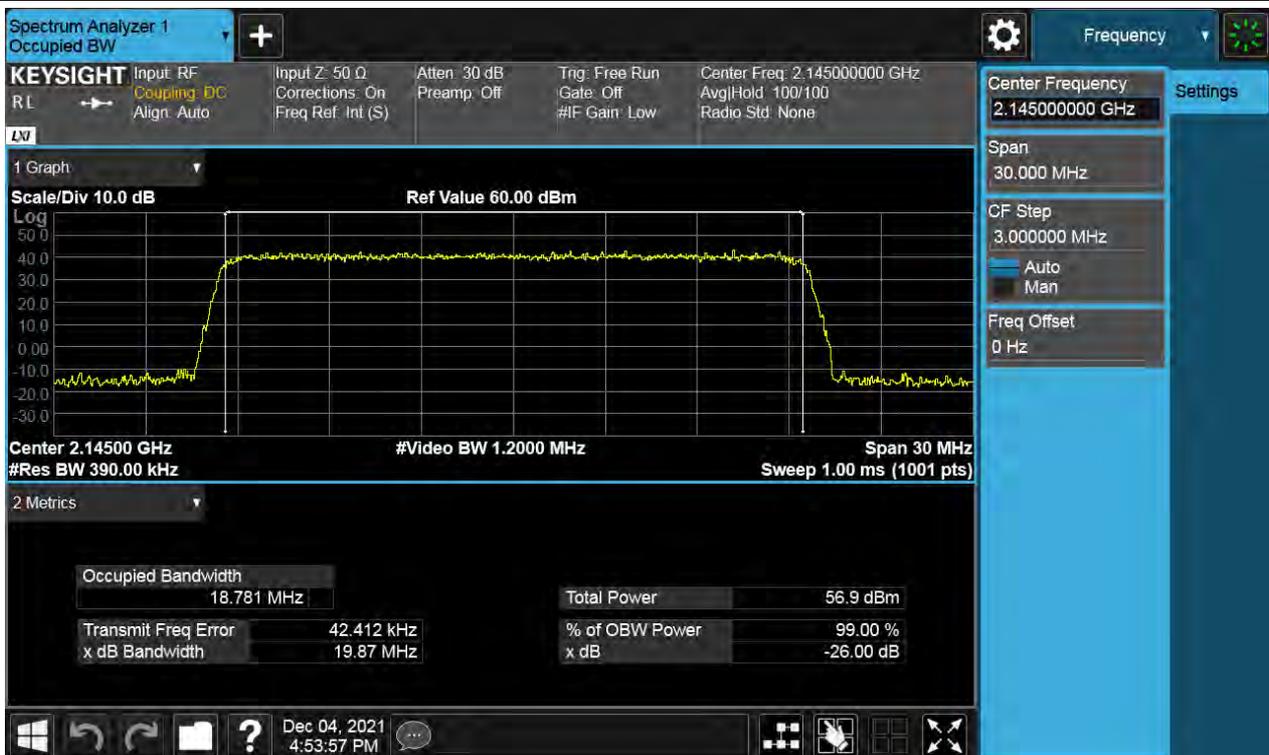
## Antenna 0 / (2 Port) B66 DSS 20 MHz 2to8 1 Carrier / QPSK / Middle



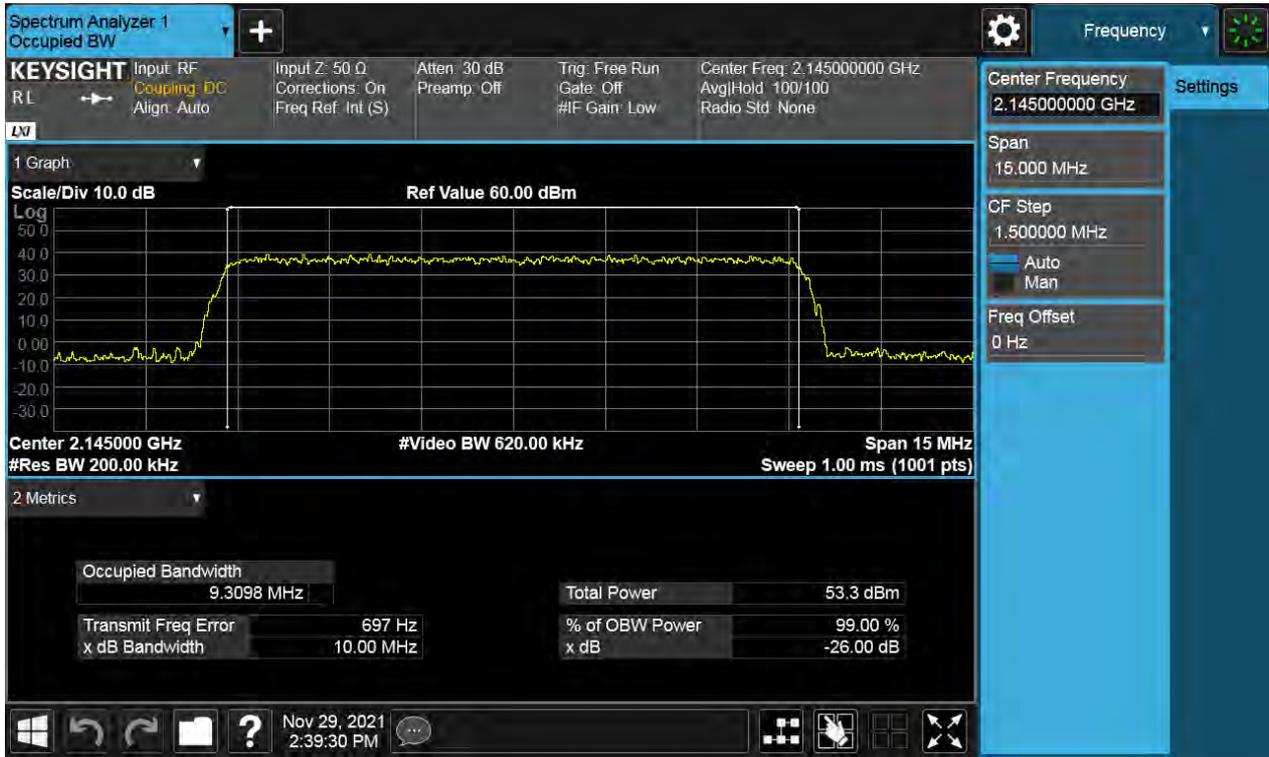
## Antenna 0 / (2 Port) B66 DSS 20 MHz 5to5 1 Carrier / QPSK / Middle



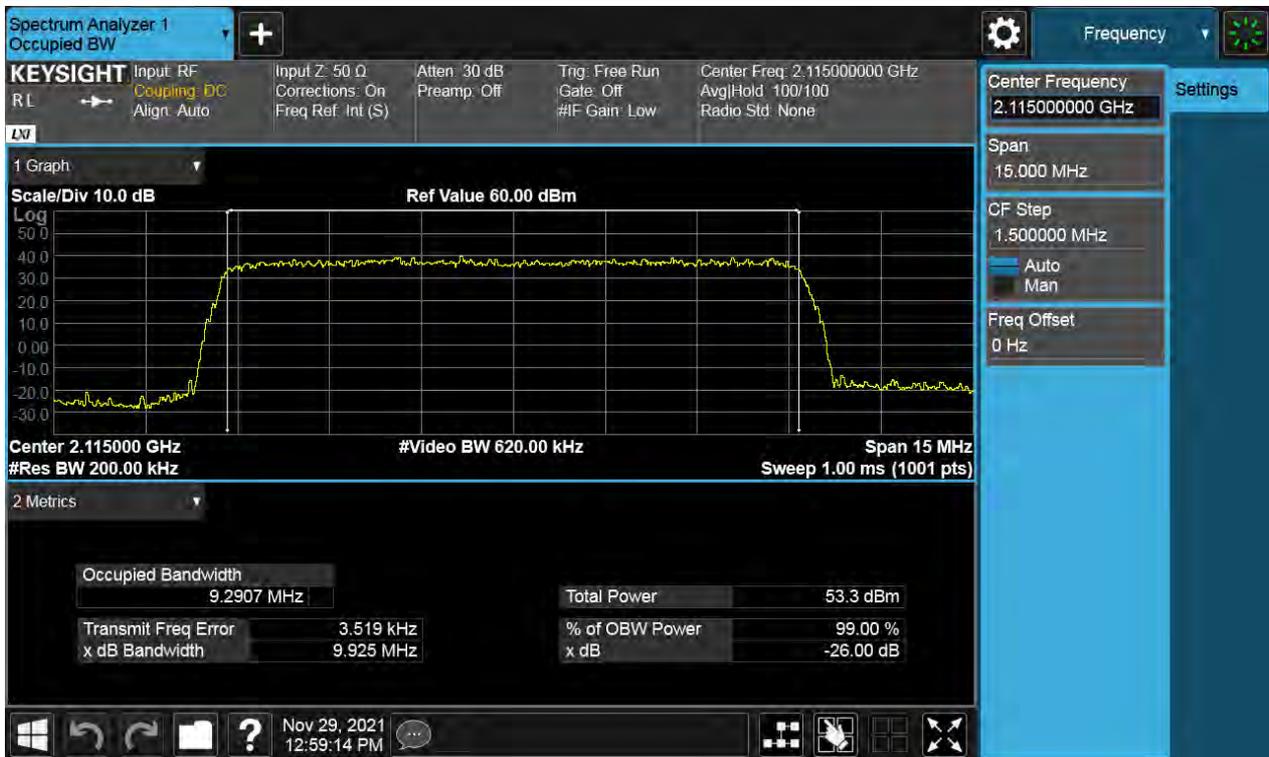
## Antenna 0 / (2 Port) B66 DSS 20 MHz 9to1 1 Carrier / QPSK / Middle

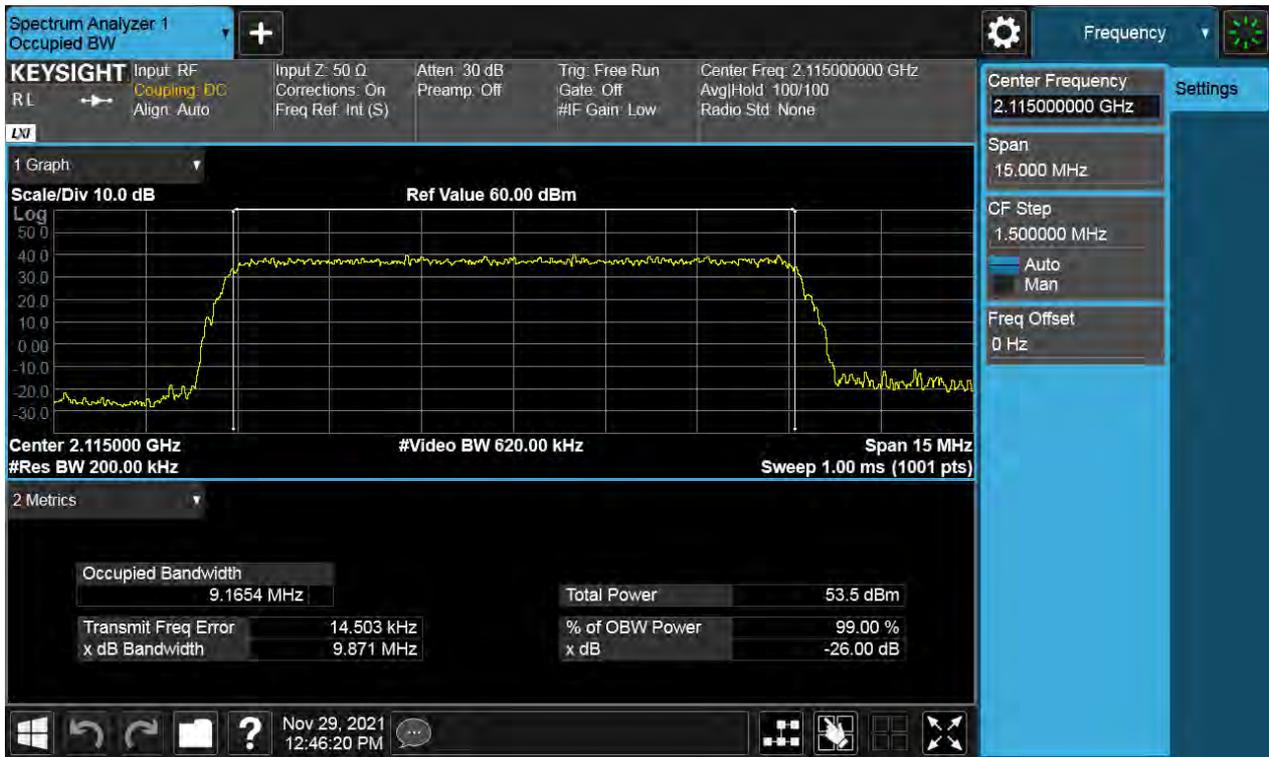
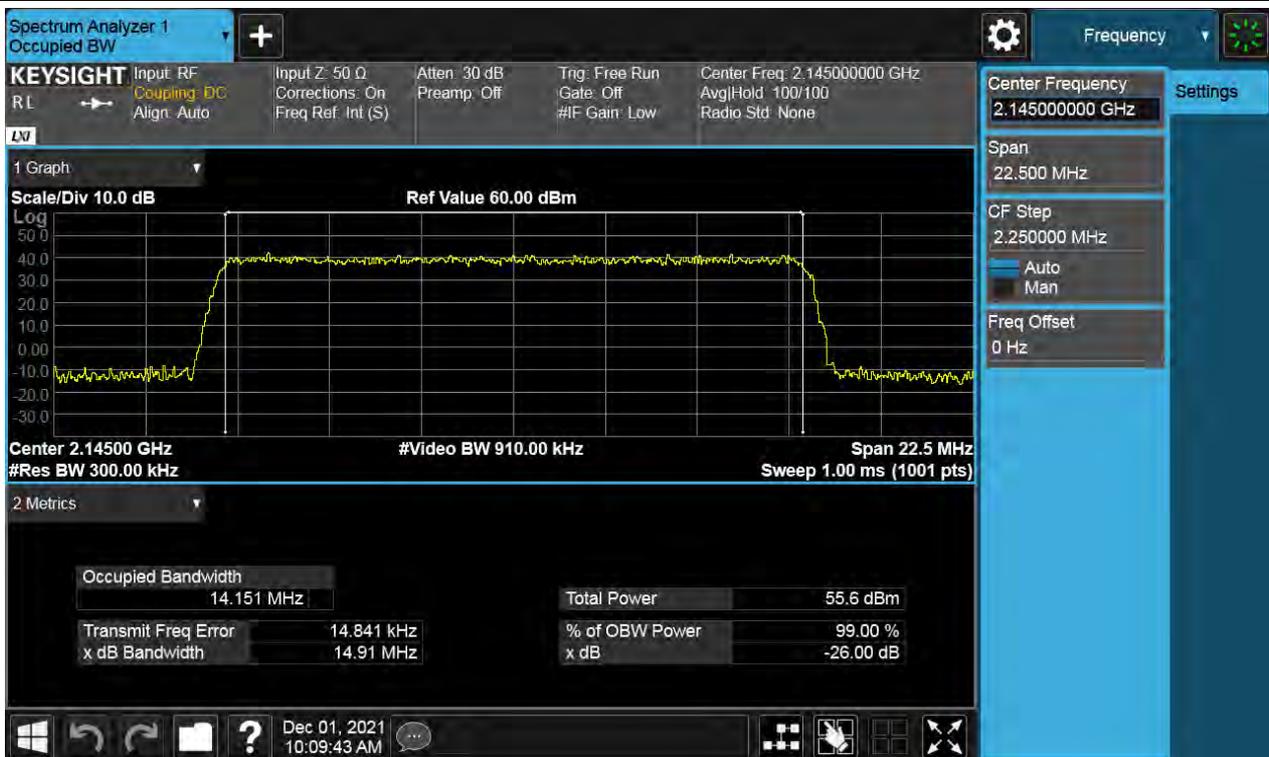


Antenna 0 / (4 Port) B66 DSS 10 MHz 2to8 1 Carrier / QPSK / Middle

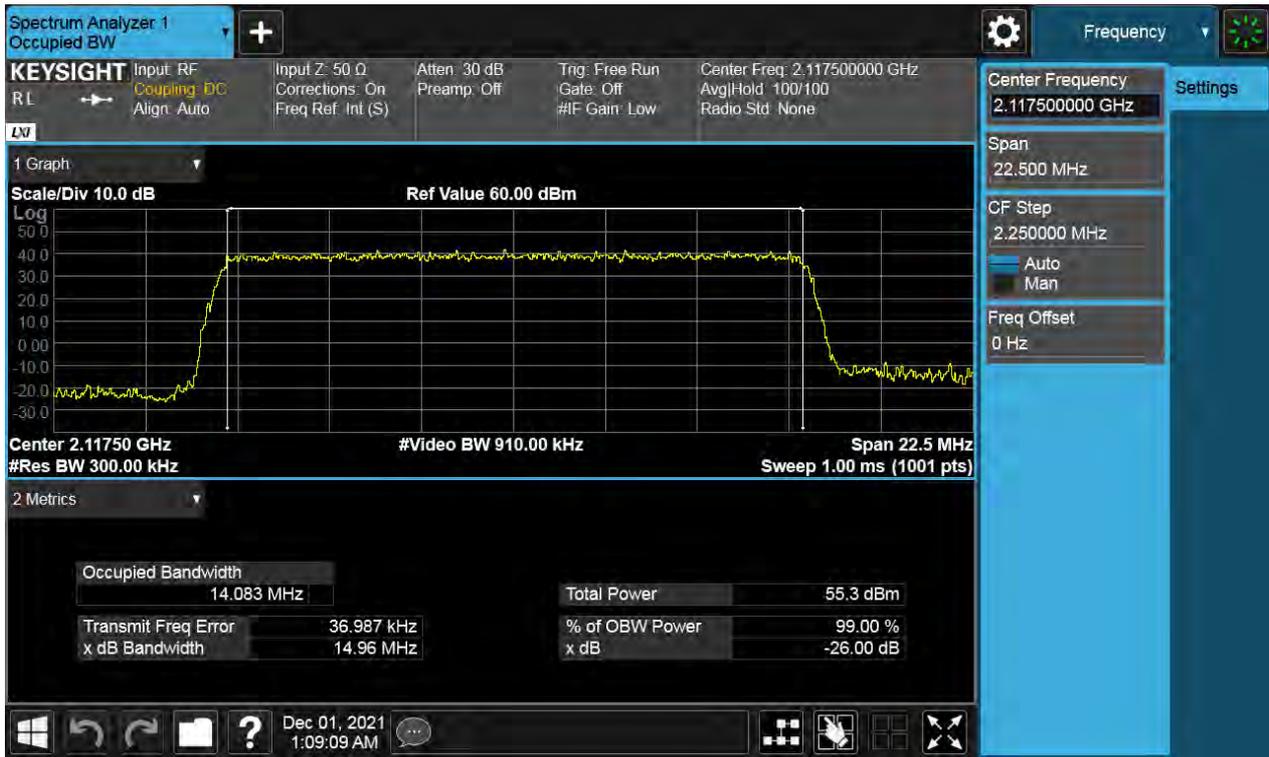


Antenna 2 / (4 Port) B66 DSS 10 MHz 5to5 1 Carrier / QPSK / Low

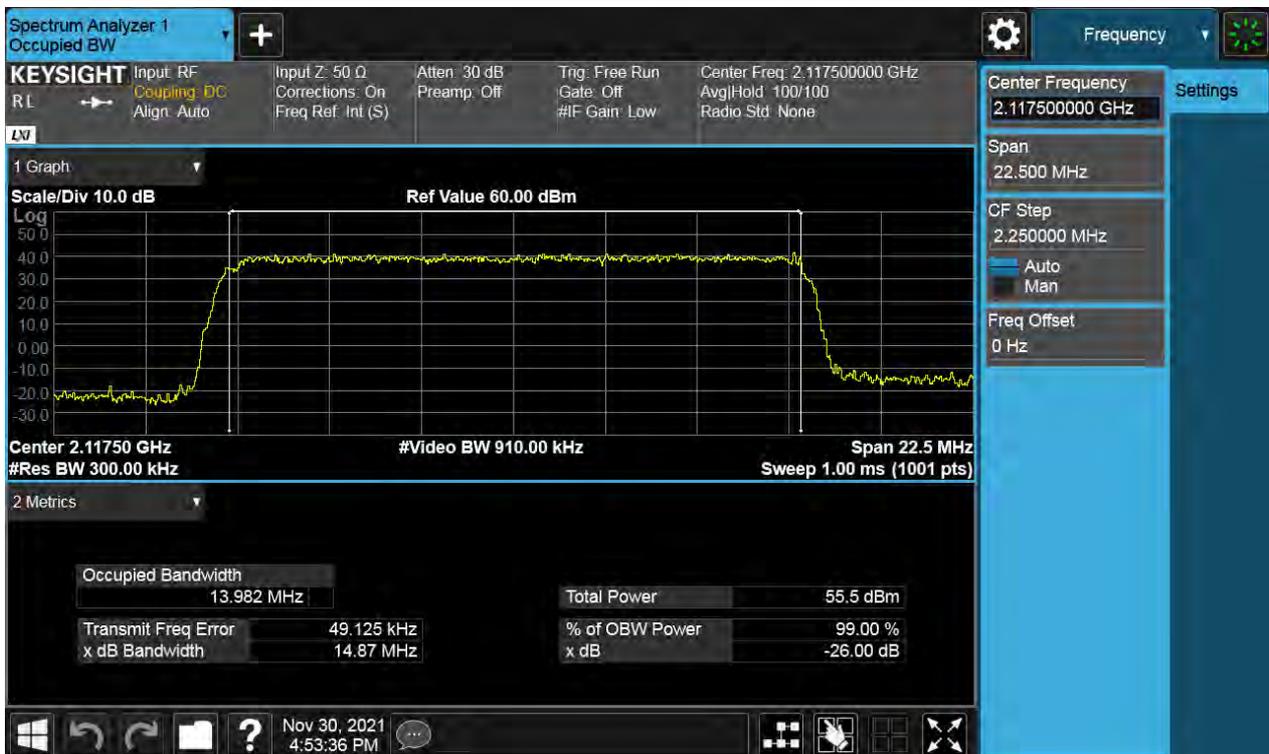


**Antenna 2 / (4 Port) B66 DSS 10 MHz 9to1 1 Carrier / QPSK / Low**

**Antenna 0 / (4 Port) B66 DSS 15 MHz 2to8 1 Carrier / 64QAM / Middle**


## Antenna 2 / (4 Port) B66 DSS 15 MHz 5to5 1 Carrier / 256QAM / Low



## Antenna 2 / (4 Port) B66 DSS 15 MHz 9to1 1 Carrier / 256QAM / Low



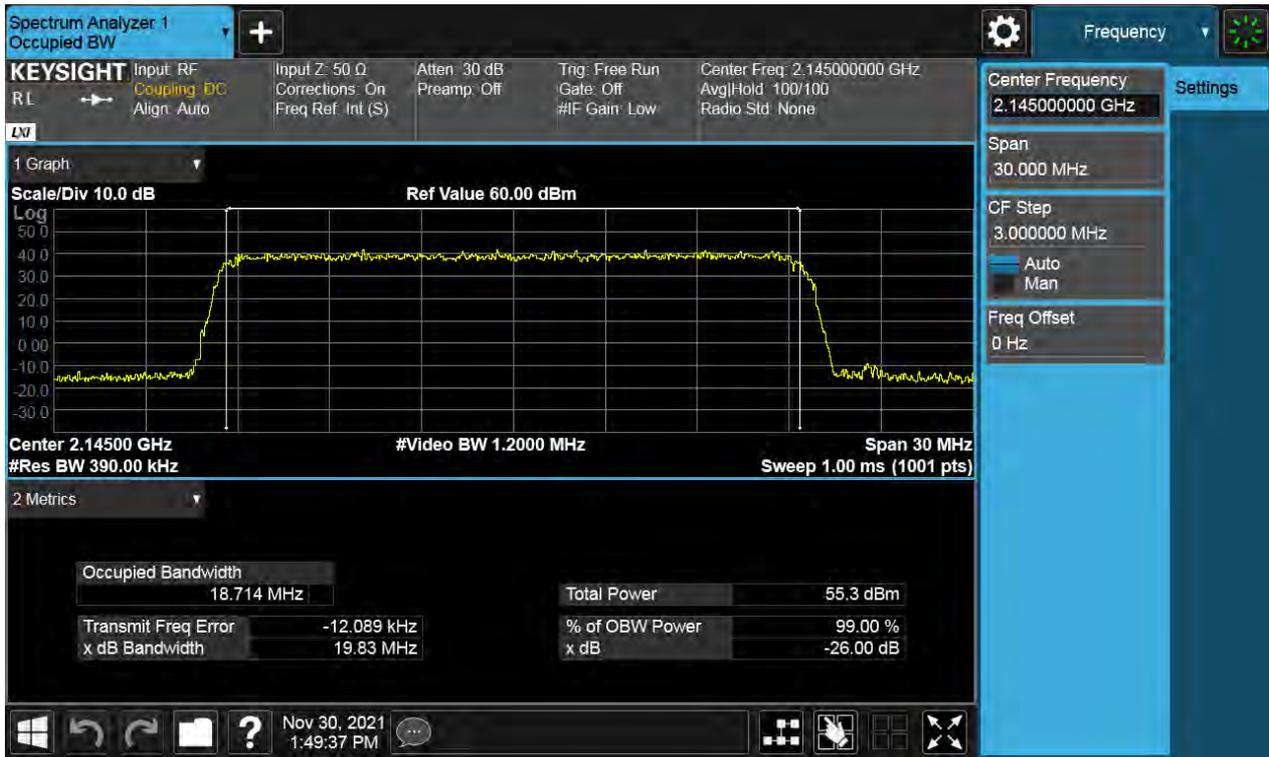
## Antenna 1 / (4 Port) B66 DSS 20 MHz 2to8 1 Carrier / 64QAM / High



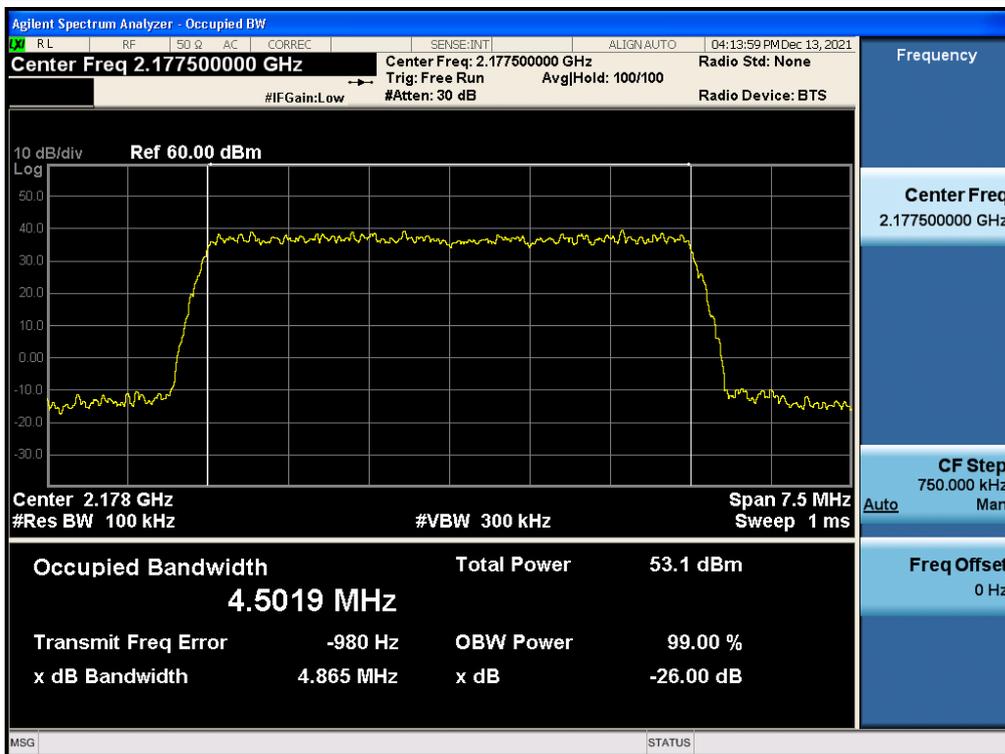
## Antenna 1 / (4 Port) B66 DSS 20 MHz 5to5 1 Carrier / 16QAM / Middle



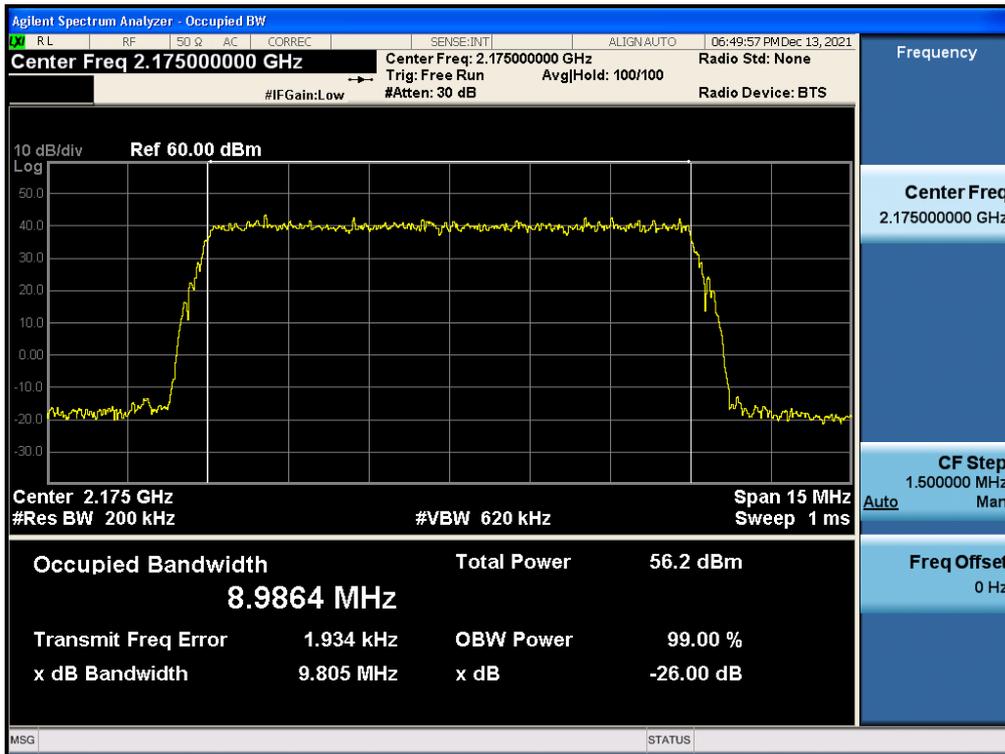
Antenna 0 / (4 Port) B66 DSS 20 MHz 9to1 1 Carrier / QPSK / Middle



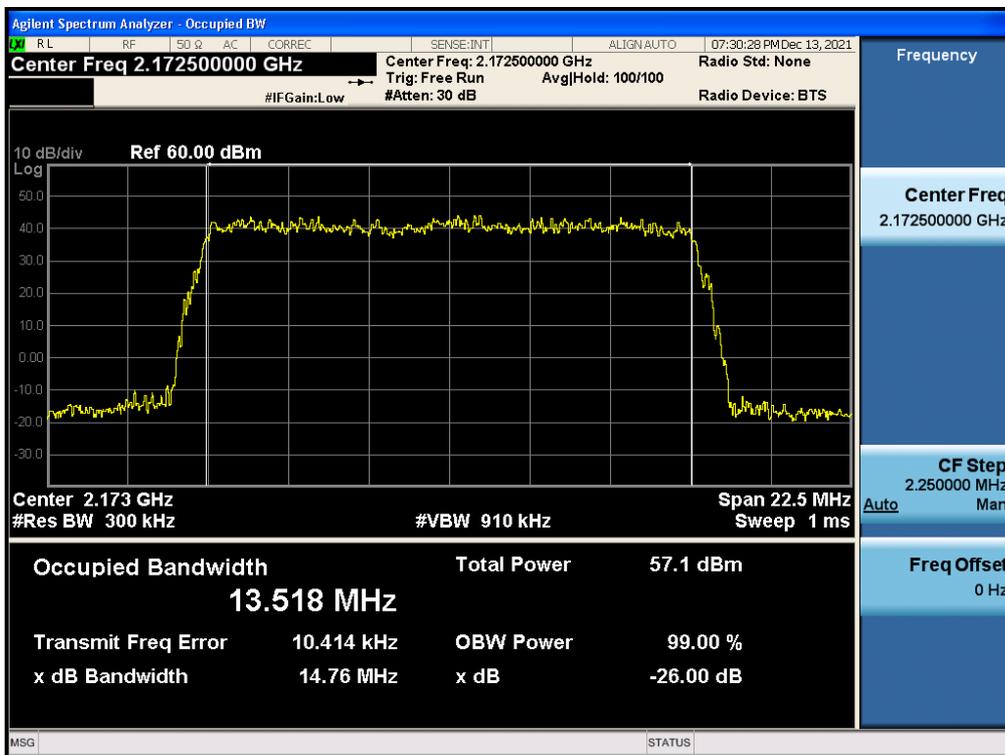
Antenna 1 / (2 Port) LTE B66 5 MHz 1 Carrier / QPSK / High



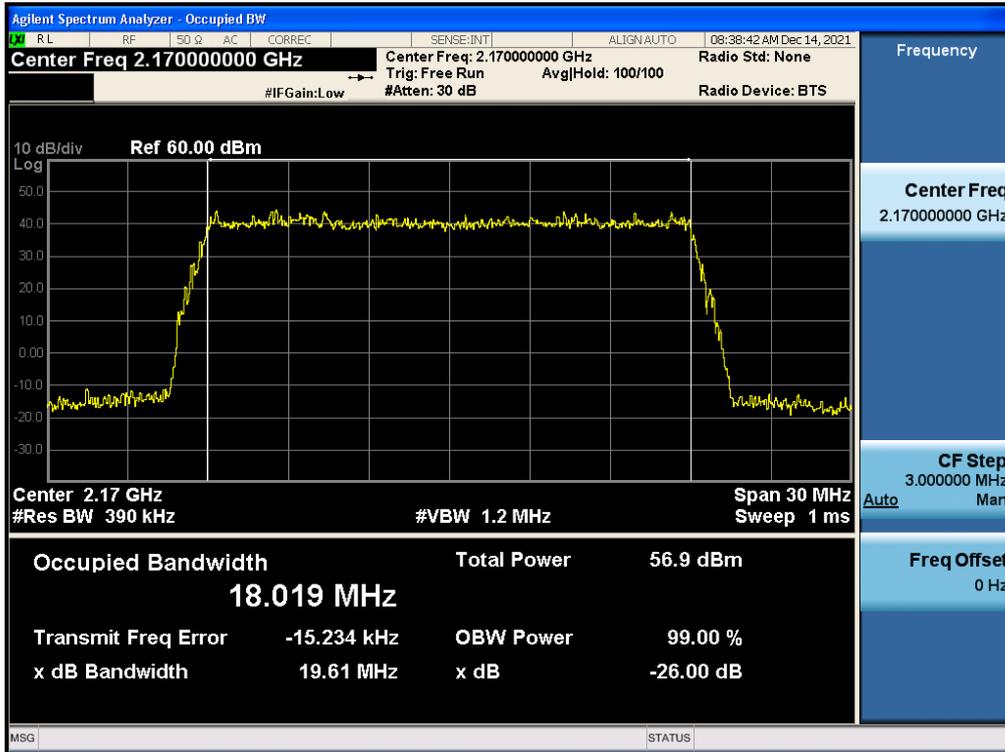
## Antenna 1 / (2 Port) LTE B66 10 MHz 1 Carrier / QPSK / High



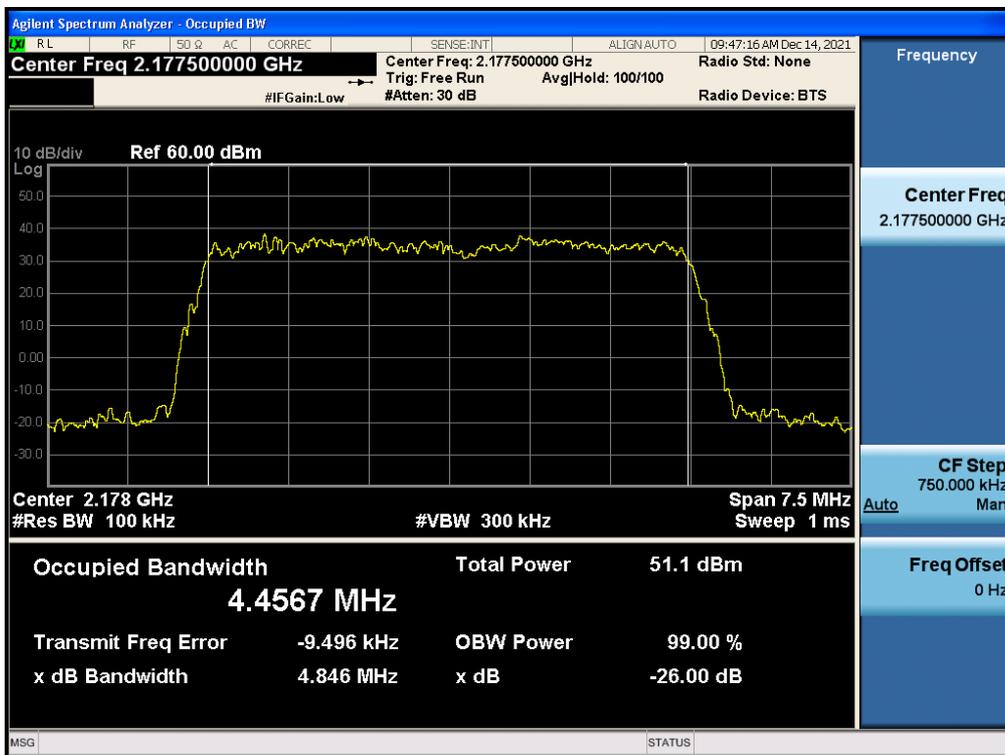
## Antenna 1 / (2 Port) LTE B66 15 MHz 1 Carrier / 16QAM / High



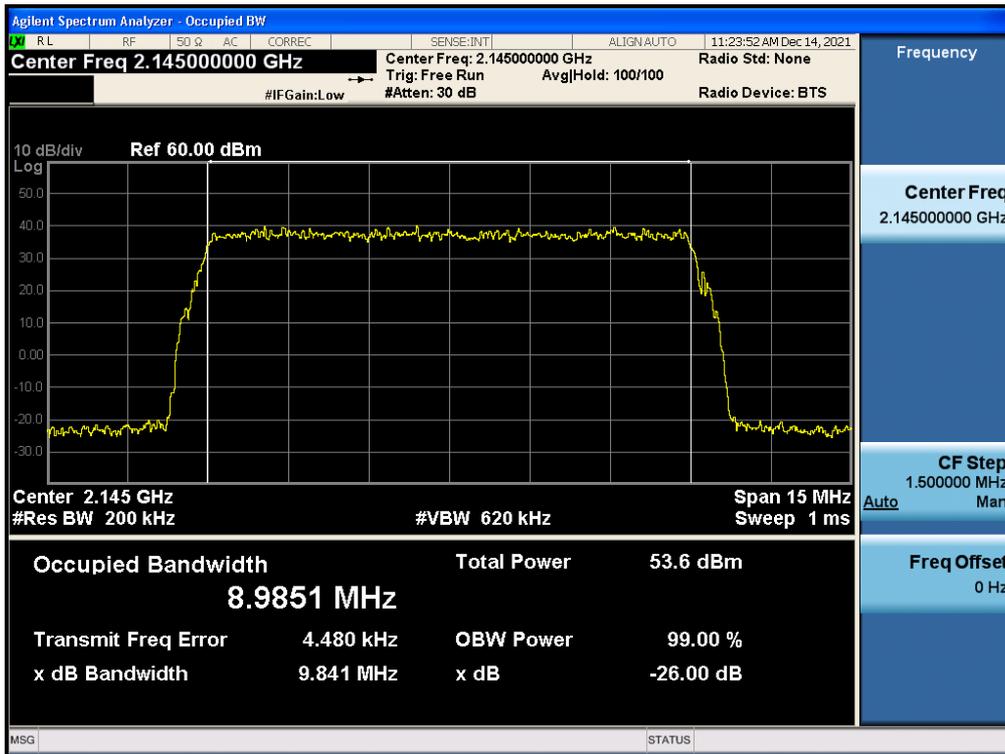
## Antenna 1 / (2 Port) LTE B66 20 MHz 1 Carrier / 16QAM / High



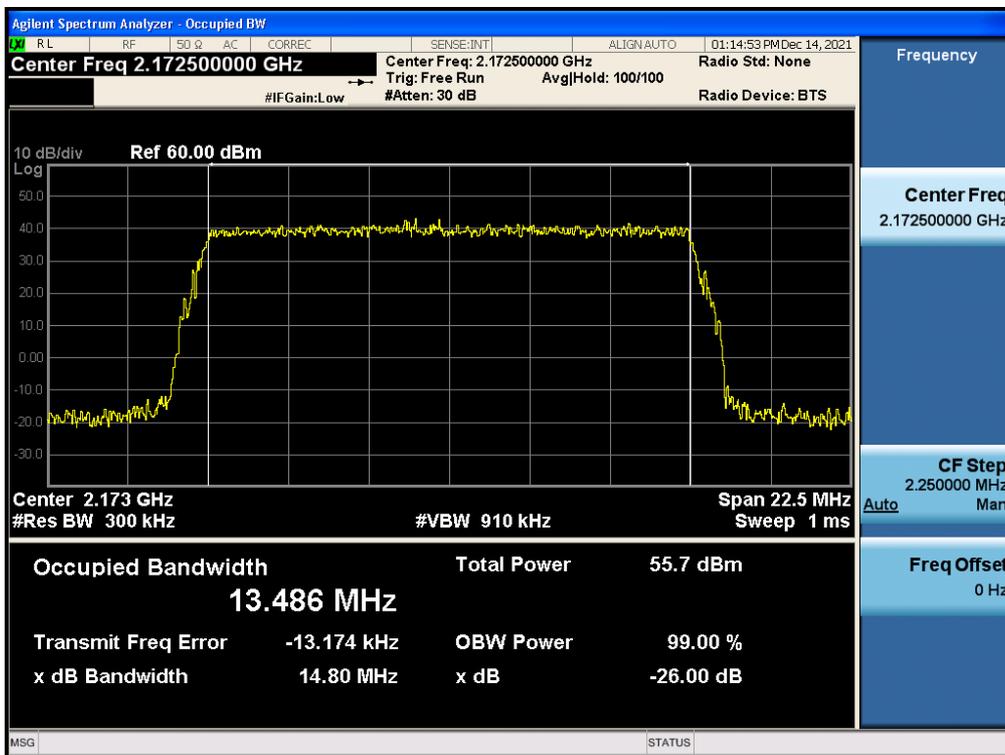
## Antenna 0 / (4 Port) LTE B66 5 MHz 1 Carrier / 16QAM / High



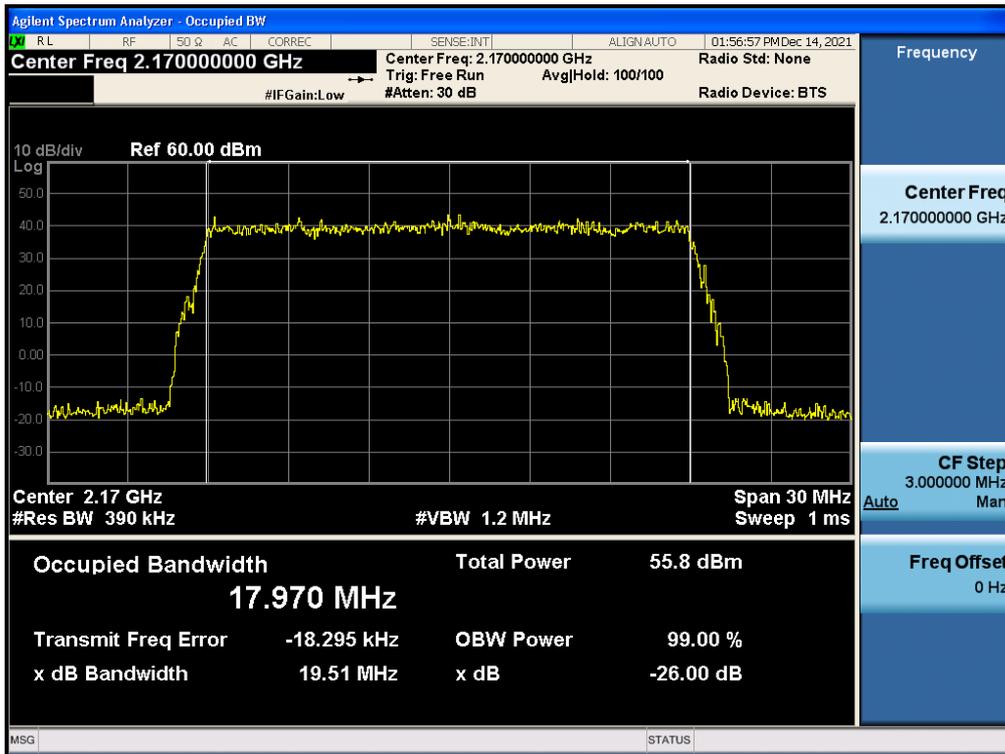
## Antenna 3 / (4 Port) LTE B66 10 MHz 1 Carrier / QPSK / Middle



## Antenna 3 / (4 Port) LTE B66 15 MHz 1 Carrier / QPSK / High



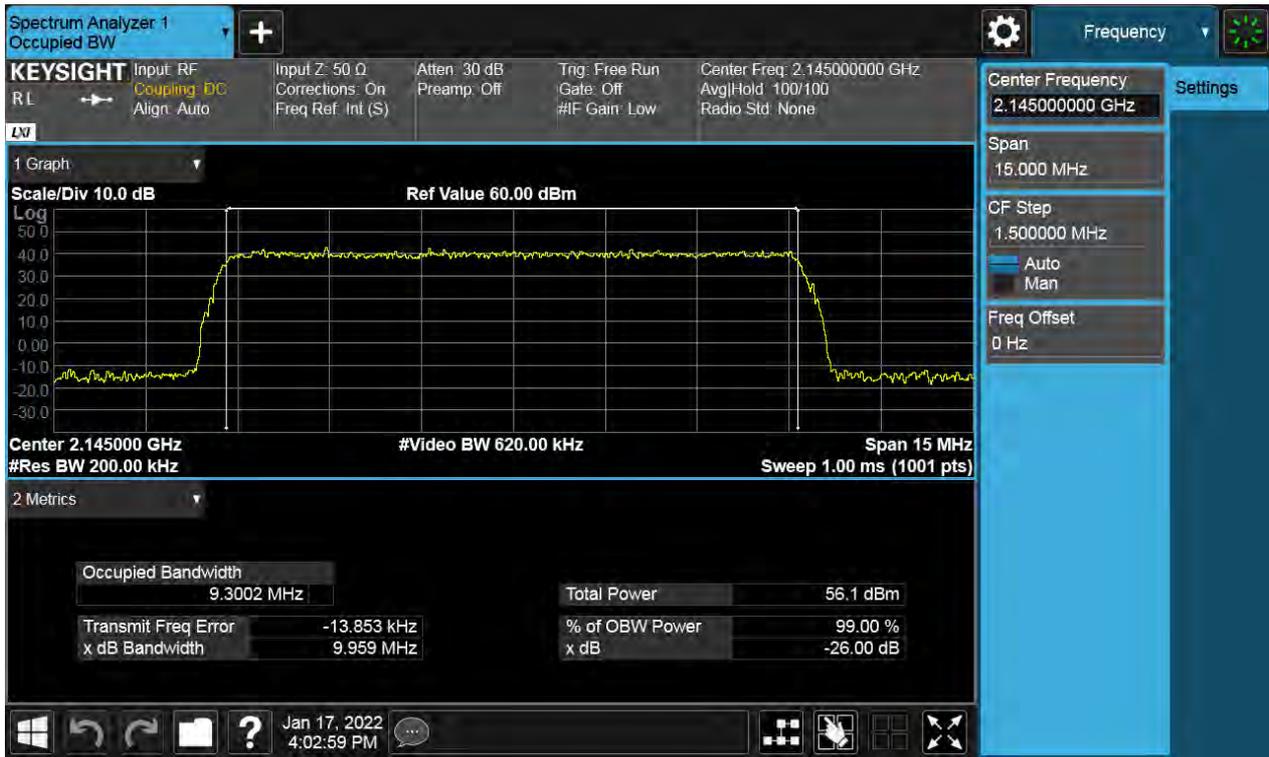
## Antenna 0 / (4 Port) LTE B66 20 MHz 1 Carrier / 16QAM / High



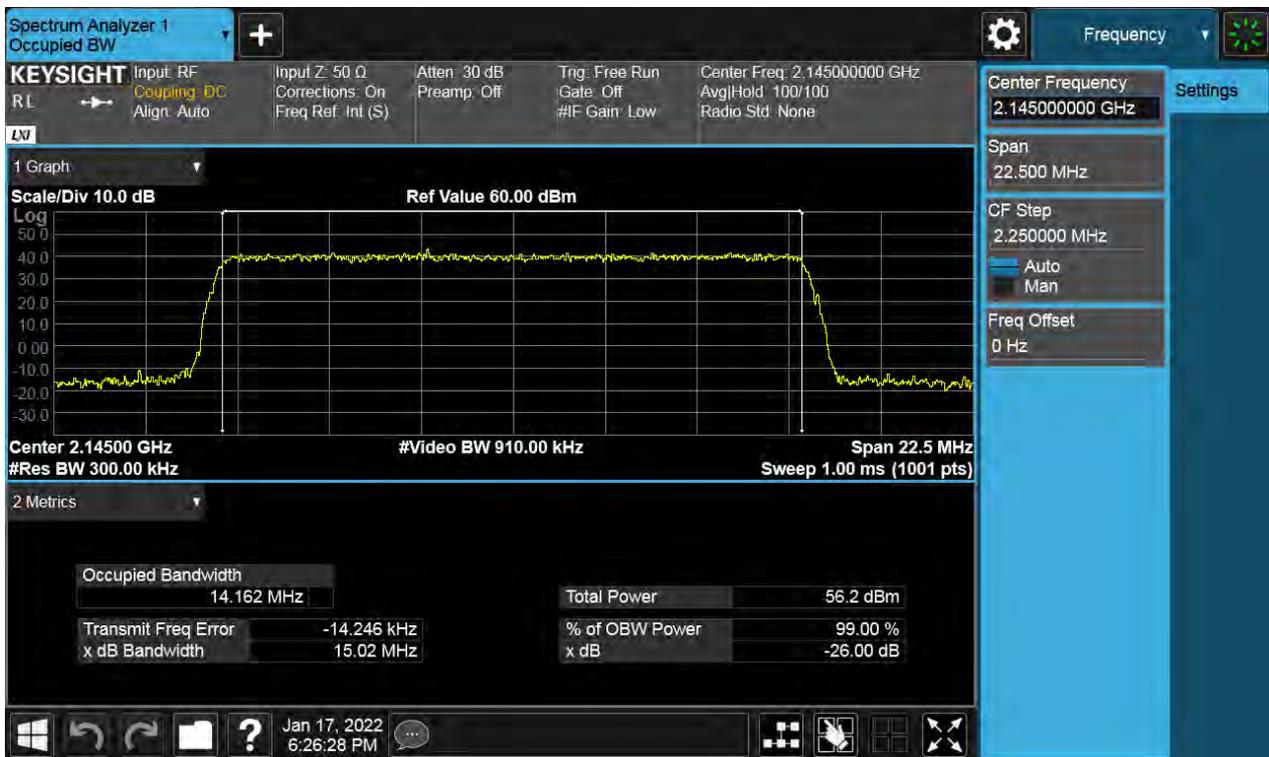
## Antenna 1 / (2 Port) 5G NR n66 5 MHz 1 Carrier / 16QAM / Middle

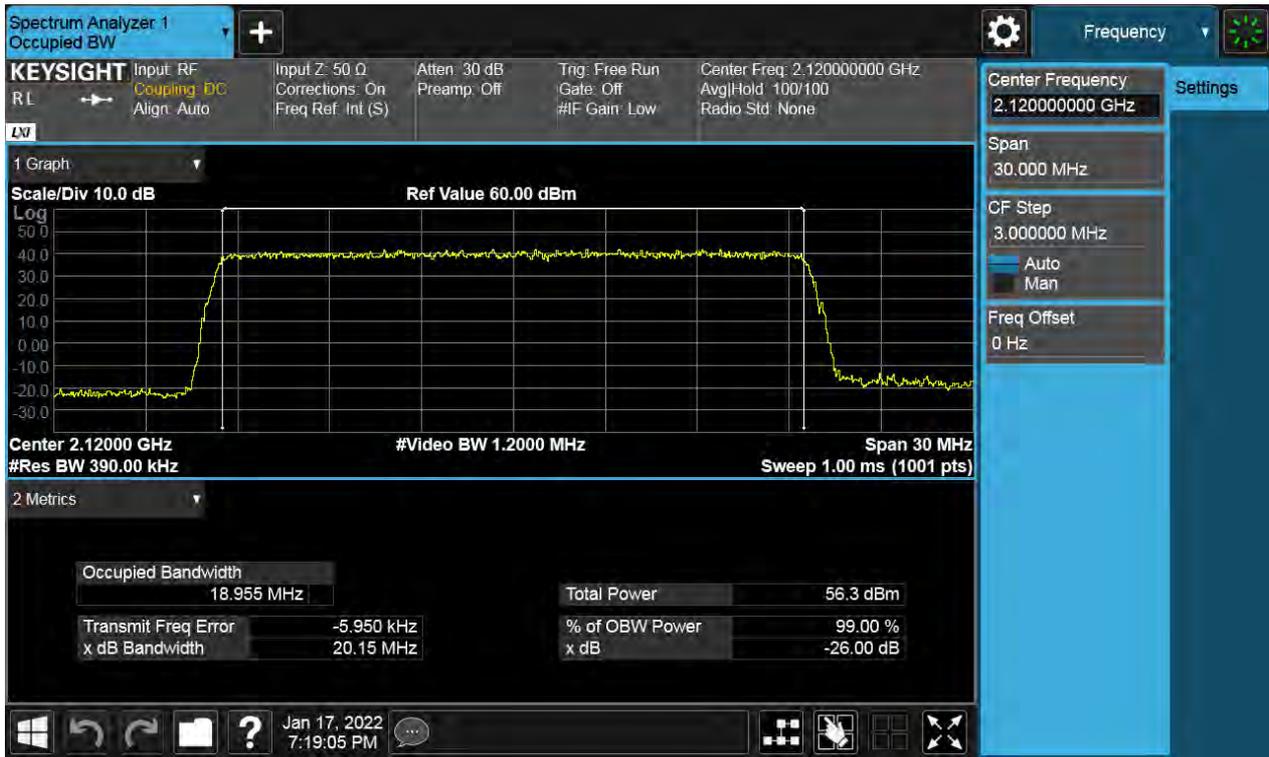


Antenna 1 / (2 Port) 5G NR n66 10 MHz 1 Carrier / 64QAM / Middle

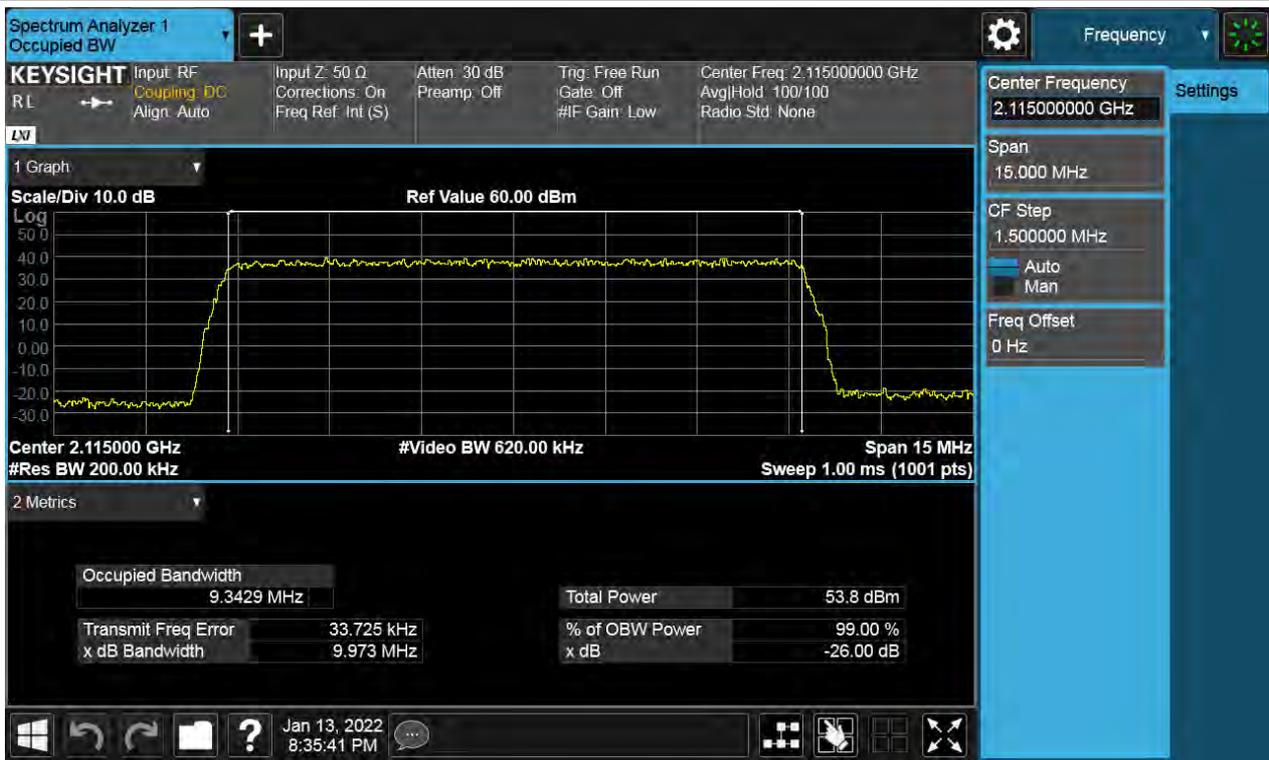


Antenna 1 / (2 Port) 5G NR n66 15 MHz 1 Carrier / 64QAM / Middle

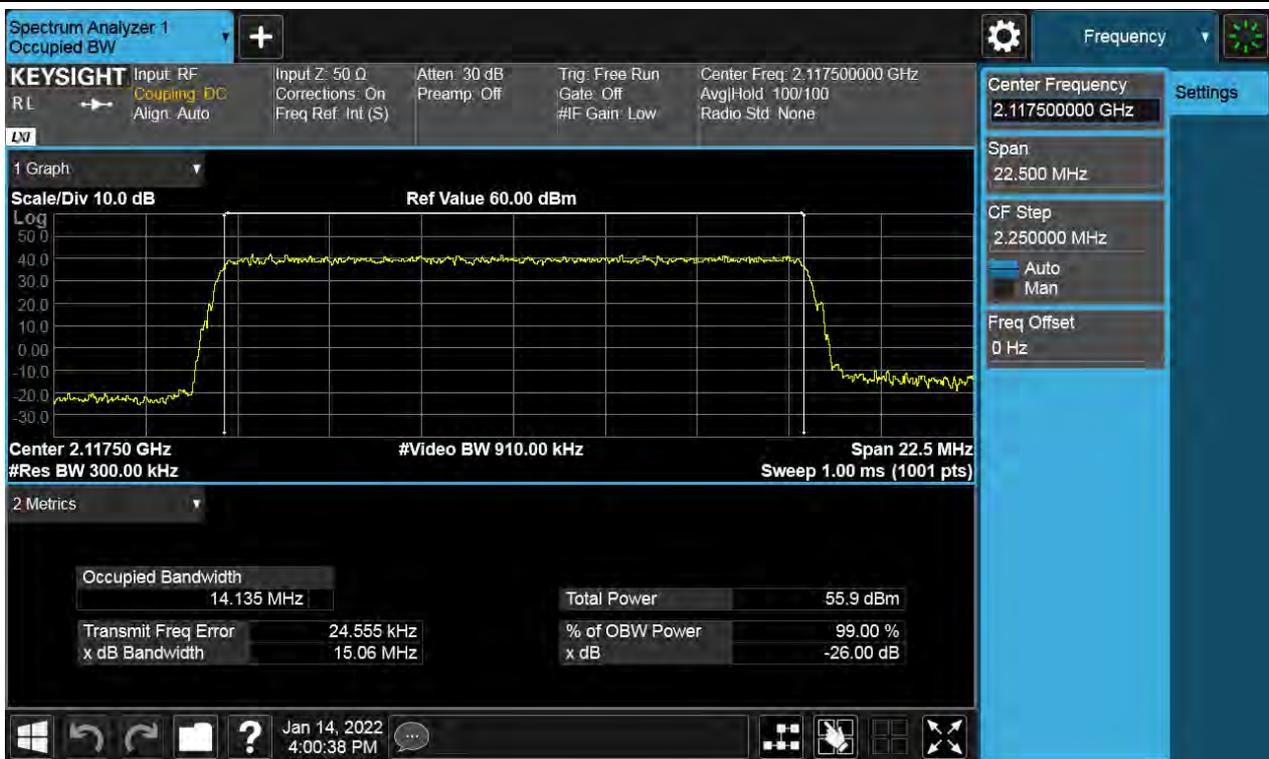


**Antenna 1 / (2 Port) 5G NR n66 20 MHz 1 Carrier / QPSK / Low**

**Antenna 3 / (4 Port) 5G NR n66 5 MHz 1 Carrier / 256QAM / Middle**

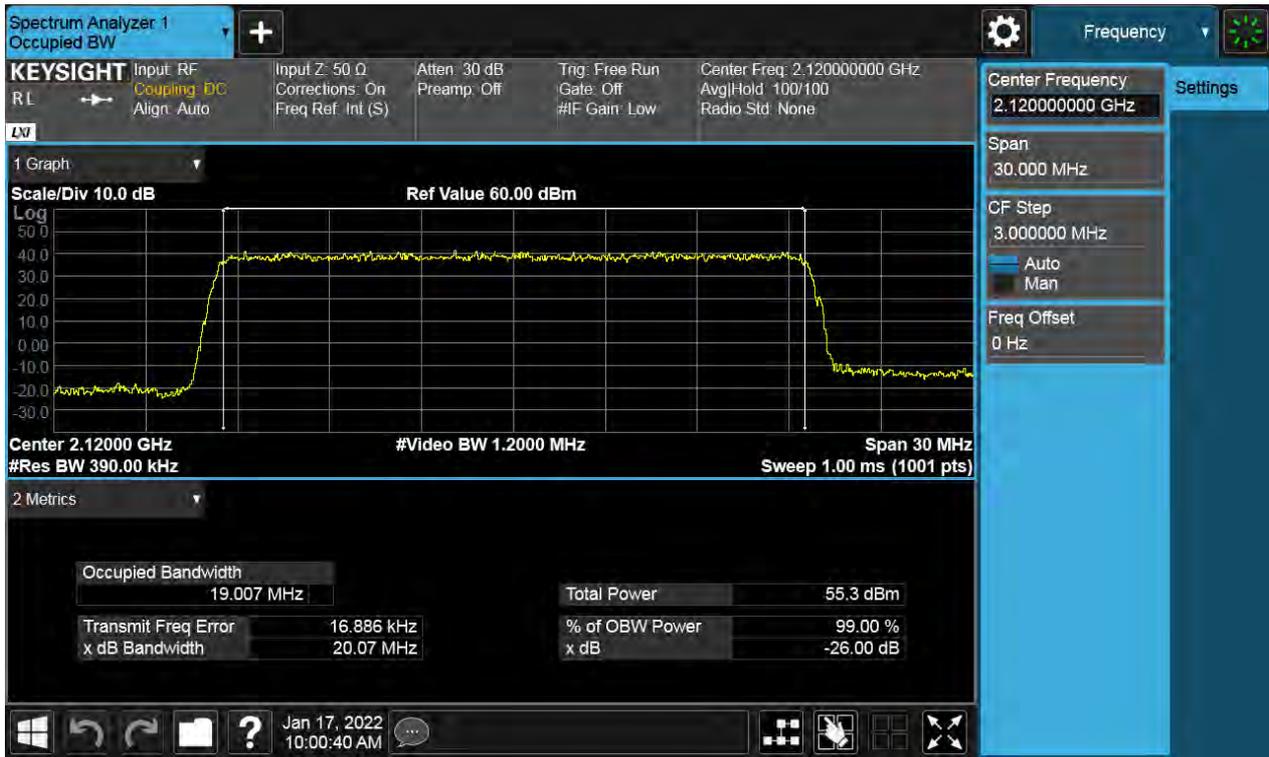

## Antenna 3 / (4 Port) 5G NR n66 10 MHz 1 Carrier / 256QAM / Low



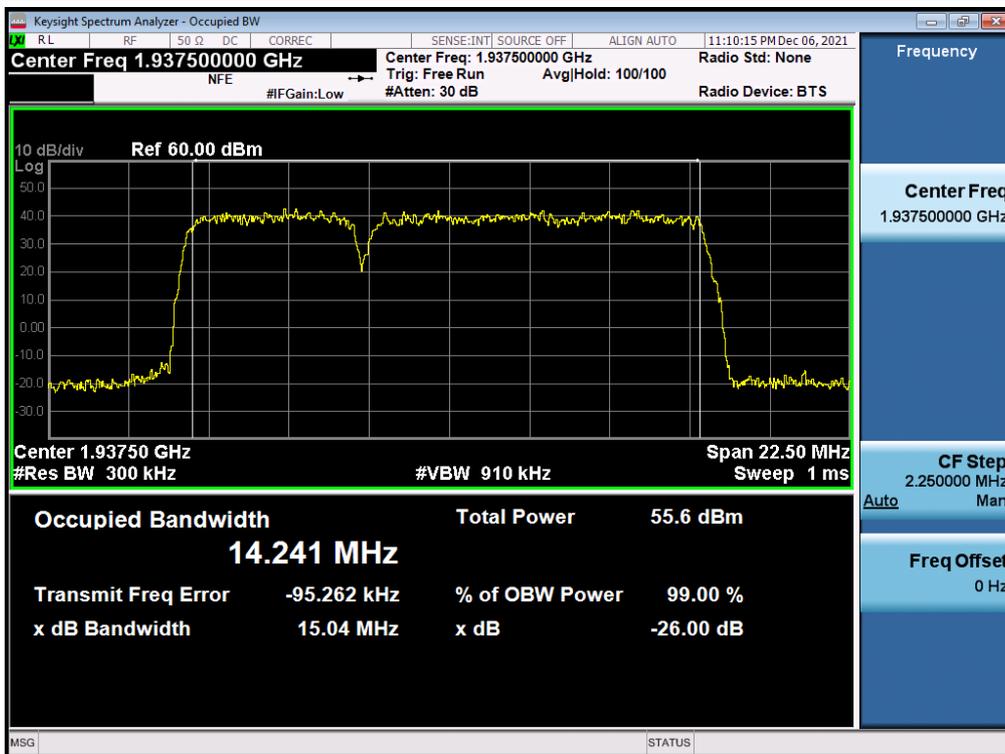
## Antenna 3 / (4 Port) 5G NR n66 15 MHz 1 Carrier / QPSK / Low



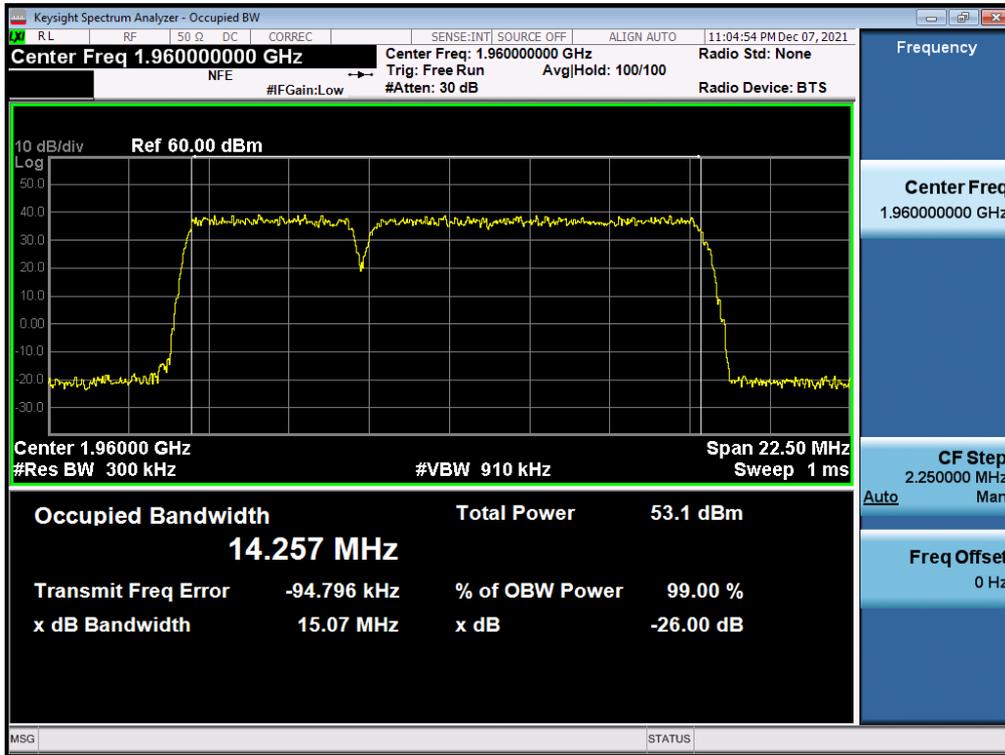
Antenna 2 / (4 Port) 5G NR n66 20 MHz 1 Carrier / QPSK / Low



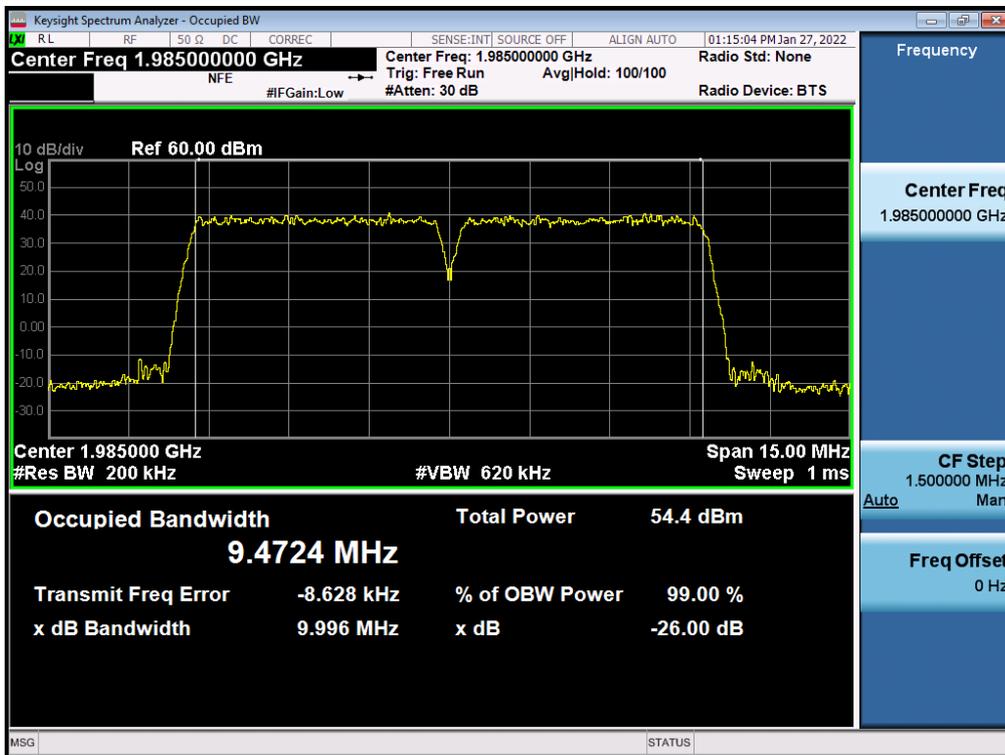
Antenna 0 / (2 Port) B2 DSS 10 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier [2 Carrier] / Contiguous / 16QAM / Low

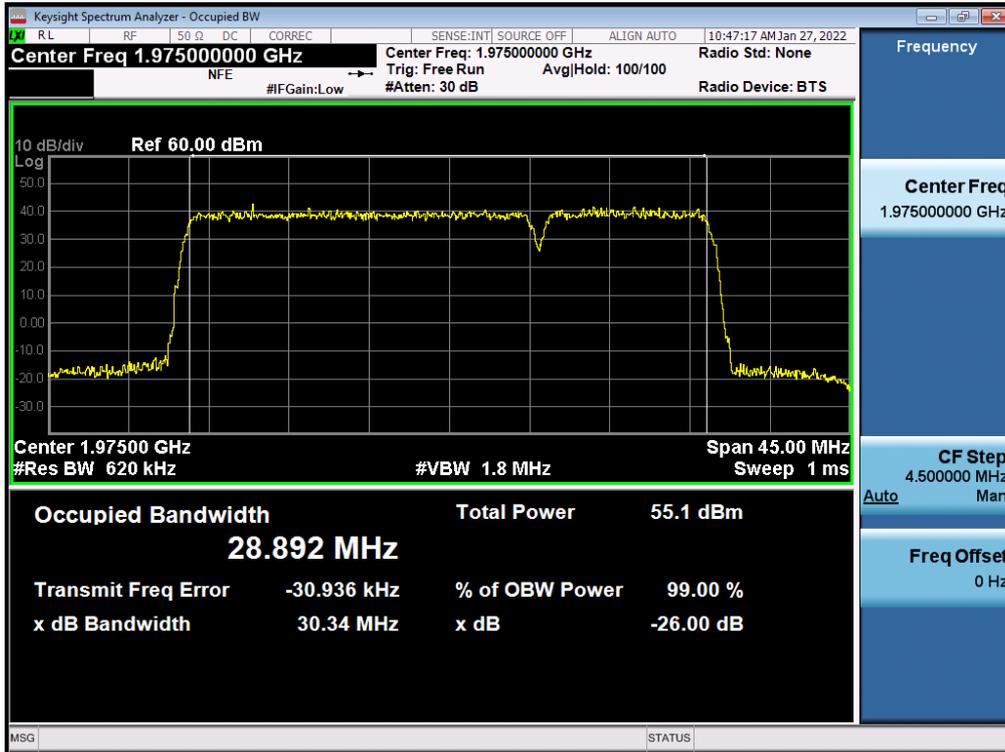
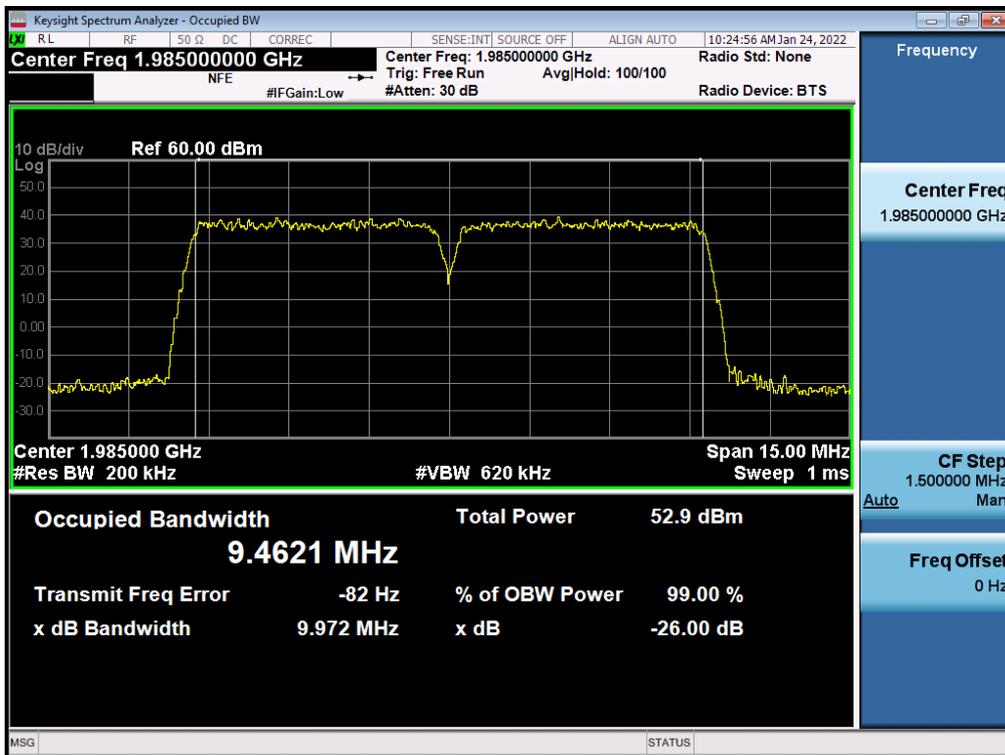


Antenna 0 / (4 Port) B2 DSS 10 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier [2 Carrier] / Contiguous / QPSK / Middle

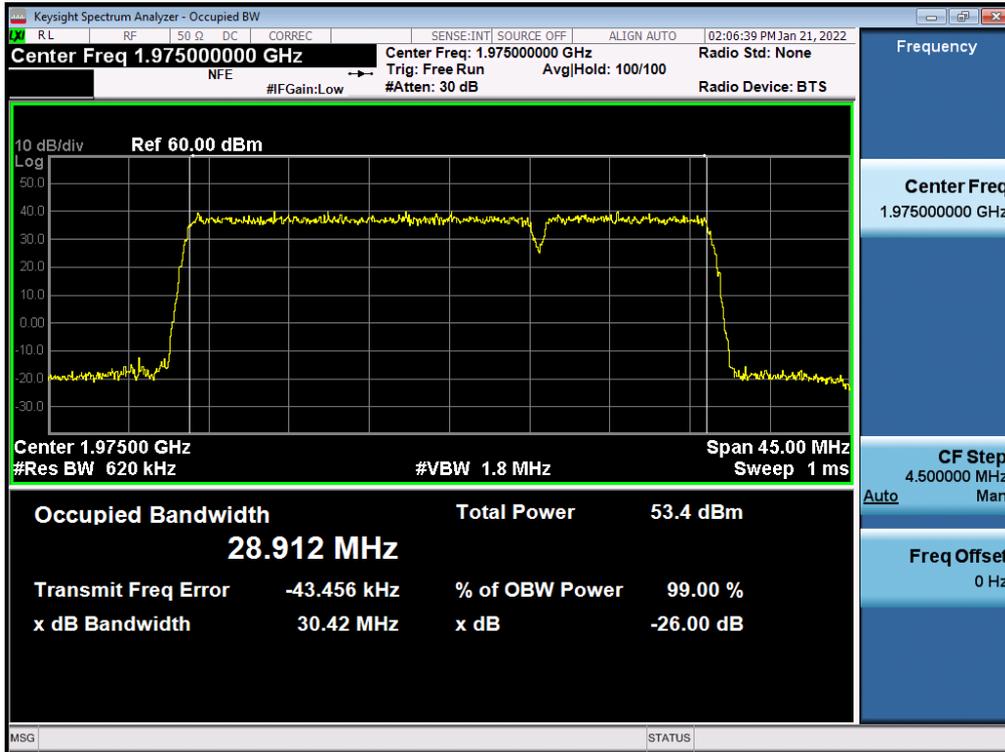


Antenna 0 / (2 Port) LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [2 Carrier] / Contiguous / 256QAM / High

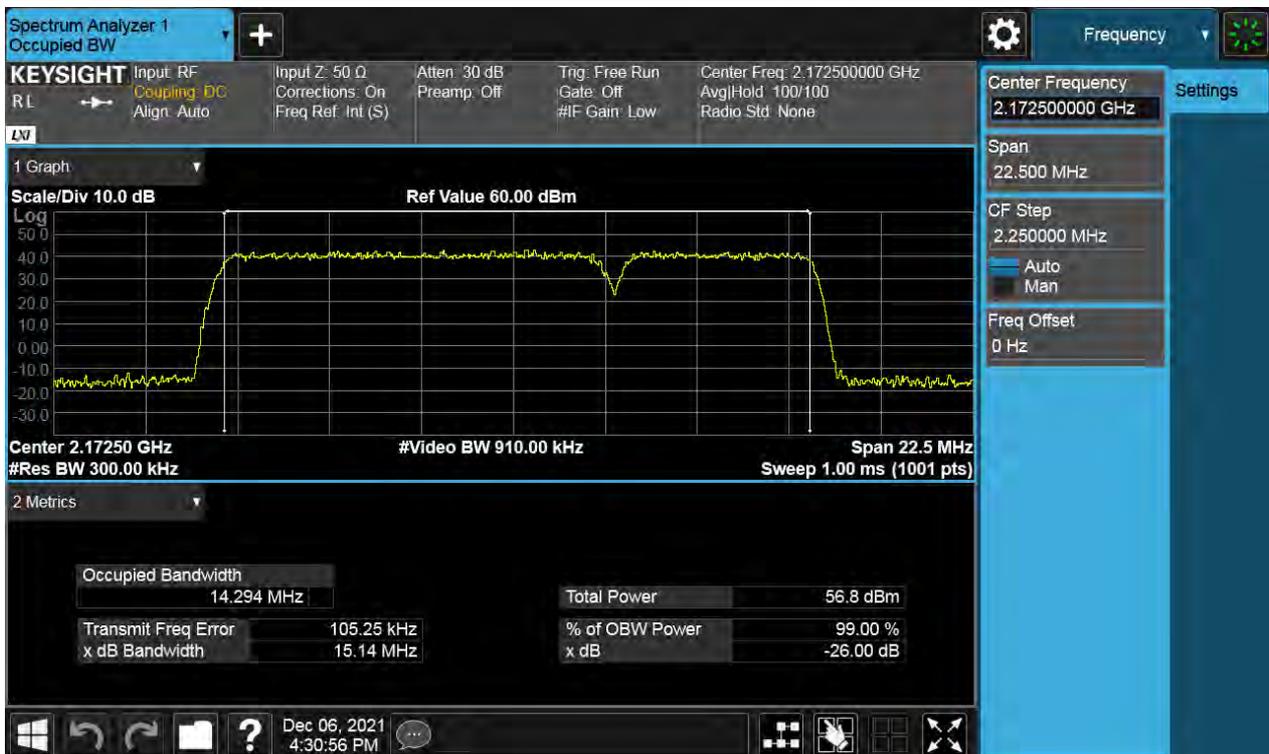


**Antenna 0 / (2 Port) LTE B2 10 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [2 Carrier] / Contiguous / 64QAM / High**

**Antenna 0 / (4 Port) LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [2 Carrier] / Contiguous / 256QAM / High**


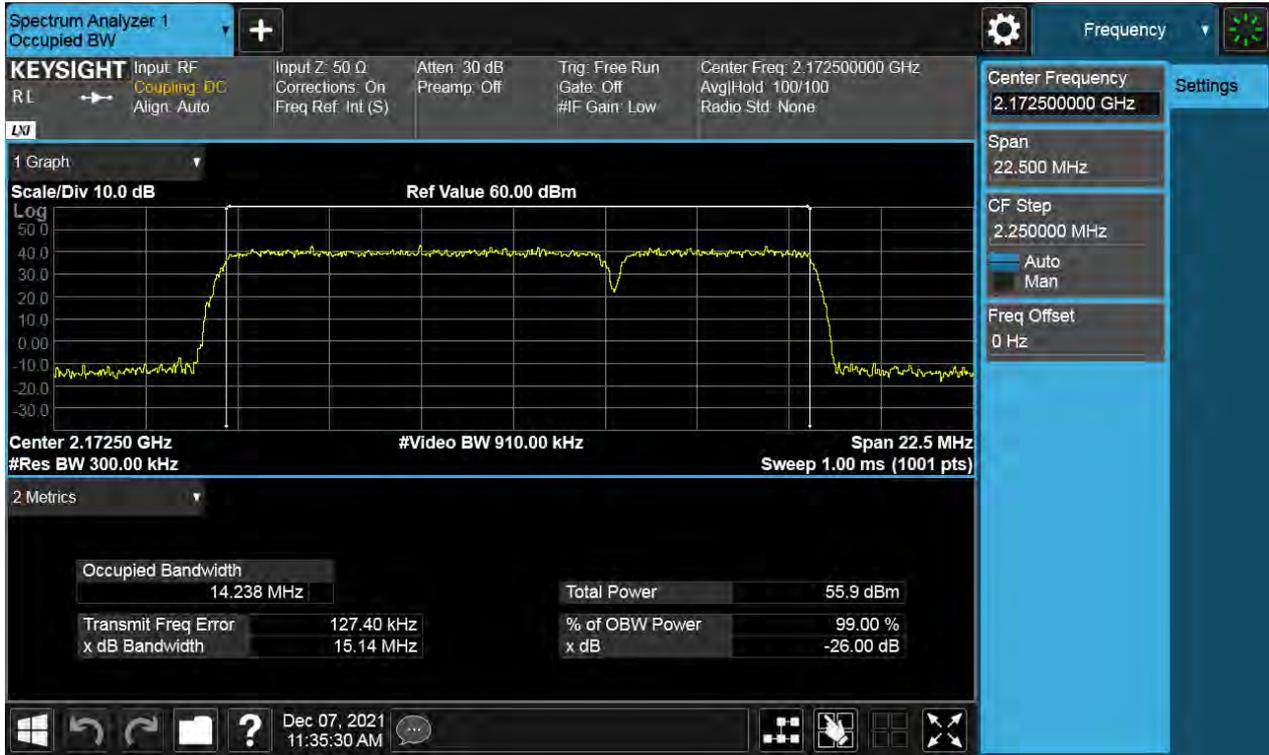
Antenna 0 / (4 Port) LTE B2 10 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [2 Carrier] / Contiguous / 64QAM / High



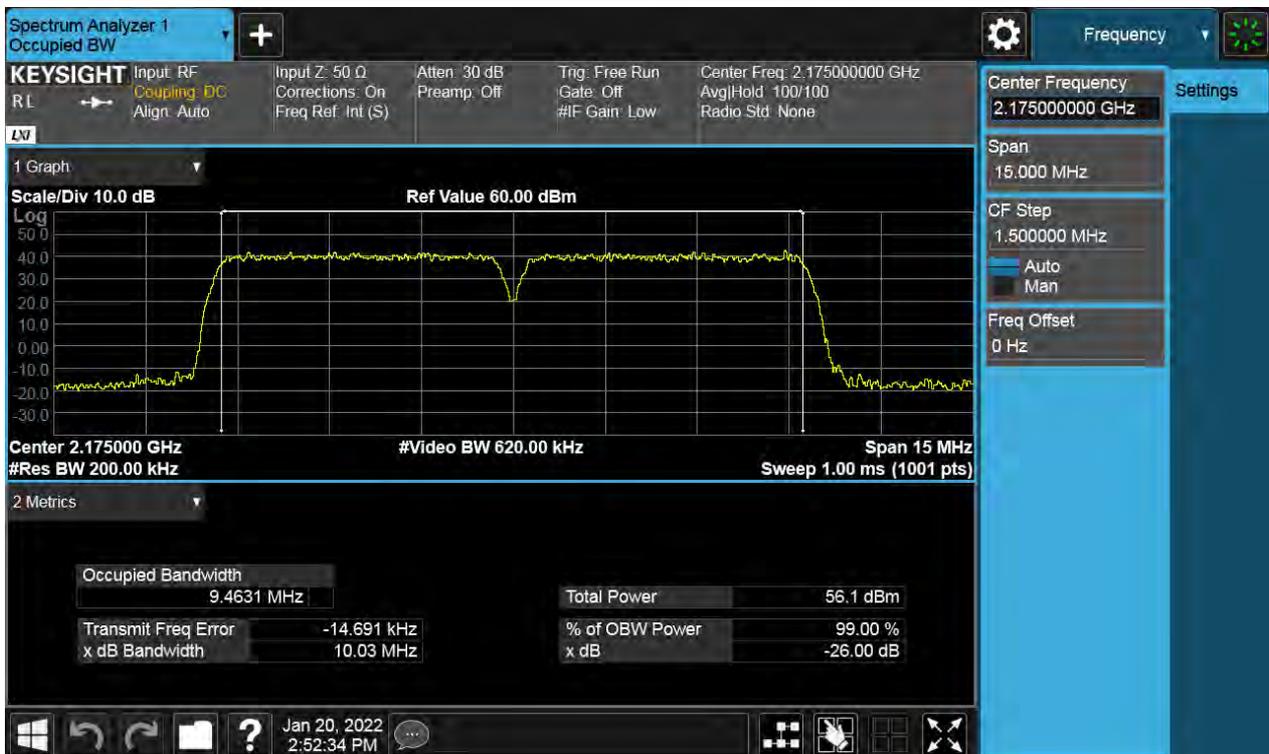
Antenna 0 / (2 Port) B66 DSS 10 MHz 9to1 1 Carrier + LTE B66 5 MHz 1 Carrier [2 Carrier] / Contiguous / QPSK / High



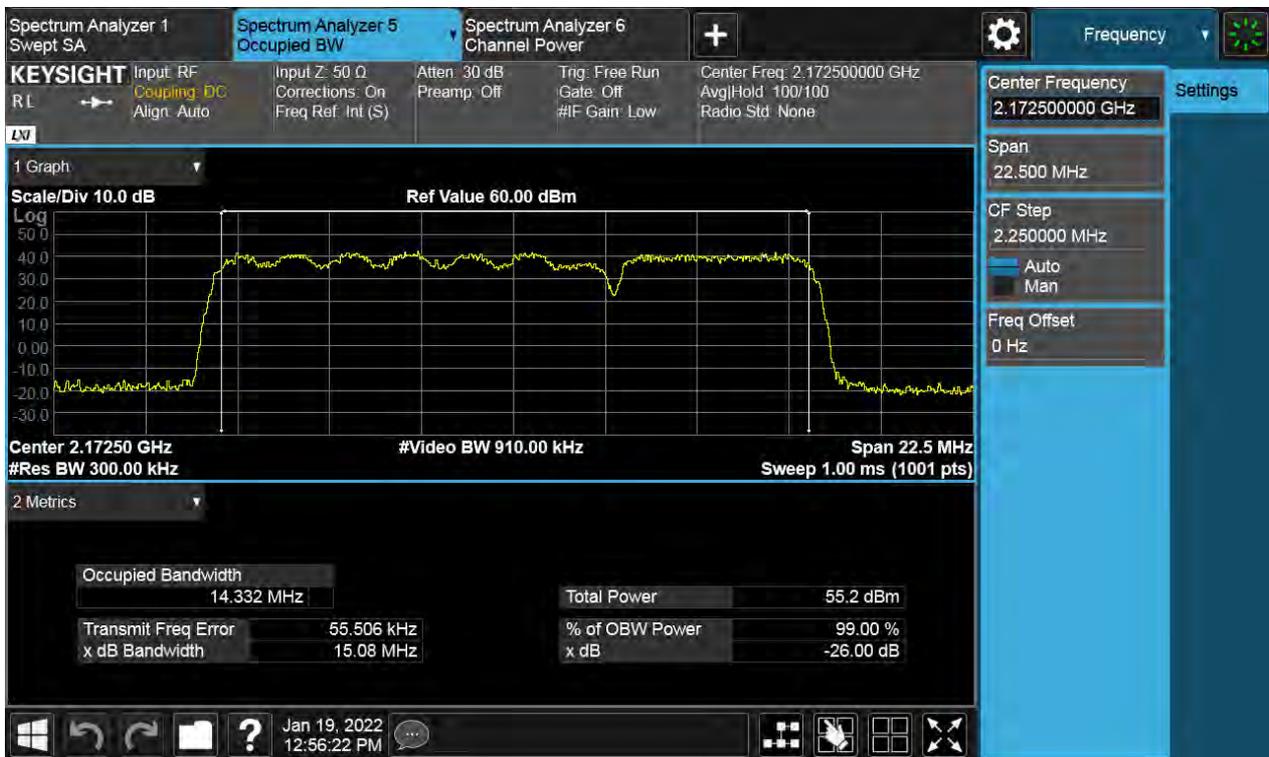
Antenna 0 / (4 Port) B66 DSS 10 MHz 9to1 1 Carrier + LTE B66 5 MHz 1 Carrier [2 Carrier] / Contiguous / 64QAM / High

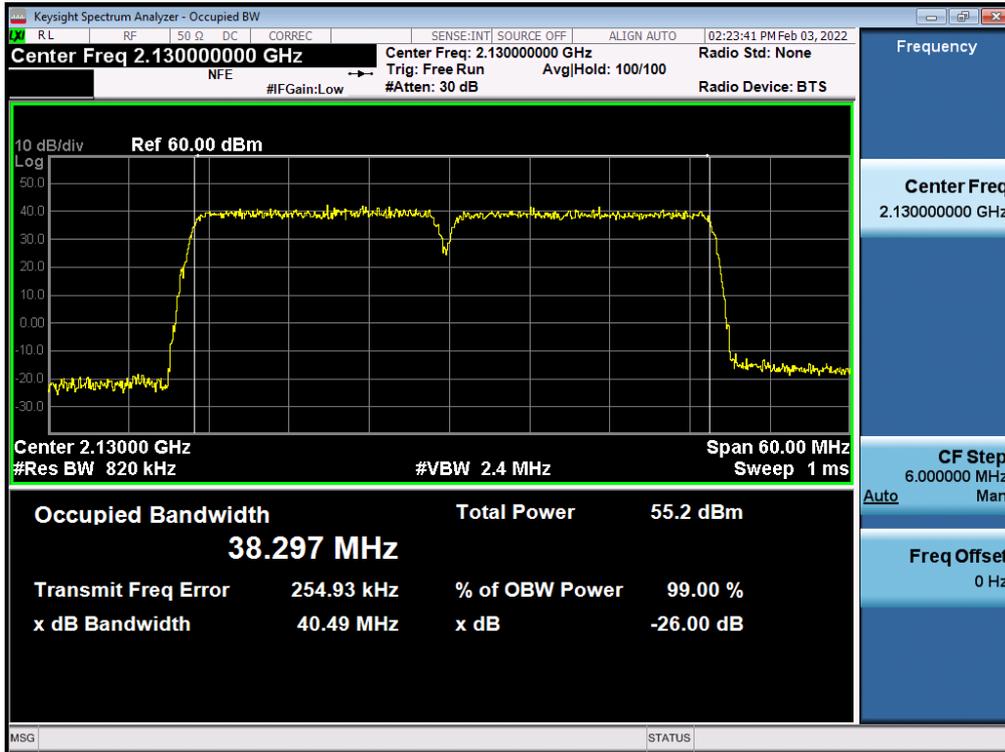
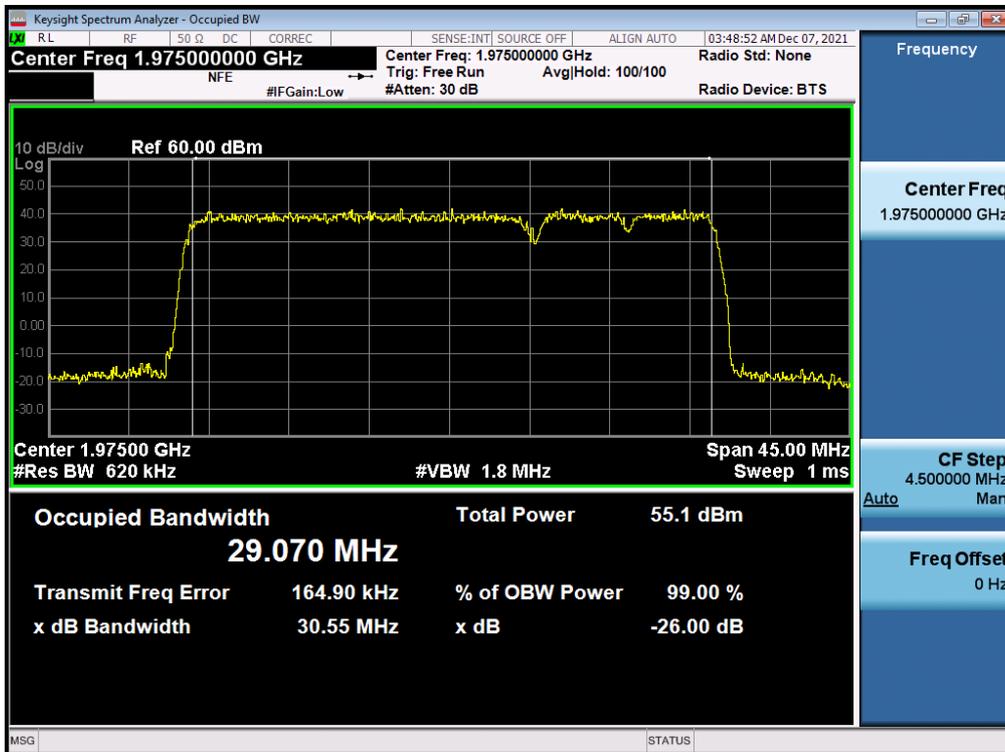


Antenna 1 / (2 Port) LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier [2 Carrier] / Contiguous / 64QAM / High

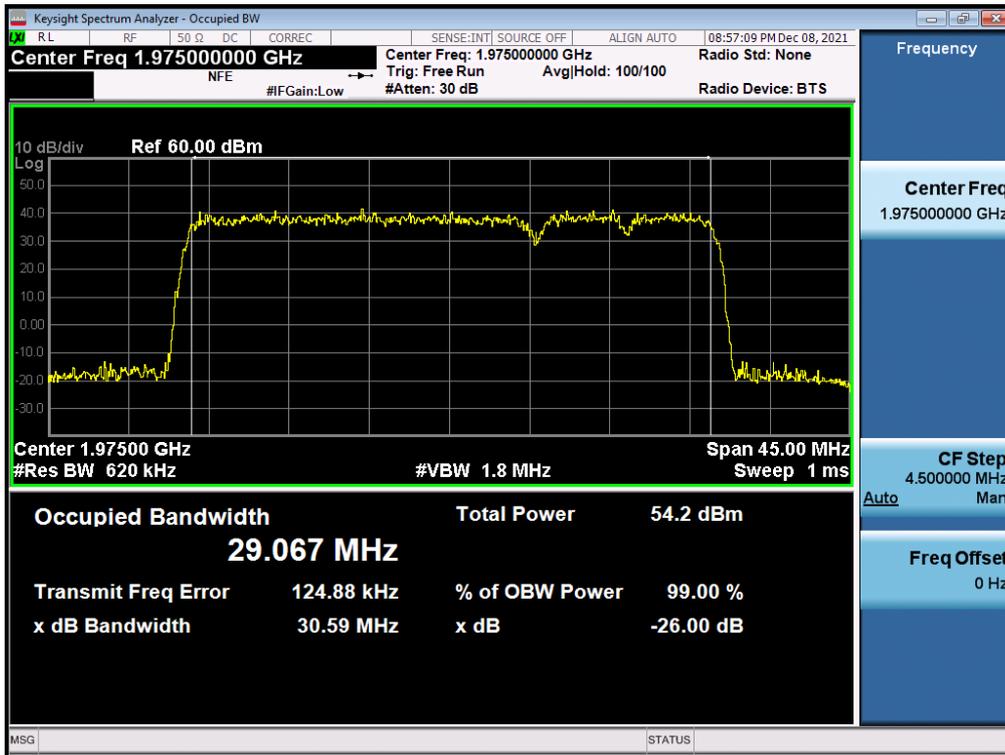


**Antenna 1 / (2 Port) LTE B66 20 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [2 Carrier] / Contiguous / 256QAM / High**

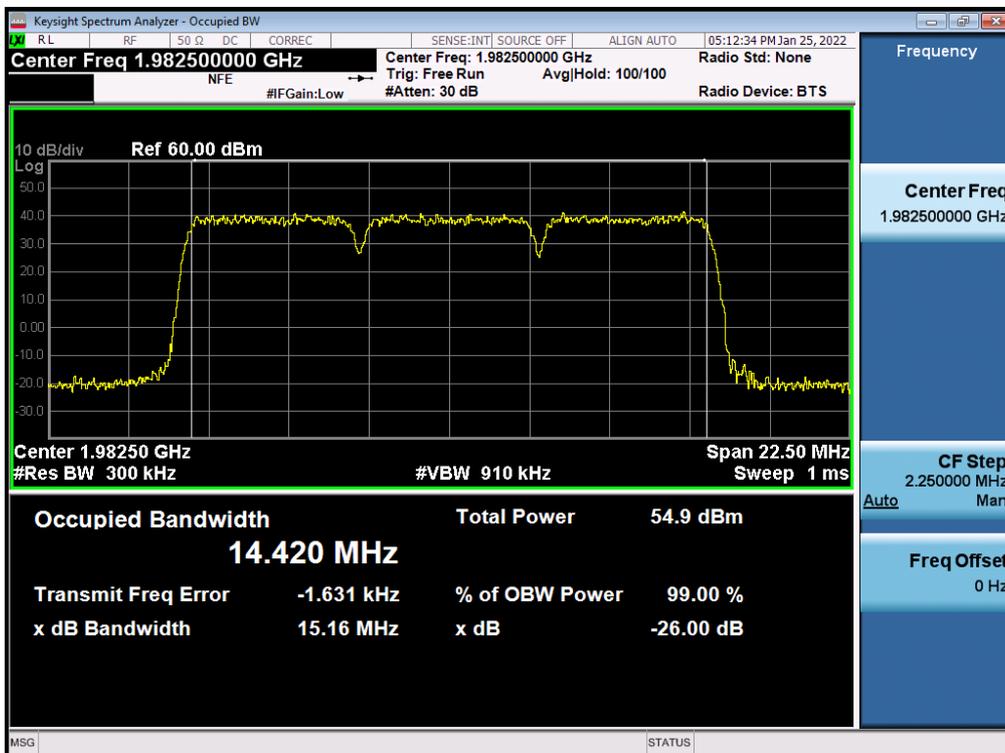
**Antenna 1 / (4 Port) LTE B66 5 MHz 1 Carrier + 5G NR n66 10 MHz 1 Carrier [2 Carrier] / Contiguous / 16QAM / High**


**Antenna 1 / (4 Port) LTE B66 20 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [2 Carrier] / Contiguous / QPSK / Low**

**Antenna 0 / (2 Port) B2 DSS 20 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier [3 Carrier] / Contiguous / QPSK / High**


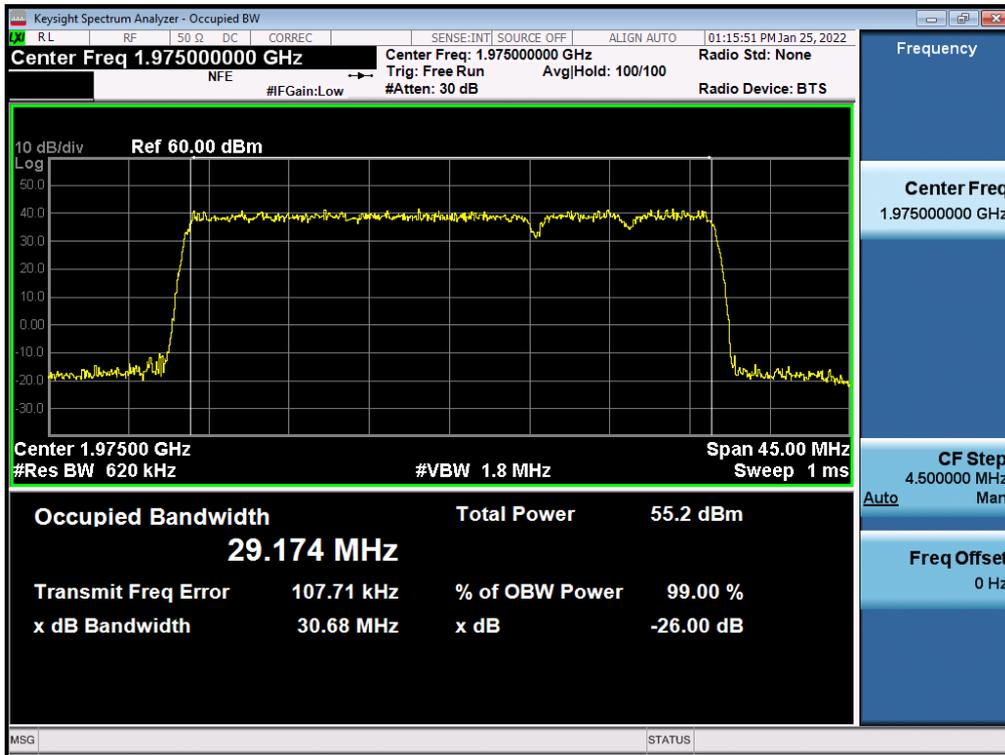
Antenna 0 / (4 Port) B2 DSS 20 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier [3 Carrier] / Contiguous / 16QAM / High



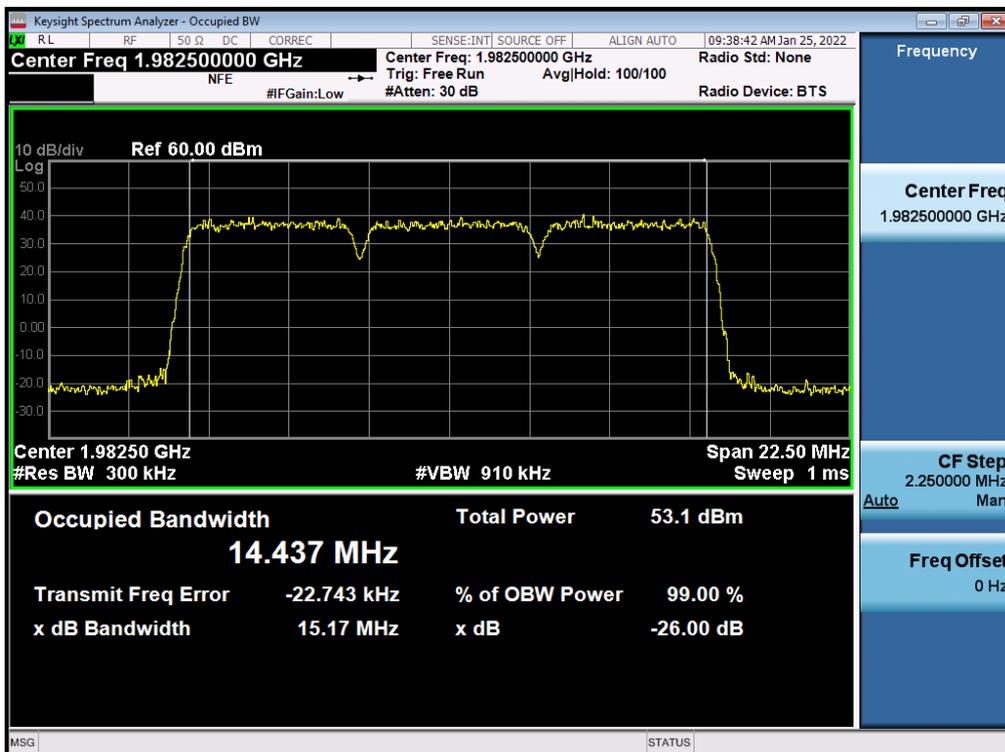
Antenna 0 / (2 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [3 Carrier] / Contiguous / 256QAM / High



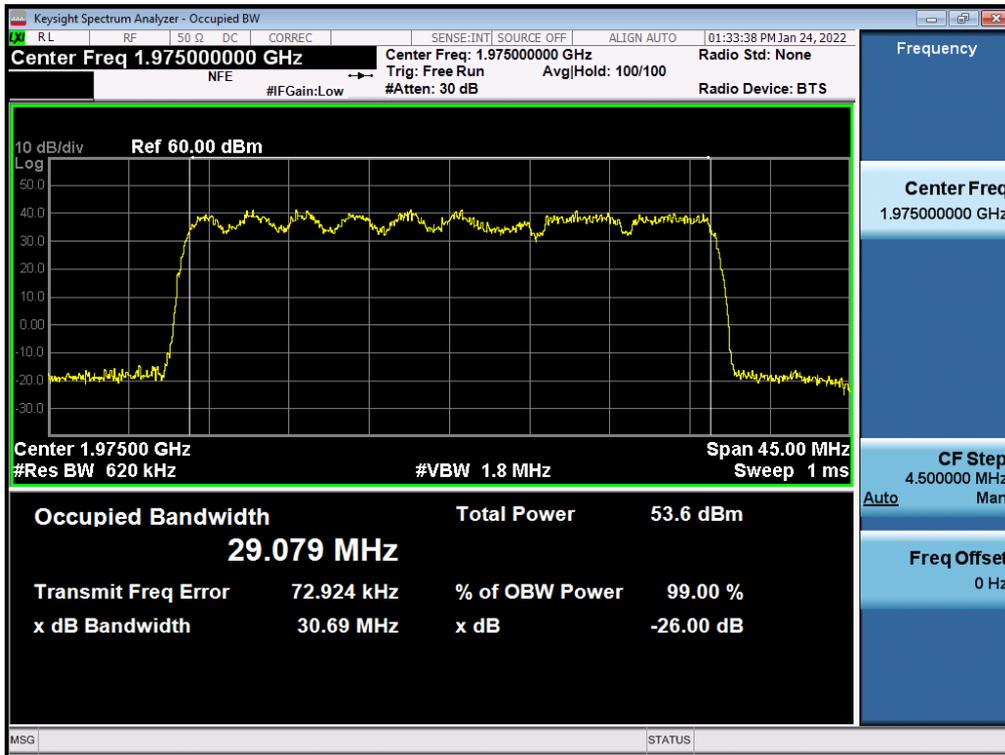
Antenna 0 / (2 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [3 Carrier] / Contiguous / 64QAM / High



Antenna 0 / (4 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [3 Carrier] / Contiguous / 256QAM / High

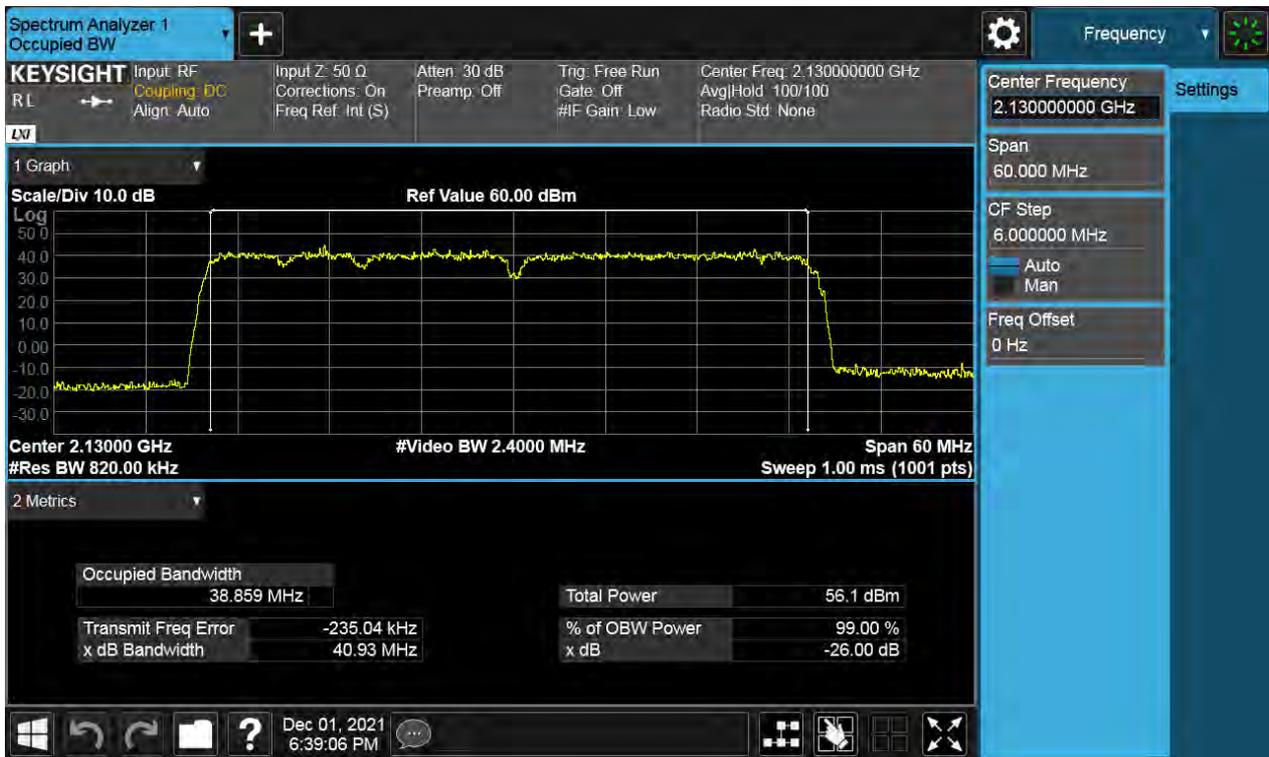


Antenna 0 / (4 Port) LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [3 Carrier] / Contiguous / 16QAM / High



Antenna 0 / (2 Port) B66 DSS 20 MHz 9to1 1 Carrier + LTE B66 10 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier [4 Carrier] / Contiguous / QPSK / Low

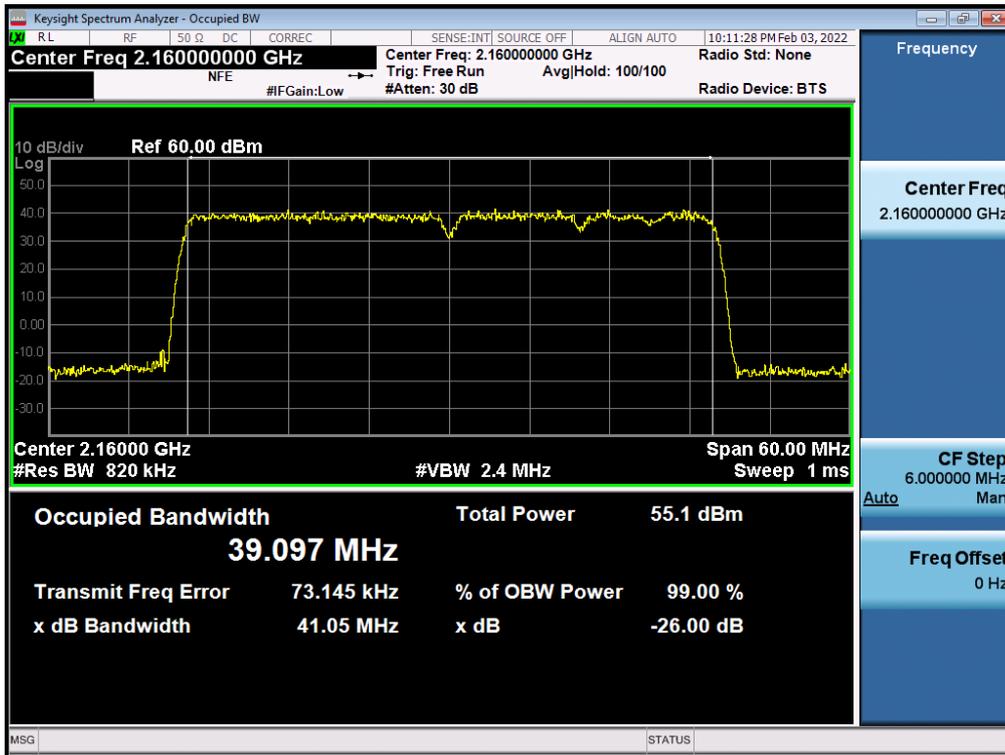


**Antenna 0 / (4 Port) B66 DSS 20 MHz 9to1 1 Carrier + LTE B66 10 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier [4 Carrier] / Contiguous / 16QAM / Low**

**Antenna 1 / (2 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier [4 Carrier] / Contiguous / QPSK / Low**

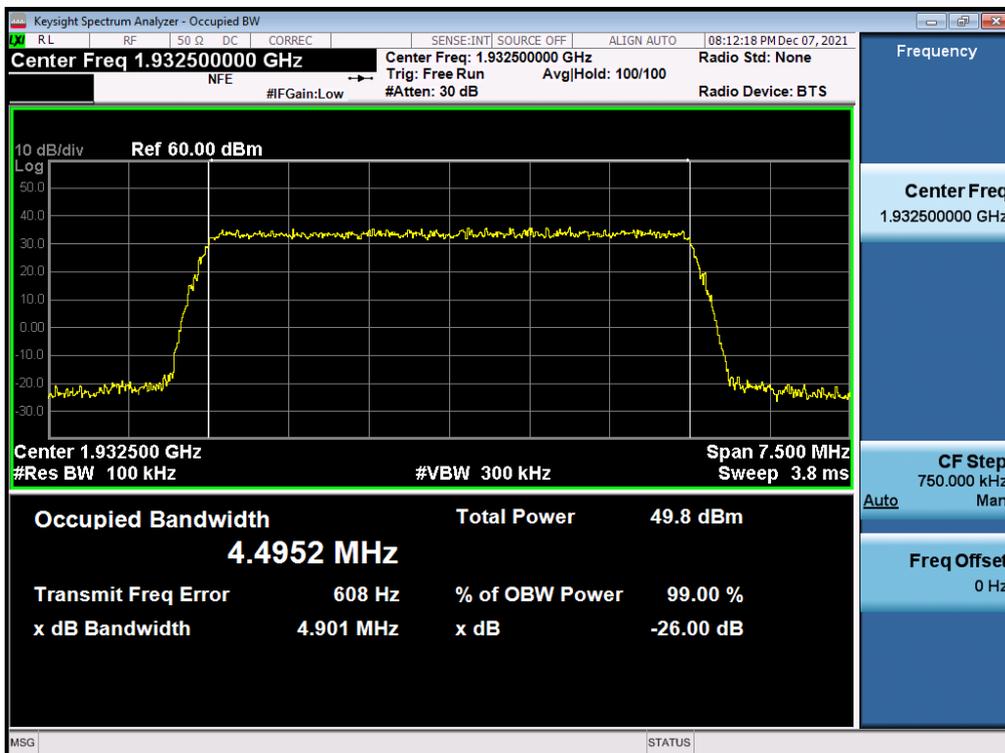

**Antenna 1 / (2 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 10 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [4 Carrier] / Contiguous / QPSK / Middle**

**Antenna 1 / (4 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier [4 Carrier] / Contiguous / 256QAM / High**

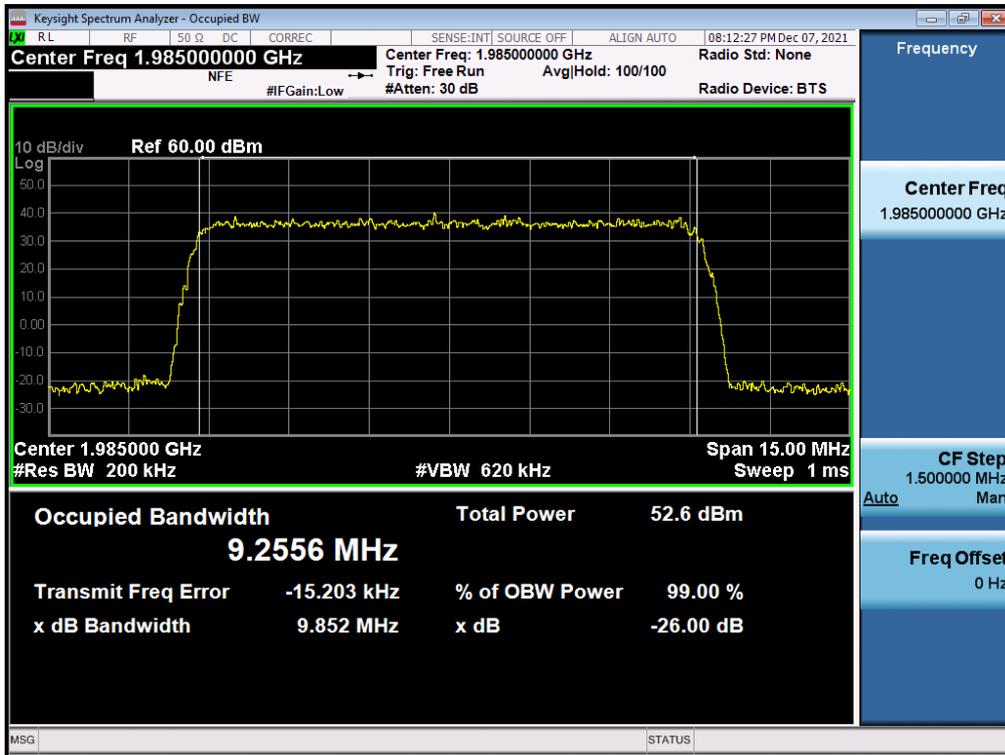

Antenna 1 / (4 Port) LTE B66 5 MHz 1 Carrier + LTE B66 5 MHz 1 Carrier + LTE B66 10 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [4 Carrier] / Contiguous / 64QAM / High



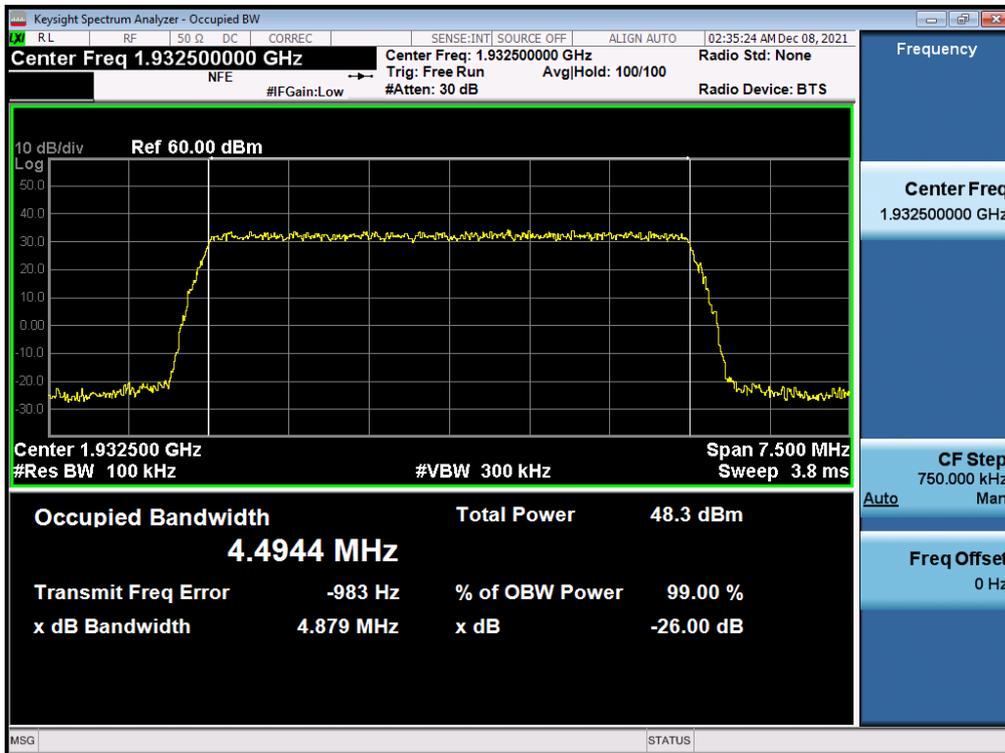
Antenna 0 / (2 Port) B2 DSS 10 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / B2 DSS 10 MHz 9to1 / 256QAM / Low



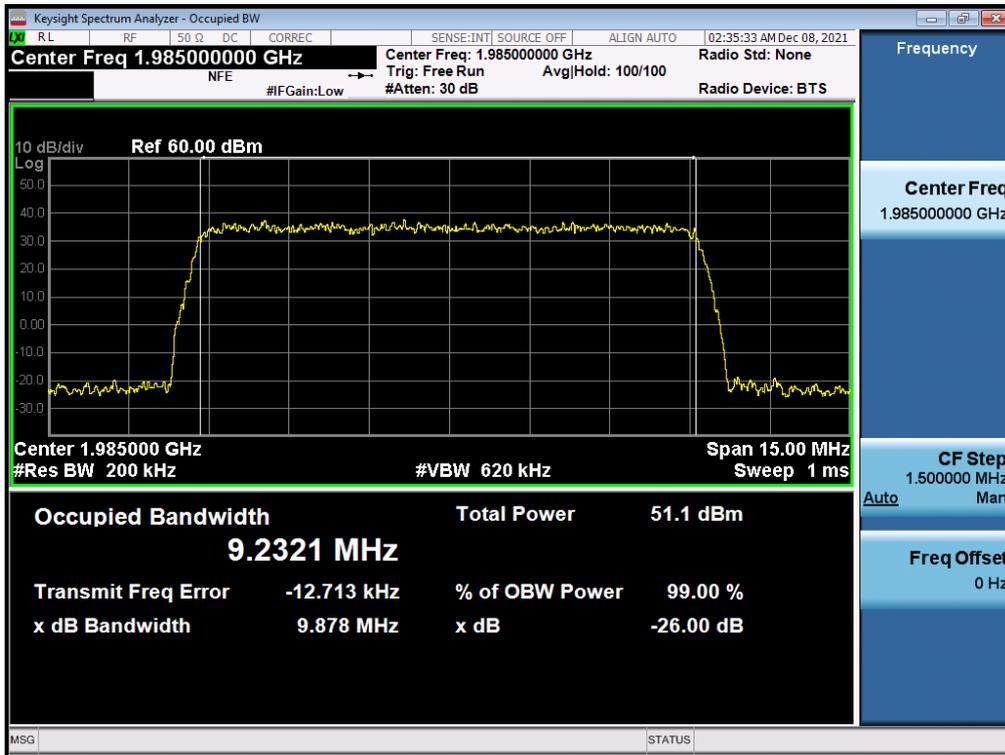
Antenna 0 / (2 Port) B2 DSS 10 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B2 5 MHz / 256QAM / High



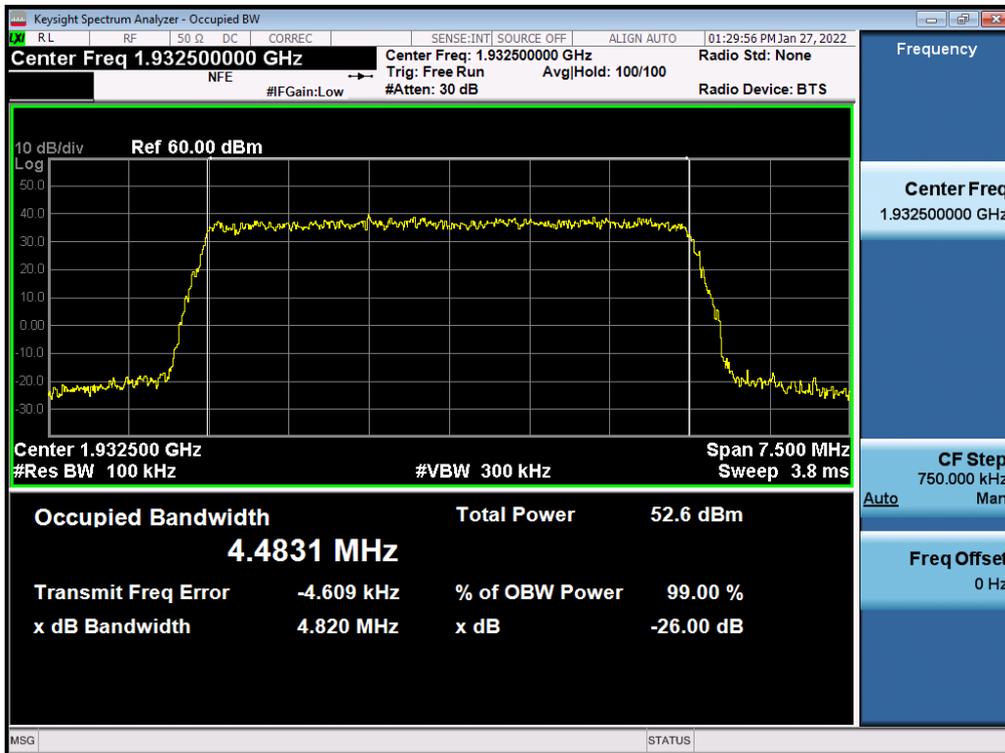
Antenna 1 / (4 Port) B2 DSS 10 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / B2 DSS 10 MHz 9to1 / 256QAM / Low



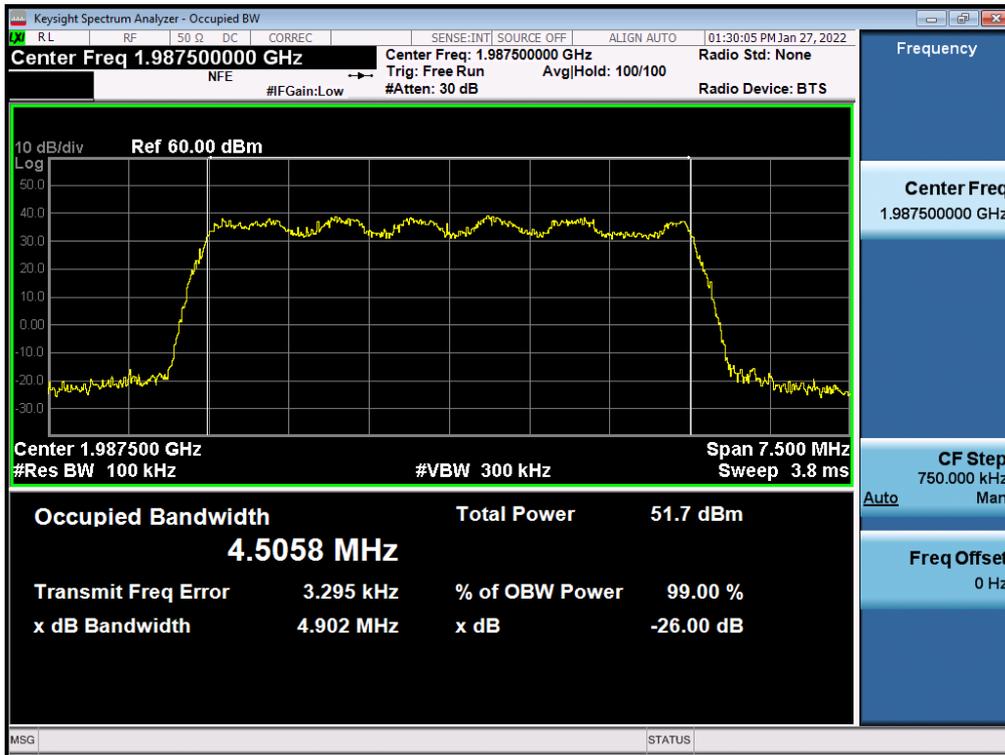
Antenna 1 / (4 Port) B2 DSS 10 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B2 5 MHz / 256QAM / High



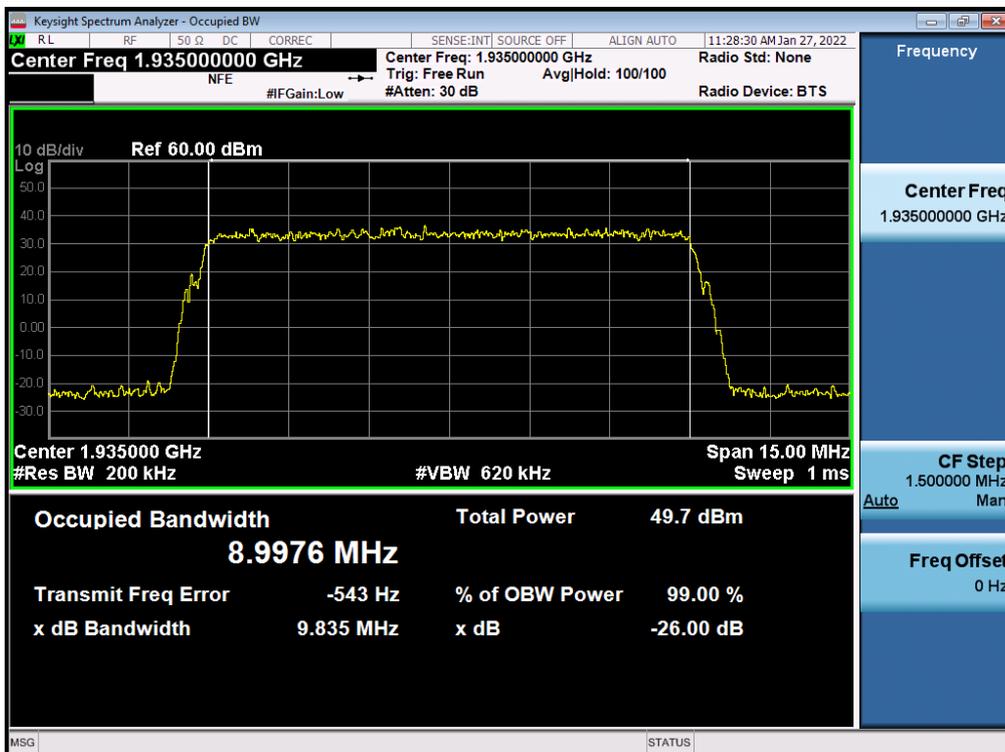
Antenna 0 / (2 Port) LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B2 5 MHz / 16QAM / Low



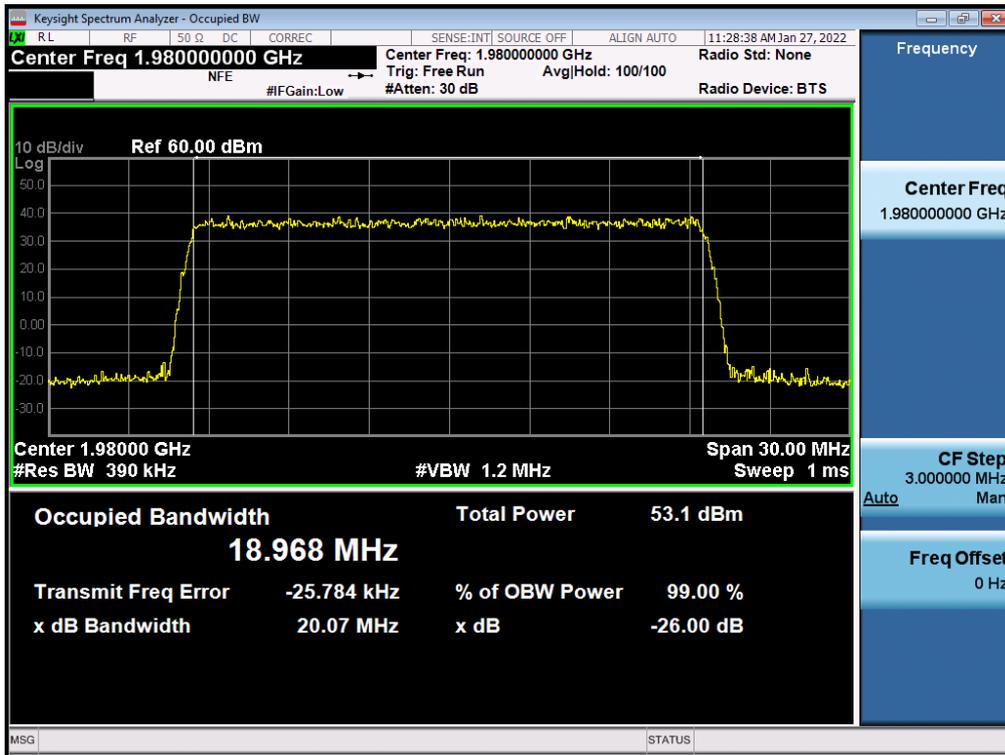
Antenna 0 / (2 Port) LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / 5G NR n2 5 MHz / 16QAM / High



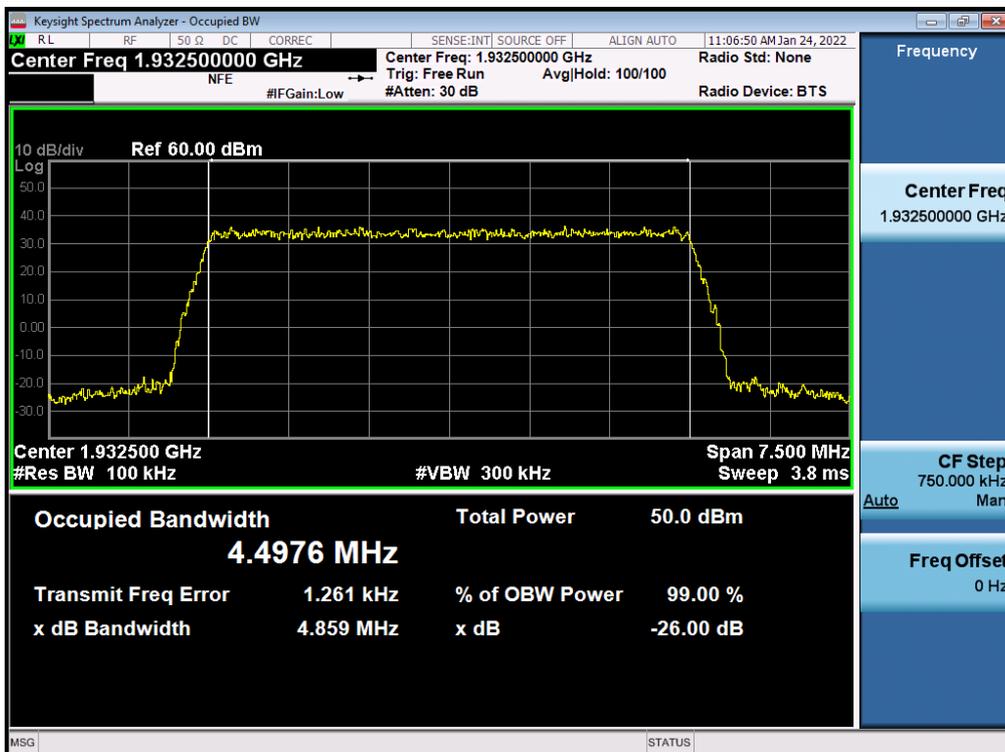
Antenna 0 / (2 Port) LTE B2 10 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B2 10 MHz / 64QAM / Low



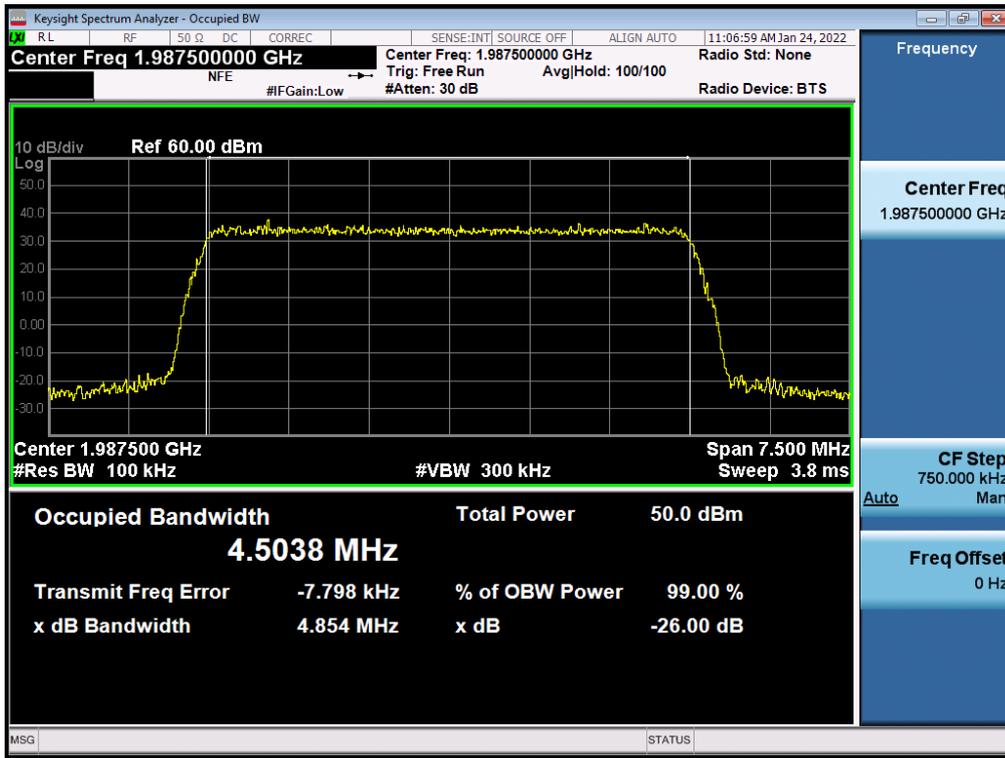
Antenna 0 / (2 Port) LTE B2 10 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [2 Carrier] / Non-Contiguous / 5G NR n2 20 MHz / 64QAM / High



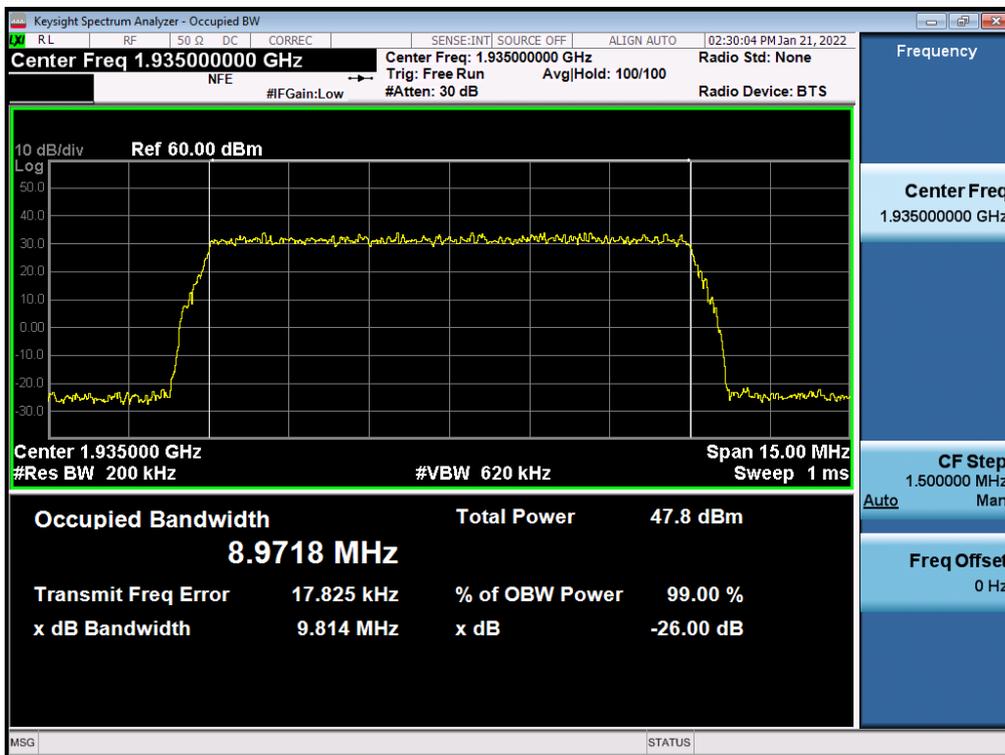
Antenna 0 / (4 Port) LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B2 5 MHz / 64QAM / Low



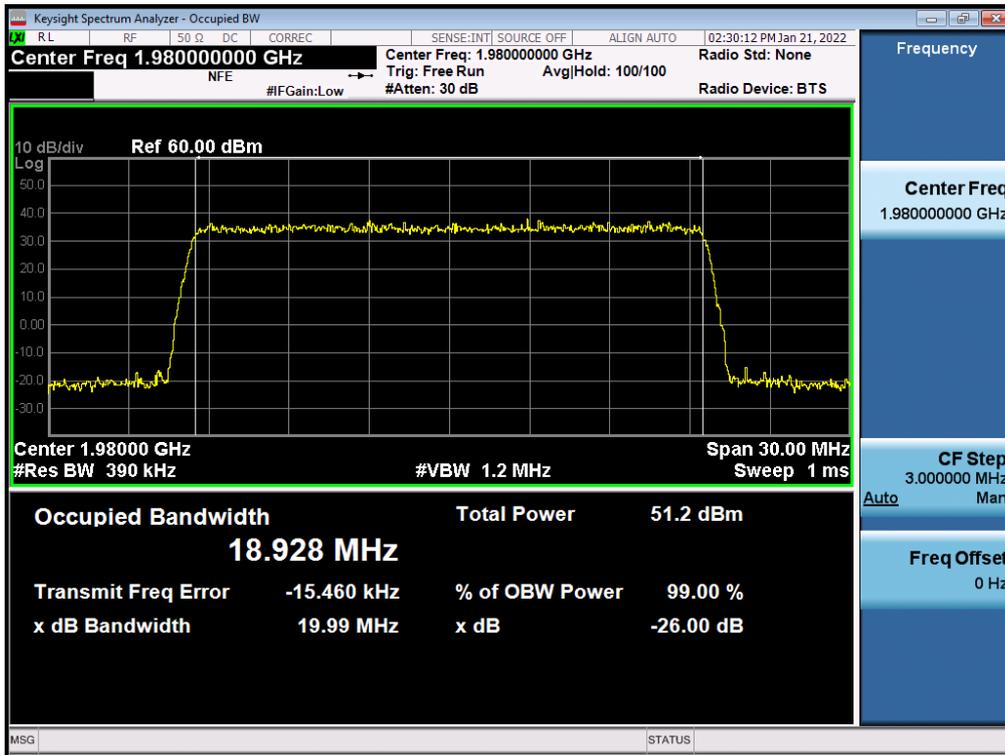
Antenna 0 / (4 Port) LTE B2 5 MHz 1 Carrier + 5G NR n2 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / 5G NR n2 5 MHz / 64QAM / High



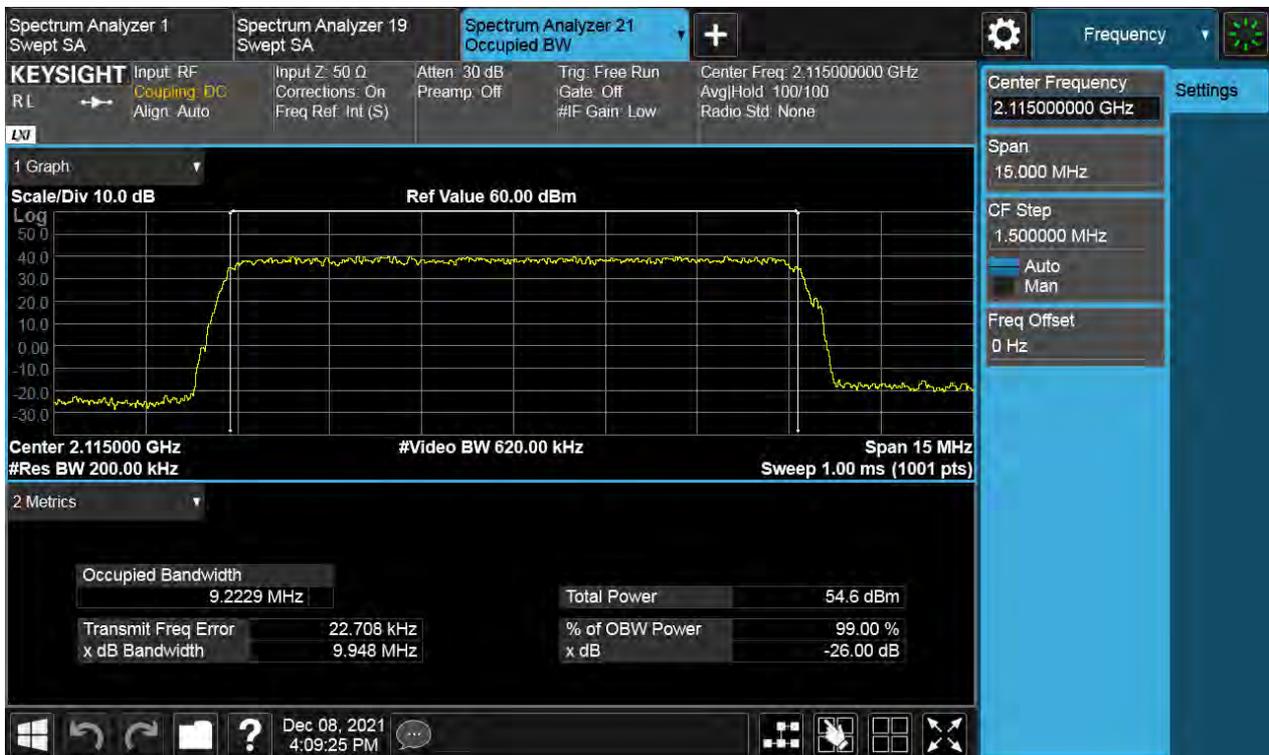
Antenna 0 / (4 Port) LTE B2 10 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B2 10 MHz / QPSK / Low

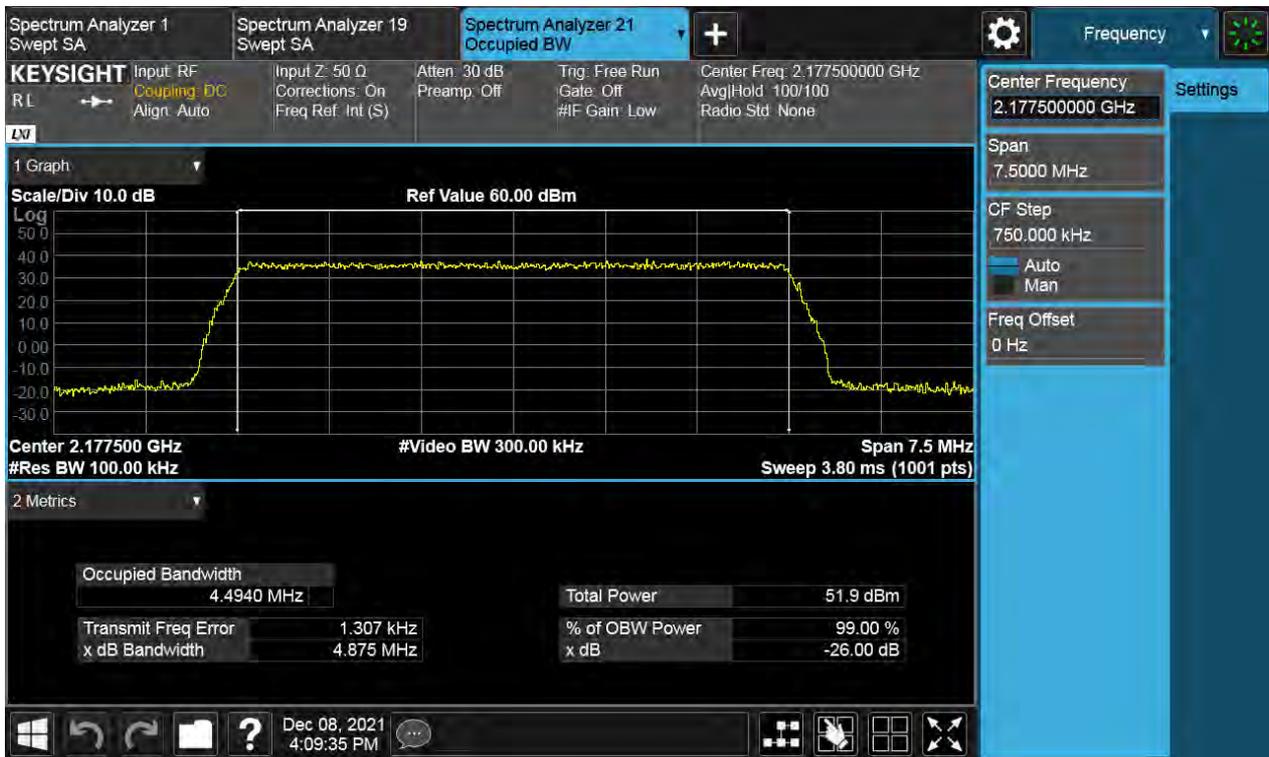
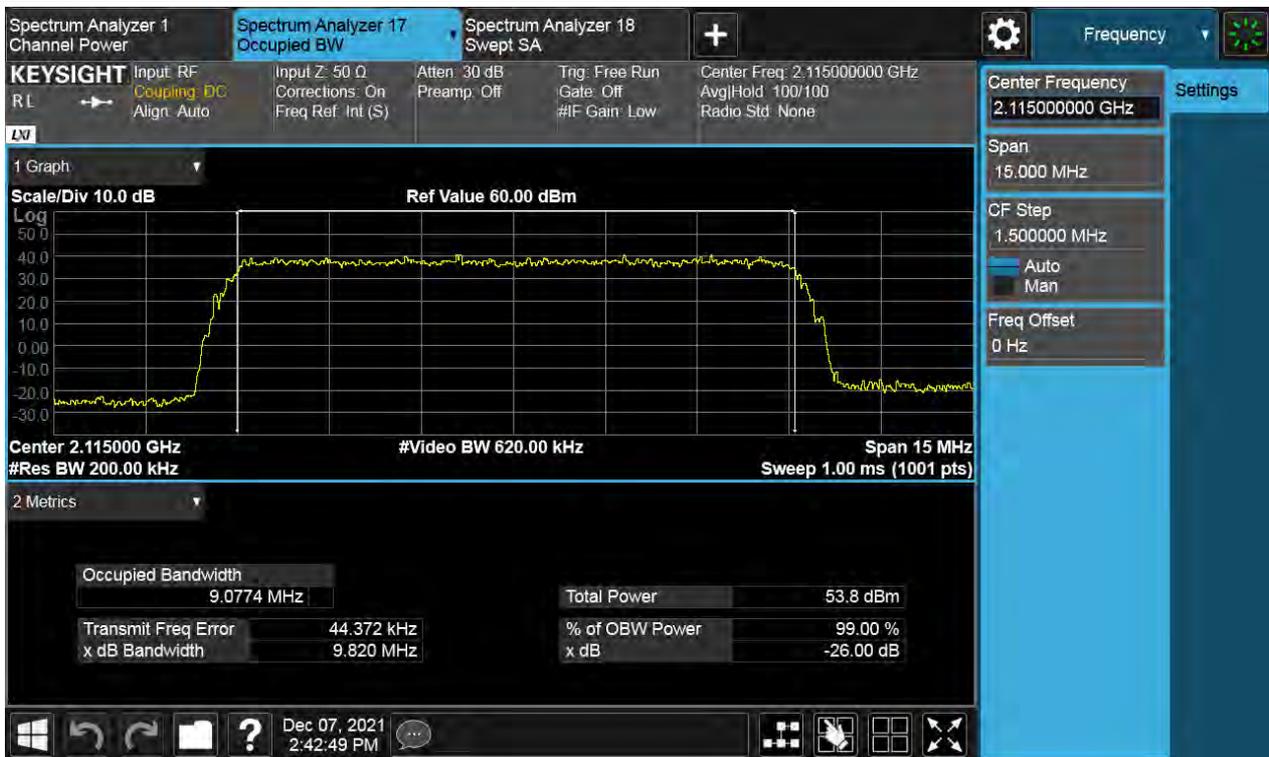


Antenna 0 / (4 Port) LTE B2 10 MHz 1 Carrier + 5G NR n2 20 MHz 1 Carrier [2 Carrier] / Non-Contiguous / 5G NR n2 20 MHz / QPSK / High

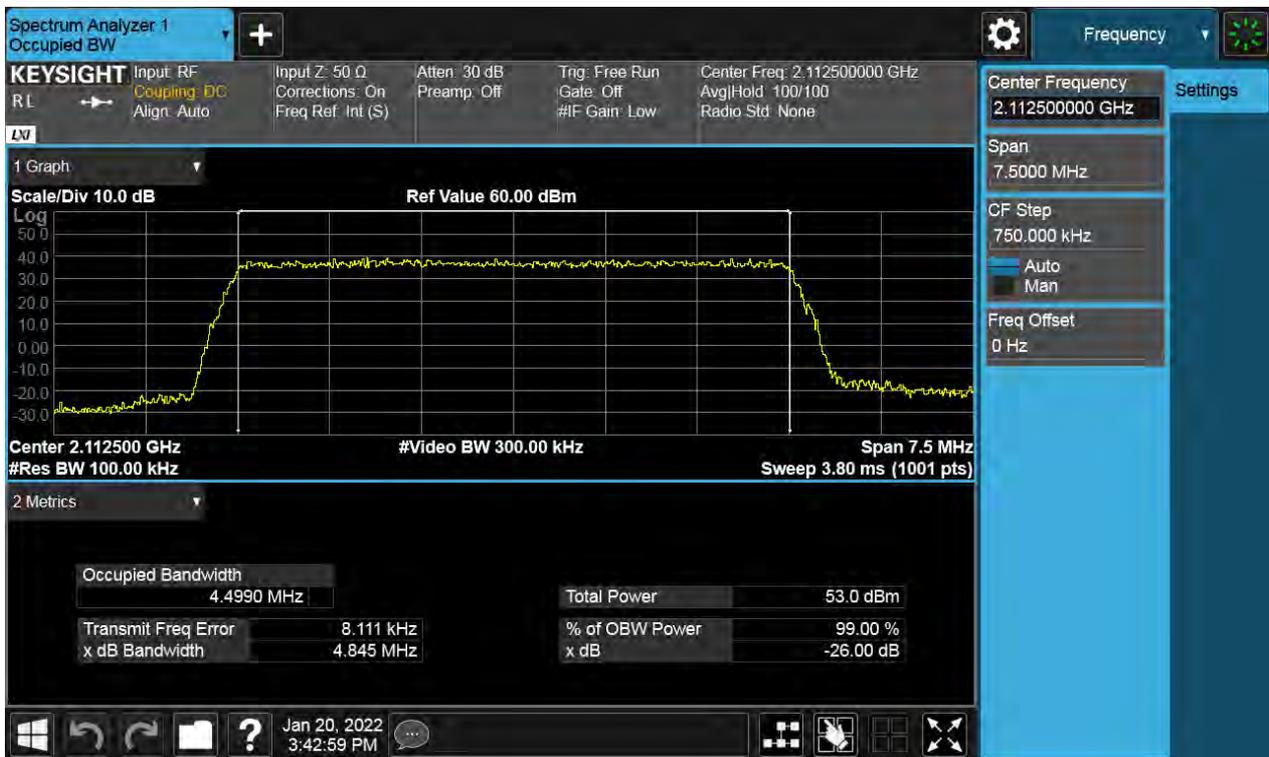


Antenna 0 / (2 Port) B66 DSS 10 MHz 9to1 1 Carrier + LTE B66 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / B66 DSS 10 MHz 9to1 / 256QAM / Low



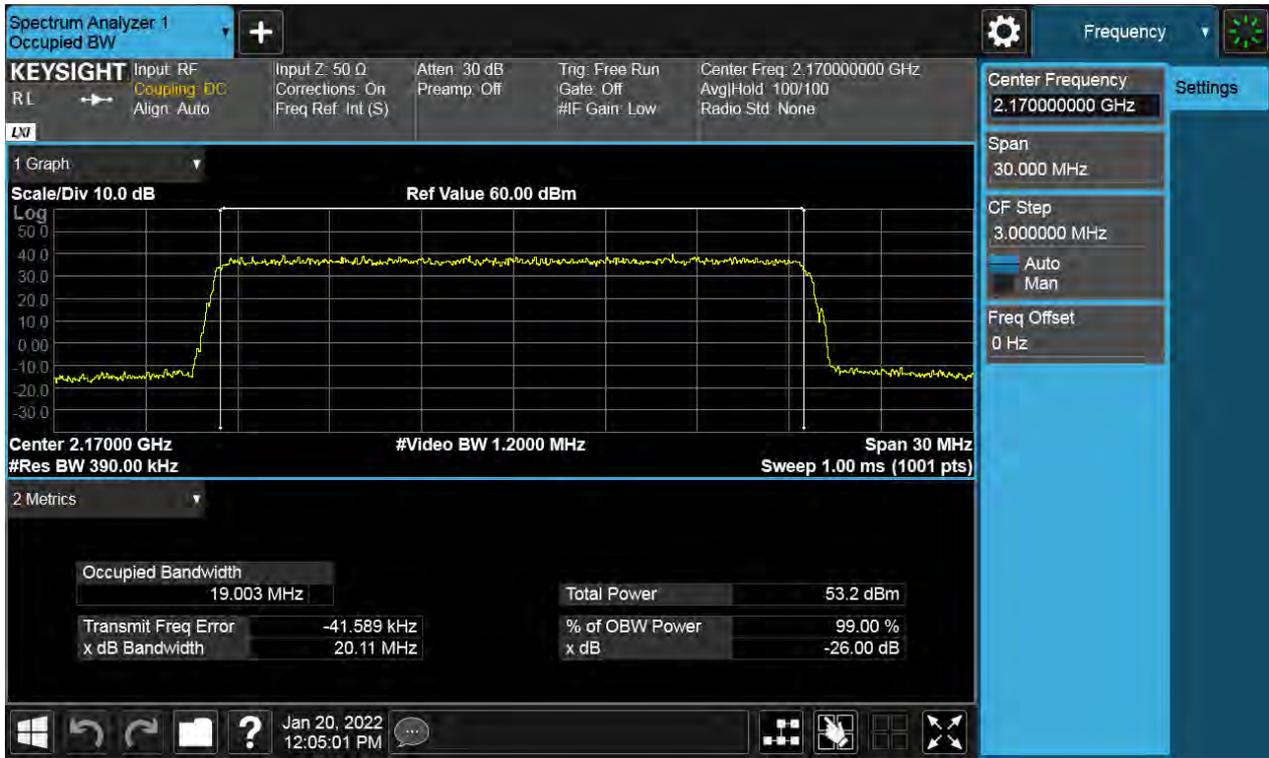
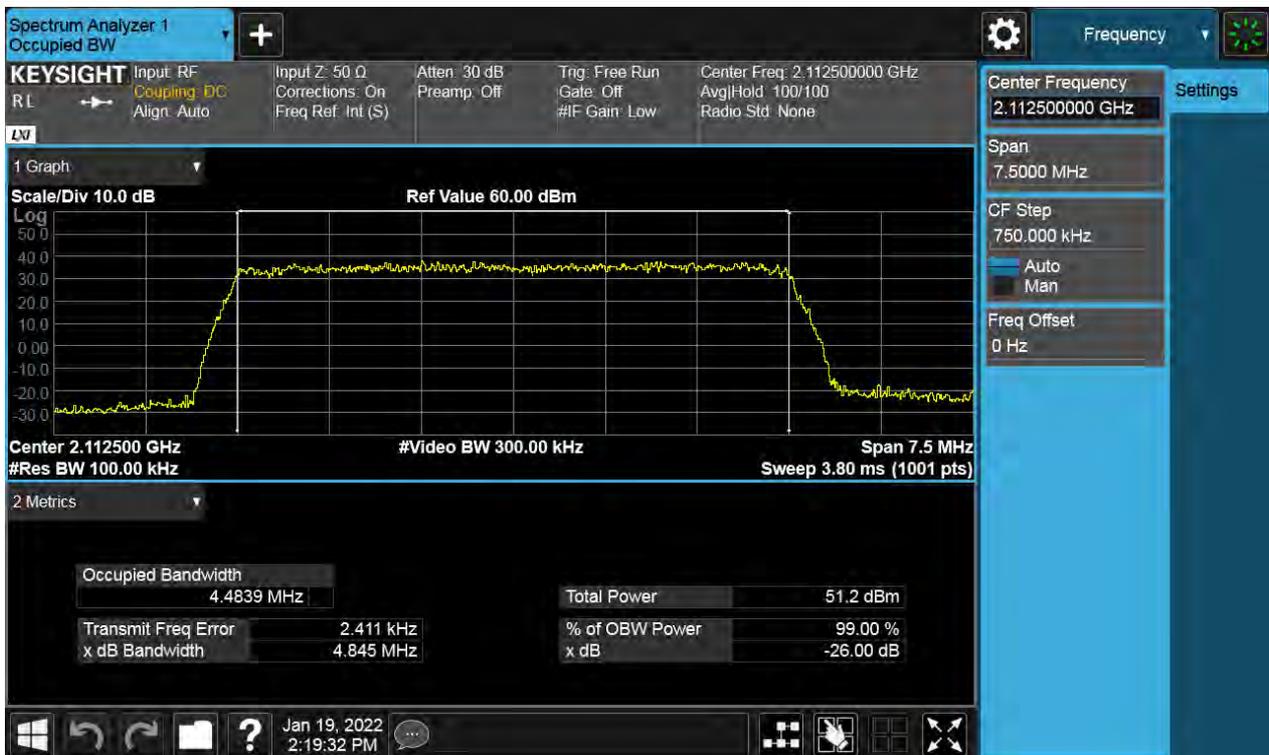
**Antenna 0 / (2 Port) B66 DSS 10 MHz 9to1 1 Carrier + LTE B66 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B66 5 MHz / 256QAM / High**

**Antenna 0 / (4 Port) B66 DSS 10 MHz 9to1 1 Carrier + LTE B66 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / B66 DSS 10 MHz 9to1 / 64QAM / Low**


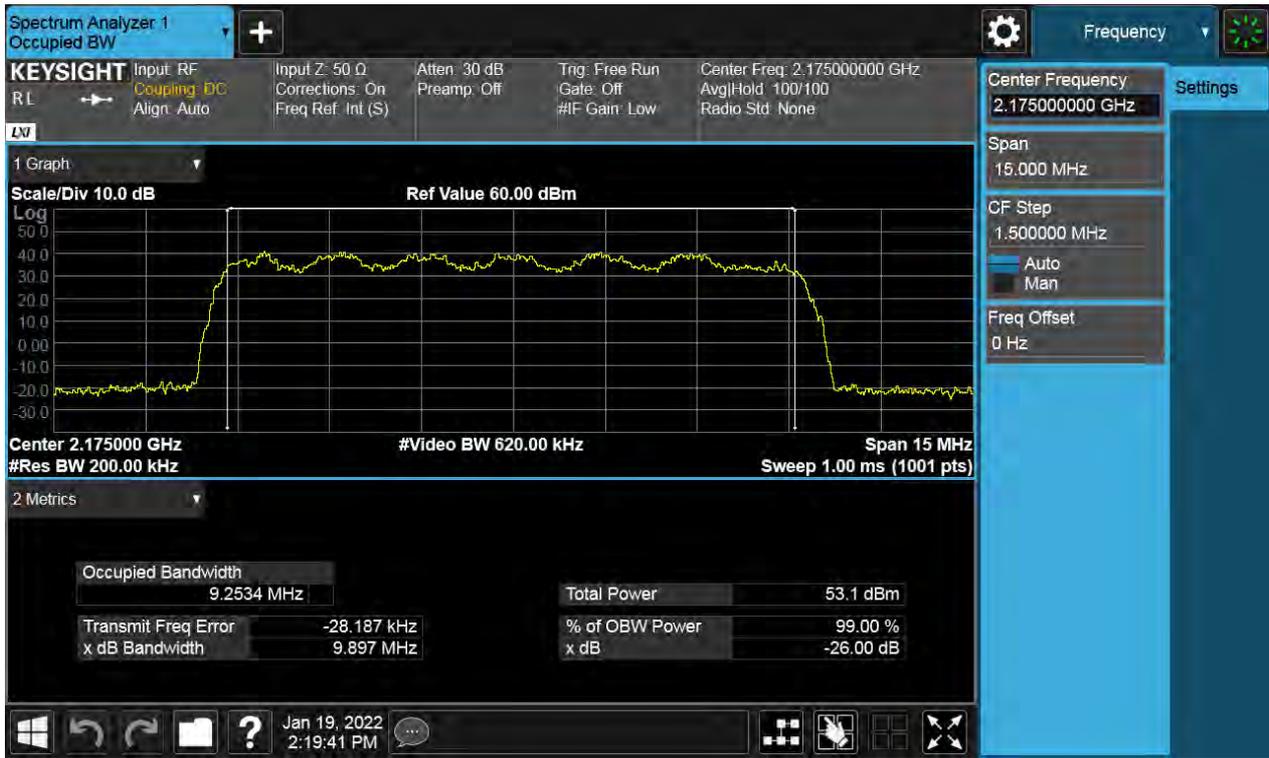
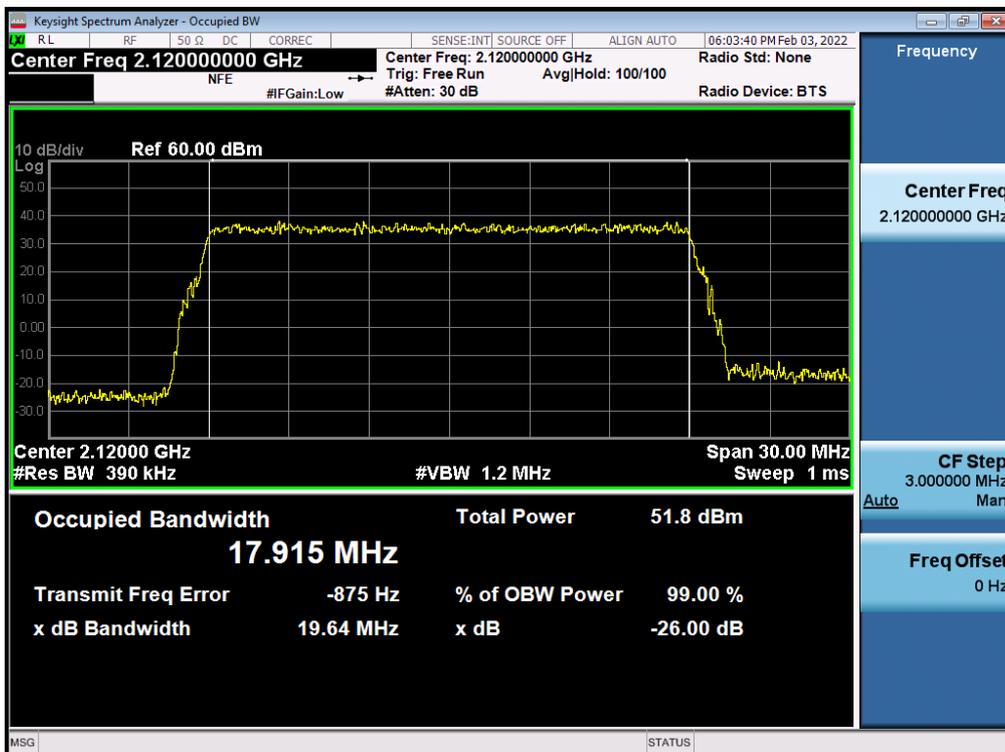
**Antenna 0 / (4 Port) B66 DSS 10 MHz 9to1 1 Carrier + LTE B66 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B66 5 MHz / 64QAM / High**

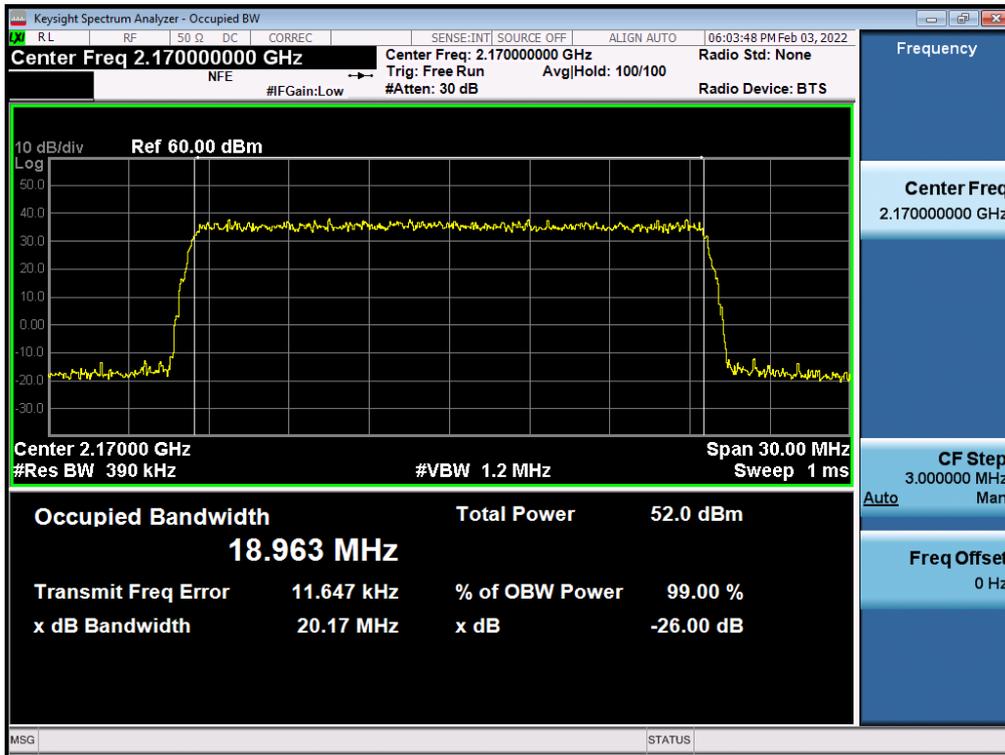
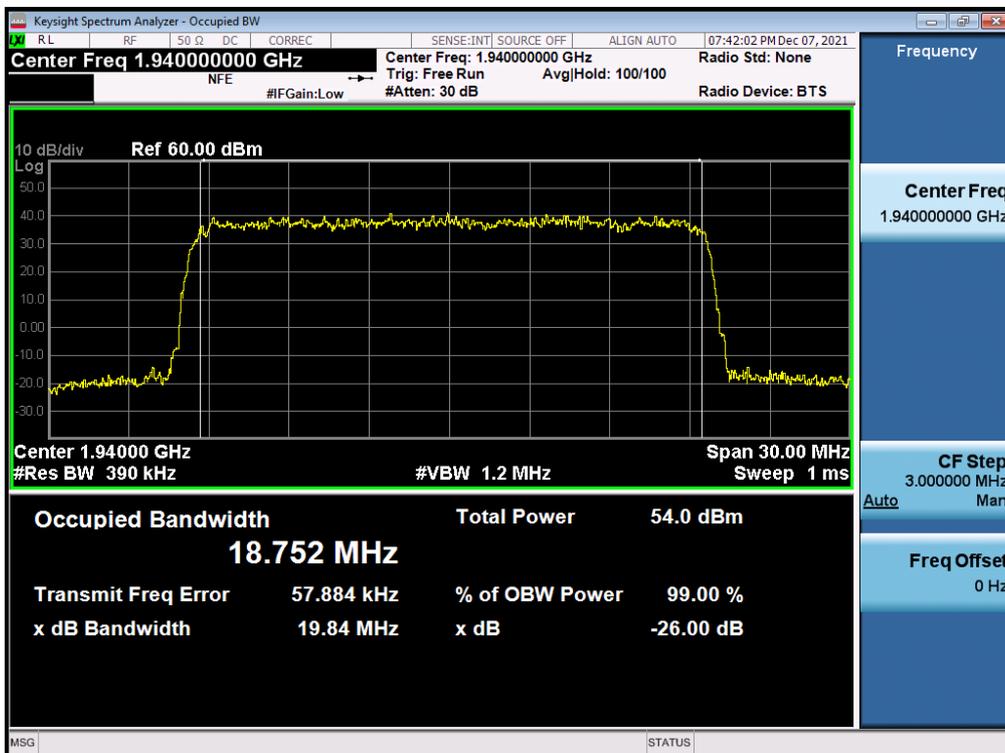
**Antenna 1 / (2 Port) LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B66 5 MHz / 64QAM / Low**


**Antenna 1 / (2 Port) LTE B66 5 MHz 1 Carrier + 5G NR n66 5 MHz 1 Carrier [2 Carrier] / Non-Contiguous / 5G NR n66 5 MHz / 64QAM / High**

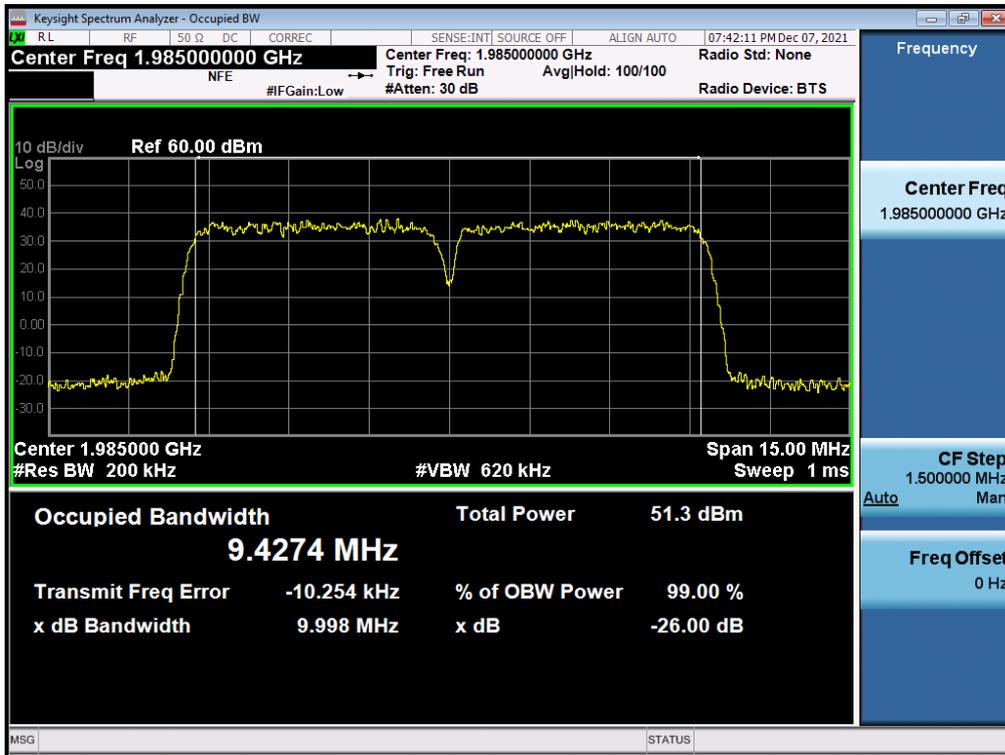
**Antenna 1 / (2 Port) LTE B66 20 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B66 20 MHz / QPSK / Low**


**Antenna 1 / (2 Port) LTE B66 20 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [2 Carrier] / Non-Contiguous / 5G NR n66 20 MHz / QPSK / High**

**Antenna 1 / (4 Port) LTE B66 5 MHz 1 Carrier + 5G NR n66 10 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B66 5 MHz / 16QAM / Low**


**Antenna 1 / (4 Port) LTE B66 5 MHz 1 Carrier + 5G NR n66 10 MHz 1 Carrier [2 Carrier] / Non-Contiguous / 5G NR n66 10 MHz / 16QAM / High**

**Antenna 2 / (4 Port) LTE B66 20 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [2 Carrier] / Non-Contiguous / LTE B66 20 MHz / 256QAM / Low**


**Antenna 2 / (4 Port) LTE B66 20 MHz 1 Carrier + 5G NR n66 20 MHz 1 Carrier [2 Carrier] / Non-Contiguous / 5G NR n66 20 MHz / 256QAM / High**

**Antenna 0 / (2 Port) B2 DSS 20 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier [3 Carrier] (1C+2C) / Non-Contiguous / B2 DSS 20 MHz 9to1 / 16QAM / Low**


**Antenna 0 / (2 Port) B2 DSS 20 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier [3 Carrier] (1C+2C) / Non-Contiguous / LTE B2 5 MHz + LTE B2 5 MHz / 16QAM / High**



**Antenna 1 / (2 Port) B2 DSS 20 MHz 9to1 1 Carrier + LTE B2 5 MHz 1 Carrier + LTE B2 5 MHz 1 Carrier [3 Carrier] (2C+1C) / Non-Contiguous / B2 DSS 20 MHz 9to1 + LTE B2 5 MHz / 256QAM / Low**

