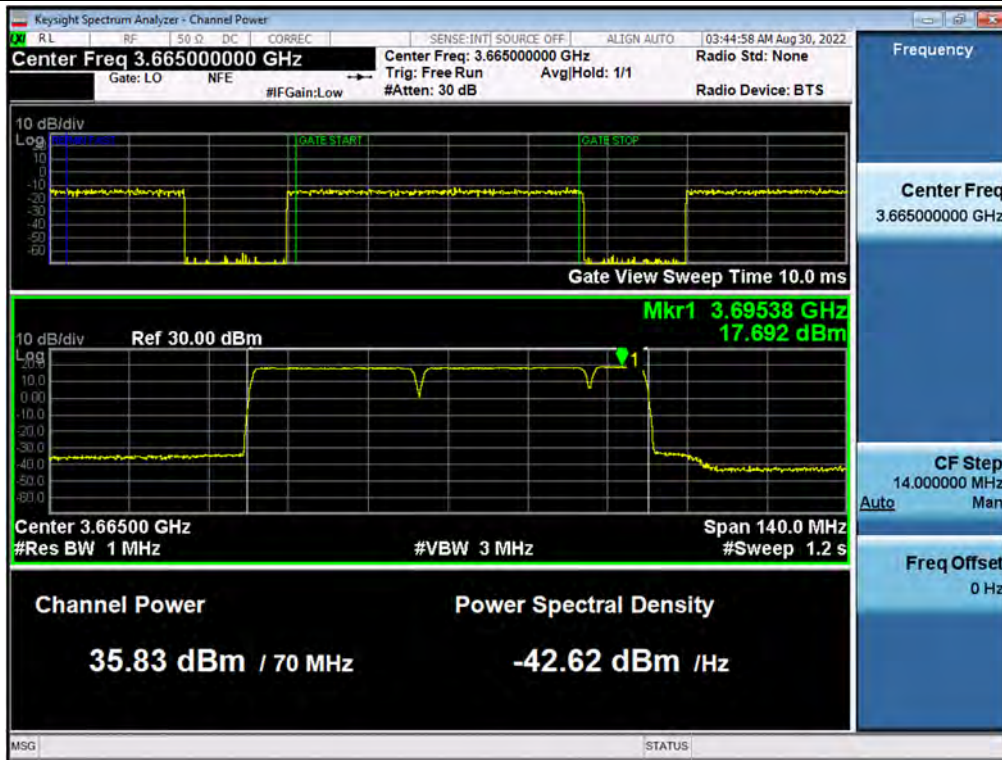
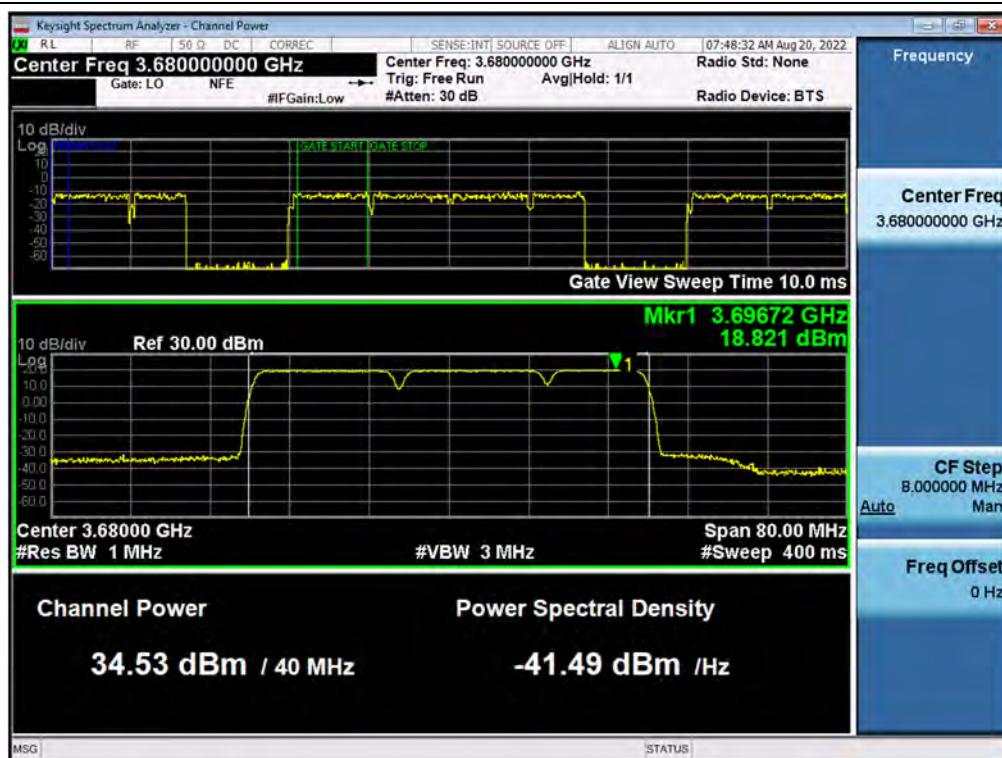


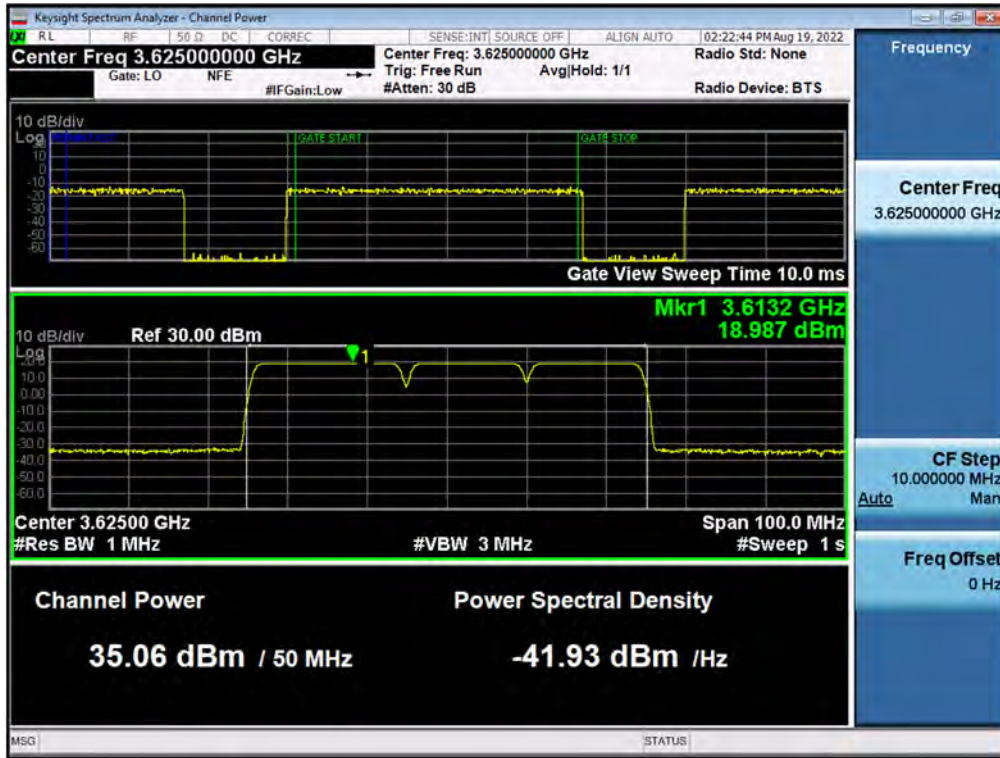
Antenna 3 / CBRs NR(30 MHz 1C + 30 MHz 1C + 10 MHz 1C)[3C] / Contiguous / 256QAM / High



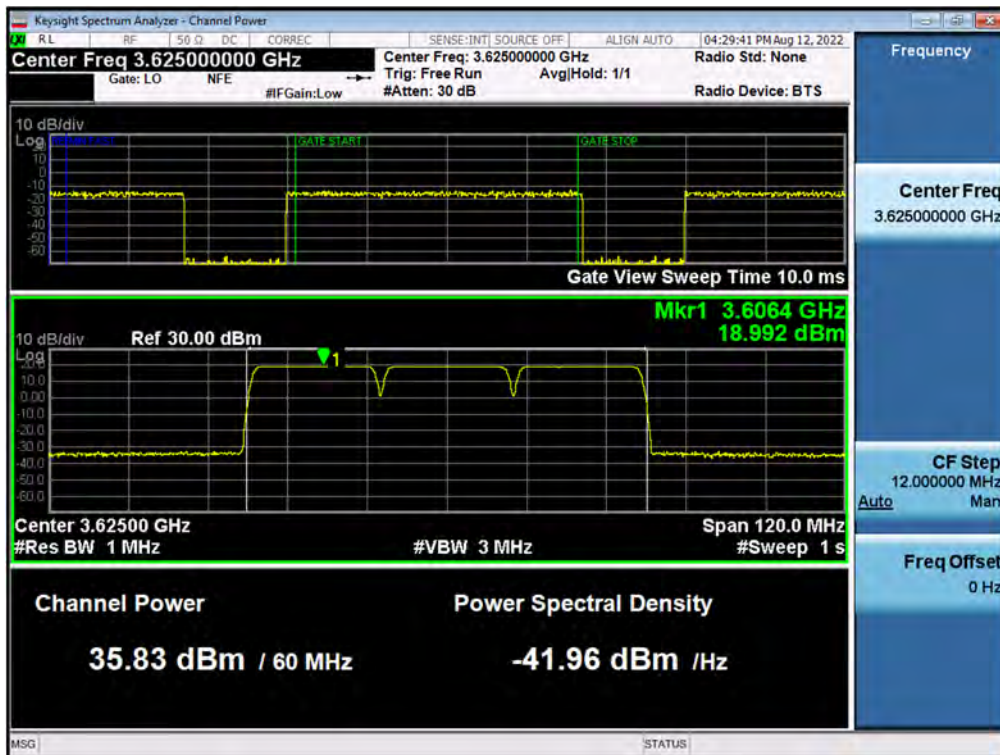
Antenna 3 / CBRs LTE(15 MHz 1C + 15 MHz 1C + 10 MHz 1C)[3C] / Contiguous / 16QAM / High



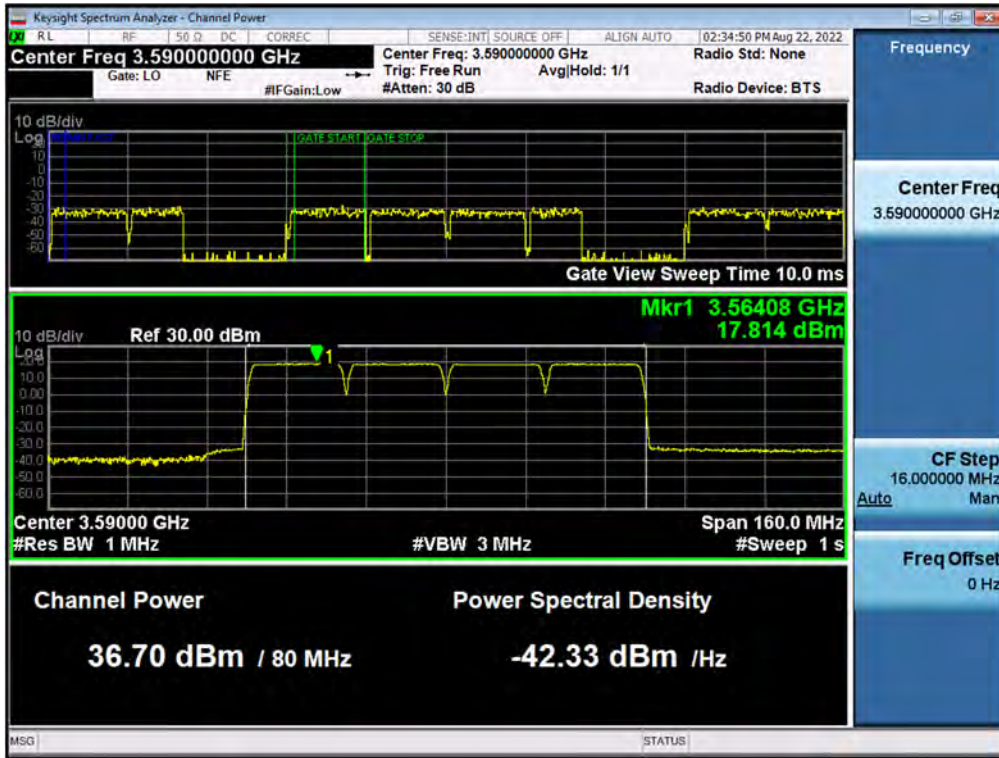
Antenna 1 / CBRS LTE(20 MHz 1C + 15 MHz 1C + 15 MHz 1C)[3C] / Contiguous / QPSK / Middle



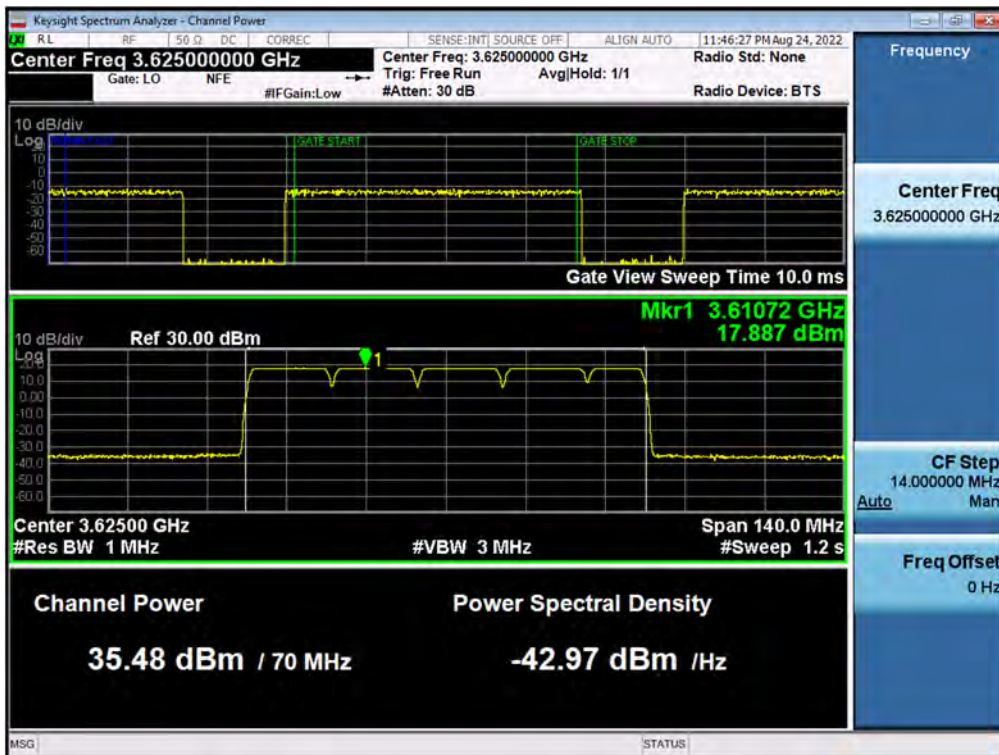
Antenna 0 / CBRS LTE(20 MHz 1C + 20 MHz 1C + 20 MHz 1C)[3C] / Contiguous / 64QAM / Middle



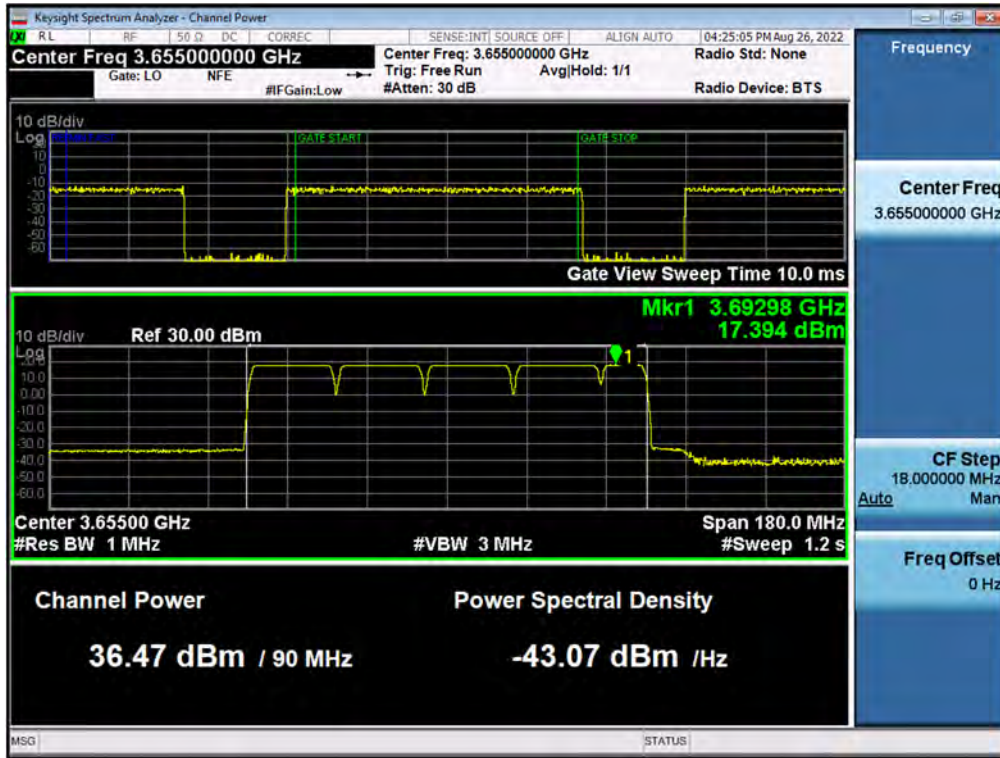
Antenna 3 / CBRS LTE(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)[4C] / Contiguous / 16QAM/ Low



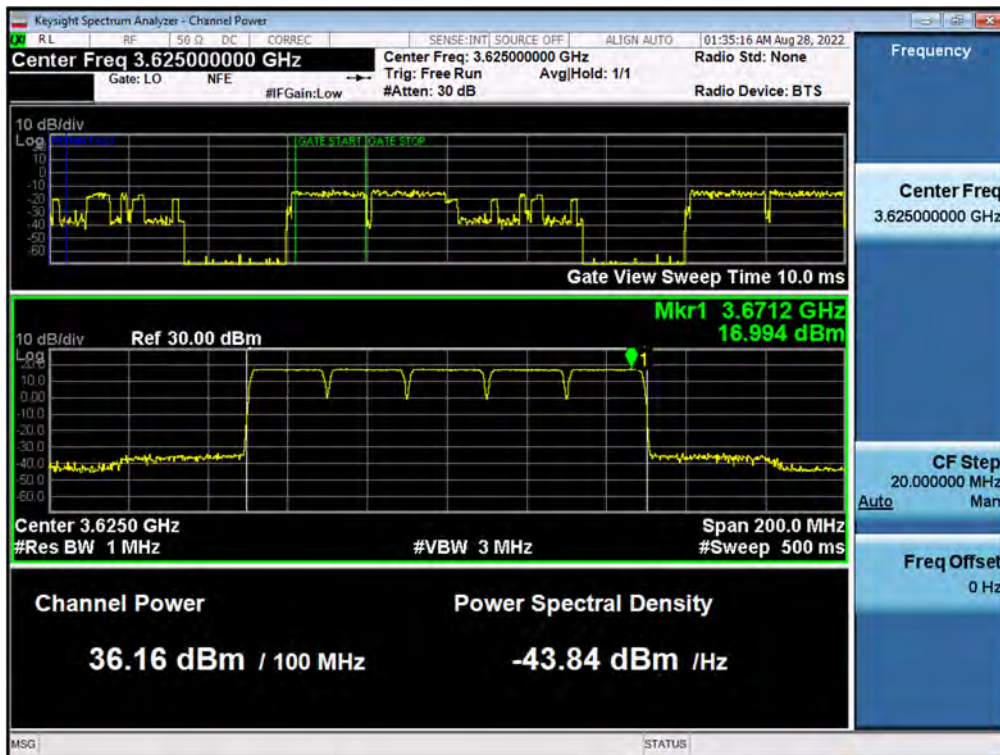
Antenna 2 / CBRS LTE(15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 10 MHz 1C)[5C] / Contiguous / QPSK / Middle



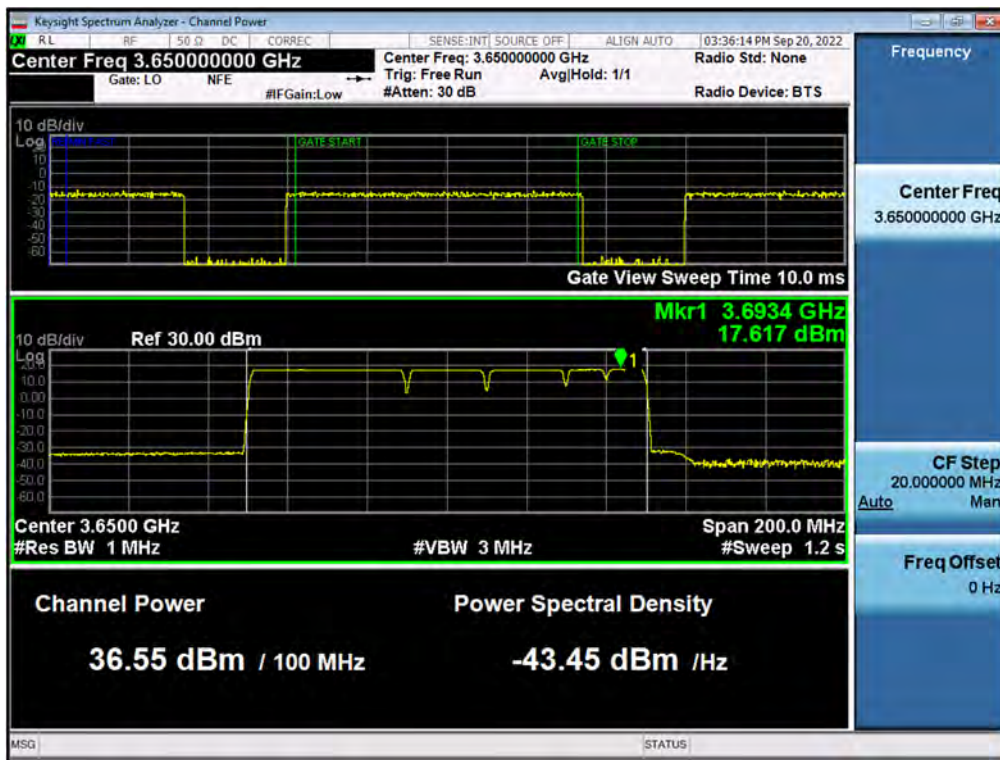
Antenna 3 / CBRS LTE(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 10 MHz 1C)[5C] / Contiguous / QPSK / High



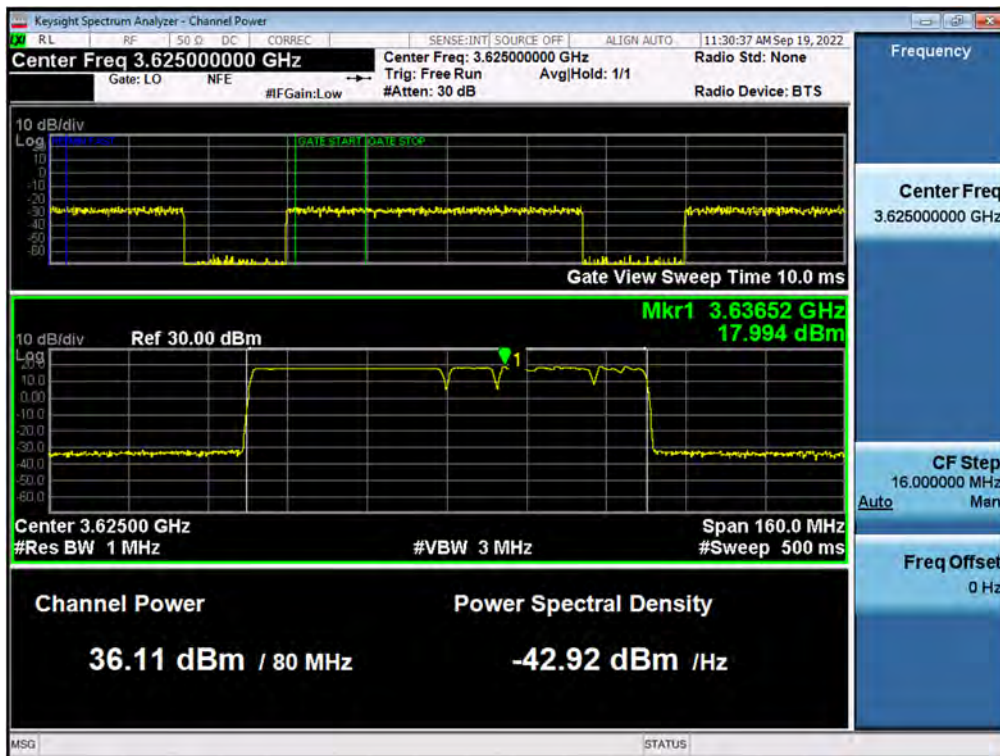
Antenna 2 / CBRS LTE(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)[5C] / Contiguous / 16QAM / Middle



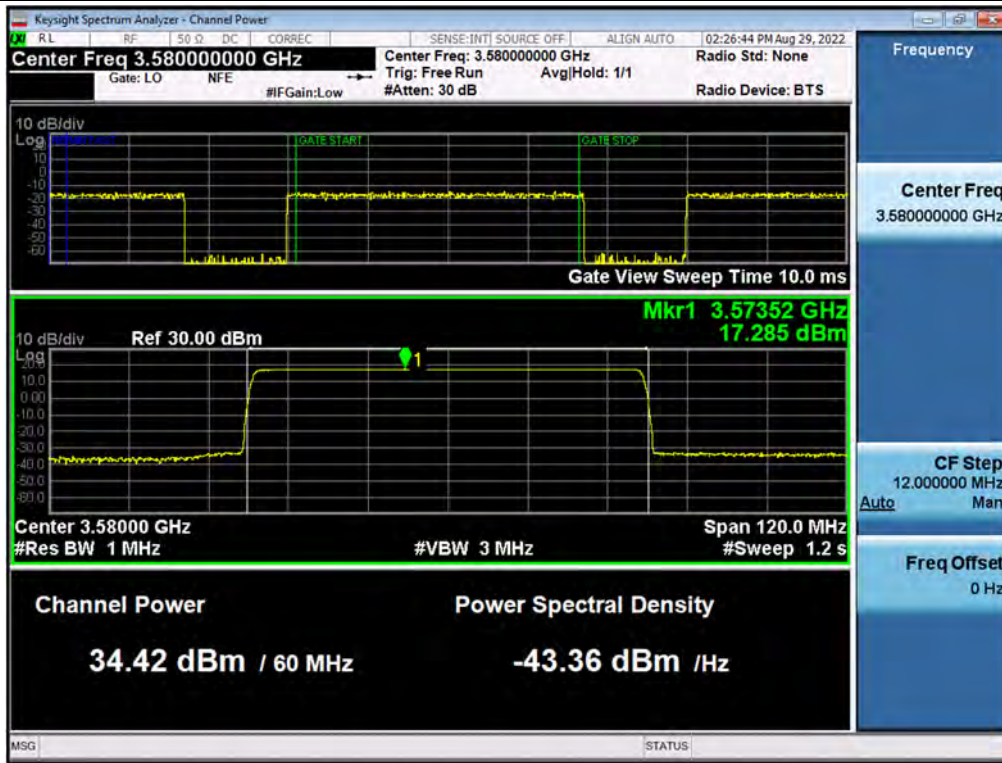
Antenna 3 / CBRS NR 40 MHz 1C + NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C + LTE 10 MHz 1C[5C] / Contiguous / 64QAM / High



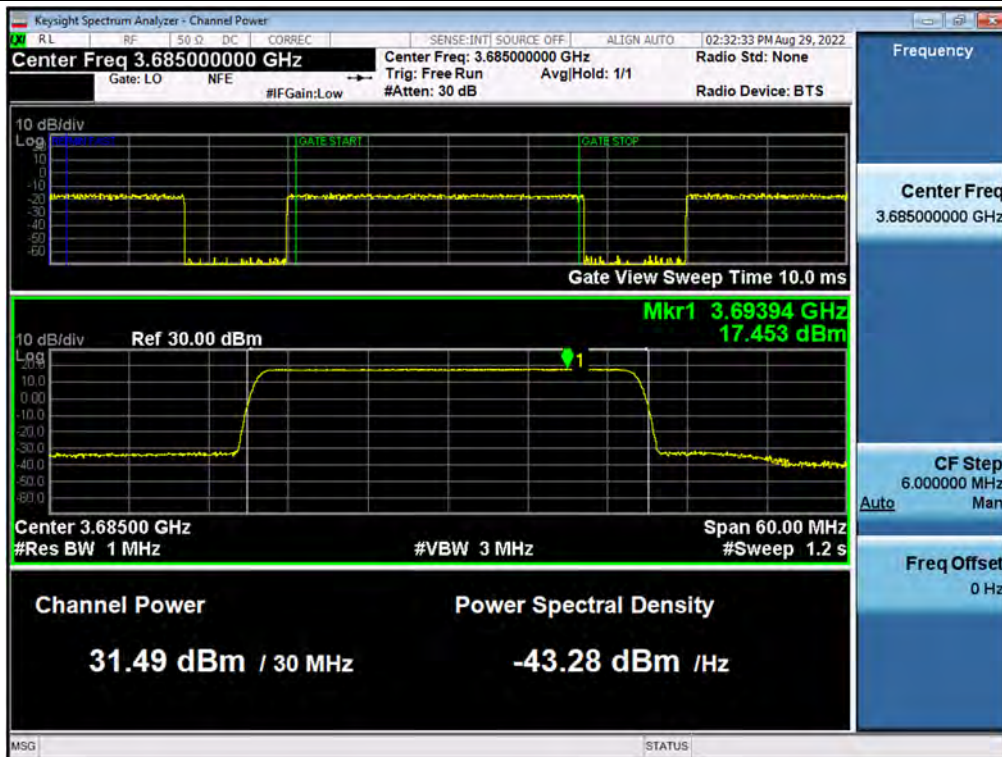
Antenna 0 / CBRS NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C + LTE 5 MHz 1C[5C] / Contiguous / 16QAM / Middle



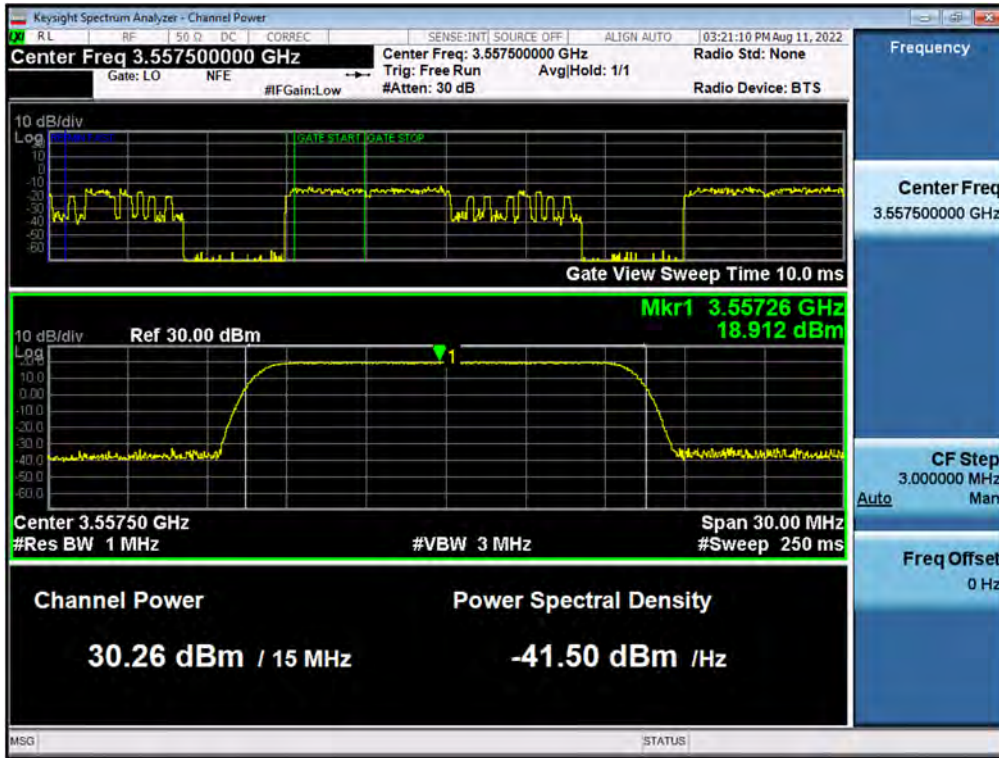
Antenna 1 / CBRS NR(60 MHz 1C + 30 MHz 1C)[2C] / NR 60 MHz 1C / Non-Contiguous / 64QAM / Low



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



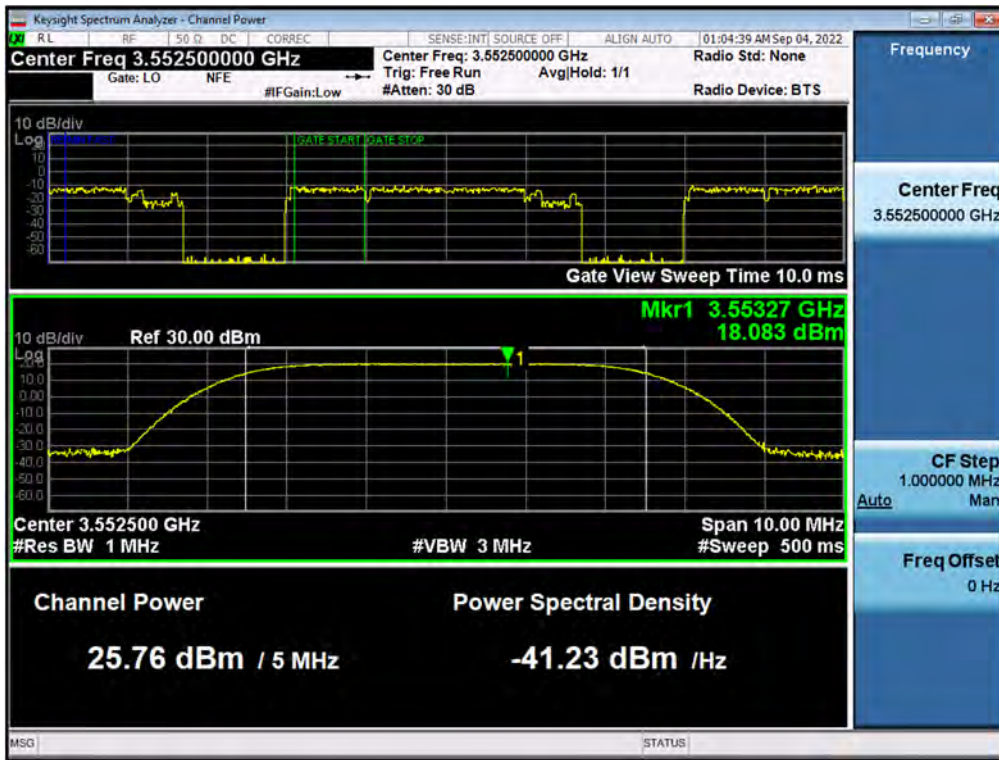
Antenna 0 / CBRS LTE(15 MHz 1C + 15 MHz 1C)[2C] / LTE 15 MHz 1C / Non-Contiguous / 16QAM / Low



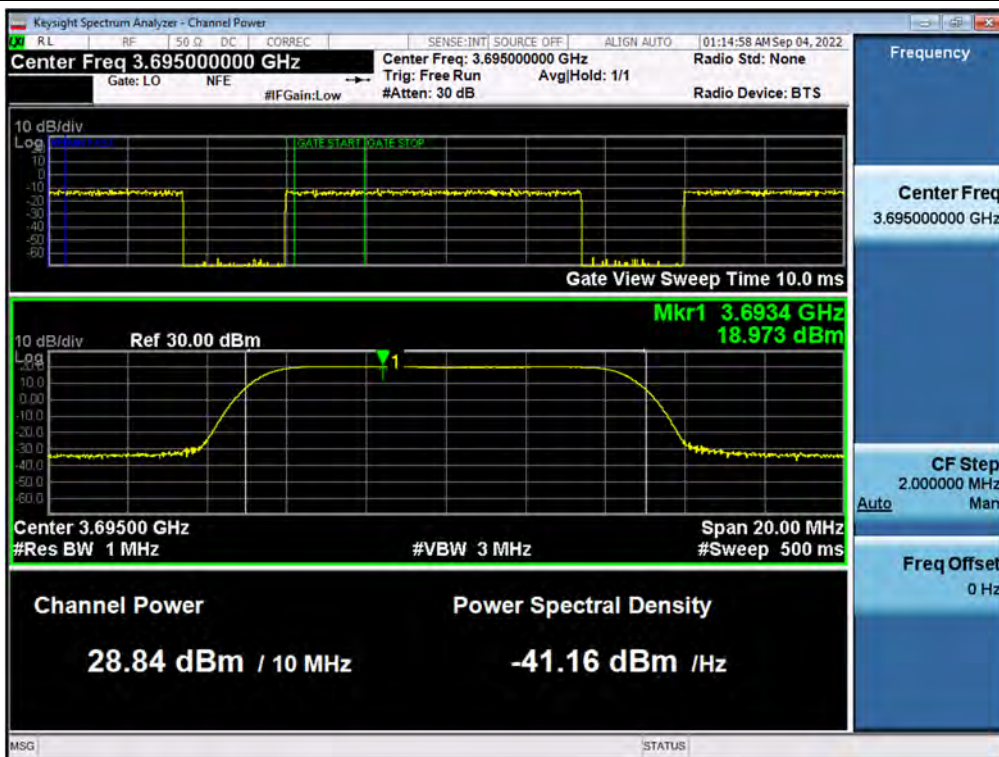
Antenna 0 / CBRS LTE(15 MHz 1C + 15 MHz 1C)[2C] / LTE 15 MHz 1C / Non-Contiguous / 16QAM / High



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

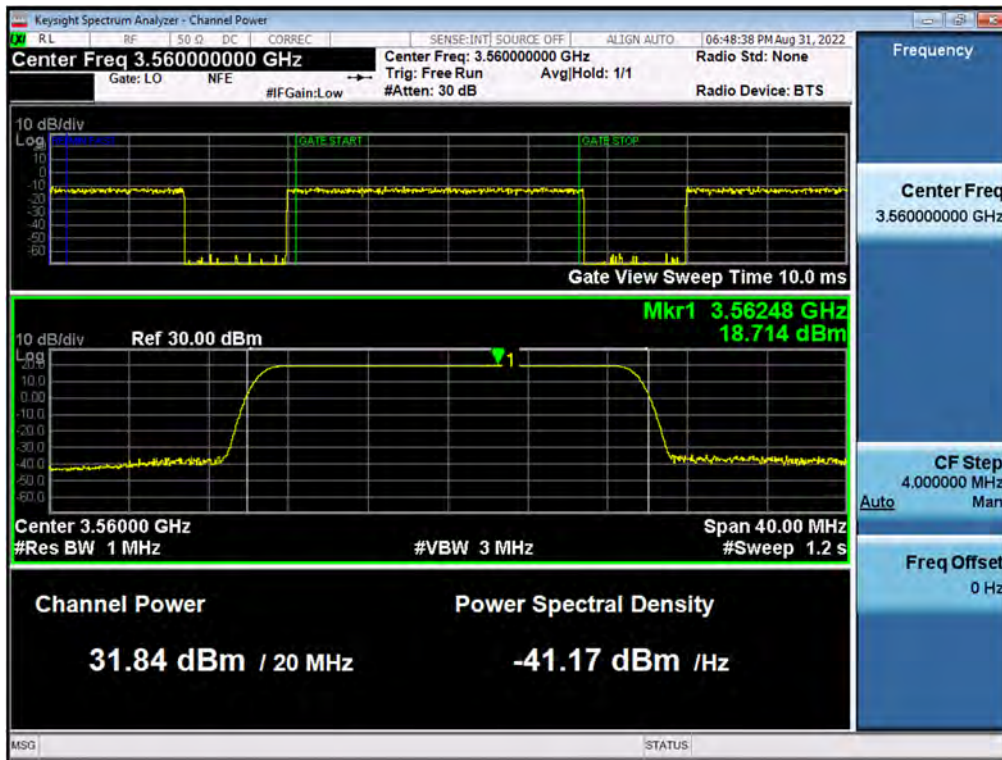


Antenna 3 / CBRS LTE 5 MHz 1C + NR 10 MHz 1C[2C] / NR 10 MHz 1C / Non-Contiguous / 16QAM / High

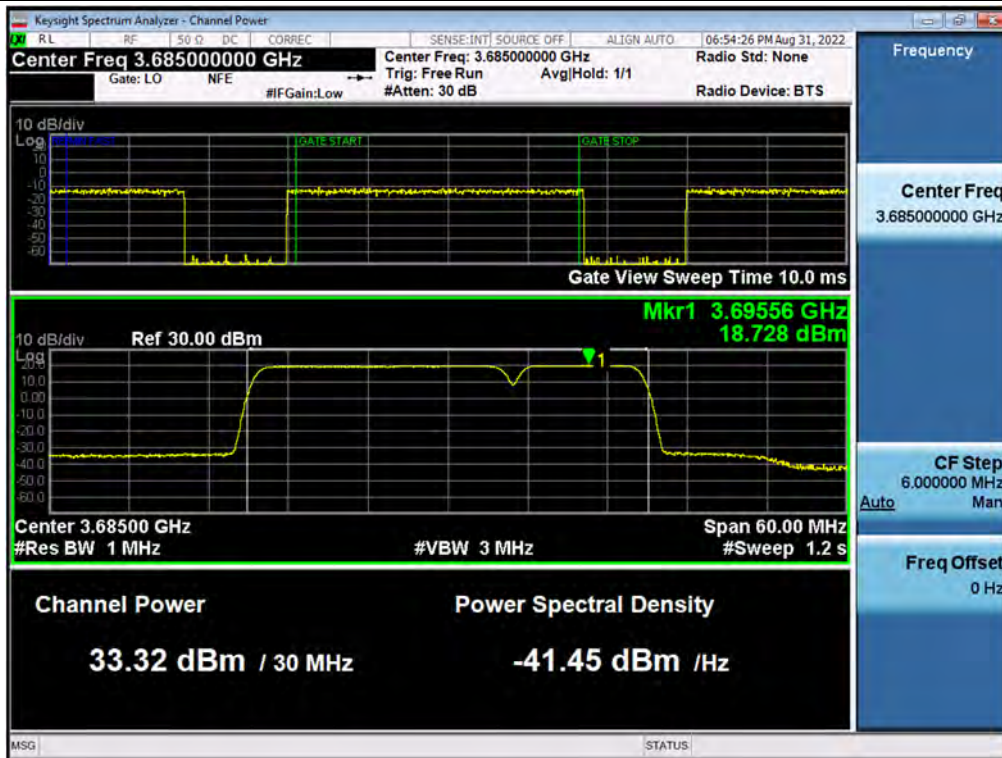




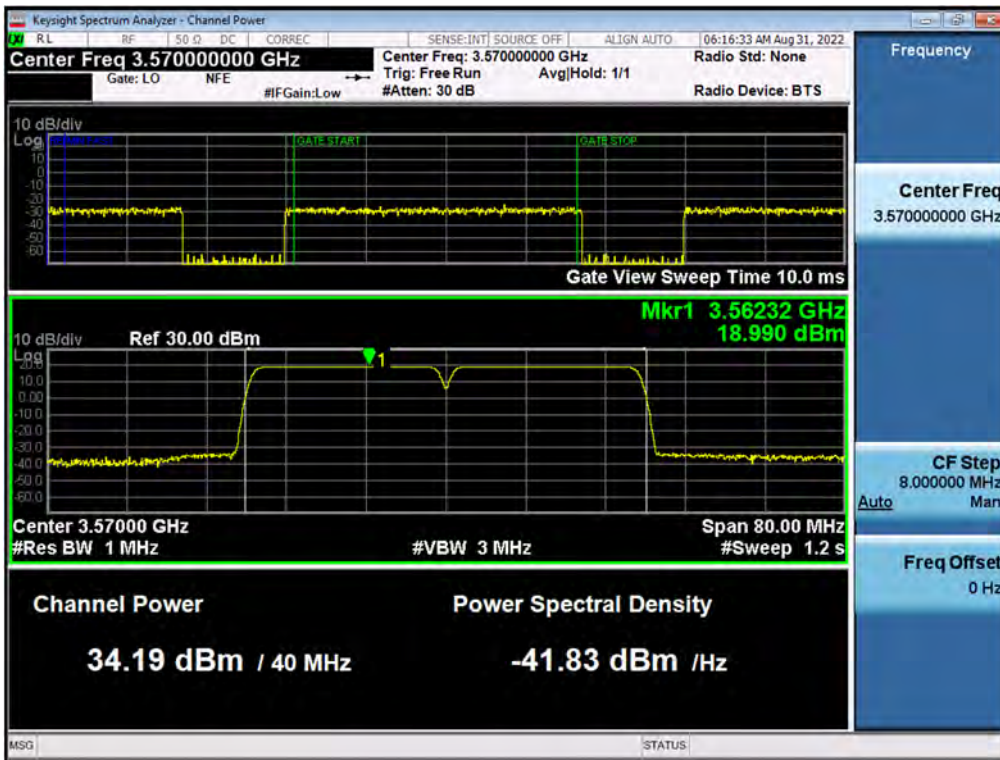
Antenna 3 / CBRS NR[20 MHz 1C + (20 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / NR 20 MHz 1C / Non-Contiguous / 256QAM / Low



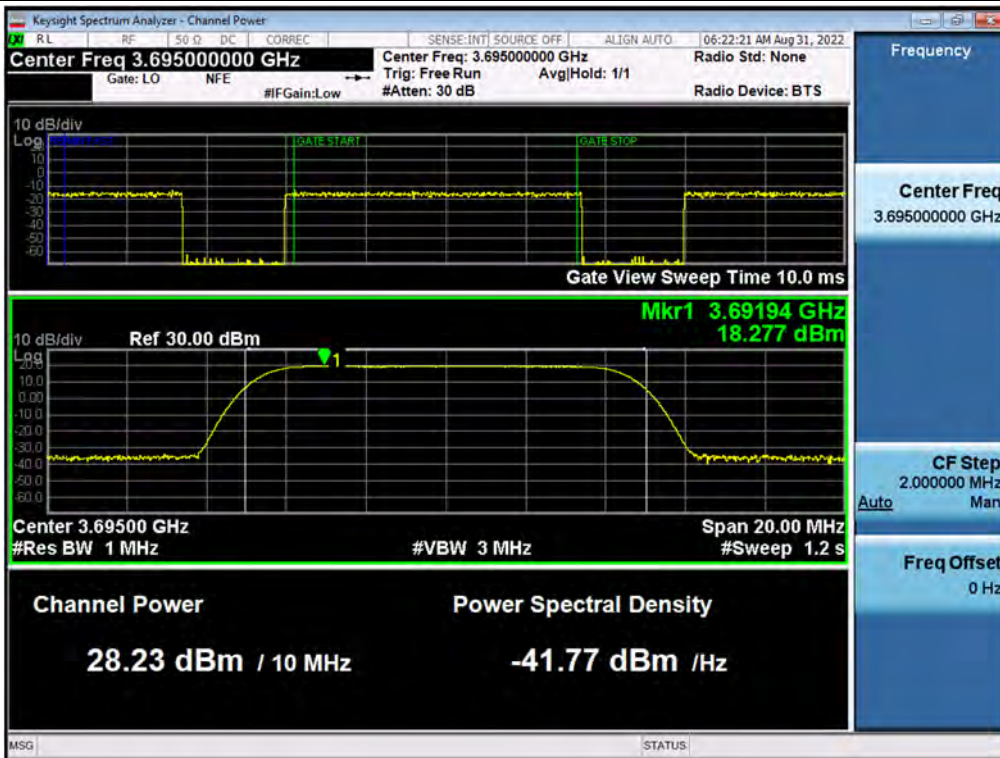
Antenna 3 / CBRS NR[20 MHz 1C + (20 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / NR 20 MHz 1C + NR 10 MHz 1C / Non-Contiguous / 256QAM / High



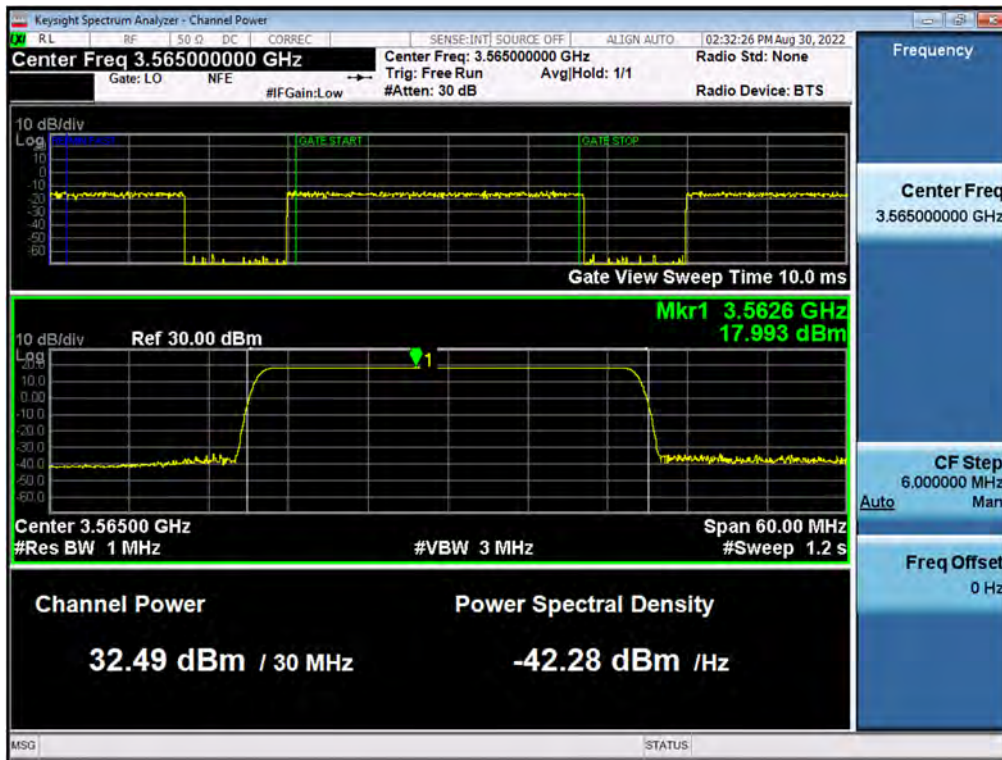
Antenna 0 / CBRS NR[(20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / NR 20 MHz 1C + NR 20 MHz 1C / Non-Contiguous / 16QAM / Low



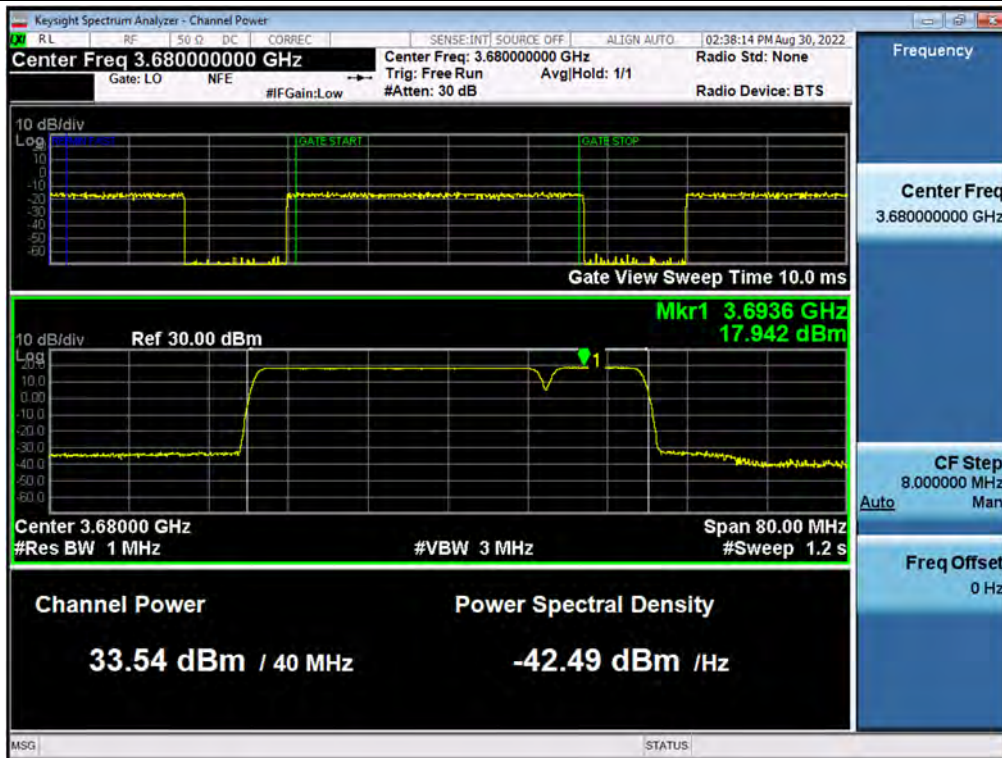
Antenna 0 / CBRS NR[(20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / NR 10 MHz 1C / Non-Contiguous / 16QAM / High



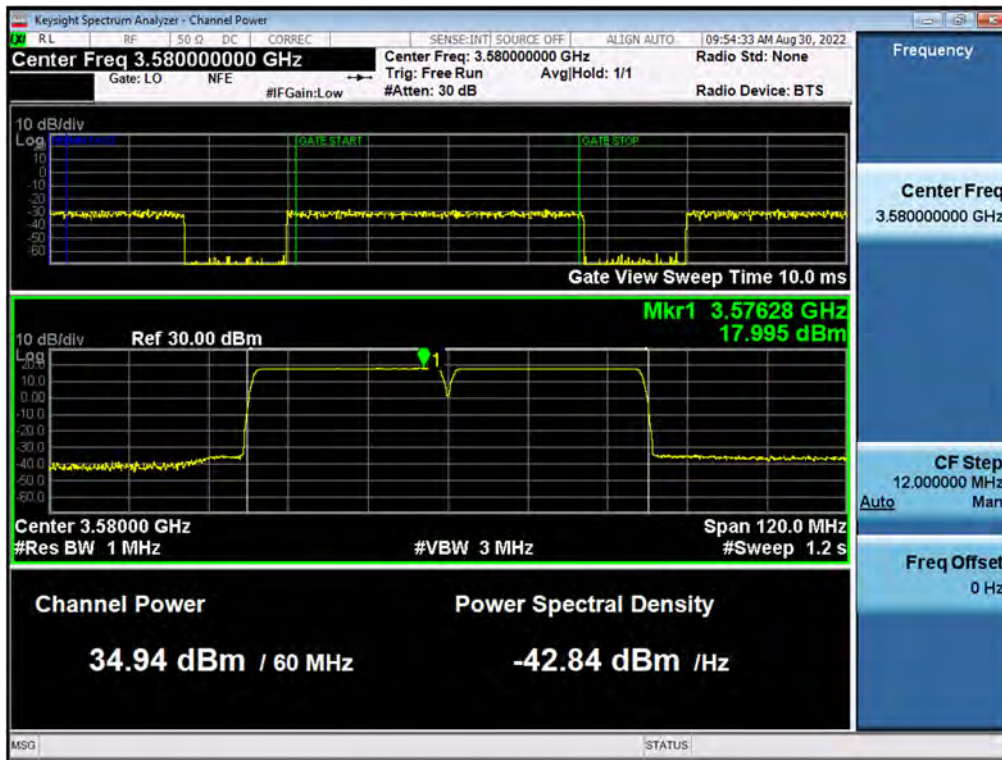
Antenna 1 / CBRS NR[30 MHz 1C + (30 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / NR 30 MHz 1C / Non-Contiguous / 64QAM / Low



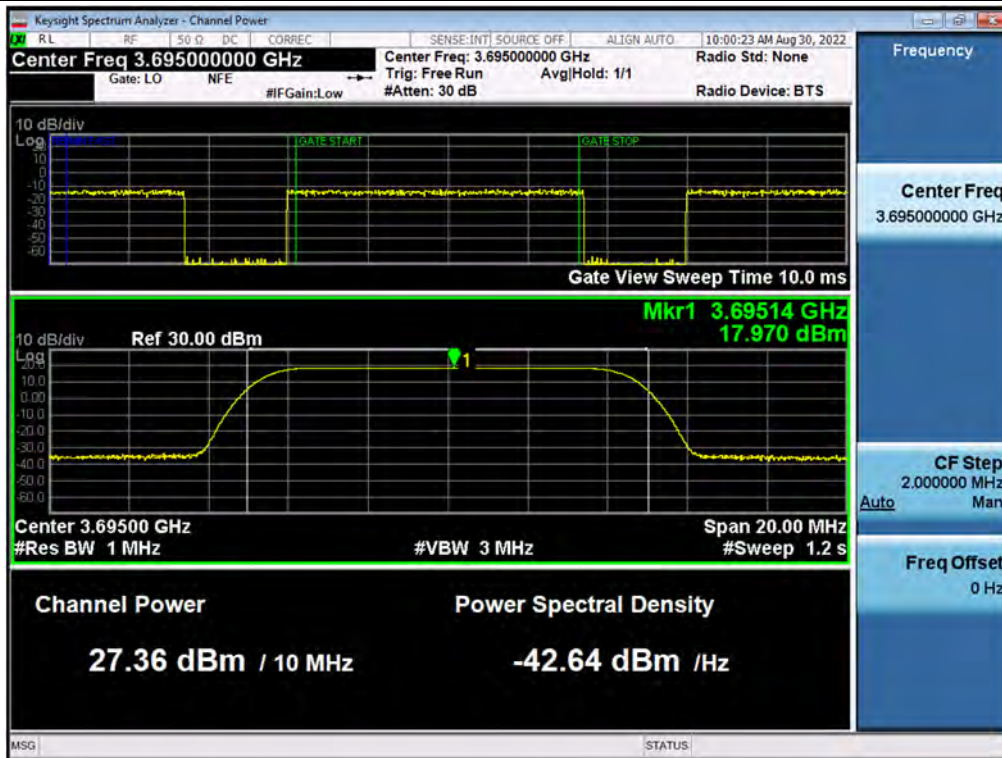
Antenna 1 / CBRS NR[30 MHz 1C + (30 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / NR 30 MHz 1C + NR 10 MHz 1C / Non-Contiguous / 64QAM / High



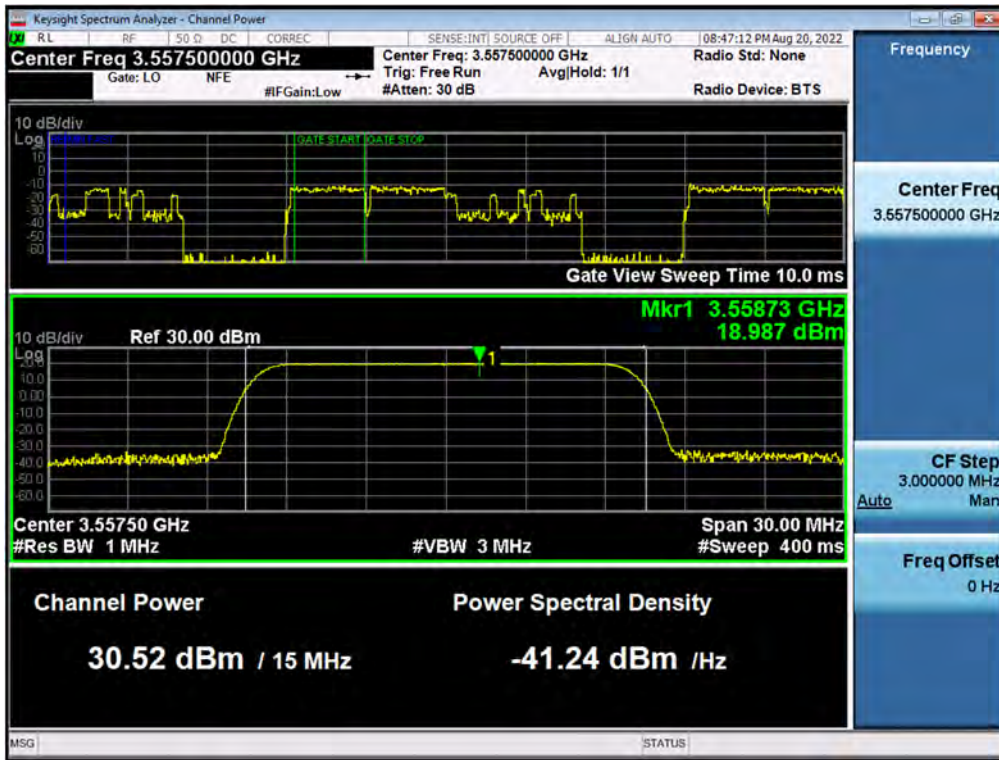
Antenna 2 / CBRS NR[(30 MHz 1C + 30 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / NR 30 MHz 1C + NR 30 MHz 1C / Non-Contiguous / 256QAM / Low



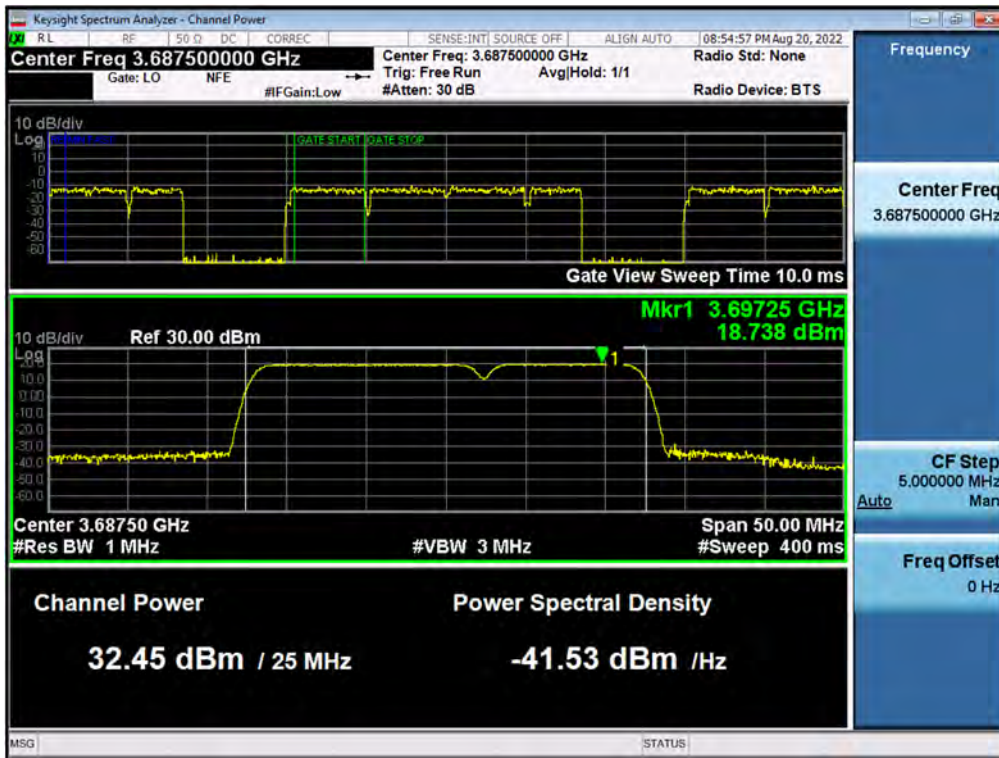
Antenna 2 / CBRS NR[(30 MHz 1C + 30 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / NR 10 MHz 1C / Non-Contiguous / 256QAM / High



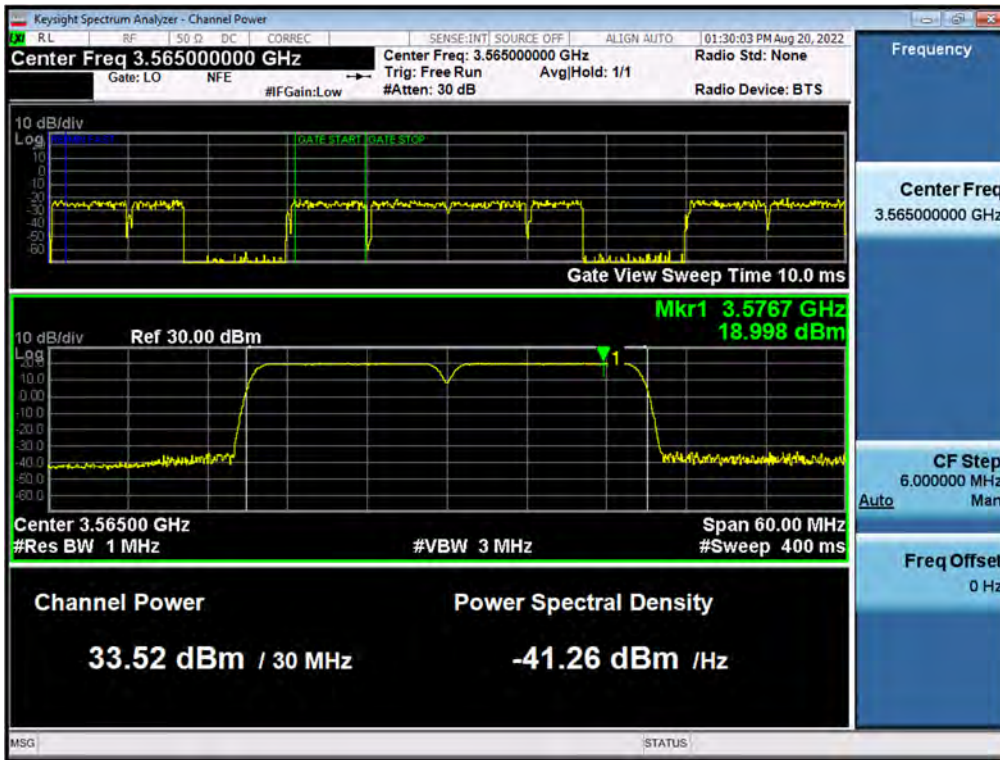
Antenna 3 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / LTE 15 MHz 1C / Non-Contiguous / 16QAM / Low



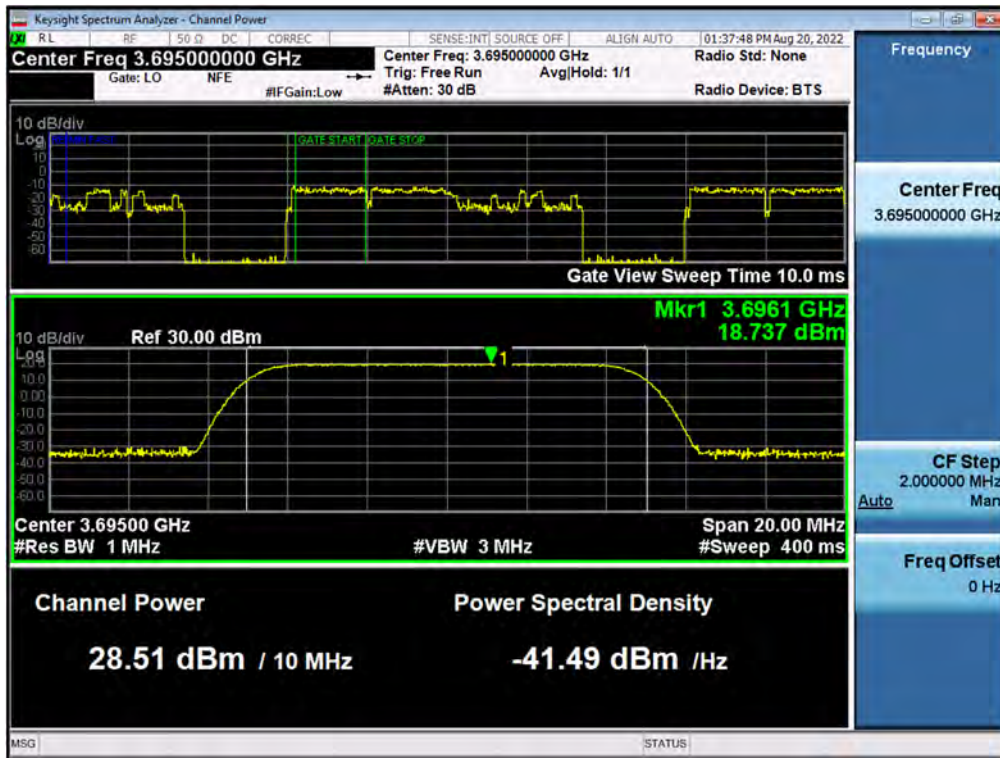
Antenna 3 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / LTE 15 MHz 1C + LTE 10 MHz 1C / Non-Contiguous / 16QAM / High



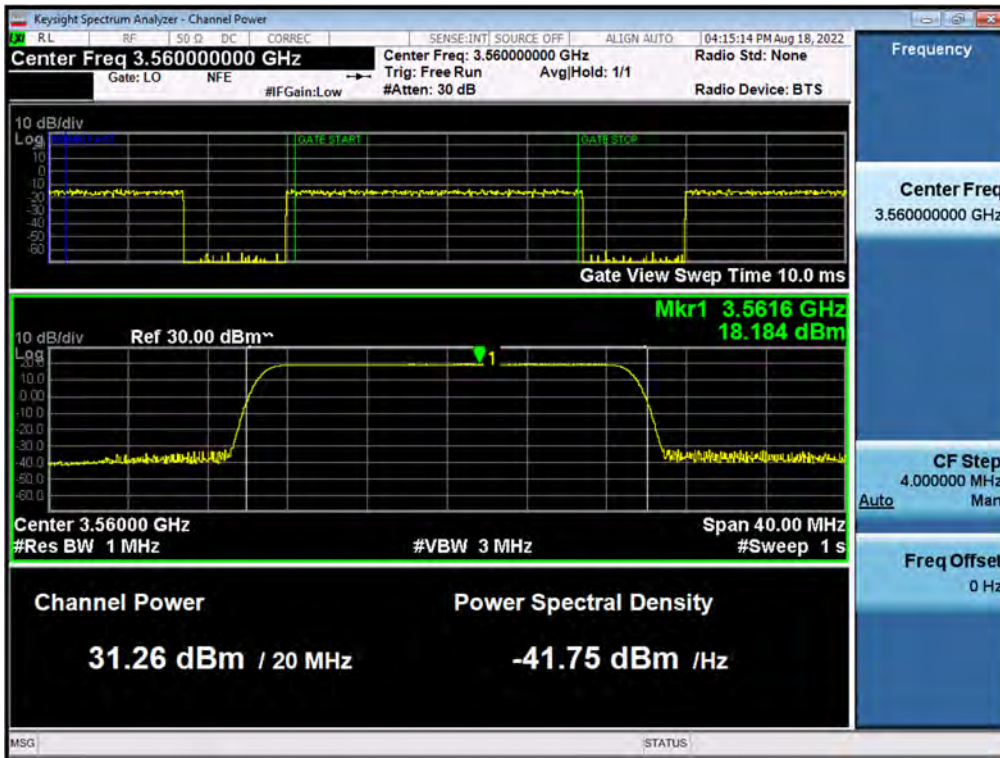
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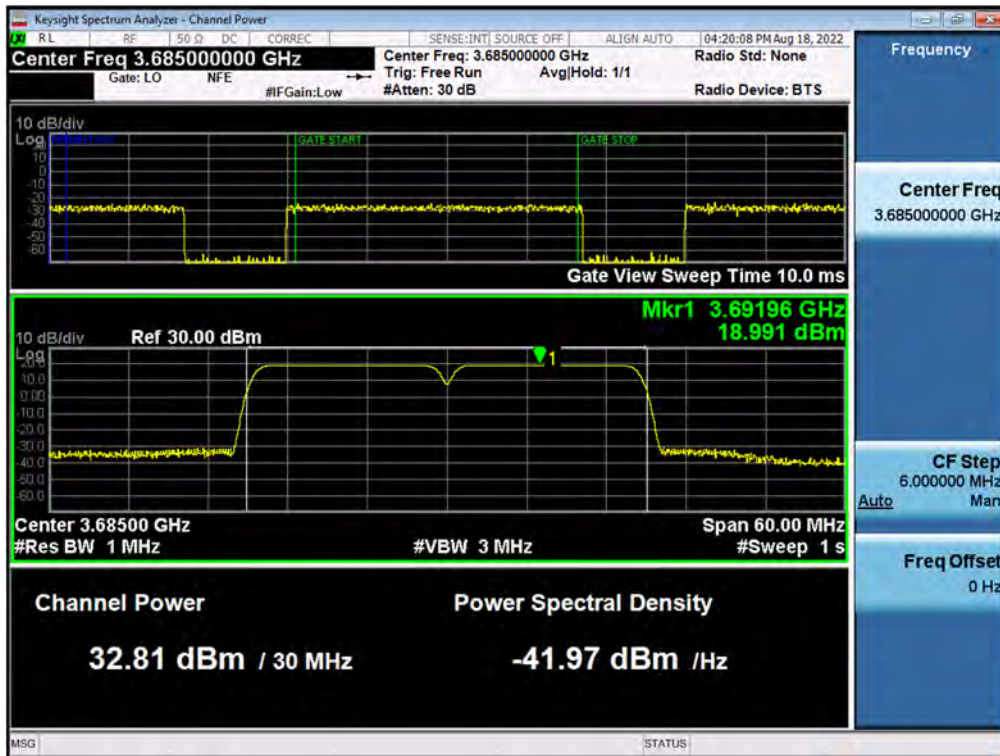
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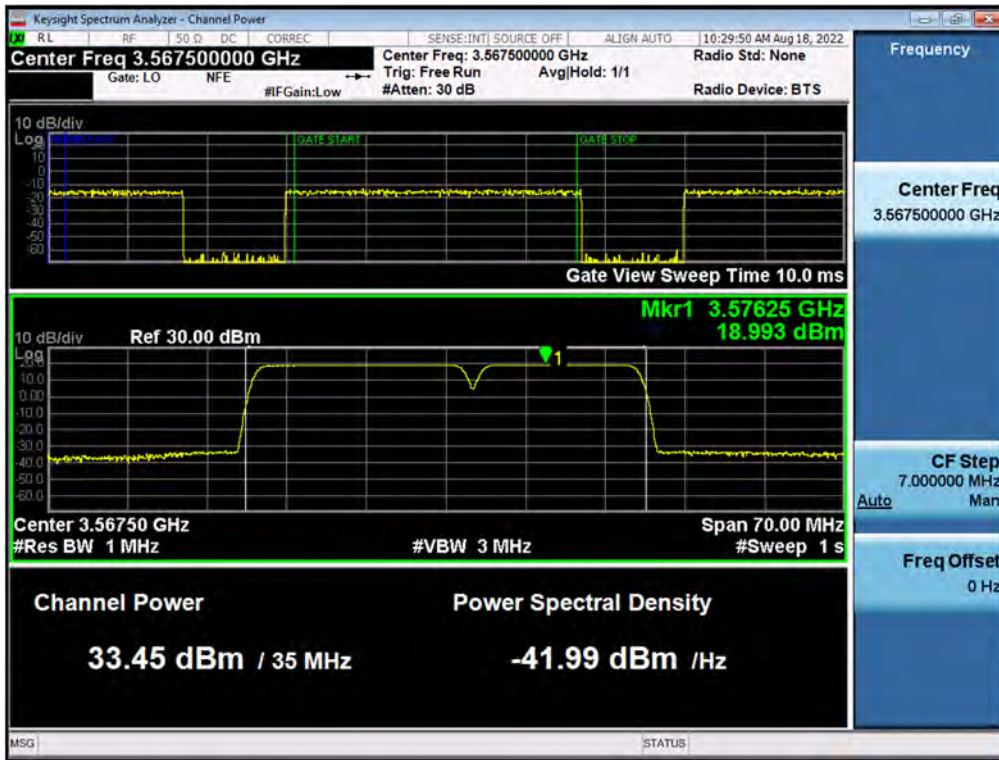
Antenna 0 / CBRS LTE[20 MHz 1C + (15 MHz 1C + 15 MHz 1C)][3C(1C+2C)] / LTE 20 MHz 1C / Non-Contiguous / 64QAM / Low



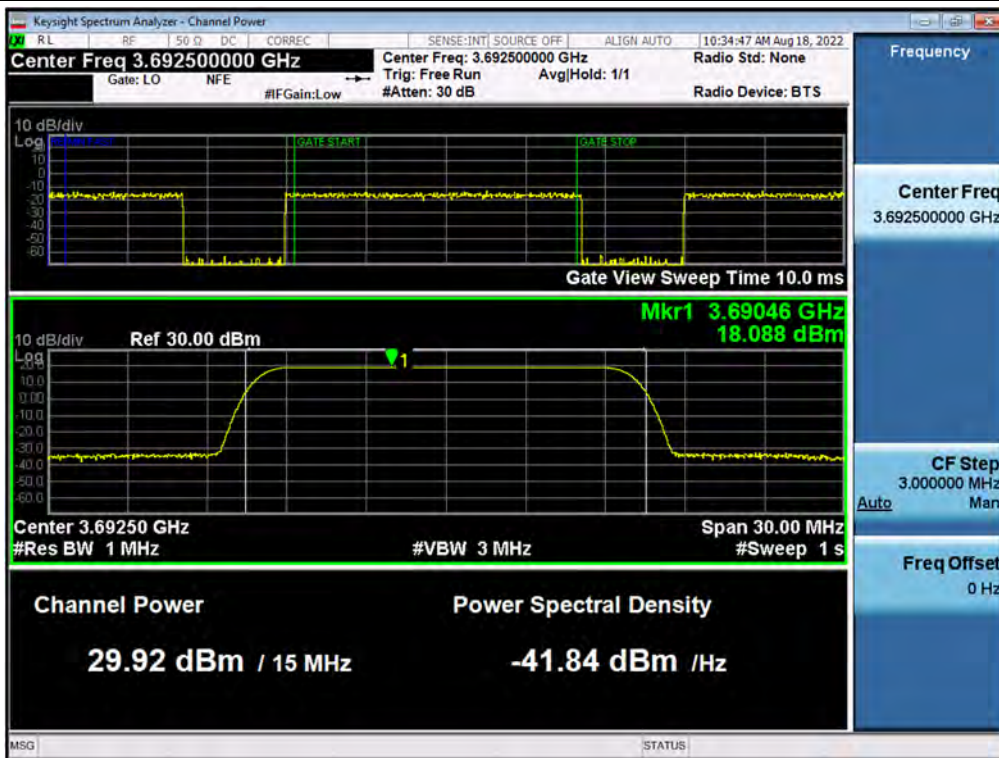
Antenna 0 / CBRS LTE[20 MHz 1C + (15 MHz 1C + 15 MHz 1C)][3C(1C+2C)] / LTE 15 MHz 1C + LTE 15 MHz 1C / Non-Contiguous / 64QAM / High



Antenna 0 / CBRS LTE[(20 MHz 1C + 15 MHz 1C) + 15 MHz 1C][3C(2C+1C)] / LTE 20 MHz 1C + LTE 15 MHz 1C / Non-Contiguous / 256QAM / Low

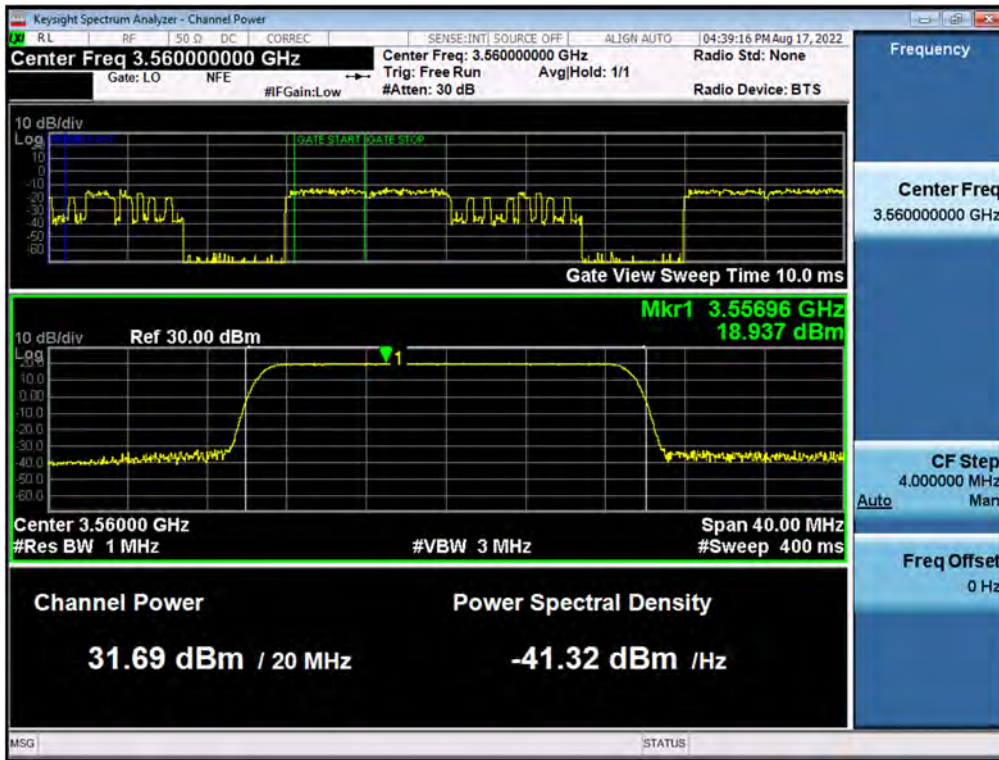


Antenna 0 / CBRS LTE[(20 MHz 1C + 15 MHz 1C) + 15 MHz 1C][3C(2C+1C)] / LTE 15 MHz 1C / Non-Contiguous / 256QAM / High

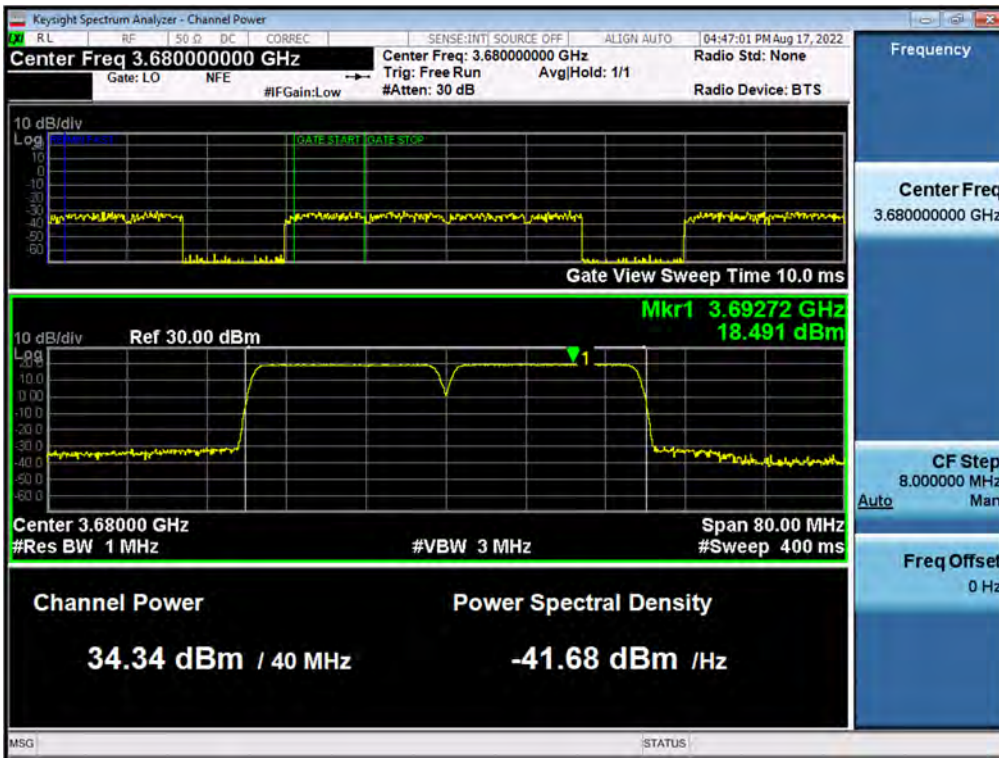




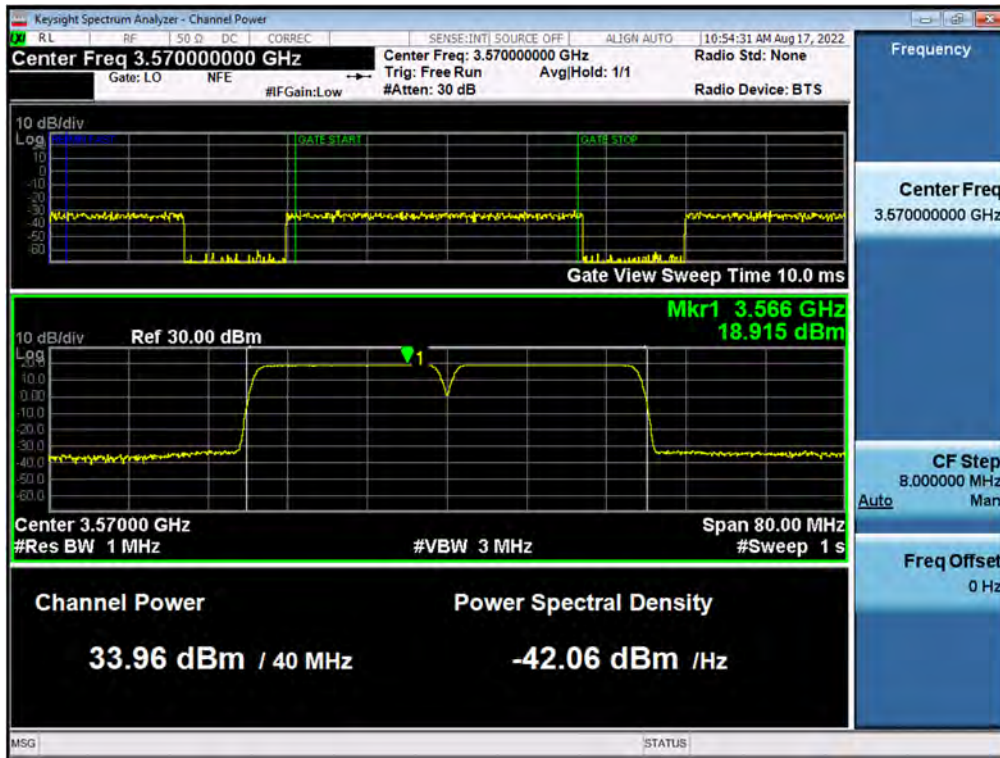
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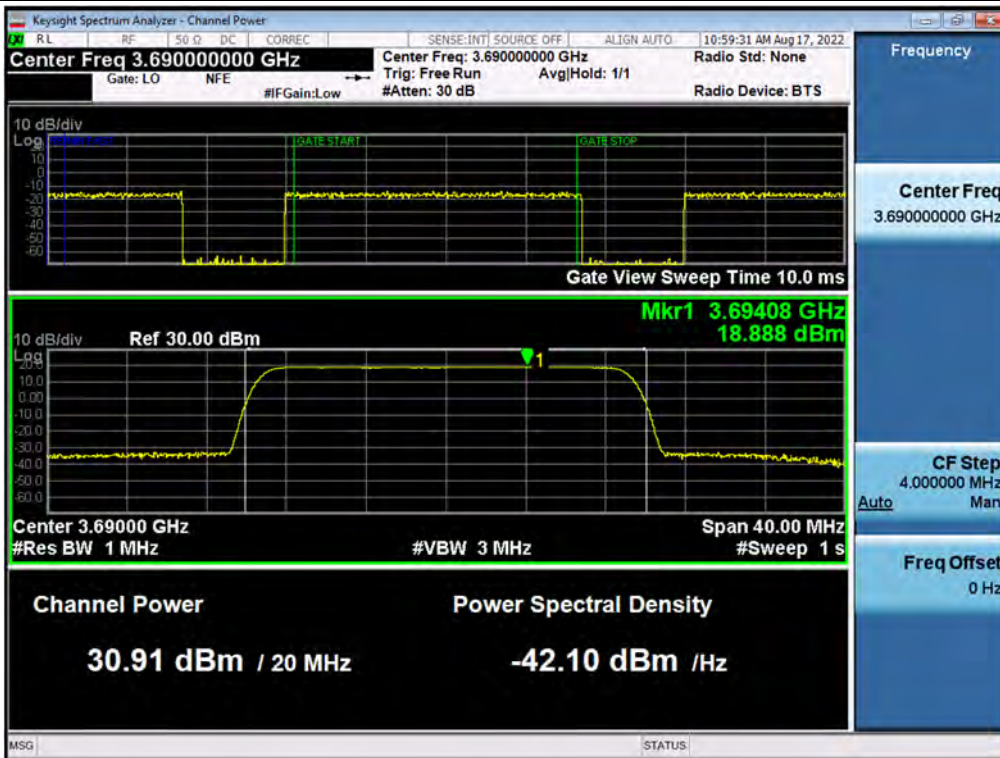
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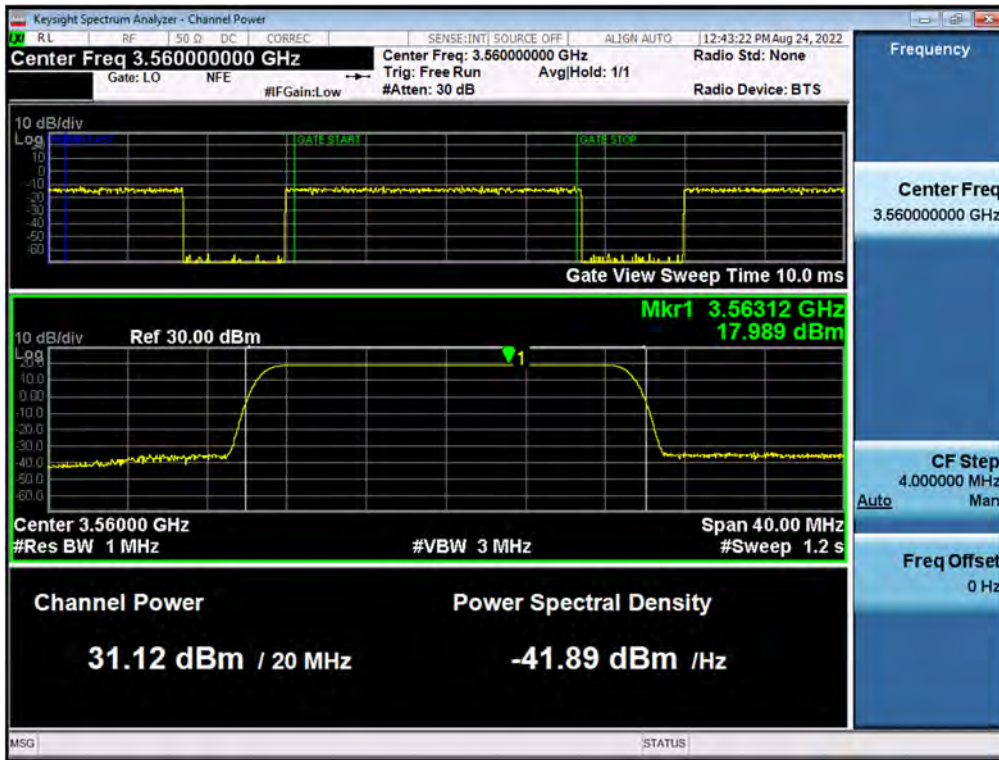
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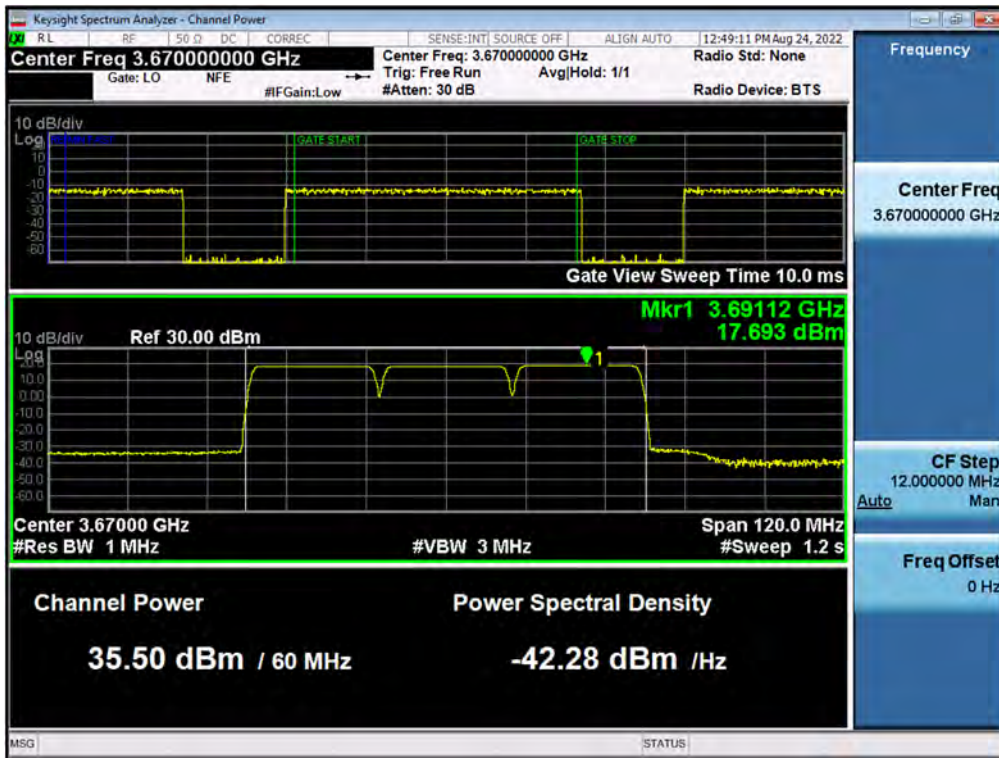
Antenna 0 / CBRS LTE[(20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][3C(2C+1C)] / LTE 20 MHz 1C / Non-Contiguous / 64QAM / High



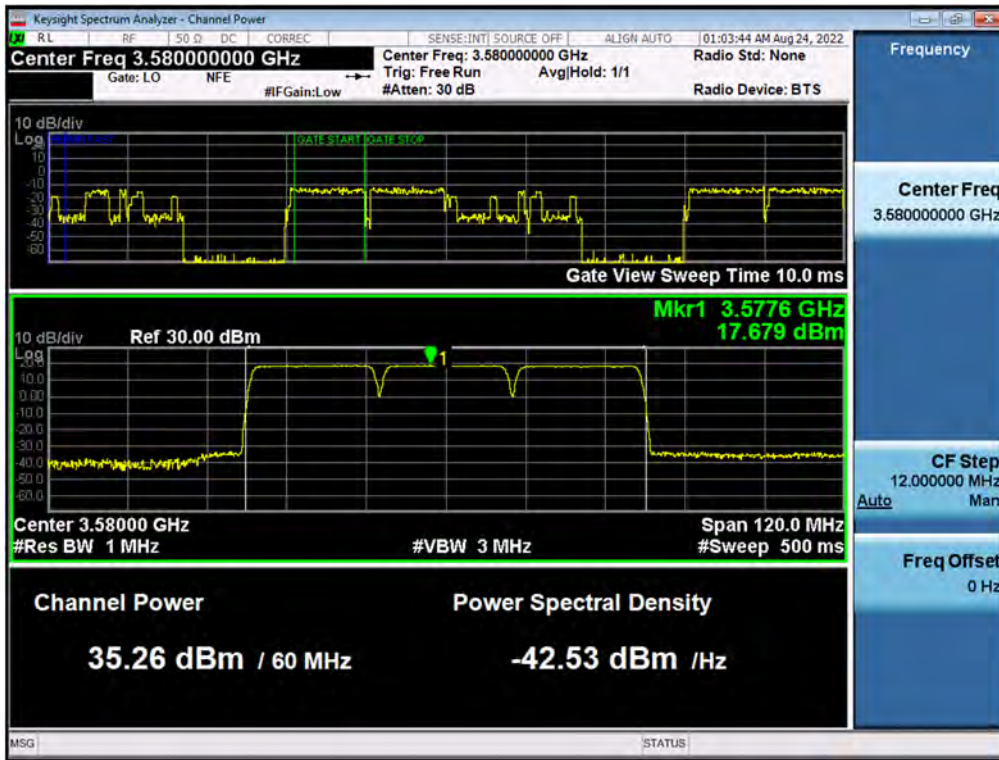
Antenna 3 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][4C(1C+3C)] / LTE 20 MHz 1C / Non-Contiguous / QPSK / Low



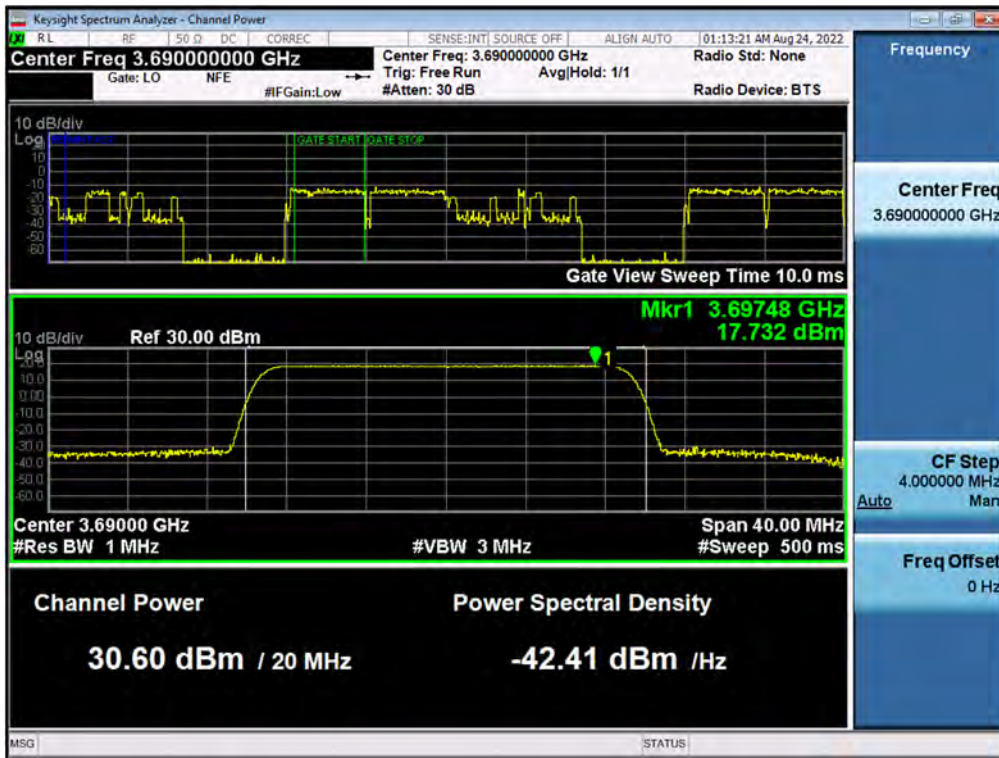
Antenna 3 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][4C(1C+3C)] / LTE 20 MHz 1C + LTE 20 MHz 1C + LTE 20 MHz 1C / Non-Contiguous / QPSK / High



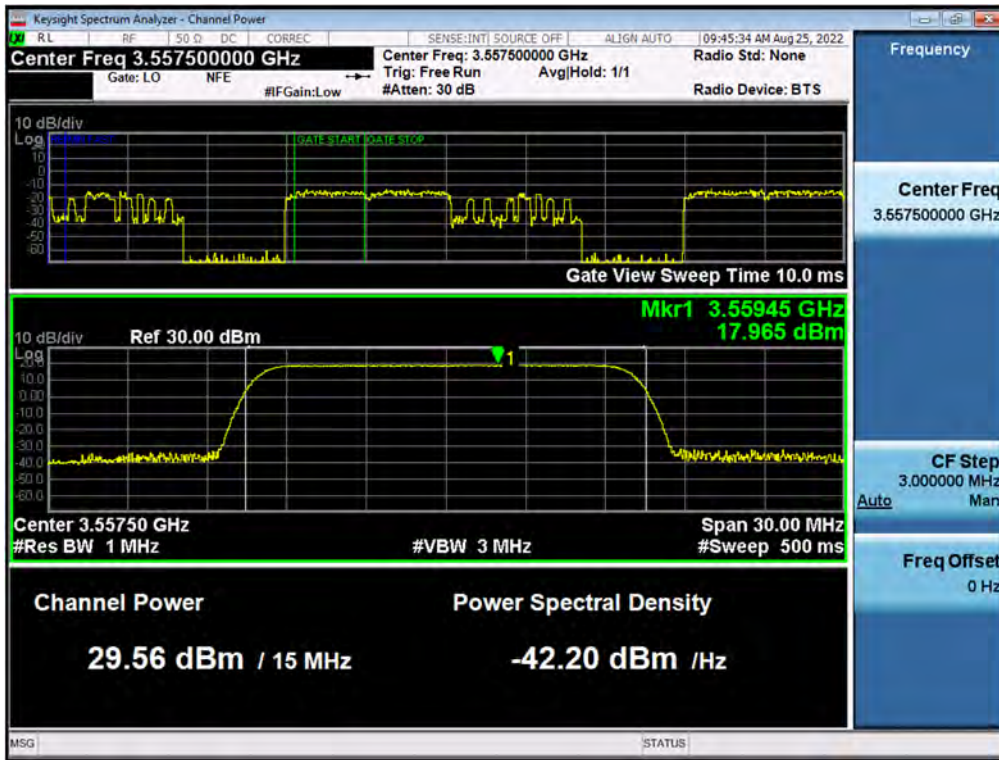
Antenna 3 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][4C(3C+1C)] / LTE 20 MHz 1C + LTE 20 MHz 1C + LTE 20 MHz 1C / Non-Contiguous / 16QAM / Low



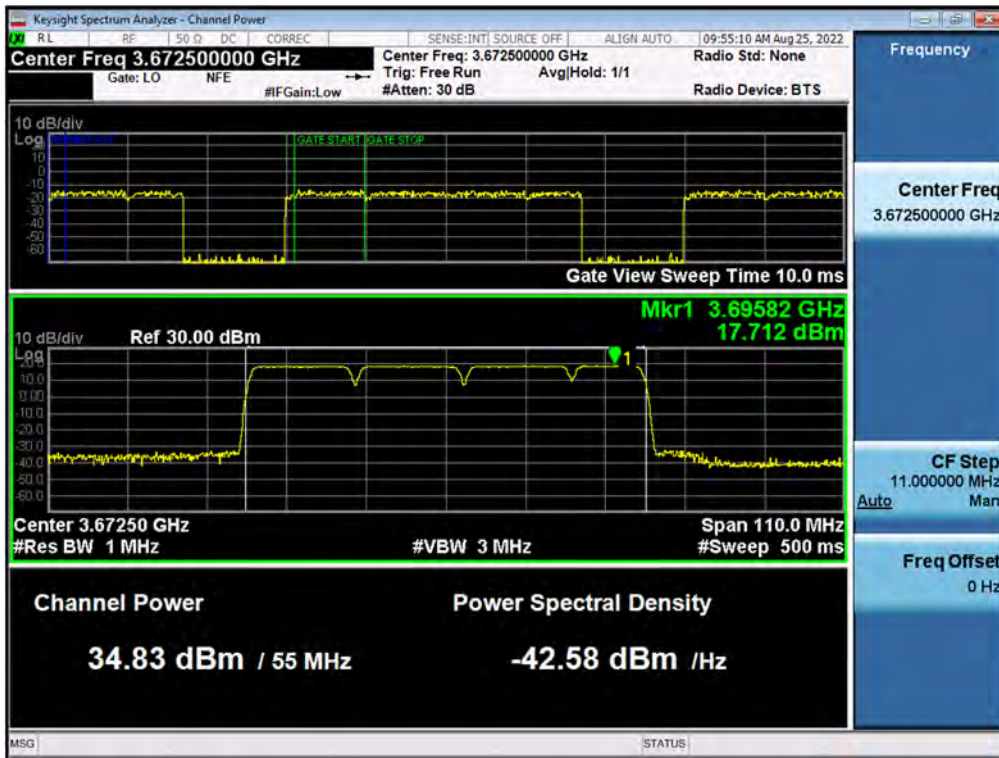
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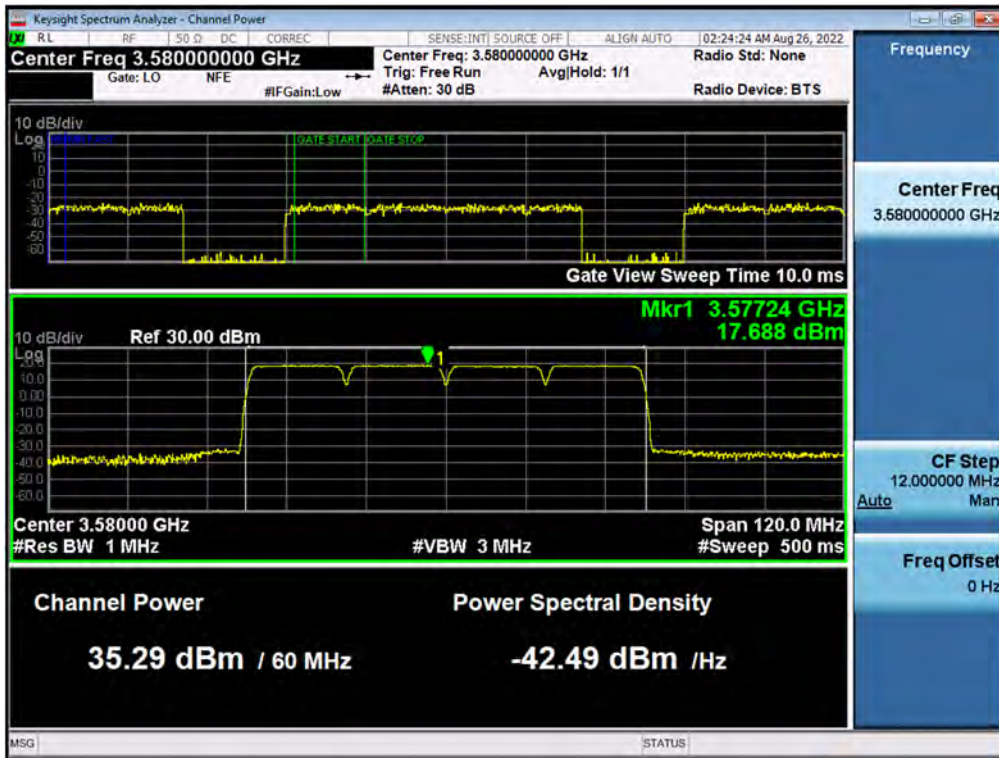
Antenna 1 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / LTE 15 MHz 1C / Non-Contiguous / 16QAM / Low



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



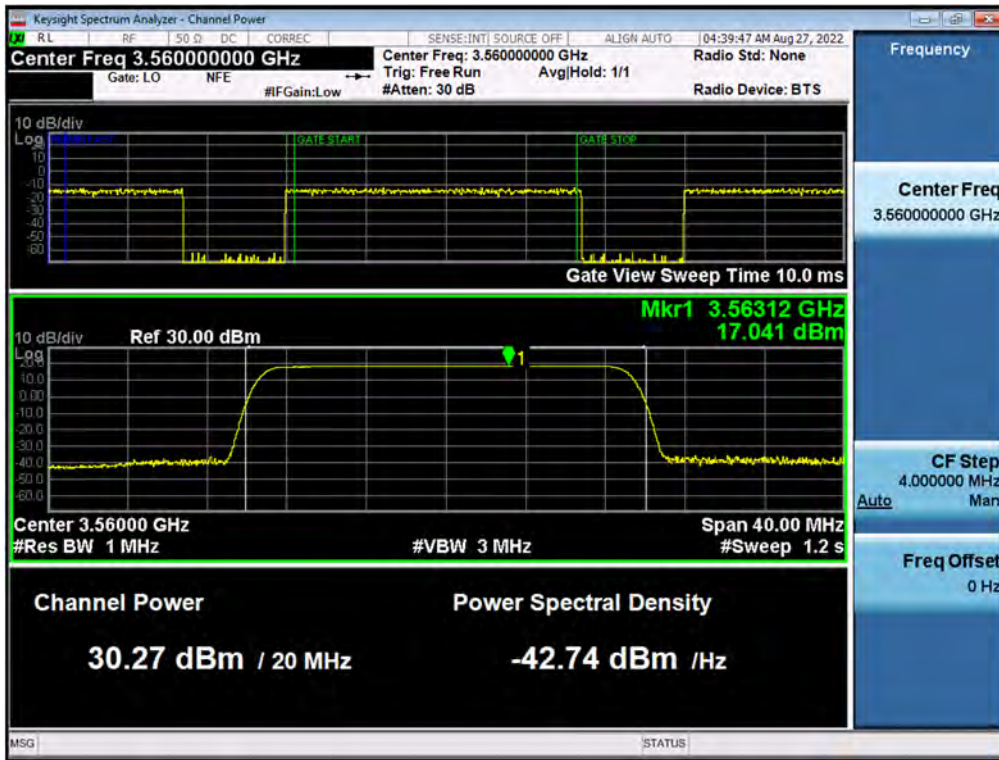
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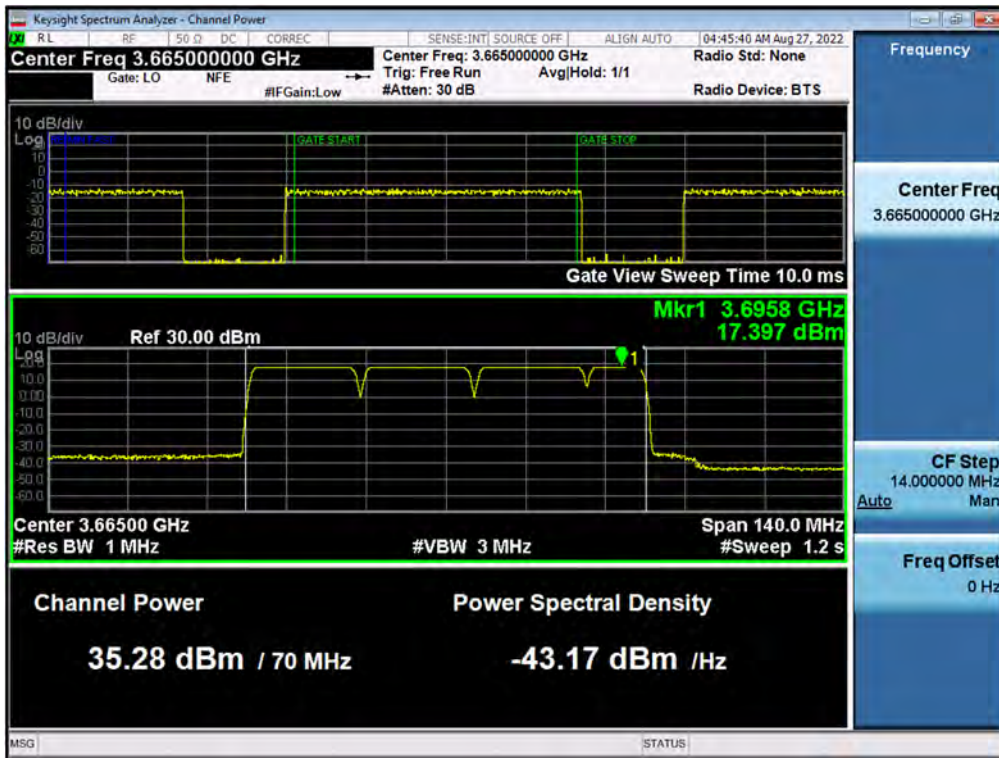
Antenna 1 / CBRS LTE[(15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / LTE 10 MHz 1C / Non-Contiguous / 16QAM / High



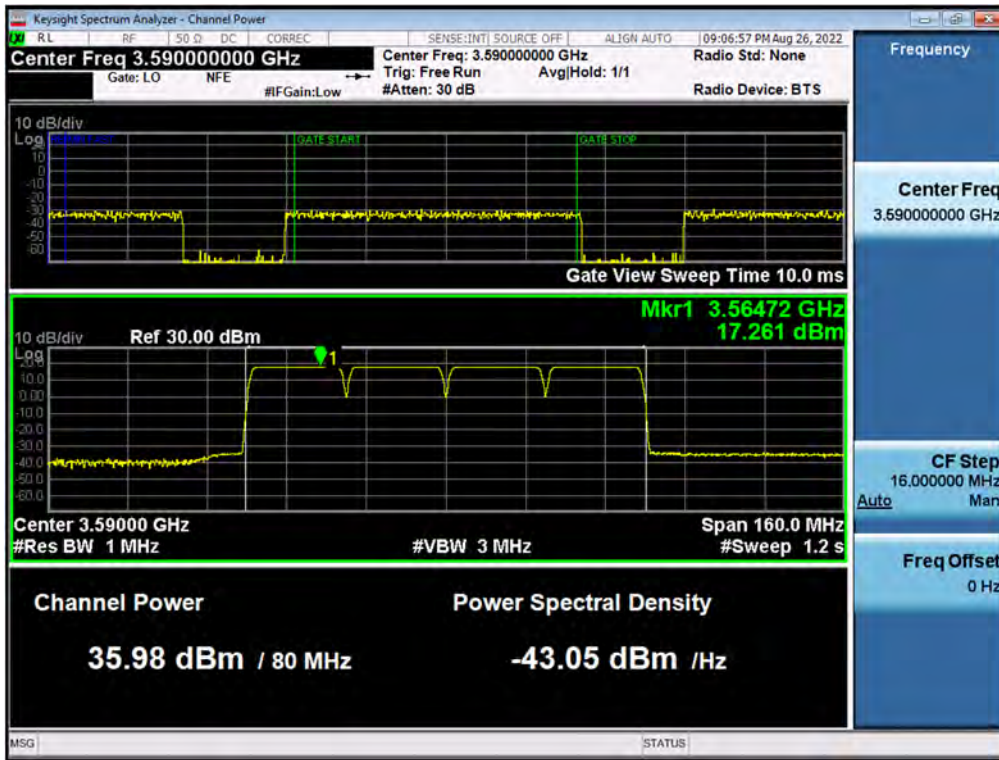
Antenna 3 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / LTE 20 MHz 1C / Non-Contiguous / QPSK / Low



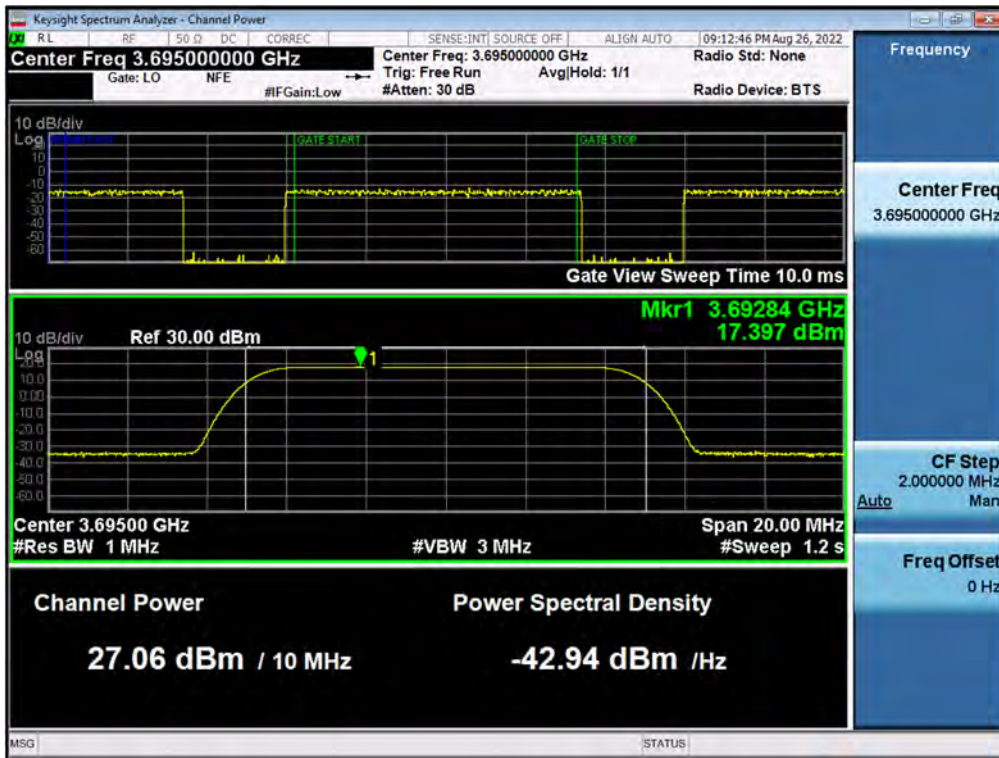
Antenna 3 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / LTE 20 MHz 1C + LTE 20 MHz 1C + LTE 20 MHz 1C + LTE 10 MHz 1C / Non-Contiguous / QPSK / High



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

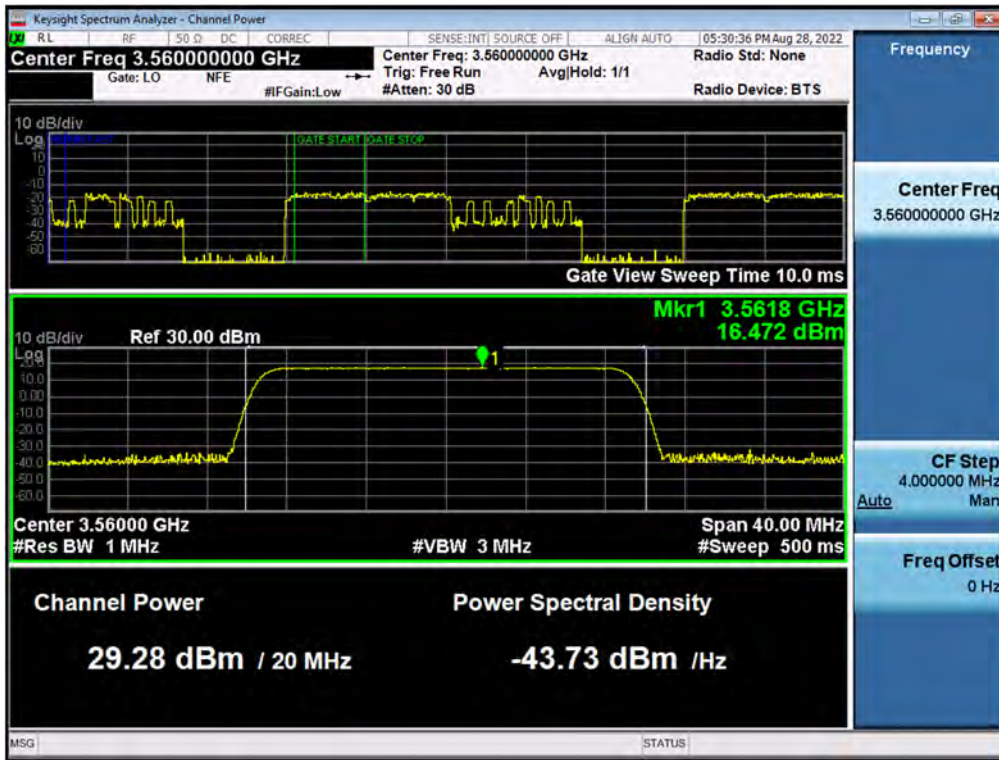


Antenna 3 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / LTE 10 MHz 1C / Non-Contiguous / QPSK / High

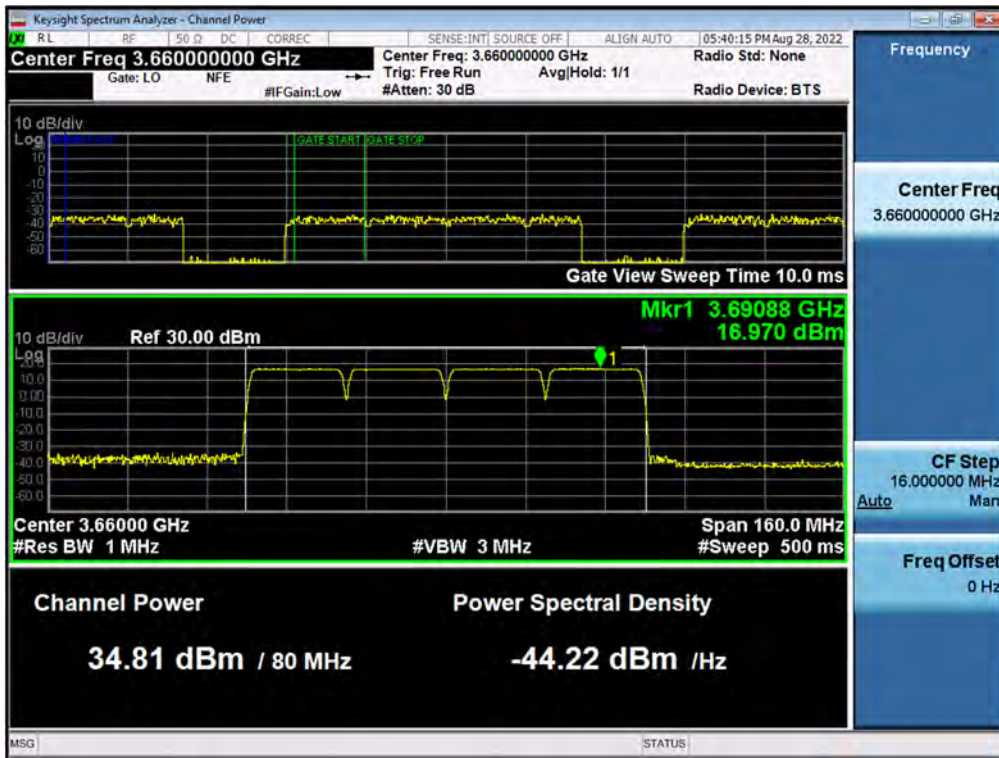




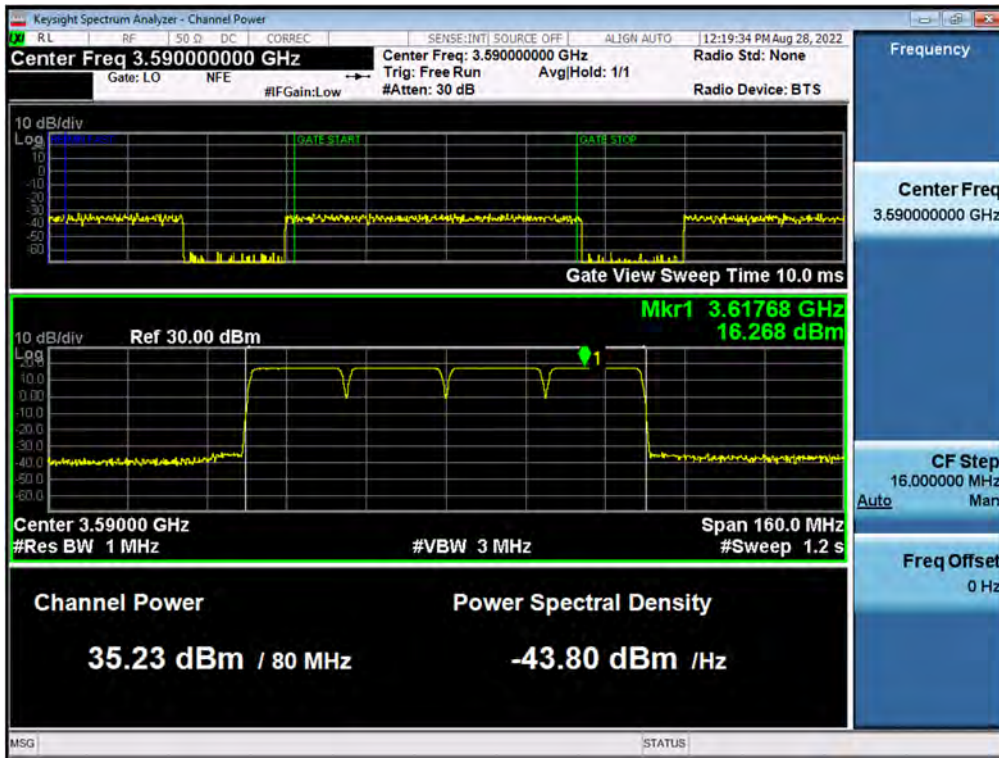
Antenna 0 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][5C(1C+4C)] / LTE 20 MHz 1C / Non-Contiguous / 16QAM / Low



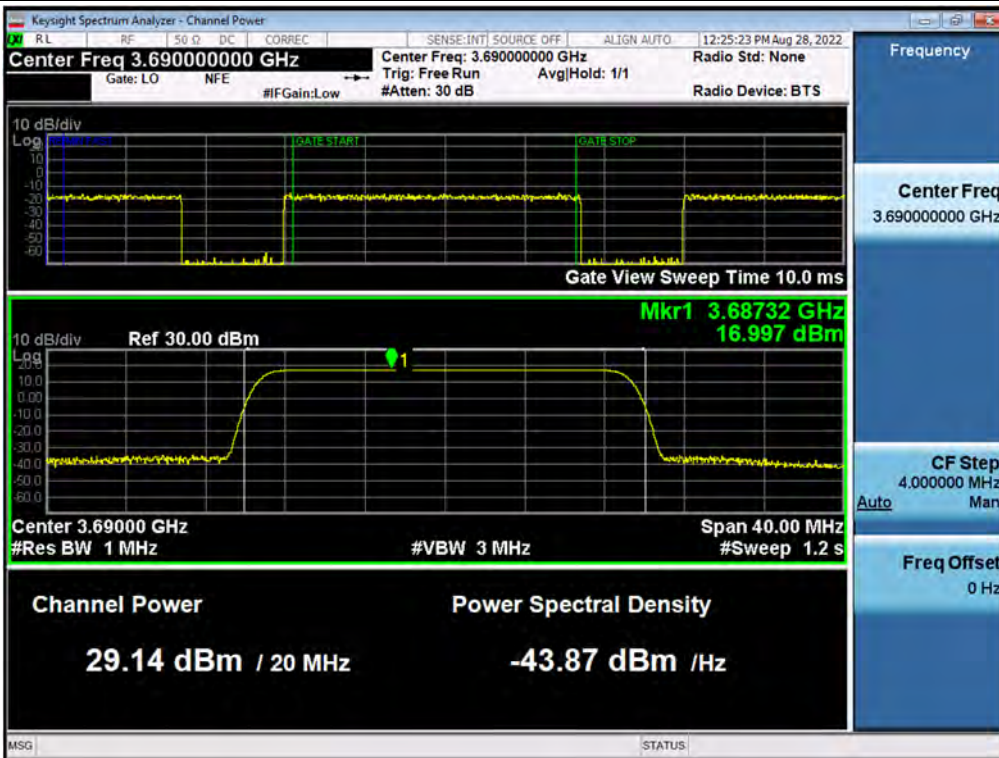
Antenna 0 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][5C(1C+4C)] / LTE 20 MHz 1C + LTE 20 MHz 1C + LTE 20 MHz 1C + LTE 20 MHz 1C / Non-Contiguous / 16QAM / High



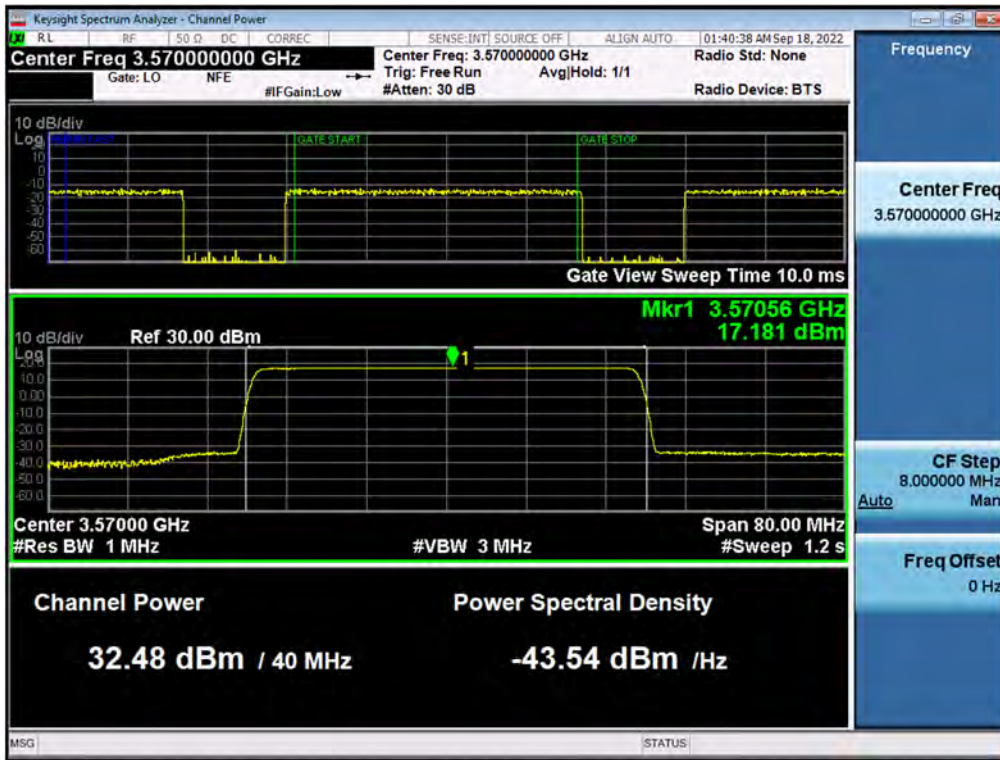
Antenna 0 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][5C(4C+1C)] / LTE 20 MHz 1C + LTE 20 MHz 1C + LTE 20 MHz 1C + LTE 20 MHz 1C / Non-Contiguous / 64QAM / Low



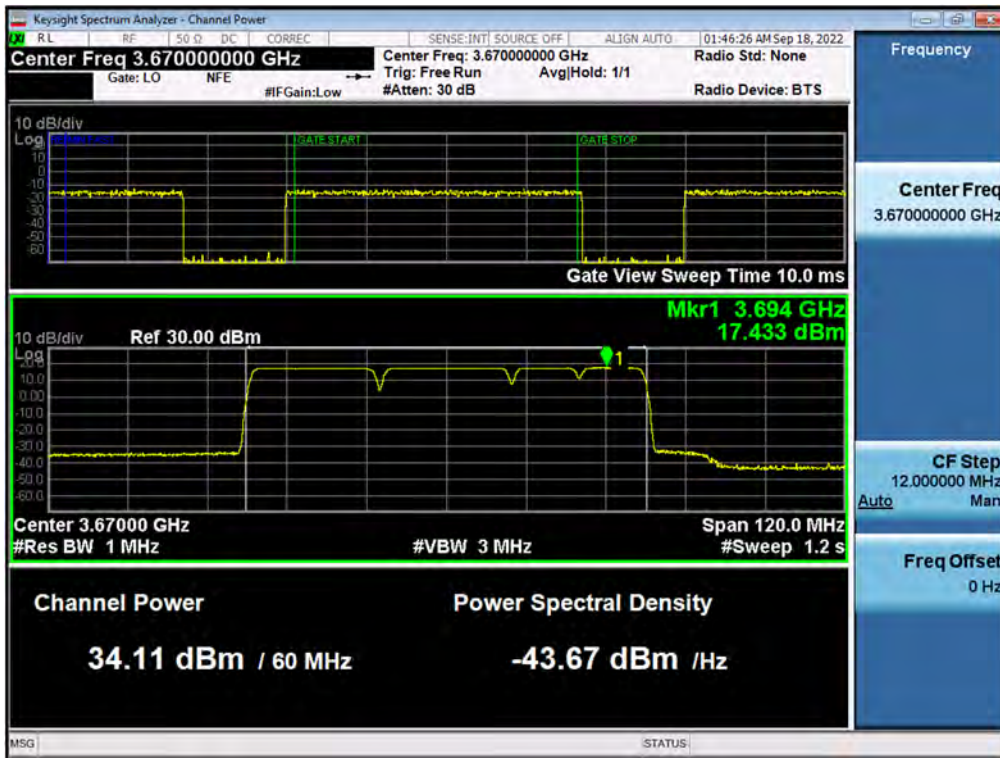
Antenna 0 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][5C(4C+1C)] / LTE 20 MHz 1C / Non-Contiguous / 64QAM / High



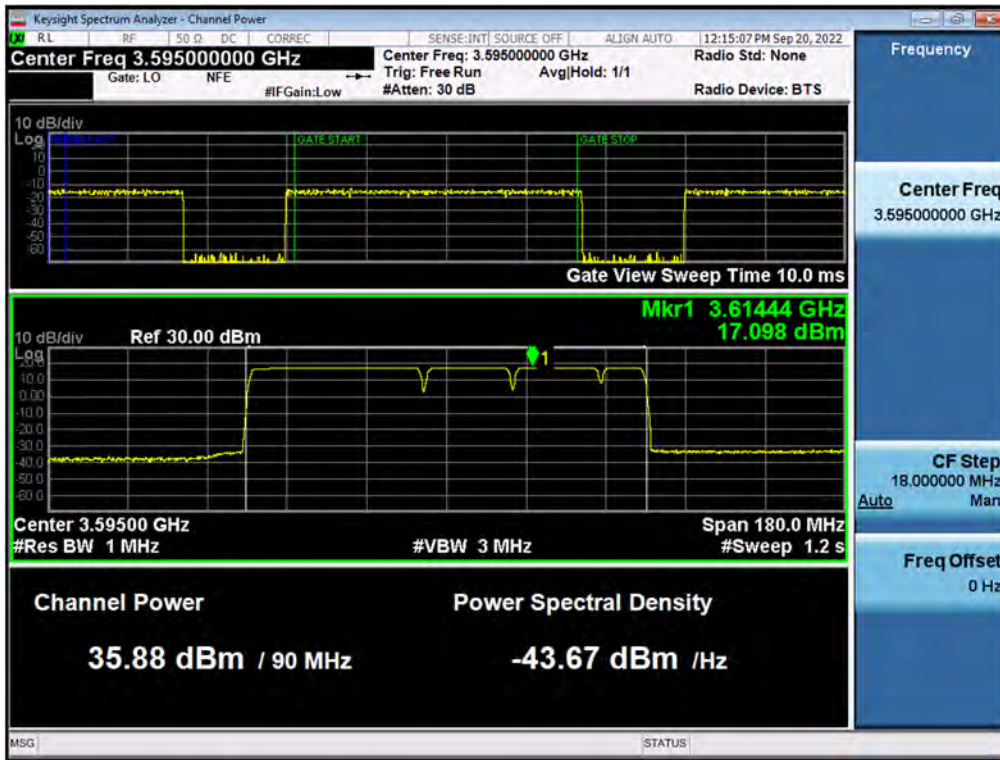
Antenna 3 / CBRS NR 40 MHz 1C + (NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C + LTE 10 MHz 1C)[5C(1C+4C)] / NR 40 MHz 1C / Non-Contiguous / 64QAM / Low



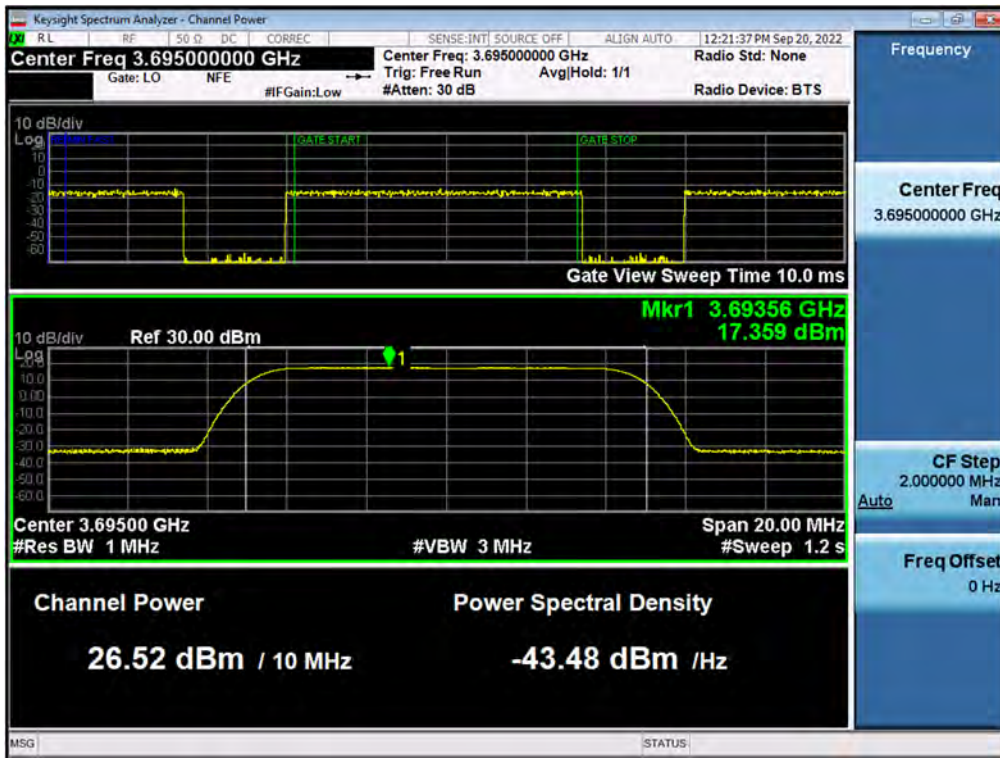
Antenna 3 / CBRS NR 40 MHz 1C + (NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C + LTE 10 MHz 1C)[5C(1C+4C)] / NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C + LTE 10 MHz 1C / Non-Contiguous / 64QAM / High



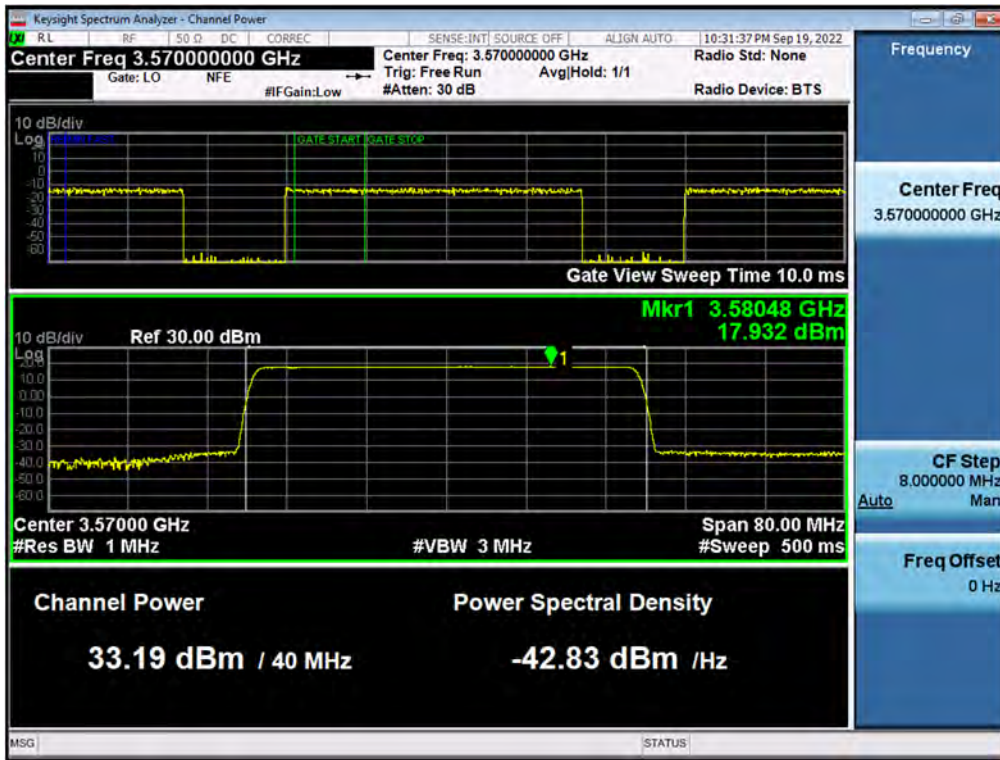
Antenna 3 / CBRS (NR 40 MHz 1C + NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C) + LTE 10 MHz 1C[5C(4C+1C)] / NR 40 MHz 1C + NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C / Non-Contiguous / QPSK / Low



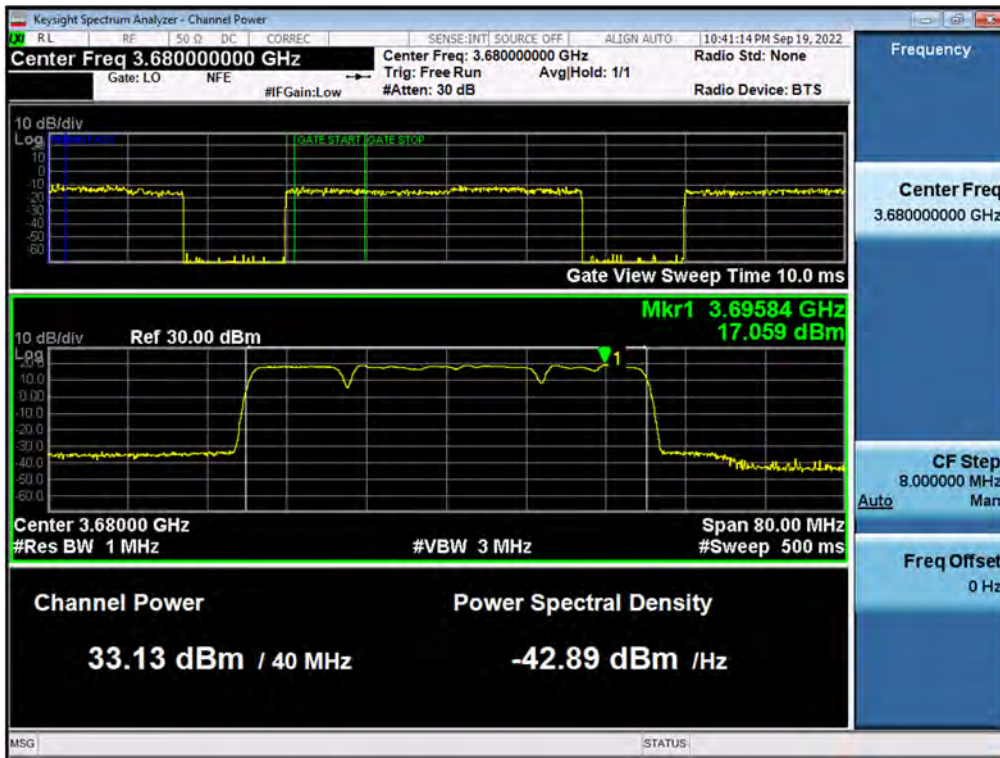
Antenna 3 / CBRS (NR 40 MHz 1C + NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C) + LTE 10 MHz 1C[5C(4C+1C)] / LTE 10 MHz 1C / Non-Contiguous / QPSK / High



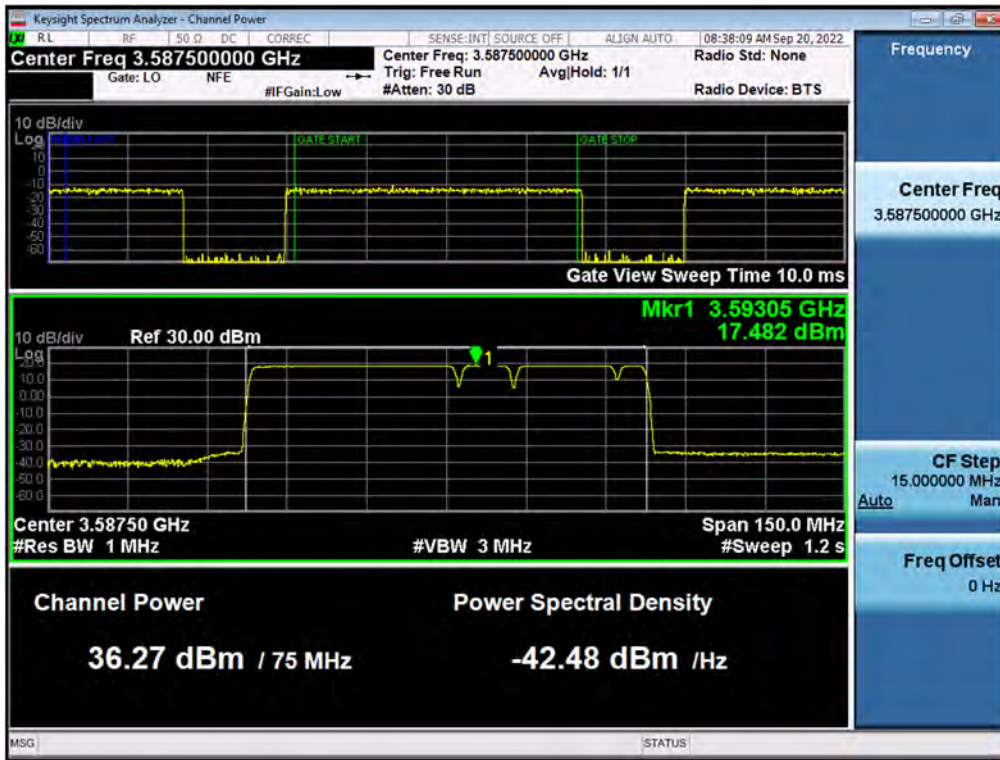
Antenna 2 / CBRS NR 40 MHz 1C + (NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C + LTE 5 MHz 1C)5C(1C+4C) / NR 40 MHz 1C / Non-Contiguous / 16QAM / Low



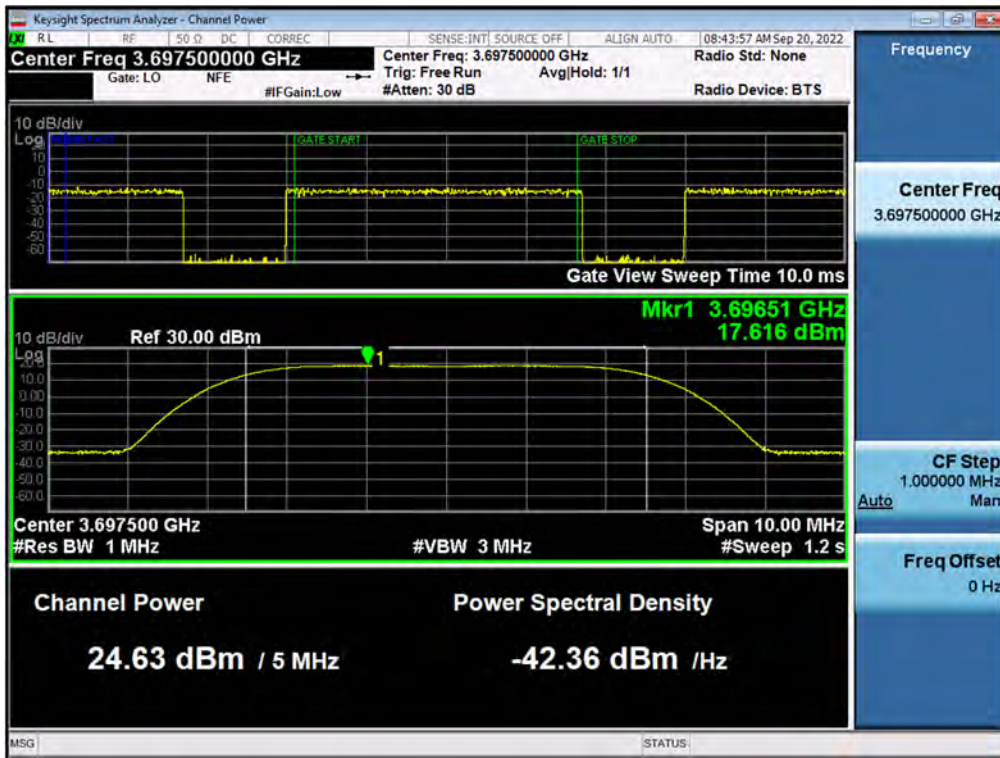
Antenna 2 / CBRS NR 40 MHz 1C + (NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C + LTE 5 MHz 1C)5C(1C+4C) / NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C + LTE 5 MHz 1C / Non-Contiguous / 16QAM / High



Antenna 3 / CBRS (NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C) + LTE 5 MHz 1C[5C(4C+1C)] / NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C / Non-Contiguous / 64QAM / Low



Antenna 3 / CBRS (NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C) + LTE 5 MHz 1C[5C(4C+1C)] / LTE 5 MHz 1C / Non-Contiguous / 64QAM / High



## 5.2. PAPR

### Test Requirements:

#### § 96.41 General radio requirements.

- (g) **Power measurement.** The peak-to-average power ratio (PAPR) of any CBSD transmitter output power must not exceed 13 dB. PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities or another Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

### Test Procedures:

The measurement is performed in accordance with Section 5.2.3.4 of ANSI C63.26.

The following guidelines are offered for performing a CCDF measurement..

- a) Set resolution/measurement bandwidth  $\geq$  OBW or specified reference bandwidth.
- b) Set the number of counts to a value that stabilizes the measured CCDF curve.
- c) Set the measurement interval as follows:
  - 1) For continuous transmissions, set to the greater of  $[10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})]$  or 1 ms.
  - 2) For burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize. Set the measurement interval to a time that is less than or equal to the burst duration.
  - 3) If there are several carriers in a single antenna port, the peak power shall be determined for each individual carrier (by disabling the other carriers while measuring the required carrier) and the total peak power calculated from the sum of the individual carrier peak powers.
- d) Record the maximum PAPR level associated with a probability of 0.1%.
- e) The peak power level is calculated from the sum of the PAPR value from step d) to the measured average power.

**Note:** The results of PAPR test shown below the frequency measured values are very small and similar trend for each port, so we are attached only the worst case plot.

## Tabular data of PAPR

## CBRS NR 10 MHz 1 Carrier

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 555.00	9.37
		Middle	3 625.00	9.45
		High	3 695.00	9.51
	16QAM	Low	3 555.00	9.48
		Middle	3 625.00	9.48
		High	3 695.00	9.42
	64QAM	Low	3 555.00	9.49
		Middle	3 625.00	9.54
		High	3 695.00	9.47
	256QAM	Low	3 555.00	9.54
		Middle	3 625.00	9.36
		High	3 695.00	9.39
1	QPSK	Low	3 555.00	9.42
		Middle	3 625.00	9.41
		High	3 695.00	9.44
	16QAM	Low	3 555.00	9.47
		Middle	3 625.00	9.41
		High	3 695.00	9.47
	64QAM	Low	3 555.00	9.50
		Middle	3 625.00	9.50
		High	3 695.00	9.49
	256QAM	Low	3 555.00	9.58
		Middle	3 625.00	9.41
		High	3 695.00	9.39



Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 555.00	9.49
		Middle	3 625.00	9.49
		High	3 695.00	9.45
	16QAM	Low	3 555.00	9.51
		Middle	3 625.00	9.48
		High	3 695.00	9.43
	64QAM	Low	3 555.00	9.53
		Middle	3 625.00	9.53
		High	3 695.00	9.51
256QAM	Low	3 555.00	9.39	
	Middle	3 625.00	9.59	
	High	3 695.00	9.53	
3	QPSK	Low	3 555.00	9.44
		Middle	3 625.00	9.50
		High	3 695.00	9.40
	16QAM	Low	3 555.00	9.44
		Middle	3 625.00	9.54
		High	3 695.00	9.45
	64QAM	Low	3 555.00	9.47
		Middle	3 625.00	9.55
		High	3 695.00	9.48
256QAM	Low	3 555.00	9.52	
	Middle	3 625.00	9.52	
	High	3 695.00	9.43	

## CBRS NR 20 MHz 1 Carrier

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 560.00	9.37
		Middle	3 625.00	9.55
		High	3 690.00	9.57
	16QAM	Low	3 560.00	9.25
		Middle	3 625.00	9.57
		High	3 690.00	9.50
	64QAM	Low	3 560.00	9.36
		Middle	3 625.00	9.25
		High	3 690.00	9.46
	256QAM	Low	3 560.00	9.30
		Middle	3 625.00	9.41
		High	3 690.00	9.51
1	QPSK	Low	3 560.00	9.57
		Middle	3 625.00	9.44
		High	3 690.00	9.61
	16QAM	Low	3 560.00	9.42
		Middle	3 625.00	9.54
		High	3 690.00	9.50
	64QAM	Low	3 560.00	9.56
		Middle	3 625.00	9.50
		High	3 690.00	9.45
	256QAM	Low	3 560.00	9.56
		Middle	3 625.00	9.54
		High	3 690.00	9.54

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 560.00	9.38
		Middle	3 625.00	9.54
		High	3 690.00	9.45
	16QAM	Low	3 560.00	9.44
		Middle	3 625.00	9.24
		High	3 690.00	9.42
	64QAM	Low	3 560.00	9.53
		Middle	3 625.00	9.52
		High	3 690.00	9.50
256QAM	Low	3 560.00	9.61	
	Middle	3 625.00	9.60	
	High	3 690.00	9.49	
3	QPSK	Low	3 560.00	9.53
		Middle	3 625.00	9.44
		High	3 690.00	9.59
	16QAM	Low	3 560.00	9.37
		Middle	3 625.00	9.58
		High	3 690.00	9.42
	64QAM	Low	3 560.00	9.58
		Middle	3 625.00	9.44
		High	3 690.00	9.22
256QAM	Low	3 560.00	9.40	
	Middle	3 625.00	9.50	
	High	3 690.00	9.47	

## CBRS NR 30 MHz 1 Carrier

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 565.00	9.42
		Middle	3 625.00	9.45
		High	3 685.00	9.51
	16QAM	Low	3 565.00	9.47
		Middle	3 625.00	9.42
		High	3 685.00	9.61
	64QAM	Low	3 565.00	9.58
		Middle	3 625.00	9.63
		High	3 685.00	9.55
	256QAM	Low	3 565.00	9.46
		Middle	3 625.00	9.50
		High	3 685.00	9.50
1	QPSK	Low	3 565.00	9.63
		Middle	3 625.00	9.52
		High	3 685.00	9.53
	16QAM	Low	3 565.00	9.51
		Middle	3 625.00	9.59
		High	3 685.00	9.50
	64QAM	Low	3 565.00	9.61
		Middle	3 625.00	9.56
		High	3 685.00	9.72
	256QAM	Low	3 565.00	9.45
		Middle	3 625.00	9.44
		High	3 685.00	9.56

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 565.00	9.50
		Middle	3 625.00	9.43
		High	3 685.00	9.55
	16QAM	Low	3 565.00	9.53
		Middle	3 625.00	9.54
		High	3 685.00	9.51
	64QAM	Low	3 565.00	9.50
		Middle	3 625.00	9.56
		High	3 685.00	9.45
256QAM	Low	3 565.00	9.48	
	Middle	3 625.00	9.43	
	High	3 685.00	9.60	
3	QPSK	Low	3 565.00	9.61
		Middle	3 625.00	9.49
		High	3 685.00	9.50
	16QAM	Low	3 565.00	9.42
		Middle	3 625.00	9.62
		High	3 685.00	9.46
	64QAM	Low	3 565.00	9.55
		Middle	3 625.00	9.74
		High	3 685.00	9.57
256QAM	Low	3 565.00	9.55	
	Middle	3 625.00	9.36	
	High	3 685.00	9.52	

## CBRS NR 40 MHz 1 Carrier

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 570.00	9.42
		Middle	3 625.00	9.44
		High	3 680.00	9.50
	16QAM	Low	3 570.00	9.46
		Middle	3 625.00	9.44
		High	3 680.00	9.58
	64QAM	Low	3 570.00	9.65
		Middle	3 625.00	9.45
		High	3 680.00	9.46
	256QAM	Low	3 570.00	9.51
		Middle	3 625.00	9.51
		High	3 680.00	9.46
1	QPSK	Low	3 570.00	9.45
		Middle	3 625.00	9.22
		High	3 680.00	9.33
	16QAM	Low	3 570.00	9.52
		Middle	3 625.00	9.64
		High	3 680.00	9.62
	64QAM	Low	3 570.00	9.49
		Middle	3 625.00	9.40
		High	3 680.00	9.67
	256QAM	Low	3 570.00	9.51
		Middle	3 625.00	9.53
		High	3 680.00	9.45

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 570.00	9.49
		Middle	3 625.00	9.51
		High	3 680.00	9.36
	16QAM	Low	3 570.00	9.47
		Middle	3 625.00	9.59
		High	3 680.00	9.61
	64QAM	Low	3 570.00	9.56
		Middle	3 625.00	9.55
		High	3 680.00	9.41
256QAM	Low	3 570.00	9.45	
	Middle	3 625.00	9.65	
	High	3 680.00	9.30	
3	QPSK	Low	3 570.00	9.38
		Middle	3 625.00	9.28
		High	3 680.00	9.55
	16QAM	Low	3 570.00	9.60
		Middle	3 625.00	9.62
		High	3 680.00	9.55
	64QAM	Low	3 570.00	9.50
		Middle	3 625.00	9.59
		High	3 680.00	9.36
256QAM	Low	3 570.00	9.48	
	Middle	3 625.00	9.20	
	High	3 680.00	9.38	

## CBRS NR 60 MHz 1 Carrier

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 580.00	8.92
		Middle	3 625.00	9.15
		High	3 670.00	8.77
	16QAM	Low	3 580.00	8.84
		Middle	3 625.00	8.77
		High	3 670.00	8.98
	64QAM	Low	3 580.00	8.88
		Middle	3 625.00	8.74
		High	3 670.00	8.87
	256QAM	Low	3 580.00	8.88
		Middle	3 625.00	8.50
		High	3 670.00	8.82
1	QPSK	Low	3 580.00	8.70
		Middle	3 625.00	8.99
		High	3 670.00	9.05
	16QAM	Low	3 580.00	8.97
		Middle	3 625.00	8.97
		High	3 670.00	8.74
	64QAM	Low	3 580.00	8.93
		Middle	3 625.00	8.93
		High	3 670.00	8.88
	256QAM	Low	3 580.00	8.86
		Middle	3 625.00	9.21
		High	3 670.00	8.94



Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 580.00	9.02
		Middle	3 625.00	9.03
		High	3 670.00	8.80
	16QAM	Low	3 580.00	8.95
		Middle	3 625.00	9.14
		High	3 670.00	9.05
	64QAM	Low	3 580.00	8.81
		Middle	3 625.00	8.96
		High	3 670.00	8.83
256QAM	Low	3 580.00	8.99	
	Middle	3 625.00	9.10	
	High	3 670.00	8.88	
3	QPSK	Low	3 580.00	8.93
		Middle	3 625.00	8.82
		High	3 670.00	8.95
	16QAM	Low	3 580.00	9.06
		Middle	3 625.00	9.07
		High	3 670.00	8.89
	64QAM	Low	3 580.00	8.85
		Middle	3 625.00	9.13
		High	3 670.00	9.11
256QAM	Low	3 580.00	8.89	
	Middle	3 625.00	9.07	
	High	3 670.00	8.89	

## CBRS NR 80 MHz 1 Carrier

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 590.00	8.98
		Middle	3 625.00	8.52
		High	3 660.00	8.82
	16QAM	Low	3 590.00	8.88
		Middle	3 625.00	8.69
		High	3 660.00	8.59
	64QAM	Low	3 590.00	9.10
		Middle	3 625.00	8.81
		High	3 660.00	8.32
	256QAM	Low	3 590.00	9.11
		Middle	3 625.00	8.70
		High	3 660.00	8.81
1	QPSK	Low	3 590.00	8.97
		Middle	3 625.00	8.58
		High	3 660.00	8.85
	16QAM	Low	3 590.00	8.95
		Middle	3 625.00	8.60
		High	3 660.00	9.07
	64QAM	Low	3 590.00	8.71
		Middle	3 625.00	8.71
		High	3 660.00	8.69
	256QAM	Low	3 590.00	8.78
		Middle	3 625.00	8.64
		High	3 660.00	8.87

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 590.00	8.80
		Middle	3 625.00	8.86
		High	3 660.00	8.98
	16QAM	Low	3 590.00	8.56
		Middle	3 625.00	8.94
		High	3 660.00	8.93
	64QAM	Low	3 590.00	8.74
		Middle	3 625.00	9.11
		High	3 660.00	8.84
256QAM	Low	3 590.00	8.98	
	Middle	3 625.00	8.74	
	High	3 660.00	8.84	
3	QPSK	Low	3 590.00	8.82
		Middle	3 625.00	8.58
		High	3 660.00	9.10
	16QAM	Low	3 590.00	8.39
		Middle	3 625.00	8.75
		High	3 660.00	8.93
	64QAM	Low	3 590.00	8.94
		Middle	3 625.00	8.77
		High	3 660.00	8.95
256QAM	Low	3 590.00	9.04	
	Middle	3 625.00	8.55	
	High	3 660.00	8.77	

## CBRS NR 100 MHz 1 Carrier

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 600.00	8.96
		Middle	3 625.00	8.67
		High	3 650.00	8.96
	16QAM	Low	3 600.00	9.15
		Middle	3 625.00	8.63
		High	3 650.00	9.01
	64QAM	Low	3 600.00	9.17
		Middle	3 625.00	9.08
		High	3 650.00	8.94
	256QAM	Low	3 600.00	9.05
		Middle	3 625.00	8.65
		High	3 650.00	8.71
1	QPSK	Low	3 600.00	8.90
		Middle	3 625.00	8.68
		High	3 650.00	8.82
	16QAM	Low	3 600.00	8.97
		Middle	3 625.00	8.63
		High	3 650.00	8.57
	64QAM	Low	3 600.00	8.72
		Middle	3 625.00	8.83
		High	3 650.00	8.57
	256QAM	Low	3 600.00	9.01
		Middle	3 625.00	8.46
		High	3 650.00	8.62

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 600.00	9.11
		Middle	3 625.00	8.51
		High	3 650.00	8.34
	16QAM	Low	3 600.00	8.68
		Middle	3 625.00	9.20
		High	3 650.00	8.96
	64QAM	Low	3 600.00	9.15
		Middle	3 625.00	8.88
		High	3 650.00	8.80
	256QAM	Low	3 600.00	9.12
		Middle	3 625.00	8.85
		High	3 650.00	8.72
3	QPSK	Low	3 600.00	8.85
		Middle	3 625.00	8.97
		High	3 650.00	8.57
	16QAM	Low	3 600.00	8.87
		Middle	3 625.00	8.59
		High	3 650.00	8.72
	64QAM	Low	3 600.00	8.91
		Middle	3 625.00	8.58
		High	3 650.00	9.27
	256QAM	Low	3 600.00	8.76
		Middle	3 625.00	8.47
		High	3 650.00	8.75

## CBRS LTE 5 MHz 1 Carrier

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 552.50	9.45
		Middle	3 625.00	9.46
		High	3 697.50	9.47
	16QAM	Low	3 552.50	9.82
		Middle	3 625.00	9.87
		High	3 697.50	9.82
	64QAM	Low	3 552.50	9.45
		Middle	3 625.00	9.44
		High	3 697.50	9.46
	256QAM	Low	3 552.50	9.42
		Middle	3 625.00	9.42
		High	3 697.50	9.41
1	QPSK	Low	3 552.50	9.47
		Middle	3 625.00	9.47
		High	3 697.50	9.44
	16QAM	Low	3 552.50	9.83
		Middle	3 625.00	9.89
		High	3 697.50	9.87
	64QAM	Low	3 552.50	9.49
		Middle	3 625.00	9.50
		High	3 697.50	9.46
	256QAM	Low	3 552.50	9.43
		Middle	3 625.00	9.44
		High	3 697.50	9.46

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 552.50	9.53
		Middle	3 625.00	9.49
		High	3 697.50	9.51
	16QAM	Low	3 552.50	9.99
		Middle	3 625.00	9.99
		High	3 697.50	9.98
	64QAM	Low	3 552.50	9.52
		Middle	3 625.00	9.50
		High	3 697.50	9.48
256QAM	Low	3 552.50	9.41	
	Middle	3 625.00	9.46	
	High	3 697.50	9.41	
3	QPSK	Low	3 552.50	9.47
		Middle	3 625.00	9.51
		High	3 697.50	9.44
	16QAM	Low	3 552.50	9.97
		Middle	3 625.00	9.95
		High	3 697.50	9.98
	64QAM	Low	3 552.50	9.47
		Middle	3 625.00	9.35
		High	3 697.50	9.57
256QAM	Low	3 552.50	9.44	
	Middle	3 625.00	9.46	
	High	3 697.50	9.41	

## CBRS LTE 10 MHz 1 Carrier

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 555.00	9.53
		Middle	3 625.00	9.56
		High	3 695.00	9.48
	16QAM	Low	3 555.00	9.73
		Middle	3 625.00	9.85
		High	3 695.00	9.73
	64QAM	Low	3 555.00	9.48
		Middle	3 625.00	9.53
		High	3 695.00	9.46
	256QAM	Low	3 555.00	9.49
		Middle	3 625.00	9.54
		High	3 695.00	9.55
1	QPSK	Low	3 555.00	9.55
		Middle	3 625.00	9.52
		High	3 695.00	9.56
	16QAM	Low	3 555.00	9.77
		Middle	3 625.00	9.73
		High	3 695.00	9.70
	64QAM	Low	3 555.00	9.45
		Middle	3 625.00	9.47
		High	3 695.00	9.45
	256QAM	Low	3 555.00	9.57
		Middle	3 625.00	9.52
		High	3 695.00	9.47



Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 555.00	9.59
		Middle	3 625.00	9.53
		High	3 695.00	9.52
	16QAM	Low	3 555.00	9.96
		Middle	3 625.00	10.04
		High	3 695.00	9.96
	64QAM	Low	3 555.00	9.54
		Middle	3 625.00	9.45
		High	3 695.00	9.36
	256QAM	Low	3 555.00	9.53
		Middle	3 625.00	9.54
		High	3 695.00	9.59
3	QPSK	Low	3 555.00	9.51
		Middle	3 625.00	9.51
		High	3 695.00	9.49
	16QAM	Low	3 555.00	9.97
		Middle	3 625.00	9.93
		High	3 695.00	9.93
	64QAM	Low	3 555.00	9.44
		Middle	3 625.00	9.57
		High	3 695.00	9.51
	256QAM	Low	3 555.00	9.54
		Middle	3 625.00	9.58
		High	3 695.00	9.58

## CBRS LTE 15 MHz 1 Carrier

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 557.50	9.55
		Middle	3 625.00	9.52
		High	3 692.50	9.65
	16QAM	Low	3 557.50	9.66
		Middle	3 625.00	9.82
		High	3 692.50	9.79
	64QAM	Low	3 557.50	9.38
		Middle	3 625.00	9.33
		High	3 692.50	9.28
	256QAM	Low	3 557.50	9.34
		Middle	3 625.00	9.55
		High	3 692.50	9.44
1	QPSK	Low	3 557.50	9.44
		Middle	3 625.00	9.61
		High	3 692.50	9.43
	16QAM	Low	3 557.50	9.83
		Middle	3 625.00	9.66
		High	3 692.50	9.92
	64QAM	Low	3 557.50	9.38
		Middle	3 625.00	9.40
		High	3 692.50	9.52
	256QAM	Low	3 557.50	9.53
		Middle	3 625.00	9.45
		High	3 692.50	9.37

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 557.50	9.55
		Middle	3 625.00	9.51
		High	3 692.50	9.63
	16QAM	Low	3 557.50	9.88
		Middle	3 625.00	10.02
		High	3 692.50	9.85
	64QAM	Low	3 557.50	9.47
		Middle	3 625.00	9.41
		High	3 692.50	9.44
256QAM	Low	3 557.50	9.48	
	Middle	3 625.00	9.42	
	High	3 692.50	9.59	
3	QPSK	Low	3 557.50	9.49
		Middle	3 625.00	9.47
		High	3 692.50	9.51
	16QAM	Low	3 557.50	10.12
		Middle	3 625.00	9.74
		High	3 692.50	9.93
	64QAM	Low	3 557.50	9.41
		Middle	3 625.00	9.41
		High	3 692.50	9.36
256QAM	Low	3 557.50	9.52	
	Middle	3 625.00	9.37	
	High	3 692.50	9.45	

## CBRS LTE 20 MHz 1 Carrier

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 560.00	9.29
		Middle	3 625.00	9.32
		High	3 690.00	9.49
	16QAM	Low	3 560.00	9.82
		Middle	3 625.00	9.76
		High	3 690.00	9.80
	64QAM	Low	3 560.00	9.39
		Middle	3 625.00	9.34
		High	3 690.00	9.45
	256QAM	Low	3 560.00	9.58
		Middle	3 625.00	9.58
		High	3 690.00	9.59
1	QPSK	Low	3 560.00	9.42
		Middle	3 625.00	9.29
		High	3 690.00	9.48
	16QAM	Low	3 560.00	9.80
		Middle	3 625.00	9.77
		High	3 690.00	9.76
	64QAM	Low	3 560.00	9.49
		Middle	3 625.00	9.45
		High	3 690.00	9.46
	256QAM	Low	3 560.00	9.55
		Middle	3 625.00	9.59
		High	3 690.00	9.54

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 560.00	9.37
		Middle	3 625.00	9.47
		High	3 690.00	9.38
	16QAM	Low	3 560.00	9.84
		Middle	3 625.00	10.00
		High	3 690.00	9.93
	64QAM	Low	3 560.00	9.34
		Middle	3 625.00	9.36
		High	3 690.00	9.46
256QAM	Low	3 560.00	9.58	
	Middle	3 625.00	9.55	
	High	3 690.00	9.62	
3	QPSK	Low	3 560.00	9.47
		Middle	3 625.00	9.38
		High	3 690.00	9.39
	16QAM	Low	3 560.00	9.88
		Middle	3 625.00	9.93
		High	3 690.00	9.97
	64QAM	Low	3 560.00	9.47
		Middle	3 625.00	9.53
		High	3 690.00	9.53
256QAM	Low	3 560.00	9.60	
	Middle	3 625.00	9.64	
	High	3 690.00	9.46	

## Tabular Data of RF Contiguous PAPR

## CBRS NR(60 MHz 1C + 30 MHz 1C)[2C]

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 595.00	9.19
		Middle	3 625.00	9.21
		High	3 655.00	8.66
	16QAM	Low	3 595.00	9.37
		Middle	3 625.00	9.29
		High	3 655.00	9.59
	64QAM	Low	3 595.00	9.18
		Middle	3 625.00	9.23
		High	3 655.00	9.51
	256QAM	Low	3 595.00	9.17
		Middle	3 625.00	9.35
		High	3 655.00	9.00
1	QPSK	Low	3 595.00	8.94
		Middle	3 625.00	9.14
		High	3 655.00	9.22
	16QAM	Low	3 595.00	9.28
		Middle	3 625.00	9.39
		High	3 655.00	9.36
	64QAM	Low	3 595.00	9.36
		Middle	3 625.00	9.47
		High	3 655.00	9.14
	256QAM	Low	3 595.00	9.27
		Middle	3 625.00	9.39
		High	3 655.00	9.54

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 595.00	9.25
		Middle	3 625.00	9.39
		High	3 655.00	8.85
	16QAM	Low	3 595.00	9.11
		Middle	3 625.00	9.12
		High	3 655.00	8.99
	64QAM	Low	3 595.00	9.18
		Middle	3 625.00	9.30
		High	3 655.00	9.18
	256QAM	Low	3 595.00	9.00
		Middle	3 625.00	9.27
		High	3 655.00	9.49
3	QPSK	Low	3 595.00	9.13
		Middle	3 625.00	9.04
		High	3 655.00	9.69
	16QAM	Low	3 595.00	9.37
		Middle	3 625.00	9.21
		High	3 655.00	9.03
	64QAM	Low	3 595.00	9.59
		Middle	3 625.00	9.38
		High	3 655.00	9.00
	256QAM	Low	3 595.00	9.57
		Middle	3 625.00	9.05
		High	3 655.00	9.35

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 565.00	9.55
		Middle	3 625.00	9.57
		High	3 685.00	9.56
	16QAM	Low	3 565.00	9.99
		Middle	3 625.00	9.69
		High	3 685.00	9.86
	64QAM	Low	3 565.00	9.32
		Middle	3 625.00	9.56
		High	3 685.00	9.44
	256QAM	Low	3 565.00	9.49
		Middle	3 625.00	9.54
		High	3 685.00	9.40
1	QPSK	Low	3 565.00	9.52
		Middle	3 625.00	9.41
		High	3 685.00	9.49
	16QAM	Low	3 565.00	9.82
		Middle	3 625.00	9.93
		High	3 685.00	9.72
	64QAM	Low	3 565.00	9.36
		Middle	3 625.00	9.50
		High	3 685.00	9.36
	256QAM	Low	3 565.00	9.41
		Middle	3 625.00	9.49
		High	3 685.00	9.59



Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 565.00	9.57
		Middle	3 625.00	9.42
		High	3 685.00	9.48
	16QAM	Low	3 565.00	9.67
		Middle	3 625.00	10.00
		High	3 685.00	10.04
	64QAM	Low	3 565.00	9.40
		Middle	3 625.00	9.43
		High	3 685.00	9.39
256QAM	Low	3 565.00	9.56	
	Middle	3 625.00	9.41	
	High	3 685.00	9.32	
3	QPSK	Low	3 565.00	9.47
		Middle	3 625.00	9.60
		High	3 685.00	9.43
	16QAM	Low	3 565.00	9.70
		Middle	3 625.00	9.65
		High	3 685.00	9.88
	64QAM	Low	3 565.00	9.39
		Middle	3 625.00	9.48
		High	3 685.00	9.45
256QAM	Low	3 565.00	9.42	
	Middle	3 625.00	9.35	
	High	3 685.00	9.46	

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 557.50	9.55
		Middle	3 625.00	9.22
		High	3 692.50	9.37
	16QAM	Low	3 557.50	9.51
		Middle	3 625.00	9.44
		High	3 692.50	9.71
	64QAM	Low	3 557.50	9.58
		Middle	3 625.00	9.49
		High	3 692.50	9.57
	256QAM	Low	3 557.50	9.38
		Middle	3 625.00	9.36
		High	3 692.50	9.48
1	QPSK	Low	3 557.50	9.46
		Middle	3 625.00	9.52
		High	3 692.50	9.40
	16QAM	Low	3 557.50	9.53
		Middle	3 625.00	9.63
		High	3 692.50	9.54
	64QAM	Low	3 557.50	9.63
		Middle	3 625.00	9.43
		High	3 692.50	9.45
	256QAM	Low	3 557.50	9.46
		Middle	3 625.00	9.50
		High	3 692.50	9.51

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 557.50	9.65
		Middle	3 625.00	9.48
		High	3 692.50	9.54
	16QAM	Low	3 557.50	9.50
		Middle	3 625.00	9.53
		High	3 692.50	9.65
	64QAM	Low	3 557.50	9.69
		Middle	3 625.00	9.46
		High	3 692.50	9.47
256QAM	Low	3 557.50	9.41	
	Middle	3 625.00	9.50	
	High	3 692.50	9.46	
3	QPSK	Low	3 557.50	9.55
		Middle	3 625.00	9.50
		High	3 692.50	9.35
	16QAM	Low	3 557.50	9.43
		Middle	3 625.00	9.45
		High	3 692.50	9.46
	64QAM	Low	3 557.50	9.57
		Middle	3 625.00	9.45
		High	3 692.50	9.58
256QAM	Low	3 557.50	9.25	
	Middle	3 625.00	9.39	
	High	3 692.50	9.51	

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 575.00	9.49
		Middle	3 625.00	9.52
		High	3 675.00	9.39
	16QAM	Low	3 575.00	9.53
		Middle	3 625.00	9.51
		High	3 675.00	9.15
	64QAM	Low	3 575.00	9.34
		Middle	3 625.00	9.41
		High	3 675.00	9.40
	256QAM	Low	3 575.00	9.35
		Middle	3 625.00	9.50
		High	3 675.00	9.55
1	QPSK	Low	3 575.00	9.83
		Middle	3 625.00	9.48
		High	3 675.00	9.37
	16QAM	Low	3 575.00	9.28
		Middle	3 625.00	9.42
		High	3 675.00	9.37
	64QAM	Low	3 575.00	9.39
		Middle	3 625.00	9.42
		High	3 675.00	9.50
	256QAM	Low	3 575.00	9.26
		Middle	3 625.00	9.53
		High	3 675.00	9.35

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 575.00	9.55
		Middle	3 625.00	9.43
		High	3 675.00	9.49
	16QAM	Low	3 575.00	9.48
		Middle	3 625.00	9.47
		High	3 675.00	9.48
	64QAM	Low	3 575.00	9.55
		Middle	3 625.00	9.40
		High	3 675.00	9.42
	256QAM	Low	3 575.00	9.40
		Middle	3 625.00	9.38
		High	3 675.00	9.37
3	QPSK	Low	3 575.00	9.53
		Middle	3 625.00	9.56
		High	3 675.00	9.43
	16QAM	Low	3 575.00	9.43
		Middle	3 625.00	9.46
		High	3 675.00	9.48
	64QAM	Low	3 575.00	9.52
		Middle	3 625.00	9.50
		High	3 675.00	9.36
	256QAM	Low	3 575.00	9.16
		Middle	3 625.00	9.62
		High	3 675.00	9.27

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 585.00	9.29
		Middle	3 625.00	9.73
		High	3 665.00	9.26
	16QAM	Low	3 585.00	9.44
		Middle	3 625.00	9.69
		High	3 665.00	9.47
	64QAM	Low	3 585.00	9.41
		Middle	3 625.00	9.47
		High	3 665.00	9.33
	256QAM	Low	3 585.00	9.43
		Middle	3 625.00	9.69
		High	3 665.00	9.40
1	QPSK	Low	3 585.00	9.49
		Middle	3 625.00	9.30
		High	3 665.00	9.54
	16QAM	Low	3 585.00	9.73
		Middle	3 625.00	9.72
		High	3 665.00	9.37
	64QAM	Low	3 585.00	9.59
		Middle	3 625.00	9.54
		High	3 665.00	9.45
	256QAM	Low	3 585.00	9.61
		Middle	3 625.00	9.52
		High	3 665.00	9.61

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 585.00	9.40
		Middle	3 625.00	9.37
		High	3 665.00	9.55
	16QAM	Low	3 585.00	9.50
		Middle	3 625.00	9.29
		High	3 665.00	9.42
	64QAM	Low	3 585.00	9.31
		Middle	3 625.00	9.51
		High	3 665.00	9.59
	256QAM	Low	3 585.00	9.37
		Middle	3 625.00	9.50
		High	3 665.00	9.45
3	QPSK	Low	3 585.00	9.42
		Middle	3 625.00	9.21
		High	3 665.00	9.61
	16QAM	Low	3 585.00	9.45
		Middle	3 625.00	9.31
		High	3 665.00	9.49
	64QAM	Low	3 585.00	8.79
		Middle	3 625.00	9.41
		High	3 665.00	9.46
	256QAM	Low	3 585.00	9.34
		Middle	3 625.00	9.40
		High	3 665.00	9.60

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 570.00	9.47
		Middle	3 625.00	9.36
		High	3 680.00	9.27
	16QAM	Low	3 570.00	9.92
		Middle	3 625.00	9.75
		High	3 680.00	10.02
	64QAM	Low	3 570.00	9.30
		Middle	3 625.00	9.55
		High	3 680.00	9.84
	256QAM	Low	3 570.00	9.31
		Middle	3 625.00	9.31
		High	3 680.00	9.34
1	QPSK	Low	3 570.00	9.39
		Middle	3 625.00	9.37
		High	3 680.00	9.56
	16QAM	Low	3 570.00	9.88
		Middle	3 625.00	9.67
		High	3 680.00	9.68
	64QAM	Low	3 570.00	9.41
		Middle	3 625.00	9.30
		High	3 680.00	9.47
	256QAM	Low	3 570.00	9.47
		Middle	3 625.00	9.58
		High	3 680.00	9.46



Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 570.00	9.45
		Middle	3 625.00	9.85
		High	3 680.00	9.51
	16QAM	Low	3 570.00	9.94
		Middle	3 625.00	9.73
		High	3 680.00	9.68
	64QAM	Low	3 570.00	9.44
		Middle	3 625.00	9.38
		High	3 680.00	9.46
	256QAM	Low	3 570.00	9.40
		Middle	3 625.00	9.30
		High	3 680.00	9.34
3	QPSK	Low	3 570.00	9.36
		Middle	3 625.00	9.43
		High	3 680.00	9.40
	16QAM	Low	3 570.00	9.80
		Middle	3 625.00	10.06
		High	3 680.00	9.88
	64QAM	Low	3 570.00	9.46
		Middle	3 625.00	9.38
		High	3 680.00	9.63
	256QAM	Low	3 570.00	9.40
		Middle	3 625.00	9.29
		High	3 680.00	9.47

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 575.00	9.32
		Middle	3 625.00	9.41
		High	3 675.00	9.37
	16QAM	Low	3 575.00	9.71
		Middle	3 625.00	9.72
		High	3 675.00	9.85
	64QAM	Low	3 575.00	9.43
		Middle	3 625.00	9.46
		High	3 675.00	9.66
	256QAM	Low	3 575.00	9.59
		Middle	3 625.00	9.33
		High	3 675.00	9.71
1	QPSK	Low	3 575.00	9.68
		Middle	3 625.00	9.40
		High	3 675.00	9.38
	16QAM	Low	3 575.00	9.64
		Middle	3 625.00	9.72
		High	3 675.00	9.83
	64QAM	Low	3 575.00	9.36
		Middle	3 625.00	9.23
		High	3 675.00	9.60
	256QAM	Low	3 575.00	9.50
		Middle	3 625.00	9.64
		High	3 675.00	9.76

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 575.00	9.36
		Middle	3 625.00	9.40
		High	3 675.00	9.42
	16QAM	Low	3 575.00	9.86
		Middle	3 625.00	9.71
		High	3 675.00	9.69
	64QAM	Low	3 575.00	9.46
		Middle	3 625.00	9.16
		High	3 675.00	9.42
	256QAM	Low	3 575.00	9.42
		Middle	3 625.00	9.64
		High	3 675.00	9.37
3	QPSK	Low	3 575.00	9.28
		Middle	3 625.00	9.38
		High	3 675.00	9.44
	16QAM	Low	3 575.00	9.94
		Middle	3 625.00	9.78
		High	3 675.00	9.76
	64QAM	Low	3 575.00	9.58
		Middle	3 625.00	9.38
		High	3 675.00	9.36
	256QAM	Low	3 575.00	9.39
		Middle	3 625.00	9.68
		High	3 675.00	9.31

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 580.00	9.63
		Middle	3 625.00	9.39
		High	3 670.00	9.31
	16QAM	Low	3 580.00	9.93
		Middle	3 625.00	9.67
		High	3 670.00	9.72
	64QAM	Low	3 580.00	9.03
		Middle	3 625.00	9.13
		High	3 670.00	9.38
	256QAM	Low	3 580.00	9.47
		Middle	3 625.00	9.27
		High	3 670.00	9.47
1	QPSK	Low	3 580.00	9.39
		Middle	3 625.00	9.24
		High	3 670.00	9.46
	16QAM	Low	3 580.00	9.86
		Middle	3 625.00	9.47
		High	3 670.00	9.52
	64QAM	Low	3 580.00	9.24
		Middle	3 625.00	9.29
		High	3 670.00	9.54
	256QAM	Low	3 580.00	9.44
		Middle	3 625.00	9.54
		High	3 670.00	9.57

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 580.00	9.02
		Middle	3 625.00	9.40
		High	3 670.00	9.59
	16QAM	Low	3 580.00	9.58
		Middle	3 625.00	9.71
		High	3 670.00	9.85
	64QAM	Low	3 580.00	9.43
		Middle	3 625.00	9.87
		High	3 670.00	9.09
256QAM	Low	3 580.00	9.45	
	Middle	3 625.00	9.42	
	High	3 670.00	9.16	
3	QPSK	Low	3 580.00	9.16
		Middle	3 625.00	9.32
		High	3 670.00	9.19
	16QAM	Low	3 580.00	9.85
		Middle	3 625.00	9.54
		High	3 670.00	9.93
	64QAM	Low	3 580.00	9.23
		Middle	3 625.00	9.52
		High	3 670.00	9.27
256QAM	Low	3 580.00	9.24	
	Middle	3 625.00	9.47	
	High	3 670.00	9.24	

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 590.00	9.18
		Middle	3 625.00	9.04
		High	3 660.00	9.32
	16QAM	Low	3 590.00	9.58
		Middle	3 625.00	9.64
		High	3 660.00	9.69
	64QAM	Low	3 590.00	9.29
		Middle	3 625.00	8.89
		High	3 660.00	9.22
	256QAM	Low	3 590.00	9.25
		Middle	3 625.00	9.31
		High	3 660.00	9.36
1	QPSK	Low	3 590.00	9.24
		Middle	3 625.00	9.44
		High	3 660.00	9.34
	16QAM	Low	3 590.00	9.37
		Middle	3 625.00	9.60
		High	3 660.00	9.40
	64QAM	Low	3 590.00	9.30
		Middle	3 625.00	9.29
		High	3 660.00	9.14
	256QAM	Low	3 590.00	9.35
		Middle	3 625.00	8.93
		High	3 660.00	9.21

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 590.00	9.25
		Middle	3 625.00	9.39
		High	3 660.00	9.20
	16QAM	Low	3 590.00	9.96
		Middle	3 625.00	9.97
		High	3 660.00	10.07
	64QAM	Low	3 590.00	9.19
		Middle	3 625.00	9.42
		High	3 660.00	9.36
	256QAM	Low	3 590.00	9.34
		Middle	3 625.00	9.18
		High	3 660.00	9.26
3	QPSK	Low	3 590.00	9.35
		Middle	3 625.00	9.40
		High	3 660.00	9.53
	16QAM	Low	3 590.00	9.77
		Middle	3 625.00	9.69
		High	3 660.00	9.93
	64QAM	Low	3 590.00	13.97
		Middle	3 625.00	9.25
		High	3 660.00	9.19
	256QAM	Low	3 590.00	8.70
		Middle	3 625.00	9.35
		High	3 660.00	9.22

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 585.00	9.44
		Middle	3 625.00	9.73
		High	3 665.00	9.43
	16QAM	Low	3 585.00	9.50
		Middle	3 625.00	9.54
		High	3 665.00	9.95
	64QAM	Low	3 585.00	9.67
		Middle	3 625.00	9.51
		High	3 665.00	9.45
	256QAM	Low	3 585.00	9.62
		Middle	3 625.00	9.50
		High	3 665.00	9.45
1	QPSK	Low	3 585.00	9.23
		Middle	3 625.00	9.72
		High	3 665.00	9.55
	16QAM	Low	3 585.00	9.93
		Middle	3 625.00	9.82
		High	3 665.00	9.53
	64QAM	Low	3 585.00	9.47
		Middle	3 625.00	9.57
		High	3 665.00	9.54
	256QAM	Low	3 585.00	9.41
		Middle	3 625.00	9.33
		High	3 665.00	9.60



Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 585.00	9.38
		Middle	3 625.00	9.66
		High	3 665.00	9.46
	16QAM	Low	3 585.00	9.85
		Middle	3 625.00	9.85
		High	3 665.00	9.93
	64QAM	Low	3 585.00	9.52
		Middle	3 625.00	9.39
		High	3 665.00	9.58
	256QAM	Low	3 585.00	9.33
		Middle	3 625.00	9.34
		High	3 665.00	9.47
3	QPSK	Low	3 585.00	9.47
		Middle	3 625.00	9.35
		High	3 665.00	9.55
	16QAM	Low	3 585.00	9.75
		Middle	3 625.00	9.59
		High	3 665.00	9.54
	64QAM	Low	3 585.00	9.41
		Middle	3 625.00	9.77
		High	3 665.00	9.42
	256QAM	Low	3 585.00	9.48
		Middle	3 625.00	9.25
		High	3 665.00	9.24

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 595.00	9.27
		Middle	3 625.00	8.99
		High	3 655.00	9.08
	16QAM	Low	3 595.00	9.13
		Middle	3 625.00	9.59
		High	3 655.00	9.44
	64QAM	Low	3 595.00	9.09
		Middle	3 625.00	9.59
		High	3 655.00	9.16
	256QAM	Low	3 595.00	9.08
		Middle	3 625.00	9.29
		High	3 655.00	9.06
1	QPSK	Low	3 595.00	9.52
		Middle	3 625.00	9.61
		High	3 655.00	9.13
	16QAM	Low	3 595.00	9.91
		Middle	3 625.00	9.38
		High	3 655.00	9.43
	64QAM	Low	3 595.00	9.44
		Middle	3 625.00	9.16
		High	3 655.00	9.60
	256QAM	Low	3 595.00	9.01
		Middle	3 625.00	9.35
		High	3 655.00	9.14

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 595.00	9.64
		Middle	3 625.00	9.42
		High	3 655.00	9.15
	16QAM	Low	3 595.00	9.91
		Middle	3 625.00	9.81
		High	3 655.00	9.61
	64QAM	Low	3 595.00	9.67
		Middle	3 625.00	9.53
		High	3 655.00	9.50
	256QAM	Low	3 595.00	9.60
		Middle	3 625.00	9.08
		High	3 655.00	9.73
3	QPSK	Low	3 595.00	9.55
		Middle	3 625.00	9.60
		High	3 655.00	9.30
	16QAM	Low	3 595.00	10.04
		Middle	3 625.00	10.08
		High	3 655.00	9.85
	64QAM	Low	3 595.00	9.13
		Middle	3 625.00	9.23
		High	3 655.00	9.18
	256QAM	Low	3 595.00	9.31
		Middle	3 625.00	9.37
		High	3 655.00	9.27

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 600.00	9.59
		Middle	3 625.00	9.82
		High	3 650.00	9.25
	16QAM	Low	3 600.00	9.32
		Middle	3 625.00	9.79
		High	3 650.00	9.52
	64QAM	Low	3 600.00	9.38
		Middle	3 625.00	9.33
		High	3 650.00	9.02
	256QAM	Low	3 600.00	9.19
		Middle	3 625.00	9.39
		High	3 650.00	9.52
1	QPSK	Low	3 600.00	9.36
		Middle	3 625.00	9.16
		High	3 650.00	8.83
	16QAM	Low	3 600.00	9.59
		Middle	3 625.00	9.52
		High	3 650.00	9.42
	64QAM	Low	3 600.00	9.26
		Middle	3 625.00	9.66
		High	3 650.00	9.27
	256QAM	Low	3 600.00	9.73
		Middle	3 625.00	9.31
		High	3 650.00	9.47

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 600.00	9.80
		Middle	3 625.00	9.40
		High	3 650.00	9.39
	16QAM	Low	3 600.00	9.73
		Middle	3 625.00	9.86
		High	3 650.00	9.55
	64QAM	Low	3 600.00	9.46
		Middle	3 625.00	9.31
		High	3 650.00	9.29
256QAM	Low	3 600.00	9.36	
	Middle	3 625.00	9.33	
	High	3 650.00	9.28	
3	QPSK	Low	3 600.00	9.26
		Middle	3 625.00	9.33
		High	3 650.00	9.24
	16QAM	Low	3 600.00	9.84
		Middle	3 625.00	9.90
		High	3 650.00	9.63
	64QAM	Low	3 600.00	9.43
		Middle	3 625.00	9.39
		High	3 650.00	9.14
256QAM	Low	3 600.00	9.33	
	Middle	3 625.00	8.86	
	High	3 650.00	9.13	

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 600.00	9.67
		Middle	3 625.00	9.38
		High	3 650.00	9.65
	16QAM	Low	3 600.00	9.78
		Middle	3 625.00	9.26
		High	3 650.00	9.83
	64QAM	Low	3 600.00	9.30
		Middle	3 625.00	9.40
		High	3 650.00	9.50
	256QAM	Low	3 600.00	9.18
		Middle	3 625.00	9.37
		High	3 650.00	9.45
1	QPSK	Low	3 600.00	9.68
		Middle	3 625.00	9.49
		High	3 650.00	9.35
	16QAM	Low	3 600.00	9.08
		Middle	3 625.00	9.28
		High	3 650.00	8.92
	64QAM	Low	3 600.00	9.87
		Middle	3 625.00	9.65
		High	3 650.00	9.25
	256QAM	Low	3 600.00	9.71
		Middle	3 625.00	9.45
		High	3 650.00	9.44

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 600.00	9.78
		Middle	3 625.00	9.30
		High	3 650.00	9.81
	16QAM	Low	3 600.00	9.22
		Middle	3 625.00	9.26
		High	3 650.00	9.38
	64QAM	Low	3 600.00	9.66
		Middle	3 625.00	9.29
		High	3 650.00	9.55
	256QAM	Low	3 600.00	9.32
		Middle	3 625.00	9.53
		High	3 650.00	9.22
3	QPSK	Low	3 600.00	9.42
		Middle	3 625.00	9.39
		High	3 650.00	9.31
	16QAM	Low	3 600.00	9.30
		Middle	3 625.00	9.65
		High	3 650.00	9.44
	64QAM	Low	3 600.00	9.54
		Middle	3 625.00	9.21
		High	3 650.00	9.71
	256QAM	Low	3 600.00	9.17
		Middle	3 625.00	9.37
		High	3 650.00	9.55

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

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

Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
0	QPSK	Low	3 590.00	9.45
		Middle	3 625.00	9.36
		High	3 660.00	9.64
	16QAM	Low	3 590.00	9.14
		Middle	3 625.00	9.43
		High	3 660.00	9.38
	64QAM	Low	3 590.00	9.74
		Middle	3 625.00	9.44
		High	3 660.00	9.60
	256QAM	Low	3 590.00	9.19
		Middle	3 625.00	9.63
		High	3 660.00	9.65
1	QPSK	Low	3 590.00	9.75
		Middle	3 625.00	9.47
		High	3 660.00	9.44
	16QAM	Low	3 590.00	9.31
		Middle	3 625.00	9.46
		High	3 660.00	9.24
	64QAM	Low	3 590.00	9.41
		Middle	3 625.00	9.46
		High	3 660.00	9.61
	256QAM	Low	3 590.00	9.78
		Middle	3 625.00	9.50
		High	3 660.00	9.76



Ant.	Modulation	Channel	Frequency (MHz)	0.1 % PAPR (dB)
2	QPSK	Low	3 590.00	9.45
		Middle	3 625.00	9.44
		High	3 660.00	9.60
	16QAM	Low	3 590.00	9.67
		Middle	3 625.00	9.74
		High	3 660.00	9.69
	64QAM	Low	3 590.00	9.50
		Middle	3 625.00	9.29
		High	3 660.00	9.57
	256QAM	Low	3 590.00	9.65
		Middle	3 625.00	9.48
		High	3 660.00	9.61
3	QPSK	Low	3 590.00	9.84
		Middle	3 625.00	9.30
		High	3 660.00	9.72
	16QAM	Low	3 590.00	9.17
		Middle	3 625.00	9.54
		High	3 660.00	9.36
	64QAM	Low	3 590.00	9.51
		Middle	3 625.00	9.48
		High	3 660.00	9.64
	256QAM	Low	3 590.00	9.54
		Middle	3 625.00	9.37
		High	3 660.00	9.44

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

Tabular data of Non-Contiguous PAPR

CBRS NR(60 MHz 1C + 30 MHz 1C)[2C]

Ant.	Modulation	NR 60 MHz		NR 30 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 580.00	8.99	3 685.00	9.44
	16QAM	3 580.00	9.17	3 685.00	9.31
	64QAM	3 580.00	9.23	3 685.00	9.41
	256QAM	3 580.00	9.46	3 685.00	9.22
1	QPSK	3 580.00	9.39	3 685.00	9.69
	16QAM	3 580.00	9.29	3 685.00	9.38
	64QAM	3 580.00	9.49	3 685.00	9.51
	256QAM	3 580.00	9.36	3 685.00	9.39
2	QPSK	3 580.00	9.18	3 685.00	9.39
	16QAM	3 580.00	9.53	3 685.00	9.36
	64QAM	3 580.00	9.13	3 685.00	9.34
	256QAM	3 580.00	9.36	3 685.00	9.34
3	QPSK	3 580.00	9.24	3 685.00	9.47
	16QAM	3 580.00	9.12	3 685.00	9.41
	64QAM	3 580.00	9.27	3 685.00	9.28
	256QAM	3 580.00	9.23	3 685.00	9.31

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

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

Ant.	Modulation	LTE 15 MHz		LTE 15 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 557.50	9.69	3 692.50	9.58
	16QAM	3 557.50	9.68	3 692.50	9.84
	64QAM	3 557.50	9.41	3 692.50	9.48
	256QAM	3 557.50	9.56	3 692.50	9.55
1	QPSK	3 557.50	9.48	3 692.50	9.57
	16QAM	3 557.50	9.77	3 692.50	9.87
	64QAM	3 557.50	9.38	3 692.50	9.53
	256QAM	3 557.50	9.53	3 692.50	9.60
2	QPSK	3 557.50	9.44	3 692.50	9.55
	16QAM	3 557.50	9.85	3 692.50	9.73
	64QAM	3 557.50	9.44	3 692.50	9.48
	256QAM	3 557.50	9.55	3 692.50	9.50
3	QPSK	3 557.50	9.56	3 692.50	9.50
	16QAM	3 557.50	10.04	3 692.50	10.00
	64QAM	3 557.50	9.44	3 692.50	9.53
	256QAM	3 557.50	9.56	3 692.50	9.55

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

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

Ant.	Modulation	LTE 5 MHz		NR 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 552.50	9.48	3 695.00	9.57
	16QAM	3 552.50	9.83	3 695.00	9.40
	64QAM	3 552.50	9.47	3 695.00	9.46
	256QAM	3 552.50	9.42	3 695.00	9.28
1	QPSK	3 552.50	9.49	3 695.00	9.49
	16QAM	3 552.50	9.86	3 695.00	9.43
	64QAM	3 552.50	9.57	3 695.00	9.55
	256QAM	3 552.50	9.48	3 695.00	9.58
2	QPSK	3 552.50	9.49	3 695.00	9.47
	16QAM	3 552.50	9.98	3 695.00	9.48
	64QAM	3 552.50	9.47	3 695.00	9.59
	256QAM	3 552.50	9.45	3 695.00	9.33
3	QPSK	3 552.50	9.48	3 695.00	9.50
	16QAM	3 552.50	9.91	3 695.00	9.41
	64QAM	3 552.50	9.52	3 695.00	9.45
	256QAM	3 552.50	9.53	3 695.00	9.40

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

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

Ant.	Modulation	NR 20 MHz		NR 20 MHz + NR 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 560.00	9.34	3 685.00	9.41
	16QAM	3 560.00	9.45	3 685.00	9.55
	64QAM	3 560.00	9.49	3 685.00	9.53
	256QAM	3 560.00	9.50	3 685.00	9.42
1	QPSK	3 560.00	9.49	3 685.00	9.07
	16QAM	3 560.00	9.48	3 685.00	9.44
	64QAM	3 560.00	9.57	3 685.00	9.51
	256QAM	3 560.00	9.55	3 685.00	9.49
2	QPSK	3 560.00	9.40	3 685.00	9.26
	16QAM	3 560.00	9.46	3 685.00	9.45
	64QAM	3 560.00	9.54	3 685.00	9.44
	256QAM	3 560.00	9.50	3 685.00	9.48
3	QPSK	3 560.00	9.57	3 685.00	9.43
	16QAM	3 560.00	9.42	3 685.00	9.42
	64QAM	3 560.00	9.48	3 685.00	9.42
	256QAM	3 560.00	9.53	3 685.00	9.46

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

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

Ant.	Modulation	NR 20 MHz + NR 20 MHz		NR 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 570.00	9.30	3 695.00	9.51
	16QAM	3 570.00	9.37	3 695.00	9.44
	64QAM	3 570.00	9.51	3 695.00	9.40
	256QAM	3 570.00	9.44	3 695.00	9.45
1	QPSK	3 570.00	9.77	3 695.00	9.47
	16QAM	3 570.00	9.46	3 695.00	9.40
	64QAM	3 570.00	9.25	3 695.00	9.45
	256QAM	3 570.00	9.38	3 695.00	9.45
2	QPSK	3 570.00	9.26	3 695.00	9.42
	16QAM	3 570.00	9.34	3 695.00	9.43
	64QAM	3 570.00	9.35	3 695.00	9.36
	256QAM	3 570.00	9.44	3 695.00	9.45
3	QPSK	3 570.00	9.36	3 695.00	9.51
	16QAM	3 570.00	9.57	3 695.00	9.38
	64QAM	3 570.00	9.55	3 695.00	9.56
	256QAM	3 570.00	9.38	3 695.00	9.45

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

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

Ant.	Modulation	NR 30 MHz		NR 30 MHz + NR 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 565.00	9.36	3 680.00	9.37
	16QAM	3 565.00	9.40	3 680.00	9.35
	64QAM	3 565.00	9.42	3 680.00	9.20
	256QAM	3 565.00	9.48	3 680.00	9.43
1	QPSK	3 565.00	9.37	3 680.00	9.25
	16QAM	3 565.00	9.43	3 680.00	9.46
	64QAM	3 565.00	9.46	3 680.00	9.28
	256QAM	3 565.00	9.36	3 680.00	9.24
2	QPSK	3 565.00	9.50	3 680.00	9.48
	16QAM	3 565.00	9.58	3 680.00	9.73
	64QAM	3 565.00	9.50	3 680.00	9.32
	256QAM	3 565.00	9.37	3 680.00	9.43
3	QPSK	3 565.00	9.26	3 680.00	9.56
	16QAM	3 565.00	9.49	3 680.00	9.22
	64QAM	3 565.00	9.45	3 680.00	9.35
	256QAM	3 565.00	9.50	3 680.00	9.31

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

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

Ant.	Modulation	NR 30 MHz + NR 30 MHz		NR 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 580.00	9.04	3 695.00	9.54
	16QAM	3 580.00	9.40	3 695.00	9.54
	64QAM	3 580.00	9.54	3 695.00	9.48
	256QAM	3 580.00	9.42	3 695.00	9.42
1	QPSK	3 580.00	9.25	3 695.00	9.63
	16QAM	3 580.00	9.20	3 695.00	9.53
	64QAM	3 580.00	9.01	3 695.00	9.49
	256QAM	3 580.00	9.40	3 695.00	9.37
2	QPSK	3 580.00	9.09	3 695.00	9.56
	16QAM	3 580.00	9.49	3 695.00	9.60
	64QAM	3 580.00	9.16	3 695.00	9.44
	256QAM	3 580.00	9.40	3 695.00	9.43
3	QPSK	3 580.00	9.26	3 695.00	9.49
	16QAM	3 580.00	9.15	3 695.00	9.44
	64QAM	3 580.00	9.48	3 695.00	9.52
	256QAM	3 580.00	9.40	3 695.00	9.47

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



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

Ant.	Modulation	LTE 15 MHz		LTE 15 MHz + LTE 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 557.50	9.41	3 687.50	9.63
	16QAM	3 557.50	9.79	3 687.50	9.89
	64QAM	3 557.50	9.45	3 687.50	9.46
	256QAM	3 557.50	9.41	3 687.50	9.62
1	QPSK	3 557.50	9.45	3 687.50	9.58
	16QAM	3 557.50	9.83	3 687.50	9.81
	64QAM	3 557.50	9.43	3 687.50	9.54
	256QAM	3 557.50	9.43	3 687.50	9.60
2	QPSK	3 557.50	9.49	3 687.50	9.53
	16QAM	3 557.50	9.97	3 687.50	9.87
	64QAM	3 557.50	9.40	3 687.50	9.63
	256QAM	3 557.50	9.56	3 687.50	9.67
3	QPSK	3 557.50	9.44	3 687.50	9.63
	16QAM	3 557.50	9.91	3 687.50	9.84
	64QAM	3 557.50	9.29	3 687.50	9.42
	256QAM	3 557.50	9.50	3 687.50	9.71

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

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

Ant.	Modulation	LTE 15 MHz + LTE 15 MHz		LTE 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 565.00	9.44	3 695.00	9.50
	16QAM	3 565.00	9.72	3 695.00	9.80
	64QAM	3 565.00	9.53	3 695.00	9.56
	256QAM	3 565.00	9.42	3 695.00	9.43
1	QPSK	3 565.00	9.44	3 695.00	9.46
	16QAM	3 565.00	9.68	3 695.00	9.80
	64QAM	3 565.00	9.51	3 695.00	9.51
	256QAM	3 565.00	9.44	3 695.00	9.53
2	QPSK	3 565.00	9.40	3 695.00	9.45
	16QAM	3 565.00	9.91	3 695.00	9.93
	64QAM	3 565.00	9.32	3 695.00	9.50
	256QAM	3 565.00	9.47	3 695.00	9.54
3	QPSK	3 565.00	9.53	3 695.00	9.51
	16QAM	3 565.00	9.96	3 695.00	9.85
	64QAM	3 565.00	9.30	3 695.00	9.49
	256QAM	3 565.00	9.53	3 695.00	9.49

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

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

Ant.	Modulation	LTE 20 MHz		LTE 15 MHz + LTE 15 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 560.00	9.44	3 685.00	9.53
	16QAM	3 560.00	9.88	3 685.00	9.85
	64QAM	3 560.00	9.42	3 685.00	9.41
	256QAM	3 560.00	9.50	3 685.00	9.63
1	QPSK	3 560.00	9.33	3 685.00	9.59
	16QAM	3 560.00	9.75	3 685.00	10.03
	64QAM	3 560.00	9.47	3 685.00	9.26
	256QAM	3 560.00	9.42	3 685.00	9.66
2	QPSK	3 560.00	9.40	3 685.00	9.41
	16QAM	3 560.00	9.97	3 685.00	9.80
	64QAM	3 560.00	9.36	3 685.00	9.34
	256QAM	3 560.00	9.49	3 685.00	9.55
3	QPSK	3 560.00	9.53	3 685.00	9.66
	16QAM	3 560.00	9.98	3 685.00	9.83
	64QAM	3 560.00	9.46	3 685.00	9.34
	256QAM	3 560.00	9.52	3 685.00	9.53

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

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

Ant.	Modulation	LTE 20 MHz + LTE 15 MHz		LTE 15 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 567.50	9.38	3 692.50	9.38
	16QAM	3 567.50	9.74	3 692.50	9.69
	64QAM	3 567.50	9.38	3 692.50	9.34
	256QAM	3 567.50	9.62	3 692.50	9.36
1	QPSK	3 567.50	9.54	3 692.50	9.47
	16QAM	3 567.50	9.58	3 692.50	9.84
	64QAM	3 567.50	9.36	3 692.50	9.32
	256QAM	3 567.50	9.39	3 692.50	9.49
2	QPSK	3 567.50	9.43	3 692.50	9.26
	16QAM	3 567.50	10.05	3 692.50	10.00
	64QAM	3 567.50	9.56	3 692.50	9.52
	256QAM	3 567.50	9.38	3 692.50	9.40
3	QPSK	3 567.50	9.32	3 692.50	9.47
	16QAM	3 567.50	9.80	3 692.50	9.89
	64QAM	3 567.50	9.40	3 692.50	9.44
	256QAM	3 567.50	9.44	3 692.50	9.53

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

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

Ant.	Modulation	LTE 20 MHz		LTE 20 MHz + LTE 20 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 560.00	9.41	3 680.00	9.31
	16QAM	3 560.00	9.67	3 680.00	9.53
	64QAM	3 560.00	9.37	3 680.00	9.43
	256QAM	3 560.00	9.43	3 680.00	9.20
1	QPSK	3 560.00	9.30	3 680.00	9.52
	16QAM	3 560.00	9.64	3 680.00	9.74
	64QAM	3 560.00	9.34	3 680.00	9.32
	256QAM	3 560.00	9.56	3 680.00	9.35
2	QPSK	3 560.00	9.43	3 680.00	9.23
	16QAM	3 560.00	9.90	3 680.00	9.94
	64QAM	3 560.00	9.34	3 680.00	9.37
	256QAM	3 560.00	9.31	3 680.00	9.45
3	QPSK	3 560.00	9.59	3 680.00	9.32
	16QAM	3 560.00	9.82	3 680.00	9.65
	64QAM	3 560.00	9.35	3 680.00	9.35
	256QAM	3 560.00	9.47	3 680.00	9.44

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

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

Ant.	Modulation	LTE 20 MHz + LTE 20 MHz		LTE 20 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 570.00	9.39	3 690.00	9.53
	16QAM	3 570.00	9.71	3 690.00	9.70
	64QAM	3 570.00	9.43	3 690.00	9.58
	256QAM	3 570.00	9.31	3 690.00	9.56
1	QPSK	3 570.00	9.29	3 690.00	9.61
	16QAM	3 570.00	9.37	3 690.00	9.65
	64QAM	3 570.00	9.38	3 690.00	9.31
	256QAM	3 570.00	9.39	3 690.00	9.41
2	QPSK	3 570.00	9.23	3 690.00	9.40
	16QAM	3 570.00	9.53	3 690.00	10.07
	64QAM	3 570.00	9.35	3 690.00	9.08
	256QAM	3 570.00	9.34	3 690.00	9.47
3	QPSK	3 570.00	9.40	3 690.00	9.50
	16QAM	3 570.00	9.82	3 690.00	9.84
	64QAM	3 570.00	9.22	3 690.00	9.51
	256QAM	3 570.00	9.38	3 690.00	9.34

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

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

Ant.	Modulation	LTE 20 MHz		LTE 20 MHz + LTE 20 MHz + LTE 20 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 560.00	9.20	3 670.00	9.41
	16QAM	3 560.00	9.67	3 670.00	9.43
	64QAM	3 560.00	9.20	3 670.00	9.40
	256QAM	3 560.00	9.38	3 670.00	9.30
1	QPSK	3 560.00	9.46	3 670.00	9.22
	16QAM	3 560.00	9.75	3 670.00	9.48
	64QAM	3 560.00	9.38	3 670.00	9.11
	256QAM	3 560.00	9.56	3 670.00	9.28
2	QPSK	3 560.00	9.52	3 670.00	9.32
	16QAM	3 560.00	9.84	3 670.00	9.52
	64QAM	3 560.00	9.35	3 670.00	9.39
	256QAM	3 560.00	9.49	3 670.00	8.89
3	QPSK	3 560.00	9.42	3 670.00	9.15
	16QAM	3 560.00	9.88	3 670.00	9.69
	64QAM	3 560.00	9.40	3 670.00	9.18
	256QAM	3 560.00	9.43	3 670.00	9.15

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

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

Ant.	Modulation	LTE 20 MHz + LTE 20 MHz + LTE 20 MHz		LTE 20 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 580.00	9.27	3 690.00	9.56
	16QAM	3 580.00	9.65	3 690.00	9.70
	64QAM	3 580.00	9.31	3 690.00	9.65
	256QAM	3 580.00	9.29	3 690.00	9.48
1	QPSK	3 580.00	9.40	3 690.00	9.40
	16QAM	3 580.00	9.63	3 690.00	9.60
	64QAM	3 580.00	9.39	3 690.00	9.47
	256QAM	3 580.00	9.07	3 690.00	9.40
2	QPSK	3 580.00	9.43	3 690.00	9.60
	16QAM	3 580.00	9.77	3 690.00	9.93
	64QAM	3 580.00	9.30	3 690.00	9.38
	256QAM	3 580.00	9.26	3 690.00	9.48
3	QPSK	3 580.00	9.43	3 690.00	9.42
	16QAM	3 580.00	9.61	3 690.00	9.90
	64QAM	3 580.00	9.05	3 690.00	9.51
	256QAM	3 580.00	9.42	3 690.00	9.45

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



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

Ant.	Modulation	LTE 15 MHz		LTE 15 MHz + LTE 15 MHz + LTE 15 MHz + LTE 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 557.50	9.51	3 672.50	9.28
	16QAM	3 557.50	9.67	3 672.50	9.75
	64QAM	3 557.50	9.31	3 672.50	9.38
	256QAM	3 557.50	9.51	3 672.50	9.38
1	QPSK	3 557.50	9.52	3 672.50	9.14
	16QAM	3 557.50	9.76	3 672.50	9.50
	64QAM	3 557.50	9.16	3 672.50	9.42
	256QAM	3 557.50	9.61	3 672.50	9.47
2	QPSK	3 557.50	9.45	3 672.50	9.56
	16QAM	3 557.50	9.82	3 672.50	9.81
	64QAM	3 557.50	9.24	3 672.50	9.52
	256QAM	3 557.50	9.56	3 672.50	9.57
3	QPSK	3 557.50	9.37	3 672.50	9.28
	16QAM	3 557.50	9.97	3 672.50	9.87
	64QAM	3 557.50	9.36	3 672.50	9.49
	256QAM	3 557.50	9.43	3 672.50	9.12

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

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

Ant.	Modulation	LTE 15 MHz + LTE 15 MHz + LTE 15 MHz + LTE 15 MHz		LTE 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 580.00	9.31	3 695.00	9.52
	16QAM	3 580.00	9.63	3 695.00	9.71
	64QAM	3 580.00	9.48	3 695.00	9.56
	256QAM	3 580.00	9.09	3 695.00	9.36
1	QPSK	3 580.00	9.45	3 695.00	9.42
	16QAM	3 580.00	9.59	3 695.00	9.72
	64QAM	3 580.00	9.07	3 695.00	9.50
	256QAM	3 580.00	9.35	3 695.00	9.41
2	QPSK	3 580.00	9.10	3 695.00	9.40
	16QAM	3 580.00	9.84	3 695.00	9.91
	64QAM	3 580.00	9.59	3 695.00	9.51
	256QAM	3 580.00	9.24	3 695.00	9.38
3	QPSK	3 580.00	8.96	3 695.00	9.51
	16QAM	3 580.00	9.71	3 695.00	10.00
	64QAM	3 580.00	9.11	3 695.00	9.56
	256QAM	3 580.00	9.26	3 695.00	9.45

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

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

Ant.	Modulation	LTE 20 MHz		LTE 20 MHz + LTE 20 MHz + LTE 20 MHz + LTE 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 560.00	9.30	3 665.00	9.55
	16QAM	3 560.00	9.58	3 665.00	9.58
	64QAM	3 560.00	9.43	3 665.00	9.15
	256QAM	3 560.00	9.37	3 665.00	9.28
1	QPSK	3 560.00	9.22	3 665.00	9.21
	16QAM	3 560.00	9.71	3 665.00	10.06
	64QAM	3 560.00	9.35	3 665.00	9.40
	256QAM	3 560.00	9.68	3 665.00	9.40
2	QPSK	3 560.00	9.38	3 665.00	9.08
	16QAM	3 560.00	9.80	3 665.00	9.85
	64QAM	3 560.00	9.39	3 665.00	9.22
	256QAM	3 560.00	9.38	3 665.00	9.41
3	QPSK	3 560.00	9.26	3 665.00	9.39
	16QAM	3 560.00	9.87	3 665.00	10.04
	64QAM	3 560.00	9.49	3 665.00	9.23
	256QAM	3 560.00	9.43	3 665.00	9.44

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

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

Ant.	Modulation	LTE 20 MHz + LTE 20 MHz + LTE 20 MHz + LTE 20 MHz		LTE 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 590.00	9.54	3 695.00	9.45
	16QAM	3 590.00	9.88	3 695.00	9.72
	64QAM	3 590.00	9.17	3 695.00	9.52
	256QAM	3 590.00	9.18	3 695.00	9.37
1	QPSK	3 590.00	9.16	3 695.00	9.49
	16QAM	3 590.00	9.37	3 695.00	9.79
	64QAM	3 590.00	9.26	3 695.00	9.49
	256QAM	3 590.00	9.25	3 695.00	9.44
2	QPSK	3 590.00	9.34	3 695.00	9.43
	16QAM	3 590.00	9.73	3 695.00	9.90
	64QAM	3 590.00	9.15	3 695.00	9.51
	256QAM	3 590.00	8.97	3 695.00	9.40
3	QPSK	3 590.00	9.12	3 695.00	9.48
	16QAM	3 590.00	9.83	3 695.00	9.85
	64QAM	3 590.00	9.12	3 695.00	9.54
	256QAM	3 590.00	9.16	3 695.00	9.43

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

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

Ant.	Modulation	LTE 20 MHz		LTE 20 MHz + LTE 20 MHz + LTE 20 MHz + LTE 20 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 560.00	9.45	3 660.00	9.73
	16QAM	3 560.00	9.75	3 660.00	9.68
	64QAM	3 560.00	9.48	3 660.00	9.17
	256QAM	3 560.00	9.55	3 660.00	9.29
1	QPSK	3 560.00	9.32	3 660.00	9.24
	16QAM	3 560.00	9.92	3 660.00	9.36
	64QAM	3 560.00	9.44	3 660.00	9.22
	256QAM	3 560.00	9.26	3 660.00	9.86
2	QPSK	3 560.00	9.36	3 660.00	9.67
	16QAM	3 560.00	9.90	3 660.00	9.85
	64QAM	3 560.00	9.35	3 660.00	9.16
	256QAM	3 560.00	9.45	3 660.00	9.16
3	QPSK	3 560.00	9.33	3 660.00	9.25
	16QAM	3 560.00	9.87	3 660.00	9.55
	64QAM	3 560.00	9.11	3 660.00	9.40
	256QAM	3 560.00	9.40	3 660.00	9.42

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

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

Ant.	Modulation	LTE 20 MHz + LTE 20 MHz + LTE 20 MHz + LTE 20 MHz		LTE 20 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 590.00	9.26	3 690.00	9.37
	16QAM	3 590.00	9.85	3 690.00	9.66
	64QAM	3 590.00	9.22	3 690.00	9.48
	256QAM	3 590.00	9.57	3 690.00	9.65
1	QPSK	3 590.00	9.48	3 690.00	9.36
	16QAM	3 590.00	9.69	3 690.00	9.88
	64QAM	3 590.00	9.49	3 690.00	9.48
	256QAM	3 590.00	9.47	3 690.00	9.55
2	QPSK	3 590.00	9.39	3 690.00	9.49
	16QAM	3 590.00	9.70	3 690.00	9.65
	64QAM	3 590.00	9.22	3 690.00	9.47
	256QAM	3 590.00	9.25	3 690.00	9.52
3	QPSK	3 590.00	9.45	3 690.00	9.43
	16QAM	3 590.00	9.59	3 690.00	9.87
	64QAM	3 590.00	9.21	3 690.00	9.64
	256QAM	3 590.00	9.38	3 690.00	9.60

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

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

Ant.	Modulation	NR 40 MHz		NR 20 MHz + NR 20 MHz + LTE 10 MHz + LTE 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 570.00	9.66	3 670.00	9.31
	16QAM	3 570.00	9.44	3 670.00	9.48
	64QAM	3 570.00	9.52	3 670.00	9.45
	256QAM	3 570.00	9.20	3 670.00	9.49
1	QPSK	3 570.00	9.63	3 670.00	9.71
	16QAM	3 570.00	9.44	3 670.00	9.50
	64QAM	3 570.00	9.44	3 670.00	9.52
	256QAM	3 570.00	9.54	3 670.00	9.49
2	QPSK	3 570.00	9.48	3 670.00	9.42
	16QAM	3 570.00	9.37	3 670.00	9.41
	64QAM	3 570.00	9.35	3 670.00	9.21
	256QAM	3 570.00	9.48	3 670.00	9.52
3	QPSK	3 570.00	9.50	3 670.00	9.45
	16QAM	3 570.00	9.56	3 670.00	9.35
	64QAM	3 570.00	9.60	3 670.00	9.41
	256QAM	3 570.00	9.72	3 670.00	9.38

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

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

Ant.	Modulation	NR 40 MHz + NR 20 MHz + NR 20 MHz + LTE 10 MHz		LTE 10 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 595.00	9.22	3 695.00	9.40
	16QAM	3 595.00	9.52	3 695.00	9.50
	64QAM	3 595.00	9.73	3 695.00	9.51
	256QAM	3 595.00	9.34	3 695.00	9.48
1	QPSK	3 595.00	9.29	3 695.00	9.50
	16QAM	3 595.00	9.32	3 695.00	9.46
	64QAM	3 595.00	9.28	3 695.00	9.55
	256QAM	3 595.00	9.46	3 695.00	9.50
2	QPSK	3 595.00	9.26	3 695.00	9.53
	16QAM	3 595.00	9.57	3 695.00	9.44
	64QAM	3 595.00	9.35	3 695.00	9.80
	256QAM	3 595.00	9.44	3 695.00	9.52
3	QPSK	3 595.00	9.51	3 695.00	9.51
	16QAM	3 595.00	9.98	3 695.00	9.43
	64QAM	3 595.00	9.53	3 695.00	9.47
	256QAM	3 595.00	9.24	3 695.00	9.52

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



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

Ant.	Modulation	NR 40 MHz		NR 10 MHz + LTE 20 MHz + LTE 5 MHz + LTE 5 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 570.00	9.31	3 680.00	9.49
	16QAM	3 570.00	9.47	3 680.00	9.47
	64QAM	3 570.00	9.47	3 680.00	9.29
	256QAM	3 570.00	9.49	3 680.00	9.40
1	QPSK	3 570.00	9.52	3 680.00	9.27
	16QAM	3 570.00	9.46	3 680.00	9.45
	64QAM	3 570.00	9.43	3 680.00	9.46
	256QAM	3 570.00	9.39	3 680.00	9.54
2	QPSK	3 570.00	9.40	3 680.00	9.38
	16QAM	3 570.00	9.70	3 680.00	9.42
	64QAM	3 570.00	9.39	3 680.00	9.35
	256QAM	3 570.00	9.31	3 680.00	9.47
3	QPSK	3 570.00	9.45	3 680.00	9.50
	16QAM	3 570.00	9.73	3 680.00	9.33
	64QAM	3 570.00	9.52	3 680.00	9.50
	256QAM	3 570.00	9.35	3 680.00	9.36

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

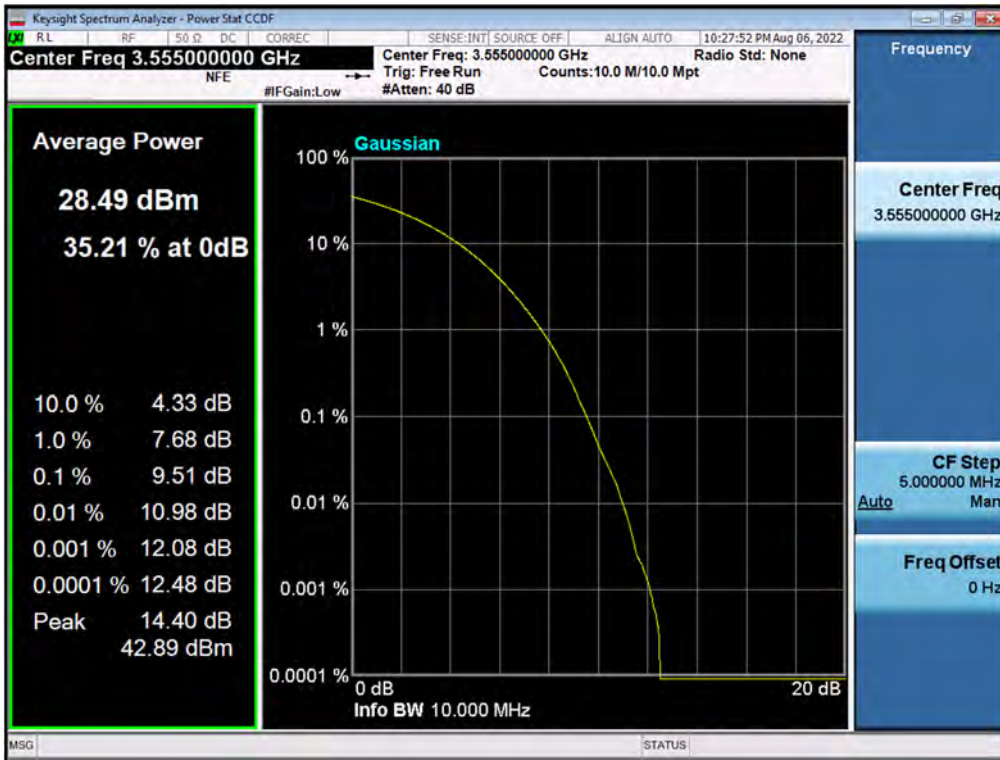
**CBRS (NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C) + LTE 5 MHz 1C[5C(4C+1C)]**

Ant.	Modulation	NR 40 MHz + NR 10 MHz + LTE 20 MHz + LTE 5 MHz		LTE 5 MHz	
		Frequency (MHz)	Measured Value (dB)	Frequency (MHz)	Measured Value (dB)
0	QPSK	3 587.50	9.51	3 697.50	9.52
	16QAM	3 587.50	9.28	3 697.50	9.55
	64QAM	3 587.50	9.63	3 697.50	9.46
	256QAM	3 587.50	9.30	3 697.50	9.39
1	QPSK	3 587.50	9.29	3 697.50	9.47
	16QAM	3 587.50	9.02	3 697.50	9.57
	64QAM	3 587.50	9.30	3 697.50	9.44
	256QAM	3 587.50	9.26	3 697.50	9.42
2	QPSK	3 587.50	9.37	3 697.50	9.49
	16QAM	3 587.50	9.63	3 697.50	9.56
	64QAM	3 587.50	9.11	3 697.50	9.45
	256QAM	3 587.50	9.34	3 697.50	9.36
3	QPSK	3 587.50	9.43	3 697.50	9.52
	16QAM	3 587.50	9.26	3 697.50	9.53
	64QAM	3 587.50	9.24	3 697.50	9.54
	256QAM	3 587.50	9.60	3 697.50	9.39

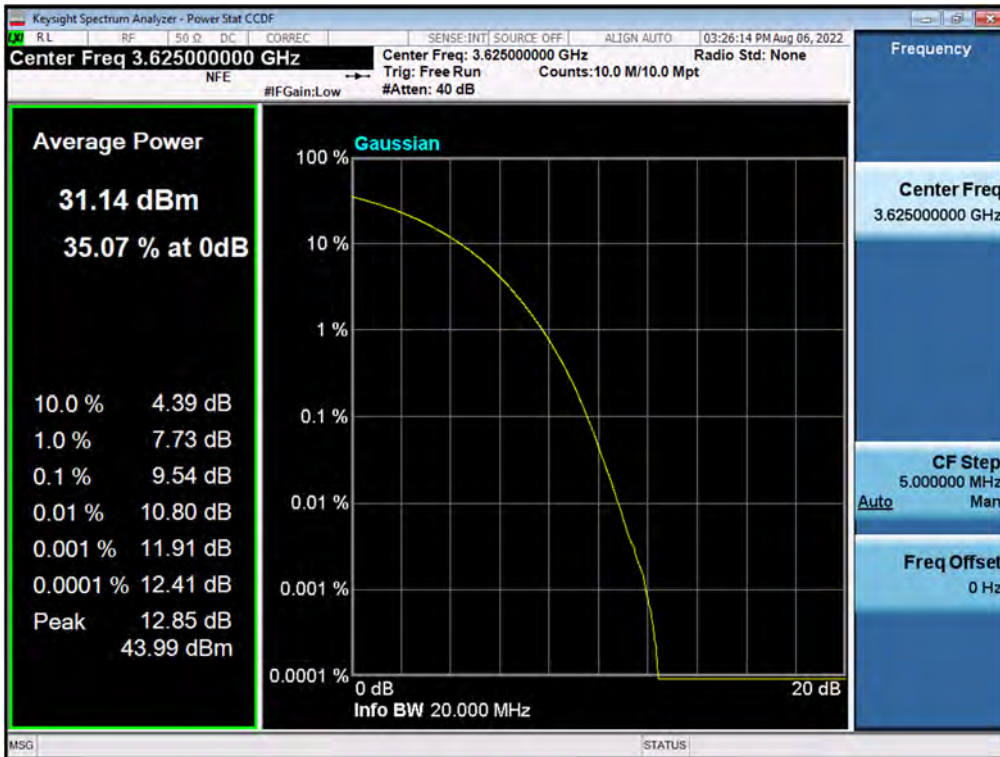
Note: 1C: 1 Carrier, 4C: 4 Carrier, 5C: 5 Carrier

## Plot Data of PAPR

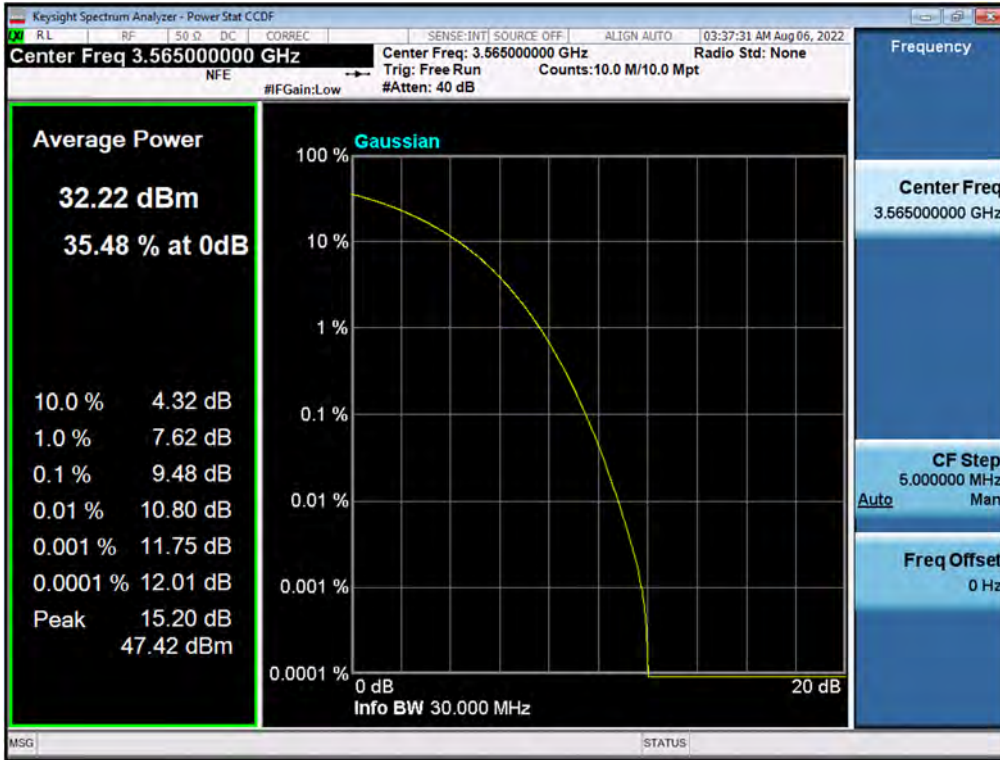
## Antenna 2 / CBRS NR 10 MHz 1 Carrier / 16QAM / Low



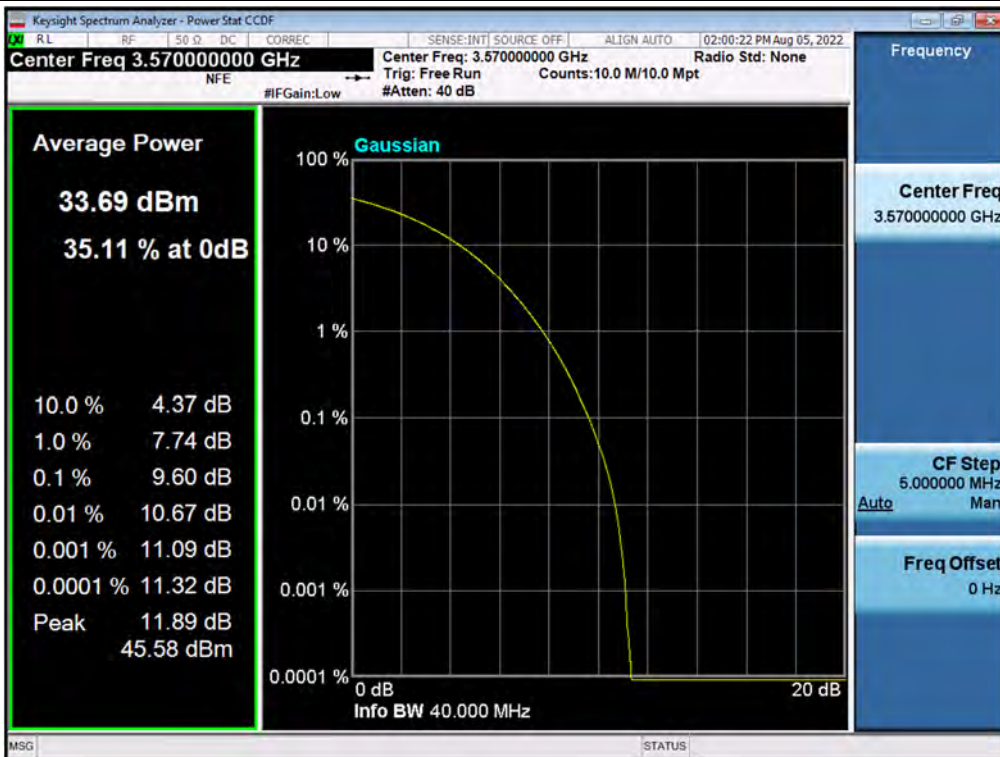
## Antenna 1 / CBRS NR 20 MHz 1 Carrier / 16QAM / Middle



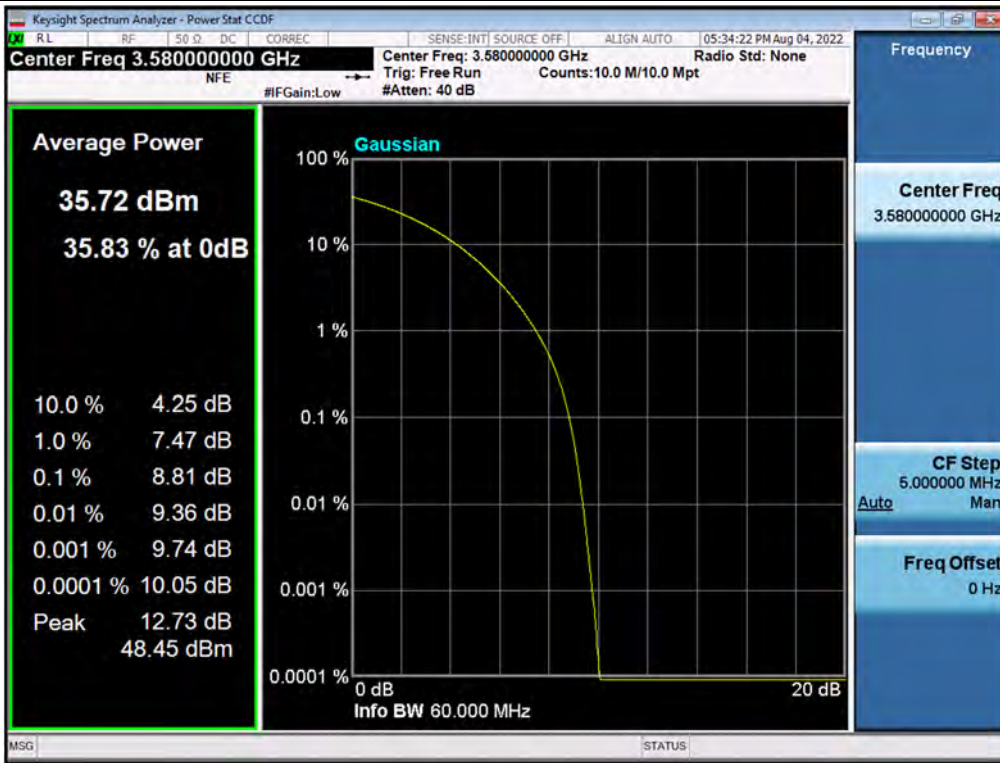
Antenna 2 / CBRS NR 30 MHz 1 Carrier / 256QAM / Low



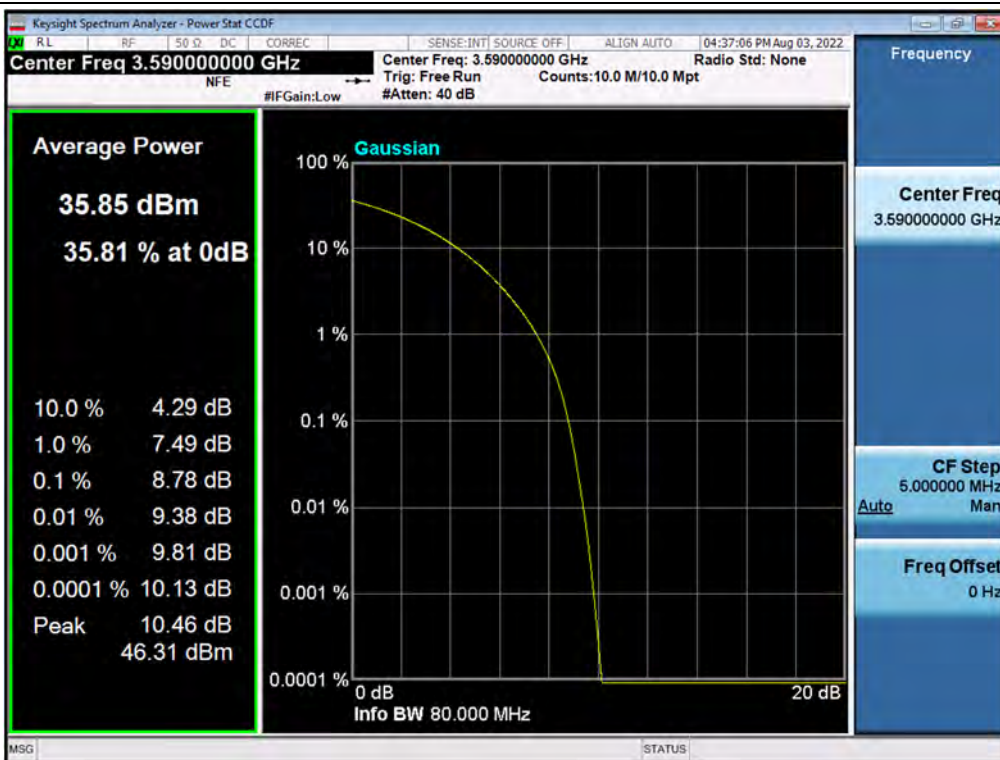
Antenna 3 / CBRS NR 40 MHz 1 Carrier / 16QAM / Low



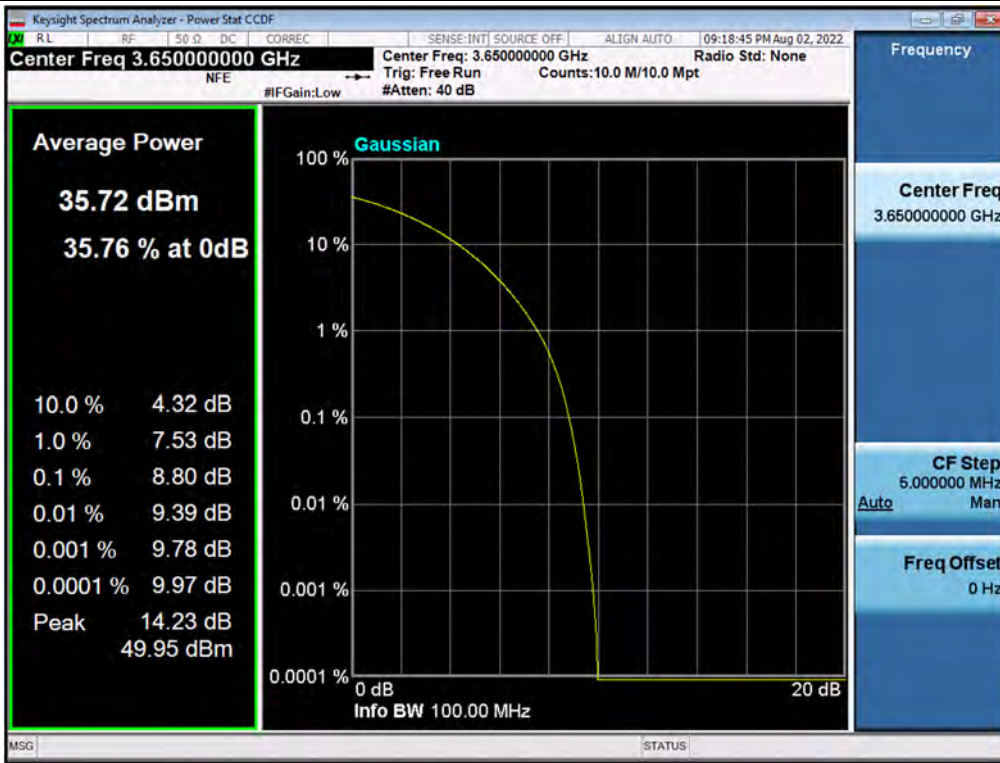
## Antenna 2 / CBRS NR 60 MHz 1 Carrier / 64QAM / Low



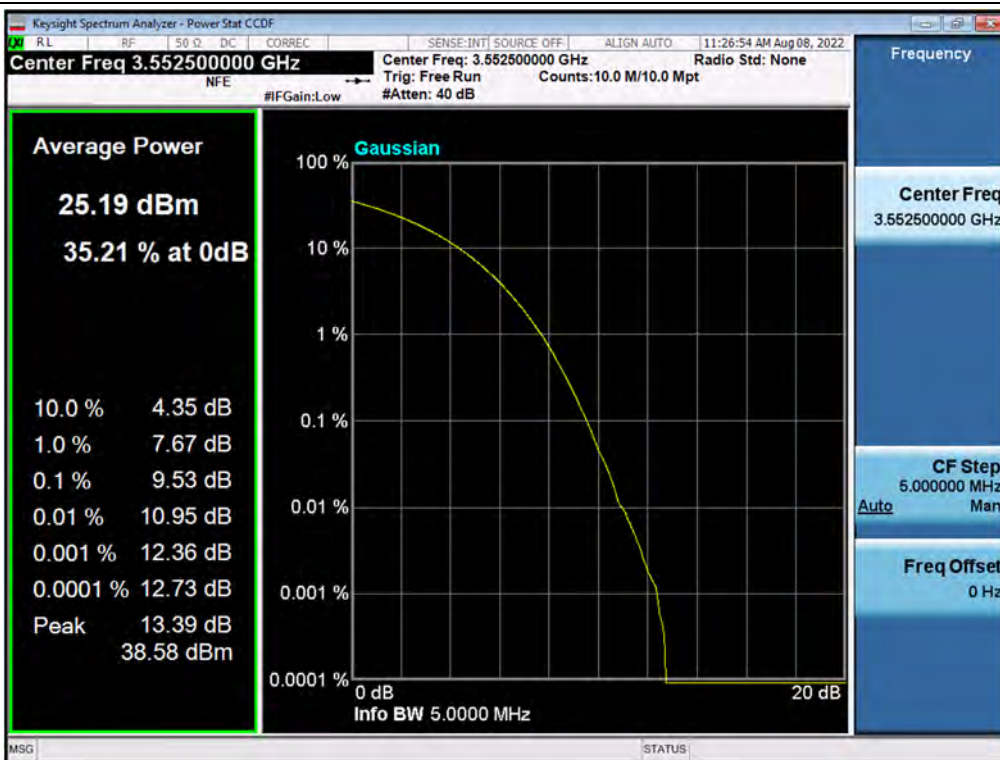
## Antenna 1 / CBRS NR 80 MHz 1 Carrier / 256QAM / Low



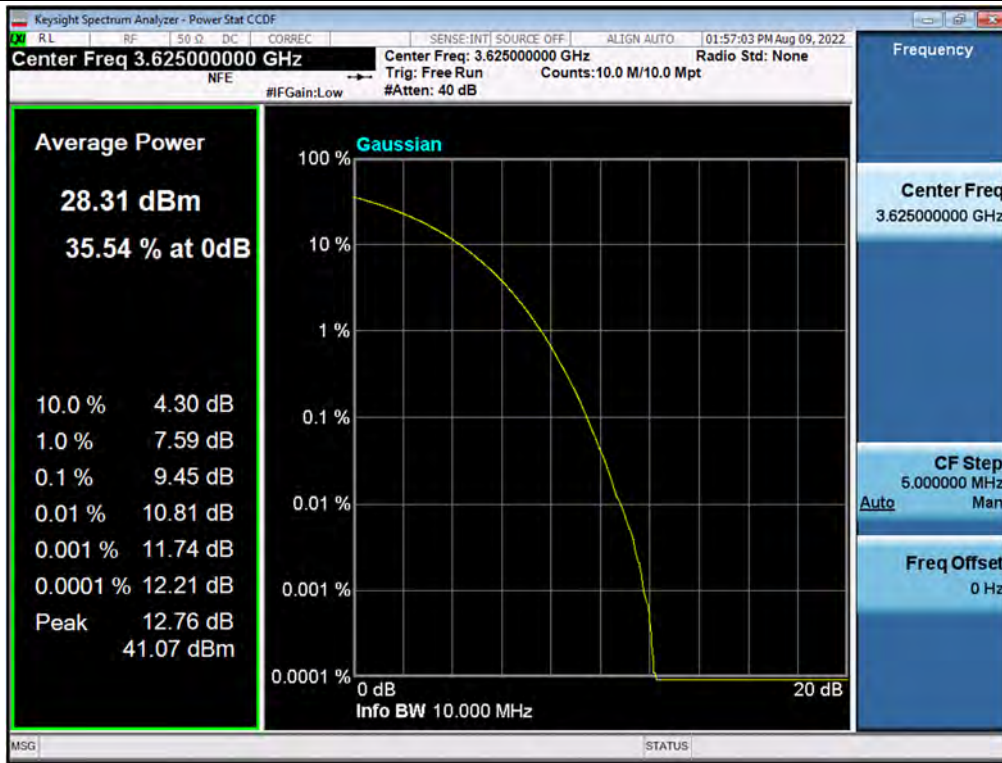
## Antenna 2 / CBRS NR 100 MHz 1 Carrier / 64QAM / High



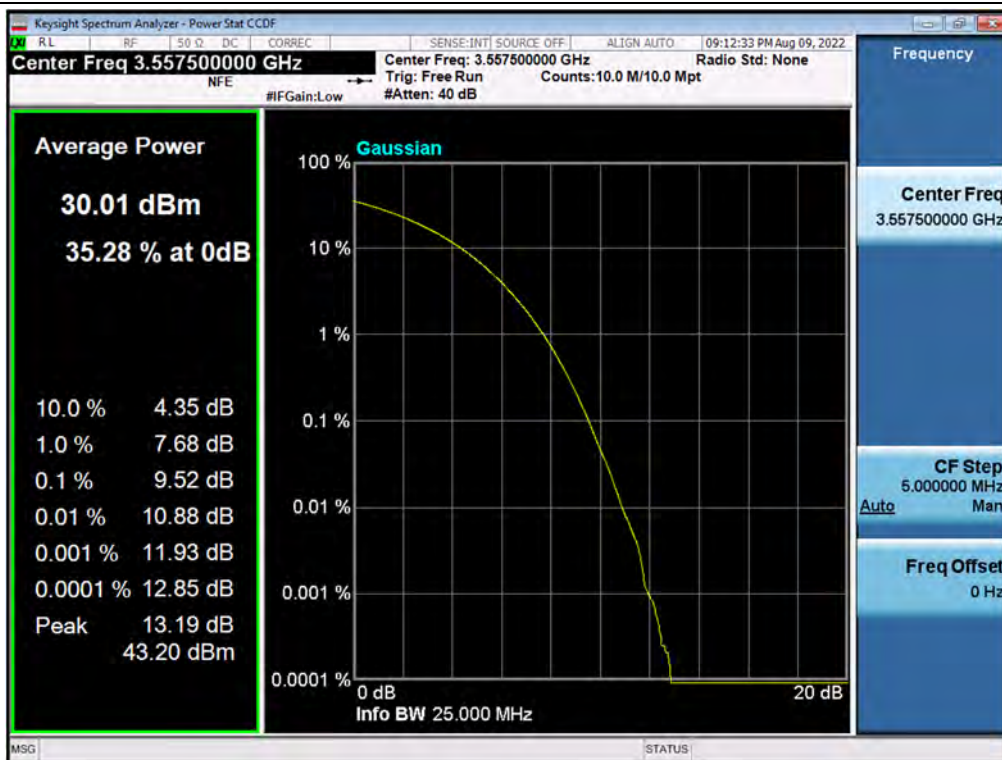
## Antenna 2 / CBRS LTE 5 MHz 1 Carrier / QPSK / Low



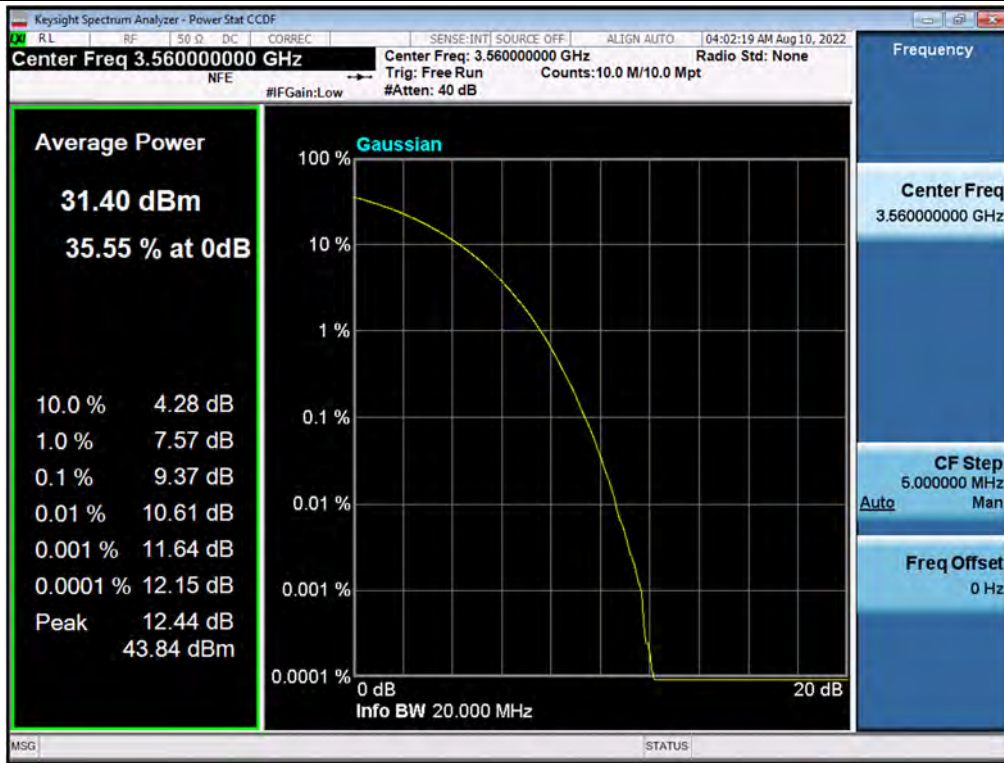
## Antenna 2 / CBRS LTE 10 MHz 1 Carrier / 64QAM / Middle



## Antenna 3 / CBRS LTE 15 MHz 1 Carrier / 256QAM / Low

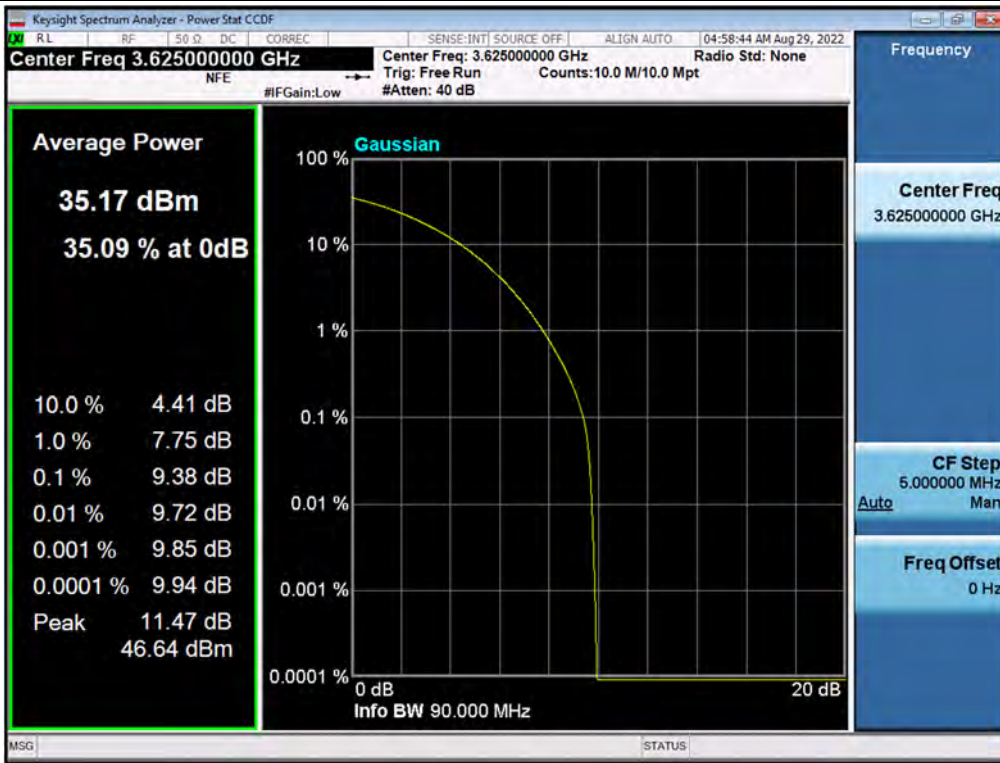


Antenna 2 / CBRS LTE 20 MHz 1 Carrier / QPSK / Low

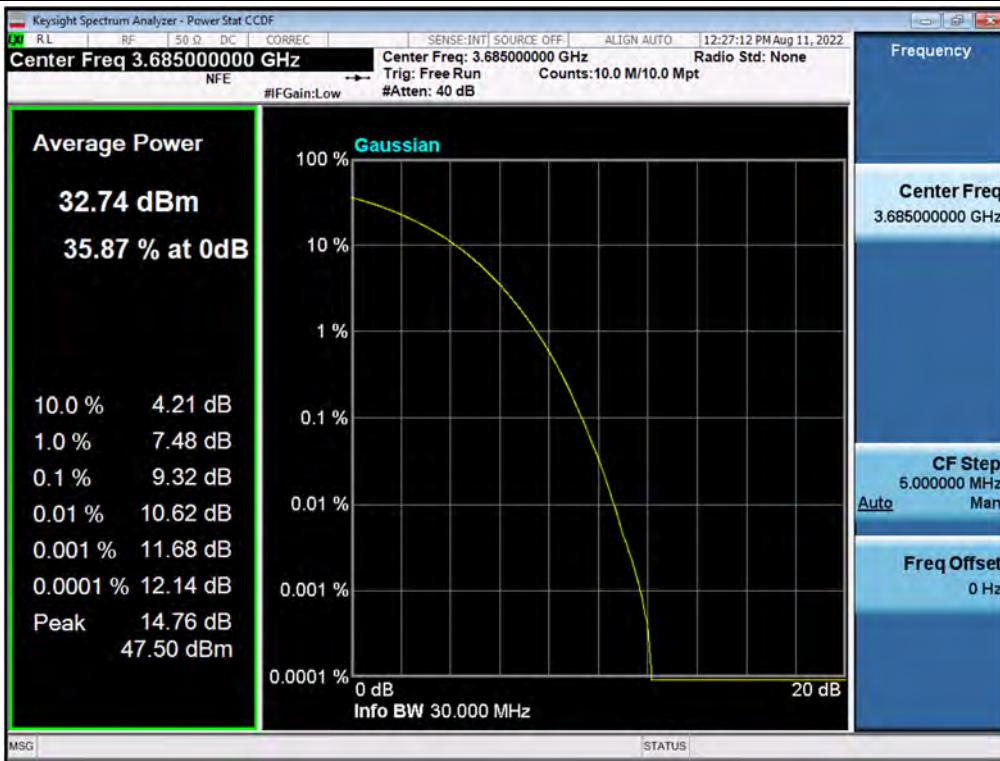


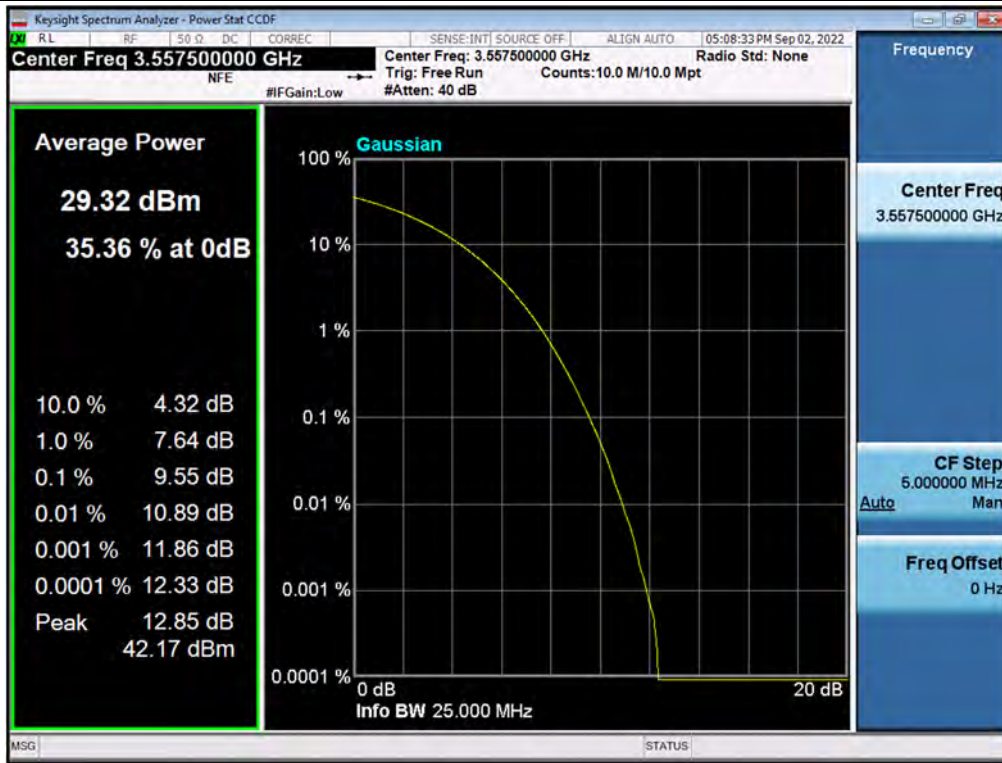
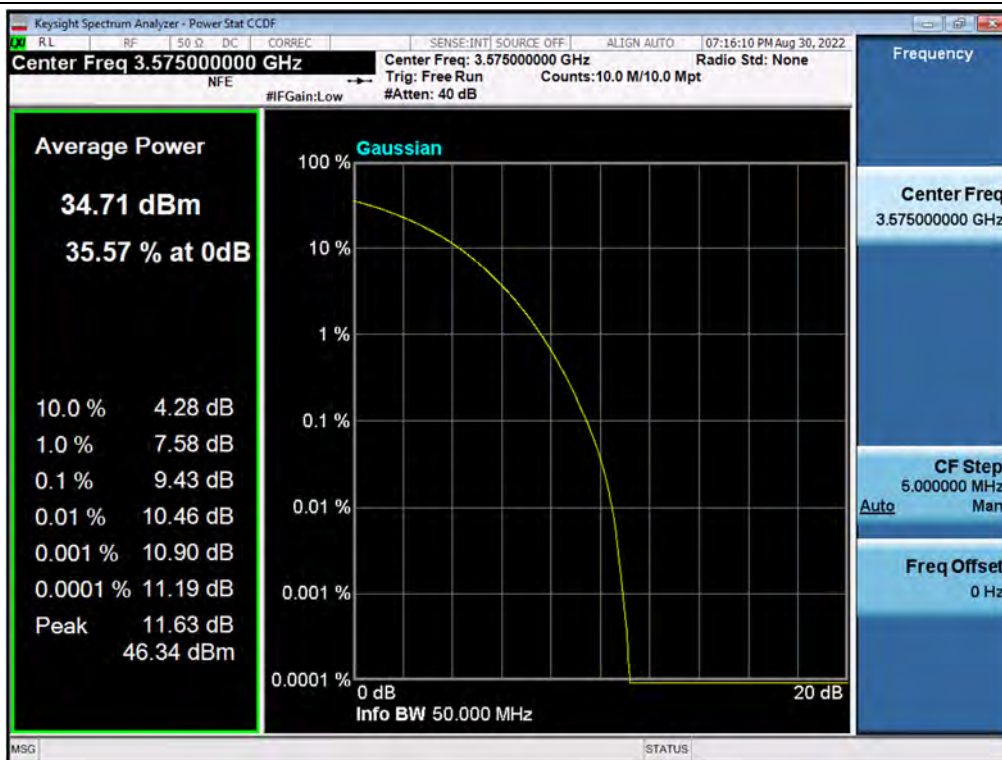


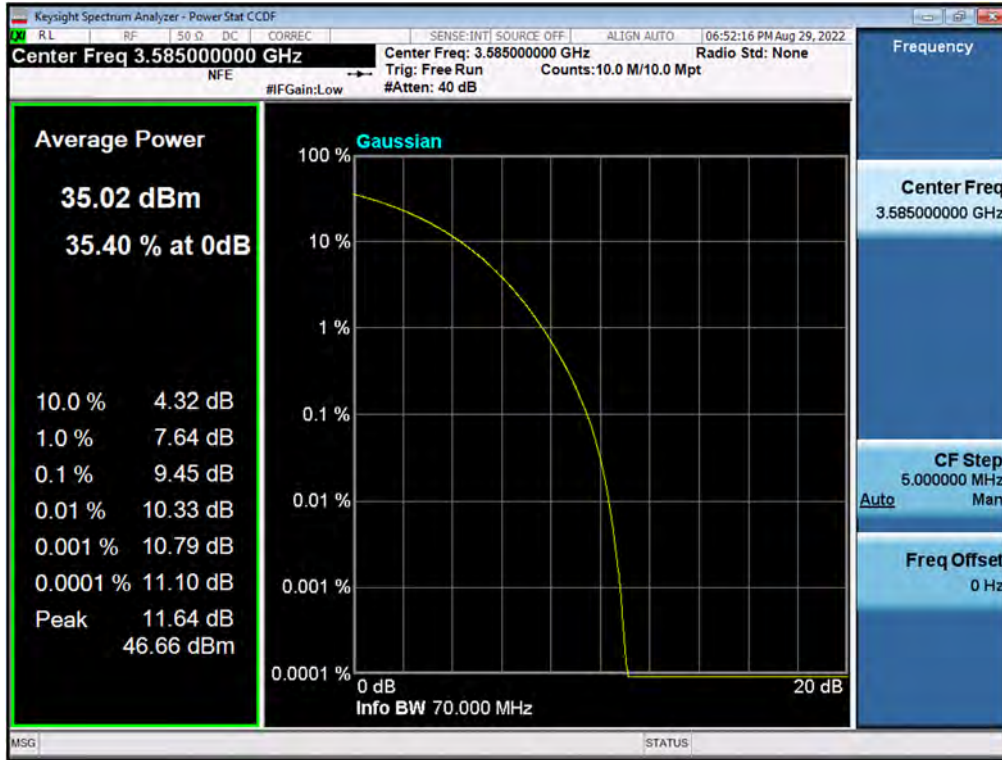
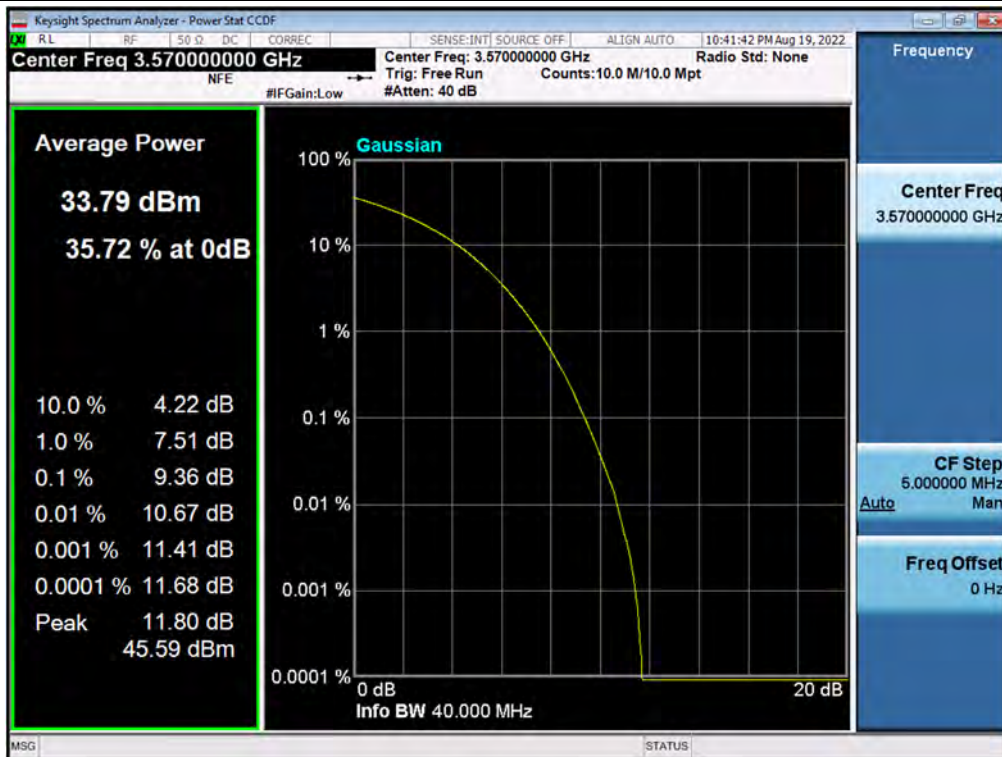
Antenna 3 / CBRS NR(60 MHz 1C + 30 MHz 1C)[2C] / Contiguous / 64QAM / Middle

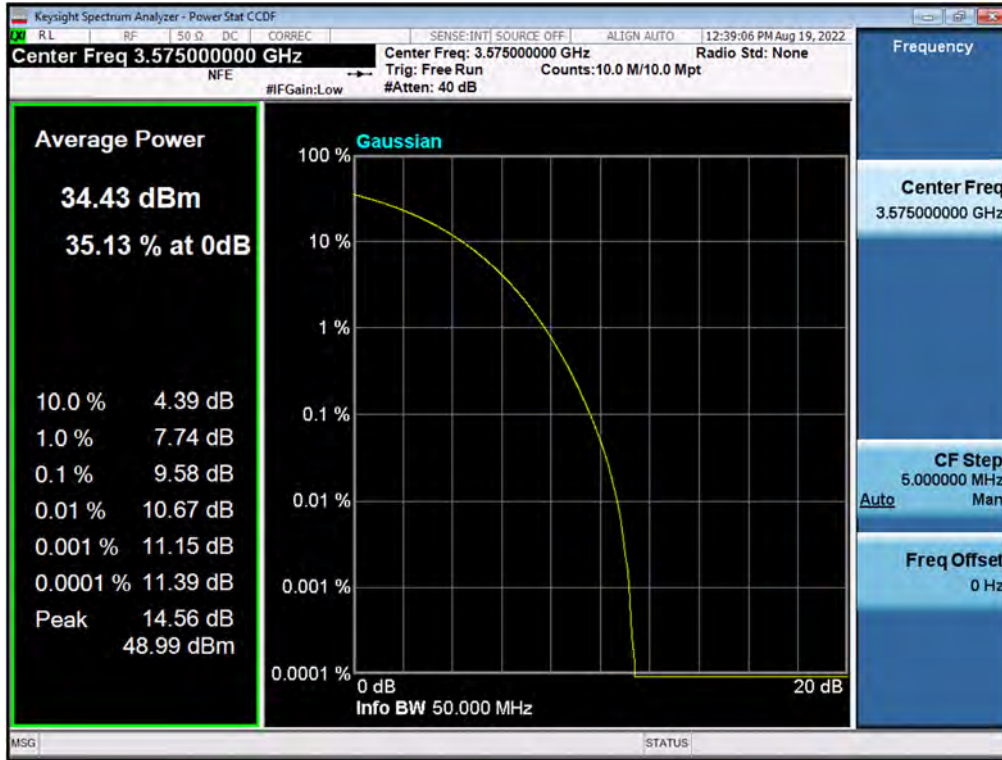
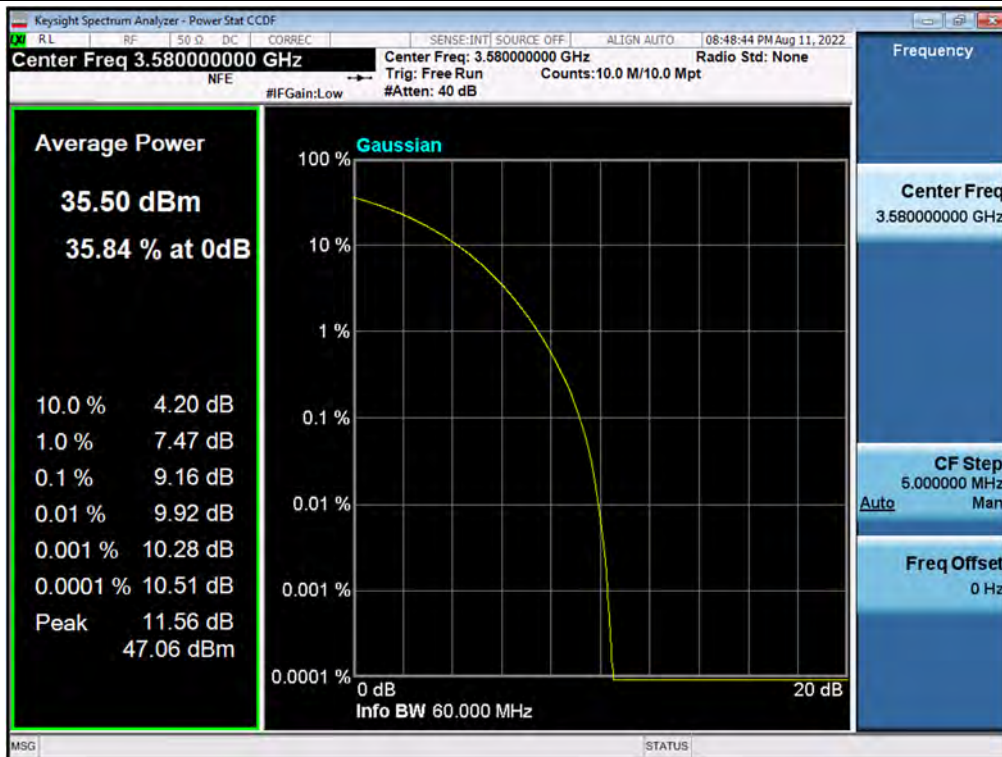


Antenna 2 / CBRS LTE(15 MHz 1C + 15 MHz 1C)[2C] / Contiguous / 256QAM / High

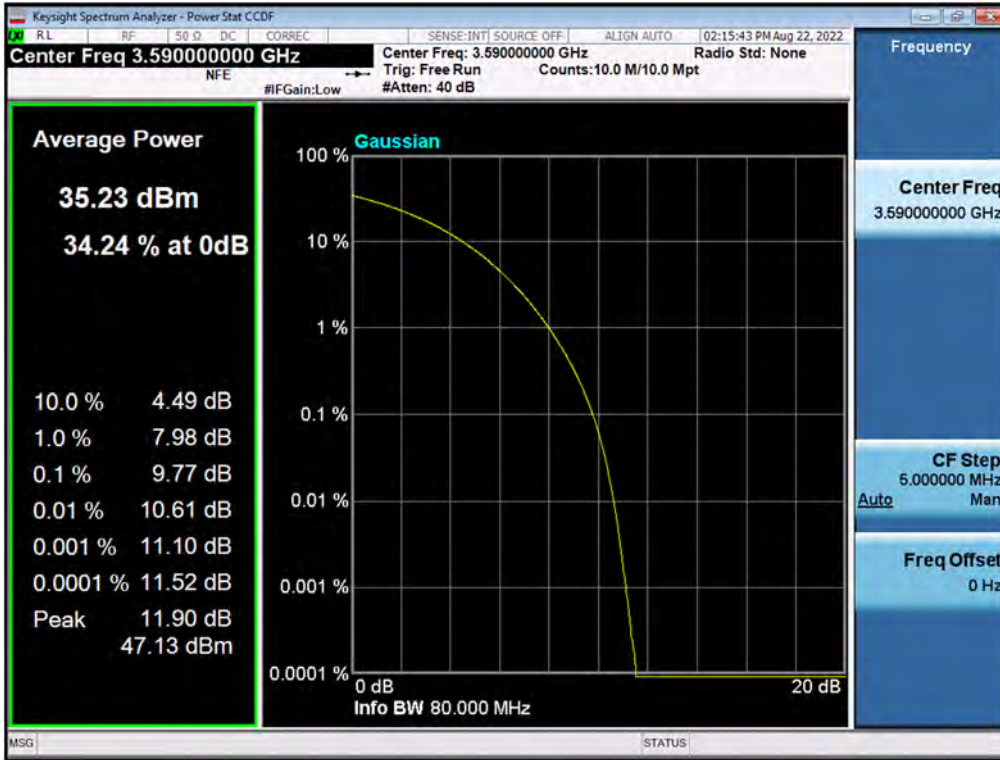


**Antenna 3 / CBRS LTE 5 MHz 1C + NR 10 MHz 1C[2C] / Contiguous / QPSK / Low**

**Antenna 3 / CBRS NR(20 MHz 1C + 20 MHz 1C + 10 MHz 1C)[3C] / Contiguous / 16QAM / Low**


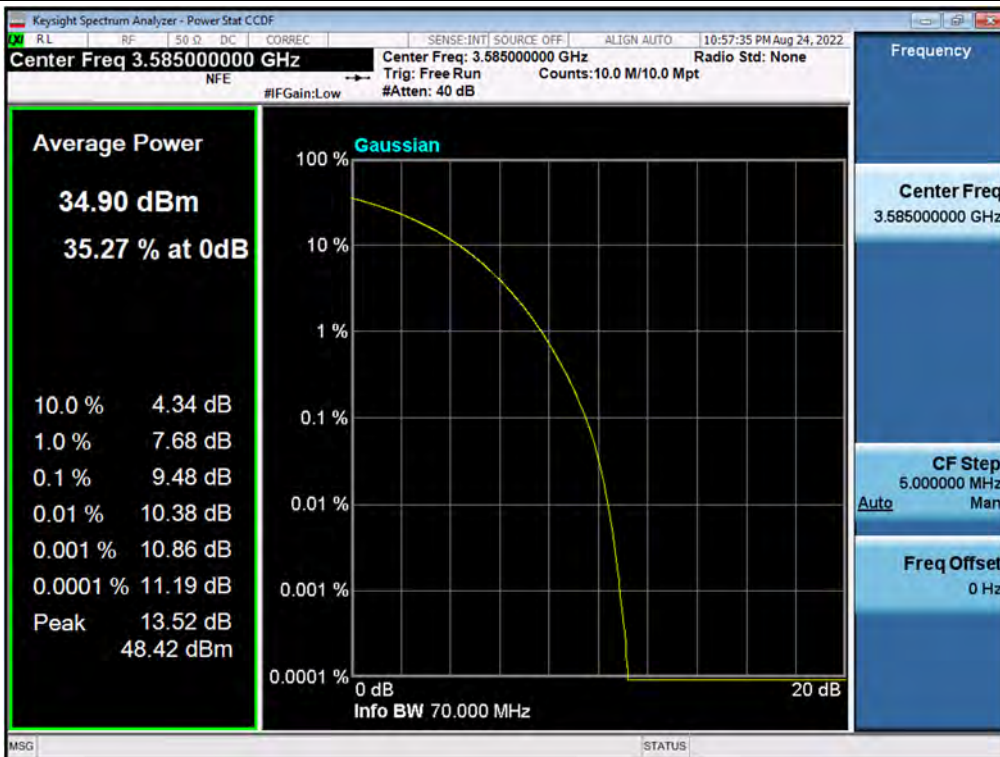
**Antenna 3 / CBRs NR(30 MHz 1C + 30 MHz 1C + 10 MHz 1C)[3C] / Contiguous / 16QAM / Low**

**Antenna 3 / CBRs LTE(15 MHz 1C + 15 MHz 1C + 10 MHz 1C)[3C] / Contiguous / QPSK / Low**


**Antenna 3 / CBRS LTE(20 MHz 1C + 15 MHz 1C + 15 MHz 1C)[3C] / Contiguous / 64QAM / Low**

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


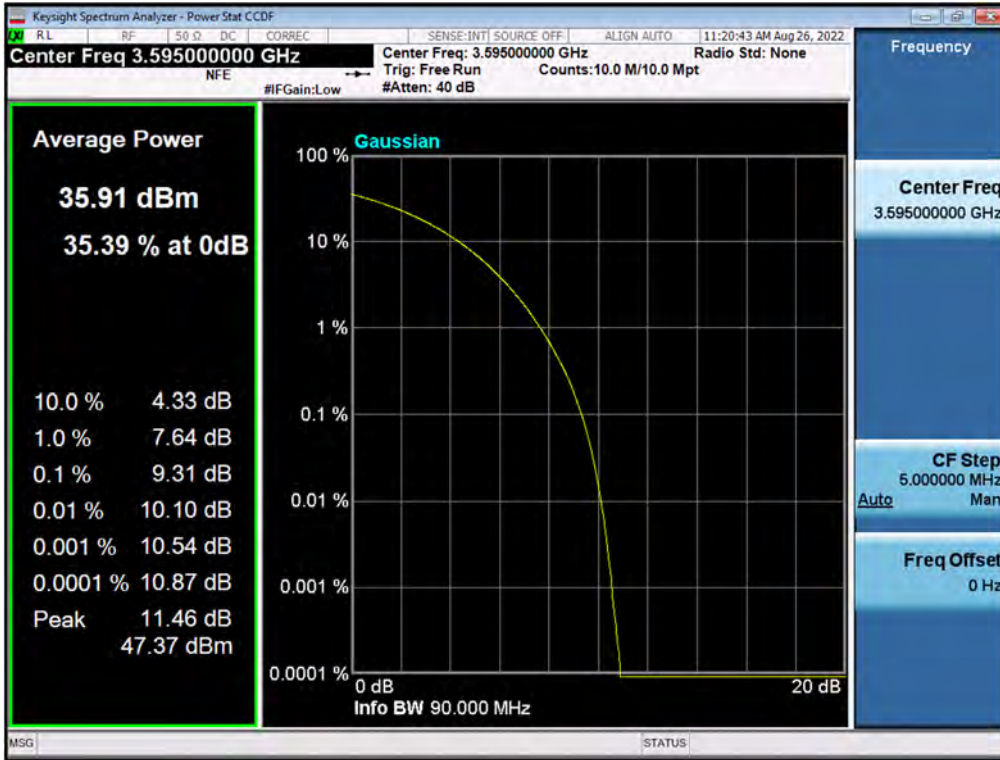
Antenna 3 / CBRS LTE(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)[4C] / Contiguous / 16QAM / Low



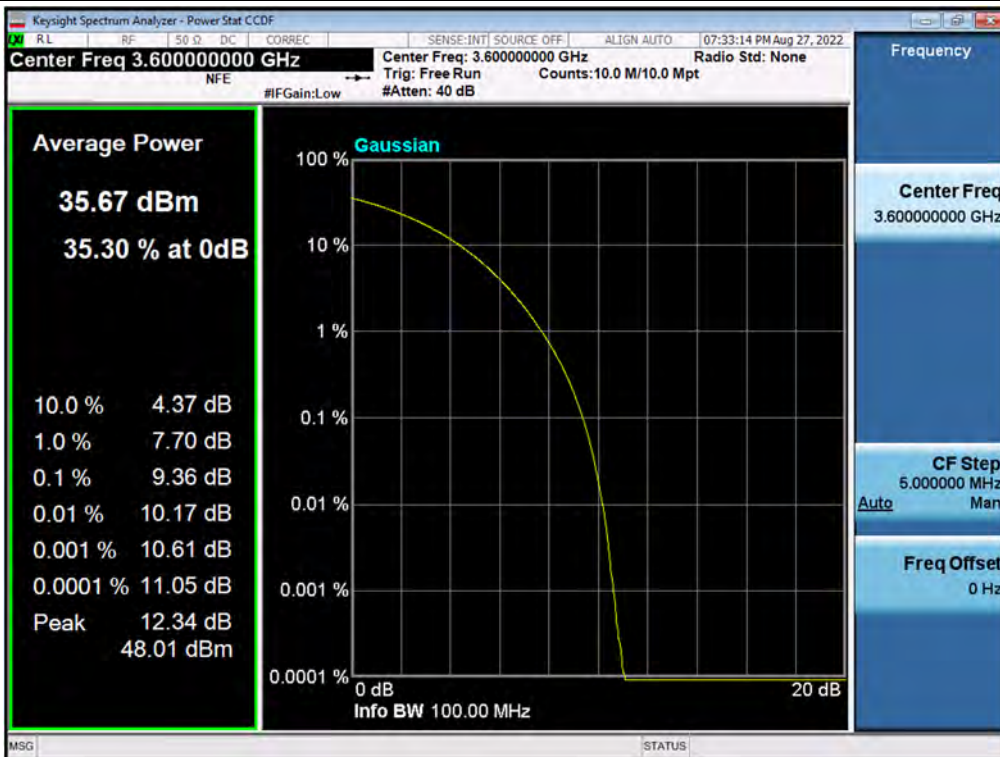
Antenna 3 / CBRS LTE(15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 10 MHz 1C)[5C] / Contiguous / 256QAM / Low



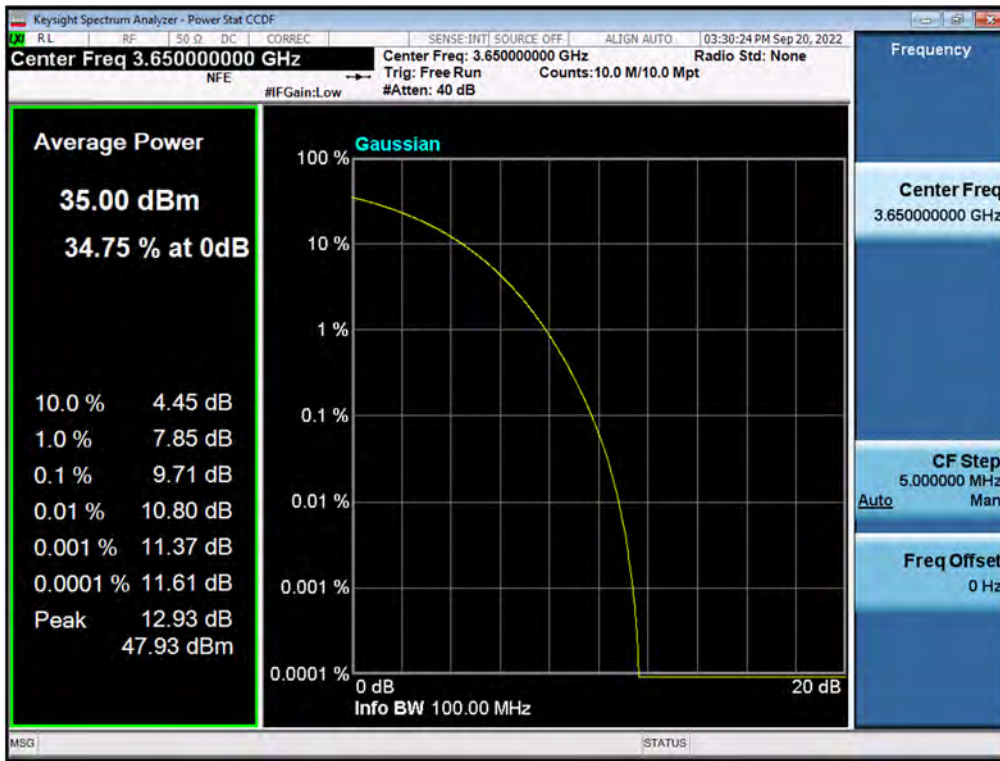
Antenna 3 / CBRS LTE(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 10 MHz 1C)[5C] / Contiguous / 256QAM / Low



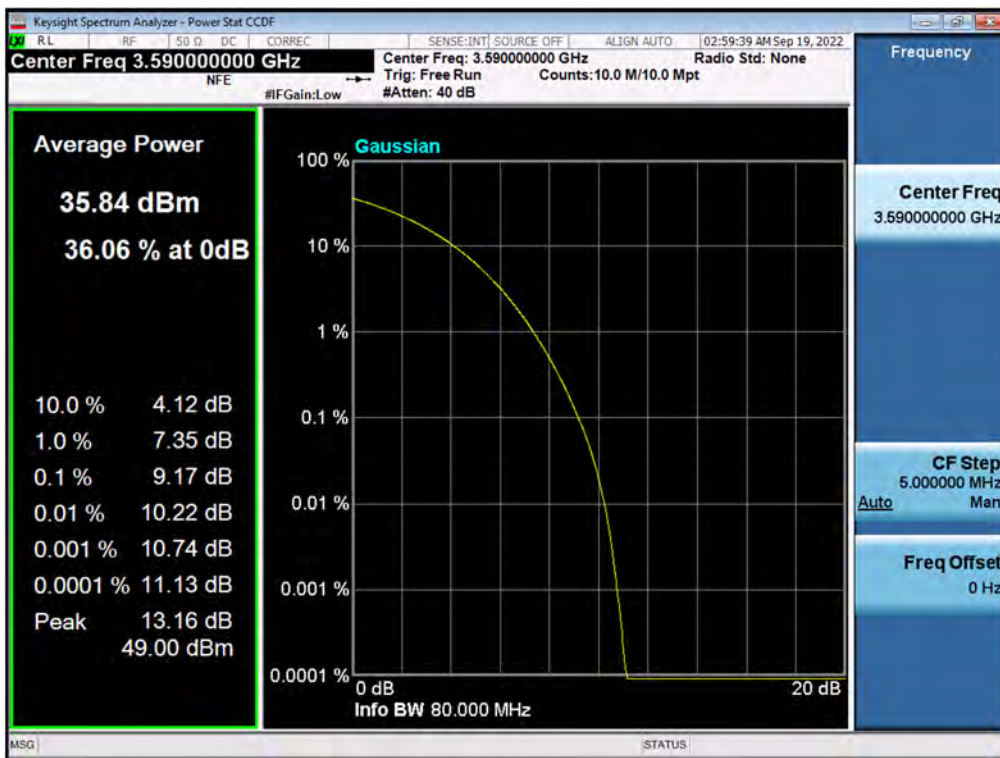
Antenna 1 / CBRS LTE(20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C + 20 MHz 1C)[5C] / Contiguous / QPSK / Low



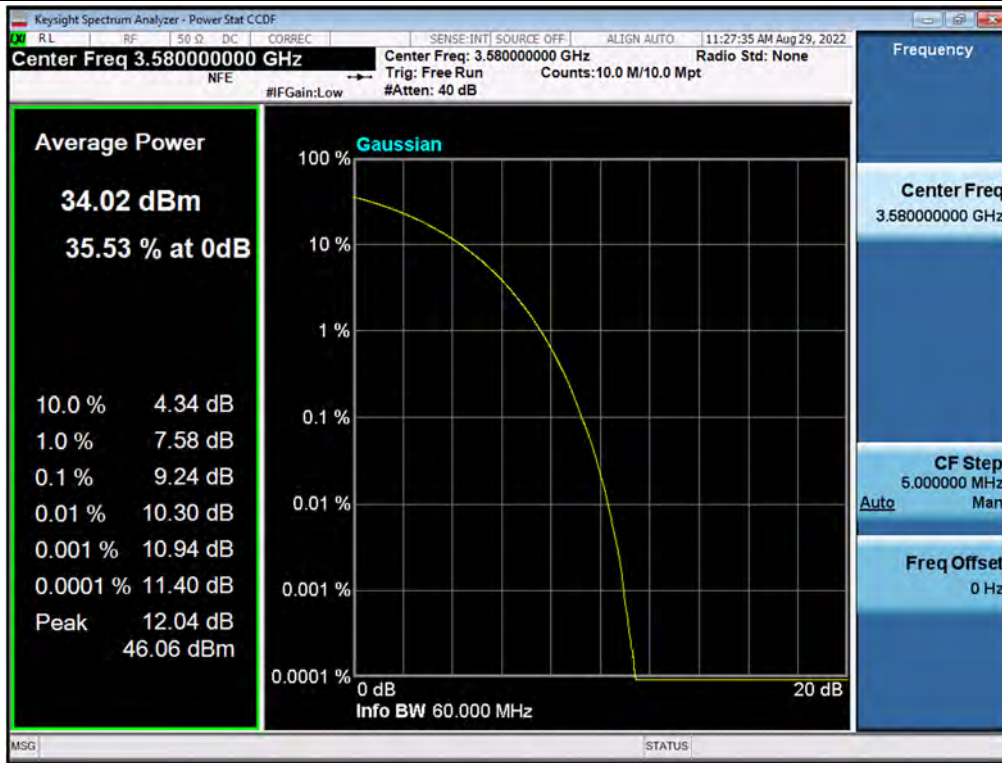
Antenna 3 / CBRS NR 40 MHz 1C + NR 20 MHz 1C + NR 20 MHz 1C + LTE 10 MHz 1C + LTE 10 MHz 1C[5C] / Contiguous / 64QAM / High



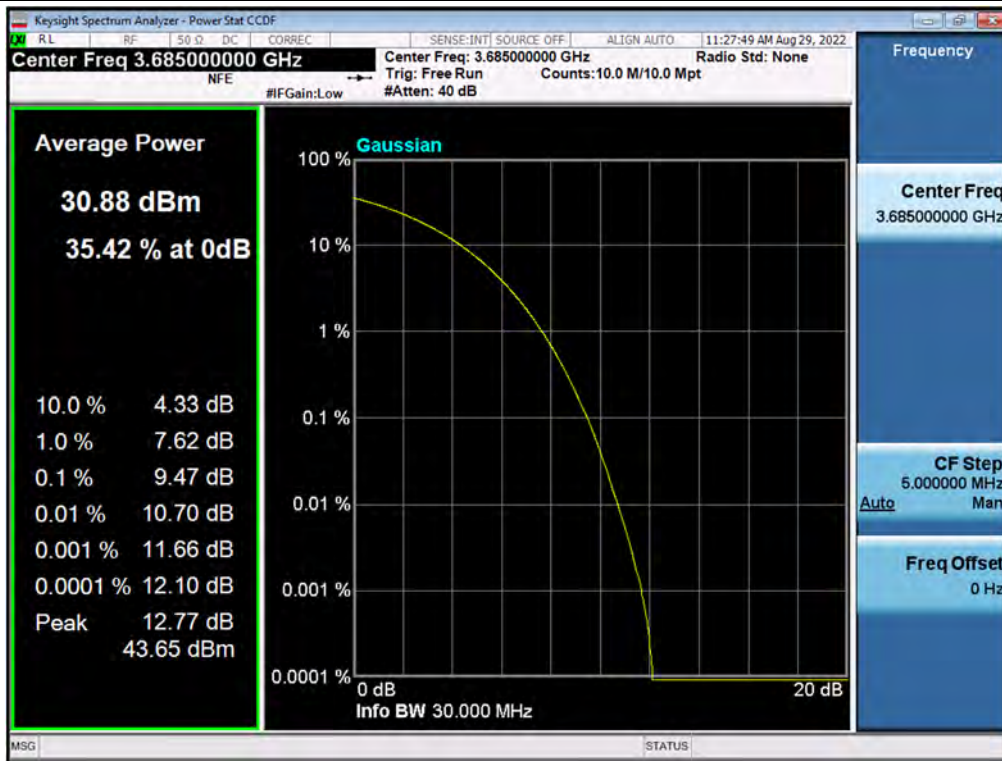
Antenna 3 / CBRS NR 40 MHz 1C + NR 10 MHz 1C + LTE 20 MHz 1C + LTE 5 MHz 1C + LTE 5 MHz 1C[5C] / Contiguous / 16QAM / Low



Antenna 3 / CBRS NR(60 MHz 1C + 30 MHz 1C)[2C] / NR 60 MHz 1C / Non-Contiguous / QPSK / Low

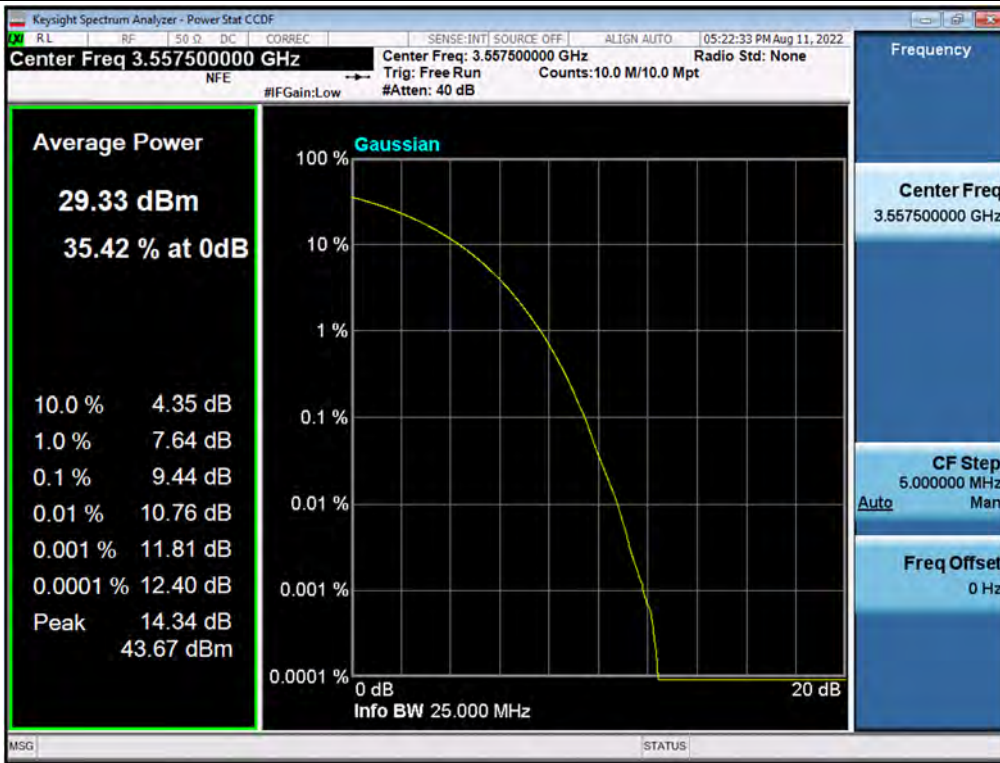


Antenna 3 / CBRS NR(60 MHz 1C + 30 MHz 1C)[2C] / NR 30 MHz 1C / Non-Contiguous / QPSK / High

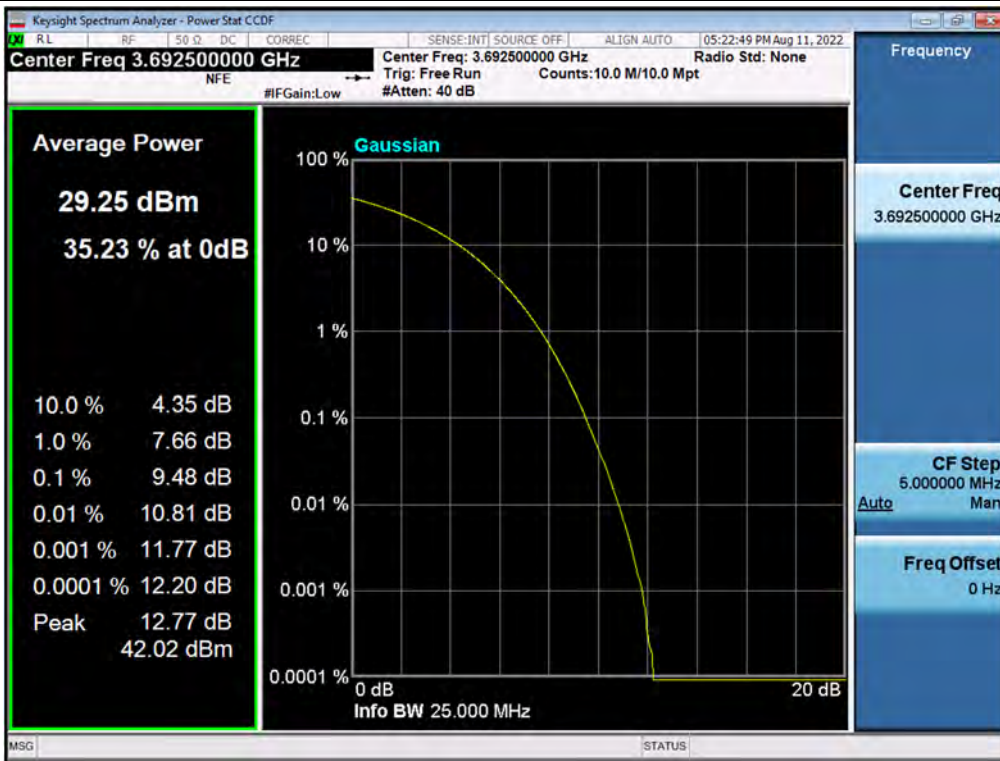




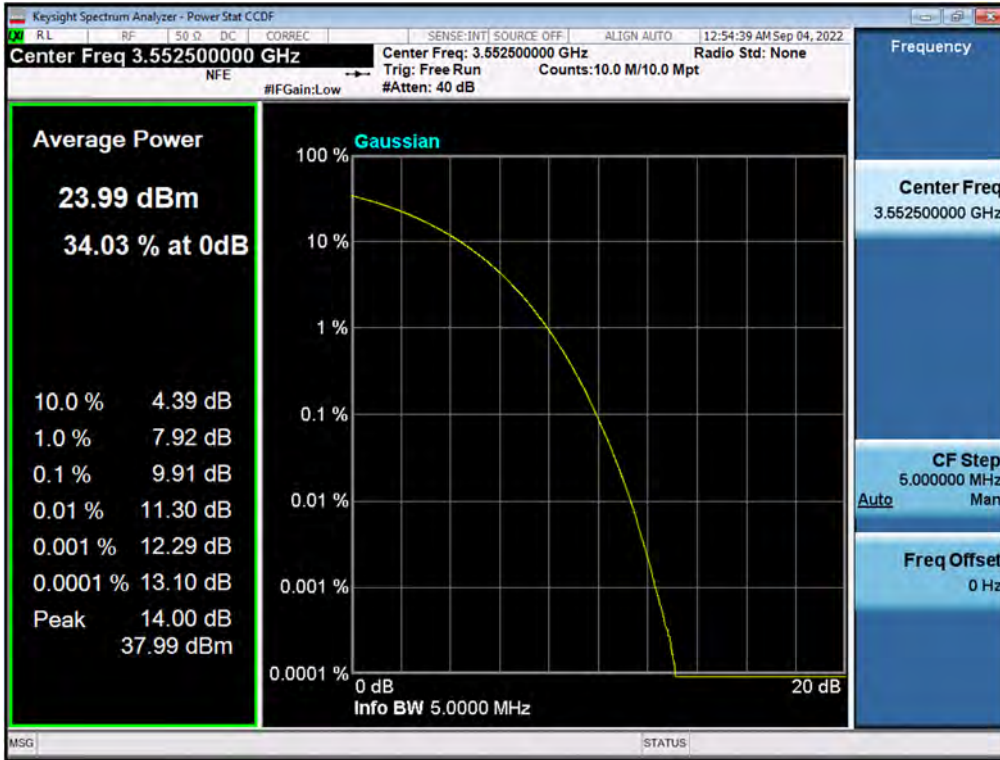
## Antenna 2 / CBRS LTE(15 MHz 1C + 15 MHz 1C)[2C] / LTE 15 MHz 1C / Non-Contiguous / 64QAM / Low



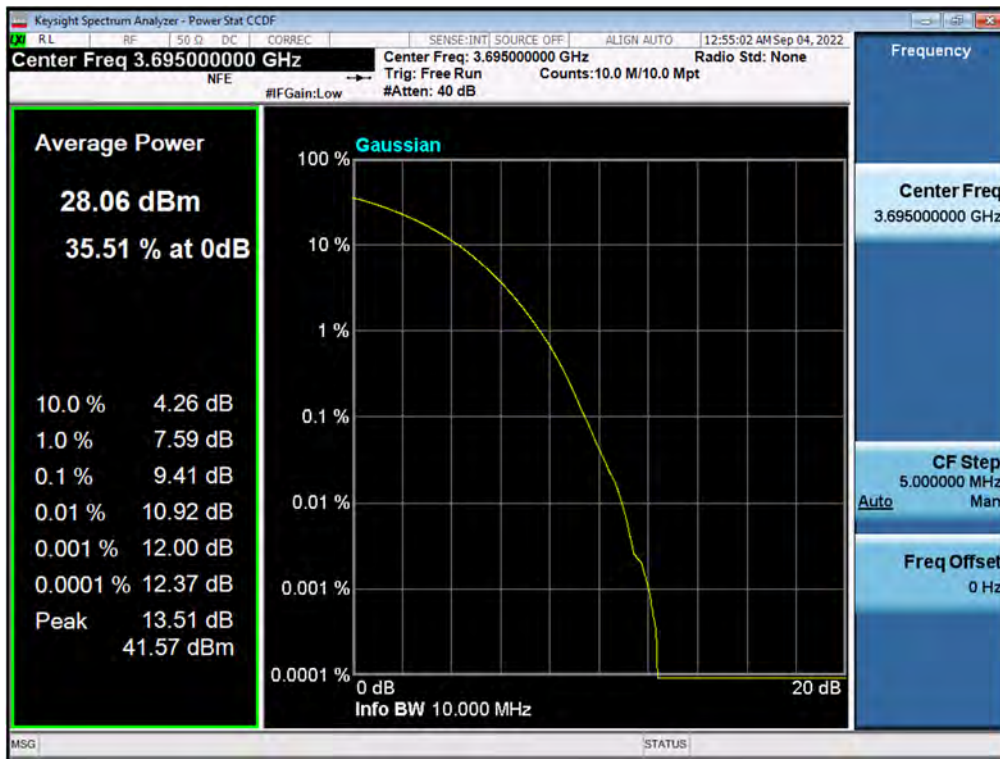
## Antenna 2 / CBRS LTE(15 MHz 1C + 15 MHz 1C)[2C] / LTE 15 MHz 1C / Non-Contiguous / 64QAM / High



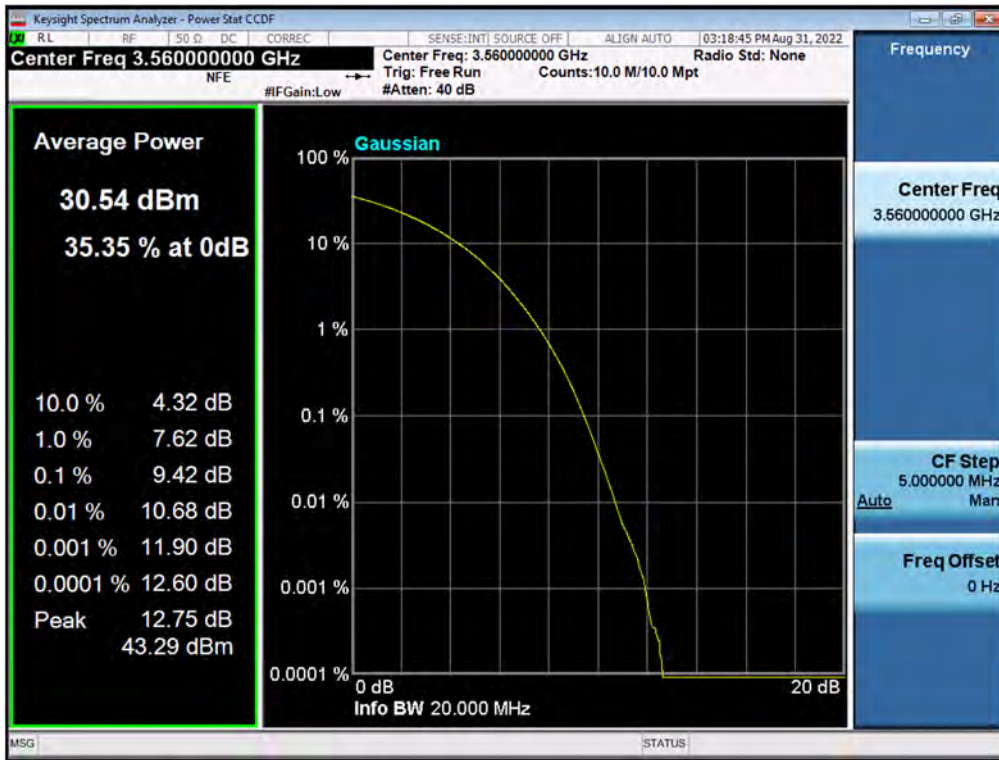
Antenna 3 / CBRS LTE 5 MHz 1C + NR 10 MHz 1C[2C] / LTE 5 MHz 1C / Non-Contiguous / 16QAM / Low



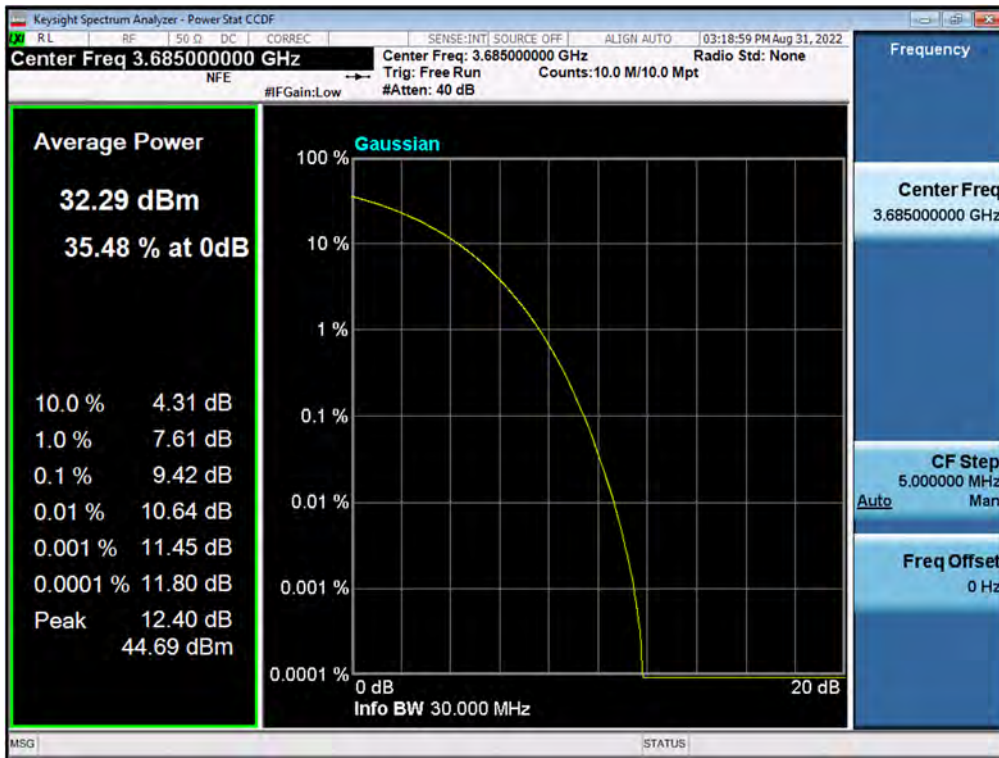
Antenna 3 / CBRS LTE 5 MHz 1C + NR 10 MHz 1C[2C] / NR 10 MHz 1C / Non-Contiguous / 16QAM / High



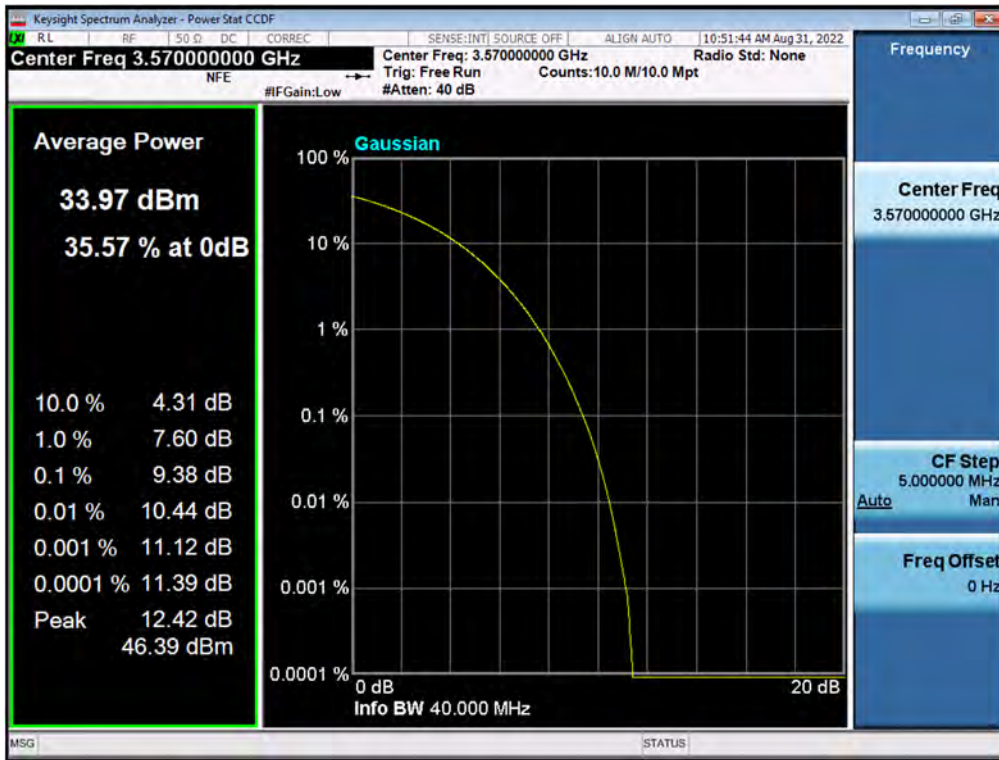
Antenna 3 / CBRS NR[20 MHz 1C + (20 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / NR 20 MHz 1C / Non-Contiguous / 16QAM / Low



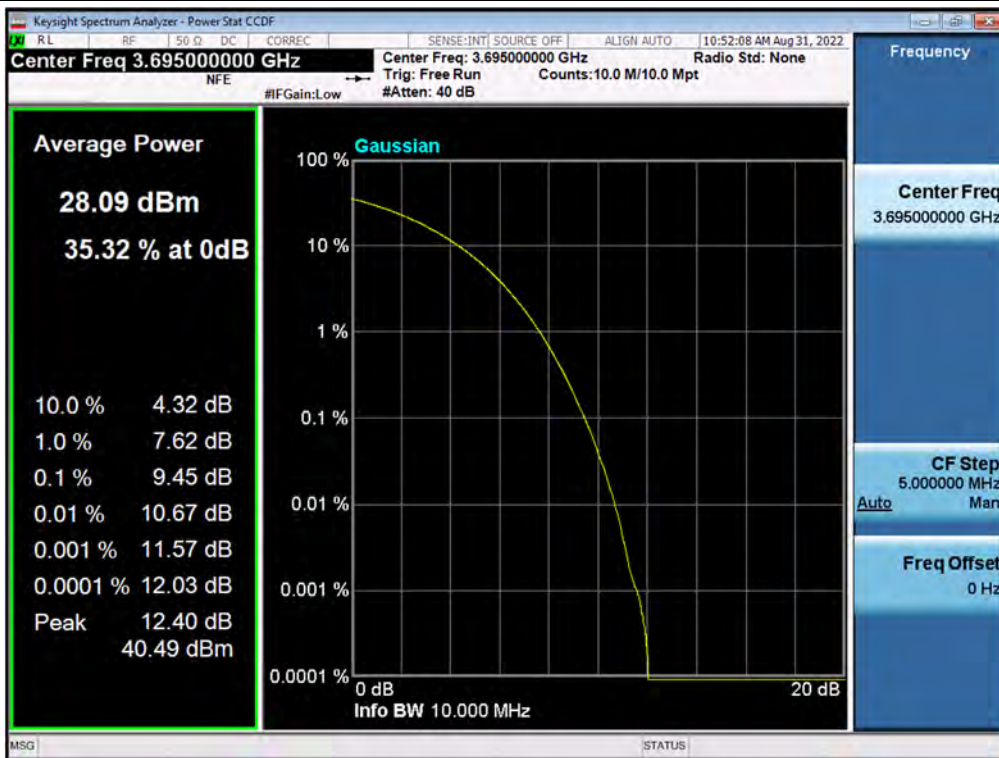
Antenna 3 / CBRS NR[20 MHz 1C + (20 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / NR 20 MHz 1C + NR 10 MHz 1C / Non-Contiguous / 16QAM / High

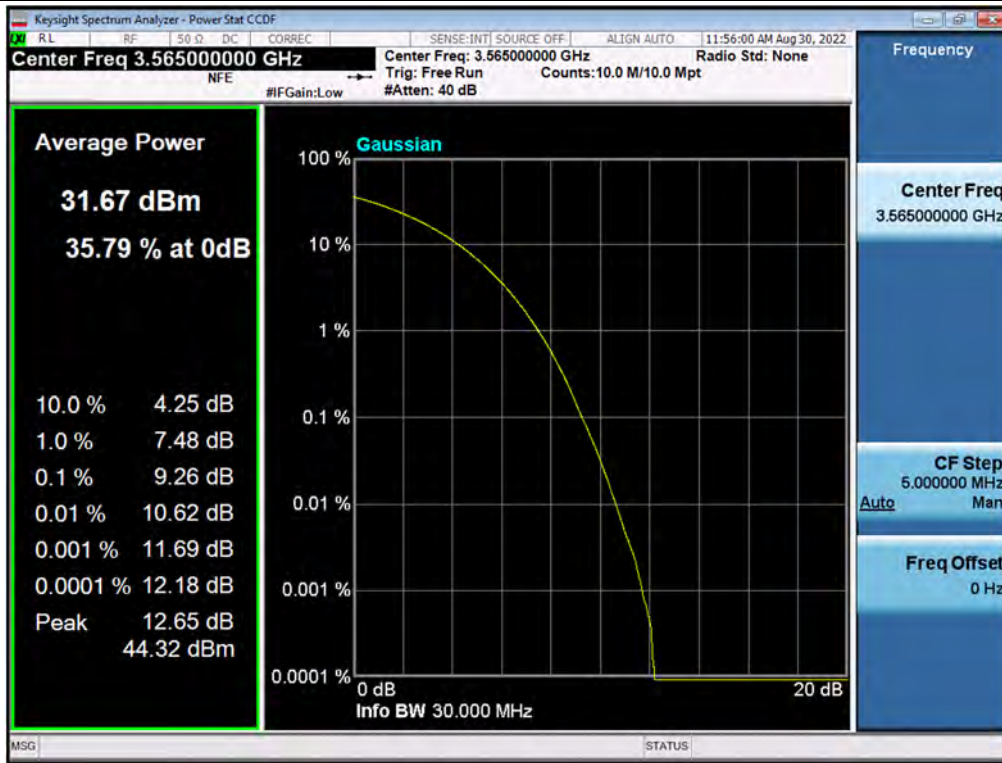
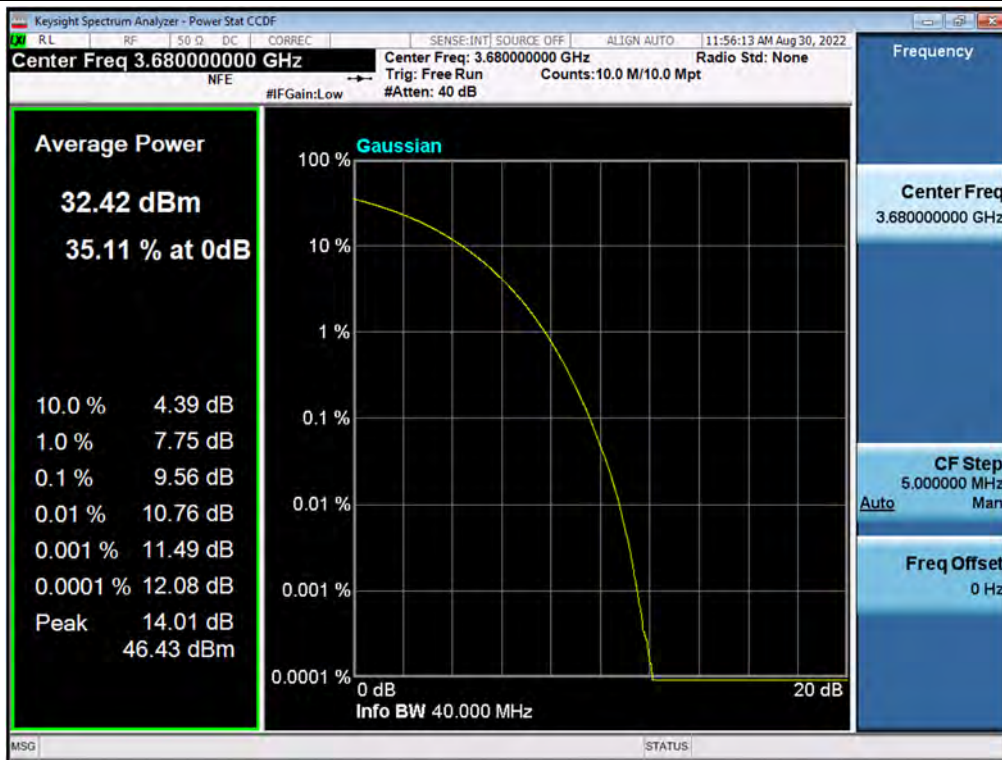


Antenna 3 / CBRS NR[(20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / NR 20 MHz 1C + NR 20 MHz 1C / Non-Contiguous / 256QAM / Low

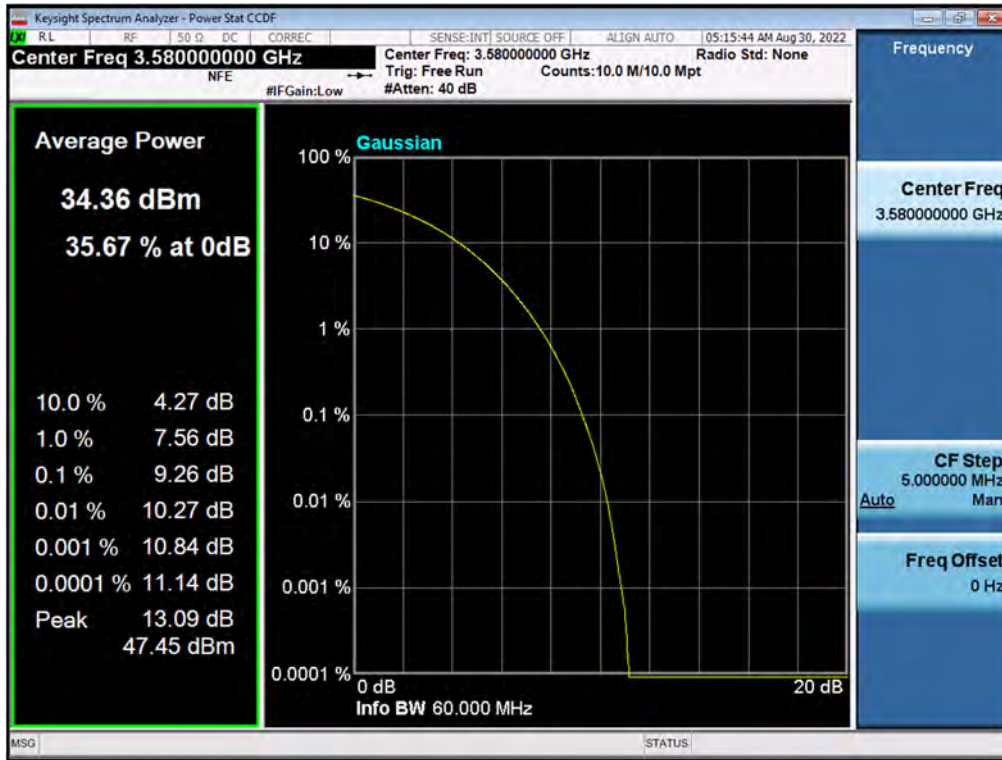


Antenna 3 / CBRS NR[(20 MHz 1C + 20 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / NR 10 MHz 1C / Non-Contiguous / 256QAM / High

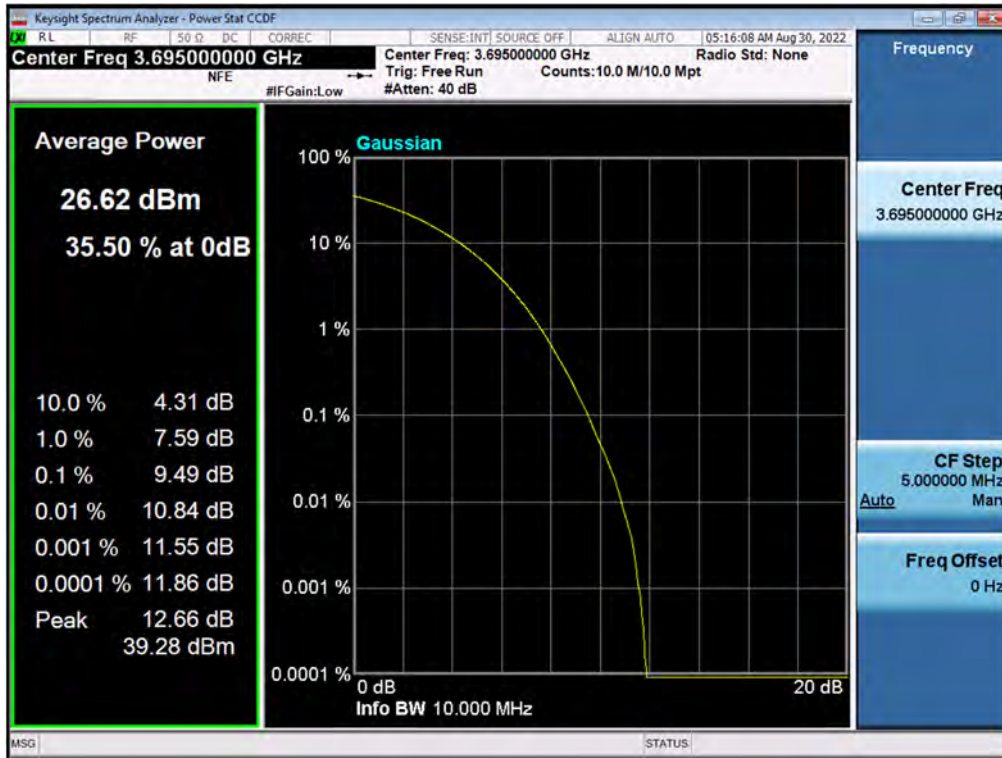


**Antenna 3 / CBRS NR[30 MHz 1C + (30 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / NR 30 MHz 1C / Non-Contiguous / QPSK / Low**

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


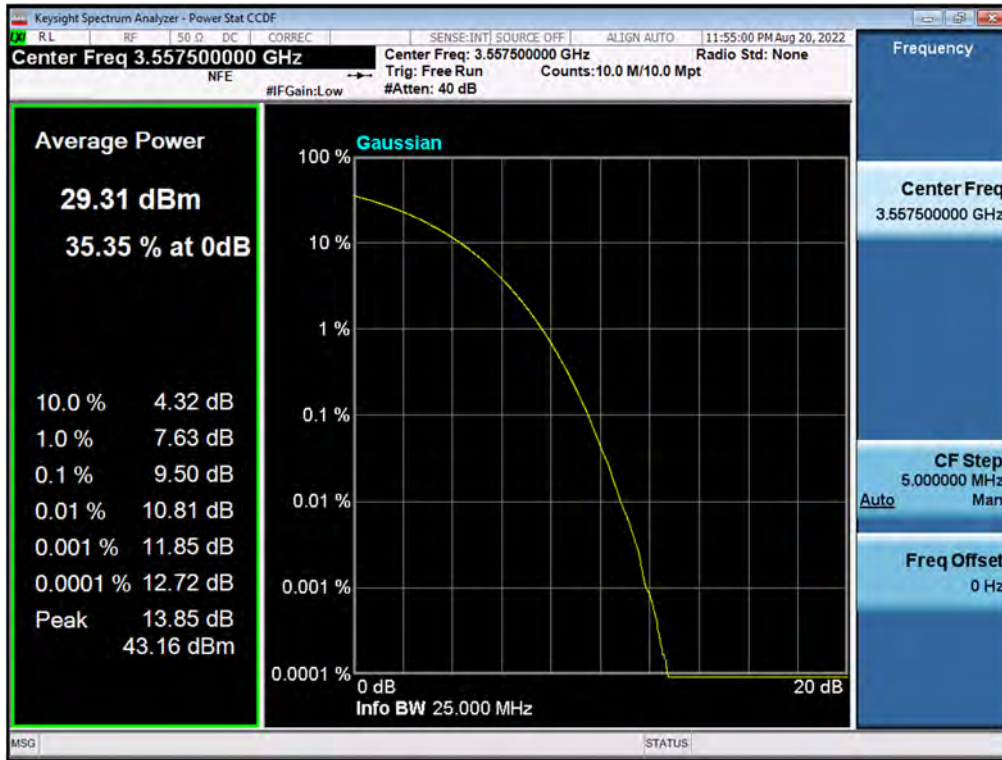
Antenna 3 / CBRS NR[(30 MHz 1C + 30 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / NR 30 MHz 1C + NR 30 MHz 1C / Non-Contiguous / QPSK / Low



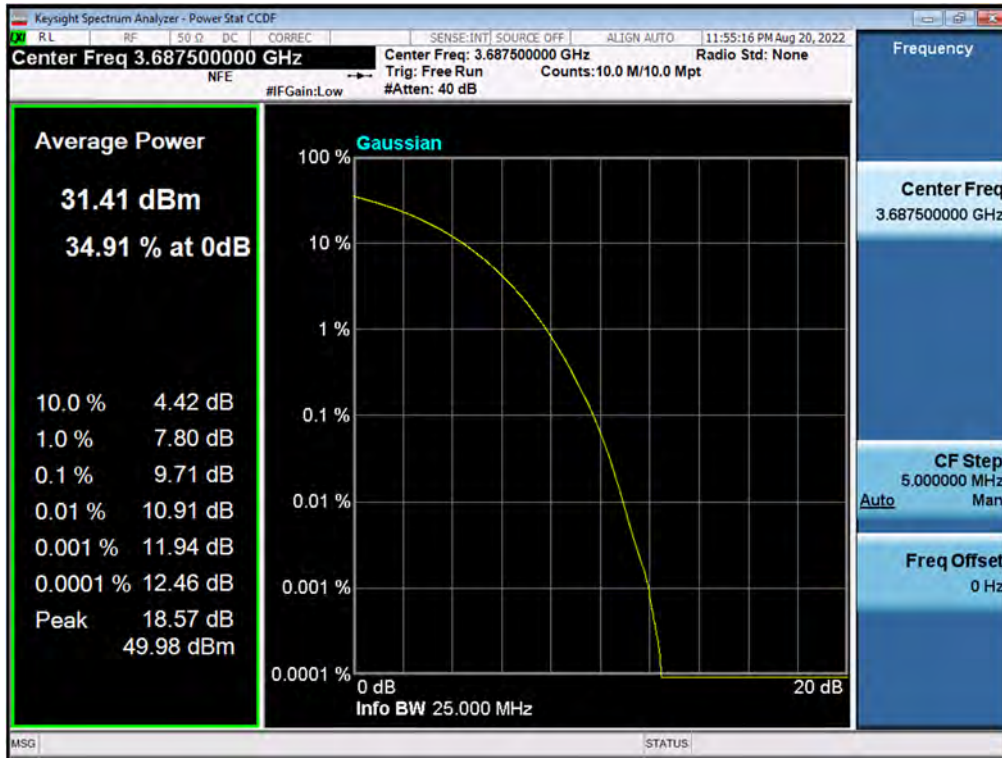
Antenna 3 / CBRS NR[(30 MHz 1C + 30 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / NR 10 MHz 1C / Non-Contiguous / QPSK / High



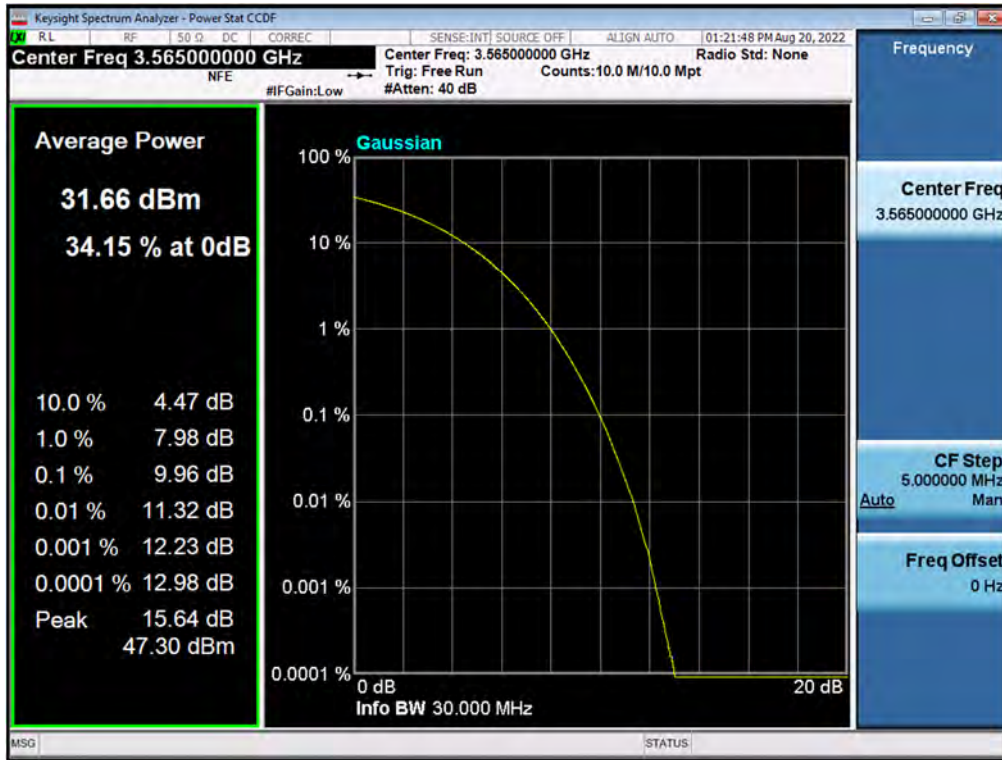
Antenna 3 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / LTE 15 MHz 1C / Non-Contiguous / 256QAM / Low



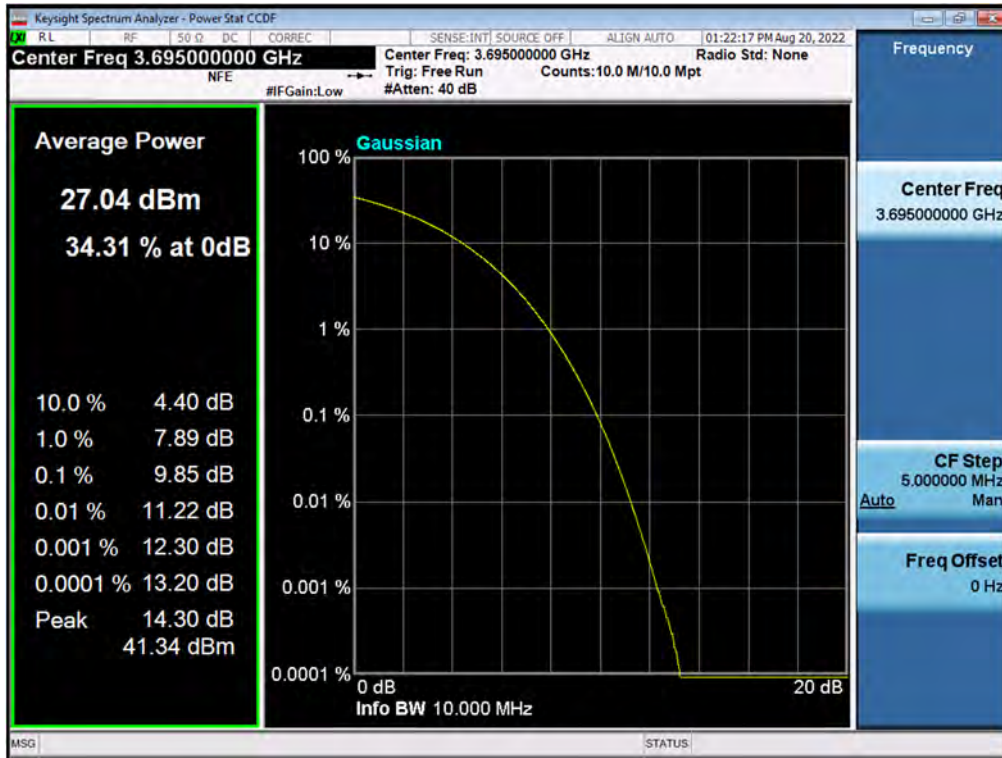
Antenna 3 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 10 MHz 1C)][3C(1C+2C)] / LTE 15 MHz 1C + LTE 10 MHz 1C / Non-Contiguous / 256QAM / High



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

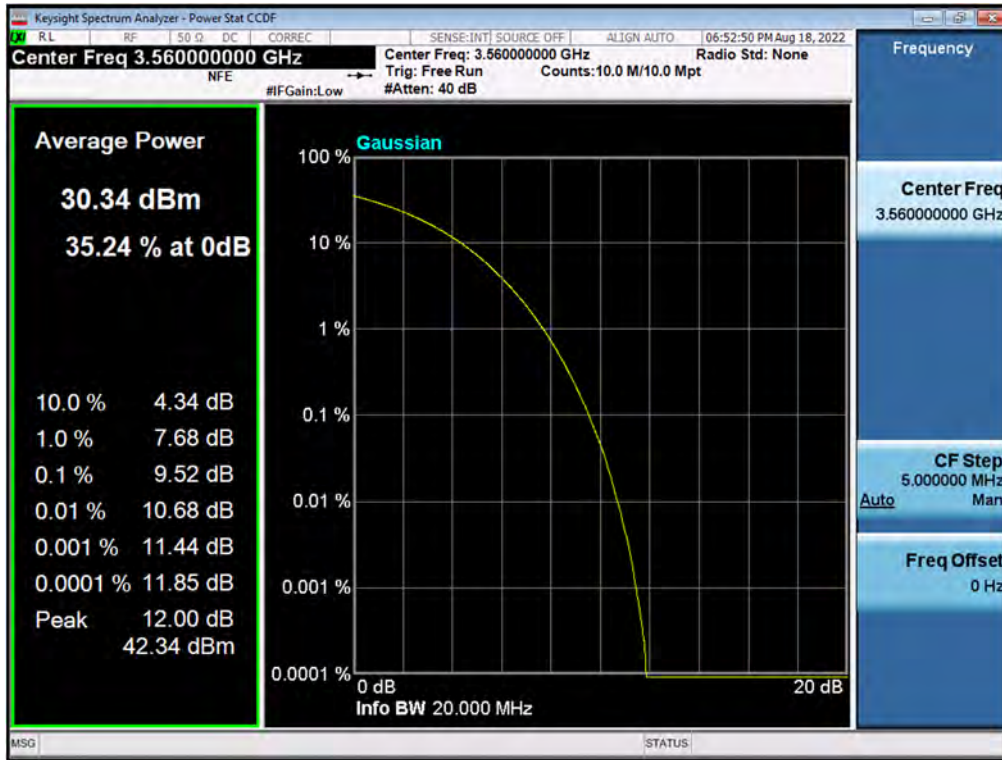


Antenna 3 / CBRS LTE[(15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][3C(2C+1C)] / LTE 10 MHz 1C / Non-Contiguous / 16QAM / High

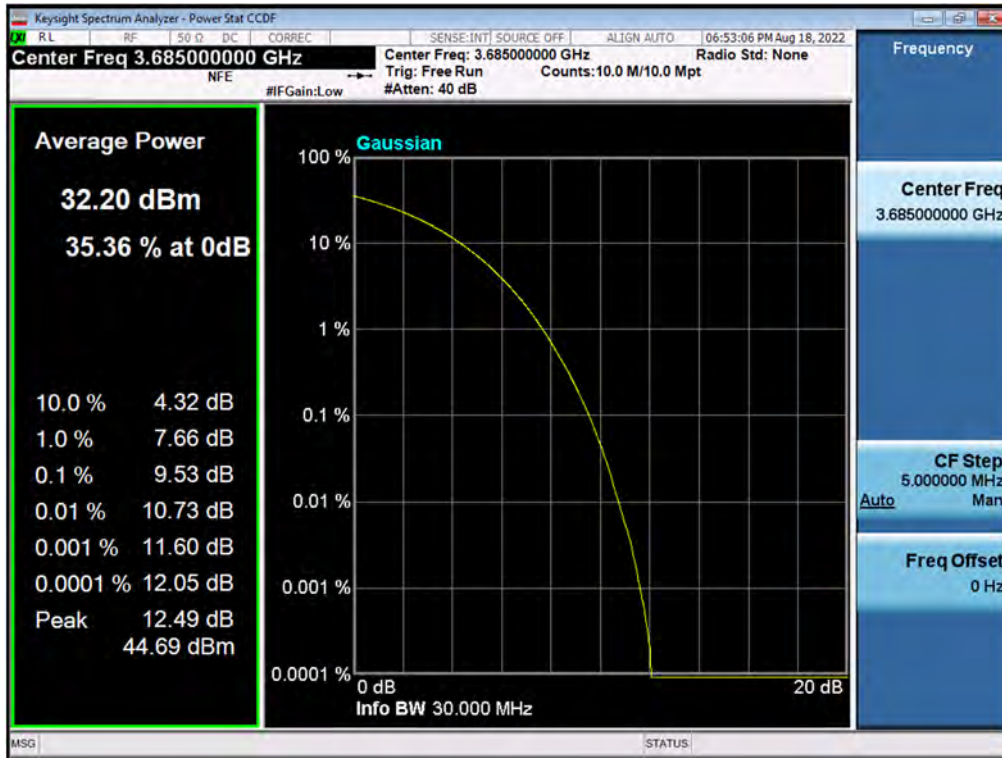




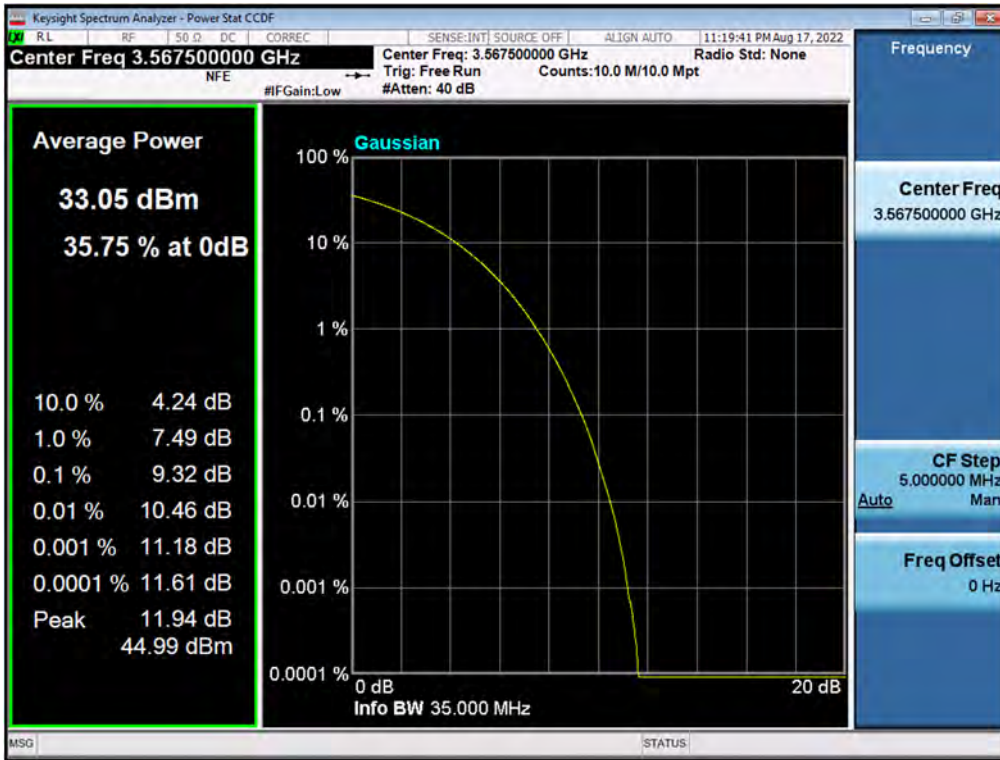
Antenna 3 / CBRS LTE[20 MHz 1C + (15 MHz 1C + 15 MHz 1C)][3C(1C+2C)] / LTE 20 MHz 1C / Non-Contiguous / 256QAM / Low



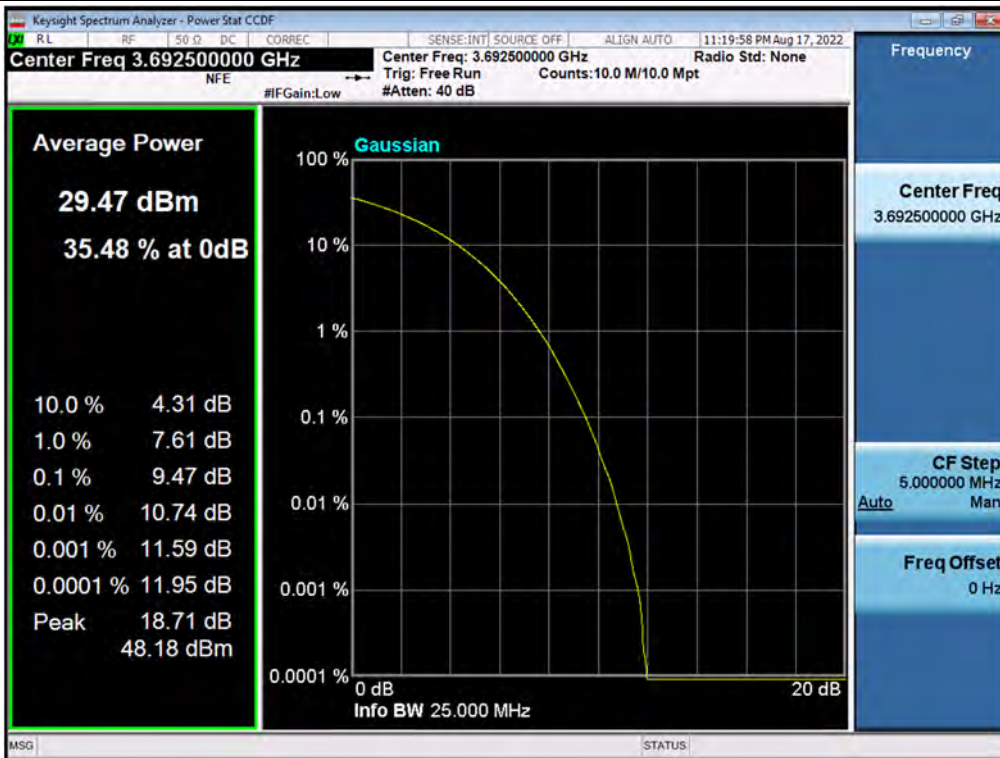
Antenna 3 / CBRS LTE[20 MHz 1C + (15 MHz 1C + 15 MHz 1C)][3C(1C+2C)] / LTE 15 MHz 1C + LTE 15 MHz 1C / Non-Contiguous / 256QAM / High



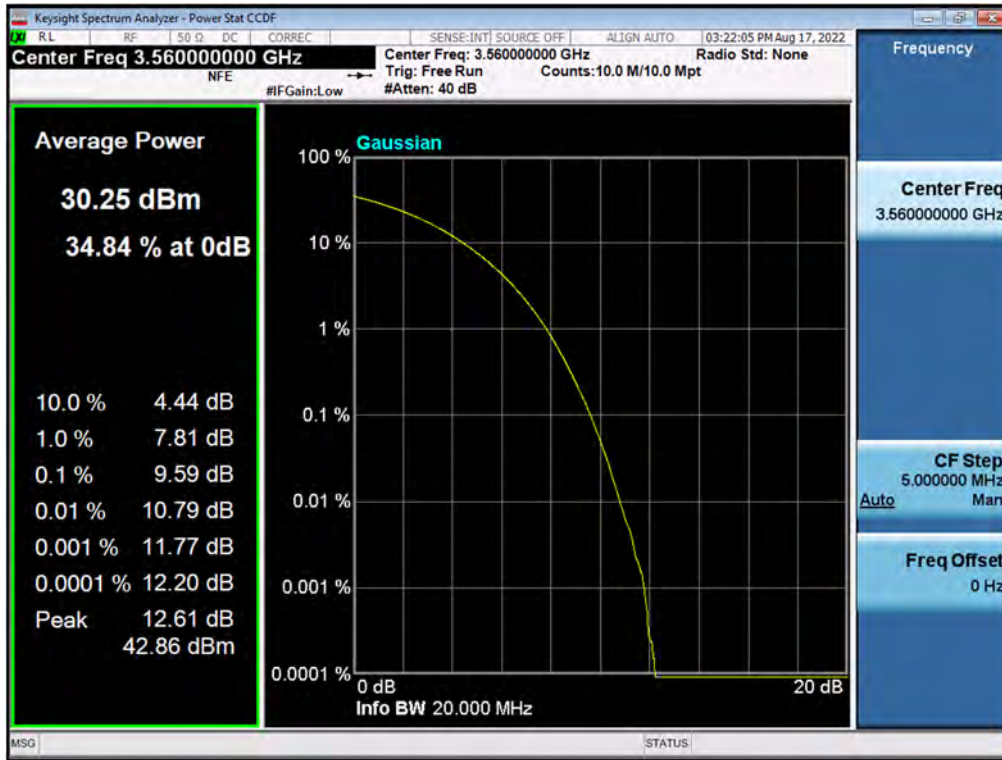
Antenna 3 / CBRS LTE[(20 MHz 1C + 15 MHz 1C) + 15 MHz 1C][3C(2C+1C)] / LTE 20 MHz 1C + LTE 15 MHz 1C / Non-Contiguous / QPSK / Low



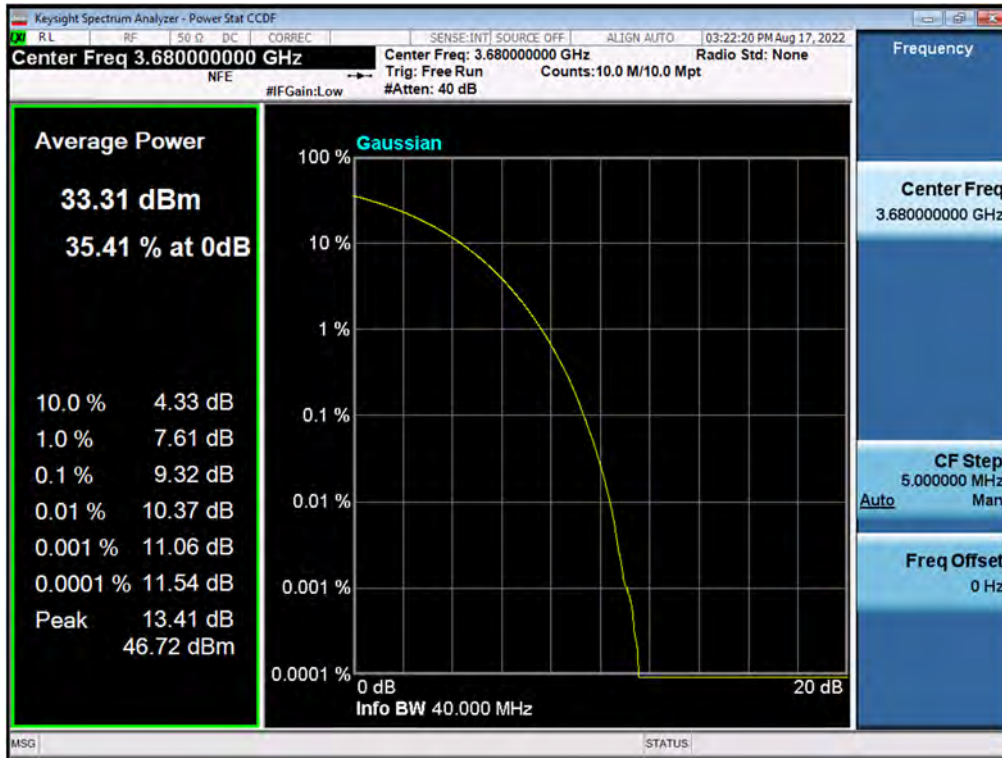
Antenna 3 / CBRS LTE[(20 MHz 1C + 15 MHz 1C) + 15 MHz 1C][3C(2C+1C)] / LTE 15 MHz 1C / Non-Contiguous / QPSK / High



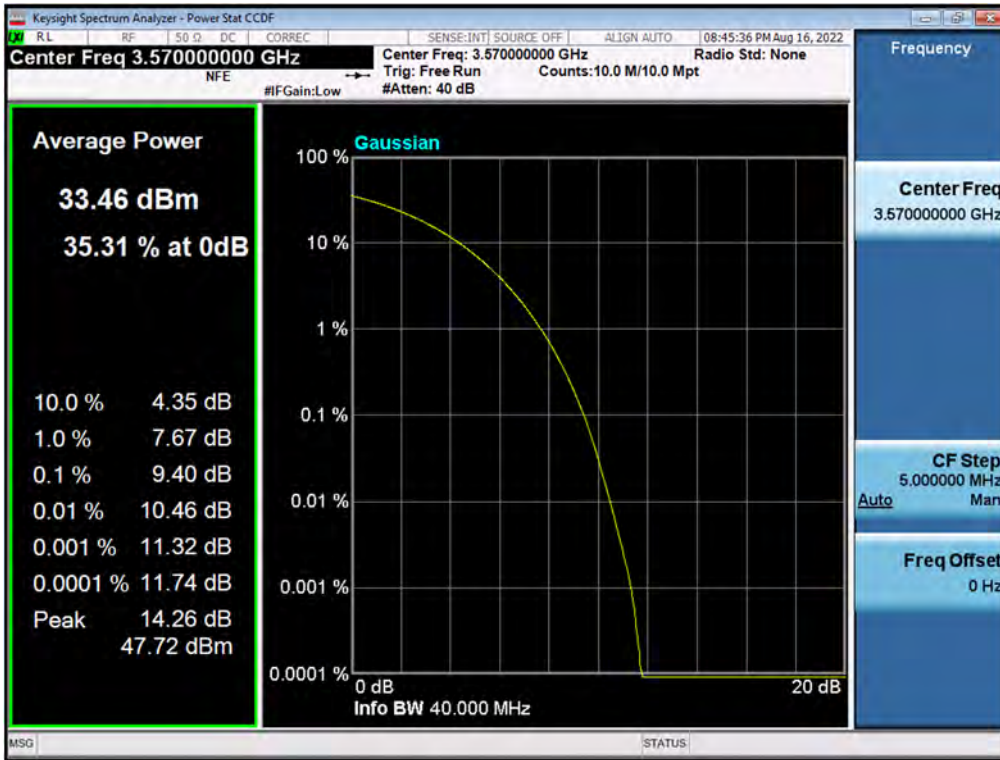
Antenna 3 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C)][3C(1C+2C)] / LTE 20 MHz 1C / Non-Contiguous / QPSK / Low



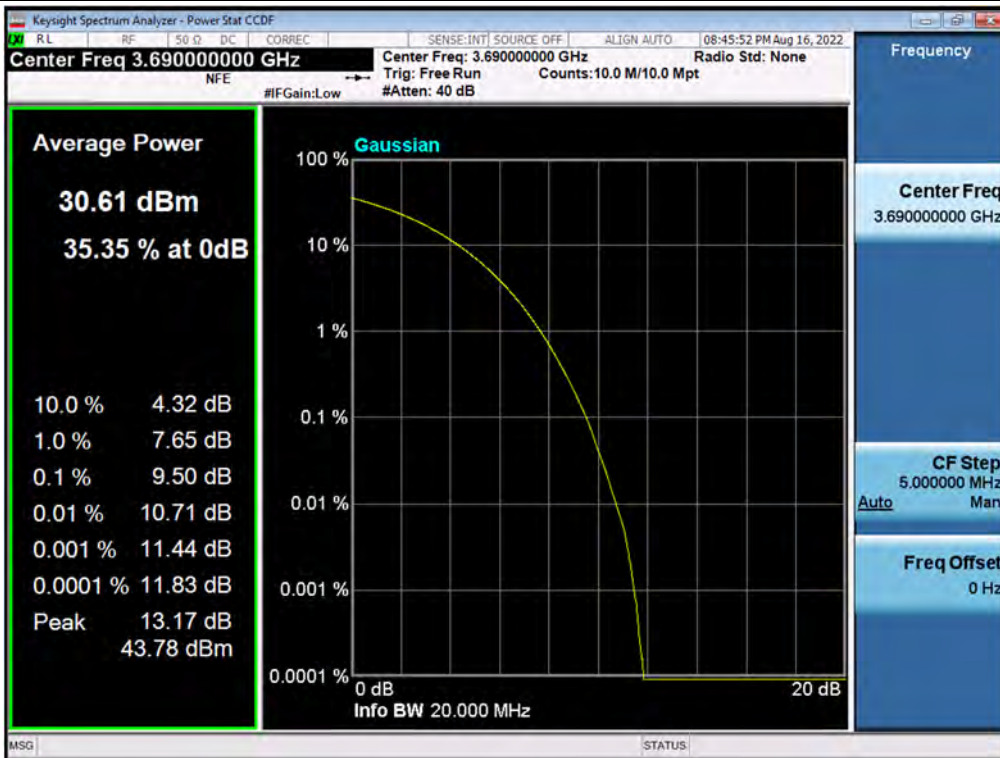
Antenna 3 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C)][3C(1C+2C)] / LTE 20 MHz 1C + LTE 20 MHz 1C / Non-Contiguous / QPSK / High



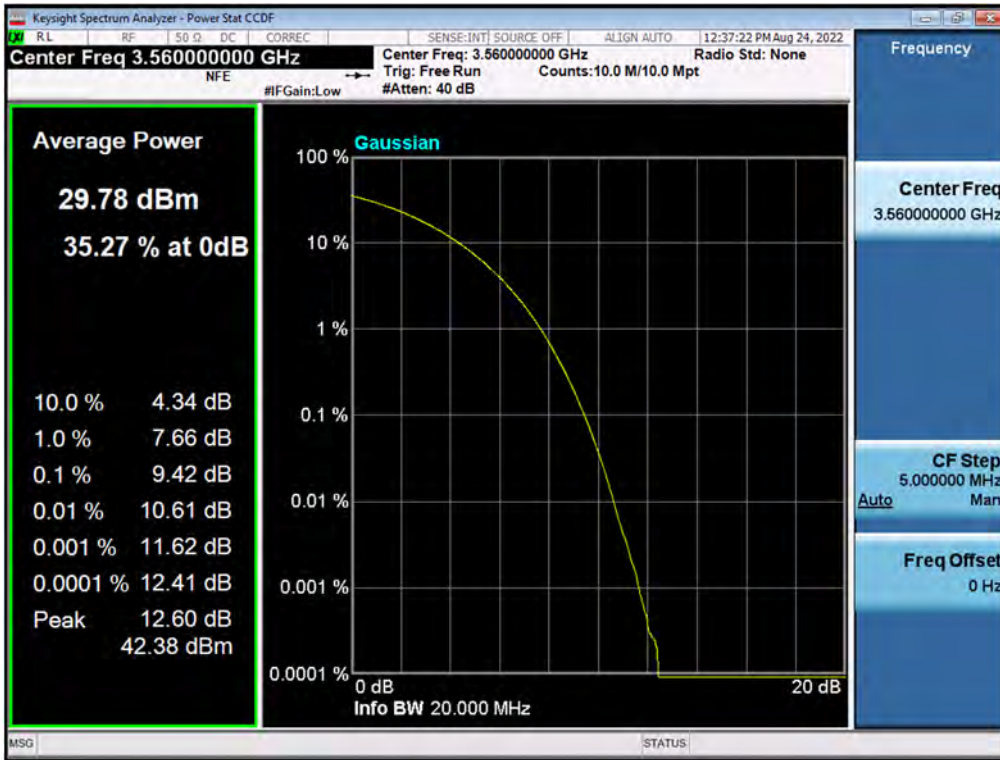
Antenna 3 / CBRS LTE[(20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][3C(2C+1C)] / LTE 20 MHz 1C + LTE 20 MHz 1C / Non-Contiguous / QPSK / Low



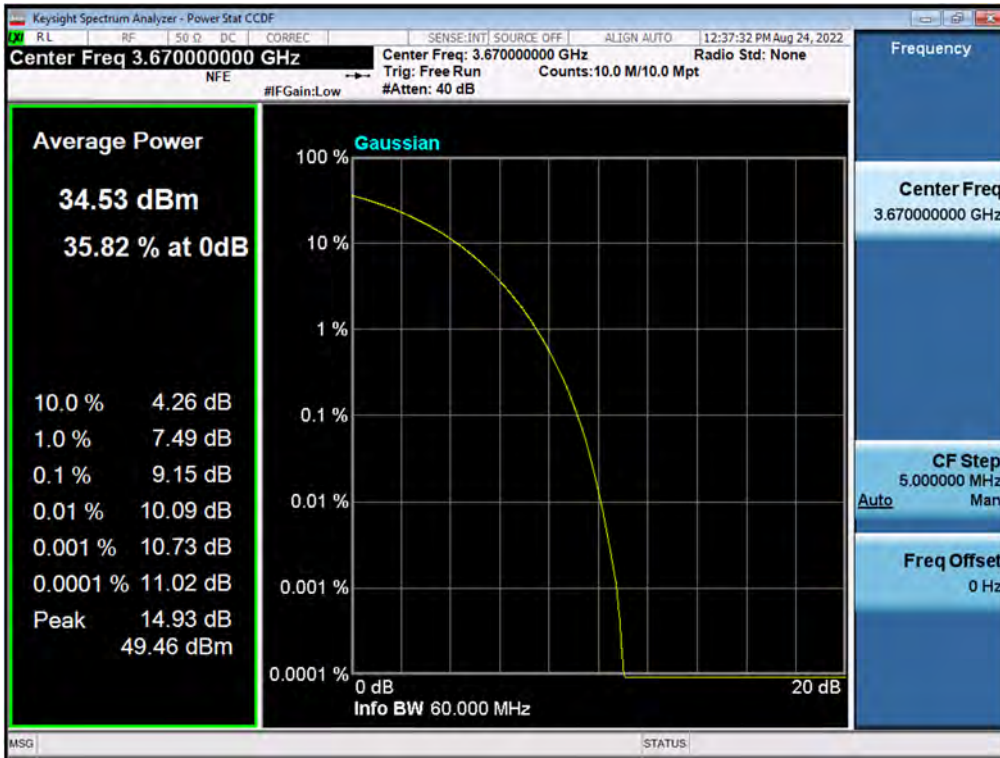
Antenna 3 / CBRS LTE[(20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][3C(2C+1C)] / LTE 20 MHz 1C / Non-Contiguous / QPSK / High



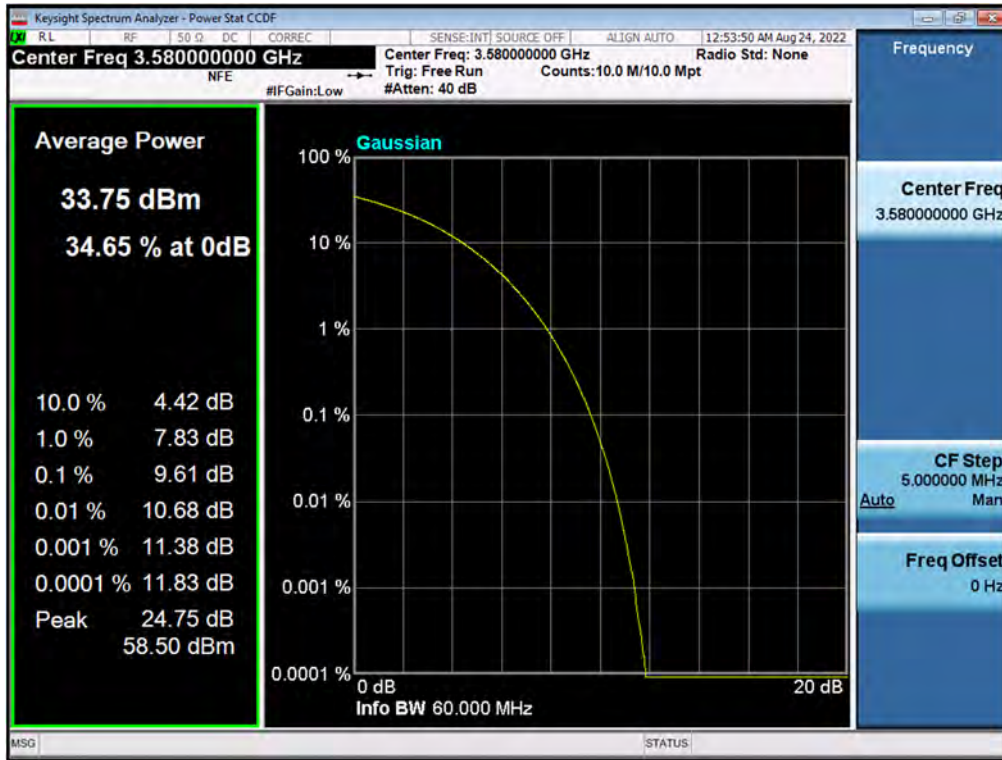
Antenna 3 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][4C(1C+3C)] / LTE 20 MHz 1C / Non-Contiguous / QPSK / Low



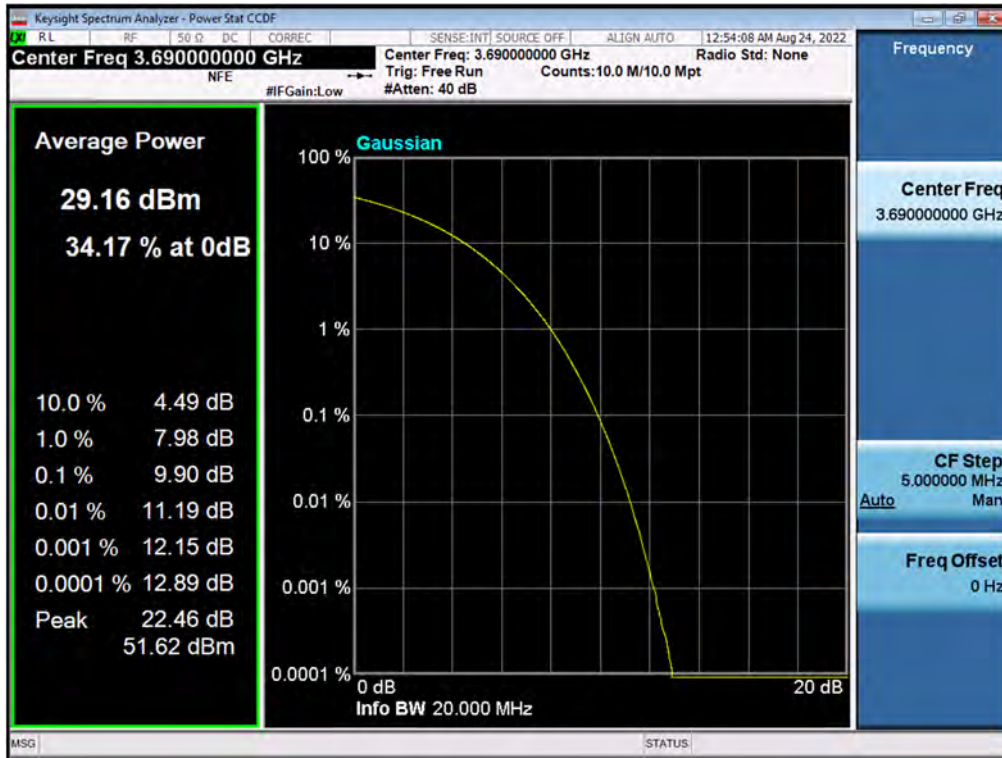
Antenna 3 / CBRS LTE[20 MHz 1C + (20 MHz 1C + 20 MHz 1C + 20 MHz 1C)][4C(1C+3C)] / LTE 20 MHz 1C + LTE 20 MHz 1C + LTE 20 MHz 1C / Non-Contiguous / QPSK / High



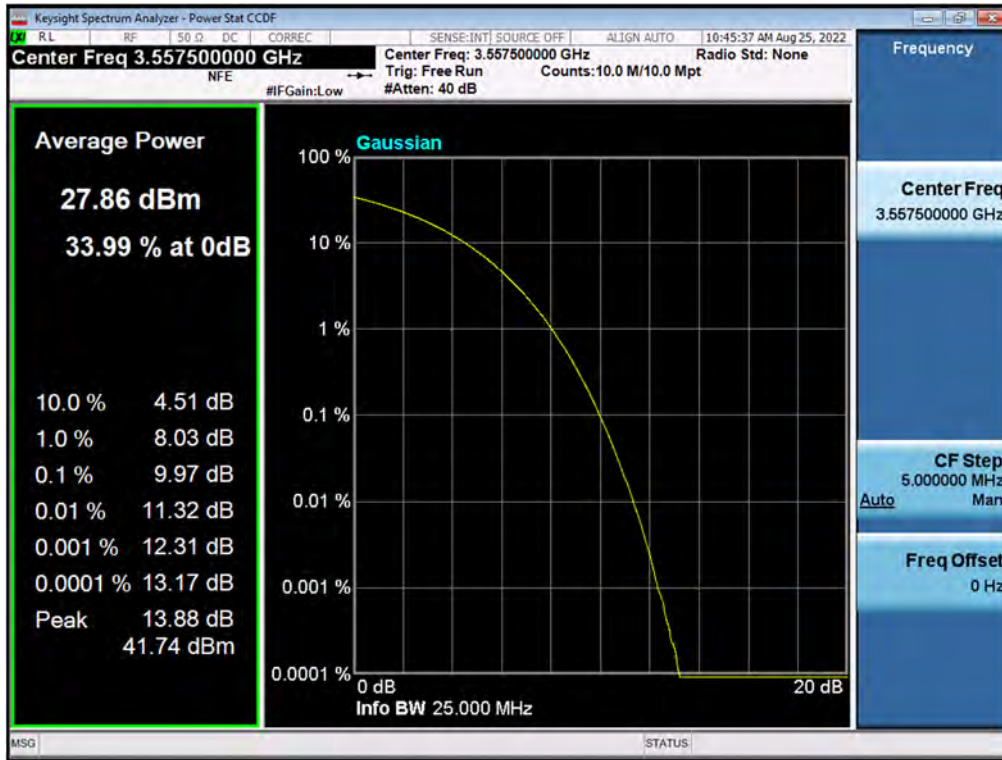
Antenna 3 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][4C(3C+1C)] / LTE 20 MHz 1C + LTE 20 MHz 1C +  
LTE 20 MHz 1C / Non-Contiguous / 16QAM / Low



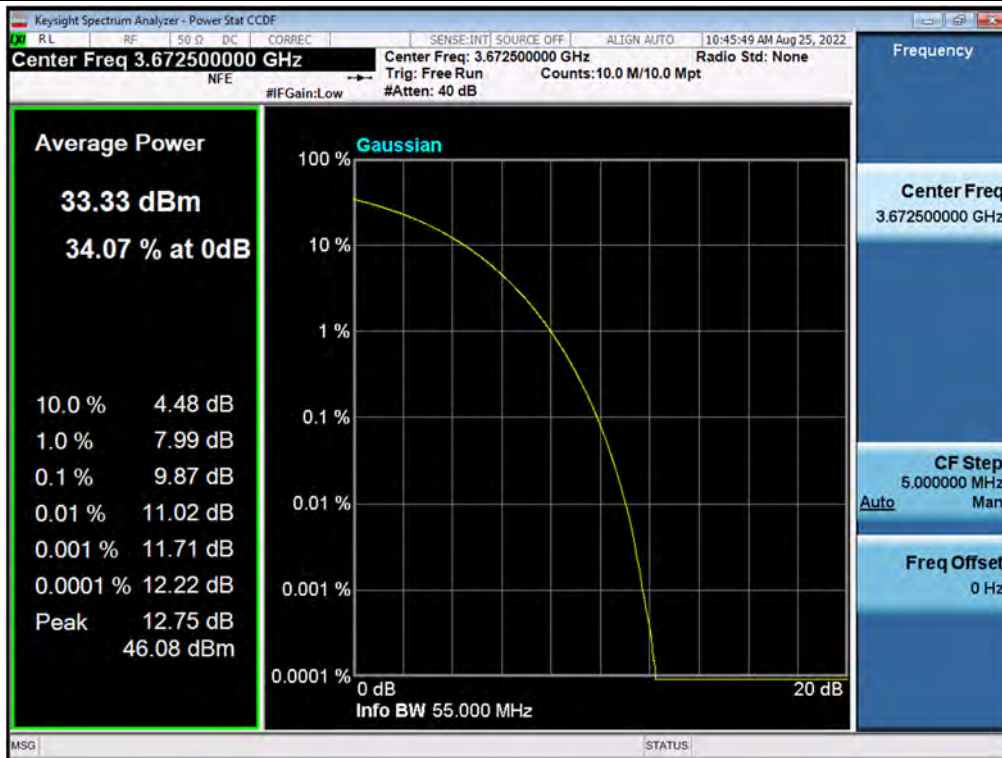
Antenna 3 / CBRS LTE[(20 MHz 1C + 20 MHz 1C + 20 MHz 1C) + 20 MHz 1C][4C(3C+1C)] / LTE 20 MHz 1C / Non-Contiguous  
/ 16QAM / High



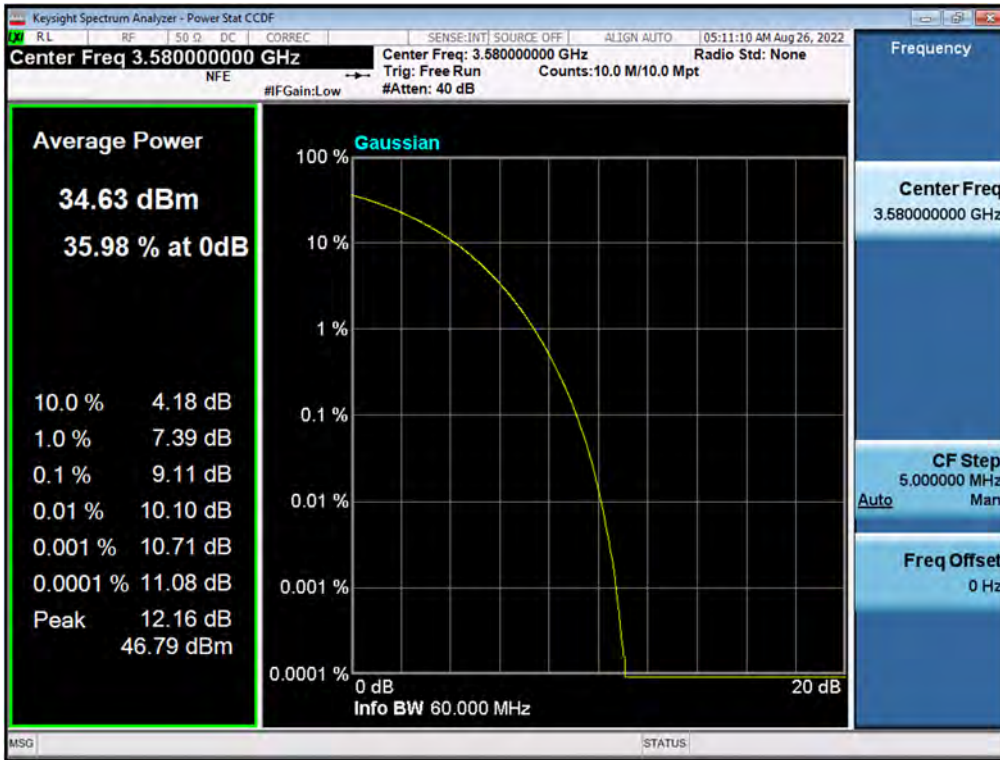
Antenna 3 / CBRS LTE[15 MHz 1C + (15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 10 MHz 1C)][5C(1C+4C)] / LTE 15 MHz 1C / Non-Contiguous / 16QAM / Low



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



Antenna 3 / CBRS LTE[(15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / LTE 15 MHz 1C + LTE 15 MHz 1C + LTE 15 MHz 1C + LTE 15 MHz 1C / Non-Contiguous / 64QAM / Low



Antenna 3 / CBRS LTE[(15 MHz 1C + 15 MHz 1C + 15 MHz 1C + 15 MHz 1C) + 10 MHz 1C][5C(4C+1C)] / LTE 10 MHz 1C / Non-Contiguous / 64QAM / High

