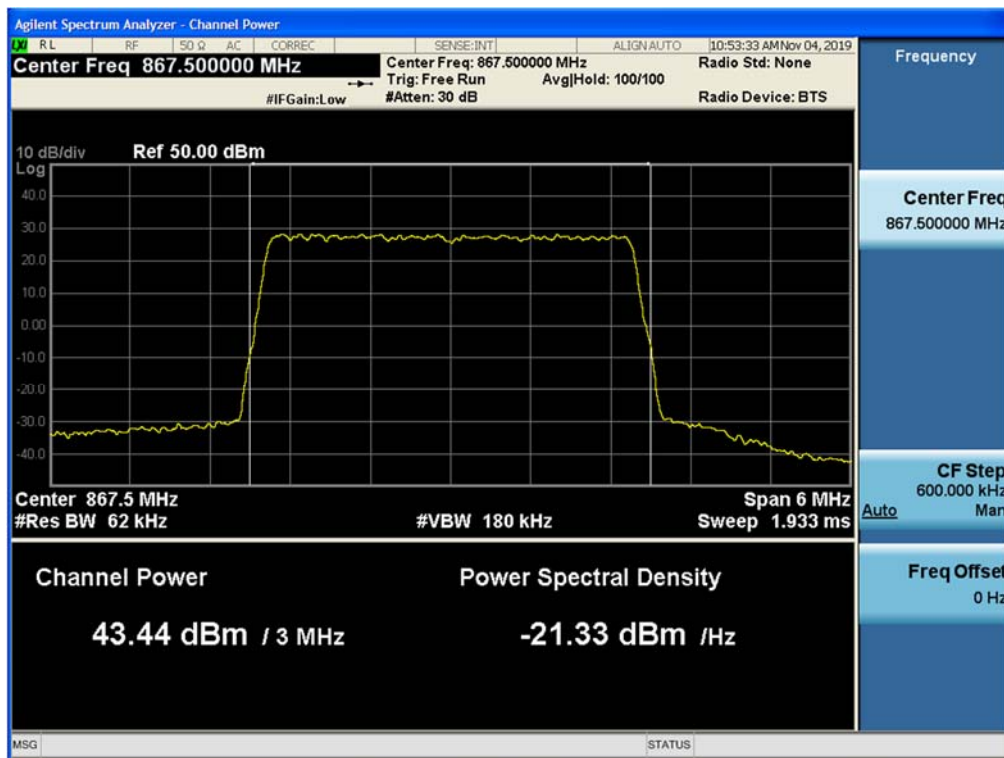
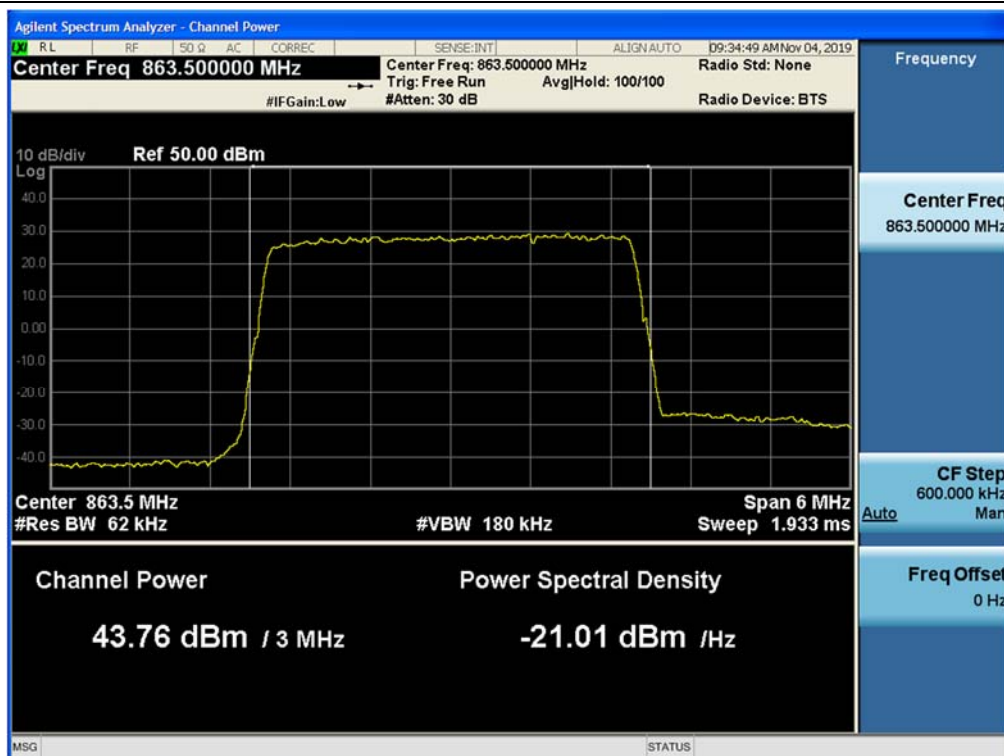


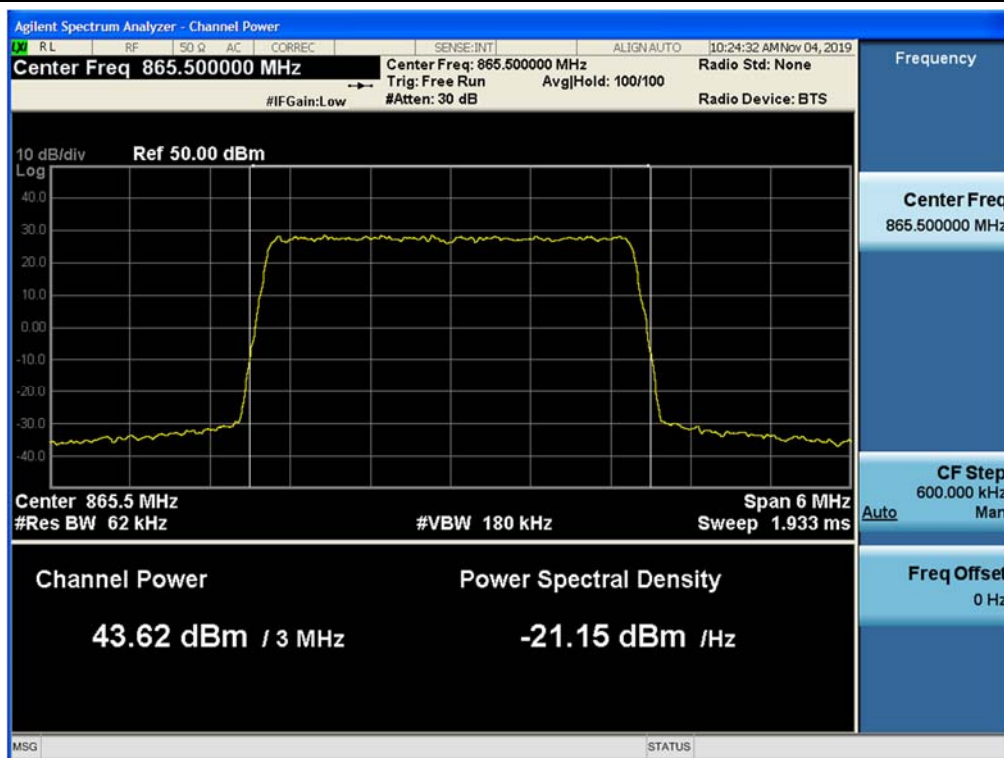
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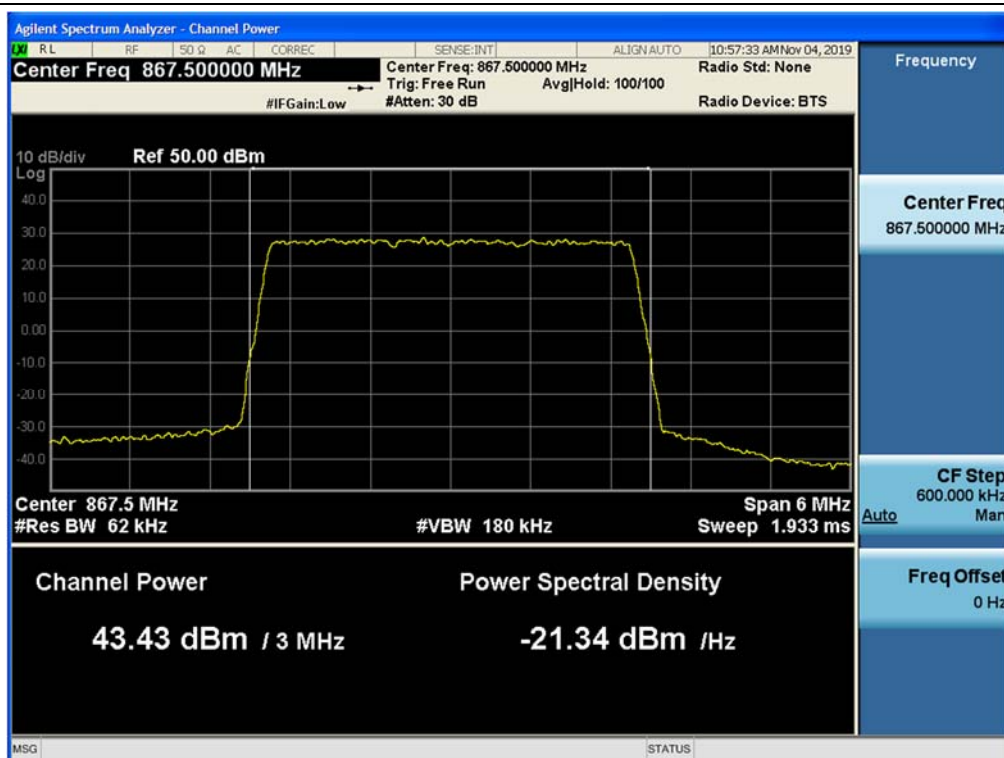
Antenna 2 / LTE 3 MHz 1 Carrier / 256QAM / Low



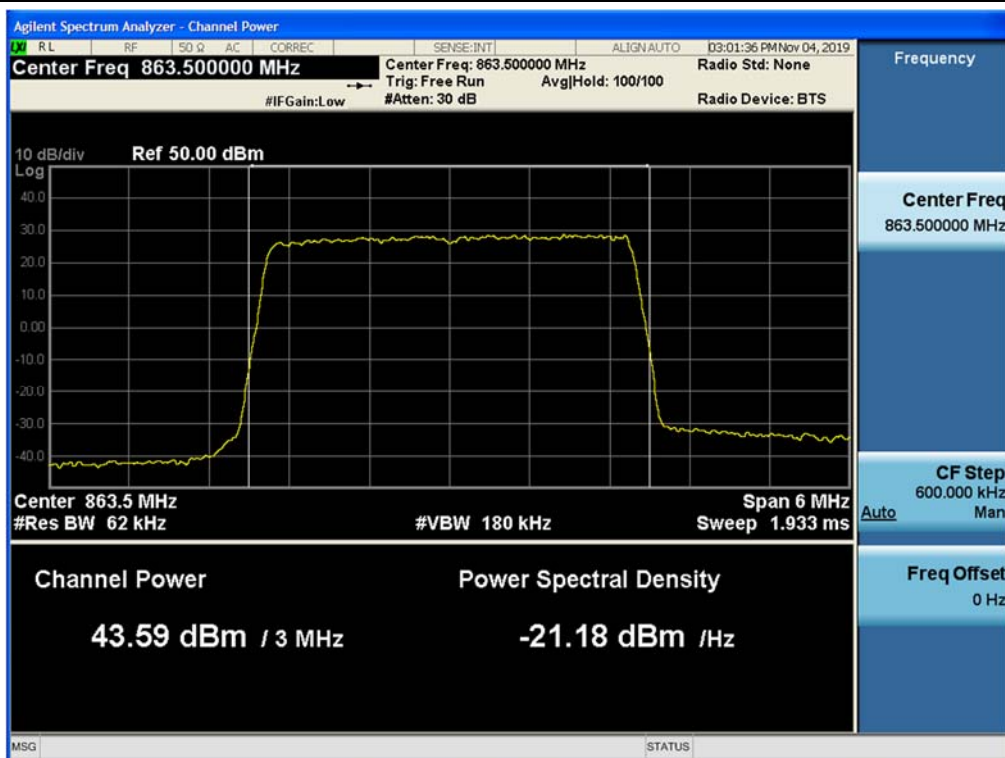
Antenna 2 / LTE 3 MHz 1 Carrier / 256QAM / Middle



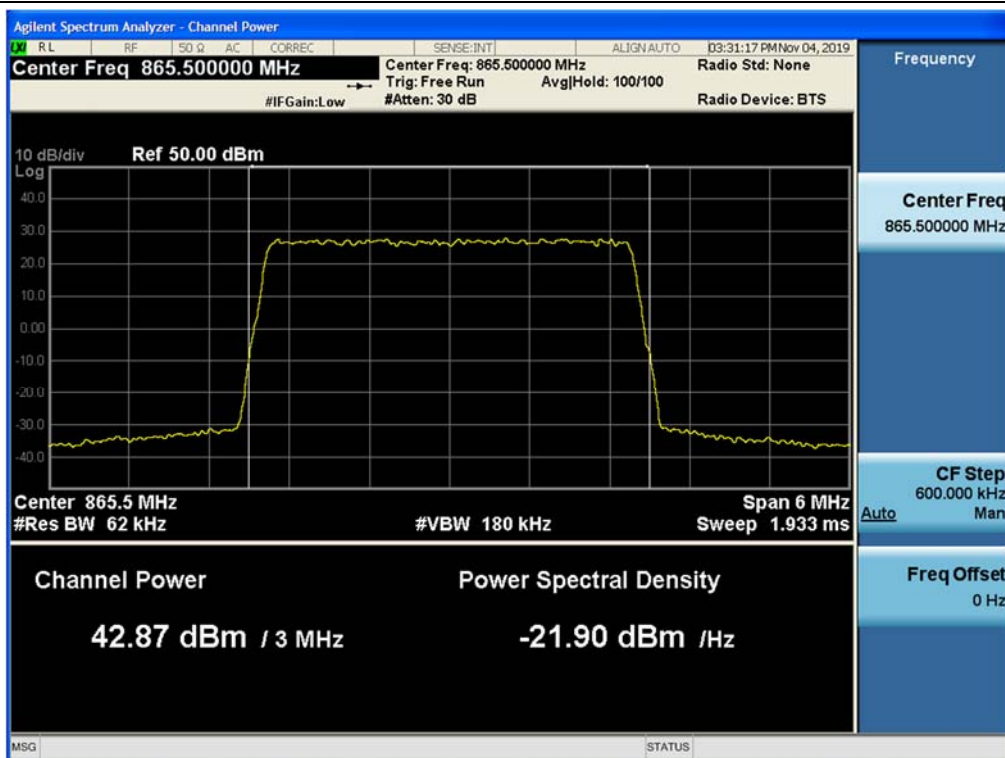
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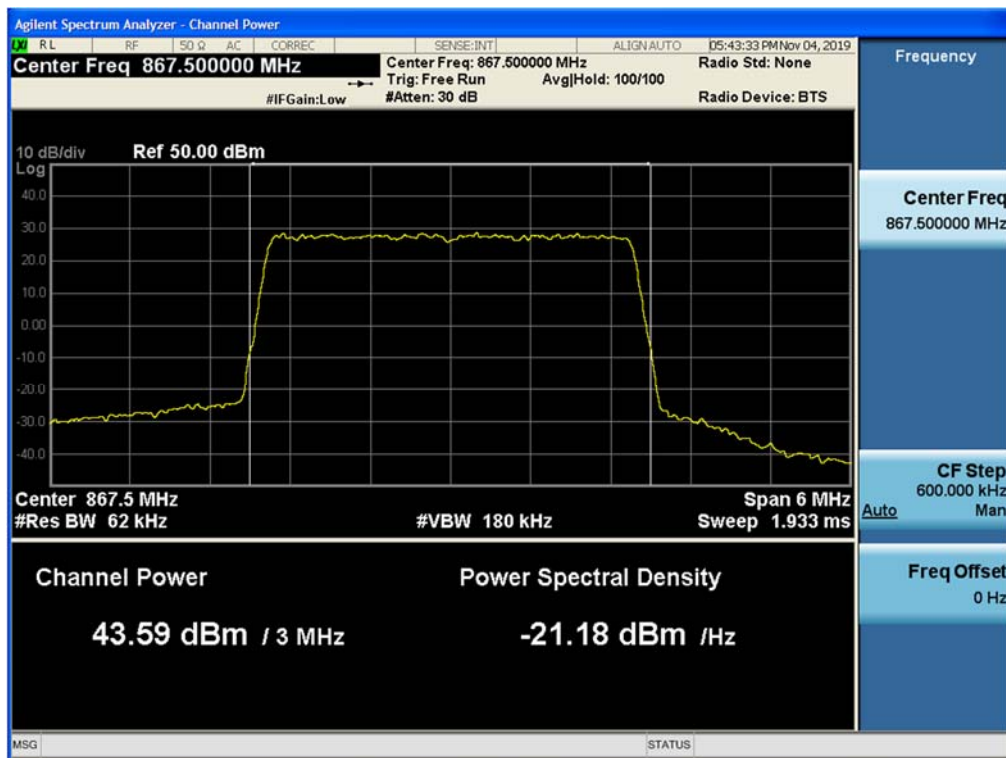
Antenna 3 / LTE 3 MHz 1 Carrier / QPSK / Low



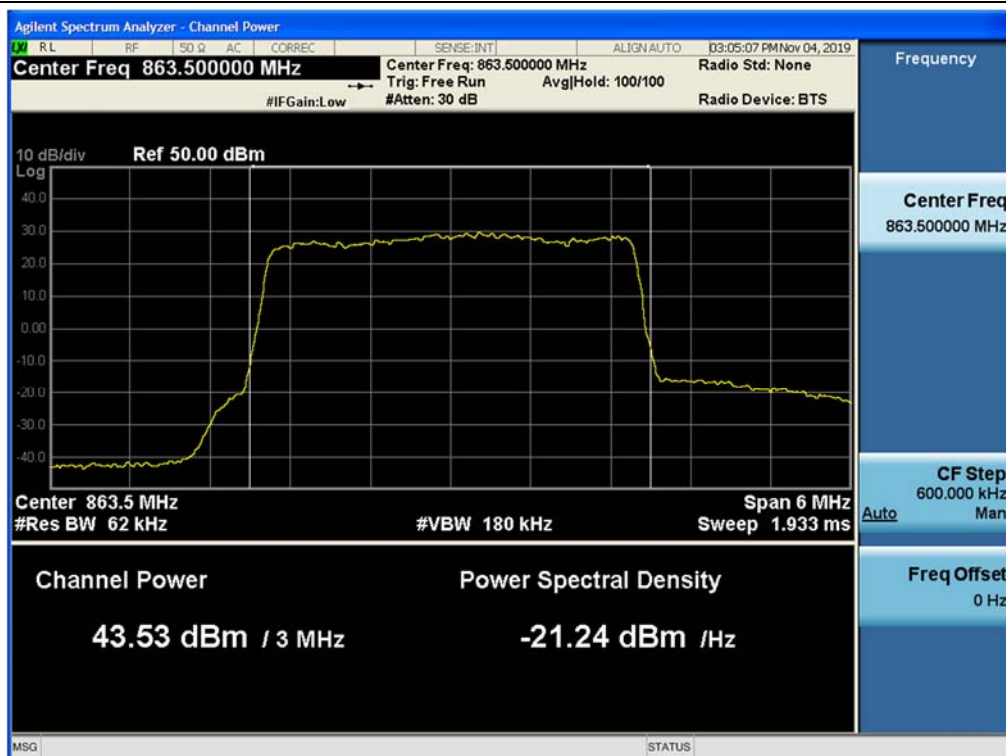
Antenna 3 / LTE 3 MHz 1 Carrier / QPSK / Middle



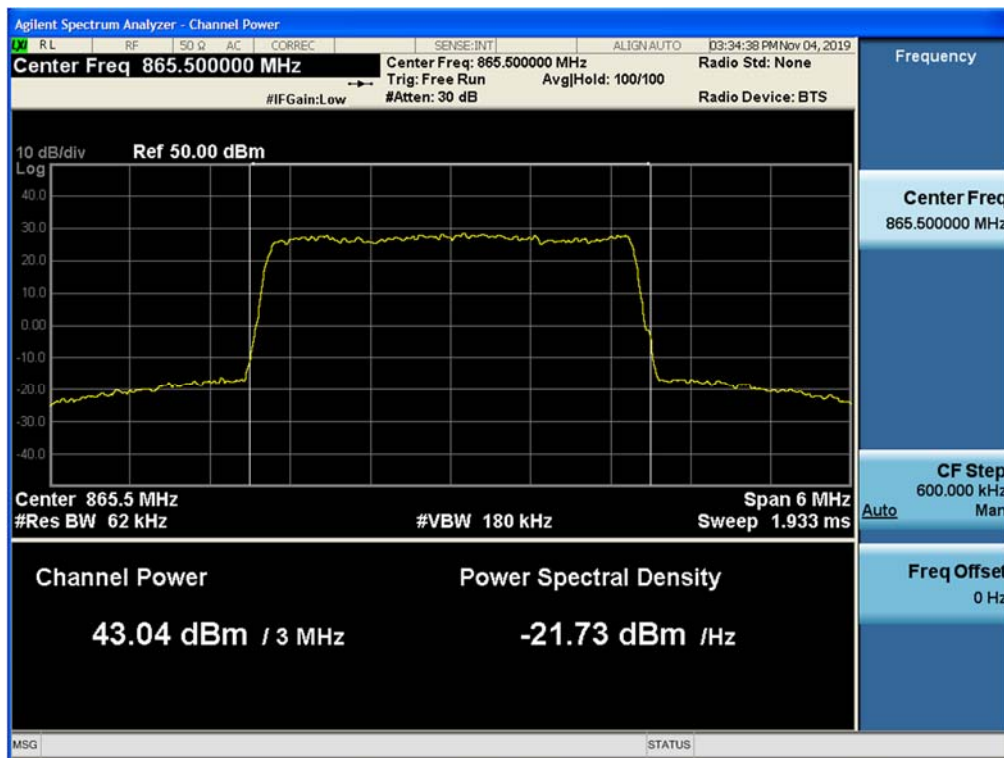
Antenna 3 / LTE 3 MHz 1 Carrier / QPSK / High



Antenna 3 / LTE 3 MHz 1 Carrier / 16QAM / Low



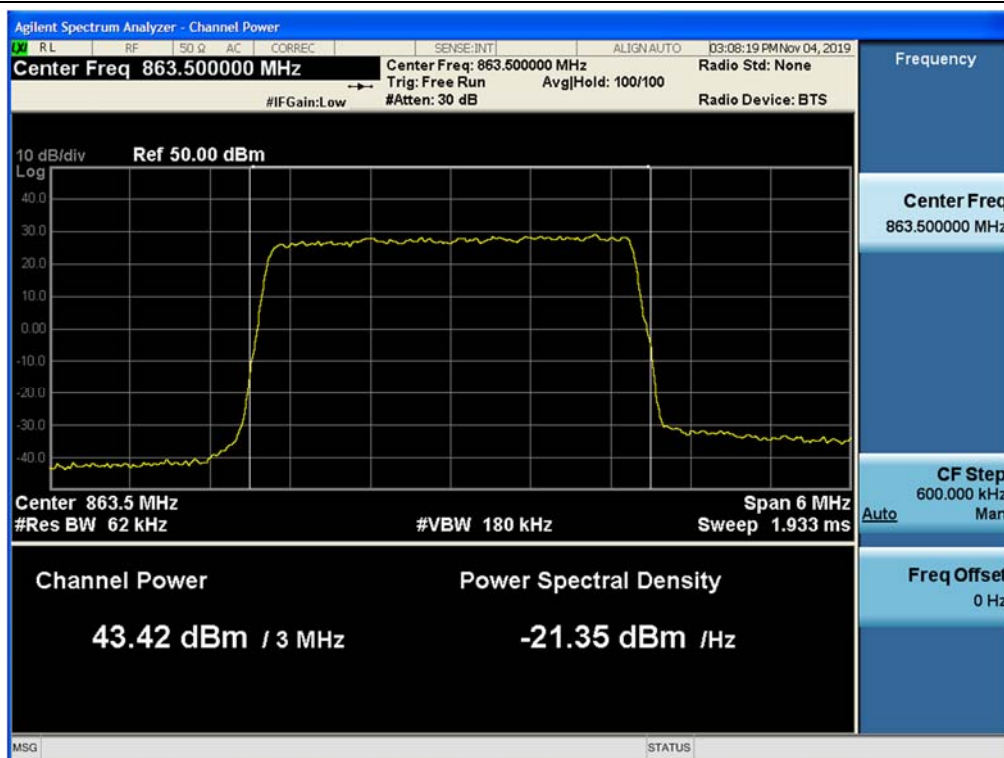
Antenna 3 / LTE 3 MHz 1 Carrier / 16QAM / Middle



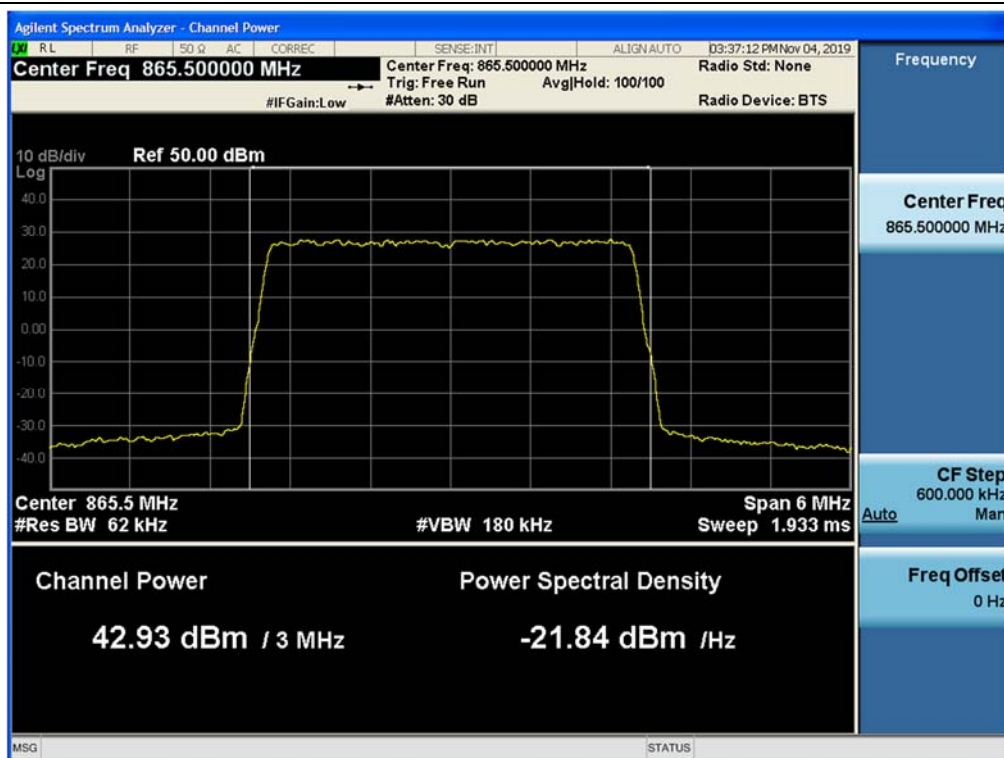
Antenna 3 / LTE 3 MHz 1 Carrier / 16QAM / High



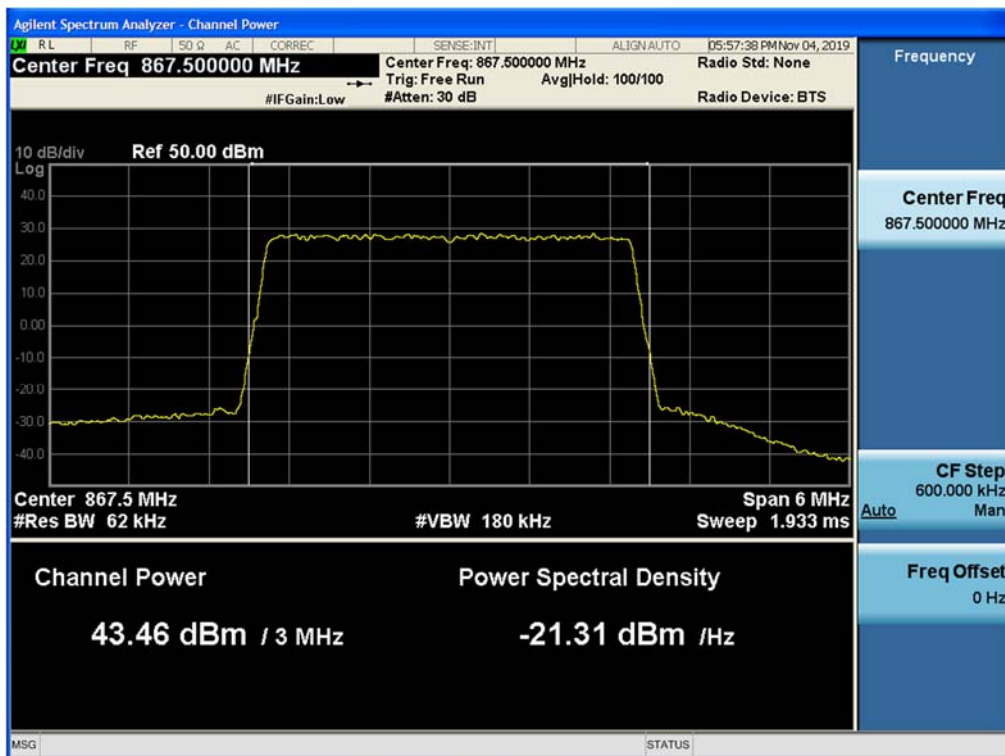
Antenna 3 / LTE 3 MHz 1 Carrier / 64QAM / Low



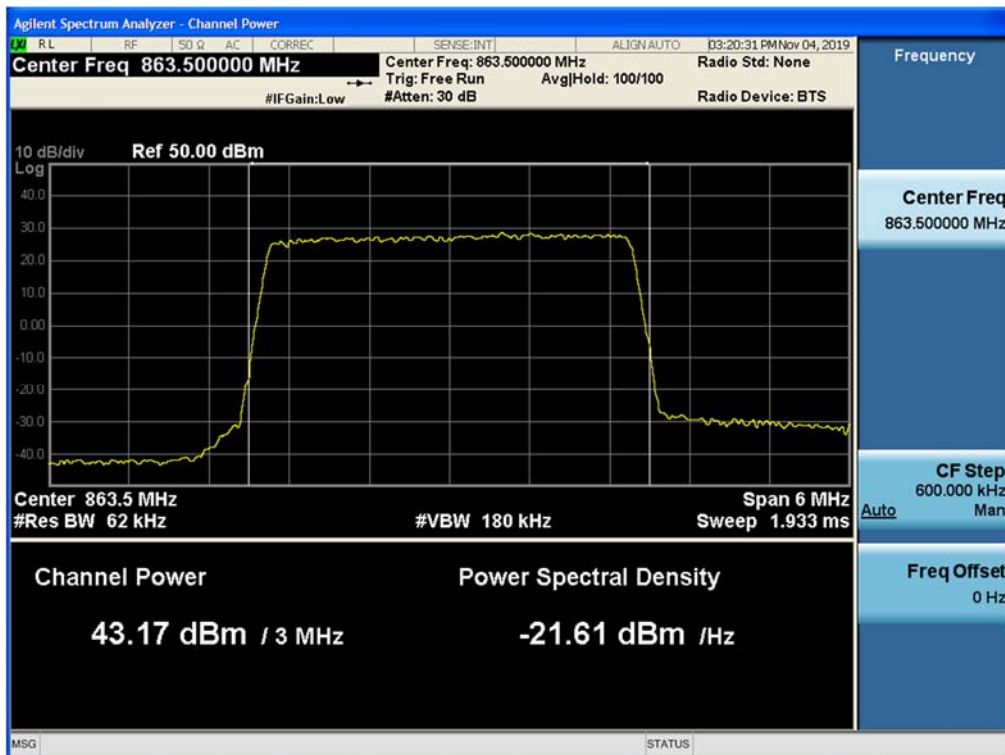
Antenna 3 / LTE 3 MHz 1 Carrier / 64QAM / Middle



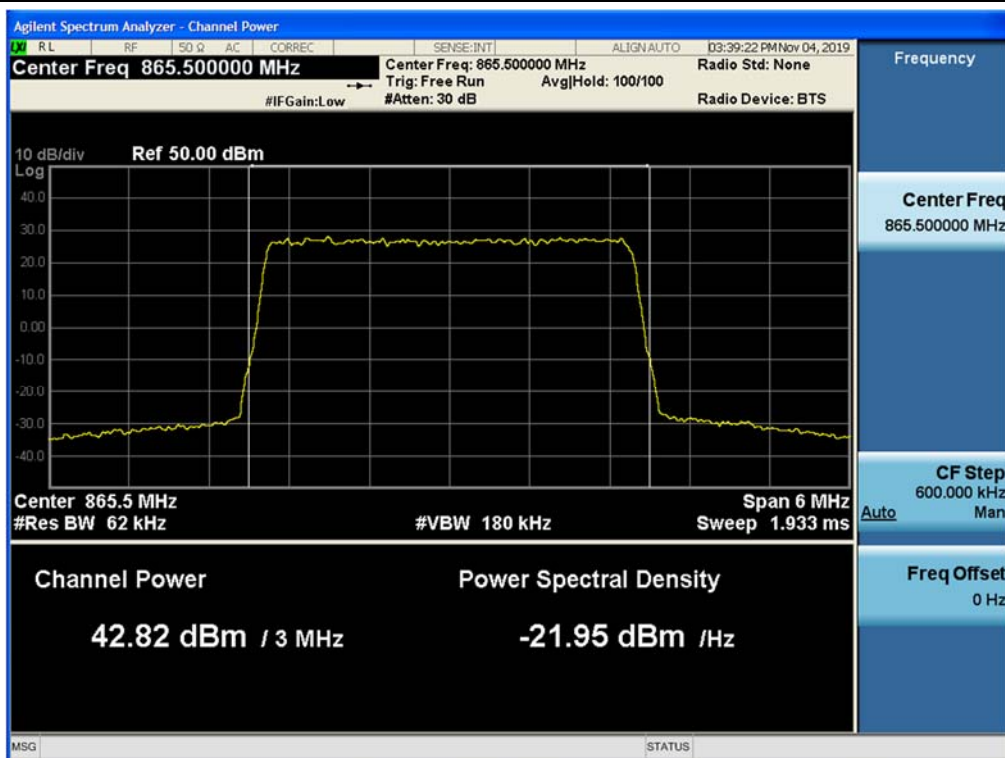
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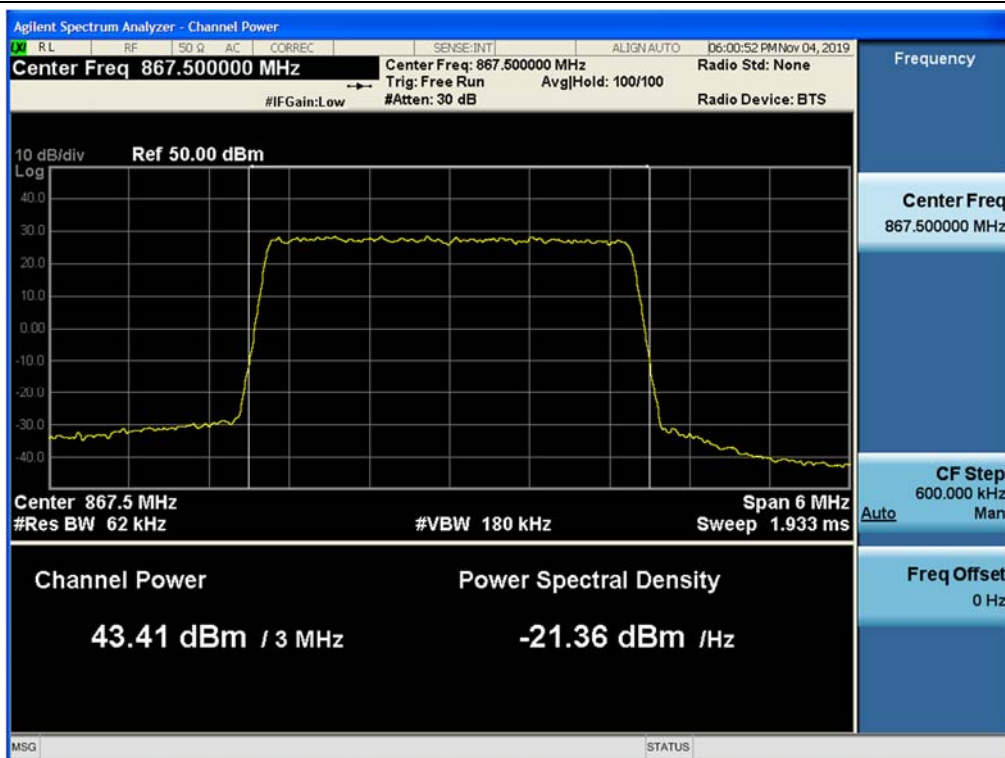
Antenna 3 / LTE 3 MHz 1 Carrier / 256QAM / Low



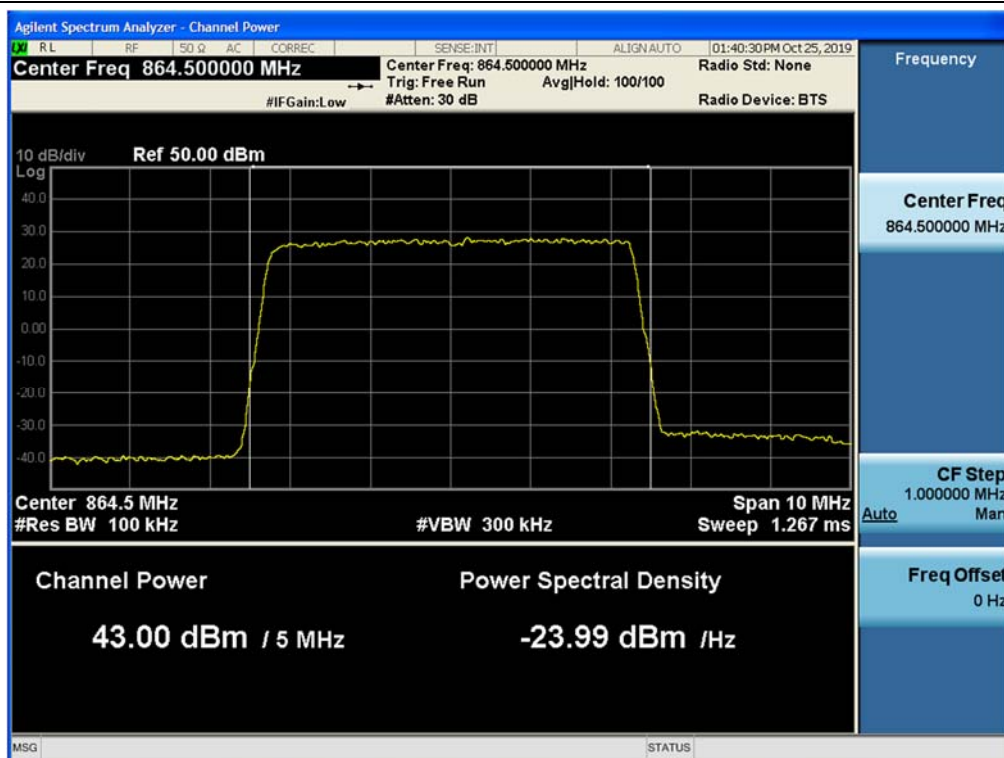
Antenna 3 / LTE 3 MHz 1 Carrier / 256QAM / Middle



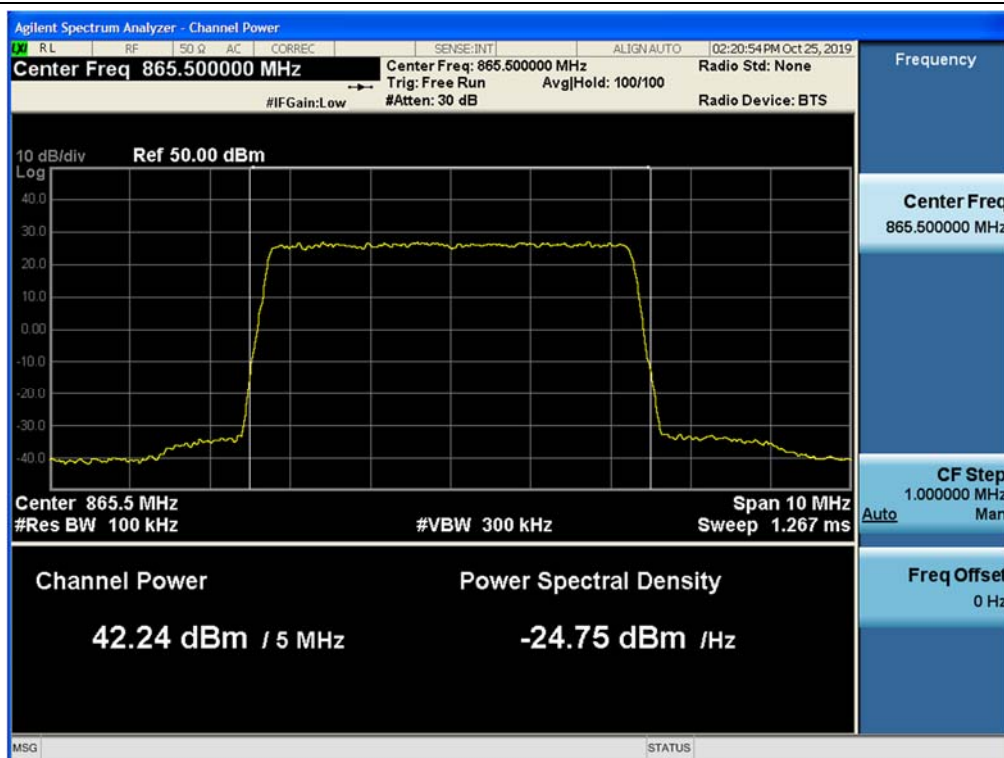
Antenna 3 / LTE 3 MHz 1 Carrier / 256QAM / High



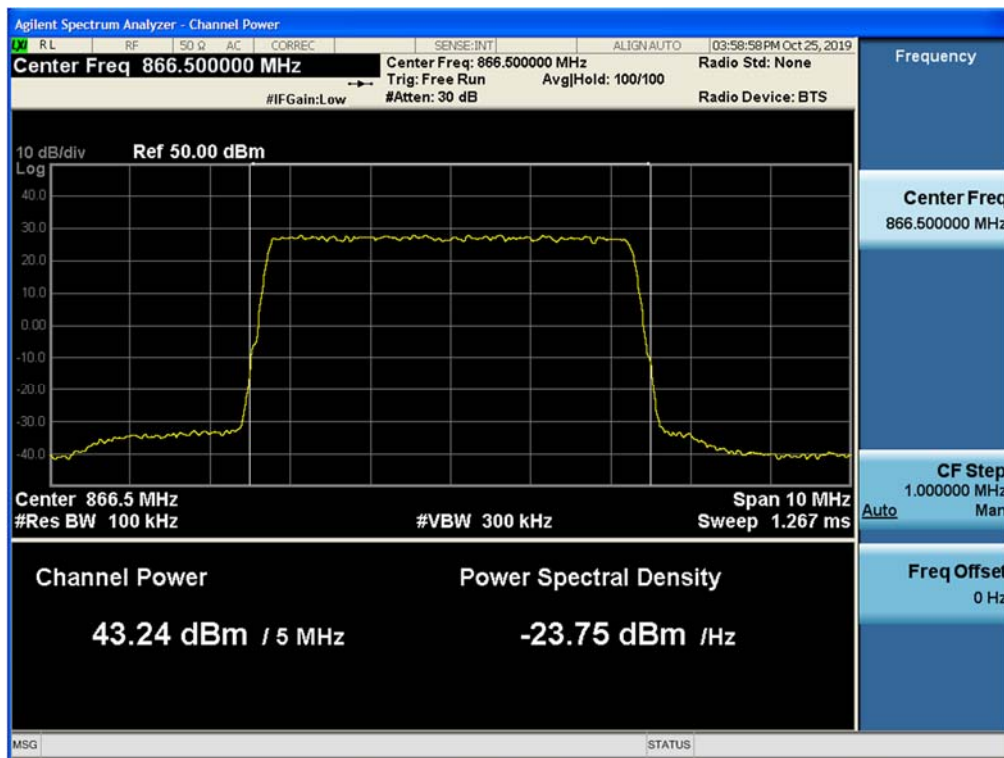
Antenna 0 / LTE 5 MHz 1 Carrier / QPSK / Low



Antenna 0 / LTE 5 MHz 1 Carrier / QPSK / Middle



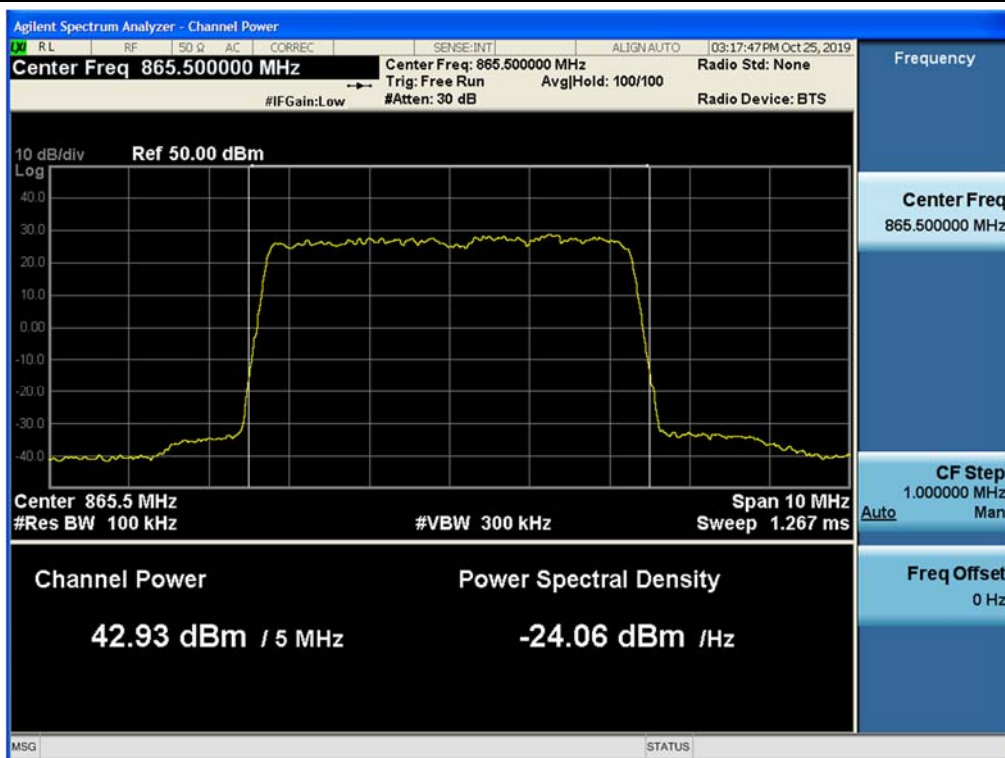
Antenna 0 / LTE 5 MHz 1 Carrier / QPSK / High



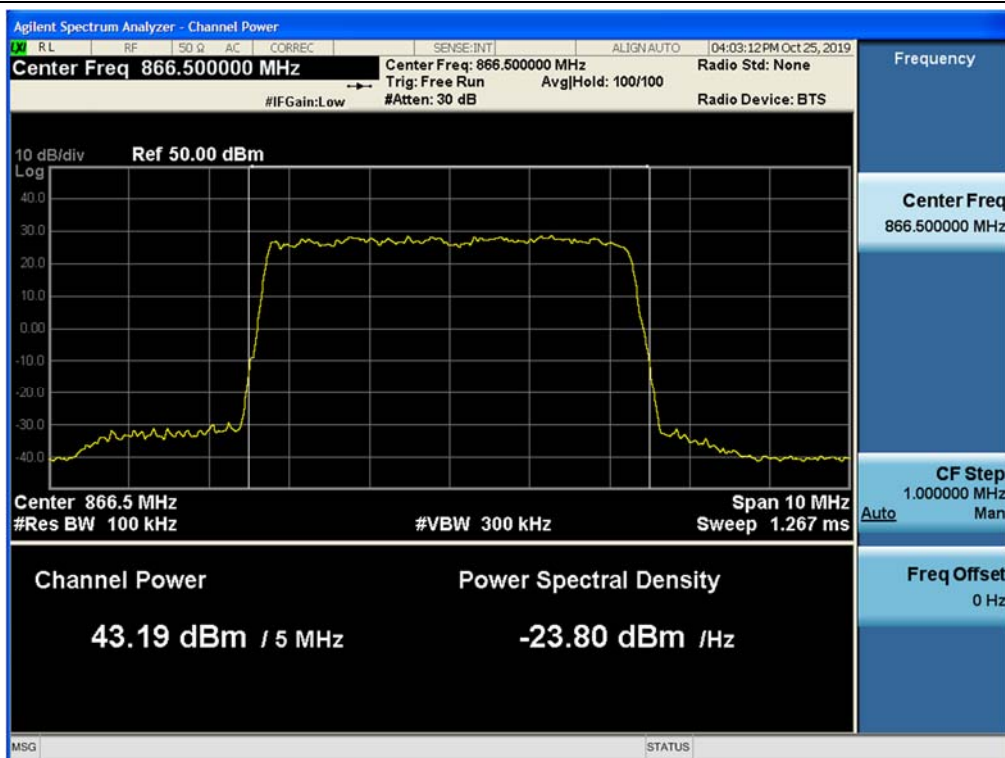
Antenna 0 / LTE 5 MHz 1 Carrier / 16QAM / Low



Antenna 0 / LTE 5 MHz 1 Carrier / 16QAM / Middle



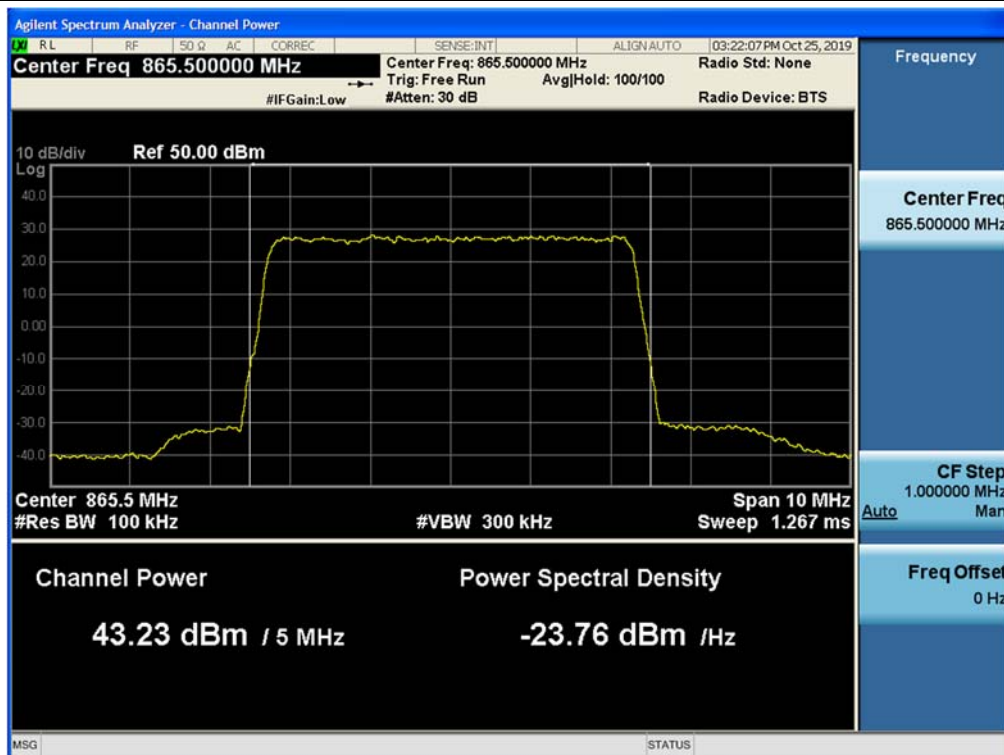
Antenna 0 / LTE 5 MHz 1 Carrier / 16QAM / High



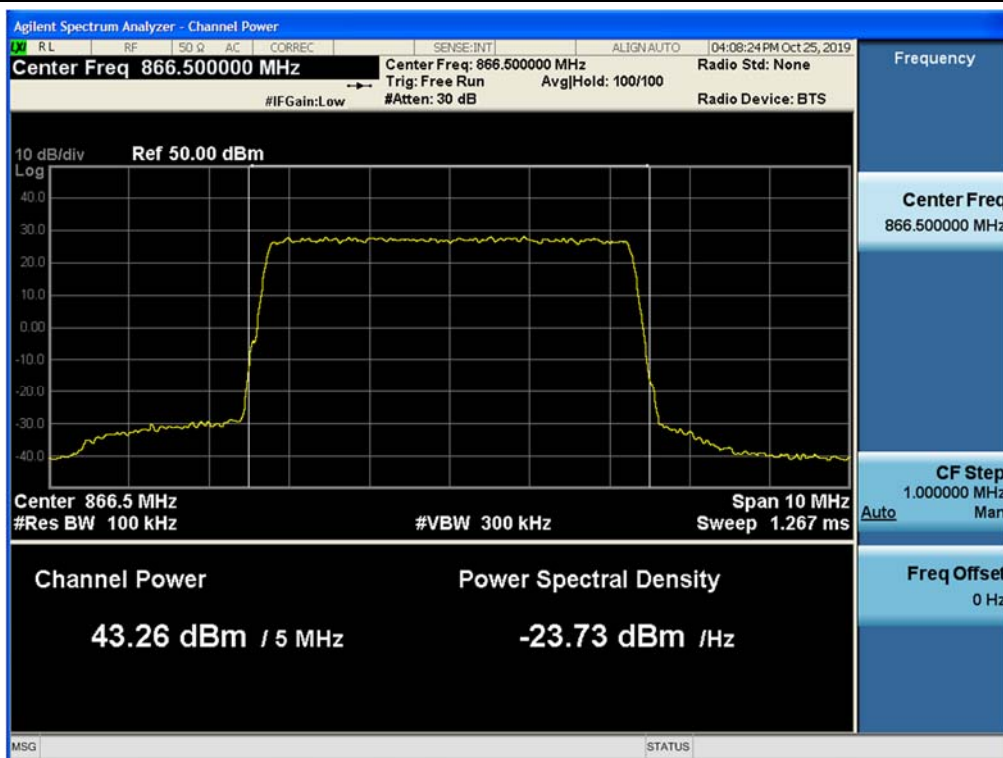
Antenna 0 / LTE 5 MHz 1 Carrier / 64QAM / Low



Antenna 0 / LTE 5 MHz 1 Carrier / 64QAM / Middle



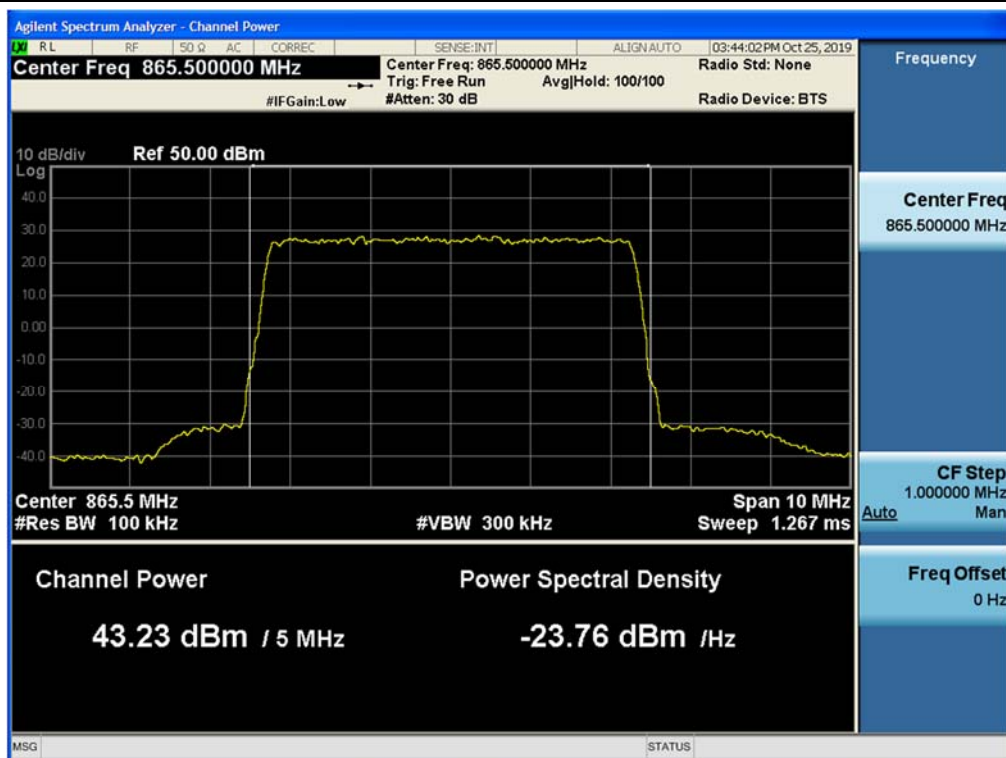
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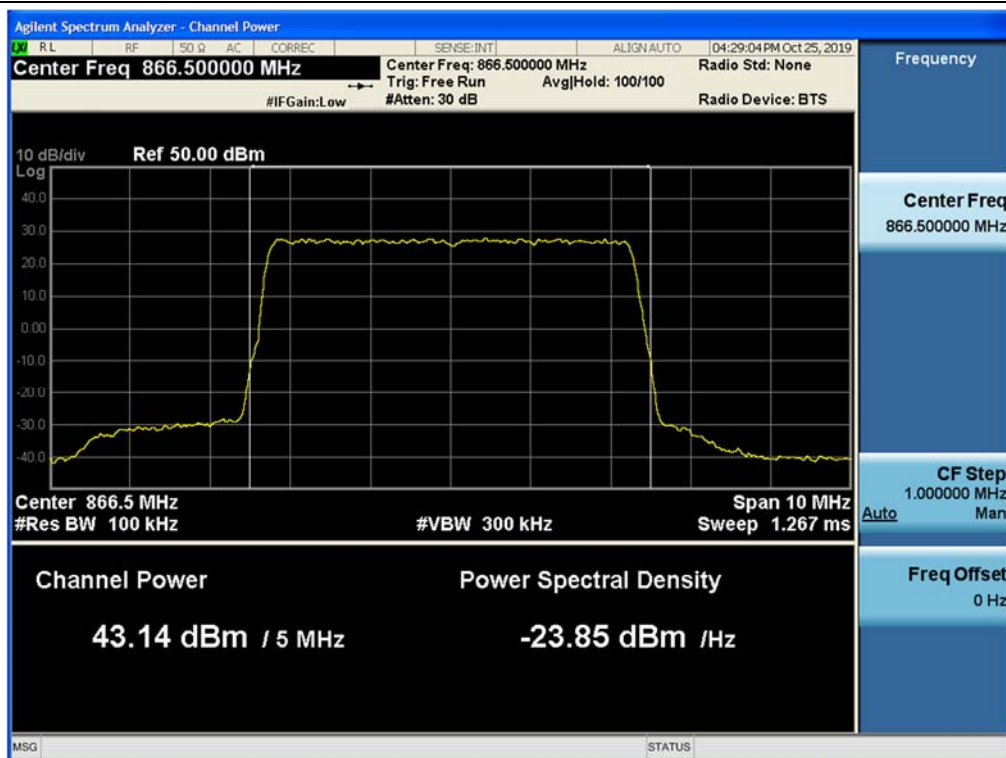
Antenna 0 / LTE 5 MHz 1 Carrier / 256QAM / Low



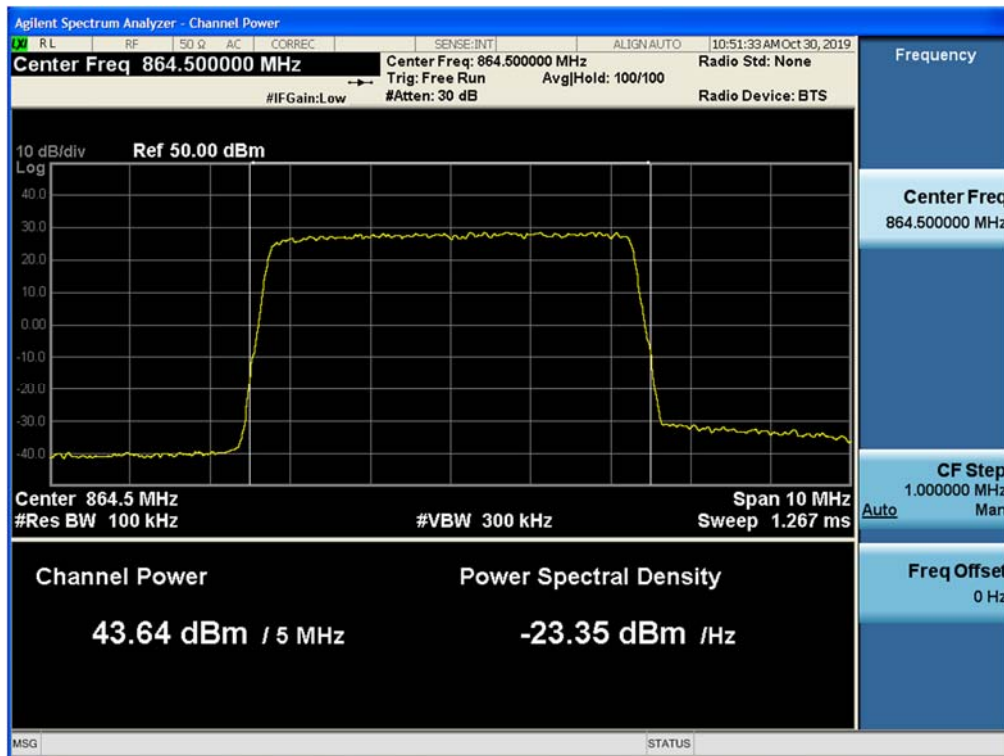
Antenna 0 / LTE 5 MHz 1 Carrier / 256QAM / Middle



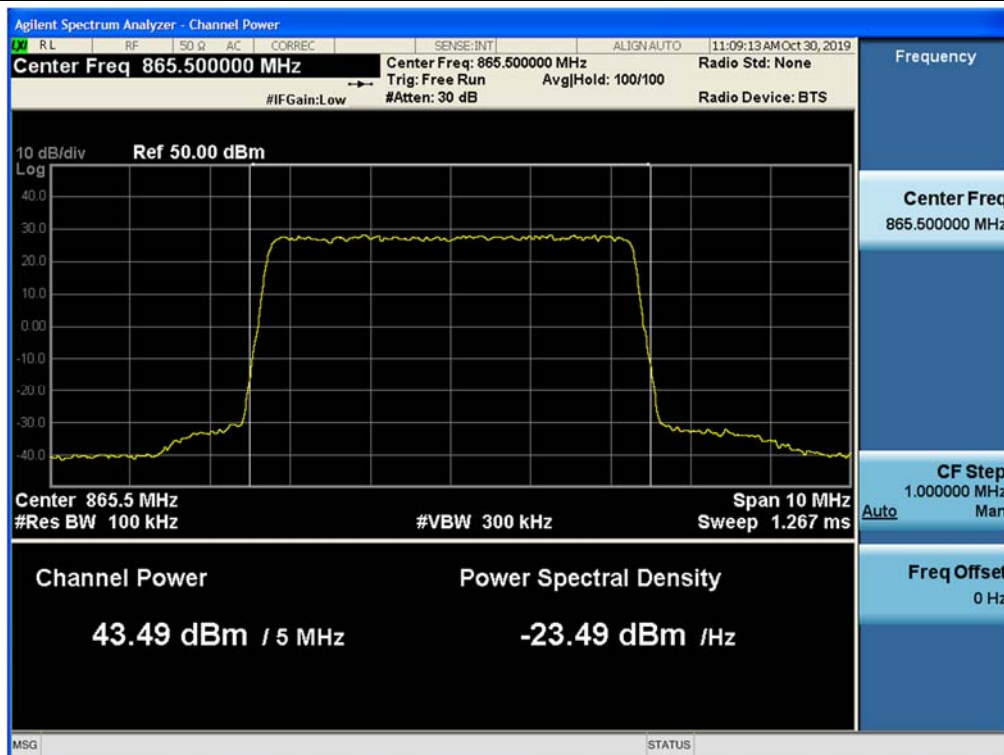
Antenna 0 / LTE 5 MHz 1 Carrier / 256QAM / High



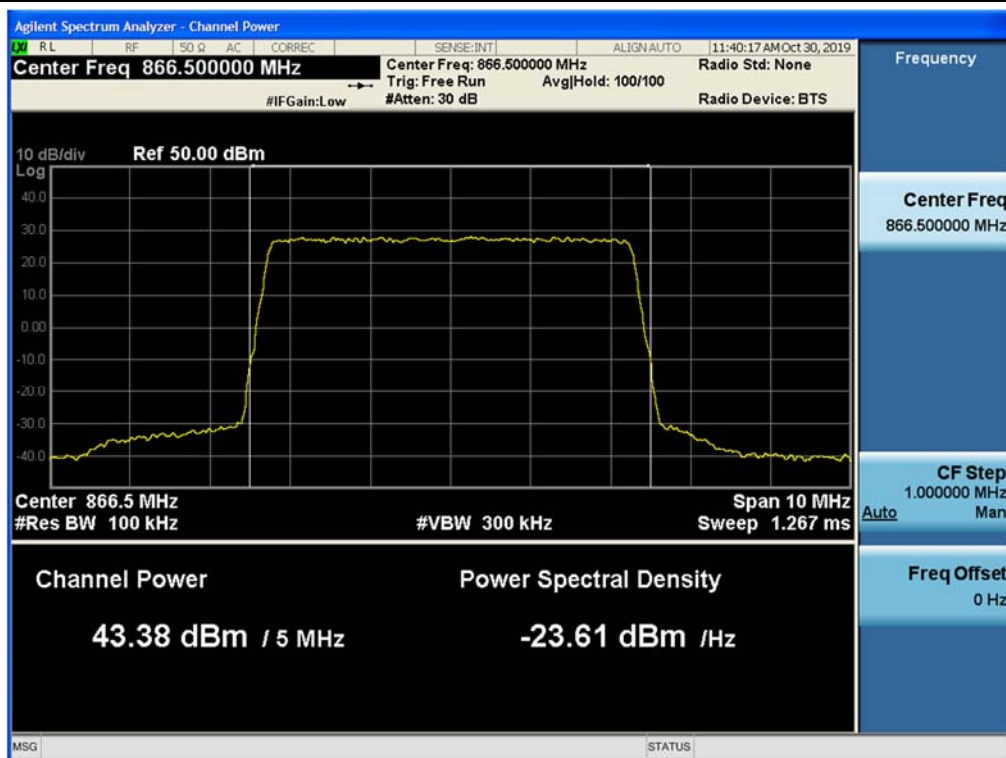
Antenna 1 / LTE 5 MHz 1 Carrier / QPSK / Low



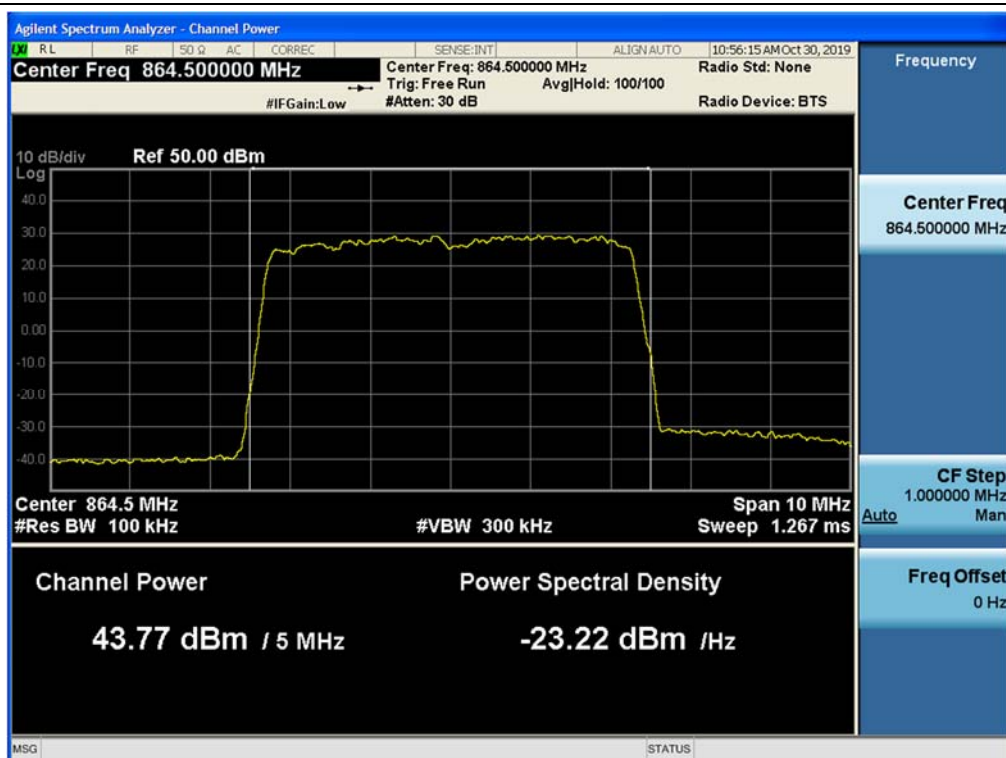
Antenna 1 / LTE 5 MHz 1 Carrier / QPSK / Middle



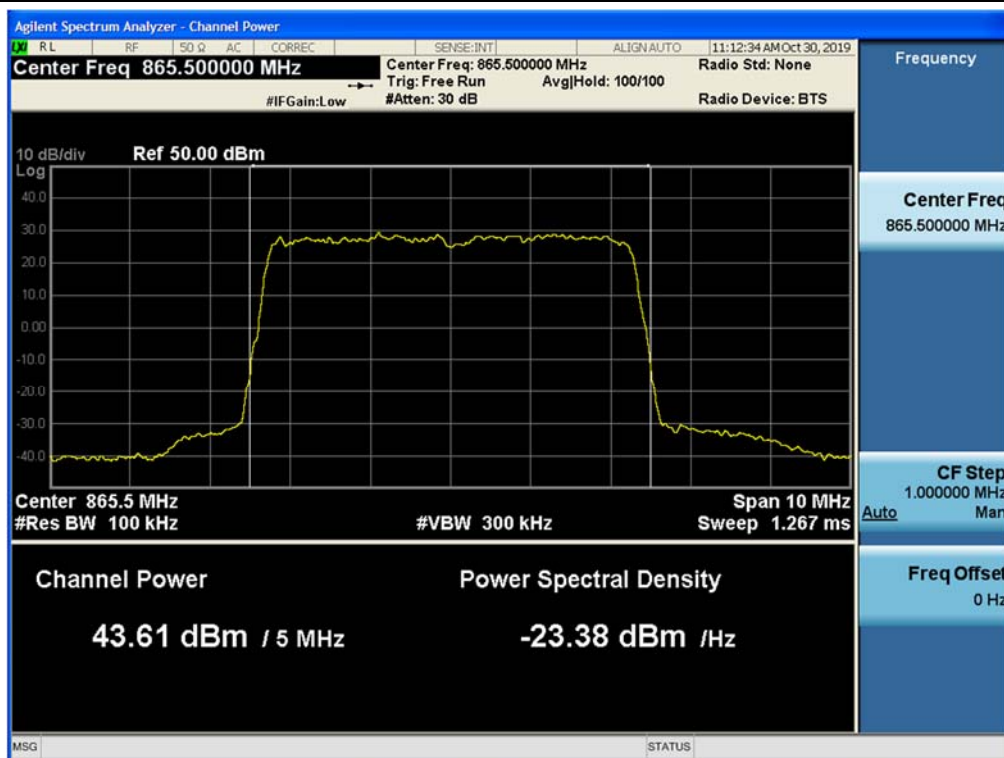
Antenna 1 / LTE 5 MHz 1 Carrier / QPSK / High



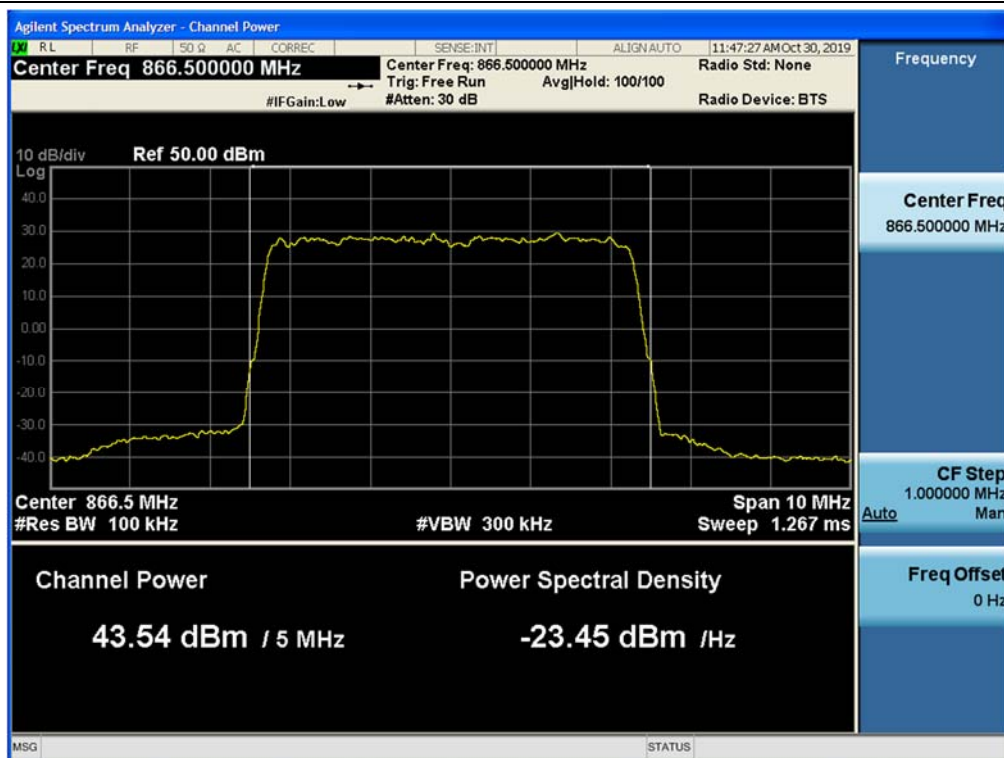
Antenna 1 / LTE 5 MHz 1 Carrier / 16QAM / Low



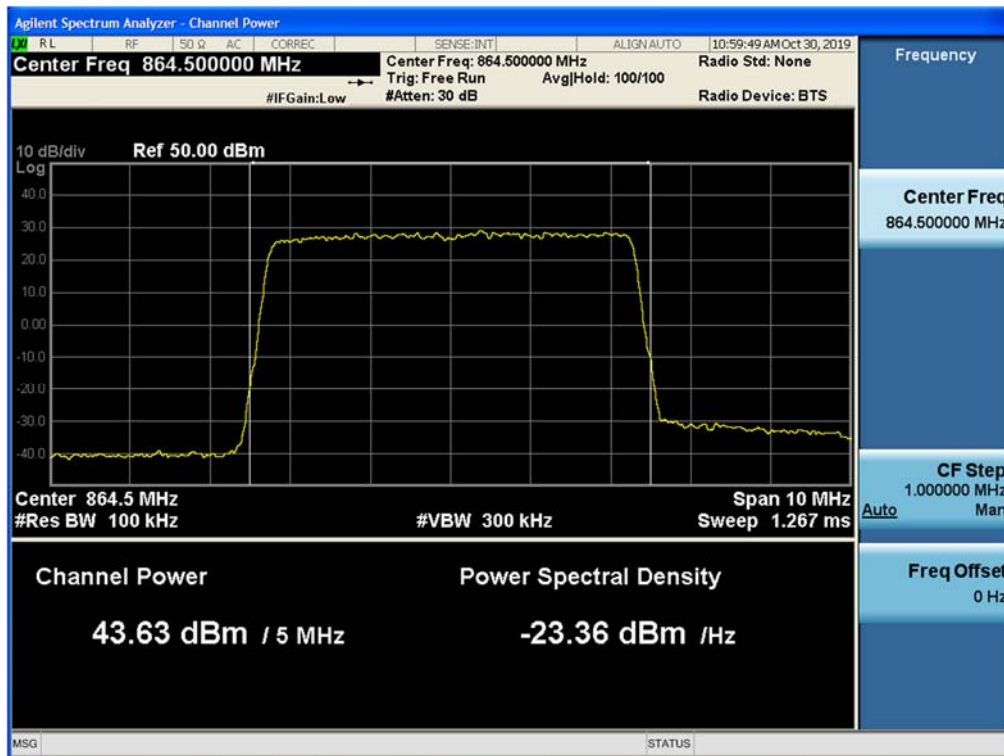
Antenna 1 / LTE 5 MHz 1 Carrier / 16QAM / Middle



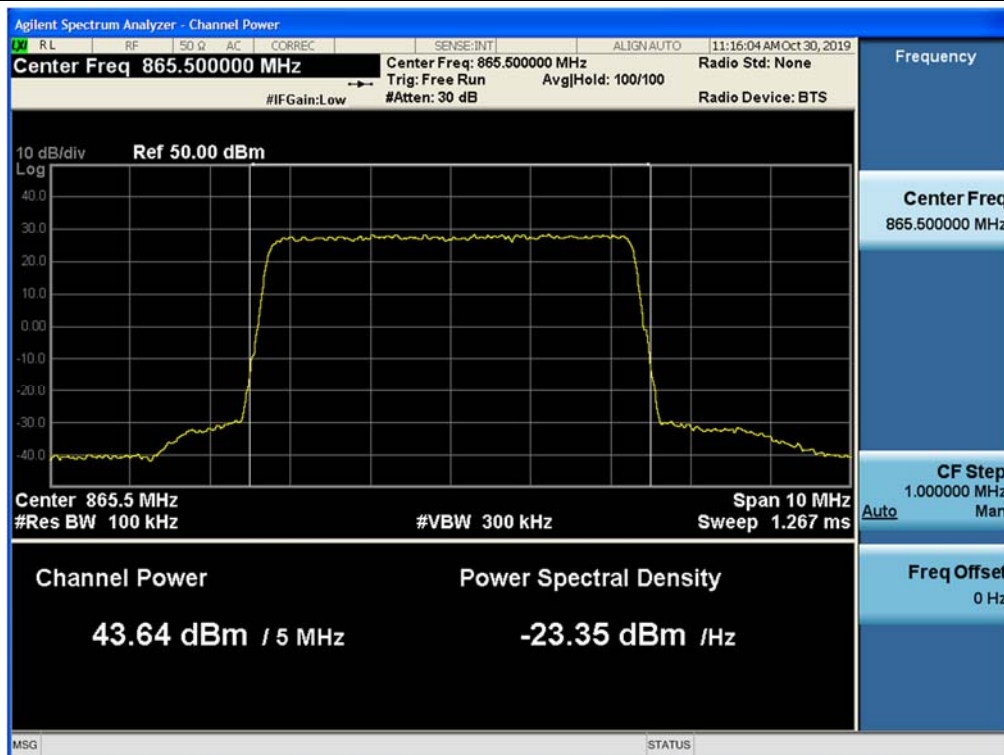
Antenna 1 / LTE 5 MHz 1 Carrier / 16QAM / High



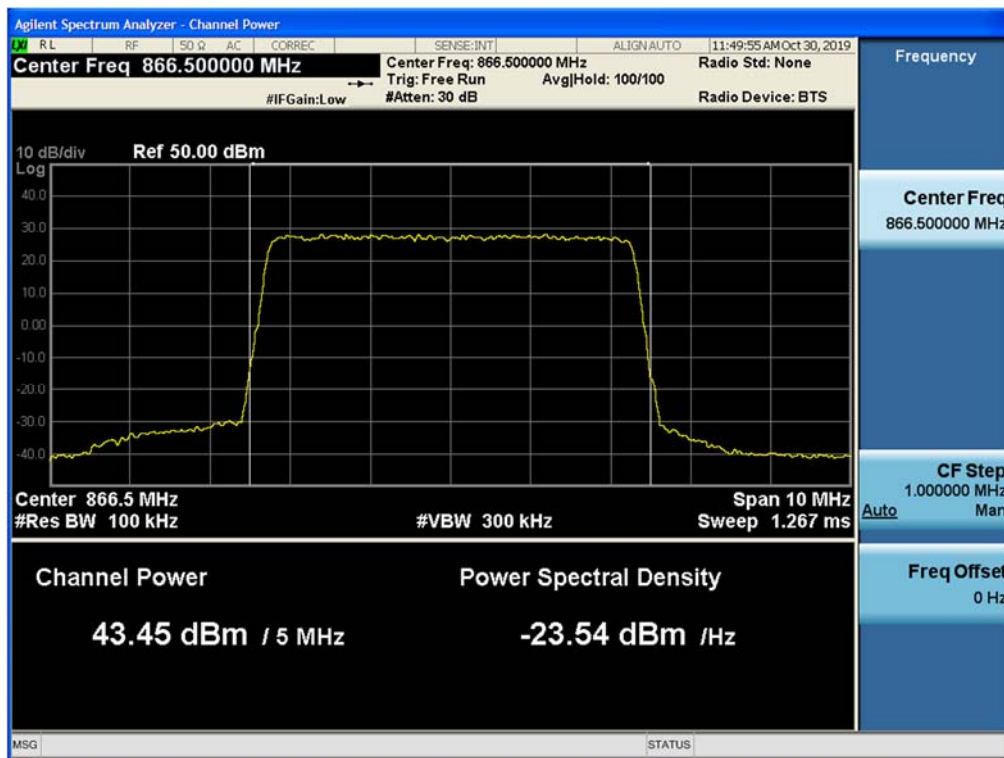
Antenna 1 / LTE 5 MHz 1 Carrier / 64QAM / Low



Antenna 1 / LTE 5 MHz 1 Carrier / 64QAM / Middle



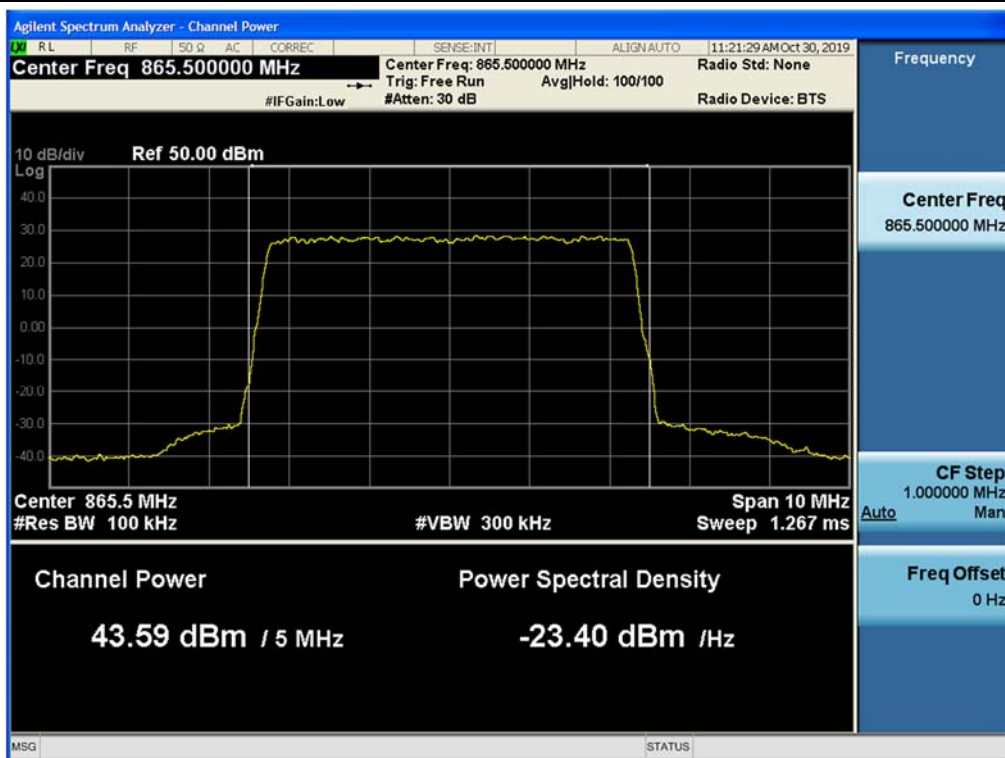
Antenna 1 / LTE 5 MHz 1 Carrier / 64QAM / High



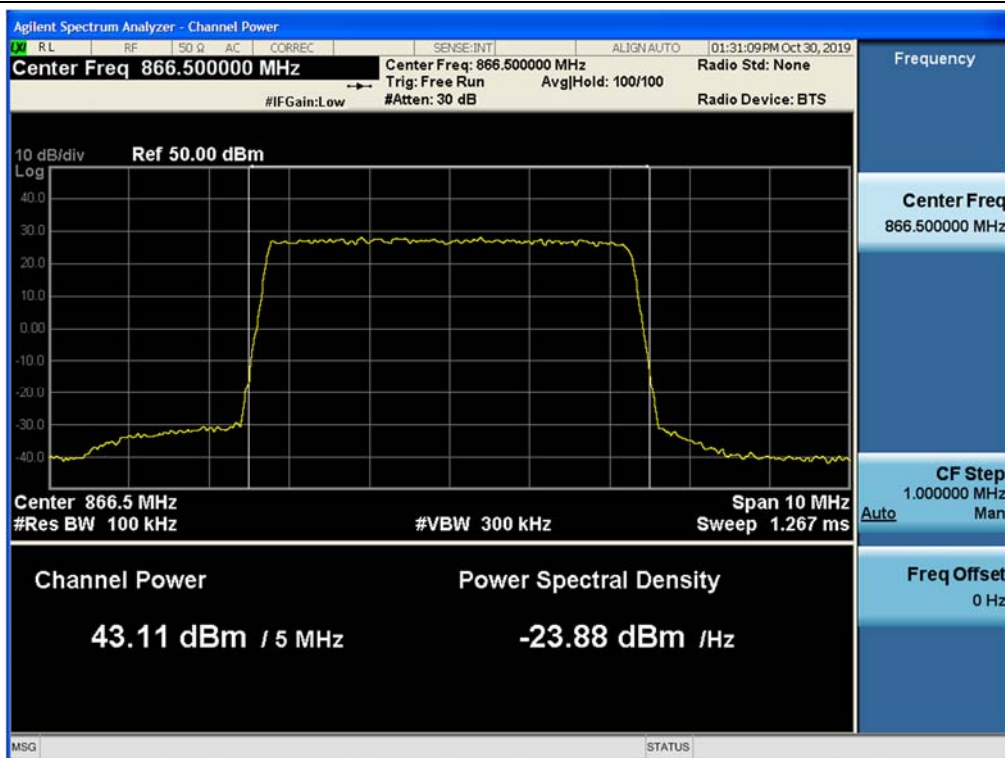
Antenna 1 / LTE 5 MHz 1 Carrier / 256QAM / Low



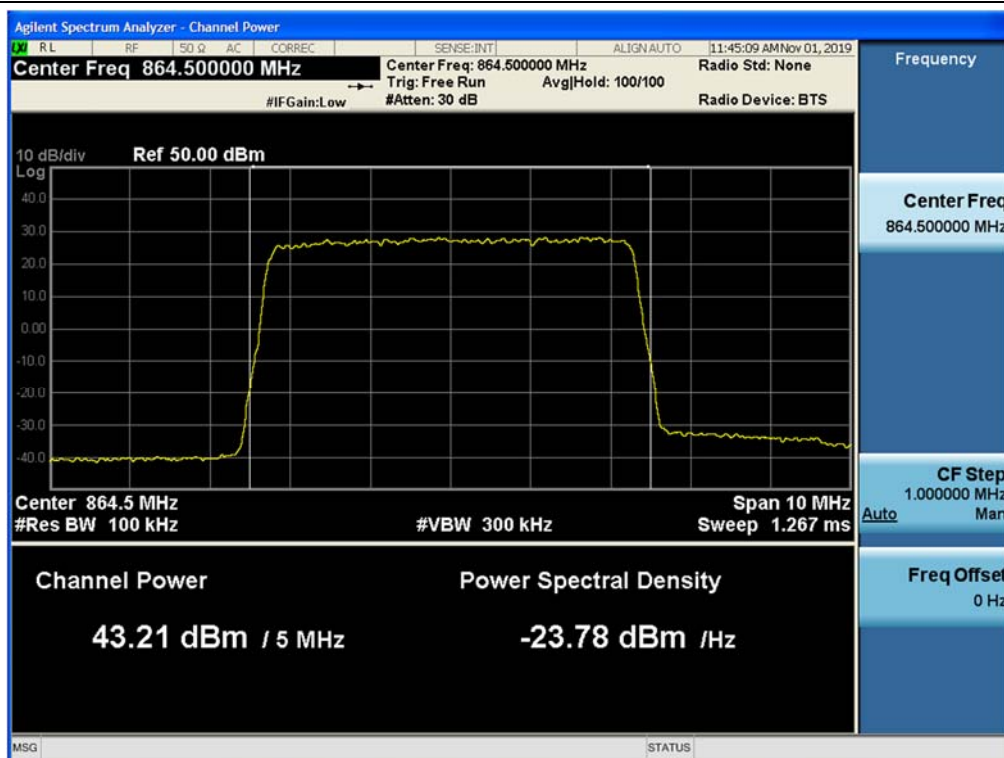
Antenna 1 / LTE 5 MHz 1 Carrier / 256QAM / Middle



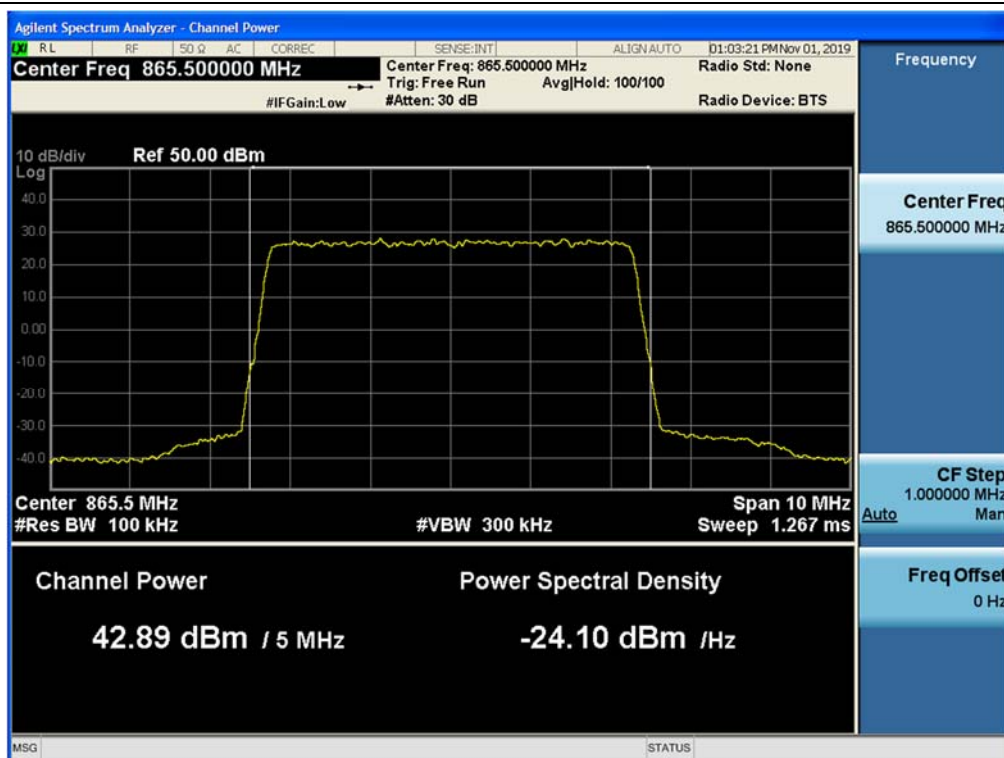
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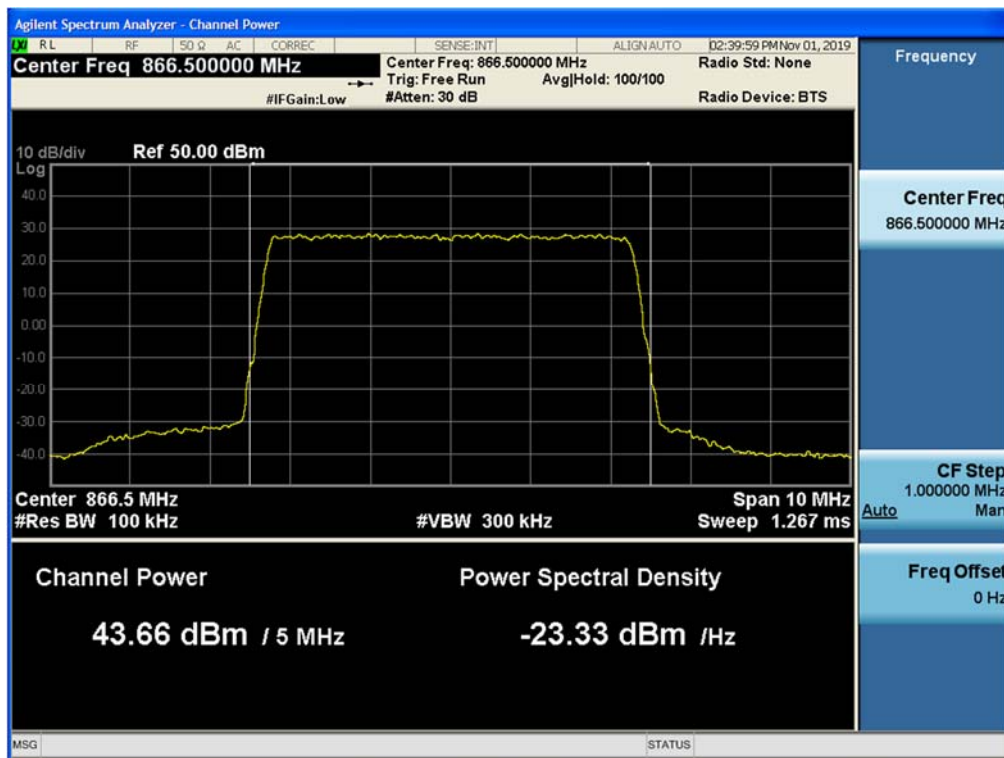
Antenna 2 / LTE 5 MHz 1 Carrier / QPSK / Low



Antenna 2 / LTE 5 MHz 1 Carrier / QPSK / Middle



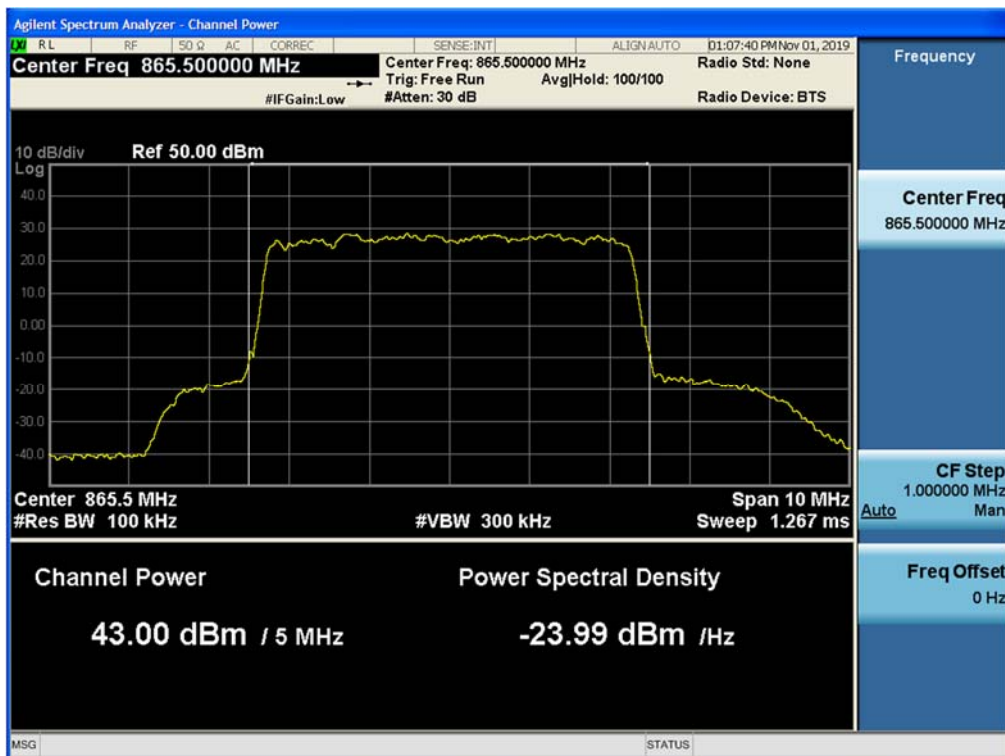
Antenna 2 / LTE 5 MHz 1 Carrier / QPSK / High



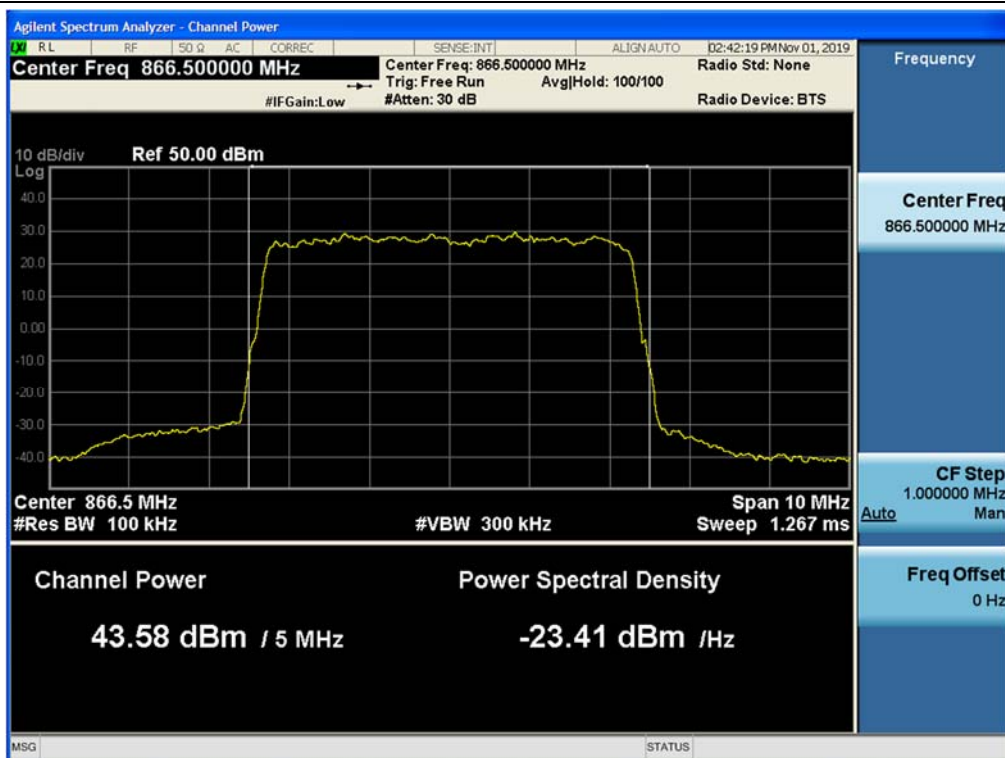
Antenna 2 / LTE 5 MHz 1 Carrier / 16QAM / Low



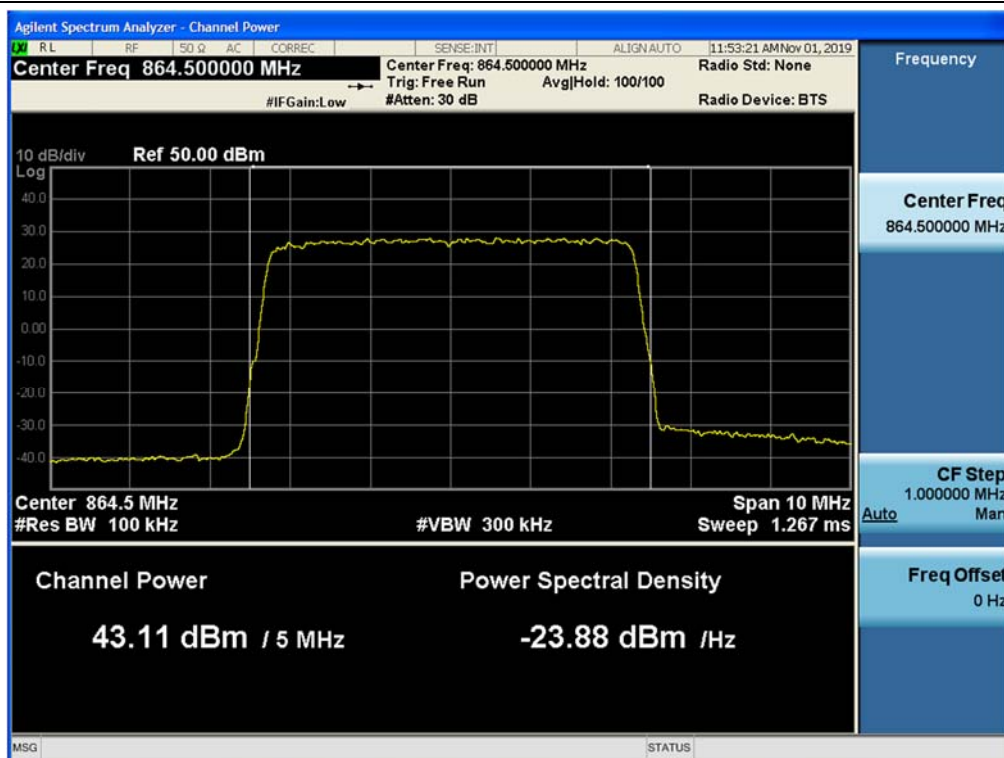
Antenna 2 / LTE 5 MHz 1 Carrier / 16QAM / Middle



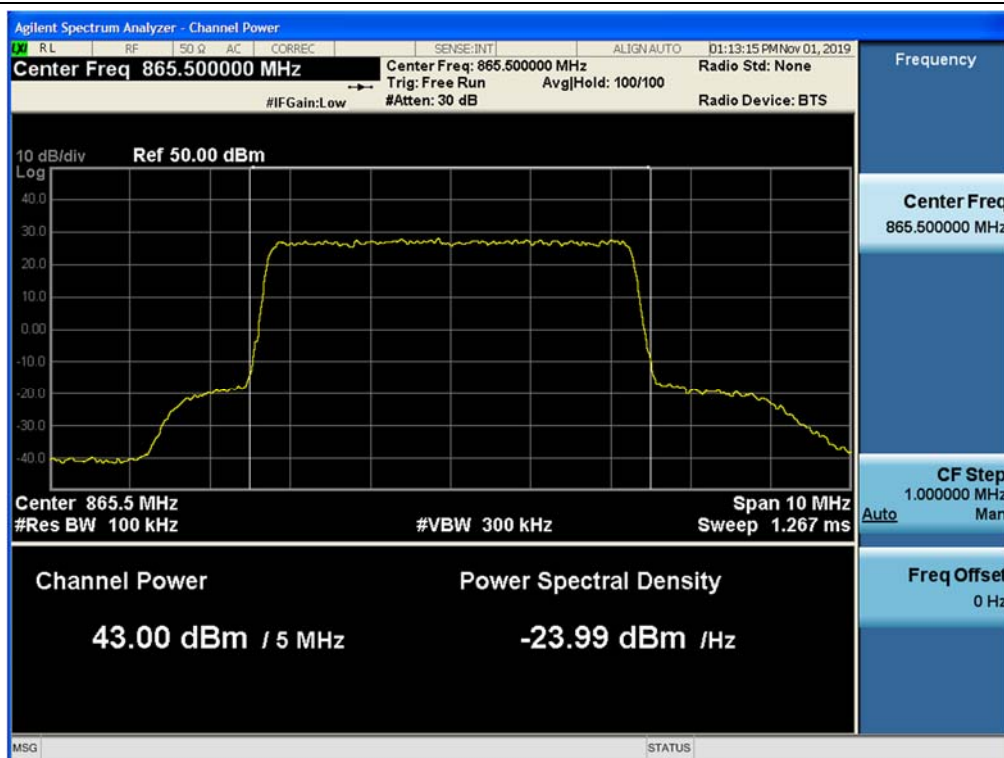
Antenna 2 / LTE 5 MHz 1 Carrier / 16QAM / High



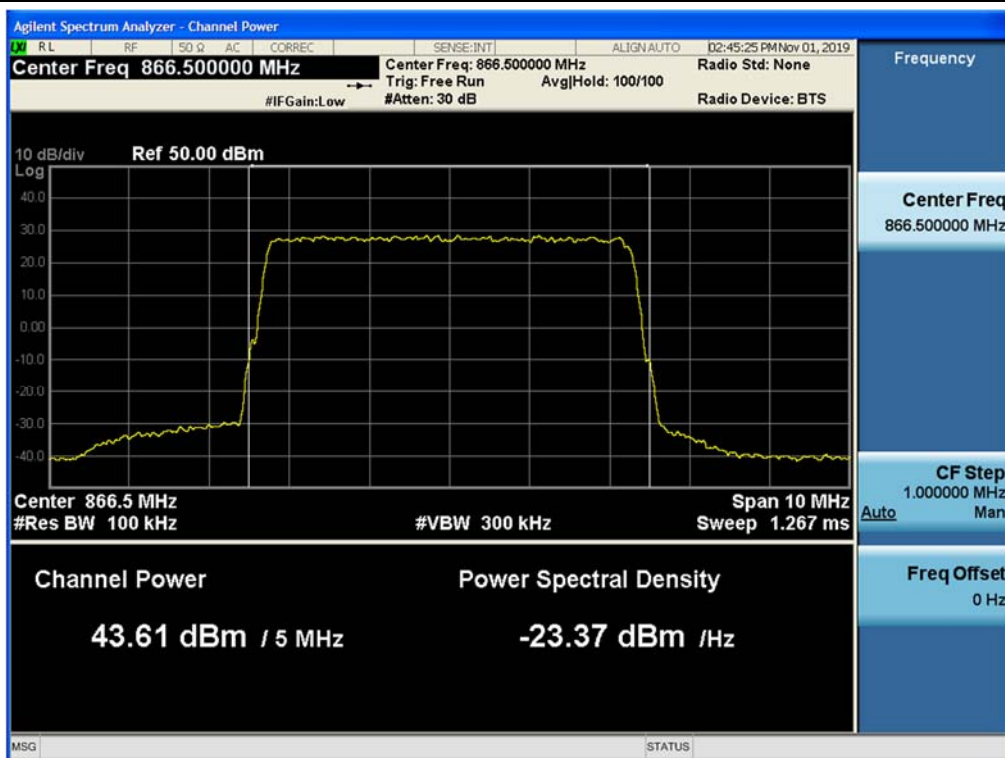
Antenna 2 / LTE 5 MHz 1 Carrier / 64QAM / Low



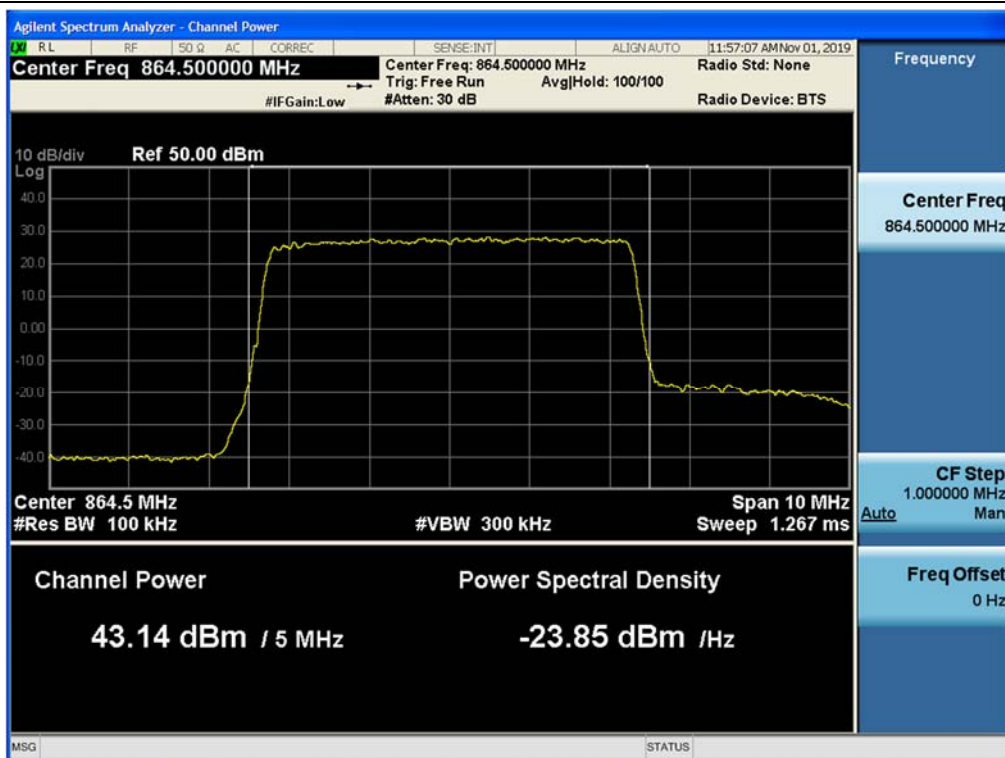
Antenna 2 / LTE 5 MHz 1 Carrier / 64QAM / Middle



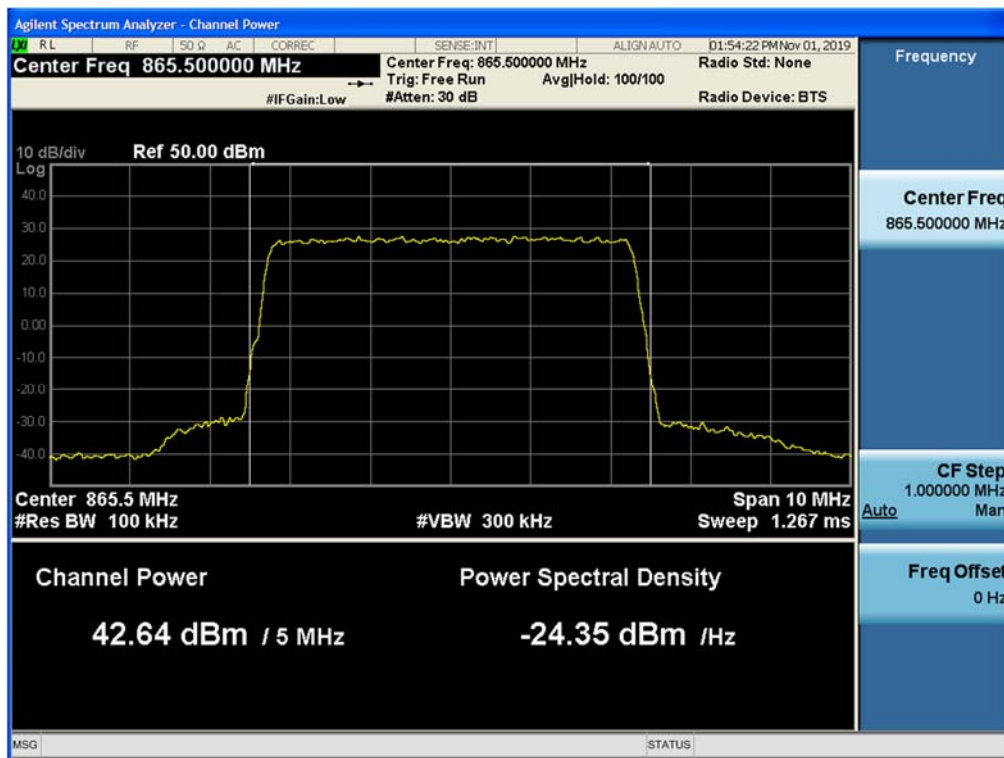
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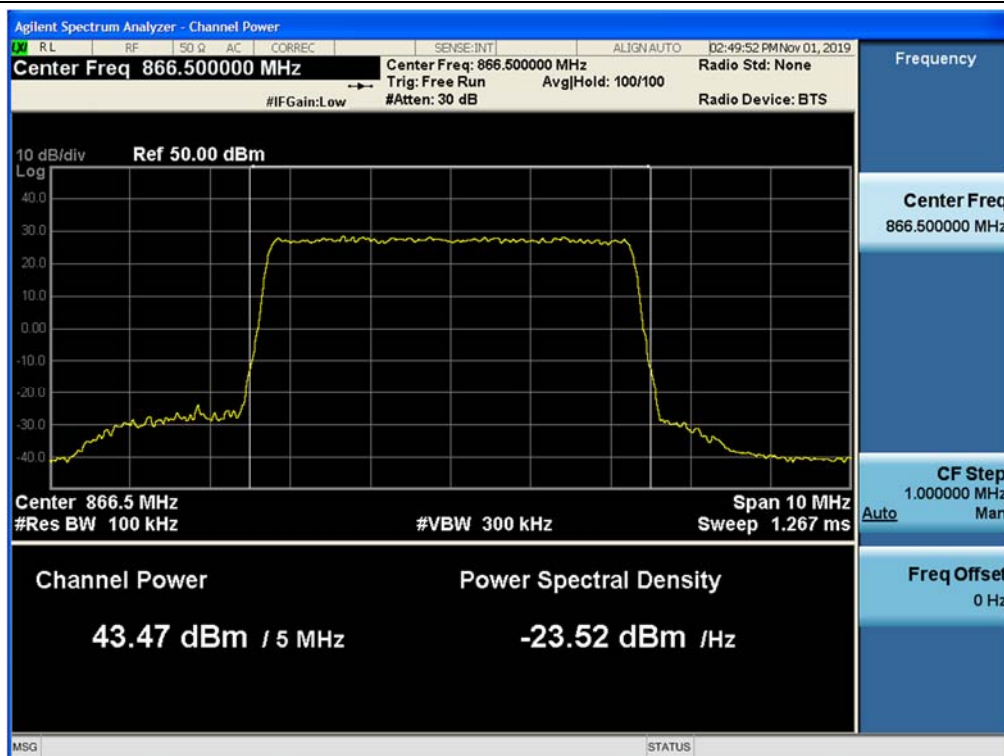
Antenna 2 / LTE 5 MHz 1 Carrier / 256QAM / Low



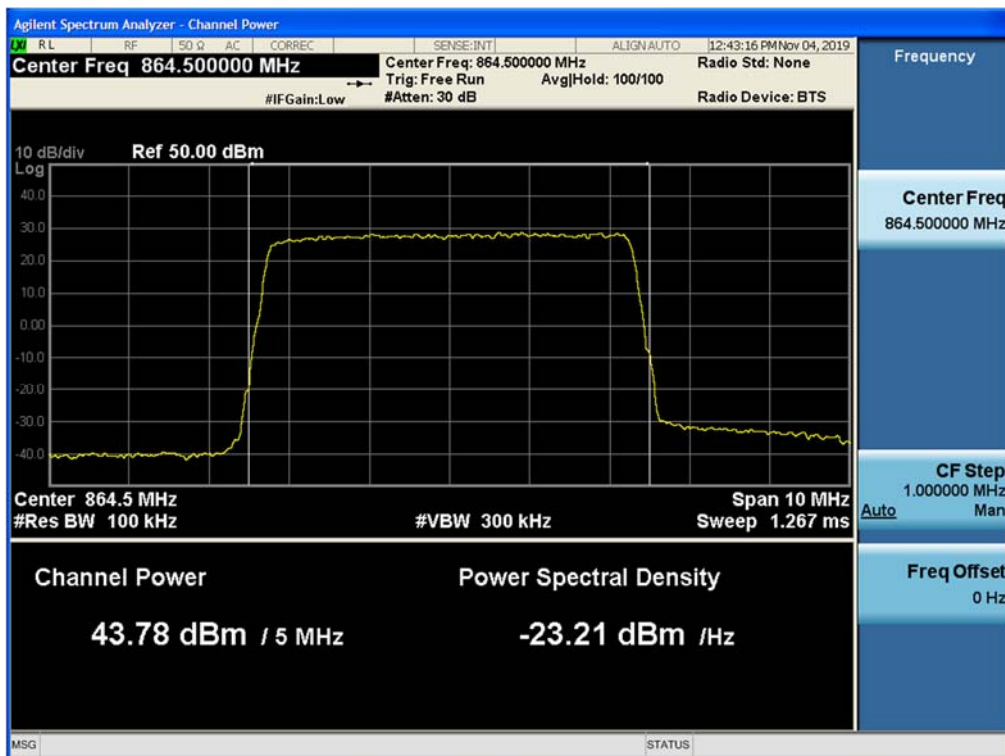
Antenna 2 / LTE 5 MHz 1 Carrier / 256QAM / Middle



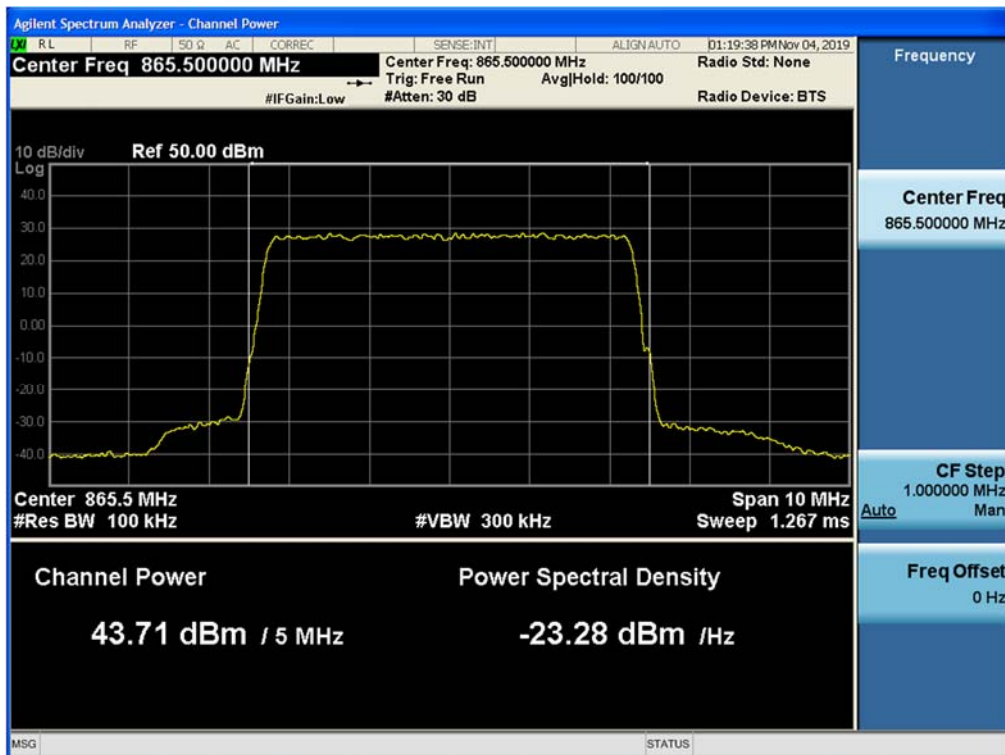
Antenna 2 / LTE 5 MHz 1 Carrier / 256QAM / High



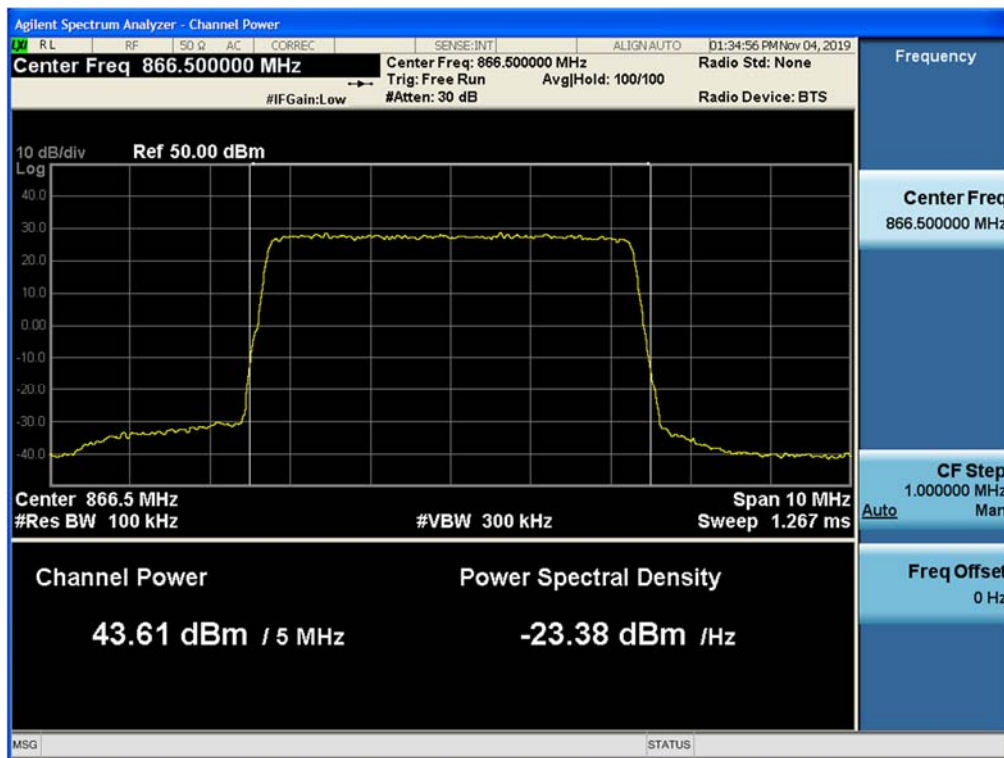
Antenna 3 / LTE 5 MHz 1 Carrier / QPSK / Low



Antenna 3 / LTE 5 MHz 1 Carrier / QPSK / Middle



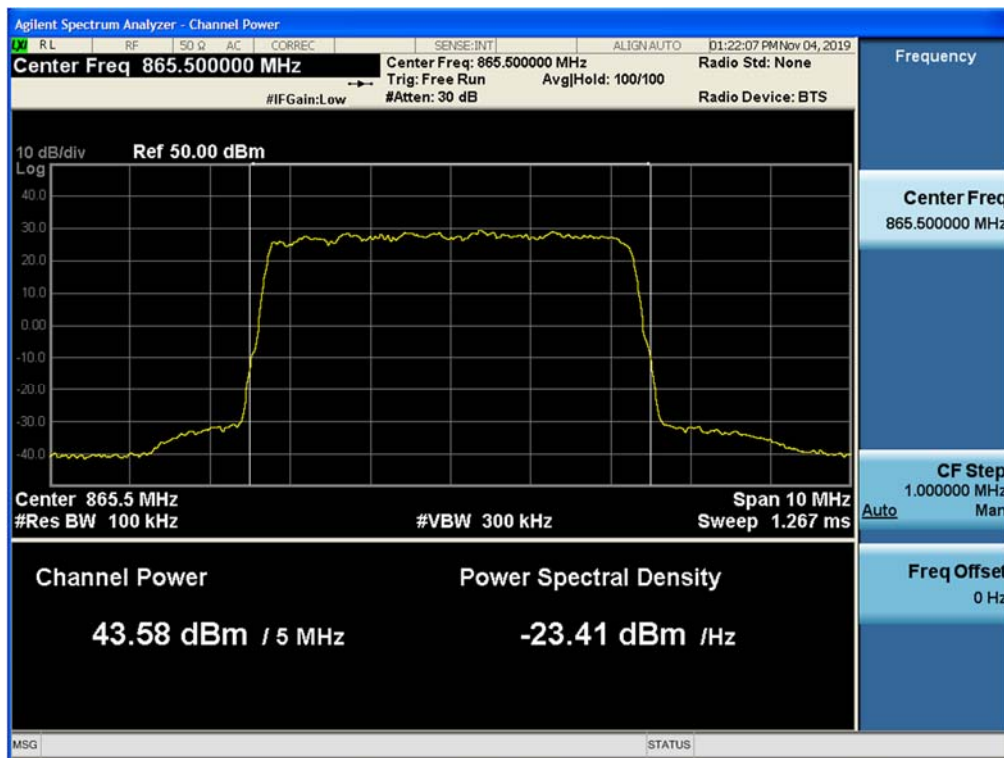
Antenna 3 / LTE 5 MHz 1 Carrier / QPSK / High



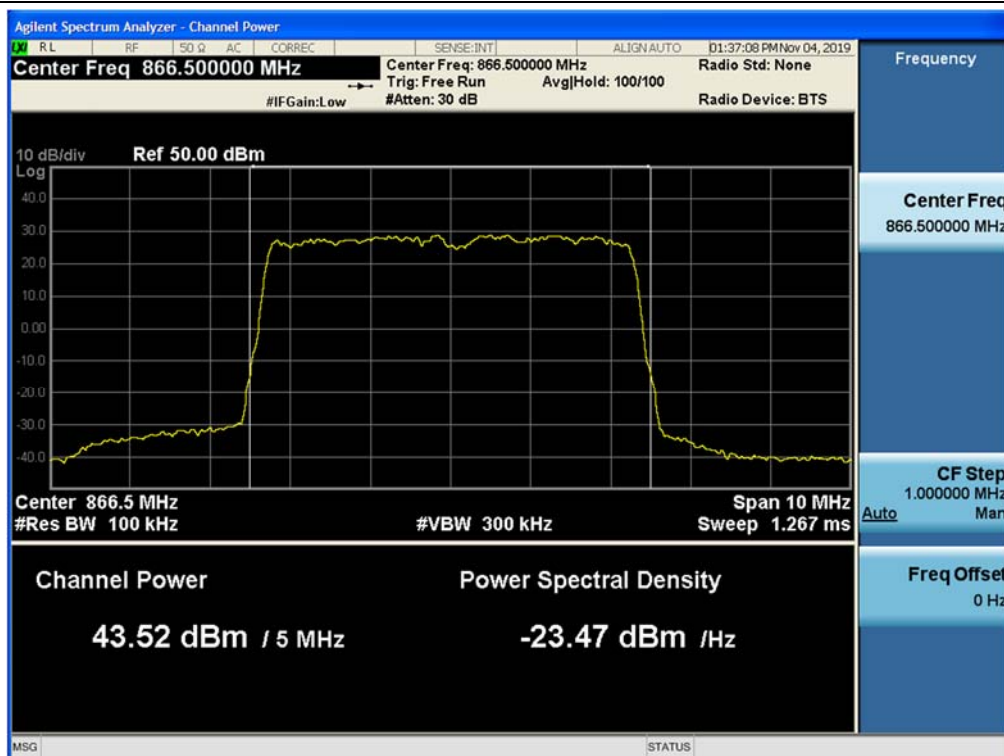
Antenna 3 / LTE 5 MHz 1 Carrier / 16QAM / Low



Antenna 3 / LTE 5 MHz 1 Carrier / 16QAM / Middle



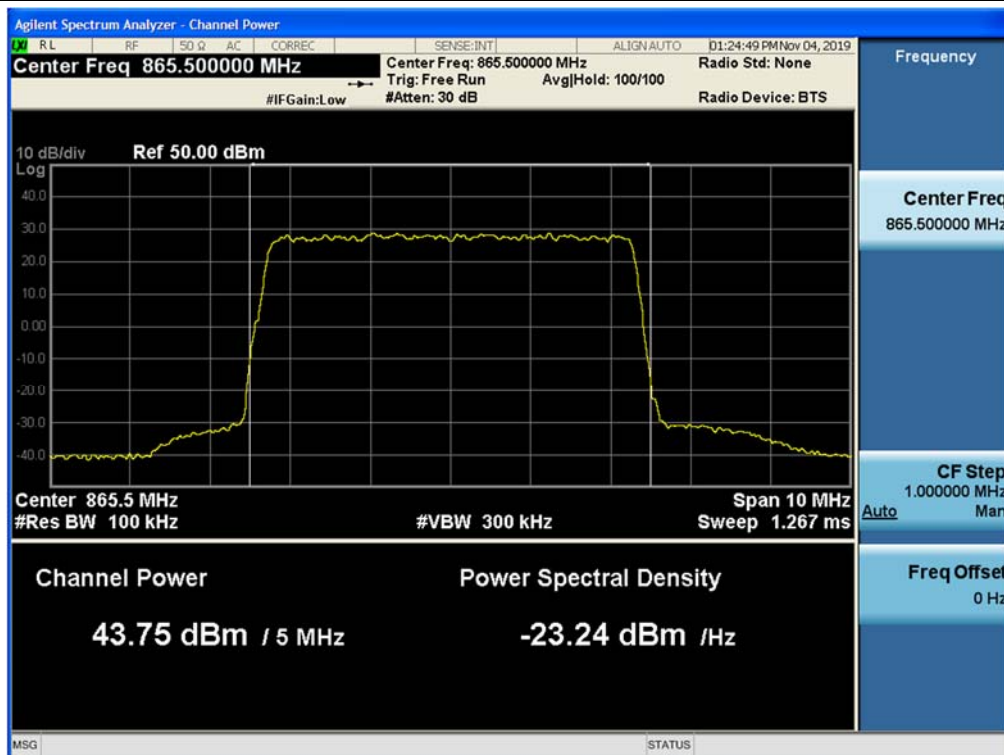
Antenna 3 / LTE 5 MHz 1 Carrier / 16QAM / High



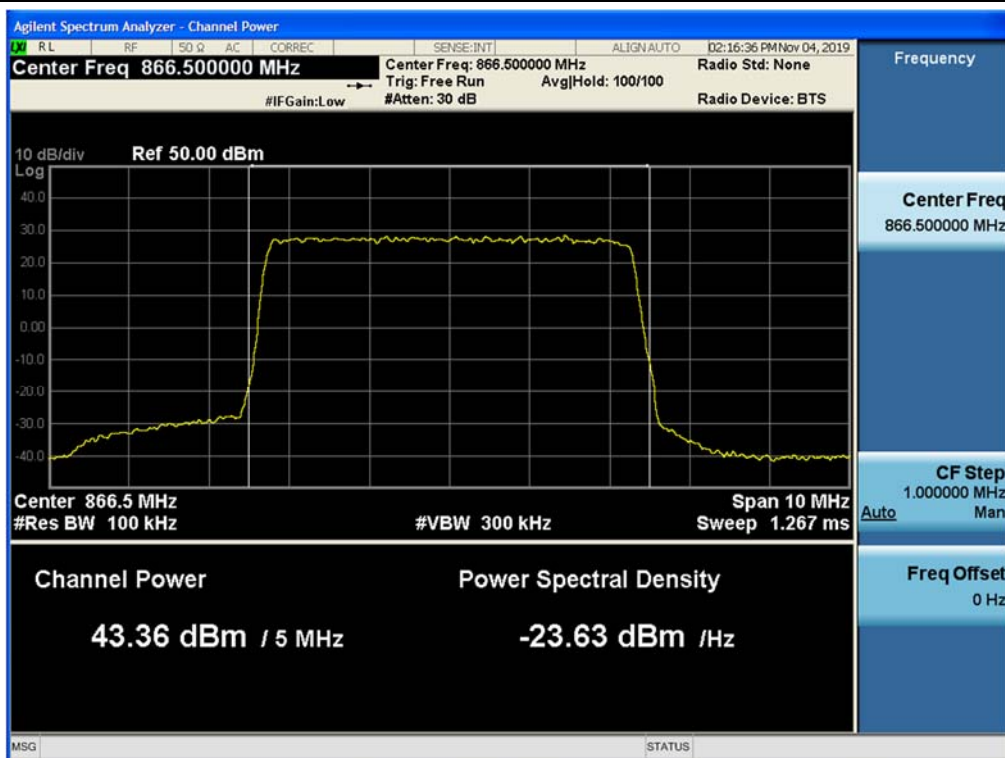
Antenna 3 / LTE 5 MHz 1 Carrier / 64QAM / Low



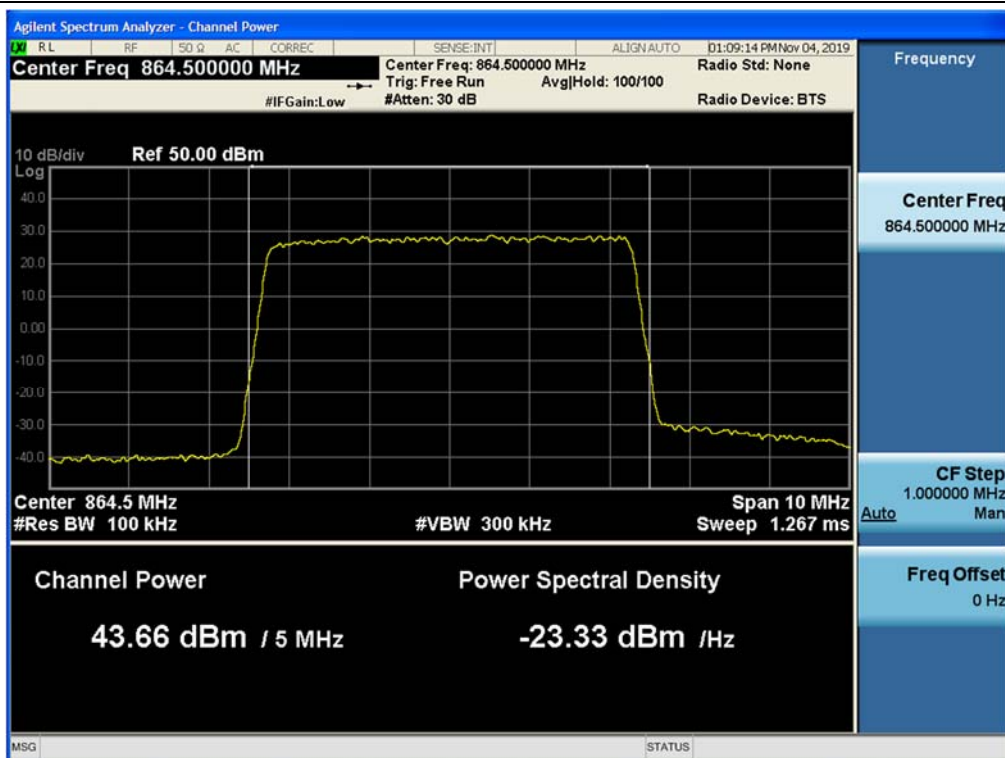
Antenna 3 / LTE 5 MHz 1 Carrier / 64QAM / Middle



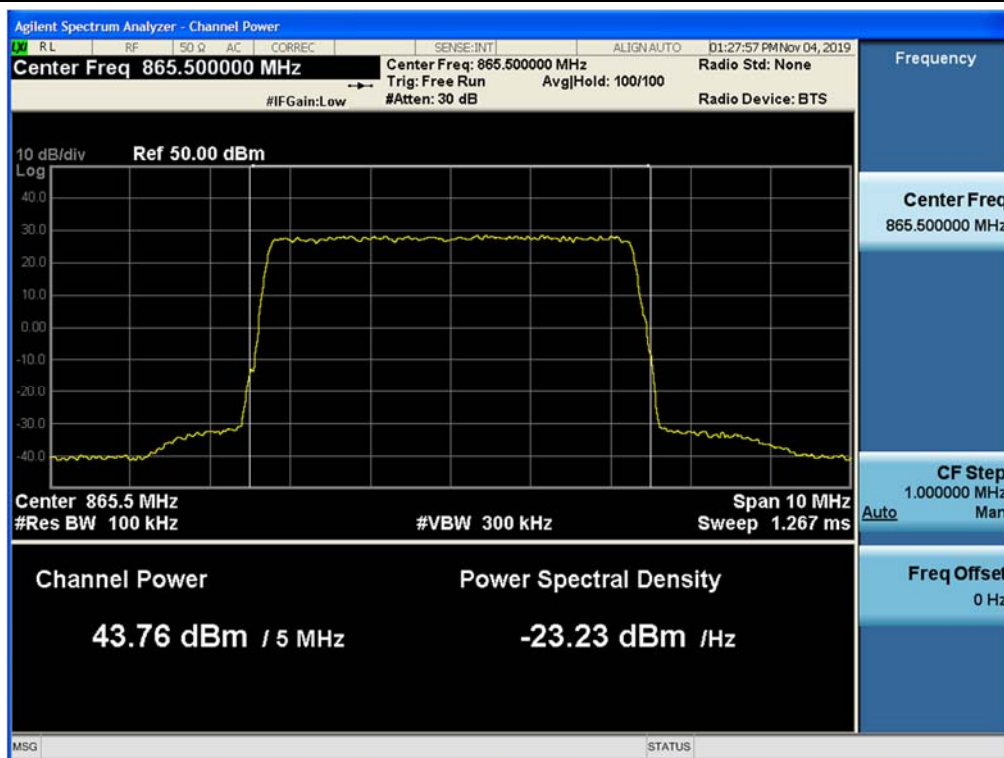
Antenna 3 / LTE 5 MHz 1 Carrier / 64QAM / High



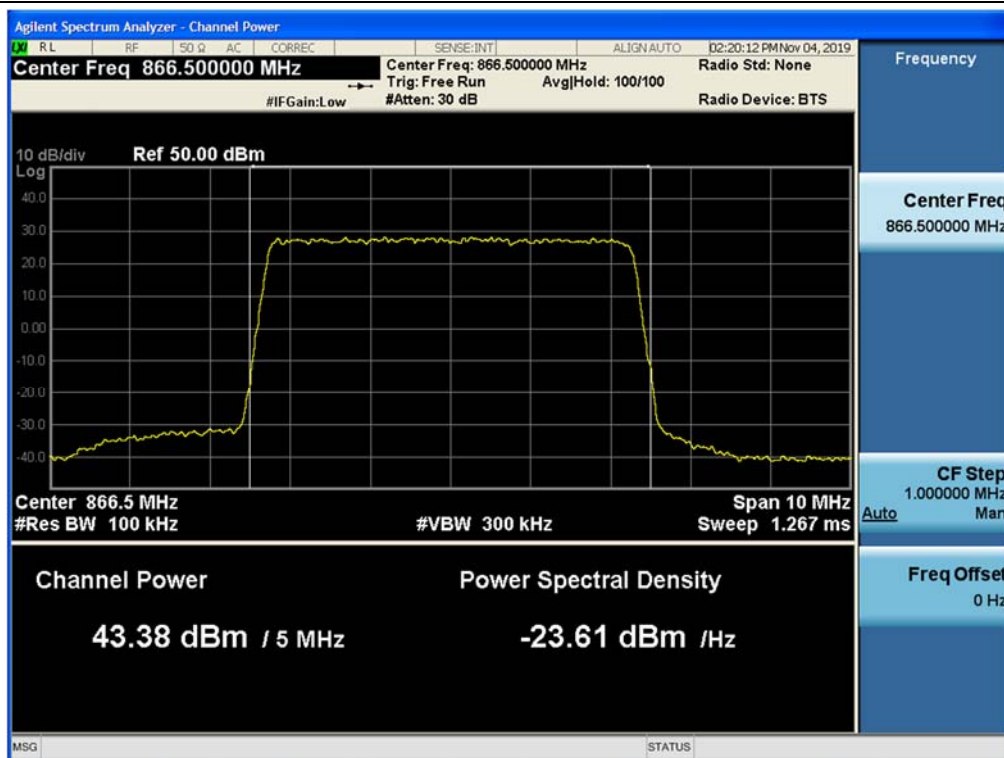
Antenna 3 / LTE 5 MHz 1 Carrier / 256QAM / Low



Antenna 3 / LTE 5 MHz 1 Carrier / 256QAM / Middle



Antenna 3 / LTE 5 MHz 1 Carrier / 256QAM / High



5.2. OCCUPIED BANDWIDTH

Test Requirements:

§ 2.1049 Measurements required: Occupied bandwidth.

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable:

- (g) Transmitters in which the modulating baseband comprises not more than three independent channels—when modulated by the full complement of signals for which the transmitter is rated. The level of modulation for each channel should be set to that prescribed in rule parts applicable to the services for which the transmitter is intended. If specific modulation levels are not set forth in the rules, the tests should provide the manufacturer's maximum rated condition.
- (h) Transmitters employing digital modulation techniques—when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated. The signal shall be applied through any filter networks, pseudo-random generators or other devices required in normal service. Additionally, the occupied bandwidth shall be shown for operation with any devices used for modifying the spectrum when such devices are optional at the discretion of the user.

Test Procedures:

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation. The EUT was connected to a spectrum analyzer enabled with an occupied bandwidth function via its antenna port. Measurements were performed to determine the occupied bandwidth in accordance with FCC Part 2.1049. The occupied bandwidth was measured from the fundamental emission at the bottom, middle and top channels. The occupied bandwidth was measured using the built in occupied bandwidth function of the spectrum analyzer. It was set to measure the bandwidth where 99% of the signal power was contained. The analyzer automatically configures the measurement bandwidths to make an accurate measurement based on the channel bandwidth and channel spacing of the EUT.

Test Results:
Tabular Data of Occupied Bandwidth
CDMA

Ant.	Mod.	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	BPSK	Low	862.900	1.2403
		Middle	865.575	1.2529
		High	868.250	1.2527
	QPSK	Low	862.900	1.2486
		Middle	865.575	1.2487
		High	868.250	1.2428
	16QAM	Low	862.900	1.2447
		Middle	865.575	1.2487
		High	868.250	1.2508

LTE 3 MHz 1 Carrier

Ant.	Mod.	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	863.50	2.7087
		Middle	865.50	2.7196
		High	867.50	2.7152
	16QAM	Low	863.50	2.7124
		Middle	865.50	2.7155
		High	867.50	2.7088
	64QAM	Low	863.50	2.7075
		Middle	865.50	2.7055
		High	867.50	2.7263
	256QAM	Low	863.50	2.7033
		Middle	865.50	2.7156
		High	867.50	2.7097
1	QPSK	Low	863.50	2.6950
		Middle	865.50	2.7116
		High	867.50	2.7090
	16QAM	Low	863.50	2.6822
		Middle	865.50	2.7147
		High	867.50	2.7222
	64QAM	Low	863.50	2.7136
		Middle	865.50	2.7160
		High	867.50	2.7115
	256QAM	Low	863.50	2.6940
		Middle	865.50	2.7150
		High	867.50	2.7179

Ant.	Mod.	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
2	QPSK	Low	863.50	2.6936
		Middle	865.50	2.7119
		High	867.50	2.7263
	16QAM	Low	863.50	2.6950
		Middle	865.50	2.7142
		High	867.50	2.7160
	64QAM	Low	863.50	2.7023
		Middle	865.50	2.7145
		High	867.50	2.7027
	256QAM	Low	863.50	2.6983
		Middle	865.50	2.7163
		High	867.50	2.7196
3	QPSK	Low	863.50	2.7020
		Middle	865.50	2.7081
		High	867.50	2.7227
	16QAM	Low	863.50	2.7029
		Middle	865.50	2.7090
		High	867.50	2.7070
	64QAM	Low	863.50	2.7152
		Middle	865.50	2.7193
		High	867.50	2.7217
	256QAM	Low	863.50	2.7080
		Middle	865.50	2.7050
		High	867.50	2.7135

LTE 5 MHz 1 Carrier

Ant.	Mod.	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
0	QPSK	Low	864.50	4.4851
		Middle	865.50	4.5010
		High	866.50	4.4986
	16QAM	Low	864.50	4.4731
		Middle	865.50	4.5059
		High	866.50	4.4899
	64QAM	Low	864.50	4.5020
		Middle	865.50	4.4999
		High	866.50	4.5097
	256QAM	Low	864.50	4.4983
		Middle	865.50	4.4952
		High	866.50	4.4928
1	QPSK	Low	864.50	4.4873
		Middle	865.50	4.5002
		High	866.50	4.4926
	16QAM	Low	864.50	4.4817
		Middle	865.50	4.5009
		High	866.50	4.4827
	64QAM	Low	864.50	4.4836
		Middle	865.50	4.5119
		High	866.50	4.5122
	256QAM	Low	864.50	4.4968
		Middle	865.50	4.4895
		High	866.50	4.4961

Ant.	Mod.	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
2	QPSK	Low	864.50	4.4842
		Middle	865.50	4.4978
		High	866.50	4.5002
	16QAM	Low	864.50	4.4738
		Middle	865.50	4.4874
		High	866.50	4.4687
	64QAM	Low	864.50	4.4857
		Middle	865.50	4.4919
		High	866.50	4.5053
	256QAM	Low	864.50	4.4830
		Middle	865.50	4.5095
		High	866.50	4.5083
3	QPSK	Low	864.50	4.4907
		Middle	865.50	4.4974
		High	866.50	4.5039
	16QAM	Low	864.50	4.4689
		Middle	865.50	4.4841
		High	866.50	4.4830
	64QAM	Low	864.50	4.4825
		Middle	865.50	4.4929
		High	866.50	4.5039
	256QAM	Low	864.50	4.5015
		Middle	865.50	4.4816
		High	866.50	4.5030