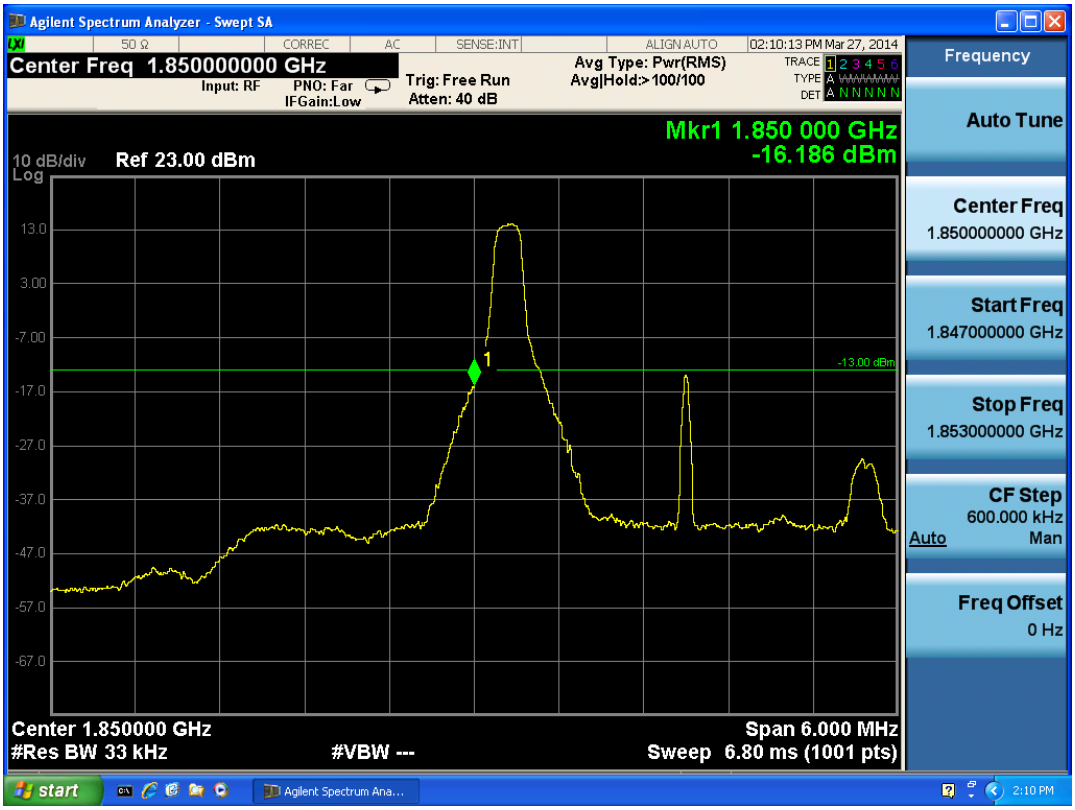
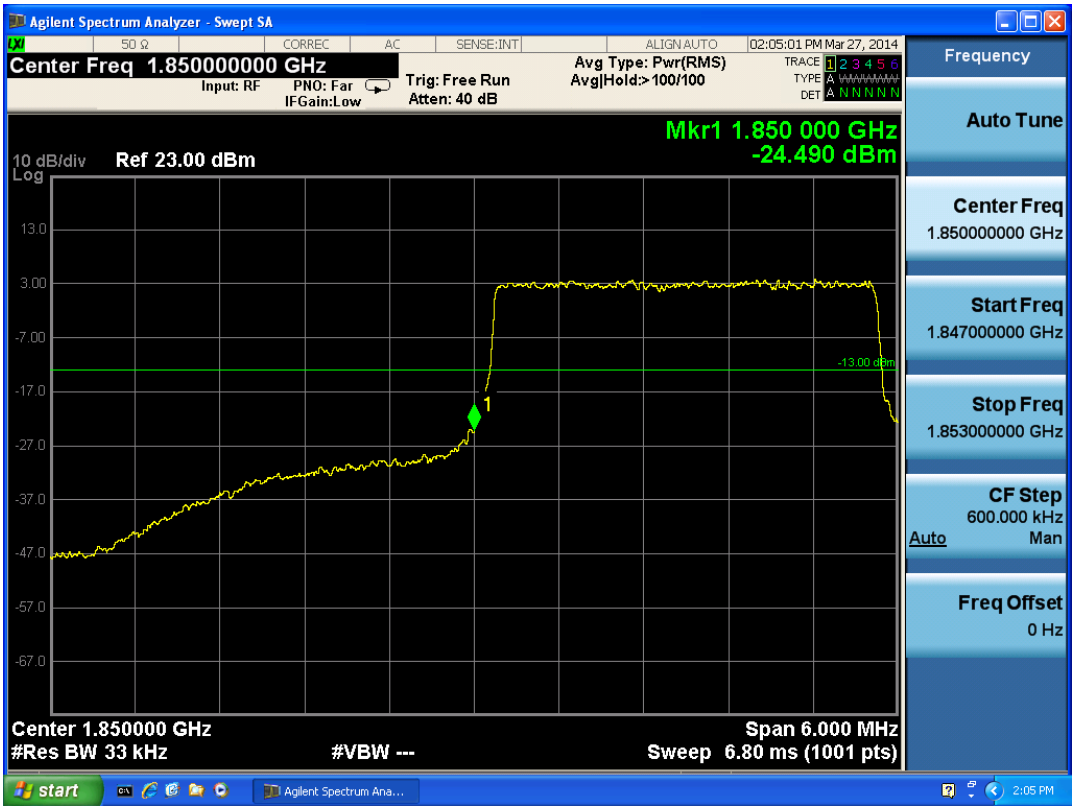
LTE Band 2 QPSK Bandwidth = 3MHz CH19185,RB 8

LTE Band 2 QPSK Bandwidth = 3MHz CH19185,RB 15

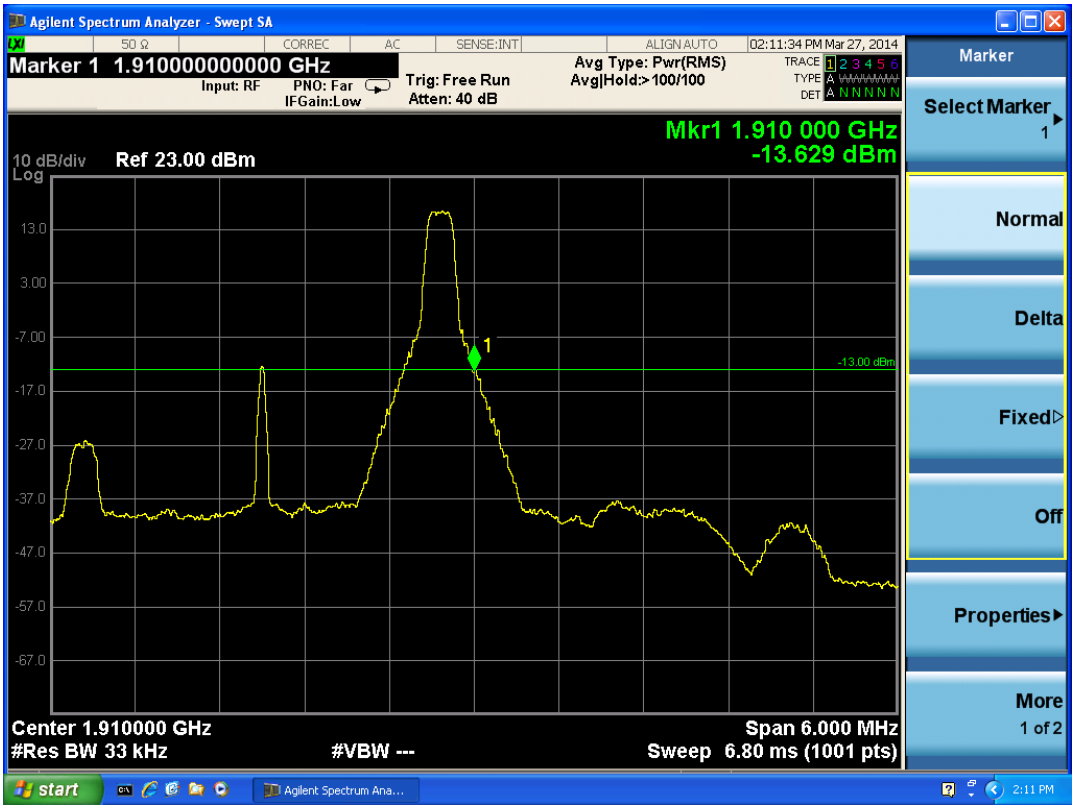


LTE Band 2 16QAM Bandwidth = 3MHz CH18615,RB 1

LTE Band 2 16QAM Bandwidth = 3MHz CH18615,RB 8



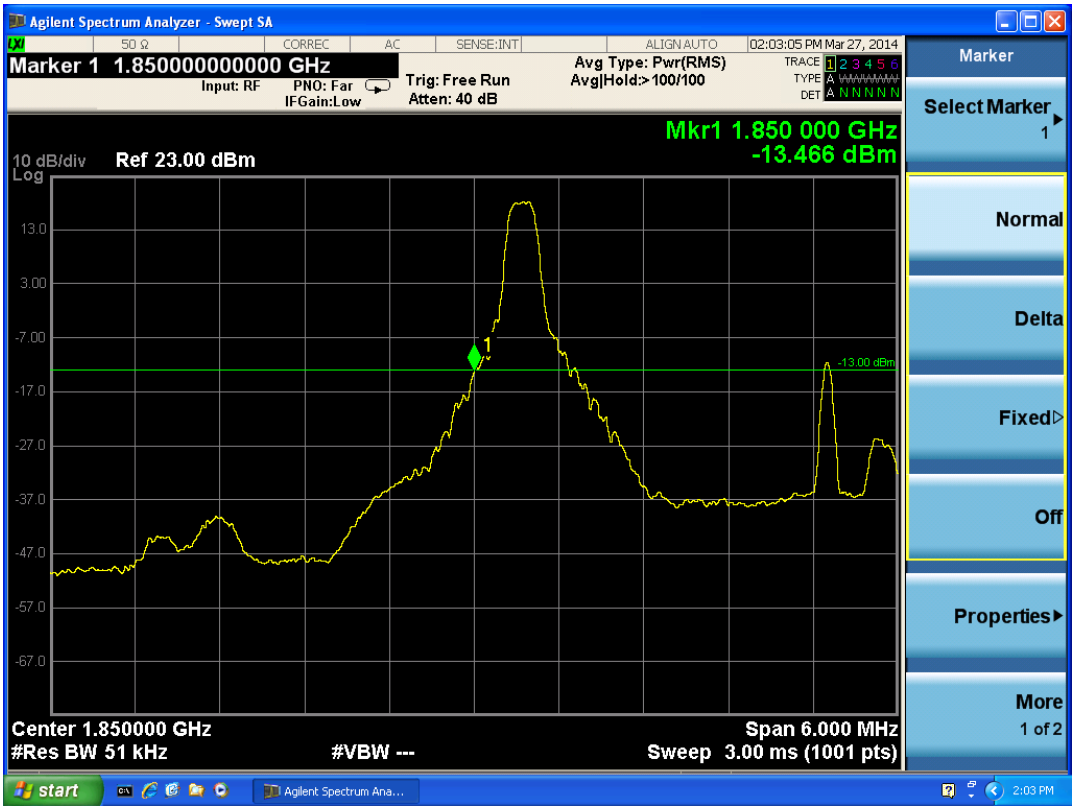
LTE Band 2 16QAM Bandwidth = 3MHz CH18615,RB 15



LTE Band 2 16QAM Bandwidth = 3MHz CH19185,RB 1

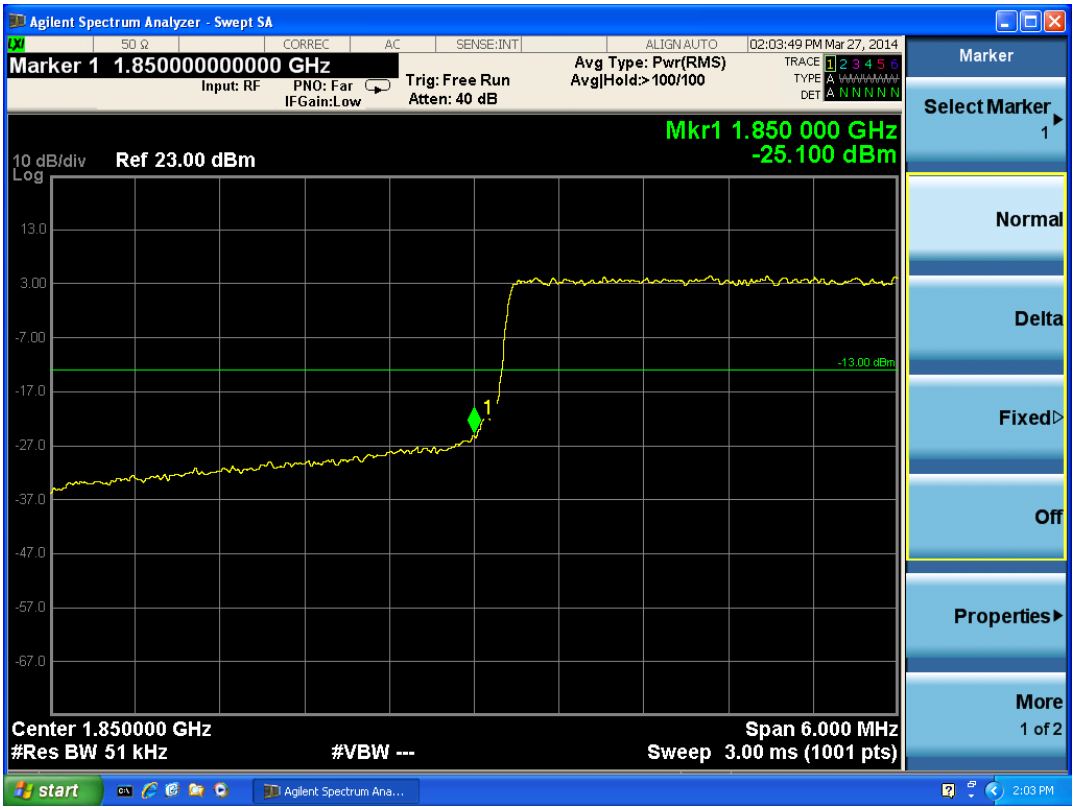
LTE Band 2 16QAM Bandwidth = 3MHz CH19185,RB 8

LTE Band 2 16QAM Bandwidth = 3MHz CH19185,RB 15

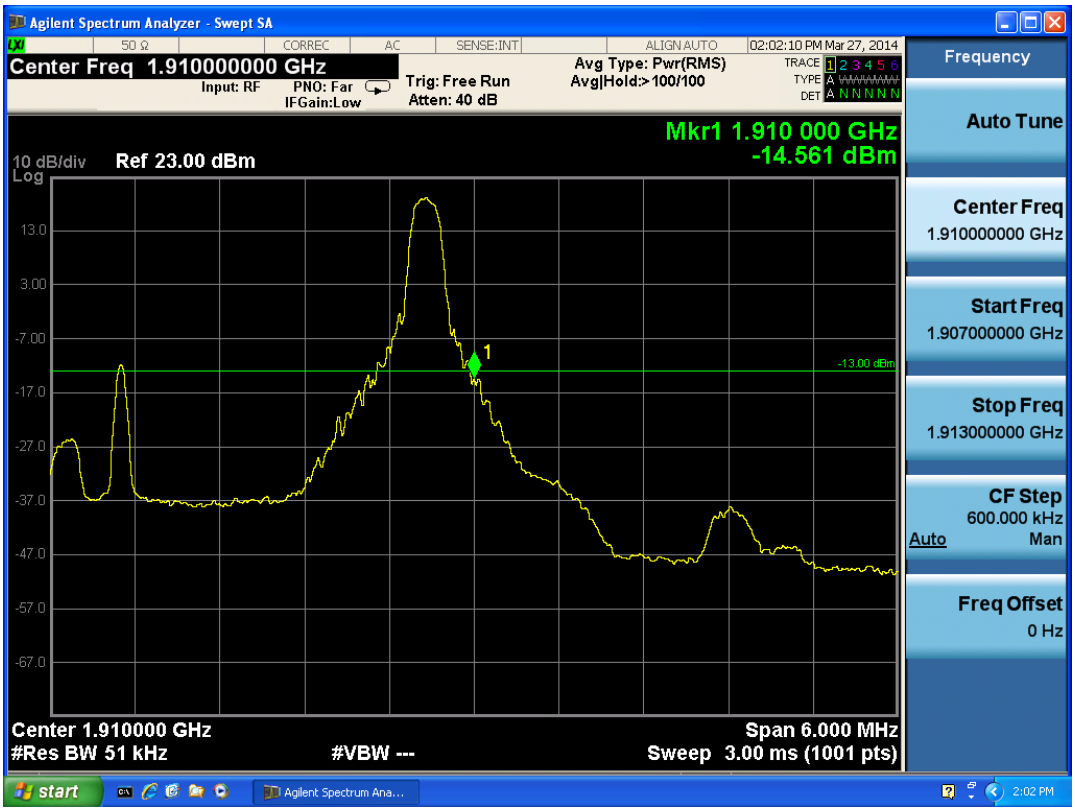


LTE Band 2 QPSK Bandwidth = 5MHz CH18625,RB 1

LTE Band 2 QPSK Bandwidth = 5MHz CH18625,RB 12



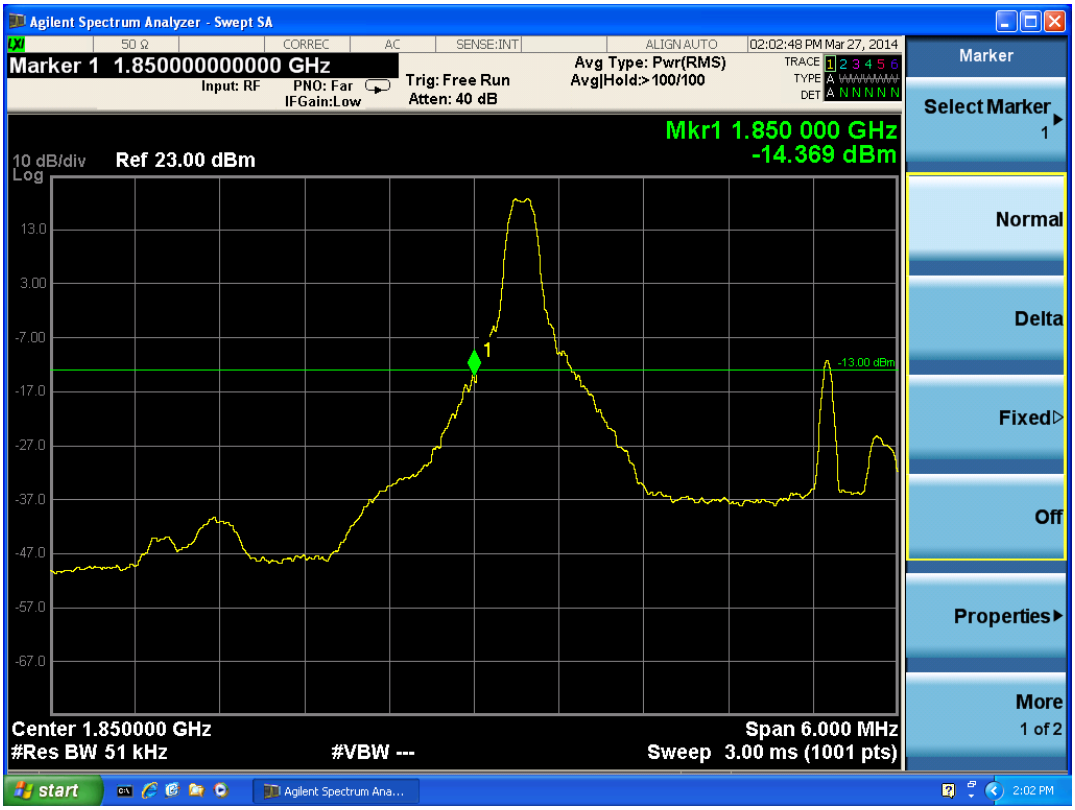
LTE Band 2 QPSK Bandwidth = 5MHz CH18625,RB 25



LTE Band 2 QPSK Bandwidth = 5MHz CH19175,RB 1

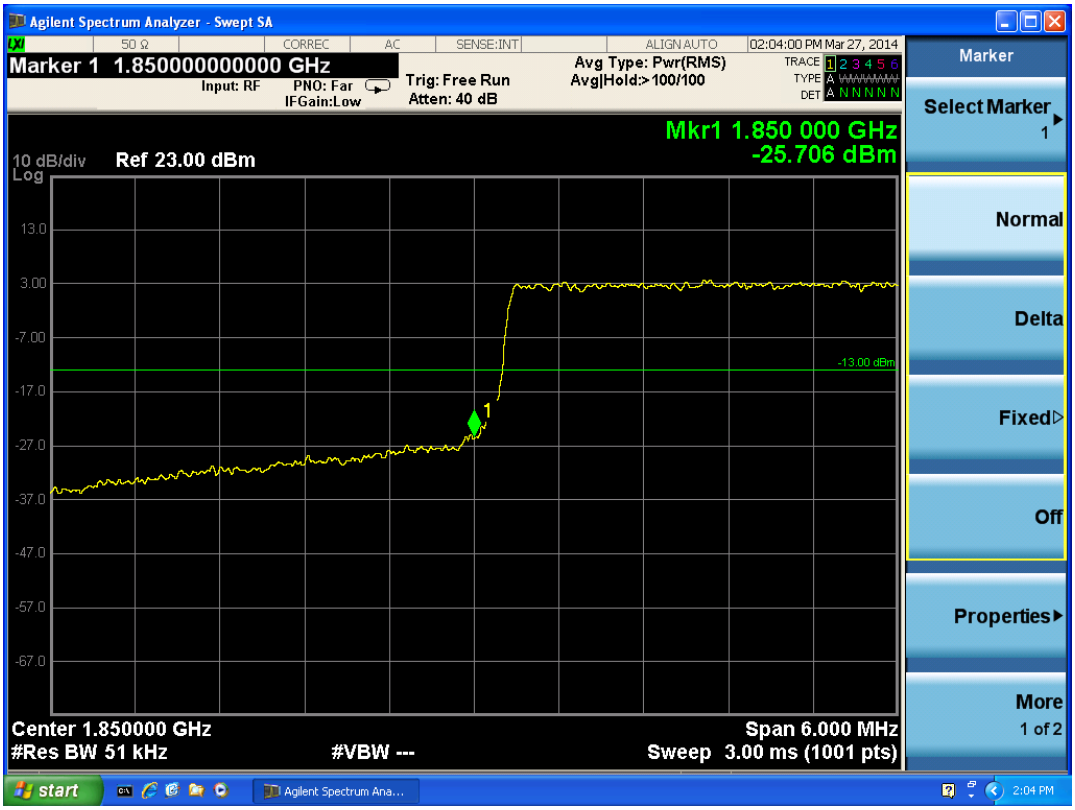
LTE Band 2 QPSK Bandwidth = 5MHz CH19175,RB 12

LTE Band 2 QPSK Bandwidth = 5MHz CH19175,RB 25

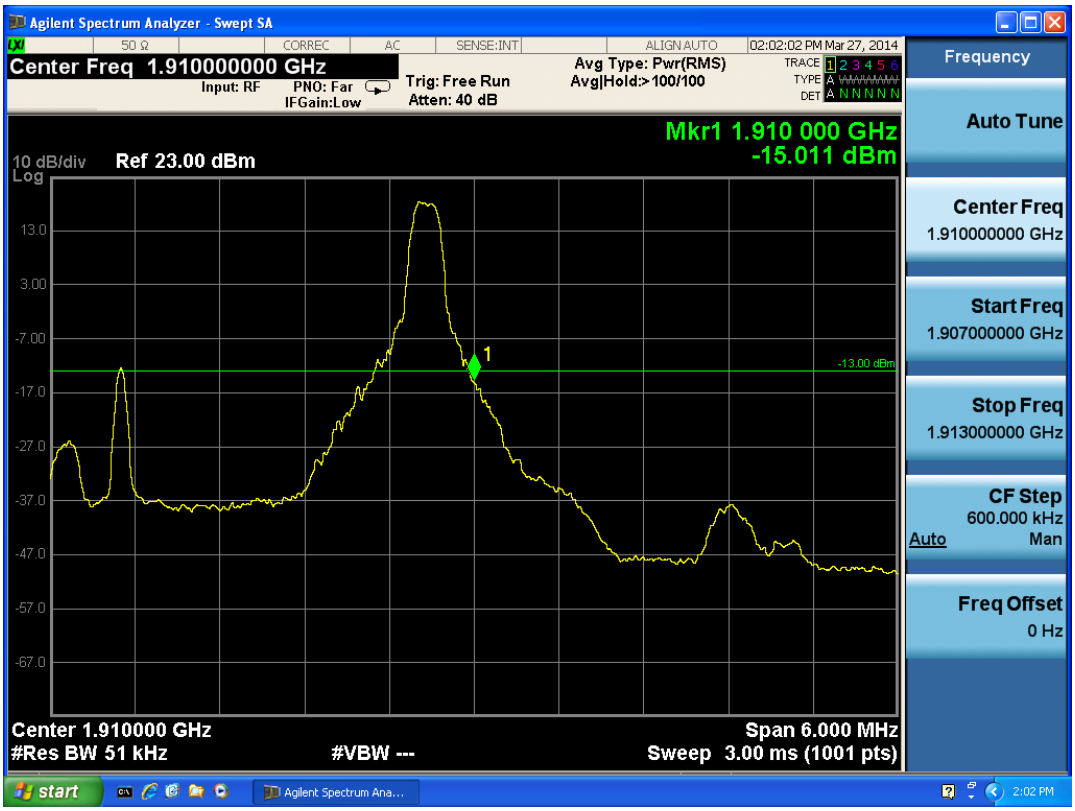


LTE Band 2 16QAM Bandwidth = 5MHz CH18625,RB 1

LTE Band 2 16QAM Bandwidth = 5MHz CH18625,RB 12



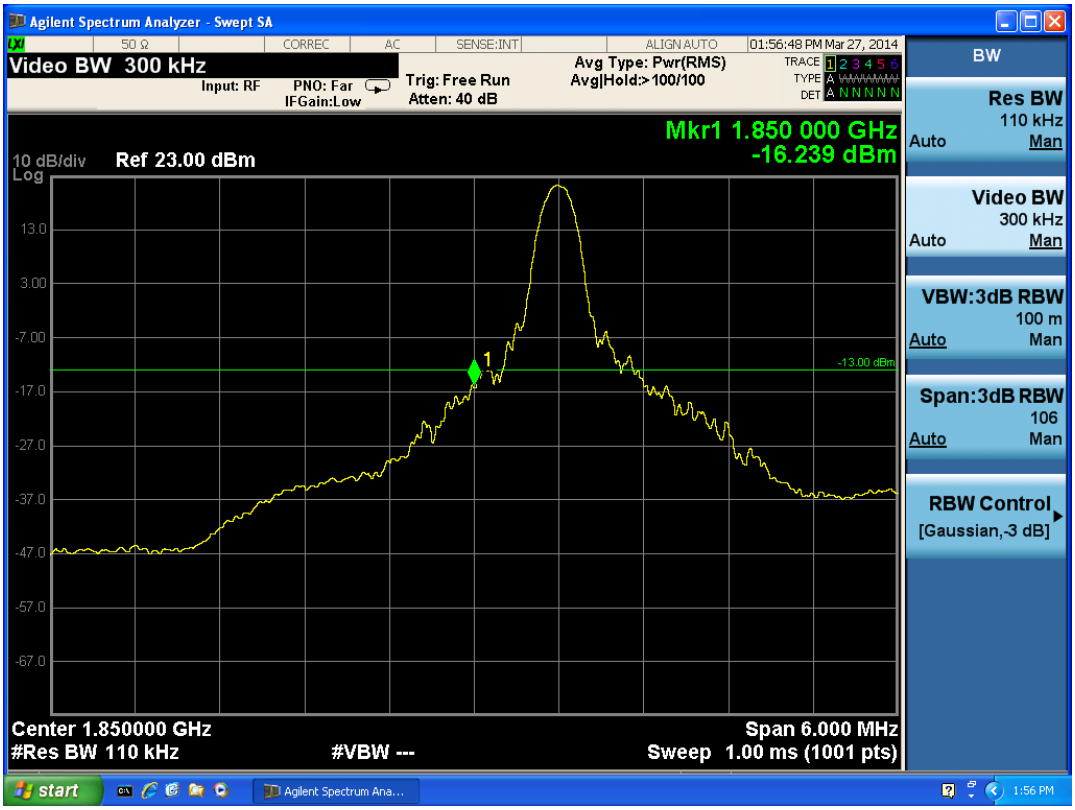
LTE Band 2 16QAM Bandwidth = 5MHz CH18625,RB 25



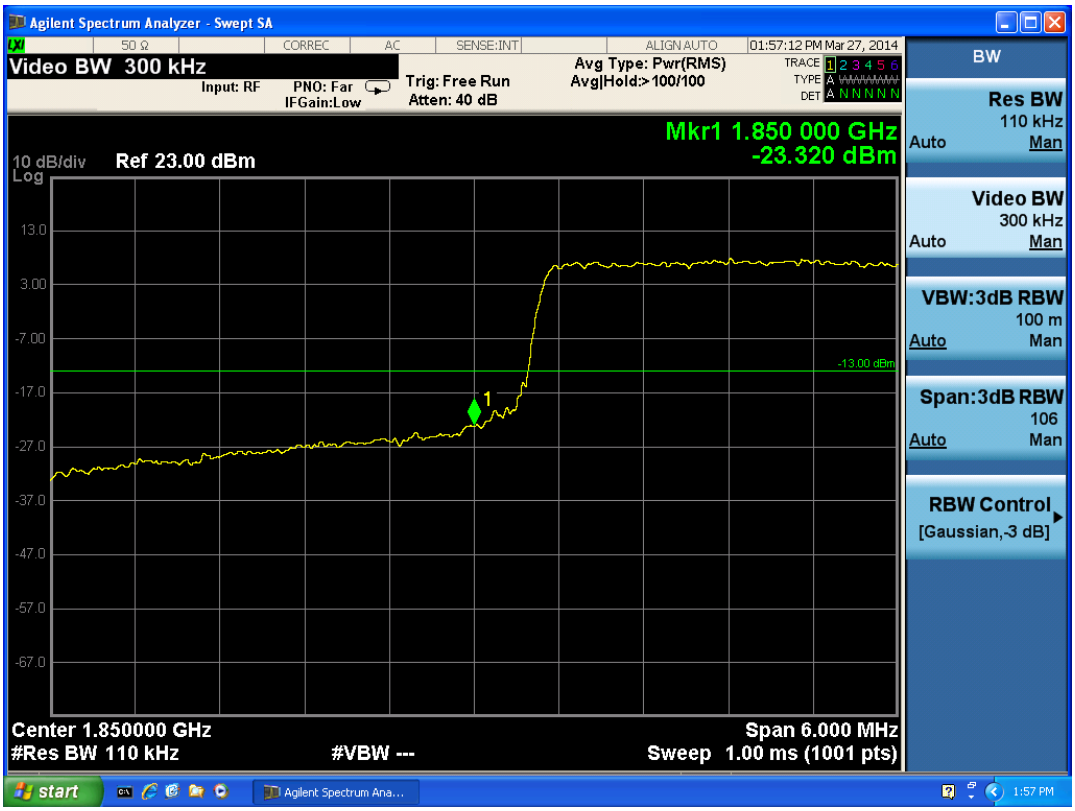
LTE Band 2 16QAM Bandwidth = 5MHz CH19175,RB 1

LTE Band 2 16QAM Bandwidth = 5MHz CH19175,RB 12

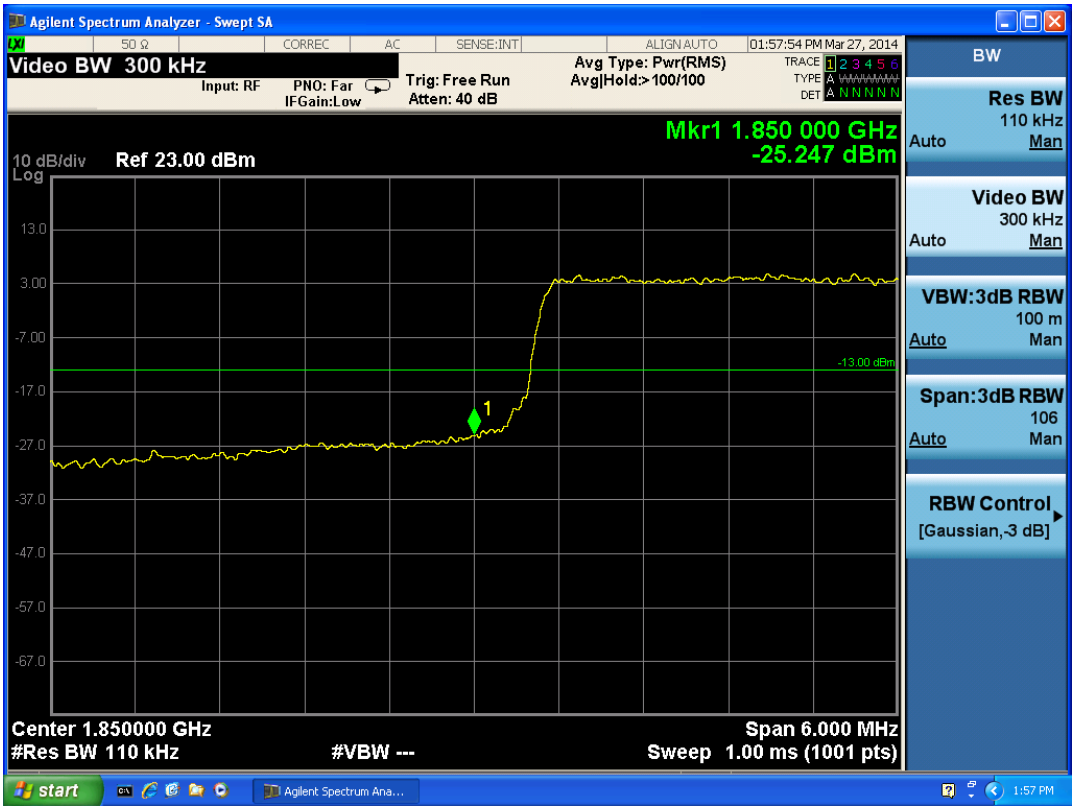
LTE Band 2 16QAM Bandwidth = 5MHz CH19175,RB 25



LTE Band 2 QPSK Bandwidth = 10MHz CH18650,RB 1



LTE Band 2 QPSK Bandwidth = 10MHz CH18650,RB 25

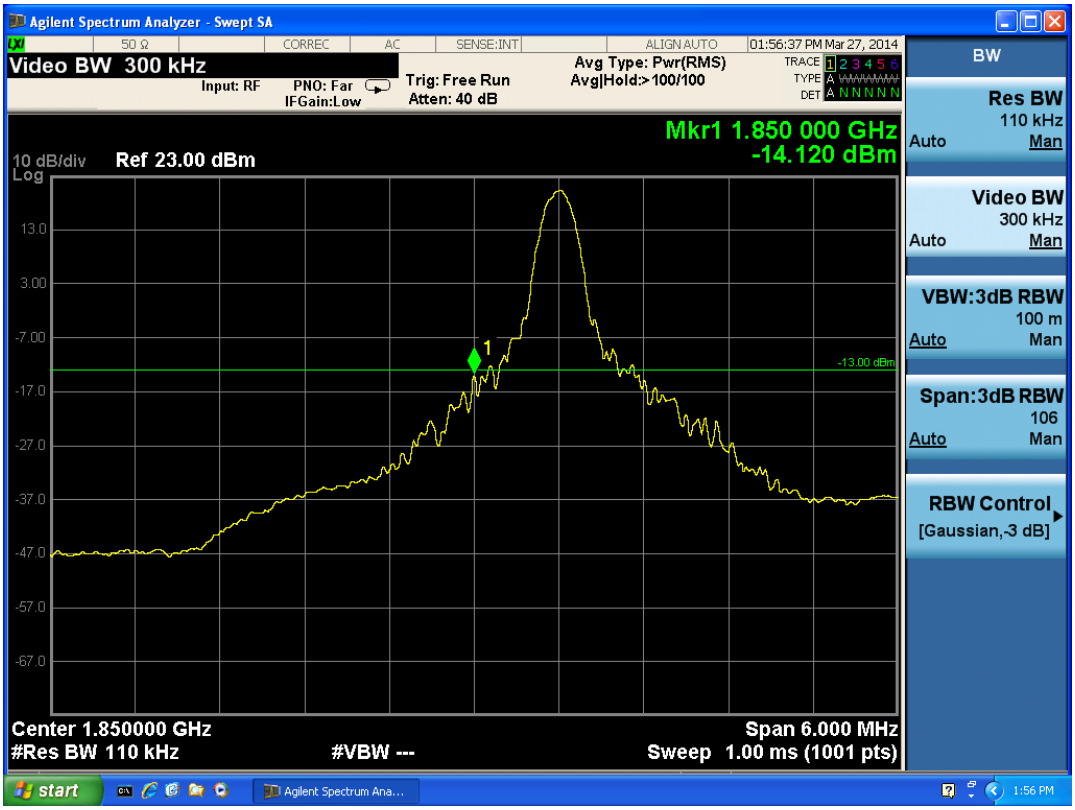


LTE Band 2 QPSK Bandwidth = 10MHz CH18650,RB 50

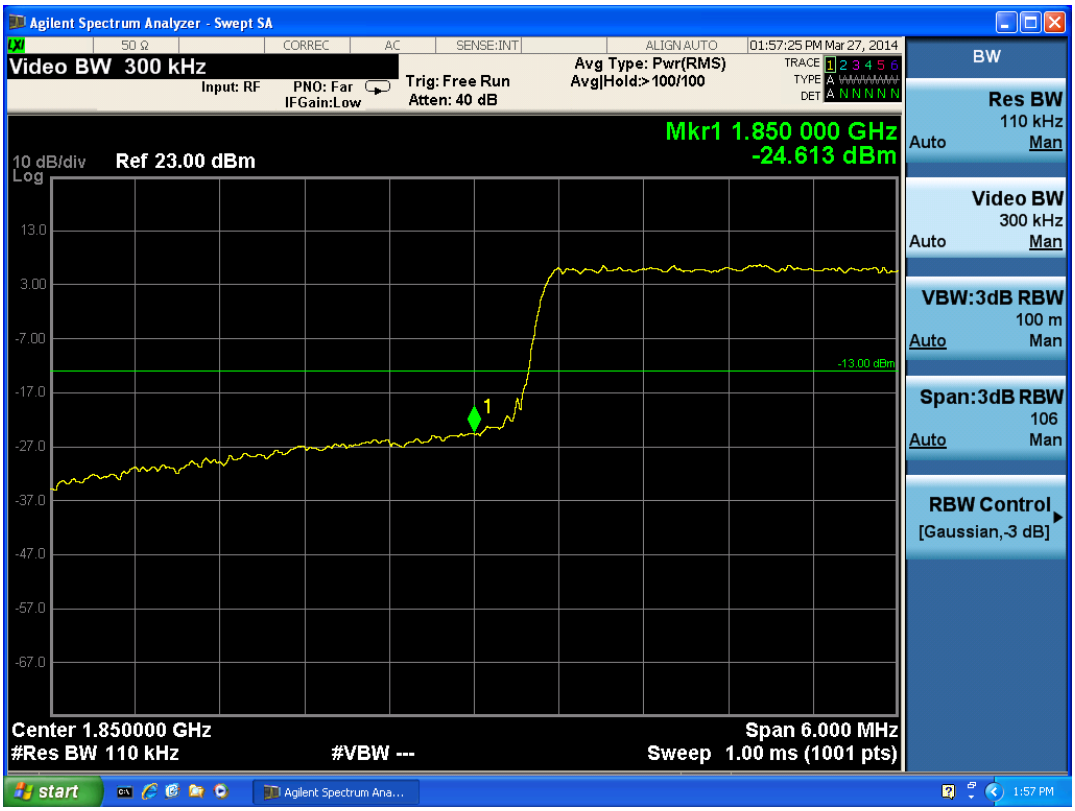
LTE Band 2 QPSK Bandwidth = 10MHz CH19150,RB 1

LTE Band 2 QPSK Bandwidth = 10MHz CH19150,RB 25

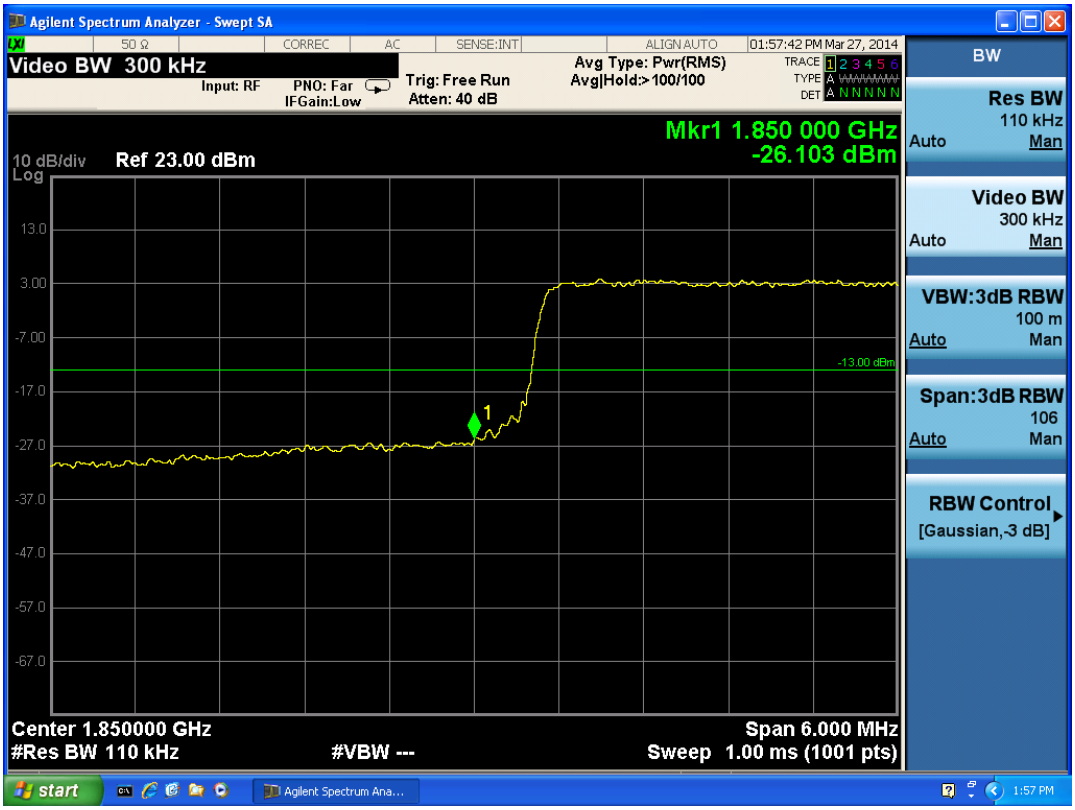
LTE Band 2 QPSK Bandwidth = 10MHz CH19150,RB 50



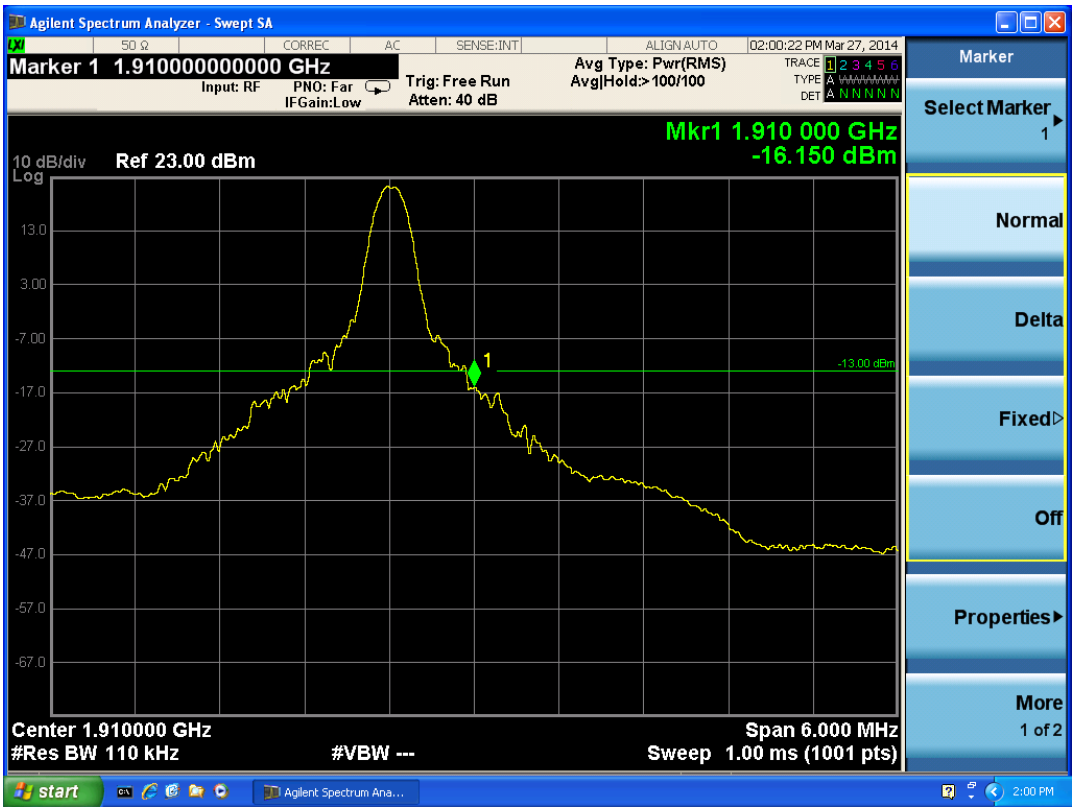
LTE Band 2 16QAM Bandwidth = 10MHz CH18650,RB 1



LTE Band 2 16QAM Bandwidth = 10MHz CH18650,RB 25



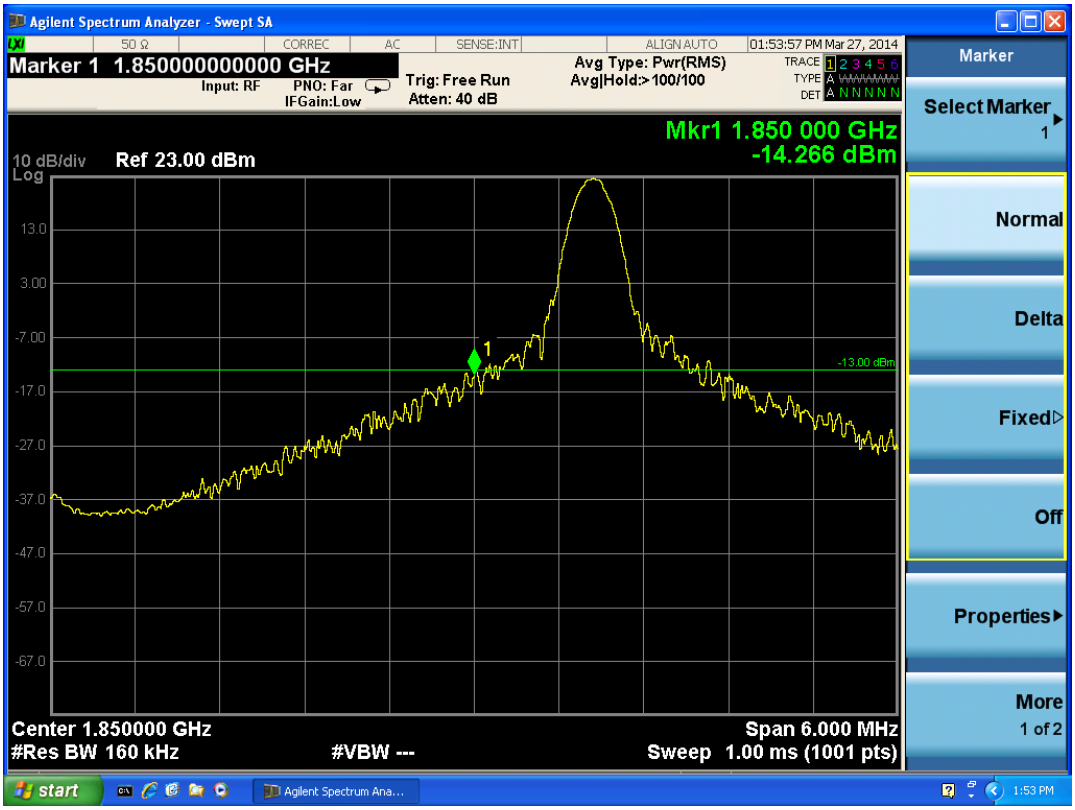
LTE Band 2 16QAM Bandwidth = 10MHz CH18650,RB 50



LTE Band 2 16QAM Bandwidth = 10MHz CH19150,RB 1

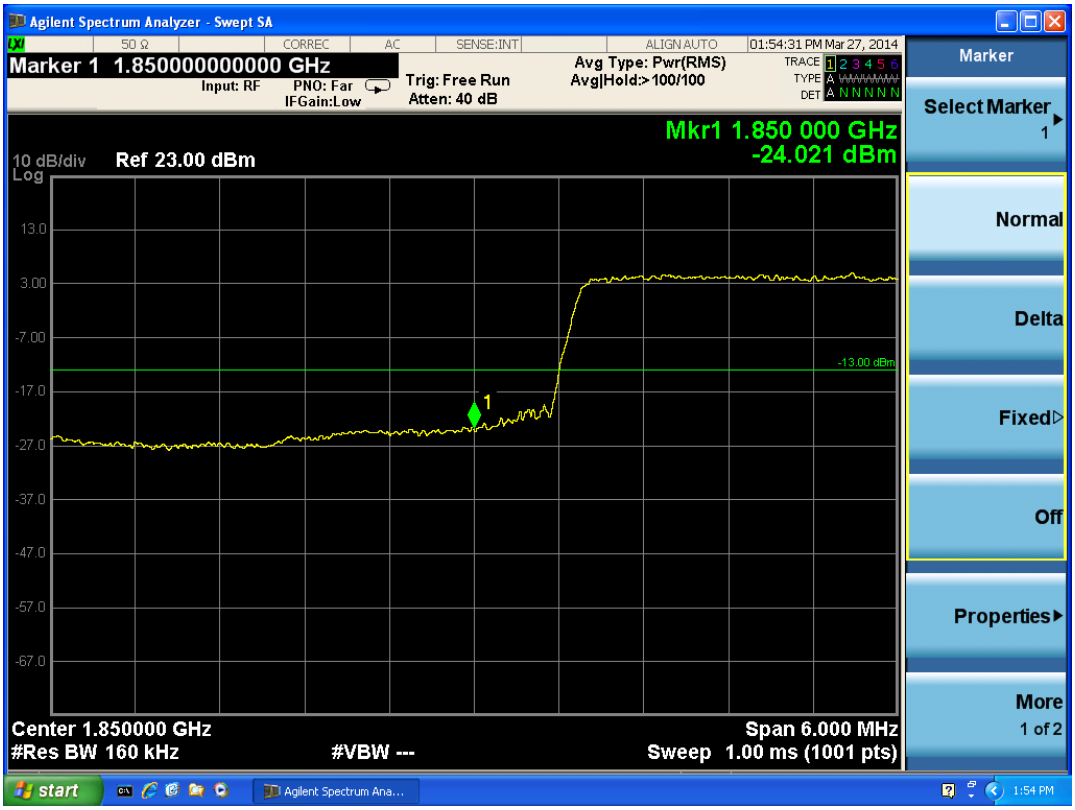
LTE Band 2 16QAM Bandwidth = 10MHz CH19150,RB 25

LTE Band 2 16QAM Bandwidth = 10MHz CH19150,RB 50



LTE Band 2 QPSK Bandwidth = 15MHz CH18675,RB 1

LTE Band 2 QPSK Bandwidth = 15MHz CH18675,RB 36

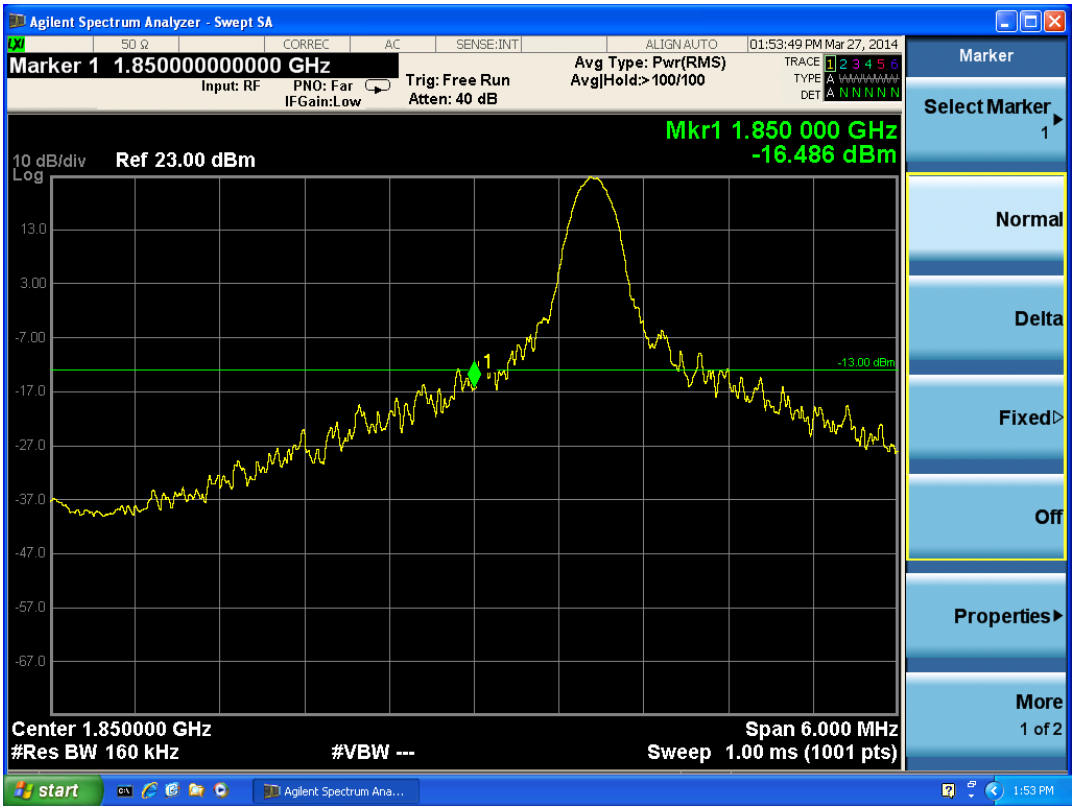


LTE Band 2 QPSK Bandwidth = 15MHz CH18675,RB 75

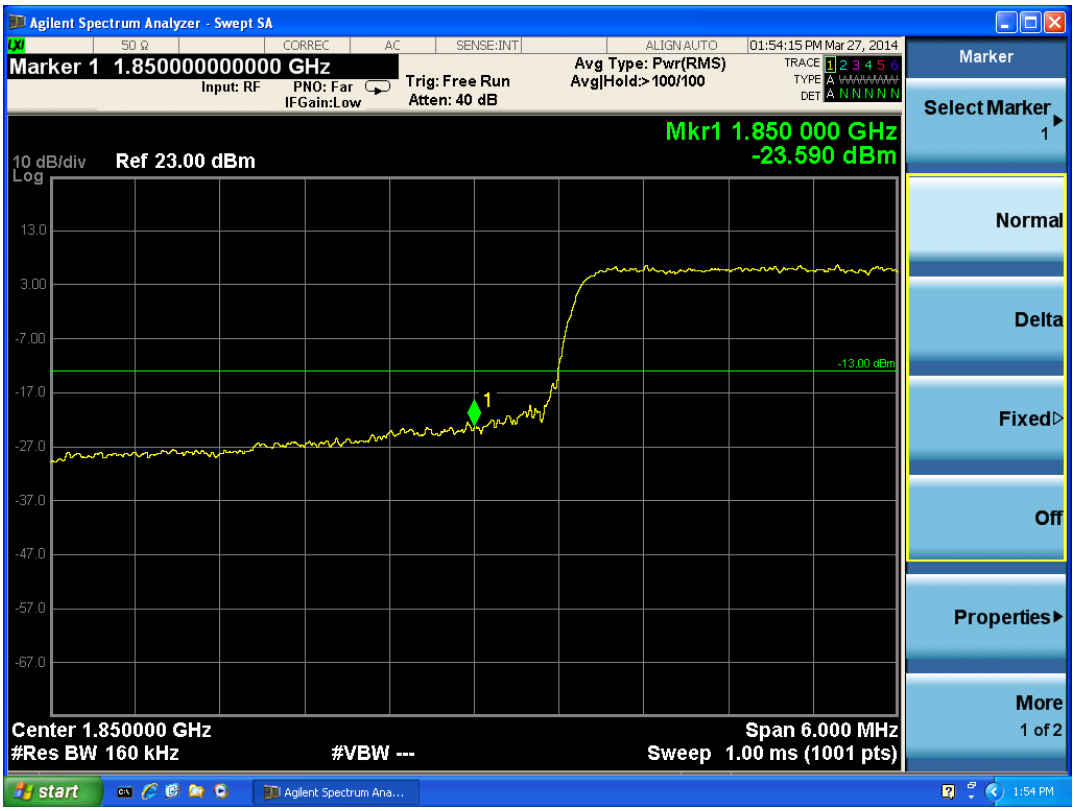
LTE Band 2 QPSK Bandwidth = 15MHz CH19125,RB 1

LTE Band 2 QPSK Bandwidth = 15MHz CH19125,RB 36

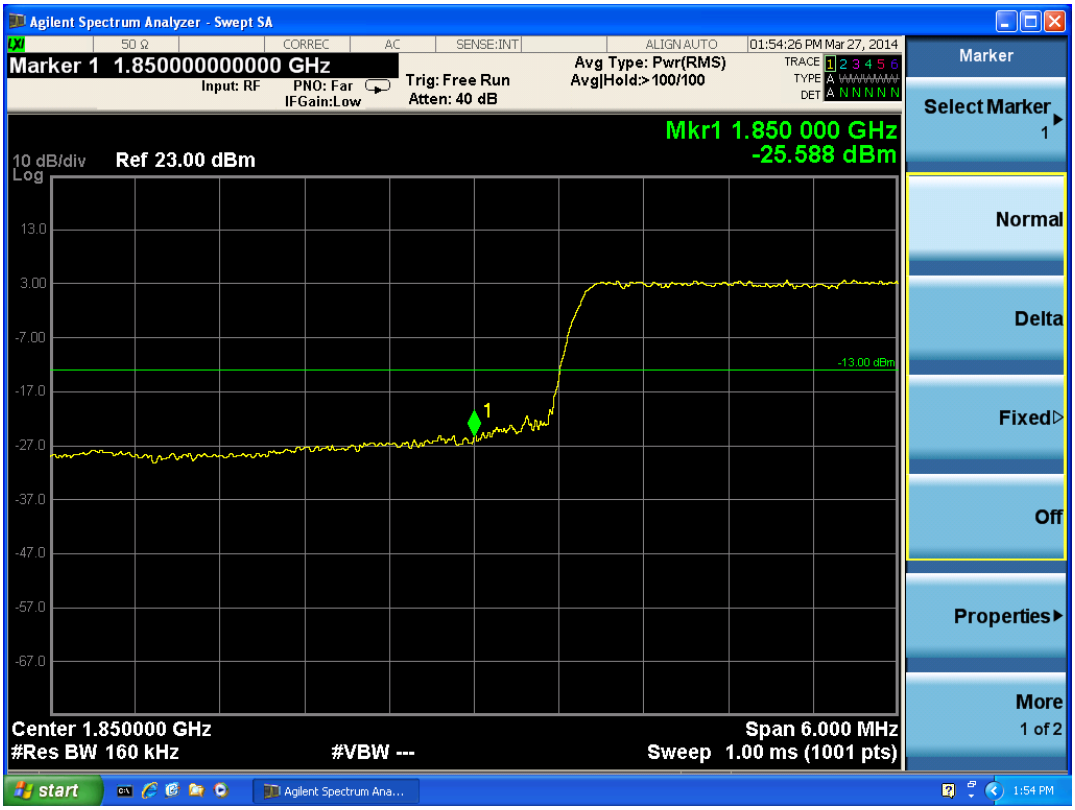
LTE Band 2 QPSK Bandwidth = 15MHz CH19125,RB 75



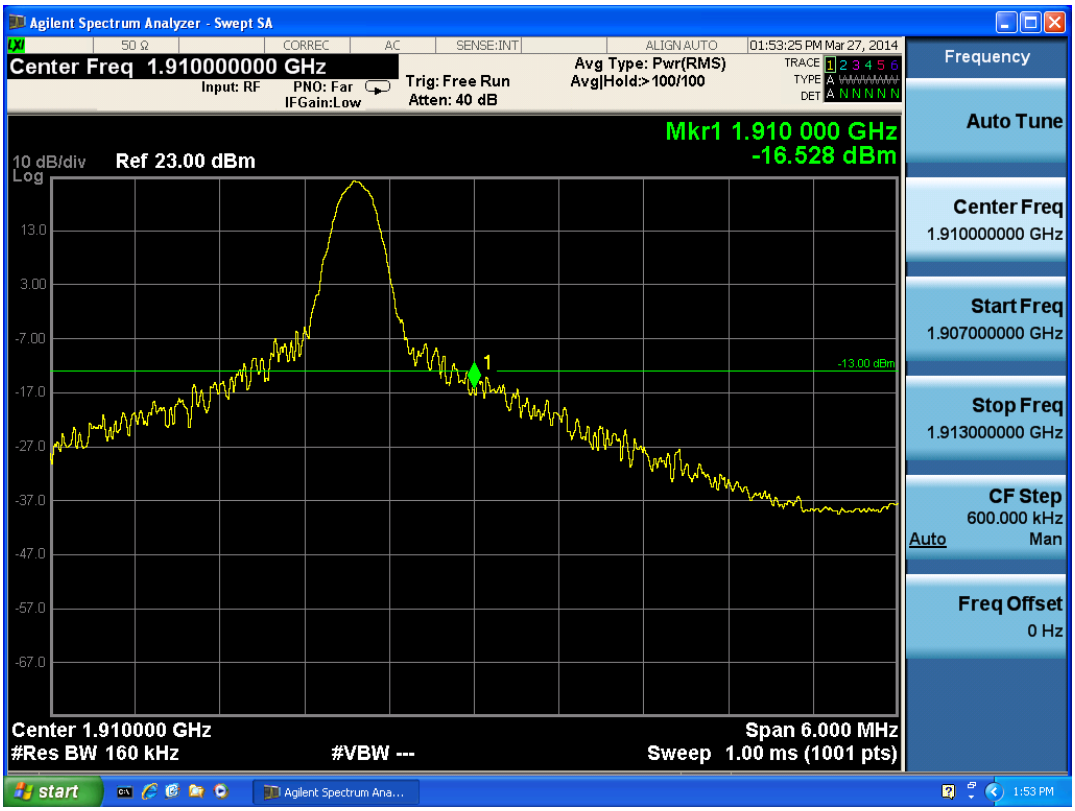
LTE Band 2 16QAM Bandwidth = 15MHz CH18675,RB 1



LTE Band 2 16QAM Bandwidth = 15MHz CH18675,RB 36



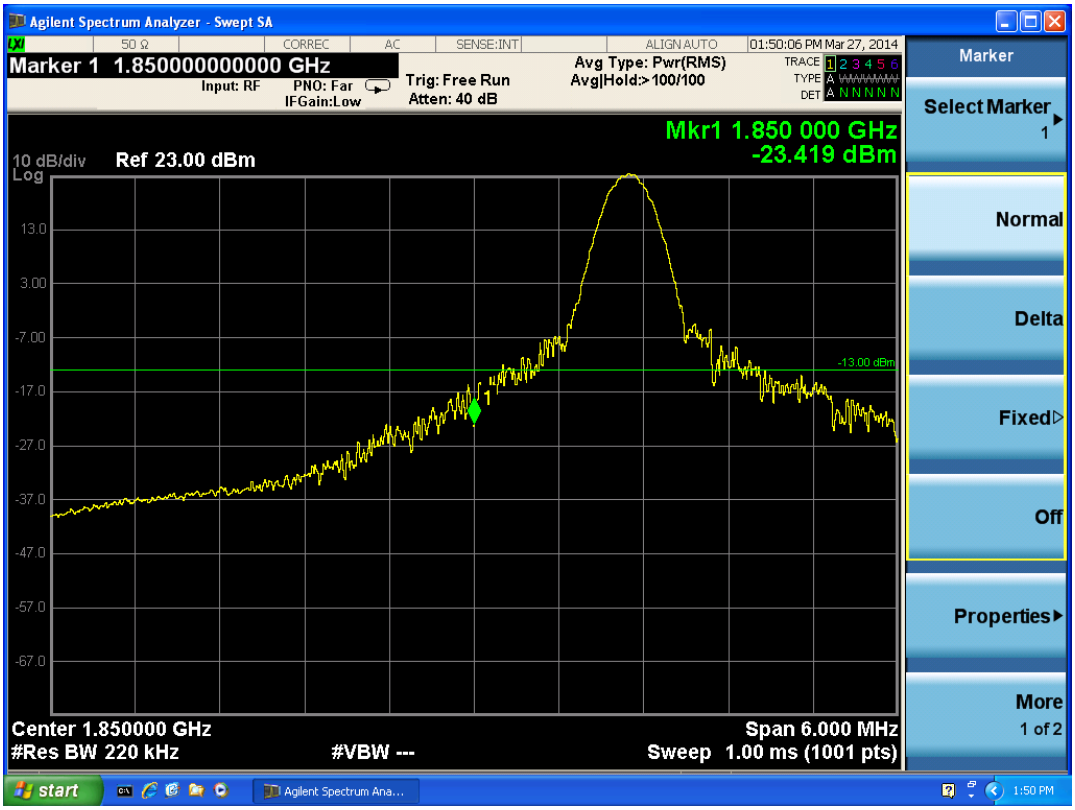
LTE Band 2 16QAM Bandwidth = 15MHz CH18675,RB 75



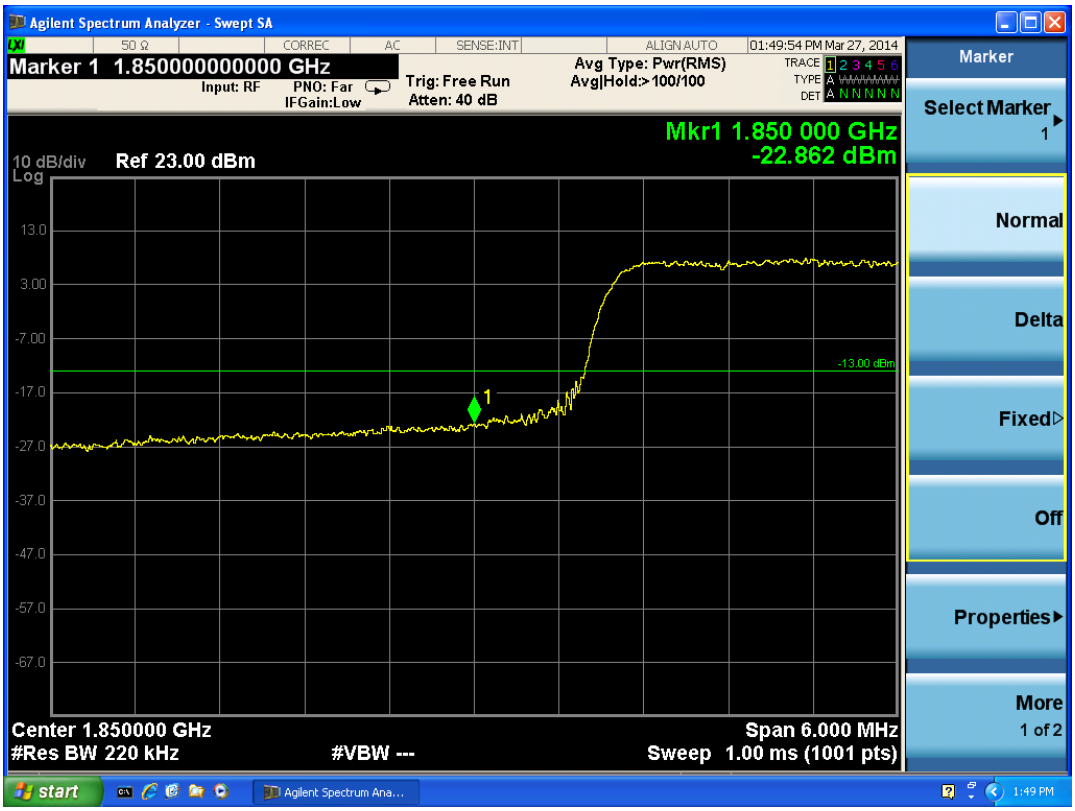
LTE Band 2 16QAM Bandwidth = 15MHz CH19125,RB 1

LTE Band 2 16QAM Bandwidth = 15MHz CH19125,RB 36

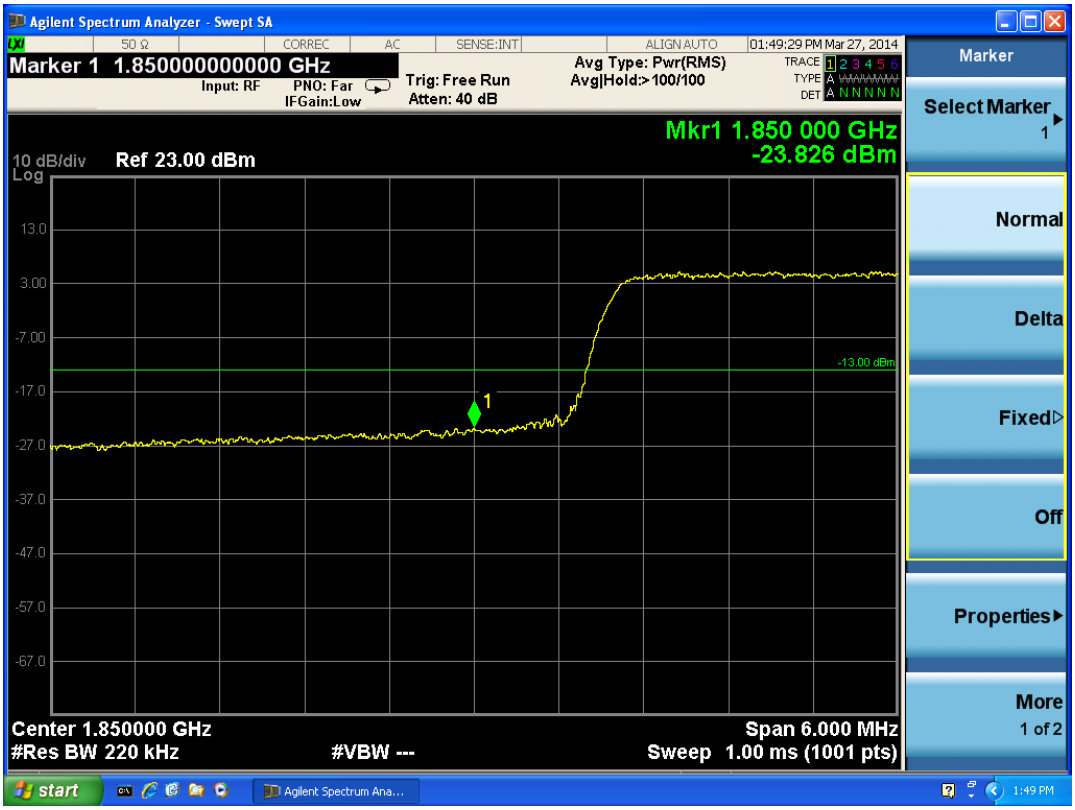
LTE Band 2 16QAM Bandwidth = 15MHz CH19125,RB 75



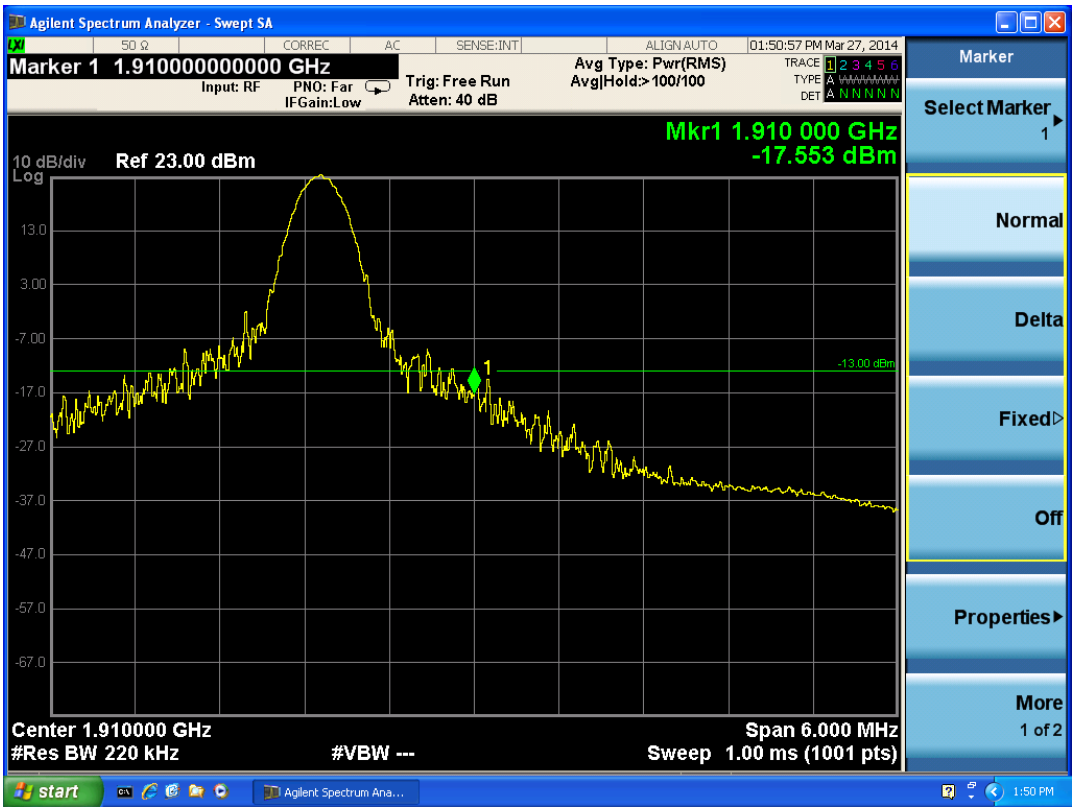
LTE Band 2 QPSK Bandwidth = 20MHz CH18700,RB 1



LTE Band 2 QPSK Bandwidth = 20MHz CH18700,RB 50



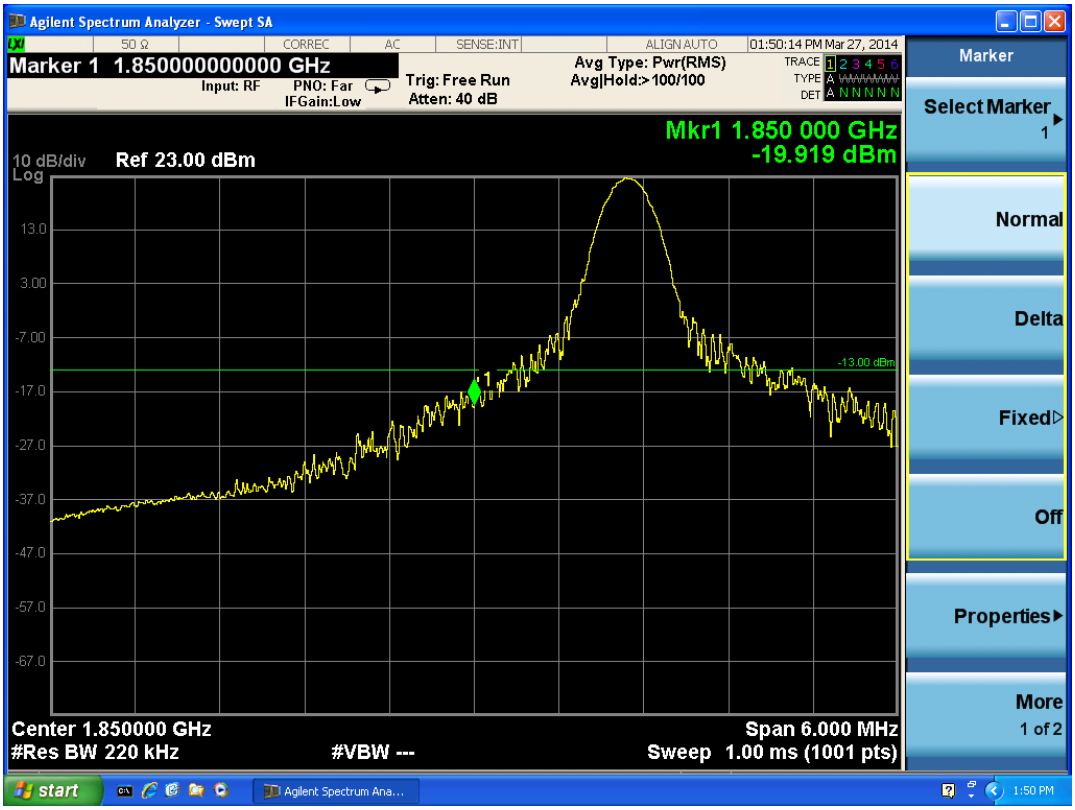
LTE Band 2 QPSK Bandwidth = 20MHz CH18700,RB 100



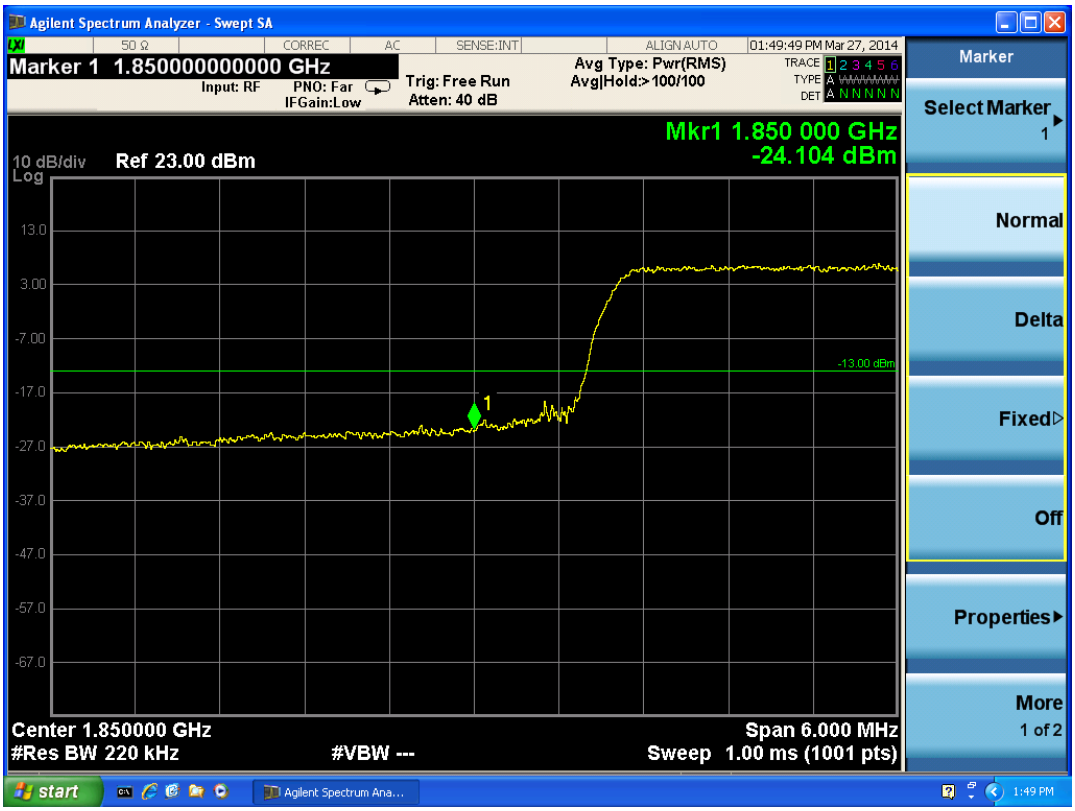
LTE Band 2 QPSK Bandwidth = 20MHz CH19100,RB 1

LTE Band 2 QPSK Bandwidth = 20MHz CH19100,RB 50

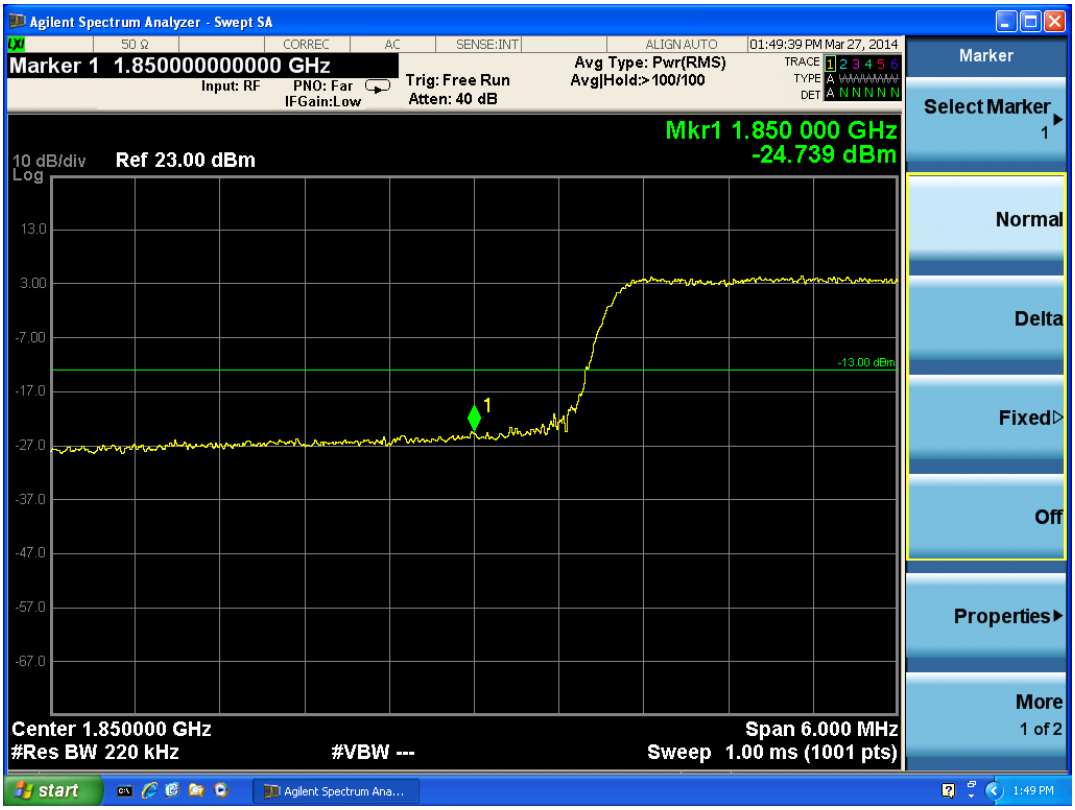
LTE Band 2 QPSK Bandwidth = 20MHz CH19100,RB 100



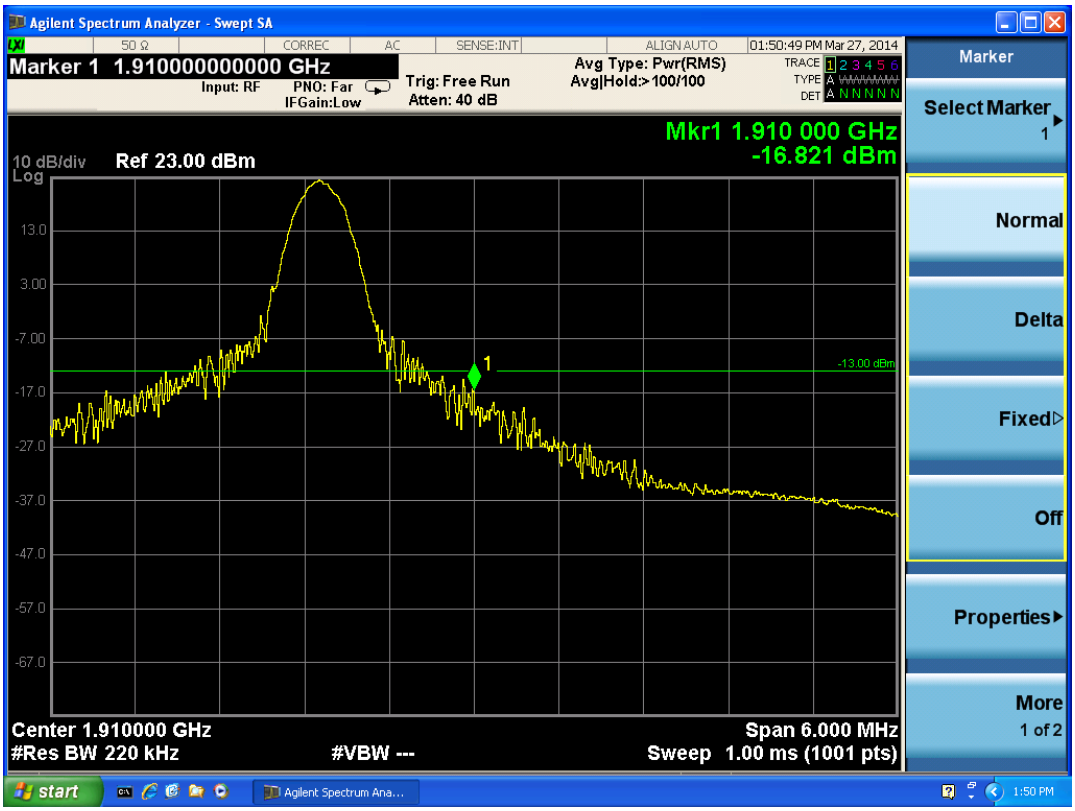
LTE Band 2 16QAM Bandwidth = 20MHz CH18700,RB 1



LTE Band 2 16QAM Bandwidth = 20MHz CH18700,RB 50



LTE Band 2 16QAM Bandwidth = 20MHz CH18700,RB 100



LTE Band 2 16QAM Bandwidth = 20MHz CH19100,RB 1

LTE Band 2 16QAM Bandwidth = 20MHz CH19100,RB 50

LTE Band 2 16QAM Bandwidth = 20MHz CH19100,RB 100

2.6. Peak-to-Average Power Ratio (PAPR)

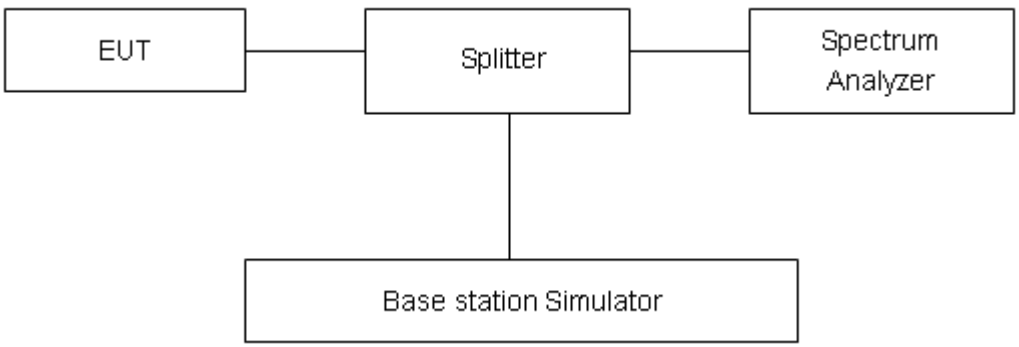
Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Methods of Measurement

The measurement procedures in KDB971168 are used.
The inherent randomness of the power peaks in a noise-like signal makes it difficult to quantify the peak power using traditional measurement techniques for determining the peak power of an analog signal. The peak power of a digitally-modulated signal is predictable only on a statistical basis. Thus, for these types of signals, a statistical measurement of the peak power is necessary.
Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth.
Step 1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
Step 2. Set the CCDF option in Spectrum analyzer.
Step 3. Record the maximum PAPR level associated with a probability of 0.1%.

Test Setup



Limits

No specific Peak-to-Average Ratio requirements in KDB 971168.

Measurement Uncertainty

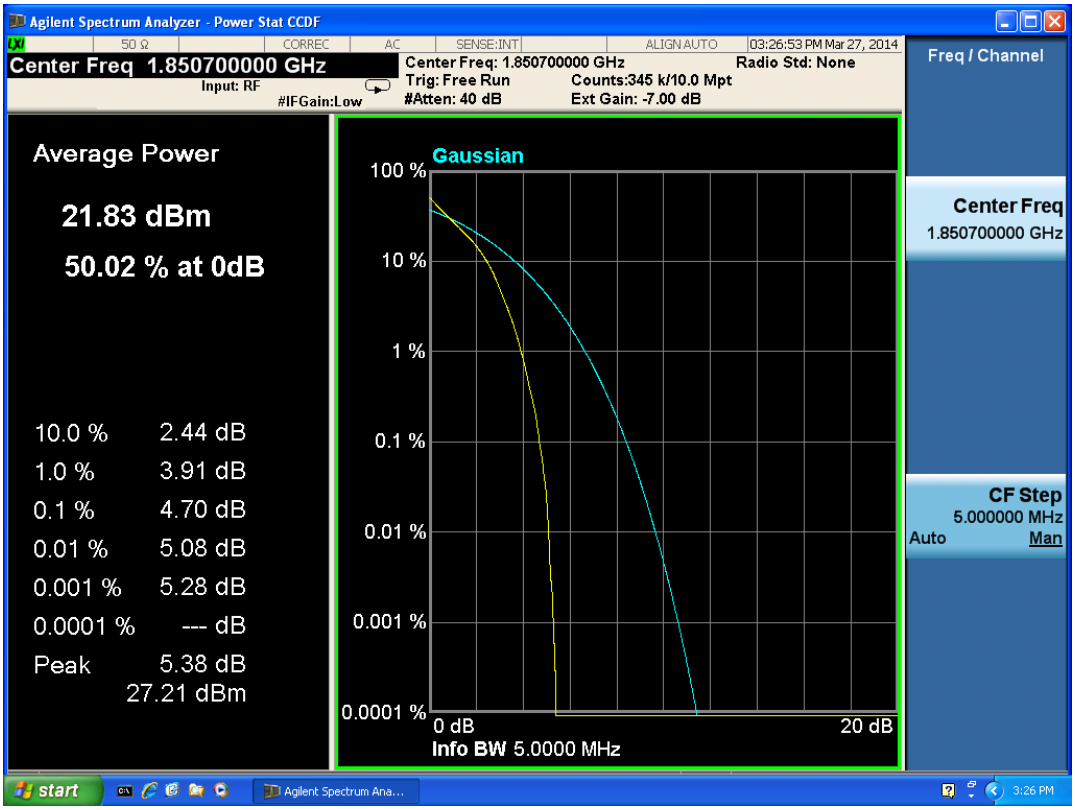
The assessed measurement uncertainty to ensure 95% confidence level for the

normal distribution is with the coverage factor k = 2, U= 0.4 dB.

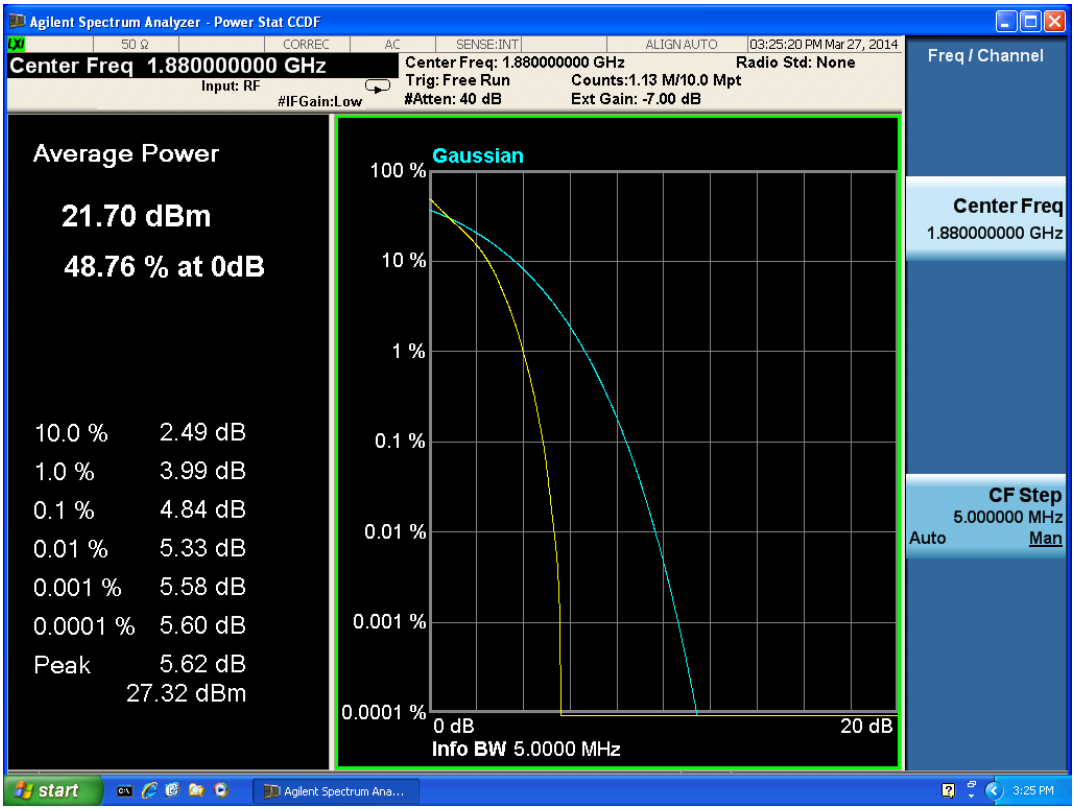
Test Results: PASS

LTE Band 2					
RB	**Modulation**	**Bandwidth ((MHz))**	**Channel**	**Frequency (MHz)**	**Test Result(dB)**
100%	QPSK	1.4	18607	1850.7	4.7
			18900	1880.0	4.84
			19193	1909.3	5.21
		3	18615	1851.5	4.72
			18900	1880.0	4.82
			19185	1908.5	5.16
		5	18625	1852.5	4.61
			18900	1880.0	4.85
			19175	1907.5	5.11
		10	18650	1855.0	4.88
			18900	1880.0	5.17
			19150	1905.0	5.30
		15	18675	1857.5	4.82
			18900	1880	5.20
			19125	1902.5	5.19
		20	18700	1860	5.31
			18900	1880	5.42
			19100	1900	5.34
	16QAM	1.4	18607	1850.7	5.36
			18900	1880.0	5.43
			19193	1909.3	5.93
		3	18615	1851.5	5.45
			18900	1880.0	5.40
			19185	1908.5	5.92
		5	18625	1852.5	5.27
			18900	1880.0	5.52
			19175	1907.5	5.76
		10	18650	1855.0	5.39

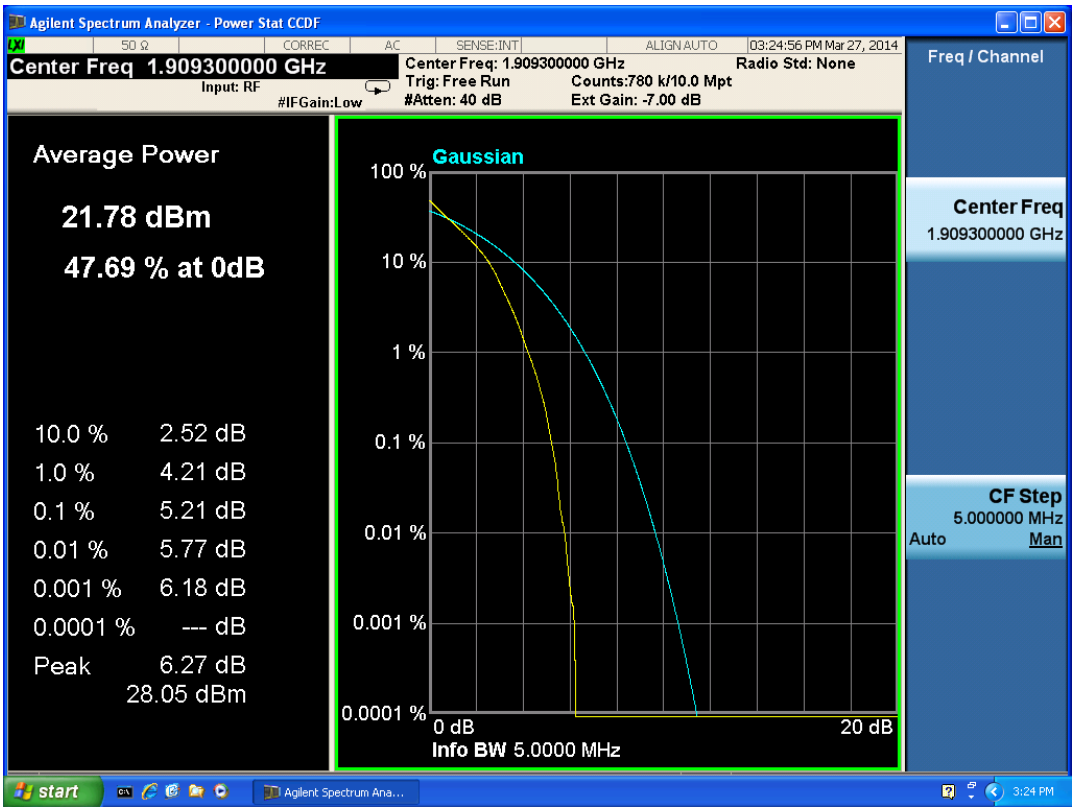
			18900	1880.0	5.80
			19150	1905.0	5.84
		15	18675	1857.5	5.52
			18900	1880	5.98
			19125	1902.5	5.82
		20	18700	1860	6.14
			18900	1880	6.37
			19100	1900	6.25



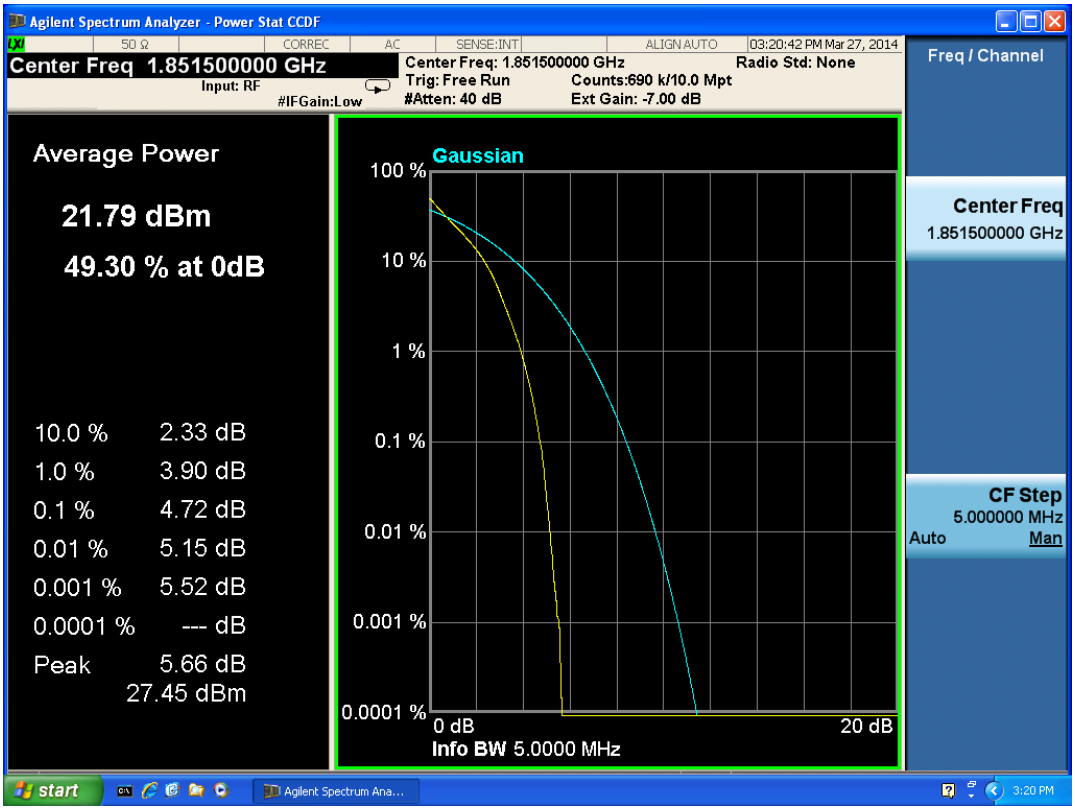
LTE Band 2 QPSK Bandwidth = 1.4MHz CH18607



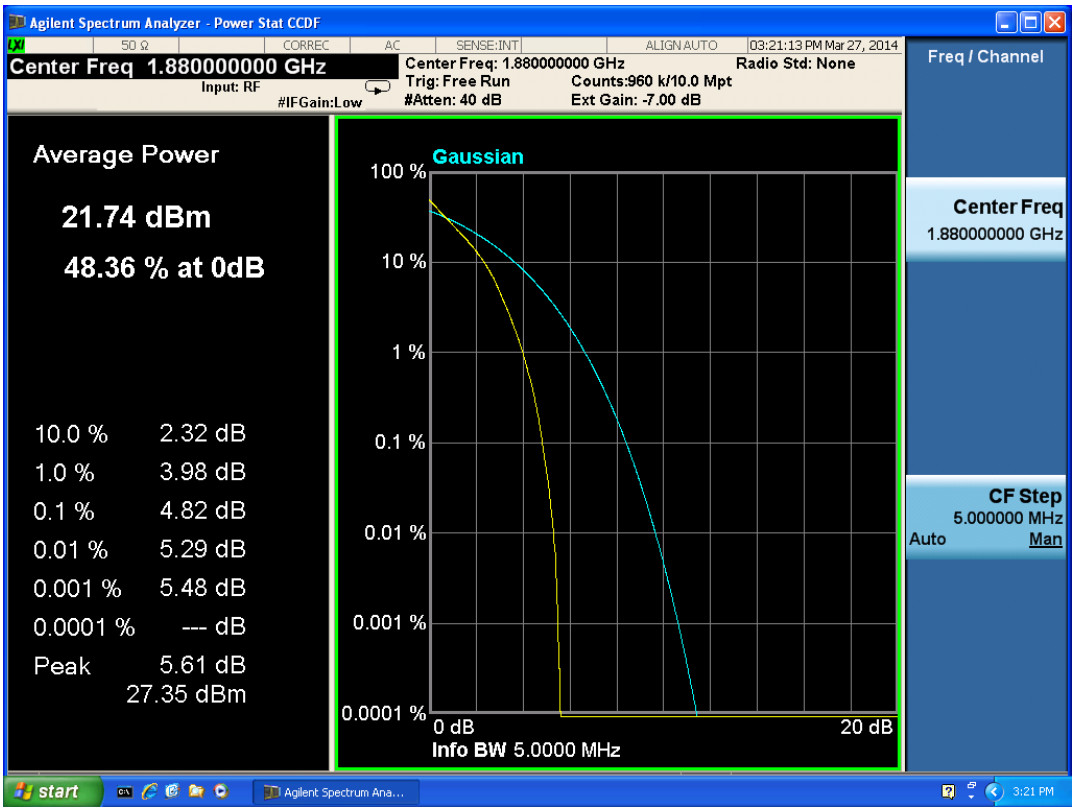
LTE Band 2 QPSK Bandwidth = 1.4MHz CH18900



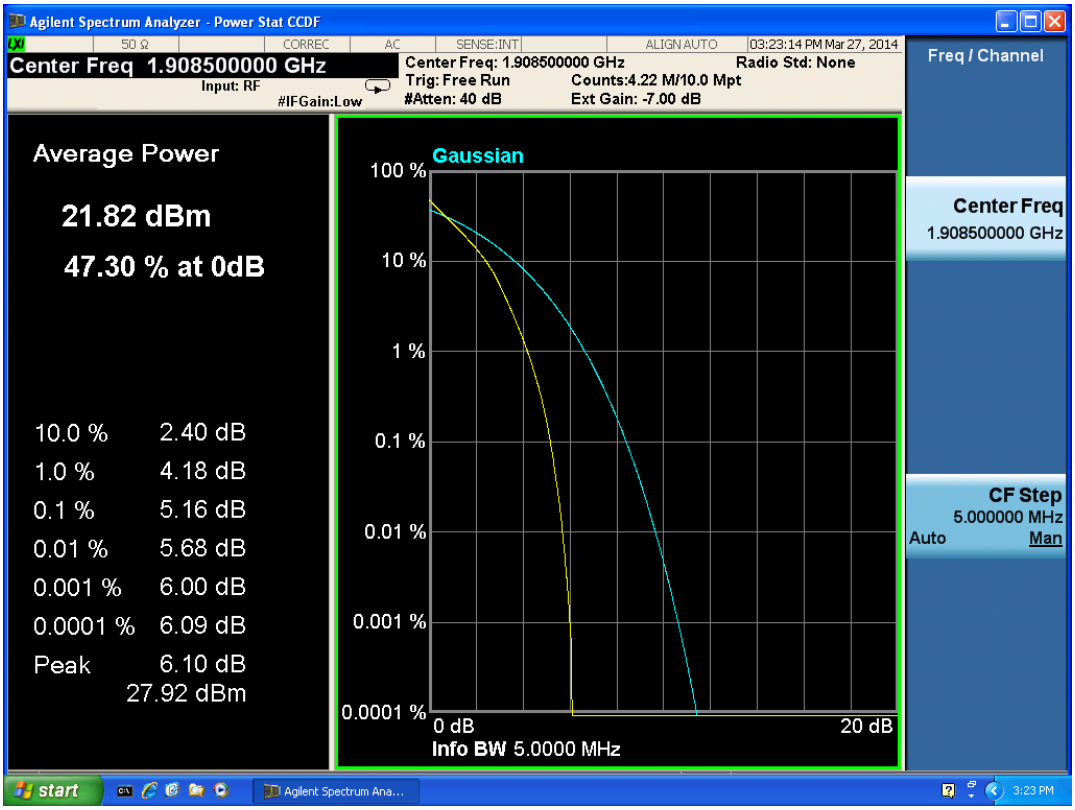
LTE Band 2 QPSK Bandwidth = 1.4MHz CH19193



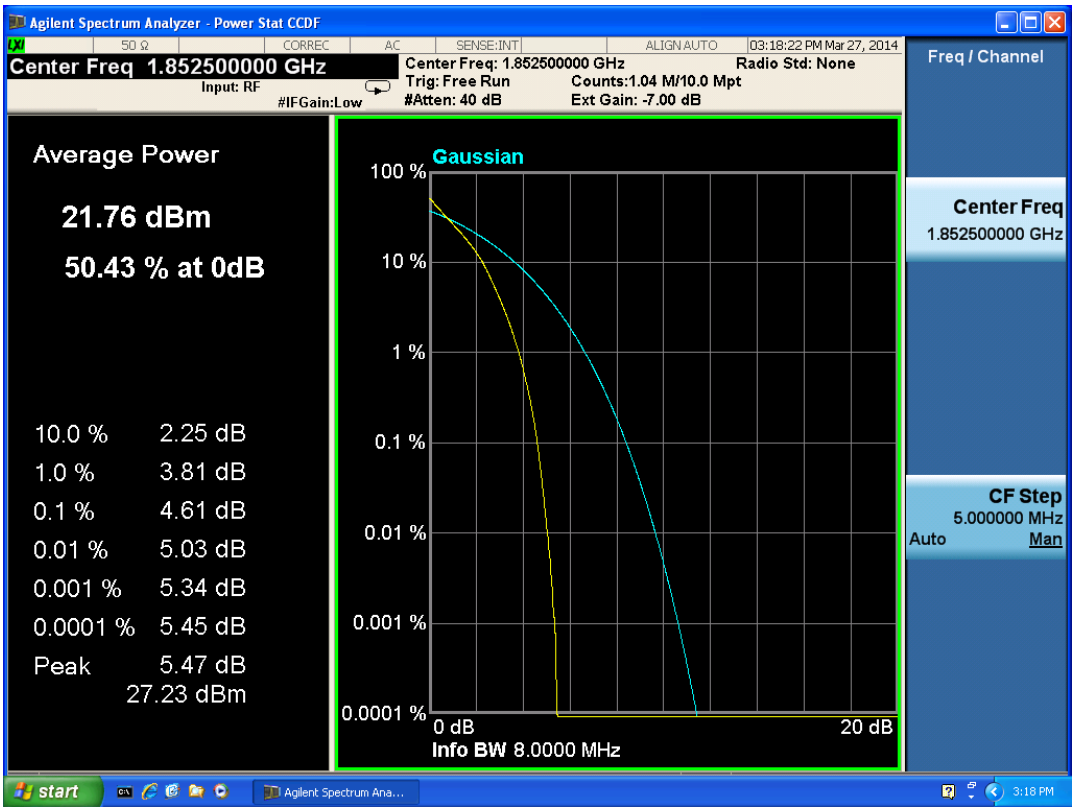
LTE Band 2 QPSK Bandwidth = 3MHz CH18615



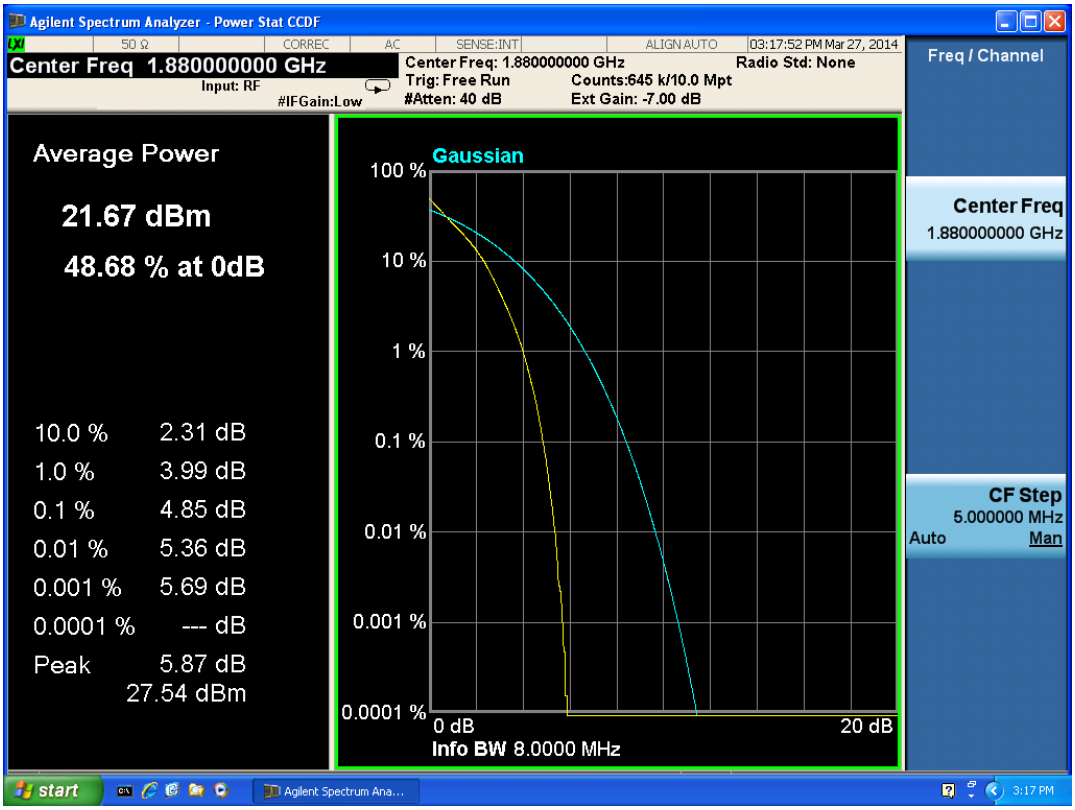
LTE Band 2 QPSK Bandwidth = 3MHz CH18900



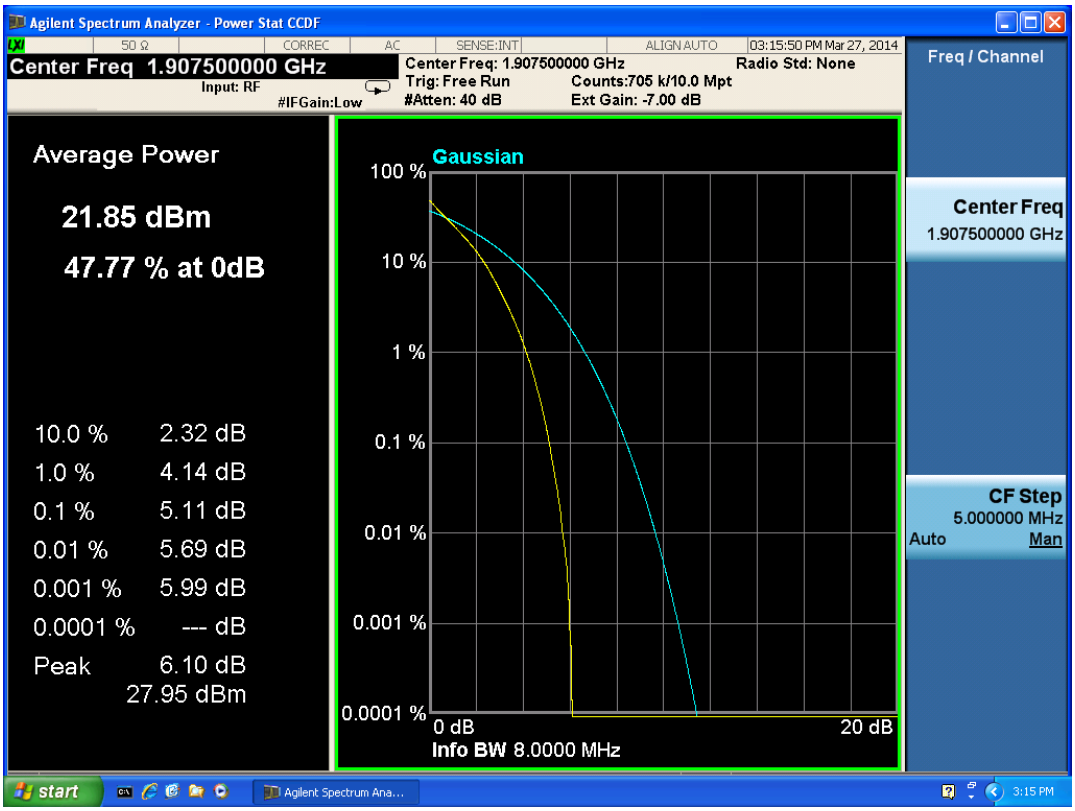
LTE Band 2 QPSK Bandwidth = 3MHz CH19185



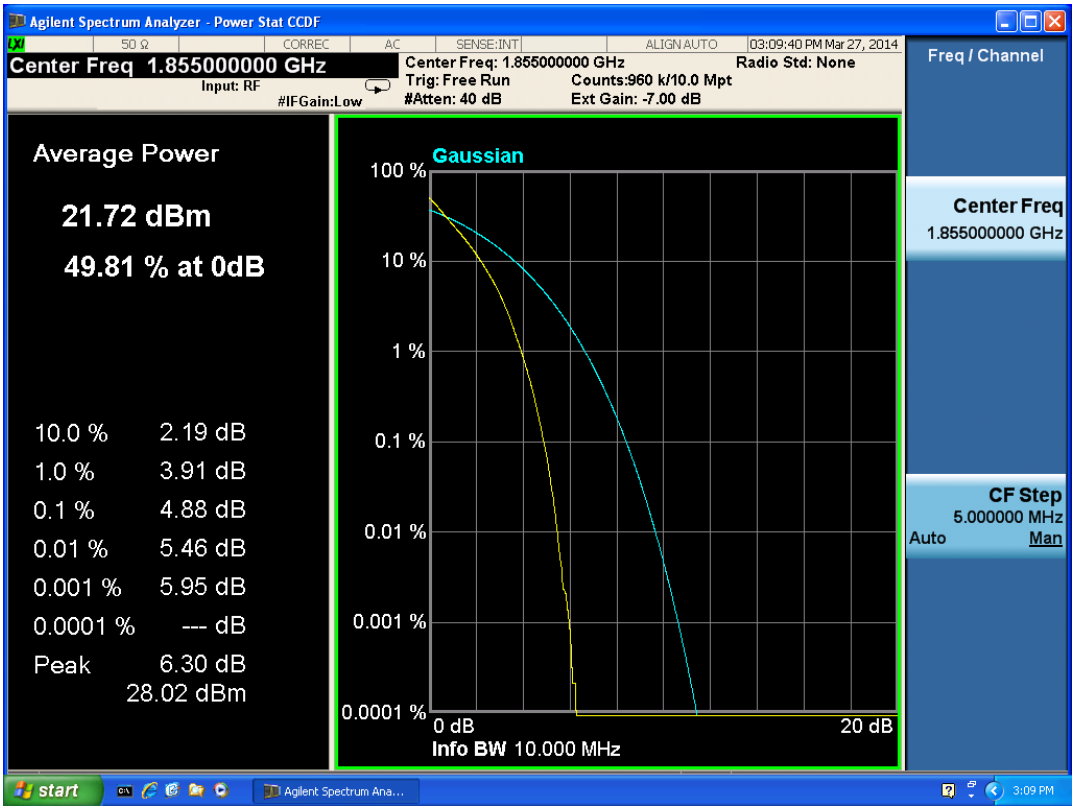
LTE Band 2 QPSK Bandwidth = 5MHz CH18625



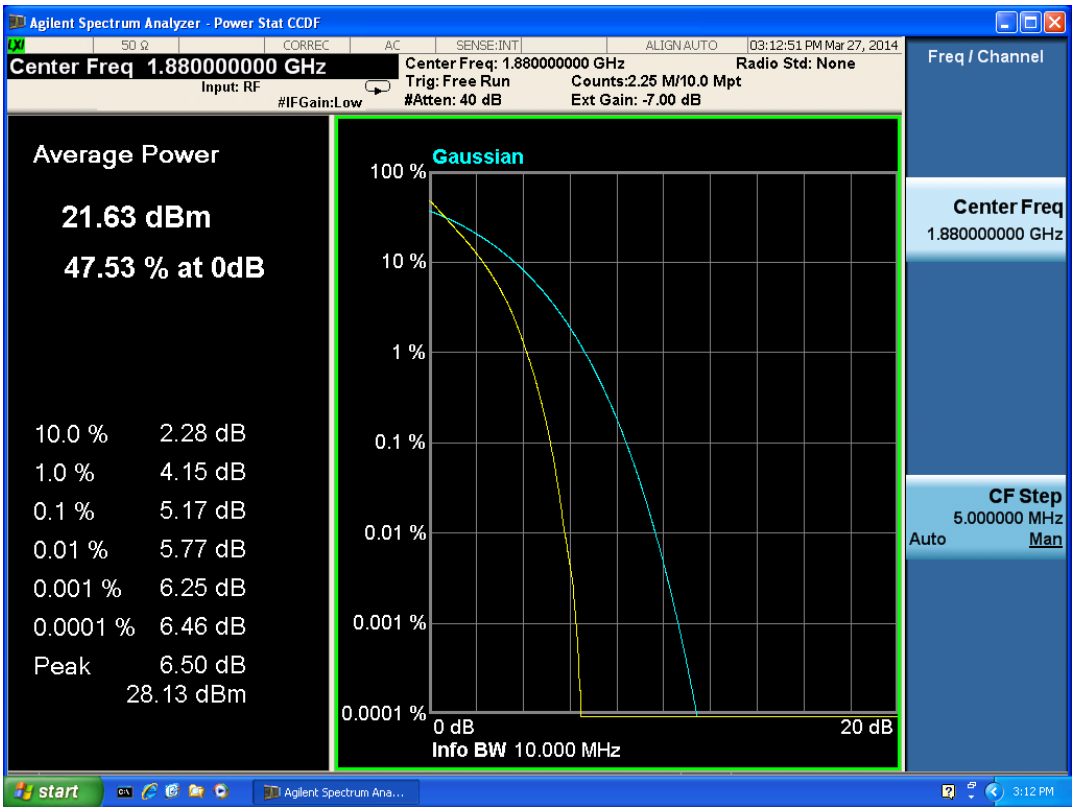
LTE Band 2 QPSK Bandwidth = 5MHz CH18900



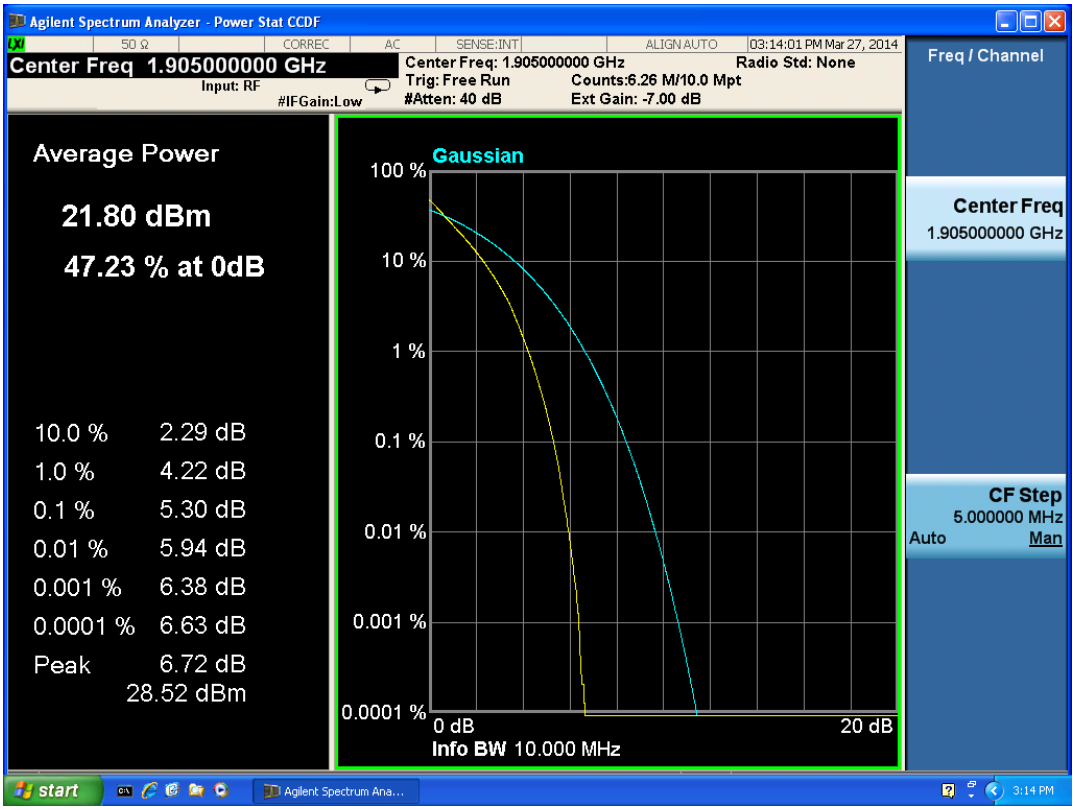
LTE Band 2 QPSK Bandwidth = 5MHz CH19175



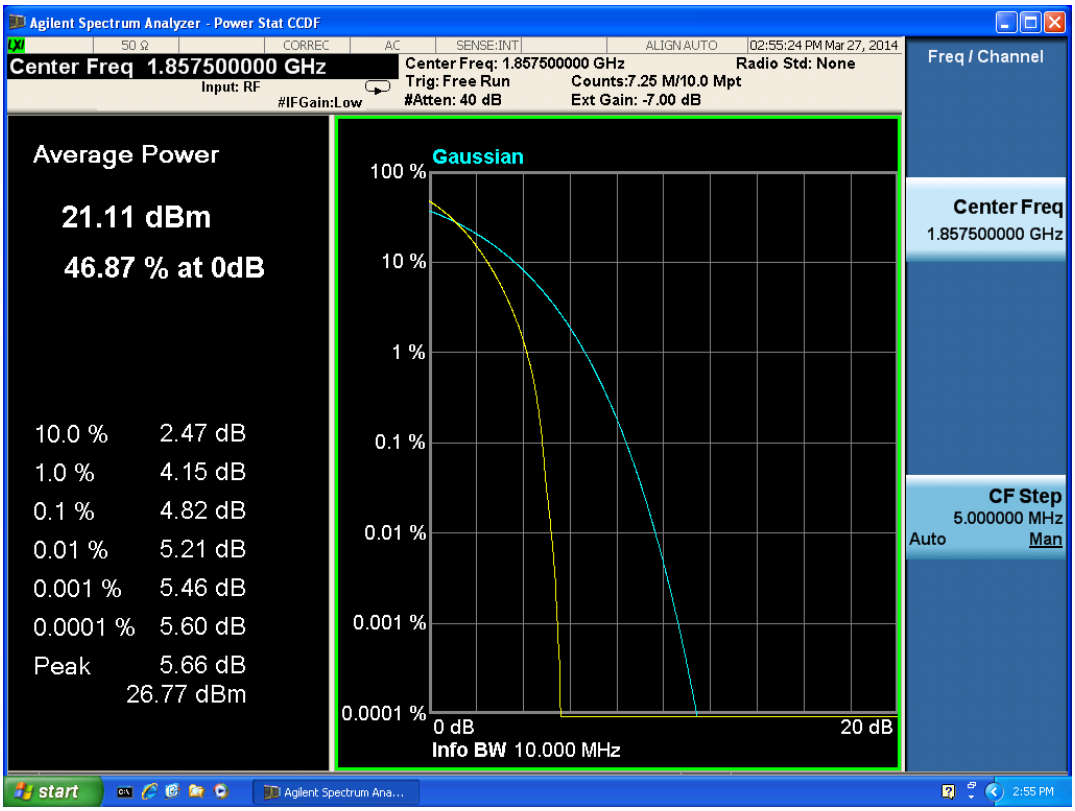
LTE Band 2 QPSK Bandwidth = 10MHz CH18650



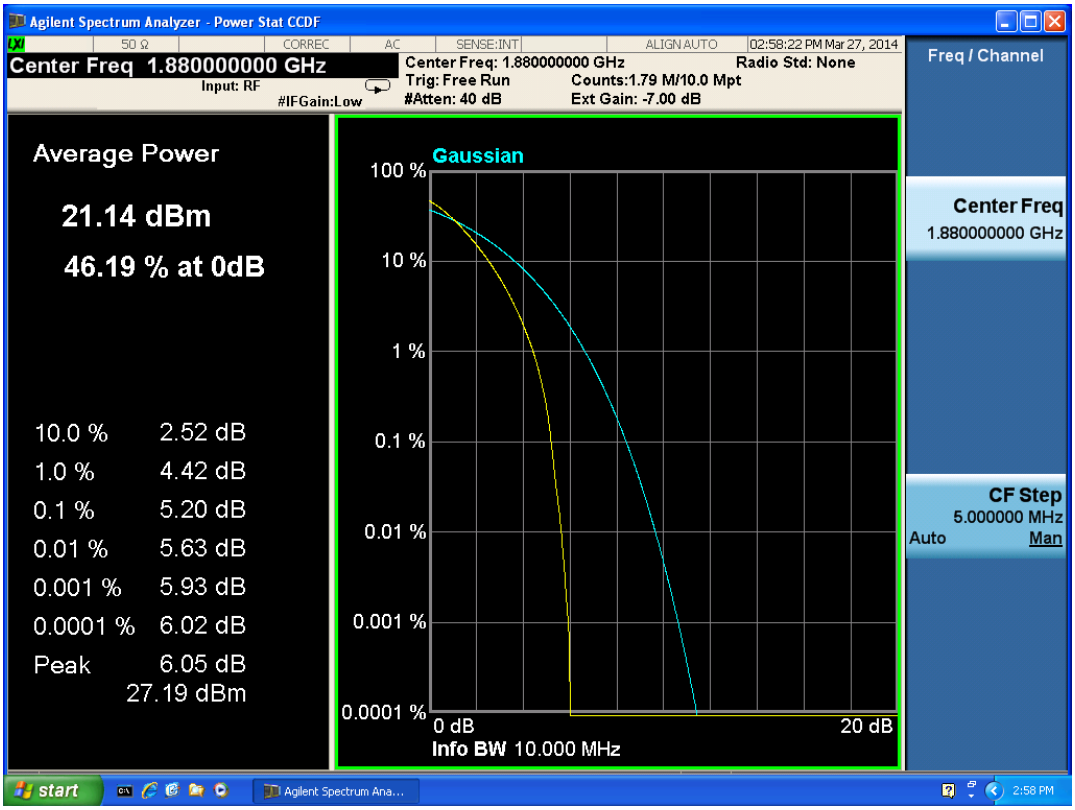
LTE Band 2 QPSK Bandwidth = 10MHz CH18900



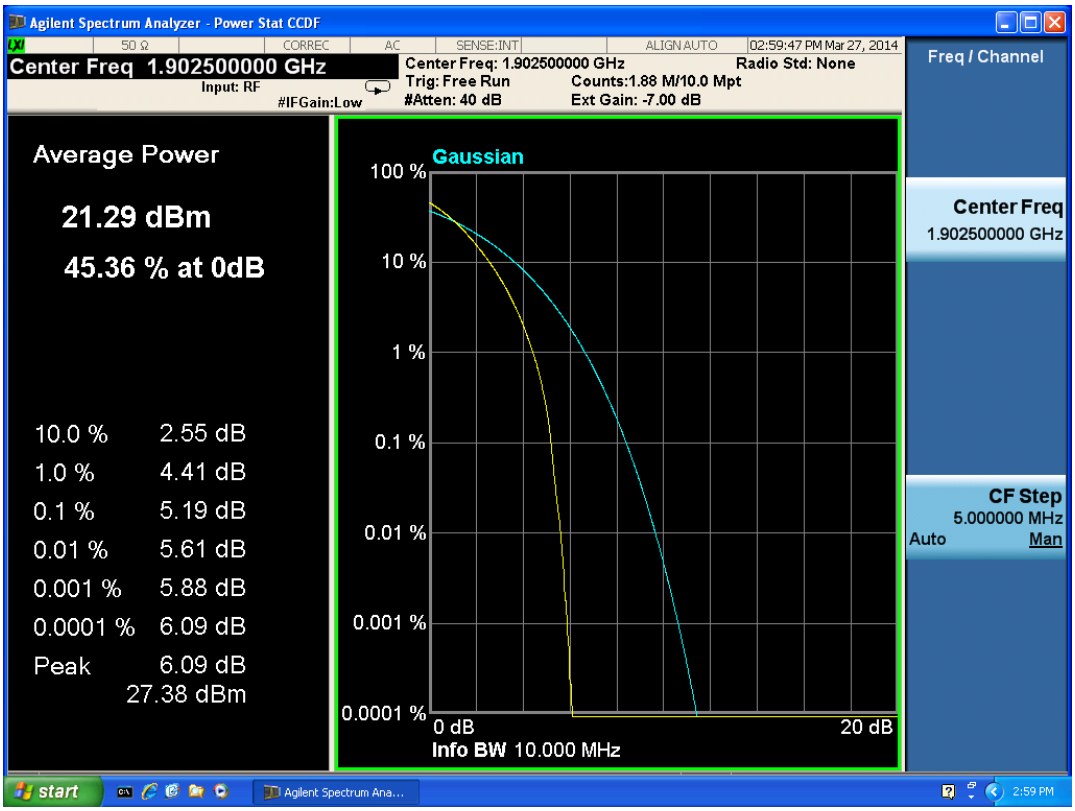
LTE Band 2 QPSK Bandwidth = 10MHz CH19150



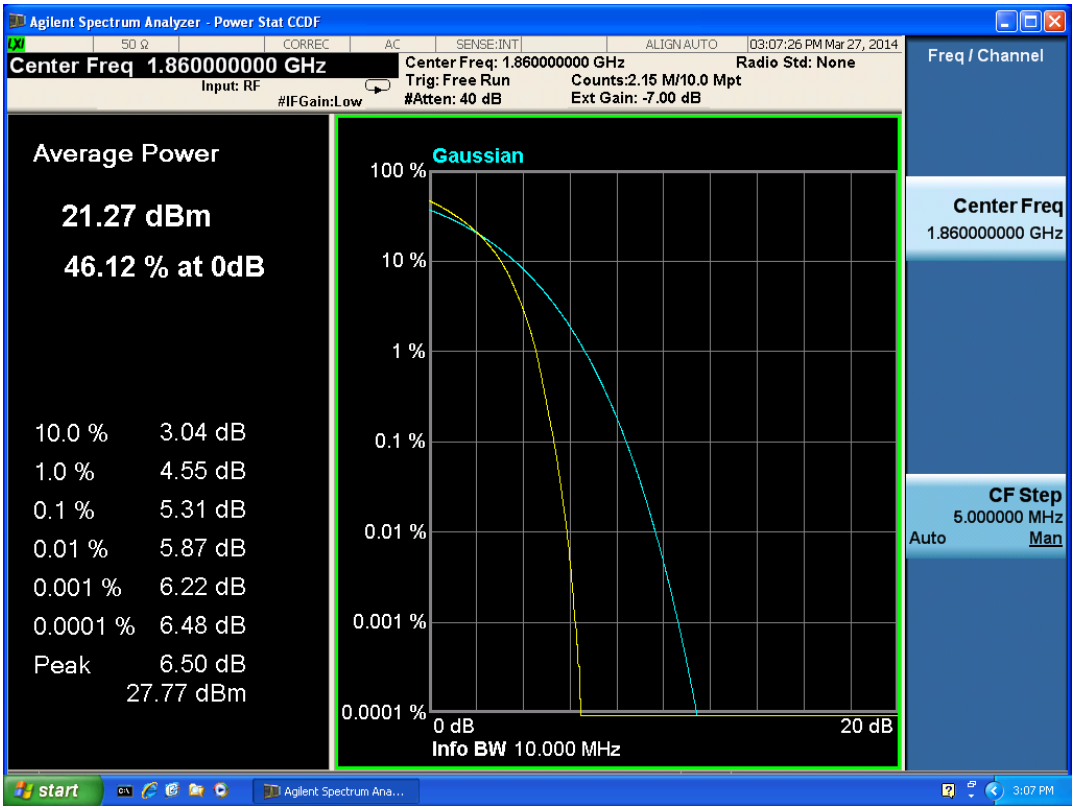
LTE Band 2 QPSK Bandwidth = 15MHz CH18675



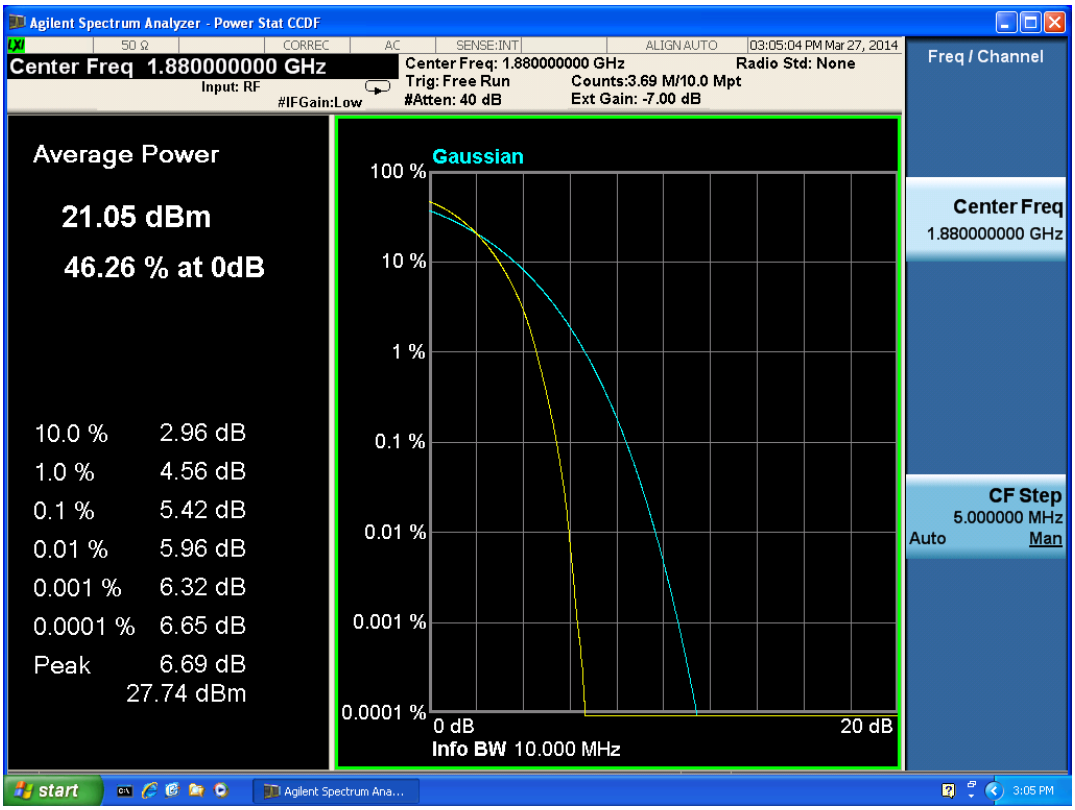
LTE Band 2 QPSK Bandwidth = 15MHz CH18900



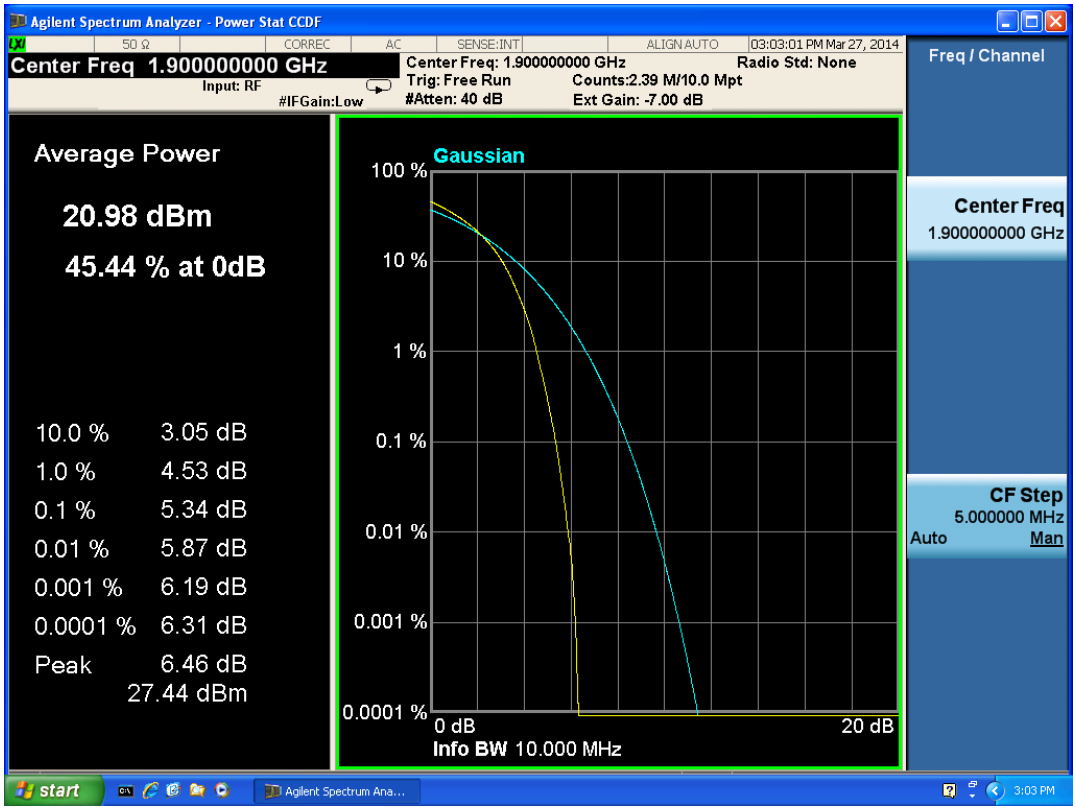
LTE Band 2 QPSK Bandwidth = 15MHz CH19125



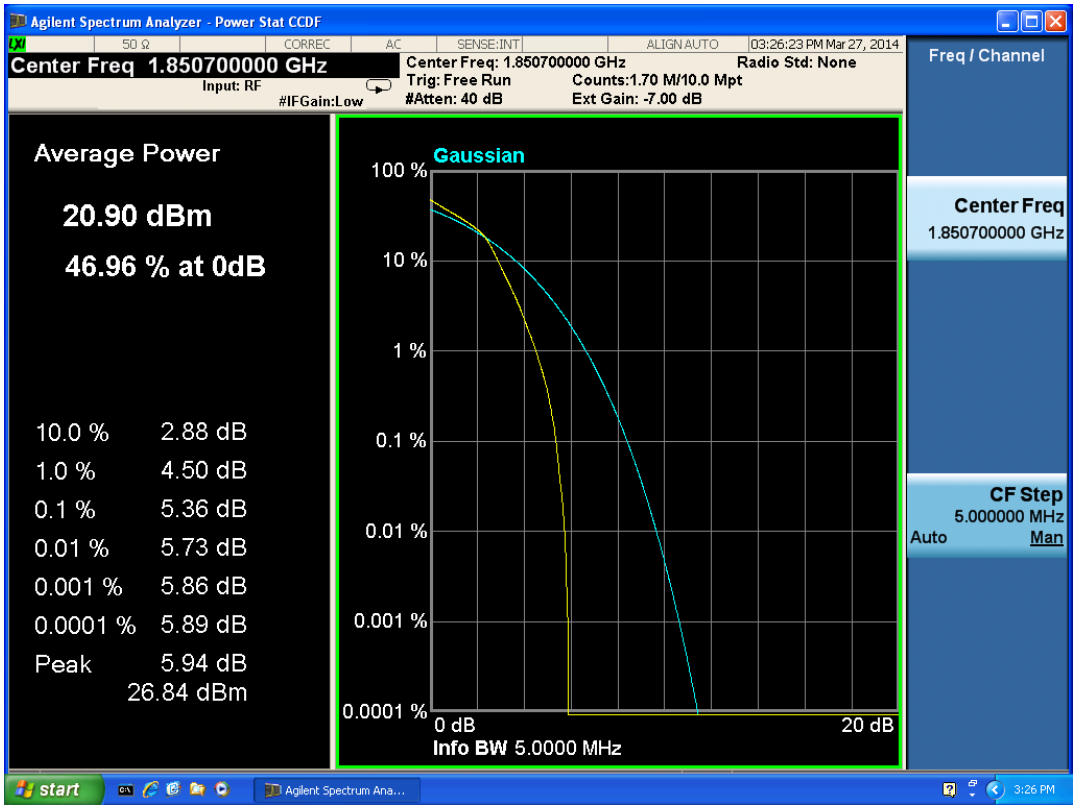
LTE Band 2 QPSK Bandwidth = 20MHz CH18700



LTE Band 2 QPSK Bandwidth = 20MHz CH18900



LTE Band 2 QPSK Bandwidth = 20MHz CH19100



LTE Band 2 16QAM Bandwidth = 1.4MHz CH18607