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	.0 Span:3dB
RBW Cor	.0 RBW Con [Gaussian,-3

LTE Band 7 16QAM Bandwidth = 20MHz CH21350,RB 100

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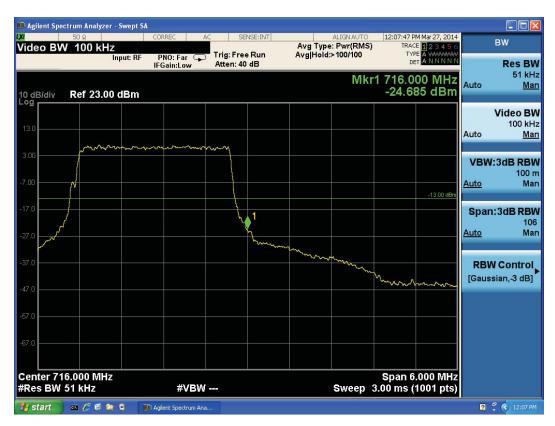
LTE Band 17							
Bandwidth	Modulation	Channel	RB	RB Start	Reference value (dBm)	Limit(dBm)	Conclusion
	QPSK	CH23755	1	0	-15.026	-13	Pass
			12	0	-24.685	-13	Pass
			25	0	-27.417	-13	Pass
			1	24	-13.913	-13	Pass
5MHz		CH23825	12	13	-25.893	-13	Pass
			25	0	-27.169	-13	Pass
			1	0	-15.297	-13	Pass
		CH23755	12	0	-26.062	-13	Pass
	16QAM		25	0	-26.564	-13	Pass
	IOQAIVI		1	24	-15.151	-13	Pass
		CH23825	12	13	-26.638	-13	Pass
			25	0	-27.916	-13	Pass
			1	0	-16.664	-13	Pass
	QPSK	CH23780	25	0	-26.722	-13	Pass
			50	0	-29.200	-13	Pass
		CH23800	1	49	-14.310	-13	Pass
			25	25	-28.993	-13	Pass
101411-			50	0	-28.488	-13	Pass
10MHz	16QAM	CH23780	1	0	-16.682	-13	Pass
			25	0	-27.346	-13	Pass
			50	0	-28.677	-13	Pass
		CH23800	1	49	-15.141	-13	Pass
			25	25	-27.404	-13	Pass
			50	0	-29.438	-13	Pass

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LTE Band 17 QPSK Bandwidth = 5MHz CH23755,RB 1



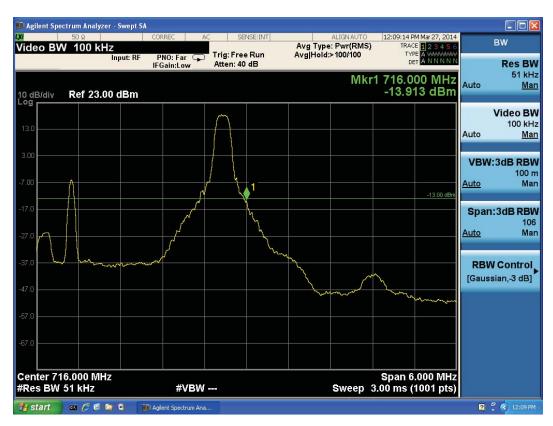
LTE Band 17 QPSK Bandwidth = 5MHz CH23755,RB 12

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50 Ω larker 1 704.000000000 Input: RF	CORREC AC SENSE:INT MHZ PNO: Far IFGain:Low IFGain:Low	ALIGNAUTO Avg Type: Pwr(RMS) Avg Hold>100/100	12:12:11 PM Mar 27, 2014 TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A N N N N N	Marker Select Marker
dB/div Ref 23.00 dBm		Mkr′	1 704.000 MHz -27.417 dBm	1
13.0				Norm
.00			-13.00 dBm	De
7.0				Fixe
7.0	······································			C
7.0				Propertie
7.0 enter 704.000 MHz Res BW 51 kHz	#VBW	Sween 3	Span 6.000 MHz 5.00 ms (1001 pts)	М а 1 о

LTE Band 17 QPSK Bandwidth = 5MHz CH23755,RB 25



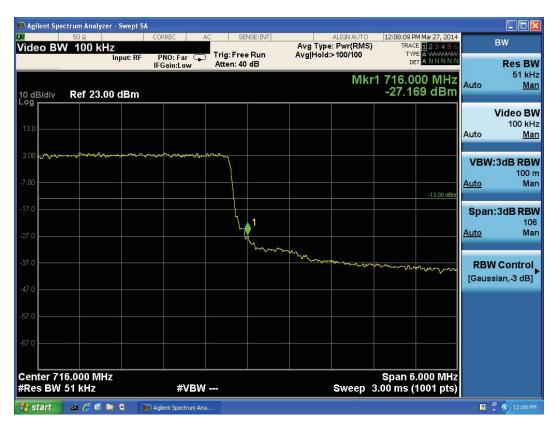
LTE Band 17 QPSK Bandwidth = 5MHz CH23825,RB 1

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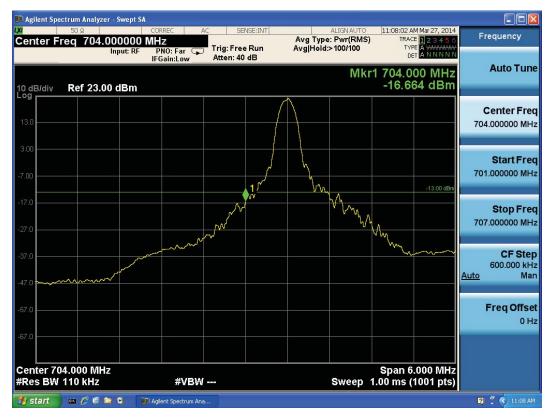


LTE Band 17 QPSK Bandwidth = 5MHz CH23825,RB 12

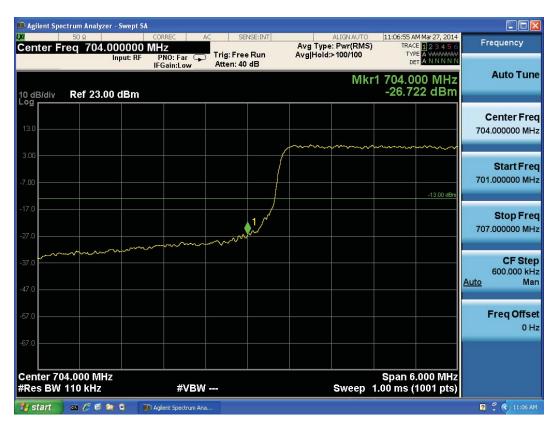


LTE Band 17 QPSK Bandwidth = 5MHz CH23825,RB 25

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LTE Band 17 QPSK Bandwidth = 10MHz CH23780,RB 1



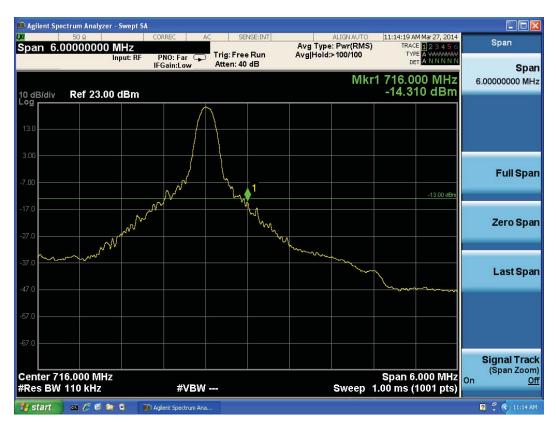
LTE Band 17 QPSK Bandwidth = 10MHz CH23780,RB 25

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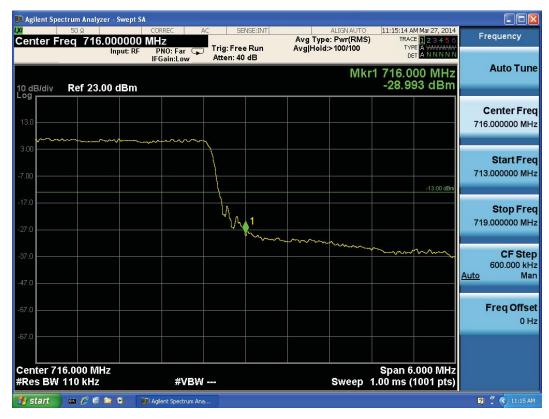


LTE Band 17 QPSK Bandwidth = 10MHz CH23780,RB 50



LTE Band 17 QPSK Bandwidth = 10MHz CH23780,RB 1

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LTE Band 17 QPSK Bandwidth = 10MHz CH23780,RB 25



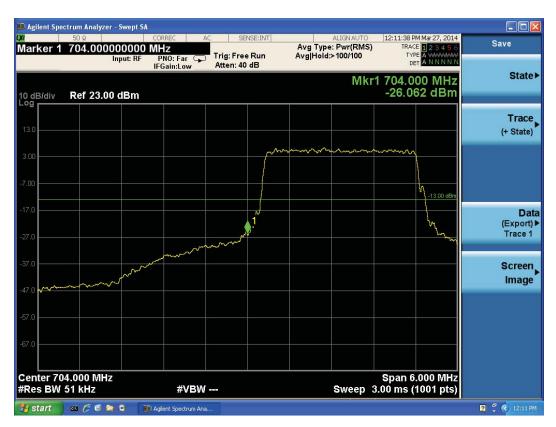
LTE Band 17 QPSK Bandwidth = 10MHz CH23780,RB 50

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LTE Band 17 16QAM Bandwidth = 5MHz CH19975,RB 1



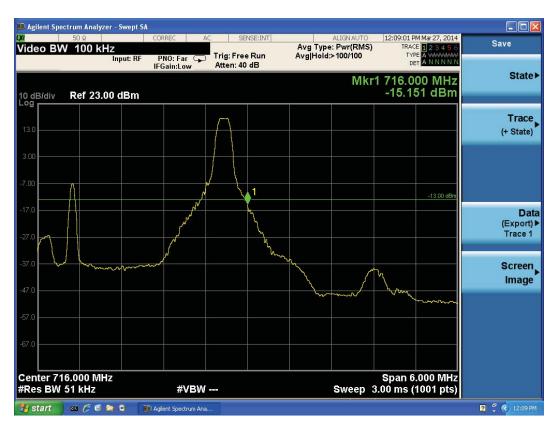
LTE Band 17 16QAM Bandwidth = 5MHz CH19975,RB 12

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Agilent Spectrun	n Analyzer - Swept SA	CORREC A	SENSE:INT	ALIGNAUTO	12:12:21 PM Mar 27, 2014	
	4.000000000 Input: RF	MHZ PNO: Far 💭	Trig: Free Run	Avg Type: Pwr(RMS) Avg Hold:>100/100		Marker
0 dB/div Re	ef 23.00 dBm	IFGain:Low	Atten: 40 dB	Mkr	1 704.000 MHz -26.564 dBm	Select Marker 1
og 13.0						Norm
.00				man and a second se	······································	De
7.0			1		-13.00 dBm	Fixe
7.0	som man	www.www	mmm			(
7.0						Propertie
enter 704.00	00 MHz				Span 6.000 MHz	M c 1 o
Res BW 51		#VBW		Sweep	3.00 ms (1001 pts)	
y start 🛛 🚥	6000	l Agilent Spectrum Ana.				🖸 🍷 🔇 12:12 P

LTE Band 17 16QAM Bandwidth = 5MHz CH19975,RB 25



LTE Band 17 16QAM Bandwidth = 5MHz CH20375,RB 1

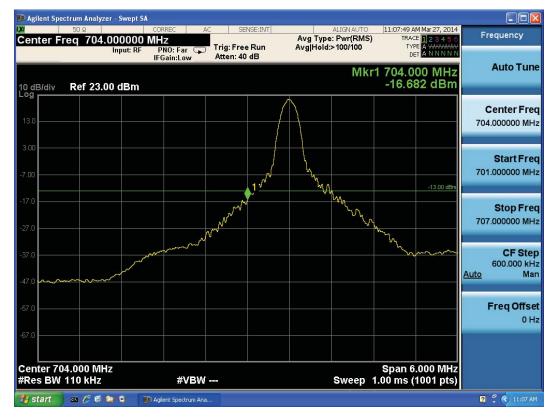
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LTE Band 17 16QAM Bandwidth = 5MHz CH20375,RB 12



LTE Band 17 16QAM Bandwidth = 5MHz CH20375,RB 25



LTE Band 17 16QAM Bandwidth = 10MHz CH23800,RB 1

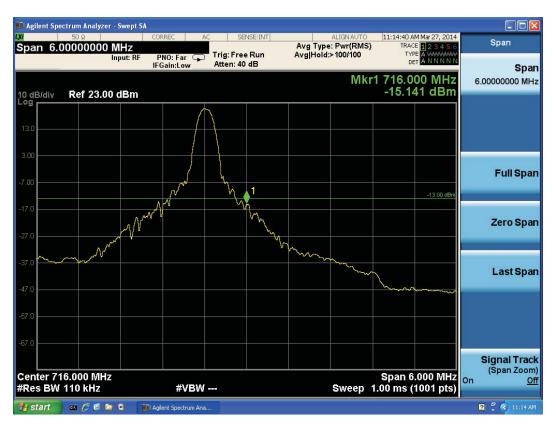


LTE Band 17 16QAM Bandwidth = 10MHz CH23800,RB 25

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LTE Band 17 16QAM Bandwidth = 10MHz CH23800,RB 50



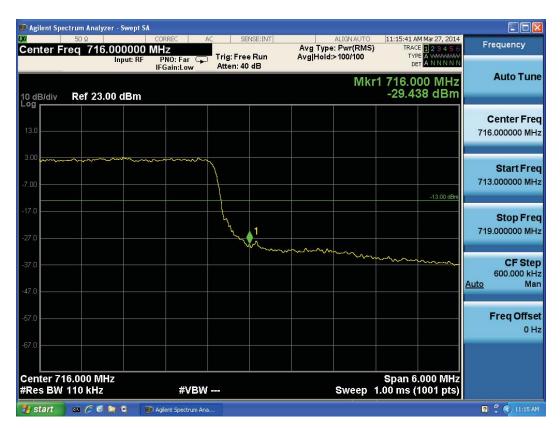
LTE Band 17 16QAM Bandwidth = 10MHz CH23800,RB 1

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LTE Band 17 16QAM Bandwidth = 10MHz CH23800,RB 25



LTE Band 17 16QAM Bandwidth = 10MHz CH23800,RB 50

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.

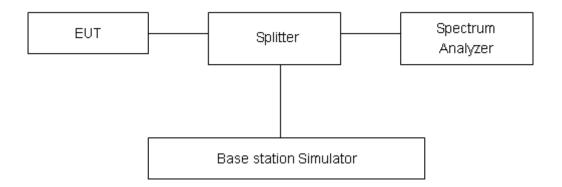
Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement 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.