

Plot 7-57. Upper Band Edge Plot (LTE Band 2 - 10MHz QPSK - Full RB)



Plot 7-58. Extended Upper Band Edge Plot (LTE Band 2 - 10MHz QPSK - Full RB)

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Plot 7-59. Upper Band Edge Plot (LTE Band 25 - 10MHz QPSK - Full RB)



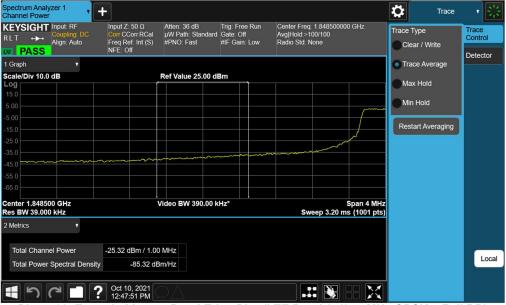
Plot 7-60. Extended Upper Band Edge Plot (LTE Band 25 - 10MHz QPSK - Full RB)

FCC ID: A3LSMS908E	Proud to be part of @ element	PART 24 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Plot 7-61. Lower Band Edge Plot (LTE Band 25/2 - 5MHz QPSK - Full RB)



Plot 7-62. Extended Lower Band Edge Plot (LTE Band 25/2 - 5MHz QPSK - Full RB)

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Plot 7-63. Upper Band Edge Plot (LTE Band 2 - 5MHz QPSK - Full RB)



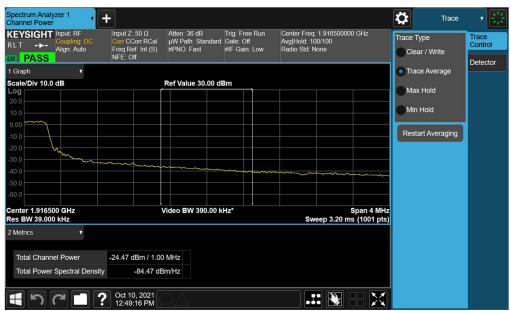
Plot 7-64. Extended Upper Band Edge Plot (LTE Band 2 - 5MHz QPSK - Full RB)

FCC ID: A3LSMS908E	PCTEST* Proud to be part of @ element	PART 24 MEASUREMENT REPORT	Approved by: Technical Manager
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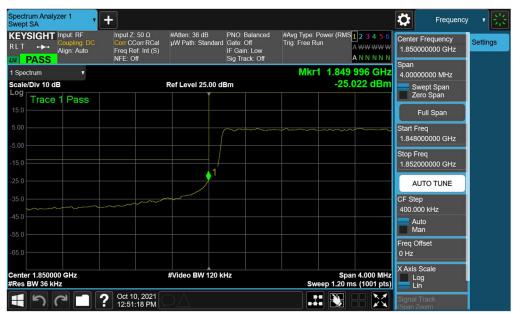
Plot 7-65. Upper Band Edge Plot (LTE Band 25 - 5MHz QPSK - Full RB)



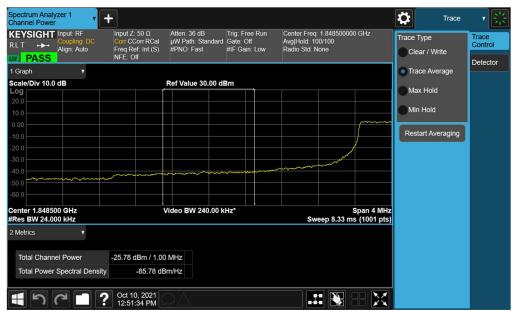
Plot 7-66. Extended Upper Band Edge Plot (LTE Band 25 - 5MHz QPSK - Full RB)

FCC ID: A3LSMS908E	PROUD to be port of (§ element	PART 24 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Plot 7-67. Lower Band Edge Plot (LTE Band 25/2 - 3MHz QPSK - Full RB)



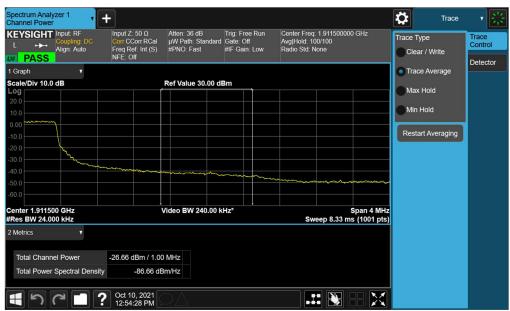
Plot 7-68. Extended Lower Band Edge Plot (LTE Band 25/2 - 3MHz QPSK - Full RB)

FCC ID: A3LSMS908E	PCTEST* Proud to be part of @ element	PART 24 MEASUREMENT REPORT	Approved by: Technical Manager
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Plot 7-69. Upper Band Edge Plot (LTE Band 2 - 3MHz QPSK - Full RB)



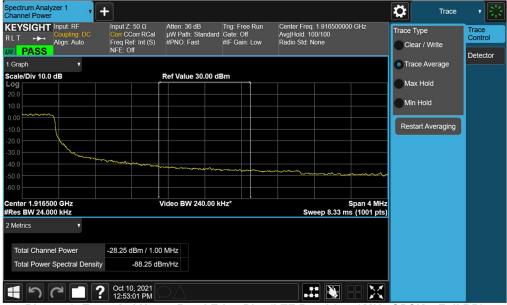
Plot 7-70. Extended Upper Band Edge Plot (LTE Band 2 - 3MHz QPSK - Full RB)

FCC ID: A3LSMS908E	Proud to be part of @ element	PART 24 MEASUREMENT REPORT	Approved by: Technical Manager
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Plot 7-71. Upper Band Edge Plot (LTE Band 25 - 3MHz QPSK - Full RB)



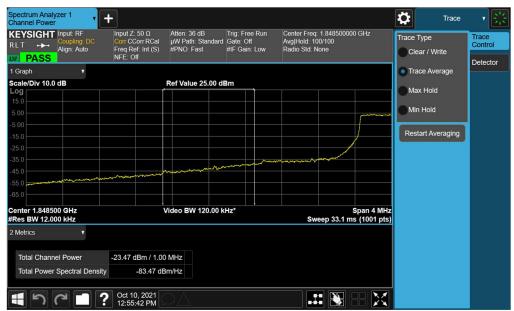
Plot 7-72. Extended Upper Band Edge Plot (LTE Band 25 - 3MHz QPSK - Full RB)

FCC ID: A3LSMS908E	Provide to be port of @ element	PART 24 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Plot 7-73. Lower Band Edge Plot (LTE Band 25/2 - 1.4MHz QPSK - Full RB)



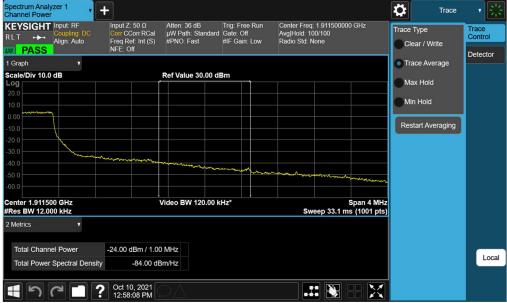
Plot 7-74. Extended Lower Band Edge Plot (LTE Band 25/2 - 1.4MHz QPSK - Full RB)

FCC ID: A3LSMS908E	Proud to be part of @ element	PART 24 MEASUREMENT REPORT	MSUNG	Approved by: Technical Manager
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Plot 7-75. Upper Band Edge Plot (LTE Band 2 – 1.4MHz QPSK – Full RB)



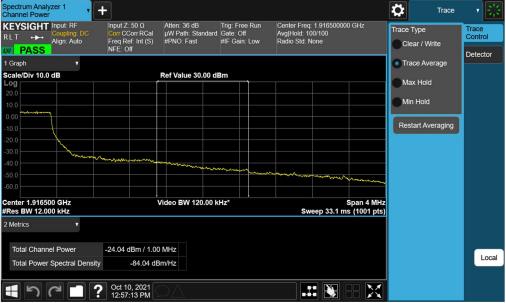
Plot 7-76. Extended Upper Band Edge Plot (LTE Band 2 - 1.4MHz QPSK - Full RB)

FCC ID: A3LSMS908E	PCTEST* Proud to be part of @ element	PART 24 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Plot 7-77. Upper Band Edge Plot (LTE Band 25 – 1.4MHz QPSK – Full RB)



Plot 7-78. Extended Upper Band Edge Plot (LTE Band 25 – 1.4MHz QPSK – Full RB)

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GSM/GPRS PCS



Plot 7-79. Lower Band Edge Plot (GPRS PCS - Ch. 512)



Plot 7-80. Upper Band Edge Plot (GPRS PCS - Ch. 810)

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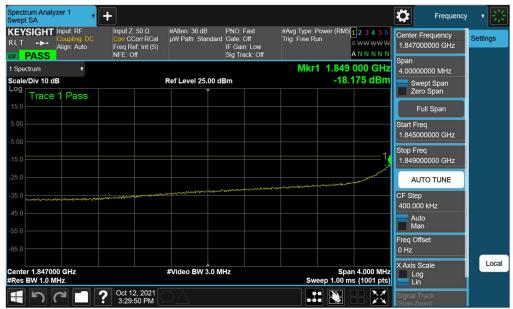
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WCDMA PCS



Plot 7-81. Lower Band Edge Plot (WCDMA PCS - Ch. 9262)



Plot 7-82. Extended Lower Band Edge Plot (WCDMA PCS - Ch. 9262)

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Plot 7-83. Upper Band Edge Plot (WCDMA PCS - Ch. 9538)



Plot 7-84. Extended Upper Band Edge Plot (WCDMA PCS - Ch. 9538)

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7.5 **Peak-Average Ratio**

Test Overview

A peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

Test Procedure Used

KDB 971168 D01 v03r01 - Section 5.7.1

Test Settings

- 1. The signal analyzer's CCDF measurement profile is enabled
- 2. Frequency = carrier center frequency
- 3. Measurement BW ≥ OBW or specified reference bandwidth
- 4. The signal analyzer was set to collect one million samples to generate the CCDF curve
- 5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-4. Test Instrument & Measurement Setup

Test Notes

None.

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LTE Band 25/2



Plot 7-85. PAR Plot (LTE Band 25/2 - 20MHz QPSK - Full RB)



Plot 7-86. PAR Plot (LTE Band 25/2 - 20MHz 256-QAM - Full RB)

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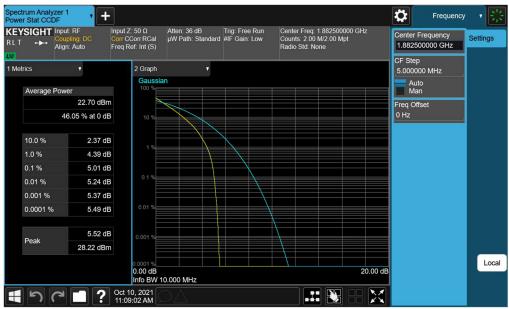
Plot 7-87. PAR Plot (LTE Band 25/2 - 15MHz QPSK - Full RB)



Plot 7-88. PAR Plot (LTE Band 25/2 - 15MHz 256-QAM - Full RB)

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Plot 7-89. PAR Plot (LTE Band 25/2 - 10MHz QPSK - Full RB)



Plot 7-90. PAR Plot (LTE Band 25/2 - 10MHz 256-QAM - Full RB)

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