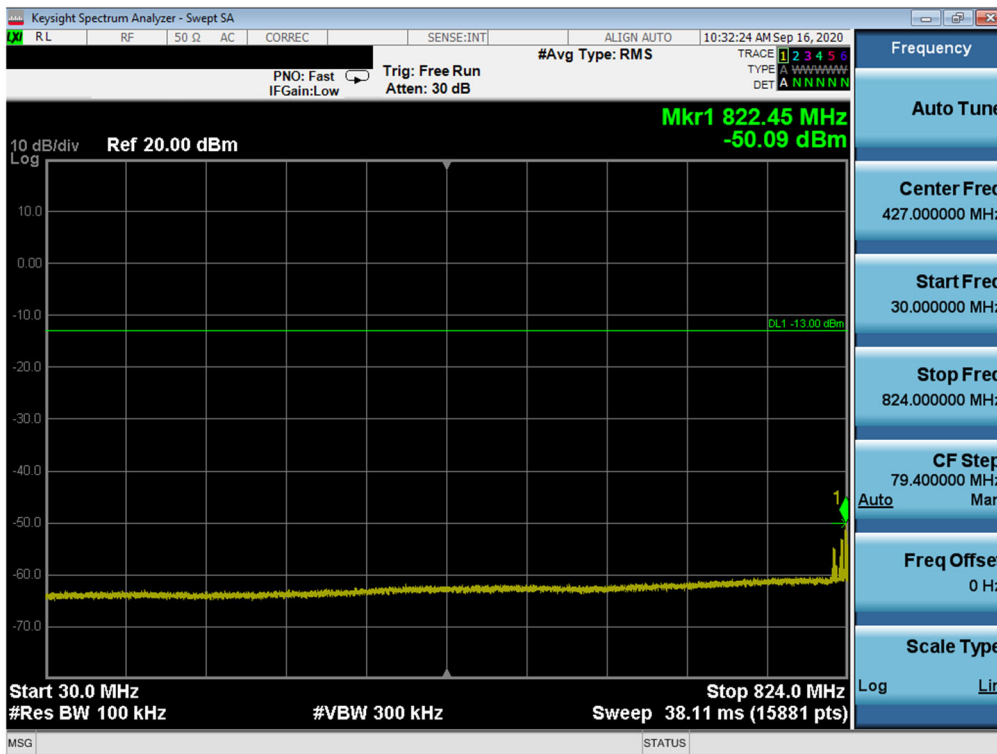
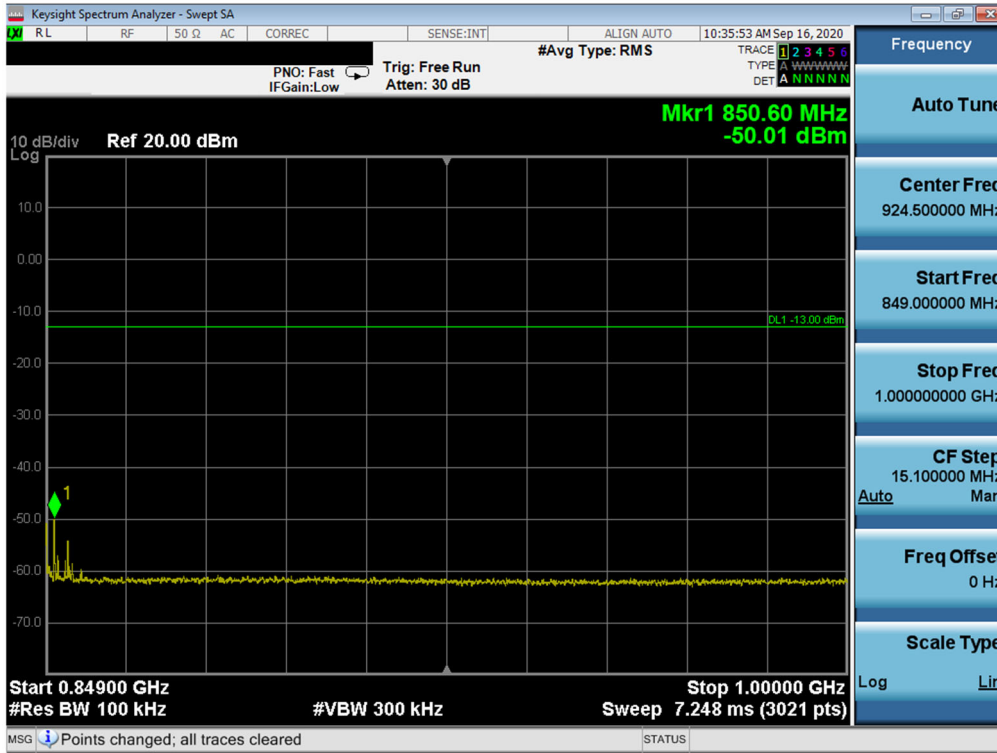


Plot 7-31. Conducted Spurious Plot (CDMA Ch. 1013)

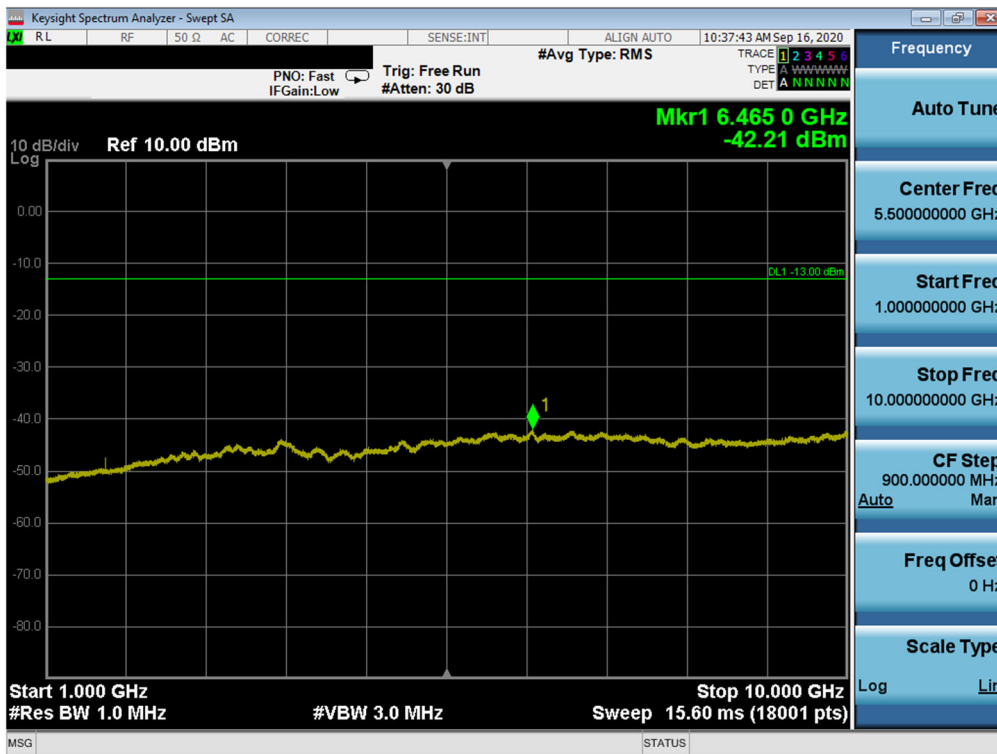


Plot 7-31. Conducted Spurious Plot (CDMA Ch. 384)

FCC ID: A3LSMG996U	PCTEST Proud to be part of element	PART 22 MEASUREMENT REPORT		Approved by: Quality Manager
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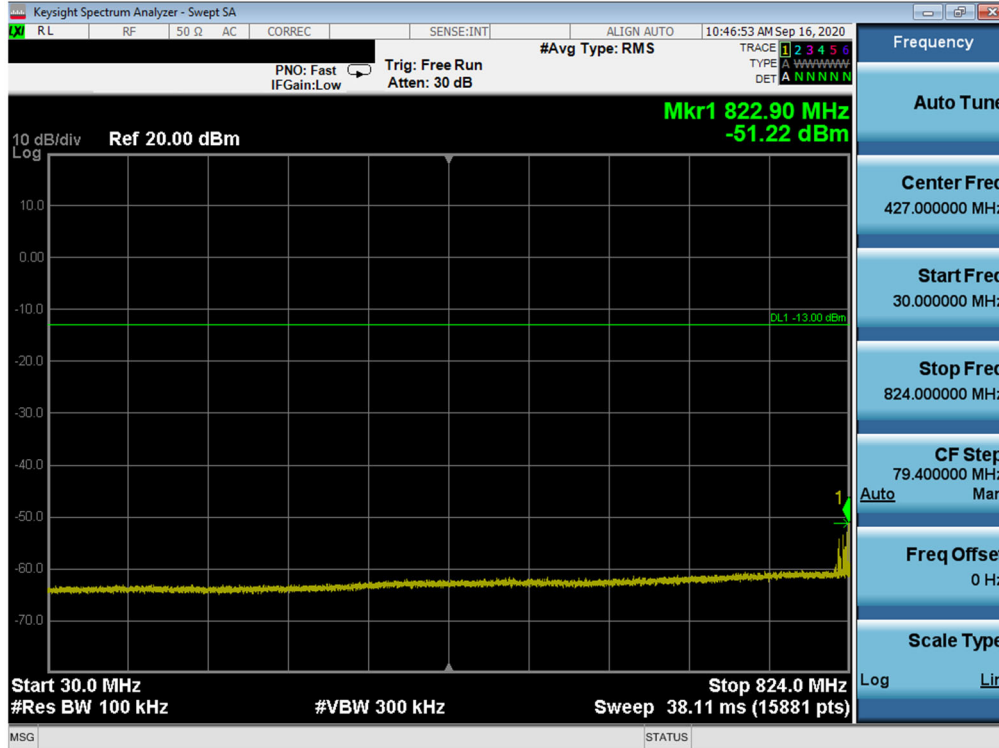


Plot 7-31. Conducted Spurious Plot (CDMA Ch. 384)

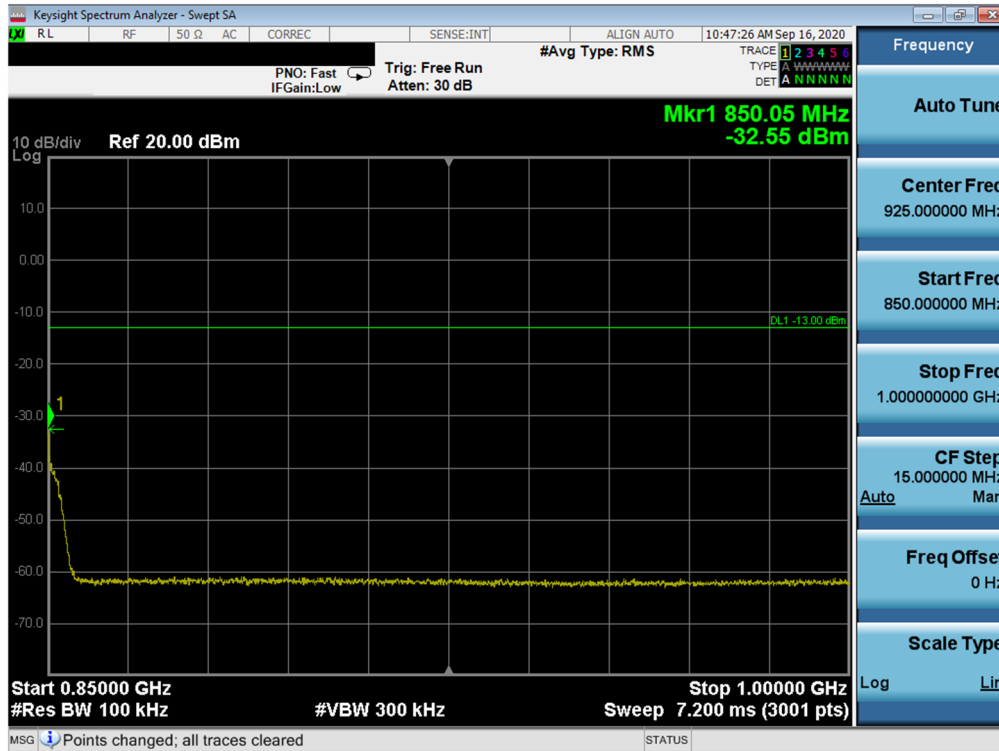


Plot 7-31. Conducted Spurious Plot (CDMA Ch. 384)

FCC ID: A3LSMG996U	PCTEST Proud to be part of element	PART 22 MEASUREMENT REPORT	SAMSUNG	Approved by: Quality Manager
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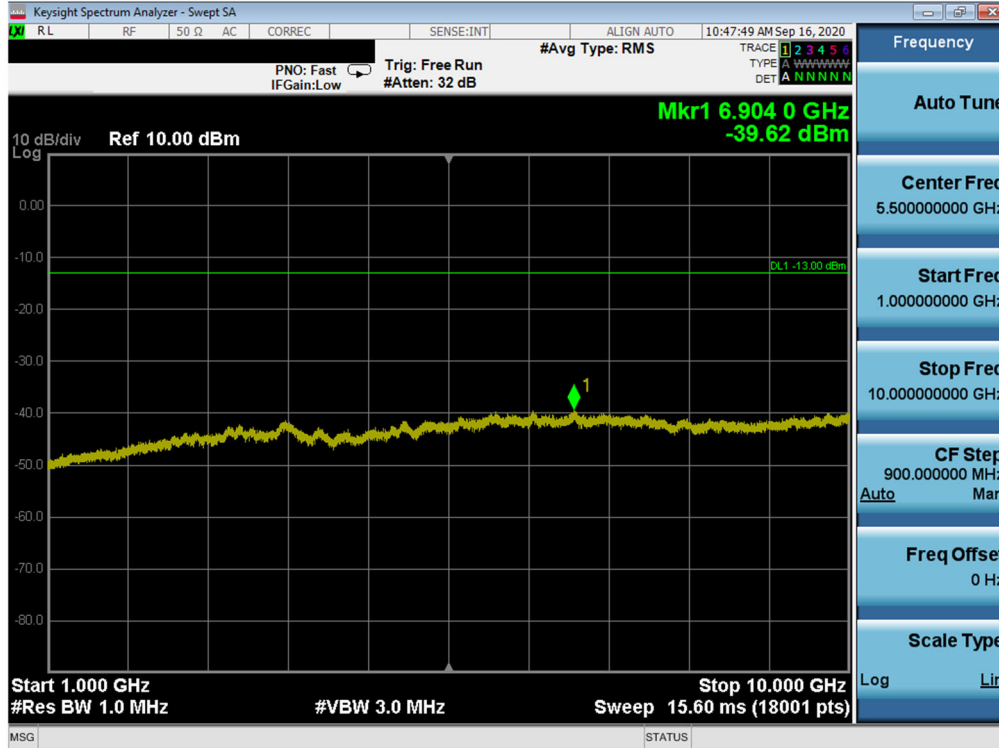


Plot 7-31. Conducted Spurious Plot (CDMA Ch. 777)



Plot 7-31. Conducted Spurious Plot (CDMA Ch. 777)

FCC ID: A3LSMG996U	PCTEST Proud to be part of  element	PART 22 MEASUREMENT REPORT		Approved by: Quality Manager
Test Report S/N: 1M2009140143-18.A3L	Test Dates: 09/15 - 11/10/2020	EUT Type: Portable Handset		Page 66 of 116



Plot 7-31. Conducted Spurious Plot (CDMA Ch. 777)

FCC ID: A3LSMG996U	PCTEST Proud to be part of element	PART 22 MEASUREMENT REPORT		Approved by: Quality Manager
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## 7.4 Band Edge Emissions at Antenna Terminal

### Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

**The minimum permissible attenuation level of any spurious emission is  $43 + 10 \log_{10}(P_{[Watts]})$ , where  $P$  is the transmitter power in Watts.**

### Test Procedure Used

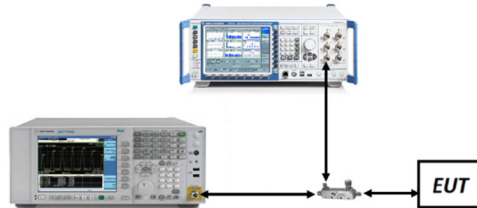
KDB 971168 D01 v03r01 – Section 6.0

### Test Settings




1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW  $\geq$  1% of the emission bandwidth
4. VBW  $\geq$  3 x RBW
5. Detector = RMS
6. Number of sweep points  $\geq$  2 x Span/RBW
7. Trace mode = trace average for continuous emissions, max hold for pulse emissions
8. Sweep time = auto couple
9. The trace was allowed to stabilize

### Test Setup

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





**Figure 7-3. Test Instrument & Measurement Setup**

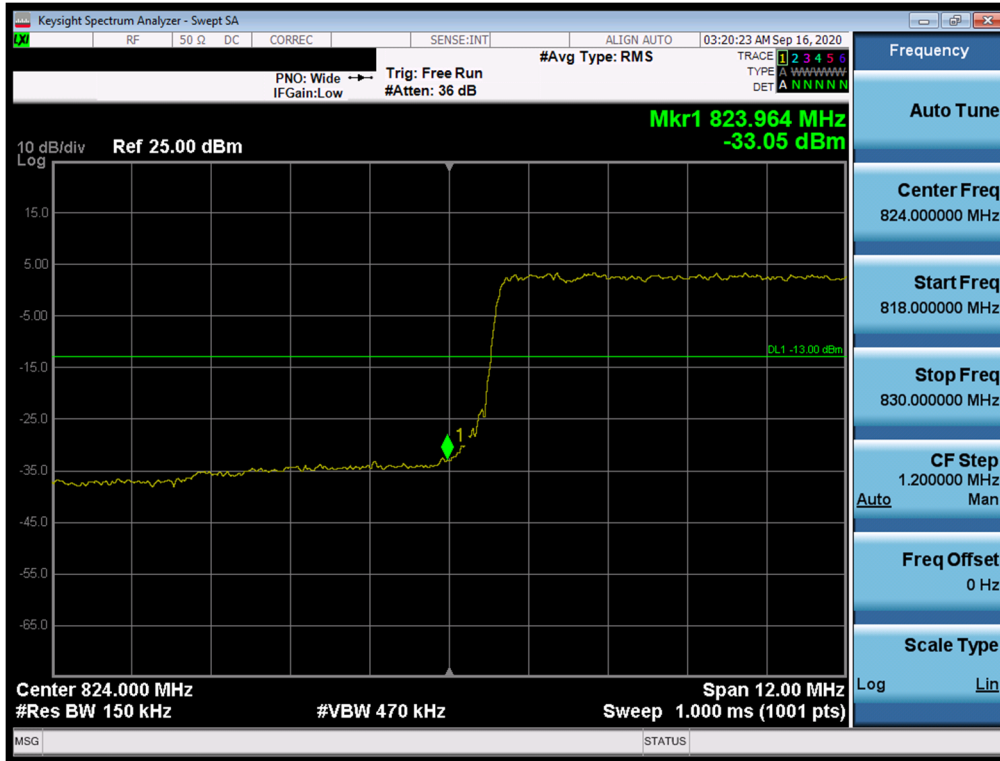
FCC ID: A3LSMG996U	 <b>PCTEST</b> Proud to be part of 	<b>PART 22 MEASUREMENT REPORT</b>		<b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M2009140143-18.A3L	<b>Test Dates:</b> 09/15 - 11/10/2020	<b>EUT Type:</b> Portable Handset	Page 68 of 116	

## Test Notes

1. Per 22.917(b) and RSS-132(5.5), in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to demonstrate compliance with the out-of-band emissions limit. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.
2. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

<b>FCC ID:</b> A3LSMG996U		<b>PART 22 MEASUREMENT REPORT</b>		<b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M2009140143-18.A3L	<b>Test Dates:</b> 09/15 - 11/10/2020	<b>EUT Type:</b> Portable Handset	Page 69 of 116	

## LTE Band 26/5

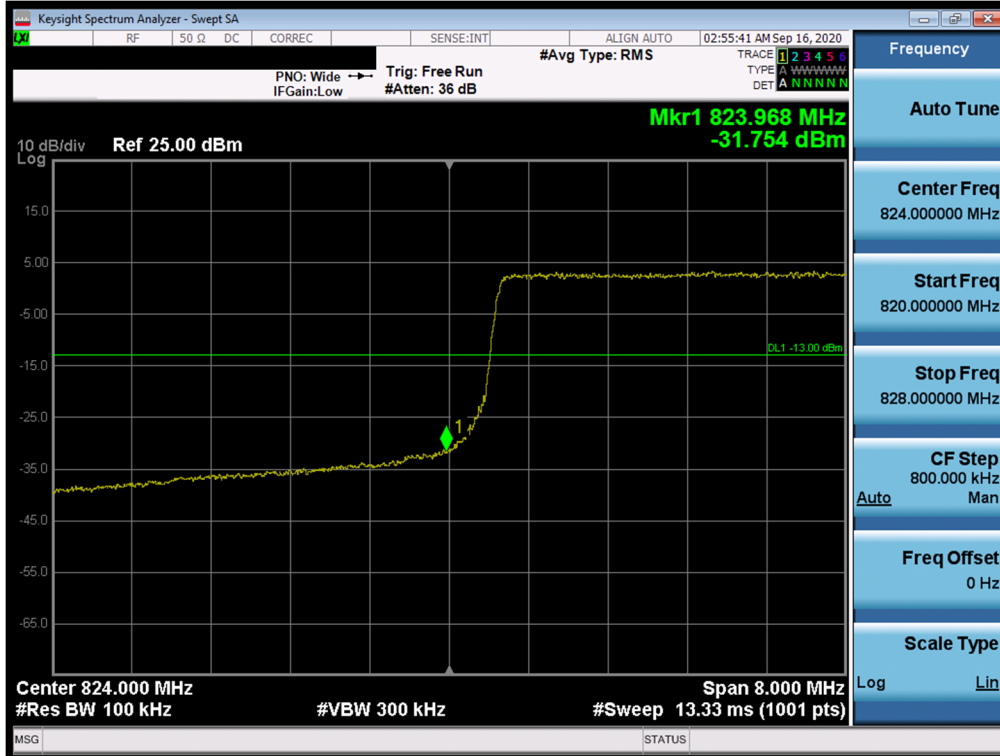


Plot 7-71. Lower Band Edge Plot (LTE Band 26 - 15MHz QPSK – Full RB Configuration)

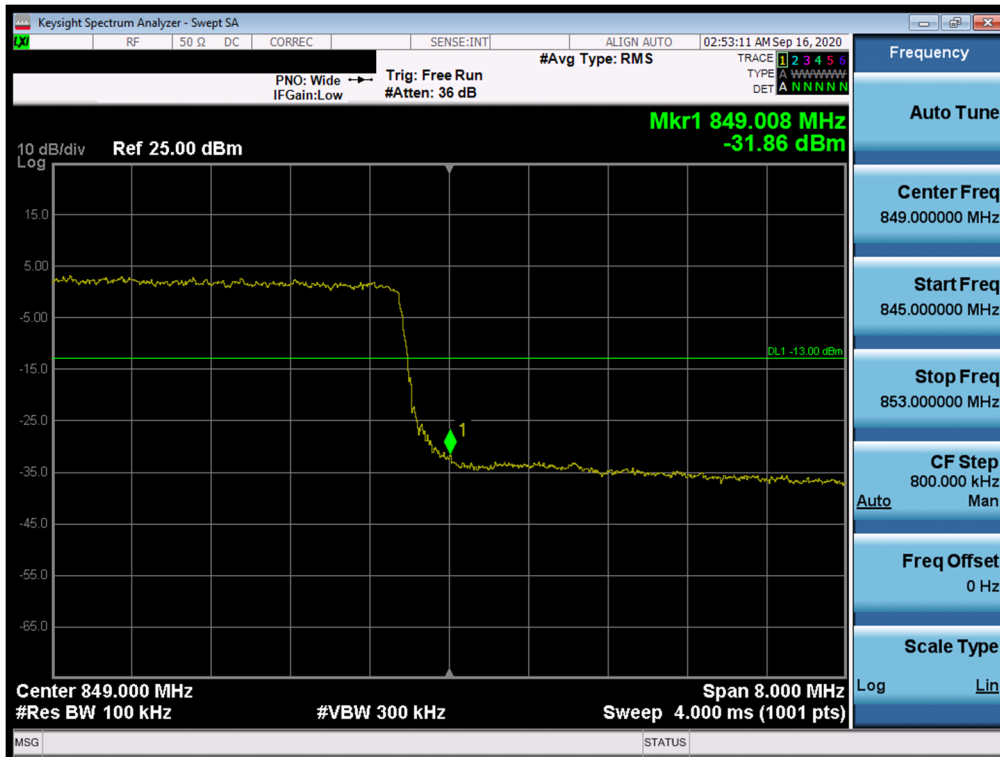


Plot 7-72. Upper Band Edge Plot (LTE Band 26 - 15MHz QPSK – Full RB Configuration)

FCC ID: A3LSMG996U	<b>PCTEST</b> Proud to be part of element	<b>PART 22 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Quality Manager
Test Report S/N: 1M2009140143-18.A3L	Test Dates: 09/15 - 11/10/2020	EUT Type: Portable Handset		Page 70 of 116



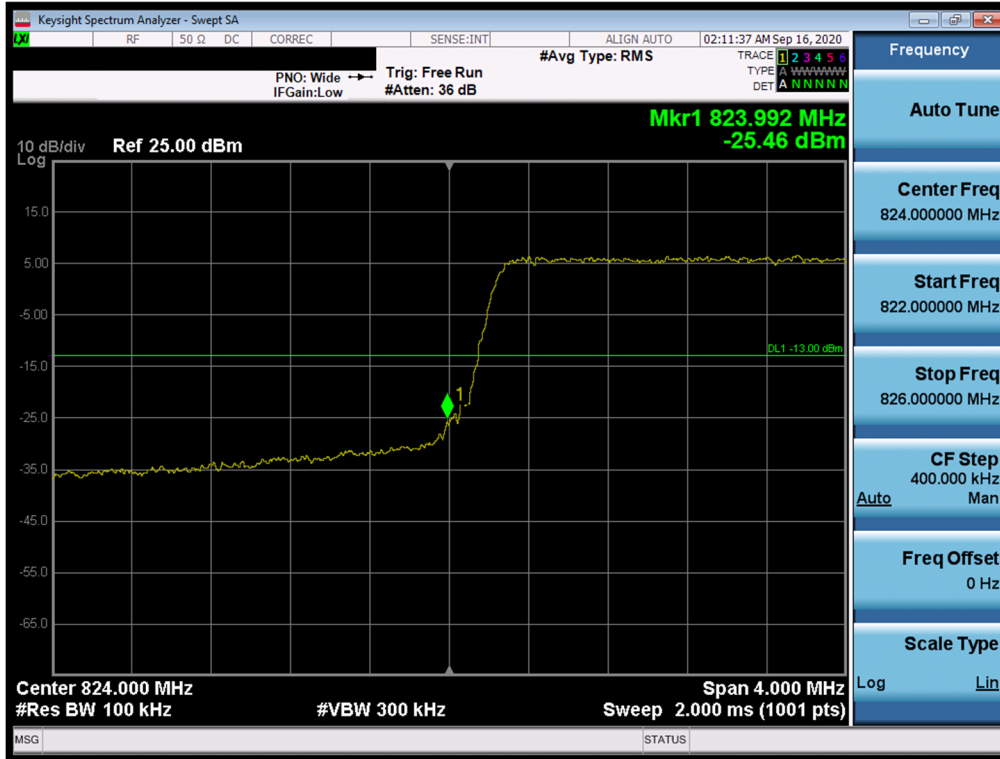
Plot 7-73. Lower Band Edge Plot (LTE Band 26/5 - 10MHz QPSK – Full RB Configuration)



Plot 7-74. Upper Band Edge Plot (LTE Band 26/5 - 10MHz QPSK – Full RB Configuration)

FCC ID: A3LSMG996U	PCTEST Proud to be part of element	PART 22 MEASUREMENT REPORT		Approved by: Quality Manager
Test Report S/N: 1M2009140143-18.A3L	Test Dates: 09/15 - 11/10/2020	EUT Type: Portable Handset		Page 71 of 116



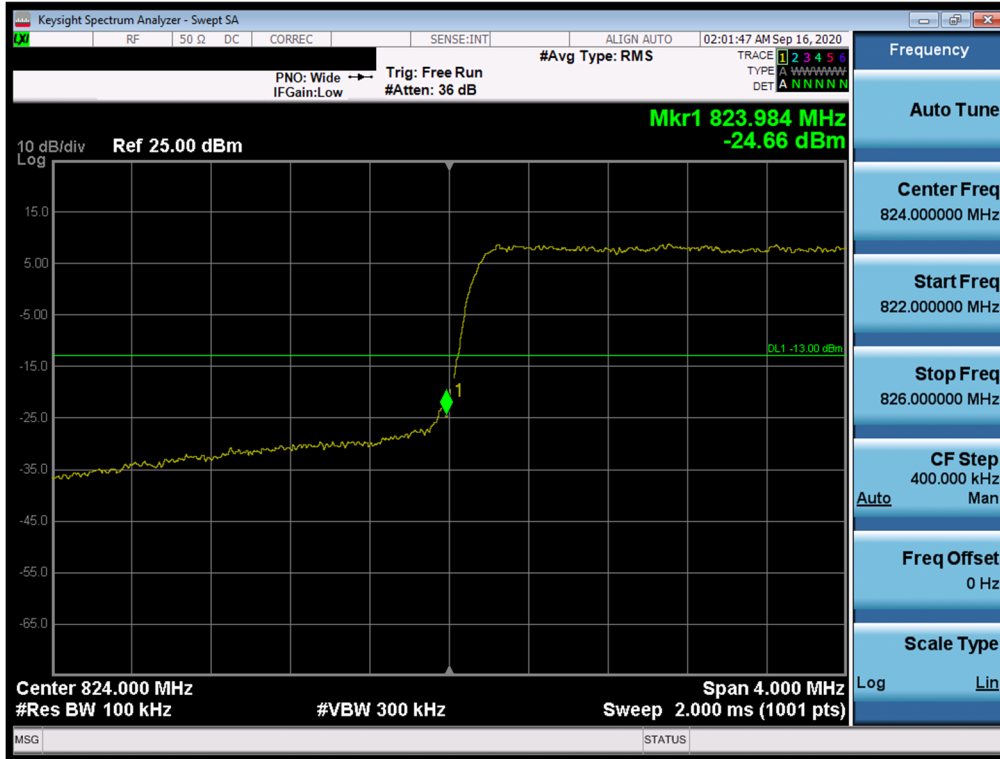


Plot 7-75. Lower Band Edge Plot (LTE Band 26/5 - 5MHz QPSK – Full RB Configuration)



Plot 7-76. Upper Band Edge Plot (LTE Band 26/5 - 5MHz QPSK – Full RB Configuration)

FCC ID: A3LSMG996U	PCTEST Proud to be part of element	PART 22 MEASUREMENT REPORT		Approved by: Quality Manager
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Plot 7-77. Lower Band Edge Plot (LTE Band 26/5 - 3MHz QPSK – Full RB Configuration)



Plot 7-78. Upper Band Edge Plot (LTE Band 26/5 - 3MHz QPSK – Full RB Configuration)

FCC ID: A3LSMG996U	PCTEST Proud to be part of element	PART 22 MEASUREMENT REPORT		Approved by: Quality Manager
Test Report S/N: 1M2009140143-18.A3L	Test Dates: 09/15 - 11/10/2020	EUT Type: Portable Handset		Page 73 of 116