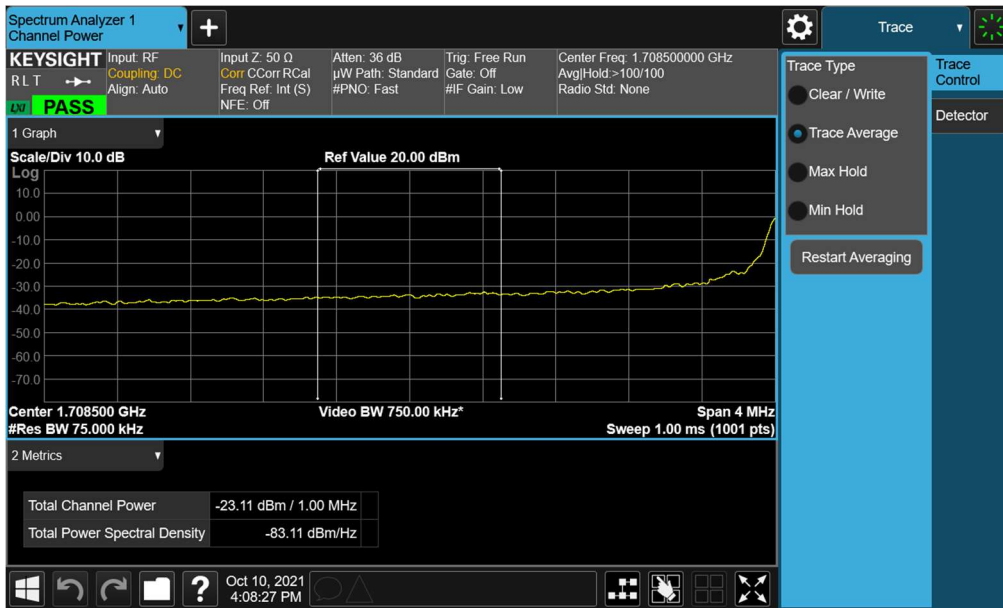
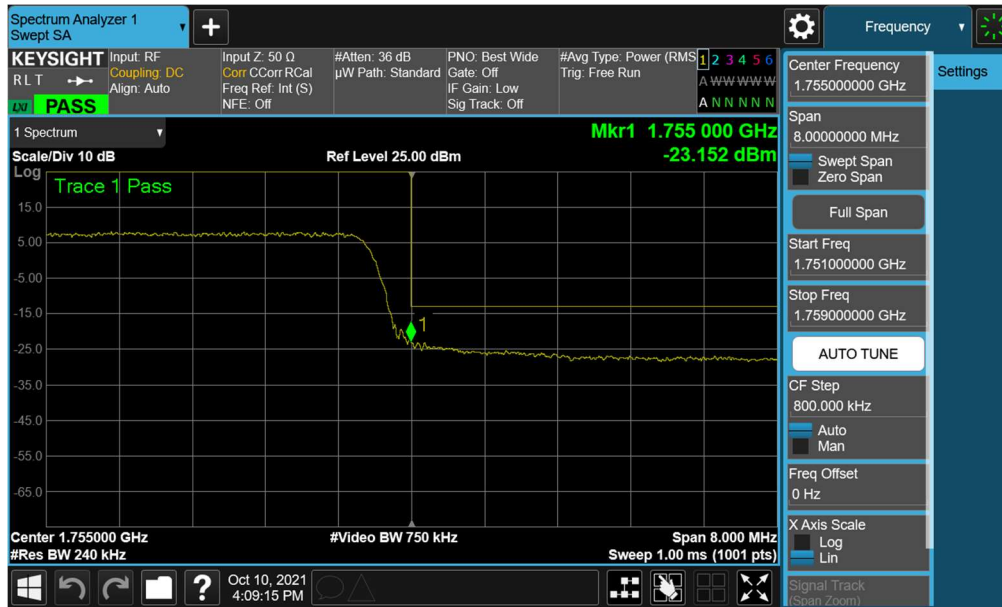


Plot 7-90. Lower Band Edge Plot (LTE Band 66/4 - 10MHz QPSK – Full RB)

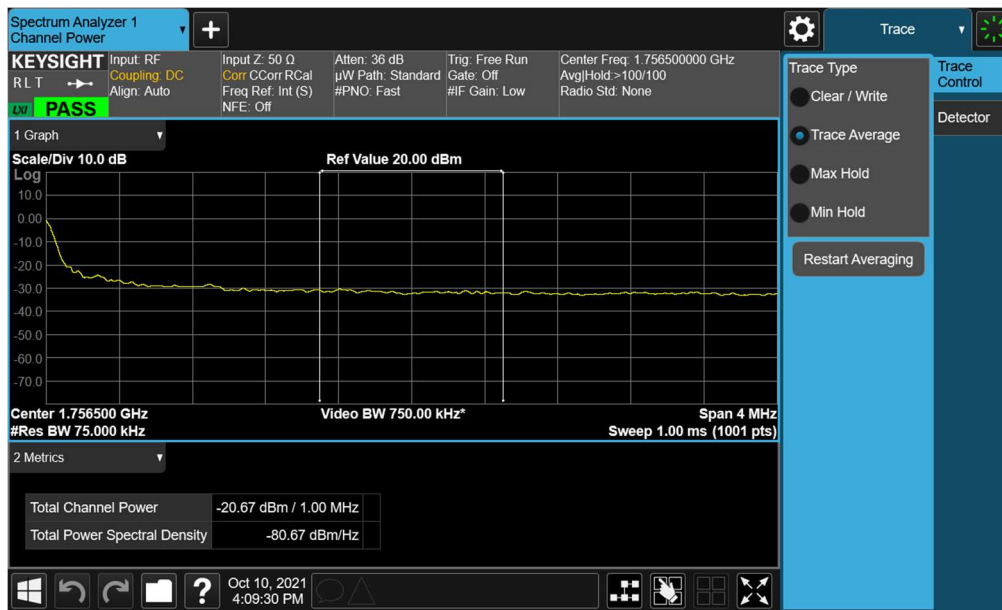


Plot 7-91. Lower Extended Band Edge Plot (LTE Band 66/4 - 10MHz QPSK – Full RB)

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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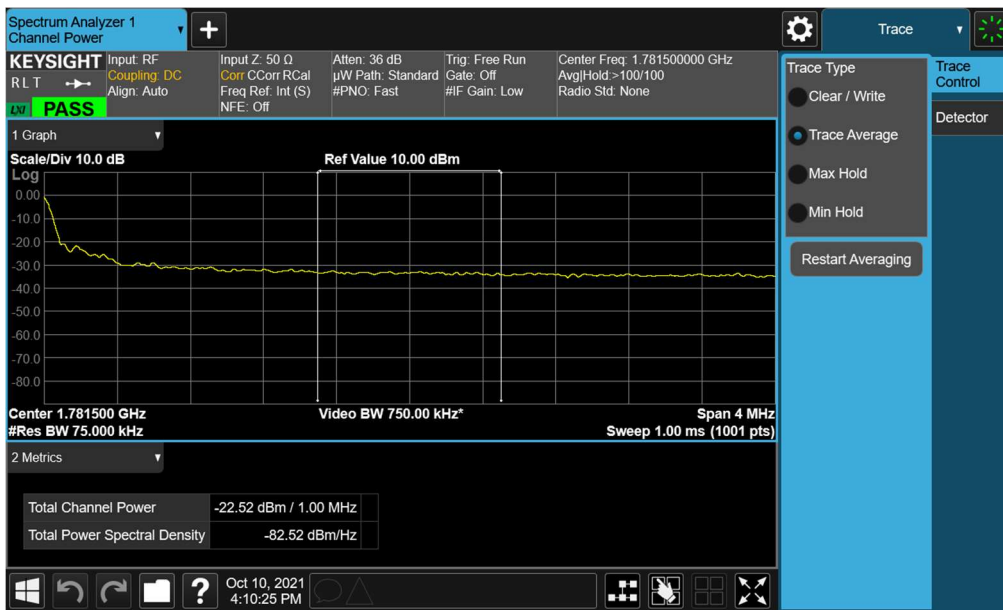


Plot 7-92. Upper Band Edge Plot (LTE Band 4 - 10MHz QPSK – Full RB)

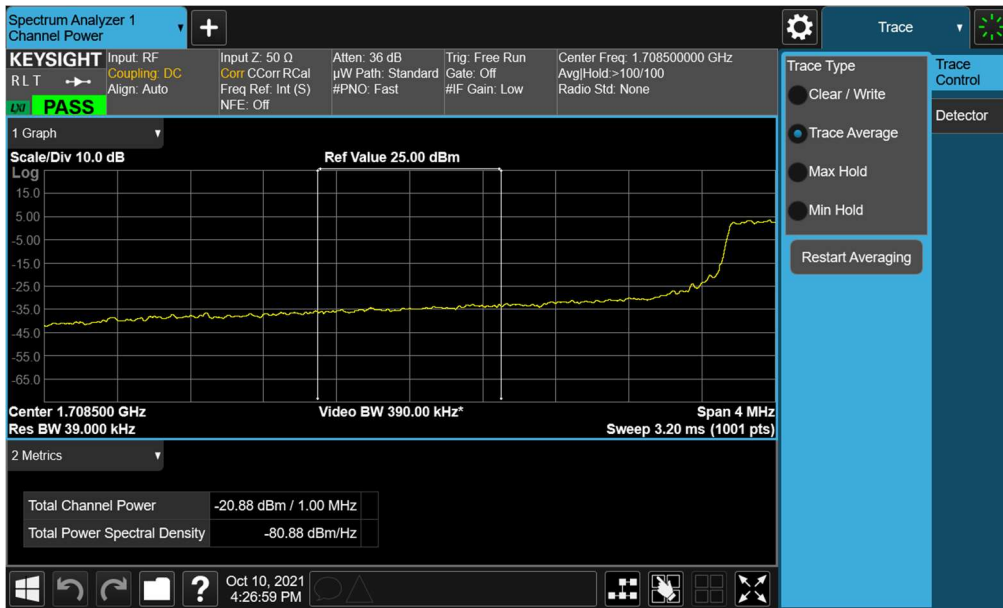


Plot 7-93. Upper Extended Band Edge Plot (LTE Band 4 - 10MHz QPSK – Full RB)

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 66 of 101

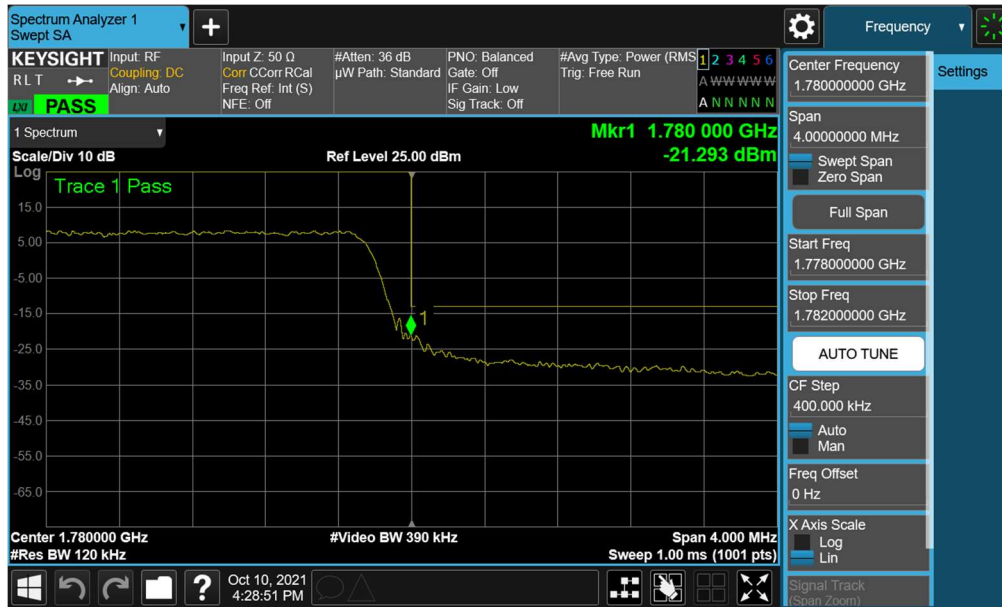


Plot 7-98. Upper Band Edge Plot (LTE Band 4 - 5MHz QPSK – Full RB)

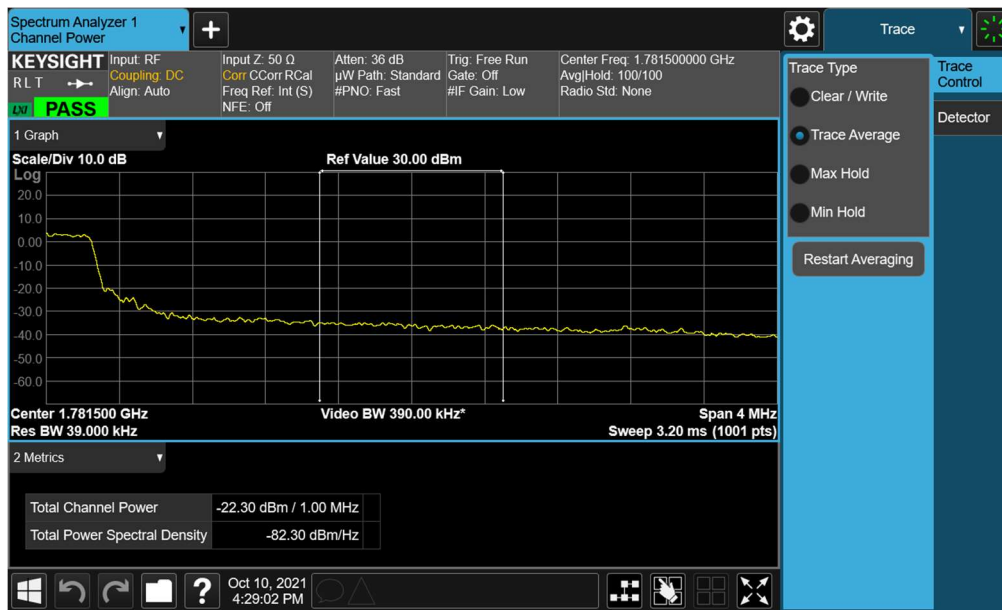


Plot 7-99. Upper Extended Band Edge Plot (LTE Band 4 - 5MHz QPSK – Full RB)

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 67 of 101

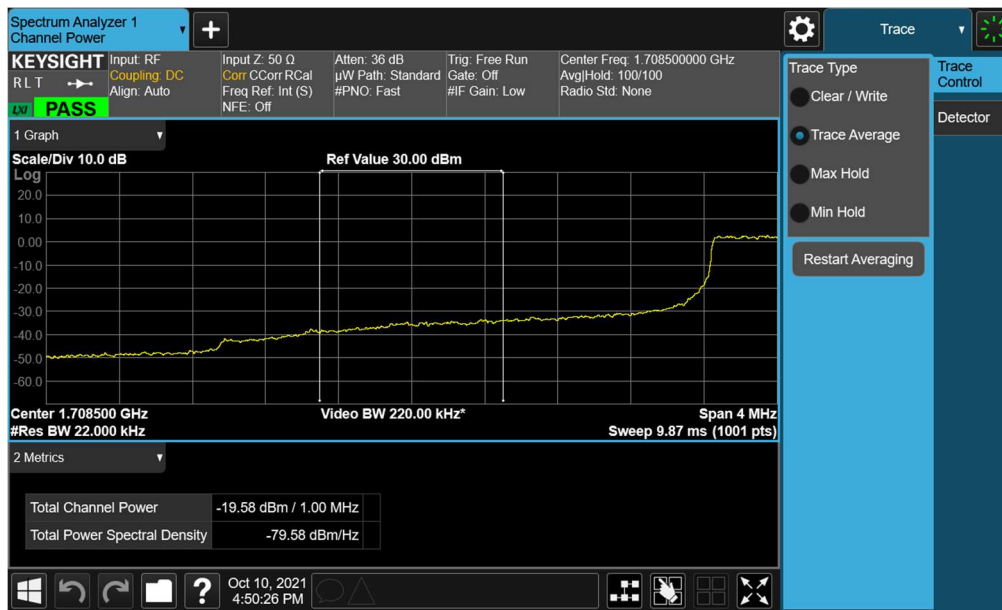
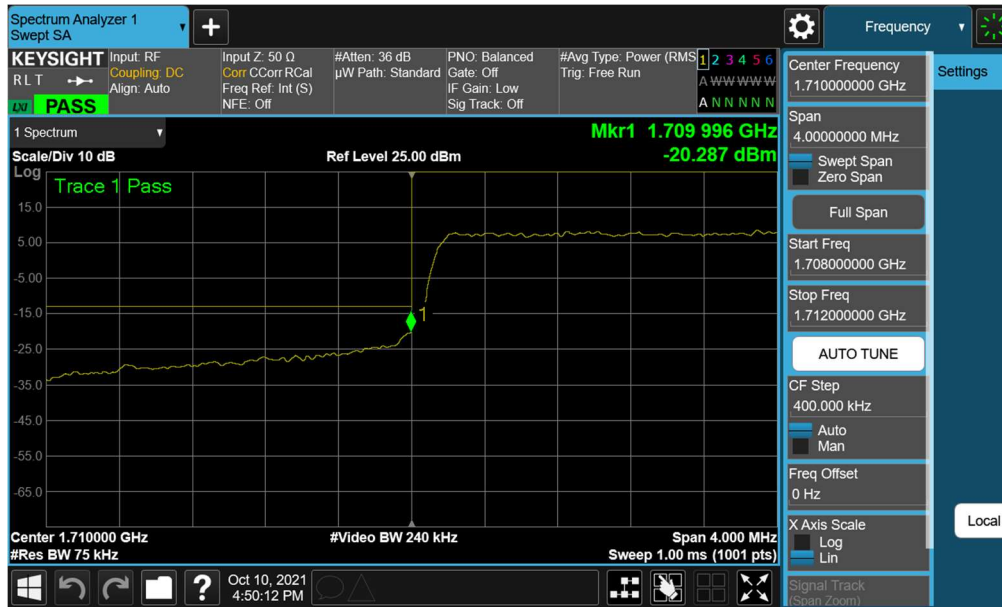


Plot 7-100. Upper Band Edge Plot (LTE Band 66 - 5MHz QPSK – Full RB)

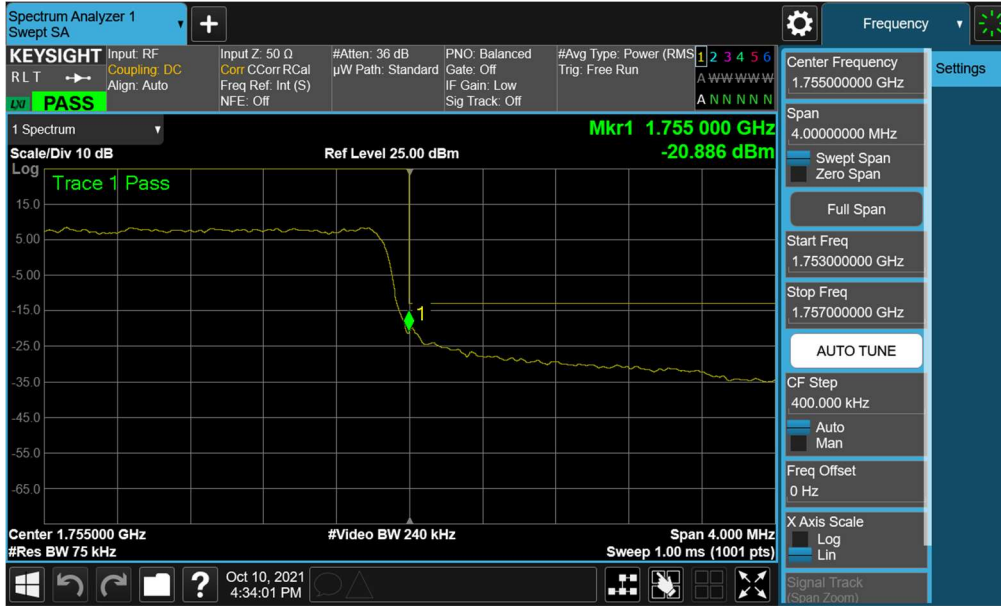


Plot 7-101. Upper Extended Band Edge Plot (LTE Band 66 - 5MHz QPSK – Full RB)

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 68 of 101



FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 69 of 101



Plot 7-104. Upper Band Edge Plot (LTE Band 4 - 3MHz QPSK – Full RB)

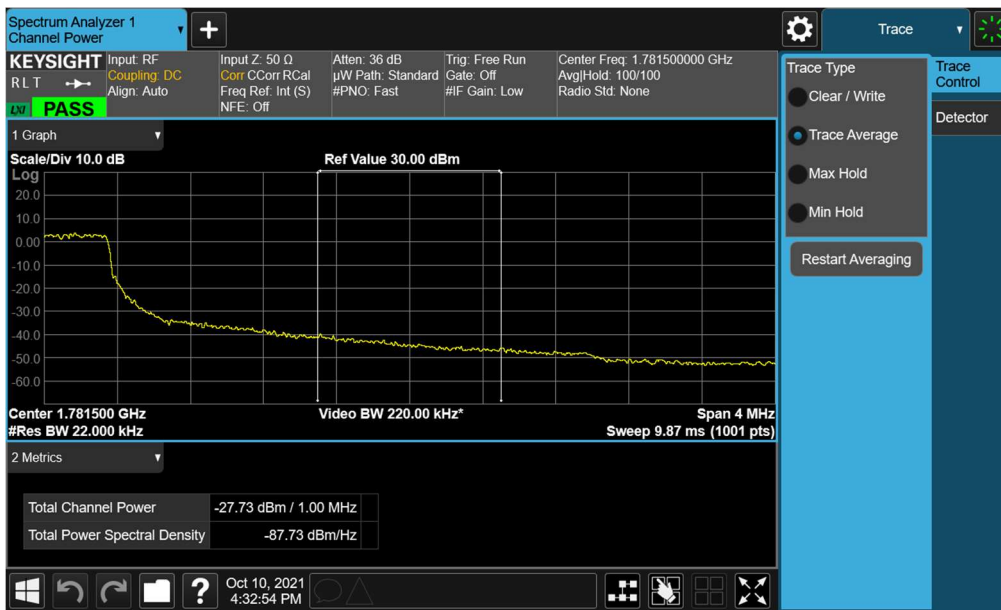


Plot 7-105. Upper Extended Band Edge Plot (LTE Band 4 - 3MHz QPSK – Full RB)

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 70 of 101



Plot 7-106. Upper Band Edge Plot (LTE Band 66 - 3MHz QPSK – Full RB)

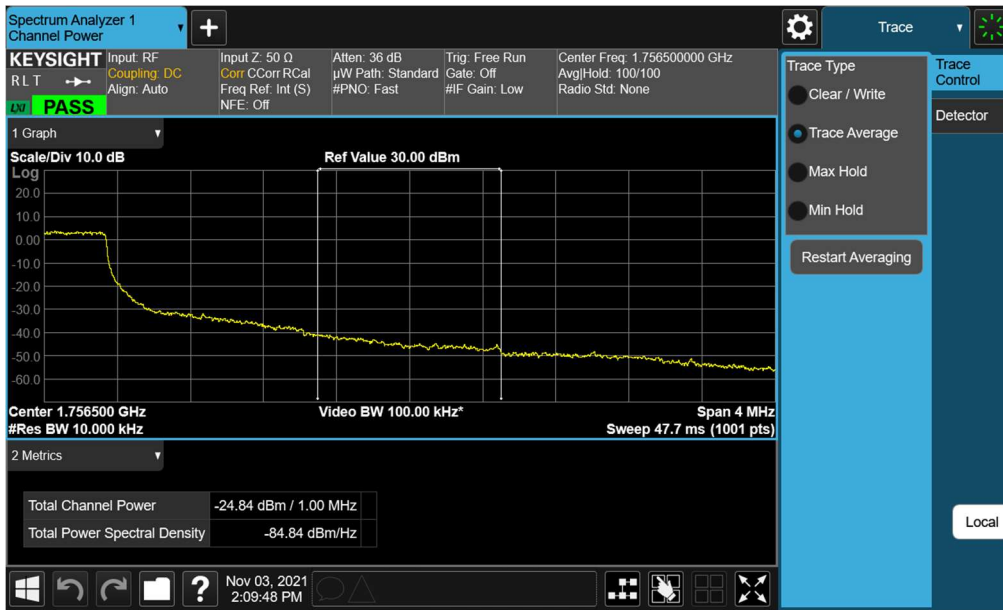


Plot 7-107. Upper Extended Band Edge Plot (LTE Band 66 - 3MHz QPSK – Full RB)

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 71 of 101



FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 72 of 101



FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 73 of 101



FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 74 of 101

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 \geq 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.

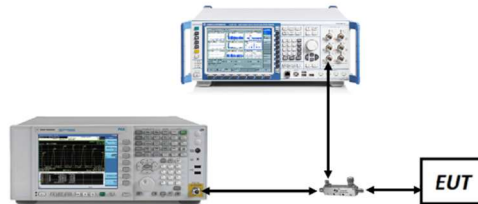


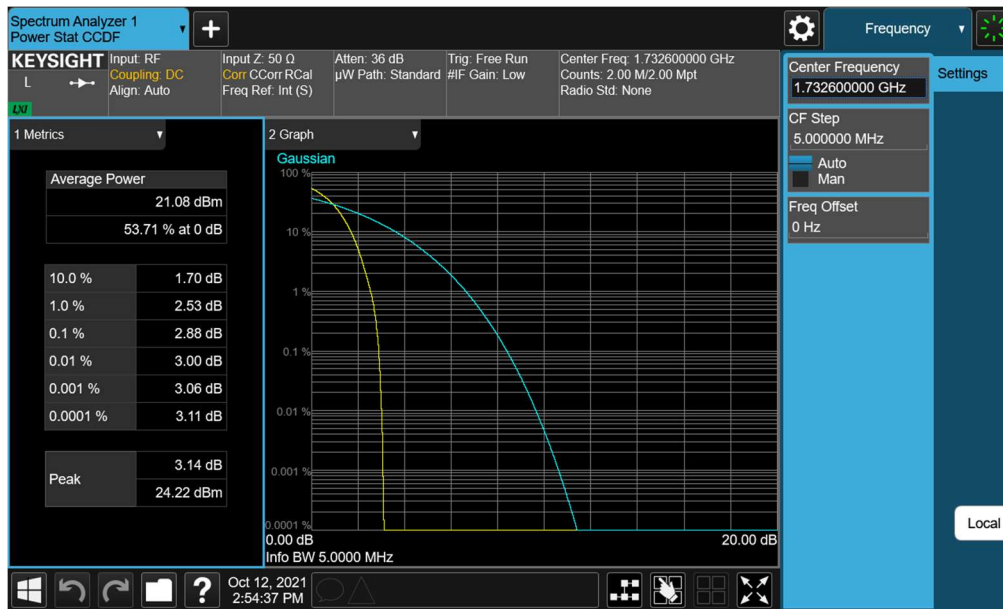
Figure 7-4. Test Instrument & Measurement Setup

Test Notes

None.

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset	Page 75 of 101

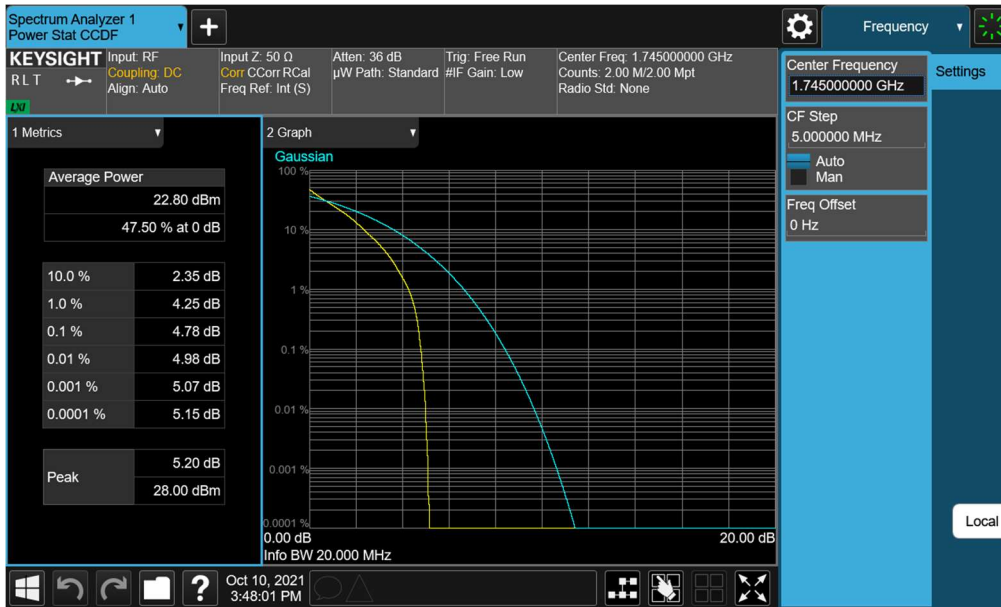
WCDMA AWS



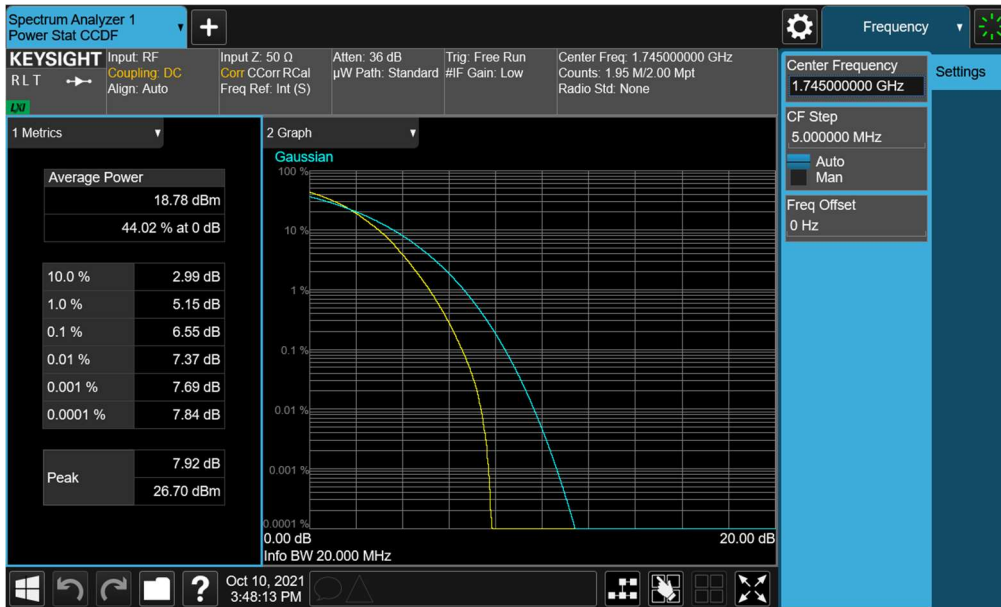
Plot 7-114. PAR Plot (WCDMA, Ch. 1413)

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 76 of 101

LTE Band 66/4

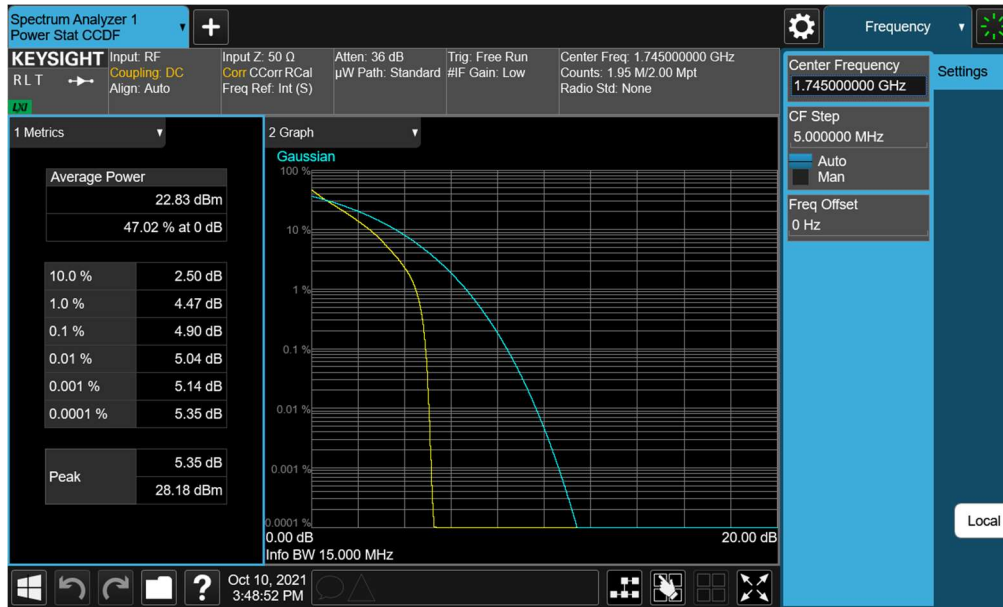


Plot 7-115. PAR Plot (LTE Band 66/4 - 20MHz QPSK - Full RB)

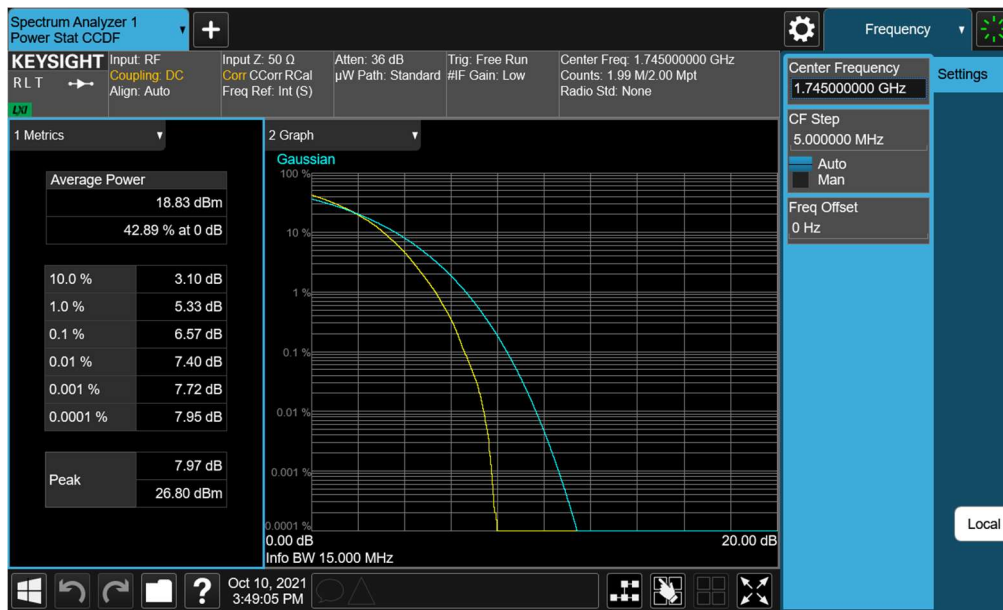


Plot 7-116. PAR Plot (LTE Band 66/4 - 20MHz 256-QAM - Full RB)

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 77 of 101

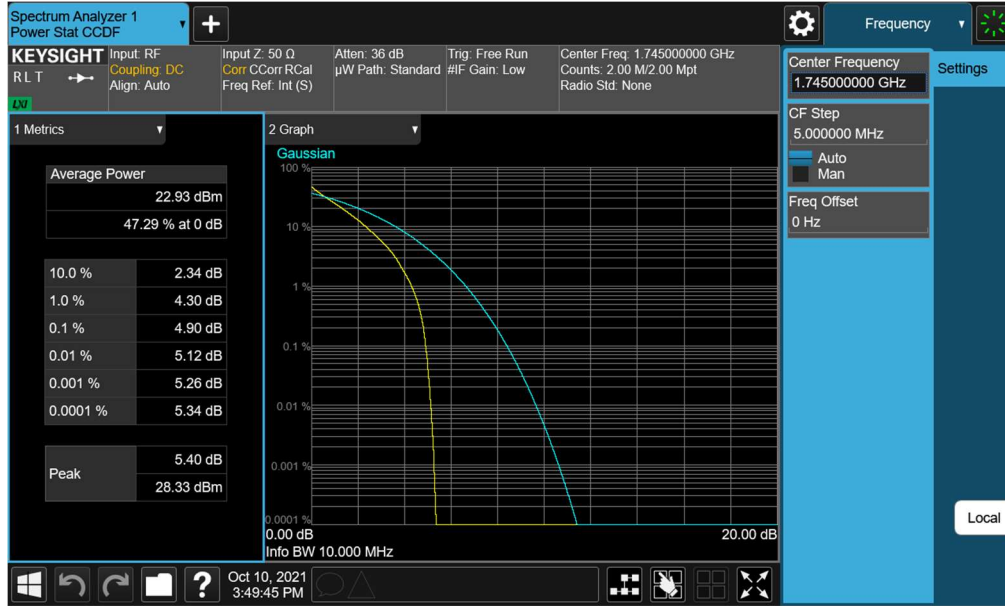


Plot 7-117. PAR Plot (LTE Band 66/4 - 15MHz QPSK - Full RB)



Plot 7-118. PAR Plot (LTE Band 66/4 - 15MHz 256-QAM - Full RB)

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 78 of 101

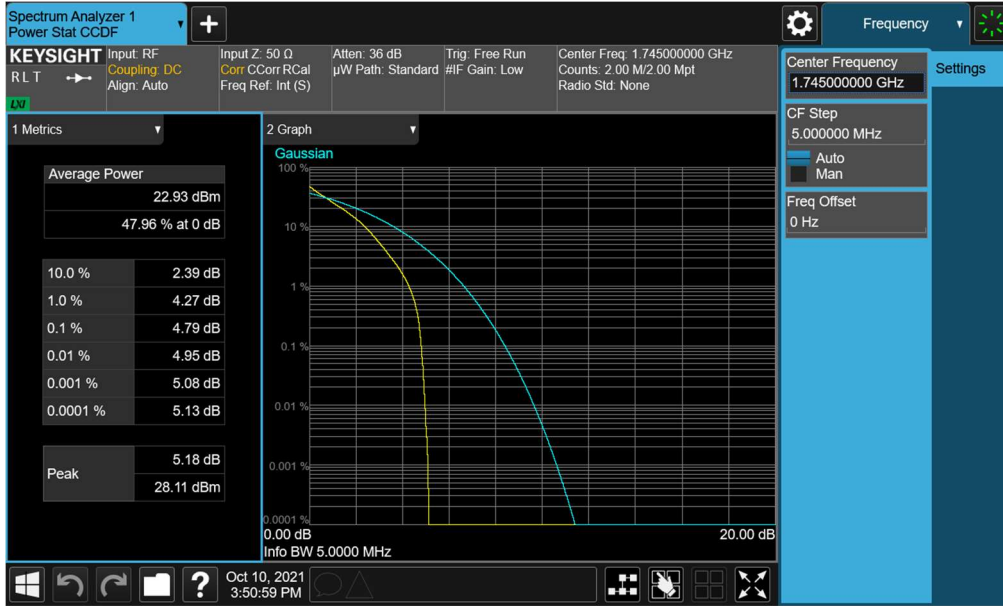


Plot 7-119. PAR Plot (LTE Band 66/4 - 10MHz QPSK - Full RB)

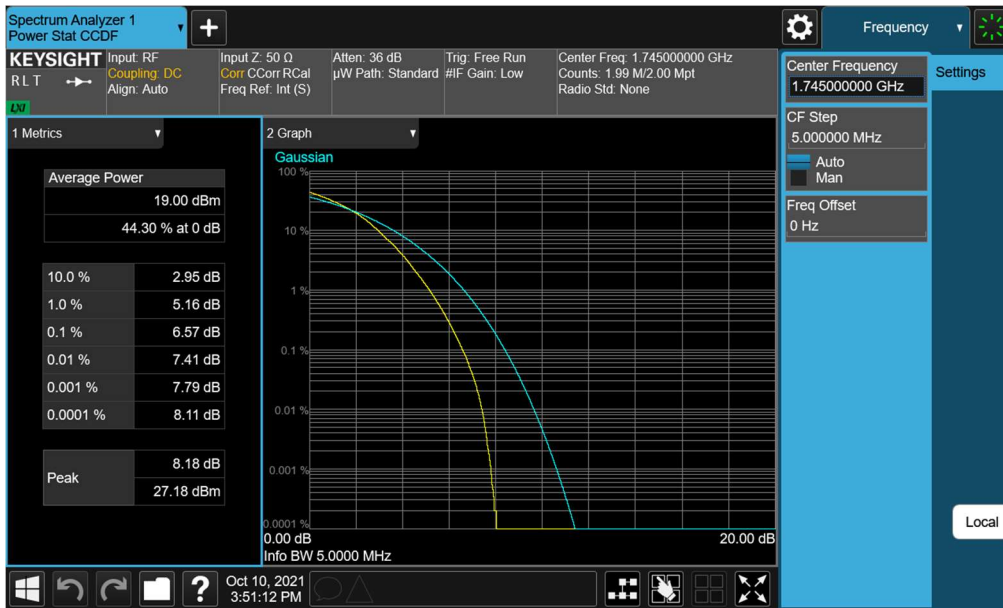


Plot 7-120. PAR Plot (LTE Band 66/4 - 10MHz 256-QAM - Full RB)

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset	Page 79 of 101



Plot 7-121. PAR Plot (LTE Band 66/4 - 5MHz QPSK - Full RB)



Plot 7-122. PAR Plot (LTE Band 66/4 - 5MHz 256-QAM - Full RB)

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2109220110-29.A3L	Test Dates: 10/8/2021 - 11/10/2021	EUT Type: Portable Handset		Page 80 of 101