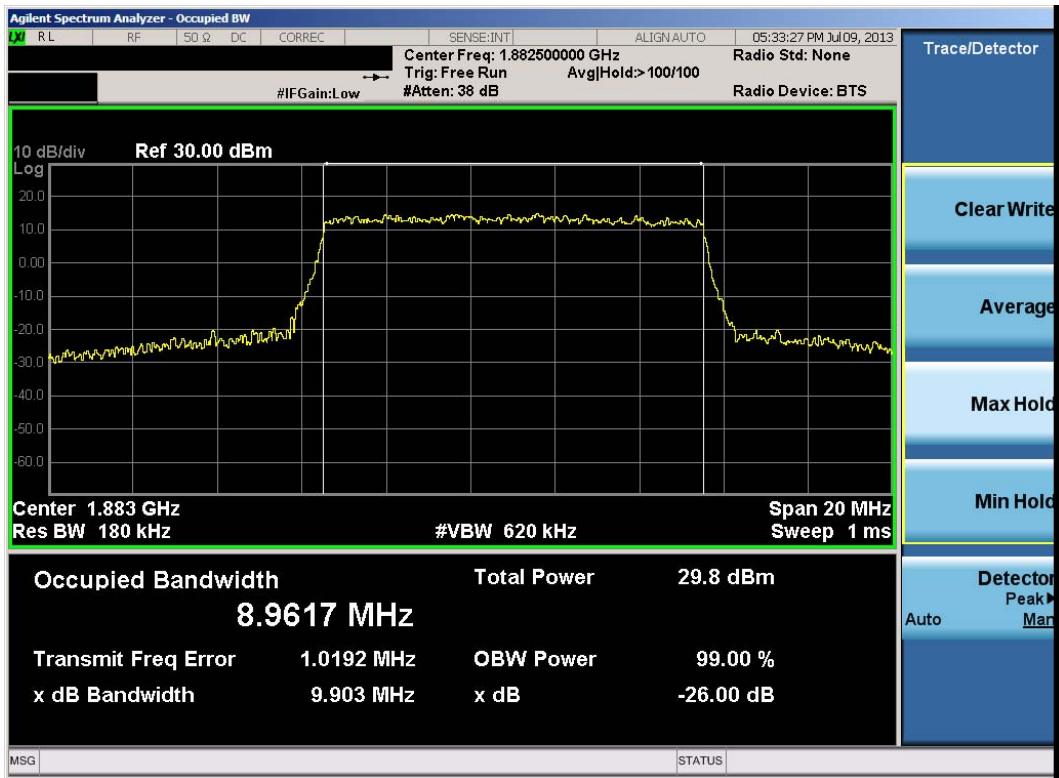
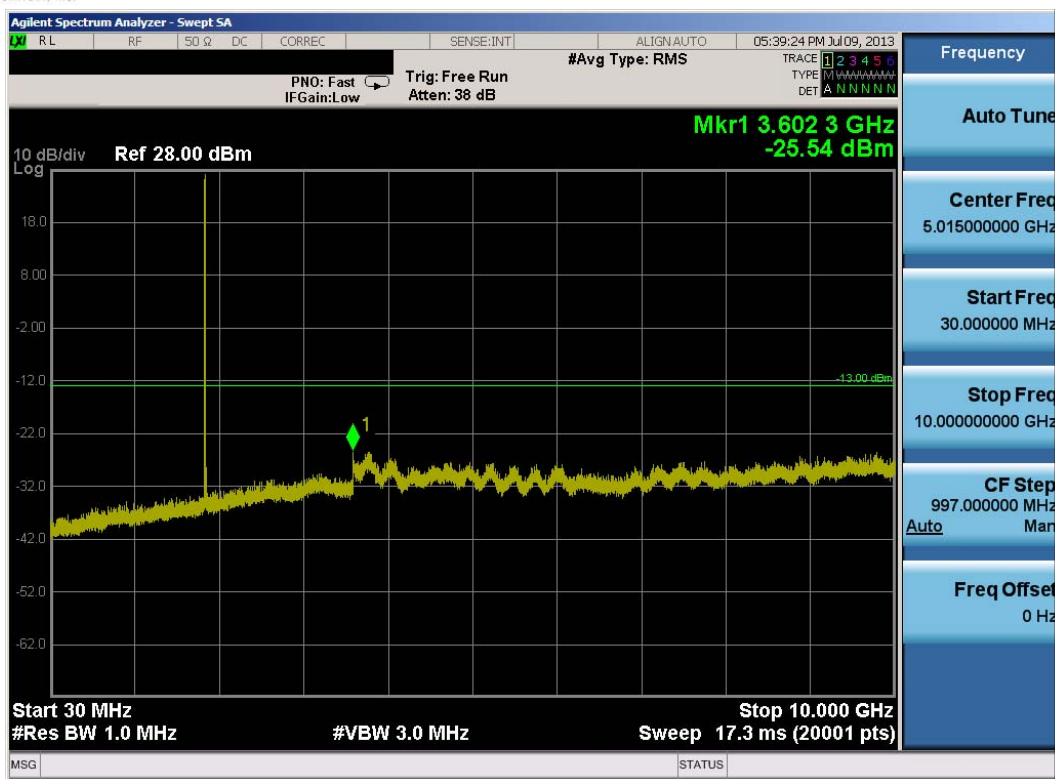


Plot 8-19. Occupied Bandwidth Plot (10.0MHz QPSK – RB Size 50)

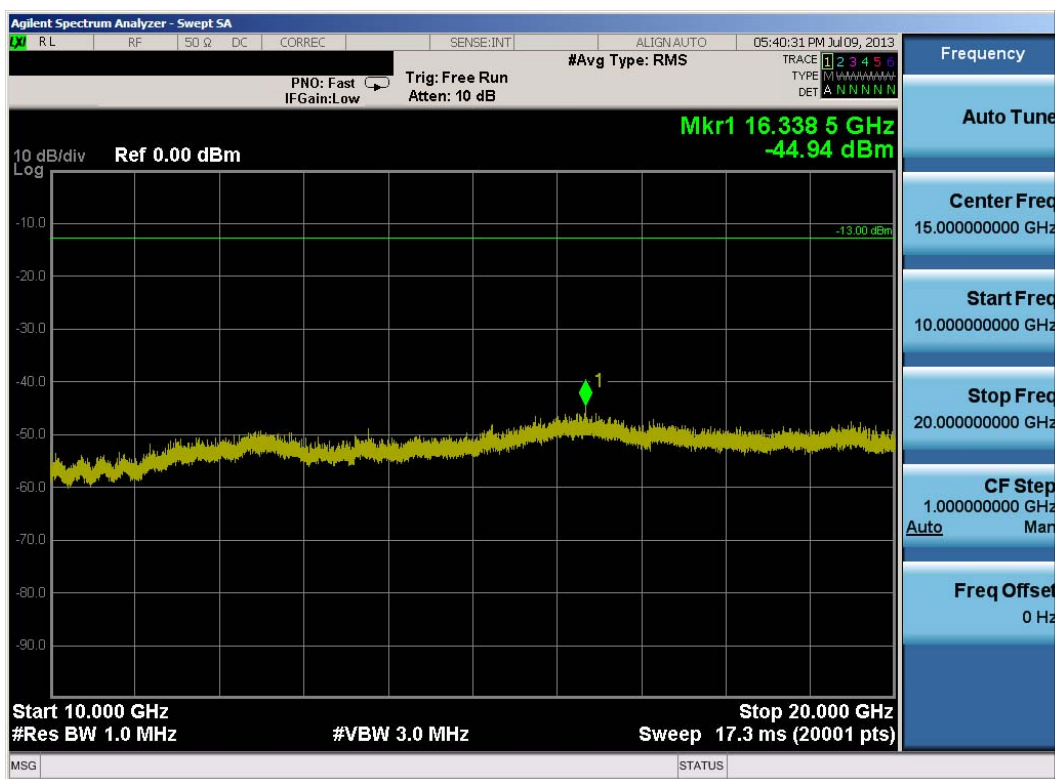


Plot 8-20. Occupied Bandwidth Plot (10.0MHz 16-QAM – RB Size 50)

FCC ID: A3LSPHL520	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)	<b>SAMSUNG</b>	Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 55 of 75

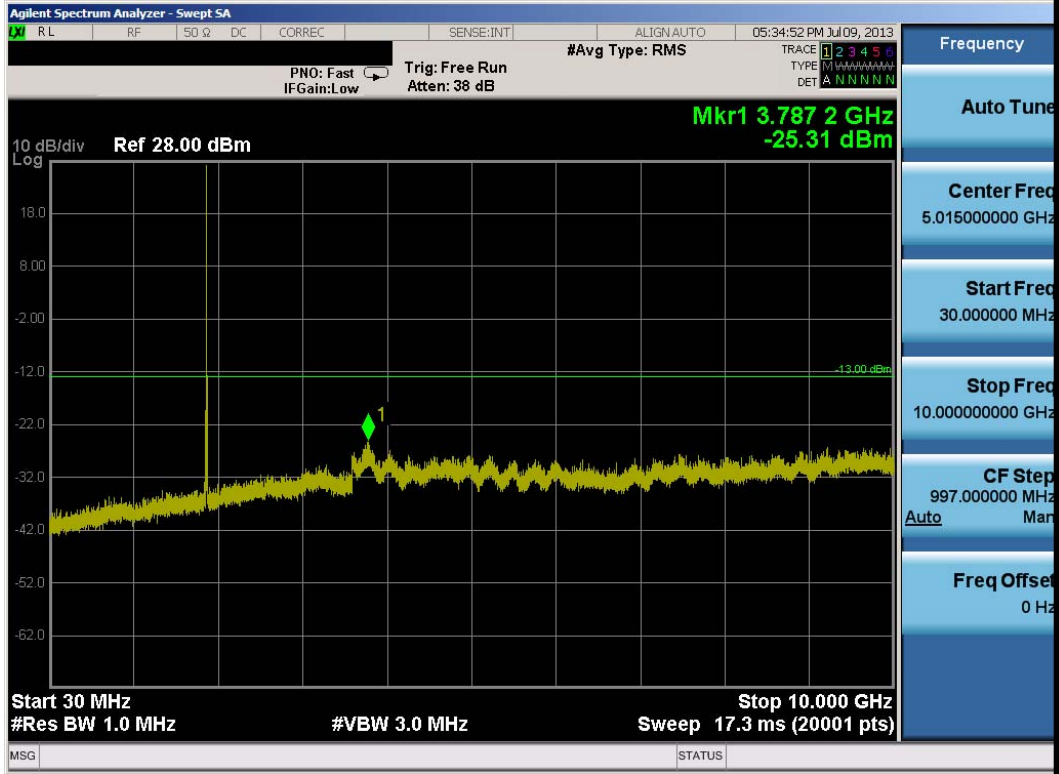


Plot 8-21. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0– Low Channel)

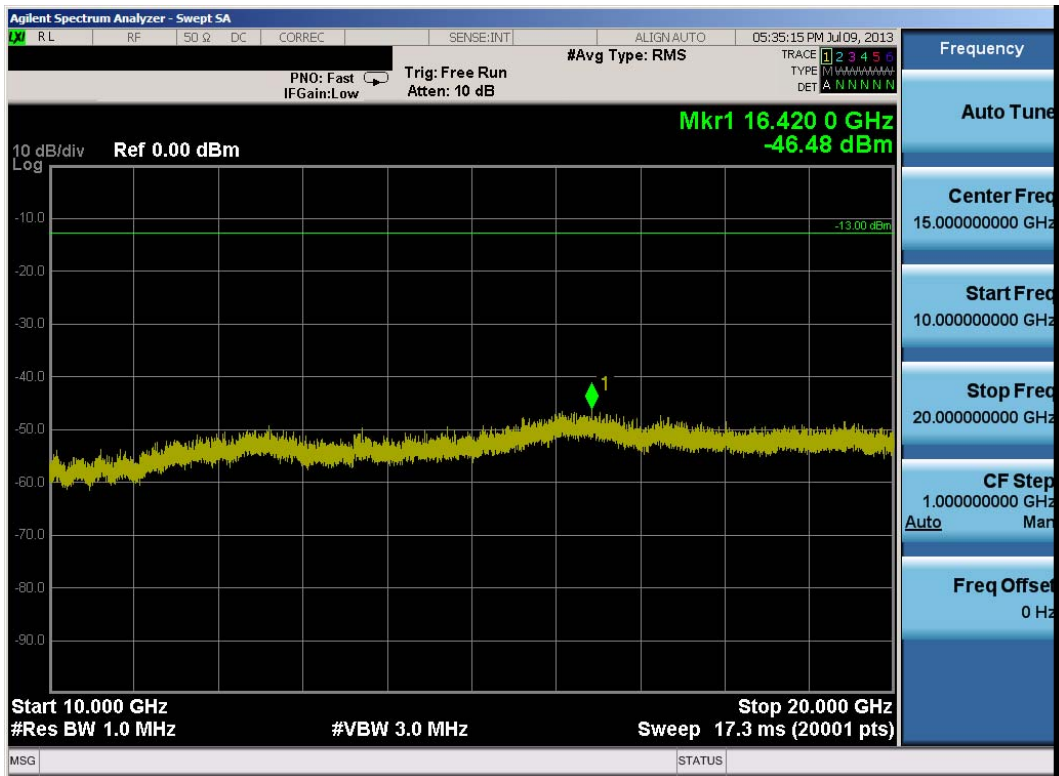


Plot 8-22. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)

FCC ID: A3LSPHL520	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 56 of 75

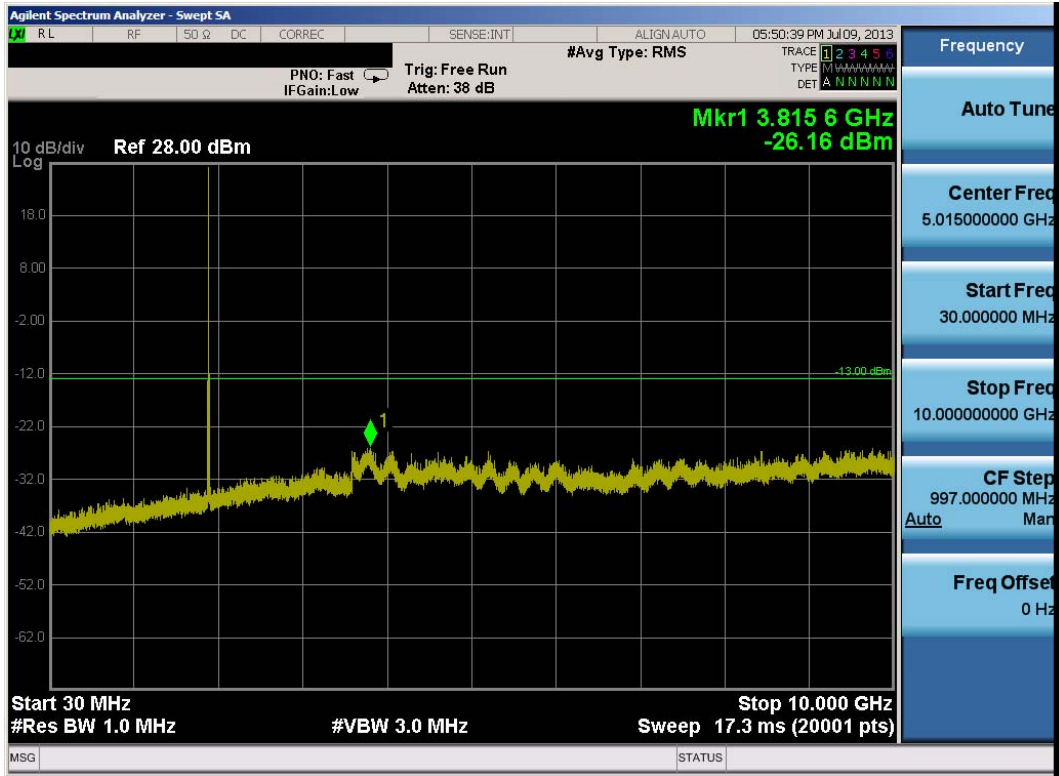


Plot 8-23. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

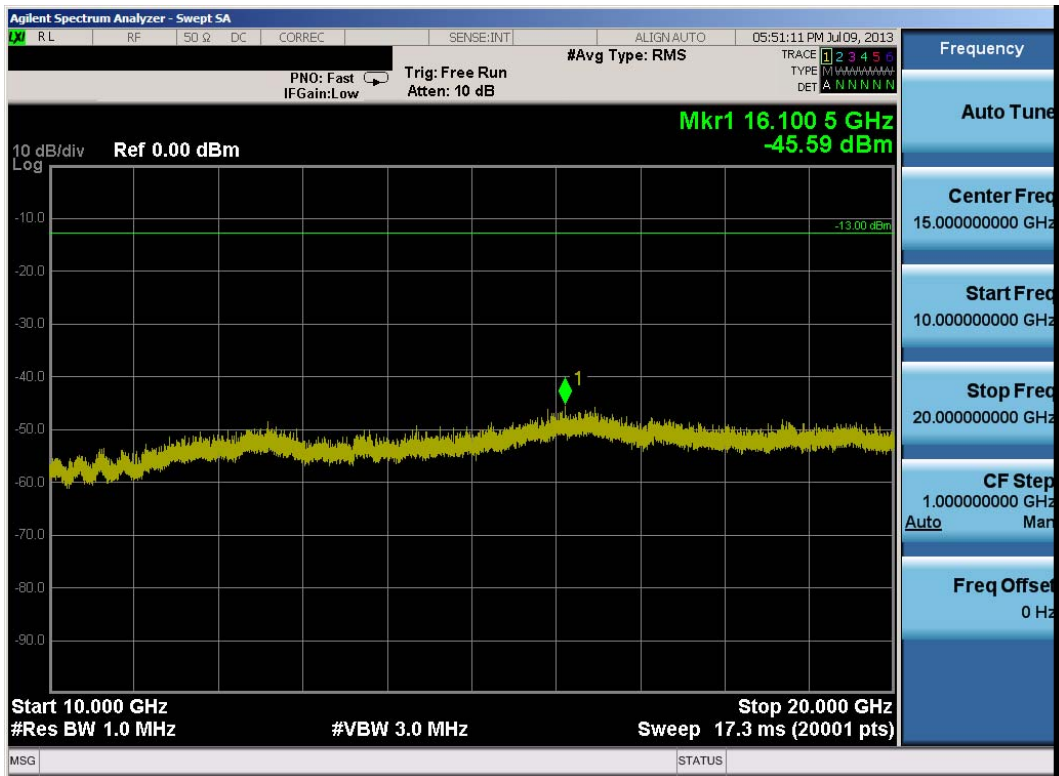


Plot 8-24. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

FCC ID: A3LSPHL520	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 57 of 75

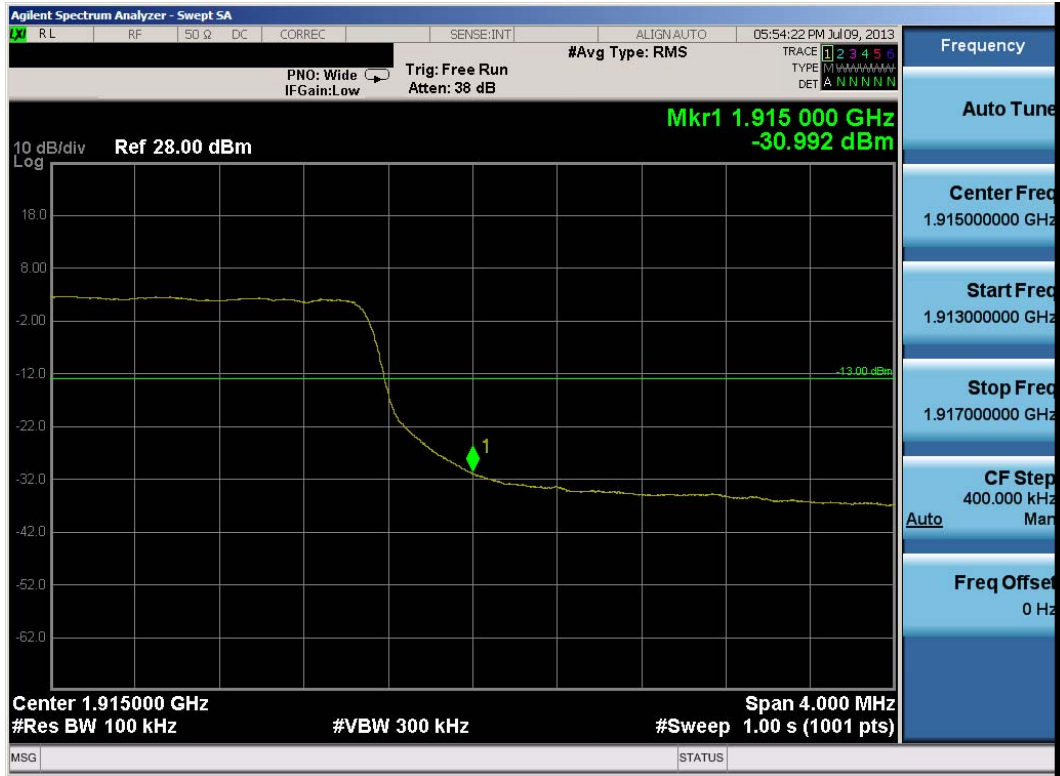


Plot 8-25. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

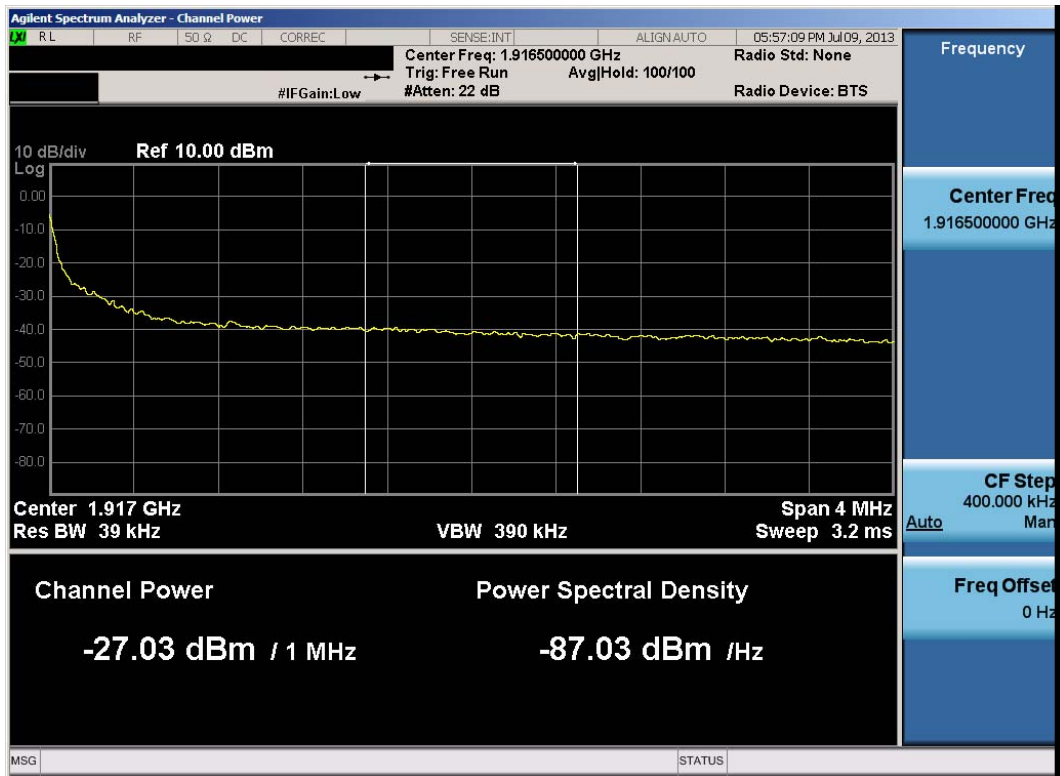


Plot 8-26. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

FCC ID: A3LSPHL520		FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 58 of 75

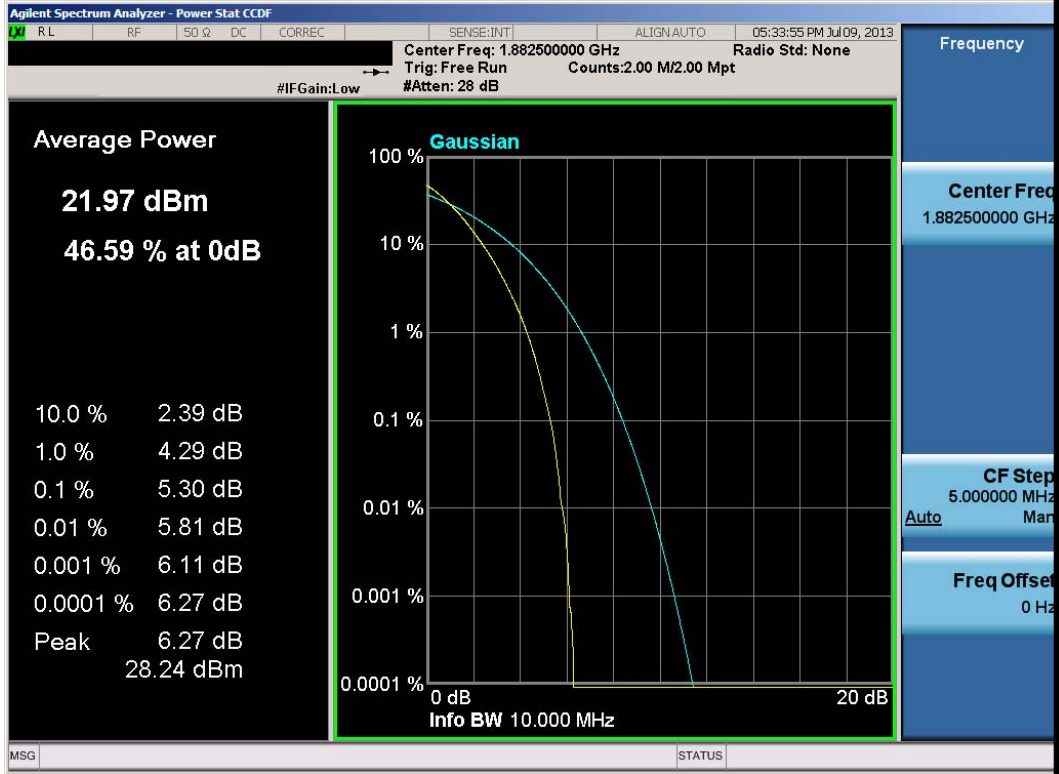


Plot 8-27. Upper Band Edge Plot (10.0MHz QPSK – RB Size 50)

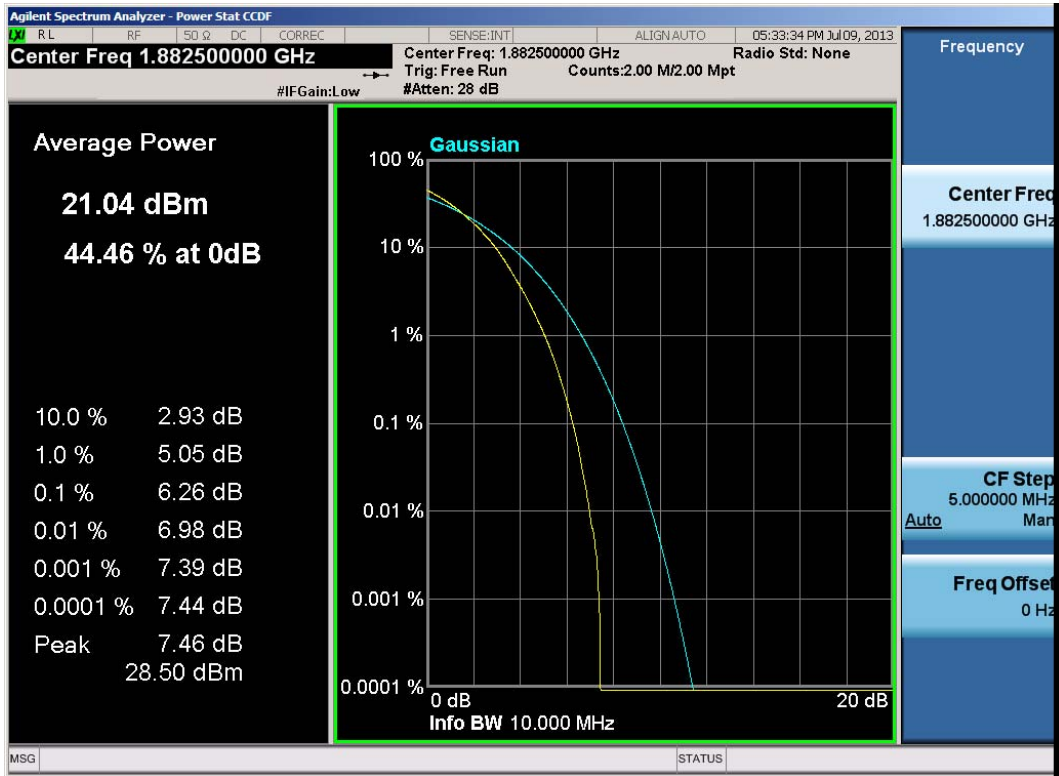


Plot 8-28. Upper Extended Band Edge Plot (10.0MHz QPSK – RB Size 50)

FCC ID: A3LSPHL520	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)	<b>SAMSUNG</b>	Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 59 of 75



Plot 8-29. PAR Plot (10.0MHz QPSK – RB Size 50)

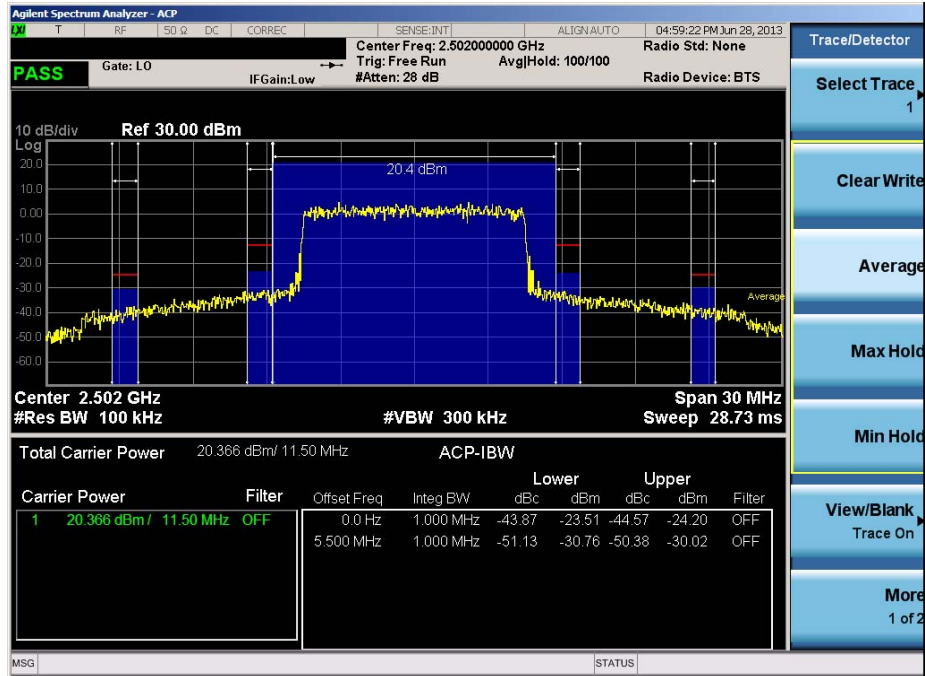


Plot 8-30. PAR Plot (10.0MHz 16-QAM – RB Size 50)

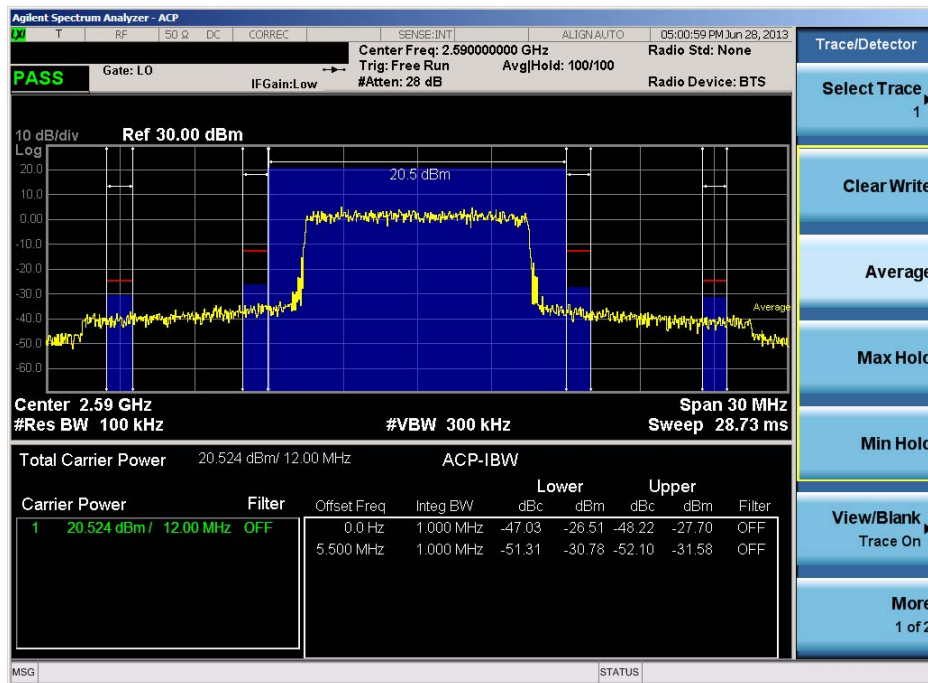
FCC ID: A3LSPHL520	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)	<b>SAMSUNG</b>	Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 60 of 75

## 9.0 BAND 41 PLOTS OF EMISSIONS

**Note:** All bandwidths, RB configurations, and modulations were investigated. The worst case test results are reported below.

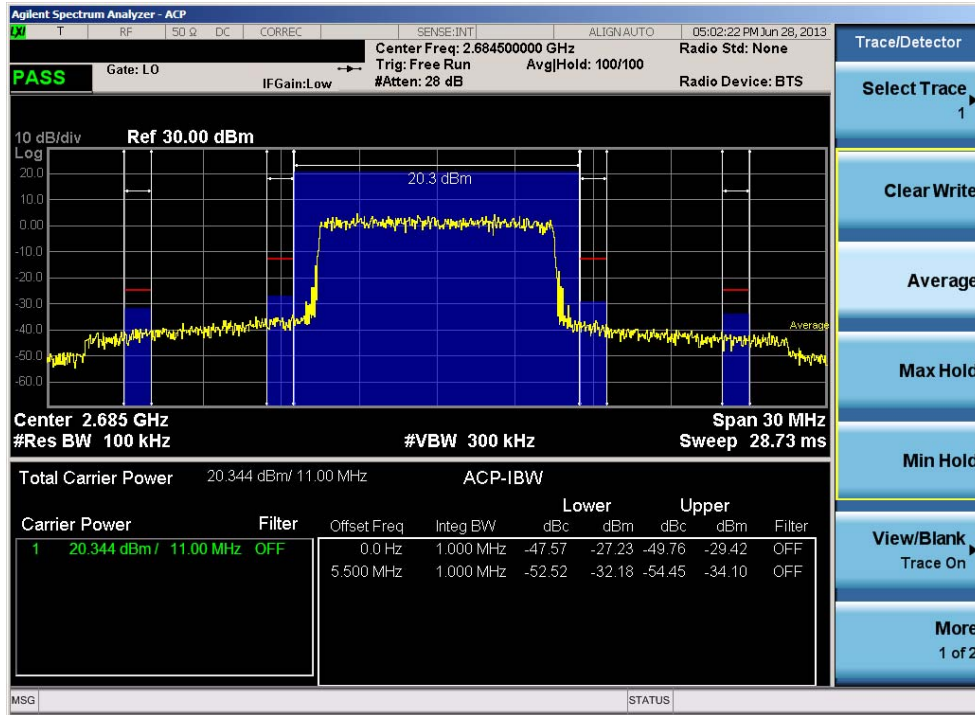


Plot 9-1. Low Channel Band Edge Plot (10.0MHz QPSK – RB Size 50)

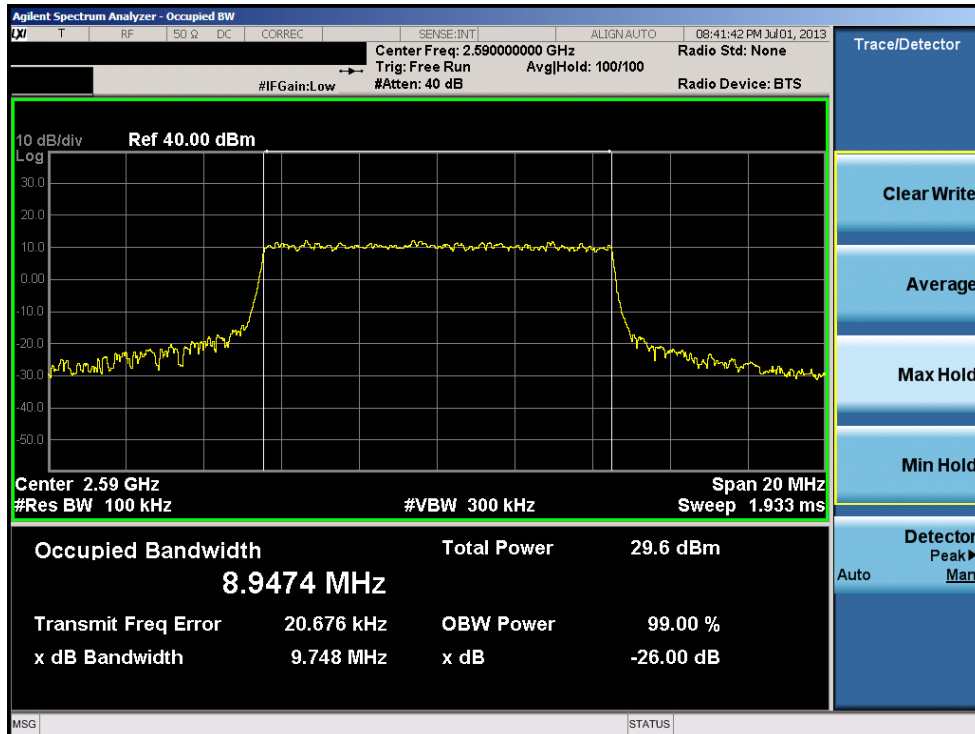


Plot 9-2. Mid Channel Band Edge Plot (10.0MHz QPSK – RB Size 50)

FCC ID: A3LSPHL520		FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 61 of 75



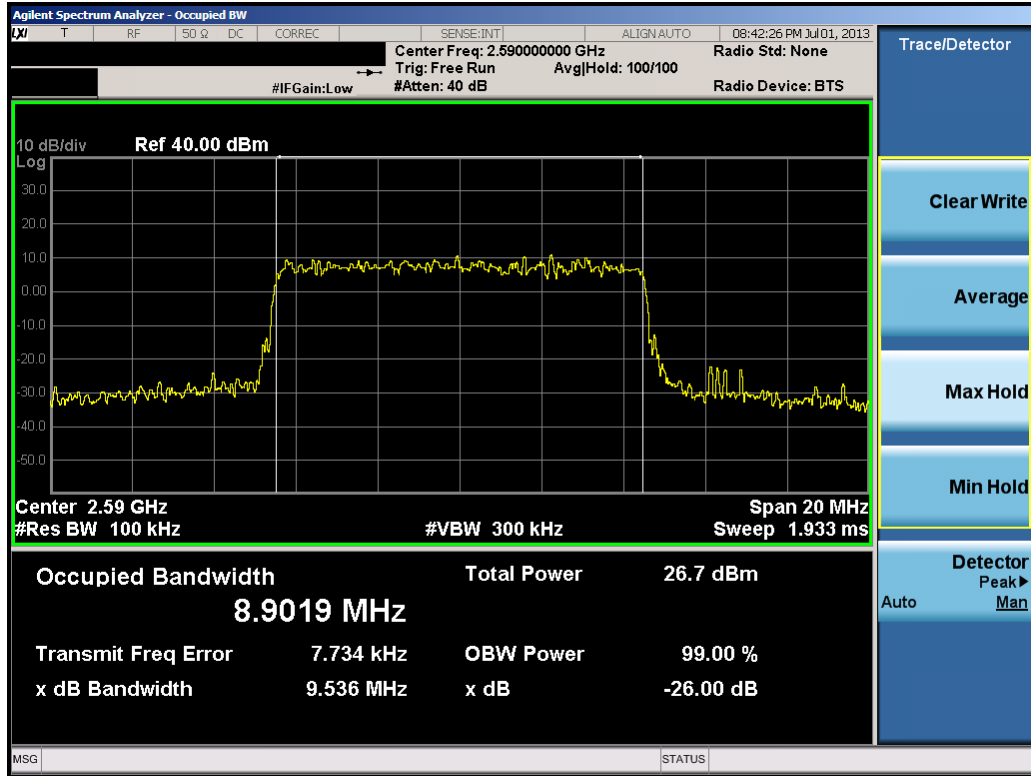
Plot 9-3. High Channel Band Edge Plot (10.0MHz QPSK – RB Size 50)



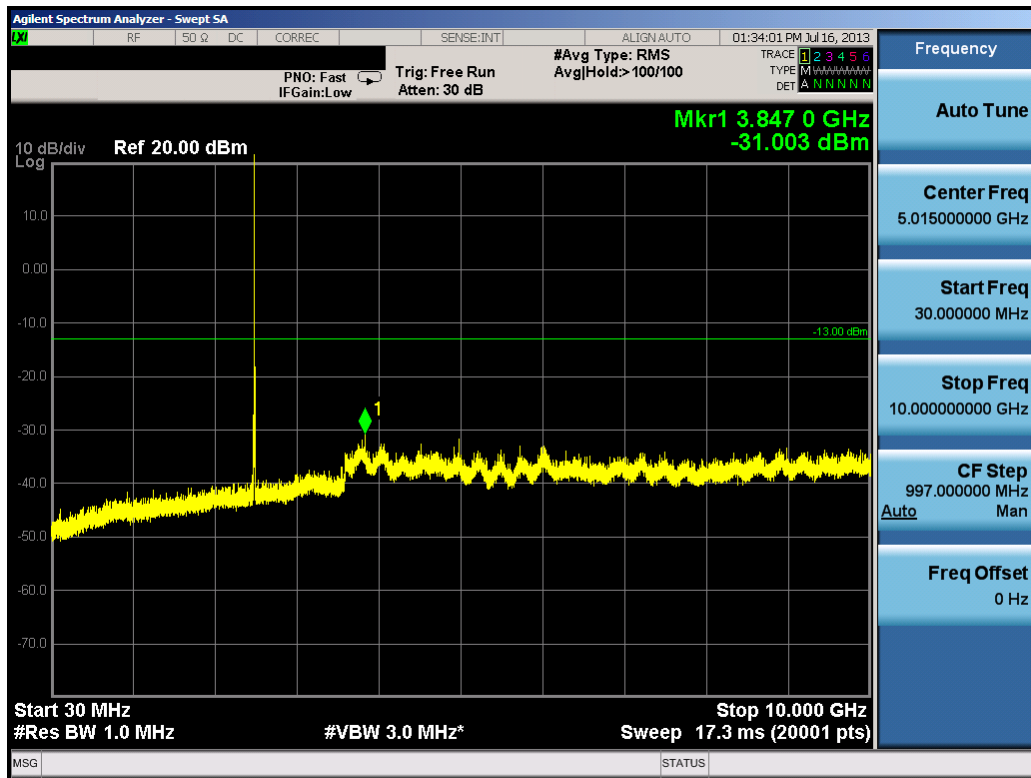
Plot 9-4. Occupied Bandwidth Plot (10.0MHz QPSK – RB Size 50)

FCC ID: A3LSPHL520		FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 62 of 75



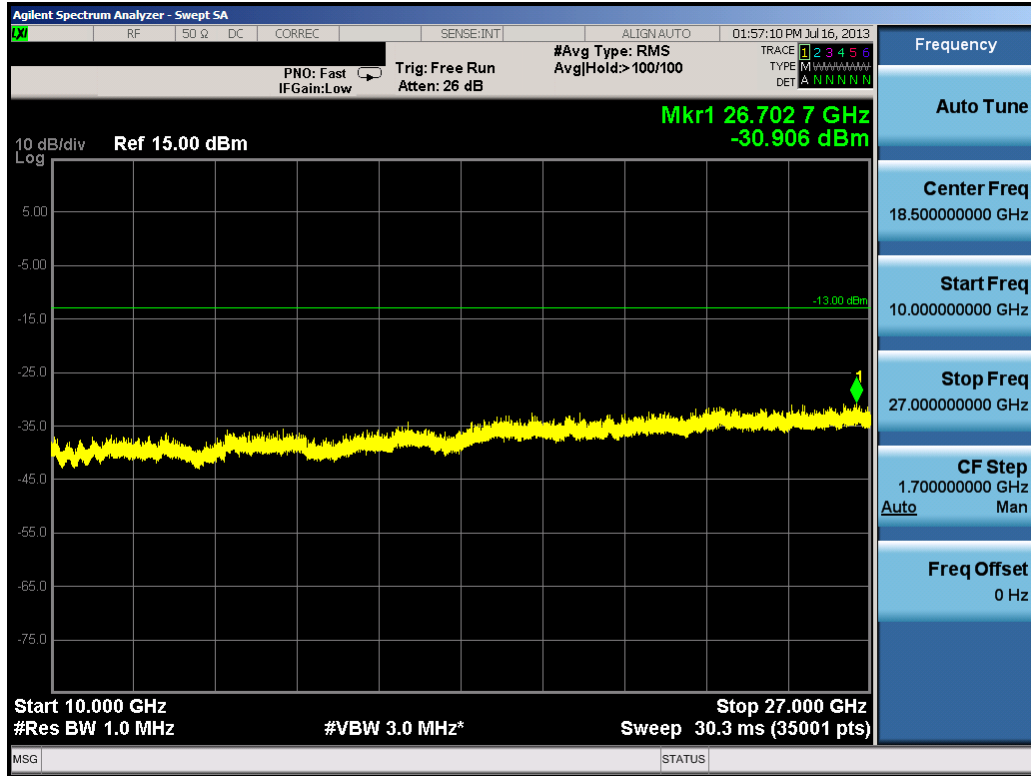


Plot 9-5. Occupied Bandwidth Plot (10.0MHz 16-QAM – RB Size 50)

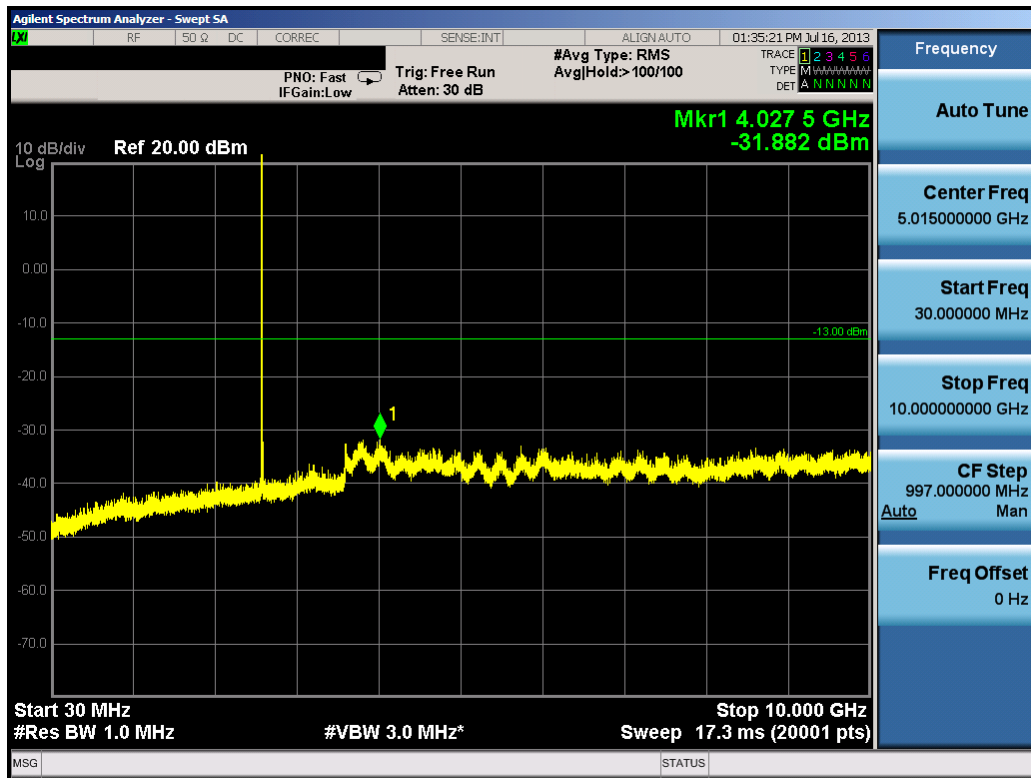


Plot 9-6. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0– Low Channel)

FCC ID: A3LSPHL520	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)	<b>SAMSUNG</b>	Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 63 of 75

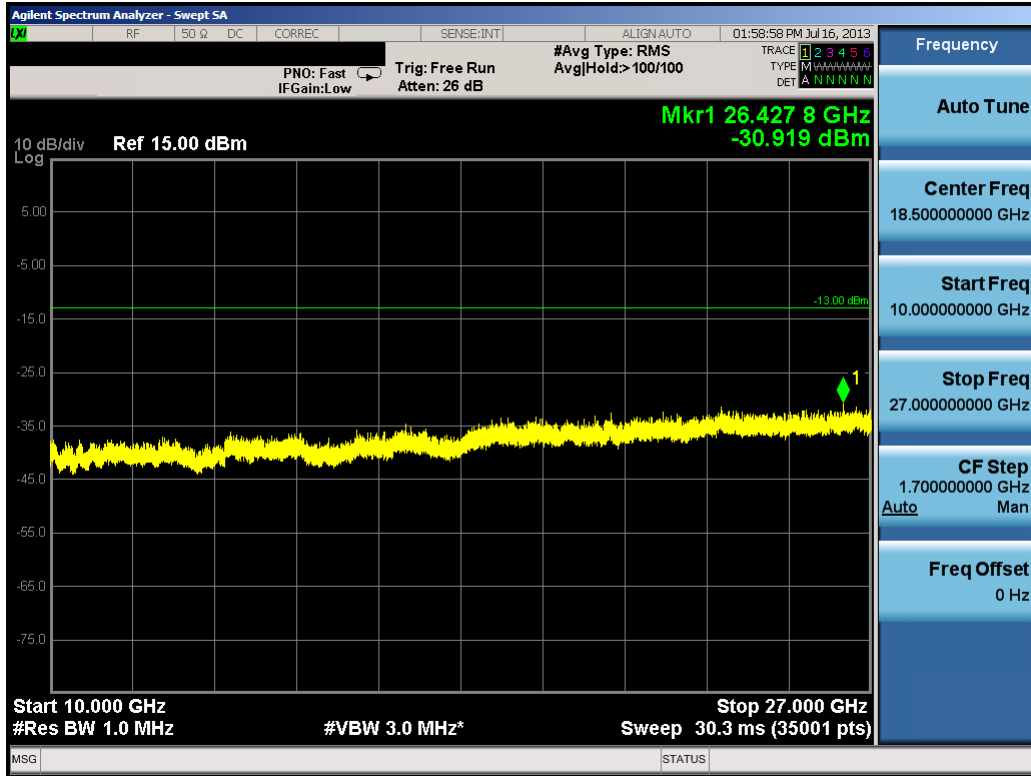


Plot 9-7. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)

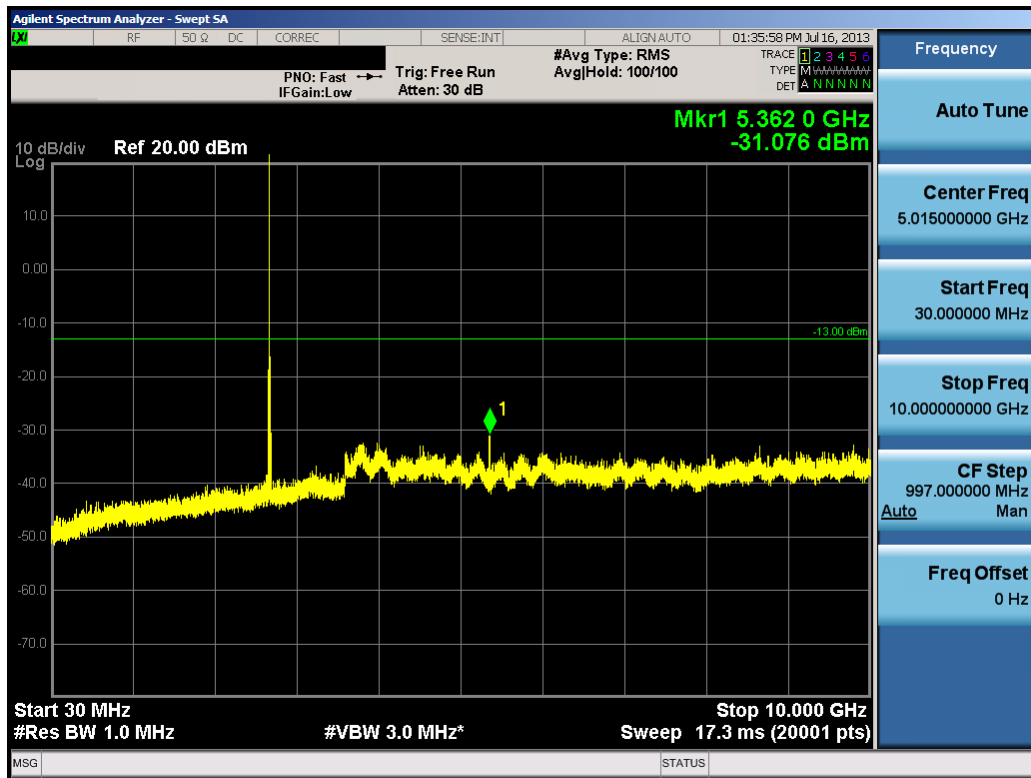


Plot 9-8. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

FCC ID: A3LSPHL520		FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 64 of 75

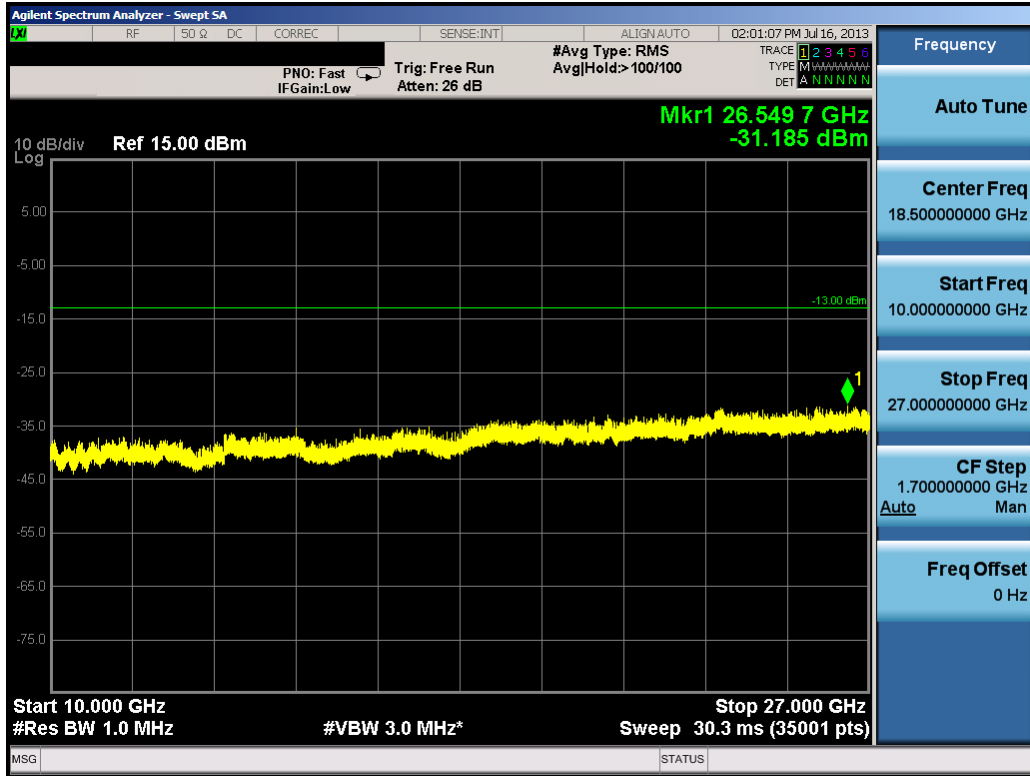


Plot 9-9. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

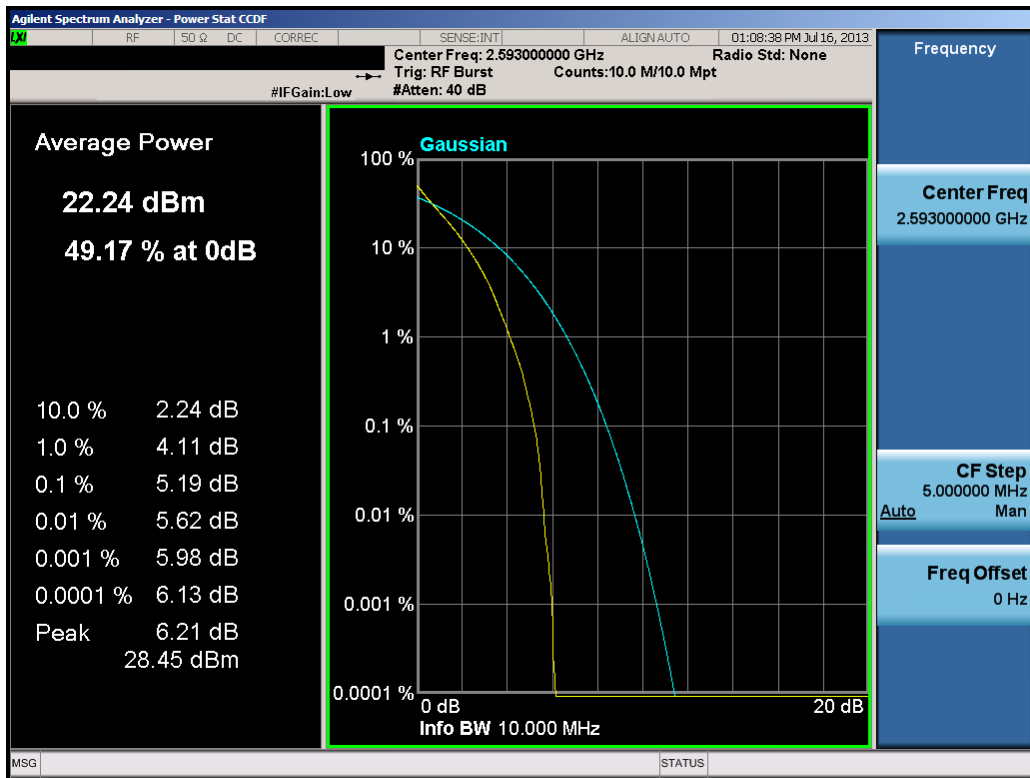


Plot 9-10. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

FCC ID: A3LSPHL520		FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 65 of 75

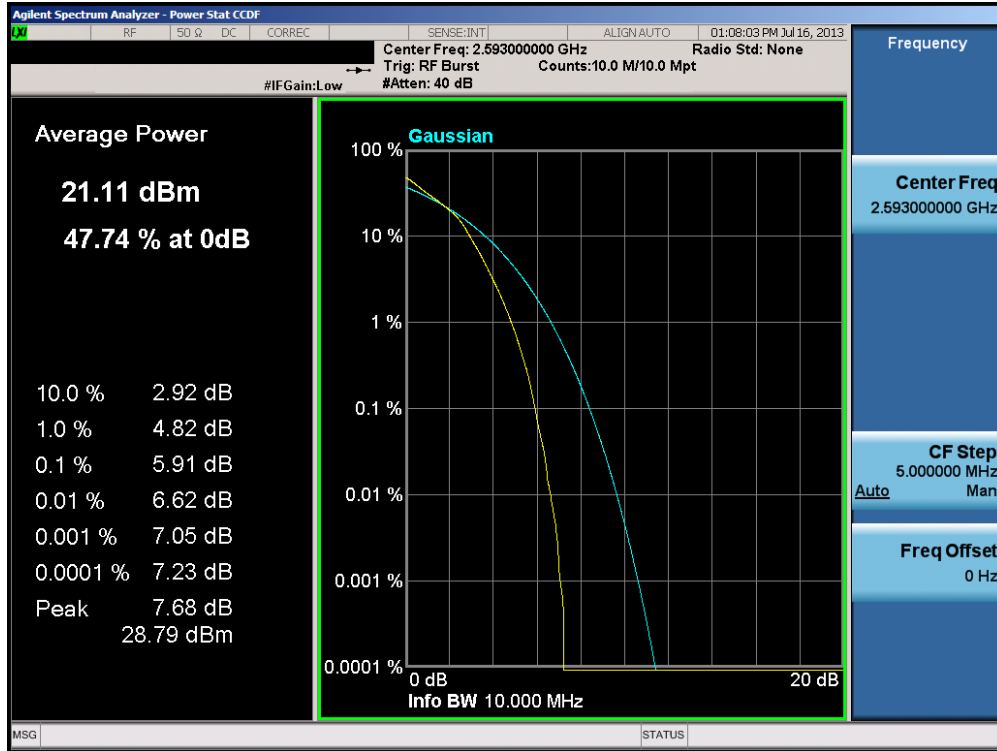


Plot 9-11. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

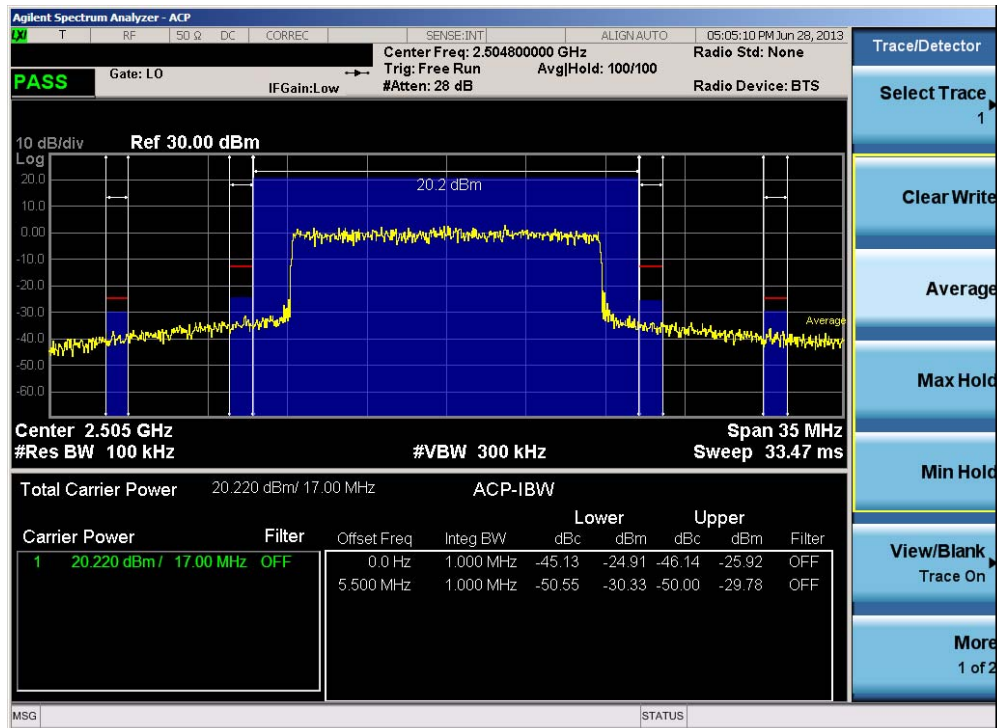


Plot 9-12. PAR Plot (10.0MHz QPSK – RB Size 50)

FCC ID: A3LSPHL520		FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 66 of 75

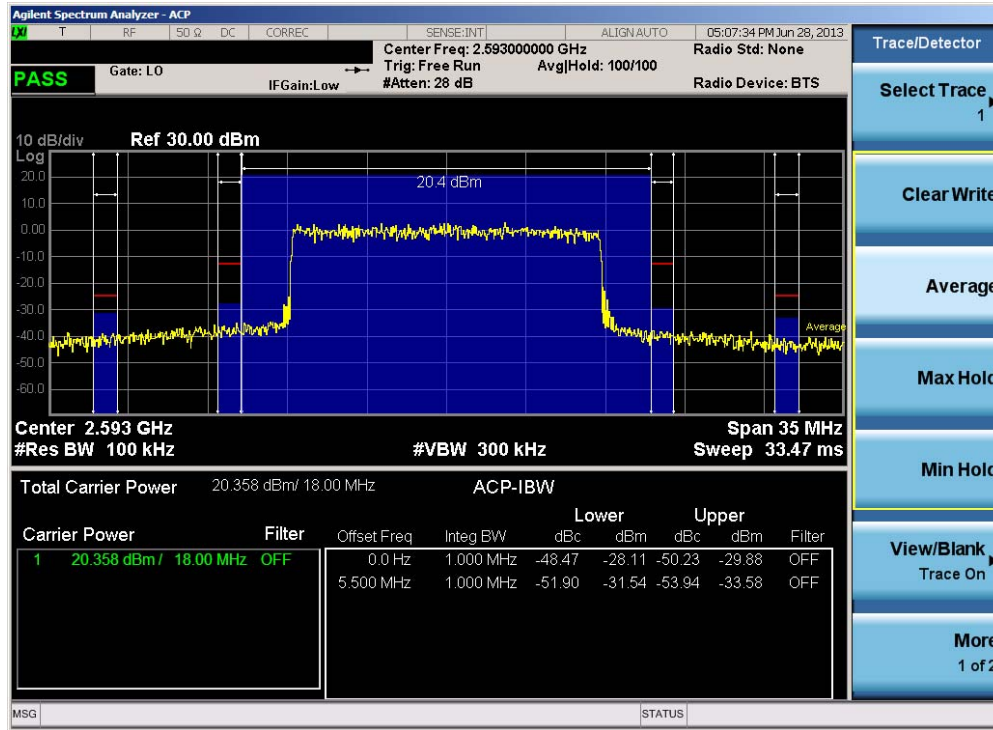


Plot 9-13. PAR Plot (10.0MHz 16-QAM – RB Size 50)

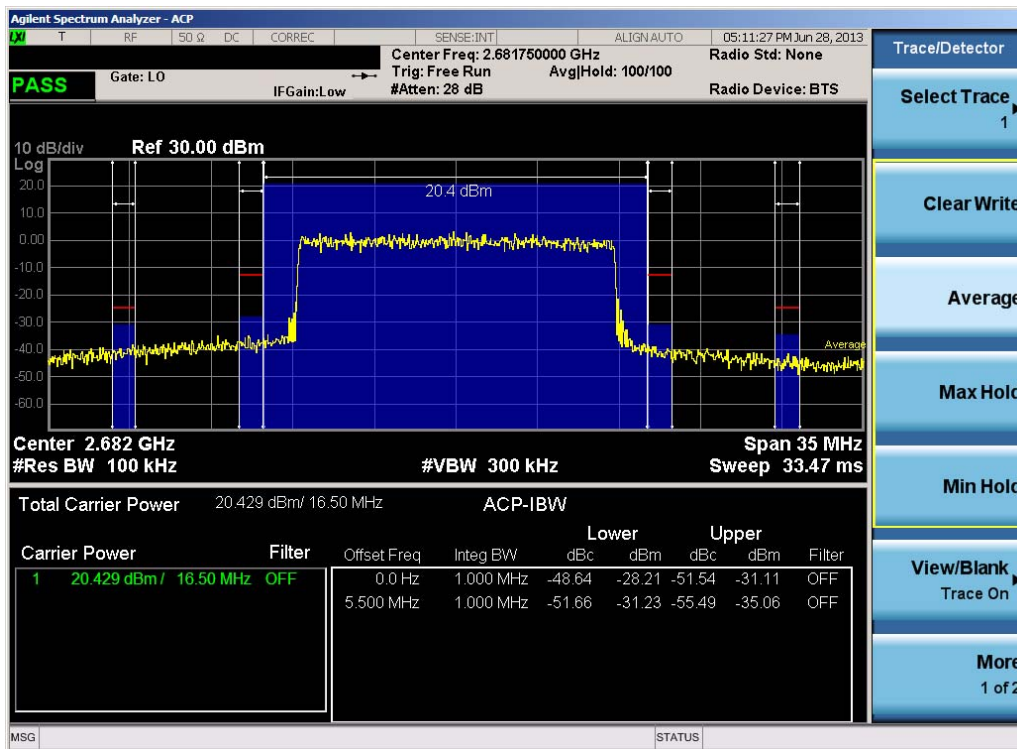


Plot 9-14. Low Channel Band Edge Plot (15.0MHz QPSK – RB Size 75)

FCC ID: A3LSPHL520	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)	<b>SAMSUNG</b>	Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 67 of 75

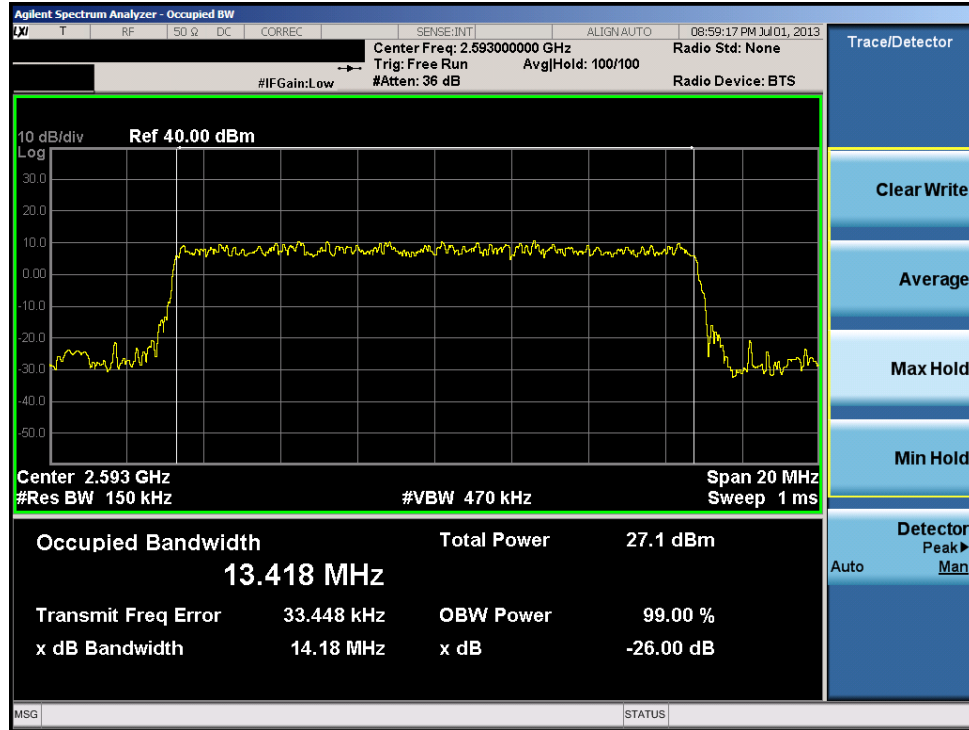


Plot 9-15. Mid Channel Band Edge Plot (15.0MHz QPSK – RB Size 75)

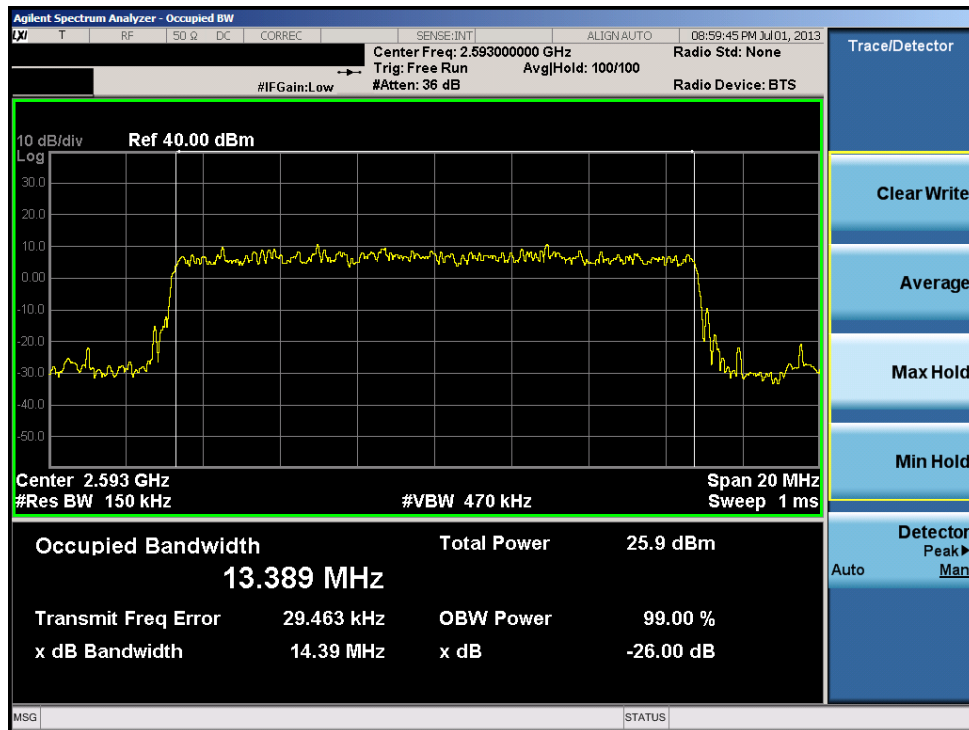


Plot 9-16. High Channel Band Edge Plot (15.0MHz QPSK – RB Size 75)

FCC ID: A3LSPHL520	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)	<b>SAMSUNG</b>	Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 68 of 75

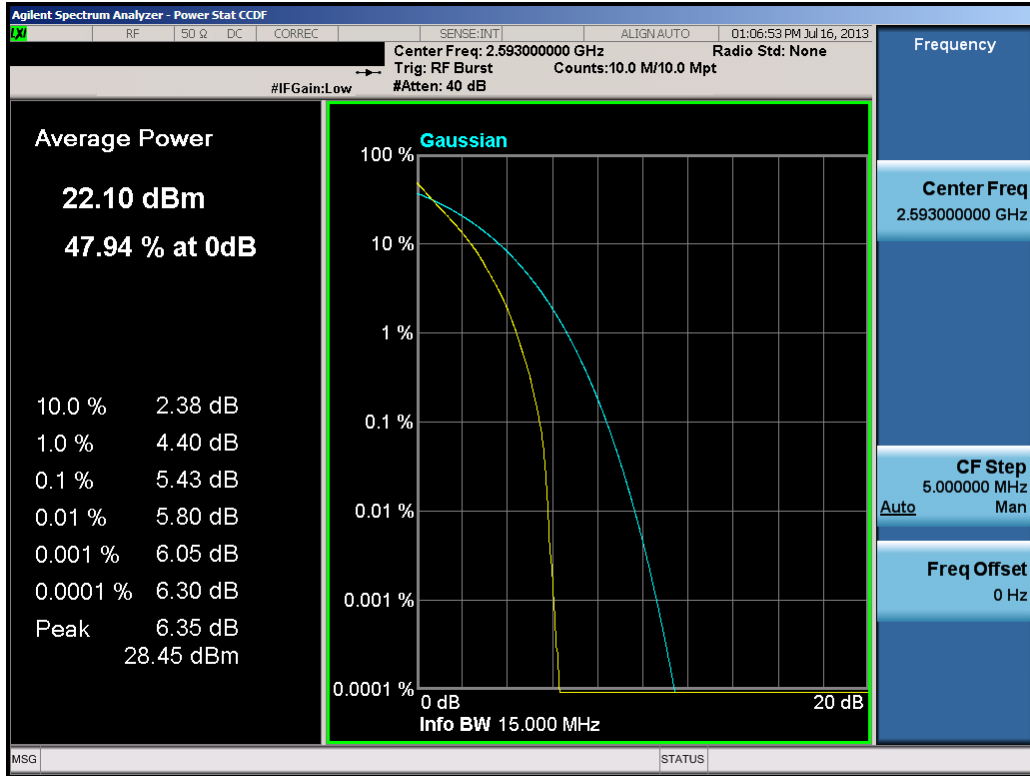


Plot 9-17. Occupied Bandwidth Plot (15.0MHz QPSK – RB Size 75)

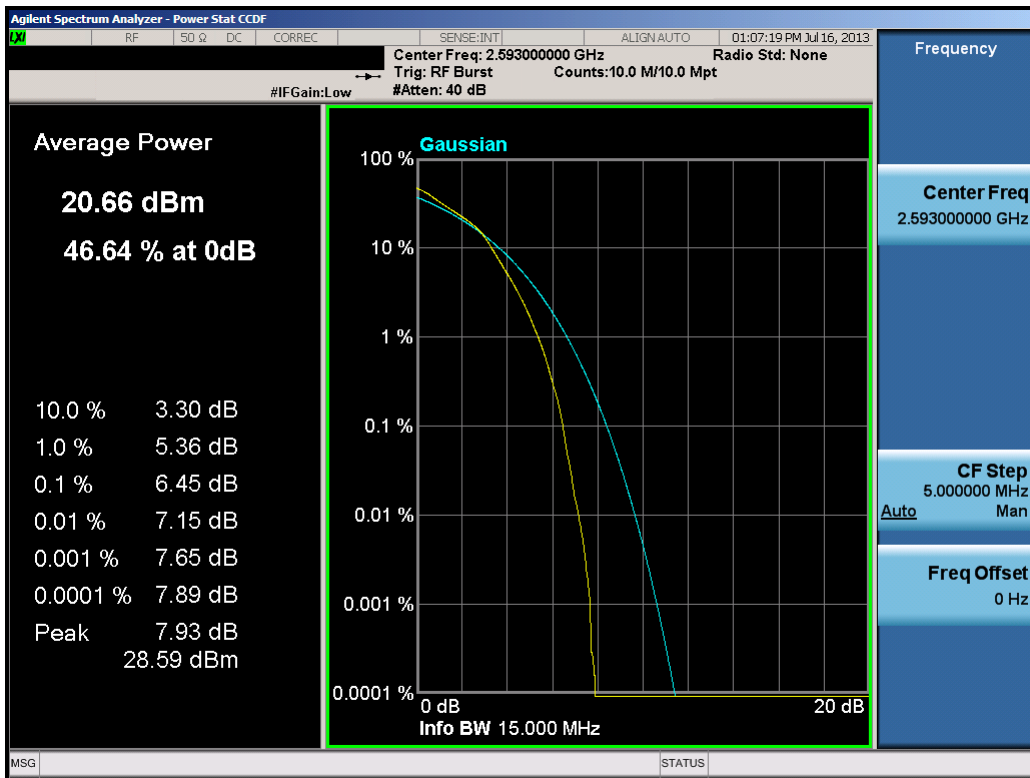


Plot 9-18. Occupied Bandwidth Plot (15.0MHz 16-QAM – RB Size 75)

FCC ID: A3LSPHL520	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)	<b>SAMSUNG</b>	Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 69 of 75



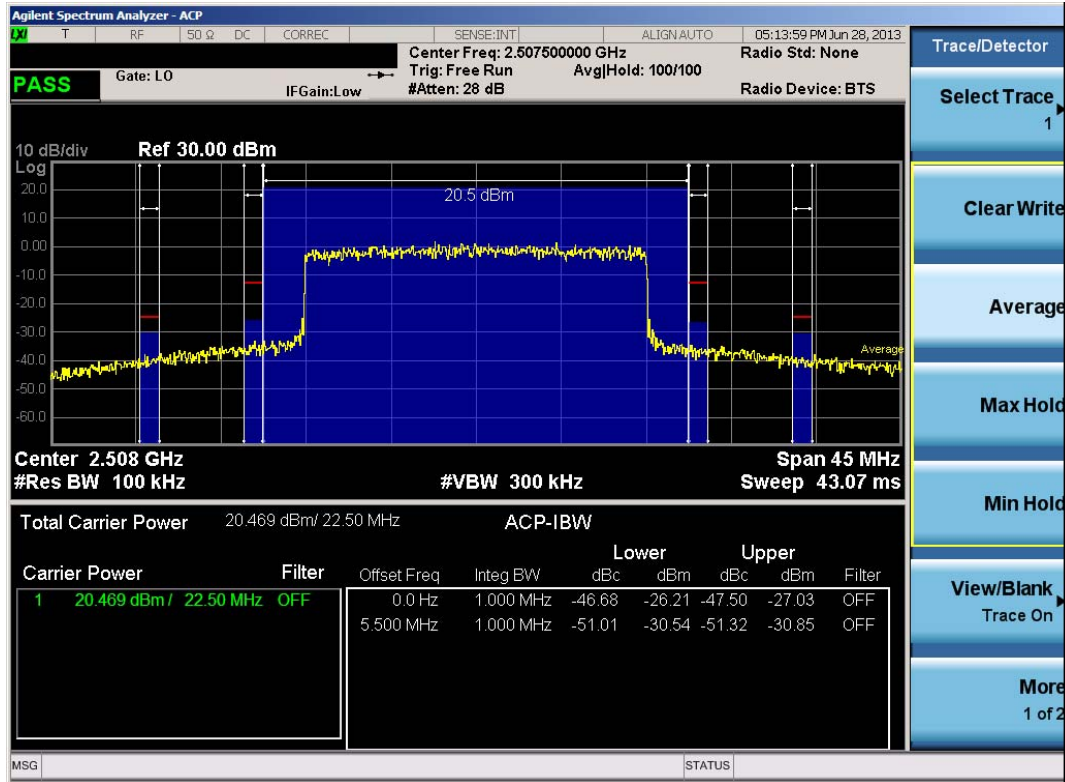
Plot 9-19. PAR Plot (15.0MHz QPSK – RB Size 75)



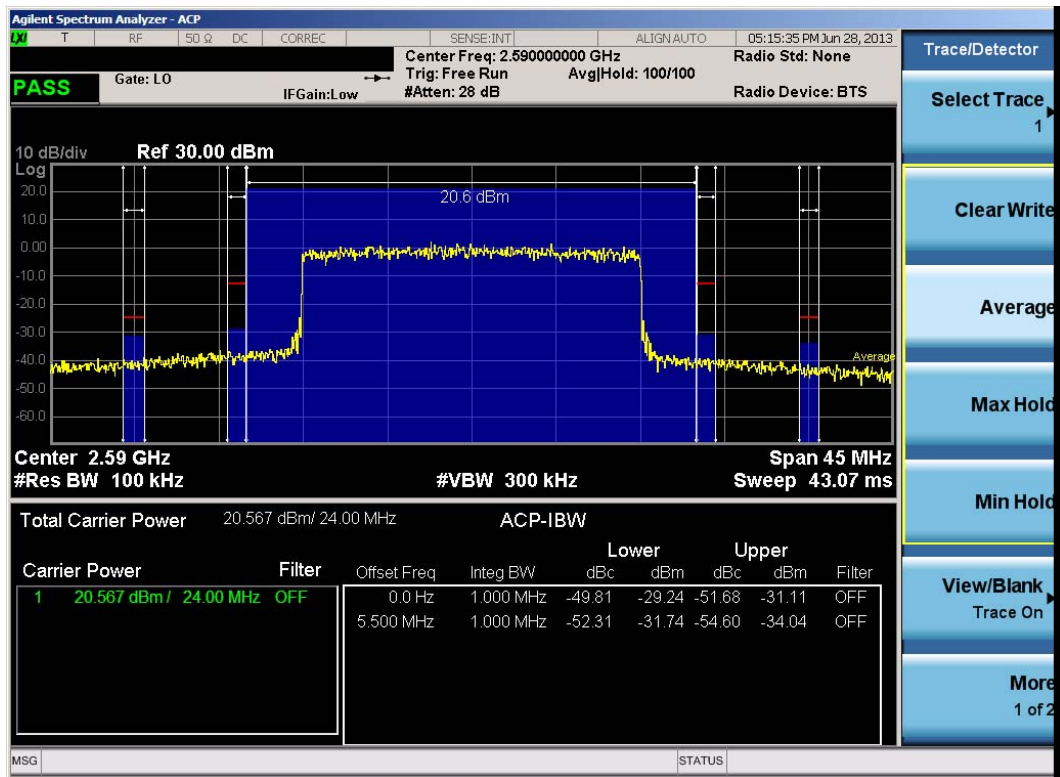
Plot 9-20. PAR Plot (15.0MHz 16-QAM – RB Size 75)

FCC ID: A3LSPHL520		FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 70 of 75



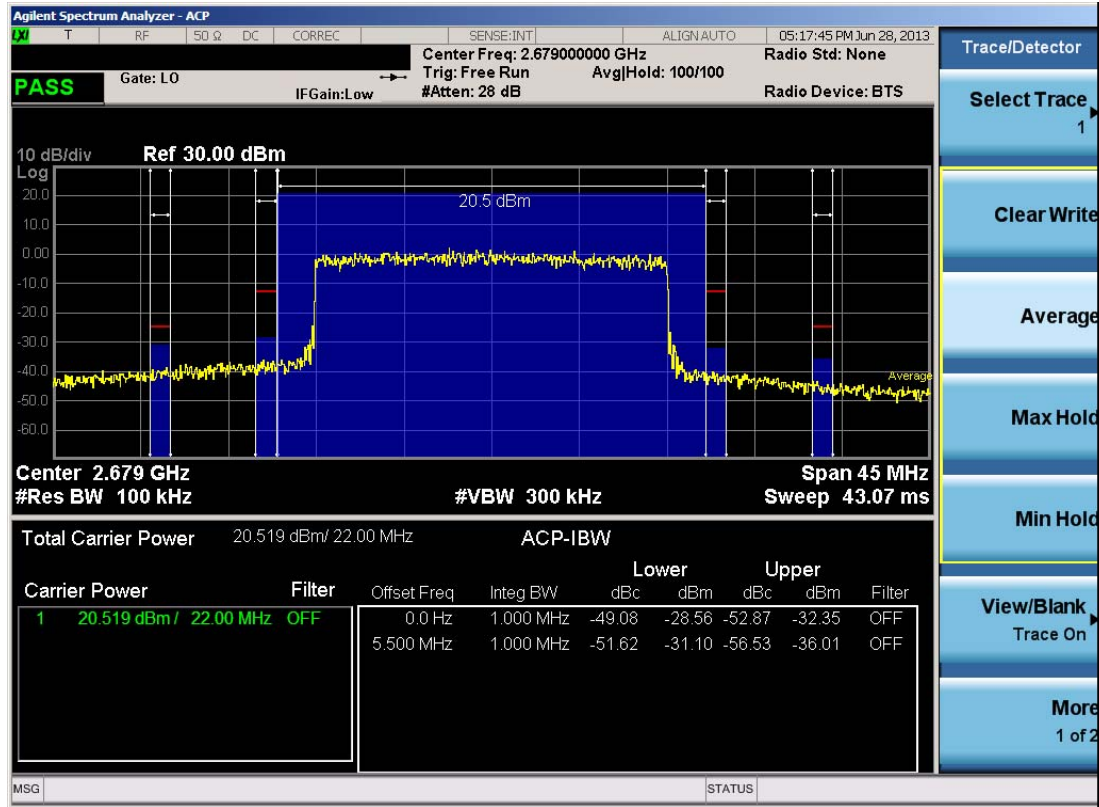


Plot 9-21. Low Channel Band Edge Plot (20.0MHz QPSK – RB Size 100)

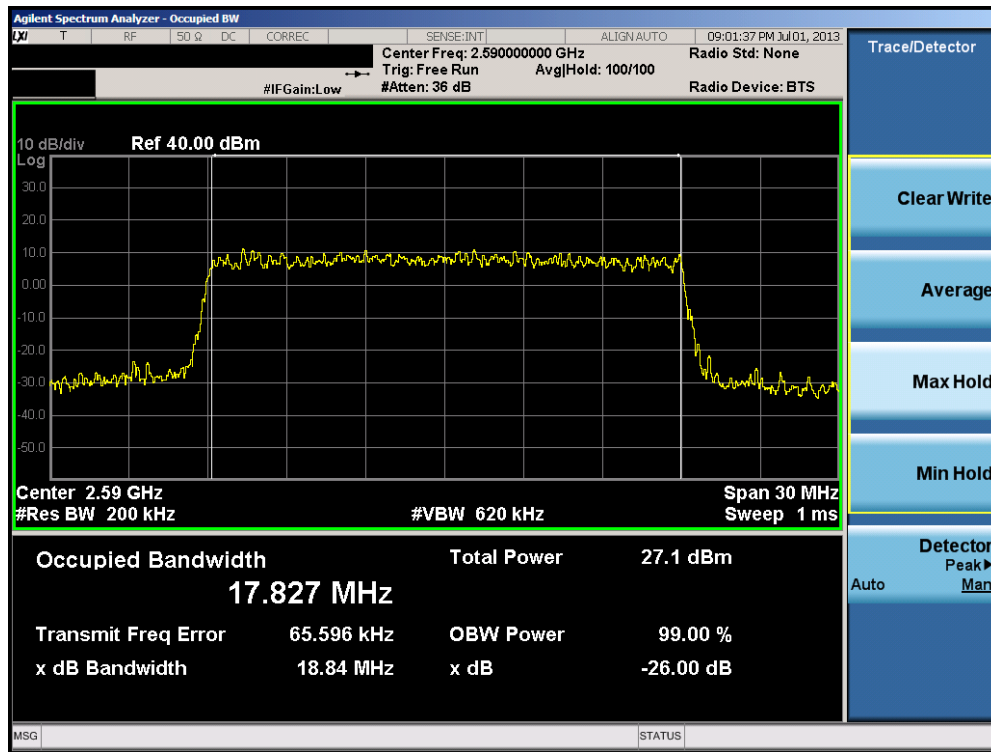


Plot 9-22. Mid Channel Band Edge Plot (20.0MHz QPSK – RB Size 100)

FCC ID: A3LSPHL520		FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 71 of 75

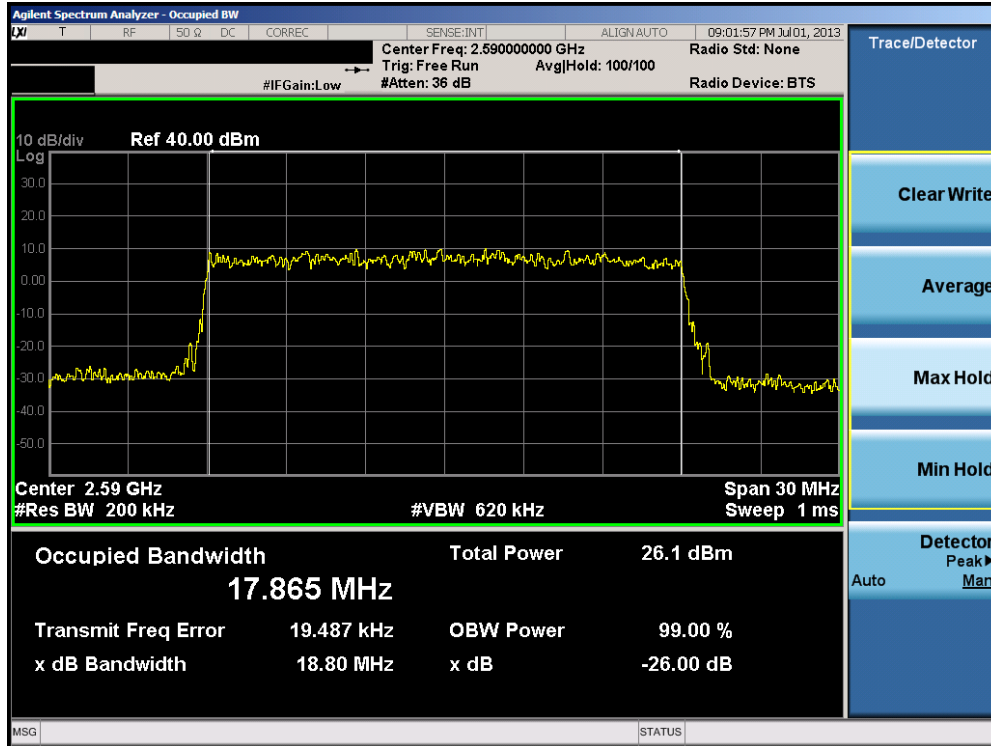


Plot 9-23. High Channel Band Edge Plot (20.0MHz QPSK – RB Size 100)

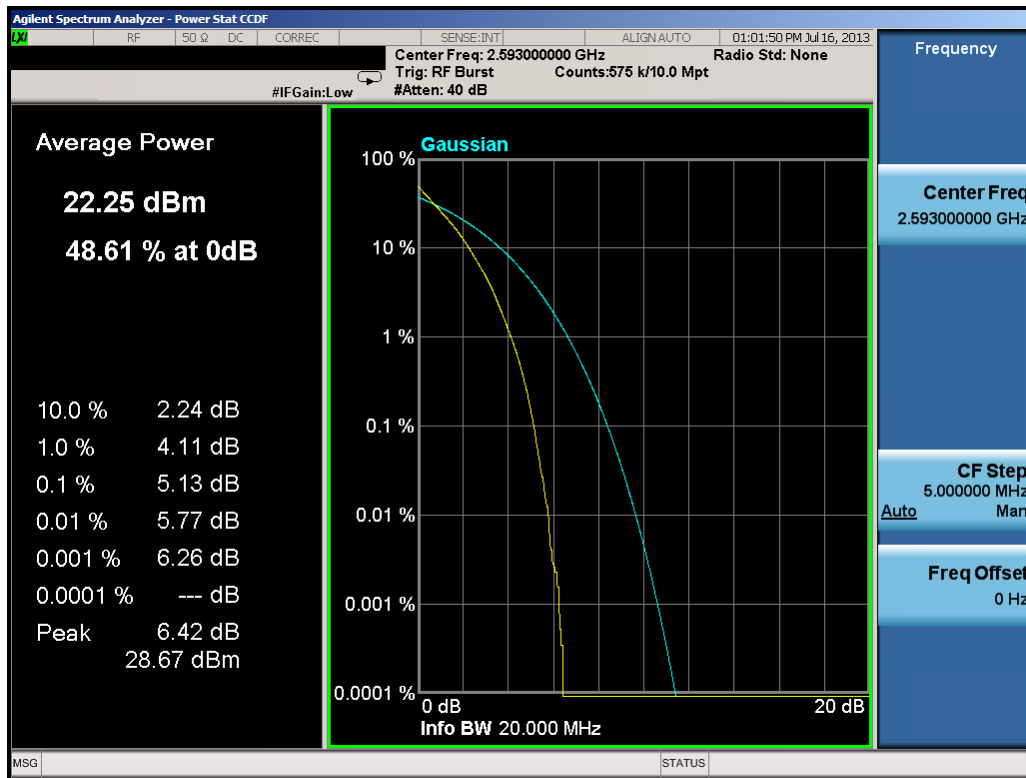


Plot 9-24. Occupied Bandwidth Plot (20.0MHz QPSK – RB Size 100)

FCC ID: A3LSPHL520		FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 72 of 75

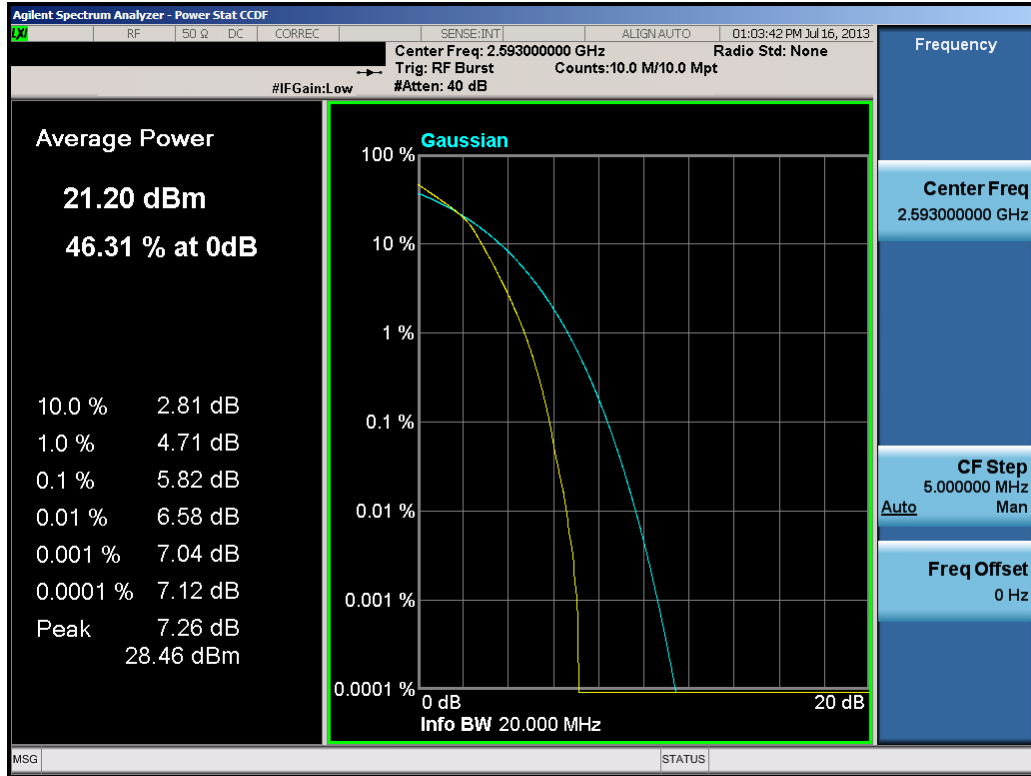


Plot 9-25. Occupied Bandwidth Plot (20.0MHz 16-QAM – RB Size 100)



Plot 9-26. PAR Plot (20.0MHz QPSK – RB Size 100)

FCC ID: A3LSPHL520	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)	<b>SAMSUNG</b>	Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 73 of 75





**Plot 9-27. PAR Plot (20.0MHz 16-QAM – RB Size 100)**

FCC ID: A3LSPHL520		FCC Pt. 22, 24 & 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1306281123.A3L-R1	Test Dates: 06/31/2013 - 07/17/2013	EUT Type: Portable Handset		Page 74 of 75

## 10.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Samsung Electronics Co., Ltd. Portable Handset FCC ID: A3LSPHL520** complies with all the requirements of Parts 2, 22, 24, 27 of the FCC rules for LTE operation only.

FCC ID: A3LSPHL520		<b>FCC Pt. 22, 24 &amp; 27 LTE MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Reviewed by:</b> Quality Manager
<b>Test Report S/N:</b> 0Y1306281123.A3L-R1	<b>Test Dates:</b> 06/31/2013 - 07/17/2013	<b>EUT Type:</b> Portable Handset		Page 75 of 75