



FCC Test Report

ANNEX 1 WCDMA

FCC ID: 2AYFQ-SEM1000

Applicant: Quanzhou SFE Electronic Technology Co.,Ltd
Address: No.35 Yangming Street, Shuangyang, Luojiang District, Quanzhou City, Fujian Province
362012, China
Manufacturer: Quanzhou SFE Electronic Technology Co.,Ltd
Address: No.35 Yangming Street, Shuangyang, Luojiang District, Quanzhou City, Fujian Province
362012, China
EUT: In-vehicle PoC Network Radio
Trade Mark: SFE
Model Number: SEM1000, SEM2000
Date of Receipt: Dec. 03, 2021
Test Date: Dec. 03, 2021 – Jan. 07, 2022
Date of Report: Jan. 07, 2022
Prepared By: Shenzhen DL Testing Technology Co., Ltd.
Address: 101-201, Building C, Shuanghuan, No.8, Baoqing Road, Baolong Industrial Zone, Baolong
Street, Longgang District, Shenzhen, Guangdong, China
Applicable Standards: FCC CFR Title 47 Part22 Subpart H
FCC CFR Title 47 Part24 Subpart E
FCC CFR Title 47 Part27
ANSI/ TIA/ EIA-603-D-2010
FCC KDB 971168 D01 Power Meas. License Digital Systems v02v02
ANSI C63.26:2015
Test Result: Pass
Report Number: DL-20220108006E

Prepared (Test Engineer): Pxing Huang
Reviewer (Supervisor): Jack Bu
Approved (Manager): Jade Yang



This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.



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1. EMISSION TEST RESULTS

1.1. -26dB and 99% Occupied Bandwidth

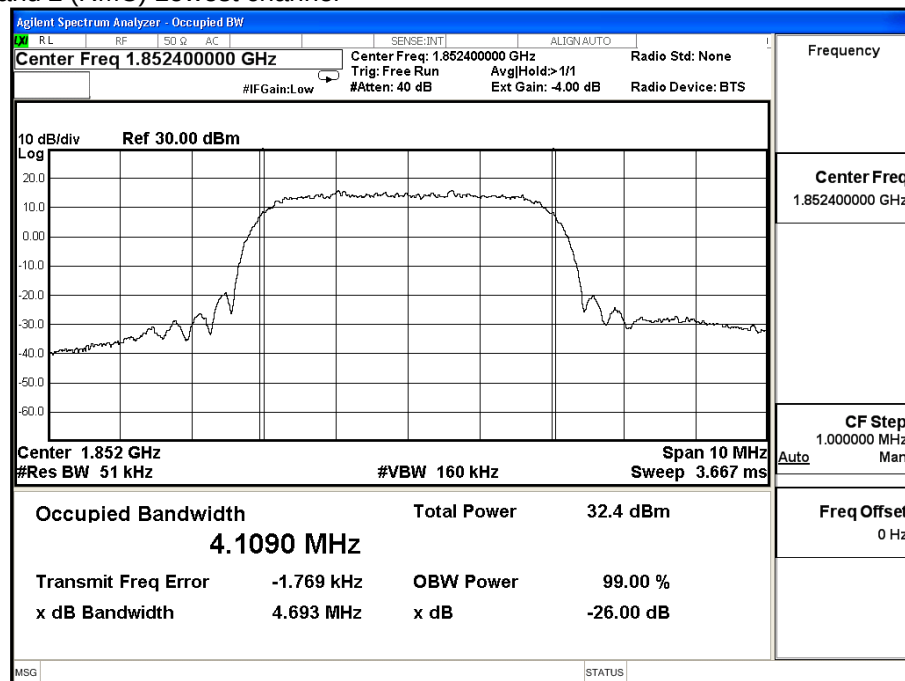
1.1.1. Test Result

EUT Mode	Channel	Frequency (MHz)	99% Occupy bandwidth (MHz)	-26dB bandwidth (MHz)
WCDMA Band 2 (RMC)	9262	1852.4	4.1090	4.693
	9400	1880.0	4.1053	4.694
	9538	1907.6	4.1127	4.687

Note: Measurement Uncertainty: ± 20 Hz.

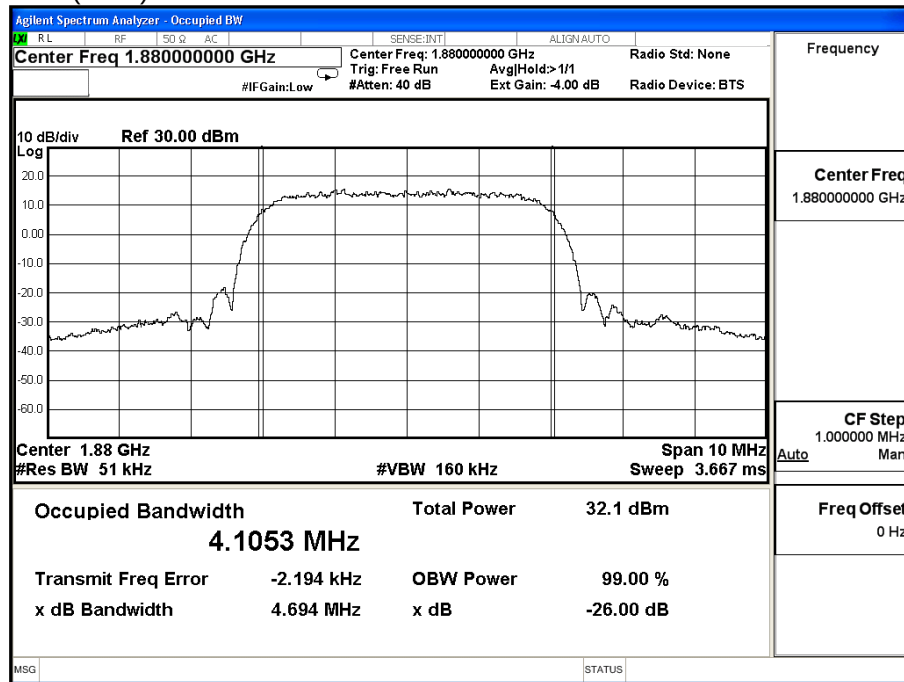
Test plot as follows:

WCDMA Band 2 (RMC) Lowest channel

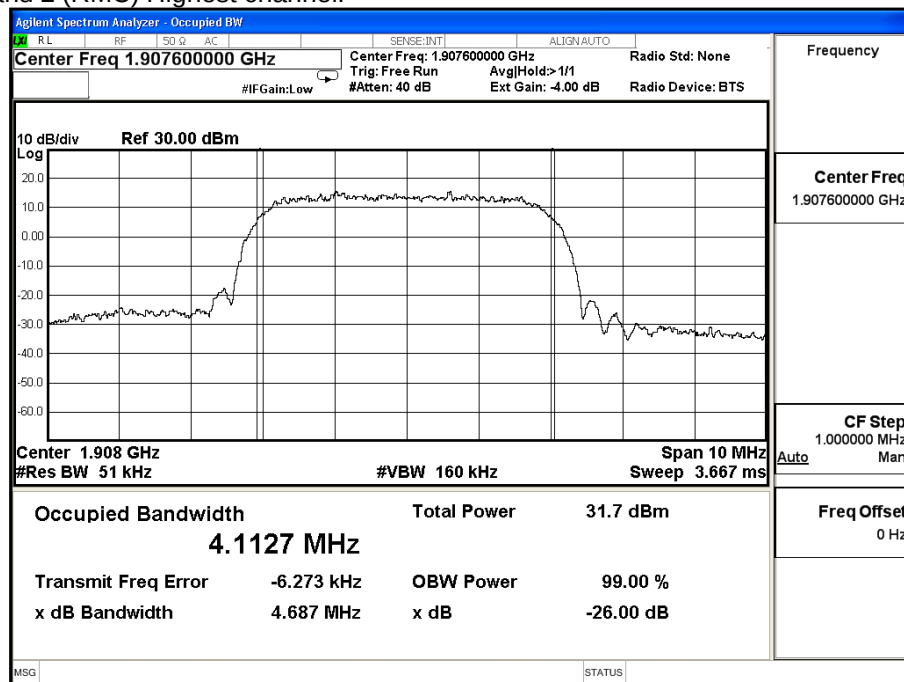




WCDMA Band 2 (RMC) Middle channel



WCDMA Band 2 (RMC) Highest channel:



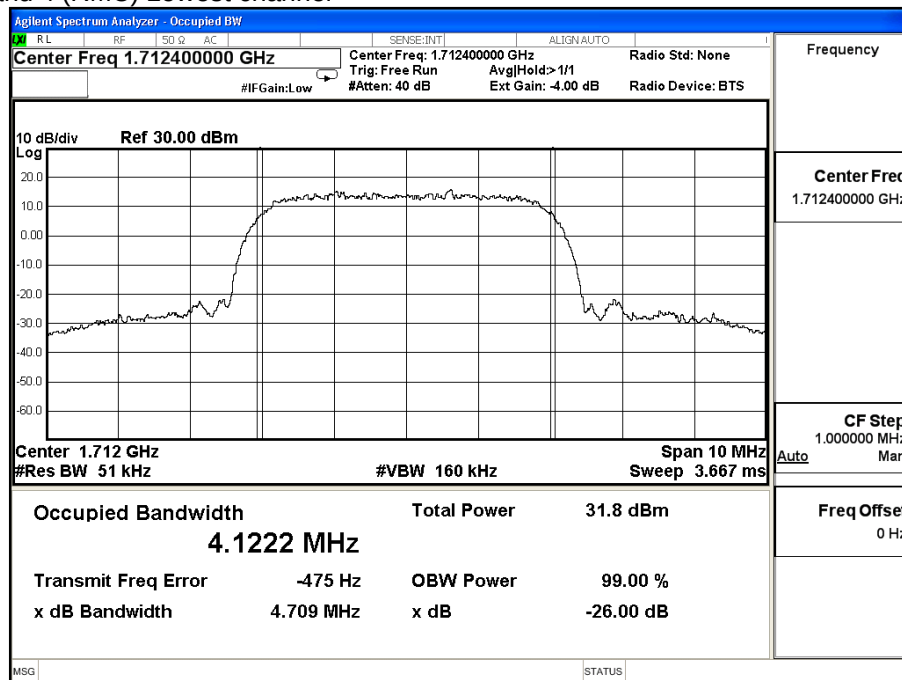


EUT Mode	Channel	Frequency (MHz)	99% Occupy bandwidth (MHz)	-26dB bandwidth (MHz)
WCDMA Band 4 (RMC)	1312	1712.4	4.1222	4.709
	1413	1732.6	4.1159	4.700
	1513	1752.6	4.1124	4.695

Note: Measurement Uncertainty: $\pm 20\text{Hz}$.

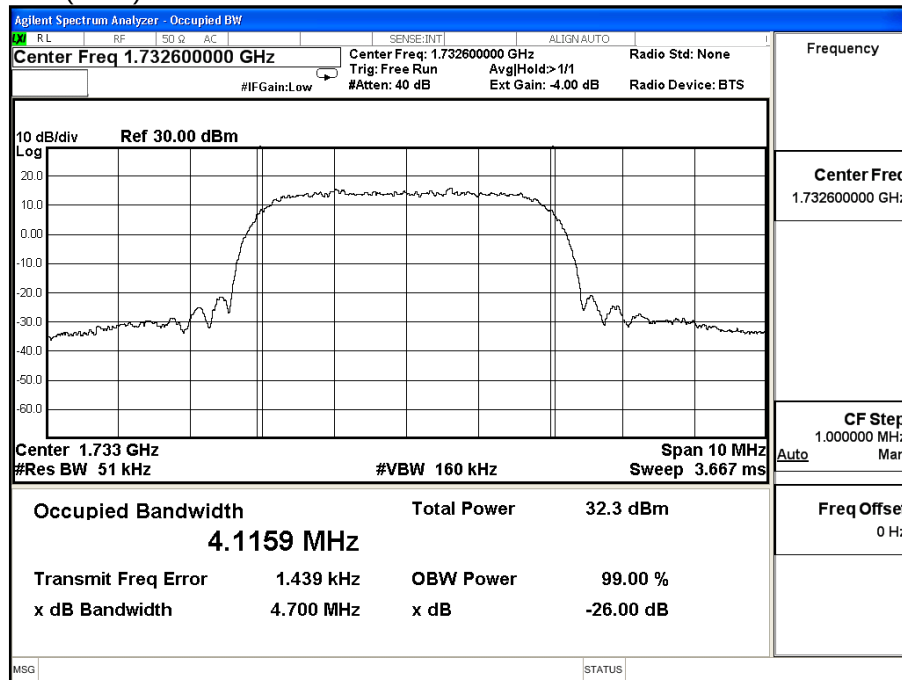
Test plot as follows:

WCDMA Band 4 (RMC) Lowest channel

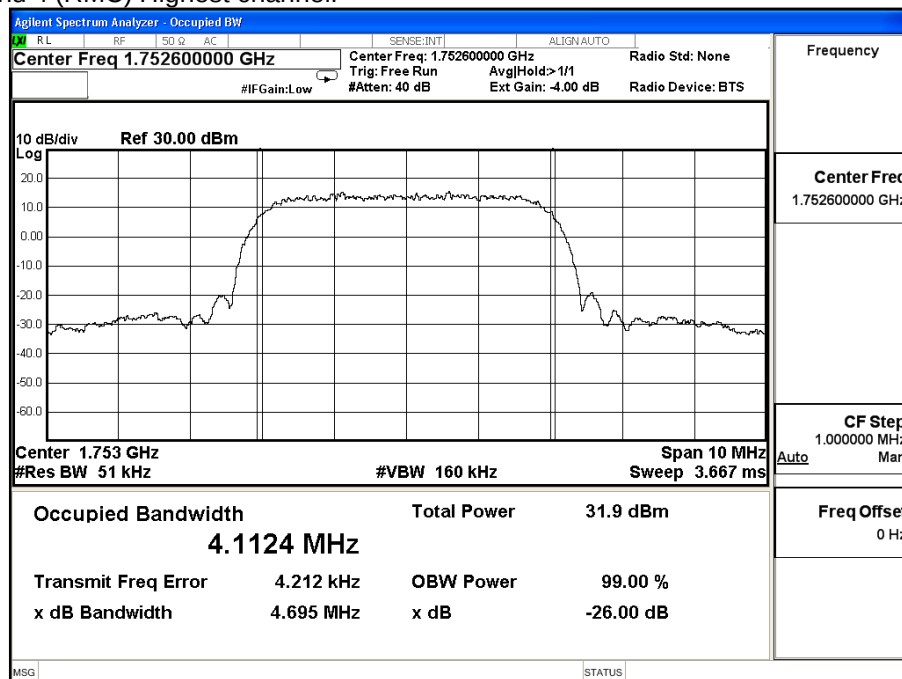




WCDMA Band 4 (RMC) Middle channel



WCDMA Band 4 (RMC) Highest channel:



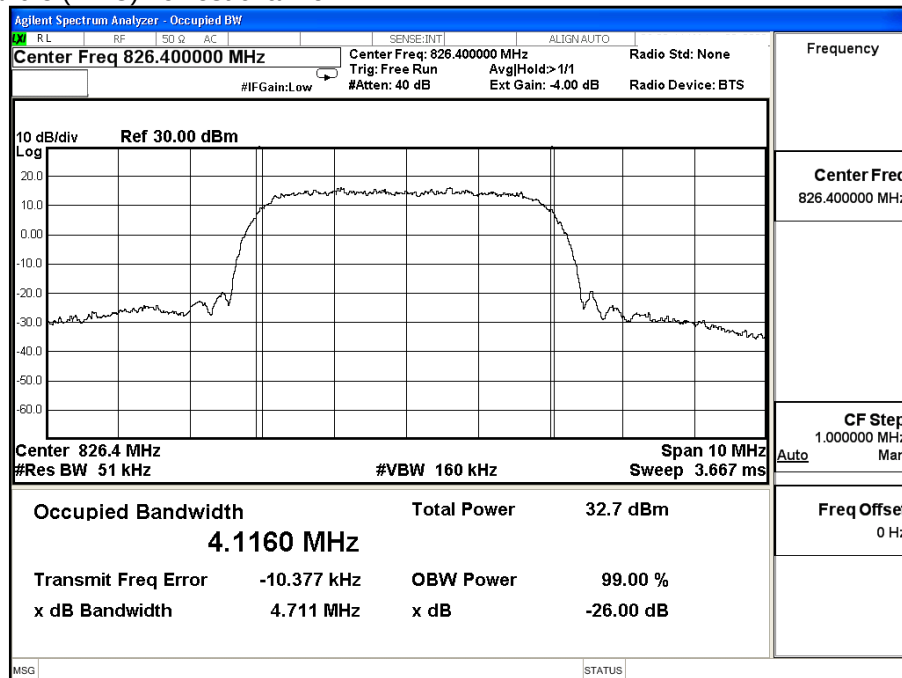


EUT Mode	Channel	Frequency (MHz)	99% Occupy bandwidth (MHz)	-26dB bandwidth (MHz)
WCDMA Band 5 (RMC)	4132	826.4	4.1160	4.711
	4183	836.6	4.1112	4.687
	4233	846.6	4.1105	4.668

Note: Measurement Uncertainty: $\pm 20\text{Hz}$.

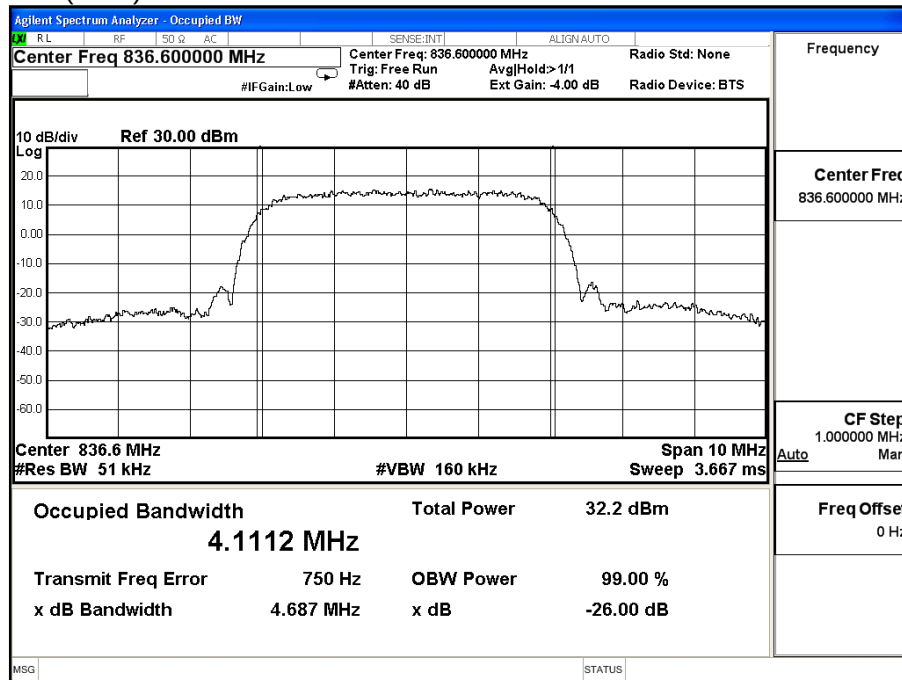
Test plot as follows:

WCDMA Band 5 (RMC) Lowest channel

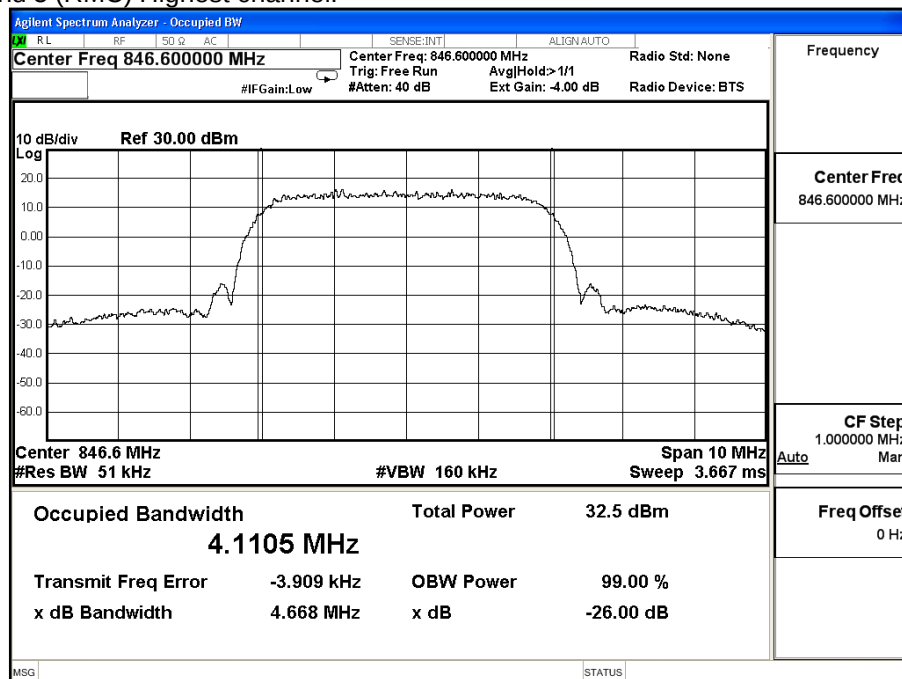




WCDMA Band 5 (RMC) Middle channel



WCDMA Band 5 (RMC) Highest channel:





1.2. Conducted Spurious Emissions

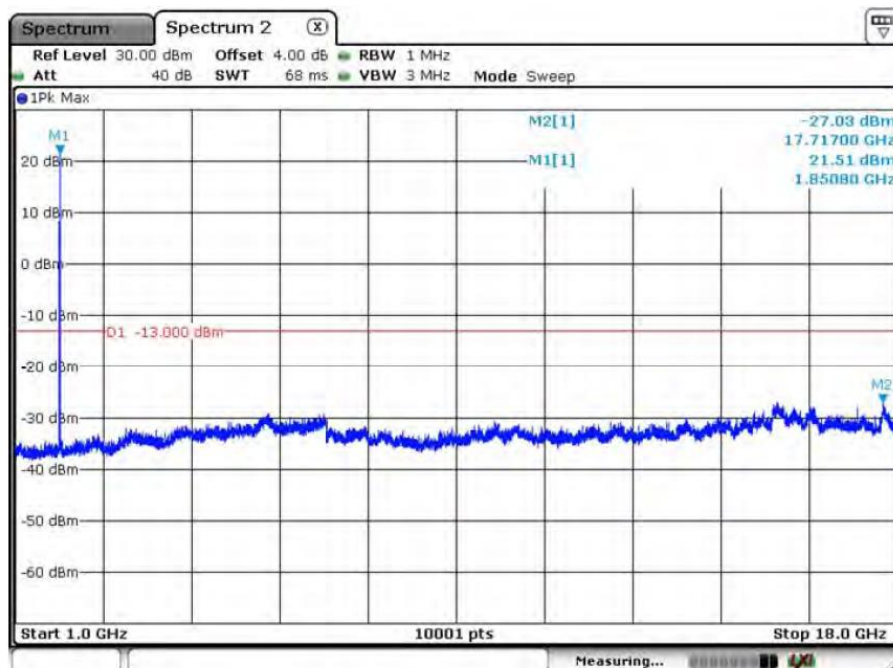
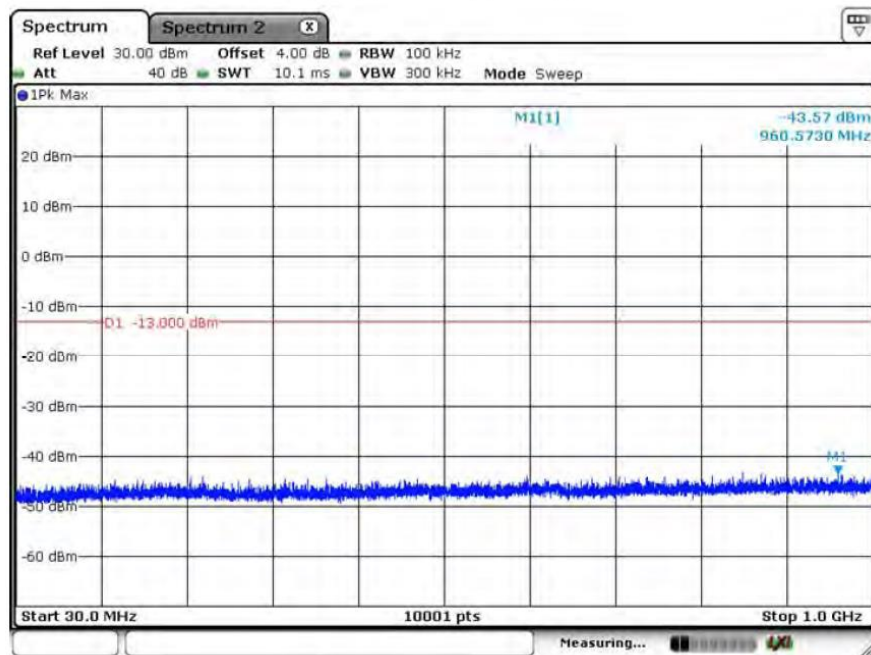
1.2.1. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

For LTE mode, the plot only show the min and max bandwidth's data.

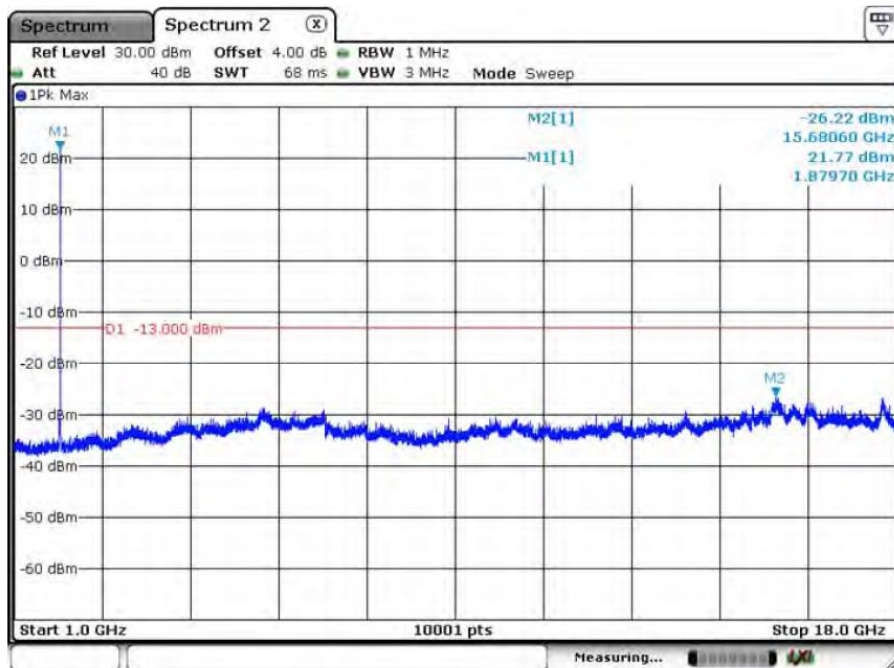
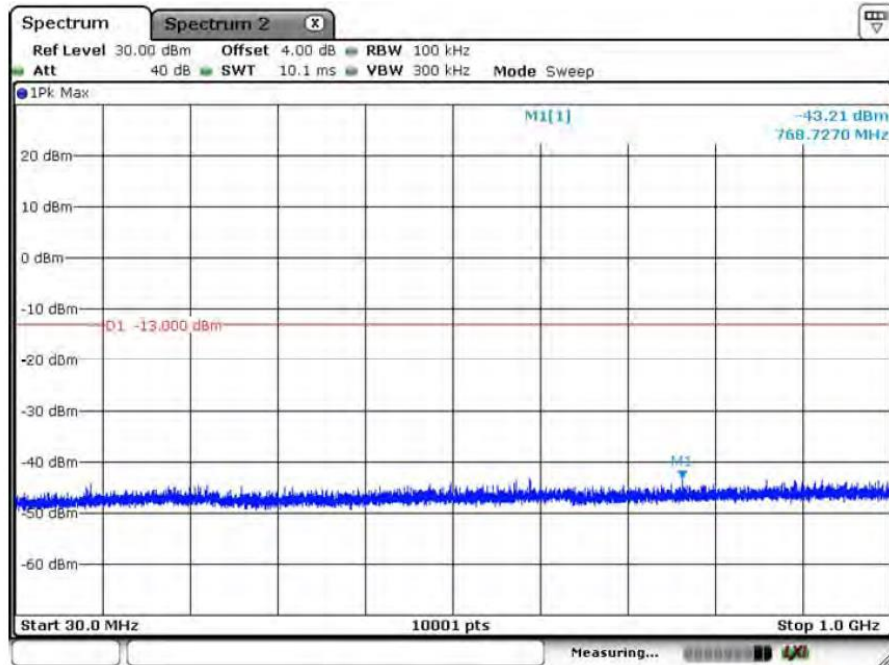
Pass, the table and plot please see annex.

WCDMA Band 2 Lowest channel



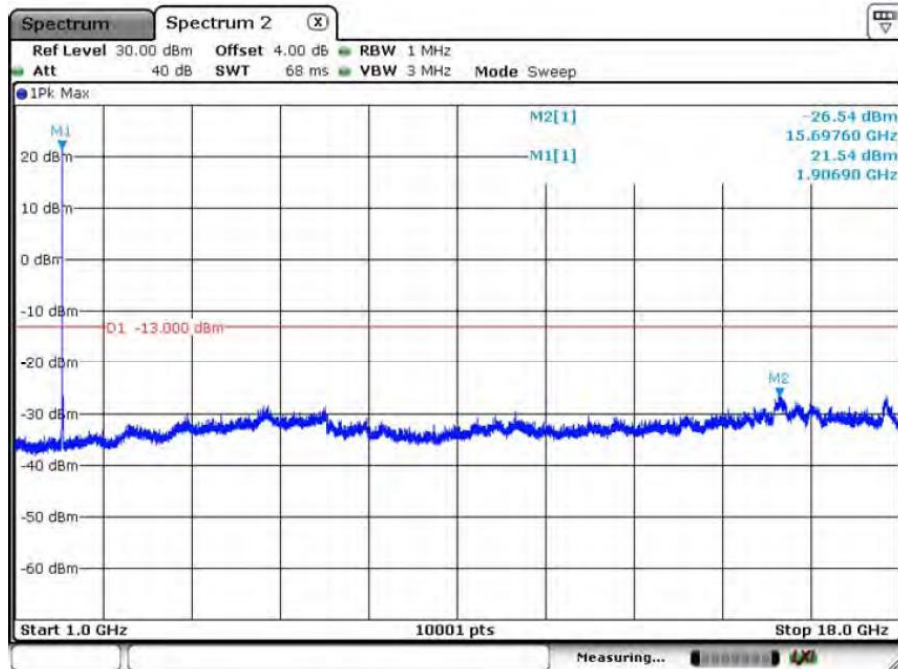
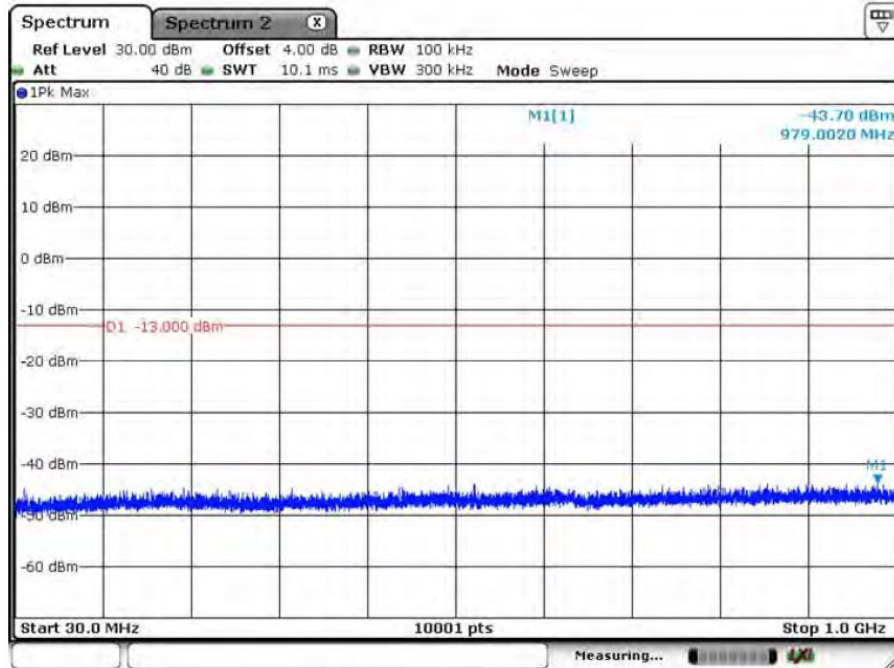


WCDMA Band 2 middle channel



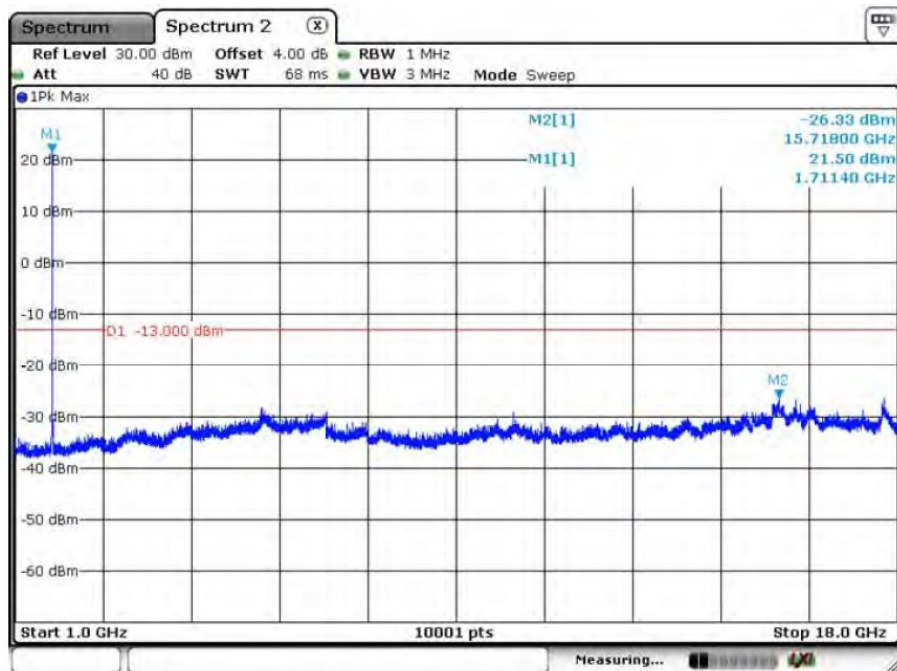
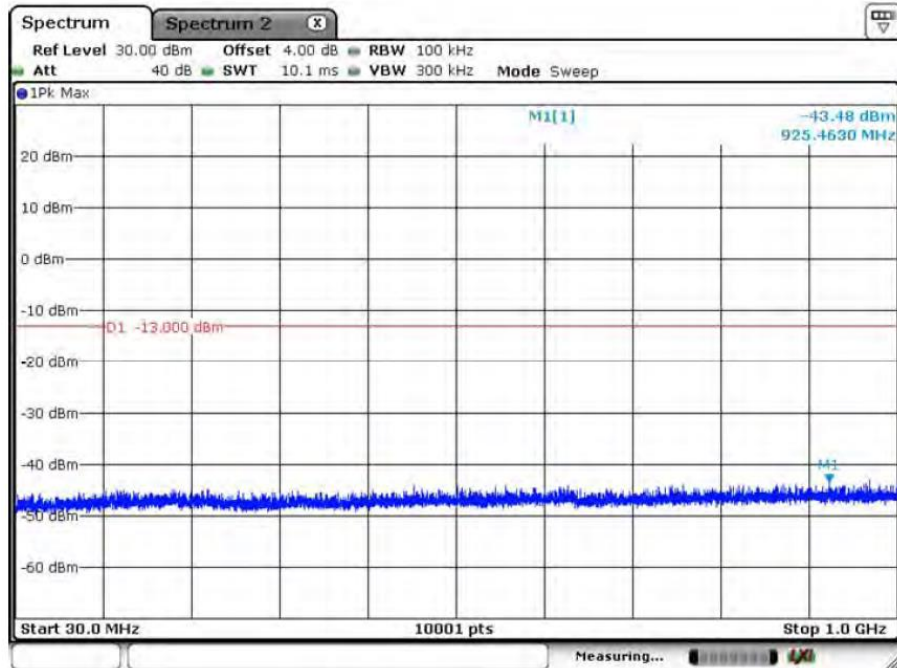


WCDMA Band 2 high channel



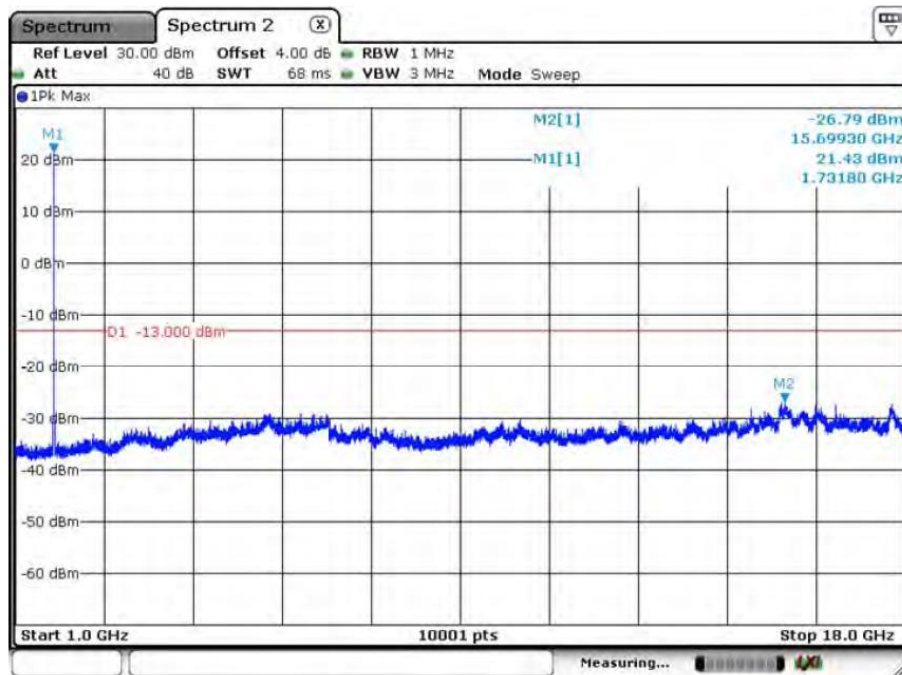
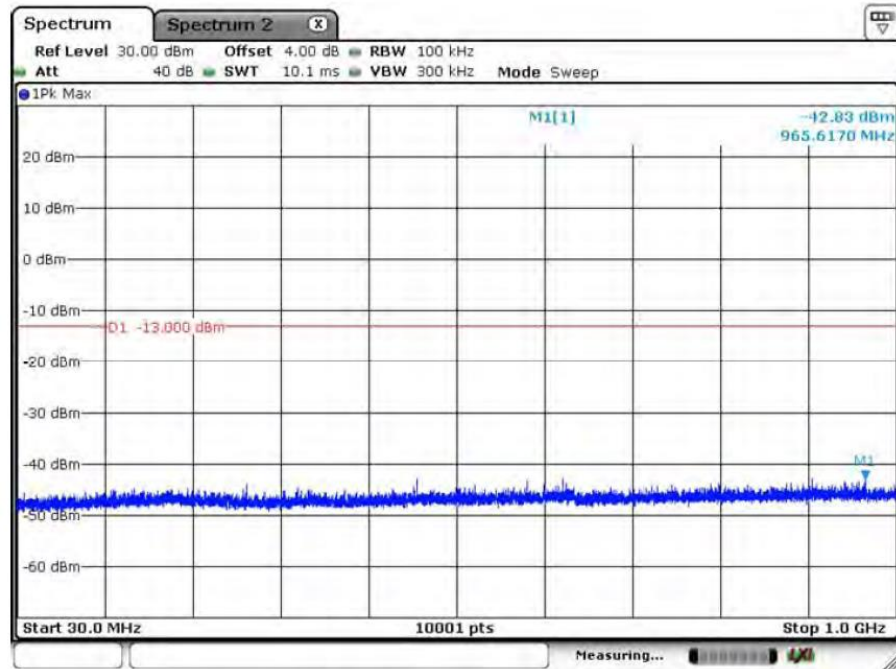


WCDMA Band 4 Lowest channel



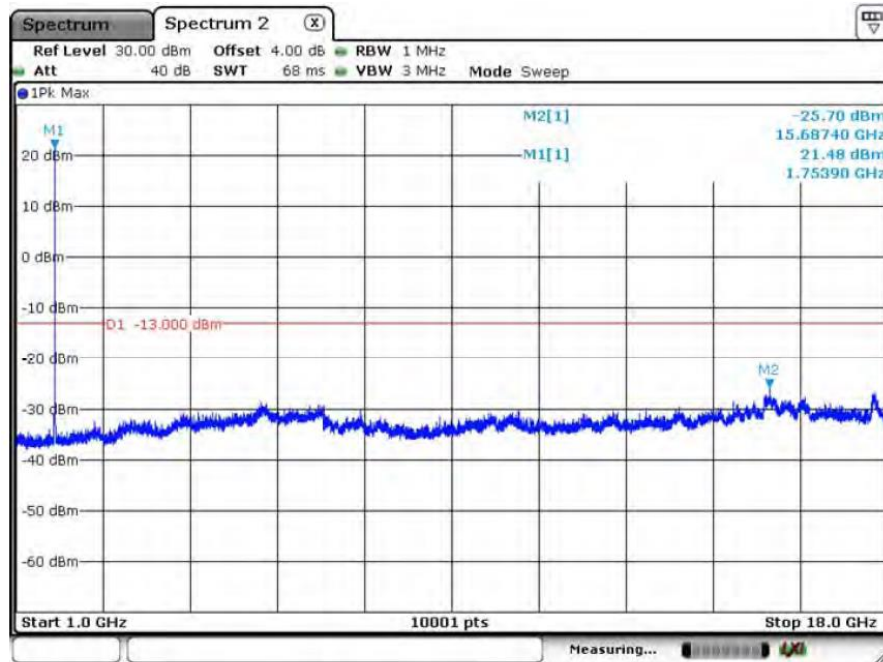
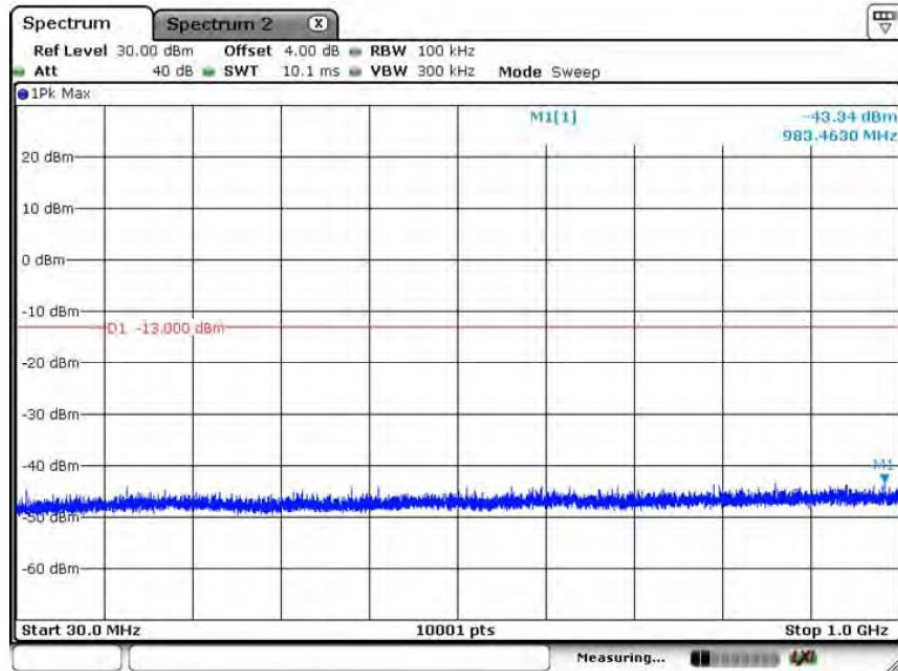


WCDMA Band 4 middle channel



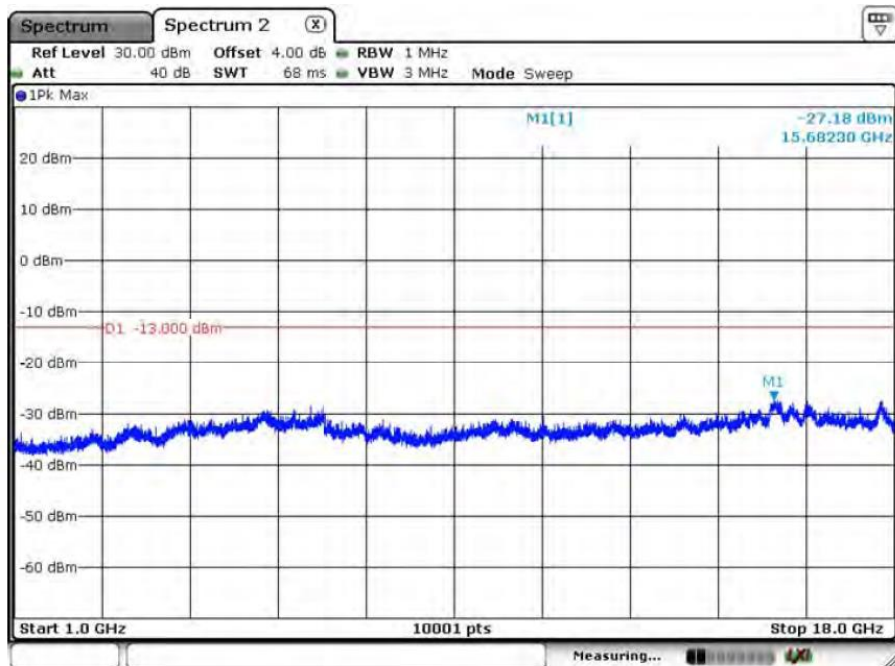
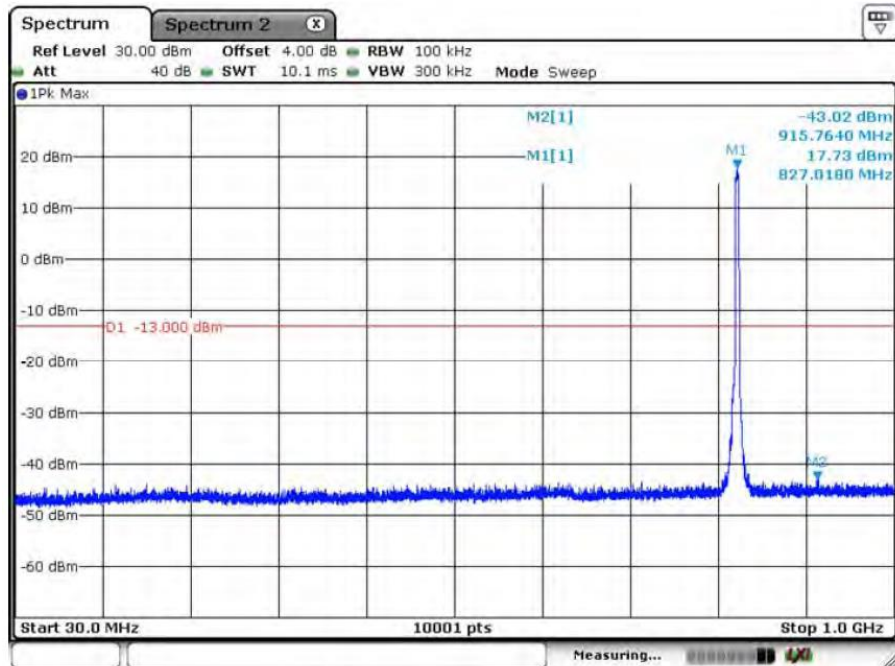


WCDMA Band 4 high channel



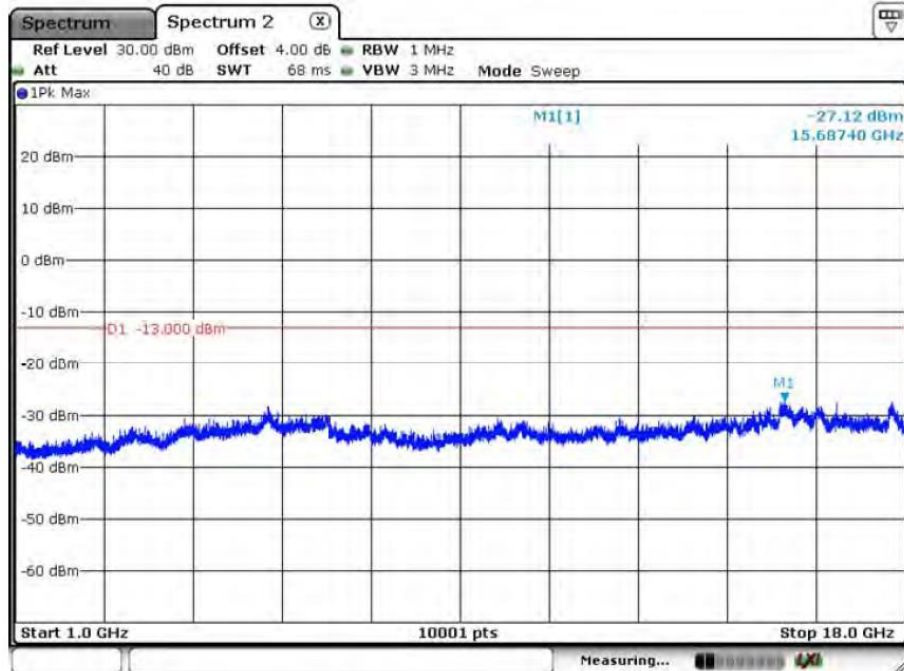
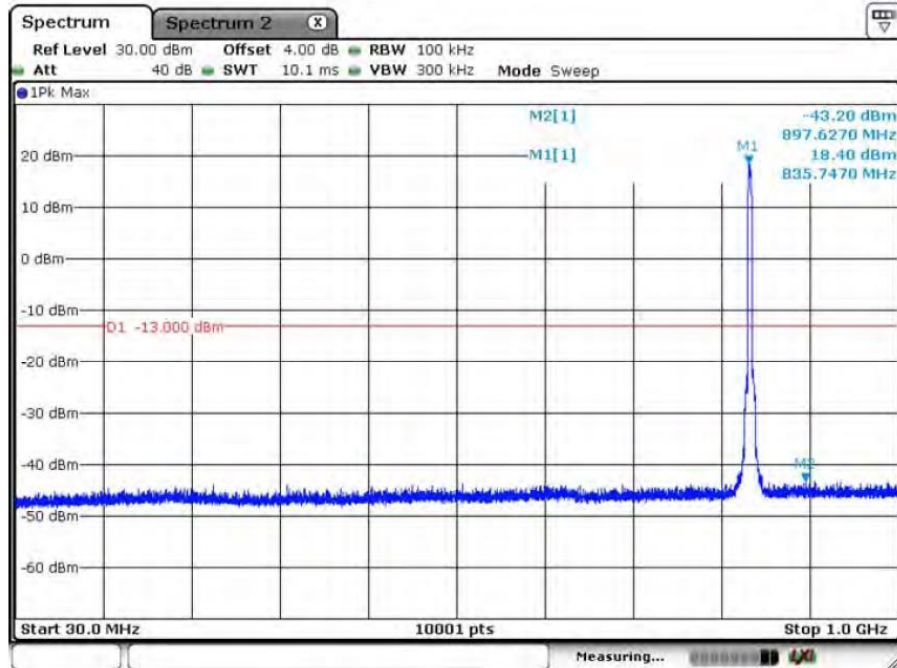


WCDMA Band 5 Lowest channel



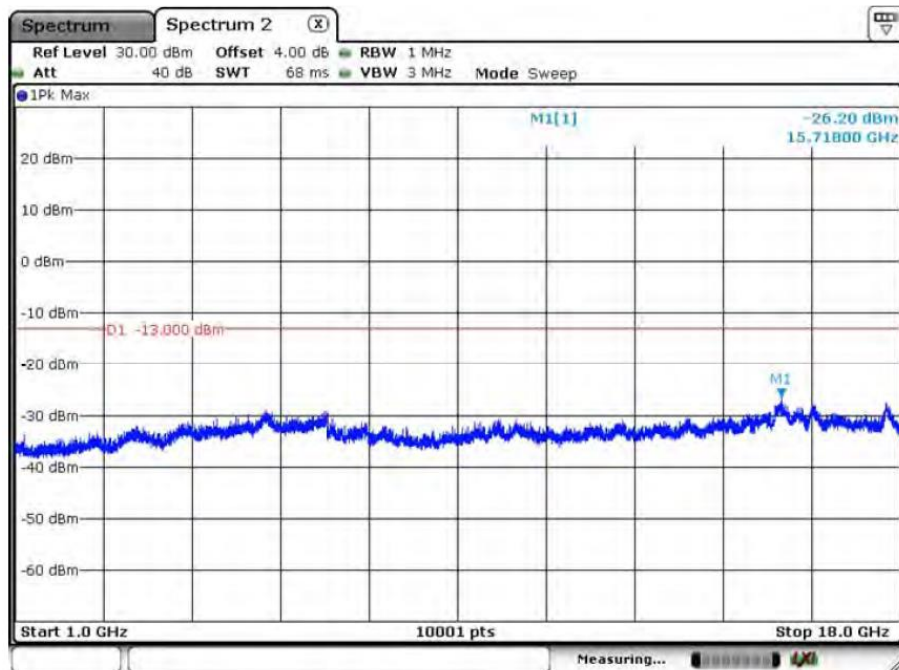
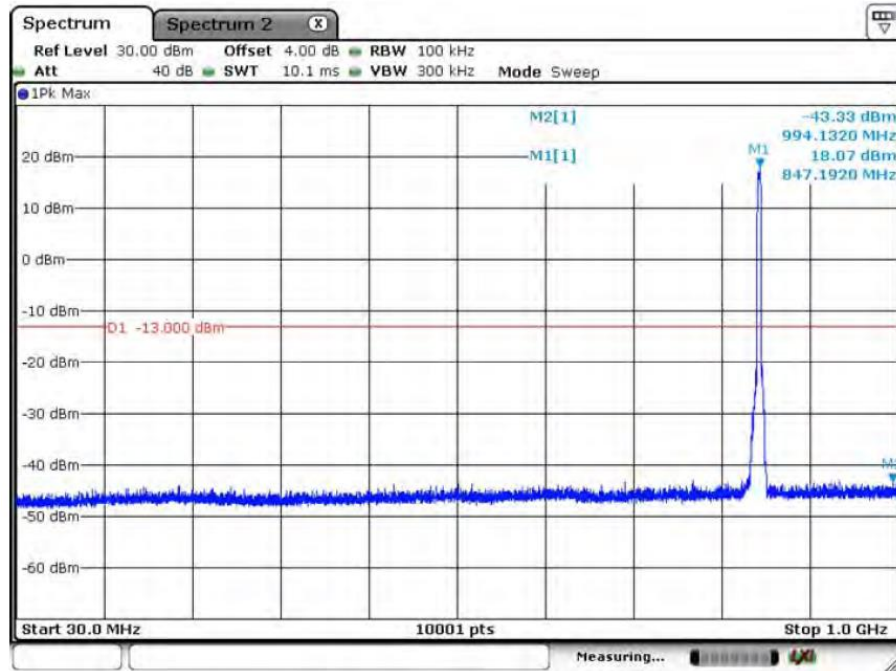


WCDMA Band 5 middle channel





WCDMA Band 5 high channel



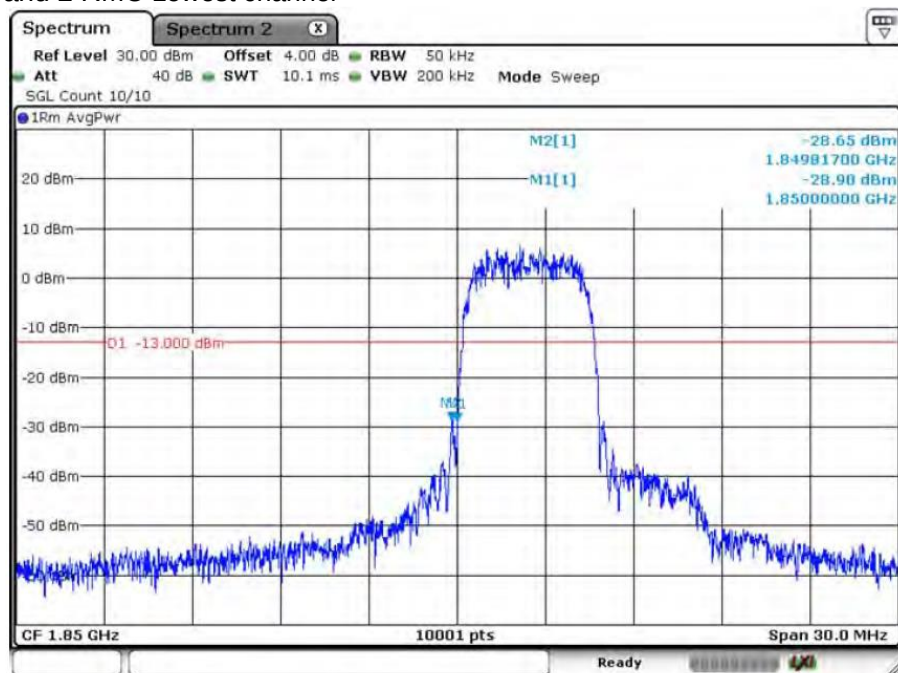


1.3. Conducted Out of Band Emissions

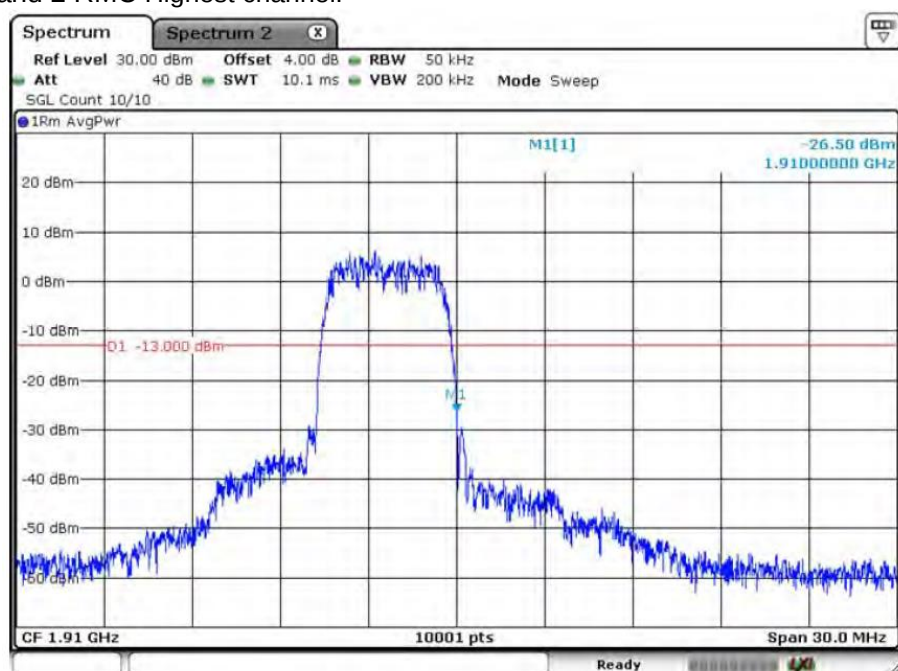
1.3.1. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

WCDMA Band 2 RMC Lowest channel

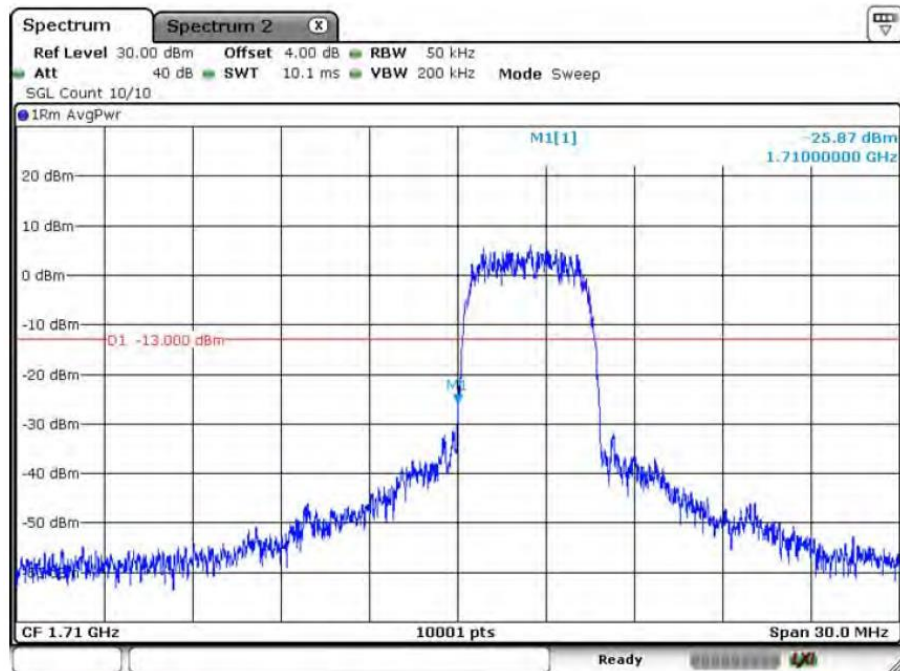


WCDMA Band 2 RMC Highest channel:

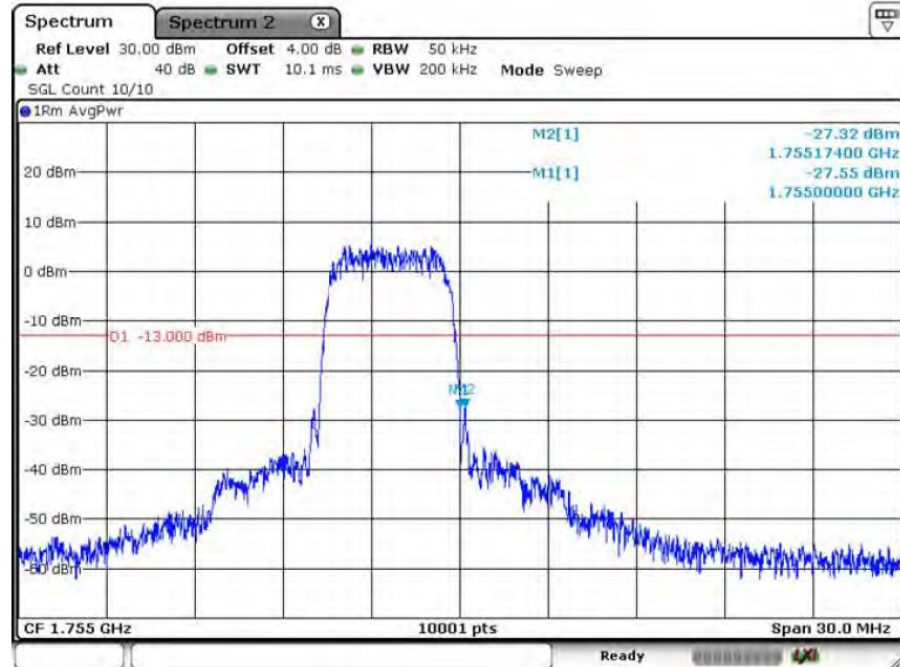




WCDMA Band 4 RMC Lowest channel

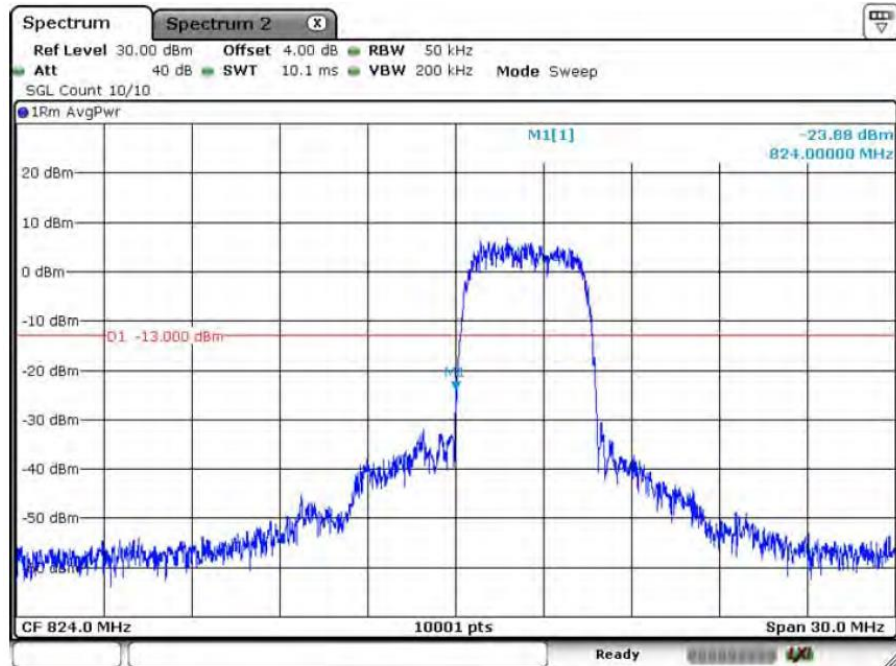


WCDMA Band 4 RMC Highest channel:

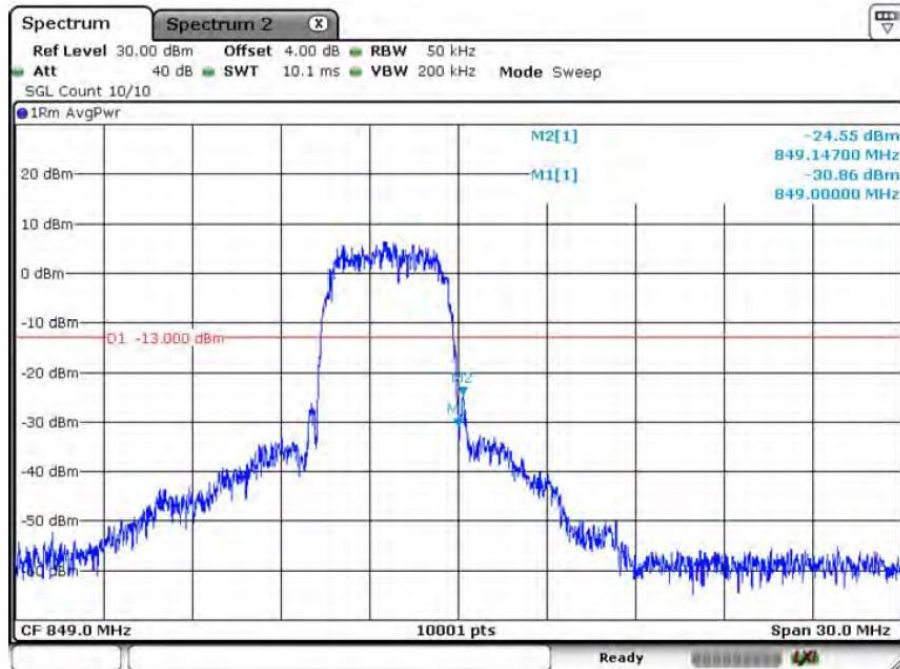




WCDMA Band 5 RMC Lowest channel



WCDMA Band 5 RMC Highest channel:



***** END *****