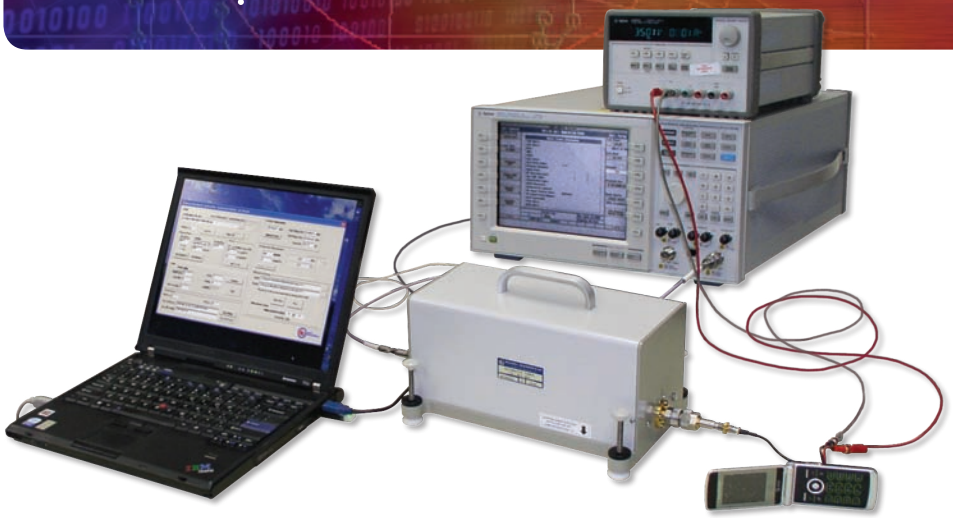
Load Pull Measurements on Mobile Phones

Agilent Technologies and Maury Microwave



- ***Mobile phone load pull measurements***
- ***Test your mobile phone designs under real-world conditions***
- ***Measure mobile phone parameters with varying impedance***
- ***Uses Agilent 8960 wireless communications test set***
- ***Maury tuner and MT910 mobile phone test software***
- ***Tests mobile phones in transmit and receive mode***
- ***Measure multiple parameters over multiple channels/ frequencies***
- ***Fully automated for ease of use and reduced test time***

Ensure your mobile phone designs operate in real-world conditions

Load pull is an ideal solution for measuring mobile phone performance under real-world conditions. In the real world mobile phones have to operate even with a lost or damaged antenna, in a tunnel or locker, when held close to the body or when in a pocket surrounded by coins. All of these conditions create non-ideal, non-50 ohm RF environments and designers and manufacturers have to demonstrate that their products can continue to work in these situations.

Load pull measurement techniques involve varying the load impedance seen by a device-under-test (DUT) while measuring its performance. The technique can be used to measure parameters such as power, sensitivity, throughput, bit error rate, current drain, gain, efficiency, harmonic power, inter-modulation distortion, error vector magnitude, adjacent channel power, etc. — all as a function of impedance.

Agilent Technologies and Maury Microwave provide a comprehensive, automated solution for load pull measurements of mobile phones. A complete setup for performing transmit and receive tests includes the DUT (amplifier, front end module, or mobile phone), a Maury tuner, a power supply, the Agilent 8960 wireless communications test set and the Maury MT910 series automated mobile test system software.

The Agilent 8960 is a one-box solution for wireless device development, manufacturing and repair providing full RF parametric and functional data test coverage for all major cellular technologies. The Maury MT910 software is a standalone application designed specifically for the testing of mobile phones in transmit and receive modes, for output power and sensitivity respectively, as a function of VSWR magnitude and phase. Secondary tests include stress testing and antenna VSWR specification. The Agilent test set and Maury software together provide a fully automated solution for testing a mobile phone in transmit and receive mode over a multitude of channels/frequencies, battery voltages and power levels.

With an automated load pull test solution from Agilent and Maury, you can reduce the time and effort required to ensure that your mobile phone designs will continue to operate effectively – even in the most harsh, real-world conditions.

Agilent Technologies

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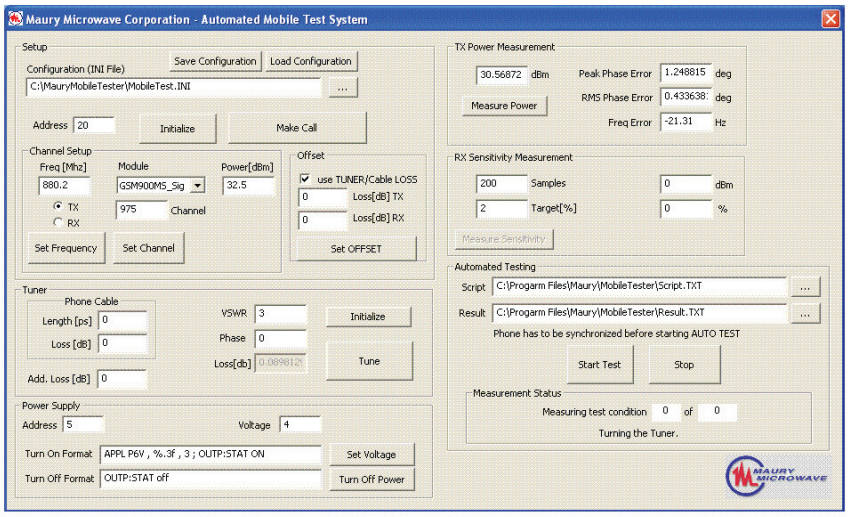

Maury MT910 Series automated mobile test system software GUI

System Components

Agilent Technologies

E5515C	8960 Series wireless communications test set
with:	
E6701x	GSM lab application
E6702x	cdma2000 lab application
E6703x	W-CDMA/HSPA lab application
E6706x	1xEV-DO lab application

Maury Microwave

Tuner *– select from:*

MT981BU10	High-power automated tuner 0.4 to 4 GHz
MT981WU10	High-power automated tuner 0.6 to 6 GHz
MT982EU30	High-power automated tuner 0.8 to 8 GHz
plus	
MT910	Automated mobile test system software for GSM or WCDMA
MT993R	Tuner automation environment

Other options are available; contact Maury Sales for more details

For a complete list of Agilent/Maury Solution Briefs:
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To learn how this solution can address your specific needs please contact Agilent's solutions partner, Maury Microwave

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