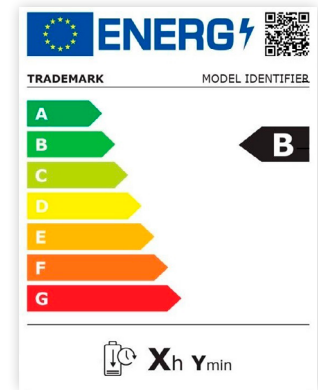


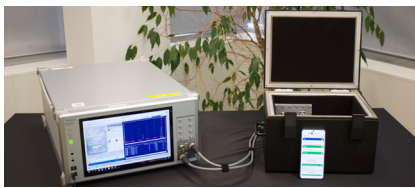
Mobile Device Testing for Energy Labelling Regulation

Anritsu and SmartViser have partnered to provide a solution for the advancement of mobile device testing for the European Union’s new energy labelling regulations. Eco-Design and Energy Labelling EU Commission regulations were published on 20th of September 2023 dictating all smartphones and tablets introduced to the market from 20th of June 2025, will require an energy label showing Energy class and Battery endurance. This also applies to devices released prior to the regulation coming into effect. For the life time of a device, any major software updates will require new testing. If there is a difference in values, a new label will be issued.



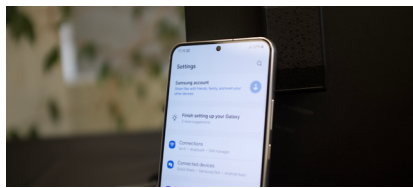
Testing Process – Smartphone Example

Test Setup in Controlled Environment



1. Measurement Setup

Anritsu’s MD8475B Network Simulator and Wi-Fi Access point are set up using EEL test specifications.



2. Mobile Device Setup

Media volume and brightness of the screen is calibrated, screen timeout and other settings are set.

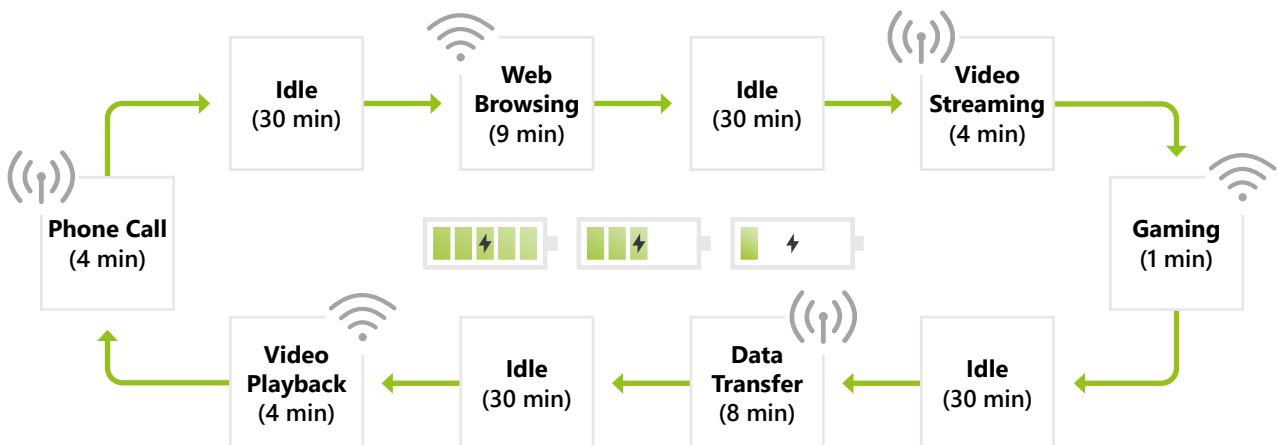


3. Test Execution

The test is executed automatically by SmartViser’s Viser Neo application installed in a smartphone.

Test Protocol

Once the device is placed into the shielded box, SmartViser’s Viser Neo application will run a continuous loop of the user actions as defined in the regulation, until the mobile device is switched off due to full battery discharge.



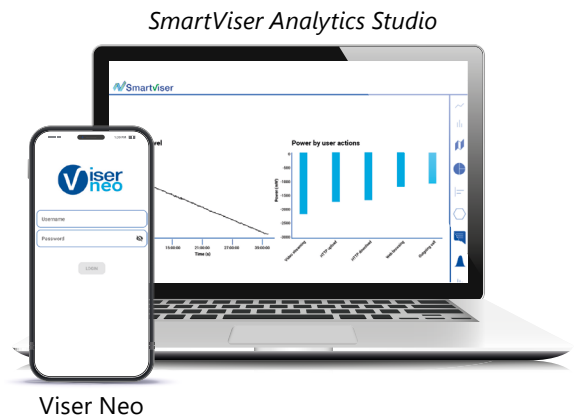
Technology used during test: (()) = Cellular Wi-Fi = Wi-Fi

Data Results

Based on a total test run indicating endurance of a mobile device and nominal voltage and capacity of a battery, Energy Efficiency Index (EEI) is calculated which defines the Energy class used for its Energy label.

More detailed KPIs are further available in SmartViser Analytics studio on-line, such as:

- Energy Class and Battery Endurance
- Battery Parameters Timelines (% Capacity, Temperature)
- Current and Power consumption per user action
- Current Timelines
- Performance KPIs and Trends: Data, Throughput, Call, Web browsing, Media player)
- Key settings (Brightness, volume)



Conclusion

The combination of Anritsu's MD8475B mobile network simulator and SmartViser's EEI solution enables easy and efficient tests of Energy efficiency and battery endurance according to current EU legislation.

Minimum MD8475B Configuration

Product Number	Product Name
MD8475B	Signalling Tester
MD8475B-070	Multi-signalling Unit
MX847550B	LTE Simulation Software
MX847550B-020	LTE 2x2 MIMO Option
MX847570B	SmartStudio
MX847570B-050	LTE Option
MX847570B-SS110	MX847570B 1 Year Support Service
P0551A, P0135x, P0250x or P0260x (One Needed)	Anritsu Test UICC TM

**Instrument and modules needed for Energy Efficiency and Battery Endurance Testing.*

EU Legislation & Standards Quick Links

- [Eco Design Requirements](#)
- [Energy Labelling Regulations](#)
- [EEI Test Specifications Excel document](#)



MD8475B Signalling Tester



About SmartViser

SmartViser, headquartered in Rennes, France offers innovative test automation products and solutions for Mobile Network Operators, Regulators, Device Manufacturers, Mission-Critical organisations, and companies looking to optimise testing, improve Quality of Experience, increase testing coverage, and reduce testing costs.