

1 General Comments

The test procedure is very straightforward and can be applied equally to many types of devices. This is, of itself, a good thing, however it will be necessary to gather further information about the devices under test in order that the data collected is useful for classification purposes.

Proposed solution: Define the set of device classification information to be recorded and submitted alongside the test data. Further comments regarding device classification and key features are included at the end of this document.

2 Specific comments

2.1 Section 3, sub. A, Acronyms

Item 12 (page 2, line 30) defines SIP. This is not the only VoIP protocol that is relevant to this subject.

Proposed solution: Include definitions for other VoIP protocols: SLIP <etc. – add list here>.

2.2 Section 3, sub. B, Product Types

Item 0 (page 2, line 37) There is no definition for a conference phone.

Proposed solution: Add definition –

Conference Phone: A telephone with no handset; with multiple microphones and speaker for conference operation. The conference phone system may include remote speakers, or have the option to add them.

Item 0 (page 2, line 37) There is no definition for a video phone.

Proposed solution: Add definition –

Video Phone: Telephone device with screen capable of making video and voice calls. Devices with a screen size > 10" may be considered to be Video Conferencing Systems and not telephony devices.

Item 7 (page 2, line 53) Cordless Telephone: This definition would include cellular telephones (which is not the intention).

Proposed solution: Change definition –

Cordless Telephone: A Telephone handset that is paired with a base station. The charging base of a cordless Telephone or its External Power Supply is designed to plug into a wall outlet, and there is no physical connection between the portable handset and the phone jack. A cordless telephone does not have the capability to roam between base stations or connect with third party base stations.

2.3 Section 3, sub. C, Operational Modes

General comment: The operational modes do not correspond well with useful telephony functions. Some redefinition would significantly improve the value of the test data collected.

Item 1 (page 3, line 79) Partial On (Sleep) Mode: This definition needs to specify which telephony functions are under consideration within the scope of this test definition.

Proposed solution: Change definition –

Partial On (Sleep) Mode: The mode that may persist for an indefinite time when a phone is connected to a power source and is capable of receiving a call. If applicable, the phone is registered and participating in the required protocol exchanges. The phone is not receiving or transmitting a conversation; recharging a battery; performing or displaying auxiliary functions; upgrading firmware; etc., the buttons and/or display are not illuminated and the handset is “on the hook”.

Item 2, a (page 3, line 85) Idle Mode: This definition is of no practical use. Telephony systems rarely spend significant time in this state and in many cases, this state is not part of normal operation (e.g. speed dial, edit-dial, etc.). It would be more useful to use this mode definition for the state where the phone is prepared for immediate use. For a consumer device this would correspond to the state where the buttons illuminate and directory/speed dial functions are active; for an enterprise device this would be the state where the display is showing the soft keys, the line(s) status and other auxiliary functions. A consumer device would no spend a significant time in this state, but an enterprise device might stay in this state throughout working hours.

Proposed solution: Change definition –

Idle Mode: The mode in which the phone is connected to a power source and prepared for immediate use. The display and/or buttons are illuminated, dialing and other functions are available but not in use and the handset is “on the hook”.

2.4 Erratum - Section 3, sub. C, Operational Modes - Notes

Diagram (page 4, line 102) Partial, mis-spelled as Parital.

3 Additional Characteristics and Features

3.1 Defining Characteristics

Product Type (according to Section 3, B).

Screen size and type (e.g. 4” backlit grayscale LCD).

Encryption support (e.g. sRTP, VPN, etc.).

Camera resolution (video phones).

Multi-line & multi-way calling support.

“PC” port (pass through Ethernet port), with priority encoding, link speed.

Power source (Wall, PoE, both, etc.)

3.2 Features

Support for Bluetooth accessories.

USB port(s).

Ethernet/WiFi dual network support.

Satellite microphone(s), number and type

4 Notes Regarding Classification and Features

There is a significant difference between the feature expectations and usage models for consumer telephony devices compared to enterprise devices. Enterprise devices generally have larger and more complex screens and support features such as: online directory, multi-line/multi-way calling, and encryption. In most cases, the devices are expected to stay for a prolonged time in Idle mode (buttons/display illuminated, auxiliary functions available) in an enterprise environment. Therefore it would be sensible to consider separate classification and separate test methodologies (or at least separate weightings) for enterprise and consumer devices.

Most additional features can be turned off and therefore will not directly influence the energy measurements of the device under test. Examples of this include Bluetooth and USB accessory ports or screen backlights. However, it should be recognized that the availability of these features will have an influence on the design requirements of the hardware and therefore has a secondary effect on the power usage of the device. Furthermore, some features, such as encryption, will be required during Partial On and Idle modes and will, therefore, have a significant impact on the energy usage of the device under test.