Avaya

Comments on the ENERGY STAR Draft Telephony Test Method
October 24, 2011

Comment 1

Pag 6 Sub Clause F (PoE Power Meter)

Given the tight measurement requirements for AC power, it seems that the PoE meter and power supply are under defined. There is no specification on the 48Vdc power (tolerance and ripple), nor is there any definition on the max. current ability of the meter / source. There is also no specification on the output impedance of such a device and there is no minimum resolution for meter measurement.

This clause states that a technician tool may be used and that data need not be recorded. However, it does not seem likely that a technician tool can be expected to meet ISO 17025 requirements for measurement and measurement uncertainty? Additionally, test data should normally be collectable and recorded for later verification and analysis by the test laboratory. It’s noted that Section 5.2 of the Method (section A) 1) requires a measurement at 10 sec intervals. How could this ever be achieved with a technician’s meter? Certainly a more sophisticated measurement device – an example of this might be Sifos Technologies PDA-300, however further examination of various off-the-shelf test meters should be completed.

Comment 2

For PoE measurements there is no specification on the length of cable between the Measurement Meter and the EUT. Given the tight efficiency requirements for Level V power supplies, this test method should be able to de-bed the losses due to the test cable or define a standard length of cable (e.g. 1 meter of cable).

Comment 3

The test method does not cover the use of accessory modules which might be used with the phone. For example, some phone sets might be capable of using additional button modules or USB devices (as mice or memory sticks). As these draw power, they should also be included in the test setup. The Test Method does not cover the need to ensure that high energy consumption modes of the phone be turned on or used -> e.g. backlight display, Bluetooth RF modules.

Comment 4

Many of IP sets have 3 ports switches which permit a PC to be connected to the network via the phone. The Telephony Test Method should cover the need to have all IP ports found on the IP phone representatively loaded during testing. A representative data stream would be needed to simulate traffic thru the phone to the PC port connected device.

Comment 5

Section 7 discusses the mode of operation of the IP Phone. It is suggested that an active call should be established with an audio source generating representative load and traffic. This will ensure that DSP resources found within the IP phone set are being properly exercised and drawing representative power. As such a noise source should be defined in the Telephony Test Method which could be used during testing. NOTE – similar requirements are already listed in EU / International EMC Test standard (IEC / EN 55024).
Additional comments which are general thoughts for discussions on the topic of testing IP Phone Sets:

Comment 6

Should tablet computers be included in this spec for testing? Avaya does sell a dedicated desktop tablet which is used a phone with video conference capability and other features such as presence and IM. Where should the line be for what is and is not an IP Phone?

Comment 7

Phone usage is very dependent on the business or customer. Many IP Phones would be used only a fraction of the day, whereas, Contact Center phones would be used almost continuously. Shouldn’t power consumption of IP phones take this into consideration?