| Subclause | Existing text in draft 2.4 | Proposed text for draft 2.5 | Explanation |
|---|---|---|---|
| 30.12.2.1.18z4 | aLldpXdot3LocMeasVoltageAccuracy | aLldpXdot3LocMeasVoltage**Uncertainty** | From NIST: *Because "accuracy" is a qualitative concept, one should not use it quantitatively, that is, associate numbers with it; numbers should be associated with measures of uncertainty instead. Thus one may write "the standard uncertainty is 2 $\mu\Omega$" but not "the accuracy is 2 $\mu\Omega$."* ([https://www.nist.gov/pml/nist-tn-1297-appendix-d-clarification-and-additional-guidance](https://www.nist.gov/pml/nist-tn-1297-appendix-d-clarification-and-additional-guidance)) |
| 30.12.2.1.18z4 | A GET attribute that indicates the number of accurate bits in the device's voltage measurement. | A GET attribute that indicates the **expanded uncertainty (coverage factor k = 2) for** the device's voltage measurement. **See Table 79–7b.** | From NIST: *In general, the value of the coverage factor k is chosen on the basis of the desired level of confidence to be associated with the interval defined by U = kuc . Typically, k is in the range 2 to 3. When the normal distribution applies and uc has negligible uncertainty (see subsection 5.4), U = 2uc (i.e., k = 2) defines an interval having a level of confidence of approximately 95 percent* ([https://www.nist.gov/pml/nist-tn-1297-6-expanded-uncertainty](https://www.nist.gov/pml/nist-tn-1297-6-expanded-uncertainty)) Also see the VIM ([http://jcgm.bipm.org/vim/en/2.35.html](http://jcgm.bipm.org/vim/en/2.35.html)) |
| 30.12.2.1.18z5 | aLldpXdot3LocMeasCurrentAccuracy | aLldpXdot3LocMeasCurrent**Uncertainty** | Same as for voltage. |
| 30.12.2.1.18z5 | A GET attribute that indicates the number of accurate bits in the device's current measurement. | A GET attribute that indicates the **expanded uncertainty (coverage factor k = 2) for** the device's current measurement. **See Table 79–7b.** | Same as for voltage. |
| 30.12.2.1.18z6 | aLldpXdot3LocMeasPowerAccuracy | aLldpXdot3LocMeasPower**Uncertainty** | Same as for voltage. |
| 30.12.2.1.18z6 | A GET attribute that indicates the number of accurate bits in the device's power measurement. | A GET attribute that indicates the **expanded uncertainty (coverage factor k = 2) for** the device's power measurement. **See Table 79–7b.** | Same as for voltage. |
| 30.12.2.1.18z7 | aLldpXdot3LocMeasEnergyAccuracy | aLldpXdot3LocMeasEnergy**Uncertainty** | Same as for voltage. |
| 30.12.2.1.18z7 | A GET attribute that indicates the number of accurate bits in the device's energy measurement. | A GET attribute that indicates the **expanded uncertainty (coverage factor k = 2) for** the device's energy measurement. **See Table 79–7b .** | Same as for voltage. |
| 30.12.2.1.18z8 | A GET attribute that returns the measured device voltage. | A GET attribute that returns the measured device voltage. **See Table 79–7b.** | For clarity. |

| Subclause | Existing text in draft 2.4 | Proposed text for draft 2.5 | Explanation |
|---|---|---|---|
| 30.12.2.1.18z9 | A GET attribute that returns the measured device current. | A GET attribute that returns the measured device current. **See Table 79–7b.** | For clarity. |
| 30.12.2.1.18z10 | A GET attribute that returns the measured device power. | A GET attribute that returns the measured device power. **See Table 79–7b.** | For clarity. Compare with aLldpXdot3LocPDRequestedPowerValue, aLldpXdot3LocPSEAllocatedPowerValue, etc. |
| 30.12.2.1.18z11 | A GET attribute that returns the measured device energy. | A GET attribute that returns the measured device energy. **See Table 79–7b.** | For clarity. |
| 30.12.3.1.18z4 | aLldpXdot3RemMeasVoltageAccuracy | aLldpXdot3RemMeasVoltage**Uncertainty** | Same as for local device. |
| 30.12.3.1.18z4 | A GET attribute that indicates the number of accurate bits in the remote device's voltage measurement. | A GET attribute that indicates the **expanded uncertainty (coverage factor k = 2) for** the remote device's voltage measurement. | Same as for local device. |
| 30.12.3.1.18z5 | aLldpXdot3RemMeasCurrentAccuracy | aLldpXdot3RemMeasCurrent**Uncertainty** | Same as for local device. |
| 30.12.3.1.18z5 | A GET attribute that indicates the number of accurate bits in the remote device's current measurement. | A GET attribute that indicates the **expanded uncertainty (coverage factor k = 2) for** the remote device's current measurement. | Same as for local device. |
| 30.12.3.1.18z6 | aLldpXdot3RemMeasPowerAccuracy | aLldpXdot3RemMeasPower**Uncertainty** | Same as for local device. |
| 30.12.3.1.18z6 | A GET attribute that indicates the number of accurate bits in the remote device's power measurement. | A GET attribute that indicates the **expanded uncertainty (coverage factor k = 2) for** the remote device's power measurement. | Same as for local device. |
| 30.12.3.1.18z7 | aLldpXdot3RemMeasEnergyAccuracy | aLldpXdot3RemMeasEnergy**Uncertainty** | Same as for local device. |
| 30.12.3.1.18z7 | A GET attribute that indicates the number of accurate bits in the remote device's energy measurement. | A GET attribute that indicates the **expanded uncertainty (coverage factor k = 2) for** the remote device's energy measurement. | Same as for local device. |
| 30.12.3.1.18z8 | A GET attribute that returns the measured remote device voltage. | A GET attribute that returns the measured remote device voltage. **See Table 79–7b.** | Same as for local device. |
| 30.12.3.1.18z9 | A GET attribute that returns the measured remote device current. | A GET attribute that returns the measured remote device current. **See Table 79–7b.** | Same as for local device. |
| 30.12.3.1.18z10 | A GET attribute that returns the measured remote device power. | A GET attribute that returns the measured remote device power. **See Table 79–7b.** | Same as for local device. |
| 30.12.3.1.18z11 | A GET attribute that returns the measured remote device energy. | A GET attribute that returns the measured remote device energy. **See Table 79–7b.** | Same as for local device. |

| Subclause | Existing text in draft 2.4 | Proposed text for draft 2.5 | Explanation |
|---|---|---|---|
| Table 79–7b | Voltage accuracy<br>Number of useful significant bits in voltage measurement data field.<br>Valid values for these bits are 1 through 16 | Voltage **uncertainty**<br>**Expanded uncertainty (coverage factor k = 2) for the voltage measurement, expressed in units of 1 mV.**<br><br>*Editor: increase the size of this field to 12 bits and update Figure 79-9* | See related comments.<br>With 1mV resolution and 12 bits we can express up to +/- 4V of uncertainty. |
| Table 79–7b | Current accuracy<br>Number of useful significant bits in current measurement data field.<br>Valid values for these bits are 1 through 16 | Current **uncertainty**<br>**Expanded uncertainty (coverage factor k = 2) for the current measurement, expressed in units of 0.1 mA.**<br><br>*Editor: increase the size of this field to 12 bits and update Figure 79-9* | See related comments.<br>With 0.1mA resolution and 12 bits we can express up to +/- 400mA of uncertainty. |
| Table 79–7b | Power accuracy<br>Number of useful significant bits in the power measurement data field.<br>Valid values for these bits are 1 through 16 | Power **uncertainty**<br>**Expanded uncertainty (coverage factor k = 2) for the power measurement, expressed in units of 10 mW.**<br><br>*Editor: increase the size of this field to 12 bits and update Figure 79-9* | See related comments.<br>With 10mW resolution and 12 bits we can express up to +/- 40W of uncertainty. |
| Table 79–7b | Energy accuracy<br>Number of useful significant bits in Energy measurement data field.<br>Valid values for these bits are 1 through 32 | Energy **uncertainty**<br>**Expanded uncertainty (coverage factor k = 2) for the energy measurement, expressed in units of 0.1 kJ.**<br><br>*Editor: increase the size of this field to 16 bits and update Figure 79-9* | See related comments.<br>With 0.1kJ resolution and 16 bits we can express up to +/- 6.5MJ of uncertainty. |

| Subclause | Existing text in draft 2.4 | Proposed text for draft 2.5 | Explanation |
|---|---|---|---|
| Table 79–7b | Voltage measurement<br>VPort_PD-2P expressed in units of 1 mV. When the Measurement source is set to 'Port total' this field contains the measurement of the pairset with the highest voltage.<br>Valid values for these bits are 1 through 65000 | Voltage measurement<br>VPort_PD-2P expressed in units of 1 mV. When the Measurement source is set to 'Port total' this field contains the measurement of the pairset with the highest voltage.<br>Valid **values are** 1 through 65000 | For correctness (a bit cannot be 65000). |
| Table 79–7b | Current measurement<br>IPort or IPort-2P expressed in units of 0.1 mA.<br>Valid values for these bits are 0 through 20000 | Current measurement<br>IPort or IPort-2P expressed in units of 0.1 mA.<br>Valid **values are** 0 through 20000 | For correctness (a bit cannot be 20000). |
| Table 79–7b | Power measurement<br>Power sourced or drawn expressed in units of 10 mW.<br>Valid values for these bits are 1 through 10000. | Power measurement<br>Power sourced or drawn expressed in units of 10 mW.<br>Valid **values are** 1 through 10000. | For correctness (a bit cannot be 10000). |