#281

**Comment:**

1. Page 198 line 12 is redundant. It is covered in 145.3.8.2
2. "calculate over 1second interval" means the calculation takes 1 second. Not what we intended to require.

The resolution is based on the response of Yair in the comment database regarding comment #281 and doing some text changes in 145.3.8.2 (page 195 lines 42-44) that allows removing the text in Page 198 lines 10-12 and also solving item (2).

**Suggested Remedy:**

***Make the following changes***

145.3.8.2 Input average power

PClass\_PD and PClass\_PD-2P in Table 145–28 are determined per the assigned Class. PClass\_PD values for each Class are shown in Table 145–24, PClass\_PD-2P values for each Class are shown in Table 145–25. The assigned PSE Class is determined by the number of class events and the PD requested Class, as shown in Table 145–11. PClass\_PD is the maximum average PI power and applies to single-signature PDs. PClass\_PD-2P is the maximum average power on a pairset and applies to dual-signature PDs.

The maximum average power including any peak power drawn per 145.3.8.4 over a 1sec sliding window shall not exceed PClass\_PD or PClass\_PD-2P in Table 145–24, Table 145–25, and Table 145–28 or PDMaxPowerValue in 145.5.3.3.5.PDs may dynamically adjust their maximum required operating power below PClass\_PD or PClass\_PD-2P as described in 145.5. PDs may also adjust their maximum required operating power below PClass\_PD or PClass\_PD-2P by using Autoclass (see 145.3.6.2).

PDs that have successfully completed DLL classification, shall not exceed a power consumption of PDMaxPowerValue as defined in 145.5.3.3.5.

145.3.8.4 Peak operating power

VOverload-2P is the PD PI voltage when the PD is drawing the permissible PPeak\_PD for single-signature PDs, or PPeak\_PD-2P for dual-signature PDs.

At any static voltage at the PI, and any PD operating condition, with the exception described in 145.3.8.4.1, the peak power for single-signature PDs shall not exceed PClass\_PD for more than TCUT-2P min, as defined in Table 145–16 and 5% duty cycle. Peak operating power shall not exceed PPeak\_PD.

At any static voltage at the PI, and any PD operating condition, with the exception described in 145.3.8.4.1, the peak power for a dual-signature PD shall not exceed PClass\_PD-2P for more than TCUT-2P min, as defined in Table 145–16 and 5% duty cycle. Peak operating power shall not exceed PPeak\_PD-2P.

NOTE—The duty cycle of the peak current is calculated using any sliding window with a width of 1 s.

Peak power is defined in Table 145–28 and depends on the Class assigned by the PSE. The equations in Table 145–28 are used to approximate the ratiometric peak powers of Class 1 through Class 8. These equations may be used to calculate PPeak\_PD or PPeak\_PD-2P for Data Link Layer classification by substituting PClass\_PD or PClass\_PD-2P with PDMaxPowerValue and for Autoclass by substituting PClass\_PD with PAutoclass\_PD.

145.3.8.4.1 Peak operating power exceptions

For Class 6 and Class 8 single-signature PDs and for Class 5 dual-signature PDs, when additional information is available to the PD regarding actual channel DC resistance between the PSE PI and the PD PI, in any operating condition with any static voltage at the PI, the peak power shall not exceed PPort\_PD for single-sig-nature PDs and PPort\_PD-2P for dual-signature PDs at the PSE PI for more than TCUT-2P min, as defined in Table 145–16 and with 5% duty cycle. Peak operating power shall not exceed 1.05 × PPort\_PD for single-sig-nature PDs and shall not exceed 1.05 × PPort\_PD-2P for dual-signature PDs on each pairset.