Background:

1. On March 2015 meeting we have completed the calculations for Type 4 parameters.
2. We know what Icable is for Type 4.
3. We need that cabling type that was used for Type 3 will be used for Type 4 as well with lower number of cables per bundle in order to keep same temperature rise as Type 3. This information need to be supplied by cabling standards (See note 3).
4. In order to support the 100 cables per bundle with the same Type 4 power conditions, we need better cable than was used for Type 3, and it need to be defined by cabling standard. This is covered by note 3 below.

As result, I am offering to updated table 33-1 as follows (changes marked in Red):

New Table 33-1 proposal

Table 33–1—System Power parameters Vs System Type

System Type (Lowest Type of PSE and PD)	Nominal Highest Current per pair (Icable, A)	Channel Pair-set maximum DC loop resistance (Rchan, Ω)	Minimum Cabling Type[1]
Type 1	0.35	20	twisted-pair cabling per 14.4 and 14.5 (class D recommended)
Type 2	0.6	12.5	Class D (ISO/IEC 11801:1995)
Type 3	0.6 [2]	12.5	Class D (ISO/IEC 11801:1995)
Type 4 [3]	0.96 [4]	12.5	Class D (ISO/IEC 11801:1995)

3. For additional information, see TIA TSB-184A.

[See next page]

[Editor Note: Type 3 and 4 current for extended power will be addressed in separate work.
Currently for extended power:
Type 3: Icont-2P=600mA, Icont-2P_unb=Icable=773mA
Type 4: Icont-2P=865mA, Icont-2P_unb=Icable=1087mA.
TIA will have to tell us regarding temperature rise if 4P total current is 2*Icable per Table 33-1;
a) What if total 4P current is kept but one of the pairs has the above pair with maximum Icont-2P_unb and the other pair has the rest: do they expect for increase in temperature rise. Base on mathematical work we did we expect that it will not affect temperature rise over the cable]