

Replace 85A.8 with the following:

85A.8 Channel integrated crosstalk noise (ICN)

Since four lanes or ten lanes are used to transfer data between PMDs, the Near-End Crosstalk (NEXT) that is coupled into a victim receiver will be from the four or ten adjacent transmitters. The channel Multiple Disturber NEXT loss, $MDNEXT_{loss}(f)$, is specified as the power sum of the individual NEXT losses as shown in Equation (85–26).

In addition, the Far-End Crosstalk (FEXT) that is coupled into a receiver will be from the three or nine other transmitters adjacent to the victim transmitter. The channel Multiple Disturber FEXT loss, $MDFEXT_{loss}(f)$, is specified as the power sum of the individual FEXT losses as shown in Equation (85–27).

Given the channel $MDNEXT_{loss}(f)$ and $MDFEXT_{loss}(f)$ measured over N uniformly-spaced frequencies f_n spanning the frequency range 50 MHz to 10000 MHz with a maximum frequency spacing of 10 MHz, the RMS value of the integrated crosstalk noise is determined using Equation (85–29) through Equation (85–33) and the parameters shown in Table 85–10.

Given the channel insertion loss at 5.15625 GHz, IL , the total integrated crosstalk RMS noise voltage is recommended to be less than the value specified by Equation (85A–6) illustrated in Figure 85A–1.

$$\sigma_{x,ch} \leq \begin{cases} 10 & 3 \leq IL \leq 7.5 \\ 13.4 - 0.45 IL & 7.5 \leq IL \leq 24.44 \end{cases} \quad (85A-6)$$

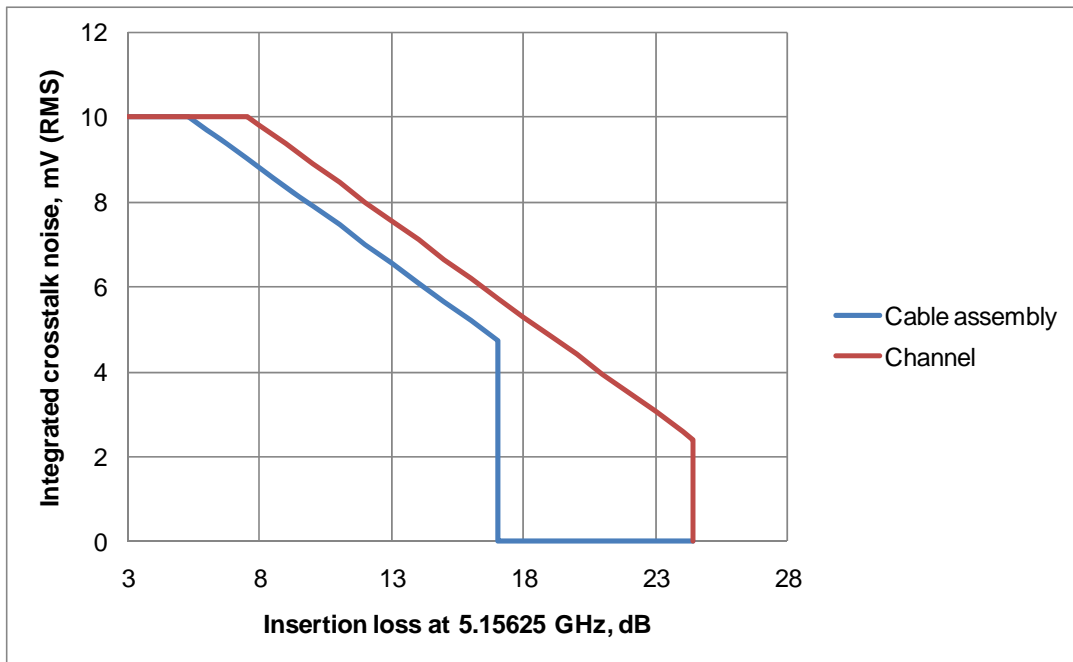


Figure 85A–1 — Channel integrated crosstalk noise