

TABLE 1 SIGNAL QUALITY WITH AND WITHOUT EDC				
Technology	10-Gbps Ethernet short reach	10-Gbps Ethernet short reach, with EDC	10-Gbps SONET long haul	10-Gbps SONET long haul, with EDC
Standard	802.3ae	802.3aq	G.959.1	G.959.1
Wavelength (nm)	850	1300	1550	1550
Fiber (microns)	MMF (62.5/125)	MMF (62.5/125)	SMF (9)	SMF (9)
Maximum distance	26m	220m	80 km	145 km
Dispersion	NA	NA	1600 psec/nm	2400 psec/nm
Bit-error rate (Hz)*	1×10^{-12}	1×10^{-12}	1×10^{-12}	1×10^{-12}
Path penalty*	NA	NA	2 dB	2 dB*

*Without EDC, the path penalty would be more than 10 dB, and bit-error rate would be less than 1×10^{-6} .