



802.3ae Qualification Test Link

The Delaire USA qualification test links are designed to act as worst-case links for bandwidth/dispersion and attenuation. These links are intended to be used in the qualification of transceivers designed to meet the IEEE 802.3ae specifications for 10GB multimode links at 850nm. The links provided are not simply designed for the length requirements but are tailored to simulate the actual bandwidth defined by the length bandwidth (OFL or EMB) product called out in the standard.

Since fiber manufacturers routinely supply fiber that far exceeds the minimum requirements, Delaire USA hand selects the actual measured bandwidth closest to the desired value. Since the measured values do not exactly correspond to the minimum bandwidth specs, the links are then constructed in such a way as to insure that the length bandwidth product does correspond to the specified length and the OFL or EMB bandwidth.

The addition of variable attenuators allows for variations in connector losses in the measurement system. Careful management of cladding modes in the link/attenuator configuration insures that the system will produce repeatable results.

Other Qualification Test Links are available including:

- 1GB MM & SM
- 10GB MM & SM
- 850nm, 1310nm & 1550nm
- **LRM**
 - **802.3aq and 802.3z**

- **Worst case link performance simulation**
- **Variable attenuation to allow for the compensation of variations in external connectors and jumper cables.**
- **Variations and inaccuracies due to cladding modes are eliminated.**

802.3ae 850nm Multimode Test Link Specs

Link	Fiber	Bandwidth	Method
1	62.5um	6.1 GHz	OFL
2	50um	6.08 GHz	OFL
3	50um	6.67 GHz	EMB

802.3ae Spec @ 850nm		
Link	Length	Fiber Bandwidth
1	26m	160MHz/km (OFL)
1	33m	200 MHz/km (OFL)
2	66m	400 MHz/km (OFL)
2	82m	500 MHz/km (OFL)
3	300m	2000MHz/km (EMB)



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