

LRM / 802.3aq Qualification Test Link

- Worst case[†] link bandwidth performance conditions using fiber
- Built to match link bandwidth using measured standard multimode fiber types
- Variable attenuation to allow for the compensation of variations in external connectors and jumper cables.

The Delaire USA qualification test links are designed to act as test links for bandwidth and a particular fiber type. These links are intended to be used in the qualification of transceivers designed to meet the LRM specifications[†] for 10GB multimode links at 850nm and 1300nm. 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) product called out in the standard. The actual fibers used are industry standards and thus represent a sampling of all of the modal structure possibilities

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.

Variable attenuators can be supplied with the links. The attenuation method insures that the launch condition is maintained

[†] The actual fibers used are industry standards and thus represent a sampling of all of the modal structure possibilities



- Testing during development and design of transceivers and compensation systems
- Production testing
- Acceptance testing
- Custom configurations available including completely automated link switching
- 2U Chassis with customer specified connectors

LRM / 802.3aq Multimode Test link Specs

850nm				
Core Diameter	Fiber Type	OFL Fiber Bandwidth (MHz-km)	Nominal Link Length	Link Bandwidth (MHz)
62.5	160/500	160	220m	727
62.5	OM1	200	220m	909
50	OM2	500	220m	2,273
50	400/400	400	100m	4,000
50	OM3	1500	220m	6,818

1300nm				
Core Diameter	Fiber Type	OFL Fiber Bandwidth (MHz-km)	Nominal Link Length	Link Bandwidth (MHz)
62.5	160/500	500	220m	2,273
62.5	OM1	500	220m	2,273
50	OM2	500	220m	2,273
50	400/400	400	100m	4,000
50	OM3	500	220m	2,273

Other Qualification Test Links are available including:

- 802.3ae, 802.3z
- 1GB MM & SM
- 10GB MM & SM
- 850nm, 1310nm & 1550nm
- Any custom arrangement of links
- 1310nm & 1550nm SM Dispersion Test Links
- Automated Test Links



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