

# Proposed subclause 999.8 for 100G BiDi

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# Proposed subclause 999.8 (references: subclauses 140.8 and 160.8)

## **999.8 Safety, installation, environment, and labeling**

### **999.8.1 General safety**

All equipment subject to this clause shall conform to the general safety requirements as specified in J.2.

### **999.8.2 Laser safety**

100GBASE-BRx optical transceivers shall conform to Hazard Level 1 laser requirements as defined in IEC 60825-1 and IEC 60825-2, under any condition of operation. This includes single fault conditions whether coupled into a fiber or out of an open bore.

Conformance to additional laser safety standards may be required for operation within specific geographic regions.

Laser safety standards and regulations require that the manufacturer of a laser product provide information about the product's laser, safety features, labeling, use, maintenance, and service. This documentation explicitly defines requirements and usage restrictions on the host system necessary to meet these safety certifications.

### **999.8.3 Installation**

It is recommended that proper installation practices, as defined by applicable local codes and regulation, be followed in every instance in which such practices are applicable.

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## **999.8.4 Environment**

Normative specifications in this clause shall be met by a system integrating a 100GBASE-BRx PMD over the life of the product while the product operates within the manufacturer's range of environmental, power, and other specifications.

It is recommended that manufacturers indicate in the literature associated with the PHY the operating environmental conditions to facilitate selection, installation, and maintenance.

It is recommended that manufacturers indicate, in the literature associated with the components of the optical link, the distance and operating environmental conditions over which the specifications of this clause are met.

## **999.8.5 Electromagnetic emission**

A system integrating a 100GBASE-BRx PMD shall comply with applicable local and national codes for the limitation of electromagnetic interference.

## **999.8.6 Temperature, humidity, and handling**

The optical link is expected to operate over a reasonable range of environmental conditions related to temperature, humidity, and physical handling (such as shock and vibration). Specific requirements and values for these parameters are considered to be beyond the scope of this standard.

## **999.8.7 PMD labeling requirements**

It is recommended that each PHY (and supporting documentation) be labeled in a manner visible to the user, with at least the applicable safety warnings and the applicable port type designation (e.g., 100GBASE-BR10-D). Labeling requirements for Hazard Level 1 lasers are given in the laser safety standards referenced in 999.8.2.

# Thank you

Any questions?