

OITDA/TP 35/CN (2022 Ed. 1)

Result of round robin test on measurement of angular misalignment between ferrule bore axis and ferrule axis for cylindrical ferrules

Summary

The angular deviation between the ferrule bore axis and the ferrule axis for cylindrical ferrule is an important characteristic, since it affects the insertion loss of the optical fiber connector. The hole angle deviation measurement method of ferrule is defined in JIS, and the item which seems to contribute to the measurement uncertainty is enumerated in the annex. The round robin test was conducted out by the ferrule manufacturing company to experimentally verify the measurement uncertainty and as a result of repeating the round robin test while advancing the unification of the measurement conditions, the target measurement variation (difference between the maximum value and the minimum value of each company's measured value) was obtained. Then, the technical paper (TP) of the optical industry technology promotion association standard (OITDA standard) was prepared to publish the round robin test result including the actual measurement condition.