Society of Cable Telecommunications Engineers

ENGINEERING COMMITTEE
Interface Practices Subcommittee

SCTE 122
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SCTE Recommended Optical Fiber Cable Types for Outside Plant Drop Applications

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1.0 INTRODUCTION

Telecommunication service providers have begun to deploy optical fiber deeper into the network and closer to the subscriber residence. An appropriate optical cable design for these applications is necessary to achieve an appropriate level of service reliability. Ensuring the long term reliability of these assets is a key performance component to the service providers and network operators.

Optical cables are designed to protect the optical fibers from a variety of harmful effects that could degrade the ultimate service life of the network. The effects of mechanical stresses, such as those experienced during installation, must be considered. Environmental effects that typically manifest themselves post-installation, such as temperature changes and chemical exposure, should also be evaluated. In order to properly evaluate and compare different cable designs a test regime of standard performance requirements should be considered by network operators.

The purpose of this document is to provide guidance in selection of a suitable outside plant (OSP) optical drop cable with respect to different application environments.