

**DE-EMBEDMENT OF OPTICAL COMPONENT CHARACTERISTICS AND
CALIBRATION OF OPTICAL RECEIVERS USING RAYLEIGH
BACKSCATTER**

ABSTRACT

Method and system are disclosed for de-embedding optical component characteristics from optical device measurements. In particular, the invention uses frequency domain averaging of the RBS on both sides of an optical component to determine one or more of its optical characteristics. Where the RBS has a slope (e.g.,
5 as in the case of a lossy fiber), a frequency domain least square fit can be used to determine the optical component characteristics. In addition, the invention uses a reference DUT to correct for variations in the frequency response of the photoreceiver. A reference interferometer is used in the invention to correct for sweep non-linearity of the TLS. The optical component characteristics are then de-
10 embedded from optical device measurements to provide a more precise analysis of the optical device.

FIG. 1 ACCOMPANIES THIS ABSTRACT

