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IEEE Standard for Conformance Test Procedures for Service Interoperability in Ethernet Passive Optical Networks, IEEE Std 1904.1™ Package A

Version 001.001

IEEE Communications Society

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Standards Development Board

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(Conformance to
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Abstract: This standard specifies a suite of conformance tests for system-level requirements of Ethernet Passive Optical Network (EPON) equipment, defined in IEEE 1904.1 Package A.

Keywords: 1G-EPON, 10G-EPON, conformance, Conformance01, EPON, Ethernet Passive Optical Network, IEEE 1904.1™, Package A, SIEPON

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Introduction

This introduction is not part of IEEE Std 1904.1/Conformance01-2014, IEEE Standard for Conformance Test Procedures for Service Interoperability in Ethernet Passive Optical Networks, IEEE Std 1904.1™ Package A – Version 001.001.

This standard builds upon the IEEE 1904.1 Service Interoperability in Ethernet Passive Optical Networks (SIEPON) and specifies a suite of conformance tests for system-level requirements of Ethernet Passive Optical Network (EPON) equipment, defined in IEEE 1904.1 Package A. This standard supplements IEEE Std 1904.1 by providing test cases to verify key requirements for proper service establishment across the Optical Line Terminal (OLT) and Optical Network Units (ONUs) from different manufacturers. Interoperability between the OLT and ONUs is verified indirectly, by assessing conformance of individual devices to IEEE 1904.1 Package A requirements.

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1. Overview

1.1 Scope

This standard specifies a suite of conformance tests for system-level requirements of Ethernet Passive Optical Network (EPON) equipment, defined in IEEE 1904.1 Package A.

1.2 Purpose

The purpose of this standard is to build upon the IEEE 1904.1 Package A EPON system-level interoperability standard and create a suite of conformance tests. Defining the exact test procedures will allow vendors, network operators, and independent testing facilities to achieve consistent results when testing EPON equipment for conformance with IEEE 1904.1 Package A.

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