VIAVI

Viavi CellAdvisor™ Base Station Analyzer Fundamentals

Course Number	Delivery Method	Course Length	Language of Instruction
TT-JD745-785	Instructor-Led at Customer Site	2 Days	English
TT-JD745-785-OE	Instructor-Led at Customer Site	2 Days	English

Synopsis

This two-day seminar introduces participants to the JD745B and/or the JD785B (JD745/785) Base Station Analyzer and presents the knowledge and skills needed to effectively operate and utilize the test set. Participants will become familiar with the user interface and menus of the JD745/785 and will learn how to perform RF testing including spectrum analysis, cable and antenna analysis, RF/optical power meter, interference analysis, channel scan, and RFoFiber™ analysis. Learning is reinforced with hands-on exercises and measured through written examination.

Prerequisites

Introduction to Telecommunications (TT-TELCOM) or a basic understanding of telecommunications transmission principles, and prior experience with cellular-based networks is recommended.

Who Should Attend

Technicians, engineers, and technical support personnel who want to know how to test and troubleshoot cell sites using the JD745/785 Base Station Analyzer.

Course Goals

Upon completion of this course, participants will be able to:

- Navigate the JD745/785 GUI and menus

- Demonstrate the ability to save and restore test configurations on the JD745/785 Base Station Analyzer

- Understand and perform Cable and Antenna measurements

- Understand and perform Spectrum Analyzer measurements

- Understand and perform Interference Analysis using the JD745B/785B Interference Analyzer functionality

- Understand and perform Fiber Inspection

- Understand the RFoFiber Spectrum measurement capability to troubleshoot External Interference and Internal PIM

Course Outline

Welcome and Introduction

- Orientation

- Course Goals

JD745/785 Base Station Analyzer Functional Overview

- JD745/785 Features and Capabilities

- JD745/785 Orientation: Front/Top Panels Connector ports

- JD745/785Functional Overview: Keys/Keypad; User Interface orientation/navigation

- System Setup and Maintenance

  - Selecting User Preferences: Date and Time; Display Layout

  - Upgrading test set firmware

  - Service diagnostics

- Saving and Managing files

- Measurement Analysis intro – how to use markers and peak search

Introduction to JD745/785 Testing Functions (may include Hands-On; only for applicable topics)

- Spectrum Analyzer: Spectrum; RF; Channel Power; Occupied Bandwidth; SEM; ACP; AM/FM Demodulation; Analysis

- Interference Analyzer: Spectrum; Sound; AM/FM Audio Demodulation; Interference; Spectrogram; RSSI; Analysis

- (for JD745B/785B and JD746B/786B analyzers only) Cable and Antenna Analyzer: Reflection (VSWR, Return Loss); DTF (VSWR, Return Loss); AnalysisPractical Approach to Fiber Care and Cleaning

- (option for JD700B analyzers only) RFoCPRI Interference Analyzer

- Channel Scanner: Channel; Frequency; Custom; Analysis

- Fiber Inspection