

3. Testobject Data

3.1 General EUT Description

Equipment under Test: Bluetooth (TM) Transceiver

Type Designation: PC card II

Kind of Device:

(optional)

Voltage Type: DC

Voltage level: 5V

General product description:

Bluetooth is a short-range radio link intended to be a cable replacement between portable and/or fixed electronic devices.

Bluetooth operates in the unlicensed ISM Band at 2.4 GHz. In the US a band of 83.5 MHz width is available. In this band, 79 RF channels spaced 1MHz apart are defined. The channel is represented by a pseudo-random hopping sequence through the 79 channels. The channel is devided into time slots, with a nominal slot length of $625\mu s$, where each slot corresponds to different RF hop frequencies. The nominal hop rate is 1600 hops/s. All frequencies are equally used. The average time of occupancy is 0.3797 s within a 30 second period.

The symbol rate on the channel is 1 Ms/s.

The EUT provides the following ports:

Ports

temporary antenna connector PCMCIA Enclosure

The main components of EUT are listed and described in Chapter 3.2

Testreport Reference: 4_TDK_0802_BTT_FCCb



3.2 EUT Main components:

Type, S/N, Short Descriptions etc. used in this Test Report

Short Description	Equipment under Test	Type Designation	Serial No.	HW Status	SW Status	Date of Receipt
EUT A	Transceiver	PC card II	-	8a	526	13.01.2003
EUT A is equipp	ped with an integrate	ed antenna.				
EUT B	Transceiver	PC card II	-	8a	526	13.01.2003
EUT B is equipped with a temporary antenna connector.						

NOTE: The short description is used to simplify the identification of the EUT in this test report

3.3 Ancillary Equipment

For the purposes of this test report, ancillary equipment is defined as equipment which is used in conjunction with the EUT to provide operational and control features to the EUT. It is necessary to configure the system in a typical fashion, as a customer would normally use it. But never the less Ancillary Equipment can influence the test results.

Short Description	Equipment under Test	Type Designation	HW Status	SW Status	Serial No.	FCC Id
AE 1	Laptop	IBM Thinkpad	-	-	-	-

3.4 EUT Setups

This chapter describes the combination of EUT's and ancillary equipment used for testing.

Setup No.	Combination of EUTs	Description
setup 1	EUT A + AE1	used for radiated measurements
setup 2	EUT B + AE1	used for conducted measurements

Testreport Reference: 4_TDK_0802_BTT_FCCb



3.5 Operating Modes

This chapter describes the operating modes of the EUT's used for testing.

Op. Mode	Description of Operating Modes	Remarks
op-mode 1	TX mode, the EUT transmits continuously on 2402 MHz	
op-mode 2	TX mode, the EUT transmits continuously on 2441 MHz	
op-mode 3	TX mode, the EUT transmits continuously on 2480 MHz	
op-mode 4	inquiry mode	
op-mode 5	paging mode	
op-mode 6	10 neighbouring channels	The EUT is set to transmit on ten neighbouring channels one after the other to see the channel separation.

Testreport Reference: 4_TDK_0802_BTT_FCCb Page 10 of 59