

### 3. Testobject Data

#### 3.1 General EUT Description

|                                       |                       |
|---------------------------------------|-----------------------|
| <b>Equipment under Test:</b>          | USB Dongle            |
| <b>Type Designation:</b>              |                       |
| <b>Kind of Device:<br/>(optional)</b> | Bluetooth transceiver |
| <b>Voltage Type:</b>                  | DC                    |
| <b>Voltage level:</b>                 | 3.3 V                 |

#### 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 divided 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

AC line of the laptop  
temporary antenna connector  
USB port  
Enclosure

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