The HiTag referred to as the EUT in this report, is a Temperature and Relative Humidity Wireless Sensor which can log its samples or transmit them to the master unit (CU) through a proprietary wireless network. The HiTag may either transmit directly to the master unit or through another HiTag.

When EUT comes in range of the CU's RF network they connect to it, directly or through other EUTs, and transfer their stored information to the CU.

The wireless communication network band is RF ISM 433MHz and there are 4 possible channels frequencies:

Channel 1 – 433.75 MHz

Channel 2 – 433.9 MHz

Channel 3 – 434.05 MHz

Channel 4 – 434.2 MHz

The EUT RF is passive when no CU is adjacent (It listen only searching for a CU RF network).

Declare maximum EIRP power:	-10 dBm@ 434 MHz
Type of modulation:	FSK
Antenna type:	External wire antenna 70 cm long

The EUT's MCU MSP430G2533 is running on external 32KHz crystal for accurate clocking at low power modes and it uses internal calibrated 8MHz clock which divided by 2 and 4 to create a 4MHz and 2 MHz respectively internal clocks drivers. The EUT RF Transceiver is clocked by external 32MHs crystal.

The EUT's power source: Single 3.0 V CR2450 or CR2 Lithium batteries.