

Technical Description

The Equipment Under Test (EUT), is a portable 2.4GHz BLE only Transceiver (Tower Unit) for a Tower of BLE 5. The sample has BLE 5 data rate speed with 1Mbps only. The sample supplied operated on 40 channels, normally at 2402 - 2480MHz. The channels are separated with 2MHz spacing.

Antenna Type: Internal, Integral antenna

Antenna Gain: 0dBi

Nominal rated field strength is 94.2dB μ V/m at 3m (Peak), 78.1dB μ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

1. U100 (nRF52832) acts as RF MCU
2. U2 acts as 3.3V Low-dropout regulator circuit
3. X101 acts as 32MHz Oscillator
4. C103 and L101 act as antenna matching circuit
5. U300 acts as Speaker circuit
6. U601, U602 and U603 act as Motor Circuit.