



Additional whitepapers available by request:

Standards documents:

- Physical Activity Monitoring for Heart Rate (CTA-2065)
- Electrocardiogram- Medical electrical equipment — Part 2-27: Particular requirements for the basic safety and essential performance of electrocardiographic monitoring equipment
- Physical Activity Monitoring for Fitness Wearables: Step Counting (ANSI/CTA-2056)

Heart rate accuracy for baseline devices during dynamic treadmill exercise

Heart rate accuracy of Valencell reference devices:

Walking and running dynamic changes- Treadmill

- Benchmark Wrist 1.2
- Benchmark Wrist 2.0
- Benchmark Forearm 1.2
- Benchmark Forearm 2.0
- Benchmark Upperarm 1.2
- Benchmark Upperarm 2.0
- Benchmark Ear 1.2
- Benchmark Ear 2.0

Running – Outdoor

- Benchmark Wrist 1.2
- Benchmark Wrist 2.0
- Benchmark Forearm 1.2
- Benchmark Forearm 2.0
- Benchmark Upperarm 1.2
- Benchmark Upperarm 2.0
- Benchmark Ear 1.2
- Benchmark Ear 2.0





Cycling indoor- Dynamic changes

- Benchmark Wrist 1.2
- Benchmark Wrist 2.0
- Benchmark Forearm 1.2
- Benchmark Forearm 2.0
- Benchmark Upperarm 1.2
- Benchmark Upperarm 2.0
- Benchmark Ear 1.2
- Benchmark Ear 2.0

Resting

- Benchmark Wrist 1.2
- Benchmark Wrist 2.0
- Benchmark Ear 1.2
- Benchmark Ear 2.0

Duration to find heart rate at rest

- Benchmark Wrist 1.2
- Benchmark Wrist 2.0
- Benchmark Ear 1.2
- Benchmark Ear 2.0

Heart rate variability background and performance:

Background

- Heart rate variability primer

Performance

- Benchmark Wrist 1.2
- Benchmark Wrist 2.0
- Benchmark Ear 2.0





Step count accuracy of Valencell reference devices

- Benchmark Wrist 1.2 and 2.0
- Benchmark Ear 1.2 and 2.0

Additional documentation:

- Testing procedures and suggestions for Benchmark BLE devices
- Heart rate accuracy of commercial devices

Please contact info@valencell.com to requests these documents.

For a list of frequently asked questions, please visit our [FAQ page](#).

