GaitSmart GS2 (EUT) RF Exposure:-

The GaitSmart GS2 EUT is intended as a portable device. The device is worn attached to the users limbs via the use of a Velcro stap placing the devices antenna at a distance of 5mm from the user.

KDB 447498 D04 Interim General RF exposure Guidance.

Clause 2.1.2 1-mW Test Exemption.
Per 1.1307(b)(3)(i)(A) - a single RF source is exempt RF device (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

Highest measured EUT radiated power was 77.98 dBuV/m @ 3m (-17.25 dBm) on low channel 2402 MHz. This equates to 0.019 mW.

These values show the EUT meets the FCC's 1mW exemption criteria even before any duty cycle (source-based time averaging) conditions are applied.

ISED RF EXPOSURE.
With reference to ISED standard **RSS-102 issue 5** section 2.5.1 Exemption limits for routine evaluation – SAR evaluation.

SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table 1

Table 1

Table 1: SAR evaluation — Exemption limits for routine evaluation based on frequency and separation distance

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
2450	4 mW	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

Note: If the operating frequency of the device is between two frequencies located in Table 1, linear interpolation shall be applied for the applicable separation distance.

2.4GHz Bluetooth FHSS transmitter:
The GaitSmart GS2 EUT is intended as a portable device. The device is worn attached to the users limbs via the use of a Velcro stap placing the devices antenna at a distance of 5mm from the user

Using Linear interpolation between Exclusion limits @ frequency 1900MHz (7mW) and 2450MHz (4mW) for <5mm distances, for the frequency 2402 MHz exemption limit in mW calculates to 4.178 mW.

EUT Antenna gain is included in the field strength measurements.

Highest measured EUT radiated power was 77.98 dBuV/m @ 3m (-17.25 dBm) on low channel 2402 MHz. This equates to 0.019 mW. These figures are for a 100% Transmit EUT Duty cycle.

EMC, Radio and Safety Testing Services

Therefore, the EUT in FHSS 2.4GHz mode meets the exemption limits from routine evaluation, even before any duty cycle has been taken into consideration.

This RF exposure evaluation was prepared by Daniel Sims of Kiwa RN Electronics Ltd, Acting as Agent towards FCC certification.

Date: 29th September 2023

Signed:  (Radio Approvals Manager)