Latch Hawk wireless sensor (EUT) RF Exposure:-

The Latch Hawk wireless sensor is intended as a fixed device attached to equipment where monitoring of latch position/status is required. A person's body would not normally be within 20cm of the device.

Evaluation is for exposure potential against the Exclusion limits given in **KDB447498** section 4.3.1.

Exclusion requirements are based upon 1g SAR exclusion for body.

Equation of 4.3.1. part 1A Transposed is:

Exclusion in mW = ((Threshold / ($\sqrt{F}$) * D

where: Threshold = 3 for 1g SAR body
        F = Frequency in GHz (2.4GHz)
        D = Separation distance in mm (200mm)

Threshold in mW for 2.4 GHz is based on equation above and 4.3.1. part b)2) (excerpt below)

b) For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

2) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance –50 mm)·10]} mW, for > 1500 MHz and ≤6 GHz

= **1656.386873 mW**

As measured conducted values for the EUT were: +3.9 dBm (or 2.46 mW) Peak, then the EUT is excluded from RF Exposure / SAR testing requirements before even any duty cycle (source based time averaged maximum conducted power) conditions are applied.
Note EUT chip antenna gain specified as -2dBi.