

**Manufacturer:** Iiwari Tracking Solutions Oy  
**Address:** Kidekuja 2, FI-88610 Vuokatti, Finland  
**Model:** Master Base Station  
**Type:** -  
**FCC ID:** 2BFQ6MBS101

**Test laboratory:** SGS Fimko Oy  
**Address:** Karakaarenkuja 4, FI-02610 Espoo, Finland  
**Accreditation body:** FINAS  
**Designation number:** FI0002

## REFERENCE DOCUMENTS

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KDB 447498 D01 General RF Exposure Guidance v06  
Test Report HELEM2402000055-1 v1.0

## EUT SPECIFICATION

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The equipment under test is a master base station for indoor positioning system.

Operating frequency range:	3993.6 MHz (UWB channel 2)
Channel width:	541.5 MHz
Maximum output power (e.i.r.p.)	-0.98 dBm/50 MHz
Antenna model/type:	Integral
Antenna gain:	+2 dBi
Device category:	Fixed
Environment:	General Population/Uncontrolled
Separation distance:	50 mm assumed for assessment

## ASSESSMENT

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### Exemption limits:

A single RF source is exempt if it satisfies the SAR Test Exclusion Threshold conditions presented in KDB document 447498 D01 v06 clause 4.3.1. For equipment operating between 100 MHz and 6 GHz and for test separation distances  $\leq 50$  mm, the SAR Test Exclusion Threshold is calculated according to clause 4.3.1 a):

$$P_{(\text{mW})} = \frac{d_{(\text{mm})} \times 3.0}{\sqrt{f_{(\text{GHz})}}}$$

where  $d_{(\text{mm})}$  is the test separation distance, and  $f_{(\text{GHz})}$  is the operating frequency of the equipment.

### Assessment results:

For  $d_{(\text{mm})} = 50$  and  $f_{(\text{GHz})} = 3.9936$  the SAR Test Exclusion Threshold is:

$$P_{(\text{mW})} = \frac{50 \times 3.0}{\sqrt{3.9936}} \approx 75 \text{ mW (19 dBm)}$$

The maximum output power of the EUT (-0.98 dBm e.i.r.p.) is below the threshold.

## CONCLUSION

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The assessment shows that the device qualifies for SAR Test Exclusion.

Date: August 30, 2024



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Testing Engineer