# **FCC MPE Exclusion Report**



Product name : Smart Network Adapter (WLAN / LAN for

bicycle trainer)

Applicant : Tacx bv. (a Garmin Company)

FCC ID : IPH-0S4443

IC : 1792A-0S4443

Test report No.: P000309928 006 Ver 1.0

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## **Laboratory information**

### Accreditation

Kiwa Nederland B.V. complies with the accreditation criteria for test laboratories as laid down in ISO/IEC 17025:2017. The accreditation covers the quality system of the laboratory as well as the specific activities as described in the authorized annex bearing the accreditation number L248 and is granted by the Dutch Council For Accreditation (RvA: Raad voor Accreditatie).

Kiwa Nederland B.V. is designated by the FCC as an Accredited Test Firm for compliance testing of equipment subject to Certification under Parts 15 & 18. The Designation number is: NL0001.

Kiwa Nederland B.V. is a Wireless Device Testing laboratory recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements.

The Industry Canada company number for Kiwa Nederland B.V. is: 4173A. The CABID is NL0001.

Kiwa Nederland B.V. is a registered Conformity Assessment body (CAB) under the Japan-EC MRA (Agreement on Mutual Recognition between Japan and the European Community). The registration number is: 201.

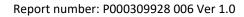
#### **Documentation**

The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory. The documentation of the testing performed on the tested devices is archived for 10 years at Kiwa Nederland B.V.

#### **Testing Location**

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Test Site	Kiwa Nederland B.V.
Test Site location	Wilmersdorf 50
	7327 AC Apeldoorn
	The Netherlands
	Tel. +31 88998 3393
Test Site FCC	NL0001
CABID	NL0001

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## **Revision History**

Version	Date	Remarks	Ву
v0.5	18-08-2023	First draft	PvW
v1.0	10-01-2024	Final release	PvW

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## Report number: P000309928 006 Ver 1.0

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## 1 General Description

## 1.1 Applicant

Client name: Tacx bv. (a Garmin Company)

**Address:** De Boeg 2, 2343 HK, Oegstgeest, the Netherlands

Telephone: +31 (0)71 7999292

E-mail: richard@tacx.nl

Contact name: Richard Kockelkoren

#### 1.2 Manufacturer

Client name: Garmin International

Address: 1200 E. 151st, 66062, Olathe, Kansas, USA

**Telephone:** (913) 440-1946

**E-mail:** Ben.karsak@garmin.com

Contact name: Mr. Ben Karsak

## 1.3 Tested Equipment Under Test (EUT)

Product name: Smart Network Adapter (WLAN / LAN for bicycle

trainer)

 Brand name:
 GARMIN

 FCC ID:
 IPH-0S4443

 IC:
 1792A-0S4443

Product type: LAN/WLAN Accessory

 Model(s):
 A0S4443

 Batch and/or serial No.
 P220536V04

 Software version:
 006-B4443-00

 Hardware version:
 013-01104-20

 Date of receipt:
 26-06-2023

 Tests started:
 05-07-2023

 Testing ended:
 06-07-2023

## 1.4

## **Applicable standards**

47 CFR § 1.1307 (b)(1)(i)(A)

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#### 1.5 Conclusions

The sample of the product showed **NO NON-COMPLIANCES** to the specifications stated in paragraph 1.4 of this report.

The results of the test as stated in this report, are exclusively applicable to the product items as identified in this report. Kiwa Netherland B.V. accepts no responsibility for any properties of product items in this test report, which are not supported by the tests as specified in paragraph 1.4 "Applicable standards".

Assessment is performed by:

Name : P. van Wanrooij, BASc

Review of assessment methods and report by:

Name : ing. P.A. Suringa

The above conclusions have been verified by the following signatory:

Date : 11-01-2024

Name : ing P.A. Suringa

Signature

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### 2 SAR exclusion Evaluation

## 2.1 Transmitter specifications

#### Transmitter 1

Variable (unit)	Value	Symbol
Conducted time-averaged output power (mW)	18.9	P
Time-averaged output power ERP (mW)	17.7	P <sub>ERP</sub>
Operating frequency range (MHz)	2400-2483.5	f
Separation distance (cm)	5	d
Separation distance (m)	0.05	R

#### 2.2 Evaluation calculations

#### Transmitter 1

Transmitter 1 is evaluated according to method B of KDB 447498 D04 v01

Method B:

$$P_{th}(mW) = \left\{ egin{aligned} ERP_{20cm} * \left( rac{d}{20cm} 
ight)^x & d \leq 20 \ cm \\ ERP_{20cm} & 20 \ cm < d \leq 40 \ cm \end{aligned} 
ight.$$

Where:

$$x = -\log_{10}\left(\frac{60}{ERP_{20cm} * \sqrt{f}}\right)$$

$$ERP_{20cm}(mW) = \begin{cases} 2040 * f & 0.3 \ GHz \le f < 1.5 \ GHz \\ 3060 & 1.5 \ GHz \le f \le 6.0 \ GHz \end{cases}$$

Filling in the values of d (cm) and f (GHz) as reported in clause 2.1 in the equations above gives the result:  $P_{th} = 218.2 \text{ mW}$ 

P or  $P_{ERP}$  = 18.9 mW which is less than the calculated  $P_{th}$  so the EUT complies with the MPE based exemption requirement.

#### 2.3 Conclusion

Since the EUT does not cause exposure in excess of the general population limit (defined in 47 CFR 1.1310 e) (ii)), no additional mitigation actions are required.

<<END OF REPORT>>

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