

FCC SAR Exclusion Report



The RvA is signatory to ILAC - MRA



Product name : TACX Stelvio
Applicant : TACX/Garmin
FCC ID : IPH-0S4355
IC ID : 1792A-0S4355

Test report No. : P000309942 006 Ver 1.0

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

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

Revision History

Version	Date	Remarks	By
v0.50	09-10-2023	First draft	IC
v1.00	22-11-2023	Final release	IC

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1 General Description

1.1 Applicant

Client name: Tacx B.V.
Address: De Boeg 2 , Oegstgeest
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E-mail: 0031 71 799 9292
Contact name: richard@tacx.nl
Richard Kockelkoren

1.2 Manufacturer

Manufacturer name: Tacx B.V.
Address: De Boeg 2 , 2343 HK Oegstgeest
Telephone: 0031 71 799 9292
E-mail: richard@tacx.nl
Contact name: Richard Kockelkoren

1.3 Tested Equipment Under Test (EUT)

Product name: TACX NEO 3M
Brand name: Garmin
FCC ID: IPH-0S4355
IC: 1792A-0S4355
Product description: Indoor bicycle trainer
Batch and/or serial No. A0S4355
Software version: 006-B4355-00
Hardware version: 011-06120-00-5
Date of receipt 18-06-2023
Tests started: 19-06-2023
Testing ended: 10-07-2023

1.4 Applicable standards

47 CFR § 1.1307 (b)(1)(i)(A)

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 : Ingrid Cezário, M. Sc.

Review of assessment methods and report by:

Name : Roy van Barneveld

The above conclusions have been verified by the following signatory:

Date : 01-12-2023

Name : ing. R. van Barneveld

Function : Test Engineer

Signature :

A handwritten signature in blue ink, consisting of a stylized 'R' followed by several horizontal strokes.

2 SAR exclusion Evaluation

2.1 Transmitter specifications

Transmitter 1

Variable (unit)	Value	Symbol
Conducted time-averaged output power (mW)	3.090	P
Time-averaged output power ERP (mW)	3.090	P_{ERP}
Operating frequency range (MHz)	2402	f
Separation distance (cm)	20	d
Separation distance (m)	0.2	R

2.2 Evaluation calculations

Transmitter 1

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

Method B:

$$P_{th}(mW) = \begin{cases} ERP_{20cm} \left(\frac{d}{20cm} \right)^x & d \leq 20 \text{ cm} \\ ERP_{20cm} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where:

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

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

Filling in the values of d (cm) and f (GHz) as reported in clause 2.1 in the equations above gives the result:

$P_{th} = 3060 \text{ mW}$

P or $P_{ERP} = 3.090 \text{ mW}$ which is less than the calculated P_{th} so the EUT complies with the SAR based exemption requirement.

2.3 Conclusion

Since the EUT does not cause exposure in excess of the general population limit, no additional mitigation actions are required.

<<END OF REPORT>>