

Measurement report

Narva Linna Jooks

5 km

Karen Aau
WA - AIMS B grade measurer
May 2025

GENERAL INFORMATION

Name of event: Narva Linna Jooks

City/Town: Narva

Country: Estonia

Advertised race distance: 5000m

Race date: 29.06.2025

Race director: Vladimir Vsivtsev

Phone: +372 5348 5279

E-mail: vovav@akkesport.net

Name of measurement team leader: Karen Aau, B grade measurer

Phone: +37253416303

E-mail: aau.karen@gmail.com

Type of terrain (Flat/Undulating/Hilly): Undulating

Type of course (Loop/Lap/Point to Point/Out & Back): point to point

Race surface: asphalt

Separation: 0,8%

Altitude:

Start – 5,5 m, Finish 5 m

Highest point – 36 m, Lowest point – 5 m

Difference in elevation highest > lowest point – 31 m

Section of road available: entire width of road

DETAIL OF THE CALIBRATION COURSE

Date: 08.04.2019

Location of calibration course: Tallinna mnt light traffic road, Narva, Estonia

Measure method: steel taped

Number of measurements: 2

Markers: nails

Start time: 10:30

Finish time: 11:30

Temperature: *Start* +11°C, *Finish* +11°C, *Average* +11 °C

MEASUREMENTS AND CALCULATIONS:

1 First measurement.

8	x	49,9 m	+	0,8 m	=	400 m
# tape lengths		distance per tape length		partial tape length		Measured distance

2 Second measurement.

8	x	49,9 m	+	0,783 m	=	399,983 m
# tape lengths		distance per tape length		partial tape length		Measured distance

3 Average raw (uncorrected) measurement of course: 399,9915 m

4 Temperature correction.

$$\text{Correction factor} = 1.0000000 + (.0000116 \times [11 - 20]) = 0,9998956$$

5 Multiply the temperature correction factor by the average raw measurement of the course

0,9998956	x	399,9915	=	399,949741 m
correction factor		avg. raw measurement		corrected measurement

6 Final (adjusted) length of calibration course: 400 m

$$399,95 \text{ m} + 0,05 \text{ m} = 400\text{m}$$

Summary: To get 400 m length calibration course, added 5 cm with steel tape.

BICYCLE CALIBRATION DATA SHEET

PRE-CALIBRATION:

Day: 09.05.2025

Time: 12.50

Temperature: +7°C

Start count	Finish count	Difference
347500	351888	4388
351888	356276	4388
356276	360664	4388
360664	365052	4388

Pre-measurement average count = $(4388+4388+4388+4388) / 4 = 4388$

Counts per km = $4388 \times 1000 / 400 = 10970$

Working Constant = $10970 \times 1,001 / 1000 = 10,98097 \text{ c/m}$

POST-CALIBRATION:

Day: 09.05.2025

Time: 17.05

Temperature: +9°C

Start count	Finish count	Difference
525686	530071	4385
530071	534457	4386
534457	538842	4385
538842	543228	4386

Post-measurement average count = $(4385+4386+4385+4386) / 4 = 4385,5$

Counts per km = $4385,5 \times 1000 / 400 = 10963,75$

Working Constant = $10963,75 \times 1,001 / 1000 = 10,97471375 \text{ c/m}$

CONSTANT FOR THE DAY = $(10,98097 + 10,97471375) / 2 = 10,97784187 \text{ c/m}$

PRE-CALIBRATION:

Day: 10.05.2025

Time: 13.10

Temperature: +10°C

Start count	Finish count	Difference
536692	541078	4386
541078	545464	4386
545464	549850	4386
549850	554236	4386

Pre-measurement average count = $(4386+4386+4386+4386) / 4 = 4386$

Counts per km = $4386 \times 1000 / 400 = 10965$

Working Constant = $10965 \times 1,001 / 1000 = 10,975965 \text{ c/m}$

POST-CALIBRATION:**Day:** 10.05.2025**Time:** 14.25**Temperature:** +11°C

Start count	Finish count	Difference
587586	591973	4387
591973	596360	4387
596360	600747	4387
600747	605134	4387

Post-measurement average count = $(4387+4387+4387+4387) / 4 = 4387$

Counts per km = $4387 \times 1000 / 400 = 10967,5$

Working Constant = $10967,5 \times 1,001 / 1000 = 10,9784675 \text{ c/m}$

CONSTANT FOR THE DAY = $(10,975965 + 10,9784675) / 2 = 10,9772162 \text{ c/m}$

COURSE MEASUREMENT DATA SHEET

reading	counts	distance	adj.dist	location
<i>Measured in running direction, 09.05.2025, c=10,97784187 c/m</i>				
--- adjustment here with steel tape adds 9,8 m ---				
374540	0	0.0 m	0.0 m	START – at Raja St (detailed sketch attached)
398595	24055	2191,2 m	2201 m	P1 – pc sign post right hand before turn to Vestervalli St
<i>Measured in running direction, 10.05.2025, c=10,9772162 c/m</i>				
555342	0	2191,2 m	2201 m	P1 – pc sign post right hand before turn to Vestervalli St
561474	6132	2749,8 m	2759,6 m	P2 – „stopping not allowed“ sign post right hand before Rütli St
<i>Measured in running direction, 10.05.2025, c=10,9772162 c/m</i>				
570751	0	2749,8 m	2759,6 m	P2 – „stopping not allowed“ sign post right hand before Rütli St
579651	8900	3560,6 m	3570,4 m	P3 – parking sign post left hand before pc sign post
<i>Measured in running direction, 09.05.2025, c=10,97784187 c/m</i>				
419780	0	3560,6 m	3570,4 m	P3 – parking sign post left hand before pc sign post
430362	10582	4524,5 m	4534,3 m	P4 – cycling path sign post left hand next to Narva Hotel
<i>Measured in running direction, 09.05.2025, c=10,97784187 c/m</i>				
--- adjustment here with steel tape adds 28 m ---				
495651		4524,5 m	4534,3 m	P4 – cycling path sign post left hand next to Narva Hotel
500456	4805	4962,2 m	5000 m	FINISH – at Linnuse St (detailed sketch attached)

Note any adjustments made to the course after measurement:

START – P1 (new startline, added 9,8 m with steel tape)
 P4 – FINIŠ (new finish line, added 28 m with steel tape).

CALIBRATION COURSE – 400 m



NARVA
LINNA JOOKS

5 km

29. juuni 2025

START 11.00

START / FINIŠ

A.LeCoq JOOGIPUNKT
REFRESHMENT STATION

ERGUTUSPUNKT
ENTERTAINMENT

Map labels: Rakvere, Sepa, Kraavi, Vestervalli, Koidula, Malmi, Madise, Vaivara, Raudsilla, Linda, P. Kerese, A. Puškini, Sadama tee, Jõe Promenaad, Narva jõgi, Tuleviku, Viru, Linnuse, Madise, Vaivara, Raudsilla, Linda, P. Kerese, A. Puškini, Sadama tee, Jõe Promenaad, Narva jõgi.

START LINE / FINISH LINE

