

Measurement report

## **Narva Linna Jooks**

21,1 km

## **GENERAL INFORMATION**

**Name of event:** Narva Linna Jooks

**City/Town:** Narva

**Country:** Estonia

**Advertised race distance:** not less than 21097,5 m

**Race date:** 06.06.2026

**Race director:** Vladimir Vsivtsev

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

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

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

**Race surface:** asphalt

**Separation:** 0,18%

**Altitude:**

Start – 5,5 m, Finish 5 m

Highest point – 37 m, Lowest point – 5 m

Difference in elevation highest > lowest point – 32 m

**Section of road available:** Mostly entire width of road, except:

P4>P5 road splitted half with cones from Linnuse St. corner until intersection of Kalda St. / Raudtee St and From Joala St. / Kalda St. intersection to Spordi st. Splitting marker is lane dividing line.

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

**2 Second measurement.**

8		49,9 m		0,783 m		399,983 m
# tape lengths	x	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		399,9915		399,949741 m
correction factor	x	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:** 06.05.2026

**Time:** 11.40

**Temperature:** +8°C

Start count	Finish count	Difference
937310	941698	4388
941698	946087	4389
946087	950475	4388
950475	954864	4389

Pre-measurement average count =  $(4388+4389+4388+4389) / 4 = 4388,5$

Counts per km =  $4388,5 \times 1000 / 400 = 10971,25$

Working Constant =  $10971,25 \times 1,001 / 1000 = 10,98222125$  c/m

### POST-CALIBRATION:

**Day:** 06.05.2026

**Time:** 15.45

**Temperature:** +8°C

Start count	Finish count	Difference
87493	91881	4388
91881	96270	4389
96270	100658	4388
100658	105047	4389

Pre-measurement average count =  $(4388+4389+4388+4389) / 4 = 4388,5$

Counts per km =  $4388,5 \times 1000 / 400 = 10971,25$

Working Constant =  $10971,25 \times 1,001 / 1000 = 10,98222125$  c/m

**CONSTANT FOR THE DAY =  $(10,98222125+10,98222125) / 2 = 10,98222125$  c/m**

## COURSE MEASUREMENT DATA SHEET

### 21,1 km

reading	counts	distance	adj.dist	location
<i>Measured in running direction, 06.05.2026, c=10,98222125 c/m</i>				
64353	0	0.0 m	0.0 m	START – at Raja St (detailed sketch attached)
65794	1441	131,2 m	0.0 m	P1 – 1st metal fence post left hand after stone wall
92621	26827	<b>2574 m</b>	<b>0.0 m</b>	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	2574 m	0.0 m	P2 – „stopping not allowed“ sign post right hand before Rütli St
579651	8900	<b>3384,8 m</b>	<b>0.0 m</b>	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	3384,8 m	0.0 m	P3 – parking sign post left hand before pc sign post
430362	10582	<b>4348,7 m</b>	<b>0.0 m</b>	P4 – cycling path sign post left hand next to Narva Hotel
<i>Measured in running direction, 06.05.2026, c=10,98222125 c/m</i>				
978949	0	4348,7 m	0.0 m	P4 – cycling path sign post left hand next to Narva Hotel
46828	67879	10529,5 m	0.0 m	P5 – lamp post right hand before intersection
48352	1524	<b>10668,3 m</b>	<b>0.0 m</b>	P1 – 1st metal fence post left hand after stone wall
<i>Measured in running direction, 06.05.2026, c=10,98222125 c/m</i>				
65794	0	10668,3 m	0.0 m	P1 – 1st metal fence post left hand after stone wall
92621	26827	<b>13111,1 m</b>	<b>0.0 m</b>	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	13111,1 m	0.0 m	P2 – „stopping not allowed“ sign post right hand before Rütli St
579651	8900	<b>13921,9 m</b>	<b>0.0 m</b>	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	13921,9 m	0.0 m	P3 – parking sign post left hand before pc sign post
430362	10582	<b>14885,8 m</b>	<b>0.0 m</b>	P4 – cycling path sign post left hand next to Narva Hotel
<i>Measured in running direction, 06.05.2026, c=10,98222125 c/m</i>				
<i>--- adjustment here adds 339 counts c=10,98222125 c/m =30,9 m ---</i>				
978949	0	14885,8 m	0.0 m	P4 – cycling path sign post left hand next to Narva Hotel
46828	67879	<b>21066,6 m</b>	<b>0.0 m</b>	P5 – lamp post right hand before intersection
<i>Measured in running direction, 06.05.2026, c=10,98222125 c/m</i>				
81784	0	21066,6 m	0.0 m	P5 – lamp post right hand before intersection
82123	339	<b>21097,5 m</b>	<b>0.0 m</b>	Finish - at Linnuse St (detailed sketch attached)

#### Note any adjustments made to the course after measurement:

The course consists of two laps. I measured the first lap, then the missing section that wasn't covered by the first lap. I calculated the total distance and then added the missing section, i.e., the finish line.

**CALIBRATION COURSE – 400 m**



**COURSE**



## START LINE / FINISH LINE



**APPENDIX**

