



Measurement report

Narva Linna Jooks

10 km





GENERAL INFORMATION

Name of event: Narva Linna Jooks

City/Town: Narva

Country: Estonia

Advertised race distance: 10000 m

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: 0,43%

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>FINISH road splitted half with cones from Linnuse St. Corner until turn to Kreenholm

Manufacture. 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	37	49,9 m		0,8 m		400 m
# tape lengths	X	distance per tape length		partial tape length	_	Measured distance

2 Second measurement.

8	v	49,9 m		0,783 m		399,983 m
# tape lengths	Λ	distance per tape length	'	partial tape length	_	Measured distance

- 3 Average raw (uncorrected) measurement of course: 399,9915 m
- 4 Temperature correction.

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	v	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:

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 = 4388x1000/400 = 10970

Working Constant = 10970x1,001/1000 = 10,98097 c/m

POST-CALIBRATION:

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 = 4385,5x1000/400 = 10963,75

Working Constant = 10963,75x1,001/1000 = 10,97471375 c/m

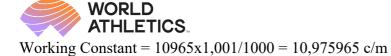
CONSTANT FOR THE DAY = (10,98097 + 10,97471375) / 2 = 10,97784187 c/m

PRE-CALIBRATION:

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 = 4386x1000/400 = 10965





POST-CALIBRATION:

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 = 4387x1000/400 = 10967,5

Working Constant = 10967,5x1,001/1000 = 10,9784675 c/m

CONSTANT FOR THE DAY = (10,975965 + 10,9784675) / 2 = 10,9772162 c/m





COURSE MEASUREMENT DATA SHEET 10 km

reading	counts	distance	adj.dist	location		
Measured in running direction, 09.05.2025, $c=10.97784187 c/m$						
374540	0	0.0 m	0.0 m	START – at Raja St (detailed sketch attached)		
398595	24055	2191,2 m	0.0 m	P1 – pc sign post right hand before turn to Vestervalli St		
Measured in running direction, 10.05.2025, $c=10.9772162 \text{ c/m}$						
565973	0	2191,2 m	0.0 m	P1 – pc sign post right hand before turn to Vestervalli St		
570751	4778	2626,5 m	0.0 m	P2 – "stopping not allowed" sign post right hand before Rüütli St		
Measured in running direction, 10.05.2025, $c=10.9772162 \text{ c/m}$						
570751	0	2626,5 m	0.0 m	P2 – "stopping not allowed" sign post right hand before Rüütli St		
579651	8900	3437,3 m	0.0 m	P3 – parking sign post left hand before pc sign post		
Measured in running direction, 09.05.2025, $c=10.97784187 \text{ c/m}$						
419780	0	3437,3 m	0.0 m	P3 – parking sign post left hand before pc sign post		
430362	10582	4401,2 m	0.0 m	P4 – ciclyng path sign post left hand next to Narva Hotel		
Measured in running direction, 09.05.2025, $c=10,97784187 \text{ c/m}$						
adjustment here with steel tape adds 28 m						
430362	0	4401,2 m	4401,2 m	P4 – ciclyng path sign post left hand next to Narva Hotel		
491517	61155	9972	10000 m	FINISH – at Linnuse St (detailed sketch attached)		

Note any adjustments made to the course after measurement:

P4 – FINIŠ (new finish line, added 28 m with steel tape).





CALIBRATION COURSE - 400 m







COURSE







START LINE / FINISH LINE







APPENDIX

