Measurement report

Narva Linna Jooks

21,1 km

Karen Aau
WA - AIMS B grade measurer
May 2023

GENERAL INFORMATION

Name of measurer: Karen Aau, B grade measurer

Address: Vanakuu 13-13, Tallinn, Estonia

Phone: +37253416303

E-mail: aau.karen@gmail.com

Name of event: Narva Linna Jooks

Location: Tallinn, Estonia

Race date: 01.06.2024

Distance: 21,1 km

Advertised race distance: not less than 21097,5 m

Race contact person: Vladimir Vsivtsev

Phone: +372 5348 5279

E-mail: vovav@akkesport.net

Description of the course

Type of course: mostly flat, some hills, point to point

Race surface: asphalt

Separation: 0,1%

Altitude:

Start – 5 m, Finish 5 m

Highest point – 37 m, Lowest point – 6 m

Difference in elevation highest > lowest point – 31 m

Measurement details

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

P2>P3 road splitted half with cones until turn to Kreenholm Manufacture

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.

Correction factor = 1.0000000 + (.0000116 x [11 – 20]) = 0,9998956

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

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

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

399,95 m + 0,05 m = 400m

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

BICYCLE CALIBRATION DATA SHEET

PRE-CALIBRATION:

Day: 10.05.2024 **Time:** 15.48 **Temperature**: +6°C

Start count	Finish count	Difference
982035	986420	4385
986420	990805	4385
990805	995190	4385
995190	999575	4385

Pre-measurement average count = (4385+4385+4385+4385) / 4 = 4385

Counts per km = 4385x1000/400 = 10962,5

Working Constant = 10962,5x1,001/1000 = 10,9734625 c/m

POST-CALIBRATION:

Day: 10.05.2024 **Time:** 19.18 **Temperature**: +6°C

Start count	Finish count	Difference
238148	242533	4385
242533	246918	4385
246918	251303	4385
251303	255688	4385

Post-measurement average count = (4385+4385+4385+4385) / 4 = 4385

Counts per km = 4385x1000/400 = 10962,5

Working Constant = 10962,5x1,001/1000 = 10,9734625 c/m

CONSTANT FOR THE DAY = (10,9734625 +10,9734625) / 2 = 10,9734625 c/m

COURSE MEASUREMENT DATA SHEET

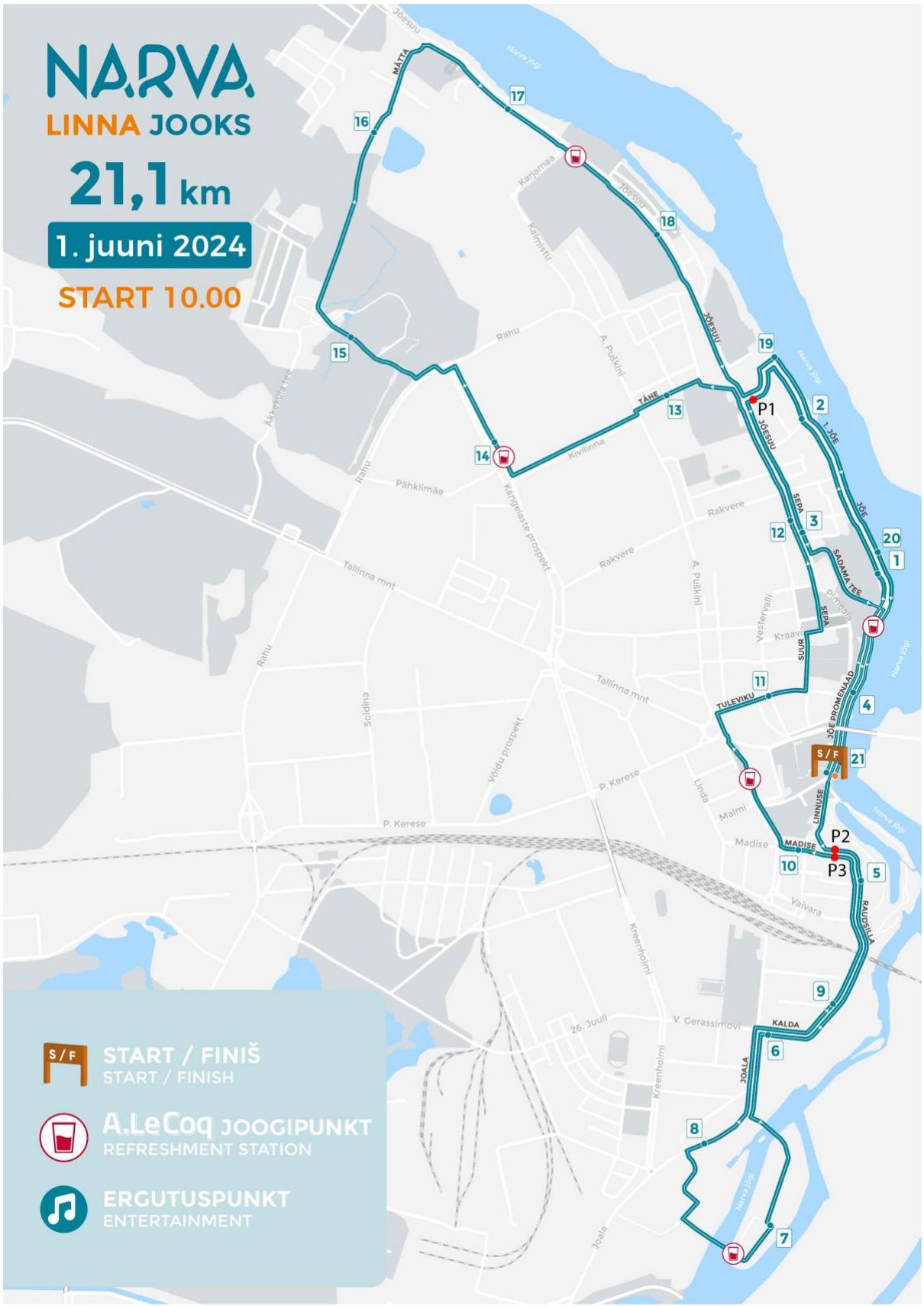
reading	counts	distance	adj.dist	location
Measured in running direction, 10.05.2024, c=10,9734625 c/m				
--- adjustment here adds 214 counts c=10,9734625 c/m =19,5 m ---				
1808	0	0.0 m	0.0 m	START - at Raja St (detailed sketch attached)
27325	25517	2325,3 m	2344,8 m	P1 – yard traffic sign left hand before Jõesuu St
53968	26643	**4753,3 m**	**4772,8 m**	P2 – pedestrian/cycle bath road sign post left hand
Measured in reverse of running direction, 10.05.2024, c=10,9734625 c/m				
53968	0	4753,3 m	4772,8 m	P2 - pedestrian/cycle bath road sign post left hand
109978	56010	**9857,4 m**	**9876,9 m**	P3 - pedestrian/cycle bath road sign post right hand
Measured in running direction, 10.05.2024, c=10,9734625 c/m				
--- adjustment here adds 381 counts c=10,9734625 c/m =34,7 m ---				
109978	0	9857,4 m	9876,9 m	P3 - pedestrian/cycle bath road sign post right hand
232726	122748	**21043,3 m**	**21097,5 m**	FINISH

Note any adjustments made to the course after measurement:

Adjustments made between START – P1 (new startline, added 19,5 m with bicycle) and P3 – FINIŠ (new finish line, added 34,7 m with bicycle).

CALIBRATION COURSE – 400 m

COURSE


NARVA
LINNA JOOKS
21,1 km
1. juuni 2024
START 10.00
S / F START / FINIŠ
START / FINISH
A.LeCoq JOOGIPUNKT
REFRESHMENT STATION
ERGUTUSPUNKT
ENTERTAINMENT
P1
P2
P3
MÄETA
JÕESUU
TÄHE
SEPA
SADAMA TEE
TULEVIKU
LINNUSE
MADISE
RAUDSILLA
KALDA
JOALA
Rahu
Pähklimäe
Rakvere
Tallinna mnt
Soldina
Võidu prospekt
P. Kerese
Madise
Vajvara
Kreenholmi
26. Juuli
V. Gerassimovi
Narva jõgi

START LINE / FINISH LINE