

# Norwegian Athletic Federation

Ullevaal stadion  
Sognsveien 75 J, 0840 Oslo, NORWAY  
E-mail: [friidrett@friidrett.no](mailto:friidrett@friidrett.no)  
Phone: +47 94 83 33 26

Sentrumsløpet – 10 km  
Haugesund, Norway  
20.April 2024

## COURSE MEASUREMENT REPORT

### - REPORT FOR INTERNATIONAL CERTIFIED COURSE –

INFORMATION ABOUT EVENT AND COURSE	
<b>Event:</b> Sentrumsløpet Haugesund	
<b>Technical Organiser:</b> Haugesund Triatlonklubb	
<b>City/Place:</b> Haugesund, Norway	
<b>Date of Arrangement:</b> 20.April 2024	
<b>Date and time for measurement:</b> 26.November 11 am	
<b>Measured distance(s):</b> 10 km	
<b>Length of calibration course:</b> 300 m	
<b>Terrain:</b> Flat <input type="checkbox"/> Slightly hilly <input type="checkbox"/> Hilly <input checked="" type="checkbox"/> Terrain <input type="checkbox"/>	
<b>Type of course route:</b> Closed loop <input checked="" type="checkbox"/> Back and forth <input type="checkbox"/> A to B <input type="checkbox"/> Other <input type="checkbox"/>	
<b>Race surface:</b> Asphalt and pavement stone slabs	
<b>Elevation Start - Finish:</b> 0	
<b>Description of start:</b> City centre – Knut Knutsen OAS gate - straight line two road signs	
<b>Description of finish:</b> Same as start	
<b>Distance, in a straight line, between start &amp; finish:</b> 0	
<b>Start and Finish marked:</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
<b>Km-markings:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<b>Measurement direction:</b> Running direction <input checked="" type="checkbox"/> Opposite running direction <input type="checkbox"/>	
<b>National record can be approved:</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

CONTACT INFORMATION		
	<b>Measured by:</b>	<b>Organizer:</b>
<b>Contact person:</b>	Erling Hiorth	Haakon Vaaga
<b>Phone:</b>	+47 91337338	+47 41465034
<b>Email:</b>	Erling.hiorth@gmail.com	Haakon.vaaga@fkh.no

It is hereby confirmed that the course has been measured by an A- or B certified international certified course measurer from Norwegian Athletics. The course is measured in accordance with AIMS and Norwegian athletics regulations, and the distance(s) has the minimum reported length(s). The survey is valid for 5 years, except if the route is changed.

30.november 2023     *Erling Hiorth*

Date	Signature by Course measurer	Date	Signature by AIMS
------	------------------------------	------	-------------------

# Norwegian Athletic Federation

Ullevaal stadion  
Sognsveien 75 J, 0840 Oslo, NORWAY  
E-mail: [friidrett@friidrett.no](mailto:friidrett@friidrett.no)  
Phone: +47 94 83 33 26

Sentrumsløpet – 10 km  
Haugesund, Norway  
20.April 2024

CALIBRATION COURSE AND PROCEDURE – 25.Nov.2023	
Length of measuring tape (steel measuring tape only)	50 m
Length of calibration course 1st measurement	300,00 m
Length of calibration course 2nd measurement	300,015 m
Possible 3rd measure (max. 1 cm diff per 100m 1 <sup>st</sup> and 2 <sup>nd</sup> )	No
Average of measurements before adjustments	300,0075 m
Temperature (road or measuring tape)	3 degree
Adjustment cf. $D-(D*(1+(temp-20)*0,0000115))$	- 0,059 m temp
Measured calibration distance after adjustment	300,039 m (+9 cm on ground)
Distance from start/finish to calibration distance	3,2 km

CALIBRATION INFORMATION - (max 8 counts difference of 1000 m between 4 measurements, ie 2 counts of 300m and 3 count of 400m)						
	Pre-measurement:			Post measurement:		
	Date and Time: 26.Nov – 09:45			Date and Time: 26.Nov – 12:00		
	Start	End	Diff.	Start	End	Diff.
1st measure	95700	99162	3462	29700	33162	3462
2nd measure	99162	102624	3462	33162	36624	3462
3rd measure	102624	106086	3462	36624	40085	3461
4th measure	106086	109548	3462	40085	43547	3462

	Pre measurement	Post measurement	
Average (1+2+3+4) / 4	3462	3461,75	Today's constant. Either highest or average of before and after measurement
Constant 1 km	11538,506	11537,673	
Addn. +1‰	11,539	11,538	
Measurement constant (rounded)	11550,044	11549,21	11550

# Norwegian Athletic Federation

Ullevaal stadion  
Sognsveien 75 J, 0840 Oslo, NORWAY  
E-mail: [friidrett@friidrett.no](mailto:friidrett@friidrett.no)  
Phone: +47 94 83 33 26

Sentrumsløpet – 10 km  
Haugesund, Norway  
20.April 2024

MEASUREMENT PROCEDURE		
Measurement constant	11550	
Measured Distance	Counter	Description of place
	12700	Start
5.020,1	79682	Intermediate passing start area
5.003,5	128472	Finish
<b>10.023,5 m</b>		<b>Total measured without adjustments</b>
- 5,5	Steel tape	Moved turning point 5,5 m shorter
- 5,5 x 3		In total 2 rounds = 4 x -5,5 m
<b>- 22,0 m</b>		<b>Total measured adjustments</b>
<b>10.001,5 m</b>		<b>Total measured course</b>

# Norwegian Athletic Federation

Ullevaal stadion  
Sognsveien 75 J, 0840 Oslo, NORWAY  
E-mail: [friidrett@friidrett.no](mailto:friidrett@friidrett.no)  
Phone: +47 94 83 33 26

Sentrumsløpet – 10 km  
Haugesund, Norway  
20.April 2024

## CONCLUSION OF MEASUREMENT

1. General information about race course and start/finish
  - The course consist of 2 rounds @ 4977 m + 2x 23 m start/finish
  - Start and finish is 23 m into sideway to main course
  - Turning point @ 3,8 km / 8,8 km was partly pre-measured on the day before
2. Measurement of calibration course
  - 3,2 km in straight line from start/finish, straight/flat cycle path on asphalt
  - Measured in accordance with procedure, 2 persons
  - Marked at both ends, adjusted for temperature and adjusted +9 cm on ground
3. Calibration of bicycle
  - Calibrated in accordance with procedure, 4 measures, deviation 0 count
4. Measurement of the course
  - From start to finish continuous using the pre-measured turning point
  - All measurement done using the road, ie pavements shall not be used
  - There are 700 m with bricks as road surface. Of this, 600 m are measured on pavement stone slabs running in parallel with the race course (see picture)
5. Post calibration of bicycle
  - Same procedure, 4 measures, deviation 1 count ok
6. Course adjustments
  - Turning point adjusted – 5,5m
7. Overall length of the course
  - The course is not shorter than 10.000 m
8. Additional info
  - Pavements shall not be used around corners
  - The organizer will set up fences on all corners / 90 degree turns to keep runners in the street. There are in total 12 corners where fences shall be used.
  - All streets will be closed during the race
  - To separate runners, the right lane will be used to/from the turning point

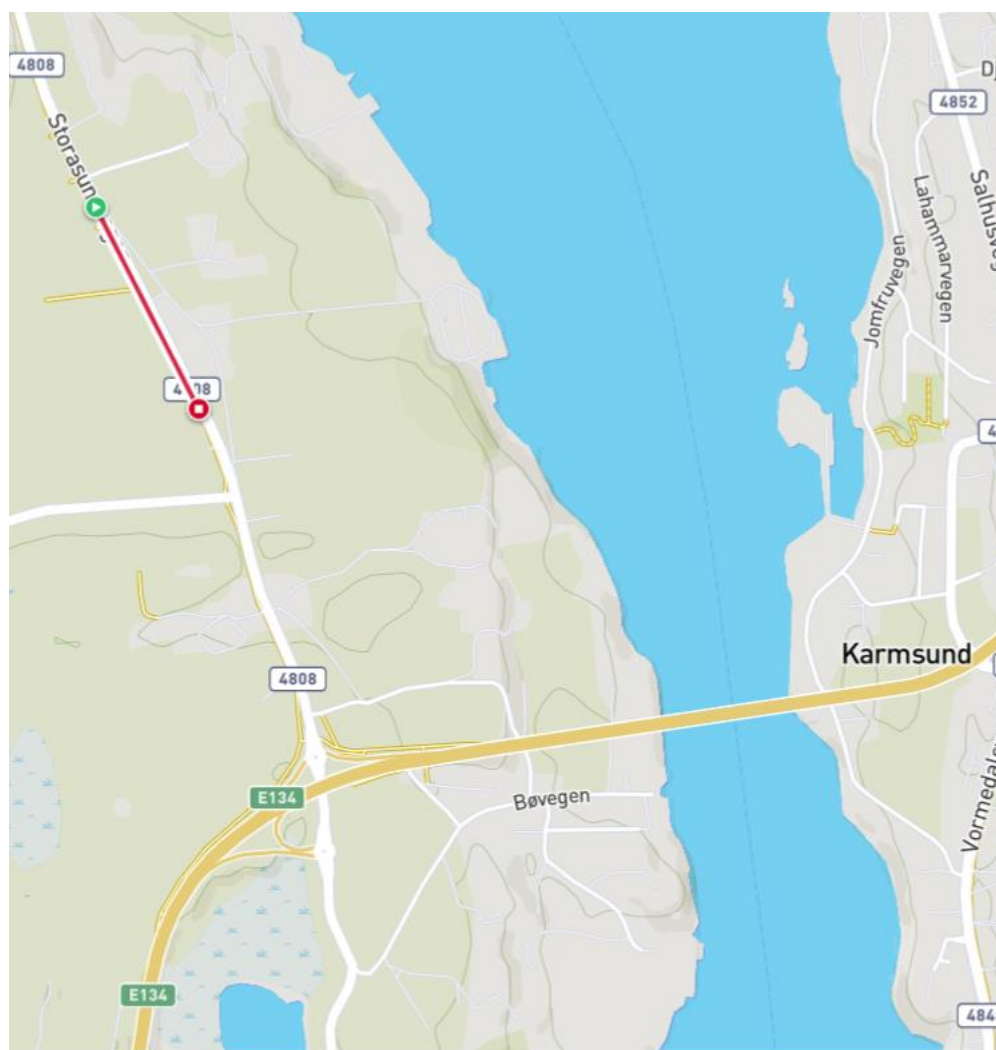
# Norwegian Athletic Federation

Ullevaal stadion  
Sognsveien 75 J, 0840 Oslo, NORWAY  
E-mail: [friidrett@friidrett.no](mailto:friidrett@friidrett.no)  
Phone: +47 94 83 33 26

Sentrumsløpet – 10 km  
Haugesund, Norway  
20.April 2024

## CALIBRATION COURSE MAP

Storasundvegen, Karmøy



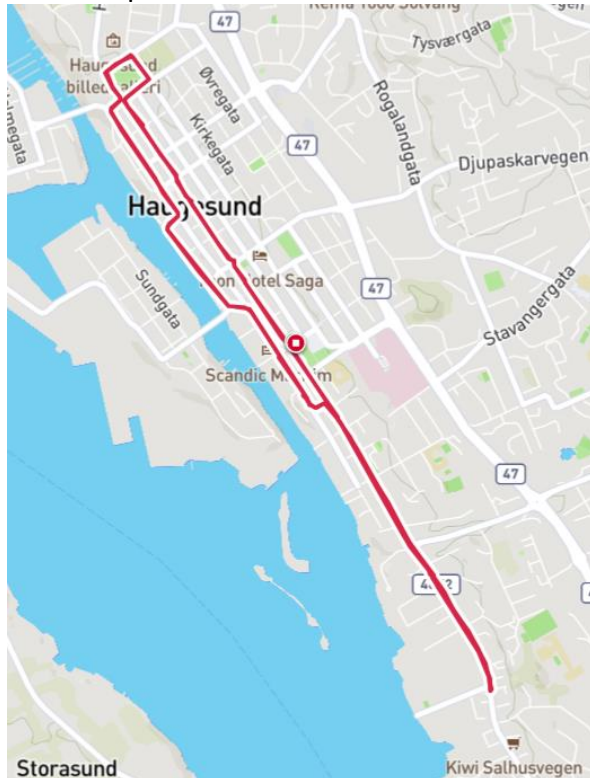
# Norwegian Athletic Federation

Ullevaal stadion  
Sognsveien 75 J, 0840 Oslo, NORWAY  
E-mail: [friidrett@friidrett.no](mailto:friidrett@friidrett.no)  
Phone: +47 94 83 33 26

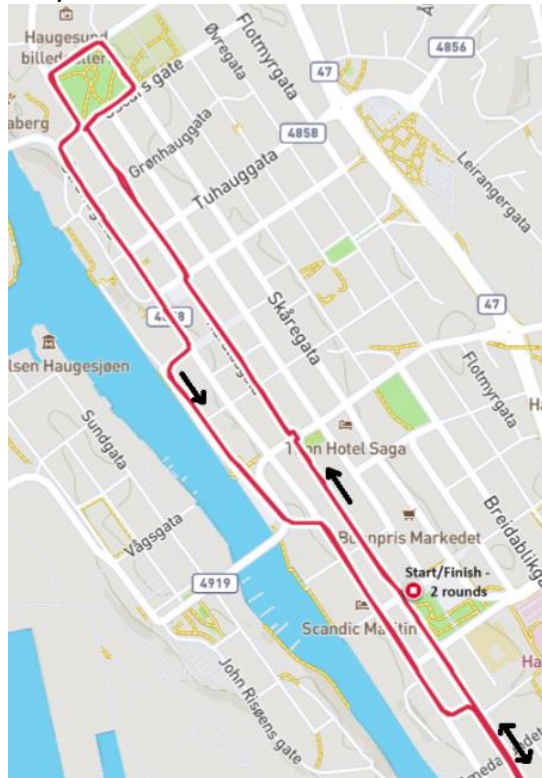
Sentrumsløpet – 10 km  
Haugesund, Norway  
20. April 2024

## COURSE MAP & DESCRIPTION

### 5 km loop – 2 rounds



### City Centre



### Start / Finish



### Turning Point





# Norwegian Athletic Federation

Ullevaal stadion  
Sognsveien 75 J, 0840 Oslo, NORWAY  
E-mail: [friidrett@friidrett.no](mailto:friidrett@friidrett.no)  
Phone: +47 94 83 33 26

Sentrumsløpet – 10 km  
Haugesund, Norway  
20.April 2024

Start / finish line



Turning point – B.Stolt-Nielsens gate



1<sup>st</sup> turn after 23 m

Barracks to be used on all corners to keep runners in the street. Pavements not to be used.



Last turn to finish line



# Norwegian Athletic Federation

Ullevaal stadion  
Sognsveien 75 J, 0840 Oslo, NORWAY  
E-mail: [friidrett@friidrett.no](mailto:friidrett@friidrett.no)  
Phone: +47 94 83 33 26

Sentrumsløpet – 10 km  
Haugesund, Norway  
20.April 2024

Measurement is done on pavement where this runs in parallel with the road bricks.  
Procedure: Bicycle wheel locked and bicycle moved 90 degrees to pavement, and same procedure when return to street.

Road bricks cover 700 m per round

Pavement stone slabs (left side)

