

# Canoe Slalom Lactate Threshold Report

ATHLETE NAME

DATE

BOAT CLASS

PROTOCOL

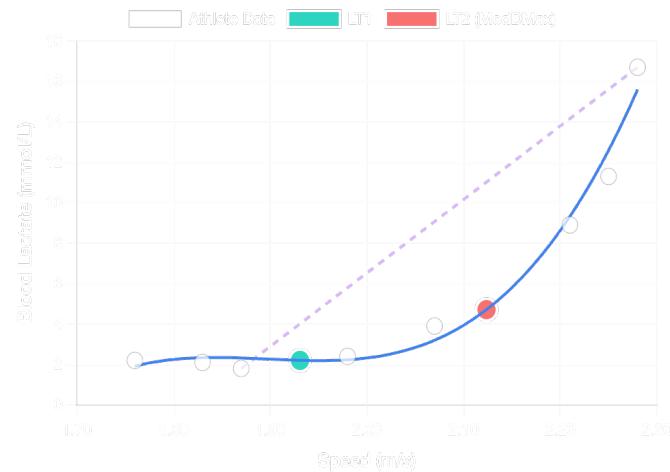
K1 Men

## Step Test Data

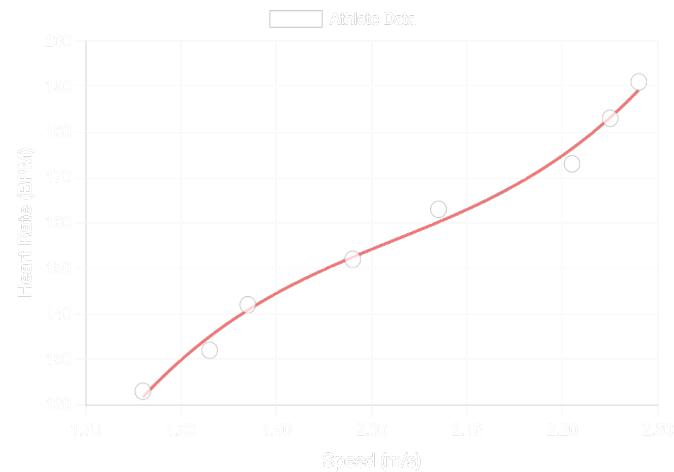
Step	HR Planned (BPM)	HR Achieved (BPM)	Speed (m/s)	Lactate (mmol)	Stroke Rate (spm)
1	120	123	1.76	2.2	33
2	130	132	1.83	2.1	32
3	140	142	1.87	1.8	32
4	150	152	1.98	2.4	37
5	160	163	2.07	3.9	45
6	170	173	2.21	8.9	56
7	180	183	2.25	11.3	62
8	Max	191	2.28	16.7	68

## Performance Visualizations

Speed vs Lactate



Speed vs Heart Rate

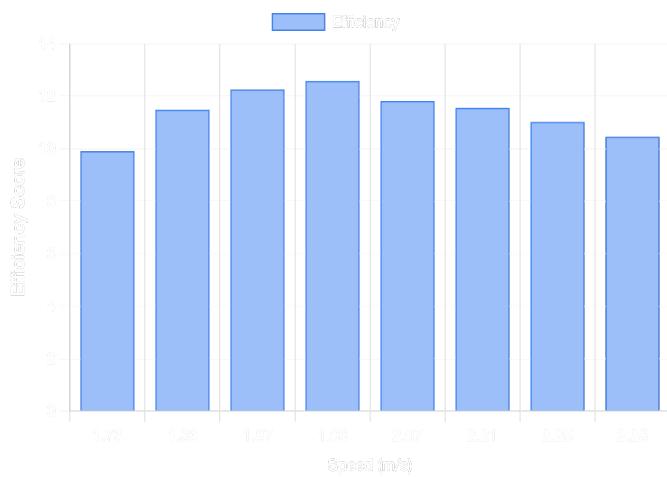
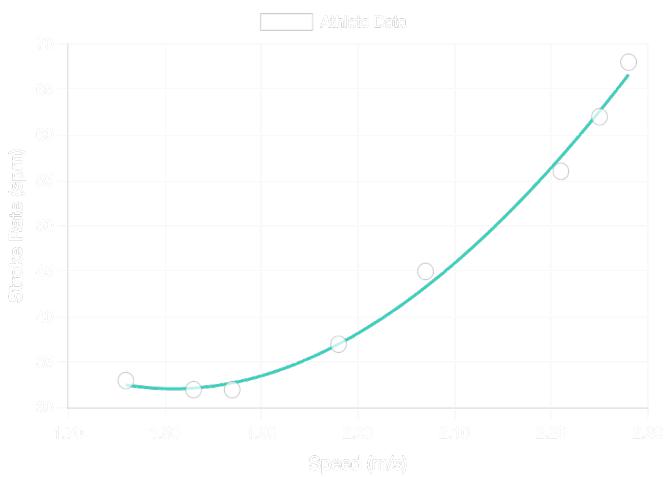


Speed vs Stroke Rate



Step Efficiency





## Thresholds & Training Zones

### Lactate Threshold 1 (LT1)

HR  
**148**

Speed  
**1.93**

Lactate  
**2.20**

### Lactate Threshold 2 (LT2)

HR  
**165**

Speed  
**2.12**

Lactate  
**4.71**

### Key Lactate Points

**2.0 mmol/L**

HR: 123  
Speed: 1.77

**4.0 mmol/L**

HR: 163  
Speed: 2.10

**6.0 mmol/L**

HR: 169  
Speed: 2.15

## Training Zones

Domain	Zone	Descriptor	HR (BPM)	Speed (m/s)	% VO <sub>2</sub> max	RPE	Duration
MODERATE	T1	Light Aerobic	< 134	< 1.71	50-60	(1-2) [7-11]	1-6h
	T2	Moderate Aerobic	134-148	1.71-1.93	60-75	(2-4) [11-13]	1-3h
<b>1ST METABOLIC THRESHOLD MT1/LT1</b>							
HEAVY	T3	Heavy Aerobic	148-157	1.93-2.03	70-85	(4-5) [13-15]	45-90m
	T4	Threshold	157-165	2.03-2.12	80-90	(5-7) [15-17]	30-60m
<b>2ND METABOLIC THRESHOLD MT2/LT2</b>							
	T5	Maximal Aerobic	> 165	> 2.12	90-100	(7-10) [17-20]	12-30m
	T6	Power Tolerance	N/A	N/A	N/A	(10) [20]	4-12m
	T7	Power Production	N/A	N/A	N/A	(10) [20]	2-6m
	T8	Neuro-muscular	N/A	N/A	N/A	(10) [20]	10s-2m

## Step Efficiency Analysis

Calculated as (velocity<sup>3</sup>) / (stroke rate / 60)

Step	Efficiency Score	% Change	Comparison to Step 1
1	9.912	+0.0%	
2	11.491	+15.9%	
3	12.261	+23.7%	
4	12.588	+27.0%	
5	11.826	+19.3%	
6	11.565	+16.7%	
7	11.023	+11.2%	
8	10.458	+5.5%	