

Performance Scales for the 20 Minute Cycling Power Test

Test Description:

- The overall goal of the student will be to maximize the average watts produced during the 20minute time period. The student will begin by adjusting the bike settings to ensure the “best fit” during the test. After a short warm-up period, the student must stop pedaling for a period of one minute to allow the cyclometer to reset all values to zero.
- Once the test begins the student must continue riding for 20 minutes without stopping. Any pause or cessation of pedaling in excess of 59 seconds prior to the completion of the test will result in no credit for the performance. The student may use any standard riding technique including seated or standing positions during the test. The student may adjust the resistance over the course of the ride to maintain the recommended average cadence of 60 to 110 rpm.
- When the test is completed, the student must stop pedaling, engage the brake by pushing the resistance lever to its highest possible position and remain on the bike until the student’s average wattage (flashing) is recorded. If possible, the student’s body weight should be taken at the time of the test. The student’s power-to-weight ratio should calculated using the formula below. Performance will be graded using the IGC 20-Minute Cycling Power Test Scale.

$$\text{Power-To-Weight Ratio (PWR)} = \frac{\text{Power (watts)}}{\text{Body Weight (kg)}} \quad \text{or} \quad \frac{2.2 * \text{Power (watts)}}{\text{Body Weight (lbs)}}$$

Females	Percentage	Males
2.35	100	2.69
2.22	97	2.55
2.08	95	2.40
1.94	93	2.26
1.81	90	2.12
1.67	87	1.98
1.54	85	1.84
1.40	83	1.70
1.26	80	1.55
1.13	77	1.41
0.99	75	1.27
0.86	73	1.13
0.72	70	0.99

2013 — based on data collected by the Department of Health and
Exercise Studies