

## Zwift Performance Verification Board Decision



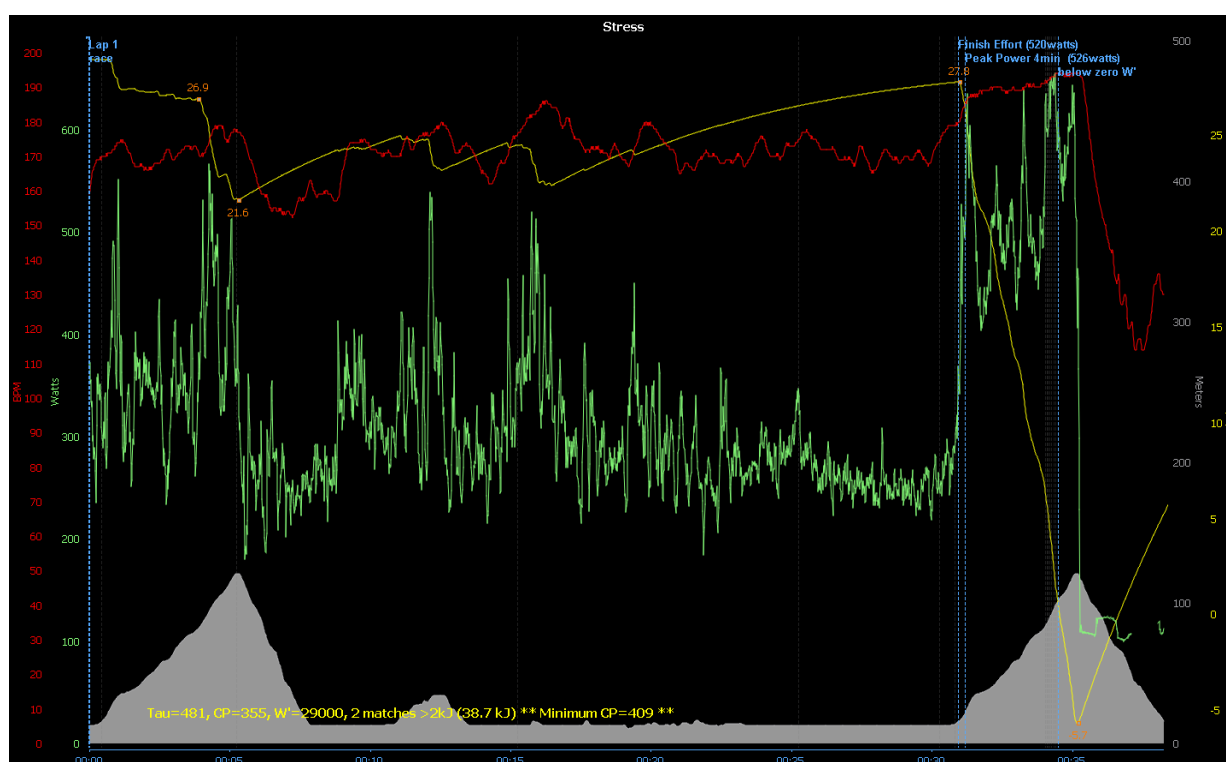
Case Number: 2022-02  
Name: Eddy Hoole

Event: UCI Cycling Esports World Championship – Continental Qualifer (Europe & Africa)  
Date: 13<sup>th</sup> November 2022

### Details:

1. The following chart shows some of the key metrics analysed for the rider in the above named event.

- Terrain Altitude – Grey
- Power – Green
- Estimated Energy Reserves – Yellow
- Heart Rate – Red



2. Of particular note is the final climb which determined the outcome of the event – up until that point, all riders had been riding at a relatively comfortable pace, that did not significantly impact their energy reserves.

3. The rider recorded the following data for the final climb:

- Total effort = 4min 16sec @ 526 Watts average
- Best 4min average power = 526 Watts

Given the rider's weight, this equates to a sustained average power output of approx. 8.5 W/kg, a performance that requires a VO<sub>2</sub>max of over 90 mL/min/kg.

4. For comparison, these values are significantly greater than those that have been measured for Olympic Pursuit Champions and World Record Holders (average power output over 4min, approx. 7.5 W/kg) or Tour de France GC winners (VO<sub>2</sub>max, approx. 85 mL/min/kg).

5. It is also noted that there is no circumstantial evidence that might suggest that the rider is a globally significant World Class athlete. For example, the rider does not have any IRL cycling (or other IRL sport) results, and their typical training load amounts to around 3 hours a week of low intensity cycling on Zwift.

6. To give the rider the maximum possible benefit of the doubt, Zwift contacted them with the above evidence and offered them the opportunity to demonstrate that they were capable of such a world class performance in an independent test.

The rider accepted the offer and conducted an independent test of their maximum average power output while simultaneously using the same powermeter that they used for the above named event. This test took them 4 minutes 47 seconds to complete with the following results.

- Their powermeter showed an average power output of 511 Watts.
- The independent measurement of their average power output was approx. 400 Watts.

This therefore conclusively demonstrated that their powermeter gave results that were broadly consistent with their performance in the above named event, but was very significantly miscalibrated (over-reading by greater than 25%) compared to the power they were actually producing.

7. The rider's performance in the above named event was however determined by the power data given by their trainer, and not by their powermeter. Given that their dual-recording of the event showed that their powermeter and trainer gave similar values throughout the event, this therefore means that:

- Their trainer must also have been very significantly miscalibrated (over-reading by greater than 25%) compared to the power they were actually producing; AND
- The amount by which their trainer was miscalibrated, almost exactly matched the amount by which their powermeter was miscalibrated.

For obvious reasons, it is highly unlikely that two completely independent pieces of equipment would be both so badly miscalibrated, and miscalibrated by exactly the same amount, by accident. Further, it is highly unusual that the trainer the rider used was self-calibrating, and with a manufacturer claimed accuracy of +/- 1%, and still showed such a high discrepancy between the power values it measured and the power values the rider was physically capable of producing.

8. In parallel to the above, detailed analysis of the rider's datastreams from their computer to the Zwift servers during the event showed that one of the data channels used was disconnected throughout the event. This disconnection occurred after the rider joined the pen for the event, and with only a couple of minutes to go before the race started. Further, no other rider showed a similar disconnection, and retrospective detailed analysis of other races the rider had competed in showed a similar pattern of disconnection of just this one specific channel just before their races began, but no such disconnections when they were just training.

It is notable that the disconnected channel normally carries analytics information about the riders system – in particular information such as the equipment that the rider is using. Zwift considers the absence of this analytics information to be equivalent to the presence of a masking-agent in anti-doping – for example, it would allow the rider to change their paired device from their trainer to a computer-controlled device that gave falsified power information, without such a change being recorded by Zwift's servers.

9. It is also notable that at no point when presenting all of the above evidence to the rider prior to issuing this decision, did they provide any explanation as to why the data they produced was physically implausible or why the full set of Zwift data was not being transmitted from their computer to the Zwift servers.


Indeed, the only notable action taken by the rider after being presented with the above evidence, was that they then immediately deleted their entire history of over 150 publicly visible dual-recordings from ZwiftPower.

**Decision:**

- The Performance Verification Board is comfortably satisfied that the power recorded by the trainer and used in-game did not match the actual power produced by the rider and/or was not the actual power measured by the trainer, and therefore that the rider's performance in the event cannot be verified.
- Further, the Board is comfortably satisfied that this was a result of deliberate manipulation of data, masked by the deliberate disconnection of the Zwift analytics datastream channel, rather than accidental miscalibration of two independent pieces of equipment by the same amount coupled with a coincidental accidental loss of analytics data.
- Pursuant to Appendix B of the Zwift Cycling Esports Rules and Regulations, the Board has therefore decided that a Tier 3 sanction ("Bringing the sport into disrepute") shall be applied, and the rider shall receive a six month suspension from all events held under the Zwift Cycling Esports Rules and Regulations.

This suspension shall run from the date of the above named event, 13 November 2022, to 12 May 2023 inclusive.

- Additionally, the Board has decided that the rider shall be retrospectively disqualified from the results of all events held on Zwift from 13 November 2022 onwards (explicitly, including the above named event). The rider may continue to use Zwift to train and participate in community level events, but their results shall not count towards any rankings (including, but not limited to, those on ZwiftPower), or be eligible for consideration towards any competitions or prizes, until after the above six month suspension has elapsed.
- If, within 1 month of the issuing of this decision, the rider can perform an independent laboratory test & anti-doping test to the satisfaction of Zwift that shows that they are naturally physiologically capable of producing the results they have recorded in this event (including, but not limited to, an average power output of 8.5 W/kg for 4 mins), the Board will happily reverse its decision, reinstate the rider's results, and additionally reimburse the rider for the cost of the tests.
- The rider should note that as part of Zwift's commitment to transparency around significant sanctions, this decision will be published on the Zwift website alongside the Esports Rules and Regulations. Whilst Zwift does not normally actively publicise individual sanctions beyond putting them on the website, the rider should be aware that it is likely that the media and/or wider racing community may view it, and therefore should expect increased public scrutiny of their performances and behaviour.

<b>Signature:</b>	
<b>Name:</b>	Dr George Gilbert Chair, Zwift Cycling Esports Commission
<b>Date:</b>	7 December 2022