

Here is what HD suggests with the SE Tuner for recording data:

You are now ready to perform data recording on a closed course track. To maximize the data being recorded follow these tips:

- Ensure the engine is fully warm prior to starting a data recording
- Ride the motorcycle at many different engine speeds and throttle positions.
- Perform some constant speed runs at a stable throttle position in multiple gears.
- Perform some increasing speed runs at a steady throttle position in multiple gears.
- If large corrections are needed to a calibration, multiple data collections and calibration updates are required to ensure a proper calibration.
- While recording data, ride at 5 mph increments from idle (low engine speed) to maximum engine speed or a safe vehicle speed for track conditions in all gears. Hold constant speed for 5–10 seconds at each speed/gear combination.
- To fine tune the drivability region of the calibration, perform data recording under normal operation.
- While recording data, perform multiple wide open throttle acceleration runs from 2500 rpm until maximum engine speed or a safe vehicle speed in 2nd through 6th gears.
- Roll-on the throttle, rather than snapping open the throttle, to reduce acceleration enrichment. The Smart tune function cannot work if acceleration enrichment is present.
- Roll-off the throttle slowly, rather than releasing the throttle quickly, to reduce deceleration enrichment. The Smart tune function cannot work if deceleration enrichment is present.
- Repeat the data recording process and calibration processing several times to attain a proper calibration.
- It is not necessary to record data higher than 80% throttle.
- Make sure to stop data recording prior to shutting off the vehicle.