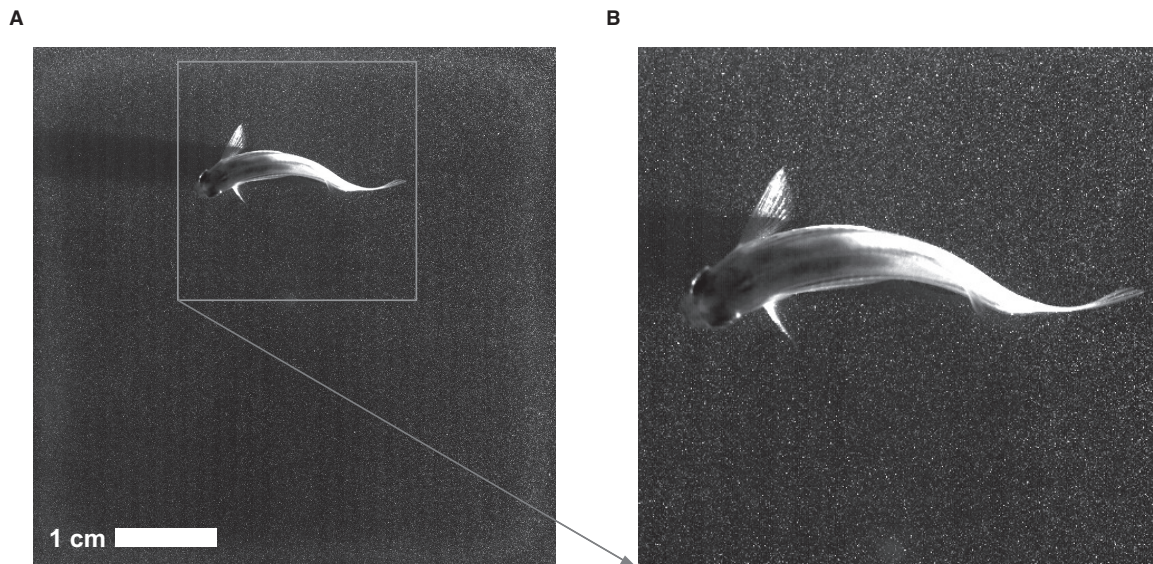


**Figure S1: Circuit diagram to power IR LEDs.** The IR LEDs are powered by a 12-35 V input and may be switched off by supplying a 5 V input control signal.



**Figure S2: DPIV image of zebrafish (A) and inset (B).** (A) Full frame DPIV image (1024 × 1024 pixels) of zebrafish during a turning maneuver. (B) Inset showing the fish body and laser illuminated particles around the fish body.