

RoboFest Hawaii 2007 Competition Rules • Aug 31, 2007

• Line Follower Sprint

Robots are required to use lights sensors to track and follow a closed course comprised of a black line on a white surface for three laps as quickly as possible.

Competition:

Robots must operate autonomously, with no human intervention after being started
Robots are given three runs (5 min limit each), with retooling or configuration allowed between runs

Line Follower Sprint will be open for competition from 10:00 - 1:00

Line Follower Sprint field will be open for calibration, practice from 9:00 - 9:50

Robot size is limited to 12 inches square in width, length, and 5 pounds in weight

Competition classes:

* Student Class (14 and younger, stock Lego parts only)

* Open Class (15 and older, using any robotics platform)

Playing field:

4' x 8' white surface with 3/4" wide black electrical tape (Columbia brand made by Plymouth Rubber Co) adhered to a white surface in random arcs and curves not to be less than 90 degrees within six inches.

The course is closed, with the finish line joining the start line.

Tightest radius of a turn shall be no less than 4", and closest approach of the line to itself (eg. for tight turns) shall be no less than 8"

The field could be a line following outline of the Big Island or perhaps a line that travels around the state of Hawaii, where robots assume a role of voyaging canoes?

Scoring:

Timed event, with fastest robot to circuit track three times winning

Team member may set robot at starting line and activate it, but may not touch the robot until it finishes the course or runs off the line

If a robot should go off the line,

Student Class: Official will place robot back onto the line without advancing its position, and add 5 seconds to the robot's time

Open Class: Robot is disqualified for the run (null score)
