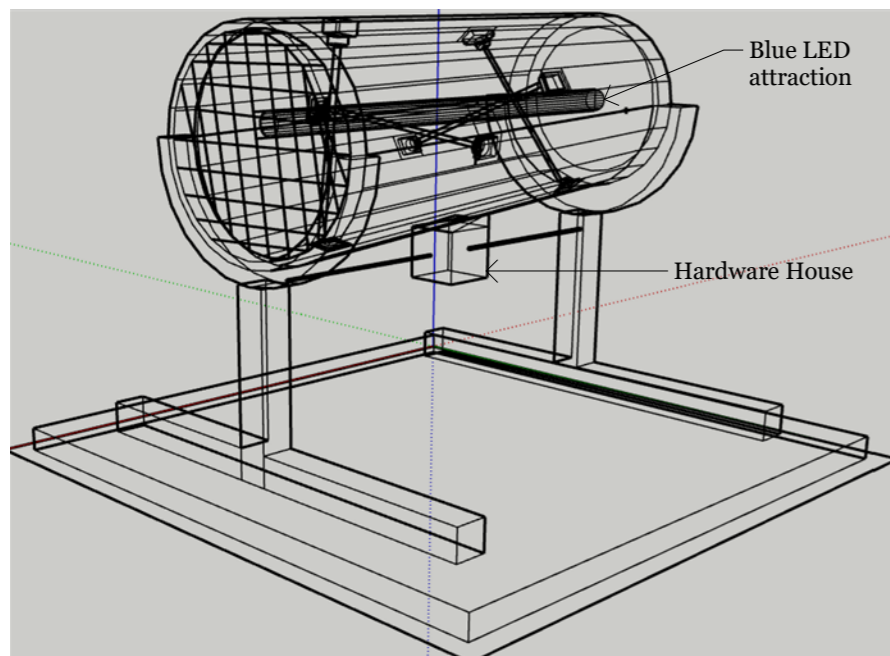


**Fig.1 : X-Ray View**  
The figure displays the structural framework of the device.

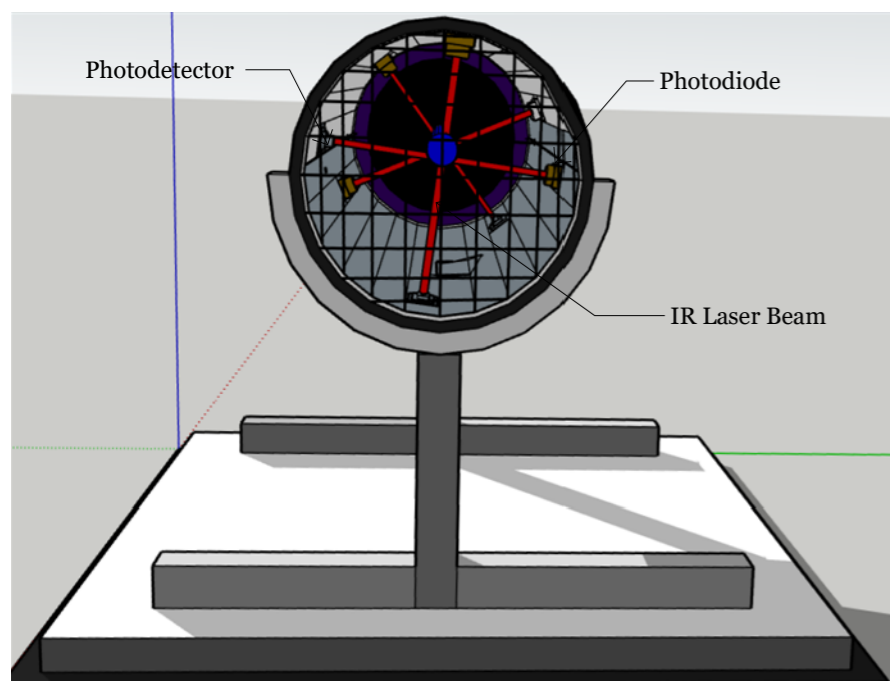
The front of the cylinder consists of a mesh to prevent large insects from flying in.

A blue LED attracts the mosquito to enter the cylinder.



**Fig. 2: Wireframe Model**  
The interior consists of four laser beams. A square base provides the mechanical stability to withstand winds.

There is a compartment under the cylinder to house the Arduino/R-pi and other components.



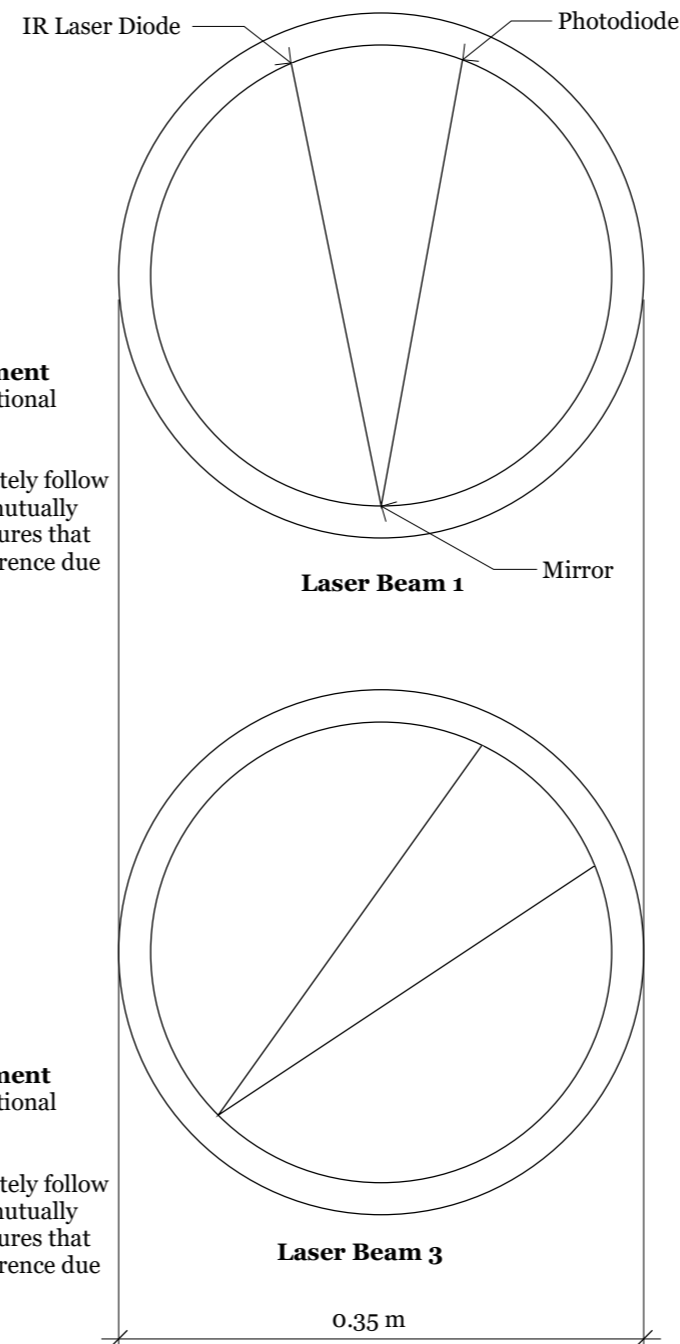
**Fig.3: Front View**  
The laser beams are arranged so as to maximize the probability of interaction between the IR beam and the mosquito.

Each beam is placed as a diameter to maximize the coverage in terms of length.

The angular separation between any two beams is either 45 or 90 degrees.

**Fig.5: Lateral View**  
The body of the cylinder itself is slanted at an angle with the horizontal to prevent rain water from accumulating.

A black cylinder on a light background makes the device easy for mosquitos to spot and also get attracted to.



**Fig.4a : Laser Alignment**  
The figure is a cross sectional view of the lasers.

Beams 1 and 2 immediately follow each other as they are mutually perpendicular. This ensures that there is minimal interference due to scattering.

**Fig.4b : Laser Alignment**  
The figure is a cross sectional view of the lasers.

Beams 1 and 2 immediately follow each other as they are mutually perpendicular. This ensures that there is minimal interference due to scattering.

