Constraints involve the limits of variables that create the product. These values are only what is needed to accomplish what is specified by the client.

Functionality:

- The light wand length should be between 30-50cm so someone can clearly see from up to 50 feet away.

- Should have a timer that the user can set

- A wide or heavy base to prevent major wobble due to rotation

- Should have a moderate strength magnets on the bottom of base to prevent sliding on a slightly slanted surface

- Light wand must have at least 30 LEDs to create a clear enough image

- Max amount of rotational wiggle room < 1cm

- There needs to be at least one microcontroller that controls the LEDs

Economic:

- Total budget: $250

Energy:

- battery life:

- 1 full hour run time

- 4 months while not in use

Usability:

- Easy to assemble with light wand attaching to the base

- Needs to be able to fit in the average car trunk

- Should be less than 30 pounds

- Easy to carry for a short distance

Health and Safety:

- Light wand should not rotate at 960 - 1500 rpms to reduce chance of epileptic seizures

- Motor should quickly stop when something obstructs the rotation like a hand or ground after being tipped over

Operational:

- Must be able to run in temperatures ranging from 30-120 fahrenheit

Time:

- Must be built in 1 month