Electromagnetic Energy Harvester to Power LEDs Illumination

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This research is based on the existence of electromagnetic waves that are discarded without being optimally used. The objectives are to build a tool to utilize the discarded electromagnetic waves to become a new energy and also to catch the discarded electromagnetic waves to become useful LEDs illumination for society. Energy from discarded electromagnetic waves can be taken by using coils by directing AC to DC using an LTC3588 module. The energy that is produced is saved in a capacitor and released in LEDs as an indicator. The discarded electromagnetic waves can become LEDs illumination power sources with 25 joules of maximum energy, 10.9 joules effective energy, and can be turned on the LEDs for 7 minutes. The Electromagnetic Energy Harvester is created as the discarded electromagnetic waves utilizer to become a new energy and the electromagnetic waves can be caught by Electromagnetic Energy Harvester to turn on LEDs illumination. Keywords: electromagnetic waves, energy harvester, prototype, electric current, energy.