Table 3: Environmental analysis computation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number of incandescent bulb** | **Power rating of incandescent bulb** | **Number of CFL** | **Power rating of CFL** | **Average daily duty cycle** |
| 1 | 60W | 1 | 20W | 6 hours |
| ADI[[1]](#endnote-1) = 0.06kW \* 6hours \* 365 days = 131.4 kWh/year | | | | |
| ADCFL[[2]](#endnote-2) = 0.02kW \* 6 hours \* 365 days = 43.8 kWh/year | | | | |
| Emission from incandescent = 131.4 kWh/year \* 0.86 kg CO2-e/kWh = 113 kg CO2-e/year | | | | |
| Emission from CFL = 43.8 kWh/year \* 0.86 kg CO2-e/kWh = 37.67 kg CO2-e/year | | | | |
| Emission saving = 113 – 37.67 = 75.33 kg CO2-e/year | | | | |

1. ADI; activity data for incandescent lamp [↑](#endnote-ref-1)
2. ADCFL; activity data for CFL [↑](#endnote-ref-2)