CLAIMS

1. A method of providing general white light illumination with a a light source comprising a LED structure comprised of

a substrate;

a light emitting area defined on the substrate as a cavity;

a first type of light emitting semiconductor source with bactericidal and germicidal characteristics mounted in the cavity;

a second type of light emitting semiconductor source mounted in the cavity with ability to excite the wavelength conversion material to generate white light; and

a wavelength conversion material layer formed on top of the light emitting semiconductor sources, or

a lighting fixture facilitating white light illumination and continuous disinfection functionality, comprising at least one integrated LED source having

a first emission, being non-perceptible to human eye, in the range of 360 to 430 nm and a full width half maximum of less than 30 nm, with

an additional emission peak being perceptible to human eye as a white light with maximum emission in the range of 430 to 700 nm or

a lighting fixture facilitating white light illumination and continuous disinfection functionality comprising at least one integrated source having

a first emission, being non-perceptible to human eye, in the range of 395 to 408 nm and a full width half maximum of less than 5 nm; and

a second emission being perceptible to human eye as a white light with maximum emission in the range of 450 to 700 nm,

wherein

- in a first set point of operation, the light source is adjusted to provide white light illumination with a bactericidal and optionally germicidal low-intensity emission in the background of the white light emission, non-perceptible to human eye; and
- in a second set point of operation, the white light illumination is tuned down, while the bactericidal and optionally germicidal emission is maximized.

2. The method according to claim 1, wherein the first set point of operation is carried out in the presence of humans.

3. The method according to claim 1 or 2, wherein the second set point of operation is carried out in a situation with no humans present.

4. The method according to any of claims 1 to 3, wherein in the second point of operation, the white light illumination is turned off.