[Document Name] Claims

[Claim 1]

A lighting system for plant cultivation comprising:

a light source;

a light source driving unit that drives the light source; and

a control unit that transmits a pulse signal to the light source driving unit,

the control unit comprising:

a first pulse generating unit that generates a first pulse signal of a predetermined frequency;

a second pulse generating unit that generates a second pulse signal of a frequency different from the predetermined frequency; and

a pulse signal selecting unit that selects any one of the first pulse signal and the second pulse signal to transmit the selected one to the light source driving unit,

the light source driving unit comprising:

a frequency determining unit that determines whether the frequency of the pulse signal received from the control unit is the frequency of the first pulse signal or the frequency of the second pulse signal;

a first driving unit that, when receiving the first pulse signal from the control unit, converts the first pulse signal to a constant current output to drive the light source; and

a second driving unit that, when receiving the second pulse signal from the control unit, outputs a pulse with an original pulse waveform of the second pulse signal to drive the light source.

[Claim 2]

The lighting system for plant cultivation as recited in claim 3, further comprising

a data storage unit that can store control data for

controlling the pulse signal selecting unit in accordance with a variety of a plant to be cultivated,

wherein the control unit controls an operation of the pulse signal selecting unit on a basis of the control data stored in the data storage unit.

[Claim 3]

The lighting system for plant cultivation as recited in claim 3 or 4, further comprising

an entry and exit information notifying unit that notifies the control unit of entry information in accordance with entry of a person into a cultivation area and notifies the control unit of exit information in accordance with exit of a person from the cultivation area,

wherein, during a period from when the entry and exit information notifying unit notifies the control unit of the entry information to when the entry and exit information notifying unit notifies the control unit of the exit information, the control unit makes the pulse signal selecting unit select the first pulse signal.