Instruction Manuals of FCC

FCC Compliance Statement for Unite States Users: -----

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B ISM equipment, pursuant to Part 18 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- * Reorient or relocate the receiving antenna.
- * Increase the separation between the equipment and receiver.
- * Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- * Consult the dealer or an experienced radio / TV technician for help.

***This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45-30 MHz.

Declaration of Conformity for Canadian Users: -----

This apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet apareil respecte toutes les exigences du Reglement sur le matèriel brouilleur du Canada.

Description of Circuitry

This fixture was equipped with an electronic transformer GET-50A.

120V / 60Hz power supply firstly pass an over-current protection fuse F_1 (2.0A/125Vac). then enter the EMI/RFI filter composed by a "I" type choke (0.9mH) and a capacitor C_1 (224/400Vdc) with a discharge resistor R_1 (1.0M Ω 1/4W).

Then enter the bridge rectification composed by rectifier diodes (1N4007 x 4), the capacitors C_2 (224/400Vdc) for smoothing the wave shape. The voltage changed from 120Vac to 160Vdc.

Now, full-wavely rectified 160Vdc the filtered supply is divided into two blanches. One passes through the resistor R_2 (120K) for trigger start circuit. The trigger start circuit composed by a trigger (DB3) and a capacitor C_3 (103/630V) and a core L_1 (4Ts:1Ts:4Ts). Another is a push-pull output which is supplied to Q_1 and Q_2 . Then the 160Vdc enter the frequency converter composed by 2 transistor (13005) and a pulse-transformer L_1 . So, the circuitry become high-frequent oscillator (frequency is from 25KHz to 30KHz) and a high-frequency transformer Output 12Vac for the load (lamp) 12V/50W. There is a Over-load protection circuitry composed by 2 transistor (C9014 + 8050) for more than 180% over-load protection and a Over-heat protection circuitry composed by a temperature fuse F_2 (115°C, 2A, 250V) for over-heat protection.