

RF Exposures Evaluation

For Maximum Permissible Exposure (MPE) evaluation of the product, the maximum power density at 20 cm from this transmitter shall be less than the General Population / Uncontrolled MPE limit in OET Bulletin 65.

For the product of tested model of KW-1008, the measured maximum field strength measured (FS) was 111.1 dB μ V/m.

The distance (D) between the antenna and the equipment under test (EUT) was 3 meters.

And the maximum source-based time-averaging duty factor is 11.98%.

From these data, the exposed power density at a distance (R) of 20cm from the center of radiation of the antenna can be calculated according to OET Bulletin 65 as follow:

$$\begin{aligned}\text{The radiated power} &= (\text{FS} \cdot \text{D})^2 / 30 \\ &= 38.6 \text{mW}\end{aligned}$$

$$\begin{aligned}\text{The radiated (EIRP) source-based time-averaging output power} &= (38.6 \cdot 0.1198) \text{mW} \\ &= 4.6 \text{mW}\end{aligned}$$

$$\begin{aligned}\text{The power density at 20 cm from the antenna} &= \text{EIRP} / 4\pi R^2 \\ &= 0.0009 \text{ mW/cm}^2\end{aligned}$$

In the frequency range of 1,500 - 100,000MHz, the MPE limit is 1.0 mWcm-2 for general population and uncontrolled exposure. As the measured power density at 20cm from the transmitter is lower than the MPE limit, the compliance to the MPE limit can be ensured by indicating the minimum 20cm separation between the transmitter's radiating structures and body of the user or nearby persons.

The following RF exposure statement is proposed to be included in the user manual:

“FCC RF Radiation Exposure Statement Caution: To maintain compliance with the FCC’s RF exposure guidelines, place the product at least 20cm from nearby persons.”

Safety Information

Precautions for the Unit SECURITY

- Before operation, check if the voltage of the unit is in line with the local voltage.
- Hold the plug to disconnect it from the mains outlet. Do not pull the power cord.
- When the plug of the unit is connected to the mains outlet, the unit will be still connected to DC even if the power is turned off.
- Disconnect the plug as soon as liquid or objects enter the unit. The unit cannot be used until being checked by experts.
- Do not open the cabinet. Laser rays employed by the unit may damage eyes. Any servicing should be done by qualified service personnel.

PLACEMENT

- Put the unit where ventilation is good enough to prevent overheating.
- Never put the unit in direct sunlight or near heat sources.
- To protect the pickup, do not put the unit where there is a lot of dust. If there is dust on the pickup, use a cleaning disc to clean it. Refer to the operation instructions of the cleaning disc you bought.

CONDENSATION

- The unit is suddenly moved from a cold place to a warm place.
- Use of the unit in a humid place.
- In these cases, the unit will not work. Unloading the disc and leaving the unit on for about one hour will evaporate the water, allowing the unit to function normally again.

CLEANING

- Use a soft cloth with a little neutral detergent to wipe the cabinet, panel and controls. Never use abrasive paper, polishing powder or any solvent such as alcohol or gasoline.

Federal Communications Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 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 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.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.