

STATEMENT CONCERNING RF HUMAN EXPOSURE –Section 24.51(c)--

Pursuant to 47 CFR §24.52 of the FCC Rules and Regulations, personal communications services (PCS) equipment is subject to the radiofrequency radiation exposure requirements specified in §1.1307(b), §2.1091 and §2.1093, as appropriate.

The PCS terminal "FLSU" is designed for and intended to be used in a fixed application. For fixed transmitters, §1.1307(b) requires the preparation of an Environmental Assessment (EA) if the transmitter would cause human exposure to levels of radiofrequency radiation in excess of applicable limits given in §1.1310. However, determination of compliance with these limits and preparation of an EA if they are exceeded is required only for licensed PCS facilities, operations and transmitters with the following characteristics:

1. non-building-mounted antennas: height above ground level to lowest point of antenna < 10 m and total power of all channels > 2000 W ERP (3280 W EIRP)
2. building-mounted antennas: total power of all channels > 2000 W ERP (3280 W EIRP)

Since the PCS terminal "FLSU" transmits with a maximum output power of 22.8 dBm (0.19W), the maximum specified antenna gain of 12 dBi results in a maximum EIRP of 3.02W, well below the level which would trigger a routine environmental evaluation. Therefore, the PCS terminal "FLSU" is categorically excluded from performance of a routine environmental evaluation or preparation of an EA.

The limit for Maximum Permissible Exposure (MPE) at the frequency of 1,902.5 MHz is 1.00 mW/cm² for General Population/Uncontrolled Exposure in §1.1310.

The conversion from power to power density uses the following equation:

$$PD = P_r G / 4\pi r^2 = EIRP / 4\pi r^2$$

Where: PD is Power Density (in W/m²);

P_r is radiated power (in watts);

G is the numeric gain of the antenna;

r is the distance (in meters) from the antenna; and

EIRP is Equivalent Isotropically Radiated Power (= $P_r G$).

The conversion from W/m² to mW/cm² is: mW/cm² = W/m²/10

Calculations:

At a distance of $r = 1$ m from the antenna, the power density is (note that this power density will only be induced on an individual if that individual was physically 1 m in line-of-site of the antenna):

Power density calculations at a distance of $r = 1$ m.

Maximum EIRP (W)	3.02
Power Density (W/m^2)	0.24
Power Density (mW/cm^2)	0.024

The distance where the power density equals MPE $1.00 mW/cm^2$.

Minimum distance in m for MPE	0.155
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At this power level, an individual would need to be within 0.155 m of the device in order to be at the limit for General Population/Uncontrolled Exposure.

Kyocera Corporation certifies that it has determined that the PCS terminal "FLSU" complies with the RF hazard requirements applicable to broadband PCS equipment operating under the authority of 47 CFR Part 24, Subpart E of the FCC Rules and Regulations.

This determination is based on the following installation and use of the "FLSU".
The antenna is located on a roof at a separation of at least 20 cm from any persons.

To ensure that the "FLSU" complies with the FCC regulations limiting human exposure to RF radiation, the installation manual contains the following statement.

To assure compliance with the United States FCC regulations on RF Exposure, the Antenna Unit of this equipment must be installed in such a way to maintain a separation of at least 20 cm (7.8 inches) between the antenna and the body of any user and nearby person.
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