

Exhibit 11 – RF Exposure Information

Motorola Customer Premise Equipment (CPE)

FCC ID: MIJZEP CPE-USB-01

Model No. LT 20M-00

This exhibit presents a discussion of the Motorola Zephyr CPE Transceiver relative to the RF Exposure requirements for transmitters approved for use in the Local Multipoint Distribution Service as defined in FCC Parts 1, 2 and 101 and Office of Engineering Technology Bulletin 65.

11.0 RF Exposure Requirements for LMDS Transmitters

Some transmitters approved for operation for Local Multipoint Distribution Service (LMDS) under FCC Part 101 are subject to an Environmental Evaluation as defined in Part 1, Paragraph 1.1307, and are required to display warning labels. FCC Part 2 also provides requirements for some transmitters with specific usage. This exhibit provides information relating to the specific requirements for the Motorola Zephyr CPE Transceiver for compliance with the RF Exposure requirements of FCC Parts 1, 2 and 101, and FCC Office of Engineering and Technology (OET) Bulletin 65.

11.1 Environmental Assessment

FCC Part 1, Paragraph 1.1307 and OET Bulletin 65, Appendix A, Table 1, state that "Routine Environmental Evaluation" must be performed for LMDS transmitters if:

- a) for non-building-mounted antennas, the height above ground level to the lowest point of the antenna is less than 10 meters AND the power is greater than 1640 Watts EIRP
- b) for building-mounted antennas, the power is greater than 1640 Watts EIRP. The Zephyr CPE transmitter at maximum rated operating power has an EIRP of 50.1 Watts, considerably less than that required for an Environment Assessment.

However, an Environmental Assessment was performed on the Motorola CPE. Figure 11-1 is a copy of that assessment. As can be seen from this assessment the RF exposure levels do not exceed the $1\text{mW}/\text{cm}^2$ level for uncontrolled environments.

11.2 Radio Frequency Radiation Exposure Evaluation Assessment

FCC Part 2, Paragraph 2.1091 defines the requirements for a radio frequency radiation exposure evaluation for mobile devices and 2.1093 defines the same for portable devices. The Zephyr CPE is neither mobile nor portable and is therefore considered exempt from these requirements.

11.3 Effective Isotropic Radiated Power (EIRP) and Power Density Calculations

The maximum EIRP from the Zephyr CPE transmitter is 50.1 Watts (+17 dBW), based on a maximum power output of 0.016 Watts (-18dBW) and an antenna gain 35 dBi. The maximum on-axis power density of High Gain transmitter was measured at 0.35 mW/cm².

11.4 Labeling Requirements

Part 1, Paragraph 1.1307, Table 1 specifies that LMDS *subscriber transceivers* are required to have a label which provides adequate notice regarding potential radio frequency hazards relative to the limits of Part 1, Paragraph 1.1310. Figure 11-2 shows the label that is to be placed on the CPE and Figure 11-3 shows the location of the label on the CPE.

