

FCC Part 15 Subpart C

Frequency Spread Spectrum Transmitter

Class 2 Permissive Change Test Report

Appendix A

RF Exposure Information

Manufacturer: LXE, Inc.

Model: 480628-4096 radio card

Variants: ♦ 480628-4096 radio card with
158586-0001 Integrated Antenna
♦ 480628-4096 radio card with
158399-001 Integrated Antenna

FCC ID: KDZ480628-4096

LXE Project Number: 02-100

General Information:

Applicant: LXE, Inc
 FCC ID: KDZ480628-4096
 Device Category: Mobile Device
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Model No: 158586-0001 & 158399-0001
 Antenna Types: Omni Directional (Both)
 Antenna Gains: 0dBi integrated (Both)
 Transmitter Conducted Power: 15.44dBm or 35mW
 Maximum System EIRP: 15.44dBm or 35mW

Operating Configuration: Handheld Device
 Exposure Conditions: Usually greater than 20cm from the population

MPE Calculation

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } P_d (mW/cm^2) = \frac{E^2}{3770}$$

MPE Distance

MPE Calculator for 2400MHz Mobile Equipment Limits for General Population/Uncontrolled Exposure*					
Transmit Freq. (MHz)	Radio Power (dBm)	Antenna Gain (dBi)	System EIRP (mW)	MPE Limit (mW/cm ²)	MPE Distance (cm)
2400	15.44	0	35	1.00	1.67
2400	15.44	0	35	1.00	1.67

SAR test justification:

These antennas are intended to be mounted in a handheld device. Except for the hands, the antennas will be installed such that a minimum distance of 20cm is maintained from them to the any part of the rest of the user's body. Due to the higher limits for hands, wrist, feet and ankles and the proximity of the antenna to the rest of the body, SAR evaluation was deemed unnecessary.

Conclusion

This device complies with the MPE requirements by providing adequate separation between the device and any body parts with the exception of the hands.