RF EXPOSURE SUMMARY PER FCC KDB INQUIRY TRACKING NUMBER 517129

Plantronics Model: D100/D100-M DECT UPCS Wireless USB Audio Adapter FCC ID: AL8-D100X

FCC Response to KDB Inquiry Tracking Number 517129

This device has been excluded from SAR testing requirements based on the source-based time-averaged conducted output power is less than 60/f. This document serves as the RF exposure exhibit in the FCC Form 731 application in lieu of a SAR report and has been reviewed and accepted by the FCC prior to submittal to the TCB.

RF Exposure Environment

The D100 and D100-M (MOC version) wireless USB audio adapter is intended for operation in the General Population / Uncontrolled RF exposure environment.

Operational Description

The D100/D100-M is a wireless USB audio system. The D100/D100-M adapter plugs into a standard PC USB jack and subscribes to a provided WH210 headset. A WH210 headset (FCC ID: AL8-WH210) is provided for device pairing. The EUT system is a UPCS TDMA system which "further divides access in time" in the context of clause 6.2.2 of C63.17-2006. Frame period is 10mS. There are 24 timeslots per frame, with one of the first 12 timeslots used for the headset transmissions and one of the last 12 timeslots used for the base (D100/D100-M) transmissions. Transmit and receive timeslots are 5mS apart in time.

Duty Cycle

Standard UPCS single slot duty cycle is 390us transmit per 10ms frame for a duty cycle of 3.9% (1 slot out of 24). The worst-case (maximum) transmission duration is CAT-iq longslot wideband mode which is equivalent to 1.5 standard DECT/UPCS slots (approximately 590us duration) for a duty cycle of 5.9% (1.5 slots out of 24). Note: The D100/D100-M does not support the proprietary 780us dual-slot wideband mode (2 slots out of 24) used on other Plantronics DECT headset systems.

RF Output Power

Manufacturer's Rated Maximum Peak Conducted Power = 18.4 dBm (69.2 mW)

(1/24 slots - 390us transmit per 10ms frame)
Manufacturer's Specified Source-Based Time-Averaged Duty Cycle = 3.9%
Source-Based Time-Averaged Conducted Output Power = 4.3 dBm (2.7 mW)
$60/f_{(GHz)}$ mW = 31.1 mW
Source-based time-averaged conducted output power = < 60/f

(1.5/24 slots - 590us transmit per 10ms frame)
Manufacturer's Specified Source-Based Time-Averaged Duty Cycle = 5.9%
Source-Based Time-Averaged Conducted Output Power = 6.1 dBm (4.1 mW)
$60/f_{(GHz)}$ mW = 31.1 mW
Source-based time-averaged conducted output power = < 60/f

RF Exposure Exhibit Revision No.s

Revision 1.1 - March 08, 2010
List 2 Models & Add Manufacturer Statement
Revision 1.0 - Initial Release - March 08, 2010

Manufacturer Statement re Model Difference

The D100 and D100-M are electrically and mechanically identical. The only difference is that the D100-M is optimized (contains firmware) for compatibility with Microsoft Office Communicator.