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SAR Test Report for Motorola the 800 MHz mobile cellular phone (FCC ID IHDT5AT1).

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The Motorola Personal Communications Sector Product Safety Laboratory has evaluated the 800 MHz mobile cellular phone (FCC ID IHDT5AT1), for the need to conduct SAR evaluation. In 47 CFR § 2.1091, paragraph (b) defines a mobile device as “a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter’s radiating structure(s) and the body of the user or nearby persons.” The 800 MHz mobile cellular phone is intended to be installed into a vehicle such that the unit is physically secured at one location. In the installation guide supplied with the product, Motorola has made the following statement: “**IMPORTANT:** To meet the FCC’s RF Exposure Guidelines, the antenna should be installed so there is at least 20 cm of separation between the body of the user and nearby persons and the antenna”. Based on the installation of the transceiver and the antenna, the transmitters radiating structure is more than 20 centimeters from the user. Thus, the 800 MHz mobile cellular phone is a “mobile device” as defined in section § 2.1091 paragraph (b).

Paragraph (c) gives the descriptions of types of mobile devices that are subject to routine environmental evaluation for RF exposure based on frequencies of operation and transmit ERP. The IHDT5AT1 mobile cellular transceiver operates at a transmit frequency of 824 to 894MHz. It has a transmit conducted power of 0.18 Watts. The mobile antenna and cable loss together have a resulting maximum ERP of 0.14 Watts. Since the transceivers transmit frequency is below 1.5 GHz and its ERP with the supplied antenna is below 1.5 Watts, the 800 MHz mobile cellular phone (FCC ID IHDT5AT1) is “categorically excluded from routine environmental evaluation” per paragraph (c), and thus SAR evaluation is not required.