MOTOROLA

ACCREDITED

Certificate Number: **1651-04**

FCC ID: AZ492FT5854
DECLARATION OF COMPLIANCE MPE ASSESSMENT

Network & Enterprise Mobility Solutions
EME Test Laboratory
8000 West Sunrise Blvd
Fort Lauderdale, FL. 33322

Date of Report: July 27, 2006
Report Revision: Rev. O
Report ID: FCC MPE rpt_M710_Rev O_060727 SR4234

Responsible Engineer:	Michael Sailsman (Sr. Staff EME Engineer)
Date/s Tested:	N/A (MPE-Numerical assessment)
Manufacturer/Location:	Motorola, Israel South
Date submitted for test:	7/18/06
DUT Description:	Car Phone for iDEN 800/900MHz;
Test TX mode(s):	N/A (MPE-Numerical assessment)
Max. Power output:	489.78mW for 800MHz; 426.58mW for 900MHz
TX Frequency Bands:	806-825MHz and 896-901 MHz
Signaling type:	iDEN QPSK, 16QAM, 64QAM
Model(s) Tested:	F321501GNAA (MPE-Numerical assessment)
Model(s) Certified:	F321501GNAA
Serial Number(s):	NA
Classification:	General Population/Uncontrolled
Rule Part(s):	90

Based on the information provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the FCC standard 47 CFR §1.1310. This report shall not be reproduced without written approval from an officially designated representative of the Motorola EME Laboratory.

Mark Douglas signature on file for Ken Enger
Ken Enger GEMS EME Lab Senior Resource Manager,
Laboratory Director,

Approval Date: 7/27/06

Certification Date: 7/27/06

Certification No.: L1060712

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REVISION HISTORY

Date	Revision	Comments
7/27/06	O	Original release

1.0 Product and System Description

The M710 model F321501GNAA FCC ID AZ492FT5854 is a fixed mobile car phone designed for dedicated access to voice and data communication from within a vehicle. This device incorporates enhanced display, well spaced keypad with all around hands-free environment and voice activation features. This device operates in the iDEN 806-825MHz and 896-901MHz bands. The maximum operational duty cycle is 67.5%. The maximum conducted output power is 489.78mW (800MHz) and 426.58mW (900MHz) as defined by the upper limit of the production line final test station. Motorola does not offer an antenna for this device and the recommended maximum antenna gain to be used for this device is +6dBi.

The User manual for this product instructs the Systems Integrator to assure that transmission occurs only when the operator and nearby persons are at least 30 cm from the antenna. Therefore, this product will be evaluated as a mobile device per 47 CFR §1.1310 titled “Radio frequency radiation exposure limits”, generally referred to as Maximum Permissible Exposure (MPE) limits, for General Population.

2.0 Evaluation methods:

MPE numerical assessment is used to evaluate the RF exposure of this M710 car phone based on a maximum antenna gain of 6dBi for both bands of operation

According to OET Bulletin 65 Edition 97-01 Section 2, calculations can be made to predict RF field strength and power density levels around typical RF sources. For example, in the case of a single radiating antenna, a prediction for power density in the far-field of the antenna can be made by use of the general Equations (3) or (4) below. These equations are generally accurate in the far-field of an antenna but will over-predict power density in the near field, where they could be used for making a "worst case" or conservative prediction.

$$S = \frac{PG}{4\pi R^2} \qquad (3)$$

Where: S = power density (mW/cm^2)
P = power input to the antenna (mW)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna (cm)

Or

$$S = \frac{EIRP}{4\pi R^2} \qquad (4)$$

Where: EIRP = equivalent (or effective) isotropically radiated power

3.0 MPE Analysis:

Max Antenna Gain	Max power (W)	Frequency Range (MHz)	Distance (cm)	Radiated power density (mW/cm2)	(*)Radiated power density perfect reflecting ground plane (mW/cm2)		Specification Limit - FCC Max Permissible Exposure (mW/cm2)	
							Uncontrolled	Controlled
6 dBi	0.4898	806-825	30	0.116	**0.466**		0.54	2.69
6 dBi	0.4266	896-902	30	0.101	**0.405**		0.60	2.99

Note: (*) A perfect reflecting ground plane, in-phase field combination is assumed, resulting in a four-fold power density increase.

4.0 Conclusion:

The MPE results for M710 per the assessment above are compliant to the FCC General population/Uncontrolled exposure limits of f/1500 per 47 CFR §1.1310 titled “Radio frequency radiation exposure limits”.