



Maximum Permissible Exposure (MPE) Evaluation

Applicant : TOSHIBA CORPORATION
Equipment : Cable Modem
Model No. : DAZ8841A
FCC ID : QVCCMDAZ8841A

MPE Calculations

According to the OET Bulletin 65 (Edition 97-01)

$$S = \frac{PG}{4\pi R^2}$$

Where:

S=power density (in appropriate units, e.g. mW/cm²)

P=power input to antenna (in appropriate units, e.g., 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 (appropriate units, e.g., cm)

Tx Frequency= 2412 (MHz)
Maximum peak power= 17.1 (dBm)
Antenna gain= 2.0 (dBi)

P= 51.29 (mW)

G= 1.58 (numeric)

R= 20.0 (cm)

S= 0.0162 (mW/cm²) (MPE limit = 1.0 mW/cm²)

The Maximum power density at 20cm distance is calculated as : 0.0162 (mW/cm²)

Notice in the User manual

FCC Radio-Frequency Exposure Statement

This equipment generates and radiates radio-frequency energy. In order to comply with FCC radio-frequency radiation exposure guidelines for an uncontrolled environment, this equipment has to be installed and operated while maintaining a minimum body to antenna distance of 20 cm based on continuous exposure of 30 minutes.