



Maximum Permissible Exposure (MPE) Evaluation

Applicant : Sony Corporation
Equipment : Wireless LAN Converter
Model No. : PCWA-DE50
FCC ID : AK8PCWADE50

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= 5260 (MHz)
Maximum peak power= 16.4 (dBm)
Antenna gain= 4.0 (dBi)

P= 43.65 (mW)

G= 2.51 (numeric)

R= 20.0 (cm)

S= 0.0218 (mW/cm²) (MPE limit = 1.0 mW/cm²)

The Maximum power density at 20cm distance is calculated as : 0.0218 (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.