

Viareggio July 29th, 2014

Object: RF exposure info for R1270C - Quark Up - 500mW UHF RFID Ultra Compact Module
FCC ID: UVECAENRFID015

Prediction of Maximum Permissible Exposure (MPE) limit at a given distance has been performed according to Prediction Methods described in Section 2 of OET Bulletin 65, Edition 97-01.

$$\frac{P \cdot G}{4 \cdot \pi \cdot R^2}$$

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

P = power input to the 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)

MPE limit has been calculated according to General Population/Uncontrolled rules.

Frequency (MHz)	902
MPE limit (mW/cm ²)	0.60
Maximum conducted power (mW)	500
Maximum conducted power (dBm)	27.0
Antenna gain (dBi)	0.73
Maximum EIRP (dBm)	27.7
Maximum EIRP (mW)	591.5
Prediction distance (cm)	20
Maximum power density at prediction distance (mW/cm ²)	0.118
Maximum antenna allowable gain (dBi)	7.81