3.8 RF Exposure Compliance

The maximum measured antenna conducted power, P is 24.9dBm

The antenna gain, G is 3dBi

The maximum EIRP power = P + G
ERP = 24.9+ 3= 27.9dBm, or 0.616W

The limits for Maximum Permissible Exposure (MPE) for transmitter operating at 902-928MHz, MPE is 928/1500 = 0.619mW/cm^2, or 6.2W/m^2

The Power Density, S is related to EIRP with the equation:
S = EIRP / 4πD^2, where D is the safe separation distance and = 0.2m, or 20cm
S = 0.616 / 4π0.2^2,
S = 1.225mW/cm^2, or below the Maximum Permissible Exposure (MPE) of 6.2W/m^2