Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

where: S = power density
P = power input to the antenna
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

Maximum peak output power at the antenna terminal:	28.90	(dBm)
Maximum peak output power at the antenna terminal:	776.2471166	(mW)
Antenna gain(typical):	4.6	(dBi)
Maximum antenna gain:	2.884031503	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	2450	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)

Power density at prediction frequency: 0.445379 (mW/cm^2)

Therefore device complies with FCC and Industry Canada RF radiation exposure limits for gereral population as a mobile device (distance > 20cm)