Prediction of MPE limit at a given distance

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

$$S = \frac{PG}{4pR^2}$$

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

Mode: GSM

Maximum peak output power at antenna input terminal:	28.76	(dBm)	GX820
Maximum peak output power at antenna input terminal:	751.6	(mW)	
Antenna gain(typical):	3	(dBi)	Tuf Duck EXE-821-SM
Maximum antenna gain:	1.995	(numeric)	
Prediction distance:	20	(cm)	
Prediction frequency:	848.8	(MHz)	
MPE limit for uncontrolled exposure at prediction frequency:	0.565866667	(mW/cm^2)	

Power density at prediction frequency:	0.298	(mW/cm^2)
Maximum allowable antenna gain:	5.8	(dBi)
Margin of Compliance:	2.8	

CalAmp Corporation
GSM/GPRS Modem Module