RF Exposure Evaluation

1 Applicable Standard

According to FCC §1.1310 and §2.1091 (Mobile Devices) RF exposure is calculated.

Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Averaging Time (minute)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	[1] (100)	30
1.34-30	824/f	2.19/f	[1] (180/f^2)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz
[1] = Plane-wave equivalent power density

2 MPE Prediction

Predication of MPE limit at a given distance, Equation from OET Bulletin 65, Edition 97-01

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:

S = power density

P = power input to the antenna

G = numeric gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the centre of radiation of the antenna

Maximum peak output power at antenna input terminal (dBm):	46.41
Maximum peak output power at antenna input terminal (mW):	43752
Maximum antenna gain: (dBi):	16.15
Maximum Antenna Gain (numeric):	41.21
Prediction distance (cm):	400
Prediction frequency (MHz):	2132.5
Power density at predication frequency and distance (mW/cm2):	0.90
MPE limit for uncontrolled exposure at predication frequency (mW/cm2):	1.0

Conclusion: compliant