RF Exposure Statement

1. LIMITS

According to §1.1310 and §2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures				
Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)
0.3 - 1.34......................................	614	1.63	*(100)	30
1.34 - 30......................................	824/f	2.19/f	*(180/ f²)	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

* = Plane-wave equivalent power density

2. MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

$$S = PG/4\pi R^2$$

S = Power density
P = power input to 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

3. RESULTS

3-1. GSM 850 BAND

Max Average output Power at antenna input terminal (dBm)	32.800
Max Average output Power at antenna input terminal (mW)	1905.461
Prediction distance (cm)	20.000
Prediction frequency (MHz)	824.200
Antenna Gain(Peak) (dBi)	−1.500
Antenna Gain(numeric)	0.7
Power density at prediction frequency (mW/cm²)	0.26837
MPE limit for uncontrolled exposure at prediction frequency (mW/cm²)	0.549

3-2. GSM 1900 BAND

Max Average output Power at antenna input terminal (dBm)	30.500
Max Average output Power at antenna input terminal (mW)	1122.018
Prediction distance (cm)	20.0000
Prediction frequency (MHz)	1850.2000
Antenna Gain(Peak) (dBi)	−1.20000
Antenna Gain(numeric)	0.75858
Power density at prediction frequency (mW/cm²)	0.169329
MPE limit for uncontrolled exposure at prediction frequency (mW/cm²)	1.00000

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