

MPE CALCULATION
FCC ID: 2ASMN-US-G05

RF Exposure Requirements:	47 CFR §1.1307(b)
RF Radiation Exposure Limits:	47 CFR §1.1310
RF Radiation Exposure Guidelines:	FCC OST/OET Bulletin Number 65
Limits for General Population/Uncontrolled Exposure in the band of:	300 - 1,500 MHz
Power Density Limit:	f/1500 mW / cm ²

Equation: $S = PG / 4\pi R^2$ or $R = \sqrt{PG / 4\pi S}$

Where, S = Power Density

P = Power Input to Antenna

G = Antenna Gain

R = distance to the center of radiated antenna

EUT: GSM base station

Power = 35.42 dBm, Antenna Gain = 20 dBi, Power density = 0.524 mW/ cm²

Type	CH Freq (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Measurement Distance (m)	Calculated MPE (mW/cm ²)	MPE Limit (mW/cm ²)	Pass/Fail
GSM	893.8	35.42	20	2.3	0.524	0.595	Pass

The Above Result had shown that the Device complied with MPE requirement.

Systems operating in areas more than 72 km (45 miles) from international borders that: (1) Are located in counties with population densities of 100 persons or fewer per square mile, based upon the most recently available population statistics from the Bureau of the Census; or, (2) Extend coverage on a secondary basis into cellular unserved areas, as those areas are defined in Title 47, CFR §22.949 (Code of Federal Regulations), the antenna gain must not exceed 23 dBi

Power = 35.42 dBm, Antenna Gain = 23 dBi, Power density = 0.540 mW/ cm²

Type	CH Freq (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Measurement Distance (m)	Calculated MPE (mW/cm ²)	MPE Limit (mW/cm ²)	Pass/Fail
GSM	893.8	35.42	23	3.2	0.540	0.595	Pass

The Above Result had shown that the Device complied with MPE requirement.

Deon

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