

Certification Exhibit

FCC ID: MTFSX6TDFWT09

FCC Rule Part: 22H, 24E

ACS Report Number: 09-0077

Applicant: Telular Corporation

RF Exposure

General Information:

Applicant: Telular Corporation
 ACS Project: 09-0077
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure
 Equipment Type: GSM/GPRS/EDGE Class 10 Module
 Maximum Antenna Gain (800 MHz): 7.82dBi
 Maximum Antenna Gain (1900 MHz): 3.01dBi

Power Limitations (Part 22.913 / 24.232):

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (Num)	Peak Conducted Pwr (dBm)	Peak Conducted Pwr (mW)	ERP (W)	EIRP (W)	Part 22 / 24 ERP/EIRP Limit (W)
836.4	7.82	6.05	32.10	1621.81	6.00	-----	7
1880	3.01	2.00	30.00	1000.00	-----	2.00	2

Source-Based Time-Averaging Power Limitations (Part 2.1091):

This Class 10 GSM/GPRS/EDGE module includes a worst case source-based time-average duty factor of 0.25.

Frequency (MHz)	Peak Conducted Pwr (dBm)	Peak Conducted Pwr (mW)	Duty Cycle GSM/GPRS/EDGE (Class 10)	Source-Based Time-Average Pwr (mW)	ERP (W)	EIRP (W)	Part 2.1091 ERP Limit (W)
836.4	32.10	1621.81	0.25	405.45	1.50	-----	1.5
1880	30.00	1000.00	0.25	250.00	0.31	-----	3

MPE Calculation:

The Power Density (mW/cm²) is calculated as follows:

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

Where:

- S = power density (in appropriate units, e.g. mW/cm²)
- P = power input to the antenna (in appropriate units, e.g., mW)
- 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 (appropriate units, e.g., cm)

Frequency (MHz)	Power Density Limit (mW/Cm ²)	Distance (cm)	Power Density (mW/cm ²)
836.4	0.56	20	0.488
1880	1.00	20	0.099

Installation Guidelines

The installation manual should contain text similar to the following advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

RF Exposure

In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element shall be installed such that a minimum separation distance of 20 centimeters will be maintained.

Conclusion

This device complies with the MPE requirements by providing adequate separation between the device, any radiating structure and the general population.