

## RF Exposure Evaluation for Mobile

FCC ID: **2ARRT-TMT7X0302**

IC: **24525-TMT7X0302**

Standards
OET Bulletin 65 Edition 97-01 August 1997
FCC 47 CFR §1.1307
FCC 47 CFR §1.1310
RSS-102 Issue 5 – March 2015

### Test limits

As specified in Table 1B of 47 CFR 1.1310 – Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure.

Frequency range (MHz)	Power density (mW/cm <sup>2</sup> )
300 – 1,500	f/1500
1,500 – 100,000	1.0

Limits specified per RSS-102, Issue 5.

Frequency range (MHz)	Power density (W/m <sup>2</sup> )	Power density (mW/cm <sup>2</sup> )
300 – 6000	0.02619 f <sup>0.6834</sup>	mW/cm <sup>2</sup> = W/m <sup>2</sup> * 0.1

Equation OET bulletin 65, page 18, edition 97-01: 
$$S = \frac{PG}{4\pi R^2} = \frac{EIRP}{4\pi R^2}$$

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 centre of radiation of the antenna

Distance = 20cm

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain -numeric- (mW/cm <sup>2</sup> )	Output Power - conducted- (dBm)	Output Power -conducted- (mW)	IC Limit (mW/cm <sup>2</sup> )	FCC Limit (mW/cm <sup>2</sup> )	Power Density value (mW/cm <sup>2</sup> )
2480	2.1	1.6218	0.90	1.23	0.5469	1.00	<b>0.0004</b>

Margin to FCC Limit (mW/cm <sup>2</sup> )	Margin to IC Limit (mW/cm <sup>2</sup> )
<b>0.9996</b>	<b>0.5465</b>

Yours Sincerely,

*T.S. Sunar*

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