RF Exposure

The maximum power density permitted as per RF exposure rules is 1.00 mW/cm

RF exposure calculation for a mobile device (GT200 is as follows).

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

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 center of radiation of the antenna

EUT Information:

Conducted Measured RF Power Output   :   23.92 dBm or .2466 Watts
Antenna Gain (Typical) - dBi   :   1.5 dbi
Antenna Gain – numerical   :   1.41
Minimum distance   :   20 cm
Frequency   :   1908.75 MHz
MPE Limit   :   1.0 mW/cm²

The worst case measured ERP was used for the calculation:

Power Density = $\dfrac{.2446 \times 1.41}{4\pi(20^2)}$

= .068613 mW/cm²

The power density at 824.7 MHz is .068613 mW/cm² at a distance of 20 cm