RF Safety Requirements to 2.1091 for Mobile Transmitters

Power Output

The EUT's maximum expected output power is

Frequency of Fundamental (MHz)	(dBm)	(Watt)
1611.88	21.43	0.139

The module specifies a +5.1 dBi antenna. Added to the conducted power output, our result is 26.53 dBm. This yields a power output of 0.450 W.

MPE Calculations

The limits for this unit (uncontrolled exposure) are 1.0 mW/cm^2 with a minimum separation distance

of 20 cm. Taking the RF Density Field Equation:

$S = (EIRP\ in\ mW)/(4rR^2)$

$S = (450\ mW)/\ 4*3.14159*20^2)$

$S = 450/5026.6$

$S = 0.09\ mW/cm^2$

This value is well below the maximum limit of 1.0 mW/cm^2.