

RF Exposure / MPE Calculation

No. : 30GE0232-HO-02

Applicant : Ricoh Company, Ltd.
Type of Equipment : Module Circuit Board
Model No. : SG4G2-TB3
FCC ID : T9FG700SE
IC Number : 144I-G700SE

Ricoh Company, Ltd. declares that Model : SG4G2-TB3
complies with FCC radiation exposure requirement specified in the FCC Rules 2.1093(for portable)/2.1091 (for mobile).

The “SG4G2-TB3“ has 4.29 mW of conducted Peak Output power and 9.38 mW of EIRP.
This kind of equipment is below 60/frequency[GHz] mW(TCB Exclusion List)
so that SAR testing is excluded. The Following calculation is the reference data for 20cm distance.

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the “SG4G2-TB3“ as calculated from FCC OET Bulletin 65 Appendix A, Table (B) Limits for General Population / Uncontrolled Exposure. This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 1.0mW/cm² uncontrolled exposure limit. The Friis formula used was:

$$S = (P * G) / (4 * \pi * r^2)$$

Where

P = 4.29 mW (Maximum peak output power)
G = 2.19 Numerical Antenna gain; equal to 3.40 dBi
r = 20.0 cm

For: SG4G2-TB3

$$S = 0.00187 \text{ mW/cm}^2$$

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