

RF Exposure / MPE Calculation

No. : 32JE0006-HO-01

Applicant	:	Hosiden Corporation
Type of Equipment	:	Bluetooth module
Model No.	:	ARC0503
FCC ID	:	VIYARC0503
IC Number	:	409B-ARC0503

Hosiden Corporation declares that Model : ARC0503
complies with FCC radiation exposure requirement specified in the FCC Rules 2.1093(for portable).

The “ARC0503“ has 1.67 mW of conducted Peak Output power and 0.84 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 “ARC0503“ 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 = 1.67 mW (Maximum peak output power)
G = 0.50 Numerical Antenna gain; equal to -3.00 dBi
r = 20.0 cm

For: ARC0503

$$S = 0.00017 \text{ mW/cm}^2$$

UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124