

RF Exposure / MPE Calculation

No. : 10191682A

Applicant : CASIO COMPUTER CO., LTD.
Type of Equipment : Electronic Cash Register (11n-20 (5GHz/5180-5320MHz, 5500-5700MHz), 11n-40 (5GHz/5190-5310MHz, 5510-5670MHz), 11a
Model No. : V-R7100-C
FCC ID : BBQVR7100

CASIO COMPUTER CO., LTD. declares that Model : V-R7100-C
complies with FCC radiation exposure requirement specified in the FCC Rule 2.1091 (for mobile).

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the "V-R7100-C" as calculated from (B) Limits for General Population / Uncontrolled Exposure of TABLE 1- LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE) of §1.1310 Radiofrequency radiation exposure limits.

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 = 47.97 mW (Maximum average output power)
G = 2.66 Numerical Antenna gain; equal to **4.25 dBi**
r = 20.0 cm

For: V-R7100-C

$$S = 0.02539 \text{ mW/cm}^2$$

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