

RF Exposure / MPE Calculation

No. : 10229481H

Applicant : Panasonic Corporation of North America
Type of Equipment : Wireless LAN Module (11b/g, 11a/n-20 (2.4GHz/5745-5825MHz),
11n-40 (2.4GHz/5755-5795MHz))
Model No. : WJ-VR3004
FCC ID : ACJ9TAWJ-VR3004

Panasonic Corporation of North America declares that Model : WJ-VR3004 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 "WJ-VR3004" 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 = 35.74 mW (Maximum average output power)
G = 1.14 Numerical Antenna gain; equal to 0.58 dBi (Antenna gain + Cable loss)
r = 20.0 cm

G is Antenna Gain with cable loss.

For: WJ-VR3004 **S = 0.00813 mW/cm² (2.4GHz)**

Where

P = 48.72 mW (Maximum average output power)
G = 0.80 Numerical Antenna gain; equal to -0.98 dBi (Antenna gain + Cable loss)
r = 20.0 cm

G is Antenna Gain with cable loss.

For: WJ-VR3004 **S = 0.00775 mW/cm² (5745-5825MHz)**