



Excellence in Compliance Testing

Certification Exhibit

FCC ID: 2AIGCWFB002

FCC Rule Part: 47 CFR Part 2.1091

ACS Project Number: 16-0222

Manufacturer: Mitsubishi Electric US, Inc.
Model: PAC-USWHS002-WF-1

RF Exposure

General Information:

Applicant: Mitsubishi Electric US, Inc.
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Inverted-F Antenna
 Antenna Gain: 3.3 dBi
 Maximum Transmitter Conducted Power: 23.83 dBm, 241.55 mW
 Maximum System EIRP: 27.13 dBm, 516.42 mW
 Exposure Conditions: 20 centimeters or greater

MPE Calculation

The Power Density (mW/cm²) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

- S = power density (in appropriate units, e.g. mW/cm²)
- P = power input to the antenna (in appropriate units, e.g., mW)
- G = power gain of the antenna in the direction of interest relative to an isotropic radiator
- R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Table 1: MPE Calculation

Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm^2)
2412	23.83	1.00	241.55	3.3	2.138	20	0.103