



Excellence in Compliance Testing

Certification Exhibit

FCC ID: VRA-SG9011098

FCC Rule Part: 15.247
IC Radio Standards Specification: RSS-210

ACS Project Number: 11-2058

Manufacturer: Sagrad
Model: SG901-1098

RF Exposure

General Information:

Applicant: Sagrad

ACS Project: 11-2058

Device Category: Mobile

Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Sagrad 3.8 dBi SG901-1066 PCB Antenna, 2.4 - 2.5 GHz

Pulse 3.2 dBi W1037 1/4 dipole antenna, 2.4 - 2.5 GHz

Pulse 4.9 dBi W1038 1/4 dipole antenna, 2.4 - 2.5 GHz

Antenna Gain: Sagrad 3.8 dBi SG901-1066 PCB Antenna

Pulse 3.2 dBi W1037 1/4 dipole antenna

Pulse 4.9 dBi W1038 1/4 dipole antenna

Maximum Transmitter Conducted Power: 23.27 dBm

Maximum System EIRP: 28.17 dBm, 656.145 mW

Exposure Conditions: Greater than 20 centimeters

MPE CalculationThe 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)

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm ²)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm ²)
2437	23.27	1.00	212.32	4.9	3.090	20	0.131

Installation Guidelines

The installation manual should contain text similar to the following advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

RF Exposure

In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element shall be installed such that a minimum separation distance of 20 centimeters will be maintained.

Conclusion

This device complies with the MPE requirements by providing adequate separation between the device, any radiating structure and the general population.