

Certification Exhibit

**FCC ID: ONTJETIREX12US
IC: 10491A-JETIREX12US**

**FCC Rule Part: 15.247
IC Radio Standards Specification: RSS-247**

ACS Project Number: 15.2048

**Manufacturer: Esprit Model
Model(s): JETIREX12US, JETIREX10US, JETIREX7US**

RF Exposure

General Information:

Applicant: Esprit Model
ACS Project: 15.2048
Device Category: Mobile
Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Coaxial Wire Antenna
Antenna Gain: 2.1 dBi
Maximum Transmitter Conducted Power: 18.91 dBm, 77.8 mW
Maximum System EIRP: 21.01 dBm, 126.18 mW
Exposure Conditions: Greater than 20 centimeters

MPE Calculation per FCC Section 1.1310

The Power Density (mW/cm^2) is calculated as follows:

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

Where:

S = power density (in appropriate units, e.g. mW/cm^2)

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: Maximum Permissible Exposure per FCC Section 1.1310

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)
2405	18.91	1.00	77.80	2.1	1.622	20	0.025

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.

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

MPE Calculation per RSS-102

Per RSS-102 Issue section 2.5.2, this device is exempt from routine RF exposure evaluation. The source-based, time-averaged maximum EIRP. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834} \text{ W}$ (adjusted for tune-up tolerance), where f is 2405 MHz;

$$1.31 \times 10^{-2} 2405^{0.6834} \text{ W} = 2.7 \text{ W EIRP}$$

The maximum permissible exposure calculations are provided below for reference.

The Power Density (W/m^2) is calculated as follows:

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

Where:

S = power density (in appropriate units, e.g. W/m^2)

P = power input to the antenna (in appropriate units, e.g., W)

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., m)

Table 2: Maximum Permissible Exposure per RSS-102

Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (W/m^2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (W/m^2)
2405	18.91	5.36	77.80	2.1	1.622	20	0.251