

NJIAL200

EXHIBIT 12

“RF Radiation Exposure”

This exhibit is submitted to comply with the submission requirements of the FCC 47 CFR section 2.1091 part b:

“For purposes of this section, a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that separation distance of at least 20 centimeters is normally maintained between the transmitter’s radiating structures(s) and the body of the user or nearby persons.....”

This exhibit is submitted to comply with the submission requirements of the FCC 47 CFR section 2.1091 part c:

“Mobile devices that operate in the Cellular Radiotelephone Service, theare subject to routine environmental evaluation for RF exposure prior to equipment authorization or use if they operate at frequencies of 1.5 GHz or below and their effective radiated power (ERP) is 1.5 watts or more, or if they operate at frequencies above 1.5 GHz and their ERP is 3 watts or more. Unlicensed....”

Submission examination in detail on FCC 47CFR section 22.1091 part b:

Whereas the “Installation and Operating Instructions” as submitted in Exhibit 7 “Users Manual” clearly states the separation distance as being 20 centimeters between the antenna and the body of the user or nearby persons, the requirement is evidenced.

Submission examination in detail on FCC 47CFR section 22.1091 part c:

Whereas the RF Exposure Information shown below shows this calculation for less than 1.5 GHZ and for less than 1.5 watts ERP the requirement is evidenced.

NJIAL200

R. Braathen
Dec 13, 2001

Maximum Radiated Power.

The NJIAL200 is designed as a 0.6 watt nominal cellular transceiver. The maximum output power is specified as 28.75 dBm over 869 MHz to 894 MHz. This is measured in accordance with 2.1046 part a.

The maximum output power, when combined with the maximum specified antenna gain of less than 3 dBd will produce an effective radiated power (ERP) of 31.75 dBm. Calculation is: $28.75 \text{ dBm} + <3 \text{ dB} = <31.75 \text{ dBm}$.

The NJIAL200 ERP with a maximum specified gain antenna is not more than the 1.5 watt (31.76 dBm ERP) requirement of section 2.1091 part c for devices operating under 1.5 GHz. This ensures the NJIAL200 is not subject to routine environmental evaluation as specified in section 2.1091.