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St.- Nr.: 159/169/01507

Federal Communications Commission
Authorization and Evaluation Division
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Applicant's declaration concerning RF Radiation Exposure

The RAYTEL Compenser (Type: 203 0111 1) is designed to be used as mobile transceiver.

The external antenna used for this mobile transmitter must provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

A safety statement concerning minimum separation distance will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

RF Human Exposure Analysis as per 47CFR § 1.1310

For transmitter operating in the 824 – 890 MHz range, paragraph 1.1310 Table 1 limits maximum permissible exposure (MPE) to $f / 1500 \text{ mW/cm}^2$ for uncontrolled environments and $f / 300 \text{ mW/cm}^2$ for controlled environments.

For transmitter operating in the 1850 – 1990 MHz range, paragraph 1.1310 Table 1 limits maximum permissible exposure (MPE) to 1.0 mW/cm^2 for uncontrolled environments and 5.0 mW/cm^2 for controlled environments.

The far field on-axis power flux density (W / cm^2) is calculated using the following formula:

$$S = G * P_T / (4 * \pi * R^2)$$

Calculations:

- Cellular Band 824-890 MHz - Limit 0.549 / 2.746

$$S = (1 * 2,377 + 10^3) / (4 * 3.14 * 20^2) = 0.473 \text{ mW/cm}^2 < \text{Limit}$$

- Cellular Band 1850-1990 MHz - Limit 1.0 / 5.0

$$S = (1 * 1.58 * 10^3) / (4 * 3.14 * 20^2) = 0.3144 \text{ mW/cm}^2 < \text{Limit}$$

The RAYTEL Compenser (Type: 203 0111 1) keeps the above mentioned limit.

Place, date Dabendorf, 04.22.2004

Signature

