



Certification Exhibit

FCC ID: 2ASEL08431142

FCC Rule Part: 47 CFR Part 2.1093

Project Number: 72143454

Manufacturer: STE Industries S.R.L.
Model: 08431142

RF Exposure

General Information:

Applicant: STE Industries S.R.L.
 Device Category: Fixed
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Minimum Test Separation Distance: 20 cm
 Highest Operating Frequency: 922.4 MHz (900MHz Radio)
 1909.8 MHz (Cellular Radio, FCC ID RI7UL865NA)
 Antenna Type: Printed Circuit Board (900MHz Radio)
 SMT Ceramic (Taoglas, P/N: PA.710.A (Cellular Radio)
 Antenna Gain: Unknown - Field Strength measurements used for evaluation (900MHz Radio)
 3.5dBi (Cellular Radio)
 Maximum Conducted Power: 33.5dBm Peak, 27.5dBm Avg (25% DC) Cellular Radio, GSM850
 30.5 dBm Peak, 24.5dBm Avg (25% DC) Cellular Radio, GSM1900
 Maximum Transmitter EIRP: -11.5 dBm[†], 0.0708mW (900MHz Radio)
 31.0 dBm, 1258.9mW (Cellular Radio)

[†]Calculated based on a 3m Field Strength measurement using a 95.2dB correction.

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/Cm ²)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm ²)
922.4	-11.5	0.61	0.0708	0	1.000	20	0.0000141
824.2	27.5	0.55	562.34	1	1.259	20	0.141
1850.2	24.5	1.00	281.84	3.2	2.089	20	0.117

Table 2: Simultaneous Transmissions Calculations

Transmit Frequency (MHz)	Power Density Limit (mW/cm ²)	Power Density (mW/cm ²)	MPE Ratio to Limit (%)	Sum of MPE Ratios (%)	Limit (%)
902.4	0.61	0.0000141	0.00	25.63	100
824.2	0.55	0.141	25.63		
902.4	0.61	0.0000141	0.00	11.7	100
1850.2	1.00	0.117	11.7		