



Certification Exhibit

FCC ID: 2ATKJ-LTSN

FCC Rule Part: 47 CFR Part 2.1093

Project Number: 72146891

Manufacturer: GE Infrastructure Sensing, LLC
Model: LUMEN-TERRAIN-Sensor-1-0-0-0-F-0-2

RF Exposure

General Information:

Applicant: GE Infrastructure Sensing, LLC
 Device Category: Fixed
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Dipole
 Antenna Gain: 2 dBi (Pulse Larsen, P/N: W5017)
 Maximum Transmitter Conducted Power: -4.2dBm, 0.38mW
 Maximum System EIRP: -2.2 dBm, 0.60 mW
 Exposure Conditions: Greater than 20 centimeters

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)
902.2	-4.2	0.60	0.38	2	1.585	20	0.0001