



## **Certification Exhibit**

**FCC ID: R7PNG0R1S5LP**

**FCC Rule Part: 47 CFR Part 2.1091**

**Project Number: 72172746**

Manufacturer: Landis + Gyr Technology, Inc  
Model: T1501 Series-5 Mesh

## **RF Exposure**

**General Information:**

Applicant: Landis + Gyr Technology, Inc  
 Device Category: Mobile  
 Environment: General Population/Uncontrolled Exposure

**Technical Information (900MHz – FCC 15.247):**

Antenna Type: Monopole Chip Antenna  
 Antenna Gains: 1 dBi  
 Maximum Transmitter Conducted Power: 29.97dBm, 993.12mW  
 Maximum System EIRP: 30.97dBm, 1250.26mW  
 Exposure Conditions: 20 centimeters  
 \*Worst Case from all 900 MHz high power modes (FHSS)

**Technical Information (900 MHz – FCC 15.249):**

Antenna Type: Monopole Chip Antenna  
 Antenna Gains: 1 dBi  
 Maximum System EIRP: -1.58dBm, 0.70mW  
 Exposure Conditions: 20 centimeters  
 \*EIRP calculated from field strength using  $EIRP (dBm) = E (dBuV/m) + 20\log(D) - 104.8$ ; where D is the measurement distance (in the far field region) in m.  
 \*Worst Case from all 900 MHz low power modes (DXT)

**MPE Calculation**

The Power Density (mW/cm<sup>2</sup>) is calculated as follows:

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

Where:

- S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)
- 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 (900 MHz – FCC 15.247)**

Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/cm <sup>2</sup> )	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )
902.3	29.97	0.60	993.12	1.0	1.259	20	0.249

**Table 2: MPE Calculation (900 MHz – FCC 15.249)**

Transmit Frequency (MHz)	Radio Power EIRP (dBm)	Power Density Limit (mW/cm <sup>2</sup> )	Radio Power EIRP (mW)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )
915	-1.58	0.61	0.70	20	0.00014