



Certification Exhibit

FCC ID: R7PNG0R1S7

FCC Rule Part: 47 CFR Part 2.1091

Project Number: 721007330

Manufacturer: Landis + Gyr Technology, Inc
Model Name: S5-MCM0

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: PIFA Antenna
 **Total Antenna Gain: 0 dBi
 *Maximum Transmitter Conducted Power: 27.97 dBm, 626.61mW
 Maximum System EIRP: 27.97 dBm, 626.61 mW
 Exposure Conditions: 20 centimeters
 *Worst Case from all 900 MHz modes (DSS)
 **Declared by the customer

RF Exposure Calculation**Table 1: Device Characteristics**

Technical Parameters	900 MHz Radio
Frequency Range (GHz)	0.902-0.928
Frequency Range (MHz)	902 – 928
Separation Distance (cm)	20.00
Separation Distance (m)	0.2000
Antenna Gain (dBi)	0.00
ERP Easily Determined	YES
1-g body or 10-g extremity	Body
Conducted Power (dBm)	27.97
Conducted Power (mW)	626.61
Duty Factor (Source-Based) %	100.0
Maximum (Source-Based) Time-Averaged Conducted Power (mW)	626.61
Maximum (Source-Based) Time-Averaged ERP (mW)	382.08
Maximum (Source-Based) Time-Averaged EIRP (mW)	626.61
Maximum Output (mW)	626.61

Test Exemption Criteria

Test exemption is determined by 47 CFR 1.1307(b)(3)(i)(B) where single RF source is exempt if:

The available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}}(d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

Table 2: 47 CFR 1.1307(b)(3)(i)(B) SAR – Based Exemption P_{th} (mW)

Technical Parameters	900 MHz Radio
x	1.46
$ERP_{20\text{cm}}(\text{mW})$	1840.90
Maximum Output (mW)	626.614
P_{th} (mW)	1840.896
Exemption	YES
Contribution Ratio (P / P_{th})	0.340
Distance to Limit (cm)	9.582