



Certification Exhibit

FCC ID: R7PMGZW1A1

FCC Rule Part: 47 CFR Part 2.1091

Project Number: 721011134

Manufacturer: Landis + Gyr Technology, Inc
Model Name: S2 EIC Wi-Fi

RF Exposure

General Information:

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

Technical Information (Wi-Fi 2.4 GHz):

*Antenna Type: Printed Inverted-F antenna
 *Total Antenna Gain: 1 dBi
 Maximum Transmitter Conducted Power: 23.36 dBm, 216.77mW
 Maximum System EIRP: 24.36 dBm, 272.90 mW
 Exposure Conditions: 20 centimeters
 *Declared by the customer

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

Technical Parameters	Wi-Fi 2.4 GHz Radio
Frequency (GHz)	2.437
Frequency (MHz)	2437
Separation Distance (cm)	20.00
Separation Distance (m)	0.2000
Antenna Gain (dBi)	1.00
ERP Easily Determined	YES
1-g body or 10-g extremity	Body
Conducted Power (dBm)	23.36
Conducted Power (mW)	216.77
Duty Factor (Source-Based) %	100.0
Maximum (Source-Based) Time-Averaged Conducted Power (mW)	216.77
Maximum (Source-Based) Time-Averaged ERP (mW)	166.40
Maximum (Source-Based) Time-Averaged EIRP (mW)	272.90
Maximum Output (mW)	216.77

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 Pth (mW) described in the following formula. Pth 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 Pth (mW)

Technical Parameters	Wi-Fi 2.4 GHz Radio
x	1.90
ERP _{20cm} (mW)	3060.00
Maximum Output (mW)	216.770
P _{th} (mW)	3060.000
Exemption	YES
Contribution Ratio (P / P _{th})	0.071
Distance to Limit (cm)	4.969