

## RF Exposure / MPE Calculation

**No. : 10529469H**

**Applicant** : **Audio-Technica Corp.**  
**Type of Equipment** : **Wireless Receiver Unit**  
**Model No.** : **ATW-RU13**  
**FCC ID** : **JFZRUI3**

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Audio-Technica Corp. declares that Model : ATW-RU13  
complies with FCC radiation exposure requirement specified in the FCC Rule 2.1091 (for mobile).

### **RF Exposure Calculations:**

The following information provides the minimum separation distance for the highest gain antenna provided with the "ATW-RU13" as calculated from (B) Limits for General Population / Uncontrolled Exposure of TABLE 1- LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE) of §1.1310 Radiofrequency radiation exposure limits.

This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 1.0mW/cm<sup>2</sup> uncontrolled exposure limit. The Friis formula used was:

$$S = (P * G) / (4 * \pi * r^2)$$

Where

**P = 10.00 mW (Output power in Theory of Operation)**  
**G = 1.29 Numerical Antenna gain; equal to 1.10 dBi**  
**r = 20.0 cm**

**For: ATW-RU13 (Tested data)**

$$S = 0.00256 \text{ mW/cm}^2$$

[Reference]

$$S = (P * G) / (4 * \pi * r^2)$$

Where

**P = 100.00 mW (Output power in Theory of Operation assuming 10 sets of the EUTs are co-located and used.)**  
**G = 1.29 Numerical Antenna gain; equal to 1.10 dBi**  
**r = 20.0 cm**

**For: ATW-RU13 (Reference data)**

$$S = 0.02563 \text{ mW/cm}^2$$

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**UL Japan, Inc.**

**Ise EMC Lab.**

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124