

Certification Exhibit

**FCC ID: HSW-Z2430HPA
IC: 4492A-Z2430HPA**

**FCC Rule Part: 15.247
IC Radio Standards Specification: RSS-210**

ACS Report Number: 08-0058

**Manufacturer: Cirronet, Inc.
Model: ZMN2430HPA**

RF Exposure Information

General Information:

Applicant: Cirronet, Inc.
ACS Project: 08-0058
FCC ID: HSW-Z2430HPA
Device Category: Mobile
Environment: General Population/Uncontrolled Exposure

Technical Information 2400 MHz

Antenna Type: Surface Mount Chip
Antenna Gain: 0dBi
Transmitter Radiated Power: 21.31dBm
Maximum System EIRP: 21.31dBm
Exposure Conditions: Portable

Portable Exposure Conditions

The Power Threshold for 'General Population' portable designation without SAR testing is: (based on Oct 2005 TCB workshop PPT slide)

$(60 / F_{\text{GHz}})$ mW for distances < 2.5 cm

For the 2.4 GHz frequency band, this results in a limit of **25 mW**.

Note that we use the more restrictive "General Population" limit in this case even though the individuals using this product will certainly be aware of its function and would qualify under the 'occupational' category.

Given the maximum transmit duty cycle, the average transmitted power of a ZMN2430HPA remote can be calculated as:

Maximum Pout = **135 mW** (21.31 dBm nominal)

Maximum Antenna Gain = **0 dBi** (for portable use)

Maximum Transmit Duty cycle (per above) = **0.084**

Pave (Source-based average) = $0.135 * 0.084 =$ **11.3 mW**

Conclusion

The ZMN2430HPA meets the MPE limits for a 'Portable' device operating in the 'General Population'.