

Federal Communication Commission Authorization and Evaluation Division 7435 Oakland Mills Road Columbia, MD 21046

Attention: Reviewing Engineer

The **HP 5092-0115** is a WLAN card with USB interface for use in printer server or similar mobile applications. In the user manual it is called USB module.

Due to the construction and the position of the antenna (TX and RX) a minimum distance under normal operating conditions of more than **20 cm** to the antenna is guaranteed. The manual contains a relevant statement. The calculation was made for this worst case.

The maximum peak output power for this device is 86.5 mW (19.37 dBm).

Regarding MPE limits, GPUC environment limits maximum exposure to 1 mW/cm².

The power density is:

$$S = E^2/3770 = -13 \text{ H}^2 < 1 \text{ mW/cm}^2$$

Where: $S = Power density (mW/cm^2)$

E = electrical field strength (V/m)

This formula converted using the EIRP is

$$P_{out} *G/4\pi *r^2 (mW/cm^2)$$

 $86.5/4\pi*20^2 = 0.0172 \text{ mW/cm}^2$

Calculations are based on standard formula for calculating field strength at a distance and converting power density using free space impedance.

If you should have any questions regarding this submission, please feel free to contact the undersigned.

Yours truly,

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