

Mr. Thomas Woods Jr.
Chief Frequency Assignments Branch
Office of spectrum management
National Telecommunications & Information Administration

February 27, 2006
Ref: FCC STA File # 0079-EX-ST-2006
STA Confirmation # EL755976

Mr. Woods,
I am submitting this letter in response to the questions you had on STA File # 0079-EX-2006.

1) In the 3850-6150 MHz band what is the EIRP (based on average power) expressed in dBm/MHz.

The FCC limit in this band is -41.3 dBm EIRP when measured using a resolution bandwidth of 1MHz. The maximum average power density from the antenna of this device is approximately -29.3 dBm/MHz. Because the spectrum is irregular in shape (not flat) this number will be lower at all the other points from 3850 MHz to 6150 MHz. Therefore the total average power radiated from this device cannot be computed by adding up -29.3 dBm/MHz across the 3850 MHz to 6150 MHz band

2) Outside the 3850-6150 MHz band what is the EIRP (based on average power) expressed in terms of dBm/MHz, particularly in the 960-1610 MHz band used by GPS.

We selected the two highest emissions across this band (960-1610 MHz) and recorded the following average power reading in max hold. These measurements are usually made using a resolution bandwidth lower than 1 MHz in order to take a more accurate reading. When using a 1 MHz resolution bandwidth the spectrum analyzers noise floor will swamp these emissions therefore a narrower resolution bandwidth of 1 kHz was required. We used a resolution bandwidth of 1 kHz and a Video Bandwidth of 10MHz and found that at 1090 MHz we were at -112 dBm and at 1460 MHz we were at -109.49 dBm. These are narrow band emissions that are artifacts of the coding sequence.

Keven Trach

Supervisor, Engineering Services

TIME DOMAIN Corp.
7057 Old Madison Pike
Huntsville, AL 35806
Phone: (256) 428-6317
keven.trach@timedomain.com