Applicant: ITRONIX, Corp. FCC ID: KBCIX260-PRO750BT

EXHIBIT 11 - MPE CALCULATION DATA

FCC ID: KBCIX260-PRO750BT

Applicant: ITRONIX, Corp.

Model: IX260 with the three co-located transmitters listed below

1.) Sierra Wireless, AirCard 750, WAN with IX260 blade antenna

Tx Freq: 1880.00 MHz

Source based time averaged conducted Power @ antenna terminal input: 28.12

Antenna Gain: 2.6 dBi

-supporting MPE calculations on page 3.

2.) INTEL PRO WM3B2200BG, WLAN with Rangestar antenna PN: 100929

Tx Freq: 2437 MHz

Max Peak Power @ antenna terminal input: 17.41 dBm

Antenna Gain: 4.5 dBi

-supporting MPE calculations on page 4.

3.) MITSUMI Electric Co., Ltd, WML-C11NU, Bluetooth with Rangestar antenna PN: 100929

Tx Freq: 2402 MHz

Max Peak Power @ antenna terminal input: 14.46 dBm

Antenna Gain 4.5 dBi

-supporting MPE calculations on page 4.

Applicant: ITRONIX, Corp.

The AirCard 750 WAN and the WLAN <u>do not</u> transmit at the same time. However, either the AirCard 750 WAN or the WLAN can transmit at the same time as the Bluetooth, so multiple frequency exposure information is provided for these two combinations. Individual calculations made for the AirCard 750 with the MaxRad 3 dBi Gain - Vehicular Antenna mount (P/N:WMLPVDB800/1900) are also included.

The MPE calculations are submitted for multiple frequency exposure criteria. The ratio of the field strength or power density to the applicable exposure limit at the exposure location was determined for each transmitter below and the sum of these ratios does not exceed the 1 mW/cm^2 limit for uncontrolled exposure / general population exposure limits detailed in CFR 47, Part 1.1310.

1.) Multiple Frequency Exposure Requirements with WAN AirCard 750 & BT

Ratio 1	Ratio 2	Limit
AirCard 750/PCS	Bluetooth	
0.235/1	0.016/1	<1.0
= 0.235	= 0.016	<1.0
Sum = 0	0.251 (mW/cm^2)	<1.0

2.) Multiple Frequency Exposure Requirements WLAN & BT

Ratio 1	Ratio 2	Limit
WLAN	Bluetooth	
0.031/1	0.016/1	<1.0
= 0.031	= 0.016	<1.0
Sum = 0	.047 (mW/cm^2)	<1.0

MPE calculations for general population/uncontrolled limits are on the following pages.

Prediction of MPE Limit OET Bulletin 65, Edition 97-01

 $S = PG/4\pi R^2$ $R = \sqrt{PG/4\pi S}$

S= power density

P= power input to the antenna

G= power gain of the antenna in the direction of interest relative to an isotropic radiator

R= distance to the center of radiation of the antenna

MPE General Population/Uncontrolled

AirCard 750 GSM GPRS

Tx Frequency:

Max. Peak Power Antenna Input Terminal:

Antenna gain:

1880.00 MHz
28.12 dBm
2.60 dBi

S= 5.00 (mW/cm^2) P= 648.6344 (mW) G= 1.82 (numeric)

R = 9.69 (cm)

Field Density $S (mw/cm^2)$ at $20cm = 0.234562924 (mw/cm^2)$

AirCard 750 GSM GPRS

With MaxRad 3 dBi Gain - Vehicular Mount Antenna (P/N:WMLPVDB800/1900)

Tx Frequency:

Max. Peak Power Antenna Input Terminal:

3 dBi Antenna gain (2.8 dB cable loss, in 17feet

1880.00 MHz
28.12 dBm
3.0 dBi

is not included).

S= 1.00 (mW/cm^2) P= 648.6344 (mW) G= 2.0 (numeric)

R = 10.15 (cm)

Field Density $S (mw/cm^2)$ at $20cm = 0.257193132 (mw/cm^2)$

MPE General Population/Uncontrolled

INTEL PRO WLAN

Tx. Frequency:	2437.00	MHz
Max. Peak Power Antenna Input Terminal:	17.41	dBm
Antenna gain:	4.5	dBi

S= 1.00 (mW/cm^2) P= 55.0808 (mW) G= 2.82 (numeric)

R = 3.51 (cm)

Field Density $S (mw/cm^2)$ at $20cm = 0.030850298 (mw/cm^2)$

MITSUMI BLUETOOTH

Tx. Frequency:	2402.00	MHz
Max. Peak Power Antenna Input Terminal:	14.16	dBm
Antenna gain:	4.50	dBi

S= 1.00 (mW/cm^2) P= 27.9254 (mW) G= 2.82 (numeric)

R = 2.50 (cm)

Field Density $S (mw/cm^2)$ at $20cm = 0.01564815 (mw/cm^2)$