EXHIBIT 11 - MPE CALCULATION DATA

FCC ID: KBCIX260MPIA750BT
Applicant: ITRONIX, Corp.
Model: IX260 with the three co-located transmitters listed below.

1.) **AIRCARD750** -supporting calculations on pages 2-4
Tx Freq: 1850.20
Tx Freq: 1880.00
Tx Freq: 1909.00
Max Peak Power @ antenna terminal input: 28.12
Max Peak Power @ antenna terminal input: 28.08
Max Peak Power @ antenna terminal input: 28.00
Antenna Gain: 0.1dBi

2.) **MPI350** -supporting calculations on page 5
Tx Freq: 2450 MHz
Max Peak Power @ antenna terminal input: 21.2 dBm
Antenna Gain: 4.5 dBi

3.) **Bluetooth** -supporting calculations on page 6
Tx Freq: 2450 MHz
Max Peak Power @ antenna terminal input: 14.46 dBm
Antenna Gain 4.5 dBi

4.) **AIRCARD750 with MaxRad External Antenna** -supporting calculations on page 7
Tx Freq: 1880 MHz
Max Peak Power @ antenna terminal input: 27.9 dBm
Antenna Gain 3.0 dBi

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.

Multiple Frequency Exposure Requirements

Ratio 1	Ratio 2	Ratio 3	Limit
AIRCARD750	MPI350	Bluetooth	<1.0
0.132/1	0.074/1.0	0.016/1	<1.0
= .132	= .074	= .016	<1.0
Sum = .222 (mW/cm^2)			<1.0

AIRCARD750		
Tx Freq: 1850.20	Tx Freq: 1880.00	Tx Freq: 1909.00
Ratio 1	Ratio 2	Ratio 3
0.132/1	0.131/1	0.128/1
= .00264	= .00262	= .0256
Max = .00264 used for multiple frequency exposure above		

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

Equation from page 18

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

$$R = \sqrt{\frac{PG}{4\pi S}}$$

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

	Choose	ENTER	
Occupational/Controlled	○		
General Population/Uncontrolled	◉		
Tx Frequency:		1850.20	(MHz)
Maximum Peak Power at Antenna Input Terminal:		28.12	(dBm)
Antenna gain (typical)+9dB for 8-element array:		0.10	(dBi)

S=	**1.00**	(mW/cm^2)
P=	**648.6344**	(mW)
G=	**1.02**	(numeric)

R = 7.27 (cm)

S (mw/cm^2) at 20cm

0.131904426

AIRCARD750#1

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

Equation from page 18

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

$$R = \sqrt{\frac{PG}{4\pi S}}$$

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

	Choose	ENTER	
Occupational/Controlled	○		
General Population/Uncontrolled	◉		
Tx Frequency:		1880.00	(MHz)
Maximum Peak Power at Antenna Input Terminal:		28.08	(dBm)
Antenna gain (typical)+9dB for 8-element array:		0.10	(dBi)

S=	**1.00**	(mW/cm^2)
P=	**642.6877**	(mW)
G=	**1.02**	(numeric)

R = 7.23 (cm)

S (mw/cm^2) at 20cm

0.130695119

AIRCARD750#2

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

Equation from page 18

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

$$R = \sqrt{\frac{PG}{4\pi S}}$$

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

	Choose	ENTER	
Occupational/Controlled	○		
General Population/Uncontrolled	◉		
Tx Frequency:		1909.00	(MHz)
Maximum Peak Power at Antenna Input Terminal:		28.00	(dBm)
Antenna gain (typical)+9dB for 8-element array:		0.10	(dBi)

S=	**1.00**	(mW/cm^2)
P=	**630.9573**	(mW)
G=	**1.02**	(numeric)

R = 7.17 (cm)

S (mw/cm^2) at 20cm

0.128309664

AIRCARD750#3

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

Equation from page 18

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

$$R = \sqrt{\frac{PG}{4\pi S}}$$

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

	Choose	ENTER	
Occupational/Controlled	○		
General Population/Uncontrolled	◉		
Tx Frequency:		2450.00	(MHz)
Maximum Peak Power at Antenna Input Terminal:		21.20	(dBm)
Antenna gain (typical)+9dB for 8-element array:		4.50	(dBi)

S=	**1.00**	(mW/cm^2)
P=	**131.8257**	(mW)
G=	**2.82**	(numeric)

R = 5.44 (cm)

S (mw/cm^2) at 20cm

0.073834505

MPI350

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

Equation from page 18

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

$$R = \sqrt{\frac{PG}{4\pi S}}$$

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

	Choose	ENTER	
Occupational/Controlled	○		
General Population/Uncontrolled	◉		
Tx Frequency:		2450.00	(MHz)
Maximum Peak Power at Antenna Input Terminal:		14.46	(dBm)
Antenna gain (typical)+9dB for 8-element array:		4.50	(dBi)

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

R = 2.50 (cm)

S (mw/cm^2) at 20cm

0.015640815

BLUETOOTH

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

Equation from page 18

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

$$R = \sqrt{\frac{PG}{4\pi S}}$$

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

	Choose	ENTER	
Occupational/Controlled	○		
General Population/Uncontrolled	◉		
Tx Frequency:		1880.00	(MHz)
Maximum Peak Power at Antenna Input Terminal:		27.90	(dBm)
Antenna gain (typical)+9dB for 8-element array:		3.00	(dBi)

S=	1.00	(mW/cm^2)
P=	616.5950	(mW)
G=	2.00	(numeric)

R = 9.89 (cm)

S (mw/cm^2) at 20cm

0.244489024

AIRCARD750
MAX RAD ANT.