

**EXHIBIT 11 - MPE CALCULATION DATA**

Model: IX300 with two co-located transmitters listed below.

**1.) AirCard775, (WAN) GSM850**

$S$  (mw/cm<sup>2</sup>) at 20cm = 0.14529791

Tx Freq: 836.6 MHz

Antenna Gain: -2.8 dBi

Max Peak Conducted Power @ antenna terminal input: 31.44 dBm

Channel #	Frequency (MHz)	Peak Power (Watts) GSMK Mode	Peak Power (dBm) GSMK Mode
(Ch.128)	824.2	1.39	31.43
(Ch.190)	836.6	1.39	31.44
(Ch.251)	848.8	1.37	31.38

**2.) AirCard775, (WAN) PCS1900**

$S$  (mw/cm<sup>2</sup>) at 20cm = 0.218403386

Tx Freq: 1850.20 MHz

Antenna Gain: 2.0 dBi

Max Peak Conducted Power @ antenna terminal input: 28.41 dBm

Channel #	Frequency (MHz)	Peak Power (Watts) GSMK Mode	Peak Power (dBm) GSMK Mode
(Ch.512)	1850.2	0.684	28.35
(Ch.661)	1880.0	0.693	28.41
(Ch.810)	1909.8	0.687	28.37

**3.) MUBTC2-TH, (Bluetooth)**

$S$  (mw/cm<sup>2</sup>) at 20cm = 0.0002

Tx Freq: 2441MHz

Antenna Gain: 0.11 dBi

Max Peak Conducted Power @ antenna terminal input: 0.557dBm

Channel	Frequency (GHz)	Measured Peak Output Power (dBm)	Internal EUT Cable loss dB	Corrected Peak Output Power (dBm)	Corrected Peak Output Power (mW)
Low	2.402	-0.932	1.3	.368	1.088
Middle	2.441	-0.743	1.3	.557	1.137
High	2.480	-1.273	1.3	.027	1.006

## Multiple Frequency Exposure Requirements

The AC775 WAN and Bluetooth can transmit at the same time.

In normal operation both can transmit at the same time.

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<sup>2</sup> limit for uncontrolled exposure / general population exposure limits detailed in CFR 47, Part 1.1310.

### Multiple Frequency Exposure Requirements with GSM850

Ratio 1		Ratio 2	Limit
AIRCARD775		Bluetooth	
0.1453 / 0.56		0.0002 / 1	<1.0
= .2595		= .0002	<1.0
Sum = 0.2597		(mW/cm <sup>2</sup> )	<1.0

### Multiple Frequency Exposure Requirements with PCS1900

Ratio 1		Ratio 2	Limit
AIRCARD775		Bluetooth	
0.2184 / 1		0.0002 / 1	<1.0
= .2184		= .0002	<1.0
Sum = 0.2186		(mW/cm <sup>2</sup> )	<1.0

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

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

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

## General Population/Uncontrolled

### 1.) AirCard775, (WAN) GSM850

Tx Frequency: 836.60 MHz  
Max. Peak Power Antenna Input Terminal: 31.44 dBm  
Antenna gain: -2.80 dBi

S= 0.56 (mW/cm<sup>2</sup>)  
P= 1393.1568 (mW)  
G= 0.52 (numeric)  
R = 10.21 (cm)

S (mw/cm<sup>2</sup>) at 20cm = 0.14529791

### 2.) AirCard775, (WAN) PCS1900

Tx Frequency: 188000 MHz  
Max. Peak Power Antenna Input Terminal: 28.41 dBm  
Antenna gain: 2.00 dBi

S= 1.00 (mW/cm<sup>2</sup>)  
P= 693.4258 (mW)  
G= 1.58 (numeric)  
R = 9.35 (cm)

S (mw/cm<sup>2</sup>) at 20cm = 0.218403386

### 3.) MUBTC2-TH, (Bluetooth)

Tx Frequency: 2441.00 MHz  
Max. Peak Power Antenna Input Terminal: 0.56 dBm  
Antenna gain: 0.11 dBi

S= 1.00 (mW/cm<sup>2</sup>)  
P= 1.1368 (mW)  
G= 1.03 (numeric)  
R = 0.30 (cm)

S (mw/cm<sup>2</sup>) at 20cm = 0.000231718