

EXHIBIT 11 - MPE CALCULATION DATA

Model: IX300 with the three co-located transmitters listed below.

1.) Sony Ericsson GC82, (WAN)

S (mw/cm²) at 20cm = 0.249034415

Tx Freq: 848.80 MHz

Max Peak Power @ antenna terminal input:

Antenna Gain: -1.8 dBi

32.78 dBm

S (mw/cm²) at 20cm = 0.084773354

Tx Freq: 1880 MHz

Max Peak Power @ antenna terminal input:

Antenna Gain: -3.3 dBi

29.60 dBm

Channel #	Frequency (MHz)	Peak Power (Watts)	Peak Power (dBm)
(Ch.128)	824.20	1.730	32.38
(Ch.190)	836.60	1.832	32.63
(Ch.251)	848.80	1.896	32.78
(Ch.512)	1850.2	0.839	29.24
(Ch.661)	1880.0	0.912	29.60
(Ch.810)	1909.8	0.908	29.58

2.) WM168b-Molex, (WLAN),

S (mw/cm²) at 20cm = 0.0039

Tx Freq: 2412 MHz

Max Peak Power @ antenna terminal input:

Antenna Gain: -3.04 dBi

16.03 dBm

Frequency GHz	Power dBm	Cable loss	Corrected Level dBm	Ant. Gain dBi	EIRP
2.412	15.45	.58	16.03	-3.04	12.99
2.437	15.30	.58	15.88	-3.04	12.84
2.462	14.97	.58	15.55	-3.04	12.51

3.) MUBTC2-TH, (Bluetooth)

S (mw/cm²) at 20cm = 0.0002

Tx Freq: 2441MHz

Max Peak Power @ antenna terminal input:

Antenna Gain: 0.11 dBi

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

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. The sum of these ratios does not exceed the 1 mW/cm² 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
GC82 Cellular	WM168b MOLEX	Bluetooth	
0.2490/0.57	0.0039 / 1	0.0002 / 1	<1.0
= 0.4368	= .0039	= .0002	<1.0
Sum = 0.4409 (mW/cm ²)			<1.0

Multiple Frequency Exposure Requirements

Ratio 1	Ratio 2	Ratio 3	Limit
GC82 PCS	WM168b MOLEX	Bluetooth	
0.0848/1	0.0039 / 1	0.0002 / 1	<1.0
=.0848	= .0039	= .0002	<1.0
Sum = 0.0889 (mW/cm ²)			<1.0

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

$$S = PG/4\pi R^2$$

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

= 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

Cellular Tx Frequency: 848.80 MHz
 Max. Peak Power Antenna Input Terminal: 32.78 dBm
 Antenna gain: -1.8 dBi

S= 0.57 (mW/cm²)
 P= 1896.7059 (mW)
 G= 0.66 (numeric)
 R = 13.28. (cm)

S (mw/cm²) at 20cm = 0.249034415

PCS Tx Frequency: 1880.00 MHz
 Max. Peak Power Antenna Input Terminal: 29.60 dBm
 Antenna gain: -3.3 dBi

S= 1.00 (mW/cm²)
 P= 912.0108 (mW)
 G= 0.47 (numeric)
 R = 5.83 (cm)

S (mw/cm²) at 20cm = 0.084773354

Bluetooth Tx Frequency: 2412.00 MHz
Max. Peak Power Antenna Input Terminal: 16.03 dBm
Antenna gain: -3.04 dBi

S= 1.00 mW/cm²)
P= 40.0867 (mW)
G= 0.50 (numeric)
R = 1.26 (cm)

S (mw/cm²) at 20cm = 0.003956028

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

S= 1.00 (mW/cm²)
P= 1.1368 (mW)
G= 1.03 (numeric)
R = 0.30 (cm)

S (mw/cm²) at 20cm = 0.000231718