



May 29, 2014

TUV SUD BAPT
Octagon House, Concorde Way
Segensworth Rd N, Fareham
PO15 5RL

Attention: Director of Certification

RE: Analysis of RF Exposure for Portable use per Title 47, Part 1 Subpart I, §1.1310, Title 47, Part 2 Subpart J, §2.1091 and RSS-102 Issue 4 March 2010.

FCC ID: FIH-2000B

IC: 1584A-2000B

1. Mobile MPE Calculation Summary using a 20cm separation distance:

Mode	Output Power	Power Density (mW/m ²)
GSM/GPRS 850	33.20 dBm	0.1857
GSM/GPRS 1900	30.20 dBm	0.0659
2.4GHz Beacon Radio	94.0 dBμV/m @ 3 meters	0.000150

2. Co-Located Transmitters transmission table:

Transmitter type	Transmitter type that can transmit at the same time
N/A	The Cellular radio and the 2.4GHz Beacon Radio does not transmit at the same time

3. Mobile MPE Calculation using a 20cm separation distance (GSM/GPRS 850):

Using Power Density formula:

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

where: S = power density

P = power input to the antenna

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

R = distance to the center of radiation of the antenna



Maximum peak output power at antenna input terminal:	33.20	(dBm)
Maximum peak output power at antenna input terminal:	2089.30	(mW)
Antenna gain(typical):	-3.5	(dBi)
Maximum antenna gain:	0.447	(numeric)
Prediction distance:	20	(cm)
Source Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	824.2	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.549	(mW/cm ²)
Power density at prediction frequency:	0.1857	(mW/cm ²)
Power density at prediction frequency:	1.857	(W/m ²)
Margin of Compliance:	-4.71	(dB)

4. Mobile MPE Calculation using a 20cm separation distance (GSM/GPRS 1900):

Maximum peak output power at antenna input terminal:	30.20	(dBm)
Maximum peak output power at antenna input terminal:	1047.13	(mW)
Antenna gain(typical):	-5.0	(dBi)
Maximum antenna gain:	0.316	(numeric)
Prediction distance:	20	(cm)
Source Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	1850.2	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm ²)
Power density at prediction frequency:	0.0659	(mW/cm ²)
Power density at prediction frequency:	0.659	(W/m ²)
Margin of Compliance:	-11.81	(dB)

5. Mobile MPE Calculation using a 20cm separation distance (2.4GHz Beacon Radio):

Measured Field Strength --Radiated:	94.00	(dBuV/m)
Maximum peak output power --Radiated:	0.0007536	(W)
Antenna gain(typical):	0.00	(dBi)
Maximum antenna gain:	1.00	(numeric)
Prediction distance:	20.00	(cm)
Prediction frequency:	2452.00	(MHz)
Limit from table below:	1.00	(mW/cm ²)
Power density at prediction frequency:	0.000150	(mW/cm ²)
Margin of Compliance:	-38.24	(dB)



Notes: Power level and worst case channel information for the cellular radio were derived from the MPE exhibit of the original filing. Antenna gains information of the cellular radio were also derived from this exhibit as well as the CTIA Over The Air Performance Summation Test Report (7 layers, Inc. Project Name: MUS_CALAMP_1102) provided by the client.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ferdie S. Custodio'.

Ferdie S. Custodio

Name

Authorized Signatory

Title: EMC/ Senior Wireless Test Engineer