May 11, 2015

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

Attention: Director of Certification

RE: Analysis of RF Exposure for Portable and Mobile use per KDB 447498 D01 Mobile Portable RF Exposure v05r02 and RSS-102 Issue 4 March 2010

FCC ID: XTE-ULP210

Mobile MPE Calculation Summary using a 65cm separation distance (with a directional antenna for sectorization model HG2417P-090, Antenna gain is = 17 dBi):

Mode	Output Power	Power Density (mW/m^2)
High CH 2475.63MHz	29.81 dBm	0.1985

1.   Co-Located Transmitters transmission table:

Transmitter type	Transmitter type that can transmit at the same time
Sectorized AP	Sectorized AP
Note.- The EUT Consist of 2 AP's with a directional antenna for sectorization (FCC ID#: XTE-ULPAP210). Directional Antenna gain is = 17 dBi model HG2417P-090).	

2.   Simultaneous Transmission MPE (worst-case):

Transmitter type	MPE (mw/cm^2)	Limit (mW/cm^2)	MPE ratio (MPE/Limit)
2402 MHz to 2475.63 MHz	**0.9036**	1.0	**0.9036**
Sum of the ratios (should be <1.0)			**0.9036**

3. *Mobile MPE Calculation using a 65cm separation distance (:*

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:	**29.81**	(dBm)
Maximum peak output power at antenna input terminal:	**957.19**	(mW)
Antenna gain(typical):	**17**	(dBi)
Maximum antenna gain:	**50.119**	(numeric)
Prediction distance:	<u>**65**</u>	(cm)
Sourse Based Time Average Duty Cycle:	**100**	(%)
Prediction frequency:	**2400**	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	**1.000**	(mW/cm^2)
Power density at prediction frequency:	<u>**0.9036**</u>	(mW/cm^2)
Power density at prediction frequency:	**9.036**	(W/m^2)
Margin of Compliance:	**0.44**	(dB)

Sincerely,

Juan Manuel Gonzalez
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Authorized Signatory
Title: Commercial/ Wireless EMC Lab Manager