



May 11, 2015

TUV SUD BABT
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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:	65	(cm)
Source 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:	0.9036	(mW/cm ²)
Power density at prediction frequency:	9.036	(W/m ²)
Margin of Compliance:	0.44	(dB)

Sincerely,

Juan Manuel Gonzalez

Name

Authorized Signatory

Title: Commercial/ Wireless EMC Lab Manager