



January 21, 2016

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

Attention: Director of Certification

**RE: Analysis of RF Exposure for Fixed and Mobile according to FCC 2.1091 and RSS-102 Issue 5 March 2015.**

FCC ID: XTE-ULPAP310  
IC: 8655A-ULPAP310

**1. Mobile MPE Calculation Summary using a 36cm separation distance:**

Mode	Output Power (dBm)	Power Density (mW/cm <sup>2</sup> )
Low Sub Band	29.98	0.4855
High Sub Band	29.85	0.4712

**2. Co-Located Transmitters transmission table:**

Transmitter type	Transmitter type that can transmit at the same time
Low Sub Band	High Sub Band
High Sub Band	Low Sub Band

**3. Simultaneous Transmission MPE:**

Transmitter type	MPE (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	MPE ratio (MPE/Limit)
Low Sub Band	0.4855	1.0	0.4855
High Sub Band	0.4712	1.0	0.4712
Sum of the ratios (should be <1.0)			0.9567



#### 4. Mobile MPE Calculation using a 36cm separation distance (Low Sub Band):

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:	29.98	(dBm)
Maximum peak output power at antenna input terminal:	995.41	(mW)
Antenna gain(typical):	9	(dBi)
Maximum antenna gain:	7.943	(numeric)
Prediction distance:	36	(cm)
Source Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	2405.98	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm <sup>2</sup> )
Power density at prediction frequency:	0.4855	(mW/cm <sup>2</sup> )
Power density at prediction frequency:	4.855	(W/m <sup>2</sup> )
Margin of Compliance:	-3.14	(dB)

#### 5. Mobile MPE Calculation using a 36cm separation distance (High Sub Band):

Maximum peak output power at antenna input terminal:	29.85	(dBm)
Maximum peak output power at antenna input terminal:	966.05	(mW)
Antenna gain(typical):	9	(dBi)
Maximum antenna gain:	7.943	(numeric)
Prediction distance:	36	(cm)
Source Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	2473.64	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm <sup>2</sup> )
Power density at prediction frequency:	0.4712	(mW/cm <sup>2</sup> )
Power density at prediction frequency:	4.712	(W/m <sup>2</sup> )
Margin of Compliance:	-3.27	(dB)



America

Sincerely,

*Alex Chang*

Alex Chang

Name

Authorized Signatory

Title: EMC/Wireless Test Engineer