



October 17, 2017

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 v06 and RSS-102 Issue 5 March 2015.

FCC ID: PKRNVWNX35C200
IC: 3229A-NX35C200

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

Mode	Output Power	Power Density (mW/m ²)
Bluetooth	8.00 dBm	0.0213
CDMA	24.61 dBm	0.091*

*Note *: CDMA data is from MPE Exhibit for Ublox LISA-C2 series under FCC ID: R5Q-LISACS200A*

2. Co-Located Transmitters transmission table:

Transmitter type	Transmitter type that can transmit at the same time
Bluetooth	CDMA
CDMA	Bluetooth

3. Simultaneous Transmission MPE:

Transmitter type	MPE (mw/cm ²)	Limit (mW/cm ²)	MPE ratio (MPE/Limit)
Bluetooth	0.0213	1.0	0.0213
CDMA	0.091	0.558	0.1631
Sum of the ratios (should be <1.0)			0.1844

4. Mobile MPE Calculation using a 20cm separation distance (Worst Case Bluetooth):

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:	8.00	(dBm)
Maximum peak output power at antenna input terminal:	6.31	(mW)
Antenna gain(typical):	2.3	(dBi)
Maximum antenna gain:	1.698	(numeric)
Prediction distance:	20	(cm)
Source Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	2440	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm ²)
Power density at prediction frequency:	0.00213	(mW/cm ²)
Power density at prediction frequency:	0.021	(W/m ²)
Margin of Compliance:	-26.71	(dB)

Sincerely,


Ivan Retana

Name

Authorized Signatory

Title: EMC/Wireless Test Engineer