



Dec. 28, 2015

RE: Analysis of RF Exposure for Portable and Mobile use per KDB 447498 D01 Mobile Portable RF Exposure v05r02 and RSS-102 Issue 5 March 2015.

FCC ID: QKLSCL1

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

Mode	Output Power	Power Density (mW/cm ²)
Bluetooth LE	-0.33 dBm	0.00047

2. Co-Located Transmitters transmission table:

Transmitter type	Transmitter type that can transmit at the same time
Bluetooth LE	N/A

3. Simultaneous Transmission MPE:

Transmitter type	MPE (mw/cm ²)	Limit (mW/cm ²)	MPE ratio (MPE/Limit)
Bluetooth LE	0.00047	1.0	0.00047
-	-	-	-
Sum of the ratios (should be <1.0)			0.00047



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

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:	-0.33	(dBm)
Maximum peak output power at antenna input terminal:	0.93	(mW)
Antenna gain(typical):	4.1	(dBi)
Maximum antenna gain:	2.57	(numeric)
Prediction distance:	20	(cm)
Source Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	2402	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm ²)
Power density at prediction frequency:	0.0004739	(mW/cm ²)
Power density at prediction frequency:	0.004739	(W/m ²)
Margin of Compliance:	-33.24	(dB)

Sincerely,

Xiaoying Zhang

Name

Authorized Signatory

Title: EMC/Wireless Test Engineer