



November 08, 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.**

FCC ID: 2AN64-9087  
IC: 23348-9087

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

| Mode                | Output Power           | Power Density (mW/cm <sup>2</sup> ) |
|---------------------|------------------------|-------------------------------------|
| 128 kHz Transmitter | 96.5 dBμV/m @ 3 meters | 0.26659463                          |

**2. Mobile MPE Calculation using a 20cm 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

|                                        |            |                       |
|----------------------------------------|------------|-----------------------|
| Measured Field Strength --Radiated:    | 96.5       | (dBuV/m)              |
| Maximum peak output power --Radiated:  | 0.00134005 | (W)                   |
| Antenna gain(typical):                 | 0.00       | (dBi)                 |
| Maximum antenna gain:                  | 1.00       | (numeric)             |
| Prediction distance:                   | 20.00      | (cm)                  |
| Prediction frequency:                  | 125 kHz    | (MHz)                 |
| Applied Limit:                         | 100        | (mW/cm <sup>2</sup> ) |
| Power density at prediction frequency: | 0.26659463 | (mW/cm <sup>2</sup> ) |
| Margin of Compliance:                  | -30.04     | (dB)                  |



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No MPE limits exist under §1.1310 for 125 kHz transmitter. The lowest frequency covered by Table 1 (§1.1310 (e)) is 300 kHz. Limit used in the calculation presented is based from 300 kHz (100 mW/cm<sup>2</sup>).

Sincerely,

Ferdie S. Custodio

Name

Authorized Signatory

Title: Senior EMC/Wireless Test Engineer