Declaration regarding RF Exposure

Federal Communication Commission
Equipment Authorization Division, Application Processing Branch
7435 Oakland Mills Road
Columbia, MD 21048

November 4, 2013

TO WHOM IT MAY CONCERN

RF Exposure issue for any portable devices subject to 2.1093 routine evaluations regarding the following product:

FCC ID Number Product	Title/Model
DD4MXW2	MXW2 Z10

SAR exemption:
This device has been excluded from SAR testing based on source-based time-averaged conducted output power and KDB 447498 D01 section 4.3.1 1).
This document serves as the RF exposure exhibit in the FCC Form 731 application in lieu of a SAR report.

Operational Description:
The MXW2 Handheld is a portable wireless transceiver operating in the DECT/UPCS band capable of sending audio as well as accepting control commands.

UPCS Channel	Frequency (GHz)
23	1.921536
24	1.923264
25	1.924992
26	1.926720
27	1.928448

RF Exposure Conditions:
The device is intended for use in the portable exposure condition and the General Population / Uncontrolled RF exposure environment.

Transmission Mode:
The above mentioned device uses the DECT wireless communication technology with a maximum of 2 TDMA slot out of the 24 total slots.

The device has no roaming and no multi line capabilities. All supported multiple time slot transmissions are considered in the calculation below.

Duty Cycle:
The slot and frame structure is defined by the DECT standard resulting in a maximum transmit full-slot number of 2.

The device is using 2 full slot out of a total of 24 (833 µs in 10ms frame) resulting in a duty-cycle of 8.33%.

Slot length (SL):417 µs, frame length (FL):10 ms, max. no. of slots per frame (N): 2

dc – duty cycle / factor	8.33%	SL X N/FL

RF Output Power:

Tx *frequency range:*	1921.536 ~	1928.448MHz
Test separation distance:	Hand:	5 mm
(see picture below)	Head:	180 mm
Pt – *Transmitted output power (rms peak)*	20.02 dBm	100.5 mW
dc – *duty cycle / factor*	8.33%	SL X N/FL
Production tuning range	20.0 ±1 dBm	125.9 mW
$P_{source\ based\ time\ average\ ,\ max}$	$P_t dc$	10.49 mW

With a maximum transmitted output power of 125.9mW (21.0dBm) the source-based time-averaged conducted output power is 10.49mW.

$$\frac{(max.\,power\ of\ channel,\,including\ tune\ up\ tolerance,\,mW)}{(min.\,test\ separation\ distance,\,mm)} * \sqrt{f_{(GHz}} \leq 3.0/7.5$$

- $f_{(GHz)}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation25
- The result is rounded to one decimal place for comparison

$$\frac{(10.49\ mW)}{(5\ mm)} * \sqrt{1.928\ GHz} = 2.91 \leq 3.0$$

The device is excluded from SAR testing.

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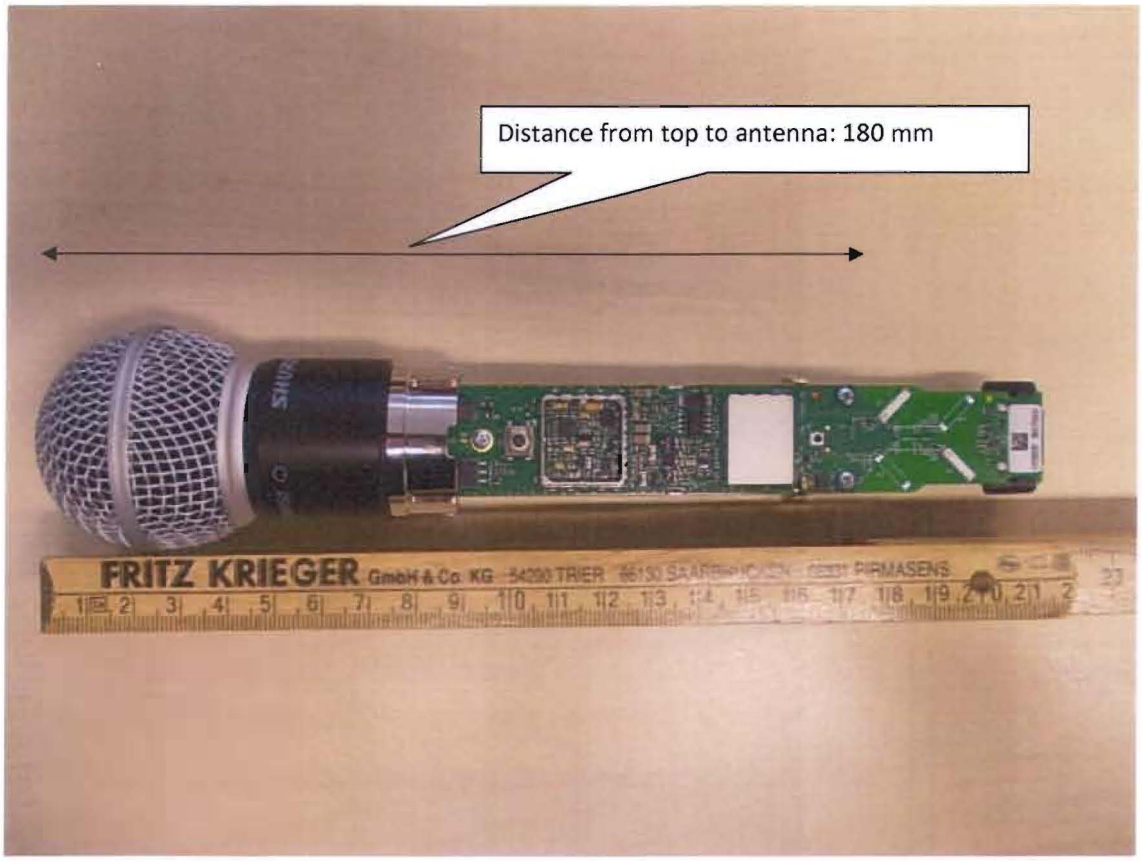
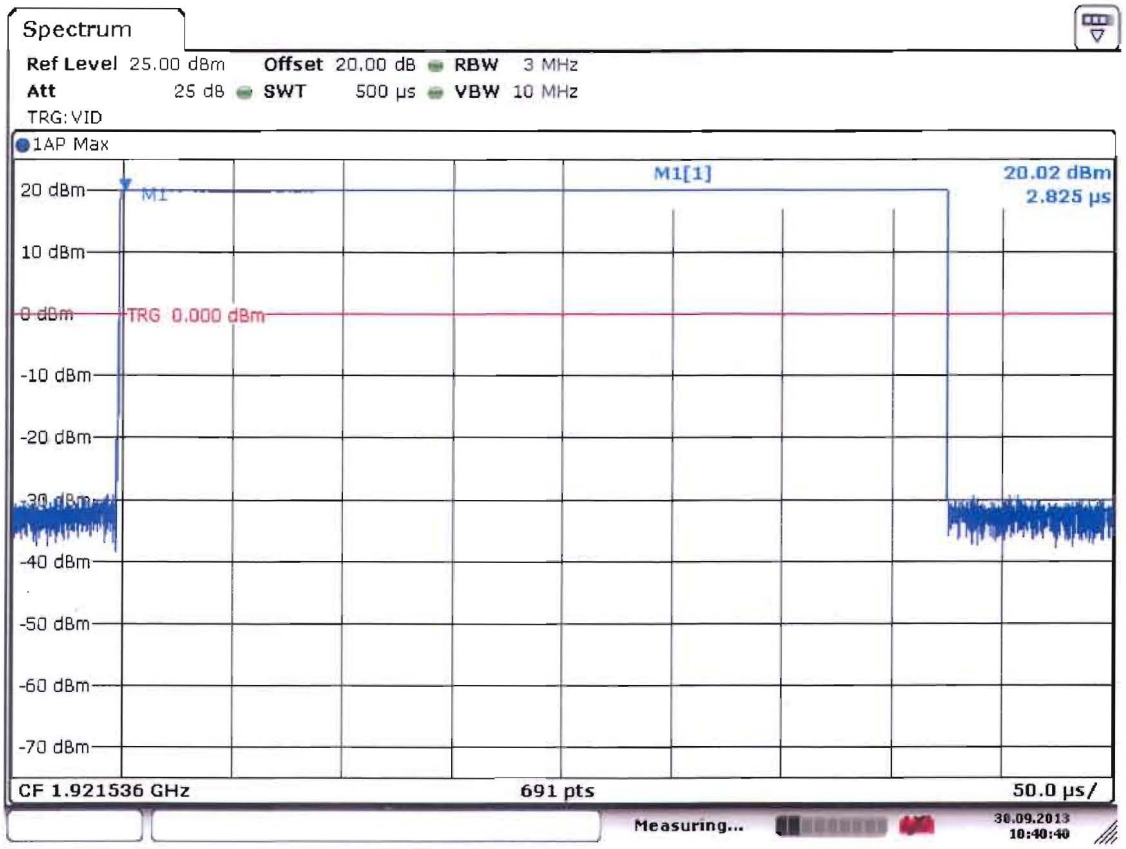

Distance from top to antenna: 180 mm
FRITZ KRIEGER GmbH & Co. KG


Spectrum
Ref Level 25.00 dBm
Offset 20.00 dB
RBW 3 MHz
Att 25 dB
SWT 500 µs
VBW 10 MHz
TRG: VID
1AP Max
M1[1]
20.02 dBm
2.825 µs
M1
TRG 0.000 dBm
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
CF 1.921536 GHz
691 pts
50.0 µs/
Measuring...
30.09.2013
10:40:40