

MPE TEST REPORT

Report No.: HCTR1103FE02

Client : JUNI Korea Co.,Ltd.
Product : WiMAX Femto
Model : JFW-600
Manufacturer/supplier : JUNI Korea Co.,Ltd.
Date of issue : 2011/ 03/ 14

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Total number of pages of this test report : 3 Pages

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1. LIMITS

According to §1.1310 and §2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/ f ²)	30
30 - 300.....	27.5	0.073	0.2	30
300 - 1500.....	f/1500	30
1500 - 100.000.....	1.0	30

F = frequency in MHz

* = Plane-wave equivalent power density

2. MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

S = Power density

P = power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

2-1 WIMAX

Max Peak output Power at antenna input terminal	26.84	dBm
Max Peak output Power at antenna input terminal	483.0588	mW
Prediction distance	20.000	cm
Prediction frequency	2684.000	MHz
Antenna Gain(typical)	2.790	dBi
Antenna Gain(numeric)	1.90108	–
Power density at prediction frequency (S)	0.18270	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.00000	mW/cm ²

2-2 WI-FI

Max Peak output Power at antenna input terminal	23.190	dBm
Max Peak output Power at antenna input terminal	208.44909	mW
Prediction distance	20.000	cm
Prediction frequency	2462.000	MHz
Antenna Gain(typical)	2.060	dBi
Antenna Gain(numeric)	1.60694	–
Power density at prediction frequency (S)	0.06664	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.00000	mW/cm ²

3. RESULTS

WIMAX: The power density level at 20 cm is 0.18270 mW/cm², which is below the uncontrolled exposure limit of 1.0 mW/cm² at 2684.0 MHz for WIMAX .

WI-FI: The power density level at 20 cm is 0.06664 mW/cm², which is below the uncontrolled exposure limit of 1.0 mW/cm² at 2462.0 MHz for WI-FI.