



RF EXPOSURE REPORT

REPORT NO.: SA981218L08

MODEL NO.: WIXFBR-103

FCC ID: MXF-WIXFBR-103

ACCORDING: FCC Guidelines for Human Exposure
IEEE C95.1

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TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei
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1. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	F/1500	30
1500-100,000	1.0	30

F = Frequency in MHz

2. MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

3. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

4. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	21.4	4	20	0.069	1.00
2487.5~2492.5	26.54	7	20	0.450	1.00
2501~2685	26.82	7	20	0.479	1.00

CONCLUSION:

WLAN and WiMAX can transmit simultaneously, the formula of calculated the MPE is:

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

1. WLAN 2.4G + WiMAX (2487.5~2492.5MHz) = 0.069 + 0.450 = 0.519
2. WLAN 2.4G + WiMAX (2501~2685MHz) = 0.069 + 0.479 = 0.548

Therefore, the maximum calculation of this situation is 0.548, which is less than the “1” limit.