

# FCC RF Exposure Report

**FCC ID** : I88WE4600-00  
**Equipment** : Tri-Band Wireless BE19000 2.5G Extender  
**Model No.** : WE4600-00  
**Brand Name** : ZYXEL  
**Applicant** : Zyxel Communications Corporation  
**Address** : No.2 Industry East RD. IX, Hsinchu Science  
Park, Hsinchu 30075, Taiwan  
**Standard** : 47 CFR FCC Part 2.1091  
**Received Date** : Dec. 05, 2024  
**Tested Date** : Jan. 20 ~ Apr. 01, 2025

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

  
Along Chen / Assistant Manager

Approved by:

  
Gary Chang / Manager

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## Release Record

Report No.	Version	Description	Issued Date
FA4D0501-01	Rev. 01	Initial issue	Aug. 19, 2025

## 1 MPE EVALUATION OF MOBILE DEVICES

### 1.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm <sup>2</sup> )	Averaging Time (minutes)
300~1500	F/1500	30
1500~100000	1.0	30

### 1.2 MPE EVALUATION FORMULA

$$Pd = \frac{Pt}{4 * Pi * R^2}$$

Where

Pd= Power density in mW/cm<sup>2</sup>

Pt= EIRP in mW

Pi= 3.1416

R= Measurement distance

### 1.3 REFERENCE GUIDANCE

447498 D01 General RF Exposure Guidance v06

### 1.4 DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE

None

### 1.5 MEASUREMENT UNCERTAINTY

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Parameters	Uncertainty
Conducted power	±0.808 dB

#### Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

#### Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

## 1.6 MPE EVALUATION RESULTS

### Non-beamforming mode

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Maximum Tune Up Limit (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	*Ratio	Pass / Fail
2412-2462	29.24	29.5	4.75	20	0.529	1	0.529	Pass
5180-5240	27.37	27.5	4.98	20	0.352	1	0.352	Pass
5260-5320	23.65	24	4.76	20	0.150	1	0.150	Pass
5500-5720	23.90	24	4.09	20	0.128	1	0.128	Pass
5745-5825	27.43	27.5	4.56	20	0.320	1	0.320	Pass

Frequency Range (MHz)	EIRP(dBm)	Maximum Tune Up Limit (dBm)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	*Ratio	Pass / Fail
5925-7125	23.14	23.5	20	0.045	1	0.045	Pass

\*Ratio = Power density / Limit.

### Beamforming mode

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Maximum Tune Up Limit (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	*Ratio	Pass / Fail
2412-2462	26.20	26.50	5.74	20	0.333	1	0.333	Pass
5180-5240	27.11	27.5	5.24	20	0.374	1	0.374	Pass
5260-5320	22.93	23	5.48	20	0.140	1	0.140	Pass
5500-5720	22.59	23	5.28	20	0.134	1	0.134	Pass
5745-5825	26.03	26.5	5.96	20	0.351	1	0.351	Pass

Frequency Range (MHz)	EIRP(dBm)	Maximum Tune Up Limit (dBm)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	*Ratio	Pass / Fail
5925-7125	23.14	23.5	20	0.045	1	0.045	Pass

\*Ratio = Power density / Limit.

## 1.7 MPE EVALUATION OF SIMULTANEOUS TRANSMISSION

### *Non-beamforming mode*

Mode	Max Ratio of Each Mode
WLAN 2.4GHz	0.529
WLAN 5GHz	0.352
WLAN 6GHz	0.045
Sum	0.926
Limit	1
Pass / Fail	Pass

### *Beamforming mode*

Mode	Max Ratio of Each Mode
WLAN 2.4GHz	0.333
WLAN 5GHz	0.374
WLAN 6GHz	0.045
Sum	0.752
Limit	1
Pass / Fail	Pass

## 2 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

### **Linkou**

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(R.O.C.)

### **Kwei Shan**

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City 33381, Taiwan (R.O.C.)  
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City 33381, Taiwan (R.O.C.)

### **Kwei Shan Site II**

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If you have any suggestion, please feel free to contact us as below information.

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