

FCC RF Exposure Report

FCC ID : 2AU6R04011
Equipment : 802.11be (WiFi 7) Triple-Radio PoE Access Point
(Please refer to section 1.1.1 for more details)
Model No. : NWA130BE
(Please refer to section 1.1.1 for more details)
Brand Name : ZYXEL
Applicant : Zyxel Networks Corporation
Address : No.2 Industry East RD. IX, Hsinchu Science Park, Hsinchu 30075, Taiwan, R.O.C
Standard : 47 CFR FCC Part 2.1091
Received Date : Sep. 11, 2023
Tested Date : Nov. 24 ~ Jan. 15, 2024

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:

Approved by:


Along Chen / Assistant Manager


Gary Chang / Manager

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Release Record

Report No.	Version	Description	Issued Date
FA391101	Rev. 01	Initial issue	Feb. 07, 2024

1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
ZYXEL	NWA130BE	802.11be (WiFi 7) Triple-Radio PoE Access Point	The difference between the two models is marketing purpose.
ZYXEL	WBE530	802.11be (WiFi 7) Triple-Radio unified Access Point	
Note: The above models, model NWA130BE was selected as a representative one for the final test and only its data was recorded in this report.			

2 MPE EVALUATION OF MOBILE DEVICES

2.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

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

2.2 MPE EVALUATION FORMULA

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

Where

Pd= Power density in mW/cm²

Pt= EIRP in mW

Pi= 3.1416

R= Measurement distance

2.3 REFERENCE GUIDANCE

447498 D01 General RF Exposure Guidance v06

2.4 DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE

None

2.5 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.

2.6 MPE EVALUATION RESULTS

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Maximum Tune Up Limit (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	*Ratio	Pass / Fail
2412-2462	27.39	27.5	1.77	20	0.168	1	0.168	Pass
5150-5250	27.15	27.5	5.14	20	0.365	1	0.365	Pass
5250-5350	23.92	24	5.14	20	0.163	1	0.163	Pass
5470-5725	23.65	24	4.77	20	0.150	1	0.150	Pass
5725-5850	26.95	27	4.77	20	0.299	1	0.299	Pass
5925-6425	24.36	24.5	3.75	20	0.133	1	0.133	Pass
6425-6525	21.99	22	2.77	20	0.060	1	0.060	Pass
6525-6875	24.02	24.5	4.09	20	0.144	1	0.144	Pass
6875-7125	24.18	24.5	3.49	20	0.125	1	0.125	Pass

*Ratio = Power density / Limit.

2.7 MPE EVALUATION OF SIMULTANEOUS TRANSMISSION

Mode	Max Ratio of Each Mode
WLAN 2.4GHz	0.168
WLAN 5GHz	0.365
WLAN 6GHz	0.144
Sum	0.677
Limit	1
Pass / Fail	Pass

3 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

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou
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(R.O.C.)

Kwei Shan

Tel: 886-3-271-8666

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St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)
No.2-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd
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City 33381, Taiwan (R.O.C.)

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

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