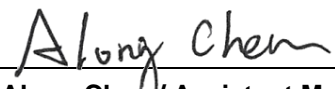


FCC RF Exposure Report

FCC ID : I8811ACAP22
Equipment : 802.11ac Wave 2 Dual-Radio Ceiling Mount PoE
Access Point
(Refer to item 1.1.1 for more details)
Model No. : NWA1123ACv3
(Refer to item 1.1.1 for more details)
Brand Name : ZYXEL
Applicant : Zyxel Communications 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 : Dec. 02, 2020
Tested Date : Dec. 07 ~ Dec. 23, 2020

We, International Certification Corp., 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 may be duplicated completely for legal use with the approval of the applicant. 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
FA070801-02	Rev. 01	Initial issue	Jan. 21, 2021

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	NWA1123ACv3	802.11ac Wave 2 Dual-Radio Ceiling Mount PoE Access Point	Software difference
ZYXEL	WAC500	802.11ac Wave 2 Dual-Radio Unified Access Point	
✦ The above models, model NWA1123ACv3 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 DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE

None

2.4 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.

2.5 MPE EVALUATION RESULTS

Non-beamforming mode

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Rated Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	*Ratio	Pass / Fail
2412 ~ 2462 ^{Note2}	24.01	24.5	0	20	0.056	1	0.056	Pass
5150~5250 ^{Note2}	25.19	25.5	0	20	0.071	1	0.071	Pass
5250~5350	23.78	24	0	20	0.050	1	0.050	Pass
5470~5725	23.66	24	0	20	0.050	1	0.050	Pass
5725~5850 ^{Note2}	25.05	25.5	0	20	0.071	1	0.071	Pass

Note 1: *Ratio = Power density / Limit.

Note 2: These 3 frequency bands are certified for original grant.

Beamforming mode

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Rated Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	*Ratio	Pass / Fail
2412 ~ 2462 ^{Note2}	19.96	20	3.01	20	0.040	1	0.040	Pass
5150~5250 ^{Note2}	24.72	25	3.01	20	0.126	1	0.126	Pass
5250~5350	23.59	24	3.01	20	0.100	1	0.1	Pass
5470~5725	23.43	23.5	3.01	20	0.089	1	0.089	Pass
5725~5850 ^{Note2}	24.28	24.5	3.01	20	0.112	1	0.112	Pass

Note 1: *Ratio = Power density / Limit.

Note 2: These 3 frequency bands are certified for original grant.

Note 3: For 2.4 GHz / 5 GHz

Directional gain = $0 + 2 \cdot \log(2/1) = 3.01$ dBi

2.6 MPE EVALUATION OF SIMULTANEOUS TRANSMISSION

Non-beamforming mode

Mode	Max Ratio of Each Mode
WLAN 2.4GHz	0.056
WLAN 5GHz	0.071
Sum	0.127
Limit	1
Pass / Fail	Pass

Beamforming mode

Mode	Max Ratio of Each Mode
WLAN 2.4GHz	0.040
WLAN 5GHz	0.126
Sum	0.166
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 Corp (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 District, New Taipei City,
Taiwan, R.O.C.

Kwei Shan

Tel: 886-3-271-8666

No. 3-1, Lane 6, Wen San 3rd St.,
Kwei Shan District, Tao Yuan City
333, Taiwan, R.O.C.

Kwei Shan Site II

Tel: 886-3-271-8640

No. 14-1, Lane 19, Wen San 3rd
St., Kwei Shan District, Tao Yuan
City 333, Taiwan, R.O.C..

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

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

==END==